

# Aristotle

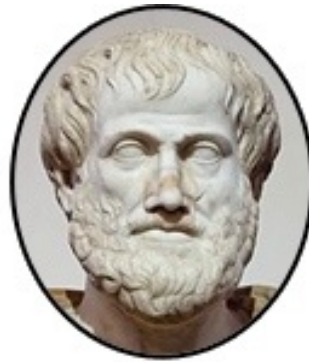
## Complete Works

DELPHI  CLASSICS

Ancient Classics Series

# *The Complete Works of* **ARISTOTLE**

(384 BC–322 BC)



**Please note:** the corresponding Bekker numbers, the standard form of reference to works in the Corpus Aristotelicum, are provided with each title.

## **Contents**

### [The Translations](#)

### [LOGIC](#)

#### [Categories \(1a\)](#)

#### [On Interpretation \(16a\)](#)

#### [Prior Analytics \(24a\)](#)

#### [Posterior Analytics \(71a\)](#)

#### [Topics \(100a\)](#)

#### [Sophistical Refutations \(164a\)](#)

### [PHYSICS](#)

[Physics \(184a\)](#)

[On the Heavens \(268a\)](#)

[On Generation and Corruption \(314a\)](#)

[Meteorology \(338a\)](#)

[On the Universe \(391a\)](#)

[On the Soul \(402a\)](#)

[The Parva Naturalia](#)

[Sense and Sensibilia \(436a\)](#)

[On Memory \(449b\)](#)

[On Sleep \(453b\)](#)

[On Dreams \(458a\)](#)

[On Divination in Sleep \(462b\)](#)

[On Length and Shortness of Life \(464b\)](#)

[On Youth, Old Age, Life and Death, and Respiration \(467b\)](#)

[On Breath \(481a\)](#)

[History of Animals \(486a\)](#)

[Parts of Animals \(639a\)](#)

[Movement of Animals \(698a\)](#)

[Progression of Animals \(704a\)](#)

[Generation of Animals \(715a\)](#)

[On Colours \(791a\)](#)

[On Things Heard \(800a\)](#)

[Physiognomonics \(805a\)](#)

[On Plants \(815a\)](#)

[On Marvelous Things Heard \(830a\)](#)

[Mechanics \(847a\)](#)

[Problems \(859a\)](#)

[On Indivisible Lines \(968a\)](#)

[The Situations and Names of Winds \(973a\)](#)

[On Melissus, Xenophanes, and Gorgias \(974a\)](#)

### [\*METAPHYSICS\*](#)

[Metaphysics \(980a\)](#)

### [\*ETHICS AND POLITICS\*](#)

[Nicomachean Ethics \(1094a\)](#)

[Great Ethics \(1181a\)](#)

[Eudemian Ethics \(1214a\)](#)

[On Virtues and Vices \(1249a\)](#)

[Politics \(1252a\)](#)

[Economics \(1343a\)](#)

### [\*RHETORIC AND POETICS\*](#)

[Rhetoric \(1354a\)](#)

[Rhetoric to Alexander \(1420a\)](#)



[Poetics \(1447a\)](#)

[Constitution of the Athenians](#)

[The Greek Texts](#)

[PRONOUNCING ANCIENT GREEK](#)

[LIST OF GREEK TEXTS](#)

[The Biographies](#)

[ARISTOTLE: LIVES OF THE EMINENT PHILOSOPHERS by Diogenes Laërtius](#)

[ARISTOTLE by Elbert Hubbard](#)

[ARISTOTLE by Charles McRae](#)

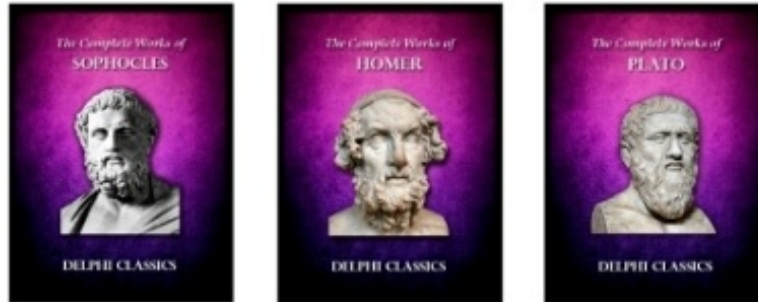
[ARISTOTLE AND ANCIENT EDUCATIONAL IDEALS by Thomas Davidson](#)

[ARISTOTLE by William MacGillivray](#)



© *Delphi Classics* 2013

Version 1



## DELPHI'S ANCIENT CLASSICS

*Featuring Greek and Latin texts and their famous translations.*

AESCHYLUS	JULIUS CAESAR
ARISTOPHANES	MENANDER
ARISTOTLE	OVID
CATULLUS	PINDAR
CICERO	PLATO
EURIPIDES	SAPPHO
HERODOTUS	SOPHOCLES
HESIOD	SUETONIUS
HOMER	THUCYDIDES
HORACE	VIRGIL

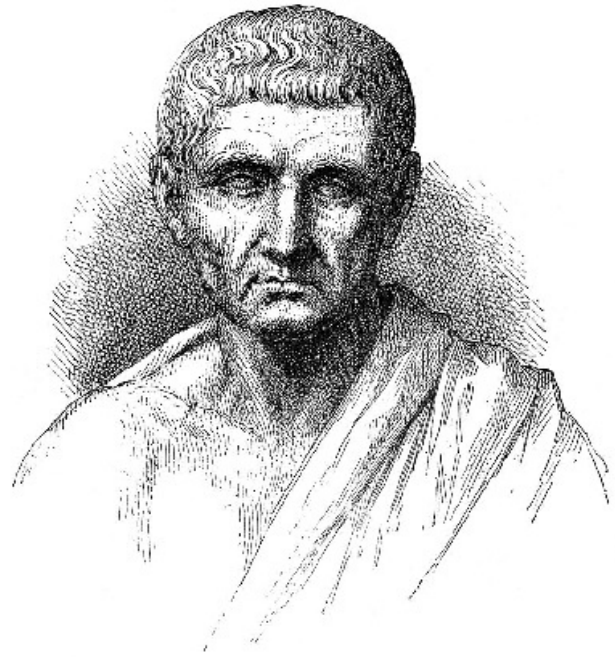
**[www.delphiclassics.com](http://www.delphiclassics.com)**

*Buy direct, receive free downloads and browse our vast range of titles*



*The Complete Works of*

**ARISTOTLE**



*By Delphi Classics, 2013*

## **The Translations**



*Stageira on the Chalkidiki peninsula — Aristotle's birthplace*

## LOGIC





*The depiction of Aristotle in the 1493 Nuremberg Chronicle. Aristotle is credited with the earliest study of formal logic and his conception was the dominant form of Western logic until 19th century advances in mathematical logic.*

### ***Categories*** (1a)



*Translated by E. M. Edghill*

The purpose of this treatise is to enumerate all the possible kinds of things that can be the subject or the predicate of a proposition, covering some of the most discussed arguments of Aristotelian notions. Divided into fifteen chapters, the *Κατηγορίαι* places every object of human apprehension under one of ten categories (known to medieval writers as the Latin term *praedicamenta*). Aristotle intended them to enumerate everything that can be expressed without composition or structure, thus anything that can be either the subject or the predicate of a proposition.

An understanding of Aristotle's notion of logic is recommended before reading this work:

The fundamental assumption behind the theory of logic is that propositions are composed of two terms – a “two-term theory” – and that the reasoning process is in turn built from propositions:

- The term is a part of speech representing something, but which is not true or false in its own right, such as “man” or “mortal”.
- The proposition consists of two terms, in which one term (the “predicate”) is “affirmed” or “denied” of the other (the “subject”), and which is capable of truth or falsity.
- The syllogism is an inference in which one proposition (the “conclusion”) follows of necessity from two others (the “premises”).

A proposition may be universal or particular, and it may be affirmative or negative. Traditionally, the four kinds of propositions are:

- A-type: Universal and affirmative (“Every philosopher is mortal”)
- I-type: Particular and affirmative (“Some philosopher is mortal”)
- E-type: Universal and negative (“Every philosopher is immortal”)
- O-type: Particular and negative (“Some philosopher is immortal”)

This was called the fourfold scheme of propositions.

The treatise *Categories* opens with an explication of what is meant by “synonymous,” or univocal words, what is meant by “homonymous,” or equivocal words, and what is meant by “paronymous,” or denominative (sometimes translated “derivative”) words.



*A Roman marble bust of Aristotle, after a Greek bronze original by Lysippus c. 330 BC.*

## CONTENTS

### [Section 1](#)

### [Part 1](#)

[Part 2](#)

[Part 3](#)

[Part 4](#)

[Part 5](#)

[Part 6](#)

[Section 2](#)

[Part 7](#)

[Part 8](#)

[Section 3](#)

[Part 9](#)

[Part 10](#)

[Part 11](#)

[Part 12](#)

[Part 13](#)

[Part 14](#)

[Part 15](#)

## **Section 1**



## Part 1

Things are said to be named 'equivocally' when, though they have a common name, the definition corresponding with the name differs for each. Thus, a real man and a figure in a picture can both lay claim to the name 'animal'; yet these are equivocally so named, for, though they have a common name, the definition corresponding with the name differs for each. For should any one define in what sense each is an animal, his definition in the one case will be appropriate to that case only.

On the other hand, things are said to be named 'univocally' which have both the name and the definition answering to the name in common. A man and an ox are both 'animal', and these are univocally so named, inasmuch as not only the name, but also the definition, is the same in both cases: for if a man should state in what sense each is an animal, the statement in the one case would be identical with that in the other.

Things are said to be named 'derivatively', which derive their name from some other name, but differ from it in termination. Thus the grammarian derives his name from the word 'grammar', and the courageous man from the word 'courage'.

## Part 2

Forms of speech are either simple or composite. Examples of the latter are such expressions as 'the man runs', 'the man wins'; of the former 'man', 'ox', 'runs', 'wins'.

Of things themselves some are predicable of a subject, and are never present in a subject. Thus 'man' is predicable of the individual man, and is never present in a subject.

By being 'present in a subject' I do not mean present as parts are present in a whole, but being incapable of existence apart from the said subject.

Some things, again, are present in a subject, but are never predicable of a subject. For instance, a certain point of grammatical knowledge is present in the mind, but is not predicable of any subject; or again, a certain whiteness may be present in the body (for colour requires a material basis), yet it is never predicable of anything.

Other things, again, are both predicable of a subject and present in a subject. Thus while knowledge is present in the human mind, it is predicable of grammar.

There is, lastly, a class of things which are neither present in a subject nor predicable of a subject, such as the individual man or the individual horse. But, to speak more generally, that which is individual and has the character of a unit is never predicable of a subject. Yet in some cases there is nothing to prevent such being present in a subject. Thus a certain point of grammatical knowledge is present in a subject.

## Part 3

When one thing is predicated of another, all that which is predicable of the predicate will be predicable also of the subject. Thus, 'man' is predicated of the individual man; but 'animal' is predicated of 'man'; it will, therefore, be predicable of the individual man also: for the individual man is both 'man' and 'animal'.

If genera are different and co-ordinate, their differentiae are themselves different in kind. Take as an instance the genus 'animal' and the genus 'knowledge'. 'With feet', 'two-footed', 'winged', 'aquatic', are differentiae of 'animal'; the species of knowledge are not distinguished by the same differentiae. One species of knowledge does not differ from another in being 'two-footed'.

But where one genus is subordinate to another, there is nothing to prevent their having the same differentiae: for the greater class is predicated of the lesser, so that all the differentiae of the predicate will be differentiae also of the subject.

## Part 4

Expressions which are in no way composite signify substance, quantity, quality, relation, place, time, position, state, action, or affection. To sketch my meaning roughly, examples of substance are 'man' or 'the horse', of quantity, such terms as 'two cubits long' or 'three cubits long', of quality, such attributes as 'white', 'grammatical'. 'Double', 'half', 'greater', fall under the category of relation; 'in a the market place', 'in the Lyceum', under that of place; 'yesterday', 'last year', under that of time. 'Lying', 'sitting', are terms indicating position, 'shod', 'armed', state; 'to lance', 'to cauterize', action; 'to be lanced', 'to be cauterized', affection.

No one of these terms, in and by itself, involves an affirmation; it is by the combination of such terms that positive or negative statements arise. For every assertion must, as is admitted, be either true or false, whereas expressions which are not in any way composite such as 'man', 'white', 'runs', 'wins', cannot be either true or false.



## Part 5

Substance, in the truest and primary and most definite sense of the word, is that which is neither predicable of a subject nor present in a subject; for instance, the individual man or horse. But in a secondary sense those things are called substances within which, as species, the primary substances are included; also those which, as genera, include the species. For instance, the individual man is included in the species 'man', and the genus to which the species belongs is 'animal'; these, therefore-that is to say, the species 'man' and the genus 'animal',-are termed secondary substances.

It is plain from what has been said that both the name and the definition of the predicate must be predicable of the subject. For instance, 'man' is predicted of the individual man. Now in this case the name of the species 'man' is applied to the individual, for we use the term 'man' in describing the individual; and the definition of 'man' will also be predicated of the individual man, for the individual man is both man and animal. Thus, both the name and the definition of the species are predicable of the individual.

With regard, on the other hand, to those things which are present in a subject, it is generally the case that neither their name nor their definition is predicable of that in which they are present. Though, however, the definition is never predicable, there is nothing in certain cases to prevent the name being used. For instance, 'white' being present in a body is predicated of that in which it is present, for a body is called white: the definition, however, of the colour 'white' is never predicable of the body.

Everything except primary substances is either predicable of a primary substance or present in a primary substance. This becomes evident by reference to particular instances which occur. 'Animal' is predicated of the species 'man', therefore of the individual man, for if there were no individual man of whom it could be predicated, it could not be predicated of the species 'man' at all. Again, colour is present in body, therefore in individual bodies, for if there were no individual body in which it was present, it could not be present in body at all. Thus everything except primary substances is either predicated of primary substances, or is present in them, and if these last did not exist, it would be impossible for anything else to exist.

Of secondary substances, the species is more truly substance than the genus, being more nearly related to primary substance. For if any one should render an account of what a primary substance is, he would render a more instructive account, and one more proper to the subject, by stating the species than by stating the genus. Thus, he would give a more instructive account of an individual man by stating that he was man than by stating that he was animal, for the former description is peculiar to the individual in a greater degree, while the latter is too general. Again, the man who gives an account of the nature of an individual tree will give a more instructive account by mentioning the species 'tree' than by mentioning the genus 'plant'.

Moreover, primary substances are most properly called substances in virtue of the fact that they are the entities which underlie everything else, and that everything else is either predicated of them or present in them. Now the same relation which subsists between primary substance and everything else subsists also between the species and the genus: for the species is to the genus as subject is to predicate, since the genus is predicated of the species, whereas the species cannot be predicated of the genus. Thus we have a second ground for asserting that the species is more truly substance than the genus.

Of species themselves, except in the case of such as are genera, no one is more truly substance than another. We should not give a more appropriate account of the individual man by stating the species to which he belonged, than we should of an individual horse by adopting the same method of definition. In the same way, of primary substances, no one is more truly substance than another; an individual man is not more truly substance than an individual ox.

It is, then, with good reason that of all that remains, when we exclude primary substances, we concede to species and genera alone the name 'secondary substance', for these alone of all the predicates convey a knowledge of primary substance. For it is by stating the species or the genus that we appropriately define any individual man; and we shall make our definition more exact by stating the former than by stating the latter. All other things that we state, such as that he is white, that he runs, and so on, are irrelevant to the definition. Thus it is just that these alone, apart from primary substances, should be called substances.

Further, primary substances are most properly so called, because they underlie and are the subjects of everything else. Now the same relation that subsists between primary substance and everything else subsists also between the species

and the genus to which the primary substance belongs, on the one hand, and every attribute which is not included within these, on the other. For these are the subjects of all such. If we call an individual man 'skilled in grammar', the predicate is applicable also to the species and to the genus to which he belongs. This law holds good in all cases.

It is a common characteristic of all substance that it is never present in a subject. For primary substance is neither present in a subject nor predicated of a subject; while, with regard to secondary substances, it is clear from the following arguments (apart from others) that they are not present in a subject. For 'man' is predicated of the individual man, but is not present in any subject: for manhood is not present in the individual man. In the same way, 'animal' is also predicated of the individual man, but is not present in him. Again, when a thing is present in a subject, though the name may quite well be applied to that in which it is present, the definition cannot be applied. Yet of secondary substances, not only the name, but also the definition, applies to the subject: we should use both the definition of the species and that of the genus with reference to the individual man. Thus substance cannot be present in a subject.

Yet this is not peculiar to substance, for it is also the case that differentiae cannot be present in subjects. The characteristics 'terrestrial' and 'two-footed' are predicated of the species 'man', but not present in it. For they are not in man. Moreover, the definition of the differentia may be predicated of that of which the differentia itself is predicated. For instance, if the characteristic 'terrestrial' is predicated of the species 'man', the definition also of that characteristic may be used to form the predicate of the species 'man': for 'man' is terrestrial.

The fact that the parts of substances appear to be present in the whole, as in a subject, should not make us apprehensive lest we should have to admit that such parts are not substances: for in explaining the phrase 'being present in a subject', we stated that we meant 'otherwise than as parts in a whole'.

It is the mark of substances and of differentiae that, in all propositions of which they form the predicate, they are predicated univocally. For all such propositions have for their subject either the individual or the species. It is true that, inasmuch as primary substance is not predicable of anything, it can never form the predicate of any proposition. But of secondary substances, the species is predicated of the individual, the genus both of the species and of the individual. Similarly the differentiae are predicated of the species and of the individuals.

Moreover, the definition of the species and that of the genus are applicable to the primary substance, and that of the genus to the species. For all that is predicated of the predicate will be predicated also of the subject. Similarly, the definition of the differentiae will be applicable to the species and to the individuals. But it was stated above that the word 'univocal' was applied to those things which had both name and definition in common. It is, therefore, established that in every proposition, of which either substance or a differentia forms the predicate, these are predicated univocally.

All substance appears to signify that which is individual. In the case of primary substance this is indisputably true, for the thing is a unit. In the case of secondary substances, when we speak, for instance, of 'man' or 'animal', our form of speech gives the impression that we are here also indicating that which is individual, but the impression is not strictly true; for a secondary substance is not an individual, but a class with a certain qualification; for it is not one and single as a primary substance is; the words 'man', 'animal', are predicable of more than one subject.

Yet species and genus do not merely indicate quality, like the term 'white'; 'white' indicates quality and nothing further, but species and genus determine the quality with reference to a substance: they signify substance qualitatively differentiated. The determinate qualification covers a larger field in the case of the genus than in that of the species: he who uses the word 'animal' is herein using a word of wider extension than he who uses the word 'man'.

Another mark of substance is that it has no contrary. What could be the contrary of any primary substance, such as the individual man or animal? It has none. Nor can the species or the genus have a contrary. Yet this characteristic is not peculiar to substance, but is true of many other things, such as quantity. There is nothing that forms the contrary of 'two cubits long' or of 'three cubits long', or of 'ten', or of any such term. A man may contend that 'much' is the contrary of 'little', or 'great' of 'small', but of definite quantitative terms no contrary exists.

Substance, again, does not appear to admit of variation of degree. I do not mean by this that one substance cannot be more or less truly substance than another, for it has already been stated that this is the case; but that no single substance admits of varying degrees within itself. For instance, one particular substance, 'man', cannot be more or less man either than himself at some other time or than some other man. One man cannot be more man than another, as that which is



white may be more or less white than some other white object, or as that which is beautiful may be more or less beautiful than some other beautiful object. The same quality, moreover, is said to subsist in a thing in varying degrees at different times. A body, being white, is said to be whiter at one time than it was before, or, being warm, is said to be warmer or less warm than at some other time. But substance is not said to be more or less that which it is: a man is not more truly a man at one time than he was before, nor is anything, if it is substance, more or less what it is. Substance, then, does not admit of variation of degree.

The most distinctive mark of substance appears to be that, while remaining numerically one and the same, it is capable of admitting contrary qualities. From among things other than substance, we should find ourselves unable to bring forward any which possessed this mark. Thus, one and the same colour cannot be white and black. Nor can the same one action be good and bad: this law holds good with everything that is not substance. But one and the selfsame substance, while retaining its identity, is yet capable of admitting contrary qualities. The same individual person is at one time white, at another black, at one time warm, at another cold, at one time good, at another bad. This capacity is found nowhere else, though it might be maintained that a statement or opinion was an exception to the rule. The same statement, it is agreed, can be both true and false. For if the statement 'he is sitting' is true, yet, when the person in question has risen, the same statement will be false. The same applies to opinions. For if any one thinks truly that a person is sitting, yet, when that person has risen, this same opinion, if still held, will be false. Yet although this exception may be allowed, there is, nevertheless, a difference in the manner in which the thing takes place. It is by themselves changing that substances admit contrary qualities. It is thus that that which was hot becomes cold, for it has entered into a different state. Similarly that which was white becomes black, and that which was bad good, by a process of change; and in the same way in all other cases it is by changing that substances are capable of admitting contrary qualities. But statements and opinions themselves remain unaltered in all respects: it is by the alteration in the facts of the case that the contrary quality comes to be theirs. The statement 'he is sitting' remains unaltered, but it is at one time true, at another false, according to circumstances. What has been said of statements applies also to opinions. Thus, in respect of the manner in which the thing takes place, it is the peculiar mark of substance that it should be capable of admitting contrary qualities; for it is by itself changing that it does so.

If, then, a man should make this exception and contend that statements and opinions are capable of admitting contrary qualities, his contention is unsound. For statements and opinions are said to have this capacity, not because they themselves undergo modification, but because this modification occurs in the case of something else. The truth or falsity of a statement depends on facts, and not on any power on the part of the statement itself of admitting contrary qualities. In short, there is nothing which can alter the nature of statements and opinions. As, then, no change takes place in themselves, these cannot be said to be capable of admitting contrary qualities.

But it is by reason of the modification which takes place within the substance itself that a substance is said to be capable of admitting contrary qualities; for a substance admits within itself either disease or health, whiteness or blackness. It is in this sense that it is said to be capable of admitting contrary qualities.

To sum up, it is a distinctive mark of substance, that, while remaining numerically one and the same, it is capable of admitting contrary qualities, the modification taking place through a change in the substance itself.

Let these remarks suffice on the subject of substance.

## Part 6

Quantity is either discrete or continuous. Moreover, some quantities are such that each part of the whole has a relative position to the other parts: others have within them no such relation of part to part.

Instances of discrete quantities are number and speech; of continuous, lines, surfaces, solids, and, besides these, time and place.

In the case of the parts of a number, there is no common boundary at which they join. For example: two fives make ten, but the two fives have no common boundary, but are separate; the parts three and seven also do not join at any boundary. Nor, to generalize, would it ever be possible in the case of number that there should be a common boundary among the parts; they are always separate. Number, therefore, is a discrete quantity.

The same is true of speech. That speech is a quantity is evident: for it is measured in long and short syllables. I mean here that speech which is vocal. Moreover, it is a discrete quantity for its parts have no common boundary. There is no common boundary at which the syllables join, but each is separate and distinct from the rest.

A line, on the other hand, is a continuous quantity, for it is possible to find a common boundary at which its parts join. In the case of the line, this common boundary is the point; in the case of the plane, it is the line: for the parts of the plane have also a common boundary. Similarly you can find a common boundary in the case of the parts of a solid, namely either a line or a plane.

Space and time also belong to this class of quantities. Time, past, present, and future, forms a continuous whole. Space, likewise, is a continuous quantity; for the parts of a solid occupy a certain space, and these have a common boundary; it follows that the parts of space also, which are occupied by the parts of the solid, have the same common boundary as the parts of the solid. Thus, not only time, but space also, is a continuous quantity, for its parts have a common boundary.

Quantities consist either of parts which bear a relative position each to each, or of parts which do not. The parts of a line bear a relative position to each other,

for each lies somewhere, and it would be possible to distinguish each, and to state the position of each on the plane and to explain to what sort of part among the rest each was contiguous. Similarly the parts of a plane have position, for it could similarly be stated what was the position of each and what sort of parts were contiguous. The same is true with regard to the solid and to space. But it would be impossible to show that the arts of a number had a relative position each to each, or a particular position, or to state what parts were contiguous. Nor could this be done in the case of time, for none of the parts of time has an abiding existence, and that which does not abide can hardly have position. It would be better to say that such parts had a relative order, in virtue of one being prior to another. Similarly with number: in counting, 'one' is prior to 'two', and 'two' to 'three', and thus the parts of number may be said to possess a relative order, though it would be impossible to discover any distinct position for each. This holds good also in the case of speech. None of its parts has an abiding existence: when once a syllable is pronounced, it is not possible to retain it, so that, naturally, as the parts do not abide, they cannot have position. Thus, some quantities consist of parts which have position, and some of those which have not.

Strictly speaking, only the things which I have mentioned belong to the category of quantity: everything else that is called quantitative is a quantity in a secondary sense. It is because we have in mind some one of these quantities, properly so called, that we apply quantitative terms to other things. We speak of what is white as large, because the surface over which the white extends is large; we speak of an action or a process as lengthy, because the time covered is long; these things cannot in their own right claim the quantitative epithet. For instance, should any one explain how long an action was, his statement would be made in terms of the time taken, to the effect that it lasted a year, or something of that sort. In the same way, he would explain the size of a white object in terms of surface, for he would state the area which it covered. Thus the things already mentioned, and these alone, are in their intrinsic nature quantities; nothing else can claim the name in its own right, but, if at all, only in a secondary sense.

Quantities have no contraries. In the case of definite quantities this is obvious; thus, there is nothing that is the contrary of 'two cubits long' or of 'three cubits long', or of a surface, or of any such quantities. A man might, indeed, argue that 'much' was the contrary of 'little', and 'great' of 'small'. But these are not quantitative, but relative; things are not great or small absolutely, they are so called rather as the result of an act of comparison. For instance, a mountain is

called small, a grain large, in virtue of the fact that the latter is greater than others of its kind, the former less. Thus there is a reference here to an external standard, for if the terms 'great' and 'small' were used absolutely, a mountain would never be called small or a grain large. Again, we say that there are many people in a village, and few in Athens, although those in the city are many times as numerous as those in the village: or we say that a house has many in it, and a theatre few, though those in the theatre far outnumber those in the house. The terms 'two cubits long,' 'three cubits long,' and so on indicate quantity, the terms 'great' and 'small' indicate relation, for they have reference to an external standard. It is, therefore, plain that these are to be classed as relative.

Again, whether we define them as quantitative or not, they have no contraries: for how can there be a contrary of an attribute which is not to be apprehended in or by itself, but only by reference to something external? Again, if 'great' and 'small' are contraries, it will come about that the same subject can admit contrary qualities at one and the same time, and that things will themselves be contrary to themselves. For it happens at times that the same thing is both small and great. For the same thing may be small in comparison with one thing, and great in comparison with another, so that the same thing comes to be both small and great at one and the same time, and is of such a nature as to admit contrary qualities at one and the same moment. Yet it was agreed, when substance was being discussed, that nothing admits contrary qualities at one and the same moment. For though substance is capable of admitting contrary qualities, yet no one is at the same time both sick and healthy, nothing is at the same time both white and black. Nor is there anything which is qualified in contrary ways at one and the same time.

Moreover, if these were contraries, they would themselves be contrary to themselves. For if 'great' is the contrary of 'small', and the same thing is both great and small at the same time, then 'small' or 'great' is the contrary of itself. But this is impossible. The term 'great', therefore, is not the contrary of the term 'small', nor 'much' of 'little'. And even though a man should call these terms not relative but quantitative, they would not have contraries.

It is in the case of space that quantity most plausibly appears to admit of a contrary. For men define the term 'above' as the contrary of 'below', when it is the region at the centre they mean by 'below'; and this is so, because nothing is farther from the extremities of the universe than the region at the centre. Indeed, it seems that in defining contraries of every kind men have recourse to a spatial

metaphor, for they say that those things are contraries which, within the same class, are separated by the greatest possible distance.

Quantity does not, it appears, admit of variation of degree. One thing cannot be two cubits long in a greater degree than another. Similarly with regard to number: what is 'three' is not more truly three than what is 'five' is five; nor is one set of three more truly three than another set. Again, one period of time is not said to be more truly time than another. Nor is there any other kind of quantity, of all that have been mentioned, with regard to which variation of degree can be predicated. The category of quantity, therefore, does not admit of variation of degree.

The most distinctive mark of quantity is that equality and inequality are predicated of it. Each of the aforesaid quantities is said to be equal or unequal. For instance, one solid is said to be equal or unequal to another; number, too, and time can have these terms applied to them, indeed can all those kinds of quantity that have been mentioned.

That which is not a quantity can by no means, it would seem, be termed equal or unequal to anything else. One particular disposition or one particular quality, such as whiteness, is by no means compared with another in terms of equality and inequality but rather in terms of similarity. Thus it is the distinctive mark of quantity that it can be called equal and unequal.

## **Section 2**

## Part 7

Those things are called relative, which, being either said to be of something else or related to something else, are explained by reference to that other thing. For instance, the word 'superior' is explained by reference to something else, for it is superiority over something else that is meant. Similarly, the expression 'double' has this external reference, for it is the double of something else that is meant. So it is with everything else of this kind. There are, moreover, other relatives, *e.g.* habit, disposition, perception, knowledge, and attitude. The significance of all these is explained by a reference to something else and in no other way. Thus, a habit is a habit of something, knowledge is knowledge of something, attitude is the attitude of something. So it is with all other relatives that have been mentioned. Those terms, then, are called relative, the nature of which is explained by reference to something else, the preposition 'of' or some other preposition being used to indicate the relation. Thus, one mountain is called great in comparison with son with another; for the mountain claims this attribute by comparison with something. Again, that which is called similar must be similar to something else, and all other such attributes have this external reference. It is to be noted that lying and standing and sitting are particular attitudes, but attitude is itself a relative term. To lie, to stand, to be seated, are not themselves attitudes, but take their name from the aforesaid attitudes.

It is possible for relatives to have contraries. Thus virtue has a contrary, vice, these both being relatives; knowledge, too, has a contrary, ignorance. But this is not the mark of all relatives; 'double' and 'triple' have no contrary, nor indeed has any such term.

It also appears that relatives can admit of variation of degree. For 'like' and 'unlike', 'equal' and 'unequal', have the modifications 'more' and 'less' applied to them, and each of these is relative in character: for the terms 'like' and 'unequal' bear 'unequal' bear a reference to something external. Yet, again, it is not every relative term that admits of variation of degree. No term such as 'double' admits of this modification. All relatives have correlatives: by the term 'slave' we mean the slave of a master, by the term 'master', the master of a slave; by 'double', the double of its half; by 'half', the half of its double; by 'greater', greater than that which is less; by 'less,' less than that which is greater.

So it is with every other relative term; but the case we use to express the



correlation differs in some instances. Thus, by knowledge we mean knowledge the knowable; by the knowable, that which is to be apprehended by knowledge; by perception, perception of the perceptible; by the perceptible, that which is apprehended by perception.

Sometimes, however, reciprocity of correlation does not appear to exist. This comes about when a blunder is made, and that to which the relative is related is not accurately stated. If a man states that a wing is necessarily relative to a bird, the connexion between these two will not be reciprocal, for it will not be possible to say that a bird is a bird by reason of its wings. The reason is that the original statement was inaccurate, for the wing is not said to be relative to the bird qua bird, since many creatures besides birds have wings, but qua winged creature. If, then, the statement is made accurate, the connexion will be reciprocal, for we can speak of a wing, having reference necessarily to a winged creature, and of a winged creature as being such because of its wings.

Occasionally, perhaps, it is necessary to coin words, if no word exists by which a correlation can adequately be explained. If we define a rudder as necessarily having reference to a boat, our definition will not be appropriate, for the rudder does not have this reference to a boat qua boat, as there are boats which have no rudders. Thus we cannot use the terms reciprocally, for the word 'boat' cannot be said to find its explanation in the word 'rudder'. As there is no existing word, our definition would perhaps be more accurate if we coined some word like 'ruddered' as the correlative of 'rudder'. If we express ourselves thus accurately, at any rate the terms are reciprocally connected, for the 'ruddered' thing is 'ruddered' in virtue of its rudder. So it is in all other cases. A head will be more accurately defined as the correlative of that which is 'headed', than as that of an animal, for the animal does not have a head qua animal, since many animals have no head.

Thus we may perhaps most easily comprehend that to which a thing is related, when a name does not exist, if, from that which has a name, we derive a new name, and apply it to that with which the first is reciprocally connected, as in the aforesaid instances, when we derived the word 'winged' from 'wing' and from 'rudder'.

All relatives, then, if properly defined, have a correlative. I add this condition because, if that to which they are related is stated as haphazard and not accurately, the two are not found to be interdependent. Let me state what I mean

more clearly. Even in the case of acknowledged correlatives, and where names exist for each, there will be no interdependence if one of the two is denoted, not by that name which expresses the correlative notion, but by one of irrelevant significance. The term 'slave,' if defined as related, not to a master, but to a man, or a biped, or anything of that sort, is not reciprocally connected with that in relation to which it is defined, for the statement is not exact. Further, if one thing is said to be correlative with another, and the terminology used is correct, then, though all irrelevant attributes should be removed, and only that one attribute left in virtue of which it was correctly stated to be correlative with that other, the stated correlation will still exist. If the correlative of 'the slave' is said to be 'the master', then, though all irrelevant attributes of the said 'master', such as 'biped', 'receptive of knowledge', 'human', should be removed, and the attribute 'master' alone left, the stated correlation existing between him and the slave will remain the same, for it is of a master that a slave is said to be the slave. On the other hand, if, of two correlatives, one is not correctly termed, then, when all other attributes are removed and that alone is left in virtue of which it was stated to be correlative, the stated correlation will be found to have disappeared.

For suppose the correlative of 'the slave' should be said to be 'the man', or the correlative of 'the wing is the bird'; if the attribute 'master' be withdrawn from 'the man', the correlation between 'the man' and 'the slave' will cease to exist, for if the man is not a master, the slave is not a slave. Similarly, if the attribute 'winged' be withdrawn from 'the bird', 'the wing' will no longer be relative; for if the so-called correlative is not winged, it follows that 'the wing' has no correlative.

Thus it is essential that the correlated terms should be exactly designated; if there is a name existing, the statement will be easy; if not, it is doubtless our duty to construct names. When the terminology is thus correct, it is evident that all correlatives are interdependent.

Correlatives are thought to come into existence simultaneously. This is for the most part true, as in the case of the double and the half. The existence of the half necessitates the existence of that of which it is a half. Similarly the existence of a master necessitates the existence of a slave, and that of a slave implies that of a master; these are merely instances of a general rule. Moreover, they cancel one another; for if there is no double it follows that there is no half, and vice versa; this rule also applies to all such correlatives. Yet it does not appear to be true in all cases that correlatives come into existence simultaneously. The object of

knowledge would appear to exist before knowledge itself, for it is usually the case that we acquire knowledge of objects already existing; it would be difficult, if not impossible, to find a branch of knowledge the beginning of the existence of which was contemporaneous with that of its object.

Again, while the object of knowledge, if it ceases to exist, cancels at the same time the knowledge which was its correlative, the converse of this is not true. It is true that if the object of knowledge does not exist there can be no knowledge: for there will no longer be anything to know. Yet it is equally true that, if knowledge of a certain object does not exist, the object may nevertheless quite well exist. Thus, in the case of the squaring of the circle, if indeed that process is an object of knowledge, though it itself exists as an object of knowledge, yet the knowledge of it has not yet come into existence. Again, if all animals ceased to exist, there would be no knowledge, but there might yet be many objects of knowledge.

This is likewise the case with regard to perception: for the object of perception is, it appears, prior to the act of perception. If the perceptible is annihilated, perception also will cease to exist; but the annihilation of perception does not cancel the existence of the perceptible. For perception implies a body perceived and a body in which perception takes place. Now if that which is perceptible is annihilated, it follows that the body is annihilated, for the body is a perceptible thing; and if the body does not exist, it follows that perception also ceases to exist. Thus the annihilation of the perceptible involves that of perception.

But the annihilation of perception does not involve that of the perceptible. For if the animal is annihilated, it follows that perception also is annihilated, but perceptibles such as body, heat, sweetness, bitterness, and so on, will remain.

Again, perception is generated at the same time as the perceiving subject, for it comes into existence at the same time as the animal. But the perceptible surely exists before perception; for fire and water and such elements, out of which the animal is itself composed, exist before the animal is an animal at all, and before perception. Thus it would seem that the perceptible exists before perception.

It may be questioned whether it is true that no substance is relative, as seems to be the case, or whether exception is to be made in the case of certain secondary substances. With regard to primary substances, it is quite true that there is no such possibility, for neither wholes nor parts of primary substances are relative.

The individual man or ox is not defined with reference to something external. Similarly with the parts: a particular hand or head is not defined as a particular hand or head of a particular person, but as the hand or head of a particular person. It is true also, for the most part at least, in the case of secondary substances; the species 'man' and the species 'ox' are not defined with reference to anything outside themselves. Wood, again, is only relative in so far as it is some one's property, not in so far as it is wood. It is plain, then, that in the cases mentioned substance is not relative. But with regard to some secondary substances there is a difference of opinion; thus, such terms as 'head' and 'hand' are defined with reference to that of which the things indicated are a part, and so it comes about that these appear to have a relative character. Indeed, if our definition of that which is relative was complete, it is very difficult, if not impossible, to prove that no substance is relative. If, however, our definition was not complete, if those things only are properly called relative in the case of which relation to an external object is a necessary condition of existence, perhaps some explanation of the dilemma may be found.

The former definition does indeed apply to all relatives, but the fact that a thing is explained with reference to something else does not make it essentially relative.

From this it is plain that, if a man definitely apprehends a relative thing, he will also definitely apprehend that to which it is relative. Indeed this is self-evident: for if a man knows that some particular thing is relative, assuming that we call that a relative in the case of which relation to something is a necessary condition of existence, he knows that also to which it is related. For if he does not know at all that to which it is related, he will not know whether or not it is relative. This is clear, moreover, in particular instances. If a man knows definitely that such and such a thing is 'double', he will also forthwith know definitely that of which it is the double. For if there is nothing definite of which he knows it to be the double, he does not know at all that it is double. Again, if he knows that a thing is more beautiful, it follows necessarily that he will forthwith definitely know that also than which it is more beautiful. He will not merely know indefinitely that it is more beautiful than something which is less beautiful, for this would be supposition, not knowledge. For if he does not know definitely that than which it is more beautiful, he can no longer claim to know definitely that it is more beautiful than something else which is less beautiful: for it might be that nothing was less beautiful. It is, therefore, evident that if a man apprehends some relative thing definitely, he necessarily knows that also definitely to which it is related.

Now the head, the hand, and such things are substances, and it is possible to know their essential character definitely, but it does not necessarily follow that we should know that to which they are related. It is not possible to know forthwith whose head or hand is meant. Thus these are not relatives, and, this being the case, it would be true to say that no substance is relative in character. It is perhaps a difficult matter, in such cases, to make a positive statement without more exhaustive examination, but to have raised questions with regard to details is not without advantage.

## Part 8

By 'quality' I mean that in virtue of which people are said to be such and such.

Quality is a term that is used in many senses. One sort of quality let us call 'habit' or 'disposition'. Habit differs from disposition in being more lasting and more firmly established. The various kinds of knowledge and of virtue are habits, for knowledge, even when acquired only in a moderate degree, is, it is agreed, abiding in its character and difficult to displace, unless some great mental upheaval takes place, through disease or any such cause. The virtues, also, such as justice, self-restraint, and so on, are not easily dislodged or dismissed, so as to give place to vice.

By a disposition, on the other hand, we mean a condition that is easily changed and quickly gives place to its opposite. Thus, heat, cold, disease, health, and so on are dispositions. For a man is disposed in one way or another with reference to these, but quickly changes, becoming cold instead of warm, ill instead of well. So it is with all other dispositions also, unless through lapse of time a disposition has itself become inveterate and almost impossible to dislodge: in which case we should perhaps go so far as to call it a habit.

It is evident that men incline to call those conditions habits which are of a more or less permanent type and difficult to displace; for those who are not retentive of knowledge, but volatile, are not said to have such and such a 'habit' as regards knowledge, yet they are disposed, we may say, either better or worse, towards knowledge. Thus habit differs from disposition in this, that while the latter is ephemeral, the former is permanent and difficult to alter.

Habits are at the same time dispositions, but dispositions are not necessarily habits. For those who have some specific habit may be said also, in virtue of that habit, to be thus or thus disposed; but those who are disposed in some specific way have not in all cases the corresponding habit.

Another sort of quality is that in virtue of which, for example, we call men good boxers or runners, or healthy or sickly: in fact it includes all those terms which refer to inborn capacity or incapacity. Such things are not predicated of a person in virtue of his disposition, but in virtue of his inborn capacity or incapacity to do something with ease or to avoid defeat of any kind. Persons are called good

boxers or good runners, not in virtue of such and such a disposition, but in virtue of an inborn capacity to accomplish something with ease. Men are called healthy in virtue of the inborn capacity of easy resistance to those unhealthy influences that may ordinarily arise; unhealthy, in virtue of the lack of this capacity. Similarly with regard to softness and hardness. Hardness is predicated of a thing because it has that capacity of resistance which enables it to withstand disintegration; softness, again, is predicated of a thing by reason of the lack of that capacity.

A third class within this category is that of affective qualities and affections. Sweetness, bitterness, sourness, are examples of this sort of quality, together with all that is akin to these; heat, moreover, and cold, whiteness, and blackness are affective qualities. It is evident that these are qualities, for those things that possess them are themselves said to be such and such by reason of their presence. Honey is called sweet because it contains sweetness; the body is called white because it contains whiteness; and so in all other cases.

The term 'affective quality' is not used as indicating that those things which admit these qualities are affected in any way. Honey is not called sweet because it is affected in a specific way, nor is this what is meant in any other instance. Similarly heat and cold are called affective qualities, not because those things which admit them are affected. What is meant is that these said qualities are capable of producing an 'affection' in the way of perception. For sweetness has the power of affecting the sense of taste; heat, that of touch; and so it is with the rest of these qualities.

Whiteness and blackness, however, and the other colours, are not said to be affective qualities in this sense, but -because they themselves are the results of an affection. It is plain that many changes of colour take place because of affections. When a man is ashamed, he blushes; when he is afraid, he becomes pale, and so on. So true is this, that when a man is by nature liable to such affections, arising from some concomitance of elements in his constitution, it is a probable inference that he has the corresponding complexion of skin. For the same disposition of bodily elements, which in the former instance was momentarily present in the case of an access of shame, might be a result of a man's natural temperament, so as to produce the corresponding colouring also as a natural characteristic. All conditions, therefore, of this kind, if caused by certain permanent and lasting affections, are called affective qualities. For pallor and duskiness of complexion are called qualities, inasmuch as we are said to be

such and such in virtue of them, not only if they originate in natural constitution, but also if they come about through long disease or sunburn, and are difficult to remove, or indeed remain throughout life. For in the same way we are said to be such and such because of these.

Those conditions, however, which arise from causes which may easily be rendered ineffective or speedily removed, are called, not qualities, but affections: for we are not said to be such in virtue of them. The man who blushes through shame is not said to be a constitutional blusher, nor is the man who becomes pale through fear said to be constitutionally pale. He is said rather to have been affected.

Thus such conditions are called affections, not qualities. In like manner there are affective qualities and affections of the soul. That temper with which a man is born and which has its origin in certain deep-seated affections is called a quality. I mean such conditions as insanity, irascibility, and so on: for people are said to be mad or irascible in virtue of these. Similarly those abnormal psychic states which are not inborn, but arise from the concomitance of certain other elements, and are difficult to remove, or altogether permanent, are called qualities, for in virtue of them men are said to be such and such.

Those, however, which arise from causes easily rendered ineffective are called affections, not qualities. Suppose that a man is irritable when vexed: he is not even spoken of as a bad-tempered man, when in such circumstances he loses his temper somewhat, but rather is said to be affected. Such conditions are therefore termed, not qualities, but affections.

The fourth sort of quality is figure and the shape that belongs to a thing; and besides this, straightness and curvedness and any other qualities of this type; each of these defines a thing as being such and such. Because it is triangular or quadrangular a thing is said to have a specific character, or again because it is straight or curved; in fact a thing's shape in every case gives rise to a qualification of it.

Rarity and density, roughness and smoothness, seem to be terms indicating quality: yet these, it would appear, really belong to a class different from that of quality. For it is rather a certain relative position of the parts composing the thing thus qualified which, it appears, is indicated by each of these terms. A thing is dense, owing to the fact that its parts are closely combined with one



another; rare, because there are interstices between the parts; smooth, because its parts lie, so to speak, evenly; rough, because some parts project beyond others.

There may be other sorts of quality, but those that are most properly so called have, we may safely say, been enumerated.

These, then, are qualities, and the things that take their name from them as derivatives, or are in some other way dependent on them, are said to be qualified in some specific way. In most, indeed in almost all cases, the name of that which is qualified is derived from that of the quality. Thus the terms 'whiteness', 'grammar', 'justice', give us the adjectives 'white', 'grammatical', 'just', and so on.

There are some cases, however, in which, as the quality under consideration has no name, it is impossible that those possessed of it should have a name that is derivative. For instance, the name given to the runner or boxer, who is so called in virtue of an inborn capacity, is not derived from that of any quality; for those capacities have no name assigned to them. In this, the inborn capacity is distinct from the science, with reference to which men are called, *e.g.* boxers or wrestlers. Such a science is classed as a disposition; it has a name, and is called 'boxing' or 'wrestling' as the case may be, and the name given to those disposed in this way is derived from that of the science. Sometimes, even though a name exists for the quality, that which takes its character from the quality has a name that is not a derivative. For instance, the upright man takes his character from the possession of the quality of integrity, but the name given him is not derived from the word 'integrity'. Yet this does not occur often.

We may therefore state that those things are said to be possessed of some specific quality which have a name derived from that of the aforesaid quality, or which are in some other way dependent on it.

One quality may be the contrary of another; thus justice is the contrary of injustice, whiteness of blackness, and so on. The things, also, which are said to be such and such in virtue of these qualities, may be contrary the one to the other; for that which is unjust is contrary to that which is just, that which is white to that which is black. This, however, is not always the case. Red, yellow, and such colours, though qualities, have no contraries.

If one of two contraries is a quality, the other will also be a quality. This will be

evident from particular instances, if we apply the names used to denote the other categories; for instance, granted that justice is the contrary of injustice and justice is a quality, injustice will also be a quality: neither quantity, nor relation, nor place, nor indeed any other category but that of quality, will be applicable properly to injustice. So it is with all other contraries falling under the category of quality.

Qualities admit of variation of degree. Whiteness is predicated of one thing in a greater or less degree than of another. This is also the case with reference to justice. Moreover, one and the same thing may exhibit a quality in a greater degree than it did before: if a thing is white, it may become whiter.

Though this is generally the case, there are exceptions. For if we should say that justice admitted of variation of degree, difficulties might ensue, and this is true with regard to all those qualities which are dispositions. There are some, indeed, who dispute the possibility of variation here. They maintain that justice and health cannot very well admit of variation of degree themselves, but that people vary in the degree in which they possess these qualities, and that this is the case with grammatical learning and all those qualities which are classed as dispositions. However that may be, it is an incontrovertible fact that the things which in virtue of these qualities are said to be what they are vary in the degree in which they possess them; for one man is said to be better versed in grammar, or more healthy or just, than another, and so on.

The qualities expressed by the terms 'triangular' and 'quadrangular' do not appear to admit of variation of degree, nor indeed do any that have to do with figure. For those things to which the definition of the triangle or circle is applicable are all equally triangular or circular. Those, on the other hand, to which the same definition is not applicable, cannot be said to differ from one another in degree; the square is no more a circle than the rectangle, for to neither is the definition of the circle appropriate. In short, if the definition of the term proposed is not applicable to both objects, they cannot be compared. Thus it is not all qualities which admit of variation of degree.

Whereas none of the characteristics I have mentioned are peculiar to quality, the fact that likeness and unlikeness can be predicated with reference to quality only, gives to that category its distinctive feature. One thing is like another only with reference to that in virtue of which it is such and such; thus this forms the peculiar mark of quality.

We must not be disturbed because it may be argued that, though proposing to discuss the category of quality, we have included in it many relative terms. We did say that habits and dispositions were relative. In practically all such cases the genus is relative, the individual not. Thus knowledge, as a genus, is explained by reference to something else, for we mean a knowledge of something. But particular branches of knowledge are not thus explained. The knowledge of grammar is not relative to anything external, nor is the knowledge of music, but these, if relative at all, are relative only in virtue of their genera; thus grammar is said to be the knowledge of something, not the grammar of something; similarly music is the knowledge of something, not the music of something.

Thus individual branches of knowledge are not relative. And it is because we possess these individual branches of knowledge that we are said to be such and such. It is these that we actually possess: we are called experts because we possess knowledge in some particular branch. Those particular branches, therefore, of knowledge, in virtue of which we are sometimes said to be such and such, are themselves qualities, and are not relative. Further, if anything should happen to fall within both the category of quality and that of relation, there would be nothing extraordinary in classing it under both these heads.

### **Section 3**

## Part 9

Action and affection both admit of contraries and also of variation of degree. Heating is the contrary of cooling, being heated of being cooled, being glad of being vexed. Thus they admit of contraries. They also admit of variation of degree: for it is possible to heat in a greater or less degree; also to be heated in a greater or less degree. Thus action and affection also admit of variation of degree. So much, then, is stated with regard to these categories.

We spoke, moreover, of the category of position when we were dealing with that of relation, and stated that such terms derived their names from those of the corresponding attitudes.

As for the rest, time, place, state, since they are easily intelligible, I say no more about them than was said at the beginning, that in the category of state are included such states as 'shod', 'armed', in that of place 'in the Lyceum' and so on, as was explained before.

## Part 10

The proposed categories have, then, been adequately dealt with. We must next explain the various senses in which the term 'opposite' is used. Things are said to be opposed in four senses: (i) as correlatives to one another, (ii) as contraries to one another, (iii) as privatives to positives, (iv) as affirmatives to negatives.

Let me sketch my meaning in outline. An instance of the use of the word 'opposite' with reference to correlatives is afforded by the expressions 'double' and 'half'; with reference to contraries by 'bad' and 'good'. Opposites in the sense of 'privatives' and 'positives' are 'blindness' and 'sight'; in the sense of affirmatives and negatives, the propositions 'he sits', 'he does not sit'.

(i) Pairs of opposites which fall under the category of relation are explained by a reference of the one to the other, the reference being indicated by the preposition 'of' or by some other preposition. Thus, double is a relative term, for that which is double is explained as the double of something. Knowledge, again, is the opposite of the thing known, in the same sense; and the thing known also is explained by its relation to its opposite, knowledge. For the thing known is explained as that which is known by something, that is, by knowledge. Such things, then, as are opposite the one to the other in the sense of being correlatives are explained by a reference of the one to the other.

(ii) Pairs of opposites which are contraries are not in any way interdependent, but are contrary the one to the other. The good is not spoken of as the good of the bad, but as the contrary of the bad, nor is white spoken of as the white of the black, but as the contrary of the black. These two types of opposition are therefore distinct. Those contraries which are such that the subjects in which they are naturally present, or of which they are predicated, must necessarily contain either the one or the other of them, have no intermediate, but those in the case of which no such necessity obtains, always have an intermediate. Thus disease and health are naturally present in the body of an animal, and it is necessary that either the one or the other should be present in the body of an animal. Odd and even, again, are predicated of number, and it is necessary that the one or the other should be present in numbers. Now there is no intermediate between the terms of either of these two pairs. On the other hand, in those contraries with regard to which no such necessity obtains, we find an intermediate. Blackness and whiteness are naturally present in the body, but it is

not necessary that either the one or the other should be present in the body, inasmuch as it is not true to say that everybody must be white or black. Badness and goodness, again, are predicated of man, and of many other things, but it is not necessary that either the one quality or the other should be present in that of which they are predicated: it is not true to say that everything that may be good or bad must be either good or bad. These pairs of contraries have intermediates: the intermediates between white and black are grey, sallow, and all the other colours that come between; the intermediate between good and bad is that which is neither the one nor the other.

Some intermediate qualities have names, such as grey and sallow and all the other colours that come between white and black; in other cases, however, it is not easy to name the intermediate, but we must define it as that which is not either extreme, as in the case of that which is neither good nor bad, neither just nor unjust.

(iii) 'privatives' and 'Positives' have reference to the same subject. Thus, sight and blindness have reference to the eye. It is a universal rule that each of a pair of opposites of this type has reference to that to which the particular 'positive' is natural. We say that that is capable of some particular faculty or possession has suffered privation when the faculty or possession in question is in no way present in that in which, and at the time at which, it should naturally be present. We do not call that toothless which has not teeth, or that blind which has not sight, but rather that which has not teeth or sight at the time when by nature it should. For there are some creatures which from birth are without sight, or without teeth, but these are not called toothless or blind.

To be without some faculty or to possess it is not the same as the corresponding 'privative' or 'positive'. 'Sight' is a 'positive', 'blindness' a 'privative', but 'to possess sight' is not equivalent to 'sight', 'to be blind' is not equivalent to 'blindness'. Blindness is a 'privative', to be blind is to be in a state of privation, but is not a 'privative'. Moreover, if 'blindness' were equivalent to 'being blind', both would be predicated of the same subject; but though a man is said to be blind, he is by no means said to be blindness.

To be in a state of 'possession' is, it appears, the opposite of being in a state of 'privation', just as 'positives' and 'privatives' themselves are opposite. There is the same type of antithesis in both cases; for just as blindness is opposed to sight, so is being blind opposed to having sight.

That which is affirmed or denied is not itself affirmation or denial. By 'affirmation' we mean an affirmative proposition, by 'denial' a negative. Now, those facts which form the matter of the affirmation or denial are not propositions; yet these two are said to be opposed in the same sense as the affirmation and denial, for in this case also the type of antithesis is the same. For as the affirmation is opposed to the denial, as in the two propositions 'he sits', 'he does not sit', so also the fact which constitutes the matter of the proposition in one case is opposed to that in the other, his sitting, that is to say, to his not sitting.

It is evident that 'positives' and 'privatives' are not opposed each to each in the same sense as relatives. The one is not explained by reference to the other; sight is not sight of blindness, nor is any other preposition used to indicate the relation. Similarly blindness is not said to be blindness of sight, but rather, privation of sight. Relatives, moreover, reciprocate; if blindness, therefore, were a relative, there would be a reciprocity of relation between it and that with which it was correlative. But this is not the case. Sight is not called the sight of blindness.

That those terms which fall under the heads of 'positives' and 'privatives' are not opposed each to each as contraries, either, is plain from the following facts: Of a pair of contraries such that they have no intermediate, one or the other must needs be present in the subject in which they naturally subsist, or of which they are predicated; for it is those, as we proved,' in the case of which this necessity obtains, that have no intermediate. Moreover, we cited health and disease, odd and even, as instances. But those contraries which have an intermediate are not subject to any such necessity. It is not necessary that every substance, receptive of such qualities, should be either black or white, cold or hot, for something intermediate between these contraries may very well be present in the subject. We proved, moreover, that those contraries have an intermediate in the case of which the said necessity does not obtain. Yet when one of the two contraries is a constitutive property of the subject, as it is a constitutive property of fire to be hot, of snow to be white, it is necessary determinately that one of the two contraries, not one or the other, should be present in the subject; for fire cannot be cold, or snow black. Thus, it is not the case here that one of the two must needs be present in every subject receptive of these qualities, but only in that subject of which the one forms a constitutive property. Moreover, in such cases it is one member of the pair determinately, and not either the one or the other, which must be present.

In the case of 'positives' and 'privatives', on the other hand, neither of the aforesaid statements holds good. For it is not necessary that a subject receptive of the qualities should always have either the one or the other; that which has not yet advanced to the state when sight is natural is not said either to be blind or to see. Thus 'positives' and 'privatives' do not belong to that class of contraries which consists of those which have no intermediate. On the other hand, they do not belong either to that class which consists of contraries which have an intermediate. For under certain conditions it is necessary that either the one or the other should form part of the constitution of every appropriate subject. For when a thing has reached the stage when it is by nature capable of sight, it will be said either to see or to be blind, and that in an indeterminate sense, signifying that the capacity may be either present or absent; for it is not necessary either that it should see or that it should be blind, but that it should be either in the one state or in the other. Yet in the case of those contraries which have an intermediate we found that it was never necessary that either the one or the other should be present in every appropriate subject, but only that in certain subjects one of the pair should be present, and that in a determinate sense. It is, therefore, plain that 'positives' and 'privatives' are not opposed each to each in either of the senses in which contraries are opposed.

Again, in the case of contraries, it is possible that there should be changes from either into the other, while the subject retains its identity, unless indeed one of the contraries is a constitutive property of that subject, as heat is of fire. For it is possible that that which is healthy should become diseased, that which is white, black, that which is cold, hot, that which is good, bad, that which is bad, good. The bad man, if he is being brought into a better way of life and thought, may make some advance, however slight, and if he should once improve, even ever so little, it is plain that he might change completely, or at any rate make very great progress; for a man becomes more and more easily moved to virtue, however small the improvement was at first. It is, therefore, natural to suppose that he will make yet greater progress than he has made in the past; and as this process goes on, it will change him completely and establish him in the contrary state, provided he is not hindered by lack of time. In the case of 'positives' and 'privatives', however, change in both directions is impossible. There may be a change from possession to privation, but not from privation to possession. The man who has become blind does not regain his sight; the man who has become bald does not regain his hair; the man who has lost his teeth does not grow a new set. (iv) Statements opposed as affirmation and negation belong manifestly to a class which is distinct, for in this case, and in this case only, it is necessary for



the one opposite to be true and the other false.

Neither in the case of contraries, nor in the case of correlatives, nor in the case of 'positives' and 'privatives', is it necessary for one to be true and the other false. Health and disease are contraries: neither of them is true or false. 'Double' and 'half' are opposed to each other as correlatives: neither of them is true or false. The case is the same, of course, with regard to 'positives' and 'privatives' such as 'sight' and 'blindness'. In short, where there is no sort of combination of words, truth and falsity have no place, and all the opposites we have mentioned so far consist of simple words.

At the same time, when the words which enter into opposed statements are contraries, these, more than any other set of opposites, would seem to claim this characteristic. 'Socrates is ill' is the contrary of 'Socrates is well', but not even of such composite expressions is it true to say that one of the pair must always be true and the other false. For if Socrates exists, one will be true and the other false, but if he does not exist, both will be false; for neither 'Socrates is ill' nor 'Socrates is well' is true, if Socrates does not exist at all.

In the case of 'positives' and 'privatives', if the subject does not exist at all, neither proposition is true, but even if the subject exists, it is not always the fact that one is true and the other false. For 'Socrates has sight' is the opposite of 'Socrates is blind' in the sense of the word 'opposite' which applies to possession and privation. Now if Socrates exists, it is not necessary that one should be true and the other false, for when he is not yet able to acquire the power of vision, both are false, as also if Socrates is altogether non-existent.

But in the case of affirmation and negation, whether the subject exists or not, one is always false and the other true. For manifestly, if Socrates exists, one of the two propositions 'Socrates is ill', 'Socrates is not ill', is true, and the other false. This is likewise the case if he does not exist; for if he does not exist, to say that he is ill is false, to say that he is not ill is true. Thus it is in the case of those opposites only, which are opposite in the sense in which the term is used with reference to affirmation and negation, that the rule holds good, that one of the pair must be true and the other false.

## Part 11

That the contrary of a good is an evil is shown by induction: the contrary of health is disease, of courage, cowardice, and so on. But the contrary of an evil is sometimes a good, sometimes an evil. For defect, which is an evil, has excess for its contrary, this also being an evil, and the mean, which is a good, is equally the contrary of the one and of the other. It is only in a few cases, however, that we see instances of this: in most, the contrary of an evil is a good.

In the case of contraries, it is not always necessary that if one exists the other should also exist: for if all become healthy there will be health and no disease, and again, if everything turns white, there will be white, but no black. Again, since the fact that Socrates is ill is the contrary of the fact that Socrates is well, and two contrary conditions cannot both obtain in one and the same individual at the same time, both these contraries could not exist at once: for if that Socrates was well was a fact, then that Socrates was ill could not possibly be one.

It is plain that contrary attributes must needs be present in subjects which belong to the same species or genus. Disease and health require as their subject the body of an animal; white and black require a body, without further qualification; justice and injustice require as their subject the human soul.

Moreover, it is necessary that pairs of contraries should in all cases either belong to the same genus or belong to contrary genera or be themselves genera. White and black belong to the same genus, colour; justice and injustice, to contrary genera, virtue and vice; while good and evil do not belong to genera, but are themselves actual genera, with terms under them.

## Part 12

There are four senses in which one thing can be said to be 'prior' to another. Primarily and most properly the term has reference to time: in this sense the word is used to indicate that one thing is older or more ancient than another, for the expressions 'older' and 'more ancient' imply greater length of time.

Secondly, one thing is said to be 'prior' to another when the sequence of their being cannot be reversed. In this sense 'one' is 'prior' to 'two'. For if 'two' exists, it follows directly that 'one' must exist, but if 'one' exists, it does not follow necessarily that 'two' exists: thus the sequence subsisting cannot be reversed. It is agreed, then, that when the sequence of two things cannot be reversed, then that one on which the other depends is called 'prior' to that other.

In the third place, the term 'prior' is used with reference to any order, as in the case of science and of oratory. For in sciences which use demonstration there is that which is prior and that which is posterior in order; in geometry, the elements are prior to the propositions; in reading and writing, the letters of the alphabet are prior to the syllables. Similarly, in the case of speeches, the exordium is prior in order to the narrative.

Besides these senses of the word, there is a fourth. That which is better and more honourable is said to have a natural priority. In common parlance men speak of those whom they honour and love as 'coming first' with them. This sense of the word is perhaps the most far-fetched.

Such, then, are the different senses in which the term 'prior' is used.

Yet it would seem that besides those mentioned there is yet another. For in those things, the being of each of which implies that of the other, that which is in any way the cause may reasonably be said to be by nature 'prior' to the effect. It is plain that there are instances of this. The fact of the being of a man carries with it the truth of the proposition that he is, and the implication is reciprocal: for if a man is, the proposition wherein we allege that he is true, and conversely, if the proposition wherein we allege that he is true, then he is. The true proposition, however, is in no way the cause of the being of the man, but the fact of the man's being does seem somehow to be the cause of the truth of the proposition, for the truth or falsity of the proposition depends on the fact of the man's being

or not being.

Thus the word 'prior' may be used in five senses.

## Part 13

The term 'simultaneous' is primarily and most appropriately applied to those things the genesis of the one of which is simultaneous with that of the other; for in such cases neither is prior or posterior to the other. Such things are said to be simultaneous in point of time. Those things, again, are 'simultaneous' in point of nature, the being of each of which involves that of the other, while at the same time neither is the cause of the other's being. This is the case with regard to the double and the half, for these are reciprocally dependent, since, if there is a double, there is also a half, and if there is a half, there is also a double, while at the same time neither is the cause of the being of the other.

Again, those species which are distinguished one from another and opposed one to another within the same genus are said to be 'simultaneous' in nature. I mean those species which are distinguished each from each by one and the same method of division. Thus the 'winged' species is simultaneous with the 'terrestrial' and the 'water' species. These are distinguished within the same genus, and are opposed each to each, for the genus 'animal' has the 'winged', the 'terrestrial', and the 'water' species, and no one of these is prior or posterior to another; on the contrary, all such things appear to be 'simultaneous' in nature. Each of these also, the terrestrial, the winged, and the water species, can be divided again into subspecies. Those species, then, also will be 'simultaneous' in point of nature, which, belonging to the same genus, are distinguished each from each by one and the same method of differentiation.

But genera are prior to species, for the sequence of their being cannot be reversed. If there is the species 'water-animal', there will be the genus 'animal', but granted the being of the genus 'animal', it does not follow necessarily that there will be the species 'water-animal'.

Those things, therefore, are said to be 'simultaneous' in nature, the being of each of which involves that of the other, while at the same time neither is in any way the cause of the other's being; those species, also, which are distinguished each from each and opposed within the same genus. Those things, moreover, are 'simultaneous' in the unqualified sense of the word which come into being at the same time.

## Part 14

There are six sorts of movement: generation, destruction, increase, diminution, alteration, and change of place.

It is evident in all but one case that all these sorts of movement are distinct each from each. Generation is distinct from destruction, increase and change of place from diminution, and so on. But in the case of alteration it may be argued that the process necessarily implies one or other of the other five sorts of motion. This is not true, for we may say that all affections, or nearly all, produce in us an alteration which is distinct from all other sorts of motion, for that which is affected need not suffer either increase or diminution or any of the other sorts of motion. Thus alteration is a distinct sort of motion; for, if it were not, the thing altered would not only be altered, but would forthwith necessarily suffer increase or diminution or some one of the other sorts of motion in addition; which as a matter of fact is not the case. Similarly that which was undergoing the process of increase or was subject to some other sort of motion would, if alteration were not a distinct form of motion, necessarily be subject to alteration also. But there are some things which undergo increase but yet not alteration. The square, for instance, if a gnomon is applied to it, undergoes increase but not alteration, and so it is with all other figures of this sort. Alteration and increase, therefore, are distinct.

Speaking generally, rest is the contrary of motion. But the different forms of motion have their own contraries in other forms; thus destruction is the contrary of generation, diminution of increase, rest in a place, of change of place. As for this last, change in the reverse direction would seem to be most truly its contrary; thus motion upwards is the contrary of motion downwards and vice versa.

In the case of that sort of motion which yet remains, of those that have been enumerated, it is not easy to state what is its contrary. It appears to have no contrary, unless one should define the contrary here also either as 'rest in its quality' or as 'change in the direction of the contrary quality', just as we defined the contrary of change of place either as rest in a place or as change in the reverse direction. For a thing is altered when change of quality takes place; therefore either rest in its quality or change in the direction of the contrary may be called the contrary of this qualitative form of motion. In this way becoming

white is the contrary of becoming black; there is alteration in the contrary direction, since a change of a qualitative nature takes place.

## Part 15

The term ‘to have’ is used in various senses. In the first place it is used with reference to habit or disposition or any other quality, for we are said to ‘have’ a piece of knowledge or a virtue. Then, again, it has reference to quantity, as, for instance, in the case of a man’s height; for he is said to ‘have’ a height of three or four cubits. It is used, moreover, with regard to apparel, a man being said to ‘have’ a coat or tunic; or in respect of something which we have on a part of ourselves, as a ring on the hand: or in respect of something which is a part of us, as hand or foot. The term refers also to content, as in the case of a vessel and wheat, or of a jar and wine; a jar is said to ‘have’ wine, and a corn-measure wheat. The expression in such cases has reference to content. Or it refers to that which has been acquired; we are said to ‘have’ a house or a field. A man is also said to ‘have’ a wife, and a wife a husband, and this appears to be the most remote meaning of the term, for by the use of it we mean simply that the husband lives with the wife.

Other senses of the word might perhaps be found, but the most ordinary ones have all been enumerated.

### *On Interpretation* (16a)



*Translated by Octavius Freire Owen*

*Περὶ Ἑρμηνείας* concerns the relationship between language and logic in a comprehensive and formal manner. The text begins by analysing simple categoric propositions, drawing a series of basic conclusions on the routine issues of classifying and defining basic linguistic forms, such as simple terms and propositions, nouns and verbs, negation, the quantity of simple propositions (primitive roots of the quantifiers in modern symbolic logic), investigations on the excluded middle (what to Aristotle is not applicable to future tense propositions — the Problem of future contingents), and on modal propositions.

The first five chapters deal with the terms that form propositions; whilst Chapters 6 and 7 deal with the relationship between affirmative, negative,



universal and particular propositions. These relationships are the basis of the well-known Square of opposition. The distinction between universal and particular propositions is the basis of modern quantification theory. The last three chapters deal with modalities. Chapter 9 is famous for the discussion of the sea-battle. *E.g. if it is true that there will be a sea-battle tomorrow, then it is true today that there will be a sea-battle. Thus a sea-battle is apparently unavoidable, and thus necessary. Another interpretation would be: that we can not know that which has not yet come to pass. In other words: if there is a sea battle tomorrow then it is true today that tomorrow there will be a sea battle. So, only if we can know whether or not there will be a sea battle tomorrow then can we know if there will be a sea battle .*



*Aristotle by Francesco Hayez, c. 1870*

## CONTENTS

[Chapter 1](#)

[Chapter 2](#)

[Chapter 3](#)

[Chapter 4](#)

[Chapter 5](#)

[Chapter 6](#)

[Chapter 7](#)

[Chapter 8](#)

[Chapter 9](#)

[Chapter 10](#)

[Chapter 11](#)

[Chapter 12](#)

[Chapter 13](#)

[Chapter 14](#)

# Chapter 1

We must first determine what a noun, and what a verb, are; next, what are negation, affirmation, enunciation, and a sentence.

Those things therefore which are in the voice, are symbols of the passions of the soul, and when written, are symbols of the (passions) in the voice, and as there are not the same letters among all men, so neither have all the same voices, yet those passions of the soul, of which these are primarily the signs, are the same among all, the things also, of which these are the similitudes, are the same. About these latter, we have spoken in the treatise “Of the Soul,” for they are parts belonging to another discussion, but as in the soul, there is sometimes a conception, without truth or falsehood, and at another time, it is such, as necessarily to have one of these, inherent in it, so also is it with the voice, for falsehood and truth are involved in composition and division. Nouns therefore and verbs of themselves resemble conception, without composition and division, as “man,” or “white,” when something is not added, for as yet it is neither true nor false, an instance of which is that the word τραγέλαφος [goat-stag] signifies something indeed, but not yet any thing true or false, unless to be, or not to be, is added, either simply, or according to time.

## Chapter 2

A noun therefore is a sound significant by compact without time, of which no part is separately significant; thus in the noun κάλλιππος [fair-horse], the ἵππος signifies nothing by itself, as it does in the sentence καλὸς ἵππος; neither does it happen with simple nouns as it does with composite, for in the former there is by no means the part significant, but in the latter a part would be, yet signifies nothing separately, as in the word ἑπαιτροκέλης [piratical ship], the κέλης signifies nothing by itself. But it is according to compact, because naturally there is no noun; but when it becomes a symbol, since illiterate sounds also signify something, as the sounds of beasts, of which there is no noun.

“Not man,” however, is not a noun, neither is a name instituted by which we ought to call it, since it is neither a sentence, nor a negation; but let it be an indefinite noun because it exists in respect of every thing alike, both of that which is, and of that which is not. Φίλωνος indeed, or Φίλωνι, and such like words are not nouns, but cases of a noun, but the definition of it (that is, of the case) is the same as to other things (with the definition of a noun), but (it differs in) that, with (the verb) “is” or “was” or “will be,” it does not signify what is true or false, but the noun always (signifies this), as “Philonus is,” or “is not,” for as yet, this neither signifies what is true, nor what is false.

## Chapter 3

A verb, is that which, besides something else, signifies time; of which no part is separately significant, and it is always indicative of those things which are asserted of something else. But I say that it signifies time, besides something else, as for instance, “health” is a noun, but “is well” is a verb; for it signifies, besides being well, that such is the case now: it is always also significant of things asserted of something else, as of those which are predicated of a subject, or which are in a subject.

Nevertheless I do not call, “is not well,” and, “is not ill” — verbs; for indeed they signify time, besides something else, and are always (significant) of something, yet a name is not given to this difference, let either be therefore an indefinite verb, because it is similarly inherent both in whatever does, and does not exist. So also “was well” or “will be well” are not *verbs*, but they are cases of a verb, and differ from a verb, because the latter, besides something else, signifies present time; but the others, that which is about the present time.

Verbs therefore so called, by themselves, are nouns, and have a certain signification, for the speaker establishes conception, and the hearer acquiesces, but they do not yet signify whether a thing “is” or “is not,” for neither is “to be” or “not to be” a sign of a thing, nor if you should say merely, “being,” for that is nothing; they signify however, besides something else, a certain composition, which without the composing members it is impossible to understand.

## Chapter 4

A sentence is voice significant by compact, of which any part separately possesses signification, as indeed a word, yet not as affirmation or negation; now I say for example “man” is significant, but does not imply that it “is” or “is not;” it will however be affirmation or negation, if any thing be added to it. One syllable of the word ἄνθρωπος, is not however (significant), neither the “ῶς” in “μῶς,” but it is now merely sound; still in compound words a part is significant, but not by itself, as we have observed.

Now every sentence is significant, not as an instrument, but, as we have said, by compact, still not every sentence is enunciative, but that in which truth or falsehood is inherent, which things do not exist in all sentences, as prayer is a sentence, but it is neither true nor false. Let therefore the other sentences be dismissed, their consideration belongs more properly to Rhetoric or Poetry; but the enunciative sentence to our present theory.

## Chapter 5

One first enunciative sentence is affirmation; afterwards negation, and all the rest are one by conjunction. It is necessary however that every enunciative sentence should be from a verb, or from the case of a verb, for the definition of “man,” unless “is,” or “was,” or “will be,” or something of this kind, be added, is not yet an enunciative sentence. Why indeed is the sentence “a terrestrial biped animal” one thing, and not many things? for it will not be one, because it is consecutively pronounced: this however belongs to another discussion. One enunciative sentence, moreover, is either that which signifies one thing, or which is one by conjunction, and many (such sentences) are either those which signify many things and not one thing, or which are without conjunction. Let therefore a noun or a verb be only a word, since we cannot say that he enunciates who thus expresses any thing by his voice whether he is interrogated by any one or not, but that he speaks from deliberate intention. Now of these enunciations one is simple, for instance something of something, or from something, but another is composed of these, as a certain sentence which is already a composite; simple enunciation, then, is voice significant about something being inherent, or non-inherent, according as times are divided.

## Chapter 6

Affirmation is the enunciation of something concerning something, but negation is the enunciation of something from something. Since, however, a man may enunciate what is inherent as though it were not, and what is not as though it were; that which is, as if it were, and that which is not, as if it were not, and in like manner about times external to the present; it is possible that whatever any one affirms may be denied, and that whatever any one denies may be affirmed, whence it is evident that to every affirmation there is an opposite negation, and to every negation an opposite affirmation. Let this be contradiction, affirmation and negation being opposites, but I call that opposition which is of the same respecting the same, not equivocally, and such other particulars of the kind as we have concluded against sophistical importunities.



## Chapter 7

Of things, since some are universal, but others singular, (and by universal I mean whatever may naturally be predicated of many things, but by singular, that which may not: as “man” is universal, but “Callias” singular,) it is necessary to enunciate that something is, or is not, inherent, at one time, in an universal, at another in a singular thing. Now, if any one universally enunciates of an universal, that something is or is not inherent, these enunciations will be contrary: I mean universally enunciates of an universal, as that “every man is white,” “no man is white.” When on the other hand he enunciates of universals, not universally, these are not contraries, though the things signified may sometimes be contrary; but I mean by not universally enunciating of universals, as that “man is white,” “man is not white:” for man being universal, is not employed as an universal in the enunciation, since the word “every” does not signify the universal, but (shows that the subject is) universally (taken). Now to predicate universally of what is universally predicated is not true, for no affirmation will be true in which the universal is predicated of an universal predicate, as for instance, “every man” is “every animal.” Wherefore I say affirmation is opposed to negation contradictorily, the affirmation which signifies the universal to that which is not universal, as “every man is white,” “not every man is white,” “no man is white,” “some man is white.” But contrarily is between universal affirmative and universal negative, as “every man is white,” “no man is white,” “every man is just,” “no man is just.” Wherefore it is impossible that these should at one and the same time be true, but the opposites to these may sometimes possibly be co-verified about the same thing, as that “not every man is white,” and “some man is white.” Of such contradictions then of universals, as are universally made, one must necessarily be true or false, and also such as are of singulars, as “Socrates is white,” “Socrates is not white;” but of such contradictions as are indeed of universals, yet are not universally made, one is not always true, but the other false. For at one and the same time we may truly say that “man is white,” and that “man is not white,” and “man is handsome,” and “man is not handsome,” for if he is deformed he is not handsome, and if any thing is *becoming* to be, it *is*, not. This however may at once appear absurd, because the assertion “man is not white,” seems at the same time to signify the same thing, as “no man is white,” but it neither necessarily signifies the same thing, nor at the same time.

Notwithstanding it is evident that of one affirmation there is one negation, for it is necessary that the negation should deny the same thing which the affirmation affirmed, and also from the same, (i. e.) either from some singular or some universal, universally or not universally; I say, for instance, that “Socrates is white,” “Socrates is not white.” If however there is something else from the same thing, or the same thing from something else, that (enunciation) will not be opposite, but different from it; to the one, “every man is white,” the other (is opposed) “not every man is white,” and to the one, “a certain man is white,” the other, “no man is white;” and to the one, “man is white,” the other, “man is not white.”

That there is then one affirmation contradictorily opposed to one negation, and what these are, has been shown, also that there are other contraries, and what they are, and that not every contradiction is true or false, and why and when it is true or false.

## Chapter 8

The affirmation and negation are one, which indicate one thing of one, either of an universal, being taken universally, or in like manner if it is not, as “every man is white,” “not every man is white,” “man is white,” “man is not white,” “no man is white,” “some man is white,” if that which is white signifies one thing. But if one name be given to two things, from which one thing does not arise, there is not one affirmation nor one negation; as if any one gave the name “garment” to a “horse,” and to “a man;” that “the garment is white,” this will not be one affirmation, nor one negation, since it in no respect differs from saying “man” and “horse” are “white,” and this is equivalent to “man is white,” and “horse is white.” If therefore these signify many things, and are many, it is evident that the first enunciation either signifies many things or nothing, for “some man is not a horse,” wherefore neither in these is it necessary that one should be a true, but the other a false contradiction.

## Chapter 9

In those things which are, and have been, the affirmation and negation must of necessity be true or false; in universals, as universals, always one true but the other false, and also in singulars, as we have shown; but in the case of universals not universally enunciated, there is no such necessity, and concerning these we have also spoken, but as to singulars and futures, this is not the case. For if every affirmation or negation be true or false, it is also necessary that every thing should exist or should not exist, for if one man says that a thing will be, but another denies the same, one of them must evidently of necessity speak truth, if every affirmation or negation be true or false, for both will not subsist in such things at one and the same time. Thus if it is true to say that “a thing is white,” or that “it is not white,” it must of necessity be “white” or not “white,” and if it is white or not white, it was true to affirm or to deny it: also if it *is not*, it is falsely said to be, and if it is falsely said to be, it is not; so that it is necessary that either the affirmation or the negation should be true or false. Indeed there is nothing which either is, or is generated fortuitously, nor casually, nor will be, or not be, but all things are from necessity, and not casually, for either he who affirms speaks truth, or he who denies, for in like manner it might either have been or not have been, for that which subsists casually neither does nor will subsist more in this way than in that. Moreover if a thing is now “white,” it was true to say before that it will be “white,” so that it was always true to say of any thing generated that it either is, or that it will be; but if it was always true to say that it is, or will be, it is impossible that this is not, nor should be; and whatever must of necessity be, it is impossible that it should not have been generated, and what it is impossible should not have been generated must of necessity have been generated; wherefore all things that will be, it is necessary should be generated, and hence there will be nothing casual nor fortuitous, for if it were fortuitous it would not be of necessity. Nor is it possible to say, that neither of them is true, as that it will neither be, nor will not be, for in the first place the affirmation being false, the negation will not be true, and this being false, it results that the affirmation is not true. And besides, if it were true to say that a thing is at the same time “white” and “great,” both must of necessity be, but if it shall be tomorrow, it must necessarily be tomorrow, and if it will neither be nor will not be tomorrow, it will not be a casual thing, for example, a naval engagement, for it would be requisite that the engagement should neither occur nor not occur.

These and similar absurdities then will happen, if of every affirmation and negation, whether in respect of universals enunciated universally, or of singulars, it is necessary that one of the opposites be true and the other false, but that nothing happens casually in those things which subsist, but that all are, and are generated of necessity; so that it will neither be necessary to deliberate nor to trouble ourselves, as if we shall do this thing, something definite will occur, but if we do not, it will not occur. For there is nothing to prevent a person for ten thousand years asserting that this will happen, and another person denying it, so that of necessity it will have been then true to assert either of them. And it makes no difference whether any persons have uttered a contradiction or not, for it is evident that the things are so, although the one should not have affirmed any thing, or the other have denied it, since it is not, because it has been affirmed or denied, that therefore a thing will or will not be, neither will it be more so for ten thousand years than for any time whatever. Hence if a thing so subsisted in every time that one of these is truly asserted of it, it was necessary that this should take place; and each thing generated, always so subsisted, as to have been generated from necessity, for when any one truly said that it will be, it was not possible not to have been generated, and of that which is generated, it was always true to say that it will be.

But if these things are impossible — (for we see that there is a beginning of future things, both from our deliberation and practice, and briefly in things which do not always energize, there is equally a power of being and of not being, in which both to be and not to be occurs, as well as to have been generated and not to have been generated; and, indeed, we have many things which evidently subsist in this manner, for example, it is possible for this garment to have been cut in pieces, and it may not be cut in pieces, but be worn out beforehand, so also it is possible that it may not be cut in pieces, for it would not have been worn out before, unless it had been possible that it might not be cut in pieces, and so also in respect of other productions, which are spoken of according to a power of this kind — ) then it is evident that all things neither are, nor are generated of necessity, but that some things subsist casually, and that their affirmation is not more true than their negation, and that there are others in which one of these subsists more frequently, and for the most part, yet so, that either might possibly have occurred, but the other not.

Wherefore, being, must of necessity be when it is, and non-being, not be, when it is not; but it is not necessary that every being should be, nor that non-being should not be, since it is not the same thing for every being to be from necessity,

when it is, and simply to be from necessity, and in like manner as to non-being. There is the same reasoning also in the case of contradiction; to be or not to be is necessary for every thing, also that it shall, or shall not be, yet it is not requisite to speak of each separately, but I say, for instance, that it is necessary for a naval action to occur or not occur tomorrow, yet it is not necessary that there should be a naval action tomorrow, nor that there should not be; it is necessary, however, that it should either be or not be. Wherefore, since assertions and things are similarly true, it is evident that things which so subsist, as that whatever have happened, the contraries also were possible, it is necessary that contradiction should subsist in the same manner, which happens to those things which are not always, or which not always, are not. For of these, one part of the contradiction must necessarily be true or false, not indeed this or that, but just as it may happen, and one must be the rather true, yet not already true nor false; so that it is evidently not necessary that of every affirmation and negation of opposites, one should be true, but the other false; for it does not happen in the same manner with things which are not, but which either may or may not be, as with things which are, but it happens as we have said.

## Chapter 10

Since affirmation signifies something of something, and this is either a noun, or anonymous, (i. e. indefinite,) but what is in affirmation must be one and of one thing, all affirmation and negation will be either from a noun and a verb, or from an indefinite noun and verb. (But what a noun is, and what the anonymous, has been shown before, for I do not reckon “not man” a noun, but an indefinite noun, for an indefinite noun signifies in a certain respect one thing, just as “is not well” is not a verb, but an indefinite verb.) Still without a verb there is neither an affirmation nor negation, for “is,” or “will be,” or “was,” or “is going to be,” and so forth, are verbs, from what has been already laid down, since in addition to something else they signify time. Hence the first affirmation and negation (will be), “man is,” “man is not,” afterwards “non-man is,” “non-man is not.” Again, “every man is,” “every man is not,” “every non-man is,” “every non-man is not,” and the same reasoning holds in times beyond (the present). But when “is,” is additionally predicated as the third thing, then the oppositions are enunciated doubly; I say for instance, “a man is just;” here the word “is,” I say, is placed as a third thing, whether noun or verb, in the affirmation, so that on this account, these will be four, of which two will subsist with respect to affirmation and negation, according to the order of consequence, as privations, but two will not. But I say that the word “is,” will be added to “just” or to “not just,” so that also negation is added, wherefore there will be four. We shall understand, however, what is said from the under-written examples: “A man is just,” the negation of this is, “a man is not just;” “he is not a just man,” the negative of this is, “he is not not a just man,” for here the word “is,” and “is not,” will be added to the “just” and the “not just,” wherefore these things, as we have shown in the Analytics, are thus arranged. The same thing will happen if the affirmation be of a noun taken universally, as for instance, “every man is just;” of this the negation is, “not every man is just,” “every man is not just,” “not every man is not just,” except that it does not similarly happen that those which are diametrically opposed are co-verified; sometimes, however, this does pen, these two therefore are opposed to each other. But the other two (are opposed) in respect to “non-man,” as to a certain added subject, as “non-man is just,” “non-man is not just,” “the non-just is not man,” “the not non-just is not man:” there are not, however, more oppositions than these, but these without those, will be by themselves, as using the noun, “non-man.” In those, however, wherein, “is,” is not adapted, — as in “he enjoys health,” and “he walks,” — here it produces the same when thus

placed, as if “is” were added; as “every man enjoys health,” “every man does not enjoy health,” “every non-man enjoys health,” “every non-man does not enjoy health.” For it must not be said, “not every man,” but the negation, “not,” must be added to “man;” for “every” does not signify universal, but that (the thing is taken) universally. This is however evident, from “a man enjoys health,” “a man does not enjoy health,” “non-man is well,” “non-man is not well,” these differ from those, in not being universally (taken). Hence “every,” or “no one,” signifies nothing else, than that affirmation or negation is of a noun universally (assumed); wherefore it is necessary to add other things of the same kind.

But because the contrary negation to this, “every animal is just,” is that which signifies that “no animal is just,” it is evident that these will never be either true at the same time, nor in respect to the same subject, but the opposites to these will sometimes be so, as “not every animal is just,” and “some animal is just.” But these follow; the one, “no man is just,” follows “every man is not just,” but the opposite, “some man is just,” follows “not every man is not just,” for it is necessary that some man should be just. In the case also of singulars, it is evident that if a man being questioned denies truly, he asserts also truly, as, “Is Socrates wise? No!” Socrates therefore is not a wise man. But in the case of universals, what is similarly asserted is not true, but the negation is true, as, “Is every man wise? No!” Every man therefore is not wise; for this is false, but this, “not every man then is wise,” is true, and this is opposite, but that is contrary.

Opposites, however, as to indefinite nouns and verbs, as “non-man” and “non-just,” may seem to be negations without a noun and verb, but they are not so, for the negation must always of necessity be either true or false, but he who says “non-man” does not speak more truly or falsely, but rather less, than he who says “man,” except something be added. Still the assertion, “every non-man is just”, does not signify the same as any one of those (propositions), nor the opposite to this, namely, “not every non-man is just;” but the assertion, “every one not just is not a man,” means the same with, “no one is just who is not a man.”

Nouns and verbs indeed, when transposed, have the same signification, as, “he is a white man,” “he is a man white,” for unless it be so, there will be many negations of the same thing, but it has been shown that there is one of one; of this, “he is a white man,” there is the negation “he is not a white man,” and of the other, “he is a man white,” (except this be the same with “he is a white man,”) the negation will either be “he is not, not a man white,” or “he is not a man white.” But the one is a negation of this, “he is not a man white,” and the



other of this, “he is a white man” (so that there will be two negations of one affirmation); wherefore it is evident that when a noun and verb are transposed, the same affirmation and negation result.

## Chapter 11

To affirm, and deny, one thing of many, or many of one, is not one affirmation nor one negation, except that is some one thing which is manifested from the many; I mean by one, not if one name be given to many things, nor if one thing result from them, as “man” is perhaps “animal,” and “biped,” and “mild,” yet one thing results from these; but from “white” and “man,” and “to walk,” one thing does not result, so that neither if a person affirm one certain thing of these is it one affirmation, but there is one articulate sound indeed, yet many affirmations, nor if he affirmed these things of one, (would there be one affirmation,) but in like manner, many. If, then, dialectic interrogation be the seeking of an answer, either of a proposition, or of either part of a contradiction, (but a proposition is a part of one contradiction,) there would not be one answer to these, for neither is there one interrogation, not even if it be true: we have, however, spoken of these in the Topics, at the same time it is evident that, What is it? is not a dialectic interrogation, for a choice should be given from the interrogation to enunciate this or that part of the contradiction; but the interrogator must besides define, whether this particular thing, or not this, be a man.

As, however, there are some things predicated as composites, so that there is one whole predicable, of those which are predicated separately, but others are not so, what is the difference? For in respect of “man,” we may truly and separately predicate “animal” and “biped,” and these as one thing; also “man” and “white,” and these as one thing; but not if he is “a shoemaker” and “a good man,” is he therefore also a good shoemaker. For if, because each of these is true, both, conjointly, should be of necessity true, many absurdities would follow, for “man” and “white” are truly predicated of a man, so that the whole together may be; again, if the thing “is white,” the whole conjointly “is white,” wherefore, it will be “a man white, white,” even to infinity; again, “a musician white walking,” and these frequently involved to infinity. Once more, if “Socrates” is “Socrates” and “man,” “Socrates” is also “Socrates man,” and if he is “man” and “biped,” he is also “man biped;” wherefore it is evident, if a man says conjunctions are simply produced, the result will be that he will utter many absurdities.

Let us now show how they are to be placed. Of things predicated, and of those of

which it happens to be predicated, whatever are accidentally enunciated, either in respect of the same, or the one of the other, these will not be one; as “man is white,” and “a musician;” but “whiteness” and “music” are not one thing, for both are accidents to the same thing. Neither if it be true to call what is white musical, yet at the same time will “musical” “white” be one thing, for what is “white” is “musical” per accidens, so that “white musical” will not be one thing, wherefore neither is a man said to be “a good shoemaker” singly, but also “a biped animal,” because these are not predicated of him per accidens. Moreover, neither are such things which are inherent in another (to be added), hence, neither is “whiteness” (to be predicated) repeatedly, nor is “a man” “a man animal,” nor (a man) “biped,” since both animal and biped are inherent in man; still it is true to assert it singly of some one, as that “a certain man is a man,” or that “a certain white man is a white man,” but this is not the case always. But when some opposition is in the adjunct which a contradiction follows, it is not true, but false, as to call a dead man a man, but when such is not inherent, it is true. Or when something (contradictory) is inherent, it is always not true; but when it is not inherent, it is not always true, as “Homer” is something, “a poet,” for instance, “is ” he therefore, or “is ” he not? for “is” is predicated of Homer accidentally, since “is ” is predicated of Homer because he is a poet, but not per se (or essentially). Wherefore, in whatever categories, contrariety is not inherent, if definitions are asserted instead of nouns, and are essentially predicated, and not accidentally, of these a particular thing may be truly and singly asserted; but non-being, because it is a matter of opinion, cannot truly be called a certain being, for the opinion of it is, not that it is, but that it is not.

## Chapter 12

These things then being determined, let us consider how the affirmations, and negations of the possible and impossible to be, subsist with reference to each other, also of the contingent and the non-contingent, and of the impossible and necessary, since this has some doubtful points. For if among the complex, those contradictions are mutually opposed, which are arranged according to the verb “to be,” and “not to be,” (as for instance the negation “to be a man,” is “not to be man,” not this, “to be not a man,” and the negation of “to be a white man” is “not to be a white man,” and not this “to be not a white man,” since if affirmation or negation be true of every thing, it will be true to say “that wood is not a white man,”) — if this be so, in those things to which the verb “to be” is not added, that which is asserted instead of the verb “to be,” will produce the same thing. For example, the negation of “a man walks,” will not be “non-man walks,” but, “a man does not walk,” for there is no difference in saying that “a man walks,” or that “a man is walking,” so that if this is every where the case, the negation of “it is possible to be,” will be “it is possible not to be,” and not “it is not possible to be.” But it appears that it is possible for the same thing both to be, and not to be, for every thing which may possibly be cut, or may possibly walk, may also possibly not be cut, and not walk, and the reason is that every thing which is thus possible, does not always energize, so that negation will also belong to it, for that which is capable of walking, may not walk, and the visible may not be seen. Still however it is impossible that opposite affirmations and negations should be true of the same thing, wherefore the negation of “it is possible to be,” is not “it is possible not to be.” Now it results from this that we either at the same time affirm and deny the same thing of the same, or that the affirmations and negations are not made according to the additions, “to be” or “not to be;” if therefore, that, be impossible, this, will be to be taken, wherefore the negation of “it is possible to be,” is “it is not possible to be,” (but not it is possible not to be). Now there is the same reasoning also about the being contingent, for the negation of this is, not to be contingent, and in like manner as to the rest, for example the necessary and impossible, since as in those it happens that, “to be,” and, “not to be,” are additions, but “whiteness” and “man” are subjects, so here “to be” and “not to be,” become as subjects, but “to be possible,” and “to be contingent,” are additions which determine the true and false in the (enunciations) “to be possible” and “to be not possible,” similarly as in those, “to be,” and “not to be.” But of “it is possible not to be,” the negation is

not, “it is not possible to be,” but “it is not possible not to be” and of “it is possible to be,” the negation is not, “it is possible not to be,” but, “it is not possible to be;” wherefore, “it is possible to be,” and, “it is possible not to be,” will appear to follow each other; for it is the same thing, “to be possible to be,” and “not to be,” since such things are not contradictories of each other, namely, “it is possible to be,” and, “it is possible not to be.” But “it is sible to be,” and “it is not possible to be,” are never true of the same thing at the same time, for they are opposed, neither at least are, “it is possible not to be,” and “it is not possible not to be,” ever true at the same time of the same thing. Likewise of, “it is necessary to be,” the negation is not, “it is necessary not to be,” but this, “it is not necessary to be,” and of, “it is necessary not to be,” (the negation) is this, “it is not necessary not to be.” Again, of, “it is impossible to be,” the negation is not “it is impossible not to be,” but “it is not impossible to be,” and of, “it is impossible not to be,” (the negation) is, “it is not impossible not to be.” In fact, universally, as we have said, “to be” and “not to be,” we must necessarily regard as subjects, but those things which produce affirmation and negation we must connect with “to be” and “not to be:” we ought also to consider these as opposite affirmations and negations; possible, impossible, contingent, non-contingent, impossible, not impossible, necessary, not necessary, true, not true.

## Chapter 13

The consequences are rightly placed thus: “it happens to be,” follows, “it is possible to be,” and this reciprocates with that; also, “it is not impossible to be” and “it is not necessary to be.” But, “it is not necessary not to be,” and, “it is not impossible not to be;” follow, “it is possible not to be,” and, “it may happen not to be;” and, “it is necessary not to be,” and, “it is impossible to be,” follow, “it is not possible to be,” and, “it does not happen to be;” but, “it is necessary to be,” and also, “it is impossible not to be,” follow, “it is not possible not to be,” and, “it is not contingent not to be:” what we say however may be seen from the following description:

1	3
It is possible to be	It is not possible to be
It may happen to be	It may not happen to be
It is not impossible to be	It is impossible to be
It is not necessary to be.	It is necessary not to be.
2	4
It is possible not to be	It is not possible not to be
It may happen not to be	It may happen not to be
It is not impossible not to be	It is impossible not to be
It is not necessary not to be.	It is necessary to be.

Therefore the impossible, and the not impossible, follow contradictorily the contingent, and the possible, and the non-contingent, and the not possible, and vice versâ; for the negation of the impossible, namely, “it is not impossible to be,” follows, “it is possible to be,” but affirmation follows negation, for, “it is impossible to be” follows “it is not possible to be,” since “it is impossible to be,” is affirmation, but, “it is not impossible to be,” is negation.

Let us next see how it is with necessary matter, now it is evident that it does not subsist thus, but contraries follow, and contradictories (are placed) separately, for, “it is not necessary to be,” is not the negation of “it is necessary not to be,”

since both, may possibly be true of the same thing, as that which necessarily, is not, need not of necessity, be. But the reason why the necessary follows not, in like manner, other propositions, is that the impossible being enunciated contrarily to the necessary, signifies the same thing; for what it is impossible should exist, must not of necessity *be*, but *not be*, and what is impossible should *not be*, this must of necessity *be*; so that if these similarly follow the possible and the not possible, these (do so) in a contrary mode, since the necessary and the impossible do not signify the same thing, but, as we have said, vice versâ. Or is it impossible that the contradictories of the necessary should be thus disposed? for, what, “is necessary to be” is “possible to be,” since if not, negation would follow, as it is necessary either to affirm or deny, so that, if it is not possible to be, it is impossible to be, wherefore it would be impossible for that to be, which necessarily is, which is absurd, but the enunciation, “it is not impossible to be” follows the other, “it is possible to be,” which again is followed by, “it is not necessary to be,” whence it happens that what necessarily exists does not necessarily exist, which is absurd. But again neither does, “it is necessary to be” follow “it is possible to be,” nor does the proposition, “it is necessary not to be,” for to that, both, may occur, but whichever of these is true, those will be no longer true, for at one and the same time, it is possible to be, and not to be, but if it is necessary either to be or not to be, both, will not be possible. It remains therefore, that “it is not necessary not to be,” follows “it is possible to be;” for this is also true in respect of what is necessary to be, since this becomes the contradiction of that proposition which follows, viz. “it is not possible to be;” as “it is impossible to be,” and “it is necessary not to be,” follow that, of which the negation is, “it is not necessary not to be.” Wherefore these contradictions follow according to the above-mentioned mode, and nothing absurd results, when they are thus disposed.

Still it may be doubted whether “it is possible to be,” follows “it is necessary to be,” for if it does not follow, the contradiction will be consequent, namely, “it is not possible to be,” and if a man should deny this to be a contradiction, it will be necessary to call, “it is possible not to be,” a contradiction, both which are false in respect of necessary matter. Nay, on the contrary, it appears to be possible that the same thing should “be cut” and “not be cut,” should “be” and “not be,” so that what necessarily “is,” may happen “not to be,” which is false. Nevertheless it is evident that not every thing which *can* “be,” and *can* “walk,” is capable also of the opposites, for in some cases this is not true. In the first place, in those things which are potent irrationally, as fire is calorific, and has irrational power; rational powers then are those of many things, and of the contraries; but not all

irrational powers, for, as we have said, fire cannot heat, and not heat, nor such other things as always energize. Yet even some irrational powers can at the same time receive opposites; but this has been stated by us, because not every power is susceptible of contraries, not even such as are predicated, according to the same species. Moreover, some powers are equivocal, for the possible is not predicated, simply; but one thing is (called so), because it is true, as being in an energy, as it is possible for a man to walk, because he walks, and in short, a thing is possible to be, because that is already in energy which is said to be possible; on the other hand, another thing (is said to be possible), because it may be in energy; as it is possible to walk, because a man may walk. Now *this* power exists in movable natures only, but *that* in immovable; but with respect to both, it is true to say, that it is not impossible to walk or to be, and that a man is now walking and energizing, and has the power to walk, hence it is not true to predicate that which is thus possible, in respect of necessary matter, simply, but the other is true. Wherefore since the universal follows the particular, to be able to be, but not all ability, follows that which is of necessity, and indeed the necessary and the non-necessary may perhaps be the principle of the existence, or of the non-existence of all things, and we should consider other things as consequent upon these. Hence from what we have stated, it is clear that whatever exists of necessity, is in energy, so that if eternal natures are prior in existence, energy also is prior to power, and some things, as the first substances, are energies without power, but others with power, namely, those which are prior by nature, but posterior in time: lastly, there are some which are never energies, but are capacities only.



## Chapter 14

But whether is affirmation contrary to negation, or affirmation to affirmation? and is the sentence which says, “every man is just,” contrary to the one, “no man is just,” or the sentence “every man is just,” to, “every man is unjust,” as “Callias is just,” “Callias is not just,” “Callias is unjust,” — which of these are contraries? For if things in the voice, follow those which exist in the intellect, but there the opinion of a contrary is contrary, as for instance, that “every man is just,” is contrary to, “every man is unjust,” it is necessary that affirmations also in the voice should subsist in the same manner, but if there, the opinion of a contrary be not contrary, neither will affirmation be contrary to affirmation, but the before-named negation. Hence it must be considered what false opinion is contrary to the true opinion, whether that of negation or that which opines it to be the contrary. I mean in this way, there is a certain true opinion of good that it is good, but another false opinion that it is not good, lastly, a third, that it is evil, which of these therefore is contrary to the true opinion? and if there is one, according to which is it contrary? If then a man should fancy contrary opinions to be defined by this, that they are of contraries, it would be erroneous, for of good that it is good, and of evil that it is evil, there is perhaps the same opinion, and it is true whether there be many (opinions) or one: but these are contraries, yet not from their being of contraries are they contraries, but rather from their subsisting in a contrary manner. If then there is an opinion of good that it is good, but another that it is not good, and there is also something else, which is neither inherent, nor can be, in good, we cannot admit any contrary of the rest, neither such opinions as imagine the non-inherent to be inherent, nor the inherent to be non-inherent, (for both are infinite, both as many as imagine the non-inherent to be inherent, and the inherent to be non-inherent); but in those things in which there is deception, (therein we admit contraries,) and these are from which there are generations; generations however are from opposites, wherefore deceptions also. If then good is good and not evil, and the one is essential, but the other accidental — (for it is accidental to it not to be evil) and of every thing the opinion is more true and false which is essential, if the true (be assumed) — the opinion that good is not good, is false in respect of that which is essentially inherent, but the opinion that it is evil is false of that which is from accident, so that the opinion of the negation of good would be more false than the opinion of the contrary. He is however especially deceived about every thing who holds a contrary opinion, for contraries belong to things which are the most

diverse about the same thing. If then one of these is contrary, but the opinion of the negation is more contrary, it is evident that this itself will be (truly) contrary; but the opinion that the good is evil is complex, for it is necessary perhaps, that the same man should suppose (good) not good. Once more, if it is requisite for the like to occur in other things, it may seem to have been well said in this case also; for the (opposition) of negation is either every where or no where; but whatever things have no contraries, of these, the opposite to the true opinion is false, as he is mistaken who fancies “a man” “not a man,” if then these (negations) are contrary the other (opinions) also, of negation, are. Besides, it is the same as to the opinion of good that it is good, and of what is not good, that it is not good; and also the opinion of good, that it is not good, and of what is not good that it is good; to the opinion then of the not good that it is not good, which is true, what will be the contrary? Certainly not that which says that it is evil, since it may at one and the same time be true; but truth is never contrary to truth, for whatever is not good is evil, so that it will happen that these opinions, shall be at one and the same time, true. Nor again will that (opinion) that it is not evil, be (the contrary), for that is also true, and these may exist at the same time, wherefore (the opinion) of what is not good, that it is good, remains as a contrary to the opinion of what is not good, that it is not good, and this will be false, so that the opinion of good that it is not good, will be the contrary to that of what is good, that it is good. That there will be no difference though we should propose universal affirmation is evident, for universal negation will be the contrary; as for instance, to the opinion which supposes every thing good to be good, that nothing of good things is good (will be the contrary opinion), for the opinion of good that it is good, if good be universal, is the same with that which opines that whatever is good is good, and this differs in no respect from the opinion that every thing which is good is good, and the like takes place as to that which is not good. So that if this be the case in opinion, and affirmations and negations in the voice are symbols of (conceptions) in the soul, it is clear that the universal negation which is about the same thing, is contrary to affirmation. For instance, to “every thing good is good,” or that “every man is good,” (the negation is contrary,) that “nothing or no man is good;” but this, that “not every thing, or not every man,” (is good, is opposed) contradictorily. It is however evident, that true opinion can neither possibly be contrary to true opinion, nor true negation (to true negation), for those are contraries which subsist about opposites; but about the same things the same may be verified, but contraries cannot possibly be inherent in the same thing, at one and the same time.



*Translated by A. J. Jenkinson*

This work on deductive reasoning specifically focuses on the syllogism. Aristotle's *Prior Analytics* is the first text in history where Logic is scientifically investigated. The term "syllogism", as used by Aristotle, does not carry the same narrow connotation as now. Aristotle defines this term in a way that would apply to a wide range of valid arguments. Some scholars prefer to use the word "deduction" instead as the meaning given by Aristotle to the Greek word συλλογισμός "sullogismos". At present, "syllogism" is used exclusively as the method used to reach a conclusion, resembling the "syllogisms" of traditional logic texts: two premises followed by a conclusion each of which is a categorical sentence containing all together three terms, two extremes which appear in the conclusion and one middle term which appears in both premises but not in the conclusion.

In this work, Aristotle investigates the science of deduction and the *Posterior Analytics* is the second demonstratively practical part. *Prior Analytics* gives an account of deductions in general narrowed down to three basic syllogisms while *Posterior Analytics* deals with demonstration.

## CONTENTS

[Book I](#)

[Book II](#)

*Sense and Sensibilia* (436a)



*Translated by J. I. Beare*

# 1

HAVING now definitely considered the soul, by itself, and its several faculties, we must next make a survey of animals and all living things, in order to ascertain what functions are peculiar, and what functions are common, to them. What has been already determined respecting the soul [sc. by itself] must be assumed throughout. The remaining parts [sc. the attributes of soul and body conjointly] of our subject must be now dealt with, and we may begin with those that come first.

The most important attributes of animals, whether common to all or peculiar to some, are, manifestly, attributes of soul and body in conjunction, *e.g.* sensation, memory, passion, appetite and desire in general, and, in addition pleasure and pain. For these may, in fact, be said to belong to all animals. But there are, besides these, certain other attributes, of which some are common to all living things, while others are peculiar to certain species of animals. The most important of these may be summed up in four pairs, *viz.* waking and sleeping, youth and old age, inhalation and exhalation, life and death. We must endeavour to arrive at a scientific conception of these, determining their respective natures, and the causes of their occurrence.

But it behoves the Physical Philosopher to obtain also a clear view of the first principles of health and disease, inasmuch as neither health nor disease can exist in lifeless things. Indeed we may say of most physical inquirers, and of those physicians who study their art philosophically, that while the former complete their works with a disquisition on medicine, the latter usually base their medical theories on principles derived from Physics.

That all the attributes above enumerated belong to soul and body in conjunction, is obvious; for they all either imply sensation as a concomitant, or have it as their medium. Some are either affections or states of sensation, others, means of defending and safeguarding it, while others, again, involve its destruction or negation. Now it is clear, alike by reasoning and observation, that sensation is generated in the soul through the medium of the body.

We have already, in our treatise On the Soul, explained the nature of sensation and the act of perceiving by sense, and the reason why this affection belongs to animals. Sensation must, indeed, be attributed to all animals as such, for by its

presence or absence we distinguish essentially between what is and what is not an animal.

But coming now to the special senses severally, we may say that touch and taste necessarily appertain to all animals, touch, for the reason given in *On the Soul*, and taste, because of nutrition. It is by taste that one distinguishes in food the pleasant from the unpleasant, so as to flee from the latter and pursue the former: and savour in general is an affection of nutrient matter.

The senses which operate through external media, *viz.* smelling, hearing, seeing, are found in all animals which possess the faculty of locomotion. To all that possess them they are a means of preservation; their final cause being that such creatures may, guided by antecedent perception, both pursue their food, and shun things that are bad or destructive. But in animals which have also intelligence they serve for the attainment of a higher perfection. They bring in tidings of many distinctive qualities of things, from which the knowledge of truth, speculative and practical, is generated in the soul.

Of the two last mentioned, seeing, regarded as a supply for the primary wants of life, and in its direct effects, is the superior sense; but for developing intelligence, and in its indirect consequences, hearing takes the precedence. The faculty of seeing, thanks to the fact that all bodies are coloured, brings tidings of multitudes of distinctive qualities of all sorts; whence it is through this sense especially that we perceive the common sensibles, *viz.* figure, magnitude, motion, number: while hearing announces only the distinctive qualities of sound, and, to some few animals, those also of voice. indirectly, however, it is hearing that contributes most to the growth of intelligence. For rational discourse is a cause of instruction in virtue of its being audible, which it is, not directly, but indirectly; since it is composed of words, and each word is a thought-symbol. Accordingly, of persons destitute from birth of either sense, the blind are more intelligent than the deaf and dumb.

## 2

Of the distinctive potency of each of the faculties of sense enough has been said already.

But as to the nature of the sensory organs, or parts of the body in which each of the senses is naturally implanted, inquirers now usually take as their guide the fundamental elements of bodies. Not, however, finding it easy to coordinate five senses with four elements, they are at a loss respecting the fifth sense. But they hold the organ of sight to consist of fire, being prompted to this view by a certain sensory affection of whose true cause they are ignorant. This is that, when the eye is pressed or moved, fire appears to flash from it. This naturally takes place in darkness, or when the eyelids are closed, for then, too, darkness is produced.

This theory, however, solves one question only to raise another; for, unless on the hypothesis that a person who is in his full senses can see an object of vision without being aware of it, the eye must on this theory see itself. But then why does the above affection not occur also when the eye is at rest? The true explanation of this affection, which will contain the answer to our question, and account for the current notion that the eye consists of fire, must be determined in the following way: Things which are smooth have the natural property of shining in darkness, without, however, producing light. Now, the part of the eye called 'the black', *i.e.* its central part, is manifestly smooth. The phenomenon of the flash occurs only when the eye is moved, because only then could it possibly occur that the same one object should become as it were two. The rapidity of the movement has the effect of making that which sees and that which is seen seem different from one another. Hence the phenomenon does not occur unless the motion is rapid and takes place in darkness. For it is in the dark that that which is smooth, *e.g.* the heads of certain fishes, and the sepia of the cuttle-fish, naturally shines, and, when the movement of the eye is slow, it is impossible that that which sees and that which is seen should appear to be simultaneously two and one. But, in fact, the eye sees itself in the above phenomenon merely as it does so in ordinary optical reflexion.

If the visual organ proper really were fire, which is the doctrine of Empedocles, a doctrine taught also in the *Timaeus*, and if vision were the result of light issuing from the eye as from a lantern, why should the eye not have had the power of seeing even in the dark? It is totally idle to say, as the *Timaeus* does,

that the visual ray coming forth in the darkness is quenched. What is the meaning of this ‘quenching’ of light? That which, like a fire of coals or an ordinary flame, is hot and dry is, indeed, quenched by the moist or cold; but heat and dryness are evidently not attributes of light. Or if they are attributes of it, but belong to it in a degree so slight as to be imperceptible to us, we should have expected that in the daytime the light of the sun should be quenched when rain falls, and that darkness should prevail in frosty weather. Flame, for example, and ignited bodies are subject to such extinction, but experience shows that nothing of this sort happens to the sunlight.

Empedocles at times seems to hold that vision is to be explained as above stated by light issuing forth from the eye, *e.g.* in the following passage: —

As when one who purposes going abroad prepares a lantern,

A gleam of fire blazing through the stormy night,

Adjusting thereto, to screen it from all sorts of winds,

transparent sides,

Which scatter the breath of the winds as they blow,

While, out through them leaping, the fire,

*i.e.* all the more subtile part of this,

Shines along his threshold old incessant beams:

So [Divine love] embedded the round “lens”, [viz.]

the primaeval fire fenced within the membranes,

In [its own] delicate tissues;

And these fended off the deep surrounding flood,

While leaping forth the fire, *i.e.* all its more subtile part-.



Sometimes he accounts for vision thus, but at other times he explains it by emanations from the visible objects.

Democritus, on the other hand, is right in his opinion that the eye is of water; not, however, when he goes on to explain seeing as mere mirroring. The mirroring that takes place in an eye is due to the fact that the eye is smooth, and it really has its seat not in the eye which is seen, but in that which sees. For the case is merely one of reflexion. But it would seem that even in his time there was no scientific knowledge of the general subject of the formation of images and the phenomena of reflexion. It is strange too, that it never occurred to him to ask why, if his theory be true, the eye alone sees, while none of the other things in which images are reflected do so.

True, then, the visual organ proper is composed of water, yet vision appertains to it not because it is so composed, but because it is translucent — a property common alike to water and to air. But water is more easily confined and more easily condensed than air; wherefore it is that the pupil, *i.e.* the eye proper, consists of water. That it does so is proved by facts of actual experience. The substance which flows from eyes when decomposing is seen to be water, and this in undeveloped embryos is remarkably cold and glistening. In sanguineous animals the white of the eye is fat and oily, in order that the moisture of the eye may be proof against freezing. Wherefore the eye is of all parts of the body the least sensitive to cold: no one ever feels cold in the part sheltered by the eyelids. The eyes of bloodless animals are covered with a hard scale which gives them similar protection.

It is, to state the matter generally, an irrational notion that the eye should see in virtue of something issuing from it; that the visual ray should extend itself all the way to the stars, or else go out merely to a certain point, and there coalesce, as some say, with rays which proceed from the object. It would be better to suppose this coalescence to take place in the fundment of the eye itself. But even this would be mere trifling. For what is meant by the ‘coalescence’ of light with light? Or how is it possible? Coalescence does not occur between any two things taken at random. And how could the light within the eye coalesce with that outside it? For the environing membrane comes between them.

That without light vision is impossible has been stated elsewhere; but, whether

the medium between the eye and its objects is air or light, vision is caused by a process through this medium.

Accordingly, that the inner part of the eye consists of water is easily intelligible, water being translucent.

Now, as vision outwardly is impossible without [extra-organic] light, so also it is impossible inwardly [without light within the organ]. There must, therefore, be some translucent medium within the eye, and, as this is not air, it must be water. The soul or its perceptive part is not situated at the external surface of the eye, but obviously somewhere within: whence the necessity of the interior of the eye being translucent, *i.e.* capable of admitting light. And that it is so is plain from actual occurrences. It is matter of experience that soldiers wounded in battle by a sword slash on the temple, so inflicted as to sever the passages of [*i.e.* inward from] the eye, feel a sudden onset of darkness, as if a lamp had gone out; because what is called the pupil, *i.e.* the translucent, which is a sort of inner lamp, is then cut off [from its connexion with the soul].

Hence, if the facts be at all as here stated, it is clear that — if one should explain the nature of the sensory organs in this way, *i.e.* by correlating each of them with one of the four elements — we must conceive that the part of the eye immediately concerned in vision consists of water, that the part immediately concerned in the perception of sound consists of air, and that the sense of smell consists of fire. (I say the sense of smell, not the organ.) For the organ of smell is only potentially that which the sense of smell, as realized, is actually; since the object of sense is what causes the actualization of each sense, so that it (the sense) must (at the instant of actualization) be (actually) that which before (the moment of actualization) it was potentially. Now, odour is a smoke-like evaporation, and smoke-like evaporation arises from fire. This also helps us to understand why the olfactory organ has its proper seat in the environment of the brain, for cold matter is potentially hot. In the same way must the genesis of the eye be explained. Its structure is an offshoot from the brain, because the latter is the moistest and coldest of all the bodily parts.

The organ of touch proper consists of earth, and the faculty of taste is a particular form of touch. This explains why the sensory organ of both touch and taste is closely related to the heart. For the heart as being the hottest of all the bodily parts, is the counterpoise of the brain.

This then is the way in which the characteristics of the bodily organs of sense must be determined.

### 3

Of the sensibles corresponding to each sensory organ, *viz.* colour, sound, odour, savour, touch, we have treated in *On the Soul* in general terms, having there determined what their function is, and what is implied in their becoming actualized in relation to their respective organs. We must next consider what account we are to give of any one of them; what, for example, we should say colour is, or sound, or odour, or savour; and so also respecting [the object of] touch. We begin with colour.

Now, each of them may be spoken of from two points of view, *i.e.* either as actual or as potential. We have in *On the Soul* explained in what sense the colour, or sound, regarded as actualized [for sensation] is the same as, and in what sense it is different from, the correlative sensation, the actual seeing or hearing. The point of our present discussion is, therefore, to determine what each sensible object must be in itself, in order to be perceived as it is in actual consciousness.

We have already in *On the Soul* stated of Light that it is the colour of the Translucent, [being so related to it] incidentally; for whenever a fiery element is in a translucent medium presence there is Light; while the privation of it is Darkness. But the 'Translucent', as we call it, is not something peculiar to air, or water, or any other of the bodies usually called translucent, but is a common 'nature' and power, capable of no separate existence of its own, but residing in these, and subsisting likewise in all other bodies in a greater or less degree. As the bodies in which it subsists must have some extreme bounding surface, so too must this. Here, then, we may say that Light is a 'nature' inhering in the Translucent when the latter is without determinate boundary. But it is manifest that, when the Translucent is in determinate bodies, its bounding extreme must be something real; and that colour is just this 'something' we are plainly taught by facts-colour being actually either at the external limit, or being itself that limit, in bodies. Hence it was that the Pythagoreans named the superficies of a body its 'hue', for 'hue', indeed, lies at the limit of the body; but the limit of the body; is not a real thing; rather we must suppose that the same natural substance which, externally, is the vehicle of colour exists [as such a possible vehicle] also in the interior of the body.

Air and water, too [i.e. as well as determinately bounded bodies] are seen to

possess colour; for their brightness is of the nature of colour. But the colour which air or sea presents, since the body in which it resides is not determinately bounded, is not the same when one approaches and views it close by as it is when one regards it from a distance; whereas in determinate bodies the colour presented is definitely fixed, unless, indeed, when the atmospheric environment causes it to change. Hence it is clear that that in them which is susceptible of colour is in both cases the same. It is therefore the Translucent, according to the degree to which it subsists in bodies (and it does so in all more or less), that causes them to partake of colour. But since the colour is at the extremity of the body, it must be at the extremity of the Translucent in the body. Whence it follows that we may define colour as the limit of the Translucent in determinately bounded body. For whether we consider the special class of bodies called translucent, as water and such others, or determinate bodies, which appear to possess a fixed colour of their own, it is at the exterior bounding surface that all alike exhibit their colour.

Now, that which when present in air produces light may be present also in the Translucent which pervades determinate bodies; or again, it may not be present, but there may be a privation of it. Accordingly, as in the case of air the one condition is light, the other darkness, in the same way the colours White and Black are generated in determinate bodies.

We must now treat of the other colours, reviewing the several hypotheses invented to explain their genesis.

(1) It is conceivable that the White and the Black should be juxtaposed in quantities so minute that [a particle of] either separately would be invisible, though the joint product [of two particles, a black and a white] would be visible; and that they should thus have the other colours for resultants. Their product could, at all events, appear neither white nor black; and, as it must have some colour, and can have neither of these, this colour must be of a mixed character — in fact, a species of colour different from either. Such, then, is a possible way of conceiving the existence of a plurality of colours besides the White and Black; and we may suppose that [of this ‘plurality’] many are the result of a [numerical] ratio; for the blacks and whites may be juxtaposed in the ratio of 3 to 2 or of 3 to 4, or in ratios expressible by other numbers; while some may be juxtaposed according to no numerically expressible ratio, but according to some relation of excess or defect in which the blacks and whites involved would be incommensurable quantities; and, accordingly, we may regard all these colours

[viz. all those based on numerical ratios] as analogous to the sounds that enter into music, and suppose that those involving simple numerical ratios, like the concords in music, may be those generally regarded as most agreeable; as, for example, purple, crimson, and some few such colours, their fewness being due to the same causes which render the concords few. The other compound colours may be those which are not based on numbers. Or it may be that, while all colours whatever [except black and white] are based on numbers, some are regular in this respect, others irregular; and that the latter [though now supposed to be all based on numbers], whenever they are not pure, owe this character to a corresponding impurity in [the arrangement of] their numerical ratios. This then is one conceivable hypothesis to explain the genesis of intermediate colours.

(2) Another is that the Black and White appear the one through the medium of the other, giving an effect like that sometimes produced by painters overlaying a less vivid upon a more vivid colour, as when they desire to represent an object appearing under water or enveloped in a haze, and like that produced by the sun, which in itself appears white, but takes a crimson hue when beheld through a fog or a cloud of smoke. On this hypothesis, too, a variety of colours may be conceived to arise in the same way as that already described; for between those at the surface and those underneath a definite ratio might sometimes exist; in other cases they might stand in no determinate ratio. To [introduce a theory of colour which would set all these hypotheses aside, and] say with the ancients that colours are emanations, and that the visibility of objects is due to such a cause, is absurd. For they must, in any case, explain sense-perception through Touch; so that it were better to say at once that visual perception is due to a process set up by the perceived object in the medium between this object and the sensory organ; due, that is, to contact [with the medium affected,] not to emanations.

If we accept the hypothesis of juxtaposition, we must assume not only invisible magnitude, but also imperceptible time, in order that the succession in the arrival of the stimulatory movements may be unperceived, and that the compound colour seen may appear to be one, owing to its successive parts seeming to present themselves at once. On the hypothesis of superposition, however, no such assumption is needful: the stimulatory process produced in the medium by the upper colour, when this is itself unaffected, will be different in kind from that produced by it when affected by the underlying colour. Hence it presents itself as a different colour, *i.e.* as one which is neither white nor black. So that, if it is impossible to suppose any magnitude to be invisible, and we must assume that

there is some distance from which every magnitude is visible, this superposition theory, too [i.e. as well as No. 3 *infra*], might pass as a real theory of colour-mixture. Indeed, in the previous case also there is no reason why, to persons at a distance from the juxtaposed blacks and whites, some one colour should not appear to present itself as a blend of both. [But it would not be so on a nearer view], for it will be shown, in a discussion to be undertaken later on, that there is no magnitude absolutely invisible.

(3) There is a mixture of bodies, however, not merely such as some suppose, *i.e.* by juxtaposition of their minimal parts, which, owing to [the weakness of our] sense, are imperceptible by us, but a mixture by which they [i.e. the ‘matter’ of which they consist] are wholly blent together by interpenetration, as we have described it in the treatise on Mixture, where we dealt with this subject generally in its most comprehensive aspect. For, on the supposition we are criticizing, the only totals capable of being mixed are those which are divisible into minimal parts, [e.g. genera into individuals] as men, horses, or the [various kinds of] seeds. For of mankind as a whole the individual man is such a least part; of horses [as an aggregate] the individual horse. Hence by the juxtaposition of these we obtain a mixed total, consisting [like a troop of cavalry] of both together; but we do not say that by such a process any individual man has been mixed with any individual horse. Not in this way, but by complete interpenetration [of their matter], must we conceive those things to be mixed which are not divisible into minima; and it is in the case of these that natural mixture exhibits itself in its most perfect form. We have explained already in our discourse ‘On Mixture’ how such mixture is possible. This being the true nature of mixture, it is plain that when bodies are mixed their colours also are necessarily mixed at the same time; and [it is no less plain] that this is the real cause determining the existence of a plurality of colours — not superposition or juxtaposition. For when bodies are thus mixed, their resultant colour presents itself as one and the same at all distances alike; not varying as it is seen nearer or farther away.

Colours will thus, too [as well as on the former hypotheses], be many in number on account of the fact that the ingredients may be combined with one another in a multitude of ratios; some will be based on determinate numerical ratios, while others again will have as their basis a relation of quantitative excess or defect not expressible in integers. And all else that was said in reference to the colours, considered as juxtaposed or superposed, may be said of them likewise when regarded as mixed in the way just described.

Why colours, as well as savours and sounds, consist of species determinate [in themselves] and not infinite [in number] is a question which we shall discuss hereafter.



## 4

We have now explained what colour is, and the reason why there are many colours; while before, in our work *On the Soul*, we explained the nature of sound and voice. We have next to speak of Odour and Savour, both of which are almost the same physical affection, although they each have their being in different things. Savours, as a class, display their nature more clearly to us than Odours, the cause of which is that the olfactory sense of man is inferior in acuteness to that of the lower animals, and is, when compared with our other senses, the least perfect of Man's sense of Touch, on the contrary, excels that of all other animals in fineness, and Taste is a modification of Touch.

Now the natural substance water per se tends to be tasteless. But [since without water tasting is impossible] either (a) we must suppose that water contains in itself [uniformly diffused through it] the various kinds of savour, already formed, though in amounts so small as to be imperceptible, which is the doctrine of Empedocles; or (b) the water must be a sort of matter, qualified, as it were, to produce germs of savours of all kinds, so that all kinds of savour are generated from the water, though different kinds from its different parts, or else (c) the water is in itself quite undifferentiated in respect of savour [whether developed or undeveloped], but some agent, such for example as one might conceive Heat or the Sun to be, is the efficient cause of savour.

(a) Of these three hypotheses, the falsity of that held by Empedocles is only too evident. For we see that when pericarpal fruits are plucked [from the tree] and exposed in the sun, or subjected to the action of fire, their sapid juices are changed by the heat, which shows that their qualities are not due to their drawing anything from the water in the ground, but to a change which they undergo within the pericarp itself; and we see, moreover, that these juices, when extracted and allowed to lie, instead of sweet become by lapse of time harsh or bitter, or acquire savours of any and every sort; and that, again, by the process of boiling or fermentation they are made to assume almost all kinds of new savours.

(b) It is likewise impossible that water should be a material qualified to generate all kinds of Savour germs [so that different savours should arise out of different parts of the water]; for we see different kinds of taste generated from the same water, having it as their nutriment.

(c) It remains, therefore, to suppose that the water is changed by passively receiving some affection from an external agent. Now, it is manifest that water does not contract the quality of sapidity from the agency of Heat alone. For water is of all liquids the thinnest, thinner even than oil itself, though oil, owing to its viscosity, is more ductile than water, the latter being uncohesive in its particles; whence water is more difficult than oil to hold in the hand without spilling. But since perfectly pure water does not, when subjected to the action of Heat, show any tendency to acquire consistency, we must infer that some other agency than heat is the cause of sapidity. For all savours [i.e. sapid liquors] exhibit a comparative consistency. Heat is, however, a coagent in the matter.

Now the sapid juices found in pericarpal fruits evidently exist also in the earth. Hence many of the old natural philosophers assert that water has qualities like those of the earth through which it flows, a fact especially manifest in the case of saline springs, for salt is a form of earth. Hence also when liquids are filtered through ashes, a bitter substance, the taste they yield is bitter. There are many wells, too, of which some are bitter, others acid, while others exhibit other tastes of all kinds.

As was to be anticipated, therefore, it is in the vegetable kingdom that tastes occur in richest variety. For, like all things else, the Moist, by nature's law, is affected only by its contrary; and this contrary is the Dry. Thus we see why the Moist is affected by Fire, which as a natural substance, is dry. Heat is, however, the essential property of Fire, as Dryness is of Earth, according to what has been said in our treatise on the elements. Fire and Earth, therefore, taken absolutely as such, have no natural power to affect, or be affected by, one another; nor have any other pair of substances. Any two things can affect, or be affected by, one another only so far as contrariety to the other resides in either of them.

As, therefore, persons washing Colours or Savours in a liquid cause the water in which they wash to acquire such a quality [as that of the colour or savour], so nature, too, by washing the Dry and Earthy in the Moist, and by filtering the latter, that is, moving it on by the agency of heat through the dry and earthy, imparts to it a certain quality. This affection, wrought by the aforesaid Dry in the Moist, capable of transforming the sense of Taste from potentiality to actuality, is Savour. Savour brings into actual exercise the perceptive faculty which pre-existed only in potency. The activity of sense-perception in general is analogous, not to the process of acquiring knowledge, but to that of exercising knowledge already acquired.

That Savours, either as a quality or as the privation of a quality, belong not to every form of the Dry but to the Nutrient, we shall see by considering that neither the Dry without the Moist, nor the Moist without the Dry, is nutrient. For no single element, but only composite substance, constitutes nutriment for animals. Now, among the perceptible elements of the food which animals assimilate, the tangible are the efficient causes of growth and decay; it is qua hot or cold that the food assimilated causes these; for the heat or cold is the direct cause of growth or decay. It is qua gustable, however, that the assimilated food supplies nutrition. For all organisms are nourished by the Sweet [i.e. the 'gustable' proper], either by itself or in combination with other savours. Of this we must speak with more precise detail in our work on Generation: for the present we need touch upon it only so far as our subject here requires. Heat causes growth, and fits the food-stuff for alimentation; it attracts [into the organic system] that which is light [viz. the sweet], while the salt and bitter it rejects because of their heaviness. In fact, whatever effects external heat produces in external bodies, the same are produced by their internal heat in animal and vegetable organisms. Hence it is [i.e. by the agency of heat as described] that nourishment is effected by the sweet. The other savours are introduced into and blended in food [naturally] on a principle analogous to that on which the saline or the acid is used artificially, *i.e.* for seasoning. These latter are used because they counteract the tendency of the sweet to be too nutrient, and to float on the stomach.

As the intermediate colours arise from the mixture of white and black, so the intermediate savours arise from the Sweet and Bitter; and these savours, too, severally involve either a definite ratio, or else an indefinite relation of degree, between their components, either having certain integral numbers at the basis of their mixture, and, consequently, of their stimulative effect, or else being mixed in proportions not arithmetically expressible. The tastes which give pleasure in their combination are those which have their components joined in a definite ratio.

The sweet taste alone is Rich, [therefore the latter may be regarded as a variety of the former], while [so far as both imply privation of the Sweet] the Saline is fairly identical with the Bitter. Between the extremes of sweet and bitter come the Harsh, the Pungent, the Astringent, and the Acid. Savours and Colours, it will be observed, contain respectively about the same number of species. For there are seven species of each, if, as is reasonable, we regard Dun [or Grey] as a variety of Black (for the alternative is that Yellow should be classed with White,

as Rich with Sweet); while [the irreducible colours, viz.] Crimson, Violet, leek-Green, and deep Blue, come between White and Black, and from these all others are derived by mixture.

Again, as Black is a privation of White in the Translucent, so Saline or Bitter is a privation of Sweet in the Nutrient Moist. This explains why the ash of all burnt things is bitter; for the potable [sc. the sweet] moisture has been exuded from them.

Democritus and most of the natural philosophers who treat of sense-perception proceed quite irrationally, for they represent all objects of sense as objects of Touch. Yet, if this is really so, it clearly follows that each of the other senses is a mode of Touch; but one can see at a glance that this is impossible.

Again, they treat the percepts common to all senses as proper to one. For [the qualities by which they explain taste viz.] Magnitude and Figure, Roughness and Smoothness, and, moreover, the Sharpness and Bluntness found in solid bodies, are percepts common to all the senses, or if not to all, at least to Sight and Touch. This explains why it is that the senses are liable to err regarding them, while no such error arises respecting their proper sensibles; *e.g.* the sense of Seeing is not deceived as to Colour, nor is that of Hearing as to Sound.

On the other hand, they reduce the proper to common sensibles, as Democritus does with White and Black; for he asserts that the latter is [a mode of the] rough, and the former [a mode of the] smooth, while he reduces Savours to the atomic figures. Yet surely no one sense, or, if any, the sense of Sight rather than any other, can discern the common sensibles. But if we suppose that the sense of Taste is better able to do so, then — since to discern the smallest objects in each kind is what marks the acutest sense—Taste should have been the sense which best perceived the common sensibles generally, and showed the most perfect power of discerning figures in general.

Again, all the sensibles involve contrariety; *e.g.* in Colour White is contrary to Black, and in Savours Bitter is contrary to Sweet; but no one figure is reckoned as contrary to any other figure. Else, to which of the possible polygonal figures [to which Democritus reduces Bitter] is the spherical figure [to which he reduces Sweet] contrary?

Again, since figures are infinite in number, savours also should be infinite; [the

possible rejoinder—'that they are so, only that some are not perceived' — cannot be sustained] for why should one savour be perceived, and another not?

This completes our discussion of the object of Taste, *i.e.* Savour; for the other affections of Savours are examined in their proper place in connection with the natural history of Plants.

## 5

Our conception of the nature of Odours must be analogous to that of Savours; inasmuch as the Sapid Dry effects in air and water alike, but in a different province of sense, precisely what the Dry effects in the Moist of water only. We customarily predicate Translucency of both air and water in common; but it is not qua translucent that either is a vehicle of odour, but qua possessed of a power of washing or rinsing [and so imbibing] the Sapid Dryness.

For the object of Smell exists not in air only: it also exists in water. This is proved by the case of fishes and testacea, which are seen to possess the faculty of smell, although water contains no air (for whenever air is generated within water it rises to the surface), and these creatures do not respire. Hence, if one were to assume that air and water are both moist, it would follow that Odour is the natural substance consisting of the Sapid Dry diffused in the Moist, and whatever is of this kind would be an object of Smell.

That the property of odorousness is based upon the Sapid may be seen by comparing the things which possess with those which do not possess odour. The elements, viz. Fire, Air, Earth, Water, are inodorous, because both the dry and the moist among them are without sapidity, unless some added ingredient produces it. This explains why sea-water possesses odour, for [unlike 'elemental' water] it contains savour and dryness. Salt, too, is more odorous than natron, as the oil which exudes from the former proves, for natron is allied to ['elemental'] earth more nearly than salt. Again, a stone is inodorous, just because it is tasteless, while, on the contrary, wood is odorous, because it is sapid. The kinds of wood, too, which contain more ['elemental'] water are less odorous than others. Moreover, to take the case of metals, gold is inodorous because it is without taste, but bronze and iron are odorous; and when the [sapid] moisture has been burnt out of them, their slag is, in all cases, less odorous than the metals [than the metals themselves]. Silver and tin are more odorous than the one class of metals, less so than the other, inasmuch as they are water [to a greater degree than the former, to a less degree than the latter].

Some writers look upon Fumid exhalation, which is a compound of Earth and Air, as the essence of Odour. [Indeed all are inclined to rush to this theory of Odour.] Heraclitus implied his adherence to it when he declared that if all existing things were turned into Smoke, the nose would be the organ to discern

them with. All writers incline to refer odour to this cause [sc. exhalation of some sort], but some regard it as aqueous, others as fumid, exhalation; while others, again, hold it to be either. Aqueous exhalation is merely a form of moisture, but fumid exhalation is, as already remarked, composed of Air and Earth. The former when condensed turns into water; the latter, in a particular species of earth. Now, it is unlikely that odour is either of these. For vaporous exhalation consists of mere water [which, being tasteless, is inodorous]; and fumid exhalation cannot occur in water at all, though, as has been before stated, aquatic creatures also have the sense of smell.

Again, the exhalation theory of odour is analogous to the theory of emanations. If, therefore, the latter is untenable, so, too, is the former.

It is clearly conceivable that the Moist, whether in air (for air, too, is essentially moist) or in water, should imbibe the influence of, and have effects wrought in it by, the Sapid Dryness. Moreover, if the Dry produces in moist media, *i.e.* water and air, an effect as of something washed out in them, it is manifest that odours must be something analogous to savours. Nay, indeed, this analogy is, in some instances, a fact [registered in language]; for odours as well as savours are spoken of as pungent, sweet, harsh, astringent rich [=‘savoury’]; and one might regard fetid smells as analogous to bitter tastes; which explains why the former are offensive to inhalation as the latter are to deglutition. It is clear, therefore, that Odour is in both water and air what Savour is in water alone. This explains why coldness and freezing render Savours dull, and abolish odours altogether; for cooling and freezing tend to annul the kinetic heat which helps to fabricate sapidity.

There are two species of the Odorous. For the statement of certain writers that the odorous is not divisible into species is false; it is so divisible. We must here define the sense in which these species are to be admitted or denied.

One class of odours, then, is that which runs parallel, as has been observed, to savours: to odours of this class their pleasantness or unpleasantness belongs incidentally. For owing to the fact that Savours are qualities of nutrient matter, the odours connected with these [e.g. those of a certain food] are agreeable as long as animals have an appetite for the food, but they are not agreeable to them when sated and no longer in want of it; nor are they agreeable, either, to those animals that do not like the food itself which yields the odours. Hence, as we observed, these odours are pleasant or unpleasant incidentally, and the same

reasoning explains why it is that they are perceptible to all animals in common.

The other class of odours consists of those agreeable in their essential nature, *e.g.* those of flowers. For these do not in any degree stimulate animals to food, nor do they contribute in any way to appetite; their effect upon it, if any, is rather the opposite. For the verse of Strattis ridiculing Euripides

Use not perfumery to flavour soup,

contains a truth.

Those who nowadays introduce such flavours into beverages deforce our sense of pleasure by habituating us to them, until, from two distinct kinds of sensations combined, pleasure arises as it might from one simple kind.

Of this species of odour man alone is sensible; the other, *viz.* that correlated with Tastes, is, as has been said before, perceptible also to the lower animals. And odours of the latter sort, since their pleasureableness depends upon taste, are divided into as many species as there are different tastes; but we cannot go on to say this of the former kind of odour, since its nature is agreeable or disagreeable *per se*. The reason why the perception of such odours is peculiar to man is found in the characteristic state of man's brain. For his brain is naturally cold, and the blood which it contains in its vessels is thin and pure but easily cooled (whence it happens that the exhalation arising from food, being cooled by the coldness of this region, produces unhealthy rheums); therefore it is that odours of such a species have been generated for human beings, as a safeguard to health. This is their sole function, and that they perform it is evident. For food, whether dry or moist, though sweet to taste, is often unwholesome; whereas the odour arising from what is fragrant, that odour which is pleasant in its own right, is, so to say, always beneficial to persons in any state of bodily health whatever.

For this reason, too, the perception of odour [in general] effected through respiration, not in all animals, but in man and certain other sanguineous animals, *e.g.* quadrupeds, and all that participate freely in the natural substance air; because when odours, on account of the lightness of the heat in them, mount to the brain, the health of this region is thereby promoted. For odour, as a power, is naturally heat-giving. Thus Nature has employed respiration for two purposes: primarily for the relief thereby brought to the thorax, secondarily for the inhalation of odour. For while an animal is inhaling — odour moves in through



its nostrils, as it were 'from a side-entrance.'

But the perception of the second class of odours above described [does not belong to all animal, but] is confined to human beings, because man's brain is, in proportion to his whole bulk, larger and moister than the brain of any other animal. This is the reason of the further fact that man alone, so to speak, among animals perceives and takes pleasure in the odours of flowers and such things. For the heat and stimulation set up by these odours are commensurate with the excess of moisture and coldness in his cerebral region. On all the other animals which have lungs, Nature has bestowed their due perception of one of the two kinds of odour [i.e. that connected with nutrition] through the act of respiration, guarding against the needless creation of two organs of sense; for in the fact that they respire the other animals have already sufficient provision for their perception of the one species of odour only, as human beings have for their perception of both.

But that creatures which do not respire have the olfactory sense is evident. For fishes, and all insects as a class, have, thanks to the species of odour correlated with nutrition, a keen olfactory sense of their proper food from a distance, even when they are very far away from it; such is the case with bees, and also with the class of small ants, which some denominate knipes. Among marine animals, too, the murex and many other similar animals have an acute perception of their food by its odour.

It is not equally certain what the organ is whereby they so perceive. This question, of the organ whereby they perceive odour, may well cause a difficulty, if we assume that smelling takes place in animals only while respiring (for that this is the fact is manifest in all the animals which do respire), whereas none of those just mentioned respire, and yet they have the sense of smell — unless, indeed, they have some other sense not included in the ordinary five. This supposition is, however, impossible. For any sense which perceives odour is a sense of smell, and this they do perceive, though probably not in the same way as creatures which respire, but when the latter are respiring the current of breath removes something that is laid like a lid upon the organ proper (which explains why they do not perceive odours when not respiring); while in creatures which do not respire this is always off: just as some animals have eyelids on their eyes, and when these are not raised they cannot see, whereas hard-eyed animals have no lids, and consequently do not need, besides eyes, an agency to raise the lids, but see straightway [without intermission] from the actual moment at which it is

first possible for them to do so [i.e. from the moment when an object first comes within their field of vision].

Consistently with what has been said above, not one of the lower animals shows repugnance to the odour of things which are essentially ill-smelling, unless one of the latter is positively pernicious. They are destroyed, however, by these things, just as human beings are; *i.e.* as human beings get headaches from, and are often asphyxiated by, the fumes of charcoal, so the lower animals perish from the strong fumes of brimstone and bituminous substances; and it is owing to experience of such effects that they shun these. For the disagreeable odour in itself they care nothing whatever (though the odours of many plants are essentially disagreeable), unless, indeed, it has some effect upon the taste of their food.

The senses making up an odd number, and an odd number having always a middle unit, the sense of smell occupies in itself as it were a middle position between the tactual senses, *i.e.* Touch and Taste, and those which perceive through a medium, *i.e.* Sight and Hearing. Hence the object of smell, too, is an affection of nutrient substances (which fall within the class of Tangibles), and is also an affection of the audible and the visible; whence it is that creatures have the sense of smell both in air and water. Accordingly, the object of smell is something common to both of these provinces, *i.e.* it appertains both to the tangible on the one hand, and on the other to the audible and translucent. Hence the propriety of the figure by which it has been described by us as an immersion or washing of dryness in the Moist and Fluid. Such then must be our account of the sense in which one is or is not entitled to speak of the odorous as having species.

The theory held by certain of the Pythagoreans, that some animals are nourished by odours alone, is unsound. For, in the first place, we see that food must be composite, since the bodies nourished by it are not simple. This explains why waste matter is secreted from food, either within the organisms, or, as in plants, outside them. But since even water by itself alone, that is, when unmixed, will not suffice for food — for anything which is to form a consistency must be corporeal-, it is still much less conceivable that air should be so corporealized [and thus fitted to be food]. But, besides this, we see that all animals have a receptacle for food, from which, when it has entered, the body absorbs it. Now, the organ which perceives odour is in the head, and odour enters with the inhalation of the breath; so that it goes to the respiratory region. It is plain,

therefore, that odour, qua odour, does not contribute to nutrition; that, however, it is serviceable to health is equally plain, as well by immediate perception as from the arguments above employed; so that odour is in relation to general health what savour is in the province of nutrition and in relation to the bodies nourished.

This then must conclude our discussion of the several organs of sense-perception.

## 6

One might ask: if every body is infinitely divisible, are its sensible qualities — Colour, Savour, Odour, Sound, Weight, Cold or Heat, [Heaviness or] Lightness, Hardness or Softness-also infinitely divisible? Or, is this impossible?

[One might well ask this question], because each of them is productive of sense-perception, since, in fact, all derive their name [of ‘sensible qualities’] from the very circumstance of their being able to stimulate this. Hence, [if this is so] both our perception of them should likewise be divisible to infinity, and every part of a body [however small] should be a perceptible magnitude. For it is impossible, *e.g.* to see a thing which is white but not of a certain magnitude.

Since if it were not so, [if its sensible qualities were not divisible, *pari passu* with body], we might conceive a body existing but having no colour, or weight, or any such quality; accordingly not perceptible at all. For these qualities are the objects of sense-perception. On this supposition, every perceptible object should be regarded as composed not of perceptible [but of imperceptible] parts. Yet it must [be really composed of perceptible parts], since assuredly it does not consist of mathematical [and therefore purely abstract and non-sensible] quantities. Again, by what faculty should we discern and cognize these [hypothetical real things without sensible qualities]? Is it by Reason? But they are not objects of Reason; nor does reason apprehend objects in space, except when it acts in conjunction with sense-perception. At the same time, if this be the case [that there are magnitudes, physically real, but without sensible quality], it seems to tell in favour of the atomistic hypothesis; for thus, indeed, [by accepting this hypothesis], the question [with which this chapter begins] might be solved [negatively]. But it is impossible [to accept this hypothesis]. Our views on the subject of atoms are to be found in our treatise on Movement.

The solution of these questions will bring with it also the answer to the question why the species of Colour, Taste, Sound, and other sensible qualities are limited. For in all classes of things lying between extremes the intermediates must be limited. But contraries are extremes, and every object of sense-perception involves contrariety: *e.g.* in Colour, White x Black; in Savour, Sweet x Bitter, and in all the other sensibles also the contraries are extremes. Now, that which is continuous is divisible into an infinite number of unequal parts, but into a finite number of equal parts, while that which is not *per se* continuous is divisible into

species which are finite in number. Since then, the several sensible qualities of things are to be reckoned as species, while continuity always subsists in these, we must take account of the difference between the Potential and the Actual. It is owing to this difference that we do not [actually] see its ten-thousandth part in a grain of millet, although sight has embraced the whole grain within its scope; and it is owing to this, too, that the sound contained in a quarter-tone escapes notice, and yet one hears the whole strain, inasmuch as it is a continuum; but the interval between the extreme sounds [that bound the quarter-tone] escapes the ear [being only potentially audible, not actually]. So, in the case of other objects of sense, extremely small constituents are unnoticed; because they are only potentially not actually [perceptible e.g.] visible, unless when they have been parted from the wholes. So the footlength too exists potentially in the two-foot length, but actually only when it has been separated from the whole. But objective increments so small as those above might well, if separated from their totals, [instead of achieving 'actual' existence] be dissolved in their environments, like a drop of sapid moisture poured out into the sea. But even if this were not so [sc. with the objective magnitude], still, since the [subjective] of sense-perception is not perceptible in itself, nor capable of separate existence (since it exists only potentially in the more distinctly perceivable whole of sense-perception), so neither will it be possible to perceive [actually] its correlatively small object [sc. its quantum of pathema or sensible quality] when separated from the object-total. But yet this [small object] is to be considered as perceptible: for it is both potentially so already [i.e. even when alone], and destined to be actually so when it has become part of an aggregate. Thus, therefore, we have shown that some magnitudes and their sensible qualities escape notice, and the reason why they do so, as well as the manner in which they are still perceptible or not perceptible in such cases. Accordingly then when these [minutely subdivided] sensibles have once again become aggregated in a whole in such a manner, relatively to one another, as to be perceptible actually, and not merely because they are in the whole, but even apart from it, it follows necessarily [from what has been already stated] that their sensible qualities, whether colours or tastes or sounds, are limited in number.

One might ask: — do the objects of sense-perception, or the movements proceeding from them ([since movements there are,] in whichever of the two ways [viz. by emanations or by stimulatory kinesis] sense-perception takes place), when these are actualized for perception, always arrive first at a spatial middle point [between the sense-organ and its object], as Odour evidently does, and also Sound? For he who is nearer [to the odorous object] perceives the

Odour sooner [than who is farther away], and the Sound of a stroke reaches us some time after it has been struck. Is it thus also with an object seen, and with Light? Empedocles, for example, says that the Light from the Sun arrives first in the intervening space before it comes to the eye, or reaches the Earth. This might plausibly seem to be the case. For whatever is moved [in space], is moved from one place to another; hence there must be a corresponding interval of time also in which it is moved from the one place to the other. But any given time is divisible into parts; so that we should assume a time when the sun's ray was not as yet seen, but was still travelling in the middle space.

Now, even if it be true that the acts of 'hearing' and 'having heard', and, generally, those of 'perceiving' and 'having perceived', form coinstantaneous wholes, in other words, that acts of sense-perception do not involve a process of becoming, but have their being none the less without involving such a process; yet, just as, [in the case of sound], though the stroke which causes the Sound has been already struck, the Sound is not yet at the ear (and that this last is a fact is further proved by the transformation which the letters [viz. the consonants as heard] undergo [in the case of words spoken from a distance], implying that the local movement [involved in Sound] takes place in the space between [us and the speaker]; for the reason why [persons addressed from a distance] do not succeed in catching the sense of what is said is evidently that the air [sound wave] in moving towards them has its form changed) [granting this, then, the question arises]: is the same also true in the case of Colour and Light? For certainly it is not true that the beholder sees, and the object is seen, in virtue of some merely abstract relationship between them, such as that between equals. For if it were so, there would be no need [as there is] that either [the beholder or the thing beheld] should occupy some particular place; since to the equalization of things their being near to, or far from, one another makes no difference.

Now this [travelling through successive positions in the medium] may with good reason take place as regards Sound and Odour, for these, like [their media] Air and Water, are continuous, but the movement of both is divided into parts. This too is the ground of the fact that the object which the person first in order of proximity hears or smells is the same as that which each subsequent person perceives, while yet it is not the same.

Some, indeed, raise a question also on these very points; they declare it impossible that one person should hear, or see, or smell, the same object as another, urging the impossibility of several persons in different places hearing or

smelling [the same object], for the one same thing would [thus] be divided from itself. The answer is that, in perceiving the object which first set up the motion — *e.g.* a bell, or frankincense, or fire — all perceive an object numerically one and the same; while, of course, in the special object perceived they perceive an object numerically different for each, though specifically the same for all; and this, accordingly, explains how it is that many persons together see, or smell, or hear [the same object]. These things [the odour or sound proper] are not bodies, but an affection or process of some kind (otherwise this [viz. simultaneous perception of the one object by many] would not have been, as it is, a fact of experience) though, on the other hand, they each imply a body [as their cause].

But [though sound and odour may travel,] with regard to Light the case is different. For Light has its *raison d'être* in the being [not becoming] of something, but it is not a movement. And in general, even in qualitative change the case is different from what it is in local movement [both being different species of kinesis]. Local movements, of course, arrive first at a point midway before reaching their goal (and Sound, it is currently believed, is a movement of something locally moved), but we cannot go on to assert this [arrival at a point midway] like manner of things which undergo qualitative change. For this kind of change may conceivably take place in a thing all at once, without one half of it being changed before the other; *e.g.* it is conceivable that water should be frozen simultaneously in every part. But still, for all that, if the body which is heated or frozen is extensive, each part of it successively is affected by the part contiguous, while the part first changed in quality is so changed by the cause itself which originates the change, and thus the change throughout the whole need not take place coinstantaneously and all at once. Tasting would have been as smelling now is, if we lived in a liquid medium, and perceived [the sapid object] at a distance, before touching it.

Naturally, then, the parts of media between a sensory organ and its object are not all affected at once — except in the case of Light [illumination] for the reason above stated, and also in the case of seeing, for the same reason; for Light is an efficient cause of seeing.

Another question respecting sense-perception is as follows: assuming, as is natural, that of two [simultaneous] sensory stimuli the stronger always tends to extrude the weaker [from consciousness], is it conceivable or not that one should be able to discern two objects coinstantaneously in the same individual time? The above assumption explains why persons do not perceive what is brought before their eyes, if they are at the time deep in thought, or in a fright, or listening to some loud noise. This assumption, then, must be made, and also the following: that it is easier to discern each object of sense when in its simple form than when an ingredient in a mixture; easier, for example, to discern wine when neat than when blended, and so also honey, and [in other provinces] a colour, or to discern the nete by itself alone, than [when sounded with the hypate] in the octave; the reason being that component elements tend to efface [the distinctive characteristics of] one another. Such is the effect [on one another] of all ingredients of which, when compounded, some one thing is formed.

If, then, the greater stimulus tends to expel the less, it necessarily follows that, when they concur, this greater should itself too be less distinctly perceptible than if it were alone, since the less by blending with it has removed some of its individuality, according to our assumption that simple objects are in all cases more distinctly perceptible.

Now, if the two stimuli are equal but heterogeneous, no perception of either will ensue; they will alike efface one another's characteristics. But in such a case the perception of either stimulus in its simple form is impossible. Hence either there will then be no sense-perception at all, or there will be a perception compounded of both and differing from either. The latter is what actually seems to result from ingredients blended together, whatever may be the compound in which they are so mixed.

Since, then, from some concurrent [sensory stimuli] a resultant object is produced, while from others no such resultant is produced, and of the latter sort are those things which belong to different sense provinces (for only those things are capable of mixture whose extremes are contraries, and no one compound can be formed from, *e.g.* White and Sharp, except indirectly, *i.e.* not as a concord is formed of Sharp and Grave); there follows logically the impossibility of discerning such concurrent stimuli coinstantaneously. For we must suppose that



the stimuli, when equal, tend alike to efface one another, since no one [form of stimulus] results from them; while, if they are unequal, the stronger alone is distinctly perceptible.

Again, the soul would be more likely to perceive coinstantaneously, with one and the same sensory act, two things in the same sensory province, such as the Grave and the Sharp in sound; for the sensory stimulation in this one province is more likely to be unitemporal than that involving two different provinces, as Sight and Hearing. But it is impossible to perceive two objects coinstantaneously in the same sensory act unless they have been mixed, [when, however, they are no longer two], for their amalgamation involves their becoming one, and the sensory act related to one object is itself one, and such act, when one, is, of course, coinstantaneous with itself. Hence, when things are mixed we of necessity perceive them coinstantaneously: for we perceive them by a perception actually one. For an object numerically one means that which is perceived by a perception actually one, whereas an object specifically one means that which is perceived by a sensory act potentially one [i.e. by an *energeia* of the same sensuous faculty]. If then the actualized perception is one, it will declare its data to be one object; they must, therefore, have been mixed. Accordingly, when they have not been mixed, the actualized perceptions which perceive them will be two; but [if so, their perception must be successive not coinstantaneous, for] in one and the same faculty the perception actualized at any single moment is necessarily one, only one stimulation or exertion of a single faculty being possible at a single instant, and in the case supposed here the faculty is one. It follows, therefore, that we cannot conceive the possibility of perceiving two distinct objects coinstantaneously with one and the same sense.

But if it be thus impossible to perceive coinstantaneously two objects in the same province of sense if they are really two, manifestly it is still less conceivable that we should perceive coinstantaneously objects in two different sensory provinces, as White and Sweet. For it appears that when the Soul predicates numerical unity it does so in virtue of nothing else than such coinstantaneous perception [of one object, in one instant, by one *energeia*]: while it predicates specific unity in virtue of [the unity of] the discriminating faculty of sense together with [the unity of] the mode in which this operates. What I mean, for example, is this; the same sense no doubt discerns White and Black, [which are hence generically one] though specifically different from one another, and so, too, a faculty of sense self-identical, but different from the former, discerns Sweet and Bitter; but while both these faculties differ from one another [and

each from itself] in their modes of discerning either of their respective contraries, yet in perceiving the coordinates in each province they proceed in manners analogous to one another; for instance, as Taste perceives Sweet, so Sight perceives White; and as the latter perceives Black, so the former perceives Bitter.

Again, if the stimuli of sense derived from Contraries are themselves Contrary, and if Contraries cannot be conceived as subsisting together in the same individual subject, and if Contraries, *e.g.* Sweet and Bitter, come under one and the same sense-faculty, we must conclude that it is impossible to discern them coinstantaneously. It is likewise clearly impossible so to discern such homogeneous sensibles as are not [indeed] Contrary, [but are yet of different species]. For these are, [in the sphere of colour, for instance], classed some with White, others with Black, and so it is, likewise, in the other provinces of sense; for example, of savours, some are classed with Sweet, and others with Bitter. Nor can one discern the components in compounds coinstantaneously (for these are ratios of Contraries, as *e.g.* the Octave or the Fifth); unless, indeed, on condition of perceiving them as one. For thus, and not otherwise, the ratios of the extreme sounds are compounded into one ratio: since we should have together the ratio, on the one hand, of Many to Few or of Odd to Even, on the other, that of Few to Many or of Even to Odd [and these, to be perceived together, must be unified].

If, then, the sensibles denominated coordinates though in different provinces of sense (*e.g.* I call Sweet and White coordinates though in different provinces) stand yet more aloof, and differ more, from one another than do any sensibles in the same province; while Sweet differs from White even more than Black does from White, it is still less conceivable that one should discern them [viz. sensibles in different sensory provinces whether coordinates or not] coinstantaneously than sensibles which are in the same province. Therefore, if coinstantaneous perception of the latter be impossible, that of the former is a *fortiori* impossible.

Some of the writers who treat of concords assert that the sounds combined in these do not reach us simultaneously, but only appear to do so, their real successiveness being unnoticed whenever the time it involves is [so small as to be] imperceptible. Is this true or not? One might perhaps, following this up, go so far as to say that even the current opinion that one sees and hears coinstantaneously is due merely to the fact that the intervals of time [between the

really successive perceptions of sight and hearing] escape observation. But this can scarcely be true, nor is it conceivable that any portion of time should be [absolutely] imperceptible, or that any should be absolutely unnoticeable; the truth being that it is possible to perceive every instant of time. [This is so]; because, if it is inconceivable that a person should, while perceiving himself or aught else in a continuous time, be at any instant unaware of his own existence; while, obviously, the assumption, that there is in the time-continuum a time so small as to be absolutely imperceptible, carries the implication that a person would, during such time, be unaware of his own existence, as well as of his seeing and perceiving; [this assumption must be false].

Again, if there is any magnitude, whether time or thing, absolutely imperceptible owing to its smallness, it follows that there would not be either a thing which one perceives, or a time in which one perceives it, unless in the sense that in some part of the given time he sees some part of the given thing. For [let there be a line *ab*, divided into two parts at *g*, and let this line represent a whole object and a corresponding whole time. Now,] if one sees the whole line, and perceives it during a time which forms one and the same continuum, only in the sense that he does so in some portion of this time, let us suppose the part *gb*, representing a time in which by supposition he was perceiving nothing, cut off from the whole. Well, then, he perceives in a certain part [viz. in the remainder] of the time, or perceives a part [viz. the remainder] of the line, after the fashion in which one sees the whole earth by seeing some given part of it, or walks in a year by walking in some given part of the year. But [by hypothesis] in the part *bg* he perceives nothing: therefore, in fact, he is said to perceive the whole object and during the whole time simply because he perceives [some part of the object] in some part of the time *ab*. But the same argument holds also in the case of *ag* [the remainder, regarded in its turn as a whole]; for it will be found [on this theory of vacant times and imperceptible magnitudes] that one always perceives only in some part of a given whole time, and perceives only some part of a whole magnitude, and that it is impossible to perceive any [really] whole [object in a really whole time; a conclusion which is absurd, as it would logically annihilate the perception of both Objects and Time].

Therefore we must conclude that all magnitudes are perceptible, but their actual dimensions do not present themselves immediately in their presentation as objects. One sees the sun, or a four-cubit rod at a distance, as a magnitude, but their exact dimensions are not given in their visual presentation: nay, at times an object of sight appears indivisible, but [vision like other special senses, is fallible

respecting 'common sensibles', *e.g.* magnitude, and] nothing that one sees is really indivisible. The reason of this has been previously explained. It is clear then, from the above arguments, that no portion of time is imperceptible.

But we must here return to the question proposed above for discussion, whether it is possible or impossible to perceive several objects coinstantaneously; by 'coinstantaneously' I mean perceiving the several objects in a time one and indivisible relatively to one another, *i.e.* indivisible in a sense consistent with its being all a continuum.

First, then, is it conceivable that one should perceive the different things coinstantaneously, but each with a different part of the Soul? Or [must we object] that, in the first place, to begin with the objects of one and the same sense, *e.g.* Sight, if we assume it [the Soul qua exercising Sight] to perceive one colour with one part, and another colour with a different part, it will have a plurality of parts the same in species, [as they must be,] since the objects which it thus perceives fall within the same genus?

Should any one [to illustrate how the Soul might have in it two different parts specifically identical, each directed to a set of aistheta the same in genus with that to which the other is directed] urge that, as there are two eyes, so there may be in the Soul something analogous, [the reply is] that of the eyes, doubtless, some one organ is formed, and hence their actualization in perception is one; but if this is so in the Soul, then, in so far as what is formed of both [*i.e.* of any two specifically identical parts as assumed] is one, the true perceiving subject also will be one, [and the contradictory of the above hypothesis (of different parts of Soul remaining engaged in simultaneous perception with one sense) is what emerges from the analogy]; while if the two parts of Soul remain separate, the analogy of the eyes will fail, [for of these some one is really formed].

Furthermore, [on the supposition of the need of different parts of Soul, co-operating in each sense, to discern different objects coinstantaneously], the senses will be each at the same time one and many, as if we should say that they were each a set of diverse sciences; for neither will an 'activity' exist without its proper faculty, nor without activity will there be sensation.

But if the Soul does not, in the way suggested [*i.e.* with different parts of itself acting simultaneously], perceive in one and the same individual time sensibles of the same sense, *a fortiori* it is not thus that it perceives sensibles of different

senses. For it is, as already stated, more conceivable that it should perceive a plurality of the former together in this way than a plurality of heterogeneous objects.

If then, as is the fact, the Soul with one part perceives Sweet, with another, White, either that which results from these is some one part, or else there is no such one resultant. But there must be such an one, inasmuch as the general faculty of sense-perception is one. What one object, then, does that one faculty [when perceiving an object, *e.g.* as both White and Sweet] perceive? [None]; for assuredly no one object arises by composition of these [heterogeneous objects, such as White and Sweet]. We must conclude, therefore, that there is, as has been stated before, some one faculty in the soul with which the latter perceives all its percepts, though it perceives each different genus of sensibles through a different organ.

May we not, then, conceive this faculty which perceives White and Sweet to be one *qua* indivisible [sc. *qua* combining its different simultaneous objects] in its actualization, but different, when it has become divisible [sc. *qua* distinguishing its different simultaneous objects] in its actualization?

Or is what occurs in the case of the perceiving Soul conceivably analogous to what holds true in that of the things themselves? For the same numerically one thing is white and sweet, and has many other qualities, [while its numerical oneness is not thereby prejudiced] if the fact is not that the qualities are really separable in the object from one another, but that the being of each quality is different [from that of every other]. In the same way therefore we must assume also, in the case of the Soul, that the faculty of perception in general is in itself numerically one and the same, but different [differentiated] in its being; different, that is to say, in genus as regards some of its objects, in species as regards others. Hence too, we may conclude that one can perceive [numerically different objects] coinstantaneously with a faculty which is numerically one and the same, but not the same in its relationship [sc. according as the objects to which it is directed are not the same].

That every sensible object is a magnitude, and that nothing which it is possible to perceive is indivisible, may be thus shown. The distance whence an object could not be seen is indeterminate, but that whence it is visible is determinate. We may say the same of the objects of Smelling and Hearing, and of all sensibles not discerned by actual contact. Now, there is, in the interval of

distance, some extreme place, the last from which the object is invisible, and the first from which it is visible. This place, beyond which if the object be one cannot perceive it, while if the object be on the hither side one must perceive it, is, I presume, itself necessarily indivisible. Therefore, if any sensible object be indivisible, such object, if set in the said extreme place whence imperceptibility ends and perceptibility begins, will have to be both visible and invisible their objects, whether regarded in general or at the same time; but this is impossible.

This concludes our survey of the characteristics of the organs of Sense-perception and their objects, whether regarded in general or in relation to each organ. Of the remaining subjects, we must first consider that of memory and remembering.

### ***On Memory*** (449b)



*Translated by J. I. Beare*

# 1

WE have, in the next place, to treat of Memory and Remembering, considering its nature, its cause, and the part of the soul to which this experience, as well as that of Recollecting, belongs. For the persons who possess a retentive memory are not identical with those who excel in power of recollection; indeed, as a rule, slow people have a good memory, whereas those who are quick-witted and clever are better at recollecting.

We must first form a true conception of these objects of memory, a point on which mistakes are often made. Now to remember the future is not possible, but this is an object of opinion or expectation (and indeed there might be actually a science of expectation, like that of divination, in which some believe); nor is there memory of the present, but only sense-perception. For by the latter we know not the future, nor the past, but the present only. But memory relates to the past. No one would say that he remembers the present, when it is present, *e.g.* a given white object at the moment when he sees it; nor would one say that he remembers an object of scientific contemplation at the moment when he is actually contemplating it, and has it full before his mind;—of the former he would say only that he perceives it, of the latter only that he knows it. But when one has scientific knowledge, or perception, apart from the actualizations of the faculty concerned, he thus ‘remembers’ (that the angles of a triangle are together equal to two right angles); as to the former, that he learned it, or thought it out for himself, as to the latter, that he heard, or saw, it, or had some such sensible experience of it. For whenever one exercises the faculty of remembering, he must say within himself, ‘I formerly heard (or otherwise perceived) this,’ or ‘I formerly had this thought’.

Memory is, therefore, neither Perception nor Conception, but a state or affection of one of these, conditioned by lapse of time. As already observed, there is no such thing as memory of the present while present, for the present is object only of perception, and the future, of expectation, but the object of memory is the past. All memory, therefore, implies a time elapsed; consequently only those animals which perceive time remember, and the organ whereby they perceive time is also that whereby they remember.

The subject of ‘presentation’ has been already considered in our work *On the Soul*. Without a presentation intellectual activity is impossible. For there is in

such activity an incidental affection identical with one also incidental in geometrical demonstrations. For in the latter case, though we do not for the purpose of the proof make any use of the fact that the quantity in the triangle (for example, which we have drawn) is determinate, we nevertheless draw it determinate in quantity. So likewise when one exerts the intellect (e.g. on the subject of first principles), although the object may not be quantitative, one envisages it as quantitative, though he thinks it in abstraction from quantity; while, on the other hand, if the object of the intellect is essentially of the class of things that are quantitative, but indeterminate, one envisages it as if it had determinate quantity, though subsequently, in thinking it, he abstracts from its determinateness. Why we cannot exercise the intellect on any object absolutely apart from the continuous, or apply it even to non-temporal things unless in connexion with time, is another question. Now, one must cognize magnitude and motion by means of the same faculty by which one cognizes time (i.e. by that which is also the faculty of memory), and the presentation (involved in such cognition) is an affection of the *sensus communis*; whence this follows, viz. that the cognition of these objects (magnitude, motion time) is effected by the (said *sensus communis*, i.e. the) primary faculty of perception. Accordingly, memory (not merely of sensible, but) even of intellectual objects involves a presentation: hence we may conclude that it belongs to the faculty of intelligence only incidentally, while directly and essentially it belongs to the primary faculty of sense-perception.

Hence not only human beings and the beings which possess opinion or intelligence, but also certain other animals, possess memory. If memory were a function of (pure) intellect, it would not have been as it is an attribute of many of the lower animals, but probably, in that case, no mortal beings would have had memory; since, even as the case stands, it is not an attribute of them all, just because all have not the faculty of perceiving time. Whenever one actually remembers having seen or heard, or learned, something, he includes in this act (as we have already observed) the consciousness of 'formerly'; and the distinction of 'former' and 'latter' is a distinction in time.

Accordingly if asked, of which among the parts of the soul memory is a function, we reply: manifestly of that part to which 'presentation' appertains; and all objects capable of being presented (viz. *aistheta*) are immediately and properly objects of memory, while those (viz. *noeta*) which necessarily involve (but only involve) presentation are objects of memory incidentally.



One might ask how it is possible that though the affection (the presentation) alone is present, and the (related) fact absent, the latter-that which is not presentis remembered. (The question arises), because it is clear that we must conceive that which is generated through sense-perception in the sentient soul, and in the part of the body which is its seat-viz. that affection the state whereof we call memory-to be some such thing as a picture. The process of movement (sensory stimulation) involved the act of perception stamps in, as it were, a sort of impression of the percept, just as persons do who make an impression with a seal. This explains why, in those who are strongly moved owing to passion, or time of life, no mnemonic impression is formed; just as no impression would be formed if the movement of the seal were to impinge on running water; while there are others in whom, owing to the receiving surface being frayed, as happens to (the stucco on) old (chamber) walls, or owing to the hardness of the receiving surface, the requisite impression is not implanted at all. Hence both very young and very old persons are defective in memory; they are in a state of flux, the former because of their growth, the latter, owing to their decay. In like manner, also, both those who are too quick and those who are too slow have bad memories. The former are too soft, the latter too hard (in the texture of their receiving organs), so that in the case of the former the presented image (though imprinted) does not remain in the soul, while on the latter it is not imprinted at all.

But then, if this truly describes what happens in the genesis of memory, (the question stated above arises:) when one remembers, is it this impressed affection that he remembers, or is it the objective thing from which this was derived? If the former, it would follow that we remember nothing which is absent; if the latter, how is it possible that, though perceiving directly only the impression, we remember that absent thing which we do not perceive? Granted that there is in us something like an impression or picture, why should the perception of the mere impression be memory of something else, instead of being related to this impression alone? For when one actually remembers, this impression is what he contemplates, and this is what he perceives. How then does he remember what is not present? One might as well suppose it possible also to see or hear that which is not present. In reply, we suggest that this very thing is quite conceivable, nay, actually occurs in experience. A picture painted on a panel is at once a picture and a likeness: that is, while one and the same, it is both of these, although the 'being' of both is not the same, and one may contemplate it either as a picture, or as a likeness. Just in the same way we have to conceive that the mnemonic presentation within us is something which by itself is merely an object of

contemplation, while, in-relation to something else, it is also a presentation of that other thing. In so far as it is regarded in itself, it is only an object of contemplation, or a presentation; but when considered as relative to something else, *e.g.* as its likeness, it is also a mnemonic token. Hence, whenever the residual sensory process implied by it is actualized in consciousness, if the soul perceives this in so far as it is something absolute, it appears to occur as a mere thought or presentation; but if the soul perceives it qua related to something else, then, just as when one contemplates the painting in the picture as being a likeness, and without having (at the moment) seen the actual Koriskos, contemplates it as a likeness of Koriskos, and in that case the experience involved in this contemplation of it (as relative) is different from what one has when he contemplates it simply as a painted figure-(so in the case of memory we have the analogous difference for), of the objects in the soul, the one (the unrelated object) presents itself simply as a thought, but the other (the related object) just because, as in the painting, it is a likeness, presents itself as a mnemonic token.

We can now understand why it is that sometimes, when we have such processes, based on some former act of perception, occurring in the soul, we do not know whether this really implies our having had perceptions corresponding to them, and we doubt whether the case is or is not one of memory. But occasionally it happens that (while thus doubting) we get a sudden idea and recollect that we heard or saw something formerly. This (occurrence of the 'sudden idea') happens whenever, from contemplating a mental object as absolute, one changes his point of view, and regards it as relative to something else.

The opposite (sc. to the case of those who at first do not recognize their phantasms as mnemonic) also occurs, as happened in the cases of Antipheron of Oreus and others suffering from mental derangement; for they were accustomed to speak of their mere phantasms as facts of their past experience, and as if remembering them. This takes place whenever one contemplates what is not a likeness as if it were a likeness.

Mnemonic exercises aim at preserving one's memory of something by repeatedly reminding him of it; which implies nothing else (on the learner's part) than the frequent contemplation of something (*viz.* the 'mnemonic', whatever it may be) as a likeness, and not as out of relation.

As regards the question, therefore, what memory or remembering is, it has now

been shown that it is the state of a presentation, related as a likeness to that of which it is a presentation; and as to the question of which of the faculties within us memory is a function, (it has been shown) that it is a function of the primary faculty of sense-perception, *i.e.* of that faculty whereby we perceive time.

## 2

Next comes the subject of Recollection, in dealing with which we must assume as fundamental the truths elicited above in our introductory discussions. For recollection is not the 'recovery' or 'acquisition' of memory; since at the instant when one at first learns (a fact of science) or experiences (a particular fact of sense), he does not thereby 'recover' a memory, inasmuch as none has preceded, nor does he acquire one *ab initio*. It is only at the instant when the aforesaid state or affection (of the aisthesis or *upolepsis*) is implanted in the soul that memory exists, and therefore memory is not itself implanted concurrently with the continuous implantation of the (original) sensory experience.

Further: at the very individual and concluding instant when first (the sensory experience or scientific knowledge) has been completely implanted, there is then already established in the person affected the (sensory) affection, or the scientific knowledge (if one ought to apply the term 'scientific knowledge' to the (mnemonic) state or affection; and indeed one may well remember, in the 'incidental' sense, some of the things (i.e. *ta katholou*) which are properly objects of scientific knowledge); but to remember, strictly and properly speaking, is an activity which will not be immanent until the original experience has undergone lapse of time. For one remembers now what one saw or otherwise experienced formerly; the moment of the original experience and the moment of the memory of it are never identical.

Again, (even when time has elapsed, and one can be said really to have acquired memory, this is not necessarily recollection, for firstly) it is obviously possible, without any present act of recollection, to remember as a continued consequence of the original perception or other experience; whereas when (after an interval of obliviscence) one recovers some scientific knowledge which he had before, or some perception, or some other experience, the state of which we above declared to be memory, it is then, and then only, that this recovery may amount to a recollection of any of the things aforesaid. But, (though as observed above, remembering does not necessarily imply recollecting), recollecting always implies remembering, and actualized memory follows (upon the successful act of recollecting).

But secondly, even the assertion that recollection is the reinstatement in consciousness of something which was there before but had disappeared requires

qualification. This assertion may be true, but it may also be false; for the same person may twice learn (from some teacher), or twice discover (i.e. excogitate), the same fact. Accordingly, the act of recollecting ought (in its definition) to be distinguished from these acts; *i.e.* recollecting must imply in those who recollect the presence of some spring over and above that from which they originally learn.

Acts of recollection, as they occur in experience, are due to the fact that one movement has by nature another that succeeds it in regular order.

If this order be necessary, whenever a subject experiences the former of two movements thus connected, it will (invariably) experience the latter; if, however, the order be not necessary, but customary, only in the majority of cases will the subject experience the latter of the two movements. But it is a fact that there are some movements, by a single experience of which persons take the impress of custom more deeply than they do by experiencing others many times; hence upon seeing some things but once we remember them better than others which we may have been frequently.

Whenever therefore, we are recollecting, we are experiencing certain of the antecedent movements until finally we experience the one after which customarily comes that which we seek. This explains why we hunt up the series (of *kineseis*) having started in thought either from a present intuition or some other, and from something either similar, or contrary, to what we seek, or else from that which is contiguous with it. Such is the empirical ground of the process of recollection; for the mnemonic movements involved in these starting-points are in some cases identical, in others, again, simultaneous, with those of the idea we seek, while in others they comprise a portion of them, so that the remnant which one experienced after that portion (and which still requires to be excited in memory) is comparatively small.

Thus, then, it is that persons seek to recollect, and thus, too, it is that they recollect even without the effort of seeking to do so, *viz.* when the movement implied in recollection has supervened on some other which is its condition. For, as a rule, it is when antecedent movements of the classes here described have first been excited, that the particular movement implied in recollection follows. We need not examine a series of which the beginning and end lie far apart, in order to see how (by recollection) we remember; one in which they lie near one another will serve equally well. For it is clear that the method is in each case the

same, that is, one hunts up the objective series, without any previous search or previous recollection. For (there is, besides the natural order, viz. the order of the pralmata, or events of the primary experience, also a customary order, and) by the effect of custom the mnemonic movements tend to succeed one another in a certain order. Accordingly, therefore, when one wishes to recollect, this is what he will do: he will try to obtain a beginning of movement whose sequel shall be the movement which he desires to reawaken. This explains why attempts at recollection succeed soonest and best when they start from a beginning (of some objective series). For, in order of succession, the mnemonic movements are to one another as the objective facts (from which they are derived). Accordingly, things arranged in a fixed order, like the successive demonstrations in geometry, are easy to remember (or recollect) while badly arranged subjects are remembered with difficulty.

Recollecting differs also in this respect from relearning, that one who recollects will be able, somehow, to move, solely by his own effort, to the term next after the starting-point. When one cannot do this of himself, but only by external assistance, he no longer remembers (i.e. he has totally forgotten, and therefore of course cannot recollect). It often happens that, though a person cannot recollect at the moment, yet by seeking he can do so, and discovers what he seeks. This he succeeds in doing by setting up many movements, until finally he excites one of a kind which will have for its sequel the fact he wishes to recollect. For remembering (which is the *condicio sine qua non* of recollecting) is the existence, potentially, in the mind of a movement capable of stimulating it to the desired movement, and this, as has been said, in such a way that the person should be moved (prompted to recollection) from within himself, i.e. in consequence of movements wholly contained within himself.

But one must get hold of a starting-point. This explains why it is that persons are supposed to recollect sometimes by starting from mnemonic loci. The cause is that they pass swiftly in thought from one point to another, e.g. from milk to white, from white to mist, and thence to moist, from which one remembers Autumn (the 'season of mists'), if this be the season he is trying to recollect.

It seems true in general that the middle point also among all things is a good mnemonic starting-point from which to reach any of them. For if one does not recollect before, he will do so when he has come to this, or, if not, nothing can help him; as, e.g. if one were to have in mind the numerical series denoted by the symbols A, B, G, D, E, Z, I, H, O. For, if he does not remember what he wants at

E, then at E he remembers O; because from E movement in either direction is possible, to D or to Z. But, if it is not for one of these that he is searching, he will remember (what he is searching for) when he has come to G if he is searching for H or I. But if (it is) not (for H or I that he is searching, but for one of the terms that remain), he will remember by going to A, and so in all cases (in which one starts from a middle point). The cause of one's sometimes recollecting and sometimes not, though starting from the same point, is, that from the same starting-point a movement can be made in several directions, as, for instance, from G to I or to D. If, then, the mind has not (when starting from E) moved in an old path (i.e. one in which it moved first having the objective experience, and that, therefore, in which un-'ethized' phusis would have it again move), it tends to move to the more customary; for (the mind having, by chance or otherwise, missed moving in the 'old' way) Custom now assumes the role of Nature. Hence the rapidity with which we recollect what we frequently think about. For as regular sequence of events is in accordance with nature, so, too, regular sequence is observed in the actualization of kinesis (in consciousness), and here frequency tends to produce (the regularity of) nature. And since in the realm of nature occurrences take place which are even contrary to nature, or fortuitous, the same happens a fortiori in the sphere swayed by custom, since in this sphere natural law is not similarly established. Hence it is that (from the same starting-point) the mind receives an impulse to move sometimes in the required direction, and at other times otherwise, (doing the latter) particularly when something else somehow deflects the mind from the right direction and attracts it to itself. This last consideration explains too how it happens that, when we want to remember a name, we remember one somewhat like it, indeed, but blunder in reference to (i.e. in pronouncing) the one we intended.

Thus, then, recollection takes place.

But the point of capital importance is that (for the purpose of recollection) one should cognize, determinately or indeterminately, the time-relation (of that which he wishes to recollect). There is, -let it be taken as a fact, -something by which one distinguishes a greater and a smaller time; and it is reasonable to think that one does this in a way analogous to that in which one discerns (spacial) magnitudes. For it is not by the mind's reaching out towards them, as some say a visual ray from the eye does (in seeing), that one thinks of large things at a distance in space (for even if they are not there, one may similarly think them); but one does so by a proportionate mental movement. For there are in the mind the like figures and movements (i.e. 'like' to those of objects and events).

Therefore, when one thinks the greater objects, in what will his thinking those differ from his thinking the smaller? (In nothing,) because all the internal though smaller are as it were proportional to the external. Now, as we may assume within a person something proportional to the forms (of distant magnitudes), so, too, we may doubtless assume also something else proportional to their distances. As, therefore, if one has (psychically) the movement in AB, BE, he constructs in thought (i.e. knows objectively) GD, since AG and GD bear equal ratios respectively (to AB and BE), (so he who recollects also proceeds). Why then does he construct GD rather than ZH? Is it not because as AG is to AB, so is O to I? These movements therefore (sc. in AB, BE, and in O:I) he has simultaneously. But if he wishes to construct to thought ZH, he has in mind BE in like manner as before (when constructing GD), but now, instead of (the movements of the ratio) O:I, he has in mind (those of the ratio K:L; for  $K:L::ZA:BA$ ). (See diagram.)

When, therefore, the ‘movement’ corresponding to the object and that corresponding to its time concur, then one actually remembers. If one supposes (himself to move in these different but concurrent ways) without really doing so, he supposes himself to remember.

For one may be mistaken, and think that he remembers when he really does not. But it is not possible, conversely, that when one actually remembers he should not suppose himself to remember, but should remember unconsciously. For remembering, as we have conceived it, essentially implies consciousness of itself. If, however, the movement corresponding to the objective fact takes place without that corresponding to the time, or, if the latter takes place without the former, one does not remember.

The movement answering to the time is of two kinds. Sometimes in remembering a fact one has no determinate time-notion of it, no such notion as that *e.g.* he did something or other on the day before yesterday; while in other cases he has a determinate notion-of the time. Still, even though one does not remember with actual determination of the time, he genuinely remembers, none the less. Persons are wont to say that they remember (something), but yet do not know when (it occurred, as happens) whenever they do not know determinately the exact length of time implied in the ‘when’.

It has been already stated that those who have a good memory are not identical with those who are quick at recollecting. But the act of recollecting differs from



that of remembering, not only chronologically, but also in this, that many also of the other animals (as well as man) have memory, but, of all that we are acquainted with, none, we venture to say, except man, shares in the faculty of recollection. The cause of this is that recollection is, as it were a mode of inference. For he who endeavours to recollect infers that he formerly saw, or heard, or had some such experience, and the process (by which he succeeds in recollecting) is, as it were, a sort of investigation. But to investigate in this way belongs naturally to those animals alone which are also endowed with the faculty of deliberation; (which proves what was said above), for deliberation is a form of inference.

That the affection is corporeal, *i.e.* that recollection is a searching for an 'image' in a corporeal substrate, is proved by the fact that in some persons, when, despite the most strenuous application of thought, they have been unable to recollect, it (*viz.* the anamnesis = the effort at recollection) excites a feeling of discomfort, which, even though they abandon the effort at recollection, persists in them none the less; and especially in persons of melancholic temperament. For these are most powerfully moved by presentations. The reason why the effort of recollection is not under the control of their will is that, as those who throw a stone cannot stop it at their will when thrown, so he who tries to recollect and 'hunts' (after an idea) sets up a process in a material part, (that) in which resides the affection. Those who have moisture around that part which is the centre of sense-perception suffer most discomfort of this kind. For when once the moisture has been set in motion it is not easily brought to rest, until the idea which was sought for has again presented itself, and thus the movement has found a straight course. For a similar reason bursts of anger or fits of terror, when once they have excited such motions, are not at once allayed, even though the angry or terrified persons (by efforts of will) set up counter motions, but the passions continue to move them on, in the same direction as at first, in opposition to such counter motions. The affection resembles also that in the case of words, tunes, or sayings, whenever one of them has become inveterate on the lips. People give them up and resolve to avoid them; yet again they find themselves humming the forbidden air, or using the prohibited word. Those whose upper parts are abnormally large, as is the case with dwarfs, have abnormally weak memory, as compared with their opposites, because of the great weight which they have resting upon the organ of perception, and because their mnemonic movements are, from the very first, not able to keep true to a course, but are dispersed, and because, in the effort at recollection, these movements do not easily find a direct onward path. Infants and very old persons

have bad memories, owing to the amount of movement going on within them; for the latter are in process of rapid decay, the former in process of vigorous growth; and we may add that children, until considerably advanced in years, are dwarf-like in their bodily structure. Such then is our theory as regards memory and remembering their nature, and the particular organ of the soul by which animals remember; also as regards recollection, its formal definition, and the manner and causes-of its performance.

***On Sleep*** (453b)



*Translated by J. I. Beare*

# 1

WITH regard to sleep and waking, we must consider what they are: whether they are peculiar to soul or to body, or common to both; and if common, to what part of soul or body they appertain: further, from what cause it arises that they are attributes of animals, and whether all animals share in them both, or some partake of the one only, others of the other only, or some partake of neither and some of both.

Further, in addition to these questions, we must also inquire what the dream is, and from what cause sleepers sometimes dream, and sometimes do not; or whether the truth is that sleepers always dream but do not always remember (their dream); and if this occurs, what its explanation is.

Again, [we must inquire] whether it is possible or not to foresee the future (in dreams), and if it be possible, in what manner; further, whether, supposing it possible, it extends only to things to be accomplished by the agency of Man, or to those also of which the cause lies in supra-human agency, and which result from the workings of Nature, or of Spontaneity.

First, then, this much is clear, that waking and sleep appertain to the same part of an animal, inasmuch as they are opposites, and sleep is evidently a privation of waking. For contraries, in natural as well as in all other matters, are seen always to present themselves in the same subject, and to be affections of the same: examples are-health and sickness, beauty and ugliness, strength and weakness, sight and blindness, hearing and deafness. This is also clear from the following considerations. The criterion by which we know the waking person to be awake is identical with that by which we know the sleeper to be asleep; for we assume that one who is exercising sense-perception is awake, and that every one who is awake perceives either some external movement or else some movement in his own consciousness. If waking, then, consists in nothing else than the exercise of sense-perception, the inference is clear, that the organ, in virtue of which animals perceive, is that by which they wake, when they are awake, or sleep, when they are awake, or sleep, when they are asleep.

But since the exercise of sense-perception does not belong to soul or body exclusively, then (since the subject of actuality is in every case identical with that of potentiality, and what is called sense-perception, as actuality, is a

movement of the soul through the body) it is clear that its affection is not an affection of soul exclusively, and that a soulless body has not the potentiality of perception. [Thus sleep and waking are not attributes of pure intelligence, on the one hand, or of inanimate bodies, on the other.]

Now, whereas we have already elsewhere distinguished what are called the parts of the soul, and whereas the nutrient is, in all living bodies, capable of existing without the other parts, while none of the others can exist without the nutrient; it is clear that sleep and waking are not affections of such living things as partake only of growth and decay, *e.g.* not of plants, because these have not the faculty of sense-perception, whether or not this be capable of separate existence; in its potentiality, indeed, and in its relationships, it is separable.

Likewise it is clear that [of those which either sleep or wake] there is no animal which is always awake or always asleep, but that both these affections belong [alternately] to the same animals. For if there be an animal not endued with sense-perception, it is impossible that this should either sleep or wake; since both these are affections of the activity of the primary faculty of sense-perception. But it is equally impossible also that either of these two affections should perpetually attach itself to the same animal, *e.g.* that some species of animal should be always asleep or always awake, without intermission; for all organs which have a natural function must lose power when they work beyond the natural time-limit of their working period; for instance, the eyes [must lose power] from [too long continued] seeing, and must give it up; and so it is with the hand and every other member which has a function. Now, if sense-perception is the function of a special organ, this also, if it continues perceiving beyond the appointed time-limit of its continuous working period, will lose its power, and will do its work no longer. Accordingly, if the waking period is determined by this fact, that in it sense-perception is free; if in the case of some contraries one of the two must be present, while in the case of others this is not necessary; if waking is the contrary of sleeping, and one of these two must be present to every animal: it must follow that the state of sleeping is necessary. Finally, if such affection is Sleep, and this is a state of powerlessness arising from excess of waking, and excess of waking is in its origin sometimes morbid, sometimes not, so that the powerlessness or dissolution of activity will be so or not; it is inevitable that every creature which wakes must also be capable of sleeping, since it is impossible that it should continue actualizing its powers perpetually.

So, also, it is impossible for any animal to continue always sleeping. For sleep is

an affection of the organ of sense-perception — a sort of tie or inhibition of function imposed on it, so that every creature that sleeps must needs have the organ of sense-perception. Now, that alone which is capable of sense-perception in actuality has the faculty of sense-perception; but to realize this faculty, in the proper and unqualified sense, is impossible while one is asleep. All sleep, therefore, must be susceptible of awakening. Accordingly, almost all other animals are clearly observed to partake in sleep, whether they are aquatic, aerial, or terrestrial, since fishes of all kinds, and molluscs, as well as all others which have eyes, have been seen sleeping. ‘Hard-eyed’ creatures and insects manifestly assume the posture of sleep; but the sleep of all such creatures is of brief duration, so that often it might well baffle one’s observation to decide whether they sleep or not. Of testaceous animals, on the contrary, no direct sensible evidence is as yet forthcoming to determine whether they sleep, but if the above reasoning be convincing to any one, he who follows it will admit this [viz. that they do so.]

That, therefore, all animals sleep may be gathered from these considerations. For an animal is defined as such by its possessing sense-perception; and we assert that sleep is, in a certain way, an inhibition of function, or, as it were, a tie, imposed on sense-perception, while its loosening or remission constitutes the being awake. But no plant can partake in either of these affections, for without sense-perception there is neither sleeping nor waking. But creatures which have sense-perception have likewise the feeling of pain and pleasure, while those which have these have appetite as well; but plants have none of these affections. A mark of this is that the nutrient part does its own work better when (the animal) is asleep than when it is awake. Nutrition and growth are then especially promoted, a fact which implies that creatures do not need sense-perception to assist these processes.

## 2

We must now proceed to inquire into the cause why one sleeps and wakes, and into the particular nature of the sense-perception, or sense-perceptions, if there be several, on which these affections depend. Since, then, some animals possess all the modes of sense-perception, and some not all, not, for example, sight, while all possess touch and taste, except such animals as are imperfectly developed, a class of which we have already treated in our work on the soul; and since an animal when asleep is unable to exercise, in the simple sense any particular sensory faculty whatever, it follows that in the state called sleep the same affection must extend to all the special senses; because, if it attaches itself to one of them but not to another, then an animal while asleep may perceive with the latter; but this is impossible.

Now, since every sense has something peculiar, and also something common; peculiar, as, *e.g.* seeing is to the sense of sight, hearing to the auditory sense, and so on with the other senses severally; while all are accompanied by a common power, in virtue whereof a person perceives that he sees or hears (for, assuredly, it is not by the special sense of sight that one sees that he sees; and it is not by mere taste, or sight, or both together that one discerns, and has the faculty of discerning, that sweet things are different from white things, but by a faculty connected in common with all the organs of sense; for there is one sensory function, and the controlling sensory faculty is one, though differing as a faculty of perception in relation to each genus of sensibles, *e.g.* sound or colour); and since this [common sensory activity] subsists in association chiefly with the faculty of touch (for this can exist apart from all the other organs of sense, but none of them can exist apart from it—a subject of which we have treated in our speculations concerning the Soul); it is therefore evident that waking and sleeping are an affection of this [common and controlling organ of sense-perception]. This explains why they belong to all animals, for touch [with which this common organ is chiefly connected], alone, [is common] to all [animals].

For if sleeping were caused by the special senses having each and all undergone some affection, it would be strange that these senses, for which it is neither necessary nor in a manner possible to realize their powers simultaneously, should necessarily all go idle and become motionless simultaneously. For the contrary experience, *viz.* that they should not go to rest altogether, would have

been more reasonably anticipated. But, according to the explanation just given, all is quite clear regarding those also. For, when the sense organ which controls all the others, and to which all the others are tributary, has been in some way affected, that these others should be all affected at the same time is inevitable, whereas, if one of the tributaries becomes powerless, that the controlling organ should also become powerless need in no wise follow.

It is indeed evident from many considerations that sleep does not consist in the mere fact that the special senses do not function or that one does not employ them; and that it does not consist merely in an inability to exercise the sense-perceptions; for such is what happens in cases of swooning. A swoon means just such impotence of perception, and certain other cases of unconsciousness also are of this nature. Moreover, persons who have the bloodvessels in the neck compressed become insensible. But sleep supervenes when such incapacity of exercise has neither arisen in some casual organ of sense, nor from some chance cause, but when, as has been just stated, it has its seat in the primary organ with which one perceives objects in general. For when this has become powerless all the other sensory organs also must lack power to perceive; but when one of them has become powerless, it is not necessary for this also to lose its power.

We must next state the cause to which it is due, and its quality as an affection. Now, since there are several types of cause (for we assign equally the 'final', the 'efficient', the 'material', and the 'formal' as causes), in the first place, then, as we assert that Nature operates for the sake of an end, and that this end is a good; and that to every creature which is endowed by nature with the power to move, but cannot with pleasure to itself move always and continuously, rest is necessary and beneficial; and since, taught by experience, men apply to sleep this metaphorical term, calling it a 'rest' [from the strain of movement implied in sense-perception]: we conclude that its end is the conservation of animals. But the waking state is for an animal its highest end, since the exercise of sense-perception or of thought is the highest end for all beings to which either of these appertains; inasmuch as these are best, and the highest end is what is best: whence it follows that sleep belongs of necessity to each animal. I use the term 'necessity' in its conditional sense, meaning that if an animal is to exist and have its own proper nature, it must have certain endowments; and, if these are to belong to it, certain others likewise must belong to it [as their condition.]

The next question to be discussed is that of the kind of movement or action, taking place within their bodies, from which the affection of waking or sleeping

arises in animals. Now, we must assume that the causes of this affection in all other animals are identical with, or analogous to, those which operate in sanguineous animals; and that the causes operating in sanguineous animals generally are identical with those operating in man. Hence we must consider the entire subject in the light of these instances [afforded by sanguineous animals, especially man]. Now, it has been definitely settled already in another work that sense-perception in animals originates in the same part of the organism in which movement originates. This locus of origination is one of three determinate loci, viz. that which lies midway between the head and the abdomen. This in sanguineous animals is the region of the heart; for all sanguineous animals have a heart; and from this it is that both motion and the controlling sense-perception originate. Now, as regards movement, it is obvious that that of breathing and of the cooling process generally takes its rise there; and it is with a view to the conservation of the [due amount of] heat in this part that nature has formed as she has both the animals which respire, and those which cool themselves by moisture. Of this [cooling process] per se we shall treat hereafter. In bloodless animals, and insects, and such as do not respire, the 'connatural spirit' is seen alternately puffed up and subsiding in the part which is in them analogous [to the region of the heart in sanguineous animals]. This is clearly observable in the holoptera [insects with undivided wings] as wasps and bees; also in flies and such creatures. And since to move anything, or do anything, is impossible without strength, and holding the breath produces strength-in creatures which inhale, the holding of that breath which comes from without, but, in creatures which do not respire, of that which is connatural (which explains why winged insects of the class holoptera, when they move, are perceived to make a humming noise, due to the friction of the connatural spirit colliding with the diaphragm); and since movement is, in every animal, attended with some sense-perception, either internal or external, in the primary organ of sense, [we conclude] accordingly that if sleeping and waking are affections of this organ, the place in which, or the organ in which, sleep and waking originate, is self-evident [being that in which movement and sense-perception originate, viz. the heart].

Some persons move in their sleep, and perform many acts like waking acts, but not without a phantasm or an exercise of sense-perception; for a dream is in a certain way a sense-impression. But of them we have to speak later on. Why it is that persons when aroused remember their dreams, but do not remember these acts which are like waking acts, has been already explained in the work 'Of Problems'.



### 3

The point for consideration next in order to the preceding is:-What are the processes in which the affection of waking and sleeping originates, and whence do they arise? Now, since it is when it has sense-perception that an animal must first take food and receive growth, and in all cases food in its ultimate form is, in sanguineous animals, the natural substance blood, or, in bloodless animals, that which is analogous to this; and since the veins are the place of the blood, while the origin of these is the heart-an assertion which is proved by anatomy-it is manifest that, when the external nutriment enters the parts fitted for its reception, the evaporation arising from it enters into the veins, and there, undergoing a change, is converted into blood, and makes its way to their source [the heart]. We have treated of all this when discussing the subject of nutrition, but must here recapitulate what was there said, in order that we may obtain a scientific view of the beginnings of the process, and come to know what exactly happens to the primary organ of sense-perception to account for the occurrence of waking and sleep. For sleep, as has been shown, is not any given impotence of the perceptive faculty; for unconsciousness, a certain form of asphyxia, and swooning, all produce such impotence. Moreover it is an established fact that some persons in a profound trance have still had the imaginative faculty in play. This last point, indeed, gives rise to a difficulty; for if it is conceivable that one who had swooned should in this state fall asleep, the phantasm also which then presented itself to his mind might be regarded as a dream. Persons, too, who have fallen into a deep trance, and have come to be regarded as dead, say many things while in this condition. The same view, however, is to be taken of all these cases, [i.e. that they are not cases of sleeping or dreaming].

As we observed above, sleep is not co-extensive with any and every impotence of the perceptive faculty, but this affection is one which arises from the evaporation attendant upon the process of nutrition. The matter evaporated must be driven onwards to a certain point, then turn back, and change its current to and fro, like a tide-race in a narrow strait. Now, in every animal the hot naturally tends to move [and carry other things] upwards, but when it has reached the parts above [becoming cool], it turns back again, and moves downwards in a mass. This explains why fits of drowsiness are especially apt to come on after meals; for the matter, both the liquid and the corporeal, which is borne upwards in a mass, is then of considerable quantity. When, therefore, this comes to a

stand it weighs a person down and causes him to nod, but when it has actually sunk downwards, and by its return has repulsed the hot, sleep comes on, and the animal so affected is presently asleep. A confirmation of this appears from considering the things which induce sleep; they all, whether potable or edible, for instance poppy, mandragora, wine, daniel, produce a heaviness in the head; and persons borne down [by sleepiness] and nodding [drowsily] all seem affected in this way, *i.e.* they are unable to lift up the head or the eyelids. And it is after meals especially that sleep comes on like this, for the evaporation from the foods eaten is then copious. It also follows certain forms of fatigue; for fatigue operates as a solvent, and the dissolved matter acts, if not cold, like food prior to digestion. Moreover, some kinds of illness have this same effect; those arising from moist and hot secretions, as happens with fever-patients and in cases of lethargy. Extreme youth also has this effect; infants, for example, sleep a great deal, because of the food being all borne upwards—a mark whereof appears in the disproportionately large size of the upper parts compared with the lower during infancy, which is due to the fact that growth predominates in the direction of the former. Hence also they are subject to epileptic seizures; for sleep is like epilepsy, and, in a sense, actually is a seizure of this sort. Accordingly, the beginning of this malady takes place with many during sleep, and their subsequent habitual seizures occur in sleep, not in waking hours. For when the spirit [evaporation] moves upwards in a volume, on its return downwards it distends the veins, and forcibly compresses the passage through which respiration is effected. This explains why wines are not good for infants or for wet nurses (for it makes no difference, doubtless, whether the infants themselves, or their nurses, drink them), but such persons should drink them [if at all] diluted with water and in small quantity. For wine is spirituous, and of all wines the dark more so than any other. The upper parts, in infants, are so filled with nutriment that within five months [after birth] they do not even turn the neck [*sc.* to raise the head]; for in them, as in persons deeply intoxicated, there is ever a large quantity of moisture ascending. It is reasonable, too, to think that this affection is the cause of the embryo's remaining at rest in the womb at first. Also, as a general rule, persons whose veins are inconspicuous, as well as those who are dwarf-like, or have abnormally large heads, are addicted to sleep. For in the former the veins are narrow, so that it is not easy for the moisture to flow down through them; while in the case of dwarfs and those whose heads are abnormally large, the impetus of the evaporation upwards is excessive. Those [on the contrary] whose veins are large are, thanks to the easy flow through the veins, not addicted to sleep, unless, indeed, they labour under some other affection which counteracts [this easy flow]. Nor are the 'atrabilious' addicted to

sleep, for in them the inward region is cooled so that the quantity of evaporation in their case is not great. For this reason they have large appetites, though spare and lean; for their bodily condition is as if they derived no benefit from what they eat. The dark bile, too, being itself naturally cold, cools also the nutrient tract, and the other parts wheresoever such secretion is potentially present [i.e. tends to be formed].

Hence it is plain from what has been said that sleep is a sort of concentration, or natural recoil, of the hot matter inwards [towards its centre], due to the cause above mentioned. Hence restless movement is a marked feature in the case of a person when drowsy. But where it [the heat in the upper and outer parts] begins to fail, he grows cool, and owing to this cooling process his eyelids droop. Accordingly [in sleep] the upper and outward parts are cool, but the inward and lower, *i.e.* the parts at the feet and in the interior of the body, are hot.

Yet one might find a difficulty on the facts that sleep is most oppressive in its onset after meals, and that wine, and other such things, though they possess heating properties, are productive of sleep, for it is not probable that sleep should be a process of cooling while the things that cause sleeping are themselves hot. Is the explanation of this, then, to be found in the fact that, as the stomach when empty is hot, while replenishment cools it by the movement it occasions, so the passages and tracts in the head are cooled as the 'evaporation' ascends thither? Or, as those who have hot water poured on them feel a sudden shiver of cold, just so in the case before us, may it be that, when the hot substance ascends, the cold rallying to meet it cools [the aforesaid parts] deprives their native heat of all its power, and compels it to retire? Moreover, when much food is taken, which [i.e. the nutrient evaporation from which] the hot substance carries upwards, this latter, like a fire when fresh logs are laid upon it, is itself cooled, until the food has been digested.

For, as has been observed elsewhere, sleep comes on when the corporeal element [in the 'evaporation'] conveyed upwards by the hot, along the veins, to the head. But when that which has been thus carried up can no longer ascend, but is too great in quantity [to do so], it forces the hot back again and flows downwards. Hence it is that men sink down [as they do in sleep] when the heat which tends to keep them erect (man alone, among animals, being naturally erect) is withdrawn; and this, when it befalls them, causes unconsciousness, and afterwards phantasy.

Or are the solutions thus proposed barely conceivable accounts of the refrigeration which takes place, while, as a matter of fact, the region of the brain is, as stated elsewhere, the main determinant of the matter? For the brain, or in creatures without a brain that which corresponds to it, is of all parts of the body the coolest. Therefore, as moisture turned into vapour by the sun's heat is, when it has ascended to the upper regions, cooled by the coldness of the latter, and becoming condensed, is carried downwards, and turned into water once more; just so the excrementitious evaporation, when carried up by the heat to the region of the brain, is condensed into a 'phlegm' (which explains why catarrhs are seen to proceed from the head); while that evaporation which is nutrient and not unwholesome, becoming condensed, descends and cools the hot. The tenuity or narrowness of the veins about the brain itself contributes to its being kept cool, and to its not readily admitting the evaporation. This, then, is a sufficient explanation of the cooling which takes place, despite the fact that the evaporation is exceedingly hot.

A person awakes from sleep when digestion is completed: when the heat, which had been previously forced together in large quantity within a small compass from out the surrounding part, has once more prevailed, and when a separation has been effected between the more corporeal and the purer blood. The finest and purest blood is that contained in the head, while the thickest and most turbid is that in the lower parts. The source of all the blood is, as has been stated both here and elsewhere, the heart. Now of the chambers in the heart the central communicates with each of the two others. Each of the latter again acts as receiver from each, respectively, of the two vessels, called the 'great' and the 'aorta'. It is in the central chamber that the [above-mentioned] separation takes place. To go into these matters in detail would, however, be more properly the business of a different treatise from the present. Owing to the fact that the blood formed after the assimilation of food is especially in need of separation, sleep [then especially] occurs [and lasts] until the purest part of this blood has been separated off into the upper parts of the body, and the most turbid into the lower parts. When this has taken place animals awake from sleep, being released from the heaviness consequent on taking food. We have now stated the cause of sleeping, viz. that it consists in the recoil by the corporeal element, upborne by the connatural heat, in a mass upon the primary sense-organ; we have also stated what sleep is, having shown that it is a seizure of the primary sense-organ, rendering it unable to actualize its powers; arising of necessity (for it is impossible for an animal to exist if the conditions which render it an animal be not fulfilled), *i.e.* for the sake of its conservation; since remission of movement

tends to the conservation of animals.

***On Dreams*** (458a)



*Translated by J. I. Beare*

# 1

WE must, in the next place, investigate the subject of the dream, and first inquire to which of the faculties of the soul it presents itself, *i.e.* whether the affection is one which pertains to the faculty of intelligence or to that of sense-perception; for these are the only faculties within us by which we acquire knowledge.

If, then, the exercise of the faculty of sight is actual seeing, that of the auditory faculty, hearing, and, in general that of the faculty of sense-perception, perceiving; and if there are some perceptions common to the senses, such as figure, magnitude, motion, &c., while there are others, as colour, sound, taste, peculiar [each to its own sense]; and further, if all creatures, when the eyes are closed in sleep, are unable to see, and the analogous statement is true of the other senses, so that manifestly we perceive nothing when asleep; we may conclude that it is not by sense-perception we perceive a dream.

But neither is it by opinion that we do so. For [in dreams] we not only assert, *e.g.* that some object approaching is a man or a horse [which would be an exercise of opinion], but that the object is white or beautiful, points on which opinion without sense-perception asserts nothing either truly or falsely. It is, however, a fact that the soul makes such assertions in sleep. We seem to see equally well that the approaching figure is a man, and that it is white. [In dreams], too, we think something else, over and above the dream presentation, just as we do in waking moments when we perceive something; for we often also reason about that which we perceive. So, too, in sleep we sometimes have thoughts other than the mere phantasms immediately before our minds. This would be manifest to any one who should attend and try, immediately on arising from sleep, to remember [his dreaming experience]. There are cases of persons who have seen such dreams, those, for example, who believe themselves to be mentally arranging a given list of subjects according to the mnemonic rule. They frequently find themselves engaged in something else besides the dream, *viz.* in setting a phantasm which they envisage into its mnemonic position. Hence it is plain that not every 'phantasm' in sleep is a mere dream-image, and that the further thinking which we perform then is due to an exercise of the faculty of opinion.

So much at least is plain on all these points, *viz.* that the faculty by which, in waking hours, we are subject to illusion when affected by disease, is identical

with that which produces illusory effects in sleep. So, even when persons are in excellent health, and know the facts of the case perfectly well, the sun, nevertheless, appears to them to be only a foot wide. Now, whether the presentative faculty of the soul be identical with, or different from, the faculty of sense-perception, in either case the illusion does not occur without our actually seeing or [otherwise] perceiving something. Even to see wrongly or to hear wrongly can happen only to one who sees or hears something real, though not exactly what he supposes. But we have assumed that in sleep one neither sees, nor hears, nor exercises any sense whatever. Perhaps we may regard it as true that the dreamer sees nothing, yet as false that his faculty of sense-perception is unaffected, the fact being that the sense of seeing and the other senses may possibly be then in a certain way affected, while each of these affections, as duly as when he is awake, gives its impulse in a certain manner to his [primary] faculty of sense, though not in precisely the same manner as when he is awake. Sometimes, too, opinion says [to dreamers] just as to those who are awake, that the object seen is an illusion; at other times it is inhibited, and becomes a mere follower of the phantasm.

It is plain therefore that this affection, which we name 'dreaming', is no mere exercise of opinion or intelligence, but yet is not an affection of the faculty of perception in the simple sense. If it were the latter it would be possible [when asleep] to hear and see in the simple sense.

How then, and in what manner, it takes place, is what we have to examine. Let us assume, what is indeed clear enough, that the affection [of dreaming] pertains to sense-perception as surely as sleep itself does. For sleep does not pertain to one organ in animals and dreaming to another; both pertain to the same organ.

But since we have, in our work *On the Soul*, treated of presentation, and the faculty of presentation is identical with that of sense-perception, though the essential notion of a faculty of presentation is different from that of a faculty of sense-perception; and since presentation is the movement set up by a sensory faculty when actually discharging its function, while a dream appears to be a presentation (for a presentation which occurs in sleep-whether simply or in some particular way-is what we call a dream): it manifestly follows that dreaming is an activity of the faculty of sense-perception, but belongs to this faculty *qua* presentative.

## 2

We can best obtain a scientific view of the nature of the dream and the manner in which it originates by regarding it in the light of the circumstances attending sleep. The objects of sense-perception corresponding to each sensory organ produce sense-perception in us, and the affection due to their operation is present in the organs of sense not only when the perceptions are actualized, but even when they have departed.

What happens in these cases may be compared with what happens in the case of projectiles moving in space. For in the case of these the movement continues even when that which set up the movement is no longer in contact [with the things that are moved]. For that which set them in motion moves a certain portion of air, and this, in turn, being moved excites motion in another portion; and so, accordingly, it is in this way that [the bodies], whether in air or in liquids, continue moving, until they come to a standstill.

This we must likewise assume to happen in the case of qualitative change; for that part which [for example] has been heated by something hot, heats [in turn] the part next to it, and this propagates the affection continuously onwards until the process has come round to its point of origination. This must also happen in the organ wherein the exercise of sense-perception takes place, since sense-perception, as realized in actual perceiving, is a mode of qualitative change. This explains why the affection continues in the sensory organs, both in their deeper and in their more superficial parts, not merely while they are actually engaged in perceiving, but even after they have ceased to do so. That they do this, indeed, is obvious in cases where we continue for some time engaged in a particular form of perception, for then, when we shift the scene of our perceptive activity, the previous affection remains; for instance, when we have turned our gaze from sunlight into darkness. For the result of this is that one sees nothing, owing to the excited by the light still subsisting in our eyes. Also, when we have looked steadily for a long while at one colour, *e.g.* at white or green, that to which we next transfer our gaze appears to be of the same colour. Again if, after having looked at the sun or some other brilliant object, we close the eyes, then, if we watch carefully, it appears in a right line with the direction of vision (whatever this may be), at first in its own colour; then it changes to crimson, next to purple, until it becomes black and disappears. And also when persons turn away from



looking at objects in motion, *e.g.* rivers, and especially those which flow very rapidly, they find that the visual stimulations still present themselves, for the things really at rest are then seen moving: persons become very deaf after hearing loud noises, and after smelling very strong odours their power of smelling is impaired; and similarly in other cases. These phenomena manifestly take place in the way above described.

That the sensory organs are acutely sensitive to even a slight qualitative difference [in their objects] is shown by what happens in the case of mirrors; a subject to which, even taking it independently, one might devote close consideration and inquiry. At the same time it becomes plain from them that as the eye [in seeing] is affected [by the object seen], so also it produces a certain effect upon it. If a woman chances during her menstrual period to look into a highly polished mirror, the surface of it will grow cloudy with a blood-coloured haze. It is very hard to remove this stain from a new mirror, but easier to remove from an older mirror. As we have said before, the cause of this lies in the fact that in the act of sight there occurs not only a passion in the sense organ acted on by the polished surface, but the organ, as an agent, also produces an action, as is proper to a brilliant object. For sight is the property of an organ possessing brilliance and colour. The eyes, therefore, have their proper action as have other parts of the body. Because it is natural to the eye to be filled with bloodvessels, a woman's eyes, during the period of menstrual flux and inflammation, will undergo a change, although her husband will not note this since his seed is of the same nature as that of his wife. The surrounding atmosphere, through which operates the action of sight, and which surrounds the mirror also, will undergo a change of the same sort that occurred shortly before in the woman's eyes, and hence the surface of the mirror is likewise affected. And as in the case of a garment, the cleaner it is the more quickly it is soiled, so the same holds true in the case of the mirror. For anything that is clean will show quite clearly a stain that it chances to receive, and the cleanest object shows up even the slightest stain. A bronze mirror, because of its shininess, is especially sensitive to any sort of contact (the movement of the surrounding air acts upon it like a rubbing or pressing or wiping); on that account, therefore, what is clean will show up clearly the slightest touch on its surface. It is hard to cleanse smudges off new mirrors because the stain penetrates deeply and is suffused to all parts; it penetrates deeply because the mirror is not a dense medium, and is suffused widely because of the smoothness of the object. On the other hand, in the case of old mirrors, stains do not remain because they do not penetrate deeply, but only smudge the surface.

From this therefore it is plain that stimulatory motion is set up even by slight differences, and that sense-perception is quick to respond to it; and further that the organ which perceives colour is not only affected by its object, but also reacts upon it. Further evidence to the same point is afforded by what takes place in wines, and in the manufacture of unguents. For both oil, when prepared, and wine become rapidly infected by the odours of the things near them; they not only acquire the odours of the things thrown into or mixed with them, but also those of the things which are placed, or which grow, near the vessels containing them.

In order to answer our original question, let us now, therefore, assume one proposition, which is clear from what precedes, *viz.* that even when the external object of perception has departed, the impressions it has made persist, and are themselves objects of perception: and [let us assume], besides, that we are easily deceived respecting the operations of sense-perception when we are excited by emotions, and different persons according to their different emotions; for example, the coward when excited by fear, the amorous person by amorous desire; so that, with but little resemblance to go upon, the former thinks he sees his foes approaching, the latter, that he sees the object of his desire; and the more deeply one is under the influence of the emotion, the less similarity is required to give rise to these illusory impressions. Thus too, both in fits of anger, and also in all states of appetite, all men become easily deceived, and more so the more their emotions are excited. This is the reason too why persons in the delirium of fever sometimes think they see animals on their chamber walls, an illusion arising from the faint resemblance to animals of the markings thereon when put together in patterns; and this sometimes corresponds with the emotional states of the sufferers, in such a way that, if the latter be not very ill, they know well enough that it is an illusion; but if the illness is more severe they actually move according to the appearances. The cause of these occurrences is that the faculty in virtue of which the controlling sense judges is not identical with that in virtue of which presentations come before the mind. A proof of this is, that the sun presents itself as only a foot in diameter, though often something else gainsays the presentation. Again, when the fingers are crossed, the one object [placed between them] is felt [by the touch] as two; but yet we deny that it is two; for sight is more authoritative than touch. Yet, if touch stood alone, we should actually have pronounced the one object to be two. The ground of such false judgements is that any appearances whatever present themselves, not only when its object stimulates a sense, but also when the sense by itself alone is stimulated, provided only it be stimulated in the same manner as it is by the object. For

example, to persons sailing past the land seems to move, when it is really the eye that is being moved by something else [the moving ship.]

### 3

From this it is manifest that the stimulatory movements based upon sensory impressions, whether the latter are derived from external objects or from causes within the body, present themselves not only when persons are awake, but also then, when this affection which is called sleep has come upon them, with even greater impressiveness. For by day, while the senses and the intellect are working together, they (i.e. such movements) are extruded from consciousness or obscured, just as a smaller is beside a larger fire, or as small beside great pains or pleasures, though, as soon as the latter have ceased, even those which are trifling emerge into notice. But by night [i.e. in sleep] owing to the inaction of the particular senses, and their powerlessness to realize themselves, which arises from the reflux of the hot from the exterior parts to the interior, they [i.e. the above 'movements'] are borne in to the head quarters of sense-perception, and there display themselves as the disturbance (of waking life) subsides. We must suppose that, like the little eddies which are being ever formed in rivers, so the sensory movements are each a continuous process, often remaining like what they were when first started, but often, too, broken into other forms by collisions with obstacles. This [last mentioned point], moreover, gives the reason why no dreams occur in sleep immediately after meals, or to sleepers who are extremely young, *e.g.* to infants. The internal movement in such cases is excessive, owing to the heat generated from the food. Hence, just as in a liquid, if one vehemently disturbs it, sometimes no reflected image appears, while at other times one appears, indeed, but utterly distorted, so as to seem quite unlike its original; while, when once the motion has ceased, the reflected images are clear and plain; in the same manner during sleep the phantasms, or residuary movements, which are based upon the sensory impressions, become sometimes quite obliterated by the above described motion when too violent; while at other times the sights are indeed seen, but confused and weird, and the dreams [which then appear] are unhealthy, like those of persons who are atrabilious, or feverish, or intoxicated with wine. For all such affections, being spirituous, cause much commotion and disturbance. In sanguineous animals, in proportion as the blood becomes calm, and as its purer are separated from its less pure elements, the fact that the movement, based on impressions derived from each of the organs of sense, is preserved in its integrity, renders the dreams healthy, causes a [clear] image to present itself, and makes the dreamer think, owing to the effects borne in from the organ of sight, that he actually sees, and owing to those which come

from the organ of hearing, that he really hears; and so on with those also which proceed from the other sensory organs. For it is owing to the fact that the movement which reaches the primary organ of sense comes from them, that one even when awake believes himself to see, or hear, or otherwise perceive; just as it is from a belief that the organ of sight is being stimulated, though in reality not so stimulated, that we sometimes erroneously declare ourselves to see, or that, from the fact that touch announces two movements, we think that the one object is two. For, as a rule, the governing sense affirms the report of each particular sense, unless another particular sense, more authoritative, makes a contradictory report. In every case an appearance presents itself, but what appears does not in every case seem real, unless when the deciding faculty is inhibited, or does not move with its proper motion. Moreover, as we said that different men are subject to illusions, each according to the different emotion present in him, so it is that the sleeper, owing to sleep, and to the movements then going on in his sensory organs, as well as to the other facts of the sensory process, [is liable to illusion], so that the dream presentation, though but little like it, appears as some actual given thing. For when one is asleep, in proportion as most of the blood sinks inwards to its fountain [the heart], the internal [sensory] movements, some potential, others actual accompany it inwards. They are so related [in general] that, if anything move the blood, some one sensory movement will emerge from it, while if this perishes another will take its place; while to one another also they are related in the same way as the artificial frogs in water which severally rise [in fixed succession] to the surface in the order in which the salt [which keeps them down] becomes dissolved. The residuary movements are like these: they are within the soul potentially, but actualize themselves only when the impediment to their doing so has been relaxed; and according as they are thus set free, they begin to move in the blood which remains in the sensory organs, and which is now but scanty, while they possess verisimilitude after the manner of cloud-shapes, which in their rapid metamorphoses one compares now to human beings and a moment afterwards to centaurs. Each of them is however, as has been said, the remnant of a sensory impression taken when sense was actualizing itself; and when this, the true impression, has departed, its remnant is still immanent, and it is correct to say of it, that though not actually Koriskos, it is like Koriskos. For when the person was actually perceiving, his controlling and judging sensory faculty did not call it Koriskos, but, prompted by this [impression], called the genuine person yonder Koriskos. Accordingly, this sensory impulse, which, when actually perceiving, it [the controlling faculty] describes (unless completely inhibited by the blood), it now [in dreams] when quasi-perceiving, receives from the movements persisting in the sense-organs, and mistakes it-an

impulse that is merely like the true [objective] impression-for the true impression itself, while the effect of sleep is so great that it causes this mistake to pass unnoticed. Accordingly, just as if a finger be inserted beneath the eyeball without being observed, one object will not only present two visual images, but will create an opinion of its being two objects; while if it [the finger] be observed, the presentation will be the same, but the same opinion will not be formed of it; exactly so it is in states of sleep: if the sleeper perceives that he is asleep, and is conscious of the sleeping state during which the perception comes before his mind, it presents itself still, but something within him speaks to this effect: 'the image of Koriskos presents itself, but the real Koriskos is not present'; for often, when one is asleep, there is something in consciousness which declares that what then presents itself is but a dream. If, however, he is not aware of being asleep, there is nothing which will contradict the testimony of the bare presentation.

That what we here urge is true, *i.e.* that there are such presentative movements in the sensory organs, any one may convince himself, if he attends to and tries to remember the affections we experience when sinking into slumber or when being awakened. He will sometimes, in the moment of awakening, surprise the images which present themselves to him in sleep, and find that they are really but movements lurking in the organs of sense. And indeed some very young persons, if it is dark, though looking with wide open eyes, see multitudes of phantom figures moving before them, so that they often cover up their heads in terror.

From all this, then, the conclusion to be drawn is, that the dream is a sort of presentation, and, more particularly, one which occurs in sleep; since the phantoms just mentioned are not dreams, nor is any other a dream which presents itself when the sense-perceptions are in a state of freedom. Nor is every presentation which occurs in sleep necessarily a dream. For in the first place, some persons [when asleep] actually, in a certain way, perceive sounds, light, savour, and contact; feebly, however, and, as it were, remotely. For there have been cases in which persons while asleep, but with the eyes partly open, saw faintly in their sleep (as they supposed) the light of a lamp, and afterwards, on being awakened, straightway recognized it as the actual light of a real lamp; while, in other cases, persons who faintly heard the crowing of cocks or the barking of dogs identified these clearly with the real sounds as soon as they awoke. Some persons, too, return answers to questions put to them in sleep. For it is quite possible that, of waking or sleeping, while the one is present in the

ordinary sense, the other also should be present in a certain way. But none of these occurrences should be called a dream. Nor should the true thoughts, as distinct from the mere presentations, which occur in sleep [be called dreams]. The dream proper is a presentation based on the movement of sense impressions, when such presentation occurs during sleep, taking sleep in the strict sense of the term.

There are cases of persons who in their whole lives have never had a dream, while others dream when considerably advanced in years, having never dreamed before. The cause of their not having dreams appears somewhat like that which operates in the case of infants, and [that which operates] immediately after meals. It is intelligible enough that no dream-presentation should occur to persons whose natural constitution is such that in them copious evaporation is borne upwards, which, when borne back downwards, causes a large quantity of motion. But it is not surprising that, as age advances, a dream should at length appear to them. Indeed, it is inevitable that, as a change is wrought in them in proportion to age or emotional experience, this reversal [from non-dreaming to dreaming] should occur also.

### *On Divination in Sleep* (462b)



*Translated by J. I. Beare*

# 1

As to the divination which takes place in sleep, and is said to be based on dreams, we cannot lightly either dismiss it with contempt or give it implicit confidence. The fact that all persons, or many, suppose dreams to possess a special significance, tends to inspire us with belief in it [such divination], as founded on the testimony of experience; and indeed that divination in dreams should, as regards some subjects, be genuine, is not incredible, for it has a show of reason; from which one might form a like opinion also respecting all other dreams. Yet the fact of our seeing no probable cause to account for such divination tends to inspire us with distrust. For, in addition to its further unreasonableness, it is absurd to combine the idea that the sender of such dreams should be God with the fact that those to whom he sends them are not the best and wisest, but merely commonplace persons. If, however, we abstract from the causality of God, none of the other causes assigned appears probable. For that certain persons should have foresight in dreams concerning things destined to take place at the Pillars of Hercules, or on the banks of the Borysthenes, seems to be something to discover the explanation of which surpasses the wit of man. Well then, the dreams in question must be regarded either as causes, or as tokens, of the events, or else as coincidences; either as all, or some, of these, or as one only. I use the word 'cause' in the sense in which the moon is [the cause] of an eclipse of the sun, or in which fatigue is [a cause] of fever; 'token' [in the sense in which] the entrance of a star [into the shadow] is a token of the eclipse, or [in which] roughness of the tongue [is a token] of fever; while by 'coincidence' I mean, for example, the occurrence of an eclipse of the sun while some one is taking a walk; for the walking is neither a token nor a cause of the eclipse, nor the eclipse [a cause or token] of the walking. For this reason no coincidence takes place according to a universal or general rule. Are we then to say that some dreams are causes, others tokens, *e.g.* of events taking place in the bodily organism? At all events, even scientific physicians tell us that one should pay diligent attention to dreams, and to hold this view is reasonable also for those who are not practitioners, but speculative philosophers. For the movements which occur in the daytime [within the body] are, unless very great and violent, lost sight of in contrast with the waking movements, which are more impressive. In sleep the opposite takes place, for then even trifling movements seem considerable. This is plain in what often happens during sleep; for example, dreamers fancy that they are affected by thunder and lightning, when in fact



there are only faint ringings in their ears; or that they are enjoying honey or other sweet savours, when only a tiny drop of phlegm is flowing down [the oesophagus]; or that they are walking through fire, and feeling intense heat, when there is only a slight warmth affecting certain parts of the body. When they are awakened, these things appear to them in this their true character. But since the beginnings of all events are small, so, it is clear, are those also of the diseases or other affections about to occur in our bodies. In conclusion, it is manifest that these beginnings must be more evident in sleeping than in waking moments.

Nay, indeed, it is not improbable that some of the presentations which come before the mind in sleep may even be causes of the actions cognate to each of them. For as when we are about to act [in waking hours], or are engaged in any course of action, or have already performed certain actions, we often find ourselves concerned with these actions, or performing them, in a vivid dream; the cause whereof is that the dream-movement has had a way paved for it from the original movements set up in the daytime; exactly so, but conversely, it must happen that the movements set up first in sleep should also prove to be starting-points of actions to be performed in the daytime, since the recurrence by day of the thought of these actions also has had its way paved for it in the images before the mind at night. Thus then it is quite conceivable that some dreams may be tokens and causes [of future events].

Most [so-called prophetic] dreams are, however, to be classed as mere coincidences, especially all such as are extravagant, and those in the fulfilment of which the dreamers have no initiative, such as in the case of a sea-fight, or of things taking place far away. As regards these it is natural that the fact should stand as it does whenever a person, on mentioning something, finds the very thing mentioned come to pass. Why, indeed, should this not happen also in sleep? The probability is, rather, that many such things should happen. As, then, one's mentioning a particular person is neither token nor cause of this person's presenting himself, so, in the parallel instance, the dream is, to him who has seen it, neither token nor cause of its [so-called] fulfilment, but a mere coincidence. Hence the fact that many dreams have no 'fulfilment', for coincidence do not occur according to any universal or general law.

## 2

On the whole, forasmuch as certain of the lower animals also dream, it may be concluded that dreams are not sent by God, nor are they designed for this purpose [to reveal the future]. They have a divine aspect, however, for Nature [their cause] is divinely planned, though not itself divine. A special proof [of their not being sent by God] is this: the power of foreseeing the future and of having vivid dreams is found in persons of inferior type, which implies that God does not send their dreams; but merely that all those whose physical temperament is, as it were, garrulous and excitable, see sights of all descriptions; for, inasmuch as they experience many movements of every kind, they just chance to have visions resembling objective facts, their luck in these matters being merely like that of persons who play at even and odd. For the principle which is expressed in the gambler's maxim: 'If you make many throws your luck must change,' holds in their case also.

That many dreams have no fulfilment is not strange, for it is so too with many bodily tokens and weather-signs, *e.g.* those of rain or wind. For if another movement occurs more influential than that from which, while [the event to which it pointed was] still future, the given token was derived, the event [to which such token pointed] does not take place. So, of the things which ought to be accomplished by human agency, many, though well-planned are by the operation of other principles more powerful [than man's agency] brought to nought. For, speaking generally, that which was about to happen is not in every case what now is happening, nor is that which shall hereafter be identical with that which is now going to be. Still, however, we must hold that the beginnings from which, as we said, no consummation follows, are real beginnings, and these constitute natural tokens of certain events, even though the events do not come to pass.

As for [prophetic] dreams which involve not such beginnings [sc. of future events] as we have here described, but such as are extravagant in times, or places, or magnitudes; or those involving beginnings which are not extravagant in any of these respects, while yet the persons who see the dream hold not in their own hands the beginnings [of the event to which it points]: unless the foresight which such dreams give is the result of pure coincidence, the following would be a better explanation of it than that proposed by Democritus, who

alleges 'images' and 'emanations' as its cause. As, when something has caused motion in water or air, this [the portion of water or air], and, though the cause has ceased to operate, such motion propagates itself to a certain point, though there the prime movement is not present; just so it may well be that a movement and a consequent sense-perception should reach sleeping souls from the objects from which Democritus represents 'images' and 'emanations' coming; that such movements, in whatever way they arrive, should be more perceptible at night [than by day], because when proceeding thus in the daytime they are more liable to dissolution (since at night the air is less disturbed, there being then less wind); and that they shall be perceived within the body owing to sleep, since persons are more sensitive even to slight sensory movements when asleep than when awake. It is these movements then that cause 'presentations', as a result of which sleepers foresee the future even relatively to such events as those referred to above. These considerations also explain why this experience befalls commonplace persons and not the most intelligent. For it would have regularly occurred both in the daytime and to the wise had it been God who sent it; but, as we have explained the matter, it is quite natural that commonplace persons should be those who have foresight [in dreams]. For the mind of such persons is not given to thinking, but, as it were, derelict, or totally vacant, and, when once set moving, is borne passively on in the direction taken by that which moves it. With regard to the fact that some persons who are liable to derangement have this foresight, its explanation is that their normal mental movements do not impede [the alien movements], but are beaten off by the latter. Therefore it is that they have an especially keen perception of the alien movements.

That certain persons in particular should have vivid dreams, *e.g.* that familiar friends should thus have foresight in a special degree respecting one another, is due to the fact that such friends are most solicitous on one another's behalf. For as acquaintances in particular recognize and perceive one another a long way off, so also they do as regards the sensory movements respecting one another; for sensory movements which refer to persons familiarly known are themselves more familiar. Atrabilious persons, owing to their impetuosity, are, when they, as it were, shoot from a distance, expert at hitting; while, owing to their mutability, the series of movements deploys quickly before their minds. For even as the insane recite, or con over in thought, the poems of Philaegides, *e.g.* the Aphrodite, whose parts succeed in order of similitude, just so do they [the 'atrabilious'] go on and on stringing sensory movements together. Moreover, owing to their aforesaid impetuosity, one movement within them is not liable to be knocked out of its course by some other movement.

The most skilful interpreter of dreams is he who has the faculty of observing resemblances. Any one may interpret dreams which are vivid and plain. But, speaking of 'resemblances', I mean that dream presentations are analogous to the forms reflected in water, as indeed we have already stated. In the latter case, if the motion in the water be great, the reflexion has no resemblance to its original, nor do the forms resemble the real objects. Skilful, indeed, would he be in interpreting such reflexions who could rapidly discern, and at a glance comprehend, the scattered and distorted fragments of such forms, so as to perceive that one of them represents a man, or a horse, Or anything whatever. Accordingly, in the other case also, in a similar way, some such thing as this [blurred image] is all that a dream amounts to; for the internal movement effaces the clearness of the dream.

The questions, therefore, which we proposed as to the nature of sleep and the dream, and the cause to which each of them is due, and also as to divination as a result of dreams, in every form of it, have now been discussed.

### ***On Length and Shortness of Life*** (464b)



*Translated by G. R. T. Ross*

# 1

THE reasons for some animals being long-lived and others short-lived, and, in a word, causes of the length and brevity of life call for investigation.

The necessary beginning to our inquiry is a statement of the difficulties about these points. For it is not clear whether in animals and plants universally it is a single or diverse cause that makes some to be long-lived, others short-lived. Plants too have in some cases a long life, while in others it lasts but for a year.

Further, in a natural structure are longevity and a sound constitution coincident, or is shortness of life independent of unhealthiness? Perhaps in the case of certain maladies a diseased state of the body and shortness of life are interchangeable, while in the case of others ill-health is perfectly compatible with long life.

Of sleep and waking we have already treated; about life and death we shall speak later on, and likewise about health and disease, in so far as it belongs to the science of nature to do so. But at present we have to investigate the causes of some creatures being long-lived, and others short-lived. We find this distinction affecting not only entire genera opposed as wholes to one another, but applying also to contrasted sets of individuals within the same species. As an instance of the difference applying to the genus I give man and horse (for mankind has a longer life than the horse), while within the species there is the difference between man and man; for of men also some are long-lived, others short-lived, differing from each other in respect of the different regions in which they dwell. Races inhabiting warm countries have longer life, those living in a cold climate live a shorter time. Likewise there are similar differences among individuals occupying the same locality.

## 2

In order to find premisses for our argument, we must answer the question, What is that which, in natural objects, makes them easily destroyed, or the reverse? Since fire and water, and whatsoever is akin thereto, do not possess identical powers they are reciprocal causes of generation and decay. Hence it is natural to infer that everything else arising from them and composed of them should share in the same nature, in all cases where things are not, like a house, a composite unity formed by the synthesis of many things.

In other matters a different account must be given; for in many things their mode of dissolution is something peculiar to themselves, *e.g.* in knowledge and health and disease. These pass away even though the medium in which they are found is not destroyed but continues to exist; for example, take the termination of ignorance, which is recollection or learning, while knowledge passes away into forgetfulness, or error. But accidentally the disintegration of a natural object is accompanied by the destruction of the non-physical reality; for, when the animal dies, the health or knowledge resident in it passes away too. Hence from these considerations we may draw a conclusion about the soul too; for, if the inherence of soul in body is not a matter of nature but like that of knowledge in the soul, there would be another mode of dissolution pertaining to it besides that which occurs when the body is destroyed. But since evidently it does not admit of this dual dissolution, the soul must stand in a different case in respect of its union with the body.

### 3

Perhaps one might reasonably raise the question whether there is any place where what is corruptible becomes incorruptible, as fire does in the upper regions where it meets with no opposite. Opposites destroy each other, and hence accidentally, by their destruction, whatsoever is attributed to them is destroyed. But no opposite in a real substance is accidentally destroyed, because real substance is not predicated of any subject. Hence a thing which has no opposite, or which is situated where it has no opposite, cannot be destroyed. For what will that be which can destroy it, if destruction comes only through contraries, but no contrary to it exists either absolutely or in the particular place where it is? But perhaps this is in one sense true, in another sense not true, for it is impossible that anything containing matter should not have in any sense an opposite. Heat and straightness can be present in every part of a thing, but it is impossible that the thing should be nothing but hot or white or straight; for, if that were so, attributes would have an independent existence. Hence if, in all cases, whenever the active and the passive exist together, the one acts and the other is acted on, it is impossible that no change should occur. Further, this is so if a waste product is an opposite, and waste must always be produced; for opposition is always the source of change, and refuse is what remains of the previous opposite. But, after expelling everything of a nature actually opposed, would an object in this case also be imperishable? No, it would be destroyed by the environment.

If then that is so, what we have said sufficiently accounts for the change; but, if not, we must assume that something of actually opposite character is in the changing object, and refuse is produced.

Hence accidentally a lesser flame is consumed by a greater one, for the nutriment, to wit the smoke, which the former takes a long period to expend, is used up by the big flame quickly.

Hence [too] all things are at all times in a state of transition and are coming into being and passing away. The environment acts on them either favourably or antagonistically, and, owing to this, things that change their situation become more or less enduring than their nature warrants, but never are they eternal when they contain contrary qualities; for their matter is an immediate source of contrariety, so that if it involves locality they show change of situation, if

quantity, increase and diminution, while if it involves qualitative affection we find alteration of character.



## 4

We find that a superior immunity from decay attaches neither to the largest animals (the horse has shorter life than man) nor to those that are small (for most insects live but for a year). Nor are plants as a whole less liable to perish than animals (many plants are annuals), nor have sanguineous animals the pre-eminence (for the bee is longer-lived than certain sanguineous animals). Neither is it the bloodless animals that live longest (for molluscs live only a year, though bloodless), nor terrestrial organisms (there are both plants and terrestrial animals of which a single year is the period), nor the occupants of the sea (for there we find the crustaceans and the molluscs, which are short-lived).

Speaking generally, the longest-lived things occur among the plants, *e.g.* the date-palm. Next in order we find them among the sanguineous animals rather than among the bloodless, and among those with feet rather than among the denizens of the water. Hence, taking these two characters together, the longest-lived animals fall among sanguineous animals which have feet, *e.g.* man and elephant. As a matter of fact also it is a general rule that the larger live longer than the smaller, for the other long-lived animals too happen to be of a large size, as are also those I have mentioned.

## 5

The following considerations may enable us to understand the reasons for all these facts. We must remember that an animal is by nature humid and warm, and to live is to be of such a constitution, while old age is dry and cold, and so is a corpse. This is plain to observation. But the material constituting the bodies of all things consists of the following-the hot and the cold, the dry and the moist. Hence when they age they must become dry, and therefore the fluid in them requires to be not easily dried up. Thus we explain why fat things are not liable to decay. The reason is that they contain air; now air relatively to the other elements is fire, and fire never becomes corrupted.

Again the humid element in animals must not be small in quantity, for a small quantity is easily dried up. This is why both plants and animals that are large are, as a general rule, longer-lived than the rest, as was said before; it is to be expected that the larger should contain more moisture. But it is not merely this that makes them longer lived; for the cause is twofold, to wit, the quality as well as the quantity of the fluid. Hence the moisture must be not only great in amount but also warm, in order to be neither easily congealed nor easily dried up.

It is for this reason also that man lives longer than some animals which are larger; for animals live longer though there is a deficiency in the amount of their moisture, if the ratio of its qualitative superiority exceeds that of its quantitative deficiency.

In some creatures the warm element is their fatty substance, which prevents at once desiccation and congelation; but in others it assumes a different flavour. Further, that which is designed to be not easily destroyed should not yield waste products. Anything of such a nature causes death either by disease or naturally, for the potency of the waste product works adversely and destroys now the entire constitution, now a particular member.

This is why salacious animals and those abounding in seed age quickly; the seed is a residue, and further, by being lost, it produces dryness. Hence the mule lives longer than either the horse or the ass from which it sprang, and females live longer than males if the males are salacious. Accordingly cock-sparrows have a shorter life than the females. Again males subject to great toil are short-lived and age more quickly owing to the labour; toil produces dryness and old age is dry.

But by natural constitution and as a general rule males live longer than females, and the reason is that the male is an animal with more warmth than the female.

The same kind of animals are longer-lived in warm than in cold climates for the same reason, on account of which they are of larger size. The size of animals of cold constitution illustrates this particularly well, and hence snakes and lizards and scaly reptiles are of great size in warm localities, as also are testacea in the Red Sea: the warm humidity there is the cause equally of their augmented size and of their life. But in cold countries the humidity in animals is more of a watery nature, and hence is readily congealed. Consequently it happens that animals with little or no blood are in northerly regions either entirely absent (both the land animals with feet and the water creatures whose home is the sea) or, when they do occur, they are smaller and have shorter life; for the frost prevents growth.

Both plants and animals perish if not fed, for in that case they consume themselves; just as a large flame consumes and burns up a small one by using up its nutriment, so the natural warmth which is the primary cause of digestion consumes the material in which it is located.

Water animals have a shorter life than terrestrial creatures, not strictly because they are humid, but because they are watery, and watery moisture is easily destroyed, since it is cold and readily congealed. For the same reason bloodless animals perish readily unless protected by great size, for there is neither fatness nor sweetness about them. In animals fat is sweet, and hence bees are longer-lived than other animals of larger size.

## 6

It is amongst the plants that we find the longest life-more than among the animals, for, in the first place, they are less watery and hence less easily frozen. Further they have an oiliness and a viscosity which makes them retain their moisture in a form not easily dried up, even though they are dry and earthy.

But we must discover the reason why trees are of an enduring constitution, for it is peculiar to them and is not found in any animals except the insects.

Plants continually renew themselves and hence last for a long time. New shoots continually come and the others grow old, and with the roots the same thing happens. But both processes do not occur together. Rather it happens that at one time the trunk and the branches alone die and new ones grow up beside them, and it is only when this has taken place that the fresh roots spring from the surviving part. Thus it continues, one part dying and the other growing, and hence also it lives a long time.

There is a similarity, as has been already said, between plants and insects, for they live, though divided, and two or more may be derived from a single one. Insects, however, though managing to live, are not able to do so long, for they do not possess organs; nor can the principle resident in each of the separated parts create organs. In the case of a plant, however, it can do so; every part of a plant contains potentially both root and stem. Hence it is from this source that issues that continued growth when one part is renewed and the other grows old; it is practically a case of longevity. The taking of slips furnishes a similar instance, for we might say that, in a way, when we take a slip the same thing happens; the shoot cut off is part of the plant. Thus in taking slips this perpetuation of life occurs though their connexion with the plant is severed, but in the former case it is the continuity that is operative. The reason is that the life principle potentially belonging to them is present in every part.

Identical phenomena are found both in plants and in animals. For in animals the males are, in general, the longer-lived. They have their upper parts larger than the lower (the male is more of the dwarf type of build than the female), and it is in the upper part that warmth resides, in the lower cold. In plants also those with great heads are longer-lived, and such are those that are not annual but of the tree-type, for the roots are the head and upper part of a plant, and among the

annuals growth occurs in the direction of their lower parts and the fruit.

These matters however will be specially investigated in the work *On Plants*. But this is our account of the reasons for the duration of life and for short life in animals. It remains for us to discuss youth and age, and life and death. To come to a definite understanding about these matters would complete our course of study on animals.

## ON COLOURS

Those colours are simple which belong to the elements, fire, air, water and earth. For air and water are naturally white in themselves, while fire and the sun are golden. The earth is also naturally white, but seems coloured because it is dyed. This becomes clear when we consider ashes; for they become white when the moisture which caused their dyeing is burned out of them; but not completely so, for they are also dyed by smoke, which is black. In the same way sand becomes golden, because the fiery red and black tints the water. The colour black belongs to the elements of things while they are undergoing a transformation of their nature. But the other colours are evidently due to mixture, when they are blended with each other. For darkness follows when light fails.

But black appears to us in three ways. In the first, that which is not seen is, generally speaking, black naturally (for any light from such things is reflected as black); or secondly, black is that from which no light is conveyed to the eyes; for that which is not seen, when the surrounding region is seen, gives an impression of black. Thirdly, all things appear black of the kind from which a very small amount of light is reflected. This is why shadows appear to be black. In the same way water appears to be black when it is rough, as for instance the ripple of the sea; for owing to the roughness of the surface few rays can fall on it, and the light is scattered, and so what is in shadow appears black. It is for the same reason that cloud appears to be black when it is very thick. It is just the same with water and air when the light does not entirely penetrate them. For these also appear to be black when deep, for very few rays of light are totally reflected; for all those parts which are in between the light parts seem to be black because of the darkness. One can learn from many facts that darkness is not a colour at all, but is merely an absence of light, and particularly from the fact that it is not possible to perceive in darkness the character or shape of anything, as it is in the case of visible objects.

But that light is the colour of fire is clear from the fact that it is discovered to have no colour but this, and because it alone is visible by itself, whereas all other things are visible by means of it. This point must be further considered. For some things which are neither fire nor forms of fire seem to produce light by nature. Unless the colour of fire is light, light is not the colour of fire alone; but it is possible that this colour does not belong to fire merely, but that light is actually its colour. Certainly visibility is impossible in any way except by light,

just as the visibility of all other bodies is only possible by the appearance of colour. But the colour black is seen when air and water are burned by fire; thus all things grow black when burning, such as wood and coals when the fire is quenched, and the smoke from potter's clay when the moisture which is in the clay separates out and is burned. For this reason smoke that arises from fat and oily matter is the blackest, such as from oil, pitch and a pinewood torch, because these burn to the greatest extent and have continuity of substance. Those things also become black through which water flows, when the moisture of those which are grown over with moss first dries up, like the plaster in walls. Stones behave in the same way in the presence of water. For these too when moss-grown and afterwards dried become black in colour.

These then are all the simple colours.

The other colours derived from these by mixture in greater or smaller proportions make many different varieties. By greater and smaller proportions I mean such as red and purple, by mixture such as white and black, which when mixed give an appearance of grey. So when what is black and shady is mixed with light the result is red. For we see that, when what is black is mixed with the light of the sun and fire, the result is always red, and black things when burned always change to the colour red; for smoky flame and coal, when it is burned through, are seen to have a red colour. Purple is gay and bright whenever the rays of the sun are a weak mixture of white and shady. Consequently at the hours of sunrise and sunset the air seems to have a purple tint, the sun being at its rising or setting. For its rays being weak at the time are cast upon the air when it is inclined to be dark. The sea again has a purple tinge when the waves rise at an angle, and consequently are in shadow; for the sun's rays striking feebly at an angle cause the colour to appear purple. The same thing is seen to occur with plumage; for when exposed to the light it has a purple tint. When less light strikes it, it is of that dark tint which men call grey-brown; when however the light is strong and mixed with primary black it becomes red. But when it is light and shining as well it changes to flame colour.

As far as mixture with each other is concerned we must begin our inquiry by making a mixture starting with an observed base, but not assuming a similar origin for all. For some colours are not simple, but the same relation applies to some of the compound colours as the simple ones bear to them, because in a sense the simple colours must be mixed with one of these compounds, and we must not assume it to be equally obvious in every case even on a close

inspection. For when we speak of a mixture of purple and red we must explain on similar lines those which are a mixture of these two and produce another colour, but must not expect a similar appearance. We must then base our assumptions and our examination of mixtures on what has been prepared before, for instance that the colour of dark wine occurs when sunlight rays are mixed with what is pure black and what is glittering, like the berries of the grape; for their colour is said to be wine-dark at the moment of ripening; for, when they are growing black, red changes to purple. According to the method we have laid down we must inquire into all the variations of colour, finding similarity of colour in objects undergoing movement according to their actual appearance, finding similar explanations of the mixing in each case, even in the case of those which both by origin and through mixture produce the appearance, and by bringing forward convincing proof. But we must make our investigation into these things not by mixing these colours as painters do, but by comparing the rays which are reflected from those to which we have already referred. For one could especially consider the mixing of rays in nature. But we require convincing proof and a consideration of similarities, if the origin of the colours is to become obvious. This is especially the case with the light of the sun, and that which comes from fire, air and water; for these being mixed in greater or less proportions produce in a sense all the colours. One must also base conclusions on the similarities of the other colours, when mixed with the rays of the sun; for coal, smoke, rust and sulphur and plumage when mixed, some with the rays of the sun and some with fire, provide many variations of colour. Other colours, again, must be considered in ripening, occurring as they do in plants and fruit, hair and feathers and all such things.

We must not, however, neglect the variegated and the ill defined among colours, and the quantities to which their occurrence is due. We shall find that it is because they have an unequal and disproportionate share of light and shade; for the difference between light and shade is a quantitative difference of more and less, so that by themselves and when mixed with colours they cause change of colour, either because the colours mixed differ in quantity and strength, or because they have not the same proportions. For purple exhibits a large number of variations, and so does red and white, and each of the other colours, both in the matter of greater and less, and in their mixture with each other and in their purity. It also makes a difference whether the colour mixed is bright and shining, or on the contrary dark and dull. Shining is nothing but the continuity and intensity of light. A golden colour appears when what is yellow and sunny gleams with great intensity. This is why the necks of doves and drops of water



appear golden when light is reflected from them. Some objects, when smoothed by rubbing or by other forces, exhibit varied and different colours, like \*, for though black they draw white lines, because they are originally composed of small elements which are thick and black, and by the dyeing process which takes place when they are made, all the passages through which the dyeing passes are coloured, so that a different appearances is given to the colour. But what is rubbed off from them is no longer golden in appearance, nor bronze, nor has it any other such tinge, but it is entirely black, because by the rubbing the passages through which the dyeing takes place are broken up, but originally they are of the same colour. For when the former colour is no longer obvious to us, because the dyeing process is dissipated, we see the colour which naturally belongs to them; and so they all appear black. But in the process of rubbing each of them to a homogeneous and smooth surface, as in treating on a touchstone, they lose their blackness, and recover their colour, the dye showing through when there is contact and continuity. But in the case of things burned and being disintegrated and melting in the fire those exhibit most colours where the smoke is light and misty and the colours are dark, like the smoke that arises from sulphur and from rusty bronze, and all substances which are dense and smooth such as silver. But other cases of variety are those which have dark colours and some measure of smoothness, such as water, clouds and birds' plumage. For these owing to their smoothness and the rays that fall upon them, mixed in various ways, produce various colours, just as darkness does.

We do not see any of the colours pure as they really are, but all are mixed with others; or if not mixed with any other colour they are mixed with rays of light and with shadows, and so they appear different and not as they are. Consequently things appear different according to whether they are seen in shadow or in sunlight, in a hard or a soft light, and according to the angle at which they are seen and in accordance with other differences as well. Those which are seen in the light of the fire or the moon and by the rays of a lamp differ by reason of the light in each case: and also by the mixture of the colours with each other; for in passing through each other they are coloured; for when light falls on something, and, being tinted by it, becomes reddish or greenish, and then the reflected light falls on another colour, being again mixed with it, it takes on still another mixture of colour. And by being affected in this way, continually but imperceptibly, it sometimes reaches the eyes as a mixture of many colours, but producing the sensation of the most predominant; so in water things appear more watery and things seen in mirrors appear to have similar colours to those in the mirrors. This also happens, one would suppose, in the

case of air. So that all colours are a mixture of three things, the light, the medium through which the light is seen, such as water and air, and thirdly, the colours forming the ground, from which the light happens to be reflected. But the white and the transparent, when it is very thin, appears misty in colour. But over what is dense a haze invariably appears, as in the case of water, glass and air, when it is dense. For, as the rays from all directions fail owing to the density, we cannot see accurately into their inner parts. But the air when examined from near by seems to have no colour (for owing to its thinness it is controlled by the rays and is divided up by them, because they are denser and show right through it), but when examined in depth, the air appears from very near by to be blue in colour because of its rarity. For where the light fails, there, being penetrated by darkness at this point, it appears blue. But when dense, just as with water, it is the whitest of all things.

All dyed things take their colour from what dyes them. For many are coloured by the flowers of plants, many by the roots, many again by bark or wood or leaves or fruit. Many again are coloured by earth, by foam, and many by ink; others again are coloured by animal juices, such as purple by the murex. Others again by wine, by smoke, by sand, or by sea as is the case with the hair among sea creatures; for these are all made reddish by the sea. This is true, speaking generally, of all those which have distinctive colours. For when the colours enter the passages of that which is being dyed together with moisture and heat, when they are dried they take their colours with them. And so it is often washed out of them, when the dye flows out of the passages. But the steeping in alum in the dyeing process produces many differences and mixtures, and so do the qualities of the substances dyed, as has been said before in the case of mixtures. When black fleeces are dyed they do not become all equally bright in colour, because their passages are dyed when the dye enters into them, but the spaces in between the hair receive no dye. These being white and lying side by side with the colours make the dye appear brighter; the black parts on the other hand are shadowy and dark. Consequently what is called brown-grey is brighter when on black wool than on white. For in this case the dye appears purer, being mingled with the rays of the black. By itself the space in between the passages is not noticed because of its smallness, just as tin is not noticed when it is mixed with bronze, nor any other such thing. The colours of things dyed vary in kind according to the reasons we have outlined.

Hair and plumage and flowers and fruit and all points can in many ways be seen to take on changes of colour at the time of ripening; but now we have to consider

what are the primary sources of the colours which belong naturally to each species, what changes they exhibit and from what and for what reason they are thus affected, and whether any other difficulties follow these facts. The inquiry depends on the following facts. The primary colour of all plants is green; for shoots and leaves and fruit are all green to begin with. One can see exactly the same thing in rain water; when the water has stood for a long time, as it dries up again it becomes green in colour. This happens logically, and in all growing things this is the first colour that obtains. For all water that stands for a long time is green originally, being mixed with the rays of the sun, but it gradually grows black, but becomes green again when mixed with fresh water. For anything moist, as has been said, as it grows old by itself and dries up, becomes black, as plaster does in its receptacles; for all things which are always in water become black, because the moisture does not grow cold and dry, but all that is drained out and exposed to the sun becomes green because the yellow is mixed with the black. Or rather, as the moist part blackens, the green becomes very dark, and of the colour of a leek. Consequently the older shoots are much blacker than the young ones; the latter are yellower because the moisture in them has not yet turned black. For as their growth becomes slower and their moisture lasts for a long time, as the moisture becomes very black as it cools, it changes to leek-green by being mixed with pure black.

But in the case of those in which the moisture is not mixed with the rays of the sun, their white colour persists, unless it grows black by lasting a long time and drying up first. Consequently in all plants the parts above the earth are green at first, but beneath the earth stalks and roots are white. Shoots, again, if they are below the earth are white, but if the earth is removed from around them they all become green right from the first, as has been said before, because the moisture which passes down into them through the shoots has this colour naturally and in the case of fruits this is soon spent on growth; but when they no longer grow, it is because the heat cannot control the food which flows into them, but on the contrary the moisture is exhausted by the heat. Then all the fruits become ripe; and as the moisture in them is also warmed by the sun and the heat of the atmosphere, each combines to take the colours from the juices, just as those which are dyed from the flowers. So they are coloured little by little, and most of all those which are turned towards the sun and the warmth.

So that the colours change in accordance with the seasons. This is obvious; those of a green hue all change as they grow ripe to their natural colour. For they are white, black, grey, yellow, blackish, dark, dull-coloured red, wine-dark and

saffron and exhibit almost all the differences of colour. But since the largest number of colours appear when more are mixed with each other, it is obvious that the colours in plants must have the same mixture; for the moisture penetrating through them, and washing all colours through with it, produces all the possible colours. And as this is warmed up in the ripening of the fruit by the sun and the warmth of the air, each of the colours becomes fixed by itself, some more quickly and some more slowly, as occurs in dyeing by the murex. For when they have cut this open and drained from it all the moisture, and have poured this out and boiled it in vessels, at first none of the colours is quite obvious in the dye, because as the liquid boils more, and the colours which are still in it get more mixed, each of them exhibits many and various differences; for there is black and white, and dull, and misty, and finally all becomes purple when the boiling is complete, so that in the mixture none of the other colours is visible by itself.

The same thing occurs with fruits. For in many of them owing to the fact that the ripening of all the colours does not take place at once, but some form earlier and others later, they change from one to the other, as in grapes and dates. For some of these become red at first, but as the black is formed in them they turn to wine-dark; but at last they become purplish, when the red colour is mixed with a large quantity of pure black. For those colours which are formed later, when they prevail, cause the previous colours to change. This is most obvious in the case of the black fruits; for the larger number of them, as has been said, changing from their initial green redden and become tawny, but they soon change again from the red and become purple owing to the unmixed black which exists in them. But this proves the point; for cuttings, and shoots, and leaves of all such plants are red, because this kind of colour exists in them, since it is obvious that the black fruits share in both these colours; for the juice of all such plants is wine-dark.

But in their order of origin the red comes before the black. This is obvious; for the ground upon which the drops fall and speaking generally any spot at which there is a moderate fall of water in dark places all change first from a greenish colour to red, and the ground becomes as though blood had been recently spilled on the spot in which the green takes on the ripening; at the end this becomes very black and blueish. The same thing happens with fruits. In their case it is easy to see that the colour of the fruit changes, as the colours are laid on it afterwards. For the fruit of the pomegranate and the petals of the rose are white to begin with, but at last as the juices in them get tinted by ripening, they become shaded off and change again to the colour of sea purple and red. Other things

have more colours in them, such as the juice of the poppy and the lees of the olive; for the latter is white at first, just like the fruit of the pomegranate, but after having grown white again it changes to the colour red, and at last by being mixed with black it becomes blueish. Consequently the leaves of the poppy are reddish on top, because their ripening comes quickly, but their other parts are black at the bottom, as this colour prevails in them, as is also the case with the fruit; for at last it becomes black. In the case of those plants which have one colour only, such as white, black, red or purple, the fruits of all these persist in having the same type of colour, when once they change from green to another colour. The flowers are in some cases of the same colour as the fruit, as is true of the pomegranate; for both its fruit and its flower become reddish; in some cases there is a great difference in colour, for instance in the bay and the ivy; for the flower of all these species is yellow, but the fruit of the latter is black and of the former red. The same thing is true of the apple-tree; for its flower is white tending to grow purple, while its fruit is golden. The flower of the poppy is red, and its fruit partly black and partly white, according to the ripening of the juices in it at different times. One can see this in many cases; for some fruits, as has already been said, exhibit many variations at the time of ripening.

So it happens that very different scents and juices are associated with both flower and fruit. This is still more obvious in the case of the flowers themselves, for, in the same petal, part may be black and part red and in some cases part may be white and part purplish. This is specially true of the iris; for this plant has many differences in colour during its ripening, as is also the case with grapes, when they come to ripen. So in their case the tips of the flowers ripen, but these at the extremities have much less colour than the rest. In some of them the moisture is, so to speak, burned out of them before they take on their own proper ripening. So the flowers remain of one colour, but the fruit changes as it ripens. Some plants owing to the smallness of their food ripen quickly, but the fruits owing to their quantity of moisture change at the time of their ripening into all their natural colours. This is clear, as has been said before, especially in the case of dyeing with colour. For sometimes to begin with, when they are dyeing purple and put in the blood red dye, it becomes grey-brown, black and sky blue; but when the dye is boiled enough, it becomes quite purple, gay, and bright. In the same way many of the flowers must differ from the colours of the fruits, some receiving an excess and some a deficiency of their natural colours, owing to the fact that in some the ripening is incomplete, and in some complete. For these reasons it happens that flowers and fruit differ from each other in colour; but the leaves of most trees become yellow at the end, because, when their food fails,

they dry before they change into their natural colours: in the same way when fruits fall off some become yellow in colour because their food has failed them before the time of ripening. This is also true of corn<sup>o</sup> and of all growing things; for they all become yellow at the end. For the moisture in them being no longer blackened by drying causes the change of colour. For when growing black and mixed with green it becomes, as has been said, greenish; but as the black grows steadily weaker, the colour changes back again gradually to green, and at last becomes yellow. So the leaves of the parsley, purslane and of some other plants grow red as they ripen. Except for those which grow dry quickly, these become yellow because their food fails before they ripen. The differences in the colours of plants are most reasonably accounted for by the reasons we have given.

Hair, plumage, skin of horses, cattle, sheep, men and all other living creatures are white and grey and red and black for the same reason; white when the moisture which possesses its own natural colour dries up, and black on the other hand when the moisture about the skin at birth, as happens in all other cases, grows black when it grows old and has lasted a long time because of its quantity; for the complexion and the skin of all such is black. Those are grey, red, yellow, and other colours, which dry before the moisture in them changes completely to black. Those in whom this change takes place unevenly have all kinds of variegated colours.

So everything accords with the skin in colour, since men of ruddy complexion have pale red hair, and dark-skinned men have black hair. But if in any part of the body white leprosy has broken out, all have also white hairs in this place, as in the beasts of varied colours. So also the hair and plumage is in accordance with the skin, and what applies to the parts applies also to the whole body. The same is true of the hoofs, talons, bills and horns; for in the black animals these are black and in the white white, because in all these cases the food passes to the outer envelope through the skin. It can be seen from many facts that this is the reason. For the heads of all infants at birth are red because of their small amount of food. But this is obvious; for the hair grows weak and thin and short at first on all infants. But as their age increases the hair grows black, as they themselves get coloured by the amount of food that flows in. Similarly when the hair on the body grows and the beard at the time of adolescence, the hairs are reddish to begin with, as the moisture dries quickly because there is but little of it, but as more food travels to the parts the hair grows black. But the hairs on the body remain red for the longest time owing to lack of nourishment, since as long as it grows these also continue to grow black, as on other parts of the body and on the

head. But this is clear; for in all living creatures which have long hair, speaking generally those near the body are blacker, while those at the extremities are more golden. The hair of sheep, horses and men are so, because the least amount of food is conveyed to those parts, and so they dry quickly. But even the plumage of black birds is blackest near the body and lighter at the extremities. The same thing is true of the parts about the neck, and speaking generally those which receive but little nourishment. This is clear; for before the period of becoming grey all the hair changes colour and becomes red, because the failing food supply dries quickly. But at last it is white, before the moisture grows black, as the food in those parts is matured. This is most evident in beasts of burden; for the hair of all such grows white. For as these parts are unable to draw their sustenance because of the feebleness of the heat, the moisture dries quickly and becomes white. So with men the hair about the temples most readily grows grey, and generally speaking about the parts that are weak and hard worked.

Most of all does the change to this colour take place when it changes its own nature. For a hare has been born white, and has also been seen black; so has a stag and a bear, and similarly a quail, a partridge and a swallow. For when they are weak at birth, all such things are white owing to the shortage of sustenance, because they ripen before their time. So, too, in the case of children; at first they have white heads and eyelids and eyebrows, as is true in each case when they approach old age. Obviously this affection is due to weakness and shortage of sustenance. Consequently most of the white animals are weaker than the black; for before their growth is complete, they are white while developing owing to shortage of sustenance, just as is true of fruits which happen to be diseased; for these ripen much more quickly owing to their weakness. But some creatures are born white and are very superior to the rest, as for instance horses and dogs. These change from their natural colour to white because they are well nourished. For the moisture in them not lasting a long time but being expended on their growth does not become black. Most of these are moist and fleshy because they are well nourished. So that not even the white of the hair changes. This is obvious; for the black parts become reddish before they go grey, because their sustenance is failing and becoming riper, but white in the last stage.

Yet there are some who suppose that all things become black because the food is burned up by the heat, just like the blood and other things, but they are wrong. For some living creatures are black to start with, such as dogs, goats and cattle, and speaking generally those whose skins and hair have sustenance from the beginning, but are less so as their age advances. And yet on this assumption it

ought not to be so, but the hair of all such creatures should grow blacker at their prime, at which time the heat in them is strongest, and they should be more white at the beginning. For in every case the heat is much more feeble at the beginning than at the time at which the hair is beginning to turn white. This is clear in the case of those which are white. For some have the whitest skin from the start, those namely which have the greatest sustenance at the beginning, and in which the moisture does not dry before its time. But as their age advances they become yellow, because later on less food passes into them. But others are yellow to begin with, and whitest at their prime, just as among birds the colours change when the food in them fails. And this is the proof; for they all grow yellow round the neck, and speaking generally in those parts which go short when the food begins to fail. And this is clear; for as red changes into black and black again into red, so does white change to yellow. This happens in the case of plants; for some revert from the latter state of ripeness back to the former. This is most obvious in the case of the pomegranate. For the kernels are red to start with, and so are the leaves through scarcity of digested food, but later on they change back again into a greenish colour, when much food flows into them and the ripening cannot exercise the same degree of control; but at last, as the food is assimilated, the colour becomes red again.

Speaking generally we may say of the hair and plumage, that they all admit changes, in some cases as we have said because food fails, in others on the other hand because it is in excess. Consequently some hairs at some period of its growth and some at others are whitest and blackest, since the plumage even of ravens changes to a yellow tinge at last, when the food in them fails. But in the case of hair none ever changes in such a way as to have red, purple or green nor any other such colour, because all such colours occur when the rays of the sun are mixed with them, but in the case of hair which is moist all change takes place within the flesh, and it does not involve any mixture. This is obvious; for initially plumage is not at all like this in colour, but all the varied plumage of birds is, so to speak, black, such as the peacock, the pigeon and the swallow; but later on the plumage takes on all these varied hues, when the ripening of the body has taken place, both in the feathers and in the crests, so that in these cases as with plants the ripening of the colours takes place outside the body. So the remainder of living creatures, both water animals and reptiles and shellfish, have all sorts of colours, as the ripening in them is considerable. From what we have said one could best conduct an investigation into the question of colours.





*Translated by T. Loveday and E. S. Forster*

The treatise *De audibilibus* was formerly attributed to Aristotle, though it is now generally believed to be the work of Strato of Lampsacus. The extant version of the text consists of long extracts included in Porphyry's *Commentary on Ptolemy's Harmonics*, concerning the study of sound production.

## **CONTENTS**

[PREFACE](#)

[ON THINGS HEARD](#)

## **PREFACE**

THIS tract appears to be a fragment of a larger work. It is certainly not Aristotle's, and has been ascribed with some likelihood to Strato. It has never been separately edited. Prantl's text in the Teubner edition (1881) has been used.

Mr. W. D. Ross's advice has again been invaluable to us.

T. L.

E. S. F.

## **ON THINGS HEARD**

All sounds, whether articulate or inarticulate, are produced by the meeting of bodies with other bodies or of the air with bodies, not because the air assumes certain shapes, as some people think, but because it is set in motion in the way in which, in other cases, bodies are moved, whether by contraction or expansion or compression, or again when it clashes together by an impact from the breath or from the strings of musical instruments. For, when the nearest portion of it is struck by the breath which comes into contact with it, the air is at once driven forcibly on, thrusting forward in like manner the adjoining air, so that the sound travels unaltered in quality as far as the disturbance of the air manages to reach. For, though the disturbance originates at a particular point, yet its force is dispersed over an extending area, like breezes which blow from rivers or from the land. Sounds which happen for any reason to have been stifled where they arise, are dim and misty; but, if they are clear, they travel far and fill all the space around them.

We all breathe in the same air, but the breath and the sounds which we emit differ owing to structural variations of the organs at our disposal, through which the breath must travel in its passage from within — namely, the wind-; pipe, the lungs, and the mouth. Now the impact of the breath upon the air and the shapes assumed by the mouth make most difference to the voice. This is clearly the case; for indeed all the differences in the kinds of sounds which are produced proceed from this cause, and we find the same people imitating the neighing of horses, the croaking of frogs, the song of the nightingale, the cries of cranes, and practically every other living creature, by means of the same breath and

windpipe, merely by expelling the air from the mouth in different ways. Many birds also imitate by these means the cries of other birds which they hear.

As to the lungs, when they are small and inexpansive and hard, they cannot admit the air nor expel it again in large quantities, nor is the impact of the breath strong and vigorous. For, because they are hard and inexpansive and constricted, they do not admit of dilatation to any great extent, nor again can they force out the breath by contracting after wide distension; just as we ourselves cannot produce any effect with bellows, when they have become hard and cannot easily be dilated and closed. For what gives strength to the impact of the breath is that the lungs after wide distension contract and violently force out the air. This can be illustrated from the other parts of the body, none of which can strike a blow with any effect at a very close distance. It is impossible with either the leg or the hand to smite the object of your blow with any force or to hurl it far, unless you allow the limb a considerable distance in which to strike the blow. If you fail to do so, the blow is hard owing to the energy exerted, but it cannot force its object far. Under similar circumstances stone-throwing engines cannot shoot far, nor a sling, nor a bow, if it is stiff and will not bend, and the string cannot be drawn back far. But if the lung is large and soft and flexible, it can admit the air and expel it again in large quantities, regulating it at will, thanks to its softness and the ease with which it can contract.

As for the windpipe, when it is long and narrow, it is only with difficulty that the voice is emitted, and considerable force is required owing to the distance that the breath has to travel. This is clear from the fact that creatures which have long necks force out their cries — geese, for example, and cranes and domestic fowls. A better illustration may be taken from the oboe; every one, for instance, finds a difficulty in filling an oboe of the kind called the ‘silkworm’ and considerable exertion is required owing to the amount of space to be filled. Furthermore, owing to narrowness of the passage, the breath is compressed within, and on escaping immediately expands and disperses, like streams when they pass through narrow straits; so that the voice is not sustained and does not carry far. Moreover, in such cases the breath must necessarily be hard to regulate and not easily controlled. On the other hand, when the windpipe is of considerable width, the breath can pass out easily, but, whilst travelling within, it becomes dispersed owing to the abundance of space, and the voice becomes hollow and lacks solidity; furthermore, creatures which have wide windpipes cannot articulate clearly with their breath because the windpipe does not hold firmly together. Creatures in whom the windpipe is irregular and has not the same

width throughout must suffer from difficulties of every kind; for their breath must be under irregular control, and must be compressed in one part and dispersed again in another part. If the windpipe is short, it necessitates a quick expulsion of the breath, and the impact on the air is more violent; in such cases the voice is more piercing owing to the quick passage of the breath.

Not only structural variations in the organs of speech make a difference to the voice, but also their condition. When the lungs and the windpipe are full of moisture, the breath is impeded and does not pass out continuously, because it is interrupted and becomes thick and moist and difficult to move, as happens in the case of a catarrh and in drunkenness. If the breath be absolutely dry, the voice becomes rather hard and dispersed; for moisture, when it is slight, holds the air together and causes, as it were, a unity in the voice. Such, then, are the differences in the voice caused by structural variations in the organs of speech and the varying condition of the organs.

Now though we localize sounds where they severally originate, yet in every case we actually hear them only when they strike upon the ear; for the air struck by the impact of the breath is borne along for a certain distance in a mass, and then gradually becomes dispersed, and we hereby distinguish all sounds as near or distant. This can be illustrated by the fact that if a man takes a pot or a pipe or a trumpet and holds it up to another man's ear and speaks through it, all the sounds which he utters seem quite close to the ear, because the air passing along the tube is not dispersed and the sound is kept uniform by the instrument which encloses it. Just as in a picture, if an artist represents two objects in colour, one as though it were at a distance and the other as though it were close at hand, the former object appears to us to be sunk into the background of the picture and the latter to stand out in the foreground, though they are really in the same plane; so, too, in the case of sounds, whether articulate or inarticulate, if one sound is already dissolved before it strikes the ear, whilst another still retains its continuity, though both reach the same spot, the former seems distant from the ear and the latter quite near to it, because the one resembles a sound coming from afar, the other a sound close at hand.

Voices are distinct in proportion to the accuracy of the sounds uttered; for it is impossible for the voice to be distinct if the sounds are not perfectly articulated, just as the sealings of signet-rings cannot be distinct unless they are accurately impressed. For this reason children cannot speak distinctly, nor drunken persons, nor old people, nor those who naturally lisp, nor, speaking generally, those

whose tongues and mouths have any defect of movement. For as in instrumental music the sound produced by the combination of brass instruments and horns is less distinct, so too, in the case of speech, great indistinctness is caused by the escape of breath from the mouth if the sounds are irregularly formed. They not only present themselves indistinctly, but they also impede the carefully articulated sounds, because the movement to which they give rise, and which affects the ear, is irregular. Therefore, when we hear one person speaking, we understand better than when we hear a number of persons saying the same thing at the same time. The same is the case with stringed instruments; and we hear still less well when the oboe and lyre are played at the same time, because the sounds confuse one another. This is particularly evident when they are played in harmony, the result being that the two; sounds produced drown one another. The conditions under which sounds become distinct have now been stated.

Clearness in sound resembles clearness in colour. Those colours which most affect the eye are most clearly seen; in like manner we must suppose that those sounds are most: clearly heard which are most able to affect the hearing, when they strike upon it, in other words sounds which are distinct and solid and pure, and have most power of penetration; for indeed it is a general law of sense-perceptions that the most distinct impressions are produced by the strongest, solidest, and purest stimuli. This is borne out by the fact that all sounds finally become dim as the air which carries them becomes dispersed. The point can also be illustrated from the oboe; the sounds produced by oboes which have sloping reeds in their mouthpieces are softer, but not so clear; for the breath being forced down; passes immediately into a wide space and is not continuously and consistently sustained, but becomes dispersed. But when the reeds are closely constructed, the sound produced is harder and clearer, the more one presses them against the lips, because the breath is thus emitted with more violence. Such, then, are the conditions of clearness in the voice. So voices which are called 'grey' are: generally considered no worse than those which are called *t* white'. For voices which are rather harsh and slightly confused and have not any very marked clearness are the fitting accompaniment of outbreaks of passion and of advancing years, and at the same time, owing to their intensity, they are less under control; for what is produced by violent exertion is not easily regulated, for it is difficult to increase or decrease the strength of the sound at will.

In the case of oboes and other instruments of the same class, the sounds produced are clear when the breath emitted from them is concentrated and intense. For the impacts on the external air must be of this kind, and it is in this

way that they will best travel to the ear in a solid mass. Similarly, in the case of odours and light and the various forms of heat, the weaker they are, the less definite is the impression which they convey to the sense-perception, just as juices are weaker when mixed with water or with other juices. Any second ingredient which makes itself felt obscures the power of the original object.

In contrast to all other musical instruments the notes produced by horns, if they strike the air in a solid and continuous mass, are indistinct. Therefore the horn which you choose ought to be one the nature of whose growth is regular and smooth, and which does not shoot up quickly. For such horns as shoot up quickly must necessarily be too soft and spongy, so that the notes are dispersed and do not pass out in a solid mass, nor do they produce a consistent sound owing to the softness of the horn and the sponginess caused by the pores. On the other hand, the horn must not be of too slowly growing a kind, nor must it be of a thick, hard consistency and lacking in resonance; for, if the sound in its passage strikes against anything, it is arrested at that point and ceases to advance on its outward course, so that the notes which proceed from such horns are dull and irregular. That the direction taken by sound follows a straight line is clear from the way in which carpenters test beams and large timber in general. For when they strike one end, the sound passes along continuously to the other end unless the wood has some flaw in it; if it has a flaw, the sound travels along up to that point and there ceases and is dispersed. It passes round the knots in the wood and cannot continue in a straight course through them. The point can also be illustrated from what happens in bronze-working when they are filing down the loosely hanging folds of drapery or the wings of statues; the cracks close up, so that the metal gives out a rasping sound and causes a considerable noise; but the sound immediately ceases if you tie a band round the folds; for the vibration continues till it strikes the soft material and is there checked.

The baking of horns contributes greatly to the excellence; of their tone; for, when they are well baked, they produce a sound very like that of pottery, owing to the hardness caused by the heat; whilst, if they are not sufficiently baked, the sound which they make is too gentle owing to the softness of the horn, and they cannot produce such well-defined notes. Men, therefore, choose the ages of their horns; the horns of old animals are dry and callous and porous, while those of young animals are quite soft and contain a considerable amount of moisture. As we have said, a horn should be dry, of uniform thickness, with straight pores and a smooth surface; for if it be so, the notes which pass through it will be full and smooth and even, and the impacts which they make upon the outer air will have

the same qualities. For those strings too are best which are smoothest and most even all along, and show the same workmanship throughout, and in which the joining of the gut is not visible; for then the impacts which they make upon the an are most even.

The reeds of oboes, too, must be solid and smooth and even, so that the breath may pass through smoothly and evenly, without being dispersed. Therefore mouthpieces which have been well steeped and soaked in grease give a pleasant sound, while those which are dry produce less agreeable notes. For the air passes softly and evenly through a moist and smooth instrument. This is clear from the fact that the breath itself, when it contains some moisture, is less likely to strike against the mouthpiece and become dispersed; while dry breath is inclined to catch in the oboe, and the impact which it causes is too hard owing to the force necessary to expel it. Differences, then, in sound arise from the above causes.

Hard voices are those which strike forcibly upon the hearing; for which reason they are particularly unpleasing — those, that is to say, which are difficult to start, but which when once started travel with added force — for any quickly yielding body which comes in the way fails to abide the impact and quickly springs aside. To take an illustration of this; heavy missiles travel along with force,; as do streams when they pass through narrow channels, for they acquire very considerable force in the actual straits, because they cannot yield to restraint all in a moment, but are driven violently along. The same thing happens in the case of articulate and inarticulate sounds. For clearly all forceful sounds are hard; as, for instance, those caused by the forcible opening of boxes and turning of hinges, and those made by bronze and iron. For the sound made on the anvil is hard when the iron that is being forged is chilled and has become hard. So, too, is the noise from the file, when they are filing iron implements and making teeth in saws. The most violent claps of thunder, too, produce very hard sounds, and those showers which from their violence we call ‘tearing’ showers.

It is quickness of breathing which makes the voice shrill, force which makes it hard. So it happens that the same individuals have not only sometimes a shriller and at other times a deeper voice, but also at times a harder and at times a softer voice. Yet some people hold that it is owing, to the hardness of the windpipe that the voice becomes hard. In this they are wrong; for, though this may be quite a slight contributing cause, the real reason is the force of the impact caused by the breath from the lungs. For as some men’s bodies are moist and soft, while those of others are hard and closely knit, so do their lungs show variety. Therefore in

some cases the breath which comes forth is soft, in others it is hard and violent; for it is easy to see at a glance that the windpipe by itself exercises but little influence. For no windpipe is of the hard consistency of an oboe; yet for all that, by passing the breath through the former and through the latter, some people produce soft and others hard tones on the oboe. This is clear from the direct perception; for, if by using greater force one increases the strength of the breathing, the voice immediately becomes harder as a result of the force applied, even if it be naturally a somewhat soft voice. So, too, in the case of the trumpet; when they are revelling, men relax the pressure of breath in the trumpet in order to make the sound as soft as possible. The point can also be illustrated from other classes of musical instruments; as has been stated, the sounds produced by tightly stretched strings are hard, as are the notes of horns which have been well baked. If one touches the strings violently instead of softly with the hand, they necessarily respond with more violent sounds. The notes produced by less tightly stretched strings and unbaked horns are softer, as are those produced by the longer musical instruments; for the impacts upon the air are both slower and softer owing to the distance that the sound has to travel, whereas in the shorter instruments they are harder owing to the tension of the strings. That this is so is shown by the fact that the sounds which the instrument itself gives forth are harder when one does not strike the string in the middle, because there is more strain upon the parts of the strings near the crossbar and near the pegs. The notes produced by instruments made of fennel-wood are softer; for the sounds striking on a soft material do not rebound with such violence.

Voices are rough when the impact of all the breath upon the air is not single and simultaneous but: divided and broken. For each portion of the air striking separately upon the hearing — as if each were moved by a different impact — the sense-impression is broken, so that one vocal utterance fails to produce any sound, while another strikes with great violence upon the ear, and the contact with the hearing is not evenly sustained; just as when a rough object touches the skin. This can be best illustrated from the file; for, when a file is being used, the air is set in motion simultaneously at a number of separate minute, points, and so the sounds passing from these points to strike the ear seem rough, and especially so when the file is scraped against a hard substance. One may compare the sense of touch; hard, rough objects produce stronger tactual impressions. The matter can also be illustrated from the pouring of liquids, for the sound made by olive-oil is less noticeable than that made by any other liquid, owing to the unbroken continuity of the parts which compose it.



Voices are thin, when the breath that is emitted is small in quantity. Children's voices, therefore, are thin, and those of women and eunuchs, and in like manner those of persons who are enfeebled by disease or over-exertion or want of nourishment; for owing to their weakness they cannot expel the breath in large quantities. The same thing may be seen in the case of stringed instruments; the sounds produced from thin strings are thin and narrow and 'fine as hairs', because the impacts upon the air have only a narrow surface of origin. For the sounds that are produced and strike on the ear are of the same quality as the source of movement which gives rise to the impacts; for example, they are spongy or solid, soft or hard, thin or full. For one portion of the air striking upon another portion of the air preserves the quality of the sound, as is the case also in respect of shrillness and depth; for the quick impulsions of the air caused by the impact, quickly succeeding one another, preserve the quality of the voice, as it was in its first origin. Now the impacts upon the air from strings are many and are distinct from one another, but because, owing to the shortness of the intermixture, the ear cannot appreciate the intervals, the sound appears to us to be united and continuous. The same thing is the case with colours; for separate coloured objects appear to join, when they are moved rapidly before our eyes. The same thing happens, too, when two notes form a concord; for owing to the fact that the two notes overlap and include one another and cease at the same moment, the intermediate constituent sounds escape our notice. For in all concords more frequent impacts upon the air are caused by the shriller note, owing to the quickness of its movement; the result is that the last note strikes upon our hearing simultaneously with an earlier sound produced by the slower impact. Thus, because, as has been said, the ear cannot perceive all the constituent sounds, we seem to hear both notes together and continuously.

Thick sounds, on the contrary, are produced when the breath is emitted in great quantity and all together. Therefore the voices of men are inclined to be thick, and the notes of the so-called 'perfect' oboes, especially when the latter are well filled with air. This is clear from the fact that if you compress the mouthpiece the sound tends to become shrill and thin, as also if one draws the 'speaker' downwards; but if one stops up the exits, the volume of the sound becomes far greater owing to the amount of breath collected in the instrument, like the notes produced from thicker strings. The sounds uttered by those whose voices are breaking and persons suffering from sore-throats, and after vomiting, are thick owing to the roughness of the windpipe and the fact that the voice does not escape, but striking upon it is pent up and acquires volume; and above all, owing to the moist condition of the body.

Piping voices are those which are thin and concentrated, such as those of grasshoppers and locusts and the nightingale's song, and, generally speaking, cries which are thin, and are not followed by a second and different sound. For this piping quality does not depend on volume of sound nor on the tones being without tension and deep, nor yet upon the close sequence of the sounds, but rather upon shrillness and thinness and accuracy. Therefore it is the instruments which are lightly constructed and tightly stretched, and those which have no horn-work about them, that produce piping notes. The sound of running water, and generally speaking, any sound which, whatever its cause, keeps up an unbroken continuity, preserve the accuracy of their tone.

Cracked voices which suddenly give way are those which travel along in a solid mass for a certain distance and then become dispersed. The best illustration may be taken from an earthenware vessel; every such vessel when broken as the result of a blow gives forth a cracked sound, for the course of the sound is broken at the point at which the blow was struck, so that the sounds which it gives forth no longer form a solid mass. The same thing happens in the case of broken horns and badly strung strings; in all such cases the sound travels in a solid mass up to a certain point and is then dispersed, wherever the medium which supports it is not continuous, so that the impact upon the air is not single but dispersed, and the sound produced seems cracked. Cracked voices closely resemble harsh voices, except that in the latter case the sounds are themselves dispersed into small portions, while cracked voices, for the most part, form a solid mass at first and afterwards become split up into a number of parts.

Aspirated sounds are formed when we emit the breath from within immediately together with the sounds; smooth sounds, on the contrary, are those which are formed without the emission of the breath.

Voices become broken when they have no longer strength enough to expel the air with an impact, but the region about the lungs collapses after distension. For just as the legs and shoulders eventually collapse when they are in a strained position, so too the region about the lungs. The breath, when it does come forth, comes forth lightly, because the impact which it produces is not forcible enough; at the same time, owing to the fact that the windpipe has become exceedingly rough, the breath cannot pass out in a solid mass, but is dispersed, and so the sounds which it produces are broken. Some people hold that it is owing to the adhesive condition of the lungs that the breath cannot pass out and abroad; but they are wrong, for what really happens is that they make a sound but cannot

speak out, because the impact upon the air does not take place with sufficient energy, but they only make a sound such as the breath would make when forced merely from the throat.

When people stammer, it is due not to an affection of the veins or windpipe, but to the movement of the tongue; for they find a difficulty in changing the position of the tongue when they have to utter a second sound. They therefore keep on repeating the same word, for they cannot utter the next word; but the movements of articulation continue and the lungs go on working with an impetus in the same direction as before, owing to the quantity and force of the breath. For just as when one is running fast it is difficult to divert the whole body from its impetus in one direction to some other movement, so likewise is it with the individual parts of the body. So people who; stammer are often unable to say the next word, but can easily say the next but one, when they make a fresh start. This explanation of stammering is supported by the fact that people often stammer when angry, because then they force out their breath.

### ***Physiognomonics*** (805a)



*Translated by T. Loveday and E. S. Forster*

Φυσιогνωμονικά, a treatise on physiognomy — the assessment of a person's character or personality from his outer appearance, especially the face. The text was formerly attributed to Aristotle, though most modern scholars regard it as spurious, written by an author in approximately 300BC. It is the earliest work surviving in Greek devoted to this subject, which in Aristotle's time was acknowledged as an art with its own skilled practitioners. The treatise is divided into two sections on theory and method, with the connections between bodily features and character being treated in detail. The treatise begins with an allusion to Aristotle's *Prior Analytics* (II.27, on the body-soul correlation), and many of the physiognomic connections discussed are mentioned specifically in the *History of Animals*.

## **CONTENTS**

### [PREFACE](#)

## PHYSIOGNOMONICA

## PREFACE

THIS work, as we have it, is evidently a compilation of two treatises, the second beginning with Chapter IV. Neither is Aristotle's: both may be Peripatetic. Prantl's text (Teubner, 1881) has been used, but a great many emendations have been taken from Forster's text and notes in his *Scriptores Physiognomonici* (1893), vol i. On Forster's excellent work we have chiefly relied; J. B. Porta's *De humana physiognomonia* (1650) has also proved very useful. We have, as before, to thank Mr. W. D. Ross for his kind advice and suggestions.

After some hesitation we decided to use the less clumsy forms 'Physiognomy', 'physiognomic', in place of the more accurate 'Physiognomony', 'physiognomonie'.

T. L.

E. S. F.

## PHYSIOGNOMONICA

MENTAL character is not independent of and unaffected by bodily processes, but is conditioned by the state of the body; and contrariwise the body is sympathetically influenced by affections of the soul. The former of these propositions is well exemplified by drunkenness and sickness, where altered bodily conditions produce obvious mental modifications, and the second by the emotions of love and fear, and by states of pleasure and pain. But still better instances of the fundamental connexion of body and soul and their very extensive interaction may be found in the normal products of nature. There never was an animal with the form of one kind and the mental character of another: the soul and body appropriate to the same kind always go together, and this shows that a specific body involves a specific mental character. Moreover, experts on the lower animals are always able to judge of character by bodily form: it is thus that a horseman chooses his horse or a sportsman his dogs. Now, supposing all this to be true (and it always is true), physiognomy must be practicable.

Three methods have been essayed in the past, each having had its special adherents.

1. The first method took as the basis for physiognomic inferences the various genera of animals, positing for each genus a peculiar animal form, and consequently upon this a peculiar mental character, and then assuming that if a man resembles such and such a genus in form he will resemble it also in soul.

2. Those who adopted the second method proceeded in the same way, except that they did not draw their inferences from all kinds of animals but confined themselves to human beings: they distinguished various races of men (e g. Egyptian, Thracian, Scythian) by differences of appearance and of character, and drew their signs of character from these races just as others did from animal genera.

3. The third method took as its basis the characteristic facial expressions which are observed to accompany different conditions of mind, such as anger, fear, erotic excitement, and all the other passions.

All these methods are possible, and others as well: the selection of signs may be made in diverse ways. The last-mentioned method by itself, however, is defective in more than one respect. For one thing, the same facial expression may belong to different characters: the brave and the impudent, for example, look alike, though their characters are far asunder. Besides, a man may at times wear an expression which is not normally his: for instance, a morose person will now and again spend an enjoyable day and assume a cheerful countenance, whilst a naturally cheerful man, if he be distressed, will change his expression accordingly. And, thirdly, the number of inferences that can be drawn from facial expression alone is small.

As to arguments from beasts, the selection of signs is made on wrong principles. Suppose you have passed in review one by one the forms of all the different kinds of animals, you still have no right to assert that a man who resembles a given kind in body will resemble it in soul also. In the first place, speaking broadly, you will never find this complete likeness, but only a resemblance. Moreover, very few signs are peculiar to individual genera; most of them are common to more than one kind, and of what use is resemblance in a common attribute? A man will resemble a lion, let us say, neither more nor less than a deer. (For we have a right to suppose that common signs indicate common

mental characters and peculiar signs peculiar characters). Thus the physiognomist will not get any clear evidence from common signs. But is he any better off if he takes every genus by itself and selects signs that are peculiar to each? Surely not, for he cannot tell what they are signs of. They ought to be signs of peculiar characteristics, but we have no right to assume that there are any *mental* characteristics peculiar to the different kinds of animals that we examine in physiognomy. Courage is not confined to the lion, but is found in many other creatures; nor timidity to the hare, but it shares this quality with numberless other creatures. Thus it is equally fruitless to select the common and the peculiar features, and we must abandon the attempt to proceed by an examination of every kind of animal singly. Rather, we ought to select our signs from all animals that have some; mental affection in common. For instance, when investigating the external marks of courage, we ought to collect all brave animals, and then to inquire what sort of affections are natural to all of them but absent in all other animals. For if we were to select this or that as the signs of courage in the animals chosen in such a way as not to exclude the possibility of the presence in all these animals of some other mental affection, we should not be able to tell whether our selected marks were really signs of courage or of this other character. Two conditions must be fulfilled, therefore: — the animals from which we choose our signs must be as numerous as possible, and they must not have any mental affection in common except that one of which we are investigating the signs.

Permanent bodily signs will indicate permanent mental qualities, but what about those that come and go? How can they be true signs if the mental character does not also come and go? No doubt if you took a transitory sign to be permanent, it might be true once in a way, but still it would be worthless because it would not be a constant concomitant of a particular state of soul.<sup>1</sup>

Then again there are affections of soul whose occurrence produces no change in the bodily marks on which the physiognomist relies, and they will not provide his art with recognizable signs. Thus as regards opinions or scientific knowledge, you cannot recognize a doctor or a musician, for the fact of having acquired a piece of knowledge will not have produced any alteration in the bodily signs on which physiognomy relies.

WE must now determine the special province of physiognomy (for the range of its application is limited), and the sources from which its various kinds of data are drawn, and then we may proceed to a detailed exposition of the more convincing among its conclusions.

Physiognomy has for its province, as the name implies, all natural affections of mental content, and also such acquired affections as on their occurrence modify the external signs which physiognomists interpret. I will explain later what kinds of acquired characters are meant, but now I will give a list — a complete list — of the sources from which physiognomic signs are drawn. They are these: movements, gestures of the body, colour, characteristic facial expression, the growth of the hair, the smoothness of the skin, the voice, condition of the flesh, the parts of the body, and the build of the body as a whole. Such is the list that physiognomists always give of the sources in which they find their signs. Had this list been obscure or insignificant, there would have been no use in my going any further; but, as things are, it may be worth while to give a more detailed description of the more convincing of the inferences that they draw from their material, and to state what their various signs are and where they are supposed to be found, so far as I have not already done so.

A brilliant *complexion* indicates a hot sanguine temper, whilst a pale pink complexion signifies naturally good parts, when it occurs on a smooth skin.

Soft *hair* indicates cowardice, and coarse hair courage. This inference is based on observation of the whole animal kingdom. The most timid of animals are deer, hares, and sheep, and they have the softest coats; whilst the lion and wild-boar are bravest and have the coarsest coats. Precisely the same holds good of birds, for it is the rule that birds with coarse plumage are brave and those with soft plumage timid, particular instances being the cock and the quail. And again, among the different races of mankind the same combination of qualities may be observed, the inhabitants of the north being brave and coarse haired, whilst southern peoples are cowardly and have soft hair. A thick growth of hair about the belly signifies loquacity, on the evidence of the whole tribe of birds, for the one is a bodily and the other a mental property peculiar to birds.

When the *flesh* is hard and constitutionally firm, it indicates dullness of sense; when smooth, it indicates naturally good parts combined with instability of character, except when smooth flesh goes with a strong frame and powerful extremities.



Lethargic *movements* are a sign of a soft character, rapid movements of a fervid temper.

As to the *voice*, when deep and full it is a sign of courage; when high-pitched and languid, of cowardice.

*Gesture* and the varieties of *facial expression* are interpreted by their affinity to different emotions: if, for instance, when disagreeably affected, a man takes on the look which normally characterizes an angry person, irascibility is signified.

Males are bigger and stronger than females of the same kind, and their extremities are stronger and sleeker and firmer and capable of more perfect performance of all functions. But inferences drawn from the parts of the body are less secure than those based on facial expression of character and movements and gesture. In general it is silly to rely on a single sign: you will have more reason for confidence in your conclusions when you find several signs all pointing one way.

Here I may mention a possible method of physiognomy which has never yet been tried. Suppose, e g., that irascibility and morose sulkiness necessarily involve an envious disposition, and that the physiognomist could, without any bodily signs of the last character, deduce its presence from the presence of the other characters, we should then have a method peculiarly appropriate to masters of philosophy, since it is, we suppose, the peculiar mark of philosophy, when certain premises are given, to know the necessary conclusion. But this method which considers the interrelations of mental affections and that which proceeds by empirical observation of animals sometimes arrive at contrary conclusions. Take the voice, for example. By the former method you might feel bound to connect a shrill voice with a fierce temper, because in vexation and anger one's voice tends to become loud and shrill, whilst placid people speak in tones at once languid and deep. But as against this, if you observe beasts, you find that a deep voice goes with courage and a shrill voice with timidity, as witness on the one hand the roar of lion and bull, the hound's bay, and the deep-noted crow of high-spirited cocks, and on the other, the high-pitched tones of deer and hares.

Yet perhaps even in these cases it is better not to connect courage and cowardice with the pitch of the voice, but rather with its intensity, so that it is strength of voice that marks the brave and a languid and feeble voice the coward. It is safest, however, to refrain from all positive assertion when you find that your signs are

inconsistent and contrary to one another in detail, unless they belong to classes, some of which you have determined to be more trustworthy than others. Above all it is best to base your arguments upon assertions about species and not about entire genera, for the species more nearly resembles the individual, and it is with individuals that physiognomy is concerned; for in physiognomy we try to infer from bodily signs the character of this or that particular person, and not the characters of the whole human race.

SIGNS of *Courage* are — coarse hair; an upright carriage of the body; size and strength of bones, sides and extremities; the belly broad and flat; shoulder-blades broad and set well apart, neither too closely nor too loosely knit; a sturdy neck, not very fleshy; a chest well covered with flesh and broad; flat hips; the thickness of the calf low down the leg; gleaming eyes, neither wide and staring nor yet mere slits, and not glistening; the body of a brilliant hue; a forehead straight and lean, not large, and neither quite smooth nor yet a mass of wrinkles. Signs of *Cowardice* are — a small growth of soft hair; the figure stooping and lacking in quickness; the thickness of the calf high up the leg; a sallow complexion; weak blinking eyes; weak extremities; little legs, and hands long and delicate; loins small and weak; a rigid gesture of the body; with undecided, deprecating, scared movements, and a shifty downcast look.

*Good natural parts* are indicated by rather moist and tender flesh, not exactly firm nor yet extremely fat; by leanness of the shoulders, neck, face, and neighbouring regions; by shoulder-blades closely knit and the parts below slack; by supple sides; a somewhat gaunt back; a clear pinkish hue over the body; a thin skin; a small growth of hair, neither very coarse nor very black; and moist, gleaming eyes. *Dullness of sense* is indicated when the back of the neck and the legs are fleshy and stiffly fitted and knitted; the hip-joint round; the shoulder-blades high-set; the forehead big, round, and fleshy; the eyes pale and vacant; the legs thick and fleshy and round at the ankles; the jaws big and fleshy; loins fleshy; legs long; neck thick-set; the face fleshy and rather long. The manner of movement, gesture, and facial expression of the dull man, you may take it, are analogous to his character.

*Impudence* is signified by small, bright, wide-open eyes, with heavy blood-shot lids slightly bulging; high shoulder-blades; a carriage of the body not erect, but crouched slightly forwards; quickness of movement; a reddish hue over the body; with a sanguine complexion, a round face, and high chest. Signs of *Good Moral Character* are — a slow gait; a slow way of speaking with a breath-like

and weak voice; small eyes, black but not lustrous, not open and staring, nor yet mere slits; with a slow, blinking movement of the lids — for rapid blinking signifies either cowardice or a hot temperament.

*Good Spirits* are indicated by a good-sized forehead, fleshy and smooth; the region of the eyes rather low; a rather drowsy-looking countenance, neither keen nor reflective. The gait, we may suppose, will be slow and languid, the gesture and facial expression those of a good but not a quick man. Signs of *Low Spirits* are — lean and wrinkled brows; enfeebled eyes (but you should notice that weak eyes may signify softness and effeminacy as well as dejection and low spirits); a meek bearing and weary gait.

The *Pathic* is weak-eyed and knock-kneed; his head hangs on his right shoulder; his hands are carried upturned and flabbily; and as he walks he either wags his loins or; else holds them rigid by an effort; and he casts a furtive gaze around, for all the world like Dionysius the Sophist.

*Sulkiness* is indicated by a snarling grin; a black complexion and withered skin; a gaunt, wrinkled face and the neighbouring regions furrowed with lines; and by straight black hair.

Men of *Fierce Temper* bear themselves erect, are broad. about the ribs and move with an easy gait; their bodies are of a reddish hue, their shoulder-blades set well apart, large and broad; their extremities large and powerful; they are smooth about the chest and groin; they have great beards, and the hair of the head starts low down with a vigorous growth.

Those of a *Gentle* disposition are robust-looking, well covered with plenty of moist flesh; well-sized men and; well-proportioned; carrying themselves with head thrown back; and their hair starts rather higher up on the head than is usual.

The *Sly* man is fat about the face, with wrinkles round his eyes, and he wears a drowsy expression.

The *Small-Minded* have small limbs and small, delicate, lean bodies, small eyes and small faces, just like a Corinthian or Leucadian.

Men addicted to *Gaming and Dancing* have short arms, like weasels.

*Railers* have the upper lip updrawn, and the lower projecting, and their hue is

reddish.

The *Compassionate* are delicate, pale, and lustrous-eyed: the top of their nostrils is furrowed with lines, and they are always weeping. Such men are fond of women and beget female children, and in character they are erotic and mindful of the past, with good natural parts and a fervid temper. The signs of these qualities have already been mentioned. Compassion goes with wisdom, with cowardice, and with good moral character, hardness of heart with stupidity and effrontery.

*Gluttony* is indicated when the distance from navel to chest is greater than that from chest to neck.

*Lasciviousness* is indicated by a pale complexion, a heavy growth of straight, thick, black hair over the body, a heavy growth of straight hair on the temples, and small, lustrous, lewd eyes.

In the *Somnolent* the upper parts are disproportionately large: such men are bulky and hot, and their flesh is firm.

*Loquacity* is indicated by disproportionate size of the upper parts, with a round delicate build, and a thick growth of hair about the belly.

A *Good Memory* is signified when the upper parts are disproportionately small, and are delicate and tolerably well covered with flesh.

SOUL and body, as it seems to me, are affected sympathetically by one another: on the one hand, an alteration of the state of the soul produces an alteration in the form of the body, and contrariwise an alteration in bodily form produces an alteration in the state of soul. Grief and joy, to take an instance, are states of the soul, and every one knows that grief involves a gloomy and joy a cheerful countenance. Now if it were the case that the external expression persisted after the soul had got rid of these emotions, we might still say that soul and body are in sympathy, but their sympathetic changes would not be entirely concomitant. As a matter of fact, however, it is obvious that every modification of the one involves a modification of the other. The best instance of this is to be found in manic insanity. Mania, it is generally allowed, is a condition of the soul, yet

doctors cure it partly by administering purgative drugs to the body, partly by prescribing, besides these, certain courses of diet. Thus the result of proper treatment of the body is that they succeed, and that too simultaneously, not only in altering the physical condition, but also in curing the soul of mania; and the fact that the changes are simultaneous proves that the sympathetic modifications of body and soul are thoroughly concomitant.

It is equally indisputable that differences in the soul's capacities are represented by corresponding physical traits, so that all the resemblances in animals are indicative of some identity.

Again, if we consider the behaviour of animals, we find that some affections of the soul are peculiar to particular genera, whilst others are common to several, and that the peculiar activities are accompanied by peculiar, the common by common, physical traits. Examples of common characters are insolence, which is found in all animals with bushy tails, and violent sexual excitability, which is found alike in asses and in dogs: whilst on the other hand railing is a character peculiar to dogs, and insensibility to pain is peculiar to the ass. I have already explained how common and peculiar characters are to be distinguished.

At the same time it is only by long and wide experience that one can hope for oneself to attain detailed and expert understanding of these matters. For not only are visible characteristics of the body to be referred for explanation, as we are told, to analogies drawn partly from animals, partly from modes of action, but there are other external traits which depend on the varying proportions of bodily heat and cold; and to add to the difficulty, some of these traits are very much alike and have not got distinctive names, as is the case e g with the paleness that results from terror and the paleness due to fatigue. Now when the difference is so slight, it can hardly be discerned except by those whom practice has taught to appreciate the congruity of different shades of expression with different conditions of mind, and so the argument from congruity leads to the quickest and soundest conclusions, and enables us to distinguish minute differences. It is a method generally useful, and particularly in the selection of physiognomic signs, for the signs selected must be congruous with what they stand for.

Deduction also should be used in the selection of signs, whenever possible. In the deductive procedure we attach to our data known attributes of them. For instance, if we have it given that a man is an impudent blackguard and penurious, we can add that he will be a thief and a miser, the one as a

consequence of his effrontery, the other as a consequence of his penuriousness. In all such cases we ought to include the deductive method in our procedure.

I WILL now first attempt to make a division of animals by the marks in which they are bound to differ if they are respectively brave or timorous, upright, or dishonest. We have to divide the whole animal kingdom for this purpose into two physical types, male and female, and to show what mental attributes are congruous with each of these types. In all beasts that we try to breed the female is tamer and gentler in disposition than the male, less powerful, more easily reared and more manageable. One may conclude from this that the female has a less spirited temper, and I think we find a parallel to this in ourselves, for when we are mastered by a fit of temper we become more obstinate and totally intractable; we grow headstrong and violent and do whatever our temper impels us to do. Further, the female is, in my opinion, more mischievous than the male, and (though feebler) more reckless. Every one can see that this is so in women and in domesticated animals, and according to the unanimous evidence of herdsmen and hunters it is no less true of the beasts of the field. Moreover, it is beyond dispute that in every genus the head of the female is smaller than that of the male, her visage narrower, her neck thinner, her chest weaker, her sides of smaller build, and that, whilst her hips and thighs are fuller, she inclines to be knock-kneed, the lower parts of her legs are less stout, and her feet more delicately made: in short, the build of her body is pleasing to the eye rather than imposing, and she is in comparison feeble and tender, and of moister tissue. The male is the opposite of all this: his is the braver and more upright nature, whilst the female is the more timid and less upright.

This being so, the lion manifestly exhibits the male type in its most perfect form. He has a good-sized mouth: his visage is square and not too bony, the upper jaw level with the lower and not protruding: his nose you would call, if anything, rather thick: his gleaming eyes are deep-set, and neither absolutely round nor unduly long, and of moderate size: his brow is of the right size, his forehead square and slightly hollowed from the centre, and over its lower part, towards the eyebrows and nose, there hangs a sort of cloud, and from the top of his forehead down to his nose there runs a ridge of hairs sloping outwards: his head is of moderate size: his neck of due length and broad in proportion, with a tawny mane upon it, which is neither stiff and bristly nor yet too closely curled. About

the clavicles he is supple and not too tightly articulated: his shoulders are stalwart, his chest powerful, his trunk broad, with sides and back to match: there is no superfluity of flesh on his haunches or thighs: his legs are powerful and sinewy, his gait vigorous, his whole frame well-knit and sinewy and neither too stiff nor too soft: he moves slowly with a large stride, rolling his shoulders as he goes. Such is his bodily appearance, and in soul he is generous and liberal, proud and ambitious, yet gentle and just and affectionate to his comrades.

The panther, on the other hand, of all animals accounted brave, approximates more closely to the feminine type, save in its legs, which it uses to perform any feat of strength. For its face is small, its mouth large, its eyes small and white, set in a hollow, but rather flat in themselves: its forehead is too long and tends to be curved rather than flat near the ears: its neck too long and thin: its chest narrow and its back long: haunches and thighs fleshy: flanks and abdomen rather flat: its colour blotchy: and its whole body ill-articulated and ill-proportioned. Such is its bodily aspect, and in soul it is mean and thievish, and in a word, a beast of low cunning.

I have now described the more notable examples of the male and the female types of body to be found among animals accounted brave, and the characterization of the remainder will present no difficulty. I will next proceed to explain in a chapter on selection of signs what marks derived from animals the student of physiognomies should take into consideration.

THE accepted doctrines of the semeiotics of human character are as follows:

A large and shapely *foot*, well-articulated and sinewy, is held to signify a strong character. For evidence we are referred to the male sex in general. A small, narrow, ill-articulated foot, pretty but weak, signifies a soft character, as in the female sex. Curved toes are a sign of impudence, and so are curved nails, on the evidence of birds with curved claws, whilst toes that are not properly divided indicate timidity, as in web-footed water-birds.

*Ankles* sinewy and well-articulated mark a strong character, on the evidence of the male sex; fleshy and ill-articulated ankles, a soft character, on the evidence of the female sex.

When the *lower leg* is at once well-articulated and sinewy and stalwart, it signifies a strong character, as in the male; sex: when it is thin and sinewy it signifies loquacity, as in birds. When it is full and almost bursting, it signifies by congruity blatant effrontery.

*Knock-knees* are a sign of the pathic, by congruity.

*Thighs* bony and sinewy indicate a strong character, as; in the male sex: but when bony and full, a soft character, as in females.

*Buttocks* pointed and bony are a mark of a strong character, as in males: fat fleshy buttocks of a soft character, as in females, whilst lean buttocks which look as if they had been rubbed bare, are indicative of a mischievous disposition, as in apes.

A narrow *waist* marks the hunter, as in the lion, and, you will find that the best hunting dogs also are narrow in the waist.

A loose build round about the *belly* indicates strength of character, as in the male sex, whilst the opposite is by congruity indicative of a soft character. A well-sized and sturdy *back* marks strength, and a narrow: feeble back softness of character, as in males and females respectively.

Strong *sides* indicate strength and weak sides softness, as in males and females respectively, whilst swollen inflated sides signify aimless loquacity, as in frogs. When the distance from navel to infra-sternal notch exceeds that from the notch to the neck, it is a mark of gluttony and of dullness of sense, of gluttony because there is so large, a receptacle of food, and of dull sense because the seat of the senses is correspondingly confined and compressed by the receptacle of food, so that the senses have become stupefied by repletion of the stomach rather than, as is usual, by inanition.

A large well-articulated *chest* signifies strength of character, as in males.

When the *upper part of the back* is large and well covered with flesh and well-knit, the character is strong, as in males: when it is feeble and gaunt and ill-knit, the character is soft, as in females. When it is very much bent and the shoulders fall in upon the chest, it is argued by congruity to signify a mischievous disposition, since the front parts of the body, which ought to stand clear to view, become invisible. When it is curved backwards, it signifies vanity and lack of



intelligence, as in the horse. So it must not be either convex or concave; and something intermediate between these extremes, therefore, should be looked for as marking a man of good natural parts.

When the *shoulders* and the back of the neck are well-articulated, they signify a strong character, whilst weak and ill-articulated shoulders signify a soft character, the reference being to the sexes, as I explained when speaking of feet and thighs. Supple shoulders signify liberality of soul, the argument being based on the external appearance, with which liberality seems to be congruous. On the other hand, stiff, clumsy shoulders indicate an illiberal disposition, also by congruity.

Suppleness of the *clavicles* signifies quickness of perception, for when the collar-bone is supple, stimulation of the senses is rendered easy. Contrariwise, a stiff collar-bone indicates dullness of sense, because then it is difficult to apprehend sense-stimuli.

A thick *neck* indicates a strong character, as in males: a thin neck, weakness, as in females: a neck thick and full, fierce temper, as in bulls: a well-sized neck, not too thick, a proud soul, as in lions: a long, thin neck, cowardice, as in deer: an unduly short neck, a treacherous disposition, as in wolves.

*Lips* thin and pendulous at their points of junction, such that part of the upper lip overhangs the lower at the corners, signify pride of soul. The reference generally given is to the lion, but you may see the same thing as well in large and powerful breeds of dogs. Lips thin and hard with a prominence about the eye-teeth are a sign of base breeding, on the evidence of swine. Thick lips, with the upper overhanging the lower, mean folly, as in the ass and the ape. Projecting upper lip and gums mark the railer, on the evidence of dogs.

A *nose* broad at the tip means laziness, as witness cattle: but if thick from the tip, it means dullness of sense, as in swine; if the tip is pointed, irascibility, as in dogs; whilst a round, blunt tip indicates pride, as in lions. Men with a nose thin at the tip have the characteristics of birds. When such a nose curves slightly right away from the forehead, it indicates impudence, as in ravens: but when it is strongly aquiline and demarcated from the forehead by a well-defined articulation, it indicates a proud soul, as in the eagle; and when it is hollow, with the part next the forehead rounded and the curve rising upwards, it signifies lasciviousness, as in cocks. A snub nose means lasciviousness, as in deer. Open

nostrils are a sign of fierce temper, for they enter into the facial expression of temper.

The *face* , when fleshy, indicates laziness, as in cattle: if gaunt, assiduity, and if bony, cowardice, on the analogy of asses and deer. A small face marks a small soul, as in the cat and the ape: a large face means lethargy, as in asses and cattle. So the face must be neither large nor little: an intermediate size is therefore best. A mean-looking face signifies by congruity an illiberal spirit.

As to the *eyes* , when the lower lids are pendulous and baggy, you may know a bibulous fellow, for heavy drinking produces bagginess below the eyes: but when the upper lids are baggy and hang over the eyes, that signifies somnolence, for on first waking from sleep our upper lids hang heavily. Small eyes mean a small soul, by congruity and on the evidence of the ape: large eyes, lethargy, as in cattle. In a man of good natural parts, therefore, the eyes will be neither large nor small. Hollow eyes mean villainy, as in the ape: protruding eyes, imbecility, by congruity and as in the ass. The eyes, therefore, must neither recede nor protrude: an intermediate position is best. When the eyes are slightly deep-set, they signify a proud soul, as in lions: and when a little deeper still, gentleness, as in cattle.

A small *forehead* means stupidity, as in swine: too large a forehead, lethargy, as in cattle. A round forehead means dullness of sense, as in the ass: a somewhat long and flat forehead, quickness of sense, as in the dog. A square and well-proportioned forehead is a sign of a proud soul, as in the lion. A cloudy brow signifies self-will, as in the lion and the bull: a taut brow is taken from observation to mark the flatterer, and you may notice how a dog's brow smooths out when he fawns upon you. So, a cloudy brow indicating self-will and a smooth brow obsequiousness, the proper condition must be intermediate between these extremes. A scowling brow means a morose disposition, for we observe that vexation is thus expressed: a downcast brow means querulousness, as may also be verified by observation.

A large *head* means quickness and a small head dullness of sense, on the evidence of the dog and the ass respectively. A peaked head means impudence, as in those birds which have curved claws.

Men with small *ears* have the disposition of monkeys, those with large ears the disposition of asses, and you may notice that the best breeds of dogs have ears of

moderate size.

Too black a *hue* marks the coward, as witness Egyptians and Ethiopians, and so does also too white a complexion, as you may see from women. So the hue that makes for courage must be intermediate between these extremes. A tawny colour indicates a bold spirit, as in lions: but too ruddy a hue marks a rogue, as in the case of the fox. A pale mottled hue signifies cowardice, for that is the colour one turns in terror. The honey-pale are cold, and coldness means immobility, and an immobile body means slowness. A red hue indicates hastiness, for all parts of the body on being heated by movement turn red. A flaming skin, however, indicates mania, for it results from an overheated body, and extreme bodily heat is likely to mean mania.

A fiery colour on the chest signifies irascibility, for it is part of the expression of the onset of anger. Swollen veins on the neck and temples also signify irascibility, being part of the expression of anger. A face that reddens easily marks a bashful man, for blushing is an expression of bashfulness. But when the jowl goes red, you have a drunkard, for a red jowl is an expression of heavy drinking: whilst eyes that flush red indicate uncontrollable temper, for in a wild outburst of temper the eyes flush red. If the eyes are too black, they signify cowardice, for we saw above that this is the signification of too black a hue: if they are not too black, but inclining to chestnut, they indicate a bold spirit. Grey or white eyes indicate cowardice, for we saw above that this is the signification of a white hue: but if they are gleaming rather than grey, they mean a bold spirit, as in lions and eagles. Goatish eyes mean lustfulness, as in goats: fiery eyes, impudence, as in dogs: eyes pale and mottled, cowardice, for in terror the eyes go pale with splotches of colour: glistening eyes, lasciviousness, on the analogy of the cock and the raven.

*Hairy* legs mean lasciviousness, as in goats. Too much hair on breast and belly means lack of persistence, as argued from birds, in which this bodily characteristic is most developed; but breasts too devoid of hair indicate impudence, as in women. So both extremes are bad, and an intermediate condition must be best. Hairy shoulders mean lack of persistence, on the analogy of birds: too much hair on the back, impudence, as in wild beasts. Hair on the nape of the neck indicates liberality, as in lions: hair on the point of the chin, a bold spirit, on the evidence of dogs. Eyebrows that meet signify moroseness, by congruity: eyebrows that droop on the nasal and rise on the temporal side, silliness, as is seen in swine. When the hair of the head stands up stiff, it

signifies cowardice, by congruity, for fright, as well as cowardly disposition, makes the hair stand on end: and very woolly hair also signifies cowardice, as may be seen in Ethiopians. Thus extremely bristly and extremely woolly hair alike signify cowardice, and so hair gently curling at the end will make for boldness of spirit, as is to be seen in lions. A ridge of hair on the upper part of the forehead indicates a liberal disposition, as in the lion: but a growth of hair on the forehead down by the nose indicates illiberality, the argument being from congruity, because such a growth presents a servile appearance.

A long and slow *step* indicates a mind slow to begin, but persistent when started, for the length of the stride shows determination, but its slowness procrastination. A short slow step means tardiness without persistence, for shortness and slowness do not indicate determination. A long quick step means enterprise and persistence, for its speed indicates enterprise and its length determination. A short quick step signifies enterprise without persistence.

Identical references are made about *gesture* of hand, elbow, and arm. To hold one's shoulders straight and stiff and roll them as one walks signifies a vainglorious spirit, on the analogy of the horse: but to roll the shoulders if one stoops a little forwards means a proud soul, as in the lion. To walk with feet and legs bent out means effeminacy, as being a characteristic of women. To keep turning and bending the body is a sign of obsequiousness, for that is the gesture of the flatterer, To walk with a stoop to the right is by congruity of appearance held to argue a pathic.

Mobile eyes signify keenness and rapacity, as in hawks: blinking eyes, cowardice, for flight begins with the eyes. Sidelong leering glances are held to be characteristic of a fop, and so are drooping movements of one lid half over a motionless eye, and an upward roll of the eyes under the upper lids with a tender gaze and drooping eyelids, and in general all tender melting glances; we argue partly from congruity, partly from the fact that these looks are common in women. A slow movement of the eyes which allows a tinge of white to show all the time, so that they look stationary, indicates a reflective character; for when the mind is absorbed in reflection, our eyes also are motionless.

A big, deep *voice* indicates insolence, as in the ass: a voice which, starting low, rises to a high pitch, indicates despondency and querulousness, the argument being partly from cattle and partly from congruity. Shrill, soft, broken tones mark the speech of the pathic, for such a voice is found in women and is

congruous with the pathic's nature. A deep, hollow, simple voice signifies a noble soul, as in the stronger breeds of dogs, and also by the argument from congruity. A soft, languid voice means gentleness, as in sheep: a shrill, shrieking voice, lewdness, as in goats.

Men of abnormally small *stature* are hasty, for the flow of their blood having but a small area to cover, its movements are too rapidly propagated to the organ of intelligence. Men of abnormally large stature, on the other hand, are slow, for the flow of the blood has to cover a large area, and its movements are therefore propagated to the organ of intelligence slowly. Small men with dry tissues, or of the hue that heat produces in the body, have not persistence enough to effect their purposes; for their blood flowing in a confined space, and at the same time, in consequence of the fiery condition of the body, flowing rapidly, their thought never keeps to a single topic, but is always passing to something new before being done with the old. Again, big men with moist tissues or of the hue that results from cold, also lack persistence; for their blood flowing over a large area, and slowly, on account of the cold condition of the body, its movement does not manage to reach the organ of intelligence entire. On the other hand, small men with moist tissues and of the hue that results from cold, do effect their purposes; for their blood moving in a confined area, the less mobile constituent in its composition produces a proportion which conduces to effectiveness. And again, big men with dry tissues, and of the hue that results from heat, are also persistent, and are keen of sense; for the warmth of tissue and complexion counteracts the excessive size, so that a proportion conducive to effectiveness is attained. Such, then, are the conditions under which opposite extremes of stature tend now to effective activity, and now to ineffectiveness. But; a stature intermediate between these extremes confers upon its possessors the greatest acuity of sense and the greatest general effectiveness, for on the one hand, movements of the blood, not having a long distance to travel, easily reach the reason, while on the other hand, not being confined in too small a space, they do not pass beyond their mark. Thus the greatest tenacity of purpose and the greatest acuity of sense will be found in persons of moderate; stature.

An ill-proportioned body indicates a rogue, the argument being partly from congruity and partly from the female sex. But, it bad proportions mean villainy, a well-proportioned frame must be characteristic of upright men and brave: [only, the standard of the right proportions must be sought in the good training and good breeding of the body, and not in the male type, as determined at the beginning of this treatise].

It is advisable, in elucidating all the signs I have mentioned, to take into consideration both their congruity with various characters and the distinction of the sexes, which is, as I showed, the most complete distinction, the male being more upright and courageous and, in short, altogether better than the female. It will be found, moreover, in every selection of signs that some signs are better adapted than others to indicate the mental character behind them. The clearest indications are given by signs in certain particularly suitable parts of the body. The most suitable part of all is the region of the eyes and forehead, head and i — face; next to it comes the region of the chest and shoulders, and next again, that of the legs and feet; whilst the belly and neighbouring parts are of least service to physiognomies. In a word, the clearest signs are derived from those parts in which intelligence is most manifest.

### ***On Plants*** (815a)



*Translated by E. S. Forster*

This treatise is generally believed to have been written by Nicolaus of Damascus, a Greek historian and philosopher that flourished during the Augustan age of the Roman Empire. *De Plantis* investigates a number of plant related topics and is divided in two parts. The work commences with a discussion of the nature of plant life, sex in plants, the parts of plants, the structure of plants, the classification of plants, the composition and products of plants, the methods of propagation and fertilisation of plants and the changes and variations of plants. The second part of the treatise describes the origins of plant life, the material of plants, the effects of external conditions and climate on plants, water plants, rock plants, effects of locality on plants, parasitism, the production of fruits and leaves, the colours and shapes of plants and fruits.

## **CONTENTS**

[PREFACE](#)

[BOOK I](#)

[BOOK II](#)

# PREFACE

The *De Plantis* is one of the least satisfactory of all the treatises which are included in the Aristotelian corpus.

Firstly, it was certainly not in its original form a work of Aristotle himself; E. H. F. Meyer, who has devoted most time to the text and its elucidation, attributes it to Nicolaus Damascenus. Much of it undoubtedly shows Peripatetic influence, and it has therefore some interest as compensating for the scantiness of our information on botanical subjects in other Aristotelian treatises. The views expressed on sex in plants are of particular importance, as partly anticipating the results of modern botanical research.

Secondly, the text has passed through a chequered career and is in a deplorable condition. The original Greek text having been lost, the treatise was preserved in an Arabic translation, now also lost, which in its turn was translated into Latin during the thirteenth century by a certain Englishman, by name Alfredus, whose knowledge of Arabic and whose Latin style leave something to be desired. The Greek text in Bekker's edition and the Teubner edition is a translation from the Latin back into Greek, and is therefore three times removed from the original.

The present translation has been made from the Latin version of Alfredus as edited by Meyer, to whose commentary I am deeply indebted. F. W. Wimmer's *Phytologiae Aristotelicae Fragmenta* has also been found useful. It has been thought worth while to note parallels with other passages in Aristotle when it has been possible to trace them.

My sincere thanks are due to the kindness of Mr. W. D. Ross, who has read through the translation and made some valuable suggestions.

E. S. F.

# BOOK I

Life is found in animals and plants; but while in animals it is clearly manifest, in plants it is hidden and less evident. But before we can assert the presence of life in plants, a long inquiry must be held as to whether plants possess a soul and a distinguishing capacity for desire and pleasure and pain. Now Anaxagoras and Empedocles say that they are influenced by desire; they also assert that they have sensation and sadness and pleasure. Anaxagoras declared that plants are animals and feel joy and sadness, deducing this from the bending of their foliage; while Empedocles held the opinion that sex has a place in their composition. Plato indeed declares that they feel desire only on account of their compelling need of nutriment. If this be granted, it will follow that they also feel joy and sadness and have sensation. I should also like to reach some conclusion as to whether they are refreshed by sleep and wake up again, and also whether they breathe, and whether they have sex through the mingling of the sexes or not. But the great diversity of opinion on these subjects involves too long an inquiry, and the best course is to pass over these topics and not to waste time on the unprofitable investigation of details. Some have asserted that plants have souls, because they have seen that they come to birth and receive nutriment and grow, and have the bloom of youth and the dissolution of old age — characteristics which nothing inanimate shares with plants; if plants possess these characteristics, they believed them also to be affected by desire.

Let us first examine their obvious characteristics, and afterwards those which are less evident. Plato says that whatsoever takes food desires food, and feels pleasure in satiety and pain when it is hungry, and that these dispositions do not occur without the accompaniment of sensation. The view of Plato in thus holding that plants have sensation and desire was marvellous enough; but Anaxagoras and Democritus and Empedocles declared that they possessed intellect and intelligence. These views we must repudiate as unsound and pursue a sane statement of the case. I assert, then, that plants have neither sensation nor desire; for desire can only proceed from sensation, and the end proposed by our volition changes in accordance with sensation. In plants we do not find sensation nor any organ of sensation, nor any semblance of it, nor any definite form or capacity to pursue objects, nor movement or means of approach to any object perceived, nor any token whereby we may judge that they possess sense-perception corresponding to the tokens by which we know that they receive



nutriment and grow. Of this we can only be certain because nutrition and growth are parts of the soul, and when we find a plant to be possessed of such a nature, we perceive of necessity that some part of a soul is present in it; but we ought not to contend that a plant which lacks sensation is a thing possessed of sense, because while sensation is the cause of the glorification of life, nutrition is merely the cause of growth in the living thing.

These differences of opinion come into consideration in their own proper place. It is certainly difficult to find a state intermediate between life and the absence of life. Some, too, will urge that a plant, if it be alive, is therefore an animal; for it is difficult to assign any principle to the life of plants except that of the life of nutrition. But, when men deny that plants have life, they do so because plants do not possess sensation; yet there are certain animals which lack foresight and intelligence. For nature, which destroys the life of the animal in death, preserves it in the continuation of the race, and it is wrong for us to suppose any intermediate state between the animate and the inanimate. We know that sea-shells are animals which lack foresight and intelligence and are at once plants and animals. The only reason, therefore, for their being called animals is that they have sensation; for genera give names and definitions to the species which fall under them, while the species give names to the individuals, and the genus ought to rest on a common cause present in the numerous individuals and not on the individuals themselves; but the meaning of the cause, on which the genus is based, is not obvious to every one. Now there are animals which have no female sex, and some which do not procreate their kind, and some which lack the power of movement, and some in which the colour varies, and some which produce an offspring unlike themselves, and some which are produced from decaying vegetation.

What, therefore, is the principle of life in animals? What is it that raises the noble animal, as surely as the heavens which encircle the sun and the planets, from the sphere of perplexity and doubt? For the heavenly bodies feel no outside influence, and sensation is an effect produced on a sentient being. Now a plant has no movement of itself, for it is fixed in the earth, which is itself immovable. Whence, then, shall we infer any similarity which may enable us to attribute life to the plant? For there is no one thing which includes all three forms of life. We therefore assert that sensation is common to all animal life, because sensation marks the distinction between life and death; but the heavens, which pursue a nobler and more sublime path than we do, are far removed from life and death. But it is fitting that animals should have some common characteristic perfect in

itself but less sublime, and this is the acquisition and deprivation of life. And one ought not to shrink from the use of these terms on the ground that there is no mean between the animate and the inanimate, between life and the deprivation of life; nay, there is a mean between life and the inanimate, because the inanimate is that which has no soul nor any portion of it. But a plant is not one of those things which entirely lack a soul, because there is some portion of a soul in it; and it is not an animal, because there is no sensation in it, and plants pass one by one gradually from life into death. We can put the matter in a different way and say that a plant is animate. I cannot, however, assert that it is inanimate as long as it possesses soul and some form of sensation; for that which receives food is not entirely without soul, and every animal has soul. But a plant is imperfect, and, whereas an animal has definite limbs, a plant is indefinite in form, and a plant derives its own particular nature from the motion which it possesses in itself. Some one might say that a plant has soul, because the soul is that which causes motion and desire to arise locally, and motion can only arise locally when sensation is present. But the absorption of food is in accordance with a natural principle, and is common both to animals and plants, and no sensation at all will accompany the absorption of food; for everything that absorbs food employs two qualities in feeding, namely, heat and cold, and an animal properly requires moist food and dry food, for coldness is always found in dry food; for neither of these two natures is ever unaccompanied by the other. And so food is continuously being supplied to that which feeds on it till the time when it begins to decay, and animals and plants have to be provided with food composed of the same elements as those of which they themselves are composed.

Let us now investigate what we have already mentioned, namely, desire in plants, their movement, and their soul, and that which is given forth by them. A plant has not respiration, although Anaxagoras declared that it has; and we even find many animals which have not respiration. We can see by ocular demonstration that plants do not sleep and wake, for waking is due to an effect of sensation, and sleeping is an enfeebled condition of sensation, and nothing of this kind is found in that which vegetates at all times in the same condition, and is itself naturally without sensation. When an animal takes food, a vapour rises from the food into its head and it falls asleep, and, when the vapour which rises to its head is consumed, it wakes up. In some animals this vapour is plentiful and yet they sleep but little. Sleep is the suppression of motion and this involves the quiescence of the thing moved.

The most important and appropriate subject of inquiry, which arises in the

science of botany is that proposed by! Empedocles, namely, whether female and male sex is found in plants, or whether there is a combination of the two sexes. Now we assert that when the male generates it generates *in* another, and when the female generates it generates *from* another, and both are mutually separate. This is not found to be the case in plants; for in a particular species the produce of the male plant will be rougher, harder, and stiffer, while the female will be weaker but more productive. We ought also to inquire whether the two kinds are found in combination in plants as Empedocles states that they are. But my opinion is that this is not the case, for things which mingle together ought first to be simple and separate, and so the male will be separate and the female separate; they afterwards mingle, and the mingling will only take place when it is produced by generation. A plant, therefore, would have been discovered before the mingling had taken place, and it ought therefore to be at the same time an active and a passive agent in the process of production. The two sexes cannot be found combined in any plant; if this were so, a plant would be more perfect than an animal, because it would not require anything outside itself in order to generate; whereas the plant *does* require the right season of the year and sunshine and its natural temperature more than anything, requiring them at the time when the tree sprouts. The nutritive principle in plants is derived from the earth, the generative principle is derived from the sun. Wherefore Anaxagoras said that the seeds of plants are borne down from the air, and other philosophers who profess the same doctrine call the earth the mother and the sun the father of plants. But we must suppose that the mingling of the male and the female in plants takes place in some other way, because the seed of a plant resembles the embryo in animals, being a mixture of the male and female elements. And just as in an egg there exists the force to generate the chicken and the material of its nutriment up to the time when it reaches perfection and emerges from the egg, and the female lays the egg in a short space of time; so too with the plant. And Empedocles is right when he said the tall trees bear their young; for that which is born can only be born from a portion of the seed, and the rest of the seed becomes at first the nutriment of the root; and the plant begins to move as soon as it is born. This, then, is the opinion which we ought to hold about the mingling of the male and female in plants, similar to that which we hold about animals. This process is the cause of plants under a certain disposition of circumstances; for in the case of an animal when the sexes mingle and afterwards separate a single offspring is produced from them both. But this is not the case with plants; when the sexes mingle, it is the forces of the sexes which mingle. And if nature has mingled the male and the female together, she has followed the right course; and in plants the only operation which we find is the

generation of fruits; and an animal is only separated at the times when it is not having sexual intercourse, and this separation is due to its multifarious activities and intellectual pursuits.

But there are some who hold that the plant is complete and perfect because of its possession of these two powers, and because of the food which is adapted to feeding it, and the length of its existence and duration. When it bears leaves and fruit its life will continue and its youth return to it. No excrement will be produced from plants. A plant does not require sleep for many reasons, for if is placed and planted in the earth and attached to it and has no movement of itself, nor has it any definite bounds to its parts, nor does it possess sensation or voluntary motion, or a perfect soul; nay, it has only part of a soul. Plants are only created for the sake of animals, and animals are not created for the sake of plants. Some one will urge that a plant requires food which is easily obtained and poor, yet it needs it very regularly and continuously, and without interruption. If it were agreed that a plant has an advantage over an animal, it would follow that things which are inanimate were better and nobler than those which are animate; yet we see that the function of the animal is nobler and better than that of the plant, and we find in the animal all the virtues which are present in the plant and many others. Empedocles said that plants had their birth when the world was yet small and its perfection not attained, while animals were born after it was completed. But this account of creation does not suit the facts, for the world as a whole has existed continuously from eternity and has never ceased to produce animals and plants and all their species. In every kind of plant there is natural heat and moisture, and, when these are consumed, the plant will become weak and grow old and decay and dry up. Some people call this corruption, others do not.

Some trees contain a gummy substance, such as resin and almond-gum and myrrh, and frankincense, and gumarabic. Some trees have fibres and veins and flesh and wood and bark and marrow within them; some trees consist almost wholly of bark. In some the fruit is underneath the bark, that is, between the bark and the wood. Some parts of the tree are simple, such as the moisture found in it and the fibres and veins; other parts are composite, such as the branches and twigs and the like. These are not all found in all plants; for some have composite and some simple parts, while others do not have them. Some plants possess various other parts as well (roots, twigs), leaves, pedicels, flowers, catkins, tendrils, and bark surrounding the fruit.

Just as in the animal, so also in the plant there are members consisting of similar parts, and some of the parts of a plant are composed of other members, The bark of a plant resembles the skin of an animal, while the root of a plant is like the mouth of an animal, and its fibres are like an animal's muscles, and so with its other parts. Any of these parts can be divided on one principle into similar parts, or a division can be made by dissimilar parts (just as mud can be divided in one way into particles of earth only and in another into particles of water; similarly the lungs and flesh can be divided up on one principle so that they are pieces of flesh, while on the other principle they can be divided into their elements or radical parts).

‘ But a hand cannot be divided up into another hand, nor a root into another root, nor leaves into other leaves; but these roots and leaves are themselves the result of; composition. Some fruits are composed of few parts, some of many — olives, for example, which are made up of bark and a fleshy substance and a shell and a seed. Some fruits have as many as three coverings. All seeds consist of two bodies. We have now mentioned the parts of which individual plants consist The conclusion of our discussion is this: it is a difficult task to determine the parts of the plant in general, and its coverings and its variations, and in particular, to define its essential nature and its colour, and the period of its duration, and the effects which are produced upon it. Plants have not fixed habits of mind and the power of action like that possessed by animals; and if we compare the parts of an animal with those of a plant, our discussion will be a long one, and we shall not avoid considerable differences of opinion in naming the parts of plants. For a part of a thing is of its own kind and of its own particular substance, and, when it is once produced, any special part will remain in its original condition, unless it departs from it owing to some long continued infirmity. Flowers, fruits, and leaves will, in some cases, be produced annually, in others they are perennial; they have not the same permanence as the bark and body of a plant (though even this is shed under the influence of burning heat, being stripped off by the desert wind )... This does not happen in plants; for various undetermined parts of plants are often shed (like hair in the case of man and claws in the case of animals), and in their stead other parts grow either where the lost parts were, or elsewhere in some other place. It is clear from this that it is not determined whether the parts of a plant are really parts or not. It is wrong for us to say that those things with which a plant grows and by which it reaches completion are not parts of it; but the leaves and everything that is found in a plant are parts of that plant, although they are not determined and are gradually shed; for the antlers of a stag and the hair of certain animals, and the

fur of certain of those which hibernate in hollows underground, fall off, and this process resembles the shedding of leaves.

We ought, therefore, to treat of the subjects which we mentioned first, and begin by enumerating the parts which are peculiar to certain plants and those which are common to all, and their differences. Let us say, therefore, that there is a great diversity in plants in respect of number and fewness, largeness and smallness, and in respect of strength and weakness. The reason of this is that the moisture which is found in large trees, is in some trees, the fig, for example, like milk, in others it is like pitch, as in the pine, in others it is watery, like the liquid found in the vine, in others it is acrid, like that found in marjoram and in the herb called opigaidum. There are also plants which have their parts dry. Some plants have their parts well defined, and neither alike nor equal in size; others have parts which are similar to one another but not equal, in others they are equal but not similar, and their position is not fixed. The differences of plants are recognized in their parts, their form and colour and sparseness and density and roughness and smoothness, and all their incidental differences of taste, their inequality of size, their numerical; increase and decrease, their largeness and smallness. Some plants, too, will not be uniform, but will show great variation, as we have already said.

Some plants produce their fruit above their leaves, others beneath; in some plants the fruit is suspended from the stock of the tree, in others it grows from the root, as in the Egyptian trees which are called vargariaton; in some cases it grows in the middle of the plant. In some plants the leaves and knots are not separated; in others the leaves are equal in size and similar to one another, and some of those which have branches have branches equal in size. The following parts, which we will name, are found in (almost) all plants, and admit of growth and addition — namely, the root, the shoots, the stem, and the branches; these resemble the limbs of animals which include all the other limbs. The root acts as an intermediary between the plants and its food, and for that reason the Greeks call it the root and cause of life in plants, for it supplies the plant with its means of life. The stem is the only part which grows out of the ground and forms, as it were, its erect stature. The suckers are the parts which sprout from the root of a tree, while the branches are above the suckers. They are not found in all plants; and in some plants which have branches these are not permanent, but only last from year to year. There are plants which do not have branches or leaves, fungi, for example, and mushrooms. Branches are only found on trees. Bark and wood and the pith of a tree are produced from moisture; some call this pith the womb

of the tree, others the vitals, others the heart. The fibres and veins and flesh of the whole plant are made up from the four elements. Parts are often found which are adapted to reproduction, leaves, for example, and flowers and small twigs (which are flowers outside the plant); the fruit and leaves on a plant grow in the same way, being produced from the seed and the shell which surrounds it.

Of plants some are trees, some are midway between trees and herbs and are called bushes, some are herbs, and some are vegetables. Almost every plant falls under one of these classes. A tree is a plant which has a stem growing from its root, from which stem numerous branches grow, olive-trees, for example, and fig-trees. A plant which is something between a tree and a small herb, and is called a bush, has many branches growing out of its roots, like the thorn-tree and bramble. Vegetables are plants which have a number of stems growing out of one root and a number of branches, rue, for example, and cabbage. Herbs are plants which have no stem, but their leaves grow out of their roots. Some plants are produced and dry up every year, wheat, for example, and vegetables. We can only indicate these various classes of plants by general inferences, and by giving examples and descriptions. Some plants verge on two very different classes, mallow, for example (since it is both a herb and a vegetable), and likewise beet. Some plants grow at first in the form of low bushes and afterwards become trees, as, for instance, the nut-tree, the chaste-tree, and the plant called goatberry. Perhaps myrtles, apple-trees, and pear-trees fall also under this class, for all of them have a number of superfluous stems growing from their roots. It is worth while to specify these that they may serve for purposes of example and inference, but we must not investigate the definitions of every kind of plant.

Some plants are indoor plants, others garden plants, and others wild, in the same way as animals. I think, too, that all species of plants which are not cultivated become wild. Some plants produce fruit, others do not; some bear flowers, others do not; some have leaves and not others; some plants shed their leaves, others do not. Plants differ greatly in their large or small size, in beauty and ugliness, and in the excellence, or the contrary, of their fruits. Trees in a wild state bear more fruit than garden trees, but the fruit of the garden tree is better than that of the wild. Some plants grow in dry places, some in the sea, others in rivers. Plants which grow in the Red Sea will there reach a great size, whereas they are only small in other places. Some plants grow on the banks of rivers, others in standing water. Of plants which grow in dry places, some grow on mountains, others in the plain; some plants grow and flourish in the most arid districts, as, for example, in the land of the Ethiopians which is called Ziara, and

increase there better than anywhere else. Some plants live at high altitudes, some on moist ground, others in dry, others equally well in either, as, for instance, willow and tamarisk.

A plant changes very much with a difference of locality, and such variations must be taken into consideration.

A plant which is fixed in the ground does not like to be separated from it. Some places are better for certain plants than others; similarly some fruits are better in one place than in another. In some plants the leaves are rough, in others smooth; in some they are small, in others they are cleft as in the vine. Some trees have a single bark, as the fig, others have several layers of bark, as in the case of the pine; some are bark throughout, as, for example, the mediannus. Some plants have joints, reeds, for example; some have thorns, like the bramble. Some have no branches, others have a great number, like the sycamore. Other plants show various differences; for instance, suckers grow from some and not from others; this can only be due to a difference in the root. Some plants have a single root only, the squill for example; for it grows in a single shoot and spreads by expansion underground, and will increase as it grows more and more and approaches the sunlight, because the sun draws out its scales.

Of the juices which are found in fruits, some are drinkable, as, for instance, the juice of grapes, pomegranates, mulberries, and myrtles. Some juices are oily, as in the olive and pine-nut; others are sweet like honey, as in the date and fig; others are hot and pungent, as in marjoram and mustard; others bitter, as in wormwood and centaury. Some fruits are made up of a fleshy and a bony substance and a seed, plums for example; others, cucumbers for instance, are made up of a fleshy substance and seeds, others of moisture and seeds like the pomegranate. Some have rind outside and seed inside, others flesh outside and seed inside; in others one comes immediately upon the seed with the envelope which encloses it, as in dates and almonds; in others this is not so. Fruits are edible or inedible accidentally, and some people can eat certain fruits while others cannot, and certain animals can eat certain fruits while others cannot. Some fruits, again, are in pods, like seeds; others in sheaths, like weapons, wheat for example; others are enclosed in a fleshy substance, dates for instance; others in husks, acorns for example, and some in several husks, a cuticle and a shell, walnuts for example. Some fruits mature quickly, like mulberries and cherries, others slowly, as do all or most wild fruits. Some plants produce their leaves and fruits quickly, others slowly; some wait for the winter before coming to maturity.



The colours of fruits and flowers vary very much. One plant is green throughout, another has a tendency to blackness, another to whiteness, another to redness. Also the conformation of the fruit, if it be wild, varies considerably; for all fruits are not angular, nor do they take the form of straight lines.

IN aromatic trees it is sometimes the root which is aromatic, sometimes the bark, sometimes the flower, and sometimes the wood; in other cases every part is aromatic, in the balsam for example.

Some trees come into existence by being planted, some from seeds, others spontaneously. Those which are planted are separated either from the root, the stem, the branches, or the seed, or else the whole is transplanted; some are slightly bruised before being planted. Some are planted in the earth, others are planted, that is, grafted, on other trees. Grafting of one on another is better in the case of trees which are similar and have the same proportions; the best results are obtained in the grafting, for instance, of apple on pear, fig on fig, or vine on vine. Sometimes grafting of different species is resorted to, bay, for example, on wild plane, olive-trees on terebinth, mulberries on a number of different trees, and wild trees on garden trees. Every plant does not produce a seed similar to that from which it is sprung; some produce a better seed, others a worse, and good trees sometimes grow from bad seeds, as in the case of bitter almonds and pomegranates. In some trees too, when they are weak, the seed fails, in the pine for example, and the palm. But a good plant is not likely to be produced from a bad seed, nor a bad tree from a good seed. Instances, however, of good producing bad and *vice versa* often occur among animals.

A tree which has hard bark and has become barren, if its root be split and a stone inserted in the cleft will become fruitful again. In palms too, if the leaves or pollen or bark of the male palm be applied to the leaves of the female palm so as to cohere, its fruits will come to maturity quickly, and it will prevent their falling off. The male can be distinguished from the female palm, because it sprouts first and its leaves are small, and also because of its odour; sometimes all these conditions are present, sometimes only some of them. It will perhaps happen that the wind will bear the odour of the male to the female palm, and then the dates will come to maturity; the foliage of the male will also cohere to that of the female palm when they catch in one another. Wild fig-trees, too, spread along the ground and are attracted by garden fig-trees; similarly wild olives are attracted by olives, when they are planted together.

Again, some plants change into other species, the nut-tree, for example, when it becomes old. It is also said that catmint changes into mint, and basil, if plucked up and planted by the Persian Gulf, will perhaps turn into thyme. Also wheat and flax change into tares. The poisonous nightshade which grows in Persia changes its nature if transplanted into Egypt and Syria and becomes edible. Almond-trees and pomegranates change their condition for the better under cultivation. Pomegranates are improved by being manured with pigs' dung and watered with fresh cold water. Almond-trees with pegs driven into them exude gum for a long while. Many wild plants are thus artificially changed into garden plants. Position and care, and, above all, the season of planting, contribute to this process. Some plants require some one to plant them, others do not. Most plants are planted in the spring, a few in the winter and autumn, very few in the summer after the rising of the dogstar; planting at this season takes place in few places — nowhere except in the Crimea. In Egypt planting only takes place once in the year.

Some trees produce shoots from their roots, some from their buds, some from the wood, others from every part. In some they are near the ground, in others far from it, in others they are neither high nor low: others produce a few shoots at various times. Some trees bear fruit once a year, others several times, and their fruit does not mature, but remains unripe. Certain trees are very fruitful over a long period, as, for instance, fig-trees. Some bear fruit one year and then recuperate for a year, as do olive-trees, although they produce a number of boughs which cover them. Some trees are more productive when they are young than when they are old; others, on the contrary, are more fertile when they are old, almond-trees, for example, and pear-trees and holm-oaks. Wild and garden plants can be distinguished by identification with the male and female, each being recognizable by its peculiar characteristics; for the male is thicker and harder and has more branches and less moisture and a smaller fruit, and does not reach such maturity; the leaves, too, and likewise the twigs, are different.

After these considerations we ought to form some conclusions in order that we may know trees and their various kinds apart, and similarly in the case of small herbs. We must consider what the ancients have said on these points, and examine the works written upon them. We shall only be able to take a brief survey and extract the essence of them. This means that we shall consider those plants which contain oil, those which produce seeds, and those which produce wine, and plants which have medicinal properties, and those which destroy life. All these particulars about trees and plants are well known. But in order to know

their causes, we ought to inquire into their production, and discover why certain plants grow in certain places and not in others, and at certain seasons and not at others; we must examine their methods of planting, their, roots, their differences of sap and odour and juice and gum, and the excellence and defects of particular plants, and the fact that the fruits of some trees last but not those of others, and why some fruits putrefy quickly, others more slowly. We must inquire into the properties of all plants, and particularly those of their roots; and why some fruits grow soft while others do not; and why some affect the bowels, others cause sleep, and others are fatal to life; and many other differences.

## BOOK II

A plant has three powers, the first derived from the element of earth, the second from that of water, the third from that of fire. From the earth the plant derives its solidity, from water the unity, and from fire the concretion of its solidity. We see much the same thing in vessels of pottery, which contain three elements — clay, which is, as it were, the material of pottery; secondly, water, which binds the pottery together; and, thirdly, fire, which draws its parts together, until it completes the process of manufacture. The appearance, then, of complete unity is due to the fire; because rarity is present in pottery according to the composition of its parts, and, when the fire heats them, the moist matter is solidified, and the parts of the clay will cohere together. Dryness will thus take the place of moisture, owing to the predominance of the fire and the process of concoction which takes place in all animals, plants, and metals. For concoction takes place where moisture and heat are present, when the struggle between them is allowed to run its course; and this is what will take place in the concoction of stone and metals. It is not so in animals and plants; for their parts are not closely compacted, and so there is an escape of moisture from them. But in metals there is no such escape of moisture or sweating, because their parts have no rarity, and therefore they can give up nothing except parts of themselves to correspond to certain superfluities which are given off by animals and plants. This escape of moisture can only take place where rarity is present; and so where there is no rarity, nothing at all can be given off. Therefore that which cannot be increased is solid, because that which might increase lacks space in which to dilate and grow; and therefore stones, salt, and earth are always the same, neither increasing nor growing. There is motion in plants in a secondary sense, and this is a form of attraction, namely, the force of the earthly element which attracts moisture; in this attraction there will be motion, and the moisture makes for a certain position, and the process of concoction is thus in a certain way completed. And so small plants usually come into being in the short space of a single day, unlike animals; for the nature of animals is in itself different; for no concoction will take place except by the use of material in the animal itself. But the material of which the plant is formed is near at hand, and therefore its generation is quick, and it grows and increases, because it is rare, more quickly than if it were dense. For that which is dense lacks many powers on account of the diversity of its form and the extension of its parts in relation to one another. Consequently the generation of a plant is quicker on account of the similarity of

its parts to one another, and the completion of its growth is speedier. Now the parts of plants are usually rare, because the heat draws the moisture into the extremities of the plant, and the material is distributed through all its parts, and that which is superfluous will flow away; just as in a bath the heat attracts the moisture and turns it into vapour which rises, and, when it is present in superfluity, it will turn into drops of water. Similarly in animals and plants, the superfluities ascend from the lower into the upper parts and then descend in their action from the upper to the lower parts.

We find the same phenomenon in streams which are generated underground and come forth from mountains, and whose material is rain. When the waters increase and are confined within the earth, an excess of vapour will be produced from them on account of their compression underground, and the vapour will break its way through the earth and fountains and streams will appear, which were formerly hidden.

We have set forth the causes which produce springs and rivers in the book on Meteorology. An earthquake frequently discloses springs and rivers which had not before been visible, when the earth is rent by vapour. We also often find that springs and rivers are submerged when an earthquake takes place. But this does not happen in the case of plants, because air is present in the rarity of their parts. This can be illustrated by the fact that an earthquake never takes place in sandy localities, but only where the ground is hard, that is in districts of water and mountains. Earthquakes occur similarly in these districts, because water and stone have no rarity in them, and it is the nature of warm, dry air to ascend. When, therefore, the particles of air become massed together, they gain force and thrust up the ground and the vapour makes its way out; whereas, if the ground were rare, the vapour would make its way out gradually from the first. But the ground being solid, it does not make its way out gradually, but its parts collect, and it is then strong enough to rend the earth. This, then, is the cause of earthquakes in solid bodies; there will, therefore, be nothing to correspond to an earthquake in the parts of plants and animals, though it will occur in other things — often, for example, in pottery and glass, and in some cases in minerals. Any body which has considerable rarity tends to rise upwards, for the air supports it. This we often see when we throw: a gold coin or some other heavy substance into the water and it immediately sinks; whereas if we throw in a piece of wood, which has rarity in it, it does not sink. A gold coin sinks not because of its leaf-like form nor on account of its weight, but because it is solid. That which has rarity can never altogether sink. Ebony and similar substances sink because there

is very little rarity in them, and therefore there will not be air present to support them; and so they sink, because their parts are practically solid. Oil and fat always float on the surface of water. We will now give the reason of this. We know that heat and moisture are present in these substances; and it is characteristic of moisture to cohere with particles of water, while it is characteristic of heat that it causes moisture to rise and makes its way towards the particles of air; and it is the habit of water to raise objects to its surface, and of air to rise upwards; and water does not rise above its surface, because the whole surface of the water is one and the same, and consequently the air rises with the oil above the water. Some stones too float on water, because rarity is present in them and is greater in quantity than the matter of which they are formed, and consequently the space occupied by air will be greater than that occupied by the earthy element. It is the nature of water to take up a position above the earth, and of air to rise above water; the material, therefore, which composes the stone, which is of the element of earth, sinks in the water, while the element of air enclosed in the stone rises above the water. Each element therefore attracts its like in a contrary direction to the element with which it is combined. If, then, one element is equal to the other, half the stone will be submerged and half will project above the surface; but if the air is present in greater quantity, the stone will float above the water. The weight of trees is made up in the same way. (These stones are due to a violent collision of waves, and are originally foam which forms a white oily substance; when the wave is dashed against the sand, the sand will collect the oily foam, and the dryness of the sea will dry it up together with the superfluous salt, and the particles of sand will collect, and thus in the long process of time stones will be formed.)

The presence of sand under the sea is explained by the fact that earth always has a fresh flavour, and when water stands it will be prevented from undergoing any change, and will form an enclosed mass of water in the place where it is, and the air will not draw it up; the particles of earth, therefore, gain the upper hand and become salty, and gradually acquire heat. (Now earth is found in its natural state in fresh running water, because there the water is sweet and light.) And because the dryness of the earth gains the upper hand in the water, it changes it into an earthy nature, or something like it, and makes both the earth and water crisp; and this process of drying goes on as long as the earth remains in its place and there is water still left, and it splits up the soil into small particles; and for this reason the earth near the sea is always sandy. The same thing happens on plains which have nothing to protect them from the sun, and which are far from fresh water; the sun has dried up the particles of fresh moisture and that which is of the

nature of earth has remained; and because the sun shines continually upon an exposed place of this kind, the parts of the soil become separated and sand is thus formed. A further proof of this is that if we dig deep down in a desert, we shall find natural soil. Natural soil, therefore, will be the basis of sand, and will only become sand accidentally and under certain circumstances, namely, when the sun's rays dwell on it for a long time and it is far removed from fresh water. The saltiness of the sea is to be accounted for in a similar way; for the basis of all water is fresh water, and saltiness is accidental, occurring only under the circumstances which we have mentioned. The fact that the earth is below the sea and the sea naturally and necessarily above the earth is a self-evident proof of this. Some, however, have held that the common element is that which is present in the greatest quantity, and that there is a greater quantity of water in the sea than elsewhere, and that, therefore, sea-water is the element present in all water. But water naturally has its position above the earth and is lighter than it; for we have already shown that water is at a higher elevation than the earth according to the altitude at which the mass of water stands. Let us take two vessels of the same size and place fresh water in one and salt water in the other; then let us take an egg and place it in the fresh water; it will sink, whereas, if we place it in the salt water, it will float. It therefore rises above the particles of salt water because these particles do not let it sink, as do those of fresh water, but they can uphold the weight, which therefore does not sink. So in the Dead Sea no animal can sink, nor is any animal life produced in it, because dryness predominates in it and it is like the form of earth. It is clear, therefore, that dense water finds a lower level than water which is not dense; for the dense is of the nature of earth, the rare of the nature of air; therefore, fresh water stands at a higher elevation than any other water, and is therefore further removed from earth. Now' we already know that the water which is furthest removed from earth is the natural water, and we have shown that fresh water is higher in position than all other kinds of water; it therefore follows certainly and necessarily that it is the natural water. Salt water is also produced in pools, because fresh water becomes salt. The saltiness, therefore, of the earth by its saltiness prevails over the fresh water and the air will remain enclosed, and the mass of water will not therefore be fresh. Saltiness may also be produced from water by being given off from it like sweat.

So too in the case of plants: their species will be formed, not from a simple element, but by a process of composition, just as saltiness and the substance of sand are formed in the water of the sea. For vapours which rise, when they become solidified, will be able to conceive these plants, and the air will descend

and bedew the ground, and from it will come forth the form of their seeds through the powerful influence of the stars. But plants must necessarily have some material, and this material is water. There are, however, different kinds of water, and water only rises if it is fresh, and salt water is heavier than fresh; and so that which rises above water is rarer than water. When, therefore, the air draws it up, it will become rarefied and rise still higher; and this is why fountains and streams are formed in mountains. Similarly phlegm and blood rise to the brain, and all foods also rise; so too all water rises. Even salt water rises in that part of it which heat dries out into the element of air, and, because air is always higher than water, that which rises from salt water is fresh. We shall often find the same thing taking place in baths. When heat takes hold of salt water, its parts will be rarefied, and vapour will rise in a contrary direction to the depth of the bath, and the particles of salt and the natural moisture become separated, for the latter is of the nature of air and follows the vapour; and cloud after cloud of vapour rises upwards, and when they reach the top of the room they press upon one another. The vapour will thus collect and become condensed, and will turn into drops of fresh water dripping down, and so in salt baths the vapour will always be fresh.

Plants ought not to grow in salt water, on account of its low temperature and dryness. This means that the plant lacks two things — its proper material and a position suitable to its nature; when these two conditions are present a plant will grow. Now we find that snow is the substance furthest removed from an equable temperature, and its most striking characteristic is the impossibility of its existing in a temperate region. We do not, therefore, find plants growing in snow; yet we often find plants appearing in the snow, and animals of all kinds, especially worms (for they are bred in the snow), and mullein and all bitter herbs. But it is not the snow which causes this to be so; but a certain characteristic of snow is active. The reason is that snow falls like smoke, and the wind congeals it and the air binds it together. There is therefore rarity amongst its parts, and air will be retained in it and will grow hot, and foul water flows from it, which had before enclosed the air; and when the air is present in considerable quantities and the sun shines upon it, the air which is enclosed in the snow will burst its way out, and a foul moisture will appear and will be solidified by the heat of the sun. But if the place is covered up by snow, plants will grow in it, but without leaves, because it is cut off from the equable temperature of the earth which is congenial to it. This is the reason why there are numerous flowers and leaves on small plants in places where the air and water are temperate, and few flowers and leaves on a plant which occurs in the snow.



So too in very salty and dry places plants do not usually appear, because these places are far from being temperate; and the ground is impoverished, because heat and moisture, which are the characteristics of fresh water, are absent. So the soil that is fresh is the mountain soil, and there plants grow quickly.

But in warm places, because there the water is fresh and the heat plentiful, the process of concoction proceeds quickly, partly as a result of the position and the air which is found there, and partly because there is a concoction of the air owing to the heat of the sun there. On mountains, because they attract moisture and the clearness of the air assists the process, concoction proceeds apace; and therefore plants are generally found on mountains. In deserts the saltiness gains the upper hand, as we have already shown, and rarities resembling one another are left between the particles of sand; the sun has therefore no power to produce or perpetuate any continuous plant life; and so in deserts separate species of plants will not occur, but species similar to one another.

PLANTS which grow on the surface of the water will only do so when there is density in the water; the reason of this is that, when heat touches water which has no current to move it, something of the nature of a cloud comes over it and retains a little of the air, and the moisture putrefies and the heat draws it up, and it spreads over the face of the water. Such a plant has no root, because roots will only attach themselves to the hard particles of the earth, and the particles of water are loose and scattered. The heat then comes forth with the putrefaction which takes place on the surface of the water. Such a plant has no leaves because it is produced under conditions which are far from temperate, and its parts are not compact, because the parts of water are not compact. It is for this reason too that such plants grow like threads. It is because the parts of earth are compact that the plants too which grow in the earth are compact. Sometimes putrefactions are set up in damp, smoky ground, and hold the air — the sun causing them to appear when rain and winds are frequent — and the dryness of the earth will make their roots dry up and solidify, and thus fungi and mushrooms and the like will be produced. In places that are exceedingly warm, because the heat assimilates the water in the interior of the earth and the sun holds the heat, a vapour is formed and a plant is thus produced. This process takes place in all warm places, and the formation of the plant is thus completed. A cold locality causes a similar but contrary process; the cold air forces the heat downwards and its particles collect together, and the ground undergoes concoction with the moisture present in it; the ground is then cleft open and a plant emerges from it. Where the ground is fresh, water is generally not far away. When, therefore, the

air which is enclosed in the earth is stirred into motion, the moisture of the water will remain behind, and the air will solidify inside the water and a plant is produced, such as the water-lily and various kinds of small plants; these plants grow straight up and do not expand, because their roots are above the earth. In places too where there is warm water running, plants often grow, because the heat of the water attracts the vapours which are retained in the earth, and draws the cold moisture upwards, and air is solidified from the moisture, which it assimilates owing to the heat of the water, and a plant appears, but only after a long lapse of time. Small plants too appear in sulphurous places: and when the wind blows violently upon the brimstone, it will recoil back again, and the air which is in it will be stirred up, and the place will become hot, and fire will be produced from it, and will continue to be produced from it, because it exists deep down in the brimstone, which is due to impurities deposited by the air; the fire attracts the air when the sulphur putrefies, and a plant will be produced from it. Such a plant, as we have shown before, will not generally have many leaves, because it is produced under conditions which are far from equable.

Edible products will grow from plants in positions which are warm and slightly elevated, especially in the third and fourth zones; fruits which fail to provide food grow in cold and high districts. Many species are produced in cold, high positions owing to the attraction of the moisture and the temperate conditions which prevail in the warmth of the sun on spring days. Similarly natural soil readily produces plants which are full of oil; such soil, as we have already seen, is found where there is fresh water.

A PLANT which grows upon solid rock takes a long time to grow; for the air which is enclosed in the stone strives to rise, and when it cannot find a way, owing to the resistance of the stone, it retreats back again and becomes heated, and attracts the residuum of the moisture in the stone upwards, and with this moisture a vapour comes forth accompanied by a resolution of small particles of the stone; and because the sun often acts upon the stone, it assists the moisture in the process of concoction, and as a result a plant is produced. Such plants do not generally grow to any height, unless they are near some soil or moisture. The growth of a plant requires soil, water, and air. A rock plant will grow low, and if it faces the east, it will grow quickly, and slowly if it faces the west. A plant, when water is the predominant element in it, will retain the air and will not allow it to rise, and thus the plant is not nourished. Similarly, when dryness predominates, the natural heat will be diverted into the extremities of the plant and will block up the ducts through which the flow of water passed, and the

plant does not receive nourishment.

Every plant of whatsoever kind needs four things (just as an animal needs four things), namely, a definite seed, a suitable position, and properly attuned water and air. When these four conditions are fulfilled, a plant will grow and increase; but if they do not harmonize, the plant will be correspondingly weakened. A plant which is used for medicinal purposes will be more serviceable and suitable for such purposes if it grows on high mountains, its fruit, however, will be harder to assimilate and will contain less nourishment. Places which are secluded from the sun's rays will not produce much plant life (just as they will not produce much animal life), because the sun makes the day long or short according to the duration of its presence or absence, and it is the sun which draws out the moisture; and so plants which grow in sunless places will not have the strength to produce leaves and fruit. As for plants which grow in watery places, when the water is still, a foulness is formed, and there will be no power in the air to rarefy the particles of water, and the air will be imprisoned inside the earth, and this will prevent the thick matter in the water from rising; then the wind will invade the spot and the earth will be cleft open, and the air which is enclosed will retreat into the earth, and the wind will solidify the moisture, and from this condition of moisture marsh plants will spring. Usually such plants do not differ from one another in form on account of the constant presence of water and its thick consistency and the heat of the sun overhead. The plants which grow in damp places will appear like patches of verdure on the surface of the earth. In such a place there is, in my opinion, little rarity, and when the sun falls upon it, it will stir up the moisture and the spot will grow warm through the resulting motion and the heat which is enclosed within the earth; and so there is nothing to cause the upward growth of the plant, while the moisture helps its expansion; and so it spreads over the earth in a sheet of verdure and produces no leaves. A kind of plant also grows which appears above the surface of the water and is smaller in quantity than that just mentioned, because it is like the nature of earth, and it neither grows upwards nor expands. Often, too, one plant grows out of another plant of a different form from itself, without any root, and spreads all over the plant. For when a plant which has numerous thorns and contains an oily juice moves, its parts will open and the sun will cause its putrefactions to turn into vapour, and the putrefied place of its own accord will produce a plant, and the wind and a moderate heat assist, and the parasite grows in the form of threads and extends over the original plant. Parasitism is a peculiarity of very thorny plants, dodder and the like.

[There is also a class of plant which has neither root nor leaves, and another which has a stalk, but no fruit or leaves, the tamarisk, for example.]

All herbs and all things that grow above or in the earth have their origin in one of five ways, namely, either from seed, or from putrefaction, or from the moisture of water, or from being planted, or from growing as parasites on other plants. These are the five causes of plants.

TREES have three different methods of production; they produce their fruit either before their leaves, or at the same time as their leaves, or else after their leaves have grown. A plant which produces its fruit before its leaves contains a considerable amount of oily juice, and when the heat which is natural to the plant has assimilated the juice, its maturity will quickly follow, and the juice will acquire force and boil up within the branches of the plant and will prevent the moisture from rising; the result is that the fruit appears before the leaves. But in plants which produce their leaves more quickly than their fruits, the effects of the moisture are various. When the heat of the sun begins to disperse the particles of water, the sun attracts the particles of this moisture upwards, and the process of ripening will be delayed, because the concoction of the fruit will only take place through coagulation, and so the leaves come before the fruit. A plant which produces its leaves and fruit simultaneously has much moisture, and frequently also contains an oily juice. When the heat has assimilated the moisture, it will, as a result, rise upward, carrying the juice with it, and the air and sun will draw it out, and the oily juice which forms the fruit will come out, while the moisture will produce the leaves, leaves and fruit coming forth together. The wise men of old used to assert that all leaves were really fruits, but so much moisture was present, because the fruit did not mature or solidify owing to the presence of heat above and the sudden attraction exerted by the sun, and consequently the moisture on which the process of assimilation had had no effect changed into leaves; the leaves, they said, are simply intended to attract the moisture and serve as a protection to the fruit from the violence of the sun. The leaves ought therefore, they said, to be equally regarded as fruit. But the truth is that the moisture rises above them and the leaves are converted into real fruits, as we have already said. The same theory applies to olives, which often fail to produce fruit; for when nature brings about concoction of moisture, some of the thin moisture, which has not matured, will rise first, and this will produce leaves

and its concoction will produce flowers, and when in the second year the process of concoction is completed, the fruit will grow and will eventually use up all the available material according to the space which it has in it.

Thorns are not characteristic of plants or natural to them. My opinion is that there is rarity present in a plant, and concoction will take place at the beginning of its existence, and moisture and cold rise upwards, and they are accompanied by a slight concoction; this circulates where there is rarity, and the sun causes it to solidify, and thus the thorns will be produced. Their form is pyramidal; for they begin by being thin at the point and gradually grow thicker, because when the air is withdrawn from the plant its parts increase, as the material of which it is composed expands. The same is true of any plant or tree which is pyramidal at the top.

Greenness must be the most common characteristic of plant life; for we see that trees are white internally and green externally. The reason is that the material which supplies their nutriment is more readily accessible: it follows therefore that there is greenness in all plants, because their material is absorbed and rarifies the wood of the tree, and the heat causes a slight concoction, and the moisture remains in the tree and appears externally: consequently there will be greenness. This is also the case with the leaves, unless the concoction in them is unusually powerful; and leaves are in respect of strength midway between bark and wood. But greenness does not persist, nor indeed come into existence without the presence of moisture, and is of the element of earth, and is the intermediate colour between that of earth and water. This can be illustrated by the fact that when the bark of trees dries up it turns black, and the wood inside the tree becomes white, and the green, which comes between these two colours, is the colour presented by the outward appearance of the plant.

The shapes of plants fall under three classes. Some spread upwards, others downwards, while others are intermediate in height between the two. The upward extension is due to the fact that the nutritive material makes its appearance in the marrow of the plant, and the heat draws it up, and the air, which is present in the rarities of the plant, compresses it, and it assumes a pyramidal form, just as fire assumes a pyramidal form in bodies in which it is present and rises upwards. Downward extension is due to the blocking of ducts

in the plant, and, when the nutritive material is assimilated, the water, which is in the marrow of the plant, will thicken, and the rarefied portion proceeds on its upward course, while the water returns to its former position in the lower portion of the plant, and by its weight presses the plant downwards. In the plants which are intermediate between the two classes already mentioned, the moisture is rarefied and the natural state of the plant is very nearly a temperate condition during the process of concoction, and the ducts are open through the middle of the plant, and the nutritive material spreads upwards and downwards. There is a double process of concoction; the first takes place below the plant, while the second takes place in the marrow which comes out of the earth and is in the middle of the plant; afterwards the nutritive materials make their appearance fully matured and are distributed through the plant, and do not undergo a third assimilation. In animals there is a third process of assimilation; this is due simply to the diversity of their limbs and to the distinctness of their parts from one another. Plants, on the other hand, are more homogeneous and repeat the same members over and over again, and the nutritive material generally has a downward tendency. The shapes of plants will depend on the character of the seed, while the flower and fruit is dependent on the water and nutritive material. In all animals the first process of maturation and concoction of the nutritive liquids takes place within the animal; there is no exception to this rule. But in plants the first concoction and maturation takes place in the nutritive material. Every tree continues to grow up, until its growth is completed and it dies. The reason is that, while in any animal its height is much the same as its width, in a plant it is far from being so, because water and fire, the elements which compose it, rise quickly, and therefore the plant grows. Variety in the branches of a plant is due to excessive rarity, and, when the moisture is intercepted there, the process of nature will cause it to grow hot and will hasten the concoction, and thus boughs will form and leaves will appear, as we have already said.

The shedding of leaves from trees will be due to the tendency to fall, induced by quickly formed rarity. When the moisture is assimilated with the nutritive material, it will assume a pyramidal form, and therefore the ducts within will be wide and will afterwards become narrow; when the nutritive material makes its appearance already assimilated and formed, it will close up the extremities of the ducts above, and the leaves will have no nutritive material, and therefore dry up. When the contrary process takes place, as we have said, the leaves do not fall

from the trees. When coldness dominates in the plant, it will affect its colour owing to the secretion of heat in the middle of the plant and the presence of cold outside in its extremities; the result is that the leaves are blue-grey and do not fall, as in the olive, and myrtle, and similar trees. When trees or plants exercise a violent force of attraction, fruit will be produced once a year; when they do not exercise such a force, nature will employ the process of concoction on successive occasions and at each concoction they produce fruit, and so some plants bear fruit several times in the year. Plants which are of the nature of water bear fruit with difficulty on account of the predominance of moisture in them, and the wideness of their ducts and the tendency of their roots to fall off; when the heat is intense, the assimilation will be quick and will be rarefied owing to the water and will not solidify; this we shall find to be the case in all small herbs and in some vegetables.

A grey colour will occur where the ground is exceedingly hot; here there will be little moisture and the ducts will become narrow, and when nature wishes to bring about assimilation it will not have sufficient moisture to supply the nutritive material and the ducts will become narrow. The process of assimilation therefore will be reversed and the heat will cause it to continue, and the plant will be seen to have a colour, intermediate between white and black. When this happens it will have black wood or anything approximating to white and ebony, that is, any of the whole range of colours from that of ebony to that of elm; and so such wood sinks in water because its parts are compact and the ducts in it are narrow, and no air enters into them. When white wood sinks the reason will be the narrowness of the ducts and the presence of superfluous moisture, which blocks up the ducts so that the air does not enter; consequently it sinks. Every flower is composed only of rarefied material when the assimilation first begins; and so the flower generally precedes the fruit in plants. We have already shown why it is that plants produce their leaves before their fruits. In the case of plants which have slender parts the colour of the flower will resemble a bright blue; when the parts are not closely compressed, it will tend to whiteness; under medium conditions it will be a blue-grey. The absence of flowers in certain plants is usually due to the variety of their parts and their rarity or their roughness or thickness. The palm and similar trees therefore have no flowers.

A plant which has thick bark expands owing to the pressure of moisture and the impelling force of heat; we see this in the pine and palm. A plant which gives forth a milky juice will have such juice within it; there will be powerful heat within and an oily substance will be present there. When the heat begins to cause

assimilation, the oily substance will be turned into moisture, and the heat will solidify it to a slight extent, and local warmth will be caused, and an oily liquid will be produced similar to milk, and vapour will rise from the moisture which attracts the milky substance into the extremities of the plant, and the moisture will retain the heat which appears. The milky substance will not be solidified, because it is the function of heat to solidify it. If the milky substance shows any considerable degree of solidification, it will be due to the presence of cold in the tree. The milky substance will solidify when it has left its original position in the tree, and the result will be the formation of gum. Gum comes out warm from the tree by distillation, and, when it comes into contact with the air, it will solidify. Some gums flow in temperate places, and these will be of the consistency of water; others flow out and solidify as hard as stone or shell. Gum which flows drop by drop keeps its form, as in the tree which is known as *aletafur*. The gum which changes into a stony substance will be very cold on its first appearance, and its appearance will be caused by heat, and when it flows it will turn to stone; it will occur where the soil is very hot. Some trees undergo a change in the winter and will become sometimes green and sometimes blue-grey, and neither their leaves nor their fruits decay; for trees in which this occurs have a great quantity of heat and rarefied water in their lower reservoirs. Thus as the year goes on this water will retain its heat on account of the coldness of the air; and because the heat goes out to the cold, it carries the moisture out with it, and the moisture tinctures it with the natural colour of heat, and therefore the colour is seen in the appearance of the tree. Consequently cold and heat are converted into activity, and the moisture retains heat, and therefore another colour makes its appearance.

Fruit will be bitter because the heat and moisture have not completed the process of assimilation (cold and dryness hindering the completion of this process), and so fruit turns bitter. This can be illustrated by the fact that what is bitter, when put into fire, becomes sweet. Trees which grow in sour water produce sweet fruit, because the sourness assisted by the heat of the sun attracts that which is of its own quality, namely, cold and dryness. Sweet liquids therefore make their appearance inside the tree, and the innermost part of the tree becomes hot when the sun shines continuously above it, and the flavour of the fruit will be successively sour, and then, when the process of assimilation has taken place, the sourness will be gradually dissolved until it disappears, and sweetness will



make its appearance. Consequently the fruit will be sweet, while the leaves and extremities of the tree will be acid. When the maturation is complete, the fruit will be bitter: this is due to a superfluity of heat with very little moisture. The moisture is used up and the fruit makes the heat rise, and so the fruit will be bitter, and the stones in the fruit will be pyramidal in form on account of the upward attraction of the heat and the downward attraction of the cold and moisture which are of the same nature as sour water; and the moisture remains in the trunk of the tree, which consequently thickens, while its extremities are thin. If trees are planted in temperate soil, they reach maturity quickly before the days of spring, because, when the heat is almost temperate and the moisture has made its appearance and the air is clear, the fruit will not require much heat during the process of assimilation. Consequently maturity comes quickly and takes place before the days of spring. Bitterness or harshness of flavour is prevalent in all trees when they are first planted. The reason is that when the moisture is in their extremities and has caused assimilation in the parts that are in the middle of the tree, from which the material of the fruit comes, the dryness comes forth and follows the moisture, and the first assimilation will be sour or bitter or harsh. The reason is that the assimilation takes place in the heat and moisture, and when moisture or dryness prevails over the heat, the fruit so produced will not at first have undergone complete assimilation, and consequently the production of fruit is at first without sweetness.

Bennut-trees at first when the fruit appears are sweet, and subsequently become harsh in flavour and finally bitter. The reason of this is that the tree has excessive rarity in it, and at the time of assimilation, when the ducts are wide, the heat will follow the moisture and will cause the fruit to mature; consequently the fruit will be sweet at first. Subsequently the heat attracts the dryness which resembles its own nature, and will cause the ducts to contract, and cold and dryness will prevail over heat and moisture; the fruit, therefore, will change to a harsh flavour. Next, the sun with its heat will prevail through the attraction of superfluous moisture in the seed, which is present at the first appearance of the tree, and the cold will prevail over the dryness; the fruit will therefore become exceedingly harsh in flavour. Next, the natural heat will rise upwards, and the heat of the sun outside will assist it; therefore the heat and dryness will prevail, and the fruit will become bitter.

Here ends the book on Plants.



*Translated by W. S. Hett*

*De mirabilibus auscultationibus* is a collection of thematically arranged anecdotes, traditionally attributed to Aristotle though most likely by a Pseudo-Aristotle writer. The anecdotes chiefly concern the natural world, examining themes such as plants, animals, minerals, weather and geography.

## **CONTENTS**

[INTRODUCTION](#)

[ON MARVELLOUS THINGS HEARD](#)

# INTRODUCTION

THIS curious collection of “marvels” reads like the jottings from a diary. All authorities are agreed that it is not the work of Aristotle, but it is included in this volume as it forms part of the “Corpus” which has come down to us; most Aristotelian scholars believe that it emanated from the Peripatetic School. Some of the notes are puerile, but some on the other hand are evidently the fruit of direct and accurate observation.

## ON MARVELLOUS THINGS HEARD

In Paeonia they say that in the mountain called Hesaenus, which divides Paeonia from Maedice, there is a wild beast called “bolinthus,” which the Paeonians call “monaepus.” They say that the beast is in general character like an ox, but that it is larger and stronger, and also more hairy; for it has a mane on its neck like a horse, stretching down very thickly, and spreading from its brow to its eyes. Its horns are not like those of oxen, but are turned downwards, and come to a sharp point by the ears; each of these holds more than three pints and is pitch black, but they shine as though they were peeled. But when the hide is skinned it covers the space of eight couches. But when the beast is hit it flees, and even if incapacitated continues to do so; its flesh is sweet. It protects itself by kicking and voiding excrement over a distance of forty feet; it easily and often employs this form of defence, which scorches so fiercely that it will scrape off a dog’s hair. They say that it has this effect when the animal is disturbed, but that it does not scorch when it is undisturbed. When they bring forth their young they meet in large numbers, and collecting in a herd all the biggest bring forth young and void excrement in a circle. For the beast voids a great deal of such excrement.

They say that camels in Arabia do not mate with their dams, and will not do so even if force is used. A story is told that once, when no stallion was available, the man in charge secretly introduced a colt. Apparently the colt completed the mating, but soon after bit the camel-driver to death.

They say that the cuckoos in Helice, when they are going to lay eggs, do not make a nest, but lay them in the nests of doves or pigeons, and do not sit, nor hatch, nor bring up their young; but when the young bird is born and has grown big, it casts out of the nest those with whom it has so far lived. It becomes apparently a fine strong bird, so it can easily master the others. They say that the ring-doves so delight in this, that they join in turning out their own young.

Goats in Crete when they are wounded with an arrow appear to hunt for dittany, which grows there. When they have eaten it, they immediately pull out the arrows.

They say that some deer in Achaea, when they shed their horns, go in to such places that they cannot easily be found. They do this because they have nothing to defend themselves with, and because the points from which they have cast off

their horns are painful. In the place of the horns ivy may often be seen to have grown on them.

In Armenia they say that a plant grows which is called leopard's bane. When a leopard has been seen, they anoint a victim with this, and set him free. When the leopard has touched this, he apparently seeks human excrement. So the hunters, putting this in a vessel, hang it from a tree, in order that he may get tired of jumping for it, and so may be captured.

In Egypt they say that sandpipers fly into the mouths of crocodiles, and pick their teeth, picking out the small pieces of flesh that adhere to them with their beaks; the crocodiles like this, and do them no harm.

They say that in Byzantium the hedgehogs can distinguish when the wind blows from the north and from the south, and promptly change their holes; when the south wind blows, they make the openings from the bottom, and when the north wind from the sides.

The goats in Cephallenia apparently do not drink like other quadrupeds, but every day turn their faces to the sea, open their mouths, and inhale the air.

They say that in Syria there is always one leader of a herd of wild asses. When one of the younger animals wishes to mate with a female, the leader is enraged and pursues the young one until he catches him, and then stooping between his hind legs tears out his organs.

They say that tortoises when they have eaten a snake eat marjoram on top, and that if they do not find any they die quickly. Many shepherds have experimented to see if this is true, and when they see a tortoise eating a snake pull up the marjoram; whenever they do this they see the tortoise die in a short space of time.

The organ of the marten is said to be unlike that of other animals, being as hard as a bone, in whatever condition it is. They say that it is an excellent cure for strangury and is administered in powdered form.

They say that the woodpecker climbs up trees like a lizard, upside down and on its belly. It is said to feed on insects from the trees, and to dig so deep into the trees in its search for worms, that it actually brings them down.

They say that pelicans dig up the mussels which live in rivers and swallow them; then when they have taken in a quantity they vomit, and so eat the flesh of the mussels without dealing with their shells.

They say that in Cyllene in Arcadia the blackbirds are white, but not in any other place, and that they have harmonious voices and come out into the moonshine; and that if one were to try by day, they are very hard to catch.

It is said that the honey called flower honey at Melos and Cnidos is sweet-scented, but only lasts for a short time, but that there is bee-bread in it.

In certain parts of Cappadocia they say that honey is made without wax, and that it is of the consistency of oil.

At Trapezus in Pontus honey from boxwood has a heavy scent; and they say that healthy men go mad, but that epileptics are cured by it immediately.

They say that in Lydia much honey is collected from trees, and that the inhabitants make small balls out of it without wax, that they cut pieces off by violent friction, and use them. The same thing is done in Thrace, but it is not so hard though rather gritty. They say that all the honey that sets retains the same bulk, not like water and other liquids.

Chalcidian grass and almond are most useful for making honey. For they say that the greatest quantity is produced from them.

They say that bees are stupefied by myrrh, and cannot bear its smell; some say that bees sting violently those smeared with myrrh.

Among the Illyrians they say that the people called Taulantii make wine out of honey. When they have squeezed out the wax, they pour in water and boil in a cauldron, until only half the liquid is left; then they pour it into earthenware vessels; they say that it ferments in these for a long time, and that it becomes vinous, sweet and strong. They say that this has occurred even among some people in Greece, so that it shows no difference from old wine; but that when they sought for the mixture later on they could not find it.

In Thessaly they record that snakes are born alive in such quantities that if they were not eaten by storks the people would leave. Consequently they honour storks, and it is unlawful to kill them; if anyone does so, he is liable to the same

penalties as a murderer.

In the same way at certain times in Sparta, it is said that there is such a crowd of snakes, that in times of famine the Spartans use them as food; hence they say that the Pythian oracle called them “serpent-necked.”

In Cyprus they say that mice eat iron.

And they say that the Chalybes, in one of the islands lying above them, collect gold from many of these creatures. For this reason apparently they cut up the mice which they catch in mines.

It is said that when one goes from Susa to Media in the second stage there is a large quantity of scorpions. Consequently the king of the Persians, whenever he went through the district, stayed there three days, ordering all his men to hunt; and he gave a prize to the man who caught most.

In Cyrene they say that there is not one kind of mouse but many, differing in shape and colour; for some have flat heads like polecats, and others are shaped like hedgehogs, which they call “echines.”

In Cilicia they say that there is a whirlpool; when birds and other creatures which have been drowned are put into it, they come to life again.

Among the Scythians called Geloni they say that there is a beast, excessively rare, which is called “tarandos”; they say that it changes the colour of its hair according to the place it is in. For this reason it is difficult to catch; for it becomes the same colour as the trees and the ground, and generally of the place in which it is. But the changing of the colour of the hair is most remarkable; other creatures change their skin like the chameleon and polypus.

But this animal is of the size of an ox. But its head is of the same kind as a deer.

It is said that at Abydus a man who was mad went into the theatre and watched for many days, as if there were people acting, and showed his approval; and when he recovered from his madness, he said that he had enjoyed the best time of his life.

In Tarentum they say that a seller of wine went mad at night, but sold wine by day. For he kept the key of his room at his girdle, and, though many tried to get it from him and take it, he never lost it.

In the island of Tenos they say there is a cup containing a mixture, from which they very easily kindle a fire. And among the Bithynians in Thrace there is in the mines a stone called “spinos,” from which they say that fire is kindled.

In the island of Lipara they say that there is a place with a down draught, in which if they hide a pipkin, anything they put into it boils.

In Media and in the district of Psittacus in Persia there are fires burning, a small one in Media, but a large one in Psittacus with a clear flame. For this reason the Persian king built his kitchen near it. Both are on level ground and not in high places. These can be seen both by night and by day, but those in Pamphylia only by night.

Also they say that in Atitania, near the boundaries of Apolloniatis, there is a rock, from which the fire which rises cannot be seen, but when oil is poured over it, it blazes.

It is said also that the district outside the Pillars of Heracles burns, part of it all the time, and part only at night, as is narrated in Hanno’s *Voyages*. The fire in Lipara can be seen flaming, not by day, but only by night. In Pitheculae they say it is fiery and hot, but not burning.

Xenophanes says that the one in Lipara faded for sixteen years, but reappeared in the seventeenth.

They say that the flow of lava in Etna is neither flaming nor continuous, but that it appears after an interval of many years.

In Lydia it is said that the fire is very strong, and burns for seven days on end.

A remarkable story is told about the lava flow in Sicily; for the width of the boiling flame is forty stades, and the height to which it travels is three.

They say the stone in Thrace called “spinos” burns when split in half, and joins together again, like charcoal embers, and that this, when joined together and sprinkled with water, burns; and that the “marieus” does the same thing. — r



Near Philippi in Macedonia they say that there are mines, the dross from which when cast out grows and produces gold, and that this can be seen.

They also say that in Cyprus in the district called Tyrrias bronze behaves in a similar way. For apparently they cut it into small pieces and sow it; then when the rain comes it grows, and puts out shoots and so is collected.

They say also that in the island of Melos places that are excavated automatically fill up again.

In Paeonia they say that when showers of rain fall continuously, as the soil melts away, gold is found called unfired gold. They say that in Paeonia the ground is so full of gold that many have found more than a mina's weight. They say that one man found two lumps and took them to the king, one weighing three minae and one five; these were laid by him on the table, and, if he ate anything, he first poured a libation on these.

They also say that among the Bactrians the river Oxus brings down lumps of gold in huge quantities, and that in Iberia the river called Theodorus silts up quantities of gold at its mouth, and similarly washes it down.

They say that in Pieria in Macedonia uncoined gold was dug into the earth by the ancient kings in four holes, and that from one of them gold a span high grew up.

It is said that the origin of Chalybian and Amisenian iron is most extraordinary. For it grows, so they say, from the sand which is borne down by the rivers. Some say that they simply wash this and heat it in a furnace; others say that they repeatedly wash the residue which is left after the first washing and heat it, and that they put into it a stone which is called fire-proof; and there is much of this in the district. This iron is much superior to all other kinds. If it were not burned in a furnace, it would not apparently be very different from silver. They say that it alone is not liable to rust, but that there is not much of it.

They say that among the Indians copper is so bright, clean, and rustless that it is indistinguishable in appearance from gold, but that among the cups of Darius there are a considerable number which could not be determined as copper or gold except by the smell.

They say that Celtic tin melts much more easily than lead. A proof of its solubility may be seen from the fact that it seems to melt even in water; for

instance, apparently it stains very quickly. It melts even in the cold, when there is frost, owing, so they say, to the heat stored up and compressed with it because of its weakness.

There is a wild olive at Pantheion called the “beautiful crown” olive. All its leaves have characteristics contrary to those of other olives; for they have the grey colour on the upper and not the under side. They put out branches like the myrtle suitable for crowns. Taking a cutting from this Heracles planted it at Olympia, and from it crowns are given to the victorious athletes. This is by the river Ilissus, about 60 stades away from the river; it has a wall round it and there is a heavy penalty for anyone who touches it. Taking a cutting from this the Eleians planted it at Olympia, and gave crowns from it.

In the mines in Lydia about Pergamum, which Croesus worked, when war broke out, the workers fled to them, and when the mouth was closed up were suffocated; much later on when the mines were cleared out the vessels which they used for their handiwork were found petrified, such as amphorae and similar vessels. These being filled with some liquid were petrified, and so were the bones of the men.

In the lake Ascania the water is so full of soda that clothes need no further cleansing, and if one lets them stay long in the water they crumble to pieces.

Near the lake Ascania there is a village called Pythopolis, about a hundred and twenty stades from Cios, in which all the wells go dry in the winter, so that it is impossible to dip a vessel into them, but in the summer they are full to the brim.

The strait between Sicily and Italy grows bigger and smaller according to the moon.

Also on the road to Syracuse there is a spring in a meadow neither large nor with much water; but when a large crowd met at the place it supplied ample water.

There is a spring among the Palici in Sicily, covering the space of ten couches; this throws up water to the height of six cubits, so that the whole place is thought by observers to be inundated; and it falls back again to the same spot. There is an oath which is regarded as very sacred there; for a man writes down the oath he takes on a small tablet and casts it into the water. If he swears truly, the tablet floats. If he swears falsely, the tablet is said to grow heavy and disappear, and the man is burned. So the priest takes security from him that someone shall

purify the temple.

Demonesus, the Chalcedonian island, took its name from Demonesus who first worked there: the place has a mine of cyanus and malachite. The best of this fetches a price comparable with gold; for it is a drug used for the eyes. There is also copper to be dived for in two fathoms of sea; from this is made the statue in Sicyon in the ancient temple of Apollo, and also those in Pheneus called yellow-copper. On them is inscribed "Heracles, son of Amphitryon, dedicated these on capturing Elis." He captured Elis under the guidance of a woman, in accordance with the oracle, whose father Augeas he had killed. Those who dig for copper become very keen-sighted, and those who have no eyelashes grow them; hence doctors also use the flower of copper and Phrygian ash for the eyes.

There is a cave called the "hollow cave"; in it are pillars made of stalagmites; these can be seen joined to the floor, for it is very narrow there.

From a pair of eagles one of the young is alternately a sea-eagle, as long as they are mated. From sea-eagles are born the osprey and from these hawks and vultures; these do not stop as vultures, but produce large vultures; these have no young. This is proved by the fact that no one has ever seen a nest of large vultures.

Among the Indians an extraordinary occurrence is told of the lead there; for when it is melted and poured into cold water it leaps out of the water.

They say that Mossynecian copper is very shiny and white, not because there is tin mixed with it, but because some earth is combined and molten with it. But they say that the man who discovered the mixture never taught anyone: so the copper vessels which were made in earlier days have this distinction, but subsequent ones have not.

They say in Pontus that some birds are found retiring into holes in winter and do not void, nor do they feel it when their wings are plucked, nor when they are put on to a small spit, but they do when they are roasted by the fire. They also say that many fish cannot feel when they are cut up and sliced, but they can feel when they are heated by the fire.

The bee appears to herald the winter solstice by walking to his work, a sign of which bee-keepers make use; for it is their quiet time. The cicada seems to sing after the solstice.

They say that the hedgehog can go without food for a year.

The spotted lizard, when it has sloughed its skin like a snake, is said to turn round and devour it; for it is watched for by physicians because of its value for epileptics.

They say that the fat of the she-bear, when it becomes set in winter, during the time that the bear lives in a cave, grows, and overflows the vessels in which it is placed.

In Cyrene they say that frogs are entirely voiceless; and in Macedonia, in the country of the Emathiotae, that pigs are solid-hooved.

In Cappadocia they say that mules breed and in Crete that poplars bear fruit.

They say that in Seriphus frogs do not croak, but if they are removed to another place they do.

Among the Indians in the part called Keras, they say that there are small fish which wander about on dry land, and then run back again to the river.

Some say that in Babylonia certain fishes remain in holes which retain moisture when the river dries up; these come out on to the threshing-floor to feed, and walk on their fins and wave their tails; when they are pursued they flee, and diving down stand to face the pursuer. For men will often approach, and even torment them. They have a head like a sea-frog, but the rest of their body is like a gudgeon, but they have gills like other fish.

In Heraclea in Pontus and in Rhegium they say that some fish are caught by digging, and that these are mostly found in riverside and watery places. Where these places dry up they can be caught in certain places on land, and then when the ground dries still more they penetrate into the mud in search of moisture; then when that grows dry they remain in the moisture, like those that survive in holes. But when they are dug up before the water comes they move.

And they say that in Paphlagonia those fishes which are dug up are bred deep down, and that they are good in quality; although no water is to be seen near by, nor any river flowing in, but the earth itself propagates the creatures.

They say that the deer in Epirus dig down and bury the right horn, when they

shed it, and that this is valuable for many purposes.

They say that the lynx conceals his urine because it is used for many purposes, especially for making signets.

They say that the seal vomits beestings when caught; this has curative properties, and is good for epileptics.

It is said that in Italy near the mountain Circe a fatal drug grows, which has this property, that when it is sprinkled on anyone, it makes him fall immediately and causes his hair to fall out; all the limbs of his body grow weak, so that the appearance of the body of those who are dying is pitiful. They say that Aulus the Peucestrian and Gaius who were going to give it to Cleonymus the Spartan were detected, and after cross-examination were put to death by the Tarentines.

They say that in the island of Diomedea in the Adriatic there is a remarkable and hallowed shrine of Diomedes, and that birds of vast size sit round this shrine in a circle, having large hard beaks. They say moreover that if ever Greeks disembark on the spot they keep quiet, but if any of the barbarians that live round about land there, they rise and wheeling round attack their heads, and wounding them with their bills kill them. The legend is that these birds are descended from the companions of Diomedes, who were wrecked near the island, when Diomedes was treacherously murdered by Aeneas, the king of those parts at the time.

Among the Umbrians they say that the cattle bear three times in the year, and the earth bears many times as many fruits as that which is sown; also that the women have many children and seldom bear one (at a time), but most of them two or three.

In the Electrides Islands, which lie in the gulf of the Adriatic, they say that two statues have been dedicated, one of tin and one of copper, wrought in the old-fashioned style. It is said that these are the works of Daedalus, a reminder of the old days, when escaping from Minos he came to this district from Sicily and Crete. They say that the river Eridanus silted up these islands. There is a lake apparently near the river, containing hot water. A heavy and unpleasant smell comes from it, and no animal ever drinks from it nor does bird fly over it without falling and dying. It has a circumference of two hundred furlongs, and a breadth of ten. The local inhabitants say that Phaethon fell into this lake when he was

struck by a thunderbolt. There are many poplars in it, from which oozes the so-called electron. They say that this is like gum, and hardens like a stone; it is collected by the inhabitants and brought to the Greeks. They say that Daedalus came to these islands, and putting in there set up in one of them his own image, and in the other that of his son Icarus. Later on, when the Pelasgians, who were expelled from Argos, sailed there, Daedalus fled, and sailed to the island of Icarus.

In Sicily in the district called Enna there is said to be a cave, around which is an abundance of flowers at every season of the year, and particularly that a vast space is filled with violets, which fill the neighbourhood with sweet scent, so that hunters cannot chase hares, because the dogs are overcome by the scent. Through this cave there is an invisible underground passage, by means of which Pluto is said to have made the rape of Core. They say that wheat is found in this place unlike the local grain, which they use, and unlike any that is imported, but having great peculiarities. They say that this was the first place in which wheat appeared among them. They also claim Demeter, saying that the goddess was born among them.

They say that there are no wolves, bears or snakes in Crete, and, generally speaking, no beasts of the kind, because Zeus was born there.

In the sea outside the Pillars of Heracles they say that a desert island was found by the Carthaginians, having woods of all kinds and navigable rivers, remarkable for all other kinds of fruits, and a few days' voyage away; as the Carthaginians frequented it often owing to its prosperity, and some even lived there, the chief of the Carthaginians announced that they would punish with death any who proposed to sail there, and that they massacred all the inhabitants, that they might not tell the story, and that a crowd might not resort to the island, and get possession of it, and take away the prosperity of the Carthaginians.

They say that there is a road called "the Heraclean" from Italy as far as the Celts, Celtoligyes, and Iberians, through which, if a Greek or native travels, he is guarded by the inhabitants, that no harm may befall him; and that they exact punishment from those through whom such harm comes.

They say that among the Celts there is a drug called by them the "arrow drug"; this produces so swift a death that the Celtic hunters, when they have shot at a deer or other beast, run hastily, and cut out the wounded part of the flesh before

the poison sinks in, both for the sake of its use, and to prevent the animal from rotting. They say that the bark of the oak-tree has been discovered to be an antidote to this; others, however, speak of another leaf which they call "raven," because a raven has been seen by them, after tasting the drug and becoming ill, to run to this leaf, and after swallowing it to cease from his pain.

In Iberia they say that when the undergrowth has been burned by shepherds, and the earth heated by the wood, that the ground can be seen to flow with silver, and that after a time when earthquakes have occurred and the ground split, that much silver has been collected, which supplied the Massaliots with considerable revenue.

In the islands of Gymnesiae, which lie off Iberia, which they say are the greatest after the so-called "seven," oil is said to have come not from olives, but from the terebinth, which corresponds in every respect to olive-oil. They also say that the Iberians who live there are so much given to women, that they will give the merchants four or five male persons in exchange for one female. On service with the Carthaginians, when they receive their pay, they apparently buy nothing but women. None of them is allowed to possess any gold or silver article. It is added that this is done with a view to preventing them from bringing in gold, because Heracles made an expedition against Iberia because of the wealth of the inhabitants.

In the country of the Massaliots about Liguria they say there is a lake, and that this boils up and overflows, and throws up an incredible quantity of fish. But when the etesian winds blow they heap the ground up over it, and so much dust arises there, that the surface of the lake vanishes and becomes like solid ground. Then the inhabitants easily raise fish out of the lake by spearing them with a threepronged fork.

Some of the Ligurians are said to use the sling so well that, when they see a number of birds, they discuss with each other which each of them shall prepare to hit, on the assumption that they will easily get them all.

They tell also of another peculiarity among them: the women bear children while at work; after washing the infant in water, they immediately dig, and hoe, and do all the household jobs which they have to do when not bearing children.

This is another marvel among the Ligurians: they say that there is a river among

them whose stream is raised so high that it is impossible to see people on the further bank.

In Tyrrhenia there is said to be an island called Aethaleia, in which in olden days copper was dug from a mine, from which all their copper vessels come; after that it was found no longer, but, after the lapse of considerable time, iron appeared from the same mine, which the Tyrrhenians who live in the district called Poplonium still use.

In Tyrrhenia also there is a city called Oenaria, which they say is remarkably strong: for in the middle of it is a wide hill, stretching up to a height of thirty stades, and below wood of all kinds, and water. They say that the inhabitants, fearing lest there should be a tyrant, set over themselves those of the household slaves who were freed, and these rule over them, and every year they set up others of the same kind.

In Cyme in Italy an underground chamber is shown apparently of the Sibyl, the reciter of the oracles, who they say was long-lived and remained a maiden, a native of Erythrae, but by some of those who live in Italy is said to come from Cyme, and by others called Melanraera. This place is said to be controlled by Leucanians. And they say that in those places about Cyme there is a river called Cetus, into which what is cast for a long time first grows a layer on top, and then becomes petrified.

They say that a cloak was made for Alcimenes, the Sybarite, so expensive that it was produced at Lacinium at the festival of Hera, to which all Italiots come, and was admired more than anything else displayed there; they say that Dionysius the Elder acquired it, and sold it to the Carthaginians for a hundred and twenty talents. It was purple, fifteen cubits in size, and on each side it was ornamented with embroidered figures, of Susa above, and of the Persians below; in the centre were Zeus, Hera, Themis, Athene, Apollo and Aphrodite. At one extremity was Alcimenes, and on either side Sybaris.

Near the promontory of Iapygia is a spot, in which it is alleged, so runs the legend, that the battle between Heracles and the giants took place; from here flows such a stream of ichor that the sea cannot be navigated at the spot owing to the heaviness of the scent. They say that in many parts of Italy there are many memorials of Heracles on the roads over which he travelled. But about Pandosia in Iapygia footprints of the god are shown, upon which no one may walk.



Also near the promontory of Iapygia is a stone large enough to load a wagon, which they say was lifted up and moved by him, and that too with one finger.

In the city of Orchomenus in Boeotia they say that a fox was seen, which, when pursued by a dog, dived into an underground passage, and that the dog dived in after it, and made a loud noise of barking, as if it had found a wide open space; the huntsmen, assuming some supernatural agency, broke down the entrance, and forced their way in as well; but seeing by some openings that light was coming in they had a complete view of the whole, and went and reported it to the magistrates.

In the island of Sardinia they say that there are many fine buildings arranged in the ancient Greek style, and among others domed buildings, carved with many shapes; these are said to have been built by Iolaus the son of Iphicles, when he took the Thespians, descended from Heracles, and sailed to those parts to colonize them, on the grounds that they belonged to him by his kinship with Heracles, because Heracles was master of all the country towards the west. Apparently the island was originally called Ichnussa, because its circumference made a shape like a man's footstep (Greek *ichnos*), and it is said before this time to have been prosperous and fruitful; for the legend was that Aristaeus, who, they say, was the most efficient husbandman in ancient times, ruled them, in a district previously full of many great birds. Now the island no longer bears anything, because the Carthaginians who got possession of it cut down all the fruits useful for food, and prescribed the penalty of death to the inhabitants, if any of them replanted them.

In one of the seven islands called those of Aeolus, which is known as Lipara, runs a legend that there is a tomb, concerning which they tell many marvels; among other things they agree that it is not safe to approach the place by night, for the sound of drums and cymbals can be heard, and distinct laughter, with noise and the clapping of castanets. There is a still more remarkable story about the cave; for someone once slept here drunk before dawn, and was sought for by his servants for three days, and on the fourth was found, and taken away for dead by the servants and put into his own tomb; after receiving all the usual rites he suddenly arose and told all that had happened to him. This strikes us as more like legend; but at the same time one must not pass over it without record, when making a catalogue of events on the spot.

Near Cyme in Italy there is a lake called Aornos; in itself it has no remarkable

properties; but they say that hills lie round it in a circle not less than three stades high, and that the lake itself is circular in shape, having an incredible depth. But this seems remarkable; for though thick trees grow over it, and some even bend down to it, one can never see a leaf lying on the water, but the water is so clear that those who look into it are amazed. But on the land not far away from it hot water flows in many places, and the whole region is called Pyriphlegethon. It is not true that no bird flies over it; for those who have been there assert that there are a quantity of swans on it.

They say that the islands of Seirenusae lie near Italy off the promontory itself near the strait, which lies in front of the place, and separates the strait which surrounds Cyme, and that which cuts off the promontory called Poseidonia; on which stands a temple of the Sirens, and they are honoured very highly by the inhabitants with sacrifices punctually. In remembrance of their names they call one Parthenope, one Leuconia, and a third Ligeia.

There is said to be a mountain between Mentorice and Istriane called Delphium, having a high peak. When the Mentores who live near the Adriatic climb this peak they can apparently see ships sailing in the Pontus. There is a spot in the gap in the middle in which, when a common market is held, Lesbian, Chian and Thasian goods are bought from the merchants who come up from Pontus, and Corcyrean amphorae from those who come from the Adriatic.

They say that the Ister flowing from the forests called Hercynian divides, and one part flows into the Pontus, and the other into the Adriatic. We can see proof not only at the present time, but still more in ancient days that the river at these points is not navigable; for they say that Jason made his entry to the Pontus by the Cyanean rocks, but his exit by the Ister; and they produce a considerable number of other proofs, and in particular they show altars in the district dedicated by Jason, and in one of the islands of the Adriatic a temple of Artemis built by Medea. They also say that he could not have sailed past the so-called Planktae, unless he had journeyed from there. Also in the island of Aethaleia, which lies in the Tyrrhenian Sea, they show other memorials of the heroes, and one which is called the "Pebble" memorial; for by the seashore they say that there are painted pebbles, and the Greeks who inhabit the island say that these derive their colour from the dirt removed by the scrapers when they oiled themselves; they say that these pebbles were to be seen from that date and not before, nor were they found afterwards. But they quote even more convincing evidence than this, that the voyage out did not take place through the

Symplegades, using the poet himself in that place as a witness. For in explaining the seriousness of the danger he says that it is impossible to sail past the place.

The waves of the sea carry the timber of ships and the bodies of men all together, and so do the storms of destructive fire.

Now it is not said that fire issues from about the Cyaneae, but about the strait which divides Sicily (from Italy), where there are eruptions of fire on both sides of the strait, and the island burns continuously and the lava about Etna frequently flows over the district.

At Tarentum it is said that at certain times sacrifices are offered to the spirits of the Atreidae, Tydidae, Aeacidae and Laertiadae, but that they offer sacrifice to the Agamemnonidae separately on another special day, upon which it is the custom for the women not to taste the victims sacrificed to them. They also possess Achilles' temple. It is also said that after the Tarentines took the place in which they now live it was called Heracleia, but in earlier time when the Ionians held it, Pleion; even before this date it was called Sigeum by the Trojans, who possessed it.

It is said that Philoctetes is honoured among the Sybarites. For when he was brought back from Troy, he lived in a place called Macalla in the region of Croton, which they say is a hundred and twenty stades away, and they relate that he dedicated Heracles' bow and arrows at the temple of Apollo the sea god. There they say that the Crotoniates during their supremacy dedicated them at the Apollonium in their own district. It is also said that, when he died, he was buried there by the river Sybaris, after helping the Rhodians who landed at the spot with Tlepolemus, and joined battle with the barbarians, who dwelt in that part of the country.

In Italy in the district called Gargaria, near Metapontum, they say that there is a temple of the Hellenian Athene, where the tools of Epeius are dedicated, which he made for the wooden horse, giving the goddess this name. For they say that Athene appeared to him in a dream, and demanded that he should dedicate the tools to her, and that, having delayed his setting out on this account, he was shut up in the place and unable to set out; whence the temple of Hellenian Athene derived its name.

In the region called Daunia there is said to be a temple of Athene called

Achaean, in which are dedicated the bronze axes and the arms of Diomedes' companion and his own. In this place they say there are dogs which do no harm to any Greeks who come there, but fawn on them as though they were their dearest friends. But all the Daunians and their neighbours dress in black, both men and women, apparently for the following reason. The Trojan women who were taken prisoners and came to that district, in their anxiety to avoid bitter slavery at the hands of the women who belonged to the Greeks before in their own country, burned their ships according to the story, that they might at the same time escape the slavery which they expected, and that, joined with them as husbands, as they were compelled to remain, they might keep them. A very fine account of them is given by the poet; for one can see that they were "long-robed" and "deep-bosomed."

Among the Peucetini they say that there is a temple of Artemis, in which is dedicated what is called the bronze necklet, bearing the legend "Diomedes to Artemis." The story goes that he hung it about the neck of a deer, and that it grew there, and in this way being found later by Agathocles, king of the Siceliot, they say that it was dedicated at the temple of Zeus.

On the promontory in Sicily called Pelorias there is said to be a crocus which grows so large that among some of the inhabitants of the district the Greeks do not know what kind of flower it is, but at Pelorias any who wish bring large wagons, and in the season of spring make beds and platforms out of the crocus.

Polycritus, who wrote the Sicilian history, says in his story that in a certain part of the interior there is a little lake having a circumference of a shield, and this has water which is transparent, but the surface is somewhat ruffled. If anyone goes into it needing to wash, it increases in width, and if a second man goes in, it grows still broader. But the limit of its expansion is reached when it has received fifty men. But when it has received this number, it swells up from the bottom and casts up the bodies of the bathers high and dry on the land; when this has occurred it reverts again to its original size in circumference. This does not occur merely in the case of men, but if a quadruped goes into it the same thing happens.

In the empire of the Carthaginians they say that there is a mountain called Uranium, full of every kind of timber, and made beautiful by many-coloured flowers, so that a succession of places sharing the sweet scent over a large district gives a most delightful air to travellers. At this place they say that there is

a spring of oil, which has a scent like the cuttings of cedar. But he who approaches it must be pure, and when this is the case the oil bubbles up more than before, so that it can be safely drawn off.

They say that near this spring there is a natural rock, of vast size. When it is summer it sends up a flame of fire, but in winter a spring of water flows from the same source, so cold that, when compared with snow, its temperature is the same. They say that this is in no way concealed, nor happens for a short time, but that the fire rises all the summer time, and water all the winter.

The story goes that in the district of Thrace called the Sintian and Maedian there is a river called Pontus, which rolls down stones which burn and behave in the opposite way to embers made from wood; for when the flame is fanned these stones are quickly quenched, but when soaked in water they light up and kindle finely. When they burn they have a smell like pitch, just as unpleasant and acrid, so that no reptile can stay in the place while they are burning.

They also say that there is a district there, not very large, but somewhere about twenty stades, which bears the barley which men use, but horses and cattle will not eat it, nor will any other animal; nor will any pigs nor dogs venture to touch the excrement of men who void after eating meal or bread made from this barley, because death follows.

In Scotussae in Thessaly they say that there is a little spring, from which a kind of water flows, which quickly heals wounds and bruises both of men and beasts, but if one puts a log of wood into it without completely crushing it, but only breaking it in half, it grows again and returns to its original state.

In Thrace above Amphipolis they say that there is a remarkable occurrence, which is incredible to those who have not seen it. For boys, coming out of the villages and places round to hunt small birds, take hawks with them, and behave as follows: when they have come to a suitable spot, they call the hawks addressing them by name; when they hear the boys' voices, they swoop down on the birds. The birds fly in terror into the bushes, where the boys catch them by knocking them down with sticks. But there is one most remarkable feature in this; when the hawks themselves catch any of the birds, they throw them down to the hunters, and the boys after giving a portion of all that is caught to the hawks go home.

They relate a remarkable occurrence among the Heneti; for countless thousands of jackdaws come to their country and consume their grain, when they have sown it; before they are about to fly over there the Heneti put out gifts for the birds on their boundaries, putting down seeds of all kinds of fruits; if the jackdaws taste these, they do not pass over the border into their country, and the Heneti know that they will be in peace; but if they do not taste them, they expect as it were an invasion of the enemy.

In Thracian Chalcidice near Olynthus they say that there is a place called Cantharolethros, a little larger in size than a threshing-floor; when any other animal comes to it, it immediately retires, but none of the cantharus beetles do so, but wheeling round and round the place die of hunger.

Among the Cyclopes in Thrace there is a small spring with water which is clear and transparent to look at, and just like other water, but, when any animal drinks of it, it immediately dies.

They say that in Crastonia near the country of the Bisaltae hares which are caught have two livers, and that there is a place there about an acre in extent, into which if any animal enters it dies. There is also there a fine large temple of Dionysus, in which when a sacrifice and feast takes place, should the god intend to give a good season, it is said that a huge flame of fire appears and that all who go to the sacred enclosure see this, but when the season is going to be very bad, this light does not appear, but darkness covers the place, just as on other nights.

In Elis they say there is a building about eight stades from the city into which at the Dionysia they place three empty bronze cauldrons. When they have done this they call upon any of the visiting Greeks who wishes to examine the vessels, and seal up the doors of the house. When they are going to open it, they show the seals to citizens and strangers, and then open it. Those that go in find the cauldrons full of wine, but the ceiling and walls intact, so that there is no suspicion that they effect it by any artifice. They also say that there are kites among them which seize pieces of meat from those who are carrying them through the market-place, but they do not touch those which are offerings to the gods.

In Coroneia in Boeotia it is said that the moles cannot live, nor dig in the earth, though the rest of Boeotia has many of them.

At Lusi in Arcadia they say there is a spring in which there are land mice; they dive and live in it. The same thing is said to occur at Lampsacus.

At Crannon in Thessaly they say that there are only two ravens in the city. After they have nested apparently they migrate, and leave behind just the same number of the young birds they hatch.

At Apollonia, which lies near to the country of the Atlantini, they say that bitumen and pitch is buried, and springs up out of the earth in the same way as water, in no way different from that in Macedonia, except that it is blacker and thicker. Not far from this spot is a fire which burns perpetually, as those who live in the district testify. The burning place is apparently not large, about enough to give room for five couches. It smells of sulphur and vitriol, and round it grows thick grass, which is a most surprising fact, and there are huge trees not more than four cubits away from the fire. There is also continuous burning in Lycia and near Megalopolis in the Peloponnese.

Cattle in Illyria are said to breed twice during the year, and most commonly of all to have twins, and that goats often bear three or four, and some five or even more; they readily yield a gallon of milk. They also say that hens do not lay once a day, as they do elsewhere, but two or three times.

It is also said in Paeonia that the wild bulls are bigger than in any of the other races, and that their horns will hold two gallons, and some of them even more.

About the Sicilian strait many others have written, and this author says that a marvellous thing happens. For the waves from the Tyrrhenian Sea are borne with much surge to both the promontories, the one on the Sicilian side and the other on the Italian side called Rhegium, and being carried from the great sea into a narrow one are compressed. When this happens the wave is carried high in the air with a loud noise over a wide space upwards, so that, when hurled high in the air, it can be seen by those who are a long way off, not like the high travel of the sea but white and foamy, and like the tracks which are made by violent storms. Sometimes the waves crash against each other on both promontories and come together with a crash impossible to describe, and unbearable to look at; and sometimes, when they have parted after dashing against each other, so deep and terrifying is the appearance to those who are forced to see it that many cannot control themselves, but grow dizzy and fall down from fear. But when the wave falling on either of the spots, and flung as high as the promontories, dashes back

again into the sea flowing below, with a vast roar and with huge swift eddies the sea boils up and is hurled high, seething from the depths and changing to every kind of colour; sometimes it appears black and sometimes blue, and then again purple. No beast can bear either to hear or to see the race and length of it, and in addition to this the upward flow, but all flee to the foot of the mountain. When the wave ceases, the eddies are carried up into the air and make such varied whirlings that the movements look like the coils of sea-serpents, or some other huge snakes.

They say that while the Athenians were building the temple of Demeter at Eleusis, a brazen pillar was found surrounded by stones, upon which was inscribed "This is the tomb of Deiope," whom some say was the wife of Musaeus, and others the mother of Triptolemus.

In one of the islands called Aeolian they say that there are a number of date-palms, whence it is called "Phoenicodes." The statement of Callisthenes cannot be true, that the plant took its name from the Phoenicians of Syria, who inhabit the sea coast. But some say that the Phoenicians were so-called by the Greeks because they were the first to sail the sea, and killed and murdered everyone at the point at which they disembarked: for in the language of the Perrhachi to shed blood is "phoenixai."

In the country called Aeniac, in that part called Hypate, an ancient pillar is said to have been found; as it bore an inscription in archaic characters of which the Aenianes wished to know the origin, they sent messengers to Athens to take it there. But as they were travelling through Boeotia, and discussing their journey from home with some strangers, it is said that they were escorted into the so-called Ismenium in Thebes. For they were told that the inscription was most likely to be deciphered there, as they possessed certain offerings having ancient letters similar in form. There having discovered what they were seeking from the known letters they transcribed the following lines:

Heracles dedicated a sacred grove to Cythera Persephassa, when I was driving the flocks of Geryon and Erythea.

The goddess Persephassa subdued me with desire for her.



Here my newly wed Erythe brought forth a son Erython; then I gave her the plain in memory of our love under a shady beech-tree.

The place called Erythus answered to this inscription and also the fact that he brought the cows from there, and not from Erytheia; for they say that the name Erytheia does not occur in the districts of Libya and Iberia.

In that part of Libya called Ityce, which lies, as they say, in the gulf between the promontories of Hermaeum and Hippius opposite Carthage at a distance of about 200 stades (which was said to have been founded by Phoenicians two hundred and eighty-seven years before Carthage itself, as is recorded in the Phoenician histories) they say there is salt buried at a depth of three fathoms, white in appearance but not hard, but like very sticky gum; when it is brought out into the sun, it hardens and becomes like Parian marble. They say that small figures and other objects are carved out of it.

It is said that the first Phoenicians who sailed to Tartessus took away so much silver as cargo, carrying there olive-oil and other petty wares, that no one could keep or receive the silver, but that on sailing away from the district they had to make all their other vessels of silver, and even all their anchors.

They say that Phoenicians who live in what is called Gades, on sailing outside the Pillars of Heracles with an east wind for four days, came to some desert lands, full of rushes and seaweed, which were not submerged when the tide ebbed, but were covered when the tide was full, upon which were found a quantity of tunny-fish, of incredible size and weight when brought to shore; pickling these and putting them into jars they brought them to Carthage. These alone the Carthaginians do not export, but owing to their value as food they consume them themselves.

In Pedasia in Caria sacrifices are offered to Zeus, in which they take a she-goat in procession, concerning which a marvel is related. For, when walking seventy stades from the Pedasi through a large crowd of watchers, it is not disturbed on its journey, nor does it turn out of the road, but tied with a rope it walks in front of the man who is conducting the sacrifice. There is also a wonderful thing, in that there are two ravens always about the temple of Zeus, and that no other

approaches the spot, and that one of them has a white patch in the front of its neck.

Among the Illyrians who are called Ardiaeans along the boundary between them and the Autariatae, they say there is a high mountain, and near to it a glen from which the water rises, not at all seasons but in the spring, in considerable quantity, which they take and keep under cover by day, but put in the open at night. After they have done this for five or six days, the water hardens and becomes very fine salt, which they keep especially for the cattle; for salt is not imported to them because they live far from the sea and do not associate with others. Consequently they need it very much for the cattle; for they give them salt twice a year. If they fail to do this, most of the cattle are found to die.

They say that there is a class of locust in Argos which is called the “scorpion-fighter.” For the moment it sees a scorpion, it attacks it, and the scorpion does exactly the same thing. It flies in a circle round the scorpion and chirps; the scorpion raises its sting and turns it round in the same place, then gradually raises its sting and stretches it to its full length, while the locust circles round. At last the locust approaches and eats it. They say it is a good thing to eat a locust as a protection against the scorpion’s sting.

They say that wasps in Naxos, when they have eaten adder’s flesh (and apparently they are very partial to it), should they sting anyone, produce so much pain, that the sting is worse than the adder’s bite.

They say that they make the Scythian poison with which they smear arrows, out of the snake. Apparently the Scythians watch for those that have just borne young, and taking them let them rot for some days. When they think that they are completely decomposed, they pour a man’s blood into a small vessel, and dig it into a dunghill, and cover it up. When this has also decomposed they mix the part which stands on the blood, which is watery, with the juice of the snake, and so make a deadly poison.

They say that there is a kind of snake in Curium in Cyprus which has the same power as the asp in Egypt, except that, if it bites in the winter, it has no effect, either for some other reason, or because the animal does not move easily when numbed by the cold, and is quite powerless, unless it is warmed.

They say that there is a kind of prickly pear in Ceos, and that, if one is pricked

by a thorn, one dies.

In Mysia they say that there is a species of white bear which lets out so foul a breath when it is hunted that it causes the flesh of the dogs to decompose: it has the same effect upon all other kinds of animals, and makes them uneatable. But if one forces one's way close to them, they let out of their mouths a quantity of phlegm, which apparently blows at the faces of dogs and men alike, so as to choke and blind them.

In Arabia they say there is a species of hyaena, which, when it sees a beast in front, or comes into the shadow of a man, produces dumbness, and such paralysis that it is impossible to move the body. It has the same effect on dogs.

In Syria they say there is a beast called the lion-killer; for the lion apparently dies when it eats of it. The lion does not do this deliberately but avoids the animal; but when the hunters catch the animal and sprinkle white meal over it to cook it, as they would with another animal, on tasting it they are said to die at once. This beast hurts a lion if it even makes water on it.

Vultures are said to die from the scent of myrrh, if anyone smears it on them, or gives them anything steeped in myrrh to eat. In the same way beetles are said to die from the scent of roses.

In Sicily and in Italy they say that the bite of the spotted lizard is mortal, and not harmless and slight as with us. There is also a kind of mouse which when it bites, causes death.

In Mesopotamia in Syria, and in Istrus, there is said to be a small snake, which does not bite the natives, but does grievous harm to strangers.

They say this happens particularly about the Euphrates. They say that apparently they often swim about the mouths of the river, and to one of the banks, so that, though seen there in the evening, at dawn they appear on the other side, and do not bite the Syrians who rest there, but do not refrain from the Greeks.

In Thessaly they say that the sacred snake destroys everyone, not only if it bites, but even if it touches them. Consequently, when it appears and they hear the sound it makes (it appears but rarely), snakes, vipers, and all other wild beasts avoid it. It is not of great, but only moderate size. They say that once in Tenos, the Thessalian city, one was killed by a woman, and that this was the manner of

its death. A woman drew a circle on the ground and putting drugs in the circle, entered it, she and her son, and then imitated the cry of the creature; the snake replied and approached. While it was replying the woman became sleepy, and as it approached still nearer she could not control her sleepiness. But her son sat by her side, and aroused her by striking her at her command, and said that, if she went to sleep, both she and he would die; but that if she restrained herself and attracted the creature they would be saved. But when the snake approached the circle, it was immediately withered up.

It is said about Tyana that there is some water sacred to Zeus, God of oaths (they call it Asbamaeum) from which a very cold stream arises and bubbles as cauldrons do. To men who keep their oaths this water is sweet and kindly, but to perjurers judgement is close at their heels. For the water leaps at their eyes, their hands and their feet, and they are seized with dropsy and consumption; and it is impossible for them to get away before it happens, but they are rooted to the spot lamenting by the water, and confessing their perjuries.

At Athens they say that the sacred olive branch sprouted in a single day, and became bigger, and then quickly contracted again.

When the crater on Etna erupted, and lava was carried here and there over the land like a swollen stream, all the pious paid honour to the god. Some young men were encircled by the stream, because they were bearing their aged parents on their shoulders, and saving them; but the fiery stream parted in two, and part of the flame went one side and part the other, and preserved the young men unharmed together with their parents.

It is said that Pheidias the sculptor, when he was making the statue of Athene on the Acropolis, carved his own head in the centre of the shield, and fastened it to the statue by some mysterious craftsmanship, so that anyone wishing to remove it could only do so by breaking up and spoiling the whole statue.

They say that the statue of Bitys in Argos killed the man who was responsible for the death of Bitys by falling on him when he was looking at it. One would suppose that this kind of thing does not happen at random.

They say that dogs only pursue wild beasts as far as the peaks of the so-called Black Mountains, and that, when they have followed them as far as this, they turn back.

At the river Phasis they say that a stick grows called “white leaf,” which jealous husbands pluck, and put round the bridal chamber and so preserve their marriage inviolate.

At the Tigris they say there is a stone, called in foreign tongue “Modon,” of a very white colour; any man who holds it suffers no harm from wild beasts.

At the Scamander there is said to be a wild herb called sistrus, very like the chick-pea, and it has seeds that shake, whence it derives its name. Those who possess it need not fear anything supernatural or any apparition.

In Libya there is a vine which some call mad, which ripens some of its fruit, but keeps the rest unripe, and some even in flower for a short time.

Near the mountain Sipylus they say that there is a stone in the shape of a cylinder, which when pious sons find it they place in the shrine of the mother of the gods, and never err in the matter of impiety, but are always affectionate to their fathers.

In the mountain Taygetus they say there is a wild herb called “charisia” which women hang round their necks at the beginning of spring, and are more affectionately loved by their husbands.

Othrys is a mountain in Thessaly, which breeds snakes called Sepes, which have not one colour, but are always like the ground on which they live. Some of them have the colour of land snails. In others the scales are green. But those that live in sandy places are like the sand in colour. When they bite they produce thirst. Their bite is not fierce and fiery, but it is unpleasant.

When the male adder associates with the female, the female bites off its head. And so the young ones, as though avenging the death of their father, bite through their mother’s belly.

In the river Nile they say that there is a stone like a bean: if dogs see it, they do not bark. But this helps those who are possessed by an evil spirit; for, as soon as their noses are put against it, the evil spirit leaves them.

In the river Maeander there is said to be a stone called “wise” by contradiction; for, if one puts it into anyone’s lap, he goes mad, and murders one of his relations.

The rivers Rhenus and Ister flow northwards, the one past the Germans, the other past the Paeonians. In summer their stream is navigable, but in winter, when it is frozen by ice, they ride on it, as though it were dry land.

Near the city of Thurium they say that there are two rivers, Sybaris and Crathis. The Sybaris makes those who drink from it timorous, but the Crathis makes men who bathe in it golden-haired.

In Euboea there are two rivers; cattle that drink from one become white; it is called Cerbes; the other is called Neleus, which makes them black.

By the river Lycormas a wild herb grows in the shape of a spear, which is very valuable as a cure for blindness.

They say that the spring at Syracuse in Sicily called Arethusa only moves every five years.

On the mountain Berecynthus there is said to be a stone called “Dagger.” If anyone finds it when the mysteries of Hecate are being celebrated, he becomes mad, as Eudoxus says.

On Mount Tmolus they say that, there is a stone like ivy which changes its colour four times a day; it is seen by girls who have not reached the age of discretion.

At the altar of Artemis Orthosia a golden bull is set up, which bellows when hunters come in.

Among the Aetolians they say that moles can see indistinctly, and do not eat earth but locusts.

They say that elephants go two years with young, but others say eighteen months; they have much difficulty in producing their young.

They say that Demaratus, a disciple of Timaeus the Locrian, fell ill, and became dumb for ten days; on the eleventh, having recovered slowly from his affliction, he said that he had had the happiest time of his life.



*Translated by W. S. Hett*

It seems certain that this collection of “mechanical” problems and their solutions is not the work of Aristotle, though it is likely the product of the Peripatetic School. The reader will find most of them interesting, particularly those dealing with the circle and the lever. Though the author is misinformed in some cases, it is surprising to find how far the science of Applied Mathematics had advanced by this date.

### **MECHANICAL PROBLEMS**

Remarkable things occur in accordance with nature, the cause of which is unknown, and others occur contrary to nature, which are produced by skill for the benefit of mankind. For in many cases nature produces effects against our advantage; for nature always acts consistently and simply, but our advantage changes in many ways. When, then, we have to produce an effect contrary to nature, we are at a loss, because of the difficulty, and require skill. Therefore we call that part of skill which assists such difficulties, a device. For as the poet Antiphon wrote, this is true: “We by skill gain mastery over things in which we are conquered by nature.” Of this kind are those in which the less master the greater, and things possessing little weight move heavy weights, and all similar devices which we term mechanical problems.

These are not altogether identical with physical problems, nor are they entirely separate from them, but they have a share in both mathematical and physical speculations, for the method is demonstrated by mathematics, but the practical application belongs to physics.

Among the problems included in this class are included those concerned with the lever. For it is strange that a great weight can be moved by a small force, and that, too, when a greater weight is involved.

For the very same weight, which a man cannot move without a lever, he quickly moves by applying the weight of the lever.

Now the original cause of all such phenomena is the circle; and this is natural, for it is in no way strange that something remarkable should result from

something more remarkable, and the most remarkable fact is the combination of opposites with each other.

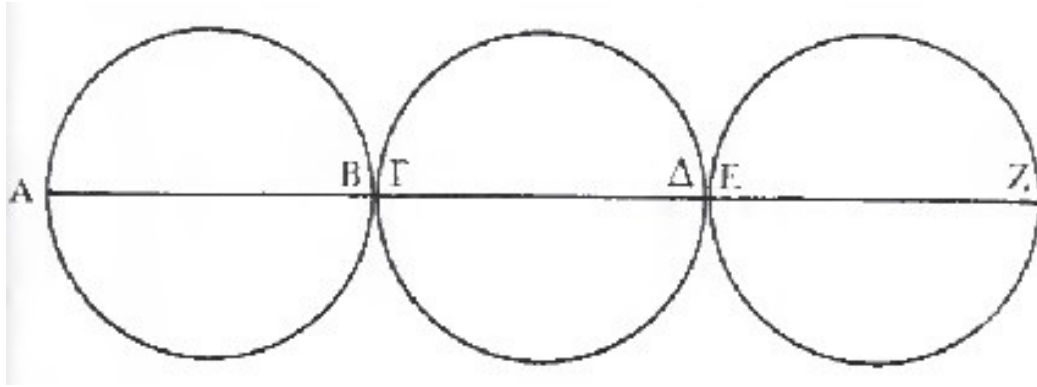
The circle is made up of such opposites, for to begin with it is composed both of the moving and of the stationary, which are by nature opposite to each other. So when one reflects on this, it becomes less remarkable that opposites should exist in it. First of all, in the circumference of the circle which has no breadth, an opposition of the kind appears, the concave and the convex. These differ from each other in the same way as the great and small; for the mean between these latter is the equal, and between the former is the straight line. Therefore, as in the former case, if they were to change into each other they must become equal before they could pass to either of the extremes, so also the line must become straight either when it changes from convex to concave, or by the reverse process becomes a convex curve. This, then, is one peculiarity of the circle, and a second is that it moves simultaneously in opposite directions; for it moves simultaneously forwards and backwards, and the radius which describes it behaves in the same way; for from whatever point it begins, it returns again to the same point; and as it moves continuously the last point again becomes the first in such a way that it is evidently changed from its first position.

Therefore, as has been said before, there is nothing strange in the circle being the first of all marvels. The facts about the balance depend upon the circle and those about the lever upon the balance, while nearly all the other problems of mechanical movement can depend upon the lever. Again, no two points on one line drawn as a radius from the centre travel at the same pace, but that which is further from the fixed centre travels more rapidly; it is due to this that many of the remarkable properties in the movement of circles arise; concerning which there will be a demonstration in what follows.

But owing to the fact that a circle has two opposite movements at the same time, and that one extremity of the diameter — that at *Ac* — moves forward while the other at *B* moves backwards, some people arrange that from one movement many circles move simultaneously in contrary directions, like the wheels of bronze and steel which they dedicate in temples. Let there be a circle with diameter *AT* touching the circle *AB*; if the diameter of the circle *AB* moves forward, then the diameter of the circle *AT* will move backward in relation to *AB*, if the diameter revolves round one point. That is, the circle *TA* will move in the opposite direction to the circle *AB*; and again it will move the next in succession, the circle *EZ* in the opposite direction to itself for the same reason.



In the same way also, if there are more circles they will show the same process, when only one of them is moved. So making use of this property inherent in the circle, craftsmen make an instrument concealing the original circle, so that the marvel of the machine is alone apparent, while its cause is invisible.



First of all then a difficulty will arise as to what happens to the balance; why, that is, larger balances are more accurate than smaller ones. The origin of this is the question why that part of the radius of a circle which is farthest from the centre moves quicker than the smaller radius which is close to the centre, and is moved by the same force. The word quicker is used in two senses; if a point covers the same distance as another in a shorter space of time we call it quicker, and also if it covers a greater distance in an equal time. But in our case the greater radius describes a greater circle in equal time; for the circumference outside is greater than the circumference inside.

The reason is that the radius describing the circle is performing two movements. Now whenever a body is moved in two directions in a fixed ratio it necessarily travels in a straight line, which is the diagonal of the figure which the lines arranged in this ratio describe.

Let the ratio according to which the body moves be represented by the ratio of AB to AT. Let AT move towards B while AB be moved towards the position HT; now let A travel to A, and let AB travel a distance determined by the point E. Then if the ratio of the movement is that of AB to AT, then the line AA must bear the same ratio to AE. Then the small parallelogram has the same proportions as the larger, so that its diagonal is the same, and the body will move to Z. It can be shown that it will behave in the same way at whatever point its movement be interrupted; it will always be on the diagonal. Conversely it is obvious that an object travelling with two movements along a diagonal will always move in the ratio of the sides of the parallelogram. For with any other

proportion it will not travel along the diagonal. But, if a body travels with two movements with no fixed ratio and in no fixed time, it would be impossible for it to travel in a straight line. For suppose it to be a straight line. If this line is drawn as a diagonal and the sides of the parallelogram be filled in, the body must move in the ratio of the sides; this has been demonstrated before. Hence the body that travels in no constant ratio and in no fixed time will not make a straight line. For if it travels in a fixed ratio for a given time, during this time it must move in a straight line, because of what we have already said. So that if it moves in two directions with no fixed ratio and in no fixed time it will be a curve.

That the line describing a circle moves in two directions simultaneously is obvious from these considerations, and also because that which travels along a straight line is along a perpendicular, so that it again travels along the perpendicular to a point above the centre.

Let ABT be a circle, and from the point B above the centre let a line be drawn to A; it is joined to the point T; if it travelled with velocities in the ratio of BA to AT it would move along the diagonal BT. But, as it is, seeing that it is in no such proportion it travels along the arc BET. Now if of two objects moving under the influence of the same force one suffers more interference, and the other less; it is reasonable to suppose that the one suffering the greater interference should move more slowly than that suffering less, which seems to take place in the case of the greater and the less of those radii which describe circles from the centre. For because the extremity of the less is nearer the fixed point than the extremity of the greater, being attracted towards the centre in the opposite direction, the extremity of the lesser radius moves more slowly. This happens with any radius which describes a circle; it moves along a curve naturally in the direction of the tangent, but is attracted to the centre contrary to nature. The lesser radius always moves in its unnatural direction; for because it is nearer the centre which attracts it, it is the more influenced. That the lesser radius moves more than the greater in the unnatural direction in the case of radii describing the circles from a fixed centre is obvious from the following considerations.

Let there be a circle BTEA and another smaller one inside it XNME described about the same centre A and let the diameters be drawn, the larger AT and BE and in the smaller circle MX and NE; let the rectangle AÿPT be completed. If the radius AB describing the circle returns again to the same position from which it started, namely to AB, it is clearly travelling towards itself. In the same way AX will return to the position AX. But AX travels more slowly than AB, as

has been said, because the interference with it is greater, and AX is more interrupted.

Let AOH be drawn, and from the point O a perpendicular OZ be dropped within the circle to AB; again from O let OY be drawn parallel to AB, and the perpendiculars OY and OZ dropped on AB. Now the lines OY and OZ are equal, but BY is less than XZ. For in unequal circles equal straight lines drawn perpendicular to the diameter cut off smaller parts of the diameter in the greater circles, and OY is equal to OZ. Now in the same time in which AO travels along the distance XO the extremity of the radius BA has described a greater arc than BO in the greater circle. For the natural travel is equal, but the unnatural is less; and BY is less than XZ: but one would expect them to be in proportion, the two that is whose travel is natural, and the two whose travel is unnatural.

The point has actually travelled over HB, which is greater than fB. Now in the given time (*i e.*, that in which AX moves to AO) AB must have travelled over the arc HB; for that will be its position, when the proportion between the natural and unnatural movements is true. If, then, the natural movement is greater in the greater circle, the unnatural movement would at that point have the same proportion only in the sense that the point B would travel along the arc BH in the same time as the point X would travel along the arc XO. For in that case the natural movement of the point B carries it to H, but its unnatural movement to K. For HK is the perpendicular dropped from H. Then HK is in the same ratio to KB, as OZ is to ZX. This will be obvious if B and X are joined respectively to H and O. But if the distance travelled by B is either greater or less than HB, the result will not be the same, nor will the proportion, between the natural and unnatural movements be the same in the two-circles.

From what has already been said the reason why the point more distant from the centre travels more quickly than the nearer point, though impelled by the same force, and why the greater radius describes the greater arc, is quite obvious. Why also greater balances are more accurate than smaller ones, is clear from these considerations. The cord which suspends the balance is the centre (for it is a fixed point), and the parts on either side of the balance scale are the radii from the centre. Now the extremity of the balance scale must move at a greater rate under the influence of the same weight, inasmuch as it is further from the cord, and consequently in small balances some weights must make no impression on the senses, but in large balances the movement must be obvious; for there is nothing to prevent a quantity from moving too little for it to be observed by the

senses. But in a large balance the same weight makes the movement visible. Some movements are obvious in both cases, but are much more obvious in larger balances, because then the extent of the swing is much greater for the same weight. This is how sellers of purple arrange their weighing machines to deceive, by putting the cord out of the true centre, and pouring lead into one arm of the balance, or by employing wood for the side to which they want it to incline taken from the root or from where there is a knot. For the part of the tree in which the root lies is heavier, and a knot is in a sense a root.

If the cord supporting a balance is fixed from above, when after the beam has inclined the weight is removed, the balance returns to its original position. If, however, it is supported from below, then it does not return to its original position. Why is this? It is because, when the support is from above (when the weight is applied) the larger portion of the beam is above the perpendicular. For the cord is the perpendicular. So that the greater weight must swing downwards until the line dividing the beam coincides with the perpendicular, because the greater weight now lies in the raised part of the beam. Let the beam be a straight one represented by BT and the cord be AA. When this is driven downwards the perpendicular will be represented by AAM, if the weight is attached in the direction of B. The face B will then adopt the position E, and the face T that of Z, so that the line bisecting the beam at first was in the position of the perpendicular AM, but when the weight was attached took up the position A0. Consequently that part of the beam in its position EZ which is outside the perpendicular AM will exceed half the beam by OII. If, then, the weight is removed from the arm E, the arm Z must be depressed, for the arm E is the smaller. If, then, the cord is attached from above, the balance returns again to its original position.

If, however, the support is from below, the opposite results; for now the portion of the beam which is lower than the perpendicular dividing it is more than half; consequently it does not return to its place; for the part rising above is lighter. Let the straight beam be represented by XE, the perpendicular being KAM, and this bisects NE. When the weight is attached to the arm N, X will take up the position 0 and H will take up the position P, while KA will go to GA, so that KO is greater than AP by OKA. Now when the weight is removed the beam must keep its new position; for the excess over half the beam beyond K acts as a weight and depresses the beam.

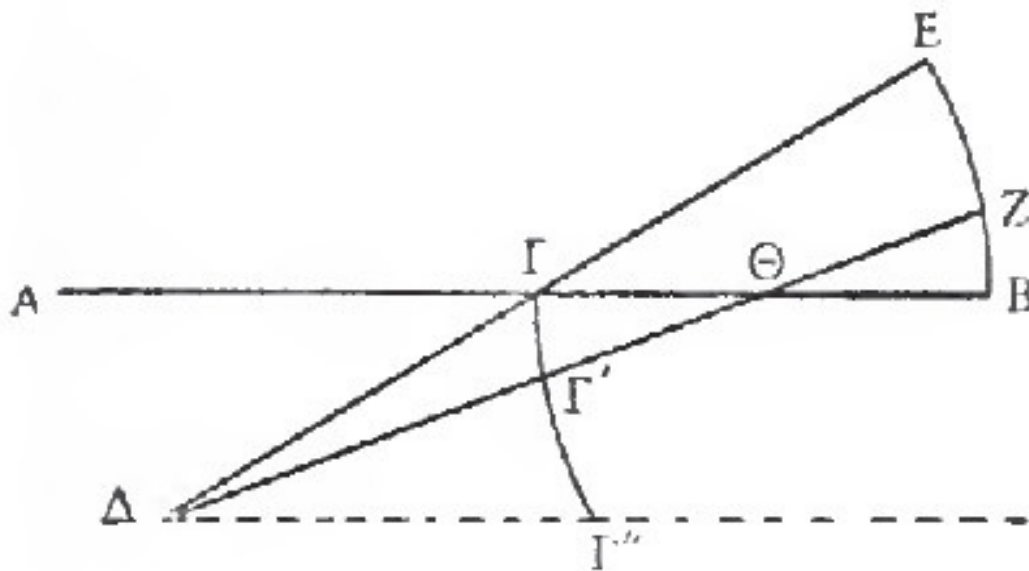
Why is it that small forces can move great weights by means of a lever, as was

said at the beginning of the treatise, seeing that one naturally adds the weight of the lever? For surely the smaller weight is easier to move, and it is smaller without the lever. Is the lever the reason, being equivalent to a beam with its cord attached below, and divided into two equal parts? For the fulcrum acts as the attached cord: for both these remain stationary, and act as a centre. But since under the impulse of the same weight the greater radius from the centre moves the more rapidly, and there are three elements in the lever, the fulcrum, that is the cord or centre, and the two weights, the one which causes the movement, and the one that is moved; now the ratio of the weight moved to the weight moving it is the inverse ratio of the distances from the centre. Now the greater the distance from the fulcrum, the more easily it will move. The reason has been given before that the point further from the centre describes the greater circle, so that by the use of the same force, when the motive force is farther from the lever, it will cause a greater movement. Let AB be the bar, T be the weight, and A the moving force, E the fulcrum; and let H be the point to which the moving force travels and K the point to which T the weight moved travels.

Why do the rowers in the middle of the ship contribute most to its movement? Is it because the oar acts like a bar? For the tholepin is the fulcrum (for it is fixed), and the sea is the weight, which the oar presses; the sailor is the force which moves the bar. In proportion as the moving force is further away from the fulcrum, so it always moves the weight more; for the circle described from the centre is greater, and the tholepin, which is the fulcrum, is the centre. The largest part of the oar is within in the centre of the ship. For the ship is broadest at this point, so that it is possible for the greater part of the oar to be within the sides of the ship on either side. Therefore the movement of the ship is caused, because the end of the oar which is within the ship travels forward when the oar is supported against the sea, and the ship being fastened to the tholepin travels forward in the same direction as the end of the oar. The ship must be thrust forward most at the point at which the oar displaces most sea, where the distance between the handle and the tholepin is greatest. This is the reason why those in the middle of the ship contribute most to the movement of the ship: for that part of the oar which stretches inside from the tholepin is greatest in the middle of the ship.

Why does the rudder, which is small and at the end of the vessel, have so great power that it is able to move the huge mass of the ship, though it is moved by a smaller tiller and by the strength of but one man, and then without violent exertion? Is it because the rudder is a bar, and the helmsman works a lever? The

point at which it is attached to the ship is the fulcrum, the whole rudder is the bar, the sea is the weight, and the helmsman is the motive force. The rudder does not strike the sea at right angles to its length, as an oar does. For it does not drive the ship forward, but turns it while it moves, receiving the sea at an angle. For since the sea is the weight, it turns the ship by pushing in a contrary direction. For the lever and the sea turn in opposite directions, the sea to the inside and the lever to the outside. The ship follows because it is attached to it. The oar pushes the weight against its breadth, and being pushed by it it in return drives the ship straight forward; but the rudder, being placed aslant, causes movement also to be at an angle, either in one direction or the other. It is placed at the end and not in the middle of the ship, because the part moved can move most easily when the moving agent acts from the end. For the first part moves most rapidly because as in other travelling bodies the travel ceases at the end, so in a continuous body the travel is weakest at the end. If, then, it is weakest there, it is at that point easiest to shift it from its position. This is why the rudder is at the stern and also because, as there is very little movement at that point, the displacement is much greater at the end, because the same angle stands on a large base, and because the enclosing lines are greater. From this it is obvious why the ship moves further in an opposite direction than the oar-blade; for the same mass, when moved by the same force, will travel further in air than in water. For let AB be the oar, *T* the tholepin, and A the part of the oar inside the ship, that is, the handle of the oar, while the point B is the end in the sea. Now if the point A be moved to the point A, the point B will not be at E; for BE is equal to AA, and it would thus have travelled an equal distance. But it is smaller, and it will be at the point Z. The point O then cuts the line AB, not where *T* is but below. For BZ is less than AA, just as OZ is less than AO; for the triangles are similar.



The centre T will also be displaced; for it moves in the opposite direction to the part B, which is in the sea, and in the same direction as A, the part in the boat, and A has changed its position to A'. So the position of the ship will be changed, and the point where the handle of the oar is will be moved. The rudder acts in the same way except that it does not contribute anything to the forward movement of the ship, but only pushes the stern sideways in one direction or the other; for the bow moves in the opposite direction to the rudder. The point at which the rudder is attached must be regarded as the pivot of the moving part, and functions like the tholepin for the oar; but the centre of the ship is moved in the same direction as the rudder. If it is moved inwards the stern moves in that direction; but the bow moves in a contrary direction, for while the bow remains in the same place the whole ship changes position.

Why is it that the higher the yard-arm, the faster the ship travels with the same sail and the same wind? Is it because the mast acts as a lever with its base in which it is fixed as a fulcrum? Then the weight which requires to be moved is the ship, and the agent of movement is the wind in the sail. If then, it is true that the farther the fulcrum, the more easily and rapidly does a given power move a given weight, then the yard-arm being higher makes the sail also farther away from the base which is the fulcrum.

Why is it that, when the wind is unfavourable and they wish to run before it, they reef the sail in the direction of the helmsman, and slacken the part of the sheet towards the bows? Is it because the rudder cannot act against the wind when it is stormy, but can when the wind is slight and so they shorten sail? In this way the

wind carries the ship forward, but the rudder turns it into the wind, acting against the sea as a lever. At the same time the sailors fight against the wind; for they lean over in the opposite direction. —

Why are round and circular bodies easiest to move? It is possible for a wheel to move in three ways; first, it may move along the felloe, the centre moving also, just as the wheel of a cart revolves; secondly, it may move about the centre, like a pulley, the centre remaining fixed; thirdly, it may move in a plane parallel to the ground, the centre still remaining fixed, as the potter's wheel revolves. All such movements are fast because the contact with the ground is slight, as a circle has only one point of contact, and because of the absence of friction; for the angle of the circumference is away from the ground. If also it meets a body, it again only comes into contact with a small surface. If, on the other hand, the body were rectilinear, it would because of its straight side touch the ground for a considerable distance. Again, the mover moves it in the same direction as its weight inclines. For when the diameter of the circle is at right angles to the ground, as the circle only touches the ground at one point, the diameter divides the weight equally on both sides of it; but when it moves the weight is immediately more in the direction of the movement, as though its balance were thrown that way. Consequently it is easier for the pusher to move it forward; for any body is easily moved in the direction towards which it inclines, and is similarly difficult to move in a direction opposite to its weight. Some say that the circumference of a circle travels perpetually, just as things remain at rest owing to resistance, as one can see in the case of greater circles in comparison with less. For greater circles move quickly and move greater weights by the application of the same force, because the angle of the greater circle has considerable influence in comparison with that of the lesser, and is in the same ratio as the diameter of the one bears to the diameter of the other. Now every circle is greater than some smaller one; for there are an infinite number of smaller circles. Now if it is a fact that one circle has weight in comparison with another, and is therefore easy to move, there are cases in which the circle and the things moved by it have an additional inclination; that is when they do not touch the surface with the felloe, but either move parallel with the ground, or with the motion of pulleys; for in this position they move very easily, and move weights as well. But this is not due to the small degree of contact and friction, but to another cause. This is the one mentioned before, that a circle consists of two directions of motion, so that the weight must always incline in the direction of one of them; thus the mover always impels it in the direction in which it is already travelling, when they move it in any direction in a line with its



circumference. For they are moving it when it is already travelling; for the moving force drives it in the direction of the tangent, while the circle itself moves in the direction of its diameter.

Why is it that we can move more easily and quickly things raised and drawn by means of greater circles? For instance larger pulleys work better than smaller ones and so do large rollers. Surely it is because, the distance from the centre being larger, a greater space is covered in the same time, and this result will still take place if an equal weight is put upon it, just as we said that larger balances are more accurate than smaller ones. For the cord is the centre and the parts of the beam which are on either side of the cord are the radii of the circle.

Why is a balance moved more easily when it is without a weight than when it has one? In the same way in the case of a wheel or anything of the kind the smaller and lighter is more easily moved than the larger and heavier. Is it because the weight is more difficult to move, not only in the opposite direction but at an angle? For it is hard to move a thing in the opposite direction to its weight, but easy in the direction of its weight; but it does not incline at an angle.

Why are heavy weights more easily carried on rollers than on carts, though the latter's wheels are larger while the circumference of rollers is small? Is it because in the case of rollers there is no friction, but in the case of carts there is the axle, and there is friction on that; for there is pressure upon it not only from above, but also horizontally? But a weight resting on rollers moves at two points of them, the ground supporting from below and the weight pressing from above; for the circle is revolving at both these points, and is impelled in the direction it travels.

Why does a missile travel further from the sling than from the hand? And yet the thrower has more control with his hand than when he has a suspended weight. In the case of a sling he has two weights to move, that of the sling and that of the missile, whereas in the former case he has the missile only. Is it because the man who hurls the missile has it already moving in the sling (for he only lets it go after swinging it round in a circle many times), but when projected from the hand it starts from rest? For everything is easier to move when it is already set in motion than when it is at rest. Is this, then, one reason, and is this another, that in using a sling the hand becomes the centre and the sling the radius? The greater then the radius, the faster the movement. But the cast from the hand is at a small distance compared to the sling.

Why are the larger handles more easy to move round a spindle than smaller ones, and in the same way less bulky windlasses are more easily moved than thicker ones by the application of the same force? Is it because the windlass and the spindle are the centre and the parts which stand away from them are the radii? Now the radii of greater circles move more quickly and a greater distance by the application of the same force than the radii of smaller circles; for by the application of the same force the extremity which is farther from the centre moves more. This is why they fit handles to the spindle with which they turn it more easily; in the case of light windlasses the part outside the centre travels further, and this is the radius of the circle.

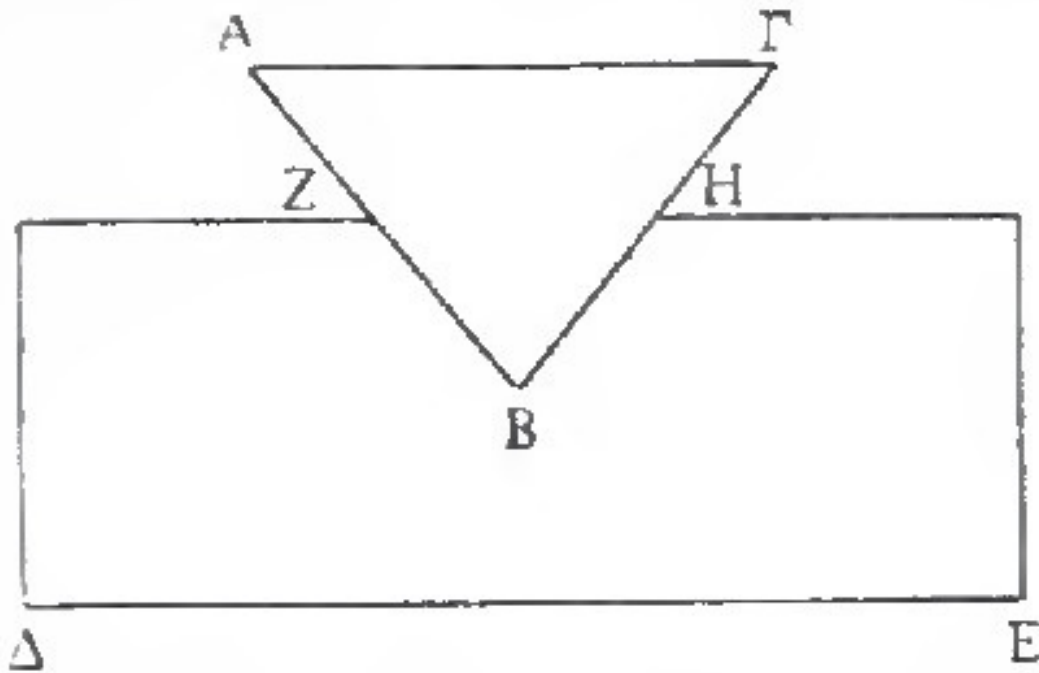
Why is a piece of wood of equal size more easily broken over the knee, if one holds it at equal distance far away from the knee to break it, than if one holds it by the knee and quite close to it? And similarly if one supports the wood on the ground and then putting the foot on it one breaks it with the hand, it breaks more easily if the hand is at some distance rather than if one holds it at a point close to the foot. Is it because in one case the knee and in the other the foot is the centre? But the farther it is away from the centre the more easily is everything moved. And what is being broken must necessarily be moved.

Why are the stones on the seashore which are called pebbles round, when they are originally made from long stones and shells? Surely it is because in movement what is further from the middle moves more rapidly. For the middle is the centre, and the distance from this is the radius. And from an equal movement the greater radius describes a greater circle. But that which travels a greater distance in an equal time describes a greater circle. Things travelling with a greater velocity over a greater distance strike harder; and things which strike harder are themselves struck harder. So that the parts further from the middle must always get worn down. As this happens to them they become round. In the case of pebbles, owing to the movement of the sea and the fact that they are moving with the sea, they are perpetually in motion and are liable to friction as they roll. But this must occur most of all at their extremities.

Why are pieces of timber weaker the longer they are, and why do they bend more easily when raised; even if the short piece is for instance two cubits and light, while the long piece of a hundred cubits is thick? Is it because the length of the wood in the act of raising it forms the lever, weight and fulcrum? For the first part of it, that which the hand raises, acts as a fulcrum, the part at the end is the weight. Consequently the greater the distance from the fulcrum the more it

must bend; for the greater the distance from the fulcrum the greater the bending must be. So the ends of the bar must be raised. If, then, the bar bends, it will bend more the more it is raised — a condition which occurs in the case of long pieces of wood; whereas in short pieces the end is close to the fulcrum, which is at rest.

Why are great weights and bodies of considerable size split by a small wedge, and why does it exert great pressure? Is it because the wedge consists of two levers opposite to each other? And each has both a weight and a fulcrum, which works either upwards or downwards. The travel of the blow is the weight which strikes and causes movement, and which makes the weight heavy; and because it moves an already moving object with considerable speed, the force is even greater. Great forces then follow what is in itself a small object; so we do not notice that it produces a considerable movement in comparison with its size.



Let ABT be the wedge, and the block to which it is applied AEHZ. Now AB is the lever, and the weight is below at B, while ZA is the fulcrum. Opposite this is the other lever BT. When AT is struck it makes use of both these levers; for at the point B there is an upward thrust.

18. Why is it that if one puts two pulleys on two blocks which support each other in opposite directions, and passes a rope round them in a circle, with one end

suspended from one of the blocks, and the other either supported by or passed over the pulleys, if one drags one end of the rope, one can draw up great weights, even if the dragging force is small? Is it because the same weight, if less force is used, can be raised, if a lever is employed, than by hand? The pulley acts in the same way as the lever, so that even one will draw the weight more easily and will raise a much heavier weight with less pull than by hand. And two pulleys will quickly raise more than twice as much. For the second rope is drawing even less weight than it would be, if it were drawing by itself, when the one rope is passed over the other; for that makes the weight still less. So if one puts the rope over still more, a great difference is made by a few pulleys, so that supposing a weight of four minae is being borne by the first, much less is being borne by the last. In this way in building construction they can easily raise great weights; for they shift from the one pulley to the other, and again from that to capstans and levers; and this is equivalent to making many pulleys.

Why is it that if one puts a large axe on a block of wood and a heavy weight on top of it, it does not cut the wood to any extent; but if one raises the axe and strikes with it, it splits it in half, even if the striker has far less weight than one placed on it and pressing it down? Is it because all work is produced by movement; and a heavy object produces the movement of weight more when it is moving than when it is at rest? When the weight lies on it, it does not produce the movement of the weight, but when it travels it produces both this movement and that of the striker. Moreover, the axe acts like a wedge; but the wedge, though it is small, splits large pieces of wood, because it is composed of two levers fixed together, and acting in opposite directions.

How is it that a steelyard can weigh heavy pieces of meat for a small weight, when the whole apparatus is only half the beam? For from the point at which the weight is placed, there hangs only the scale-pan, while on the other end there is nothing but the steelyard. Is it because the steelyard is both balance and lever at the same time? It is a balance insomuch as each of the cords becomes the centre of the steelyard. Now at one end it has a scale-pan, and at the other instead of a pan it has a round weight, which is fastened on to the beam, just as if one were to put the other scale-pan and the weight at the other end of the steelyard; for it is clear that it draws just as much weight when it lies in the other pan. But in order that the one beam may act as a number of beams, a number of small cords are attached to such a beam; in each case the part on the side of the round ball constitutes half of the steelyard, and the weight acts equally when the small cords are moved away from each other, so that it is possible to measure how

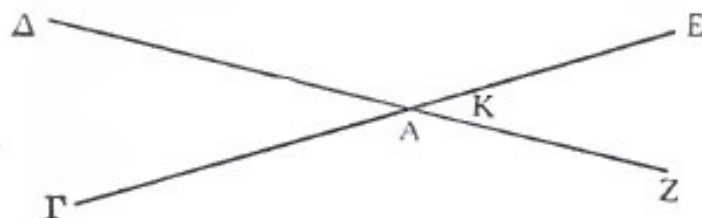
much weight the object lying in the scale-pan draws; so that one knows, when the steelyard is straight, how much weight the scale-pan holds according to the position of the rope, as has been said. Speaking generally this is a balance, having but one scale-pan, in which the weight is placed, the other being that in which the weight of the steelyard lies. So the steelyard at the opposite end is the ball weight. Being made in this way it acts as a number of beams, according to the number of cords it possesses. But the cord nearer to the scale-pan and the weight thereon draws a greater weight, because the whole steelyard is really an inverted lever (for each cord is the fulcrum which supports from above, and the weight is what is in the scale-pan), but the greater the distance of the beam from the fulcrum, the more easily does it move, but in this case it produces a balance, and balances the weight of the steelyard by the ball weight.

Why do dentists find it easier to take out teeth by applying the weight of the forceps than with the bare hand? Is it because the tooth more easily slips from the hand than it does from the forceps? Or does iron slip more easily than the hand and also does not press evenly on the tooth all round? For the flesh of the fingers being soft should stick more easily and fit more readily round it. But the forceps are really two levers working in opposite directions, having the point at which the blades are joined together as the fulcrum; dentists use this instrument for extraction because they find it moves more easily.

Let one end of the forceps be A and the other, the end which extracts, B. Now the one lever is AAZ and the other BFE and T0A is the fulcrum; the tooth is at the point I, where the extremities of the forceps come together; this is the weight. The dentist holds the tooth with BZ and moves it at the same time; but when he has moved it he can extract it more easily with the hand than with the instrument.

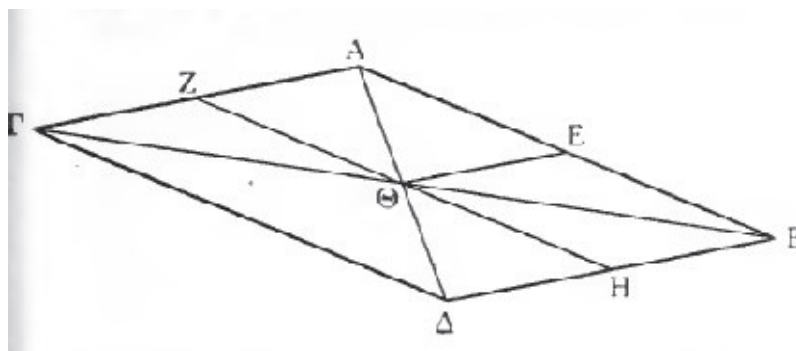
Why can one easily break nuts without a blow in instruments made to break them? For the considerable force of motion and violence is missing. Moreover one could break them more quickly with hard and heavy nutcrackers than with wooden and light ones. Is it because the nut is crushed in two directions by two levers, and heavy bodies are easily split by a lever? For nutcrackers consist of two levers having the same fulcrum, namely the point of junction, the point A in the figure. Just, then, as the extremities EZ could easily be pushed apart, so they can easily be brought together by small force applied at the points Δ and T So the two arms ET and ZΔ being levers produce as much or even more force than that which the weight produces in a blow; for by raising them they are raised in

opposite directions, and when they crush they break what is at the point K.



For exactly the same reason the nearer K is to the point A the more quickly is it crushed; for the farther the distance the lever is from the fulcrum, the more easily and the more considerably does it move it by use of the same force. A is then the fulcrum and  $\Delta AZ$  is the lever, as also is  $TAE$ . The nearer, then, that K is to the angle A the nearer it is to the junction at A; and this is the fulcrum. It follows therefore that ZE is raised farther by the use of the same force. So that when the raising is from two opposite directions, it must be the more crushed; and that which is more crushed is more easily broken.

Why is it that in a rhombus, when the extreme points travel in two movements, they do not each travel along an equal straight line, but one travels much farther than the other? It is only another way of asking the same question to inquire why the travelling point passes through a distance less than the side? For the diagonal is the less distance and the side the greater; the one travels with one motion and the other with two. Let A travel towards B, and B towards A with the same velocity along the line AB; again let AB travel along  $\Delta\Gamma$  parallel to  $\Gamma A$  with the same velocity as these. The point A must be carried along the diagonal  $A\Delta$  and B along  $B\Gamma$ , and each must arrive at the end at the same time, and AB moves along the side  $A\Gamma$ . For let the point A be carried along AE, and AB along to AZ, so as to make ZH parallel to AB, and a line drawn from E to complete the parallelogram. The parallelogram thus formed is similar to the whole.

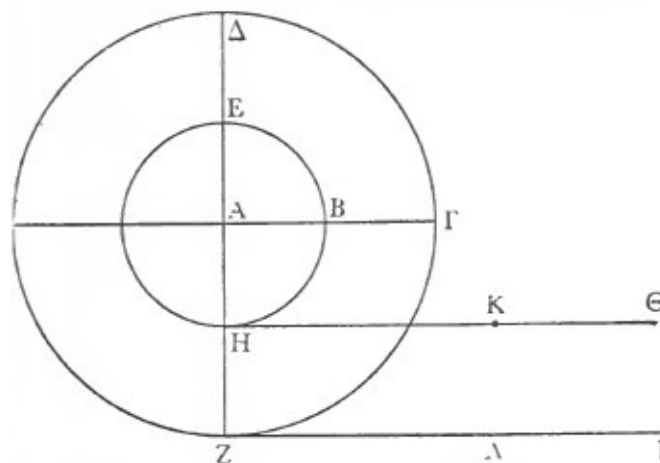


Then AZ is equal to AE, so that the point A is borne along the side AE. Then AB would travel along AZ and will therefore be on the diagonal at Θ. And it must always travel along the diagonal. At the same time the side AB will travel along the side AΓ, and the point A will travel along the diagonal AΔ. Similarly it can be proved that the point B is borne along the diagonal BΓ; for BE is equal to BH. When, then, the parallelogram is completed by a line drawn from H, the enclosed parallelogram is similar to the whole. The point B will be on the diagonal at the intersection of the diagonals, and the side will travel along the side at the same time as the point B will travel along the diagonal BΓ. Then the point B will travel many times more than AB, and the side will travel along the lesser side, though carried at the same velocity, and the side in one journey has travelled further than A. The more acute-angled the rhombus is the less the diagonal AA becomes and the greater BΓ but the side is less than BT. For it is odd, as has been said, that the point travelling along two components should sometimes move more slowly than that travelling along one, and that when both points are given an equal velocity one should travel a greater distance than the other.

But the reason is, that when a point moves from an obtuse angle, the two paths are more or less opposite, I mean the path which the point travels and that in which it is impelled along the side; when on the other hand the point moves from the acute angle it is almost being borne in the same direction. For the angle made by the sides assists to move the point along the diagonal; and in proportion as the one makes the angle more acute and the other more obtuse, so the former travels more slowly and the latter more quickly. For they are more in opposite directions because the angle is more obtuse; but in the other case they approximate more nearly to the same direction because the lines are closer together. For the point B in both its movements is travelling nearly in the same direction; for the one movement is assisted by the other, and the more acute the angle the more this becomes true. But with A the opposite is the case; for the point itself is travelling towards B, while the side tends to divert it to A. The more obtuse the angle, the more opposed to each other do the two movements become; for the lines approach more nearly to the straight. If they were entirely straight, they would be entirely opposite. But the side travelling in one direction is checked by nothing. Naturally therefore it traverses the greater distance.

A difficulty arises as to how it is that a greater circle when it revolves traces out a path of the same length as a smaller circle, if the two are concentric. When they are revolved separately, then the paths along which they travel are in the

same ratio as their respective sizes. Again, assuming that the two have the same centre, sometimes the path along which they revolve is the same size as the smaller circle would travel independently, and sometimes it is the size of the larger circle's path. Now it is evident that the larger circle revolves along a larger path. For an examination of the angle which each circumference makes with its own diameter shows that the angle of the larger circle is larger, and of the smaller circle smaller, so that they bear the same ratio as that of the paths on which they travel bear to each other. Yet on the other hand it is clear that they do revolve over the same distance, when they are described about the same centre; and thus it comes about that sometimes the revolution is equal to the path which the larger circle traces out, and sometimes to that of the smaller. Let AZT be the greater circle and EHB the less, with A as the centre of both. Let the line ZI be the path traced by the circumference of the larger circle, when it travels independently, and HK the path travelled independently by the smaller circle, HK being equal to ZA. If I move the smaller circle I am moving the same centre, namely A; now let the larger circle be attached to it. At the moment when AB becomes perpendicular to HK, AT also becomes perpendicular to ZA; so that it will have invariably travelled the same distance, that is HK, the distance over which the circumference HB has travelled, and ZA that over which ZT has travelled. Now if the quadrant in each case has travelled an equal distance, it is obvious that the whole circle will travel over a distance equal to the whole circumference, so that when the line BH has reached the point K, then the arc of the circumference ZT will have travelled along ZA, and the circle will have performed a complete revolution.



Similarly, if I move the large circle and fit the small one to it, the two circles being concentric as before, the line AB will be perpendicular and vertical at the



same time as AT, the latter to ZI, the former to H0. So that whenever the one shall have traversed a distance equal to H0, and the other to ZI, and ZA has again become perpendicular to ZA, and AH again to HK, the points H and Z will again be in their original positions at 0 and I. As, then, nowhere does the greater stop and wait for the less in such a way as to remain stationary for a time at the same point (for in both cases both are moving continuously), and as the smaller does not skip any point, it is remarkable that in the one case the greater should travel over a path equal to the smaller, and in the other case the smaller equal to the larger. It is indeed remarkable that as the movement is one all the time, that the same centre should in one case travel a large path and in the other a smaller one. For the same thing travelling at the same speed should always cover an equal path; and moving anything with the same velocity implies travelling over the same distance in both cases.

To discover the cause of these things we may start with this axiom, that the same or equal forces move one mass more slowly and another more rapidly. Let us suppose that there is a body which has no natural movement of its own; if a body which has a natural movement of its own moves the former as well as itself, it will move more slowly than if it moved by itself; and it will be just the same if it naturally moves by itself, and nothing is moved with it. It is impossible for it to have a greater movement than that which moves it; for it moves not with a motion of its own, but with that of the mover.

Suppose that there are two circles, the greater A and the lesser B. If the lesser were to push the greater without revolving itself it is clear that the greater will travel along a straight path as far as it is pushed by the lesser. It must have been pushed as far as the small circle has moved. Therefore they have travelled over an equal amount of the straight path. So if the lesser circle were to push the larger while revolving, the latter would be revolved as well as pushed, and only so far as the smaller revolves, if it does not move at all by its own motion. For that which is moved must be moved just so far as the mover moves it; so the small circle has moved it so far and in such a way, *e g* in a circle over one foot (let this be the extent of the movement), and the greater circle has moved thus far. Similarly, if the greater circle moves the less, the small circle will move exactly as the greater does. (This will be true) whichever of the two circles is moved independently, whether fast or slowly; so the lesser circle will trace a path at the same velocity, and of the same length as the greater does. This, then, constitutes our difficulty, that they do not behave in the same way when joined together; that is to say, if one is moved by the other, not in a natural way nor by

its own movement. For it makes no difference whether it is enclosed and fitted in or whether one is attached to the other. In the same way, when one produces the movement, and the other is moved by it, to whatever distance the one moves the other will also move. Now when one moves a circle which is leaning against or suspended from another, one does not move it continuously; but when they are fastened about the same centre, the one must of necessity revolve with the other. But nevertheless the other does not move with its own motion, but just as if it had no motion. This also occurs if it has a motion of its own, but does not use it. When, then, the large circle moves the small one attached to it, the smaller one moves exactly as the larger one; when the small one is the mover, the larger one moves according to the other's movement. But when separated each of them has its own movement. If anyone objects that the two circles trace out unequal paths though they have the same centre, and move at the same speed, his argument is erroneous. It is true that both circles have the same centre, but this fact is only accidental, just as a thing might be both "musical" and "white." For the fact of each circle having the same centre does not affect it in the same way in the two cases. When the small circle produces the movement the centre, and origin of movement belongs to the small circle, but when the large circle produces the movement, the centre belongs to it. Therefore what produces the movement is not the same in both cases, though in a sense it is.

Why do they make beds with the length double the ends, the former being six feet or a little more and the latter three? And why do they not cord them diagonally? Probably they are of those dimensions, that they may fit ordinary bodies; for the length is twice the ends, the length being four cubits and the width two. They do not cord them diagonally, but from side to side, that the timbers may be less strained; for these are most easily split when they are cleft in a natural direction, and they suffer most strain when pulled in this way. Moreover, since the ropes have to bear the weight, they will be much less strained if the weight is put on the ropes stretched crosswise than diagonally. Also in this way less rope is expended. Let AZHI be the bed and let ZH be bisected at B. The holes in ZB are equal to those in ZA. For these sides are equal; and the whole length ZH is twice ZA. Now they cord them as has been explained from A to B, then to T, then to A, and then to O and then to E and so on continuously until they return to the other corner. For the terminations of the rope are at two corners.

Now the lengths of rope that form the angles are equal, *e.g.* AB and BT to TA and AO. For the same proof shows it in each case. For instance, AB is equal to

EO; for the opposite sides of the parallelogram BHKA are equal, and the holes are an equal distance apart. BH is equal to KA; for the angle at B is equal to the angle at H; for the exterior angle of a parallelogram is equal to the interior and opposite; and the angle at B is half a right angle; for ZB is equal to ZA, and the angle at Z is a right angle. Again, the angle at B is equal to the angle H; for the angle at Z is a right angle, since the one side is double the other, and is bisected at B. So BT is equal to EH; and KO is also equal to it; for it is parallel to it, so that BT is equal to KO. And TE to AO. Similarly also the other sides forming the turns can be shown to be equal pair by pair. So that it is clear that there are four lengths of rope equal to AB in the bed; and whatever number of holes there are in ZH, there will be half the number in ZB, which is half of it. So that in half the bed there are as many lengths of rope as there are in BA, and just as many holes as there are in BH. This is equivalent to saying as many as there are in AZ plus BZ. But if the ropes were fastened diagonally as in the bed ABrA, the halves are not of the same length as the sides of both AZ and ZH, but they are the same number as the holes in ZB, ZA; for AZ, BZ being two lines are greater than AB. So that the rope is greater by the amount that the two sides are greater than the diagonal.

Why is it more difficult to carry long timbers on the shoulders by the end than by the middle, provided that the weight is equal in the two cases? Is it because the vibration of the end of the timber prevents the carrying, because it interferes with the carrying by its vibration? Hardly, because even if it does not bend at all, and is not very long, still it is more difficult to carry it by the end. For the same reason that it is more easily lifted from the middle than from the end, it is easier to carry it in this position. The reason is that when raised from the middle each end tends to lighten the other, and the one end assists in lifting the other. For the middle acts as a centre, whether it is being lifted or carried. Each of the two ends by pressing downwards raises the other in an upward direction. But when raised or carried from the end this does not happen, but all the weight presses in one direction. Let A be the centre of a piece of timber while the ends are B and T. When lifted or carried from A, the end B pressing downwards tends to raise the end T, while T pressing downwards tends to raise B; this is not what happens when they are both raised together.

Why is it that if the weight in question is extremely long, it is harder to raise it on the shoulder, even if one carries it by the middle, than if it is smaller? In the previous case it was stated that it was not due to vibration; but in this case it is. For when the timber is longer the ends vibrate more, so that it would be more

difficult for the bearer to carry it. The reason why the vibration is greater is, that under the influence of the same movement the ends shift further, inasmuch as the timber is longer. For the shoulder is the centre, at A (and this remains stationary), and AB and AT are the radii from the centre. In so far as the radius, that is AB or AT, is larger the more movement will take place in the mass. This has been demonstrated before.

Why do men make swing-beams at wells in the way they do? For they add the weight of the lead to the wooden beam, the bucket itself having weight whether empty or full. Is it because the machine functions in two stages (for it must be let down and drawn up again), and it can easily be let down whereas it is difficult to draw up? The disadvantage, then, of letting it down rather more slowly is balanced by the advantage of lightening the weight when drawing it up. The attachment of lead or a stone at the end of the swing-beam produces this result. For thus, when one lets down the bucket by a rope, the weight is greater than if one let the bucket down alone and empty; but when it is full, the lead draws it up, or whatever weight is attached to it. So that on the average the two processes are easier than they would be in the other case.

Why is it that when two men carry a weight between them on a plank or something of the kind, they do not feel the pressure equally, unless the weight is midway between them, but the nearer carrier feels it more? Surely it is because in these circumstances the plank becomes a lever, the weight the fulcrum, and the nearer of the two carrying the weight is the object moved, and the other carrier is the mover of the weight. For the farther he is from the weight, the more easily he moves it, and the more downward pressure falls on the other, as though the weight attached pressed in the opposite direction, and became the fulcrum. But when the weight is placed in the middle, the one no more becomes the weight than the other, nor does either do the moving, but one is the weight in just the same sense as the other.

Why is it that, when men stand up, they rise by making an acute angle between the lower leg and the thigh, and between the trunk and the thigh? Otherwise they cannot rise at all. Is it because equilibrium is always a cause of rest, and a right angle is a type of equilibrium, and so produces immobility: so the man is travelling towards a position in which he makes equal angles with the earth's surface; for he will not be actually at right angles to the ground? Or is it because when standing up he becomes at right angles, and the man in an erect position must be at right angles to the ground? If, then, he is going to arrive at the

perpendicular, that is, so that his head is immediately above his feet, this must happen when he rises. For when he is seated, his head and feet are parallel and not in one straight line. Let A be the head, AB the trunk, BT the thigh, and TA the lower leg. The trunk, that is AB, is perpendicular to the thigh, and the thigh to the lower leg, when the man is seated in this position. So that while in this position he cannot rise. But he must bend the lower leg, and bring the feet below the head. This will be the position if TA takes up the position TZ, and then he will rise at the same time as he brings the head and the feet into the same straight line. And TZ makes an acute angle with BT.

Why is it easier to move that which is already moving than that which is stationary? For instance, a moving wagon is more easily shifted than it is at the beginning. Is it for the same reason that it is most difficult to shift a weight which is moving in the opposite direction? For some of the power of the mover is lost, even if it is much quicker than the object moved. For the thrust of the body which is being pushed against has to become slower. In a secondary degree it is more difficult, if it is at rest; for what is at rest offers a resistance. But when a body is moving in the same direction as the pusher, it acts just as if one increased the force and speed of the mover; for by moving forward itself it has the same effect as would be produced by the mover.

Why do objects thrown ever stop travelling? Is it when the force that discharged them is exhausted, or because of the resistance, or because of the weight, if any of these is stronger than the discharging force? Or is it ridiculous to deal with these difficulties, when we have not the underlying principle?

Why, again, does a body travel at all except by its own motion, when the discharging force does not follow and continue to push it? Surely it is clear that the initial impulse given causes it to push something else in the first instance, while this in turn pushes something else; it stops when the force which is pushing the travelling object has no longer power to push it along, and when the weight of the travelling object pulls it down more than the power of the pushing force can drive it forwards.

Why can neither small nor great bodies travel far when thrown, but must always bear a relation to the thrower? Is it because an object thrown or pushed must always offer resistance in the direction from which the thrust comes? But that which by its size cannot give way, or by its weakness cannot offer any resistance can neither be thrown nor pushed. That which far exceeds the strength of what

pushes it does not yield at all, but that which is much weaker offers no resistance. Is it because a travelling body can only travel as far as it can penetrate into the depths of the air? But that which does not move at all cannot move anything. Both these conditions occur with these things. For the superlatively great and the superlatively small may both be regarded as having no movement; for the one moves nothing and the other does not move at all.

Why do objects which are travelling in eddying water all finish their movement in the middle? Is it because the travelling object has definite magnitude, so that it is moving in two circles, one less and one greater, each of its ends being in one of them? The greater circle then, because it is travelling more quickly, turns the object round and drives it sideways into the smaller circle. But since the travelling object has breadth, this second circle produces the same result, and again drives it into the next inner circle, until ultimately it reaches the middle. There it remains because being in the middle it is in the same relation to all circles. For in each circle the centre is the same distance from the circumference. Or can it be because objects which the travel of the whirling water cannot control because of their weight (that is, that the weight of the object overcomes the speed of the revolving circle) must get left behind and must travel more slowly? But the smaller circle travels more slowly; for the large circle revolves to the same extent in the same time as the smaller circle, when the two are concentric. So that the object must be left in each lesser circle in succession until it comes to the centre. In cases in which the travel prevails at the beginning, it will do the same until it stops. For the original circle and then the next must prevail by its speed over the weight of the object, so that it will pass successively to each smaller circle all the time. For an object which does not prevail must be moved either inside or outside. For that which is not overcome cannot continue to travel in the circle in which it is originally. Still less can it remain in the outer circle; for the travel of the outer circle is more rapid. The only thing left is for the object which is not controlled by the water to shift to the inside. Now each object always inclines not to be controlled. But since its arrival at the middle puts an end to the movement, the centre is the only part at rest, and everything therefore must collect there.

### ***Problems*** (859a)



*Translated by E. S. Forster*

The Προβλήματα is most likely a pseudo-Aristotelian text, forming a collection of problems written in a question and answer format. The collection was gradually assembled by the Peripatetic school, culminating its final form at some point between the third century BC and the 6th century AD. The work is divided by topic into 38 sections and it contains almost nine hundred problems, concerning a diverse range of ailments and natural phenomena.

## **CONTENTS**

### [PREFACE](#)

### [BOOK I. PROBLEMS CONNECTED WITH MEDICINE](#)

### [BOOK II. PROBLEMS CONNECTED WITH PERSPIRATION](#)

### [BOOK III. PROBLEMS CONNECTED WITH THE DRINKING OF WINE AND DRUNKENNESS](#)

### [BOOK IV. PROBLEMS CONNECTED WITH SEXUAL INTERCOURSE](#)

### [BOOK V. PROBLEMS CONNECTED WITH FATIGUE](#)

### [BOOK VI. PROBLEMS CONNECTED WITH THE POSITIONS ASSUMED IN LYING DOWN AND IN OTHER POSTURES.](#)

### [BOOK VII. PROBLEMS CONNECTED WITH SYMPATHETIC](#)

### [BOOK VIII. PROBLEMS CONNECTED WITH CHILL AND SHIVERING.](#)

### [BOOK IX. PROBLEMS CONNECTED WITH BRUISES, SCARS, AND WEALS](#)

### [BOOK X. A SUMMARY OF PHYSICAL PROBLEMS](#)

### [BOOK XI. PROBLEMS CONNECTED WITH THE VOICE](#)

### [BOOK XII. PROBLEMS CONNECTED WITH THINGS OF PLEASANT ODOUR](#)

BOOK XIII. PROBLEMS CONNECTED WITH THINGS OF UNPLEASANT ODOUR

BOOK XIV. PROBLEMS CONNECTED WITH THE EFFECT OF LOCALITY ON TEMPERAMENT

BOOK XV. PROBLEMS CONNECTED WITH MATHEMATICAL THEORY

BOOK XVI. PROBLEMS CONNECTED WITH INANIMATE THINGS

BOOK XVII. PROBLEMS CONNECTED WITH ANIMATE THINGS

BOOK XVIII. PROBLEMS CONNECTED WITH LITERARY STUDY

BOOK XIX. PROBLEMS CONNECTED WITH MUSIC

BOOK XX. PROBLEMS CONCERNING SHRUBS AND VEGETABLES

BOOK XXI. PROBLEMS CONCERNING BARLEY-MEAL, BARLEY-CAKE, AND THE LIKE

BOOK XXII. PROBLEMS CONNECTED WITH FRUIT

BOOK XXIII. PROBLEMS CONNECTED WITH SALT WATER AND THE SEA

BOOK XXIV. PROBLEMS CONCERNING HOT WATER

BOOK XXV. PROBLEMS CONNECTED WITH THE AIR

BOOK XXVI. PROBLEMS CONNECTED WITH THE WINDS

BOOK XXVII. PROBLEMS CONNECTED WITH FEAR AND COURAGE

BOOK XXVIII. PROBLEMS CONNECTED WITH TEMPERANCE AND INTEMPERANCE, CONTINENCE AND INCONTINENCE

BOOK XXIX. PROBLEMS CONNECTED WITH JUSTICE AND INJUSTICE

BOOK XXX. PROBLEMS CONNECTED WITH PRUDENCE, INTELLIGENCE, AND WISDOM



BOOK XXXI. PROBLEMS CONNECTED WITH THE EYES

BOOK XXXII. PROBLEMS CONNECTED WITH THE EARS

BOOK XXXIII. PROBLEMS CONCERNING THE NOSE

BOOK XXXIV. PROBLEMS CONCERNING THE MOUTH AND THE PARTS THEREIN

BOOK XXXV. PROBLEMS CONNECTED WITH THE EFFECTS OF TOUCH

BOOK XXXVI. PROBLEMS CONNECTED WITH THE FACE

BOOK XXXVII. PROBLEMS CONNECTED WITH THE WHOLE BODY

BOOK XXXVIII. PROBLEMS CONCERNING THE COLORATION OF THE FLESH

## PREFACE

The inclusion of the *Problemata* in the Aristotelian Corpus is no doubt due to the fact that Aristotle is known to have written a work of this kind, to which reference is made in his genuine works and by other writers. An examination of these references shows that some of them can be connected with passages in the *Problemata*, while others cannot; from which it may be concluded that, while the *Problemata* is not the genuine Aristotelian work, it nevertheless contains an element derived from such a work. It is also obviously indebted to other Aristotelian treatises, especially those on Natural History, to the Hippocratean writings, and to Theophrastus. The repetitions and contradictions which occur in the work seem to show that it was a gradual compilation by several hands; and, if one may judge from the late forms of words which occur in several passages, it did not reach its final form until some time after the beginning of the Christian Era. Some critics would date its completion as late as the fifth or sixth century A.D. The doctrine throughout is Peripatetic, and the variety of subjects treated shows the wide interests of that school.

The text used for this translation is that of Ruelle-Knoellinger-Klek (Leipzig, Teubner, ). The preface to that edition contains a complete account of the MSS. and a valuable bibliography. Wherever any other reading is adopted the fact is stated in the foot-notes.

Professor W. D. Ross has been good enough to read the translation both in MS. and in proof; a small part of the debt which I owe him is indicated in the foot-notes, but there are innumerable other passages in which his vast knowledge of Aristotelian usage has enabled me to introduce material improvements. I have also to thank Sir Henry Hadow, D.Mus., Vice-Chancellor of the University of Sheffield, and my colleague Mr. G. E. Linfoot, Mus.Bac., B.Sc., for generous assistance in elucidating the Musical Problems.

E. S. FORSTER.

THE UNIVERSITY, SHEFFIELD.

## BOOK I. PROBLEMS CONNECTED WITH MEDICINE

WHY is it that great excesses cause disease? Is it because they engender excess

or defect, and it is in these after all that disease consists?

But why is it that diseases can often be cured if the patient indulges in excess of some kind? And this is the treatment used by some doctors; for they cure by the excessive use of wine or water or salt, or by over-feeding or starving the patient. Is it because the causes of the disease are opposites of one another, so that each reduces the other to the mean?

Why is it that the changes of the seasons and the winds intensify or stop diseases and bring them to a crisis and engender them? Is it because the seasons are hot and cold and moist and dry, while diseases are due to excess of these qualities and health to their equality? In that case, if the disease is due to moisture or cold, a season which has the opposite characteristics stops it; but if a season of the opposite kind follows, the same admixture of qualities being caused as before intensifies the disease and kills the patient. For this reason the seasons even cause disease in healthy persons, because by their changes they destroy the proper admixture of qualities; for it is at the same time improved by suitable seasons, times of life, and localities. The health therefore requires careful management at times of change. And what has been said generally as to the effect of the seasons applies also in detail; for changes of winds and of age and of locality are to some extent; changes of season. These also therefore intensify and stop diseases and bring them to a crisis and engender them, as do the seasons and the risings of certain constellations, such as Orion and Arcturus and the Pleiads and the Dogstar, since they cause wind and rain and fine weather and storms and sunshine.

Why ought emetics to be avoided at the changes of the seasons? Is it in order that there may be no disturbance when the excretions are being altered by such changes?

Why is it that the feet swell both of those who are bilious and of those who are suffering from starvation? Is it in both cases the effect of wasting? For those who are starving waste because they do not receive any nourishment at all, while the bilious waste because they do not derive any benefit from the nourishment which they take.

Why it is that, though the diseases due to bile occur in the summer (the season when fevers are at their height), acute diseases due to bile occur rather in the winter? Is it because, being accompanied by fever, they are acute because they

are violent, and violence is unnatural? For fervent inflammation is set up when certain parts of the body are moist, and inflammation, being due to an excess of heat, engenders fevers. In the summer, therefore, diseases are dry and hot, but in the winter they are moist and consequently acute (for they soon kill the patient), for concoction will not take place because of the abundance of the excretion.

Why is it that the plague alone among diseases infects particularly persons who come into contact with those who are under treatment for it? Is it because it is the only disease to which all men alike are liable, and so the plague affects any one who is already in a low state of health? For they quickly become infected by the inflammatory matter caused by the disease which is communicated by the patient.

Why is it that, when north winds have been prevalent in the winter, if the spring is rainy and characterized by south winds the summer is unhealthy with fever and ophthalmia? Is it because the summer finds the body full of alien humours, and the earth, and any place in which men dwell, becomes moist and resembles localities which are regarded as permanently unhealthy? The result is that, first, ophthalmia occurs when the excretion in the region of the head liquefies, and, secondly, fever ensues.

For it is noticeable that anything which admits of extreme cold also admits of extreme heat, — water, for example, and a stone, of which the former boils quicker than other things, the latter burns more. As, therefore, in the air a stifling heat occurs when it grows warm owing to its density, so likewise in the body stifling and heat are engendered, and heat in the body is fever and in the eyes ophthalmia. Generally speaking the change which occurs when a warm, dry summer follows immediately on a wet spring, being violent has a deleterious effect upon the body. The effect is still worse if the summer is rainy; for then the sun finds material, which it will cause to boil in the body as in the earth and air; the result is fever and ophthalmia. —

Why is it that, if the winter is characterized by south winds and rainy and if the spring is dry with the wind in the north, both the spring and the summer are unhealthy? Is it because in the winter owing to the heat and moisture the body assimilates its condition to that of the season, since it must necessarily be moist and relaxed? When the body is in this state, the spring being cool congeals and hardens it owing to its dryness. The result is that women who are pregnant run a risk of abortion in the spring because of the inflammation and mortification

caused by the dry cold, since the necessary moisture is not secreted, and the foetus in the womb becomes weakly and defective owing to the excess of cold; for children who are born at this season in fine weather become strong and receive nourishment in the womb. In the case of other persons — because in the spring the phlegm is not purged away owing to its excess (as happens when the weather is warm), but congeals owing to the cold — when the summer and warmth succeeds, setting up violent liquefaction, humours form in those who are bilious and dry because their bodies lack moisture and are naturally parched; but these humours are slight and so such people suffer from dry ophthalmia. Those on the other hand who are phlegmatic are afflicted with sore throats and catarrh of the lungs. Women suffer from dysentery owing to their natural moisture and cold; while elderly persons are afflicted with apoplexy, when moisture being all set free at once overcomes them and solidifies owing to the weakness of their natural heat.

Why is it that, when the summer is dry and northerly winds prevail and the autumn on the contrary is wet and characterized by south winds, headaches and sore throats and coughs occur in the ensuing winter and then terminate in phthisis? Is it because the winter finds a considerable amount of matter in the body and so it is a difficult task for it to solidify the moisture and form phlegm? Consequently, when moisture is engendered in the head, it causes a feeling of heaviness, and if it is plenteous and cold, it causes mortification; but if, owing to its abundance, it does not solidify, it flows into the nearest region of the body, and thus coughs are caused and sore throats and wasting.

But why is it that if the summer and autumn are dry and northerly winds prevail, this weather suits those who are phlegmatic, and women? Is it because in both cases nature tends to an excess in one direction, and so the season exerting its influence in the opposite direction establishes an equable temperament, and they are healthy at the time, unless they themselves do anything which harms them, and, when the winter comes on, they are not in a moist condition, having heat in them with which to resist the cold?

Why is it that a dry summer and autumn in which northerly winds prevail is unhealthy for those who are bilious? Is it because their bodily condition and the season have the same tendency and it is like adding fire to fire? For the body becoming dry (the freshest element in it becoming evaporated) and being overheated, dry ophthalmia must necessarily ensue owing to solidification; but because the remaining humours are full of bile and these become overheated,

acute fevers must ensue caused by the bile, which is undiluted, and in some cases madness, where black bile is naturally present; for the black bile comes to the surface as the contrary humours are dried up.

Why do they say that a change of drinking-water is unhealthy, but not a change of air? Is it because water becomes nutriment, with the result that it gets into one's system and has an effect upon one, which is not the case with air? Further there are many kinds of water differing intrinsically from one another, but not of air; this then may also be a reason. For even when we change our place of dwelling we continue to breathe practically the same air, but we drink different waters. It is, therefore, probably a right opinion that change of drinking-water is unhealthy.

Why is it that a change of drinking-water is more unhealthy than a change of food? Is it because we consume more water than anything else? For water is found in farinaceous and other foods and whatever we drink consists mainly of water.

But why is a change of water unhealthy? Is it because every change also of season and of age is liable to disturbance? For extremities, such as beginnings and ends, are particularly liable to disturbance. So too foods, when they are different, corrupt one another; for some have only just entered the system, while others have not yet done so. Further, just as a varied diet is unhealthy (for the concoction is then disturbed and not uniform), so those who change their drinking-water are using a varied diet in what they drink; and liquid nourishment has more effect than dry food because it is greater in bulk and because the moisture from the foods themselves forms nourishment.

Why does a change of drinking-water cause an increase of lice in those who suffer from louse-disease? Is it because, owing to the disturbance set up by the different water in those who frequently change their drinking-water, the unconcocted state of the liquid causes a moist condition, especially in that part where the conditions are suitable?

Now the brain is moist, and therefore the head is always the moistest part of the body (as is shown by the fact that hair grows there more than elsewhere), and it is the moisture of this part which generates lice. This is clear in the case of children; for their heads are moist and they frequently have either running at the nose or discharge of blood, and persons of this age suffer particularly from lice.

Why is it that from the rising of the Pleiads until the west wind blows those who suffer from chronic diseases are most likely to die, and the old rather than the young? Is it because two things are fatal to life, excess and cold?

For life is heat, whereas this season has both the above characteristics, for it is cold, and winter is then at its height, the subsequent season being spring. Or is it because those who suffer from chronic diseases are in a similar condition to the old? For the occurrence of a long illness is like premature old age, since in both the body is dry and cold, — in the one case owing to the time of life, in the other from disease. Now winter and frosts constitute an excess of coldness and dryness; therefore to those who are in a condition where a very little will turn the scale, winter is like ‘fire added to fire’ and so causes death.

Why is it that in marshy districts sores on the head are quickly cured, but those on the legs only with difficulty? Is it because the moisture, owing to the fact that it contains an earthy element, is heavy, and heavy things are carried downwards? Thus the upper parts of the body are cleared out because the impurities are carried to the lower parts, and these become full of excretions which easily putrefy.

Why is it that, when a very dry summer follows after northerly winds have prevailed in the winter and the spring has been damp and rainy, the autumn is universally fatal, especially to children, while in other people dysentery and prolonged quartan fevers occur then? Is it because, when there is a moderate amount of rain in the summer, the moisture boiling within us, which collected in the damp spring, is cooled and becomes quiescent? If on the other hand this does not happen, children, because they are moist and hot, are in a state of excessive boiling, because they are not cooled; and anything which does not as it were boil out in the summer, does so in the autumn. If the excretions do not cause death immediately, but settle round the lungs and windpipe — for they collect first in the upper part of the body, because we are warmed by the air, for it is owing to this that ophthalmia occurs before fever in an unhealthy summer — if then, as I have said, the excretions in the upper parts of the body do not immediately kill the patient, they descend in an unconcocted condition into the stomach; and thus dysentery is caused, because the moisture owing to its abundance is not discharged. If the dysentery ceases, quartan fevers arise in those patients who survive; for the sediment of the unconcocted moisture remains very persistently in the body and becomes active, just like black bile.

Why is it that, if the summer and the autumn have been rainy and damp, the ensuing winter is unhealthy? Is it because the winter finds the body in a very moist state, and also the change from great heat is violent and not gradual, because the autumn as well as the summer has been hot, and so acute diseases are caused in some persons, if they have no rarity in their bodies (for in such persons the moist excretions tend to collect in the upper part of the body, because these parts provide room for them, whereas the lower parts differ in this respect)? Those then whose flesh is solid do not allow of much excretion. When therefore the excretion in the upper parts of the body cools (as happens in drunken persons when they grow cold), the above-mentioned diseases are engendered. On the other hand when fevers are set up in persons in whose bodies there is more rarity, the fevers caused by a large quantity of unconcocted moisture become burning fevers, because in such people the humours are distributed more through the whole body than in solid-fleshed people, and, when the flesh is contracted by the winter-cold, the humours being heated cause fever. For excessive heat in the whole body is fever, and, when it is intensified by the abundance of moisture already present there, it turns into a burning fever.

Why is it that when a large amount of vapour is drawn out of the earth by the sun, the year is pestilential? Is it because it is necessarily a sign that the year is damp and rainy and the ground is necessarily damp? The conditions of life will then resemble those under which people live in a marshy district, and these are unhealthy. The body must then have in it an abundance of excretion and so contain unhealthy matter in the summer.

Why is it that those years are unhealthy in which small toad-like frogs are produced in abundance? Is it because everything flourishes in its natural environment, and these frogs are naturally moist and so signify that the year is moist and damp? Now such years are unhealthy; for then the body being moist contains abundant excretion, which is a cause of diseases.

Why is it that south winds which are dry and do not bring rain cause fever? Is it because they cause alien moisture and heat (for they are naturally moist and hot), and this is what causes fever, for it is due to the combined excess of moisture and heat? When therefore south winds blow without bringing rain, they engender this condition in us, whereas, when they bring rain with them, the rain cools us. Now south winds from the sea are also beneficial to plants, for they are cooled by the sea before they reach them; whereas blight is due to alien moisture and heat.



Why is it that men feel heavier and weaker when the wind is in the south? Is it because moisture becomes abundant instead of scanty, being melted by the heat, and moisture, which is heavy, takes the place of breath, which is light? Further, our strength is in our joints, and they are relaxed by south winds (as is shown by the fact that things which have been glued together creak); for the viscous matter in the joints, if it hardens, prevents us from moving, whereas, if it is too moist, it prevents us from exerting ourselves.

Why are people more liable to fall ill in the summer,

while those who are ill are more liable to die in the winter? Is it because in the winter, owing to the fact that the hot matter from its density becomes collected within the body and we suffer more through the excretions which solidify in us, if we cannot concoct them, the commencement of the disease must necessarily be violent, and being of this character it is likely to prove fatal? In the summer on the other hand, because the whole body is in a state of rarity and cool and too much relaxed for great exertion, there must necessarily be many commencements of disease owing to fatigue and to the fact that we do not concoct all that we swallow (for summer is the season of fresh fruit); but such diseases are not so violent, and therefore yield easily to treatment.

Why is it that deaths are particularly likely to occur during the hundred days following each solstice? Is it because in each case the excess of heat or cold extends over this period, and excess causes disease and death in the weakly?

Why is it that the spring and the autumn are unhealthy? Is it because changes are unhealthy? The autumn is more unhealthy than the spring, because we are more apt to contract disease when heat turns to cold than when cold turns to heat, and it is in spring that cold turns to heat and in autumn that heat turns to cold.

Why is it that illnesses are rarer in the winter than in the summer, but more often fatal? Is it because illnesses arise from slight causes in the summer but not in the winter? For in winter we are in a better condition for concoction and at the very height of our health, so that naturally illnesses which arise from more serious causes are themselves more serious and more likely to prove fatal. We see the same thing in athletes and generally amongst those who are in a healthy condition; for they either are not afflicted with disease, or, if they are, they rapidly succumb, for they only become ill from some serious cause.

Why is it that in the autumn and winter burning fevers are more likely to occur when the weather is cold, while in the summer chills are most troublesome when it is hot? Is it due to the fact that of the humours in man the bile is hot and the phlegm cold? As a result, in summer the cold matter is set free, and being diffused in the body gives rise to chill and shivering; in the winter, on the other hand, the hot matter is overpowered by the weather and cooled. Burning fevers are more troublesome in the winter and autumn, because, owing to the cold, the hot matter collects within, and the fever is within and not on the surface; it is natural therefore that burning fevers should occur during this part of the year. This can be well illustrated by contrasting those who bathe in cold water and those who use warm water in the winter; those who wash in cold water, though they feel chilled for a short time whilst they are actually washing, suffer no ill effects from the cold during the rest of the day, while those who use hot water continue to be less able to resist the cold. For the flesh of those who wash in cold water becomes solid, and the hot matter collects within; but the flesh of those who use warm water becomes rare, and the hot matter is diverted to the outside of the body.

In what does the virtue of a poultice consist? Would it, owing to its dissolvent action, set up perspiration and evaporation?

How can the presence of an abscess be diagnosed? Is it true that, if, when hot water is poured over it, a change takes place, there is an abscess, but none if there is no change?

In what cases ought cauterization to be employed, and in what cases the surgeon's knife? Is it true that wounds which have large openings and do not close up quickly ought to be cauterized, so that a scab may form? If this is done, there will be no festering.

In what does the virtue of a remedy for stanching blood consist? Is it because it has a drying effect and stops the discharge of excretions without making a scab or causing decay of the flesh? If so, the wound must be free from inflammation and likely to heal up. For if there is no discharge, it will be free from inflammation, and being dry it will close up; whereas it will not close up as long as it is discharging moisture. Most remedies, therefore, for stanching blood are pungent, so as to cause contraction.

When ought drugs to be employed and not the knife or cauterization? Ought

drugs to be used for the armpits and groin? For sores in these parts are sometimes painful and sometimes dangerous after they are cut open. Flat growths and those which project considerably and are situated in parts which are venous and not fleshy, should be cauterized; but those which collect at an acute point and are not situated in solid parts of the body should be treated with the knife.

Why is it that, if one is cut with a copper instrument, the wound heals more quickly than if the cut is made with iron? Is it because copper is smoother and so tears the flesh and bruises the body less? Or must we reject this explanation, since, if iron takes a better edge, the cleavage is easier and less painful? Yet even so copper has a medicinal power of its own, and 'in all things it is the beginning that is important', and so the copper, by its immediate action as soon as the cut is made, causes the wound to close up.

Why is it that burns inflicted by copper heal more quickly than others? Is it because copper contains more rarity and is less substantial, and the more solid a thing is the more heat it contains?

Is barley-gruel lighter and better for use in sickness than that made from wheat? For the latter commends itself to some people who argue from the fact that amongst bakers those who handle wheaten flour have a much better colour than those who employ barley meal, and furthermore that barley is moister and that which is moister requires more concoction. But is there any reason why barley should not have some qualities which make it more difficult of concoction and others which make it more serviceable because of its lightness? For barley is not only moister than wheat, but it is also colder, and porridge and any other food which is served to one who is in a fever ought to be such that it will provide him with a little nourishment and also cool him. Now barley-gruel has these qualities; for, because it is moist rather than substantial, it gives nourishment which is small in bulk and at the same time has a cooling effect.

Why do purslane and salt stop inflammation of the gums? Is it because purslane contains some moisture? This is seen if one chews it or if it is crushed together for some time; for the moisture is then drawn out of it. This glutinous matter sinks into the gum and drives out the acidity. For that there is an affinity between the disease and the remedy is shown by the acidity; for the juice of purslane has a certain acidity. Salt on the other hand dissolves and draws out the acidity. Why then do lye and soda not have this effect? Is it because they have an astringent

instead of a dissolvent action?

Why is it that fatigue must be cured in summer by baths, in winter by anointing? Is anointing employed in the latter case because of the cold and the changes which it causes in the body? For the fatigue must be got rid of by heat which will warm the body, and olive-oil contains heat.

In summer, on the other hand, the body requires moisture, because the season is then dry and chills are not to be feared, because the natural inclination is towards heat.

A sparing diet of solid food and a liberal indulgence in liquid nourishment are appropriate to the summer, the latter being peculiar to summer, while the former is commoner then than at other seasons; for indulgence in drinking is peculiar to the summer because of the dryness of the season, but a sparing diet is found at all seasons but is more general in the summer; for then, owing to the weather, heat is engendered by food.

Why do some drugs relax the stomach and not the bladder, others the bladder and not the stomach? Is it true that anything which is naturally moist and full of water, if it has medicinal properties, relaxes the bladder?

For it is there that the unconcocted moisture settles; for the bladder is a receptacle for any moisture which is not concocted in the stomach; and such moisture does not remain there, but passes away without undergoing or causing any change. But anything which partakes of the nature of earth, if it has medicinal properties, relaxes the stomach; for it is to the stomach that anything of an earthy nature is carried, so that, if it has any motive power, it causes a disturbance in the stomach.

Why is it that some things affect the upper part of the stomach, hellebore for example, others the lower part, for instance scammony, while others like elaterium and the juice of thapsia affect both parts? Is it because some of the drugs which affect the stomach are hot and others cold, so that some of them, owing to their heat, as soon as they reach the upper part of the stomach are carried thence to the upper region of the body, melting in particular anything there which is most alien to them and least substantial; and if the drug be powerful or has been administered in a dose stronger than nature can withstand, it carries these liquefactions and any excretions that there may be down into the

upper part of the stomach, and by its heat stirring up the breath, which it engenders in great quantity, checks their progress and causes vomiting? Drugs of a cold nature, on the other hand, owing to their weight are carried downwards before undergoing or causing any change and, borne thence, have the same action as those which affect the upper part of the body; for passing thence upwards through the ducts and setting in motion any excretions or liquefactions over which they prevail, they carry them with them in the same direction. Drugs which partake of both these kinds and are a mixture of hot and cold, possessing both qualities, have both these effects, and are the composite drugs which doctors now make up.

Why is it that drugs have a purgative effect, while other things, though they surpass them in bitterness and astringency and other such qualities, do not have this effect? Is it because the purgative effect is not due to these qualities but to the fact that they are unconcocted? For anything which, though small in bulk, owing to its excessive heat or cold is unconcocted and of such a nature as to overcome, and not be overcome by, animal heat, if it is easily dissolved in the two stomachs, is a drug. For when such drugs enter the stomach and become dissolved, they are carried into the vein by the ducts through which the food passes, and, not being concocted but themselves prevailing, they make their way out, carrying with them anything which gets in their way; and this is called purging. Copper and silver and the like, although they are not concocted by animal heat, are not easily dissolved in the stomach. Oil and honey and milk and other such foods have a purgative effect; but this depends, not on any quality which they possess, but on quantity; for, if they act as a purge, they only do so when they are unconcocted owing to their quantity. For things can be unconcocted for two reasons, either because of their quality or because of their quantity. So none of the above-mentioned foods are drugs, because they do not purge owing to their quality. Astringency and bitterness and unpleasant odour are characteristic of drugs, because a drug is the opposite of a food; for that which is concocted by a natural process amalgamates with the body and is called a food; but that whose nature it is to refuse to be overcome and which enters into the veins and causes disturbance there owing to its excess of heat or cold, this is of the nature of a drug.

Why is it that pepper if taken in large quantities relaxes the bladder, but if taken in small quantities affects the stomach, whereas scammony if taken in large quantities relaxes the stomach, but if taken in small quantities and when it is old affects the bladder? Is it because each has more effect on one part of the body?

For pepper promotes urine, while scammony is purgative. Pepper therefore if taken in large quantities is carried into the bladder and does not dissolve in the stomach, but if taken in small quantities it is overcome and relaxes the stomach and acts upon it as a drug. Scammony, on the other hand, if it is taken in large quantities, is overcome to such an extent that it is dissolved, and being dissolved it becomes a drug for the reason mentioned above; but, if it is taken in small quantities, it is swallowed with what is drunk and passes into the ducts and is quickly carried into the bladder before it can cause any disturbance, and there by its own force it carries off all the excretions and liquefactions which are on the surface. When it is taken in large quantities, as has already been remarked, owing to its strength it remains a long time in the stomach and effects an extensive purgation of the earthy element.

“ — Why do some cure by cooling the same inflammations which others bring to a head by heating them? Surely it is because the latter collect the inflammation by applying external heat, the former by cooling the heat already present in the body.

Why is it necessary to change poultices? Is it in order that they may be more felt? For as, in things which we eat, that to which we have grown accustomed no longer acts as a drug but becomes a food, so poultices lose their effect.

Why does it promote health to reduce one's diet and increase one's exercise? Is it because an excess of excretion causes disease, and this occurs when we take too much nourishment or too little exercise?

Why is it that drugs, and bitter and evil-smelling substances generally, have a purgative effect? Is it because any thing which is evil-smelling and bitter does not admit of concoction? Drugs therefore are bitter and evil-smelling; for they are drugs because, in addition to being bitter, they do not admit of concoction and can cause motion; and if they are administered in too large doses, they are destructive of life. But substances which are destructive of life even if given in small quantities are not drugs but deadly poisons. Nor again do we give the name of drugs to those substances which are not purgative through their natural qualities; for indeed many foods have the effect of drugs, if taken in sufficient quantity — milk, for example, and olive oil and unfermented wine; all these things, because they are not easily concocted, have a purgative effect on those by whom they are not easily concocted. For different things are easy or difficult of concoction to different people; and so the same things do not act upon every one

as drugs, but particular things act upon certain people. For, generally speaking, a drug ought not only to be difficult of concoction, but also ought to have the power to produce movement; just as also exercises, whether external or internal, expel alien matter.

Why is it that sweet-smelling seeds or plants promote the flow of urine? Is it because they contain heat and are easily concocted, and such things have this effect? For the heat in them causes quick digestion, and their odour has no corporeal existence; for even strong-smelling plants, such as garlic, promote the flow of urine owing to their heat, though their wasting effect is a still more marked characteristic; but sweet-smelling seeds contain heat.

Why is it that unclean and foul sores require to be treated with dry, pungent, and astringent drugs, while clean, healthy sores require moist, porous remedies? Is it because something must be drawn out from unclean sores, and it is foreign moisture which must be extracted? Now biting, pungent, and astringent substances have this effect, and the dry rather than the moist. Clean sores, on the other hand, only require to skin over.

Why is it that sexual excess is beneficial to diseases caused by phlegm? Is it because the semen is the secretion of an excrement and in its nature resembles phlegm, and so sexual intercourse is beneficial because it draws off a quantity of phlegm-like matter?

Is it better to give the patient nourishment at first or later? Ought nourishment to be given at the beginning, so that the inflammation, when it sets in, may not find the patient already weak? Or ought the patient to be reduced at once? Or ought the following to be the treatment, namely, that the patient should first take nourishment in the form of draughts, since food of this kind is milder and more readily swallowed and dissolved, and it is easier for a sick person to receive nourishment from this sort of food? For where the food has first to be acted upon in the stomach, — namely, both dissolved and heated — these processes cause pain to the body.

Why is it that, in order to examine urine to see if it is concocted, one must stop the flow of urine rather than continue to pass it? Is it because it is a sign of concoction if it is reddish in colour, and this is better detected if the flow is stopped? Or is it because anything that is liquid forms as it were a better mirror of its colour in a small than in a large quantity? For form is better discerned in a

large quantity, but colour in a small quantity, in dew, for example, and drops of rain and tears on the eyelids. If urine, therefore, is allowed to flow it becomes greater in quantity, but, if it is checked, it takes on colour more readily; and so if it has already taken on this character by concoction, this can be better observed if the flow of urine is stopped and light thus refracted and a mirror formed.

Why should the flesh be made rare rather than dense in order to promote health? For just as a city or locality is healthy which is open to the breezes (and this is why the sea too is healthy), so a body is healthier in which the air can circulate. For either there ought to be no excrement present in the body or else the body ought to get rid of it as soon as possible and ought always to be in such a condition that it can reject the excrement as soon as it receives it, and be in a state of motion and never at rest. For that which remains stationary putrefies (standing water, for example), and that which putrefies causes disease; but that which is rejected passes away before it becomes corrupt. This then does not occur if the flesh is dense, the ducts being as it were blocked up, but it does happen if the flesh is rare. One ought not therefore to walk naked in the sun; for the flesh thereby solidifies and acquires an absolutely fleshy consistency, and the body becomes moister; for the internal moisture remains, but the surface moisture is expelled, a process which also takes place in meat when it is roasted rather than boiled. Nor ought one to walk about with the chest bare; for then the sun draws the moisture out of the best constructed parts of the body, which least of all require to be deprived of it. It is rather the inner parts of the body which should be submitted to this process; because they are remote, it is impossible to produce perspiration from them except by violent effort, but it is easy to produce it from the chest because it is near the surface.

Why is it that both cold and hot water are beneficial to chilblains? Is it because chilblains are caused by an excess of moisture? If so, the cold water thickens and hardens the moisture, while the hot water causes it to evaporate and enables the vapour to escape by rarefying the flesh.

Why is it that cold both causes and stops chilblains, and heat both causes and stops burns? Is the cause the same in both cases, namely, that they cause them by setting up liquefaction and stop them by drying them up?

In fevers liquid nourishment ought to be administered often and in small quantities. For a large quantity flows away and is wasted, but a small quantity taken frequently sinks in and penetrates into the flesh. For as the rain, if it comes



down upon the earth in torrents, runs to waste, but, if it comes down in small quantities, merely moistens the ground; so the same thing occurs in fever patients. In irrigation, if the water is allowed to flow gradually, the channel sucks it up; whereas, if the same amount of water is allowed to flow all at once, it makes its way wherever it is directed.

Next the patient ought to lie as still as possible, because fire also obviously dies down if one does not stir it. And he ought not to lie in a draught, because the wind stirs up the fire, and, being fanned, it becomes great instead of small. For this reason the patient ought to be well wrapped up, because fire is extinguished if it is not allowed to draw in air; and the garments ought not to be removed until damp heat is present, for the fire if exposed to the air dries up the moisture — just as happens also in nature.

In the case of intermittent fevers one must make preparations beforehand by washing the patient and applying fomentations to his feet, and he must rest well wrapped up, in order that there may be as much heat as possible in him before the attack begins. For a flame will not be able to burn where there is a great fire; for the great fire will absorb the little fire. Consequently a great fire must be prepared beforehand in the body; for fever has but little fire in it, and so the great fire will absorb the little fire.

In quartan fevers the patient must not be allowed to get thin, and heat must be introduced and engendered in his body. Exercises must also be employed. On the day on which the attack is expected he must bathe himself and avoid sleep. A heating diet is beneficial, because a quartan fever is weak; for if it were not so, it would not occur only every fourth day. For, mark you, where there is a great fire, a flame cannot burn; for the great fire attracts and absorbs the little fire. For this reason it is necessary to engender great heat in the body, because fever has but little fire in it. The daily treatment consists in introducing at one time heat and at another time moisture into the body. Some diseases are caused by heat, others by moisture; those which are caused by heat are cured by moisture, and those which are due to moisture are cured by heat, for heat dries up moisture.

## **BOOK II. PROBLEMS CONNECTED WITH PERSPIRATION**

Why is it that perspiration is caused neither when the breath is expanded nor when it is held in, but rather when TO it is relaxed? Is it because, when it is held in, the breath fills out the veins and so does not allow the perspiration to escape,

just as the water in a water clock cannot escape if you turn it off when the clock is full? But when the perspiration does come out, it does so in great abundance, because it has gradually collected during the actual period that it has been checked.

Why is it that the parts of the body that are immersed in hot water do not perspire, even though they are themselves hot? Is it because the water prevents liquefaction, while perspiration is formed when matter which is not properly attached to the flesh is expelled by heat?

Why is perspiration salty? Is it because it is caused by movement and heat which rejects any foreign matter in the process by which nourishment passes into blood and flesh? For such matter quickly separates, because it has no affinity with the body, and evaporates externally. It is salty because the sweetest and lightest part of the food is taken up by the body, while the unsuitable and unconcocted part is discharged. This when it is excreted below is called urine, in the flesh it is sweat; both of these are salty for the same reason.

Why is it that the upper parts of the body perspire more freely than the lower? Is it because heat rises upwards and remains there, and this carries the moisture upwards? Or is it because breath causes sweat, and the breath is in the upper parts of the body? Or is it because sweat is unconcocted moisture, and such moisture resides in the upper parts because the process of its composition takes place there?

Why is it that sweat is produced most copiously if we exercise the arms while we keep the other parts of the body in the same position? Is it because we have most strength in this region of the body? For it is in this region, which is nearest to the strongest part of us, that we hold our breath; and we gain strength by violent exertion, and, having gained strength, we can hold the breath more easily. Furthermore, we feel the effect of friction more in the arm than when any other part of the body is rubbed; for it is by holding the breath that we get exercise, both when we are rubbed and when we rub.

Why is it that sweat given off from the head either has no odour or less than that from the body? Is it because air circulates freely in the region of the head? That

the head possesses rarity is shown by the fact that it produces hair. And it is those regions of the body and the substances of which they are composed through which the air does not circulate that are malodorous.

Why is it that those who take athletic exercise, if they wrestle after a period of rest, perspire more freely than if they wrestle continuously? Is it because the sweat collects while they are resting, and then the wrestling afterwards brings out this sweat? Continuous exercise, on the other hand, dries up the sweat, just as does the heat of the sun.

Why is it that one sweats more freely if one has not for a long time employed means to induce perspiration? Is it because sweat is not caused by moisture alone, but is also due to the fact that the pores are opened wider and the body becomes porous? In those, therefore, who take no measures to induce perspiration the pores become closed up, whereas if they do take such measures the pores are kept open. g Why is it that, although the sun warms those who are naked more than those who are clothed, the latter perspire more freely? Is it because the sun by burning causes the pores to close up? Or is it because it dries up the moisture? These processes are less likely to happen in those who are clothed.

Why is it that the face gives off the most perspiration? Is it because the sweat can find a way out through parts which are particularly porous and moist? Now the head seems to be the source of moisture, and it is owing to the presence of copious moisture that the hair grows; and the region of the head is rare and porous, and so the sweat naturally finds a way out.

Why is it that one perspires most freely, not when the heat is applied all at once or when it is gradually diminished, but when it is gradually increased? For those who are in vapour baths perspire under these conditions more freely than if all the heat be applied at once. Is it because it is the presence of anything in proper proportions which produces each required effect, and so, if it produces this effect, its presence in greater quantity will not produce a greater effect, or will rather produce the contrary effect, for it is because a thing is proportionate that it produces a certain effect? For this reason then increased perspiration is not induced as the result of greater heat; but because to each increment of heat there answers a different proportion, and that which has already produced its effect produces no greater effect, increased perspiration is rather the result of successive additions of heat. For it is not the same cause which prepares the way

and creates a favourable condition for a series of effects and then begins to produce the effect, but a different cause. So a small quantity of heat prepares the way and predisposes the body to perspire better than a large quantity; but another and a greater proportion is required actually to produce the perspiration, but this does not continue to produce the effect which it originally produced, but must be followed by another application of heat different again in its proportions.

Why does the sweat flow more freely if a scraper be used than if it be allowed to remain on the body? Is it because the presence of external sweat induces cooling? Or is it because the external sweat forms as it were a lid over the pores and so prevents the movement of the internal sweat?

Why is it that rue and certain unguents give the perspiration an evil odour? Is it because things which have a heavy scent, mixing with the excretory fluids, make the odour of these still more unpleasant?

Why do we perspire more on the back than on the front of the body? Is it because in the front of the body there is an interior region into which the moisture is drained, but this is not the case with the back, but there the excretion of moisture must be external? (It is for the same reason that we perspire less on the stomach than on the chest.) A further reason is the fact that the back and hinder parts hold the perspiration more than the front, because the latter become more cooled than the former. (This is the reason too why the armpits perspire most readily and freely; for they are least subject to cooling.) Further, the regions about the back are fleshier than those in front and therefore moister; and there is more moisture in the hinder parts, because the marrow in the spine causes considerable humidity.

Why is it that we do not perspire in those parts of the body on which we are lying-? Is it because the area with which we come into contact with anything is hot and therefore prevents the perspiration from passing forth, for it dries it up? Furthermore it is compressed, and pressure causes the blood to disperse, and, when this happens, the part tends to become cool. This can be illustrated from numbness, which is a condition due to cooling and is caused by pressure or by a blow.

Why do those who are asleep perspire more freely? Is it due to the heat being driven inwards? For the heat collects a inside and expels the moisture.

Why is it that one perspires most freely on the face, though it is far from being fleshy? Is it because parts which are rather moist and rare perspire freely, and the head has these characteristics? For it possesses an abundance of natural moisture; this is shown by the veins which extend from it and the discharges which it produces and the brain-fluid and the numerous pores. That there are numerous pores extending outwards is shown by the presence of the hair. The perspiration then comes not from the lower parts of the body but from the head; and so one perspires most readily and freely on the forehead, for it is the first thing below the top of the head, and moisture flows down and not up.

Why is it that those who are perspiring are apt to vomit if they are cooled either by water or by air? Is it because the moisture when cooled ceases to move and collects together, whereas before it was not at rest because it was in a state of flux? Or is it because the breath which turns into perspiration by being cooled as it passes out, being cooled internally before passing out turns into moisture and attacking the body causes vomiting?

Why is it that sweat is given off from the head and feet of those who are heated more freely than from any other part of the body? Is it because the part which is heated attracts the moisture to itself, and the moisture has nowhere where it can expend itself in these regions of the body, because they are bony, and therefore it finds its way out?

Why do those who exert themselves perspire when they cease to exert themselves? For since the exertion is the cause, they ought to perspire while they are exerting themselves. Is it because during their exertion the veins, being inflated with breath, cause the pores to close up, whereas, when they stop, the veins contract, and so the pores become wider and the moisture finds an easier outlet? Or is it because during the exertion the motion expels air from the solidified moisture and, owing to the heat caused by the motion, the moisture becomes breath on the surface of the body; while on the other hand, when the exertion ceases, the heat also stops at the same time, and then the moisture, which we call perspiration, is generated from the condensation of the breath?

Is it more necessary to induce perspiration in the summer or in the winter? Is it not more necessary to do so at a time when, unless care be taken, the body would become too moist and in a dangerous condition? If so, it would be more necessary to perspire in the summer, when a violent change takes place in the body and the excretions are not thoroughly concocted. Again in the winter, since

the body is cool, it is also unnatural to perspire. It is clearly, therefore, more necessary to induce perspiration in the summer; for moisture of all kinds is then more apt to putrefy and should therefore be drawn off. This was the opinion of all the ancients and for the above reason.

Why is it that, although the body is in a state of continual flux, and effluvia are given off from the excrements, the body is only lightened if it perspires? Is it because the excretion in the form of effluvia is too little? For when liquid is transformed into air much air is formed out of little liquid; for what is excreted in liquid form is more abundant. The process of excretion, therefore, takes longer to begin, both for the above reason and because the excretion takes place through smaller pores. Further, the viscous and adhesive matter is expelled with the moisture, because it mingles with it, but it cannot be expelled with the breath; and it is this thick matter in particular that causes pain. Therefore also vomiting lightens the body more than sweating, because that which is vomited, being thicker and more substantial, carries away this viscous matter with it. Or is there a further reason, namely, that the region in which the viscous and the adhesive matter is, is situated at a distance in relation to the flesh (and so it is difficult to make it change its position), but near the stomach? For it is engendered either in or close to it; and therefore it is difficult to get rid of it in any other way.

Why is it that one perspires less during actual exertion than when one ceases? Is it because while one is exerting oneself one is engendering perspiration, but the process of engendering it is only complete when the exertion is ended?

This then is naturally the time when it is expelled from the body in greater quantities; for during exertion it is coming into being, but, when the exertion is finished, it actually exists. Or is it because during exertion the pores of the flesh are closed, because the breath is held, but when the pressure of the breath is relaxed the pores open again? Consequently one perspires less when one is holding the breath.

Why is it that perspiration is more copious not when one is running and the body is in motion, but when one stops? Is it because the same thing happens as when flowing water is checked by the hand or by some other means and collects from every direction, and, when it is released, flows in greater volume than before; so perspiration can be stopped by the breath — like water in a water clock — and also in the bladder, which keeps the moisture within. So too, while there is

considerable movement, the breath is cut off inside the body, and so the veins are distended, the moisture being unable to find its way out. The moisture then, being cut off, collects, and when the breath is relaxed comes all out at once.

Why is it that, when one is drinking, one perspires less if one eats something as well? Is it because the food sucks up the moisture, as though a sponge were applied, and, just as a stream can be stopped by blocking up its channels, so by stopping the pores through administering food it is possible to a large extent to prevent the flowing of moisture?

Why is that the feet of those who are nervous perspire and not the face? For it would be more natural that the feet should perspire only when the whole body perspires; for the feet are the coldest region of the body and therefore least liable to perspire. Also in sickness physicians order the feet in particular to be wrapped up, because they are especially susceptible to cold and so readily give rise to cold in the rest of the body also. Is it because nervousness does not cause a displacement of heat — such as takes place from the upper to the lower parts of the body under the influence of fear (hence the relaxation of the bowels in those who are alarmed). — but an increase of heat such as is caused by anger? For anger causes the heat round the heart to boil up; and one who is nervous is affected not by fear or cold, but by an increase of heat.

How is it that one can become red in the face without perspiring? Is it due to excessive warmth which results in the heat on the surface drying up the moisture in the face, whilst it liquefies the moisture in the feet because, though less than the heat on the surface, it is more powerful than the natural heat already existent in the feet?

Why is it that we perspire more when asleep than when awake? Is it because perspiration originates internally, and the interior parts of the body are hotter, and so the internal heat melts and expels the internal moisture? Or is it because in all probability there is always something given off from the body, but it is not apparent because there is nothing with which it can come into contact and by which its escape can be arrested? That this is so is shown by the fact that the hollow parts of the body perspire continually.

Why is it that persons in vapour baths perspire more freely when it is cold? Is it because the heat does not find a way out, because it is surrounded by the cold, which prevents its exit, but collects internally, and, remaining there, dissolves

the moisture in our body and engenders perspiration from it?

Why is it that perspiration, even though it be less ° profuse, is more beneficial if it be induced by running naked rather than clothed? Is it because exertion in general is better than non-exertion, and perspiration which is induced by exertion is better than that which is produced without exertion, and that which is due in a greater degree to exertion is better than that which is due in a less degree? Now perspiration involves more exertion if induced by running about naked: for a naked man cannot perspire at all unless he runs with considerable energy; whereas, if he be clothed, owing to the heat produced by his garments, he soon perspires although he runs only moderately fast. Those too who run naked in the summer have a healthier colour than those who wear garments; for just as those who live in regions open to the air have a better colour than those who live in a stifling atmosphere, so too a man, when he is as it were in a well-aired condition, acquires a better colour than when he is stifled and surrounded by considerable heat, as he is more likely to be when he runs clothed.

For this reason too those who sleep much have a less healthy colour than those who sleep a moderate amount; for a man who is asleep is in a stifled condition.

Why is it that our feet perspire, but not our faces, when we are in a state of nervousness, whereas under ordinary conditions our faces perspire most and our feet least? Is it because nervousness is a kind of fear connected with the beginning of an action, and fear causes a cooling in the upper part of the body; this is also why those who are nervous are pale-faced. On the other hand they move and dance their feet about, thus resembling those who are taking exercise; therefore they naturally perspire in those parts which they are exercising. Also they rub their hands together and bend and stretch themselves and keep jumping up and can never remain still; for they are eager for action, because the heat within them is collected in the region of the chest, which is one of the more substantial parts of the body, and this heat and the blood rushing thence through their whole body results in frequent and varied movement. But they perspire most in the feet, because these are being continually exerted, whereas the other parts of the body obtain rest in the changes of position and movement.

Why is it that in a vapour bath one perspires most freely not when the heat is applied all at once nor when it is gradually diminished, but when it is gradually increased? For if the heat is gradually introduced into the vapour bath, one perspires more freely than if the full amount were admitted at first. Is it because



heat which is great from the beginning, finding the flesh on the surface dry, burns the skin and bakes it hard, and the flesh when it is in this condition holds the perspiration within? Less heat on the other hand tends to relax and rarefy the flesh and as it were stimulates the internal moisture to separate itself and come forth. This condition being established, when more heat is gradually introduced and penetrates deep into the flesh owing to its rarity, it vaporizes the already softened humours and separating those which are light expels them with the breath.

Is it more necessary to induce perspiration in the summer I or in the winter? In winter does not the heat collecting within the body concoct and vaporize our internal humours, and so, because all or most of them are expended, there is no need to supply an appropriate method of expelling them? In the summer, on the other hand, because the flesh is in a state of rarity, the heat escapes and our internal humours become less concocted and therefore need to be drawn off. For if they are allowed to remain, they putrefy owing to the season and cause disease; for anything that putrefies does so owing to heat that is not its own, whereas its own natural heat causes concoction. Consequently in the summer the external heat prevails, and so everything within the body tends to putrefy; but in the winter the natural heat predominates, and so the winter does not cause putrefaction.

Why is it that, whereas perspiration is due to internal heat or else to heat attacking the body from without, yet we sometimes shiver while we perspire? Is it because, when owing to the internal heat the perspiration is expelled from a large area into a small space, it collects on the surface of the body and entirely blocks up the channels through which the heat circulates, and so shivering ensues? Another reason is that the flesh becomes saturated and the heat escapes. On the other hand the external heat attacking the flesh at first rarefies it, and then the internal natural heat as it is given off causes the shivering.

Why are hot sweats considered to be better than cold? Is it because all perspiration is the rejection of some excretion, and it is natural that a small excretion should become heated, whereas a more abundant excretion is less likely to do so, and so a cold sweat would be an indication of a copious excretion; consequently the disease, the presence of which so it indicates, is likely to last longer?

Why is it that, although perspiration is caused by heat, we perspire less in front

of a large fire? Is it because, when the body is subjected to considerable heat, the humours are dissolved into vapour; or else we do not feel the moisture, because it makes its way out and quickly dies on the surface?

Why is it that, though the sun heats us more if we wear no clothing, yet we perspire more freely when we are clothed? To this we shall give the same answer as to the last problem.

Why is it that, though brisk movements are generally regarded as more heating than slow movements, walking <sup>o</sup> up a steep hill, which is a slower movement, induces more perspiration and obstructs the breathing, as though it were more heating than walking down hill? Is it because it is natural for weights to be carried downwards and unnatural for them to be carried upwards? Consequently the nature of the heat which carries us along does not undergo any strain when we are going down hill, but has to bear a continual burden when we are walking up hill; and so it grows exceedingly hot by movement of this kind and causes more profuse perspiration and obstructs the breath. The bending, too, of the body involved in walking up hill contributes to prevent the free passage of the breath by obstructing it.

Why is it that, although more perspiration is induced by additional clothing, it is not those who wear most clothing that perspire most? To this question we shall give the same answer as we gave above.

Why is it that, although our bodies are drier in the summer than in the winter, we are more disposed to perspire in the summer? Is it because, our bodies being in a condition of rarity in the summer, not much natural heat is contained in them? This, therefore, dissolves the humours into vapour. In the winter on the contrary, our bodies being externally in a dense condition, the considerable amount of natural heat enclosed within does not dissolve the humours into vapour. Moreover, in the summer we swallow liquid in large quantities, but in small quantities in the winter. exertion? Is it because exertion continually drains off the superfluous moisture and makes the flesh drier, so that the hollows of the pores are healthy and there is no obstruction to the straining off of the heat? On the other hand the so-called spontaneous perspiration (which really occurs of necessity when the natural pores are disturbed by excessive moisture, and the heat is not completely retained, but can still resist and expel the moisture) is rightly regarded as a sign of disease. For then, owing to the presence of a more than proportionate amount of moisture, a natural process of cooling takes place,

and the flesh becoming saturated assumes a most unhealthy condition.

Why is it that in the winter perspiration is given off less freely and we do not feel the same desire to induce it, although our bodies are moister in the winter? Do we perspire less, because in winter our humours are congealed and solidified to a considerable extent, and are consequently less easily dissolved? The reason why we do not think it necessary to induce perspiration in the winter is because the condition in which we are is a healthy one, and any one who induces perspiration dissolves and upsets that condition; moreover, by creating in the body a condition of greater rarity than it ought to have, he expels and reduces the natural heat, so that it cannot so effectively resist the surrounding cold; also external moisture will more easily burst its way into the body when the pores are rarefied by process of perspiration.

### **BOOK III. PROBLEMS CONNECTED WITH THE DRINKING OF WINE AND DRUNKENNESS**

WHY is it that, though wine is hot, the drunken are unable to endure cold and are very readily attacked by pleurisy and similar diseases? Is it because a large quantity of moisture, if it be cooled, forms a mass of cold and so overpowers the natural heat? For this is similar to what happens when, if a garment is soaked in cold water, the flesh beneath it also becomes cold.

Why is it that it is not those who are very drunk that are most troublesome in their cups, but those who are only slightly intoxicated? Is it because they have neither drunk so little that they still resemble the sober nor so much that they are in the incapacitated state of those who have drunk deep? Further, those who are sober have more power of judgement, while those who are very drunk make no attempt to exercise their judgement; but those who are only slightly intoxicated can still exercise their judgement because they are not very drunk, but they exercise it badly because they are not sober, and they are ready to despise some of their neighbours and imagine that they are being slighted by others.

Why is it that those who drink slightly diluted wine suffer more from the after effects than those who drink wine absolutely unmixed? Is it because owing to its lightness diluted wine penetrates better into more numerous and narrower parts of the body than unmixed wine, and so is less easy to get rid of? Or is it because those who drink unmixed wine drink a less quantity, because it is impossible to drink more, and vomit more readily? Furthermore unmixed wine, being hotter,

causes concoction in other things and in itself; whereas watery wine has the opposite effect.

Why is the semen of drunkards generally infertile? Is it because the composition of their body has become full of moisture, and the semen is fertile not when it is liquid but when it has body and consistency?

Why do drunkards tremble, and more so the more they drink unmixed wine? Now wine is heating; but trembling is chiefly due to cold, and so those who are chilled tremble very much. Yet many people before now, who have taken unmixed wine as their only form of nourishment, have been seized with such violent trembling as to throw off those who were trying to hold them down; and when they wash in hot water, they have no perception of it. Is it because trembling is due to cooling, and cooling takes place either when the heat is driven within by external cold, as happens in winter, or when the natural heat is extinguished either by its opposite or by lapse of time, as in old age, or by the excess of extraneous heat which is caused in that which is exposed to the sun or to a blazing fire? This occurs also in those who take unmixed wine. The wine, being hot, when on mingling with the proper heat of the body it exceeds it in power, quenches the bodily heat; and the heat being thus extinguished and the body cooled, trembling ensues. But there is also another process of cooling differing from all those described above; namely, when the matter whereby the heat in anything is fed, is removed, and, as a result, the heat dies down. This can be illustrated in the inanimate world from the lamp; for when the oil is expended, the light goes out; and in living beings old age and long, wasting diseases have a similar effect. For when that which feeds the heat is removed or diminished, the result is that the heat fails; for heat is fed by moisture, not, however, by any kind of moisture but by that which is smooth and fat. In those, therefore, who are suffering from the diseases mentioned above and in those who are growing old, when moisture of this kind becomes corrupted and changed (becoming harsh and dry instead of smooth and oily), as a result the heat fails. A proof of the above is afforded by the treatment applied to those who are wasting to death; for, whenever they have any nourishing liquid administered to them, the result is that their vitality is revived, which implies that their bodily dissolution is due to the lack of such a substance. The same cause seems to operate in those who drink unmixed wine. For the wine, being warm, co-operating with the heat already naturally present in the body, tends to use up the supply already present in the body for the natural heat; consequently some drunkards become dropsical, others rheumatic, whilst in others the stomach is

affected. For the other humours in them are harsh, and what they imbibe, being soft, does not acquire consistency owing to the weakness of the natural heat. Their heat is weak because the matter in which it is still contained is itself weak; like a fire fed by reeds, which, because its material is weak, is weaker than a wood-fire.

Why is it that, though wine is hot, the drunken are unable to endure cold and are very readily attacked by pleurisy and similar diseases? Is it because a large quantity of moisture, if it be cooled, forms a mass of cold, and so overpowers the natural heat? Now the moister anything is the hotter it is by nature, as is shown by the fact that external agencies cause heat but do not cause liquefaction; but where there is less heat, it is clear that either the heat or the moisture is failing too quickly, and so, cold humours only being left, it is natural that the drunken should be colder and show the usual symptoms of chill.

Why is it that children, who have a hot temperament, are not fond of wine, although the Scythians and all who are courageous are fond of wine because they have a hot temperament? Is it because the latter, though they are hot, are also dry (for this is the natural condition of a man), whereas children are hot and moist? Now fondness for drink is due to a desire for moisture; and so their moist condition prevents children from being thirsty, for desire implies a lack of something.

Why is it that men are more sensitive to salty and bad o — water when they are drunk than when they are sober? Is it because that which is like and similarly constituted is unaffected by its like, but opposites are very sensitive to opposites? A drunken man then has sweet liquids in him (for such seems to be the nature of wine), and so is more sensitive to bad liquids; but the sober man has harsh and salty liquids in him, and so, when his food becomes concocted, the excretory humours come to the surface and these are unaffected by their like and cause the man in whose body they are to be similarly unaffected.

Why is it that to those who are very drunk everything seems to revolve in a circle, and as soon as the wine takes hold of them they cannot see objects at a distance, and so this is used by some as a test of drunkenness? Is it because the vision is continually disturbed by the heat of the wine?

It makes no difference then whether it is the vision that is disturbed or the object seen; for the result is the same in producing the above-mentioned effect. And

since the vision of drunken persons is often mistaken about objects near at hand, it is only natural that it should be even more so in looking at distant objects. So the latter are not visible to them at all, while objects near at hand are not seen in their proper places, but appear to revolve in a circle and not to be near or far, because, firstly, the circular motion makes it less possible for the sight to be directed towards distant objects; for it is difficult to do two contrary things at the same time. Now the movement of the sight in a straight line towards the distance is strong, but the circular movement of the vision is restricted to the area implied by its name. For the above-mentioned reasons then the vision does not travel to a distance. Secondly, if it could travel to both near and distant objects, it would not see them, for the next moment the near or distant object at which it was looking in the same direction would fail, and, if it did so, the eye could not see it. The circular movement is due to the natural constitution of the sight; for it is a cone, the base of which is a circle, and, moving in this circle, the sight always sees the same thing, because it never fails, but it is deceived as to its position, because it never directs the same glance upon it; for just the same thing would happen whether the object moved in relation to the eye or the eye in relation to the object.

Why is it that to those who are drunk one thing at which they are looking sometimes appears to be many? Is it because, as has already been remarked, the vision is disturbed, with the result that the same glance does not rest on the same object for any length of time? Now that which is seen differently at the same time appears to exist later in time; for that which is seen is seen by contact with the vision, and it is impossible for several objects to be in contact with the same thing at the same time. But because the intervening time, during which the vision comes into contact with and passes away from the object seen, is imperceptible, the moment during which it has been in contact and passed away seems to be one and the same; and so when several glances come into contact with the same object at the same time, the objects seen appear to be several, because it is impossible for the glances to be in contact with the same thing at the same time.

Why is it that those who are drunk are incapable of having sexual intercourse? Is it because to do so a certain part of the body must be in a state of greater heat than the rest, and this is impossible in the drunken owing to the large quantity of heat present in the whole body, for the heat set up by the movement is extinguished by the greater surrounding heat, because they have in them a considerable quantity of unconcocted moisture? Furthermore the semen is derived from food and all food is concocted, and those who are satiated with

food are more inclined for sexual intercourse. This is why some people say that with a view to the sexual act one ought to take a plenteous midday meal but a light supper, so that there may be less unconcocted than concocted matter in the body.

Why is it that sweet wine and unmixed wine and mead if drunk from time to time during a drinking bout make men more sober? And why do those who drink from large vessels become less drunk? Is the reason in all cases the same, namely the repression of heat on the surface of the body? For drunkenness takes place when the heat is in the region of the head.

Why is it that, though that which is sweet tends to rise to the surface, if any one who is already drunk takes a sweet draught the wine which he has drunk before is concocted and causes less discomfort? Is it because that which is sweet is both soothing and adhesive (which is the reason why it blocks up the pores), while that which is bitter has a roughening effect? The latter makes it easy for the heat ! to rise, but the sweet draught keeps it in by blocking up the pores; and it has already been remarked that drunkenness is due to the upper parts of the body becoming heated. Furthermore sweet wine is odourless, but bitter wine is not, and any odour oppresses the head.

Why is it that wine which is mixed but tends towards the unmixed causes a worse headache the next morning than entirely unmixed wine? Is it because unmixed wine is composed of heavy particles and so does not find its way into the pores of the head, which are narrow, but only its power, namely its odour and heat, reaches the head? Diluted wine on the other hand, being mixed with water, which is light, itself penetrates to the head and having body, as well as much of the power of unmixed wine, is much less easily concocted; for moist things are most difficult of all to concoct, and actual substances are more difficult of concoction than mere effects.

Why is it that those who do not take physical exercise are better able to drink themselves into a condition of drunkenness, and throw it off more easily, than those who take such exercise? Is it because those who have excretions and moisture in their bodies are more inclined to pass urine? This enables them to drink and afterwards to be relieved of the effects, because much vinous moisture does not remain in them. Those who take no exercise are moist and full of excretions; but those who do take exercise are dry, and so the vinous moisture penetrates into their body, and its impetus immediately checks the flow of urine,

and the moisture remaining afterwards behind forms a weight in the body.

Why has wine the effect both of stupefying and of driving to frenzy those who drink it? For these are contrary states, the frenzied being in a state of excessive movement and the stupid in a condition of too little movement. Is it true, as Chaeremon says, that

Wine mingles with the temper of the drinker?

It therefore has the opposite effect not on the same but upon the unlike, just as fire dries up some things but liquefies others, but does not have both these effects on the same things — for instance it melts ice, but hardens salt. So wine, being in its nature moist, excites the slow and makes them quicker, while it enervates the quick. Therefore some of those who are naturally of a melancholic temperament become entirely enervated as the result of a drunken debauch. For just as a bath makes supple those who have a well-knit and hard frame, while it relaxes those who are supple and moist, so wine has this effect, acting as an internal bath.

Why is it that cabbage stops the ill effects of drinking? Is it because its juice is sweet and has a cleansing effect (and so doctors use it to purge the bowels), while in itself it is cold? This is shown by the fact that doctors use it in cases of acute diarrhoea, boiling it thoroughly and draining off the juice and letting it cool. In those who are suffering from the after effects of drinking the effect of the juice of cabbage is to draw off the internal humours, which are vinous and unconcocted, into the stomach, whilst the cabbage itself remains in the upper part of the stomach and cools the body. As the body cools, the light humours are carried into the bladder. Thus since the humours throughout the body are expelled by these two methods and it becomes cool, the ill effects of drinking naturally vanish; for wine is moist and hot. A further result of the humours being drawn downwards and expelled is that breath is thereby carried down into the body, and it is only from there that breath can be carried from the wine into the head and cause stupor and headache. But if the breath is carried downwards and the body cooled in the manner mentioned above, the pain of the headache is relieved. For the headache is due to a seething and to inflammation as it dies down; but it is more painful than drunkenness, because the latter drives men out



of their senses, but the headache causes them pain when they are in full possession of their wits. Just as those who are in a fever are delirious rather than in pain, but feel pain when they are relieved of the fever and recover their senses; for just the same thing happens with headache and drunkenness.

Why is it that watery wine is more apt to cause vomiting than water and than unmixed wine? Is it because anything that tends to rise to the surface and is unpleasant to the taste is most likely to cause vomiting? Now wine has the effect of repression; while water is light and not unpleasant, and, therefore, being light it quickly penetrates downwards, but, not being unpleasant, it does not cause heartburn. Now excessively diluted wine is not light enough to percolate through quickly, and because it has ° a little wine in it, it is unpleasant; for it disturbs the sense of taste by setting up two kinds of movement, one produced by the wine and the other by the water, both of which make themselves felt. But the proper mixing of wine does away with the taste of water and gives the wine a soft taste, which makes it pleasant to drink. But watery wine, being unpleasant to the taste, has a tendency to rise, and anything which does this is apt to cause vomiting.

Why is it that men are more sensitive to salty and bad water when they are drunk than when they are sober? Is it because anything which has an unpleasant taste is more perceptible to those who feel no desire, but is not noticed by those who feel desire? A man therefore who is in a state of lacking something resembles one who feels a desire, and the sober man is in this condition; whereas the drunken man is satiated.

Why is it that to those who are very drunk everything seems to revolve in a circle, and as soon as the wine takes hold of them they cannot count objects at a distance, and so this is used by some as a test of drunkenness? Is it because the vision is continually disturbed by the heat of the wine? The same thing then happens to those who are drunk as when an object appears double if one puts it close to the eye. For it makes no difference if you move the eye instead of putting the object close to it, and whether the movement is within the eye or outside it; for the effect on the vision is the same in both cases. The result will be that the object seen appears not to be at rest, and more so if it is at a distance (for it has less hold upon the vision when the latter is extended to a distance); and this near movement causes a still greater variation at the farthest point to which the eye reaches; and if the vision is moved violently and unevenly up and down, it has still less hold upon the distant object. Now anything which is extended to a distance moves in a circle, masts, for example, and objects suspended; and so the

same thing happens to the vision owing to its weakness, as though it were actually projected to a distance. It makes no difference whether it is the vision which moves or the object seen; for the effect on the appearance of the object is the same.

Why is it that, when a quantity of wine is drunk at once, the stomach becomes drier, whereas it ought to be rendered moister by the additional liquid? Is it because the stomach has no action upon a large amount of liquid swallowed at once, but it goes unaltered to its proper place (and the proper place for unconcocted liquid is the bladder), whereas the stomach acts upon a small quantity and concocts it, so that it remains in the stomach and makes it moist?

Why is it that those who drink wine properly diluted suffer more from the after effects than those who drink unmixed wine? Is it because diluted wine, being light, finds its way into more parts of the body (just as it penetrates into clothing), and is more difficult to expel (water by itself being of a thinner consistency but easier to expel)? Or is it because the amount of unmixed wine which is drunk is less because of the impossibility of drinking a large quantity, and there is more liability to vomiting? Moreover unmixed wine concocts everything else as well as itself.

Why is it that death ensues from the drinking of unmixed wine in large quantities by one who is already in a lean condition? On the other hand, those who are addicted to drinking, if they are not in a lean condition, often become dry from drinking a large quantity at a time; for both wine and life seem to be of the nature of hot things, whereas death is a process of cooling. Is it because death by drinking resembles death by hemlock, the natural heat being gradually extinguished? But the process is different in the two cases; for hemlock by its coldness congeals the moisture and heat, whereas wine by its own heat parches up the natural heat. So just as a small fire is extinguished by a large blaze and by the heat of the sun, so too the heat in the body is extinguished by that in the wine, if the latter surpasses it in strength.

Why are the drunken more easily moved to tears? Is it because they become hot and moist, and so they have no command over themselves and are affected by trifling causes?

(Why is it that sweet wine and unmixed wine and mead if drunk from time to time during a drinking bout make men more sober? And) why do those who

drink from large vessels become less drunk? Is the reason in all cases the same, namely the repression of heat; that is to say, on the surface of the body? For drunkenness takes place in the region of the head.

(Why is it that those who drink much unmixed wine fall asleep easily?) Is it because to induce sleep warm moisture must be present, for it is easily concocted? But if no moisture is present, or only a little, or moisture which is difficult of concoction, sleep does not come on. Therefore men become sleepest when they are fatigued and after meat and drink, owing to the heat. But sleeplessness afflicts the melancholic and those who are in a high fever, the former because the moisture in them is cooled, the latter because there is little or no moisture in them; these facts must clearly be looked to as the causes of sleeplessness in these two cases.

Why do drunkards tremble, and the more so the more they drink unmixed wine? Now wine is heating, and trembling is chiefly due to cold; and so it is principally those who are chilled that tremble. Yet many people before now who have taken unmixed wine as their only form of nourishment, have been seized with such violent trembling as to throw off those who were trying to hold them down, and when they wash with hot water they have no perception of it. Others who live in this way, but also undergo massage and take meat as part of their diet, have been stricken with apoplectic seizures; these are less subject to trembling, because they are unable to move, but they suffer from violent pain and an inability to rest. Trembling is due to cooling; for, as has been remarked, it is those who are chilled who suffer from it and the very old, the cause being in the former their cold condition, in the latter their age. Wine, on the other hand, is very heating; so that it ought to have the opposite effect. Is there any reason why the same effect should not be produced by contraries working in a different manner?

For example, burning is caused both by frost and by heat, when the frost collects the heat in one place. Thus there is a sense in which the same condition is produced both by contrary causes and by the same cause. Now trembling is due to lack of heat, — not, however, of any kind of heat, but of natural heat. Heat perishes either by dying down or by being extinguished; it is extinguished by its contraries, cold and moisture, and it dies down either through lack of material, as lamps do when they have no more fuel or oil, or under the influence of external heat, as the fire goes out in the sunlight and lamps when they are exposed to the fire. Those then who are chilled tremble because the heat in them is extinguished by the cold. This is why the pouring of hot water over a person makes his hair

bristle; for the cold being enclosed within and being compressed causes the hair to stand on end. The coldness of one who is beginning to suffer from fever is due to a like cause. In old age the heat dies down because the material which feeds it fails; for moisture is the food of heat, and old age is dry. Now it is because their own heat dies down that drunkards tremble and any others in whom this effect is produced by wine; but they do not do so in the same way as those who tremble from old age, but there is, as we saw, a third way in which the heat is destroyed. For when too much wine is taken, the heat being considerable in the body extinguishes or weakens our own heat, in which our strength consists; for trembling arises when the motive power loses control over that which it moves, just as the extremity of a long and large piece of wood trembles if one has not a good hold upon it, and this happens because either that which is being held is too large or that which is moving it is too weak. So, when the heat is extinguished (for heat appears to be the cause of motion in animals), the natural control of the body is lost. That this condition is induced in drunkards and the aged by a process of cooling is proved by the fact that the trembling is unaccompanied by chill.

Why is it that one who is slightly intoxicated is more troublesome in his cups than one who is more drunk and ° than the sober man? Is it because the sober man exercises his judgement properly, whereas one who is quite drunk, because his senses are blocked up, being unable to resist the heaviness which oppresses him, cannot exercise his judgement at all, and, this being so, he is not troublesome in his cups? But he who is slightly intoxicated uses his judgement, but, owing to the wine which he has drunk, he uses it amiss, and so is troublesome in his cups. He is like Satyrus of Clazomenae, who was given to abuse, and so when he was defendant in a lawsuit, in order that he might speak to the point and not abuse his adversary, they stopped up his ears, so that he might not hear anything and become abusive; but as his adversary was finishing his speech, they uncovered his ears, and he, hearing a few words at the end of the speech, could not restrain himself and began to revile him, because he could use his senses ° but could not use his judgement aright.

Why is it that men do not become drunkards by being addicted to sweet wine, which is pleasanter to the taste?

Is it because sweet wine possesses a flavour other than that of wine? He then who is addicted to sweet wine will be a lover of what is sweet rather than of wine.

Why is it that drunkards take a particular delight in the warmth of the sun? Is it because they need concoction? Another reason is the fact that they are cooled by the wine; which is also a reason why apoplectic seizures and torpidity very readily occur after drinking.

Why is it that drunkards when looking at a single object sometimes see several objects? Is it because the sources of vision (like the whole head) are disturbed internally by the wine, and, this being so, the vision of the two eyes cannot meet at the same point, but as it were moves to different parts of the object seen; consequently the object appears to be two? The same thing happens if one presses one eye from below; for this disturbs the source of its vision, so that it no longer falls upon the same point as the other eye. This then is an external disturbance, while that caused by wine is internal; but there is no real difference, the effect being the same whatever the cause of the disturbance.

Why is it that the tongue of those who are drunk stumbles? Is it because, just as the whole body staggers in drunkenness, so also the tongue staggers and stumbles and cannot articulate clearly? Or is it because the flesh of the tongue is spongy? It therefore becomes saturated and swells up, and when this happens it is more difficult to move, owing to the thickness caused by its increased bulk, and it cannot articulate distinctly. Or is it because, just as we cannot speak under water through lack of air, so we cannot speak when we take liquid into the mouth?

So in a state of drunkenness we cannot articulate because the tongue is surrounded by a large quantity of moisture; for a stumbling speech is due to inability to articulate.

Or is it because in drunkenness the mind is affected and stumbles? If the mind is in this condition, it is only natural that the tongue should suffer likewise; for the mind is the source of speech. This is why, apart from drunkenness, if the mind is affected, the tongue is affected also, as for example in those who are frightened.

Why is it that drunkards and those who have to do with the sea delight in the sun? Is it because drunkards require concoction and at the same time certain parts of their bodies have become cooled? This is why apoplectic seizures and torpor follow after drinking. Those who have to do with the sea like the sun because they live always amid moisture.

Why is it that those who are drunk are incapable of having sexual intercourse? Is it because to do so a certain part of the body ought to be in a state of greater heat than the rest, and this is impossible in the drunken owing to the large quantity of heat in them; the heat therefore caused by the movement is extinguished, being heated by the surrounding heat? Or is it because for sexual intercourse the lower parts of the body must be heated, whereas wine naturally rises upwards and so creates heat in the upper parts and withdraws it from the lower parts? Also people are least inclined for sexual intercourse after food and are recommended to take a heavy midday meal and a light supper with a view to it, for the heat and moisture move upwards when the food is unconcocted and downwards when it is concocted; and the semen is formed from concocted food. Those who are fatigued emit semen during JO sleep, because fatigue is a moist and hot condition; if therefore the excretion takes place in this part of the body, the result is that semen is emitted during sleep. This also occurs for the same reason in certain forms of illness, and likewise in those who are frightened and in the dying.

Why is it that the young wet their beds more, when they are drunk, than the old? Is it because they are hot and moist, and so the excretion which collects is abundant, because the body does not expend the moisture, and so it overflows; but as they become older, the body owing to its dryness absorbs the excess of moisture? Or is it because the young are more inclined to sleep than the old? Consequently, without their being aware of it, the flow of urine finds its way out while they are asleep, before they can wake up, whereas the old are aware of it, just as they are more alive to any external movement than the young. This is confirmed by the fact that the young themselves wet their beds most when they are most sound asleep.

Why is it that oil is beneficial against drunkenness and sipping it enables one to continue drinking? Is it because it promotes the flow of urine and so prepares a way for the liquor?

## BOOK IV. PROBLEMS CONNECTED WITH SEXUAL INTERCOURSE

WHY is it that one who is having sexual intercourse, I and also a dying person, casts his eyes upwards, while a sleeper casts them downwards? Is it because the heat going out in an upward direction makes the eyes turn in the direction in which it is itself travelling, whereas during sleep the heat collects in the lower part of the body and so inclines the eyes downwards? The eyes close because there is no moisture left in them.

Why do the eyes and flanks of those who indulge too frequently in sexual intercourse sink very noticeably, though the latter are near and the former far from the sexual organs?

Is it because these parts co-operate very noticeably in the effort made in the act of coition, contracting at the time of the emission of the semen? It is from these parts then in particular that any easily liquefied nourishment which is present there is squeezed out by the pressure. Or is it because these parts become overheated and waste away most, and sexual intercourse operates through heat, and those parts are most heated which are moved in the act of coition? Now the eyes and the parts about the buttocks noticeably co-operate in the sexual act; for it is impossible to emit the semen without drawing the buttocks together and closing the eyes, for the buttocks by their contraction press out the semen (just as the liquid can be expelled from the bladder by the pressure of the hand), while the bringing together of the eyelids presses out the moisture in the brain.

That the eyes and the region near them have considerable influence in procreation is shown by the fact that childless and fruitful women alike try the experiment of anointing them, thinking that strength must pass by this way into the semen. These two parts, the fundament and the eyes, are always in all persons full of fatness; and, because they co-operate in the act of coition, they share in the heat which it engenders and are made lean thereby, and much of their substance is excreted into the semen. For unless a part of the body is fat, the heat will not melt it properly, nor will it do so if the part is fat but does not co-operate in the sexual act, as is the case with the stomach. (The kidneys, however, have more sensation in sexual intercourse than other parts of the body because of their nearness to the organs employed.) Moreover, the mere passage of the semen through these parts, which is quite perceptible by these parts, is sufficient

to make them lean; for its proximity takes away something without adding anything to them.

Why is it that both those who indulge in sexual excess and eunuchs, who never do so, alike lose their sharpness of vision? Is it because in the former owing to their desire, and in the latter owing to their mutilation, the upper parts of the body become drier than they ought to be, and this is most noticeable in those organs which have delicate work to do, such as the eye? So when the moisture is drawn away downwards, the upper parts become dry. It is quite obvious that sexual intercourse has this effect. In eunuchs the legs swell and the bowels are easily relaxed, which shows that the moisture has moved downwards.

Why is it that man alone grows hair on the face and body when he begins to be capable of sexual intercourse, whereas this does not happen in the other animals which have hair? Is it because on coming to maturity the characteristics of animals change to their opposites? For the voice becomes deep instead of shrill, and they become hairy instead of bare; it is clear therefore that animals which are hirsute from birth ought to become bare and not continue to be hirsute when they begin to secrete semen. But this is not so, because animals which emit semen become drier and rarer, conditions which are favourable to the growth of hair. This is shown by the fact that hair does not grow on scars, for scars are of a close texture and not rare; nor does hair grow upon women and children, both of whom are moist and not dry.

Why is it that having the feet bare is prejudicial to sexual intercourse? Is it because the body, when it is about to have sexual intercourse, ought to be warm and moist internally? This condition is attained during sleep rather than when one is awake; and so emission of semen takes place readily and without effort during sleep, but requires exertion in those who are awake. When the body is moist and warm, the feet are even more so; as is shown by the fact that the feet of those who are asleep are warm, being in this condition simultaneously with the interior of the body. But bareness of the feet has the opposite effect of causing dryness and cold. So since it is either difficult or impossible to have sexual intercourse when the feet are not warm, bareness of the feet must necessarily be prejudicial to the performance of the sexual act.

Why is it that man is more languid after sexual intercourse than any other animal? Is it because in proportion to his bulk he emits more semen than any other animal? But why does he do so? Is it because man digests his food with



less effort and is naturally moister and hotter than all the other animals? His moistness then creates an abundance of semen, while his heat creates a natural condition favourable to it; for the semen must be moist and hot as long as it is kept in the body.

Why is it that, whereas sexual intercourse takes place by means of heat, and fear and death have a cooling effect, yet semen is sometimes emitted by those who are frightened and by the dying? Is it because, though some parts are cooled, others become somewhat warmed, since they already have their own heat and receive additional heat from the parts which are cooling? So that, though such persons are growing cold, the emission of semen is due not to cooling but to the simultaneous heating. Observation proves this to be so in those who are frightened; for the blood leaves ° the upper parts of the body, and the lower parts become moist, and the bowels and bladder are relaxed. Thus under the influence of fright the heat makes its way downwards, and at death it travels upwards from below, and, because it creates a state of moisture by its warmth, it causes the emission of semen.

Why is it that one ought not to have sexual intercourse or vomit or sneeze or emit a deep breath, unless one is in a turgid state? Is it because if we are not in a turgid state, we are in the condition of plants torn up from the earth with which something which does not belong to them is torn up also, or of which some part is torn off and left in the ground? Now anything which ought to be removed, but of which a part is detached and remains behind, will cause trouble for a long while. And if one disturbs something external to oneself, this will cause trouble, because it is not in its proper place; and this is what will happen if we do any of the above-mentioned things when we are not in a turgid state.

Why is it that one can have sexual intercourse more readily when fasting? Is it because the ducts of the body are emptier in those who are fasting and full in those who are full? In the latter case they prevent the moisture from passing through into the semen. This is seen to be the case with the bladder; for when it is full it is impossible to have sexual intercourse readily.

Why is it that the young, when they first begin to have sexual intercourse, feel loathing after the act for those with whom they have had intercourse? Is it due to the fact that the change caused in them is great? For they are only conscious of the ensuing feeling of discomfort, and so avoid those with whom they have had intercourse as being the cause of this feeling.

Why is it that those who are continually on horseback are more inclined for sexual intercourse? Is it because owing to the heat and movement they are in the same condition as during sexual intercourse? So as growth takes place with increasing age in the region of the genital organs, these parts become enlarged. Since then they are always in this state of movement, their bodies become open-pored and in a condition which disposes them for sexual intercourse.

Why is it that when sexual powers begin to be present the flesh has an unpleasant odour which is not present in men or women before puberty? Is it because unconcocted matter always has a worse taste — being more acid or salty or bitter — and a more unpleasant odour, while concocted matter has a pleasant, or less unpleasant, taste and a more agreeable, or less disagreeable, odour? This is clear from an observation of the whole vegetable and animal world. If the properly concocted matter is removed, that which is left is unconcocted, — for instance in ashes, the sweet portion having been consumed, the dust which remains is bitter, and similarly perspiration is salty. Now the natural heat concocts the semen, which though small in amount is very strong, being a large quantity in a concentrated form. When, therefore, it leaves the body, the latter usually becomes languid and cold; and so the juices in it are subject to less concoction, since the pores are opened owing to the excretion of the semen. Consequently the perspiration of adults is saltier and has a more unpleasant odour than that of children, because it is unconcocted; and if their natural condition is such that the residue of their perspiration has an unpleasant odour, it is still more evident in such persons, and particularly in those parts, such as the armpit, in which it is especially evident in other people also.

Why is it that we regard the creature which is born from our own semen as our offspring, while that which is produced from any other part of us or from any other excretion is not looked upon as our own? For many things are produced by putrefaction, even from semen.

Why then is that which resembles us claimed as our own, while that which is alien to us is not so considered? For either all or none ought to belong to us. Is the reason that, in the first place, what is produced from the semen is born from what is our own, but that which is produced otherwise originates from something which is not ours, namely, from what is purged or excreted from us? In a word, nothing in a creature procreates another creature except the semen; and that which is harmful and evil, and also that which is alien, is not claimed by anything as its own; for it is not the same thing to be part of a thing and to be

alien to it and other than it and evil. Now our excretions and putrefactions are not our own but are other than us and alien to our nature. For all things that grow in the body must not be considered as belonging to the body, for even boils grow on it and these are removed and cast forth. In a word, all things that are contrary to nature are alien to the body, and many of the things that grow there are contrary to nature. If therefore the semen is the only thing in us from which a creature can be born, we should be right in regarding as our own offspring that only which is produced from the semen. Moreover anything else which is produced from the semen, as for instance, when it putrefies, a worm, or the so-called monstrosities, when there is corruption in the womb, are not to be reckoned as offspring. In a word, anything which is produced from corruption is no longer produced from that which is our own but from that which is alien to us, like that which is generated from excretions such as ordure. That all such things are produced from corruption is proved by the fact that what is generated from uncorrupted semen is of such a nature as to resemble that from which the semen came, a horse being born from a horse and a man from a man. And we do not value the semen in itself or everything that is being completed in the process of coming into being (for it is sometimes moisture and a mere mass and flesh which is coming into being), because it has not yet its true nature but only so much of its nature as is implied in the fact that it is so disposed as to produce something resembling ourselves; and nothing even of this kind can be produced from corrupted semen. For these reasons we do not regard as our offspring that which is produced either from anything else in us except the semen, or from the semen when it is corrupted or fails to achieve perfection.

Why are people less able to have sexual intercourse in the water? Is it because in water none of those things liquefy which liquefy with heat — lead, for example, or wax? Now the semen obviously liquefies with heat, for it does not liquefy until it is warmed by the friction. Fishes, however, have sexual intercourse without friction.

Why is it that sexual intercourse is the most pleasant of all things to animals, and is it so of necessity or with some purpose in view? Is it pleasant because the semen comes either from the whole body, as some declare, or not from the whole body but only from the area over which all the ducts of the veins extend? The pleasure then of the friction being similar in both cases, the sensation extends as it were over the whole body. Now the friction is pleasant, since it involves the emission of vaporous moisture enclosed unnaturally in the body; but the act of generation is an emission of similar matter for its natural purpose.

It is pleasant both of necessity and because it has a purpose in view, — of necessity, because the way to a natural result is pleasant, if it is realized by the senses; and because of its purpose, namely, the procreation of animal life. For it is the pleasure more than anything else which incites animals to sexual intercourse.

Why is it that sexual excess is beneficial in some diseases caused by phlegm? Is it because it involves the emission of an excretion, and so a considerable amount of excreted matter is rejected with it, and phlegm is an excretion?

Why does sexual intercourse cool and dry the stomach? Does it cool it because the heat is expelled in coition? Coition causes dryness, because, as the heat goes out, the moisture is vaporized and finds its way out as the body cools, while at the same time the heat caused by the act of copulation has a drying effect.

Why are those whose eyelashes fall off accounted lustful?

Is it for the same reason as that for which the bald also are so accounted? For the eyelashes and the hair of the head really belong together. The reason is that all the congenital hair which does not increase as a man gets older, falls off owing to lustfulness. For the hair of the head and the eyebrows and eyelashes are congenital hair; and of these the eyebrows alone sometimes grow thicker with advancing years (the reason for this has been stated elsewhere), while the hair of the head and the eyelashes both fail from the same cause, viz., that lustfulness cools the upper parts of the body which are deficient in blood, and so this portion of the body does not concoct any of the nourishment, and the hair not receiving any nourishment drops off.

Why is it that those who wish to pass urine cannot have sexual intercourse? Is it because the ducts become full?

Now that which is full of moisture cannot admit any more moisture.

Why is it that varicocele prevents both man and any other animals which suffer from it from procreating their species? Is it because varicocele is due to a displacement of breath, and this is why it is beneficial to melancholic diseases? Now sexual intercourse also is accompanied by an emission of breath. If therefore a rush of breath makes its way along when sexual intercourse is taking place, it fails to impart movement to the semen and the latter becomes cold; consequently it enfeebles the erection of the penis.

Why do those who have sexual intercourse usually become languid and weaker? Is it because the semen is an excretion from the whole body, and so the composition of the body, like the harmony of a building, is disturbed by the loss of any portion of it — if, for example, all the blood or any other component part of it is removed?

So important is that which the body loses in sexual intercourse, being indeed formed from a large amount of nourishment though itself small in quantity, just as a cake is made from wheaten flour.

Why is it that the penis is greatly distended in those who have sexual intercourse at a time when they desire to pass urine? Is it because, owing to the ducts being full of moisture, the semen, passing out through a narrower space, swells the bulk of the penis and lifts it up, for it is situated close to the ducts.

What is the cause of the erection and swelling of the penis? Are there two reasons, first, that it is raised by a weight applied behind the testicles, the latter acting as the fulcrum, and, secondly, that the pores become full of breath? Or does its bulk become greater from the increase of the moisture and its change of position, or from the formation of moisture? Now very large objects are less easily moved, because the weight is farther away from the fulcrum.

Why is it that those who have sexual intercourse or are capable of it have an evil odour and what is called a hircine smell, whereas children do not? Is it because, as has already been said, in children the breath concocts the moisture and perspiration, whereas the perspiration of grown men remains unconcocted?

Why is it that in summer men are less capable of sexual intercourse and women more so? As the poet says, Men, when the artichoke blooms, are weaker and women more wanton.

Is it because the testicles hang down lower then than in the winter, and they must be drawn up if sexual intercourse is to take place? Or is it because hot natures collapse in summer when the heat is excessive, but cold natures are invigorated by it? Now a man is dry and hot, but a woman is cold and moist; consequently a man's strength is impaired, but a woman's force is invigorated, its deficiency being compensated by its opposite.

Why is it that some persons find pleasure in submitting to sexual intercourse, and some take pleasure in performing the active part, and others do not? Is it

because each form of excretion has a region in which it is naturally secreted and, when an effort is made, the breath in finding its way out causes the excretion to swell and expels it; for example, urine collects in the bladder, food from which the moisture has been extracted in the bowels, tears in the eyes, mucous matter in the nostrils, and blood in the veins? Similarly the semen collects in the testicles and penis. In those whose ducts are not in a natural condition, owing either to the blocking up of the ducts leading to the sexual organs (as in the case of eunuchs or other victims of sexual disablement) or to some other cause, all such moisture collects in the region of the fundament; for it is by this way that it passes out of the body. That this is so is proved by the contraction of that part in sexual intercourse and the wasting of that region of the body. If therefore through wantonness a man has a superfluity of semen, it all collects there; and so, when desire comes upon him, the part in which it is collected desires friction. This desire may be due to diet or to the imagination. When desire is stirred from any cause, the breath collects and secretion of this kind flows to its natural place. If the secretion be thin and full of air, when the breath finds its way out the desire ceases (just as the erection in boys and older persons sometimes ceases without the discharge of any moisture); and the same thing happens, if the moisture dries up. But if neither of these things occurs, the desire continues till the one or the other of them takes place. But those who are effeminate by nature are so constituted that little or no semen is secreted where it is secreted by those who are in a natural state, but it collects in this part of the body. The reason of this is that they are unnaturally constituted; for, though male, they are in a condition in which this part of them is necessarily incapacitated. Now incapacity may involve either complete destruction or else perversion; the former, however, is impossible, for it would involve a man becoming a woman. They must therefore become perverted and aim at something other than the discharge of semen. The result is that they suffer from unsatisfied desires, like women; for the moisture is scanty and has not enough force to find its way out and quickly cools. When it finds its way to the fundament only, there is a desire to submit to sexual intercourse; but if it settles both there and in the sexual organs, there is a desire both for performing and submitting to the sexual act, and the desire for one or other is greater as more semen is present in either part. This condition is sometimes the result of habit; for men take a pleasure in whatever they are accustomed to do and emit the semen accordingly. They therefore desire to do the acts by which pleasure and the emission of semen are produced, and habit becomes more and more a second nature.

For this reason those who have been accustomed to submit to sexual intercourse

about the age of puberty and not before, because recollection of the past presents itself to them during the act of copulation and with the recollection the idea of pleasure, desire to take a passive part owing to habit, as though it were natural to them to do so; frequent repetition, however, and habit become a second nature.

All this is more likely to occur in the case of one who is both lustful and effeminate.

Why is it that those who desire to submit to sexual intercourse feel a great shame about confessing it, which they do not feel in confessing a desire for meat or drink or anything of that kind? Is it because the desire for most things is necessary and its non-satisfaction is sometimes fatal to life, but sexual desires proceed from something beyond mere necessity?

Why is it that men are more inclined for sexual intercourse in the winter and women in the summer? Is it because men are hotter and drier in their nature, and women moister and cooler? In men therefore during the winter the moisture and heat are sufficient to cause the impulse (and it is moisture and heat which give rise to the production of the semen), whereas in women the heat is less and the moisture is congealed owing to the lack of fire. But in summer in women the heat is well proportioned, whereas in men it is more than sufficient; for the excess dissolves much of their strength. For this reason also children are thinner during the summer; for it is a case of 'fire added to fire'.

Why is it that those who are hot by nature, when they are strong and well nourished, if they do not have sexual intercourse are often oppressed by bile, which makes its way down in a very bitter condition, and a salty phlegm is engendered, and their complexion changes? Is it because some excretion always comes away with the semen? (Wherefore also the semen of some men who emit a large quantity of excretion is said to smell of the water in which fish have been washed.) So when they have sexual intercourse, this excretion comes away with the semen and so causes no inconvenience; but if they abstain from copulation, the excretion becomes bitter or salty.

Why are the melancholic particularly inclined for sexual intercourse? Is it because they are full of breath, and the semen is a discharge of breath? If so, those whose semen is full of breath must necessarily often desire to purge themselves of it; for thus they are relieved of it.

Why are birds, and men with thick hair, lustful? Is it because they have a large amount of moisture? Or is this not true (for the female sex is moist and not hairy), but is the real reason that the natures both of birds and of thick haired men are able owing to their heat to concoct a large quantity of moisture? This is indicated by the presence of hair and feathers. Or is it because the moisture is plentiful and is overpowered by the heat? For if the moisture were not plentiful or were not overpowered, hair would not grow on human beings nor feathers on birds. Now the semen is formed most plentifully under conditions of locality and at seasons that have these characteristics, in spring for example, which is naturally moist and hot. Birds and lame men are lustful for the same reason, namely, that in both, owing to the deficiencies of their legs, the nourishment is carried downwards in small quantities only, while the rest travels into the upper region of the body and is converted into semen.

Why is it that when a man has sexual intercourse his eyes grow very weak? Is it not clear that this happens because the moisture leaves them? This is proved by the fact that the semen is cold; for it does not become moist unless the heat warms it thoroughly. Nor does it require melting, for it is dispersed about the body like blood.

## **BOOK V. PROBLEMS CONNECTED WITH FATIGUE**

WHY is it that long walks are more fatiguing and short I walks less fatiguing over level ground than over uneven country? Is it because much movement and violent movement causes fatigue, and spasmodic movement is violent, and continuous and monotonous movement is much movement? In walking therefore on hilly ground, if the distance be long, the change provides a rest, and the same movement is not continued for long, even in the case of horses, owing to the change. On even ground, on the other hand, the similarity of position continues uninterruptedly and gives the limbs no rest, but helps to make the movement continuous. Now if the distance is short, no fatigue is caused on flat ground by long-continued motion; whereas over hilly ground the violent change to an opposite kind of movement, sometimes uphill and sometimes down, gives rise to fatigue. Such, in our opinion, is movement over hill country, and that over level ground is the contrary.

Why is it that those who faint and those who collapse after physical exertion are generally held to become smaller in bulk and their voices shriller? Is it because their voices, appearing to be less, seem shriller (this can be illustrated by the fact



that those who imitate distant voices make shrill sounds), while their bulk appears less (because the blood removes from the upper to the lower parts of the body)?

Why is it that only the stomach becomes thinner in those who take violent physical exercise? Is it because the greatest quantity of fat is found round the stomach?

Why is it that the fat is consumed in those who exert themselves? Is it because fat melts when heated, and the movement causes heat, whereas flesh does not melt?

Why is it that the parts round the belly are fattest? Is it because they are near to the nourishment? While then the other parts of the body receive something from the belly, the belly itself often receives something. Or is it because the belly is exerted less than the other parts, because it has no joints?

Why is it that fatigue ceases more readily if one mixes water with the oil with which one rubs oneself? Is it because the oil sinks in farther when mixed with water, whereas by itself it does not penetrate so well, because it has a tendency to remain on the surface? If, therefore, it sinks in, the body is more softened; for oil is naturally hot, and hot things have a drying and hardening effect, and dryness and hardness are inexpedient in fatigue; but when applied with water the oil has a less drying effect.

Why is it that vomiting is prescribed for those who are suffering from fatigue, although vomiting is itself fatiguing?

Is it because fatigue is caused by the crushing and pressure and weariness of the bones, and this can be caused either by some external or by some internal agency, and in the latter case from one of two causes, either because the flesh overreaches its own strength, or because one bodily constituent mingles in a large quantity with the rest of the body and does not keep to its proper place, as happens with the excretions? For any burdens which are put upon us externally cause more fatigue than our own members, even though they are lighter than these in weight. This can be illustrated by the fact that those who have eaten or drunk somewhat freely, though they have exerted themselves less than when they were fasting, yet feel more fatigue, because the food, being unconcocted, is not in its proper place.

And since fatigue causes liquefaction, and liquefaction is an excretion, it is the latter which produces fatigue in us, wandering about at random and attacking the bones and sinews and the interior parts of the flesh, which are rare and open. Consequently vomiting, by dislodging the excretion which is the cause of fatigue, naturally makes us less fatigued; for it leaves the body in the state in which it was when the exertion began. Vomiting is fatiguing, not because of the excess of movement caused while it is taking place, but when it does not happen to be thoroughly carried out; for fatigue caused by vomiting occurs when a considerable amount of food is left behind and this contains excretions, which, as we have already said, happens in those who have eaten largely. If, therefore, in the latter it is not exertion which causes fatigue, but they feel fatigue because of the condition in which they are, so vomiting could not be the cause of fatigue in those who do not get rid of all the food which is in them; for in that case every one who vomited would feel fatigue, whereas many through vomiting become less fatigued.

Why is it more fatiguing to the arm if one casts with the hand empty than with a stone in it? Is it because the movement is more spasmodic if the hand be empty, for the hand has nothing to rest upon, such as the thrower finds in the missile which he holds in his hand? Similarly the competitor in the fivefold contest finds resistance in the weights which he holds, and the runner in his arms which he swings; so the former jumps farther if he holds weights than if he does not, and the latter runs more quickly if he swings his arms than if he does not do so.

Why is it that quick running causes a tendency to disease in the head both in man and in the other animals? Yet generally speaking running appears to draw the excretions downwards, as does walking; for which reason also those who walk much grow fat in the legs, because both the nourishment and the excretions settle down from the upper into the lower parts. Is it true that while motion has this effect, yet quick motion, owing to the strain and the holding of the breath which it involves, causes heat in the head and inflates the veins in it and renders them liable to be affected by external influences, such as cold and heat, and by the contents of the trunk; and that if these can enter the head, disease is necessarily engendered in that region?

Why is it more fatiguing to walk on level than on uneven ground, whereas one can walk more quickly on an even than on an uneven road? Is it because it is less fatiguing if one does not move continually in the same position, and this is the case rather in traversing uneven ground? On the other hand one progresses more

quickly the less one's movement is contrary to nature. On even ground, therefore, the raising and planting of the foot is a slight but frequent movement, while the opposite occurs on uneven ground. Now to raise the foot is unnatural (for raising anything requires an effort); and the slight movement of raising the foot at each step becomes considerable when repeated many times.

Why is it more fatiguing to lie down on a flat than on a concave surface? Is it for the same reason that it is more fatiguing to lie on a convex than on a flat surface?

For the weight being concentrated in one place in the sitting or reclining position causes pain owing to the pressure. This is more the case on a convex than on a straight surface, and more on a straight than on a concave; for our body assumes curved rather than straight lines, and in such circumstances concave surfaces give more points of contact than flat surfaces. For this reason also couches and seats which yield to pressure are less fatiguing than those which do not do so.

Why are short walks fatiguing? Is it because they involve abrupt change, for they necessitate coming often to a standstill? Now frequent change from one extreme to another is fatiguing, for it does not allow one to become accustomed to either extreme, and this is tiring; and one cannot become accustomed to both things at once.

Why is it that those who ride on horseback water more freely at the eyes the quicker the horse goes? Is it because the stream of air which meets them is colder according as it is for a shorter time in contact with the body (as happens in the case of naked runners), and it is the cold which makes the eyes water? Or is the reason the contrary of this, namely, that heat makes the eyes water (the sun, for instance), and movement engenders heat?

Or is it due to the impact of the air? For as blasts of wind coming from an opposite direction trouble the eyes, so the air all the more deals a gentle blow the quicker the horse is driven.

Why is it that the other parts of the body become more fleshy when subjected to friction, but the stomach becomes leaner? Or is it true that the stomach does not become gradually leaner but solider? The flesh, however, is not similarly affected, and this is the point of the problem; for, speaking generally, the stomach does become leaner as the result of exercise and exertion. The reason is that the fat parts, and those which naturally admit of more expansion, liquefy

when heated. Now the skin naturally admits of expansion; but, because it very quickly fattens, it always contains some fat, unless any disease is present. The reason of this is that it is near the nourishment. Since, therefore, generally speaking, fat is not natural but adventitious, and is not one of the necessary constituents of the body, as is the flesh, the movements set up by exercise and friction warm and melt it and distribute the superfluous nourishment in the other portions of the body. It is for this reason that sitting still makes the stomach fat and the rest of the body thin; whereas movement and friction make the stomach thin and fill out the rest of the body.

Why is it that after long and violent walking or running, if one stands on tiptoe, the heels quiver and are hastily drawn down again? Is it because, owing to the continuity and violence of the movement, the quivering of the muscles in the man does not cease? For the mind often controls the body as a whole, but does not control certain parts of it, when they have been set in motion in a certain way, the heart, for example, and the sexual organ. The reason is that a considerable quantity of breath is consumed by heat round the muscles, which does not cool off immediately a man comes to a standstill. This breath, therefore, is drawn down, making him quiver, as it were dragging at him beneath by its movement, and leaves him little control over the most distant part of his body — in this case over his heels. A similar phenomenon occurs in the trembling of the lower lip in those who are angry.

Why is it that those who are not running very hard respire rhythmically? Is it because every rhythm is measured by a definite movement, and the movement at regular intervals which occurs in running is of this nature?

As soon, therefore, as they begin to run they respire; and so the respiration taking place at equal intervals, because it is measured out by a uniform movement, creates a rhythm.

Or is it because all respiration without exception takes place at equal intervals in those who respire naturally and do not hold their breath? The rhythm then is not obvious in those who are sitting or walking, because the movement of the body is slight; and in those who are running vigorously we cannot comprehend the rhythm of the respiration, because our senses cannot follow the movement. But in those who are running moderately fast the movement allows the measure observed by the breathing to be perceptible, and so shows the rhythm.

Why is it that, when we are running, the air seems to turn into breath? Is it because, while we are moving in the act of running, we set in motion a stream of air continuous with our bodies, and this is breath? Wherefore the air not only seems to turn into breath, but actually does so. Or is it because in running we come into collision with the air, and, when this happens, we have a more acute perception of the air owing to the movement? It is only natural, therefore, that it should seem to us to turn into breath; for the phenomenon occurs through the rush of our movement.

Why is it that one is more liable to fall when running than when walking? Is it because in the former case one raises oneself higher before moving? For this is the difference between running and walking.

Why is it that in ascending a slope our knees feel the strain, and in descending our thighs? Is it because when we ascend we throw the body upwards and the jerk of the body from the knees is considerable, and so we feel the strain in the knees? But in going downhill, because the ° weight is carried by the legs, we are supported by our thighs, and so they feel the strain. Furthermore, whatever is unnatural causes strain and pain. Now it is natural for the knees to bend forward and the thighs to bend backwards.

In going uphill then the knees are bent backwards owing to one's desire to support oneself, but in going downhill the thighs are bent forwards because the body has a tendency to fall forwards.

Why is it that on journeys the middle of the thigh is the part which feels the strain most? Is it because in anything that is prolonged and continuous and fixed the strain falls most upon the centre, and so it is most likely to break at that point? Now the thigh is of this nature, and so it is in the middle of it that we feel the strain most.

Why is it that persons of a moist temperament easily choke as a result of exertion and through heat? Is it because their moisture when heated becomes air and the excess of it burns more fiercely? When, therefore, it cannot find its way out owing to its abundance, the process of cooling does not take place; and so it quickly catches fire owing to the natural and adventitious heat. It is for this reason that perspiration induced by taking physical exercise, and by exerting oneself generally, and the emission of breath are beneficial; for breath is formed by the separation and rarefaction of moisture.

Why is it that bodies of an equable temperament often feel weariness but throw it off more easily? Is the cause the same in both cases? For that which is equable is uniform, and that which is uniform is the more subject to similar influences; so if any part suffers, the whole straightway suffers in sympathy. But that which is not equable, being more disunited, is not sympathetically affected by its parts. A body of equable temperament therefore often feels weariness, but throws it off more easily, because the whole body shares it; for the suffering, being distributed over a larger area, is weaker and therefore more easily got rid of. But a body which is not of an equable temperament, inasmuch as it has no communion with its members, is less often afflicted with weariness, but has greater difficulty in shaking it off; for its suffering is acute. —

Why is it more fatiguing to walk on level than on uneven ground, whereas one can walk more quickly on an even than on an uneven road? Is it because it is least fatiguing if one does not move continually in the same position, and this is the case rather in traversing uneven ground? But one travels more quickly when the foot has to be lifted less in any equal period of time. On level ground the raising of the foot is a slight but frequent movement, on uneven ground the reverse; but the slight movement of raising the foot at each step becomes considerable when repeated many times.

Why is it that in descending a slope we feel the strain most in the thighs, and in ascending in the legs? Is it because in ascending the strain is due to the raising of the body? For the whole body becomes a burden; and so the part upon which it all rests and with which we raise it (that is, the legs) feels the strain most. For the leg is an extremity, having length but not having width, as the foot has; consequently it is shaken. So we may cite in illustration the fact that we move weights with the shoulder and rest them upon it, and therefore feel the strain most in the shoulder. But when we are descending, the strain is caused by the body falling downwards and thrusting us forward unnaturally, so that we feel the strain most in the part on which it falls most and which it shakes. Now the leg remains unaffected, and the trunk forms the weight; but it is the thigh which receives the weight and is shaken, because it has extension and is forced from above into a bent position where the trunk presses on it.

Why is it that a journey seems longer when we traverse it without knowing its length than when we do know it, all other conditions being equal? Is it because to know its length is to be able to connect a number with it, and the indeterminate is always more than the determinate? Just as, therefore, if one

knows that a journey is a certain length, it must necessarily be finite, so, if one does not know, as though the proposition was convertible, the mind draws a false conclusion, and the distance appears infinite. Furthermore, a quantity is determinate, and that which is determinate is a quantity; therefore when a thing appears not to be determinate, it appears to be as it were infinite, because that which is of a nature to be determined, if it is not so is infinite; so that what appears not to be determined necessarily appears in a sense unlimited.

Why is it that the thighs feel fatigue more than the legs? Is it because they are nearer to the part of the body which contains the excrement, so that, when that part overflows with heat owing to the movement, the thighs contract more readily and to a greater extent? Or is it because the thighs are more closely connected by growth with one another, for they suffer considerably owing to the separation of what is really continuous? For indeed, If one feels fatigue when there is no excrement in the body, yet it is the thighs and loins which suffer more than the other parts. Or is it because, just as swellings in the groin are caused, if one receives a blow, owing to the close connexion of the veins and sinews, so the thigh is similarly affected? For the thigh is nearer than the leg to the source of the veins. Or is it because the thigh remains more in the same position than the legs, and this is more fatiguing? Or is it because the thigh is fleshy, and therefore the natural heat there is considerable?

Why is it that in some people sores are formed as the result of exertion? Is it because, when the body contains impurities, movement heats it and causes other excretions to exude with the perspiration? These excretions, being thick and containing harmful humours of an acid, bitter, and salty nature, cannot be expelled owing to their thickness, but swell up through the flesh and cause sores owing to the bitterness of the humour which they contain.

Why is it that food is not given immediately after exercise and after medicine has been administered? Is it because the body is still being purged and has not yet rested from its toil, and the excretions have not yet been expelled?

Why is it more difficult to run than to walk? Is it because the runner has a heavier burden, since, when he is raised in the air, he has his whole weight to support? But a man who is walking continues to put his weight on the part of him which is at rest, like a man leaning against a wall.

Why is it that one does not feel hungry immediately after exercise? Is it because

liquefaction still remains until the concoction of anything is complete? Or is it owing to the breath which the exertion engenders from the moisture?

Or is it owing to the thirst which is due to the heat caused by the exertion? All these possible causes are present.

Why is it that those who are fatigued and those who are suffering from phthisis are apt to emit semen during sleep? Is it because generally speaking those who are warm and moist are inclined to do so, since the semen naturally has these characteristics? Now such a thing is most likely to happen in persons in these conditions, when the heat engendered by sleep is added; for the body requires a slight impulse only, which must be internal and not external. This condition is fulfilled in those who are suffering from phthisis and in those who are fatigued; the latter being full of hot liquid owing to their fatigue and movement, and the former owing to their state of flux and the heat engendered by their inflamed condition. —

Why is it more difficult to apply prolonged friction oneself to the left leg than to the right? Is it because, though our right is the side which is capable of exertion, yet the rubbing of the left leg, since it involves a distorted attitude, is unnatural, and anything which is unnatural is difficult? The difficulty of rubbing the right side with the left hand is not obvious, because the left hand has no strength whichever side it is applied to.

Why is it healthy to reduce the amount of nourishment and to increase the amount of exercise? Is it because abundance of excretion is the cause of disease? Now this is due either to excess of nourishment or to lack of exercise.

Why should the flesh be made rare rather than dense in order to promote health? For just as a city or locality is healthy which is open to the breezes (and that is why the sea too is healthy), so a body is healthier in which the air can circulate. For either there ought to be no excrement present in the body, or else the body ought to get rid of it as soon as possible and ought to be in such a condition that it can reject the excrement as soon as it receives it and be always in a state of motion and never at rest. For that which remains stationary putrefies (standing water, for example), and that which putrefies and does not move causes disease; but that which is rejected passes away before it becomes corrupt. This then does not occur if the flesh is dense, the ducts being as it were blocked up, but it does happen if the flesh is rare. One ought not, therefore, to walk naked in the sun; for



the flesh thereby solidifies and acquires an absolutely fleshy consistency, and the body becomes moister, for the internal moisture remains, but the surface moisture is expelled, a process which also takes place in meat when it is roasted rather than boiled. Nor ought one to walk about with the chest bare; for then the sun draws the moisture out of the best constructed parts of the body, which least of all require to be deprived of it.

It is rather the inner parts of the body which should be submitted to this process; for, because they are remote, it is impossible to produce perspiration from them except by violent effort, but it is easy to produce it from the chest because it is near the surface.

Why is it that short walks are fatiguing? Is it because one often comes to a standstill and there is no uniform movement in the joints, and this is fatiguing?

Why do those who stand still in the sun become warmer than those who move, and this although movement is productive of heat? Is it true that every kind of movement does not produce heat, but some kinds have a cooling effect, as happens, for example, when one blows upon or keeps in motion kitchen-pots which have boiled up? If then the heat remains when one stands still and, doing so, heats us more than if it were in motion (for our own body always gives off a warm steam, which heats the neighbouring air, as though there were a burning brand there), then, if we remain motionless, the air surrounding us becomes warm for the reasons already stated; whereas, if we move, a wind is set up which cools us, for wind always has a cooling effect.

Why is it that those who ride on horseback water more freely at the eyes the quicker the horse goes, and those on foot the quicker they run? Is it due to the fact that the air which meets them is cold? For cold causes the eyes to water; for by contracting and solidifying the flesh it purges out the moisture. Or is the reason the contrary of this, namely, that the heat causes perspiration, and watering at the eyes is a form of perspiration? Therefore both perspiration and watering at the eyes are due to heat and are alike salty; and it is movement which causes heat. Or is it due to the impact of the air? For as blasts of wind coming from an opposite direction trouble the eyes, so too the quicker a man drives or runs the more does the air deal a gentle blow, and this causes the eyes to water, because the ducts of the eye are rarefied by the blow; for every blow has the effect either of cleaving or crushing. —

Why is it that fatigue must be cured in the summer by baths, in the winter by anointing? Is it because the latter, owing to the cold and the changes which it causes in the body, must be got rid of by heat, which will cause warmth, and olive-oil contains heat? In summer, on the other hand, the body requires moisture; for the season is dry and chills are not engendered, because it is warm. A sparing diet of solid food and a liberal indulgence in liquid nourishment are characteristic of the summer, the latter being peculiar to the summer, while the former is commoner than another seasons; for indulgence in drinking is peculiar to the summer because of the dryness of the season, but a sparing diet is found at all seasons, but is more general in the summer; for then owing to the season more heat is engendered by food.

Why is it that those who are running vigorously experience the greatest shock, if any one impedes them in their course? Is it because a thing is being drawn apart most vigorously when it is being dragged or moved violently in a contrary direction? If therefore any one impedes one who is running and whose limbs are being vigorously thrust forward, the result is that he wrenches him back at the same time as his limbs are still moving forward, and so the more vigorously he is running the more violent is the shock which he receives.

Why is it that walking along roads over uneven ground is less fatiguing than along a flat, straight surface? Is it because an upright carriage is natural to everybody, but walking over even surfaces is more fatiguing than over uneven ground, since walking over even ground causes a continuous strain on the same members, whereas walking over uneven ground distributes the strain over the whole body? Now walking in warm weather tends more to make the body thin than in cold weather; for it causes more strain upon the outer parts, and so causes thinness by engendering perspiration. Walking in cold weather makes the flesh more solid and causes a great desire for food; for it engenders an increase of heat in the inner parts and, since they become less liable to be affected by the cold, it cleanses the inner region by increasing the heat there, while it makes the flesh firm, since it cannot prevail over the whole of it.

In like manner walking uphill is a greater exertion and tends more to cause thinness than walking downhill. For walking uphill causes most strain to the loins (whereas walking downhill is most trying to the thighs, for the whole weight falls upon them and so usually causes fatigue in them); for as they are forcibly carried upwards in an unnatural manner, heat is engendered. Walking uphill therefore induces perspiration and causes thinness by heightening the

respiration and engenders pain in the loins; for the legs, being lifted with difficulty, cause the loins to bend and draw them up, which naturally causes a very great strain. Walking on hard, resisting ground causes fatigue to the muscles and tendons of the legs; for it causes tension in the sinews and muscles, because the pressure upon them is violent. Walking on soft ground is fatiguing to the joints; for it causes frequent bending of the joints, because the surface trodden gives way.

Why do we walk with difficulty up a steep slope? Is it because all progression is made up of raising the feet and putting them down again? Now raising the foot is unnatural and putting it down is natural, while putting the foot forward is a mean between the two. Now in walking up a steep slope the unnatural motion preponderates.

[Why are riders on horseback less likely to fall? Is it because owing to their fear they are more careful?]

## **BOOK VI. PROBLEMS CONNECTED WITH THE POSITIONS ASSUMED IN LYING DOWN AND IN OTHER POSTURES.**

WHY is it that sitting down makes some persons fat and I others lean? Is it because bodily conditions differ, some men being hot, others cold? Those therefore who are hot grow fat (for the body owing to its heat prevails over the nourishment); but those who are cold, owing to the fact that their body requires heat introduced from without and derives it chiefly from movement, cannot concoct their food while they are at rest. Or is it because the hot are full of superfluities and require movement to expend them, while the cold are not so?

Why is it necessary that the parts of the body should be distended, as happens when a man takes athletic exercise?

Is it because the ducts must be purged by their own breath?

Why is it better to lie in a curved position and why do many physicians prescribe this? Is it because the stomach concocts food more quickly when it is kept warm, and it keeps warmer in this position? Furthermore it is necessary to give the vapours a place where they can settle; for then there is less likely to be pain from flatulence. (It is on this account that swollen veins and abscesses of all kinds help to restore a healthy condition, because they form hollows in which they

receive the vapours.) When the body then is extended no hollow is formed (for the internal organs occupy all the space); but a hollow is formed when the body is curved.

Why is dizziness more likely to occur in those who are standing than in those who are sitting? Is it because, when one is still, the moisture all inclines to one part of the body? This is why raw eggs cannot be spun round and round but fall over. The same thing occurs when the moisture in the body is put in motion. So one stands up after having been at rest, when one is in this condition; but one sits down after having been in motion, when the moisture is evenly and uniformly distributed. Why is it that sleep comes more readily if one lies on the right side? Is it because the conditions when we are awake and when we are asleep are the contrary of one another? Since, therefore, when we are awake we recline on the left side, the contrary will occur when another principle, namely, the contrary, is at work. Or is it because sleep is the absence of movement? The parts then of the body which are most active must be at rest; and the parts of the body on the right are most active.

So, if one is lying on this side, a waking principle is as it were enchained.

Why does one feel numbness? And why more in the hands and feet than elsewhere? Is it because numbness is a process of cooling, being due to deprivation of blood and its transference elsewhere? Now these parts, especially the feet, are least fleshy and most muscular, and so they are naturally disposed to cool quickly.

Why do we find it comfortable to recline on the left side, but sleep better on the right side? Is it because by turning away we avoid looking towards the light, since in the dark sleep comes on more readily? Or is it because we keep awake when reclining on the left side, and in this position we can easily employ ourselves in any particular function; and so for the contrary purpose the contrary position is advantageous; for each position invites to a particular function.

## **BOOK VII. PROBLEMS CONNECTED WITH SYMPATHETIC**

## ACTION

WHY do men generally themselves yawn when they see I others yawn? Is it because, if they are reminded of it when they feel a desire to perform any function, they then put it into execution, particularly where the desire is easily stirred, for example, that of passing urine? Now a yawn is a breath and a movement of moisture; it is therefore easy of performance, if only one sees some one else yawning; for the yawn is always ready to come.

Why is it that, although we do not imitate the action if we see a man stretching out his hand or foot or doing anything else of the kind, yet we ourselves yawn if we see some one else doing so? Or does this not always occur, but only when the body happens to feel a desire and is in such a condition that its moisture becomes heated? For then it is recollection which gives the impulse, as also in sexual desire and hunger; for it is that which causes recollection to exist that provides the stimulus towards the condition observed in another person.

Why is it that if we stand by a fire we desire to pass urine, and if men stand near water (for example, near a river) they actually pass urine? Is it because water in general reminds us of the water in our own bodies, and the neighbourhood of water incites our internal moisture to come out? Fire of itself dissolves anything which is solidified in the body, just as the sun melts the snow.

Why is it that those who come into contact with certain diseases become affected by them, but no one ever becomes healthy through contact with health? Is it because disease is a state of movement, while health is a state of rest? If so, disease can set up movement, but health cannot. Or is it because disease comes to us against our will, while health comes by our own wish? Things then which occur against our will are different from those which occur by our wish and deliberate choice.

Why is it that not only do some unpleasant sounds make us shudder — for example, when a saw is being sharpened, or pumice-stone cut, or a stone ground — but the signs of effects produced in others conveyed by the sight cause those very effects in ourselves? For our teeth are set on edge when we see others eating anything bitter, and some people faint when they see any one being strangled. Is it because every sound or noise is a breath, and this penetrating into us naturally causes disturbance? Now it will cause greater disturbance if it comes

either in great quantity or with an unusually violent impact, setting up a new condition or causing some alteration within us. Wherefore breaths which, though large in bulk, are yet soft, stir the actual seat of sensation, and such have a pleasant effect; but those which are rough, causing a violent impact, shake the seat of sensation and affect a wide area owing to the force of their impact. Now things which are cold also affect a wide area, for coldness is a kind of force; therefore, as has been already said, it causes shuddering. But things which are rough, because they cause a series of frequent impacts, striking on the base of the hair thrust it in the opposite direction; for when the hair is thrust out, its ends must necessarily assume a contrary position, with the result that it stands upright; for hair always naturally lies flat. The direction taken by the breath which is conveyed to the body by the hearing is downwards from above. The sounds, therefore, which we have mentioned being harsh, the hair bristles for the reasons stated. The bristling occurs more on the rest of the body than on the head, because the hair there is weaker and the effect produced is weaker. The sensation produced by hearing being blunter than that produced by sight, the effects produced by it are confined to the surface of the body; the bristling of the hair is an effect of this kind, so it occurs from many dissimilar causes. The sensation produced by sight being very distinct, its results too are correspondingly more distinct; therefore the effects actually occurring in others are reproduced in those who observe them, but more mildly than in the original. But as a result of hearing our hair stands on end for fear, not of the actual sounds, but of the anticipation which they arouse; for it is an anticipation of grievous ill.

Why is yawning caused by the sight of others yawning,

and so also the passing of urine, particularly in beasts of burden? Is it due to recollection? For when recollection occurs the part of the body concerned is stimulated. In men then, because their sensations are finer, when they see something stimulation and recollection occur simultaneously. But in the beasts the sight is not sufficient by itself, but they require another sense to be called into activity; so the sense of smell must also be employed, this being a more easily stimulated sense in unreasoning animals. So the other animals always pass urine in the same spot as the first one; for the stimulus is most acute when the sense of smell is employed; and the sense of smell is called in play when they are near the spot.

Why is it that when we see any one cut or burned or tortured or undergoing any

other painful suffering, we share mentally in his pain? Is it because nature is common to us all, and it is this which shares in the sufferer's pain, when we see any of these things happening to him, through kinship with him? Or is it because, just as the nose and hearing according to their particular faculties receive certain emanations, so also the sight does the same as the result of things pleasant and painful?

Why is it that those who come into contact with phthisis or ophthalmia or scurvy become affected by them, but there is no contagion from dropsy or fevers or apoplexy and the rest? In ophthalmia is contagion due to the fact that the eye is very easily affected and more than the other senses assimilates itself to that which it sees — for example, it moves when it sees something else moved — and so it very readily becomes disordered when it sees another eye in that condition? In phthisis is the contagion due to the fact that phthisis makes the breath weak and laboured, and those diseases are most quickly contracted which are due to the corruption of the breath, as is seen in plagues? He therefore who comes into contact with the sufferer inhales this corrupted breath, and so himself becomes ill, because the breath is unhealthy; and he catches the disease from one person only, because that person exhales this particular breath, which is different from that which others exhale; and he catches the same disease, because, in inhaling the breath by which he becomes infected, he is inhaling just such breath as he would if he were already suffering from the disease. Scurvy alone is catching among similar diseases, such as leprosy and the like, because it affects the surface of the body and causes a glutinous discharge (for this is the nature of itching diseases), and so this disease, being on the surface of the body and glutinous, can be conveyed by contact. Other similar diseases are not so conveyed, because either they are not on the surface, or else, being on the surface, they do not remain there, because they are dry.

Why do purslane and salt stop inflammation of the gums? Is it because purslane contains some moisture? This is seen to be so if one chews it or if it be crushed together for some time; for the moisture is then drawn out of it. The glutinous matter sinks into the gum and draws out the acidity. For that there is an affinity between the disease and the remedy is shown by the acidity; for the juice of the purslane has a certain acidity. Salt, on the other hand, dissolves and draws out the acidity. Why then do lye and soda not have this effect? Is it because they have an astringent instead of a dissolvent effect?

## **BOOK VIII. PROBLEMS CONNECTED WITH CHILL AND**

## SHIVERING.

WHY is it that those who are chilled become livid? Is it because the blood is congealed by the cold and, as it congeals, becomes black through the absence of heat?

(A white colour, on the other hand, is to be attributed to fire.) For this reason also the flesh of the aged is particularly livid, because it contains very little heat.

Why is it that those who are chilled cannot sleep? Is it because any one who is chilled tends to hold his breath, but a sleeper exhales rather than inhales, so that it is difficult for one who is cold to sleep, since it is impossible to do contrary things simultaneously?

Why is it that those who are ill or in pain or angry become more active under the influence of cold? Is it because a cold condition makes a man stronger?

Why is it that athletes in good training do not bear the cold well? Is it because their condition is clean and airy and free from fat? Such a condition is easily accessible to the air, since it is permeable and does not contain any heat; fat, on the other hand, is hot, unless it is saturated with moisture.

Why are the extremities most affected by cold? Is it due to their narrow shape? Also the ducts in them, being narrow, hold little blood, and therefore little heat; for the blood is hot.

Why are the feet more liable to become chilled when they are suspended in mid air? Is it because the wind blows more underneath then? Or is it because the blood is contracted into a narrower space below, and so the rest of the foot is more easily chilled, because the heat leaves it?

Why is it that stout persons are especially liable to chill, although fat is warm? Is it because, owing to the greatness of their bulk, their extreme parts are far from the internal heat, while their near parts are far from the external cold?

Why do people shiver after sneezing and after passing urine? Is it because in both processes the veins are emptied, and when they are empty the cold air enters, and this causes shivering?

Why is it that ravenous hunger is felt in cold weather and in winter rather than in



summer? Is it because ravenous hunger is brought on through lack of dry nourishment, and in the cold and winter the internal heat contracts into a narrower space and its internal nourishment soon fails, and when this happens ravenous hunger is more likely to occur? The faintness and weakness due to ravenous hunger occur when liquefaction takes place in the body owing to the collection of heat in one place. This liquefied matter flows into the region usually occupied by the nourishment and itself becomes nourishment for the body; if it attacks the seat of respiration, loss of voice and weakness ensue, the loss of voice being due to the obstruction of the passage of the breath, while the weakness is caused by the lack of nourishment in the body and internal liquefaction. Treatment in such cases can be quickly and simply applied, because the cause of the trouble is external; for it is the external cold making our heat contract which causes the ravenous hunger. So just as one trembles and turns pale from fear, but, when freed from the danger, one recovers immediately; so too those who are suffering from ravenous hunger, after taking a little bread, quickly recover, having undergone a violent and unnatural disturbance, but not having been permanently injured thereby; for the same thing which resists the tendency of nature also restores us to our natural course. Once relax the force which is straining against nature, and the body slips back into its natural state as suddenly as children who are playing at ‘ tug-of-war’ with a rope, if the rope is let go, fall on their backs.

Why is it that those who have undergone athletic training do not bear the cold so well as those who have not done so? Is it because the fat is got rid of by their exercises, and it is the fat which gives warmth, since that which is oily is hot? Or is it because the body is in a more airy and rare condition, because the fat and the excretions have been got rid of, so that there is nothing to keep out the cold? Or is it because through the opening of the pores by perspiration a number of doors are as it were removed? It is clear that the same condition does not conduce both to health and to strength; for obviously a condition of health is one of fatness, while a condition of strength is a state of rarity.

Why do we shiver both when hot and when cold water is poured over us? For it is strange that contraries should produce the same result. Is it because, when cold water is poured over us, the extinguishing of the internal heat causes shivering, whereas, as the effect of warm water, the superficial cold is enclosed in one place and massed together by its inward rush? So both effects are due to the same cause, but in one case it operates from within and in the other from without.

Why do the hairs bristle upon the skin? Is it because they naturally stand erect when the skin is contracted, and this contraction occurs owing to cold and certain other conditions?

Why is it that one shivers at the last emission of urine? Is it because, whilst the warm liquid is still within, the bladder and the passages round it are full, but when it has passed out they fill up again with cold air, for nothing can be empty, but must be full either of something corporeal or of air? Inasmuch then as cold air enters, shivering is a natural result.

Why is it that the tongue of those who are chilled, like that of the drunken, stumbles? Is it because, as it stiffens and hardens with the cold, it becomes difficult to move, and, when this happens, it cannot speak plainly? Or is it because, the outer parts of the body being solidified by the cold, the moisture flows together within and saturates the tongue, and so it cannot perform its function, as has been already described in the case of the drunken? Or is it because owing to the trembling produced by chill, the movement of the tongue is irregular and it cannot articulate the words which it utters, and consequently it stumbles?

Why do the hairs stand erect on the bodies of those who are chilled? Is it because as a result of cooling the heat collects in the inner region of the body, and the flesh, as the heat leaves it, contracts more and more, and, as it is drawn together, the hairs become more upright?

[Or is it because...]

Why in the winter are we more likely to become chilled through running than through standing still? Is it because the air surrounding the body, when we stand still, no longer causes discomfort when once the body is thoroughly warm, but on the other hand, when we are running, we are continually encountering more and more cold air, and so are more liable to become chilled? Moreover also air is cold when it is in motion, and it is for the most part such air that meets us in running.

Why is it that it is colder at dawn, although the sun is nearer to us? Is it because the period of the sun's absence is then at its longest, so that the earth has become more cooled? Or is it because towards daybreak the dew falls, as does the hoarfrost, and both of these are cold? Or do they too fall because the heat which rises

from the earth is overpowered, the reason that it is overpowered being the absence of the sun? So that they do not fall when the sun is farther away, but when it is nearer they fall and become congealed, because the longer the sun is absent the cooler the ground becomes. Or is it because the nocturnal breezes tend to cause cold towards daybreak? Or do we only imagine that it is colder because then the food within us is concocted and, the stomach being emptier, we are more liable to feel the cold? This can be illustrated by the fact that we feel very cold after vomiting.

Why is it that those who are chilled feel pain if they are taken straight to the fire, whereas they do not do so if they are warmed gradually? Is it because one contrary immediately succeeding another contrary always sets up a violent change? We may compare the fact that if one bends a tree by degrees, it does not suffer, but if one bends it with greater violence and not gradually, it breaks off.

If therefore like is unaffected by like, and the heat of a man who is chilled collects and concentrates within him, and the moisture and cold are left behind, and a contrary is destructive of its contrary, it follows that, if one is warmed by degrees, the heat comes out gradually and less pain is caused, but, if the warming is not gradual, the heat is rather drawn out.

Why is it that when we are chilled the same heat causes more burning and pain? Is it because owing to its density the flesh holds the heat which comes into contact with it? This is the reason why lead becomes hotter than wool. Or is the passage of the heat violent because the pores are congealed by the cold?

Why is it that those who are angry do not become cold? Is it because anger and wrath are the opposite of cowardice? Now anger is the result of fiery heat, for by retaining a large quantity of fiery heat within us we become warm. This is particularly noticeable in children. For grown-up men when angry become distracted, but children first of all take in breath in large quantities and then blush; for the amount of heat in them being very great and causing liquefaction makes them blush, since, if one were to pour a quantity of cold water on them, they would cease from their wrath, for their heat would be quenched. The opposite occurs in cowards and those who are afraid; for they are chilled and become cold and pale; for the heat leaves the superficial region of their bodies.

Why is it that when we shiver, the hairs stand erect? Do they lie down because they grow in moisture? For the weight of the hair prevails over the moisture.

Now shivering is caused by the cold, for the cold naturally congeals the moisture. When therefore the moisture, out of which the hair grows, undergoes a change and congeals, it is natural that the hair should undergo a change also.

If therefore it changes into a contrary condition, it either remains permanently in that condition, or else the hair will again prevail over the moisture. It is not, however, likely that the hair can by its weight overpower the moisture when it is congealed and condensed; and if it is impossible for the hair to lie down anywhere because the moisture is congealed, the only thing left for it to do is to stand erect. Or is it because, as a result of cooling, the heat collects in the interior region of the body, and the flesh, as the heat leaves it, contracts more and more, and, as it draws together, the hair grows more upright, just as when one fixes a twig or some other object into the ground and fills the space round it and collects the soil on every side, it is more likely to remain erect than if one leaves the soil loose round it?

Why is it that those who are chilled find it particularly difficult to go to sleep? Is it because one who is chilled holds his breath rather than exhales, and a sleeper exhales rather than inhales? Chill therefore induces a condition which is directly opposed to sleep.

## **BOOK IX. PROBLEMS CONNECTED WITH BRUISES, SCARS, AND WEALS**

Why is it that weals can be prevented by the application of newly flayed hides, particularly those of rams, and by breaking-eggs over the part affected? Is it because both these things prevent the collection of moisture and the consequent swelling? For the wounded place attracts the moisture and swells owing to the inflammation. Now eggs owing to their glutinous consistency cause adhesion and prevent swelling (their effect resembling that of cautery), acting as a kind of glue. The hide owing to its glutinous condition adheres and at the same time by its heat sets up concoction and stops the inflammation, for they do not remove it for several days. Rubbing with salt and vinegar is also employed with the object of drawing out the inflammation.

Why is it that scars are black on the rest of the body but white on the eye? Is it

because a scar, like everything else which is diseased, takes on the contrary of its original colour, and it is in the black part of the eye that wounds are inflicted? However, scars on the body do not become black immediately, but are white at first; nor are scars in the eye always white, but it is only after a while that they become absolutely or comparatively so.

Why does a fennel-stalk make the parts round the place which is struck red and the centre of it white? Is it because it presses the blood away from the middle, at the point where, being round, it strikes deepest? Or would one not expect the blood for this reason to return there again, the redness being due to the rush of blood and such a rush taking place towards the part which is struck?

Why is it that, when a violent blow is struck with a fennel-stalk, the middle of the flesh which is struck turns white and the surrounding parts red, whereas, if an ordinary stick is used, the middle is the reddest part? Is it because the fennel-stalk owing to its lightness, if it strikes a hard blow, disperses the blood on the surface, and so the part from which the blood has retired has a white appearance, but the parts to which it flows in greater quantities become redder? When the part struck swells up, the dispersed blood does not readily return to its place, because it is scanty and the course which it must follow is upwards; for it needs the force imparted by mass to make it follow an unnatural course. But blows dealt with hard objects owing to their weight and strength cause compression and crushing.

The compression, therefore, produces a hollow, while the crushing causes rarity; for crushing is a mild form of cutting and cleaving. The middle of the part struck becoming hollow and rare, the blood flows into it from the surrounding surface; for it naturally flows downwards and into the rare parts, because they give way before it. The blood collecting there naturally makes this part red, whilst the surrounding regions, from which the blood retires, turn white.

Why do those who are splenetic have black scars? Is it because their blood is corrupted by the admixture of vitiated and watery blood from the spleen? Now the scar occupies only a small depth of the skin on the surface, but the blood, which is black because it is watery and hot, shows through the skin and gives the scar also a black appearance. Moreover, very often the scar meanwhile becomes blacker and blacker; this is due to the same cause, for owing to the weakness of the skin the blood cools, and as the heat evaporates, turns blacker. Similarly in the aged the flesh becomes blacker, and their congenital scars are blacker than

those of the young; for their whole body assumes as it were the condition of a bruise owing not to the thinness of their skin but to the fact that their heat fails.

Do things which cause the same effect possess the same power for the production of that effect, or not? For example, seeing that copper and radishes and mashed beans and 'sea-lungs' and clay and various other things take away bruises, do they do so in virtue of the same power? Or does copper produce this effect because of its rust, which has a medicinal value, and beans and 'sea-lungs' and clay because they have an attractive force owing to their rarity, and other things for various other reasons? Or is the ultimate effect the same in all these cases (for many of them possess contrary qualities, for example heat and cold), while the earlier effects may nevertheless be different?

Why do all other scars turn black, while those in the eye are white? Is it because they cause a change in respect of colour in the parts in which they occur, and so scars which occur in the eye, which is black, must necessarily be white?

Why is the blow of a fennel-stalk more painful than that of some much harder instruments, if in dealing the blow one considers their comparative effects? For it would be much more natural to suppose that the stroke of a harder instrument would be more painful, for it deals a heavier blow. Is it because the flesh is pained not only by receiving a blow but also by dealing one? When it is struck by hard substances, it only receives a blow (for it yields to them because they are hard); but when it is struck by a fennel-stalk, two effects are produced — it receives a blow and it also deals one, because it does not yield owing to the lightness of the weight imposed upon it; and so the blow is of a double nature.

Why are thapsia and metal ladles used to stop bruises, (the former being applied immediately, the latter at a later stage), containing as they do opposite qualities? For a ladle is cold, as the poet says, *Between his teeth the chilly bronze he bit*; whilst thapsia is hot and burning. Does the ladle have the same effect that water has upon the fainting? For its coldness encounters the heat and prevents it from escaping out of the blood, which collects on the surface owing to the blow and congeals when the heat passes out. For just as would happen if it congealed outside, so the blood congeals near the outer surface while it is still under the skin; but if the heat is prevented from escaping by the coldness of the bronze, the blood does not congeal, but disperses again and returns to the area from which it was collected. Thapsia being hot has the same effect; for by its heat it prevents congelation.

Why are bruises dispersed by the application of copper objects such as ladles and the like? Is it because copper is cold? It therefore prevents the escape of the heat from the blood which collects as the result of the blow, and it is the loss of heat from the surface which causes the bruise. The ladle must therefore be applied quickly before congelation takes place. Thapsia, too, mixed with honey is a good remedy for the same reason; for being hot it prevents the blood from becoming cold.

Why is it that if a wound occurs several times in the II same place, the scar turns black? Is it because, whenever a wound is dealt, the part affected is always weak and becomes weaker the more often it is wounded? Now that which is weak is chilled and full of moisture; therefore it has a black appearance. Again large and inveterate wounds form black scars, and to receive frequent wounds is equivalent to having one wound for a long time.

Why do we apply metal ladles to bruises? Is it because, when we are struck, the part affected is cooled and the heat leaves it? So the application of the ladle, the material of which, being copper, is cold, prevents the heat from escaping.

Why is it that hairs do not grow on scars? Is it because the pores, from which the hairs grow, become blocked up and displaced?

Why do blows cause swelling and discoloration? Is it because the moisture in the part affected is dispersed and, after breaking its way into the adjoining regions, recoils again and collects owing to the conglutination of the moisture? Also if any small veins are burst, a collection of bloodshot matter is formed.

## **BOOK X. A SUMMARY OF PHYSICAL PROBLEMS**

WHY is it that some animals cough, while others do not, for example a man coughs, but an ox does not? Is it because in most animals the excretion is directed to some other part, but in man to this part? Or is it because in man the matter in the brain is very copious and liquid, and coughing occurs when phlegm flows down?

Why is it that in man alone of the animals blood flows from the nostrils? Is it because the matter in his brain is very copious and liquid, whence the veins, becoming full of excretion, send forth a stream through the ducts? For unhealthy blood (that is, blood which is mixed with excretions from the brain) is thinner

than pure blood and resembles lymph.

Why is it that some animals are fat under the flesh, others in the flesh, and others in both these places? Is it because in those whose flesh is dense the moisture collects between the skin and the flesh, because the skin there is naturally loose, and this moisture being concocted turns into fat? Those, on the other hand, who have rare flesh and a tightly fitting skin, become fat in the flesh; while those who have both these characteristics are fat both in and under the flesh.

Why are boys and women less liable to white leprosy than men, and middle-aged women more than young? Is it because white leprosy is due to the escape of breath, and the bodies of boys are dense and do not allow the passage of breath, and those of women do so less than those of men, for the breath is diverted into the *catamenia* ? The density of their flesh is shown by its smoothness. But the bodies of middle-aged and old women allow the passage of breath; for they alone, like old buildings, have a loose structure of their component parts.

Why is it that man alone has white leprosy? Is it because he is the thinnest-skinned and at the same time the fullest of breath amongst the animals? An indication of this is the fact that leprosy appears most abundantly and soonest on the parts of the body where the skin is thinnest. Or, while this is true, is there a further reason, namely, that in man alone of the animals the hair turns grey? For in leprosy the hair becomes grey, and so it is impossible for leprosy to occur in those in whom the hair does not turn grey.

Why is it that goats and sheep yield the most milk, although their bodies are not the largest, whereas women and cows produce proportionately less? Is it because in the latter two cases the available material is used up to form bulk, whilst in the other animals it goes into excretions, and in sheep and goats the residue of the excretion all becomes milk? Or is it because sheep and goats are more prolific than the large animals, and so draw off more excretion, because they have more offspring to nourish? Or is it because owing to the weakness of their bodies more excretion is formed during the period of gestation, and the milk comes from the excretion?

Why is it that in some animals (goats, for example) a change of water causes a change in their colour, which assimilates to that of other animals in the new locality, whereas with other animals (man, for example) this is not so? Or, to put



the question generally, why do some animals change and others not (the crow, for example)? Do those animals not change in whom the element of moisture does not predominate, birds, for example, which consequently have no bladder? Why is it that while such creatures do not themselves change, yet their offspring do so? Is it because the offspring is weaker than its parents?

Why are males usually larger than females? Is it because they are hotter, and heat is productive of growth? Or is it because the male is complete in all its parts, whereas the female is defective? Or is it because the male takes a long time to attain perfection, the female a short time?

Why is it that some animals bear their young quickly, but in others the period of gestation is a long one? Is it because the longer-lived animals come to perfection more slowly? It is the longer-lived animals that take a long time to bear their young. This is not, however, true of the longest lived of all animals; for example, the horse is slower in bearing its young but shorter-lived than man.

The reason of this is the hardness of the uterus; for the uterus of a mare may be compared to a dry soil which does not readily bring the crops to maturity.

Why is it that the young of all other animals resemble their parents in nature more closely than do those of man?

Is it because man's mental condition is more varied at the moment of sexual intercourse, and so the offspring varies according to the condition of the male and female parents? The other animals, or most of them, are wholly absorbed in the sexual act; further, owing to this avidity, impregnation does not usually take place.

Why is it that fair men and white horses usually have grey eyes? Is it because there are three colours in eyes, black, greenish, and grey, and the colour of the eyes follows that of the body, resulting in this case in greyness?

For what reason are there dwarfs? Or to put the question more generally, why are some creatures quite large, others small? Let us examine the latter question. The causes of smallness are two, either space or nourishment — space, if it be narrow, and nourishment, if it be scanty; as happens when attempts are made to make animals small after their birth, for example by keeping puppies in quail-cages. Those who suffer from lack of space become pygmies; for they have width and depth corresponding to the dimensions of their parents, but they are

quite small in stature. The reason of this is that owing to the narrowness of the space in which they are confined the straight lines become crushed and bent. So pygmies are like figures painted on shops which are short in stature but are seen to be of ordinary width and depth. Those who fail to come to perfection from lack of nourishment clearly have the limbs of children, and one sometimes sees persons who are very small and yet perfectly proportioned, like Melitaeans. The reason is that the process of growth has a different effect from that of space.

Why is it that some animals come into being from the sexual intercourse of animals with one another, others from the compounding of certain elements — a process resembling the original production of their species? Just as the writers on natural phenomena explain the first origin of animals as being due to powerful changes and movements in the world and universe; so now, if it is to happen again, some similar movements must take place. For the beginning of anything is the most important part, being indeed half of the whole; and in this case the seed is the beginning. The reason then why small animals which are not produced by sexual intercourse resemble the species as it originally came into being, is the smallness of the seed; for the smaller a thing is, the smaller is its first beginning. So the changes even of this are sufficient to produce a seed for it. And this is what actually happens; for it is under conditions of change that such creatures usually come into being. In the larger animals a greater change is necessary for their production.

Why is it that some animals are prolific, such as the pig, the dog, and the hare, whilst others are not so, for instance man and the lion? Is it because the former class has a number of wombs which they desire to fill and moulds into which the semen is distributed, while with the latter the opposite is the case?

Why has man a smaller distance between his eyes in proportion to his size than any other animal? Is it because man follows the law of nature most closely and perception is naturally of that which is in front, since it is necessary to see beforehand that to which the movement is directed?

Now the greater the distance between the eyes, the more will the sight incline sideways. So if the sight is to accord with the law of nature, the distance between the eyes ought to be as small as possible, for then it will travel most directly forward. Further, the other animals must necessarily turn their gaze sideways, since they do not possess hands; their eyes therefore are farther apart, especially

those of sheep, because they generally advance bending their heads downwards.

Why is it that the other animals seldom or never emit semen during sleep? Is it because no animal except man sleeps on its back and no emission of semen takes place except in that position? Or is it because the other animals dream less than man, and the emission of semen only takes place when the imagination is stirred?

Why is it that some animals move their heads and others not? Is it because some have no necks and so cannot move their heads?

Why does man sneeze more than the other animals? Is it because in him the ducts are wide through which the breath and scent pass in? For it is with these, when they fill with breath, that he sneezes. That these ducts are wide is shown by the fact that man has a weaker sense of smell than any other animal; and the narrower the ducts, the keener is the sense of smell. Since, therefore, the moisture, the evaporation of which causes sneezing, enters in larger quantities and more often into wide ducts, and man more than any other animal has such ducts, he might naturally be expected to sneeze most often. Or is it because his nostrils are particularly short and so the heated moisture can quickly turn into breath, whereas in the other animals, owing to the length of their nostrils, it cools before it can evaporate?

Why is it that in no animal is the tongue of a fatty consistency? Is it because that which is fat is dense, whereas the tongue is naturally rare in order that it may recognize different flavours?

Why is it that females pass urine with an effort, but males without an effort? Is it because in the female the bladder is farther away both in depth of position and in distance, since the womb is situated between the fundament and the bladder? It therefore requires a greater effort to drive the urine owing to the distance of the womb; and the requisite force is exercised by an effort of the breath.

Why is it that all such animals as do not fly shed their winter coats, except the pig? The dog, for example, does so, and the ox. Is it because the pig is very hot and its hairs grow out of a hot substance (for that which is fat is hot)? In the other animals the hair is shed because either the moisture cools or else the natural heat cannot concoct the nourishment. But the pig does not shed its hair, either because the moisture in it undergoes no change or because its nourishment

is properly concocted; for whenever any cause is present to make it shed its hair, the fat is sufficient to prevent it. Sheep and men are unaffected owing to the quantity and density of their hair; for the cold cannot penetrate deep enough to congeal the moisture or to prevent the heat from concocting it.

Why is it that in sheep the hair grows again softer when it is plucked out, but in man it is harder? Is it because the hair of sheep grows out of the surface, and so can be plucked out without causing pain, the source of its nourishment, which is in the flesh, remaining unimpaired? So the pores being opened, the excretions evaporate more readily, and the wool receives the natural nourishment of the flesh, the latter being fed by soft, sweet nourishment. The hair of man, on the other hand, since it grows from a great depth, can only be plucked out by force and painfully. This is shown by the fact that it draws blood with it. The place therefore from which it is plucked is wounded and scarred. So at last the hair ceases to grow on those who pluck it out, and as long as it does grow again, it grows hard, because all the nourishing food in the flesh fails, and it is from the excretions of this food that the hair grows. This can be illustrated by the fact that in all those who inhabit a southerly clime the hair is hard, because the exterior heat penetrates deeply and vaporizes the well-concocted nourishment; but the hair of those who dwell in northern climes is soft, because in them the blood and sweet humours are nearer the surface, for which reason also they have a healthy complexion.

Why is it that in sheep the longer the hair grows the harder it is, whereas in man it is softer? Is it because the hair of sheep, obtaining the nourishment described above, receives less food because it is far removed from the source of it, and the nourishment already present in it easily evaporates out of it owing to the heat as a result of incomplete concoction? And as the hair dries it becomes harder; for it is the moisture which makes it soft. Human hair, on the other hand, receives less nourishment but is situated nearer to the source of it; and the nourishment is more thoroughly concocted because it is less abundant, and, being concocted, it makes the hair softer, because anything that is concocted is softer than that which is unconcocted; for human hair is derived more from excretion than that of sheep. That concocted matter is softer than unconcocted is shown by the fact that the wool of young sheep is softer than that of old.

Why is it that thick-haired men and birds with thick feathers are lustful? Is it because they are naturally hot and moist? Now both these characteristics are necessary for sexual intercourse; for the heat causes excretion, and the moisture

is the form which the excretion takes. Lame men are lustful for the same reason as birds; for, owing to the deficiencies of their legs, the nourishment is carried downwards in small quantities only, but travels into the upper region of the body in large quantities, and is there converted into semen.

Why has man no mane? Is it because he has a beard, and so the nourishment consisting of the necessary excretion, which in animals goes into the mane, in man goes into the beard?

Why is it that all animals have an even number of feet? Is it because it is impossible to move (except by jumping), unless some part is at rest? Since, then, progression involves two things, namely, movement and rest, we immediately get here a pair and an even number. Quadrupeds have two more legs; for they move two, while the other two are at rest. Six-footed animals have an additional pair, of which one moves while the other is at rest.

Why is it that in horses and asses hair grows out of scars, but not in man? 'Is it because in the other animals the skin is part of the flesh, but in man it is only as it were a condition of the flesh? For in man the surface of the flesh seems to become harder through cooling and resembles what we call the crust of boiled meal; just, then, as this crust is really only boiled meal, so what is called man's skin would really be only flesh. Now when a man receives a wound or is chafed, the result is that his flesh becomes denser; and so, the surface of the flesh having undergone a change, the wounded parts do not assume the same nature as the original skin; and, as the flesh has undergone a change, it is not to be wondered at that what grew from it no longer does so — a phenomenon also occurring in what is called baldness, which is also due to a corruption and change in the surface of the flesh. When, however, beasts of burden have been chafed and recover again, the parts of the body affected fill out again with the same substance, but it is weaker than it was before; and since their skin too is a part of them, the hair (which grows out of the skin) must come forth and grow, but it is white, because the skin which was formed is weaker than the original skin, and white hair is the weakest kind of hair.

Why is it that among the other animals twins though differing in sex are just as likely to survive, but this is not so with the young of man? Is it because human twins are particularly weak, for man naturally produces only one offspring at a time? Now in twins it is unnatural to find a diversity of sex; and so what is most contrary to nature is also weakest.

Why is it that in horses and asses hair grows out of scars, but not in man? Is it because the scar impedes the growth of the hair, either owing to the condensation of the flesh or because its nutrition is impaired? In man, therefore, it absolutely prevents the growth owing to the weakness of the hair; but in horses it does not prevent, but merely impairs, the growth.

Why have animals an even number of feet? Is it because in anything that moves something must necessarily be at rest, and this could not happen if there were an odd number of feet (for it was the arrangement of the feet in pairs which originally made movement possible)?

Why is it that animals are asleep for a shorter time than they are awake, and their sleep is not continuous? Is it because all the excretion is not concocted at the same time, but, when some is concocted, the animal is relieved and wakes up? Again, they more often wake up when the region in which the excretion is concocted becomes cold; for it quickly and frequently ceases to do its work, and this cessation causes awakening. Sleep not unnaturally seems to be pleasant, because it gives us rest; but the rest which we take in sleep does not last longer than the time taken by our natural activities, nor do we eat for a longer period than that during which we abstain from food, in spite of the fact that eating is pleasanter than fasting.

Why is it that some animals imitate their parents immediately after birth, whilst others, like man, do so late, or hardly at all, or never? Is it because some quickly attain a state of physical perfection, whilst others are late in doing so, and some are without a perception of what is for their good, whilst others possess such a perception? Those therefore which possess both these qualities, namely, perception of what is for their good and physical perfection, imitate their parents, but those who have not both these qualities do not do so; for physical and perceptive powers are both requisite.

Why is it that white leprosy does not occur in animals other than man? Is it because, while it is a disease which afflicts other animals, only in man does the hair and skin turn partially white? (But, if so, one might raise the question why diversity of colour in animals occurs at birth and not afterwards.) Or is it because the skin of other animals is hard, whereas man has naturally very thin skin? Now white leprosy is an excretion of breath, which in the other animals is prevented from escaping by the thickness of their skin.

Why is it that in white leprosy the hair turns grey, but it does not necessarily follow that leprosy is always present where there is grey hair? Is it because the hair grows from the skin, and greyness is as it were a corruption of the hair? When therefore the skin is in a morbid condition, the hair that grows from it is necessarily affected; but when the hair is unhealthy the skin is not necessarily so.

Why is it that some animals are ill-tempered after bearing young, dogs, for example, and pigs, but others are not noticeably so, for instance women and sheep? Is it because those animals which are full of excretions are mild-tempered, for that which causes them pain passes out at the time of birth? Those, on the other hand, who in bearing young lose healthy material, are made irritable by the reduced condition in which they are; just as hens are bad-tempered, not just when they have laid, but when they are sitting, from want of food.

Why is it that eunuchs, when they are emasculated, in other respects change into the likeness of the female, — for they have the voice, the shapelessness, and the looseness of joints which characterize women, and so undergo a violent change, as do other animals when castrated (in bulls and rams, however, we find the horns assuming contrary forms, the reason being that their females have contrary kinds of horns, and so bulls when they are castrated grow larger horns and rams smaller horns) — in respect of size, however, alone eunuchs change into the likeness of the male, for they become larger? Now size is characteristic of the male, for the female is smaller than the male. Or is it not after all a change into the likeness of the female rather than the male? For it is not a change in every dimension, but only in height, whereas the male is characterized by width and depth as well; for this is what his full growth involves. Furthermore, as is the female to the male, so within the female sex is the maiden to the woman; for the latter has reached the full nobility of form, while the former has not yet done so. It is into the likeness of *their* nature then that the eunuch changes; for their growth is in height.

So Homer well says, Stature chaste Artemis gave them, as being able to give what, being a maiden, she herself possessed. When, therefore, a eunuch changes in size, he does not change into the likeness of the male; for the change is not in the direction of physical perfection, but eunuchs increase in size only in respect of height.

Why is it that eunuchs either never suffer from varicocele, or do so less than others? Is it because, by their being castrated, their nature changes into that of

persons lacking generative power? Now boys and women lack this power, and neither has varicose veins except women very occasionally.

Why is man better able to utter many voices, while other animals of one and the same species utter only one voice?

Has man too really only one voice, but many forms of speech?

And why has man different forms of speech in different places, while the other animals have not? Is it because men in their speech make use of a number of letters, but the other animals employ either none or only two or three consonants?

(Now it is consonants combined with vowels that form speech.) Now speaking is signifying something not merely by the voice but by certain conditions of the voice, and not merely to signify pain or pleasure; and it is the letters which regulate these conditions. But children express what they want to say just in the same way as wild beasts; for young children cannot yet make use of the letters in speech.

Why is it that of all animals man alone is apt to hesitate in his speech? Is it because he is also liable to be dumb, and hesitancy of speech is a form of dumbness, or at any rate the organ of speech is not perfect? Or is it because man partakes more of rational speech, while the other animals only possess voice, and hesitancy of speech, as its name implies, is simply being unable to explain one's meaning continuously?

Why is it that man more than the other animals is apt to be lame from birth? Is it because the legs of animals are strong (for quadrupeds and birds have bony and sinewy legs), but human legs are fleshy, and so owing to their softness they more easily become damaged through movement? Or is it because in man alone of animals the period of gestation varies? For he may be born after the seventh or the eighth or the tenth month. For the other animals there is one fixed time for coming to perfection without any further delay; but in man the period of delay is long, and so, when the foetus moves, its extremities being soft are more liable to become broken in the longer period.

Why have eunuchs sore and ulcerated legs? Is it because this is also characteristic of women, and eunuchs are effeminate? Or, while this is true, is the cause in women as well this, that the heat has a downward tendency?



(Menstruation shows that this is so.) So neither eunuchs nor women grow thick hair, owing to the presence of copious moisture in them.

Why is it that no animal except man suffers from gallstones? Is it because in beasts of burden and cloven-hoofed animals the ducts of the bladder are wide? Those animals which produce their young alive not immediately but after an interval, like certain of the fishes, never have bladders, but the sediment which might form gallstones is forced into the bowels (as happens also in birds), and so easily passes out with the excrement. But man has a bladder and a stalk to the bladder, which is narrow in proportion to his size; so, because he has this part, the earthy matter is forced into the bladder (and so chamber-pots become discoloured by it) and, owing to the heat in that region, it becomes concocted and thickens still more and remains there and increases owing to the narrowness of the urethra; for the earthy sediment, being unable to make its way out easily, coheres together and forms a gallstone.

“ — Why is it that beasts of burden and cattle and horned animals and birds do not eruct? Is it owing to the dryness of their stomachs? For the moisture is quickly used up and percolates through; whereas eructation results when the moisture remains and evaporates. In animals with long manes and tails, owing to the length of their necks, the breath tends to travel downwards, and therefore they generally break wind backwards. Birds and horned animals neither eruct nor break wind; and ruminating animals do not eruct, because they have several stomachs and the so-called ‘reticulum’; and so the breath finds a passage up and down through many channels, and the moisture is taken up before it can become vaporized and cause either eructation or breaking of wind.

Why is it that tame animals are invariably found also in a wild state, but wild animals are not always found also in a tame condition? For even men certainly exist in a wild state in some places, and wild dogs are found in India and horses elsewhere; but lions and leopards and vipers and many other animals are never found in a tame state. Is it because the inferior condition is more easily acquired at first and it is easier to degenerate into it, since it is not the original but the ultimate nature which is difficult to attain to at once? For this reason all tame animals are at first wild rather than tame (for example the child is greedier and more quick-tempered than the man), but physically weaker. So we find the same state of affairs in the products of nature as in those of the arts. For among the latter there are always badly made objects, and the bad are more numerous than the good, beds for instance and garments and the like; and, where a good object

is produced, it is always possible to find also a bad one, but, where a bad object is produced, it is not also possible always to find a good one. This can be seen from an examination of the works of the primitive painters and sculptors; for in their day there was not yet any good painting or sculpture anywhere, but only inferior work. So likewise nature always produces inferior specimens and in a greater number, and superior specimens in a smaller number and in some cases not at all. Now the tame is superior and the wild inferior.

It is, I suppose, easier for nature — not the primitive nature but that towards which animals develop — to make the good kinds also tame; but the opposite kinds never, or scarcely ever, become tame, and it is only under certain conditions of locality and time that sooner or later owing to a general admixture of circumstances all animals can become tame. The same thing happens in plants of all kinds; those which are garden plants are also found in a wild state, but it is impossible for all to be cultivated, but some are so peculiarly conditioned in many respects in their natural soil that, though neglected and left wild, they grow better and more like cultivated plants than those which are carefully tilled in other soil.

Why is it that men have large navels, whereas in the other animals they are inconspicuous? Is it because in the latter, owing to the long period of gestation, they wither off and project outwards and swell all up into sores, and so the navel sometimes even becomes misshapen? Now man comes forth from the womb in an imperfect condition, and so his navel comes away still full of moisture and blood. That some animals are perfect and others imperfect at birth is shown by the fact that some animals can fend for themselves, but children require looking after.

Why is it that some animals copulate only once, others frequently, and some only at certain seasons of the year and others at no fixed time? For example, man does so at all times but wild animals only occasionally, and the wild boar only does so once but the domesticated pig frequently. Is it the effect of nourishment and warmth and exercise, since 'Cypris depends on fullness'? Again, the same species bears young once in some localities but several times in others; for instance, the sheep in Magnesia and Libya have young twice a year. The reason is the prolonged period of gestation; for animals, when their desire is satisfied, feel desire no longer, just as, when they have fed, they no longer desire food. Also animals when pregnant feel less desire for sexual intercourse, because the menstrual purgation does not take place.

Why is it that men who have porous teeth are generally short-lived? Is it a sign that the skull is thick? For the brain is weak if it is not well ventilated, and so, being moist, it quickly decays, just as all other things decay if they are not in motion and cannot evaporate. For this reason too man has very thick hair upon the head, and the male is longer-lived than the female because of the sutures in his skull.

But we must next consider length of life in relation to other conditions.

Why then are men long-lived who have a cut right across their hands? Is it because animals whose limbs are badly articulated are shortest-lived, aquatic animals for example?

And if those which are badly articulated are short-lived, clearly those that are well articulated must be the opposite. Now the latter are those in which even those parts are best articulated which are by nature badly articulated; and the inside of the hand is the least well articulated part of the body.

Why is it that man alone squints, or at any rate does so more than any other animal? Is it because he alone, or more than other animals, is liable to epilepsy in infancy, when distortion of the vision also always begins?

Why is man more affected by smoke than other animals? Is it because he is most prone to shed tears, and shedding tears is one of the effects of smoke?

Why does horse take pleasure in and desire horse, and man take pleasure in man, and generally why do animals delight in animals which are akin to and like them? For every animal is not equally beautiful, and desire is of the beautiful. The beautiful then ought to be pleasanter; but in actual fact it is truer that not every kind of beauty is pleasant, nor are pleasure and the beautiful equally pleasing to all men; for example, one creature takes greater pleasure in eating or drinking and another in sexual intercourse. The question why each creature prefers and takes greatest pleasure in sexual intercourse with a creature that is akin to it is dealt with elsewhere; but to add that what is akin is also most beautiful is not true. But we regard as beautiful that which is pleasing with a view to sexual intercourse, because, when we feel desire, we delight in looking upon the object of our desire. And indeed the same thing happens in other forms of desire; for example, when we are thirsty we take greater pleasure in the sight of something to drink. So that which is beautiful in view of a certain use of it

seems to be most pleasant because we particularly desire it. (But this is not true of that which is beautiful in itself, as is proved by the fact that even grown men appear to us beautiful, when we look at them without any idea of sexual intercourse. Do they then appear beautiful in such a way as to give our eyes more pleasure than those who are of an age for sexual intercourse? There is no reason why they should not, provided we do not happen to feel a desire for sexual intercourse.) Thus something to drink appears to us as particularly good; for, if we happen to be thirsty, we shall see it with considerable pleasure.

Why is it that in man the front of the body is more thickly covered with hair than the posterior portion, but in quadrupeds the posterior part is hairiest? Is it because all two-footed animals have the front part of the body more thickly covered? For the birds resemble man in this respect. Or is nature always wont to protect the weaker parts and is every creature weak in some respect? Now in all quadrupeds the posterior portions are weaker than the front parts owing to their position; for they are more liable to suffer from cold and heat; but in man the front portions of the body are weaker and suffer likewise under these conditions.

Why is it that man sneezes more than any other animal? Is it because he also suffers most from running at the nose? The reason of this is that, the heat being situated in the region of the heart and being naturally disposed to rise upwards, in the other animals its natural direction is towards the shoulders and thence, splitting up owing to refraction, it travels partly into the neck and head and partly into the backbone and flanks, because these parts are all in the same straight line and parallel to the ground on which the animal stands. Now the heat, as it travels along, distributes the moisture uniformly to these parts alike; for the moisture follows the heat. Four-footed animals therefore do not suffer either much from running at the nose or sneeze; for sneezing is due to the rush either of a mass of breath, when moisture evaporates more quickly than the body, or of unconcocted moisture (hence it precedes a cold in the head); and these forms of moisture are not found in the other animals, because the rush of heat is equally distributed between the fore and hind parts of an animal. Man being naturally, like the plants, at a right angle to the ground on which he stands, the result is that a very copious and violent rush of heat takes place in the direction of the head, and the heat in its course thither rarefies and heats the ducts in the region of the head. Now these ducts being in this condition are better able to receive the moisture than those leading downwards from the heart. When, therefore, a man happens to have become in too moist a condition and to have been cooled off externally, the result is that the heat obtaining nourishment and collecting within

increases, and as it does so it is carried to the head and the ducts there.

Into these the moisture, which is thin and unconcocted, follows the heat and fills them up and causes cold in the head and likewise sneezing. For at the beginning of a cold the heat, being carried along in advance of the moisture and inflating the ducts, causes sneezing by the expulsion of the breath and by the drawing off of those humours which are light and pungent. Hence it happens that after sneezing from a cold in the head one wipes away watery matter. These all having been set in motion, the continuous and solid humours follow closely upon them and block up the ducts in the region of the head and nostrils. If they become swollen and distended, they cause pain in the region of the head. That the ducts are blocked is shown by the fact that no breath can pass out through them; so those who suffer from running at the nose neither sneeze nor can they use their sense of smell. Sneezing unaccompanied by running at the nose is due to the same causes, but has some slight and insignificant origin; and so the humours, being collected by the heat and vaporized by it owing to their small mass, are precipitated down the nostrils. The noise made by the breath is due quite as much to the violence of its rush as to its quantity. For the heat, being carried along in a direct line to the brain and rushing into it, is refracted into the nostrils, because the ducts there lead out from the brain. The rush made by the breath in breaking out into the nostrils, being unnatural, is consequently violent, and therefore makes loud noises. Amongst the other animals birds are most liable to running at the nose, because they most resemble man in form; but they are less liable to it than man, because they usually hold their heads down, since they derive their food from the ground.

Why are marine animals larger and better nourished than land animals? Is it because the sun consumes the outer surface of the earth and takes the nourishment out of it? (For this reason too those animals which are enclosed in the earth are better nourished.) Marine animals then are free from all these disadvantages.

Why is it that the other animals provide themselves more often with dry than with moist food, but man takes more moist than dry nourishment? Is it because man is naturally very hot and therefore requires most cooling?

Why is it that eunuchs do not become bald? Is it because they have a large amount of brain-matter? Now this is the result of their not having sexual intercourse with women; for the semen passes from the brain through the spine.

For this reason too bulls which have been castrated appear to have large horns after castration. For the same reason also, apparently, women and children are not bald.

Why is it that some animals are able to feed themselves directly after birth, while others cannot? Are those who can do so the shorter-lived among those animals which are capable of memory? It is for this reason that they always die sooner.

Why does man produce more moist than dry excrement, but horses and asses more dry than moist? Is it because the latter animals take more dry food, whereas man takes more moist than dry nourishment? For all excrement comes from food, and a greater amount of food produces a greater quantity of excrement. Some animals then take more moist food, others more dry food, because some are naturally dry and others moist. Animals then which are naturally dry feel more desire for moist food, since they require it more; but those which are naturally moist desire dry food, for they stand more in need of it.

Why is it that birds and men and the courageous animals have hard frames? Is it because high spirit is accompanied by bodily heat, since fear is a process of cooling? Those then whose blood is hot are also courageous and high-spirited; for the blood gives them sustenance. Plants too which are watered with warm water become harder.

Why is it that quadrupeds of a small size most often give birth to monstrosities, whereas man and the larger quadrupeds, such as horses and asses, do so less often?

Is it because the small quadrupeds, such as dogs, pigs, goats, and sheep, have much more abundant progeny than the larger animals, which either always or usually produce only one offspring at a time? Monstrosities come into being when the semen becomes confused and disturbed either in the emission of the seminal fluid or in the mingling which takes place in the uterus of the female. So birds too produce monstrosities; for they lay twin eggs, and their monstrosities are born from such eggs in which the yolk is not separated by the membrane.

Why is the head in man more hairy than the rest of the body — in fact quite disproportionately so — while in the other animals the opposite is the case? Is it because some of the other animals send an excessive amount of their nutritive material into teeth, others into horns, others into hair? Those who expend their

nourishment on horns have less thick hair on the head; for the available material is used up in the horns. Those whose nourishment goes into teeth have thicker hair on the head than horned animals (for they have crests or manes), but less thick than such creatures as birds. For birds have the same sort of covering as man; but, whereas in birds the covering is distributed all over the body owing to its abundance, in man it breaks out only on the head; for man is neither on the one hand devoid of hair, nor on the other hand has he sufficient to cover the whole body.

Why is it that in man alone of the animals the hair turns white? Is it because most of the animals shed their coats every year, for instance the horse and the ox, while others, though they do not do so, are short-lived, such as sheep and others (in which case the hair does not turn white, because it does not as it were grow old)? But man does not change his hair and is long-lived, and so he grows white owing to age.

Why is it that those in whom the distance from the navel downwards is longer than that from the navel to the chest are short-lived and weak? Is it because their stomach is cold owing to its small size, and therefore it tends to cause excretion rather than concoction? Now such persons are unhealthy.

Why is it that some animals come into being not only from the sexual intercourse of animals with one another but also spontaneously, while others, such as man and the horse, can only be born as the result of sexual intercourse? Is it due, if to no other cause, at any rate to the fact that the former have a short period of coming to birth, so that the moment of birth is not protracted and can take place at the change of the seasons; but of the latter class the coming to birth is much protracted, since they are born after a year or ten months, so that they must necessarily be born from the intercourse of animals with each other or not at all?

Why is it that the teeth of Ethiopians are white — indeed whiter than those of other nations, but their nails are not correspondingly white? Are their nails dark because their skin also is black and blacker than that of others, and the nails grow out of the skin? But why are their teeth white? Is it because those things turn white out of which the sun extracts the moisture without adding any colour to them, as happens in the case of wax? Now the sun colours the skin, but it does not colour the teeth, but the moisture is evaporated out of them by the heat.

Why is it that, when the head is removed, some animals die immediately or very soon, while others do not? Does death occur less quickly in the bloodless animals, which require little nourishment, since they do not need food immediately and the heat in them is not diffused in moisture, whereas full-blooded animals cannot live without food and heat? The former can live after their heads are cut off, for they can live longer without breathing. The reason for this has been stated elsewhere.

## **BOOK XI. PROBLEMS CONNECTED WITH THE VOICE**

Why is it that of all the senses the hearing is most liable to be defective from birth? Is it because the sense of hearing and the voice may be held to arise from the same source? Now language, which is a kind of voice, seems to be very easily destroyed and to be very difficult to perfect; this is indicated by the fact that we are dumb for a long time after our birth, for at first we simply do not talk at all and then at length begin only to lisp. And because language is easily destroyed, and language (being a kind of voice) and hearing both have the same source, hearing is, as it were, *per accidens*, though not *per se*, the most easily destroyed of the senses. Further evidence of the fact that the source of language is eminently easy to destroy may be taken from the other animals; for no animal other than man talks, and even he begins to do so late, as has already been remarked.

Why is it that the deaf always speak through their nostrils? Is it because they are near to being dumb? Now the dumb make sounds through their nostrils; for the breath escapes by that way because their mouth is closed, and it is closed because they make no use of their tongue for vocal purposes.

Why have all hot-natured men big voices? Is it because they necessarily have a large amount of cold air in them?

For their breath, which is hot, attracts the air to itself, and the more of it there is the more it attracts. Now a big voice arises from setting in motion a large quantity of air, and when the motion is swift, the voice is shrill, and when it is slow, it is deep.

Why do the deaf always speak through their nostrils? Is it because the deaf breathe more violently? For they are near to being dumb; the passage therefore of the nostrils is distended by the breath, and those who are in this condition



speaking through the nostrils.

Why are sounds more audible at night? Is it because there is more quiet than owing to the absence of great heat? For this reason too there is usually less disturbance; for it is the sun which is the source of movement.

Why do voices sound shriller at a distance? For example, those who try to imitate persons shouting from a very great distance utter shrill noises, like those of an echo; and the sound of an echo is distinctly shriller, and it is a distant sound, being the result of refraction. Since then in sound the swift is shrill and the slow is deep, one would have expected voices to seem deeper from a distance, for all moving bodies move more slowly the farther they progress from their starting-point, and at last fall. May not the explanation be that these mimics use a feeble and thin voice when they imitate a distant sound? Now a thin voice is not deep, and it is impossible to emit a small and feeble sound that is deep, but such a sound is necessarily shrill. Or is it true that not only do the mimics imitate for this reason, but also the sounds themselves become shriller? The reason is that the air which travels makes the sound; and just as that which first sets the air in motion causes the sound, so the air in its turn must do likewise and be partly a motive power and partly itself set in motion. That is why sound is continuous, motive power continually succeeding to motive power, until the force is spent, which results in falling in the case of bodies, when the air can no longer impel the missile, while in the case of sound the air can no longer impel other air. Continuous sound is produced when air is impelled by air, while the missile continues its progress as long as there is air to keep a body in motion. In the latter it is always the same body that is carried along until it drops, in the former it is always different air. Smaller objects travel more quickly at first, but do not go far. Therefore voices are shriller and thinner at a distance; for that which moves more quickly is shrill — a question which we have already raised. It is for the same reason that children and invalids have shrill voices, whereas grown men and healthy persons have deep voices. That from near at hand one cannot clearly distinguish degrees of deepness and shrillness and that altogether the conditions are not the same as those of heavy bodies thrown, is due to the fact that the body thrown is one and preserves its identity throughout; whereas sound is air impelled by air. Consequently a body falls in one particular spot, while the voice scatters in every direction, just as though a body thrown were, in the course of its flight, to be broken into infinitesimally small pieces, some particles even returning on their track.

Why are newly plastered houses more resonant? Is it because their smoothness gives greater facility for refraction? They are smoother because they are free from cracks and their surface is continuous. One must, however, take a house which is already dry and not one which is still quite wet; for damp clay gives no refraction of sound.

It is for this reason that stucco has a higher degree of resonance. Perhaps the absence of disturbance in the air also contributes something; for when the air is massed together it beats back the air that strikes against it.

Why is it that if a large jar or empty earthenware vessels are buried in the ground and lids placed on them, the buildings in which they are have more resonance, and the same is true if there is a well or cistern in the house? Is it because, since an echo is due to refraction, the air when enclosed is necessarily massed together, and so the sound has something dense and smooth upon which it can strike and from which it can be refracted, these being the most favourable conditions for an echo? A well, then, or a cistern causes the contraction and massing together of air, and jars and earthenware vessels also have dense surrounding walls, and so the phenomenon in question results in both cases. For anything which is hollow is particularly resonant; for which reason bronze vessels are particularly so. That resonance still continues when the vessels are buried need not surprise us; for the voice is carried downwards as much as in any other direction — indeed one conceives of it as being carried in a circle in every direction.

But why is it that there is more resonance where vessels are buried than where they are not? Is it because covered vessels receive the air and retain it better? The result is that the impact of sound upon them is more violent.

Why does cold water poured out of a jug make a shriller sound than hot water poured from the same vessel? Is it because the cold water falls at a greater speed, being heavier, and the greater speed causes the sound to be shriller?

Heat, on the other hand, makes water lighter by rarefying it and causing it to rise. We may compare the phenomenon that torches deal softer blows when they are alight.

Why is it that the voice is rougher when one has passed II a sleepless night? Is it because the body, owing to absence of concoction, is moister than usual,

especially in its upper part (which is also the cause of heaviness in the head), and moisture in the region of the windpipe necessarily makes the voice rougher? For roughness is due to unevenness, whilst depth is due to congestion; for the passage of sound is then slower.

Why does the voice become broken very readily after meals? Is it because the region in which it is produced is thoroughly heated by constant impacts, and, becoming heated, attracts the moisture? The moisture too is itself more copious and readier to hand when food is being taken.

Why is the sound of weeping shrill, whereas that of laughing is deep? Is it because those who weep either set only a little breath in motion, because they are weak, or else exhale violently, which makes their breath travel quickly? Now speed makes for shrillness; for that which is hurled from a body which is tense travels quickly. (On the other hand, a man who is laughing is in a relaxed condition.) Those who are weak make shrill sounds, for they set only a little air in motion, in some cases merely on the surface. Further, the air emitted by those who are laughing is warm, while the breath of those who are weeping is colder, just as pain is a chilling of the region round the breast. Now heat sets a great mass of air in motion, so that its progress is slow, whereas cold imparts movement to a little air only. The same thing happens with flutes; when the player's breath is hot, the sound produced is much deeper.

Why do children and the young of other animals have shriller voices than the full-grown of their species, and that though shrillness involves a quality of violence? Is it because the voice is a movement of the air, and the swifter the movement the shriller is the sound? Now a little air can be moved more easily and quickly than a large quantity, and it is set in motion owing either to its concretion or to its dissolution by heat. Now since we draw in cold air when we inhale, the air within us can become concreted by the act of inhalation; but exhalation, when heat sets air in motion, can become voice, for it is when we are exhaling that we speak, not when we are inhaling. And since the young are hotter than their elders, and their interior passages are narrower, they may well have less air in them. So, as there is less in them of that which is moved and more motive power, namely heat, for both reasons the movement of the air may be quicker; and, for the reasons already stated, the quicker the movement the shriller the voice.

Why is the sound of weeping shrill and of laughter deep? Is it because those who

weep, in uttering their cries, strain and contract the mouth? Owing to the tension the air that is in them is impelled into swift motion, and the contraction of the mouth, through which it passes, makes its speed still greater. For both these reasons the voice becomes shrill. On the other hand, those who laugh relax the tension in doing so and open the mouth. Since then for this reason they emit the air from the mouth through a wide aperture and slowly, their voice is naturally deep.

Why is it that persons without generative power, such as boys, women, men grown old, and eunuchs, have shrill voices, while adult men have deep voices? Is it because the thin voice has only one dimension, just as the line and other thin things have one dimension, while thick things have more than one? Now it is easier to create and set in motion one thing than several things. Now the breathing of the persons mentioned above is feeble and sets little air in motion; and the air which has only one dimension is very small in quantity, for it will be thin for the reasons already stated. And the voice produced from it will be of the same quality, and a thin voice is shrill. This then is the reason why persons without generative power have shrill voices; whereas men who are vigorous set a large quantity of air in motion with their breath, and the air, being large in quantity, is likely to move slowly and causes the voice to be deep. For shrillness of voice is, as we have seen, produced by a movement at once swift and thin, neither of which conditions is fulfilled in an adult man.

Why are our voices deeper in the winter? Is it because then the air both inside and outside us is thicker, and, being such, its movement is slower and the voice therefore deeper? Further, we are drowsier in the winter than in the summer and sleep longer, and we are heavier after sleeping. In the period then during which we sleep for a longer time than we are awake (namely, the winter), we may expect to have deeper voices than in the season when the contrary happens. For during the short interval of wakefulness the condition set up during sleep persists and causes a tendency to drowsiness.

Why is the voice deeper as a result of drinking and vomiting and cold weather? Is it due to the congestion of the larynx caused by phlegm, which makes fluid matter collect in it? In some people vomiting and drinking, in others the season and the constriction resulting therefrom, make the larynx narrower, so that the passage of breath is slower; and its slow passage makes the voice deep.

Why is it that a deeper voice is more audible close at hand, but less so at a

distance? Is it because a deeper voice sets a greater amount of air in motion, but not at a distance?

So we hear it less well at a distance, because it travels less far, but better from near at hand, because a greater mass of air strikes upon our sensory organ. A shrill sound is audible at a distance, because it is thinner; and that which is thin has greater longitudinal extension. It might also be said that the motion which causes it is quicker; this would be so, if the breath which sets the air in motion were at the same time dense and narrow. For, in the first place, air which is small in bulk moves more readily (for the air which is set in motion by that which is narrow is small in bulk); and, secondly, that which is dense deals more impacts, and it is these which cause the sound. This can be illustrated from musical instruments; for, all other conditions being the same, it is the thinner strings that give shriller sounds.

Why does the voice seem shriller to those standing at a distance, whereas shrillness depends on the rapidity at which the voice travels, and that which travels moves more slowly the farther it goes? Is it because the shrillness of the voice depends not only on the rapidity with which it travels but also on the attenuation of sound? The farther one is away the more attenuated is the voice when it reaches one, because very little air is set in motion. For the motion gradually diminishes; and just as number in diminishing terminates in the unit, so a body terminates in a single dimension, and this in a body is tenuity. So it is also with the voice.

Why is it that both those who have taken violent exercise and those who are ill speak shrilly? Is it because those who are ill set only a little air in motion, and a little air travels more quickly than a larger quantity? Those who have taken violent exercise, on the other hand, set the air in vigorous motion, and air which is in vigorous motion travels more quickly, and in the voice quickness of motion causes shrillness.

Why do those who shout after meals spoil their voices? Indeed, we can see how those who are training their voices, such as actors and chorus-men and all such persons, practice early in the morning and on an empty stomach. Is it because the spoiling of the voice is simply the spoiling of the region through which the voice passes out? So too those who have sore throats have their voices spoiled, not because the breath which causes the voice is any worse, but because the windpipe is roughened. This region by its nature is especially liable to be

roughened by violent heat; and so neither can those who are in a fever sing, nor can those who have been suffering from a violent fever sing immediately after it leaves them; for their larynx is roughened by the heat. The consumption of food naturally increases and heats the breath, and it is reasonable to suppose that the breath being in this state makes the windpipe sore and rough as it passes through; and when this happens the voice is naturally spoilt.

Why is it that the voice, which is air that has taken a certain form and is carried along, often loses its form by dissolution, but an echo, which is caused by such air striking on something hard, does not become dissolved, but we hear it distinctly? Is it because in an echo refraction takes place and not dispersion? This being so, the whole continues to exist and there are two parts of it of similar form; for refraction takes place at the same angle. So the voice of the echo is similar to the original voice.

Why is it that, although the young of all other animals and infants have shriller voices than the full-grown of their species, calves have deeper voices than full-grown oxen? Is it because in each species the young resembles the female of the same kind? Now among cattle cows have deeper voices than bulls, and the calves resemble the former rather than the latter; but in all other species the males have deeper voices.

Why is it that when the orchestra of a theatre is spread with straw, the chorus makes less sound? Is it because, owing to the unevenness of the surface, the voice does not find the ground smooth when it strikes upon it and is therefore less uniform, and so is less in bulk, because it is not continuous? Similarly light too shines more on smooth surfaces, because it is not cut off by anything which intercepts it.

Why does salt make a noise when it is thrown on fire? Is it because salt has a little moisture in it which is evaporated by the heat and violently bursting forth rends the salt?

Now anything which is rent makes a noise.

Why is it that some children, before they reach the age at which it is time for them to express themselves clearly, find voice and say something distinctly, and then go on as before until the usual age for speaking arrives? Some regard such incidents as portents; and before now cases have been reported of children who

spoke immediately after birth. Is it because generally the majority of children at birth follow the usual course of nature (and so the phenomenon in question occurs only in a few), and their faculties keep pace with one another; and so they hear [and find voice] and understand what they hear and speak and express themselves clearly all at the same time? Sometimes, however, these things do not go together, but some children understand before the faculty by which they converse is set free for use, while in others the opposite happens. The latter, then, would not converse intelligently (for they merely repeat what they hear); but when the time comes at which they can both speak and understand, they make a natural use of both functions. But in those in whose souls perception through hearing has been perfected before the organ by which the voice is first set in motion and speech is formed, the full power and freeing of the organ of speech sometimes comes to pass when they already understand a great deal. This is especially likely to happen after sleep — the reason being that sleep makes the body and the faculties more sluggish by giving them a rest — or, if not after sleep, after some other similar change has taken place. We can do many things of this sort which require some short-lived opportunity — after which the conditions are no longer suitable — when the organ of speech is in this state of freedom; and when there has been obviously present to their sensation something by which thought was stirred, in virtue of having heard it the child returns to it and utters it. Now tunes and phrases often occur to us without our deliberate intention, but if we originally utter them deliberately, we afterwards speak or sing them without deliberate intention and cannot get rid of them from our lips. So too when this happens in children, they speak, and then the faculty involved relapses again into its natural condition, until the time comes for it to become strong and to be separately constituted.

Why do some objects, chests for example, suddenly make a noise and move, when nothing perceptible sets them in motion? Yet that which causes motion is stronger than that which is moved. The same question arises in connexion with corruption and old age; for everything which is said to be ‘destroyed by time’ is destroyed by something imperceptible. Is it similar to dripping water and stones lifted by the growth of plants, namely, that it is not the final effort but its continuity which raises or moves the object? This continuity of effort is imperceptible, but it results in a movement which is perceptible. So too that which is contained within perceptible spaces of time moves and can be divided into imperceptible portions, but these cause motion and corruption by their sum and their continuity. Now continuity is not in the present time but in the period of time terminated by the present.

Why does one hear less well when one is yawning? Is it because a quantity of breath emitted in the yawn finds its way also into the ears, so that the motion which it sets up in the neighbourhood of the ears makes a distinct impression on the perception, especially after sleep? Now sound is air or a certain condition of it. The sound then from outside enters the ear, and that from within comes into collision with it, and the movement thus caused checks the progress of the sound from without.

Why do children hesitate more in their speech than grown men? Is it because, just as, when we are children, we always have less control over our hands and feet and at a still earlier age cannot walk at all, so the young cannot control their tongue? Now when they are quite small, they cannot speak at all but can only make sounds like the animals, because they lack control. This is the cause not only of hesitancy in speech but also of lisping and stammering. Lisping is due to the inability to master a letter — not any letter but some particular one; stammering is due to the dropping out of some particular letter or syllable; hesitancy is due to the inability to join one syllable to another sufficiently quickly. All three are due to want of power; for the tongue is not an efficient servant of the intelligence. The same thing occurs in those who are drunken and in the old; but always to a less extent than in children.

Why is it that the voice trembles in those who are nervous or afraid? Is it because the heart is shaken by the passing out of the heat? For this happens in both conditions, being an effect both of nervousness and of fear. When the heart is shaken, the impact is not one but many, like that from strings which are not properly stretched.

Why is it that those who are nervous have deep voices, but those who are afraid speak shrilly? Is it because in those who are afraid the region about the heart is chilled, because the heat passes downwards, and so they set only a little air in motion? For the force which sets the air in motion is derived from heat. In those who are nervous the heat travels upwards, as happens in those who are ashamed; for it is through shame that nervousness is felt. In those who are ashamed the heat travels upwards to the face, as is shown by the fact that they tend to blush. The heat therefore dissolves and thickens the air with which they speak, and such air can only be propelled slowly; and in the voice that which is slow is deep.

Why are sounds more audible in the night than in the day? Is it for the reason



that Anaxagoras gives, namely, that in the day-time the air, heated by the sun, hisses and roars, but at night it is still because the heat has ceased, and that when there is no noise hearing is easier? Or is it because one hears more easily through a comparative void than through a *plenum* ? Now in the day the air is dense, being full of light and of the sun's rays; but at night it is rarer, for then the fire and the rays, which are bodies, have gone out of it. Or is it because in the day-time the various bodies around us distract our intelligence, and so it is less able to distinguish what it hears? Also because we do all that we have to do preferably in the day rather than at night, our intelligence too is busy then; and the perception apart from intelligence does, if one may say so, only an imperceptible amount of work — as the saying is, 'It is the mind which sees, the mind which hears'. But at night when our sight has no work to do and our intelligence is more at liberty, the channel of hearing, being wider open, is just as receptive of sounds and better able to report them to the intelligence, because the latter is neither busy nor distracted by the sight, as it is in the day-time.

Why is it that persons without generative power, such as boys, women, men grown old, and eunuchs, have shrill voices, while adult men have deeper voices? Is it because of the weakness of the organ which sets the air in motion? For that which is weak sets only a little in motion; and a little air travels quickly, and that which travels quickly is shrill. Or is it because the first passage through which the air passes is narrow in those who are without generative power, so that that which expels the air from it has little force, and the air, being small in volume, travels quickly through the larynx above, which is wide? But in the adult and fully developed men this passage is wide (just as also is that leading to the testicles), and so the quantity of the air expelled is also greater; and so passing through more slowly it makes a deeper sound.

Why is it that those who hesitate in their speech cannot speak in a low voice? Is it because they are hindered from using their voice by some impediment? Since, then, there is not equal force exerted and similar movement set up when there is some impediment to the movement and when there is none, a violent effort is required. Now the voice is a movement, and those who use more force speak louder; and so, since they have to force the hindrance out of the way, those who hesitate in their speech must necessarily speak louder.

Why do those who hesitate in their speech become worse when they are nervous, but better under the influence of drunkenness? Is it because their condition is a state resembling apoplexy of some interior part of the body which they cannot

move and which by its coldness hinders their speech? Wine then, being naturally hot, tends to get rid of the coldness, but nervousness creates coldness; for it is a form of fear, and fear is a chilling condition.

Why is it easier to hear sounds from outside in a house than those from inside a house outside it? Is it because the sound from inside becomes dispersed because it travels over an immense space, so that each component part of the sound is not sufficiently strong to make itself heard, or at any rate is less audible? On the other hand, a voice from without entering within into a smaller space and into stagnant air arrives in a close mass, and so being greater in bulk is more audible.

Why are those who hesitate in their speech melancholic?

Is it because melancholy is due to their responding too quickly to the imagination? Now this is characteristic of those who hesitate in their speech; for the impulse to speak outstrips their power to do so, the mind responding too quickly to that which is presented to it. The same thing occurs in those who lisp; for in them the organs employed in speech are too slow. This is shown by the fact that men under the influence of wine become lispsers, since then they respond most to the objects presented to their vision and not so much to the mind.

Why do leeks contribute to loudness of the voice (for we find that this is so even with partridges)? Is it because, whereas boiled garlic makes the throat smooth, leeks contain a certain amount of adhesive matter, and this cleanses the larynx?

Why is it that in all other creatures the sounds made are shriller when more violence is used, but man speaks more shrilly when he is weak? Is it because then he sets less air in motion, and this passes along quickly, and its speed makes the sound shrill?

Why can one hear better when one holds one's breath than when one exhales? This is why people when hunting tell one another not to breathe. Is it because the power of perception rises into the upper parts of the body when the veins are distended? For it sinks when one is asleep; and so those who are sleeping exhale rather than inhale, and lose the sense of hearing. Or does the blood rise upwards when one exhales, so that the lower parts of the body become void, and one can hear better in a void? Or is it because breathing is a noise, and when it takes place in the act of exhaling it impedes the hearing?

Why do small quantities of salt make a noise and explode more quickly, but large quantities more violently? Is it because in the former case the particles burst quickly because they are small (for the fire does not have far to penetrate), but in the latter case slowly, since a large mass is more difficult to burst than a small? A small quantity makes a small noise because the impact is small, whereas a large quantity makes a loud noise because the impact is greater; and sound is an impact. The stronger an object is, the greater is the explosion if it is struck; for it is less yielding.

Why is it that if the same quantity of salt is thrown on to a large fire, it makes less noise than if thrown on a small fire, or else makes no noise at all? Is it because it is burnt up before it can burst? For it burns because the moisture is used up, and it makes a noise because it bursts.

Why does one hear less well when one is yawning? “ Is it because the action of yawning cuts off the breath internally and the breath so cut off accumulates in the region of the ears? This is shown by the fact that there is a noise in the ears when one yawns. Now the breath thus cut off hinders the hearing. Further one also makes a noise when one yawns, and this tends to impede the hearing. Also the organs of hearing must necessarily become compressed by the distension of the mouth in yawning.

Why is it that though the voice, since it is a kind of stream, is naturally inclined to travel upwards, yet it is more audible below from above than above from below?

Is it because the voice is a kind of air mingled with moisture, and this air being weighed down by the moisture is carried downwards instead of upwards, since it is the natural characteristic of moisture to be carried downwards? For this reason one hears better when one is below. Or is such a result characteristic only of the voice of a living creature (for it contains moisture), while the phenomenon which we are discussing is found also in other sounds?

Just as the sight then, if it be allowed to fall from a higher to a lower object, makes an upward reflexion and vice versa, so the voice, which has a natural tendency to rise, coming into collision with the air which bars its progress, cannot overpower the air, which is greater in mass and heavier, but the air which is set in motion by the voice, being refracted, is carried in a contrary direction and downwards, and so, being scattered in a downward direction, it is more

audible below. Somewhat similar is that which happens in an echo, which is due to the refraction of the voice in a contrary direction.

Why are the voices of drunken persons more broken than those of the sober? Is it because their voice breaks easily owing to their state of repletion? This can be illustrated by the fact that chorus-men and actors practise not after a meal but on an empty stomach. Now since a person in a state of drunkenness is in a condition of greater repletion, his voice is naturally more broken.

Why can one hear shriller voices at a greater distance?

Is it because shrillness in the voice is rapidity, and what is carried forcibly along moves more rapidly, and what is carried violently along is carried farther? —

Why can we hear better if we hold the breath? Is it because breathing makes a noise? It is only natural therefore that we should hear better when the noise is less; for the noise is less when we hold the breath.

Why is it that light cannot penetrate through dense objects, whereas sound can do so, although light is rarer and travels farther and quicker than sound? Is it because light travels in a straight line, and so, if anything blocks its direct course, it is completely cut off, but sound, because it is a breath, can also travel in a line that is not direct? So we can hear those who make sounds from any direction and not only those who are in a straight line with our ears.

Why is the sound of laughing deep, whereas that of weeping is shrill? Is it because a voice which comes from those who are in a state of tension is shrill, and that which is shrill is weak? Now both these characteristics are found rather in those who are weeping; for they are in a state of greater tension and they are weaker.

Why is it that the voice, being air which has assumed a certain form and is carried along, often loses its form by dissolution, but an echo, which is formed by such air striking on something hard, does not become dissolved, but we hear it distinctly? Is it because in an echo refraction takes place, not dispersion? It starts then as a complete whole and continues to be so. Also, the effect produced upon it is due to a similar agency; for it is refracted from the air in the hollow, not from the hollow itself.

Why is it that when one person makes a sound and a number of persons make

the same sound simultaneously, the sound produced is not equal nor does it reach correspondingly farther? Is it because each of them thrusts forward his own portion of air and they do not all impel the same air, except to a very small extent? The result is much the same as when a number of persons throw stones but each throws a different stone, or at any rate most of them do so. Neither in the latter case will any missile travel far (or at any rate not correspondingly farther), nor in the former case will the voice reach farther. For this great voice is that of many, not of one; so at a short distance it appears correspondingly greater (just as a number of missiles reaches the same spot), but at a great distance this is no longer so.

Why do those who are nervous have deep voices, but those who are afraid speak shrilly, though a feeling of shame is a kind of fear? Or are the two conditions really very different? For those who feel shame blush (and nervousness is a kind of shame), whereas those who are afraid turn pale. It is clear then that in those who are afraid the heat fails in the upper part of the body, so that the breath, being weak, sets only a little air in motion; and that which is small in bulk travels quickly, and in the voice quickness is shrillness. But in those who feel shame the heat in the region of the breast travels upwards, as is shown by the fact that they blush. Now a strong force sets a great mass of air in motion, and a great mass travels slowly, and in the voice slowness is deepness.

What is the cause of hesitation of speech? Is it due to the chilling of the region in which the sound is produced, and to a condition resembling apoplexy in that part of the body? This is why those who hesitate, if warmed with wine and deriving thence a continuity of speech, are better able to connect their words together.

Why is it that of all animals man alone is apt to become hesitating in speech? Is it because he alone possesses the power of uttering words, while the other animals only have voices? Now those who hesitate in their speech use their voice, but they cannot connect their words together.

Why is the voice shriller in winter and in those who are sober, and deeper in summer and in those who are drunken? Is it because the quicker a voice is the shriller it is, and it is quicker when it proceeds from one who is in a state of tension? The bodies of those who are sober are in a more solid condition than those of the drunken, and bodies are in a more solid condition in winter than in summer; for heat and warmth have a dissolvent effect upon the body.

Why does the voice come to perfection later in man than in any other creature capable of sound? Is it because there are many variations and kinds of sounds in the human voice? For the other animals can express few or no letters; and that which is most elaborate and contains a large number of variations takes a long time to perfect. *p*, Why is it that the sight cannot pass through hard objects, but the voice can do so? Is it because the course of the sight can only take one direction, namely, a straight line (as is shown by the rays of the sun and the fact that we can only see what is directly opposite us), whereas the voice can take many directions, since we can hear from everywhere? When therefore the sight is prevented from making its way through in a straight line, because there is no continuous passage between the eye and the object, it is impossible to see through the impeding matter. But the air and the voice, since they travel everywhere, find their way everywhere and make themselves audible. On the other hand, the sight can penetrate through liquids, but voices cannot be heard through them or hardly at all, although the liquid is rarer than the earth, because the passages are small and close together and continuous, and so the sight is not prevented from travelling in a straight line. For the same reason it is possible to see through glass, although it is dense, but not through a fennel-stalk, although it contains rarities, because in the former the pores are continuous, in the latter they are irregular, and their size is no advantage if they are not straight. The voice is not audible through water, because the empty air-spaces in it are too small and so cannot admit the voice or let it pass through, or only with difficulty; for the voice is a kind of air. For that which is rarer is not necessarily more penetrable, unless at the same time the passages are adapted to that which is passing through. So also that which is rarer is not necessarily more compressible, unless its passages are of such a kind as to admit the passage of other bodies. But, it may be urged, that which is rare is soft and compressible. True, but in some things compression is impossible owing to the smallness of the passages — in glass, for example; for its passages cannot be contracted, although it may be rarer than a fennel-stalk, for the reason already mentioned. So too with water and the like. This then is clear, that, although the rare and the soft are either identical or else of a very similar nature, yet it does not follow that the rarer a thing is the more it admits of contraction. The reason in all these cases is the same.

Why is it that the sound produced becomes less if some of those who produce it are withdrawn, but its character is unchanged? Is it because their voice had formed part of a general mingling of sound, and that which is mingled is not mingled in one part and not in another, but is mingled throughout? So when

some of those who make the sound are withdrawn, the volume of sound comes forth in the same way as before from the various voices, and must therefore, though smaller, necessarily retain the same characteristics.

What is the cause of hesitancy in speech? Are those who hesitate in too great a hurry because of the heat that is in them, and so they stumble and stop? If so, they resemble those who are angry, for they too become full of panting, with the result that a large quantity of breath comes together. Or do they pant owing to the boiling of the heat, because it is abundant and cannot come forth before the proper moment of exhalation? Or is the right explanation the exact contrary, namely, that it is the chilling rather than the heating of the region in which the sound is produced — a state resembling apoplexy in that part of the body? That is why those who hesitate, when warmed with wine and deriving thence a continuity of speech, are better able to connect their words together.

Why are voices deeper in the winter? Is it because then the air is thicker and as a consequence its movement is slower, and therefore the voice is deeper? Or is it because the air passes more slowly through narrow passages, and the region round the larynx is closed by the cold and by the phlegm which flows into it?

Why is it that boys, women, eunuchs, and old men have shrill voices? Is it because the movement of air which creates a shriller sound is quicker? Now it is more difficult to move a greater amount of the same thing, and so those who are in the prime of life draw in the air in greater quantities, and therefore this air, since it travels more slowly, makes the voice deeper. In boys and eunuchs the contrary occurs, because they contain less air. Old men's voices tremble because they cannot control them, just as, when invalids and children take hold of a long stick by one end, the other end shakes, because they have no control over it; this too is the cause of trembling in old men, namely lack of control. We must suppose also that trembling of the voice in those who are nervous or afraid or chilled is due to the same cause. For in one whose voice is in this state, since most of the heat collects within as a result of the above conditions, the rest, which is small in quantity, cannot control the voice; consequently it shakes and trembles. This is the reason why artists who belong to the class of those who are conscious of nervousness speak in a low voice at first, until they settle down to their work; for by keeping the voice low they can control it.

## **BOOK XII. PROBLEMS CONNECTED WITH THINGS OF PLEASANT ODOUR**

Why is it that perfumes produced by burning affect the senses less at a short distance? Is it because the effluvium is pleasanter when mingled with the air in a weak form, as happens in medicinal myrrh? Or can the contrary of this be the explanation, namely, that the fire destroys the odour in the immediate neighbourhood of the flames? For the odour is produced when the perfume evaporates; wherefore near the embers the effluvium has no odour, but it appears purer and thinner the farther away it is.

Why is it that the odours of burning perfumes and of flowers are less sweet-scented at a close distance? Is it because particles of earth are given off with the odour, and these, owing to their weight, fall more quickly to the ground, and therefore the odour is pure at a greater distance? Or is the effluvium not at its strongest either quite near to its source or very far from it? For close at hand it has not yet gained strength, while at a distance it has become dissipated. It is said that trees become sweet-scented upon which the rainbow has fallen. Is this true or false? And if it is true, what can be the cause of the phenomenon? That it does not happen always and as a universal rule is obvious; for rainbows often occur without any visible effect on the trees. When it does happen (for it does occur sometimes and this has given rise to the saying), the effect is not produced on every kind of wood. The cause can only be attributed to the rainbow *per accidens*, especially if the rainbow does not really occur in nature but is an effect produced on the eye by refraction. Now the phenomenon, as we said, does not occur whatever the condition of the wood; for shepherds say that sweet odour is noticeable after the rains which accompany the rainbow not in green or in dry trees but in burnt wood, and in particular where briars and brambles grow and trees which have sweet-scented flowers. The reason of the sweet scent is the same as in the soil; for where the soil is hot and burnt through and through, anything which grows from it is at first sweet-scented. For things which contain but little moisture, if they are burnt at all, become sweet-scented; for the heat concocts this moisture. (So, all the world over, those parts towards the sun have a sweeter odour than those towards the north; and of the former those towards the east have a sweeter odour than those towards the south, for the districts of Syria and Arabia have more soil, but Libya is sandy and free from moisture.) For there must not be a large amount of moisture — for much moisture is difficult of concoction — nor must there be a complete absence of it, or else there will be no evaporation. These conditions are fulfilled in newly burnt wood and wood which naturally has a sweet odour in itself. This is proved to be true by the flowers, for it is through them that the wood emits its scent. The theory that sweet odour is engendered in any trees upon which the rainbow rests is due to



the fact that this cannot happen without the presence of water; for it is when the wood has been wetted and has then concocted the moisture by the heat which is in it, that it gives out the vapour which is being engendered in it. But there must not be a large amount of water; for too much water drenches the tree and extinguishes the heat previously caused by the burning. Now the rains which follow the rainbow, so far from being heavy, may almost be called slight. Also if there is a number of rainbows, the rain is not heavy, but it falls little and often. It is therefore natural under these circumstances that men notice nothing unusual except the rainbow and attribute to it the cause of the sweet odour.

Why is it that flowers and burnt perfumes smell sweeter at a distance, whereas close at hand they have rather the smell either of vegetation or of smoke? Is it because scent is a form of heat and sweet-scented things are hot?

Now heat is light, and so, the further the perfumes penetrate, the more does their scent become purified from other concomitant odours produced by their leaves and by smoke, which is a watery steam; at a short distance, on the other hand, the mingled odours are simultaneously perceptible in the plants in which they are present.

Why do things always emit a stronger odour when they are in motion? Is it because they fill a larger space of air than when they are at rest? The result is that the odour is thus transmitted more quickly to our perception.

Why is it that we perceive odours less in the winter, especially in frosty weather? Is it because the air is more free from motion when it is cold? The motion therefore set up by the body which produces the odour cannot have such a far-reaching effect owing to the difficulty of imparting motion to the effluvium and to the air in which it is present.

Why do perfumes have a more pungent odour when they are burnt on ashes than on the fire? And why is their odour stronger and more persistent when they are burnt on ashes? Is it because their odour is less thoroughly concocted on ashes, and therefore greater in bulk?

Now fire by quickly concocting their natural force alters their odour; for concoction involves alteration in that which is concocted.

Why do those roses in which the centres are rough smell sweeter than those in which they are smooth? Is it because those roses smell sweetest which partake

most of the natural characteristics of the rose? Now the rose is naturally 'spiky', and so it smells sweeter when its characteristics are more attenuated.

Why are the odours both of burnt perfumes and of flowers less pleasant at a short distance? Is it because at a short distance the earthy element is transmitted with the scent, and so mixing with it lessens its strength, whereas the odour travels to a distance? It is for this reason too that flowers when rubbed lose their scent.

Are scents smoke [or air] or vapour? For it makes a difference, in that the former is produced by fire, the latter without it. And is something transmitted from the sense to the objects producing the scent or vice versa, causing a continuous motion in the adjoining air? Also, if any effluvium is given off by these objects, one would expect them to become less; yet we see that those things which have the strongest scent last the longest.

Why have perfumes a more pungent odour when they are burnt on ashes than on fire? Is it because their odour is less thoroughly concocted on ashes and is therefore greater in bulk? Consequently a large quantity of the earthy element is vaporized in the process and becomes smoke; but the fire burns up the earthy element before it can escape, and so the odour is purer and reaches the senses untainted by the smoke. This is also the reason why flowers when rubbed smell less sweet; for the rubbing imparts motion to the earthy element and the slow heat does not destroy it.

Why is it that sweet-smelling seeds and plants promote the flow of urine? Is it because they contain heat and are easily concocted, and such things have this effect? For the heat which is in them causes quick digestion and their odour has no corporeal existence; for evil-smelling plants, such as garlic, by reason of their heat promote the flow of urine, but their wasting effect is a still more marked characteristic. But sweet-smelling seeds contain heat, because odour is in general engendered by heat; while evil-smelling things are unconcocted. Now anything which is to promote the flow of urine must be not only hot but also easily concocted, in order that it may accompany the liquids in their downward course and effect their digestion.

Why is it that wines mixed with water have a less strong odour than when they are unmixed? Is it because wine is mixed with water is weaker than unmixed wine? Now the weaker is more easily changed by any force acting upon it than

the stronger. So wine mixed in the water is more easily affected than unmixed wine. Now it is characteristic of that which is easily affected to yield to something else or to receive something which does not belong to it; unmixed wine, therefore, has a strong odour, but wine mixed with water is odourless.

### **BOOK XIII. PROBLEMS CONNECTED WITH THINGS OF UNPLEASANT ODOUR**

WHY is it that urine acquires a more unpleasant odour the longer it remains in the body, whereas ordure becomes less unpleasant to the smell? Is it because the latter becomes drier the longer it remains in the body (and what is dry is less liable to putrefaction), but urine thickens, and the fresher it is the more like it is to the original liquid drunk?

Why is it that things of unpleasant odour do not seem to have an odour to those who have eaten them? Is it because, owing to the fact that the scent penetrates to the mouth through the palate, the sense of smell soon becomes satiated and so it no longer perceives the odour inside the mouth to the same extent — for at first every one perceives the odour, but, when they are in actual contact with it, they no longer do so, as though it had become part of themselves — and the similar odour from without is overpowered by the odour within?

Why have flowers an unpleasant odour when they are rubbed? Is it because the earthy element, which is in the flower, mingles with the odour?

Why is it that no living creature is pleasant to the smell except the panther — which is pleasing even to the animals, for they are said to find pleasure in its odour — and when they decay they are unpleasant to the smell, but many plants when they decay and wither become still more pleasant to the smell? Is it because the cause of evil odour is an unconcocted condition of excretion? For this reason the perspiration of some people is sometimes unpleasant, particularly in those whose perspiration is not usually unpleasant, as the result of disease. Also the exhalations and eructations of those who are in an unconcocted state are unpleasant. The same cause must be ascribed for evil odour in the flesh and in that which is analogous to it (by which I mean that which in other animals corresponds to flesh); for here too there is sometimes unconcocted excretion. This then when it putrefies is a cause of evil odour in living creatures and in decaying bodies. For this reason too the fat and the bony parts and the hair have no evil odour, because the fat and bones are already concocted, while the hair

contains no moisture. Now plants contain no excretion. Or is there excretion in them also, but, because plants are naturally dry and hot, is the moisture in them more easily concocted and not of a thick consistency? This can be illustrated from the soil, which is pleasant to the smell in hot regions, such as Syria and Arabia, and from the fact that the plants which come from there are sweet-smelling, because they are dry and hot; and such plants are not liable to decay. But animals are not dry and hot, and so their excretions are unconcocted and malodorous, and likewise their exhalations, and when they decay the moisture putrefies. This does not happen in plants, because they contain no excretions.

Why are things of unpleasant odour more unpleasant when they are hot than when they are cool? Is it because odour is a vapour and an effluvium? A vapour, then, and an effluvium is caused by heat; for a movement takes place, and heat is the source of the movement. Cold, on the contrary, is a source of stagnation and contraction and downward movement; but heat and all odours have an upward tendency, because they are in the air, and the organ which perceives them is above and not below; for odour penetrates to the brain and so causes perception.

Why, if one eats garlic, does the urine smell of it, whereas this does not happen when other things are eaten which have a strong odour? Is it because, as some of the followers of Heraclitus say, vaporization takes place in the body just as in the universe, and then, when the process of cooling succeeds, moisture is formed in the universe and urine in the body, so the vaporization from the food, when it is formed by intermixture, causes the odour (for it is odour after it has undergone change)? If so, ought not all the foods too which have a strong odour to produce this effect, which we know they do not? Furthermore, concretions from vapour do not resume their original form — which would result in wine, for example, being produced from the vapour of wine instead of water, as actually happens — and so this part of their theory is also untrue. The truth is that garlic, alone of foods which have an odour which is strong and also promotes the flow of urine, has the quality of inflating the lower part of the belly; all other such foods (radishes, for example) engender breath higher up or else do not promote the flow of urine.

But garlic has these three qualities: it promotes the flow of urine, it engenders breath, and it does so in the lower part of the body. The region round the privy parts and the bladder feels the effect of such foods owing to its nearness and because it is liable to admit breath; that this is so is shown by the distension of the privy parts.

It is clear therefore that the excretion of garlic is more liable than that of any other such food to reach the bladder with the breath, and this excretion mingling with the urine imparts its odour to it.

Why is it that the mouths of those who have eaten nothing, but are fasting, have a stronger odour, 'the smell of fasting', as it is called, but when they eat the odour ceases, when one would expect it to increase? Is it because, as the stomach becomes empty, the air becomes hotter from the absence of motion and causes the breath and the excretions of phlegm to putrefy? That the air becomes hotter is proved by the fact that fasting also induces an increase of thirst. When food is taken, the odour ceases because it is less than that of the food; for the heat in the food overcomes the internal heat, so that it cannot undergo any process of change. Why has the armpit a more unpleasant odour than any other part of the body? Is it because it is least exposed to the air? Such parts have a particularly unpleasant odour because putrefaction takes place in them owing to the stagnation of fat. Or is it because the armpit is not moved and exercised?

Why is it that those who have a rank odour are still more unpleasant when they anoint themselves with unguents? Is it because this kind of thing happens in many instances; for example, if something acid and something sweet are mixed, the resulting whole is sweeter? Now any one who perspires has an unpleasant odour, and unguents are productive of heat and therefore induce perspiration.

Why is it that the odour of the breath of those who are bent and deformed is more unpleasant and oppressive? Is it because the region round the lungs is contracted and bent out of an upright position, so that it does not give a free passage to the air, but the moisture and the breath, which tends to be enclosed within, putrefies?

Why is it that most unguents are unpleasant when they mingle with perspiration, but others have a sweeter or at any rate not a more unpleasant odour? Do those which change as a result of movement or friction deteriorate in odour, whereas those which do not are improved? There are some such perfumes, just as there are some flowers from which scents are made, which deteriorate when rubbed or heated or dried, white violets, for example; but others remain the same, for instance roses. The unguents too made from flowers of the former class change, while those made from the latter do not; and so rose-perfume is least liable to change. Also unguents have a more unpleasant odour on those whose perspiration is malodorous, through mingling with their opposite, just as honey

when mixed with salt becomes not sweeter but less sweet.

Why do objects always produce a stronger odour when they are in motion? Is it because they fill up the air?

The result is that the odour is thus transmitted more quickly to our perception.

## **BOOK XIV. PROBLEMS CONNECTED WITH THE EFFECT OF LOCALITY ON TEMPERAMENT**

WHY are those who live under conditions of excessive cold or heat brutish in character and aspect? Is the cause the same in both cases? For the best mixture of conditions benefits the mind as well as the body, but excesses of all kinds cause disturbance, and, as they distort the body, so do they pervert the mental temperament.

Why is it that in Pontus corn, if exposed to the cold, keeps intact for many years? Is it because the extraneous moisture is evaporated together with the heat, as happens in grapes? For some things are evaporated by the cold and others with the heat.

Why do burning fevers occur more frequently in the coldest season? Is it because the cold imprisons the heat within? In the summer the contrary occurs, the interior of the body being cooler than the exterior. Burning fever is the inflammation in which, the exterior of the body being cold, the interior is in a condition of excessive heat.

Why are the Ethiopians and the Egyptians bandy-legged? Is it because the bodies of living creatures become distorted by heat, like logs of wood when they become dry? The condition of their hair too supports this theory; for it is curlier than that of other nations, and curliness is as it were crookedness of the hair.

Why is it that in damp regions copulation is more likely to lead to the birth of female offspring? Is it because a large amount of moisture thickens more slowly, and in damp regions the semen is moister owing to the presence of more moisture in the temperament?

Why is it that in marshy districts sores on the head are quickly cured, but those on the legs only with difficulty? Is it because the moisture, since it contains an

earthy element, is heavy, and heavy things are carried downwards? Thus the upper parts of the body are easily concocted, because the impurities are carried downwards; but the lower parts become full of abundant excretion which easily putrefies. —

Why is it that those who live in airy regions grow old slowly, but those who inhabit hollow and marshy districts age quickly? Is it because old age is a process of putrefaction, and that which is at rest putrefies, but that which is in motion is either quite free from, or at any rate less liable to, putrefaction, as we see in water? In lofty regions, therefore, owing to the free access of the breezes, the air is in motion, but in hollow districts it stagnates. Furthermore, in the former, owing to its movement, the air is always pure and constantly renewed, but in marshy districts it is stagnant.

Why are the inhabitants of warm regions cowardly, and those who dwell in cold districts courageous? Is it because there is a natural tendency which counteracts the effects of locality and season, since if both had the same effect mankind would inevitably be soon destroyed by heat or cold? Now those who are hot by nature are courageous, and those who are cold are cowardly. But the effect of hot regions upon those who dwell in them is that they are cooled, while cold regions engender a natural state of heat in their inhabitants. Both races are large of stature — those who live in cold regions because of the innate heat in them, and those who inhabit hot districts owing to the heat in which they live; for increase of stature occurs both in those who are hot and as a result of heat, whereas cold has a contracting effect. Since then those who live in cold districts have a powerful principle of growth in themselves, and those who live in hot regions encounter no external cold which prevents their growth, both naturally admit of considerable increase in stature. But this is less true of those who live in our latitudes, because the principle of growth in them is less strong, and those who live in cold regions feel the contracting effect of cold.

Why are those who live in hot regions longer-lived? Is it because their natural condition is drier, and that which is drier is less liable to putrefaction and more lasting, and death is as it were a kind of putrefaction? Or is it because death is due to the chilling of the interior heat, and everything is chilled by a surrounding medium which is colder than itself? Now in warm regions the surrounding air is hot, but in cold regions it is cold and so more quickly and effectively destroys the interior heat of the body.

Why are those who live in hot regions longer-lived? Is it because they preserve their heat and moisture better? For death is the corruption of these.

Why is it that we become drowsier in marshy districts? Is it because there we are more cooled, and cooling, being a kind of rest, induces sleep, and sleep occurs during rest?

Why is it that those who live on board ship, though they spend their time on the water, have a healthier colour than those who live in marshes? Is the weather and the free access of the breezes the cause? Now water makes men pale when it putrefies, a process which is due to the absence of movement; that is why those who live in marshy regions are rather pale.

Why is suffocating heat very frequently experienced in wintry regions, much more so than in warm districts? Is it because of the moisture in the air? For as a result of the same heat applied to it water becomes hotter than air, and therefore damper air becomes hotter than dry air. Or perhaps the air is not really hotter in these regions, but only seems so by contrast with the general coolness, as the sun emerging from a cloud seems hotter in contrast with its effect when it is behind a cloud.

Why do those who live in southerly climes tend to have black eyes? Is blueness of the eyes due to excess of internal heat, whereas blackness is due to its absence, as Empedocles affirms? Just, therefore, as those who dwell in the north have blue eyes, because the internal heat is prevented from escaping owing to the external cold; so in those who dwell in southerly climes the moisture cannot escape owing to the surrounding heat, but the heat escapes because there is nothing to bar its exit, and the moisture left behind causes blackness; for when light departs that which is left behind is dark. Or does the pigmentation of the eye assimilate itself to the colour of the rest of the body? If so, the eyes of those who live towards the north are blue, because they are themselves white (for blue is akin to white); and those who dwell in the south being black, their eyes also are black.

Why are those who live in warm regions wiser than those who dwell in cold districts? Is it for the same reason as that for which the old are wiser than the



young? For those who live in cold regions are much hotter, because their nature recoils owing to the coldness of the region in which they live, so that they are very like the drunken and are not of an inquisitive turn of mind, but are courageous and sanguine; but those who live in hot regions are sober because they are cool. Now everywhere those who feel fear make more attempt to inquire into things than do the self-confident, and therefore they discover more. Or is it because the race of those who live in warm regions is more ancient, the inhabitants of the cold regions having perished in the Flood, so that the latter stand in the same relation to the former as do the young to the old?

Why are the inhabitants of warm regions cowardly, and those who dwell in cold regions courageous? Is it because human beings have a natural tendency which counteracts the effect of locality and season (for, if both had the same tendency, they would soon be destroyed)? Now those who are hot by nature are courageous and those who are cold are cowardly. The effect of hot regions upon their inhabitants is to cool them (for, their bodies having rarities, the heat escapes out of them), but those who live in a cold climate become heated in their nature, because their flesh is densified by the external cold, and when it is in this condition the heat collects internally.

## **BOOK XV. PROBLEMS CONNECTED WITH MATHEMATICAL THEORY**

Why is it that of all the lines which divide a rectilinear figure into two parts that drawn from angle to angle alone bears the name of diameter? Is it because the diameter, as its name implies, divides the figure of which it is the diameter into two parts without destroying it? The line therefore which divides it at its joints (by which I mean the angles) will be the diameter; for it does not destroy the figure but divides it, like those who divide up implements of war for distribution. But a division which cuts through a composite figure in the lines which form it destroys the figure; for a rectilinear figure is constructed on angles.

Why is the diameter so called? Is it because it is the only line which divides a rectilinear figure into two parts, as though one should call it the dichiameter? And why is it the only one that bears this name of all the lines which divide a rectilinear figure into two parts? Is it because it is the only line which divides the figure at the points where its limbs bend, whereas all other lines divide it in its sides? just as they say eleven, twelve? Or why do they not stop at some point beyond ten and repeat from there? For every number is made up of one, two,

&c., combined with a preceding number, and thus a different number is formed; but the counting always proceeds in fixed sets of ten. For it is clearly not the result of chance that all men invariably o — count in tens; and that which is invariable and universal is not the result of chance, but is in the nature of things.

Is it because ten is a perfect number? For it combines every kind of number, odd and even, square and cube, length and surface, prime and composite. Or is it because ten is the original number, since one, two, three, and four together make ten? Or is it because the bodies which move in the heavens are nine in number? Or is it because in ten proportions four cubic numbers result, from which numbers the Pythagoreans declare that the whole universe is constituted? Or is it because all men have ten fingers, and so, as though possessing counters that indicate a the numbers proper to man, they count all other things by this quantity? One race among the Thracians alone of all men count in fours, because their memory, like that of children, cannot extend farther and they do not use a large number of anything.

(Why is it that the shapes of the heavenly bodies always appear to us the same? Is it) because the earth is a centre? For the shapes which appear to us are always similar. This does not seem to be so unless one views them from the centre, but they would sometimes appear triangular, sometimes irregular four-sided figures, and sometimes take other forms. Now the earth would appear to us to be the centre of the universe, if we could view it from the heavenly bodies. For the earth being spherical, the centre of the universe and of the earth will be the same. But we dwell on the surface of the earth, so that it is not from the centre but at the distance of half the diameter that the heavenly bodies appear to have the shapes that they do appear to have. What reason then is there why the appearance of their shapes should not remain the same when the distance is increased?

Why is it that, although the sun moves with uniform motion, yet the increase and decrease of the shadows is not the same in any equal period of time? Is it because the angles to the objects seen, that is the angles made by the rays of the sun and subtending equal arcs, are equal? Now if these are equal, so also are the angles which the rays when produced make in the triangle formed by the first ray and the object seen and the shadow. If the angles are equal, the line which is farther from the object seen must be greater than that which is less far; for we know that this is so. Let the circumference, therefore, be divided into any number of equal parts, and let the object seen be . When therefore the sun at A

falling on makes the shadow OMEGO LAMBDA the ray must fall on LAMBDA. But when the sun comes to *B*, the ray from *B* will fall within OMEGO LAMBDA and similarly again when the sun comes to *T*; otherwise one straight line will touch another straight line at two points. Since therefore *AB* is equal to *BT* the angles which subtend them at *A* will also be equal, for they are situated about the centre. But if the angles on this side of *A* are equal, so also are the corresponding angles in the triangle; for they are at the apices of the first pair of angles. So while the angle is divided into two equal parts, the line *AE* will be greater than the line *EZ* within LAMBDA OMEGO. So too with the other angles formed by the rays from the circumference. At the same time it is clear that the shadow must be shortest at midday and that then its increases are least. For the sun is most over our head at midday, and stifling heat occurs both for the reason just mentioned and because there is no wind; for wind is caused when the sun dissipates the air near the earth. If therefore it does so simultaneously in both hemispheres, midnight and midday would naturally be windless.

Why does the sun penetrating through quadrilaterals form not rectilinear shapes but circles, as for instance when it passes through wicker-work? Is it because the projection of the vision is in the form of a cone, and the base of a cone is a circle, so that the rays of the sun always appear circular on whatever object they fall? For the figure also formed by the sun must be contained by straight lines, if the rays are straight; for when they fall in a straight line on to a straight line, they form a figure contained by straight lines. And this is what happens with the rays; for they fall on the straight line of the wicker-work, at the point where they shine through, and are themselves straight, so that their projection is a straight line. But because the parts of the vision which are cut off towards the extremities of the straight lines are weak, the parts of the figure about the angles are not seen; but what there is of straight line in the cone describes a straight line, while the rest does not, but the sight falls on part of the figure without perceiving it. For there are many things to which the sight penetrates without our seeing them, objects, for instance, which are in darkness. A similar phenomenon is the fact that a quadrilateral figure appears polygonal, and at a greater distance circular. Now since the projection of sight is in the form of a cone, when the figure is removed to a distance the parts of the vision which are cut off towards the angles, because they are weak and few, do not see anything when the distance is increased; but the parts of the vision which fall upon the centre of the figure, being numerous and strong, are more persistent. When, therefore, the figure is near at hand, they can see the parts in the angles; but, when the distance is greater, they cannot do so. For this reason too a curved line removed to a

distance appears straight, and the moon on the eighth day seems to be contained by straight lines, if the vision falls upon the line which encloses it and not on its breadth. For when the circumference is near, the sight can discern how much nearer one part of the circumference is than another; but when it is distant, the sight does not perceive it clearly, and it seems to be equally distant; and so it appears to be straight.

Why, though the moon is spherical, do we see it straight when it is half-full? Is it because our vision and the circumference of the circles which the sun makes when it falls upon the moon are in the same plane? Whenever this happens, the sun appears as a straight line; for, since that which casts its vision on a sphere must see a circle, and the moon is spherical, and the sun looks down upon it, there must be a circle which is caused by the sun. When therefore this is opposite to us, the whole is visible and the moon appears to be full; but when it changes owing to the altered position of the sun, its circumference becomes on a plane with our sight and so it appears straight, and the rest appears circular, because a hemisphere is opposite our vision, and this has the appearance of a semicircle; for the moon is always facing our vision, but when the sun sheds its rays we do not see it. And after the eighth day it begins to fill out from the middle, because the sun as it passes on makes the circle incline more towards us; and the circle being thus presented to view resembles the section of a cone. It assumes a crescent-like appearance when the sun changes its position; for when the circle of the sun reaches the extreme points, which make the moon seem half-full, the circumference of the circle appears; for it is no longer in a straight line with the vision, but passes beyond it. When this happens and the circle passes through the same points, it must necessarily appear to have a crescent shape; for a part of the circle is directly on a plane with the eye (a part of the circle, that is, which was formerly opposite to us), so that part of the brightness is cut off. Then the extremities too remain in the same position, so that the moon must have a crescent shape to a greater or less extent according to the sun's movement; for when the sun changes its position, the circle upon which it looks also turns, remaining on the same points; for it might assume an infinite number of inclinations, since an infinite number of the largest circles can be described through the same points.

Why is it that the sun and moon, which are round, have the appearance of being flat? Is it because all things of which the distance is uncertain seem to be equidistant, when they are more or less distant? And so in a single body ° composed of parts, provided that it is uniform in colour, the parts must

necessarily appear equidistant, and the equidistant must appear to be uniform and flat.

Why does the sun make long shadows as it rises and sets, and shorter when it is high in the heavens, and shortest of all at midday? Is it because, as it rises, it will at first make a shadow parallel to the earth and cast it to an infinite distance, and then make a long shadow, which grows ever less because the straight line from the higher point falls within that from the lower point. Let  $AB$  be the gnomon, and  $P$  and  $A$  two positions of the sun. The ray from  $T$ , the line  $TZ$ , will fall outside the line  $AE$ ; and the shadow  $BE$  is formed when the sun is higher in the heavens, and  $BZ$  when it is lower, and it will be shortest when the sun is at its highest and over our head.

Why are the shadows thrown by the moon longer than those thrown by the sun, though both are thrown by the same perpendicular object? Is it because the sun is higher than the moon, and so the ray from the higher point must fall within that from the lower point? Let  $AA$  be the gnomon,  $B$  the moon, and  $T$  the sun. The ray from the moon is  $BZ$ , so that the shadow will be  $JZ$ ; but the ray from the sun is  $TE$ , and its shadow therefore will necessarily be less, viz.  $AE$ .

Why is it that during eclipses of the sun, if one views them through a sieve or a leaf — for example, that of a plane-tree or any other broad-leaved tree — or through the two hands with the fingers interlaced, the rays are crescent shaped in the direction of the earth? Is it because, just as, when the light shines through an aperture with regular angles, the result is a round figure, namely a cone (the reason being that two cones are formed, one between the sun and the aperture and the other between the aperture and the ground, and their apices meet), so, when under these conditions part is cut off from the orb in the sky, there will be a crescent on the other side of the aperture from the illuminant, that is, in the direction of the earth (for the rays proceed from that part of the circumference which is a crescent)? Now as it were small apertures are formed between the fingers and in a sieve, and so the phenomenon can be more clearly demonstrated than when the rays pass through wide apertures. Such crescents are not formed by the moon, whether in eclipse or waxing or waning, because the rays from its extremities are not clear-cut, but it sheds its light from the middle, and the middle portion of the crescent is but small.

Why does the parhelion not occur either when the sun is in mid-heaven or above the sun or below it, but only at the side of it? Is it because the parhelion is

produced when our visual ray to the sun is refracted, and this stationary condition of the air, on the occasion of which the vision is refracted, cannot occur either near the sun or far away from it? For, if it is near, the sun will dissolve it, whereas, if it is far away, the sight will not be refracted; for, if it is strained to a distance, it is weak when refracted from a small refractor. (So too a halo does not form.) If then a refractor forms opposite the sun and near to it, the sun will dissolve it, whereas if it be far away, the incidence of the sight upon it will be too weak. If, however, it forms at the side of the sun, it is possible for the refractor to be at such a distance that neither does the sun dissolve it nor does the sight ascend weakened by passing under the earth.

It does not form below the sun because, being near the earth, it would be dissolved by the sun; whereas, if it were above the sun when the sun is in mid-heaven, the sight would be distracted. And it cannot form at all even at the side of the sun when it is in mid-heaven, because, if the sight is directed too far under the earth, very little of it will reach the refractor, so that, when it is refracted, it will be very weak.

Why does the extremity of the shadow caused by the sun seem to tremble? For it is not due to the fact that the sun is travelling along; for it is impossible for it to move in contrary directions, and it is of such motion that trembling consists. (Moreover it is uncertain why a shadow changes its position, as also why the sun itself moves.) Is it due to the movement of the so-called motes in the air? These can be seen in the rays which enter through a window; for they move even when there is no wind. These then being constantly carried from the shadow into the light and from the light into the shadow, the common boundary between the light and the shadow is seen to move similarly. For changing from side to side of it, these motes cause as it were shadow in one place and light in another; so that the shadow appears to move, though it is not really it but the motes which move in this way.

## **BOOK XVI. PROBLEMS CONNECTED WITH INANIMATE THINGS**

WHY is it that the bases of bubbles in water are white, and if they are placed in the sun they do not make any shadow, but, while the rest of the bubble casts a shadow, the base does not do so but is surrounded on all sides by sunlight? And, what is still more wonderful, even if a piece of wood is placed on the water in the sunlight, (there is no continuous shadow but) it is cut off by the water at that

point. Is no shadow really formed? Is the shadow dissolved by the sun? If then a shadow is to be defined as anything which is not visible to the sun, the whole mass of the object all round must be visible to the sun; but the impossibility of this has been demonstrated in the treatises on optics," for even the largest optical system cannot see the whole circumference of the smallest visible object.

Why are bubbles hemispherical? Is it because the radii between the centre and the outer air extend in every direction upwards to the same distance and thus necessarily produce a hemispherical form? The corresponding hemisphere below is cut off by the watery surface in which the central point is situated.

Why is it that in magnitudes of uneven weight, if you set the lighter part of them in motion, the object thrown revolves in a circle, as happens, for example, with loaded dice if you throw them with the unweighted side turned towards you? Is it because the heavier part cannot travel at the same speed as the lighter when hurled with the same force? Now the object must travel as a single whole, but cannot move alike in all its parts; therefore if the parts were moved with equal speed they would move in the same line, while since one part travels more quickly than the other, the object necessarily revolves as it moves; for it is only in this manner that the parts which are always opposite one another can follow unequal paths in the same time.

Why is it that objects which fall to the earth and rebound describe similar angles to the earth's surface on either side of the point at which they touch the surface? Is it because all things naturally tend to travel at right angles to the earth? Objects, therefore, which fall upon the ground at right angles, striking the surface perpendicularly and diametrically, when they rebound, form angles of that size, because the diameter divides the angle at the surface into equal parts. But objects which fall obliquely, since they do not strike the ground perpendicularly but at a point above the perpendicular, when they are thrust back by that against which they strike, travel in the opposite direction. This in the case of round objects is due to the fact that, striking against it in their course, they revolve in an opposite direction to that in which they are thrust back, whether their central point is at rest or changes its position. In the case of rectilinear objects it is due to the fact that their perpendicular is thrown backwards after being brought forward; just as happens to those whose legs are sheared away from under them or whose scrotum is pulled downwards, for such persons always fall in a contrary direction and backwards, because their perpendicular is raised above the ground and then thrust forward. For clearly the opposite of

perpendicularity will be to fall backwards and downwards, and objects carried downwards would be heavier. That, therefore, which in these persons involves a fall, becomes movement in rebounding objects. Neither round nor rectilinear objects therefore rebound at right angles, because the perpendicular divides the objects in motion into two parts depthways, and there cannot be several perpendiculars to the same plane surface cutting one another, which will happen if a perpendicular is formed at the moment of their impact at the point where the object in motion strikes the plane surface, so that the original perpendicular along which it travelled must necessarily be cut by the new perpendicular. Now since the object will be borne back, but will not be borne back at a right angle, it remains that the angle on either side of the point of impact with the plane surface must be an acute angle; for the right angle forms the division between the opposite angles.

Why is it that a cylinder, when it is set in motion, travels straight and describes straight lines with the circles in which it terminates, whereas a cone revolves in a circle, its apex remaining still, and describes a circle with the circle in which it terminates? Both move with a circular motion, but the cylinder describes straight lines on the plane surface, while the cone describes circles because the circles which compose the cone are unequal and the greater circle always moves more quickly than the less about the same centre. Now since all the circles composing the cone move at different rates, it results that the outermost circles travel over most space and describe the longest line in the same time (hence they must move in a circle); for all the circles are described by the same straight line, and when the straight line revolves the various points on it do not describe an equal line in the same time, but can travel along an equal line only if they proceed in a straight direction. But in the cylinders, since all the circles are equal and about the same centre, the result is that, since they touch the plane surface at all the points on them at the same time, as they roll they travel at a uniform speed (because cylinders are uniform throughout), and reach the plane surface again simultaneously when each has completed its own circuit; thus the straight lines described on the plane surface are also equal, for the circles describe them by contact, since they both are equal and travel at the same speed. Now the lines described by the same line travelling in a straight direction are straight, and so the cylinder would travel straight along them; for it makes no difference whether you drag the cylinder over the plane surface at the line where it first touched the plane surface, or whether you roll it over it; for the result will always be that an equal and similar line made up of points on the cylinder will touch the plane surface, both when the cylinder is dragged and when it is rolled along.



Why is it that the section of a rolled book, which is flat, if you cut it parallel to the base becomes straight when unrolled, but if it is cut obliquely becomes crooked? Is it due to the fact that, since the circles in the first section are in the same plane, the result is that the oblique section is not parallel but is partly more and partly less distant from the first section, so that, when the roll is unfolded, the circles, which are in the same plane and have their origin in the same plane, assume, when unrolled, the line which they themselves form? For the resulting line is formed from the circles which are in the same plane, so that the line, being on a plane, is also straight. But the line of the oblique section when it is unrolled, not being parallel to the first section, but partly more and partly less distant from it (this being the position of the section relative to it), will not be on a plane and therefore not straight either; for part of a straight line cannot be in one plane and part in another.

Why is it that magnitudes always appear less when divided up than when taken as a whole? Is it because, though things which are divided always possess number, in size they are smaller than that which is single and undivided? For that which is great is said to be great owing to its continuity and because it is of a certain size, but the number of its parts is always greater than the number of any undivided magnitude. So it is only natural that the whole should appear greater than the parts into which it is divided; for, though the whole and its parts are identical, the whole, being continuous, possesses more of the quality of magnitude, while the parts have more of the quality of number.

Of the phenomena which occur in the water-clock the cause seems to be in general that ascribed by Anaxagoras; for the air which is cut off within it is the cause of the water not entering when the tube has been closed. The air, however, by itself is not the cause; for if one plunges the water-clock obliquely into the water, having first blocked up the tube, the water will enter. So Anaxagoras does not adequately explain how the air is the cause; though, as has been said, it certainly is the cause. Now air, whether impelled along or travelling of itself without any compelling force, naturally travels in a straight line like the other elements. When therefore the water-clock is plunged obliquely into the water, the air preserving its straight course is driven out by the water through the holes opposite to those which are in the water, and, as it goes out, the water flows in. But if the water-clock is plunged upright into the water, the air not being able to pass straight up, because the upper parts are closed, remains round the first holes; for it cannot contract into itself. The fact that the air can keep out the water by its immobility can be illustrated by an experiment with the water-clock

itself. For if you fill the bulb itself of the water-clock with water, having stopped up the tube, and invert it with the tube downwards, the water does not flow along the tube to the outlet. And when the outlet is opened, it does not immediately flow out along the tube but only after a moment's interval, since it is not already at the outlet of the tube but passes along it afterwards, when it is opened. But when the water-clock is full and in an upright position, the water passes through the strainer as soon as ever the tube is opened, because it is in contact with the strainer, whereas it is not in contact with the extremities of the tube. The water does not, therefore, flow into the water-clock, for the reason already mentioned, but flows out when the tube is opened because the air in it being set in motion up and down causes considerable movement in the water inside the water-clock. The water then, being thrust downwards and having itself also a tendency in that direction, naturally flows out, forcing its way through the air outside the water-clock, which is set in motion and is equal in force to the air which impels it but weaker than it in its power of resistance, because the interior air, since it passes through the tube, which is narrow, flows more quickly and violently and forces the water on. The reason why the water does not flow when the tube is closed is that the water on entering into the water-clock drives the air forcibly out of it. (That this is so is shown by the breath and noise engendered in it as the water enters. ) And driving the air forcibly along it rushes into the tube itself, and like wedges of wood or bronze driven in by cleavage, remains in position without anything else to hold it together, until it is expelled from the opposite direction, as pegs which are broken in wood are knocked out. This occurs when the tube is opened for the reasons already mentioned. If this is the reason, it is only natural that it should not flow out or make its way forth, since the air forcibly prevents it and becomes inflated. (The noise which is made shows that the water is drawn up by the air, and this is a common phenomenon.) All the water then, being drawn up and being in itself continuous, remains in the same position under the pressure of the air, until it is thrust away again by it; and, since the first part of the water remains in the same position, the rest of the water is dependent from it in one continuous mass. It is only natural that this should be so; for it is the property of the same thing to move something from its own place and to hold it when it has moved it, and to do so for a longer time, if that which holds and that which is held are of equal force, or if that which holds is stronger, as occurs in the present case; for air has greater force than water.

Why is it that the parts of plants and of animals which have no functional importance are all round — in plants, for instance, the stem and the shoots, and in animals the legs, thighs, arms, and chest — and no whole or part is triangular

or multi-angular? Is it due, as Archytas used to say, to the fact that in natural movement the proportion of equality is always present (for he holds that all things move in a proportion), and that this is the only proportion which can return to itself, and so it forms circles and rotundities wherever it occurs?

Why do extremities always take rounded forms? Is it because nature makes everything as excellent and as beautiful as the available material permits, and a rounded form is the most beautiful, being as uniform as possible?

Why does a circular object when it is thrown at first describe a straight line, but, as it ceases to move, describe a spiral, until it falls? Does it describe a straight line at first, because the air on either side of it alike keeps it upright? The inclination then to either side being equal, the line also which it describes must be of such a nature that it divides the space on either side of it equally, and such a line is a straight line. But when it inclines to one side, because the air on either side of it is not even, it no longer describes an equal line with its inner and with its outer edge, but is forced to describe a circular line.

Why is it that in magnitudes of uneven weight, if you set the lighter part of them in motion, the object thrown revolves in a circle, as happens for example with loaded dice if you throw them with the unweighted side towards you? Is it because the heavier part cannot travel at the same speed as the lighter when hurled with the same force? Now since it must necessarily move, but cannot do so in the same manner, that is in a straight line, it must take an inward direction and revolve; just as, if part of the object had as a whole remained motionless owing to a weight in the centre, the part next to the person setting the object in motion would have moved so as to occupy the position of the part away from him, while the farther side would have moved towards him. But when the whole object moves and, as it travels, has a weight in the middle, it must necessarily behave in the same manner.

Why is it that objects which are travelling along, when they come into collision with anything, rebound in a direction opposite to that in which they are naturally travelling, and at similar angles? Is it because they move not only with the impetus which accords with their own nature but also with that which is due to the agent which throws them? Their own impetus then ceases when they reach their own proper position (for everything comes to rest when it reaches the position to which it is naturally carried), but, owing to the extraneous impetus, it is forced to continue to move, not, however, in a forward direction, because it is

prevented from doing so, but either sideways or in a direct line backwards. Now every object rebounds at similar angles, because it is travelling to the point to which it is carried by the impetus which was imparted by the person who threw it; and at that point it must be travelling at an acute angle or at a right angle. Since then the repelling object stops the movement in a straight line, it stops alike the moving object and its impetus. As then in a mirror the image appears at the end of the line along which the sight travels, so the opposite occurs in moving objects, for they are repelled at an angle of the same magnitude as the angle at the apex (for it must be observed that both the angle and the impetus are changed), and in these circumstances it is clear that moving objects must rebound at similar angles.

## **BOOK XVII. PROBLEMS CONNECTED WITH ANIMATE THINGS**

Why do those who are unsymmetrical appear larger when set side by side with other men than by themselves?

Is it because that which is symmetrical is one, and symmetry more than anything else gives unity to a thing, and that which is one tends to be indivisible, and the indivisible is smaller, whereas asymmetry by causing diversity creates a multiplicity? When things therefore are seen by themselves, their dimensions are less likely to be noticed; but this is not so when they are seen side by side with one another. That then which is indivisible appears to be one, and the impression which it makes on the beholder is one because of its symmetry. But that which is unsymmetrical makes a greater impression, as though it were many, and appears greater because, though in reality only one, it seems to be many; for it partakes of the nature of magnitude, because it is continuous, and of number, because of the inequality of its parts; and so being increased in both these respects, it naturally appears great by the side of that which is simple and one.

Why do animals and plants grow more in length than otherwise? Is it because length increases three times over, width twice, and depth once? For length is the first and original dimension, and so it increases both of itself, and secondly in combination with width, and thirdly in combination with depth. But width implies an increase in two dimensions only, in itself and at the same time in

depth.

In what sense must we understand the terms 'prior' and 'posterior'? As those who lived in the time of Troy are 'prior' to us, so are those who lived before them 'prior' to them and so on *ad infinitum* ? Or since there is a beginning and a middle and an end of the universe, and when a man, as he becomes old, reaches the limit and turns again towards the beginning, that which is nearer to the beginning is earlier, what prevents our being nearer to the beginning than to the end, in which case we should be 'prior'? Just as the course of the firmament and of each of the stars is a circle, why should not also the coming into being and the decay of perishable things be of such a kind that the same things again come into being and decay? This agrees with the saying that 'human life is a circle'. To demand that those who are coming into being should always be numerically identical is foolish, but one would more readily accept the theory of the identity of the species. And so we should ourselves be 'prior', and one might suppose the arrangement of the series to be such that it returns back in a circle to the point from which it began and thus secures continuity and identity of composition. For Alcmaeon declares that men perish because they cannot link together the beginning to the end — a clever saying, if one supposes that he uses it metaphorically and the literal meaning is not insisted upon. If then human life is a circle, and a circle has neither beginning nor end, we should not be 'prior' to those who lived in the time of Troy nor they 'prior' to us by being nearer to the beginning.

## **BOOK XVIII. PROBLEMS CONNECTED WITH LITERARY STUDY**

I WHY is it that some people, if they begin to read, are overcome by sleep even against their will, whereas others wishing to be overcome by sleep are kept awake by taking up a book? Is it because in those in whom movements of breath take place owing to the coldness of their nature or of melancholic humours, which by their coldness engender an unconcocted excretion of breath — in such people, the intelligence, when it is set in motion and does not think of anything with concentrated attention, is checked by the second movement, which has a cooling effect, and this causes a tendency to sleep? But when they fix the intelligence firmly upon something, as happens in reading, they are impelled by the heating movement, which is unchecked by anything, and so they cannot go to sleep. In those who are in a natural condition, however, when the intelligence, which is very powerful, stands at a single point and does not keep changing from one subject to another, every function in that region (whose inactivity involves sleep) is at a standstill; and when the intelligence stands still and is as it were weary, being situated in the head, it weighs it down and produces sleep. But as long as the mind moves naturally, it does not go to sleep; for it is then that it is most alive, and wakefulness rather than sleeping is the cause of life.

Why are contentious disputations useful as a mental exercise? Is it because they involve frequent victories and defeats? They therefore quickly instil a spirit of rivalry; for, when men are victorious, they are induced by their joy to contend yet more, and, when they are defeated, they continue the struggle in hopes of turning defeat into victory. Those engaged in struggles of other kinds act in the same way, and so when fighting and getting the worst of it often refuse to come to terms.

Why is it that in rhetorical displays men prefer examples and fables rather than enthymemes? Is it because they like to learn and to learn quickly, and this end is achieved more easily by examples and fables, since these are familiar to them and are of the nature of particulars, whereas enthymemes are proofs based on generalities, with which we are less familiar than with the particular? Further, we attach more credence to any evidence which is supported by several witnesses, and examples and fables resemble evidence, and proofs supported by witnesses are easily obtained. Further, men like to hear of similarities, and examples and fables display similarities.

Why do we talk of an orator, or a general, or a business man as being shrewd, but not use the term of a musician or of an actor? Is it because the powers of the two last are exercised apart from any desire of gaining an advantage (for their aim is pleasure), whereas the three first aim at some advantage? For a good orator or general or business man is one who can gain some advantage, and shrewdness consists mainly in getting the better of some one else.

Why is the philosopher generally regarded as superior to the orator? Is it because the philosopher treats of the nature of injustice, while the orator says that such and such a person is unjust, and the orator states that such and such a person is a tyrant, while the philosopher discusses the nature of tyranny? —

Why is it that some men spend their time in pursuits which they have chosen, though these are sometimes mean, rather than in more honourable professions? Why, for example, should a man who chooses to be a conjurer or an actor or a piper prefer these callings to that of an astronomer or an orator? Is it because some men would prefer to undertake the more honourable professions but do not do so because they do not feel confident that they would succeed in them? Or is it because each man chooses the calling in which he thinks he can excel and devotes himself to that which he chooses, giving up the greater part of each day to it, in order that he may improve his own proficiency in it? Now when men have chosen a calling from the first and have become accustomed to it, they lose the power of discriminating between the higher and the lower; for their mind is warped by their bad choice.

Why is it that some persons, if they begin to read, are overcome by sleep even against their will, whereas those who wish to go to sleep are made unable to do so if they take up a book? Is it because in those in whom movements of breath take place owing to the coldness of their nature or of melancholic humours, which by their coldness engender an unconcocted excretion of breath — in these when the intelligence is set in motion and does not think of anything with concentrated attention, the intelligence is checked by the second movement, and so they undergo a great mental change and go to sleep (for the movement of breath is overcome)? But when they fix their intelligence on something, as happens in reading, they are impelled by the movement of breath unchecked by anything, and so cannot sleep. But in those who are in a natural condition, when the intelligence is fixed on one thing and does not keep changing from one subject to another, every function in that region (the inactivity of which involves sleep) is at a standstill. (Similarly during a rout, if the leader halts, all the forces

under his command halt also.) For naturally that which is light rises, while the heavy sinks. As long, therefore, as the mind moves naturally, it does not go to sleep; for it is then that it is most alive. When the mind stands still and is as it were weary, the intellect undergoes a change, and the corporeal elements rise to the head and produce sleep. Reading might be expected to prevent sleep; but wakefulness is not due to the fact that we are thinking (for then our mind is most concentrated) but to the constant change; for the intellectual activities which cause wakefulness are those in which the mind searches and finds difficulties rather than those in which it pursues continual contemplation; for the former cause lack of concentration, while the latter do not.

Why is it that in contentious disputes no trifling can ever occur? Is it because such reasoning is apparent syllogism, and syllogism involves only a brief discussion; and, if it be prolonged, after a time the false reasoning is detected and the disputant can withdraw the premisses which he has granted?

Why do we feel more pleasure in listening to narratives in which the attention is concentrated on a single point than in hearing those which are concerned with many subjects?

Is it because we pay more attention to and feel more pleasure in listening to things which are more easily comprehended, and that which is definite is more easily comprehended than that which is indefinite? Now a single thing is definite, but a plurality partakes of the nature of the infinite.

Why do we like to hear of events which are neither very old nor quite new? Is it because we discredit events which occurred long before our time and take no pleasure in events which we discredit, while we can still as it were perceive very recent events and so take no pleasure in hearing about them?

## **BOOK XIX. PROBLEMS CONNECTED WITH MUSIC**

WHY do those who are grieving and those who are I enjoying themselves alike have the flute played to them?

Is it in order that the distress of the former may be lessened and the pleasure of the latter increased?



Why is it that, when the same person uses the same vocal power, the sound travels farther when he is singing or shouting with others than when he does so by himself? Is it because the doing of anything with a number of other people — compressing, for instance, or pushing something — does not produce an effect in simple proportion to the number of persons; but, just as a line two feet long describes a circle which is not double but quadruple that described by a line a foot long, so collective actions have greater force in proportion to their number than when they are carried out separately? When, therefore, a number of persons sing together, the force of their voice unites, and impels the air simultaneously, so that it travels many times as far; for the voice produced by all is the multiple of each single voice.

Why does the voice waver most when singing *parhy pate* and to no less a degree than when singing *nete* and the higher notes, although the interval is greater? Is it because the interval is more difficult to sing and is a primary element? Now the difficulty is due to the straining and pressure of the voice; and these require an effort, and things which require an effort are more likely to fail.

But why is *parhy pate* difficult to sing, but *hypate* easy, although there is only a quarter-tone between them? Is it because *hypate* is accompanied by relaxation of the voice and also because after tension it is easy to slacken? It is probably for the same reason that what a man says with violence, he says with this note or *paranete* . [For one must... with a consciousness of the character which one is representing and under conditions most akin to it according to one's purpose.] [But what is the first condition of concordant music?]

Why do men take greater pleasure in listening to those who are singing such music as they already know than music which they do not know? Is it because, when they recognize what is being sung, it is more obvious that the singer is as it were achieving his aims, and this is pleasant to contemplate? Or is it because it is less pleasant to learn? And the reason of this is that in the one case there is acquisition of knowledge, in the other the use and recognition of it. Further, that which is familiar is always pleasanter than the unfamiliar. to the resulting contrast? For the contrast gives an expression of feeling and implies extremity of calamity or grief, whereas uniformity is less mournful.

Why did the ancients, when they gave the scale seven notes, leave in *hypate* and not *nete* ? Is this a false statement, since they left in both and omitted *trite*, or is the truer answer that the lower note contains the sound of the higher note, so that

*hypate* gives the impression of the octave above better than (*nete* for the high note needs more force, while the low note is easier to utter)?

Why does the low note contain the sound of the high note? Is it because the low note is greater and resembles an obtuse angle, while the high note resembles an acute angle?

Why do we listen with greater pleasure to a solo when a man sings it to the accompaniment of a flute or lyre? Yet the same tune is sung note for note with or without accompaniment. This creates a problem, for if it gave more delight to hear more of the same thing, we ought to sing to the accompaniment of a large number of flute-players and this ought to be even more pleasant. Is it because the singer is more obviously achieving his aim when he is accompanied by a flute or lyre? And the accompaniment of a number of flute-players or lyres does not add to the pleasure, because it drowns the singing.

Why, if the human voice is more pleasant than an instrument, is the voice of a man singing without words — as, for example, when making meaningless warblings — not so pleasant as a flute or lyre? Or is it true that even in the case of an instrument we get less pleasure if it is not expressive of meaning? The instrument, however, has an advantage even in its actual effect; for while the human voice is pleasanter, instruments strike the note better than the human mouth, wherefore they are pleasanter to hear than meaningless warblings.

Why is the voice higher when it echoes back? Is it because it is smaller, having become weaker?

Why does the lower of two strings sounded together always give the tune? For if one omits *paranete*, when one should sound it with *mese*, the tune is given none the less; but if one omits *mese*, when one should sound both, the tune is lost. Is it because the low note is large and <sup>o</sup> therefore strong, and the less is contained in the greater? So too if *hypate* is stopped down in the centre, two *netes* are produced.

Why is it that the low note in the octave gives the effect of unison with the high, but not vice versa? Is it because, if possible, the sound of both notes is in both notes, but, failing that, in the low note, since it is greater?

Why does the accord in the octave escape notice, and why does there appear to be a simple unison, as for example in the Phoenician lyre and in the human

voice? For the upper and lower note do not give the same sound but are analogous to one another at the octave. Is it because their sound appears to be practically the same owing to the analogy, and analogy is equality in sounds, and equality is of the one? The same deception occurs also in the pipes.

Why were 'nomes' not composed in antistrophes like all other songs, that is, choric songs? Is it because the 'nomes' were assigned to virtuosi, and as these were already able to imitate different characters and sustain their parts, the songs composed for them became long and elaborate? Like the words, therefore, the music conformed to the imitation, becoming constantly different; for it was more essential for the music to be imitative than the words. (For this reason too dithyrambs, since they have become imitative, no longer have antistrophes, as they had formerly.) The reason is that in the old days free citizens themselves formed the choruses; it was difficult, therefore, for a large number to sing together like virtuosi, so they sang in one mode. For it is easier for a single person to make many changes than for a large chorus, and for a professional than for those who are preserving the character of the music. And so they made the music more simple for them. Now the antistrophic song is simple; for there is one rhythm and one unit of metre. For the same reason songs executed from the stage are not antistrophic, but those sung by the chorus are so; for the actor is a virtuoso and an imitator, but the chorus is less imitative.

Why is 'antiphonal' accompaniment more pleasing than symphonic' accompaniment? Is it because in the former the consonance is more obvious than when the accompaniment of the singing is 'symphonic'? For of the two notes played by the instrument one must be in unison with the note sung, and so two notes contending against one drown the other note.

Why is it that singing in fifths does not give the effect of antiphony'? Is it because one symphonic' note is not the same as the other 'symphonic' note, as are the notes which are an octave apart? For in the accord in the octave the deep note in the lower part of the scale is analogous to the high note in the upper part; it is, therefore, as it were at once the same and different. But this does not occur in fifths and fourths, so that the sound of the 'antiphonal' note does not appear, for it is not identical.

Why is it that the accord in the octave alone is used in ; singing? For in 'magadizing' this and no other accord is used. Is it because it alone is made up of 'antiphonal' notes, and with 'antiphonal' notes, if but one be sung, the same

effect is produced as if both were sung? For the one note in a way contains the sounds of both, so that, when one is sung, the concordant note at this interval is also sung; and when they sing both, or when one note is sung and the other played on the flute, they both as it were sing one note. Therefore the accord in the octave alone is sung, because the ‘antiphonal’ notes have the sound of one note.

But why does the power of producing the effect of a single note belong only to ‘antiphonal’ notes? Is it because they alone are equidistant from *mese* ? The presence then of this mean creates a certain similarity in their sounds, and the ear seems to tell us that it is the same note and that they are both extremes.

Why is it that, if, after tuning the other strings, one alters *mese* and uses the instrument, the ear is offended and an unmusical effect is produced not only when *mese* is used, but in the rest of the piece as well, whereas, if *lichanos* or any other string is altered, it only seems to make a difference when that particular string is used? Surely this is only natural; for in all good music *mese* occurs frequently, and all good composers have frequent recourse to *mese* , and, if they leave it, they soon return to it, as they do to no other note. Similarly in language, if certain connecting particles are removed, such as *re* and *kai* , the language is no longer Greek; whereas the omission of some particles does not offend the ear, because certain particles must be frequently used, if there is to be language, but others not. So *mese* is as it were a conjunction among sounds, and more so than the other notes, because its sound occurs more often.

Why is it that of singers those who are singing low notes are more conspicuous if they sing out of tune than those ° who are singing high? So too those who make mistakes in time in the lower notes are more conspicuous. Is it because the period of time occupied by the low note is longer, and this longer period is more perceptible (for, lasting for a greater time, it creates a deeper sense-impression), whereas a quick, high note escapes notice owing to its swiftness?

Why does a large choir keep better time than a small one? Is it because they look more to one man, their leader, and dance more slowly and so more easily achieve unity?

For mistakes occur more frequently in quick singing.

Why is *hypate* double *nete* ? Is it because in the first place, when half the string

is struck and when the whole string is struck an accord in the octave is produced? So too with wind instruments, the sound produced through the middle hole and that produced through the whole flute give an accord in the octave. Again, in the reed-pipe an accord in the octave is obtained by doubling the length, and this is how flute-makers produce it. Similarly they obtain a fifth by means of a length in the ratio of three to two. Again, those who construct Pan-pipes stuff wax into the extreme end of the *hypate*-reed, but fill up the *nete* -reed to the middle. Similarly they obtain a fifth by means of a length in the ratio of to , and a fourth by means of a length in the ratio of to . Further, *hypate* and *netez* on triangular stringed instruments, when they are equally stretched, give an accord in the octave when one is double the other in length.

Why, if one strikes *nete* and then stops it down, does *hypate* alone seem to resound? Is it because the vibration produced from *hypate* is very much of the same nature as the sound of *nete* , because it is in accord with it? When it is increased by the addition of its like, it alone is audible, the other sounds being imperceptible owing to their smallness.

Why is *mese* ('the middle note') so called in the scale, though there is no middle of eight notes? Is it because in the old days scales had seven notes, and seven has a middle?

Why do most men sing high when they sing out of tune? Is it because it is easier to sing high than low?

Or is it because singing high is worse than singing low, and a mistake is doing what is worse? —

Why is it that of all things which are perceived by the senses that which is heard alone possesses moral character? For music, even if it is unaccompanied by words, yet has character; whereas a colour and an odour and a savour have not. Is it because that which is heard alone has movement, not, however, the movement in us to which the sound gives rise (for such movement exists also in the other ° things which affect our senses, for colour also moves our sight), but we perceive the movement which follows such and such a sound? This movement resembles moral character both in the rhythms and in the melodic disposition of the high and low notes, but not in their commingling; for 'symphony' does possess moral character.

This does not occur in the other objects of sense-perception. Now these movements are connected with action, and actions are indicative of moral character.

Why are the 'nomes' (nomoi) which are sung so called?

Is it because before men knew the art of writing they used to sing their laws (nomoi) in order not to forget them, as they are still accustomed to do among the Agathyrsi? They, therefore, called the earliest of their subsequent songs by the same name as their earliest songs.

Why do rhythms and tunes, which after all are only voice, resemble moral characters, whereas savours do not, nor yet colours and odours? Is it because they are movements, as actions also are? Now efficient action is already moral and determines character, but savours and colours have no similar effect.

Why is neither the Hypodorian nor the Hypophrygian mode suitable for use by the chorus in tragedy? Is it because they do not admit of antistrophic melody? They are used, however, from the stage, because they are imitative.

Why were Phrynichus and his contemporaries primarily musicians? Is it because in those days the lyrical portions of tragedies were many times longer than the purely metrical?

Why is the 'diapason' (accord in the octave) so called and not named after the number of notes a 'diocto', like the 'diatessaron' (fourth) and the 'diapente' (fifth)? Is it because the notes were originally seven in number, and then Terpander took away *trite* and added *nete*, and in his time it was called 'diapason' and not 'diocto', since it was really 'diepta'?

Why is it more satisfactory for a singer to pass from a high to a low note than from a low to a high note? Is it because the former amounts to beginning at the beginning, for the *mese*, or leader, is the highest note in the tetrachord? But in passing from a low to a high note one begins not at the beginning but at the end. Or is it because a low note is nobler and more euphonious after a high note?

Why are a double fifth and a double fourth not concordant, whereas a double octave is? Is it because neither a double fifth nor a double fourth is in a superparticular ratio, though a fourth and a fifth are so?

Why is the accord in the octave the most beautiful of all?

Is it because its ratios are contained within integral terms, while those of the others are not so contained? For since *nete* is double *hypate*, as *nete* is two, so *hypate* is one; and as *hypate* is two, *nete* is four; and so on. But *nete* is to *mese* in the ratio of three/two to one (for a fifth is in this ratio), and that which is in the ratio of three/two to one is not contained within integral terms; for as the lesser number is one, so the greater number is one with the addition of a half, so that it is no longer a comparison of whole numbers, but fractions are left over. The like happens also with the fourth; for the 'epitrite' of a term is as great as that term and one third as great again. Or is it because the accord which is made up of both the other two is the most perfect, and because it is the measure of the melody?

Why (is the sound shrillest in the middle of the note?

Is it because) in any body which is displaced the movement is most violent in the middle and quieter at the beginning and end, and when the movement is most violent the sound of that which is displaced is shriller? For this reason also strings which are tightly stretched give a shriller note, for their movement is quicker. Now if a sound is the displacement of air or of something else, a sound which is in the middle of its course must be shrillest. If this were not so, there would be no displacement of anything.

Why is it that if *mese* is altered, the sound of the other strings also is spoilt, but if on the other hand *mese* is left alone and one of the other strings altered, the note which is altered alone is spoilt? Is it because for all strings 'being in tune' means standing in a certain relation to *mese*? and the tension of each is already determined by *mese*? If, therefore, that which is the cause of their being in tune and which holds them together is taken away, their proper relationship appears to be no longer maintained. But if one string is out of tune but *mese* is not altered, naturally the defect lies in that string only; for all the others are in tune.

Why is it that, though height in a voice is in accordance with smallness and lowness in accordance with largeness (for a low note is slow owing to its largeness, and a high note quick owing to its smallness), yet more effort is required to sing a high than a low note, and few can sing the top notes, and the 'Orthian songs' and high music are hard to sing owing to the strain which they involve? Yet it requires less effort to set in motion that which is small than that which is large, and this ought to be true also of the air. Is it because the

possession of a naturally high voice and the singing of high notes are not the same thing, but naturally high voices are always due to weakness because of the inability to set more than a little air in motion, and the little air thus set in motion is carried quickly along? But height of note in singing is a sign of strength; for that which is carried violently along is carried swiftly. Hence persons in robust health can sing high. And it requires an effort to sing the high notes, but the low notes are easier.

Why do all men delight in rhythm and melody and concords in general? Is it because we naturally rejoice in natural movements? This is shown by the fact that children rejoice in them as soon as they are born. Now we delight in the various types of melody for their moral character, but we delight in rhythm because it contains a familiar and ordered number and moves in a regular manner; for ordered movement is naturally more akin to us than disordered, and is therefore more in accordance with nature. This is shown by the fact that by working and eating and drinking in an ordered manner we preserve and improve our nature and strength, whereas if we do these things irregularly we destroy and derange our nature; for diseases are disturbances of the natural order of the body. Thirdly, we delight in concord because it is the mingling of contraries which stand in proportion to one another. Proportion, then, is order, which, as we have said, is naturally pleasant. Now that which is mingled is always more pleasant than that which is unmingled, especially if, being perceived by the senses, it contains equally the force of both extremes; and in a concord the proportion has this characteristic.

Why is ‘antiphony’ more pleasant than ‘homophony’? Is it because ‘antiphony’ is concord in the octave? For ‘antiphony’ is produced by young boys and men whose voices are separated in pitch as *nete* is from *hypate*. Now any concord is more pleasing than a simple note for the reasons already stated, and of concords that in the octave is the most pleasing; whereas ‘homophony’ produces only a simple sound. ‘Magadizing’ is in the concord of the octave, because, just as in verses the syllables stand to one another in the proportion of equal to equal, or two to one, or some other proportion, so too the sounds in a concord stand in a proportion of movement to one another. In the other concords the termination of one of the two notes is incomplete since it coincides with the end of only a half of the other; and so they are not equal in force, and being unequal they make a different impression on the sense-perception, as happens in a chorus when at the conclusion some are singing louder than others. Furthermore, *hypate* happens to have the same conclusions to the periods in its sounds as *nete*, for the second



stroke which *nete* makes upon the air is *hypate* . As, then, these notes, though they do not do the same thing, terminate together, the result is that they carry out one common task, like those who are playing a stringed accompaniment to a song; for these, though they do not play the same other notes as the singer, yet, if they finish on the same note, give more pleasure by their conclusion than they give pain by the differences which occur earlier in the piece, because after diversity the unity due to the accord in the octave is very pleasing. Now ‘magadizing’ is made up of contrary notes, and for this reason it is carried out in the accord in the octave.

Why do men take greater pleasure in listening to those who are singing tunes which they already know than if they do not know them? Is it because it is more obvious that the singer is as it were achieving his aim when they recognize what is being sung, and when they recognize it the contemplation of it is pleasant? Or is it because the listener is in sympathy with one who sings what he himself knows? For he sings with him; and every one enjoys singing when he is under no compulsion to sing.

Why are a double fifth and a double fourth not concordant, whereas a double octave is? Is it because a fifth is in the ratio of to , and a fourth in that of to ? Now in a series of three numbers in a ratio of three to two or four to three, the two extreme numbers will have no ratio to one another; for neither will they be in a superparticular ratio nor will one be a multiple of the other. But, since the octave is in a ratio of two to one if it be doubled the extreme numbers would be in a fourfold ratio. So, since a concord is a compound of sounds which are in a proper ratio to one another, and sounds which are at an interval of two octaves from one another are in a ratio to one another (while double fourths and double fifths are not), the sounds constituting the double octave would give a concord (while the others would not) for the reasons given above.

Why is it that, if one strikes *nete* and then stops it down, *hypate* seems to respond? Is it because *nete* , as it ceases and dies down, becomes *hypate* ? (This can be illustrated by the fact that it is possible to sing *nete* from *hypate* ; for the similarity can be taken from *hypate* as being a response to *nete* .) And since an echo is a response to a note, and when *nete* ceases a sound is set in motion which is the same as the note of *hypate* , it is only natural owing to the similarity that *nete* should seem to set *hypate* in motion. For we know that *nete* is not in motion, because it is stopped down, and seeing that *hypate* itself is not stopped down and hearing its note we think that it is *hypate* which is giving forth a

sound. (This kind of illusion is quite common, where we cannot perceive the exact truth either by reasoning or by the senses.) Again, it would be nothing extraordinary if, after *nete* is struck when it is very tightly stretched, the bridge were set in motion; and it would not be strange if, when the bridge moved, all the strings were set in motion with it and made a sound. Now the sound of *nete* is alien to the other notes both in its end and in its beginning, but is the same as *hypate* in its end. This having been added to the movement of *hypate* itself, it would not be strange that the sound should seem to be entirely that of *hypate* ; and it will be louder than the combined sound of the other notes, because the latter, being as it were impelled by *nete*, give only a soft sound, whereas *nete*, being the most violent of notes, sounds with its full force; and so naturally its second sound would be louder than that of the others, especially if only a slight movement has taken place in them.

Why do we listen with greater pleasure to a solo sung to a flute than to one sung to a lyre? Is it because anything becomes still more pleasant when mingled with what is more pleasant? Now the flute is more pleasant than the lyre, so that singing would be more pleasant when it mingles with the flute than with the lyre. Further, that which is mingled is more pleasant than that which is unmingled, if there is a simultaneous perception of both the elements. For wine is pleasanter than ‘oxymel’, because natural mixtures are more thoroughly mingled than those which we make ourselves. For there is also wine which is mingled of bitter and sweet savours, as is shown by the so called vinous pomegranates. Singing, then, and the flute mingle with one another owing to their similarity, for they are both produced by breath. But the sound of the lyre, since it is not produced by breath (which is what makes the sound of the flute less noticeable), mingles less well with the voice and, causing a contrast in the perception, has a less sweetening effect, as has been said of savours. Furthermore, the flute by its own sound and by its likeness to the voice covers up many of the mistakes of the singer; but the sounds of the lyre, which are isolated and mingle less well with the voice, since they are themselves observed, and exist, on their own account, show up the mistakes of the singing as well, providing as it were a standard for criticizing it. And when there are many mistakes in the singing, the combined effect of the singing and the accompaniment must necessarily be worse.

“ — Why is *mese* (‘the middle note’) so called, though there is no middle of eight notes? Is it because in the old days the scales had seven notes, and seven has a middle? Again, since of the points which fall between two extremes the middle alone forms a kind of starting-point, that which lies between the points

which verge towards either end in an extended space, being also a starting-point — *that* will be the true middle. And since *nete* and *hypate* are the extremes of the scale and the other sounds lie between them, of which the one which is called *mese* alone is the beginning of the second tetrachord, the name *mese* ('middle note') is amply justified; for of the points lying between certain extremities, as has been shown, the middle alone forms a beginning.

Why does a large chorus keep the rhythm better than a small one? Is it because they look more to one man, their leader, and dance more slowly, and so more easily achieve unity? For mistakes occur more frequently in quick singing. Now a large chorus attends to its leader, and no one by differing from the rest would render himself conspicuous by making himself heard above the rest: in a small chorus, on the other hand, individuals can make themselves more conspicuous; they, therefore, vie with one another instead of looking to their leader.

Why do most men sing high when they sing out of tune? Is it because it is easier to sing a high note than a low note? They have at all events a tendency to sing high and so make mistakes in what they sing.

Why did the ancients, when they made the scales consist of seven strings, leave in *hypate* but not *nete* ? Or should we say that they omitted not *nete* but what is now called *paramese* and the interval of a tone? They treated *mese* then, as the lower note of the upper 'pycnon'; whence came the name *mese* , because it was the end of the upper tetrachord and the beginning of the lower, and was in pitch in an intermediate relation between the extreme notes.

Why do the choruses in tragedy not sing either in the Hypodorian or in the Hypophrygian mode? Is it because these modes have very little of the kind of tune which is specially necessary to a chorus? Now the Hypophrygian mode has a character of action (hence in the *Geryone* the march-forth and arming are composed in this mode); and the Hypodorian is magnificent and steadfast, and so is the most suitable of all the modes to accompaniment by the lyre. Now both these are unsuited to the chorus and more proper for the characters on the stage; for the latter imitate heroes, and among the ancients the leaders alone were heroes, and the people, of whom the chorus consists, were mere men. So a woeful and quiet character and type of music are suited to the chorus, for they are more human. These characteristics belong to the other modes, but least to the Phrygian among them — for it is exciting and orgiastic — and most to the Mixolydian. In accordance with this mode, then, we adopt a passive attitude, and

the weak are more passive than the strong; and so this mode is appropriate to choruses. When we use the Hypodorian and Hypophrygian modes, on the other hand, we are active, and action is not fitting for choruses; for the chorus is in attendance and takes no active part, for it simply shows goodwill towards those with whom it is present.

Why is it that of the sounds which form a consonance the lower is more suited to melody? Is it because melody is in its own nature soft and tranquil, but becomes harsh and full of movement by the admixture of rhythm? Now since the low note is soft and tranquil, and the high note full of movement, of the notes which maintain the same melody the lower would rather be more melodious in the same melody; for melody in itself, as has been shown, is soft.

Why is it that the sounds produced from two jars of the same size and quality, one empty and the other half-full, give an accord in the octave? Is it because the sound produced from the half-full jar is double that produced from the empty jar? This surely is just what happens in the pipes. For the quicker the movement, the higher seems the note, and in larger spaces the air collects more slowly, and in double the space in double the time, and proportionately in the other spaces. A wine-skin too which is double the size of another, gives an accord in the octave with one which is half its size.

## **BOOK XX. PROBLEMS CONCERNING SHRUBS AND VEGETABLES**

WHY is it that celery can endure salt water, but the leek cannot? Is it because the roots of the latter are weak, but those of the former are strong, and that which is stronger is less liable to be affected?

What is the reason of the saying:

Mint should neither be eaten nor planted in season of warfare?

Is it because mint has a cooling effect upon the body, as is shown by the corruption which it causes in the semen? This is opposed to courage and spirit, being the same in kind.

Why is it that some plants, though they have blossom, have no fruit, such as the cucumber and the pumpkin and the pomegranate? Or have they fruit, the

blossom being the fruit? For example the part which blossoms is a fruit-case, and the cucumber is a fruit-case.

Why is it that some plants are edible only after they have been boiled, while others can be eaten raw? Do the juices of such plants as are not at first edible become sweeter when the plants have been warmed by heat, whilst in others the juices are originally sweet, and these can be eaten raw?

Why is it that some plants are boiled, others roasted?

Is it because the moister plants do not require so much moistening, while the drier plants must not be further dried? Now anything which is boiled becomes moister and softer, and that which is less moist becomes dry if exposed to the fire.

Why are some plants edible and others inedible? Is it owing to their juices? For plants which in their raw state have unconcocted juices and, when heated, do not undergo change, are inedible. Now those of which the juice is edible but somewhat strong are used as condiments; for plants which have a strong savour in a small compass serve to flavour those of which the savour is distributed over a large bulk.

Why is it that some plants live only until they have produced seeds and having borne seeds dry up — grass, for instance, and the so-called herbs — while others do not, but bear seeds time after time? And of those which live only until they have produced seed why are the majority annuals, while horse-parsley produces its fruit in the second year and having done so dries up? Is it because all things flourish until their seed reaches its prime (for man too continues to grow until the age of thirty, sometimes in height and sometimes in bulk), but when they can no longer produce seed, as in the case of man, they begin to dry up and grow old — in some cases slowly and in proportion? The reason why some forms of life are long-lived and others shortlived is to be the subject of another treatise. But since the perfection of the seed is the limit in all cases, it necessarily follows that the shortlived bear fruit only once or only a few times, and the long-lived many times; so that the weakest bear only once and so necessarily dry up; and those of them which can bear seed in a year are annuals, whilst others, like horse-parsley, do so in the second year, both plants and trees alike.

Why is it that if one digs down to the roots of celery and surrounds them with

barley-husks, and puts earth over these and then waters the plants, the roots become very large? Is it because the barley-husks, being hot and spongy, hold the nourishment in a mass so that it does not rise upwards, but, being hot, causes concoction, and so considerable growth takes place?

Why is it that if one buries gourds or pumpkins in the ground when they are still small, they become large? Is it because the wind and the sun dry everything up and prevent growth, and make everything smaller in bulk but closer in texture? (As can be seen in the difference between trees growing in windy and sunny localities and those in hollow and moist places, the latter being large and spongy in texture, the former small and dense.) Now the burying of things in the earth is the contrary of this and produces a contrary result. (A similar difference occurs in fruits placed in vessels; if pumpkins are placed in hollow fennel-stalks or boxes, and pomegranates or apples in earthenware jars, the apples become large and spongy, but the pumpkins become small and hard because they grow against a resisting surface.) The reason then is that the nutriment is increased, because it is not dispersed by the wind or dried up; for the covering of earth prevents it from being thus affected.

Why are the seeds of pungent plants more pungent than the roots and the leaves? Is it because everything is derived from the seed and distributed to the other parts from it, as it were pre-existing in it, as some contend, including the juices and odours, since the odours always become distinctive as soon as the seeds are formed? If, therefore, the pungency in the rest of the plant is derived from the seed, it is only natural that it should be present in the greatest degree in the seed.

Why are thin radishes more pungent? Is it because the larger radishes are more concocted owing to the lapse of time?

Why is it that the caper-plant will not grow easily in tilled ground — for the experiment has often been made of transplanting the roots or sowing the seed (for in some places it is more profitable than roses) — but grows best among the tombs because the ground is most untrodden? As regards this and similar questions the principle must be accepted that all things do not come into being and grow from the same matter, but some things originally come into being and grow from the corruption of other things — for instance lice and the hair on the body when its nutriment is corrupted and when the body is itself in a state of deterioration. As therefore in the body certain products are engendered from the excrement of nutriment (which means that concoction is incomplete), and since,

when nature cannot prevail over the excrement, the commonest excretions are absorbed into the bladder and bowels, while from others living organisms are engendered (and so these attain the greatest growth in old age and disease ), so in the earth some products are engendered and grow from the concoction of nutriment, others from excretions and matter that is in a condition which is the opposite of concoction. Now tillage concocts the nutriment and makes it productive, and from this the cultivated fruits are formed. The products, therefore, of this cultivation are called cultivated because they are benefited by art, undergoing as it were a kind of training. Plants, on the other hand, which cannot be so benefited or are formed from an opposite condition, are 'wild' and will not grow in a highly tilled soil. For tillage spoils them by trying to train them; for they are engendered from corruption. It is to this class that the caper-plant belongs.

Why is it that, when radishes are in their prime in the winter, if one cuts off the leaves and heaps earth round them and treads it in so as to keep out the water, they grow to an extraordinary size in the summer? Is it because the heaping up of the earth round them secures them from becoming corrupted by preventing the water from rotting them, and the nutriment, which the plant used to send into the shoot, enters into the radish, so that it must either itself increase in size or send out lateral shoots and grow other roots, as do onions? For onions, if they are not pulled up each year but are left in the ground during the winter, become multiplied. Now onions are among the plants which send out shoots laterally; but the radish does not do so, and must therefore increase in bulk, because it absorbs all the nutriment.

Why is it that if one plants pumpkins or gourds near a well and, when they are ripe, lets them down into the well and covers them over, they remain green for a whole year? Is it because the vapour from the water cools them and prevents them from drying up and keeps them in good condition, and the covering of them up fosters the breath which has formed in them? Their conservation is due to the fact that they still receive nutriment, because their roots are left undisturbed; for even if one removes the shoots, when they have borne fruit, and after cutting them away heaps earth round the roots and treads it down, the plant will produce early pumpkins, because the roots can survive; for the pumpkin-plant is not a biennial. Plants treated in this way will bear fruit more quickly than seedlings, because the root, the most important part of their organism, is already present in their growth, whereas in seedlings the roots must grow first. Furthermore, the heaping of earth round the root engenders warmth, so that it is

preserved and sends up a shoot more quickly. So too if one sows gourd-seeds during the winter in small wicker baskets and waters them with hot water and carries them out into the sun and places them by the fire, very early gourds will be produced if one plants them out in the ground, as they are, in the baskets, when the proper season arrives.

Why are plants watered at dawn or at night or in the evening? Is it in order that the sun may not consume the water? Or is it because, when the water is warm, it corrupts the plants which are watered with it?

Why is it that sweet-smelling seeds and plants promote the flow of urine? Is it because they contain heat and are easily concocted, and such things have this effect? For the heat which is in them causes quick digestion, and their odour has no corporeal existence; for evil-smelling plants, such as garlic, owing to their heat, promote the flow of urine, but their wasting effect is a more marked characteristic. But sweet-smelling seeds contain heat, because odour is entirely engendered by the presence of some heat; but evil-smelling things are unconcocted. Now anything which is to promote the flow of urine must be not only hot but also easily concocted, so that it may accompany the liquids in their downward course and effect their digestion.

Why is it that vegetables which are produced from older seeds (for example, two or three years old) produce more stalk than those grown from fresh seeds? Is it because, just as in animals that which is at its prime produces semen most readily, so too very old seeds lose their vigour by evaporation, and those which are produced from fresh seeds are too weak because they still contain excrement which is alien to them, but those which are of moderate age are strongest, because the moisture has left them, and so they produce seed more readily? And the production of seed is the same process as the production of stalk, since the seed comes from the stalk.

Why does rue grow best and most abundantly if it is grafted on to a fig-tree? Now it is grafted inside the bark and plastered with clay. Is it because the roots of the rue require heat and warmth (and this is why they are benefited by being surrounded with ashes), and the fig-tree contains heat? That this is so is shown by the fact that its sap is the most pungent of all and by the amount of smoke which it produces when burnt. It therefore possesses the same kind of heat and moisture as ashes, so that if ashes benefit rue, it must necessarily flourish greatly when grafted on the fig-tree, since, whereas ashes give off no fluid, the flow of



liquid from the fig-tree is continuous, its moisture being never exhausted. —

Why do some plants always produce empty stalks?

Are they among those plants which have to produce something other than stalk?

Why is it that in Attica, while all other fruits are very sweet, thyme is very bitter, yet thyme is a kind of fruit?

Is it because the soil there is thin and dry, so that the plants which grow there do not contain much moisture?

In plants, then, which are naturally sweet, owing to the moderate quantity of moisture which they contain, when the sun has absorbed the greater part of it the remainder is easily concocted; for it is difficult for a large amount, but easy for a moderate amount, to be ripened. Fruits, therefore, which are naturally sweet become more so; but in those which are naturally dry and not sweet, the natural moisture fails, because it is scanty, and is very far from being sweet. For the sun absorbs the sweetest and lightest part of it; and these fruits have no superfluous moisture, as have other fruits.

Why do pennyroyal and narcissi and onions bloom if hung up at the time of the summer solstice? Is it because there is unconcocted nutriment in them, which in winter does not become concocted owing to the cold, but at the summer solstice owing to the season becomes concocted, and so the growth takes place? This growth, however, because there is no influx of moisture, quickly dies down; for if they have not some source of nutriment or influx of moisture, they dry up. A similar phenomenon occurs in Scythia, where, owing to the presence of abundant snow, the corn remains a long time in the earth and then suddenly shoots up.

Why does the onion alone make the eyes smart to such an excessive degree (hence it is said to derive its name because it makes one cover up the pupil), whereas marjoram and other pungent plants do not have this effect? For the nasturtium, though it is more stinging, does not cause tears to the same extent if placed near the eyes, whereas the onion has this effect both when so placed and when eaten. Is it because many differences attach to each of the pungent plants, which give each its peculiar property? The nasturtium then, because it is hotter, is so dry that it prevails over the liquefaction which it causes; for it causes tears when it is eaten, but it does not cause tears when placed near the eyes, because it

does not give off any thin vapour, being too dry and hot to do so. But marjoram and such warm plants are dry, though only slightly so; and that which is to cause tears must be stinging and moist and viscous. This is why olive oil causes tears, though its sting is weak; for it penetrates owing to its viscosity and tenuity and causes pain, and the pain causes melting. Now the onion has such properties that its moisture and the vapour which it gives off are hot and tenuous and viscous; and so, when it is placed near the eye, it causes tears, because the vapour which it gives off is of such a character and carries with it a thin moisture; and, when it is eaten, the exhalation penetrates and produces the same effect. Garlic, on the other hand, is hot and pungent and contains moisture, but is not viscous; and so does not cause tears.

Why is it that myrtle-berries which have been compressed in the hand seem to us sweeter than those which have not been so compressed? Is it for the same reason as makes dried grapes sweeter than fresh clusters and undried grapes?

For dried grapes are, it appears, flavoured by the juice, which is naturally sweet (for they are even externally saturated by it), but the grapes which are still in the cluster are not so flavoured. So too myrtle-berries, which are naturally sweet and have their sweetness within, like grapes when they are compressed, become saturated by the sweetness which is within them and are clearly sweeter externally.

Why is it that, the smaller myrtle-berries are, the more they tend to have no stones, and the same is true also of dates and clusters of grapes, in which the small grapes have no stones at all or only smaller stones? Is it because, being less perfect, they have less distinctly formed stones?

For the purpose of the stone is to contain the seed. Now the berries are smaller, because they are mere offshoots and imperfect, and they are less sweet than those which have proper stones; for they are less concocted, and concoction is a process which produces perfection.

Why is it that in some fruits the parts which are near the root are more bitter (for example in the cucumber), but in others the parts towards the upper extremity (for example in acorns)? Is it because in the former the nutriment in that part is unconcocted, because there is a continual influx along the root; while the latter are naturally dry, and so, when the sweetness is drawn off from the extremity and has become concocted, they are henceforward dry and the bitterness is left

behind like salt? Now as anything becomes dry, it becomes more bitter, just as olives and acorns become bitter as they grow old.

Why do some plants sprout when they are not in the earth, but either cut off or placed in store, lily-stalks, for example, and garlic and onions? Is it because they all have nutriment within themselves and not in any definite place outside the plant? [It is therefore their superabundance of nutriment which makes them sprout, as is clear from the fact that squills and purse-tassels do the same.] Now each of them grows not merely because it contains nutriment, but only when that nutriment is concocted and distributed; it therefore contains nutriment before, but it only grows when the season comes at which this process takes place owing to the concoction caused by the season, as happens also to crocodiles' eggs. The growth, however, is not continuous, because there is no influx of more nutriment.

Why is it that garlic and onions grow better according as they are drier when planted, whilst other plants grow worse under such conditions? Is it because all plants of this kind are exceedingly full of moisture? If, then, they are planted in this condition, they enjoy equable conditions.

A further reason is that they are less likely to rot if they are dried before being planted. —

Why is it that garlic and onions alone among plants sprout when they are stored away? Is it because they are full of moisture and nutriment? It is abundance of nutriment, then, which makes them sprout, as is clear from the fact that squills and purse-tassels do the same.

But they grow only when the proper season for each of them comes.

Why is it that plants which are watered with cold water are sweeter than those watered with warm water? Is it because the warm water when it becomes enclosed in the plant is saltier (just as that which is saltier is hotter, and that which is sweet is the opposite, that is, in a sense, cold)?

Now the nutriment of vegetables is liquid, and it is this which gives them their juices.

Why is it that garlic has a stronger odour when it has run to stalk than when it is young? Is it because, when it is young, there is still a large quantity of alien

moisture in it which deprives it of its strength? When, however, the plant has ripened, the alien moisture having been already excreted, it then has its own proper odour; and this is naturally pungent. Similarly, all other fruits when they are young are more watery. This is the reason why young onions are less pungent.

Why is it that, if myrtle-branches are not embalmed, the berries rather than the leaves drop off, whereas, if they are embalmed with seaweed, the leaves drop off but the berries do not? Is it what naturally happens if the branches are not embalmed, for the berries naturally drop off when they become ripe? This does not occur when the branches are stored away, but the moisture in the seaweed only prevents the moisture in the berries from undergoing change. The leaves, on the other hand, drop off as the branches become dry, and the seaweed, which is salty, has a drying effect upon them. The leaves thus undergo different processes when they remain on the tree and when they are stored away.

Why do melons grow best in marshy plains which are humid, for example, round Orchomenus and in Egypt, which appears to be a well-watered country? Now marshy districts are full of water and melons themselves are somewhat moist; and this is why those grown in gardens are poor. Is it because they have to be planted deep owing to the hardness of the ground? For clayey, flat ground becomes very hard, and plants grow best which are deeply planted. Or is it because the ground must be dry, because the plant itself is naturally moist? For thus being pulled in opposite directions it will attain the mean. Now ground which is somewhat marshy but deep contains nutriment owing to the depth of the soil and the locality, but not in an excessive quantity, because the ground dries up again.

Why is it that rue and certain unguents give the perspiration an evil odour? Is it because things which have a heavy and pungent odour, mixing with the excretory fluids, make the odour of these still more unpleasant?

Why is rue said to be a remedy against the evil eye? Is it because men think they are victims of the evil eye when they eat greedily or when they expect some enmity and are suspicious of the food set before them? For instance, when they take anything for themselves from the same course, they offer some one else a portion, adding the words, 'so that you may not cast the evil eye upon me. All therefore will take with alarm of what is offered them, whether liquid or solid, of those foods, the constriction or vomiting forth of which causes the solids to be

carried upwards and ejected or the flatulence from the liquid to give rise to pain and writhing. Rue, therefore, being eaten beforehand, since it is naturally warming, rarefies the organ which receives the food and the whole body, with the result that it drives out the flatulence enclosed within it.

Why is it that marjoram, being thrown into the must, makes the wine sweet, and two cupfuls are thrown into a jar of wine? Is it because it takes away the elements which cause harshness by absorbing into itself by its dryness the watery and sedimentary parts? That it is these which cause harshness is shown by the fact that wines are less soft if water is added or if they have been allowed to stand a long time on the lees. Also when they make raisin wine, they expose the grapes for a long time to the sun, which draws out the watery element and concocts the remainder. Now marjoram produces the same result, for it is dry and hot, and so naturally has a lasting effect.

Why do black myrtle-trees have thicker foliage than white? Is it because they are a wilder species? That they are so is proved by the fact that they grow in the untilled ground and undergo very little modification as a result of cultivation. Now wild plants invariably have denser foliage; for, because their fruit is less concocted, the nutriment is diverted into the foliage.

## **BOOK XXI. PROBLEMS CONCERNING BARLEY-MEAL, BARLEY-CAKE, AND THE LIKE**

Why is it that barley-gruel and wheaten-flour become whiter if oil is poured on to them, though oil is reddish in colour? Is it because oil naturally foams when it is mixed with liquid, and foaming causes whiteness? Now mixing is carried out by pounding and motion, and is most complete in the case of corporeal substances. This process occurs in foods which are boiled, and so makes them whiter.

Why is it that foods made from wheat suit our bodies best and are more nourishing than those made from barley? Is it because wheat contains a moderate amount of stickiness, and food ought to have this quality, since it ought to cling and adhere to the body, and its stickiness causes it to do so? But barley is less cohesive, and so cakes in which the barley is well kneaded are more nourishing than those in which it is not kneaded.

Why is it that of wheaten-flour that which is ground first is whiter, but of barley-

meal that which is ground last? Is it because barley, being dry, breaks into pieces, whereas wheat is soft and crushes? Now in both it is the inner part which is whitest.

Why do loaves appear whiter when they are cold than when they are hot? Is it somehow for the same reason that stale oil is whiter than fresh? For the cause of the blackness is the water which in both cases is present in larger quantities when they are fresh; but after a time, owing to evaporation, the water remaining near the surface becomes less. Now it is either the passage of time or the heat of the sun which causes evaporation from the oil; and from loaves the heat goes forth as they cool and has entirely departed when they are cold, whereas it is still present when they are warm.

Why do loaves which contain no salt weigh heavier than those which are salted, the other ingredients being exactly the same? The contrary would be expected, since salt is added, and salt is heavier than water. Is it because the salt causes drying to take place? This is why things which are preserved with salt remain uncorrupted; for the moisture in them is taken up and dried up by the salt, and it is the moisture in things that is corrupted by heat.

So too in bread the moisture is taken up by the salt and evaporates outside. Stale bread therefore is lighter than hot bread, since it is colder. Now in loaves which do not contain salt this moisture is present in greater quantities and makes them heavier.

Why is it that loaves which have become cold, if they are moistened and placed in contact with one another, do not cohere, whereas hot loaves do so? Is it because the cold loaves give off with the vapour the sticky moisture which is in them, and, because this has gone forth, do not cohere (for the water with which they were wetted is too uncohesive); but the hot loaves contain a certain amount of stickiness, and so, when they are moistened and the vapour comes forth, the heat, owing to its rarity, is given off, but the sticky matter, which comes out with it and mingles with the moisture, causes the loaves to adhere together?

Why is it that of wheaten-flour that which is ground first is whiter, but of barley-meal that which is ground last? Is it because barley, being dry, breaks into pieces, and this happens most when it is ground for a very long time, but the flour which is inside the wheat is soft and fine and is crushed out at first? Now in both cases it is the inner part which is whitest.

Why is it that barley-cake becomes more indigestible the more it is kneaded, whereas wheaten-bread becomes easier to digest? Is it because dough becomes less by being much kneaded (and this is the nature of that which is sticky), but the moisture has been expelled from every part of the loaf by the fire, so that, when the moisture has been entirely expelled, the loaf becomes more uncohesive the more it is kneaded, because in the kneading it is divided up into smaller particles? Now that which is uncohesive is more easily concocted. Barley-cake, on the other hand, the more it is kneaded becomes more sticky, as the liquid mingles in it; and that which is sticky is not easily divided up, and such foods are not easily concocted; for that which is to be concocted must be split up into small parts.

Why does barley-cake become less when it is kneaded, whereas dough becomes more? Is it because barley-meal when moistened and kneaded unites owing to the binding quality of the moisture, because it is of even texture and granulated, but wheaten-flour rises, because it is very dense? For that which is dense grows hot when kneaded and, when it is hot and inflated, it rises, as does the flesh.

But why does dough increase more when it is heated than barley-cake does? Is it because dough contains moisture which is not separated in such a way that it can escape when warmed, owing to the kneading? When therefore it is warmed, breath is engendered, and more breath is necessarily engendered from a greater amount of moisture.

Why is it that although honey is more adhesive than water, wheaten-flour is more uncohesive, when it is boiled or baked, if it is mixed with honey-water than with water?

Is it because water becomes stiff and solid under the influence of the heat, whereas the honey becomes solid but also has a drying effect, and so makes the food more uncohesive (for this quality is produced by dryness)?

Why do twice-baked loaves, when they are cool, not become hard? Is it because wheat has in it a certain sweet and sticky juice, which is as it were its 'soul'? This can be illustrated by the fact that when it is dried it becomes quite empty, but, when it is wetted, it expands. This juice, therefore, being present also in wheaten-flour, especially in that of the purest quality, when the flour is made into dough and the dough is kneaded the same thing happens, as is proved by the fact that when it is boiled it becomes more digestible. When, therefore, the bread

is baked for the first time, the thin and light part of the moisture is evaporated from the bread, and the part of the flour which most resembles chaff is burnt out. But when the dough is taken out and kneaded again, the smoothest part of the flour and the stickiest part of the moisture being left mingle more with one another, owing to the fact that they have become smoother and stickier, and owing to the effect of the heat; for their mixing resembles the process of dyeing, so that the dough, when subsequently kneaded, is like boiled flour. For when this dough is kneaded and the lightest flour and the stickiest moisture are left, the bread, when it has been exposed to the fire, becomes glutinous and does not dry up; for that which is sticky cannot be separated, and that which is dense does not of itself give up any moisture. Twice-baked bread then undergoes this same process for the reasons mentioned above, and, always containing moisture, does not become hard.

Why is it that we can go on partaking of some kinds both of solid and of liquid food for a long period — for instance, food made from barley-meal and wheaten-flour, and dry wines, and water — whereas we cannot partake continually of others, though they are pleasanter to the taste? Is it because some of the foods which we take tend to float on the stomach and are highly nutritious, so that when one has discharged them, though their first nutriment has been consumed, a considerable force still remains in the body, concocted for the first bodily process but unconcocted for its final purpose and for the succeeding process? Now most of the pleasing foods belong to this class; for the fatty and sweet and rich foods seem pleasantest to our taste, and these, however they differ from one another, are all foods which are nutritious, and not difficult of concoction, and apt to float on the stomach; their force is therefore lasting, if one takes one's fill of them, and the perception of them does not quickly pass away; for the feeling of satiety does not only continue while they are in the stomach but also when their nutriment has been distributed to other parts of the body. Or is this not the only reason, and is there a further reason, namely, that some foods are naturally suited and akin to us? For our bodies accept all such foods more readily because they are natural, while they accept less readily those which are unnatural. And different foods suit different temperaments; for example, honey is the natural food of bees, so that they take no other, though they are physically weak; so that what they consume must be small in amount, but must be to their strength as what men eat is to theirs. And so any pleasing foods which are of this kind seem pleasing because they are present in small quantities in our nature, but they only appear so for a short time, and then soon cause a feeling of satiety. But we always need the natural foods, so that we feel less satiety from foods



continually taken other than those which are most pleasing in themselves.

Why is it that the same things seem pleasant when we are becoming accustomed to them and not pleasant if we partake of them too continuously, though being accustomed to anything is doing it often and continuously? Is it because custom engenders a receptive habit but does not bring satiety, whereas taking anything continuously fills up the desire, just as a vessel is filled; for desire is a kind of void? Now habits, when exercised, increase and grow, but vessels when they are filled full do not become any bigger. Hence custom, being an exercise, increases the ° receptive habit; but that which is continuously taken fills up and satisfies the desire, and, when this is satisfied, we no longer receive any more, and nothing can increase the desire for the reasons already stated regarding the filling of vessels. Furthermore, custom is not pleasant through constantly giving pleasure (for such things too cause pain through continual practice), but because we enter upon the beginning of the process with pleasure and can continue doing the same thing longer than if we were unaccustomed to it.

In the same way then as custom, which is pleasant, causes pain, so too do all other pleasant things; for things which happen and foods which are taken continuously, both alike cause pain. The reason is that the powers of acceptance and action which we possess in ourselves are not unlimited but limited, and when they have reached their full capacity (and this is continually visible to an increasing extent) the receptive powers are satisfied, and the powers for action can no longer function. —

Why does dough become white when it is kneaded, while barley-cake becomes blacker? Is it because the surface of the barley-meal becomes drier, and it is the heat in the moisture which causes the whiteness? Or is it because, through exposure to the heat, the surface of barley-meal attracts the moisture, since it consists of larger particles?

Why does barley-meal adhere better together when mixed with water than with oil, though oil is more viscous? Yet that which is viscous is more binding, and oil is more viscous than water. Is it because water is thinner and so penetrates into everything and makes the barley-meal soft, and the grains adhere together better and are compressed into one another, even though pressed together without any kneading?

Why does bread which is either not kneaded or very much kneaded break up?

Does the unkneaded bread do so because it is not sufficiently bound together? Now it is the kneading that binds the bread; so that unkneaded bread is already on the way to breaking up. Further, it contains much moisture not properly mixed in. Bread which is very much kneaded is dry, because it has very little moisture; for when it is heated, the moisture all escapes. So that in both cases the bread breaks up because much moisture goes forth; for much moisture is actually present in the unkneaded bread, and in the over-kneaded bread much (escapes) compared to what remains behind.

Why is the admixture of barley-meal and liquid lighter than the two things together when unmixed? Is it because, when they are mixed, air is enclosed in them? Or is it because part of the water is evaporated by the heat in the barley-meal, and so the mixture becomes smaller in bulk? The air, however, if it were also mixed in, would not make the mixture any lighter; for air enclosed in air possesses weight.

Why do milk and sweet wine appear sweeter if drunk with barley-meal? Do they appear sweeter in contrast with anything which is not sweet (for barley-meal is not sweet)? Or is it because the barley-meal continues to hold sweetness, and so the perception of it is prolonged?

Why does the same potion seem less strong if it is drunk with barley-meal? Is it because the barley unites what has one quality with what has another, or because the barley - meal interferes with the potion and destroys it, absorbing it into itself?

Why does gruel take up more water than the wheat from which such gruel is made? Is it because the gruel is a kind of flour, and flour takes up more water (for its bulk is greater than that of the wheat, for even the particles of the wheat are packed closely together)? Now that which is more holds more both for this reason and also because both flour and gruel contain heat, and heat both attracts the moisture more and expends it by evaporation.

Why does wheaten-flour increase much more in proportion than barley-meal when it is kneaded? Is it because flour admits a large quantity of water, but barley-meal only a little? (But why does it admit more, for barley-meal would naturally be expected to do so, because it has been exposed to heat, whereas the flour has not, and that which has been exposed to heat is drier?) Or is it because flour admits of more kneading, the reason being that it is composed of smaller

particles? As therefore it is potentially as it were more manifold by reason of the smallness of its parts, so much the more water does it take up. For it uses the water as a glue — a metaphor employed by Empedocles in the *Physics*? when he says ‘gluing barley with water’ — and it consumes much water for this reason.

Why does dough increase more when it has been heated than barley-cake does? Is it because it contains moisture which is not separated in such a way that it can escape when it is warmed, and this moisture, becoming breath and not being able to escape (as it can in the barley-cake) owing to the density of the dough (for that which is made up of smaller particles is dense), makes the dough, therefore, rise and causes the mass to be greater? Furthermore, the moisture which it contains is more considerable, and it is from this, when it is heated, that the breath is engendered; and from the greater amount of moisture more breath must necessarily be engendered.

Why is it that, of persons engaged in the preparation of cereals, those who handle barley become pale and are subject to catarrh, while those who handle wheat are healthy? Is it because wheat is more easily concocted than barley, and therefore its emanations are also more easily concocted?

Why is it that bread, if one toasts it, becomes harder, whereas, if one warms it, it becomes moister up to a certain point? Is it because, when it is toasted, the moisture goes out of it, and so it becomes harder, whereas, when it is warmed, the moisture having acquired consistency is liquefied again by the fire, and so the bread becomes moister?

Why does flour, as it cools, become less closely packed, but barley-meal more so? Is it because things which are made up of small particles contain no vacant spaces, and heavy things, by the pressure which they exert, take up the same space whether they are more or less numerically? Barley-meal then is soft; when it cools, therefore, it becomes less, so that the less is more compressed. But wheaten-flour already consists of small particles, and so it does not cool in this way, but in such a way as to become lighter and not so as to become more closely packed by compression; for wheaten-flour is naturally heavier than barley-meal.

## **BOOK XXII. PROBLEMS CONNECTED WITH FRUIT**

WHY is it that the volume of food necessary for repletion is not proportionate in

the same persons if they eat fruit at the beginning and at the end of a meal? Is it because fruit is much heavier than solid food? This can be illustrated by the fact that figs, though eaten last, are vomited out last. If, therefore, they are eaten first, owing to their weight they sink downwards and leave ample space above, so that one can easily contain the volume of solid food. If, however, the converse takes place, the solid food when it enters in, because it does not sink downwards, quickly occupies the vacant upper space.

Why is it that, although sweet foods are more akin to us than pungent, we are more quickly sated by the former? For the contrary might have been expected, since we might naturally be supposed to be less sated by foods which are akin to us. Is it because the organ whereby we receive nourishment and the body, which is nourished, are not sated equally quickly, but sometimes the stomach is full, in those, for instance, who are thirsty, but the thirst is not less? For we do not cease being thirsty because the stomach is full, but when each part of the body has drawn thence its own particular moisture; and we cease being thirsty only when they have received this in sufficiency. The same thing also occurs when we are hungry.

Why are we more quickly sated by sweet than by pungent foods? Is it because we cease desiring sweet things sooner? Or, while it is not generally admitted that we become satiated as the stomach is filled by sweet foods, yet might it not be said that our desire is more quickly sated by them? Or is it because desire is simply a want, which occurs when we no longer have any nutriment in us or very little? Pungent foods then are not nourishing, but contain little nutriment and a considerable amount of excrement. We therefore naturally seek to eat them in large quantities, and yet do not satiate our desire with them, because we still lack nutriment and they do not contain it. But all sweet foods are nutriment, and the body derives a large amount of nutriment from a small quantity of them. When, therefore, it derives a large amount of nutriment, it can no longer eat, because it cannot tolerate more. We are therefore naturally more quickly satisfied by sweet foods.

Why is it that fruits and meat and the like remain uncorrupted if placed in skins, when these are tightly inflated, as also do substances placed in closely covered vessels? Is it because all things become corrupt through being in motion, and things which are full are without motion (for it is impossible for anything to be moved without there being a void), and these vessels are full?

Why does wine seem bitter when drunk after the eating of rotten fruits? Is it because such rottenness contains bitterness? That, then, which remains on the tongue, mingling with the draught and becoming diffused in it, makes the draught bitter. The fruit by itself, when eaten, seems less bitter, because juice of this kind takes effect at many different points and is divided up into small particles.

Why should dried fruits be eaten? Is it in order that we may drink sufficiently? For we ought not only to drink to satisfy the thirst which is engendered by solid food, but also when the solid food is finished.

Why do roasted nuts deteriorate when they become cool, and also bread and acorns and many such things, but improve when they are heated again? Is it because, when they become cold, the juice becomes hard, but, when they are warmed up, it becomes liquid again, and it is the juice which is pleasing?

Why is it that, for the proper enjoyment of fruits such as figs and the like, one ought to drink with them either unmixed wine or water, which are the opposites of one another? Is it because fruit is both hot and moist owing to the manner of its growth? For it contains much both of fire and of moisture; and so, owing to the fire, the juice causes as it were a boiling within, such as must makes on the surface (though the others, the hard-shelled fruit, also have this force, but in a less degree), while the large quantity of moisture causes an unconcocted condition. Water then, owing to its coldness, extinguishes the boiling, as wine also usually does by its heat; for it takes away its power, just as one fire extinguishes another if the latter be less. And wine by its heat is better able to concoct the moisture, and by its weight it prevails over the scum formed on the surface by the boiling.

Why is it that those dried figs are sweetest which are slit twice, and not those which are slit either many times or not at all? Is it because, if they are slit many times, most of the sweetness escapes and evaporates with the moisture, whereas in those which are entirely closed the watery element is considerable, because it has not been turned into vapour? Those, however, which have been slit, but not many times, do not suffer from either of these disadvantages.

Why is it that figs when they are dried in an oven are harder if they are left to cool in the oven than if they are taken out to cool? Is it because in the oven all the moisture is evaporated by the heat, whereas outside the surrounding air cools

the moisture and prevents it from escaping and the moisture retains its consistency rather than evaporates? Now what is dry is hard, and what is moist is soft.

Why is it that wine and water seem sweeter when taken II with something sour, if, for instance, one munches acorns or myrtle-berries or something of the kind? Is not this natural and does it not happen in other things too? For everything seems to assert its identity more forcibly when compared with its opposite, and here the tastes of the two opposites are in a way set against one another. Or is it because, as in objects which are being dyed, the tongue has already been permeated by the sour matter and opens its pores, and so the sweetness can penetrate better? For objects which are being dyed are first of all moistened in sour liquid, because that which is thus permeated takes the dye better.

Why do sweet things seem to be less sweet when they are hot than when they are cold? Is it because two sensations of the two qualities are present together, and so that of heat dispels the other? Or is it because that which is sweet is also hot, and it is therefore a case of 'fire upon fire and thus the heat prevents the perception of the sweetness? Or is it because fire takes away the power of everything, since it causes motion? Things, then, which are hot are nearer to change, but when they cool they become stable again.

Why is it that chaff concocts hard fruits and does not corrupt those which are already concocted? Is it because chaff is both hot and absorbent? It, therefore, by its heat causes concoction, while owing to its absorbent property it attracts the corrupted impurity, which therefore does not cause corruption.

Why do figs, which are soft and sweet, destroy the teeth? Do they, owing to their stickiness, penetrate into the gums, and, because they are soft, insinuate themselves into the spaces between the teeth, and, being hot, quickly cause decay? Perhaps also, owing to the hardness of the seeds, the teeth are quickly caused to ache in the process of chewing them up.

## **BOOK XXIII. PROBLEMS CONNECTED WITH SALT WATER AND THE SEA**

WHY is it that the waves do not ripple in the deep open sea, but only where it is confined and shallow? Is it because a small amount of liquid, as it is carried along, is more divided up by the wind than a large amount?

Why do the waves sometimes begin to move before the winds reach them? Is it because the portion of the sea near the source of the wind being impelled along first has continually the same effect upon the adjoining part, and so, since the sea is continuous, the same effect is caused in every part of it, as though from one continuous impetus?

Now this occurs simultaneously, with the result that the first and the last parts of the sea are set in motion at the same time. This effect is not produced in the air, because it is not a single body (since many hindrances affect it from all sides, which often cut short the first and most vigorous movement); the sea, however, suffers from no such impediments, because it is heavier and less easily disturbed than the air.

Why do ships seem to be more heavily loaded in harbour than out at sea, and why do they travel more quickly from the open sea towards the land than from the land towards the open sea? Is it because the greater quantity of water offers more resistance than the less, and the vessel sinks deeper into the latter, because it prevails more over it, for it pushes up the water from below? Now in a harbour the sea is shallow, but deep out at sea; so that a vessel will seem to carry a heavier load in harbour and will move with greater difficulty, because it is sunk deeper into the water, which offers less resistance. But in the open sea the contrary happens.

Why is it that if anything (for example an anchor) is so thrown into the sea when it is rough, a calm ensues? Is it because the sea is stopped by the descending object, with which a certain amount of air is carried down, and this air, carried in a direct course downwards and drawn thither, draws with it also the lateral force which is disturbing the sea? Now a wave does not move downwards from above but along the surface, and, when it ceases, a calm ensues.

Furthermore, the sea, as it closes in upon the space opened by the descending object, makes an eddy, and eddies move in a circle. Now since it is a case of a straight line touching a circle at a point (and waves travel obliquely in a straight line), the result would be that the waves touch the circumference of the eddy only at a point, both for the reasons stated and because the eddy pushes the wave off as soon as it comes into contact with it. The place, then, where the eddy is, being without waves, the result is that there is a calm where the surface is broken, because the air, which descended with the object thrown in, subsequently ascending and thrusting the sea upwards, causes it as it were to

bubble; for a bubble consists of moisture thrust up by air from below. Now every bubble is smooth and still. A proof that the above process takes place is given by the fact that the sea at the point where the object is thrown in rises a moment later to a higher level than the surrounding sea.

Why is it that sometimes vessels which are journeying over the sea in fine weather are swallowed up and disappear so completely that no wreckage even is washed up? Is it because, when a cavernous space breaks open in the earth beneath the sea, the ship at the same time follows the rush of air into the sea and into the cavern? And in like manner the sea, being carried everywhere round in a circle, is borne downwards; and this constitutes a whirlpool. And ships in the Straits of Messina suffer the same fate owing to the flow of water, which causes eddies, and are swallowed up into the abyss, for the reasons stated above and also because the sea is deep and the land cavernous to a great distance. The eddies, therefore, overpower the ships and carry them thither, and so no wreckage is washed up. The flow occurs when, the former wind having stopped, a contrary wind blows over the sea when it is running under the impulse of the former wind, and especially when the contrary wind is the south wind. For the currents flowing against one another try to thrust one another aside, as happens in rivers, and eddies are formed. And the original movement, which is strong, is borne whirling round and round from above. Since then the currents cannot travel laterally (for they are mutually repelled), they must be thrust down into the depths, and so whatever is caught by the eddy must necessarily be carried down too. Hence they build ships with slanting ends; for cases have been recorded before now in which a ship with straight ends has been swallowed up. —

Why is the water whiter in the Black Sea than in the Aegean? Is it owing to the refraction of the vision from the sea into the air? For in the region of the Black Sea the air is thick and white, so that the surface of the sea appears to be similar, whereas in the Aegean it is blue, because it is clear to a great distance, and so the sea too reflecting the air appears to be similar. Or is it because all lakes are more whitish than the sea, and the Black Sea has the character of a lake because many rivers flow into it? Now lakes are whiter than the sea, and than rivers; for example, painters picture rivers as pale yellow and the sea as blue. Or is it because the sight cannot penetrate quickly through fresh water and is refracted into the air, but is not perishes before it becomes perceptible; and so the wave is not really prior to the wind, but the former is noticeable, while the latter is not. Or do the winds not blow everywhere at the same time, but at first only in the quarter from which they arise? Now as soon as they begin to blow, they set in



motion the sea which is near them, and this sets in motion the adjoining sea; and thus it would be possible for the wave to break forth before the wind reaches it. For the movement is due to the sea and not to wind, being a movement of the sea which travels more quickly than that of the air.

Why is it easier to swim in the sea than in a river? Is it because the swimmer always leans on the water as he swims, and we receive more support from that which is of a more corporeal nature, and' sea water is more corporeal than river water, for it is thicker and able to offer more resistance to pressure?

Why can one remain longer in the sea than in a river?

Is it because river water is rare and therefore penetrates more into the body and chokes one?

Why is sea water combustible, while fresh water is not? Or does fresh water also burn, while the reason why sea water has less power to extinguish fire is because it is of a more fatty composition? (And that it is so is proved by the fact that an oil is given off from sea water.) Or are the interstices in sea water less able to adapt themselves to fire because they are too wide, and all the more so owing to the presence also of salt? As, therefore, that which is dry has less power to quench than that which is moist, so that which is drier is proportionately more capable of being burnt, one thing being more so than another, since the drier a thing is the more closely allied is it to heat; and sea water possesses both these qualities of dryness and heat to a greater extent than fresh water.

Why is it that the wind blows cold in early morning from rivers, but not from the sea? Is it because the sea extends over open spaces, but rivers are in narrow places? The breeze, therefore, from the sea is dispersed over a wide area and is consequently weak; whereas the breeze from a river is carried along in a mass and is stronger and therefore naturally seems colder. Or is the reason other than this, namely, that the rivers are cold, but the sea is neither hot nor cold? Now a breeze or an exhalation is due to the heating or cooling of liquids; for whichever of these two processes they undergo, evaporation takes place, and, when water evaporates, the resultant air is set in motion, and this is a breeze. That which is produced from cold liquids naturally blows cold, while that which blows from very hot liquids cools and becomes cold. One would, therefore, find that all the rivers are cold, but that the sea is neither very hot nor very cold. That which blows from it, therefore, is not cold, because it is not itself cold, nor does it cool

quickly, because it is not very hot.

Why do waves calm down more slowly in the wider open sea than in shallow waters? Is it because everything calms down more slowly after much motion than after little? Now in the wide open sea the ebb and flow is greater than in shallow waters; there is, therefore, nothing strange if that which is greater is more slow in calming down. —

Why is it that salt water when it is cold is not drinkable, but becomes more drinkable when it is heated, and when it is heated and then cooled? Is it because a thing naturally changes from one opposite into the other? Now drinkable water is the opposite of salt water; and, when salt water is heated, the salt is boiled out, and, when it cools, is precipitated.

Why is it that waters near the sea are usually fresh and not salty? Is it because water which is allowed to percolate becomes more drinkable, and the nearer water is to the sea the more it percolates?

Why does salt water not flow readily? Is it because that which is heavy is stationary, and salt water is heavy? Hence only warm salt waters flow readily, for they have lightness in them which prevails over the heaviness which is in their saltiness; for that which is hot is lighter. Furthermore, water which flows readily can percolate through the earth; and if water can percolate, the thickest and heaviest part of it is always carried to the bottom, while the light and clean element becomes separated. For salt water is heavy and fresh water is light. And so flowing water is fresh. It is for the same reason that salt water, when it is set in motion and undergoes change, becomes fresher; for it becomes lighter and weaker owing to the motion.

Why is it that in Libya, if one digs a hole near the sea, the water that first comes is drinkable, but afterwards quickly becomes salty, but this happens less elsewhere? Is it because the water which comes first is the water which was already there and has been concocted by the earth, but after a time the sea also percolates through and, because it has had no time to undergo any change, makes the water more salty? [Elsewhere, however, there is either no water or abundant water, because the ground is not dried up.]

Why does salt water melt salt more quickly than drinking water? Is it because the process of melting anything is its dissolution by moisture or heat penetrating

into it so that it becomes liquid? Now those things do not cause melting which either cannot penetrate at all or penetrate in such a way as not to touch the substance. Those things which pass through easily scarcely cause any melting, but those which enter in with violence dissolve substances very quickly. Now those liquids which are composed of very large particles do not penetrate, for they are too large for the pores; while those which are composed of small particles pass through without touching. Now drinking water is rare, while salt water is thicker; and so the former, passing through easily owing to its rarity, scarcely causes any melting, whereas the latter penetrates, but percolates through to a less extent, because it is composed of larger particles, and forces its way in more quickly.

Why does water appear less white when it is in motion, for instance when there is a ripple? Whence Homer says that, when the wind begins to blow, the sea grows blacker beneath it. —

Are there two reasons? Firstly, because, when the sight is near to it, it can penetrate farther through the water when it is still, but when it is in motion the sight cannot pass directly through it. (And that which is transparent appears white, for that through which the sight cannot pass is what Homer calls black; therefore the air appears black from a distance but white near at hand, and the part of the sea which is near is white, while that which is distant is blue or black.) And, secondly, because, when the sight is at a distance and is subject in any way to disturbance, it is refracted back in a mass towards the light, if the water is still, but cannot be refracted when it is in motion.

Why is it that the waves do not ripple in the deep, open sea, but only on small expanses? Is it because a small amount of water, as it is carried along, is more divided by the air than a large amount? Hence it beats more and is broken up. Now in deep water the quantity which is set in motion is great, but in shallow water it is small.

Why are the waters saltier in regions facing the south wind? Do they become mixed because the sea is driven under the earth by the south wind?

Why does the salty element in water come to the surface more in sweet than in dry wine? Is it because sweet wine, like raisin wine, has more earth in it? Or is it because sweet wine is heavier and stickier and so mixes less, and, as the wine does not mix with the water, the salty element comes to the surface?

Why does the salty element, being earthy, float on the surface at all (for its natural tendency is to sink)? Is it owing to its heat, as happens with salt (for it resembles an efflorescence)? Or is there some other reason? For if it is for no other reason, it is not unreasonable that it should be for this reason that it floats specially on the surface of sweet wine; for that is the hottest of wines.

Why do the waves sometimes begin to move before the winds reach them? Is it because they also cease to move later? For the first breath of wind as it were dies down before the wave which has been impelled by it into motion; and it is not the wave which is first set in motion that arrives, but there is a successive impetus given to the adjoining water.

Why is it that the ground where the waves break more violently becomes solid, often to such an extent as to appear to have been artificially levelled, and why is the ground where the waves break solid, whereas further from the sea it is loose? Is it because the fine sand is not cast up from a long way off by the waves, but rather the coarser sand, just as it is not possible to throw a very small object far with the hand? Then, many objects being mingled in confusion, the smallest particles fall out and form into a mass, and the motion of the wave, as it recedes, levels them and no longer disturbs them. Since, then, the smallest particles cannot leap far, a mass is formed of very small objects; and since it is in frequent motion, it becomes continuous, the sand falling in amongst it until it unites it together; it is then levelled by the last waves, and the slight moisture causes it to adhere together. But the ground farther from the sea, being dry, becomes disintegrated, and is formed of larger pebbles and is unlevelled.

Why is it that the upper parts of the sea are saltier and hotter than the depths? So, too, in wells of drinking water the upper water is saltier than that at the bottom; yet salty water, being heavier, ought to stand at a lower level.

Is it because the sun and the air always attract the lightest part of liquid? Now water which is suitable for drinking is always lighter, and the sun can more easily attract it from the part of the water nearest to it. And so that which is left on the surface both of the sea and of drinking water is saltier (since the fresh element has been extracted) than that from which little or nothing has been withdrawn. For this reason the upper part is also hotter; for salt water is hotter than drinking water. Therefore some of the followers of Heraclitus declare that stones and earth are formed from the drying and solidifying of fresh water and that the sun draws up vapours from the sea.

Why are the waters of the sea fresher which are nearer the land? Is it because they are more continuously in motion? Now salt water becomes fresher through motion.

Or is it because the water is saltier in its depths, and the part of the sea near the land is less deep? Wherefore also water which shelves deeply near the shore is less fresh.

The reason of this is that the salty element being heavy is carried down more into deep water.

Why is sea water the only kind of water that is combustible, whereas drinking water and river water are not?

Is it because it has much earth in it, as is proved by the presence of the salt in it? Or is it because it is of a fatty composition, as is proved by the oil which forms on the surface of salt water?

Why does sand not form in lakes, or at any rate less than in the sea and in rivers? Is it because rocks form in the sea and the earth has been to a great extent burnt out of them? Now sand is rock which has been broken up into small and minute particles, and it is broken up by the impetus of the waves. But in lakes rocks free of earth are not formed to the same extent, nor are they broken to the same extent, because there are not waves to the same extent. But sand is formed more in rivers, because they carry down the earth and break up the rocks with their impetus.

Why is it that, when a lake either falls or dries up, the corn in the adjoining plain is more likely to be cut off by frost? Is it because the moisture in the lake evaporates and warms the air with its vapour, and so makes the frosts slighter and weaker than in hollow and marshy districts?

Or is it from the earth, as men say, that the cold begins and penetrates unnoticed? If then the lake becomes dry, owing to the larger space of earth greater cold attacks the crops and freezes them and cuts them off to a greater extent; and on such ground the cold comes from below, as is the popular belief. And yet the earth is warm in winter; but the surface heat which is in the earth, owing to the fact that it is moist, becomes cooled, for the moisture is neither so far in as not to be affected by cold, owing to the heat which is present in liquids, nor so slight as to have no force, since the earth is permeated with water. For

instance, owing to its becoming cold, one walks and lives upon ice.

Why is the sea salty and bitter? Is it because the juices in the sea are numerous? For saltiness and bitterness appear at the same time.

Why do shells and stones which are in the sea become round? Is it because the breaking off of their extremities equally on every side causes them to assume a round form?

For this is the only shape in which the outer surface is the same on all sides, and the sea by moving objects in every direction breaks off their extremities equally.

Why is it that sometimes, if one digs a hole near the sea, the first water which enters is drinkable but afterwards it becomes salty? Is it because the water comes from the sea itself which percolates under the earth? The water which first comes is, therefore, naturally fresh; for fresh water is lighter than salt water, and the sea has some freshness in it, which mingling with the earth tends to come to the surface. But the salt water, owing to its weight and to the fact that it has power to penetrate, is carried downwards. Whether this is so or whether the fresh water flows from the mainland into the sea through the earth's veins, it would naturally float on the surface of the sea which mingles with it; but, the passages being opened, the salt water, owing to its greater volume, subsequently prevails and makes the whole sea salty. For if the passages are blocked the result is that the inflowing salt water finds another way higher up; but when they are opened, it is all carried there, just as happens in the veins in the body.

Why is it that the sea, which is heavier than fresh water, is more transparent? Is it because of its fattier composition? Now oil poured on the surface of water makes it more transparent, and the sea, having fat in it, is naturally more transparent. Or is that which is lighter not always more transparent also? For oil itself is lighter than water but not more transparent. Or is the sea not really more transparent, but only apparently so? For fresh water comes from the earth or from streams, and its source sends forth earth also with the water, so that the streams, not being pure, bring down with them the earth and sediment. This then is the reason why fresh water is less transparent.

Why do the bowels of those who swim in the sea open readily? For if it is because they take violent exercise, those who run also take very violent exercise, yet their bowels do not open. Or does not every form of exertion cause the

bowels to open, but only such exercise as does not cause wasting? Now staying in the sea seems to make men, generally speaking, hungrier and opens the bowels; for the vapour given off by it is both hot and dry.

Why does the Lake of Paesus, of which the water is drinkable, wash and also remove the stains from garments?

For water which is fresh washes, but that which is bitter removes stains, and water cannot have both these qualities at the same time. Are stains removed not because the water is bitter, but by the quality of stickiness which has this power? Hence animals' hoofs have this effect, and anything which contains gelatinous matter; and so also any bitter substances which partake of this character do the same. Now in this lake it so happens that the bitter element of the quality of soda has been burnt out, but the fatty and sticky element remains. It is by virtue of this that it removes stains, and it washes because it is fresh.

Why does the part of the sea which is calm appear white, and while that which is agitated appears black? Is it because that which is less visible appears blacker, and water which is in motion is less seen than that which is still? Or is it because that which is transparent is white, while that which is not so is black, and that which is in motion is less transparent?

## **BOOK XXIV. PROBLEMS CONCERNING HOT WATER**

WHY is it that, if one is anointed with oil, hot water poured over one seems less hot, in spite of the fact that oil contains heat? Is it because owing to the smoothness caused by the oil the water glides off and sinks in less?

Why is it that in the summer the water in wells becomes warm after midday? Is it because by that hour the heat has mastered the air, whereas before midday the heat is dissolving and putting an end to the cold; but the one does not prevail as soon as the other has ceased, but only after time has elapsed?

Why is it that water, which sometimes becomes hotter than a flame, does not burn wood, whereas the flame does so? Is it because the flame, and the breath which comes from it, consist of small particles, whereas water is made up of large particles and so does not penetrate? Now flame and the heat from coals owing to their rarity can penetrate and destroy.

Why is it that boiling water has not the power to melt, while the stomach

possesses this power? Is it because the heat which is in the stomach penetrates owing to its rarity, whereas water cannot penetrate because of its density? Or is it because liquid prevents other things also from melting (for nothing melts in liquid)? In the stomach, however, the liquid flows down into the bladder and so does not prevent the process of melting.

Why is it that the bottom of a vessel containing boiling water does not burn, but one can carry it holding it by the bottom, whereas if the water be removed it burns? Is it because the heat as it is engendered in the bottom of the vessel is extinguished by the water? Wherefore also substances which can be melted do not melt if any liquid is added to them.

Why is it that water does not boil over so much in winter as in summer, although heated not only up to the same temperature but even higher, and although equally hot or even hotter? Is it because boiling over is due to the rising of bubbles? The water then itself becomes just as hot in winter as in summer, but the bubbles cannot rise to the same extent, because the surrounding air is cold, but they rise smaller in size, being compressed by the cold, and soon burst, being broken by the air. They are, therefore, smaller in bulk and fewer in number in the winter, and the contrary in summer. Now boiling over is due to the number and size of the bubbles forming the froth. Why does hot water cause wrinkles, but fire, though it is hot, not do so? Is it because fire produces breath and so causes swelling (for it distends the skin), whereas it is the curving of the skin which makes wrinkles?

Why is it that the bottoms of vessels in which water is being heated are hotter while the water is still cold? Is it because, while the water is still cool, the heat is enclosed and driven inwards, being prevented from making its way out, but, when the water in the vessel becomes thoroughly heated, since the fire no longer holds the heat but expends itself and becomes less, the bottom of the vessel becomes cooler, just as a bath does? For a bath is hotter in winter than in summer, because the heat is more enclosed in winter than in summer by the surrounding air which is cold.

Why is it that water when it boils does not form a scum, as do pea-soup and lentil-soup? And yet water is lighter than these, and light substances ought to be able to project themselves more easily to a distance. The same thing happens in the case of silver when it is being purified; for those who clean out the mint make gains by appropriating the remnants, sweeping up the silver which is



scattered about. Is it because the heat causes the scum by vaporizing and subjecting to force anything which opposes its own natural impetus? Water, therefore, owing to its lightness and rarity is not subjected to force, and so no great heat is collected in it, but the heat which continually passes into it cuts its way through before it can become massed together. But substances which have body in them, like thick soups and silver, since, owing to their weight, they contain much corporeal matter and offer resistance, because they are subjected to violent force as the heat tries to make its way out, form bubbles wherever the heat prevails; for, owing to their density, the heat cannot pass through them, but the density prevails until it is thrown off by the heat which flows into it. The result is a sudden impact, and not a continuous pressure, owing to the heat passing up quickly from below.

Why, if substances are moistened in hot water for a short time, do they swell, but, if for a long time, collapse and become wrinkled? Is it because the heat makes a thing liquid instead of solid and produces breath from liquid and rarefies what is dense? At first, therefore, it heats things which are solid and makes them moister, and producing breath from the moisture distends and swells them; but when it heats them still more, it rarefies their outer part, so that the vapour is given off, and the drying up of moisture causes their bulk to collapse. Now, as anything collapses, its outer skin shrivels up, and where it shrivels up unevenly, wrinkles are formed.

I — Why are stones formed by hot water rather than by cold? Is it because a stone is produced from the failure of moisture, and moisture fails more through the operation of heat than of cold, in other words petrification is the result of heat, as Empedocles says both rocks and stones come into being through the action of hot waters? Or, while it is true that heat petrifies, can petrification also take place through cold, because an extremely hard frost consumes the moisture and causes hardening? That cold, pure and simple, produces this effect is clear from the fact that its excess does so.

Why is it that if one has one's foot in hot water, if the foot is kept still the water appears to be less hot, but hotter if it is moved? Does the same thing happen as in the body; viz that, when one runs in the wind, the opposing air becomes increasingly colder, and the farther one continues to go the more one notices it?

Why do hot things cool off more in the sun than in the shade? Is it because the lesser heat is destroyed by the greater? Or is it because in the shade the

surrounding cold represses the interior heat and does not allow it to make its way out, producing the same effect as the pouring of cold water produces upon those who are fainting (for it encloses the heat and prevents it from escaping); and speaking generally the interior parts of anything are warmer in the winter? But in the sun, since there is nothing which intercepts it, the heat is free to move and vanishes more quickly.

Why is it that water heated by the sun is not more, wholesome for washing purposes? Is it because, owing to the fact that it is cooling, it causes shivering while it is still upon the body? Or, while it has this effect, is it unhealthy if used often for washing? For hot water, generally speaking, produces concoction and has a drying effect, whereas cold water has an astringent effect, and so both do good. Therefore cold water and water heated over a fire are both beneficial to those who wash in them; but water heated by the sun owing to the weakness of its heat produces the effect of neither of these, but merely has the effect of moistening — like the light of the moon.

Why is water which has been heated in the sun not wholesome? Is it because that which is cooling causes shivering?

Why are the hot waters at Magnesia and at Atarneus drinkable? Is it because more water pours into the hot water as it flows out, and so its saltiness disappears, but its heat remains? —

Why is it that in Magnesia the hot waters ceased to be hot but the water remained salty? Is it because more cold water from elsewhere was poured at the same time into the springs and extinguished the heat? Now the earth was salty, but not hot owing to the abundance of water flowing into it. (A similar process occurs in water which is strained through hot ashes; for the water being strained through the hot ashes cools the ashes and itself becomes cold, but is salty and bitter owing to the ashes.) But when the water which was added had become transformed, the heat in the earth for a different reason prevailed over the coldness of the water owing to its small volume, and hot waters flowed again.

Why are waters from hot springs all salty? Is it because they usually percolate through earth which contains alum (as is shown by the smell of the water) and has been burnt? Now the ashes of anything are salty and smell of sulphur.

The earth therefore burns the water like a thunderbolt. Many hot springs

therefore are due to strokes of thunderbolts.

Why are hot bathing-places sacred? Is it because they are due to two very sacred things, sulphur and the thunder-

## **BOOK XXV. PROBLEMS CONNECTED WITH THE AIR**

WHY is it that pain is caused if the limbs are enclosed in inflated skins? Is it due to the pressure of the air? For just as the air does not yield to pressure applied to the skin from outside but repels it, so the air also presses upon the limbs enclosed within. Or is it because the air is held within by force and is compressed, and so, having naturally an outward impetus in every direction, it presses against the body enclosed within?

Why is it that in marshes near rivers the so-called 'bellowings' take place, which according to the fable are uttered by the sacred bulls of the god? That which is produced is certainly a noise which resembles the roaring of a bull, so much so that it has the same effect on cows when they hear it as the bellowing of a bull. Is it due to the fact that this phenomenon always occurs wherever rivers stagnate into marshes, or are driven back by the sea, or give forth wind in unusually large quantities? The reason is that hollows in the earth form, and the water making its way in (for there is always a flow of water in marshy ground of this kind) thrusts the air also through a narrow entrance into a wider hollow, just as a noise like roaring is produced if one makes a sound through the aperture into an empty jar; for it is by a similarly shaped organ that a bull's roaring is produced. Now, if the hollows have irregular forms, a variety of strange noises is produced; for if one takes off the base of a vessel and rubs it against the bottom, drawing it in and out, it makes enough noise to frighten away wild animals when orchard-watchers employ this device.

Why does the air not become moist when it comes into contact with water? For all other things become moist when they touch water. Is it because the extremities of the air and water meet, but the surface of each remains distinct? All other things then are heavier, but the air does not sink below the outer extremity of the water.

It therefore touches it, because there is nothing between them; but it does not become wet, because it always remains above the water.

Why does calm weather occur most often at midnight and at midday? Is it because calm is immobility of the air, and the air is most at rest when it either has the mastery or is overmastered, and it is in movement when it is struggling? Now it has the mastery most at midnight and is overmastered at midday; for at the former time the sun is farthest away and at the latter nearest at hand. Again, the winds begin to blow either about dawn or about sunset; and the wind which blows at dawn dies down when it is overpowered, and that which blows at sunset dies down when it ceases to have the mastery. Consequently the former dies down at midday, the latter at midnight.

Why is it colder when dawn is breaking and it is already early morning than at night, although the sun is nearer to us? Is it because towards daybreak dew and hoar-frost fall, and both of these are cold? The whole ground then being as it were sprinkled with cold moisture, a process of cooling takes place.

Why is it that in Pontus both intense cold and stifling heat occur? Is it because of the thickness of the air?

For in the winter it cannot be thoroughly warmed, and in the summer, when it is heated, it burns because it is thick.

It is for the same reason also that marshy regions are cold in winter and hot in summer. Or is it because of the course of the sun? For in the winter it is far away, and in the summer near at hand.

Why is the sky finer at night than by day? Is the sun the cause of wind and disturbance? For these occur when some movement takes place; the cause therefore is the heat.

So, when the heat is not present, everything is at rest, and there is more rest when the sun is rising than when it is sinking. And the saying,

Have no fear of a cloud from the land, — means that, where there is most movement, there must be least permanence and consistency, that which is trying to hold together being inequable and unable to gain the mastery. And this is what happens on the sea in winter and on land in summer.

Why is it that when liquid which fills a jar is poured into skins the jar not only holds the liquid and the skins as well but also has room for more liquid? Is it because there is air present in the liquid? This then, when it is in the jar, cannot

be given off owing to the size of the jar; for the larger anything is the more difficult it is to press any moisture or air out of it, as can be seen in sponges. But when it is divided up into small portions, it is pressed out of the skin together with the air already there, so that the space occupied by the air becomes empty; and so the jar can hold the skins and additional liquid as well. This is more especially the case with wine, because there is more air in wine than in water. Similarly the same vessel can hold the same quantities of ashes and water together as it can hold of each poured in separately. For there are apparently many empty spaces in ashes, and so the water, being thinner, sinks in more and saturates the ashes, so that they become dense, because the saturation takes place in one part after another (for a thing always becomes more thoroughly saturated if the process takes place little by little than all at once), and, as this takes place, the ashes gradually sink, at the same time absorbing the liquid because they contain hollows. (But ashes thrown into water while still hot cleave the water and cause it to evaporate.) And the same thing happens if the water is poured in first and the ashes put in afterwards, so that the water also would seem to contain hollows and empty spaces. Or do the ashes take up the water, and not the water the ashes? For it is only natural that that which is composed of smaller particles should be that which finds its way into something else. (Further, this can be illustrated by an experiment; for when ashes are sprinkled water is attracted to any spot where they are sprinkled; whereas the contrary would have taken place if it were the water which takes up the ashes.) Or does this process not occur if the water be poured in first and fill the vessel to the brim, but, if anything then be added, does it overflow? But if the water once overflows and the ashes settle down, then it does occur; for it was the ashes which took up the water. There is a parallel to this in the fact that trenches do not hold all the earth which has been dug out of them; for apparently some air occupies the space excavated, and for this reason it does not hold all the earth.

Why is it that, though air is denser than light, it can pass through solids? Is it because light travels in a straight line only, and so the sight cannot see through porous substances like pumice-stone, in which the pores are irregular, whereas they are not so in glass? The air, on the other hand, is not obstructed, because it does not travel directly through anything through which it passes.

Why is it that the air becomes cold by touching water but not moist, even though one blows so hard upon water as to cause waves? That it becomes cold is clear from the change which it undergoes; for the air from water causes cold. Is it because it is the nature of air to be cold or hot, and it changes by touching

anything with which it comes into contact; but it does not also become moist, because it is too light and so never penetrates below the level of the water, but always remains in contact only with the surface, even though it be forced downwards, and the water then recedes still lower, so that the air can never penetrate into its depth?

Why is the air from bubbles and the air which comes up from beneath the water never wet? Is it because the moisture is not retained, but the water drops off? The water on the surface of a bubble is also too little to moisten anything.

Why is it that air cannot saturate anything, but water can? For water even when it is transformed into air is moist. Is it for the same reason as that for which stone cannot do so? For everything has not this faculty of saturating other things, but only that which is viscous or liquid.

(Why is it that an inflated skin floats?) Is it because the air in it is carried upwards? For when the skin is empty it sinks; but when it is inflated, it remains on the surface, because the air supports it. But if the air makes it lighter and prevents it from sinking, why does a skin become heavier when it is inflated? And how is it that when it is heavier it floats, and when it is lighter it sinks?

Why is it that the air does not rise upwards? For if the winds are the result of air being moved by heat and it is the nature of fire to rise upwards, the wind ought to travel upwards, since that which sets it in motion rushes upwards and that which is set in motion has a natural tendency to travel in the same direction. As a matter of fact, however, the air obviously travels in an oblique direction.

Why is the hour of dawn colder than the evening? Is it because the former is nearer to midnight and the latter to midday? Now midday is the hottest time, because it is nearest to the sun, and midnight the coldest for the opposite reason.

Why is it that in hot weather the nights are more stifling than the days? Is it owing to the absence of wind? For the periodical winds and the 'forerunners' blow less at night.

Why is it that substances enclosed in inflated skins and closely covered vessels remain uncorrupted? Is it because things which are in motion become corrupt, and all things that are full are without motion, and such skins and vessels are full?

Why is it that it is colder when the sky is clear than when it is overcast, though the stars and the heaven are warm? Is it because in clear weather there is nothing to hold the vapour, but it is diffused everywhere, whereas in cloudy weather it is contained? For the same reason it is colder when the wind is in the North than when it is in the South; for the South wind attracts cloud, whereas the North wind dispels it, and more evaporation appears to take place when the wind is in the North than when it is in the South, and in winter than in summer. Or is it because of dissimilarity? Or because vapour is formed when that which is hot cools?

Why is it that a smaller amount of air is warmer than a larger quantity (for confined spaces are always warmer)?

Is it because a larger quantity is subjected to more motion, and motion makes a thing cold? This can be seen from the fact that hot things become cold if set in motion.

Why is it that water and earth become corrupt, but air and fire do not? Is it because anything which is corrupted must become hotter, but there is nothing hotter than fire? Or is it because a thing must be chilled before it can be corrupted, but fire is always hot and the air is full of fire?

So nothing becomes corrupted when it is hot, but only when it is chilled. Now earth and water can become hot and cold.

Why is cloudy weather hotter than clear weather? Is it because, as the men of old said, the stars are cold?

Or is this too absurd a doctrine, and is the real reason that in clear weather vaporization takes place? That this is so can be inferred from the fact that, when there is no wind, dew and hoar-frost are formed. When, therefore, the weather is clear, the hot substance, by which the moisture is taken up, is blown about, and so the air becomes cold; for which reason also the moisture which the hot substance lets fall forms dew. But when the weather is cloudy the moisture is contained; and therefore there is no dew or hoar-frost in cloudy weather. The heat, therefore, remaining in the neighbourhood of the earth makes the weather warm.

Why is it that in lofty rooms the air constantly ebbs and flows, especially in calm weather? Is it because the air contains much void in its composition? When,

therefore, it begins to flow in, the air inside the room gives way and contracts; and when in course of time this air becomes massed together, the air outside becomes more full of voids and contains much vacant space. Into this space then the air from the room rushes, since it is near at hand, and passes into it, because it is in suspense and the nature of the void cannot resist. So when this happens in many parts of it, the adjoining air follows it owing to the forward impetus and then, since a large quantity of air rushes out, the space within becomes full of voids, while the air outside is denser and so rushes in again from outside. Thus these two currents continually interchange.

## **BOOK XXVI. PROBLEMS CONNECTED WITH THE WINDS**

I Why does the North-East wind (Caecias) alone of the winds attract the clouds to itself? Is it because it blows from higher regions? For the parts towards the East are higher than those towards the West, as is shown by the Caecias does not strictly speaking correspond with our NE. wind, since the quadrants of the Greek compass were divided into three and not four sections as in a modern compass; Caecias is, therefore, thirty degrees and not north of the East wind. The chart of the Greek winds has been dealt with by Professor D'Arcy Thompson in *C. R.*, xxxii, who has independently come to the same conclusion as I had previously formed in translating the *de Mundo* : he proves conclusively that Kaibel and Capelle's 'wind-rose which I had adopted when translating the *de Ventorum Sitibus*, is wrong, but he was apparently unaware that I had changed my view when translating the *de Mundo*.

Now the North-East wind (Caecias), blowing from above to a contrary direction, describes in its course a line which follows an upward curve in relation to the earth; and falling, as has been said, upon the western regions of the earth and massing the clouds together as a result of the form of line which it follows, on its return back it thrusts the clouds before it towards itself. It is the only one of all the winds which does this, because for some the opposing regions are higher, towards which their course, either starting from a lower level or proceeding in a straight line, as a result travels in a downward curve towards the earth, so that there can be no return of the wind to its source because it ends its course round the earth, where, besides, there are no clouds. The East wind and the other winds which follow a less curving course do not form clouds because they have no moisture. Since, then, it forms no clouds, the effect produced by the East wind is less obvious than that produced by the North-East wind.



Why do the North winds occur at a fixed period of the year, whereas the South winds do not? Or do South winds occur annually but are they not continuous, because the source of the South wind is far away from us, and we live close to the North wind? Further, the annual North winds blow when the air is still (for they blow in summer); whereas the South winds occur in the spring, when the region of the air is less stable. Again, the South wind is moist, and the upper region of the atmosphere is unfavourable to moisture; so any moisture which is formed in it is quickly dissolved. Also moisture is erratic; and so the South wind, because it does not remain in the same place, helps to set up changes in the movement of the air. And since the air does not remain in the same place when it moves, other winds are consequently set up; for a wind is a movement of air.

Why does the South wind blow after a hoar-frost? Is it because hoar-frost occurs when concoction takes place, and after concoction and cleansing a change to the opposite condition takes place? Now the South wind is the opposite of the North wind. For the same reason also the South wind blows after snow. In a word, both snow and hail and rain and all such processes of cleansing are a sign of concoction; therefore after rain and similar storms the winds fall.

Why do the alternating winds blow? Is it for the same reason as causes the change of current in straits?

For both sea and air are carried along until they flow; then, when the land-winds encounter opposition and can no longer advance, because the source of their motion and impetus is not strong, they retire in a contrary direction.

Why do the alternating winds come from the sea? Is it because the sea is close at hand? Or is it because the alternating wind is the opposite of the land-wind and as it were the reverse of it? Now the land-wind is the breeze which blows from the land towards the sea, and the alternating wind is the reflux of the land-wind, so that it must necessarily come from the sea. Or is it because the air which has been set in motion collects out at sea? The reason of its not collecting on land and of its being thrown back is the fact that the sea is in a hollow, and air, like water, flows always into the deepest hollow it can find.

Why do cloud-winds stop sooner when rain falls? Is it because, when it rains, the hollows of the cloud, in which the source of the wind is formed, collapse?

Why are not the same winds everywhere rainy? Is it because the same winds do

not everywhere blow against mountains, but different winds are opposed to different mountains? For example, when the winds blow laboriously against steep mountains, the clouds are more likely to form there, since the wind cannot push them farther forward; and when the clouds form and are compressed, they burst.

Why are sunsets, if they are clear, a sign of fine weather; if they are disturbed, a sign of stormy weather? Is it because a storm occurs when the air is dense and thick? When, therefore, the sun prevails, it breaks up and clears the air; but, if it is itself overpowered, an overcast sky results. If, therefore, the density is excessive, a storm occurs as soon as the day dawns; whereas if it is weaker but not completely overpowered, the denseness which forms is driven towards the setting sun and remains there, because the air round the earth is thicker than the storm. And the rest of the air quickly densifies, because a beginning of the process has already been made and there is a rallying point to receive and collect anything which comes to it, the same thing occurring in the air as happens in a rout, where, if one man makes a stand, the rest also remain firm. Hence the sky sometimes becomes quickly and suddenly overcast. When, therefore, there is a disturbed sunset, it is a strong indication that the sun has not got the mastery over the density, though it has struggled long against it, so that probably further condensation has taken place. This is a less alarming symptom when it occurs after a storm than in calm weather; for in the former circumstances it is probably the remnant of a storm, but in the latter the beginning of condensation.

What is the origin of the saying, —

Boreas blows not at night when once the third sun hath arisen?

Is it because the breezes which come from the north are weak when they blow at night? A proof that the amount of air which is set in motion is not great is the fact that they blow at a time when there was a small amount of heat; and a small amount of heat was moving a small amount of air. Now all things terminate in multiples of three, and things which are very small terminate at the end of the first triad; and that is what this wind does.

Why does the North wind blow more frequently than the South wind? Is it because the North wind, being near the inhabited portion of the world, attracts our notice in spite of its short duration (for it is with us as soon as it begins to blow), whereas the South wind does not reach us, because it blows from a

distance?

Why does the South wind blow as much on winter nights as on winter days? Is it because during the night the sun is near the southern region, and the nights there are warmer than are the days in the north? Much air, therefore, is set in motion and not less than by day; but the warmer days prevent the wind from blowing more strongly by drying up the moisture.

Why does the South wind blow at the time of the Dog-star, and why does this happen regularly like any other natural phenomenon? Is it because the southern regions are warm, since the sun is not far away, and so the evaporation is considerable? The South winds would blow frequently if it were not for the annual winds; as it is, these prevent their blowing. Or is it because a sign occurs at the setting and rising of any star, and especially of the Dog-star? It is clear that winds blow most at the time of and after its rising, and since it causes stifling heat, it is only natural that the hottest winds should be set in motion when it rises; and the South wind is hot. And since things are most accustomed to pass from contraries into contraries, and the 'forerunners', which are northern winds, blow before the rising of the Dog-star, the South wind naturally blows after the Dog-star appears, since a sign then occurs, and the occurrence of a sign at the time when stars rise means a change in the air. Now all winds change either into their contraries or into those on their right; but since the North wind cannot change into the winds on its right, the only thing left for it to do would be to change into a South wind. Now on the fifteenth day after the winter solstice the wind is in the south, because the solstice marks as it were a fresh start and the sun sets in motion air which is nearest to it and at this solstice it is near the south.

Just as, therefore, when it sets the region of the east in motion it stirs up the East winds, so when it sets in motion the southern region it stirs up the South winds. It does not do this immediately after the solstice, because the changes which it sets up extend at first over a very small area, but only on the fifteenth day, because this date corresponds to the first sensible impression made by the change; for the said date is simply the most significant part of a whole.

Why are the days most changeable during the period of Orion, and why is there then such variability in the wind? Is it because during a period of change all things are always most indeterminate, and Orion rises at the beginning of autumn and sets in the winter, so that, since there is not yet one settled season,

but one is coming on and the other coming to an end, the winds must therefore necessarily be unsettled, because those of each season are passing into one another? And Orion is said to be dangerous both in his setting and in his rising owing to the uncertainty of the season; for it must needs be full of confusion and inconsistency.

Why does the North wind which blows at night cease on the third day? Is it because it comes from a small and weak source and the third day marks the crisis? or is it because it expends itself all at once like the 'cloud-winds', and therefore quickly dies down again?

Why do the North winds blow more than the other winds? Is it owing to the fact that the inhabited portion of the earth is near the region of the north, which is high and outside the tropics and full of snow, which never leaves some of the mountains? As, therefore, frozen matter is usually melting there, a wind often arises, and this wind is the North wind which comes from the region of the pole.

Why do the South winds blow during winter and at the beginning of spring and the end of the autumn, and why are they boisterous and whirling in their course, and why are they cold to the inhabitants of Libya in like manner as the North winds are to us? Is it because, the sun being near, the winds must necessarily be set in motion? Now during the winter the sun travels towards the south, and at the beginning of the spring and at the end of autumn it is giving forth heat; whereas during the summer the sun travels towards the north and leaves those other regions. The South wind is hot, because it mingles its breath with the air in the region of Libya, which is hot; and so it is boisterous and makes the summer rainy, sweeping down on the sea.

Why does the South wind cause evil odours? Is it because it makes bodies moist and hot, and they are then most liable to corruption? South winds, however, which come from the sea are good for plants — for the South wind reaches the Thriasian Plain in Attica from the sea — and the reason is that it is cooled before it arrives. Now mildew is caused by moisture which is hot and comes from without.

Why does wind usually occur before eclipses, at nightfall before midnight eclipses and at midnight before those which occur at dawn? Is it because the heat which comes from the moon becomes faint, because its course is already getting near the earth, and when it is quite near the eclipse will take place? Now when

the heat, by which the air is held back and kept still, is set free, the air begins to move again and a wind springs up later in time according as the eclipse is later.

Why is the South wind rainy not when it is beginning but when it is ending? Is it because it collects the air ° from a distance? For the rain comes when the South wind masses the air together, and it masses the air together only after it begins to blow. Or is it because, when the South wind begins to blow, the air is still hot, because it comes from a hot region, but in course of time it becomes cool, and then tends to become massed into rain?

Why is it that the South wind, when it is less strong, brings clear weather, but, when it is strong, brings clouds and lasts longer? Is it, as some say, owing to the source from which it comes? For if it comes from a weaker source it brings clear weather, but if it starts from a stronger source it brings clouds. Or is it because it is weaker when it begins, so that it does not propel much air, but in the end it usually becomes strong? Hence comes the proverb, When the South wind begins and when Boreas ceases his blowing.

Why is it that in the winter the winds come forth from the east, but in the summer also from the west? Is it because, when the sun no longer prevails, the air flows freely? When, therefore, the sun sinks, it leaves clouds behind it, which cause the West winds, and anything which it carries with it to the inhabitants of the southern hemisphere becomes an East wind. And, contrariwise, when it sinks in the southern region of the earth, it will cause West winds for the inhabitants of that region and East winds in our part of the world from the air which accompanies it. For this reason too, if it finds another wind blowing, that wind becomes stronger when the sun rises, because it adds something to it.

Why are hounds least able to find the scent when a West wind is blowing? Is it because it disperses the scent most owing to the fact that of all the winds it blows most continuously and down on to the earth?

Why, when there are shooting stars, is it a sign of wind? Is it because they are carried along by the wind, and the wind occurs where they are, before it reaches us? For this reason also the wind rises in that quarter from which the stars are set in motion.

Why is it that of all the winds the West wind drives the largest clouds? Is it because it blows from the open sea and over the deep, so that it collects clouds

from a large area?

Why are the winds strongest which are at their ending? Is it because when they expend themselves all at once, what remains is very little?

Why is it that, if the South-West wind (Lips) blows about the time of the equinox, rain results? Is it because the sun sets the winds in motion from any part of the universe in which it is? Hence the succession of the winds corresponds to the course of the sun. Now since the equinox is the boundary between winter and summer, when it happens that the sun, according to the equinox as it appears to us, has passed the exact boundary or falls short of it and is rather in the wintry region, the result is that the winds from that region blow, of which the first is the South-West wind (Lips), which is naturally moist. Now when the sun is rather in the wintry region of the universe and stirs up the winds there, the result is that the functions of winter come into operation; one of which is wet weather. Again, since the equinox is as it were winter and summer equally balanced, if anything is added to either one of them it causes a distinct inclination in one direction, just as happens in the case of equally balanced scales. But, since the South-West wind (Lips) is of the wintry order and naturally moist, its addition at the equinox causes an inclination towards winter and rainy weather; for rain is the wintry weather most akin to the wind that has begun to blow.

Why are the South wind and the SouthEast wind (Eurus), which are warmer than their respective contraries, the North wind and the West wind, more rainy, although water is engendered from the air by cold? For it is not true that the clouds form because the North wind thrusts them away from our part of the world; for the West and SouthEast winds both alike — for they are similarly at the sides of the world — drive away clouds from the quarter from which they blow, as also do all the other winds. Is it because the more the heat exists outside, the more the cold is driven within? Or is it due in some degree to the quarter from which they blow that certain winds bring clear weather? For the SouthEast wind rises from the dawn (and the region is warm), while the West wind is situated towards the evening. But is there not a further reason, namely, that air; like water, cools most quickly and thoroughly when it is previously heated? The air then brought by the SouthEast wind arrives warm from the rising sun, as does that brought by the South wind from the midday sun; when, therefore, they reach the colder region, they quickly condense and become massed into rain. And the SouthEast wind has a greater tendency to form rain,

because it brings the air more directly from the sun and equally hot; but the South wind is rainy as it ceases to blow, because the first air that is brought comes cold from the sea, whereas the last air, which is very warm, is brought from the land. Or is there not a further reason, namely, that the South wind is stronger as it ceases to blow (hence the proverb applied to it, 'When the South wind begins...'), and stronger winds are colder, and so the South wind masses the clouds together at the end of its duration? Is not this why it is more rainy then than when it first begins to blow?

Why do the winds, though they are cold, cause dryness? Is it because the colder winds cause evaporation? But why should they do so more than the sun? Is it because they carry off the vapour, whereas the sun leaves it where it is and consequently causes more moisture and less dryness?

Why does the North-East wind (Caecias) alone of all the winds attract the clouds towards itself, as the proverb has it, 'Drawing it to himself, as Caecias draws clouds'? For the other winds simply drive forward the clouds from the quarter from which they blow. Is this phenomenon to be attributed to the fact that the contrary wind blows at the same time? But would not this have been obvious, and is it not more likely that the North-East wind naturally follows a circular course? The other winds therefore blow round the earth, but the North-East wind (Caecias) has the concave side of its course towards the heavens and not towards the earth, and so, blowing towards its source, it attracts the clouds to itself.

Why is it that the wind blows cold in the early morning from rivers but not from the sea? Is it because the sea extends over open spaces, but rivers are in narrow places? The breeze, therefore, from the sea is dispersed over a wide area and is consequently weak; whereas the breeze from a river is carried along in a mass and is stronger and therefore naturally appears colder. Or is the reason other than this, namely, that the rivers are cold, but the sea is neither hot nor cold? Now a breeze or exhalation is due to the heating cooling of liquids; for whichever of these two processes they undergo, evaporation takes place, and, when water evaporates, the resultant air is set in motion, and this is a breeze. That which is produced from cold liquids naturally blows cold, while that which blows from very hot liquids cools and becomes cold. One would therefore find that all the rivers are cold, but the sea is neither very hot nor very cold. That which blows from it therefore is not cold, because the sea is not itself very cold, nor does it cool quickly because the sea is not very hot.

Why is the West wind always considered to bring fair weather and to be the pleasantest of the winds? So, for instance, Homer says that in the Elysian Plains Ever the breezes blow of the Zephyr. Is it because in the first place it has an equable temperature? For it is neither hot like the winds from the south and east, nor cold like that from the north, but is on the boundary between the cold and the hot winds; and, being near to them both, it partakes of their qualities, and is consequently temperate and breathes most of spring. Furthermore, the winds change either into their contraries or into those on their right; blowing therefore after the North wind (for the west is on the right of the north), it enjoys a good reputation, as being mild as compared with an inclement wind. Also as soon as wintry weather ceases, fine weather usually follows; and the North wind is a wintry wind. [The East wind, though it lies between the warm and the cold winds, partakes less of them; for, when it blows, it sets in motion the winds towards the south (for when it changes it does so in that direction), but though it sets them in motion it does not mingle with them. The West wind is set in motion by the South winds, and when it blows it sets the North winds in motion; for there the succession of the winds ceases. Hence the West wind, constituting as it does the end of some winds and the starting-point of others, justly is and is considered to be a pleasant wind.]

Why does the South wind blow at the time of the Dog-star? Is it because a sign occurs at the setting or rising of any star, and especially of the Dog-star? It is clear then that the wind blows most at the time of and after its rising. And since it causes stifling heat, it is only natural that the hottest winds should be set in motion when it rises; and the South wind is hot. And since, &c. (as -).

Why does the West wind blow towards evening and not in the early morning? Is the sun at its rising and setting usually the cause of breezes? For when it concocts and dissolves the air, which is moist, by thoroughly heating it, it dissolves it into breath; and if the air is full of breath, it becomes still more evaporated by the sun. When, therefore, the sun is in the east, it is far away from the West wind, for the latter blows from the setting sun; but when the sun is already near its setting, the breath is then thoroughly dissolved, and from midday onwards and towards evening the sun is most suitably situated for heating and dissolving the air. It is for this reason also that the East wind begins to blow in the early morning; for since the air above the earth becomes charged with moisture during the night and owing to its weight approaches the earth, the sun from dawn onwards dissolves it and sets in motion first the air which is nearest to itself. Now the East wind get its name Apeliotes because it is the wind which



blows from the rising sun.

Why is it that when the sun rises the winds both rise and fall? Is it because a wind is the movement either of the air or of moisture carried up? Now this movement, when it is only slight, is quickly absorbed by the sun, so that no wind occurs; but when it is greater, the movement is increased when the sun rises, for the sun is a source of movement. —

Why does the West wind blow in the evening? Is it because all the winds blow when the sun disperses the moisture? For the moisture being already in a mass, the power of heat, when it approaches it, concocts it. Now the West wind blows from the setting sun; it is only natural then that it should rise in the evening, for then the sun reaches the quarter proper to that wind.

The North and the South winds are the most frequent of winds, because, when one contrary is overcome by its direct contrary, it is least able to continue, whereas it is better able to resist a wind blowing against it from an angle.' Now the South and the North winds blow from regions on either side of the sun's course, while the other winds blow rather in a straight line with it.

Does the wind come from a source, as water does, and is it unable to rise to a higher level than that source, or is this not so? And does it come from a single point or from a wider area? There are indeed in the wind certain similarities to that which seems to occur in water; for water flows faster when it travels downhill, whereas it stagnates on flat and level ground, and the winds act similarly, for on promontories and high ground the air is always in motion, whereas in hollows it is often at rest and there is a calm. Moreover on exceedingly high mountains there is no wind at all — on Mount Athos, for example, amongst others, as is proved by the fact that offerings which persons sacrificing leave there one year are, so it is said, found there still in the following year. It is clear then that the course of the wind starts as it were from a source of some kind. It cannot, therefore, rise any higher. Hence the above phenomenon occurs on high mountains, to which what happens to water would be a close parallel; for apparently neither a strong flow of water nor a violent wind is found in high mountains.

Why is it that when the South wind blows the sea becomes blue, but when the North wind blows it becomes dark? Is it because the North wind disturbs the sea less, and that which is less disturbed appears to be all black?

Why do the South winds when they blow gently cause no overclouding, but when they become strong overcloud the sky? Is it because, when they blow gently, they cannot thrust many clouds along? They therefore cover only a small area with cloud; but, when they blow strongly, they thrust along many clouds, and therefore seem to cause more overclouding.

Why is the North wind strong when it begins to blow, but weak as it ceases, whereas the South wind is weak when it begins, but strong as it ceases? Is it because the North wind is near to us and the South wind distant? The former then, when it begins, blows immediately in one part of the world, whereas the beginning of the latter becomes dispersed owing to the long time it takes to travel, and little of its first breath reaches us; and we feel the end of the North wind, but that of the South wind not at all. It is, therefore, only natural that the North wind should be weak as it ceases (for the end of all things is weak), while the South wind is not weak at its close, since we do not feel its ending at all.

Why do alternating winds blow where there are bay but not where there is a wide expanse of open sea? Is it because the wind, when it pours into the bays, is less broken up and travels practically in a collected mass, whereas over open expanses of sea the land-winds tend to be broken up as they begin to flow, and when they move the same thing happens to them, because they are free to travel in many directions? For an alternating wind is the reflux of a land-wind.

What is the origin of the saying, When the South wind begins and when Boreas ceases his blowing?

Is it because the North wind, owing to the fact that we live near it and our habitation is towards the pole, immediately blows strongly, for it is with us as soon as it begins? Hence, as it ceases, it blows pleasantly; for it then blows weakly.

The South wind, on the other hand, because it is far away, reaches us later in greater strength.

Why is it that men feel heavier and weaker when the wind is in the south? Is it because moisture becomes abundant instead of scanty, being melted by the heat, and moisture, which is heavy, takes the place of breath, which is light, and under these conditions men's strength becomes languid?

Why are men hungrier when the wind is in the north than when it is in the south?

Is it because the North winds are colder?

Why does the South wind not blow in Egypt itself in the regions towards the sea nor for the distance of a day and a night's journey inland, while in the regions beyond Memphis and for the distance of a day and a night's journey it blows freshly; and does not blow to the west for the distance of two days' and two nights' journey, while to the east the South-West wind (Lips) blows? Is it because Egypt in its lower regions is hollow, so the South wind passes over above it, but to the south and farther away the regions are loftier?

Why is it that the South wind is weak when it begins to blow, but becomes stronger as it ceases, while with the North wind the contrary is the case, hence the proverb, Sail when the South wind begins and when Boreas ceases his blowing?

Is it because we dwell rather towards the pole than towards the midday sun, and the North wind blows from the pole, while the South wind blows from the midday sun? It is only natural, therefore, that the North wind, when it begins, immediately attacks with violence the regions nearer to it, and afterwards transfers its violence to the dwellers farther south. The South wind, on the contrary, when it begins, presses upon those who dwell towards the midday sun, and, when it has passed them by, blows freshly upon those who dwell towards the pole.

What is the origin of the saying, —

Straightway the winter comes, if the South wind call to the North wind?

Is it because it is the nature of the South wind to collect clouds and much rain? When therefore the North wind blows under these conditions, since there is abundant material, the North wind freezes it and brings on the winter. Hence the saying, When Boreas findeth the mire, soon cometh the season of winter.

Now mud and rain in general are usually, if not invariably, due to the South wind.

Why does the North wind follow quickly upon the South wind, but not the South wind upon the North wind? Is it because the North wind arrives from near at hand, but the South wind from a distance, since our habitation is towards the pole?

Why is it that the winds are cold, although they are due to movement caused by heat? Is movement caused by heat not invariably hot, but only when it occurs in a certain manner? If it comes forth in a mass, it burns with its heat the very thing which emits it; but if it passes out gradually through a narrow space, it is itself hot, but the air which is set in motion by this process completes the movement in accordance with whatever was its original nature. This can be seen in the mouth; for there is a saying that from the same organ we breathe both hot and cold, but this is untrue, since all that proceeds from the mouth is hot, as is shown by the fact that it appears hot if the hand is placed close to the mouth. It is the manner in which it comes forth which makes the difference. For if in yawning we emit breath from a wide opening, it appears hot because we can feel it; but if it be emitted through a narrow opening, being more violent, it impels the air in its immediate neighbourhood, which in its turn impels the adjoining air. If the air is cold, its movement is also cold. May not the same thing happen also in the winds, and their first movement be through a narrow channel and then set in motion the adjoining air, and then other air begin to rush onwards? So in the summer the winds are hot, in winter they are cold, because in each case this is the temperature of the air which is already there; for that the air does not follow this course because it is either set in motion by itself or overpowered by the heat, is clear not only from the fact that it heats the winds when there is more heat in it, but also because it was originally being carried upwards. For fire is of this nature; whereas cold naturally travels downwards. The winds move horizontally and for good reason; for since the heat presses upwards and the cold downwards and neither prevails, and the air cannot remain still, it is only natural that its motion should be sideways.

Why are the South winds cold in Libya as the North winds are with us? Is it primarily because the sources of these winds are respectively nearer to us and to them? For if, as we have already said, the winds pass through a narrow channel, they will be colder to those who are nearer to them owing to the violence of their movement; for when their movement proceeds farther, they become dispersed. Hence the North winds are cold in our part of the world, because we are nearer to them and dwell quite near the pole.

Why is it that those South winds which are dry and do not bring rain cause fever? Is it because they engender unnatural moist heat in the body? For they are by nature moist and hot, and this causes fever, which is due to a combined excess of these two things. When, therefore, the South winds blow under the influence of the sun without bringing rain, they engender this condition in us;

whereas, when they bring rain with them, the rain cools us.

Why do the periodical winds always blow at the season at which they do blow and with the force with which they blow? And why do they cease at close of day and not blow during the night? Is this due to the fact that the melting of snow by the sun ceases towards evening and at night? Now these winds blow in general when the sun begins to prevail and melt the northern ice. When the ice begins to melt, the forerunners' blow; when it is already melting, the periodic winds blow.

Why is the West wind at once the gentlest of winds and also cold, and why does it blow mainly at two seasons, namely, spring and autumn, and towards evening, and usually in the direction of the land? Is it cold because it blows from the sea and from extended areas? It is less cold indeed than the North wind, because it blows from evaporated water and not from snow; but it *is* cold, because it blows either after the winter, when the sun is only just beginning to prevail, or in the autumn, when the sun no longer has power. For it does not have to wait for its proper matter, as it would if it were a land-wind, but wanders freely, because it has travelled over water. For the same reason it blows evenly; for it does not blow from mountains or from forcibly melted matter, but flowing gently as through a channel. For the regions towards the north and south are mountainous; but towards the west there is neither mountain nor land but the Atlantic Sea, so that it travels in the direction of the land. Further, it blows towards evening owing to the quarter from which it comes; for the sun then approaches that quarter. It ceases at night because the movement set up by the sun dies down.

Why do all things appear larger when the SouthEast wind (Eurus) blows? Is it because it makes the air gloomier?

Why is it that during the winter the winds blow early and from the east, but in summer in the evening and from the setting sun? Is it because what happens in our part of the world during the summer occurs during the winter among those who inhabit the opposite hemisphere of the earth, and with us in the winter the winds blow early and from the east, because the air, which during the night is full of moisture, is dissolved and set in motion by the sun in the early morning, the air nearest the sun being the first to be affected? The sun begins to produce this effect even before it rises; therefore the breezes blow just as much before sunrise. Since then the sun attracts the moisture to itself and in the winter before its rising sets in motion in our part of the earth the air which is moist, it is clear that it would also attract the moisture when it is in the southern hemisphere, and

it would be evening there when it is early morning with us. The result would be that the air, which the sun attracts to itself before its rising in our part of the world, would become a West wind to the dwellers in the south and would blow in the evening. Now what happens during our winter at dawn happens to them in the evening, and what happens in the summer to them at dawn happens to us in the evening; for when it is summer here, it is winter there, and our evening is their early morning, at which time they have breezes from the east, while we have West winds for the same reasons as are mentioned above.

In the summer breezes do not blow from the east, because the sun, when it rises, finds the air in our part of the earth still too dry, owing to the short period of its absence; and West winds do not blow in the evening during the winter, because East winds do not blow in the southern hemisphere either at that time for the aforesaid reasons, in virtue of which the sun attracts the moisture to itself and produces the West wind in our part of the earth.

Why is the West wind always considered to bring fair weather and to be the pleasantest of the winds? Is it because it is on the boundary between the hot and the cold winds, and being near to them both it partakes of their qualities, and is therefore temperate? The East wind, though it also lies between the hot and the cold winds, partakes less of them; for when it blows it sets in motion the winds towards the south (for, when it changes, it does so in that direction), but, though it sets them in motion, it does not mingle with them. The West wind is set in motion by the South winds and, when it blows, it sets the North winds in motion; for there the succession of the winds ceases. Hence the West wind, constituting as it does the end of some winds and the starting-point of others, justly is and is considered to be a pleasant wind.

Why are different winds rainy in different places; for example. Hellespontias (the East wind) in Attica and the islands, the North wind on the Hellespont and in Cyrene, and the South wind round Lesbos? Is it because rain occurs wherever there is a collection of clouds, since density collects wherever it can settle? It is for this reason that there is more rain among the mountains than where the mass of clouds can find a free passage, for that which is confined becomes dense as a necessary consequence; also it rains more in calm weather. In the Hellespont the North wind, blowing from its upper end, masses together many clouds, which Hellespontias (the East wind) drives towards Attica and the islands, being thus provided with ample material; for most clouds come round from the north.

Round Lesbos the SouthEast (Eurus) and South winds bring much cloud from the open sea and drive it against the land. Similar instances might be quoted for the other winds.

What is the origin of the saying, —

Have no fear of a cloud from the land in the season of winter, But if it come from over the deep have a care; and in summer Ever distrust the cloud that sweeps from the gloom of the mainland? Is it because in the winter the sea is warmer, so that, if any cloud has formed, it must have done so from some powerful cause, otherwise it would have been dissolved, because the region in which it forms is warm? Now in the summer the sea is cold, as also are the sea breezes, but the land is hot, so that if any cloud comes from the land, it must have been formed from some considerable cause; for it would have been dissolved if it had been weak.

Why is it that in Arcadia, which is high, the winds are no colder than elsewhere, but when there is no wind and it is cloudy, it is cold, just as it is in flat, marshy districts?

Is it because Arcadia resembles a marshy district, since it has no outlet for its waters to the sea, for which reason also there are many chasms there? When, therefore, there is a wind, it winnows away the exhalations from the earth,' which are cold, but the winds themselves are not cold, because they arrive from the sea; but when there is no wind the vapour which rises from the stagnant water causes the cold.

Why is it that the wind lasts a long time when it begins to blow at dawn? Is it because, when the sun rises, the impetus given to the wind is very violent and can therefore maintain its character? That this is so is shown by the fact that it forms a strong mass.

Why is it that the North wind is keen during the day but falls at night? Is it because it is generated from frozen rain when this is evaporated by the sun? It falls at night, because the process does not go on as before, but is reversed; for at night the North wind expends itself, but it is less apt to do so during the day.

Why is it that when many spiders' webs are borne through the air, they are a sign of wind? Is it because the spider works in fine weather, but the webs are set in motion because the air, as it cools, collects on the ground, and this cooling

process is the beginning of winter, so that the movement of the webs is a sign? Or is it because after rain and storms the spiders are borne through the air in large numbers, since they work in fine weather (for they do not appear at all in the winter, the spider being an animal which cannot support the cold), and as they are borne along by the wind they unwind a quantity of web?

Now after rain winds usually blow.

Why is it that the strong North winds in winter cause clouds in the cold regions, but outside them bring a clear sky? Is it because they are at the same time cold and strong, and in the regions near the north they are colder and so congeal the clouds before they can drive them along, and the clouds, when they are congealed, remain where they are owing to their weight? Elsewhere, however, it is their strength rather than their coldness which takes effect.

## **BOOK XXVII. PROBLEMS CONNECTED WITH FEAR AND COURAGE**

WHY do those who are afraid tremble? Is it due to the I process of chilling? For the heat fails and contracts; that is also why the bowels usually are loosened.

Why do men become thirsty under certain conditions, those, for example, who are about to be punished? For this ought not to be so, since they are chilled. Is it because the chilling and heating do not occur in the same region, but the former takes place on the surface of the body, from which the heat departs, but the heating takes place in the interior, so that it warms it, as is proved by the fact that the bowels become loosened? For thirst occurs when the sovereign region of the body becomes dry. The same thing seems to happen as occurs in those suffering from ague, who are thirsty and cold at the same time; for in their case too the same part of the body is not hot and cold.

Why is it that under the influence of anger men become heated and bold (the heat collecting in the interior of the body), whereas in a state of fear they are in a contrary condition? Is it because they are not affected in the same region, but in those who are angry the heat collects in the region of the heart — hence they become courageous and red in the face and full of breath — the course of the heat being upwards, whereas in those who are afraid the blood and heat both retreat in a downward direction — hence the bowels become loosened. For the beating of the heart is different, since in those who are frightened it is frequent



and strongly punctuated, as would naturally occur from the failure of heat, while in those who are angry it has the character which one would expect when a greater quantity of heat collects. Hence the expressions about anger 'boiling up and 'rising and 'being stirred up and the like are apt and fitting. Is the thirst also due to this cause, since dry-spitting and the parching of the tongue and the like are due to the simultaneous upward rush of breath and heat? Thirst, moreover, is clearly due to the body becoming heated. How then can the same region, namely, that in which we feel thirst, become dried up both in one who is afraid and in one who is angry? That fear tends to produce thirst is clearly shown in the case of routed soldiers; for under no other condition is such thirst experienced. The same is true of those suffering from great anxiety; therefore they wash out their mouths and swallow liquid, as did Parmenon the actor. Or is it in such cases not thirst but dryness due to the flight of blood (whence also they become pale)? This is indicated by the fact that they do not drink much but simply take a gulp; routed soldiers on the other hand are undergoing violent exertion. So those who are about to be punished feel thirst, and in this there is nothing strange. In war some brave men even, when they are drawn up in battle array, actually tremble when they are not distraught but confident; and they often beat their bodies with a flat cane or, failing that, with the hand, in order that they may be warmed. It seems probable that owing to the violence and impetus of the heat a disturbing inequality of the temperature is set up in the body.

Why are brave men generally fond of wine? Is it because the brave are full of heat, and the heat is in the region of the chest? (For it is there also that fear shows itself, acting as a process of cooling; with the result that less heat remains in the region of the heart, and in some men the heart beats violently as it is cooled.) Those then who have an abundance of blood in their lungs have hot lungs, as though they were drunk, and so the presentiment of danger does not chill them. Such men are fond of drinking; for the desire for drink is due to the heat of this, region, as has been stated elsewhere, and the desire is for that which has power to stop the heat. Now wine is naturally hot and satisfies the thirst better than water, particularly in those whom we are now considering; the reason for this has been stated elsewhere. Hence those who are suffering from inflammation of the lungs and those who are mad both desire wine, though the lungs of the former are hot owing to the fever, and those of the latter owing to their state of disturbance. Since, then, the same people are usually of a thirsty and of a brave kind, and those who are thirsty desire wine and are therefore fond of drinking-, it necessarily follows that the two characteristics of bravery and fondness for wine usually go together. Hence those who are drunk are braver

than those who are not.

Why do states honour courage more than anything else, though it is not the highest of the virtues? Is it because they are continually either making war or having war made against them, and courage is most useful in both these circumstances? They, therefore, honour not that which is ideally best, but that which is best for themselves.

Why do those who are afraid tremble most in the voice, the hands, and the lower lip? Is it because this affection is due to the departure of heat from the upper parts of the body? If so, their pallor is due to the same cause. The voice, then, trembles owing to the departure of heat from the chest, the region in which the voice is set in motion thus becoming cooled. So too with the hands; for they are attached to the chest. The lower lip trembles, and not the upper, because the upper lip hangs downwards in the direction of its natural tendency; but the upward direction of the lower lip is contrary to nature and it is held steady in that position by the heat. When, therefore, the heat is withdrawn as the process of cooling takes place, it trembles.

For the same reason the lip hangs down when a man is angry, as can be seen clearly in children; for the heat rushes together into the heart.

Why do those who are afraid tremble, especially in the voice, the hands, and the lower lip? Is it because the heat fails in the region of the body in which the voice is situated, while the trembling of the lip and hands is due to the fact that they are very easily set in motion and contain very little blood? Those who are afraid also emit bile and their sexual organs contract, the emission of bile being due to the heat which descends and causes liquefaction, while the contraction of the sexual organs is due to the fact that fear comes from outside, and therefore the rush of heat is in the contrary direction.

Why do those who are afraid feel both thirst and cold, these being contrary affections? Do they feel cold because they are chilled, and thirst because they are heated, since under the influence of fear the heat and the moisture leave the upper parts of the body? That this happens is shown by the change of colour and by the effect on the bowels; for the face becomes pale and the bowels are sometimes loosened. The cold, therefore, is caused by the departure of the heat, and the thirst by the departure of the moisture, from the upper parts of the body.

Why is it that, although both fear and pain are a kind of grief, those who are in pain cry out, but those who are afraid keep silence? Is it because those who are in pain hold their breath (and so it is emitted all at once and comes forth with a loud cry), whereas the body of those who are afraid is chilled and the heat is carried downwards and creates breath? It creates breath in the particular region to which it is carried; hence those who are frightened break wind. Now the voice is a rush of breath upwards in a particular manner and through certain channels; and the reason why those who are in pain hold the breath is that when we suffer anything (just as the other animals use their horns or teeth or claws in self-defence) we invariably make use straightway and without thought of the resources which we have in ourselves by nature, and against all or most forms of pain heat is helpful. This is what occurs when a man holds his breath; for he applies heat and concoction to the pain by collecting heat within him by means of the breath.

Why is it that in those who are afraid the bowels are loosened and they desire to pass urine? Is it because the heat in us is as it were alive? It therefore flees whenever it is afraid of anything. Since, then, the fears due to nervousness and the like come from without and pass from the upper to the lower parts of the body and from the surface to the interior, the regions round the bowels and bladder becoming heated are loosened and make these organs ready to function. For anise and wormwood and all substances which promote the flow of urine have heating properties. Similarly the drugs which affect the bowels are those

... which cause heat in the lower parts of the body, and some of those which are applied merely have a loosening effect, while others set up a further process of liquefaction, like garlic, which passes into the urine. Now heat coming from the surfaces of the body and meeting in these regions has the same effect as such drugs.

Why do the sexual organs contract in those who are afraid? For one would expect the contrary to happen, namely, that they should become relaxed, since the heat collects in this region in those who are afraid. Is it because those who are afraid are almost always as it were chilled? Their sexual organs therefore contract, because the heat has left the surface of the body; hence also those who are greatly frightened have internal rumblings. The surface of the body and the skin of those who are cold seems to contract, because the heat is driven out; and it is for this reason too that they shiver. Now the scrotum too contracts upwards and the testicles also are lifted up with it as it is drawn in. This is more readily

seen in the effect on the sexual organs; for fear causes excretion, and an emission of semen often occurs in those who are nervous or greatly alarmed.

## **BOOK XXVIII. PROBLEMS CONNECTED WITH TEMPERANCE AND INTemperANCE, CONTINENCE AND INCONTINENCE**

WHY is it that some men become ill when, after having been accustomed to live intemperately, they adopt a temperate mode of life? For example, Dionysius the tyrant, when during the siege he ceased drinking for a short time, immediately became consumptive, until he changed his manner of life and began to drink again. Is it because in every one habit is a matter of importance, since it soon becomes a second nature? Just, then, as a fish would fare ill if it continued long in the air or a man if he continued long in the water, so those who alter their manner of life suffer from the change, and a resumption of their accustomed mode of life is just as much their salvation as if they were returning to a natural condition. Furthermore, men waste away if they have been accustomed to large quantities of a particular diet; for if they do not receive their usual food, they are reduced to the condition in which they would be if they had no nourishment at all. Moreover, the excretions, when mixed with a large quantity of food, disappear, but by themselves they rise to the surface and are carried to the eyes or lungs; whereas, if one takes nourishment, they mix with it and become diluted and harmless.

But in those who live an intemperate life the excretions become superabundant up to a certain point, when they cease from their accustomed mode of life, owing to the fact that much undigested matter is still present in them from their former manner of living; and, when this is melted, like a mass of snow, by the natural heat, the result is that violent fluxes take place.

Why is it that we speak of men as incontinent in connexion with two only of the senses, namely, touch and taste? Is it because of the pleasures that result from these in us and in the other animals? Being then shared by the animals, they are held in least honour and so are regarded as the only pleasures deserving of reproach, or at any rate more so than any others. So we blame a man who is a slave to them and call him incontinent and intemperate, because he is a slave to the worst pleasures.

Why are men called incontinent in respect only of their desires, although

incontinence is possible also in anger?

Is it because an incontinent man is one who acts in some way contrary to reason, and incontinence is a mode of life in which is contrary to reason, and the desires are, generally speaking, contrary to reason? Feelings of anger, on the other hand, are in consonance with reason, not in the sense that reason prompts them, but in the sense that reason informs us of the insult or of the charge made against us.

Why is it that we approve most of continence and temperance in the young and wealthy, and of justice in the poor? Is it because we feel most admiration if a man abstains from what he most desires, rather than from the contrary? Now a poor man desires easy circumstances, while a rich young man wants enjoyment.

—

Why can men tolerate thirst less easily than hunger? Is it because thirst is more painful? A proof that it is so is the fact that there is more pleasure in drinking when one is thirsty than in eating when one is hungry. Now the contrary of what is more pleasant is more painful. Or is it because the heat whereby we live requires moisture more? Or is it because thirst is a desire of two things, namely, drink and food, but hunger is a desire of only one, namely, food? —

Why can we endure thirst less than hunger? Is it because the former causes us more pain? A proof of the pain it causes is the fact that the pleasure it gives is more intense. Further, he who is thirsty needs two things, nourishment and cooling, and drink provides both of these; but he who is hungry needs one of them only.

Why are men called incontinent if they indulge to excess in the pleasures connected with touch and taste? (For those who are intemperate in sexual intercourse and the enjoyments of eating and drinking are called incontinent; and in the joys of eating and drinking the pleasure is partly in the tongue and partly in the throat; hence Philoxenus longed for the throat of a crane.) And why is the term incontinent never extended to the pleasures of sight and hearing?

Is it because the pleasures of touch and taste are common to us and the other animals? Being, then, shared by the animals they are held in least honour and so are regarded as the only pleasures deserving of reproach, or at any rate more so than any others. So we blame a man who is a slave to them and call him incontinent and intemperate, because he is a slave to the worst pleasures. Now

the senses being five in number, the other animals find pleasure only in the two already mentioned; in the others they find no pleasure, or, if they do, it is only incidentally. For the lion rejoices when he sees or scents his prey, because he is going to enjoy it; and when he has satisfied his hunger, such things do not please him, just as the smell of dried fish gives us no pleasure when we have eaten our fill of it, though, when we wanted to partake of it, it was pleasant.

The scent of the rose, on the other hand, is always pleasant.

Why are men less able to restrain their laughter in the presence of friends? Is it because, when anything is especially elated, it is easily set in motion? Now benevolence causes elation, so that laughter more readily moves us.

## **BOOK XXIX. PROBLEMS CONNECTED WITH JUSTICE AND INJUSTICE**

Why is it that, although injustice is greater according as I the good which is injured is greater, and honour is a greater good, yet injustice in the matter of money seems to be more serious and those who are unjust as regards money are considered more unjust? Is it because men prefer money to honour, and money is common to all, whereas honour comes only to a few and its enjoyment is a rare occurrence?

Why is it a more terrible thing to rob a man of a deposit than of a loan? Is it because it is disgraceful to wrong a friend? Now he who robs another of a deposit does wrong to a friend; for no one places a deposit with another unless he trusts him. A creditor, on the other hand, is not a friend; for, if a man is a friend, he gives and does not lend. Or is it because the injustice is greater, since, in addition to the loss inflicted, he also violates his plighted word, for the sake of which, if for no other reason, he ought to abstain from doing the wrong? Further, it is base not to requite like with like; for the one party in making the deposit regarded the other as his friend, but the latter in robbing him treated him as an enemy; but a lender does not lend in the spirit of friendship. Again, a deposit is handed over to be guarded and returned, whereas the lender lends for his own advantage as well. Now we are less angry at losing if we are in pursuit of gain, like fishermen when they lose their bait; for the risk is obvious. Again, those who make deposits are generally the victims of plots or misfortune, but it is the rich who lend money; and it is more terrible to wrong the unfortunate than the fortunate.

Why is it that in some law courts the jury give their verdict in accordance with the birth of the litigants rather than the provisions of the will? Is it because about birth it is impossible to lie, but the truth must be declared, whereas before now many wills have been proved to be forged?

Why is it that poverty is more commonly found amongst the good than amongst the bad? Is it because, being universally hated and despised, she takes refuge with the good, thinking that with them she is most likely to find safety and a place of habitation; whereas she thinks that if she goes to the wicked, they would never remain content with the same condition but would steal or plunder, in which case she could no longer remain with them? Or is it because she thinks that the good will treat her better than any one else and that she is least likely to be insulted by them? So, just as we place deposits of money with good men, so she of her own accord ranges herself with them. Or is it because, being of the female sex, she is more helpless, so that she needs the assistance of the good? Or is it because, being herself an evil, she will not betake herself to that which is evil, since if she were to choose the evil, her position would be quite irremediable?

Why is it that wrongs in other matters are not so liable to be committed on a large scale as those in respect of money? For example, a man who has spoken a light word would not therefore necessarily divulge a secret, nor would one who has betrayed an individual also betray a city, as a man who has stolen an obol would steal a talent also. Is it because, though there are forms of unjust disposition which are worse, the acts resulting from them are less serious owing to lack of power?

Why is it more disgraceful to rob a man of a small deposit than of a large loan? Is it because he who robs another of a deposit is deceiving a man who thought him to be honest? Or is it because he who commits the one crime would commit the other also?

Why is it that man, who of all animals has the advantage of most education, is

yet the most unjust of all? Is it because he possesses the power of reasoning to the greatest degree, and has therefore most carefully estimated the pleasures and happiness, and these are impossible of attainment without injustice? —

Why is it that wealth is more often found in the hands of the wicked than in those of the good? Is it because, being blind, it cannot read men's hearts and choose the best?

Why is it considered more just to defend the dead than the living? Is it because those who are alive can look after themselves, but a dead man can no longer do so?

Why is it that a man who associates with one who is healthy does not himself become any healthier, nor does intercourse with the strong or beautiful improve a man's condition, whereas association with the just and temperate and good does have this effect? Is it because some qualities can, and others cannot, be imitated by the soul, goodness being a quality of the soul and health of the body? A man can, therefore, accustom himself to feel pleasure and pain under the proper circumstances; but his association with the healthy does not produce this result, for health does not consist in taking pleasure or not in certain things, since none of these things can produce health.

Why is it more terrible to kill a woman than a man, although the male is naturally superior to the female? Is it because she is weaker and so he commits a greater injustice? Or is it because it is not a manly act to use one's strength against that which is greatly inferior?

Why is the defendant given the position on the right hand in a law court? Is it from a desire to equalize matters? Since, then, the plaintiff possesses other advantages, the defendant is given the advantage of position. Further, as a rule defendants are under guard; and, if the defendant has the right-hand position, the guard is on his right.

Why is it that, when the votes for the plaintiff and for the defendant are shown to be equal, the defendant wins the case? Is it because the defendant has heard only in court, during the course of the trial itself, the charges against which he has to make his defence and produce the witnesses to refute the accusations, if any advantage is to be obtained from them? Now it is not easy for a man to foresee of what he ought to provide witnesses or some other kind of evidence to prove



his innocence. The plaintiff, on the other hand, can act as he pleases and can begin to take action before having the summons issued; and even after he has summoned his opponent he can invent and bring against him any plausible accusation he likes. The lawgiver then, recognizing that the defendant has the disadvantage in all these respects, has given him any advantage which may accrue from the disagreement of the jury. And, indeed, that defendants are at a disadvantage is shown by the fact that when men are in a state of alarm they omit much of what they ought to have said or done, and defendants are, generally speaking, always in greater danger; and so, if they omit necessary parts of their defence, when they are put on a level with their opponents in respect of their claims, they would clearly have been victorious if they had not omitted anything.

Further, any one of us would prefer to pass a sentence acquitting a wrong-doer rather than condemn as guilty one who is innocent, in the case, for example, of a man being accused of enslavement or murder. For we should prefer to acquit either of such persons, though the charges brought against them by their accuser were true, rather than condemn them if they were untrue; for, when any doubt is entertained, the less grave error ought to be preferred; it is a serious matter to decide that a slave is free, yet it is much more serious to convict a freeman of being a slave.

Further, if one man brings a charge and another disputes his claim to any piece of property, we do not consider that we ought to award the disputed property immediately to the plaintiff, but that the man in possession ought to enjoy it until the matter is decided. Similarly, when a number of persons are involved in a case and the numbers of those who declare that a wrong has been committed and of those who deny it are equal — just as in the case cited above when one man brought an accusation, while another denied the truth of it — we consider that the lawgiver is right in not handing over the disputed property to the accuser but allowing the defendant to remain in possession until the plaintiff has established some superiority. Similarly, when the votes of the jury are equal and so neither side has the superiority, the lawgiver has allowed matters to be left as they are.

Again, in serious crimes the punishments are also heavy, so that, if the jury pass an unjust sentence and then change their mind, it is impossible to take the opportunity of remedying the mistake; if, on the other hand, they acquit the accused when they ought not to do so, if he lives so circumspectly as never to commit any crime again, how can the jury have made a serious mistake in failing

to condemn such a man to death? If, however, he subsequently commits a crime, the law would consider that he ought to be punished for both crimes.

Or is it because it is an act of greater injustice to bring an unjust accusation than to commit an offence which may easily be made the subject of an unjust accusation? For wrong-doing may be due to anger or fear or desire and to many other causes, and not only to design, but an unjust accusation is generally due to design. So when the votes have proved equal, indicating both that the accuser has brought an unjust charge and that the defendant is in the wrong, the unjust accuser being judged the greater offender, the lawgiver has awarded the legal victory to the defendant.

Again, we ourselves adopt the attitude towards our servants that, when we suspect that they have committed a crime and have no certain knowledge, but nevertheless think that they have done the deed, we do not immediately proceed to punish them; and when we cannot pursue our inquiries any further, we acquit them of blame. —

Further, he who designedly commits a crime does a greater wrong than he who does not act designedly. Now the man who brings a vexatious charge against another always does wrong designedly, whereas he who commits any other crime may happen to do so either under compulsion or through ignorance or by some other chance. But when the votes are equal, the prosecutor has been judged by half the jury to be committing a wrong wilfully, while the defendant is considered by the remainder to be in the wrong, but not wilfully; and so, since the prosecutor is judged guilty of a more serious wrong than the defendant, the lawgiver has rightly decided that he who has committed the less serious wrong wins the case.

Further, a man is always more unjust who does not expect to escape the observation of the man whom he wrongs and nevertheless commits the wrong, than he who expects to remain undiscovered. Now he who brings a vexatious charge against another does not expect to escape the observation of the man whom he falsely accuses, whereas those who commit any other crime usually try to commit an injustice with the expectation of doing so without the knowledge of their victims, so that plaintiffs ought to be regarded as more unjust than defendants.

Why is it that, if a man steals from the baths or the wrestling-school or the

market or any similar place, he is punished with death, whereas, if he steals from a house, he merely pays back double the value of what he has stolen?

Is it because in houses it is possible in some way or other to safeguard one's property? For the wall is strong and there is a key, and it is the business of all the slaves in the house to see that the contents of the house are kept safe. At the baths, however, and in places which are similarly public, it is easy for any one who wishes to commit a crime; for those who place their property there have no sure means of guarding it except their own eyes, so that, if one takes one's eye off it for a moment, it is immediately placed at the mercy of the thief. Hence the lawgiver, considering that bathers are not able to guard their property, has set the law to guard against thieves by threatening that they shall lose their lives if they appropriate the possessions of others.

Further, the owner of a house is responsible for admitting into it whom he wishes and for introducing into it any one whom he does not trust; but the man who deposits any property in a bath cannot prevent any one from coming in, nor can he prevent him, when he has entered, from placing his garments next to his own when he has stripped himself; but, contrary to his wishes, the clothing of the thief and of the man who is about to be robbed lie together in a confused heap. Therefore the lawgiver has prescribed not very heavy penalties to help the man who of his own free will and by his own mistake has admitted the thief to his house, but has clearly fixed heavy penalties for theft to aid those who are obliged to share with others the right of entrance and the promiscuity of the baths.

Further, it is obvious that all those who commit theft in places the entrance to which is open to any one who wishes to come are bad men, and so, if they are allowed to live, do not desire to have the semblance of honest men even for the future advantage which they can gain from it, regarding it as useless to pretend to be honest in the eyes of those who know their real character; they therefore continue henceforward to be openly wicked. Those, on the other hand, whose wickedness is known to one person only, try to persuade that person by bribery not to make known their real character to the rest of the world; they are not likely therefore to be completely wicked for ever, and so the penalty which the lawgiver has fixed for them is less severe.

Further, of all crimes those which are committed in the most crowded meetings and assemblies bring most disgrace upon the city, just as public orderliness brings the greatest credit; for it is at public gatherings that the citizens are most

conspicuous to each other and the rest of the world.

The result, therefore, of such thefts is that not only is the man who loses his property personally injured, but also abuse is heaped upon the city. This is why the lawgiver has fixed heavier penalties for such thieves than for those who abstract property from a private house.

Again, the man who loses anything from a private house is in a place where it is easy for him to bear his misfortune, since he is in his own home and neither suffers anything nor is jeered at by others. But the man who is robbed at the baths finds it difficult to leave without his clothing, and, in addition, is usually jeered at by others; and this is harder to bear than the actual loss. Therefore the lawgiver has prescribed heavier penalties to assist such persons.

Again, many legislative parallels can be found for these penalties. For example, if any one speaks evil of a magistrate the punishment is severe, but there is no penalty for speaking evil of an ordinary individual; and rightly so, for the legislator considers that the slanderer not only commits an offence against the magistrate but also insults the city. Similarly, a man who commits a theft at the harbour is considered not only to harm the individual whom he robs, but also to bring disgrace upon the city. And the same is true of any crime committed in a place of public meeting.

Why is it that in law courts, if equal votes are given for the two adversaries, the defendant wins the case? Is it because the defendant has remained unaffected by the action of the plaintiff, and in a position of equality with him he would probably have won?

Why is it that for theft the punishment is death, whereas for assault, which is a more serious crime, the penalty or fine is assessable in court? Is it because to commit an assault is an act of human weakness, of which all more or less partake, whereas there is no force which compels us to theft? A further reason is the fact that a man who tries to commit theft would think nothing of committing assault also.

## **BOOK XXX. PROBLEMS CONNECTED WITH PRUDENCE, INTELLIGENCE, AND WISDOM**

I Why is it that all those who have become eminent in philosophy or politics or

poetry or the arts are clearly of an atrabilious temperament, and some of them to such an extent as to be affected by diseases caused by black bile, as is said to have happened to Heracles among the heroes? For he appears to have been of this nature, wherefore epileptic afflictions were called by the ancients 'the sacred disease' after him. That his temperament was atrabilious is shown by the fury which he displayed towards his children and the eruption of sores which took place before his disappearance on Mount Oeta; for this often occurs as the result of black bile. Lysander the Lacedaemonian also suffered from similar sores before his death. There are also the stories of Ajax and Bellerophon, of whom the former became insane, while the latter sought out habitations in desert places; wherefore Homer writes, And since of all the gods he was hated, Verily o'er the Aleïan plain alone he would wander, Eating his own heart out, avoiding the pathway of mortals.

And many others of the heroes seem to have been similarly afflicted, and among men of recent times Empedocles, Plato, and Socrates, and numerous other well-known men, and also most of the poets. For many such persons have bodily afflictions as the result of this kind of temperament, while some of them obviously possess a natural inclination to affections of this kind; in a word, they all, as has been said, are naturally atrabilious. The cause of this may be understood if we first take an example from the effect of wine, which if taken in large quantities appears to produce such qualities as we attribute to the atrabilious, inducing, as it is drunk, many different characteristics, making men for instance irritable, benevolent, compassionate, or reckless; whereas no such results are produced by honey or milk or water or anything similar. One can easily see that wine has a variety of effects by observing how it gradually changes those who drink it; for, finding them chilled and taciturn as the result of abstinence, a small quantity makes them more talkative, while a larger quantity makes them eloquent and bold, and, when they proceed to action, reckless, and a still larger quantity makes them insolent and afterwards frenzied, while outrageous excess enfeebles them and makes them stupid like those who have been epileptic from childhood, and very similar to those who are exceedingly atrabilious. As, therefore, an individual as he drinks and takes wine in different quantities changes his character, so there are men who embody each character. For the temporary condition of one man when he is drunk is the permanent character of another, and one man is loquacious, another emotional, another easily moved to tears; for wine has this effect also on some people and therefore Homer writes,

He says that I swim in tears, like a man that is heavy with drinking.

Others become compassionate or savage or taciturn; for some maintain a complete silence, especially those atrabilious subjects who are out of their minds. Wine also makes men amorous; as is shown by the fact that a man who is drinking is induced to kiss those whom, owing to their appearance or age, no sober person would kiss. Wine then gives a man extraordinary characteristics, but for a short time only, while nature gives them permanently for the period of a lifetime; for some men are bold, others taciturn, others compassionate, and others cowardly by nature. It is therefore clear that each characteristic is produced by wine and by nature by the same means; for the whole body functions under the control of heat. Now both the juice and the atrabilious temperament are full of wind; wherefore the physicians say that flatulence and disorders of the stomach are due to black bile. Now wine has the quality of containing air; so wine and the atrabilious temperament are similar in nature. The froth which forms on wine shows that it contains air; for oil — does not produce froth, although it is hot, but wine produces it in large quantities and dark wine more than white because it contains more heat and substance. It is ° for this reason that wine excites sexual desire, and Dionysus and Aphrodite are rightly coupled together, and atrabilious persons are generally lustful. For sexual desire is due to the presence of breath, as is shown by the fact that the virile organ quickly increases from a small to a large size by inflation; also boys before they are capable of emitting semen find a certain pleasure in rubbing their sexual organs through lust when they are approaching the age of puberty, and the swelling of the organ becomes manifest because breath passes through the passages through which the semen subsequently passes; also the effusion and impetus of the semen in sexual intercourse is clearly due to propulsion by the breath. So those foods and liquids which fill the region of the sexual organs with breath are rightly regarded as aphrodisiac. Thus dark wine more than anything else produces the condition found in atrabilious persons. This condition is obvious in some individuals; for most atrabilious persons are thin and their veins stand out, the reason being the abundance not of blood but of breath. The reason why all atrabilious persons are not thin or dark, but only those who contain particularly unhealthy humours, is stated elsewhere.

But to return to our previous subject of discussion, this humour, namely, the atrabilious, is originally mingled in the bodily nature, for it is a mixture of heat and cold, which two things the bodily nature consists. Black bile, therefore, becomes both very hot and very cold, for the same thing naturally admits both heat and cold, like water, which, though cold, yet when it is sufficiently heated (for example, when it boils) is hotter than the actual flame which heats it, and similarly a stone or a piece of iron when thoroughly heated becomes hotter than charcoal, though they are naturally cold. (This subject has been dealt with more clearly in dealing with Fire.) Now black bile, which is naturally cold and not on the surface, being in the condition mentioned above, if it abounds in the body, produces apoplexy or torpor or despondency or fear; but when it is overheated, it produces cheerfulness accompanied by song, and frenzy, and the breaking forth of sores, and the like. In most people then black bile engendered from their daily nutriment does not change their character, but merely produces an atrabilious disease. But those who naturally possess an atrabilious temperament immediately develop diverse characters in accordance with their various temperaments; for example, those who are originally full of cold black bile become dull and stupid, whereas those who possess a large quantity of hot black bile become frenzied or clever or erotic or easily moved to anger and desire, while some become more loquacious. Many too, if this heat approaches the region of the intellect, are affected by diseases of frenzy and possession; and this is the origin of Sibyls and soothsayers and all inspired persons, when they are affected not by disease but by natural temperament. Maracus, the Syracusan, was actually a better poet when he was out of his mind. Those in whom the excessive heat dies down to a mean temperature are atrabilious, but they are cleverer and less eccentric and in many respects superior to others either in mental accomplishments or in the arts or in public life. In respect too of facing dangers an atrabilious state causes great variation, in that many of those who are in this condition are inconsistent under the influence of fears; for they vary from time to time according to the state in which their bodies happen to be in respect to the atrabilious temperament. Now this temperament is itself also inconsistent, just as it produces inconsistency in those suffering from the diseases which it causes; for, like water, it is sometimes cold and sometimes hot. And so the announcement of something alarming, if it occurs at a time when the temperament is rather cold, makes a man cowardly; for it has already prepared a way for the entrance of fear, and fear has a chilling effect (as is shown by the fact that those who are greatly alarmed tremble). If, however, the temperament is inclined to be hot, fear reduces it to a moderate temperature and causes a man to be in his senses and *I* unexcited. So too with the despondency which occurs in

everyday life (for we are often in the condition of feeling grief without being able to ascribe any cause for it, while at other times we feel cheerful without knowing why), such feelings and those usually called superficial feelings occur to a slight degree in every one, for something of the force which produces them is mingled in every one; but those who are thoroughly penetrated by them acquire them as a permanent part of their nature. For as men differ in appearance not because they possess faces but because they possess certain kinds of faces, some handsome, others ugly, others with nothing remarkable about them (those, that is, who are naturally ordinary); so those who possess an atrabilious temperament in a slight degree are ordinary, but those who have much of it are quite unlike the majority of people. For, if their condition is quite complete, they are very atrabilious; but, if they possess a mixed temperament, they are men of genius. If they neglect their health, they have a tendency towards the atrabilious diseases, the part of the body affected varying in different people; in some persons epileptic symptoms declare themselves, in others apoplectic, in others violent despondency or terrors, in others over-confidence, as happened to Archelaus, King of Macedonia. The force which gives rise to such a condition is the temperament according as it contains heat or cold.

If it be cold beyond due measure, it produces groundless despondency; hence suicide by hanging occurs most frequently among the young, but sometimes also among older men. Many men too put an end to themselves after drunkenness, and some atrabilious persons continue in a state of despondency after drinking; for the heat of the wine quenches their natural heat. Heat in the region in which we think and form hopes makes us cheerful; and for this reason all men are eager to drink until they become \ intoxicated, for abundance of wine makes all men hopeful, just as their youth makes children sanguine; for old age is despairing but youth is full of hope. There are a few who are seized with despondency while they are drinking, for the same reason as makes others despondent after drinking. Those then who become despondent as the heat in them dies down tend to hang themselves. Hence the young and the old are more likely to hang themselves; for old age makes the heat die down, and so, in the young, does their condition, which is itself natural. When the heat is extinguished suddenly, most men make away with themselves to the general astonishment of all, since they have given no previous sign of any such intention. When the temperament caused by the admixture of black bile is colder, it gives rise, as has been already remarked, to despondency of various kinds, but when it is hotter to cheerfulness. Hence the young are more cheerful, the old more despondent, the former being hot and the latter cold; for old age is a process of cooling. Extinction takes place



suddenly from external causes, just as objects which have been heated in the fire are cooled by unnatural processes, as for example when water is poured over hot coals. Hence men sometimes commit suicide after drunkenness; for the heat of the wine is introduced from outside, and when it is extinguished the condition which leads to suicide is set up. Also after sexual intercourse most people tend to be despondent; those, however, who emit a considerable amount of excrement with the semen become more cheerful, for they are relieved of an excess of excrement and breath and heat. But those who indulge in sexual intercourse are often more despondent, for by so doing they become cooled, because they lose something which is valuable, as is shown by the fact that the amount of semen which is emitted is not great.

To sum the matter up, owing to the fact that the effect of black bile is variable, atrabilious persons also show variation; for the black bile becomes very hot and very cold. And because it has an effect upon the character (for heat and cold have such an effect to a greater extent than anything else in us), like wine mingling in a stronger or weaker form in the body, it gives us our own special characters. Now both wine and black bile are full of breath. And since it is possible for an abnormal state to be well attuned and in a sense a favourable condition, and since it is possible for the condition to be hotter and then again cold, when it should be so, or to change to the contrary owing to excess, the result is that all atrabilious persons have remarkable gifts, not owing to disease but from natural causes.

Why do we say that we acquire a habit as the result of pursuing some sciences but not others? Are we said to acquire a habit only by such sciences as enable us to make discoveries, since discovery is the result of a habit?

Why is it that of all the animals man has most practical wisdom? Is it because he has the smallest head in proportion to his body? Or is it because he is abnormally small in certain parts? For that is why his head is small, and among men those who have smaller heads are wiser than those who have larger heads.

Why is it that a journey seems longer when we traverse it without knowing its length than when we know it, all other conditions being equal? Is it because to know its length is to be able to connect a number with it? For that which cannot be numbered is the same as the infinite, and the infinite is always more than the determinate. Just as, therefore, if one knows that a journey is a certain length it must necessarily be finite, so if one does not know its length one as it were

converts the proposition and the mind draws a false conclusion, and this journey appears infinite. Furthermore, a quantity is determinate, and that which is determinate is a quantity; therefore when a thing does not appear determinate it will appear to be as it were infinite, because that which is of a nature to be determined, if it is not so, is infinite, and that which appears not to be determined necessarily appears in a sense unlimited.

Why is it that, whereas we become wiser as we grow older, yet the younger we are the more easily we can learn? Is it because God has given us two instruments within ourselves, which enable us to use external instruments, providing the body with the hand and the soul with intelligence? For intelligence is among the things implanted in us by nature, being as it were an instrument; and, whereas the sciences and arts are among the things created by us, intelligence is one of the gifts of nature.

So just as we cannot use the hand to the best advantage immediately after birth, but only when nature has perfected it (for the hand can perform its particular function best as age progresses), in like manner of our natural endowments reason is of most assistance to us not in early life but as we get old, and is then at its highest perfection, unless it becomes incapacitated by anything, as may happen also to the other natural endowments. Intelligence comes to us later than the faculty of using the hands, because the instruments used by the intelligence are posterior to those used by the hands. For science is an instrument of the intelligence (for it is useful to the intelligence just as flutes are useful to the flute-player), and many things in nature are instruments of the hands, but nature itself and its creations are prior to science. Now it is natural that where the instruments are prior, the faculties should also come into being in us first (for it is by using the instruments that we acquire a habit); and the instrument of each faculty is related similarly to that faculty, and conversely, as the instruments are to one another, so are the faculties of which they are the instruments to one another. Intelligence then for this reason comes to us when we are older; but we learn more quickly when we are young because we do not yet know anything, and when we know more we are no longer so well able to acquire knowledge, just as we remember best what we come upon early in the day, and then, as the day goes on, are less able to remember what happens, because we have come into contact with a number of incidents.

Why should man be obeyed more than any other animal? Is it because, as Plato answered to Neocles, he alone of all the animals can count? Or is it because he is

the only animal that believes in gods? Or is it because he is the most imitative (for it is for this reason that he can learn)?

Why is it that we feel no pleasure in the contemplation or anticipation of the fact that the interior angles of a triangle are equal to two right angles, and similar geometrical truths — except in so far as we enjoy the speculation, and the pleasure of this is always the same and would be equally great if these angles were equal to three or more right angles — but we rejoice at the recollection of an Olympic victory or the sea-battle at Salamis, and at the anticipation of such events, but not in their opposites? Is it because we rejoice in such events as having taken place or taking place, but as regards what happens in the course of nature the contemplation of the real state of affairs alone causes us pleasure, whereas actions give rise to the pleasure caused by their results? Since, then, actions are various, their results too are sometimes painful and sometimes pleasant; and we avoid and pursue anything in accordance with pleasure and pain.

Why do doctors continue their treatment only until health is restored? For the doctor reduces the patient, and next dries his body, then creates a healthy condition and at that point stops. Is it because it is impossible for any other condition to be produced from health? Or, if it is possible, is it the task of another science, and will what is produced from health be something different? Now, if health is produced from conditions which are its opposite or are intermediate between health and sickness, it is obvious that the patient is sick because he is too moist or too dry or something else. The doctor, then, from a state of cold creates a less extreme condition and, finally, a condition of a certain heat or dryness or moisture by change from the opposite or intermediate condition, until he achieves a state which is such as to constitute a condition of health; and from this no condition can be produced except one which is intermediate between health and sickness. The possessor of the art can, then, create some new condition; for, when he has reached a certain point, he can retrace his steps and undo his work; but the doctor's *art* has nothing to do with such a course, for its aim is always to create a better condition. So neither the doctor's art nor any other art will create anything else out of health; for either nothing would be being produced, or else the opposite of health, if the same science were being employed (so too out of a house nothing could make its contrary): nor is there any other art which can make anything out of health, except as making a whole out of a part, as, for example, when the cobbler's art makes a shoe out of the front part of a shoe; for these two things can be

produced out of one another by two processes, one of composition and the other of destruction.

Why is it generally considered that the philosopher is superior to the orator? Is it because the philosopher spends his time in studying the actual forms of things, while the orator deals with the embodiments of these forms — the former considering what injustice and tyranny are, the latter urging that a certain individual is unjust or dealing with the character of a tyrant?

Why are theatrical artists generally persons of bad character? Is it because they partake but little of reason and wisdom, because most of their life is spent in the pursuit of the arts which provide their daily needs, and because the greater part of their life is passed in incontinence and often in want, and both these things prepare the way to villainy?

Why did the men of old institute prizes for physical contests but none for wisdom? Is it because in all fairness the judges should in the intellectual sphere be either the superiors or at any rate not the inferiors of the competitors? Now if those who were pre-eminent in wisdom had to compete and a prize had been offered, they would have no one to act as judges. In athletic contests, however, anyone can judge by merely using his eyes. Further, the original institutor of the games did not wish to propose to the Greeks such a contest as would be likely to produce violent disputes and enmity; for when one is rejected or accepted in a contest of bodily strength, men do not altogether harbour any grievance nor feel sentiments of enmity towards the judges, but they feel great wrath and indignation against those who decide their relative wisdom or worthlessness; and this is a quarrelsome and bad state of affairs.

Furthermore, the prize ought to be better than the contest; for in athletic games the prize is more desirable than, and superior to, the contest. But what prize could be found superior to wisdom?

Why is it that man in particular thinks one thing and does another? Is it because the same science deals with contraries? Or is it because the reason has many objects, desire one? Now man usually lives by the intelligence, the animals by appetite, passion, and desire.

Why is it that some prudent men spend their time acquiring rather than using? Is it because they are following the habit of doing so? Or is it due to the pleasure of

anticipation?

(Why do those who sleep deeply and most pleasantly see no visions? Is it) because sensation and thought function because the mind is at rest — hence the word knowledge ( episteme )seems to be derived from the fact that knowledge checks the mind (istesi) — since when it is in motion and being carried along it can neither have sensation nor think? Hence it is that children and those who are drunk and the insane are senseless; for, owing to the abundance of heat present in them, they are in a state of considerable and very violent movement, but when this ceases they become more sensible; for, when the thought is undisturbed, they can control it better. Those who have visions during their sleep dream because thought is checked, and in proportion as it is at rest. For the mind is greatly moved during sleep, since, when heat collects in the interior from the rest of the body, there is a very considerable and violent movement; and it is not true, as most people suppose, that it is most at rest and by itself, and especially so when no vision is seen. The contrary is really true; for because it is in considerable movement and never rests for a moment, it cannot think. And it is naturally in most movement when it sleeps most pleasantly, because it is then in particular that the greatest amount of heat collects in the interior of the body. That, when it is in motion, the mind cannot think, not only in its waking hours but also in sleep, is proved by the fact that one is least likely to see visions during the sleep which follows the taking of food; now this is the time when the mind is most disturbed owing to the nourishment which has been introduced into the body. A vision occurs when sleep comes over us while we are thinking or letting things pass before our eyes. Hence we usually see things which we are doing or intend or wish to do; for it is on these things that our thoughts and fancies most often dwell. And the better men are, the better are their dreams, because they think of better things in their waking hours, while those who are less well disposed in mind or body have worse dreams. For there is a close correspondence between the disposition of the body and the images of our dreams; for, when a man is ill, the ideas proposed by his thoughts are bad, and furthermore, owing to the disturbance which reigns in his body, his mind cannot rest. It is for this reason that atrabilious persons start in their sleep, because, owing to the excess of heat, the mind is in a state of too much movement, and, when the movement is too violent, they cannot sleep.

# CONTENTS

[BOOK I](#)

[BOOK II](#)

[BOOK III](#)

[BOOK VII](#)

[BOOK VIII](#)

**Please note :** Books IV to VI are exactly the same as given in *The Nicomachean Ethics* and can be accessed from that text.

# BOOK I

The man who at Delos set forth in the precinct of the god his own opinion composed an inscription for the forecourt of the temple of Leto in which he distinguished goodness, beauty and pleasantness as not all being properties of the same thing. His verses are:

“ Justice is fairest, and Health is best,

But to win one’s desire is the pleasantest.”

*Theog.* 255f.

But for our part let us not allow that he is right; for Happiness is at once the pleasantest and the fairest and best of all things whatever.

About every thing and every natural species there are many views that involve difficulty and require examination; of these some relate only to our knowledge of the thing, others deal also with modes of acquiring it and of acting in relation to it. As to all those views therefore that involve only speculative philosophy, we must say whatever may be proper to the inquiry when the suitable occasion occurs. But we must consider first what the good life consists in and how it is to be obtained — whether all of those who receive the designation ‘happy’ acquire happiness by nature, as is the case with tallness and shortness of stature and differences of complexion, or by study, which would imply that there is a science of happiness, or by some form of training, for there are many human attributes that are not bestowed by nature nor acquired by study but gained by habituation — bad attributes by those trained in bad habits and good attributes by those trained in good ones. Or does happiness come in none of these ways, but either by a sort of elevation of mind inspired by some divine power, as in the case of persons possessed by a nymph or a god, or, alternatively, by fortune? for many people identify happiness with good fortune.

Now it is pretty clear that the presence of happiness is bestowed upon men by all of these things, or by some or one of them; for almost all the modes in which it is produced fall under these principles, inasmuch as all the acts that spring from thought may be included with those that spring from knowledge. But to be happy and to live blissfully and finely may consist chiefly in three things deemed to be

most desirable: some people say that Wisdom is the greatest good, others Goodness and others Pleasure. And certain persons debate about their importance in relation to happiness, [1214b] declaring that one contributes more to it than another — some holding that Wisdom is a greater good than Goodness, others the reverse, and others that Pleasure is a greater good than either of them; and some think that the happy life comes from them all, others from two of them, others that it consists in some one of them.

Having then in regard to this subject established that everybody able to live according to his own purposive choice should set before him some object for noble living to aim at — either honor or else glory or wealth or culture — on which he will keep his eyes fixed in all his conduct (since clearly it is a mark of much folly not to have one's life regulated with regard to some End), it is therefore most necessary first to decide within oneself, neither hastily nor carelessly, in which of the things that belong to us the good life consists, and what are the indispensable conditions for men's possessing it. For there is a distinction between health and the things that are indispensable conditions of health, and this is similarly the case with many other things; consequently also to live finely is not the same as the things without which living finely is impossible. And in the latter class of things some that are indispensable conditions of health and life are not peculiar to special people but common to practically all men — both some states and some actions — for instance, without breathing or being awake or participating in movement we could not possess any good or any evil at all; whereas others are more peculiar to special types of natural constitution — for instance, eating meat and taking walking exercise after dinner are not closely related to health in the same way as the conditions mentioned. And these facts must not be overlooked, for these are the causes of the disputes about the real nature of happiness and about the means of procuring it; for some people regard the things that are indispensable conditions of being happy as actual parts of happiness.

Now to examine all the opinions that any people hold about happiness is a superfluous task. For children and the sick and insane have many opinions which no sensible man would discuss, for these persons need not argument but the former time in which to grow up and alter and the latter medical or official chastisement (treatment with drugs being chastisement just as much as flogging is). And similarly it is also superfluous to examine the opinions of the multitude either; [1215a] for they talk at random about almost everything, and especially about happiness. We ought to examine only the opinions of the wise; for it is out



of place to apply reasoning to those who do not need reasoning at all, but experience. But since every subject has special difficulties related to it, it is clear that there are such in regard to the highest life and the best mode of existence; it is then well to examine the opinions putting these difficulties, since the refutations advanced by those who challenge them are demonstrations of the theories that are opposed to them.

Moreover to notice such matters is especially advantageous with a view to the subjects to which all inquiry ought to be directed — the question what are the means that make it possible to participate in living well and finely (if ‘blissfully’ is too invidious an expression) — and with a view to the hope that we may have of the things that are good in the various departments. For if living finely depends on things that come by fortune or by nature, it would be beyond the hopes of many men, for then its attainment is not to be secured by effort, and does not rest with men themselves and is not a matter of their own conduct; but if it consists in oneself and one’s own actions having a particular quality, the good would be more common and more divine — more common because it would be possible for more people to share it, and more divine because happiness would then be in store for those who made themselves and their actions of a particular quality. Most of the points debated and the difficulties raised will be clear if it be satisfactorily determined what the proper conception of happiness is — does it consist merely in a person’s possessing some particular quality of spirit, as some of the sages and the older thinkers held, or although a particular personal character is indeed an indispensable condition, is a particular quality of conduct even more necessary?

There are various different modes of life, and some do not lay any claim to well-being of the kind under consideration, but are pursued merely for the sake of things necessary — for instance the lives devoted to the vulgar and mechanic arts and those dealing with business (by vulgar arts I mean those pursued only for reputation, by mechanic the sedentary and wage-earning pursuits, and by arts of business those concerned with market purchase and retail selling); but on the other hand, the things related to the happy conduct of life being three, the things already mentioned as the greatest possible goods for men — goodness, wisdom and pleasure, we see that there are also three ways of life in which those to whom fortune gives opportunity invariably choose to live, the life of politics, the life of philosophy, and the life of enjoyment. [1215b] Of these the philosophic life denotes being concerned with the contemplation of truth, the political life means being occupied with honorable activities (and these are the activities that

spring from goodness), and the life of enjoyment is concerned with the pleasures of the body. Owing to this, different people give the name of happy to different persons, as was said before too; and Anaxagoras of Clazomenae when asked 'Who is the happiest man?' said 'None of those whom you think, but he would seem to you an odd sort of person.' But Anaxagoras answered in that way because he saw that the man who put the question supposed it to be impossible to receive the appellation 'happy' without being great and beautiful or rich, whereas he himself perhaps thought that the person who humanly speaking enjoys bliss is he that lives by the standard of justice without pain and in purity, or participates in some form of divine contemplation.

While there are many different things as to which it is not easy to make a right judgement, this is especially the case with one about which everybody thinks that it is very easy to judge and that anybody can decide — the question which of the things contained in being alive is preferable, and which when attained would fully satisfy a man's desire. For many of life's events are such that they cause men to throw life away, for instance, diseases, excessive pains, storms; so that it is clear that on account of these things any way it would actually be preferable, if someone offered us the choice, not to be born at all. And in addition, the kind of life that people live while still children is not desirable — in fact no sensible person could endure to go back to it again. And further, many of the experiences that contain no pleasure nor pain, and also of those that do contain pleasure but pleasure of an ignoble kind, are such that non-existence would be better than being alive. And generally, if one collected together the whole of the things that the whole of mankind do and experience yet do and experience unwillingly, because not for the sake of the things themselves, and if one added an infinite extent of time, these things would not cause a man to choose to be alive rather than not alive. But moreover, also the pleasure of food or of sex alone, with the other pleasures abstracted that knowledge or sight or any other of the senses provides for human beings, would not induce anybody to value life higher if he were not utterly slavish, for it is clear that to one making this choice there would be no difference between being born a beast or a man; at all events, the ox in Egypt, [1216a] which they reverence as Apis, has a greater abundance of such indulgences than many monarchs. Nor likewise would anyone desire life for the pleasure of sleep either; for what is the difference between slumbering without being awakened from the first day till the last of a thousand or any number of years, and living a vegetable existence? any way plants seem to participate in life of that kind; and so do children too, inasmuch as at their first procreation in the mother, although alive, they stay asleep all the

time. So that it is clear from considerations of this sort that the precise nature of well-being and of the good in life escapes our investigation.

Now it is said that when somebody persisted in putting various difficulties of this sort to Anaxagoras and went on asking for what object one should choose to come into existence rather than not, he replied by saying, 'For the sake of contemplating the heavens and the whole order of the universe.' Anaxagoras therefore thought that the alternative of being alive was valuable for the sake of some kind of knowledge; but those who ascribe bliss to Sardanapallus or Smindyrides of Sybaris or some of the others living the life of enjoyment, all appear for their part to place happiness in delight; while a different set would not choose either wisdom of any kind or the bodily pleasures in preference to the actions that spring from goodness: at all events, some people choose those actions not only for the sake of reputation but even when they are not going to get any credit. But the majority of those engaged in politics are not correctly designated 'politicians,' for they are not truly political, since the political man is one who purposely chooses noble actions for their own sake, whereas the majority embrace that mode of life for the sake of money and gain.

What has been said, therefore, demonstrates that all men ascribe happiness to three modes of life — the political, the philosophic, and the life of enjoyment. Among these, the nature and quality of the pleasure connected with the body and with enjoyment, and the means that procure it, are not hard to see; so that it is not necessary for us to inquire what these pleasures are, but whether they conduce at all to happiness or not, and how they so conduce, and, if it be the case that the noble life ought to have some pleasures attached to it, whether these are the pleasures that ought to be attached, or whether these must be enjoyed in some other way, whereas the pleasures which people reasonably believe to make the happy man's life pleasant and not merely painless are different ones.

But these matters must be examined later. Let us first consider Goodness and Wisdom — what the nature of each is, and also whether they themselves or the actions that spring from them are parts of the good life, [1216b] since that they are connected with happiness is asserted, if not by everybody, at all events by all of mankind who are worthy of consideration.

Accordingly Socrates the senior thought that the End is to get to know virtue, and he pursued an inquiry into the nature of justice and courage and each of the divisions of virtue. And this was a reasonable procedure, since he thought that

all the virtues are forms of knowledge, so that knowing justice and being just must go together, for as soon as we have learnt geometry and architecture, we are architects and geometers; owing to which he used to inquire what virtue is, but not how and from what sources it is produced. But although this does happen in the case of the theoretical sciences, inasmuch as astronomy and natural science and geometry have no other End except to get to know and to contemplate the nature of the things that are the subjects of the sciences (although it is true that they may quite possibly be useful to us accidentally for many of our necessary requirements), yet the End of the productive sciences is something different from science and knowledge, for example the End of medicine is health and that of political science ordered government, or something of that sort, different from mere knowledge of the science. Although, therefore, it is fine even to attain a knowledge of the various fine things, all the same nevertheless in the case of goodness it is not the knowledge of its essential nature that is most valuable but the ascertainment of the sources that produce it. For our aim is not to know what courage is but to be courageous, not to know what justice is but to be just, in the same way as we want to be healthy rather than to ascertain what health is, and to be in good condition of body rather than to ascertain what good bodily condition is.

And about all these matters the endeavor must be made to seek to convince by means of rational arguments, using observed facts as evidences and examples. For the best thing would be if all mankind were seen to be in agreement with the views that will be stated, but failing that, at any rate that all should agree in some way. And this they will do if led to change their ground, for everyone has something relative to contribute to the truth, and we must start from this to give a sort of proof about our views; for from statements that are true but not clearly expressed, as we advance, clearness will also be attained, if at every stage we adopt more scientific positions in exchange for the customary confused statements. And in every investigation arguments stated in philosophical form are different from those that are non-philosophical; hence we must not think that theoretical study of such a sort as to make manifest not only the nature of a thing but also its cause is superfluous even for the political student, since that is the philosophic procedure in every field of inquiry. Nevertheless this requires much caution. [1217a] For because to say nothing at random but use reasoned argument seems to mark a philosopher, some people often without being detected advance arguments that are not germane to the subject under treatment and that have nothing in them (and they do this sometimes through ignorance and sometimes from charlatanry), which bring it about that even men of

experience and practical capacity are taken in by these people, who neither possess nor are capable of constructive or practical thought. And this befalls them owing to lack of education — for in respect of each subject inability to distinguish arguments germane to the subject from those foreign to it is lack of education. And it is also well to judge separately the statement of the cause and the demonstrated fact, both for the reason stated just now, that it is not proper in regard to all things to attend to theoretical arguments, but often rather to the facts of observation (whereas now when men are unable to refute an argument they are forced to believe what has been said), and also because often, although the result that seems to have been proved by the arguments is true, it is not true because of the cause asserted in the argument. For it is possible to prove truth by falsehood, as is clear from *Analytics* .

These prefatory remarks having also been made, let us proceed by starting first from the first statements, which, as has been said, are not clearly expressed, afterwards seeking to discover clearly the essential nature of happiness. Now it is agreed that happiness is the greatest and best of human goods (and we say ‘human’ because there might very likely also be a happiness belonging to some higher being, for instance a god); since none of the other animals, which are inferior in nature to men, share in the designation ‘happy,’ for a horse is not happy, nor is a bird nor a fish nor any other existing thing whose designation does not indicate that it possesses in its nature a share of something divine, but it is by some other mode of participating in things good that one of them has a better life and another a worse.

But the fact that this is so must be considered later. At the present let us say that among things good some are within the range of action for a human being and others are not. And we make this distinction for the reason that some existing things do not participate in change at all, and therefore some good things do not, and these are perhaps in their nature the best things; and some things, though practicable, are only practicable for beings superior to us. And inasmuch as ‘practicable’ has two meanings (for both the Ends for which we act and the actions that we do as means to those Ends have to do with action — for example we class among things practicable both health and wealth and the pursuits that are followed for the sake of health and wealth, healthy exercise and lucrative business), it is clear that happiness must be set down as the best of the things practicable for a human being. [1217b]

We must consider, therefore, what the best is, and in how many senses the term

is used. The answer seems to be principally contained in three views. For it is said that the best of all things is the Absolute Good, and that the Absolute Good is that which has the attributes of being the first of goods and of being by its presence the cause to the other goods of their being good; and both of these attributes, it is said, belong to the Form of good (I mean both being the first of goods and being by its presence the cause to the other goods of their being good), since it is of that Form that goodness is most truly predicated (inasmuch as the other goods are good by participation in and resemblance to the Form of good) and also it is the first of goods, for the destruction of that which is participated in involves the destruction of the things participating in the Form (which get their designation by participating in it), and that is the relation existing between what is primary and what is subsequent; so that the Form of good is the Absolute Good, inasmuch as the Form of good is separable from the things that participate in it, as are the other Forms also.

Now a thorough examination of this opinion belongs to another course of study, and one that for the most part necessarily lies more in the field of Logic, for that is the only science dealing with arguments that are at the same time destructive and general. But if we are to speak about it concisely, we say that in the first place to assert the existence of a Form not only of good but of anything else is an expression of logic and a mere abstraction (but this has been considered in various ways both in extraneous discourses and in those on philosophical lines); next, even granting that Forms and the Form of good exist in the fullest sense, surely this is of no practical value for the good life or for conduct.

For 'good' has many senses, in fact as many as 'being.' For the term 'is,' as it has been analyzed in other works, signifies now substance, now quality, now quantity, now time, and in addition to these meanings it consists now in undergoing change and now in causing it; and the good is found in each of these cases — in essence, as mind and God, in quality justice, in quantity moderation, in time opportunity, and as instances of change, the teacher and the taught. Therefore, just as being is not some one thing in respect of the categories mentioned, so neither is the good, and there is no one science either of the real or of the good. But also even the goods predicated in the same category, for example opportunity or moderation, do not fall within the province of a single science to study, but different sorts of opportunity and of moderation are studied by different sciences, for instance opportunity and moderation in respect of food are studied by medicine and gymnastics, in respect of military operations by strategics, and similarly in respect of another pursuit by another science; so that

it can hardly be the case that the Absolute Good is the subject of only one science. [1218a]

Again, wherever there is a sequence of factors, a prior and a subsequent, there is not some common element beside these factors and that element separable; for then there would be something prior to the first in the series, for the common and separable term would be prior because when the common element was destroyed the first factor would be destroyed. For example, if double is the first of the multiples, the multiplicity predicated of them in common cannot exist as a separable thing, for then it will be prior to double, if it is the case that the common element is the Form, as it would be if one were to make the common element separable: for if justice is a good, and courage, there is then, they say, a Good-in-itself, so the term 'in itself' is added to the common definition. But what could this denote except that the good is eternal and separable? Yet a thing that is white for days is no more white than a thing that is white for one day, so that the good is no more good by being eternal; nor yet therefore is the common good the same as the Form, for it is the common property of all the goods.

Also the proper method of proving the Absolute Good is the contrary of the method now adopted. At present it is from things not admitted to possess goodness that they prove the things admitted to be good, for instance, they prove from numbers that justice and health are good, because they are arrangements and numbers — on the assumption that goodness is a property of numbers and monads because the Absolute Good is unity. But the proper method is to start from things admitted to be good, for instance health, strength, sobriety of mind, and prove that beauty is present even more in the unchanging; for all these admitted goods consist in order and rest, and therefore, if that is so, the things unchanging are good in an even greater degree, for they possess order and rest in a greater degree. — And it is a hazardous way of proving that the Absolute Good is unity to say that numbers aim at unity; for it is not clearly stated how they aim at it, but the expression is used in too unqualified a manner; and how can one suppose that things not possessing life can have appetite? One ought to study this matter carefully, and not make an unreasoned assumption about something as to which it is not easy to attain certainty even with the aid of reason. — And the statement that all existing things desire some one good is not true; each thing seeks its own particular good, the eye sight, the body health, and similarly another thing another good.

Such then are the difficulties indicating that the Absolute Good does not exist,

— and that it is of no use for political science, but that this has a special good of its own, as have the other sciences also — for instance the good of gymnastics is good bodily condition.

Further there is also what has been written in the discourse: either the Class-form of the good is in itself useful to no science, or it is useful to all alike.

Further it is not practicable.

And similarly the good as universal also is not an Absolute Good [1218b] (for universality might be an attribute of even a small good), and also it is not practicable; for medical science does not study how to procure an attribute that belongs to anything, but how to procure health, and similarly also each of the other practical sciences. But ‘good’ has many meanings, and there is a part of it that is beautiful, and one form of it is practicable but another is not. The sort of good that is practicable is that which is an object aimed at, but the good in things unchangeable is not practicable. It is manifest, therefore, that the Absolute Good we are looking for is not the Form of good, nor yet the good as universal, for the Form is unchangeable and impracticable, and the universal good though changeable is not practicable. But the object aimed at as End is the chief good, and is the cause of the subordinate goods and first of all; so that the Absolute Good would be this — the End of the goods practicable for man. And this is the good that comes under the supreme of all the practical sciences, which is Politics and Economics and Wisdom; for these states of character differ from the others in the fact that they are supreme (whether they differ at all from one another must be discussed later on). And that the End stands in a causal relation to the means subordinate to it is shown by the method of teachers; they prove that the various means are each good by first defining the End, because the End aimed at is a cause: for example, since to be in health is so-and-so, what contributes to health must necessarily be so-and-so; the wholesome is the efficient cause of health, though only the cause of its existing — it is not the cause of health’s being a good. Furthermore nobody proves that health is a good (unless he is a sophist and not a physician — it is sophists that juggle with irrelevant arguments), any more than he proves any other first principle.

After this we must take a fresh starting-point and consider, in regard to the good as End for man and in regard to the best of practicable goods, how many senses there are of the term ‘best of all,’ since this is best.



## BOOK II

After this we must take a fresh starting-point and discuss the subjects that follow.

Now all goods are either external or within the spirit, and of these two kinds the latter are preferable, as we class them even in the extraneous discourses. For Wisdom and Goodness and Pleasure are in the spirit, and either some or all of these are thought by everybody to be an End. And the contents of the spirit are in two groups, one states or faculties, the other activities and processes.

Let these assumptions, then, be made, and let it be assumed as to Goodness that it is the best disposition or state or faculty of each class of things that have some use or work. [1219a] This is clear from induction, for we posit this in all cases: for instance, there is a goodness that belongs to a coat, for a coat has a particular function and use, and the best state of a coat is its goodness; and similarly with a ship and a house and the rest. So that the same is true also of the spirit, for it has a work of its own. And therefore let us assume that the better the state is the better is the work of that state, and that as states stand in relation to one another so do the works that result from them. And the work of each thing is its End; from this, therefore, it is plain that the work is a greater good than the state, for the End is the best as being an End, since the greatest good is assumed as an End and as the ultimate object for the sake of which all the other things exist. It is clear, therefore, that the work is a greater good than the state and disposition. But the term 'work' has two meanings; for some things have a work that is something different from the employment of them, for instance the work of architecture is a house, not the act of building, that of medicine health, not the process of healing or curing, whereas with other things their work is the process of using them, for instance the work of sight is the act of seeing, that of mathematical science the contemplation of mathematical truths. So it follows that with the things whose work is the employment of them, the act of employing them must be of more value than the state of possessing them.

And these points having been decided in this way, we say that the same work belongs to a thing and to its goodness (although not in the same way): for example, a shoe is the work of the art of shoemaking and of the act of shoemaking; so if there is such a thing as shoemaking goodness and a good shoemaker, their work is a good shoe; and in the same way in the case of the

other arts also.

Again, let us grant that the work of the spirit is to cause life, and that being alive is employment and being awake (for sleep is a kind of inactivity and rest); with the consequence that since the work of the spirit and that of its goodness are necessarily one and the same, the work of goodness would be good life. Therefore this is the perfect good, which as we saw is happiness. And it is clear from the assumptions laid down (for we said that happiness is the greatest good and that the Ends or the greatest of goods are in the spirit, but things in the spirit are either a state or an activity) that, since an activity is a better thing than a disposition and the best activity than the best state, and since goodness is the best state, the activity of goodness is the spirit's greatest good. But also we saw that the greatest good is happiness. Therefore happiness is the activity of a good spirit. And since we saw that happiness is something perfect, and life is either perfect or imperfect, and the same with goodness (for some goodness is a whole and some a part), but the activity of imperfect things is imperfect, it would follow that happiness is an activity of perfect life in accordance with perfect goodness.

And that our classification and definition of it are correct is evidenced by opinions that we all hold. [1219b] For we think that to do well and live well are the same as to be happy; but each of these, both life and action, is employment and activity, inasmuch as active life involves employing things — the coppersmith makes a bridle, but the horseman uses it. There is also the evidence of the opinion that a person is not happy for one day only, and that a child is not happy, nor any period of life (hence also Solon's advice holds good, not to call a man happy while he is alive, but only when he has reached the end), for nothing incomplete is happy, since it is not a whole. And again, there are the praises given to goodness on account of its deeds, and panegyrics describing deeds (and it is the victorious who are given wreaths, not those who are capable of winning but do not win); and there is the fact that we judge a man's character from his actions. Also why is happiness not praised? It is because it is on account of it that the other things are praised, either by being placed in relation to it or as being parts of it. Hence felicitation, praise and panegyric are different things: panegyric is a recital of a particular exploit, praise a statement of a man's general distinction, felicitation is bestowed on an end achieved. From these considerations light is also thrown on the question sometimes raised — what is the precise reason why the virtuous are for half their lives no better than the base, since all men are alike when asleep? The reason is that sleep is inaction of

the spirit, not an activity. Hence the goodness of any other part of the spirit, for instance the nutritive, is not a portion of goodness as a whole, just as also goodness of the body is not; for the nutritive part functions more actively in sleep, where as the sensory and appetitive parts are ineffective in sleep. But even the imaginations of the virtuous, so far as the imaginative faculty participates in any mode of motion, are better than those of the base, provided they are not perverted by disease or mutilation.

Next we must study the spirit; for goodness is a property of the spirit, it is not accidental. And since it is human goodness that we are investigating, let us begin by positing that the spirit has two parts that partake of reason, but that they do not both partake of reason in the same manner, but one of them by having by nature the capacity to give orders, and the other to obey and listen (let us leave out any part that is irrational in another way). And it makes no difference whether the spirit is divisible or is undivided yet possessed of different capacities, namely those mentioned, just as the concave and convex sides in a curve are inseparable, and the straightness and whiteness in a straight white line, although a straight thing is not white except accidentally and not by its own essence. And we have also abstracted any other part of the spirit that there may be, for instance the factor of growth; for the parts that we have mentioned are the special properties of the human spirit, and hence the excellences of the part dealing with nutrition and growth are not the special property of a man, for necessarily, if considered as a man, he must possess a reasoning faculty for a principle and with a view to conduct, [1220a] and the reasoning faculty is a principle controlling not reasoning but appetite and passions; therefore he must necessarily possess those parts. And just as a good constitution consists of the separate excellences of the parts of the body, so also the goodness of the spirit, as being an End, is composed of the separate virtues.

And goodness has two forms, moral virtue and intellectual excellence; for we praise not only the just but also the intelligent and the wise. For we assumed that what is praiseworthy is either goodness or its work, and these are not activities but possess activities. And since the intellectual excellences involve reason, these forms of goodness belong to the rational part, which as having reason is in command of the spirit; whereas the moral virtues belong to the part that is irrational but by nature capable of following the rational — for in stating a man's moral qualities we do not say that he is wise or clever but that he is gentle or rash.

After this we must first consider Moral Goodness — its essence and the nature of its divisions (for that is the subject now arrived at), and the means by which it is produced. Our method of inquiry then must be that employed by all people in other matters when they have something in hand to start with — we must endeavor by means of statements that are true but not clearly expressed to arrive at a result that is both true and clear. For our present state is as if we knew that health is the best disposition of the body and that Coriscus is the darkest man in the market-place; for that is not to know what health is and who Coriscus is, but nevertheless to be in that state is a help towards knowing each of these things. — Then let it first be taken as granted that the best disposition is produced by the best means, and that the best actions in each department of conduct result from the excellences belonging to each department — for example, it is the best exercises and food that produce a good condition of body, and a good condition of body enables men to do the best work; further, that every disposition is both produced and destroyed by the same things applied in a certain manner, for example health by food and exercises and climate; these points are clear from induction. Therefore goodness too is the sort of disposition that is created by the best movements in the spirit and is also the source of the production of the spirit's best actions and emotions; and it is in one way produced and in another way destroyed by the same things, and its employment of the things that cause both its increase and its destruction is directed towards the things towards which it creates the best disposition. And this is indicated by the fact that both goodness and badness have to do with things pleasant and painful; for punishments, which are medicines, and which as is the case with other cures operate by means of opposites, operate by means of pleasures and pains.

It is clear, therefore, that Moral Goodness has to do with pleasures and pains. And since moral character is, [1220b] as even its name implies that it has its growth from habit, and by our often moving in a certain way a habit not innate in us is finally trained to be operative in that way (which we do not observe in inanimate objects, for not even if you throw a stone upwards ten thousand times will it ever rise upward unless under the operation of force) — let moral character then be defined as a quality of the spirit in accordance with governing reason that is capable of following the reason. We have then to say what is the part of the spirit in respect of which our moral characters are of a certain quality. And it will be in respect of our faculties for emotions according to which people are termed liable to some emotion, and also of the states of character according to which people receive certain designations in respect of the emotions, because of their experiencing or being exempt from some form of emotion.

After this comes the classification, made in previous discussions, of the modes of emotion, the faculties and the states of character. By emotions I mean such things as anger, fear, shame, desire, and generally those experiences that are in themselves usually accompanied by sensory pleasure or pain. And to these there is no quality corresponding [but they are passive]. But quality corresponds to the faculties: by faculties I mean the properties acting by which persons are designated by the names of the various emotions, for instance choleric, insensitive, erotic, bashful, shameless. States of character are the states that cause the emotions to be present either rationally or the opposite: for example courage, sobriety of mind, cowardice, profligacy.

These distinctions having been established, it must be grasped that in every continuum that is divisible there is excess and deficiency and a mean, and these either in relation to one another or in relation to us, for instance in gymnastics or medicine or architecture or navigation, and in any practical pursuit of whatever sort, both scientific and unscientific, both technical and untechnical; for motion is a continuum, and conduct is a motion. And in all things the mean in relation to us is the best, for that is as knowledge and reason bid. And everywhere this also produces the best state. This is proved by induction and reason: contraries are mutually destructive, and extremes are contrary both to each other and to the mean, as the mean is either extreme in relation to the other — for example the equal is greater than the less and less than the greater. Hence moral goodness must be concerned with certain means and must be a middle state. We must, therefore, ascertain what sort of middle state is goodness and with what sort of means it is concerned. Let each then be taken by way of illustration and studied with the help of the schedule:

Irascibility

Spiritlessness

Gentleness

Rashness

Cowardice

Courage

[1221a]

Shamelessness

Diffidence

Modesty

Profligacy

Insensitiveness

Temperance

Envy

(nameless )

Righteous Indignation

Profit

Loss

The Just

Prodigality

Meanness

Liberality

Boastfulness

Self-depreciation

Sincerity

Flattery

Surliness

Friendliness

Subservience

Stubbornness

Dignity

Luxuriousness

Endurance

-- ..

Hardiness

Vanity

Smallness of Spirit

Greatness of Spirit

Extravagance

Shabbiness

Magnificence

Rascality

Simpleness

Wisdom.

These and such as these are the emotions that the spirit experiences, and they are all designated from being either excessive or defective. The man that gets angry more and more quickly and with more people than he ought is irascible, he that in respect of persons and occasions and manner is deficient in anger is insensitive; the man that is not afraid of things of which he ought to be afraid, nor when nor as he ought, is rash, he that is afraid of things of which he ought not to be afraid, and when and as he ought not to be, is cowardly. Similarly also one that is a prey to his desires and that exceeds in everything possible is profligate, and one that is deficient and does not desire even to a proper degree



and in a natural way, but is as devoid of feeling as a stone, is insensitive. The man that seeks gain from every source is a profiteer, and he that seeks gain if not from no source, yet from few, is a waster. He that pretends to have more possessions than he really has is a boaster, and he that pretends to have fewer is a self-depreciator. One that joins in approval more than is fitting is a flatterer, one that does so less than is fitting is surly. To be too complaisant is subservience; to be complaisant seldom and reluctantly is stubbornness. Again, the man that endures no pain, not even if it is good for him, is luxurious; one that can endure all pain alike is strictly speaking nameless, but by metaphor he is called hard, patient or enduring. He that rates himself too high is vain, he that rates himself too low, small-spirited. Again, he that exceeds in all expenditure is prodigal, he that falls short in all, mean. Similarly the shabby man and the swaggerer — the latter exceeds what is fitting and the former falls below it. The rascal grasps profit by every means and from every source, the simpleton does not make profit even from the proper sources. Envy consists in being annoyed at prosperity more often than one ought to be, for the envious are annoyed by the prosperity even of those who deserve to prosper; the opposite character is less definitely named, [1221b] but it is the man that goes too far in not being annoyed even at the prosperity of the undeserving, and is easy going, as gluttons are in regard to food, whereas his opposite is difficult-tempered in respect of jealousy. — It is superfluous to state in the definition that the specified relation to each thing must not be accidental; no science whether theoretical or productive makes this addition to the definition either in discourse or in practice, but this addition is aimed against the logical quibbling of the sciences. Let us then accept these simple definitions, and let us make them more precise when we are speaking about the opposite dispositions. But these modes of emotion themselves are divided into species designated according to their difference in respect of time or intensity or in regard to one of the objects that cause the emotions. I mean for instance that a man is called quick-tempered from feeling the emotion of anger sooner than he ought, harsh and passionate from feeling it more than he ought, bitter from having a tendency to cherish his anger, violent and abusive owing to the acts of retaliation to which his anger gives rise. Men are called gourmands or gluttons and drunkards from having an irrational liability to indulgence in one or the other sort of nutriment.

But it must not be ignored that some of the vices mentioned cannot be classed under the heading of manner, if manner is taken to be feeling the emotion to excess. For example, a man is not an adulterer because he exceeds in intercourse with married women, for ‘excess’ does not apply here, but adultery merely in

itself is a vice, since the term denoting the passion implicitly denotes that the man is vicious; and similarly with outrage. Hence men dispute the charge, and admit intercourse but deny adultery on the ground of having acted in ignorance or under compulsion, or admit striking a blow but deny committing an outrage; and similarly in meeting the other charges of the same kind.

These points having been taken, we must next say that since the spirit has two parts, and the virtues are divided between them, one set being those of the rational part, intellectual virtues, whose work is truth, whether about the nature of a thing or about its mode of production, while the other set belongs to the part that is irrational but possesses appetite (for if the spirit is divided into parts, not any and every part possesses appetite), it therefore follows that the moral character is vicious or virtuous by reason of pursuing or avoiding certain pleasures and pains. This is clear from the classification of the emotions, faculties and states of character. For the faculties and the states are concerned with the modes of emotion, and the emotions are distinguished by pain and pleasure; so that it follows from these considerations as well as from the positions already laid down that all moral goodness is concerned with pleasures and pains. For our state of character is related to and concerned with such things as have the property of making every person's spirit worse and better. [1222a] But we say that men are wicked owing to pleasures and pains, through pursuing and avoiding the wrong ones or in the wrong way. Hence all men readily define the virtues as insensitiveness or tranquillity in regard to pleasures and pains, and the vices by the opposite qualities.

But since it has been assumed that goodness is a state of character of a sort that causes men to be capable of doing the best actions and gives them the best disposition in regard to the greatest good, and the best and greatest good is that which is in accordance with right principle, and this is the mean between excess and deficiency relative to ourselves, it would necessarily follow that moral goodness corresponds with each particular middle state and is concerned with certain mean points in pleasures and pains and pleasant and painful things. And this middle state will sometimes be in pleasures (for even in these there is excess and deficiency), sometimes in pains, sometimes in both. For he that exceeds in feeling delight exceeds in the pleasant, and he that exceeds in feeling pain exceeds in the opposite — and this whether his feelings are excessive absolutely or excessive in relation to some standard, for instance are felt more than ordinary men feel them; whereas the good man feels in the proper way. — And since there is a certain state of character which results in its possessor's being in one

instance such as to accept an excess and in another such as to accept a deficiency of the same thing, it follows that as these actions are contrary to each other and to the mean, so also the states of character that cause them are contrary to each other and to virtue.

It comes about, however, that sometimes all the oppositions are more evident, sometimes those on the side of excess, in some cases those on the side of deficiency. The cause of this contrariety is that the resemblance does not always reach the same point of inequality in regard to the middle, but sometimes it may pass over more quickly from the excess, sometimes from the deficiency, to the middle state, the person farther removed from which seems to be more contrary: for instance, with regard to the body excess is more healthy and nearer the middle than deficiency in the case of exercises but deficiency than excess in the case of food. Consequently the states of will favorable to athletic training will be variously favorable to health according to the two different fields of choice — in the one case the over-energetic men <will be nearer the mean than the slack ones>, in the other the too hardy <will be nearer the mean than the self-indulgent ones>; and also the character contrary to the moderate and rational will be in the one case the slack and not both the slack and the over-energetic, and in the other case the self-indulgent and not the man who goes hungry. And this comes about because from the start our nature does not diverge from the mean in the same way as regards everything, but in energy we are deficient and in self-indulgence excessive, and this is also the same with regard the spirit. And we class as contrary to the mean the disposition to which we, and most men, are more liable to err; whereas the other passes unnoticed as if non-existent, because its rarity makes it not observed. For instance we count anger the contrary of gentleness and the passionate man the contrary of the gentle; [1222b] yet there is also excess in the direction of being gentle and placable and not being angry when struck, but men of that sort are few, and everyone is more prone to the other extreme; on which account moreover a passionate temper is not a characteristic of a toady.

And since we have dealt with the scheme of states of character in respect of the various emotions in which there are excesses and deficiencies, and of the opposite states in accordance with which men are disposed in accordance with right principle (though the question what is the right principle and what rule is to guide us in defining the mean must be considered later), it is evident that all the forms of moral goodness and badness have to do with excesses and deficiencies of pleasures and pains, and that pleasures and pains result from the states of

character and modes of emotion mentioned. But then the best state in relation to each class of thing is the middle state. It is clear, therefore, that the virtues will be either all or some of these middle states.

Let us, therefore, take another starting-point for the ensuing inquiry. Now all essences are by nature first principles of a certain kind, owing to which each is able to generate many things of the same sort as itself, for example a man engenders men, and in general an animal animals, and a plant plants. And in addition to this, obviously man alone among animals initiates certain conduct — for we should not ascribe conduct to any of the others. And the first principles of that sort, which are the first source of motions, are called first principles in the strict sense, and most rightly those that have necessary results; doubtless God is a ruling principle that acts in this way. But the strict sense of ‘first principle’ is not found in first principles incapable of movement, for example those of mathematics, although the term is indeed used of them by analogy, for in mathematics if the first principle were changed virtually all the things proved from it would change, though they do not change owing to themselves, one being destroyed by the other, except by destroying the assumption and thereby establishing a proof. But man is a first principle of a certain motion, for action is motion. And since as in other matters the first principle is a cause of the things that exist or come into existence because of it, we must think as we do in the case of demonstrations. For example, if as the angles of a triangle are together equal to two right angles the angles of a quadrilateral are necessarily equal to four right angles, that the angles of a triangle are equal to two right angles is clearly the cause of that fact; and supposing a triangle were to change, a quadrilateral would necessarily change too — for example if the angles of a triangle became equal to three right angles, the angles of a quadrilateral would become equal to six right angles, or if four, eight; also if a triangle does not change but is as described, a quadrilateral too must of necessity be as described.

The necessity of what we are arguing is clear from *Analytics* ; at present we cannot either deny or affirm anything definitely except just this. Supposing there were no further cause of the triangle’s having the property stated, then the triangle would be a sort of first principle or cause of the later stages. Hence if in fact there are among existing things some that admit of the opposite state, their first principles also must necessarily have the same quality; [1223a] for of things that are of necessity the result is necessary, albeit the subsequent stages may possibly happen in the opposite way. And the things that depend on men themselves in many cases belong to this class of variables, and men are

themselves the first principle of things of this sort. Hence it is clear that all the actions of which a man is the first principle and controller may either happen or not happen, and that it depends on himself for them to happen or not, as he controls their existence or non-existence. But of things which it depends on him to do or not to do he is himself the cause, and what he is the cause of depends on himself. And since goodness and badness and the actions that spring from them are in some cases praiseworthy and in other cases blameworthy (for praise and blame are not given to things that we possess from necessity or fortune or nature but to things of which we ourselves are the cause, since for things of which another person is the cause, that person has the blame and the praise), it is clear that both goodness and badness have to do with things where a man is himself the cause and origin of his actions. We must, then, ascertain what is the kind of actions of which a man is himself the cause and origin. Now we all agree that each man is the cause of all those acts that are voluntary and purposive for him individually, and that he is not himself the cause of those that are involuntary. And clearly he commits voluntarily all the acts that he commits purposely. It is clear, then, that both goodness and badness will be in the class of things voluntary.

We must, therefore, ascertain what voluntary and involuntary mean, and what is purposive choice, since they enter into the definition of goodness and badness. And first we must consider the meaning of voluntary and involuntary. Now they would seem to refer to one of three things — conformity with appetite, or with purposive choice, or with thought: voluntary is what conforms with one of these and involuntary is what contravenes one of them. But moreover there are three subdivisions of appetite — wish, passion and desire; so that we have to distinguish these. And first we must consider conformity with desire.

It would seem that everything that conforms with desire is voluntary. For everything involuntary seems to be forced, and what is forced and everything that people do or suffer under necessity is painful, as indeed Evenus says: “For all necessity doth cause distress —

“ Evenus of Paros = Theog. 472 so that if a thing is painful it is forced and if a thing is forced it is painful; but everything contrary to desire is painful (for desire is for what is pleasant), so that it is forced and involuntary. Therefore what conforms with desire is voluntary, for things contrary to and things in conformity with desire are opposite to one another. Again, all wickedness makes a man more unrighteous, and lack of self-control seems to be wickedness; and

the uncontrolled man is the sort of man to act in conformity with desire contrary to calculation, and he shows his lack of control when his conduct is guided by desire; [1223b] so that the uncontrolled man will act unrighteously by acting in conformity with desire. But unrighteous action is voluntary. Therefore he will be acting voluntarily, and action guided by desire is voluntary. Indeed it would be strange if those who become uncontrolled will be more righteous. — From these considerations, then, it would appear that what is in conformity with desire is voluntary; and from this the opposite follows, for all that a man does voluntarily he wishes to do, and what he wishes to do he does voluntarily, but nobody wishes what he thinks to be bad. But yet the uncontrolled man does not do what he wishes, for being uncontrolled means acting against what one thinks to be best owing to desire; hence it will come about that the same person is acting voluntarily and involuntarily at the same time. But this is impossible. And further, the self-controlled man will act righteously, or more righteously than lack of control will; for self-control is goodness, and goodness makes men more righteous. And a man exercises self-control when he acts against his desire in conformity with rational calculation. So that if righteous action is voluntary, as also unrighteous action (for both of these seem to be voluntary, and if one of them is voluntary it follows of necessity that the other is also), whereas what is contrary to desire is involuntary, it therefore follows that the same person will do the same action voluntarily and involuntarily at the same time.

The same argument applies also in the case of passion; for there appear to be control and lack of control of passion as well as of desire and what is contrary to passion is painful and restraint is a matter of force, so that if what is forced is involuntary, what is in accordance with passion will always be voluntary. Even Heraclitus seems to have in view the strength of passion when he remarks that the checking of passion is painful; for 'It is difficult (he says) to do battle with passion, for it buys its wish at the price of life.' And if it is impossible to do the same act voluntarily and involuntarily at the same time and in respect of the same part of the act, action guided by one's wish is more voluntary than action guided by desire or passion. And a proof of this is that we do many things voluntarily without anger or desire.

It remains, therefore, to consider whether acting as we wish and acting voluntarily are the same. This also seems impossible. For it is a fundamental assumption with us, and a general opinion, that wickedness makes men more unrighteous; and lack of self-control seems to be a sort of wickedness. But from the hypothesis that acting as we wish and acting voluntarily are the same the

opposite will result; for nobody wishes things that he thinks to be bad, yet he does them when he has become uncontrolled, so if to do injustice is voluntary and the voluntary is what is in accordance with one's wish, then when a man has become uncontrolled he will no longer be acting unjustly but will be more just than he was before he lost control of himself. But this is impossible. Therefore it is clear that acting voluntarily does not mean acting in accordance with appetite nor acting involuntarily acting in opposition to appetite.

Also it is clear from the following considerations that voluntary action does not mean acting in accordance with purposive choice. It was proved that acting in accordance with one's wish is not acting involuntarily, [1224a] but rather everything that one wishes is also voluntary — it has only been proved that it is possible to do a thing voluntarily without wishing; but many things that we wish we do suddenly, whereas nobody makes a purposive choice suddenly.

But if as we said the voluntary must necessarily be one of three things — what is in conformity with appetite, or with purposive choice, or with thought — , and if it is not the two former, it remains that voluntariness consists in acting with some kind of thought. Moreover, let us put a conclusion to our delimitation of the voluntary and involuntary by carrying the thought argument a little further. Acting under compulsion and not under compulsion seem to be terms akin to the ones mentioned; for we say that everything forced is involuntary and everything involuntary is forced. So we must first consider the exact meaning of 'forced,' and how what is forced is related to the voluntary and involuntary. It seems, then, that in the sphere of conduct 'forced' or 'necessary,' and force or necessity, are the opposite of 'voluntary,' and of persuasion. And we employ the terms force and necessity in a general sense even in the case of inanimate objects: we say that a stone travels upwards and fire downwards by force and under necessity, whereas when they travel according to their natural and intrinsic impulse we say that they do not move under force — although nevertheless they are not spoken of as moving voluntarily: the state opposite to forced motion has no name, but when they travel contrary to their natural impulse we say that they move by force. Similarly also in the case of living things and of animals, we see many being acted on by force, and also acting under force when something moves them from outside, contrary to the impulse within the thing itself. In inanimate things the moving principle is simple, but in living things it is multiple, for appetite and rational principle are not always in harmony. Hence whereas in the case of the other animals the factor of force is simple, as it is in the case of inanimate objects, for animals do not possess rational principle and

appetition in opposition to it, but live by their appetite, in man both forms of force are present — that is, at a certain age, the age to which we attribute action in the proper sense; for we do not speak of a child as acting, any more than a wild animal, but only a person who has attained to acting by rational calculation. So what is forced always seems to be painful, and no one acting under force acts gladly. Consequently there is a great deal of dispute about the self-controlled man and the uncontrolled. For each of them acts under a conflict of impulses within him, so that the self-controlled man, they say, acts under force in dragging himself away from the pleasures that he covets (for he feels pain in dragging himself away against the resistance of appetite), while the uncontrolled man acts under force in going contrary to his rational faculty. But he seems to feel less pain, because desire is for what is pleasant, and he follows his desire; so that the uncontrolled man rather acts voluntarily and not under force, because not painfully. On the other hand persuasion is thought to be the opposite of force and necessity; and the self-controlled man is led towards things that he has been persuaded to pursue, and proceeds not under force but voluntarily; [1224b] whereas desire leads a man on without employing persuasion, since it possesses no element of rational principle. It has, then, been stated that these men only seem to act under force and involuntarily; and we have shown the reason — it is because their action has a certain resemblance to forced action, just as we speak of forced action even in the case of inanimate objects too. Yet nevertheless if one added there also the addition made in our definition, the statement is refuted. For we speak of a thing as being forced to act when something external moves it or brings it to rest, acting against the impulse within the thing itself — when there is no external motive, we do not say that it acts under force; and in the uncontrolled man and the self-controlled it is the impulse present in the man himself that drives him (for he has both impulses), so that as far as these considerations go neither of them would be acting under force, but voluntarily; nor yet are they acting of necessity, for by necessity we mean an external principle that either checks or moves a man in opposition to his impulse — as if A were to take hold of B's hand and with it strike C, B's will and desire both resisting; whereas when the source of action is from within, we do not speak of the act as done under force. Again, both pleasure and pain are present in both cases; for a man exercising self-control both feels pain when he finally acts in opposition to his desire and enjoys the pleasure of hoping that he will be benefited later on, or is even being benefited already, by being in good health; and the uncontrolled man enjoys getting what he desires owing to his lack of self-control, but feels prospective pain because he thinks he is doing a bad thing. Hence it is reasonable to say that each does what he does under



compulsion, and that each is at one point acting involuntarily, from motives both of appetite and of rational calculation — for calculation and appetite are things quite separate, and each is pushed aside by the other. Hence men transfer this to the spirit as a whole, because they see something of this sort in the experiences of the spirit. Now it is admissible to say this in the case of the parts, but the spirit as a whole both in the uncontrolled and in the self-controlled man acts voluntarily, and in neither case does the man act under compulsion, but one of the parts in them so acts — for we possess by nature both parts; since rational principle is a natural property, because it will be present in us if our growth is allowed and not stunted, and also desire is natural, because it accompanies and is present in us from birth; and these are pretty nearly the two things by which we define the natural — it is what accompanies everybody as soon as he is born, or else what comes to us if development is allowed to go on regularly, for example grey hair, old age, *etc.* Therefore each of the two persons in a way acts not in accordance with nature, but absolutely each does act according to nature, though not according to the same nature. The difficulties, then, raised about the uncontrolled and the self-controlled man are these: do both, or does one of them, act under compulsion, so that they either act not voluntarily or else voluntarily and under compulsion at the same time — and if what is done under compulsion is involuntary, act voluntarily and involuntarily at the same time? And it is fairly clear from what has been said how these difficulties are to be met. [1225a]

But there is another way in which people are said to act under compulsion and of necessity without disagreement between rational principle and appetite, when they do something that they consider actually painful and bad but they are faced by flogging or imprisonment or execution if they do not do it; for in these cases they say that they are acting under necessity. Possibly, however, this is not the case, but they all do the actual deeds willingly, since it is open to them not to do them but to endure the penalty threatened. Moreover, perhaps someone might say that in some cases these actions are done of necessity and in others not. For in cases where the presence or absence of such circumstances depends on the agent himself, even the actions that he does without wishing to do them he does willingly and not under compulsion; but where in such cases the circumstances do not rest with himself, he acts under compulsion in a sense, though not indeed under compulsion absolutely, because he does not definitely choose the actual thing that he does but the object for which he does it; since even in the objects of action there is a certain difference. For if someone were to kill a man to prevent his catching him by groping for him, it would be ridiculous for him to say that he had done it under compulsion and of necessity — there must be some greater

and more painful evil that he will suffer if he does not do it. It is when a man does something evil for the sake of something good, or for deliverance from another evil, that he will be acting under necessity and by compulsion, or at all events not by nature; and then he will really be acting unwillingly, for these actions do not rest with himself. On this account many reckon even love as involuntary, and some forms of anger, and natural impulses, because their power is even beyond nature; and we pardon them as naturally capable of constraining nature. And it would be thought that a man is acting more under compulsion and involuntarily when his object is to avoid violent pain than when it is to avoid mild pain, and in general more when his object is the avoidance of pain than when it is to gain enjoyment. For what rests with himself — and it wholly turns on this — means what his nature is able to bear; what his nature is not able to bear and what is not a matter of his own natural appetite or calculation does not rest with himself. On this account also in the case of persons who are inspired and utter prophecies, although they perform an act of thought, nevertheless we do not say that saying what they said and doing what they did rested with themselves. Nor yet do we say that what men do because of desire rests with themselves; so that some thoughts and emotions, or the actions that are guided by such thoughts and calculations, do not rest with ourselves, but it is as Philolaus said—'some arguments are too strong for us.' Hence if it was necessary to consider the voluntary and involuntary with reference also to acting under compulsion, let this be our decision of the matter (for those who cause most hindrance . . . the voluntary . . . as acting under compulsion, but voluntarily).

Now that this is concluded, and as the voluntary has been found not to be defined by appetite, nor yet by purposive choice, it therefore remains to define it as that which is in accordance with thought. [1225b] Now the voluntary seems to be the opposite of the involuntary; and acting with knowledge of either the person acted on or the instrument or the result (for sometimes the agent knows that it is his father but does not intend to kill him but to save him — as the Peliads did — or knows that what he is offering is a drink but offers it as a love-charm or wine, when really it is hemlock) seems to be the opposite of acting without knowing the person acted on, the instrument and the nature of the act, through ignorance and not by accident. But to act through ignorance of the act, the means and the person acted on is involuntary action. Therefore the opposite is voluntary. It follows then that all the things that a man does not in ignorance, and through his own agency, when it is in his power not to do them, are voluntary acts, and it is in this that the voluntary consists; and all the things that

he does in ignorance, and through being in ignorance, he does involuntarily. But since to understand or know has two meanings, one being to have the knowledge and the other to use it, a man who has knowledge but is not using it would in one case be justly described as acting in ignorance but in another case unjustly — namely, if his non-employment of the knowledge were due to carelessness. And similarly one would be blamed for not having the knowledge, if it were something that was easy or necessary and his not having it is due to carelessness or pleasure or pain. These points therefore must be added to our definition. Let this, then, be our mode of definition about the voluntary and involuntary.

Next let us speak about purposive choice, first raising various difficulties about it. For one might doubt to which class it naturally belongs and in what class it ought to be put, and whether the voluntary and the purposely chosen are different things or the same thing. And a view specially put forward from some quarters, which on inquiry may seem correct, is that purposive choice is one of two things, either opinion or appetition; for both are seen to accompany it. Now it is evident that it is not appetition; for in that case it would be either wish or desire or passion, since nobody wants to get a thing without having experienced one of those feelings. Now even animals possess passion and desire, but they do not have purposive choice. And again, beings that possess both of these often make choices even without passion and desire; and while they are experiencing these feelings do not make a choice but hold out. Again, desire and passion are always accompanied by pain, but we often make a choice even without pain. But moreover purposive choice is not the same as wish either; for men wish for some things that they know to be impossible, for instance to be king of all mankind and to be immortal, but nobody purposively chooses a thing knowing it to be impossible, nor in general a thing that, though possible, he does not think in his own power to do or not to do. So that this much is clear — a thing purposively chosen must necessarily be something that rests with oneself. [1226a] And similarly it is manifest that purposive choice is not opinion either, nor something that one simply thinks; for we saw that a thing chosen is something in one's own power, but we have opinions as to many things that do not depend on us, for instance that the diagonal of a square is incommensurable with the side; and again, choice is not true or false. Nor yet is purposive choice an opinion about practicable things within one's own power that makes us think that we ought to do or not to do something; but this characteristic is common to opinion and to wish. For no one purposively chooses any End, but the means to his End — I mean for instance no one chooses to be healthy, but to take a walk or sit down for the sake of being healthy, no one chooses to be well off, but to go into

business or to speculate for the sake of being well off; and generally, one who makes a choice always makes it clear both what his choice is and what its object is, 'object' meaning that for the sake of which he chooses something else and 'choice' meaning that which he chooses for the sake of something else. Whereas clearly it is specially an End that a man wishes, and the feeling that he ought to be healthy and prosperous is an opinion. So these considerations make it clear that purposive choice is different from both opinion and wish. Forming wishes and forming opinions apply specially to one's End; purposive choice is not of Ends.

It is clear, then, that purposive choice is not either wish or opinion or judgement simply; but in what does it differ from them? and how is it related to the voluntary? To answer these questions will make it clear what purposive choice is. Now of things that can both be and not be, some are such that it is possible to deliberate about them, but about others it is not possible. Some things can either be or not be but their coming into being does not rest with us, but in some cases is due to the operation of nature and in others to other causes; and about these things nobody would deliberate unless in ignorance of the facts. But with some things not only their existence or non-existence is possible, but also for human beings to deliberate about them; and these are all the things that it rests with us to do or not to do. Hence we do not deliberate about affairs in India, or about how to square the circle; for affairs in India do not rest with us, whereas the objects of choice and things practicable are among things resting with us, and squaring the circle is entirely impracticable (and thus it is clear that purposive choice is not simply opinion either). But purposive choice does not deal with all the practicable things resting with us either. Hence one might also raise the question, why is it exactly that, whereas doctors deliberate about things in their field of science, scholars do not? The reason is that since error occurs in two ways (for we err either in reasoning, or in perception when actually doing the thing), in medicine it is possible to err in both ways, but in grammar error only occurs in our perception and action, [1226b] to investigate which would be an endless undertaking.

Since then purposive choice is not either opinion nor wish separately, nor yet both (for no one makes a deliberate choice suddenly, but men do suddenly think they ought to act and wish to act), therefore it arises as from both, for both of them are present with a person choosing. But how purposive choice arises out of opinion and wish must be considered. And indeed in a manner the actual term 'choice' makes this clear. 'Choice' is 'taking,' but not taking simply — it is

taking one thing in preference to another; but this cannot be done without consideration and deliberation; hence purposive choice arises out of deliberative opinion.

Now nobody deliberates about his End — this everybody has fixed; but men deliberate about the means leading to their End — does this contribute to it, or does this ? or when a means has been decided on, how will that be procured? and this deliberation as to means we all pursue until we have carried the starting-point in the process of producing the End back to ourselves. If, then, nobody chooses without first preparing, and deliberating as to the comparative merits of the alternatives, and a man deliberates as to those among the means to the End capable of existing or not existing that are within our power, it is clear that purposive choice is deliberative appetite of things within one's power. For we deliberate about everything that we choose, although of course we do not choose everything that we deliberate about. I call appetite deliberative when its origin or cause is deliberation, and when a man desires because of having deliberated. Therefore the faculty of purposive choice is not present in the other animals, nor in man at every age nor in every condition, for no more is the act of deliberation, nor yet the concept of cause: it is quite possible that many men may possess the faculty of forming an opinion whether to do or not to do a thing without also having the power of forming this opinion by process of reasoning. For the deliberative faculty is the spirit's power of contemplating a kind of cause — for one sort of cause is the final cause, as although cause means anything because of which a thing comes about, it is the object of a thing's existence or production that we specially designate as its cause: for instance, if a man walks in order to fetch things, fetching things is the cause of his walking. Consequently people who have no fixed aim are not given to deliberation. Hence inasmuch as if a man of his own accord and not through ignorance does or refrains from doing something resting with himself either to do or not to do, he acts or refrains from acting voluntarily, but yet we do many such things without deliberation or previous thought, it necessarily follows that, although all that has been purposively chosen is voluntary, 'voluntary' is not the same as 'chosen,' and, although all things done by purposive choice are voluntary, not all things voluntary are done by purposive choice. And at the same time it is clear from these considerations that the classification of offences made by legislators as in voluntary, voluntary and premeditated is a good one; [1227a] for even if it is not precisely accurate, yet at all events it approximates to the truth in a way. But we will speak about this in our examination of justice. As to purposive choice, it is clear that it is not absolutely identical with wish nor with opinion, but is opinion

plus appetite when these follow as a conclusion from deliberation.

But since one who deliberates always deliberates for the sake of some object, and a man deliberating always has some aim in view with reference to which he considers what is expedient, nobody deliberates about his End, but this is a starting-point or assumption, like the postulates in the theoretic sciences (we have spoken about this briefly at the beginning of this discourse, and in detail in Analytica ); whereas with all men deliberation whether technical or untechnical is about the means that lead to their End, *e.g.* when they deliberate about whether to go to war or not to go to war with a given person. And the question of means will depend rather on a prior question, that is, the question of object, for instance wealth or pleasure or something else of that kind which happens to be our object. For one who deliberates deliberates if he has considered, from the standpoint of the End, either what tends to enable him to bring the End to himself or how he can himself go to the End. And by nature the End is always a good and a thing about which men deliberate step by step (for example a doctor may deliberate whether he shall give a drug, and a general where he shall pitch his camp) when their End is the good that is the absolute best; but in contravention of nature and by perversion not the good but the apparent good is the End. The reason is that there are some things that cannot be employed for something other than their natural objects, for instance sight — it is not possible to see a thing that is not visible, or to hear a thing that is not audible; but a science does enable us to do a thing that is not the object of the science. For health and disease are not the objects of the same science in the same way: health is its object in accordance with nature, and disease in contravention of nature. And similarly, by nature good is the object of wish, but evil is also its object in contravention of nature; by nature one wishes good, against nature and by perversion one even wishes evil.

But moreover with everything its corruption and perversion are not in any chance direction, but leads to the contrary and intermediate states. For it is not possible to go outside these, since even error does not lead to any chance thing, but, in the case of things that have contraries, to the contraries, and to those contraries that are contrary according to their science. It therefore necessarily follows that both error and purposive choice take place from the middle point to the contraries (the contraries of the middle being the more and the less). — And the cause is pleasure and pain; for things are so constituted that the pleasant appears to the spirit good and the more pleasant better, the painful bad and the more painful worse. [1227b] So from these things also it is clear that goodness

and badness have to do with pleasures and pains; for they occur in connection with the objects of purposive choice, and this has to do with good and bad and what appears to be good and bad, and pleasure and pain are by nature things of that kind.

It therefore follows that since moral goodness is itself a middle state and is entirely concerned with pleasures and pains, and badness consists in excess and defect and is concerned with the same things as goodness, moral goodness or virtue is a state of purposively choosing the mean in relation to ourselves in all those pleasant and painful things in regard to which according as a person feels pleasure or pain he is described as having some particular moral quality (for a person is not said to have a particular moral character merely for being fond of sweets or savories).

These things having been settled, let us say whether goodness makes the purposive choice correct and the End right in the sense of making the agent choose for the sake of the proper End, or whether (as some hold) it makes the rational principle right. But what does this is self-control — for that saves the rational principle from being corrupted; and goodness and self-control are different. But we must speak about this later, since all who do hold that goodness makes the rational principle right think so on the ground that that is the nature of self-control and self-control is a praiseworthy thing. Having raised this preliminary question let us continue. It is possible to have one's aim right but to be entirely wrong in one's means to the end aimed at; and it is possible for the aim to have been wrongly chosen but the means conducing to it to be right; and for neither to be right. But does goodness decide the aim or the means to it? Well, our position is that it decides the aim, because this is not a matter of logical inference or rational principle, but in fact this must be assumed as a starting-point. For a doctor does not consider whether his patient ought to be healthy or not, but whether he ought to take walking exercise or not, and the gymnastic trainer does not consider whether his pupil ought to be in good condition or not, but whether he ought to go in for wrestling or not; and similarly no other science either deliberates about its End. For as in the theoretic sciences the assumptions are first principles, so in the productive sciences the End is a starting-point and assumption: since it is required that so-and-so is to be in good health, if that is to be secured it is necessary for such-and-such a thing to be provided — just as in mathematics, if the angles of a triangle are together equal to two right angles, such and such a consequence necessarily follows. Therefore the End is the starting-point of the process of thought, but the conclusion of the

process of thought is the starting-point of action. If, then, of all rightness either rational principle or goodness is the cause, if rational principle is not the cause of the rightness of the End, then the End (though not the means to the End) will be right owing to goodness. But the End is the object for which one acts; for every purposive choice is a choice of something and for some object. The End is therefore the object for which the thing chosen is the mean, of which End goodness is the cause by its act of choice — though the choice is not of the End but of the means adopted for the sake of the End. Therefore though it belongs to another faculty to hit on the things that must be done for the sake of the End, [1228a] goodness is the cause of the End aimed at by choice being right. And owing to this it is by a man's purposive choice that we judge his character — that is, not by what he does but what he does it for. Similarly also badness causes purposive choice to be made from the opposite motives. If therefore, when a man has it in his power to do what is honorable and refrain from doing what is base, he does the opposite, it is clear that this man is not virtuous. Hence it necessarily follows that both badness and goodness are voluntary; for there is no necessity to do wicked things. For this reason badness is a blameworthy thing and goodness praiseworthy; for involuntary baseness and evil are not blamed nor involuntary good things praised, but voluntary ones are. Moreover we praise and blame all men with regard to their purpose rather than with regard to their actions (although activity is a more desirable thing than goodness), because men may do bad acts under compulsion, but no one is compelled to choose to do them. Moreover because it is not easy to see the quality of a man's purpose we are forced to judge his character from his actions; therefore activity is more desirable, but purpose more praiseworthy. And this not only follows from our assumptions but also is admitted by reason of observed facts.



## BOOK III

It has then been stated in general terms that there are middle states in the virtues and that these are purposive, and also that the opposite dispositions are vices and what these are. But let us take them separately and discuss them seriatim. And first let us speak about Courage.

Now almost everybody holds that the brave man is concerned with fears, and that courage is one of the virtues. And in our schedule previously we distinguished daring and fear as contraries, for they are indeed in a manner opposed to one another. It is clear, therefore, that the persons named after these states of character will also be similarly opposed to each other — that is, the coward (for that is the term that denotes being more afraid than is proper and less daring than is proper) and the daring man (for that denotes the characteristic of being less afraid than is proper and more daring than is proper — and from this the name is derived, as the word ‘daring’ is cognate with the word ‘dare’). So that since courage is the best state of character in relation to feelings of fear and daring, and the proper character is neither that of the daring (for they fall short in one respect and exceed in another) nor that of the cowardly (for they also do the same, only not as regards the same things but inversely — [1228b] they fall short in daring and exceed in being afraid), it is clear that the middle state of character between daring and cowardice is courage, for this is the best state.

And it seems that the brave man is in general fearless, and the coward liable to fear; and that the latter fears things when they are few in number and small in size as well as when numerous and great, and fears violently, and gets frightened quickly, whereas the former on the contrary either never feels fear at all or only slightly and reluctantly and seldom, and in regard to things of magnitude; and he endures things that are extremely formidable, whereas the other does not endure even those that are slightly formidable. What sort of things, then, does the brave man endure? First, is it the things that are formidable to himself or formidable to somebody else? If the things formidable to somebody else, one would not indeed call it anything remarkable; but if it is those that are formidable to himself, what is formidable to him must be things of great magnitude and number. But formidable things are productive of fear in the particular person to whom they are formidable — that is, if they are very formidable, the fear they produce will

be violent, if slightly formidable, it will be weak; so it follows that the brave man's fears are great and many. Yet on the contrary it appeared that courage makes a man fearless, and that fearlessness consists in fearing nothing, or else few things, and those slightly and reluctantly. But perhaps 'formidable' is an ambiguous term, like 'pleasant' and 'good.' Some things are pleasant and good absolutely, whereas others are so to a particular person but absolutely are not so, but on the contrary are bad and unpleasant — all the things that are beneficial for the base, and all those that are pleasant to children qua children. And similarly some things are formidable absolutely and others to a particular person: thus the things that the coward qua coward fears are some of them not formidable to anybody and others only slightly formidable, but things that are formidable to most men, and all that are formidable to human nature, we pronounce to be formidable absolutely. But the brave man is fearless in regard to them, and endures formidable things of this sort, which are formidable to him in one way but in another way are not — they are formidable to him qua human being, but qua brave not formidable except slightly, or not at all. Yet such things really are formidable, for they are formidable to most men. Owing to this the brave man's state of character is praised, because it resembles that of the strong and the healthy. These have those characters not because no labor in the one case or extreme of temperature in the other can crush them, but because they are not affected at all, or only affected slightly, by the things that affect the many or the majority. Therefore whereas the sickly and weak and cowardly are affected also by the afflictions commonly felt, only more quickly and to a greater extent than the mass of men, the healthy, strong and brave, although affected by the very great afflictions, are affected by them more slowly and less than the mass of men, and moreover they are entirely unaffected or only slightly affected by things that affect the mass.

But the question is raised whether to the brave man nothing is formidable, and whether he would be insensible to fear. [1229a] Or is it not possible that he may feel fear in the way described? For courage is following reason, and reason bids us choose what is fine. Hence he who endures formidable things not on account of reason is either out of his mind or daring, but only he who does so from motives of honor is fearless and brave. The coward, therefore, fears even things that he ought not to fear, and the daring man is bold even about things about which he ought not to be bold, but the brave man alone does both as he ought, and is intermediate in this respect, for he feels both confidence and fear about what ever things reason bids; but reason does not bid him endure things that are extremely painful and destructive, unless they are fine. The daring man,

therefore, faces such things with confidence even if reason does not bid him face them, and the coward does not face them even if it does, but only the brave man faces them if reason bids.

There are five kinds of courage so called by analogy, because brave men of these kinds endure the same things as the really courageous but not for the same reasons. One is civic courage; this is courage due to a sense of shame. Second is military courage; this is due to experience and to knowledge, not of what is formidable, as Socrates said, but of ways of encountering what is formidable. Third is the courage due to inexperience and ignorance, that makes children and madmen face things rushing on them, or grasp snakes. Another is the courage caused by hope, which often makes those who have had a stroke of luck endure dangers, and those who are intoxicated — for wine makes men sanguine. Another is due to some irrational emotion, for example love or passion. For if a man is in love he is more daring than cowardly, and endures many dangers, like the man who murdered the tyrant at Metapontium and the person in Crete in the story; and similarly if a man is under the influence of anger and passion, for passion is a thing that makes him beside himself. Hence wild boars are thought to be brave, though they are not really, for they are so when they are beside themselves, but otherwise they are variable, like daring men. But nevertheless the courage of passion is in the highest degree natural; passion is a thing that does not know defeat, owing to which the young are the best fighters. Civic courage is due to law. But none of these is truly courage, though they are all useful for encouragement in dangers.

Up to this point we have spoken about things formidable in general terms, but it will be better to define them more precisely. As a general term the formidable denotes what causes fear, and that is of a property of things that appear capable of causing pain of a destructive kind: for persons expecting some other pain might perhaps experience a different sort of pain and a different feeling, but will not have fear — for example if a man foresaw that he was going to feel the pain felt by the jealous, or the sort of pain felt by the envious or by those who are ashamed. But fear only occurs in the case of pains that seem likely to be of the kind whose nature it is to destroy life. [1229b] Hence some people who are even very soft about certain things are brave, and some who are hard and enduring are also cowardly. Moreover it is thought to be almost a special property of courage to be of a certain disposition in regard to death and the pain of death; for if a man were such as to be capable of rational endurance in respect of heat and cold and pains of that sort that are not dangerous, but at the same time soft and

excessively timid about death, not because of any other feeling but just because it brings destruction, while another man was soft in regard to those pains but impassive as regards death, the former would be thought a coward and the latter brave. For we speak of danger only in the case of such formidable things as bring near to us what causes destruction of that sort, and when this appears near it appears to be danger.

The formidable things, therefore, in relation to which we speak of a man as brave are, we have said, those that appear likely to cause pain of the destructive kind — provided that these appear close at hand and not far off, and are or appear to be of a magnitude proportionate to a human being; for some things must necessarily appear fearful to every human being and throw everybody into alarm, since it is quite possible that, just as heat and cold and some of the other forces are above us and above the conditions of the human body, so also are some mental sufferings.

Therefore whereas the cowardly and the daring are mistaken owing to their characters, since the coward thinks things not formidable formidable and things slightly formidable extremely formidable, and the daring man on the contrary thinks formidable things perfectly safe and extremely formidable things only slightly formidable, to the brave man on the other hand things seem exactly what they are. Hence a man is not brave if he endures formidable things through ignorance (for instance, if owing to madness he were to endure a flight of thunderbolts), nor if he does so owing to passion when knowing the greatness of the danger, as the Celts ‘take arms and march against the waves’; and in general, the courage of barbarians has an element of passion. And some men endure terrors for the sake of other pleasures also — for even passion contains pleasure of a sort, since it is combined with hope of revenge. But nevertheless neither if a man endures death for the sake of this pleasure nor for another, nor for the sake of avoiding greater pains, would any of these persons justly be termed brave. For if dying were pleasant, profligates would be dying constantly, owing to lack of self-control, just as even as it is, when, although death itself is not pleasant, things that cause it are, many men through lack of self control knowingly encounter it; none of whom would be thought brave, even though he were thought to die quite readily. Nor yet are any of those brave who, as many men do, commit suicide to escape from trouble, as Agathon says: [1230a]

“

The base among mankind, by toil o’ercome

The base among mankind, by toil to overcome,

Conceive a love of death.

“

*Agathon Fr. 7*

As also Cheiron, in the legendary story of the poets, because of the pain from his wound prayed that though immortal he might die. And in like manner to these, all who face dangers because of experience are not brave; this is how perhaps most of the military class face dangers. For the fact is the exact opposite of the view of Socrates, who thought that bravery was knowledge: sailors who know how to go aloft are not daring through knowing what things are formidable, but because they know how to protect themselves against the dangers; also courage is not merely what makes men more daring fighters, for in that case strength and wealth would be courage — as Theognis puts it:

“

For every man by poverty subdued.

“

*Theog. 177*

But manifestly some men do face emergencies in spite of being cowards, owing to experience, and they do so because they do not think that there is any danger, as they know how to protect themselves. A proof of this is that when they think that they have no protection and that the cause of alarm is now close at hand, they turn tail. But among all such causes, it is when shame makes men face what is alarming that they would appear to be bravest, as Homer says Hector faced the danger of encountering Achilles: “ And shame on Hector seized —

“ Source unknown and

“ Polydamas will be the first to taunt me.



## Hom. Il. 22.100

Civic courage is this kind. But true courage is neither this nor any of the others, though it resembles them, as does the courage of wild animals, which are led by passion to rush to meet the blow. For it is not from fear that he will incur disgrace that a man ought to stand his ground, nor from motives of anger, nor because he does not think that he will be killed or because he has forces to protect him, for in that case he will not think that there is really anything to be afraid of. But, since indeed all goodness involves purposive choice (it has been said before what we mean by this — goodness makes a man choose everything for the sake of some object, and that object is what is fine), it is clear that courage being a form of goodness will make a man face formidable things for some object, so that he does not do it through ignorance (for it rather makes him judge correctly), nor yet for pleasure, but because it is fine, since in a case where it is not fine but insane he will not face them, for then it would be base to do so.

We have now given an account that is fairly adequate for our present procedure of the kind of things in relation to which Courage is a middle state, and between what vices and for what reason it is this, and what is the power that formidable things exercise.

We must next attempt to decide about Temperance and Profligacy. The term ‘profligate’ (unchaste) has a variety of meanings. It means the man who has not been (as it were) ‘chastised’ or cured, just as ‘undivided’ means one that has not been divided; and these terms include both one capable of the process and one not capable of it: [1230b] ‘undivided’ means both that which cannot be divided and that which though it can be has not been; and similarly with ‘unchaste’ — it denotes both that which is by nature incapable of chastening and that which, though capable, has not actually been chastened in respect of the errors as regards which the temperate man acts rightly, as is the case with children; for of them it is in this sense that the term ‘unchaste’ is used, whereas another use of it again refers to persons hard to cure or entirely incurable by chastisement. But though ‘profligacy’ has more than one sense, it is clear that the profligate are concerned with certain pleasures and pains and that they differ from one another and from the other vicious characters in being disposed in a certain manner towards these; and we described previously the way in which we apply the term ‘profligacy’ by analogy. Persons on the other hand who owing to insensitiveness

are uninfluenced by these pleasures are called by some people ‘insensitive’ and by others are designated by other names of the same sort; but the state is not a very familiar one nor of common occurrence, because all men err more in the other direction, and susceptibility and sensitiveness to pleasures of this sort are natural to everybody. It specially attaches to persons like the boors who are a stock character in comedy — people who steer clear of pleasures even in moderate and necessary indulgences.

And since the temperate character is shown in connection with pleasures, it follows that it is also related to certain desires. We must, therefore, ascertain what these are. For the temperate man is not temperate about all pleasures nor about everything pleasant, but apparently about the objects of two of the senses, taste and touch, and in reality about the objects of touch. For the temperate man is not concerned with the pleasure of beautiful things (apart from sexual desire) or pain caused by ugly things, the medium of which is sight, nor with the pleasure of harmonious sounds or pain of discords conveyed through the medium of hearing, nor yet with the pleasures and pains of smell, derived from good and bad scents; for neither is anyone termed profligate because of being sensitive or not sensitive to sensations of that sort — for example, a man would not be considered profligate if when looking at a beautiful statue or horse or person, or listening to someone singing, he did not wish for food or drink or sexual indulgence but only wished to look at the beautiful objects or listen to the music, — any more than the persons held spell-bound in the abode of the Sirens. Temperance and profligacy have to do with those two sorts of sensory objects in relation to which alone the lower animals also happen to be sensitive and to feel pleasure and pain — the objects of taste and of touch, whereas about virtually all the pleasures of the other senses alike animals are clearly so constituted as to be insensitive — [1231a] *e.g.* harmonious sound, or beauty; for clearly they are not affected in any degree worth speaking of by the mere sight of beautiful objects or by listening to musical sounds, except possibly in the case of some miraculous occurrences. Nor yet are they sensitive to good or bad smells, although it is true that all their senses are keener than man’s; but even the smells they enjoy are those that have agreeable associations, and are not intrinsically agreeable. By smells not intrinsically agreeable I mean those that we enjoy because of either anticipation or recollection, for example the smell of things to eat or drink, for we enjoy these scents on account of a different pleasure, that of eating or drinking; by intrinsically agreeable I mean scents such as those of flowers (this is the reason of Stratonicus’s neat remark that the scent of flowers is beautiful but that of things to eat and drink sweet). For even the pleasures of taste are not



all attractive to animals, nor are those perceived with the tip of the tongue, but those perceived by the throat, the sensation of which seems more like touch than taste; so that gourmands do not pray that they may have a long tongue but a crane's gullet, like Philoxenus son of Eryxis. It follows that broadly speaking profligacy must be considered to be related to the objects of touch, and likewise it is with pleasures of that sort that the profligate is concerned; for tippling and gluttony and lechery and gormandizing and the like all have to do with the sensations specified, and these are the departments into which profligacy is divided. But nobody is called profligate if he exceeds in regard to the pleasures of sight or hearing or smell; those errors we criticize without severe rebuke, and generally all the things included under the term 'lack of self-control': the uncontrolled are not profligate, yet they are not temperate.

Therefore the person of such a character as to be deficient in all the enjoyments which practically everybody must share and must enjoy, is insensitive (or whatever the proper term is), and he that exceeds in them is profligate. For all people by nature enjoy these things, and conceive desires for them, without being or being called profligate, for they do not exceed by feeling more joy than they ought when they get them nor more pain than they ought when they do not get them; nor yet are they unfeeling, for they do not fall short in feeling joy or pain, but rather exceed.

And since there are excess and deficiency in regard to these things, it is clear that there is also a middle state, and that this state of character is the best one, and is the opposite of both the others. Hence if temperance is the best state of character in relation to the things with which the profligate is concerned, the middle state in regard to the pleasant objects of sense mentioned will be Temperance, being a middle state between profligacy and insensitiveness: the excess will be Profligacy, [1231b] and the deficiency will either be nameless or will be denoted by the terms mentioned. We shall have to define the class of pleasures concerned more exactly in our discussion of Self-control and Lack of Control later on.

And also the nature of Gentleness and Harshness must be ascertained in the same way. For we see that the term 'gentle' is concerned with the pain that arises from passion — a man is gentle by being disposed in a certain way towards that pain. And in our diagram we opposed to the irascible and harsh and fierce man (for all such traits belong to the same disposition) the slavish and spiritless man; for these are perhaps the most usual words to denote those whose passion is not

aroused even at all the things at which it ought to be, but who undergo insulting treatment readily and meet slights with humility; since as opposed to feeling the pain that we call passion quickly, extremely or for a long time there is feeling it slowly, slightly, or for a short time. And since, as we said in the other cases, so here also there is excess and deficiency (for the harsh man is the sort of man that feels this emotion too quickly, too long, at the wrong time, with the wrong kind of people, and with many people, while the slavish man is the opposite), it is clear that there is also some body who is at the middle point in the inequality. Since, therefore, both those states of character are wrong, it is clear that the state midway between them is right, for it is neither too hasty nor too slow-tempered, nor does it get angry with the people with whom it ought not nor fail to get angry with those with whom it ought. So that since the best state of character in regard to those feelings is gentleness, Gentleness also would be a middle state, and the gentle man would be midway between the harsh man and the slavish man.

Greatness of Spirit and Magnificence and Liberality are also middle states. Liberality is the mean in regard to the acquisition and expenditure of wealth. The man who is more pleased than he ought to be by all acquisition and more pained than he ought to be by all expenditure is mean, he that feels both feelings less than he ought is prodigal, and he that feels both as he ought is liberal (what I mean by 'as he ought,' both in this and in the other cases, is 'as right principle directs'). And since the two former characters consist in excess and deficiency, and where there are extremes there is also a mean, and that mean is best, there being a single best for each kind of action, a single thing, it necessarily follows that liberality is a middle state between prodigality and meanness as regards getting and parting with wealth. But the terms 'wealth' and 'art of wealth' we use in two senses, since one way of using an article of property, [1232a] for example a shoe or a cloak, is proper to the article itself, another is accidental, though not as using a shoe for a weight would be an accidental use of it, but for example selling it or letting it on hire, for these uses do employ it as a shoe. The covetous man is the party whose interest centers on money, and money is a thing of ownership instead of accidental use. But the mean man might be even prodigal in regard to the accidental mode of getting wealth, inasmuch as it is in the natural acquisition of wealth that he pursues increase. The prodigal man lacks necessities, but the liberal man gives his superfluity. And of these classes themselves there are species designated as exceeding or deficient in respect of parts of the matter concerned: for example, the stingy man, the skinflint and the profiteer are mean — the stingy in not parting with money, the profiteer in accepting anything, the skinflint is he who is very excited about small sums; also

the man who offends by way of meanness is a false reckoner and a cheat. Similarly 'prodigal' includes the spendthrift who is prodigal in unregulated spending and the reckless man who is prodigal in not being able to endure the pain of calculation.

On the subject of Greatness of Spirit we must define its characteristic from the attributes of the great-spirited man. For just as in the other cases of things that, owing to their affinity and similarity up to a point, are not noticed to differ when they advance further, the same has happened about greatness of spirit. Hence sometimes the opposite characters claim the same quality, for instance the extravagant man claims to be the same as the liberal, the self-willed as the proud, the daring as the brave; for they are concerned with the same things, and also are neighbors up to a point, as the brave man can endure dangers and so can the daring man, but the former in one way and the latter in another, and that makes a very great difference. And we use the term 'great-spirited' according to the designation of the word, as consisting in a certain greatness or power of spirit. So that the great-spirited man seems to resemble both the proud man and the magnificent, because greatness of spirit seems to go with all the virtues also. For it is praiseworthy to judge great and small goods rightly; and those goods seem great which a man pursues who possesses the best state of character in relation to such pleasures, and greatness of spirit is the best. And the virtue concerned with each thing judges rightly the greater and the smaller good, just as the wise man and virtue would bid, so that all the virtues go with it, or it goes with all the virtues.

Again, it is thought characteristic of the great-spirited man to be disdainful. Each virtue makes men disdainful of things irrationally deemed great: [1232b] for example, courage makes a man disdainful of dangers, for he thinks that to consider danger a great matter is a disgraceful thing, and that numbers are not always formidable; and the sober-minded man disdains great and numerous pleasures, and the liberal man wealth. But the reason why this is thought characteristic of the great-spirited man is because of his caring about few things and those great ones, and not about whatever somebody else thinks. And a great-spirited man would consider more what one virtuous man thinks than what many ordinary people think, as Antiphon after his condemnation said to Agathon when he praised his speech for his defence. And a feeling thought to be specially characteristic of the great-spirited man is disdain. On the other hand, as to the accepted objects of human interest, honor, life, wealth, he is thought to care nothing about any of them except honor; it would grieve him to be dishonored

and ruled by someone unworthy, and his greatest joy is to obtain honor.

Thus he might therefore be thought inconsistent, on the ground that to be specially concerned about honor and to be disdainful of the multitude and of reputation do not go together. But in saying this we must distinguish. Honor is small or great in two ways: it differs in being conferred either by many ordinary people or by persons of consideration, and again it differs in what it is conferred for, since its greatness does not depend only on the number or the quality of those who confer it, but also on its being honorable; and in reality those offices and other good things are honorable and worthy of serious pursuit that are truly great, so that there is no goodness without greatness; owing to which each of the virtues seems to make men great-spirited in regard to the things with which that virtue is concerned, as we said. But nevertheless there is a single virtue of greatness of spirit side by side with the other virtues, so that the possessor of this virtue must be termed great-spirited in a special sense. And since there are certain goods which are in some cases honorable and in others not, according to the distinction made before, and of goods of this sort some are truly great and others small, and some men deserve and claim the former, it is among these men that the great-spirited man must be looked for. And there are necessarily four varieties of claim: it is possible to deserve great things and to claim them as one's desert; and there are small things and a man may deserve and claim things of that size; and as regards each of these two classes of things the reverse is possible — one man may be of such a character that although deserving small things he claims great ones — the goods held in high honor, and another man though deserving great things may claim small ones. Now the man worthy of small things but claiming great ones is blameworthy, for it is foolish and not fine to obtain what does not correspond to one's deserts. And he also is blameworthy who though worthy of such things does not deem himself worthy to partake of them although they are available for him. [1233a] But there is left here the man who is the opposite of both of these, who being worthy of great things claims them as his desert, and is of such a character as to deem himself worthy: he is praiseworthy, and he is in the middle between the two. Since, therefore, greatness of spirit is the best disposition in relation to the choice and the employment of honor and of the other good things that are esteemed, and not in relation to useful things, and since we assign this to the great-spirited man, and since also at the same time the middle state is most praiseworthy, it is clear that even greatness of spirit must be a middle state. And of the opposites as shown in our diagram, the one in the direction of deeming oneself worthy of great goods when one is not worthy is vanity (for the sort of men that fancy themselves

worthy of great things though they are not we call vain), and the one that is concerned with not deeming oneself worthy of great things when one is worthy of them is smallness of spirit (for if a man does not think himself worthy of anything great although he possesses qualities which would justly make him considered worthy of it, he is thought small-spirited); so that it follows that greatness of spirit is a middle state between vanity and smallness of spirit. But the fourth of the persons in our classification is neither entirely reprehensible nor is he great spirited, as he is concerned with nothing possessing greatness, for he neither is nor thinks himself worthy of great things; owing to which he is not the opposite of the man of great spirit. Yet thinking oneself worthy of small things when one is worthy of small things might be thought the opposite of thinking oneself worthy of great ones when one is worthy of great ones; but he is not opposite to the great-spirited man because he is not blameworthy either, for his character is as reason bids, and in nature he is the same as the great-spirited man, for both claim as their desert the things that they are worthy of. And he might become great-spirited, for he will claim the things that he is worthy of; whereas the small-spirited man, who when great goods corresponding to his worth are available does not think himself worthy of them — what would he have done if his deserts were small? For either he would have conceitedly thought himself worthy of great things, or of still less. Hence nobody would call a man small-spirited for not claiming to hold office and submitting to authority if he is a resident alien, but one would do so if he were of noble birth and attached great importance to office.

The Magnificent Man also (except in a case when we are using the term metaphorically) is not concerned with any and every action and purposive choice, but with expenditure. Without expenditure there is no magnificence, for it is what is appropriate in ornament, and ornament does not result from any chance expenditure, but consists in going beyond the merely necessary. Therefore the magnificent man is the man who purposively chooses the appropriate greatness in great expenditure, and who even on the occasion of a pleasure of this nature aims at this sort of moderation. There is no name denoting the man who likes spending to excess and inappropriately; however the persons whom some people call tasteless and swaggering have a certain affinity to him. [1233b] For instance if a rich man spending money on the wedding of a favorite thinks it fitting for him to have the sort of arrangements that would be fitting when entertaining abstainers, he is shabby, while one who entertains guests of that sort after the manner of a wedding feast, if he does not do it for the sake of reputation or to gain an office, resembles the swaggerer; but he that entertains

suitably and as reason directs is magnificent, for the fitting is the suitable, as nothing is fitting that is unsuitable. But it must be fitting in each particular, that is, in suitability to the agent and to the recipient and to the occasion — for example, what is fitting at the wedding of a servant is not what is fitting at that of a favorite; and it is fitting for the agent himself, if it is of an amount or quality suitable to him — for example people thought that the mission that Themistocles conducted to Olympia was not fitting for him, because of his former low station, but would have been for Cimon. But he who is casual in regard to the question of suitability is not in any of these classes.

Similarly in regard to liberality: a man may be neither liberal nor illiberal.

Generally speaking the other praiseworthy and blameworthy states of character also are excesses or deficiencies or middle states, but in respect of an emotion: for instance, the envious man and the malicious. For — to take the states of character after which they are named — Envy means being pained at people who are deservedly prosperous, while the emotion of the malicious man is itself nameless, but the possessor of it is shown by his feeling joy at undeserved adversities; and midway between them is the righteously indignant man, and what the ancients called Righteous Indignation — feeling pain at undeserved adversities and prosperities and pleasure at those that are deserved; hence the idea that Nemesis is a deity.

Modesty is a middle state between Shamelessness and Bashfulness: the man who pays regard to nobody's opinion is shameless, he who regards everybody's is bashful, he who regards the opinion of those who appear good is modest.

Friendliness is a middle state between Animosity and Flattery; the man who accommodates himself readily to his associates' desires in everything is a flatterer, he who runs counter to them all shows animosity, he who neither falls in with nor resists every pleasure, but falls in with what seems to be the best, is friendly.

Dignity is a middle state between Self-will and Obsequiousness. A man who in his conduct pays no regard at all to another but is contemptuous is self-willed; he who regards another in everything and is inferior to everybody is obsequious; he who regards another in some things but not in others, and is regardful of persons worthy of regard, is dignified.

The truthful and sincere man, called 'downright,' is midway between the dissembler and the charlatan. He that wittingly makes a false statement against himself that is depreciatory is a dissembler, [1234a] he that exaggerates his merits is a charlatan, he that speaks of himself as he is is truthful and in Homer's phrase 'sagacious'; and in general the one is a lover of truth and the others lovers of falsehood. Wittiness also is a middle state, and the witty man is midway between the boorish or stiff man and the buffoon. For just as in the matter of food the squeamish man differs from the omnivorous in that the former takes nothing or little, and that reluctantly, and the latter accepts everything readily, so the boor stands in relation to the vulgar man or buffoon — the former takes no joke except with difficulty, the latter accepts everything easily and with pleasure. Neither course is right: one should allow some things and not others, and on principle, — that constitutes the witty man. The proof of the formula is the same as in the other cases: wittiness of this kind (not the quality to which we apply the term in a transferred sense) is a very becoming sort of character, and also a middle state is praiseworthy, whereas extremes are blameworthy. But as there are two kinds of wit (one consisting in liking a joke, even one that tells against oneself if it is funny, for instance a jeer, the other in the ability to produce things of this sort), these kinds of wit differ from one another, but both are middle states; for a man who can produce jokes of a sort that will give pleasure to a person of good judgement even though the laugh is against himself will be midway between the vulgar man and the frigid. This is a better definition than that the thing said must not be painful to the victim whatever sort of man he may be — rather, it must give pleasure to the man in the middle position, since his judgement is good.

All these middle states, though praiseworthy, are not virtues, nor are the opposite states vices, for they do not involve purposive choice; they are all in the classification of the emotions, for each of them is an emotion. But because they are natural they contribute to the natural virtues; for, as will be said in what follows, each virtue exists both naturally and otherwise, that is, in conjunction with thought. Therefore envy contributes to injustice (for the actions that spring from it affect another person), and righteous indignation to justice, and modesty to temperance (owing to which people even define temperance as a species of emotion), and the sincere and false are respectively wise and foolish.

And the mean is more opposed to the extremes than the extremes are to one another, [1234b] because the mean does not occur in combination with either extreme, whereas the extremes often do occur in combination with one another,

and sometimes the same men are venturesome cowards, or extravagant in some things and illiberal in others, and in general not uniform in a bad way — for when men lack uniformity in a good way, this results in men of the middle characters, since the mean contains both extremes.

The opposition existing between the mean and the extremes does not seem to be the same in the case of both the extremes, but sometimes the greater opposition is by way of excess, sometimes by way of deficiency. The causes of this are partly the two first mentioned, rarity (for example, the rarity of people insensitive to pleasant things) and the fact that the error to which we are more prone seems more opposite to the mean, and thirdly the fact that the extreme that more resembles the mean seems less opposite to it, as is the case with daring in relation to boldness and extravagance in relation to liberality. We have therefore sufficiently discussed the other praiseworthy virtues, and must now speak about Justice.



## BOOK VII

Friendship — its nature and qualities, what constitutes a friend, and whether the term friendship has one or several meanings, and if several, how many, and also what is our duty towards a friend and what are the just claims of friendship — is a matter that calls for investigation no less than any of the things that are fine and desirable in men's characters. For to promote friendship is thought to be the special task of political science; and people say that it is on this account that goodness is a valuable thing, for persons wrongfully treated by one another cannot be each other's friends. Furthermore we all say that justice and injustice are chiefly displayed towards friends; it is thought that a good man is a friendly man, and that friendship is a state of the moral character; and if one wishes to make men not act unjustly, it is enough to make them friends, for true friends do not wrong one another. But neither will men act unjustly if they are just; therefore justice and friendship are either the same or nearly the same thing.

In addition to this, we consider a friend to be one of the greatest goods, and friendlessness and solitude a very terrible thing, because the whole of life and voluntary association is with friends; [1235a] for we pass our days with our family or relations or comrades, children, parents or wife. And our private rights in relation to our friends depend only on ourselves, whereas our rights in relation to the rest of men are established by law and do not depend on us.

Many questions are raised about friendship — first, on the line of those who take in wider considerations and extend the term. For some hold that like is friend to like, whence the sayings:

“ Mark how God ever brings like men together

“

## Hom. Od. 17.218

;

“ For jackdaw by the side of jackdaw . . .

“

; “And thief knows thief and wolf his fellow wolf.”

And the natural philosophers even arrange the whole of nature in a system by assuming as a first principle that like goes to like, owing to which Empedocles said that the dog sits on the tiling because it is most like him.

Some people then give this account of a friend; but others say that opposite is dear to opposite, since it is what is loved and desired that is dear to everybody, and the dry does not desire the dry but the wet (whence the sayings—“Earth loveth rain,” and “In all things change is sweet—” change being transition to the opposite), whereas like hates like, for “Potter against potter has a grudge,” and animals that live on the same food are hostile to one another. These opinions, therefore, are thus widely variant. One party thinks that the like is friend and the opposite foe —

“ The less is rooted enemy to the more

For ever, and begins the day of hate,

“

## **Eur. Phoen. 539f.**

and moreover adversaries are separated in locality, whereas friendship seems to bring men together. The other party say that opposites are friends, and Heracleitus rebukes the poet who wrote —

“ Would strife might perish out of heaven and earth,

“

## Hom. Il. 18.107

for, he says, there would be no harmony without high and low notes, and no animals without male and female, which are opposites.

These, then, are two opinions about friendship, and being so widely separated they are too general; but there are others that are closer together and more akin to the facts of observation. Some persons think that it is not possible for bad men to be friends, but only for the good. Others think it strange that mothers should not love their own children (and maternal affection we see existing even among animals — at least, animals choose to die for their young). Others hold that only what is useful is a friend, the proof being that all men actually do pursue the useful, and discard what is useless even in their own persons (as the old Socrates used to say, instancing spittle, hair and nails), and that we throw away even parts of the body that are of no use, and finally the body itself, [1235b] when it dies, as a corpse is useless — but people that have a use for it keep it, as in Egypt. Now all these factors seem to be somewhat opposed to one another. For like is of no use to like and opposition is farthest removed from likeness, and at the same time opposite is most useless to opposite, since opposite is destructive of opposite. Moreover some think that to gain a friend is easy, but others that it is the rarest thing to recognize a friend, and not possible without misfortune, as everybody wants to be thought a friend of the prosperous; and others maintain that we must not trust even those who stay with us in our misfortunes, because they are deceiving us and pretending, in order that by associating with us when unfortunate they may gain our friendship when we are again prosperous.

Accordingly a line of argument must be taken that will best explain to us the views held on these matters and at the same time solve the difficulties and contradictions. And this will be secured if the contradictory views are shown to be held with some reason. For such a line of argument will be most in agreement with the observed facts: and in the upshot, if what is said is true in one sense but not true in another, both the contradictory views stand good.

There is also a question as to whether what is dear to us is the pleasant or the good. If we hold dear what we desire (and that is specially characteristic of love, for “None is a lover that holds not dear for aye”), and desire is for what is pleasant, on this showing it is the pleasant that is dear; whereas if we hold dear what we wish, it is the good; but the pleasant and the good are different things.

We must therefore attempt to decide about these matters and others akin to them, taking as a starting point the following. The thing desired and wished is either the good or the apparent good. Therefore also the pleasant is desired, for it is an apparent good, since some people think it good, and to others it appears good even though they do not think it so (as appearance and opinion are not in the same part of the spirit). Yet it is clear that both the good and the pleasant are dear.

This being decided, we must make another assumption. Things good are some of them absolutely good, others good for someone but not good absolutely; and the same things are absolutely good and absolutely pleasant. For things advantageous for a healthy body we pronounce good for the body absolutely, but things good for a sick body not — for example doses of medicine and surgical operations; and likewise also the things pleasant for a healthy and perfect body are pleasant for the body absolutely, for example to live in the light and not in the dark, although the reverse is the case for a man with ophthalmia. And the pleasanter wine is not the wine pleasant to a man whose palate has been corrupted by tippling, since sometimes they pour in a dash of vinegar, but to the uncorrupted taste. [1236a] And similarly also in the case of the spirit, the really pleasant things are not those pleasant to children and animals, but those pleasant to the adult; at least it is these that we prefer when we remember both. And as a child or animal stands to an adult human being, so the bad and foolish man stands to the good and wise man; and these take pleasure in things that correspond to their characters, and these are things good and fine.

Since therefore good is a term of more than one meaning (for we call one thing good because that is its essential nature, but another because it is serviceable and useful), and furthermore pleasant includes both what is absolutely pleasant and absolutely good and what is pleasant for somebody and apparently good — , as in the case of inanimate objects we may choose a thing and love it for each of these reasons, so also in the case of a human being, one man we love because of his character, and for goodness, another because he is serviceable and useful, another because he is pleasant, and for pleasure. And a man becomes a friend when while receiving affection he returns it, and when he and the other are in some way aware of this.

It follows, therefore, that there are three sorts of friendship, and that they are not all so termed in respect of one thing or as species of one genus, nor yet have they the same name entirely by accident. For all these uses of the term are related to

one particular sort of friendship which is primary, like the term ‘surgical’ — and we speak of a surgical mind and a surgical hand and a surgical instrument and a surgical operation, but we apply the term properly to that which is primarily so called. The primary is that of which the definition is implicit in the definition of all, for example a surgical instrument is an instrument that a surgeon would use, whereas the definition of the instrument is not implicit in that of surgeon. Therefore in every case people seek the primary, and because the universal is primary they assume that also the primary is universal; but this is untrue. Hence in the case of friendship, they cannot take account of all the observed facts. For as one definition does not fit, they think that the other kinds of friendship are not friendships at all; but really they are, although not in the same way, but when they find that the primary friendship does not fit, assuming that it would be universal if it really were primary, they say that the others are not friendships at all. But in reality there are many kinds of friendships: this was among the things said already, as we have distinguished three senses of the term friendship — one sort has been defined as based on goodness, another on utility, another on pleasure.

Of these the one based on utility is assuredly the friendship of most people; for they love one another because they are useful, and in so far as they are and so, as says the proverb—”Glaucus, an ally is a friend, as long as he our battle fights, and

“ Athens no longer knows Megara.

“

*Fr. Eleg. Adespota 6 (Bergk)*

On the other hand friendship based on pleasure is the friendship of the young, for they have a sense of what is pleasant; hence young people’s friendship easily changes, for since their characters change as they grow up, their taste in pleasure also changes. But the friendship in conformity with goodness is the friendship of the best men. [1236b]

It is clear from this that the primary friendship, that of the good, is mutual reciprocity of affection and purpose. For the object of affection is dear to the giver of it, but also the giver of affection is himself dear to the object. This friendship, therefore, only occurs in man, for he alone perceives purpose; but the

other forms occur also in the lower animals. Indeed mutual utility manifestly exists to some small extent between the domestic animals and man, and between animals themselves, for instance Herodotus's account of the friendship between the crocodile and the sandpiper, and the perching together and separating of birds of which soothsayers speak. The bad may be each other's friends from motives both of utility and of pleasure; though some say that they are not really friends, because the primary kind of friendship does not belong to them, since obviously a bad man will injure a bad man, and those who suffer injury from one another do not feel affection for one another. But as a matter of fact bad men do feel affection for one another, though not according to the primary form of friendship — because clearly nothing hinders their being friends under the other forms, since for the sake of pleasure they put up with one another although they are being harmed, so long as they are lacking in self-restraint. The view is also held, when people look into the matter closely, that those who feel affection for each other on account of pleasure are not friends, because it is not the primary friendship, since that is reliable but this is unreliable. But as a matter of fact it is friendship, as has been said, though not that sort of friendship but one derived from it. Therefore to confine the use of the term friend to that form of friendship alone is to do violence to observed facts, and compels one to talk paradoxes; though it is not possible to bring all friendship under one definition. The only remaining alternative, therefore, is, that in a sense the primary sort of friendship alone is friendship, but in a sense all sorts are, not as having a common name by accident and standing in a merely chance relationship to one another, nor yet as falling under one species, but rather as related to one thing.

And since the same thing is absolutely good and absolutely pleasant at the same time if nothing interferes, and the true friend and friend absolutely is the primary friend, and such is a friend chosen in and for himself (and he must necessarily be such, for he for whom one wishes good for his own sake must necessarily be desirable for his own sake), a true friend is also absolutely pleasant; owing to which it is thought that a friend of any sort is pleasant. But we must define this still further, for it is debatable whether what is good merely for oneself is dear or what is absolutely good, and whether the actual exercise of affection is accompanied by pleasure, so that an object of affection is also pleasant, or not. Both questions must be brought to the same issue; for things not absolutely good but possibly evil are to be avoided, and also a thing not good for oneself is no concern of oneself, but what is sought for is that things absolutely good shall be good for oneself. For the absolutely good is absolutely desirable, but what is good for oneself is desirable for oneself; [1237a] and the two ought to come into

agreement. This is effected by goodness; and the purpose of political science is to bring it about in cases where it does not yet exist. And one who is a human being is well adapted to this and on the way to it (for by nature things that are absolutely good are good to him), and similarly a man rather than a woman and a gifted man rather than a dull one; but the road is through pleasure — it is necessary that fine things shall be pleasant. When there is discord between them, a man is not yet perfectly good; for it is possible for unrestraint to be engendered in him, as unrestraint is caused by discord between the good and the pleasant in the emotions.

Therefore since the primary sort of friendship is in accordance with goodness, friends of this sort will be absolutely good in themselves also, and this not because of being useful, but in another manner. For good for a given person and good absolutely are twofold; and the same is the case with states of character as with profitableness — what is profitable absolutely and what is profitable for given persons are different things (just as taking exercise is a different thing from taking drugs). So the state of character called human goodness is of two kinds — for let us assume that man is one of the things that are excellent by nature: consequently the goodness of a thing excellent by nature is good absolutely, but that of a thing not excellent by nature is only good for that thing.

The case of the pleasant also, therefore, is similar. For here we must pause and consider whether there is any friendship without pleasure, and how such a friendship differs from other friendship, and on which exactly of the two things the affection depends — do we love a man because he is good even if he is not pleasant, but not because he is pleasant? Then, affection having two meanings, does actual affection seem to involve pleasure because activity is good? It is clear that as in science recent studies and acquirements are most fully apprehended, because of their pleasantness, so with the recognition of familiar things, and the principle is the same in both cases. By nature at all events the absolutely good is absolutely pleasant, and the relatively good is pleasant to those for whom it is good. Hence ipso facto like takes pleasure in like, and man is the thing most pleasant to man; so that as this is so even with imperfect things, it is clearly so with things when perfected, and a good man is a perfect man. And if active affection is the reciprocal choice, accompanied by pleasure, of one another's acquaintance, it is clear that friendship of the primary kind is in general the reciprocal choice of things absolutely good and pleasant because they are good and pleasant; and friendship itself is a state from which such choice arises. For its function is an activity, but this not external but within the



lover himself; whereas the function of every faculty is external, for it is either in another or in oneself qua other. Hence to love is to feel pleasure but to be loved is not; for being loved is not an activity of the thing loved, whereas loving is an activity — the activity of friendship; and loving occurs only in an animate thing, whereas being loved occurs with an inanimate thing also, for even inanimate things are loved. And since to love actively is to treat the loved object qua loved, [1237b] and the friend is an object of love to the friend qua dear to him but not qua musician or medical man, the pleasure of friendship is the pleasure derived from the person himself qua himself; for the friend loves him as himself, not because he is something else. Consequently if he does not take pleasure in him qua good, it is not the primary friendship. Nor ought any accidental quality to cause more hindrance than the friend's goodness causes delight; for surely, if a person is very evil-smelling, people cut him — he must be content with our goodwill, he must not expect our society!

This then is the primary friendship, which all people recognize. It is on account of it that the other sorts are considered to be friendship, and also that their claim is disputed — for friendship seems to be some thing stable, and only this friendship is stable; for a formed judgement is stable, and not doing things quickly or easily makes the judgement right. And there is no stable friendship without confidence, and confidence only comes with time; for it is necessary to make trial, as Theognis says:

“ You cannot know the mind of man nor woman

Before have you tried them as you try cattle.

“

*Theog. 125f.*

Those who become friends without the test of time are not real friends but only wish to be friends; and such a character very readily passes for friendship, because when eager to be friends they think that by rendering each other all friendly services they do not merely wish to be friends but actually are friends. But as a matter of fact it happens in friendship as in everything else; people are not healthy merely if they wish to be healthy, so that even if people wish to be friends they are not actually friends already. A proof of this is that people who have come into this position without first testing one another are easily set at

variance; for though men are not set at variance easily about things in which they have allowed each other to test them, in cases where they have not, whenever those who are attempting to set them, at variance produce evidence they may be convinced. At the same time it is manifest that this friendship does not occur between base people either; for the base and evil-natured man is distrustful towards everybody, because he measures other people by himself. Hence good men are more easily cheated, unless as a result of trial they are distrustful. But the base prefer the goods of nature to a friend, and none of them love people more than things; and so they are not friends, for the proverbial 'common property as between friends' is not realized in this way — the friend is made an appendage of the things, not the things of the friends.

Therefore the first kind of friendship does not occur between many men, because it is difficult to test many — one would have to go and live with each of them. Nor indeed should one exercise choice in the case of a friend in the same way as about a coat; although in all matters it seems the mark of a sensible man to choose the better of two things, and if he had been wearing his worse coat for a long time and had not yet worn his better one, the better one ought to be chosen — but you ought not in place of an old friend to choose one whom you do not know to be a better man. [1238a] For a friend is not to be had without trial and is not a matter of a single day, but time is needed; hence the peck of salt' has come to be proverbial. At the same time if a friend is really to be your friend he must be not only good absolutely but also good to you; for a man is good absolutely by being good, but he is a friend by being good to another, and he is both good absolutely and a friend when both these attributes harmonize together, so that what is good absolutely is also good for another person; or also he may be not good absolutely yet good to another because useful. But being a friend of many people at once is prevented even by the factor of affection, for it is not possible for affection to be active in relation to many at once.

These things, therefore, show the correctness of the saying that friendship is a thing to be relied on, just as happiness is a thing that is self-sufficing. And it has been rightly said: "Nature is permanent, but wealth is not—" although it would be much finer to say 'Friendship' than 'Nature.' And it is proverbial that time shows a friend, and also misfortunes more than good fortune. For then the truth of the saying 'friends' possessions are common property' is clear for only friends, instead of the natural goods and natural evils on which good and bad fortune turn, choose a human being rather than the presence of the former and the absence of the latter; and misfortune shows those who are not friends really

but only because of some casual utility. And both are shown by time; for even the useful friend is not shown quickly, but rather the pleasant one — except that one who is absolutely pleasant is also not quick to show himself. For men are like wines and foods; the sweetness of those is quickly evident, but when lasting longer it is unpleasant and not sweet, and similarly in the case of men. For absolute pleasantness is a thing to be defined by the End it effects and the time it lasts. And even the multitude would agree, not in consequence of results only, but in the same way as in the case of a drink they call it sweeter — for a drink fails to be pleasant not because of its result, but because its pleasantness is not continuous, although at first it quite takes one in.

The primary form of friendship therefore, and the one that causes the name to be given to the others, is friendship based on goodness and due to the pleasure of goodness, as has been said before. The other friendships occur even among children and animals and wicked people: whence the sayings—”Two of an age each other gladden” and “Pleasure welds the bad man to the bad.”

And also the bad may be pleasant to each other not as being bad or neutral, but if for instance both are musicians or one fond of music and the other a musician, and in the way in which all men have some good in them and so fit in with one another. Further they might be mutually useful and beneficial (not absolutely but for their purpose) not as being bad or neutral. [1238b] It is also possible for a bad man to be friends with a good man, for the bad man may be useful to the good man for his purpose at the time-and the good man to the uncontrolled man for his purpose at the time and to the bad man for the purpose natural to him; and he will wish his friend what is good — wish absolutely things absolutely good, and under a given condition things good for him, as poverty or disease may be beneficial: things good for him he will wish for the sake of the absolute goods, in the way in which he wishes his friend to drink medicine — he does not wish the action in itself but wishes it for the given purpose. Moreover a bad man may also be friends with a good one in the ways in which men not good may be friends with one another: he may be pleasant to him not as being bad but as sharing some common characteristic, for instance if he is musical. Again they may be friends in the way in which there is some good in everybody (owing to which some men are sociable even though good), or in the way in which they suit each particular person, for all men have something of good.

These then are three kinds of friendship; and in all of these the term friendship in a manner indicates equality, for even with those who are friends on the ground

of goodness the friendship is in a manner based on equality of goodness.

But another variety of these kinds is friendship on a basis of superiority, as in that of a god for a man, for that is a different kind of friendship, and generally of a ruler and subject; just as the principle of justice between them is also different, being one of equality proportionally but not of equality numerically. The friendship of father for son is in this class, and that of benefactor for beneficiary. And of these sorts of friendship themselves there are varieties: the friendship of father for son is different from that of husband for wife — the former is friendship as between ruler and subject, the latter that of benefactor for beneficiary. And in these varieties either there is no return of affection or it is not returned in a similar way. For it would be ludicrous if one were to accuse God because he does not return love in the same way as he is loved, or for a subject to make this accusation against a ruler; for it is the part of a ruler to be loved, not to love, or else to love in another way. And the pleasure differs; the pleasure that a man of established position has in his own property or son and that which one who lacks them feels in an estate or a child coming to him are not one and the same. And in the same way also in the case of those who are friends for utility or for pleasure — some are on a footing of equality, others one of superiority. Owing to this those who think they are on the former footing complain if they are not useful and beneficial in a similar manner; and also in the case of pleasure. This is clear in cases of passionate affection, for this is often a cause of combat between the lover and his beloved: the lover does not see that they have not the same reason for their affection. Hence Aenetus has said: “A loved one so would speak, but not a lover.” But they think that the reason is the same. [1239a] There being then, as has been said, three kinds of friendship, based on goodness, utility and pleasantness, these are again divided in two, one set being on a footing of equality and the other on one of superiority. Though both sets, therefore, are friendships, only when they are on an equality are the parties friends; for it would be absurd for a man to be a friend of a child, though he does feel affection for him and receive it from him. In some cases, while the superior partner ought to receive affection, if he gives it he is reproached as loving an unworthy object; for affection is measured by the worth of the friends and by one sort of equality. So in some cases there is properly a dissimilarity of affection because of inferiority of age, in others on the ground of goodness or birth or some other such superiority; it is right for the superior to claim to feel either less affection or none, alike in a friendship of utility and in one of pleasure and one based on goodness. So in cases of small degrees of superiority disputes naturally occur (for a small amount is not of importance in some matters, as in

weighing timber, though in gold plate it is; but people judge smallness of amount badly, since one's own good because of its nearness appears big and that of others because of its remoteness small); but when there is an excessive amount of difference, then even the parties themselves do not demand that they ought to be loved in return, or not loved alike — for example, if one were claiming a return of love from God. It is manifest, therefore, that men are friends when they are on an equality, but that a return of affection is possible without their being friends. And it is clear why men seek friendship on a basis of superiority more than that on one of equality; for in the former case they score both affection and a sense of superiority at the same time. Hence with some men the flatterer is more esteemed than the friend, for he makes the person flattered appear to score both advantages. And this most of all characterizes men ambitious of honors, since to be admired implies superiority. Some persons grow up by nature affectionate and others ambitious; one who enjoys loving more than being loved is affectionate, whereas the other enjoys being loved more. So the man who enjoys being admired and loved is a lover of superiority, whereas the other, the affectionate man, loves the pleasure of loving. For this he necessarily possesses by the mere activity of loving; for being loved is an accident, as one can be loved without knowing it, but one cannot love without knowing it. Loving depends, more than being loved, on the actual feeling, whereas being loved corresponds with the nature of the object. A sign of this is that a friend, if both things were not possible, would choose to know the other person rather than to be known by him, as for example women do when they allow others to adopt their children, and Andromache in the tragedy of Antiphon. Indeed the wish to be known seems to be selfish, and its motive a desire to receive and not to confer some benefit, whereas to wish to know a person is for the sake of conferring benefit and bestowing affection. [1239b] For this reason we praise those who remain constant in affection towards the dead; for they know, but are not known. It has, then, been stated that there are several modes of friendship, and how many modes there are, namely three, and that receiving affection and having one's affection returned, and friends on an equality and those on a footing of superiority, are different.

But as the term 'friend' is used in a more universal sense as well, as was also said at the beginning, by those who take in wider considerations (some saying that what is like is dear, others what is opposite), we must also speak about these forms of friendship and their relation to the kinds that have been discussed. As for likeness, it connects with pleasantness and also with goodness. For the good is simple, whereas the bad is multiform; and also the good man is always alike

and does not change in character, whereas the wicked and the foolish are quite different in the evening from what they were in the morning. Hence if wicked men do not hit it off together, they are not friends with one another but they separate; yet an insecure friendship is not friendship at all. So the like is dear to us in this way, because the good is like. But in a way it is also dear on the score of pleasantness; for to those who are alike the same things are pleasant, and also everything is by nature pleasant to itself. Owing to this relations find one another's voices and characters and society pleasantest, and so with the lower animals; and in this way it is possible even for bad men to feel affection for each other: "But pleasure welds the bad man to the bad." But opposite is dear to opposite on the score of utility. For the like is useless to itself, and therefore master needs slave and slave master, man and wife need one another; and the opposite is pleasant and desirable as useful, not as contained in the End but as a means to the End — for when a thing has got what it desires it has arrived at its End, and does not strive to get its opposite, for example the hot the cold and the wet the dry.

But in a way love of the opposite is also love of the good. For opposites strive to reach one another through the middle point, for they strive after each other as tallies, because in that way one middle thing results from the two. Hence accidentally love of the good is love of the opposite, but essentially it is love of the middle, for opposites do not strive to reach one another but the middle. If when people have got too cold they are subjected to heat, and when they have got too hot to cold, they reach a mean temperature, and similarly in other matters; but without such treatment they are always in a state of desire, because they are not at the middle points. But a man in the middle enjoys without passionate desire things by nature pleasant, whereas the others enjoy everything that takes them outside their natural state. This kind of relationship, then, exists even between inanimate things; but when it occurs in the case of living things it becomes affection. [1240a] Hence sometimes people take delight in persons unlike themselves, the stiff for instance in the witty and the active in the lazy, for they are brought by one another into the middle state. Hence accidentally, as was said, opposites are dear to opposites also on account of the good.

It has, then, been said how many kinds of friendship there are, and what are the different senses in which people are termed friends, and also givers and objects of affection, both in a manner that makes them actually friends and without being friends.

The question whether one is one's own friend or not involves much consideration. Some think that every man is his own best friend, and they use this friendship as a standard by which to judge his friendship for his other friends. On theoretical grounds, and in view of the accepted attributes of friends, self-love and love of others are in some respects opposed but in others manifestly similar. For in a way self-love is friendship by analogy, but not absolutely. For being loved and loving involve two separate factors; owing to which a man is his own friend rather in the way in which, in the case of the unrestrained and the self-restrained man, we have said how one has those qualities voluntarily or involuntarily — namely by the parts of one's spirit being related to each other in a certain way; and all such matters are a similar thing, whether a man can be his own friend or foe, and whether a man can treat himself unjustly. For all these relations involve two separate factors; in so far then as the spirit is in a manner two, these relations do in a manner belong to it, but in so far as the two are not separate, they do not.

From the state of friendship for oneself are determined the remaining modes of friendship under which we usually study it in our discourses. For a man is thought to be a friend who wishes for somebody things that are good, or that he believes to be good, not on his own account but for the other's sake; and in another way when a man wishes another's existence — even though not bestowing goods on him, let alone existence — for that other's sake and not for his own, he would be thought to be in a high degree the friend of that other; and in another way a man is a friend of one whose society he desires merely for the sake of his company and not for something else, as fathers desire their children's existence, though they associate with other people. All these cases conflict with one another; some men do not think they are loved unless the friend wishes them this or that particular good, others unless their existence is desired, others unless their society. Again we shall reckon it affection to grieve with one who grieves not for some ulterior motive — as for instance slaves in relation to their masters share their grief because when in grief they are harsh, and not for their masters' own sake, as mothers grieve with their children, and birds that share each other's pain. For a friend wishes most of all that he might not only feel pain when his friend is in pain but feel actually the same pain — for example when he is thirsty, share his thirst — if this were possible, and if not, as nearly the same as may be. The same principle applies also in the case of joy; it is characteristic of a friend to rejoice for no other reason than because the other is rejoicing. [1240b] Again there are sayings about friendship such as 'Amity is equality' and 'True friends have one spirit.' All these sayings refer back to the single individual; for

that is the way in which the individual wishes good to himself, as nobody benefits himself for some ulterior motive, nor speaks well of himself for such and such a consideration, because he acted as an individual; for one who displays his affection wishes not to be but to be thought affectionate. And wishing for the other to exist, and associating together, and sharing joy and grief, and 'being one spirit' and being unable even to live without one another but dying together — for this is the case with the single individual, and he associates with himself in this way, — all these characteristics then belong to the man in relation to himself. In a wicked man on the other hand, for instance in one who lacks self-control, there is discord, and because of this it is thought to be possible for a man actually to be his own enemy; but as being one and indivisible he is desirable to himself. This is the case with a good man and one whose friendship is based on goodness, because assuredly an evil man is not a single individual but many, and a different person in the same day, and full of caprice. Hence a man's affection for himself carries back to love of the good; for because in a way a man is like himself and a single person and good to himself, in this way he is dear and desirable to himself. And a man is like that by nature, but a wicked man is contrary to nature. But a good man does not rebuke himself either at the time, like the uncontrolled, nor yet his former self his later, like the penitent, nor his later self his former, like the liar — (and generally, if it is necessary to distinguish as the sophists do, he is related to himself as 'John Styles' is related to 'good John Styles'; for it is clear that the same amount of 'John Styles' is good as of 'good John Styles') — because when men blame themselves they are murdering their own personalities, whereas everybody seems to himself good. And he who is absolutely good seeks to be dear even to himself, as has been said, because he has two factors within him which by nature desire to be friendly and which it is impossible to draw asunder. Therefore in the case of man each individual seems dear to himself, although in the case of other animals it is not so, for example a horse to itself . . . so it is not dear to itself. But neither are children, but only when they have come to possess purposive choice; for when that point is reached the mind is at variance with the appetite. And affection for oneself resembles the affection of relationship: neither connection is in people's own power to dissolve, but even if the parties quarrel, nevertheless relatives are still relatives and the individual is still one as long as he lives. From what has been said, then, it is clear how many meanings there are of the term 'affection,' and that all the forms of friendship carry back to the first one. [1241a] It is relative to our inquiry to consider also the subject of agreement of feeling and kindly feeling; for some people think that they are the same thing, and others that they cannot exist apart. Kindly feeling is neither entirely distinct from



friendship nor yet identical with it. If friendship is divided into three modes, kindly feeling is not found in the friendship of utility nor in friendship for pleasure. If A wishes B prosperity because he is useful, the motive of his wish would be not B's interest but his own, whereas it is thought that kindly feeling like . . . is not for the sake of the person who feels it himself but for the sake of him for whom he feels kindly; and if kindly feeling were found in friendship for the pleasant, men would feel kindly even towards inanimate objects. So that it is clear that kindly feeling has to do with the friendship that is based on character. But it is the mark of one who feels kindly only to wish good, whereas it is the mark of the friend also to do the good that he wishes; for kindly feeling is the beginning of friendship, as every friend feels kindly, but not everyone who feels kindly is a friend, since the kindly man is only as it were making a beginning. Therefore kindly feeling is the beginning of friendship, but it is not friendship.

For it is thought that friends agree in feeling, and that those who agree in feeling are friends. But the agreement of friendship is not in regard to everything, but to things practicable for the parties, and the good to all that contributes to their association. Nor is it only agreement in thought or in appetition, for it is possible to think and to desire opposite things, as in the man lacking self-control this discord occurs; if a man agrees with another in purposive choice he does not necessarily agree with him in desire also. Agreement occurs in the case of good men — at all events when bad men purpose and desire the same things they harm one another. And it appears that agreement, like friendship, is not a term of single meaning, but whereas the primary and natural form of it is good, so that it is not possible for bad men to agree in this way, there is another sort of agreement shown even by bad men when their purpose and desire are for the same objects. But it is only proper for them to aim at the same objects in cases when it is possible for both to have the things aimed at, since if they aim at a thing of a kind that it is not possible for both to have, they will quarrel; but those who agree in mind do not quarrel.

Therefore agreement exists when there is the same purposive choice as to ruling and being ruled — not each choosing himself to rule but both the same one. Agreement is civic friendship. So much for the subject of agreement in feeling and kindly feeling.

The question is raised, why those who have conferred a benefit feel more affection for those who have received it than those who have received it feel for those who have conferred it; whereas justice seems to require the opposite. One

might conceive that it occurs for reasons of utility and personal benefit; for benefit is owing to one party and it is the other party's duty to repay it. But really it is not this alone; it is also a law of nature — activity is a more desirable thing, [1241b] and there is the same relation between effect and activity as between the parties here: the person benefited is as it were the product of the benefactor. This is why even animals have the philoprogenitive instinct, which urges them to produce offspring and also to protect the offspring produced. And in fact fathers love their children more than they are loved by them (mothers more so than fathers) and these in their turn love their children more than their parents, because activity is the greatest good. And mothers love their children more than fathers, because they think that the children are more their work; for people estimate work by its difficulty, and in the production of a child the mother has more pain.

Such may be our decision on the subject of friendship for oneself and of friendship among more than one.

It is thought that what is just is something that is equal, and also that friendship is based on equality, if there is truth in the saying 'Amity is equality.' And all constitutions are some species of justice; for they are partnerships, and every partnership is founded on justice, so that there are as many species of justice and of partnership as there are of friendship, and all these species border on each other and have their differentia closely related. But since the relations of soul and body, craftsman and tool, and master and slave are similar, between the two terms of each of these pairs there is no partnership; for they are not two, but the former is one and the latter a part of that one, not one itself; nor is the good divisible between them, but that of both belongs to the one for whose sake they exist. For the body is the soul's tool born with it, a slave is as it were a member or tool of his master, a tool is a sort of inanimate slave.

The other partnerships are a constituent part of the partnerships of the state — for example that of the members of a brotherhood or a priesthood, or with business partnerships. All forms of constitution exist together in the household, both the correct forms and the deviations (for the same thing is found in constitutions as in the case of musical modes) — paternal authority being royal, the relationship of man and wife aristocratic, that of brothers a republic, while the deviation-forms of these are tyranny, oligarchy and democracy; and there are therefore as many varieties of justice.

And since there are two sorts of equality, numerical and proportional, there will also be various species of justice and of partnership and friendship. The partnership of democracy is based on numerical equality, and so is the friendship of comrades, as it is measured by the same standard; whereas the aristocratic partnership (which is the best) and the royal are proportional, for it is just for superior and inferior to have not the same share but proportional shares; and similarly also the friendship of father and son, and the same way in partnerships. [1242a]

Specified sorts of friendship are therefore the friendship of relatives, that of comrades, that of partners and what is termed civic friendship. Really friendship of relatives has more than one species, one as between brothers, another as of father and son: it may be proportional, for example paternal friendship, or based on number, for example the friendship of brothers — for this is near the friendship of comrades, as in this also they claim privileges of seniority. Civic friendship on the other hand is constituted in the fullest degree on the principle of utility, for it seems to be the individual's lack of self-sufficiency that makes these unions permanent — since they would have been formed in any case merely for the sake of society. Only civic friendship and the deviation from it are not merely friendships but also partnerships on a friendly footing; the others are on a basis of superiority. The justice that underlies a friendship of utility is in the highest degree just, because this is the civic principle of justice. The coming together of a saw with the craft that uses it is on different lines — it is not for the sake of some common object, for saw and craft are like instrument and spirit, but for the sake of the man who employs them. It does indeed come about that even the tool itself receives attention which it deserves with a view to its work, since it exists for the sake of its work, and the essential nature of a gimlet is twofold, the more important half being its activity, boring. And the body and the slave are in the class of tool, as has been said before. Therefore to seek the proper way of associating with a friend is to seek for a particular kind of justice. In fact the whole of justice in general is in relation to a friend, for what is just is just for certain persons; and persons who are partners, and a friend is a partner, either in one's family or in one's life. For man is not only a political but also a householding animal, and does not, like the other animals, couple occasionally and with any chance female or male, but man is in a special way not a solitary but a gregarious animal, associating with the persons with whom he has a natural kinship; accordingly there would be partnership; and justice of a sort, even if there were no state. And a household is a sort of friendship — or rather the relationships of master and slave is that of craft and tools, and of spirit and body,

and such relationships are not friendships or forms of justice but something analogous, just as health is not justice but analogous to it. But the friendship of man and wife is one of utility, a partnership; that of father and son is the same as that between god and man and between benefactor and beneficiary, and generally between natural ruler and natural subject. That between brothers is principally the friendship of comrades, as being on a footing of equality—"For never did he make me out a bastard,

But the same Zeus, my lord, was called the sire

Of both —

"for these are the words of men seeking equality. [1242b] Hence in the household are first found the origins and springs of friendship, of political organization and of justice.

And since there are three sorts of friendship, based on goodness, on utility and on pleasure, and two varieties of each sort (for each of them is either on a basis of superiority or of equality), and what is just in relation to them is clear from our discussions, in the variety based on superiority the proportionate claims are not on the same lines, but the superior party claims by inverse proportion — the contribution of the inferior to stand in the same ratio to his own as he himself stands in to the inferior, his attitude being that of ruler to subject; or if not that, at all events he claims a numerically equal share (for in fact it happens in this way in other associations too — sometimes the shares are numerically equal, sometimes proportionally: if the parties contributed a numerically equal sum of money, they also take a share equal by numerical equality, if an unequal sum, a share proportionally equal). The inferior party on the contrary inverts the proportion, and makes a diagonal conjunction; but it would seem that in this way the superior comes off worse, and the friendship or partnership is a charitable service. Therefore equality must be restored and proportion secured by some other means; and this means is honor, which belongs by nature to a ruler and god in relation to a subject. But the profit must be made equal to the honor.

Friendship on a footing of equality is civic friendship. Civic friendship is, it is true, based on utility, and fellow-citizens are one another's friends in the same way as different cities are, and "Athens no longer knoweth Megara," nor similarly do citizens know one another, when they are not useful to one another; their friendship is a ready-money transaction. Nevertheless there is present here

a ruling factor and a ruled — not a natural ruler or a royal one, but one that rules in his turn, and not for the purpose of conferring benefit, as God rules, but in order that he may have an equal share of the benefit and of the burden. Therefore civic friendship aims at being on a footing of equality. But useful friendship is of two kinds, the merely legal and the moral. Civic friendship looks to equality and to the object, as buyers and sellers do — hence the saying “Unto a friend his wage —

“.

When, therefore, it is based on a definite agreement, this is civic and legal friendship; but when they trust each other for repayment, it tends to be moral friendship, that of comrades. Hence this is the kind of friendship in which recriminations most occur, the reason being that it is contrary to nature; for friendship based on utility and friendship based on goodness are different, but these people wish to have it both ways at once — they associate together for the sake of utility but make it out to be a moral friendship as between good men, [1243a] and so represent it as not merely legal, pretending that it is a matter of trust.

For in general, of the three kinds of friendship, it is in useful friendship that most recriminations occur (for goodness is not given to recrimination, and pleasant friends having got and given their share break it off, but useful friends do not dissolve the association at once, if their intercourse is on comradely and not merely legal lines); nevertheless the legal sort of useful friendship is not given to recrimination. The legal method of discharging the obligation is a matter of money, for that serves as a measure of equality; but the moral method is voluntary. Hence in some places there is a law prohibiting friendly associates of this sort from actions as to their voluntary contracts — rightly, since it is not natural for good men to go to law, and these men make their contracts as good men and as dealing with trustworthy people. And in fact in this sort of friendship the recriminations are doubtful on both sides — what line of accusation each party will take, inasmuch as their confidence was of a moral kind and not merely legal.

Indeed it is a question in which of two ways one ought to judge what is a just return, whether by looking at the actual amount or quality of the service rendered, or by its amount or quality for the recipient; for it may be as Theognis says—” Goddess, ‘tis small to thee, but great to me

“, and also the result may be opposite, as in the saying ‘This is sport to you but death to me.’ Hence recriminations, as has been said; for one party claims recompense as having rendered a great service, because he did it for his friend in need, or saying something else of the sort as to how much it was worth in relation to the benefit given to the recipient and not what it was to himself, while the other party on the contrary speaks of how much it was to the donor and not how much it was to himself. And at other times the position is reversed: the one says how little he got out of it, the other how much the service was worth to him — for instance, if by taking a risk he did the other a shilling’s worth of benefit, the one talks about the amount of the risk and the other about the amount of the cash; just as in the repayment of a money loan, for there too the dispute turns on this — one claims to be repaid the value that the money had when lent, the other claims to repay it at the present value, unless they have put a proviso in the contract.

Civic friendship, then, looks at the agreement and to the thing, but moral friendship at the intention; hence the latter is more just — it is friendly justice. The cause of conflict is that moral friendship is nobler but friendship of utility more necessary; and men begin as being moral friends and friends on grounds of goodness, but when some private interest comes into collision it becomes clear that really they were different. For most men pursue what is fine only when they have a good margin in hand, and so with the finer sort of friendship too. [1243b] Hence it is clear how these cases must be decided. If they are moral friends, we must consider if their intentions are equal, and nothing else must be claimed by either from the other; and if they are friends on the ground of utility or civic friends, we must consider what form of agreement would have been profitable for them. But if one says they are friends on one footing and the other on another, it is not honorable, when an active return is due, merely to make fine speeches, and similarly also in the other case; — but since they did not provide for this in the contract, on the ground that it was a moral friendship, somebody must judge, and neither party must cheat by pretending; so that each must be content with his luck. But it is clear that moral friendship is a matter of intention, since even if a man after having received great benefits owing to inability did not repay them, but only repaid as much as he was able, he acts honorably; for even God is content with getting sacrifices in accordance with our ability. But a seller will not be satisfied if a man says he cannot pay more, nor will one who has made a loan.

In friendships not based on direct reciprocity many causes of recrimination occur, and it is not easy to see what is just; for it is difficult to measure by one given thing relations that are not directly reciprocal. This is how it happens in love affairs, since in them one party pursues the other as a pleasant person to live with, but sometimes the other the one as useful, and when the lover ceases to love, he having changed the other changes, and then they calculate the quid pro quo, and quarrel as Pytho and Pammenes used, and as teacher and pupil do in general (for knowledge and money have no common measure), and as Herodicus the doctor did with the patient who offered to pay his fee with a discount, and as the harpist and the king fell out. The king associated with the harpist as pleasant and the harpist with the king as useful; but the king, when the time came for him to pay, made out that he was himself of the pleasant sort, and said that just as the harpist had given him pleasure by his singing, so he had given the harpist pleasure by his promises to him. Nevertheless here too it is clear how we must decide: here too we must measure by one standard, but by a ratio, not a number. For we must measure by proportion, as also the civic partnership is measured. For how is a shoemaker to be partner with a farmer unless their products are equalized by proportion? Therefore the measure for partnerships not directly reciprocal is proportion — for example if one party complains that he has given wisdom and the other says he has given the former money, what is the ratio of wisdom to being rich? and then, what is the amount given for each? for if one party has given half of the smaller amount but the other not even a small fraction of the larger, it is clear that the latter is cheating. But here too there is a dispute at the outset, if one says that they came together on grounds of utility and the other denies it and says it was on the basis of some other kind of friendship. [1244a]

About the good friend and the friend on the basis of goodness, we must consider whether one ought to render useful services and assistance to him or to the friend who is able to make an equal return. This is the same problem as whether it is more one's duty to benefit a friend or a virtuous man. If a man is a friend and virtuous, perhaps it is not over-difficult, provided one does not exaggerate the one factor and underrate the other, benefiting him greatly as friend but only slightly as good. But in other cases many problems arise, for instance, if A was a friend but is going not to be and B is going to be but is not now, or if A became one but is not one now and B is one now but was not and is going not to be. But the former problem is more difficult. For possibly there is something in the lines of Euripides:

“Dilemma takes precedence over the first-born friendship—

— Prutnee take words as thy just pay for words,

But he, that gave a deed, a deed shall have;

“

*Eur. Fr. 882 (Nauck)*

and it is not one's duty to give everything to one's father, but there are other things that one ought to give to one's mother, although the father is the superior; for even to Zeus not all the sacrifices are offered, nor does he have all the honors but some particular ones. Perhaps, therefore, there are some services that ought to be rendered to the useful friend and others to the good friend: for instance, if a friend gives you food and necessities you are not therefore bound to give him your society, and accordingly also you are not bound to render to the friend to whom you give your society the things that you do not get from him but from the useful friend; but those who by so doing wrongly give everything to one whom they love are good-for-nothing people. And the defining marks of friendship stated in the discourses all belong to friendship in some sense, but not to the same kind of friendship. It is a mark of the useful friend that one wishes the things good for him, and so of the benefactor, and in fact a friend of any sort (for this definition of friendship is not distinctive); of another friend, that one wishes his existence, of another that one wishes his society; of the friend on the ground of pleasure, that one shares his grief and his joy. All these defining marks are predicated in the case of some friendship, but none of them with reference to friendship as a single thing. Hence there are many of them, and each is thought to belong to friendship as one, though it does not: for instance, the desire for the friend's existence — for the superior friend and benefactor wishes existence to belong to his own work — and to him who gave one existence it is one's duty to give existence in return; but he wishes the society not of this friend but of the pleasant one.

Friends in some cases wrong each other, because they love things more, not the possessor of them, and are friends of the possessor too on this account (just as a man chose his wine because it was sweet and chose his wealth because it was useful), for he is more useful. Hence naturally he is annoyed, just as if they had preferred his possessions to himself as being inferior; and they complain, for now they look to find in him the good man, having previously looked for the pleasant or the useful man. [1244b]



We must also consider self-sufficiency and friendship, and the interrelationship of their potentialities. For one may raise the question whether if a person be self-sufficing in every respect he will have a friend, or whether on the contrary a friend is sought for in need, and the good man will be most self-sufficing. If the life that is combined with goodness is happy, what need would there be of a friend? For it does not belong to the self-sufficing man to need either useful friends or friends to amuse him and society, for he is sufficient society for himself. This is most manifest in the case of God; for it is clear that as he needs nothing more he will not need a friend, and that supposing he has no need of one he will not have one. Consequently the happiest human being also will very little need a friend, except in so far as to be self-sufficing is impossible. Of necessity, therefore, he who lives the best life will have fewest friends, and they will constantly become fewer, and he will not be eager to have friends but will think lightly not only of useful friends but also of those desirable for society. But assuredly even his case would seem to show that a friend is not for the sake of utility or benefit but that one loved on account of goodness is the only real friend. For when we are not in need of something, then we all seek people to share our enjoyments, and beneficiaries rather than benefactors; and we can judge them better when we are self-sufficing than when in need, and we most need friends who are worthy of our society.

But about this question we must consider whether perhaps, although the view stated is partly sound, in part the truth escapes us because of the comparison. The matter is clear if we ascertain what life in the active sense and as an End is. It is manifest that life is perception and knowledge, and that consequently social life is perception and knowledge in common. But perception and knowledge themselves are the thing most desirable for each individually (and it is owing to this that the appetite for life is implanted by nature in all, for living must be deemed a mode of knowing). If therefore one were to abstract and posit absolute knowledge and its negation (though this, it is true, is obscure in the argument as we have written it, but it may be observed in experience), there would be no difference between absolute knowledge and another person's knowing instead of oneself; but that is like another person's living instead of oneself, whereas perceiving and knowing oneself is reasonably more desirable. For two things must be taken into consideration together, that life is desirable and that good is desirable, and as a consequence that it is desirable for ourselves to possess a nature of that quality. [1245a] If, therefore, of the pair of corresponding series of this kind one is always in the class of the desirable, and the known and the perceived are generally speaking constituted by their participation in the

‘determined’ nature, so that to wish to perceive oneself is to wish oneself to be of a certain character, — since, then, we are not each of these things in ourselves but only by participating in these faculties in the process of perceiving or knowing (for when perceiving one becomes perceived by means of what one previously perceives, in the manner and in the respect in which one perceives it, and when knowing one becomes known) — hence owing to this one wishes always to live because one wishes always to know; and this is because one wishes to be oneself the object known. To choose to live in the society of others might, therefore, from a certain point of view seem foolish (first in the case of the things common to the other animals also, for instance eating together or drinking together, for what difference does it make whether these things take place when we are near together or apart, if you take away speech? but even to share in speech that is merely casual is a thing indifferent, and also neither to impart nor to receive information is possible for friends who are self-sufficing, since receiving information implies a deficiency in oneself and imparting it a deficiency in one’s friend, and likeness is friendship) — but nevertheless it surely seems that we all find it pleasanter to share good things with our friends, as far as these fall to each, and the best that each can — but among these, it falls to one to share bodily pleasure, to another artistic study, to another philosophy — ; and so it is pleasanter to be with one’s friend (whence the saying ‘Distant friends a burden are’), so that they must not be separated when this is taking place. Hence also love seems to resemble friendship, for the lover is eager to share the life of the loved one, although not in the most proper way but in a sensuous manner.

Therefore the argument in raising the question asserts the former position, but the facts of experience are obviously on the latter lines, so that it is clear that the raiser of the question in a way misleads us. We must therefore examine the truth from the following consideration: ‘friend’ really denotes, in the language of the proverb, ‘another Hercules’ — another self; but the characteristics are scattered, and it is difficult for all to be realized in the case of one person; though by nature a friend is what is most akin, yet one resembles his friend in body and another in spirit, and one in one part of the body or spirit, another in another. But still none the less a friend really means as it were a separate self. To perceive and to know a friend, therefore, is necessarily in a manner to perceive and in a manner to know oneself. Consequently to share even vulgar pleasures and ordinary life with a friend is naturally pleasant (for it always involves our simultaneously perceiving the friend), but more so to share the more divine pleasures; the reason of which is that it is always more pleasant to behold oneself enjoying the

superior good, [1245b] and this is sometimes a passive, sometimes an active experience, sometimes something else. But if it is pleasant to live well oneself and for one's friend also to live well, and if living together involves working together, surely their partnership will be pre-eminently in things included in the End. Hence we should study together, and feast together — not on the pleasures of food and the necessary pleasures (for such partnerships do not seem to be real social intercourse but mere enjoyment), but each really wishes to share with his friends the End that he is capable of attaining, or failing this, men choose most of all to benefit their friends and to be benefited by them. It is therefore manifest that to live together is actually a duty, and that all people wish it very much, and that this is most the case with the man that is the happiest and best. But that the contrary appeared to be the conclusion of the argument was also reasonable, the statement being true. For the solution is on the line of the comparison, the correspondence being true; for the fact that God is not of such a nature as to need a friend postulates that man, who is like God, also does not need one. Yet according to this argument the virtuous man will not think of anything; for God's perfection does not permit of this, but he is too perfect to think of anything else beside himself. And the reason is that for us well-being has reference to something other than ourselves, but in his case he is himself his own well-being. As to seeking for ourselves and praying for many friends, and at the same time saying that one who has many friends has no friend, both statements are correct. For if it is possible to live with and share the perceptions of many at once, it is most desirable for them to be the largest possible number; but as that is very difficult, active community of perception must of necessity be in a smaller circle, so that it is not only difficult to acquire many friends (for probation is needed), but also to use them when one has got them.

One for whom we feel affection we sometimes wish to prosper in absence from us, but sometimes to share the same experiences. And to wish to be together is a mark of friendship, for if it is possible to be together and to prosper all choose this; but if it is not possible to prosper together, then we choose as the mother of Heracles perhaps would have chosen for her son, to be a god rather than to be with her but in service to Eurystheus. For men would say things like the jest which the Spartan made when somebody told him to invoke the Dioscuri in a storm.

It seems to be characteristic of one who feels affection for another to debar him from sharing his troubles, and of the person for whom affection is felt to wish to share them. Both these things happen reasonably; for to a friend nothing ought to

give so much pain as his friend gives pleasure, yet it is felt that he ought not to choose his own interest. Hence people hinder their friends from sharing their sorrows; they are content to be in trouble by themselves, [1246a] in order that they may not appear from selfish considerations actually to choose the joy of their friend's grief and furthermore to find it a relief not to bear their misfortunes alone. And as both well-being and companionship are desirable, it is clear that companionship combined with even a lesser good is in a way more desirable than separation with a greater good. But as it is not clear how much value companionship has, at this point men differ, and some think it is friendly to share everything in company, and say, for instance, that it is pleasanter to dine with company though having the same food; others wish to share only in well-being, because, they say, if one supposes extreme cases, people experiencing great adversity in company or great prosperity separately are on a par. And it is much the same as this in regard to misfortunes also; sometimes we wish our friends to be absent, and do not want to give them pain when their presence is not going to do any good, but at other times for them to be present is most pleasant. And the reason of this contrariety is very easily explained; it comes about because of the things stated before, and because to behold a friend in pain or in a bad state is a thing we absolutely shun, as we shun it in our own case, but to see a friend is as pleasant as anything can be, for the reason stated, and indeed to see him ill if one is ill oneself; so that whichever of these is more pleasant, it sways the balance of wishing him to be present or not. And it fits in that the former occurs in the case of inferior people, and for the same reason; they are most eager for their friends not to prosper and not to be absent if they themselves have to suffer adversity. Hence sometimes suicides kill those whom they love with themselves, as they think that they feel their own misfortune more if their loved ones are to survive; just as, if a man in trouble had the memory that he had once been prosperous, he would be more conscious of his trouble than if he thought that he had always done badly.

## BOOK VIII

But one may raise the question whether it is possible to use any given thing both for its natural purpose and otherwise, and in the latter case to use it qua itself or on the contrary incidentally: for instance, with an eye qua eye, to see, or also just to see wrong, by squinting so that one object appears two — both these uses of the eye, then, use it because it is an eye, but it would be possible to make use of an eye but to use it in another way, incidentally, for example, if it were possible to sell it or to eat it. And similarly with the use of knowledge: one can use it truly, and one can use it wrongly — for instance, when one spells a word incorrectly on purpose, then at the time one is using knowledge as ignorance, just as dancing-girls sometimes interchange the hand and the foot and use foot as hand and hand as foot. If then all the virtues are forms of knowledge, it would be possible to use even justice as injustice — in that case a man will be behaving unjustly by doing unjust acts as a result of justice, as when one makes ignorant mistakes from knowledge; but if this is impossible, it is clear that the virtues cannot be branches of knowledge. [1246b] And also if it is not possible from knowledge to be ignorant, but only to make mistakes and do the same things as one does from ignorance, a man will assuredly never act from justice in the same way as he will act from injustice. But since wisdom is knowledge and a form of truth, wisdom also will produce the same effect as knowledge, that is, it would be possible from wisdom to act unwisely and to make the same mistakes as the unwise man does; but if the use of anything qua itself were single, when so acting men would be acting wisely. In the case of the other forms of knowledge, therefore, another higher form causes their diversion; but what knowledge causes the diversion of the actually highest of all? Obviously there is no longer any knowledge or any mind to do it. But moreover goodness does not cause it either; for wisdom makes use of goodness, since the goodness of the ruling part uses that of the ruled. Who then is there in whom this occurs? or is it in the same way as the vice of the irrational part of the spirit is termed lack of control, and the uncontrolled man is in a manner profligate — possessing reason, but ultimately if his appetite is powerful it will turn him round, and he will draw the opposite inference? Or is it manifest that also if there is goodness in the irrational part but folly in the reason, goodness and folly are transformed in another way? so that it will be possible to use justice unjustly and badly, and wisdom unwisely; and therefore the opposite uses also will be possible. For it is strange if whereas when wickedness at any time arises in the irrational part it

will pervert the goodness in the rational and cause it to be ignorant, yet goodness in the irrational part when there is folly in the rational should not convert the folly and make it form wise and proper judgements, and again wisdom in the rational part should not make profligacy in the irrational act temperately — which seems to be what self-control essentially is. So that there will actually be wise action arising from folly. But these consequences are absurd, especially that of using wisdom wisely as a result of folly; for that is a thing which we certainly do not see in other cases — for instance profligacy perverts one's medical knowledge or scholarship, but it does not pervert one's ignorance if it be opposed to it, because it does not contain superiority, but rather it is goodness in general that stands in this relation to badness; for example, the just man is capable of all that the unjust man is, and in general inability is contained in ability. So that it is clear that men are wise and good simultaneously, and that the states of character above described belong to a different person, and the Socratic dictum 'Nothing is mightier than wisdom,' is right. But in that by 'wisdom' he meant 'knowledge,' he was wrong; for wisdom is a form of goodness, and is not scientific knowledge but another kind of cognition.

But wisdom is not the only thing which acting in accordance with goodness causes welfare, [1247a] but we also speak of the fortunate as faring well, which implies that good fortune also engenders welfare in the same way as knowledge does; we must therefore consider whether one man is fortunate and another unfortunate by nature or not, and how it stands with these matters. For that some men are fortunate we see, since many though foolish succeed in things in which luck is paramount, and some even in things which involve skill although also containing a large element of luck — for example strategy and navigation. Are, then, these men fortunate as a result of a certain state of character, or are they enabled to achieve fortunate results not by reason of a certain quality in themselves? As it is, people think the latter, holding that some men are successful by natural causes; but nature makes men of a certain quality, and the fortunate and unfortunate are different even from birth, in the same way as some men are blue-eyed and others black-eyed because a particular part of them is of a particular quality. For it is clear that they do not succeed by means of wisdom, because wisdom is not irrational but can give reason why it acts as it does, whereas they could not say why they succeed — for that would be science; and moreover it is manifest that they succeed in spite of being unwise — not unwise about other matters (for that would not be anything strange, for example Hippocrates was skilled in geometry but was thought to be stupid and unwise in other matters, and it is said that on a voyage owing to foolishness he lost a great

deal of money, taken from him by the collectors of the two-per-cent duty at Byzantium), but even though they are unwise about the matters in which they are fortunate. For in navigation it is not the cleverest who are fortunate, but (just as in throwing dice one man throws a blank and another a six) a man is fortunate according as things were arranged by nature. Or is it because he is loved by God, as the phrase goes, and because success is something from outside? as for instance a badly built ship often gets through a voyage better, though not owing to itself, but because it has a good man at the helm. But on this showing the fortunate man has the deity as steersman. But it is strange that a god or deity should love a man of this sort, and not the best and most prudent. If, then, the success of the lucky must necessarily be due to either nature or intellect or some guardianship, and of these three causes two are ruled out, those who are fortunate will be so by nature. But again, nature of course is the cause of a thing that happens either always or generally in the same way, whereas fortune is the opposite. If, then, unexpected achievement seems a matter of fortune, but, if a man is fortunate owing to fortune, it would seem that the cause is not of such a sort as to produce the same result always or generally — further, if a man's succeeding or not succeeding is due to his being of a certain sort, as a man does not see clearly because he has blue eyes, not fortune but nature is the cause; therefore he is not a man who has good fortune but one who has as it were a good nature. Hence we should have to say that the people we call fortunate are so not by reason of fortune; therefore they are not fortunate, [1247b] for the fortunate are those for whom good fortune is a cause of good things.

But if so, shall we say that there is no such thing as fortune at all, or that it does exist but is not a cause? No, it must both exist and be a cause. Consequently it will furthermore be a cause of goods or evils to certain persons; whereas if fortune is to be eliminated altogether, then nothing must be said to come about from fortune, in spite of the fact that, although there is another cause, because we do not see it we say that fortune is a cause — owing to which people give it as a definition of fortune that it is a cause incalculable to human reasoning, implying that it is a real natural principle. This, then, would be a matter for another inquiry. But since we see that some people have good fortune on one occasion, why should they not succeed a second time too owing to the same cause? and a third time? and a fourth? for the same cause produces the same effect. Therefore this will not be a matter of fortune; but when the same result follows from indeterminate and in definite antecedents, it will be good or bad for somebody, but there will not be the knowledge of it that comes by experience, since, if there were, some fortunate persons would learn it, or indeed all branches

of knowledge would, as Socrates said, be forms of good fortune. What, then, prevents such things from happening to somebody a number of times running not because he has a certain character, but in the way in which for instance it would be possible to make the highest throw at dice every time? And what then? are there not some impulses in the spirit that arise from reasoning and others from irrational appetite? and are not the latter prior? because if the impulse caused by desire for what is pleasant exists by nature, appetite also would merely by nature proceed towards what is good in every case. If, therefore, some men have good natures — just as musical people though they have not learnt to sing have a natural aptitude for it — and without the aid of reason have an impulse in the direction of the natural order of things and desire the right thing in the right way at the right time, these men will succeed even although they are in fact foolish and irrational, just as the others will sing well although unable to teach singing. And men of this sort obviously are fortunate — men who without the aid of reason are usually successful. Hence it will follow that the fortunate are so by nature.

Or has the term ‘good fortune’ more than one meaning? For some things are done from impulse and as a result of the agents’ purposive choice, other things not so but on the contrary; and if in the former cases when the agents succeed they seem to have reasoned badly, we say that in fact they have had good fortune; and again in the latter cases, if they wished for a different good or less good than they have got. The former persons then may possibly owe their good fortune to nature, for their impulse and appetite, being for the right object, succeeded, but their reasoning was foolish; and in their case, when it happens that their reasoning seems to be incorrect but that impulse is the cause of it, this impulse being right has saved them; although sometimes on the contrary owing to appetite they have reasoned in this way and come to misfortune. But in the case of the others, then, how will good fortune be due to natural goodness of appetite and desire? [1248a] The fact is that the good fortune here and that in the other case are the same. Or is good fortune of more than one kind, and is fortune twofold? But since we see some people being fortunate contrary to all the teachings of science and correct calculation, it is clear that the cause of good fortune must be something different. But is it or is it not good fortune whereby a man formed a desire for the right thing and at the right time when in his case human reasoning could not make this calculation? For a thing the desire for which is natural is not altogether uncalculated, but the reasoning is perverted by something. So no doubt he seems fortunate, because fortune is the cause of things contrary to reason, and this is contrary to reason, for it is contrary to



knowledge and to general principle. But probably it does not really come from fortune, but seems to do so from the above cause. So that this argument does not prove that good fortune comes by nature, but that not all those who seem fortunate succeed because of fortune, but because of nature; nor does it prove that there is no such thing as fortune, nor that fortune is not the cause of anything, but that it is not the cause of all the things of which it seems to be the cause.

Yet someone may raise the question whether fortune is the cause of precisely this — forming a desire for the right thing at the right time. Or, on that showing, will not fortune be the cause of everything — even of thought and deliberation? since it is not the case, that one only deliberates when one has deliberated even previously to that deliberation, nor does one only think when one has previously thought before thinking, and so on to infinity, but there is some starting-point; therefore thought is not the starting-point of thinking, nor deliberation of deliberating. Then what else is, save fortune? It will follow that everything originates from fortune. Or shall we say that there is a certain starting-point outside which there is no other, and that this, merely owing to its being of such and such a nature, can produce a result of such and such a nature? But this is what we are investigating — what is the starting-point of motion in the spirit? The answer then is clear: as in the universe, so there, everything is moved by God; for in a manner the divine element in us is the cause of all our motions. And the starting-point of reason is not reason but something superior to reason. What, then, could be superior even to knowledge and to intellect, except God? Not goodness, for goodness is an instrument of the mind; and owing to this, as I was saying some time ago, those are called fortunate who although irrational succeed in whatever they start on. And it does not pay them to deliberate, for they have within them a principle of a kind that is better than mind and deliberation (whereas the others have reason but have not this): they have inspiration, but they cannot deliberate. For although irrational they attain even what belongs to the prudent and wise — swiftness of divination: only the divination that is based on reason we must not specify, but some of them attain it by experience and others by practice in the use of observation; and these men use the divine. For this quality discerns aright the future as well as the present, and these are the men whose reason is disengaged. This is why the melancholic even have dreams that are true; for it seems that when the reason is disengaged principle has more strength — [1248b] just as the blind remember better, being released from having their faculty of memory engaged with objects of sight.

It is clear, then, that there are two kinds of good fortune — one divine, owing to which the fortunate man's success is thought to be due to the aid of God, and this is the man who is successful in accordance with his impulse, while the other is he who succeeds against his impulse. Both persons are irrational. The former kind is more continuous good fortune, the latter is not continuous.

We have, then, previously spoken about each virtue in particular; and as we have distinguished their meaning separately, we must also describe in detail the virtue constituted from them, to which we now give the name of nobility. Now it is manifest that one who is to obtain this appellation truly must possess the particular virtues; for it is impossible for it to be otherwise in the case of any other matter either — for instance, no one is healthy in his whole body but not in any part of it, but all the parts, or most of them and the most important, must necessarily be in the same condition as the whole. Now being good and being noble are really different not only in their names but also in themselves. For all goods have Ends that are desirable in and for themselves. Of these, all those are fine which are laudable as existing for their own sakes, for these are the Ends which are both the motives of laudable actions and laudable themselves — justice itself and its actions, and temperate actions, for temperance also is laudable; but health is not laudable, for its effect is not, nor is vigorous action laudable, for strength is not — these things are good but they are not laudable. And similarly induction makes this clear in the other cases also. Therefore a man is good for whom the things good by nature are good. For the things men fight about and think the greatest, honor and wealth and bodily excellences and pieces of good fortune and powers, are good by nature but may possibly be harmful to some men owing to their characters. If a man is foolish or unjust or profligate he would gain no profit by employing them, any more than an invalid would benefit from using the diet of a man in good health, or a weakling and cripple from the equipment of a healthy man and of a sound one. A man is noble because he possesses those good things that are fine for their own sake and because he is a doer of fine deeds even for their own sake; and the fine things are the virtues and the actions that arise from virtue.

But there is also a state of character that is the 'civic' character, such as the Spartans have or others like them may have; and this character is of the following sort. There are those who think that one ought, it is true, to possess goodness, but for the sake of the things that are naturally good; [1249a] hence though they are good men (for the things naturally good are good for them), yet they have not nobility, for it is not the case with them that they possess fine

things for their own sake and that they purpose fine actions, and not only this, but also that things not fine by nature but good by nature are fine for them. For things are fine when that for which men do them and choose them is fine. Therefore to the noble man the things good by nature are fine; for what is just is fine, and what is according to worth is just, and he is worthy of these things; and what is befitting is fine, and these things befit him — wealth, birth, power. Hence for the noble man the same things are both advantageous and fine; but for the multitude these things do not coincide, for things absolutely good are not also good for them, whereas they are good for the good man; and to the noble man they are also fine, for he performs many fine actions because of them. But he who thinks that one ought to possess the virtues for the sake of external goods does fine things only by accident. Nobility then is perfect goodness.

We have also spoken about the nature of pleasure and the manner in which it is a good, and have said that things pleasant absolutely are also fine and that things good absolutely are also pleasant. Pleasure does not occur except in action; on this account the truly happy man will also live most pleasantly, and it is not without reason that people demand this.

But since a doctor has a certain standard by referring to which he judges the healthy body and the goods unhealthy, and in relation to which each thing up to a certain point ought to be done and is wholesome, but if less is done, or more, it ceases to be wholesome, so in regard to actions and choices of things good by nature but not laudable a virtuous man ought to have a certain standard both of character and of choice and avoidance; [1249b] and also in regard to large and small amount of property and of good fortune. Now in what preceded we stated the standard ‘as reason directs’; but this is as if in matters of diet one were to say ‘as medical science and its principles direct,’ and this though true is not clear. It is proper, therefore, here as in other matters to live with reference to the ruling factor, and to the state and the activity of the ruling factor, as for example slave must live with reference to the rule of master, and each person with reference to the rule appropriate to each. And since man consists by nature of a ruling part and a subject part, and each would properly live with reference to the ruling principle within him (and this is twofold, for medical science is a ruling principle in one way and health is in another, and the former is a means to the latter), this is therefore the case in regard to the faculty of contemplation. For God is not a ruler in the sense of issuing commands, but is the End as a means to which wisdom gives commands (and the term ‘End’ has two meanings, but these have been distinguished elsewhere); since clearly God is in need of nothing. Therefore

whatever mode of choosing and of acquiring things good by nature — whether goods of body or wealth or friends or the other goods — will best promote the contemplation of God, that is the best mode, and that standard is the finest; and any mode of choice and acquisition that either through deficiency or excess hinders us from serving and from contemplating God — that is a bad one. This is how it is for the spirit, and this is the best spiritual standard — to be as far as possible unconscious of the irrational part of the spirit, as such.

Let this, then, be our statement of what is the standard of nobility and what is the aim of things absolutely good.

### *On Virtues and Vices* (1249a)



*Translated by H. Rackham*

*De Virtutibus et Vitiis Libellus* is the shortest of the four ethical treatises attributed to Aristotle. The work is now regarded as spurious by scholars and its true origins are uncertain, though it was most likely written by a member of the Peripatetic school.

## On Virtues and Vices

Fine things are the objects of praise, base things of blame; and at the head of the fine stand the virtues, at the head of the base the vices; consequently the virtues are objects of praise, and also the causes of the virtues are objects of praise, and the things that accompany the virtues and that result from them, and their works, while the opposite are the objects of blame.

If in accordance with Plato the spirit is taken as having three parts, wisdom is goodness of the rational part, gentleness and courage of the passionate, of the appetitive sobriety of mind and self-control, and of the spirit as a whole righteousness, liberality and, great-spiritedness; while badness of the rational part is folly, of the passionate ill-temper and cowardice, of the appetitive profligacy and uncontrol, and of the spirit as a whole unrighteousness, meanness and smallmindedness.

Wisdom is goodness of the rational part that is productive of the things contributing to happiness. Gentleness is goodness of the passionate part that makes people difficult to move to anger. Courage is goodness of the passionate part that makes them undismayed by fear of death. Sobriety of mind is goodness of the appetitive part that makes them not desirous of the base pleasures of sensual enjoyment. Self-control is goodness of the appetitive part that enables men by means of reason to restrain their appetite when it is set on base pleasures. Righteousness is goodness of the spirit shown in distributing what is according to desert.

Liberality is goodness of spirit shown in spending rightly on fine objects. Great-spiritedness is goodness of spirit that enables men to bear good fortune and bad, honor and dishonor. On the other hand folly is badness of the rational part that causes bad living. Ill-temper is badness of the passionate part that makes men easy to provoke to anger. Cowardice is badness of the passionate part that causes men to be dismayed by fear, and especially by fear of death. Profligacy is badness of the appetitive part that makes men desirous of the base pleasures of sensual enjoyment. Uncontrol is badness of the appetitive part that makes men choose base pleasures when reason tries to hinder. Unrighteousness is badness of spirit that makes men covetous of what is contrary to their desert. Meanness is badness of spirit that makes men try to get profit from all sources. Smallmindedness is badness of spirit that makes men unable to bear good

fortune and bad, honor and dishonor.

It belongs to wisdom to take counsel, to judge the goods and evils and all the things in life that are desirable and to be avoided, to use all the available goods finely, to behave rightly in society, to observe due occasions, to employ both speech and action with sagacity, to have expert knowledge of all things that are useful. Memory and experience and acuteness are each of them either a consequence or a concomitant of wisdom; or some of them are as it were subsidiary causes of wisdom, as for instance experience and memory, others as it were parts of it, for example good counsel and acuteness.

To gentleness belongs ability to bear reproaches and slights with moderation, and not to embark on revenge quickly, and not to be easily provoked to anger, but free from bitterness and contentiousness, having tranquillity and stability in the spirit.

To courage it belongs to be undismayed by fears of death and confident in alarms and brave in face of dangers, and to prefer a fine death to base security, and to be a cause of victory. It also belongs to courage to labor and endure and play a manly part. Courage is accompanied by confidence and bravery and daring, and also by perseverance and endurance.

To sobriety of mind it belongs not to value highly bodily pleasures and enjoyments, not to be covetous of every enjoyable pleasure, to fear disorder, and to live an orderly life in small things and great alike. Sobriety of mind is accompanied by orderliness, regularity, modesty, caution.

To self-control belongs ability to restrain desire by reason when it is set on base enjoyments and pleasures, and to be resolute, and readiness to endure natural want and pain.

To righteousness it belongs to be ready to distribute according to desert, and to preserve ancestral customs and institutions and the established laws, and to tell the truth when interest is at stake, and to keep agreements. First among the claims of righteousness are our duties to the gods, then our duties to the spirits, then those to country and parents, then those to the departed; and among these claims is piety, which is either a part of righteousness or a concomitant of it. Righteousness is also accompanied by holiness and truth and loyalty and hatred of wickedness.

To liberality it belongs to be profuse of money on praiseworthy objects and lavish in spending on what is necessary, and to be helpful in a matter of dispute, and not to take from wrong sources. The liberal man is cleanly in his dress and dwelling, and fond of providing himself with things that are above the ordinary and fine and that afford entertainment without being profitable; and he is fond of keeping animals that have something special or remarkable about them. Liberality is accompanied by elasticity and ductility of character, and kindness, and a compassionate and affectionate and hospitable and honorable nature.

To greatness of spirit it belongs to bear finely both good fortune and bad, honor and disgrace, and not to think highly of luxury or attention or power or victories in contests, and to possess a certain depth and magnitude of spirit. He who values life highly and who is fond of life is not great-spirited. The great-spirited man is simple and noble in character, able to bear injustice and not revengeful. Greatness of spirit is accompanied by simplicity and sincerity.

To folly belongs bad judgement of affairs, bad counsel, bad fellowship, bad use of one's resources, false opinions about what is fine and good in life. Folly is accompanied by unskilfulness, ignorance, uncontrol, awkwardness, forgetfulness.

Of ill-temper there are three kinds, irascibility, bitterness, sullenness. It belongs to the ill-tempered man to be unable to bear either small slights or defeats but to be given to retaliation and revenge, and easily moved to anger by any chance deed or word. Ill-temper is accompanied by excitability of character, instability, bitter speech, and liability to take offence at trifles and to feel these feelings quickly and on slight occasions.

To cowardice it belongs to be easily excited by chance alarms, and especially by fear of death or of bodily injuries, and to think it better to save oneself by any means than to meet a fine end. Cowardice is accompanied by softness, unmanliness, faint-heartedness, fondness of life; and it also has an element of cautiousness and submissiveness of character.

To profligacy belongs choosing harmful and base pleasures and enjoyments, and thinking that the happiest people are those who pass their lives in pleasures of that kind, and being fond of laughter and mockery and jokes and levity in words and deeds. Profligacy is accompanied by disorder, shamelessness, irregularity, luxury, slackness, carelessness, negligence, remissness.

To uncontrol it belongs to choose the enjoyment of pleasures when reason would restrain, and although one believes that it would be better not to participate in them, to participate in them all the same, and while thinking one ought to do fine and expedient things yet to abstain from them for the sake of one's pleasures. The concomitants of uncontrol are softness and negligence and in general the same as those of profligacy.

Of unrighteousness there are three kinds, impiety, greed, outrage. Transgression in regard to gods and spirits, or even in regard to the departed and to parents and country, is impiety. Transgression in regard to contracts, taking what is in dispute contrary to one's desert, is greed. Outrage is the unrighteousness that makes men procure pleasures for themselves while leading others into disgrace; in consequence of which Evenus says about outrage: She that wrongs others e'en when she gaineth nought. And it belongs to unrighteousness to transgress ancestral customs and regulations, to disobey the laws and the rulers, to lie, to perjure, to transgress covenants and pledges. Unrighteousness is accompanied by slander, imposture, pretence of kindness, malignity, unscrupulousness.

Of meanness there are three kinds, love of base gain, parsimony, niggardliness. Love of base gain makes men seek profit from all sources and pay more regard to the profit than to the disgrace; parsimony makes them unwilling to spend money on a necessary object; niggardliness causes them only to spend in driblets and in a bad way, and to lose more than they gain by not at the proper moment letting go the difference. It belongs to meanness to set a very high value on money and to think nothing that brings profit a disgrace — a menial and servile and squalid mode of life, alien to ambition and to liberality. Meanness is accompanied by pettiness, sulkiness, self-abasement, lack of proportion, ignobleness, misanthropy.

It belongs to smallmindedness to be unable to bear either honor or dishonor, either good fortune or bad, but to be filled with conceit when honored and puffed up by trifling good fortune, and to be unable to bear even the smallest dishonor and to deem any chance failure a great misfortune, and to be distressed and annoyed at everything. Moreover the smallminded man is the sort of person to call all slights an insult and dishonor, even those that are due to ignorance or forgetfulness. Smallmindedness is accompanied by pettiness, querulousness, pessimism, self-abasement.

In general it belongs to goodness to make the spirit's disposition virtuous,



experiencing tranquil and ordered emotions and in harmony throughout all its parts; this is the cause of the opinion that the disposition of a good spirit is a pattern of a good constitution of the state. It also belongs to goodness to do good to the deserving and love the good and hate the wicked, and not to be eager to inflict punishment or take vengeance, but gracious and kindly and forgiving. Goodness is accompanied by honesty, reasonableness, kindness, hopefulness, and also by such traits as love of home and of friends and comrades and guests, and of one's fellow-men, and love of what is noble — all of which qualities are among those that are praised.

To badness belong the opposite qualities, and it has the opposite concomitants : all the qualities and concomitants of badness are among the things that are blamed.

# DE RHETORICA AD ALEXANDRUM

[Aristotle to Alexander. Salutation.]

<sup>1</sup> You write that you have often sent persons to me to urge upon me the project of noting down for you the principles of public speaking. It is not through indifference that I have put off doing so all this time, but because I was seeking how to write on this subject with more exactitude than any one else who has concerned himself therewith. It was only natural that I should have such an intention; for just as you are desirous to have more splendid raiment than other men, so you ought to strive to attain to a more glorious skill in speech than other men possess. For it is far more honourable and kingly to have the mind well ordered than to see the bodily form well arrayed. For verily it is absurd that one who in deeds excels all men should in words manifestly fall short of ordinary mortals, especially when he knows full well that, whereas among those whose political constitution is democracy the final appeal on all matters is to the law, among those who are under kingly rule the appeal is to reason. Just as their public law always directs self-governing communities along the best path, so might reason, as embodied in you, guide along the path of their advantage those who are subject to your rule. For law can be simply described as reason defined by the common consent of the community, regulating action of every kind. Furthermore, I think that you are well aware that we praise as good men and true those who employ reason and prefer always to act under its guidance, while we abhor as savage and brutish those who act in any matter without reason. It is for this cause too that we punish wicked men when they show their wickedness and admire the good when they display their virtue. Thus we have discovered a means of preventing possible wickedness, while we enjoy the benefits of existing goodness. In this way we escape annoyances which threaten us and secure advantages which we did not previously possess. Just as a life free from pain is an object of desire, so is wise reason an object of contentment.

Again, you must realize that the model set before most men is either the law or else your life and the expression of your reason. In order therefore that you may excel all Greeks and barbarians, you must exert yourself to the utmost, so that those who spend their lives in these pursuits, using the elements of virtue in them to produce a beautiful copy of the model thus set before them, may not direct themselves towards ignoble ends but make it their desire to partake in the

same virtue.

Moreover, deliberation is the most divine of human activities. Therefore you must not waste your energies on subordinate and worthless pursuits, but desire to drink at the very fountain-head of good counsel. For what man of sense could ever doubt that, while it is a sign of foolishness to act without deliberation, it is the mark of true culture to accomplish under the guidance of reason anything that reason commands? It is plain to see that all the greatest politicians of Greece resort to reason first and then to deeds, and further that those who have won the highest repute among the barbarians have employed reason before action, knowing full well that the consideration of expediency by the light of reason is a very citadel of salvation. Yea, it is reason which we must regard as an impregnable citadel, and not look on any fortress built by man as a sure safeguard.

But I hesitate to say another word, lest I should seem to be writing for effect, bringing forward proofs of facts which are fully known as though they were not generally admitted.

I will therefore say no more, after mentioning only one topic, in enlarging on which one might spend one's whole life, namely, that reason is the one thing wherein we are superior to all other animals, we who have received the highest honour which heaven can bestow. For all animals display the appetites and desire and the like, but none save man possess reason. Now it would be most strange if, when it is by virtue of reason alone that we live happier lives than all other animals, we should through indifference despise and renounce that which is the cause of our well-being. Though you have long been exhorted thereto, I urge you to embrace with the utmost zeal the study of reasoned speech. For just as health preserves the body, so is education the recognized preserver of the mind. Under its guidance you will never take a false step in anything that you do, but you will keep safe practically all the advantages which you already possess. Moreover, if physical sight is a pleasure, to see clearly with the eyes of the soul is a thing to be admired. Again, as the general is the saviour of his army, so is reason, allied with education, the guide of life. These, then, and like sentiments I think I may well dismiss at the present moment.

In your letter you urge me not to let this book fall into other hands than yours, and this knowing full well that, just as parents love their own offspring more than supposititious children, so those who have invented something have more

affection for it than those to whom the discovery is merely imparted. For men have died in defence of their words, as they would die for their offspring. For the so-called Parian Sophists, because what they teach is not of their own production, in their gross indifference feel no affection and barter it away for money. Wherefore I exhort you to watch over these precepts, the children of my brain, that while they are yet young they may be corrupted by no man, and, sharing in your well-ordered life, when they come to man's estate, may win unsullied glory.

Following the lesson taught by Nicanor, we have adopted from other authors anything on the same subjects which was particularly well expressed in their treatises. You will find two such books, one of which is my own, viz the Oratorical Art which I wrote for Theodectes, while the other is the treatise of Corax. The other points connected with public and forensic exhortations have all been dealt with specially in these treatises. So in these commentaries written expressly for you you will find material for amplifying these two treatises. Farewell.]

Public speeches fall into three classes, deliberative, epideictic, and forensic. They are of seven kinds, being employed in persuasion, dissuasion, eulogy, vituperation, accusation, defence, and inquiry either by itself or in relation to something else. Such are the different kinds of discourses and their number. We shall employ them in public harangues, in lawsuits about contracts, and in private conversation. We shall treat of them most conveniently if we take them each separately and enumerate their qualities, their uses, and their arrangement. And first let us discuss persuasion and dissuasion, since they are used most of all in private conversations and in public harangues. To speak generally, persuasion is an exhortation to some purpose or speech or action, while dissuasion is the prevention of some purpose or speech or action. Such being the definition of these words, he who persuades must show that those things to which he exhorts are just, lawful, expedient, honourable, pleasant, and easy of accomplishment. Failing that, when he is exhorting to that which is difficult, he must show that it is practicable and that its execution is necessary. He who dissuades, by pursuing the opposite course, must exert a hindering influence, showing that the proposed action is neither just nor lawful nor expedient nor honourable nor pleasant nor practicable; if he cannot do that, he must urge that it is toilsome and unnecessary. All actions can have both these sets of attributes applied to them, so that a man who can urge neither of these two sets of fundamental qualities is at a loss for anything to say. It is for these qualities therefore that those who seek

to persuade or dissuade must look. I will now attempt to define them one by one and show whence we shall supply them for our discourses.

That which is just is the unwritten custom of all or the majority of men which draws a distinction between what is honourable and what is base. We may take as examples the honouring of parents, doing good to one's friends, and returning good to one's benefactors. These and similar duties are not enjoined upon mankind by written laws, but they are observed by unwritten custom and universal practice. So much for just actions.

Law is a common agreement made by the community, which ordains in writing how the citizens ought to act under every kind of circumstance.

Expediency is the safeguarding of existing advantages, or the acquisition of those not already possessed, or the riddance of existing disadvantages, or the prevention of harm which threatens to occur. For individuals you can divide up expediency according as it applies to the body or the mind or external possessions. For the body, strength, beauty, and health are expedient; for the mind, courage, wisdom, and justice. External possessions are friends, wealth, and property. The contraries of these are inexpedient. For a community such things as concord, strength for war, wealth, a plentiful supply of revenue, and excellence and abundance of allies are expedient. In a word we look upon anything of this kind as expedient and the contrary as inexpedient. Honourable things are those from which good repute and creditable distinction will accrue to the doers. Pleasant things are those which cause joy. Easy things are those which are accomplished with the least expenditure of time, trouble, and money. Practicable things are all those which admit of performance. Necessary things are those the execution of which does not depend upon us but takes place as it were by some necessity divine or human. Such, then, is the nature of things just, lawful, expedient, honourable, easy, practicable, and necessary.

It will be easy to speak about such subjects by the use of the arguments mentioned above and by arguments analogous to them and by arguments opposed to them and by employing judgements pronounced by the gods or by men by judges of repute or by our opponents.

We have already described the nature of that which is just. The following are cases where there is an analogy to that which is just: 'As we consider it just to obey parents, on the same principle it behoves sons to imitate the actions of their

fathers'; or again, 'As it is just to do good in return to those who do good to us, so it is just to abstain from harming those who have done us no ill'. It is by this method that we must get analogies to justice. Then we ought to make the example itself clear by taking the contrary case: 'As it is just to punish those who do us a wrong, so it behoves us to do good in return to our benefactors'.

You will discover what is just in the judgement of men of repute by a consideration such as the following: 'Not only do we hate and do harm to our enemies, but the Athenians also and the Lacedaemonians judge that it is just to punish their enemies.' By following this system you will often discover what is just.

We have already defined the nature of that which is lawful. When it serves our purpose we must introduce the legislator himself and his law and any case of analogy to the written law. For example, 'As the lawgiver punishes thieves with very serious penalties, so we ought to inflict heavy chastisement on those who deceive, for they steal away the understanding'; or again, 'Just as the lawgiver has made the nearest relatives the heirs of those who die childless, so I ought in the present case to have authority over the possessions of a freed man; for since those who set him free are dead and I am the nearest relative of the deceased persons, I am justified in assuming control over their freedmen. This is an example of the way in which an analogy to that which is ordained by law is obtained.

The following is an illustration of what is contrary to that which is lawful: 'If the law prohibits the distribution of public property, it was clearly the judgement of the lawgiver that all who divide up such property are doing wrong; for if the laws ordain that those who govern the state well and justly should be honoured, they clearly regard those who make away with public property as deserving of punishment.' The nature of the lawful is thus clearly shown by taking cases of the contrary. It can be demonstrated from previous judgements by a consideration such as this: 'Not only do I — hold that the lawgiver made this law to cover such cases as these, but on a former occasion, when Lysithidas gave an explanation similar to that which I am now putting forward, the jury voted in favour of this interpretation of the law.' By this method we shall often be able to demonstrate what is lawful.

The nature of the expedient itself has already been defined. We must, in addition to the subjects already mentioned, introduce the expedient, wherever it is

available, into our arguments and often bring it to light, pursuing the same method which we employed for the lawful and the just. The following would be instances of analogies to the expedient: 'As in war it is expedient to station the bravest men in the front rank, so in the state it is advantageous that the wisest and justest men should be the leaders of the people'; or again, 'As it is expedient for the healthy to be on their guard against disease, so too in communities which live in harmony it is expedient to provide against possibilities of faction.' By following this method you will be able to make many analogies to the expedient. The expedient will also be clear if you take contrary cases such as the following: 'If it is advantageous to honour good citizens, it would be expedient also to punish the wicked'; or again, 'If you think it inexpedient that we should make war unaided on the Thebans, it would be expedient to make the Lacedaemonians our allies and then make war on the Thebans.' This is the method by which you will demonstrate the expedient by arguing from the contrary. You can discover what has been judged to be expedient by judges of repute by considerations such as the following:

'The Lacedaemonians, when they had conquered the Athenians, thought it expedient not to enslave their city, and on another occasion the Athenians and Thebans, when it was within their power to depopulate Sparta, thought it expedient to allow the Lacedaemonians to survive.'

By pursuing this method you will have plenty to say about the just, the lawful, and the expedient. You must employ the same methods in the case of the honourable, the easy, the pleasant, the practicable, and the necessary. We shall thus have abundant material on these topics also.

Next let us determine the number, the character, and the names of the subjects which we discuss in the council-chamber and in the popular assembly. If we have a clear knowledge of these, the actual circumstances will provide us with something appropriate to say on each occasion when we are giving advice. If we have long been familiar with the characteristics common to each class of subject, we shall always be able to apply them readily in practice. We must therefore distinguish the various subjects about which all men hold public deliberation.

To sum the matter up, there are seven subjects on which we shall speak in public. For whether we are addressing the council or the people, we must necessarily deliberate and speak about either sacred rites or laws or the political constitution or alliances and contracts with other states or war or peace or the

provision of resources. These, then, are the subjects about which we shall deliberate and address the people. Let us take each of them separately and see how they can be treated in a speech.

There are three ways in which we must deal with the subject of sacred rites; for we shall urge either that they ought to be retained in their existing form, or that they ought to be changed so as to be more magnificent or else less sumptuous. When we are maintaining that the existing form should be retained, we should derive material from the argument of justice, urging that it is regarded by all men as unjust to transgress the customs of our forefathers, and that all the oracles command men to make their sacrifices according to the usages of their forefathers, and that it is of the utmost importance that the religious observances should be continued which were prescribed by those who originally founded cities and set up temples to the gods. On the ground of expediency we shall urge that, if the sacrifices are offered according to ancestral usage, it will be expedient either for individuals or the community at large in view of the payments of money which will be involved, and that it will benefit the citizens by creating a feeling of self-confidence; for if heavy-armed troops, horsemen, and light-armed soldiers join in a religious procession, the citizens, priding themselves on such things, would feel greater confidence in themselves. It can be urged on the ground of what is honourable, if it results in the spectacle of splendid festivals; on the ground of pleasure, because a variety in the sacrifices to the gods is introduced into the spectacle; and on the ground of practicability, if neither defect nor excess has characterized the celebration. Thus when we are speaking in support of the existing state of affairs, we must pursue our inquiry by the above or similar methods and treat the question under discussion as the nature of the subject permits.

When we are advising a change to greater magnificence in the celebration of sacred rites, we shall have a plausible pretext for altering ancestral usages, if we urge that an addition to existing rites involves not their destruction but their extension; again, that it is reasonable to suppose that the gods are more favourably disposed to those who honour them more; again, that even our fathers used not to perform their sacrifices always in the same way, but regulated their service to the gods, both as a community and as private individuals, according to the occasion and their own prosperity; again, that this is a principle which we follow in all other matters in the government of our cities and our private establishments. You must also mention any advantage in brilliance or enjoyment which is likely to result to the city from the alteration, following the methods



which we have described above.

When we are urging a reduction of the scale of our sacred rites, we must in the first place direct our remarks to the circumstances of the moment and show in what respect the citizens are less prosperous now than formerly. Next we must show that it is reasonable to suppose that the gods rejoice, not in the costliness of the sacrifices, but in the piety of those who offer them; again, that both gods and men deem those who do anything beyond their means to be guilty of great folly; next, that public expenditure is not merely a personal question but depends on prosperity and adversity. These and others of the same kind are the arguments which we shall offer on the subject of sacrifices.

But in order that we may know how to give some indications and offer rules as to the conditions of the ideal sacrifice, let us define it thus: the best sacrifice of all is one which is pious towards the gods, moderate in costliness, likely to bring advantage in war, and splendid from a spectacular point of view. It will be pious towards the gods, if ancestral usage is not violated; it will be moderate in costliness, if the accompaniments of the ceremony are not all wasted; it will be splendid from a spectacular point of view, if gold and such things as are not actually consumed are used lavishly; and it will be advantageous for war, if horsemen and infantry in full panoply accompany the procession. By following these rules we shall best provide for the service of the gods. From what has been said above we shall know how to speak in public about the performance of sacred rites of every kind.

Let us next deal similarly with laws and the political constitution. Laws may be briefly described as common agreements made by the community which define and ordain in writing how the citizens should act under various circumstances.

In democratic states legislation ought to provide for appointment by lot to the less important and the majority of the offices (for thus faction will be avoided), while the most important magistrates should be elected by the votes of the multitude. In this way the people, having the power to bestow honours on whomsoever they like, will not be jealous of those who obtain them, while the more prominent men will be encouraged to practice virtue, knowing that it will be to their advantage to have a good repute among their fellow-citizens. Such are the laws which ought to be laid down regarding elections in a democratic state. It would be a lengthy task to go into detail about the rest of the administration. But, to put the matter briefly, care must be taken that the laws may prevent the

multitude from entertaining designs against the possessors of property and may instil into the wealthy citizens an eagerness to spend money in undertaking public burdens. The laws will ensure this if certain distinctions are set aside by law for the owners of property in return for their expenditure in the service of the state, and if the laws show more consideration for the tillers of the soil and the sailors among the poorer classes than for the rabble of the city; so that the rich may willingly serve the state, and the people may prefer work to dishonest means of gain. In addition stringent laws must be laid down forbidding the distribution of public lands and the confiscation of the property of deceased persons, and heavy penalties must be imposed on those who commit these transgressions. Also public land in a good position in front of the city must be set apart for the burial of those who are killed in war, and their children must be supported at the public expense until they grow up. Such must be the character of legislation in a democratic state.

In oligarchical states the laws ought to distribute the magistracies impartially to all who possess the rights of citizenship; most of them should be bestowed by lot, but the most important should be assigned by secret vote under oath and with the strictest precautions. Under an oligarchy the penalties inflicted on those who offer affronts to any of the citizens ought to be very heavy, for the people are not so much annoyed at being debarred from holding office as they are angered at being affronted. Differences between citizens ought to be settled as quickly as possible and not be allowed to continue. Nor ought the lower classes to be allowed to collect from the country into the city; for the result of such assemblages is that the populace unites and overthrows the oligarchy. Speaking generally, in democratic states the laws ought to hinder the populace from entertaining designs on the property of the rich; in oligarchical states they ought to check the possessors of political rights from insulting those who are weaker than themselves and from imposing upon the citizens. From what I have said you will not fail to perceive what aims the laws and political constitution ought to keep in view.

Any one who wishes to speak in favour of a law must show that it affects all equally, that it harmonizes with the rest of the laws, and that it is *bénéficiai* to the city, particularly in promoting concord; failing this, he must show that it will conduce to virtue among the citizens, or that it will benefit the public revenue or the good repute of the city as a whole, or that it will strengthen the power of the state, or that it will confer some similar advantage. If you are speaking against a law, you must consider whether it does not apply equally to all the citizens; and

next, whether, so far from agreeing with the other laws, it is actually opposed to them; and further, whether it will conduce to none of the benefits which we have mentioned, being on the contrary harmful. These considerations will provide us with abundant arguments for making proposals and speaking about laws and the political constitution.

We will now proceed to deal with alliances and contracts with other states. Contracts must necessarily be regulated by public arrangements and agreements. Alliances must be formed on occasions when one party is too weak by itself, or when a war is expected to break out; or else men must enter into an alliance with another state because they think they will thus prevent certain people from making war. These and a number of similar circumstances are the reasons which induce states to make allies.

When you wish to support the formation of an alliance, you must make it clear that the occasion for doing so exists, and show if possible, that the proposed allies are just men, and that they have previously conferred some benefit upon the state, and that they are possessed of considerable power, and that they are situated near at hand. If all these advantages are not present, you must collect in your speech any of them which do exist. When you are trying to prevent an alliance, it is open to you to show in the first place that it is unnecessary at the moment; or again, that the proposed allies are not just men, or that they have wronged us on a previous occasion. Failing that, you can object to them on the ground that they live too far away and are not in a position to help us at the proper moment. With these and similar arguments we shall have abundant material for speaking against and in support of the formation of alliances.

Again, on the subject of peace and war let us use a similar method to obtain our chief kinds of argument. The pretexts for making war on another state are as follows: when we have been the victims of aggression, we must take vengeance on those who have wronged us, now that a suitable opportunity has presented itself; or else, when we are actually being wronged, we must go to war on our own behalf or on behalf of our kindred or benefactors; or else we must help our allies when they are wronged; or else we must go to war to gain some advantage for the city, in respect either of glory, or of resources, or of strength, or of something similar.

When we are exhorting any one to go to war we must collect as many of these pretexts as possible, and afterwards show that those whom we are exhorting

possess most of the advantages which bring success in warfare. Now men are always successful either by the favour of the gods, which we call good fortune, or through the number and strength of their troops, or through the abundance of their resources or the wisdom of their general or the excellence of their allies, or through their superiority of position. From these, then, and similar advantages we shall select and demonstrate those which are most applicable to the circumstances, when our advice is in favour of war, belittling the points of superiority possessed by the enemy and exaggerating those which we ourselves enjoy. If we are trying to prevent a war which is likely to take place, we must first of all find pretexts to show that the alleged grievances either do not exist at all or else are small and insignificant; next we must show that it is not expedient to go to war, dwelling on the disasters that befall men in warfare; and further, that the advantages which conduce to victory (which have just been enumerated) are possessed by the enemy rather than by us.

These are the means which we must employ to avert a war which is likely to occur. When we are trying to stop a war which has actually started, if those to whom our advice is offered are stronger than their foes, the first point on which we must insist is that sensible men ought not to wait until they have a fall, but should make peace while they are strong; also, that it is characteristic of war to ruin many even of those who are successful in it, but of peace to save the vanquished and to allow the victorious to enjoy the possessions which they have gained in warfare. We must also dwell upon the numerous and incalculable vicissitudes of warfare. Such are the methods by which we must exhort to peace those who are victorious in war.

Those who have already met with failure we must urge to make peace on the ground of actual events, and because they ought to learn from their misfortunes and not be exasperated by those who have already injured them, and because of the dangers which have already resulted from not making peace, and because it is better to sacrifice a part of their possessions to an enemy stronger than themselves than to be conquered and lose their lives as well as their property. And, to put the matter briefly, we must realize that it is the universal custom of mankind to abandon mutual warfare, either when they think that the demands of the enemy are just, or when they are at variance with their allies, or weary of war, or afraid of their enemy, or suffering from internal strife. If, therefore, you collect from amongst all these and similar arguments those which are most applicable to the circumstances, you will have no lack of material for speaking about peace and war.

Lastly, it remains for us to treat of the provision of resources. First, then, we must inquire whether any property belonging to the city is neglected, neither bringing in any revenue nor being dedicated to the gods: I mean, for example, any public lands which are neglected and might bring in revenue to the city if they were sold or leased to private persons; for this is a very common source of income.

If this expedient is lacking, we must impose taxes on rateable property, or order the poor to give their personal service in time of danger, the rich to pay money, and the craftsmen to provide arms. In a word, when we are treating of ways and means, we must say that they affect all the citizens equally and are permanent and ample, while the exact opposite is true of our adversaries' proposals.

From what has now been said we are acquainted with the subjects on which we shall speak in public, when we are seeking to persuade or dissuade, and their component parts, which will supply us with the material of our orations.

Next in order let us set forth and treat of the eulogistic and vituperative kinds of oratory.

To speak generally, the eulogistic kind is the amplification of creditable purposes, deeds, and words, and the attribution of qualities which do not exist; while the vituperative kind is the opposite of this and consists in the minimizing of creditable qualities and the amplification of those which are discreditable. Deeds worthy of praise are those which are just, lawful, expedient, honourable, pleasant, and easy of execution. The nature of these qualities and the sources from which we can obtain abundant material about them have already been stated. He who is eulogizing must show in his speech that one of these praiseworthy deeds is connected with a certain person or his acts, because it has either been brought about by his personal exertions, or has been produced through his agency, or has resulted from a certain action of his, or has been done for some object, or could not have come to pass except under certain circumstances which are due to him. Similarly he who is censuring must show that the contrary of this is true of the person whom he is censuring. The following are examples of the results of action; bodily health is the result of a fondness for gymnastics; a man falls into ill-health as the result of not caring for exercise, or becomes wiser as the result of studying philosophy, or lacks the necessities of life as the result of his own carelessness. The following are actions done with an object: men endure many toils and dangers with the object of being

crowned by their fellow-citizens, or neglect everything else with the object of pleasing those whom they love. Instances of things which can only take place under certain circumstances are the following: victories at sea can only take place when there are sailors to win them, and drunkenness can only occur as the result of drinking. By pursuing this method on the lines already laid down you will have abundant material for eulogy and vituperation.

Generally speaking you will be able to amplify and minimize under all such circumstances by the following method: first, by showing, as I explained just now, that many good or bad results have been caused by a certain person's actions. This is one kind of amplification. A second method is to introduce a judgement already passed — a favourable one, if you are eulogizing, and an unfavourable one, if you are censuring — and then set side by side with it what you have to say and compare the two together, making as much as possible of your own opinion and as little as possible of the other judgement; the result will be that your own opinion is magnified. A third plan is to compare that about which you are speaking with the least thing which falls under the same category; for the former will then appear magnified, just as persons of moderate height appear taller than they really are when they stand side by side with persons of unusually small stature. The following is another safe method of amplification: if a certain thing has been considered a great good, then its contrary, if you mention it, will appear to be a great evil, and similarly, if a thing is considered to be a great evil, its contrary, if you mention it, will appear to be a great good. You can also magnify good and bad actions by showing that the doer of them acted intentionally, proving that he had long premeditated doing them, that he purposed to do them often, that he did them over a long period, that no one else ever tried to do them, that he acted in company with others with whom no one else ever acted, or following those whom no one else ever followed, or that he acted wittingly or designedly, and that we should be fortunate, or unfortunate, if we all did as he did. You must also prove your point by drawing parallels and amplifying as follows, building them as it were, one on the top of another : 'If a man cares for his friends, it is natural to suppose that he honours his parents, and he who honours his parents will also desire to benefit his fatherland.' Generally speaking, if you can prove that a man is the cause of *many* good or bad things, these things will appear to be important. You must also examine the topic on which you are speaking and see whether it appears to have more weight when divided into parts or when treated as a whole, and you must treat it in the manner in which it appears to have more weight. By pursuing these methods you will be able to make the most frequent and effective amplifications.

You will minimize good and bad actions in your speeches by following the opposite method to that which we have prescribed for amplification. The best thing is to show that a man's action has produced no 'result at all, or, if that is impossible, only the smallest and most insignificant results. From these instructions we know how to amplify or minimize any point which we are bringing forward, when we are eulogizing or censuring. These materials for amplification are useful in other kinds of oratory, but they are most effective in eulogy and vituperation. We shall thus be provided with ample material on these topics.

— Let us next similarly define the kinds of oratory employed in accusation and defence, [which are concerned with forensic business, ] and the elements of which they are composed and the uses to which they are to be put. The oratory of accusation is, to put the matter briefly, the exposition of errors and crimes; defensive oratory is the disproving of errors and crimes of which a man is accused or suspected.

Both styles, then, having these qualities, he who is accusing, when he charges his opponents with deliberate wickedness, must declare that their acts are unjust and illegal and detrimental to the interests of the mass of citizens; when he is accusing an adversary of folly, he must declare his acts to be both inexpedient for the actual doer of them and disgraceful and odious and impracticable. These and similar arguments are those which should be directed against the wicked and foolish. Accusers should also observe against what kinds of offences the punishments ordained by the laws are directed and for what offences juries impose penalties. Where the law has laid down a definite punishment, the accuser must make it his sole object to prove that the offence has been committed. When the jury has to assess the penalty, first the charges must be proved; then the errors committed by one's opponents must be amplified, and, if possible it must be shown that the offence was committed wittingly, and not with ordinary intent but after every possible preparation. If you cannot do this, and think that your opponent intends to show that he has somehow made a mistake or that he intended to act honourably in the matter but met with misfortune, you must deprive him of any claim to pardon by telling your hearers that evil-doers, instead of declaring that they have made a mistake after they have acted, ought to be careful before they act; and further that, even if he has made mistakes or

met with misfortune, he is more deserving of punishment for his misfortunes and mistakes than one who has done neither of these things. Moreover the legislator has not let those who make mistakes go free, but has made them liable to punishment, in order to prevent any one else from making mistakes. You must also point out that if they listen to one who makes this kind of defence, they will have many persons doing wrong deliberately; for if they are successful, they will simply do what they like, while, if they are unsuccessful, they will declare that they have met with ill-fortune, and they then will be excused from punishment. By such arguments must accusers deprive their adversaries of any claim to pardon, and by means of the amplifications already described their acts must be shown to have caused many evils. These are the component parts of which the oratory of accusation is made up.

Defensive oratory consists of three methods. A man who is defending himself must either prove that he committed none of the acts of which he is accused; or if he is forced to admit them, he must try to show that what he has done is lawful and just and honourable and expedient for the state; if he cannot prove this, he must attribute his acts to an error or to misfortune and show that the harm which has resulted from them is small, and so try to gain pardon. You can define a crime, an error, and a misfortune thus: you must regard as a crime a wicked deed done deliberately, and you must urge that the heaviest penalty be exacted for such deeds; a harmful act done in ignorance must be called an error; while the failure to accomplish some good intention, not through one's own fault but owing to some one else or to luck, is to be accounted a misfortune. The commission of crime you must declare to be confined to wicked men, while error and misfortune in action are not peculiar to oneself but are common to all men, including those who are sitting in judgement upon you. You must ask for pardon if you are forced to admit that you have committed faults of this kind, pointing out that your hearers are as liable to error and misfortune as you are. A man who is making his defence must observe all the offences for which the laws have laid down punishment and juries assess penalties. When the law fixes a definite punishment, he must show that he has not committed the offence at all, or that he has acted legally and justly. But when the jury is empowered to assess the penalty, he must not follow the same course and deny that he has committed the offence, but rather he must try to prove that his action has caused little harm to his adversary and that it was done involuntarily.

If we follow these and similar methods, we shall have abundant material in cases of accusation and defence. It remains for us still to deal with the style of oratory



employed in an inquiry.

Inquiry may be summarily described as the elucidation of intentions, acts, and words which are contradictory to one another or to the rest of a man's mode of life. He who is making an inquiry must try to discover whether either the statement which he is examining or the acts or intentions of the subject of his inquiry are in any respect contradictory to one another. The method to be pursued is as follows: he must consider whether in the past the person in question, after having been originally the friend of another man, next became his enemy and then again the friend of the same person, or whether he has done anything contradictory or of a discreditable tendency, or is likely in the future, if opportunities should occur, to act in a manner which contradicts his former acts. Similarly, you must observe whether, in making some statement now, he is speaking in contradiction of his former words, and likewise whether he has formed any intention which contradicts his former words, or would do so if opportunities should arise. By a similar process you must deal with the contradictions which occur in the mode of life of the person whom you are examining in respect of his other and highly esteemed habits of life. If you thus pursue this branch of oratory, there is no method of examination which you will leave untried.

All the various branches of oratory having now been distinguished, we must employ them, when it is fitting, either each separately or in common with one another by mingling their different qualities. For there are very great differences between them, but in actual practice they have much in common. In this respect they resemble the various classes of human beings, who are partly similar and partly dissimilar in their appearance and in their perceptions. Having thus distinguished the various kinds of oratory, let us next enumerate the requisites which are common to all kinds and explain how they must be used.

First, then, the just, the lawful, the expedient, the honourable, the pleasant, and similar topics are, as I stated at the beginning, common to all the various kinds of oratory, but are chiefly used in persuasive oratory. Secondly, amplification and minimization are necessarily useful in all kinds of oratory, but most use is made of them in eulogy and vituperation. Thirdly, there are the proofs, which must necessarily be employed in every department of oratory, but are particularly useful in accusation and defence, since these need most refutation. Further we must deal with anticipations of arguments, postulates, reiterations, prolixity of speech, and moderate length of speech, brevity, and method of

statement. For these and similar expedients are useful in all the various branches of oratory.

The just, the lawful, and the like I have already defined and explained their application; I have also dealt with amplification and minimization. I will now explain the other terms, beginning with the proofs.

Proofs are of two kinds; some are derived directly from actual words, acts, and persons, others are supplementary to words and actions. Probabilities, examples, infallible signs, enthymemes, maxims, fallible signs, and refutations are proofs derived from actual words, persons, and actions.

Testimonies, oaths, and evidence given under torture are supplementary proofs. We must understand the nature of each of these kinds of proof, and whence we are to derive material for them, and how they differ from one another.

It is a Probability when one's hearers have examples in their own minds of what is being said. For instance, if any one were to say that he desires the glorification of his country, the prosperity of his friends, and the misfortunes of his foes, and the like, his statements taken together would appear probable; for each one of his hearers is himself conscious that he entertains such wishes on these and similar subjects. We must, therefore, always carefully notice, when we are speaking, whether we are likely to find our audience in sympathy with us on the subject on which we are speaking; for in that case they are most likely to believe what we say. Such, then, is the nature of a probability.

We can divide probabilities into three kinds. One kind consists in the inclusion in one's speech, when accusing or defending, of the feelings which are naturally found in mankind — if, for example, certain persons happen to despise or fear a certain other person, or have often done this very action, or, further, if they feel pleasure or pain or desire, or have ceased from desire, or if they act under the influence of wine, or have experienced in mind or body or one of the senses any of the feelings whereby we are all affected.

These and similar feelings, being common to all human nature, are well known to our hearers. Such, then, are the natural feelings which are wont to affect mankind, and for these we say that a place ought to be found in our speeches. Another division of probabilities falls under the heading of habit (which is what we do from custom), a third under that of love of gain. For we often for the sake

of gain choose to act in a way which does violence to our nature and character.

With these definitions before us, when we are seeking to persuade or dissuade, we must show in regard to the subject in question that the action to which we are exhorting our hearers, or which we are opposing, has the effect which we declare that it has. Failing that, we must show that actions similar to that of which we are speaking either generally or invariably turn out as we say they do. Such must be our application of probabilities in relation to actions. As regards persons you must show, if you can, when you are accusing any one, that he has often committed the act in question on previous occasions; or, if that is impossible, that he has done similar acts. You must also try to prove that it was to his advantage to commit these acts; for most men, themselves preferring what is to their advantage, think that others too always act from this motive. If, therefore, you can derive an argument of probability directly from your adversaries, this is the method by which you must infer it. Failing that, you must take similar persons and adduce their customary procedure; for example, when the man whom you are accusing is young, argue that he has committed acts such as persons of that age are in the habit of committing; for your accusations against him will be believed on the ground of this resemblance. Similarly you will gain credence if you can show that his companions have the character which you declare him to have; for owing to his association with them it will appear likely that he has the same pursuits as his friends. Such must be the employment of the argument from probabilities by those who are accusing.

Those who are speaking in their own defence must make it their chief object to show that none of the acts of which they are accused has ever been committed either by themselves or by any of their friends or by any person who resembles them, and that it was of no advantage to them to commit such acts. But if you have manifestly done the same deed on a previous occasion, the fault must be attributed to your youth, or some other excuse must be introduced to provide a reasonable pretext for your having done wrong on that occasion. You must declare also that it was of no benefit to you to have acted thus at the time and that it would not have been of any advantage to you now. If no act of the kind alleged has ever been committed by you, but some of your friends happen to have done such deeds, you must plead that it is not just that you should be slandered because of them, and you must show that others of your associates are honest men; you will thus throw doubt on the crime of which you are accused. If they point out that other persons, who resemble you, have committed the same crimes as they allege against you you must declare that it is absurd if the fact that

other people can be shown to have done wrong is to be regarded as a proof that you have committed any of the deeds of which you are accused. If, then, you deny that you have done the deed with which you are charged, you must thus make your defence by arguing from probabilities; for you will then make the charge appear improbable. If, however, you are obliged to admit the charge, you must point out the resemblance of your acts to the usual practice of mankind, by stating as emphatically as possible that the majority of men, nay all men, act under these and similar circumstances exactly as you have done.

If you cannot do this, you must take refuge in pleas of misfortune or error, and try to obtain pardon by citing the passions which are common to all mankind and make us lose our reason — love, anger, drunkenness, ambition, and the like. Such is the method by which we shall make the most skilful use of the argument from probability.

Examples are actions which have taken place in the past and are similar to, or the contrary of, those about which we are speaking. They must be used when your statement is not credible and you wish to establish its truth when it does not gain credence from the argument of probability; the object being that your hearers, learning that another action similar to that of which you are speaking has been carried out in the way in which you declare it to have been done, may be more ready to believe what you say.

Examples are of two kinds; for some things turn out according to our expectations, others contrary to them. The former cause credit, the latter discredit. For instance, if some one declares that the rich are juster than the poor and instances certain just actions on the part of rich men, such examples are in accordance with our expectation, for one can see that most men think that rich people are juster than poor people. If, on the other hand, some one shows that certain rich individuals have acted unjustly in order to get money, thus employing an example which is contrary to expectation, he would cause the rich to be distrusted. Similarly, if any one brings forward an example of what seems to be in accordance with our expectation — for instance, that on some occasion the Lacedaemonians or Athenians employing a large number of allies utterly defeated their enemies — he then disposes his hearers to take to themselves many allies.

Such examples are in accordance with our expectation, for every one is of opinion that large numbers are of no small importance for winning a victory. If,

on the other hand, a speaker wishes to prove that numbers do not bring victory, he must give as examples occasions when the unexpected has happened, pointing out, for instance, that the Athenian exiles first seized Phyle with fifty men and then fought a battle against the far more numerous party in the city, who had the Lacedaemonians as their allies, and were thus restored to their own city; or again, that the Thebans, when the Lacedaemonians and practically all the Peloponnesians invaded Boeotia, confronted them alone at Leuctra and conquered the might of the Lacedaemonians: or again, that Dio the Syracusan sailed to Syracuse with three thousand hoplites and defeated Dionysius, whose forces were many times as great; and likewise the Corinthians, when they went to the assistance of the Syracusans with nine triremes, defeated the Carthaginians, although they were blockading the harbours of Syracuse with a hundred and fifty ships and held all the city except the acropolis. To sum the matter up, these and similar instances of unexpected successes often serve to discredit counsels which are based on ordinary probability. Such, then, is the nature of examples. Examples of both kinds must be employed, when we are urging what may be reasonably expected to happen, in order to show that the suggested course of action usually turns out in a particular way; and, when we are predicting some unexpected result, in order to give instances in which satisfactory results have accrued where they seemed to be least expected. If your adversaries use this device, you must show that their instances were the results of good luck, and declare that such things happen rarely, whereas your examples are of common occurrence. This, then, is the method of employing examples. If, on the other hand, we wish to cite instances where the unexpected has happened, we must collect as many of them as possible and show by enumeration that the unexpected happens quite as often as the expected. We must use not only examples derived in this way but also those based on contraries. For instance, you can show that a certain state has acted selfishly towards its allies and that their friendship has thus been dissolved, and then say, 'We on the other hand, if we behave fairly and impartially towards our allies, shall keep their alliance for a long time'; or again, you can show that certain others have gone to war without due preparation and have consequently been defeated, and then say, 'If we were to go to war properly prepared, we should have better hopes of success.' You will be able to derive a number of examples from past and from present events; for actions are generally partly like and partly unlike one another. For this reason therefore we shall have no lack of examples and no difficulty in contradicting those brought forward by the other side. We now know the different kinds of examples and how we are to employ them and whence we are to derive them in abundance.

Infallible Signs exist where the direct contrary of that with which the speech is concerned has occurred, and where the speech is self-contradictory. For most listeners conclude from the contraries which occur in connexion with a speech or action that there is nothing sound in what is being said or done. You will often discover infallible signs by considering whether your adversary's speech is self-contradictory or whether his action itself contradicts his words. Such is the nature of infallible signs and the method by which you will obtain the greatest number of them.

Enthymemes arise where contraries occur not only of the speech and action in question but of anything else as well. You will often discover them by pursuing the method prescribed for the oratory of inquiry and by considering whether the speech is self-contradictory in any respect, or whether what has been done is contrary to justice or law or expediency, or to what is honourable, practicable, easy, or probable, or to the character of the speaker or the nature of the circumstances. Such are the enthymemes which must be chosen for use against our adversaries. The contraries of these must be employed on our own behalf, and we must prove that our actions and words are the contrary of those which are unjust, unlawful, inexpedient, and of the habits of wicked men — in a word, of those things which are considered evil. We must speak in support of each of these pleas as briefly as possible and express ourselves in the fewest possible words. This then is the way in which we shall obtain a large number of enthymemes and the best method of employing them.

A Maxim is, briefly, the expression of an individual opinion on general matters. There are two kinds of maxims, those which agree with current opinion and those which are paradoxical. When you are using the former, there is no need to bring forward any reasons for your statement, for what you say is well known and does not excite incredulity. But when you are uttering a paradox, you must state your reasons briefly, so as to avoid prolixity and not arouse incredulity. The maxims which you quote must be applicable to the circumstances, in order that your words may not seem inept and far-fetched. We shall form a large number of maxims either from the peculiar nature of the circumstances or by means of hyperbole or by drawing parallels. The following are examples of maxims derived from the peculiar circumstances of a case: 'do not regard it as possible for a man to become a clever general if he is without experience in affairs'; or again, 'It is characteristic of sensible men to profit by the examples of their predecessors and so try to avoid the errors of evil counsel.' Such then are the maxims which we shall form from the peculiar circumstances of a case. Maxims

such as the following are formed by hyperbole: 'Thieves are in my opinion worse than plunderers; for the former carry off property secretly, the latter openly.' By this method we shall form a number of maxims by hyperbole. The following are maxims based on parallels: 'Those who appropriate money seem to me to act very like those who betray cities; for both are trusted and wrong those who have trusted them'; or again, 'My opponents seem to me to act very like tyrants; for tyrants claim not to be punished for the wrongs which they have themselves inflicted, while they demand the fullest punishment for the wrongs of which they accuse others; and my adversaries, if they have themselves something which belongs to me, do not restore it, while, if I have received something which belongs to them, they think that they ought to have it restored to them and the interest on it as well.' By following this method then we shall form a number of maxims.

One thing is a Sign of another thing, but one thing taken at random is not a sign of something else taken at random, nor is everything a sign of everything else; but the sign of a thing is that which usually occurs before, or simultaneously with, or after it. That which has happened is a sign not only of what has happened but also of what has not happened; and similarly what has not happened is a sign not only of what does not exist but also of what does exist. One sign causes belief, another knowledge; the latter is the best kind of sign, while that which produces the most plausible opinion is second best. To put the matter briefly, we shall obtain an abundance of signs from anything which has been done or is said or seen, taking each separately, and also from the greatness or smallness of the resultant disadvantages or advantages. We shall also derive them from testimonies and evidence and from our own supporters or those of our enemies, or from our enemies themselves; also from the challenges issued by the parties and from times and seasons and from many other things. From these sources then we shall have an abundance of signs.

A Refutation is that which cannot be otherwise than as we say it is. It is based on what is by nature necessary, or necessary as urged by us, and on what is impossible by nature or impossible as urged by our adversaries. An example of something which is naturally necessary is the statement that 'living creatures require food', and the like. What is necessary as urged by us is such a statement as that 'those who are scourged confess what their tormentors tell them to confess'. Again, an instance of what is naturally impossible is the statement that 'a small child stole a sum of money, which he could not possibly carry, and went off with it. It will be an impossibility as urged by an adversary, if, for example,

he declares that on a certain date we made a contract at Athens, whereas we can prove to our hearers that at that time we were absent in some other city. It is from these and similar materials that we shall form our refutations. We have now briefly described all the proofs which are derived from actual words and from acts and from persons. Let us now consider how they differ from one another.

A probability differs from an example in this, that the hearers have themselves some notion of the probability, while examples (are supplied from our own experience. Examples differ from infallible signs because they) can be derived from contraries and from similars, while infallible signs can only be constructed from contrarieties of word and deed. Again, an enthymeme always has this distinction from an infallible sign, that an infallible sign is a contrariety which is concerned with a word or an action, while an enthymeme selects also contrarieties connected with other kinds of things; in other words, it is impossible for us to obtain an infallible sign unless there is some contrariety in respect of actions or words, whereas speakers can provide themselves with enthymemes from a variety of sources. Maxims differ from enthymemes in that enthymemes can be constructed only from contrarieties, whereas maxims can be enunciated both in connexion with contrarieties and also by themselves. Signs differ from maxims and all the other proofs already mentioned, because, while all the others engender an opinion in the minds of those who hear them, certain of the signs cause those who judge to have a clear knowledge; also because it is impossible for us ourselves to provide most of the other proofs, while it is easy to obtain a large number of signs. Further, a refutation differs from a sign, because some signs cause those who hear them merely to entertain an opinion, whereas every refutation teaches the truth to the judges. Thus from what has been said we know the nature of the proofs which concern words and actions, and the sources from which we are to derive them, and how they differ from one another.

Let us next deal with each of the supplementary proofs.

The opinion of a speaker is the declaration of his own belief about things. He ought to show himself to be experienced in the matters about which he is speaking, and point out that it is to his advantage to tell the truth concerning them.

One who is contradicting ought first and foremost to show that his adversary has no experience of the matters on which he is nevertheless giving his opinion; if



however that is impossible, he ought to show that even persons of experience often make mistakes; and if this is inadmissible, he must say that it is contrary to the advantage of his opponents to tell the truth about these matters. Such is the use which we shall make of opinions expressed by speakers, both when we are ourselves expressing them and when we are contradicting others.

Testimony is a confession made voluntarily by one who knows. That which is testified must be either likely or unlikely or of doubtful credit: similarly the witness must be trustworthy or untrustworthy or of doubtful good faith. When therefore the evidence is likely and the witness truthful, the testimony needs no further support, unless you wish briefly to introduce a maxim or enthymeme for adornment's sake. But when the witness is under suspicion, you must prove that such a person would not give false evidence to show gratitude or from motives of revenge or gain. You must also make it clear that it is not to his advantage to bear false witness; for the benefits which he gains, you will urge, are small, while detection is a serious matter, and, if he is found out, the laws punish him not only by fining him but also by damaging his reputation and destroying his credit. By these methods then we shall cause witnesses to be believed.

When we are contradicting evidence, we must cast prejudice on the character of the witness, if he is a bad man, or inquire into the evidence, if it is improbable, or else contradict both the witness and the evidence by bringing together all that is most discreditable to our adversaries. We must also consider whether the witness is a friend to him for whom he is giving evidence, or whether he can in any way be associated with his deed, or whether he is an enemy of the man against whom he is bearing witness, or whether he is poor. For such men are under suspicion of bearing false witness either to show favour or from motives of revenge or for gain. We shall also say that the legislator laid down the law about false testimony to apply to persons of this kind and that it is absurd that, whereas the legislator did not trust witnesses, those should believe them who are sitting in judgement after having sworn to judge according to the laws. By these methods then we shall cause witnesses to be discredited.

It is possible also to disguise evidence by a proceeding such as the following: 'Bear witness', you say, 'in my favour, Callicles'—'By the gods, I will not,' he replies, 'for the accused committed these crimes, though I tried to prevent him. In this way, though he has given false evidence in his refusal, he will not be liable to punishment as a false witness. This then is the way in which we shall treat evidence, when it is to our advantage to disguise it.

If our opponents try to do anything of this kind, we shall expose their wickedness and order them to give their evidence in writing. With these instructions then before us we know how to deal with witnesses and evidence.

— Evidence given under torture is a confession on the part of one who knows but is unwilling to state what he knows. When therefore it is to our interest to strengthen such evidence, we must say that individuals take their proofs from evidence under torture in their most serious affairs, and cities in their most important business, and that evidence under torture is more trustworthy than ordinary testimony. For it is often to the interest of witnesses to lie; but those who are under torture gain by telling the truth, for doing so will bring them the speediest relief from their sufferings.

When you wish to discredit evidence given under torture, you must say in the first place that slaves who are being tortured become hostile to those who have delivered them up to be tortured and for this reason tell many lies against their masters. Secondly, you must say that they often make confessions to their torturers which are not the truth, in order to end their torments as quickly as possible. You must also point out that even free men have often before now lied against themselves under torture to escape the suffering of the moment; it is therefore much more likely that slaves should wish to avoid punishment by lying against their masters, rather than, when they are enduring great bodily and mental pain, deliberately refuse to utter a falsehood in order to save other people from suffering. By these and similar arguments we shall cause evidence given under torture to be believed or disbelieved.

An Oath is an affirmation without proof accompanied by an invocation of the gods. When we wish to amplify the power of an oath we must say that no one would desire to commit perjury, because he would fear punishment from heaven and disgrace in the eyes of men; we must also point out that, while it is possible to escape the notice of men, it is impossible to elude the gods. When our opponents take refuge in an oath and we wish to belittle it, we must point out that those who do evil deeds are the very men who do not scruple to commit perjury; for a man who thinks that the gods take no notice of him when he does wrong, also thinks that he will not be punished even if he forswears himself. By pursuing a method such as the above in the matter of oaths we shall have no lack of material about them.

— We have now briefly carried out our purpose of dealing with all the various

kinds of proof and have shown not only the force of each of them, but also how they differ from one another and how they ought to be employed. We will now proceed to explain the other expedients which belong to all three kinds of oratory and are useful in speeches of every kind.

Anticipation is the method by which we shall counteract the ill-feeling which is felt against us by anticipating the adverse criticisms of our audience and the arguments of those who are going to speak against us. We shall anticipate the criticisms of our audience by such a statement as, 'Perhaps some of you are astonished that, young as I am, I attempt thus to speak in public on important matters'; or again, 'Let no one oppose me through resentment, because I am going to offer you advice on subjects about which certain other people hesitate to speak openly before you.' In matters then which are likely to annoy your hearers you must by anticipations of this kind bring forward reasons, which will show that you are justified in offering advice, pointing out the dearth of public speakers or the greatness of the dangers or the public expediency, or giving some other such reason whereby you will remove the ill-feeling which threatens you. If your audience still cries out just as much against you, you must address them briefly in the form of a maxim or enthymeme, saying, for example, that it is absolutely absurd that they should have come together to take the best counsel about the political situation and then think that they can take good counsel without deigning to hear what the speakers have to say; or again, you may say that it is only fair that they should either themselves get up and offer some advice, or else listen to those who have advice to offer, and then vote in favour of any course that recommends itself to them. Such must be the method of employing anticipation in public speaking, and this is how outcries must be faced.

In forensic speeches we shall use similar methods of anticipation to the above. If an outcry is raised against us at an early stage of the proceedings, we shall meet it in this manner: 'Is it not absurd that, while the legislator ordained that each party should be allowed to speak twice, you who are sitting in judgement upon us should have sworn to pass sentence according to the law, and then refuse even to listen to a single speech? And that, while he took such measures to secure that you should give your vote in accordance with your oath after hearing all that was to be said, you should be so indifferent to his injunctions that, without even listening to the beginnings of the speeches, you already think that you know all the facts perfectly?' Or you can put the matter differently and say, 'How absurd it is that the lawgiver should have ordained that, if the votes were equal, the

defendant should win the case, whereas you hold so strongly to the contrary opinion that you do not even listen to the defence offered by those who have been slandered; and that, whereas he granted this advantage in the voting to defendants because they run greater risks, you, while you show no hostility towards the accusers who run no risks, alarm by these outcries those who in terror and danger are defending themselves from the charges brought against them.' Such must be your method of meeting those who raise an outcry against you at the beginning of your speech. If they interrupt you when your speech is well advanced, then, if those who do so are few in number, you must rebuke them and tell them that it is only just that they should listen to you at the moment, in order that they may not prevent the rest from forming a correct judgement, and that, when they have heard you, then they can do what they please. If the majority raises an outcry against you, you should blame yourself and not your judges; for, if you find fault with them, you only make them angry, whereas, if you blame yourself and say that you are in the wrong, you will gain their pardon. You must also beg your judges to give a favourable ear to your speech and not at this early stage to show what view they take about the facts on which they are to give their secret vote. In general, we shall meet interruptions in a summary manner with maxims and enthymemes, pointing out that our interrupters are setting themselves in opposition to justice or the laws or the interests of the city or what is honourable; for such methods as these are best calculated to make one's hearers stop interrupting. We now know from what has been said above how to employ anticipations in dealing with an audience and how to meet interruptions.

I will next show you how to anticipate what is likely to be said by one's opponents. You can say: 'Perhaps he will bewail his poverty, which is not my fault but has been caused by his own way of life'; or again, 'I hear that he intends to say such and such a thing.' If we are speaking first, we must thus anticipate what our opponents are likely to say and so destroy and invalidate their pleas. For even though the arguments which you forestall and discredit are quite forcible, they will appear much less weighty to those who have already heard them.

If we are speaking after our opponents and they have anticipated what we intend to say, it is necessary to counteract their anticipations and destroy them by speaking as follows, 'My opponent has not only told you many lies to my discredit, but further, well knowing that I shall refute his charges, he has anticipated my plea and discredited it beforehand, in order that you may not give

it the attention which you otherwise would, or else that I may not employ it at all, because it has already been torn to pieces by him.

I hold, however, that you ought to hear my arguments from my own lips, not from his, even if he has tried to tear my arguments to pieces by saying things which I declare to be a strong sign that he has no sound plea to offer.' Euripides has made a clever use of this device in the following lines of his *Philoctetes*:

E'en though he thinks to have destroyed my pleas

Escaping charge of wrong, yet will I speak;

From mine own lips mine arguments shall come,

Let his words show what kind of man he is.

We know then from the above how to make use of anticipations in relation both to our judges and to our opponents.

— Postulates in oratory are the demands which speakers make from their hearers. Some of them are just, others unjust. It is just to ask that they should listen to what you are saying and lend a favourable ear. It is also a just demand that they should give one the assistance which the laws allow and never vote against the laws and that they should make allowances for misfortunes. Any demand which is contrary to the law is unjust, otherwise it is just. Such are the postulates. We have distinguished their different kinds in order that, knowing the just from the unjust, we may use them on the light occasion, and that it may not escape our notice if our adversaries make any unjust demand from the judges. From what has been said we shall have an adequate knowledge on this subject.

— Iteration is a means of briefly reminding one's hearers.

It must be employed both at the conclusion of a division of a speech and at the final conclusion. In recapitulating we use iteration in the form either of a

division or of the recommendation of a certain course or of asking questions or of an enumeration. I will show you of what nature each of these is. The following is an example of its use in the form of a division: 'I cannot say what these men would have done, if they had not manifestly deserted us long ago and were not convicted of having served against our city and of having never fulfilled any of their promises.' Such is the use of iteration in an argument. It can be used as follows in the form of an enumeration: I have shown that they were the first to break the treaty of alliance and the first to attack us when we were at war with the Lacedaemonians, and that they displayed the utmost eagerness to enslave our city.' Such is the use of iteration in an enumeration. The following is an example of its use in reminding your audience under the form of recommending a certain course of action: 'You must remember that ever since we entered into friendship with these men we have never suffered any reverse at the hands of our enemies. For they have often helped us and prevented the Lacedaemonians from devastating our territory, and they have continued to this day to contribute large sums of money.' Thus shall we remind our hearers by recommending a certain course of action. The following is an instance of iteration in the form of a question: 'I should like to hear from them, why it is that they do not pay us the tribute which they owe. For they cannot have the face to say that they are in need of money, when they can be shown to be receiving such large sums of money annually from their land, nor yet can they say that they spend much on the administration of their city; for they clearly spend less than all the other islanders.' Such will be our use of iteration in the form of a question.

Irony is to say something and pretend that you are not saying it, or else to call things by the names of their contraries. It may take the following form in a brief reminder of what has already been said: 'I think that I need hardly say that these men, who pretend that they have done the state many services, are shown to have done it much harm, whereas we, whom they declare to be ungrateful, are shown to have often helped them and never to have done any one any injury.' Such is the way briefly to remind your hearers of something under the pretence of omitting it. Secondly, the following is an instance of calling things by contrary names: 'These noble citizens have clearly done great harm to their allies, while we worthless mortals have obviously been the cause of many benefits to them.' In this way we shall briefly remind our hearers and employ iteration at the end of the divisions of our speeches and at their final conclusion.

We will next explain how one can speak pleasingly and prolong a speech to the

length which one desires.

We can speak pleasingly in the following manner, by introducing, for example, whole enthymemes or half of one in such a way that our audience can guess the other half; we must also include maxims. To some of these we must give a place in every division of the speech, but the actual words must be varied and a similar phrase must never be applied repeatedly in the same connexion. In this way your speech will have a pleasing effect.

When you wish to lengthen your speech, you must divide up your subject and in each division explain the nature of its contents and their particular and general application and state the grounds of your pleas. If we wish to make our discourse still longer, we must employ a number of words in dealing with each topic. In each division of the speech you must iterate and make your iteration brief; while at the conclusion of your speech you ought to recapitulate as a whole all that you have dealt with in detail, and treat the subject generally. In this way your speech will be of a sufficient length.

If you wish to speak briefly, you should include your whole subject in a single word and that word the shortest which is applicable to the subject. You must also employ few conjunctive particles and connect as many things as possible together. Such must be your choice of words; you must make your language serve a double purpose, and you must do away with the brief iterations in the separate divisions of the speech and only employ iteration in your final conclusion. This is the way in which we shall make our speeches brief.

If you wish to speak at moderate length, you must pick out the most important divisions of your speech and make them your subject. You must also use words of medium length and not the longest or the shortest, and not employ a large number on a single topic but observe moderation. You must neither on the one hand do away entirely with conclusions in the intermediate parts of your speech, nor on the other hand introduce them in every division; but you must make special iterations at the end of those parts to which you wish your audience to pay particular attention. On these principles, then, we shall regulate the length of our speeches, whenever we wish to do so.

If you wish to compose a speech which will be pleasing, you must take care as far as possible to adapt the character of your speech to that of your audience. You will achieve this, if you observe their character, whether noble or petty or

ordinary.

On these points, then, you will have adequate knowledge from what has been said above. We will now treat of the putting together of words; for this too is essential.

In the first place, then, words are of three kinds, simple, composite, and metaphorical.

Similarly there are three ways in which words can be put together: firstly, you can end one syllable with a vowel and begin the next with a vowel; secondly, you can begin a word with a consonant and end the previous word with a consonant; thirdly, you can put consonants and vowels in juxtaposition.

There are four orders in which words can be arranged.

First, you can either put similar words side by side or else disperse them; or again, you can use the same words or else change them into others; thirdly, you can describe a thing in one or many words; fourthly, you can name in their proper order the subjects of which you have undertaken to treat, or else transpose them.

I will next show what is the best method of statement which you can employ.

— First of all, you must make your statement by means of a twofold division, and, secondly, you must discourse lucidly. The following are the various forms of this twofold division. First, one can say that one can oneself do one thing and another; secondly, that this man cannot do a certain thing, but that man can; thirdly, that this man can do a certain thing and something else; fourthly, that neither can one do a certain thing oneself nor can any one else do it; fifthly, that one cannot do a certain thing oneself, but that some one else can; sixthly, that one can do one thing oneself, but the other person cannot do something else. You can see each of these cases in the following examples. An illustration of the case where one can oneself do one thing and another is: ‘I have not only achieved this for you, but also, when Timotheus intended to make an expedition against you, I prevented him.’ The following is an example of the case where one man cannot do a thing but another man can: ‘This man then is unable to go himself on an embassy for you, but here is a man who is a friend of the Spartan state and would be better able than any one else to carry out the negotiations which you wish carried out.’ The case where a man can do a certain thing and



something else as well can be thus illustrated: 'Not only has he proved himself a strong man in war, but he can also give as good advice as any other citizen.' The following is a case where one cannot oneself do a thing and nobody else can: 'Having but a small force I cannot myself conquer our adversaries, nor could any other citizen do so.' The following is an instance in which another man can do a thing, but one — cannot do it oneself: 'Yes, he is physically strong, but I am weak.' The following is an illustration of the case where one can oneself do one thing, but some other person cannot do something else: 'I can steer, but this man cannot even pull an oar.' This then is how you will employ forms of twofold statement, following the same course in every subject. We must next consider how you are to treat your subject lucidly.

First, then, call anything of which you speak by its proper name, avoiding ambiguity. Take care not to put vowels next to one another. Be careful to put the so-called 'articles' in the proper place. Consider how you put words together, so that there may be neither confusion nor transposition; for if your discourse has these qualities it is obscure. When you use an introductory particle, employ the corresponding particle afterwards. The following is an example of the use of a corresponding particle: 'I *indeed* (*men*) came to the place to which I said I would come, *but* (*de*) you, though you promised to come, did not do so' ; or again, when the same particle follows: 'You were *both* (*kai*) the cause of that *and* (*kai*) the cause of this.' So much for particles; from these examples you must infer the use of others.

Words must be put together so as to avoid confusion or transposition. The following is an example of such confusion: 'It is a terrible thing that this man should strike this man.' Here it is not clear which man struck the other; but you will make it clear if you say:

'It is a terrible thing that this man should be struck by this man.' This is an example where there is a confusion in the arrangement of words. The following is an instance of care taken to put the article in the right place: 'This man is wronging this man.' In this case the insertion of the articles makes the diction clear, while their omission will make it obscure; the reverse is sometimes true. So much then for the articles.

Never put vowels in juxtaposition, unless it is impossible to make your meaning clear otherwise, or unless a breathing-space or some other division occurs.

The following is a case where ambiguity must be avoided: the same words are sometimes used in several senses, for example we speak of a threshold (*odos*) of a door and of a way (*udōs*) along which people walk; in such cases we must always add that which gives the word its distinctive meaning.

If we follow these rules we shall be clear in our use of words, and we shall make statements by means of the twofold method of division already described.

— Let us now deal with ‘antitheses’, ‘*parisoses*’ and ‘similarities’; for we shall need these also.

An ‘antithesis’ occurs when both the wording and the sense, or one or other of them, are opposed in a contrast. The following would be an antithesis both of wording and sense: ‘It is not fair that my opponent should become rich by possessing what belongs to me, while I sacrifice my property and become a mere beggar.’ In the following sentence we have a merely verbal antithesis: ‘Let the rich and prosperous give to the poor and needy;’ and an antithesis of sense only in the following: ‘I tended him when he was sick, but he has been the cause of very great misfortunes to me.’ Here there is no verbal antithesis, but the two actions are contrasted. The double antithesis (that is, both of sense and of wording) would be the best to use: but the other two kinds are also true antitheses.

‘*Parisosis*’ (parallelism of structure) occurs when a sentence has two equal ‘members’. The equality can be that of many small to few great things, and an equality of magnitude can be united with an equality of number.

‘*Parisosis*’ takes a form such as the following, ‘either through lack of resources or through the magnitude of the war’. These things are neither like nor opposed to one another, but merely equal to one another.

‘*Paromoeosis*’ (parallelism of sound) goes further than ‘*parisosis*’; for it makes the ‘members’ not only equal but also similar, being composed of similar words, in the following, for example: ‘If you must imitate the wording, you should simulate the feeling.’ Above all you should make the last words similar; for this gives the closest similarity. Words are similar which have similar syllables, in which most of the letters are the same; for example, ‘in numbers deficient, in might sufficient’. For whatever lies outside the scope of art, the inspiration of the moment will be your guide.

Enough then of these topics. For we are acquainted with the nature of the just, the lawful, the honourable, the expedient and the other qualities, and the sources from which we can derive them in abundance. Similarly we know the nature of amplifications and minimizations, and how we can provide them for our discourses. In like manner we are acquainted with the methods of anticipation, the postulates which we demand from our hearers, iterations, methods of pleasing, the means of regulating the length of our speeches, and all the ways of putting words together for purposes of statement. And so knowing from what has been said the qualities which are common to every kind of oratory and their uses, if we accustom and practise ourselves according to the prescribed preparatory exercises, we shall attain to great facility both in writing and speaking.

It is by taking the component parts separately that you can most accurately distinguish the methods of speaking.

I will next treat of the manner in which the words must be organically arranged in the various kinds of oratory, and which parts must be put first and how they must be treated.

I deal therefore first with proems; for the proem is common to all seven kinds of oratory and it can be fittingly applied to all subjects.

— The Proem can be described in a general way as a preparation of one's audience and a declaration of the subject in a summary manner for the benefit of the ignorant, in order that they may know with what the speech is concerned and may follow the argument. It also exhorts them to pay attention and tries, as far as is possible in a speech, to influence their minds in our favour. Such is the preparation at which the proem must aim.

I will first show how the proem must be employed in public speaking and persuasive oratory. The following are examples of the way in which to lay your subject before your hearers and make it clear to them: 'I stand before you to advise that we should go to war on behalf of the Syracusans,' or, 'I stand before you to demonstrate the inadvisability of our helping the Syracusans.' This, then, is the way to summarize your subject.

We shall know how to exhort our hearers to pay attention, if we ourselves call to mind to what arguments and facts we pay most attention when deliberating. Do

we not pay the closest attention when the subjects of deliberation are important or alarming or else nearly concern us; or when those who address us claim that they will show us that the measures which they are urging us to adopt are just and honourable and expedient and easy and honest; or when they beg us to listen with attention? Just as, therefore, we ourselves attend to others, so if we take those of the points above mentioned which are most applicable to the subjects of which we are treating and lay them before our hearers, we shall make them attend to what we are saying. These, then, are the ways in which we exhort our hearers to pay attention.

We shall secure their goodwill if we first consider what is in fact their attitude towards us, whether they are well or ill disposed or whether they are indifferent. If they are actually well disposed towards us, it is superfluous to talk about goodwill; if, however, we wish to talk about it at all, we must do so briefly, using 'irony' in the following way: 'That I am well disposed towards the state, and that you have often acted expediently by following my advice, and that I observe a just attitude towards public affairs, preferring a personal sacrifice to reaping any advantage at the expense of the state, — these are, I think, statements which it is unnecessary for me to make to you who know well the truth of them. My efforts shall be directed rather to showing you that you will be well advised, if on this occasion too you follow my counsels.' This then is the method by which in a public speech you must remind those who are well disposed towards you of their goodwill.

When your hearers are neither prejudiced against you nor well disposed, you must say that it is right and expedient that they should give a favourable ear to those citizens who have not yet given a proof of their quality as speakers. You must then flatter your audience by praising them, saying that it is their custom to judge the speeches which they hear with fairness and discrimination. Further, you must employ minimization and say, 'I stand before you not through any confidence in my own cleverness, but because I think that the advice which I am about to offer is beneficial to the state.' By such methods you must secure the goodwill of those who are neither well nor ill disposed towards you.

If you are the object of misrepresentation, the misrepresentation must be connected with yourself or the subject on which you are speaking or your actual words. Misrepresentations of this kind can date either from the present or from the past. If then one is under suspicion of wrongdoing in the past, one must employ anticipation in addressing one's audience and say: 'I am well aware that

a prejudice exists against me, but I will prove that it is groundless.’

You must then make a brief defence in your proem, if you have anything to say on your own behalf, or raise objections to the judgements which have been passed upon you. For whether you have been publicly or privately misrepresented, judgement must either have been passed upon you or be impending in the immediate future, or else those who have laid the charge against you are unwilling to submit the matter to judgement; and you must say that the judgement passed upon you was unfair and that you have been the victim of party plots. If this is impossible, you must say that your previous misfortunes were sufficient, and that it is only fair, now that the matter has been judged and done with, that no further prejudice should be raised against you on the same grounds. If you are expecting to have judgement passed upon you, you must say that you are ready to submit the misrepresentations now to the judgement of your present audience; adding that, if you are proved to have wronged the state, you consider yourself worthy of death.

If your accusers do not press their charges against you, you must use this very fact as an indication that their misrepresentations of you are groundless; for it will seem hardly likely that those who are bringing true accusations against you can be unwilling to submit the matter to judgement. You must always denounce misrepresentation and declare it to be outrageous and universal and the cause of endless evil. You must also point out that many have before now been ruined through unjust misrepresentation. You must show moreover that it is foolish that men, when they are consulting about matters of public interest, should allow themselves to be disturbed by the misrepresentations of individuals instead of listening to the advice of all and then considering what true policy requires. You must also promise to prove that the advice which you have undertaken to give is just and expedient. Such then is the method which those who have been misrepresented in the past must adopt in public speaking in order to refute misrepresentation.

In reference to the present time the first thing which creates a prejudice against speakers is their age. If a man who is quite young or quite old is speaking in public, his hearers feel annoyance; for they think that the former ought not yet to have begun to speak, while the latter ought before now to have ceased speaking. Secondly, a prejudice is created against a man, if he is a frequent speaker, for it looks as if he were a busybody; or again, against a man who has never spoken before, for it looks as if he had some private motive in thus speaking in public

contrary to his usual custom. Such, then, are the ways in which prejudices in reference to the present are likely to be created against a public speaker.

Excuses must be made by a young man by urging the dearth of advisers and the special suitability of the speaker; for instance, if the question concerns the superintendence of the torch-races or the gymnasium or arms or horses or war — in such matters a young man has no small interest. He must also urge that, if he has not yet the wisdom of years, he has at any rate that wisdom which comes from natural endowments and diligent application. He should also point out that, whereas unsuccessful advice reflects only upon its unhappy proposer, the benefit conferred when the policy succeeds is shared by the whole community. Such then are the excuses which must be urged by a young man. Excuses must be made when an old man is speaking by pointing out the dearth of advisers and his extensive knowledge of the subject. Furthermore he may urge the magnitude and unusual character of the crisis and the like. When a man is in the habit of speaking too frequently, he may point to his wide experience and urge that it would be wrong that one who was formerly in the habit of speaking should not express his opinion on this occasion. One who is not in the habit of speaking must urge the magnitude of the crisis and that it is essential that every one who has a stake in the community should express his opinion on the present situation. Such then are the means by which we shall attempt to break down the prejudices raised against the persons of public speakers.

Prejudice is created against the subject matter of a speech when the speaker advises the rupture of peaceful relations with those from whom we have received no injury or who are stronger than we, or when he advises a discreditable peace or urges a reduction of the expenditure on sacrifices or makes some other such proposal. On such subjects, first, one should employ anticipation in addressing one's hearers; secondly, one ought to lay the blame upon necessity and fortune and the times and expediency, and say that it is not those who are giving advice but the circumstances which are to be blamed for such proposals.

Such are the methods by which we shall free political speakers from prejudices which are due to their subject matter.

The actual speech in a public harangue creates a prejudice when it is too lengthy or old-fashioned, or lacks probability. If it be long, this must be attributed to the abundance of material; if it be old-fashioned, it must be pointed out that such a style is opportune at the moment; if it is improbable, you must promise that you

will prove it to be true in the course of your oration. These then are the considerations which will have a place in our public speeches.

Next, what arrangement shall we employ? If there be no prejudice against either ourselves personally or our speech or our subject, we shall lay down our proposition at the very beginning, and we shall afterwards exhort our hearers to pay attention and give our words a favourable hearing.

If any prejudice has been created against us in previous speeches, we shall anticipate the judgement of our audience and, after briefly defending and excusing ourselves from the prejudices thus caused, shall then state our proposition and exhort our hearers to give us their attention. This, then, is the way in which public speeches should be constituted.

Next we must either narrate events which have happened in the past or recall them to the minds of our hearers, or arrange under divisions and explain events which are occurring at the moment, or else predict what is likely to occur in the future. When therefore we are reporting the details of an embassy, we must make a lucid statement of everything that was said, in order that our speech may carry weight (for it will be a report and nothing else, and no other style will find its way in); next, if we have been unsuccessful, our object will be to make our hearers think that the failure of the negotiations was due to some other cause and not to our negligence; whereas, if we have met with success, they must be made to suppose that the result has been due not to chance but to our zealous efforts. This they are ready to believe, if, not having been present at the negotiations, they observe the zeal displayed in our speech in omitting nothing but accurately reporting every detail. So when we are describing the results of an embassy, we must for the reasons which I have stated report everything just as it happened.

When we are ourselves describing in a public speech some past event or explaining the events of the moment or predicting what will happen in the future, we must do each of these things briefly, clearly, and convincingly. We must be clear, in order that our hearers may grasp the events which we are describing, and concise, in order that they may remember what we have said; and we must speak convincingly, in order that they may not reject our statements before we have supported them with proofs and justifications.

The clearness of our explanations will be due to the words which we use or to our facts; to the latter, if we do not present them in an inverted order, but

mention first those which have occurred or are occurring or are going to occur first, and arrange the subsequent events in their proper order, and do not desert the subject about which we have undertaken to speak, and deal with some other subject. Thus, then, we shall speak clearly as far as our facts are concerned. Our actual words will be clear, if we describe actions as far as possible in words which are appropriate to them, and if we employ usual words and do not put them in an inverted order but always arrange together those which naturally follow one another. If we observe these rules, our narrative will be clear.

We shall be concise if we omit all facts and words the mention of which is not essential, keeping only those the omission of which will render our speech obscure. Our narrative will then be concise.

We shall speak convincingly if, in support of facts which are improbable, we bring forward reasons which will make the events which we describe seem likely to have taken place. We must omit anything the occurrence of which seems too improbable. If you are obliged to mention such things, you must make it clear that you have definite knowledge of them, and you must pass lightly over them, weaving them into your speech by the figure of 'pretended omission', and promise to show their truth as your speech progresses, making the excuse that you wish first to demonstrate the truth or justice (or the like) of your previous statements. This is the way in which we shall remedy incredulity in our hearers.

In a word, by employing all the above-mentioned devices we shall make our reports, expositions, and predictions clear, brief, and convincing.

There are three different methods in which we shall arrange them. If the actions about which we are speaking are few in number and well known to our audience, we shall include the narration of them in our proem, in order that this part of our speech may not in itself be too short. If the actions which we are recounting are too numerous and not familiar to our audience, we shall present them in every case in a connected form and show that they are just, expedient, and honourable, in order that we may not only make our tale plain and unembellished by simply relating facts but may also win the attention of our hearers. If the facts which we are recounting are unimportant and unfamiliar, we ought to insert the report or exposition or prediction of them bodily in the proem. This we shall do by recounting them from beginning to end and including nothing extraneous but merely relating the bare facts. We shall thus know how to arrange narratives of facts in our proem.



Next comes confirmation, whereby we confirm that the facts which we have already mentioned are of the nature of which we have undertaken to prove them to be, by adducing proofs and by considerations of justice and expediency. When therefore you include them in your speech, the proofs which are best suited to public orations are those based on the customary course of events and examples and supplementary enthymemes and the opinion of the orator; but any other proofs which present themselves may also be employed. They must be arranged in the following way: first, the opinion of the orator must be mentioned, or, if that is not done, the customary course of events must be indicated, showing that what we are asserting, or something similar, is what usually occurs. Following on this we must cite examples, and any point of similarity must be introduced to support what we are saying. The examples which we take must be closely akin to our subject and the nearest in time or place to our hearers. In the absence of such examples we must employ the most striking and best known that we can find. Next we must cite maxims.

Also, in the parts where we introduce probabilities and examples we must end with enthymemes and maxims. This is the manner then in which we must introduce proofs where facts are concerned.

If our statements of facts are believed as soon as they are made, we must omit all proofs and confirm the facts which we have already stated by appeals to justice and lawfulness and expediency and considerations of what is honourable, pleasant, easy, possible, or necessary. Where an appeal to justice is possible, it must be given the first place, and we must explain our statements in relation to justice or a resemblance to justice or its contrary or what has been judged to be just. You must also cite examples similar to the cases of justice which you are instancing. You will also be able to produce numerous examples of what is regarded as just under special circumstances and in the actual city in which your speech is made, and in other states. When, following this method, we have said what we have to say adding at the end maxims and brief enthymemes of different kinds, if this division of our speech is long and we wish it to be remembered by our hearers, we shall give a concise iteration; if, however, it is short and still fresh in their memory, we shall bring the division itself to a close and begin another one. The following is an example of what I mean: 'In what I have already said I think that the justice of our helping the Syracusans has been sufficiently demonstrated; I will now attempt to show the expediency of our doing so.' You will next treat the question of expediency by a similar method to that which we employed above in the case of justice, and at the end of that

division add an iteration or definite conclusion, and then bring forward some other considerations with which you have to deal. This is the way in which you must connect one division with another and keep up the thread of your speech. When you have employed every possible means to enforce your advice, you must in addition to all this show in a summary manner with the help of enthymemes and maxims or figures that it is unjust and inexpedient and dishonourable and unpleasant not to adopt your suggestion, and in a summary way you must contrast with this the justice, expediency, honourableness, and pleasure of doing what you are recommending. When you have made a sufficient use of maxims, you must end your exhortations with a definite conclusion. This then is the way in which we shall confirm the proposals which we make. The next division of our treatise will be concerned with the anticipation of contrary arguments.

Anticipation is the method by which you anticipate and demolish the objections which can be brought against your speech. You must minimize the arguments of your opponents and amplify your own, as you have already learnt to do from the instructions about amplification. You must set a single argument against another when yours is the stronger, and several against several and one against many and many against one, using every possible kind of contrast, and magnify your own arguments and weaken and minimize those of your adversaries. This is the manner in which we shall employ anticipations. Having done this we shall conclude with an iteration using the forms of argument or enumeration or recommendation of a certain course or questioning or irony which we have already mentioned.

If we are urging that help should be given to some one, whether to private individuals or to states, it will be fitting briefly to mention any friendship cause for gratitude or pity which already exists between them and the assembly which you are addressing. For they are most willing to help those who stand in such relations to them. All men feel an affection for those from whom, or from whose friends, they think they themselves, or those for whom they care, have received or are receiving or are going to receive some deserved kindness. They feel gratitude towards those from whom, or from whose friends, they think they themselves or those for whom they care have received, are receiving, or will receive some undeserved benefit. If any feelings of this kind are present in their minds, we must briefly dwell upon them and so move our hearers to pity. We shall have no difficulty in arousing as much pity as we wish, if we realize that all men pity those whom they suppose to be closely connected with themselves or

think to be unworthy to suffer misfortune. You must prove that this is the condition of those for whom you wish to excite pity, and show that they either have been or are in an evil plight, or will be so unless your hearers assist them. If this is not possible, you must show that those on whose behalf you are speaking have been deprived of advantages which all or most other people enjoy, or else have been or are without some advantage, or never will obtain it unless those whom you are addressing take pity on them now. These are the ways in which we shall incline our audience to pity.

In dissuasion we shall employ the contrary method, using the same kind of proem and narrating the facts and giving the proofs and showing our hearers that what they are attempting to do is unlawful, unjust, inexpedient, disgraceful, unpleasant, impracticable, burdensome, and unnecessary.

The arrangement of our speech will be similar to that used in persuasion. Such, then, is the way in which those who are employing dissuasion on their own account must arrange their speech.

Those who are opposing the advice given by others must in the first place state in their proem the views which they intend to oppose and then add one by one the other parts of the proem. After the proem the speaker must first bring forward separately each of the points in the previous speech and show that the recommendations of his adversary are not just or lawful or expedient or the like. This you will do by proving that what he says is unjust or inexpedient or bears a resemblance to injustice or inexpediency, or is the opposite of the just or expedient or what has been judged to be so. You must treat the other points in a similar manner. This, then, is the most effective method of dissuasion. If this course is impossible, you must try to dissuade your audience by taking some point which your adversary has omitted: for example, if he has shown that a certain course is just, you must attempt to prove that it is discreditable or inexpedient or toilsome or impracticable or whatever else you can; or if he has expediency on his side, you must show that his suggestion is unjust and whatever else you can as well. You must amplify your own contentions and minimize those of your adversary, employing the method already prescribed for persuasive oratory.

You must also introduce maxims and enthymemes, as in persuasion, and refute anticipations, and in conclusion employ iteration.

In addition to this we must show, when we are seeking to persuade our hearers, that friendship exists between them and those whom we are urging them to help, and that they owe a debt of gratitude to those who are asking for their assistance; but when we are trying to prevent help from being given, we must show that they are worthy objects of indignation or envy or hostility. We shall implant a sentiment of hostility in those whom we are seeking to dissuade by showing that either they themselves, or those for whom they care, have received undeserved ill-treatment at the hands of the other party or their friends. We shall arouse indignation, if we show that they, or those for whom they themselves care, have been wrongfully treated with contempt or injustice by the other party or their friends. We shall create a feeling of envy, to put the matter briefly, against those whom we show to have enjoyed unmerited prosperity, or to be now doing so, or to be likely to do so in the future; or never to have been without some advantage, or not to be so now, or to be never likely to be so; or never to have suffered some misfortune in the past, or not to be doing so now, or to be never likely to do so in future. This, then, is the method by which we shall implant envy or hostility or indignation; while we shall create feelings of friendship, gratitude, and pity by the methods which we indicated in treating of persuasion. We shall give these sentiments their place and arrangement according to the various methods already mentioned. We now know the nature of persuasive oratory and its component parts and how it must be employed.

Let us next set before ourselves the consideration of eulogistic and vituperative oratory. Here too we must first of all state our propositions in the proem, and refute misrepresentation by the same method as in persuasive oratory. We must also exhort our hearers to give us their attention by the methods already described under public speeches and in particular by saying things which will cause astonishment and attract remark, and showing that the subjects of our speech and those who usually incur praise or blame have acted in the same manner. Speeches of this kind are usually made not in order to fight a case but for display.

First, we shall arrange the proem on the same principle as in persuasive and dissuasive speeches. After the proem, we must distinguish those good qualities of our subject which are outside the sphere of virtue and those which fall within it, as follows: those which fall outside the sphere of virtue we shall divide into good birth, physical strength, personal beauty, and wealth, while we shall divide virtue into wisdom, justice, courage, and noteworthy habits of life. The qualities which pertain to virtue are proper subjects of eulogy; those which fall outside

virtue must be disguised, for we ought to congratulate rather than praise those who are strong and handsome and well-born and wealthy. Having made these distinctions we shall give the genealogy of the subject of our speech the first place after the proem: for this is the first thing which brings credit or discredit upon men and also upon animals. We shall therefore be justified in giving the genealogy of a man or any other animal; and when we are praising any one's feeling or action or speech or possession, we shall be justified in beginning our eulogy by mentioning the distinguished qualities which he possesses.

The following is the way to treat a man's genealogy: if his ancestors were good men and true, you ought to mention them all from the earliest times down to the subject of your eulogy and give a brief account of some glorious achievement performed by each of his forefathers. If it is only his earliest ancestors that were good men while the rest failed to do anything remarkable, you must mention the former in the manner already described and omit the undistinguished members of the family, excusing yourself by saying that, his ancestors being so numerous, you do not wish to weary your audience by speaking of them, and that every one knows that men who are born of a good stock usually resemble their forefathers. If his early ancestors were undistinguished but those who come nearer his own time were men of repute, you must dwell upon his descent from the latter and say that it would be tedious to speak at length about his early forefathers, and you must show that the immediate ancestors of those whom you are eulogizing were good men; adding that it is quite clear that *their* ancestors must have been good men and true, for it is hardly likely that such excellent and worthy persons can have been born of bad parents. If there is nothing distinguished in the ancestry of the subject of your eulogy, you must insist on his personal nobility and suggest that all those who have a natural predisposition for virtue are 'well born', and you must censure those other orators who dwell upon ancestral glories, pointing out that many men of distinguished ancestry have proved themselves unworthy of their forefathers. You must also insist that your task on the present occasion is to praise the man himself, not his ancestors. A similar use must be made of genealogies to discredit one whose ancestors were men of evil repute. Such then is the place which genealogy must occupy in eulogy and vituperation.

If the subject of your eulogy owes some distinction to good luck, (you must attribute his success rather to his own efforts than to fortune.

You must next describe his habits and way of life beginning from his earliest

years), observing this one principle that you say what befits his various ages; and do not speak at too great length. For example, in children it is generally considered that orderliness and self-control are due not to themselves but to those who have charge of them, and so they must be dealt with briefly. When you have thus described his early years, after concluding with an enthymeme or maxim at the end of this division of your speech, you will, when you come to the early manhood of the subject of your eulogy, state your subject, viz his achievements or character or habits, and you must amplify them on the principle which we laid down at the beginning in treating of eulogistic oratory, explaining that it was at this age that such and such a glorious deed was done by him whom you are eulogizing, or through his agency or owing to some habit of his, or that he inspired it or supplied the motive. You must also compare the notable achievements of other young men and show that his actions far surpass theirs, relating the least important of their deeds and the most important of the achievements of the subject of your eulogy. You must set deeds of others which are notable but less important side by side with those which you are relating, and so exaggerate the importance of the latter. You must also always amplify his achievements by conjectures of the following kind: 'Yet one who at this early age became so great a philosopher, if he had been older would have advanced yet further'; or again, 'A man who so stoutly endures the toils of the gymnasium, will gladly welcome the love of toil which philosophy demands.' By conjectures of this kind we shall amplify his good qualities.

When we have dealt with the events of his early manhood and put maxims and enthymemes at the end of this section, after either briefly iterating what we have said, or bringing it to a final conclusion, we shall next treat of the achievements of the subject of our eulogy after reaching full manhood, and after setting forth his justice first and amplifying this topic by the method already described we shall proceed to deal with his wisdom, if he possesses this quality; having similarly dealt with this we shall set forth his courage, if he possesses any, and after going through the process of amplifying this also, when we have reached the end of this section and described all his various qualities, we shall repeat and summarize what we have said and bring the whole speech to a conclusion with a maxim or an enthymeme. It will be suitable in eulogies to treat the various points at considerable length and to employ a dignified diction.

We shall use the same method to compose our accusations when we are dealing with wicked men. But we must not scoff at the man with whom we are finding fault, but we must describe his life; for statements have more effect than scoffs,

bringing conviction to our hearers and causing annoyance to those with whom we are finding fault; for scoffing is directed against outward appearance and circumstance, while statements about a man are the picture, as it were, of his habits and character. Be on your guard against calling disgraceful actions by disgraceful names, so as not to violate conventional feeling, but express such things by indirect hints and explain the facts in words which are really applicable to different actions. In finding fault you must employ irony and laugh at the points on which your adversary prides himself; in private, and in the presence of a few listeners, you should seek to discredit him, but before the multitude you should abuse him by levelling only ordinary accusations against him. You must employ the same methods of amplification and minimization in finding fault as in eulogy. From what has been said we shall know how to practise these kinds of oratory.

It remains for us to deal with the oratory of accusation and inquiry. Let us next discuss how we shall compose and arrange these in the forensic type of oratory. We shall therefore first set forth in the proem, as in the other kinds, the action which is to be the subject of our accusation or defence. We shall exhort our hearers to attention by the same means in the defensive style as we employed in the persuasive style.

Again, as regards the goodwill of the audience, when they are well-disposed towards the subject of our speech and he is not the object of prejudice because they are irritated against him or his action or his speech, we must secure their goodwill by the method described in dealing with the other kinds of oratory. When they are neither well nor ill-disposed towards him in connexion with either the past or the present, or when his personality or his action or his words are the object of prejudice, we must bring forward reasons for goodwill towards him, sometimes blending them together and sometimes taking them separately. Such, then, is the method by which we must conciliate goodwill.

Those who are the objects neither of goodwill nor ill-will we must briefly eulogize, while we must dispraise their adversaries. We must praise them in connexion with the qualities which most nearly concern our hearers, calling them, for example, patriotic, true to their friends, grateful, compassionate; while we shall dispraise an adversary by applying to him epithets which will arouse the indignation of our audience, such as unpatriotic, untrue to his friends, thankless, pitiless, and the like. We must also conciliate the jury by praising their justice and the intelligence which they bring to their task. We must also mention any

point in which our client is at a disadvantage compared with his opponents, whether in word or deed or anything else which concerns his suit; and we must further introduce the considerations of justice, legality, expediency, and the like. It is by these means that we must win goodwill in the minds of the jury for one who is the object of neither kindly nor unkindly feeling.

When our client is an object of prejudice, if the prejudice dates from the past and is concerned with what he has said, we know from what has already been remarked how to remove it. If it dates from the present time, it must necessarily be concerned with the man's personality if he is represented as unfit to bring the case in question, or his character as contradicting the charges he brings or consistent with the accusation brought against him. It would be a case of unsuitability if too young or too old a man pleaded on behalf of another; of contradiction, if a strong man accused a weak man of assault, or if a violent man brought a charge of violence against a self-controlled man, or if a very poor man went to law against a very rich man, accusing him of defrauding him of money. These are cases where there is a contradiction between the accusations and those who bring them. There will be consistency with the charge where a strong man is prosecuted for assault by a weak man or one who has the reputation of being a thief is put on his trial for theft. In a word, there will seem to be consistency with the charge in the case of persons who cause an opinion to be formed about them which corresponds with their character. Such, then, will be the misrepresentations which arise at the moment against a man's personality. Prejudice will be raised against a man's action if he goes to law with his own friends or guests or relatives, or on petty or discreditable pleas; for these things bring disrepute upon the parties in a suit.

I will now show how we are to get rid of the above mentioned prejudices. I maintain that there are two principles which hold good in all cases. First, when you think your opponents are likely to impress the jury, anticipate them and make the impression yourself. Secondly, when it is a question of acts, you should, if possible, turn the blame upon your adversaries, or, failing that, upon some one else, urging as an excuse that you have been dragged into the suit against your will and under compulsion from your opponents. Against each particular prejudice you must urge such excuses as these: a young man, for example, should allege a lack of older friends to fight the case on his behalf, or the enormity or number of his opponent's misdeeds, or the short limit of time allowed, or some other such excuse. If you are speaking on some one else's behalf, you must say that you are pleading his cause from motives of friendship



for him or hatred of his opponent, or because you were present at the events in question, or for the public good, or because your client stands in need of friends and is a victim of injustice. If his character agrees with the charge brought against him or is in contradiction to the accusation which he brings, you must make use of anticipation and say that it is not just or lawful or expedient to judge from an opinion or suspicion before listening to the facts. Such, then, is the way in which we shall get rid of prejudices against a man's personality; those which concern his action we shall repudiate by transferring the blame to his adversary, or by accusing the latter of libel or injustice or greed or contentiousness, or by alleging as an excuse the indignation of our client and showing that he could not possibly obtain justice in any other way. This is how we shall get rid of personal prejudices in the law courts; those which concern a man's public life we shall refute by the various methods prescribed for the kinds of oratory already dealt with.

We shall arrange the proems of forensic speeches in the same manner as those of public orations, and on the same principle we shall include the narration of facts in the proem and either show them to be trustworthy and just in detail or else insert them bodily by themselves.

Next will follow confirmation, by means of proofs if the facts are disputed by our opponents, or, if they are admitted, by considerations of justice, expediency, and the like. Of proofs we must put testimony first and admissions made under torture, if there are any. Next we must confirm our statements, if they are credible, by maxims and enthymemes, but, if they are not entirely credible, by considerations of probability, and afterwards by examples, signs, infallible and fallible, and refutations, and lastly by enthymemes and maxims. If the facts are admitted, we must leave proofs alone and make use of justification as already described. Such, then, is the method of confirmation which we shall employ.

After such confirmation we shall next state the arguments which we can urge against our opponents, and anticipate what they are likely to say. If they deny the facts, we must amplify the proofs which we have already stated and criticize and minimize those which they are likely to bring forward. If they admit the actions but intend to show that they are legal and just according to written laws, we must attempt to show that the laws which we bring forward, and laws similar to them, are just and right and to the common advantage of the state, and that this is the opinion generally held about them, while the contrary is true of the laws which our opponents are bringing forward. If it is impossible to say this, you must

remind the jury that they have to give their verdict not on a point of law but on a point of fact, and that they have sworn to vote according to the established law, and you must tell them that they must not pass laws now but upon the proper days fixed for that purpose. If it so happens that what has been done contravenes laws which appear to be bad, we must say that here we have not law but the negation of law; for law is laid down for the public benefit, but this law is harmful to the state. We must say that they will not be acting illegally if they vote in contravention of this law, but will be legislating to prevent the use of bad and illegal ordinances. You can also point out that no law forbids the conferring of a public benefit and that it is a benefaction to the state to annul bad laws. Regarding laws, then, of which the meaning is clear, we shall easily be able, by such methods of anticipation, to speak against any of them with which we are concerned. When there is ambiguity, if the jury understand a law in a sense which favours you, you must give it that interpretation; but if they give it the construction which your opponent puts upon it, you must tell them that this is not what the lawgiver meant but that he interpreted it as you do, and that it is to the advantage of the jury to put the construction which you do upon it. If you cannot twist the law round, point out that it cannot mean anything but what you say it means. If you follow this method you will have no difficulty as to the way in which to deal with laws.

Generally speaking, if they admit the facts and intend to base their defence on pleas of justice and legality, you must employ these methods to anticipate what they are likely to say. But if they admit the facts but claim to be pardoned, you must deprive your opponents of such arguments in the following manner. First, you must say that their conduct is all the more reprehensible and that it is only when they have been found out that they admit their mistake in so acting, adding, 'If, therefore, you pardon the defendant, you will absolve every one else from punishment.' You can say, 'If you acquit those who admit their mistakes, how will you be able to condemn those who do not do so?'

You must urge that 'even if he has made a mistake, there is no reason why I should suffer through his mistake'. Furthermore, you must say that the lawgiver shows no pity for those who make mistakes, and so the jury in giving their verdict according to the laws should not do so either. Such theft, as we have stated at the beginning, are the means by which we shall refute their appeals for pardon, and, speaking generally, we shall anticipate by the method already mentioned anything which our opponents intend to say with a view either to proof or justification or pardon.

Next we must recount the charge, the whole story of the case being summarized, and, if possible, in a few words instil into the minds of the jury a feeling of hostility or indignation or envy towards our opponents and of goodwill or gratitude or pity for ourselves. How this is done we have already stated in dealing with public speaking and persuasion and dissuasion, and we shall again allude to it finally in treating of the defensive style of oratory. This, then, is the way in which we shall compose and arrange our speech when we are the first to speak and are the accusers in a forensic case.

When we are defending a case, we shall frame our proem in the same way as when accusing, and we shall make no mention of the accusations, of which our opponent has informed our hearers, but after the proem we shall set forth and refute the opinions which he has put into their minds and throw discredit on his witnesses and the testimony given under torture and the oaths, in the manner already described to you. If the facts are credible, we must put our defence against them into the form of a pretended omission, and, if the witnesses who have been examined under torture are trustworthy, we must have recourse to argument or statement of fact or any other strong point which we can bring against them. If your adversary accuses you by bringing a charge which accords with your advantage or habitual practice, you must defend yourself, if you can, by showing that the crime with which you are charged does not accord with your advantage; or, failing that, you must urge that it has not been the custom either of yourself or of persons like you to do such things, or to do them in such a manner. This is how you will refute the argument of probability. When he employs an example, you must first show, if you can, that it does not resemble the crime with which you are charged, or, failing that, yourself bring forward another example to the contrary which has occurred against probability. If he employs a sign, you must refute it by giving reasons why it implies the exact opposite, while you must show that his maxims and enthymemes are either paradoxical or ambiguous. His fallible signs you must prove to be signs of a number of other things and not only of the charge which he is bringing against you. This, then, is the way in which we shall cause our adversary's contentions to be discredited by either interpreting them in a contrary sense or reducing them to ambiguity.

If, on the other hand, we admit that we have done the acts with which we are charged, we shall base our plea on justice and legality and try to prove that our acts are juster and more legal. If this is impossible, we must resort to pleas of error or misfortune, and try to win pardon by showing that the harm which has

resulted is small, pointing out that error is common to all men, while wrongdoing is peculiar to the wicked. You must urge that it is right and just and expedient to pardon errors; for no man knows whether it may not fall to his lot to commit such an error. You must also point out that your opponent claimed pardon when he committed an error.

Next will come the anticipations which your adversaries have made in their speeches. Anticipations of other kinds we shall easily be able to refute by an appeal to the facts; but if they misrepresent us by saying that we read our speeches or practise them beforehand, or that we are pleading for the sake of some reward, we must meet such accusations with irony and say with regard to the writing of speeches that the law does not forbid a man to read out a written speech any more than it forbids his opponent to speak without notes; for, while it prohibits the doing of certain actions, it allows a man to make a speech in any way he likes. You must also say: 'My opponent considers that the wrongs which he has committed are so serious that he does not think I am doing justice to the accusation which I am bringing against him, unless I write out and take a long time to think over my speech.' Such then is the way in which we must meet the misrepresentation of having written out our speech. If our opponents declare that we learn and rehearse our speeches, we shall admit it and say: 'We who, according to you, learn what we are going to say, are not litigious, whereas you, who declare that you do not know how to speak, have been convicted of bringing vexatious suits in the past and are doing so now against us'; and we shall draw the conclusion that it would apparently therefore be better for the citizens, if our opponent also learned to be an orator, for then he would not be such a scoundrel and pettifogger. We shall meet the accusation that we are paid to plead in court by a similar argument — admitting it and speaking ironically and pointing out that our accuser and every one else does so. You must distinguish between the different kinds of pay and say that some men plead in court for money, others as a favour, others for vengeance, others for honours. You must show that you are yourself pleading as a favour, and say that your opponent pleads for no small payment; for he is going to law that he may make money by unrighteous means, not in order to avoid having to pay it. We must follow the same method if any one accuses us of teaching others how to plead and of composing speeches to be delivered in court. You must point out that every one else, as far as lies within his power, helps his friends by instruction and advice. Thus you will have an answer in such cases in accordance with the rules of rhetoric.

You must not be slow in any questions and answers which occur in cases of this kind; but you must make a clear distinction in your answers between admissions and denials. The following are examples of admissions: 'Did you kill my son?'—' Yes, I did kill him, when he, unprovoked, raised a sword against me; or again, 'Did you thrash my son?'—' Yes, but he first assaulted me'; or again, 'Did you break my head?'—'Yes, when you were forcing your way into my house at night.' Such admissions are made in reliance on the legality of your action. Denials, on the other hand, aim at diverting the course of law, for example: 'Did you kill my son?'—'No, it was not I, but the law that killed him.' This is the kind of answer which you must always make when one law enjoins, while another forbids, a certain course of action. Out of all these various methods you will gather the means to meet your adversaries.

Next will follow an iteration by way of brief reminder of what you have said. It is useful on all occasions and should therefore be employed in every part and in every kind of speech. It is very suitable in accusation and defence and also in persuasion and dissuasion. In my opinion we ought here not only to remind our audience, as in eulogistic and vituperative speeches, of what has been said, but we ought also to dispose our judges to be favourable towards ourselves and unfavourable to our opponents; we shall make this the last part of our speech. It is possible to refresh your hearer's memory in a summary manner either by enumerating the points which you have mentioned, or by making a division, or by asking additional questions which will bring the most credit on yourself and the most discredit on your opponents, or, if you like, you can use the form of a simple question. The nature of these methods we know from what has already been said.

We shall win a favourable hearing for ourselves and an unfavourable one for our opponents if, as in persuasion and dissuasion, we show briefly how we ourselves (or our friends) have benefited or are benefiting or intend to benefit those who are now seeking to wrong us (or those for whom they care), or else our judges (or those for whom they care); and point out to them that now is the opportunity to show us gratitude for our good services; and also, when it is possible, induce them to pity us. This we shall do by showing that a close tie binds us to our hearers and that we are suffering undeserved misfortune, having been unfairly treated in the past, or being so now, or being likely to be so in the future, unless they help us now. If such arguments are inapplicable, we must describe the advantages of which we have been, or are being, or are likely to be deprived, if our prayers are rejected by our judges; or show that we never have been, or are

not now, or are never likely to be in enjoyment of some benefit, unless they help us. For it is by these means that we shall win pity and gain the goodwill of our audience.

We shall cause a prejudice and feelings of envy against our opponents by employing the opposite method and pointing out that our hearers, or those for whom they care, have received undeserved ill-treatment, or are receiving it, or are likely to receive it at the hands of our opponents or their friends; for by such arguments they will be induced to entertain feelings of hatred and indignation against them. Where this is impossible, we shall collect together all the arguments by which we can create in our hearers a feeling of envy against our opponents; for envy is very near to hatred. They will be objects of envy, to put the matter briefly, if we can show that they have met with undeserved prosperity and that no close ties bind them to our hearers, and point out that they have unjustly received, or are receiving, or are about to receive many benefits; or that they have never in the past been without some advantage, or are not without it now, or likely to be so in the future; or that they have never met with some misfortune, or are not now meeting with it, or likely to do so, unless the judges punish them now. By these means then we shall in the peroration of our speech win favour for ourselves and disfavour for our opponents, and by following all the instructions given above we shall be able to arrange speeches for accusation and defence according to the rules of rhetoric.

The inquisitive kind of oratory generally occurs, not separately, but in connexion with the other styles; it is especially useful in dealing with contradictions. However, in order that we may know the arrangement of this kind of speech also, when we have to inquire into the words or manner of life or deeds of men or the administration of a city, I will describe it also in a summary manner. When conducting an inquiry of this kind we must begin in the same way as when refuting a prejudice; and so, after first adducing plausible pretexts so as to make our action appear reasonable, we shall then proceed to conduct our inquiry. The following are suitable pretexts: in political assemblies, that we are adopting such a course not from party-spirit but in order that it may not escape the attention of our hearers, or again, that our adversaries molested us first. In private suits our excuse will be a feeling of hatred or the bad character of the subjects of our inquiry or our friendship towards them or the object of making them realize what they are doing and not do it again. In public trials our pretexts will be legality, justice, and the general interest. After first treating of these and similar subjects we shall next in order set forth and inquire into each utterance or

deed or intention of our opponents, showing that these are opposed to justice and legality and private and public expediency, and examining them all to see whether in any respect they contradict one another or the practice of good citizens or probability. But, not to be tedious by going into details, the more we can prove to our hearers that the conduct of the subjects of our inquiry is opposed to honourable pursuits, acts, words, or habits, the greater will be the discredit which attaches to them. We ought to conduct our inquiry not in a bitter but in a gentle spirit; for words if thus spoken will appear more persuasive to our hearers, and those who utter them will be less likely to bring prejudice upon themselves. When you have carefully inquired into everything and amplified the results, you must conclude with a brief iteration and remind your hearers of what you have said. By arranging them thus we shall be able to employ all the various kinds of oratory according to the rules of rhetoric.

Both in speaking and writing we must try as far as possible to make our words accord with the principles laid down above, and accustom ourselves to practice each principle readily, and we shall have many clever expedients to enable us to make speeches according to the rules of art in private and public suits and in conversation with others; but an orator ought to be careful not only about his words but also about his personal behaviour, regulating it according to the principles already laid down; for the manner of a man's life contributes to the persuasive influence which he exercises and to the establishment of a good reputation.

In the first place you must divide up your subject-matter according to the general system of division in which you have been instructed, and decide what you must treat of first, secondly, thirdly, and fourthly. Next you must prepare your hearers to receive you, as I have described in dealing with the attitude to be taken towards your audience in proems. You will dispose them well towards you, if you are true to your promises and if you keep the same friends all your life and show yourself unchanging in your other habits and always following the same course. They will listen attentively to you, if you treat of great and noble deeds and such as promote the public good.

Their goodwill having been won, when you come to practical suggestions they will accept as expedient to themselves those which procure the avoidance of evils and the provision of benefits, and reject those which involve the contrary results.

In order that your exposition may be quick and lucid and may command credit, you ought to make your practical suggestions as follows. You will perform your task quickly, if you do not try to do everything at once, but take the first point first and then the next. You will speak lucidly, if you do not suddenly leave your subject and go on to other points before you have finished it. You will command credit, if you do not act contrary to your usual character, and further if you do not pretend that the same persons are your enemies and your friends.

As regards proof, where we have sure knowledge, we shall prefer to follow its guidance in prescribing plans of action, but, where we lack knowledge, we shall take the ordinary course of events as our guide; for it is safest in such cases to act with a view to what usually happens.

When we have adversaries to contend with, if it is a question of words, we shall obtain confirmation in support of our case from the actual words uttered; in suits about contracts we shall do so by dealing with them in accordance with unwritten and written laws with the support of the best possible testimony and within definite limits of time.

As regards our peroration we shall remind our hearers of what has been said by a summary repetition of the facts; while we shall remind them of our past deeds by reference to our present deeds, when we are undertaking actions identical with, or similar to, former actions.

Our hearers will be well disposed to us, if we follow a course of action which will result in their thinking themselves well treated in the past, present, or future. We shall add weight to our actions, if we deal with transactions which are likely to produce great credit for the state.

Such then is the manner in which an orator must regulate his personal behaviour; while he must practice the art of oratory according to the principles already laid down.

[Sacrifices must be conducted on the principles already indicated; they must be reverent towards the gods, moderate in costliness, splendid from a spectacular point of view, and likely to bring advantage to the citizens. They will be reverent towards the gods, if we sacrifice according to ancestral custom; they will be moderate in costliness, if the accompaniments of the ceremony are not used up as well as the money actually expended; they will be splendid from a spectacular



point of view, if they are magnificently appointed; they will be beneficial to the citizens, if horsemen and infantry in full panoply accompany the procession. Our dealings with the gods will be devoutly performed if carried out thus.

We shall establish friendly relations with those who are of like character to our own and have the same interests, and with whom we are obliged to co-operate in matters of great importance; for such friendship is most likely to be permanent. We must make those men our allies, who are most righteous and are possessed, of considerable power and live near at hand; those who are the contrary must be our enemies. We must undertake war against those who are trying to injure the state or her friends or her allies. The protection of the state must be secured either by personal service or by the help of allies or by mercenaries; the first method is preferable to the second, and the second to the third.

As regards the supply of resources, we must provide them first and foremost from our own revenues and possessions, secondly by taxes on rateable property, and thirdly by personal service on the part of the poor, and the provision of arms by the craftsmen, and of money by the wealthy.

As for political constitution, the best form of democracy is that under which the laws bestow the posts of dignity on the best citizens, and the people are not deprived of the rights of electing and voting; the worst form is that under which the laws deliver up the wealthy to the insolence of the mob. Oligarchies are of two kinds, being based either on political partisanship or on a property qualification.

Alliances must be formed when the citizens are unable by themselves to protect their own territory and strongholds or hold the enemy in check. An alliance must be dispensed with when it is unnecessary or when the proposed allies are too far distant and unable to arrive at the opportune moment.

A good citizen is one who provides the state with useful friends and few and feeble foes, and who procures for her the greatest revenue without confiscating the property of a single private citizen, and who, while conducting himself righteously, exposes those who attempt any injury to the state.

Men always bestow presents either in the hope of benefiting themselves or in grateful return for previous services. Service is always given either for gain or honour or pleasure or fear. All dealings are carried out either by choice or

unwillingly: for all acts are done either under compulsion or through persuasion or fraud or on some pretext.

In war one side gains the upper hand either through luck, or superiority of numbers or strength or resources, or advantage of position, or excellence of allies, or skill on the part of a general. It is generally held that men should abandon their allies either because it is expedient to do so or because they have brought the war to a close.

To act justly is to follow the common customs of the state, to obey the laws, and to abide by one's personal promises.

Physical advantages are good condition, beauty, strength, and health; mental advantages are wisdom, prudence, courage, self-control, and justice. Wealth and friends are advantages alike to mind and body. The opposites of these qualities and the lack of wealth and friends are disadvantageous. To a state a multitude of good citizens is an advantage.]

### *Poetics* (1447a)



*Translated by S. H. Butcher*

Aristotle's *Περὶ ποιητικῆς* is the earliest surviving work of dramatic theory and the first extant philosophical treatise to focus on literary theory. The text offers an account of what Aristotle calls “poetry”, a term which in Greek includes drama, lyric poetry, epic poetry and the dithyramb. Aristotle examines its “first principles” and identifies the genres and basic elements. The analysis of tragedy constitutes the core of the discussion. At some point, the original text was divided in two, with each “book” written on a separate roll of papyrus. Only the first part, which focuses on tragedy, survives. The lost second part addressed comedy.

*Poetics* is considered to have been less influential in its time compared with its more famous contemporary, *Rhetoric*. This is most likely because in Aristotle's time rhetoric and poetics were classified as joint concepts in the pantheon of ideal things. Due to rhetoric's direct importance for law and politics, it evolved to become distinct from poetics, in spite of both subjects being classified under

aesthetics in the Aristotelian system of metaphysics.

# CONTENTS

[I](#)

[II](#)

[III](#)

[IV](#)

[V](#)

[VI](#)

[VII](#)

[VIII](#)

[IX](#)

[X](#)

[XI](#)

[XII](#)

[XIII](#)

[XIV](#)

[XV](#)

[XVI](#)

[XVII](#)

[XVIII](#)

[XIX](#)

[XX](#)

[XXI](#)

[XXII](#)

[XXIII](#)

[XXIV](#)

[XXV](#)

[XXVI](#)

# I

I propose to treat of Poetry in itself and of its various kinds, noting the essential quality of each, to inquire into the structure of the plot as requisite to a good poem; into the number and nature of the parts of which a poem is composed; and similarly into whatever else falls within the same inquiry. Following, then, the order of nature, let us begin with the principles which come first.

Epic poetry and Tragedy, Comedy also and Dithyrambic poetry, and the music of the flute and of the lyre in most of their forms, are all in their general conception modes of imitation. They differ, however, from one another in three respects — the medium, the objects, the manner or mode of imitation, being in each case distinct.

For as there are persons who, by conscious art or mere habit, imitate and represent various objects through the medium of color and form, or again by the voice; so in the arts above mentioned, taken as a whole, the imitation is produced by rhythm, language, or ‘harmony,’ either singly or combined.

Thus in the music of the flute and of the lyre, ‘harmony’ and rhythm alone are employed; also in other arts, such as that of the shepherd’s pipe, which are essentially similar to these. In dancing, rhythm alone is used without ‘harmony’; for even dancing imitates character, emotion, and action, by rhythmical movement.

There is another art which imitates by means of language alone, and that either in prose or verse — which verse, again, may either combine different meters or consist of but one kind — but this has hitherto been without a name. For there is no common term we could apply to the mimes of Sophron and Xenarchus and the Socratic dialogues on the one hand; and, on the other, to poetic imitations in iambic, elegiac, or any similar meter. People do, indeed, add the word ‘maker’ or ‘poet’ to the name of the meter, and speak of elegiac poets, or epic (that is, hexameter) poets, as if it were not the imitation that makes the poet, but the verse that entitles them all to the name. Even when a treatise on medicine or natural science is brought out in verse, the name of poet is by custom given to the author; and yet Homer and Empedocles have nothing in common but the meter, so that it would be right to call the one poet, the other physicist rather than poet. On the same principle, even if a writer in his poetic imitation were to

combine all meters, as Chaeremon did in his Centaur, which is a medley composed of meters of all kinds, we should bring him too under the general term poet.

So much then for these distinctions.

There are, again, some arts which employ all the means above mentioned — namely, rhythm, tune, and meter. Such are Dithyrambic and Nomic poetry, and also Tragedy and Comedy; but between them originally the difference is, that in the first two cases these means are all employed in combination, in the latter, now one means is employed, now another.

Such, then, are the differences of the arts with respect to the medium of imitation

## II

Since the objects of imitation are men in action, and these men must be either of a higher or a lower type (for moral character mainly answers to these divisions, goodness and badness being the distinguishing marks of moral differences), it follows that we must represent men either as better than in real life, or as worse, or as they are. It is the same in painting. Polygnotus depicted men as nobler than they are, Pauson as less noble, Dionysius drew them true to life.

Now it is evident that each of the modes of imitation above mentioned will exhibit these differences, and become a distinct kind in imitating objects that are thus distinct. Such diversities may be found even in dancing, flute-playing, and lyre-playing. So again in language, whether prose or verse unaccompanied by music. Homer, for example, makes men better than they are; Cleophon as they are; Hegemon the Thasian, the inventor of parodies, and Nicocharēs, the author of the *Deiliad*, worse than they are. The same thing holds good of Dithyrambs and Nomes; here too one may portray different types, as Timotheus and Philoxenus differed in representing their Cyclopes. The same distinction marks off Tragedy from Comedy; for Comedy aims at representing men as worse, Tragedy as better than in actual life.



### III

There is still a third difference — the manner in which each of these objects may be imitated. For the medium being the same, and the objects the same, the poet may imitate by narration — in which case he can either take another personality as Homer does, or speak in his own person, unchanged — or he may present all his characters as living and moving before us.

These, then, as we said at the beginning, are the three differences which distinguish artistic imitation — the medium, the objects, and the manner. So that from one point of view, Sophocles is an imitator of the same kind as Homer — for both imitate higher types of character; from another point of view, of the same kind as Aristophanes — for both imitate persons acting and doing. Hence, some say, the name of ‘drama’ is given to such poems, as representing action. For the same reason the Dorians claim the invention both of Tragedy and Comedy. The claim to Comedy is put forward by the Megarians — not only by those of Greece proper, who allege that it originated under their democracy, but also by the Megarians of Sicily, for the poet Epicharmus, who is much earlier than Chionides and Magnes, belonged to that country. Tragedy too is claimed by certain Dorians of the Peloponnese. In each case they appeal to the evidence of language. The outlying villages, they say, are by them called komai, by the Athenians demoi: and they assume that comedians were so named not from komazein, ‘to revel,’ but because they wandered from village to village (kata komas), being excluded contemptuously from the city. They add also that the Dorian word for ‘doing’ is dran, and the Athenian, prattein.

This may suffice as to the number and nature of the various modes of imitation.

## IV

Poetry in general seems to have sprung from two causes, each of them lying deep in our nature. First, the instinct of imitation is implanted in man from childhood, one difference between him and other animals being that he is the most imitative of living creatures, and through imitation learns his earliest lessons; and no less universal is the pleasure felt in things imitated. We have evidence of this in the facts of experience. Objects which in themselves we view with pain, we delight to contemplate when reproduced with minute fidelity: such as the forms of the most ignoble animals and of dead bodies. The cause of this again is, that to learn gives the liveliest pleasure, not only to philosophers but to men in general; whose capacity, however, of learning is more limited. Thus the reason why men enjoy seeing a likeness is, that in contemplating it they find themselves learning or inferring, and saying perhaps, 'Ah, that is he.' For if you happen not to have seen the original, the pleasure will be due not to the imitation as such, but to the execution, the coloring, or some such other cause.

Imitation, then, is one instinct of our nature. Next, there is the instinct for 'harmony' and rhythm, meters being manifestly sections of rhythm. Persons, therefore, starting with this natural gift developed by degrees their special aptitudes, till their rude improvisations gave birth to Poetry.

Poetry now diverged in two directions, according to the individual character of the writers. The graver spirits imitated noble actions, and the actions of good men. The more trivial sort imitated the actions of meaner persons, at first composing satires, as the former did hymns to the gods and the praises of famous men. A poem of the satirical kind cannot indeed be put down to any author earlier than Homer; though many such writers probably there were. But from Homer onward, instances can be cited — his own *Margites*, for example, and other similar compositions. The appropriate meter was also here introduced; hence the measure is still called the iambic or lampooning measure, being that in which people lampooned one another. Thus the older poets were distinguished as writers of heroic or of lampooning verse.

As, in the serious style, Homer is pre-eminent among poets, for he alone combined dramatic form with excellence of imitation so he too first laid down the main lines of comedy, by dramatizing the ludicrous instead of writing personal satire. His *Margites* bears the same relation to comedy that the *Iliad* and

Odyssey do to tragedy. But when Tragedy and Comedy came to light, the two classes of poets still followed their natural bent: the lampooners became writers of Comedy, and the Epic poets were succeeded by Tragedians, since the drama was a larger and higher form of art.

Whether Tragedy has as yet perfected its proper types or not; and whether it is to be judged in itself, or in relation also to the audience — this raises another question. Be that as it may, Tragedy — as also Comedy — was at first mere improvisation. The one originated with the authors of the Dithyramb, the other with those of the phallic songs, which are still in use in many of our cities. Tragedy advanced by slow degrees; each new element that showed itself was in turn developed. Having passed through many changes, it found its natural form, and there it stopped.

Aeschylus first introduced a second actor; he diminished the importance of the Chorus, and assigned the leading part to the dialogue. Sophocles raised the number of actors to three, and added scene-painting. Moreover, it was not till late that the short plot was discarded for one of greater compass, and the grotesque diction of the earlier satyric form for the stately manner of Tragedy. The iambic measure then replaced the trochaic tetrameter, which was originally employed when the poetry was of the satyric order, and had greater with dancing. Once dialogue had come in, Nature herself discovered the appropriate measure. For the iambic is, of all measures, the most colloquial we see it in the fact that conversational speech runs into iambic lines more frequently than into any other kind of verse; rarely into hexameters, and only when we drop the colloquial intonation. The additions to the number of ‘episodes’ or acts, and the other accessories of which tradition tells, must be taken as already described; for to discuss them in detail would, doubtless, be a large undertaking.

## V

Comedy is, as we have said, an imitation of characters of a lower type — not, however, in the full sense of the word bad, the ludicrous being merely a subdivision of the ugly. It consists in some defect or ugliness which is not painful or destructive. To take an obvious example, the comic mask is ugly and distorted, but does not imply pain.

The successive changes through which Tragedy passed, and the authors of these changes, are well known, whereas Comedy has had no history, because it was not at first treated seriously. It was late before the Archon granted a comic chorus to a poet; the performers were till then voluntary. Comedy had already taken definite shape when comic poets, distinctively so called, are heard of. Who furnished it with masks, or prologues, or increased the number of actors — these and other similar details remain unknown. As for the plot, it came originally from Sicily; but of Athenian writers Crates was the first who abandoning the ‘iambic’ or lampooning form, generalized his themes and plots.

Epic poetry agrees with Tragedy in so far as it is an imitation in verse of characters of a higher type. They differ in that Epic poetry admits but one kind of meter and is narrative in form. They differ, again, in their length: for Tragedy endeavors, as far as possible, to confine itself to a single revolution of the sun, or but slightly to exceed this limit, whereas the Epic action has no limits of time. This, then, is a second point of difference; though at first the same freedom was admitted in Tragedy as in Epic poetry.

Of their constituent parts some are common to both, some peculiar to Tragedy: whoever, therefore knows what is good or bad Tragedy, knows also about Epic poetry. All the elements of an Epic poem are found in Tragedy, but the elements of a Tragedy are not all found in the Epic poem.

## VI

Of the poetry which imitates in hexameter verse, and of Comedy, we will speak hereafter. Let us now discuss Tragedy, resuming its formal definition, as resulting from what has been already said.

Tragedy, then, is an imitation of an action that is serious, complete, and of a certain magnitude; in language embellished with each kind of artistic ornament, the several kinds being found in separate parts of the play; in the form of action, not of narrative; through pity and fear effecting the proper purgation of these emotions. By 'language embellished,' I mean language into which rhythm, 'harmony' and song enter. By 'the several kinds in separate parts,' I mean, that some parts are rendered through the medium of verse alone, others again with the aid of song.

Now as tragic imitation implies persons acting, it necessarily follows in the first place, that Spectacular equipment will be a part of Tragedy. Next, Song and Diction, for these are the media of imitation. By 'Diction' I mean the mere metrical arrangement of the words: as for 'Song,' it is a term whose sense every one understands.

Again, Tragedy is the imitation of an action; and an action implies personal agents, who necessarily possess certain distinctive qualities both of character and thought; for it is by these that we qualify actions themselves, and these — thought and character — are the two natural causes from which actions spring, and on actions again all success or failure depends. Hence, the Plot is the imitation of the action — for by plot I here mean the arrangement of the incidents. By Character I mean that in virtue of which we ascribe certain qualities to the agents. Thought is required wherever a statement is proved, or, it may be, a general truth enunciated. Every Tragedy, therefore, must have six parts, which parts determine its quality — namely, Plot, Character, Diction, Thought, Spectacle, Song. Two of the parts constitute the medium of imitation, one the manner, and three the objects of imitation. And these complete the list. These elements have been employed, we may say, by the poets to a man; in fact, every play contains Spectacular elements as well as Character, Plot, Diction, Song, and Thought.

But most important of all is the structure of the incidents. For Tragedy is an

imitation, not of men, but of an action and of life, and life consists in action, and its end is a mode of action, not a quality. Now character determines men's qualities, but it is by their actions that they are happy or the reverse. Dramatic action, therefore, is not with a view to the representation of character: character comes in as subsidiary to the actions. Hence the incidents and the plot are the end of a tragedy; and the end is the chief thing of all. Again, without action there cannot be a tragedy; there may be without character. The tragedies of most of our modern poets fail in the rendering of character; and of poets in general this is often true. It is the same in painting; and here lies the difference between Zeuxis and Polygnotus. Polygnotus delineates character well; the style of Zeuxis is devoid of ethical quality. Again, if you string together a set of speeches expressive of character, and well finished in point of diction and thought, you will not produce the essential tragic effect nearly so well as with a play which, however deficient in these respects, yet has a plot and artistically constructed incidents. Besides which, the most powerful elements of emotional interest in Tragedy — Peripeteia or Reversal of the Situation, and Recognition scenes — are parts of the plot. A further proof is, that novices in the art attain to finish of diction and precision of portraiture before they can construct the plot. It is the same with almost all the early poets.

The plot, then, is the first principle, and, as it were, the soul of a tragedy; Character holds the second place. A similar fact is seen in painting. The most beautiful colors, laid on confusedly, will not give as much pleasure as the chalk outline of a portrait. Thus Tragedy is the imitation of an action, and of the agents mainly with a view to the action.

Third in order is Thought — that is, the faculty of saying what is possible and pertinent in given circumstances. In the case of oratory, this is the function of the political art and of the art of rhetoric: and so indeed the older poets make their characters speak the language of civic life; the poets of our time, the language of the rhetoricians. Character is that which reveals moral purpose, showing what kind of things a man chooses or avoids. Speeches, therefore, which do not make this manifest, or in which the speaker does not choose or avoid anything whatever, are not expressive of character. Thought, on the other hand, is found where something is proved to be or not to be, or a general maxim is enunciated.

Fourth among the elements enumerated comes Diction; by which I mean, as has been already said, the expression of the meaning in words; and its essence is the same both in verse and prose.

Of the remaining elements Song holds the chief place among the embellishments

The Spectacle has, indeed, an emotional attraction of its own, but, of all the parts, it is the least artistic, and connected least with the art of poetry. For the power of Tragedy, we may be sure, is felt even apart from representation and actors. Besides, the production of spectacular effects depends more on the art of the stage machinist than on that of the poet.

## VII

These principles being established, let us now discuss the proper structure of the Plot, since this is the first and most important thing in Tragedy.

Now, according to our definition Tragedy is an imitation of an action that is complete, and whole, and of a certain magnitude; for there may be a whole that is wanting in magnitude. A whole is that which has a beginning, a middle, and an end. A beginning is that which does not itself follow anything by causal necessity, but after which something naturally is or comes to be. An end, on the contrary, is that which itself naturally follows some other thing, either by necessity, or as a rule, but has nothing following it. A middle is that which follows something as some other thing follows it. A well constructed plot, therefore, must neither begin nor end at haphazard, but conform to these principles.

Again, a beautiful object, whether it be a living organism or any whole composed of parts, must not only have an orderly arrangement of parts, but must also be of a certain magnitude; for beauty depends on magnitude and order. Hence a very small animal organism cannot be beautiful; for the view of it is confused, the object being seen in an almost imperceptible moment of time. Nor, again, can one of vast size be beautiful; for as the eye cannot take it all in at once, the unity and sense of the whole is lost for the spectator; as for instance if there were one a thousand miles long. As, therefore, in the case of animate bodies and organisms a certain magnitude is necessary, and a magnitude which may be easily embraced in one view; so in the plot, a certain length is necessary, and a length which can be easily embraced by the memory. The limit of length in relation to dramatic competition and sensuous presentment is no part of artistic theory. For had it been the rule for a hundred tragedies to compete together, the performance would have been regulated by the water-clock — as indeed we are told was formerly done. But the limit as fixed by the nature of the drama itself is this: the greater the length, the more beautiful will the piece be by reason of its size, provided that the whole be perspicuous. And to define the matter roughly, we may say that the proper magnitude is comprised within such limits, that the sequence of events, according to the law of probability or necessity, will admit of a change from bad fortune to good, or from good fortune to bad.



## VIII

Unity of plot does not, as some persons think, consist in the unity of the hero. For infinitely various are the incidents in one man's life which cannot be reduced to unity; and so, too, there are many actions of one man out of which we cannot make one action. Hence the error, as it appears, of all poets who have composed a *Heracleid*, a *Theseid*, or other poems of the kind. They imagine that as Heracles was one man, the story of Heracles must also be a unity. But Homer, as in all else he is of surpassing merit, here too — whether from art or natural genius — seems to have happily discerned the truth. In composing the *Odyssey* he did not include all the adventures of Odysseus — such as his wound on Parnassus, or his feigned madness at the mustering of the host — incidents between which there was no necessary or probable connection: but he made the *Odyssey*, and likewise the *Iliad*, to center round an action that in our sense of the word is one. As therefore, in the other imitative arts, the imitation is one when the object imitated is one, so the plot, being an imitation of an action, must imitate one action and that a whole, the structural union of the parts being such that, if any one of them is displaced or removed, the whole will be disjointed and disturbed. For a thing whose presence or absence makes no visible difference, is not an organic part of the whole.

## IX

It is, moreover, evident from what has been said, that it is not the function of the poet to relate what has happened, but what may happen — what is possible according to the law of probability or necessity. The poet and the historian differ not by writing in verse or in prose. The work of Herodotus might be put into verse, and it would still be a species of history, with meter no less than without it. The true difference is that one relates what has happened, the other what may happen. Poetry, therefore, is a more philosophical and a higher thing than history: for poetry tends to express the universal, history the particular. By the universal I mean how a person of a certain type on occasion speak or act, according to the law of probability or necessity; and it is this universality at which poetry aims in the names she attaches to the personages. The particular is — for example — what Alcibiades did or suffered. In Comedy this is already apparent: for here the poet first constructs the plot on the lines of probability, and then inserts characteristic names — unlike the lampooners who write about particular individuals. But tragedians still keep to real names, the reason being that what is possible is credible: what has not happened we do not at once feel sure to be possible; but what has happened is manifestly possible: otherwise it would not have happened. Still there are even some tragedies in which there are only one or two well-known names, the rest being fictitious. In others, none are well known — as in Agathon's *Antheus*, where incidents and names alike are fictitious, and yet they give none the less pleasure. We must not, therefore, at all costs keep to the received legends, which are the usual subjects of Tragedy. Indeed, it would be absurd to attempt it; for even subjects that are known are known only to a few, and yet give pleasure to all. It clearly follows that the poet or 'maker' should be the maker of plots rather than of verses; since he is a poet because he imitates, and what he imitates are actions. And even if he chances to take a historical subject, he is none the less a poet; for there is no reason why some events that have actually happened should not conform to the law of the probable and possible, and in virtue of that quality in them he is their poet or maker.

Of all plots and actions the episodic are the worst. I call a plot 'episodic' in which the episodes or acts succeed one another without probable or necessary sequence. Bad poets compose such pieces by their own fault, good poets, to please the players; for, as they write show pieces for competition, they stretch

the plot beyond its capacity, and are often forced to break the natural continuity.

But again, Tragedy is an imitation not only of a complete action, but of events inspiring fear or pity. Such an effect is best produced when the events come on us by surprise; and the effect is heightened when, at the same time, they follow as cause and effect. The tragic wonder will then be greater than if they happened of themselves or by accident; for even coincidences are most striking when they have an air of design. We may instance the statue of Mityros at Argos, which fell upon his murderer while he was a spectator at a festival, and killed him. Such events seem not to be due to mere chance. Plots, therefore, constructed on these principles are necessarily the best.

## X

Plots are either Simple or Complex, for the actions in real life, of which the plots are an imitation, obviously show a similar distinction. An action which is one and continuous in the sense above defined, I call Simple, when the change of fortune takes place without Reversal of the Situation and without Recognition

A Complex action is one in which the change is accompanied by such Reversal, or by Recognition, or by both. These last should arise from the internal structure of the plot, so that what follows should be the necessary or probable result of the preceding action. It makes all the difference whether any given event is a case of propter hoc or post hoc.

## XI

Reversal of the Situation is a change by which the action veers round to its opposite, subject always to our rule of probability or necessity. Thus in the Oedipus, the messenger comes to cheer Oedipus and free him from his alarms about his mother, but by revealing who he is, he produces the opposite effect. Again in the Lynceus, Lynceus is being led away to his death, and Danaus goes with him, meaning to slay him; but the outcome of the preceding incidents is that Danaus is killed and Lynceus saved.

Recognition, as the name indicates, is a change from ignorance to knowledge, producing love or hate between the persons destined by the poet for good or bad fortune. The best form of recognition is coincident with a Reversal of the Situation, as in the Oedipus. There are indeed other forms. Even inanimate things of the most trivial kind may in a sense be objects of recognition. Again, we may recognize or discover whether a person has done a thing or not. But the recognition which is most intimately connected with the plot and action is, as we have said, the recognition of persons. This recognition, combined with Reversal, will produce either pity or fear; and actions producing these effects are those which, by our definition, Tragedy represents. Moreover, it is upon such situations that the issues of good or bad fortune will depend. Recognition, then, being between persons, it may happen that one person only is recognized by the other — when the latter is already known — or it may be necessary that the recognition should be on both sides. Thus Iphigenia is revealed to Orestes by the sending of the letter; but another act of recognition is required to make Orestes known to Iphigenia.

Two parts, then, of the Plot — Reversal of the Situation and Recognition — turn upon surprises. A third part is the Scene of Suffering. The Scene of Suffering is a destructive or painful action, such as death on the stage, bodily agony, wounds, and the like.

## XII

The parts of Tragedy which must be treated as elements of the whole have been already mentioned. We now come to the quantitative parts — the separate parts into which Tragedy is divided — namely, Prologue, Episode, Exode, Choric song; this last being divided into Parode and Stasimon. These are common to all plays: peculiar to some are the songs of actors from the stage and the Commoi.

The Prologue is that entire part of a tragedy which precedes the Parode of the Chorus. The Episode is that entire part of a tragedy which is between complete choric songs. The Exode is that entire part of a tragedy which has no choric song after it. Of the Choric part the Parode is the first undivided utterance of the Chorus: the Stasimon is a Choric ode without anapaests or trochaic tetrameters: the Commos is a joint lamentation of Chorus and actors. The parts of Tragedy which must be treated as elements of the whole have been already mentioned. The quantitative parts — the separate parts into which it is divided — are here enumerated.

## XIII

As the sequel to what has already been said, we must proceed to consider what the poet should aim at, and what he should avoid, in constructing his plots; and by what means the specific effect of Tragedy will be produced.

A perfect tragedy should, as we have seen, be arranged not on the simple but on the complex plan. It should, moreover, imitate actions which excite pity and fear, this being the distinctive mark of tragic imitation. It follows plainly, in the first place, that the change of fortune presented must not be the spectacle of a virtuous man brought from prosperity to adversity: for this moves neither pity nor fear; it merely shocks us. Nor, again, that of a bad man passing from adversity to prosperity: for nothing can be more alien to the spirit of Tragedy; it possesses no single tragic quality; it neither satisfies the moral sense nor calls forth pity or fear. Nor, again, should the downfall of the utter villain be exhibited. A plot of this kind would, doubtless, satisfy the moral sense, but it would inspire neither pity nor fear; for pity is aroused by unmerited misfortune, fear by the misfortune of a man like ourselves. Such an event, therefore, will be neither pitiful nor terrible. There remains, then, the character between these two extremes — that of a man who is not eminently good and just, yet whose misfortune is brought about not by vice or depravity, but by some error or frailty. He must be one who is highly renowned and prosperous — a personage like Oedipus, Thyestes, or other illustrious men of such families.

A well-constructed plot should, therefore, be single in its issue, rather than double as some maintain. The change of fortune should be not from bad to good, but, reversely, from good to bad. It should come about as the result not of vice, but of some great error or frailty, in a character either such as we have described, or better rather than worse. The practice of the stage bears out our view. At first the poets recounted any legend that came in their way. Now, the best tragedies are founded on the story of a few houses — on the fortunes of Alcmaeon, Oedipus, Orestes, Meleager, Thyestes, Telephus, and those others who have done or suffered something terrible. A tragedy, then, to be perfect according to the rules of art should be of this construction. Hence they are in error who censure Euripides just because he follows this principle in his plays, many of which end unhappily. It is, as we have said, the right ending. The best proof is that on the stage and in dramatic competition, such plays, if well worked out, are

the most tragic in effect; and Euripides, faulty though he may be in the general management of his subject, yet is felt to be the most tragic of the poets.

In the second rank comes the kind of tragedy which some place first. Like the *Odyssey*, it has a double thread of plot, and also an opposite catastrophe for the good and for the bad. It is accounted the best because of the weakness of the spectators; for the poet is guided in what he writes by the wishes of his audience. The pleasure, however, thence derived is not the true tragic pleasure. It is proper rather to Comedy, where those who, in the piece, are the deadliest enemies — like Orestes and Aegisthus — quit the stage as friends at the close, and no one slays or is slain.



## XIV

Fear and pity may be aroused by spectacular means; but they may also result from the inner structure of the piece, which is the better way, and indicates a superior poet. For the plot ought to be so constructed that, even without the aid of the eye, he who hears the tale told will thrill with horror and melt to pity at what takes Place. This is the impression we should receive from hearing the story of the Oedipus. But to produce this effect by the mere spectacle is a less artistic method, and dependent on extraneous aids. Those who employ spectacular means to create a sense not of the terrible but only of the monstrous, are strangers to the purpose of Tragedy; for we must not demand of Tragedy any and every kind of pleasure, but only that which is proper to it. And since the pleasure which the poet should afford is that which comes from pity and fear through imitation, it is evident that this quality must be impressed upon the incidents.

Let us then determine what are the circumstances which strike us as terrible or pitiful.

Actions capable of this effect must happen between persons who are either friends or enemies or indifferent to one another. If an enemy kills an enemy, there is nothing to excite pity either in the act or the intention — except so far as the suffering in itself is pitiful. So again with indifferent persons. But when the tragic incident occurs between those who are near or dear to one another — if, for example, a brother kills, or intends to kill, a brother, a son his father, a mother her son, a son his mother, or any other deed of the kind is done — these are the situations to be looked for by the poet. He may not indeed destroy the framework of the received legends — the fact, for instance, that Clytemnestra was slain by Orestes and Eriphyle by Alcmaeon — but he ought to show of his own, and skilfully handle the traditional. material. Let us explain more clearly what is meant by skilful handling.

The action may be done consciously and with knowledge of the persons, in the manner of the older poets. It is thus too that Euripides makes Medea slay her children. Or, again, the deed of horror may be done, but done in ignorance, and the tie of kinship or friendship be discovered afterwards. The Oedipus of Sophocles is an example. Here, indeed, the incident is outside the drama proper; but cases occur where it falls within the action of the play: one may cite the

Alcmaeon of Astydamos, or Telegonus in the Wounded Odysseus. Again, there is a third case — [to be about to act with knowledge of the persons and then not to act. The fourth case] is when some one is about to do an irreparable deed through ignorance, and makes the discovery before it is done. These are the only possible ways. For the deed must either be done or not done — and that wittingly or unwittingly. But of all these ways, to be about to act knowing the persons, and then not to act, is the worst. It is shocking without being tragic, for no disaster follows. It is, therefore, never, or very rarely, found in poetry. One instance, however, is in the *Antigone*, where Haemon threatens to kill Creon. The next and better way is that the deed should be perpetrated. Still better, that it should be perpetrated in ignorance, and the discovery made afterwards. There is then nothing to shock us, while the discovery produces a startling effect. The last case is the best, as when in the *Cresphontes* Merope is about to slay her son, but, recognizing who he is, spares his life. So in the *Iphigenia*, the sister recognizes the brother just in time. Again in the *Helle*, the son recognizes the mother when on the point of giving her up. This, then, is why a few families only, as has been already observed, furnish the subjects of tragedy. It was not art, but happy chance, that led the poets in search of subjects to impress the tragic quality upon their plots. They are compelled, therefore, to have recourse to those houses whose history contains moving incidents like these.

Enough has now been said concerning the structure of the incidents, and the right kind of plot.

## XV

In respect of Character there are four things to be aimed at. First, and most important, it must be good. Now any speech or action that manifests moral purpose of any kind will be expressive of character: the character will be good if the purpose is good. This rule is relative to each class. Even a woman may be good, and also a slave; though the woman may be said to be an inferior being, and the slave quite worthless. The second thing to aim at is propriety. There is a type of manly valor; but valor in a woman, or unscrupulous cleverness is inappropriate. Thirdly, character must be true to life: for this is a distinct thing from goodness and propriety, as here described. The fourth point is consistency: for though the subject of the imitation, who suggested the type, be inconsistent, still he must be consistently inconsistent. As an example of motiveless degradation of character, we have Menelaus in the *Orestes*; of character indecorous and inappropriate, the lament of Odysseus in the *Scylla*, and the speech of Melanippe; of inconsistency, the *Iphigenia at Aulis* — for *Iphigenia* the suppliant in no way resembles her later self.

As in the structure of the plot, so too in the portraiture of character, the poet should always aim either at the necessary or the probable. Thus a person of a given character should speak or act in a given way, by the rule either of necessity or of probability; just as this event should follow that by necessary or probable sequence. It is therefore evident that the unraveling of the plot, no less than the complication, must arise out of the plot itself, it must not be brought about by the *Deus ex Machina* — as in the *Medea*, or in the return of the Greeks in the *Iliad*. The *Deus ex Machina* should be employed only for events external to the drama — for antecedent or subsequent events, which lie beyond the range of human knowledge, and which require to be reported or foretold; for to the gods we ascribe the power of seeing all things. Within the action there must be nothing irrational. If the irrational cannot be excluded, it should be outside the scope of the tragedy. Such is the irrational element the *Oedipus* of Sophocles.

Again, since Tragedy is an imitation of persons who are above the common level, the example of good portrait painters should be followed. They, while reproducing the distinctive form of the original, make a likeness which is true to life and yet more beautiful. So too the poet, in representing men who are irascible or indolent, or have other defects of character, should preserve the type

and yet ennoble it. In this way Achilles is portrayed by Agathon and Homer.

These then are rules the poet should observe. Nor should he neglect those appeals to the senses, which, though not among the essentials, are the concomitants of poetry; for here too there is much room for error. But of this enough has been said in our published treatises.

## XVI

What Recognition is has been already explained. We will now enumerate its kinds.

First, the least artistic form, which, from poverty of wit, is most commonly employed — recognition by signs. Of these some are congenital — such as ‘the spear which the earth-born race bear on their bodies,’ or the stars introduced by Carcinus in his *Thyestes*. Others are acquired after birth; and of these some are bodily marks, as scars; some external tokens, as necklaces, or the little ark in the *Tyro* by which the discovery is effected. Even these admit of more or less skilful treatment. Thus in the recognition of *Odysseus* by his scar, the discovery is made in one way by the nurse, in another by the swineherds. The use of tokens for the express purpose of proof — and, indeed, any formal proof with or without tokens — is a less artistic mode of recognition. A better kind is that which comes about by a turn of incident, as in the Bath Scene in the *Odyssey*.

Next come the recognitions invented at will by the poet, and on that account wanting in art. For example, *Orestes* in the *Iphigenia* reveals the fact that he is *Orestes*. She, indeed, makes herself known by the letter; but he, by speaking himself, and saying what the poet, not what the plot requires. This, therefore, is nearly allied to the fault above mentioned — for *Orestes* might as well have brought tokens with him. Another similar instance is the ‘voice of the shuttle’ in the *Tereus* of *Sophocles*.

The third kind depends on memory when the sight of some object awakens a feeling: as in the *Cyprians* of *Dicaeogenes*, where the hero breaks into tears on seeing the picture; or again in the *Lay of Alcinous*, where *Odysseus*, hearing the minstrel play the lyre, recalls the past and weeps; and hence the recognition.

The fourth kind is by process of reasoning. Thus in the *Choephoroi*: ‘Some one resembling me has come: no one resembles me but *Orestes*: therefore *Orestes* has come.’ Such too is the discovery made by *Iphigenia* in the play of *Polyidus* the Sophist. It was a natural reflection for *Orestes* to make, ‘So I too must die at the altar like my sister.’ So, again, in the *Tydeus* of *Theodectes*, the father says, ‘I came to find my son, and I lose my own life.’ So too in the *Phineidae*: the women, on seeing the place, inferred their fate—‘Here we are doomed to die, for here we were cast forth.’ Again, there is a composite kind of recognition

involving false inference on the part of one of the characters, as in the *Odysseus Disguised as a Messenger*. A said [that no one else was able to bend the bow;... hence B (the disguised *Odysseus*) imagined that A would] recognize the bow which, in fact, he had not seen; and to bring about a recognition by this means — the expectation that A would recognize the bow — is false inference.

But, of all recognitions, the best is that which arises from the incidents themselves, where the startling discovery is made by natural means. Such is that in the *Oedipus* of *Sophocles*, and in the *Iphigenia*; for it was natural that *Iphigenia* should wish to dispatch a letter. These recognitions alone dispense with the artificial aid of tokens or amulets. Next come the recognitions by process of reasoning.

## XVII

In constructing the plot and working it out with the proper diction, the poet should place the scene, as far as possible, before his eyes. In this way, seeing everything with the utmost vividness, as if he were a spectator of the action, he will discover what is in keeping with it, and be most unlikely to overlook inconsistencies. The need of such a rule is shown by the fault found in Carcinus. Amphiaraus was on his way from the temple. This fact escaped the observation of one who did not see the situation. On the stage, however, the Piece failed, the audience being offended at the oversight.

Again, the poet should work out his play, to the best of his power, with appropriate gestures; for those who feel emotion are most convincing through natural sympathy with the characters they represent; and one who is agitated storms, one who is angry rages, with the most lifelike reality. Hence poetry implies either a happy gift of nature or a strain of madness. In the one case a man can take the mould of any character; in the other, he is lifted out of his proper self.

As for the story, whether the poet takes it ready made or constructs it for himself, he should first sketch its general outline, and then fill in the episodes and amplify in detail. The general plan may be illustrated by the Iphigenia. A young girl is sacrificed; she disappears mysteriously from the eyes of those who sacrificed her; she is transported to another country, where the custom is to offer up an strangers to the goddess. To this ministry she is appointed. Some time later her own brother chances to arrive. The fact that the oracle for some reason ordered him to go there, is outside the general plan of the play. The purpose, again, of his coming is outside the action proper. However, he comes, he is seized, and, when on the point of being sacrificed, reveals who he is. The mode of recognition may be either that of Euripides or of Polyidus, in whose play he exclaims very naturally: 'So it was not my sister only, but I too, who was doomed to be sacrificed'; and by that remark he is saved.

After this, the names being once given, it remains to fill in the episodes. We must see that they are relevant to the action. In the case of Orestes, for example, there is the madness which led to his capture, and his deliverance by means of the purificatory rite. In the drama, the episodes are short, but it is these that give extension to Epic poetry. Thus the story of the Odyssey can be stated briefly. A

certain man is absent from home for many years; he is jealously watched by Poseidon, and left desolate. Meanwhile his home is in a wretched plight — suitors are wasting his substance and plotting against his son. At length, tempest-tost, he himself arrives; he makes certain persons acquainted with him; he attacks the suitors with his own hand, and is himself preserved while he destroys them. This is the essence of the plot; the rest is episode.



## XVIII

Every tragedy falls into two parts — Complication and Unraveling or Denouement. Incidents extraneous to the action are frequently combined with a portion of the action proper, to form the Complication; the rest is the Unraveling. By the Complication I mean all that extends from the beginning of the action to the part which marks the turning-point to good or bad fortune. The Unraveling is that which extends from the beginning of the change to the end. Thus, in the *Lynceus* of Theodectes, the Complication consists of the incidents presupposed in the drama, the seizure of the child, and then again... [the Unraveling] extends from the accusation of murder to the end.

There are four kinds of Tragedy: the Complex, depending entirely on Reversal of the Situation and Recognition; the Pathetic (where the motive is passion) — such as the tragedies on *Ajax* and *Ixion*; the Ethical (where the motives are ethical) — such as the *Phthiotides* and the *Peleus*. The fourth kind is the Simple. [We here exclude the purely spectacular element], exemplified by the *Phorcides*, the *Prometheus*, and scenes laid in *Hades*. The poet should endeavor, if possible, to combine all poetic elements; or failing that, the greatest number and those the most important; the more so, in face of the caviling criticism of the day. For whereas there have hitherto been good poets, each in his own branch, the critics now expect one man to surpass all others in their several lines of excellence.

In speaking of a tragedy as the same or different, the best test to take is the plot. Identity exists where the Complication and Unraveling are the same. Many poets tie the knot well, but unravel it Both arts, however, should always be mastered.

Again, the poet should remember what has been often said, and not make an Epic structure into a tragedy — by an Epic structure I mean one with a multiplicity of plots — as if, for instance, you were to make a tragedy out of the entire story of the *Iliad*. In the Epic poem, owing to its length, each part assumes its proper magnitude. In the drama the result is far from answering to the poet's expectation. The proof is that the poets who have dramatized the whole story of the Fall of Troy, instead of selecting portions, like Euripides; or who have taken the whole tale of *Niobe*, and not a part of her story, like Aeschylus, either fail utterly or meet with poor success on the stage. Even Agathon has been known to fail from this one defect. In his *Reversals of the Situation*, however, he shows a marvelous skill in the effort to hit the popular taste — to produce a tragic effect

that satisfies the moral sense. This effect is produced when the clever rogue, like Sisyphus, is outwitted, or the brave villain defeated. Such an event is probable in Agathon's sense of the word: 'is probable,' he says, 'that many things should happen contrary to probability.'

The Chorus too should be regarded as one of the actors; it should be an integral part of the whole, and share in the action, in the manner not of Euripides but of Sophocles. As for the later poets, their choral songs pertain as little to the subject of the piece as to that of any other tragedy. They are, therefore, sung as mere interludes — a practice first begun by Agathon. Yet what difference is there between introducing such choral interludes, and transferring a speech, or even a whole act, from one play to another.

## XIX

It remains to speak of Diction and Thought, the other parts of Tragedy having been already discussed. concerning Thought, we may assume what is said in the Rhetoric, to which inquiry the subject more strictly belongs. Under Thought is included every effect which has to be produced by speech, the subdivisions being: proof and refutation; the excitation of the feelings, such as pity, fear, anger, and the like; the suggestion of importance or its opposite. Now, it is evident that the dramatic incidents must be treated from the same points of view as the dramatic speeches, when the object is to evoke the sense of pity, fear, importance, or probability. The only difference is that the incidents should speak for themselves without verbal exposition; while effects aimed at in should be produced by the speaker, and as a result of the speech. For what were the business of a speaker, if the Thought were revealed quite apart from what he says?

Next, as regards Diction. One branch of the inquiry treats of the Modes of Utterance. But this province of knowledge belongs to the art of Delivery and to the masters of that science. It includes, for instance — what is a command, a prayer, a statement, a threat, a question, an answer, and so forth. To know or not to know these things involves no serious censure upon the poet's art. For who can admit the fault imputed to Homer by Protagoras — that in the words, 'Sing, goddess, of the wrath, he gives a command under the idea that he utters a prayer? For to tell some one to do a thing or not to do it is, he says, a command. We may, therefore, pass this over as an inquiry that belongs to another art, not to poetry.

## XX

Language in general includes the following parts: Letter, Syllable, Connecting Word, Noun, Verb, Inflection or Case, Sentence or Phrase.

A Letter is an indivisible sound, yet not every such sound, but only one which can form part of a group of sounds. For even brutes utter indivisible sounds, none of which I call a letter. The sound I mean may be either a vowel, a semivowel, or a mute. A vowel is that which without impact of tongue or lip has an audible sound. A semivowel that which with such impact has an audible sound, as S and R. A mute, that which with such impact has by itself no sound, but joined to a vowel sound becomes audible, as G and D. These are distinguished according to the form assumed by the mouth and the place where they are produced; according as they are aspirated or smooth, long or short; as they are acute, grave, or of an intermediate tone; which inquiry belongs in detail to the writers on meter.

A Syllable is a nonsignificant sound, composed of a mute and a vowel: for GR without A is a syllable, as also with A — GRA. But the investigation of these differences belongs also to metrical science.

A Connecting Word is a nonsignificant sound, which neither causes nor hinders the union of many sounds into one significant sound; it may be placed at either end or in the middle of a sentence. Or, a nonsignificant sound, which out of several sounds, each of them significant, is capable of forming one significant sound — as amphi, peri, and the like. Or, a nonsignificant sound, which marks the beginning, end, or division of a sentence; such, however, that it cannot correctly stand by itself at the beginning of a sentence — as men, etoi, de.

A Noun is a composite significant sound, not marking time, of which no part is in itself significant: for in double or compound words we do not employ the separate parts as if each were in itself significant. Thus in Theodorus, ‘god-given,’ the doron or ‘gift’ is not in itself significant.

A Verb is a composite significant sound, marking time, in which, as in the noun, no part is in itself significant. For ‘man’ or ‘white’ does not express the idea of ‘when’; but ‘he walks’ or ‘he has walked’ does connote time, present or past.

Inflection belongs both to the noun and verb, and expresses either the relation 'of,' 'to,' or the like; or that of number, whether one or many, as 'man' or 'men'; or the modes or tones in actual delivery, e.g., a question or a command. 'Did he go?' and 'go' are verbal inflections of this kind.

A Sentence or Phrase is a composite significant sound, some at least of whose parts are in themselves significant; for not every such group of words consists of verbs and nouns—'the definition of man,' for example — but it may dispense even with the verb. Still it will always have some significant part, as 'in walking,' or 'Cleon son of Cleon.' A sentence or phrase may form a unity in two ways — either as signifying one thing, or as consisting of several parts linked together. Thus the Iliad is one by the linking together of parts, the definition of man by the unity of the thing signified.

## XXI

Words are of two kinds, simple and double. By simple I mean those composed of nonsignificant elements, such as *ge*, 'earth.' By double or compound, those composed either of a significant and nonsignificant element (though within the whole word no element is significant), or of elements that are both significant. A word may likewise be triple, quadruple, or multiple in form, like so many Massilian expressions, e.g., 'Hermo-caico-xanthus [who prayed to Father Zeus].'

Every word is either current, or strange, or metaphorical, or ornamental, or newly-coined, or lengthened, or contracted, or altered.

By a current or proper word I mean one which is in general use among a people; by a strange word, one which is in use in another country. Plainly, therefore, the same word may be at once strange and current, but not in relation to the same people. The word *sigynon*, 'lance,' is to the Cyprians a current term but to us a strange one.

Metaphor is the application of an alien name by transference either from genus to species, or from species to genus, or from species to species, or by analogy, that is, proportion. Thus from genus to species, as: 'There lies my ship'; for lying at anchor is a species of lying. From species to genus, as: 'Verily ten thousand noble deeds hath Odysseus wrought'; for ten thousand is a species of large number, and is here used for a large number generally. From species to species, as: 'With blade of bronze drew away the life,' and 'Cleft the water with the vessel of unyielding bronze.' Here *arusai*, 'to draw away' is used for *tamein*, 'to cleave,' and *tamein*, again for *arusai* — each being a species of taking away. Analogy or proportion is when the second term is to the first as the fourth to the third. We may then use the fourth for the second, or the second for the fourth. Sometimes too we qualify the metaphor by adding the term to which the proper word is relative. Thus the cup is to Dionysus as the shield to Ares. The cup may, therefore, be called 'the shield of Dionysus,' and the shield 'the cup of Ares.' Or, again, as old age is to life, so is evening to day. Evening may therefore be called, 'the old age of the day,' and old age, 'the evening of life,' or, in the phrase of Empedocles, 'life's setting sun.' For some of the terms of the proportion there is at times no word in existence; still the metaphor may be used. For instance, to scatter seed is called sowing; but the action of the sun in scattering his rays is nameless. Still this process bears to the sun the same relation as sowing to the

seed. Hence the expression of the poet ‘sowing the god-created light.’ There is another way in which this kind of metaphor may be employed. We may apply an alien term, and then deny of that term one of its proper attributes; as if we were to call the shield, not ‘the cup of Ares,’ but ‘the wineless cup’.

A newly-coined word is one which has never been even in local use, but is adopted by the poet himself. Some such words there appear to be: as *ernyges*, ‘sprouters,’ for *kerata*, ‘horns’; and *areter*, ‘supplicator’, for *hiereus*, ‘priest.’

A word is lengthened when its own vowel is exchanged for a longer one, or when a syllable is inserted. A word is contracted when some part of it is removed. Instances of lengthening are: *poleos* for *poleos*, *Peleiadeo* for *Peleidou*; of contraction: *kri*, *do*, and *ops*, as in *mia ginetai amphoteron ops*, ‘the appearance of both is one.’

An altered word is one in which part of the ordinary form is left unchanged, and part is recast: as in *dexiteron kata mazon*, ‘on the right breast,’ *dexiteron* is for *dexion*.

Nouns in themselves are either masculine, feminine, or neuter. Masculine are such as end in N, R, S, or in some letter compounded with S — these being two, PS and X. Feminine, such as end in vowels that are always long, namely E and O, and — of vowels that admit of lengthening — those in A. Thus the number of letters in which nouns masculine and feminine end is the same; for PS and X are equivalent to endings in S. No noun ends in a mute or a vowel short by nature. Three only end in I — *meli*, ‘honey’; *kommi*, ‘gum’; *peperi*, ‘pepper’; five end in U. Neuter nouns end in these two latter vowels; also in N and S.

## XXII

The perfection of style is to be clear without being mean. The clearest style is that which uses only current or proper words; at the same time it is mean — witness the poetry of Cleophon and of Sthenelus. That diction, on the other hand, is lofty and raised above the commonplace which employs unusual words. By unusual, I mean strange (or rare) words, metaphorical, lengthened — anything, in short, that differs from the normal idiom. Yet a style wholly composed of such words is either a riddle or a jargon; a riddle, if it consists of metaphors; a jargon, if it consists of strange (or rare) words. For the essence of a riddle is to express true facts under impossible combinations. Now this cannot be done by any arrangement of ordinary words, but by the use of metaphor it can. Such is the riddle: ‘A man I saw who on another man had glued the bronze by aid of fire,’ and others of the same kind. A diction that is made up of strange (or rare) terms is a jargon. A certain infusion, therefore, of these elements is necessary to style; for the strange (or rare) word, the metaphorical, the ornamental, and the other kinds above mentioned, will raise it above the commonplace and mean, while the use of proper words will make it perspicuous. But nothing contributes more to produce a cleanness of diction that is remote from commonness than the lengthening, contraction, and alteration of words. For by deviating in exceptional cases from the normal idiom, the language will gain distinction; while, at the same time, the partial conformity with usage will give perspicuity. The critics, therefore, are in error who censure these licenses of speech, and hold the author up to ridicule. Thus Eucleides, the elder, declared that it would be an easy matter to be a poet if you might lengthen syllables at will. He caricatured the practice in the very form of his diction, as in the verse:

Epicharen eidon Marathonade badizonta,

I saw Epichares walking to Marathon,

or,

ouk an g'eramenos ton ekeinou elleboron.

Not if you desire his hellebore.

To employ such license at all obtrusively is, no doubt, grotesque; but in any



mode of poetic diction there must be moderation. Even metaphors, strange (or rare) words, or any similar forms of speech, would produce the like effect if used without propriety and with the express purpose of being ludicrous. How great a difference is made by the appropriate use of lengthening, may be seen in Epic poetry by the insertion of ordinary forms in the verse. So, again, if we take a strange (or rare) word, a metaphor, or any similar mode of expression, and replace it by the current or proper term, the truth of our observation will be manifest. For example, Aeschylus and Euripides each composed the same iambic line. But the alteration of a single word by Euripides, who employed the rarer term instead of the ordinary one, makes one verse appear beautiful and the other trivial. Aeschylus in his *Philoctetes* says:

phagedaina d'he mou sarkas esthiei podos.

The tumor which is eating the flesh of my foot.

Euripides substitutes *thoinatai*, 'feasts on,' for *esthiei*, 'feeds on.' Again, in the line,

nun de m'eon oligos te kai outidanos kai aeikes,

Yet a small man, worthless and unseemly,

the difference will be felt if we substitute the common words,

nun de m'eon mikros te kai asthenikos kai aeides.

Yet a little fellow, weak and ugly.

Or, if for the line,

diphron aeikelion katatheis oligen te trapezan,

Setting an unseemly couch and a meager table,

we read,

diphron mochtheron katatheis mikran te trapezan.

Setting a wretched couch and a puny table.

Or, for eiones booosin, 'the sea shores roar,' eiones krazousin, 'the sea shores screech.'

Again, Aripgrades ridiculed the tragedians for using phrases which no one would employ in ordinary speech: for example, domaton apo, 'from the house away,' instead of apo domaton, 'away from the house;' sethen, ego de nin, 'to thee, and I to him;' Achilleos peri, 'Achilles about,' instead of peri Achilleos, 'about Achilles;' and the like. It is precisely because such phrases are not part of the current idiom that they give distinction to the style. This, however, he failed to see.

It is a great matter to observe propriety in these several modes of expression, as also in compound words, strange (or rare) words, and so forth. But the greatest thing by far is to have a command of metaphor. This alone cannot be imparted by another; it is the mark of genius, for to make good metaphors implies an eye for resemblances.

Of the various kinds of words, the compound are best adapted to dithyrambs, rare words to heroic poetry, metaphors to iambic. In heroic poetry, indeed, all these varieties are serviceable. But in iambic verse, which reproduces, as far as may be, familiar speech, the most appropriate words are those which are found even in prose. These are the current or proper, the metaphorical, the ornamental.

Concerning Tragedy and imitation by means of action this may suffice.

## XXIII

As to that poetic imitation which is narrative in form and employs a single meter, the plot manifestly ought, as in a tragedy, to be constructed on dramatic principles. It should have for its subject a single action, whole and complete, with a beginning, a middle, and an end. It will thus resemble a living organism in all its unity, and produce the pleasure proper to it. It will differ in structure from historical compositions, which of necessity present not a single action, but a single period, and all that happened within that period to one person or to many, little connected together as the events may be. For as the sea-fight at Salamis and the battle with the Carthaginians in Sicily took place at the same time, but did not tend to any one result, so in the sequence of events, one thing sometimes follows another, and yet no single result is thereby produced. Such is the practice, we may say, of most poets. Here again, then, as has been already observed, the transcendent excellence of Homer is manifest. He never attempts to make the whole war of Troy the subject of his poem, though that war had a beginning and an end. It would have been too vast a theme, and not easily embraced in a single view. If, again, he had kept it within moderate limits, it must have been over-complicated by the variety of the incidents. As it is, he detaches a single portion, and admits as episodes many events from the general story of the war — such as the Catalogue of the ships and others — thus diversifying the poem. All other poets take a single hero, a single period, or an action single indeed, but with a multiplicity of parts. Thus did the author of the *Cypria* and of the *Little Iliad*. For this reason the *Iliad* and the *Odyssey* each furnish the subject of one tragedy, or, at most, of two; while the *Cypria* supplies materials for many, and the *Little Iliad* for eight — the *Award of the Arms*, the *Philoctetes*, the *Neoptolemus*, the *Eurypylus*, the *Mendicant Odysseus*, the *Laconian Women*, the *Fall of Ilium*, the *Departure of the Fleet*.

## XXIV

Again, Epic poetry must have as many kinds as Tragedy: it must be simple, or complex, or 'ethical,' or 'pathetic.' The parts also, with the exception of song and spectacle, are the same; for it requires Reversals of the Situation, Recognitions, and Scenes of Suffering. Moreover, the thoughts and the diction must be artistic. In all these respects Homer is our earliest and sufficient model. Indeed each of his poems has a twofold character. The Iliad is at once simple and 'pathetic,' and the Odyssey complex (for Recognition scenes run through it), and at the same time 'ethical.' Moreover, in diction and thought they are supreme.

Epic poetry differs from Tragedy in the scale on which it is constructed, and in its meter. As regards scale or length, we have already laid down an adequate limit: the beginning and the end must be capable of being brought within a single view. This condition will be satisfied by poems on a smaller scale than the old epics, and answering in length to the group of tragedies presented at a single sitting.

Epic poetry has, however, a great — a special — capacity for enlarging its dimensions, and we can see the reason. In Tragedy we cannot imitate several lines of actions carried on at one and the same time; we must confine ourselves to the action on the stage and the part taken by the players. But in Epic poetry, owing to the narrative form, many events simultaneously transacted can be presented; and these, if relevant to the subject, add mass and dignity to the poem. The Epic has here an advantage, and one that conduces to grandeur of effect, to diverting the mind of the hearer, and relieving the story with varying episodes. For sameness of incident soon produces satiety, and makes tragedies fail on the stage.

As for the meter, the heroic measure has proved its fitness by hexameter test of experience. If a narrative poem in any other meter or in many meters were now composed, it would be found incongruous. For of all measures the heroic is the stateliest and the most massive; and hence it most readily admits rare words and metaphors, which is another point in which the narrative form of imitation stands alone. On the other hand, the iambic and the trochaic tetrameter are stirring measures, the latter being akin to dancing, the former expressive of action. Still more absurd would it be to mix together different meters, as was done by Chaeremon. Hence no one has ever composed a poem on a great scale in any

other than heroic verse. Nature herself, as we have said, teaches the choice of the proper measure.

Homer, admirable in all respects, has the special merit of being the only poet who rightly appreciates the part he should take himself. The poet should speak as little as possible in his own person, for it is not this that makes him an imitator. Other poets appear themselves upon the scene throughout, and imitate but little and rarely. Homer, after a few prefatory words, at once brings in a man, or woman, or other personage; none of them wanting in characteristic qualities, but each with a character of his own.

The element of the wonderful is required in Tragedy. The irrational, on which the wonderful depends for its chief effects, has wider scope in Epic poetry, because there the person acting is not seen. Thus, the pursuit of Hector would be ludicrous if placed upon the stage — the Greeks standing still and not joining in the pursuit, and Achilles waving them back. But in the Epic poem the absurdity passes unnoticed. Now the wonderful is pleasing, as may be inferred from the fact that every one tells a story with some addition of his knowing that his hearers like it. It is Homer who has chiefly taught other poets the art of telling lies skilfully. The secret of it lies in a fallacy. For, assuming that if one thing is or becomes, a second is or becomes, men imagine that, if the second is, the first likewise is or becomes. But this is a false inference. Hence, where the first thing is untrue, it is quite unnecessary, provided the second be true, to add that the first is or has become. For the mind, knowing the second to be true, falsely infers the truth of the first. There is an example of this in the Bath Scene of the *Odyssey*.

Accordingly, the poet should prefer probable impossibilities to improbable possibilities. The tragic plot must not be composed of irrational parts. Everything irrational should, if possible, be excluded; or, at all events, it should lie outside the action of the play (as, in the *Oedipus*, the hero's ignorance as to the manner of Laius' death); not within the drama — as in the *Electra*, the messenger's account of the Pythian games; or, as in the *Mysians*, the man who has come from Tegea to Mysia and is still speechless. The plea that otherwise the plot would have been ruined, is ridiculous; such a plot should not in the first instance be constructed. But once the irrational has been introduced and an air of likelihood imparted to it, we must accept it in spite of the absurdity. Take even the irrational incidents in the *Odyssey*, where Odysseus is left upon the shore of Ithaca. How intolerable even these might have been would be apparent if an inferior poet were to treat the subject. As it is, the absurdity is veiled by the

poetic charm with which the poet invests it.

The diction should be elaborated in the pauses of the action, where there is no expression of character or thought. For, conversely, character and thought are merely obscured by a diction that is over-brilliant

## XXV

With respect to critical difficulties and their solutions, the number and nature of the sources from which they may be drawn may be thus exhibited.

The poet being an imitator, like a painter or any other artist, must of necessity imitate one of three objects — things as they were or are, things as they are said or thought to be, or things as they ought to be. The vehicle of expression is language — either current terms or, it may be, rare words or metaphors. There are also many modifications of language, which we concede to the poets. Add to this, that the standard of correctness is not the same in poetry and politics, any more than in poetry and any other art. Within the art of poetry itself there are two kinds of faults — those which touch its essence, and those which are accidental. If a poet has chosen to imitate something, [but has imitated it incorrectly] through want of capacity, the error is inherent in the poetry. But if the failure is due to a wrong choice — if he has represented a horse as throwing out both his off legs at once, or introduced technical inaccuracies in medicine, for example, or in any other art — the error is not essential to the poetry. These are the points of view from which we should consider and answer the objections raised by the critics.

First as to matters which concern the poet's own art. If he describes the impossible, he is guilty of an error; but the error may be justified, if the end of the art be thereby attained (the end being that already mentioned) — if, that is, the effect of this or any other part of the poem is thus rendered more striking. A case in point is the pursuit of Hector. if, however, the end might have been as well, or better, attained without violating the special rules of the poetic art, the error is not justified: for every kind of error should, if possible, be avoided.

Again, does the error touch the essentials of the poetic art, or some accident of it? For example, not to know that a hind has no horns is a less serious matter than to paint it inartistically.

Further, if it be objected that the description is not true to fact, the poet may perhaps reply, 'But the objects are as they ought to be'; just as Sophocles said that he drew men as they ought to be; Euripides, as they are. In this way the objection may be met. If, however, the representation be of neither kind, the poet may answer, 'This is how men say the thing is.' applies to tales about the gods.

It may well be that these stories are not higher than fact nor yet true to fact: they are, very possibly, what Xenophanes says of them. But anyhow, 'this is what is said.' Again, a description may be no better than the fact: 'Still, it was the fact'; as in the passage about the arms: 'Upright upon their butt-ends stood the spears.' This was the custom then, as it now is among the Illyrians.

Again, in examining whether what has been said or done by some one is poetically right or not, we must not look merely to the particular act or saying, and ask whether it is poetically good or bad. We must also consider by whom it is said or done, to whom, when, by what means, or for what end; whether, for instance, it be to secure a greater good, or avert a greater evil.

Other difficulties may be resolved by due regard to the usage of language. We may note a rare word, as in oureas men proton, 'the mules first [he killed],' where the poet perhaps employs oureas not in the sense of mules, but of sentinels. So, again, of Dolon: 'ill-favored indeed he was to look upon.' It is not meant that his body was ill-shaped but that his face was ugly; for the Cretans use the word eueides, 'well-flavored' to denote a fair face. Again, zoroterion de keraie, 'mix the drink livelier' does not mean 'mix it stronger' as for hard drinkers, but 'mix it quicker.'

Sometimes an expression is metaphorical, as 'Now all gods and men were sleeping through the night,' while at the same time the poet says: 'Often indeed as he turned his gaze to the Trojan plain, he marveled at the sound of flutes and pipes.' 'All' is here used metaphorically for 'many,' all being a species of many. So in the verse, 'alone she hath no part...', oie, 'alone' is metaphorical; for the best known may be called the only one.

Again, the solution may depend upon accent or breathing. Thus Hippias of Thasos solved the difficulties in the lines, didomen (didomen) de hoi, and to men hou (ou) kataputhetai ombro.

Or again, the question may be solved by punctuation, as in Empedocles: 'Of a sudden things became mortal that before had learnt to be immortal, and things unmixed before mixed.'

Or again, by ambiguity of meaning, as parocheken de pleo nux, where the word pleo is ambiguous.

Or by the usage of language. Thus any mixed drink is called oinos, 'wine'.



Hence Ganymede is said 'to pour the wine to Zeus,' though the gods do not drink wine. So too workers in iron are called chalkeas, or 'workers in bronze.' This, however, may also be taken as a metaphor.

Again, when a word seems to involve some inconsistency of meaning, we should consider how many senses it may bear in the particular passage. For example: 'there was stayed the spear of bronze' — we should ask in how many ways we may take 'being checked there.' The true mode of interpretation is the precise opposite of what Glaucon mentions. Critics, he says, jump at certain groundless conclusions; they pass adverse judgement and then proceed to reason on it; and, assuming that the poet has said whatever they happen to think, find fault if a thing is inconsistent with their own fancy.

The question about Icarius has been treated in this fashion. The critics imagine he was a Lacedaemonian. They think it strange, therefore, that Telemachus should not have met him when he went to Lacedaemon. But the Cephallenian story may perhaps be the true one. They allege that Odysseus took a wife from among themselves, and that her father was Icadius, not Icarius. It is merely a mistake, then, that gives plausibility to the objection.

In general, the impossible must be justified by reference to artistic requirements, or to the higher reality, or to received opinion. With respect to the requirements of art, a probable impossibility is to be preferred to a thing improbable and yet possible. Again, it may be impossible that there should be men such as Zeuxis painted. 'Yes,' we say, 'but the impossible is the higher thing; for the ideal type must surpass the realty.' To justify the irrational, we appeal to what is commonly said to be. In addition to which, we urge that the irrational sometimes does not violate reason; just as 'it is probable that a thing may happen contrary to probability.'

Things that sound contradictory should be examined by the same rules as in dialectical refutation — whether the same thing is meant, in the same relation, and in the same sense. We should therefore solve the question by reference to what the poet says himself, or to what is tacitly assumed by a person of intelligence.

The element of the irrational, and, similarly, depravity of character, are justly censured when there is no inner necessity for introducing them. Such is the irrational element in the introduction of Aegeus by Euripides and the badness of

Menelaus in the Orestes.

Thus, there are five sources from which critical objections are drawn. Things are censured either as impossible, or irrational, or morally hurtful, or contradictory, or contrary to artistic correctness. The answers should be sought under the twelve heads above mentioned.

## XXVI

The question may be raised whether the Epic or Tragic mode of imitation is the higher. If the more refined art is the higher, and the more refined in every case is that which appeals to the better sort of audience, the art which imitates anything and everything is manifestly most unrefined. The audience is supposed to be too dull to comprehend unless something of their own is thrown by the performers, who therefore indulge in restless movements. Bad flute-players twist and twirl, if they have to represent 'the quoit-throw,' or hustle the coryphaeus when they perform the Scylla. Tragedy, it is said, has this same defect. We may compare the opinion that the older actors entertained of their successors. Mynniscus used to call Callippides 'ape' on account of the extravagance of his action, and the same view was held of Pindarus. Tragic art, then, as a whole, stands to Epic in the same relation as the younger to the elder actors. So we are told that Epic poetry is addressed to a cultivated audience, who do not need gesture; Tragedy, to an inferior public. Being then unrefined, it is evidently the lower of the two.

Now, in the first place, this censure attaches not to the poetic but to the histrionic art; for gesticulation may be equally overdone in epic recitation, as by Sosistratus, or in lyrical competition, as by Mnasiheus the Opuntian. Next, all action is not to be condemned — any more than all dancing — but only that of bad performers. Such was the fault found in Callippides, as also in others of our own day, who are censured for representing degraded women. Again, Tragedy like Epic poetry produces its effect even without action; it reveals its power by mere reading. If, then, in all other respects it is superior, this fault, we say, is not inherent in it.

And superior it is, because it has all the epic elements — it may even use the epic meter — with the music and spectacular effects as important accessories; and these produce the most vivid of pleasures. Further, it has vividness of impression in reading as well as in representation. Moreover, the art attains its end within narrower limits for the concentrated effect is more pleasurable than one which is spread over a long time and so diluted. What, for example, would be the effect of the Oedipus of Sophocles, if it were cast into a form as long as the Iliad? Once more, the Epic imitation has less unity; as is shown by this, that any Epic poem will furnish subjects for several tragedies. Thus if the story adopted by the poet has a strict unity, it must either be concisely told and appear

truncated; or, if it conforms to the Epic canon of length, it must seem weak and watery. [Such length implies some loss of unity,] if, I mean, the poem is constructed out of several actions, like the Iliad and the Odyssey, which have many such parts, each with a certain magnitude of its own. Yet these poems are as perfect as possible in structure; each is, in the highest degree attainable, an imitation of a single action.

If, then, tragedy is superior to epic poetry in all these respects, and, moreover, fulfills its specific function better as an art — for each art ought to produce, not any chance pleasure, but the pleasure proper to it, as already stated — it plainly follows that tragedy is the higher art, as attaining its end more perfectly.

Thus much may suffice concerning Tragic and Epic poetry in general; their several kinds and parts, with the number of each and their differences; the causes that make a poem good or bad; the objections of the critics and the answers to these objections....

# Constitution of the Athenians



*Translated by Frederic G. Kenyon*

The Ἀθηναίων πολιτεία survives from two leaves of a papyrus codex discovered at Oxyrhynchus, Egypt, in 1879. Due to the wealth of historical information provided in the text, it was a monumental find. The *Constitution of the Athenians* was not included in Bekker's famous edition as it was first edited in 1891 from the rolls that were acquired by the British Museum. Therefore it is the only Aristotle work to be without a Bekker reference number.

Ancient sources claim that Aristotle devised 170 Constitutions for various different city states and it is widely assumed they provided him much needed research for the *Politics*, with many of them being written or drafted by his students. Athens, however, was a particularly important state, as it was where Aristotle was living at the time. Some scholars believe that this text was intended as a model for the rest and so was written by Aristotle himself, though some prominent scholars doubt this.

Interestingly, this was the only extant work by Aristotle that was actually intended for publication. Written between 330 and 322 BC, it describes the political system of ancient Athens. The work consists of two parts, with Chapter I to Chapter XLI dealing with the different iterations of the constitution, from the trial of the Alcmaeonidae till 403 BC. The second part describes the city's institutions, including the terms of access to citizenship, magistrates and the courts.



*The archaeological site at Oxyrhynchus, where many valuable and lost texts were re-discovered*

# CONTENTS

[1](#)

[2](#)

[3](#)

[4](#)

[5](#)

[6](#)

[7](#)

[8](#)

[9](#)

[10](#)

[11](#)

[12](#)

[13](#)

[14](#)

[15](#)

[16](#)

[17](#)

[18](#)

[19](#)

[20](#)

[21](#)

[22](#)

[23](#)

[24](#)

[25](#)

[26](#)

[27](#)

[28](#)

[29](#)

[30](#)

[31](#)

[32](#)

[33](#)

[34](#)

[35](#)

[36](#)

[37](#)

[38](#)

[39](#)

[40](#)



[41](#)

[42](#)

[43](#)

[44](#)

[45](#)

[46](#)

[47](#)

[48](#)

[49](#)

[50](#)

[51](#)

[52](#)

[53](#)

[54](#)

[55](#)

[56](#)

[57](#)

[58](#)

[59](#)

[60](#)

[61](#)

[62](#)

[63](#)

[64](#)

[65](#)

[66](#)

[67](#)

[68](#)

[69](#)

## **The Athenian Constitution**

# 1

...[They were tried] by a court empanelled from among the noble families, and sworn upon the sacrifices. The part of accuser was taken by Myron. They were found guilty of the sacrilege, and their bodies were cast out of their graves and their race banished for evermore. In view of this expiation, Epimenides the Cretan performed a purification of the city.

## 2

After this event there was contention for a long time between the upper classes and the populace. Not only was the constitution at this time oligarchical in every respect, but the poorer classes, men, women, and children, were the serfs of the rich. They were known as Pelatae and also as Hectemori, because they cultivated the lands of the rich at the rent thus indicated. The whole country was in the hands of a few persons, and if the tenants failed to pay their rent they were liable to be haled into slavery, and their children with them. All loans secured upon the debtor's person, a custom which prevailed until the time of Solon, who was the first to appear as the champion of the people. But the hardest and bitterest part of the constitution in the eyes of the masses was their state of serfdom. Not but what they were also discontented with every other feature of their lot; for, to speak generally, they had no part nor share in anything.

### 3

Now the ancient constitution, as it existed before the time of Draco, was organized as follows. The magistrates were elected according to qualifications of birth and wealth. At first they governed for life, but subsequently for terms of ten years. The first magistrates, both in date and in importance, were the King, the Polemarch, and the Archon. The earliest of these offices was that of the King, which existed from ancestral antiquity. To this was added, secondly, the office of Polemarch, on account of some of the kings proving feeble in war; for it was on this account that Ion was invited to accept the post on an occasion of pressing need. The last of the three offices was that of the Archon, which most authorities state to have come into existence in the time of Medon. Others assign it to the time of Acastus, and adduce as proof the fact that the nine Archons swear to execute their oaths 'as in the days of Acastus,' which seems to suggest that it was in his time that the descendants of Codrus retired from the kingship in return for the prerogatives conferred upon the Archon. Whichever way it may be, the difference in date is small; but that it was the last of these magistracies to be created is shown by the fact that the Archon has no part in the ancestral sacrifices, as the King and the Polemarch have, but exclusively in those of later origin. So it is only at a comparatively late date that the office of Archon has become of great importance, through the dignity conferred by these later additions. The Thesmothetae were many years afterwards, when these offices had already become annual, with the object that they might publicly record all legal decisions, and act as guardians of them with a view to determining the issues between litigants. Accordingly their office, alone of those which have been mentioned, was never of more than annual duration.

Such, then, is the relative chronological precedence of these offices. At that time the nine Archons did not all live together. The King occupied the building now known as the Boculium, near the Prytaneum, as may be seen from the fact that even to the present day the marriage of the King's wife to Dionysus takes place there. The Archon lived in the Prytaneum, the Polemarch in the Epilyceum. The latter building was formerly called the Polemarcheum, but after Epilycus, during his term of office as Polemarch, had rebuilt it and fitted it up, it was called the Epilyceum. The Thesmothetae occupied the Thesmotheteum. In the time of Solon, however, they all came together into the Thesmotheteum. They had power to decide cases finally on their own authority, not, as now, merely to hold

a preliminary hearing. Such then was the arrangement of the magistracies. The Council of Areopagus had as its constitutionally assigned duty the protection of the laws; but in point of fact it administered the greater and most important part of the government of the state, and inflicted personal punishments and fines summarily upon all who misbehaved themselves. This was the natural consequence of the facts that the Archons were elected under qualifications of birth and wealth, and that the Areopagus was composed of those who had served as Archons; for which latter reason the membership of the Areopagus is the only office which has continued to be a life-magistracy to the present day.

Such was, in outline, the first constitution, but not very long after the events above recorded, in the archonship of Aristaichmus, Draco enacted his ordinances. Now his constitution had the following form. The franchise was given to all who could furnish themselves with a military equipment. The nine Archons and the Treasurers were elected by this body from persons possessing an unencumbered property of not less than ten minas, the less important officials from those who could furnish themselves with a military equipment, and the generals [Strategi] and commanders of the cavalry [Hipparchi] from those who could show an unencumbered property of not less than a hundred minas, and had children born in lawful wedlock over ten years of age. These officers were required to hold to bail the Prytanes, the Strategi, and the Hipparchi of the preceding year until their accounts had been audited, taking four securities of the same class as that to which the Strategi and the Hipparchi belonged. There was also to be a Council, consisting of four hundred and one members, elected by lot from among those who possessed the franchise. Both for this and for the other magistracies the lot was cast among those who were over thirty years of age; and no one might hold office twice until every one else had had his turn, after which they were to cast the lot afresh. If any member of the Council failed to attend when there was a sitting of the Council or of the Assembly, he paid a fine, to the amount of three drachmas if he was a Pentacosiomedimnus, two if he was a Knight, and One if he was a Zeugites. The Council of Areopagus was guardian of the laws, and kept watch over the magistrates to see that they executed their offices in accordance with the laws. Any person who felt himself wronged might lay an information before the Council of Areopagus, on declaring what law was broken by the wrong done to him. But, as has been said before, loans were secured upon the persons of the debtors, and the land was in the hands of a few.

## 5

Since such, then, was the organization of the constitution, and the many were in slavery to the few, the people rose against the upper class. The strife was keen, and for a long time the two parties were ranged in hostile camps against one another, till at last, by common consent, they appointed Solon to be mediator and Archon, and committed the whole constitution to his hands. The immediate occasion of his appointment was his poem, which begins with the words:

I behold, and within my heart deep sadness has claimed its place,

As I mark the oldest home of the ancient Ionian race

Slain by the sword.

In this poem he fights and disputes on behalf of each party in turn against the other, and finally he advises them to come to terms and put an end to the quarrel existing between them. By birth and reputation Solon was one of the foremost men of the day, but in wealth and position he was of the middle class, as is generally agreed, and is, indeed, established by his own evidence in these poems, where he exhorts the wealthy not to be grasping.

But ye who have store of good, who are sated and overflow,

Restrain your swelling soul, and still it and keep it low:

Let the heart that is great within you be trained a lowlier way;

Ye shall not have all at your will, and we will not for ever obey.

Indeed, he constantly fastens the blame of the conflict on the rich; and accordingly at the beginning of the poem he says that he fears 'the love of wealth and an overweening mind', evidently meaning that it was through these that the quarrel arose.



## 6

As soon as he was at the head of affairs, Solon liberated the people once and for all, by prohibiting all loans on the security of the debtor's person: and in addition he made laws by which he cancelled all debts, public and private. This measure is commonly called the *Seisachtheia* [= removal of burdens], since thereby the people had their loads removed from them. In connexion with it some persons try to traduce the character of Solon. It so happened that, when he was about to enact the *Seisachtheia*, he communicated his intention to some members of the upper class, whereupon, as the partisans of the popular party say, his friends stole a march on him; while those who wish to attack his character maintain that he too had a share in the fraud himself. For these persons borrowed money and bought up a large amount of land, and so when, a short time afterwards, all debts were cancelled, they became wealthy; and this, they say, was the origin of the families which were afterwards looked on as having been wealthy from primeval times. However, the story of the popular party is by far the most probable. A man who was so moderate and public-spirited in all his other actions, that when it was within his power to put his fellow-citizens beneath his feet and establish himself as tyrant, he preferred instead to incur the hostility of both parties by placing his honour and the general welfare above his personal aggrandisement, is not likely to have consented to defile his hands by such a petty and palpable fraud. That he had this absolute power is, in the first place, indicated by the desperate condition the country; moreover, he mentions it himself repeatedly in his poems, and it is universally admitted. We are therefore bound to consider this accusation to be false.

Next Solon drew up a constitution and enacted new laws; and the ordinances of Draco ceased to be used, with the exception of those relating to murder. The laws were inscribed on the wooden stands, and set up in the King's Porch, and all swore to obey them; and the nine Archons made oath upon the stone, declaring that they would dedicate a golden statue if they should transgress any of them. This is the origin of the oath to that effect which they take to the present day. Solon ratified his laws for a hundred years; and the following was the fashion in which he organized the constitution. He divided the population according to property into four classes, just as it had been divided before, namely, Pentacosiomedimni, Knights, Zeugitae, and Thetes. The various magistracies, namely, the nine Archons, the Treasurers, the Commissioners for Public Contracts (Poletae), the Eleven, and Clerks (Colacretae), he assigned to the Pentacosiomedimni, the Knights, and the Zeugitae, giving offices to each class in proportion to the value of their rateable property. To who ranked among the Thetes he gave nothing but a place in the Assembly and in the juries. A man had to rank as a Pentacosiomedimnus if he made, from his own land, five hundred measures, whether liquid or solid. Those ranked as Knights who made three hundred measures, or, as some say, those who were able to maintain a horse. In support of the latter definition they adduce the name of the class, which may be supposed to be derived from this fact, and also some votive offerings of early times; for in the Acropolis there is a votive offering, a statue of Diphilus, bearing this inscription:

The son of Diphilus, Athenion hight,

Raised from the Thetes and become a knight,

Did to the gods this sculptured charger bring,

For his promotion a thank-offering.

And a horse stands in evidence beside the man, implying that this was what was meant by belonging to the rank of Knight. At the same time it seems reasonable to suppose that this class, like the Pentacosiomedimni, was defined by the possession of an income of a certain number of measures. Those ranked as

Zeugitae who made two hundred measures, liquid or solid; and the rest ranked as Thetes, and were not eligible for any office. Hence it is that even at the present day, when a candidate for any office is asked to what class he belongs, no one would think of saying that he belonged to the Thetes.

## 8

The elections to the various offices Solon enacted should be by lot, out of candidates selected by each of the tribes. Each tribe selected ten candidates for the nine archonships, and among these the lot was cast. Hence it is still the custom for each tribe to choose ten candidates by lot, and then the lot is again cast among these. A proof that Solon regulated the elections to office according to the property classes may be found in the law still in force with regard to the Treasurers, which enacts that they shall be chosen from the Pentacosiomedimni. Such was Solon's legislation with respect to the nine Archons; whereas in early times the Council of Areopagus summoned suitable persons according to its own judgement and appointed them for the year to the several offices. There were four tribes, as before, and four tribe-kings. Each tribe was divided into three Trittyes [=Thirds], with twelve Naucraries in each; and the Naucraries had officers of their own, called Naucrari, whose duty it was to superintend the current receipts and expenditure. Hence, among the laws of Solon now obsolete, it is repeatedly written that the Naucrari are to receive and to spend out of the Naucratic fund. Solon also appointed a Council of four hundred, a hundred from each tribe; but he assigned to the Council of the Areopagus the duty of superintending the laws, acting as before as the guardian of the constitution in general. It kept watch over the affairs of the state in most of the more important matters, and corrected offenders, with full powers to inflict either fines or personal punishment. The money received in fines it brought up into the Acropolis, without assigning the reason for the mulct. It also tried those who conspired for the overthrow of the state, Solon having enacted a process of impeachment to deal with such offenders. Further, since he saw the state often engaged in internal disputes, while many of the citizens from sheer indifference accepted whatever might turn up, he made a law with express reference to such persons, enacting that any one who, in a time civil factions, did not take up arms with either party, should lose his rights as a citizen and cease to have any part in the state.

## 9

Such, then, was his legislation concerning the magistracies. There are three points in the constitution of Solon which appear to be its most democratic features: first and most important, the prohibition of loans on the security of the debtor's person; secondly, the right of every person who so willed to claim redress on behalf of any one to whom wrong was being done; thirdly, the institution of the appeal to the jurycourts; and it is to this last, they say, that the masses have owed their strength most of all, since, when the democracy is master of the voting-power, it is master of the constitution. Moreover, since the laws were not drawn up in simple and explicit terms (but like the one concerning inheritances and wards of state), disputes inevitably occurred, and the courts had to decide in every matter, whether public or private. Some persons in fact believe that Solon deliberately made the laws indefinite, in order that the final decision might be in the hands of the people. This, however, is not probable, and the reason no doubt was that it is impossible to attain ideal perfection when framing a law in general terms; for we must judge of his intentions, not from the actual results in the present day, but from the general tenor of the rest of his legislation.

## 10

These seem to be the democratic features of his laws; but in addition, before the period of his legislation, he carried through his abolition of debts, and after it his increase in the standards of weights and measures, and of the currency. During his administration the measures were made larger than those of Pheidon, and the mina, which previously had a standard of seventy drachmas, was raised to the full hundred. The standard coin in earlier times was the two-drachma piece. He also made weights corresponding with the coinage, sixty-three minas going to the talent; and the odd three minas were distributed among the staters and the other values.

# 11

When he had completed his organization of the constitution in the manner that has been described, he found himself beset by people coming to him and harassing him concerning his laws, criticizing here and questioning there, till, as he wished neither to alter what he had decided on nor yet to be an object of ill will to every one by remaining in Athens, he set off on a journey to Egypt, with the combined objects of trade and travel, giving out that he should not return for ten years. He considered that there was no call for him to expound the laws personally, but that every one should obey them just as they were written. Moreover, his position at this time was unpleasant. Many members of the upper class had been estranged from him on account of his abolition of debts, and both parties were alienated through their disappointment at the condition of things which he had created. The mass of the people had expected him to make a complete redistribution of all property, and the upper class hoped he would restore everything to its former position, or, at any rate, make but a small change. Solon, however, had resisted both classes. He might have made himself a despot by attaching himself to whichever party he chose, but he preferred, though at the cost of incurring the enmity of both, to be the saviour of his country and the ideal lawgiver.

## 12

The truth of this view of Solon's policy is established alike by common consent, and by the mention he has himself made of the matter in his poems. Thus:

I gave to the mass of the people such rank as befitted their need,

I took not away their honour, and I granted naught to their greed;

While those who were rich in power, who in wealth were glorious and great,

I bethought me that naught should befall them unworthy their splendour and state;

So I stood with my shield outstretched, and both were sale in its sight,

And I would not that either should triumph, when the triumph was not with right.

Again he declares how the mass of the people ought to be treated:

But thus will the people best the voice of their leaders obey,

When neither too slack is the rein, nor violence holdeth the sway;

For indulgence breedeth a child, the presumption that spurns control,

When riches too great are poured upon men of unbalanced soul.

And again elsewhere he speaks about the persons who wished to redistribute the land:

So they came in search of plunder, and their cravings knew no hound,

Every one among them deeming endless wealth would here be found.

And that I with glozing smoothness hid a cruel mind within.

Fondly then and vainly dreamt they; now they raise an angry din,



And they glare askance in anger, and the light within their eyes

Burns with hostile flames upon me. Yet therein no justice lies.

All I promised, fully wrought I with the gods at hand to cheer,

Naught beyond in folly ventured. Never to my soul was dear

With a tyrant's force to govern, nor to see the good and base

Side by side in equal portion share the rich home of our race.

Once more he speaks of the abolition of debts and of those who before were in servitude, but were released owing to the Seisachtheia:

Of all the aims for which I summoned forth

The people, was there one I compassed not?

Thou, when slow time brings justice in its train,

O mighty mother of the Olympian gods,

Dark Earth, thou best canst witness, from whose breast

I swept the pillars broadcast planted there,

And made thee free, who hadst been slave of yore.

And many a man whom fraud or law had sold

For from his god-built land, an outcast slave,

I brought again to Athens; yea, and some,

Exiles from home through debt's oppressive load,

Speaking no more the dear ATHENIAN tongue,

But wandering far and wide, I brought again;  
And those that here in vilest slavery  
Crouched 'neath a master's frown, I set them free.  
Thus might and right were yoked in harmony,  
Since by the force of law I won my ends  
And kept my promise. Equal laws I gave  
To evil and to good, with even hand  
Drawing straight justice for the lot of each.  
But had another held the goad as  
One in whose heart was guile and greediness,  
He had not kept the people back from strife.  
For had I granted, now what pleased the one,  
Then what their foes devised in counterpoise,  
Of many a man this state had been bereft.  
Therefore I showed my might on every side,  
Turning at bay like wolf among the hounds.  
And again he reviles both parties for their grumblings in the times that followed:  
Nay, if one must lay blame where blame is due,  
Wer't not for me, the people ne'er had set  
Their eyes upon these blessings e'en in dreams:-

While greater men, the men of wealthier life,  
Should praise me and should court me as their friend.  
For had any other man, he says, received this exalted post,  
He had not kept the people back, nor ceased  
Til he had robbed the richness of the milk.  
But I stood forth a landmark in the midst,  
And barred the foes from battle.

Such then, were Solon's reasons for his departure from the country. After his retirement the city was still torn by divisions. For four years, indeed, they lived in peace; but in the fifth year after Solon's government they were unable to elect an Archon on account of their dissensions, and again four years later they elected no Archon for the same reason. Subsequently, after a similar period had elapsed, Damasias was elected Archon; and he governed for two years and two months, until he was forcibly expelled from his office. After this, it was agreed, as a compromise, to elect ten Archons, five from the Eupatridae, three from the Agroeci, and two from the Demiurgi, and they ruled for the year following Damasias. It is clear from this that the Archon was at the time the magistrate who possessed the greatest power, since it is always in connexion with this office that conflicts are seen to arise. But altogether they were in a continual state of internal disorder. Some found the cause and justification of their discontent in the abolition of debts, because thereby they had been reduced to poverty; others were dissatisfied with the political constitution, because it had undergone a revolutionary change; while with others the motive was found in personal rivalries among themselves. The parties at this time were three in number. First there was the party of the Shore, led by Megacles the son of Alcmeon, which was considered to aim at a moderate form of government; then there were the men of the Plain, who desired an oligarchy and were led by Lycurgus; and thirdly there were the men of the Highlands, at the head of whom was Pisistratus, who was looked on as an extreme democrat. This latter party was reinforced by those who had been deprived of the debts due to them, from motives of poverty, and by those who were not of pure descent, from motives of personal apprehension. A proof of this is seen in the fact that after the tyranny was overthrown a revision was made of the citizen-roll, on the ground that many persons were partaking in the franchise without having a right to it. The names given to the respective parties were derived from the districts in which they held their lands.

Pisistratus had the reputation of being an extreme democrat, and he also had distinguished himself greatly in the war with Megara. Taking advantage of this, he wounded himself, and by representing that his injuries had been inflicted on him by his political rivals, he persuaded the people, through a motion proposed by Aristion, to grant him a bodyguard. After he had got these 'club-bearers', as they were called, he made an attack with them on the people and seized the Acropolis. This happened in the archonship of Comeas, thirty-one years after the legislation of Solon. It is related that, when Pisistratus asked for his bodyguard, Solon opposed the request, and declared that in so doing he proved himself wiser than half the people and braver than the rest, wiser than those who did not see that Pisistratus designed to make himself tyrant, and braver than those who saw it and kept silence. But when all his words availed nothing he carried forth his armour and set it up in front of his house, saying that he had helped his country so far as lay in his power (he was already a very old man), and that he called on all others to do the same. Solon's exhortations, however, proved fruitless, and Pisistratus assumed the sovereignty. His administration was more like a constitutional government than the rule of a tyrant; but before his power was firmly established, the adherents of Megacles and Lycurgus made a coalition and drove him out. This took place in the archonship of Hegesias, five years after the first establishment of his rule. Eleven years later Megacles, being in difficulties in a party struggle, again opened negotiations with Pisistratus, proposing that the latter should marry his daughter; and on these terms he brought him back to Athens, by a very primitive and simple-minded device. He first spread abroad a rumour that Athena was bringing back Pisistratus, and then, having found a woman of great stature and beauty, named Phye (according to Herodotus, of the deme of Paeania, but as others say a Thracian flower-seller of the deme of Collytus), he dressed her in a garb resembling that of the goddess and brought her into the city with Pisistratus. The latter drove in on a chariot with the woman beside him, and the inhabitants of the city, struck with awe, received him with adoration.

In this manner did his first return take place. He did not, however, hold his power long, for about six years after his return he was again expelled. He refused to treat the daughter of Megacles as his wife, and being afraid, in consequence, of a combination of the two opposing parties, he retired from the country. First he led a colony to a place called Rhaicelus, in the region of the Thermaic gulf; and thence he passed to the country in the neighbourhood of Mt. Pangaeus. Here he acquired wealth and hired mercenaries; and not till ten years had elapsed did he return to Eretria and make an attempt to recover the government by force. In this he had the assistance of many allies, notably the Thebans and Lygdamis of Naxos, and also the Knights who held the supreme power in the constitution of Eretria. After his victory in the battle at Pallene he captured Athens, and when he had disarmed the people he at last had his tyranny securely established, and was able to take Naxos and set up Lygdamis as ruler there. He effected the disarmament of the people in the following manner. He ordered a parade in full armour in the Theseum, and began to make a speech to the people. He spoke for a short time, until the people called out that they could not hear him, whereupon he bade them come up to the entrance of the Acropolis, in order that his voice might be better heard. Then, while he continued to speak to them at great length, men whom he had appointed for the purpose collected the arms and locked them up in the chambers of the Theseum hard by, and came and made a signal to him that it was done. Pisistratus accordingly, when he had finished the rest of what he had to say, told the people also what had happened to their arms; adding that they were not to be surprised or alarmed, but go home and attend to their private affairs, while he would himself for the future manage all the business of the state.

Such was the origin and such the vicissitudes of the tyranny of Pisistratus. His administration was temperate, as has been said before, and more like constitutional government than a tyranny. Not only was he in every respect humane and mild and ready to forgive those who offended, but, in addition, he advanced money to the poorer people to help them in their labours, so that they might make their living by agriculture. In this he had two objects, first that they might not spend their time in the city but might be scattered over all the face of the country, and secondly that, being moderately well off and occupied with their own business, they might have neither the wish nor the time to attend to public affairs. At the same time his revenues were increased by the thorough cultivation of the country, since he imposed a tax of one tenth on all the produce. For the same reasons he instituted the local justices,' and often made expeditions in person into the country to inspect it and to settle disputes between individuals, that they might not come into the city and neglect their farms. It was in one of these progresses that, as the story goes, Pisistratus had his adventure with the man of Hymettus, who was cultivating the spot afterwards known as 'Tax-free Farm'. He saw a man digging and working at a very stony piece of ground, and being surprised he sent his attendant to ask what he got out of this plot of land. 'Aches and pains', said the man; 'and that's what Pisistratus ought to have his tenth of'. The man spoke without knowing who his questioner was; but Pisistratus was so leashed with his frank speech and his industry that he granted him exemption from all taxes. And so in matters in general he burdened the people as little as possible with his government, but always cultivated peace and kept them in all quietness. Hence the tyranny of Pisistratus was often spoken of proverbially as 'the age of gold'; for when his sons succeeded him the government became much harsher. But most important of all in this respect was his popular and kindly disposition. In all things he was accustomed to observe the laws, without giving himself any exceptional privileges. Once he was summoned on a charge of homicide before the Areopagus, and he appeared in person to make his defence; but the prosecutor was afraid to present himself and abandoned the case. For these reasons he held power long, and whenever he was expelled he regained his position easily. The majority alike of the upper class and of the people were in his favour; the former he won by his social intercourse with them, the latter by the assistance which he gave to their private purses, and his nature fitted him to win the hearts of both. Moreover, the laws in reference to

tyrants at that time in force at Athens were very mild, especially the one which applies more particularly to the establishment of a tyranny. The law ran as follows: 'These are the ancestral statutes of the ATHENIANS; if any persons shall make an attempt to establish a tyranny, or if any person shall join in setting up a tyranny, he shall lose his civic rights, both himself and his whole house.'



Thus did Pisistratus grow old in the possession of power, and he died a natural death in the archonship of Philoneos, three and thirty years from the time at which he first established himself as tyrant, during nineteen of which he was in possession of power; the rest he spent in exile. It is evident from this that the story is mere gossip which states that Pisistratus was the youthful favourite of Solon and commanded in the war against Megara for the recovery of Salamis. It will not harmonize with their respective ages, as any one may see who will reckon up the years of the life of each of them, and the dates at which they died. After the death of Pisistratus his sons took up the government, and conducted it on the same system. He had two sons by his first and legitimate wife, Hippias and Hipparchus, and two by his Argive consort, Iophon and Hegesistratus, who was surnamed Thessalus. For Pisistratus took a wife from Argos, Timonassa, the daughter of a man of Argos, named Gorgilus; she had previously been the wife of Archinus of Ambracia, one of the descendants of Cypselus. This was the origin of his friendship with the Argives, on account of which a thousand of them were brought over by Hegesistratus and fought on his side in the battle at Pallene. Some authorities say that this marriage took place after his first expulsion from Athens, others while he was in possession of the government.

Hippias and Hipparchus assumed the control of affairs on grounds alike of standing and of age; but Hippias, as being also naturally of a statesmanlike and shrewd disposition, was really the head of the government. Hipparchus was youthful in disposition, amorous, and fond of literature (it was he who invited to Athens Anacreon, Simonides, and the other poets), while Thessalus was much junior in age, and was violent and headstrong in his behaviour. It was from his character that all the evils arose which befell the house. He became enamoured of Harmodius, and, since he failed to win his affection, he lost all restraint upon his passion, and in addition to other exhibitions of rage he finally prevented the sister of Harmodius from taking the part of a basket-bearer in the Panathenaic procession, alleging as his reason that Harmodius was a person of loose life. Thereupon, in a frenzy of wrath, Harmodius and Aristogeiton did their celebrated deed, in conjunction with a number of confederates. But while they were lying in wait for Hippias in the Acropolis at the time of the Panathenaea (Hippias, at this moment, was awaiting the arrival of the procession, while Hipparchus was organizing its dispatch) they saw one of the persons privy to the plot talking familiarly with him. Thinking that he was betraying them, and desiring to do something before they were arrested, they rushed down and made their attempt without waiting for the rest of their confederates. They succeeded in killing Hipparchus near the Leocoreum while he was engaged in arranging the procession, but ruined the design as a whole; of the two leaders, Harmodius was killed on the spot by the guards, while Aristogeiton was arrested, and perished later after suffering long tortures. While under the torture he accused many persons who belonged by birth to the most distinguished families and were also personal friends of the tyrants. At first the government could find no clue to the conspiracy; for the current story, that Hippias made all who were taking part in the procession leave their arms, and then detected those who were carrying secret daggers, cannot be true, since at that time they did not bear arms in the processions, this being a custom instituted at a later period by the democracy. According to the story of the popular party, Aristogeiton accused the friends of the tyrants with the deliberate intention that the latter might commit an impious act, and at the same time weaken themselves, by putting to death innocent men who were their own friends; others say that he told no falsehood, but was betraying the actual accomplices. At last, when for all his efforts he could not obtain release by death, he promised to give further information against a

number of other persons; and, having induced Hippias to give him his hand to confirm his word, as soon as he had hold of it he reviled him for giving his hand to the murderer of his brother, till Hippias, in a frenzy of rage, lost control of himself and snatched out his dagger and dispatched him.

## 19

After this event the tyranny became much harsher. In consequence of his vengeance for his brother, and of the execution and banishment of a large number of persons, Hippias became a distrusted and an embittered man. About three years after the death of Hipparchus, finding his position in the city insecure, he set about fortifying Munichia, with the intention of establishing himself there. While he was still engaged on this work, however, he was expelled by Cleomenes, king of Lacedaemon, in consequence of the Spartans being continually incited by oracles to overthrow the tyranny. These oracles were obtained in the following way. The Athenian exiles, headed by the Alcmeonidae, could not by their own power effect their return, but failed continually in their attempts. Among their other failures, they fortified a post in Attica, Lipsydrium, above Mt. Parnes, and were there joined by some partisans from the city; but they were besieged by the tyrants and reduced to surrender. After this disaster the following became a popular drinking song:

Ah! Lipsydrium, faithless friend!

Lo, what heroes to death didst send,

Nobly born and great in deed!

Well did they prove themselves at need

Of noble sires a noble seed.

Having failed, then, in very other method, they took the contract for rebuilding the temple at Delphi, thereby obtaining ample funds, which they employed to secure the help of the Lacedaemonians. All this time the Pythia kept continually enjoining on the Lacedaemonians who came to consult the oracle, that they must free Athens; till finally she succeeded in impelling the Spartans to that step, although the house of Pisistratus was connected with them by ties of hospitality. The resolution of the Lacedaemonians was, however, at least equally due to the friendship which had been formed between the house of Pisistratus and Argos. Accordingly they first sent Anchimolus by sea at the head of an army; but he was defeated and killed, through the arrival of Cineas of Thessaly to support the

sons of Pisistratus with a force of a thousand horsemen. Then, being roused to anger by this disaster, they sent their king, Cleomenes, by land at the head of a larger force; and he, after defeating the Thessalian cavalry when they attempted to intercept his march into Attica, shut up Hippias within what was known as the Pelargic wall and blockaded him there with the assistance of the Athenians. While he was sitting down before the place, it so happened that the sons of the Pisistratidae were captured in an attempt to slip out; upon which the tyrants capitulated on condition of the safety of their children, and surrendered the Acropolis to the Athenians, five days being first allowed them to remove their effects. This took place in the archonship of Harpactides, after they had held the tyranny for about seventeen years since their father's death, or in all, including the period of their father's rule, for nine-and-forty years.

After the overthrow of the tyranny, the rival leaders in the state were Isagoras son of Tisander, a partisan of the tyrants, and Cleisthenes, who belonged to the family of the Alcmeonidae. Cleisthenes, being beaten in the political clubs, called in the people by giving the franchise to the masses. Thereupon Isagoras, finding himself left inferior in power, invited Cleomenes, who was united to him by ties of hospitality, to return to Athens, and persuaded him to 'drive out the pollution', a plea derived from the fact that the Alcmeonidae were supposed to be under the curse of pollution. On this Cleisthenes retired from the country, and Cleomenes, entering Attica with a small force, expelled, as polluted, seven hundred Athenian families. Having effected this, he next attempted to dissolve the Council, and to set up Isagoras and three hundred of his partisans as the supreme power in the state. The Council, however, resisted, the populace flocked together, and Cleomenes and Isagoras, with their adherents, took refuge in the Acropolis. Here the people sat down and besieged them for two days; and on the third they agreed to let Cleomenes and all his followers depart, while they summoned Cleisthenes and the other exiles back to Athens. When the people had thus obtained the command of affairs, Cleisthenes was their chief and popular leader. And this was natural; for the Alcmeonidae were perhaps the chief cause of the expulsion of the tyrants, and for the greater part of their rule were at perpetual war with them. But even earlier than the attempts of the Alcmeonidae, one Cedon made an attack on the tyrants; when there came another popular drinking song, addressed to him:

Pour a health yet again, boy, to Cedon; forget not this duty to do,

If a health is an honour befitting the name of a good man and true.

## 21

The people, therefore, had good reason to place confidence in Cleisthenes. Accordingly, now that he was the popular leader, three years after the expulsion of the tyrants, in the archonship of Isagoras, his first step was to distribute the whole population into ten tribes in place of the existing four, with the object of intermixing the members of the different tribes, and so securing that more persons might have a share in the franchise. From this arose the saying 'Do not look at the tribes', addressed to those who wished to scrutinize the lists of the old families. Next he made the Council to consist of five hundred members instead of four hundred, each tribe now contributing fifty, whereas formerly each had sent a hundred. The reason why he did not organize the people into twelve tribes was that he might not have to use the existing division into trittyes; for the four tribes had twelve trittyes, so that he would not have achieved his object of redistributing the population in fresh combinations. Further, he divided the country into thirty groups of demes, ten from the districts about the city, ten from the coast, and ten from the interior. These he called trittyes; and he assigned three of them by lot to each tribe, in such a way that each should have one portion in each of these three localities. All who lived in any given deme he declared fellow-demesmen, to the end that the new citizens might not be exposed by the habitual use of family names, but that men might be officially described by the names of their demes; and accordingly it is by the names of their demes that the Athenians speak of one another. He also instituted Demarchs, who had the same duties as the previously existing Naucrari, the demes being made to take the place of the naucraries. He gave names to the demes, some from the localities to which they belonged, some from the persons who founded them, since some of the areas no longer corresponded to localities possessing names. On the other hand he allowed every one to retain his family and clan and religious rites according to ancestral custom. The names given to the tribes were the ten which the Pythia appointed out of the hundred selected national heroes.

By these reforms the constitution became much more democratic than that of Solon. The laws of Solon had been obliterated by disuse during the period of the tyranny, while Cleisthenes substituted new ones with the object of securing the goodwill of the masses. Among these was the law concerning ostracism. Four years after the establishment of this system, in the archonship of Hermocreon, they first imposed upon the Council of Five Hundred the oath which they take to the present day. Next they began to elect the generals by tribes, one from each tribe, while the Polemarch was the commander of the whole army. Then, eleven years later, in the archonship of Phaenippus they won the battle of Marathon; and two years after this victory, when the people had now gained self-confidence, they for the first time made use of the law of ostracism. This had originally been passed as a precaution against men in high office, because Pisistratus took advantage of his position as a popular leader and general to make himself tyrant; and the first person ostracized was one of his relatives, Hipparchus son of Charmus, of the deme of Collytus, the very person on whose account especially Cleisthenes had enacted the law, as he wished to get rid of him. Hitherto, however, he had escaped; for the Athenians, with the usual leniency of the democracy, allowed all the partisans of the tyrants, who had not joined in their evil deeds in the time of the troubles to remain in the city; and the chief and leader of these was Hipparchus. Then in the very next year, in the archonship of Telesinus, they for the first time since the tyranny elected, tribe by tribe, the nine Archons by lot out of the five hundred candidates selected by the demes, all the earlier ones having been elected by vote; and in the same year Megacles son of Hippocrates, of the deme of Alopece, was ostracized.

Thus for three years they continued to ostracize the friends of the tyrants, on whose account the law had been passed; but in the following year they began to remove others as well, including any one who seemed to be more powerful than was expedient. The first person unconnected with the tyrants who was ostracized was Xanthippus son of Ariphron. Two years later, in the archonship of Nicodemus, the mines of Maroneia were discovered, and the state made a profit of a hundred talents from the working of them. Some persons advised the people to make a distribution of the money among themselves, but this was prevented by Themistocles. He refused to say on what he proposed to spend the money, but he bade them lend it to the hundred richest men in Athens, one talent to each,



and then, if the manner in which it was employed pleased the people, the expenditure should be charged to the state, but otherwise the state should receive the sum back from those to whom it was lent. On these terms he received the money and with it he had a hundred triremes built, each of the hundred individuals building one; and it was with these ships that they fought the battle of Salamis against the barbarians. About this time Aristides the son of Lysimachus was ostracized. Three years later, however, in the archonship of Hypsichides, all the ostracized persons were recalled, on account of the advance of the army of Xerxes; and it was laid down for the future that persons under sentence of ostracism must live between Geraestus and Scyllaeum, on pain of losing their civic rights irrevocably.

So far, then, had the city progressed by this time, growing gradually with the growth of the democracy; but after the Persian wars the Council of Areopagus once more developed strength and assumed the control of the state. It did not acquire this supremacy by virtue of any formal decree, but because it had been the cause of the battle of Salamis being fought. When the generals were utterly at a loss how to meet the crisis and made proclamation that every one should see to his own safety, the Areopagus provided a donation of money, distributing eight drachmas to each member of the ships' crews, and so prevailed on them to go on board. On these grounds people bowed to its prestige; and during this period Athens was well administered. At this time they devoted themselves to the prosecution of the war and were in high repute among the Greeks, so that the command by sea was conferred upon them, in spite of the opposition of the Lacedaemonians. The leaders of the people during this period were Aristides, of Lysimachus, and Themistocles, son of Lysimachus, and Themistocles, son of Neocles, of whom the latter appeared to devote himself to the conduct of war, while the former had the reputation of being a clever statesman and the most upright man of his time. Accordingly the one was usually employed as general, the other as political adviser. The rebuilding of the fortifications they conducted in combination, although they were political opponents; but it was Aristides who, seizing the opportunity afforded by the discredit brought upon the Lacedaemonians by Pausanias, guided the public policy in the matter of the defection of the Ionian states from the alliance with Sparta. It follows that it was he who made the first assessment of tribute from the various allied states, two years after the battle of Salamis, in the archonship of Timosthenes; and it was he who took the oath of offensive and defensive alliance with the Ionians, on which occasion they cast the masses of iron into the sea.

After this, seeing the state growing in confidence and much wealth accumulated, he advised the people to lay hold of the leadership of the league, and to quit the country districts and settle in the city. He pointed out to them that all would be able to gain a living there, some by service in the army, others in the garrisons, others by taking a part in public affairs; and in this way they would secure the leadership. This advice was taken; and when the people had assumed the supreme control they proceeded to treat their allies in a more imperious fashion, with the exception of the Chians, Lesbians, and Samians. These they maintained to protect their empire, leaving their constitutions untouched, and allowing them to retain whatever dominion they then possessed. They also secured an ample maintenance for the mass of the population in the way which Aristides had pointed out to them. Out of the proceeds of the tributes and the taxes and the contributions of the allies more than twenty thousand persons were maintained. There were 6,000 jurymen, 1,600 bowmen, 1,200 Knights, 500 members of the Council, 500 guards of the dockyards, besides fifty guards in the Acropolis. There were some 700 magistrates at home, and some 700 abroad. Further, when they subsequently went to war, there were in addition 2,500 heavy-armed troops, twenty guard-ships, and other ships which collected the tributes, with crews amounting to 2,000 men, selected by lot; and besides these there were the persons maintained at the Prytaneum, and orphans, and gaolers, since all these were supported by the state.

Such was the way in which the people earned their livelihood. The supremacy of the Areopagus lasted for about seventeen years after the Persian wars, although gradually declining. But as the strength of the masses increased, Ephialtes, son of Sophonides, a man with a reputation for incorruptibility and public virtue, who had become the leader of the people, made an attack upon that Council. First of all he ruined many of its members by bringing actions against them with reference to their administration. Then, in the archonship of Conon, he stripped the Council of all the acquired prerogatives from which it derived its guardianship of the constitution, and assigned some of them to the Council of Five Hundred, and others to the Assembly and the lawcourts. In this revolution he was assisted by Themistocles, who was himself a member of the Areopagus, but was expecting to be tried before it on a charge of treasonable dealings with Persia. This made him anxious that it should be overthrown, and accordingly he warned Ephialtes that the Council intended to arrest him, while at the same time he informed the Areopagites that he would reveal to them certain persons who were conspiring to subvert the constitution. He then conducted the representatives delegated by the Council to the residence of Ephialtes, promising to show them the conspirators who assembled there, and proceeded to converse with them in an earnest manner. Ephialtes, seeing this, was seized with alarm and took refuge in suppliant guise at the altar. Every one was astounded at the occurrence, and presently, when the Council of Five Hundred met, Ephialtes and Themistocles together proceeded to denounce the Areopagus to them. This they repeated in similar fashion in the Assembly, until they succeeded in depriving it of its power. Not long afterwards, however, Ephialtes was assassinated by Aristodicus of Tanagra. In this way was the Council of Areopagus deprived of its guardianship of the state.

After this revolution the administration of the state became more and more lax, in consequence of the eager rivalry of candidates for popular favour. During this period the moderate party, as it happened, had no real chief, their leader being Cimon son of Miltiades, who was a comparatively young man, and had been late in entering public life; and at the same time the general populace suffered great losses by war. The soldiers for active service were selected at that time from the roll of citizens, and as the generals were men of no military experience, who owed their position solely to their family standing, it continually happened that some two or three thousand of the troops perished on an expedition; and in this way the best men alike of the lower and the upper classes were exhausted. Consequently in most matters of administration less heed was paid to the laws than had formerly been the case. No alteration, however, was made in the method of election of the nine Archons, except that five years after the death of Ephialtes it was decided that the candidates to be submitted to the lot for that office might be selected from the Zeugitae as well as from the higher classes. The first Archon from that class was Mnesitheides. Up to this time all the Archons had been taken from the Pentacosiomedimni and Knights, while the Zeugitae were confined to the ordinary magistracies, save where an evasion of the law was overlooked. Four years later, in the archonship of Lysicrates, thirty 'local justices', as they as they were called, were re-established; and two years afterwards, in the archonship of Antidotus, consequence of the great increase in the number of citizens, it was resolved, on the motion of Pericles, that no one should be admitted to the franchise who was not of citizen birth by both parents.

After this Pericles came forward as popular leader, having first distinguished himself while still a young man by prosecuting Cimon on the audit of his official accounts as general. Under his auspices the constitution became still more democratic. He took away some of the privileges of the Areopagus, and, above all, he turned the policy of the state in the direction of sea power, which caused the masses to acquire confidence in themselves and consequently to take the conduct of affairs more and more into their own hands. Moreover, forty-eight years after the battle of Salamis, in the archonship of Pythodorus, the Peloponnesian war broke out, during which the populace was shut up in the city and became accustomed to gain its livelihood by military service, and so, partly voluntarily and partly involuntarily, determined to assume the administration of the state itself. Pericles was also the first to institute pay for service in the lawcourts, as a bid for popular favour to counterbalance the wealth of Cimon. The latter, having private possessions on a regal scale, not only performed the regular public services magnificently, but also maintained a large number of his fellow-demesmen. Any member of the deme of Laciadae could go every day to Cimon's house and there receive a reasonable provision; while his estate was guarded by no fences, so that any one who liked might help himself to the fruit from it. Pericles' private property was quite unequal to this magnificence and accordingly he took the advice of Damonides of Oia (who was commonly supposed to be the person who prompted Pericles in most of his measures, and was therefore subsequently ostracized), which was that, as he was beaten in the matter of private possessions, he should make gifts to the people from their own property; and accordingly he instituted pay for the members of the juries. Some critics accuse him of thereby causing a deterioration in the character of the juries, since it was always the common people who put themselves forward for selection as jurors, rather than the men of better position. Moreover, bribery came into existence after this, the first person to introduce it being Anytus, after his command at Pylos. He was prosecuted by certain individuals on account of his loss of Pylos, but escaped by bribing the jury.

So long, however, as Pericles was leader of the people, things went tolerably well with the state; but when he was dead there was a great change for the worse. Then for the first time did the people choose a leader who was of no reputation among men of good standing, whereas up to this time such men had always been found as leaders of the democracy. The first leader of the people, in the very beginning of things, was Solon, and the second was Pisistratus, both of them men of birth and position. After the overthrow of the tyrants there was Cleisthenes, a member of the house of the Alcmeonidae; and he had no rival opposed to him after the expulsion of the party of Isagoras. After this Xanthippus was the leader of the people, and Miltiades of the upper class. Then came Themistocles and Aristides, and after them Ephialtes as leader of the people, and Cimon son of Miltiades of the wealthier class. Pericles followed as leader of the people, and Thucydides, who was connected by marriage with Cimon, of the opposition. After the death of Pericles, Nicias, who subsequently fell in Sicily, appeared as leader of the aristocracy, and Cleon son of Cleaenetus of the people. The latter seems, more than any one else, to have been the cause of the corruption of the democracy by his wild undertakings; and he was the first to use unseemly shouting and coarse abuse on the Bema, and to harangue the people with his cloak girt up short about him, whereas all his predecessors had spoken decently and in order. These were succeeded by Theramenes son of Hagnon as leader of the one party, and the lyre-maker Cleophon of the people. It was Cleophon who first granted the twoobol donation for the theatrical performances, and for some time it continued to be given; but then Callicrates of Paeania ousted him by promising to add a third obol to the sum. Both of these persons were subsequently condemned to death; for the people, even if they are deceived for a time, in the end generally come to detest those who have beguiled them into any unworthy action. After Cleophon the popular leadership was occupied successively by the men who chose to talk the biggest and pander the most to the tastes of the majority, with their eyes fixed only on the interests of the moment. The best statesmen at Athens, after those of early times, seem to have been Nicias, Thucydides, and Theramenes. As to Nicias and Thucydides, nearly every one agrees that they were not merely men of birth and character, but also statesmen, and that they ruled the state with paternal care. On the merits of Theramenes opinion is divided, because it so happened that in his time public affairs were in a very stormy state. But those who give their opinion deliberately

find him, not, as his critics falsely assert, overthrowing every kind of constitution, but supporting every kind so long as it did not transgress laws; thus showing that he was able, as every good citizen should be, to live under any form of constitution, while he refused to countenance illegality and was its constant enemy.



So long as the fortune of the war continued even, the Athenians preserved the democracy; but after the disaster in Sicily, when the Lacedaemonians had gained the upper hand through their alliance with the king of Persia, they were compelled to abolish the democracy and establish in its place the constitution of the Four Hundred. The speech recommending this course before the vote was made by Melobius, and the motion was proposed by Pythodorus of Anaphlystus; but the real argument which persuaded the majority was the belief that the king of Persia was more likely to form an alliance with them if the constitution were on an oligarchical basis. The motion of Pythodorus was to the following effect. The popular Assembly was to elect twenty persons, over forty years of age, who, in conjunction with the existing ten members of the Committee of Public Safety, after taking an oath that they would frame such measures as they thought best for the state, should then prepare proposals for the public safety. In addition, any other person might make proposals, so that of all the schemes before them the people might choose the best. Cleitophon concurred with the motion of Pythodorus, but moved that the committee should also investigate the ancient laws enacted by Cleisthenes when he created the democracy, in order that they might have these too before them and so be in a position to decide wisely; his suggestion being that the constitution of Cleisthenes was not really democratic, but closely akin to that of Solon. When the committee was elected, their first proposal was that the Prytanes should be compelled to put to the vote any motion that was offered on behalf of the public safety. Next they abolished all indictments for illegal proposals, all impeachments and public prosecutions, in order that every Athenian should be free to give his counsel on the situation, if he chose; and they decreed that if any person imposed a fine on any other for his acts in this respect, or prosecuted him or summoned him before the courts, he should, on an information being laid against him, be summarily arrested and brought before the generals, who should deliver him to the Eleven to be put to death. After these preliminary measures, they drew up the constitution in the following manner. The revenues of the state were not to be spent on any purpose except the war. All magistrates should serve without remuneration for the period of the war, except the nine Archons and the Prytanes for the time being, who should each receive three obols a day. The whole of the rest of the administration was to be committed, for the period of the war, to those Athenians who were most capable of serving the state personally or pecuniarily,

to the number of not less than five thousand. This body was to have full powers, to the extent even of making treaties with whomsoever they willed; and ten representatives, over forty years of age, were to be elected from each tribe to draw up the list of the Five Thousand, after taking an oath on a full and perfect sacrifice.

These were the recommendations of the committee; and when they had been ratified the Five Thousand elected from their own number a hundred commissioners to draw up the constitution. They, on their appointment, drew up and produced the following recommendations. There should be a Council, holding office for a year, consisting of men over thirty years of age, serving without pay. To this body should belong the Generals, the nine Archons, the Amphictyonic Registrar (Hieromnemon), the Taxiarchs, the Hipparchs, the Phylarch, the commanders of garrisons, the Treasurers of Athena and the other gods, ten in number, the Hellenic Treasurers (Hellenotamiae), the Treasurers of the other non-sacred moneys, to the number of twenty, the ten Commissioners of Sacrifices (Hieropoei), and the ten Superintendents of the mysteries. All these were to be appointed by the Council from a larger number of selected candidates, chosen from its members for the time being. The other offices were all to be filled by lot, and not from the members of the Council. The Hellenic Treasurers who actually administered the funds should not sit with the Council. As regards the future, four Councils were to be created, of men of the age already mentioned, and one of these was to be chosen by lot to take office at once, while the others were to receive it in turn, in the order decided by the lot. For this purpose the hundred commissioners were to distribute themselves and all the rest as equally as possible into four parts, and cast lots for precedence, and the selected body should hold office for a year. They were to administer that office as seemed to them best, both with reference to the safe custody and due expenditure of the finances, and generally with regard to all other matters to the best of their ability. If they desired to take a larger number of persons into counsel, each member might call in one assistant of his own choice, subject to the same qualification of age. The Council was to sit once every five days, unless there was any special need for more frequent sittings. The casting of the lot for the Council was to be held by the nine Archons; votes on divisions were to be counted by five tellers chosen by lot from the members of the Council, and of these one was to be selected by lot every day to act as president. These five persons were to cast lots for precedence between the parties wishing to appear before the Council, giving the first place to sacred matters, the second to heralds, the third to embassies, and the fourth to all other subjects; but matters concerning the war might be dealt with, on the motion of the generals, whenever there was need, without balloting. Any member of the Council who did not enter

the Council-house at the time named should be fined a drachma for each day, unless he was away on leave of absence from the Council.

Such was the constitution which they drew up for the time to come, but for the immediate present they devised the following scheme. There should be a Council of Four Hundred, as in the ancient constitution, forty from each tribe, chosen out of candidates of more than thirty years of age, selected by the members of the tribes. This Council should appoint the magistrates and draw up the form of oath which they were to take; and in all that concerned the laws, in the examination of official accounts, and in other matters generally, they might act according to their discretion. They must, however, observe the laws that might be enacted with reference to the constitution of the state, and had no power to alter them nor to pass others. The generals should be provisionally elected from the whole body of the Five Thousand, but so soon as the Council came into existence it was to hold an examination of military equipments, and thereon elect ten persons, together with a secretary, and the persons thus elected should hold office during the coming year with full powers, and should have the right, whenever they desired it, of joining in the deliberations of the Council. The Five thousand was also to elect a single Hipparch and ten Phylarchs; but for the future the Council was to elect these officers according to the regulations above laid down. No office, except those of member of the Council and of general, might be held more than once, either by the first occupants or by their successors. With reference to the future distribution of the Four Hundred into the four successive sections, the hundred commissioners must divide them whenever the time comes for the citizens to join in the Council along with the rest.

The hundred commissioners appointed by the Five Thousand drew up the constitution as just stated; and after it had been ratified by the people, under the presidency of Aristomachus, the existing Council, that of the year of Callias, was dissolved before it had completed its term of office. It was dissolved on the fourteenth day of the month Thargelion, and the Four Hundred entered into office on the twenty-first; whereas the regular Council, elected by lot, ought to have entered into office on the fourteenth of Scirophorion. Thus was the oligarchy established, in the archonship of Callias, just about a hundred years after the expulsion of the tyrants. The chief promoters of the revolution were Pisander, Antiphon, and Theramenes, all of them men of good birth and with high reputations for ability and judgement. When, however, this constitution had been established, the Five Thousand were only nominally selected, and the Four Hundred, together with the ten officers on whom full powers had been conferred, occupied the Council-house and really administered the government. They began by sending ambassadors to the Lacedaemonians proposing a cessation of the war on the basis of the existing Position; but as the Lacedaemonians refused to listen to them unless they would also abandon the command of the sea, they broke off the negotiations.

For about four months the constitution of the Four Hundred lasted, and Mnasilochus held office as Archon of their nomination for two months of the year of Theopompus, who was Archon for the remaining ten. On the loss of the naval battle of Eretria, however, and the revolt of the whole of Euboea except Oreum, the indignation of the people was greater than at any of the earlier disasters, since they drew far more supplies at this time from Euboea than from Attica itself. Accordingly they deposed the Four Hundred and committed the management of affairs to the Five Thousand, consisting of persons Possessing a military equipment. At the same time they voted that pay should not be given for any public office. The persons chiefly responsible for the revolution were Aristocrates and Theramenes, who disapproved of the action of the Four Hundred in retaining the direction of affairs entirely in their own hands, and referring nothing to the Five Thousand. During this period the constitution of the state seems to have been admirable, since it was a time of war and the franchise was in the hands of those who possessed a military equipment.

The people, however, in a very short time deprived the Five Thousand of their monopoly of the government. Then, six years after the overthrow of the Four Hundred, in the archonship of Callias of Angele, battle of Arginusae took place, of which the results were, first, that the ten generals who had gained the victory were all condemned by a single decision, owing to the people being led astray by persons who aroused their indignation; though, as a matter of fact, some of the generals had actually taken no part in the battle, and others were themselves picked up by other vessels. Secondly, when the Lacedaemonians proposed to evacuate Decelea and make peace on the basis of the existing position, although some of the Athenians supported this proposal, the majority refused to listen to them. In this they were led astray by Cleophon, who appeared in the Assembly drunk and wearing his breastplate, and prevented peace being made, declaring that he would never accept peace unless the Lacedaemonians abandoned their claims on all the cities allied with them. They mismanaged their opportunity then, and in a very short time they learnt their mistake. The next year, in the archonship of Alexias, they suffered the disaster of Aegospotami, the consequence of which was that Lysander became master of the city, and set up the Thirty as its governors. He did so in the following manner. One of the terms of peace stipulated that the state should be governed according to 'the ancient constitution'. Accordingly the popular party tried to preserve the democracy, while that part of the upper class which belonged to the political clubs, together with the exiles who had returned since the peace, aimed at an oligarchy, and those who were not members of any club, though in other respects they considered themselves as good as any other citizens, were anxious to restore the ancient constitution. The latter class included Archinus, Anytus, Cleitophon, Phormisius, and many others, but their most prominent leader was Theramenes. Lysander, however, threw his influence on the side of the oligarchical party, and the popular Assembly was compelled by sheer intimidation to pass a vote establishing the oligarchy. The motion to this effect was proposed by Dracontides of Aphidna.



In this way were the Thirty established in power, in the archonship of Pythodorus. As soon, however, as they were masters of the city, they ignored all the resolutions which had been passed relating to the organization of the constitution, but after appointing a Council of Five Hundred and the other magistrates out of a thousand selected candidates, and associating with themselves ten Archons in Piraeus, eleven superintendents of the prison, and three hundred 'lash-bearers' as attendants, with the help of these they kept the city under their own control. At first, indeed, they behaved with moderation towards the citizens and pretended to administer the state according to the ancient constitution. In pursuance of this policy they took down from the hill of Areopagus the laws of Ephialtes and Archestratus relating to the Areopagite Council; they also repealed such of the statutes of Solon as were obscure, and abolished the supreme power of the lawcourts. In this they claimed to be restoring the constitution and freeing it from obscurities; as, for instance, by making the testator free once for all to leave his property as he pleased, and abolishing the existing limitations in cases of insanity, old age, and undue female influence, in order that no opening might be left for professional accusers. In other matters also their conduct was similar. At first, then, they acted on these lines, and they destroyed the professional accusers and those mischievous and evil-minded persons who, to the great detriment of the democracy, had attached themselves to it in order to curry favour with it. With all of this the city was much pleased, and thought that the Thirty were doing it with the best of motives. But so soon as they had got a firmer hold on the city, they spared no class of citizens, but put to death any persons who were eminent for wealth or birth or character. Herein they aimed at removing all whom they had reason to fear, while they also wished to lay hands on their possessions; and in a short time they put to death not less than fifteen hundred persons.

Theramenes, however, seeing the city thus falling into ruin, was displeased with their proceedings, and counselled them to cease such unprincipled conduct and let the better classes have a share in the government. At first they resisted his advice, but when his proposals came to be known abroad, and the masses began to associate themselves with him, they were seized with alarm lest he should make himself the leader of the people and destroy their despotic power. Accordingly they drew up a list of three thousand citizens, to whom they announced that they would give a share in the constitution. Theramenes, however, criticized this scheme also, first on the ground that, while proposing to give all respectable citizens a share in the constitution, they were actually giving it only to three thousand persons, as though all merit were confined within that number; and secondly because they were doing two inconsistent things, since they made the government rest on the basis of force, and yet made the governors inferior in strength to the governed. However, they took no notice of his criticisms, and for a long time put off the publication of the list of the Three Thousand and kept to themselves the names of those who had been placed upon it; and every time they did decide to publish it they proceeded to strike out some of those who had been included in it, and insert others who had been omitted.

Now when winter had set in, Thrasybulus and the exiles occupied Phyle, and the force which the Thirty led out to attack them met with a reverse. Thereupon the Thirty decided to disarm the bulk of the population and to get rid of Theramenes; which they did in the following way. They introduced two laws into the Council, which they commanded it to pass; the first of them gave the Thirty absolute power to put to death any citizen who was not included in the list of the Three Thousand, while the second disqualified all persons from participation in the franchise who should have assisted in the demolition of the fort of Eetioneia, or have acted in any way against the Four Hundred who had organized the previous oligarchy. Theramenes had done both, and accordingly, when these laws were ratified, he became excluded from the franchise and the Thirty had full power to put him to death. Theramenes having been thus removed, they disarmed all the people except the Three Thousand, and in every respect showed a great advance in cruelty and crime. They also sent ambassadors to Lacedaemonian to blacken the character of Theramenes and to ask for help; and the Lacedaemonians, in answer to their appeal, sent Callibius as military governor with about seven hundred troops, who came and occupied the Acropolis.

These events were followed by the occupation of Munichia by the exiles from Phyle, and their victory over the Thirty and their partisans. After the fight the party of the city retreated, and next day they held a meeting in the marketplace and deposed the Thirty, and elected ten citizens with full powers to bring the war to a termination. When, however, the Ten had taken over the government they did nothing towards the object for which they were elected, but sent envoys to Lacedaemonian to ask for help and to borrow money. Further, finding that the citizens who possessed the franchise were displeased at their proceedings, they were afraid lest they should be deposed, and consequently, in order to strike terror into them (in which design they succeeded), they arrested Demaretus, one of the most eminent citizens, and put him to death. This gave them a firm hold on the government, and they also had the support of Callibius and his Peloponnesians, together with several of the Knights; for some of the members of this class were the most zealous among the citizens to prevent the return of the exiles from Phyle. When, however, the party in Piraeus and Munichia began to gain the upper hand in the war, through the defection of the whole populace to them, the party in the city deposed the original Ten, and elected another Ten, consisting of men of the highest repute. Under their administration, and with their active and zealous cooperation, the treaty of reconciliation was made and the populace returned to the city. The most prominent members of this board were Rhinon of Paeania and Phayllus of Acherdus, who, even before the arrival of Pausanias, opened negotiations with the party in Piraeus, and after his arrival seconded his efforts to bring about the return of the exiles. For it was Pausanias, the king of the Lacedaemonians, who brought the peace and reconciliation to a fulfillment, in conjunction with the ten commissioners of arbitration who arrived later from Lacedaemonian, at his own earnest request. Rhinon and his colleagues received a vote of thanks for the goodwill shown by them to the people, and though they received their charge under an oligarchy and handed in their accounts under a democracy, no one, either of the party that had stayed in the city or of the exiles that had returned from the Piraeus, brought any complaint against them. On the contrary, Rhinon was immediately elected general on account of his conduct in this office.

This reconciliation was effected in the archonship of Eucleides, on the following terms. All persons who, having remained in the city during the troubles, were now anxious to leave it, were to be free to settle at Eleusis, retaining their civil rights and possessing full and independent powers of self-government, and with the free enjoyment of their own personal property. The temple at Eleusis should be common ground for both parties, and should be under the superintendence of the Ceryces, and the Eumolpidae, according to primitive custom. The settlers at Eleusis should not be allowed to enter Athens, nor the people of Athens to enter Eleusis, except at the season of the mysteries, when both parties should be free from these restrictions. The secessionists should pay their share to the fund for the common defence out of their revenues, just like all the other Athenians. If any of the seceding party wished to take a house in Eleusis, the people would help them to obtain the consent of the owner; but if they could not come to terms, they should appoint three valuers on either side, and the owner should receive whatever price they should appoint. Of the inhabitants of Eleusis, those whom the secessionists wished to remain should be allowed to do so. The list of those who desired to secede should be made up within ten days after the taking of the oaths in the case of persons already in the country, and their actual departure should take place within twenty days; persons at present out of the country should have the same terms allowed to them after their return. No one who settled at Eleusis should be capable of holding any office in Athens until he should again register himself on the roll as a resident in the city. Trials for homicide, including all cases in which one party had either killed or wounded another, should be conducted according to ancestral practice. There should be a general amnesty concerning past events towards all persons except the Thirty, the Ten, the Eleven, and the magistrates in Piraeus; and these too should be included if they should submit their accounts in the usual way. Such accounts should be given by the magistrates in Piraeus before a court of citizens rated in Piraeus, and by the magistrates in the city before a court of those rated in the city. On these terms those who wished to do so might secede. Each party was to repay separately the money which it had borrowed for the war.

When the reconciliation had taken place on these terms, those who had fought on the side of the Thirty felt considerable apprehensions, and a large number intended to secede. But as they put off entering their names till the last moment, as people will do, Archinus, observing their numbers, and being anxious to retain them as citizens, cut off the remaining days during which the list should have remained open; and in this way many persons were compelled to remain, though they did so very unwillingly until they recovered confidence. This is one point in which Archinus appears to have acted in a most statesmanlike manner, and another was his subsequent prosecution of Thrasybulus on the charge of illegality, for a motion by which he proposed to confer the franchise on all who had taken part in the return from Piraeus, although some of them were notoriously slaves. And yet a third such action was when one of the returned exiles began to violate the amnesty, whereupon Archinus haled him to the Council and persuaded them to execute him without trial, telling them that now they would have to show whether they wished to preserve the democracy and abide by the oaths they had taken; for if they let this man escape they would encourage others to imitate him, while if they executed him they would make an example for all to learn by. And this was exactly what happened; for after this man had been put to death no one ever again broke the amnesty. On the contrary, the Athenians seem, both in public and in private, to have behaved in the most unprecedentedly admirable and public-spirited way with reference to the preceding troubles. Not only did they blot out all memory of former offences, but they even repaid to the Lacedaemonians out of the public purse the money which the Thirty had borrowed for the war, although the treaty required each party, the party of the city and the party of Piraeus, to pay its own debts separately. This they did because they thought it was a necessary first step in the direction of restoring harmony; but in other states, so far from the democratic parties making advances from their own possessions, they are rather in the habit of making a general redistribution of the land. A final reconciliation was made with the secessionists at Eleusis two years after the secession, in the archonship of Xenaenetus.

This, however, took place at a later date; at the time of which we are speaking the people, having secured the control of the state, established the constitution which exists at the present day. Pythodorus was Archon at the time, but the democracy seems to have assumed the supreme power with perfect justice, since it had effected its own return by its own exertions. This was the eleventh change which had taken place in the constitution of Athens. The first modification of the primaeval condition of things was when Ion and his companions brought the people together into a community, for then the people was first divided into the four tribes, and the tribe-kings were created. Next, and first after this, having now some semblance of a constitution, was that which took place in the reign of Theseus, consisting in a slight deviation from absolute monarchy. After this came the constitution formed under Draco, when the first code of laws was drawn up. The third was that which followed the civil war, in the time of Solon; from this the democracy took its rise. The fourth was the tyranny of Pisistratus; the fifth the constitution of Cleisthenes, after the overthrow of the tyrants, of a more democratic character than that of Solon. The sixth was that which followed on the Persian wars, when the Council of Areopagus had the direction of the state. The seventh, succeeding this, was the constitution which Aristides sketched out, and which Ephialtes brought to completion by overthrowing the Areopagite Council; under this the nation, misled by the demagogues, made the most serious mistakes in the interest of its maritime empire. The eighth was the establishment of the Four Hundred, followed by the ninth, the restored democracy. The tenth was the tyranny of the Thirty and the Ten. The eleventh was that which followed the return from Phyle and Piraeus; and this has continued from that day to this, with continual accretions of power to the masses. The democracy has made itself master of everything and administers everything by its votes in the Assembly and by the lawcourts, in which it holds the supreme power. Even the jurisdiction of the Council has passed into the hands of the people at large; and this appears to be a judicious change, since small bodies are more open to corruption, whether by actual money or influence, than large ones. At first they refused to allow payment for attendance at the Assembly; but the result was that people did not attend. Consequently, after the Prytanes had tried many devices in vain in order to induce the populace to come and ratify the votes, Agyrrhius, in the first instance, made a provision of one obol a day, which Heracleides of Clazomenae, nicknamed 'the king', increased

to two obols, and Agyrrhius again to three.



The present state of the constitution is as follows. The franchise is open to all who are of citizen birth by both parents. They are enrolled among the demesmen at the age of eighteen. On the occasion of their enrollment the demesmen give their votes on oath, first whether the candidates appear to be of the age prescribed by the law (if not, they are dismissed back into the ranks of the boys), and secondly whether the candidate is free born and of such parentage as the laws require. Then if they decide that he is not a free man, he appeals to the lawcourts, and the demesmen appoint five of their own number to act as accusers; if the court decides that he has no right to be enrolled, he is sold by the state as a slave, but if he wins his case he has a right to be enrolled among the demesmen without further question. After this the Council examines those who have been enrolled, and if it comes to the conclusion that any of them is less than eighteen years of age, it fines the demesmen who enrolled him. When the youths (Ephebi) have passed this examination, their fathers meet by their tribes, and appoint on oath three of their fellow tribesmen, over forty years of age, who, in their opinion, are the best and most suitable persons to have charge of the youths; and of these the Assembly elects one from each tribe as guardian, together with a director, chosen from the general body of Athenians, to control the while. Under the charge of these persons the youths first of all make the circuit of the temples; then they proceed to Piraeus, and some of them garrison Munichia and some the south shore. The Assembly also elects two trainers, with subordinate instructors, who teach them to fight in heavy armour, to use the bow and javelin, and to discharge a catapult. The guardians receive from the state a drachma apiece for their keep, and the youths four obols apiece. Each guardian receives the allowance for all the members of his tribe and buys the necessary provisions for the common stock (they mess together by tribes), and generally superintends everything. In this way they spend the first year. The next year, after giving a public display of their military evolutions, on the occasion when the Assembly meets in the theatre, they receive a shield and spear from the state; after which they patrol the country and spend their time in the forts. For these two years they are on garrison duty, and wear the military cloak, and during this time they are exempt from all taxes. They also can neither bring an action at law, nor have one brought against them, in order that they may have no excuse for requiring leave of absence; though exception is made in cases of actions concerning inheritances and wards of state, or of any sacrificial ceremony

connected with the family. When the two years have elapsed they thereupon take their position among the other citizens. Such is the manner of the enrollment of the citizens and the training of the youths.

All the magistrates that are concerned with the ordinary routine of administration are elected by lot, except the Military Treasurer, the Commissioners of the Theoric fund, and the Superintendent of Springs. These are elected by vote, and hold office from one Panathenaic festival to the next. All military officers are also elected by vote.

The Council of Five Hundred is elected by lot, fifty from each tribe. Each tribe holds the office of Prytanes in turn, the order being determined by lot; the first four serve for thirty-six days each, the last six for thirty-five, since the reckoning is by lunar years. The Prytanes for the time being, in the first place, mess together in the Tholus, and receive a sum of money from the state for their maintenance; and, secondly, they convene the meetings of the Council and the Assembly. The Council they convene every day, unless it is a holiday, the Assembly four times in each prytany. It is also their duty to draw up the programme of the business of the Council and to decide what subjects are to be dealt with on each particular day, and where the sitting is to be held. They also draw up the programme for the meetings of the Assembly. One of these in each prytany is called the 'sovereign' Assembly; in this the people have to ratify the continuance of the magistrates in office, if they are performing their duties properly, and to consider the supply of corn and the defence of the country. On this day, too, impeachments are introduced by those who wish to do so, the lists of property confiscated by the state are read, and also applications for inheritances and wards of state, so that nothing may pass unclaimed without the cognizance of any person concerned. In the sixth prytany, in addition to the business already stated, the question is put to the vote whether it is desirable to hold a vote of ostracism or not; and complaints against professional accusers, whether Athenian or aliens domiciled in Athens, are received, to the number of not more than three of either class, together with cases in which an individual has made some promise to the people and has not performed it. Another Assembly in each prytany is assigned to the hearing of petitions, and at this meeting any one is free, on depositing the petitioner's olive-branch, to speak to the people concerning any matter, public or private. The two remaining meetings are devoted to all other subjects, and the laws require them to deal with three questions connected with religion, three connected with heralds and embassies, and three on secular subjects. Sometimes questions are brought forward without

a preliminary vote of the Assembly to take them into consideration.

Heralds and envoys appear first before the Prytanes, and the bearers of dispatches also deliver them to the same officials.

There is a single President of the Prytanes, elected by lot, who presides for a night and a day; he may not hold the office for more than that time, nor may the same individual hold it twice. He keeps the keys of the sanctuaries in which the treasures and public records of the state are preserved, and also the public seal; and he is bound to remain in the Tholus, together with one-third of the Prytanes, named by himself. Whenever the Prytanes convene a meeting of the Council or Assembly, he appoints by lot nine Proedri, one from each tribe except that which holds the office of Prytanes for the time being; and out of these nine he similarly appoints one as President, and hands over the programme for the meeting to them. They take it and see to the preservation of order, put forward the various subjects which are to be considered, decide the results of the votings, and direct the proceedings generally. They also have power to dismiss the meeting. No one may act as President more than once in the year, but he may be a Proedrus once in each prytany.

Elections to the offices of General and Hipparch and all other military commands are held in the Assembly, in such manner as the people decide; they are held after the sixth prytany by the first board of Prytanes in whose term of office the omens are favourable. There has, however, to be a preliminary consideration by the Council in this case also.

In former times the Council had full powers to inflict fines and imprisonment and death; but when it had consigned Lysimachus to the executioner, and he was sitting in the immediate expectation of death, Eumelides of Alopece rescued him from its hands, maintaining that no citizen ought to be put to death except on the decision of a court of law. Accordingly a trial was held in a lawcourt, and Lysimachus was acquitted, receiving henceforth the nickname of 'the man from the drum-head'; and the people deprived the Council thenceforward of the power to inflict death or imprisonment or fine, passing a law that if the Council condemn any person for an offence or inflict a fine, the Thesmothetae shall bring the sentence or fine before the lawcourt, and the decision of the jurors shall be the final judgement in the matter.

The Council passes judgement on nearly all magistrates, especially those who have the control of money; its judgement, however, is not final, but is subject to an appeal to the lawcourts. Private individuals, also, may lay an information against any magistrate they please for not obeying the laws, but here too there is an appeal to the lawcourts if the Council declare the charge proved. The Council also examines those who are to be its members for the ensuing year, and likewise the nine Archons. Formerly the Council had full power to reject candidates for office as unsuitable, but now they have an appeal to the lawcourts. In all these matters, therefore, the Council has no final jurisdiction. It takes, however, preliminary cognizance of all matters brought before the Assembly, and the Assembly cannot vote on any question unless it has first been considered by the Council and placed on the programme by the Prytanes; since a person who carries a motion in the Assembly is liable to an action for illegal proposal on these grounds.

The Council also superintends the triremes that are already in existence, with their tackle and sheds, and builds new triremes or quadriremes, whichever the Assembly votes, with tackle and sheds to match. The Assembly appoints master-builders for the ships by vote; and if they do not hand them over completed to the next Council, the old Council cannot receive the customary donation-that being normally given to it during its successor's term of office. For the building of the triremes it appoints ten commissioners, chosen from its own members. The Council also inspects all public buildings, and if it is of opinion that the state is being defrauded, it reports the culprit to the Assembly, and on condemnation hands him over to the lawcourts.

The Council also cooperates with other magistrates in most of their duties. First there are the treasurers of Athena, ten in number, elected by lot, one from each tribe. According to the law of Solon-which is still in force-they must be Pentacosiomedimni, but in point of fact the person on whom the lot falls holds the office even though he be quite a poor man. These officers take over charge of the statue of Athena, the figures of Victory, and all the other ornaments of the temple, together with the money, in the presence of the Council. Then there are the Commissioners for Public Contracts (Poletae), ten in number, one chosen by lot from each tribe, who farm out the public contracts. They lease the mines and taxes, in conjunction with the Military Treasurer and the Commissioners of the Theoric fund, in the presence of the Council, and grant, to the persons indicated by the vote of the Council, the mines which are let out by the state, including both the workable ones, which are let for three years, and those which are let under special agreements years. They also sell, in the presence of the Council, the property of those who have gone into exile from the court of the Areopagus, and of others whose goods have been confiscated, and the nine Archons ratify the contracts. They also hand over to the Council lists of the taxes which are farmed out for the year, entering on whitened tablets the name of the lessee and the amount paid. They make separate lists, first of those who have to pay their instalments in each prytany, on ten several tablets, next of those who pay thrice in the year, with a separate tablet for each instalment, and finally of those who pay in the ninth prytany. They also draw up a list of farms and dwellings which have been confiscated and sold by order of the courts; for these too come within their province. In the case of dwellings the value must be paid up in five years, and in that of farms, in ten. The instalments are paid in the ninth prytany. Further, the King-archon brings before the Council the leases of the sacred enclosures, written on whitened tablets. These too are leased for ten years, and the instalments are paid in the prytany; consequently it is in this prytany that the greatest amount of money is collected. The tablets containing the lists of the instalments are carried into the Council, and the public clerk takes charge of them. Whenever a payment of instalments is to be made he takes from the pigeon-holes the precise list of the sums which are to be paid and struck off on that day, and delivers it to the Receivers-General. The rest are kept apart, in order that no sum may be struck off before it is paid.



There are ten Receivers-General (Apodectae), elected by lot, one from each tribe. These officers receive the tablets, and strike off the instalments as they are paid, in the presence of the Council in the Council-chamber, and give the tablets back to the public clerk. If any one fails to pay his instalment, a note is made of it on the tablet; and he is bound to pay double the amount of the deficiency, or, in default, to be imprisoned. The Council has full power by the laws to exact these payments and to inflict this imprisonment. They receive all the instalments, therefore, on one day, and portion the money out among the magistrates; and on the next day they bring up the report of the apportionment, written on a wooden notice-board, and read it out in the Council-chamber, after which they ask publicly in the Council whether any one knows of any malpractice in reference to the apportionment, on the part of either a magistrate or a private individual, and if any one is charged with malpractice they take a vote on it.

The Council also elects ten Auditors (Logistae) by lot from its own members, to audit the accounts of the magistrates for each prytany. They also elect one Examiner of Accounts (Euthunus) by lot from each tribe, with two assessors (Paredri) for each examiner, whose duty it is to sit at the ordinary market hours, each opposite the statue of the eponymous hero of his tribe; and if any one wishes to prefer a charge, on either public or private grounds, against any magistrate who has passed his audit before the lawcourts, within three days of his having so passed, he enters on a whitened tablet his own name and that of the magistrate prosecuted, together with the malpractice that is alleged against him. He also appends his claim for a penalty of such amount as seems to him fitting, and gives in the record to the Examiner. The latter takes it, and if after reading it he considers it proved he hands it over, if a private case, to the local justices who introduce cases for the tribe concerned, while if it is a public case he enters it on the register of the Thesmothetae. Then, if the Thesmothetae accept it, they bring the accounts of this magistrate once more before the lawcourt, and the decision of the jury stands as the final judgement.

The Council also inspects the horses belonging to the state. If a man who has a good horse is found to keep it in bad condition, he is mulcted in his allowance of corn; while those which cannot keep up or which shy and will not stand steady, it brands with a wheel on the jaw, and the horse so marked is disqualified for service. It also inspects those who appear to be fit for service as scouts, and any one whom it rejects is deprived of his horse. It also examines the infantry who serve among the cavalry, and any one whom it rejects ceases to receive his pay. The roll of the cavalry is drawn up by the Commissioners of Enrolment (Catalogeis), ten in number, elected by the Assembly by open vote. They hand over to the Hipparchs and Phylarchs the list of those whom they have enrolled, and these officers take it and bring it up before the Council, and there open the sealed tablet containing the names of the cavalry. If any of those who have been on the roll previously make affidavit that they are physically incapable of cavalry service, they strike them out; then they call up the persons newly enrolled, and if any one makes affidavit that he is either physically or pecuniarily incapable of cavalry service they dismiss him, but if no such affidavit is made the Council vote whether the individual in question is suitable for the purpose or not. If they vote in the affirmative his name is entered on the tablet; if not, he is dismissed with the others.

Formerly the Council used to decide on the plans for public buildings and the contract for making the robe of Athena; but now this work is done by a jury in the lawcourts appointed by lot, since the Council was considered to have shown favouritism in its decisions. The Council also shares with the Military Treasurer the superintendence of the manufacture of the images of Victory and the prizes at the Panathenaic festival.

The Council also examines infirm paupers; for there is a law which provides that persons possessing less than three minas, who are so crippled as to be unable to do any work, are, after examination by the Council, to receive two obols a day from the state for their support. A treasurer is appointed by lot to attend to them.

The Council also, speaking broadly, cooperates in most of the duties of all the other magistrates; and this ends the list of the functions of that body.

## 50

There are ten Commissioners for Repairs of Temples, elected by lot, who receive a sum of thirty minas from the Receivers-General, and therewith carry out the most necessary repairs in the temples.

There are also ten City Commissioners (Astynomi), of whom five hold office in Piraeus and five in the city. Their duty is to see that female flute-and harp-and lute-players are not hired at more than two drachmas, and if more than one person is anxious to hire the same girl, they cast lots and hire her out to the person to whom the lot falls. They also provide that no collector of sewage shall shoot any of his sewage within ten stradia of the walls; they prevent people from blocking up the streets by building, or stretching barriers across them, or making drain-pipes in mid-air with a discharge into the street, or having doors which open outwards; they also remove the corpses of those who die in the streets, for which purpose they have a body of state slaves assigned to them.

# 51

Market Commissioners (Agoranomi) are elected by lot, five for Piraeus, five for the city. Their statutory duty is to see that all articles offered for sale in the market are pure and unadulterated.

Commissioners of Weights and Measures (Metronomi) are elected by lot, five for the city, and five for Piraeus. They see that sellers use fair weights and measures.

Formerly there were ten Corn Commissioners (Sitophylaces), elected by lot, five for Piraeus, and five for the city; but now there are twenty for the city and fifteen for Piraeus. Their duties are, first, to see that the unprepared corn in the market is offered for sale at reasonable prices, and secondly, to see that the millers sell barley meal at a price proportionate to that of barley, and that the bakers sell their loaves at a price proportionate to that of wheat, and of such weight as the Commissioners may appoint; for the law requires them to fix the standard weight.

There are ten Superintendents of the Mart, elected by lot, whose duty is to superintend the Mart, and to compel merchants to bring up into the city two-thirds of the corn which is brought by sea to the Corn Mart.

The Eleven also are appointed by lot to take care of the prisoners in the state gaol. Thieves, kidnappers, and pickpockets are brought to them, and if they plead guilty they are executed, but if they deny the charge the Eleven bring the case before the lawcourts; if the prisoners are acquitted, they release them, but if not, they then execute them. They also bring up before the lawcourts the list of farms and houses claimed as state-property; and if it is decided that they are so, they deliver them to the Commissioners for Public Contracts. The Eleven also bring up informations laid against magistrates alleged to be disqualified; this function comes within their province, but some such cases are brought up by the Thesmothetae.

There are also five Introducers of Cases (Eisagogeis), elected by lot, one for each pair of tribes, who bring up the 'monthly' cases to the lawcourts. 'Monthly' cases are these: refusal to pay up a dowry where a party is bound to do so, refusal to pay interest on money borrowed at 12 per cent., or where a man desirous of setting up business in the market has borrowed from another man capital to start with; also cases of slander, cases arising out of friendly loans or partnerships, and cases concerned with slaves, cattle, and the office of trierarch, or with banks. These are brought up as 'monthly' cases and are introduced by these officers; but the Receivers-General perform the same function in cases for or against the farmers of taxes. Those in which the sum concerned is not more than ten drachmas they can decide summarily, but all above that amount they bring into the lawcourts as 'monthly' cases.

The Forty are also elected by lot, four from each tribe, before whom suitors bring all other cases. Formerly they were thirty in number, and they went on circuit through the demes to hear causes; but after the oligarchy of the Thirty they were increased to forty. They have full powers to decide cases in which the amount at issue does not exceed ten drachmas, but anything beyond that value they hand over to the Arbitrators. The Arbitrators take up the case, and, if they cannot bring the parties to an agreement, they give a decision. If their decision satisfies both parties, and they abide by it, the case is at an end; but if either of the parties appeals to the lawcourts, the Arbitrators enclose the evidence, the pleadings, and the laws quoted in the case in two urns, those of the plaintiff in the one, and those of the defendant in the other. These they seal up and, having attached to them the decision of the arbitrator, written out on a tablet, place them in the custody of the four justices whose function it is to introduce cases on behalf of the tribe of the defendant. These officers take them and bring up the case before the lawcourt, to a jury of two hundred and one members in cases up to the value of a thousand drachmas, or to one of four hundred and one in cases above that value. No laws or pleadings or evidence may be used except those which were adduced before the Arbitrator, and have been enclosed in the urns.

The Arbitrators are persons in the sixtieth year of their age; this appears from the schedule of the Archons and the Eponymi. There are two classes of Eponymi, the ten who give their names to the tribes, and the forty-two of the years of service. The youths, on being enrolled among the citizens, were formerly registered upon whitened tablets, and the names were appended of the Archon in whose year they were enrolled, and of the Eponymus who had been in course in the preceding year; at the present day they are written on a bronze pillar, which stands in front of the Council-chamber, near the Eponymi of the tribes. Then the Forty take the last of the Eponymi of the years of service, and assign the arbitrations to the persons belonging to that year, casting lots to determine which arbitrations each shall undertake; and every one is compelled to carry through the arbitrations which the lot assigns to him. The law enacts that any one who does not serve as Arbitrator when he has arrived at the necessary age shall lose his civil rights, unless he happens to be holding some other office during that year, or to be out of the country. These are the only persons who escape the duty. Any one who suffers injustice at the hands of the Arbitrator may appeal to the

whole board of Arbitrators, and if they find the magistrate guilty, the law enacts that he shall lose his civil rights. The persons thus condemned have, however, in their turn an appeal. The Eponymi are also used in reference to military expeditions; when the men of military age are despatched on service, a notice is put up stating that the men from such-and such an Archon and Eponymus to such-and such another Archon and Eponymus are to go on the expedition.

The following magistrates also are elected by lot: Five Commissioners of Roads (Hodopoei), who, with an assigned body of public slaves, are required to keep the roads in order: and ten Auditors, with ten assistants, to whom all persons who have held any office must give in their accounts. These are the only officers who audit the accounts of those who are subject to examination, and who bring them up for examination before the lawcourts. If they detect any magistrate in embezzlement, the jury condemn him for theft, and he is obliged to repay tenfold the sum he is declared to have misappropriated. If they charge a magistrate with accepting bribes and the jury convict him, they fine him for corruption, and this sum too is repaid tenfold. Or if they convict him of unfair dealing, he is fined on that charge, and the sum assessed is paid without increase, if payment is made before the ninth prytany, but otherwise it is doubled. A tenfold fine is not doubled.

The Clerk of the prytany, as he is called, is also elected by lot. He has the charge of all public documents, and keeps the resolutions which are passed by the Assembly, and checks the transcripts of all other official papers and attends at the sessions of the Council. Formerly he was elected by open vote, and the most distinguished and trustworthy persons were elected to the post, as is known from the fact that the name of this officer is appended on the pillars recording treaties of alliance and grants of consulship and citizenship. Now, however, he is elected by lot. There is, in addition, a Clerk of the Laws, elected by lot, who attends at the sessions of the Council; and he too checks the transcript of all the laws. The Assembly also elects by open vote a clerk to read documents to it and to the Council; but he has no other duty except that of reading aloud.

The Assembly also elects by lot the Commissioners of Public Worship (Hieropoei) known as the Commissioners for Sacrifices, who offer the sacrifices appointed by oracle, and, in conjunction with the seers, take the auspices whenever there is occasion. It also elects by lot ten others, known as Annual Commissioners, who offer certain sacrifices and administer all the quadrennial festivals except the Panathenaea. There are the following quadrennial festivals: first that of Delos (where there is also a sexennial festival), secondly the Brauronia, thirdly the Heracleia, fourthly the Eleusinia, and fifthly the Panathenaea; and no two of these are celebrated in the same place. To these the



Hephaestia has now been added, in the archonship of Cephisophon.

An Archon is also elected by lot for Salamis, and a Demarch for Piraeus. These officers celebrate the Dionysia in these two places, and appoint Choregi. In Salamis, moreover, the name of the Archon is publicly recorded.

All the foregoing magistrates are elected by lot, and their powers are those which have been stated. To pass on to the nine Archons, as they are called, the manner of their appointment from the earliest times has been described already. At the present day six Thesmothetae are elected by lot, together with their clerk, and in addition to these an Archon, a King, and a Polemarch. One is elected from each tribe. They are examined first of all by the Council of Five Hundred, with the exception of the clerk. The latter is examined only in the lawcourt, like other magistrates (for all magistrates, whether elected by lot or by open vote, are examined before entering on their offices); but the nine Archons are examined both in the Council and again in the lawcourt. Formerly no one could hold the office if the Council rejected him, but now there is an appeal to the lawcourt, which is the final authority in the matter of the examination. When they are examined, they are asked, first, 'Who is your father, and of what deme? who is your father's father? who is your mother? who is your mother's father, and of what deme?' Then the candidate is asked whether he possesses an ancestral Apollo and a household Zeus, and where their sanctuaries are; next if he possesses a family tomb, and where; then if he treats his parents well, and pays his taxes, and has served on the required military expeditions. When the examiner has put these questions, he proceeds, 'Call the witnesses to these facts'; and when the candidate has produced his witnesses, he next asks, 'Does any one wish to make any accusation against this man?' If an accuser appears, he gives the parties an opportunity of making their accusation and defence, and then puts it to the Council to pass the candidate or not, and to the lawcourt to give the final vote. If no one wishes to make an accusation, he proceeds at once to the vote. Formerly a single individual gave the vote, but now all the members are obliged to vote on the candidates, so that if any unprincipled candidate has managed to get rid of his accusers, it may still be possible for him to be disqualified before the lawcourt. When the examination has been thus completed, they proceed to the stone on which are the pieces of the victims, and on which the Arbitrators take oath before declaring their decisions, and witnesses swear to their testimony. On this stone the Archons stand, and swear to execute their office uprightly and according to the laws, and not to receive presents in respect of the performance of their duties, or, if they do, to dedicate a golden statue. When they have taken this oath they proceed to the Acropolis, and there they repeat it; after this they enter upon their office.

The Archon, the King, and the Polemarch have each two assessors, nominated by themselves. These officers are examined in the lawcourt before they begin to act, and give in accounts on each occasion of their acting.

As soon as the Archon enters office, he begins by issuing a proclamation that whatever any one possessed before he entered into office, that he shall possess and hold until the end of his term. Next he assigns Choregi to the tragic poets, choosing three of the richest persons out of the whole body of Athenians. Formerly he used also to assign five Choregi to the comic poets, but now the tribes provide the Choregi for them. Then he receives the Choregi who have been appointed by the tribes for the men's and boys' choruses and the comic poets at the Dionysia, and for the men's and boys' choruses at the Thargelia (at the Dionysia there is a chorus for each tribe, but at the Thargelia one between two tribes, each tribe bearing its share in providing it); he transacts the exchanges of properties for them, and reports any excuses that are tendered, if any one says that he has already borne this burden, or that he is exempt because he has borne a similar burden and the period of his exemption has not yet expired, or that he is not of the required age; since the Choregus of a boys' chorus must be over forty years of age. He also appoints Choregi for the festival at Delos, and a chief of the mission for the thirty-oar boat which conveys the youths thither. He also superintends sacred processions, both that in honour of Asclepius, when the initiated keep house, and that of the great Dionysia-the latter in conjunction with the Superintendents of that festival. These officers, ten in number, were formerly elected by open vote in the Assembly, and used to provide for the expenses of the procession out of their private means; but now one is elected by lot from each tribe, and the state contributes a hundred minas for the expenses. The Archon also superintends the procession at the Thargelia, and that in honour of Zeus the Saviour. He also manages the contests at the Dionysia and the Thargelia.

These, then, are the festivals which he superintends. The suits and indictments which come before him, and which he, after a preliminary inquiry, brings up before the lawcourts, are as follows. Injury to parents (for bringing these actions the prosecutor cannot suffer any penalty); injury to orphans (these actions lie against their guardians); injury to a ward of state (these lie against their

guardians or their husbands), injury to an orphan's estate (these too lie against the guardians); mental derangement, where a party charges another with destroying his own property through unsoundness of mind; for appointment of liquidators, where a party refuses to divide property in which others have a share; for constituting a wardship; for determining between rival claims to a wardship; for granting inspection of property to which another party lays claim; for appointing oneself as guardian; and for determining disputes as to inheritances and wards of state. The Archon also has the care of orphans and wards of state, and of women who, on the death of their husbands, declare themselves to be with child; and he has power to inflict a fine on those who offend against the persons under his charge, or to bring the case before the lawcourts. He also leases the houses of orphans and wards of state until they reach the age of fourteen, and takes mortgages on them; and if the guardians fail to provide the necessary food for the children under their charge, he exacts it from them. Such are the duties of the Archon.

The King in the first place superintends the mysteries, in conjunction with the Superintendents of Mysteries. The latter are elected in the Assembly by open vote, two from the general body of Athenians, one from the Eumolpidae, and one from the Ceryces. Next, he superintends the Lenaeon Dionysia, which consists of a procession and a contest. The procession is ordered by the King and the Superintendents in conjunction; but the contest is managed by the King alone. He also manages all the contests of the torch-race; and to speak broadly, he administers all the ancestral sacrifices. Indictments for impiety come before him, or any disputes between parties concerning priestly rites; and he also determines all controversies concerning sacred rites for the ancient families and the priests. All actions for homicide come before him, and it is he that makes the proclamation requiring polluted persons to keep away from sacred ceremonies. Actions for homicide and wounding are heard, if the homicide or wounding be willful, in the Areopagus; so also in cases of killing by poison, and of arson. These are the only cases heard by that Council. Cases of unintentional homicide, or of intent to kill, or of killing a slave or a resident alien or a foreigner, are heard by the court of Palladium. When the homicide is acknowledged, but legal justification is pleaded, as when a man takes an adulterer in the act, or kills another by mistake in battle, or in an athletic contest, the prisoner is tried in the court of Delphinium. If a man who is in banishment for a homicide which admits of reconciliation incurs a further charge of killing or wounding, he is tried in Phreatto, and he makes his defence from a boat moored near the shore. All these cases, except those which are heard in the Areopagus, are tried by the Ephetae on whom the lot falls. The King introduces them, and the hearing is held within sacred precincts and in the open air. Whenever the King hears a case he takes off his crown. The person who is charged with homicide is at all other times excluded from the temples, nor is it even lawful for him to enter the marketplace; but on the occasion of his trial he enters the temple and makes his defence. If the actual offender is unknown, the writ runs against 'the doer of the deed'. The King and the tribe-kings also hear the cases in which the guilt rests on inanimate objects and the lower animal.

The Polemarch performs the sacrifices to Artemis the huntress and to Enyalios, and arranges the contest at the funeral of those who have fallen in war, and makes offerings to the memory of Harmodios and Aristogeiton. Only private actions come before him, namely those in which resident aliens, both ordinary and privileged, and agents of foreign states are concerned. It is his duty to receive these cases and divide them into ten groups, and assign to each tribe the group which comes to it by lot; after which the magistrates who introduce cases for the tribe hand them over to the Arbitrators. The Polemarch, however, brings up in person cases in which an alien is charged with deserting his patron or neglecting to provide himself with one, and also of inheritances and wards of state where aliens are concerned; and in fact, generally, whatever the Archon does for citizens, the Polemarch does for aliens.

The Thesmothetae in the first place have the power of prescribing on what days the lawcourts are to sit, and next of assigning them to the several magistrates; for the latter must follow the arrangement which the Thesmothetae assign. Moreover they introduce impeachments before the Assembly, and bring up all votes for removal from office, challenges of a magistrate's conduct before the Assembly, indictments for illegal proposals, or for proposing a law which is contrary to the interests of the state, complaints against Proedri or their president for their conduct in office, and the accounts presented by the generals. All indictments also come before them in which a deposit has to be made by the prosecutor, namely, indictments for concealment of foreign origin, for corrupt evasion of foreign origin (when a man escapes the disqualification by bribery), for blackmailing accusations, bribery, false entry of another as a state debtor, false testimony to the service of a summons, conspiracy to enter a man as a state debtor, corrupt removal from the list of debtors, and adultery. They also bring up the examinations of all magistrates, and the rejections by the demes and the condemnations by the Council. Moreover they bring up certain private suits in cases of merchandise and mines, or where a slave has slandered a free man. It is they also who cast lots to assign the courts to the various magistrates, whether for private or public cases. They ratify commercial treaties, and bring up the cases which arise out of such treaties; and they also bring up cases of perjury from the Areopagus. The casting of lots for the jurors is conducted by all the nine Archons, with the clerk to the Thesmothetae as the tenth, each performing the duty for his own tribe. Such are the duties of the nine Archons.

There are also ten Commissioners of Games (Athlothetae), elected by lot, one from each tribe. These officers, after passing an examination, serve for four years; and they manage the Panathenaic procession, the contest in music and that in gymnastic, and the horse-race; they also provide the robe of Athena and, in conjunction with the Council, the vases, and they present the oil to the athletes. This oil is collected from the sacred olives. The Archon requisitions it from the owners of the farms on which the sacred olives grow, at the rate of three-quarters of a pint from each plant. Formerly the state used to sell the fruit itself, and if any one dug up or broke down one of the sacred olives, he was tried by the Council of Areopagus, and if he was condemned, the penalty was death. Since, however, the oil has been paid by the owner of the farm, the procedure has lapsed, though the law remains; and the oil is a state charge upon the property instead of being taken from the individual plants. When, then, the Archon has collected the oil for his year of office, he hands it over to the Treasurers to preserve in the Acropolis, and he may not take his seat in the Areopagus until he has paid over to the Treasurers the full amount. The Treasurers keep it in the Acropolis until the Panathenaea, when they measure it out to the Commissioners of Games, and they again to the victorious competitors. The prizes for the victors in the musical contest consist of silver and gold, for the victors in manly vigour, of shields, and for the victors in the gymnastic contest and the horse-race, of oil.



All officers connected with military service are elected by open vote. In the first place, ten Generals (Strategi), who were formerly elected one from each tribe, but now are chosen from the whole mass of citizens. Their duties are assigned to them by open vote; one is appointed to command the heavy infantry, and leads them if they go out to war; one to the defence of the country, who remains on the defensive, and fights if there is war within the borders of the country; two to Piraeus, one of whom is assigned to Munichia, and one to the south shore, and these have charge of the defence of the Piraeus; and one to superintend the symmories, who nominates the trierarchs arranges exchanges of properties for them, and brings up actions to decide on rival claims in connexion with them. The rest are dispatched to whatever business may be on hand at the moment. The appointment of these officers is submitted for confirmation in each prytany, when the question is put whether they are considered to be doing their duty. If any officer is rejected on this vote, he is tried in the lawcourt, and if he is found guilty the people decide what punishment or fine shall be inflicted on him; but if he is acquitted he resumes his office. The Generals have full power, when on active service, to arrest any one for insubordination, or to cashier him publicly, or to inflict a fine; the latter is, however, unusual.

There are also ten Taxiarchs, one from each tribe, elected by open vote; and each commands his own tribesmen and appoints captains of companies (Lochagi). There are also two Hipparchs, elected by open vote from the whole mass of the citizens, who command the cavalry, each taking five tribes. They have the same powers as the Generals have in respect of the infantry, and their appointments are also subject to confirmation. There are also ten Phylarchs, elected by open vote, one from each tribe, to command the cavalry, as the Taxiarchs do the infantry. There is also a Hipparch for Lemnos, elected by open vote, who has charge of the cavalry in Lemnos. There is also a treasurer of the Paralus, and another of the Ammonias, similarly elected.

Of the magistrates elected by lot, in former times some including the nine Archons, were elected out of the tribe as a whole, while others, namely those who are now elected in the Theseum, were apportioned among the demes; but since the demes used to sell the elections, these magistrates too are now elected from the whole tribe, except the members of the Council and the guards of the dockyards, who are still left to the demes.

Pay is received for the following services. First the members of the Assembly receive a drachma for the ordinary meetings, and nine obols for the 'sovereign' meeting. Then the jurors at the lawcourts receive three obols; and the members of the Council five obols. The Prytaness receive an allowance of an obol for their maintenance. The nine Archons receive four obols apiece for maintenance, and also keep a herald and a flute-player; and the Archon for Salamis receives a drachma a day. The Commissioners for Games dine in the Prytaneum during the month of Hecatombaeon in which the Panathenaic festival takes place, from the fourteenth day onwards. The Amphictyonic deputies to Delos receive a drachma a day from the exchequer of Delos. Also all magistrates sent to Samos, Scyros, Lemnos, or Imbros receive an allowance for their maintenance. The military offices may be held any number of times, but none of the others more than once, except the membership of the Council, which may be held twice.

The juries for the lawcourts are chosen by lot by the nine Archons, each for their own tribe, and by the clerk to the Thesmothetae for the tenth. There are ten entrances into the courts, one for each tribe; twenty rooms in which the lots are drawn, two for each tribe; a hundred chests, ten for each tribe; other chests, in which are placed the tickets of the jurors on whom the lot falls; and two vases. Further, staves, equal in number to the jurors required, are placed by the side of each entrance; and counters are put into one vase, equal in number to the staves. These are inscribed with letters of the alphabet beginning with the eleventh (lambda), equal in number to the courts which require to be filled. All persons above thirty years of age are qualified to serve as jurors, provided they are not debtors to the state and have not lost their civil rights. If any unqualified person serves as juror, an information is laid against him, and he is brought before the court; and, if he is convicted, the jurors assess the punishment or fine which they consider him to deserve. If he is condemned to a money fine, he must be imprisoned until he has paid up both the original debt, on account of which the information was laid against him, and also the fine which the court has imposed upon him. Each juror has his ticket of boxwood, on which is inscribed his name, with the name of his father and his deme, and one of the letters of the alphabet up to kappa; for the jurors in their several tribes are divided into ten sections, with approximately an equal number in each letter. When the Thesmothetes has decided by lot which letters are required to attend at the courts, the servant puts up above each court the letter which has been assigned to it by the lot.

The ten chests above mentioned are placed in front of the entrance used by each tribe, and are inscribed with the letters of the alphabet from alpha to kappa. The jurors cast in their tickets, each into the chest on which is inscribed the letter which is on his ticket; then the servant shakes them all up, and the Archon draws one ticket from each chest. The individual so selected is called the Ticket-hanger (Empectes), and his function is to hang up the tickets out of his chest on the bar which bears the same letter as that on the chest. He is chosen by lot, lest, if the Ticket-hanger were always the same person, he might tamper with the results. There are five of these bars in each of the rooms assigned for the lot-drawing. Then the Archon casts in the dice and thereby chooses the jurors from each tribe, room by room. The dice are made of brass, coloured black or white; and according to the number of jurors required, so many white dice are put in, one for each five tickets, while the remainder are black, in the same proportion. As the Archon draws out the dice, the crier calls out the names of the individuals chosen. The Ticket-hanger is included among those selected. Each juror, as he is chosen and answers to his name, draws a counter from the vase, and holding it out with the letter uppermost shows it first to the presiding Archon; and he, when he has seen it, throws the ticket of the juror into the chest on which is inscribed the letter which is on the counter, so that the juror must go into the court assigned to him by lot, and not into one chosen by himself, and that it may be impossible for any one to collect the jurors of his choice into any particular court. For this purpose chests are placed near the Archon, as many in number as there are courts to be filled that day, bearing the letters of the courts on which the lot has fallen.

The juror thereupon, after showing his counter again to the attendant, passes through the barrier into the court. The attendant gives him a staff of the same colour as the court bearing the letter which is on his counter, so as to ensure his going into the court assigned to him by lot; since, if he were to go into any other, he would be betrayed by the colour of his staff. Each court has a certain colour painted on the lintel of the entrance. Accordingly the juror, bearing his staff, enters the court which has the same colour as his staff, and the same letter as his counter. As he enters, he receives a voucher from the official to whom this duty has been assigned by lot. So with their counters and their staves the selected jurors take their seats in the court, having thus completed the process of admission. The unsuccessful candidates receive back their tickets from the Ticket-hangers. The public servants carry the chests from each tribe, one to each court, containing the names of the members of the tribe who are in that court, and hand them over to the officials assigned to the duty of giving back their tickets to the jurors in each court, so that these officials may call them up by name and pay them their fee.

When all the courts are full, two ballot boxes are placed in the first court, and a number of brazen dice, bearing the colours of the several courts, and other dice inscribed with the names of the presiding magistrates. Then two of the Thesmothetae, selected by lot, severally throw the dice with the colours into one box, and those with the magistrates' names into the other. The magistrate whose name is first drawn is thereupon proclaimed by the crier as assigned for duty in the court which is first drawn, and the second in the second, and similarly with the rest. The object of this procedure is that no one may know which court he will have, but that each may take the court assigned to him by lot.

When the jurors have come in, and have been assigned to their respective courts, the presiding magistrate in each court draws one ticket out of each chest (making ten in all, one out of each tribe), and throws them into another empty chest. He then draws out five of them, and assigns one to the superintendence of the water-clock, and the other four to the telling of the votes. This is to prevent any tampering beforehand with either the superintendent of the clock or the tellers of the votes, and to secure that there is no malpractice in these respects. The five who have not been selected for these duties receive from them a statement of the order in which the jurors shall receive their fees, and of the places where the several tribes shall respectively gather in the court for this purpose when their duties are completed; the object being that the jurors may be broken up into small groups for the reception of their pay, and not all crowd together and impede one another.

These preliminaries being concluded, the cases are called on. If it is a day for private cases, the private litigants are called. Four cases are taken in each of the categories defined in the law, and the litigants swear to confine their speeches to the point at issue. If it is a day for public causes, the public litigants are called, and only one case is tried. Water-clocks are provided, having small supply-tubes, into which the water is poured by which the length of the pleadings is regulated. Ten gallons are allowed for a case in which an amount of more than five thousand drachmas is involved, and three for the second speech on each side. When the amount is between one and five thousand drachmas, seven gallons are allowed for the first speech and two for the second; when it is less than one thousand, five and two. Six gallons are allowed for arbitrations between rival claimants, in which there is no second speech. The official chosen by lot to superintend the water-clock places his hand on the supply tube whenever the clerk is about to read a resolution or law or affidavit or treaty. When, however, a case is conducted according to a set measurement of the day, he does not stop the supply, but each party receives an equal allowance of water. The standard of measurement is the length of the days in the month Poseideon.... The measured day is employed in cases when imprisonment, death, exile, loss of civil rights, or confiscation of goods is assigned as the penalty.

Most of the courts consist of 500 members...; and when it is necessary to bring public cases before a jury of 1,000 members, two courts combine for the purpose, the most important cases of all are brought 1,500 jurors, or three courts. The ballot balls are made of brass with stems running through the centre, half of them having the stem pierced and the other half solid. When the speeches are concluded, the officials assigned to the taking of the votes give each juror two ballot balls, one pierced and one solid. This is done in full view of the rival litigants, to secure that no one shall receive two pierced or two solid balls. Then the official designated for the purpose takes away the jurors staves, in return for which each one as he records his vote receives a brass voucher marked with the numeral 3 (because he gets three obols when he gives it up). This is to ensure that all shall vote; since no one can get a voucher unless he votes. Two urns, one of brass and the other of wood, stand in the court, in distinct spots so that no one may surreptitiously insert ballot balls; in these the jurors record their votes. The brazen urn is for effective votes, the wooden for unused votes; and the brazen urn has a lid pierced so as to take only one ballot ball, in order that no one may put in two at a time.

When the jurors are about to vote, the crier demands first whether the litigants enter a protest against any of the evidence; for no protest can be received after the voting has begun. Then he proclaims again, 'The pierced ballot for the plaintiff, the solid for the defendant'; and the juror, taking his two ballot balls from the stand, with his hand closed over the stem so as not to show either the pierced or the solid ballot to the litigants, casts the one which is to count into the brazen urn, and the other into the wooden urn.



When all the jurors have voted, the attendants take the urn containing the effective votes and discharge them on to a reckoning board having as many cavities as there are ballot balls, so that the effective votes, whether pierced or solid, may be plainly displayed and easily counted. Then the officials assigned to the taking of the votes tell them off on the board, the solid in one place and the pierced in another, and the crier announces the numbers of the votes, the pierced ballots being for the prosecutor and the solid for the defendant. Whichever has the majority is victorious; but if the votes are equal the verdict is for the defendant. Each juror receives two ballots, and uses one to record his vote, and throws the other away.

Then, if damages have to be awarded, they vote again in the same way, first returning their pay-vouchers and receiving back their staves. Half a gallon of water is allowed to each party for the discussion of the damages. Finally, when all has been completed in accordance with the law, the jurors receive their pay in the order assigned by the lot.

## The Greek Texts



*The ancient Agora, Athens*

# PRONOUNCING ANCIENT GREEK



This is a brief guide to pronouncing Ancient Greek, allowing readers to voice aloud Aristotle's original text. You may wish to bookmark this page for future reference.

## *The Letters*

Like the Roman alphabet, Greek has separate capital and lowercase letters, which are all provided here with their Roman equivalents.

A, α    a

B, β    b

Γ, γ    g

Δ, δ    d

E, ε    e

Z, ζ    z

H, η    ê

Θ, θ    th

I, ι    i

K, κ    k

Λ, λ l

Μ, μ m

Ν, ν n

Ξ, ξ x

Ο, ο o

Π, π p

Ρ, ρ r

Σ, σ, ς s

Τ, τ t

Υ, υ y

Φ, φ ph

Χ, χ ch

Ψ, ψ ps

Ω, ω ô

### *Consonants*

Most of the consonants are pronounced exactly as in English, except for:

The g is always hard as in ‘golf’, never soft.

z is pronounced zd.

x is pronounced with a ks sound.

r is rolled as in Spanish or Italian.

ps is always pronounced as two sounds

With aspirated consonants ph, th, ch and rh, ignore the h.

The ch should be pronounced the same as a k.

### *Diphthongs*

ai as in aisle

ei as in vein

oi as in oil

au as ow in cow

eu as e of get followed by oo

ou as in soup

## LIST OF GREEK TEXTS



In this section of the eBook, readers can view the original Greek texts of Aristotle's works, which are listed with their Greek name, their corresponding Bekker number and an English translation of the title. You may wish to Bookmark this page for future reference.

# CONTENTS

[Λογικά - Logic](#)

[Κατηγορίαι \(1a\) Categories](#)

[Περὶ ἑρμηνείας \(16a\) De Interpretatione](#)

[Ἀναλυτικῶν προτέρων \(24a\) Prior Analytics](#)

[Ἀναλυτικῶν ὑστέρων \(71a\) Posterior Analytics](#)

[Τοπικοὶ \(100a\) Topics](#)

[Περὶ τῶν Σοφιστικῶν Ἐλεγχῶν \(164a\) Sophistical Refutations](#)

[Φυσικά - Physics](#)

[Φυσικῆς ἀκροάσεως \(184a\) Physics](#)

[Περὶ οὐρανοῦ \(268a\) On the Heavens](#)

[Περὶ γενέσεως καὶ φθορᾶς \(314a\) On Generation and Corruption](#)

[Μετεωρολογικά \(338a\) Meteorology](#)

[Περὶ κόσμου \(ψευδεπίγραφο\) \(391a\) On the Universe](#)

[Περὶ ψυχῆς \(402a\) On the Soul](#)

[Περὶ Αἰσθησεως καὶ Αἰσθητῶν \(436a\) Sense and Sensibilia](#)

[Περὶ Μνήμης καὶ Αναμνησεως \(449b\) On Memory](#)

[Περὶ ὕπνου καὶ ἐγρηγορσεως \(453b\) On Sleep](#)

[Περὶ ἐνυπνίων \(458a\) On Dreams](#)

[Περὶ τῆς καθ' ὕπνον μαντικῆς \(462b\) On Divination in Sleep](#)

[Περὶ Μακροβιοτητος και Βραχυβιοτητος \(464b\) On Length and Shortness of Life](#)

[Περὶ Νεοτητος και Γηρωσ, και Ζωης και Θανατου, και Αναπνοης \(467b\) On Youth, Old Age, Life and Death, and Respiration](#)

[Ανωνυμου περὶ Πνευματοσ \(481a\) On Breath](#)

[Τῶν περὶ τὰ ζῷα ἱστοριῶν \(486a\) History of Animals](#)

[Περὶ ζῶων μορίων \(639a\) Parts of Animals](#)

[Περὶ ζῶων κινήσεως \(698a\) Movement of Animals](#)

[Περὶ πορείας ζῶων \(704a\) Progression of Animals](#)

[Περὶ ζῶων γενέσεως \(715a\) Generation of Animals](#)

[Περὶ Χρωματων \(791a\) On Colours](#)

[Εκ του περὶ Ακουστων \(800a\) On Things Heard](#)

[Φυσιογνωμονικα \(805a\) Physiognomonics](#)

[Περὶ Θαυμασιων Ακουσματος \(830a\) On Marvellous Things Heard](#)

[Προβληματα \(859a\) Problems](#)

[Περὶ Ατομων Γραμμων \(968a\) On Indivisible Lines](#)

[Ανεμων Θεσεις και Προσηγοριαι-εκ των Αριστοτελους περὶ Σημειων \(973a\) The Situations and Names of Winds](#)

[Περὶ Ξενοφανους, περὶ Ζηνωνος, περὶ Γοργιου \(974a\) On Melissus, Xenophanes, and Gorgias](#)

[Ψυχολογικά - Metaphysics](#)

[Μεταφυσικά \(980a\) Metaphysics](#)

[Ηθικά καὶ Πολιτικων - Ethics and Politics](#)



[Ηθικων Νικομαχειων \(1094a\) Nicomachean Ethics](#)

[Αριστοτελους Ηθικων \(1181a\) Magna Moralia](#)

[Ηθικων Ευδημιων \(1214a\) Eudemian Ethics](#)

[Περι Αρετων και Κακιων \(1249a\) On Virtues and Vices](#)

[Πολιτικων \(1252a\) Politics](#)

[Οικονομικά \(1343a\) Economics](#)

[Ρητορική και Ποιητική – Rhetoric and Poetics](#)

[Ρητορικη \(1354a\) Rhetoric](#)

[Περι Ποιητικης \(1447a\) Poetics](#)

[Ἀθηναίων πολιτεία - The Constitution of the Athenians](#)

## **Λογικά - Logic**

### **Κατηγορίαι (1a) Categories**



# CONTENTS

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

## Κεφάλαιο 1

[1a] Ὁμώνυμα λέγεται ὧν ὄνομα μόνον κοινόν, ὃ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας ἕτερος, οἷον ζῶον ὃ τε ἄνθρωπος καὶ τὸ γεγραμμένον· τούτων γὰρ ὄνομα μόνον κοινόν, ὃ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας ἕτερος· ἔαν γὰρ

ἀποδιδῶ τις τί ἐστὶν αὐτῶν ἑκατέρῳ τὸ ζῶν εἶναι, ἴδιον ἑκατέρου λόγον ἀποδώσει. συνώνυμα δὲ λέγεται ὧν τό τε ὄνομα κοινὸν καὶ ὁ κατὰ τοῦνομα λόγος τῆς οὐσίας ὁ αὐτός, οἷον ζῶν ὃ τε ἄνθρωπος καὶ ὁ βοῦς· τούτων γὰρ ἑκάτερον κοινῶ ὀνόματι προσαγορεύεται ζῶν, καὶ ὁ λόγος δὲ τῆς οὐσίας ὁ αὐτός· ἐὰν γὰρ ἀποδιδῶ τις τὸν ἑκατέρου λόγον τί ἐστὶν αὐτῶν ἑκατέρῳ τὸ ζῶν εἶναι, τὸν αὐτὸν λόγον ἀποδώσει. παρώνυμα δὲ λέγεται ὅσα ἀπὸ τινος διαφέροντα τῇ πτώσει τὴν κατὰ τοῦνομα προσηγορίαν ἔχει, οἷον ἀπὸ τῆς γραμματικῆς ὁ γραμματικὸς καὶ ἀπὸ τῆς ἀνδρείας ὁ ἀνδρεῖος.

Τῶν λεγομένων τὰ μὲν κατὰ συμπλοκὴν λέγεται, τὰ δὲ ἄνευ συμπλοκῆς. τὰ μὲν οὖν κατὰ συμπλοκὴν, οἷον ἄνθρωπος τρέχει, ἄνθρωπος νικᾷ· τὰ δὲ ἄνευ συμπλοκῆς, οἷον ἄνθρωπος, βοῦς, τρέχει, νικᾷ.

## Κεφάλαιο 2

τῶν ὄντων τὰ μὲν καθ' ὑποκειμένου τινὸς λέγεται, ἐν ὑποκειμένῳ δὲ οὐδενὶ ἐστὶν, οἷον ἄνθρωπος καθ' ὑποκειμένου μὲν λέγεται τοῦ τινὸς ἀνθρώπου, ἐν ὑποκειμένῳ δὲ οὐδενὶ ἐστὶν· τὰ δὲ ἐν ὑποκειμένῳ μὲν ἐστὶ, καθ' ὑποκειμένου δὲ οὐδενὸς λέγεται, ἐν ὑποκειμένῳ δὲ λέγω ὃ ἐν τινι μὴ ὡς μέρος ὑπάρχον ἀδύνατον χωρὶς εἶναι τοῦ ἐν ᾧ ἐστίν, οἷον ἢ τις γραμματικὴ ἐν ὑποκειμένῳ μὲν ἐστὶ τῇ ψυχῇ, καθ' ὑποκειμένου δὲ οὐδενὸς λέγεται, καὶ τὸ τὶ λευκὸν ἐν ὑποκειμένῳ μὲν ἐστὶ τῷ σώματι, ἅπαν γὰρ χρῶμα ἐν σώματι, καθ' ὑποκειμένου δὲ οὐδενὸς λέγεται· τὰ δὲ καθ' ὑποκειμένου τε λέγεται καὶ ἐν ὑποκειμένῳ ἐστίν, οἷον ἢ ἐπιστήμη ἐν ὑποκειμένῳ μὲν ἐστὶ τῇ ψυχῇ, καθ' ὑποκειμένου δὲ λέγεται τῆς γραμματικῆς· τὰ δὲ οὔτε ἐν ὑποκειμένῳ ἐστὶν οὔτε καθ' ὑποκειμένου λέγεται, οἷον ὁ τις ἄνθρωπος ἢ ὁ τις ἵππος, οὐδὲν γὰρ τῶν τοιούτων οὔτε ἐν ὑποκειμένῳ ἐστὶν οὔτε καθ' ὑποκειμένου λέγεται· ἀπλῶς δὲ τὰ ἅτομα καὶ ἐν ἀριθμῷ κατ' οὐδενὸς ὑποκειμένου λέγεται, ἐν ὑποκειμένῳ δὲ ἔνια οὐδὲν κωλύει εἶναι· ἢ γὰρ τις γραμματικὴ τῶν ἐν ὑποκειμένῳ ἐστίν.

## Κεφάλαιο 3

Ὅταν ἕτερον καθ' ἑτέρου κατηγορῇται ὡς καθ' ὑποκειμένου, ὅσα κατὰ τοῦ κατηγορουμένου λέγεται, πάντα καὶ κατὰ τοῦ ὑποκειμένου ῥηθήσεται· οἷον ἄνθρωπος κατὰ τοῦ τινὸς ἀνθρώπου κατηγορεῖται, τὸ δὲ ζῶν κατὰ τοῦ ἀνθρώπου· οὐκοῦν καὶ κατὰ τοῦ τινὸς ἀνθρώπου τὸ ζῶν κατηγορηθήσεται· ὁ γὰρ τις ἄνθρωπος καὶ ἀνθρωπός ἐστι καὶ ζῶν.

τῶν ἑτερογενῶν καὶ μὴ ὑπ' ἄλληλα τεταγμένων ἕτεραι τῷ εἶδει καὶ αἱ διαφοραί, οἷον ζώου καὶ ἐπιστήμης· ζώου μὲν γὰρ διαφοραὶ τό τε πεζὸν καὶ τὸ πτηνὸν καὶ τὸ ἔνυδρον καὶ τὸ δίπουν, ἐπιστήμης δὲ οὐδεμία τούτων· οὐ γὰρ διαφέρει ἐπιστήμη ἐπιστήμης τῷ δίπους εἶναι. τῶν δέ γε ὑπ' ἄλληλα γενῶν οὐδὲν κωλύει τὰς αὐτὰς διαφορὰς εἶναι· τὰ γὰρ ἐπάνω τῶν ὑπ' αὐτὰ γενῶν κατηγορεῖται, ὥστε ὅσαι τοῦ κατηγορουμένου διαφοραὶ εἰσι τοσαῦται καὶ τοῦ ὑποκειμένου ἔσονται.

## Κεφάλαιο 4

Τῶν κατὰ μηδεμίαν συμπλοκὴν λεγομένων ἕκαστον ἥτοι οὐσίαν σημαίνει ἢ ποσὸν ἢ ποιὸν ἢ πρὸς τι ἢ ποῦ ἢ ποτὲ ἢ κεῖσθαι ἢ ἔχειν ἢ ποιεῖν ἢ πάσχειν. ἔστι δὲ οὐσία μὲν ὡς τύπῳ εἰπεῖν οἷον ἄνθρωπος, ἵππος· ποσὸν δὲ οἷον δίπηχυ, τρίπηχυ· ποιὸν δὲ οἷον λευκόν, γραμματικόν· πρὸς τι δὲ [2a] οἷον διπλάσιον, ἥμισυ, μεῖζον· ποῦ δὲ οἷον ἐν Λυκείῳ, ἐν ἀγορᾷ· ποτὲ δὲ οἷον χθές, πέρυσιν· κεῖσθαι δὲ οἷον ἀνάκειται, κάθηται· ἔχειν δὲ οἷον ὑποδέδεσθαι, ὥπλισται· ποιεῖν δὲ οἷον τέμνειν, καίειν· πάσχειν δὲ οἷον τέμνεσθαι, καίεσθαι. ἕκαστον δὲ τῶν εἰρημένων αὐτὸ μὲν καθ' αὐτὸ ἐν οὐδεμιᾷ καταφάσει λέγεται, τῇ δὲ πρὸς ἄλληλα τούτων συμπλοκῇ κατάφασις γίνεσθαι· ἅπαντα γὰρ δοκεῖ κατάφασις ἥτοι ἀληθοῦς ἢ ψευδοῦς εἶναι, τῶν δὲ κατὰ μηδεμίαν συμπλοκὴν λεγομένων οὐδὲν οὔτε ἀληθές οὔτε ψεῦδός ἐστιν, οἷον ἄνθρωπος, λευκόν, τρέχει, νικᾷ.

## Κεφάλαιο 5

Οὐσία δὲ ἐστὶν ἡ κυριώτατά τε καὶ πρώτως καὶ μάλιστα λεγομένη, ἢ μήτε καθ' ὑποκειμένου τινὸς λέγεται μήτε ἐν ὑποκειμένῳ τινὶ ἐστίν, οἷον ὁ τις ἄνθρωπος ἢ ὁ τις ἵππος. δεύτεραι δὲ οὐσὶαι λέγονται, ἐν οἷς εἶδесιν αἱ πρώτως οὐσὶαι λεγόμεναι ὑπάρχουσιν, ταῦτά τε καὶ τὰ τῶν εἰδῶν τούτων γένη· οἷον ὁ τις ἄνθρωπος ἐν εἶδει μὲν ὑπάρχει τῷ ἀνθρώπῳ, γένος δὲ τοῦ εἶδους ἐστὶ τὸ ζῶον· δεύτεραι οὖν αὐταὶ λέγονται οὐσὶαι, οἷον ὁ τε ἄνθρωπος καὶ τὸ ζῶον. — φανερόν δὲ ἐκ τῶν εἰρημένων ὅτι τῶν καθ' ὑποκειμένου λεγομένων ἀναγκαῖον καὶ τοῦνομα καὶ τὸν λόγον κατηγορεῖσθαι τοῦ ὑποκειμένου· οἷον ἄνθρωπος καθ' ὑποκειμένου λέγεται τοῦ τινὸς ἀνθρώπου, καὶ κατηγορεῖται γε τοῦνομα, — τὸν γὰρ ἄνθρωπον κατὰ τοῦ τινὸς ἀνθρώπου κατηγορήσεις· — καὶ ὁ λόγος δὲ τοῦ ἀνθρώπου κατὰ τοῦ τινὸς ἀνθρώπου κατηγορηθήσεται, — ὁ γὰρ τις ἄνθρωπος καὶ ἄνθρωπός ἐστιν· — ὥστε καὶ τοῦνομα καὶ ὁ λόγος κατὰ τοῦ ὑποκειμένου κατηγορηθήσεται. τῶν δ' ἐν ὑποκειμένῳ ὄντων ἐπὶ μὲν τῶν πλείστων οὔτε τοῦνομα οὔτε ὁ λόγος

κατηγορεῖται τοῦ ὑποκειμένου· ἐπ' ἐνίων δὲ τοῦτομα μὲν οὐδὲν κωλύει κατηγορεῖσθαι τοῦ ὑποκειμένου, τὸν δὲ λόγον ἀδύνατον· οἷον τὸ λευκὸν ἐν ὑποκειμένῳ ὄν τῷ σώματι κατηγορεῖται τοῦ ὑποκειμένου, — λευκὸν γὰρ σῶμα λέγεται, — ὁδὲ λόγος τοῦ λευκοῦ οὐδέποτε κατὰ τοῦ σώματος κατηγορηθήσεται. — τὰ δ' ἄλλα πάντα ἦτοι καθ' ὑποκειμένων λέγεται τῶν πρώτων οὐσιῶν ἢ ἐν ὑποκειμέναις αὐταῖς ἐστίν. τοῦτο δὲ φανερόν ἐκ τῶν καθ' ἕκαστα προχειριζομένων· οἷον τὸ ζῶον κατὰ τοῦ ἀνθρώπου κατηγορεῖται, οὐκοῦν καὶ κατὰ τοῦ τινὸς ἀνθρώπου, — εἰ γὰρ κατὰ μηδενὸς τῶν τινῶν [2b] ἀνθρώπων, οὐδὲ κατὰ ἀνθρώπου ὅλως· — πάλιν τὸ χρῶμα ἐν σώματι, οὐκοῦν καὶ ἐν τινὶ σώματι· εἰ γὰρ μὴ ἐν τινὶ τῶν καθ' ἕκαστα, οὐδὲ ἐν σώματι ὅλως· ὥστε τὰ ἄλλα πάντα ἦτοι καθ' ὑποκειμένων τῶν πρώτων οὐσιῶν λέγεται ἢ ἐν ὑποκειμέναις αὐταῖς ἐστίν. μὴ οὐσῶν οὖν τῶν πρώτων οὐσιῶν ἀδύνατον τῶν ἄλλων τι εἶναι· πάντα γὰρ τὰ ἄλλα ἦτοι καθ' ὑποκειμένων τούτων λέγεται ἢ ἐν ὑποκειμέναις αὐταῖς ἐστίν· ὥστε μὴ οὐσῶν τῶν πρώτων οὐσιῶν ἀδύνατον τῶν ἄλλων τι εἶναι.

Τῶν δὲ δευτέρων οὐσιῶν μᾶλλον οὐσία τὸ εἶδος τοῦ γένους· ἔγγιον γὰρ τῆς πρώτης οὐσίας ἐστίν. ἐὰν γὰρ ἀποδιδῶ τις τὴν πρώτην οὐσίαν τί ἐστι, γνωριμώτερον καὶ οἰκειότερον ἀποδώσει τὸ εἶδος ἀποδιδούς ἢ τὸ γένος· οἷον τὸν τινὰ ἄνθρωπον γνωριμώτερον ἂν ἀποδοίῃ ἄνθρωπον ἀποδιδούς ἢ ζῶον, — τὸ μὲν γὰρ ἴδιον μᾶλλον τοῦ τινὸς ἀνθρώπου, τὸ δὲ κοινότερον, — καὶ τὸ τὶ δένδρον ἀποδιδούς γνωριμώτερον ἀποδώσει δένδρον ἀποδιδούς ἢ φυτόν. ἔτι αἱ πρῶται οὐσίαι διὰ τὸ τοῖς ἄλλοις ἅπασιν ὑποκεῖσθαι καὶ πάντα τὰ ἄλλα κατὰ τούτων κατηγορεῖσθαι ἢ ἐν ταύταις εἶναι διὰ τοῦτο μάλιστα οὐσίαι λέγονται· ὥς δέ γε αἱ πρῶται οὐσίαι πρὸς τὰ ἄλλα ἔχουσιν, οὕτω καὶ τὸ εἶδος πρὸς τὸ γένος ἔχει· — ὑπόκειται γὰρ τὸ εἶδος τῷ γένει· τὰ μὲν γὰρ γένη κατὰ τῶν εἰδῶν κατηγορεῖται, τὰ δὲ εἶδη κατὰ τῶν γενῶν οὐκ ἀντιστρέφει· — ὥστε καὶ ἐκτούτων τὸ εἶδος τοῦ γένους μᾶλλον οὐσία. — αὐτῶν δὲ τῶν εἰδῶν ὅσα μὴ ἐστι γένη, οὐδὲν μᾶλλον ἕτερον ἑτέρου οὐσία ἐστίν· οὐδὲν γὰρ οἰκειότερον ἀποδώσει κατὰ τοῦ τινὸς ἀνθρώπου τὸν ἄνθρωπον ἀποδιδούς ἢ κατὰ τοῦ τινὸς ἵππου τὸν ἵππον. ὡσαύτως δὲ καὶ τῶν πρώτων οὐσιῶν οὐδὲν μᾶλλον ἕτερον ἑτέρου οὐσία ἐστίν· οὐδὲν γὰρ μᾶλλον ὅ τις ἄνθρωπος οὐσία ἢ ὅ τις βοῦς.

Εἰκότως δὲ μετὰ τὰς πρώτας οὐσίας μόνα τῶν ἄλλων τὰ εἶδη καὶ τὰ γένη δεύτεραι οὐσίαι λέγονται· μόνα γὰρ δηλοῖ τὴν πρώτην οὐσίαν τῶν κατηγορουμένων· τὸν γὰρ τινὰ ἄνθρωπον ἐὰν ἀποδιδῶ τις τί ἐστίν, τὸ μὲν εἶδος ἢ τὸ γένος ἀποδιδούς οἰκείως ἀποδώσει, — καὶ γνωριμώτερον ποιήσει ἄνθρωπον ἢ ζῶον ἀποδιδούς· — τῶν δ' ἄλλων ὅ τι ἂν ἀποδιδῶ τις,

ἀλλοτρίως ἔσται ἀποδεδωκώς, οἷον λευκὸν ἢ τρέχει ἢ ὅτιοῦν τῶν τοιούτων ἀποδιδούς· ὥστε εἰκότως ταῦτα μόνα τῶν ἄλλων οὐσίαι λέγονται. ἔτι αἱ πρῶται οὐσίαι διὰ τὸ τοῖς ἄλλοις ἅπασιν ὑποκεῖσθαι κυριώτατα οὐσίαι [3a] λέγονται· ὡς δέ γε αἱ πρῶται οὐσίαι πρὸς τὰ ἄλλα πάντα ἔχουσιν, οὕτω τὰ εἶδη καὶ τὰ γένη τῶν πρώτων οὐσιῶν πρὸς τὰ λοιπὰ πάντα ἔχει· κατὰ τούτων γὰρ πάντα τὰ λοιπὰ κατηγορεῖται· τὸν γὰρ τινὰ ἄνθρωπον ἐρεῖς γραμματικόν, οὐκοῦν καὶ ἄνθρωπον καὶ ζῶον γραμματικὸν ἐρεῖς· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων.

Κοινὸν δὲ κατὰ πάσης οὐσίας τὸ μὴ ἐν ὑποκειμένῳ εἶναι. ἡ μὲν γὰρ πρώτη οὐσία οὔτε καθ' ὑποκειμένου λέγεται οὔτε ἐν ὑποκειμένῳ ἐστίν. τῶν δὲ δευτέρων οὐσιῶν φανερὸν μὲν καὶ οὕτως ὅτι οὐκ εἰσὶν ἐν ὑποκειμένῳ· ὁ γὰρ ἄνθρωπος καθ' ὑποκειμένου μὲν τοῦ τινὸς ἀνθρώπου λέγεται, ἐν ὑποκειμένῳ δὲ οὐκ ἔστιν, — οὐ γὰρ ἐν τῷ τινὶ ἀνθρώπῳ ὁ ἄνθρωπός ἐστιν· — ὡσαύτως δὲ καὶ τὸ ζῶον καθ' ὑποκειμένου μὲν λέγεται τοῦ τινὸς ἀνθρώπου, οὐκ ἔστι δὲ τὸ ζῶον ἐν τῷ τινὶ ἀνθρώπῳ. ἔτι δὲ τῶν ἐν ὑποκειμένῳ ὄντων τὸ μὲν ὄνομα οὐδὲν κωλύει κατηγορεῖσθαι ποτε τοῦ ὑποκειμένου, τὸν δὲ λόγον ἀδύνατον· τῶν δὲ δευτέρων οὐσιῶν κατηγορεῖται καὶ ὁ λόγος κατὰ τοῦ ὑποκειμένου καὶ τοῦ ὀνόματος, — τὸν γὰρ τοῦ ἀνθρώπου λόγον κατὰ τοῦ τινὸς ἀνθρώπου κατηγορήσεις καὶ τὸν τοῦ ζώου. — ὥστε οὐκ ἂν εἴη οὐσία τῶν ἐν ὑποκειμένῳ. — οὐκ ἴδιον δὲ οὐσίας τοῦτο, ἀλλὰ καὶ ἡ διαφορὰ τῶν μὴ ἐν ὑποκειμένῳ ἐστίν· τὸ γὰρ πεζὸν καὶ τὸ δίπουν καθ' ὑποκειμένου μὲν λέγεται τοῦ ἀνθρώπου, ἐν ὑποκειμένῳ δὲ οὐκ ἔστιν, — οὐ γὰρ ἐν τῷ ἀνθρώπῳ ἐστὶ τὸ δίπουν οὐδὲ τὸ πεζόν. — καὶ ὁ λόγος δὲ κατηγορεῖται ὁ τῆς διαφορᾶς καθ' οὗ ἂν λέγηται ἡ διαφορὰ· οἷον εἰ τὸ πεζὸν κατὰ ἀνθρώπου λέγεται, καὶ ὁ λόγος τοῦ πεζοῦ κατηγορηθήσεται τοῦ ἀνθρώπου, — πεζὸν γάρ ἐστιν ὁ ἄνθρωπος. — μὴ ταραττέτω δὲ ἡμᾶς τὰ μέρη τῶν οὐσιῶν ὡς ἐν ὑποκειμένοις ὄντα τοῖς ὅλοις, μή ποτε ἀναγκασθῶμεν οὐκ οὐσίας αὐτὰ φάσκειν εἶναι· οὐ γὰρ οὕτω τὰ ἐν ὑποκειμένῳ ἐλέγετο τὰ ὡς μέρη ὑπάρχοντα ἐν τινι.

Ἐπάρχει δὲ ταῖς οὐσίαις καὶ ταῖς διαφοραῖς τὸ πάντα συνωνύμως ἀπ' αὐτῶν λέγεσθαι· πᾶσαι γὰρ αἱ ἀπὸ τούτων κατηγορίαι ἦτοι κατὰ τῶν ἀτόμων κατηγοροῦνται ἢ κατὰ τῶν εἰδῶν. ἀπὸ μὲν γὰρ τῆς πρώτης οὐσίας οὐδεμία ἐστὶ κατηγορία, — κατ' οὐδενὸς γὰρ ὑποκειμένου λέγεται. — τῶν δὲ δευτέρων οὐσιῶν τὸ μὲν εἶδος κατὰ τοῦ ἀτόμου κατηγορεῖται, τὸ δὲ γένος καὶ κατὰ τοῦ εἶδους καὶ κατὰ τοῦ ἀτόμου· [3b] ὡσαύτως δὲ καὶ αἱ διαφοραὶ καὶ κατὰ τῶν εἰδῶν καὶ κατὰ τῶν ἀτόμων κατηγοροῦνται. καὶ τὸν λόγον δὲ ἐπιδέχονται αἱ πρῶται οὐσίαι τὸν τῶν εἰδῶν καὶ τὸν τῶν γενῶν, καὶ τὸ εἶδος

δὲ τὸν τοῦ γένους. — ὅσα γὰρ κατὰ τοῦ κατηγορουμένου λέγεται, καὶ κατὰ τοῦ ὑποκειμένου ῥηθήσεται· — ὡσαύτως δὲ καὶ τὸν τῶν διαφορῶν λόγον ἐπιδέχεται τὰ τε εἶδη καὶ τὰ ἄτομα· συνώνυμα δέ γε ἦν ὧν καὶ τοῦνομα κοινὸν καὶ ὁ λόγος ὁ αὐτός. ὥστε πάντα τὰ ἀπὸ τῶν οὐσιῶν καὶ τῶν διαφορῶν συνωνύμως λέγεται.

Πᾶσα δὲ οὐσία δοκεῖ τόδε τι σημαίνειν. ἐπὶ μὲν οὖν τῶν πρώτων οὐσιῶν ἀναμφισβήτητον καὶ ἀληθές ἐστιν ὅτι τόδε τι σημαίνει· ἄτομον γὰρ καὶ ἓν ἀριθμῶ τὸ δηλούμενόν ἐστιν. ἐπὶ δὲ τῶν δευτέρων οὐσιῶν φαίνεται μὲν ὁμοίως τῷ σχήματι τῆς προσηγορίας τόδε τι σημαίνειν, ὅταν εἴπῃ ἄνθρωπον ἢ ζῶον· οὐ μὴν ἀληθές γε, ἀλλὰ μᾶλλον ποιόν τι σημαίνει, — οὐ γὰρ ἓν ἐστὶ τὸ ὑποκείμενον ὥσπερ ἡ πρώτη οὐσία, ἀλλὰ κατὰ πολλῶν ὁ ἄνθρωπος λέγεται καὶ τὸ ζῶον· — οὐχ ἀπλῶς δὲ ποιόν τι σημαίνει, ὥσπερ τὸ λευκόν· οὐδὲν γὰρ ἄλλο σημαίνει τὸ λευκὸν ἄλλ' ἢ ποιόν, τὸ δὲ εἶδος καὶ τὸ γένος περὶ οὐσίαν τὸ ποιὸν ἀφορίζει, — ποιὰν γὰρ τινα οὐσίαν σημαίνει. — ἐπὶ πλεῖον δὲ τῷ γένει ἢ τῷ εἶδει τὸν ἀφορισμὸν ποιεῖται· ὁ γὰρ ζῶον εἰπὼν ἐπὶ πλεῖον περιλαμβάνει ἢ ὁ τὸν ἄνθρωπον.

Ὑπάρχει δὲ ταῖς οὐσίαις καὶ τὸ μηδὲν αὐταῖς ἐναντίον εἶναι. τῇ γὰρ πρώτη οὐσία τί ἂν εἴῃ ἐναντίον; οἶον τῷ τινὲ ἀνθρώπῳ οὐδὲν ἐστὶν ἐναντίον, οὐδέ γε τῷ ἀνθρώπῳ ἢ τῷ ζῳῳ οὐδὲν ἐστὶν ἐναντίον. οὐκ ἴδιον δὲ τῆς οὐσίας τοῦτο, ἀλλὰ καὶ ἐπ' ἄλλων πολλῶν οἶον ἐπὶ τοῦ ποσοῦ· τῷ γὰρ διπλήκει οὐδὲν ἐστὶν ἐναντίον, οὐδὲ τοῖς δέκα, οὐδὲ τῶν τοιούτων οὐδενί, εἰ μή τις τὸ πολὺ τῷ ὀλίγῳ φαίῃ ἐναντίον εἶναι ἢ τὸ μέγα τῷ μικρῷ· τῶν δὲ ἀφορισμένων ποσῶν οὐδὲν οὐδενὶ ἐναντίον ἐστίν.

Δοκεῖ δὲ ἡ οὐσία οὐκ ἐπιδέχεσθαι τὸ μᾶλλον καὶ τὸ ἥττον· λέγω δὲ οὐχ ὅτι οὐσία οὐσίας οὐκ ἔστι μᾶλλον οὐσία, — τοῦτο μὲν γὰρ εἴρηται ὅτι ἔστιν, — ἀλλ' ὅτι ἐκάστη οὐσία τοῦθ' ὅπερ ἐστὶν οὐ λέγεται μᾶλλον καὶ ἥττον· οἶον εἰ ἔστιν αὕτη ἡ οὐσία ἄνθρωπος, οὐκ ἔσται μᾶλλον καὶ ἥττον ἄνθρωπος, οὔτε αὐτὸς αὐτοῦ οὔτε ἕτερος ἑτέρου. οὐ γὰρ ἐστὶν ἕτερος ἑτέρου μᾶλλον ἄνθρωπος, ὥσπερ [4a] τὸ λευκόν ἐστὶν ἕτερον ἑτέρου μᾶλλον λευκόν, καὶ καλὸν ἕτερον ἑτέρου μᾶλλον· καὶ αὐτὸ δὲ αὐτοῦ μᾶλλον καὶ ἥττον λέγεται, οἶον τὸ σῶμα λευκὸν ὃν μᾶλλον λευκὸν λέγεται νῦν ἢ πρότερον, καὶ θερμὸν ὃν μᾶλλον θερμὸν καὶ ἥττον λέγεται· ἡ δέ γε οὐσία οὐδὲν λέγεται, — οὐδὲ γὰρ ἄνθρωπος μᾶλλον νῦν ἄνθρωπος ἢ πρότερον λέγεται, οὐδὲ τῶν ἄλλων οὐδέν, ὅσα ἐστὶν οὐσία· — ὥστε οὐκ ἂν ἐπιδέχοιτο ἡ οὐσία τὸ μᾶλλον καὶ ἥττον.

Μάλιστα δὲ ἴδιον τῆς οὐσίας δοκεῖ εἶναι τὸ ταῦτόν καὶ ἐν ἀριθμῷ ὄν τῶν ἐναντίων εἶναι δεκτικόν· οἷον ἐπὶ μὲν τῶν ἄλλων οὐδενὸς ἂν ἔχοι τις προενεγκεῖν [ὅσα μὴ ἐστὶν οὐσία], ὃ ἐν ἀριθμῷ ὄν τῶν ἐναντίων δεκτικόν ἐστίν· οἷον τὸ χρῶμα, ὃ ἐστὶν ἐν καὶ ταῦτόν ἀριθμῷ, οὐκ ἔσται λευκὸν καὶ μέλαν, οὐδὲ ἡ αὐτὴ πρᾶξις καὶ μία τῷ ἀριθμῷ οὐκ ἔσται φαύλη καὶ σπουδαία, ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων, ὅσα μὴ ἐστὶν οὐσία. ἡ δέ γε οὐσία ἐν καὶ ταῦτόν ἀριθμῷ ὄν δεκτικὸν τῶν ἐναντίων ἐστίν· οἷον ὁ τις ἄνθρωπος, εἷς καὶ ὁ αὐτὸς ὢν, ὅτε μὲν λευκὸς ὅτε δὲ μέλας γίνεταί, καὶ θερμὸς καὶ ψυχρὸς, καὶ φαῦλος καὶ σπουδαῖος. ἐπὶ δὲ τῶν ἄλλων οὐδενὸς φαίνεται τὸ τοιοῦτον, εἰ μὴ τις ἐνίσταται τὸν λόγον καὶ τὴν δόξαν φάσκων τῶν τοιούτων εἶναι· ὁ γὰρ αὐτὸς λόγος ἀληθῆς τε καὶ ψευδὴς εἶναι δοκεῖ, οἷον εἰ ἀληθὴς εἴη ὁ λόγος τὸ καθῆσθαι τινα, ἀναστάντος αὐτοῦ ὁ αὐτὸς οὗτος ψευδὴς ἔσται· ὡσαύτως δὲ καὶ ἐπὶ τῆς δόξης· εἰ γὰρ τις ἀληθῶς δοξάζει τὸ καθῆσθαι τινα, ἀναστάντος αὐτοῦ ψευδῶς δοξάσει τὴν αὐτὴν ἔχων περὶ αὐτοῦ δόξαν. εἰ δέ τις καὶ τοῦτο παραδέχοιτο, ἀλλὰ τῷ γε τρόπῳ διαφέρει· τὰ μὲν γὰρ ἐπὶ τῶν οὐσιῶν αὐτὰ μεταβάλλοντα δεκτικὰ τῶν ἐναντίων ἐστίν, — ψυχρὸν γὰρ ἐκ θερμοῦ γενόμενον μετέβαλεν (ἡλλοίωται γάρ), καὶ μέλαν ἐκ λευκοῦ καὶ σπουδαῖον ἐκ φαύλου, ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων ἕκαστον αὐτὸ μεταβολὴν δεχόμενον τῶν ἐναντίων δεκτικόν ἐστίν· — ὁ δὲ λόγος καὶ ἡ δόξα αὐτὰ μὲν ἀκίνητα πάντῃ πάντως διαμένει, τοῦ δὲ πράγματος κινουμένου τὸ ἐναντίον περὶ αὐτὰ γίνεταί· ὁ μὲν γὰρ λόγος διαμένει ὁ αὐτὸς τὸ καθῆσθαι τινα, τοῦ δὲ [4b] πράγματος κινήθεντος ὅτε μὲν ἀληθὴς ὅτε δὲ ψευδὴς γίνεταί· ὡσαύτως δὲ καὶ ἐπὶ τῆς δόξης. ὥστε τῷ τρόπῳ γε ἴδιον ἂν εἴη τῆς οὐσίας τὸ κατὰ τὴν αὐτῆς μεταβολὴν δεκτικὴν τῶν ἐναντίων εἶναι, — εἰ δὲ τις καὶ ταῦτα παραδέχοιτο, τὴν δόξαν καὶ τὸν λόγον δεκτικὰ τῶν ἐναντίων εἶναι. οὐκ ἔστι δὲ ἀληθὲς τοῦτο· ὁ γὰρ λόγος καὶ ἡ δόξα οὐ τῷ αὐτὰ δέχεσθαι τι τῶν ἐναντίων εἶναι δεκτικὰ λέγεται, ἀλλὰ τῷ περὶ ἕτερόν τι τὸ πάθος γεγενῆσθαι· — τῷ γὰρ τὸ πρᾶγμα εἶναι ἢ μὴ εἶναι, τούτῳ καὶ ὁ λόγος ἀληθὴς ἢ ψευδὴς εἶναι λέγεται, οὐ τῷ αὐτὸν δεκτικὸν εἶναι τῶν ἐναντίων· ἀπλῶς γὰρ οὐδὲν ὑπ’ οὐδενὸς οὔτε ὁ λόγος κινεῖται οὔτε ἡ δόξα, ὥστε οὐκ ἂν εἴη δεκτικὰ τῶν ἐναντίων μηδενὸς ἐν αὐτοῖς γιγνομένου· — ἡ δέ γε οὐσία τῷ αὐτὴν τὰ ἐναντία δέχεσθαι, τούτῳ δεκτικὴ τῶν ἐναντίων λέγεται· νόσον γὰρ καὶ ὑγίειαν δέχεται, καὶ λευκότητα καὶ μελανίαν, καὶ ἕκαστον τῶν τοιούτων αὐτὴ δεχομένη τῶν ἐναντίων εἶναι δεκτικὴ λέγεται. ὥστε ἴδιον ἂν οὐσίας εἴη τὸ ταῦτόν καὶ ἐν ἀριθμῷ ὄν δεκτικὸν εἶναι τῶν ἐναντίων. περὶ μὲν οὖν οὐσίας τοσαῦτα εἰρήσθω.

## Κεφάλαιο 6



Τοῦ δὲ ποσοῦ τὸ μὲν ἐστὶ διωρισμένον, τὸ δὲ συνεχές· καὶ τὸ μὲν ἐκ θέσιν ἐχόντων πρὸς ἄλληλα τῶν ἐν αὐτοῖς μορίων συνέστηκε, τὸ δὲ οὐκ ἐξ ἐχόντων θέσιν. ἔστι δὲ διωρισμένον μὲν οἶον ἀριθμὸς καὶ λόγος, συνεχές δὲ γραμμὴ, ἐπιφάνεια, σῶμα, ἔτι δὲ παρὰ ταῦτα χρόνος καὶ τόπος. — τῶν μὲν γὰρ τοῦ ἀριθμοῦ μορίων οὐδεὶς ἐστὶ κοινὸς ὅρος, πρὸς ὃν συνάπτει τὰ μόρια αὐτοῦ· οἶον τὰ πέντε εἰ ἔστι τῶν δέκα μόριον, πρὸς οὐδένα κοινὸν ὅρον συνάπτει τὰ πέντε καὶ τὰ πέντε, ἀλλὰ διώρισται· καὶ τὰ τρία γε καὶ τὰ ἑπτὰ πρὸς οὐδένα κοινὸν ὅρον συνάπτει· οὐδ’ ὅλως ἂν ἔχοις ἐπ’ ἀριθμοῦ λαβεῖν κοινὸν ὅρον τῶν μορίων, ἀλλ’ ἀεὶ διώρισται· ὥστε ὁ μὲν ἀριθμὸς τῶν διωρισμένων ἐστίν. ὡσαύτως δὲ καὶ ὁ λόγος τῶν διωρισμένων ἐστίν· (ὅτι μὲν γὰρ ποσὸν ἐστὶν ὁ λόγος φανερόν· καταμετρεῖται γὰρ συλλαβῇ μακρᾷ καὶ βραχείᾳ· λέγω δὲ αὐτὸν τὸν μετὰ φωνῆς λόγον γιγνόμενον)· πρὸς οὐδένα γὰρ κοινὸν ὅρον αὐτοῦ τὰ μόρια συνάπτει· οὐ γὰρ ἔστι κοινὸς ὅρος πρὸς ὃν αἱ συλλαβαὶ συνάπτουσιν, ἀλλ’ ἐκάστη διώρισται αὐτὴ καθ’ αὐτήν. [5a] — ἡ δὲ γραμμὴ συνεχές ἐστίν· ἔστι γὰρ λαβεῖν κοινὸν ὅρον πρὸς ὃν τὰ μόρια αὐτῆς συνάπτει, στιγμὴν· καὶ τῆς ἐπιφανείας γραμμῆν, — τὰ γὰρ τοῦ ἐπιπέδου μόρια πρὸς τινα κοινὸν ὅρον συνάπτει. — ὡσαύτως δὲ καὶ ἐπὶ τοῦ σώματος ἔχοις ἂν λαβεῖν κοινὸν ὅρον, γραμμὴν ἢ ἐπιφάνειαν, πρὸς ἣν τὰ τοῦ σώματος μόρια συνάπτει. ἔστι δὲ καὶ ὁ χρόνος καὶ ὁ τόπος τῶν τοιούτων· ὁ γὰρ νῦν χρόνος συνάπτει πρὸς τε τὸν παρεληλυθότα καὶ τὸν μέλλοντα. πάλιν ὁ τόπος τῶν συνεχῶν ἐστίν· τόπον γάρ τινα τὰ τοῦ σώματος μόρια κατέχει, ἃ πρὸς τινα κοινὸν ὅρον συνάπτει· οὐκοῦν καὶ τὰ τοῦ τόπου μόρια, ἃ κατέχει ἕκαστον τῶν τοῦ σώματος μορίων, πρὸς τὸν αὐτὸν ὅρον συνάπτει πρὸς ὃν καὶ τὰ τοῦ σώματος — τὸς μόρια· ὥστε συνεχές ἂν εἴη καὶ ὁ τόπος· πρὸς γὰρ ἓνα κοινὸν ὅρον αὐτοῦ τὰ μόρια συνάπτει.

Ἔτι τὰ μὲν ἐκ θέσιν ἐχόντων πρὸς ἄλληλα τῶν ἐν αὐτοῖς μορίων συνέστηκεν, τὰ δὲ οὐκ ἐξ ἐχόντων θέσιν· οἶον τὰ μὲν τῆς γραμμῆς μόρια θέσιν ἔχει πρὸς ἄλληλα, — ἕκαστον γὰρ αὐτῶν κεῖται που, καὶ ἔχοις ἂν διαλαβεῖν καὶ ἀποδοῦναι οὐ ἕκαστον κεῖται ἐν τῷ ἐπιπέδῳ καὶ πρὸς ποῖον μόριον τῶν λοιπῶν συνάπτει· — ὡσαύτως δὲ καὶ τὰ τοῦ ἐπιπέδου μόρια θέσιν ἔχει τινά, — ὁμοίως γὰρ ἂν ἀποδοθῇ ἕκαστον οὐ κεῖται, καὶ ποῖα συνάπτει πρὸς ἄλληλα. — καὶ τὰ τοῦ στερεοῦ δὲ ὡσαύτως καὶ τὰ τοῦ τόπου. ἐπὶ δέ γε τοῦ ἀριθμοῦ οὐκ ἂν ἔχοι τις ἐπιβλέψαι ὡς τὰ μόρια θέσιν τινὰ ἔχει πρὸς ἄλληλα ἢ κεῖται που, ἢ ποῖα γε πρὸς ἄλληλα συνάπτει τῶν μορίων· οὐδὲ τὰ τοῦ χρόνου· ὑπομένει γὰρ οὐδὲν τῶν τοῦ χρόνου μορίων, ὃ δὲ μή ἐστὶν ὑπομένον, πῶς ἂν τοῦτο θέσιν τινὰ ἔχοι; ἀλλὰ μᾶλλον τάξιν τινὰ εἵποις ἂν ἔχειν τῷ τὸ μὲν πρότερον εἶναι τοῦ χρόνου τὸ δ’ ὕστερον. καὶ ἐπὶ τοῦ ἀριθμοῦ δὲ ὡσαύτως, τῷ πρότερον ἀριθμεῖσθαι τὸ ἐν τῶν δύο καὶ τὰ δύο τῶν τριῶν· καὶ

οὕτω τάξιν ἄν τινα ἔχοι, θέσιν δὲ οὐ πάνυ λάβοις ἄν. καὶ ὁ λόγος δὲ ὡσαύτως· οὐδὲν γὰρ ὑπομένει τῶν μορίων αὐτοῦ, ἀλλ' εἴρηταί τε καὶ οὐκ ἔστιν ἔτι τοῦτο λαβεῖν, ὥστε οὐκ ἄν εἴη θέσις τῶν μορίων αὐτοῦ, εἶγε μηδὲν ὑπομένει. — τὰ μὲν οὖν ἐκ θέσιν ἐχόντων τῶν μορίων συνέστηκε, τὰ δὲ οὐκ ἐξ ἐχόντων θέσιν.

Κυρίως δὲ ποσὰ ταῦτα μόνα λέγεται τὰ εἰρημένα, τὰ δὲ ἄλλα πάντα κατὰ συμβεβηκός· εἰς ταῦτα γὰρ [5b] βλέποντες καὶ τὰλλα ποσὰ λέγομεν, οἷον πολὺ τὸ λευκὸν λέγεται τῷ τὴν ἐπιφάνειαν πολλὴν εἶναι, καὶ ἡ πρᾶξις μακρὰ τῷ γε τὸν χρόνον πολὺν εἶναι, καὶ ἡ κίνησις πολλή· οὐ γάρ καθ' αὐτὸ ἕκαστον τούτων ποσὸν λέγεται· οἷον ἐὰν ἀποδιδῶ τις πόση τις ἡ πρᾶξις ἐστὶ, τῷ χρόνῳ ὀριεῖ ἐνιαυσίαν ἢ οὕτω πῶς ἀποδιδούς, καὶ τὸ λευκὸν ποσὸν τι ἀποδιδούς τῇ ἐπιφανείᾳ ὀριεῖ, — ὅση γὰρ ἄν ἡ ἐπιφάνεια ἦ, τοσοῦτον καὶ τὸ λευκὸν φήσεται εἶναι. — ὥστε μόνα κυρίως καὶ καθ' αὐτὰ ποσὰ λέγεται τὰ εἰρημένα, τῶν δὲ ἄλλων οὐδὲν αὐτὸ καθ' αὐτό, ἀλλ' εἰ ἄρα κατὰ συμβεβηκός.

Ἔτι τῷ ποσῷ οὐδὲν ἐστὶν ἐναντίον, (ἐπὶ μὲν γὰρ τῶν ἀφωρισμένων φανερόν ὅτι οὐδὲν ἐστὶν ἐναντίον, οἷον τῷ διπῇχει ἢ τριπῇχει ἢ τῇ ἐπιφανείᾳ ἢ τῶν τοιούτων τινί, — οὐδὲν γὰρ ἐστὶν ἐναντίον), εἰ μὴ τὸ πολὺ τῷ ὀλίγῳ φαίη τις εἶναι ἐναντίον ἢ τὸ μέγα τῷ μικρῷ. τούτων δὲ οὐδὲν ἐστὶ ποσὸν ἀλλὰ τῶν πρὸς τι· οὐδὲν γὰρ αὐτὸ καθ' αὐτὸ μέγα λέγεται ἢ μικρόν, ἀλλὰ πρὸς ἕτερον ἀναφέρεται, οἷον ὄρος μὲν μικρὸν λέγεται, κέγχρος δὲ μεγάλῃ τῷ τὴν μὲν τῶν ὁμογενῶν μεῖζον εἶναι, τὸ δὲ ἔλαττον τῶν ὁμογενῶν· οὐκοῦν πρὸς ἕτερον ἢ ἀναφορά, ἐπεὶ εἶγε καθ' αὐτὸ μικρὸν ἢ μέγα ἐλέγετο, οὐκ ἄν ποτε τὸ μὲν ὄρος μικρὸν ἐλέγετο, ἢ δὲ κέγχρος μεγάλῃ. πάλιν ἐν μὲν τῇ κώμῃ πολλοὺς φάμεν ἀνθρώπους εἶναι, ἐν Ἀθήναις δὲ ὀλίγους πολλαπλασίους αὐτῶν ὄντας, καὶ ἐν μὲν τῇ οἰκίᾳ πολλοὺς, ἐν δὲ τῷ θεάτρῳ ὀλίγους πολλῷ πλείους ὄντας. — ἔτι τὸ μὲν δίπηχυ καὶ τρίπηχυ καὶ ἕκαστον τῶν τοιούτων ποσὸν σημαίνει, τὸ δὲ μέγα ἢ μικρὸν οὐ σημαίνει ποσὸν ἀλλὰ μᾶλλον πρὸς τι· πρὸς γὰρ ἕτερον θεωρεῖται τὸ μέγα καὶ τὸ μικρόν· ὥστε φανερόν ὅτι ταῦτα τῶν πρὸς τί ἐστὶν. — ἔτι ἐὰν τε τιθῇ τις αὐτὰ ποσὰ εἶναι ἐὰν τε μὴ τιθῇ, οὐκ ἔστιν αὐτοῖς ἐναντίον οὐδέν· ὃ γὰρ μὴ ἔστιν αὐτὸ καθ' αὐτὸ λαβεῖν ἀλλὰ πρὸς ἕτερον ἀναφέροντα, πῶς ἄν εἴη τούτῳ τι ἐναντίον; — ἔτι εἰ ἔσται τὸ μέγα καὶ τὸ μικρὸν ἐναντία, συμβήσεται τὸ αὐτὸ ἅμα τὰ ἐναντία ἐπιδέχεσθαι καὶ αὐτὰ αὐτοῖς εἶναι ἐναντία. συμβαίνει γὰρ ἅμα τὸ αὐτὸ μέγα τε καὶ μικρὸν εἶναι, — ἔστι γὰρ πρὸς μὲν τοῦτο μικρόν, πρὸς ἕτερον δὲ τὸ αὐτὸ τοῦτο μέγα· — ὥστε τὸ αὐτὸ καὶ μέγα καὶ μικρὸν κατὰ τὸν αὐτὸν χρόνον εἶναι συμβαίνει, ὥστε ἅμα τὰ ἐναντία ἐπιδέχεσθαι· ἀλλ' οὐδὲν δοκεῖ [6a] ἅμα τὰ ἐναντία

ἐπιδέχεσθαι· οἷον ἐπὶ τῆς οὐσίας, δεκτικὴ μὲν τῶν ἐναντίων δοκεῖ εἶναι, ἀλλ' οὔτι γε ἅμα νοσεῖ καὶ ὑγιαίνει, οὐδὲ λευκὸν καὶ μέλαν ἐστὶν ἅμα, οὐδὲ τῶν ἄλλων οὐδὲν ἅμα τὰ ἐναντία ἐπιδέχεται. καὶ αὐτὰ δ' αὐτοῖς συμβαίνει ἐναντία εἶναι· εἰ γὰρ ἐστὶ τὸ μέγα τῷ μικρῷ ἐναντίον, τὸ δ' αὐτό ἐστὶν ἅμα μέγα καὶ μικρόν, αὐτὸ αὐτῷ ἂν εἴη ἐναντίον· ἀλλὰ τῶν ἀδυνάτων ἐστὶν αὐτὸ αὐτῷ εἶναι ἐναντίον. — οὐκ ἔστιν ἄρα τὸ μέγα τῷ μικρῷ ἐναντίον, οὐδὲ τὸ πολὺ τῷ ὀλίγῳ, ὥστε κἂν μὴ τῶν πρὸς τι ταῦτά τις ἐρεῖ ἀλλὰ τοῦ ποσοῦ, οὐδὲν ἐναντίον ἔξει. — μάλιστα δὲ ἡ ἐναντιότης τοῦ ποσοῦ περὶ τὸν τόπον δοκεῖ ὑπάρχειν· τὸ γὰρ ἄνω τῷ κάτω ἐναντίον τιθέασι, τὴν πρὸς τὸ μέσον χώραν κάτω λέγοντες, διὰ τὸ πλείστην τῷ μέσῳ διάστασιν πρὸς τὰ πέρατα τοῦ κόσμου εἶναι. εἰκόασι δὲ καὶ τὸν τῶν ἄλλων ἐναντίων ὀρισμὸν ἀπὸ τούτων ἐπιφέρειν· τὰ γὰρ πλεῖστον ἀλλήλων διεστηκότα τῶν ἐν τῷ αὐτῷ γένει ἐναντία ὀρίζονται.

Οὐ δοκεῖ δὲ τὸ ποσὸν ἐπιδέχεσθαι τὸ μᾶλλον καὶ τὸ ἥττον, οἷον τὸ δίπηχυ, — οὐ γὰρ ἐστὶν ἕτερον ἑτέρου μᾶλλον δίπηχυ· — οὐδ' ἐπὶ τοῦ ἀριθμοῦ, οἷον τὰ τρία τῶν πέντε οὐδὲν μᾶλλον [πέντε ἢ] τρία λέγεται, οὐδὲ τὰ τρία τῶν τριῶν· οὐδέ γε ὁ χρόνος ἕτερος ἑτέρου μᾶλλον χρόνος λέγεται· οὐδ' ἐπὶ τῶν εἰρημένων ὅλως οὐδενὸς τὸ μᾶλλον καὶ τὸ ἥττον λέγεται· ὥστε τὸ ποσὸν οὐκ ἐπιδέχεται τὸ μᾶλλον καὶ τὸ ἥττον.

Ἴδιον δὲ μάλιστα τοῦ ποσοῦ τὸ ἴσον τε καὶ ἄνισον λέγεσθαι. ἕκαστον γὰρ τῶν εἰρημένων ποσῶν καὶ ἴσον καὶ ἄνισον λέγεται, οἷον σῶμα καὶ ἴσον καὶ ἄνισον λέγεται, καὶ ἀριθμὸς καὶ ἴσος καὶ ἄνισος λέγεται, καὶ χρόνος καὶ ἴσος καὶ ἄνισος· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν ῥηθέντων ἕκαστον ἴσον τε καὶ ἄνισον λέγεται. τῶν δὲ λοιπῶν ὅσα μὴ ἐστὶ ποσόν, οὐ πάνυ ἂν δόξαι ἴσον τε καὶ ἄνισον λέγεσθαι, οἷον ἡ διάθεσις ἴση τε καὶ ἄνισος οὐ πάνυ λέγεται ἀλλὰ μᾶλλον ὁμοία, καὶ τὸ λευκὸν ἴσον τε καὶ ἄνισον οὐ πάνυ, ἀλλ' ὅμοιον. ὥστε τοῦ ποσοῦ μάλιστα ἂν εἴη ἴδιον τὸ ἴσον τε καὶ ἄνισον λέγεσθαι.

## Κεφάλαιο 7

Πρός τι δὲ τὰ τοιαῦτα λέγεται, ὅσα αὐτὰ ἄπερ ἐστὶν ἐτέρων εἶναι λέγεται ἢ ὁπωσοῦν ἄλλως πρὸς ἕτερον· οἷον τὸ μείζον τοῦθ' ὅπερ ἐστὶν ἐτέρου λέγεται, — τινὸς γὰρ μείζον λέγεται, — καὶ τὸ διπλάσιον ἐτέρου λέγεται τοῦθ' ὅπερ [6b] ἐστίν, — τινὸς γὰρ διπλάσιον λέγεται· — ὡσαύτως δὲ καὶ ὅσα ἄλλα τοιαῦτα. ἔστι δὲ καὶ τὰ τοιαῦτα τῶν πρὸς τι οἷον ἕξις, διάθεσις, αἴσθησις, ἐπιστήμη, θέσις· πάντα γὰρ τὰ εἰρημένα τοῦθ' ὅπερ ἐστὶν ἐτέρων λέγεται καὶ οὐκ ἄλλο τι· ἢ γὰρ ἕξις τινὸς ἕξις λέγεται καὶ ἢ ἐπιστήμη τινὸς ἐπιστήμη καὶ ἢ θέσις τινὸς θέσις, καὶ τὰ ἄλλα δὲ ὡσαύτως. πρὸς τι οὖν ἐστὶν ὅσα αὐτὰ ἄπερ ἐστὶν ἐτέρων λέγεται, ἢ ὁπωσοῦν ἄλλως πρὸς ἕτερον· οἷον ὅρος μέγα λέγεται πρὸς ἕτερον, — πρὸς τι γὰρ μέγα λέγεται τὸ ὅρος, — καὶ τὸ ὅμοιον τινὶ ὅμοιον λέγεται, καὶ τὰ ἄλλα δὲ τὰ τοιαῦτα ὡσαύτως πρὸς τι λέγεται. ἔστι δὲ καὶ ἡ ἀνάκλισις καὶ ἡ στάσις καὶ ἡ καθέδρα θέσεις τινές, ἢ δὲ θέσις τῶν πρὸς τι· τὸ δὲ ἀνακε<κλ>ίσθαι ἢ ἐστάναι ἢ καθῆσθαι αὐτὰ μὲν οὐκ εἰσὶ θέσεις, παρωνύμως δὲ ἀπὸ τῶν εἰρημένων θέσεων λέγεται.

Ὑπάρχει δὲ καὶ ἐναντιότης ἐν τοῖς πρὸς τι, οἷον ἀρετὴ κακία ἐναντίον, ἐκάτερον αὐτῶν πρὸς τι ὄν, καὶ ἐπιστήμη ἀγνοία. οὐ πᾶσι δὲ τοῖς πρὸς τι ὑπάρχει ἐναντίον· τῷ γὰρ διπλασίῳ οὐδὲν ἐστὶν ἐναντίον οὐδὲ τῷ τριπλασίῳ οὐδὲ τῶν τοιούτων οὐδενί. — δοκεῖ δὲ καὶ τὸ μᾶλλον καὶ τὸ ἥττον ἐπιδέχεσθαι τὰ πρὸς τι· ὅμοιον γὰρ μᾶλλον καὶ ἥττον λέγεται, καὶ ἄνισον μᾶλλον καὶ ἥττον λέγεται, ἐκάτερον αὐτῶν πρὸς τι ὄν· τό τε γὰρ ὅμοιον τινὶ ὅμοιον λέγεται καὶ τὸ ἄνισον τινὶ ἄνισον. οὐ πάντα δὲ ἐπιδέχεται τὸ μᾶλλον καὶ ἥττον· τὸ γὰρ διπλάσιον οὐ λέγεται μᾶλλον καὶ ἥττον διπλάσιον οὐδὲ τῶν τοιούτων οὐδέν.

Πάντα δὲ τὰ πρὸς τι πρὸς ἀντιστρέφοντα λέγεται, οἷον ὁ δοῦλος δεσπότης λέγεται, καὶ ὁ δεσπότης δούλου δεσπότης λέγεται, καὶ τὸ διπλάσιον ἡμίσεος διπλάσιον καὶ τὸ ἥμισυ διπλασίου ἥμισυ, καὶ τὸ μείζον ἐλάττωνος μείζον καὶ τὸ ἐλάττων μείζονος ἐλάττων· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων· πλὴν τῇ πτώσει ἐνίοτε διοίσει κατὰ τὴν λέξιν, οἷον ἢ ἐπιστήμη ἐπιστητοῦ λέγεται ἐπιστήμη καὶ τὸ ἐπιστητὸν ἐπιστήμη ἐπιστητόν, καὶ ἢ αἴσθησις αἰσθητοῦ αἴσθησις καὶ τὸ αἰσθητὸν αἰσθήσει αἰσθητόν. οὐ μὴν ἄλλ' ἐνίοτε οὐ δόξει ἀντιστρέφειν, ἐὰν μὴ οἰκείως πρὸς ὃ λέγεται ἀποδοθῇ ἀλλὰ διαμάρτη ὁ ἀποδιδούς· οἷον τὸ πτερὸν ἐὰν ἀποδοθῇ ὄρνιθος, οὐκ ἀντιστρέφει ὄρνις πτεροῦ· οὐ γὰρ οἰκείως τὸ [7a] πρῶτον ἀποδέδοται πτερὸν ὄρνιθος, — οὐ γὰρ ἢ ὄρνις, ταύτῃ τὸ πτερὸν αὐτῆς λέγεται, ἀλλ' ἢ πτερωτόν

ἐστίν· πολλῶν γὰρ καὶ ἄλλων πτερὰ ἐστίν ἃ οὐκ εἰσὶν ὄρνιθες· — ὥστε ἐὰν ἀποδοθῇ οἰκείως, καὶ ἀντιστρέφει, οἷον τὸ πτερὸν πτερωτοῦ πτερὸν καὶ τὸ πτερωτὸν πτερῶ πτερωτόν. — ἐνίστε δὲ καὶ ὀνοματοποιεῖν ἴσως ἀναγκαῖον, ἐὰν μὴ κείμενον ἢ ὄνομα πρὸς ὃ οἰκείως ἂν ἀποδοθῇ· οἷον τὸ πηδάλιον πλοίου ἐὰν ἀπο — δοθῇ, οὐκ οἰκεία ἢ ἀπόδοσις, — οὐ γὰρ ἢ πλοῖον ταύτη αὐτοῦ τὸ πηδάλιον λέγεται· ἔστι γὰρ πλοῖα ὧν οὐκ ἔστι πηδάλια· — διὸ οὐκ ἀντιστρέφει· τὸ γὰρ πλοῖον οὐ λέγεται πηδαλίου πλοῖον. ἀλλ' ἴσως οἰκειότερα ἂν ἢ ἀπόδοσις εἴη, εἰ οὕτω πως ἀποδοθῇ τὸ πηδάλιον πηδαλιωτοῦ πηδάλιον ἢ ὁπωσοῦν ἄλλως, — ὄνομα γὰρ οὐ κεῖται· — καὶ ἀντιστρέφει γε, ἐὰν οἰκείως ἀποδοθῇ· τὸ γὰρ πηδαλιωτὸν πηδαλίῳ πηδαλιωτόν. ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων, οἷον ἢ κεφαλὴ οἰκειότερως ἂν ἀποδοθῇ κεφαλωτοῦ ἢ ζώου ἀποδιδομένη· οὐ γὰρ ἢ ζῶον κεφαλὴν ἔχει· πολλὰ γὰρ τῶν ζώων κεφαλὴν οὐκ ἔχει. οὕτω δὲ ῥᾶστα ἂν ἴσως τις λαμβάνοι οἷς μὴ κεῖται ὀνόματα, εἰ ἀπὸ τῶν πρώτων καὶ τοῖς πρὸς αὐτὰ ἀντιστρέφουσι τιθεῖ τὰ ὀνόματα, ὡς περ ἐπὶ τῶν προειρημένων ἀπὸ τοῦ πτεροῦ τὸ πτερωτὸν καὶ ἀπὸ τοῦ πηδαλίου τὸ πηδαλιωτόν. πάντα οὖν τὰ πρὸς τι, ἐάνπερ οἰκείως ἀποδιδῶται, πρὸς ἀντιστρέφοντα λέγεται· ἐπεὶ, ἐάν γε πρὸς τὸ τυχὸν ἀποδιδῶται καὶ μὴ πρὸς αὐτὸ ὃ λέγεται, οὐκ ἀντιστρέφει. — λέγω δὲ ὅτι οὐδὲ τῶν ὁμολογουμένων πρὸς ἀντιστρέφοντα λεγομένων καὶ ὀνομάτων αὐτοῖς κειμένων οὐδὲν ἀντιστρέφει, ἐὰν πρὸς τι τῶν συμβεβηκότων ἀποδιδῶται καὶ μὴ πρὸς αὐτὸ ὃ λέγεται· οἷον ὁ δοῦλος ἐὰν μὴ δεσπότου ἀποδοθῇ ἀλλ' ἀνθρώπου ἢ δίποδος ἢ ὅτουοῦν τῶν τοιούτων, οὐκ ἀντιστρέφει· οὐ γὰρ οἰκεία ἢ ἀπόδοσις. — ἔτι ἐὰν μὲν οἰκείως ἀποδεδομένον ἢ πρὸς ὃ λέγεται, πάντων περιαιρουμένων τῶν ἄλλων ὅσα συμβεβηκότα ἐστίν, καταλειπομένου δὲ τούτου μόνου πρὸς ὃ ἀπεδόθη οἰκείως, ἀεὶ πρὸς αὐτὸ ῥηθήσεται· οἷον εἰ ὁ δοῦλος πρὸς δεσπότην λέγεται, περιαιρουμένων ἀπάντων ὅσα συμβεβηκότα ἐστὶ τῷ δεσπότη, οἷον τὸ δίποδι εἶναι, τὸ ἐπιστήμης δεκτικῶ, τὸ ἀνθρώπῳ, καταλειπο — μένου δὲ μόνου τοῦ δεσπότην εἶναι, ἀεὶ ὁ δοῦλος πρὸς αὐτὸ ῥηθήσεται· ὁ γὰρ δοῦλος δεσπότου δοῦλος [7b] λέγεται. ἐὰν δέ γε μὴ οἰκείως ἀποδοθῇ πρὸς ὃ ποτε λέγεται, περιαιρουμένων μὲν τῶν ἄλλων καταλειπομένου δὲ μόνου τοῦ πρὸς ὃ ἀπεδόθη, οὐ ῥηθήσεται πρὸς αὐτό· ἀποδεδόσθω γὰρ ὁ δοῦλος ἀνθρώπου καὶ τὸ πτερὸν ὄρνιθος, καὶ περιηρήσθω τοῦ ἀνθρώπου τὸ δεσπότη αὐτῷ εἶναι· οὐ γὰρ ἔτι ὁ δοῦλος πρὸς ἄνθρωπον ῥηθήσεται, — μὴ γὰρ ὄντος δεσπότου οὐδὲ δοῦλός ἐστιν· — ὡσαύτως δὲ καὶ τοῦ ὄρνιθος περιηρήσθω τὸ πτερωτῷ εἶναι· οὐ γὰρ ἔτι ἔσται τὸ πτερὸν τῶν πρὸς τι· μὴ γὰρ ὄντος πτερωτοῦ οὐδὲ πτερὸν ἔσται τινός. — ὥστε δεῖ μὲν ἀποδιδόναι πρὸς ὃ ποτε οἰκείως λέγεται· κἂν μὲν ὄνομα ἢ κείμενον ῥαδία ἢ ἀπόδοσις γίγνεται, μὴ ὄντος δὲ ἀναγκαῖον ἴσως ὀνοματοποιεῖν. οὕτω δὲ ἀποδιδομένων φανερόν ὅτι πάντα τὰ πρὸς τι πρὸς ἀντιστρέφοντα ῥηθήσεται.

Δοκεῖ δὲ τὰ πρὸς τι ἅμα τῇ φύσει εἶναι. καὶ ἐπὶ μὲν τῶν πλείστων ἀληθές ἐστιν· ἅμα γὰρ διπλάσιόν τέ ἐστι καὶ ἡμισυ, καὶ ἡμίσεος ὄντος διπλάσιόν ἐστιν, καὶ δούλου ὄντος δεσπότης ἐστίν· ὁμοίως δὲ τούτοις καὶ τὰ ἄλλα. καὶ συναναιρεῖ δὲ ταῦτα ἄλληλα· μὴ γὰρ ὄντος διπλασίου οὐκ ἔστιν ἡμισυ, καὶ ἡμίσεος μὴ ὄντος οὐκ ἔστι διπλάσιον· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων ὅσα τοιαῦτα. — οὐκ ἐπὶ πάντων δὲ τῶν πρὸς τι ἀληθές δοκεῖ τὸ ἅμα τῇ φύσει εἶναι· τὸ γὰρ ἐπιστητὸν τῆς ἐπιστήμης πρότερον ἂν δόξειεν εἶναι· ὡς γὰρ ἐπὶ τὸ πολὺ προϋπαρχόντων τῶν πραγμάτων τὰς ἐπιστήμας λαμβάνομεν· ἐπ' ὀλίγων γὰρ ἢ ἐπ' οὐδενὸς ἴδοι τις ἂν ἅμα τῷ ἐπιστητῷ τὴν ἐπιστήμην γιγνομένην. ἔτι τὸ μὲν ἐπιστητὸν ἀναιρεθὲν συναναιρεῖ τὴν ἐπιστήμην, ἢ δὲ ἐπιστήμη τὸ ἐπιστητὸν οὐ συν — ἀναιρεῖ· ἐπιστητοῦ γὰρ μὴ ὄντος οὐκ ἔστιν ἐπιστήμη, — οὐδενὸς γὰρ ἔτι ἔσται ἐπιστήμη, — ἐπιστήμης δὲ μὴ οὔσης οὐδὲν κωλύει ἐπιστητὸν εἶναι· οἷον καὶ ὁ τοῦ κύκλου τετραγωνισμὸς εἶγε ἔστιν ἐπιστητόν, ἐπιστήμη μὲν αὐτοῦ οὐκ ἔστιν οὐδέπω, αὐτὸ δὲ τὸ ἐπιστητὸν ἔστιν. ἔτι ζώου μὲν ἀναιρεθέντος οὐκ ἔστιν ἐπιστήμη, τῶν δ' ἐπιστητῶν πολλὰ ἐνδέχεται εἶναι. — ὁμοίως δὲ τούτοις καὶ τὰ ἐπὶ τῆς αἰσθήσεως ἔχει· τὸ γὰρ αἰσθητὸν πρότερον τῆς αἰσθήσεως δοκεῖ εἶναι· τὸ μὲν γὰρ αἰσθητὸν ἀναιρεθὲν συναναιρεῖ τὴν αἴσθησιν, ἢ δὲ αἴσθησις τὸ αἰσθητὸν οὐ συναναιρεῖ. αἰ γὰρ αἰσθήσεις περὶ σῶμα καὶ ἐν σώματί εἰσιν, αἰσθητοῦ δὲ ἀναιρεθέντος [8a] ἀνήρηται καὶ σῶμα, — τῶν γὰρ αἰσθητῶν καὶ τὸ σῶμα, — σώματος δὲ μὴ ὄντος ἀνήρηται καὶ ἡ αἴσθησις, ὥστε συναναιρεῖ τὸ αἰσθητὸν τὴν αἴσθησιν. ἢ δέ γε αἴσθησις τὸ αἰσθητὸν οὔ· ζώου γὰρ ἀναιρεθέντος αἴσθησις μὲν ἀνήρηται, αἰσθητὸν δὲ ἔσται, οἷον σῶμα, θερμόν, γλυκύ, πικρόν, καὶ τὰ ἄλλα πάντα ὅσα ἐστὶν αἰσθητά. ἔτι ἢ μὲν αἴσθησις ἅμα τῷ αἰσθητικῷ γίγνεται, — ἅμα γὰρ ζῶόν τε γίγνεται καὶ αἴσθησις, — τὸ δέ γε αἰσθητὸν ἔστι καὶ πρὸ τοῦ αἴσθησιν εἶναι, — πῦρ γὰρ καὶ ὕδωρ καὶ τὰ τοιαῦτα, ἐξ ὧν καὶ τὸ ζῶον συνίσταται, ἔστι καὶ πρὸ τοῦ ζῶον ὅλως εἶναι ἢ αἴσθησιν, — ὥστε πρότερον ἂν τῆς αἰσθήσεως τὸ αἰσθητὸν εἶναι δόξειεν.

Ἐχει δὲ ἀπορίαν πότερον οὐδεμία οὐσία τῶν πρὸς τι λέγεται, καθάπερ δοκεῖ, ἢ τοῦτο ἐνδέχεται κατὰ τινας τῶν δευτέρων οὐσιῶν. ἐπὶ μὲν γὰρ τῶν πρώτων οὐσιῶν ἀληθές ἐστιν· οὔτε γὰρ τὰ ὅλα οὔτε τὰ μέρη πρὸς τι λέγεται· ὁ γὰρ τις ἄνθρωπος οὐ λέγεται τινός τις ἄνθρωπος, οὐδὲ ὁ τις βοῦς τινός τις βοῦς· ὡσαύτως δὲ καὶ τὰ μέρη· ἢ γὰρ τις χεὶρ οὐ λέγεται τινός τις χεὶρ ἀλλὰ τινὸς χεὶρ, καὶ ἢ τις κεφαλὴ οὐ λέγεται τινός τις κεφαλὴ ἀλλὰ τινὸς κεφαλὴ. ὡσαύτως δὲ καὶ ἐπὶ τῶν δευτέρων οὐσιῶν, ἐπὶ γε τῶν πλείστων· οἷον ὁ ἄνθρωπος οὐ λέγεται τινὸς ἄνθρωπος, οὐδὲ ὁ βοῦς τινὸς βοῦς, οὐδὲ τὸ ξύλον τινὸς ξύλον, ἀλλὰ τινὸς κτῆμα λέγεται. ἐπὶ μὲν οὖν τῶν τοιούτων φανερόν ὅτι οὐκ ἔστι τῶν πρὸς τι, ἐπ' ἐνίων δὲ τῶν δευτέρων οὐσιῶν ἔχει

ἀμφισβήτησιν· οἶον ἢ κεφαλὴ τινὸς λέγεται κεφαλὴ καὶ ἡ χεὶρ τινὸς λέγεται χεὶρ καὶ ἕκαστον τῶν τοιούτων, ὥστε ταῦτα τῶν πρὸς τι δόξειεν ἂν εἶναι. — εἰ μὲν οὖν ἱκανῶς ὁ τῶν πρὸς τι ὀρισμὸς ἀποδέδοται, ἢ τῶν πάνυ χαλεπῶν ἢ τῶν ἀδυνάτων ἐστὶ τὸ λῦσαι ὡς οὐδεμία οὐσία τῶν πρὸς τι λέγεται· εἰ δὲ μὴ ἱκανῶς, ἀλλ’ ἔστι τὰ πρὸς τι οἷς τὸ εἶναι ταῦτόν ἐστι τῷ πρὸς τί πως ἔχειν, ἴσως ἂν ῥηθεῖη τι πρὸς αὐτά. ὁ δὲ πρότερος ὀρισμὸς παρακολουθεῖ μὲν πᾶσι τοῖς πρὸς τι, οὐ μὴν τοῦτο γέ ἐστι τὸ πρὸς τι αὐτοῖς εἶναι τὸ αὐτὰ ἅπερ ἐστὶν ἐτέρων λέγεσθαι. ἐκ δὲ τούτων δῆλόν ἐστιν ὅτι ἐάν τις εἰδῇ τι ὠρισμένως τῶν πρὸς τι, κάκεῖνο πρὸς ὃ λέγεται ὠρισμένως εἴσεται. φανερόν μὲν οὖν καὶ ἐξ αὐτοῦ ἐστίν· εἰ γὰρ οἶδέ τις τόδε τι ὅτι τῶν πρὸς τί ἐστίν, ἔστι δὲ τὸ εἶναι τοῖς πρὸς τι ταῦτό τῷ [8b] πρὸς τί πως ἔχειν, κάκεῖνο οἶδε πρὸς ὃ τοῦτο πως ἔχει· εἰ γὰρ οὐκ οἶδεν ὅλως πρὸς ὃ τοῦτο πως ἔχει, οὐδ’ εἰ πρὸς τί πως ἔχει εἴσεται. καὶ ἐπὶ τῶν καθ’ ἕκαστα δὲ δῆλον τὸ τοιοῦτον· οἶον τόδε τι εἰ οἶδεν ἀφωρισμένως ὅτι ἔστι διπλάσιον, καὶ ὅτου διπλάσιόν ἐστιν εὐθύς ἀφωρισμένως οἶδεν, — εἰ γὰρ μηδενὸς τῶν ἀφωρισμένων οἶδεν αὐτὸ διπλάσιον, οὐδ’ εἰ ἔστι διπλάσιον ὅλως οἶδεν· — ὡσαύτως δὲ καὶ τόδε τι εἰ οἶδεν ὅτι κάλλιόν ἐστι, καὶ ὅτου κάλλιόν ἐστιν ἀφωρισμένως ἀναγκαῖον εἰδέναι διὰ ταῦτα, (οὐκ ἀορίστως δὲ εἴσεται ὅτι τοῦτο ἐστὶ χείρονος κάλλιον· ὑπόληψις γὰρ τὸ τοιοῦτο γίνεται, οὐκ ἐπιστήμη· οὐ γὰρ ἔτι εἴσεται ἀκριβῶς ὅτι ἐστὶ χείρονος κάλλιον· εἰ γὰρ οὕτως ἔτυχεν, οὐδέν ἐστι χεῖρον αὐτοῦ)· ὥστε φανερόν ὅτι ἀναγκαῖόν ἐστιν, ὃ ἂν εἰδῇ τις τῶν πρὸς τι ὠρισμένως, κάκεῖνο πρὸς ὃ λέγεται ὠρισμένως εἰδέναι. τὴν δέ γε κεφαλὴν καὶ τὴν χεῖρα καὶ ἕκαστον τῶν τοιούτων αἱ εἰσιν οὐσίαι αὐτὸ μὲν ὅπερ ἐστὶν ὠρισμένως ἔστιν εἰδέναι, πρὸς ὃ δὲ λέγεται οὐκ ἀναγκαῖον· τίνος γὰρ αὕτη ἢ κεφαλὴ ἢ τίνος ἢ χεὶρ οὐκ ἔστιν εἰδέναι ὠρισμένως· ὥστε οὐκ ἂν εἴη ταῦτα τῶν πρὸς τι· εἰ δὲ μὴ ἐστὶ τῶν πρὸς τι, ἀληθὲς ἂν εἴη λέγειν ὅτι οὐδεμία οὐσία τῶν πρὸς τί ἐστίν. ἴσως δὲ χαλεπὸν περὶ τῶν τοιούτων σφοδρῶς ἀποφαίνεσθαι μὴ πολλάκις ἐπεσκεμμένον, τὸ μέντοι διηπορηκέναι ἐφ’ ἕκαστον αὐτῶν οὐκ ἄχρηστόν ἐστιν.

## Κεφάλαιο 8

Ποιότητα δὲ λέγω καθ’ ἣν ποιοὶ τινες λέγονται· ἔστι δὲ ἡ ποιότης τῶν πλεοναχῶς λεγομένων. ἔν μὲν οὖν εἶδος ποιότητος ἕξις καὶ διάθεσις λεγέσθωσαν. διαφέρει δὲ ἕξις διαθέσεως τῷ μονιμώτερον καὶ πολυχρονιώτερον εἶναι· τοιαῦται δὲ αἱ τε ἐπιστήμαι καὶ αἱ ἀρεταί· ἢ τε γὰρ ἐπιστήμη δοκεῖ τῶν παραμονίμων εἶναι καὶ δυσκινήτων, ἐὰν καὶ μετρίως τις ἐπιστήμην λάβῃ, ἐάνπερ μὴ μεγάλη μεταβολὴ γένηται ὑπὸ νόσου ἢ ἄλλου τινὸς τοιούτου· ὡσαύτως δὲ καὶ ἡ ἀρετή· οἶον ἡ δικαιοσύνη καὶ ἡ σωφροσύνη καὶ ἕκαστον

τῶν τοιούτων οὐκ εὐκίνητον δοκεῖ εἶναι οὐδ' εὐμετάβολον. διαθέσεις δὲ λέγονται ἅ ἐστιν εὐκίνητα καὶ ταχὺ μεταβάλλοντα, οἷον θερμότης καὶ κατάψυξις καὶ νόσος καὶ ὑγίεια καὶ ὅσα ἄλλα τοιαῦτα· διάκειται μὲν γὰρ πῶς κατὰ ταύτας ὁ ἄνθρωπος, ταχὺ δὲ μεταβάλλει ἐκ θερμοῦ ψυχρὸς γιγνόμενος καὶ ἐκ τοῦ ὑγιαίνειν εἰς τὸ νο[9a]σεῖν· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων, εἰ μὴ τις καὶ αὐ — τῶν τούτων τυγχάνοι διὰ χρόνου πλῆθος ἤδη πεφυσιωμένη καὶ ἀνίατος ἢ πάνυ δυσκίνητος οὕσα, ἣν ἂν τις ἴσως ἔξιν ἤδη προσαγορεύοι. φανερόν δὲ ὅτι ταῦτα βούλονται ἔξεις λέγειν ἅ ἐστι πολυχρονιώτερα καὶ δυσκίνητότερα· τοὺς γὰρ τῶν ἐπιστημῶν μὴ πάνυ κατέχοντας ἄλλ' εὐκινήτους ὄντας οὗ φασιν ἔξιν ἔχειν, καίτοι διάκεινται γέ πῶς κατὰ τὴν ἐπιστήμην ἢ χειρόν ἢ βέλτιον. ὥστε διαφέρει ἔξεις διαθέσεως τῷ τὸ μὲν εὐκίνητον εἶναι τὸ δὲ πολυχρονιώτερόν τε καὶ δυσκίνητότερον. — εἰσὶ δὲ αἱ μὲν ἔξεις καὶ διαθέσεις, αἱ δὲ διαθέσεις οὐκ ἐξ ἀνάγκης ἔξεις· οἱ μὲν γὰρ ἔξεις ἔχοντες καὶ διάκεινται πῶς κατὰ ταύτας, οἱ δὲ διακείμενοι οὐ πάντως καὶ ἔξιν ἔχουσιν.

Ἔτερον δὲ γένος ποιότητος καθ' ὃ πυκτικοὺς ἢ δρομικοὺς ἢ ὑγιεινοὺς ἢ νοσώδεις λέγομεν, καὶ ἀπλῶς ὅσα κατὰ δύναμιν φυσικὴν ἢ ἀδυναμίαν λέγεται. οὐ γὰρ τῷ διακεῖσθαι πῶς ἕκαστον τῶν τοιούτων λέγεται, ἀλλὰ τῷ δύναμιν ἔχειν φυσικὴν τοῦ ποιῆσαι τι ῥαδίως ἢ μηδὲν πάσχειν· οἷον πυκτικοὶ ἢ δρομικοὶ λέγονται οὐ τῷ διακεῖσθαι πῶς ἀλλὰ τῷ δύναμιν ἔχειν φυσικὴν τοῦ ποιῆσαι τι ῥαδίως, ὑγιεινοὶ δὲ λέγονται τῷ δύναμιν ἔχειν φυσικὴν τοῦ μηδὲν πάσχειν ὑπὸ τῶν τυχόντων ῥαδίως, νοσώδεις δὲ τῷ ἀδυναμίαν ἔχειν τοῦ μηδὲν πάσχειν. ὁμοίως δὲ τούτοις καὶ τὸ σκληρὸν καὶ τὸ μαλακὸν ἔχει· τὸ μὲν γὰρ σκληρὸν λέγεται τῷ δύναμιν ἔχειν τοῦ μὴ ῥαδίως διαιρεῖσθαι, τὸ δὲ μαλακὸν τῷ ἀδυναμίαν ἔχειν τοῦ αὐτοῦ τούτου.

Τρίτον δὲ γένος ποιότητος παθητικαὶ ποιότητες καὶ πάθη· ἔστι δὲ τὰ τοιάδε οἷον γλυκύτης τε καὶ πικρότης καὶ στρυφνότης καὶ πάντα τὰ τούτοις συγγενῆ, ἔτι δὲ θερμότης καὶ ψυχρότης καὶ λευκότης καὶ μελανία. ὅτι μὲν οὖν αὗ — ται ποιότητές εἰσιν φανερόν· τὰ γὰρ δεδεδεγμένα ποιά λέγεται κατ' αὐτάς· οἷον τὸ μέλι τῷ γλυκύτητι δεδέχθαι λέγεται γλυκύ, καὶ τὸ σῶμα λευκὸν τῷ λευκότητι δεδέχθαι· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων ἔχει. παθητικαὶ δὲ ποιότητες λέγονται οὐ τῷ αὐτὰ τὰ δεδεδεγμένα τὰς [9b] ποιότητος πεπονθέναι τι· οὔτε γὰρ τὸ μέλι τῷ πεπονθέναι τι λέγεται γλυκύ, οὔτε τῶν ἄλλων τῶν τοιούτων οὐδέν· ὁμοίως δὲ τούτοις καὶ ἡ θερμότης καὶ ἡ ψυχρότης παθητικαὶ ποιότητες λέγονται οὐ τῷ αὐτὰ τὰ δεδεδεγμένα πεπονθέναι τι, τῷ δὲ κατὰ τὰς αἰσθήσεις ἐκάστην τῶν εἰρημένων ποιοτήτων πάθους εἶναι ποιητικὴν παθητικαὶ ποιότητες λέγονται· ἢ τε γὰρ γλυκύτης πάθος τι κατὰ τὴν γεῦσιν ἐμποιεῖ καὶ ἡ θερμότης κατὰ τὴν ἀφήν, ὁμοίως δὲ καὶ αἱ ἄλλαι. λευκότης δὲ καὶ μελανία



καὶ αἱ ἄλλαι χροιαὶ οὐ τὸν αὐτὸν τρόπον τοῖς εἰρημένοις παθητικαῖς ποιότητες λέγονται, ἀλλὰ τῷ αὐτὰς ἀπὸ πάθους γεγενῆσθαι. ὅτι μὲν οὖν γίνονται διὰ πάθος πολλαὶ μεταβολαὶ χρωμάτων, δῆλον· αἰσχυνθεῖς γάρ τις ἐρυθρὸς ἐγένετο καὶ φοβηθεῖς ὠχρὸς καὶ ἕκαστον τῶν τοιούτων· ὥστε καὶ εἴ τις φύσει τῶν τοιούτων τι παθῶν πέπονθεν, τὴν ὁμοίαν χροιάν εἰκὸς ἐστὶν ἔχειν αὐτόν· ἥτις γὰρ νῦν ἐν τῷ αἰσχυνθῆναι διάθεσις τῶν περὶ τὸ σῶμα ἐγένετο, καὶ κατὰ φυσικὴν σύστασιν ἢ αὐτὴ γένοιτ' ἂν διάθεσις, ὥστε φύσει καὶ τὴν χροιάν ὁμοίαν γίνεσθαι. — ὅσα μὲν οὖν τῶν τοιούτων συμπτωμάτων ἀπὸ τινων παθῶν δυσκινήτων καὶ παραμονίμων τὴν ἀρχὴν εἴληφε ποιότητες λέγονται· εἴτε γὰρ ἐν τῇ κατὰ φύσιν συστάσει ὠχρότης ἢ μελανία γεγένηται, ποιότης λέγεται, — ποιοὶ γὰρ κατὰ ταύτας λεγόμεθα, — εἴτε διὰ νόσον μακρὰν ἢ διὰ καῦμα [τὸ αὐτὸ] συμβέβηκεν ὠχρότης ἢ μελανία, καὶ μὴ ῥαδίως ἀποκαθ — ἴστανται ἢ καὶ διὰ βίου παραμένουσι, ποιότητες καὶ αὐταὶ λέγονται, — ὁμοίως γὰρ ποιοὶ κατὰ ταύτας λεγόμεθα. — ὅσα δὲ ἀπὸ ῥαδίως διαλυομένων καὶ ταχὺ ἀποκαθισταμένων γίνεται πάθη λέγεται· οὐ γὰρ λέγονται ποιοὶ τινες κατὰ ταῦτα· οὔτε γὰρ ὁ ἐρυθριῶν διὰ τὸ αἰσχυνθῆναι ἐρυθρίας λέγεται, οὔτε ὁ ὠχριῶν διὰ τὸ φοβεῖσθαι ὠχρίας, ἀλλὰ μᾶλλον πεπονθέναι τι· ὥστε πάθη μὲν τὰ τοιαῦτα λέγεται, ποιότητες δὲ οὐ. — ὁμοίως δὲ τούτοις καὶ κατὰ τὴν ψυχὴν παθητικαῖς ποιότητες καὶ πάθη λέγεται. ὅσα τε γὰρ ἐν τῇ γενέσει εὐθύς ἀπὸ τινων παθῶν γεγένηται ποιότητες λέγονται, οἷον ἢ τε μανικὴ [10a] ἔκστασις καὶ ἡ ὀργὴ καὶ τὰ τοιαῦτα· ποιοὶ γὰρ κατὰ ταύτας λέγονται, ὀργίλοι τε καὶ μανικοί. ὁμοίως δὲ καὶ ὅσαι ἐκστάσεις μὴ φυσικαί, ἀλλ' ἀπὸ τινων ἄλλων συμπτωμάτων γεγένηται δυσαπάλλακτοι ἢ καὶ ὅλως ἀκίνητοι, ποιότητες καὶ τὰ τοιαῦτα· ποιοὶ γὰρ κατὰ ταύτας λέγονται. ὅσα δὲ ἀπὸ ταχὺ καθισταμένων γίνεται πάθη λέγεται, οἷον εἰ λυπούμενος ὀργιλώτερός ἐστιν· οὐ γὰρ λέγεται ὀργίλος ὁ ἐν τῷ τοιούτῳ πάθει ὀργιλώτερος ὢν, ἀλλὰ μᾶλλον πεπονθέναι τι· ὥστε πάθη μὲν λέγεται τὰ τοιαῦτα, ποιότητες δὲ οὐ.

Τέταρτον δὲ γένος ποιότητος σχῆμά τε καὶ ἡ περὶ ἕκαστον ὑπάρχουσα μορφή, ἔτι δὲ πρὸς τούτοις εὐθύτης καὶ καμπυλότης καὶ εἴ τι τούτοις ὁμοίον ἐστίν· καθ' ἕκαστον γὰρ τούτων ποιόν τι λέγεται· τῷ γὰρ τρίγωνον ἢ τετράγωνον εἶναι ποιόν τι λέγεται, καὶ τῷ εὐθὺ ἢ καμπύλον. καὶ κατὰ τὴν μορφήν δὲ ἕκαστον ποιόν τι λέγεται. τὸ δὲ μανὸν καὶ τὸ πυκνὸν καὶ τὸ τραχὺ καὶ τὸ λεῖον δόξειε μὲν ἂν ποιὸν σημαίνειν, ἔοικε δὲ ἀλλότρια τὰ τοιαῦτα εἶναι τῆς περὶ τὸ ποιὸν διαιρέσεως· θέσιν γάρ τινα μᾶλλον φαίνεται τῶν μορίων ἑκάτερον δηλοῦν· πυκνὸν μὲν γὰρ τῷ τὰ μόρια σύνεγγυς εἶναι ἀλλήλοις, μανὸν δὲ τῷ διεστάναι ἀπ' ἀλλήλων· καὶ λεῖον μὲν τῷ ἐπ' εὐθείας πως τὰ μόρια κεῖσθαι, τραχὺ δὲ τῷ τὸ μὲν ὑπερέχειν τὸ δὲ ἐλλείπειν. — ἴσως μὲν

οὖν καὶ ἄλλος ἂν τις φανείη τρόπος ποιότητος, ἀλλ' οἷ γε μάλιστα λεγόμενοι σχεδὸν τοσοῦτοί εἰσιν.

Ποιότητες μὲν οὖν εἰσὶν αἱ εἰρημέναι, ποιά δὲ τὰ κατὰ ταύτας παρωνύμως λεγόμενα ἢ ὅπως οὖν ἄλλως ἀπ' αὐτῶν. ἐπὶ μὲν οὖν τῶν πλείστων καὶ σχεδὸν ἐπὶ πάντων παρωνύμως λέγεται, οἷον ἀπὸ τῆς λευκότητος ὁ λευκὸς καὶ ἀπὸ τῆς γραμματικῆς ὁ γραμματικὸς καὶ ἀπὸ τῆς δικαιοσύνης ὁ δίκαιος, ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων. ἐπ' ἐνίων δὲ διὰ τὸ μὴ κεῖσθαι ταῖς ποιότησιν ὀνόματα οὐκ ἐνδέχεται παρωνύμως ἀπ' αὐτῶν λέγεσθαι· οἷον ὁ δρομικὸς ἢ ὁ πυκτικὸς ὁ κατὰ δύναμιν φυσικὴν λεγόμενος ἀπ' οὐδεμιᾶς ποιότητος [10b] παρωνύμως λέγεται· οὐ γὰρ κεῖται ὀνόματα ταῖς δυνάμεσι καθ' ἃς οὗτοι ποιοὶ λέγονται, ὥσπερ καὶ ταῖς ἐπιστήμασι καθ' ἃς πυκτικοὶ ἢ παλαιστρικοὶ οἱ κατὰ διάθεσιν λέγονται, — πυκτικὴ γὰρ ἐπιστήμη λέγεται καὶ παλαιστρική, ποιοὶ δὲ ἀπὸ τούτων παρωνύμως οἱ διακείμενοι λέγονται. — ἐνίοτε δὲ καὶ ὀνόματος κειμένου οὐ λέγεται παρωνύμως τὸ κατ' αὐτὴν ποιὸν λεγόμενον, οἷον ἀπὸ τῆς ἀρετῆς ὁ σπουδαῖος· τῷ γὰρ ἀρετὴν ἔχειν σπουδαῖος λέγεται, ἀλλ' οὐ παρωνύμως ἀπὸ τῆς ἀρετῆς· οὐκ ἐπὶ πολλῶν δὲ τὸ τοιοῦτόν ἐστιν. ποιά οὖν λέγεται τὰ παρωνύμως ἀπὸ τῶν εἰρημένων ποιοτήτων λεγόμενα ἢ ὅπως οὖν ἄλλως ἀπ' αὐτῶν.

Ὑπάρχει δὲ καὶ ἐναντιότης κατὰ τὸ ποιόν, οἷον δικαιοσύνη ἀδικία ἐναντίον καὶ λευκότης μελανία καὶ τᾶλλα ὡσαύτως, καὶ τὰ κατ' αὐτάς δὲ ποιά λεγόμενα, οἷον τὸ ἀδικὸν τῷ δικαίῳ καὶ τὸ λευκὸν τῷ μέλανι. οὐκ ἐπὶ πάν — των δὲ τὸ τοιοῦτον· τῷ γὰρ πυρρῷ ἢ ὠχρῷ ἢ ταῖς τοιαύταις χροιαῖς οὐδὲν ἐστὶν ἐναντίον ποιοῖς οὖσιν. — ἔτι ἐὰν τῶν ἐναντίων θάτερον ἢ ποιόν, καὶ τὸ λοιπὸν ἔσται ποιόν. τοῦτο δὲ δῆλον προχειριζομένῳ τὰς ἄλλας κατηγορίας, οἷον εἰ ἔστιν ἡ δικαιοσύνη τῇ ἀδικίᾳ ἐναντίον, ποιὸν δὲ ἡ δικαιοσύνη, ποιὸν ἄρα καὶ ἡ ἀδικία· οὐδεμία γὰρ τῶν ἄλλων κατηγοριῶν ἐφαρμόζει τῇ ἀδικίᾳ, οὔτε ποσὸν οὔτε πρὸς τι οὔτε πού, οὐδ' ὅλως τι τῶν τοιούτων οὐδὲν ἀλλ' ἢ ποιόν· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων κατὰ τὸ ποιὸν ἐναντίων.

Ἐπιδέχεται δὲ καὶ τὸ μᾶλλον καὶ τὸ ἥττον τὰ ποιά· λευκὸν γὰρ μᾶλλον καὶ ἥττον ἕτερον ἑτέρου λέγεται, καὶ δίκαιον ἕτερον ἑτέρου μᾶλλον. καὶ αὐτὸ δὲ ἐπίδοσιν λαμβάνει, — λευκὸν γὰρ ὃν ἔτι ἐνδέχεται λευκότερον γενέσθαι· — οὐ πάντα δέ, ἀλλὰ τὰ πλεῖστα· δικαιοσύνη γὰρ δικαιοσύνης εἰ λέγεται μᾶλλον ἀπορήσειεν ἂν τις, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων διαθέσεων. ἔνιοι γὰρ διαμφισβητοῦσι περὶ τῶν τοιούτων· δικαιοσύνην μὲν γὰρ δικαιοσύνης οὐ πάνυ φασὶ μᾶλλον καὶ ἥττον λέγεσθαι, οὐδὲ ὑγίειαν ὑγιείας, ἥττον μέντοι ἔχειν ἕτερον ἑτέρου ὑγίειαν φασι, καὶ [11a] δικαιοσύνην ἥττον ἕτερον ἑτέρου,

ὡσαύτως δὲ καὶ γραμματικὴν καὶ τὰς ἄλλας διαθέσεις. ἀλλ' οὖν τὰ γε κατὰ ταύτας λεγόμενα ἀναμφισβητήτως ἐπιδέχεται τὸ μᾶλλον καὶ ἥττον· γραμματικώτερος γὰρ ἕτερος ἑτέρου λέγεται καὶ δικαιότερος καὶ ὑγιεινότερος, καὶ ἐπὶ τῶν ἄλλων ὡσαύτως. τρίγωνον δὲ καὶ τετράγωνον οὐ δοκεῖ τὸ μᾶλλον ἐπιδέχεσθαι, οὐδὲ τῶν ἄλλων σχημάτων οὐδέν· τὰ μὲν γὰρ ἐπιδεχόμενα τὸν τοῦ τριγώνου λόγον καὶ τὸν τοῦ κύκλου πάνθ' ὁμοίως τρίγωνα ἢ κύκλοι εἰσίν, τῶν δὲ μὴ ἐπιδεχομένων οὐδὲν ἕτερον ἑτέρου μᾶλλον ῥηθήσεται· οὐδὲν γὰρ μᾶλλον τὸ τετράγωνον τοῦ ἑτε — ρομήκους κύκλος ἐστίν· οὐδέτερον γὰρ ἐπιδέχεται τὸν τοῦ κύκλου λόγον. ἀπλῶς δέ, ἐὰν μὴ ἐπιδέχεται ἀμφοτέρω τὸν τοῦ προκειμένου λόγον, οὐ ῥηθήσεται τὸ ἕτερον τοῦ ἑτέρου μᾶλλον. οὐ πάντα οὖν τὰ ποια ἐπιδέχεται τὸ μᾶλλον καὶ τὸ ἥττον.

Τῶν μὲν οὖν εἰρημένων οὐδὲν ἴδιον ποιότητος, ὅμοια δὲ καὶ ἀνόμοια κατὰ μόνας τὰς ποιότητας λέγεται· ὅμοιον γὰρ ἕτερον ἑτέρω οὐκ ἔστι κατ' ἄλλο οὐδὲν ἢ καθ' ὃ ποιόν ἐστίν. ὥστε ἴδιον ἂν εἴη ποιότητος τὸ ὅμοιον ἢ ἀνόμοιον λέγεσθαι κατ' αὐτήν.

Οὐ δεῖ δὲ ταραττεσθαι μή τις ἡμᾶς φήσῃ ὑπὲρ ποιότητος τὴν πρόθεσιν ποιησαμένους πολλὰ τῶν πρὸς τι συγκαταριθμεῖσθαι· τὰς γὰρ ἕξεις καὶ τὰς διαθέσεις τῶν πρὸς τι εἶναι. σχεδὸν γὰρ ἐπὶ πάντων τῶν τοιούτων τὰ γένη πρὸς τι λέγεται, τῶν δὲ καθ' ἕκαστα οὐδέν· ἢ μὲν γὰρ ἐπιστήμη, γένος οὖσα, αὐτὸ ὅπερ ἐστὶν ἑτέρου λέγεται, — τινὸς γὰρ ἐπιστήμη λέγεται. — τῶν δὲ καθ' ἕκαστα οὐδὲν αὐτὸ ὅπερ ἐστὶν ἑτέρου λέγεται, οἷον ἡ γραμματικὴ οὐ λέγεται τινὸς γραμματικὴ οὐδ' ἡ μουσικὴ τινὸς μουσική, ἀλλ' εἰ ἄρα κατὰ τὸ γένος καὶ αὐταὶ πρὸς τι λέγεται· οἷον ἡ γραμματικὴ λέγεται τινὸς ἐπιστήμη, οὐ τινὸς γραμματικὴ, καὶ ἡ μουσικὴ τινὸς ἐπιστήμη, οὐ τινὸς μουσική· ὥστε αἱ καθ' ἕκαστα οὐκ εἰσὶ τῶν πρὸς τι. λεγόμεθα δὲ ποιοὶ ταῖς καθ' ἕκαστα· ταύτας γὰρ καὶ ἔχομεν, — ἐπιστήμονες γὰρ λεγόμεθα τῷ ἔχειν τῶν καθ' ἕκαστα ἐπιστημῶν τινά· — ὥστε αὐταὶ ἂν καὶ ποιότητες εἴησαν αἱ καθ' ἕκαστα, καθ' ἃς ποτε καὶ ποιοὶ λεγόμεθα· αὐταὶ δὲ οὐκ εἰσὶ τῶν πρὸς τι. — ἔτι εἰ τυγχάνει τὸ αὐτὸ ποιὸν καὶ πρὸς τι ὄν, οὐδὲν ἄτοπον ἐν ἀμφοτέροις τοῖς γένεσιν αὐτὸ καταριθμεῖσθαι. <.....> **Κεφάλαιο 9**

Ἐπιδέχεται δὲ καὶ τὸ ποιεῖν καὶ πάσχειν ἐναντιό — τητα καὶ τὸ μᾶλλον καὶ τὸ ἥττον· τὸ γὰρ θερμαίνειν τῷ ψύχειν ἐναντίον καὶ τὸ θερμαίνεσθαι τῷ ψύχεσθαι καὶ τὸ ἡδεσθαι τῷ λυπεῖσθαι· ὥστε ἐπιδέχεται ἐναντιότητα. καὶ τὸ μᾶλλον δὲ καὶ τὸ ἥττον· θερμαίνειν γὰρ μᾶλλον καὶ ἥττον ἔστι, καὶ θερμαίνεσθαι μᾶλλον καὶ ἥττον, καὶ λυπεῖσθαι μᾶλλον καὶ ἥττον· ἐπιδέχεται οὖν τὸ μᾶλλον καὶ τὸ ἥττον τὸ ποιεῖν καὶ τὸ πάσχειν. <.....>

[Ὑπὲρ μὲν οὖν τούτων τοσαῦτα λέγεται· εἴρηται δὲ καὶ ὑπὲρ τοῦ κεῖσθαι ἐν τοῖς πρὸς τι, ὅτι παρωνύμως ἀπὸ τῶν θέσεων λέγεται. ὑπὲρ δὲ τῶν λοιπῶν, τοῦ τε ποτὲ καὶ τοῦ ποῦ καὶ τοῦ ἔχειν, διὰ τὸ προφανῆ εἶναι οὐδὲν ὑπὲρ αὐτῶν ἄλλο λέγεται ἢ ὅσα ἐν ἀρχῇ ἐρρήθη, ὅτι τὸ ἔχειν μὲν σημαίνει τὸ ὑποδεδέσθαι, τὸ ὠπλίσθαι, τὸ δὲ ποῦ οἶον ἐν Λυκείῳ, καὶ τὰ ἄλλα δὲ ὅσα ὑπὲρ αὐτῶν ἐρρήθη. — ὑπὲρ μὲν οὖν τῶν προτεθέντων γενῶν ἱκανὰ τὰ εἰρημένα· περὶ δὲ τῶν ἀντικειμένων, ποσαχῶς εἴωθε ἀντιτίθεσθαι, ρητέον.]

## Κεφάλαιο 10

Λέγεται δὲ ἕτερον ἑτέρῳ ἀντικεῖσθαι τετραχῶς, ἢ ὡς τὰ πρὸς τι, ἢ ὡς τὰ ἐναντία, ἢ ὡς στέρησις καὶ ἔξις, ἢ ὡς κατάφασις καὶ ἀπόφασις. ἀντίκειται δὲ ἕκαστον τῶν τοιούτων, ὡς τύπῳ εἰπεῖν, ὡς μὲν τὰ πρὸς τι οἶον τὸ διπλάσιον τῷ ἡμίσει, ὡς δὲ τὰ ἐναντία οἶον τὸ κακὸν τῷ ἀγαθῷ, ὡς δὲ κατὰ στέρησιν καὶ ἔξιν οἶον τυφλότης καὶ ὄψις, ὡς δὲ κατάφασις καὶ ἀπόφασις οἶον κάθηται — οὐ κάθηται.

Ὅσα μὲν οὖν ὡς τὰ πρὸς τι ἀντίκειται αὐτὰ ἅπερ ἐστὶ τῶν ἀντικειμένων λέγεται ἢ ὁπωσοῦν ἄλλως πρὸς αὐτά· οἶον τὸ διπλάσιον τοῦ ἡμίσεος αὐτὸ ὅπερ ἐστὶ διπλάσιον λέγεται· καὶ ἡ ἐπιστήμη δὲ τῷ ἐπιστητῷ ὡς τὰ πρὸς τι ἀντίκειται, καὶ λέγεται γε ἡ ἐπιστήμη αὐτὸ ὅπερ ἐστὶ τοῦ ἐπιστητοῦ· καὶ τὸ ἐπιστητὸν δὲ αὐτὸ ὅπερ ἐστὶ πρὸς τὸ ἀντικείμενον λέγεται τὴν ἐπιστήμην· τὸ γὰρ ἐπιστητὸν τινὶ λέγεται ἐπιστητὸν τῇ ἐπιστήμῃ.

Ὅσα οὖν ἀντίκειται ὡς τὰ πρὸς τι αὐτὰ ἅπερ ἐστὶ τῶν ἀντικειμένων ἢ ὁπωσδήποτε πρὸς ἄλληλα λέγεται· τὰ δὲ ὡς τὰ ἐναντία, αὐτὰ μὲν ἅπερ ἐστὶν οὐδαμῶς πρὸς ἄλληλα λέγεται, ἐναντία μέντοι ἀλλήλων λέγεται· οὔτε γὰρ τὸ ἀγαθὸν τοῦ κακοῦ λέγεται ἀγαθόν, ἀλλ’ ἐναντίον, οὔτε τὸ λευκὸν τοῦ μέλανος λευκόν, ἀλλ’ ἐναντίον. ὥστε διαφέρουσιν αὗται αἱ ἀντιθέσεις ἀλλήλων. — ὅσα δὲ τῶν ἐναντίων τοιαῦτά ἐστίν [12a] ὥστε ἐν οἷς πέφυκε γίνεσθαι ἢ ὧν κατηγορεῖται ἀναγκαῖον αὐτῶν θάτερον ὑπάρχειν, τούτων οὐδὲν ἐστὶν ἀνὰ μέσον· [ὧν δέ γε μὴ ἀναγκαῖον θάτερον ὑπάρχειν, τούτων ἔστι τι ἀνὰ μέσον πάντως.] οἶον νόσος καὶ ὑγίεια ἐν σώματι ζώου πέφυκε γίνεσθαι, καὶ ἀναγκαῖόν γε θάτερον ὑπάρχειν τῷ τοῦ ζώου σώματι ἢ νόσον ἢ ὑγίειαν· καὶ περιττὸν δὲ καὶ ἄρτιον ἀριθμοῦ κατηγορεῖται, καὶ ἀναγκαῖόν γε θάτερον τῷ ἀριθμῷ ὑπάρχειν ἢ περιττὸν ἢ ἄρτιον· καὶ οὐκ ἔστι γε τούτων οὐδὲν ἀνὰ μέσον, οὔτε νόσου καὶ ὑγιείας οὔτε περιττοῦ καὶ ἀρτίου. ὧν δέ γε μὴ ἀναγκαῖον θάτερον ὑπάρχειν, τούτων ἔστι τι ἀνὰ μέσον· οἶον μέλαν καὶ λευκὸν ἐν σώματι πέφυκε γίνεσθαι, καὶ οὐκ ἀναγκαῖόν γε θάτερον αὐτῶν

ὑπάρχειν τῷ σώματι, — οὐ γὰρ πᾶν ἦτοι λευκὸν ἢ μέλαν ἐστίν· — καὶ φαῦλον δὲ καὶ σπουδαῖον κατηγορεῖται μὲν καὶ κατ' ἀνθρώπου καὶ κατ' ἄλλων πολλῶν, οὐκ ἀναγκαῖον δὲ θάτερον αὐτῶν ὑπάρχειν ἐκείνοις ὧν κατηγορεῖται· οὐ γὰρ πάντα ἦτοι φαῦλα ἢ σπουδαῖά ἐστιν. καὶ ἔστι γέ τι τούτων ἀνὰ μέσον, οἷον τοῦ μὲν λευκοῦ καὶ τοῦ μέλανος τὸ φαιδὸν καὶ ὠχρὸν καὶ ὅσα ἄλλα χρώματα, τοῦ δὲ φαύλου καὶ τοῦ σπουδαίου τὸ οὔτε φαῦλον οὔτε σπουδαῖον. ἐπ' ἐνίων μὲν οὖν ὀνόματα κεῖται τοῖς ἀνὰ μέσον, οἷον λευκοῦ καὶ μέλανος τὸ φαιδὸν καὶ ὠχρὸν· ἐπ' ἐνίων δὲ ὀνόματι μὲν οὐκ εὔπορον τὸ ἀνὰ μέσον ἀποδοῦναι, τῇ δὲ ἐκατέρου τῶν ἄκρων ἀποφάσει τὸ ἀνὰ μέσον ὀρίζεται, οἷον τὸ οὔτε ἀγαθὸν οὔτε κακὸν καὶ οὔτε δίκαιον οὔτε ἀδίκον.

Στέρησις δὲ καὶ ἕξις λέγεται μὲν περὶ ταῦτόν τι, οἷον ἡ ὄψις καὶ ἡ τυφλότης περὶ ὀφθαλμόν· καθόλου δὲ εἰπεῖν, ἐν ᾧ πέφυκεν ἡ ἕξις γίνεσθαι, περὶ τοῦτο λέγεται ἐκάτερον αὐτῶν. ἐστερῆσθαι δὲ τότε λέγομεν ἕκαστον τῶν τῆς ἕξεως δεκτικῶν, ὅταν ἐν ᾧ πέφυκεν ὑπάρχειν καὶ ὅτε πέφυκεν ἔχειν μηδαμῶς ὑπάρχει· νωδὸν τε γὰρ λέγομεν οὐ τὸ μὴ ἔχον ὀδόντας, καὶ τυφλὸν οὐ τὸ μὴ ἔχον ὄψιν, ἀλλὰ τὸ μὴ ἔχον ὅτε πέφυκεν ἔχειν· τινὰ γὰρ ἐκ γενετῆς οὔτε ὄψιν οὔτε ὀδόντας ἔχει, ἀλλ' οὐ λέγεται νωδὰ οὐδὲ τυφλὰ. τὸ δὲ ἐστερῆσθαι καὶ τὸ ἔχειν τὴν ἕξιν οὐκ ἔστι στέρησις καὶ ἕξις· ἕξις μὲν γὰρ ἐστίν ἡ ὄψις, στέρησις δὲ ἡ τυφλότης, τὸ δὲ ἔχειν τὴν ὄψιν οὐκ ἔστιν ὄψις, οὐδὲ τὸ τυφλὸν εἶναι τυφλότης· στέρησις γάρ τις ἡ τυφλότης ἐστίν, τὸ δὲ τυφλὸν εἶναι ἐστερῆσθαι, οὐ στέρησις ἐστίν. ἔτι εἰ ἦν ἡ τυφλότης ταῦτόν τῳ τυφλὸν εἶναι, κατηγορεῖτο ἂν ἀμφοτέρω κατὰ τοῦ αὐτοῦ· ἀλλὰ τυφλὸς μὲν λέγεται ὁ ἄνθρωπος, τυφλότης [12b] δὲ ὁ ἄνθρωπος οὐδαμῶς λέγεται. ἀντικεῖσθαι δὲ καὶ ταῦτα δοκεῖ, τὸ ἐστερῆσθαι καὶ τὸ τὴν ἕξιν ἔχειν ὡς στέρησις καὶ ἕξις· ὁ γὰρ τρόπος τῆς ἀντιθέσεως ὁ αὐτός· ὡς γὰρ ἡ τυφλότης τῇ ὄψει ἀντίκειται, οὕτω καὶ τὸ τυφλὸν εἶναι τῳ ὄψιν ἔχειν ἀντίκειται. (οὐκ ἔστι δὲ οὐδὲ τὸ ὑπὸ τὴν κατάφασιν καὶ ἀπόφασιν κατάφασις καὶ ἀπόφασις· ἡ μὲν γὰρ κατάφασις λόγος ἐστὶ καταφατικὸς καὶ ἡ ἀπόφασις λόγος ἀποφατικός, τῶν δὲ ὑπὸ τὴν κατάφασιν ἢ ἀπόφασιν οὐδέν ἐστι λόγος. λέγεται δὲ καὶ ταῦτα ἀντικεῖσθαι ἀλλήλοις ὡς κατάφασις καὶ ἀπόφασις· καὶ γὰρ ἐπὶ τούτων ὁ τρόπος τῆς ἀντιθέσεως ὁ αὐτός· ὡς γὰρ ποτε ἡ κατάφασις πρὸς τὴν ἀπόφασιν ἀντίκειται, οἷον τὸ κάθηται — οὐ κάθηται, οὕτω καὶ τὸ ὑφ' ἐκάτερον πρᾶγμα ἀντίκειται, τὸ καθῆσθαι — μὴ καθῆσθαι.) — ὅτι δὲ ἡ στέρησις καὶ ἡ ἕξις οὐκ ἀντίκειται ὡς τὰ πρὸς τι, φανερόν· οὐ γὰρ λέγεται αὐτὸ ὅπερ ἐστὶ τοῦ ἀντικειμένου· ἡ γὰρ ὄψις οὐκ ἔστι τυφλότητος ὄψις, οὐδ' ἄλλως οὐδαμῶς πρὸς αὐτὸ λέγεται· ὡσαύτως δὲ οὐδὲ ἡ τυφλότης λέγοιτ' ἂν τυφλότης ὄψεως, ἀλλὰ στέρησις μὲν ὄψεως ἢ τυφλότης λέγεται, τυφλότης δὲ ὄψεως οὐ λέγεται. ἔτι τὰ πρὸς τι

πάντα πρὸς ἀντιστρέφοντα λέγεται, ὥστε καὶ ἡ τυφλότης εἶπερ ἦν τῶν πρὸς τι, ἀντέστρεφεν ἂν κἀκεῖνο πρὸς ὃ λέγεται· ἀλλ' οὐκ ἀντιστρέφει· οὐ γὰρ λέγεται ἡ ὄψις τυφλότητος ὄψις.

Ὅτι δὲ οὐδ' ὥς τὰ ἐναντία ἀντίκειται τὰ κατὰ στέρησιν λεγόμενα καὶ ἕξιν ἐκ τῶνδε δῆλον. τῶν μὲν γὰρ ἐναντίων, ὧν μηδὲν ἐστὶν ἀνὰ μέσον, ἀναγκαῖον, ἐν οἷς πέφυκε γίνεσθαι ἢ ὧν κατηγορεῖται, θάτερον αὐτῶν ὑπάρχειν ἀεί· τούτων γὰρ οὐδὲν ἦν ἀνὰ μέσον, ὧν θάτερον ἀναγκαῖον ἦν τῷ δεκτικῷ ὑπάρχειν, οἷον ἐπὶ νόσου καὶ ὑγιείας καὶ περιπτοῦ καὶ ἀρτίου· ὧν δὲ ἔστι τι ἀνὰ μέσον, οὐδέποτε ἀνάγκη παντὶ ὑπάρχειν θάτερον· οὔτε γὰρ λευκὸν ἢ μέλαν ἀνάγκη πᾶν εἶναι τὸ δεκτικόν, οὔτε θερμὸν ἢ ψυχρόν, — τούτων γὰρ ἀνὰ μέσον τι οὐδὲν κωλύει ὑπάρχειν· — ἔτι δὲ καὶ τούτων ἦν τι ἀνὰ μέσον ὧν μὴ ἀναγκαῖον ἦν θάτερον ὑπάρχειν τῷ δεκτικῷ, εἰ μὴ οἷς φύσει τὸ ἐν ὑπάρχει, οἷον τῷ πυρὶ τὸ θερμῷ εἶναι καὶ τῇ χιόνι τὸ λευκῇ· — ἐπὶ δὲ τούτων ἀφωρισμένως ἀναγκαῖον θάτερον ὑπάρχειν, καὶ οὐχ ὁπότερον ἔτυχεν· οὐ γὰρ ἐνδέχεται τὸ πῦρ ψυχρὸν εἶναι οὐδὲ τὴν χιόνα μέλαιναν· — ὥστε παντὶ μὲν οὐκ ἀνάγκη [13a] τῷ δεκτικῷ θάτερον αὐτῶν ὑπάρχειν, ἀλλὰ μόνον οἷς φύσει τὸ ἐν ὑπάρχει, καὶ τούτοις ἀφωρισμένως τὸ ἐν καὶ οὐχ ὁπότερον ἔτυχεν. ἐπὶ δὲ τῆς στερήσεως καὶ τῆς ἕξεως οὐδέ — τερον τῶν εἰρημένων ἀληθές· οὐδὲ γὰρ ἀεί τῷ δεκτικῷ ἀναγκαῖον θάτερον αὐτῶν ὑπάρχειν, — τὸ γὰρ μήπω πεφυκὸς ὄψιν ἔχειν οὔτε τυφλὸν οὔτε ὄψιν ἔχειν λέγεται, ὥστε οὐκ ἂν εἴη ταῦτα τῶν τοιούτων ἐναντίων ὧν οὐδὲν ἐστὶν ἀνὰ μέσον· — ἀλλ' οὐδὲ ὧν τι ἔστιν ἀνὰ μέσον· ἀναγκαῖον γὰρ ποτε παντὶ τῷ δεκτικῷ θάτερον αὐτῶν ὑπάρχειν· ὅταν γὰρ ἤδη πεφυκὸς ἢ ἔχειν ὄψιν, τότε ἢ τυφλὸν ἢ ἔχον ὄψιν ῥηθήσεται, καὶ τούτων οὐκ ἀφωρισμένως θάτερον, ἀλλ' ὁπότερον ἔτυχεν, — οὐ γὰρ ἀναγκαῖον ἢ τυφλὸν ἢ ὄψιν ἔχον εἶναι, ἀλλ' ὁπότερον ἔτυχεν· — ἐπὶ δέ γε τῶν ἐναντίων, ὧν ἔστιν ἀνὰ μέσον τι, οὐδέποτε ἀναγκαῖον ἦν παντὶ θάτερον ὑπάρχειν, ἀλλὰ τισίν, καὶ τούτοις ἀφωρισμένως τὸ ἐν. ὥστε δῆλον ὅτι κατ' οὐδέτερον τῶν τρόπων ὥς τὰ ἐναντία ἀντίκειται τὰ κατὰ στέρησιν καὶ ἕξιν ἀντικείμενα. — ἔτι ἐπὶ μὲν τῶν ἐναντίων ὑπάρχοντος τοῦ δεκτικοῦ δυνατὸν εἰς ἄλληλα μεταβολὴν γενέσθαι, εἰ μὴ τι φύσει τὸ ἐν ὑπάρχει, οἷον τῷ πυρὶ τὸ θερμῷ εἶναι· καὶ γὰρ τὸ ὑγιαῖνον δυνατὸν νοσῆσαι καὶ τὸ λευκὸν μέλαν γενέσθαι καὶ τὸ ψυχρὸν θερμόν, καὶ ἐκ σπουδαίου γε φαῦλον καὶ ἐκ φαύλου σπουδαῖον δυνατὸν γενέσθαι· — ὁ γὰρ φαῦλος εἰς βελτίους διατριβὰς ἀγόμενος καὶ λόγους κἂν μικρόν γέ τι ἐπιδοίη εἰς τὸ βελτίω εἶναι· ἐὰν δὲ ἅπαξ κἂν μικρὰν ἐπίδοσιν λάβῃ, φανερόν ὅτι ἢ τελείως ἂν μεταβάλῃ ἢ πάνυ πολλὴν ἂν ἐπίδοσιν λάβῃ· ἀεί γὰρ εὐκίνητοτερος πρὸς ἀρετὴν γίγνεται, κἂν ἡντινοῦν ἐπίδοσιν εἰληφώς ἐξ ἀρχῆς ἢ, ὥστε καὶ πλείω εἰκὸς ἐπίδοσιν λαμβάνειν· καὶ τοῦτο ἀεί γιγνόμενον

τελείως εἰς τὴν ἐναντίαν ἔξιν ἀποκαθίστησιν, ἐάνπερ μὴ χρόνῳ ἐξείργηται· — ἐπὶ δέ γε τῆς στερήσεως καὶ τῆς ἔξεως ἀδύνατον εἰς ἄλληλα μεταβολὴν γενέσθαι· ἀπὸ μὲν γὰρ τῆς ἔξεως ἐπὶ τὴν στέρησιν γίνεται μεταβολή, ἀπὸ δὲ τῆς στερήσεως ἐπὶ τὴν ἔξιν ἀδύνατον· οὔτε γὰρ τυφλὸς γενόμενός τις πάλιν ἔβλεπεν, οὔτε φαλακρὸς ὢν κομήτης ἐγένετο, οὔτε νωδὸς ὢν ὀδόντας ἔφυσεν.

Ὅσα δὲ ὡς κατάφασις καὶ ἀπόφασις ἀντίκειται, [13b] φανερόν ὅτι κατ' οὐδένα τῶν εἰρημένων τρόπων ἀντίκειται· ἐπὶ μόνων γὰρ τούτων ἀναγκαῖον αἰεὶ τὸ μὲν ἀληθὲς τὸ δὲ ψεῦδος αὐτῶν εἶναι. οὔτε γὰρ ἐπὶ τῶν ἐναντίων ἀναγκαῖον αἰεὶ θάτερον μὲν ἀληθὲς εἶναι θάτερον δὲ ψεῦδος, οὔτε ἐπὶ τῶν πρὸς τι, οὔτε ἐπὶ τῆς ἔξεως καὶ στερήσεως· οἷον ὑγία καὶ νόσος ἐναντία, καὶ οὐδέτερόν γε οὔτε ἀληθὲς οὔτε ψεῦδος ἐστίν· ὡσαύτως δὲ καὶ τὸ διπλάσιον καὶ τὸ ἥμισυ ὡς τὰ πρὸς τι ἀντίκειται, καὶ οὐκ ἔστιν αὐτῶν οὐδέτερον οὔτε ἀληθὲς οὔτε ψεῦδος· οὐδέ γε τὰ κατὰ στέρησιν καὶ ἔξιν, οἷον ἡ ὄψις καὶ ἡ τυφλότης· ὅλως δὲ τῶν κατὰ μηδεμίαν συμπλοκὴν λεγομένων οὐδὲν οὔτε ἀληθὲς οὔτε ψεῦδος ἐστίν· πάντα δὲ τὰ εἰρημένα ἄνευ συμπλοκῆς λέγεται. οὐ μὴν ἀλλὰ μάλιστα δόξειεν ἂν τὸ τοιοῦτο συμβαίνειν ἐπὶ τῶν κατὰ συμπλοκὴν ἐναντίων λεγομένων, — τὸ γὰρ ὑγιαίνειν Σωκράτη τῷ νοσεῖν Σωκράτη ἐναντίον ἐστίν, — ἀλλ' οὐδ' ἐπὶ τούτων ἀναγκαῖον αἰεὶ θάτερον μὲν ἀληθὲς θάτερον δὲ ψεῦδος εἶναι· ὄντος μὲν γὰρ Σωκράτους ἔσται τὸ μὲν ἀληθὲς τὸ δὲ ψεῦδος, μὴ ὄντος δὲ ἀμφοτέρω ψευδῆ· οὔτε γὰρ τὸ νοσεῖν Σωκράτη οὔτε τὸ ὑγιαίνειν ἀληθὲς αὐτοῦ μὴ ὄντος ὅλως τοῦ Σωκράτους. ἐπὶ δὲ τῆς στερήσεως καὶ τῆς ἔξεως μὴ ὄντος γε ὅλως οὐδέτερον ἀληθές, ὄντος δὲ οὐκ αἰεὶ θάτερον ἀληθές· τὸ γὰρ ὄψιν ἔχειν Σωκράτη τῷ τυφλὸν εἶναι Σωκράτη ἀντίκειται ὡς στέρησις καὶ ἔξις, καὶ ὄντος γε οὐκ ἀναγκαῖον θάτερον ἀληθὲς εἶναι ἢ ψεῦδος, — ὅτε γὰρ μήπω πέφυκεν ἔχειν, ἀμφοτέρω ψευδῆ, — μὴ ὄντος δὲ ὅλως τοῦ Σωκράτους καὶ οὕτω ψευδῆ ἀμφοτέρω, καὶ τὸ ὄψιν αὐτὸν ἔχειν καὶ τὸ τυφλὸν εἶναι. ἐπὶ δέ γε τῆς καταφάσεως καὶ τῆς ἀποφάσεως αἰεὶ, ἐάν τε ἢ ἐάν τε μὴ ἢ, τὸ μὲν ἕτερον ἔσται ψεῦδος τὸ δὲ ἕτερον ἀληθές· τὸ γὰρ νοσεῖν Σωκράτη καὶ τὸ μὴ νοσεῖν Σωκράτη, ὄντος τε αὐτοῦ φανερόν ὅτι τὸ ἕτερον αὐτῶν ἀληθές ἢ ψεῦδος, καὶ μὴ ὄντος ὁμοίως· τὸ μὲν γὰρ νοσεῖν μὴ ὄντος ψεῦδος, τὸ δὲ μὴ νοσεῖν ἀληθές· ὥστε ἐπὶ μόνων τούτων ἴδιον ἂν εἴη τὸ αἰεὶ θάτερον αὐτῶν ἀληθές ἢ ψεῦδος εἶναι, ὅσα ὡς κατάφασις καὶ ἀπόφασις ἀντίκειται.

## Κεφάλαιο 11

Ἐναντίον δέ ἐστιν ἀγαθῷ μὲν ἐξ ἀνάγκης κακόν, — τοῦτο δὲ δῆλον τῇ καθ'

ἕκαστον ἐπαγωγῇ, οἷον ὑγεία νόσος καὶ δικαιοσύνη [14a] ἀδικία καὶ ἀνδρεία δειλία, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, — κακῶ δὲ ὅτε μὲν ἀγαθὸν ἐναντίον ἐστίν, ὅτε δὲ κακόν· τῇ γὰρ ἐνδεία κακῶ ὄντι ἢ ὑπερβολὴ ἐναντίον κακὸν ὄν· ὁμοίως δὲ καὶ ἡ μεσότης ἐναντία ἐκατέρω οὔσα ἀγαθόν. ἐπ' ὀλίγων δ' ἂν τὸ τοιοῦτον ἴδοι τις, ἐπὶ δὲ τῶν πλείστων ἀεὶ τῷ κακῷ τὸ ἀγαθὸν ἐναντίον ἐστίν. — ἔτι τῶν ἐναντίων οὐκ ἀναγκαῖον, ἐὰν θάτερον ἦ, καὶ τὸ λοιπὸν εἶναι· ὑγιαινόντων γὰρ ἀπάντων ὑγεία μὲν ἔσται, νόσος δὲ οὐ· ὁμοίως δὲ καὶ λευκῶν ὄντων ἀπάντων λευκότης μὲν ἔσται, μελανία δὲ οὐ. ἔτι εἰ τὸ Σωκράτη ὑγιαίνειν τῷ Σωκράτη νοσεῖν ἐναντίον ἐστίν, μὴ ἐνδέχεται δὲ ἅμα ἀμφοτέρω τῷ αὐτῷ ὑπάρχειν, οὐκ ἂν ἐνδέχοιτο τοῦ ἑτέρου τῶν ἐναντίων ὄντος καὶ τὸ λοιπὸν εἶναι· ὄντος γὰρ τοῦ Σωκράτη ὑγιαίνειν οὐκ ἂν εἴη τὸ νοσεῖν Σωκράτη.

Δῆλον δὲ ὅτι καὶ περὶ ταῦτόν ἡ εἶδει ἡ γένει πέφυκε γίγνεσθαι τὰ ἐναντία· νόσος μὲν γὰρ καὶ ὑγεία ἐν σώματι ζώου, λευκότης δὲ καὶ μελανία ἀπλῶς ἐν σώματι, δικαιοσύνη δὲ καὶ ἀδικία ἐν ψυχῇ. ἀνάγκη δὲ πάντα τὰ ἐναντία ἢ ἐν τῷ αὐτῷ γένει εἶναι ἢ ἐν τοῖς ἐναντίοις γένεσιν, ἢ αὐτὰ γένη εἶναι· λευκὸν μὲν γὰρ καὶ μέλαν ἐν τῷ αὐτῷ γένει, — χρῶμα γὰρ αὐτῶν τὸ γένος, — δικαιοσύνη δὲ καὶ ἀδικία ἐν τοῖς ἐναντίοις γένεσιν, — τοῦ μὲν γὰρ ἀρετῆ, τοῦ δὲ κακίας τὸ γένος, — ἀγαθὸν δὲ καὶ κακὸν οὐκ ἔστιν ἐν γένει, ἀλλ' αὐτὰ τυγχάνει γένη τινῶν ὄντα.

## Κεφάλαιο 12

Πρότερον ἕτερον ἑτέρου λέγεται τετραχῶς· πρῶτον μὲν καὶ κυριώτατα κατὰ χρόνον, καθ' ὃ πρεσβύτερον ἕτερον ἑτέρου καὶ παλαιότερον λέγεται, — τῷ γὰρ τὸν χρόνον πλείω εἶναι καὶ πρεσβύτερον καὶ παλαιότερον λέγεται. — δεύτερον δὲ τὸ μὴ ἀντιστρέφον κατὰ τὴν τοῦ εἶναι ἀκολουθήσιν, οἷον τὸ ἐν τῶν δύο πρότερον· δεῖν μὲν γὰρ ὄντων ἀκολουθεῖ εὐθύς τὸ ἐν εἶναι, ἐνὸς δὲ ὄντος οὐκ ἀναγκαῖον δύο εἶναι, ὥστε οὐκ ἀντιστρέφει ἀπὸ τοῦ ἐνὸς ἢ ἀκολουθήσιν τοῦ εἶναι τὸ λοιπόν, πρότερον δὲ δοκεῖ τὸ τοιοῦτον εἶναι ἀφ' οὗ μὴ ἀντιστρέφει ἢ τοῦ εἶναι ἀκολουθήσιν. τρίτον δὲ κατὰ τινὰ τάξιν πρότερον λέγεται, καθάπερ ἐπὶ τῶν ἐπιστημῶν καὶ τῶν λόγων· ἐν τε γὰρ ταῖς ἀποδεικτικαῖς ἐπιστήμαις ὑπάρχει τὸ πρότερον καὶ τὸ ὕστερον τῇ τάξει, — τὰ γὰρ στοιχεῖα πρότερα τῶν [14b] διαγραμμάτων τῇ τάξει, καὶ ἐπὶ τῆς γραμματικῆς τὰ στοιχεῖα πρότερα τῶν συλλαβῶν, — ἐπὶ τε τῶν λόγων ὁμοίως, — τὸ γὰρ προοίμιον τῆς διηγήσεως πρότερον τῇ τάξει ἐστίν. — ἔτι παρὰ τὰ εἰρημένα τὸ βέλτιον καὶ τὸ τιμιώτερον πρότερον εἶναι τῇ φύσει δοκεῖ· εἰώθασι δὲ καὶ οἱ πολλοὶ τοὺς ἐντιμότερους καὶ μᾶλλον ἀγαπωμένους



ὕπ' αὐτῶν προτέρους φάσκειν εἶναι· ἔστι μὲν δὴ σχεδὸν ἀλλοτριώτατος τῶν τρόπων οὗτος.

Οἱ μὲν οὖν λεγόμενοι τοῦ προτέρου τρόποι τοσοῦτοί εἰσιν. δόξειε δ' ἂν καὶ παρὰ τοὺς εἰρημένους ἕτερος εἶναι προτέρου τρόπος· τῶν γὰρ ἀντιστροφόντων κατὰ τὴν τοῦ εἶναι ἀκολουθήσιν τὸ αἷτιον ὁπωσοῦν θατέρω τοῦ εἶναι πρότερον εἰκότως φύσει λέγοιτ' ἄν. ὅτι δ' ἔστι τινὰ τοιαῦτα, δῆλον· τὸ γὰρ εἶναι ἄνθρωπον ἀντιστρέφει κατὰ τὴν τοῦ εἶ — ναι ἀκολουθήσιν πρὸς τὸν ἀληθῆ περὶ αὐτοῦ λόγον· εἰ γὰρ ἔστιν ἄνθρωπος, ἀληθὴς ὁ λόγος ὃν λέγομεν ὅτι ἔστιν ἄνθρωπος· καὶ ἀντιστρέφει γε, — εἰ γὰρ ἀληθὴς ὁ λόγος ὃν λέγομεν ὅτι ἔστιν ἄνθρωπος, ἔστιν ἄνθρωπος· — ἔστι δὲ ὁ μὲν ἀληθὴς λόγος οὐδαμῶς αἷτιος τοῦ εἶναι τὸ πρᾶγμα, τὸ μέντοι πρᾶγμα φαίνεται πως αἷτιον τοῦ εἶναι ἀληθῆ τὸν λόγον· τῷ γὰρ εἶναι τὸ πρᾶγμα ἢ μὴ ἀληθὴς ὁ λόγος ἢ ψευδὴς λέγεται. ὥστε κατὰ πέντε τρόπους πρότερον ἕτερον ἑτέρου λέγοιτ' ἄν.

### Κεφάλαιο 13

Ἄμα δὲ λέγεται ἀπλῶς μὲν καὶ κυριώτατα ὧν ἡ γένεσις ἐν τῷ αὐτῷ χρόνῳ· οὐδέτερον γὰρ πρότερον οὐδὲ ὕστερόν ἐστιν· ἅμα δὲ κατὰ τὸν χρόνον ταῦτα λέγεται. φύσει δὲ ἅμα ὅσα ἀντιστρέφει μὲν κατὰ τὴν τοῦ εἶναι ἀκολουθήσιν, μηδαμῶς δὲ αἷτιον θάτερον θατέρω τοῦ εἶναι ἐστιν, οἷον ἐπὶ τοῦ διπλασίου καὶ τοῦ ἡμίσεος· ἀντιστρέφει μὲν γὰρ ταῦτα, — διπλασίου γὰρ ὄντος ἐστὶν ἡμισυ, καὶ ἡμίσεος ὄντος διπλάσιόν ἐστιν, — οὐδέτερον δὲ οὐδετέρω αἷτιον τοῦ εἶναι ἐστιν. καὶ τὰ ἐκ τοῦ αὐτοῦ γένους ἀντιδιηρημένα ἀλλήλοις ἅμα τῇ φύσει λέγεται. ἀντιδιηρῆσθαι δὲ λέγεται ἀλλήλοις τὰ κατὰ τὴν αὐτὴν διαίρεσιν, οἷον τὸ πτηνὸν τῷ πεζῷ καὶ τῷ ἐνύδρῳ· ταῦτα γὰρ ἀλλήλοις ἀντιδιήρηται ἐκ τοῦ αὐτοῦ γένους ὄντα· τὸ γὰρ ζῶον διαιρεῖται εἰς ταῦτα, εἷς τε τὸ πτηνὸν καὶ τὸ πεζὸν καὶ τὸ ἐνυδρον, καὶ οὐδέν γε τούτων πρότερον ἢ ὕστερόν ἐστιν, ἀλλ' ἅμα τῇ φύσει τὰ [15a] τοιαῦτα δοκεῖ εἶναι· (διαιρεθεῖη δ' ἂν καὶ ἕκαστον τούτων εἰς εἶδη πάλιν, οἷον τὸ πεζὸν καὶ τὸ πτηνὸν καὶ τὸ ἐνυδρον.) ἔσται οὖν κάκεῖνα ἅμα τῇ φύσει, ὅσα ἐκ τοῦ αὐτοῦ γένους κατὰ τὴν αὐτὴν διαίρεσιν ἐστίν· τὰ δὲ γένη τῶν εἰδῶν ἀεὶ πρότερα· οὐ γὰρ ἀντιστρέφει κατὰ τὴν τοῦ εἶναι ἀκολουθήσιν· οἷον ἐνύδρου μὲν ὄντος ἔστι ζῶον, ζώου δὲ ὄντος οὐκ ἀνάγκη ἐνυδρον εἶναι. — ἅμα οὖν τῇ φύσει λέγεται ὅσα ἀντιστρέφει μὲν κατὰ τὴν τοῦ εἶναι ἀκολουθήσιν, μηδαμῶς δὲ αἷτιον τὸ ἕτερον τῷ ἑτέρῳ τοῦ εἶναι ἐστιν, καὶ τὰ ἐκ τοῦ αὐτοῦ γένους ἀντιδιηρημένα ἀλλήλοις· ἀπλῶς δὲ ἅμα, ὧν ἡ γένεσις ἐν τῷ αὐτῷ χρόνῳ.

### Κεφάλαιο 14

Κινήσεως δέ ἐστιν εἶδη ἕξ· γένεσις, φθορά, αὔξησις, μείωσις, ἀλλοίωσις, κατὰ τόπον μεταβολή. αἱ μὲν οὖν ἄλλαι κινήσεις φανερόν ὅτι ἕτεραι ἀλλήλων εἰσίν· οὐ γάρ ἐστιν ἡ γένεσις φθορά οὐδέ γε ἡ αὔξησις μείωσις οὐδέ ἡ κατὰ τόπον μεταβολή, ὡσαύτως δὲ καὶ αἱ ἄλλαι· ἐπὶ δὲ τῆς ἀλλοιώσεως ἔχει τινὰ ἀπορίαν, μήποτε ἀναγκαῖον ἢ τὸ ἀλλοιούμενον κατὰ τινὰ τῶν λοιπῶν κινήσεων ἀλλοιοῦσθαι. τοῦτο δὲ οὐκ ἀληθές ἐστιν· σχεδὸν γὰρ κατὰ πάντα τὰ πάθη ἢ τὰ πλεῖστα ἀλλοιοῦσθαι συμβέβηκεν ἡμῖν οὐδεμιᾶς τῶν ἄλλων κινήσεων κοινωνοῦσιν· οὔτε γὰρ αὔξεσθαι ἀναγκαῖον τὸ κατὰ πάθος κινούμενον οὔτε μειοῦσθαι, ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων, ὥσθ' ἑτέρα ἂν εἴη παρὰ τὰς ἄλλας κινήσεις ἢ ἀλλοιώσεις· εἰ γὰρ ἦν ἡ αὕτη, ἔδει τὸ ἀλλοιούμενον εὐθὺς καὶ αὔξεσθαι ἢ μειοῦσθαι ἢ τινὰ τῶν ἄλλων ἀκολουθεῖν κινήσεων· ἀλλ' οὐκ ἀνάγκη. ὡσαύτως δὲ καὶ τὸ αὐξόμενον ἢ τινὰ ἄλλην κίνησιν κινούμενον ἀλλοιοῦσθαι· ἀλλ' ἔστι τινὰ αὐξανόμενα ἃ οὐκ ἀλλοιοῦνται· οἷον τὸ τετράγωνον γνώμονος περιτεθέντος ἠϋζήται μὲν, ἀλλοιότερον δὲ οὐδὲν γεγένηται· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων. ὥσθ' ἕτεραι ἂν εἴησαν αἱ κινήσεις ἀλλήλων. [15b]

Ἔστι δὲ ἀπλῶς μὲν κινήσεις ἡρεμία ἐναντίον· ταῖς δὲ καθ' ἕκαστα, γενέσει μὲν φθορά, αὐξήσει δὲ μείωσις· τῇ δὲ κατὰ τόπον μεταβολῇ ἢ κατὰ τόπον ἡρεμία μάλιστα ἔοικεν ἀντικεῖσθαι, καὶ εἰ ἄρα ἡ εἰς τὸν ἐναντίον τόπον μεταβολή, οἷον τῇ κάτωθεν ἢ ἄνω, τῇ ἄνωθεν ἢ κάτω. τῇ δὲ λοιπῇ τῶν ἀποδοθεισῶν κινήσεων οὐ ῥάδιον ἀποδοῦναι τί ποτέ ἐστιν ἐναντίον, ἔοικε δὲ οὐδὲν εἶναι αὐτῇ ἐναντίον, εἰ μή τις καὶ ἐπὶ ταύτης τὴν κατὰ τὸ ποιὸν ἡρεμίαν ἀντιθεῖν <ἢ> τῇ <v> εἰς τὸ ἐναντίον τοῦ ποιοῦ μεταβολή<v>, καθάπερ καὶ ἐπὶ τῆς κατὰ τόπον μεταβολῆς τὴν κατὰ τόπον ἡρεμίαν ἢ τὴν εἰς τὸ ἐναντίον τόπον μεταβολήν, — ἔστι γὰρ ἡ ἀλλοίωσις μεταβολή κατὰ τὸ ποιόν· — ὥστε ἀντίκειται τῇ <κατὰ τὸ ποιὸν κινήσει ἢ> κατὰ τὸ ποιὸν ἡρεμία <ἢ> ἢ εἰς τὸ ἐναντίον τοῦ ποιοῦ μεταβολή, οἷον τὸ λευκὸν γίνεσθαι τῷ μέλαν γίνεσθαι· ἀλλοιοῦται γὰρ εἰς τὰ ἐναντία τοῦ ποιοῦ μεταβολῆς γιγνομένης.

## Κεφάλαιο 15

Τὸ ἔχειν κατὰ πλείονας τρόπους λέγεται· ἢ γὰρ ὡς ἕξιν καὶ διάθεσιν ἢ ἄλλην τινὰ ποιότητα, — λεγόμεθα γὰρ ἐπιστήμην ἔχειν καὶ ἀρετήν· — ἢ ὡς ποσόν, οἷον ὃ τυγχάνει τις ἔχων μέγεθος, — λέγεται γὰρ τρίπηχυ μέγεθος ἔχειν ἢ τετράπηχυ· — ἢ ὡς τὰ περὶ τὸ σῶμα, οἷον ἰμάτιον ἢ χιτῶνα· ἢ ὡς ἐν μορίῳ, οἷον ἐν χειρὶ δακτύλιον· ἢ ὡς μέρος, οἷον χεῖρα ἢ πόδα· ἢ ὡς ἐν ἀγγεῖῳ, οἷον ὁ μέδιμνος τοὺς πυροὺς ἢ τὸ κεράμιον τὸν οἶνον, — οἶνον γὰρ ἔχειν τὸ κεράμιον λέγεται, καὶ ὁ μέδιμνος πυρούς· ταῦτ' οὖν ἔχειν λέγεται ὡς ἐν

ἀγγείω· — ἢ ὡς κτῆμα· ἔχειν γὰρ οἰκίαν καὶ ἀγρὸν λεγόμεθα. λεγόμεθα δὲ καὶ γυναῖκα ἔχειν καὶ ἡ γυνὴ ἄνδρα· ἔοικε δὲ ἀλλοτριώτατος ὁ νῦν ῥηθεὶς τρόπος τοῦ ἔχειν εἶναι· οὐδὲν γὰρ ἄλλο τῷ ἔχειν γυναῖκα σημαίνομεν ἢ ὅτι συνοικεῖ. ἴσως δ' ἂν καὶ ἄλλοι τινὲς φανείησαν τοῦ ἔχειν τρόποι, οἱ δὲ εἰωθότες λέγεσθαι σχεδὸν ἅπαντες κατηρίθμηνται.

## Περὶ Ἑρμηνείας (16a) De Interpretatione



### CONTENTS

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

## Κεφάλαιο 1

[16a] Πρῶτον δεῖ θέσθαι τί ὄνομα καὶ τί ῥῆμα, ἔπειτα τί ἐστὶν ἀπόφασις καὶ κατάφασις καὶ ἀπόφανσις καὶ λόγος.

Ἔστι μὲν οὖν τὰ ἐν τῇ φωνῇ τῶν ἐν τῇ ψυχῇ παθημάτων σύμβολα, καὶ τὰ γραφόμενα τῶν ἐν τῇ φωνῇ. καὶ ὥσπερ οὐδὲ γράμματα πᾶσι τὰ αὐτά, οὐδὲ φωναὶ αἱ αὐταί· ὧν μέντοι ταῦτα σημεῖα πρώτων, ταῦτα πᾶσι παθήματα τῆς ψυχῆς, καὶ ὧν ταῦτα ὁμοιώματα πράγματα ἤδη ταῦτά. περὶ μὲν οὖν τούτων εἴρηται ἐν τοῖς περὶ ψυχῆς, — ἄλλης γὰρ πραγματείας· — ἔστι δέ, ὥσπερ ἐν τῇ ψυχῇ ὅτε μὲν νόημα ἄνευ τοῦ ἀληθεύειν ἢ ψεύδεσθαι ὅτε δὲ ἤδη ὦ ἀνάγκη τούτων ὑπάρχειν θάτερον, οὕτω καὶ ἐν τῇ φωνῇ· περὶ γὰρ σύνθεσιν καὶ διαίρεσιν ἐστὶ τὸ ψεῦδος τε καὶ τὸ ἀληθές. τὰ μὲν οὖν ὀνόματα αὐτὰ καὶ τὰ ῥήματα ἔοικε τῷ ἄνευ συνθέσεως καὶ διαιρέσεως νοήματι, οἷον τὸ ἄνθρωπος ἢ λευκόν, ὅταν μὴ προστεθῇ τι· οὔτε γὰρ ψεῦδος οὔτε ἀληθές πω. σημεῖον δ' ἐστὶ τοῦδε· καὶ γὰρ ὁ τραγέλαφος σημαίνει μὲν τι, οὕπω δὲ ἀληθές ἢ ψεῦδος, ἐὰν μὴ τὸ εἶναι ἢ μὴ εἶναι προστεθῇ ἢ ἀπλῶς ἢ κατὰ χρόνον.

## Κεφάλαιο 2

Ὄνομα μὲν οὖν ἐστὶ φωνὴ σημαντικὴ κατὰ συνθήκην ἄνευ χρόνου, ἥς μηδὲν μέρος ἐστὶ σημαντικὸν κεχωρισμένον· ἐν γὰρ τῷ Κάλλιππος τὸ ἵππος οὐδὲν καθ' αὐτὸ σημαίνει, ὥσπερ ἐν τῷ λόγῳ τῷ καλὸς ἵππος. οὐ μὴν οὐδ' ὥσπερ ἐν τοῖς ἀπλοῖς ὀνόμασιν, οὕτως ἔχει καὶ ἐν τοῖς πεπλεγμένοις· ἐν ἐκείνοις μὲν γὰρ οὐδαμῶς τὸ μέρος σημαντικόν, ἐν δὲ τούτοις βούλεται μὲν, ἀλλ' οὐδενὸς κεχωρισμένον, οἷον ἐν τῷ ἐπακτροκέλης τὸ κελῆς. τὸ δὲ κατὰ συνθήκην, ὅτι φύσει τῶν ὀνομάτων οὐδέν ἐστιν, ἀλλ' ὅταν γένηται σύμβολον· ἐπεὶ δηλοῦσί γέ τι καὶ οἱ ἀγράμματοι ψόφοι, οἷον θηρίων, ὧν οὐδέν ἐστιν ὄνομα. — τὸ δ' οὐκ ἄνθρωπος οὐκ ὄνομα· οὐ μὴν οὐδὲ κεῖται ὄνομα ὃ τι δεῖ καλεῖν αὐτό, — οὔτε γὰρ λόγος οὔτε ἀπόφασις ἐστὶν· — ἀλλ' ἔστω ὄνομα ἀόριστον. τὸ δὲ Φίλωνος ἢ Φίλωνι καὶ ὅσα [16b] τοιαῦτα οὐκ ὀνόματα ἀλλὰ πτώσεις ὀνόματος. λόγος δὲ ἐστὶν αὐτοῦ τὰ μὲν ἄλλα κατὰ τὰ αὐτά, ὅτι δὲ μετὰ τοῦ ἐστὶν ἢ ἦν ἢ ἔσται οὐκ ἀληθεύει ἢ ψεύδεται, — τὸ δ' ὄνομα αἰεὶ, — οἷον Φίλωνός ἐστιν ἢ οὐκ ἔστιν· οὐδὲν γὰρ πω οὔτε ἀληθεύει οὔτε ψεύδεται.

### Κεφάλαιο 3

Ῥῆμα δέ ἐστι τὸ προσσημαῖνον χρόνον, οὗ μέρος οὐδέν σημαίνει χωρίς· ἔστι δὲ τῶν καθ' ἑτέρου λεγομένων σημείον. λέγω δ' ὅτι προσσημαίνει χρόνον, οἷον ὑγίεια μὲν ὄνομα, τὸ δ' ὑγιαίνει ῥῆμα· προσσημαίνει γὰρ τὸ νῦν ὑπάρχειν. καὶ ἀεὶ τῶν ὑπαρχόντων σημείον ἐστίν, οἷον τῶν καθ' ὑποκειμένου. — τὸ δὲ οὐχ ὑγιαίνει καὶ τὸ οὐ κάμνει οὐ ῥῆμα λέγω· προσσημαίνει μὲν γὰρ χρόνον καὶ ἀεὶ κατὰ τινος ὑπάρχει, τῇ διαφορᾷ δὲ ὄνομα οὐ κεῖται· ἀλλ' ἔστω ἀόριστον ῥῆμα, ὅτι ὁμοίως ἐφ' ὅτου οὖν ὑπάρχει καὶ ὄντος καὶ μὴ ὄντος. ὁμοίως δὲ καὶ τὸ ὑγίανεν ἢ τὸ ὑγιανεῖ οὐ ῥῆμα, ἀλλὰ πτώσις ῥήματος· διαφέρει δὲ τοῦ ῥήματος, ὅτι τὸ μὲν τὸν παρόντα προσσημαίνει χρόνον, τὰ δὲ τὸν πέριξ. — αὐτὰ μὲν οὖν καθ' αὐτὰ λεγόμενα τὰ ῥήματα ὀνόματά ἐστι καὶ σημαίνει τι, — ἴσθησι γὰρ ὁ λέγων τὴν διάνοιαν, καὶ ὁ ἀκούσας ἡρέμησεν, — ἀλλ' εἰ ἔστιν ἢ μὴ οὕτω σημαίνει· οὐ γὰρ τὸ εἶναι ἢ μὴ εἶναι σημείον ἐστὶ τοῦ πράγματος, οὐδ' ἐὰν τὸ ὄν εἴπῃς ψιλόν. αὐτὸ μὲν γὰρ οὐδέν ἐστίν, προσσημαίνει δὲ σύνθεσιν τινα, ἣν ἄνευ τῶν συγκειμένων οὐκ ἔστι νοῆσαι.

### Κεφάλαιο 4

Λόγος δέ ἐστι φωνὴ σημαντική, ἥς τῶν μερῶν τι σημαντικόν ἐστὶ κεχωρισμένον, ὡς φάσις ἀλλ' οὐχ ὡς κατάφασις. λέγω δέ, οἷον ἄνθρωπος σημαίνει τι, ἀλλ' οὐχ ὅτι ἔστιν ἢ οὐκ ἔστιν (ἀλλ' ἔσται κατάφασις ἢ ἀπόφασις ἐὰν τι προστεθῇ)· ἀλλ' οὐχ ἢ τοῦ ἀνθρώπου συλλαβὴ μία· οὐδὲ γὰρ ἐν τῷ μῦς τὸ υς σημαντικόν, ἀλλὰ φωνή ἐστὶ νῦν μόνον. ἐν δὲ τοῖς διπλοῖς σημαίνει μὲν, ἀλλ' οὐ καθ' αὐτό, ὥσπερ εἴρηται. ἔστι δὲ λόγος ἅπας μὲν [17a] σημαντικός, οὐχ ὡς ὄργανον δέ, ἀλλ' ὥσπερ εἴρηται κατὰ συνθήκην· ἀποφαντικός δὲ οὐ πᾶς, ἀλλ' ἐν ᾧ τὸ ἀληθεύειν ἢ ψεύδεσθαι ὑπάρχει· οὐκ ἐν ἅπασιν δὲ ὑπάρχει, οἷον ἢ εὐχὴ λόγος μὲν, ἀλλ' οὐτ' ἀληθὴς οὔτε ψευδής. οἱ μὲν οὖν ἄλλοι ἀφείσθωσαν, — ῥητορικῆς γὰρ ἢ ποιητικῆς οἰκειοτέρα ἢ σκέψις, — ὁ δὲ ἀποφαντικὸς τῆς νῦν θεωρίας.

### Κεφάλαιο 5

Ἔστι δὲ εἷς πρῶτος λόγος ἀποφαντικός κατάφασις, εἶτα ἀπόφασις· οἱ δὲ ἄλλοι συνδέσμῳ εἷς. ἀνάγκη δὲ πάντα λόγον ἀποφαντικὸν ἐκ ῥήματος εἶναι ἢ πτώσεως· καὶ γὰρ ὁ τοῦ ἀνθρώπου λόγος, ἐὰν μὴ τὸ ἔστιν ἢ ἔσται ἢ ἦν ἢ τι τοιοῦτο προστεθῇ, οὕτω λόγος ἀποφαντικός (διότι δὲ ἐν τί ἐστὶν ἀλλ' οὐ πολλὰ τὸ ζῶον πεζὸν δίπουν, — οὐ γὰρ δὴ τῷ σύνεγγυς εἰρησθαι εἷς ἔσται,

— ἔστι δὲ ἄλλης τοῦτο πραγματείας εἰπεῖν). ἔστι δὲ εἷς λόγος ἀποφαντικός ἢ ὁ ἐν δηλῶν ἢ ὁ συνδέσμῳ εἷς, πολλοὶ δὲ οἱ πολλὰ καὶ μὴ ἐν ἢ οἱ ἀσύνδετοι. τὸ μὲν οὖν ὄνομα καὶ τὸ ῥῆμα φάσις ἔστω μόνον, ἐπεὶ οὐκ ἔστιν εἰπεῖν οὕτω δηλοῦντά τι τῇ φωνῇ ὥστ' ἀποφαίνεσθαι, ἢ ἐρωτῶντός τινος, ἢ μὴ ἀλλ' αὐτὸν προαιρούμενον. τούτων δ' ἡ μὲν ἀπλῆ ἐστὶν ἀπόφανσις, οἷον τὶ κατὰ τινὸς ἢ τὶ ἀπὸ τινός, ἡ δ' ἐκ τούτων συγκειμένη, οἷον λόγος τις ἤδη σύνθετος.

## Κεφάλαιο 6

Ἔστι δ' ἡ μὲν ἀπλῆ ἀπόφανσις φωνὴ σημαντικὴ περὶ τοῦ εἰ ὑπάρχει τι ἢ μὴ ὑπάρχει, ὡς οἱ χρόνοι διήρηνται· κατάφασις δὲ ἐστὶν ἀπόφανσις τινὸς κατὰ τινός, ἀπόφασις δὲ ἐστὶν ἀπόφανσις τινὸς ἀπὸ τινός. ἐπεὶ δὲ ἔστι καὶ τὸ ὑπάρχον ἀποφαίνεσθαι ὡς μὴ ὑπάρχον καὶ τὸ μὴ ὑπάρχον ὡς ὑπάρχον καὶ τὸ ὑπάρχον ὡς ὑπάρχον καὶ τὸ μὴ ὑπάρχον ὡς μὴ ὑπάρχον, καὶ περὶ τοὺς ἐκτὸς δὲ τοῦ νῦν χρόνους ὡσαύτως, ἅπαν ἂν ἐνδέχοιτο καὶ ὃ κατέφησέ τις ἀποφῆσαι καὶ ὃ ἀπέφησε καταφῆσαι· ὥστε δῆλον ὅτι πάσῃ καταφάσει ἐστὶν ἀπόφασις ἀντικειμένη καὶ πάσῃ ἀποφάσει κατάφασις. καὶ ἔστω ἀντίφασις τοῦτο, κατάφασις καὶ ἀπόφασις αἱ ἀντικείμεναι· λέγω δὲ ἀντικεῖσθαι τὴν τοῦ αὐτοῦ κατὰ τοῦ αὐτοῦ, — μὴ ὁμωνύμως δέ, καὶ ὅσα ἄλλα τῶν τοιούτων προσδιορίζομεθα πρὸς τὰς σοφιστικὰς ἐνοχλήσεις.

## Κεφάλαιο 7

Ἐπεὶ δὲ ἐστὶ τὰ μὲν καθόλου τῶν πραγμάτων τὰ δὲ καθ' ἕκαστον, — λέγω δὲ καθόλου μὲν ὃ ἐπὶ πλειόνων πέφυκε κατηγορεῖσθαι, καθ' ἕκαστον δὲ ὃ μὴ, οἷον ἄνθρωπος μὲν [17b] τῶν καθόλου Καλλίας δὲ τῶν καθ' ἕκαστον, — ἀνάγκη δ' ἀποφαίνεσθαι ὡς ὑπάρχει τι ἢ μὴ, ὅτε μὲν τῶν καθόλου τινί, ὅτε δὲ τῶν καθ' ἕκαστον. ἐὰν μὲν οὖν καθόλου ἀποφαίνεται ἐπὶ τοῦ καθόλου ὅτι ὑπάρχει ἢ μὴ, ἔσονται ἐναντία ἀποφάνσεις, — λέγω δὲ ἐπὶ τοῦ καθόλου ἀποφαίνεσθαι καθόλου, οἷον πᾶς ἄνθρωπος λευκός, οὐδεὶς ἄνθρωπος λευκός· — ὅταν δὲ ἐπὶ τῶν καθόλου μὲν, μὴ καθόλου δέ, οὐκ εἰσὶν ἐναντία, τὰ μέντοι δηλούμενα ἔστιν εἶναι ἐναντία, — λέγω δὲ τὸ μὴ καθόλου ἀποφαίνεσθαι ἐπὶ τῶν καθόλου, οἷον ἔστι λευκὸς ἄνθρωπος, οὐκ ἔστι λευκὸς ἄνθρωπος· καθόλου γὰρ ὄντος τοῦ ἄνθρωπος οὐχ ὡς καθόλου χρῆται τῇ ἀποφάνσει· τὸ γὰρ πᾶς οὐ τὸ καθόλου σημαίνει ἀλλ' ὅτι καθόλου. — ἐπὶ δὲ τοῦ κατηγορουμένου τὸ καθόλου κατηγορεῖν καθόλου οὐκ ἔστιν ἀληθές· οὐδεμία γὰρ κατάφασις ἔσται, ἐν ἣ τοῦ κατηγορουμένου καθόλου τὸ καθόλου κατηγορηθῆσεται, οἷον ἔστι πᾶς ἄνθρωπος πᾶν ζῶον.

Ἀντικεῖσθαι μὲν οὖν κατάφασιν ἀποφάσει λέγω ἀντιφατικῶς τὴν τὸ καθόλου σημαίνουσιν τῷ αὐτῷ ὅτι οὐ καθόλου, οἷον πᾶς ἄνθρωπος λευκός — οὐ πᾶς ἄνθρωπος λευκός, οὐδεὶς ἄνθρωπος λευκός — ἔστι τις ἄνθρωπος λευκός· ἐναντίως δὲ τὴν τοῦ καθόλου κατάφασιν καὶ τὴν τοῦ καθόλου ἀπόφασιν, οἷον πᾶς ἄνθρωπος δίκαιος — οὐδεὶς ἄνθρωπος δίκαιος· διὸ ταύτας μὲν οὐχ οἷον τε ἅμα ἀληθεῖς εἶναι, τὰς δὲ ἀντικειμένας αὐταῖς ἐνδέχεται ἐπὶ τοῦ αὐτοῦ, οἷον οὐ πᾶς ἄνθρωπος λευκός, καὶ ἔστι τις ἄνθρωπος λευκός. ὅσαι μὲν οὖν ἀντιφάσεις τῶν καθόλου εἰσὶ καθόλου, ἀνάγκη τὴν ἑτέραν ἀληθῆ εἶναι ἢ ψευδῆ, καὶ ὅσαι ἐπὶ τῶν καθ' ἕκαστα, οἷον ἔστι Σωκράτης λευκός — οὐκ ἔστι Σωκράτης λευκός· ὅσαι δ' ἐπὶ τῶν καθόλου μὴ καθόλου, οὐκ ἀεὶ ἢ μὲν ἀληθῆς ἢ δὲ ψευδής· — ἅμα γὰρ ἀληθές ἐστιν εἰπεῖν ὅτι ἔστιν ἄνθρωπος λευκός καὶ ὅτι οὐκ ἔστιν ἄνθρωπος λευκός, καὶ ἔστιν ἄνθρωπος καλός καὶ οὐκ ἔστιν ἄνθρωπος καλός· εἰ γὰρ αἰσχύρος, καὶ οὐ καλός· καὶ εἰ γίγνεται τι, καὶ οὐκ ἔστιν. — δόξειε δ' ἂν ἐξαίφνης ἄτοπον εἶναι διὰ τὸ φαίνεσθαι σημαίνειν τὸ οὐκ ἔστιν ἄνθρωπος λευκός ἅμα καὶ ὅτι οὐδεὶς ἄνθρωπος λευκός· τὸ δὲ οὔτε ταῦτόν σημαίνει οὔθ' ἅμα ἐξ ἀνάγκης. — φανερόν δ' ὅτι καὶ μία ἀπόφασις μιᾶς καταφάσεως· τὸ γὰρ αὐτὸ δεῖ ἀποφῆσαι τὴν ἀπόφασιν ὅπερ κατέφησεν ἢ κατάφασιν, καὶ ἀπὸ τοῦ αὐτοῦ, ἢ τῶν καθ' ἕκαστά [18a] τινος ἢ ἀπὸ τῶν καθόλου τινός, ἢ ὡς καθόλου ἢ ὡς μὴ καθόλου· λέγω δὲ οἷον ἔστι Σωκράτης λευκός — οὐκ ἔστι Σωκράτης λευκός (ἐὰν δὲ ἄλλο τι ἢ ἀπ' ἄλλου τὸ αὐτό, οὐχ ἢ ἀντικειμένη ἄλλ' ἔσται ἐκείνης ἑτέρα), τῇ δὲ πᾶς ἄνθρωπος λευκός ἢ οὐ πᾶς ἄνθρωπος λευκός, τῇ δὲ τις ἄνθρωπος λευκός ἢ οὐδεὶς ἄνθρωπος λευκός, τῇ δὲ ἔστιν ἄνθρωπος λευκός ἢ οὐκ ἔστιν ἄνθρωπος λευκός.

Ὅτι μὲν οὖν μία κατάφασις μιᾶ ἀποφάσει ἀντίκειται ἀντιφατικῶς, καὶ τίνες εἰσὶν αὗται, εἴρηται, καὶ ὅτι αἱ ἐναντίαι ἄλλαι, καὶ τίνες εἰσὶν αὗται, καὶ ὅτι οὐ πᾶσα ἀληθῆς ἢ ψευδής ἀντίφασις, καὶ διὰ τί, καὶ πότε ἀληθῆς ἢ ψευδής.

## Κεφάλαιο 8

μία δὲ ἐστὶ κατάφασις καὶ ἀπόφασις ἢ ἐν καθ' ἑνὸς σημαίνουσα, ἢ καθόλου ὄντος καθόλου ἢ μὴ ὁμοίως, οἷον πᾶς ἄνθρωπος λευκός ἐστίν — οὐκ ἔστι πᾶς ἄνθρωπος λευκός, ἔστιν ἄνθρωπος λευκός — οὐκ ἔστιν ἄνθρωπος λευκός, οὐδεὶς ἄνθρωπος λευκός — ἔστι τις ἄνθρωπος λευκός, εἰ τὸ λευκὸν ἐν σημαίνει. εἰ δὲ δυεῖν ἐν ὄνομα κεῖται, ἐξ ὧν μὴ ἐστίν ἓν, οὐ μία κατά φασιν· οἷον εἴ τις θεῖτο ὄνομα ἱμάτιον ἵππῳ καὶ ἀνθρώπῳ, τὸ ἔστιν ἱμάτιον λευκόν, αὕτη οὐ μία κατάφασιν [οὐδὲ ἀπόφασιν μία]· οὐδὲν γὰρ διαφέρει τοῦτο εἰπεῖν ἢ ἔστιν ἵππος καὶ ἄνθρωπος λευκός, τοῦτο δ' οὐδὲν διαφέρει τοῦ εἰπεῖν ἔστιν

ἵππος λευκὸς καὶ ἔστιν ἄνθρωπος λευκός. εἰ οὖν αὗται πολλὰ σημαίνουσι καὶ εἰςὶ πολλάι, δῆλον ὅτι καὶ ἡ πρώτη ἦτοι πολλὰ ἢ οὐδὲν σημαίνει, — οὐ γὰρ ἔστιν τις ἄνθρωπος ἵππος· — ὥστε οὐδ' ἐν ταύταις ἀνάγκη τὴν μὲν ἀληθεῖ τὴν δὲ ψευδεῖ εἶναι ἀντίφασιν.

## Κεφάλαιο 9

Ἐπὶ μὲν οὖν τῶν ὄντων καὶ γενομένων ἀνάγκη τὴν κατάφασιν ἢ τὴν ἀπόφασιν ἀληθεῖ ἢ ψευδεῖ εἶναι· καὶ ἐπὶ μὲν τῶν καθόλου ὡς καθόλου ἀεὶ τὴν μὲν ἀληθεῖ τὴν δὲ ψευδεῖ καὶ ἐπὶ τῶν καθ' ἕκαστα, ὥσπερ εἴρηται· ἐπὶ δὲ τῶν καθόλου μὴ καθόλου λεχθέντων οὐκ ἀνάγκη· εἴρηται δὲ καὶ περὶ τούτων. — ἐπὶ δὲ τῶν καθ' ἕκαστα καὶ μελλόντων οὐχ ὁμοίως. εἰ γὰρ πᾶσα κατάφασις ἢ ἀπόφασις ἀληθὴς ἢ ψευδής, καὶ ἅπαν ἀνάγκη ἢ ὑπάρχειν ἢ μὴ ὑπάρχειν· εἰ γὰρ ὁ μὲν φήσῃ ἔσεσθαι τι ὁ δὲ μὴ φήσῃ τὸ αὐτὸ τοῦτο, δῆλον ὅτι ἀνάγκη ἀληθεύειν τὸν ἕτερον αὐτῶν, εἰ πᾶσα κατάφασις ἀληθὴς ἢ ψευδής· ἄμφω γὰρ οὐχ ὑπάρξει ἅμα ἐπὶ τοῖς τοιούτοις. εἰ γὰρ ἀληθὲς εἰπεῖν ὅτι λευκὸν ἢ οὐ [18b] λευκὸν ἔστιν, ἀνάγκη εἶναι λευκὸν ἢ οὐ λευκόν, καὶ εἰ ἔστι λευκὸν ἢ οὐ λευκόν, ἀληθὲς ἦν φάναι ἢ ἀποφάναι· καὶ εἰ μὴ ὑπάρχει, ψεύδεται, καὶ εἰ ψεύδεται, οὐχ ὑπάρχει· ὥστ' ἀνάγκη τὴν κατάφασιν ἢ τὴν ἀπόφασιν ἀληθεῖ εἶναι. οὐδὲν ἄρα οὔτε ἔστιν οὔτε γίνεταί οὔτε ἀπὸ τύχης οὔθ' ὁπότερ' ἔτυχεν, οὐδ' ἔσται ἢ οὐκ ἔσται, ἀλλ' ἐξ ἀνάγκης ἅπαντα καὶ οὐχ ὁπότερ' ἔτυχεν (ἢ γὰρ ὁ φᾶς ἀληθεύει ἢ ὁ ἀποφᾶς)· ὁμοίως γὰρ ἂν ἐγίγνετο ἢ οὐκ ἐγίγνετο· τὸ γὰρ ὁπότερ' ἔτυχεν οὐδὲν μᾶλλον οὕτως ἢ μὴ οὕτως ἔχει ἢ ἔξει. — ἔτι εἰ ἔστι λευκὸν νῦν, ἀληθὲς ἦν εἰπεῖν πρότερον ὅτι ἔσται λευκόν, ὥστε ἀεὶ ἀληθὲς ἦν εἰπεῖν ὅτι οὖν τῶν γενομένων ὅτι ἔσται· εἰ δ' ἀεὶ ἀληθὲς ἦν εἰπεῖν ὅτι ἔστιν ἢ ἔσται, οὐχ οἷόν τε τοῦτο μὴ εἶναι οὐδὲ μὴ ἔσεσθαι. ὁ δὲ μὴ οἷόν τε μὴ γενέσθαι, ἀδύνατον μὴ γενέσθαι· ὁ δὲ ἀδύνατον μὴ γενέσθαι, ἀνάγκη γενέσθαι· ἅπαντα οὖν τὰ ἐσόμενα ἀναγκαῖον γενέσθαι. οὐδὲν ἄρα ὁπότερ' ἔτυχεν οὐδ' ἀπὸ τύχης ἔσται· εἰ γὰρ ἀπὸ τύχης, οὐκ ἐξ ἀνάγκης. — ἀλλὰ μὴν οὐδ' ὡς οὐδέτερόν γε ἀληθὲς ἐνδέχεται λέγειν, οἷον ὅτι οὗτ' ἔσται οὔτε οὐκ ἔσται. πρῶτον μὲν γὰρ οὔσης τῆς καταφάσεως ψευδοῦς ἢ ἀπόφασις οὐκ ἀληθὴς, καὶ ταύτης ψευδοῦς οὔσης τὴν κατάφασιν συμβαίνει μὴ ἀληθεῖ εἶναι. καὶ πρὸς τούτοις, εἰ ἀληθὲς εἰπεῖν ὅτι λευκὸν καὶ μέλαν, δεῖ ἄμφω ὑπάρχειν, εἰ δὲ ὑπάρξῃν εἰς αὖριον, ὑπάρξει εἰς αὖριον· εἰ δὲ μήτ' ἔσται μήτε μὴ ἔσται αὖριον, οὐκ ἂν εἴη τὸ ὁπότερ' ἔτυχεν, οἷον ναυμαχία· δέοι γὰρ ἂν μήτε γενέσθαι ναυμαχίαν μήτε μὴ γενέσθαι.

Τὰ μὲν δὴ συμβαίνοντα ἄτοπα ταῦτα καὶ τοιαῦθ' ἕτερα, εἴπερ πάσης καταφάσεως καὶ ἀποφάσεως, ἢ ἐπὶ τῶν καθόλου λεγομένων ὡς καθόλου ἢ



ἐπὶ τῶν καθ' ἕκαστα, ἀνάγκη τῶν ἀντικειμένων εἶναι τὴν μὲν ἀληθῆ τὴν δὲ ψευδῆ, μηδὲν δὲ ὁπότ' ἔτυχεν εἶναι ἐν τοῖς γιγνομένοις, ἀλλὰ πάντα εἶναι καὶ γίνεσθαι ἐξ ἀνάγκης. ὥστε οὔτε βουλευέσθαι δέοι ἂν οὔτε πραγματεύεσθαι, ὥς ἔαν μὲν τοδί ποιήσωμεν, ἔσται τοδί, ἔαν δὲ μὴ τοδί, οὐκ ἔσται. οὐδὲν γὰρ κωλύει εἰς μυριοστὸν ἔτος τὸν μὲν φάναι τοῦτ' ἔσεσθαι τὸν δὲ μὴ φάναι, ὥστε ἐξ ἀνάγκης ἔσεσθαι ὁπότερον αὐτῶν ἀληθὲς ἦν εἰπεῖν τότε. ἀλλὰ μὴν οὐδὲ τοῦτο διαφέρει, εἴ τινες εἶπον τὴν ἀντίφασιν ἢ μὴ εἶπον· δῆλον γὰρ ὅτι οὔτως ἔχει τὰ πράγματα, κἂν μὴ ὁ μὲν καταφήσῃ ὁ δὲ ἀποφήσῃ· οὐ γὰρ διὰ τὸ καταφάναι ἢ ἀποφάναι ἔσται ἢ οὐκ ἔσται, οὐδ' εἰς [19a] μυριοστὸν ἔτος μᾶλλον ἢ ἐν ὁποσσοῦν χρόνῳ. ὥστ' εἰ ἐν ἅπαντι τῷ χρόνῳ οὔτως εἶχεν ὥστε τὸ ἕτερον ἀληθεύεσθαι, ἀναγκαῖον ἦν τοῦτο γενέσθαι, καὶ ἕκαστον τῶν γενομένων ἀεὶ οὔτως ἔχειν ὥστε ἐξ ἀνάγκης γενέσθαι· ὃ τε γὰρ ἀληθῶς εἶπε τις ὅτι ἔσται, οὐχ οἷόν τε μὴ γενέσθαι· καὶ τὸ γενόμενον ἀληθὲς ἦν εἰπεῖν ἀεὶ ὅτι ἔσται.

Εἰ δὴ ταῦτα ἀδύνατα, — ὁρῶμεν γὰρ ὅτι ἔστιν ἀρχὴ τῶν ἐσομένων καὶ ἀπὸ τοῦ βουλευέσθαι καὶ ἀπὸ τοῦ πρᾶξαι τι, καὶ ὅτι ὅλως ἔστιν ἐν τοῖς μὴ ἀεὶ ἐνεργοῦσι τὸ δυνατόν εἶναι καὶ μὴ, ἐν οἷς ἄμφω ἐνδέχεται καὶ τὸ εἶναι καὶ τὸ μὴ εἶναι, ὥστε καὶ τὸ γενέσθαι καὶ τὸ μὴ γενέσθαι· καὶ πολλὰ ἡμῖν δῆλὰ ἔστιν οὔτως ἔχοντα, οἷον ὅτι τουτὶ τὸ ἱμάτιον δυνατόν ἐστι διατμηθῆναι καὶ οὐ διατμηθήσεται, ἀλλ' ἔμπροσθεν κατατριβήσεται· ὁμοίως δὲ καὶ τὸ μὴ διατμηθῆναι δυνατόν· οὐ γὰρ ἂν ὑπῆρχε τὸ ἔμπροσθεν αὐτὸ κατατριβῆναι, εἴγε μὴ δυνατόν ἦν τὸ μὴ διατμηθῆναι· ὥστε καὶ ἐπὶ τῶν ἄλλων γενέσεων, ὅσαι κατὰ δύναμιν λέγονται τὴν τοιαύτην. — φανερόν ἄρα ὅτι οὐχ ἅπαντα ἐξ ἀνάγκης οὔτ' ἔστιν οὔτε γίγνεται, ἀλλὰ τὰ μὲν ὁπότ' ἔτυχε καὶ οὐδὲν μᾶλλον ἢ ἡ κατάφασις ἢ ἡ ἀπόφασις ἀληθής, τὰ δὲ μᾶλλον μὲν καὶ ὥς ἐπὶ τὸ πολὺ θάτερον, οὐ μὴν ἀλλ' ἐνδέχεται γενέσθαι καὶ θάτερον, θάτερον δὲ μὴ.

Τὸ μὲν οὖν εἶναι τὸ ὄν ὅταν ᾗ, καὶ τὸ μὴ ὄν μὴ εἶναι ὅταν μὴ ᾗ, ἀνάγκη· οὐ μέντοι οὔτε τὸ ὄν ἅπαν ἀνάγκη εἶναι οὔτε τὸ μὴ ὄν μὴ εἶναι. — οὐ γὰρ ταῦτόν ἐστι τὸ ὄν ἅπαν εἶναι ἐξ ἀνάγκης ὅτε ἔστιν, καὶ τὸ ἀπλῶς εἶναι ἐξ ἀνάγκης· ὁμοίως δὲ καὶ ἐπὶ τοῦ μὴ ὄντος. — καὶ ἐπὶ τῆς ἀντιφάσεως ὁ αὐτὸς λόγος· εἶναι μὲν ἢ μὴ εἶναι ἅπαν ἀνάγκη, καὶ ἔσεσθαι γε ἢ μὴ· οὐ μέντοι διελόντα γε εἰπεῖν θάτερον ἀναγκαῖον. λέγω δὲ οἷον ἀνάγκη μὲν ἔσεσθαι ναυμαχίαν αὔριον ἢ μὴ ἔσεσθαι, οὐ μέντοι γενέσθαι αὔριον ναυμαχίαν ἀναγκαῖον οὐδὲ μὴ γενέσθαι· γενέσθαι μέντοι ἢ μὴ γενέσθαι ἀναγκαῖον. ὥστε, ἐπεὶ ὁμοίως οἱ λόγοι ἀληθεῖς ὥσπερ τὰ πράγματα, δῆλον ὅτι ὅσα οὔτως ἔχει ὥστε ὁπότ' ἔτυχε καὶ τὰ ἐναντία ἐνδέχεσθαι, ἀνάγκη ὁμοίως ἔχειν καὶ τὴν ἀντίφασιν· ὅπερ συμβαίνει ἐπὶ τοῖς μὴ ἀεὶ οὖσιν ἢ μὴ ἀεὶ μὴ

οὕσιν· τούτων γὰρ ἀνάγκη μὲν θάτερον μόνον τῆς ἀντιφάσεως ἀληθὲς εἶναι ἢ ψεῦδος, οὐ μέντοι τόδε ἢ τόδε ἄλλ' ὁπότερ' ἔτυχεν, καὶ μᾶλλον μὲν ἀληθῆ τὴν ἑτέραν, οὐ μέντοι ἤδη ἀληθῆ ἢ ψευδῆ. ὥστε δῆλον [19b] ὅτι οὐκ ἀνάγκη πάσης καταφάσεως καὶ ἀποφάσεως τῶν ἀντικειμένων τὴν μὲν ἀληθῆ τὴν δὲ ψευδῆ εἶναι· οὐ γὰρ ὥσπερ ἐπὶ τῶν ὄντων οὕτως ἔχει καὶ ἐπὶ τῶν μὴ ὄντων, δυνατῶν δὲ εἶναι ἢ μὴ εἶναι, ἀλλ' ὥσπερ εἴρηται.

## Κεφάλαιο 10

Ἐπεὶ δὲ ἐστὶ τὸ κατὰ τινὸς ἢ κατάφασις σημαίνουσα, τοῦτο δ' ἐστὶν ἡ ὄνομα ἢ τὸ ἀνώνυμον, ἔν δὲ δεῖ εἶναι καὶ καθ' ἐνὸς τὸ ἐν τῇ καταφάσει (τὸ δὲ ὄνομα εἴρηται καὶ τὸ ἀνώνυμον πρότερον· τὸ γὰρ οὐκ ἄνθρωπος ὄνομα μὲν οὐ λέγω ἀλλὰ ἀόριστον ὄνομα, — ἐν γὰρ πῶς σημαίνει ἀόριστον, — ὥσπερ καὶ τὸ οὐχ ὑγιαίνει οὐ ῥῆμα), ἔσται πᾶσα κατάφασις ἢ ἐξ ὀνόματος καὶ ῥήματος ἢ ἐξ ἀορίστου ὀνόματος καὶ ῥήματος. ἄνευ δὲ ῥήματος οὐδεμία κατάφασις οὐδ' ἀπόφασις· τὸ γὰρ ἔστιν ἢ ἔσται ἢ ἦν ἢ γίνεταί ἢ ὅσα ἄλλα τοιαῦτα, ῥήματα ἐκ τῶν κειμένων ἐστίν· προσσημαίνει γὰρ χρόνον. ὥστε πρώτη κατάφασις καὶ ἀπόφασις τὸ ἔστιν ἄνθρωπος — οὐκ ἔστιν ἄνθρωπος, εἴτα ἔστιν οὐκ ἄνθρωπος — οὐκ ἔστιν οὐκ ἄνθρωπος, πάλιν ἔστι πᾶς ἄνθρωπος — οὐκ ἔστι πᾶς ἄνθρωπος, ἔστι πᾶς οὐκ ἄνθρωπος — οὐκ ἔστι πᾶς οὐκ ἄνθρωπος· καὶ ἐπὶ τῶν ἐκτὸς δὲ χρόνων ὁ αὐτὸς λόγος.

Ὅταν δὲ τὸ ἔστι τρίτον προσκατηγορηθῇ, διχῶς λέγονται αἱ ἀντιθέσεις. λέγω δὲ οἷον ἔστι δίκαιος ἄνθρωπος, τὸ ἔστι τρίτον φημὶ συγκεῖσθαι ὄνομα ἢ ῥῆμα ἐν τῇ καταφάσει. ὥστε διὰ τοῦτο τέτταρα ἔσται ταῦτα, ὧν τὰ μὲν δύο πρὸς τὴν κατάφασιν καὶ ἀπόφασιν ἔξει κατὰ τὸ στοιχοῦν ὡς αἱ στερήσεις, τὰ δὲ δύο οὐ· λέγω δὲ ὅτι τὸ ἔστιν ἢ τῷ δικαίῳ προσκείσεται ἢ τῷ οὐ δικαίῳ, ὥστε καὶ ἡ ἀπόφασις. τέτταρα οὖν ἔσται. νοῶμεν δὲ τὸ λεγόμενον ἐκ τῶν ὑπογεγραμμένων· ἔστι δίκαιος ἄνθρωπος — ἀπόφασις τούτου, οὐκ ἔστι δίκαιος ἄνθρωπος· ἔστιν οὐ δίκαιος ἄνθρωπος — τούτου ἀπόφασις, οὐκ ἔστιν οὐ δίκαιος ἄνθρωπος. τὸ γὰρ ἔστιν ἐνταῦθα καὶ τὸ οὐκ ἔστιν τῷ δικαίῳ καὶ τῷ οὐ δικαίῳ πρόσκειται. ταῦτα μὲν οὖν, ὥσπερ ἐν τοῖς Ἀναλυτικοῖς λέγεται, οὕτω τέτακται. ὁμοίως δὲ ἔχει καὶ καθόλου τοῦ ὀνόματος ἢ ἡ κατάφασις, οἷον πᾶς ἐστὶν ἄνθρωπος δίκαιος — [ἀπόφασις] οὐ πᾶς ἐστὶν ἄνθρωπος δίκαιος, πᾶς ἐστὶν ἄνθρωπος οὐ δίκαιος — οὐ πᾶς ἐστὶν ἄνθρωπος οὐ δίκαιος. πλὴν οὐχ ὁμοίως τὰς κατὰ διάμετρον ἐνδέχεται συναληθεύεσθαι, ἐνδέχεται δὲ ποτέ. αὐταὶ μὲν οὖν δύο ἀντίκεινται, ἄλλαι δὲ πρὸς τὸ οὐκ ἄνθρωπος ὡς ὑποκειμένον τι προστεθέντος· ἔστι δίκαιος οὐκ ἄνθρωπος — οὐκ ἔστι δίκαιος οὐκ ἄνθρωπος, ἔστιν οὐ δίκαιος οὐκ ἄνθρωπος — οὐκ ἔστιν

οὐ δίκαιος [20a] οὐκ ἄνθρωπος. πλείους δὲ τούτων οὐκ ἔσονται ἀντιθέσεις· αὗται δὲ χωρὶς ἐκείνων αὐτὰ καθ' αὐτάς εἰσιν, ὡς ὀνόματι τῷ οὐκ ἄνθρωπος χρώμεναι.

Ἐφ' ὅσων δὲ τὸ ἔστι μὴ ἀρμόττει, οἷον ἐπὶ τοῦ ὑγιαίνειν καὶ βαδίζειν, ἐπὶ τούτων τὸ αὐτὸ ποιεῖ οὕτω τιθέμενα ὡς ἂν εἰ τὸ ἔστι προσήπτετο· οἷον ὑγιαίνει πᾶς ἄνθρωπος — οὐχ ὑγιαίνει πᾶς ἄνθρωπος, ὑγιαίνει πᾶς οὐκ ἄνθρωπος — οὐχ ὑγιαίνει πᾶς οὐκ ἄνθρωπος· οὐ γάρ ἐστι τὸ οὐ πᾶς ἄνθρωπος λεκτέον, ἀλλὰ τὸ οὐ, τὴν ἀπόφασιν, τῷ ἄνθρωπος προσθετέον· τὸ γὰρ πᾶς οὐ τὸ καθόλου σημαίνει, ἀλλ' ὅτι καθόλου· δῆλον δὲ ἐκ τοῦδε, ὑγιαίνει ἄνθρωπος — οὐχ ὑγιαίνει ἄνθρωπος, ὑγιαίνει οὐκ ἄνθρωπος — οὐχ ὑγιαίνει οὐκ ἄνθρωπος· ταῦτα γὰρ ἐκείνων διαφέρει τῷ μὴ καθόλου· ὥστε τὸ πᾶς ἢ μηδεὶς οὐδὲν ἄλλο προσσημαίνει ἢ ὅτι καθόλου τοῦ ὀνόματος κατάφησιν ἢ ἀπόφησιν· τὰ οὖν ἄλλα τὰ αὐτὰ δεῖ προστιθέναι.

Ἐπεὶ δ' ἐναντία ἀπόφασίς ἐστι τῇ ἅπαν ἐστὶ ζῶον δίκαιον ἢ σημαίνουσα ὅτι οὐδὲν ἐστὶ ζῶον δίκαιον, αὗται μὲν φανερόν ὅτι οὐδέποτε ἔσονται οὔτε ἀληθεῖς ἅμα οὔτε ἐπὶ τοῦ αὐτοῦ, αἱ δὲ ἀντικείμεναι ταύταις ἔσονται ποτε· οἷον οὐ πᾶν ζῶον δίκαιον καὶ ἔστι τι ζῶον δίκαιον. ἀκολουθοῦσι δ' αὗται, τῇ μὲν πᾶς ἐστὶν ἄνθρωπος οὐ δίκαιος ἢ οὐδεὶς ἐστὶν ἄνθρωπος δίκαιος, τῇ δὲ ἔστι τις δίκαιος ἄνθρωπος ἢ ἀντικειμένη ὅτι οὐ πᾶς ἐστὶν ἄνθρωπος οὐ δίκαιος· ἀνάγκη γὰρ εἶναι τινα. φανερόν δὲ ὅτι καὶ ἐπὶ μὲν τῶν καθ' ἕκαστον, εἰ ἀληθὲς ἐρωτηθέντα ἀποφῆσαι, ὅτι καὶ καταφῆσαι ἀληθές, οἷον ἄρα γε Σωκράτης σοφός; οὐ· Σωκράτης ἄρα οὐ σοφός. ἐπὶ δὲ τῶν καθόλου οὐκ ἀληθὲς ἢ ὁμοίως λεγομένη, ἀληθὲς δὲ ἢ ἀπόφασις, οἷον· ἄρα γε πᾶς ἄνθρωπος σοφός; οὐ· πᾶς ἄρα ἄνθρωπος οὐ σοφός· τοῦτο γὰρ ψεῦδος, ἀλλὰ τὸ οὐ πᾶς ἄρα ἄνθρωπος σοφός ἀληθές· αὕτη δὲ ἐστὶν ἢ ἀντικειμένη, ἐκείνη δὲ ἢ ἐναντία.

Αἱ δὲ κατὰ τὰ ἀόριστα ἀντικείμεναι ὀνόματα καὶ ῥήματα, οἷον ἐπὶ τοῦ μὴ ἄνθρωπος καὶ μὴ δίκαιος, ὥσπερ ἀποφάσεις ἄνευ ὀνόματος καὶ ῥήματος δόξαιεν ἂν εἶναι· οὐκ εἰσὶ δέ· αἰεὶ γὰρ ἀληθεύειν ἀνάγκη ἢ ψεύδεσθαι τὴν ἀπόφασιν, ὃ δ' εἰπὼν οὐκ ἄνθρωπος οὐδὲν μᾶλλον τοῦ ἄνθρωπος ἀλλὰ καὶ ἥττον ἡλήθευκέ τι ἢ ἔψευσται, ἐὰν μή τι προστεθῇ. σημαίνει δὲ τὸ ἔστι πᾶς οὐκ ἄνθρωπος δίκαιος οὐδεμιᾶ ἐκείνων ταύτων, οὐδ' ἢ ἀντικειμένη ταύτη ἢ οὐκ ἔστι πᾶς οὐκ ἄνθρωπος δίκαιος· τὸ δὲ πᾶς οὐ δίκαιος οὐκ ἄνθρωπος τῷ οὐδεὶς δίκαιος οὐκ ἄνθρωπος ταύτὸν σημαίνει. [20b]

Μετατιθέμενα δὲ τὰ ὀνόματα καὶ τὰ ῥήματα ταύτὸν σημαίνει, οἷον ἔστι

λευκὸς ἄνθρωπος — ἔστιν ἄνθρωπος λευκός· εἰ γὰρ μὴ τοῦτό ἐστιν, τοῦ αὐτοῦ πλείους ἔσσονται ἀποφάσεις, ἀλλ' ἐδέδεικτο ὅτι μία μῖς. τοῦ μὲν γὰρ ἔστι λευκὸς ἄνθρωπος ἀπόφασις τὸ οὐκ ἔστι λευκὸς ἄνθρωπος· τοῦ δὲ ἔστιν ἄνθρωπος λευκός, εἰ μὴ ἡ αὐτὴ ἐστι τῇ ἔστι λευκὸς ἄνθρωπος, ἔσται ἀπόφασις ἥτοι τὸ οὐκ ἔστιν οὐκ ἄνθρωπος λευκός ἢ τὸ οὐκ ἔστιν ἄνθρωπος λευκός. ἀλλ' ἡ ἑτέρα μὲν ἐστιν ἀπόφασις τοῦ ἔστιν οὐκ ἄνθρωπος λευκός, ἡ ἑτέρα δὲ τοῦ ἔστι λευκὸς ἄνθρωπος, ὥστε ἔσσονται δύο μῖς. ὅτι μὲν οὖν μετατιθεμένου τοῦ ὀνόματος καὶ τοῦ ῥήματος ἡ αὐτὴ γίνεταί κατάφασις καὶ ἀπόφασις, δῆλον.

## Κεφάλαιο 11

τὸ δὲ ἓν κατὰ πολλῶν ἢ πολλὰ καθ' ἑνὸς καταφάναι ἢ ἀποφάναι, ἐὰν μὴ ἔν τι ἢ τὸ ἐκ τῶν πολλῶν συγκείμενον, οὐκ ἔστι κατάφασις μία οὐδὲ ἀπόφασις. λέγω δὲ ἓν οὐκ ἐὰν ὄνομα ἓν ἢ κείμενον, μὴ ἢ δὲ ἓν τι ἐξ ἐκείνων, οἷον ὁ ἄνθρωπος ἴσως ἐστὶ καὶ ζῶον καὶ δίπουν καὶ ἡμερον, ἀλλὰ καὶ ἓν τι γίνεταί ἐκ τούτων· ἐκ δὲ τοῦ λευκοῦ καὶ τοῦ ἀνθρώπου καὶ τοῦ βαδίζειν οὐχ ἓν. ὥστε οὐτ' ἐὰν ἓν τι κατὰ τούτων καταφήσῃ τις μία κατάφασις, ἀλλὰ φωνὴ μὲν μία καταφάσεις δὲ πολλάι, οὐτ' ἐὰν καθ' ἑνὸς ταῦτα, ἀλλ' ὁμοίως πολλάι. εἰ οὖν ἡ ἐρώτησις ἢ διαλεκτικὴ ἀποκρίσεως ἐστὶν αἵτησις, ἢ τῆς προτάσεως ἢ θατέρου μορίου τῆς ἀντιφάσεως, ἢ δὲ πρότασις ἀντιφάσεως μῖς μόριον, οὐκ ἂν εἴη μία ἀπόκρισις πρὸς ταῦτα· οὐδὲ γὰρ ἡ ἐρώτησις μία, οὐδ' ἂν ἢ ἀληθής. εἴρηται δὲ ἓν τοῖς Τοπικοῖς περὶ αὐτῶν. ἅμα δὲ δῆλον ὅτι οὐδὲ τὸ τί ἐστὶν ἐρώτησις ἐστὶ διαλεκτικὴ· δεῖ γὰρ δεδόσθαι ἐκ τῆς ἐρωτήσεως ἐλέσθαι ὁπότερον βούλεται τῆς ἀντιφάσεως μόριον ἀποφήνασθαι. ἀλλὰ δεῖ τὸν ἐρωτῶντα προσδιορίσαι πότερον τότε ἐστὶν ὁ ἄνθρωπος ἢ οὐ τοῦτο.

Ἐπεὶ δὲ τὰ μὲν κατηγορεῖται συντιθέμενα, ὥς ἓν τὸ πᾶν κατηγορήμα τῶν χωρὶς κατηγορουμένων, τὰ δὲ οὐ, τίς ἢ διαφορά; κατὰ γὰρ τοῦ ἀνθρώπου ἀληθὲς εἰπεῖν καὶ χωρὶς ζῶον καὶ χωρὶς δίπουν, καὶ ὥς ἓν, καὶ ἄνθρωπον καὶ λευκόν, καὶ ταῦθ' ὥς ἓν· ἀλλ' οὐχί, εἰ σκυτεὺς καὶ ἀγαθός, καὶ σκυτεὺς ἀγαθός. εἰ γάρ, ὅτι ἐκάτερον, καὶ τὸ συνάμφω, πολλὰ καὶ ἄτοπα ἔσται. κατὰ γὰρ τοῦ ἀνθρώπου καὶ τὸ ἄνθρωπος ἀληθὲς καὶ τὸ λευκόν, ὥστε καὶ τὸ ἅπαν· πάλιν εἰ τὸ λευκόν, καὶ τὸ ἅπαν, ὥστε ἔσται ἄνθρωπος λευκὸς λευκός, καὶ τοῦτο εἰς ἄπειρον· καὶ πάλιν [21a] μουσικὸς λευκὸς βαδίζων, καὶ ταῦτα πολλάκις πεπλεγμένα. ἔτι εἰ ὁ Σωκράτης Σωκράτης καὶ ἄνθρωπος, καὶ Σωκράτης ἄνθρωπος, καὶ εἰ ἄνθρωπος καὶ δίπους, καὶ ἄνθρωπος δίπους.

Ὅτι μὲν οὖν, εἴ τις ἀπλῶς θήσῃ τὰς συμπλοκάς γίνεσθαι, πολλὰ συμβαίνει

λέγειν ἄτοπα, δῆλον· ὅπως δὲ θετέον, λέγομεν νῦν. τῶν δὴ κατηγορουμένων, καὶ ἐφ’ οἷς κατηγορεῖσθαι συμβαίνει, ὅσα μὲν λέγεται κατὰ συμβεβηκὸς ἢ κατὰ τοῦ αὐτοῦ ἢ θάτερον κατὰ θατέρου, ταῦτα οὐκ ἔσται ἔν· οἷον ἄνθρωπος λευκός ἐστι καὶ μουσικός, ἀλλ’ οὐχ ἔν τὸ λευκὸν καὶ τὸ μουσικόν· συμβεβηκότα γὰρ ἄμφω τῷ αὐτῷ. οὐδ’ εἰ τὸ λευκὸν μουσικὸν ἀληθὲς εἶπεῖν, ὅμως οὐκ ἔσται τὸ μουσικὸν λευκὸν ἔν τι· κατὰ συμβεβηκὸς γὰρ τὸ μουσικὸν λευκόν, ὥστε οὐκ ἔσται τὸ λευκὸν μουσικόν. διὸ οὐδ’ ὁ σκυτεὺς ἀπλῶς ἀγαθός, ἀλλὰ ζῶον δίπουν· οὐ γὰρ κατὰ συμβεβηκός. ἔτι οὐδ’ ὅσα ἐνυπάρχει ἐν τῷ ἐτέρῳ· διὸ οὔτε τὸ λευκὸν πολλάκις οὔτε ὁ ἄνθρωπος ἄνθρωπος ζῶον ἢ δίπουν· ἐνυπάρχει γὰρ ἐν τῷ ἀνθρώπῳ τὸ δίπουν καὶ τὸ ζῶον. ἀληθὲς δ’ ἐστὶν εἶπεῖν κατὰ τοῦ τινὸς καὶ ἀπλῶς, οἷον τὸν τινὰ ἄνθρωπον ἄνθρωπον ἢ τὸν τινὰ λευκὸν ἄνθρωπον λευκόν· οὐκ ἀεὶ δέ, ἀλλ’ ὅταν μὲν ἐν τῷ προσκειμένῳ τῶν ἀντικειμένων τι ἐνυπάρχη οἷς ἔπεται ἀντίφασις, οὐκ ἀληθὲς ἀλλὰ ψεῦδος, — οἷον τὸν τεθνεῶτα ἄνθρωπον ἄνθρωπον εἶπεῖν, — ὅταν δὲ μὴ ἐνυπάρχη, ἀληθές. ἢ ὅταν μὲν ἐνυπάρχη, ἀεὶ οὐκ ἀληθές, ὅταν δὲ μὴ ἐνυπάρχη, οὐκ ἀεὶ ἀληθές· ὥσπερ Ὀμηρός ἐστὶ τι, οἷον ποιητής· ἄρ’ οὖν καὶ ἔστιν, ἢ οὔ; κατὰ συμβεβηκὸς γὰρ κατηγορεῖται τὸ ἔστιν τοῦ Ὀμήρου· ὅτι γὰρ ποιητής ἐστίν, ἀλλ’ οὐ καθ’ αὐτό, κατηγορεῖται κατὰ τοῦ Ὀμήρου τὸ ἔστιν. ὥστ’ ἐν ὅσαις κατηγορίαις μήτε ἐναντιότης ἔνεστιν, ἐὰν λόγοι ἀντ’ ὀνομάτων λέγωνται, καὶ καθ’ αὐτὰ κατηγορῆται καὶ μὴ κατὰ συμβεβηκός, ἐπὶ τούτων τὸ τί καὶ ἀπλῶς ἀληθὲς ἔσται εἶπεῖν. τὸ δὲ μὴ ὄν, ὅτι δοξαστόν, οὐκ ἀληθὲς εἶπεῖν ὄν τι· δόξα γὰρ αὐτοῦ οὐκ ἔστιν ὅτι ἔστιν, ἀλλ’ ὅτι οὐκ ἔστιν.

## Κεφάλαιο 12

Τούτων δὲ διωρισμένων σκεπτέον ὅπως ἔχουσιν αἱ ἀποφάσεις καὶ καταφάσεις πρὸς ἀλλήλας αἱ τοῦ δυνατὸν εἶναι καὶ μὴ δυνατόν, καὶ ἐνδεχόμενον καὶ μὴ ἐνδεχόμενον, καὶ περὶ τοῦ ἀδυνατοῦ τε καὶ ἀναγκαίου· ἔχει γὰρ ἀπορίας τινάς. εἰ γὰρ τῶν συμπλεκόμενων αὐταὶ ἀλλήλαις ἀντίκεινται αἱ ἀντιφάσεις, ὅσαι κατὰ τὸ εἶναι καὶ μὴ εἶναι τάττονται, οἷον [21b] τοῦ εἶναι ἄνθρωπον ἀπόφασις τὸ μὴ εἶναι ἄνθρωπον, οὐ τὸ εἶναι μὴ ἄνθρωπον, καὶ τοῦ εἶναι λευκὸν ἄνθρωπον τὸ μὴ εἶναι λευκὸν ἄνθρωπον, ἀλλ’ οὐ τὸ εἶναι μὴ λευκὸν ἄνθρωπον, — εἰ γὰρ κατὰ παντὸς ἢ κατάφασις ἢ ἡ ἀπόφασις, τὸ ξύλον ἔσται ἀληθὲς εἶπεῖν εἶναι μὴ λευκὸν ἄνθρωπον· εἰ δὲ οὕτως, καὶ ὅσοις τὸ εἶναι μὴ προστίθεται, τὸ αὐτὸ ποιήσει τὸ ἀντὶ τοῦ εἶναι λεγόμενον, οἷον τοῦ ἄνθρωπος βαδίζει οὐ τὸ οὐκ ἄνθρωπος βαδίζει ἀπόφασις, ἀλλὰ τὸ οὐ βαδίζει ἄνθρωπος· οὐδὲν γὰρ διαφέρει εἶπεῖν ἄνθρωπον βαδίζειν ἢ ἄνθρωπον βαδίζοντα εἶναι· — ὥστε εἰ οὕτω πανταχοῦ, καὶ τοῦ δυνατὸν εἶναι ἀπόφασις τὸ δυνατόν μὴ

εἶναι, ἀλλ' οὐ τὸ μὴ δυνατόν εἶναι. δοκεῖ δὲ τὸ αὐτὸ δύνασθαι καὶ εἶναι καὶ μὴ εἶναι· πᾶν γὰρ τὸ δυνατόν τέμνεσθαι ἢ βαδίζειν καὶ μὴ βαδίζειν καὶ μὴ τέμνεσθαι δυνατόν· λόγος δ' ὅτι ἅπαν τὸ οὕτω δυνατόν οὐκ ἀεὶ ἐνεργεῖ, ὥστε ὑπάρξει αὐτῷ καὶ ἡ ἀπόφασις· δύναται γὰρ καὶ μὴ βαδίζειν τὸ βαδιστικὸν καὶ μὴ ὀρᾶσθαι τὸ ὀρατόν. ἀλλὰ μὴν ἀδύνατον κατὰ τοῦ αὐτοῦ ἀληθεύεσθαι τὰς ἀντικειμένους φάσεις· οὐκ ἄρα αὕτη ἀπόφασις· συμβαίνει γὰρ ἐκ τούτων ἡ τὸ αὐτὸ φάναι καὶ ἀποφάναι ἅμα κατὰ τοῦ αὐτοῦ, ἢ μὴ κατὰ τὸ εἶναι καὶ μὴ εἶναι τὰ προστιθέμενα γίνεσθαι φάσεις καὶ ἀποφάσεις. εἰ οὖν ἐκεῖνο ἀδύνατον, τοῦτ' ἂν εἴη αἰρετόν. ἔστιν ἄρα ἀπόφασις τοῦ δυνατόν εἶναι τὸ μὴ δυνατόν εἶναι. ὁ δ' αὐτὸς λόγος καὶ περὶ τοῦ ἐνδεχόμενον εἶναι· καὶ γὰρ τούτου ἀπόφασις τὸ μὴ ἐνδεχόμενον εἶναι. καὶ ἐπὶ τῶν ἄλλων δὲ ὁμοιοτρόπως, οἷον ἀναγκαίου τε καὶ ἀδυνάτου. γίγνεται γάρ, ὥσπερ ἐπ' ἐκείνων τὸ εἶναι καὶ μὴ εἶναι προσθέσεις, τὰ δ' ὑποκείμενα πράγματα τὸ μὲν λευκὸν τὸ δὲ ἄνθρωπος, οὕτως ἐνταῦθα τὸ μὲν εἶναι ὡς ὑποκείμενον γίγνεται, τὸ δὲ δύνασθαι καὶ ἐνδέχεσθαι προσθέσεις διορίζουσαι, ὥσπερ ἐπ' ἐκείνων τὸ εἶναι καὶ μὴ εἶναι τὸ ἀληθές, ὁμοίως αὐταὶ ἐπὶ τοῦ εἶναι δυνατόν καὶ εἶναι οὐ δυνατόν.

Τοῦ δὲ δυνατόν μὴ εἶναι ἀπόφασις τὸ οὐ δυνατόν μὴ εἶναι. διὸ καὶ ἀκολουθεῖν ἂν δόξαιεν ἀλλήλαις αἱ δυνατόν εἶναι — δυνατόν μὴ εἶναι· τὸ γὰρ αὐτὸ δυνατόν εἶναι καὶ μὴ εἶναι· οὐ γὰρ ἀντιφάσεις ἀλλήλων αἱ τοιαῦται. ἀλλὰ τὸ δυνατόν εἶναι καὶ [22a] μὴ δυνατόν εἶναι οὐδέποτε ἅμα· ἀντίκεινται γάρ. οὐδέ γε τὸ δυνατόν μὴ εἶναι καὶ οὐ δυνατόν μὴ εἶναι οὐδέποτε ἅμα. ὁμοίως δὲ καὶ τοῦ ἀναγκαῖον εἶναι ἀπόφασις οὐ τὸ ἀναγκαῖον μὴ εἶναι, ἀλλὰ τὸ μὴ ἀναγκαῖον εἶναι· τοῦ δὲ ἀναγκαῖον μὴ εἶναι τὸ μὴ ἀναγκαῖον μὴ εἶναι. καὶ τοῦ ἀδύνατον εἶναι οὐ τὸ ἀδύνατον μὴ εἶναι, ἀλλὰ τὸ μὴ ἀδύνατον εἶναι· τοῦ δὲ ἀδύνατον μὴ εἶναι τὸ οὐκ ἀδύνατον μὴ εἶναι. — καὶ καθόλου δέ, ὥσπερ εἴρηται, τὸ μὲν εἶναι καὶ μὴ εἶναι δεῖ τιθέναι ὡς τὰ ὑποκείμενα, κατάφασιν δὲ καὶ ἀπόφασιν ταῦτα ποιοῦντα πρὸς τὸ εἶναι καὶ μὴ εἶναι συνάπτειν. καὶ ταύτας οἶεσθαι χρὴ εἶναι τὰς ἀντικειμένους φάσεις, δυνατόν — οὐ δυνατόν, ἐνδεχόμενον — οὐκ ἐνδεχόμενον, ἀδύνατον — οὐκ ἀδύνατον, ἀναγκαῖον — οὐκ ἀναγκαῖον, ἀληθές — οὐκ ἀληθές.

### Κεφάλαιο 13

Καὶ αἱ ἀκολουθήσεις δὲ κατὰ λόγον γίνονται οὕτω τιθεμένοις· τῷ μὲν γὰρ δυνατῷ εἶναι τὸ ἐνδέχεσθαι εἶναι, καὶ τοῦτο ἐκείνῳ ἀντιστρέφει, καὶ τὸ μὴ ἀδύνατον εἶναι καὶ τὸ μὴ ἀναγκαῖον εἶναι· τῷ δὲ δυνατῷ μὴ εἶναι καὶ ἐνδεχομένῳ μὴ εἶναι τό τε μὴ ἀναγκαῖον μὴ εἶναι καὶ οὐκ ἀδύνατον μὴ εἶναι,

τῷ δὲ μὴ δυνατῷ εἶναι καὶ μὴ ἐνδεχομένῳ εἶναι τὸ ἀναγκαῖον μὴ εἶναι καὶ τὸ ἀδύνατον εἶναι, τῷ δὲ μὴ δυνατῷ μὴ εἶναι καὶ μὴ ἐνδεχομένῳ μὴ εἶναι τὸ ἀναγκαῖον εἶναι καὶ τὸ ἀδύνατον μὴ εἶναι. θεωρεῖσθω δὲ ἐκ τῆς ὑπογραφῆς ὡς λέγομεν·

δυνατὸν εἶναι                      οὐ δυνατὸν εἶναι

ἐνδεχόμενον εἶναι              οὐκ ἐνδεχόμενον εἶναι

οὐκ ἀδύνατον εἶναι              ἀδύνατον εἶναι

οὐκ ἀναγκαῖον εἶναι              ἀναγκαῖον εἶναι

δυνατὸν μὴ εἶναι              οὐ δυνατὸν μὴ εἶναι

δυνατὸν μὴ εἶναι              οὐ δυνατὸν μὴ εἶναι

ἐνδεχόμενον μὴ εἶναι              οὐκ ἐνδεχόμενον μὴ εἶναι

οὐκ ἀδύνατον μὴ εἶναι ἀδύνατον μὴ εἶναι

οὐκ ἀναγκαῖον μὴ εἶναι ἀναγκαῖον εἶναι.

Τὸ μὲν οὖν ἀδύνατον καὶ οὐκ ἀδύνατον τῷ ἐνδεχομένῳ καὶ δυνατῷ καὶ οὐκ ἐνδεχομένῳ καὶ μὴ δυνατῷ ἀκολουθεῖ μὲν ἀντιφατικῶς, ἀντεστραμμένως δέ· τῷ μὲν γὰρ δυνατῷ εἶναι ἢ ἀπόφασις τοῦ ἀδυνάτου, τῇ δὲ ἀποφάσει ἢ κατάφασις· τῷ γὰρ οὐ δυνατῷ εἶναι τὸ ἀδύνατον εἶναι· κατάφασις γὰρ τὸ ἀδύνατον εἶναι, τὸ δὲ οὐκ ἀδύνατον ἀπόφασις.

Τὸ δ' ἀναγκαῖον πῶς, ὁπτέον. φανερόν δὴ ὅτι οὐχ οὕτως, ἀλλ' αἱ ἐναντίαι ἔπονται, αἱ δ' ἀντιφάσεις χωρὶς. οὐ γὰρ ἐστὶν [22b] ἀπόφασις τοῦ ἀνάγκη μὴ εἶναι τὸ οὐκ ἀνάγκη εἶναι· ἐνδέχεται γὰρ ἀληθεύεσθαι ἐπὶ τοῦ αὐτοῦ ἀμφοτέρως· τὸ γὰρ ἀναγκαῖον μὴ εἶναι οὐκ ἀναγκαῖον εἶναι. αἴτιον δὲ τοῦ μὴ ἀκολουθεῖν ὁμοίως τοῖς ἑτέροις ὅτι ἐναντίως τὸ ἀδύνατον τῷ ἀναγκαίῳ ἀποδίδοται, τὸ αὐτὸ δυνάμενον· εἰ γὰρ ἀδύνατον εἶναι, ἀναγκαῖον τοῦτο οὐχὶ εἶναι ἀλλὰ μὴ εἶναι· εἰ δὲ ἀδύνατον μὴ εἶναι, τοῦτο ἀνάγκη εἶναι· ὥστ' εἰ ἐκεῖνα ὁμοίως τῷ δυνατῷ καὶ μὴ, ταῦτα ἐξ ἐναντίας, ἐπεὶ σημαίνει γε ταῦτόν τό τε ἀναγκαῖον καὶ τὸ ἀδύνατον, ἀλλ' ὥσπερ εἴρηται, ἀντεστραμμένως. ἢ ἀδύνατον οὕτω κεῖσθαι τὰς τοῦ ἀναγκαίου ἀντιφάσεις; τὸ μὲν γὰρ ἀναγκαῖον εἶναι δυνατόν εἶναι· εἰ γὰρ μὴ, ἢ ἀπόφασις ἀκολουθήσει· ἀνάγκη γὰρ ἢ φάναι ἢ ἀποφάναι· ὥστ' εἰ μὴ δυνατόν εἶναι, ἀδύνατον εἶναι· ἀδύνατον ἄρα εἶναι τὸ ἀναγκαῖον εἶναι, ὅπερ ἄτοπον. ἀλλὰ μὴν τῷ γε δυνατόν εἶναι τὸ οὐκ ἀδύνατον εἶναι ἀκολουθεῖ, τούτῳ δὲ τὸ μὴ ἀναγκαῖον εἶναι· ὥστε συμβαίνει τὸ ἀναγκαῖον εἶναι μὴ ἀναγκαῖον εἶναι, ὅπερ ἄτοπον. ἀλλὰ μὴν οὐδὲ τὸ ἀναγκαῖον εἶναι ἀκολουθεῖ τῷ δυνατόν εἶναι, οὐδὲ τὸ ἀναγκαῖον μὴ εἶναι· τῷ μὲν γὰρ ἄμφω ἐνδέχεται συμβαίνειν, τούτων δ' ὁπότερον ἂν ἀληθὲς ᾖ, οὐκέτι ἔσται ἐκεῖνα ἀληθῆ· ἅμα γὰρ δυνατόν εἶναι καὶ μὴ εἶναι· εἰ δ' ἀνάγκη εἶναι ἢ μὴ εἶναι, οὐκ ἔσται δυνατόν ἄμφω. λείπεται τοίνυν τὸ οὐκ ἀναγκαῖον μὴ εἶναι ἀκολουθεῖν τῷ δυνατόν εἶναι· τοῦτο γὰρ ἀληθὲς καὶ κατὰ τοῦ ἀναγκαῖον εἶναι. καὶ γὰρ αὕτη γίγνεται ἀντίφασις τῇ ἐπομένῃ τῷ οὐ δυνατῷ εἶναι· ἐκείνῳ γὰρ ἀκολουθεῖ τὸ ἀδύνατον εἶναι καὶ ἀναγκαῖον μὴ εἶναι, οὐ ἀπόφασις τὸ οὐκ ἀναγκαῖον μὴ εἶναι. ἀκολουθοῦσιν ἄρα καὶ αὗται αἱ ἀντιφάσεις κατὰ τὸν εἰρημένον τρόπον, καὶ οὐδὲν ἀδύνατον συμβαίνει τιθεμένων οὕτως.



Ἀπορήσειε δ' ἂν τις εἰ τῷ ἀναγκαῖον εἶναι τὸ δυνατόν εἶναι ἔπεται. εἴ τε γὰρ μὴ ἔπεται, ἢ ἀντίφασις ἀκολουθήσει, τὸ μὴ δυνατόν εἶναι· καὶ εἴ τις ταύτην μὴ φήσειεν εἶναι ἀντίφασιν, ἀνάγκη λέγειν τὸ δυνατόν μὴ εἶναι· ἅπερ ἄμφω ψευδῇ κατὰ τοῦ ἀναγκαῖον εἶναι. ἀλλὰ μὴν πάλιν τὸ αὐτὸ εἶναι δοκεῖ δυνατόν τέμνεσθαι καὶ μὴ τέμνεσθαι, καὶ εἶναι καὶ μὴ εἶναι, ὥστε ἔσται τὸ ἀναγκαῖον εἶναι ἐνδεχόμενον μὴ εἶναι· τοῦτο δὲ ψεῦδος. φανερόν δὲ ὅτι οὐ πᾶν τὸ δυνατόν ἢ εἶναι ἢ βαδίζειν καὶ τὰ ἀντικείμενα δύναται, ἀλλ' ἔστιν ἐφ' ὧν οὐκ ἀληθές· πρῶτον μὲν ἐπὶ τῶν μὴ κατὰ λόγον δυνατῶν, οἷον τὸ πῦρ θερμαντικὸν καὶ ἔχει δύναμιν ἄλογον, — αἱ μὲν οὖν μετὰ λόγου [23a] δυνάμεις αἱ αὐταὶ πλειόνων καὶ τῶν ἐναντίων, αἱ δ' ἄλογοι οὐ πᾶσαι, ἀλλ' ὥσπερ εἴρηται, τὸ πῦρ οὐ δυνατόν θερμαίνειν καὶ μή, οὐδ' ὅσα ἄλλα ἐνεργεῖ αἰ· ἔνια μέντοι δύναται καὶ τῶν κατὰ τὰς ἀλόγους δυνάμεις ἅμα τὰ ἀντικείμενα· ἀλλὰ τοῦτο μὲν τούτου χάριν εἴρηται, ὅτι οὐ πᾶσα δύναμις τῶν ἀντικειμένων, οὐδ' ὅσαι λέγονται κατὰ τὸ αὐτὸ εἶδος, — ἔνια δὲ δυνάμεις ὁμώνυμοί εἰσιν· τὸ γὰρ δυνατόν οὐχ ἀπλῶς λέγεται, ἀλλὰ τὸ μὲν ὅτι ἀληθές ὡς ἐνεργεῖα ὄν, οἷον δυνατόν βαδίζειν ὅτι βαδίζει, καὶ ὅλως δυνατόν εἶναι ὅτι ἤδη ἔστι κατ' ἐνέργειαν ὃ λέγεται δυνατόν, τὸ δὲ ὅτι ἐνεργήσειεν ἂν, οἷον δυνατόν βαδίζειν ὅτι βαδίσειεν ἂν. καὶ αὕτη μὲν ἐπὶ τοῖς κινητοῖς ἐστὶ μόνοις ἢ δυνάμεις, ἐκείνη δὲ καὶ ἐπὶ τοῖς ἀκινήτοις· ἄμφω δὲ ἀληθές εἰπεῖν τὸ μὴ ἀδύνατον εἶναι βαδίζειν ἢ εἶναι, καὶ τὸ βαδίζον ἤδη καὶ ἐνεργοῦν καὶ τὸ βαδιστικόν. τὸ μὲν οὖν οὕτω δυνατόν οὐκ ἀληθές κατὰ τοῦ ἀναγκαίου ἀπλῶς εἰπεῖν, θάτερον δὲ ἀληθές. ὥστε, ἐπεὶ τῷ ἐν μέρει τὸ καθόλου ἔπεται, τῷ ἐξ ἀνάγκης ὄντι ἔπεται τὸ δύνασθαι εἶναι, οὐ μέντοι πᾶν. καὶ ἔστι δὲ ἀρχὴ ἴσως τὸ ἀναγκαῖον καὶ μὴ ἀναγκαῖον πάντων ἢ εἶναι ἢ μὴ εἶναι, καὶ τὰ ἄλλα ὡς τούτοις ἀκολουθοῦντα ἐπισκοπεῖν δεῖ. Φανερόν δὲ ἐκ τῶν εἰρημένων ὅτι τὸ ἐξ ἀνάγκης ὄν κατ' ἐνέργειαν ἐστίν, ὥστε εἰ πρότερα τὰ αἰδία, καὶ ἐνέργεια δυνάμεως προτέρα. καὶ τὰ μὲν ἄνευ δυνάμεως ἐνέργειαι εἰσιν, οἷον αἱ πρῶται οὐσίαι, τὰ δὲ μετὰ δυνάμεως, ἃ τῇ μὲν φύσει πρότερα, τῷ χρόνῳ δὲ ὕστερα, τὰ δὲ οὐδέποτε ἐνέργειαι εἰσιν ἀλλὰ δυνάμεις μόνον.

## Κεφάλαιο 14

Πότερον δὲ ἐναντία ἐστὶν ἢ κατάφασις τῇ ἀποφάσει ἢ ἢ κατάφασις τῇ καταφάσει, καὶ ὁ λόγος τῷ λόγῳ ὁ λέγων ὅτι πᾶς ἄνθρωπος δίκαιος τῷ οὐδεὶς ἄνθρωπος δίκαιος, ἢ τὸ πᾶς ἄνθρωπος δίκαιος τῷ πᾶς ἄνθρωπος ἄδικος; οἷον ἔστι Καλλίας δίκαιος — οὐκ ἔστι Καλλίας δίκαιος — Καλλίας ἄδικός ἐστιν, ποτέρα ἐναντία τούτων; — εἰ γὰρ τὰ μὲν ἐν τῇ φωνῇ ἀκολουθεῖ τοῖς ἐν τῇ διανοίᾳ, ἐκεῖ δ' ἐναντία δόξα ἢ τοῦ ἐναντίου, οἷον ὅτι πᾶς ἄνθρωπος δίκαιος τῇ πᾶς ἄνθρωπος ἄδικος, καὶ ἐπὶ τῶν ἐν τῇ φωνῇ

καταφάσεων ἀνάγκη ὁμοίως ἔχειν. εἰ δὲ μὴδὲ ἐκεῖ ἢ τοῦ ἐναντίου δόξα ἐναντία ἐστίν, οὐδ' ἢ κατάφασις τῇ καταφάσει ἔσται ἐναντία, ἀλλ' ἢ εἰρημένη ἀπόφασις. ὥστε σκεπτέον ποία δόξα ἀληθῆς ψευδεῖ δόξη ἐναντία, πότερον ἢ τῆς ἀποφάσεως ἢ ἢ τὸ ἐναντίον εἶναι δοξάζουσα. λέγω δὲ ὥδε· ἔστι τις δόξα ἀληθῆς τοῦ ἀγαθοῦ ὅτι ἀγαθόν, ἄλλη δὲ [23b] ὅτι οὐκ ἀγαθὸν ψευδῆς, ἑτέρα δὲ ὅτι κακόν· ποτέρα δὴ τούτων ἐναντία τῇ ἀληθεῖ; καὶ εἰ ἔστι μία, κατὰ ποτέραν ἐναντία; (τὸ μὲν δὴ τούτῳ οἶσθαι τὰς ἐναντίας δόξας ὠρίσθαι, τῶ τῶν ἐναντίων εἶναι, ψεῦδος· τοῦ γὰρ ἀγαθοῦ ὅτι ἀγαθὸν καὶ τοῦ κακοῦ ὅτι κακὸν ἢ αὐτὴ ἴσως καὶ ἀληθῆς, εἴτε πλείους εἴτε μία ἐστίν· ἐναντία δὲ ταῦτα· ἀλλ' οὐ τῶ ἐναντίων εἶναι ἐναντίαι, ἀλλὰ μᾶλλον τῶ ἐναντίως.) Εἰ δὴ ἔστι μὲν τοῦ ἀγαθοῦ ὅτι ἐστὶν ἀγαθὸν δόξα, ἔστι δ' ὅτι οὐκ ἀγαθόν, ἔστι δὲ ὅτι ἄλλο τι ὃ οὐχ ὑπάρχει οὐδ' οἷόν τε ὑπάρξει (τῶν μὲν δὴ ἄλλων οὐδεμίαν θετέον, οὐθ' ὅσαι ὑπάρχειν τὸ μὴ ὑπάρχον δοξάζουσιν οὐθ' ὅσαι μὴ ὑπάρχειν τὸ ὑπάρχον, — ἅπειροι γὰρ ἀμφοτέραι, καὶ ὅσαι ὑπάρχειν δοξάζουσι τὸ μὴ ὑπάρχον καὶ ὅσαι μὴ ὑπάρχειν τὸ ὑπάρχον, — ἀλλ' ἐν ὅσαις ἐστὶν ἢ ἀπάτη· αὗται δὲ ἐξ ὧν αἱ γενέσεις· ἐκ τῶν ἀντικειμένων δὲ αἱ γενέσεις, ὥστε καὶ αἱ ἀπάται), εἰ οὖν τὸ ἀγαθὸν καὶ ἀγαθὸν καὶ οὐ κακόν ἐστίν, καὶ τὸ μὲν καθ' αὐτὸ τὸ δὲ κατὰ συμβεβηκός (συμβέβηκε γὰρ αὐτῷ οὐ κακῷ εἶναι), μᾶλλον δ' ἐκάστου ἀληθῆς ἢ καθ' αὐτό, καὶ ψευδῆς εἴπερ καὶ ἀληθῆς. — ἢ μὲν οὖν ὅτι οὐκ ἀγαθὸν τὸ ἀγαθὸν τοῦ καθ' αὐτὸ ὑπάρχοντος ψευδῆς, ἢ δὲ τοῦ ὅτι κακὸν τοῦ κατὰ συμβεβηκός, ὥστε μᾶλλον ἂν εἴη ψευδῆς τοῦ ἀγαθοῦ ἢ τῆς ἀποφάσεως ἢ ἢ τοῦ ἐναντίου. διέψευσται δὲ μάλιστα περὶ ἑκάστον ὁ τὴν ἐναντίαν ἔχων δόξαν· τὰ γὰρ ἐναντία τῶν πλείστον διαφερόντων περὶ τὸ αὐτό. εἰ οὖν ἐναντία μὲν τούτων ἢ ἑτέρα, ἐναντιωτέρα δὲ ἢ τῆς ἀντιφάσεως, δῆλον ὅτι αὕτη ἂν εἴη ἢ ἐναντία. ἢ δὲ τοῦ ὅτι κακὸν τὸ ἀγαθὸν συμπεπλεγμένη ἐστίν· καὶ γὰρ ὅτι οὐκ ἀγαθὸν ἀνάγκη ἴσως ὑπολαμβάνειν τὸν αὐτόν.

Ἔτι δ' εἰ καὶ ἐπὶ τῶν ἄλλων ὁμοίως δεῖ ἔχειν, καὶ ταύτη ἂν δόξειε καλῶς εἰρηῆσθαι· ἢ γὰρ παν — ταχοῦ τὸ τῆς ἀντιφάσεως ἢ οὐδαμοῦ· ὅσοις δὲ μὴ ἐστὶν ἐναντία, περὶ τούτων ἔστι μὲν ψευδῆς ἢ τῇ ἀληθεῖ ἀντικειμένη, οἷον ὁ τὸν ἄνθρωπον μὴ ἄνθρωπον οἰόμενος διέψευσται. εἰ οὖν αὗται ἐναντίαι, καὶ αἱ ἄλλαι αἱ τῆς ἀντιφάσεως.

Ἔτι ὁμοίως ἔχει ἢ τοῦ ἀγαθοῦ ὅτι ἀγαθὸν καὶ ἢ τοῦ μὴ ἀγαθοῦ ὅτι οὐκ ἀγαθόν, καὶ πρὸς ταύταις ἢ τοῦ ἀγαθοῦ ὅτι οὐκ ἀγαθὸν καὶ ἢ τοῦ μὴ ἀγαθοῦ ὅτι ἀγαθόν. τῇ οὖν τοῦ μὴ ἀγαθοῦ ὅτι οὐκ ἀγαθὸν ἀληθεῖ οὔση δόξη τίς ἐναντία; οὐ γὰρ δὴ ἢ λέγουσα ὅτι κακόν· ἅμα γὰρ ἂν ποτε εἴη ἀληθῆς, οὐδέποτε δὲ ἀληθῆς ἀληθεῖ ἐναντία· ἔστι γὰρ τι μὴ ἀγαθὸν κακόν,

ὥστε ἐνδέχεται ἅμα ἀληθεῖς εἶναι. οὐδ' αὖ ἢ ὅτι οὐ κακόν· [ἀληθὲς γὰρ καὶ αὕτη·] ἅμα γὰρ καὶ ταῦτα ἂν εἴη. λείπεται δὴ τῇ τοῦ μὴ ἀγαθοῦ [24a] ὅτι οὐκ ἀγαθὸν ἐναντία ἢ τοῦ μὴ ἀγαθοῦ ὅτι ἀγαθόν [ψευδής· ἀληθὲς γὰρ αὕτη]. ὥστε καὶ ἢ τοῦ ἀγαθοῦ ὅτι οὐκ ἀγαθὸν τῇ τοῦ ἀγαθοῦ ὅτι ἀγαθόν.

Φανερόν δὲ ὅτι οὐδὲν διοίσει οὐδ' ἂν καθόλου τιθῶμεν τὴν κατάφασιν· ἢ γὰρ καθόλου ἀπόφασις ἐναντία ἔσται, οἷον τῇ δόξῃ τῇ δοξαζούσῃ ὅτι πᾶν ἀγαθὸν ἀγαθόν ἢ ὅτι οὐδὲν τῶν ἀγαθῶν ἀγαθόν. ἢ γὰρ τοῦ ἀγαθοῦ ὅτι ἀγαθόν, εἰ καθόλου τὸ ἀγαθόν, ἢ αὐτὴ ἐστὶ τῇ ὅτι ἂν ἢ ἀγαθὸν δοξαζούσῃ ὅτι ἀγαθόν· τοῦτο δὲ οὐδὲν διαφέρει τοῦ ὅτι πᾶν ὃ ἂν ἢ ἀγαθὸν ἀγαθόν ἐστίν. ὁμοίως δὲ καὶ ἐπὶ τοῦ μὴ [24b] ἀγαθοῦ.

Ὡστ' εἴπερ ἐπὶ δόξης οὕτως ἔχει, εἰσὶ δὲ αἱ ἐν τῇ φωνῇ καταφάσεις καὶ ἀποφάσεις σύμβολα τῶν ἐν τῇ ψυχῇ, δῆλον ὅτι καὶ καταφάσει ἐναντία μὲν ἀπόφασις ἢ περὶ τοῦ αὐτοῦ καθόλου, οἷον <τῇ> ὅτι πᾶν ἀγαθὸν ἀγαθόν ἢ ὅτι πᾶς ἄνθρωπος ἀγαθός ἢ ὅτι οὐδὲν ἢ οὐδεὶς, ἀντιφατικῶς δὲ ὅτι ἢ οὐ πᾶν ἢ οὐ πᾶς. φανερόν δὲ καὶ ὅτι ἀληθῆ ἀληθεῖ οὐκ ἐνδέχεται ἐναντίαν εἶναι οὔτε δόξαν οὔτε ἀντίφασιν· ἐναντίαι μὲν γὰρ αἱ περὶ τὰ ἀντικείμενα, περὶ ταῦτα δ' ἐνδέχεται ἀληθεύειν τὸν αὐτόν· ἅμα δὲ οὐκ ἐνδέχεται τὰ ἐναντία ὑπάρχειν τῷ αὐτῷ.

## Ἀναλυτικῶν προτέρων (24a) Prior Analytics



### CONTENTS

[Βιβλίο 1](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Κεφάλαιο 24](#)

[Κεφάλαιο 25](#)

[Κεφάλαιο 26](#)

[Κεφάλαιο 27](#)

[Κεφάλαιο 28](#)

[Κεφάλαιο 29](#)

[Κεφάλαιο 30](#)

[Κεφάλαιο 31](#)

[Κεφάλαιο 32](#)

[Κεφάλαιο 33](#)

[Κεφάλαιο 34](#)

[Κεφάλαιο 35](#)

[Κεφάλαιο 36](#)

[Κεφάλαιο 37](#)

[Κεφάλαιο 38](#)

[Κεφάλαιο 39](#)

[Κεφάλαιο 40](#)

[Κεφάλαιο 41](#)

[Κεφάλαιο 42](#)

[Κεφάλαιο 43](#)

[Κεφάλαιο 44](#)

[Κεφάλαιο 45](#)

[Κεφάλαιο 46](#)

[Βιβλίο 2](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Κεφάλαιο 24](#)

[Κεφάλαιο 25](#)

[Κεφάλαιο 26](#)

[Κεφάλαιο 27](#)

## **Βιβλίο 1**

### **Κεφάλαιο 1**

[24a] Πρῶτον εἰπεῖν περὶ τί καὶ τίνος ἐστὶν ἡ σκέψις, ὅτι περὶ ἀπόδειξιν καὶ ἐπιστήμης ἀποδεικτικῆς· εἶτα διορίσαι τί ἐστὶ πρότασις καὶ τί ὅρος καὶ τί συλλογισμός, καὶ ποῖος τέλειος καὶ ποῖος ἀτελής, μετὰ δὲ ταῦτα τί τὸ ἐν ὅλῳ εἶναι ἢ μὴ εἶναι τόδε τῷδε, καὶ τί λέγομεν τὸ κατὰ παντὸς ἢ μηδενὸς κατηγορεῖσθαι.

Πρότασις μὲν οὖν ἐστὶ λόγος καταφατικὸς ἢ ἀποφατικός τινος κατὰ τινος· οὗτος δὲ ἢ καθόλου ἢ ἐν μέρει ἢ ἀδιόριστος. λέγω δὲ καθόλου μὲν τὸ παντὶ ἢ μηδενὶ ὑπάρχειν, ἐν μέρει δὲ τὸ τινὶ ἢ μὴ τινὶ ἢ μὴ παντὶ ὑπάρχειν, ἀδιόριστον δὲ τὸ ὑπάρχειν ἢ μὴ ὑπάρχειν ἄνευ τοῦ καθόλου ἢ κατὰ μέρος, οἷον τὸ τῶν ἐναντίων εἶναι τὴν αὐτὴν ἐπιστήμην ἢ τὸ τὴν ἡδονὴν μὴ εἶναι ἀγαθόν. διαφέρει δὲ ἡ ἀποδεικτικὴ πρότασις τῆς διαλεκτικῆς, ὅτι ἡ μὲν ἀποδεικτικὴ λήψις θατέρου μορίου τῆς ἀντιφάσεως ἐστὶν (οὐ γὰρ ἐρωτᾷ ἀλλὰ λαμβάνει ὁ ἀποδεικνύων), ἡ δὲ διαλεκτικὴ ἐρώτησις ἀντιφάσεως ἐστὶν. οὐδὲν δὲ διοίσει πρὸς τὸ γενέσθαι τὸν ἑκατέρου συλλογισμόν· καὶ γὰρ ὁ ἀποδεικνύων καὶ ὁ ἐρωτῶν συλλογίζεται λαβὼν τι κατὰ τινος ὑπάρχειν ἢ μὴ ὑπάρχειν. ὥστε ἔσται συλλογιστικὴ μὲν πρότασις ἀπλῶς κατάφασις ἢ ἀπόφασις τινος κατὰ τινος τὸν εἰρημένον τρόπον, ἀποδεικτικὴ δέ, ἐὰν ἀληθὴς ἢ καὶ διὰ τῶν ἐξ ἀρχῆς [24b] ὑποθέσεων εἰλημμένη, διαλεκτικὴ δὲ πυνθανομένῳ μὲν ἐρώτησις ἀντιφάσεως, συλλογιζομένῳ δὲ λήψις τοῦ φαινομένου καὶ ἐνδόξου, καθάπερ ἐν τοῖς Τοπικοῖς εἴρηται. τί μὲν οὖν ἐστὶ

πρότασις, καὶ τί διαφέρει συλλογιστικὴ καὶ ἀποδεικτικὴ καὶ διαλεκτικὴ, δι' ἀκριβείας μὲν ἐν τοῖς ἐπομένοις ῥηθήσεται, πρὸς δὲ τὴν παροῦσαν χρεῖαν ἱκανῶς ἡμῖν διωρίσθω τὰ νῦν.

Ὅρον δὲ καλῶ εἰς ὃν διαλύεται ἡ πρότασις, οἷον τό τε κατηγορούμενον καὶ τὸ καθ' οὗ κατηγορεῖται, προστιθεμένου [ἢ διαιρουμένου] τοῦ εἶναι ἢ μὴ εἶναι. συλλογισμὸς δὲ ἐστὶ λόγος ἐνῶν τεθέντων τινῶν ἕτερόν τι τῶν κειμένων ἐξ ἀνάγκης συμβαίνει τῷ ταῦτα εἶναι. λέγω δὲ τῷ ταῦτα εἶναι τὸ διὰ ταῦτα συμβαίνειν, τὸ δὲ διὰ ταῦτα συμβαίνειν τὸ μηδεὶς ἐξωθεν ὅρου προσδεῖν πρὸς τὸ γενέσθαι τὸ ἀναγκαῖον. τέλειον μὲν οὖν καλῶ συλλογισμὸν τὸν μηδεὶς ἄλλου προσδεόμενον παρὰ τὰ εἰλημμένα πρὸς τὸ φανῆναι τὸ ἀναγκαῖον, ἀτελεῖ δὲ τὸν προσδεόμενον ἢ ἐνὸς ἢ πλειόνων, ἃ ἐστὶ μὲν ἀναγκαῖα διὰ τῶν ὑποκειμένων ὅρων, οὐ μὴν εἴληπται διὰ προτάσεων. τὸ δὲ ἐν ὅλῳ εἶναι ἕτερον ἐτέρῳ καὶ τὸ κατὰ παντὸς κατηγορεῖσθαι θατέρου θάτερον ταῦτόν ἐστιν. λέγομεν δὲ τὸ κατὰ παντὸς κατηγορεῖσθαι ὅταν μηδὲν ἢ λαβεῖν [τοῦ ὑποκειμένου] καθ' οὗ θάτερον οὐ λεχθήσεται· καὶ τὸ κατὰ μηδεὶς ὡσαύτως. [25a]

## Κεφάλαιο 2

Ἐπεὶ δὲ πᾶσα πρότασις ἐστὶν ἢ τοῦ ὑπάρχειν ἢ τοῦ ἐξ ἀνάγκης ὑπάρχειν ἢ τοῦ ἐνδέχεσθαι ὑπάρχειν, τούτων δὲ αἱ μὲν καταφατικαὶ αἱ δὲ ἀποφατικαὶ καθ' ἐκάστην πρόσρῃσιν, πάλιν δὲ τῶν καταφατικῶν καὶ ἀποφατικῶν αἱ μὲν καθόλου αἱ δὲ ἐν μέρει αἱ δὲ ἀδιόριστοι, τὴν μὲν ἐν τῷ ὑπάρχειν καθόλου στερητικὴν ἀνάγκη τοῖς ὅροις ἀντιστρέφειν, οἷον εἰ μηδεμία ἡδονὴ ἀγαθόν, οὐδ' ἀγαθὸν οὐδὲν ἔσται ἡδονή· τὴν δὲ κατηγορικὴν ἀντιστρέφειν μὲν ἀναγκαῖον, οὐ μὴν καθόλου ἀλλ' ἐν μέρει, οἷον εἰ πᾶσα ἡδονὴ ἀγαθόν, καὶ ἀγαθόν τι εἶναι ἡδονήν· τῶν δὲ ἐν μέρει τὴν μὲν καταφατικὴν ἀντιστρέφειν ἀνάγκη κατὰ μέρος (εἰ γὰρ ἡδονὴ τις ἀγαθόν, καὶ ἀγαθόν τι ἔσται ἡδονή), τὴν δὲ στερητικὴν οὐκ ἀναγκαῖον· (οὐ γὰρ εἰ ἄνθρωπος μὴ ὑπάρχει τινὶ ζώῳ, καὶ ζῶον οὐκ ὑπάρχει τινὶ ἀνθρώπῳ).

Πρῶτον μὲν οὖν ἔστω στερητικὴ καθόλου ἡ A B πρότασις. εἰ οὖν μηδενὶ τῷ B τὸ A ὑπάρχει, οὐδὲ τῷ A οὐδενὶ ὑπάρξει τὸ B· εἰ γὰρ τινι, οἷον τῷ Γ, οὐκ ἀληθὲς ἔσται τὸ μηδενὶ τῷ B τὸ A ὑπάρχειν· τὸ γὰρ Γ τῶν B τί ἐστίν. εἰ δὲ παντὶ τὸ A τῷ B, καὶ τὸ B τινὶ τῷ A ὑπάρξει· εἰ γὰρ μηδενί, οὐδὲ τὸ A οὐδενὶ τῷ B ὑπάρξει· ἀλλ' ὑπέκειτο παντὶ ὑπάρχειν. ὁμοίως δὲ καὶ εἰ κατὰ μέρος ἐστὶν ἡ πρότασις. εἰ γὰρ τὸ A τινὶ τῷ B, καὶ τὸ B τινὶ τῷ A ἀνάγκη ὑπάρχειν· εἰ γὰρ μηδενί, οὐδὲ τὸ A οὐδενὶ τῷ B. εἰ δέ γε τὸ A τινὶ τῷ B μὴ



ὑπάρχει, οὐκ ἀνάγκη καὶ τὸ Β τινὶ τῷ Α μὴ ὑπάρχειν, οἷον εἰ τὸ μὲν Β ἐστὶ ζῶον, τὸ δὲ Α ἄνθρωπος· ἄνθρωπος μὲν γὰρ οὐ παντὶ ζῳῷ, ζῶον δὲ παντὶ ἀνθρώπῳ ὑπάρχει.

### Κεφάλαιο 3

Τὸν αὐτὸν δὲ τρόπον ἔξει καὶ ἐπὶ τῶν ἀναγκαίων προτάσεων. ἡ μὲν γὰρ καθόλου στερητικὴ καθόλου ἀντιστρέφει, τῶν δὲ καταφατικῶν ἑκάτερα κατὰ μέρος. εἰ μὲν γὰρ ἀνάγκη τὸ Α τῷ Β μηδενὶ ὑπάρχειν, ἀνάγκη καὶ τὸ Β τῷ Α μηδενὶ ὑπάρχειν· εἰ γὰρ τινὶ ἐνδέχεται, καὶ τὸ Α τῷ Β τινὶ ἐνδέχοιτο ἄν. εἰ δὲ ἐξ ἀνάγκης τὸ Α παντὶ ἢ τινὶ τῷ Β ὑπάρχει, καὶ τὸ Β τινὶ τῷ Α ἀνάγκη ὑπάρχειν· εἰ γὰρ μὴ ἀνάγκη, οὐδ' ἂν τὸ Α τινὶ τῷ Β ἐξ ἀνάγκης ὑπάρχοι. τὸ δ' ἐν μέρει στερητικὸν οὐκ ἀντιστρέφει, διὰ τὴν αὐτὴν αἰτίαν δι' ἣν καὶ πρότερον ἔφαμεν.

Ἐπὶ δὲ τῶν ἐνδεχομένων, ἐπειδὴ πολλαχῶς λέγεται τὸ ἐνδέχεσθαι (καὶ γὰρ τὸ ἀναγκαῖον καὶ τὸ μὴ ἀναγκαῖον καὶ τὸ δυνατόν ἐνδέχεσθαι λέγομεν), ἐν μὲν τοῖς καταφατικοῖς ὁμοίως ἔξει κατὰ τὴν ἀντιστροφὴν ἐν ἅπασιν. εἰ γὰρ τὸ Α [25b] παντὶ ἢ τινὶ τῷ Β ἐνδέχεται, καὶ τὸ Β τινὶ τῷ Α ἐνδέχοιτο ἄν· εἰ γὰρ μηδενί, οὐδ' ἂν τὸ Α οὐδενὶ τῷ Β· δέδεικται γὰρ τοῦτο πρότερον. ἐν δὲ τοῖς ἀποφατικοῖς οὐχ ὡσαύτως, ἀλλ' ὅσα μὲν ἐνδέχεσθαι λέγεται τῷ ἐξ ἀνάγκης ὑπάρχειν ἢ τῷ μὴ ἐξ ἀνάγκης μὴ ὑπάρχειν, ὁμοίως, οἷον εἴ τις φαίη τὸν ἄνθρωπον ἐνδέχεσθαι μὴ εἶναι ἵππον ἢ τὸ λευκὸν μηδενὶ ἱματίῳ ὑπάρχειν (τούτων γὰρ τὸ μὲν ἐξ ἀνάγκης οὐχ ὑπάρχει, τὸ δὲ οὐκ ἀνάγκη ὑπάρχειν, καὶ ὁμοίως ἀντιστρέφει ἡ πρότασις· εἰ γὰρ ἐνδέχεται μηδενὶ ἀνθρώπῳ ἵππον, καὶ ἄνθρωπον ἐγχωρεῖ μηδενὶ ἵππῳ· καὶ εἰ τὸ λευκὸν ἐγχωρεῖ μηδενὶ ἱματίῳ, καὶ τὸ ἱμάτιον ἐγχωρεῖ μηδενὶ λευκῷ· εἰ γὰρ τινὶ ἀνάγκη, καὶ τὸ λευκὸν ἱματίῳ τινὶ ἔσται ἐξ ἀνάγκης· τοῦτο γὰρ δέδεικται πρότερον), ὁμοίως δὲ καὶ ἐπὶ τῆς ἐν μέρει ἀποφατικῆς· ὅσα δὲ τῷ ὡς ἐπὶ τὸ πολὺ καὶ τῷ πεφυκέναι λέγεται ἐνδέχεσθαι, καθ' ὃν τρόπον διορίζομεν τὸ ἐνδεχόμενον, οὐχ ὁμοίως ἔξει ἐν ταῖς στερητικαῖς ἀντιστροφαῖς, ἀλλ' ἡ μὲν καθόλου στερητικὴ πρότασις οὐκ ἀντιστρέφει, ἡ δὲ ἐν μέρει ἀντιστρέφει. τοῦτο δὲ ἔσται φανερόν ὅταν περὶ τοῦ ἐνδεχομένου λέγωμεν. νῦν δὲ τοσοῦτον ἡμῖν ἔστω πρὸς τοῖς εἰρημένοις δῆλον, ὅτι τὸ ἐνδέχεσθαι μηδενὶ ἢ τινὶ μὴ ὑπάρχειν καταφατικὸν ἔχει τὸ σχῆμα (τὸ γὰρ ἐνδέχεται τῷ ἔστιν ὁμοίως τάττεται, τὸ δὲ ἔστιν, οἷς ἂν προσκατηγοῖται, κατάφασιν ἀεὶ ποιεῖ καὶ πάντως, οἷον τὸ ἔστιν οὐκ ἀγαθόν ἢ ἔστιν οὐ λευκόν ἢ ἀπλῶς τὸ ἔστιν οὐ τοῦτο· δειχθήσεται δὲ καὶ τοῦτο διὰ τῶν ἐπομένων), κατὰ δὲ τὰς ἀντιστροφὰς ὁμοίως ἔξουσι ταῖς ἄλλαις.

## Κεφάλαιο 4

Διωρισμένων δὲ τούτων λέγωμεν ἤδη διὰ τίνων καὶ πότε καὶ πῶς γίνεται πᾶς συλλογισμός· ὕστερον δὲ λεκτέον περὶ ἀποδείξεως. πρότερον δὲ περὶ συλλογισμοῦ λεκτέον ἢ περὶ ἀποδείξεως διὰ τὸ καθόλου μᾶλλον εἶναι τὸν συλλογισμόν· ἢ μὲν γὰρ ἀπόδειξις συλλογισμός τις, ὁ συλλογισμὸς δὲ οὐ πᾶς ἀπόδειξις.

Ὅταν οὖν ὅροι τρεῖς οὕτως ἔχωσι πρὸς ἀλλήλους ὥστε τὸν ἔσχατον ἐν ὅλῳ εἶναι τῷ μέσῳ καὶ τὸν μέσον ἐν ὅλῳ τῷ πρώτῳ ἢ εἶναι ἢ μὴ εἶναι, ἀνάγκη τῶν ἄκρων εἶναι συλλογισμὸν τέλειον. καλῶ δὲ μέσον μὲν ὃ καὶ αὐτὸ ἐν ἄλλῳ καὶ ἄλλο ἐν τούτῳ ἐστίν, ὃ καὶ τῇ θέσει γίνεται μέσον· ἄκρα δὲ τὸ αὐτό τε ἐν ἄλλῳ ὄν καὶ ἐν ᾧ ἄλλο ἐστίν. εἰ γὰρ τὸ Α κατὰ παντὸς τοῦ Β καὶ τὸ Β κατὰ παντὸς τοῦ Γ, ἀνάγκη τὸ Α κατὰ παντὸς τοῦ Γ κατηγορεῖσθαι· πρότερον γὰρ εἴρηται πῶς τὸ κατὰ παντὸς λέγομεν. ὁμοίως δὲ καὶ εἰ τὸ μὲν Α κατὰ μη[26a] δενὸς τοῦ Β, τὸ δὲ Β κατὰ παντὸς τοῦ Γ, ὅτι τὸ Α οὐδενὶ τῷ Γ ὑπάρξει. εἰ δὲ τὸ μὲν πρῶτον παντὶ τῷ μέσῳ ἀκολουθεῖ, τὸ δὲ μέσον μηδενὶ τῷ ἐσχάτῳ ὑπάρχει, οὐκ ἔσται συλλογισμὸς τῶν ἄκρων· οὐδὲν γὰρ ἀναγκαῖον συμβαίνει τῷ ταῦτα εἶναι· καὶ γὰρ παντὶ καὶ μηδενὶ ἐνδέχεται τὸ πρῶτον τῷ ἐσχάτῳ ὑπάρχειν, ὥστε οὔτε τὸ κατὰ μέρος οὔτε τὸ καθόλου γίνεται ἀναγκαῖον· μηδενοῦ δὲ ὄντος ἀναγκαίου διὰ τούτων οὐκ ἔσται συλλογισμός. ὅροι τοῦ παντὶ ὑπάρχειν ζῶον — ἄνθρωπος — ἵππος, τοῦ μηδενὶ ζῶον — ἄνθρωπος — λίθος. οὐδ' ὅταν μήτε τὸ πρῶτον τῷ μέσῳ μήτε τὸ μέσον τῷ ἐσχάτῳ μηδενὶ ὑπάρχη, οὐδ' οὕτως ἔσται συλλογισμός. ὅροι τοῦ ὑπάρχειν ἐπιστήμη — γραμμὴ — ἰατρικὴ, τοῦ μὴ ὑπάρχειν ἐπιστήμη — γραμμὴ — μονάς. καθόλου μὲν οὖν ὄντων τῶν ὅρων, δῆλον ἐν τούτῳ τῷ σχήματι πότε ἔσται καὶ πότε οὐκ ἔσται συλλογισμός, καὶ ὅτι ὄντος τε συλλογισμοῦ τοὺς ὅρους ἀναγκαῖον ἔχειν ὡς εἵπομεν, ἂν θ' οὕτως ἔχωσιν, ὅτι ἔσται συλλογισμός.

Εἰ δ' ὁ μὲν καθόλου τῶν ὅρων ὁ δ' ἐν μέρει πρὸς τὸν ἕτερον, ὅταν μὲν τὸ καθόλου τεθῇ πρὸς τὸ μεῖζον ἄκρον ἢ κατηγορικὸν ἢ στερητικόν, τὸ δὲ ἐν μέρει πρὸς τὸ ἔλαττον κατηγορικόν, ἀνάγκη συλλογισμὸν εἶναι τέλειον, ὅταν δὲ πρὸς τὸ ἔλαττον ἢ καὶ ἄλλως πῶς ἔχωσιν οἱ ὅροι, ἀδύνατον. λέγω δὲ μεῖζον μὲν ἄκρον ἐν ᾧ τὸ μέσον ἐστίν, ἔλαττον δὲ τὸ ὑπὸ τὸ μέσον ὄν. ὑπαρχέτω γὰρ τὸ μὲν Α παντὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ. οὐκοῦν εἰ ἔστι παντὸς κατηγορεῖσθαι τὸ ἐν ἀρχῇ λεχθέν, ἀνάγκη τὸ Α τινὶ τῷ Γ ὑπάρχειν. καὶ εἰ τὸ μὲν Α μηδενὶ τῷ Β ὑπάρχει, τὸ δὲ Β τινὶ τῷ Γ, ἀνάγκη τὸ Α τινὶ τῷ Γ μὴ ὑπάρχειν· ὠρίσται γὰρ καὶ τὸ κατὰ μηδενοῦ πῶς λέγομεν· ὥστε ἔσται

συλλογισμὸς τέλειος. ὁμοίως δὲ καὶ εἰ ἀδιόριστον εἴη τὸ Β Γ, κατηγορικὸν ὄν· ὁ γὰρ αὐτὸς ἔσται συλλογισμὸς ἀδιόριστου τε καὶ ἐν μέρει ληφθέντος.

Ἐὰν δὲ πρὸς τὸ ἔλαττον ἄκρον τὸ καθόλου τεθῇ ἢ κατηγορικὸν ἢ στερητικόν, οὐκ ἔσται συλλογισμὸς, οὔτε καταφατικοῦ οὔτε ἀποφατικοῦ τοῦ ἀδιόριστου ἢ κατὰ μέρος ὄντος, οἷον εἰ τὸ μὲν Α τινὶ τῷ Β ὑπάρχει ἢ μὴ ὑπάρχει, τὸ δὲ Β παντὶ τῷ Γ ὑπάρχει· ὅροι τοῦ ὑπάρχειν ἀγαθόν — ἕξις — φρόνησις, τοῦ μὴ ὑπάρχειν ἀγαθόν — ἕξις — ἀμαθία. πάλιν εἰ τὸ μὲν Β μηδενὶ τῷ Γ, τὸ δὲ Α τινὶ τῷ Β ἢ ὑπάρχει ἢ μὴ ὑπάρχει ἢ μὴ παντὶ ὑπάρχει, οὐδ' οὕτως ἔσται συλλογισμὸς. ὅροι λευκόν — ἵππος — κύκνος, λευκόν — ἵππος — κόραξ. οἱ αὐτοὶ δὲ καὶ εἰ τὸ Α Β ἀδιόριστον. Οὐδ' ὅταν τὸ μὲν πρὸς [26b] τῷ μείζονι ἄκρῳ καθόλου γένηται ἢ κατηγορικὸν ἢ στερητικόν, τὸ δὲ πρὸς τῷ ἐλάττονι στερητικὸν κατὰ μέρος, οὐκ ἔσται συλλογισμὸς [ἀδιόριστου τε καὶ ἐν μέρει ληφθέντος], οἷον εἰ τὸ μὲν Α παντὶ τῷ Β ὑπάρχει, τὸ δὲ Β τινὶ τῷ Γ μὴ, ἢ εἰ μὴ παντὶ ὑπάρχει· ὧ γὰρ ἂν τινι μὴ ὑπάρχῃ τὸ μέσον, τούτῳ καὶ παντὶ καὶ οὐδενὶ ἀκολουθήσει τὸ πρῶτον. ὑποκείσθωσαν γὰρ οἱ ὅροι ζῶον — ἄνθρωπος — λευκόν· εἴτα καὶ ὧν μὴ κατηγορεῖται λευκῶν ὁ ἄνθρωπος, εἰλήφθω κύκνος καὶ χιών· οὐκοῦν τὸ ζῶον τοῦ μὲν παντὸς κατηγορεῖται, τοῦ δὲ οὐδενός, ὥστε οὐκ ἔσται συλλογισμὸς. πάλιν τὸ μὲν Α μηδενὶ τῷ Β ὑπαρχέτω, τὸ δὲ Β τινὶ τῷ Γ μὴ ὑπαρχέτω· καὶ οἱ ὅροι ἔστωσαν ἄψυχον — ἄνθρωπος — λευκόν· εἴτα εἰλήφθωσαν, ὧν μὴ κατηγορεῖται λευκῶν ὁ ἄνθρωπος, κύκνος καὶ χιών· τὸ γὰρ ἄψυχον τοῦ μὲν παντὸς κατηγορεῖται, τοῦ δὲ οὐδενός. ἔτι ἐπεὶ ἀδιόριστον τὸ τινὶ τῷ Γ τὸ Β μὴ ὑπάρχειν, ἀληθεύεται δέ, καὶ εἰ μηδενὶ ὑπάρχει καὶ εἰ μὴ παντί, ὅτι τινὶ οὐχ ὑπάρχει, ληφθέντων δὲ τοιούτων ὅρων ὥστε μηδενὶ ὑπάρχειν οὐ γίνεται συλλογισμὸς (τοῦτο γὰρ εἴρηται πρότερον), φανερόν οὖν ὅτι τῷ οὕτως ἔχειν τοὺς ὅρους οὐκ ἔσται συλλογισμὸς· ἦν γὰρ ἂν καὶ ἐπὶ τούτων. ὁμοίως δὲ δειχθήσεται καὶ εἰ τὸ καθόλου τεθείη στερητικόν. Οὐδὲ ἔὰν ἄμφω τὰ διαστήματα κατὰ μέρος ἢ κατηγορικῶς ἢ στερητικῶς, ἢ τὸ μὲν κατηγορικῶς τὸ δὲ στερητικῶς λέγηται, ἢ τὸ μὲν ἀδιόριστον τὸ δὲ διωρισμένον, ἢ ἄμφω ἀδιόριστα, οὐκ ἔσται συλλογισμὸς οὐδαμῶς. ὅροι δὲ κοινοὶ πάντων ζῶον — λευκόν — ἵππος, ζῶον — λευκόν — λίθος.

Φανερόν οὖν ἐκ τῶν εἰρημένων ὡς ἔὰν ἢ συλλογισμὸς ἐν τούτῳ τῷ σχήματι κατὰ μέρος, ὅτι ἀνάγκη τοὺς ὅρους οὕτως ἔχειν ὡς εἵπομεν· ἄλλως γὰρ ἐχόντων οὐδαμῶς γίνεται. δῆλον δὲ καὶ ὅτι πάντες οἱ ἐν αὐτῷ συλλογισμοὶ τέλειοι εἰσι· (πάντες γὰρ ἐπιτελοῦνται διὰ τῶν ἐξ ἀρχῆς ληφθέντων), καὶ ὅτι πάντα τὰ προβλήματα δείκνυται διὰ τούτου τοῦ σχήματος· καὶ γὰρ τὸ παντὶ καὶ τὸ μηδενὶ καὶ τὸ τινὶ καὶ τὸ μὴ τινι ὑπάρχειν. καλῶ δὲ τὸ τοιοῦτον σχῆμα

πρῶτον.

## Κεφάλαιο 5

Ὅταν δὲ τὸ αὐτὸ τῷ μὲν παντὶ τῷ δὲ μηδενὶ ὑπάρχει, ἢ ἑκατέρῳ παντὶ ἢ μηδενί, τὸ μὲν σχῆμα τὸ τοιοῦτον καλῶ δεύτερον, μέσον δὲ ἐν αὐτῷ λέγω τὸ κατηγορούμενον ἀμφοῖν, ἅκρα δὲ καθ' ὧν λέγεται τοῦτο, μεῖζον δὲ ἅκρον τὸ πρὸς τῷ μέσῳ κείμενον· ἔλαττον δὲ τὸ πορρωτέρω τοῦ μέσου. τίθεται δὲ τὸ μέσον ἔξω μὲν τῶν ἁκρῶν, πρῶτον δὲ τῇ θέσει. [27a] τέλειος μὲν οὖν οὐκ ἔσται συλλογισμὸς οὐδαμῶς ἐν τούτῳ τῷ σχήματι, δυνατὸς δ' ἔσται καὶ καθόλου καὶ μὴ καθόλου τῶν ὄρων ὄντων. καθόλου μὲν οὖν ὄντων ἔσται συλλογισμὸς ὅταν τὸ μέσον τῷ μὲν παντὶ τῷ δὲ μηδενὶ ὑπάρχει, ἂν πρὸς ὁποτέρῳ ἢ τὸ στερητικόν· ἄλλως δ' οὐδαμῶς. κατηγορεῖσθω γὰρ τὸ Μ τοῦ μὲν Ν μηδενός, τοῦ δὲ Ξ παντός. ἐπεὶ οὖν ἀντιστρέφει τὸ στερητικόν, οὐδενὶ τῷ Μ ὑπάρξει τὸ Ν· τὸ δέ γε Μ παντὶ τῷ Ξ ὑπέκειτο· ὥστε τὸ Ν οὐδενὶ τῷ Ξ· τοῦτο γὰρ δέδεικται πρότερον. πάλιν εἰ τὸ Μ τῷ μὲν Ν παντὶ τῷ δὲ Ξ μηδενί, οὐδὲ τὸ Ξ τῷ Ν οὐδενὶ ὑπάρξει (εἰ γὰρ τὸ Μ οὐδενὶ τῷ Ξ, οὐδὲ τὸ Ξ οὐδενὶ τῷ Μ· τὸ δέ γε Μ παντὶ τῷ Ν ὑπῆρχεν· τὸ ἄρα Ξ οὐδενὶ τῷ Ν ὑπάρξει· γεγένηται γὰρ πάλιν τὸ πρῶτον σχῆμα)· ἐπεὶ δὲ ἀντιστρέφει τὸ στερητικόν, οὐδὲ τὸ Ν οὐδενὶ τῷ Ξ ὑπάρξει, ὥστ' ἔσται ὁ αὐτὸς συλλογισμός. ἔστι δὲ δεικνύειν ταῦτα καὶ εἰς τὸ ἀδύνατον ἄγοντας. ὅτι μὲν οὖν γίνεται συλλογισμὸς οὕτως ἐχόντων τῶν ὄρων, φανερόν, ἀλλ' οὐ τέλειος· οὐ γὰρ μόνον ἐκ τῶν ἐξ ἀρχῆς ἀλλὰ καὶ ἐξ ἄλλων ἐπιτελεῖται τὸ ἀναγκαῖον. ἐὰν δὲ τὸ Μ παντός τοῦ Ν καὶ τοῦ Ξ κατηγορῇται, οὐκ ἔσται συλλογισμός. ὅροι τοῦ ὑπάρχειν οὐσία — ζῶον — ἄνθρωπος, τοῦ μὴ ὑπάρχειν οὐσία — ζῶον — ἀριθμός· μέσον οὐσία. οὐδ' ὅταν μήτε τοῦ Ν μήτε τοῦ Ξ μηδενὸς κατηγορῇται τὸ Μ. ὅροι τοῦ ὑπάρχειν γραμμὴ — ζῶον — ἄνθρωπος, τοῦ μὴ ὑπάρχειν γραμμὴ — ζῶον — λίθος. φανερόν οὖν ὅτι ἂν ἢ συλλογισμὸς καθόλου τῶν ὄρων ὄντων, ἀνάγκη τοὺς ὅρους ἔχειν ὡς ἐν ἀρχῇ εἵπομεν· ἄλλως γὰρ ἐχόντων οὐ γίνεται τὸ ἀναγκαῖον.

Ἐὰν δὲ πρὸς τὸν ἕτερον ἢ καθόλου τὸ μέσον, ὅταν μὲν πρὸς τὸν μεῖζον γένηται καθόλου ἢ κατηγορικῶς ἢ στερητικῶς, πρὸς δὲ τὸν ἐλάττω κατὰ μέρος καὶ ἀντικειμένως τῷ καθόλου (λέγω δὲ τὸ ἀντικειμένως, εἰ μὲν τὸ καθόλου στερητικόν, τὸ ἐν μέρει καταφατικόν· εἰ δὲ κατηγορικόν τὸ καθόλου, τὸ ἐν μέρει στερητικόν), ἀνάγκη γίνεσθαι συλλογισμὸν στερητικὸν κατὰ μέρος. εἰ γὰρ τὸ Μ τῷ μὲν Ν μηδενὶ τῷ δὲ Ξ τινὶ ὑπάρχει, ἀνάγκη τὸ Ν τινὶ τῷ Ξ μὴ ὑπάρχειν. ἐπεὶ γὰρ ἀντιστρέφει τὸ στερητικόν, οὐδενὶ τῷ Μ ὑπάρξει τὸ Ν· τὸ δέ γε Μ ὑπέκειτο τινὶ τῷ Ξ ὑπάρχειν· ὥστε τὸ Ν τινὶ τῷ Ξ οὐχ

ὑπάρξει· γίνεται γὰρ συλλογισμὸς διὰ τοῦ πρώτου σχήματος. πάλιν εἰ τῷ μὲν N παντὶ τὸ M, τῷ δὲ Ξ τινὶ μὴ ὑπάρχει, ἀνάγκη τὸ N τινὶ τῷ Ξ μὴ ὑπάρχειν· εἰ γὰρ παντὶ ὑπάρχει, κατηγορεῖται δὲ καὶ τὸ M παντὸς τοῦ N, ἀνάγκη τὸ M [27b] παντὶ τῷ Ξ ὑπάρχειν· ὑπέκειτο δὲ τινὶ μὴ ὑπάρχειν. καὶ εἰ τὸ M τῷ μὲν N παντὶ ὑπάρχει τῷ δὲ Ξ μὴ παντί, ἔσται συλλογισμὸς ὅτι οὐ παντὶ τῷ Ξ τὸ N· ἀπόδειξις δ' ἡ αὐτή. ἐὰν δὲ τοῦ μὲν Ξ παντὸς τοῦ δὲ N μὴ παντὸς κατηγορῇται, οὐκ ἔσται συλλογισμὸς. ὅροι ζῶον — οὐσία — κόραξ, ζῶον — λευκόν — κόραξ. οὐδ' ὅταν τοῦ μὲν Ξ μηδενός, τοῦ δὲ N τινός. ὅροι τοῦ ὑπάρχειν ζῶον — οὐσία — μονάς, τοῦ μὴ ὑπάρχειν ζῶον — οὐσία — ἐπιστήμη.

Ὅταν μὲν οὖν ἀντικείμενον ἦ τὸ καθόλου τῷ κατὰ μέρος, εἴρηται πότ' ἔσται καὶ πότ' οὐκ ἔσται συλλογισμὸς· ὅταν δὲ ὁμοιοσχήμονες ὦσιν αἱ προτάσεις, οἷον ἀμφοτέραι στερητικαὶ ἢ καταφατικαί, οὐδαμῶς ἔσται συλλογισμὸς. ἔστωσαν γὰρ πρῶτον στερητικαί, καὶ τὸ καθόλου κείσθω πρὸς τὸ μεῖζον ἄκρον, οἷον τὸ M τῷ μὲν N μηδενὶ τῷ δὲ Ξ τινὶ μὴ ὑπαρχέτω· ἐνδέχεται δὲ καὶ παντὶ καὶ μηδενὶ τῷ Ξ τὸ N ὑπάρχειν. ὅροι τοῦ μὲν μὴ ὑπάρχειν μέλαν — χιών — ζῶον· τοῦ δὲ παντὶ ὑπάρχειν οὐκ ἔστι λαβεῖν, εἰ τὸ M τῷ Ξ τινὶ μὲν ὑπάρχει τινὶ δὲ μὴ. εἰ γὰρ παντὶ τῷ Ξ τὸ N, τὸ δὲ M μηδενὶ τῷ N, τὸ M οὐδενὶ τῷ Ξ ὑπάρξει· ἀλλ' ὑπέκειτο τινὶ ὑπάρχειν. οὕτω μὲν οὖν οὐκ ἐγχωρεῖ λαβεῖν ὅρους, ἐκ δὲ τοῦ ἀδιορίστου δεικτέον· ἐπεὶ γὰρ ἀληθεύεται τὸ τινὶ μὴ ὑπάρχειν τὸ M τῷ Ξ καὶ εἰ μηδενὶ ὑπάρχει, μηδενὶ δὲ ὑπάρχοντος οὐκ ἦν συλλογισμὸς, φανερόν ὅτι οὐδὲ νῦν ἔσται. πάλιν ἔστωσαν κατηγορικαί, καὶ τὸ καθόλου κείσθω ὁμοίως, οἷον τὸ M τῷ μὲν N παντὶ τῷ δὲ Ξ τινὶ ὑπαρχέτω· ἐνδέχεται δὲ τὸ N τῷ Ξ καὶ παντὶ καὶ μηδενὶ ὑπάρχειν. ὅροι τοῦ μηδενὶ ὑπάρχειν λευκόν — κύκνος — λίθος τοῦ δὲ παντὶ οὐκ ἔσται λαβεῖν διὰ τὴν αὐτὴν αἰτίαν ἥνπερ πρότερον, ἀλλ' ἐκ τοῦ ἀδιορίστου δεικτέον. εἰ δὲ τὸ καθόλου πρὸς τὸ ἔλαττον ἄκρον ἐστί, καὶ τὸ M τῷ μὲν Ξ μηδενὶ τῷ δὲ N τινὶ μὴ ὑπάρχει, ἐνδέχεται τὸ N τῷ Ξ καὶ παντὶ καὶ μηδενὶ ὑπάρχειν. ὅροι τοῦ ὑπάρχειν λευκόν — ζῶον — κόραξ, τοῦ μὴ ὑπάρχειν λευκόν — λίθος — κόραξ. εἰ δὲ κατηγορικαὶ αἱ προτάσεις, ὅροι τοῦ μὴ ὑπάρχειν λευκόν — ζῶον — χιών, τοῦ ὑπάρχειν λευκόν — ζῶον — κύκνος. φανερόν οὖν, ὅταν ὁμοιοσχήμονες ὦσιν αἱ προτάσεις καὶ ἡ μὲν καθόλου ἡ δ' ἐν μέρει, ὅτι οὐδαμῶς γίνεται συλλογισμὸς. ἀλλ' οὐδ' εἰ τινὶ ἐκατέρω ὑπάρχει ἢ μὴ ὑπάρχει, ἢ τῷ μὲν τῷ δὲ μή, ἢ μηδετέρω παντί, ἢ ἀδιορίστως. ὅροι δὲ κοινοὶ πάντων λευκόν — ζῶον — ἄνθρωπος, λευκόν — ζῶον — ἄψυχον. [28a]

Φανερόν οὖν ἐκ τῶν εἰρημένων ὅτι ἐάν τε οὕτως ἔχωσιν οἱ ὅροι πρὸς

ἀλλήλους ὡς ἐλέχθη, γίνεται συλλογισμὸς ἐξ ἀνάγκης, ἂν τ' ἢ συλλογισμὸς, ἀνάγκη τοὺς ὅρους οὕτως ἔχειν. δῆλον δὲ καὶ ὅτι πάντες ἀτελεῖς εἰσὶν οἱ ἐν τούτῳ τῷ σχήματι συλλογισμοί (πάντες γὰρ ἐπιτελοῦνται προσλαμβανομένων τινῶν, ἃ ἢ ἐνυπάρχει τοῖς ὅροις ἐξ ἀνάγκης ἢ τίθενται ὡς ὑποθέσεις, οἷον ὅταν διὰ τοῦ ἀδυνάτου δεικνύωμεν), καὶ ὅτι οὐ γίνεται καταφατικὸς συλλογισμὸς διὰ τούτου τοῦ σχήματος, ἀλλὰ πάντες στερητικοί, καὶ οἱ καθόλου καὶ οἱ κατὰ μέρος.

## Κεφάλαιο 6

Ἐὰν δὲ τῷ αὐτῷ τὸ μὲν παντὶ τὸ δὲ μηδενὶ ὑπάρχη, ἢ ἄμφω παντὶ ἢ μηδενὶ, τὸ μὲν σχῆμα τὸ τοιοῦτον καλῶ τρίτον, μέσον δ' ἐν αὐτῷ λέγω καθ' οὗ ἄμφω τὰ κατηγορούμενα, ἅκρα δὲ τὰ κατηγορούμενα, μεῖζον δ' ἅκρον τὸ πορρώτερον τοῦ μέσου, ἔλαττον δὲ τὸ ἐγγύτερον. τίθεται δὲ τὸ μέσον ἔξω μὲν τῶν ἁκρων, ἔσχατον δὲ τῇ θέσει. τέλειος μὲν οὖν οὐ γίνεται συλλογισμὸς οὐδ' ἐν τούτῳ τῷ σχήματι, δυνατὸς δ' ἔσται καὶ καθόλου καὶ μὴ καθόλου τῶν ὄρων ὄντων πρὸς τὸ μέσον.

Καθόλου μὲν οὖν ὄντων, ὅταν καὶ τὸ Π καὶ τὸ Ρ παντὶ τῷ Σ ὑπάρχη, ὅτι τινὶ τῷ Ρ τὸ Π ὑπάρξει ἐξ ἀνάγκης· ἐπεὶ γὰρ ἀντιστρέφει τὸ κατηγορικόν, ὑπάρξει τὸ Σ τινὶ τῷ Ρ, ὥστ' ἐπεὶ τῷ μὲν Σ παντὶ τὸ Π, τῷ δὲ Ρ τινὶ τὸ Σ, ἀνάγκη τὸ Π τινὶ τῷ Ρ ὑπάρχειν· γίνεται γὰρ συλλογισμὸς διὰ τοῦ πρώτου σχήματος. ἔστι δὲ καὶ διὰ τοῦ ἀδυνάτου καὶ τῷ ἐκθέσθαι ποιεῖν τὴν ἀπόδειξιν· εἰ γὰρ ἄμφω παντὶ τῷ Σ ὑπάρχει, ἂν ληφθῇ τι τῶν Σ οἷον τὸ Ν, τούτῳ καὶ τὸ Π καὶ τὸ Ρ ὑπάρξει, ὥστε τινὶ τῷ Ρ τὸ Π ὑπάρξει. καὶ ἂν τὸ μὲν Ρ παντὶ τῷ Σ, τὸ δὲ Π μηδενὶ ὑπάρχη, ἔσται συλλογισμὸς ὅτι τὸ Π τινὶ τῷ Ρ οὐχ ὑπάρξει ἐξ ἀνάγκης· ὁ γὰρ αὐτὸς τρόπος τῆς ἀποδείξεως ἀντιστραφείσης τῆς Ρ Σ προτάσεως. δειχθείη δ' ἂν καὶ διὰ τοῦ ἀδυνάτου, καθάπερ ἐπὶ τῶν πρότερον. ἔὰν δὲ τὸ μὲν Ρ μηδενὶ τὸ δὲ Π παντὶ ὑπάρχη τῷ Σ, οὐκ ἔσται συλλογισμὸς. ὅροι τοῦ ὑπάρχειν ζῶον — ἵππος — ἄνθρωπος, τοῦ μὴ ὑπάρχειν ζῶον — ἄψυχον — ἄνθρωπος. οὐδ' ὅταν ἄμφω κατὰ μηδενὸς τοῦ Σ λέγηται, οὐκ ἔσται συλλογισμὸς. ὅροι τοῦ ὑπάρχειν ζῶον — ἵππος — ἄψυχον, τοῦ μὴ ὑπάρχειν ἄνθρωπος — ἵππος — ἄψυχον· μέσον ἄψυχον. φανερὸν οὖν καὶ ἐν τούτῳ τῷ σχήματι πότ' ἔσται καὶ πότ' οὐκ ἔσται συλλογισμὸς καθόλου τῶν ὄρων ὄντων. ὅταν μὲν γὰρ ἀμφοτέρω οἱ ὅροι ὡσι κατηγορικοί, ἔσται συλλογισμὸς ὅτι τινὶ ὑπάρχει τὸ ἅκρον τῷ ἁκρῳ, ὅταν δὲ στερητικοί, οὐκ [28b] ἔσται. ὅταν δ' ὁ μὲν ἢ στερητικὸς ὁ δὲ καταφατικὸς, ἔὰν μὲν ὁ μεῖζων γένηται στερητικὸς ἄτερος δὲ καταφατικὸς, ἔσται συλλογισμὸς ὅτι τινὶ οὐχ ὑπάρχει τὸ ἅκρον τῷ ἁκρῳ, ἔὰν δ' ἀνάπαλιν, οὐκ

ἔσται.

Ἐὰν δ' ὁ μὲν ἦ καθόλου πρὸς τὸ μέσον ὁ δ' ἐν μέρει, κατηγορικῶν μὲν ὄντων ἀμφοῖν ἀνάγκη γίνεσθαι συλλογισμόν, ἂν ὁποτεροσοῦν ἦ καθόλου τῶν ὄρων. εἰ γὰρ τὸ μὲν  $P$  παντὶ τῷ  $\Sigma$  τὸ δὲ  $\Pi$  τινί, ἀνάγκη τὸ  $\Pi$  τινὶ τῷ  $P$  ὑπάρχειν. ἐπεὶ γὰρ ἀντιστρέφει τὸ καταφατικόν, ὑπάρξει τὸ  $\Sigma$  τινὶ τῷ  $\Pi$ , ὥστ' ἐπεὶ τὸ μὲν  $P$  παντὶ τῷ  $\Sigma$ , τὸ δὲ  $\Sigma$  τινὶ τῷ  $\Pi$ , καὶ τὸ  $P$  τινὶ τῷ  $\Pi$  ὑπάρξει· ὥστε τὸ  $\Pi$  τινὶ τῷ  $P$ . πάλιν εἰ τὸ μὲν  $P$  τινὶ τῷ  $\Sigma$  τὸ δὲ  $\Pi$  παντὶ ὑπάρχει, ἀνάγκη τὸ  $\Pi$  τινὶ τῷ  $P$  ὑπάρχειν· ὁ γὰρ αὐτὸς τρόπος τῆς ἀποδείξεως. ἔστι δ' ἀποδείξαι καὶ διὰ τοῦ ἀδυνάτου καὶ τῇ ἐκθέσει, καθάπερ ἐπὶ τῶν πρότερον.

Ἐὰν δ' ὁ μὲν ἦ κατηγορικὸς ὁ δὲ στερητικὸς, καθόλου δὲ ὁ κατηγορικὸς, ὅταν μὲν ὁ ἐλάττων ἦ κατηγορικὸς, ἔσται συλλογισμός. εἰ γὰρ τὸ  $P$  παντὶ τῷ  $\Sigma$ , τὸ δὲ  $\Pi$  τινὶ μὴ ὑπάρχει, ἀνάγκη τὸ  $\Pi$  τινὶ τῷ  $P$  μὴ ὑπάρχειν. εἰ γὰρ παντί, καὶ τὸ  $P$  παντὶ τῷ  $\Sigma$ , καὶ τὸ  $\Pi$  παντὶ τῷ  $\Sigma$  ὑπάρξει· ἄλλ' οὐχ ὑπῆρχεν. δείκνυται δὲ καὶ ἄνευ τῆς ἀπαγωγῆς, ἐὰν ληφθῇ τι τῶν  $\Sigma$  ὃ τὸ  $\Pi$  μὴ ὑπάρχει. ὅταν δ' ὁ μείζων ἦ κατηγορικὸς, οὐκ ἔσται συλλογισμός, οἷον εἰ τὸ μὲν  $\Pi$  παντὶ τῷ  $\Sigma$ , τὸ δὲ  $P$  τινὶ τῷ  $\Sigma$  μὴ ὑπάρχει. ὅροι τοῦ παντὶ ὑπάρχειν ἔμψυχον — ἄνθρωπος — ζῶον. τοῦ δὲ μηδενὶ οὐκ ἔστι λαβεῖν ὄρους, εἰ τινὶ μὲν ὑπάρχει τῷ  $\Sigma$  τὸ  $P$ , τινὶ δὲ μὴ· εἰ γὰρ παντὶ τὸ  $\Pi$  τῷ  $\Sigma$  ὑπάρχει, τὸ δὲ  $P$  τινὶ τῷ  $\Sigma$ , καὶ τὸ  $\Pi$  τινὶ τῷ  $P$  ὑπάρξει· ὑπέκειτο δὲ μηδενὶ ὑπάρχειν. ἄλλ' ὥσπερ ἐν τοῖς πρότερον ληπτέον· ἀδιορίστου γὰρ ὄντος τοῦ τινὶ μὴ ὑπάρχειν καὶ τὸ μηδενὶ ὑπάρχον ἀληθὲς εἰπεῖν τινὶ μὴ ὑπάρχειν· μηδενὶ δὲ ὑπάρχοντος οὐκ ἦν συλλογισμός. φανερόν οὖν ὅτι οὐκ ἔσται συλλογισμός. ἐὰν δ' ὁ στερητικὸς ἦ καθόλου τῶν ὄρων, ὅταν μὲν ὁ μείζων ἦ στερητικὸς ὁ δὲ ἐλάττων κατηγορικὸς, ἔσται συλλογισμός. εἰ γὰρ τὸ  $\Pi$  μηδενὶ τῷ  $\Sigma$ , τὸ δὲ  $P$  τινὶ ὑπάρχει τῷ  $\Sigma$ , τὸ  $\Pi$  τινὶ τῷ  $P$  οὐχ ὑπάρξει· πάλιν γὰρ ἔσται τὸ πρῶτον σχῆμα τῆς  $P$   $\Sigma$  προτάσεως ἀντιστραφείσης. ὅταν δὲ ὁ ἐλάττων ἦ στερητικὸς, οὐκ ἔσται συλλογισμός. ὅροι τοῦ ὑπάρχειν ζῶον — ἄνθρωπος — ἄγριον, τοῦ μὴ ὑπάρχειν ζῶον — ἐπιστήμη — ἄγριον· μέσον ἐν ἀμφοῖν τὸ ἄγριον. οὐδ' ὅταν ἀμφοτέροι στερητικοὶ τεθῶσιν, ἦ δ' ὁ μὲν καθόλου ὁ δ' ἐν μέρει. ὅροι [29a] ὅταν ὁ ἐλάττων ἦ καθόλου πρὸς τὸ μέσον, ζῶον — ἐπιστήμη — ἄγριον, ζῶον — ἄνθρωπος — ἄγριον· ὅταν δ' ὁ μείζων, τοῦ μὲν μὴ ὑπάρχειν κόραξ — χιών — λευκόν. τοῦ δ' ὑπάρχειν οὐκ ἔστι λαβεῖν, εἰ τὸ  $P$  τινὶ μὲν ὑπάρχει τῷ  $\Sigma$ , τινὶ δὲ μὴ ὑπάρχει. εἰ γὰρ τὸ  $\Pi$  παντὶ τῷ  $P$ , τὸ δὲ  $P$  τινὶ τῷ  $\Sigma$ , καὶ τὸ  $\Pi$  τινὶ τῷ  $\Sigma$ · ὑπέκειτο δὲ μηδενί. ἄλλ' ἐκ τοῦ ἀδιορίστου δεικτέον.

Οὐδ' ἂν ἐκάτερος τινὶ τῷ μέσῳ ὑπάρχη ἢ μὴ ὑπάρχη, ἢ ὁ μὲν ὑπάρχη ὁ δὲ μὴ ὑπάρχη, ἢ ὁ μὲν τινὶ ὁ δὲ μὴ παντί, ἢ ἀδιορίστως, οὐκ ἔσται συλλογισμός

οὐδαμῶς. ὅροι δὲ κοινοὶ πάντων ζῶον — ἄνθρωπος — λευκόν, ζῶον — ἄψυχον — λευκόν.

Φανερόν οὖν καὶ ἐν τούτῳ τῷ σχήματι πότ' ἔσται καὶ πότ' οὐκ ἔσται συλλογισμός, καὶ ὅτι ἐχόντων τε τῶν ὅρων ὡς ἐλέχθη γίνεται συλλογισμὸς ἐξ ἀνάγκης, ἂν τ' ἢ συλλογισμός, ἀνάγκη τοὺς ὅρους οὕτως ἔχειν. φανερόν δὲ καὶ ὅτι πάντες ἀτελεῖς εἰσὶν οἱ ἐν τούτῳ τῷ σχήματι συλλογισμοί (πάντες γὰρ τελειοῦνται προσλαμβανομένων τινῶν) καὶ ὅτι συλλογίσασθαι τὸ καθόλου διὰ τούτου τοῦ σχήματος οὐκ ἔσται, οὔτε στερητικὸν οὔτε καταφατικόν.

## Κεφάλαιο 7

Δῆλον δὲ καὶ ὅτι ἐν ἅπασι τοῖς σχήμασιν, ὅταν μὴ γίνηται συλλογισμός, κατηγορικῶν μὲν ἢ στερητικῶν ἀμφοτέρων ὄντων τῶν ὅρων οὐδὲν ὅλως γίνεται ἀναγκαῖον, κατηγορικοῦ δὲ καὶ στερητικοῦ, καθόλου ληφθέντος τοῦ στερητικοῦ ἀεὶ γίνεται συλλογισμὸς τοῦ ἐλάττονος ἄκρου πρὸς τὸ μείζον, οἷον εἰ τὸ μὲν A παντὶ τῷ B ἢ τινί, τὸ δὲ B μηδενὶ τῷ Γ· ἀντιστρεφομένων γὰρ τῶν προτάσεων ἀνάγκη τὸ Γ τινὶ τῷ A μὴ ὑπάρχειν. ὁμοίως δὲ καὶ πρὸς τῶν ἐτέρων σχημάτων· ἀεὶ γὰρ γίνεται διὰ τῆς ἀντιστροφῆς συλλογισμός. δῆλον δὲ καὶ ὅτι τὸ ἀδιόριστον ἀντὶ τοῦ κατηγορικοῦ τοῦ ἐν μέρει τιθέμενον τὸν αὐτὸν ποιήσει συλλογισμὸν ἐν ἅπασι τοῖς σχήμασιν.

Φανερόν δὲ καὶ ὅτι πάντες οἱ ἀτελεῖς συλλογισμοὶ τελειοῦνται διὰ τοῦ πρώτου σχήματος. ἢ γὰρ δεικτικῶς ἢ διὰ τοῦ ἀδυνάτου περαίνονται πάντες· ἀμφοτέρως δὲ γίνεται τὸ πρῶτον σχῆμα, δεικτικῶς μὲν τελειουμένων, ὅτι διὰ τῆς ἀντιστροφῆς ἐπεραίνοντο πάντες, ἢ δ' ἀντιστροφή τὸ πρῶτον ἐποίει σχῆμα, διὰ δὲ τοῦ ἀδυνάτου δεικνυμένων, ὅτι τεθέντος τοῦ ψεύδους ὁ συλλογισμὸς γίνεται διὰ τοῦ πρώτου σχήματος, οἷον ἐν τῷ τελευταίῳ σχήματι, εἰ τὸ A καὶ τὸ B παντὶ τῷ Γ ὑπάρχει, ὅτι τὸ A τινὶ τῷ B ὑπάρχει· εἰ γὰρ μηδενί, τὸ δὲ B παντὶ τῷ Γ, οὐδενὶ τῷ Γ τὸ A· ἀλλ' ἦν παντί. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. [29b]

Ἔστι δὲ καὶ ἀναγαγεῖν πάντας τοὺς συλλογισμοὺς εἰς τοὺς ἐν τῷ πρώτῳ σχήματι καθόλου συλλογισμούς. οἱ μὲν γὰρ ἐν τῷ δευτέρῳ φανερόν ὅτι δι' ἐκείνων τελειοῦνται, πλὴν οὐχ ὁμοίως πάντες, ἀλλ' οἱ μὲν καθόλου τοῦ στερητικοῦ ἀντιστραφέντος, τῶν δ' ἐν μέρει ἐκάτερος διὰ τῆς εἰς τὸ ἀδύνατον ἀπαγωγῆς. οἱ δ' ἐν τῷ πρώτῳ, οἱ κατὰ μέρος, ἐπιτελοῦνται μὲν καὶ δι' αὐτῶν, ἔστι δὲ καὶ διὰ τοῦ δευτέρου σχήματος δεικνύναι εἰς ἀδύνατον ἀπάγοντας, οἷον εἰ τὸ A παντὶ τῷ B, τὸ δὲ B τινὶ τῷ Γ, ὅτι τὸ A τινὶ τῷ Γ· εἰ



γὰρ μηδενί, τῷ δὲ B παντί, οὐδενὶ τῷ Γ τὸ B ὑπάρξει· τοῦτο γὰρ ἴσμεν διὰ τοῦ δευτέρου σχήματος. ὁμοίως δὲ καὶ ἐπὶ τοῦ στερητικοῦ ἔσται ἡ ἀπόδειξις. εἰ γὰρ τὸ A μηδενὶ τῷ B, τὸ δὲ B τινὶ τῷ Γ ὑπάρχει, τὸ A τινὶ τῷ Γ οὐχ ὑπάρξει· εἰ γὰρ παντί, τῷ δὲ B μηδενὶ ὑπάρχει, οὐδενὶ τῷ Γ τὸ B ὑπάρξει· τοῦτο δ' ἦν τὸ μέσον σχῆμα. ὥστ' ἐπεὶ οἱ μὲν ἐν τῷ μέσῳ σχήματι συλλογισμοὶ πάντες ἀνάγονται εἰς τοὺς ἐν τῷ πρώτῳ καθόλου συλλογισμούς, οἱ δὲ κατὰ μέρος ἐν τῷ πρώτῳ εἰς τοὺς ἐν τῷ μέσῳ, φανερόν ὅτι καὶ οἱ κατὰ μέρος ἀναχθήσονται εἰς τοὺς ἐν τῷ πρώτῳ σχήματι καθόλου συλλογισμούς. οἱ δ' ἐν τῷ τρίτῳ καθόλου μὲν ὄντων τῶν ὅρων εὐθὺς ἐπιτελοῦνται δι' ἐκείνων τῶν συλλογισμῶν, ὅταν δ' ἐν μέρει ληφθῶσι, διὰ τῶν ἐν μέρει συλλογισμῶν τῶν ἐν τῷ πρώτῳ σχήματι· οὗτοι δὲ ἀνήχθησαν εἰς ἐκείνους, ὥστε καὶ οἱ ἐν τῷ τρίτῳ σχήματι, οἱ κατὰ μέρος, φανερόν οὖν ὅτι πάντες ἀναχθήσονται εἰς τοὺς ἐν τῷ πρώτῳ σχήματι καθόλου συλλογισμούς.

Οἱ μὲν οὖν τῶν συλλογισμῶν ὑπάρχειν ἢ μὴ ὑπάρχειν δεικνύντες εἴρηται πῶς ἔχουσι, καὶ καθ' ἑαυτοὺς οἱ ἐκ τοῦ αὐτοῦ σχήματος καὶ πρὸς ἀλλήλους οἱ ἐκ τῶν ἑτέρων.

## Κεφάλαιο 8

Ἐπεὶ δ' ἕτερόν ἐστιν ὑπάρχειν τε καὶ ἐξ ἀνάγκης ὑπάρχειν καὶ ἐνδέχεσθαι ὑπάρχειν (πολλὰ γὰρ ὑπάρχει μὲν, οὐ μέντοι ἐξ ἀνάγκης· τὰ δ' οὐτ' ἐξ ἀνάγκης οὐθ' ὑπάρχει ὅλως, ἐνδέχεται δ' ὑπάρχειν), δῆλον ὅτι καὶ συλλογισμὸς ἐκάστου τούτων ἕτερος ἔσται, καὶ οὐχ ὁμοίως ἐχόντων τῶν ὅρων, ἀλλ' ὁ μὲν ἐξ ἀναγκαίων, ὁ δ' ἐξ ὑπαρχόντων, ὁ δ' ἐξ ἐνδεχομένων.

Ἐπὶ μὲν οὖν τῶν ἀναγκαίων σχεδὸν ὁμοίως ἔχει καὶ ἐπὶ τῶν ὑπαρχόντων· ὡσαύτως γὰρ τιθεμένων τῶν ὅρων ἐν τε τῷ ὑπάρχειν καὶ τῷ ἐξ ἀνάγκης ὑπάρχειν ἢ μὴ ὑπάρχειν ἔσται τε καὶ οὐκ ἔσται συλλογισμὸς, πλὴν διοίσει τῷ [30a] προσκεῖσθαι τοῖς ὅροις τὸ ἐξ ἀνάγκης ὑπάρχειν ἢ μὴ ὑπάρχειν. τό τε γὰρ στερητικὸν ὡσαύτως ἀντιστρέφει, καὶ τὸ ἐν ὅλῳ εἶναι καὶ τὸ κατὰ παντὸς ὁμοίως ἀποδώσομεν. ἐν μὲν οὖν τοῖς ἄλλοις τὸν αὐτὸν τρόπον δειχθήσεται διὰ τῆς ἀντιστροφῆς τὸ συμπέρασμα ἀναγκαῖον, ὥσπερ ἐπὶ τοῦ ὑπάρχειν· ἐν δὲ τῷ μέσῳ σχήματι, ὅταν ἢ τὸ καθόλου καταφατικὸν τὸ δ' ἐν μέρει στερητικόν, καὶ πάλιν ἐν τῷ τρίτῳ, ὅταν τὸ μὲν καθόλου κατηγορικὸν τὸ δ' ἐν μέρει στερητικόν, οὐχ ὁμοίως ἔσται ἡ ἀπόδειξις, ἀλλ' ἀνάγκη ἐκθεμένους ὡς τινὶ ἐκάτερον μὴ ὑπάρχει, κατὰ τούτου ποιεῖν τὸν συλλογισμόν· ἔσται γὰρ ἀναγκαῖος ἐπὶ τούτων· εἰ δὲ κατὰ τοῦ ἐκτεθέντος ἐστὶν

ἀναγκαῖος, καὶ κατ' ἐκείνου τινός· τὸ γὰρ ἐκτεθὲν ὅπερ ἐκεῖνό τί ἐστίν· γίνεται δὲ τῶν συλλογισμῶν ἐκάτερος ἐν τῷ οἰκείῳ σχήματι.

## Κεφάλαιο 9

Συμβαίνει δέ ποτε καὶ τῆς ἐτέρας προτάσεως ἀναγκαίας οὔσης ἀναγκαῖον γίνεσθαι τὸν συλλογισμόν, πλὴν οὐχ ὁποτέρας ἔτυχεν, ἀλλὰ τῆς πρὸς τὸ μεῖζον ἄκρον, οἷον εἰ τὸ μὲν Α τῷ Β ἐξ ἀνάγκης εἴληπται ὑπάρχον ἢ μὴ ὑπάρχον, τὸ δὲ Β τῷ Γ ὑπάρχον μόνον· οὕτως γὰρ εἰλημμένων τῶν προτάσεων ἐξ ἀνάγκης τὸ Α τῷ Γ ὑπάρξει ἢ οὐχ ὑπάρξει. ἐπεὶ γὰρ παντὶ τῷ Β ἐξ ἀνάγκης ὑπάρχει ἢ οὐχ ὑπάρχει τὸ Α, τὸ δὲ Γ τι τῶν Β ἐστί, φανερόν ὅτι καὶ τῷ Γ ἐξ ἀνάγκης ἔσται θάτερον τούτων. εἰ δὲ τὸ μὲν Α Β μὴ ἔστιν ἀναγκαῖον, τὸ δὲ Β Γ ἀναγκαῖον, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον. εἰ γὰρ ἔστι, συμβήσεται τὸ Α τινὶ τῷ Β ὑπάρχειν ἐξ ἀνάγκης διὰ τε τοῦ πρώτου καὶ διὰ τοῦ τρίτου σχήματος. τοῦτο δὲ ψεῦδος· ἐνδέχεται γὰρ τοιοῦτον εἶναι τὸ Β ὃ ἐγγωρεῖ τὸ Α μηδενὶ ὑπάρχειν. ἔτι καὶ ἐκ τῶν ὅρων φανερόν ὅτι οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον, οἷον εἰ τὸ μὲν Α εἴη κίνησις, τὸ δὲ Β ζῶον, ἐφ' ᾧ δὲ τὸ Γ ἄνθρωπος· ζῶον μὲν γὰρ ὁ ἄνθρωπος ἐξ ἀνάγκης ἐστί, κινεῖται δὲ τὸ ζῶον οὐκ ἐξ ἀνάγκης, οὐδ' ὁ ἄνθρωπος. ὁμοίως δὲ καὶ εἰ στερητικὸν εἴη τὸ Α Β· ἢ γὰρ αὕτη ἀπόδειξις. ἐπὶ δὲ τῶν ἐν μέρει συλλογισμῶν, εἰ μὲν τὸ καθόλου ἐστὶν ἀναγκαῖον, καὶ τὸ συμπέρασμα ἔσται ἀναγκαῖον, εἰ δὲ τὸ κατὰ μέρος, οὐκ ἀναγκαῖον, οὔτε στερητικῆς οὔτε κατηγορικῆς οὔσης τῆς καθόλου προτάσεως. ἔστω δὴ πρῶτον τὸ καθόλου ἀναγκαῖον, καὶ τὸ μὲν Α παντὶ τῷ Β ὑπαρχέτω ἐξ ἀνάγκης, τὸ δὲ Β τινὶ τῷ Γ ὑπαρχέτω μόνον· ἀνάγκη δὴ τὸ Α τινὶ τῷ Γ ὑπάρχειν ἐξ ἀνάγκης· τὸ γὰρ Γ ὑπὸ τὸ Β ἐστί, τῷ δὲ Β παντὶ  $\{\chi\}_{40}[30b]$  ὑπῆρχεν ἐξ ἀνάγκης, ὁμοίως δὲ καὶ εἰ στερητικὸς εἴη ὁ συλλογισμός· ἢ γὰρ αὕτη ἔσται ἀπόδειξις. εἰ δὲ τὸ κατὰ μέρος ἐστὶν ἀναγκαῖον, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον (οὐδὲν γὰρ ἀδύνατον συμπίπτει), καθάπερ οὐδ' ἐν τοῖς καθόλου συλλογισμοῖς. ὁμοίως δὲ καὶ τῶν στερητικῶν. ὅροι κίνησις — ζῶον — λευκόν.

## Κεφάλαιο 10

Ἐπὶ δὲ τοῦ δευτέρου σχήματος, εἰ μὲν ἡ στερητικὴ πρότασις ἐστὶν ἀναγκαία, καὶ τὸ συμπέρασμα ἔσται ἀναγκαῖον, εἰ δ' ἡ κατηγορικὴ, οὐκ ἀναγκαῖον. ἔστω γὰρ πρῶτον ἡ στερητικὴ ἀναγκαία, καὶ τὸ Α τῷ μὲν Β μηδενὶ ἐνδεχέσθω, τῷ δὲ Γ ὑπαρχέτω μόνον. ἐπεὶ οὖν ἀντιστρέφει τὸ στερητικόν, οὐδὲ τὸ Β τῷ Α οὐδενὶ ἐνδέχεται· τὸ δὲ Α παντὶ τῷ Γ ὑπάρχει, ὥστ' οὐδενὶ τῷ Γ τὸ Β ἐνδέχεται· τὸ γὰρ Γ ὑπὸ τὸ Α ἐστίν. ὡσαύτως δὲ καὶ εἰ πρὸς τῷ Γ

τεθείη τὸ στερητικόν· εἰ γὰρ τὸ Α μηδενὶ τῷ Γ ἐνδέχεται, οὐδὲ τὸ Γ οὐδενὶ τῷ Α ἐγγωρεῖ· τὸ δὲ Α παντὶ τῷ Β ὑπάρχει, ὥστ' οὐδενὶ τῷ Β τὸ Γ ἐνδέχεται· γίνεται γὰρ τὸ πρῶτον σχῆμα πάλιν. οὐκ ἄρα οὐδὲ τὸ Β τῷ Γ ἀντιστρέφει γὰρ ὁμοίως.

Εἰ δὲ ἡ κατηγορικὴ πρότασις ἐστὶν ἀναγκαία, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον. ὑπαρχέτω γὰρ τὸ Α παντὶ τῷ Β ἐξ ἀνάγκης, τῷ δὲ Γ μηδενὶ ὑπαρχέτω μόνον. ἀντιστραφέντος οὖν τοῦ στερητικοῦ τὸ πρῶτον γίνεται σχῆμα· δέδεικται δ' ἐν τῷ πρώτῳ ὅτι μὴ ἀναγκαίως οὕσης τῆς πρὸς τὸ μεῖζον στερητικῆς οὐδὲ τὸ συμπέρασμα ἔσται ἀναγκαῖον, ὥστ' οὐδ' ἐπὶ τούτων ἔσται ἐξ ἀνάγκης. ἔτι δ' εἰ τὸ συμπέρασμα ἐστὶν ἀναγκαῖον, συμβαίνει τὸ Γ τινὶ τῷ Α μὴ ὑπάρχειν ἐξ ἀνάγκης. εἰ γὰρ τὸ Β τῷ Γ μηδενὶ ὑπάρχει ἐξ ἀνάγκης, οὐδὲ τὸ Γ τῷ Β οὐδενὶ ὑπάρξει ἐξ ἀνάγκης. τὸ δέ γε Β τινὶ τῷ Α ἀνάγκη ὑπάρχειν, εἴπερ καὶ τὸ Α παντὶ τῷ Β ἐξ ἀνάγκης ὑπῆρχεν. ὥστε τὸ Γ ἀνάγκη τινὶ τῷ Α μὴ ὑπάρχειν. ἀλλ' οὐδὲν κωλύει τὸ Α τοιοῦτον ληφθῆναι ὥς παντὶ τὸ Γ ἐνδέχεται ὑπάρχειν. ἔτι κἂν ὅρους ἐκθέμενον εἴη δεῖξαι ὅτι τὸ συμπέρασμα οὐκ ἔστιν ἀναγκαῖον ἀπλῶς, ἀλλὰ τούτων ὄντων ἀναγκαῖον. οἷον ἔστω τὸ Α ζῶον, τὸ δὲ Β ἄνθρωπος, τὸ δὲ Γ λευκόν, καὶ αἱ προτάσεις ὁμοίως εἰλήφθωσαν· ἐνδέχεται γὰρ τὸ ζῶον μηδενὶ λευκῷ ὑπάρχειν. οὐχ ὑπάρξει δὴ οὐδ' ὁ ἄνθρωπος οὐδενὶ λευκῷ, ἀλλ' οὐκ ἐξ ἀνάγκης· ἐνδέχεται γὰρ ἄνθρωπον γενέσθαι λευκόν, οὐ μέντοι ἕως ἂν ζῶον μηδενὶ λευκῷ ὑπάρχη. ὥστε τούτων μὲν ὄντων ἀναγκαῖον ἔσται τὸ συμπέρασμα, ἀπλῶς δ' οὐκ ἀναγκαῖον. [31a]

Ὅμοίως δ' ἔξει καὶ ἐπὶ τῶν ἐν μέρει συλλογισμῶν. ὅταν μὲν γὰρ ἡ στερητικὴ πρότασις καθόλου τ' ἢ καὶ ἀναγκαία, καὶ τὸ συμπέρασμα ἔσται ἀναγκαῖον· ὅταν δὲ ἡ κατηγορικὴ καθόλου, ἡ δὲ στερητικὴ κατὰ μέρος, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον. ἔστω δὴ πρῶτον ἡ στερητικὴ καθόλου τε καὶ ἀναγκαία, καὶ τὸ Α τῷ μὲν Β μηδενὶ ἐνδεχέσθω ὑπάρχειν, τῷ δὲ Γ τινὶ ὑπαρχέτω. ἐπεὶ οὖν ἀντιστρέφει τὸ στερητικόν, οὐδὲ τὸ Β τῷ Α οὐδενὶ ἐνδέχοιτ' ἂν ὑπάρχειν· τὸ δέ γε Α τινὶ τῷ Γ ὑπάρχει, ὥστ' ἐξ ἀνάγκης τινὶ τῷ Γ οὐχ ὑπάρξει τὸ Β. πάλιν ἔστω ἡ κατηγορικὴ καθόλου τε καὶ ἀναγκαία, καὶ κείσθω πρὸς τῷ Β τὸ κατηγορικόν. εἰ δὴ τὸ Α παντὶ τῷ Β ἐξ ἀνάγκης ὑπάρχει, τῷ δὲ Γ τινὶ μὴ ὑπάρχει, ὅτι μὲν οὐχ ὑπάρξει τὸ Β τινὶ τῷ Γ, φανερόν, ἀλλ' οὐκ ἐξ ἀνάγκης· οἱ γὰρ αὐτοὶ ὅροι ἔσονται πρὸς τὴν ἀπόδειξιν οἵπερ ἐπὶ τῶν καθόλου συλλογισμῶν. ἀλλ' οὐδ' εἰ τὸ στερητικὸν ἀναγκαῖον ἐστὶν ἐν μέρει ληφθέν, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον· διὰ γὰρ τῶν αὐτῶν ὅρων ἡ ἀπόδειξις.

## Κεφάλαιο 11

Ἐν δὲ τῷ τελευταίῳ σχήματι καθόλου μὲν ὄντων τῶν ὄρων πρὸς τὸ μέσον καὶ κατηγορικῶν ἀμφοτέρων τῶν προτάσεων, ἐὰν ὁποτερονοῦν ἢ ἀναγκαῖον, καὶ τὸ συμπέρασμα ἔσται ἀναγκαῖον. ἐὰν δὲ τὸ μὲν ἢ στερητικὸν τὸ δὲ κατηγορικόν, ὅταν μὲν τὸ στερητικὸν ἀναγκαῖον ἢ, καὶ τὸ συμπέρασμα ἔσται ἀναγκαῖον, ὅταν δὲ τὸ κατηγορικόν, οὐκ ἔσται ἀναγκαῖον. ἔστωσαν γὰρ ἀμφοτέραι κατηγορικαὶ πρῶτον αἱ προτάσεις, καὶ τὸ Α καὶ τὸ Β παντὶ τῷ Γ ὑπαρχέτω, ἀναγκαῖον δ' ἔστω τὸ Α Γ. ἐπεὶ οὖν τὸ Β παντὶ τῷ Γ ὑπάρχει, καὶ τὸ Γ τινὶ τῷ Β ὑπάρξει διὰ τὸ ἀντιστρέφειν τὸ καθόλου τῷ κατὰ μέρος, ὥστ' εἰ παντὶ τῷ Γ τὸ Α ἐξ ἀνάγκης ὑπάρχει καὶ τὸ Γ τῷ Β τινί, καὶ τῷ Β τινὶ ἀναγκαῖον ὑπάρχειν τὸ Α· τὸ γὰρ Β ὑπὸ τὸ Γ ἐστίν. γίνεταί οὖν τὸ πρῶτον σχῆμα. ὁμοίως δὲ δειχθήσεται καὶ εἰ τὸ Β Γ ἐστὶν ἀναγκαῖον· ἀντιστρέφει γὰρ τὸ Γ τῷ Α τινί, ὥστ' εἰ παντὶ τῷ Γ τὸ Β ἐξ ἀνάγκης ὑπάρχει, καὶ τῷ Α τινὶ ὑπάρξει ἐξ ἀνάγκης.

Πάλιν ἔστω τὸ μὲν Α Γ στερητικόν, τὸ δὲ Β Γ καταφατικόν, ἀναγκαῖον δὲ τὸ στερητικόν. ἐπεὶ οὖν ἀντιστρέφει τινὶ τῷ Β τὸ Γ, τὸ δὲ Α οὐδενὶ τῷ Γ ἐξ ἀνάγκης, οὐδὲ τῷ Β τινὶ ὑπάρξει ἐξ ἀνάγκης τὸ Α· τὸ γὰρ Β ὑπὸ τὸ Γ ἐστίν. εἰ δὲ τὸ κατηγορικὸν ἀναγκαῖον, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον. ἔστω γὰρ τὸ Β Γ κατηγορικόν καὶ ἀναγκαῖον, τὸ δὲ Α Γ στερητικόν καὶ μὴ ἀναγκαῖον. ἐπεὶ οὖν ἀντιστρέφει τὸ καταφατικόν, ὑπάρξει καὶ τὸ Γ τινὶ τῷ Β ἐξ ἀνάγκης, ὥστ' εἰ τὸ μὲν Α μηδενὶ τῷ Γ τὸ [31b] δὲ Γ τινὶ τῷ Β, τὸ Α τινὶ τῷ Β οὐχ ὑπάρξει· ἀλλ' οὐκ ἐξ ἀνάγκης· δέδεικται γὰρ ἐν τῷ πρώτῳ σχήματι ὅτι τῆς στερητικῆς προτάσεως μὴ ἀναγκαίας οὔσης οὐδὲ τὸ συμπέρασμα ἔσται ἀναγκαῖον. ἔτι κἂν διὰ τῶν ὄρων εἴη φανερόν. ἔστω γὰρ τὸ μὲν Α ἀγαθόν, τὸ δ' ἐφ' ᾧ Β ζῶον, τὸ δὲ Γ ἵππος. τὸ μὲν οὖν ἀγαθὸν ἐνδέχεται μηδενὶ ἵππῳ ὑπάρχειν, τὸ δὲ ζῶον ἀνάγκη παντὶ ὑπάρχειν· ἀλλ' οὐκ ἀνάγκη ζῶόν τι μὴ εἶναι ἀγαθόν, εἴπερ ἐνδέχεται πᾶν εἶναι ἀγαθόν. ἢ εἰ μὴ τοῦτο δυνατόν, ἀλλὰ τὸ ἐγρηγορέναι ἢ τὸ καθεύδειν ὅρον θετέον· ἅπαν γὰρ ζῶον δεκτικὸν τούτων.

Εἰ μὲν οὖν οἱ ὅροι καθόλου πρὸς τὸ μέσον εἰσὶν, εἴρηται πότε ἔσται τὸ συμπέρασμα ἀναγκαῖον· εἰ δ' ὁ μὲν καθόλου ὁ δ' ἐν μέρει, κατηγορικῶν μὲν ὄντων ἀμφοτέρων, ὅταν τὸ καθόλου γένηται ἀναγκαῖον, καὶ τὸ συμπέρασμα ἔσται ἀναγκαῖον. ἀπόδειξις δ' ἡ αὐτὴ ἢ καὶ πρότερον· ἀντιστρέφει γὰρ καὶ τὸ ἐν μέρει κατηγορικόν. εἰ οὖν ἀνάγκη τὸ Β παντὶ τῷ Γ ὑπάρχειν, τὸ δὲ Α ὑπὸ τὸ Γ ἐστίν, ἀνάγκη τὸ Β τινὶ τῷ Α ὑπάρχειν. εἰ δὲ τὸ Β τῷ Α τινί, καὶ τὸ Α τῷ Β τινὶ ὑπάρχειν ἀναγκαῖον· ἀντιστρέφει γάρ. ὁμοίως δὲ καὶ εἰ τὸ Α Γ εἴη

ἀναγκαῖον καθόλου ὄν· τὸ γὰρ Β ὑπὸ τὸ Γ ἐστίν. εἰ δὲ τὸ ἐν μέρει ἐστὶν ἀναγκαῖον, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον. ἔστω γὰρ τὸ Β Γ ἐν μέρει τε καὶ ἀναγκαῖον, τὸ δὲ Α παντὶ τῷ Γ ὑπαρχέτω, μὴ μέντοι ἐξ ἀνάγκης. ἀντιστραφέντος οὖν τοῦ Β Γ τὸ πρῶτον γίγνεται σχῆμα, καὶ ἡ μὲν καθόλου πρότασις οὐκ ἀναγκαία, ἡ δ' ἐν μέρει ἀναγκαία. ὅτε δ' οὕτως ἔχοιεν αἱ προτάσεις, οὐκ ἦν τὸ συμπέρασμα ἀναγκαῖον, ὥστ' οὐδ' ἐπὶ τούτων. ἔτι δὲ καὶ ἐκ τῶν ὅρων φανερόν. ἔστω γὰρ τὸ μὲν Α ἐγρήγορσις, τὸ δὲ Β δίπουν, ἐφ' ᾧ δὲ τὸ Γ ζῶον. τὸ μὲν οὖν Β τινὶ τῷ Γ ἀνάγκη ὑπάρχειν, τὸ δὲ Α τῷ Γ ἐνδέχεται, καὶ τὸ Α τῷ Β οὐκ ἀναγκαῖον· οὐ γὰρ ἀνάγκη δίπουν τι καθεύδειν ἢ ἐγρηγορέναι. ὁμοίως δὲ καὶ διὰ τῶν αὐτῶν ὅρων δειχθήσεται καὶ εἰ τὸ Α Γ εἶη ἐν μέρει τε καὶ ἀναγκαῖον.

Εἰ δ' ὁ μὲν κατηγορικὸς ὁ δὲ στερητικὸς τῶν ὅρων, ὅταν μὲν ἢ τὸ καθόλου στερητικόν τε καὶ ἀναγκαῖον, καὶ τὸ συμπέρασμα ἔσται ἀναγκαῖον· εἰ γὰρ τὸ Α τῷ Γ μηδενὶ ἐνδέχεται, τὸ δὲ Β τινὶ τῷ Γ ὑπάρχει, τὸ Α τινὶ τῷ Β ἀνάγκη μὴ ὑπάρχειν. ὅταν δὲ τὸ καταφατικὸν ἀναγκαῖον τεθῇ, ἢ καθόλου ὄν ἢ ἐν μέρει, ἢ τὸ στερητικὸν κατὰ μέρος, οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον. τὰ μὲν γὰρ ἄλλα ταῦτά ᾧ καὶ ἐπὶ τῶν πρότερον ἐροῦμεν, ὅροι δ' ὅταν μὲν ἢ καθόλου τὸ κατηγορικὸν ἀναγκαῖον, ἐγρήγορσις — ζῶον — ἄνθρωπος, μέσον [32a] ἄνθρωπος, ὅταν δ' ἐν μέρει τὸ κατηγορικὸν ἀναγκαῖον, ἐγρήγορσις — ζῶον — λευκόν· ζῶον μὲν γὰρ ἀνάγκη τινὶ λευκῷ ὑπάρχειν, ἐγρήγορσις δ' ἐνδέχεται μηδενί, καὶ οὐκ ἀνάγκη τινὶ ζῷῳ μὴ ὑπάρχειν ἐγρηγορῆσαι. ὅταν δὲ τὸ στερητικὸν ἐν μέρει ὄν ἀναγκαῖον ἢ, δίπουν — κινούμενον — ζῶον, μέσον ζῶον.

## Κεφάλαιο 12

Φανερόν οὖν ὅτι τοῦ μὲν ὑπάρχειν οὐκ ἔστι συλλογισμός, ἐὰν μὴ ἀμφότεραι ὥσιν αἱ προτάσεις ἐν τῷ ὑπάρχειν, τοῦ δ' ἀναγκαίου ἔστι καὶ τῆς ἐτέρας μόνον ἀναγκαίης οὔσης. ἐν ἀμφοτέροις δέ, καὶ καταφατικῶν καὶ στερητικῶν ὄντων τῶν συλλογισμῶν, ἀνάγκη τὴν ἐτέραν πρότασιν ὁμοίαν εἶναι τῷ συμπεράσματι. λέγω δὲ τὸ ὁμοίαν, εἰ μὲν ὑπάρχον, ὑπάρχουσαν, εἰ δ' ἀναγκαῖον, ἀναγκαίαν. ὥστε καὶ τοῦτο δῆλον, ὅτι οὐκ ἔσται τὸ συμπέρασμα οὔτ' ἀναγκαῖον οὔθ' ὑπάρχον εἶναι μὴ ληφθείσης ἀναγκαίης ἢ ὑπαρχούσης προτάσεως.

## Κεφάλαιο 13

Περὶ μὲν οὖν τοῦ ἀναγκαίου, πῶς γίγνεται καὶ τίνα διαφορὰν ἔχει πρὸς τὸ

ὑπάρχον, εἴρηται σχεδὸν ἱκανῶς· περὶ δὲ τοῦ ἐνδεχομένου μετὰ ταῦτα λέγωμεν πότε καὶ πῶς καὶ διὰ τίνων ἔσται συλλογισμός. λέγω δ' ἐνδέχεσθαι καὶ τὸ ἐνδεχόμενον, οὗ μὴ ὄντος ἀναγκαίου, τεθέντος δ' ὑπάρχειν, οὐδὲν ἔσται διὰ τοῦτ' ἀδύνατον· τὸ γὰρ ἀναγκαῖον ὁμωνύμως ἐνδέχεσθαι λέγομεν. [ὅτι δὲ τοῦτ' ἔστι τὸ ἐνδεχόμενον, φανερόν ἔκ τε τῶν ἀποφάσεων καὶ τῶν καταφάσεων τῶν ἀντικειμένων· τὸ γὰρ οὐκ ἐνδέχεται ὑπάρχειν καὶ ἀδύνατον ὑπάρχειν καὶ ἀνάγκη μὴ ὑπάρχειν ἥτοι ταῦτά ἐστιν ἢ ἀκολουθεῖ ἀλλήλοις, ὥστε καὶ τὰ ἀντικείμενα, τὸ ἐνδέχεται ὑπάρχειν καὶ οὐκ ἀδύνατον ὑπάρχειν καὶ οὐκ ἀνάγκη μὴ ὑπάρχειν, ἥτοι ταῦτά ἐσται ἢ ἀκολουθοῦντα ἀλλήλοις· κατὰ παντὸς γὰρ ἢ φάσις ἢ ἡ ἀπόφασις. ἔσται ἄρα τὸ ἐνδεχόμενον οὐκ ἀναγκαῖον καὶ τὸ μὴ ἀναγκαῖον ἐνδεχόμενον.] συμβαίνει δὲ πάσας τὰς κατὰ τὸ ἐνδέχεσθαι προτάσεις ἀντιστρέφειν ἀλλήλαις. λέγω δὲ οὐ τὰς καταφατικὰς ταῖς ἀποφατικαῖς, ἀλλ' ὅσαι καταφατικὸν ἔχουσι τὸ σχῆμα κατὰ τὴν ἀντίθεσιν, οἷον τὸ ἐνδέχεσθαι ὑπάρχειν τῷ ἐνδέχεσθαι μὴ ὑπάρχειν, καὶ τὸ παντὶ ἐνδέχεσθαι τῷ ἐνδέχεσθαι μηδενὶ καὶ μὴ παντί, καὶ τὸ τινὶ τῷ μὴ τινί. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων. ἐπεὶ γὰρ τὸ ἐνδεχόμενον οὐκ ἔστιν ἀναγκαῖον, τὸ δὲ μὴ ἀναγκαῖον ἐγχωρεῖ μὴ ὑπάρχειν, φανερόν ὅτι, εἰ ἐνδέχεται τὸ Α τῷ Β ὑπάρχειν, ἐνδέχεται καὶ μὴ ὑπάρχειν· καὶ εἰ παντὶ ἐνδέχεται ὑπάρχειν, καὶ παντὶ ἐνδέχεται μὴ ὑπάρχειν. ὁμοίως δὲ κἀπὶ τῶν ἐν μέρει καταφάσεων· ἡ γὰρ αὐτὴ [32b] ἀπόδειξις. εἰσὶ δ' αἱ τοιαῦται προτάσεις κατηγορικαὶ καὶ οὐ στερητικαί· τὸ γὰρ ἐνδέχεσθαι τῷ εἶναι ὁμοίως τάττεται, καθάπερ ἐλέχθη πρότερον.

Διωρισμένων δὲ τούτων πάλιν λέγωμεν ὅτι τὸ ἐνδέχεσθαι κατὰ δύο λέγεται τρόπους, ἓνα μὲν τὸ ὥς ἐπὶ τὸ πολὺ γίνεσθαι καὶ διαλείπειν τὸ ἀναγκαῖον, οἷον τὸ πολιοῦσθαι ἄνθρωπον ἢ τὸ αὐξάνεσθαι ἢ φθίνειν, ἢ ὅλως τὸ πεφυκὸς ὑπάρχειν (τοῦτο γὰρ οὐ συνεχὲς μὲν ἔχει τὸ ἀναγκαῖον διὰ τὸ μὴ αἰετὶ εἶναι ἄνθρωπον, ὄντος μέντοι ἀνθρώπου ἢ ἐξ ἀνάγκης ἢ ὥς ἐπὶ τὸ πολὺ ἐστιν), ἄλλον δὲ τὸ ἀόριστον, ὃ καὶ οὕτως καὶ μὴ οὕτως δυνατόν, οἷον τὸ βαδίζειν ζῶον ἢ βαδίζοντος γενέσθαι σεισμόν, ἢ ὅλως τὸ ἀπὸ τύχης γινόμενον· οὐδὲν γὰρ μᾶλλον οὕτως πέφυκεν ἢ ἐναντίως. ἀντιστρέφει μὲν οὖν καὶ κατὰ τὰς ἀντικειμένας προτάσεις ἐκάτερον τῶν ἐνδεχομένων, οὐ μὴν τὸν αὐτὸν γε τρόπον, ἀλλὰ τὸ μὲν πεφυκὸς εἶναι τῷ μὴ ἐξ ἀνάγκης ὑπάρχειν (οὕτω γὰρ ἐνδέχεται μὴ πολιοῦσθαι ἄνθρωπον), τὸ δ' ἀόριστον τῷ μηδὲν μᾶλλον οὕτως ἢ ἐκείνως. ἐπιστήμη δὲ καὶ συλλογισμὸς ἀποδεικτικὸς τῶν μὲν ἀορίστων οὐκ ἔστι διὰ τὸ ἄτακτον εἶναι τὸ μέσον, τῶν δὲ πεφυκόντων ἔστι, καὶ σχεδὸν οἱ λόγοι καὶ αἱ σκέψεις γίνονται περὶ τῶν οὕτως ἐνδεχομένων· ἐκείνων δ' ἐγχωρεῖ μὲν γενέσθαι συλλογισμόν, οὐ μὴν εἴωθέ γε ζητεῖσθαι.

Ταῦτα μὲν οὖν διορισθήσεται μᾶλλον ἐν τοῖς ἐπομένοις· νῦν δὲ λέγωμεν πότε καὶ πῶς καὶ τίς ἔσται συλλογισμὸς ἐκ τῶν ἐνδεχομένων προτάσεων. ἐπεὶ δὲ τὸ ἐνδέχεσθαι τόδε τῷδε ὑπάρχειν διχῶς ἔστιν ἐκλαβεῖν· ἢ γὰρ ὡς ὑπάρχει τόδε ἢ ὡς ἐνδέχεται αὐτὸ ὑπάρχειν — τὸ γάρ, καθ' οὗ τὸ Β, τὸ Α ἐνδέχεσθαι τούτων σημαίνει θάτερον, ἢ καθ' οὗ λέγεται τὸ Β ἢ καθ' οὗ ἐνδέχεται λέγεσθαι· τὸ δέ, καθ' οὗ τὸ Β, τὸ Α ἐνδέχεσθαι ἢ παντὶ τῷ Β τὸ Α ἐγγωρεῖν οὐδὲν διαφέρει — φανερόν ὅτι διχῶς ἂν λέγοιτο τὸ Α τῷ Β παντὶ ἐνδέχεσθαι ὑπάρχειν. πρῶτον οὖν εἴπωμεν, εἰ καθ' οὗ τὸ Γ τὸ Β ἐνδέχεται, καὶ καθ' οὗ τὸ Β τὸ Α, τίς ἔσται καὶ ποῖος συλλογισμὸς· οὕτω γὰρ αἱ προτάσεις ἀμφοτέραι λαμβάνονται κατὰ τὸ ἐνδέχεσθαι, ὅταν δὲ καθ' οὗ τὸ Β ὑπάρχει τὸ Α ἐνδέχεται, ἢ μὲν ὑπάρχουσα ἢ δ' ἐνδεχομένη. ὥστ' ἀπὸ τῶν ὁμοιοσημόνων ἀρκτέον, καθάπερ καὶ ἐν τοῖς ἄλλοις.

## Κεφάλαιο 14

Ὅταν οὖν τὸ Α παντὶ τῷ Β ἐνδέχεται καὶ τὸ Β παντὶ τῷ Γ, συλλογισμὸς ἔσται τέλειος ὅτι τὸ Α παντὶ τῷ Γ ἐνδέχεται ὑπάρχειν. τοῦτο δὲ φανερόν ἐκ τοῦ ὀρισμοῦ· τὸ γὰρ [33a] ἐνδέχεσθαι παντὶ ὑπάρχειν οὕτως ἐλέγομεν. ὁμοίως δὲ καὶ εἰ τὸ μὲν Α ἐνδέχεται μηδενὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ, ὅτι τὸ Α ἐνδέχεται μηδενὶ τῷ Γ· τὸ γὰρ καθ' οὗ τὸ Β ἐνδέχεται, τὸ Α μὴ ἐνδέχεσθαι, τοῦτ' ἦν τὸ μηδὲν ἀπολείπειν τῶν ὑπὸ τὸ Β ἐνδεχομένων. ὅταν δὲ τὸ Α παντὶ τῷ Β ἐνδέχεται, τὸ δὲ Β ἐνδέχεται μηδενὶ τῷ Γ, διὰ μὲν τῶν εἰλημμένων προτάσεων οὐδεὶς γίνεται συλλογισμὸς, ἀντιστραφείσης δὲ τῆς Β Γ κατὰ τὸ ἐνδέχεσθαι γίνεται ὁ αὐτὸς ὅσπερ πρότερον. ἐπεὶ γὰρ ἐνδέχεται τὸ Β μηδενὶ τῷ Γ ὑπάρχειν, ἐνδέχεται καὶ παντὶ ὑπάρχειν· τοῦτο δ' εἴρηται πρότερον. ὥστ' εἰ τὸ μὲν Β παντὶ τῷ Γ, τὸ δ' Α παντὶ τῷ Β, πάλιν ὁ αὐτὸς γίνεται συλλογισμὸς. ὁμοίως δὲ καὶ εἰ πρὸς ἀμφοτέρας τὰς προτάσεις ἢ ἀπόφασις τεθείη μετὰ τοῦ ἐνδέχεσθαι. λέγω δ' οἷον εἰ τὸ Α ἐνδέχεται μηδενὶ τῷ Β καὶ τὸ Β μηδενὶ τῷ Γ· διὰ μὲν γὰρ τῶν εἰλημμένων προτάσεων οὐδεὶς γίνεται συλλογισμὸς, ἀντιστρεφομένων δὲ πάλιν ὁ αὐτὸς ἔσται ὅσπερ καὶ πρότερον. φανερόν οὖν ὅτι τῆς ἀποφάσεως τιθεμένης πρὸς τὸ ἔλαττον ἄκρον ἢ πρὸς ἀμφοτέρας τὰς προτάσεις ἢ οὐ γίνεται συλλογισμὸς ἢ γίνεται μὲν ἀλλ' οὐ τέλειος· ἐκ γὰρ τῆς ἀντιστροφῆς περαίνεται τὸ ἀναγκαῖον.

Ἐὰν δ' ἢ μὲν καθόλου τῶν προτάσεων ἢ δ' ἐν μέρει ληφθῇ, πρὸς μὲν τὸ μεῖζον ἄκρον κειμένης τῆς καθόλου συλλογισμὸς ἔσται [τέλειος]. εἰ γὰρ τὸ Α παντὶ τῷ Β ἐνδέχεται, τὸ δὲ Β τινὶ τῷ Γ, τὸ Α τινὶ τῷ Γ ἐνδέχεται. τοῦτο δὲ φανερόν ἐκ τοῦ ὀρισμοῦ τοῦ ἐνδέχεσθαι. πάλιν εἰ τὸ Α ἐνδέχεται μηδενὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ ἐνδέχεται ὑπάρχειν, ἀνάγκη τὸ Α ἐνδέχεσθαι τινὶ τῶν Γ

μὴ ὑπάρχειν. ἀπόδειξις δ' ἡ αὐτή. ἐὰν δὲ στερητικὴ ληφθῇ ἢ ἐν μέρει πρότασις, ἢ δὲ καθόλου καταφατική, τῇ δὲ θέσει ὁμοίως ἔχωσιν (οἷον τὸ μὲν A παντὶ τῷ B ἐνδέχεται, τὸ δὲ B τινὶ τῷ Γ ἐνδέχεται μὴ ὑπάρχειν), διὰ μὲν τῶν εἰλημμένων προτάσεων οὐ γίνεται φανερὸς συλλογισμός, ἀντιστραφείσης δὲ τῆς ἐν μέρει καὶ τεθέντος τοῦ B τινὶ τῷ Γ ἐνδέχεσθαι ὑπάρχειν τὸ αὐτὸ ἔσται συμπέρασμα ὃ καὶ πρότερον, καθάπερ ἐν τοῖς ἐξ ἀρχῆς.

Ἐὰν δ' ἡ πρὸς τὸ μείζον ἄκρον ἐν μέρει ληφθῇ, ἢ δὲ πρὸς τὸ ἔλαττον καθόλου, ἐάν τ' ἀμφότεραι καταφατικαὶ τεθῶσιν ἐάν τε στερητικαὶ ἐάν τε μὴ ὁμοιοσχήμονες, ἐάν τ' ἀμφότεραι ἀδιόριστοι ἢ κατὰ μέρος, οὐδαμῶς ἔσται συλλογισμός· οὐδὲν γὰρ κωλύει τὸ B ὑπερτείνειν τοῦ A καὶ μὴ κατηγορεῖσθαι ἐπ' ἴσων· ὥ δ' ὑπερτείνει τὸ B τοῦ A, εἰλήφθω τὸ Γ· τούτῳ γὰρ οὔτε παντὶ [33b] οὔτε μηδενὶ οὔτε τινὶ οὔτε μὴ τινὶ ἐνδέχεται τὸ A ὑπάρχειν, εἴπερ ἀντιστρέφουσιν αἱ κατὰ τὸ ἐνδέχεσθαι προτάσεις καὶ τὸ B πλείοσιν ἐνδέχεται ἢ τὸ A ὑπάρχειν. ἔτι δὲ καὶ ἐκ τῶν ὅρων φανερόν· οὕτω γὰρ ἐχουσῶν τῶν προτάσεων τὸ πρῶτον τῷ ἐσχάτῳ καὶ οὐδενὶ ἐνδέχεται καὶ παντὶ ὑπάρχειν ἀναγκαῖον. ὅροι δὲ κοινοὶ πάντων τοῦ μὲν ὑπάρχειν ἐξ ἀνάγκης ζῶον — λευκόν — ἄνθρωπος, τοῦ δὲ μὴ ἐνδέχεσθαι ζῶον — λευκόν — ἱμάτιον. φανερόν οὖν τοῦτον τὸν τρόπον ἐχόντων τῶν ὅρων ὅτι οὐδεὶς γίνεται συλλογισμός. ἢ γὰρ τοῦ ὑπάρχειν ἢ τοῦ ἐξ ἀνάγκης ἢ τοῦ ἐνδέχεσθαι πᾶς ἐστὶ συλλογισμός. τοῦ μὲν οὖν ὑπάρχειν καὶ τοῦ ἀναγκαίου φανερόν ὅτι οὐκ ἔστιν· ὁ μὲν γὰρ καταφατικὸς ἀναιρεῖται τῷ στερητικῷ, ὁ δὲ στερητικὸς τῷ καταφατικῷ. λείπεται δὲ τοῦ ἐνδέχεσθαι εἶναι· τοῦτο δ' ἀδύνατον· δέδεικται γὰρ ὅτι οὕτως ἐχόντων τῶν ὅρων καὶ παντὶ τῷ ἐσχάτῳ τὸ πρῶτον ἀνάγκη καὶ οὐδενὶ ἐνδέχεται ὑπάρχειν. ὥστ' οὐκ ἂν εἴη τοῦ ἐνδέχεσθαι συλλογισμός· τὸ γὰρ ἀναγκαῖον οὐκ ἦν ἐνδεχόμενον.

Φανερόν δὲ ὅτι καθόλου τῶν ὅρων ὄντων ἐν ταῖς ἐνδεχομέναις προτάσεσιν αἰεὶ γίνεται συλλογισμὸς ἐν τῷ πρώτῳ σχήματι, καὶ κατηγορικῶν καὶ στερητικῶν ὄντων, πλὴν κατηγορικῶν μὲν τέλειος, στερητικῶν δὲ ἀτελής. δεῖ δὲ τὸ ἐνδέχεσθαι λαμβάνειν μὴ ἐν τοῖς ἀναγκαίοις, ἀλλὰ κατὰ τὸν εἰρημένον διορισμόν. ἐνίοτε δὲ λανθάνει τὸ τοιοῦτον.



## Κεφάλαιο 15

Ἐὰν δ' ἡ μὲν ὑπάρχειν ἡ δ' ἐνδέχεσθαι λαμβάνηται τῶν προτάσεων, ὅταν μὲν ἡ πρὸς τὸ μεῖζον ἄκρον ἐνδέχεσθαι σημαίνει, τέλειοί τ' ἔσονται πάντες οἱ συλλογισμοὶ καὶ τοῦ ἐνδέχεσθαι κατὰ τὸν εἰρημένον διορισμόν, ὅταν δ' ἡ πρὸς τὸ ἔλαττον, ἀτελεῖς τε πάντες, καὶ οἱ στερητικοὶ τῶν συλλογισμῶν οὐ τοῦ κατὰ τὸν διορισμόν ἐνδεχομένου, ἀλλὰ τοῦ μηδενὶ ἢ μὴ παντὶ ἐξ ἀνάγκης ὑπάρχειν· εἰ γὰρ μηδενὶ ἢ μὴ παντὶ ἐξ ἀνάγκης, ἐνδέχεσθαι φαμεν καὶ μηδενὶ καὶ μὴ παντὶ ὑπάρχειν. ἐνδεχέσθω γὰρ τὸ Α παντὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ κείσθω ὑπάρχειν. ἐπεὶ οὖν ὑπὸ τὸ Β ἐστὶ τὸ Γ, τῷ δὲ Β παντὶ ἐνδέχεται τὸ Α, φανερόν ὅτι καὶ τῷ Γ παντὶ ἐνδέχεται. γίνεται δὴ τέλειος συλλογισμός· ὁμοίως δὲ καὶ στερητικῆς οὔσης τῆς Α Β προτάσεως, τῆς δὲ Β Γ καταφατικῆς, καὶ τῆς μὲν ἐνδέχεσθαι τῆς δ' ὑπάρχειν λαμβανομένης, τέλειος ἔσται συλλογισμός ὅτι τὸ Α ἐνδέχεται μηδενὶ τῷ Γ ὑπάρχειν. [34a]

Ὅτι μὲν οὖν τοῦ ὑπάρχειν τιθεμένου πρὸς τὸ ἔλαττον ἄκρον τέλειοι γίνονται συλλογισμοί, φανερόν· ὅτι δ' ἐναντίως ἔχοντος ἔσονται συλλογισμοί, διὰ τοῦ ἀδυνάτου δεικτέον. ἅμα δ' ἔσται δῆλον καὶ ὅτι ἀτελεῖς· ἡ γὰρ δεῖξις οὐκ ἐκ τῶν εἰλημμένων προτάσεων. πρῶτον δὲ λεκτέον ὅτι εἰ τοῦ Α ὄντος ἀνάγκη τὸ Β εἶναι, καὶ δυνατοῦ ὄντος τοῦ Α δυνατόν ἔσται καὶ τὸ Β ἐξ ἀνάγκης. ἔστω γὰρ οὕτως ἐχόντων τὸ μὲν ἐφ' ᾧ τὸ Α δυνατόν, τὸ δ' ἐφ' ᾧ τὸ Β ἀδύνατον. εἰ οὖν τὸ μὲν δυνατόν, ὅτε δυνατόν εἶναι, γένοιτ' ἄν, τὸ δ' ἀδύνατον, ὅτ' ἀδύνατον, οὐκ ἂν γένοιτο, ἅμα δ' εἴη τὸ Α δυνατόν καὶ τὸ Β ἀδύνατον, ἐνδέχοιτ' ἄν τὸ Α γενέσθαι ἄνευ τοῦ Β, εἰ δὲ γενέσθαι, καὶ εἶναι· τὸ γὰρ γεγονός, ὅτε γέγονεν, ἔστιν. δεῖ δὲ λαμβάνειν μὴ μόνον ἐν τῇ γενέσει τὸ ἀδύνατον καὶ δυνατόν, ἀλλὰ καὶ ἐν τῷ ἀληθεύεσθαι καὶ ἐν τῷ ὑπάρχειν, καὶ ὁσαυτὼς ἄλλως λέγεται τὸ δυνατόν· ἐν ἅπασιν γὰρ ὁμοίως ἔξει. ἔτι τὸ ὄντος τοῦ Α τὸ Β εἶναι, οὐχ ὥς ἐνός τινος ὄντος τοῦ Α τὸ Β ἔσται δεῖ ὑπολαβεῖν· οὐ γὰρ ἔστιν οὐδὲν ἐξ ἀνάγκης ἐνός τινος ὄντος, ἀλλὰ δυοῖν ἐλαχίστοις, οἷον ὅταν αἱ προτάσεις οὕτως ἔχωσιν ὥς ἐλέχθη κατὰ τὸν συλλογισμόν. εἰ γὰρ τὸ Γ κατὰ τοῦ Δ, τὸ δὲ Δ κατὰ τοῦ Ζ, καὶ τὸ Γ κατὰ τοῦ Ζ ἐξ ἀνάγκης· καὶ εἰ δυνατόν ἐκάτερον, καὶ τὸ συμπέρασμα δυνατόν. ὥσπερ οὖν εἴ τις θεῖη τὸ μὲν Α τὰς προτάσεις, τὸ δὲ Β τὸ συμπέρασμα, συμβαίνοι ἄν οὐ μόνον ἀναγκαίου τοῦ Α ὄντος ἅμα καὶ τὸ Β εἶναι ἀναγκαῖον, ἀλλὰ καὶ δυνατοῦ δυνατόν.

Τούτου δὲ δειχθέντος, φανερόν ὅτι ψεύδους ὑποτεθέντος καὶ μὴ ἀδυνάτου καὶ τὸ συμβαῖνον διὰ τὴν ὑπόθεσιν ψεῦδος ἔσται καὶ οὐκ ἀδύνατον. οἷον εἰ τὸ Α

ψεῦδος μὲν ἔστι μὴ μέντοι ἀδύνατον, ὄντος δὲ τοῦ Α τὸ Β ἔστι, καὶ τὸ Β ἔσται ψεῦδος μὲν οὐ μέντοι ἀδύνατον. ἐπεὶ γὰρ δέδεικται ὅτι εἰ τοῦ Α ὄντος τὸ Β ἔστι, καὶ δυνατοῦ ὄντος τοῦ Α ἔσται τὸ Β δυνατόν, ὑπόκειται δὲ τὸ Α δυνατόν εἶναι, καὶ τὸ Β ἔσται δυνατόν· εἰ γὰρ ἀδύνατον, ἅμα δυνατόν ἔσται τὸ αὐτὸ καὶ ἀδύνατον. Διωρισμένων δὴ τούτων ὑπαρχέτω τὸ Α παντὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ ἐνδεχέσθω· ἀνάγκη οὖν τὸ Α παντὶ τῷ Γ ἐνδέχεσθαι ὑπάρχειν. μὴ γὰρ ἐνδεχέσθω, τὸ δὲ Β παντὶ τῷ Γ κείσθω ὡς ὑπάρχον· τοῦτο δὲ ψεῦδος μὲν, οὐ μέντοι ἀδύνατον. εἰ οὖν τὸ μὲν Α μὴ ἐνδέχεται παντὶ τῷ Γ, τὸ δὲ Β παντὶ ὑπάρχει τῷ Γ, τὸ Α οὐ παντὶ τῷ Β ἐνδέχεται· γίνεται γὰρ συλλογισμὸς διὰ τοῦ τρίτου σχήματος. ἀλλ' ὑπέκειτο παντὶ ἐνδέχεσθαι ὑπάρχειν. ἀνάγκη ἄρα τὸ Α παντὶ [34b] τῷ Γ ἐνδέχεσθαι· ψεύδους γὰρ τεθέντος καὶ οὐκ ἀδυνάτου τὸ συμβαῖνόν ἐστιν ἀδύνατον. [ἐγχωρεῖ δὲ καὶ διὰ τοῦ πρώτου σχήματος ποιῆσαι τὸ ἀδύνατον, θέντας τῷ Γ τὸ Β ὑπάρχειν. εἰ γὰρ τὸ Β παντὶ τῷ Γ ὑπάρχει, τὸ δὲ Α παντὶ τῷ Β ἐνδέχεται, κἂν τῷ Γ παντὶ ἐνδέχοιτο τὸ Α. ἀλλ' ὑπέκειτο μὴ παντὶ ἐγχωρεῖν.]

Δεῖ δὲ λαμβάνειν τὸ παντὶ ὑπάρχον μὴ κατὰ χρόνον ὀρίσαντας, οἷον νῦν ἢ ἐν τῷδε τῷ χρόνῳ, ἀλλ' ἀπλῶς· διὰ τοιούτων γὰρ προτάσεων καὶ τοὺς συλλογισμοὺς ποιοῦμεν, ἐπεὶ κατὰ γε τὸ νῦν λαμβανομένης τῆς προτάσεως οὐκ ἔσται συλλογισμὸς· οὐδὲν γὰρ ἴσως κωλύει ποτὲ καὶ παντὶ κινουμένῳ ἄνθρωπον ὑπάρχειν, οἷον εἰ μηδὲν ἄλλο κινοῖτο· τὸ δὲ κινούμενον ἐνδέχεται παντὶ ἵππῳ· ἀλλ' ἄνθρωπον οὐδενὶ ἵππῳ ἐνδέχεται. ἔτι ἔστω τὸ μὲν πρῶτον ζῶον, τὸ δὲ μέσον κινούμενον, τὸ δ' ἔσχατον ἄνθρωπος. αἱ μὲν οὖν προτάσεις ὁμοίως ἔξουσι, τὸ δὲ συμπέρασμα ἀναγκαῖον, οὐκ ἐνδεχόμενον· ἐξ ἀνάγκης γὰρ ὁ ἄνθρωπος ζῶον. φανερόν οὖν ὅτι τὸ καθόλου ληπτέον ἀπλῶς, καὶ οὐ χρόνῳ διορίζοντας.

Πάλιν ἔστω στερητικὴ πρότασις καθόλου ἢ Α Β, καὶ εἰλήφθω τὸ μὲν Α μηδενὶ τῷ Β ὑπάρχειν, τὸ δὲ Β παντὶ ἐνδεχέσθω ὑπάρχειν τῷ Γ. τούτων οὖν τεθέντων ἀνάγκη τὸ Α ἐνδέχεσθαι μηδενὶ τῷ Γ ὑπάρχειν. μὴ γὰρ ἐνδεχέσθω, τὸ δὲ Β τῷ Γ κείσθω ὑπάρχον, καθάπερ πρότερον. ἀνάγκη δὴ τὸ Α τινὶ τῷ Β ὑπάρχειν· γίνεται γὰρ συλλογισμὸς διὰ τοῦ τρίτου σχήματος· τοῦτο δὲ ἀδύνατον. ὥστ' ἐνδέχοιτ' ἂν τὸ Α μηδενὶ τῷ Γ· ψεύδους γὰρ τεθέντος ἀδύνατον τὸ συμβαῖνόν. οὗτος οὖν ὁ συλλογισμὸς οὐκ ἔστι τοῦ κατὰ τὸν διορισμὸν ἐνδεχομένου, ἀλλὰ τοῦ μηδενὶ ἐξ ἀνάγκης (αὕτη γάρ ἐστιν ἡ ἀντίφασις τῆς γενομένης ὑποθέσεως· ἐτέθη γὰρ ἐξ ἀνάγκης τὸ Α τινὶ τῷ Γ ὑπάρχειν, ὁ δὲ διὰ τοῦ ἀδυνάτου συλλογισμὸς τῆς ἀντικειμένης ἐστὶν φάσεως). ἔτι δὲ καὶ ἐκ τῶν ὅρων φανερόν ὅτι οὐκ ἔσται τὸ συμπέρασμα ἐνδεχόμενον. ἔστω γὰρ τὸ μὲν Α κόραξ, τὸ δ' ἐφ' ᾧ Β διανοούμενον, ἐφ' ᾧ δὲ Γ ἄνθρωπος. οὐδενὶ δὴ

τῷ Β τὸ Α ὑπάρχει· οὐδὲν γὰρ διανοούμενον κόραξ. τὸ δὲ Β παντὶ ἐνδέχεται τῷ Γ· παντὶ γὰρ ἀνθρώπῳ τὸ διανοεῖσθαι. ἀλλὰ τὸ Α ἐξ ἀνάγκης οὐδενὶ τῷ Γ· οὐκ ἄρα τὸ συμπέρασμα ἐνδεχόμενον. ἀλλ' οὐδ' ἀναγκαῖον αἰεὶ. ἔστω γὰρ τὸ μὲν Α κινούμενον, τὸ δὲ Β ἐπιστήμη, τὸ δ' ἐφ' ᾧ Γ ἄνθρωπος. τὸ μὲν οὖν Α οὐδενὶ τῷ Β ὑπάρξει, τὸ δὲ Β παντὶ τῷ Γ ἐνδέχεται, καὶ οὐκ ἔσται τὸ συμπέρασμα ἀναγκαῖον· οὐ γὰρ ἀνάγκη μηδένα κινεῖσθαι ἄνθρωπον, ἀλλ' [35a] οὐκ ἀνάγκη τινά. δῆλον οὖν ὅτι τὸ συμπέρασμά ἐστι τοῦ μηδενὶ ἐξ ἀνάγκης ὑπάρχειν. ληπτέον δὲ βέλτιον τοὺς ὅρους.

Ἐὰν δὲ τὸ στερητικὸν τεθῇ πρὸς τὸ ἔλαττον ἄκρον ἐνδέχεσθαι σημαῖνον, ἐξ αὐτῶν μὲν τῶν εἰλημμένων προτάσεων οὐδεὶς ἔσται συλλογισμὸς, ἀντιστραφείσης δὲ τῆς κατὰ τὸ ἐνδέχεσθαι προτάσεως ἔσται, καθάπερ ἐν τοῖς πρότερον. ὑπαρχέτω γὰρ τὸ Α παντὶ τῷ Β, τὸ δὲ Β ἐνδεχέσθω μηδενὶ τῷ Γ. οὕτω μὲν οὖν ἐχόντων τῶν ὅρων οὐδὲν ἔσται ἀναγκαῖον· ἐὰν δ' ἀντιστραφῇ τὸ Β Γ καὶ ληφθῇ τὸ Β παντὶ τῷ Γ ἐνδέχεσθαι, γίνεται συλλογισμὸς ὥσπερ πρότερον· ὁμοίως γὰρ ἔχουσιν οἱ ὅροι τῇ θέσει. τὸν αὐτὸν δὲ τρόπον καὶ στερητικῶν ὄντων ἀμφοτέρων τῶν διαστημάτων, ἐὰν τὸ μὲν Α Β μὴ ὑπάρχειν, τὸ δὲ Β Γ μηδενὶ ἐνδέχεσθαι σημαίνει· δι' αὐτῶν μὲν γὰρ τῶν εἰλημμένων οὐδαμῶς γίνεται τὸ ἀναγκαῖον, ἀντιστραφείσης δὲ τῆς κατὰ τὸ ἐνδέχεσθαι προτάσεως ἔσται συλλογισμὸς. εἰλήφθω γὰρ τὸ μὲν Α μηδενὶ τῷ Β ὑπάρχειν, τὸ δὲ Β ἐνδέχεσθαι μηδενὶ τῷ Γ. διὰ μὲν οὖν τούτων οὐδὲν ἀναγκαῖον· ἐὰν δὲ ληφθῇ τὸ Β παντὶ τῷ Γ ἐνδέχεσθαι, ὅπερ ἐστὶν ἀληθές, ἡ δὲ Α Β πρότασις ὁμοίως ἔχη, πάλιν ὁ αὐτὸς ἔσται συλλογισμὸς. ἐὰν δὲ μὴ ὑπάρχειν τεθῇ τὸ Β παντὶ τῷ Γ καὶ μὴ ἐνδέχεσθαι μὴ ὑπάρχειν, οὐκ ἔσται συλλογισμὸς οὐδαμῶς, οὔτε στερητικῆς οὔσης οὔτε καταφατικῆς τῆς Α Β προτάσεως. ὅροι δὲ κοινοὶ τοῦ μὲν ἐξ ἀνάγκης ὑπάρχειν λευκόν — ζῶον — χιών, τοῦ δὲ μὴ ἐνδέχεσθαι λευκόν — ζῶον — πίττα. Φανερόν οὖν ὅτι καθόλου τῶν ὅρων ὄντων, καὶ τῆς μὲν ὑπάρχειν τῆς δ' ἐνδέχεσθαι λαμβανομένης τῶν προτάσεων, ὅταν ἡ πρὸς τὸ ἔλαττον ἄκρον ἐνδέχεσθαι λαμβάνηται πρότασις, αἰεὶ γίνεται συλλογισμὸς, πλὴν ὅτε μὲν ἐξ αὐτῶν ὅτε δ' ἀντιστραφείσης τῆς προτάσεως. πότε δὲ τούτων ἐκάτερος καὶ διὰ τίν' αἰτίαν, εἰρήκαμεν.

Ἐὰν δὲ τὸ μὲν καθόλου τὸ δ' ἐν μέρει ληφθῇ τῶν διαστημάτων, ὅταν μὲν τὸ πρὸς τὸ μεῖζον ἄκρον καθόλου τεθῇ καὶ ἐνδεχόμενον, εἴτ' ἀποφατικὸν εἴτε καταφατικόν, τὸ δ' ἐν μέρει καταφατικὸν καὶ ὑπάρχον, ἔσται συλλογισμὸς τέλειος, καθάπερ καὶ καθόλου τῶν ὅρων ὄντων. ἀπόδειξις δ' ἡ αὐτὴ ἡ καὶ πρότερον. ὅταν δὲ καθόλου μὲν ᾗ τὸ πρὸς τὸ μεῖζον ἄκρον, ὑπάρχον δὲ καὶ μὴ ἐνδεχόμενον, θάτερον δ' ἐν μέρει καὶ ἐνδεχόμενον, ἐὰν τ' ἀποφατικαὶ ἐὰν

τε καταφατικά τεθῶσιν ἀμφότεραι, ἐάν τε ἡ μὲν ἀποφατική ἡ δὲ καταφατική, πάντως ἔσται συλλογισμὸς ἀτελής. πλὴν οἱ μὲν διὰ τοῦ ἀδυνάτου δειχθήσονται, [35b] οἱ δὲ καὶ διὰ τῆς ἀντιστροφῆς τῆς τοῦ ἐνδέχεσθαι, καθάπερ ἐν τοῖς πρότερον. ἔσται δὲ συλλογισμὸς διὰ τῆς ἀντιστροφῆς [καὶ] ὅταν ἡ μὲν καθόλου πρὸς τὸ μείζον ἄκρον τεθεῖσα σημαίνει τὸ ὑπάρχειν [ἢ μὴ ὑπάρχειν], ἡ δ' ἐν μέρει στερητική οὕσα τὸ ἐνδέχεσθαι λαμβάνη, οἷον εἰ τὸ μὲν A παντὶ τῷ B ὑπάρχει ἢ μὴ ὑπάρχει, τὸ δὲ B τινὶ τῷ Γ ἐνδέχεται μὴ ὑπάρχειν· ἀντιστραφέντος γὰρ τοῦ B Γ κατὰ τὸ ἐνδέχεσθαι γίνεται συλλογισμὸς. ὅταν δὲ τὸ μὴ ὑπάρχειν λαμβάνη ἡ κατὰ μέρος τεθεῖσα, οὐκ ἔσται συλλογισμὸς. ὅροι τοῦ μὲν ὑπάρχειν λευκόν — ζῶον — χιών, τοῦ δὲ μὴ ὑπάρχειν λευκόν — ζῶον — πίττα· διὰ γὰρ τοῦ ἀδιορίστου ληπτέον τὴν ἀπόδειξιν. ἐάν δὲ τὸ καθόλου τεθῇ πρὸς τὸ ἔλαττον ἄκρον, τὸ δ' ἐν μέρει πρὸς τὸ μείζον, ἐάν τε στερητικὸν ἐάν τε καταφατικόν, ἐάν τ' ἐνδεχόμενον ἐάν θ' ὑπάρχον ὁποτερονοῦν, οὐδαμῶς ἔσται συλλογισμὸς.

Οὐδ' ὅταν ἐν μέρει ἢ ἀδιορίστοι τεθῶσιν αἱ προτάσεις, εἴτ' ἐνδέχεσθαι λαμβάνουσαι εἴθ' ὑπάρχειν εἴτ' ἐναλλάξ, οὐδ' οὕτως ἔσται συλλογισμὸς. ἀπόδειξις δ' ἡ αὐτὴ ἢ περ κάπὶ τῶν πρότερον. ὅροι δὲ κοινοὶ τοῦ μὲν ὑπάρχειν ἐξ ἀνάγκης ζῶον — λευκόν — ἄνθρωπος, τοῦ δὲ μὴ ἐνδέχεσθαι ζῶον — λευκόν — ἱμάτιον. φανερόν οὖν ὅτι τοῦ μὲν πρὸς τὸ μείζον ἄκρον καθόλου τεθέντος αἰεὶ γίνεται συλλογισμὸς, τοῦ δὲ πρὸς τὸ ἔλαττον οὐδέποτε οὐδενός.

## Κεφάλαιο 16

Ὅταν δ' ἡ μὲν ἐξ ἀνάγκης ὑπάρχειν ἡ δ' ἐνδέχεσθαι σημαίνει τῶν προτάσεων, ὁ μὲν συλλογισμὸς ἔσται τὸν αὐτὸν τρόπον ἐχόντων τῶν ὅρων, καὶ τέλειος ὅταν πρὸς τῷ ἐλάττονι ἄκρῳ τεθῇ τὸ ἀναγκαῖον· τὸ δὲ συμπέρασμα κατηγορικῶν μὲν ὄντων τῶν ὅρων τοῦ ἐνδέχεσθαι καὶ οὐ τοῦ ὑπάρχειν ἔσται, καὶ καθόλου καὶ μὴ καθόλου τιθεμένων, ἐάν δ' ἢ τὸ μὲν καταφατικὸν τὸ δὲ στερητικόν, ὅταν μὲν ἢ τὸ καταφατικὸν ἀναγκαῖον, τοῦ ἐνδέχεσθαι καὶ οὐ τοῦ μὴ ὑπάρχειν, ὅταν δὲ τὸ στερητικόν, καὶ τοῦ ἐνδέχεσθαι μὴ ὑπάρχειν καὶ τοῦ μὴ ὑπάρχειν, καὶ καθόλου καὶ μὴ καθόλου τῶν ὅρων ὄντων· τὸ δ' ἐνδέχεσθαι ἐν τῷ συμπεράσματι τὸν αὐτὸν τρόπον ληπτέον ὥν περ καὶ ἐν τοῖς πρότερον. τοῦ δ' ἐξ ἀνάγκης μὴ ὑπάρχειν οὐκ ἔσται συλλογισμὸς· ἕτερον γὰρ τὸ μὴ ἐξ ἀνάγκης ὑπάρχειν καὶ τὸ ἐξ ἀνάγκης μὴ ὑπάρχειν.

Ὅτι μὲν οὖν καταφατικῶν ὄντων τῶν ὅρων οὐ γίνεται τὸ συμπέρασμα ἀναγκαῖον, φανερόν. ὑπαρχέτω γὰρ τὸ μὲν A παντὶ τῷ B ἐξ ἀνάγκης, τὸ δὲ B

ένδεχέσθω παντὶ τῷ Γ. ἔσται δὴ συλλογισμὸς ἀτελὴς ὅτι ἐνδέχεται τὸ Α παντὶ τῷ Γ [36a] ὑπάρχειν. ὅτι δ' ἀτελής, ἐκ τῆς ἀποδείξεως δῆλον· τὸν αὐτὸν γὰρ τρόπον δειχθήσεται ὅνπερ κάπὶ τῶν πρότερον. πάλιν τὸ μὲν Α ἐνδεχέσθω παντὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ ὑπαρχέτω ἐξ ἀνάγκης. ἔσται δὴ συλλογισμὸς ὅτι τὸ Α παντὶ τῷ Γ ἐνδέχεται ὑπάρχειν, ἀλλ' οὐχ ὅτι ὑπάρχει, καὶ τέλειος, ἀλλ' οὐκ ἀτελής· εὐθύς γὰρ ἐπιτελεῖται διὰ τῶν ἐξ ἀρχῆς προτάσεων.

Εἰ δὲ μὴ ὁμοιοσχήμονες αἱ προτάσεις, ἔστω πρῶτον ἡ στερητικὴ ἀναγκαία, καὶ τὸ μὲν Α μηδενὶ ἐνδεχέσθω τῷ Β, τὸ δὲ Β παντὶ τῷ Γ ἐνδεχέσθω. ἀνάγκη δὴ τὸ Α μηδενὶ τῷ Γ ὑπάρχειν. κείσθω γὰρ ὑπάρχειν ἢ παντὶ ἢ τινί· τῷ δὲ Β ὑπέκειτο μηδενὶ ἐνδέχεσθαι. ἐπεὶ οὖν ἀντιστρέφει τὸ στερητικόν, οὐδὲ τὸ Β τῷ Α οὐδενὶ ἐνδέχεται· τὸ δὲ Α τῷ Γ ἢ παντὶ ἢ τινὶ κεῖται ὑπάρχειν· ὥστ' οὐδενὶ ἢ οὐ παντὶ τῷ Γ τὸ Β ἐνδέχοιτ' ἂν ὑπάρχειν· ὑπέκειτο δὲ παντὶ ἐξ ἀρχῆς. φανερόν δ' ὅτι καὶ τοῦ ἐνδέχεσθαι μὴ ὑπάρχειν γίνεταί συλλογισμός, εἴπερ καὶ τοῦ μὴ ὑπάρχειν. πάλιν ἔστω ἡ καταφατικὴ πρότασις ἀναγκαία, καὶ τὸ μὲν Α ἐνδεχέσθω μηδενὶ τῷ Β ὑπάρχειν, τὸ δὲ Β παντὶ τῷ Γ ὑπαρχέτω ἐξ ἀνάγκης. ὁ μὲν οὖν συλλογισμὸς ἔσται τέλειος, ἀλλ' οὐ τοῦ μὴ ὑπάρχειν ἀλλὰ τοῦ ἐνδέχεσθαι μὴ ὑπάρχειν· ἢ τε γὰρ πρότασις οὕτως ἐλήφθη ἢ ἀπὸ τοῦ μείζονος ἄκρου, καὶ εἰς τὸ ἀδύνατον οὐκ ἔστιν ἀγαγεῖν· εἰ γὰρ ὑποτεθεῖν τὸ Α τῷ Γ τινὶ ὑπάρχειν, κεῖται δὲ καὶ τῷ Β ἐνδέχεσθαι μηδενὶ ὑπάρχειν, οὐδὲν συμβαίνει διὰ τούτων ἀδύνατον. ἔαν δὲ πρὸς τῷ ἐλάττονι ἄκρῳ τεθῇ τὸ στερητικόν, ὅταν μὲν ἐνδέχεσθαι σημαίνῃ, συλλογισμὸς ἔσται διὰ τῆς ἀντιστροφῆς, καθάπερ ἐν τοῖς πρότερον, ὅταν δὲ μὴ ἐνδέχεσθαι, οὐκ ἔσται. οὐδ' ὅταν ἄμφω μὲν τεθῇ στερητικά, μὴ ἢ δ' ἐνδεχόμενον τὸ πρὸς τὸ ἔλαττον. ὅροι δ' οἱ αὐτοί, τοῦ μὲν ὑπάρχειν λευκόν — ζῶον — χιών, τοῦ δὲ μὴ ὑπάρχειν λευκόν — ζῶον — πίττα.

Τὸν αὐτὸν δὲ τρόπον ἔξει κάπὶ τῶν ἐν μέρει συλλογισμῶν. ὅταν μὲν γὰρ ἢ τὸ στερητικὸν ἀναγκαῖον, καὶ τὸ συμπέρασμα ἔσται τοῦ μὴ ὑπάρχειν. οἷον εἰ τὸ μὲν Α μηδενὶ τῷ Β ἐνδέχεται ὑπάρχειν, τὸ δὲ Β τινὶ τῷ Γ ἐνδέχεται ὑπάρχειν, ἀνάγκη τὸ Α τινὶ τῷ Γ μὴ ὑπάρχειν. εἰ γὰρ παντὶ ὑπάρχει, τῷ δὲ Β μηδενὶ ἐνδέχεται, οὐδὲ τὸ Β οὐδενὶ τῷ Α ἐνδέχεται ὑπάρχειν. ὥστ' εἰ τὸ Α παντὶ τῷ Γ ὑπάρχει, οὐδενὶ τῷ Γ τὸ Β ἐνδέχεται. ἀλλ' ὑπέκειτό τινι ἐνδέχεσθαι. ὅταν δὲ τὸ ἐν μέρει καταφατικὸν ἀναγκαῖον ἢ, τὸ ἐν τῷ στερητικῷ συλλογισμῷ, οἷον τὸ Β Γ, ἢ τὸ [36b] καθόλου τὸ ἐν τῷ κατηγορικῷ, οἷον τὸ Α Β, οὐκ ἔσται τοῦ ὑπάρχειν συλλογισμός. ἀπόδειξις δ' ἢ αὐτὴ ἢ καὶ ἐπὶ τῶν πρότερον. ἔαν δὲ τὸ μὲν καθόλου τεθῇ πρὸς τὸ ἔλαττον ἄκρον, ἢ καταφατικὸν ἢ στερητικόν, ἐνδεχόμενον, τὸ δ' ἐν μέρει

ἀναγκαῖον [πρὸς τῷ μείζονι ἄκρῳ], οὐκ ἔσται συλλογισμός (ὅροι δὲ τοῦ μὲν ὑπάρχειν ἐξ ἀνάγκης ζῶν — λευκόν — ἄνθρωπος, τοῦ δὲ μὴ ἐνδέχεσθαι ζῶν — λευκόν — ἰμάτιον)· ὅταν δ' ἀναγκαῖον ᾖ τὸ καθόλου, τὸ δ' ἐν μέρει ἐνδεχόμενον, στερητικοῦ μὲν ὄντος τοῦ καθόλου τοῦ μὲν ὑπάρχειν ὅροι ζῶν — λευκόν — κόραξ, τοῦ δὲ μὴ ὑπάρχειν ζῶν — λευκόν — πίττα, καταφατικοῦ δὲ τοῦ μὲν ὑπάρχειν ζῶν — λευκόν — κύκνος, τοῦ δὲ μὴ ἐνδέχεσθαι ζῶν — λευκόν — χιών. οὐδ' ὅταν ἀδιόριστοι ληφθῶσιν αἱ προτάσεις ἢ ἀμφοτέραι κατὰ μέρος, οὐδ' οὕτως ἔσται συλλογισμός. ὅροι δὲ κοινοὶ τοῦ μὲν ὑπάρχειν ζῶν — λευκόν — ἄνθρωπος, τοῦ δὲ μὴ ὑπάρχειν ζῶν — λευκόν — ἄψυχον. καὶ γὰρ τὸ ζῶν τινὶ λευκῷ καὶ τὸ λευκὸν ἀψύχῳ τινὶ καὶ ἀναγκαῖον ὑπάρχειν καὶ οὐκ ἐνδέχεται ὑπάρχειν. κάπὶ τοῦ ἐνδέχεσθαι ὁμοίως, ὥστε πρὸς ἅπαντα χρήσιμοι οἱ ὅροι.

Φανερόν οὖν ἐκ τῶν εἰρημένων ὅτι ὁμοίως ἐχόντων τῶν ὁρῶν ἔν τε τῷ ὑπάρχειν καὶ ἐν τοῖς ἀναγκαίοις γίνεται τε καὶ οὐ γίνεται συλλογισμός, πλὴν κατὰ μὲν τὸ ὑπάρχειν τιθεμένης τῆς στερητικῆς προτάσεως τοῦ ἐνδέχεσθαι ἦν ὁ συλλογισμός, κατὰ δὲ τὸ ἀναγκαῖον τῆς στερητικῆς καὶ τοῦ ἐνδέχεσθαι καὶ τοῦ μὴ ὑπάρχειν. [δῆλον δὲ καὶ ὅτι πάντες ἀτελεῖς οἱ συλλογισμοὶ καὶ ὅτι τελειοῦνται διὰ τῶν προειρημένων σχημάτων.]

## Κεφάλαιο 17

Ἐν δὲ τῷ δευτέρῳ σχήματι ὅταν μὲν ἐνδέχεσθαι λαμβάνωσιν ἀμφοτέραι αἱ προτάσεις, οὐδεὶς ἔσται συλλογισμός, οὔτε κατηγορικῶν οὔτε στερητικῶν τιθεμένων, οὔτε καθόλου οὔτε κατὰ μέρος· ὅταν δὲ ἢ μὲν ὑπάρχειν ἢ δ' ἐνδέχεσθαι σημαίνει, τῆς μὲν καταφατικῆς ὑπάρχειν σημαινούσης οὐδέποτε ἔσται, τῆς δὲ στερητικῆς τῆς καθόλου ἀεί. τὸν αὐτὸν δὲ τρόπον καὶ ὅταν ἢ μὲν ἐξ ἀνάγκης ἢ δ' ἐνδέχεσθαι λαμβάνηται τῶν προτάσεων. δεῖ δὲ καὶ ἐν τούτοις λαμβάνειν τὸ ἐν τοῖς συμπεράσμασιν ἐνδεχόμενον ὥσπερ ἐν τοῖς πρότερον.

Πρῶτον οὖν δεικτέον ὅτι οὐκ ἀντιστρέφει τὸ ἐν τῷ ἐνδέχεσθαι στερητικόν, οἷον εἰ τὸ Α ἐνδέχεται μηδενὶ τῷ Β, οὐκ ἀνάγκη καὶ τὸ Β ἐνδέχεσθαι μηδενὶ τῷ Α. κείσθω γὰρ τοῦτο, καὶ ἐνδεχέσθω τὸ Β μηδενὶ τῷ Α ὑπάρχειν. οὐκοῦν ἐπεὶ ἀντιστρέφουσιν αἱ ἐν τῷ ἐνδέχεσθαι καταφάσεις ταῖς ἀποφάσεσι, καὶ αἱ ἐναντίαι καὶ αἱ ἀντικείμεναι, τὸ δὲ Β τῷ Α ἐνδέχεται μηδενὶ [37a] ὑπάρχειν, φανερόν ὅτι καὶ παντὶ ἂν ἐνδέχοιτο τῷ Α ὑπάρχειν. τοῦτο δὲ ψεῦδος· οὐ γὰρ εἰ τότε τῷδε παντὶ ἐνδέχεται, καὶ τότε τῷδε ἀναγκαῖον· ὥστ' οὐκ ἀντιστρέφει τὸ στερητικόν. ἔτι δ' οὐδὲν κωλύει τὸ μὲν Α τῷ Β ἐνδέχεσθαι

μηδενί, τὸ δὲ B τινὶ τῶν A ἐξ ἀνάγκης μὴ ὑπάρχειν, οἷον τὸ μὲν λευκὸν παντὶ ἀνθρώπῳ ἐνδέχεται μὴ ὑπάρχειν (καὶ γὰρ ὑπάρχειν), ἄνθρωπον δ' οὐκ ἀληθὲς εἰπεῖν ὡς ἐνδέχεται μηδενὶ λευκῷ· πολλοῖς γὰρ ἐξ ἀνάγκης οὐχ ὑπάρχει, τὸ δ' ἀναγκαῖον οὐκ ἦν ἐνδεχόμενον.

Ἀλλὰ μὴν οὐδ' ἐκ τοῦ ἀδυνάτου δειχθήσεται ἀντιστρέφον, οἷον εἴ τις ἀξιώσκειν, ἐπεὶ ψεῦδος τὸ ἐνδέχεσθαι τὸ B τῷ A μηδενὶ ὑπάρχειν, ἀληθὲς τὸ μὴ ἐνδέχεσθαι μηδενί (φάσις γὰρ καὶ ἀπόφασις), εἰ δὲ τοῦτ', ἀληθὲς ἐξ ἀνάγκης τινὶ τῷ A ὑπάρχειν· ὥστε καὶ τὸ A τινὶ τῷ B· τοῦτο δ' ἀδύνατον. οὐ γὰρ εἰ μὴ ἐνδέχεται μηδενὶ τὸ B τῷ A, ἀνάγκη τινὶ ὑπάρχειν. τὸ γὰρ μὴ ἐνδέχεσθαι μηδενὶ διχῶς λέγεται, τὸ μὲν εἰ ἐξ ἀνάγκης τινὶ ὑπάρχει, τὸ δ' εἰ ἐξ ἀνάγκης τινὶ μὴ ὑπάρχει· τὸ γὰρ ἐξ ἀνάγκης τινὶ τῶν A μὴ ὑπάρχον οὐκ ἀληθὲς εἰπεῖν ὡς παντὶ ἐνδέχεται μὴ ὑπάρχειν, ὥσπερ οὐδὲ τὸ τινὶ ὑπάρχον ἐξ ἀνάγκης ὅτι παντὶ ἐνδέχεται ὑπάρχειν. εἰ οὖν τις ἀξιοίη, ἐπεὶ οὐκ ἐνδέχεται τὸ Γ τῷ Δ παντὶ ὑπάρχειν, ἐξ ἀνάγκης τινὶ μὴ ὑπάρχειν αὐτό, ψεῦδος ἂν λαμβάνοι· παντὶ γὰρ ὑπάρχει, ἀλλ' ὅτι ἐνίοις ἐξ ἀνάγκης ὑπάρχει, διὰ τοῦτο φάμεν οὐ παντὶ ἐνδέχεσθαι. ὥστε τῷ ἐνδέχεσθαι παντὶ ὑπάρχειν τό τ' ἐξ ἀνάγκης τινὶ ὑπάρχειν ἀντίκειται καὶ τὸ ἐξ ἀνάγκης τινὶ μὴ ὑπάρχειν. ὁμοίως δὲ καὶ τῷ ἐνδέχεσθαι μηδενί. δῆλον οὖν ὅτι πρὸς τὸ οὕτως ἐνδεχόμενον καὶ μὴ ἐνδεχόμενον ὡς ἐν ἀρχῇ διωρίσαμεν οὐ τὸ ἐξ ἀνάγκης τινὶ ὑπάρχειν ἀλλὰ τὸ ἐξ ἀνάγκης τινὶ μὴ ὑπάρχειν ληπτέον. τούτου δὲ ληφθέντος οὐδὲν συμβαίνει ἀδύνατον, ὥστ' οὐ γίνεται συλλογισμός. φανερόν οὖν ἐκ τῶν εἰρημένων ὅτι οὐκ ἀντιστρέφει τὸ στερητικόν.

Τούτου δὲ δειχθέντος κείσθω τὸ A τῷ μὲν B ἐνδέχεσθαι μηδενί, τῷ δὲ Γ παντί. διὰ μὲν οὖν τῆς ἀντιστροφῆς οὐκ ἔσται συλλογισμός· εἴρηται γὰρ ὅτι οὐκ ἀντιστρέφει ἡ τοιαύτη πρότασις. ἀλλ' οὐδὲ διὰ τοῦ ἀδυνάτου· τεθέντος γὰρ τοῦ B <μὴ> παντὶ τῷ Γ ἐνδέχεσθαι <μὴ> ὑπάρχειν οὐδὲν συμβαίνει ψεῦδος· ἐνδέχοιτο γὰρ ἂν τὸ A τῷ Γ καὶ παντὶ καὶ μηδενὶ ὑπάρχειν. ὅλως δ' εἰ ἔστι συλλογισμός, δῆλον ὅτι τοῦ ἐνδέχεσθαι ἀνεῖη διὰ τὸ μηδετέραν τῶν προτάσεων εἰληφθαι ἐν τῷ ὑπάρχειν, καὶ οὗτος ἢ καταφατικὸς ἢ στερητικὸς· οὐδετέρως δ' [37b] ἐγχωρεῖ. καταφατικοῦ μὲν γὰρ τεθέντος δειχθήσεται διὰ τῶν ὅρων ὅτι οὐκ ἐνδέχεται ὑπάρχειν, στερητικοῦ δέ, ὅτι τὸ συμπέρασμα οὐκ ἐνδεχόμενον ἀλλ' ἀναγκαῖόν ἐστιν. ἔστω γὰρ τὸ μὲν A λευκόν, τὸ δὲ B ἄνθρωπος, ἐφ' ᾧ δὲ Γ ἵππος. τὸ δὲ A, τὸ λευκόν, ἐνδέχεται τῷ μὲν παντὶ τῷ δὲ μηδενὶ ὑπάρχειν. ἀλλὰ τὸ B τῷ Γ οὔτε ὑπάρχειν ἐνδέχεται οὔτε μὴ ὑπάρχειν. ὅτι μὲν οὖν ὑπάρχειν οὐκ ἐγχωρεῖ, φανερόν· οὐδεὶς γὰρ ἵππος ἄνθρωπος. ἀλλ' οὐδ' ἐνδέχεσθαι μὴ ὑπάρχειν· ἀνάγκη γὰρ μηδένα ἵππον ἄνθρωπον εἶναι, τὸ δ' ἀναγκαῖον οὐκ ἦν ἐνδεχόμενον. οὐκ ἄρα γίνεται

συλλογισμός. ὁμοίως δὲ δειχθήσεται καὶ ἂν ἀνάπαλιν τεθῇ τὸ στερητικόν, κἄν ἀμφότεραι καταφατικαὶ ληφθῶσιν ἢ στερητικάι (διὰ γὰρ τῶν αὐτῶν ὅρων ἔσται ἡ ἀπόδειξις)· καὶ ὅταν ἡ μὲν καθόλου ἡ δ' ἐν μέρει, ἢ ἀμφότεραι κατὰ μέρος ἢ ἀδιόριστοι, ἢ ὁσαχῶς ἄλλως ἐνδέχεται μεταλαβεῖν τὰς προτάσεις· ἀεὶ γὰρ ἔσται διὰ τῶν αὐτῶν ὅρων ἡ ἀπόδειξις. φανερόν οὖν ὅτι ἀμφοτέρων τῶν προτάσεων κατὰ τὸ ἐνδέχεσθαι τιθεμένων οὐδεὶς γίνεται συλλογισμός.

## Κεφάλαιο 18

Εἰ δ' ἡ μὲν ὑπάρχειν ἡ δ' ἐνδέχεσθαι σημαίνει, τῆς μὲν κατηγορικῆς ὑπάρχειν τεθείσης τῆς δὲ στερητικῆς ἐνδέχεσθαι οὐδέποτε ἔσται συλλογισμός, οὔτε καθόλου τῶν ὅρων οὔτ' ἐν μέρει λαμβανομένων (ἀπόδειξις δ' ἡ αὐτὴ καὶ διὰ τῶν αὐτῶν ὅρων)· ὅταν δ' ἡ μὲν καταφατικὴ ἐνδέχεσθαι ἡ δὲ στερητικὴ ὑπάρχειν, ἔσται συλλογισμός. εἰλήφθω γὰρ τὸ Α τῷ μὲν Β μηδενὶ ὑπάρχειν, τῷ δὲ Γ παντὶ ἐνδέχεσθαι. ἀντιστραφέντος οὖν τοῦ στερητικοῦ τὸ Β τῷ Α οὐδενὶ ὑπάρξει· τὸ δὲ Α παντὶ τῷ Γ ἐνδέχετο· γίνεται δὴ συλλογισμός ὅτι ἐνδέχεται τὸ Β μηδενὶ τῷ Γ διὰ τοῦ πρώτου σχήματος. ὁμοίως δὲ καὶ εἰ πρὸς τῷ Γ τεθείη τὸ στερητικόν. ἔαν δ' ἀμφότεραι μὲν ὥσι στερητικά, σημαίνει δ' ἡ μὲν μὴ ὑπάρχειν ἡ δ' ἐνδέχεσθαι, δι' αὐτῶν μὲν τῶν εἰλημμένων οὐδὲν συμβαίνει ἀναγκαῖον, ἀντιστραφείσης δὲ τῆς κατὰ τὸ ἐνδέχεσθαι προτάσεως γίγνεται συλλογισμός ὅτι τὸ Β τῷ Γ ἐνδέχεται μηδενὶ ὑπάρχειν, καθάπερ ἐν τοῖς πρότερον· ἔσται γὰρ πάλιν τὸ πρῶτον σχῆμα. ἔαν δ' ἀμφότεραι τεθῶσι κατηγορικά, οὐκ ἔσται συλλογισμός. ὅροι τοῦ μὲν ὑπάρχειν ὑγίεια — ζῶον — ἄνθρωπος, τοῦ δὲ μὴ ὑπάρχειν ὑγίεια — ἵππος — ἄνθρωπος.

Τὸν αὐτὸν δὲ τρόπον ἔξει κάπὶ τῶν ἐν μέρει συλλογισμῶν. ὅταν μὲν γὰρ ἢ τὸ καταφατικὸν ὑπάρχον, εἴτε [38a] καθόλου εἴτ' ἐν μέρει ληφθὲν, οὐδεὶς ἔσται συλλογισμός (τοῦτο δ' ὁμοίως καὶ διὰ τῶν αὐτῶν ὅρων δείκνυται τοῖς πρότερον), ὅταν δὲ τὸ στερητικόν, ἔσται διὰ τῆς ἀντιστροφῆς, καθάπερ ἐν τοῖς πρότερον. πάλιν ἔαν ἄμφω μὲν τὰ διαστήματα στερητικὰ ληφθῇ, καθόλου δὲ τὸ μὴ ὑπάρχειν, ἐξ αὐτῶν μὲν τῶν προτάσεων οὐκ ἔσται τὸ ἀναγκαῖον, ἀντιστραφέντος δὲ τοῦ ἐνδέχεσθαι καθάπερ ἐν τοῖς πρότερον ἔσται συλλογισμός. ἔαν δὲ ὑπάρχον μὲν ἢ τὸ στερητικόν, ἐν μέρει δὲ ληφθῇ, οὐκ ἔσται συλλογισμός, οὔτε καταφατικῆς οὔτε στερητικῆς οὔσης τῆς ἐτέρας προτάσεως. οὐδ' ὅταν ἀμφότεραι ληφθῶσιν ἀδιόριστοι — ἢ καταφατικά ἢ ἀποφατικά — ἢ κατὰ μέρος. ἀπόδειξις δ' ἡ αὐτὴ καὶ διὰ τῶν αὐτῶν ὅρων.

## Κεφάλαιο 19



Ἐὰν δ' ἡ μὲν ἐξ ἀνάγκης ἡ δ' ἐνδέχεσθαι σημαίνει τῶν προτάσεων, τῆς μὲν στερητικῆς ἀναγκαίᾳς οὐσης ἔσται συλλογισμός, οὐ μόνον ὅτι ἐνδέχεται μὴ ὑπάρχειν, ἀλλὰ καὶ ὅτι οὐχ ὑπάρχει, τῆς δὲ καταφατικῆς οὐκ ἔσται. κείσθω γὰρ τὸ Α τῷ μὲν Β ἐξ ἀνάγκης μηδενὶ ὑπάρχειν, τῷ δὲ Γ παντὶ ἐνδέχεσθαι. ἀντιστραφείσης οὖν τῆς στερητικῆς οὐδὲ τὸ Β τῷ Α οὐδενὶ ὑπάρξει· τὸ δὲ Α παντὶ τῷ Γ ἐνδέχεται· γίνεται δὴ πάλιν διὰ τοῦ πρώτου σχήματος ὁ συλλογισμὸς ὅτι τὸ Β τῷ Γ ἐνδέχεται μηδενὶ ὑπάρχειν. ἅμα δὲ δῆλον ὅτι οὐδ' ὑπάρξει τὸ Β οὐδενὶ τῷ Γ. κείσθω γὰρ ὑπάρχειν· οὐκοῦν εἰ τὸ Α τῷ Β μηδενὶ ἐνδέχεται, τὸ δὲ Β ὑπάρχει τινὶ τῷ Γ, τὸ Α τῷ Γ τινὶ οὐκ ἐνδέχεται· ἀλλὰ παντὶ ὑπέκειτο ἐνδέχεσθαι. τὸν αὐτὸν δὲ τρόπον δειχθήσεται καὶ εἰ πρὸς τῷ Γ τεθείη τὸ στερητικόν.

Πάλιν ἔστω τὸ κατηγορικὸν ἀναγκαῖον, θάτερον δ' ἐνδεχόμενον, καὶ τὸ Α τῷ μὲν Β ἐνδεχέσθω μηδενί, τῷ δὲ Γ παντὶ ὑπαρχέτω ἐξ ἀνάγκης. οὕτως οὖν ἐχόντων τῶν ὅρων οὐδεὶς ἔσται συλλογισμός. συμβαίνει γὰρ τὸ Β τῷ Γ ἐξ ἀνάγκης μὴ ὑπάρχειν. ἔστω γὰρ τὸ μὲν Α λευκόν, ἐφ' ᾧ δὲ τὸ Β ἄνθρωπος, ἐφ' ᾧ δὲ τὸ Γ κύκνος. τὸ δὴ λευκὸν κύκνω μὲν ἐξ ἀνάγκης ὑπάρχει, ἀνθρώπῳ δ' ἐνδέχεται μηδενί· καὶ ἄνθρωπος οὐδενὶ κύκνω ἐξ ἀνάγκης. ὅτι μὲν οὖν τοῦ ἐνδέχεσθαι οὐκ ἔστι συλλογισμός, φανερόν· τὸ γὰρ ἐξ ἀνάγκης οὐκ ἦν ἐνδεχόμενον. ἀλλὰ μὴν οὐδὲ τοῦ ἀναγκαίου· τὸ γὰρ ἀναγκαῖον ἢ ἐξ ἀμφοτέρων ἀναγκαίων ἢ ἐκ τῆς στερητικῆς συνέβαινε. ἔτι δὲ καὶ ἐγχωρεῖ τούτων κειμένων τὸ Β τῷ Γ ὑπάρχειν· οὐδὲν γὰρ κωλύει τὸ μὲν Γ ὑπὸ τὸ Β εἶναι, τὸ δὲ Α τῷ μὲν Β παντὶ ἐνδέχεσθαι, τῷ δὲ Γ ἐξ ἀνάγκης ὑπάρχειν, οἷον εἰ τὸ μὲν Γ εἴη ἐγρηγορός, τὸ δὲ Β ζῶον, τὸ δ' ἐφ' ᾧ τὸ Α κίνησις. τῷ μὲν γὰρ ἐγρηγορότι ἐξ [38b] ἀνάγκης κίνησις, ζῶω δὲ παντὶ ἐνδέχεται· καὶ πᾶν τὸ ἐγρηγορὸς ζῶον. φανερόν οὖν ὅτι οὐδὲ τοῦ μὴ ὑπάρχειν, εἴπερ οὕτως ἐχόντων ἀνάγκη ὑπάρχειν. οὐδὲ δὴ τῶν ἀντικειμένων καταφάσεων, ὥστ' οὐδεὶς ἔσται συλλογισμός. ὁμοίως δὲ δειχθήσεται καὶ ἀνάπαλιν τεθείσης τῆς καταφατικῆς.

Ἐὰν δ' ὁμοιοσχήμονες ὦσιν αἱ προτάσεις, στερητικῶν μὲν οὐσῶν ἀεὶ γίνεται συλλογισμὸς ἀντιστραφείσης τῆς κατὰ τὸ ἐνδέχεσθαι προτάσεως καθάπερ ἐν τοῖς πρότερον. εἰλήφθω γὰρ τὸ Α τῷ μὲν Β ἐξ ἀνάγκης μὴ ὑπάρχειν, τῷ δὲ Γ ἐνδέχεσθαι μὴ ὑπάρχειν· ἀντιστραφειῶν οὖν τῶν προτάσεων τὸ μὲν Β τῷ Α οὐδενὶ ὑπάρχει, τὸ δὲ Α παντὶ τῷ Γ ἐνδέχεται· γίνεται δὴ τὸ πρῶτον σχῆμα. κἂν εἰ πρὸς τῷ Γ τεθείη τὸ στερητικόν, ὡσαύτως. ἐὰν δὲ κατηγορικαὶ τεθῶσιν, οὐκ ἔσται συλλογισμός. τοῦ μὲν γὰρ μὴ ὑπάρχειν ἢ τοῦ ἐξ ἀνάγκης μὴ ὑπάρχειν φανερόν ὅτι οὐκ ἔσται διὰ τὸ μὴ εἰληφθαι στερητικὴν πρότασιν μήτ' ἐν τῷ ὑπάρχειν μήτ' ἐν τῷ ἐξ ἀνάγκης ὑπάρχειν. ἀλλὰ μὴν οὐδὲ τοῦ

ἐνδέχεσθαι μὴ ὑπάρχειν· ἐξ ἀνάγκης γὰρ οὕτως ἐχόντων τὸ Β τῷ Γ οὐχ ὑπάρξει, οἷον εἰ τὸ μὲν Α τεθείη λευκόν, ἐφ' ᾧ δὲ τὸ Β κύκνος, τὸ δὲ Γ ἄνθρωπος. οὐδέ γε τῶν ἀντικειμένων καταφάσεων, ἐπεὶ δέδεικται τὸ Β τῷ Γ ἐξ ἀνάγκης οὐχ ὑπάρχον. οὐκ ἄρα γίνεται συλλογισμὸς ὅλως.

Ὅμοίως δ' ἔξει κάπὶ τῶν ἐν μέρει συλλογισμῶν· ὅταν μὲν γὰρ ἢ τὸ στερητικὸν καθόλου τε καὶ ἀναγκαῖον, ἀεὶ συλλογισμὸς ἔσται καὶ τοῦ ἐνδέχεσθαι καὶ τοῦ μὴ ὑπάρχειν (ἀπόδειξις δὲ διὰ τῆς ἀντιστροφῆς), ὅταν δὲ τὸ καταφατικόν, οὐδέποτε· τὸν αὐτὸν γὰρ τρόπον δειχθήσεται ὅν καὶ ἐν τοῖς καθόλου, καὶ διὰ τῶν αὐτῶν ὅρων. οὐδ' ὅταν ἀμφότεραι ληφθῶσι καταφατικά· καὶ γὰρ τούτου ἢ αὐτὴ ἀπόδειξις ἢ καὶ πρότερον. ὅταν δὲ ἀμφότεραι μὲν στερητικά, καθόλου δὲ καὶ ἀναγκαῖα ἢ τὸ μὴ ὑπάρχειν σημαίνουσα, δι' αὐτῶν μὲν τῶν εἰλημμένων οὐκ ἔσται τὸ ἀναγκαῖον, ἀντιστραφείσης δὲ τῆς κατὰ τὸ ἐνδέχεσθαι προτάσεως ἔσται συλλογισμὸς, καθάπερ ἐν τοῖς πρότερον. ἐὰν δ' ἀμφότεραι ἀδιόριστοι ἢ ἐν μέρει τεθῶσιν, οὐκ ἔσται συλλογισμὸς. ἀπόδειξις δ' ἢ αὐτὴ καὶ διὰ τῶν αὐτῶν ὅρων.

Φανερόν οὖν ἐκ τῶν εἰρημένων ὅτι τῆς μὲν στερητικῆς τῆς καθόλου τιθεμένης ἀναγκαίας ἀεὶ γίνεται συλλογισμὸς οὐ μόνον τοῦ ἐνδέχεσθαι μὴ ὑπάρχειν, ἀλλὰ καὶ τοῦ μὴ ὑπάρχειν, τῆς δὲ καταφατικῆς οὐδέποτε. καὶ ὅτι τὸν αὐτὸν τρόπον ἐχόντων ἐν τε τοῖς ἀναγκαίοις καὶ ἐν τοῖς [39a] ὑπάρχουσι γίνεται τε καὶ οὐ γίνεται συλλογισμὸς. δῆλον δὲ καὶ ὅτι πάντες ἀτελεῖς οἱ συλλογισμοί, καὶ ὅτι τελειοῦνται διὰ τῶν προειρημένων σχημάτων.

## Κεφάλαιο 20

Ἐν δὲ τῷ τελευταίῳ σχήματι καὶ ἀμφοτέρων ἐνδεχομένων καὶ τῆς ἐτέρας ἔσται συλλογισμὸς. ὅταν μὲν οὖν ἐνδέχεσθαι σημαίνωσιν αἱ προτάσεις, καὶ τὸ συμπέρασμα ἔσται ἐνδεχόμενον· καὶ ὅταν ἢ μὲν ἐνδέχεσθαι ἢ δ' ὑπάρχειν. ὅταν δ' ἢ ἐτέρα τεθῇ ἀναγκαῖα, ἐὰν μὲν ἢ καταφατική, οὐκ ἔσται τὸ συμπέρασμα οὔτε ἀναγκαῖον οὔθ' ὑπάρχον, ἐὰν δ' ἢ στερητική, τοῦ μὴ ὑπάρχειν ἔσται συλλογισμὸς, καθάπερ καὶ ἐν τοῖς πρότερον· ληπτέον δὲ καὶ ἐν τούτοις ὁμοίως τὸ ἐν τοῖς συμπεράσμασιν ἐνδεχόμενον.

Ἔστωσαν δὴ πρῶτον ἐνδεχόμενα, καὶ τὸ Α καὶ τὸ Β παντὶ τῷ Γ ἐνδεχέσθω ὑπάρχειν. ἐπεὶ οὖν ἀντιστρέφει τὸ καταφατικὸν ἐπὶ μέρους, τὸ δὲ Β παντὶ τῷ Γ ἐνδέχεται, καὶ τὸ Γ τινὶ τῷ Β ἐνδέχοιτ' ἄν. ὥστ' εἰ τὸ μὲν Α παντὶ τῷ Γ ἐνδέχεται, τὸ δὲ Γ τινὶ τῷ Β, ἀνάγκη καὶ τὸ Α τινὶ τῷ Β ἐνδέχεσθαι· γίγνεται γὰρ τὸ πρῶτον σχῆμα. καὶ εἰ τὸ μὲν Α ἐνδέχεται μηδενὶ τῷ Γ ὑπάρχειν, τὸ δὲ

Β παντὶ τῷ Γ, ἀνάγκη τὸ Α τινὶ τῷ Β ἐνδέχεσθαι μὴ ὑπάρχειν· ἔσται γὰρ πάλιν τὸ πρῶτον σχῆμα διὰ τῆς ἀντιστροφῆς. εἰ δ' ἀμφοτέραι στερητικαὶ τεθείησαν, ἔξ αὐτῶν μὲν τῶν εἰλημμένων οὐκ ἔσται τὸ ἀναγκαῖον, ἀντιστραφεισῶν δὲ τῶν προτάσεων ἔσται συλλογισμός, καθάπερ ἐν τοῖς πρότερον. εἰ γὰρ τὸ Α καὶ τὸ Β τῷ Γ ἐνδέχεται μὴ ὑπάρχειν, ἐὰν μεταληφθῇ τὸ ἐνδέχεσθαι ὑπάρχειν, πάλιν ἔσται τὸ πρῶτον σχῆμα διὰ τῆς ἀντιστροφῆς. εἰ δ' ὁ μὲν ἔστι καθόλου τῶν ὄρων ὁ δ' ἐν μέρει, τὸν αὐτὸν τρόπον ἐχόντων τῶν ὄρων ὅνπερ ἐπὶ τοῦ ὑπάρχειν, ἔσται τε καὶ οὐκ ἔσται συλλογισμός. ἐνδεχέσθω γὰρ τὸ μὲν Α παντὶ τῷ Γ, τὸ δὲ Β τινὶ τῷ Γ ὑπάρχειν. ἔσται δὲ πάλιν τὸ πρῶτον σχῆμα τῆς ἐν μέρει προτάσεως ἀντιστραφείσης· εἰ γὰρ τὸ Α παντὶ τῷ Γ, τὸ δὲ Γ τινὶ τῷ Β, τὸ Α τινὶ τῷ Β ἐνδέχεται. καὶ εἰ πρὸς τῷ Β Γ τεθείη τὸ καθόλου, ὡσαύτως. ὁμοίως δὲ καὶ εἰ τὸ μὲν Α Γ στερητικὸν εἴη, τὸ δὲ Β Γ καταφατικόν· ἔσται γὰρ πάλιν τὸ πρῶτον σχῆμα διὰ τῆς ἀντιστροφῆς. εἰ δ' ἀμφοτέραι στερητικαὶ τεθείησαν, ἢ μὲν καθόλου ἢ δ' ἐν μέρει, δι' αὐτῶν μὲν τῶν [39b] εἰλημμένων οὐκ ἔσται συλλογισμός, ἀντιστραφεισῶν δ' ἔσται, καθάπερ ἐν τοῖς πρότερον. ὅταν δὲ ἀμφοτέραι ἀδιόριστοι ἢ ἐν μέρει ληφθῶσιν, οὐκ ἔσται συλλογισμός· καὶ γὰρ παντὶ ἀνάγκη τὸ Α τῷ Β καὶ μηδενὶ ὑπάρχειν. ὅροι τοῦ ὑπάρχειν ζῶον — ἄνθρωπος — λευκόν, τοῦ μὴ ὑπάρχειν ἵππος — ἄνθρωπος — λευκόν, μέσον λευκόν.

## Κεφάλαιο 21

Ἐὰν δὲ ἢ μὲν ὑπάρχειν ἢ δ' ἐνδέχεσθαι σημαίνει τῶν προτάσεων, τὸ μὲν συμπέρασμα ἔσται ὅτι ἐνδέχεται καὶ οὐχ ὅτι ὑπάρχει, συλλογισμὸς δ' ἔσται τὸν αὐτὸν τρόπον ἐχόντων τῶν ὄρων ὃν καὶ ἐν τοῖς πρότερον. ἔστωσαν γὰρ πρῶτον κατηγοριοί, καὶ τὸ μὲν Α παντὶ τῷ Γ ὑπαρχέτω, τὸ δὲ Β παντὶ ἐνδεχέσθω ὑπάρχειν. ἀντιστραφέντος οὖν τοῦ Β Γ τὸ πρῶτον ἔσται σχῆμα, καὶ τὸ συμπέρασμα ὅτι ἐνδέχεται τὸ Α τινὶ τῷ Β ὑπάρχειν· ὅτε γὰρ ἢ ἑτέρα τῶν προτάσεων ἐν τῷ πρώτῳ σχήματι σημαίνει ἐνδέχεσθαι, καὶ τὸ συμπέρασμα ἦν ἐνδεχόμενον. ὁμοίως δὲ καὶ εἰ τὸ μὲν Β Γ ὑπάρχειν τὸ δὲ Α Γ ἐνδέχεσθαι, καὶ εἰ τὸ μὲν Α Γ στερητικὸν τὸ δὲ Β Γ κατηγορικόν, ὑπάρχοι δ' ὁποτερονοῦν, ἀμφοτέρως ἐνδεχόμενον ἔσται τὸ συμπέρασμα· γίνεται γὰρ πάλιν τὸ πρῶτον σχῆμα, δέδεικται δ' ὅτι τῆς ἑτέρας προτάσεως ἐνδέχεσθαι σημαίνουσιν ἐν αὐτῷ καὶ τὸ συμπέρασμα ἔσται ἐνδεχόμενον. εἰ δὲ τὸ στερητικὸν τεθείη πρὸς τὸ ἔλαττον ἄκρον, ἢ καὶ ἄμφω ληφθῇ στερητικά, δι' αὐτῶν μὲν τῶν κειμένων οὐκ ἔσται συλλογισμός, ἀντιστραφέντων δ' ἔσται, καθάπερ ἐν τοῖς πρότερον.

Εἰ δ' ἢ μὲν καθόλου τῶν προτάσεων ἢ δ' ἐν μέρει, κατηγορικῶν μὲν οὐσῶν

ἀμφοτέρων, ἢ τῆς μὲν καθόλου στερητικῆς τῆς δ' ἐν μέρει καταφατικῆς, ὁ αὐτὸς τρόπος ἔσται τῶν συλλογισμῶν· πάντες γὰρ περαίνονται διὰ τοῦ πρώτου σχήματος. ὥστε φανερόν ὅτι τοῦ ἐνδέχεσθαι καὶ οὐ τοῦ ὑπάρχειν ἔσται ὁ συλλογισμός. εἰ δ' ἢ μὲν καταφατικὴ καθόλου ἢ δὲ στερητικὴ ἐν μέρει, διὰ τοῦ ἀδυνάτου ἔσται ἡ ἀπόδειξις. ὑπαρχέτω γὰρ τὸ μὲν Β παντὶ τῷ Γ, τὸ δὲ Α ἐνδέχεσθω τινὶ τῷ Γ μὴ ὑπάρχειν· ἀνάγκη δὴ τὸ Α ἐνδέχεσθαι τινὶ τῷ Β μὴ ὑπάρχειν. εἰ γὰρ παντὶ τῷ Β τὸ Α ὑπάρχει ἐξ ἀνάγκης, τὸ δὲ Β παντὶ τῷ Γ κεῖται ὑπάρχειν, τὸ Α παντὶ τῷ Γ ἐξ ἀνάγκης ὑπάρξει· τοῦτο γὰρ δέδεικται πρότερον. ἀλλ' ὑπέκειτο τινὶ ἐνδέχεσθαι μὴ ὑπάρχειν. [40a]

Ὅταν δ' ἀδιόριστοι ἢ ἐν μέρει ληφθῶσιν ἀμφότεραι, οὐκ ἔσται συλλογισμός. ἀπόδειξις δ' ἢ αὐτὴ ἢ καὶ ἐν τοῖς πρότερον, καὶ διὰ τῶν αὐτῶν ὄρων.

## Κεφάλαιο 22

Εἰ δ' ἐστὶν ἢ μὲν ἀναγκαῖα τῶν προτάσεων ἢ δ' ἐνδεχομένη, κατηγορικῶν μὲν ὄντων τῶν ὄρων ἀεὶ τοῦ ἐνδέχεσθαι ἔσται συλλογισμός, ὅταν δ' ἢ τὸ μὲν κατηγορικὸν τὸ δὲ στερητικόν, ἐὰν μὲν ἢ τὸ καταφατικὸν ἀναγκαῖον, τοῦ ἐνδέχεσθαι μὴ ὑπάρχειν, ἐὰν δὲ τὸ στερητικόν, καὶ τοῦ ἐνδέχεσθαι καὶ τοῦ μὴ ὑπάρχειν. τοῦ δ' ἐξ ἀνάγκης μὴ ὑπάρχειν οὐκ ἔσται συλλογισμός, ὥσπερ οὐδ' ἐν τοῖς ἑτέροις σχήμασιν.

Ἐστώσαν δὴ κατηγορικοὶ πρῶτον οἱ ὅροι, καὶ τὸ μὲν Α παντὶ τῷ Γ ὑπαρχέτω ἐξ ἀνάγκης, τὸ δὲ Β παντὶ ἐνδέχεσθω ὑπάρχειν. ἐπεὶ οὖν τὸ μὲν Α παντὶ τῷ Γ ἀνάγκη, τὸ δὲ Γ τινὶ τῷ Β ἐνδέχεται, καὶ τὸ Α τινὶ τῷ Β ἐνδεχόμενον ἔσται καὶ οὐχ ὑπάρχον· οὕτω γὰρ συνέπιπτεν ἐπὶ τοῦ πρώτου σχήματος. ὁμοίως δὲ δειχθήσεται καὶ εἰ τὸ μὲν Β Γ τεθεῖη ἀναγκαῖον, τὸ δὲ Α Γ ἐνδεχόμενον. πάλιν ἔστω τὸ μὲν κατηγορικὸν τὸ δὲ στερητικόν, ἀναγκαῖον δὲ τὸ κατηγορικόν· καὶ τὸ μὲν Α ἐνδέχεσθω μηδενὶ τῷ Γ ὑπάρχειν, τὸ δὲ Β παντὶ ὑπαρχέτω ἐξ ἀνάγκης. ἔσται δὴ πάλιν τὸ πρῶτον σχῆμα· καὶ γὰρ ἡ στερητικὴ πρότασις ἐνδέχεσθαι σημαίνει· φανερόν οὖν ὅτι τὸ συμπέρασμα ἔσται ἐνδεχόμενον· ὅτε γὰρ οὕτως ἔχοιεν αἱ προτάσεις ἐν τῷ πρώτῳ σχήματι, καὶ τὸ συμπέρασμα ἦν ἐνδεχόμενον. εἰ δ' ἢ στερητικὴ πρότασις ἀναγκαῖα, τὸ συμπέρασμα ἔσται καὶ ὅτι ἐνδέχεται τινὶ μὴ ὑπάρχειν καὶ ὅτι οὐχ ὑπάρχει. κείσθω γὰρ τὸ Α τῷ Γ μὴ ὑπάρχειν ἐξ ἀνάγκης, τὸ δὲ Β παντὶ ἐνδέχεσθαι. ἀντιστραφέντος οὖν τοῦ Β Γ καταφατικοῦ τὸ πρῶτον ἔσται σχῆμα, καὶ ἀναγκαῖα ἢ στερητικὴ πρότασις. ὅτε δ' οὕτως ἔχοιεν αἱ προτάσεις, συνέβαινε τὸ Α τῷ Γ καὶ ἐνδέχεσθαι τινὶ μὴ ὑπάρχειν καὶ μὴ ὑπάρχειν, ὥστε καὶ τὸ Α τῷ Β ἀνάγκη τινὶ μὴ ὑπάρχειν. ὅταν δὲ τὸ στερητικὸν τεθῇ πρὸς τὸ ἔλαττον ἄκρον, ἐὰν μὲν ἐνδεχόμενον,

ἔσται συλλογισμὸς μεταληφθείσης τῆς προτάσεως, καθάπερ ἐν τοῖς πρότερον, ἔάν δ' ἀναγκαῖον, οὐκ ἔσται· καὶ γὰρ παντὶ ἀνάγκη καὶ οὐδενὶ ἐνδέχεται ὑπάρχειν. ὅροι τοῦ παντὶ ὑπάρχειν ὕπνος — ἵππος καθεύδων — ἄνθρωπος, τοῦ μηδενὶ ὕπνος — ἵππος ἐγρηγορῶς — ἄνθρωπος.

Ὅμοίως δ' ἔξει καὶ εἰ ὁ μὲν καθόλου τῶν ὅρων ὁ δ' ἐν μέρει πρὸς τὸ μέσον· κατηγορικῶν μὲν γὰρ ὄντων [40b] ἀμφοτέρων τοῦ ἐνδέχεσθαι καὶ οὐ τοῦ ὑπάρχειν ἔσται συλλογισμός, καὶ ὅταν τὸ μὲν στερητικὸν ληφθῇ τὸ δὲ καταφατικόν, ἀναγκαῖον δὲ τὸ καταφατικόν. ὅταν δὲ τὸ στερητικὸν ἀναγκαῖον, καὶ τὸ συμπέρασμα ἔσται τοῦ μὴ ὑπάρχειν· ὁ γὰρ αὐτὸς τρόπος ἔσται τῆς δείξεως καὶ καθόλου καὶ μὴ καθόλου τῶν ὅρων ὄντων. ἀνάγκη γὰρ διὰ τοῦ πρώτου σχήματος τελειοῦσθαι τοὺς συλλογισμούς, ὥστε καθάπερ ἐν ἐκείνοις, καὶ ἐπὶ τούτων ἀναγκαῖον συμπίπτειν. ὅταν δὲ τὸ στερητικὸν καθόλου ληφθὲν τεθῇ πρὸς τὸ ἔλαττον ἄκρον, ἔάν μὲν ἐνδεχόμενον, ἔσται συλλογισμὸς διὰ τῆς ἀντιστροφῆς, ἔάν δ' ἀναγκαῖον, οὐκ ἔσται. δειχθήσεται δὲ τὸν αὐτὸν τρόπον ὄν καὶ ἐν τοῖς καθόλου, καὶ διὰ τῶν αὐτῶν ὅρων. φανερόν οὖν καὶ ἐν τούτῳ τῷ σχήματι πότε καὶ πῶς ἔσται συλλογισμός, καὶ πότε τοῦ ἐνδέχεσθαι καὶ πότε τοῦ ὑπάρχειν. δῆλον δὲ καὶ ὅτι πάντες ἀτελεῖς, καὶ ὅτι τελειοῦνται διὰ τοῦ πρώτου σχήματος.

## Κεφάλαιο 23

Ὅτι μὲν οὖν οἱ ἐν τούτοις τοῖς σχήμασι συλλογισμοὶ τελειοῦνται τε διὰ τῶν ἐν τῷ πρώτῳ σχήματι καθόλου συλλογισμῶν καὶ εἰς τούτους ἀνάγονται, δῆλον ἐκ τῶν εἰρημένων· ὅτι δ' ἀπλῶς πᾶς συλλογισμὸς οὕτως ἔξει, νῦν ἔσται φανερόν, ὅταν δειχθῇ πᾶς γινόμενος διὰ τούτων τινὸς τῶν σχημάτων. Ἀνάγκη δὴ πᾶσαν ἀπόδειξεν καὶ πάντα συλλογισμὸν ἢ ὑπάρχον τι ἢ μὴ ὑπάρχον δεικνύειν, καὶ τοῦτο ἢ καθόλου ἢ κατὰ μέρος, ἔτι ἢ δεικτικῶς ἢ ἐξ ὑποθέσεως. τοῦ δ' ἐξ ὑποθέσεως μέρος τὸ διὰ τοῦ ἀδυνάτου. πρῶτον οὖν εἵπωμεν περὶ τῶν δεικτικῶν· τούτων γὰρ δειχθέντων φανερόν ἔσται καὶ ἐπὶ τῶν εἰς τὸ ἀδύνατον καὶ ὅλως τῶν ἐξ ὑποθέσεως.

Εἰ δὴ δέοι τὸ Α κατὰ τοῦ Β συλλογίσασθαι ἢ ὑπάρχον ἢ μὴ ὑπάρχον, ἀνάγκη λαβεῖν τι κατὰ τινος. εἰ μὲν οὖν τὸ Α κατὰ τοῦ Β ληφθῇ, τὸ ἐξ ἀρχῆς ἔσται εἰλημμένον. εἰ δὲ κατὰ τοῦ Γ, τὸ δὲ Γ κατὰ μηδενός, μηδ' ἄλλο κατ' ἐκείνου, μηδὲ κατὰ τοῦ Α ἕτερον, οὐδεὶς ἔσται συλλογισμός· τῷ γὰρ ἐν καθ' ἐνὸς ληφθῆναι οὐδὲν συμβαίνει ἐξ ἀνάγκης. ὥστε προσληπτέον καὶ ἑτέραν πρότασιν. ἔάν μὲν οὖν ληφθῇ τὸ Α κατ' ἄλλου ἢ ἄλλο κατὰ τοῦ Α, ἢ κατὰ τοῦ Γ ἕτερον, εἶναι μὲν συλλογισμὸν οὐδὲν κωλύει, πρὸς μέντοι τὸ Β οὐκ

ἔσται διὰ τῶν εἰλημμένων. οὐδ' ὅταν τὸ Γ ἐτέρω, κάκεῖνο ἄλλω, καὶ τοῦτο ἐτέρω, μὴ [41a] συνάπτη δὲ πρὸς τὸ Β, οὐδ' οὕτως ἔσται πρὸς τὸ Β συλλογισμός. ὅλως γὰρ εἶπομεν ὅτι οὐδεὶς οὐδέποτε ἔσται συλλογισμὸς ἄλλου κατ' ἄλλου μὴ ληφθέντος τινὸς μέσου, ὃ πρὸς ἐκάτερον ἔχει πῶς ταῖς κατηγορίαις· ὁ μὲν γὰρ συλλογισμὸς ἀπλῶς ἐκ προτάσεων ἐστίν, ὁ δὲ πρὸς τόδε συλλογισμὸς ἐκ τῶν πρὸς τόδε προτάσεων, ὁ δὲ τοῦδε πρὸς τόδε διὰ τῶν τοῦδε πρὸς τόδε προτάσεων. ἀδύνατον δὲ πρὸς τὸ Β λαβεῖν πρότασιν μηδὲν μήτε κατηγοροῦντας αὐτοῦ μήτ' ἀπαρνούμενους, ἢ πάλιν τοῦ Α πρὸς τὸ Β μηδὲν κοινὸν λαμβάνοντας ἀλλ' ἐκατέρου ἴδια ἅττα κατηγοροῦντας ἢ ἀπαρνούμενους. ὥστε ληπτέον τι μέσον ἀμφοῖν, ὃ συνάψει τὰς κατηγορίας, εἵπερ ἔσται τοῦδε πρὸς τόδε συλλογισμός. εἰ οὖν ἀνάγκη μὲν τι λαβεῖν πρὸς ἄμφω κοινόν, τοῦτο δ' ἐνδέχεται τριχῶς (ἢ γὰρ τὸ Α τοῦ Γ καὶ τὸ Γ τοῦ Β κατηγορήσαντας, ἢ τὸ Γ κατ' ἀμφοῖν, ἢ ἄμφω κατὰ τοῦ Γ), ταῦτα δ' ἐστὶ τὰ εἰρημένα σχήματα, φανερόν ὅτι πάντα συλλογισμὸν ἀνάγκη γίνεσθαι διὰ τούτων τινὸς τῶν σχημάτων. ὁ γὰρ αὐτὸς λόγος καὶ εἰ διὰ πλειόνων συνάπτοι πρὸς τὸ Β· ταὐτὸ γὰρ ἔσται σχῆμα καὶ ἐπὶ τῶν πολλῶν.

Ὅτι μὲν οὖν οἱ δεικτικοὶ περαίνονται διὰ τῶν προειρημένων σχημάτων, φανερόν· ὅτι δὲ καὶ οἱ εἰς τὸ ἀδύνατον, δῆλον ἔσται διὰ τούτων. πάντες γὰρ οἱ διὰ τοῦ ἀδυνάτου περαίνοντες τὸ μὲν ψεῦδος συλλογίζονται, τὸ δ' ἐξ ἀρχῆς ἐξυποθέσεως δεικνύουσιν, ὅταν ἀδύνατόν τι συμβαίνει τῆς ἀντιφάσεως τεθείσης, οἷον ὅτι ἀσύμμετρος ἢ διάμετρος διὰ τὸ γίνεσθαι τὰ περιττὰ ἴσα τοῖς ἀρτίοις συμμέτρου τεθείσης. τὸ μὲν οὖν ἴσα γίνεσθαι τὰ περιττὰ τοῖς ἀρτίοις συλλογίζεται, τὸ δ' ἀσύμμετρον εἶναι τὴν διάμετρον ἐξ ὑποθέσεως δείκνυσιν, ἐπεὶ ψεῦδος συμβαίνει διὰ τὴν ἀντίφασιν. τοῦτο γὰρ ἦν τὸ διὰ τοῦ ἀδυνάτου συλλογίσασθαι, τὸ δεῖξαι τι ἀδύνατον διὰ τὴν ἐξ ἀρχῆς ὑπόθεσιν. ὥστ' ἐπεὶ τοῦ ψεύδους γίνεται συλλογισμὸς δεικτικὸς ἐν τοῖς εἰς τὸ ἀδύνατον ἀπαγομένοις, τὸ δ' ἐξ ἀρχῆς ἐξ ὑποθέσεως δείκνυται, τοὺς δὲ δεικτικούς πρότερον εἶπομεν ὅτι διὰ τούτων περαίνονται τῶν σχημάτων, φανερόν ὅτι καὶ οἱ διὰ τοῦ ἀδυνάτου συλλογισμοὶ διὰ τούτων ἔσονται τῶν σχημάτων. ὡσαύτως δὲ καὶ οἱ ἄλλοι πάντες οἱ ἐξ ὑποθέσεως· ἐν ἅπασιν γὰρ ὁ μὲν συλλογισμὸς γίνεται πρὸς τὸ μεταλαμβανόμενον, τὸ δ' ἐξ ἀρχῆς περαίνεται δι' ὁμολογίας ἢ τινος ἄλλης [41b] ὑποθέσεως. εἰ δὲ τοῦτ' ἀληθές, πᾶσαν ἀπόδειξιν καὶ πάντα συλλογισμὸν ἀνάγκη γίνεσθαι διὰ τριῶν τῶν προειρημένων σχημάτων. τούτου δὲ δειχθέντος δῆλον ὡς ἅπας τε συλλογισμὸς ἐπιτελεῖται διὰ τοῦ πρώτου σχήματος καὶ ἀνάγεται εἰς τοὺς ἐν τούτῳ καθόλου συλλογισμούς.

## Κεφάλαιο 24

Ἔτι τε ἐν ἅπαντι δεῖ κατηγορικόν τινα τῶν ὅρων εἶναι καὶ τὸ καθόλου ὑπάρχειν· ἄνευ γὰρ τοῦ καθόλου ἢ οὐκ ἔσται συλλογισμὸς ἢ οὐ πρὸς τὸ κείμενον, ἢ τὸ ἐξ ἀρχῆς αἰτήσεται. κείσθω γὰρ τὴν μουσικὴν ἡδονὴν εἶναι σπουδαίαν. εἰ μὲν οὖν ἀξιώσειεν ἡδονὴν εἶναι σπουδαίαν μὴ προσθεὶς τὸ πᾶσαν, οὐκ ἔσται συλλογισμὸς· εἰ δὲ τινὰ ἡδονήν, εἰ μὲν ἄλλην, οὐδὲν πρὸς τὸ κείμενον, εἰ δ' αὐτὴν ταύτην, τὸ ἐξ ἀρχῆς λαμβάνει. μᾶλλον δὲ γίνεται φανερόν ἐν τοῖς διαγράμμασιν, οἷον ὅτι τοῦ ἰσοσκελοῦς ἴσαι αἱ πρὸς τῇ βάσει. ἔστωσαν εἰς τὸ κέντρον ἡγμένοι αἱ Α Β. εἰ οὖν ἴσην λαμβάνοι τὴν Α Γ γωνίαν τῇ Β Δ μὴ ὅλως ἀξιώσας ἴσας τὰς τῶν ἡμικυκλίων, καὶ πάλιν τὴν Γ τῇ Δ μὴ πᾶσαν προσλαβὼν τὴν τοῦ τμήματος, ἔτι δ' ἂπ' ἴσων οὐσῶν τῶν ὅλων γωνιῶν καὶ ἴσων ἀφηρημένων ἴσας εἶναι τὰς λοιπὰς τὰς Ε Ζ, τὸ ἐξ ἀρχῆς αἰτήσεται, ἔὰν μὴ λάβῃ ἀπὸ τῶν ἴσων ἴσων ἀφαιρουμένων ἴσα λείπεσθαι. φανερόν οὖν ὅτι ἐν ἅπαντι δεῖ τὸ καθόλου ὑπάρχειν, καὶ ὅτι τὸ μὲν καθόλου ἐξ ἀπάντων τῶν ὅρων καθόλου δείκνυται, τὸ δ' ἐν μέρει καὶ οὕτως κἀκείνως, ὥστ' ἔὰν μὲν ἢ τὸ συμπέρασμα καθόλου, καὶ τοὺς ὅρους ἀνάγκη καθόλου εἶναι, ἔὰν δ' οἱ ὅροι καθόλου, ἐνδέχεται τὸ συμπέρασμα μὴ εἶναι καθόλου. δῆλον δὲ καὶ ὅτι ἐν ἅπαντι συλλογισμῷ ἢ ἀμφοτέρας ἢ τὴν ἑτέραν πρότασιν ὁμοίαν ἀνάγκη γίνεσθαι τῷ συμπεράσματι. λέγω δ' οὐ μόνον τῷ καταφατικὴν εἶναι ἢ στερητικὴν, ἀλλὰ καὶ τῷ ἀναγκαίαν ἢ ὑπάρχουσαν ἢ ἐνδεχομένην. ἐπισκέψασθαι δὲ δεῖ καὶ τὰς ἄλλας κατηγορίας.

Φανερόν δὲ καὶ ἀπλῶς πότ' ἔσται καὶ πότ' οὐκ ἔσται συλλογισμὸς, καὶ πότε δυνατὸς καὶ πότε τέλειος, καὶ ὅτι συλλογισμοῦ ὄντος ἀναγκαῖον ἔχειν τοὺς ὅρους κατὰ τινα τῶν εἰρημένων τρόπων.

## Κεφάλαιο 25

Δῆλον δὲ καὶ ὅτι πᾶσα ἀπόδειξις ἔσται διὰ τριῶν ὅρων καὶ οὐ πλειόνων, ἔὰν μὴ δι' ἄλλων καὶ ἄλλων τὸ αὐτὸ συμπέρασμα γίνηται, οἷον τὸ Ε διὰ τε τῶν Α Β καὶ διὰ τῶν Γ Δ, ἢ διὰ τῶν Α Β καὶ Α Γ Δ· πλείω γὰρ μέσα τῶν αὐτῶν οὐδὲν εἶναι κωλύει. τούτων δ' ὄντων οὐχ εἷς ἀλλὰ [42a] πλείους εἰσὶν οἱ συλλογισμοί. ἢ πάλιν ὅταν ἑκάτερον τῶν Α Β διὰ συλλογισμοῦ ληφθῇ (οἷον τὸ Α διὰ τῶν Δ Ε καὶ πάλιν τὸ Β διὰ τῶν Ζ Θ), ἢ τὸ μὲν ἐπαγωγῇ, τὸ δὲ συλλογισμῷ. ἀλλὰ καὶ οὕτως πλείους οἱ συλλογισμοί· πλείω γάρ τὰ συμπεράσματα ἐστίν, οἷον τό τε Α καὶ τὸ Β καὶ τὸ Γ. Εἰ δ' οὖν μὴ πλείους ἀλλ' εἷς, οὕτω μὲν ἐνδέχεται γενέσθαι διὰ πλειόνων τὸ αὐτὸ συμπέρασμα, ὥς δὲ τὸ Γ διὰ τῶν Α Β, ἀδύνατον. ἔστω γὰρ τὸ Ε συμπεπερασμένον ἐκ τῶν Α Β Γ Δ. οὐκοῦν ἀνάγκη τι αὐτῶν ἄλλο πρὸς ἄλλο εἰληφθαι, τὸ μὲν ὡς ὅλον τὸ δ' ὡς μέρος· τοῦτο γὰρ δέδεικται πρότερον, ὅτι ὄντος συλλογισμοῦ ἀναγκαῖον

οὕτως τινὰς ἔχειν τῶν ὄρων. ἐχέτω οὖν τὸ Α οὕτως πρὸς τὸ Β. ἔστιν ἄρα τι ἐξ αὐτῶν συμπέρασμα. οὐκοῦν ἦτοι τὸ Ε ἢ τῶν Γ Δ θάτερον ἢ ἄλλο τι παρὰ ταῦτα. καὶ εἰ μὲν τὸ Ε, ἐκ τῶν Α Β μόνον ἂν εἴη ὁ συλλογισμός. τὰ δὲ Γ Δ εἰ μὲν ἔχει οὕτως ὥστ' εἶναι τὸ μὲν ὡς ὅλον τὸ δ' ὡς μέρος, ἔσται τι καὶ ἐξ ἐκείνων, καὶ ἦτοι τὸ Ε ἢ τῶν Α Β θάτερον ἢ ἄλλο τι παρὰ ταῦτα. καὶ εἰ μὲν τὸ Ε ἢ τῶν Α Β θάτερον, ἢ πλείους ἔσονται οἱ συλλογισμοί, ἢ ὡς ἐνεδέχετο ταῦτ' διὰ πλειόνων ὄρων περαίνεσθαι συμβαίνει· εἰ δ' ἄλλο τι παρὰ ταῦτα, πλείους ἔσονται καὶ ἀσύναπτοι οἱ συλλογισμοὶ πρὸς ἀλλήλους. εἰ δὲ μὴ οὕτως ἔχοι τὸ Γ πρὸς τὸ Δ ὥστε ποιεῖν συλλογισμόν, μάτην ἔσται εἰλημμένα, εἰ μὴ ἐπαγωγῆς ἢ κρύψεως ἢ τινος ἄλλου τῶν τοιούτων χάριν.

Εἰ δ' ἐκ τῶν Α Β μὴ τὸ Ε ἀλλ' ἄλλο τι γίνεταί συμπέρασμα, ἐκ δὲ τῶν Γ Δ ἢ τούτων θάτερον ἢ ἄλλο παρὰ ταῦτα, πλείους τε οἱ συλλογισμοὶ γίνονται καὶ οὐ τοῦ ὑποκειμένου· ὑπέκειτο γὰρ εἶναι τοῦ Ε τὸν συλλογισμόν. εἰ δὲ μὴ γίνεται ἐκ τῶν Γ Δ μηδὲν συμπέρασμα, μάτην τε εἰληφθαι αὐτὰ συμβαίνει καὶ μὴ τοῦ ἐξ ἀρχῆς εἶναι τὸν συλλογισμόν. ὥστε φανερόν ὅτι πᾶσα ἀπόδειξις καὶ πᾶς συλλογισμὸς ἔσται διὰ τριῶν ὄρων μόνον.

Τούτου δ' ὄντος φανεροῦ, δῆλον ὡς καὶ ἐκ δύο προτάσεων καὶ οὐ πλειόνων (οἱ γὰρ τρεῖς ὅροι δύο προτάσεις), εἰμὴ προσλαμβάνοιτό τι, καθάπερ ἐν τοῖς ἐξ ἀρχῆς ἐλέχθη, πρὸς τὴν τελείωσιν τῶν συλλογισμῶν. φανερόν οὖν ὡς ἐν ᾧ λόγῳ συλλογιστικῶ μὴ ἄρτιαί εἰσιν αἱ προτάσεις δι' ὧν γίνεται τὸ συμπέρασμα τὸ κύριον (ἐνία γὰρ τῶν ἄνωθεν συμπερασμάτων ἀναγκαῖον εἶναι προτάσεις), οὗτος ὁ λόγος ἢ οὐ συλλελόγισται ἢ πλείω τῶν ἀναγκαίων ἠρώτηκε πρὸς τὴν θέσιν. [42b]

Κατὰ μὲν οὖν τὰς κυρίας προτάσεις λαμβανομένων τῶν συλλογισμῶν, ἅπας ἔσται συλλογισμὸς ἐκ προτάσεων μὲν ἀρτίων ἐξ ὄρων δὲ περιττῶν· ἐνὶ γὰρ πλείους οἱ ὅροι τῶν προτάσεων. ἔσται δὲ καὶ τὰ συμπεράσματα ἡμίση τῶν προτάσεων. ὅταν δὲ διὰ προσυλλογισμῶν περαίνεται ἢ διὰ πλειόνων μέσων συνεχῶν, οἷον τὸ Α Β διὰ τῶν Γ Δ, τὸ μὲν πλῆθος τῶν ὄρων ὡσαύτως ἐνὶ ὑπερέξει τὰς προτάσεις (ἢ γὰρ ἔξωθεν ἢ εἰς τὸ μέσον τεθήσεται ὁ παρεμπίπτων ὅρος· ἀμφοτέρως δὲ συμβαίνει ἐνὶ ἐλάττω εἶναι τὰ διαστήματα τῶν ὄρων), αἱ δὲ προτάσεις ἴσαι τοῖς διαστήμασιν· οὐ μέντοι αἰεὶ αἱ μὲν ἄρτια ἔσονται οἱ δὲ περιττοί, ἀλλ' ἐναλλάξ, ὅταν μὲν αἱ προτάσεις ἄρτια, περιττοὶ οἱ ὅροι, ὅταν δ' οἱ ὅροι ἄρτιοι, περιτταὶ αἱ προτάσεις· ἅμα γὰρ τῷ ὄρῳ μία προστίθεται πρότασις, ἂν ὁποθενοῦν προστεθῇ ὁ ὅρος, ὥστ' ἐπεὶ αἱ μὲν ἄρτια οἱ δὲ περιττοὶ ἦσαν, ἀνάγκη παραλλάττειν τῆς αὐτῆς προσθέσεως γινομένης. τὰ δὲ συμπεράσματα οὐκέτι τὴν αὐτὴν ἔξει τάξιν οὔτε πρὸς τοὺς



ὅρους οὔτε πρὸς τὰς προτάσεις· ἐνὸς γὰρ ὅρου προστιθεμένου συμπεράσματα προστεθήσεται ἐνὶ ἐλάττω τῶν προϋπαρχόντων ὅρων· πρὸς μόνον γὰρ τὸν ἔσχατον οὐ ποιεῖ συμπέρασμα, πρὸς δὲ τοὺς ἄλλους πάντας, οἷον εἰ τῷ Α Β Γ πρόσκειται τὸ Δ, εὐθὺς καὶ συμπεράσματα δύο πρόσκειται, τό τε πρὸς τὸ Α καὶ τὸ πρὸς τὸ Β. ὁμοίως δὲ κάπὶ τῶν ἄλλων. καὶ εἰς τὸ μέσον δὲ παρεμπίπτῃ, τὸν αὐτὸν τρόπον· πρὸς ἓνα γὰρ μόνον οὐ ποιήσει συλλογισμόν. ὥστε πολὺ πλείω τὰ συμπεράσματα καὶ τῶν ὅρων ἔσται καὶ τῶν προτάσεων.

## Κεφάλαιο 26

Ἐπεὶ δ' ἔχομεν περὶ ὧν οἱ συλλογισμοί, καὶ ποῖον ἐν ἐκάστω σχήματι καὶ ποσαχῶς δείκνυται, φανερόν ἡμῖν ἐστὶ καὶ ποῖον πρόβλημα χαλεπὸν καὶ ποῖον εὐεπιχείρητον· τὸ μὲν γὰρ ἐν πλείοσι σχήμασι καὶ διὰ πλειόνων πτώσεων περαινόμενον ῥᾶον, τὸ δ' ἐν ἐλάττωσι καὶ δι' ἐλαττόνων δυσεπιχειρητότερον. τὸ μὲν οὖν καταφατικὸν τὸ καθόλου διὰ τοῦ πρώτου σχήματος δείκνυται μόνου, καὶ διὰ τούτου μοναχῶς· τὸ δὲ στερητικὸν διὰ τε τοῦ πρώτου καὶ διὰ τοῦ μέσου, καὶ διὰ μὲν τοῦ πρώτου μοναχῶς, διὰ δὲ τοῦ μέσου διχῶς· τὸ δ' ἐν μέρει καταφατικὸν διὰ τοῦ πρώτου καὶ διὰ τοῦ ἐσχάτου, μοναχῶς μὲν διὰ τοῦ πρώτου, τριχῶς δὲ διὰ τοῦ ἐσχάτου. τὸ δὲ στερητικὸν τὸ κατὰ μέρος ἐν ἅπασι τοῖς σχήμασι δείκνυται, πλην ἐν μὲν τῷ πρώτῳ μοναχῶς, ἐν δὲ τῷ μέσῳ καὶ τῷ ἐσχάτῳ ἐν τῷ μὲν διχῶς ἐν τῷ δὲ τριχῶς. [43a] φανερόν οὖν ὅτι τὸ καθόλου κατηγορικὸν κατασκευάσαι μὲν χαλεπώτατον, ἀνασκευάσαι δὲ ῥᾶστον. ὅλως δ' ἐστὶν ἀναιροῦντι μὲν τὰ καθόλου τῶν ἐν μέρει ῥᾶω· καὶ γὰρ ἦν μηδενὶ καὶ ἦν τινὶ μὴ ὑπάρχει, ἀνήρηται· τούτων δὲ τὸ μὲν τινὶ μὴ ἐν ἅπασι τοῖς σχήμασι δείκνυται, τὸ δὲ μηδενὶ ἐν τοῖς δυσὶν. τὸν αὐτὸν δὲ τρόπον κάπὶ τῶν στερητικῶν· καὶ γὰρ εἰ παντὶ καὶ εἰ τινὶ, ἀνήρηται τὸ ἐξ ἀρχῆς· τοῦτο δ' ἦν ἐν δύο σχήμασιν. ἐπὶ δὲ τῶν ἐν μέρει μοναχῶς, ἢ παντὶ ἢ μηδενὶ δείξαντα ὑπάρχειν. κατασκευάζοντι δὲ ῥᾶω τὰ ἐν μέρει· καὶ γὰρ ἐν πλείοσι σχήμασι καὶ διὰ πλειόνων τρόπων. ὅλως τε οὐ δεῖ λανθάνειν ὅτι ἀνασκευάσαι μὲν δι' ἀλλήλων ἔστι καὶ τὰ καθόλου διὰ τῶν ἐν μέρει καὶ ταῦτα διὰ τῶν καθόλου, κατασκευάσαι δ' οὐκ ἔστι διὰ τῶν κατὰ μέρος τὰ καθόλου, δι' ἐκείνων δὲ ταῦτ' ἔστιν. ἅμα δὲ δῆλον ὅτι καὶ τὸ ἀνασκευάζειν ἐστὶ τοῦ κατασκευάζειν ῥᾶον.

Πῶς μὲν οὖν γίνεται πᾶς συλλογισμὸς καὶ διὰ πόσων ὅρων καὶ προτάσεων, καὶ πῶς ἔχουσιν πρὸς ἀλλήλας, ἔτι δὲ ποῖον πρόβλημα ἐν ἐκάστω σχήματι καὶ ποῖον ἐν πλείοσι καὶ ποῖον ἐν ἐλάττωσι δείκνυται, δῆλον ἐκ τῶν εἰρημένων.

## Κεφάλαιο 27

πῶς δ' εὐπορήσομεν αὐτοὶ πρὸς τὸ τιθέμενον αἰεὶ συλλογισμῶν, καὶ διὰ ποίας ὁδοῦ ληψόμεθα τὰς περὶ ἕκαστον ἀρχάς, νῦν ἤδη λεκτέον· οὐ γὰρ μόνον ἴσως δεῖ τὴν γένεσιν θεωρεῖν τῶν συλλογισμῶν, ἀλλὰ καὶ τὴν δύναμιν ἔχειν τοῦ ποιεῖν. Ἀπάντων δὴ τῶν ὄντων τὰ μὲν ἐστὶ τοιαῦτα ὥστε κατὰ μηδενὸς ἄλλου κατηγορεῖσθαι ἀληθῶς καθόλου (οἶον Κλέων καὶ Καλλίας καὶ τὸ καθ' ἕκαστον καὶ αἰσθητόν), κατὰ δὲ τούτων ἄλλα (καὶ γὰρ ἄνθρωπος καὶ ζῶον ἑκάτερος τούτων ἐστί)· τὰ δ' αὐτὰ μὲν κατ' ἄλλων κατηγορεῖται, κατὰ δὲ τούτων ἄλλα πρότερον οὐ κατηγορεῖται· τὰ δὲ καὶ αὐτὰ ἄλλων καὶ αὐτῶν ἕτερα, οἶον ἄνθρωπος Καλλίου καὶ ἀνθρώπου ζῶον. ὅτι μὲν οὖν ἔνια τῶν ὄντων κατ' οὐδενὸς πέφυκε λέγεσθαι, δῆλον· τῶν γὰρ αἰσθητῶν σχεδὸν ἕκαστόν ἐστι τοιοῦτον ὥστε μὴ κατηγορεῖσθαι κατὰ μηδενός, πλην ὡς κατὰ συμβεβηκός· φαμὲν γάρ ποτε τὸ λευκὸν ἐκεῖνο Σωκράτην εἶναι καὶ τὸ προσιὸν Καλλίαν. ὅτι δὲ καὶ ἐπὶ τὸ ἄνω πορευομένοις ἴσταται ποτε, πάλιν ἐροῦμεν· νῦν δ' ἔστω τοῦτο κείμενον. κατὰ μὲν οὖν τούτων οὐκ ἔστιν ἀποδείξαι κατηγορούμενον ἕτερον, πλην εἰ μὴ κατὰ δόξαν, ἀλλὰ ταῦτα κατ' ἄλλων· οὐδὲ τὰ καθ' ἕκαστα κατ' ἄλλων, ἀλλ' ἕτερα κατ' ἐκείνων. τὰ δὲ μεταξὺ δῆλον ὡς ἀμφοτέρως ἐνδέχεται (καὶ γὰρ αὐτὰ κατ' ἄλλων καὶ ἄλλα κατὰ τούτων λεχθήσεται)· καὶ σχεδὸν οἱ λόγοι καὶ αἱ σκέψεις εἰσὶ μάλιστα περὶ τούτων.[43b] Δεῖ δὴ τὰς προτάσεις περὶ ἕκαστον οὕτως ἐκλαμβάνειν, ὑποθέμενον αὐτὸ πρῶτον καὶ τοὺς ὁρισμούς τε καὶ ὅσα ἴδια τοῦ πράγματός ἐστιν, εἴτα μετὰ τοῦτο ὅσα ἔπεται τῷ πράγματι, καὶ πάλιν οἷς τὸ πρᾶγμα ἀκολουθεῖ, καὶ ὅσα μὴ ἐνδέχεται αὐτῷ ὑπάρχειν. οἷς δ' αὐτὸ μὴ ἐνδέχεται, οὐκ ἐκληπτέον διὰ τὸ ἀντιστρέφειν τὸ στερητικόν. διαιρετέον δὲ καὶ τῶν ἐπομένων ὅσα τε ἐν τῷ τί ἐστὶ καὶ ὅσα ἴδια καὶ ὅσα ὡς συμβεβηκότα κατηγορεῖται, καὶ τούτων ποῖα δοξαστικῶς καὶ ποῖα κατ' ἀλήθειαν· ὅσω μὲν γὰρ ἂν πλειόνων τοιούτων εὐπορῇ τις, θᾶττον ἐντεύζεται συμπεράσματι, ὅσω δ' ἂν ἀληθεστέρων, μᾶλλον ἀποδείξει.

Δεῖ δ' ἐκλέγειν μὴ τὰ ἐπόμενα τινί, ἀλλ' ὅσα ὅλῳ τῷ πράγματι ἔπεται, οἶον μὴ τί τινὶ ἀνθρώπῳ ἀλλὰ τί παντὶ ἀνθρώπῳ ἔπεται· διὰ γὰρ τῶν καθόλου προτάσεων ὁ συλλογισμός. ἀδιορίστου μὲν οὖν ὄντος ἄδηλον εἰ καθόλου ἢ πρότασις, διωρισμένου δὲ φανερόν. ὁμοίως δ' ἐκλεκτέον καὶ οἷς αὐτὸ ἔπεται ὅλοις, διὰ τὴν εἰρημένην αἰτίαν. αὐτὸ δὲ τὸ ἐπόμενον οὐ ληπτέον ὅλον ἔπεσθαι, λέγω δ' οἶον ἀνθρώπῳ πᾶν ζῶον ἢ μουσικῇ πᾶσαν ἐπιστήμην, ἀλλὰ μόνον ἀπλῶς ἀκολουθεῖν, καθάπερ καὶ προτεινόμεθα· καὶ γὰρ ἄχρηστον θάτερον καὶ ἀδύνατον, οἶον πάντα ἄνθρωπον εἶναι πᾶν ζῶον ἢ δικαιοσύνην ἅπαν ἀγαθόν. ἀλλ' ὧ ἔπεται, ἐπ' ἐκείνου τὸ παντὶ λέγεται. ὅταν δ' ὑπό τινος

περιέχεται τὸ ὑποκείμενον ὥς τὰ ἐπόμενα δεῖ λαβεῖν, τὰ μὲν τῷ καθόλου ἐπόμενα ἢ μὴ ἐπόμενα οὐκ ἐκλεκτέον ἐν τούτοις (εἴληπται γὰρ ἐν ἐκείνοις· ὅσα γὰρ ζῶω, καὶ ἀνθρώπῳ ἔπεται, καὶ ὅσα μὴ ὑπάρχει, ὡσαύτως), τὰ δὲ περὶ ἕκαστον ἴδια ληπτέον· ἔστι γὰρ ἅττα τῷ εἶδει ἴδια παρὰ τὸ γένος· ἀνάγκη γὰρ τοῖς ἑτέροις εἶδεσιν ἴδια ἅττα ὑπάρχειν. οὐδὲ δὴ τῷ καθόλου ἐκλεκτέον οἷς ἔπεται τὸ περιεχόμενον, οἷον ζῶω οἷς ἔπεται ἄνθρωπος· ἀνάγκη γάρ, εἰ ἀνθρώπῳ ἀκολουθεῖ τὸ ζῶον, καὶ τούτοις ἅπασιν ἀκολουθεῖν, οἰκειότερα δὲ ταῦτα τῆς τοῦ ἀνθρώπου ἐκλογῆς. ληπτέον δὲ καὶ τὰ ὡς ἐπὶ τὸ πολὺ ἐπόμενα καὶ οἷς ἔπεται· τῶν γὰρ ὡς ἐπὶ τὸ πολὺ προβλημάτων καὶ ὁ συλλογισμὸς ἐκ τῶν ὡς ἐπὶ τὸ πολὺ προτάσεων, ἢ πασῶν ἢ τινῶν· ὅμοιον γὰρ ἐκάστου τὸ συμπέρασμα ταῖς ἀρχαῖς. ἔτι τὰ πᾶσιν ἐπόμενα οὐκ ἐκλεκτέον· οὐ γὰρ ἔσται συλλογισμὸς ἐξ αὐτῶν. δι' ἣν δ' αἰτίαν, ἐν τοῖς ἐπομένοις ἔσται δῆλον.

## Κεφάλαιο 28

Κατασκευάζειν μὲν οὖν βουλομένοις κατὰ τινος ὅλου τοῦ μὲν κατασκευαζομένου βλεπτέον εἰς τὰ ὑποκείμενα καθ' ὧν αὐτὸ τυγχάνει λεγόμενον, οὐ δὲ δεῖ κατηγορεῖσθαι, ὅσα τούτῳ ἔπεται· ἂν γάρ τι τούτων ἢ ταυτόν, ἀνάγκη θάτερον θατέρῳ ὑπάρχειν. ἦν δὲ μὴ ὅτι παντὶ ἄλλ' ὅτι τινί, οἷς [44a] ἔπεται ἐκάτερον· εἰ γάρ τι τούτων ταυτόν, ἀνάγκη τινὶ ὑπάρχειν. ὅταν δὲ μηδενὶ δέῃ ὑπάρχειν, ὥς μὲν οὐ δεῖ ὑπάρχειν, εἰς τὰ ἐπόμενα, ὃ δὲ δεῖ μὴ ὑπάρχειν, εἰς ἃ μὴ ἐνδέχεται αὐτῷ παρεῖναι· ἢ ἀνάπαλιν, ὥς μὲν δεῖ μὴ ὑπάρχειν, εἰς ἃ μὴ ἐνδέχεται αὐτῷ παρεῖναι, ὃ δὲ μὴ ὑπάρχειν, εἰς τὰ ἐπόμενα. τούτων γὰρ ὄντων τῶν αὐτῶν ὁποτέρωνοῦν, οὐδενὶ ἐνδέχεται θατέρῳ θάτερον ὑπάρχειν· γίνεται γὰρ ὅτε μὲν ὁ ἐν τῷ πρώτῳ σχήματι συλλογισμὸς, ὅτε δ' ὁ ἐν τῷ μέσῳ. ἐὰν δὲ τινὶ μὴ ὑπάρχειν, ὥς μὲν δεῖ μὴ ὑπάρχειν, οἷς ἔπεται, ὃ δὲ μὴ ὑπάρχειν, ἃ μὴ δυνατὸν αὐτῷ ὑπάρχειν· εἰ γάρ τι τούτων εἴη ταυτόν, ἀνάγκη τινὶ μὴ ὑπάρχειν.

Μᾶλλον δ' ἴσως ὧς ἔσται τῶν λεγομένων ἕκαστον φανερόν. ἔστω γὰρ τὰ μὲν ἐπόμενα τῷ Α ἑφ' ὧν Β, οἷς δ' αὐτὸ ἔπεται, ἑφ' ὧν Γ, ἃ δὲ μὴ ἐνδέχεται αὐτῷ ὑπάρχειν, ἑφ' ὧν Δ· πάλιν δὲ τῷ Ε τὰ μὲν ὑπάρχοντα, ἑφ' οἷς Ζ, οἷς δ' αὐτὸ ἔπεται, ἑφ' οἷς Η, ἃ δὲ μὴ ἐνδέχεται αὐτῷ ὑπάρχειν, ἑφ' οἷς Θ. εἰ μὲν οὖν ταυτό τί ἐστι τῶν Γ τινὶ τῶν Ζ, ἀνάγκη τὸ Α παντὶ τῷ Ε ὑπάρχειν· τὸ μὲν γὰρ Ζ παντὶ τῷ Ε, τῷ δὲ Γ παντὶ τὸ Α, ὥστε παντὶ τῷ Ε τὸ Α. εἰ δὲ τὸ Γ καὶ τὸ Η ταυτόν, ἀνάγκη τινὶ τῷ Ε τὸ Α ὑπάρχειν· τῷ μὲν γὰρ Γ τὸ Α, τῷ δὲ Η τὸ Ε παντὶ ἀκολουθεῖ. εἰ δὲ τὸ Ζ καὶ τὸ Δ ταυτόν, οὐδενὶ τῶν Ε τὸ Α ὑπάρξει ἐκ προσυλλογισμοῦ· ἐπεὶ γὰρ ἀντιστρέφει τὸ στερητικὸν καὶ τὸ Ζ τῷ

Δ ταυτόν, οὐδενὶ τῶν Z ὑπάρξει τὸ A, τὸ δὲ Z παντὶ τῷ E. πάλιν εἰ τὸ B καὶ τὸ Θ ταυτόν, οὐδενὶ τῶν E τὸ A ὑπάρξει· τὸ γὰρ B τῷ μὲν A παντί, τῷ δ' ἐφ' ὃ τὸ E οὐδενὶ ὑπάρξει· ταυτόν γὰρ ἦν τῷ Θ, τὸ δὲ Θ οὐδενὶ τῶν E ὑπῆρχεν. εἰ δὲ τὸ Δ καὶ τὸ Η ταυτόν, τὸ A τινὶ τῷ E οὐχ ὑπάρξει· τῷ γὰρ Η οὐχ ὑπάρξει, ὅτι οὐδὲ τῷ Δ· τὸ δὲ Η ἐστὶν ὑπὸ τὸ E, ὥστε τινὶ τῶν E οὐχ ὑπάρξει. εἰ δὲ τῷ Η τὸ B ταυτόν, ἀντεστραμμένος ἔσται συλλογισμός· τὸ μὲν γὰρ E τῷ A ὑπάρξει παντί — τὸ γὰρ B τῷ A, τὸ δὲ E τῷ B (ταυτόν γὰρ ἦν τῷ Η) — τὸ δὲ A τῷ E παντὶ μὲν οὐκ ἀνάγκη ὑπάρχειν, τινὶ δ' ἀνάγκη διὰ τὸ ἀντιστρέφειν τὴν καθόλου κατηγορίαν τῇ κατὰ μέρος.

Φανερόν οὖν ὅτι εἰς τὰ προειρημένα βλεπτόν ἐκατέρου καθ' ἕκαστον πρόβλημα· διὰ τούτων γὰρ ἅπαντες οἱ συλλογισμοί. δεῖ δὲ καὶ τῶν ἐπομένων, καὶ οἷς ἔπεται ἕκαστον, εἰς τὰ πρῶτα καὶ τὰ καθόλου μάλιστα βλέπειν, οἷον τοῦ μὲν E μᾶλλον εἰς τὸ K Z ἢ εἰς τὸ Z μόνον, τοῦ δὲ A εἰς [44b] τὸ K Γ ἢ εἰς τὸ Γ μόνον. εἰ μὲν γὰρ τῷ K Z ὑπάρχει τὸ A, καὶ τῷ Z καὶ τῷ E ὑπάρχει· εἰ δὲ τούτῳ μὴ ἔπεται, ἐγχωρεῖ τῷ Z ἔπεσθαι. ὁμοίως δὲ καὶ ἐφ' ὧν αὐτὸ ἀκολουθεῖ σκεπτόν· εἰ μὲν γὰρ τοῖς πρώτοις, καὶ τοῖς ὑπ' ἐκεῖνα ἔπεται, εἰ δὲ μὴ τούτοις, ἀλλὰ τοῖς ὑπὸ ταῦτα ἐγχωρεῖ.

Δῆλον δὲ καὶ ὅτι διὰ τῶν τριῶν ὅρων καὶ τῶν δύο προτάσεων ἡ σκέψις, καὶ διὰ τῶν προειρημένων σχημάτων οἱ συλλογισμοὶ πάντες. δείκνυται γὰρ ὑπάρχειν μὲν παντὶ τῷ E τὸ A, ὅταν τῶν Γ καὶ Z ταυτόν τι ληφθῇ. τοῦτο δ' ἔσται μέσον, ἄκρα δὲ τὸ A καὶ E· γίνεται οὖν τὸ πρῶτον σχῆμα. τινὶ δέ, ὅταν τὸ Γ καὶ τὸ Η ληφθῇ ταυτόν. τοῦτο δὲ τὸ ἔσχατον σχῆμα· μέσον γὰρ τὸ Η γίνεται. μηδενὶ δέ, ὅταν τὸ Δ καὶ Z ταυτόν. οὕτω δὲ καὶ τὸ πρῶτον σχῆμα καὶ τὸ μέσον, τὸ μὲν πρῶτον ὅτι οὐδενὶ τῷ Z ὑπάρχει τὸ A (εἴπερ ἀντιστρέφει τὸ στερητικόν), τὸ δὲ Z παντὶ τῷ E, τὸ δὲ μέσον ὅτι τὸ Δ τῷ μὲν A οὐδενὶ τῷ δὲ E παντὶ ὑπάρχει. τινὶ δὲ μὴ ὑπάρχειν, ὅταν τὸ Δ καὶ Η ταυτόν ᾗ. τοῦτο δὲ τὸ ἔσχατον σχῆμα· τὸ μὲν γὰρ A οὐδενὶ τῷ Η ὑπάρξει, τὸ δὲ E παντὶ τῷ Η. φανερόν οὖν ὅτι διὰ τῶν προειρημένων σχημάτων οἱ συλλογισμοὶ πάντες, καὶ ὅτι οὐκ ἐκλεκτέον ὅσα πᾶσιν ἔπεται, διὰ τὸ μηδένα γίγνεσθαι συλλογισμὸν ἐξ αὐτῶν. κατασκευάζειν μὲν γὰρ ὅλως οὐκ ἦν ἐκ τῶν ἐπομένων, ἀποστερεῖν δ' οὐκ ἐνδέχεται διὰ τοῦ πᾶσιν ἐπομένου· δεῖ γὰρ τῷ μὲν ὑπάρχειν τῷ δὲ μὴ ὑπάρχειν.

Φανερόν δὲ καὶ ὅτι αἱ ἄλλαι σκέψεις τῶν κατὰ τὰς ἐκλογὰς ἀχρειοὶ πρὸς τὸ ποιεῖν συλλογισμὸν, οἷον εἰ τὰ ἐπόμενα ἐκατέρω ταῦτά ἐστιν, ἢ εἰ οἷς ἔπεται τὸ A καὶ ἃ μὴ ἐνδέχεται τῷ E, ἢ ὅσα πάλιν μὴ ἐγχωρεῖ ἐκατέρω ὑπάρχειν· οὐ γὰρ γίνεται συλλογισμὸς διὰ τούτων. εἰ μὲν γὰρ τὰ ἐπόμενα ταῦτά, οἷον

τὸ Β καὶ τὸ Ζ, τὸ μέσον γίνεται σχῆμα κατηγορικὰς ἔχον τὰς προτάσεις· εἰ δ' οἷς ἔπεται τὸ Α καὶ ἂ μὴ ἐνδέχεται τῷ Ε, οἷον τὸ Γ καὶ τὸ Θ, τὸ πρῶτον σχῆμα στερητικὴν ἔχον τὴν πρὸς τὸ ἔλαττον ἄκρον πρότασιν. εἰ δ' ὅσα μὴ ἐνδέχεται ἑκατέρω, οἷον τὸ Δ καὶ τὸ Θ, στερητικαὶ ἀμφοτέραι αἱ προτάσεις, ἢ ἐν τῷ πρώτῳ ἢ ἐν τῷ μέσῳ σχήματι. οὕτως δ' οὐδαμῶς συλλογισμός.

Δῆλον δὲ καὶ ὅτι ὅποια ταῦτ' ἀληπτεόν τ' ἀ κατὰ τὴν ἐπίσκεψιν, καὶ οὐχ ὅποια ἕτερα ἢ ἐναντία, πρῶτον μὲν ὅτι τοῦ μέσου χάριν ἢ ἐπίβλεψις, τὸ δὲ μέσον οὐχ ἕτερον [45a] ἀλλὰ ταῦτόν δεῖ λαβεῖν. εἴτα ἐν ὅσοις καὶ συμβαίνει γίνεσθαι συλλογισμόν τῷ ληφθῆναι ἐναντία ἢ μὴ ἐνδεχόμενα τῷ αὐτῷ ὑπάρχειν, εἰς τοὺς προειρημένους ἅπαντα ἀναχθήσεται τρόπους, οἷον εἰ τὸ Β καὶ τὸ Ζ ἐναντία ἢ μὴ ἐνδέχεται τῷ αὐτῷ ὑπάρχειν· ἔσται μὲν γὰρ τούτων ληφθέντων συλλογισμός ὅτι οὐδενὶ τῶν Ε τὸ Α ὑπάρχει, ἀλλ' οὐκ ἐξ αὐτῶν ἀλλ' ἐκ τοῦ προειρημένου τρόπου· τὸ γὰρ Β τῷ μὲν Α παντὶ τῷ δὲ Ε οὐδενὶ ὑπάρξει· ὥστ' ἀνάγκη ταῦτόν εἶναι τὸ Β τινὶ τῷ Θ. [πάλιν εἰ τὸ Β καὶ Η μὴ ἐγχωρεῖ τῷ αὐτῷ παρεῖναι, ὅτι τινὶ τῷ Ε οὐχ ὑπάρξει τὸ Α· καὶ γὰρ οὕτως τὸ μέσον ἔσται σχῆμα· τὸ γὰρ Β τῷ μὲν Α παντὶ τῷ δὲ Ε οὐδενὶ ὑπάρξει· ὥστ' ἀνάγκη τὸ Β ταῦτόν τινι εἶναι τῶν Θ. τὸ γὰρ μὴ ἐνδέχεσθαι τὸ Β καὶ τὸ Η τῷ αὐτῷ ὑπάρχειν οὐδὲν διαφέρει ἢ τὸ Β τῶν Θ τινὶ ταῦτόν εἶναι· πάντα γὰρ εἴληπται τὰ μὴ ἐνδεχόμενα τῷ Ε ὑπάρχειν.]

Φανερόν οὖν ὅτι ἐξ αὐτῶν μὲν τούτων τῶν ἐπιβλέψεων οὐδεὶς γίνεται συλλογισμός, ἀνάγκη δ' εἰ τὸ Β καὶ τὸ Ζ ἐναντία, ταῦτόν τινι εἶναι τὸ Β τῶν Θ καὶ τὸν συλλογισμόν γίνεσθαι διὰ τούτων. συμβαίνει δὲ τοῖς οὕτως ἐπισκοποῦσι προσεπιβλέπειν ἄλλην ὁδὸν τῆς ἀναγκαίας διὰ τὸ λανθάνειν τὴν ταυτότητα τῶν Β καὶ τῶν Θ.

## Κεφάλαιο 29

Τὸν αὐτὸν δὲ τρόπον ἔχουσι καὶ οἱ εἰς τὸ ἀδύνατον ἄγοντες συλλογισμοὶ τοῖς δεικτικοῖς· καὶ γὰρ οὗτοι γίνονται διὰ τῶν ἐπομένων καὶ οἷς ἔπεται ἑκάτερον. καὶ ἡ αὐτὴ ἐπίσκεψις ἐν ἀμφοῖν· ὃ γὰρ δείκνυται δεικτικῶς, καὶ διὰ τοῦ ἀδυνάτου ἔστι συλλογίσασθαι διὰ τῶν αὐτῶν ὅρων, καὶ ὃ διὰ τοῦ ἀδυνάτου, καὶ δεικτικῶς, οἷον ὅτι τὸ Α οὐδενὶ τῷ Ε ὑπάρχει. κείσθω γὰρ τινὶ ὑπάρχειν· οὐκοῦν ἐπεὶ τὸ Β παντὶ τῷ Α, τὸ δὲ Α τινὶ τῷ Ε, τὸ Β τινὶ τῶν Ε ὑπάρξει· ἀλλ' οὐδενὶ ὑπῆρχεν. πάλιν ὅτι τινὶ ὑπάρχει· εἰ γὰρ μηδενὶ τῷ Ε τὸ Α, τὸ δὲ Ε παντὶ τῷ Η, οὐδενὶ τῶν Η ὑπάρξει τὸ Α· ἀλλὰ παντὶ ὑπῆρχεν. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων προβλημάτων· ἀεὶ γὰρ ἔσται καὶ ἐν ἅπασιν ἢ διὰ τοῦ ἀδυνάτου δεῖξις ἐκ τῶν ἐπομένων καὶ οἷς ἔπεται ἑκάτερον. καὶ καθ'

ἕκαστον πρόβλημα ἢ αὐτὴ σκέψις δεικτικῶς τε βουλομένῳ συλλογίσασθαι καὶ εἰς ἀδύνατον ἀγαγεῖν· ἔκ γὰρ τῶν αὐτῶν ὅρων ἀμφοτέραι αἰ ἀποδείξεις, οἷον εἰ δέδεικται μηδενὶ ὑπάρχειν τῷ E τὸ A, ὅτι συμβαίνει καὶ τὸ B τινὶ τῷ E ὑπάρχειν, ὅπερ ἀδύνατον· ἐὰν ληφθῇ τῷ μὲν E μηδενὶ τῷ δὲ A παντὶ ὑπάρχειν τὸ B, φανερόν [45b] ὅτι οὐδενὶ τῷ E τὸ A ὑπάρξει. πάλιν εἰ δεικτικῶς συλλελογίσται τὸ A τῷ E μηδενὶ ὑπάρχειν, ὑποθεμένοις ὑπάρχειν τινὶ διὰ τοῦ ἀδυνάτου δειχθήσεται οὐδενὶ ὑπάρχον. ὁμοίως δὲ κάπὶ τῶν ἄλλων· ἐν ἅπασιν γὰρ ἀνάγκη κοινόν τινα λαβεῖν ὅρον ἄλλον τῶν ὑποκειμένων, πρὸς ὃν ἔσται τοῦ ψεύδους ὁ συλλογισμός, ὥστ' ἀντιστραφείσης ταύτης τῆς προτάσεως, τῆς δ' ἐτέρας ὁμοίως ἐχούσης, δεικτικὸς ἔσται ὁ συλλογισμὸς διὰ τῶν αὐτῶν ὅρων. διαφέρει γὰρ ὁ δεικτικὸς τοῦ εἰς τὸ ἀδύνατον, ὅτι ἐν μὲν τῷ δεικτικῷ κατ' ἀλήθειαν ἀμφοτέραι τίθενται αἰ προτάσεις, ἐν δὲ τῷ εἰς τὸ ἀδύνατον ψευδῶς ἢ μία.

Ταῦτα μὲν οὖν ἔσται μᾶλλον φανερὰ διὰ τῶν ἐπομένων, ὅταν περὶ τοῦ ἀδυνάτου λέγωμεν· νῦν δὲ τοσοῦτον ἡμῖν ἔστω δῆλον, ὅτι εἰς ταῦτ' ἀεὶ βλέπτον δεικτικῶς τε βουλομένῳ συλλογίζεσθαι καὶ εἰς τὸ ἀδύνατον ἄγειν. ἐν δὲ τοῖς ἄλλοις συλλογισμοῖς τοῖς ἐξ ὑποθέσεως, οἷον ὅσοι κατὰ μετάληψιν ἢ κατὰ ποιότητα, ἐν τοῖς ὑποκειμένοις, οὐκ ἐν τοῖς ἐξ ἀρχῆς ἀλλ' ἐν τοῖς μεταλαμβανομένοις, ἔσται ἡ σκέψις, ὁ δὲ τρόπος ὁ αὐτὸς τῆς ἐπιβλέψεως. ἐπισκέψασθαι δὲ δεῖ καὶ διελεῖν ποσαχῶς οἱ ἐξ ὑποθέσεως.

Δείκνυται μὲν οὖν ἕκαστον τῶν προβλημάτων οὕτως, ἔστι δὲ καὶ ἄλλον τρόπον ἕνια συλλογίσασθαι τούτων, οἷον τὰ καθόλου διὰ τῆς κατὰ μέρος ἐπιβλέψεως ἐξ ὑποθέσεως. εἰ γὰρ τὸ Γ καὶ τὸ Η ταῦτ' εἴη, μόνοις δὲ ληφθείη τοῖς Η τὸ E ὑπάρχειν, παντὶ ἂν τῷ E τὸ A ὑπάρχοι· καὶ πάλιν εἰ τὸ Δ καὶ Η ταῦτ', μόνων δὲ τῶν Η τὸ E κατηγοροῖτο, ὅτι οὐδενὶ τῷ E τὸ A ὑπάρξει. φανερόν οὖν ὅτι καὶ οὕτως ἐπιβλεπτόν. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἀναγκαίων καὶ τῶν ἐνδεχομένων· ἡ γὰρ αὐτὴ σκέψις, καὶ διὰ τῶν αὐτῶν ὅρων ἔσται τῇ τάξει τοῦ τ' ἐνδέχεσθαι καὶ τοῦ ὑπάρχειν ὁ συλλογισμός. ληπτέον δ' ἐπὶ τῶν ἐνδεχομένων καὶ τὰ μὴ ὑπάρχοντα δυνατὰ δ' ὑπάρχειν· δέδεικται γὰρ ὅτι καὶ διὰ τούτων γίνεται ὁ τοῦ ἐνδέχεσθαι συλλογισμός. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων κατηγοριῶν.

Φανερόν οὖν ἔκ τῶν εἰρημένων οὐ μόνον ὅτι ἐγγωρεῖ διὰ ταύτης τῆς ὁδοῦ γίνεσθαι πάντας τοὺς συλλογισμούς, ἀλλὰ καὶ ὅτι δι' ἄλλης ἀδύνατον. ἅπας μὲν γὰρ συλλογισμὸς δέδεικται διὰ τινος τῶν προειρημένων σχημάτων γινόμενος, ταῦτα δ' οὐκ ἐγγωρεῖ δι' ἄλλων συσταθῆναι πλὴν διὰ τῶν ἐπομένων καὶ οἷς ἔπεται ἕκαστον· ἔκ τούτων γὰρ [46a] αἰ προτάσεις καὶ ἡ

τοῦ μέσου λήψις, ὥστ' οὐδὲ συλλογισμὸν ἐγχωρεῖ γίνεσθαι δι' ἄλλων.

### Κεφάλαιο 30

Ἡ μὲν οὖν ὁδὸς κατὰ πάντων ἢ αὐτὴ καὶ περὶ φιλοσοφίαν καὶ περὶ τέχνην ὁποιοῦν καὶ μάθημα· δεῖ γὰρ τὰ ὑπάρχοντα καὶ οἷς ὑπάρχει περὶ ἑκάτερον ἀθρεῖν, καὶ τούτων ὡς πλείστων εὐπορεῖν, καὶ ταῦτα διὰ τῶν τριῶν ὅρων σκοπεῖν, ἀνασκευάζοντα μὲν ὡδί, κατασκευάζοντα δὲ ὡδί, κατὰ μὲν ἀλήθειαν ἐκ τῶν κατ' ἀλήθειαν διαγεγραμμένων ὑπάρχειν, εἰς δὲ τοὺς διαλεκτικοὺς συλλογισμοὺς ἐκ τῶν κατὰ δόξαν προτάσεων. αἱ δ' ἀρχαὶ τῶν συλλογισμῶν καθόλου μὲν εἴρηται, ὃν τρόπον τ' ἔχουσι καὶ ὃν τρόπον δεῖ θηρεύειν αὐτάς, ὅπως μὴ βλέπωμεν εἰς ἅπαντα τὰ λεγόμενα, μηδ' εἰς ταῦτα κατασκευάζοντες καὶ ἀνασκευάζοντες, μηδὲ κατασκευάζοντές τε κατὰ παντὸς ἢ τινὸς καὶ ἀνασκευάζοντες ἀπὸ πάντων ἢ τινῶν, ἀλλ' εἰς ἐλάττω καὶ ὠρισμένα, καθ' ἕκαστον δὲ ἐκλέγειν τῶν ὄντων, οἷον περὶ ἀγαθοῦ ἢ ἐπιστήμης. ἴδιαι δὲ καθ' ἑκάστην αἱ πλείσται. διὸ τὰς μὲν ἀρχὰς τὰς περὶ ἕκαστον ἐμπειρίας ἐστὶ παραδοῦναι, λέγω δ' οἷον τὴν ἀστρολογικὴν μὲν ἐμπειρίαν τῆς ἀστρολογικῆς ἐπιστήμης (ληφθέντων γὰρ ἱκανῶς τῶν φαινομένων οὕτως εὐρέθησαν αἱ ἀστρολογικαὶ ἀποδείξεις), ὁμοίως δὲ καὶ περὶ ἄλλην ὁποιοῦν ἔχει τέχνην τε καὶ ἐπιστήμην· ὥστ' ἐὰν ληφθῇ τὰ ὑπάρχοντα περὶ ἕκαστον, ἡμέτερον ἤδη τὰς ἀποδείξεις ἐτοίμως ἐμφανίζειν. εἰ γὰρ μηδὲν κατὰ τὴν ἱστορίαν παραλειφθεῖ τῶν ἀληθῶς ὑπαρχόντων τοῖς πράγμασιν, ἔξομεν περὶ ἁπαντος οὗ μὲν ἔστιν ἀπόδειξις, ταύτην εὐρεῖν καὶ ἀποδεικνύειν, οὐ δὲ μὴ πέφυκεν ἀπόδειξις, τοῦτο ποιεῖν φανερόν.

Καθόλου μὲν οὖν, ὃν δεῖ τρόπον τὰς προτάσεις ἐκλέγειν, εἴρηται σχεδόν· δι' ἀκριβείας δὲ διεληλύθαμεν ἐν τῇ πραγματείᾳ τῇ περὶ τὴν διαλεκτικὴν.

### Κεφάλαιο 31

Ὅτι δ' ἡ διὰ τῶν γενῶν διαίρεσις μικρόν τι μόριόν ἐστι τῆς εἰρημένης μεθόδου, ῥάδιον ἰδεῖν· ἔστι γὰρ ἡ διαίρεσις οἷον ἀσθενὴς συλλογισμός· ὃ μὲν γὰρ δεῖ δεῖξαι αἰτεῖται, συλλογίζεται δ' αἰεὶ τι τῶν ἄνωθεν. πρῶτον δ' αὐτὸ τοῦτο ἐλελήθει τοὺς χρωμένους αὐτῇ πάντας, καὶ πείθειν ἐπεχείρουν ὡς ὄντος δυνατοῦ περὶ οὐσίας ἀπόδειξιν γενέσθαι καὶ τοῦ τί ἐστίν. ὥστ' οὔτε ὃ τι ἐνδέχεται συλλογίσασθαι διαιρουμένοις ξυνίεσαν, οὔτε ὅτι οὕτως ἐνεδέχετο ὥσπερ εἰρήκαμεν. ἐν μὲν οὖν ταῖς ἀποδείξεσιν, ὅταν δέῃ τι συλλογίσασθαι ὑπάρχειν, δεῖ τὸ μέσον, δι' οὗ γίνεται ὁ συλλο[46b] γισμός, καὶ ἦττον αἰεὶ εἶναι καὶ μὴ καθόλου τοῦ πρώτου τῶν ἄκρων· ἡ δὲ διαίρεσις τοῦναντίον

βούλεται· τὸ γὰρ καθόλου λαμβάνει μέσον. ἔστω γὰρ ζῶον ἐφ' οὗ Α, τὸ δὲ θνητὸν ἐφ' οὗ Β, καὶ ἀθάνατον ἐφ' οὗ Γ, ὁ δ' ἄνθρωπος, οὗ τὸν λόγον δεῖ λαβεῖν, ἐφ' οὗ τὸ Δ. ἅπαν δὲ ζῶον λαμβάνει ἢ θνητὸν ἢ ἀθάνατον· τοῦτο δ' ἐστίν, ὃ ἂν ἢ Α, ἅπαν εἶναι ἢ Β ἢ Γ. πάλιν τὸν ἄνθρωπον ἀεὶ διαιρούμενος τίθεται ζῶον εἶναι, ὥστε κατὰ τοῦ Δ τὸ Α λαμβάνει ὑπάρχειν. ὁ μὲν οὖν συλλογισμὸς ἐστίν ὅτι τὸ Δ ἢ Β ἢ Γ ἅπαν ἔσται, ὥστε τὸν ἄνθρωπον ἢ θνητὸν μὲν ἢ ἀθάνατον ἀναγκαῖον εἶναι, ζῶον θνητὸν δὲ οὐκ ἀναγκαῖον, ἀλλ' αἰτεῖται· τοῦτο δ' ἦν ὃ ἔδει συλλογίσασθαι. καὶ πάλιν θέμενος τὸ μὲν Α ζῶον θνητόν, ἐφ' οὗ δὲ τὸ Β ὑπόπουν, ἐφ' οὗ δὲ τὸ Γ ἄπουν, τὸν δ' ἄνθρωπον τὸ Δ, ὡσαύτως λαμβάνει τὸ μὲν Α ἥτοι ἐν τῷ Β ἢ ἐν τῷ Γ εἶναι (ἅπαν γὰρ ζῶον θνητὸν ἢ ὑπόπουν ἢ ἄπουν ἐστί), κατὰ δὲ τοῦ Δ τὸ Α (τὸν γὰρ ἄνθρωπον ζῶον θνητὸν εἶναι ἔλαβεν)· ὥσθ' ὑπόπουν μὲν ἢ ἄπουν εἶναι ζῶον ἀνάγκη τὸν ἄνθρωπον, ὑπόπουν δ' οὐκ ἀνάγκη, ἀλλὰ λαμβάνει· τοῦτο δ' ἦν ὃ ἔδει πάλιν δεῖξαι. καὶ τοῦτον δὲ τὸν τρόπον ἀεὶ διαιρουμένοις τὸ μὲν καθόλου συμβαίνει αὐτοῖς μέσον λαμβάνειν, καθ' οὗ δ' ἔδει δεῖξαι καὶ τὰς διαφορὰς ἄκρα. τέλος δέ, ὅτι τοῦτ' ἐστίν ἄνθρωπος ἢ ὅ τι ποτ' ἂν ἢ τὸ ζητούμενον, οὐδὲν λέγουσι σαφὲς ὥστ' ἀναγκαῖον εἶναι· καὶ γὰρ τὴν ἄλλην ὁδὸν ποιοῦνται πᾶσαν, οὐδὲ τὰς ἐνδεχομένας εὐπορίας ὑπολαμβάνοντες ὑπάρχειν.

Φανερόν δ' ὅτι οὗτ' ἀνασκευάσαι ταύτη τῇ μεθόδῳ ἔστιν, οὔτε περὶ συμβεβηκότος ἢ ἰδίου συλλογίσασθαι, οὔτε περὶ γένους, οὗτ' ἐν οἷς ἀγνοεῖται τὸ πότερον ὡδὶ ἢ ὡδὶ ἔχει, οἷον ἄρ' ἡ διάμετρος ἀσύμμετρος ἢ σύμμετρος. ἐὰν γὰρ λάβῃ ὅτι ἅπαν μῆκος ἢ σύμμετρον ἢ ἀσύμμετρον, ἡ δὲ διάμετρος μῆκος, συλλελογίσται ὅτι ἀσύμμετρος ἢ σύμμετρος ἡ διάμετρος. εἰ δὲ λήψεται ἀσύμμετρον, ὃ ἔδει συλλογίσασθαι λήψεται. οὐκ ἄρα ἔστι δεῖξαι· ἡ μὲν γὰρ ὁδὸς αὕτη, διὰ ταύτης δ' οὐκ ἔστιν. τὸ ἀσύμμετρον ἢ σύμμετρον ἐφ' οὗ Α, μῆκος Β, διάμετρος Γ. φανερόν οὖν ὅτι οὔτε πρὸς πᾶσαν σκέψιν ἀρμόζει τῆς ζητήσεως ὁ τρόπος, οὗτ' ἐν οἷς μάλιστα δοκεῖ πρέπειν, ἐν τούτοις ἐστὶ χρήσιμος.

Ἐκ τίνων μὲν οὖν αἱ ἀποδείξεις γίνονται καὶ πῶς, καὶ εἰς ὅποια βλεπτέον καθ' ἕκαστον πρόβλημα, φανερόν ἐκ τῶν εἰρημένων.

## Κεφάλαιο 32

πῶς δ' ἀνάξομεν τοὺς συλλογισμοὺς εἰς [47a] τὰ προειρημένα σχήματα, λεκτέον ἂν εἴη μετὰ ταῦτα· λοιπὸν γὰρ ἔτι τοῦτο τῆς σκέψεως. εἰ γὰρ τὴν τε γένεσιν τῶν συλλογισμῶν θεωροῖμεν καὶ τοῦ εὐρίσκειν ἔχοιμεν δύναμιν, ἔτι



δὲ τοὺς γεγεννημένους ἀναλύοιμεν εἰς τὰ προειρημένα σχήματα, τέλος ἂν ἔχοι ἢ ἐξ ἀρχῆς πρόθεσις. συμβήσεται δ' ἅμα καὶ τὰ πρότερον εἰρημένα ἐπιβεβαιουῖσθαι καὶ φανερώτερα εἶναι ὅτι οὕτως ἔχει, διὰ τῶν γυν λεχθησομένων· δεῖ γὰρ πᾶν τὸ ἀληθὲς αὐτὸ ἐαυτῷ ὁμολογούμενον εἶναι πάντη.

Πρῶτον μὲν οὖν δεῖ πειρᾶσθαι τὰς δύο προτάσεις ἐκλαμβάνειν τοῦ συλλογισμοῦ (ῥῥῶν γὰρ εἰς τὰ μείζω διελεῖν ἢ τὰ ἐλάττω, μείζω δὲ τὰ συγκείμενα ἢ ἐξ ὧν), εἴτα σκοπεῖν ποτέρα ἐν ὅλῳ καὶ ποτέρα ἐν μέρει, καί, εἰμὴ ἄμφω εἰλημμέναι εἶεν, αὐτὸν τιθέναι τὴν ἑτέραν. ἐνίοτε γὰρ τὴν καθόλου προτείναντες τὴν ἐν ταύτῃ οὐ λαμβάνουσιν, οὔτε γράφοντες οὔτ' ἐρωτῶντες· ἢ ταύτας μὲν προτείνουσι, δι' ὧν δ' αὗται περαίνονται, παραλείπουσιν, ἄλλα δὲ μάτην ἐρωτῶσιν. σκεπτέον οὖν εἴ τι περίεργον εἴληπται καὶ εἴ τι τῶν ἀναγκαίων παραλέλειπται, καὶ τὸ μὲν θετέον τὸ δ' ἀφαιρετέον, ἕως ἂν ἔλθῃ εἰς τὰς δύο προτάσεις· ἄνευ γὰρ τούτων οὐκ ἔστιν ἀναγαγεῖν τοὺς οὕτως ἠρωτημένους λόγους. ἐνίων μὲν οὖν ῥῥῶδιον ἰδεῖν τὸ ἐνδεές, ἔνιοι δὲ λανθάνουσι καὶ δοκοῦσι συλλογίζεσθαι διὰ τὸ ἀναγκαῖόν τι συμβαίνειν ἐκ τῶν κειμένων, οἷον εἰ ληφθεῖη μὴ οὐσίας ἀναιρουμένης μὴ ἀναιρεῖσθαι οὐσίαν, ἐξ ὧν δ' ἐστὶν ἀναιρουμένων, καὶ τὸ ἐκ τούτων φθεῖρεσθαι· τούτων γὰρ τεθέντων ἀναγκαῖον μὲν τὸ οὐσίας μέρος εἶναι οὐσίαν, οὐ μὴν συλλελόγισται διὰ τῶν εἰλημμένων, ἀλλ' ἐλλείπουσι προτάσεις. πάλιν εἰ ἀνθρώπου ὄντος ἀνάγκη ζῶον εἶναι καὶ ζώου οὐσίαν, ἀνθρώπου ὄντος ἀνάγκη οὐσίαν εἶναι· ἀλλ' οὕπῳ συλλελόγισται· οὐ γὰρ ἔχουσιν αἱ προτάσεις ὥς εἴπομεν.

Ἀπατώμεθα δ' ἐν τοῖς τοιούτοις διὰ τὸ ἀναγκαῖόν τι συμβαίνειν ἐκ τῶν κειμένων, ὅτι καὶ ὁ συλλογισμὸς ἀναγκαῖόν ἐστιν. ἐπὶ πλέον δὲ τὸ ἀναγκαῖον ἢ ὁ συλλογισμός· ὁ μὲν γὰρ συλλογισμὸς πᾶς ἀναγκαῖον, τὸ δ' ἀναγκαῖον οὐ πᾶν συλλογισμός. ὥστ' οὐκ εἴ τι συμβαίνει τεθέντων τινῶν, πειρατέον ἀνάγειν εὐθύς, ἀλλὰ πρῶτον ληπτέον τὰς δύο προτάσεις, εἴθ' οὕτω διαιρετέον εἰς τοὺς ὅρους, μέσον δὲ θετέον τῶν ὅρων τὸν ἐν ἀμφοτέραις ταῖς προτάσεσι λεγόμενον· ἀνάγκη γὰρ τὸ μέσον ἐν ἀμφοτέραις ὑπάρχειν ἐν ἅπασι τοῖς σχήμασιν.

Ἐὰν μὲν οὖν [47b] κατηγορῇ καὶ κατηγορῇται τὸ μέσον, ἢ αὐτὸ μὲν κατηγορῇ, ἄλλο δ' ἐκείνου ἀπαρνῇται, τὸ πρῶτον ἔσται σχῆμα· ἐὰν δὲ καὶ κατηγορῇ καὶ ἀπαρνῇται ἀπὸ τινος, τὸ μέσον· ἐὰν δ' ἄλλα ἐκείνου κατηγορῇται, ἢ τὸ μὲν ἀπαρνῇται τὸ δὲ κατηγορῇται, τὸ ἔσχατον. οὕτω γὰρ εἶχεν ἐν ἐκάστῳ σχήματι τὸ μέσον. ὁμοίως δὲ καὶ ἐὰν μὴ καθόλου ὣσιν αἱ

προτάσεις· ὁ γὰρ αὐτὸς διορισμὸς τοῦ μέσου. φανερόν οὖν ὡς ἐν ᾧ λόγῳ μὴ λέγεται ταῦτὸ πλεονάκεις, ὅτι οὐ γίνεται συλλογισμός· οὐ γὰρ εἴληπται μέσον. ἐπεὶ δ' ἔχομεν ποῖον ἐν ἐκάστῳ σχήματι περαίνεται τῶν προβλημάτων, καὶ ἐν τίνι τὸ καθόλου καὶ ἐν ποίῳ τὸ ἐν μέρει, φανερόν ὡς οὐκ εἰς ἅπαντα τὰ σχήματα βλεπτέον, ἀλλ' ἐκάστου προβλήματος εἰς τὸ οἰκεῖον. ὅσα δ' ἐν πλείοσι περαίνεται, τῇ τοῦ μέσου θέσει γνωριῶμεν τὸ σχῆμα.

### Κεφάλαιο 33

Πολλάκις μὲν οὖν ἀπατᾶσθαι συμβαίνει περὶ τοὺς συλλογισμοὺς διὰ τὸ ἀναγκαῖον, ὥσπερ εἴρηται πρότερον, ἐνίῳτε δὲ παρὰ τὴν ὁμοιότητα τῆς τῶν ὄρων θέσεως· ὅπερ οὐ χρὴ λανθάνειν ἡμᾶς. οἶον εἰ τὸ Α κατὰ τοῦ Β λέγεται καὶ τὸ Β κατὰ τοῦ Γ· δόξειε γὰρ ἂν οὕτως ἐχόντων τῶν ὄρων εἶναι συλλογισμός, οὐ γίνεται δ' οὕτ' ἀναγκαῖον οὐδὲν οὔτε συλλογισμός. ἔστω γὰρ ἐφ' ᾧ Α τὸ ἀεὶ εἶναι, ἐφ' ᾧ δὲ Β διανοητὸς Ἀριστομένης, τὸ δ' ἐφ' ᾧ Γ Ἀριστομένης. ἀληθὲς δὴ τὸ Α τῷ Β ὑπάρχειν· ἀεὶ γὰρ ἐστὶ διανοητὸς Ἀριστομένης. ἀλλὰ καὶ τὸ Β τῷ Γ· ὁ γὰρ Ἀριστομένης ἐστὶ διανοητὸς Ἀριστομένης. τὸ δ' Α τῷ Γ οὐχ ὑπάρχει· φθαρτὸς γὰρ ἐστὶν ὁ Ἀριστομένης. οὐ γὰρ ἐγένετο συλλογισμὸς οὕτως ἐχόντων τῶν ὄρων, ἀλλ' ἔδει καθόλου τὴν Α Β ληφθῆναι πρότασιν. τοῦτο δὲ ψεῦδος, τὸ ἀξιοῦν πάντα τὸν διανοητὸν Ἀριστομένην ἀεὶ εἶναι, φθαρτοῦ ὄντος Ἀριστομένου. πάλιν ἔστω τὸ μὲν ἐφ' ᾧ Γ Μίκκαλος, τὸ δ' ἐφ' ᾧ Β μουσικὸς Μίκκαλος, ἐφ' ᾧ δὲ τὸ Α τὸ φθειρεσθαι αὔριον. ἀληθὲς δὴ τὸ Β τοῦ Γ κατηγορεῖν· ὁ γὰρ Μίκκαλός ἐστι μουσικὸς Μίκκαλος. ἀλλὰ καὶ τὸ Α τοῦ Β· φθείροιτο γὰρ ἂν αὔριον μουσικὸς Μίκκαλος. τὸ δέ γε Α τοῦ Γ ψεῦδος. τοῦτο δὴ ταῦτόν ἐστι τῷ πρότερον· οὐ γὰρ ἀληθὲς καθόλου, Μίκκαλος μουσικὸς ὅτι φθίρεται αὔριον· τούτου δὲ μὴ ληφθέντος οὐκ ἦν συλλογισμός.

Αὕτη μὲν οὖν ἡ ἀπάτη γίνεται ἐν τῷ παρὰ μικρόν· ὡς γὰρ οὐδὲν διαφέρον εἶπεῖν τόδε τῷδε ὑπάρχειν ἢ τόδε τῷδε παντὶ ὑπάρχειν, συγχωροῦμεν.

### Κεφάλαιο 34

πολλάκις δὲ [48a] διαψεύδεσθαι συμπεσεῖται παρὰ τὸ μὴ καλῶς ἐκτίθεσθαι τοὺς κατὰ τὴν πρότασιν ὄρους, οἶον εἰ τὸ μὲν Α εἶη ὑγία, τὸ δ' ἐφ' ᾧ Β νόσος, ἐφ' ᾧ δὲ Γ ἄνθρωπος. ἀληθὲς γὰρ εἶπεῖν ὅτι τὸ Α οὐδενὶ τῷ Β ἐνδέχεται ὑπάρχειν (οὐδεμιᾷ γὰρ νόσω ὑγία ὑπάρχει), καὶ πάλιν ὅτι τὸ Β παντὶ τῷ Γ ὑπάρχει (πᾶς γὰρ ἄνθρωπος δεκτικὸς νόσου). δόξειεν ἂν οὖν συμβαίνειν μηδενὶ ἀνθρώπῳ ἐνδέχεσθαι ὑγίαν ὑπάρχειν. τούτου δ' αἴτιον τὸ

μὴ καλῶς ἐκκεῖσθαι τοὺς ὅρους κατὰ τὴν λέξιν, ἐπεὶ μεταληφθέντων τῶν κατὰ τὰς ἑξεῖς οὐκ ἔσται συλλογισμός, οἷον ἀντὶ μὲν τῆς ὑγιείας εἰ τεθείη τὸ ὑγιαῖνον, ἀντὶ δὲ τῆς νόσου τὸ νοσοῦν. οὐ γὰρ ἀληθὲς εἰπεῖν ὡς οὐκ ἐνδέχεται τῷ νοσοῦντι τὸ ὑγιαίνειν ὑπάρξαι. τούτου δὲ μὴ ληφθέντος οὐ γίνεται συλλογισμός, εἰ μὴ τοῦ ἐνδέχεσθαι· τοῦτο δ' οὐκ ἀδύνατον· ἐνδέχεται γὰρ μηδενὶ ἀνθρώπῳ ὑπάρχειν ὑγίειαν. πάλιν ἐπὶ τοῦ μέσου σχήματος ὁμοίως ἔσται τὸ ψεῦδος· τὴν γὰρ ὑγίειαν νόσω μὲν οὐδεμιᾷ ἀνθρώπῳ δὲ παντὶ ἐνδέχεται ὑπάρχειν, ὥστ' οὐδενὶ ἀνθρώπῳ νόσον. ἐν δὲ τῷ τρίτῳ σχήματι κατὰ τὸ ἐνδέχεσθαι συμβαίνει τὸ ψεῦδος, καὶ γὰρ ὑγίειαν καὶ νόσον καὶ ἐπιστήμην καὶ ἄνοιαν καὶ ὅλως τὰ ἐναντία τῷ αὐτῷ ἐνδέχεται ὑπάρχειν, ἀλλήλοις δ' ἀδύνατον. τοῦτο δ' ἀνομολογούμενον τοῖς προειρημένοις· ὅτε γὰρ τῷ αὐτῷ πλείω ἐνεδέχετο ὑπάρχειν, ἐνεδέχετο καὶ ἀλλήλοις.

Φανερόν οὖν ὅτι ἐν ἅπασιν τούτοις ἡ ἀπάτη γίνεται παρὰ τὴν τῶν ὅρων ἔκθεσιν· μεταληφθέντων γὰρ τῶν κατὰ τὰς ἑξεῖς οὐδὲν γίνεται ψεῦδος. δῆλον οὖν ὅτι κατὰ τὰς τοιαύτας προτάσεις ἀεὶ τὸ κατὰ τὴν ἑξιν ἀντὶ τῆς ἑξεως μεταληπτέον καὶ θετέον ὅρον.

### Κεφάλαιο 35

Οὐ δεῖ δὲ τοὺς ὅρους ἀεὶ ζητεῖν ὀνόματι ἐκτίθεσθαι· πολλάκις γὰρ ἔσονται λόγοι οἷς οὐ κεῖται ὄνομα· διὸ χαλεπὸν ἀνάγειν τοὺς τοιούτους συλλογισμούς. ἐνίοτε δὲ καὶ ἀπατᾶσθαι συμβήσεται διὰ τὴν τοιαύτην ζήτησιν, οἷον ὅτι τῶν ἀμέσων ἔστι συλλογισμός. ἔστω τὸ Α δύο ὀρθαί, τὸ ἐφ' ᾧ Β τρίγωνον, ἐφ' ᾧ δὲ Γ ἰσοσκελές. τῷ μὲν οὖν Γ ὑπάρχει τὸ Α διὰ τὸ Β, τῷ δὲ Β οὐκέτι δι' ἄλλο (καθ' αὐτὸ γὰρ τὸ τρίγωνον ἔχει δύο ὀρθάς), ὥστ' οὐκ ἔσται μέσον τοῦ Α Β, ἀποδεικτοῦ ὄντος. φανερόν γὰρ ὅτι τὸ μέσον οὐχ οὕτως ἀεὶ ληπτέον ὡς τόδε τι, ἀλλ' ἐνίοτε λόγον, ὅπερ συμβαίνει κάπὶ τοῦ λεχθέντος.

### Κεφάλαιο 36

Τὸ δὲ ὑπάρχειν τὸ πρῶτον τῷ μέσῳ καὶ τοῦτο τῷ ἄκρῳ οὐ δεῖ λαμβάνειν ὡς αἰεὶ κατηγορηθησομένων [48b] ἀλλήλων ἢ ὁμοίως τό τε πρῶτον τοῦ μέσου καὶ τοῦτο τοῦ ἐσχάτου. καὶ ἐπὶ τοῦ μὴ ὑπάρχειν δ' ὡσαύτως. ἀλλ' ὁσαυῶς τὸ εἶναι λέγεται καὶ τὸ ἀληθὲς εἰπεῖν αὐτὸ τοῦτο, τοσαυταυῶς οἶεσθαι χρὴ σημαίνειν καὶ τὸ ὑπάρχειν. οἷον ὅτι τῶν ἐναντίων ἔστι μία ἐπιστήμη. ἔστω γὰρ τὸ Α τὸ μίαν εἶναι ἐπιστήμην, τὰ ἐναντία ἀλλήλοις ἐφ' οὗ Β. τὸ δὲ Α τῷ Β ὑπάρχει οὐχ ὥστε τὰ ἐναντία [τὸ] μίαν εἶναι [αὐτῶν] ἐπιστήμην, ἀλλ' ὅτι ἀληθὲς εἰπεῖν κατ' αὐτῶν μίαν εἶναι αὐτῶν ἐπιστήμην.

Συμβαίνει δ' ὅτε μὲν ἐπὶ τοῦ μέσου τὸ πρῶτον λέγεσθαι, τὸ δὲ μέσον ἐπὶ τοῦ τρίτου μὴ λέγεσθαι, οἷον εἰ ἡ σοφία ἐστὶν ἐπιστήμη, τοῦ δ' ἀγαθοῦ ἐστὶν ἡ σοφία, συμπέρασμα ὅτι τοῦ ἀγαθοῦ ἐστὶν ἐπιστήμη· τὸ μὲν δὲ ἀγαθὸν οὐκ ἐστὶν ἐπιστήμη, ἡ δὲ σοφία ἐστὶν ἐπιστήμη. ὅτε δὲ τὸ μὲν μέσον ἐπὶ τοῦ τρίτου λέγεται, τὸ δὲ πρῶτον ἐπὶ τοῦ μέσου οὐ λέγεται, οἷον εἰ τοῦ ποιοῦ παντὸς ἐστὶν ἐπιστήμη ἢ ἐναντίου, τὸ δ' ἀγαθὸν καὶ ἐναντίον καὶ ποιόν, συμπέρασμα μὲν ὅτι τοῦ ἀγαθοῦ ἐστὶν ἐπιστήμη, οὐκ ἔστι δὲ τὸ ἀγαθὸν ἐπιστήμη οὐδὲ τὸ ποιὸν οὐδὲ τὸ ἐναντίον, ἀλλὰ τὸ ἀγαθὸν ταῦτα. ἔστι δὲ μήτε τὸ πρῶτον κατὰ τοῦ μέσου μήτε τοῦτο κατὰ τοῦ τρίτου, τοῦ πρώτου κατὰ τοῦ τρίτου ὅτε μὲν λεγομένου ὅτε δὲ μὴ λεγομένου. οἷον εἰ οὐ ἐπιστήμη ἐστὶν, ἔστι τούτου γένος, τοῦ δ' ἀγαθοῦ ἐστὶν ἐπιστήμη, συμπέρασμα ὅτι τοῦ ἀγαθοῦ ἔστι γένος· κατηγορεῖται δ' οὐδὲν κατ' οὐδενός. εἰ δ' οὐ ἐστὶν ἐπιστήμη, γένος ἐστὶ τοῦτο, τοῦ δ' ἀγαθοῦ ἐστὶν ἐπιστήμη, συμπέρασμα ὅτι τἀγαθὸν ἐστὶ γένος· κατὰ μὲν δὲ τοῦ ἄκρου κατηγορεῖται τὸ πρῶτον, κατ' ἀλλήλων δ' οὐ λέγεται.

Τὸν αὐτὸν δὲ {{χ|27}} τρόπον καὶ ἐπὶ τοῦ μὴ ὑπάρχειν ληπτέον. οὐ γὰρ ἀεὶ σημαίνει τὸ μὴ ὑπάρχειν τόδε τῷδε μὴ εἶναι τόδε τόδε, ἀλλ' ἐνίστε τὸ μὴ εἶναι τόδε τοῦδε ἢ τόδε τῷδε, οἷον ὅτι οὐκ ἔστι κινήσεως κίνησις ἢ γενέσεως γένεσις, ἡδονῆς δ' ἔστιν· οὐκ ἄρα ἡ ἡδονὴ γένεσις. ἢ πάλιν ὅτι γέλως μὲν ἔστι σημεῖον, σημείου δ' οὐκ ἔστι σημεῖον, ὥστ' οὐ σημεῖον ὁ γέλως. ὁμοίως δὲ κἂν τοῖς ἄλλοις ἐν ὅσοις ἀναιρεῖται τὸ πρόβλημα τῷ λέγεσθαί πως πρὸς αὐτὸ τὸ γένος. πάλιν ὅτι ὁ καιρὸς οὐκ ἔστι χρόνος δέων· θεῷ γὰρ καιρὸς μὲν ἔστι, χρόνος δ' οὐκ ἔστι δέων διὰ τὸ μηδὲν εἶναι θεῷ ὠφέλιμον. ὅρους μὲν γὰρ θετέον καιρὸν καὶ χρόνον δέοντα καὶ θεόν, τὴν δὲ πρότασιν ληπτέον κατὰ τὴν τοῦ ὀνόματος πῶσιν. ἀπλῶς γὰρ τοῦτολέγομεν κατὰ πάντων, ὅτι τοὺς μὲν ὅρους ἀεὶ θετέον κατὰ τὰς κλήσεις τῶν ὀνομάτων, οἷον ἄνθρωπος ἢ ἀγαθὸν ἢ [49a] ἐναντία, οὐκ ἀνθρώπου ἢ ἀγαθοῦ ἢ ἐναντίων, τὰς δὲ προτάσεις ληπτέον κατὰ τὰς ἐκάστου πῶσεις· ἢ γὰρ ὅτι τούτῳ, οἷον τὸ ἴσον, ἢ ὅτι τούτου, οἷον τὸ διπλάσιον, ἢ ὅτι τοῦτο, οἷον τὸ τύπτον ἢ ὀρών, ἢ ὅτι οὗτος, οἷον ὁ ἄνθρωπος ζῶν, ἢ εἰ πως ἄλλως πίπτει τοῦνομα κατὰ τὴν πρότασιν.

## Κεφάλαιο 37

Τὸ δ' ὑπάρχειν τόδε τῷδε καὶ τὸ ἀληθεύεσθαι τόδε κατὰ τοῦδε τοσαυταχῶς ληπτέον ὁσαχῶς αἱ κατηγορίαι διήρηνται, καὶ ταύτας ἢ πῇ ἢ ἀπλῶς, ἔτι ἢ ἀπλᾶς ἢ συμπεπλεγμένας· ὁμοίως δὲ καὶ τὸ μὴ ὑπάρχειν. ἐπισκεπτέον δὲ ταῦτα καὶ διοριστέον βέλτιον.

## Κεφάλαιο 38

Τὸ δ' ἐπαναδιπλούμενον ἐν ταῖς προτάσεσι πρὸς τῷ πρώτῳ ἄκρῳ θετέον, οὐ πρὸς τῷ μέσῳ. λέγω δ' οἷον εἰ γένοιτο συλλογισμὸς ὅτι τῆς δικαιοσύνης ἔστιν ἐπιστήμη ὅτι ἀγαθόν, τὸ ὅτι ἀγαθόν ἢ ἢ ἀγαθόν πρὸς τῷ πρώτῳ θετέον. ἔστω γὰρ τὸ Α ἐπιστήμη ὅτι ἀγαθόν, ἐφ' ᾧ δὲ Β ἀγαθόν, ἐφ' ᾧ δὲ Γ δικαιοσύνη. τὸ δὲ Α ἀληθὲς τοῦ Β κατηγορεῖται· τοῦ γὰρ ἀγαθοῦ ἔστιν ἐπιστήμη ὅτι ἀγαθόν. ἀλλὰ καὶ τὸ Β τοῦ Γ· ἡ γὰρ δικαιοσύνη ὅπερ ἀγαθόν. οὕτω μὲν οὖν γίνεται ἀνάλυσις. εἰ δὲ πρὸς τῷ Β τεθείη τὸ ὅτι ἀγαθόν, οὐκ ἔσται· τὸ μὲν γὰρ Α κατὰ τοῦ Β ἀληθὲς ἔσται, τὸ δὲ Β κατὰ τοῦ Γ οὐκ ἀληθὲς ἔσται· τὸ γὰρ ἀγαθόν ὅτι ἀγαθόν κατηγορεῖν τῆς δικαιοσύνης ψεῦδος καὶ οὐ συνετόν. ὁμοίως δὲ καὶ εἰ τὸ ὑγιεινὸν δειχθείη ὅτι ἔστιν ἐπιστητὸν ἢ ἀγαθόν, ἢ τραγέλαφος ἢ μὴ ὄν, ἢ ὁ ἄνθρωπος φθαρτὸν ἢ αἰσθητόν· ἐν ἅπασιν γὰρ τοῖς ἐπικατηγορουμένοις πρὸς τῷ ἄκρῳ τὴν ἐπαναδίπλωσιν θετέον.

Οὐχ ἡ αὐτὴ δὲ θέσις τῶν ὅρων ὅταν ἀπλῶς τι συλλογισθῇ καὶ ὅταν τότε τι ἢ πῇ ἢ πῶς, λέγω δ' οἷον ὅταντ' ἀγαθὸν ἐπιστητὸν δειχθῇ καὶ ὅταν ἐπιστητὸν ὅτι ἀγαθόν· ἀλλ' εἰ μὲν ἀπλῶς ἐπιστητὸν δέδεικται, μέσον θετέον τὸ ὄν, εἰ δ' ὅτι ἀγαθόν, τὸ τὶ ὄν. ἔστω γὰρ τὸ μὲν Α ἐπιστήμη ὅτι τὶ ὄν, ἐφ' ᾧ δὲ Β ὄν τι, τὸ δ' ἐφ' ᾧ Γ ἀγαθόν. ἀληθὲς δὲ τὸ Α τοῦ Β κατηγορεῖν· ἦν γὰρ ἐπιστήμη τοῦ τινὸς ὄντος ὅτι τὶ ὄν. ἀλλὰ καὶ τὸ Β τοῦ Γ· τὸ γὰρ ἐφ' ᾧ Γ ὄν τι. ὥστε καὶ τὸ Α τοῦ Γ· ἔσται ἄρα ἐπιστήμη τ' ἀγαθοῦ ὅτι ἀγαθόν· ἦν γὰρ τὸ τὶ ὄν τῆς ἰδίου σημείον οὐσίας. εἰ δὲ τὸ ὄν μέσον ἐτέθη καὶ πρὸς τῷ ἄκρῳ τὸ ὄν ἀπλῶς καὶ μὴ τὸ τὶ ὄν ἐλέχθη, οὐκ ἂν ἦν συλλογισμὸς ὅτι ἔστιν ἐπιστήμη τ' ἀγαθοῦ ὅτι ἀγαθόν, ἀλλ' ὅτι ὄν, οἷον ἐφ' ᾧ τὸ Α ἐπιστήμη [49b] ὅτι ὄν, ἐφ' ᾧ Β ὄν, ἐφ' ᾧ Γ ἀγαθόν. φανερόν οὖν ὅτι ἐν τοῖς ἐν μέρει συλλογισμοῖς οὕτως ληπτέον τοὺς ὅρους.

## Κεφάλαιο 39

Δεῖ δὲ καὶ μεταλαμβάνειν ἅ τὸ αὐτὸ δύναται, ὀνόματα ἀντ' ὀνομάτων καὶ λόγους ἀντὶ λόγων καὶ ὄνομα καὶ λόγον, καὶ ἀεὶ ἀντὶ τοῦ λόγου τοῦνομα λαμβάνειν· ῥάων γὰρ ἡ τῶν ὅρων ἔκθεσις. οἷον εἰ μηδὲν διαφέρει εἰπεῖν τὸ ὑποληπτὸν τοῦ δοξαστοῦ μὴ εἶναι γένος ἢ μὴ εἶναι ὅπερ ὑποληπτόν τι τὸ δοξαστόν (ταῦτόν γὰρ τὸ σημανόμενον), ἀντὶ τοῦ λόγου τοῦ λεχθέντος τὸ ὑποληπτὸν καὶ τὸ δοξαστόν ὅρους θετέον.

## Κεφάλαιο 40

Ἐπεὶ δ' οὐ ταῦτόν ἐστι τὸ εἶναι τὴν ἡδονὴν ἀγαθὸν καὶ τὸ εἶναι τὴν ἡδονὴν τὸ ἀγαθόν, οὐχ ὁμοίως θετέον τοὺς ὅρους, ἀλλ' εἰ μὲν ἐστὶν ὁ συλλογισμὸς ὅτι ἡ ἡδονὴ τὰγαθόν, τὰγαθόν, εἰ δ' ὅτι ἀγαθόν, ἀγαθόν. οὕτως κάπὶ τῶν ἄλλων.

## Κεφάλαιο 41

Οὐκ ἔστι δὲ ταῦτόν οὗτ' εἶναι οὗτ' εἰπεῖν, ὅτι ὦ τὸ Β ὑπάρχει, τούτῳ παντὶ τὸ Α ὑπάρχει, καὶ τὸ εἰπεῖν τὸ ὦ παντὶ τὸ Β ὑπάρχει, καὶ τὸ Α παντὶ ὑπάρχει· οὐδὲν γὰρ κωλύει τὸ Β τῷ Γ ὑπάρχειν, μὴ παντὶ δέ. οἷον ἔστω τὸ Β καλόν, τὸ δὲ Γ λευκόν. εἰ δὴ λευκῷ τινὶ ὑπάρχει καλόν, ἀληθὲς εἰπεῖν ὅτι τῷ λευκῷ ὑπάρχει καλόν· ἀλλ' οὐ παντὶ ἴσως. εἰ μὲν οὖν τὸ Α τῷ Β ὑπάρχει, μὴ παντὶ δὲ καθ' οὗ τὸ Β, οὗτ' εἰ παντὶ τῷ Γ τὸ Β, οὗτ' εἰ μόνον ὑπάρχει, ἀνάγκη τὸ Α οὐχ ὅτι οὐ παντί, ἀλλ' οὐδ' ὑπάρχειν. εἰ δὲ καθ' οὗ ἂν τὸ Β λέγεται ἀληθῶς, τούτῳ παντὶ ὑπάρχει, συμβήσεται τὸ Α, καθ' οὗ παντὸς τὸ Β λέγεται, κατὰ τούτου παντὸς λέγεσθαι. εἰ μέντοι τὸ Α λέγεται καθ' οὗ ἂν τὸ Β λέγεται κατὰ παντός, οὐδὲν κωλύει τῷ Γ ὑπάρχειν τὸ Β, μὴ παντὶ δὲ τὸ Α ἢ ὅλως μὴ ὑπάρχειν. ἐν δὴ τοῖς τρισὶν ὅροις δῆλον ὅτι τὸ καθ' οὗ τὸ Β παντὸς τὸ Α λέγεσθαι τοῦτ' ἔστι, καθ' ὅσων τὸ Β λέγεται, κατὰ πάντων λέγεσθαι καὶ τὸ Α. καὶ εἰ μὲν κατὰ παντὸς τὸ Β, καὶ τὸ Α οὕτως· εἰ δὲ μὴ κατὰ παντός, οὐκ ἀνάγκη τὸ Α κατὰ παντός.

Οὐ δεῖ δ' οἴεσθαι παρὰ τὸ ἐκτίθεσθαι τι συμβαίνειν ἄτοπον· οὐδὲν γὰρ προσχρώμεθα τῷ τόδε τι εἶναι, ἀλλ' ὥσπερ ὁ γεωμέτρης τὴν ποδιαίαν καὶ εὐθεΐαν τήνδε καὶ ἀπλατῇ εἶναι λέγει οὐκ οὔσας, ἀλλ' οὐχ οὕτως χρῆται ὡς ἐκ τούτων συλλογισζόμενος. ὅλως γὰρ ὃ μὴ ἔστιν ὡς ὅλον πρὸς μέρος καὶ ἄλλο πρὸς τοῦτο ὡς μέρος πρὸς ὅλον, ἐξ οὐδενὸς τῶν τοιούτων δείκνυσιν ὁ δεικνύων, ὥστε οὐδὲ γίνεται [50a] συλλογισμός. τῷ δ' ἐκτίθεσθαι οὕτω χρώμεθα ὥσπερ καὶ τῷ αἰσθάνεσθαι, τὸν μανθάνοντ' ἀλέγοντες· οὐ γὰρ οὕτως ὡς ἄνευ τούτων οὐχ οἷόν τ' ἀποδειχθῆναι, ὥσπερ ἐξ ὧν ὁ συλλογισμός.

## Κεφάλαιο 42

Μὴ λανθανέτω δ' ἡμᾶς ὅτι ἐν τῷ αὐτῷ συλλογισμῷ οὐχ ἅπαντα τὰ συμπεράσματα δι' ἐνὸς σχήματός ἐστιν, ἀλλὰ τὸ μὲν διὰ τούτου τὸ δὲ δι' ἄλλου. δῆλον οὖν ὅτι καὶ τὰς ἀναλύσεις οὕτω ποιητέον. ἐπεὶ δ' οὐ πᾶν πρόβλημα ἐν ἅπαντι σχήματι ἀλλ' ἐν ἐκάστῳ τεταγμένα, φανερόν ἐκ τοῦ συμπεράσματος ἐν ᾧ σχήματι ζητητέον.

## Κεφάλαιο 43

Τούς τε πρὸς ὀρισμὸν τῶν λόγων, ὅσοι πρὸς ἓν τι τυγχάνουσι διειλεγμένοι τῶν ἐν τῷ ὄρω, πρὸς ὃ διείλεκται θετέον ὅρον, καὶ οὐ τὸν ἅπαντα λόγον· ἦττον γὰρ συμβήσεται ταραττεσθαι διὰ τὸ μῆκος, οἷον εἰ τὸ ὕδωρ ἔδειξεν ὅτι ὑγρὸν ποτόν, τὸ ποτὸν καὶ τὸ ὕδωρ ὅρους θετέον.

## Κεφάλαιο 44

Ἔτι δὲ τοὺς ἐξ ὑποθέσεως συλλογισμοὺς οὐ πειρατέον ἀνάγειν· οὐ γὰρ ἔστιν ἐκ τῶν κειμένων ἀνάγειν. οὐ γὰρ διὰ συλλογισμοῦ δεδειγμένοι εἰσίν, ἀλλὰ διὰ συνθήκης ὡμολογημένοι πάντες. οἷον εἰ ὑποθέμενος, ἂν δύναιμι τις μία μὴ ἢ τῶν ἐναντίων, μηδ' ἐπιστήμην μίαν εἶναι, εἴτα διαλεχθεῖη ὅτι οὐκ ἔστι πᾶσα δύναμις τῶν ἐναντίων, οἶονεὶ τοῦ ὑγιεινοῦ καὶ τοῦ νοσώδους· ἅμα γὰρ ἔσται τὸ αὐτὸ ὑγιεινὸν καὶ νοσῶδες. ὅτι μὲν οὖν οὐκ ἔστι μία πάντων τῶν ἐναντίων δύναμις, ἐπιδέδεικται, ὅτι δ' ἐπιστήμη οὐκ ἔστιν, οὐ δέδεικται. καίτοι ὁμολογεῖν ἀναγκαῖον· ἀλλ' οὐκ ἐκ συλλογισμοῦ, ἀλλ' ἐξ ὑποθέσεως. τοῦτον μὲν οὖν οὐκ ἔστιν ἀναγαγεῖν, ὅτι δ' οὐ μία δύναμις, ἔστιν· οὗτος γὰρ ἴσως καὶ ἦν συλλογισμός, ἐκεῖνο δ' ὑπόθεσις.

Ὅμοίως δὲ καὶ ἐπὶ τῶν διὰ τοῦ ἀδυνάτου περαινομένων· οὐδὲ γὰρ τούτους οὐκ ἔστιν ἀναλύειν, ἀλλὰ τὴν μὲν εἰς τὸ ἀδύνατον ἀπαγωγὴν ἔστι (συλλογισμῷ γὰρ δείκνυται), θάτερον δ' οὐκ ἔστιν· ἐξ ὑποθέσεως γὰρ περαίνεται. διαφέρουσι δὲ τῶν προειρημένων ὅτι ἐν ἐκείνοις μὲν δεῖ προδιομολογήσασθαι, εἰ μέλλει συμφήσειν, οἷον ἂν δειχθῇ μία δύναμις τῶν ἐναντίων, καὶ ἐπιστήμην εἶναι τὴν αὐτήν· ἐνταῦθα δὲ καὶ μὴ προδιομολογησάμενοι συγχωροῦσι διὰ τὸ φανερόν εἶναι τὸ ψεῦδος, οἷον τεθείσης τῆς διαμέτρου συμμέτρου τὸ τὰ περιττὰ ἴσα εἶναι τοῖς ἀρτίοις.

Πολλοὶ δὲ καὶ ἕτεροι περαίνονται ἐξ ὑποθέσεως, οὓς ἐπισκέψασθαι δεῖ καὶ διασημῆναι καθαρῶς. τίνες μὲν οὖν αἱ [50b] διαφοραὶ τούτων, καὶ ποσαχῶς γίνεται τὸ ἐξ ὑποθέσεως, ὕστερον ἐροῦμεν· νῦν δὲ τοσοῦτον ἡμῖν ἔστω φανερόν, ὅτι οὐκ ἔστιν ἀναλύειν εἰς τὰ σχήματα τοὺς τοιούτους συλλογισμούς. καὶ δι' ἣν αἰτίαν, εἰρήκαμεν.

## Κεφάλαιο 45

Ὅσα δ' ἐν πλείοσι σχήμασι δείκνυται τῶν προβλημάτων, ἣν ἐν θατέρῳ συλλογισθῇ, ἔστιν ἀναγαγεῖν τὸν συλλογισμὸν εἰς θάτερον, οἷον τὸν ἐν τῷ

πρώτῳ στερητικὸν εἰς τὸ δεύτερον, καὶ τὸν ἐν τῷ μέσῳ εἰς τὸ πρῶτον, οὐχ ἅπαντας δὲ ἄλλ' ἐνίους. ἔσται δὲ φανερόν ἐν τοῖς ἐπομένοις. εἰ γὰρ τὸ Α μηδενὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ, τὸ Α οὐδενὶ τῷ Γ. οὕτω μὲν οὖν τὸ πρῶτον σχῆμα, ἐὰν δ' ἀντιστραφῇ τὸ στερητικόν, τὸ μέσον ἔσται· τὸ γὰρ Β τῷ μὲν Α οὐδενί, τῷ δὲ Γ παντὶ ὑπάρχει. ὁμοίως δὲ καὶ εἰ μὴ καθόλου ἄλλ' ἐν μέρει ὁ συλλογισμός, οἷον εἰ τὸ μὲν Α μηδενὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ· ἀντιστραφέντος γὰρ τοῦ στερητικοῦ τὸ μέσον ἔσται σχῆμα.

Τῶν δ' ἐν τῷ δευτέρῳ συλλογισμῶν οἱ μὲν καθόλου ἀναχθήσονται εἰς τὸ πρῶτον, τῶν δ' ἐν μέρει ἄτερος μόνος. ἔστω γὰρ τὸ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ παντὶ ὑπάρχον. ἀντιστραφέντος οὖν τοῦ στερητικοῦ τὸ πρῶτον ἔσται σχῆμα· τὸ μὲν γὰρ Β οὐδενὶ τῷ Α, τὸ δὲ Α παντὶ τῷ Γ ὑπάρξει. ἐὰν δὲ τὸ κατηγορικὸν ᾗ πρὸς τῷ Β, τὸ δὲ στερητικὸν πρὸς τῷ Γ, πρῶτον ὅρον θετέον τὸ Γ· τοῦτο γὰρ οὐδενὶ τῷ Α, τὸ δὲ Α παντὶ τῷ Β· ὥστ' οὐδενὶ τῷ Β τὸ Γ, οὐδ' ἄρα τὸ Β τῷ Γ οὐδενί· ἀντιστρέφει γὰρ τὸ στερητικόν. ἐὰν δ' ἐν μέρει ᾗ ὁ συλλογισμός, ὅταν μὲν ᾗ τὸ στερητικὸν πρὸς τῷ μείζονι ἄκρῳ, ἀναχθήσεται εἰς τὸ πρῶτον, οἷον εἰ τὸ Α μηδενὶ τῷ Β, τῷ δὲ Γ τινί· ἀντιστραφέντος γὰρ τοῦ στερητικοῦ τὸ πρῶτον ἔσται σχῆμα· τὸ μὲν γὰρ Β οὐδενὶ τῷ Α, τὸ δὲ Α τινὶ τῷ Γ. ὅταν δὲ τὸ κατηγορικόν, οὐκ ἀναλυθήσεται, οἷον εἰ τὸ Α τῷ μὲν Β παντί, τῷ δὲ Γ οὐ παντί· οὔτε γὰρ δέχεται ἀντιστροφὴν τὸ Α Β, οὔτε γενομένης ἔσται συλλογισμός.

Πάλιν οἱ μὲν ἐν τῷ τρίτῳ σχήματι οὐκ ἀναλυθήσονται πάντες εἰς τὸ πρῶτον, οἱ δ' ἐν τῷ πρώτῳ πάντες εἰς τὸ τρίτον. ὑπαρχέτω γὰρ τὸ Α παντὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ. οὐκοῦν ἐπειδὴ ἀντιστρέφει τὸ ἐν μέρει κατηγορικόν, ὑπάρξει τὸ Γ τινὶ τῷ Β· τὸ δὲ Α παντὶ ὑπῆρχεν, ὥστε γίνεται τὸ τρίτον σχῆμα. καὶ εἰ στερητικὸς ὁ συλλογισμός, ὡσαύτως· ἀντιστρέφει γὰρ τὸ ἐν μέρει κατηγορικόν, ὥστε τὸ μὲν Α οὐδενὶ τῷ Β, τὸ δὲ Γ τινὶ ὑπάρξει. [51a]

Τῶν δ' ἐν τῷ τελευταίῳ σχήματι συλλογισμῶν εἷς μόνος οὐκ ἀναλύεται εἰς τὸ πρῶτον, ὅταν μὴ καθόλου τεθῇ τὸ στερητικόν, οἱ δ' ἄλλοι πάντες ἀναλύονται. κατηγορείσθω γὰρ παντὸς τοῦ Γ τὸ Α καὶ τὸ Β· οὐκοῦν ἀντιστρέψει τὸ Γ πρὸς ἑκάτερον ἐπὶ μέρους· ὑπάρχει ἄρα τινὶ τῷ Β. ὥστ' ἔσται τὸ πρῶτον σχῆμα, εἰ τὸ μὲν Α παντὶ τῷ Γ, τὸ δὲ Γ τινὶ τῷ Β. καὶ εἰ τὸ μὲν Α παντὶ τῷ Γ, τὸ δὲ Β τινί, ὁ αὐτὸς λόγος· ἀντιστρέφει γὰρ πρὸς τὸ Β τὸ Γ. ἐὰν δὲ τὸ μὲν Β παντὶ τῷ Γ, τὸ δὲ Α τινὶ τῷ Γ, πρῶτος ὅρος θετέος τὸ Β· τὸ γὰρ Β παντὶ τῷ Γ, τὸ δὲ Γ τινὶ τῷ Α, ὥστε τὸ Β τινὶ τῷ Α. ἐπεὶ δ' ἀντιστρέφει τὸ ἐν μέρει, καὶ τὸ Α τινὶ τῷ Β ὑπάρξει. καὶ εἰ στερητικὸς ὁ συλλογισμός, καθάλου τῶν ὅρων ὄντων, ὁμοίως ληπτέον. ὑπαρχέτω γὰρ τὸ Β



παντὶ τῷ Γ, τὸ δὲ Α μηδενί· οὐκοῦν τινὶ τῷ Β ὑπάρξει τὸ Γ, τὸ δὲ Α οὐδενὶ τῷ Γ, ὥστ' ἔσται μέσον τὸ Γ. ὁμοίως δὲ καὶ εἰ τὸ μὲν στερητικὸν καθόλου, τὸ δὲ κατηγορικὸν ἐν μέρει· τὸ μὲν γὰρ Α οὐδενὶ τῷ Γ, τὸ δὲ Γ τινὶ τῶν Β ὑπάρξει. ἔαν δ' ἐν μέρει ληφθῇ τὸ στερητικόν, οὐκ ἔσται ἀνάλυσις, οἷον εἰ τὸ μὲν Β παντὶ τῷ Γ, τὸ δὲ Α τινὶ μὴ ὑπάρχει· ἀντιστραφέντος γὰρ τοῦ Β Γ ἀμφοτέραι αἱ προτάσεις ἔσονται κατὰ μέρος.

Φανερόν δὲ καὶ ὅτι πρὸς τὸ ἀναλύειν εἰς ἄλληλα τὰ σχήματα ἢ πρὸς τῷ ἐλάττονι ἄκρῳ πρότασις ἀντιστρεπτέα ἐν ἀμφοτέροις τοῖς σχήμασι· ταύτης γὰρ μετατιθεμένης ἢ μετάβασις ἐγίνετο.

Τῶν δ' ἐν τῷ μέσῳ σχήματι ἄτερος μὲν ἀναλύεται, ἄτερος δ' οὐκ ἀναλύεται, εἰς τὸ τρίτον. ὅταν μὲν γὰρ ἢ τὸ καθόλου στερητικόν, ἀναλύεται. εἰ γὰρ τὸ Α μηδενὶ τῷ Β, τῷ δὲ Γ τινί, ἀμφοτέρα ὁμοίως ἀντιστρέφει πρὸς τὸ Α, ὥστε τὸ μὲν Β οὐδενὶ τῷ Α, τὸ δὲ Γ τινί· μέσον ἄρα τὸ Α. ὅταν δὲ τὸ Α παντὶ τῷ Β, τῷ δὲ Γ τινὶ μὴ ὑπάρχει, οὐκ ἔσται ἀνάλυσις· οὐδετέρα γὰρ τῶν προτάσεων ἐκ τῆς ἀντιστροφῆς καθόλου. Καὶ οἱ ἐκ τοῦ τρίτου δὲ σχήματος ἀναλυθήσονται εἰς τὸ μέσον, ὅταν ἢ καθόλου τὸ στερητικόν, οἷον εἰ τὸ Α μηδενὶ τῷ Γ, τὸ δὲ Β τινὶ ἢ παντί. καὶ γὰρ τὸ Γ τῷ μὲν Α οὐδενί, τῷ δὲ Β τινὶ ὑπάρξει. ἔαν δ' ἐπὶ μέρους ἢ τὸ στερητικόν, οὐκ ἀναλυθήσεται· οὐ γὰρ δέχεται ἀντιστροφὴν τὸ ἐν μέρει ἀποφατικόν.

Φανερόν οὖν ὅτι οἱ αὐτοὶ συλλογισμοὶ οὐκ ἀναλύονται ἐν τούτοις τοῖς σχήμασιν οἵπερ οὐδ' εἰς τὸ πρῶτον ἀνελύοντο, [51b] καὶ ὅτι εἰς τὸ πρῶτον σχῆμα τῶν συλλογισμῶν ἀναγομένων οὗτοι μόνοι διὰ τοῦ ἀδυνάτου περαίνονται.

Πῶς μὲν οὖν δεῖ τοὺς συλλογισμοὺς ἀνάγειν, καὶ ὅτι ἀναλύεται τὰ σχήματα εἰς ἄλληλα, φανερόν ἐκ τῶν εἰρημένων.

## Κεφάλαιο 46

Διαφέρει δέ τι ἐν τῷ κατασκευάζειν ἢ ἀνασκευάζειν τὸ ὑπολαμβάνειν ἢ ταῦτόν ἢ ἕτερον σημαίνειν τὸ μὴ εἶναι τοδὶ καὶ εἶναι μὴ τοῦτο, οἷον τὸ μὴ εἶναι λευκὸν τῷ εἶναι μὴ λευκόν. οὐ γὰρ ταῦτόν σημαίνει, οὐδ' ἔστιν ἀπόφασις τοῦ εἶναι λευκὸν τὸ εἶναι μὴ λευκόν, ἀλλὰ τὸ μὴεἶναι λευκόν. λόγος δὲ τούτου ὅδε. ὁμοίως γὰρ ἔχει τὸ δύναται βαδίζειν πρὸς τὸ δύναται οὐ βαδίζειν τῷ ἔστι λευκόν πρὸς τὸ ἔστιν οὐ λευκόν, καὶ ἐπίσταται τάγαθόν πρὸς τὸ ἐπίσταται τὸ οὐκ ἀγαθόν. τὸ γὰρ ἐπίσταται τάγαθόν ἢ ἔστιν ἐπιστάμενος

τάγαθόν οὐδὲν διαφέρει, οὐδὲ τὸ δύναται βαδίζειν ἢ ἔστι δυνάμενος βαδίζειν· ὥστε καὶ τὰ ἀντικείμενα, οὐ δύναται βαδίζειν — οὐκ ἔστι δυνάμενος βαδίζειν. εἰ οὖν τὸ οὐκ ἔστι δυνάμενος βαδίζειν ταὐτὸ σημαίνει καὶ ἔστι δυνάμενος οὐ βαδίζειν ἢ μὴ βαδίζειν, ταῦτά γε ἅμα ὑπάρξει ταύτῳ (ὁ γὰρ αὐτὸς δύναται καὶ βαδίζειν καὶ μὴ βαδίζειν, καὶ ἐπιστήμων τάγαθοῦ καὶ τοῦ μὴ ἀγαθοῦ ἐστὶ), φάσις δὲ καὶ ἀπόφασις οὐχ ὑπάρχουσιν αἱ ἀντικείμεναι ἅμα τῷ αὐτῷ. ὥσπερ οὖν οὐ ταὐτό ἐστὶ τὸ μὴ ἐπίστασθαι τάγαθόν καὶ ἐπίστασθαι τὸ μὴ ἀγαθόν, οὐδ' εἶναι μὴ ἀγαθόν καὶ μὴ εἶναι ἀγαθόν ταυτόν. τῶν γὰρ ἀνάλογον ἐὰν θάτερα ἢ ἕτερα, καὶ θάτερα. οὐδὲ τὸ εἶναι μὴ ἴσον καὶ τὸ μὴ εἶναι ἴσον· τῷ μὲν γὰρ ὑπόκειται τι, τῷ ὄντι μὴ ἴσω, καὶ τοῦτ' ἔστι τὸ ἄνισον, τῷ δ' οὐδέν. διόπερ ἴσον μὲν ἢ ἄνισον οὐ πᾶν, ἴσον δ' ἢ οὐκ ἴσον πᾶν. ἔτι τὸ ἔστιν οὐ λευκὸν ξύλον καὶ οὐκ ἔστι λευκὸν ξύλον οὐχ ἅμα ὑπάρχει. εἰ γὰρ ἔστι ξύλον οὐ λευκόν, ἔσται ξύλον· τὸ δὲ μὴ ὄν λευκὸν ξύλον οὐκ ἀνάγκη ξύλον εἶναι. ὥστε φανερόν ὅτι οὐκ ἔστι τοῦ ἔστιν ἀγαθόν τὸ ἔστιν οὐκ ἀγαθόν ἀπόφασις. εἰ οὖν κατὰ παντὸς ἐνὸς ἢ φάσις ἢ ἀπόφασις ἀληθής, εἰ μὴ ἔστιν ἀπόφασις, δῆλον ὡς κατάφασις ἂν πως εἴη. καταφάσεως δὲ πάσης ἀπόφασις ἔστιν· καὶ ταύτης ἄρα τὸ οὐκ ἔστιν οὐκ ἀγαθόν.

Ἐχει δὲ τάξιν τήνδε πρὸς ἄλληλα. ἔστω τὸ εἶναι ἀγαθόν ἐφ' οὗ Α, τὸ δὲ μὴ εἶναι ἀγαθόν ἐφ' οὗ Β, τὸ δὲ εἶναι μὴ ἀγαθόν ἐφ' οὗ Γ, ὑπὸ τὸ Β, τὸ δὲ μὴ εἶναι μὴ ἀγαθόν ἐφ' οὗ Δ, ὑπὸ τὸ Α. παντὶ δὴ ὑπάρξει ἢ τὸ Α ἢ τὸ Β, καὶ οὐδενὶ τῷ αὐτῷ· καὶ ἢ τὸ Γ ἢ τὸ Δ, καὶ οὐδενὶ τῷ αὐτῷ. καὶ ὥς τὸ Γ, ἀνάγκη τὸ Β παντὶ ὑπάρχειν (εἰ [52a] γὰρ ἀληθὲς εἰπεῖν ὅτι ἐστὶν οὐ λευκόν, καὶ ὅτι οὐκ ἔστι λευκὸν ἀληθές· ἀδύνατον γὰρ ἅμα εἶναι λευκὸν καὶ εἶναι μὴ λευκόν, ἢ εἶναι ξύλον οὐ λευκὸν καὶ εἶναι ξύλον λευκόν, ὥστ' εἰ μὴ ἢ κατάφασις, ἢ ἀπόφασις ὑπάρξει), τῷ δὲ Β τὸ Γ οὐκ αἰεὶ (ὃ γὰρ ὅλως μὴ ξύλον, οὐδὲ ξύλον ἔσται οὐ λευκόν). ἀνάπαλιν τοίνυν, ὥς τὸ Α, τὸ Δ παντί (ἢ γὰρ τὸ Γ ἢ τὸ Δ· ἐπεὶ δ' οὐχ οἷόν τε ἅμα εἶναι μὴ λευκὸν καὶ λευκόν, τὸ Δ ὑπάρξει· κατὰ γὰρ τοῦ ὄντος λευκοῦ ἀληθὲς εἰπεῖν ὅτι οὐκ ἔστιν οὐ λευκόν), κατὰ δὲ τοῦ Δ οὐ παντὸς τὸ Α (κατὰ γὰρ τοῦ ὅλως μὴ ὄντος ξύλου οὐκ ἀληθὲς τὸ Α εἰπεῖν, ὡς ἔστι ξύλον λευκόν, ὥστε τὸ Δ ἀληθές, τὸ δ' Α οὐκ ἀληθές, ὅτι ξύλον λευκόν). δῆλον δ' ὅτι καὶ τὸ Α Γ οὐδενὶ τῷ αὐτῷ καὶ τὸ Β καὶ τὸ Δ ἐνδέχεται τινὶ τῷ αὐτῷ ὑπάρξαι. Ὅμοίως δ' ἔχουσι καὶ αἱ στερήσεις πρὸς τὰς κατηγορίας ταύτη τῇ θέσει. ἴσον ἐφ' οὗ Α, οὐκ ἴσον ἐφ' οὗ Β, ἄνισον ἐφ' οὗ Γ, οὐκ ἄνισον ἐφ' οὗ Δ.

Καὶ ἐπὶ πολλῶν δέ, ὧν τοῖς μὲν ὑπάρχει τοῖς δ' οὐχ ὑπάρχει ταυτόν, ἢ μὲν ἀπόφασις ὁμοίως ἀληθεύοιτ' ἂν, ὅτι οὐκ ἔστι λευκὰ πάντα ἢ ὅτι οὐκ ἔστι λευκὸν ἕκαστον· ὅτι δ' ἐστὶν οὐ λευκὸν ἕκαστον ἢ πάντα ἐστὶν οὐ λευκά,

ψεῦδος. ὁμοίως δὲ καὶ τοῦ ἔστι πᾶν ζῶον λευκόν οὐ τὸ ἔστιν οὐ λευκὸν ἅπαν ζῶον ἀπόφασις (ἄμφω γὰρ ψευδεῖς), ἀλλὰ τὸ οὐκ ἔστι πᾶν ζῶον λευκόν.

Ἐπεὶ δὲ δῆλον ὅτι ἕτερον σημαίνει τὸ ἔστιν οὐ λευκόν καὶ οὐκ ἔστι λευκόν, καὶ τὸ μὲν κατάφασις τὸ δ' ἀπόφασις, φανερόν ὡς οὐχ ὁ αὐτὸς τρόπος τοῦ δεικνύναι ἐκάτερον, οἷον ὅτι ὁ ἂν ἢ ζῶον οὐκ ἔστι λευκὸν ἢ ἐνδέχεται μὴ εἶναι λευκόν, καὶ ὅτι ἀληθὲς εἰπεῖν μὴ λευκόν· τοῦτο γὰρ ἔστιν εἶναι μὴ λευκόν. ἀλλὰ τὸ μὲν ἀληθὲς εἰπεῖν ἔστι λευκόν εἴτε μὴ λευκόν ὁ αὐτὸς τρόπος· κατασκευαστικῶς γὰρ ἄμφω διὰ τοῦ πρώτου δείκνυται σχήματος· τὸ γὰρ ἀληθὲς τῷ ἔστιν ὁμοίως τάττεται· τοῦ γὰρ ἀληθὲς εἰπεῖν λευκόν οὐ τὸ ἀληθὲς εἰπεῖν μὴ λευκόν ἀπόφασις, ἀλλὰ τὸ μὴ ἀληθὲς εἰπεῖν λευκόν. εἰ δὲ ἔσται ἀληθὲς εἰπεῖν ὁ ἂν ἢ ἄνθρωπος μουσικὸν εἶναι ἢ μὴ μουσικὸν εἶναι, ὁ ἂν ἢ ζῶον ληπτέον ἢ εἶναι μουσικὸν ἢ εἶναι μὴ μουσικόν, καὶ δέδεικται. τὸ δὲ μὴ εἶναι μουσικὸν ὁ ἂν ἢ ἄνθρωπος, ἀνασκευαστικῶς δείκνυται κατὰ τοὺς εἰρημένους τρόπους τρεῖς. Ἀπλῶς δ' ὅταν οὕτως ἔχη τὸ Α καὶ τὸ Β ὥσθ' ἅμα μὲν τῷ αὐτῷ μὴ ἐνδέχεσθαι, παντὶ δὲ ἐξ ἀνάγκης [52b] θάτερον, καὶ πάλιν τὸ Γ καὶ τὸ Δ ὡσαύτως, ἔπεται δὲ τῷ Γ τὸ Α καὶ μὴ ἀντιστρέφει, καὶ τῷ Β τὸ Δ ἀκολουθήσει καὶ οὐκ ἀντιστρέψει· καὶ τὸ μὲν Α καὶ Δ ἐνδέχεται τῷ αὐτῷ, τὸ δὲ Β καὶ Γ οὐκ ἐνδέχεται. πρῶτον μὲν οὖν ὅτι τῷ Β τὸ Δ ἔπεται, ἐνθὲνδε φανερόν. ἔπει γὰρ παντὶ τῶν Γ Δ θάτερον ἐξ ἀνάγκης, ὥ δὲ τὸ Β, οὐκ ἐνδέχεται τὸ Γ διὰ τὸ συνεπιφέρειν τὸ Α, τὸ δὲ Α καὶ Β μὴ ἐνδέχεσθαι τῷ αὐτῷ, φανερόν ὅτι τὸ Δ ἀκολουθήσει. πάλιν ἔπει τῷ Α τὸ Γ οὐκ ἀντιστρέφει, παντὶ δὲ τὸ Γ ἢ τὸ Δ, ἐνδέχεται τὸ Α καὶ τὸ Δ τῷ αὐτῷ ὑπάρχειν. τὸ δὲ γε Β καὶ τὸ Γ οὐκ ἐνδέχεται διὰ τὸ συνακολουθεῖν τῷ Γ τὸ Α· συμβαίνει γάρ τι ἀδύνατον. φανερόν οὖν ὅτι οὐδὲ τῷ Δ τὸ Β ἀντιστρέφει, ἐπεὶπερ ἐγχωρεῖ ἅμα τὸ Δ καὶ τὸ Α ὑπάρχειν.

Συμβαίνει δ' ἐνίοτε καὶ ἐν τῇ τοιαύτῃ τάξει τῶν ὄρων ἀπατᾶσθαι διὰ τὸ μὴ τὰ ἀντικείμενα λαμβάνειν ὀρθῶς ὡς ἀνάγκη παντὶ θάτερον ὑπάρχειν· οἷον εἰ τὸ Α καὶ τὸ Β μὴ ἐνδέχεται ἅμα τῷ αὐτῷ, ἀνάγκη δ' ὑπάρχειν, ὥ μὴ θάτερον, θάτερον, καὶ πάλιν τὸ Γ καὶ τὸ Δ ὡσαύτως, ὥ δὲ τὸ Γ, παντὶ ἔπεται τὸ Α. συμβήσεται γὰρ ὥ τὸ Δ, τὸ Β ὑπάρχειν ἐξ ἀνάγκης, ὅπερ ἔστι ψεῦδος. εἰλήφθω γὰρ ἀπόφασις τῶν Α Β ἢ ἐφ' ὧ Ζ, καὶ πάλιν τῶν Γ Δ ἢ ἐφ' ὧ Θ. ἀνάγκη δὲ παντὶ ἢ τὸ Α ἢ τὸ Ζ· ἢ γὰρ τὴν φάσιν ἢ τὴν ἀπόφασιν. καὶ πάλιν ἢ τὸ Γ ἢ τὸ Θ· φάσις γὰρ καὶ ἀπόφασις. καὶ ὥ τὸ Γ, παντὶ τὸ Α ὑπόκειται. ὥστε ὥ τὸ Ζ, παντὶ τὸ Θ. πάλιν ἔπει τῶν Ζ Β παντὶ θάτερον καὶ τῶν Θ Δ ὡσαύτως, ἀκολουθεῖ δὲ τῷ Ζ τὸ Θ, καὶ τῷ Δ ἀκολουθήσει τὸ Β· τοῦτο γὰρ ἴσμεν. εἰ ἄρα τῷ Γ τὸ Α, καὶ τῷ Δ τὸ Β. τοῦτο δὲ ψεῦδος· ἀνάπαλιν γὰρ ἦν ἐν τοῖς

οὕτως ἔχουσιν ἢ ἀκολουθήσις. οὐ γὰρ ἴσως ἀνάγκη παντὶ τὸ Α ἢ τὸ Ζ, οὐδὲ τὸ Ζ ἢ τὸ Β· οὐ γάρ ἐστιν ἀπόφασις τοῦ Α τὸ Ζ. τοῦ γὰρ ἀγαθοῦ τὸ οὐκ ἀγαθὸν ἀπόφασις· οὐ ταῦτ' οὖν δ' ἐστὶ τὸ οὐκ ἀγαθὸν τῷ οὐτ' ἀγαθὸν οὐτ' οὐκ ἀγαθόν. ὁμοίως δὲ καὶ ἐπὶ τῶν Γ Δ· αἱ γὰρ ἀποφάσεις αἱ εἰλημμέναι δύο εἰσὶν.

## Βιβλίον 2

### Κεφάλαιον 1

Ἐν πόσοις μὲν οὖν σχήμασι καὶ διὰ ποίων καὶ πόσων προτάσεων καὶ πότε καὶ πῶς γίνεται συλλογισμός, ἔτι δ' εἰς ποῖα βλεπτέον ἀνασκευάζοντι καὶ κατασκευάζ[53a] ζοντι, καὶ πῶς δεῖ ζητεῖν περὶ τοῦ προκειμένου καθ' ὅποιαν οὖν μέθοδον, ἔτι δὲ διὰ ποίας ὁδοῦ ληψόμεθα τὰς περὶ ἕκαστον ἀρχάς, ἤδη διεληλύθαμεν. ἐπεὶ δ' οἱ μὲν καθόλου τῶν συλλογισμῶν εἰσὶν οἱ δὲ κατὰ μέρος, οἱ μὲν καθόλου πάντες αἰεὶ πλείω συλλογίζονται, τῶν δ' ἐν μέρει οἱ μὲν κατηγορικοὶ πλείω, οἱ δ' ἀποφατικοὶ τὸ συμπέρασμα μόνον. αἱ μὲν γὰρ ἄλλαι προτάσεις ἀντιστρέφουσιν, ἡ δὲ στερητικὴ οὐκ ἀντιστρέφει. τὸ δὲ συμπέρασμα τὸ κατὰ τινός ἐστιν, ὥσθ' οἱ μὲν ἄλλοι συλλογισμοὶ πλείω συλλογίζονται, οἷον εἰ τὸ Α δέδεικται παντὶ τῷ Β ἢ τινί, καὶ τὸ Β τινὶ τῷ Α ἀναγκαῖον ὑπάρχειν, καὶ εἰ μηδενὶ τῷ Β τὸ Α, οὐδὲ τὸ Β οὐδενὶ τῷ Α, τοῦτο δ' ἕτερον τοῦ ἔμπροσθεν· εἰ δὲ τινὶ μὴ ὑπάρχει, οὐκ ἀνάγκη καὶ τὸ Β τινὶ τῷ Α μὴ ὑπάρχειν· ἐνδέχεται γὰρ παντὶ ὑπάρχειν.

Αὕτη μὲν οὖν κοινὴ πάντων αἰτία, τῶν τε καθόλου καὶ τῶν κατὰ μέρος· ἔστι δὲ περὶ τῶν καθόλου καὶ ἄλλως εἰπεῖν. ὅσα γὰρ ἢ ὑπὸ τὸ μέσον ἢ ὑπὸ τὸ συμπέρασμα ἐστίν, ἀπάντων ἔσται ὁ αὐτὸς συλλογισμός, ἐὰν τὰ μὲν ἐν τῷ μέσῳ τὰ δ' ἐν τῷ συμπεράσματι τεθῇ, οἷον εἰ τὸ Α Β συμπέρασμα διὰ τοῦ Γ, ὅσα ὑπὸ τὸ Β ἢ τὸ Γ ἐστίν, ἀνάγκη κατὰ πάντων λέγεσθαι τὸ Α· εἰ γὰρ τὸ Δ ἐν ὅλῳ τῷ Β, τὸ δὲ Β ἐν τῷ Α, καὶ τὸ Δ ἔσται ἐν τῷ Α· πάλιν εἰ τὸ Ε ἐν ὅλῳ τῷ Γ, τὸ δὲ Γ ἐν τῷ Α, καὶ τὸ Ε ἐν τῷ Α ἔσται. ὁμοίως δὲ καὶ εἰ στερητικὸς ὁ συλλογισμός. ἐπὶ δὲ τοῦ δευτέρου σχήματος τὸ ὑπὸ τὸ συμπέρασμα μόνον ἔσται συλλογίσασθαι, οἷον εἰ τὸ Α τῷ Β μηδενί, τῷ δὲ Γ παντί· συμπέρασμα ὅτι οὐδενὶ τῷ Γ τὸ Β. εἰ δὲ τὸ Δ ὑπὸ τὸ Γ ἐστὶ, φανερόν ὅτι οὐχ ὑπάρχει αὐτῷ τὸ Β· τοῖς δ' ὑπὸ τὸ Α ὅτι οὐχ ὑπάρχει, οὐ δῆλον διὰ τοῦ συλλογισμοῦ. καίτοι οὐχ ὑπάρχει τῷ Ε, εἰ ἔστιν ὑπὸ τὸ Α· ἀλλὰ τὸ μὲν τῷ Γ μηδενὶ ὑπάρχειν τὸ Β διὰ τοῦ συλλογισμοῦ δέδεικται, τὸ δὲ τῷ Α μὴ ὑπάρχειν ἀναπόδεικτον εἴληπται, ὥστ' οὐ διὰ τὸν συλλογισμὸν συμβαίνει τὸ Β τῷ Ε μὴ ὑπάρχειν. ἐπὶ δὲ τῶν ἐν μέρει τῶν μὲν ὑπὸ τὸ συμπέρασμα οὐκ ἔσται τὸ

ἀναγκαῖον (οὐ γὰρ γίνεται συλλογισμός, ὅταν αὕτη ληφθῇ ἐν μέρει), τῶν δ' ὑπὸ τὸ μέσον ἔσται πάντων, πλὴν οὐ διὰ τὸν συλλογισμόν· οἷον εἰ τὸ Α παντὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ· τοῦ μὲν γὰρ ὑπὸ τὸ Γ τεθέντος οὐκ ἔσται συλλογισμός, τοῦ δ' ὑπὸ τὸ Β ἔσται, ἀλλ' οὐ διὰ τὸν προγεγενημένον. ὁμοίως δὲ καὶ τῶν ἄλλων σχημάτων· τοῦ μὲν γὰρ ὑπὸ τὸ συμπέρασμα οὐκ ἔσται, [53b] θατέρου δ' ἔσται, πλὴν οὐ διὰ τὸν συλλογισμόν, ἢ καὶ ἐν τοῖς καθόλου ἐξ ἀναποδείκτου τῆς προτάσεως τὰ ὑπὸ τὸ μέσον ἐδείκνυτο· ὥστ' ἢ οὐδ' ἐκεῖ ἔσται ἢ καὶ ἐπὶ τούτων.

## Κεφάλαιο 2

Ἔστι μὲν οὖν οὕτως ἔχειν ὥστ' ἀληθεῖς εἶναι τὰς προτάσεις δι' ὧν ὁ συλλογισμός, ἔστι δ' ὥστε ψευδεῖς, ἔστι δ' ὥστε τὴν μὲν ἀληθεῖ τὴν δὲ ψευδεῖ. τὸ δὲ συμπέρασμα ἢ ἀληθὲς ἢ ψεῦδος ἐξ ἀνάγκης. ἐξ ἀληθῶν μὲν οὖν οὐκ ἔστι ψεῦδος συλλογίσασθαι, ἐκ ψευδῶν δ' ἔστιν ἀληθές, πλὴν οὐ διότι ἀλλ' ὅτι· τοῦ γὰρ διότι οὐκ ἔστιν ἐκ ψευδῶν συλλογισμός· δι' ἣν δ' αἰτίαν, ἐν τοῖς ἐπομένοις λεχθήσεται.

Πρῶτον μὲν οὖν ὅτι ἐξ ἀληθῶν οὐχ οἷόν τε ψεῦδος συλλογίσασθαι, ἐντεῦθεν δῆλον. εἰ γὰρ τοῦ Α ὄντος ἀνάγκη τὸ Β εἶναι, τοῦ Β μὴ ὄντος ἀνάγκη τὸ Α μὴ εἶναι. εἰ οὖν ἀληθές ἐστι τὸ Α, ἀνάγκη τὸ Β ἀληθές εἶναι, ἢ συμβήσεται τὸ αὐτὸ ἅμα εἶναι τε καὶ οὐκ εἶναι· τοῦτο δ' ἀδύνατον. μὴ ὅτι δὲ κεῖται τὸ Α εἷς ὅρος, ὑποληφθήτω ἐνδέχεσθαι ἐνός τινος ὄντος ἐξ ἀνάγκης τι συμβαίνειν· οὐ γὰρ οἷόν τε· τὸ μὲν γὰρ συμβαῖνον ἐξ ἀνάγκης τὸ συμπέρασμα ἔστι, δι' ὧν δὲ τοῦτο γίνεται ἐλαχίστων, τρεῖς ὅροι, δύο δὲ διαστήματα καὶ προτάσεις. εἰ οὖν ἀληθές, ὥ τὸ Β ὑπάρχει, τὸ Α παντί, ὥ δὲ τὸ Γ, τὸ Β, ὥ τὸ Γ, ἀνάγκη τὸ Α ὑπάρχειν καὶ οὐχ οἷόν τε τοῦτο ψεῦδος εἶναι· ἅμα γὰρ ὑπάρξει ταῦτο καὶ οὐχ ὑπάρξει. τὸ οὖν Α ὥσπερ ἔν κεῖται, δύο προτάσεις συλληφθεῖσαι. ὁμοίως δὲ καὶ ἐπὶ τῶν στερητικῶν ἔχει· οὐ γὰρ ἔστιν ἐξ ἀληθῶν δεῖξαι ψεῦδος.

Ἐκ ψευδῶν δ' ἀληθές ἔστι συλλογίσασθαι καὶ ἀμφοτέρων τῶν προτάσεων ψευδῶν οὐσῶν καὶ τῆς μιᾶς, ταύτης δ' οὐχ ὁποτέρας ἔτυχεν ἀλλὰ τῆς δευτέρας, ἐάνπερ ὅλην λαμβάνῃ ψευδεῖ· μὴ ὅλης δὲ λαμβανομένης ἔστιν ὁποτερασοῦν. ἔστω γὰρ τὸ Α ὅλω τῷ Γ ὑπάρχον, τῷ δὲ Β μηδενί, μηδὲ τὸ Β τῷ Γ. ἐνδέχεται δὲ τοῦτο, οἷον λίθω οὐδενὶ ζῶον, οὐδὲ λίθος οὐδενὶ ἀνθρώπῳ. ἐὰν οὖν ληφθῇ τὸ Α παντὶ τῷ Β καὶ τὸ Β παντὶ τῷ Γ, τὸ Α παντὶ τῷ Γ ὑπάρξει, ὥστ' ἐξ ἀμφοῖν ψευδῶν ἀληθὲς τὸ συμπέρασμα· πᾶς γὰρ ἄνθρωπος ζῶον. ὡσαύτως δὲ καὶ τὸ στερητικόν. ἔστι γὰρ τῷ Γ μήτε τὸ Α

ὑπάρχειν μηδενὶ μήτε τὸ Β, τὸ μέντοι Α τῷ Β παντί, οἷον ἐάν τῶν αὐτῶν ὄρων ληφθέντων μέσον τεθῇ ὁ ἄνθρωπος· λίθω γὰρ οὔτε ζῶον οὔτε ἄνθρωπος οὐδενὶ ὑπάρχει, ἀνθρώπῳ δὲ παντὶ ζῶον. ὥστ' ἐάν ὦ μὲν ὑπάρχει, λάβῃ μηδενὶ ὑπάρχειν, ὦ δὲ μὴ ὑπάρχει, παντὶ ὑπάρχειν, ἐκ ψευδῶν ἀμφοῖν ἀληθὲς ἔσται τὸ [54a] συμπέρασμα. ὁμοίως δὲ δειχθήσεται καὶ ἐάν ἐπὶ τι ψευδὴς ἐκάτερα ληφθῇ. Ἐάν δ' ἡ ἑτέρα τεθῇ ψευδής, τῆς μὲν πρώτης ὅλης ψευδοῦς οὔσης, οἷον τῆς Α Β, οὐκ ἔσται τὸ συμπέρασμα ἀληθές, τῆς δὲ Β Γ ἔσται. λέγω δ' ὅλην ψευδῇ τὴν ἐναντίαν, οἷον εἰ μηδενὶ ὑπάρχον παντὶ εἴληπται ἢ εἰ παντὶ μηδενὶ ὑπάρχειν. ἔστω γὰρ τὸ Α τῷ Β μηδενὶ ὑπάρχον, τὸ δὲ Β τῷ Γ παντί. ἂν δὲ τὴν μὲν Β Γ πρότασιν λάβω ἀληθῆ, τὴν δὲ τὸ Α Β ψευδῇ ὅλην, καὶ παντὶ ὑπάρχειν τῷ Β τὸ Α, ἀδύνατον τὸ συμπέρασμα ἀληθὲς εἶναι· οὐδενὶ γὰρ ὑπῆρχε τῶν Γ, εἴπερ ὦ τὸ Β, μηδενὶ τὸ Α, τὸ δὲ Β παντὶ τῷ Γ. ὁμοίως δ' οὐδ' εἰ τὸ Α τῷ Β παντὶ ὑπάρχει καὶ τὸ Β τῷ Γ, ἐλήφθη δ' ἡ μὲν τὸ Β Γ ἀληθὴς πρότασις, ἡ δὲ τὸ Α Β ψευδὴς ὅλη, καὶ μηδενὶ ὦ τὸ Β, τὸ Α — τὸ συμπέρασμα ψεῦδος ἔσται· παντὶ γὰρ ὑπάρξει τῷ Γ τὸ Α, εἴπερ ὦ τὸ Β, παντὶ τὸ Α, τὸ δὲ Β παντὶ τῷ Γ. φανερόν οὖν ὅτι τῆς πρώτης ὅλης λαμβανομένης ψευδοῦς, ἐάν τε καταφατικῆς ἐάν τε στερητικῆς, τῆς δ' ἑτέρας ἀληθοῦς, οὐ γίνεται ἀληθὲς τὸ συμπέρασμα.

Μὴ ὅλης δὲ λαμβανομένης ψευδοῦς ἔσται. εἰ γὰρ τὸ Α τῷ μὲν Γ παντὶ ὑπάρχει τῷ δὲ Β τινί, τὸ δὲ Β παντὶ τῷ Γ, οἷον ζῶον κύκνῳ μὲν παντὶ λευκῷ δὲ τινί, τὸ δὲ λευκὸν παντὶ κύκνῳ, ἐάν ληφθῇ τὸ Α παντὶ τῷ Β καὶ τὸ Β παντὶ τῷ Γ, τὸ Α παντὶ τῷ Γ ὑπάρξει ἀληθῶς· πᾶς γὰρ κύκνος ζῶον. ὁμοίως δὲ καὶ εἰ στερητικὸν εἴη τὸ Α Β· ἐγχωρεῖ γὰρ τὸ Α τῷ μὲν Β τινὶ ὑπάρχειν τῷ δὲ Γ μηδενί, τὸ δὲ Β παντὶ τῷ Γ, οἷον ζῶον τινὶ λευκῷ χιονί δ' οὐδεμιᾷ, λευκὸν δὲ πάσῃ χιονί. εἰ οὖν ληφθῇ τὸ μὲν Α μηδενὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ, τὸ Α οὐδενὶ τῷ Γ ὑπάρξει. Ἐάν δ' ἡ μὲν Α Β πρότασις ὅλη ληφθῇ (28) ἀληθής, ἡ δὲ Β Γ ὅλη ψευδής, ἔσται συλλογισμὸς ἀληθής· οὐδὲν γὰρ κωλύει τὸ Α τῷ Β καὶ τῷ Γ παντὶ ὑπάρχειν, τὸ μέντοι Β μηδενὶ τῷ Γ, οἷον ὅσα τοῦ αὐτοῦ γένους εἶδη μὴ ὑπ' ἄλληλα· τὸ γὰρ ζῶον καὶ ἵππῳ καὶ ἀνθρώπῳ ὑπάρχει, ἵππος δ' οὐδενὶ ἀνθρώπῳ. ἐάν οὖν ληφθῇ τὸ Α παντὶ τῷ Β καὶ τὸ Β παντὶ τῷ Γ, ἀληθὲς ἔσται τὸ συμπέρασμα, ψευδοῦς ὅλης οὔσης τῆς Β Γ προτάσεως. ὁμοίως δὲ καὶ στερητικῆς οὔσης τῆς Α Β προτάσεως. ἐνδέχεται γὰρ τὸ Α μήτε τῷ Β μήτε τῷ Γ μηδενὶ ὑπάρχειν, μηδὲ τὸ Β μηδενὶ τῷ Γ, οἷον τοῖς ἐξ ἄλλου γένους εἶδεσι τὸ γένος· τὸ γὰρ ζῶον οὔτε μουσικῇ οὔτ' ἰατρικῇ ὑπάρχει, οὐδ' [54b] ἡ μουσικὴ ἰατρικῇ. ληφθέντος οὖν τοῦ μὲν Α μηδενὶ τῷ Β, τοῦ δὲ Β παντὶ τῷ Γ, ἀληθὲς ἔσται τὸ συμπέρασμα. καὶ εἰ μὴ ὅλη ψευδὴς ἢ Β Γ ἀλλ' ἐπὶ τι, καὶ οὕτως ἔσται τὸ συμπέρασμα ἀληθές. οὐδὲν γὰρ κωλύει τὸ Α καὶ τῷ Β καὶ τῷ Γ ὅλῳ ὑπάρχειν, τὸ μέντοι Β τινὶ τῷ Γ, οἷον τὸ γένος

τῷ εἶδει καὶ τῇ διαφορᾷ· τὸ γὰρ ζῶον παντὶ ἀνθρώπῳ καὶ παντὶ πεζῷ, ὃ δ' ἀνθρωπος τινὶ πεζῷ καὶ οὐ παντί. εἰ οὖν τὸ Α παντὶ τῷ Β καὶ τὸ Β παντὶ τῷ Γ ληφθείη, τὸ Α παντὶ τῷ Γ ὑπάρξει· ὅπερ ἦν ἀληθές. ὁμοίως δὲ καὶ στερητικῆς οὔσης τῆς Α Β προτάσεως. ἐνδέχεται γὰρ τὸ Α μήτε τῷ Β μήτε τῷ Γ μηδενὶ ὑπάρχειν, τὸ μέντοι Β τινὶ τῷ Γ, οἷον τὸ γένος τῷ ἐξ ἄλλου γένους εἶδει καὶ διαφορᾷ· τὸ γὰρ ζῶον οὔτε φρονήσει οὐδεμιᾷ ὑπάρχει οὔτε θεωρητικῇ, ἡ δὲ φρόνησις τινὶ θεωρητικῇ. εἰ οὖν ληφθείη τὸ μὲν Α μηδενὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ, οὐδενὶ τῷ Γ τὸ Α ὑπάρξει· τοῦτο δ' ἦν ἀληθές.

Ἐπὶ δὲ τῶν ἐν μέρει συλλογισμῶν ἐνδέχεται καὶ τῆς πρώτης προτάσεως ὅλης οὔσης ψευδοῦς τῆς δ' ἐτέρας ἀληθοῦς ἀληθὲς εἶναι τὸ συμπέρασμα, καὶ ἐπὶ τι ψευδοῦς οὔσης τῆς πρώτης τῆς δ' ἐτέρας ἀληθοῦς, καὶ τῆς μὲν ἀληθοῦς τῆς δ' ἐν μέρει ψευδοῦς, καὶ ἀμφοτέρων ψευδῶν. οὐδὲν γὰρ κωλύει τὸ Α τῷ μὲν Β μηδενὶ ὑπάρχειν τῷ δὲ Γ τινί, καὶ τὸ Β τῷ Γ τινί, οἷον ζῶον οὐδεμιᾷ χιόνι λευκῷ δὲ τινὶ ὑπάρχει, καὶ ἡ χιών λευκῷ τινί. εἰ οὖν μέσον τεθείη ἡ χιών, πρῶτον δὲ τὸ ζῶον, καὶ ληφθείη τὸ μὲν Α ὅλῳ τῷ Β ὑπάρχειν, τὸ δὲ Β τινὶ τῷ Γ, ἡ μὲν Α Β ὅλη ψευδής, ἡ δὲ Β Γ ἀληθής, καὶ τὸ συμπέρασμα ἀληθές. ὁμοίως δὲ καὶ στερητικῆς οὔσης τῆς Α Β προτάσεως· ἐγχωρεῖ γὰρ τὸ Α τῷ μὲν Β ὅλῳ ὑπάρχειν τῷ δὲ Γ τινὶ μὴ ὑπάρχειν, τὸ μέντοι Β τινὶ τῷ Γ ὑπάρχειν, οἷον τὸ ζῶον ἀνθρώπῳ μὲν παντὶ ὑπάρχει, λευκῷ δὲ τινὶ οὐχ ἔπεται, ὃ δ' ἀνθρωπος τινὶ λευκῷ ὑπάρχει, ὥστ' εἰ μέσου τεθέντος τοῦ ἀνθρώπου ληφθείη τὸ Α μηδενὶ τῷ Β ὑπάρχειν, τὸ δὲ Β τινὶ τῷ Γ ὑπάρχειν, ἀληθὲς ἔσται τὸ συμπέρασμα ψευδοῦς οὔσης ὅλης τῆς Α Β προτάσεως. καὶ εἰ ἐπὶ τι ψευδῆς ἡ Α Β πρότασις, ἔσται τὸ συμπέρασμα ἀληθές. οὐδὲν γὰρ κωλύει τὸ Α καὶ τῷ Β καὶ τῷ Γ τινὶ ὑπάρχειν, καὶ τὸ Β τῷ Γ τινὶ ὑπάρχειν, οἷον τὸ ζῶον τινὶ καλῷ καὶ τινὶ μεγάλῳ, καὶ τὸ καλὸν τινὶ μεγάλῳ ὑπάρχειν. ἐὰν οὖν ληφθῇ τὸ Α παντὶ τῷ Β καὶ τὸ Β τινὶ τῷ Γ, [55a] ἡ μὲν Α Β πρότασις ἐπὶ τι ψευδῆς ἔσται, ἡ δὲ Β Γ ἀληθής, καὶ τὸ συμπέρασμα ἀληθές. ὁμοίως δὲ καὶ στερητικῆς οὔσης τῆς Α Β προτάσεως· οἱ γὰρ αὐτοὶ ὅροι ἔσονται καὶ ὡσαύτως κείμενοι πρὸς τὴν ἀπόδειξιν.

Πάλιν εἰ ἡ μὲν Α Β ἀληθὲς ἡ δὲ Β Γ ψευδής, ἀληθὲς ἔσται τὸ συμπέρασμα. οὐδὲν γὰρ κωλύει τὸ Α τῷ μὲν Β ὅλῳ ὑπάρχειν τῷ δὲ Γ τινί, καὶ τὸ Β τῷ Γ μηδενὶ ὑπάρχειν, οἷον ζῶον κύκνῳ μὲν παντὶ μέλανι δὲ τινί, κύκνος δὲ οὐδενὶ μέλανι. ὥστ' εἰ ληφθείη παντὶ τῷ Β τὸ Α καὶ τὸ Β τινὶ τῷ Γ, ἀληθὲς ἔσται τὸ συμπέρασμα ψευδοῦς ὄντος τοῦ Β Γ. ὁμοίως δὲ καὶ στερητικῆς λαμβανομένης τῆς Α Β προτάσεως. ἐγχωρεῖ γὰρ τὸ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ τινὶ μὴ ὑπάρχειν, τὸ μέντοι Β μηδενὶ τῷ Γ, οἷον τὸ γένος τῷ ἐξ ἄλλου γένους εἶδει καὶ τῷ συμβεβηκότι τοῖς αὐτοῦ εἶδεσι· τὸ γὰρ ζῶον ἀριθμῷ μὲν οὐδενὶ

ὑπάρχει λευκῷ δὲ τινί, ὁ δ' ἀριθμὸς οὐδενὶ λευκῷ· ἐὰν οὖν μέσον τεθῇ ὁ ἀριθμὸς, καὶ ληφθῇ τὸ μὲν Α μηδενὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ, τὸ Α τινὶ τῷ Γ οὐχ ὑπάρξει, ὅπερ ἦν ἀληθές· καὶ ἡ μὲν Α Β πρότασις ἀληθής, ἡ δὲ Β Γ ψευδής. καὶ εἰ ἐπὶ τι ψευδὴς ἡ Α Β, ψευδὴς δὲ καὶ ἡ Β Γ, ἔσται τὸ συμπέρασμα ἀληθές. οὐδὲν γὰρ κωλύει τὸ Α τῷ Β τινὶ καὶ τῷ Γ τινὶ ὑπάρχειν ἑκατέρω, τὸ δὲ Β μηδενὶ τῷ Γ, οἷον εἰ ἐναντίον τὸ Β τῷ Γ, ἄμφω δὲ συμβεβηκότα τῷ αὐτῷ γένει· τὸ γὰρ ζῶον τινὶ λευκῷ καὶ τινὶ μέλανι ὑπάρχει, λευκὸν δ' οὐδενὶ μέλανι. ἐὰν οὖν ληφθῇ τὸ Α παντὶ τῷ Β καὶ τὸ Β τινὶ τῷ Γ, ἀληθές ἔσται τὸ συμπέρασμα. καὶ στερητικῆς δὲ λαμβανομένης τῆς Α Β ὡσαύτως· οἱ γὰρ αὐτοὶ ὅροι καὶ ὡσαύτως τεθήσονται πρὸς τὴν ἀπόδειξιν. καὶ ἀμφοτέρων δὲ ψευδῶν οὐσῶν ἔσται τὸ συμπέρασμα ἀληθές· ἐγχωρεῖ γὰρ τὸ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ τινὶ ὑπάρχειν, τὸ μὲντοι Β μηδενὶ τῷ Γ, οἷον τὸ γένος τῷ ἐξ ἄλλου γένους εἶδει καὶ τῷ συμβεβηκότι τοῖς εἶδεσι τοῖς αὐτοῦ· ζῶον γὰρ ἀριθμῷ μὲν οὐδενὶ λευκῷ δὲ τινὶ ὑπάρχει, καὶ ὁ ἀριθμὸς οὐδενὶ λευκῷ. ἐὰν οὖν ληφθῇ τὸ Α παντὶ τῷ Β καὶ τὸ Β τινὶ τῷ Γ, τὸ μὲν συμπέρασμα ἀληθές, αἱ δὲ προτάσεις ἄμφω ψευδεῖς. ὁμοίως δὲ καὶ στερητικῆς οὔσης τῆς Α Β. οὐδὲν γὰρ κωλύει τὸ Α τῷ μὲν Β ὅλῳ ὑπάρχειν τῷ δὲ Γ τινὶ μὴ ὑπάρχειν, μηδὲ τὸ Β μηδενὶ τῷ Γ, οἷον ζῶον κύκνῳ μὲν παντὶ μέλανι δὲ τινὶ οὐχ ὑπάρχει, κύκνος δ' οὐδενὶ μέλανι. ὥστ' εἰ ληφθῇ τὸ Α μηδενὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ, τὸ Α τινὶ [55b] τῷ Γ οὐχ ὑπάρξει. τὸ μὲν οὖν συμπέρασμα ἀληθές, αἱ δὲ προτάσεις ψευδεῖς.

### Κεφάλαιο 3

Ἐν δὲ τῷ μέσῳ σχήματι πάντως ἐγχωρεῖ διὰ ψευδῶν ἀληθὲς συλλογίσασθαι, καὶ ἀμφοτέρων τῶν προτάσεων ὅλων ψευδῶν λαμβανομένων καὶ ἐπὶ τι ἑκατέρας, καὶ τῆς μὲν ἀληθοῦς τῆς δὲ ψευδοῦς οὔσης [ὅλης] ὅποτερασοῦν ψευδοῦς τιθεμένης, [καὶ εἰ ἀμφοτέραι ἐπὶ τι ψευδεῖς, καὶ εἰ ἡ μὲν ἀπλῶς ἀληθὴς ἡ δ' ἐπὶ τι ψευδής, καὶ εἰ ἡ μὲν ὅλη ψευδὴς ἡ δ' ἐπὶ τι ἀληθής,] καὶ ἐν τοῖς καθόλου καὶ ἐπὶ τῶν ἐν μέρει συλλογισμῶν. εἰ γὰρ τὸ Α τῷ μὲν Β μηδενὶ ὑπάρχει τῷ δὲ Γ παντί, οἷον ζῶον λίθῳ μὲν οὐδενὶ ἵππῳ δὲ παντί, ἐὰν ἐναντίως τεθῶσιν αἱ προτάσεις καὶ ληφθῇ τὸ Α τῷ μὲν Β παντὶ τῷ δὲ Γ μηδενί, ἐκ ψευδῶν ὅλων τῶν προτάσεων ἀληθὲς ἔσται τὸ συμπέρασμα. ὁμοίως δὲ καὶ εἰ τῷ μὲν Β παντὶ τῷ δὲ Γ μηδενὶ ὑπάρχει τὸ Α· ὁ γὰρ αὐτὸς ἔσται συλλογισμὸς.

Πάλιν εἰ ἡ μὲν ἑτέρα ὅλη ψευδὴς ἡ δ' ἑτέρα ὅλη ἀληθής· οὐδὲν γὰρ κωλύει τὸ Α καὶ τῷ Β καὶ τῷ Γ παντὶ ὑπάρχειν, τὸ μὲντοι Β μηδενὶ τῷ Γ, οἷον τὸ γένος τοῖς μὴ ὑπ' ἄλληλα εἶδεσιν. τὸ γὰρ ζῶον καὶ ἵππῳ παντὶ καὶ



άνθρώπῳ, καὶ οὐδεὶς ἄνθρωπος ἵππος. ἐὰν οὖν ληφθῇ τῷ μὲν παντὶ τῷ δὲ μηδενὶ ὑπάρχειν, ἢ μὲν ὅλη ψευδὴς ἔσται ἢ δ' ὅλη ἀληθής, καὶ τὸ συμπέρασμα ἀληθὲς πρὸς ὁποτέρω οὖν τεθέντος τοῦ στερητικοῦ. καὶ εἰ ἢ ἑτέρα ἐπὶ τι ψευδής, ἢ δ' ἑτέρα ὅλη ἀληθής. ἐγχωρεῖ γὰρ τὸ Α τῷ μὲν Β τινὶ ὑπάρχειν τῷ δὲ Γ παντί, τὸ μέντοι Β μηδενὶ τῷ Γ, οἷον ζῶον λευκῷ μὲν τινὶ κόρακι δὲ παντί, καὶ τὸ λευκὸν οὐδενὶ κόρακι. ἐὰν οὖν ληφθῇ τὸ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ ὅλῳ ὑπάρχειν, ἢ μὲν Α Β πρότασις ἐπὶ τι ψευδής, ἢ δ' Α Γ ὅλη ἀληθής, καὶ τὸ συμπέρασμα ἀληθές. καὶ μετατιθεμένου δὲ τοῦ στερητικοῦ ὡσαύτως· διὰ γὰρ τῶν αὐτῶν ὅρων ἢ ἀπόδειξις. καὶ εἰ ἢ καταφατικὴ πρότασις ἐπὶ τι ψευδής, ἢ δὲ στερητικὴ ὅλη ἀληθής. οὐδὲν γὰρ κωλύει τὸ Α τῷ μὲν Β τινὶ ὑπάρχειν τῷ δὲ Γ ὅλῳ μὴ ὑπάρχειν, καὶ τὸ Β μηδενὶ τῷ Γ, οἷον τὸ ζῶον λευκῷ μὲν τινὶ πίττῃ δ' οὐδεμιᾷ, καὶ τὸ λευκὸν οὐδεμιᾷ πίττῃ. ὥστ' ἐὰν ληφθῇ τὸ Α ὅλῳ τῷ Β ὑπάρχειν τῷ δὲ Γ μηδενί, ἢ μὲν Α Β ἐπὶ τι ψευδής, ἢ δ' Α Γ ὅλη ἀληθής, καὶ τὸ συμπέρασμα ἀληθές. καὶ εἰ ἀμφοτέραι αἱ προτάσεις ἐπὶ τι ψευδεῖς, ἔσται τὸ συμπέρασμα ἀληθές. ἐγχωρεῖ γὰρ τὸ Α καὶ τῷ Β καὶ τῷ Γ τινὶ ὑπάρχειν, τὸ δὲ Β μηδενὶ τῷ Γ, οἷον ζῶον καὶ [56a] λευκῷ τινὶ καὶ μέλανι τινί, τὸ δὲ λευκὸν οὐδενὶ μέλανι. ἐὰν οὖν ληφθῇ τὸ Α τῷ μὲν Β παντὶ τῷ δὲ Γ μηδενί, ἄμφω μὲν αἱ προτάσεις ἐπὶ τι ψευδεῖς, τὸ δὲ συμπέρασμα ἀληθές. ὁμοίως δὲ καὶ μετατεθείσης τῆς στερητικῆς διὰ τῶν αὐτῶν ὅρων. Φανερόν δὲ καὶ ἐπὶ τῶν ἐν μέρει συλλογισμῶν· οὐδὲν γὰρ κωλύει τὸ Α τῷ μὲν Β παντὶ τῷ δὲ Γ τινὶ ὑπάρχειν, καὶ τὸ Β τῷ Γ τινὶ μὴ ὑπάρχειν, οἷον ζῶον παντὶ ἀνθρώπῳ λευκῷ δὲ τινί, ἄνθρωπος δὲ τινὶ λευκῷ οὐχ ὑπάρξει. ἐὰν οὖν τεθῇ τὸ Α τῷ μὲν Β μηδενὶ ὑπάρχειν τῷ δὲ Γ τινὶ ὑπάρχειν, ἢ μὲν καθόλου πρότασις ὅλη ψευδής, ἢ δ' ἐν μέρει ἀληθής, καὶ τὸ συμπέρασμα ἀληθές. ὡσαύτως δὲ καὶ καταφατικῆς λαμβανομένης τῆς Α Β· ἐγχωρεῖ γὰρ τὸ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ τινὶ μὴ ὑπάρχειν, καὶ τὸ Β τῷ Γ τινὶ μὴ ὑπάρχειν, οἷον τὸ ζῶον οὐδενὶ ἀψύχῳ, λευκῷ δὲ τινί, καὶ τὸ ἄψυχον οὐχ ὑπάρξει τινὶ λευκῷ. ἐὰν οὖν τεθῇ τὸ Α τῷ μὲν Β παντὶ τῷ δὲ Γ τινὶ μὴ ὑπάρχειν, ἢ μὲν Α Β πρότασις, ἢ καθόλου, ὅλη ψευδής, ἢ δὲ Α Γ ἀληθής, καὶ τὸ συμπέρασμα ἀληθές. καὶ τῆς μὲν καθόλου ἀληθοῦς τεθείσης, τῆς δ' ἐν μέρει ψευδοῦς. οὐδὲν γὰρ κωλύει τὸ Α μήτε τῷ Β μήτε τῷ Γ μηδενὶ ἔπεσθαι, τὸ μέντοι Β τινὶ τῷ Γ μὴ ὑπάρχειν, οἷον ζῶον οὐδενὶ ἀριθμῷ οὐδ' ἀψύχῳ, καὶ ὁ ἀριθμὸς τινὶ ἀψύχῳ οὐχ ἔπεται. ἐὰν οὖν τεθῇ τὸ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ τινί, τὸ μὲν συμπέρασμα ἔσται ἀληθές καὶ ἢ καθόλου πρότασις, ἢ δ' ἐν μέρει ψευδής. καὶ καταφατικῆς δὲ τῆς καθόλου τιθεμένης ὡσαύτως. ἐγχωρεῖ γὰρ τὸ Α καὶ τῷ Β καὶ τῷ Γ ὅλῳ ὑπάρχειν, τὸ μέντοι Β τινὶ τῷ Γ μὴ ἔπεσθαι, οἷον τὸ γένος τῷ εἴδει καὶ τῇ διαφορᾷ· τὸ γὰρ ζῶον παντὶ ἀνθρώπῳ καὶ ὅλῳ πεζῷ ἔπεται, ἄνθρωπος δ' οὐ

παντὶ πεζῷ. ὥστ' ἂν ληφθῇ τὸ Α τῷ μὲν Β ὅλῳ ὑπάρχειν, τῷ δὲ Γ τινὶ μὴ ὑπάρχειν, ἢ μὲν καθόλου πρότασις ἀληθής, ἢ δ' ἐν μέρει ψευδής, τὸ δὲ συμπέρασμα ἀληθές.

Φανερόν δὲ καὶ ὅτι ἐξ ἀμφοτέρων ψευδῶν ἔσται τὸ συμπέρασμα ἀληθές, εἴπερ ἐνδέχεται τὸ Α καὶ τῷ Β καὶ τῷ Γ ὅλῳ ὑπάρχειν, τὸ μέντοι Β τινὶ τῷ Γ μὴ ἔπεσθαι. ληφθέντος γὰρ τοῦ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ τινὶ ὑπάρχειν, αἱ μὲν προτάσεις ἀμφοτέραι ψευδεῖς, τὸ δὲ συμπέρασμα ἀληθές. ὁμοίως δὲ καὶ κατηγορικῆς οὔσης τῆς καθόλου προτάσεως, τῆς δ' ἐν μέρει στερητικῆς. ἐγχωρεῖ γὰρ τὸ Α τῷ μὲν Β μηδενὶ τῷ δὲ Γ παντὶ ἔπεσθαι, καὶ τὸ Β τινὶ τῷ Γ μὴ ὑπάρχειν, οἷον ζῶον ἐπιστήμη μὲν οὐδεμιᾷ ἀνθρώπῳ δὲ παντὶ ἔπεται, ἢ δ' ἐπιστήμη οὐ παντὶ ἀνθρώπῳ. [56b] ἐὰν οὖν ληφθῇ τὸ Α τῷ μὲν Β ὅλῳ ὑπάρχειν, τῷ δὲ Γ τινὶ μὴ ἔπεσθαι, αἱ μὲν προτάσεις ψευδεῖς, τὸ δὲ συμπέρασμα ἀληθές.

## Κεφάλαιο 4

Ἔσται δὲ καὶ ἐν τῷ ἐσχάτῳ σχήματι διὰ ψευδῶν ἀληθές, καὶ ἀμφοτέρων ψευδῶν οὐσῶν ὅλων καὶ ἐπὶ τι ἑκατέρας, καὶ τῆς μὲν ἑτέρας ἀληθοῦς ὅλης τῆς δ' ἑτέρας ψευδοῦς, καὶ τῆς μὲν ἐπὶ τι ψευδοῦς τῆς δ' ὅλης ἀληθοῦς, καὶ ἀνάπαλιν, καὶ ὁσαυχῶς ἄλλως ἐγχωρεῖ μεταλαβεῖν τὰς προτάσεις. οὐδὲν γὰρ κωλύει μήτε τὸ Α μήτε τὸ Β μηδενὶ τῷ Γ ὑπάρχειν, τὸ μέντοι Α τινὶ τῷ Β ὑπάρχειν, οἷον οὗτ' ἄνθρωπος οὔτε πεζὸν οὐδενὶ ἀψύχῳ ἔπεται, ἄνθρωπος μέντοι τινὶ πεζῷ ὑπάρχει. ἐὰν οὖν ληφθῇ τὸ Α καὶ τὸ Β παντὶ τῷ Γ ὑπάρχειν, αἱ μὲν προτάσεις ὅλαι ψευδεῖς, τὸ δὲ συμπέρασμα ἀληθές. ὡσαύτως δὲ καὶ τῆς μὲν στερητικῆς τῆς δὲ καταφατικῆς οὔσης. ἐγχωρεῖ γὰρ τὸ μὲν Β μηδενὶ τῷ Γ ὑπάρχειν, τὸ δὲ Α παντί, καὶ τὸ Α τινὶ τῷ Β μὴ ὑπάρχειν, οἷον τὸ μέλαν οὐδενὶ κύκνῳ, ζῶον δὲ παντί, καὶ τὸ ζῶον οὐ παντὶ μέλανι. ὥστ' ἂν ληφθῇ τὸ μὲν Β παντὶ τῷ Γ, τὸ δὲ Α μηδενί, τὸ Α τινὶ τῷ Β οὐχ ὑπάρξει· καὶ τὸ μὲν συμπέρασμα ἀληθές, αἱ δὲ προτάσεις ψευδεῖς. καὶ εἰ ἐπὶ τι ἑκατέρα ψευδής, ἔσται τὸ συμπέρασμα ἀληθές. οὐδὲν γὰρ κωλύει καὶ τὸ Α καὶ τὸ Β τινὶ τῷ Γ ὑπάρχειν, καὶ τὸ Α τινὶ τῷ Β, οἷον τὸ λευκὸν καὶ τὸ καλὸν τινὶ ζῳῷ ὑπάρχει, καὶ τὸ λευκὸν τινὶ καλῷ. ἐὰν οὖν τεθῇ τὸ Α καὶ τὸ Β παντὶ τῷ Γ ὑπάρχειν, αἱ μὲν προτάσεις ἐπὶ τι ψευδεῖς, τὸ δὲ συμπέρασμα ἀληθές. καὶ στερητικῆς δὲ τῆς Α Γ τιθεμένης ὁμοίως. οὐδὲν γὰρ κωλύει τὸ μὲν Α τινὶ τῷ Γ μὴ ὑπάρχειν, τὸ δὲ Β τινὶ ὑπάρχειν, καὶ τὸ Α τῷ Β μὴ παντὶ ὑπάρχειν, οἷον τὸ λευκὸν τινὶ ζῳῷ οὐχ ὑπάρχει, τὸ δὲ καλὸν τινὶ ὑπάρχει, καὶ τὸ λευκὸν οὐ παντὶ καλῷ. ὥστ' ἂν ληφθῇ τὸ μὲν Α μηδενὶ τῷ Γ, τὸ δὲ Β παντί, ἀμφοτέραι μὲν αἱ προτάσεις ἐπὶ τι ψευδεῖς, τὸ δὲ συμπέρασμα ἀληθές.

Ὡσαύτως δὲ καὶ τῆς μὲν ὅλης ψευδοῦς τῆς δ' ὅλης (33) ἀληθοῦς λαμβανομένης. ἐγχωρεῖ γὰρ καὶ τὸ Α καὶ τὸ Β παντὶ τῷ Γ ἔπεσθαι, τὸ μέντοι Α τινὶ τῷ Β μὴ ὑπάρχειν, οἷον ζῶον καὶ λευκὸν παντὶ κύκνῳ ἔπεται, τὸ μέντοι ζῶον οὐ παντὶ ὑπάρχει λευκῷ. τεθέντων οὖν ὅρων τοιούτων, ἐὰν ληφθῇ τὸ μὲν Β ὅλῳ τῷ Γ ὑπάρχειν, τὸ δὲ Α ὅλῳ μὴ ὑπάρχειν, ἢ μὲν Β Γ ὅλη ἔσται ἀληθής, ἢ δὲ Α Γ ὅλη ψευδής, καὶ τὸ συμπέρασμα ἀληθές. ὁμοίως δὲ καὶ εἰ τὸ μὲν Β Γ ψεῦδος, τὸ δὲ Α Γ ἀληθές· οἱ γὰρ αὐτοὶ ὅροι πρὸς τὴν ἀπό[57a] δεῖξιν [μέλαν — κύκνος — ἄψυχον]. ἀλλὰ καὶ εἰ ἀμφοτέραι λαμβάνονται καταφατικά. οὐδὲν γὰρ κωλύει τὸ μὲν Β παντὶ τῷ Γ ἔπεσθαι, τὸ δὲ Α ὅλῳ μὴ ὑπάρχειν, καὶ τὸ Α τινὶ τῷ Β ὑπάρχειν, οἷον κύκνῳ παντὶ ζῶον, μέλαν δ' οὐδενὶ κύκνῳ, καὶ τὸ μέλαν ὑπάρχει τινὶ ζῶῳ. ὥστ' ἂν ληφθῇ τὸ Α καὶ τὸ Β παντὶ τῷ Γ ὑπάρχειν, ἢ μὲν Β Γ ὅλη ἀληθής, ἢ δὲ Α Γ ὅλη ψευδής, καὶ τὸ συμπέρασμα ἀληθές. ὁμοίως δὲ καὶ τῆς Α Γ ληφθείσης ἀληθοῦς· διὰ γὰρ τῶν αὐτῶν ὅρων ἡ ἀπόδειξις.

Πάλιν τῆς μὲν ὅλης ἀλη(9)θοῦς οὔσης, τῆς δ' ἐπὶ τι ψευδοῦς. ἐγχωρεῖ γὰρ τὸ μὲν Β παντὶ τῷ Γ ὑπάρχειν, τὸ δὲ Α τινί, καὶ τὸ Α τινὶ τῷ Β, οἷον δίπουν μὲν παντὶ ἀνθρώπῳ, καλὸν δ' οὐ παντί, καὶ τὸ καλὸν τινὶ δίποδι ὑπάρχει. ἐὰν οὖν ληφθῇ καὶ τὸ Α καὶ τὸ Β ὅλῳ τῷ Γ ὑπάρχειν, ἢ μὲν Β Γ ὅλη ἀληθής, ἢ δὲ Α Γ ἐπὶ τι ψευδής, τὸ δὲ συμπέρασμα ἀληθές. ὁμοίως δὲ καὶ τῆς μὲν Α Γ ἀληθοῦς τῆς δὲ Β Γ ἐπὶ τι ψευδοῦς λαμβανομένης· μετατεθέντων γὰρ τῶν αὐτῶν ὅρων ἔσται ἡ ἀπόδειξις. καὶ τῆς μὲν στερητικῆς τῆς δὲ καταφατικῆς οὔσης. ἐπεὶ γὰρ ἐγχωρεῖ τὸ μὲν Β ὅλῳ τῷ Γ ὑπάρχειν, τὸ δὲ Α τινί, καὶ ὅταν οὕτως ἔχωσιν, οὐ παντὶ τῷ Β τὸ Α, ἐὰν οὖν ληφθῇ τὸ μὲν Β ὅλῳ τῷ Γ ὑπάρχειν, τὸ δὲ Α μηδενί, ἢ μὲν στερητικὴ ἐπὶ τι ψευδής, ἢ δ' ἑτέρα ὅλη ἀληθής καὶ τὸ συμπέρασμα. πάλιν ἐπεὶ δέδεικται ὅτι τοῦ μὲν Α μηδενὶ ὑπάρχοντος τῷ Γ, τοῦ δὲ Β τινί, ἐγχωρεῖ τὸ Α τινὶ τῷ Β μὴ ὑπάρχειν, φανερόν ὅτι καὶ τῆς μὲν Α Γ ὅλης ἀληθοῦς οὔσης, τῆς δὲ Β Γ ἐπὶ τι ψευδοῦς, ἐγχωρεῖ τὸ συμπέρασμα εἶναι ἀληθές. ἐὰν γὰρ ληφθῇ τὸ μὲν Α μηδενὶ τῷ Γ, τὸ δὲ Β παντί, ἢ μὲν Α Γ ὅλη ἀληθής, ἢ δὲ Β Γ ἐπὶ τι ψευδής.

Φανερόν δὲ καὶ ἐπὶ τῶν ἐν μέρει συλλογισμῶν ὅτι πάντως ἔσται διὰ ψευδῶν ἀληθές. οἱ γὰρ αὐτοὶ ὅροι ληπτέοι καὶ ὅταν καθόλου ὦσιν αἱ προτάσεις, οἱ μὲν ἐν τοῖς κατηγορικοῖς κατηγορικοί, οἱ δ' ἐν τοῖς στερητικοῖς στερητικοί. οὐδὲν γὰρ διαφέρει μηδενὶ ὑπάρχοντος παντὶ λαβεῖν ὑπάρχειν, καὶ τινὶ ὑπάρχοντος καθόλου λαβεῖν ὑπάρχειν, πρὸς τὴν τῶν ὅρων ἔκθεσιν· ὁμοίως δὲ καὶ ἐπὶ τῶν στερητικῶν.

Φανερόν οὖν ὅτι ἂν μὲν ᾗ τὸ συμπέρασμα ψεῦδος, ἀνάγκη, ἐξ ὧν ὁ λόγος,

ψευδῆ εἶναι ἢ πάντα ἢ ἕνια, ὅταν δ' ἀληθές, οὐκ ἀνάγκη ἀληθές εἶναι οὔτε τὶ οὔτε πάντα, ἀλλ' ἔστι μηδενὸς ὄντος ἀληθοῦς τῶν ἐν τῷ συλλογισμῷ τὸ συμπέρασμα ὁμοίως εἶναι ἀληθές· οὐ μὴν ἐξ ἀνάγκης. αἴτιον δ' [57b] ὅτι ὅταν δύο ἔχη οὕτω πρὸς ἀλλήλα ὥστε θατέρου ὄντος ἐξ ἀνάγκης εἶναι θάτερον, τούτου μὴ ὄντος μὲν οὐδὲ θάτερον ἔσται, ὄντος δ' οὐκ ἀνάγκη εἶναι θάτερον· τοῦ δ' αὐτοῦ ὄντος καὶ μὴ ὄντος ἀδύνατον ἐξ ἀνάγκης εἶναι τὸ αὐτό· λέγω δ' οἷον τοῦ A ὄντος λευκοῦ τὸ B εἶναι μέγα ἐξ ἀνάγκης, καὶ μὴ ὄντος λευκοῦ τοῦ A τὸ B εἶναι μέγα ἐξ ἀνάγκης. ὅταν γὰρ τουδὶ ὄντος λευκοῦ, τοῦ A, τοδὶ ἀνάγκη μέγα εἶναι, τὸ B, μεγάλου δὲ τοῦ B ὄντος τὸ Γ μὴ λευκόν, ἀνάγκη, εἰ τὸ A λευκόν, τὸ Γ μὴ εἶναι λευκόν. καὶ ὅταν δύο ὄντων θατέρου ὄντος ἀνάγκη θάτερον εἶναι, τούτου μὴ ὄντος ἀνάγκη τὸ πρῶτον μὴ εἶναι. τοῦ δὲ B μὴ ὄντος μεγάλου τὸ A οὐχ οἷον τε λευκὸν εἶναι. τοῦ δὲ A μὴ ὄντος λευκοῦ εἰ ἀνάγκη τὸ B μέγα εἶναι, συμβαίνει ἐξ ἀνάγκης τοῦ B μεγάλου μὴ ὄντος αὐτὸ τὸ B εἶναι μέγα· τοῦτο δ' ἀδύνατον. εἰ γὰρ τὸ B μὴ ἔστι μέγα, τὸ A οὐκ ἔσται λευκὸν ἐξ ἀνάγκης. εἰ οὖν μὴ ὄντος τούτου λευκοῦ τὸ B ἔσται μέγα, συμβαίνει, εἰ τὸ B μὴ ἔστι μέγα, εἶναι μέγα, ὡς διὰ τριῶν.

## Κεφάλαιο 5

Τὸ δὲ κύκλω καὶ ἐξ ἀλλήλων δείκνυσθαι ἔστι τὸ διὰ τοῦ συμπεράσματος καὶ τοῦ ἀνάπαλιν τῇ κατηγορίᾳ τὴν ἑτέραν λαβόντα πρότασιν συμπεράνασθαι τὴν λοιπὴν, ἣν ἐλάμβανεν ἐν θατέρῳ συλλογισμῷ. οἷον εἰ ἔδει δεῖξαι ὅτι τὸ A τῷ Γ παντὶ ὑπάρχει, ἔδειξε δὲ διὰ τοῦ B, πάλιν εἰ δεικνύοι ὅτι τὸ A τῷ B ὑπάρχει, λαβὼν τὸ μὲν A τῷ Γ ὑπάρχειν τὸ δὲ Γ τῷ B [καὶ τὸ A τῷ B]· πρότερον δ' ἀνάπαλιν ἔλαβε τὸ B τῷ Γ ὑπάρχον. ἢ εἰ [ὅτι] τὸ B τῷ Γ δεῖ δεῖξαι ὑπάρχον, εἰ λάβοι τὸ A κατὰ τοῦ Γ, ὃ ἦν συμπέρασμα, τὸ δὲ B κατὰ τοῦ A ὑπάρχειν· πρότερον δ' ἐλήφθη ἀνάπαλιν τὸ A κατὰ τοῦ B. ἄλλως δ' οὐκ ἔστιν ἐξ ἀλλήλων δεῖξαι. εἴτε γὰρ ἄλλο μέσον λήψεται, οὐ κύκλω· οὐδὲν γὰρ λαμβάνεται τῶν αὐτῶν· εἴτε τούτων τι, ἀνάγκη θάτερον μόνον· εἰ γὰρ ἄμφω, ταῦτόν ἐσται συμπέρασμα, δεῖ δ' ἕτερον.

Ἐν μὲν οὖν τοῖς μὴ ἀντιστρέφουσιν ἐξ ἀναποδείκτου τῆς ἑτέρας προτάσεως γίνεται ὁ συλλογισμός· οὐ γὰρ ἔστιν ἀποδείξαι διὰ τούτων τῶν ὅρων ὅτι τῷ μέσῳ τὸ τρίτον ὑπάρχει ἢ τῷ πρώτῳ τὸ μέσον. ἐν δὲ τοῖς ἀντιστρέφουσιν ἔστι πάντα δεικνύναι δι' ἀλλήλων, οἷον εἰ τὸ A καὶ τὸ B καὶ τὸ Γ ἀντιστρέφουσιν ἀλλήλοις. δεδείχθω γὰρ τὸ A Γ διὰ μέσου τοῦ B, καὶ πάλιν τὸ A B διὰ τε τοῦ συμπεράσματος καὶ διὰ τῆς B Γ προτάσεως ἀντιστραφείσης, ὡσαύτως δὲ καὶ τὸ B Γ διὰ τε τοῦ συμπεράσματος καὶ τῆς A B [58a] προτάσεως ἀντεστραμμένης. δεῖ δὲ τὴν τε Γ B καὶ τὴν B A πρότασιν

ἀποδείξαι· ταύταις γὰρ ἀναποδείκτοις κεκρήμεθα μόναις. ἔαν οὖν ληφθῇ τὸ Β παντὶ τῷ Γ ὑπάρχειν καὶ τὸ Γ παντὶ τῷ Α, συλλογισμὸς ἔσται τοῦ Β πρὸς τὸ Α. πάλιν ἔαν ληφθῇ τὸ μὲν Γ παντὶ τῷ Α, τὸ δὲ Α παντὶ τῷ Β, παντὶ τῷ Β τὸ Γ ἀνάγκη ὑπάρχειν. Ἐν ἀμφοτέροις δὴ τούτοις τοῖς συλλογισμοῖς ἢ Γ Α πρότασις εἴληπται ἀναπόδεικτος· αἱ γὰρ ἕτεραι δεδειγμέναι ἦσαν. ὥστ' ἂν ταύτην ἀποδείξωμεν, ἅπασαι ἔσσονται δεδειγμέναι δι' ἀλλήλων. ἔαν οὖν ληφθῇ τὸ Γ παντὶ τῷ Β καὶ τὸ Β παντὶ τῷ Α ὑπάρχειν, ἀμφοτέραι τε αἱ προτάσεις ἀποδεδειγμέναι λαμβάνονται, καὶ τὸ Γ τῷ Α ἀνάγκη ὑπάρχειν. φανερόν οὖν ὅτι ἐν μόνοις τοῖς ἀντιστρέφουσι κύκλῳ καὶ δι' ἀλλήλων ἐνδέχεται γίνεσθαι τὰς ἀποδείξεις, ἐν δὲ τοῖς ἄλλοις ὡς πρότερον εἵπομεν. συμβαίνει δὲ καὶ ἐν τούτοις αὐτῷ τῷ δεικνυμένῳ χρῆσθαι πρὸς τὴν ἀπόδειξιν· τὸ μὲν γὰρ Γ κατὰ τοῦ Β καὶ τὸ Β κατὰ τοῦ Α δεικνύται ληφθέντος τοῦ Γ κατὰ τοῦ Α λέγεσθαι, τὸ δὲ Γ κατὰ τοῦ Α διὰ τούτων δεικνύται τῶν προτάσεων, ὥστε τῷ συμπεράσματι χρώμεθα πρὸς τὴν ἀπόδειξιν.

Ἐπὶ δὲ τῶν στερητικῶν συλλογισμῶν ὥδε δεικνύται ἐξ ἀλλήλων. ἔστω τὸ μὲν Β παντὶ τῷ Γ ὑπάρχειν, τὸ δὲ Α οὐδενὶ τῷ Β· συμπέρασμα ὅτι τὸ Α οὐδενὶ τῷ Γ. εἰ δὴ πάλιν δεῖ συμπεράνασθαι ὅτι τὸ Α οὐδενὶ τῷ Β, ὃ πάλαι ἔλαβεν, ἔστω τὸ μὲν Α μηδενὶ τῷ Γ, τὸ δὲ Γ παντὶ τῷ Β· οὕτω γὰρ ἀνάπαλιν ἢ πρότασις. εἰ δ' ὅτι τὸ Β τῷ Γ δεῖ συμπεράνασθαι, οὐκέθ' ὁμοίως ἀντιστρεπτέον τὸ Α Β (ἢ γὰρ αὐτὴ πρότασις, τὸ Β μηδενὶ τῷ Α καὶ τὸ Α μηδενὶ τῷ Β ὑπάρχειν), ἀλλὰ ληπτέον, ὥ τὸ Α μηδενὶ ὑπάρχει, τὸ Β παντὶ ὑπάρχειν. ἔστω τὸ Α μηδενὶ τῷ Γ ὑπάρχειν, ὅπερ ἦν τὸ συμπέρασμα· ὥ δὲ τὸ Α μηδενί, τὸ Β εἰλήφθω παντὶ ὑπάρχειν· ἀνάγκη οὖν τὸ Β παντὶ τῷ Γ ὑπάρχειν. ὥστε τριῶν ὄντων ἕκαστον συμπέρασμα γέγονε, καὶ τὸ κύκλῳ ἀποδεικνύναι τοῦτ' ἔστι, τὸ τὸ συμπέρασμα λαμβάνοντα καὶ ἀνάπαλιν τὴν ἑτέραν πρότασιν τὴν λοιπὴν συλλογίζεσθαι.

Ἐπὶ δὲ τῶν ἐν μέρει συλλογισμῶν τὴν μὲν καθόλου πρότασιν οὐκ ἔστιν ἀποδείξαι διὰ τῶν ἑτέρων, τὴν δὲ κατὰ μέρος ἔστιν. ὅτι μὲν οὖν οὐκ ἔστιν ἀποδείξαι τὴν καθόλου, φανερόν· τὸ μὲν γὰρ καθόλου δεικνύται διὰ τῶν καθόλου, τὸ δὲ συμπέρασμα οὐκ ἔστι καθόλου, δεῖ δ' ἐκ τοῦ συμπεράσματος δεῖξαι καὶ τῆς ἑτέρας προτάσεως. ἔτι ὅλως οὐδὲ γίνεται [58b] συλλογισμὸς ἀντιστραφείσης τῆς προτάσεως· ἐν μέρει γὰρ ἀμφοτέραι γίνονται αἱ προτάσεις. τὴν δ' ἐπὶ μέρους ἔστιν. δεδείχθω γὰρ τὸ Α κατὰ τινὸς τοῦ Γ διὰ τοῦ Β. ἔαν οὖν ληφθῇ τὸ Β παντὶ τῷ Α καὶ τὸ συμπέρασμα μένη, τὸ Β τινὶ τῷ Γ ὑπάρξει· γίνεται γὰρ τὸ πρῶτον σχῆμα, καὶ τὸ Α μέσον. εἰ δὲ στερητικὸς ὁ συλλογισμὸς, τὴν μὲν καθόλου πρότασιν οὐκ ἔστι δεῖξαι, δι' ὃ καὶ πρότερον ἐλέχθη· τὴν δ' ἐν μέρει ἔστιν, ἔαν ὁμοίως ἀντιστραφῇ τὸ Α Β ὥσπερ κάπὶ

τῶν καθόλου, [οὐκ ἔστι, διὰ προσλήψεως δ' ἔστιν,] οἷον ὥ τὸ Α τινὶ μὴ ὑπάρχει, τὸ Β τινὶ ὑπάρχειν· ἄλλως γὰρ οὐ γίνεται συλλογισμὸς διὰ τὸ ἀποφατικὴν εἶναι τὴν ἐν μέρει πρότασιν.

## Κεφάλαιο 6

Ἐν δὲ τῷ δευτέρῳ σχήματι τὸ μὲν καταφατικὸν οὐκ ἔστι δεῖξαι διὰ τούτου τοῦ τρόπου, τὸ δὲ στερητικὸν ἔστιν. τὸ μὲν οὖν κατηγορικὸν οὐ δείκνυται διὰ τὸ μὴ ἀμφοτέρας εἶναι τὰς προτάσεις καταφατικές· τὸ γὰρ συμπέρασμα στερητικὸν ἔστι, τὸ δὲ κατηγορικὸν ἐξ ἀμφοτέρων ἐδείκνυτο καταφατικῶν. τὸ δὲ στερητικὸν ὥδε δείκνυται. ὑπαρχέτω τὸ Α παντὶ τῷ Β, τῷ δὲ Γ μηδενί· συμπέρασμα τὸ Β οὐδενὶ τῷ Γ. ἐὰν οὖν ληφθῇ τὸ Β παντὶ τῷ Α ὑπάρχον, [τῷ δὲ Γ μηδενί,] ἀνάγκη τὸ Α μηδενὶ τῷ Γ ὑπάρχειν· γίνεται γὰρ τὸ δεύτερον σχῆμα· μέσον τὸ Β. εἰ δὲ τὸ Α Β στερητικὸν ἐλήφθη, θάτερον δὲ κατηγορικόν, τὸ πρῶτον ἔσται σχῆμα. τὸ μὲν γὰρ Γ παντὶ τῷ Α, τὸ δὲ Β οὐδενὶ τῷ Γ, ὥστ' οὐδενὶ τῷ Α τὸ Β· οὐδ' ἄρα τὸ Α τῷ Β. διὰ μὲν οὖν τοῦ συμπεράσματος καὶ τῆς μιᾶς προτάσεως οὐ γίνεται συλλογισμὸς, προσληφθείσης δ' ἑτέρας ἔσται. εἰ δὲ μὴ καθόλου ὁ συλλογισμὸς, ἡ μὲν ἐν ὅλῳ πρότασις οὐ δείκνυται διὰ τὴν αὐτὴν αἰτίαν ἥνπερ εἵπομεν καὶ πρότερον, ἡ δ' ἐν μέρει δείκνυται, ὅταν ἡ τὸ καθόλου κατηγορικόν· ὑπαρχέτω γὰρ τὸ Α παντὶ τῷ Β, τῷ δὲ Γ μὴ παντί· συμπέρασμα Β Γ. ἐὰν οὖν ληφθῇ τὸ Β παντὶ τῷ Α, τῷ δὲ Γ οὐ παντί, τὸ Α τινὶ τῷ Γ οὐχ ὑπάρξει· μέσον Β. εἰ δ' ἔστιν ἡ καθόλου στερητική, οὐ δειχθήσεται ἡ Α Γ πρότασις ἀντιστραφέντος τοῦ Α Β· συμβαίνει γὰρ ἡ ἀμφοτέρας ἢ τὴν ἑτέραν πρότασιν γίνεσθαι ἀποφατικὴν, ὥστ' οὐκ ἔσται συλλογισμὸς. ἀλλ' ὁμοίως δειχθήσεται ὡς καὶ ἐπὶ τῶν καθόλου, ἐὰν ληφθῇ, ὥ τὸ Β τινὶ μὴ ὑπάρχει, τὸ Α τινὶ ὑπάρχειν.

## Κεφάλαιο 7

Ἐπὶ δὲ τοῦ τρίτου σχήματος ὅταν μὲν ἀμφότεραι αἱ προτάσεις καθόλου ληφθῶσιν, οὐκ ἐνδέχεται δεῖξαι δι' ἀλλήλων· τὸ μὲν γὰρ καθόλου δείκνυται διὰ τῶν καθόλου, τὸ [59a] δ' ἐν τούτῳ συμπέρασμα αἰετὶ κατὰ μέρος, ὥστε φανερόν ὅτι ὅλως οὐκ ἐνδέχεται δεῖξαι διὰ τούτου τοῦ σχήματος τὴν καθόλου πρότασιν. Ἐὰν δ' ἡ μὲν ἢ καθόλου ἢ δ' ἐν μέρει, (3) ποτὲ μὲν ἔσται ποτὲ δ' οὐκ ἔσται. ὅταν μὲν οὖν ἀμφότεραι κατηγορικαὶ ληφθῶσι καὶ τὸ καθόλου γένηται πρὸς τῷ ἐλάττονι ἄκρῳ, ἔσται, ὅταν δὲ πρὸς θατέρῳ, οὐκ ἔσται. ὑπαρχέτω γὰρ τὸ Α παντὶ τῷ Γ, τὸ δὲ Β τινί· συμπέρασμα τὸ Α Β. ἐὰν οὖν ληφθῇ τὸ Γ παντὶ τῷ Α ὑπάρχειν, τὸ μὲν Γ δέδεικται τινὶ τῷ Β ὑπάρχον, τὸ δὲ Β τινὶ τῷ Γ οὐ δέδεικται. καίτοι ἀνάγκη, εἰ τὸ Γ τινὶ τῷ Β, καὶ τὸ Β τινὶ τῷ Γ

ὑπάρχειν. ἀλλ' οὐ ταῦτόν ἐστι τόδε τῷδε καὶ τόδε τῷδε ὑπάρχειν· ἀλλὰ προσληπτέον, εἰ τόδε τινὲς τῷδε, καὶ θάτερον τινὲς τῷδε. τούτου δὲ ληφθέντος οὐκέτι γίνεται ἐκ τοῦ συμπεράσματος καὶ τῆς ἐτέρας προτάσεως ὁ συλλογισμός. εἰ δὲ τὸ Β παντὶ τῷ Γ, τὸ δὲ Α τινὲς τῷ Γ, ἔσται δεῖξαι τὸ Α Γ, ὅταν ληφθῇ τὸ μὲν Γ παντὶ τῷ Β ὑπάρχειν, τὸ δὲ Α τινί. εἰ γὰρ τὸ Γ παντὶ τῷ Β, τὸ δὲ Α τινὲς τῷ Β, ἀνάγκη τὸ Α τινὲς τῷ Γ ὑπάρχειν· μέσον τὸ Β. καὶ ὅταν ἢ ἡ μὲν κατηγορική ἢ δὲ στερητική, καθόλου δ' ἢ κατηγορική, δειχθήσεται ἡ ἐτέρα. ὑπαρχέτω γὰρ τὸ Β παντὶ τῷ Γ, τὸ δὲ Α τινὲς μὴ ὑπαρχέτω· συμπέρασμα ὅτι τὸ Α τινὲς τῷ Β οὐχ ὑπάρχει. ἐὰν οὖν προσληφθῇ τὸ Γ παντὶ τῷ Β ὑπάρχειν, ἀνάγκη τὸ Α τινὲς τῷ Γ μὴ ὑπάρχειν· μέσον τὸ Β. ὅταν δ' ἢ στερητική καθόλου γένηται, οὐ δείκνυται ἡ ἐτέρα, εἰ μὴ ὥσπερ ἐπὶ τῶν πρότερον, ἐὰν ληφθῇ, ὥ τοῦτο τινὲς μὴ ὑπάρχει, θάτερον τινὲς ὑπάρχειν, οἷον εἰ τὸ μὲν Α μηδενὶ τῷ Γ, τὸ δὲ Β τινί· συμπέρασμα ὅτι τὸ Α τινὲς τῷ Β οὐχ ὑπάρχει. ἐὰν οὖν ληφθῇ, ὥ τὸ Α τινὲς μὴ ὑπάρχει, τὸ Γ τινὲς ὑπάρχειν, ἀνάγκη τὸ Γ τινὲς τῷ Β ὑπάρχειν. ἄλλως δ' οὐκ ἔστιν ἀντιστρέφοντα τὴν καθόλου πρότασιν δεῖξαι τὴν ἐτέραν· οὐδαμῶς γὰρ ἔσται συλλογισμός.

[Φανερόν οὖν ὅτι ἐν μὲν τῷ πρώτῳ σχήματι ἢ δι' ἀλλήλων δεῖξις διὰ τε τοῦ τρίτου καὶ διὰ τοῦ πρώτου γίνεται σχήματος. κατηγορικοῦ μὲν γὰρ ὄντος τοῦ συμπεράσματος διὰ τοῦ πρώτου, στερητικοῦ δὲ διὰ τοῦ ἐσχάτου· λαμβάνεται γὰρ, ὥ τοῦτο μηδενί, θάτερον παντὶ ὑπάρχειν. ἐν δὲ τῷ μέσῳ καθόλου μὲν ὄντος τοῦ συλλογισμοῦ δι' αὐτοῦ τε καὶ διὰ τοῦ πρώτου σχήματος, ὅταν δ' ἐν μέρει, δι' αὐτοῦ τε καὶ τοῦ ἐσχάτου. ἐν δὲ τῷ τρίτῳ δι' αὐτοῦ πάντες. φανερόν δὲ καὶ ὅτι ἐν τῷ τρίτῳ καὶ τῷ μέσῳ οἱ μὴ δι' αὐτῶν γινόμενοι συλλογισμοὶ ἢ οὐκ εἰσὶ κατὰ τὴν κύκλῳ δεῖξιν ἢ ἀτελεῖς.] [59b]

## Κεφάλαιο 8

Τὸ δ' ἀντιστρέφειν ἐστὶ τὸ μετατιθέντα τὸ συμπέρασμα ποιεῖν τὸν συλλογισμόν ὅτι ἢ τὸ ἄκρον τῷ μέσῳ οὐχ ὑπάρξει ἢ τοῦτο τῷ τελευταίῳ. ἀνάγκη γὰρ τοῦ συμπεράσματος ἀντιστραφέντος καὶ τῆς ἐτέρας μενούσης προτάσεως ἀναιρεῖσθαι τὴν λοιπὴν· εἰ γὰρ ἔσται, καὶ τὸ συμπέρασμα ἔσται. διαφέρει δὲ τὸ ἀντικειμένως ἢ ἐναντίως ἀντιστρέφειν τὸ συμπέρασμα· οὐ γὰρ ὁ αὐτὸς γίνεται συλλογισμὸς ἐκατέρως ἀντιστραφέντος· δῆλον δὲ τοῦτ' ἔσται διὰ τῶν ἐπομένων. λέγω δ' ἀντικεῖσθαι μὲν τὸ παντὶ τῷ οὐ παντὶ καὶ τὸ τινὲς τῷ οὐδενί, ἐναντίως δὲ τὸ παντὶ τῷ οὐδενί καὶ τὸ τινὲς τῷ οὐ τινὲς ὑπάρχειν. ἔστω γὰρ δεδειγμένον τὸ Α κατὰ τοῦ Γ διὰ μέσου τοῦ Β. εἰ δὴ τὸ Α ληφθεῖν μηδενὶ τῷ Γ ὑπάρχειν, τῷ δὲ Β παντί, οὐδενὶ τῷ Γ ὑπάρξει τὸ Β. καὶ εἰ τὸ μὲν Α μηδενὶ τῷ Γ, τὸ δὲ Β παντὶ τῷ Γ, τὸ Α οὐ παντὶ τῷ Β καὶ οὐχ ἀπλῶς

οὐδενί· οὐ γὰρ ἐδείκνυτο τὸ καθόλου διὰ τοῦ ἐσχάτου σχήματος. ὅλως δὲ τὴν πρὸς τῷ μείζονι ἄκρῳ πρότασιν οὐκ ἔστιν ἀνασκευάσαι καθόλου διὰ τῆς ἀντιστροφῆς· αἰεὶ γὰρ ἀναιρεῖται διὰ τοῦ τρίτου σχήματος· ἀνάγκη γὰρ πρὸς τὸ ἐσχάτον ἄκρον ἀμφοτέρας λαβεῖν τὰς προτάσεις. καὶ εἰ στερητικὸς ὁ συλλογισμὸς, ὡσαύτως. δεδείχθω γὰρ τὸ Α μηδενὶ τῷ Γ ὑπάρχον διὰ τοῦ Β. οὐκοῦν ἂν ληφθῇ τὸ Α τῷ Γ παντὶ ὑπάρχειν, τῷ δὲ Β μηδενί, οὐδενὶ τῷ Γ τὸ Β ὑπάρξει. καὶ εἰ τὸ Α καὶ τὸ Β παντὶ τῷ Γ, τὸ Α τινὶ τῷ Β· ἀλλ' οὐδενὶ ὑπῆρχεν.

Ἐὰν δ' ἀντικειμένως ἀντιστραφῇ τὸ συμπέρασμα, καὶ οἱ συλλογισμοὶ ἀντικείμενοι καὶ οὐ καθόλου ἔσσονται. γίνεται γὰρ ἢ ἑτέρα πρότασις ἐν μέρει, ὥστε καὶ τὸ συμπέρασμα ἔσται κατὰ μέρος. ἔστω γὰρ κατηγορικὸς ὁ συλλογισμὸς, καὶ ἀντιστρεφείτω οὕτως. οὐκοῦν εἰ τὸ Α οὐ παντὶ τῷ Γ, τῷ δὲ Β παντί, τὸ Β οὐ παντὶ τῷ Γ· καὶ εἰ τὸ μὲν Α μὴ παντὶ τῷ Γ, τὸ δὲ Β παντί, τὸ Α οὐ παντὶ τῷ Β. ὁμοίως δὲ καὶ εἰ στερητικὸς ὁ συλλογισμὸς. εἰ γὰρ τὸ Α τινὶ τῷ Γ ὑπάρχει, τῷ δὲ Β μηδενί, τὸ Β τινὶ τῷ Γ οὐχ ὑπάρξει, οὐχ ἀπλῶς οὐδενί· καὶ εἰ τὸ μὲν Α τῷ Γ τινί, τὸ δὲ Β παντί, ὥσπερ ἐν ἀρχῇ ἐλήφθη, τὸ Α τινὶ τῷ Β ὑπάρξει.

Ἐπὶ δὲ τῶν ἐν μέρει συλλογισμῶν ὅταν μὲν ἀντικειμένως ἀντιστρέφηται τὸ συμπέρασμα, ἀναιροῦνται ἀμφοτέραι αἱ προτάσεις, ὅταν δ' ἐναντίως, οὐδετέρα. οὐ γὰρ ἔτι συμβαίνει, καθάπερ ἐν τοῖς καθόλου, ἀναιρεῖν ἐλλείποντος τοῦ συμπεράσματος κατὰ τὴν ἀντιστροφήν, ἀλλ' οὐδ' ὅλως [60a] ἀναιρεῖν. δεδείχθω γὰρ τὸ Α κατὰ τινὸς τοῦ Γ. οὐκοῦν ἂν ληφθῇ τὸ Α μηδενὶ τῷ Γ ὑπάρχειν, τὸ δὲ Β τινί, τὸ Α τῷ Β τινὶ οὐχ ὑπάρξει· καὶ εἰ τὸ Α μηδενὶ τῷ Γ, τῷ δὲ Β παντί, οὐδενὶ τῷ Γ τὸ Β. ὥστ' ἀναιροῦνται ἀμφοτέραι. ἔὰν δ' ἐναντίως ἀντιστραφῇ, οὐδετέρα. εἰ γὰρ τὸ Α τινὶ τῷ Γ μὴ ὑπάρχει, τῷ δὲ Β παντί, τὸ Β τινὶ τῷ Γ οὐχ ὑπάρξει, ἀλλ' οὕτω ἀναιρεῖται τὸ ἐξ ἀρχῆς· ἐνδέχεται γὰρ τινὶ ὑπάρχειν καὶ τινὶ μὴ ὑπάρχειν. τῆς δὲ καθόλου, τῆς Α Β, ὅλως οὐδὲ γίνεται συλλογισμὸς· εἰ γὰρ τὸ μὲν Α τινὶ τῷ Γ μὴ ὑπάρχει, τὸ δὲ Β τινὶ ὑπάρχει, οὐδετέρα καθόλου τῶν προτάσεων. ὁμοίως δὲ καὶ εἰ στερητικὸς ὁ συλλογισμὸς· εἰ μὲν γὰρ ληφθῇ τὸ Α παντὶ τῷ Γ ὑπάρχειν, ἀναιροῦνται ἀμφοτέραι, εἰ δὲ τινί, οὐδετέρα. ἀπόδειξις δ' ἡ αὕτη.

## Κεφάλαιο 9

Ἐν δὲ τῷ δευτέρῳ σχήματι τὴν μὲν πρὸς τῷ μείζονι ἄκρῳ πρότασιν οὐκ ἔστιν ἀνελεῖν ἐναντίως, ὅποτερωσοῦν τῆς ἀντιστροφῆς γινομένης· αἰεὶ γὰρ ἔσται τὸ συμπέρασμα ἐν τῷ τρίτῳ σχήματι, καθόλου δ' οὐκ ἦν ἐν τούτῳ



συλλογισμός. τὴν δ' ἑτέραν ὁμοίως ἀναιρήσομεν τῇ ἀντιστροφῇ. λέγω δὲ τὸ ὁμοίως, εἰ μὲν ἐναντίως ἀντιστρέφεται, ἐναντίως, εἰ δ' ἀντικειμένως, ἀντικειμένως. ὑπαρχέτω γὰρ τὸ Α παντὶ τῷ Β, τῷ δὲ Γ μηδενί· συμπέρασμα Β Γ. ἔαν οὖν ληφθῇ τὸ Β παντὶ τῷ Γ ὑπάρχειν καὶ τὸ Α Β μένη, τὸ Α παντὶ τῷ Γ ὑπάρξει· γίνεται γὰρ τὸ πρῶτον σχῆμα. εἰ δὲ τὸ Β παντὶ τῷ Γ, τὸ δὲ Α μηδενὶ τῷ Γ, τὸ Α οὐ παντὶ τῷ Β· σχῆμα τὸ ἔσχατον. ἔαν δ' ἀντικειμένως ἀντιστραφῇ τὸ Β Γ, ἢ μὲν Α Β ὁμοίως δειχθήσεται, ἢ δὲ Α Γ ἀντικειμένως. εἰ γὰρ τὸ Β τινὶ τῷ Γ, τὸ δὲ Α μηδενὶ τῷ Γ, τὸ Α τινὶ τῷ Β οὐχ ὑπάρξει. πάλιν εἰ τὸ Β τινὶ τῷ Γ, τὸ δὲ Α παντὶ τῷ Β, τὸ Α τινὶ τῷ Γ, ὥστ' ἀντικείμενος γίνεται ὁ συλλογισμός. ὁμοίως δὲ δειχθήσεται καὶ εἰ ἀνάπαλιν ἔχοιεν αἱ προτάσεις. εἰ δ' ἐστὶν ἐπὶ μέρους ὁ συλλογισμός, ἐναντίως μὲν ἀντιστρεφόμενου τοῦ συμπεράσματος οὐδετέρα τῶν προτάσεων ἀναιρεῖται, καθάπερ οὐδ' ἐν τῷ πρώτῳ σχήματι, ἀντικειμένως δ' ἀμφοτέραι. κείσθω γὰρ τὸ Α τῷ μὲν Β μηδενὶ ὑπάρχειν, τῷ δὲ Γ τινί· συμπέρασμα Β Γ. ἔαν οὖν τεθῇ τὸ Β τινὶ τῷ Γ ὑπάρχειν καὶ τὸ Α Β μένη, συμπέρασμα ἔσται ὅτι τὸ Α τινὶ τῷ Γ οὐχ ὑπάρχει, ἀλλ' οὐκ ἀνήρηται τὸ ἐξ ἀρχῆς· ἐνδέχεται γὰρ τινὶ ὑπάρχειν καὶ μὴ ὑπάρχειν. πάλιν εἰ τὸ Β τινὶ τῷ Γ καὶ τὸ Α τινὶ τῷ Γ, οὐκ ἔσται συλλογισμός· οὐδέτερον γὰρ καθόλου τῶν εἰλημμένων. [60b] ὥστ' οὐκ ἀναιρεῖται τὸ Α Β. ἔαν δ' ἀντικειμένως ἀντιστρέφηται, ἀναιροῦνται ἀμφοτέραι. εἰ γὰρ τὸ Β παντὶ τῷ Γ, τὸ δὲ Α μηδενὶ τῷ Β, οὐδενὶ τῷ Γ τὸ Α· ἦν δὲ τινί. πάλιν εἰ τὸ Β παντὶ τῷ Γ, τὸ δὲ Α τινὶ τῷ Γ, τινὶ τῷ Β τὸ Α. ἢ αὐτὴ δ' ἀπόδειξις καὶ εἰ τὸ καθόλου κατηγορικόν.

## Κεφάλαιο 10

Ἐπὶ δὲ τοῦ τρίτου σχήματος ὅταν μὲν ἐναντίως ἀντιστρέφηται τὸ συμπέρασμα, οὐδετέρα τῶν προτάσεων ἀναιρεῖται κατ' οὐδένα τῶν συλλογισμῶν, ὅταν δ' ἀντικειμένως, ἀμφοτέραι καὶ ἐν ἅπασιν. δεδείχθω γὰρ τὸ Α τινὶ τῷ Β ὑπάρχον, μέσον δ' εἰλήφθω τὸ Γ, ἔστωσαν δὲ καθόλου αἱ προτάσεις. οὐκοῦν ἔαν ληφθῇ τὸ Α τινὶ τῷ Β μὴ ὑπάρχειν, τὸ δὲ Β παντὶ τῷ Γ, οὐ γίνεται συλλογισμὸς τοῦ Α καὶ τοῦ Γ. οὐδ' εἰ τὸ Α τῷ μὲν Β τινὶ μὴ ὑπάρχει, τῷ δὲ Γ παντί, οὐκ ἔσται τοῦ Β καὶ τοῦ Γ συλλογισμός. ὁμοίως δὲ δειχθήσεται καὶ εἰ μὴ καθόλου αἱ προτάσεις. ἢ γὰρ ἀμφοτέρας ἀνάγκη κατὰ μέρος εἶναι διὰ τῆς ἀντιστροφῆς, ἢ τὸ καθόλου πρὸς τῷ ἐλάττονι ἄκρῳ γίνεσθαι· οὕτω δ' οὐκ ἦν συλλογισμὸς οὐτ' ἐν τῷ πρώτῳ σχήματι οὐτ' ἐν τῷ μέσῳ. ἔαν δ' ἀντικειμένως ἀντιστρέφηται, αἱ προτάσεις ἀναιροῦνται ἀμφοτέραι. εἰ γὰρ τὸ Α μηδενὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ, τὸ Α οὐδενὶ τῷ Γ· πάλιν εἰ τὸ Α τῷ μὲν Β μηδενί, τῷ δὲ Γ παντί, τὸ Β οὐδενὶ τῷ Γ. καὶ εἰ ἡ ἑτέρα μὴ καθόλου, ὡσαύτως. εἰ γὰρ τὸ Α μηδενὶ τῷ Β, τὸ δὲ Β τινὶ τῷ Γ, τὸ

Α τινὲ τῷ Γ οὐχ ὑπάρξει· εἰ δὲ τὸ Α τῷ μὲν Β μηδενί, τῷ δὲ Γ παντί, οὐδενὶ τῷ Γ τὸ Β.

Ὅμοίως δὲ καὶ εἰ στερητικὸς ὁ συλλογισμὸς. δεδείχθω γὰρ τὸ Α τινὲ τῷ Β μὴ ὑπάρχον, ἔστω δὲ κατηγορικὸν μὲν τὸ Β Γ, ἀποφατικὸν δὲ τὸ Α Γ· οὕτω γὰρ ἐγίνετο ὁ συλλογισμὸς. ὅταν μὲν οὖν τὸ ἐναντίον ληφθῇ τῷ συμπεράσματι, οὐκ ἔσται συλλογισμὸς. εἰ γὰρ τὸ Α τινὲ τῷ Β, τὸ δὲ Β παντὶ τῷ Γ, οὐκ ἦν συλλογισμὸς τοῦ Α καὶ τοῦ Γ. οὐδ' εἰ τὸ Α τινὲ τῷ Β, τῷ δὲ Γ μηδενί, οὐκ ἦν τοῦ Β καὶ τοῦ Γ συλλογισμὸς. ὥστε οὐκ ἀναιροῦνται αἱ προτάσεις. ὅταν δὲ τὸ ἀντικείμενον, ἀναιροῦνται. εἰ γὰρ τὸ Α παντὶ τῷ Β καὶ τὸ Β τῷ Γ, τὸ Α παντὶ τῷ Γ· ἀλλ' οὐδενὶ ὑπῆρχεν. πάλιν εἰ τὸ Α παντὶ τῷ Β, τῷ δὲ Γ μηδενί, τὸ Β οὐδενὶ τῷ Γ· ἀλλὰ παντὶ ὑπῆρχεν. ὁμοίως δὲ δείκνυται καὶ εἰ μὴ καθόλου εἰσὶν αἱ προτάσεις. γίνεται γὰρ τὸ Α Γ καθόλου τε καὶ στερητικόν, θάτερον δ' ἐπὶ μέρους καὶ κατηγορικόν. εἰ μὲν οὖν τὸ Α παντὶ τῷ Β, τὸ δὲ Β τινὲ τῷ Γ, τὸ Α τινὲ τῷ Γ συμβαίνει· ἀλλ' οὐδενὶ ὑπῆρχεν. πάλιν εἰ τὸ Α παντὶ τῷ Β, τῷ δὲ Γ [61a] μηδενί, τὸ Β οὐδενὶ τῷ Γ· ἔκειτο δὲ τινί. εἰ δὲ τὸ Α τινὲ τῷ Β καὶ τὸ Β τινὲ τῷ Γ, οὐ γίνεται συλλογισμὸς· οὐδ' εἰ τὸ Α τινὲ τῷ Β, τῷ δὲ Γ μηδενί, οὐδ' οὕτως. ὥστ' ἐκείνως μὲν ἀναιροῦνται, οὕτω δ' οὐκ ἀναιροῦνται αἱ προτάσεις.

## Κεφάλαιο 11

Τί μὲν οὖν ἐστὶ τὸ ἀντιστρέφειν καὶ πῶς ἐν ἐκάστῳ σχήματι καὶ τίς γίνεται συλλογισμός, φανερόν. ὁ δὲ διὰ τοῦ ἀδυνάτου συλλογισμὸς δείκνυται μὲν ὅταν ἡ ἀντίφασις τεθῇ τοῦ συμπεράσματος καὶ προσληφθῇ ἄλλη πρότασις, γίνεται δ' ἐν ἅπασιν τοῖς σχήμασιν· ὅμοιον γὰρ ἐστὶ τῇ ἀντιστροφῇ, πλὴν διαφέρει τοσοῦτον ὅτι ἀντιστρέφεται μὲν γεγεννημένου συλλογισμοῦ καὶ εἰλημμένων ἀμφοῖν τῶν προτάσεων, ἀπάγεται δ' εἰς ἀδύνατον οὐ προομολογηθέντος τοῦ ἀντικειμένου πρότερον, ἀλλὰ φανεροῦ ὄντος ὅτι ἀληθές. οἱ δ' ὅροι ὁμοίως ἔχουσιν ἐν ἀμφοῖν, καὶ ἡ αὐτὴ λήψις ἀμφοτέρων. οἷον εἰ τὸ Α τῷ Β παντὶ ὑπάρχει, μέσον δὲ τὸ Γ, ἐὰν ὑποτεθῇ τὸ Α ἢ μὴ παντὶ ἢ μηδενὶ τῷ Β ὑπάρχειν, τῷ δὲ Γ παντί, ὅπερ ἦν ἀληθές, ἀνάγκη τὸ Γ τῷ Β ἢ μηδενὶ ἢ μὴ παντὶ ὑπάρχειν. τοῦτο δ' ἀδύνατον, ὥστε ψεῦδος τὸ ὑποτεθέν· ἀληθές ἄρα τὸ ἀντικείμενον. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων σχημάτων· ὅσα γὰρ ἀντιστροφὴν δέχεται, καὶ τὸν διὰ τοῦ ἀδυνάτου συλλογισμόν.

Τὰ μὲν οὖν ἄλλα προβλήματα πάντα δείκνυται διὰ τοῦ ἀδυνάτου ἐν ἅπασιν τοῖς σχήμασι, τὸ δὲ καθόλου κατηγορικὸν ἐν μὲν τῷ μέσῳ καὶ τῷ τρίτῳ δείκνυται, ἐν δὲ τῷ πρώτῳ οὐ δείκνυται. ὑποκείσθω γὰρ τὸ Α τῷ Β μὴ παντὶ ἢ μηδενὶ ὑπάρχειν, καὶ προσειλήφθω ἄλλη πρότασις ὅποτερωθενοῦν, εἴτε τῷ Α παντὶ ὑπάρχειν τὸ Γ εἴτε τὸ Β παντὶ τῷ Δ· οὕτω γὰρ ἂν εἴη τὸ πρῶτον σχῆμα. εἰ μὲν οὖν ὑπόκειται μὴ παντὶ ὑπάρχειν τὸ Α τῷ Β, οὐ γίνεται [61b] συλλογισμὸς ὅποτερωθενοῦν τῆς προτάσεως λαμβανομένης, εἰ δὲ μηδενί, ὅταν μὲν ἡ Β Δ προσληφθῇ, συλλογισμὸς μὲν ἔσται τοῦ ψεύδους, οὐ δείκνυται δὲ τὸ προκείμενον. εἰ γὰρ τὸ Α μηδενὶ τῷ Β, τὸ δὲ Β παντὶ τῷ Δ, τὸ Α οὐδενὶ τῷ Δ. τοῦτο δ' ἔστω ἀδύνατον· ψεῦδος ἄρα τὸ μηδενὶ τῷ Β τὸ Α ὑπάρχειν. ἀλλ' οὐκ εἰ τὸ μηδενὶ ψεῦδος, τὸ παντὶ ἀληθές. ἐὰν δ' ἡ Γ Α προσληφθῇ, οὐ γίνεται συλλογισμὸς, οὐδ' ὅταν ὑποτεθῇ μὴ παντὶ τῷ Β τὸ Α ὑπάρχειν. ὥστε φανερόν ὅτι τὸ παντὶ ὑπάρχειν οὐ δείκνυται ἐν τῷ πρώτῳ σχήματι διὰ τοῦ ἀδυνάτου. Τὸ δὲ γε τινὶ καὶ τὸ μηδενὶ καὶ μὴ παντὶ δείκνυται. ὑποκείσθω γὰρ τὸ Α μηδενὶ τῷ Β ὑπάρχειν, τὸ δὲ Β εἰλήφθω παντὶ ἢ τινὶ τῷ Γ. οὐκοῦν ἀνάγκη τὸ Α μηδενὶ ἢ μὴ παντὶ τῷ Γ ὑπάρχειν. τοῦτο δ' ἀδύνατον — ἔστω γὰρ ἀληθές καὶ φανερόν ὅτι παντὶ ὑπάρχει τῷ Γ τὸ Α — ὥστ' εἰ τοῦτο ψεῦδος, ἀνάγκη τὸ Α τινὶ τῷ Β ὑπάρχειν. ἐὰν δὲ πρὸς τῷ Α ληφθῇ ἡ ἑτέρα πρότασις, οὐκ ἔσται συλλογισμὸς. οὐδ' ὅταν τὸ ἐναντίον τῷ συμπεράσματι ὑποτεθῇ, οἷον τὸ τινὶ μὴ ὑπάρχειν. φανερόν οὖν ὅτι τὸ ἀντικείμενον ὑποθετέον.

Πάλιν ὑποκείσθω τὸ Α τινὶ τῷ Β ὑπάρχειν, εἰλήφθω δὲ τὸ Γ παντὶ τῷ Α. ἀνάγκη οὖν τὸ Γ τινὶ τῷ Β ὑπάρχειν. τοῦτο δ' ἔστω ἀδύνατον, ὥστε ψεῦδος τὸ ὑποτεθέν. εἰ δ' οὕτως, ἀληθὲς τὸ μηδενὶ ὑπάρχειν. ὁμοίως δὲ καὶ εἰ στερητικὸν ἐλήφθη τὸ Γ Α. εἰ δ' ἢ πρὸς τῷ Β εἴληπται πρότασις, οὐκ ἔσται συλλογισμός. ἔαν δὲ τὸ ἐναντίον ὑποτεθῇ, συλλογισμὸς μὲν ἔσται καὶ τὸ ἀδύνατον, οὐ δεικνυται δὲ τὸ προτεθέν. ὑποκείσθω γὰρ παντὶ τῷ Β τὸ Α ὑπάρχειν, καὶ τὸ Γ τῷ Α εἰλήφθω παντί. οὐκοῦν ἀνάγκη τὸ Γ παντὶ τῷ Β ὑπάρχειν. τοῦτο δ' ἀδύνατον, ὥστε ψεῦδος τὸ παντὶ τῷ Β τὸ Α ὑπάρχειν. ἀλλ' οὕτω γε ἀναγκαῖον, εἰ μὴ παντί, μηδενὶ ὑπάρχειν. ὁμοίως δὲ καὶ εἰ πρὸς τῷ Β ληφθεῖη ἡ ἑτέρα πρότασις· συλλογισμὸς μὲν γὰρ ἔσται καὶ τὸ ἀδύνατον, οὐκ ἀναιρεῖται δ' ἡ ὑπόθεσις· ὥστε τὸ ἀντικείμενον ὑποθετέον.

Πρὸς δὲ τὸ μὴ παντὶ δεῖξαι ὑπάρχον τῷ Β τὸ Α, ὑποθετέον παντὶ ὑπάρχειν· εἰ γὰρ τὸ Α παντὶ τῷ Β καὶ τὸ Γ παντὶ τῷ Α, τὸ Γ παντὶ τῷ Β, ὥστ' εἰ τοῦτο ἀδύνατον, ψεῦδος τὸ ὑποτεθέν. ὁμοίως δὲ καὶ εἰ πρὸς τῷ Β ἐλήφθη ἡ ἑτέρα πρότασις. καὶ εἰ στερητικὸν ἦν τὸ Γ Α, ὡσαύτως· καὶ γὰρ οὕτω γίνεται συλλογισμός. ἔαν δὲ πρὸς τῷ Β ἢ τὸ στερητικόν, οὐδὲν δεικνυται. ἔαν δὲ μὴ παντὶ ἀλλὰ τινὶ ὑπάρχειν ὑποτεθῇ, οὐ δεικνυται ὅτι οὐ παντὶ ἀλλ' ὅτι οὐδενί. εἰ γὰρ τὸ Α τινὶ τῷ Β, τὸ δὲ Γ παντὶ τῷ Α, τινὶ [62a] τῷ Β τὸ Γ ὑπάρξει. εἰ οὖν τοῦτ' ἀδύνατον, ψεῦδος τὸ τινὶ ὑπάρχειν τῷ Β τὸ Α, ὥστ' ἀληθὲς τὸ μηδενί. τούτου δὲ δειχθέντος προσαναιρεῖται τὸ ἀληθές· τὸ γὰρ Α τῷ Β τινὶ μὲν ὑπῆρχε, τινὶ δ' οὐχ ὑπῆρχεν. ἔτι οὐδὲν παρὰ τὴν ὑπόθεσιν συμβαίνει [τὸ] ἀδύνατον· ψεῦδος γὰρ ἂν εἴη, εἴπερ ἐξ ἀληθῶν μὴ ἔστι ψεῦδος συλλογίσασθαι· νῦν δ' ἐστὶν ἀληθές· ὑπάρχει γὰρ τὸ Α τινὶ τῷ Β. ὥστ' οὐχ ὑποθετέον τινὶ ὑπάρχειν, ἀλλὰ παντί. ὁμοίως δὲ καὶ εἰ τινὶ μὴ ὑπάρχον τῷ Β τὸ Α δεικνύοιμεν· εἰ γὰρ ταῦτὸ τὸ τινὶ μὴ ὑπάρχειν καὶ μὴ παντὶ ὑπάρχειν, ἡ αὐτὴ ἀμφοῖν ἀπόδειξις.

Φανερόν οὖν ὅτι οὐ τὸ ἐναντίον ἀλλὰ τὸ ἀντικείμενον ὑποθετέον ἐν ἅπασιν τοῖς συλλογισμοῖς. οὕτω γὰρ τό τε ἀναγκαῖον ἔσται καὶ τὸ ἀξίωμα ἔνδοξον. εἰ γὰρ κατὰ παντὸς ἡ φάσις ἢ ἡ ἀπόφασις, δειχθέντος ὅτι οὐχ ἡ ἀπόφασις, ἀνάγκη τὴν κατάφασιν ἀληθεύεσθαι. πάλιν εἰ μὴ τίθησιν ἀληθεύεσθαι τὴν κατάφασιν, ἔνδοξον τὸ ἀξιῶσαι τὴν ἀπόφασιν. τὸ δ' ἐναντίον οὐδετέρως ἀρμόττει ἀξιοῦν· οὔτε γὰρ ἀναγκαῖον, εἰ τὸ μηδενὶ ψεῦδος, τὸ παντὶ ἀληθές, οὔτ' ἔνδοξον ὡς εἰ θάτερον ψεῦδος, ὅτι θάτερον ἀληθές.

## Κεφάλαιο 12

Φανερόν οὖν ὅτι ἐν τῷ πρώτῳ σχήματι τὰ μὲν ἄλλα προβλήματα πάντα

δείκνυται διὰ τοῦ ἀδυνάτου, τὸ δὲ καθόλου καταφατικὸν οὐ δείκνυται. ἐν δὲ τῷ μέσῳ καὶ τῷ ἐσχάτῳ καὶ τοῦτο δείκνυται. κείσθω γὰρ τὸ Α μὴ παντὶ τῷ Β ὑπάρχειν, εἰλήφθω δὲ τῷ Γ παντὶ ὑπάρχειν τὸ Α. οὐκοῦν εἰ τῷ μὲν Β μὴ παντί, τῷ δὲ Γ παντί, οὐ παντὶ τῷ Β τὸ Γ. τοῦτο δ' ἀδύνατον· ἔστω γὰρ φανερόν ὅτι παντὶ τῷ Β ὑπάρχει τὸ Γ, ὥστε ψεῦδος τὸ ὑποκείμενον. ἀληθὲς ἄρα τὸ παντὶ ὑπάρχειν. ἐὰν δὲ τὸ ἐναντίον ὑποτεθῇ, συλλογισμὸς μὲν ἔσται καὶ τὸ ὀδύνατον, οὐ μὴν δείκνυται τὸ προτεθέν. εἰ γὰρ τὸ Α μηδενὶ τῷ Β, τῷ δὲ Γ παντί, οὐδενὶ τῷ Β τὸ Γ. τοῦτο δ' ἀδύνατον, ὥστε ψεῦδος τὸ μηδενὶ ὑπάρχειν. ἀλλ' οὐκ εἰ τοῦτο ψεῦδος, τὸ παντὶ ἀληθές. ὅτι δὲ τινὶ τῷ Β ὑπάρχει τὸ Α, ὑποκείσθω τὸ Α μηδενὶ τῷ Β ὑπάρχειν, τῷ δὲ Γ παντὶ ὑπαρχέτω. ἀνάγκη οὖν τὸ Γ μηδενὶ τῷ Β. ὥστ' εἰ τοῦτ' ἀδύνατον, ἀνάγκη τὸ Α τινὶ τῷ Β ὑπάρχειν. ἐὰν δ' ὑποτεθῇ τινὶ μὴ ὑπάρχειν, ταῦτ' ἔσται ἄπερ ἐπὶ τοῦ πρώτου σχήματος. πάλιν ὑποκείσθω τὸ Α τινὶ τῷ Β ὑπάρχειν, τῷ δὲ Γ μηδενὶ ὑπαρχέτω. ἀνάγκη οὖν τὸ Γ τινὶ τῷ Β μὴ ὑπάρχειν. ἀλλὰ παντὶ ὑπῆρχεν, ὥστε ψεῦδος τὸ ὑποτεθέν· οὐδενὶ ἄρα τῷ Β τὸ Α ὑπάρξει. ὅτι δ' οὐ παντὶ τὸ Α τῷ Β, ὑποκείσθω παντὶ ὑπάρχειν, τῷ [62b] δὲ Γ μηδενί. ἀνάγκη οὖν τὸ Γ μηδενὶ τῷ Β ὑπάρχειν. τοῦτο δ' ἀδύνατον, ὥστ' ἀληθὲς τὸ μὴ παντὶ ὑπάρχειν. φανερόν οὖν ὅτι πάντες οἱ συλλογισμοὶ γίνονται διὰ τοῦ μέσου σχήματος.

### Κεφάλαιο 13

Ὅμοίως δὲ καὶ διὰ τοῦ ἐσχάτου. κείσθω γὰρ τὸ Α τινὶ τῷ Β μὴ ὑπάρχειν, τὸ δὲ Γ παντί· τὸ ἄρα Α τινὶ τῷ Γ οὐχ ὑπάρχει. εἰ οὖν τοῦτ' ἀδύνατον, ψεῦδος τὸ τινὶ μὴ ὑπάρχειν, ὥστ' ἀληθὲς τὸ παντί. ἐὰν δ' ὑποτεθῇ μηδενὶ ὑπάρχειν, συλλογισμὸς μὲν ἔσται καὶ τὸ ἀδύνατον, οὐ δείκνυται δὲ τὸ προτεθέν· ἐὰν γὰρ τὸ ἐναντίον ὑποτεθῇ, ταῦτ' ἔσται ἄπερ ἐπὶ τῶν πρότερον. ἀλλὰ πρὸς τὸ τινὶ ὑπάρχειν αὕτη ληπτέα ἢ ὑπόθεσις. εἰ γὰρ τὸ Α μηδενὶ τῷ Β, τὸ δὲ Γ τινὶ τῷ Β, τὸ Α οὐ παντὶ τῷ Γ. εἰ οὖν τοῦτο ψεῦδος, ἀληθὲς τὸ Α τινὶ τῷ Β ὑπάρχειν. ὅτι δ' οὐδενὶ τῷ Β ὑπάρχει τὸ Α, ὑποκείσθω τινὶ ὑπάρχειν, εἰλήφθω δὲ καὶ τὸ Γ παντὶ τῷ Β ὑπάρχον. οὐκοῦν ἀνάγκη τῷ Γ τινὶ τὸ Α ὑπάρχειν. ἀλλ' οὐδενὶ ὑπῆρχεν, ὥστε ψεῦδος τὸ τινὶ τῷ Β ὑπάρχειν τὸ Α. ἐὰν δ' ὑποτεθῇ παντὶ τῷ Β ὑπάρχειν τὸ Α, οὐ δείκνυται τὸ προτεθέν, ἀλλὰ πρὸς τὸ μὴ παντὶ ὑπάρχειν αὕτη ληπτέα ἢ ὑπόθεσις. εἰ γὰρ τὸ Α παντὶ τῷ Β καὶ τὸ Γ παντὶ τῷ Β, τὸ Α ὑπάρχει τινὶ τῷ Γ. τοῦτο δὲ οὐκ ἦν, ὥστε ψεῦδος τὸ παντὶ ὑπάρχειν. εἰ δ' οὕτως, ἀληθὲς τὸ μὴ παντί. ἐὰν δ' ὑποτεθῇ τινὶ ὑπάρχειν, ταῦτ' ἔσται ἄ καὶ ἐπὶ τῶν προειρημένων.

Φανερόν οὖν ὅτι ἐν ἅπασι τοῖς διὰ τοῦ ἀδυνάτου συλλογισμοῖς τὸ

ἀντικείμενον ὑποθετέον. δῆλον δὲ καὶ ὅτι ἐν τῷ μέσῳ σχήματι δείκνυται πως τὸ καταφατικὸν καὶ ἐν τῷ ἐσχάτῳ τὸ καθόλου.

## Κεφάλαιο 14

Διαφέρει δ' ἡ εἰς τὸ ἀδύνατον ἀπόδειξις τῆς δεικτικῆς τῷ τιθέναι ὃ βούλεται ἀναιρεῖν ἀπάγουσα εἰς ὁμολογούμενον ψεῦδος· ἡ δὲ δεικτικὴ ἄρχεται ἐξ ὁμολογούμενων θέσεων. λαμβάνουσι μὲν οὖν ἀμφοτέραι δύο προτάσεις ὁμολογούμενας· ἀλλ' ἡ μὲν ἐξ ὧν ὁ συλλογισμός, ἡ δὲ μίαν μὲν τούτων, μίαν δὲ τὴν ἀντίφασιν τοῦ συμπεράσματος. καὶ ἔνθα μὲν οὐκ ἀνάγκη γνώριμον εἶναι τὸ συμπέρασμα, οὐδὲ προϋπολαμβάνειν ὡς ἔστιν ἢ οὐ· ἔνθα δὲ ἀνάγκη ὡς οὐκ ἔστιν. διαφέρει δ' οὐδὲν φάσιν ἢ ἀπόφασιν εἶναι τὸ συμπέρασμα, ἀλλ' ὁμοίως ἔχει περὶ ἀμφοῖν. Ἄπαν (38) δὲ τὸ δεικτικῶς περαινόμενον καὶ διὰ τοῦ ἀδυνάτου δειχθήσεται, καὶ τὸ διὰ τοῦ ἀδυνάτου δεικτικῶς διὰ τῶν αὐτῶν ὅρων [οὐκ ἐν τοῖς αὐτοῖς δὲ σχήμασιν]. ὅταν μὲν γὰρ ὁ [63a] συλλογισμὸς ἐν τῷ πρώτῳ σχήματι γένηται, τὸ ἀληθὲς ἔσται ἐν τῷ μέσῳ ἢ τῷ ἐσχάτῳ, τὸ μὲν στερητικὸν ἐν τῷ μέσῳ, τὸ δὲ κατηγορικὸν ἐν τῷ ἐσχάτῳ. ὅταν δ' ἐν τῷ μέσῳ ὁ συλλογισμὸς, τὸ ἀληθὲς ἐν τῷ πρώτῳ ἐπὶ πάντων τῶν προβλημάτων. ὅταν δ' ἐν τῷ ἐσχάτῳ ὁ συλλογισμὸς, τὸ ἀληθὲς ἐν τῷ πρώτῳ καὶ τῷ μέσῳ, τὰ μὲν καταφατικὰ ἐν τῷ πρώτῳ, τὰ δὲ στερητικὰ ἐν τῷ μέσῳ. ἔστω γὰρ δεδειγμένον τὸ Α μηδενὶ ἢ μὴ παντὶ τῷ Β διὰ τοῦ πρώτου σχήματος. οὐκοῦν ἢ μὲν ὑπόθεσις ἦν τινὶ τῷ Β ὑπάρχειν τὸ Α, τὸ δὲ Γ ἐλαμβάνετο τῷ μὲν Α παντὶ ὑπάρχειν, τῷ δὲ Β οὐδενί· οὕτω γὰρ ἐγίνετο ὁ συλλογισμὸς καὶ τὸ ἀδύνατον. τοῦτο δὲ τὸ μέσον σχῆμα, εἰ τὸ Γ τῷ μὲν Α παντὶ τῷ δὲ Β μηδενὶ ὑπάρχει. καὶ φανερόν ἐκ τούτων ὅτι οὐδενὶ τῷ Β ὑπάρχει τὸ Α. ὁμοίως δὲ καὶ εἰ μὴ παντὶ δέδεικται ὑπάρχον. ἢ μὲν γὰρ ὑπόθεσις ἔστι παντὶ ὑπάρχειν, τὸ δὲ Γ ἐλαμβάνετο τῷ μὲν Α παντί, τῷ δὲ Β οὐ παντί. καὶ εἰ στερητικὸν λαμβάνοιτο τὸ Γ Α, ὡσαύτως· καὶ γὰρ οὕτω γίνεται τὸ μέσον σχῆμα. πάλιν δεδείχθω τινὶ ὑπάρχον τῷ Β τὸ Α. ἢ μὲν οὖν ὑπόθεσις μηδενὶ ὑπάρχειν, τὸ δὲ Β ἐλαμβάνετο παντὶ τῷ Γ ὑπάρχειν καὶ τὸ Α ἢ παντὶ ἢ τινὶ τῷ Γ· οὕτω γὰρ ἔσται τὸ ἀδύνατον. τοῦτο δὲ τὸ ἔσχατον σχῆμα, εἰ τὸ Α καὶ τὸ Β παντὶ τῷ Γ. καὶ φανερόν ἐκ τούτων ὅτι ἀνάγκη τὸ Α τινὶ τῷ Β ὑπάρχειν. ὁμοίως δὲ καὶ εἰ τινὶ τῷ Γ ληφθεῖη ὑπάρχον τὸ Β ἢ τὸ Α.

Πάλιν ἐν τῷ μέσῳ σχήματι δεδείχθω τὸ Α παντὶ τῷ Β ὑπάρχον. οὐκοῦν ἢ μὲν ὑπόθεσις ἦν μὴ παντὶ τῷ Β τὸ Α ὑπάρχειν, εἴληπται δὲ τὸ Α παντὶ τῷ Γ καὶ τὸ Γ παντὶ τῷ Β· οὕτω γὰρ ἔσται τὸ ἀδύνατον. τοῦτο δὲ τὸ πρῶτον σχῆμα, τὸ Α παντὶ τῷ Γ καὶ τὸ Γ παντὶ τῷ Β. ὁμοίως δὲ καὶ εἰ τινὶ δέδεικται ὑπάρχον· ἢ μὲν γὰρ ὑπόθεσις ἦν μηδενὶ τῷ Β τὸ Α ὑπάρχειν, εἴληπται δὲ τὸ Α παντὶ τῷ

Γ καὶ τὸ Γ τινὶ τῷ Β. εἰ δὲ στερητικὸς ὁ συλλογισμὸς, ἡ μὲν ὑπόθεσις τὸ Α τινὶ τῷ Β ὑπάρχειν, εἴληπται δὲ τὸ Α μηδενὶ τῷ Γ καὶ τὸ Γ παντὶ τῷ Β, ὥστε γίνεται τὸ πρῶτον σχῆμα. καὶ εἰ μὴ καθόλου ὁ συλλογισμὸς, ἀλλὰ τὸ Α τινὶ τῷ Β δέδεικται μὴ ὑπάρχειν, ὡσαύτως. ὑπόθεσις μὲν γὰρ παντὶ τῷ Β τὸ Α ὑπάρχειν, εἴληπται δὲ τὸ Α μηδενὶ τῷ Γ καὶ τὸ Γ τινὶ τῷ Β· οὕτω γὰρ τὸ πρῶτον σχῆμα.

Πάλιν ἐν τῷ τρίτῳ σχήματι δεδείχθω τὸ Α παντὶ τῷ Β ὑπάρχειν. οὐκοῦν ἡ μὲν ὑπόθεσις ἦν μὴ παντὶ τῷ Β τὸ [63b] Α ὑπάρχειν, εἴληπται δὲ τὸ Γ παντὶ τῷ Β καὶ τὸ Α παντὶ τῷ Γ· οὕτω γὰρ ἔσται τὸ ἀδύνατον. τοῦτο δὲ τὸ πρῶτον σχῆμα. ὡσαύτως δὲ καὶ εἰ ἐπὶ τινὸς ἡ ἀπόδειξις· ἡ μὲν γὰρ ὑπόθεσις μηδενὶ τῷ Β τὸ Α ὑπάρχειν, εἴληπται δὲ τὸ Γ τινὶ τῷ Β καὶ τὸ Α παντὶ τῷ Γ. εἰ δὲ στερητικὸς ὁ συλλογισμὸς, ὑπόθεσις μὲν τὸ Α τινὶ τῷ Β ὑπάρχειν, εἴληπται δὲ τὸ Γ τῷ μὲν Α μηδενί, τῷ δὲ Β παντί· τοῦτο δὲ τὸ μέσον σχῆμα. ὁμοίως δὲ καὶ εἰ μὴ καθόλου ἡ ἀπόδειξις. ὑπόθεσις μὲν γὰρ ἔσται παντὶ τῷ Β τὸ Α ὑπάρχειν, εἴληπται δὲ τὸ Γ τῷ μὲν Α μηδενί, τῷ δὲ Β τινί· τοῦτο δὲ τὸ μέσον σχῆμα. Φανερόν οὖν ὅτι διὰ τῶν αὐτῶν ὅρων καὶ δεικτικῶς ἔστι δεικνύναι τῶν προβλημάτων ἕκαστον [καὶ διὰ τοῦ ἀδυνάτου]. ὁμοίως δ' ἔσται καὶ δεικτικῶν ὄντων τῶν συλλογισμῶν εἰς ἀδύνατον ἀπάγειν ἐν τοῖς εἰλημμένοις ὅροις, ὅταν ἡ ἀντικειμένη πρότασις τῷ συμπεράσματι ληφθῇ. γίνονται γὰρ οἱ αὐτοὶ συλλογισμοὶ τοῖς διὰ τῆς ἀντιστροφῆς, ὥστ' εὐθὺς ἔχομεν καὶ τὰ σχήματα δι' ὧν ἕκαστον ἔσται. δῆλον οὖν ὅτι πᾶν πρόβλημα δείκνυται κατ' ἀμφοτέρους τοὺς τρόπους, διὰ τε τοῦ ἀδυνάτου καὶ δεικτικῶς, καὶ οὐκ ἐνδέχεται χωρίζεσθαι τὸν ἕτερον.

## Κεφάλαιο 15

Ἐν ποίῳ δὲ σχήματι ἔστιν ἐξ ἀντικειμένων προτάσεων συλλογίσασθαι καὶ ἐν ποίῳ οὐκ ἔστιν, ὥδ' ἔσται φανερόν. λέγω δ' ἀντικειμένας εἶναι προτάσεις κατὰ μὲν τὴν λέξιν τέτταρας, οἷον τὸ παντὶ τῷ οὐδενί, καὶ τὸ παντὶ τῷ οὐ παντί, καὶ τὸ τινὶ τῷ οὐδενί, καὶ τὸ τινὶ τῷ οὐ τινί, κατ' ἀλήθειαν δὲ τρεῖς· τὸ γὰρ τινὶ τῷ οὐ τινὶ κατὰ τὴν λέξιν ἀντίκειται μόνον. τούτων δ' ἐναντίας μὲν τὰς καθόλου, τὸ παντὶ τῷ μηδενὶ ὑπάρχειν, οἷον τὸ πᾶσαν ἐπιστήμην εἶναι σπουδαίαν τῷ μηδεμίαν εἶναι σπουδαίαν, τὰς δ' ἄλλας ἀντικειμένας.

Ἐν μὲν οὖν τῷ πρώτῳ σχήματι οὐκ ἔστιν ἐξ ἀντικειμένων προτάσεων συλλογισμὸς, οὔτε καταφατικὸς οὔτε ἀποφατικός, καταφατικὸς μὲν ὅτι ἀμφοτέρως δεῖ καταφατικὰς εἶναι τὰς προτάσεις, αἱ δ' ἀντικείμεναι φάσις καὶ ἀπόφασις, στερητικὸς δὲ ὅτι αἱ μὲν ἀντικείμεναι τὸ αὐτὸ τοῦ αὐτοῦ

κατηγοροῦσι καὶ ἀπαρνοῦνται, τὸ δ' ἐν τῷ πρώτῳ μέσον οὐ λέγεται κατ' ἀμφοῖν, ἀλλ' ἐκείνου μὲν ἄλλο ἀπαρνεῖται, αὐτὸ δὲ ἄλλου κατηγορεῖται· αὐταὶ δ' οὐκ ἀντίκεινται.

Ἐν δὲ τῷ μέσῳ σχήματι καὶ ἐκ τῶν ἀντικειμένων καὶ ἐκ τῶν ἐναντίων ἐνδέχεται γίνεσθαι συλλογισμόν. ἔστω γὰρ [64a] ἀγαθὸν μὲν ἐφ' οὗ A, ἐπιστήμη δὲ ἐφ' οὗ B καὶ Γ. εἰ δὴ πᾶσαν ἐπιστήμην σπουδαίαν ἔλαβε καὶ μηδεμίαν, τὸ A τῷ B παντὶ ὑπάρχει καὶ τῷ Γ οὐδενί, ὥστε τὸ B τῷ Γ οὐδενί· οὐδεμία ἄρα ἐπιστήμη ἐπιστήμη ἐστίν. ὁμοίως δὲ καὶ εἰ πᾶσαν λαβὼν σπουδαίαν τὴν ἰατρικὴν μὴ σπουδαίαν ἔλαβε· τῷ μὲν γὰρ B παντὶ τὸ A, τῷ δὲ Γ οὐδενί, ὥστε ἢ τις ἐπιστήμη οὐκ ἔσται ἐπιστήμη. καὶ εἰ τῷ μὲν Γ παντὶ τὸ A, τῷ δὲ B μηδενί, ἔστι δὲ τὸ μὲν B ἐπιστήμη, τὸ δὲ Γ ἰατρική, τὸ δὲ A ὑπόληψις· οὐδεμίαν γὰρ ἐπιστήμην ὑπόληψιν λαβὼν εἴληφε τινὰ εἶναι ὑπόληψιν. διαφέρει δὲ τοῦ πάσαι τῷ ἐπὶ τῶν ὅρων ἀντιστρέφεσθαι· πρότερον μὲν γὰρ πρὸς τῷ B, νῦν δὲ πρὸς τῷ Γ τὸ καταφατικόν. καὶ ἂν ἢ δὲ μὴ καθόλου ἢ ἑτέρα πρότασις, ὡσαύτως· ἀεὶ γὰρ τὸ μέσον ἐστὶν ὃ ἀπὸ θατέρου μὲν ἀποφατικῶς λέγεται, κατὰ θατέρου δὲ καταφατικῶς. ὥστ' ἐνδέχεται τ' ἀντικείμενα περαίνεσθαι, πλὴν οὐκ ἀεὶ οὐδὲ πάντως, ἀλλ' ἐὰν οὕτως ἔχη τὰ ὑπὸ τὸ μέσον ὥστ' ἢ ταῦτα εἶναι ἢ ὅλον πρὸς μέρος. ἄλλως δ' ἀδύνατον· οὐ γὰρ ἔσσονται οὐδαμῶς αἱ προτάσεις οὔτ' ἐναντία οὔτ' ἀντικείμενα.

Ἐν δὲ τῷ τρίτῳ σχήματι καταφατικὸς μὲν συλλογισμὸς οὐδέποτε ἔσται ἐξ ἀντικειμένων προτάσεων διὰ τὴν εἰρημένην αἰτίαν καὶ ἐπὶ τοῦ πρώτου σχήματος, ἀποφατικὸς δ' ἔσται, καὶ καθόλου καὶ μὴ καθόλου τῶν ὅρων ὄντων. ἔστω γὰρ ἐπιστήμη ἐφ' οὗ τὸ B καὶ Γ, ἰατρικὴ δ' ἐφ' οὗ A. εἰ οὖν λάβοι πᾶσαν ἰατρικὴν ἐπιστήμην καὶ μηδεμίαν ἰατρικὴν ἐπιστήμην, τὸ B παντὶ τῷ A εἴληφε καὶ τὸ Γ οὐδενί, ὥστ' ἔσται τις ἐπιστήμη οὐκ ἐπιστήμη. ὁμοίως δὲ καὶ ἂν μὴ καθόλου ληφθῇ ἢ B A πρότασις· εἰ γὰρ ἐστὶ τις ἰατρικὴ ἐπιστήμη καὶ πάλιν μηδεμία ἰατρικὴ ἐπιστήμη, συμβαίνει ἐπιστήμην τινὰ μὴ εἶναι ἐπιστήμην. εἰσὶ δὲ καθόλου μὲν τῶν ὅρων λαμβανομένων ἐναντία αἱ προτάσεις, ἐὰν δ' ἐν μέρει ἄτερος, ἀντικείμενα. Δεῖ δὲ κατανοεῖν ὅτι ἐνδέχεται μὲν οὕτω τὰ ἀντικείμενα λαμβάνειν ὥσπερ εἵπομεν πᾶσαν ἐπιστήμην σπουδαίαν εἶναι καὶ πάλιν μηδεμίαν, ἢ τινὰ μὴ σπουδαίαν· ὅπερ οὐκ εἴωθε λανθάνειν. ἔστι δὲ δι' ἄλλων ἐρωτημάτων συλλογίσασθαι θάτερον, ἢ ὡς ἐν τοῖς Τοπικοῖς ἐλέχθη λαβεῖν. ἐπεὶ δὲ τῶν καταφάσεων αἱ ἀντιθέσεις τρεῖς, ἐξαχῶς συμβαίνει τὰ ἀντικείμενα λαμβάνειν, ἢ παντὶ καὶ μηδενί, ἢ παντὶ καὶ μὴ παντί, ἢ τινὶ καὶ μηδενί, καὶ τοῦτο ἀντιστρέψαι ἐπὶ [64b] τῶν ὅρων, οἷον τὸ A παντὶ τῷ B, τῷ δὲ Γ μηδενί, ἢ τῷ Γ παντί, τῷ δὲ B μηδενί, ἢ τῷ μὲν παντί, τῷ δὲ μὴ παντί, καὶ πάλιν τοῦτο ἀντιστρέψαι κατὰ τοὺς ὅρους.



ὁμοίως δὲ καὶ ἐπὶ τοῦ τρίτου σχήματος. ὥστε φανερόν ὅσαχῶς τε καὶ ἐν ποίοις σχήμασιν ἐνδέχεται διὰ τῶν ἀντικειμένων προτάσεων γενέσθαι συλλογισμόν.

Φανερόν δὲ καὶ ὅτι ἐκ ψευδῶν μὲν ἔστιν ἀληθὲς συλλογίσασθαι, καθάπερ εἴρηται πρότερον, ἐκ δὲ τῶν ἀντικειμένων οὐκ ἔστιν· αἰεὶ γὰρ ἐναντίος ὁ συλλογισμὸς γίνεται τῷ πράγματι, οἷον εἰ ἔστιν ἀγαθόν, μὴ εἶναι ἀγαθόν, ἢ εἰ ζῶν, μὴ ζῶν, διὰ τὸ ἐξ ἀντιφάσεως εἶναι τὸν συλλογισμόν καὶ τοὺς ὑποκειμένους ὅρους ἢ τοὺς αὐτοὺς εἶναι ἢ τὸν μὲν ὅλον τὸν δὲ μέρος. δῆλον δὲ καὶ ὅτι ἐν τοῖς παραλογισμοῖς οὐδὲν κωλύει γίνεσθαι τῆς ὑποθέσεως ἀντίφασιν, οἷον εἰ ἔστι περιττόν, μὴ εἶναι περιττόν. ἐκ γὰρ τῶν ἀντικειμένων προτάσεων ἐναντίος ἦν ὁ συλλογισμὸς· ἐὰν οὖν λάβῃ τοιαύτας, ἔσται τῆς ὑποθέσεως ἀντίφασις, δεῖ δὲ κατανοεῖν ὅτι οὕτω μὲν οὐκ ἔστιν ἐναντία συμπεράνασθαι ἐξ ἐνὸς συλλογισμοῦ ὥστ' εἶναι τὸ συμπέρασμα τὸ μὴ ὂν ἀγαθὸν ἀγαθὸν ἢ ἄλλο τι τοιοῦτον, ἐὰν μὴ εὐθὺς ἢ πρότασις τοιαύτη ληφθῇ (οἷον πᾶν ζῶν λευκὸν εἶναι καὶ μὴ λευκόν, τὸν δ' ἄνθρωπον ζῶν), ἀλλ' ἢ προσλαβεῖν δεῖ τὴν ἀντίφασιν (οἷον ὅτι πᾶσα ἐπιστήμη ὑπόληψις [καὶ οὐχ ὑπόληψις], εἴτα λαβεῖν ὅτι ἡ ἱατρικὴ ἐπιστήμη μὲν ἔστιν, οὐδεμία δ' ὑπόληψις, ὥσπερ οἱ ἔλεγχοι γίνονται), ἢ ἐκ δύο συλλογισμῶν. ὥστε δ' εἶναι ἐναντία κατ' ἀλήθειαν τὰ εἰλημμένα, οὐκ ἔστιν ἄλλον τρόπον ἢ τοῦτον, καθάπερ εἴρηται πρότερον.

## Κεφάλαιο 16

Τὸ δ' ἐν ἀρχῇ αἰτεῖσθαι καὶ λαμβάνειν ἐστὶ μὲν, ὡς ἐν γένει λαβεῖν, ἐν τῷ μὴ ἀποδεικνύναι τὸ προκείμενον, τοῦτο δὲ συμβαίνει πολλαχῶς· καὶ γὰρ εἰ ὅλως μὴ συλλογίζεται, καὶ εἰ δι' ἀγνωστοτέρων ἢ ὁμοίως ἀγνώστων, καὶ εἰ διὰ τῶν ὑστέρων τὸ πρότερον· ἢ γὰρ ἀπόδειξις ἐκ πιστοτέρων τε καὶ προτέρων ἐστίν. τούτων μὲν οὖν οὐδέν ἐστι τὸ αἰτεῖσθαι τὸ ἐξ ἀρχῆς· ἀλλ' ἐπεὶ τὰ μὲν δι' αὐτῶν πέφυκε γνωρίζεσθαι τὰ δὲ δι' ἄλλων (αἰ μὲν γὰρ ἀρχαὶ δι' αὐτῶν, τὰ δ' ὑπὸ τὰς ἀρχὰς δι' ἄλλων), ὅταν μὴ τὸ δι' αὐτοῦ γνωστὸν δι' αὐτοῦ τις ἐπιχειρῇ δεικνύναι, τότε αἰτεῖται τὸ ἐξ ἀρχῆς. τοῦτο δ' ἔστι μὲν οὕτω ποιεῖν ὥστ' εὐθὺς ἀξιῶσαι τὸ προκείμενον, ἐνδέχεται δὲ καὶ μεταβάντας ἐπ' ἄλλα ἄττα τῶν πεφυκότων δι' ἐκείνου δεικνυσθαι διὰ τούτων [65a] ἀποδεικνύναι τὸ ἐξ ἀρχῆς, οἷον εἰ τὸ Α δεικνύοιτο διὰ τοῦ Β, τὸ δὲ Β διὰ τοῦ Γ, τὸ δὲ Γ πεφυκὸς εἶη δεικνυσθαι διὰ τοῦ Α· συμβαίνει γὰρ αὐτὸ δι' αὐτοῦ τὸ Α δεικνύναι τοὺς οὕτω συλλογιζομένους. ὅπερ ποιοῦσιν οἱ τὰς παραλλήλους οἰόμενοι γράφειν· λανθάνουσι γὰρ αὐτοὶ ἑαυτοὺς τοιαῦτα λαμβάνοντες ἢ οὐχ οἷόν τε ἀποδεῖξαι μὴ οὐσῶν τῶν παραλλήλων. ὥστε

συμβαίνει τοῖς οὕτω συλλογιζομένοις ἕκαστον εἶναι λέγειν, εἰ ἔστιν ἕκαστον· οὕτω δ' ἅπαν ἔσται δι' αὐτοῦ γνωστόν· ὅπερ ἀδύνατον.

Εἰ οὖν τις ἀδήλου ὄντος ὅτι τὸ Α ὑπάρχει τῷ Γ, ὁμοίως δὲ καὶ ὅτι τῷ Β, αἰτοῖτο τῷ Β ὑπάρχειν τὸ Α, οὕτω δῆλον εἰ τὸ ἐν ἀρχῇ αἰτεῖται, ἀλλ' ὅτι οὐκ ἀποδείκνυσιν, δῆλον· οὐ γὰρ ἀρχὴ ἀποδείξεως τὸ ὁμοίως ἀδελον. εἰ μέντοι τὸ Β πρὸς τὸ Γ οὕτως ἔχει ὥστε ταῦτόν εἶναι, ἢ δῆλον ὅτι ἀντιστρέφουσιν, ἢ ἐνυπάρχει θάτερον θατέρω, τὸ ἐν ἀρχῇ αἰτεῖται. καὶ γὰρ ἂν ὅτι τῷ Β τὸ Α ὑπάρχει δι' ἐκείνων δεικνύοι, εἰ ἀντιστρέφοι (νῦν δὲ τοῦτο κωλύει, ἀλλ' οὐχ ὁ τρόπος). εἰ δὲ τοῦτο ποιοῖ, τὸ εἰρημένον ἂν ποιοῖ καὶ ἀντιστρέφοι διὰ τριῶν. ὡσαύτως δὲ κἂν εἰ τὸ Β τῷ Γ λαμβάνοι ὑπάρχειν, ὁμοίως ἀδελον ὄν καὶ εἰ τὸ Α, οὕτω τὸ ἐξ ἀρχῆς, ἀλλ' οὐκ ἀποδείκνυσιν. ἔαν δὲ ταῦτόν ἢ τὸ Α καὶ Β ἢ τῷ ἀντιστρέφειν ἢ τῷ ἔπεσθαι τῷ Β τὸ Α, τὸ ἐξ ἀρχῆς αἰτεῖται διὰ τὴν αὐτὴν αἰτίαν· τὸ γὰρ ἐξ ἀρχῆς τί δύναται, εἴρηται ἡμῖν, ὅτι τὸ δι' αὐτοῦ δεικνύναι τὸ μὴ δι' αὐτοῦ δῆλον.

Εἰ οὖν ἔστι τὸ ἐν ἀρχῇ αἰτεῖσθαι τὸ δι' αὐτοῦ δεικνύναι τὸ μὴ δι' αὐτοῦ δῆλον, τοῦτο δ' ἔστι τὸ μὴ δεικνύναι, ὅταν ὁμοίως ἀδελων ὄντων τοῦ δεικνυμένου καὶ δι' οὗ δεικνυσιν ἢ τῷ ταῦτὰ τῷ αὐτῷ ἢ τῷ ταῦτόν τοῖς αὐτοῖς ὑπάρχειν, ἐν μὲν τῷ μέσῳ σχήματι καὶ τρίτῳ ἀμφοτέρως ἂν ἐνδέχοιτο τὸ ἐν ἀρχῇ αἰτεῖσθαι, ἐν δὲ κατηγορικῷ συλλογισμῷ ἔν τε τῷ τρίτῳ καὶ τῷ πρώτῳ. ὅταν δ' ἀποφατικῶς, ὅταν τὰ αὐτὰ ἀπὸ τοῦ αὐτοῦ· καὶ οὐχ ὁμοίως ἀμφοτέραι αἱ προτάσεις (ὡσαύτως δὲ καὶ ἐν τῷ μέσῳ), διὰ τὸ μὴ ἀντιστρέφειν τοὺς ὅρους κατὰ τοὺς ἀποφατικοὺς συλλογισμούς. ἔστι δὲ τὸ ἐν ἀρχῇ αἰτεῖσθαι ἐν μὲν ταῖς ἀποδείξεσι τὰ κατ' ἀλήθειαν οὕτως ἔχοντα, ἐν δὲ τοῖς διαλεκτικοῖς τὰ κατὰ δόξαν.

## Κεφάλαιο 17

Τὸ δὲ μὴ παρὰ τοῦτο συμβαίνειν τὸ ψεῦδος, ὃ πολλάκις ἐν τοῖς λόγοις εἰώθαμεν λέγειν, πρῶτον μὲν ἔστιν ἐν τοῖς εἰς τὸ ἀδύνατον συλλογισμοῖς, ὅταν πρὸς ἀντίφασιν ἢ [65b] τούτου ὃ ἐδείκνυτο τῇ εἰς τὸ ἀδύνατον. οὔτε γὰρ μὴ ἀντιφάσας ἐρεῖ τὸ οὐ παρὰ τοῦτο, ἀλλ' ὅτι ψεῦδός τι ἐτέθη τῶν πρότερον, οὔτ' ἐν τῇ δεικνυούσῃ· οὐ γὰρ τίθησι ὃ ἀντίφησιν. ἔτι δ' ὅταν ἀναιρεθῇ τι δεικτικῶς διὰ τῶν Α Β Γ, οὐκ ἔστιν εἰπεῖν ὡς οὐ παρὰ τὸ κείμενον γεγένηται ὁ συλλογισμός. τὸ γὰρ μὴ παρὰ τοῦτο γίνεσθαι τότε λέγομεν, ὅταν ἀναιρεθέντος τούτου μηδὲν ἥττον περαίνεται ὁ συλλογισμός, ὅπερ οὐκ ἔστιν ἐν τοῖς δεικτικοῖς· ἀναιρεθείσης γὰρ τῆς θέσεως οὐδ' ὁ πρὸς ταύτην ἔσται συλλογισμός. φανερόν οὖν ὅτι ἐν τοῖς εἰς τὸ ἀδύνατον λέγεται

τὸ μὴ παρὰ τοῦτο, καὶ ὅταν οὕτως ἔχη πρὸς τὸ ἀδύνατον ἢ ἐξ ἀρχῆς ὑπόθεσις ὥστε καὶ οὔσης καὶ μὴ οὔσης ταύτης οὐδὲν ἦττον συμβαίνει τὸ ἀδύνατον.

Ὁ μὲν οὖν φανερώτατος τρόπος ἐστὶ τοῦ μὴ παρὰ τὴν θέσιν εἶναι τὸ ψεῦδος, ὅταν ἀπὸ τῆς ὑποθέσεως ἀσύναπτος ἢ ἀπὸ τῶν μέσων πρὸς τὸ ἀδύνατον ὁ συλλογισμός, ὅπερ εἴρηται καὶ ἐν τοῖς Τοπικοῖς. τὸ γὰρ τὸ ἀναίτιον ὡς αἴτιον τιθέναι τοῦτο ἐστίν, οἷον εἰ βουλούμενος δεῖξαι ὅτι ἀσύμμετρος ἢ διάμετρος, ἐπιχειροῖ τὸν Ζήνωνος λόγον, ὡς οὐκ ἔστι κινεῖσθαι, καὶ εἰς τοῦτο ἀπάγει τὸ ἀδύνατον· οὐδαμῶς γὰρ οὐδαμῇ συνεχές ἐστὶ τὸ ψεῦδος τῇ φάσει τῇ ἐξ ἀρχῆς. ἄλλος δὲ τρόπος, εἰ συνεχές μὲν εἴη τὸ ἀδύνατον τῇ ὑποθέσει, μὴ μέντοι δι' ἐκείνην συμβαίνοι. τοῦτο γὰρ ἐγχωρεῖ γενέσθαι καὶ ἐπὶ τὸ ἄνω καὶ ἐπὶ τὸ κάτω λαμβάνοντι τὸ συνεχές, οἷον εἰ τὸ Α τῷ Β κεῖται ὑπάρχον, τὸ δὲ Β τῷ Γ, τὸ δὲ Γ τῷ Δ, τοῦτο δ' εἴη ψεῦδος, τὸ τὸ Β τῷ Δ ὑπάρχειν. εἰ γὰρ ἀφαιρεθέντος τοῦ Α μηδὲν ἦττον ὑπάρχοι τὸ Β τῷ Γ καὶ τὸ Γ τῷ Δ, οὐκ ἂν εἴη τὸ ψεῦδος διὰ τὴν ἐξ ἀρχῆς ὑπόθεσιν. ἢ πάλιν εἴ τις ἐπὶ τὸ ἄνω λαμβάνοι τὸ συνεχές, οἷον εἰ τὸ μὲν Α τῷ Β, τῷ δὲ Α τὸ Ε καὶ τῷ Ε τὸ Ζ, ψεῦδος δ' εἴη τὸ ὑπάρχειν τῷ (30)Α τὸ Ζ· καὶ γὰρ οὕτως οὐδὲν ἂν ἦττον εἴη τὸ ἀδύνατον ἀναιρεθείσης τῆς ἐξ ἀρχῆς ὑποθέσεως. ἀλλὰ δεῖ πρὸς τοὺς ἐξ ἀρχῆς ὅρους συνάπτειν τὸ ἀδύνατον· οὕτω γὰρ ἔσται διὰ τὴν ὑπόθεσιν, οἷον ἐπὶ μὲν τὸ κάτω λαμβάνοντι τὸ συνεχές πρὸς τὸν κατηγορούμενον τῶν ὅρων (εἰ γὰρ ἀδύνατον τὸ Α τῷ Δ ὑπάρχειν, ἀφαιρεθέντος τοῦ Α οὐκέτι ἔσται τὸ ψεῦδος)· ἐπὶ δὲ τὸ ἄνω, καθ' οὗ κατηγορεῖται (εἰ γὰρ τῷ Β μὴ ἐγχωρεῖ τὸ Ζ ὑπάρχειν, ἀφαιρεθέντος τοῦ Β οὐκέτι ἔσται τὸ ἀδύνατον). ὁμοίως δὲ καὶ στερητικῶν τῶν συλλογισμῶν ὄντων. [66a]

Φανερόν οὖν ὅτι τοῦ ἀδυνάτου μὴ πρὸς τοὺς ἐξ ἀρχῆς ὅρους ὄντος οὐ παρὰ τὴν θέσιν συμβαίνει τὸ ψεῦδος. ἢ οὐδ' οὕτως ἀεὶ διὰ τὴν ὑπόθεσιν ἔσται τὸ ψεῦδος; καὶ γὰρ εἰ μὴ τῷ Β ἀλλὰ τῷ Κ ἐτέθη τὸ Α ὑπάρχειν, τὸ δὲ Κ τῷ Γ καὶ τοῦτο τῷ Δ, καὶ οὕτω μένει τὸ ἀδύνατον (ὁμοίως δὲ καὶ ἐπὶ τὸ ἄνω λαμβάνοντι τοὺς ὅρους), ὥστ' ἐπεὶ καὶ ὄντος καὶ μὴ ὄντος τούτου συμβαίνει τὸ ἀδύνατον, οὐκ ἂν εἴη παρὰ τὴν θέσιν. ἢ τὸ μὴ ὄντος τούτου μηδὲν ἦττον γίνεσθαι τὸ ψεῦδος οὐχ οὕτω ληπτέον ὥστ' ἄλλου τιθεμένου συμβαίνει τὸ ἀδύνατον, ἀλλ' ὅταν ἀφαιρεθέντος τούτου διὰ τῶν λοιπῶν προτάσεων ταῦτο περαίνεται ἀδύνατον, ἐπεὶ ταῦτό γε ψεῦδος συμβαίνει διὰ πλειόνων ὑποθέσεων οὐδὲν ἴσως ἄτοπον, οἷον τὰς παραλλήλους συμπίπτειν καὶ εἰ μείζων ἐστὶν ἢ ἐντὸς τῆς ἐκτὸς καὶ εἰ τὸ τρίγωνον ἔχει πλείους ὀρθὰς διευεῖν;

## Κεφάλαιο 18

Ὁ δὲ ψευδὴς λόγος γίνεται παρὰ τὸ πρῶτον ψεῦδος. ἢ γὰρ ἐκ τῶν δύο προτάσεων ἢ ἐκ πλειόνων πᾶς ἐστὶ συλλογισμός. εἰ μὲν οὖν ἐκ τῶν δύο, τούτων ἀνάγκη τὴν ἑτέραν ἢ καὶ ἀμφοτέρας εἶναι ψευδεῖς· ἐξ ἀληθῶν γὰρ οὐκ ἦν ψευδὴς συλλογισμός. εἰ δ' ἐκ πλειόνων, οἷον τὸ μὲν Γ διὰ τῶν (20)Α Β, ταῦτα δὲ διὰ τῶν Δ Ε Ζ Η, τούτων τι ἔσται τῶν ἐπάνω ψεῦδος, καὶ παρὰ τοῦτο ὁ λόγος· τὸ γὰρ Α καὶ Β δι' ἐκείνων περαίνονται. ὥστε παρ' ἐκείνων τι συμβαίνει τὸ συμπέρασμα καὶ τὸ ψεῦδος.

## Κεφάλαιο 19

Πρὸς δὲ τὸ μὴ κατασυλλογίζεσθαι παρατηρητέον, ὅταν ἄνευ τῶν συμπερασμάτων ἐρωτᾷ τὸν λόγον, ὅπως μὴ δοθῇ δις ταὐτὸν ἐν ταῖς προτάσεσιν, ἐπειδήπερ ἴσμεν ὅτι ἄνευ μέσου συλλογισμὸς οὐ γίνεται, μέσον δ' ἐστὶ τὸ πλεονάκις λεγόμενον. ὡς δὲ δεῖ πρὸς ἕκαστον συμπέρασμα τηρεῖν τὸ μέσον, φανερὸν ἐκ τοῦ εἰδέναι ποῖον ἐν ἐκάστῳ σχήματι δείκνυται. τοῦτο δ' ἡμᾶς οὐ λήσεται διὰ τὸ εἰδέναι πῶς ὑπέχομεν τὸν λόγον.

Χρὴ δ' ὅπερ φυλάττεσθαι παραγγέλλομεν ἀποκρινόμενους, αὐτοὺς ἐπιχειροῦντας πειρᾶσθαι λανθάνειν. τοῦτο δ' ἔσται πρῶτον, ἐὰν τὰ συμπεράσματα μὴ προσυλλογίζονται ἀλλ' εἰλημμένων τῶν ἀναγκαίων ἄδηλα ἢ, ἔτι δὲ ἂν μὴ τὰ σύνεγγυς ἐρωτᾷ, ἀλλ' ὅτι μάλιστα ἄμεσα. οἷον ἔστω δέον συμπεραίνεισθαι τὸ Α κατὰ τοῦ Ζ· μέσα Β Γ Δ Ε. δεῖ οὖν ἐρωτᾶν εἰ τὸ Α τῷ Β, καὶ πάλιν μὴ εἰ τὸ Β τῷ Γ, ἀλλ' εἰ τὸ Δ τῷ Ε, κᾷπειτα εἰ τὸ Β τῷ Γ, καὶ οὕτω [66b] τὰ λοιπά. κᾷν δι' ἑνὸς μέσου γίνηται ὁ συλλογισμός, ἀπὸ τοῦ μέσου ἄρχεσθαι· μάλιστα γὰρ ἂν οὕτω λανθάνοι τὸν ἀποκρινόμενον.

## Κεφάλαιο 20

Ἐπεὶ δ' ἔχομεν πότε καὶ πῶς ἐχόντων τῶν ὅρων γίνεται συλλογισμός, φανερὸν καὶ πότ' ἔσται καὶ πότ' οὐκ ἔσται ἔλεγχος. πάντων μὲν γὰρ συγχωρουμένων, ἢ ἐναλλάξ τιθεμένων τῶν ἀποκρίσεων, οἷον τῆς μὲν ἀποφατικῆς τῆς δὲ καταφατικῆς, ἐγχωρεῖ γίνεσθαι ἔλεγχον. ἦν γὰρ συλλογισμὸς καὶ οὕτω καὶ ἐκείνως ἐχόντων τῶν ὅρων, ὥστ' εἰ τὸ κείμενον ἐναντίον τῷ συμπεράσματι, ἀνάγκη γίνεσθαι ἔλεγχον· ὁ γὰρ ἔλεγχος ἀντιφάσεως συλλογισμός. εἰ δὲ μηδὲν συγχωροῖτο, ἀδύνατον γενέσθαι ἔλεγχον· οὐ γὰρ ἦν συλλογισμὸς πάντων τῶν ὅρων στερητικῶν ὄντων, ὥστ' οὐδ' ἔλεγχος· εἰ μὲν γὰρ ἔλεγχος, ἀνάγκη συλλογισμὸν εἶναι, συλλογισμοῦ δ' ὄντος οὐκ ἀνάγκη ἔλεγχον. ὡσαύτως δὲ καὶ εἰ μηδὲν τεθείη κατὰ τὴν ἀπόκρισιν ἐν ὅλῳ· ὁ γὰρ αὐτὸς ἔσται διορισμὸς ἐλέγχου καὶ συλλογισμοῦ.

## Κεφάλαιο 21

Συμβαίνει δ' ἐνίστε, καθάπερ ἐν τῇ θέσει τῶν ὄρων ἀπατώμεθα, καὶ κατὰ τὴν ὑπόληψιν γίνεσθαι τὴν ἀπάτην, οἷον εἰ ἐνδέχεται τὸ αὐτὸ πλείοσι πρώτοις ὑπάρχειν, καὶ τὸ μὲν λεληθέναι τινὰ καὶ οἶεσθαι μηδενὶ ὑπάρχειν, τὸ δὲ εἰδέναι. ἔστω τὸ Α τῷ Β καὶ τῷ Γ καθ' αὐτὰ ὑπάρχον, καὶ ταῦτα παντὶ τῷ Δ ὡσαύτως. εἰ δὴ τῷ μὲν Β τὸ Α παντὶ οἶεται ὑπάρχειν, καὶ τοῦτο τῷ Δ, τῷ δὲ Γ τὸ Α μηδενί, καὶ τοῦτο τῷ Δ παντί, τοῦ αὐτοῦ κατὰ ταῦτόν ἔξει ἐπιστήμην καὶ ἄγνοιαν. πάλιν εἴ τις ἀπατηθεῖη περὶ τὰ ἐκ τῆς αὐτῆς συστοιχίας, οἷον εἰ τὸ Α ὑπάρχει τῷ Β, τοῦτο δὲ τῷ Γ καὶ τὸ Γ τῷ Δ, ὑπολαμβάνοι δὲ τὸ Α παντὶ τῷ Β ὑπάρχειν καὶ πάλιν μηδενὶ τῷ Γ. ἅμα γὰρ εἴσεται τε καὶ οὐχ ὑπολήψεται ὑπάρχειν. ἄρ' οὖν οὐδὲν ἄλλο ἀξιοῖ ἐκ τούτων ἢ ὃ ἐπίσταται, τοῦτο μὴ ὑπολαμβάνειν; ἐπίσταται γὰρ πως ὅτι τὸ Α τῷ Γ ὑπάρχει διὰ τοῦ Β, ὡς τῇ καθόλου τὸ κατὰ μέρος, ὥστε ὃ πως ἐπίσταται, τοῦτο ὅλως ἀξιοῖ μὴ ὑπολαμβάνειν· ὅπερ ἀδύνατον.

Ἐπὶ δὲ τοῦ πρότερον λεχθέντος, εἰ μὴ ἐκ τῆς αὐτῆς συστοιχίας τὸ μέσον, καθ' ἑκάτερον μὲν τῶν μέσων ἀμφοτέρας τὰς προτάσεις οὐκ ἐγχωρεῖ ὑπολαμβάνειν, οἷον τὸ Α τῷ μὲν Β παντί, τῷ δὲ Γ μηδενί, ταῦτα δ' ἀμφοτέρα παντὶ τῷ Δ. συμβαίνει γὰρ ἢ ἀπλῶς ἢ ἐπὶ τι ἐναντίαν λαμβάνεσθαι τὴν πρώτην πρότασιν. εἰ γὰρ ὥ τὸ Β ὑπάρχει, παντὶ τὸ Α ὑπολαμβάνει [67a] ὑπάρχειν, τὸ δὲ Β τῷ Δ οἶδε, καὶ ὅτι τῷ Δ τὸ Α οἶδεν. ὥστ' εἰ πάλιν, ὥ τὸ Γ, μηδενὶ οἶεται τὸ Α ὑπάρχειν, ὥ τὸ Β τινὶ ὑπάρχει, τούτῳ οὐκ οἶεται τὸ Α ὑπάρχειν. τὸ δὲ παντὶ οἰόμενον ὥ τὸ Β, πάλιν τινὶ μὴ οἶεσθαι ὥ τὸ Β, ἢ ἀπλῶς ἢ ἐπὶ τι ἐναντίον ἐστίν.

Οὕτω μὲν οὖν οὐκ ἐνδέχεται ὑπολαβεῖν, καθ' ἑκάτερον δὲ τὴν μίαν ἢ κατὰ θάτερον ἀμφοτέρας οὐδὲν κωλύει, οἷον τὸ Α παντὶ τῷ Β καὶ τὸ Β τῷ Δ, καὶ πάλιν τὸ Α μηδενὶ τῷ Γ. ὁμοία γὰρ ἡ τοιαύτη ἀπάτη καὶ ὡς ἀπατώμεθα περὶ τὰς ἐν μέρει, οἷον εἰ ὥ τὸ Β, παντὶ τὸ Α ὑπάρχει, τὸ δὲ Β τῷ Γ παντί, τὸ Α παντὶ τῷ Γ ὑπάρχει. εἰ οὖν τις οἶδεν ὅτι τὸ Α, ὥ τὸ Β, ὑπάρχει παντί, οἶδε καὶ ὅτι τῷ Γ. ἀλλ' οὐδὲν κωλύει ἀγνοεῖν τὸ Γ ὅτι ἔστιν, οἷον εἰ τὸ μὲν Α δύο ὀρθαί, τὸ δ' ἐφ' ὧ Β τρίγωνον, τὸ δ' ἐφ' ὧ Γ αἰσθητὸν τρίγωνον. ὑπολάβοι γὰρ ἂν τις μὴ εἶναι τὸ Γ, εἰδὼς ὅτι πᾶν τρίγωνον ἔχει δύο ὀρθάς, ὥσθ' ἅμα εἴσεται καὶ ἀγνοήσει ταυτόν. τὸ γὰρ εἰδέναι πᾶν τρίγωνον ὅτι δύο ὀρθαῖς οὐχ ἀπλοῦν ἐστίν, ἀλλὰ τὸ μὲν τῷ τὴν καθόλου ἔχειν ἐπιστήμην, τὸ δὲ τὴν καθ' ἑκαστον. οὕτω μὲν οὖν ὡς τῇ καθόλου οἶδε τὸ Γ ὅτι δύο ὀρθαί, ὡς δὲ τῇ καθ' ἑκαστον οὐκ οἶδεν, ὥστ' οὐχ ἔξει τὰς ἐναντίας. ὁμοίως δὲ καὶ ὃ ἐν τῷ Μένωνι λόγος, ὅτι ἡ μάθησις ἀνάμνησις. οὐδαμοῦ γὰρ συμβαίνει

προεπίστασθαι τὸ καθ' ἑκαστον, ἀλλ' ἅμα τῇ ἐπαγωγῇ λαμβάνειν τὴν τῶν κατὰ μέρος ἐπιστήμην ὥσπερ ἀναγνωρίζοντας. ἓνια γὰρ εὐθὺς ἴσμεν, οἷον ὅτι δύο ὀρθαῖς, ἐὰν ἴδωμεν ὅτι τρίγωνον. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

Τῇ μὲν οὖν καθόλου θεωροῦμεν τὰ ἐν μέρει, τῇ δ' οἰκεία οὐκ ἴσμεν, ὥστ' ἐνδέχεται καὶ ἀπατᾶσθαι περὶ αὐτά, πλὴν οὐκ ἐναντίως, ἀλλ' ἔχειν μὲν τὴν καθόλου, ἀπατᾶσθαι δὲ τὴν κατὰ μέρος. ὁμοίως οὖν καὶ ἐπὶ τῶν προειρημένων· οὐ γὰρ ἐναντία ἢ κατὰ τὸ μέσον ἀπάτη τῇ κατὰ τὸν συλλογισμόν ἐπιστήμῃ, οὐδ' ἢ καθ' ἑκάτερον τῶν μέσων ὑπόληψις. οὐδὲν δὲ κωλύει εἰδότες καὶ ὅτι τὸ Α ὅλῳ τῷ Β ὑπάρχει καὶ πάλιν τοῦτο τῷ Γ, οἰηθῆναι μὴ ὑπάρχειν τὸ Α τῷ Γ, οἷον ὅτι πᾶσα ἡμίονος ἄτοκος καὶ αὕτη ἡμίονος οἷεσθαι κύειν ταύτην· οὐ γὰρ ἐπίσταται ὅτι τὸ Α τῷ Γ, μὴ συνθεωρῶν τὸ καθ' ἑκάτερον. ὥστε δῆλον ὅτι καὶ εἰ τὸ μὲν οἶδε τὸ δὲ μὴ οἶδεν, ἀπατηθήσεται· ὅπερ ἔχουσιν αἱ καθόλου πρὸς τὰς κατὰ μέρος ἐπιστήμας. οὐδὲν γὰρ τῶν [67b] αἰσθητῶν ἔξω τῆς αἰσθήσεως γενόμενον ἴσμεν, οὐδ' ἂν ἡσθημένοι τυγχάνωμεν, εἰ μὴ ὡς τῷ καθόλου καὶ τῷ ἔχειν τὴν οἰκείαν ἐπιστήμην, ἀλλ' οὐχ ὡς τῷ ἐνεργεῖν. τὸ γὰρ ἐπίστασθαι λέγεται τριχῶς, ἢ ὡς τῇ καθόλου ἢ ὡς τῇ οἰκεία ἢ ὡς τῷ ἐνεργεῖν, ὥστε καὶ τὸ ἡπατῆσθαι τοσαυταχῶς. οὐδὲν οὖν κωλύει καὶ εἰδέναι καὶ ἡπατῆσθαι περὶ ταυτό, πλὴν οὐκ ἐναντίως. ὅπερ συμβαίνει καὶ τῷ καθ' ἑκατέραν εἰδότες τὴν πρότασιν καὶ μὴ ἐπεσκεμμένῳ πρότερον. ὑπολαμβάνων γὰρ κύειν τὴν ἡμίονον οὐκ ἔχει τὴν κατὰ τὸ ἐνεργεῖν ἐπιστήμην, οὐδ' αὖ διὰ τὴν ὑπόληψιν ἐναντίαν ἀπάτην τῇ ἐπιστήμῃ· συλλογισμὸς γὰρ ἢ ἐναντία ἀπάτη τῇ καθόλου.

Ὁ δ' ὑπολαμβάνων τὸ ἀγαθὸ εἶναι κακὸ εἶναι, τὸ αὐτὸ ὑπολήπεται ἀγαθὸ εἶναι καὶ κακὸ. ἔστω γὰρ τὸ μὲν ἀγαθὸ εἶναι ἐφ' οὗ Α, τὸ δὲ κακὸ εἶναι ἐφ' οὗ Β, πάλιν δὲ τὸ ἀγαθὸ εἶναι ἐφ' οὗ Γ. ἐπεὶ οὖν ταύτῳ ὑπολαμβάνει τὸ Β καὶ τὸ Γ, καὶ εἶναι τὸ Γ τὸ Β ὑπολήπεται, καὶ πάλιν τὸ Β τὸ Α εἶναι ὡσαύτως, ὥστε καὶ τὸ Γ τὸ Α. ὥσπερ γὰρ εἰ ἦν ἀληθές, καθ' οὗ τὸ Γ, τὸ Β, καὶ καθ' οὗ τὸ Β, τὸ Α, καὶ κατὰ τοῦ Γ τὸ Α ἀληθές ἦν, οὕτω καὶ ἐπὶ τοῦ ὑπολαμβάνειν. ὁμοίως δὲ καὶ ἐπὶ τοῦ εἶναι· ταύτοῦ γὰρ ὄντος τοῦ Γ καὶ Β, καὶ πάλιν τοῦ Β καὶ Α, καὶ τὸ Γ τῷ Α ταύτῳ ἦν· ὥστε καὶ ἐπὶ τοῦ δοξάζειν ὁμοίως. ἄρ' οὖν τοῦτο μὲν ἀναγκαῖον, εἴ τις δώσει τὸ πρῶτον; ἀλλ' ἴσως ἐκεῖνο ψεῦδος, τὸ ὑπολαβεῖν τινὰ κακὸ εἶναι τὸ ἀγαθὸ εἶναι, εἰ μὴ κατὰ συμβεβηκός· πολλαχῶς γὰρ ἐγχωρεῖ τοῦθ' ὑπολαμβάνειν. ἐπισκεπτέον δὲ τοῦτο βέλτιον.

## Κεφάλαιο 22

Ὅταν δ' ἀντιστρέφη τὰ ἄκρα, ἀνάγκη καὶ τὸ μέσον ἀντιστρέφειν πρὸς ἄμφω. εἰ γὰρ τὸ Α κατὰ τοῦ Γ διὰ τοῦ Β ὑπάρχει, εἰ ἀντιστρέφει καὶ ὑπάρχει, ὥ τὸ Α, παντὶ τὸ Γ, καὶ τὸ Β τῷ Α ἀντιστρέψει καὶ ὑπάρξει, ὥ τὸ Α, παντὶ τὸ Β διὰ μέσου τοῦ Γ· καὶ τὸ Γ τῷ Β ἀντιστρέψει διὰ μέσου τοῦ Α. καὶ ἐπὶ τοῦ μὴ ὑπάρχειν ὡσαύτως, οἷον εἰ τὸ Β τῷ Γ ὑπάρχει, τῷ δὲ Β τὸ Α οὐχ ὑπάρχει, οὐδὲ τὸ Α τῷ Γ οὐχ ὑπάρξει. εἰ δὴ τὸ Β τῷ Α ἀντιστρέφει, καὶ τὸ Γ τῷ Α ἀντιστρέψει. ἔστω γὰρ τὸ Β μὴ ὑπάρχον τῷ Α· οὐδ' ἄρα τὸ Γ· παντὶ γὰρ τῷ Γ τὸ Β ὑπῆρχεν. καὶ εἰ τῷ Β τὸ Γ ἀντιστρέφει, καὶ τὸ Α ἀντιστρέψει· καθ' οὗ γὰρ ἅπαντος τὸ Β, καὶ τὸ Γ. καὶ εἰ τὸ Γ <καὶ> πρὸς τὸ Α ἀντιστρέφει, καὶ τὸ Β ἀντιστρέψει. ὥ γὰρ τὸ Β, [68a] τὸ Γ· ὥ δὲ τὸ Α, τὸ Γ οὐχ ὑπάρχει. καὶ μόνον τοῦτο ἀπὸ τοῦ συμπεράσματος ἄρχεται, τὰ δ' ἄλλα οὐχ ὁμοίως καὶ ἐπὶ τοῦ κατηγορικοῦ συλλογισμοῦ. Πάλιν εἰ τὸ Α καὶ τὸ Β ἀντιστρέφει, καὶ τὸ Γ καὶ τὸ Δ ὡσαύτως, ἅπαντι δ' ἀνάγκη τὸ Α ἢ τὸ Γ ὑπάρχειν, καὶ τὸ Β καὶ Δ οὕτως ἔξει ὥστε παντὶ θάτερον ὑπάρχειν. ἐπεὶ γὰρ ὥ τὸ Α, τὸ Β, καὶ ὥ τὸ Γ, τὸ Δ, παντὶ δὲ τὸ Α ἢ τὸ Γ καὶ οὐχ ἅμα, φανερόν ὅτι καὶ τὸ Β ἢ τὸ Δ παντὶ καὶ οὐχ ἅμα [οἷον ... γεγονέναι]· δύο γὰρ συλλογισμοὶ σύγκεινται. πάλιν εἰ παντὶ (11) μὲν τὸ Α ἢ τὸ Β καὶ τὸ Γ ἢ τὸ Δ, ἅμα δὲ μὴ ὑπάρχει, εἰ ἀντιστρέφει τὸ Α καὶ τὸ Γ, καὶ τὸ Β καὶ τὸ Δ ἀντιστρέφει. εἰ γὰρ τινὶ μὴ ὑπάρχει τὸ Β, ὥ τὸ Δ, δῆλον ὅτι τὸ Α ὑπάρχει. εἰ δὲ τὸ Α, καὶ τὸ Γ· ἀντιστρέφει γάρ. ὥστε ἅμα τὸ Γ καὶ τὸ Δ. τοῦτο δ' ἀδύνατον. <οἷον εἰ τὸ ἀγέννητον ἀφθαρτον καὶ τὸ ἀφθαρτον ἀγέννητον, ἀνάγκη τὸ γενόμενον φθαρτὸν καὶ τὸ φθαρτὸν γεγονέναι>.

Ὅταν δὲ τὸ Α ὅλω τῷ Β καὶ τῷ Γ ὑπάρχη καὶ μηδενὸς ἄλλου κατηγορῇται, ὑπάρχη δὲ καὶ τὸ Β παντὶ τῷ Γ, ἀνάγκη τὸ Α καὶ Β ἀντιστρέφειν· ἐπεὶ γὰρ κατὰ μόνων τῶν Β Γ λέγεται τὸ Α, κατηγορεῖται δὲ τὸ Β καὶ αὐτὸ αὐτοῦ καὶ τοῦ Γ, φανερόν ὅτι καθ' ὧν τὸ Α, καὶ τὸ Β λεχθήσεται πάντων πλὴν αὐτοῦ τοῦ Α. πάλιν ὅταν τὸ Α καὶ τὸ Β ὅλω τῷ Γ ὑπάρχη, ἀντιστρέφη δὲ τὸ Γ τῷ Β, ἀνάγκη τὸ Α παντὶ τῷ Β ὑπάρχειν· ἐπεὶ γὰρ παντὶ τῷ Γ τὸ Α, τὸ δὲ Γ τῷ Β διὰ τὸ ἀντιστρέφειν, καὶ τὸ Α παντὶ τῷ Β.

Ὅταν δὲ δυοῖν ὄντοι τὸ Α τοῦ Β αἰρετώτερον ᾖ, ὄντων ἀντικειμένων, καὶ τὸ Δ τοῦ Γ ὡσαύτως, εἰ αἰρετώτερα τὰ Α Γ τῶν Β Δ, τὸ Α τοῦ Δ αἰρετώτερον. ὁμοίως γὰρ διωκτὸν τὸ Α καὶ φευκτὸν τὸ Β (ἀντικείμενα γάρ), καὶ τὸ Γ τῷ Δ (καὶ γὰρ ταῦτα ἀντίκειται). εἰ οὖν τὸ Α τῷ Δ ὁμοίως αἰρετόν, καὶ τὸ Β τῷ Γ φευκτόν· ἑκάτερον γὰρ ἑκατέρω ὁμοίως, φευκτὸν διωκτῷ. ὥστε καὶ τὰ ἄμφω τὰ Α Γ τοῖς Β Δ. ἐπεὶ δὲ μᾶλλον, οὐχ οἷόν τε ὁμοίως· καὶ γὰρ ἂν τὰ Β Δ ὁμοίως ᾗσαν. εἰ δὲ τὸ Δ τοῦ Α αἰρετώτερον, καὶ τὸ Β τοῦ Γ ἥττον φευκτόν· τὸ γὰρ ἔλαττον τῷ ἐλάττονι ἀντίκειται. αἰρετώτερον δὲ τὸ μείζον ἀγαθὸν καὶ

ἔλαττον κακὸν ἢ τὸ ἔλαττον ἀγαθὸν καὶ μεῖζον κακόν· καὶ τὸ ἅπαν ἄρα, τὸ Β Δ, αἰρετώτερον τοῦ Α Γ. νῦν δ' οὐκ ἔστιν. τὸ Α ἄρα αἰρετώτερον τοῦ Δ, καὶ τὸ Γ ἄρα τοῦ Β ἦττον φευκτόν. εἰ δὲ ἔλοιτο πᾶς ὁ ἐρῶν κατὰ τὸν ἔρωτα τὸ Α τὸ οὕτως ἔχειν ὥστε χαρίζεσθαι, καὶ τὸ μὴ χαρίζεσθαι τὸ ἐφ' οὗ Γ, ἢ τὸ χαρίζεσθαι τὸ ἐφ' οὗ Δ, καὶ [68b] τὸ μὴ τοιοῦτον εἶναι οἷον χαρίζεσθαι τὸ ἐφ' οὗ Β, δῆλον ὅτι τὸ Α τὸ τοιοῦτον εἶναι αἰρετώτερόν ἐστιν ἢ τὸ χαρίζεσθαι. τὸ ἄρα φιλεῖσθαι τῆς συνουσίας αἰρετώτερον κατὰ τὸν ἔρωτα. μᾶλλον ἄρα ὁ ἔρως ἐστὶ τῆς φιλίας ἢ τοῦ συνεῖναι. εἰ δὲ μάλιστα τούτου, καὶ τέλος τοῦτο. τὸ ἄρα συνεῖναι ἢ οὐκ ἔστιν ὅλως ἢ τοῦ φιλεῖσθαι ἔνεκεν· καὶ γὰρ αἱ ἄλλαι ἐπιθυμίαι καὶ τέχναι οὕτως.

## Κεφάλαιο 23

Πῶς μὲν οὖν ἔχουσιν οἱ ὅροι κατὰ τὰς ἀντιστροφὰς καὶ τὸ αἰρετώτεροι ἢ φευκτότεροι εἶναι, φανερόν· ὅτι δ' οὐ μόνον οἱ διαλεκτικοὶ καὶ ἀποδεικτικοὶ συλλογισμοὶ διὰ τῶν προειρημένων γίνονται σχημάτων, ἀλλὰ καὶ οἱ ῥητορικοὶ καὶ ἀπλῶς ἡτισοῦν πίστις καὶ ἡ καθ' ὁποιοῦν μέθοδον, νῦν ἂν εἴη λεκτέον. ἅπαντα γὰρ πιστεύομεν ἢ διὰ συλλογισμοῦ ἢ ἐξ ἐπαγωγῆς.

Ἐπαγωγή μὲν οὖν ἐστὶ καὶ ὁ ἐξ ἐπαγωγῆς συλλογισμὸς τὸ διὰ τοῦ ἐτέρου θάτερον ἄκρον τῷ μέσῳ συλλογίσασθαι, οἷον εἰ τῶν Α Γ μέσον τὸ Β, διὰ τοῦ Γ δεῖξαι τὸ Α τῷ Β ὑπάρχον· οὕτω γὰρ ποιούμεθα τὰς ἐπαγωγὰς. οἷον ἔστω τὸ Α μακρόβιον, τὸ δ' ἐφ' ᾧ Β τὸ χολὴν μὴ ἔχον, ἐφ' ᾧ δὲ Γ τὸ καθ' ἕκαστον μακρόβιον, οἷον ἄνθρωπος καὶ ἵππος καὶ ἡμίονος. τῷ δὲ Γ ὅλῳ ὑπάρχει τὸ Α (πᾶν γὰρ τὸ Γ μακρόβιον)· ἀλλὰ καὶ τὸ Β, τὸ μὴ ἔχειν χολήν, παντὶ ὑπάρχει τῷ Γ. εἰ οὖν ἀντιστρέφει τὸ Γ τῷ Β καὶ μὴ ὑπερτείνει τὸ μέσον, ἀνάγκη τὸ Α τῷ Β ὑπάρχειν. δέδεικται γὰρ πρότερον ὅτι ἂν δύο ἄττα τῷ αὐτῷ ὑπάρχη καὶ πρὸς θάτερον αὐτῶν ἀντιστρέφῃ τὸ ἄκρον, ὅτι τῷ ἀντιστρέφοντι καὶ θάτερον ὑπάρξει τῶν κατηγορουμένων. δεῖ δὲ νοεῖν τὸ Γ τὸ ἐξ ἀπάντων τῶν καθ' ἕκαστον συγκείμενον· ἡ γὰρ ἐπαγωγή διὰ πάντων.

Ἔστι δ' ὁ τοιοῦτος συλλογισμὸς τῆς πρώτης καὶ ἀμέσου προτάσεως· ὧν μὲν γὰρ ἔστι μέσον, διὰ τοῦ μέσου ὁ συλλογισμός, ὧν δὲ μὴ ἔστι, δι' ἐπαγωγῆς. καὶ τρόπον τινὰ ἀντίκειται ἡ ἐπαγωγή τῷ συλλογισμῷ· ὁ μὲν γὰρ διὰ τοῦ μέσου τὸ ἄκρον τῷ τρίτῳ δείκνυσιν, ἡ δὲ διὰ τοῦ τρίτου τὸ ἄκρον τῷ μέσῳ. φύσει μὲν οὖν πρότερος καὶ γνωριμώτερος ὁ διὰ τοῦ μέσου συλλογισμός, ἡμῖν δ' ἐναργέστερος ὁ διὰ τῆς ἐπαγωγῆς.

## Κεφάλαιο 24



Παράδειγμα δ' ἐστὶν ὅταν τῷ μέσῳ τὸ ἄκρον ὑπάρχον δειχθῇ διὰ τοῦ ὁμοίου τῷ τρίτῳ. δεῖ δὲ καὶ τὸ μέσον τῷ τρίτῳ καὶ τὸ πρῶτον τῷ ὁμοίῳ γνώριμον εἶναι ὑπάρχον. οἷον ἔστω τὸ Α κακόν, τὸ δὲ Β πρὸς ὁμόρους ἀναιρεῖσθαι [69a] πόλεμον, ἐφ' ᾧ δὲ Γ τὸ Ἀθηναίους πρὸς Θηβαίους, τὸ δ' ἐφ' ᾧ Δ Θηβαίους πρὸς Φωκεῖς. ἐὰν οὖν βουλώμεθα δεῖξαι ὅτι τὸ Θηβαίοις πολεμεῖν κακόν ἐστὶ, ληπτέον ὅτι τὸ πρὸς τοὺς ὁμόρους πολεμεῖν κακόν. τούτου δὲ πίστις ἐκ τῶν ὁμοίων, οἷον ὅτι Θηβαίοις ὁ πρὸς Φωκεῖς. ἐπεὶ οὖν τὸ πρὸς τοὺς ὁμόρους κακόν, τὸ δὲ πρὸς Θηβαίους πρὸς ὁμόρους ἐστί, φανερόν ὅτι τὸ πρὸς Θηβαίους πολεμεῖν κακόν. ὅτι μὲν οὖν τὸ Β τῷ Γ καὶ τῷ Δ ὑπάρχει, φανερόν (ἄμφω γὰρ ἐστὶ πρὸς τοὺς ὁμόρους ἀναιρεῖσθαι πόλεμον), καὶ ὅτι τὸ Α τῷ Δ (Θηβαίοις γὰρ οὐ συνήνεγκεν ὁ πρὸς Φωκεῖς πόλεμος). ὅτι δὲ τὸ Α τῷ Β ὑπάρχει, διὰ τοῦ Δ δειχθήσεται. τὸν αὐτὸν δὲ τρόπον καὶ εἰ διὰ πλειόνων τῶν ὁμοίων ἢ πίστις γένοιτο τοῦ μέσου πρὸς τὸ ἄκρον. φανερόν οὖν ὅτι τὸ παράδειγμά ἐστὶν οὔτε ὡς μέρος πρὸς ὅλον οὔτε ὡς ὅλον πρὸς μέρος, ἀλλ' ὡς μέρος πρὸς μέρος, ὅταν ἄμφω μὲν ἢ ὑπὸ ταῦτό, γνώριμον δὲ θάτερον. καὶ διαφέρει τῆς ἐπαγωγῆς, ὅτι ἢ μὲν ἐξ ἀπάντων τῶν ἀτόμων τὸ ἄκρον ἐδείκνυεν ὑπάρχειν τῷ μέσῳ καὶ πρὸς τὸ ἄκρον οὐ συνῆπτε τὸν συλλογισμόν, τὸ δὲ καὶ συνάπτει καὶ οὐκ ἐξ ἀπάντων δείκνυσιν.

## Κεφάλαιο 25

Ἀπαγωγή δ' ἐστὶν ὅταν τῷ μὲν μέσῳ τὸ πρῶτον δῆλον ἢ ὑπάρχον, τῷ δ' ἐσχάτῳ τὸ μέσον ἄδηλον μὲν, ὁμοίως δὲ πιστὸν ἢ μᾶλλον τοῦ συμπεράσματος· ἔτι ἂν ὀλίγα ἢ τὰ μέσα τοῦ ἐσχάτου καὶ τοῦ μέσου· πάντως γὰρ ἐγγύτερον εἶναι συμβαίνει τῆς ἐπιστήμης. οἷον ἔστω τὸ Α τὸ διδακτόν, ἐφ' οὗ Β ἐπιστήμη, τὸ Γ δικαιοσύνη. ἢ μὲν οὖν ἐπιστήμη ὅτι διδακτόν, φανερόν· ἢ δ' ἀρετὴ εἰ ἐπιστήμη, ἄδηλον. εἰ οὖν ὁμοίως ἢ μᾶλλον πιστὸν τὸ Β Γ τοῦ Α Γ, ἀπαγωγή ἐστίν· ἐγγύτερον γὰρ τοῦ ἐπίστασθαι διὰ τὸ προσειληφέναι τὴν Α Β ἐπιστήμην, πρότερον οὐκ ἔχοντας. ἢ πάλιν εἰ ὀλίγα τὰ μέσα τῶν Β Γ· καὶ γὰρ οὕτως ἐγγύτερον τοῦ εἰδέναι. οἷον εἰ τὸ Δ εἴη τετραγωνίζεσθαι, τὸ δ' ἐφ' ᾧ Ε εὐθύγραμμον, τὸ δ' ἐφ' ᾧ Ζ κύκλος· εἰ τοῦ Ε Ζ ἐν μόνον εἴη μέσον, τὸ μετὰ μηνίσκων ἴσον γίνεσθαι εὐθυγράμμῳ τὸν κύκλον, ἐγγύς ἂν εἴη τοῦ εἰδέναι. ὅταν δὲ μήτε πιστότερον ἢ τὸ Β Γ τοῦ Α Γ μήτ' ὀλίγα τὰ μέσα, οὐ λέγω ἀπαγωγήν. οὐδ' ὅταν ἄμεσον ἢ τὸ Β Γ· ἐπιστήμη γὰρ τὸ τοιοῦτον.

## Κεφάλαιο 26

Ἐνστασις δ' ἐστὶ πρότασις προτάσει ἐναντία. διαφέρει δὲ τῆς προτάσεως, ὅτι

τὴν μὲν ἔνστασιν ἐνδέχεται εἶναι ἐπὶ μέρους, τὴν δὲ πρότασιν ἢ ὅλως οὐκ ἐνδέχεται ἢ οὐκ ἐν τοῖς [69b] καθόλου συλλογισμοῖς. φέρεται δὲ ἡ ἔνστασις διχῶς καὶ διὰ δύο σχημάτων, διχῶς μὲν ὅτι ἢ καθόλου ἢ ἐν μέρει πᾶσα ἔνστασις, ἐκ δύο δὲ σχημάτων ὅτι ἀντικείμενα φέρονται τῇ προτάσει, τὰ δ' ἀντικείμενα ἐν τῷ πρώτῳ καὶ τῷ τρίτῳ σχήματι περαίνονται μόνοις. ὅταν γὰρ ἀξιῶσθαι παντὶ ὑπάρχειν, ἐνιστάμεθα ἢ ὅτι οὐδενὶ ἢ ὅτι τινὶ οὐχ ὑπάρχει· τούτων δὲ τὸ μὲν μηδενὶ ἐκ τοῦ πρώτου σχήματος, τὸ δὲ τινὶ μὴ ἐκ τοῦ ἐσχάτου. οἷον ἔστω τὸ Α μίαν εἶναι ἐπιστήμην, ἐφ' ᾧ τὸ Β ἐναντία. προτείναντος δὴ μίαν εἶναι τῶν ἐναντίων ἐπιστήμην, ἢ ὅτι ὅλως οὐχ ἡ αὐτὴ τῶν ἀντικειμένων ἐνίσταται, τὰ δ' ἐναντία ἀντικείμενα, ὥστε γίνεται τὸ πρῶτον σχῆμα, ἢ ὅτι τοῦ γνωστοῦ καὶ ἀγνώστου οὐ μία· τοῦτο δὲ τὸ τρίτον· κατὰ γὰρ τοῦ Γ, τοῦ γνωστοῦ καὶ ἀγνώστου, τὸ μὲν ἐναντία εἶναι ἀληθές, τὸ δὲ μίαν αὐτῶν ἐπιστήμην εἶναι ψεῦδος. πάλιν ἐπὶ τῆς στερητικῆς προτάσεως ὡσαύτως. ἀξιῶντος γὰρ μὴ εἶναι μίαν τῶν ἐναντίων, ἢ ὅτι πάντων τῶν ἀντικειμένων ἢ ὅτι τινῶν ἐναντίων ἡ αὐτὴ λέγομεν, οἷον ὑγιεινοῦ καὶ νοσώδους· τὸ μὲν οὖν πάντων ἐκ τοῦ πρώτου, τὸ δὲ τινῶν ἐκ τοῦ τρίτου σχήματος.

Ἀπλῶς γὰρ ἐν πᾶσι καθόλου μὲν ἐνιστάμενον ἀνάγκη πρὸς τὸ καθόλου τῶν προτεινομένων τὴν ἀντίφασιν εἰπεῖν, οἷον εἰ μὴ τὴν αὐτὴν ἀξιῶ τῶν ἐναντίων, πάντων εἰπόντα τῶν ἀντικειμένων μίαν. οὕτω δ' ἀνάγκη τὸ πρῶτον εἶναι σχῆμα· μέσον γὰρ γίνεται τὸ καθόλου πρὸς τὸ ἐξ ἀρχῆς. ἐν μέρει δέ, πρὸς ὃ ἐστὶ καθόλου καθ' οὗ λέγεται ἡ πρότασις, οἷον γνωστοῦ καὶ ἀγνώστου μὴ τὴν αὐτήν· τὰ γὰρ ἐναντία καθόλου πρὸς ταῦτα. καὶ γίνεται τὸ τρίτον σχῆμα· μέσον γὰρ τὸ ἐν μέρει λαμβανόμενον, οἷον τὸ γνωστὸν καὶ τὸ ἀγνώστον. ἐξ ὧν γὰρ ἔστι συλλογίσασθαι τοῦναντίον, ἐκ τούτων καὶ τὰς ἐνστάσεις ἐπιχειροῦμεν λέγειν. διὸ καὶ ἐκ μόνων τούτων τῶν σχημάτων φέρομεν· ἐν μόνοις γὰρ οἱ ἀντικείμενοι συλλογισμοί· διὰ γὰρ τοῦ μέσου οὐκ ἦν καταφατικῶς. ἔτι δὲ κἂν λόγου δέοιτο πλείονος ἢ διὰ τοῦ μέσου σχήματος, οἷον εἰ μὴ δοίη τὸ Α τῷ Β ὑπάρχειν διὰ τὸ μὴ ἀκολουθεῖν αὐτῷ τὸ Γ. τοῦτο γὰρ δι' ἄλλων προτάσεων δῆλον· οὐ δεῖ δὲ εἰς ἄλλα ἐκτρέπεσθαι τὴν ἔνστασιν, ἀλλ' εὐθὺς φανερὰν ἔχειν τὴν ἑτέραν πρότασιν. [διὸ καὶ τὸ σημεῖον ἐκ μόνου τούτου τοῦ σχήματος οὐκ ἔστιν.]

Ἐπισκεπτέον δὲ καὶ περὶ τῶν ἄλλων ἐνστάσεων, οἷον περὶ τῶν ἐκ τοῦ ἐναντίου καὶ τοῦ ὁμοίου καὶ τοῦ κατὰ δόξαν, καὶ [70a] εἰ τὴν ἐν μέρει ἐκ τοῦ πρώτου ἢ τὴν στερητικὴν ἐκ τοῦ μέσου δυνατὸν λαβεῖν.

## Κεφάλαιο 27

<Ἐνθύμημα δὲ ἐστὶ συλλογισμὸς ἐξ εἰκότων ἢ σημείων,> εἰκὸς δὲ καὶ σημεῖον οὐ ταύτόν ἐστιν, ἀλλὰ τὸ μὲν εἰκὸς ἐστὶ πρότασις (3) ἔνδοξος· ὃ γὰρ ὡς ἐπὶ τὸ πολὺ ἴσασιν οὕτω γινόμενον ἢ μὴ γινόμενον ἢ ὄν ἢ μὴ ὄν, τοῦτ' ἐστὶν εἰκὸς, οἷον τὸ μισεῖν τοὺς φθονοῦντας ἢ τὸ φιλεῖν τοὺς ἐρωμένους. σημεῖον δὲ βούλεται εἶναι πρότασις ἀποδεικτικὴ ἢ ἀναγκαία ἢ ἔνδοξος· οὐ γὰρ ὄντος ἔστιν ἢ οὐ γενομένου πρότερον ἢ ὕστερον γέγονε τὸ πρᾶγμα, τοῦτο σημεῖόν ἐστι τοῦ γεγονέναι ἢ εἶναι. [Ἐνθύμημα . . . σημείων] λαμβάνεται δὲ τὸ σημεῖον τριχῶς, ὁσαυχῶς (11) καὶ τὸ μέσον ἐν τοῖς σχήμασιν· ἢ γὰρ ὡς ἐν τῷ πρώτῳ ἢ ὡς ἐν τῷ μέσῳ ἢ ὡς ἐν τῷ τρίτῳ, οἷον τὸ μὲν δεῖξαι κύουσιν διὰ τὸ γάλα ἔχειν ἐκ τοῦ πρώτου σχήματος· μέσον γὰρ τὸ γάλα ἔχειν. ἐφ' ᾧ τὸ Α κύειν, τὸ Β γάλα ἔχειν, γυνὴ ἐφ' ᾧ Γ. τὸ δ' ὅτι οἱ σοφοὶ σπουδαῖοι, Πιττακὸς γὰρ σπουδαῖος, διὰ τοῦ ἐσχάτου. ἐφ' ᾧ Α τὸ σπουδαῖον, ἐφ' ᾧ Β οἱ σοφοί, ἐφ' ᾧ Γ Πιττακός. ἀληθὲς δὴ καὶ τὸ Α καὶ τὸ Β τοῦ Γ κατηγορεῖσθαι· πλὴν τὸ μὲν οὐ λέγουσι διὰ τὸ εἰδέναι, τὸ δὲ λαμβάνουσιν. τὸ δὲ κύειν, ὅτι ὠχρά, διὰ τοῦ μέσου σχήματος βούλεται εἶναι· ἐπεὶ γὰρ ἔπεται ταῖς κυούσαις τὸ ὠχρόν, ἀκολουθεῖ δὲ καὶ ταύτῃ, δεδειχθαι οἷοντα ὅτι κύει. τὸ ὠχρόν ἐφ' οὗ τὸ Α, τὸ κύειν ἐφ' οὗ Β, γυνὴ ἐφ' οὗ Γ.

Ἐὰν μὲν οὖν ἡ μία λεχθῇ πρότασις, σημεῖον γίνεται μόνον, ἐὰν δὲ καὶ ἡ ἑτέρα προσληφθῇ, συλλογισμός, οἷον ὅτι Πιττακὸς ἐλευθέριος· οἱ γὰρ φιλότιμοι ἐλευθέριοι, Πιττακὸς δὲ φιλότιμος. ἢ πάλιν ὅτι οἱ σοφοὶ ἀγαθοί· Πιττακὸς γὰρ ἀγαθός, ἀλλὰ καὶ σοφός. οὕτω μὲν οὖν γίνονται συλλογισμοί, πλὴν ὁ μὲν διὰ τοῦ πρώτου σχήματος ἄλυτος, ἂν ἀληθὴς ἦ (καθόλου γὰρ ἐστὶν), ὁ δὲ διὰ τοῦ ἐσχάτου λύσιμος, κἂν ἀληθὲς ἦ τὸ συμπέρασμα, διὰ τὸ μὴ εἶναι καθόλου μηδὲ πρὸς τὸ πρᾶγμα τὸν συλλογισμόν· οὐ γὰρ εἰ Πιττακὸς σπουδαῖος, διὰ τοῦτο καὶ τοὺς ἄλλους ἀνάγκη σοφούς. ὁ δὲ διὰ τοῦ μέσου σχήματος ἀεὶ καὶ πάντως λύσιμος· οὐδέποτε γὰρ γίνεται συλλογισμὸς οὕτως ἐχόντων τῶν ὄρων· οὐ γὰρ εἰ ἡ κύουσα ὠχρά, ὠχρά δὲ καὶ ἡδε, κύειν ἀνάγκη ταύτην. ἀληθὲς μὲν οὖν ἐν ἅπασιν ὑπάρξει τοῖς σημείοις, διαφορὰς δ' ἔχουσι τὰς εἰρημένας. [70b]

Ἡ δὲ οὕτω διαιρετέον τὸ σημεῖον, τούτων δὲ τὸ μέσον τεκμήριον ληπτέον (τὸ γὰρ τεκμήριον τὸ εἰδέναι ποιοῦν φασὶν εἶναι, τοιοῦτο δὲ μάλιστα τὸ μέσον), ἢ τὰ μὲν ἐκ τῶν ἄκρων σημεῖον λεκτέον, τὰ δ' ἐκ τοῦ μέσου τεκμήριον· ἐνδοξότατον γὰρ καὶ μάλιστα ἀληθὲς τὸ διὰ τοῦ πρώτου σχήματος.

Τὸ δὲ φυσιογνωμονεῖν δυνατόν ἐστιν, εἴ τις δίδωσιν ἅμα μεταβάλλειν τὸ σῶμα καὶ τὴν ψυχὴν ὅσα φυσικά ἐστι παθήματα· μαθὼν γὰρ ἴσως μουσικὴν μεταβέβληκε τι τὴν ψυχὴν, ἀλλ' οὐ τῶν φύσει ἡμῖν ἐστὶ τοῦτο τὸ πάθος, ἀλλ'

οἷον ὄργαι καὶ ἐπιθυμίαι τῶν φύσει κινήσεων. εἰ δὴ τοῦτο τε δοθείη καὶ ἐν ἐνὸς σημεῖον εἶναι, καὶ δυναίμεθα λαμβάνειν τὸ ἴδιον ἐκάστου γένους πάθος καὶ σημεῖον, δυνησόμεθα φυσιογνωμονεῖν. εἰ γὰρ ἐστὶν ἰδίᾳ τινὶ γένει ὑπάρχον ἀτόμῳ πάθος, οἷον τοῖς λέουσιν ἀνδρεία, ἀνάγκη καὶ σημεῖον εἶναί τι· συμπάσχειν γὰρ ἀλλήλοις ὑπόκειται. καὶ ἔστω τοῦτο τὸ μέγαλα τὰ ἀκρωτήρια ἔχειν· ὃ καὶ ἄλλοις ὑπάρχειν γένεσι μὴ ὅλοις ἐνδέχεται. τὸ γὰρ σημεῖον οὕτως ἴδιόν ἐστιν, ὅτι ὅλου γένους ἴδιόν ἐστι [πάθος], καὶ οὐ μόνου ἴδιον, ὥσπερ εἰώθαμεν λέγειν. ὑπάρξει δὴ καὶ ἐν ἄλλῳ γένει τοῦτο, καὶ ἔσται ἀνδρεῖος [ὁ] ἄνθρωπος καὶ ἄλλο τι ζῶον. ἔξει ἄρα τὸ σημεῖον· ἐν γὰρ ἐνὸς ἦν. εἰ τοίνυν ταῦτ' ἐστί, καὶ δυνησόμεθα τοιαῦτα σημεῖα συλλέξει ἐπὶ τούτων τῶν ζώων ἃ μόνον ἐν πάθος ἔχει τὸ ἴδιον, ἕκαστον δ' ἔχει σημεῖον, ἐπεὶ περ ἐν ἔχειν ἀνάγκη, δυνησόμεθα φυσιογνωμονεῖν. εἰ δὲ δύο ἔχει ἴδια ὅλον τὸ γένος, οἷον ὁ λέων ἀνδρεῖον καὶ μεταδοτικόν, πῶς γνωσόμεθα πότερον ποτέρου σημεῖον τῶν ἰδίᾳ ἀκολουθούντων σημείων; ἢ εἰ ἄλλῳ τινὶ μὴ ὅλῳ ἄμφω, καὶ ἐν οἷς μὴ ὅλοις ἐκάτερον, ὅταν τὸ μὲν ἔχη τὸ δὲ μή· εἰ γὰρ ἀνδρεῖος μὲν ἐλευθέριος δὲ μή, ἔχει δὲ τῶν δύο τοδί, δῆλον ὅτι καὶ ἐπὶ τοῦ λέοντος τοῦτο σημεῖον τῆς ἀνδρείας.

Ἔστι δὴ τὸ φυσιογνωμονεῖν τῷ ἐν τῷ πρώτῳ σχήματι τὸ μέσον τῷ μὲν πρώτῳ ἄκρῳ ἀντιστρέφειν, τοῦ δὲ τρίτου ὑπερτείνειν καὶ μὴ ἀντιστρέφειν, οἷον ἀνδρεία τὸ Α, τὰ ἀκρωτήρια μέγαλα ἐφ' οὗ Β, τὸ δὲ Γ λέων. ὥ δὲ τὸ Γ, τὸ Β παντί, ἀλλὰ καὶ ἄλλοις. ὥ δὲ τὸ Β, τὸ Α παντὶ καὶ οὐ πλείοσιν, ἀλλ' ἀντιστρέφει· εἰ δὲ μή, οὐκ ἔσται ἐν ἐνὸς σημεῖον.

## Ἀναλυτικῶν Ὑστέρων (71a) Posterior Analytics



### CONTENTS

[Βιβλίο 1](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Κεφάλαιο 24](#)

[Κεφάλαιο 25](#)

[Κεφάλαιο 26](#)

[Κεφάλαιο 27](#)

[Κεφάλαιο 28](#)

[Κεφάλαιο 29](#)

[Κεφάλαιο 30](#)

[Κεφάλαιο 31](#)

[Κεφάλαιο 32](#)

[Κεφάλαιο 33](#)

[Κεφάλαιο 34](#)

[Βιβλίο 2](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

## **Βιβλίο 1**

### **Κεφάλαιο 1**

(71a.) Πᾶσα διδασκαλία καὶ πᾶσα μάθησις διανοητικὴ ἐκ προϋπαρχούσης γίνεται γνώσεως. φανερόν δὲ τοῦτο θεωροῦσιν ἐπὶ πασῶν· αἱ τε γὰρ μαθηματικαὶ τῶν ἐπιστημῶν διὰ τούτου τοῦ τρόπου παραγίνονται καὶ τῶν ἄλλων ἐκάστη τεχνῶν. ὁμοίως δὲ καὶ περὶ τοὺς λόγους οἳ τε διὰ συλλογισμῶν καὶ οἱ δι' ἐπαγωγῆς· ἀμφοτέρω γὰρ διὰ προγινωσκομένων ποιοῦνται τὴν διδασκαλίαν, οἱ μὲν λαμβάνοντες ὡς παρὰ ξυνιέντων, οἱ δὲ δεικνύντες τὸ καθόλου διὰ τοῦ δῆλον εἶναι τὸ καθ' ἕκαστον. ὡς δ' αὖτως καὶ οἱ ῥητορικοὶ συμπείθουσιν· ἡ γὰρ διὰ παραδειγμάτων, ὃ ἐστὶν ἐπαγωγή, ἡ δι' ἐνθυμημάτων, ὅπερ ἐστὶ συλλογισμός. διχῶς δ' ἀναγκαῖον προγινώσκειν· τὰ μὲν γάρ, ὅτι ἔστι, προὑπολαμβάνειν ἀναγκαῖον, τὰ δέ, τί τὸ λεγόμενόν ἐστι, ξυνιέναι δεῖ, τὰ δ' ἄμφω, οἷον ὅτι μὲν ἅπαν ἢ φῆσαι ἢ ἀποφῆσαι ἀληθές, ὅτι ἔστι, τὸ δὲ τρίγωνον, ὅτι τοδὶ σημαίνει, τὴν δὲ μονάδα ἄμφω, καὶ τί σημαίνει καὶ ὅτι ἔστιν· οὐ γὰρ ὁμοίως τούτων ἕκαστον δῆλον ἡμῖν.

Ἔστι δὲ γνωρίζειν τὰ μὲν πρότερον γνωρίσαντα, τῶν δὲ καὶ ἅμα λαμβάνοντα τὴν γνώσιν, οἷον ὅσα τυγχάνει ὄντα ὑπὸ τὸ καθόλου οὗ ἔχει τὴν γνώσιν. ὅτι μὲν γὰρ πᾶν τρίγωνον ἔχει δυσὶν ὀρθαῖς ἴσας, προήδει· ὅτι δὲ τόδε τὸ ἐν τῷ

ἡμικυκλίῳ τρίγωνόν ἐστιν, ἅμα ἐπαγόμενος ἐγνώρισεν. (ἐνίων γὰρ τοῦτον τὸν τρόπον ἢ μάθησις ἐστὶ, καὶ οὐ διὰ τοῦ μέσου τὸ ἔσχατον γνωρίζεται, ὅσα ἤδη τῶν καθ' ἑκάστα τυγχάνει ὄντα καὶ μὴ καθ' ὑποκειμένου τινός.) πρὶν δ' ἐπαχθῆναι ἢ λαβεῖν συλλογισμὸν τρόπον μὲν τινα ἴσως φατέον ἐπίστασθαι, τρόπον δ' ἄλλον οὐ. ὃ γὰρ μὴ ἤδει εἰ ἔστιν ἀπλῶς, τοῦτο πῶς ἤδει ὅτι δύο ὀρθὰς ἔχει ἀπλῶς; ἀλλὰ δῆλον ὡς ὠδὶ μὲν ἐπίσταται, ὅτι καθόλου ἐπίσταται, ἀπλῶς δ' οὐκ ἐπίσταται. εἰ δὲ μή, τὸ ἐν τῷ Μένωνι ἀπόρημα συμβήσεται· ἢ γὰρ οὐδὲν μαθήσεται ἢ ἃ οἶδεν. οὐ γὰρ δὴ, ὡς γέ τινες ἐγχειροῦσι λύειν, λεκτέον. ἄρ' οἶδας ἅπασαν δυάδα ὅτι ἀρτία ἢ οὐ; φήσαντος δὲ προήνεγκάν τινα δυάδα ἦν οὐκ ὦρετ' εἶναι, ὥστ' οὐδ' ἀρτίαν. λύουσι γὰρ οὐ φάσκοντες εἰδέναι πᾶσαν δυάδα ἀρτίαν οὔσαν, ἀλλ' ἦν ἴσασιν ὅτι δυάς. καίτοι (71b.) ἴσασι μὲν οὐπὲρ τὴν ἀπόδειξιν ἔχουσι καὶ οὐ ἔλαβον, ἔλαβον δ' οὐχὶ παντὸς οὐ ἂν εἰδῶσιν ὅτι τρίγωνον ἢ ὅτι ἀριθμός, ἀλλ' ἀπλῶς κατὰ παντὸς ἀριθμοῦ καὶ τριγώνου· οὐδεμία γὰρ πρότασις λαμβάνεται τοιαύτη, ὅτι ὃν σὺ οἶδας ἀριθμὸν ἢ ὃ σὺ οἶδας εὐθύγραμμον, ἀλλὰ κατὰ παντός. ἀλλ' οὐδὲν (οἶμαι) κωλύει, ὃ μανθάνει, ἔστιν ὡς ἐπίστασθαι, ἔστι δ' ὡς ἀγνοεῖν· ἄτοπον γὰρ οὐκ εἰ οἶδέ πως ὃ μανθάνει, ἀλλ' εἰ ὠδί, οἶον ἢ μανθάνει καὶ ὡς.

## Κεφάλαιο 2

Ἐπίστασθαι δὲ οἰόμεθ' ἑκάστον ἀπλῶς, ἀλλὰ μὴ τὸν σοφιστικὸν τρόπον τὸν κατὰ συμβεβηκός, ὅταν τὴν τ' αἰτίαν οἰώμεθα γινώσκειν δι' ἣν τὸ πρᾶγμα ἐστὶν, ὅτι ἐκείνου αἰτία ἐστὶ, καὶ μὴ ἐνδέχεσθαι τοῦτ' ἄλλως ἔχειν. δῆλον τοίνυν ὅτι τοιοῦτόν τι τὸ ἐπίστασθαί ἐστι· καὶ γὰρ οἱ μὴ ἐπιστάμενοι καὶ οἱ ἐπιστάμενοι οἱ μὲν οἶονται αὐτοὶ οὕτως ἔχειν, οἱ δ' ἐπιστάμενοι καὶ ἔχουσιν, ὥστε οὐ ἀπλῶς ἔστιν ἐπιστήμη, τοῦτ' ἀδύνατον ἄλλως ἔχειν.

Εἰ μὲν οὖν καὶ ἕτερος ἔστι τοῦ ἐπίστασθαι τρόπος, ὕστερον ἐροῦμεν, φαμὲν δὲ καὶ δι' ἀποδείξεως εἰδέναι. ἀπόδειξιν δὲ λέγω συλλογισμὸν ἐπιστημονικόν· ἐπιστημονικὸν δὲ λέγω καθ' ὃν τῷ ἔχειν αὐτὸν ἐπιστάμεθα. εἰ τοίνυν ἐστὶ τὸ ἐπίστασθαι οἶον ἔθεμεν, ἀνάγκη καὶ τὴν ἀποδεικτικὴν ἐπιστήμην ἐξ ἀληθῶν τ' εἶναι καὶ πρώτων καὶ ἀμέσων καὶ γνωριμωτέρων καὶ προτέρων καὶ αἰτίων τοῦ συμπεράσματος· οὕτω γὰρ ἔσονται καὶ αἱ ἀρχαὶ οἰκεῖαι τοῦ δεικνυμένου. συλλογισμὸς μὲν γὰρ ἔσται καὶ ἄνευ τούτων, ἀπόδειξις δ' οὐκ ἔσται· οὐ γὰρ ποιήσει ἐπιστήμην. ἀληθῆ μὲν οὖν δεῖ εἶναι, ὅτι οὐκ ἔστι τὸ μὴ ὃν ἐπίστασθαι, οἶον ὅτι ἡ διάμετρος σύμμετρος. ἐκ πρώτων δ' ἀναποδείκτων, ὅτι οὐκ ἐπιστήσεται μὴ ἔχων ἀπόδειξιν αὐτῶν· τὸ γὰρ ἐπίστασθαι ὧν ἀπόδειξις ἔστι μὴ κατὰ συμβεβηκός, τὸ ἔχειν ἀπόδειξιν ἐστίν. αἷτιά τε καὶ γνωριμώτερα δεῖ εἶναι καὶ πρότερα, αἷτια μὲν ὅτι τότε ἐπιστάμεθα ὅταν τὴν αἷτιαν εἰδῶμεν,



καὶ πρότερα, εἴπερ αἴτια, καὶ προγινωσκόμενα οὐ μόνον τὸν ἕτερον τρόπον τῷ ξυνιέναι, ἀλλὰ καὶ τῷ εἰδέναι ὅτι ἔστιν. πρότερα δ' ἐστὶ καὶ γνωριμώτερα διχῶς· οὐ γὰρ ταῦτόν πρότερον τῇ φύσει καὶ πρὸς ἡμᾶς πρότερον, (72a.) οὐδὲ γνωριμώτερον καὶ ἡμῖν γνωριμώτερον. λέγω δὲ πρὸς ἡμᾶς μὲν πρότερα καὶ γνωριμώτερα τὰ ἐγγύτερον τῆς αἰσθήσεως, ἀπλῶς δὲ πρότερα καὶ γνωριμώτερα τὰ πορρώτερον. ἔστι δὲ πορρωτάτω μὲν τὰ καθόλου μάλιστα, ἐγγυτάτω δὲ τὰ καθ' ἕκαστα· καὶ ἀντίκειται ταῦτ' ἀλλήλοις. ἐκ πρώτων δ' ἐστὶ τὸ ἐξ ἀρχῶν οἰκείων· ταῦτό γὰρ λέγω πρῶτον καὶ ἀρχήν. ἀρχὴ δ' ἐστὶν ἀποδείξεως πρότασις ἄμεσος, ἄμεσος δὲ ἥς μὴ ἔστιν ἄλλη προτέρα. πρότασις δ' ἐστὶν ἀποφάνσεως τὸ ἕτερον μόνιον, ἐν καθ' ἑνός, διαλεκτικὴ μὲν ἢ ὁμοίως λαμβάνουσα ὅποτερονοῦν, ἀποδεικτικὴ δὲ ἢ ὠρισμένως θάτερον, ὅτι ἀληθές. ἀπόφανσις δὲ ἀντιφάσεως ὅποτερονοῦν μόνιον, ἀντίφασις δὲ ἀντίθεσις ἥς οὐκ ἔστι μεταξὺ καθ' αὐτήν, μόνιον δ' ἀντιφάσεως τὸ μὲν τὶ κατὰ τινὸς κατάφασις, τὸ δὲ τὶ ἀπὸ τινὸς ἀπόφασις.

Ἀμέσου δ' ἀρχῆς συλλογιστικῆς θέσιν μὲν λέγω ἦν μὴ ἔστι δεῖξαι, μηδ' ἀνάγκη ἔχειν τὸν μαθησόμενόν τι· ἦν δ' ἀνάγκη ἔχειν τὸν ὁτιοῦν μαθησόμενον, ἀξίωμα· ἔστι γὰρ ἕνια τοιαῦτα· τοῦτο γὰρ μάλιστ' ἐπὶ τοῖς τοιούτοις εἰώθαμεν ὄνομα λέγειν. θέσεως δ' ἢ μὲν ὅποτερονοῦν τῶν μορίων τῆς ἀντιφάσεως λαμβάνουσα, οἷον λέγω τὸ εἶναι τι ἢ τὸ μὴ εἶναι τι, ὑπόθεσις, ἢ δ' ἄνευ τούτου ὀρισμός. ὁ γὰρ ὀρισμὸς θέσις μὲν ἐστὶ· τίθεται γὰρ ὁ ἀριθμητικὸς μονάδα τὸ ἀδιαίρετον εἶναι κατὰ τὸ ποσόν· ὑπόθεσις δ' οὐκ ἔστι· τὸ γὰρ τί ἐστὶ μονὰς καὶ τὸ εἶναι μονάδα οὐ ταῦτόν.

Ἐπεὶ δὲ δεῖ πιστεύειν τε καὶ εἰδέναι τὸ πρᾶγμα τῷ τοιούτον ἔχειν συλλογισμόν ὃν καλοῦμεν ἀπόδειξιν, ἔστι δ' οὗτος τῷ ταδὶ εἶναι ἐξ ὧν ὁ συλλογισμός, ἀνάγκη μὴ μόνον προγινώσκειν τὰ πρῶτα, ἢ πάντα ἢ ἕνια, ἀλλὰ καὶ μᾶλλον· αἰεὶ γὰρ δι' ὃ ὑπάρχει ἕκαστον, ἐκεῖνω μᾶλλον ὑπάρχει, οἷον δι' ὃ φιλοῦμεν, ἐκεῖνο φίλον μᾶλλον. ὥστ' εἴπερ ἴσμεν διὰ τὰ πρῶτα καὶ πιστεύομεν, κἀκεῖνα ἴσμεν τε καὶ πιστεύομεν μᾶλλον, ὅτι δι' ἐκεῖνα καὶ τὰ ὕστερα. οὐχ οἷόν τε δὲ πιστεύειν μᾶλλον ὧν οἶδεν ἢ μὴ τυγχάνει μήτε εἰδῶς μήτε βέλτιον διακείμενος ἢ εἰ ἐτύχχανεν εἰδῶς. συμβήσεται δὲ τοῦτο, εἰ μὴ τις προγνώσεται τῶν δι' ἀπόδειξιν πιστευόντων· μᾶλλον γὰρ ἀνάγκη πιστεύειν ταῖς ἀρχαῖς ἢ πάσαις ἢ τισὶ τοῦ συμπεράσματος. τὸν δὲ μέλλοντα ἔξιν τὴν ἐπιστήμην τὴν δι' ἀποδείξεως οὐ μόνον δεῖ τὰς ἀρχὰς μᾶλλον γνωρίζειν καὶ μᾶλλον αὐταῖς πιστεύειν ἢ τῷ δεικνυμένῳ, (72b.) ἀλλὰ μηδ' ἄλλο αὐτῷ πιστότερον εἶναι μηδὲ γνωριμώτερον τῶν ἀντικειμένων ταῖς ἀρχαῖς ἐξ ὧν ἔσται συλλογισμὸς ὁ τῆς ἐναντίας ἀπάτης, εἴπερ δεῖ τὸν ἐπιστάμενον ἀπλῶς ἀμετάπειστον εἶναι.

### Κεφάλαιο 3

Ἐνίοις μὲν οὖν διὰ τὸ δεῖν τὰ πρῶτα ἐπίστασθαι οὐ δοκεῖ ἐπιστήμη εἶναι, τοῖς δ' εἶναι μὲν, πάντων μέντοι ἀπόδειξις εἶναι· ὧν οὐδέτερον οὔτ' ἀληθές οὔτ' ἀναγκαῖον. οἱ μὲν γὰρ ὑποθέμενοι μὴ εἶναι ὅλως ἐπίστασθαι, οὗτοι εἰς ἄπειρον ἀξιοῦσιν ἀνάγεσθαι ὡς οὐκ ἂν ἐπισταμένους τὰ ὕστερα διὰ τὰ πρότερα, ὧν μὴ ἔστι πρῶτα, ὀρθῶς λέγοντες· ἀδύνατον γὰρ τὰ ἄπειρα διελθεῖν. εἴ τε ἴσταται καὶ εἰσὶν ἀρχαί, ταύτας ἀγνώστους εἶναι ἀποδείξεώς γε μὴ οὔσης αὐτῶν, ὅπερ φασὶν εἶναι τὸ ἐπίστασθαι μόνον· εἰ δὲ μὴ ἔστι τὰ πρῶτα εἰδέναι, οὐδὲ τὰ ἐκ τούτων εἶναι ἐπίστασθαι ἀπλῶς οὐδὲ κυρίως, ἀλλ' ἐξ ὑποθέσεως, εἰ ἐκεῖνα ἔστιν. οἱ δὲ περὶ μὲν τοῦ ἐπίστασθαι ὁμολογοῦσι· δι' ἀποδείξεως γὰρ εἶναι μόνον· ἀλλὰ πάντων εἶναι ἀπόδειξιν οὐδὲν κωλύειν· ἐνδέχεσθαι γὰρ κύκλῳ γίνεσθαι τὴν ἀπόδειξιν καὶ ἐξ ἀλλήλων.

Ἡμεῖς δὲ φαμεν οὔτε πᾶσαν ἐπιστήμην ἀποδεικτικὴν εἶναι, ἀλλὰ τὴν τῶν ἀμέσων ἀναπόδεικτον (καὶ τοῦθ' ὅτι ἀναγκαῖον, φανερόν· εἰ γὰρ ἀνάγκη μὲν ἐπίστασθαι τὰ πρότερα καὶ ἐξ ὧν ἡ ἀπόδειξις, ἴσταται δέ ποτε τὰ ἄμεσα, ταῦτ' ἀναπόδεικτα ἀνάγκη εἶναι)- ταῦτά τ' οὖν οὕτω λέγομεν, καὶ οὐ μόνον ἐπιστήμην ἀλλὰ καὶ ἀρχὴν ἐπιστήμης εἶναί τινά φαμεν, ἥ τοὺς ὅρους γνωρίζομεν. κύκλῳ τε ὅτι ἀδύνατον ἀποδείκνυσθαι ἀπλῶς, δῆλον, εἴπερ ἐκ προτέρων δεῖ τὴν ἀπόδειξιν εἶναι καὶ γνωριμωτέρων· ἀδύνατον γάρ ἐστι τὰ αὐτὰ τῶν αὐτῶν ἅμα πρότερα καὶ ὕστερα εἶναι, εἰ μὴ τὸν ἕτερον τρόπον, οἷον τὰ μὲν πρὸς ἡμᾶς τὰ δ' ἀπλῶς, ὅνπερ τρόπον ἡ ἐπαγωγὴ ποιεῖ γνωρίμον. εἰ δ' οὕτως, οὐκ ἂν εἴη τὸ ἀπλῶς εἰδέναι καλῶς ὠριμένον, ἀλλὰ διττόν· ἢ οὐχ ἀπλῶς ἢ ἑτέρα ἀπόδειξις, γινομένη γ' ἐκ τῶν ἡμῖν γνωριμωτέρων.

συμβαίνει δὲ τοῖς λέγουσι κύκλῳ τὴν ἀπόδειξιν εἶναι οὐ μόνον τὸ νῦν εἰρημένον, ἀλλ' οὐδὲν ἄλλο λέγειν ἢ ὅτι τοῦτ' ἔστιν εἰ τοῦτ' ἔστιν· οὕτω δὲ πάντα ῥάδιον δεῖξαι. δῆλον δ' ὅτι τοῦτο συμβαίνει τριῶν ὅρων τεθέντων. τὸ μὲν γὰρ διὰ πολλῶν ἢ δι' ὀλίγων ἀνακάμπτειν φάναι οὐδὲν διαφέρει, δι' ὀλίγων δ' ἢ δυοῖν. ὅταν γὰρ τοῦ Α ὄντος ἐξ ἀνάγκης ἢ τὸ Β, τούτου δὲ τὸ Γ, τοῦ Α ὄντος ἔσται τὸ Γ. εἰ δὲ τοῦ Α ὄντος ἀνάγκη τὸ Β εἶναι, τούτου δ' (73a.) ὄντος τὸ Α (τοῦτο γὰρ ἦν τὸ κύκλῳ), κείσθω τὸ Α ἐφ' οὗ τὸ Γ. τὸ οὖν τοῦ Β ὄντος τὸ Α εἶναι λέγειν ἐστὶ τὸ Γ εἶναι λέγειν, τοῦτο δ' ὅτι τοῦ Α ὄντος τὸ Γ ἔστι· τὸ δὲ Γ τῷ Α τὸ αὐτό. ὥστε συμβαίνει λέγειν τοὺς κύκλῳ φάσκοντας εἶναι τὴν ἀπόδειξιν οὐδὲν ἕτερον πλὴν ὅτι τοῦ Α ὄντος τὸ Α ἔστιν. οὕτω δὲ πάντα δεῖξαι ῥάδιον.

Οὐ μὴν ἄλλ' οὐδὲ τοῦτο δυνατόν, πλὴν ἐπὶ τούτων ὅσα ἀλλήλοις ἔπεται, ὥσπερ τὰ ἴδια. ἑνὸς μὲν οὖν κειμένου δέδεικται ὅτι οὐδέποτ' ἀνάγκη τι εἶναι ἕτερον (λέγω δ' ἑνός, ὅτι οὔτε ὅρου ἑνὸς οὔτε θέσεως μιᾶς τεθείσης), ἐκ δύο δὲ θέσεων πρώτων καὶ ἐλαχίστων ἐνδέχεται, εἴπερ καὶ συλλογίσασθαι. ἐὰν μὲν οὖν τό τε Α τῷ Β καὶ τῷ Γ ἔπεται, καὶ ταῦτ' ἀλλήλοις καὶ τῷ Α, οὕτω μὲν ἐνδέχεται ἐξ ἀλλήλων δεικνύναι πάντα τὰ αἰτηθέντα ἐν τῷ πρώτῳ σχήματι, ὥς δέδεικται ἐν τοῖς περὶ συλλογισμοῦ. δέδεικται δὲ καὶ ὅτι ἐν τοῖς ἄλλοις σχήμασιν ἢ οὐ γίνεται συλλογισμὸς ἢ οὐ περὶ τῶν ληφθέντων. τὰ δὲ μὴ ἀντικατηγορούμενα οὐδαμῶς ἔστι δεῖξαι κύκλῳ, ὥστ' ἐπειδὴ ὀλίγα τοιαῦτα ἐν ταῖς ἀποδείξεσι, φανερόν ὅτι κενόν τε καὶ ἀδύνατον τὸ λέγειν ἐξ ἀλλήλων εἶναι τὴν ἀπόδειξιν καὶ διὰ τοῦτο πάντων ἐνδέχεσθαι εἶναι ἀπόδειξιν.

## Κεφάλαιο 4

Ἐπεὶ δ' ἀδύνατον ἄλλως ἔχειν οὐ ἔστιν ἐπιστήμη ἀπλῶς, ἀναγκαῖον ἂν εἴη τὸ ἐπιστητὸν τὸ κατὰ τὴν ἀποδεικτικὴν ἐπιστήμην· ἀποδεικτικὴ δ' ἐστὶν ἣν ἔχομεν τῷ ἔχειν ἀπόδειξιν. ἐξ ἀναγκαίων ἄρα συλλογισμὸς ἐστὶν ἢ ἀπόδειξις. ληπτέον ἄρα ἐκ τίνων καὶ ποίων αἱ ἀποδείξεις εἰσὶν. πρῶτον δὲ διορίσωμεν τί λέγομεν τὸ κατὰ παντὸς καὶ τί τὸ καθ' αὐτὸ καὶ τί τὸ καθόλου.

Κατὰ παντὸς μὲν οὖν τοῦτο λέγω ὃ ἂν ἦ μὴ ἐπὶ τινὸς μὲν τινὸς δὲ μή, μηδὲ ποτὲ μὲν ποτὲ δὲ μή, οἷον εἰ κατὰ παντὸς ἀνθρώπου ζῶον, εἰ ἀληθὲς τόνδ' εἰπεῖν ἄνθρωπον, ἀληθὲς καὶ ζῶον, καὶ εἰ νῦν θάτερον, καὶ θάτερον, καὶ εἰ ἐν πάσῃ γραμμῇ στιγμή, ὡσαύτως. σημεῖον δέ· καὶ γὰρ τὰς ἐνστάσεις οὕτω φέρομεν ὥς κατὰ παντὸς ἐρωτώμενοι, ἢ εἰ ἐπὶ τινι μή, ἢ εἰ ποτε μή. Καθ' αὐτὰ δ' ὅσα ὑπάρχει τε ἐν τῷ τί ἐστίν, οἷον τριγώνῳ γραμμῇ καὶ γραμμῇ στιγμή (γὰρ οὐσία αὐτῶν ἐκ τούτων ἐστί, καὶ ἐν τῷ λόγῳ τῷ λέγοντι τί ἐστίν ἐνυπάρχει), καὶ ὅσοις τῶν ὑπαρχόντων αὐτοῖς αὐτὰ ἐν τῷ λόγῳ ἐνυπάρχουσι τῷ τί ἐστὶ δηλοῦντι, οἷον τὸ εὐθὺ ὑπάρχει γραμμῇ καὶ τὸ περιφερές, καὶ τὸ περιττὸν καὶ ἄρτιον ἀριθμῷ, καὶ τὸ πρῶτον καὶ σύνθετον, καὶ ἰσόπλευρον (73b.) καὶ ἑτερόμηκες· καὶ πᾶσι τούτοις ἐνυπάρχουσιν ἐν τῷ λόγῳ τῷ τί ἐστὶ λέγοντι ἔνθα μὲν γραμμῇ ἔνθα δ' ἀριθμός. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τὰ τοιαῦθ' ἐκάστοις καθ' αὐτὰ λέγω, ὅσα δὲ μηδετέρως ὑπάρχει, συμβεβηκότα, οἷον τὸ μουσικὸν ἢ λευκὸν τῷ ζῶω.

ἔτι δὲ μὴ καθ' ὑποκειμένου λέγεται ἄλλου τινός, οἷον τὸ βαδίζον ἕτερόν τι ὄν βαδίζον ἐστὶ καὶ τὸ λευκὸν, ἢ δ' οὐσία, καὶ ὅσα τότε τι σημαίνει, οὐχ ἕτερόν τι ὄντα ἐστὶν ὅπερ ἐστίν. τὰ μὲν δὴ μὴ καθ' ὑποκειμένου καθ' αὐτὰ λέγω, τὰ

δὲ καθ' ὑποκειμένου συμβεβηκότα. ἔτι δ' ἄλλον τρόπον τὸ μὲν δι' αὐτὸ ὑπάρχον ἐκάστω καθ' αὐτό, τὸ δὲ μὴ δι' αὐτὸ συμβεβηκός, οἷον εἰ βαδίζοντος ἤστραψε, συμβεβηκός· οὐ γὰρ διὰ τὸ βαδίζειν ἤστραψεν, ἀλλὰ συνέβη, φαμέν, τοῦτο. εἰ δὲ δι' αὐτό, καθ' αὐτό, οἷον εἴ τι σφαττόμενον ἀπέθανε, καὶ κατὰ τὴν σφαγὴν, ὅτι διὰ τὸ σφάττεσθαι, ἀλλ' οὐ συνέβη σφαττόμενον ἀποθανεῖν.

τὰ ἄρα λεγόμενα ἐπὶ τῶν ἀπλῶς ἐπιστητῶν καθ' αὐτὰ οὕτως ὡς ἐνυπάρχειν τοῖς κατηγορουμένοις ἢ ἐνυπάρχεσθαι δι' αὐτὰ τέ ἐστι καὶ ἐξ ἀνάγκης. οὐ γὰρ ἐνδέχεται μὴ ὑπάρχειν ἢ ἀπλῶς ἢ τὰ ἀντικείμενα, οἷον γραμμῇ τὸ εὐθύ ἢ τὸ καμπύλον καὶ ἀριθμῷ τὸ περιττὸν ἢ τὸ ἄρτιον. ἔστι γὰρ τὸ ἐναντίον ἢ στέρησις ἢ ἀντίφασις ἐν τῷ αὐτῷ γένει, οἷον ἄρτιον τὸ μὴ περιττὸν ἐν ἀριθμοῖς ἢ ἔπεται. ὥστ' εἰ ἀνάγκη φάναι ἢ ἀποφάναι, ἀνάγκη καὶ τὰ καθ' αὐτὰ ὑπάρχειν.

Τὸ μὲν οὖν κατὰ παντός καὶ καθ' αὐτὸ διωρίσθω τὸν τρόπον τοῦτον· καθόλου δὲ λέγω ὃ ἂν κατὰ παντός τε ὑπάρχη καὶ καθ' αὐτὸ καὶ ἡ αὐτό. φανερόν ἄρα ὅτι ὅσα καθόλου, ἐξ ἀνάγκης ὑπάρχει τοῖς πράγμασιν. τὸ καθ' αὐτὸ δὲ καὶ ἡ αὐτὸ ταῦτόν, οἷον καθ' αὐτὴν τῇ γραμμῇ ὑπάρχει στιγμὴ καὶ τὸ εὐθύ (καὶ γὰρ ἡ γραμμὴ), καὶ τῷ τριγώνῳ ἢ τρίγωνον δύο ὀρθαί (καὶ γὰρ καθ' αὐτὸ τὸ τρίγωνον δύο ὀρθαῖς ἴσον). τὸ καθόλου δὲ ὑπάρχει τότε, ὅταν ἐπὶ τοῦ τυχόντος καὶ πρώτου δεικνύηται. οἷον τὸ δύο ὀρθὰς ἔχει οὔτε τῷ σχήματι ἐστὶ καθόλου (καίτοι ἔστι δεῖξαι κατὰ σχήματος ὅτι δύο ὀρθὰς ἔχει, ἀλλ' οὐ τοῦ τυχόντος σχήματος, οὐδὲ χρῆται τῷ τυχόντι σχήματι δεικνύς· τὸ γὰρ τετράγωνον σχῆμα μὲν, οὐκ ἔχει δὲ δύο ὀρθαῖς ἴσας)- τὸ δ' ἰσοσκελὲς ἔχει μὲν τὸ τυχὸν δύο ὀρθαῖς ἴσας, ἀλλ' οὐ πρῶτον, ἀλλὰ τὸ τρίγωνον πρότερον. ὃ τοίνυν τὸ τυχὸν πρῶτον δείκνυται δύο ὀρθὰς ἔχον ἢ ὅτιοῦν ἄλλο, τούτῳ πρῶτῳ (74a.) ὑπάρχει καθόλου, καὶ ἡ ἀπόδειξις καθ' αὐτὸ τούτου καθόλου ἐστὶ, τῶν δ' ἄλλων τρόπον τινὰ οὐ καθ' αὐτό, οὐδὲ τοῦ ἰσοσκελοῦς οὐκ ἔστι καθόλου ἀλλ' ἐπὶ πλέον.

## Κεφάλαιο 5

Δεῖ δὲ μὴ λανθάνειν ὅτι πολλάκις συμβαίνει διαμαρτάνειν καὶ μὴ ὑπάρχειν τὸ δεικνύμενον πρῶτον καθόλου, ἢ δοκεῖ δεικνυσθαι καθόλου πρῶτον. ἀπατώμεθα δὲ ταύτην τὴν ἀπάτην, ὅταν ἡ μηδὲν ἢ λαβεῖν ἀνώτερον παρὰ τὸ καθ' ἕκαστον [ἢ τὰ καθ' ἕκαστα], ἢ ἡ μὲν, ἀλλ' ἀνώνυμον ἢ ἐπὶ διαφόροις εἶδει πράγμασιν, ἢ τυγχάνη ὃν ὡς ἐν μέρει ὅλον ἐφ' ᾧ δείκνυται· τοῖς γὰρ ἐν μέρει ὑπάρξει μὲν ἡ ἀπόδειξις, καὶ ἔσται κατὰ παντός, ἀλλ' ὅμως οὐκ ἔσται

τούτου πρώτου καθόλου ἢ ἀπόδειξις. λέγω δὲ τούτου πρώτου, ἢ τοῦτο, ἀπόδειξιν, ὅταν ἢ πρώτου καθόλου. εἰ οὖν τις δείξειεν ὅτι αἱ ὀρθαὶ οὐ συμπίπτουσι, δόξειεν ἂν τούτου εἶναι ἢ ἀπόδειξις διὰ τὸ ἐπὶ πασῶν εἶναι τῶν ὀρθῶν. οὐκ ἔστι δέ, εἴπερ μὴ ὅτι ὡδὶ ἴσαι γίνεται τοῦτο, ἀλλ' ἢ ὁπωσοῦν ἴσαι. καὶ εἰ τρίγωνον μὴ ἦν ἄλλο ἢ ἰσοσκελές, ἢ ἰσοσκελές ἂν ἐδόκει ὑπάρχειν. καὶ τὸ ἀνάλογον ὅτι καὶ ἐναλλάξ, ἢ ἀριθμοὶ καὶ ἢ γραμμαὶ καὶ ἢ στερεὰ καὶ ἢ χρόνοι, ὥσπερ ἐδείκνυτο ποτε χωρὶς, ἐνδεχόμενον γε κατὰ πάντων μιᾷ ἀποδείξει δειχθῆναι· ἀλλὰ διὰ τὸ μὴ εἶναι ὠνομασμένον τι ταῦτα πάντα ἓν, ἀριθμοὶ μήκη χρόνοι στερεά, καὶ εἶδει διαφέρειν ἀλλήλων, χωρὶς ἐλαμβάνετο. νῦν δὲ καθόλου δείκνυται· οὐ γὰρ ἢ γραμμαὶ ἢ ἢ ἀριθμοὶ ὑπῆρχεν, ἀλλ' ἢ τοδί, ὃ καθόλου ὑποτίθενται ὑπάρχειν. διὰ τοῦτο οὐδ' ἂν τις δείξη καθ' ἕκαστον τὸ τρίγωνον ἀποδείξει ἢ μιᾷ ἢ ἑτέρᾳ ὅτι δύο ὀρθὰς ἔχει ἕκαστον, τὸ ἰσόπλευρον χωρὶς καὶ τὸ σκαληνές καὶ τὸ ἰσοσκελές, οὐπω οἶδε τὸ τρίγωνον ὅτι δύο ὀρθαῖς, εἰ μὴ τὸν σοφιστικὸν τρόπον, οὐδὲ καθ' ὅλου τριγώνου, οὐδ' εἰ μηδὲν ἔστι παρὰ ταῦτα τρίγωνον ἕτερον. οὐ γὰρ ἢ τρίγωνον οἶδεν, οὐδὲ πᾶν τρίγωνον, ἀλλ' ἢ κατ' ἀριθμόν· κατ' εἶδος δ' οὐ πᾶν, καὶ εἰ μηδὲν ἔστιν ὃ οὐκ οἶδεν.

Πότ' οὖν οὐκ οἶδε καθόλου, καὶ πότ' οἶδεν ἀπλῶς; δῆλον δὲ ὅτι εἰ ταῦτόν ἦν τριγώνῳ εἶναι καὶ ἰσοπλεύρῳ ἢ ἐκάστω ἢ πᾶσιν. εἰ δὲ μὴ ταῦτόν ἀλλ' ἕτερον, ὑπάρχει δ' ἢ τρίγωνον, οὐκ οἶδεν. πότερον δ' ἢ τρίγωνον ἢ ἢ ἰσοσκελές ὑπάρχει; καὶ πότε κατὰ τοῦθ' ὑπάρχει πρῶτον; καὶ καθόλου τίνος ἢ ἀπόδειξις; δῆλον ὅτι ὅταν ἀφαιρουμένων ὑπάρχη πρῶτω. οἶον τῷ ἰσοσκελεῖ χαλκῷ τριγώνῳ ὑπάρξουσι δύο ὀρθαί, ἀλλὰ καὶ τοῦ χαλκοῦν εἶναι ἀφαιρεθέντος (74b.) καὶ τοῦ ἰσοσκελές. ἀλλ' οὐ τοῦ σχήματος ἢ πέρατος. ἀλλ' οὐ πρώτων. τίνος οὖν πρώτου; εἰ δὲ τριγώνου, κατὰ τοῦτο ὑπάρχει καὶ τοῖς ἄλλοις, καὶ τούτου καθόλου ἐστὶν ἢ ἀπόδειξις. Εἰ οὖν ἐστὶν ἢ ἀποδεικτικὴ ἐπιστήμη ἐξ ἀναγκαίων ἀρχῶν (ὃ γὰρ ἐπίσταται, οὐ δυνατόν ἄλλως ἔχειν), τὰ δὲ καθ' αὐτὰ ὑπάρχοντα ἀναγκαῖα τοῖς πράγμασιν (τὰ μὲν γὰρ ἐν τῷ τί ἐστὶν ὑπάρχει· τοῖς δ' αὐτὰ ἐν τῷ τί ἐστὶν ὑπάρχει κατηγορουμένοις αὐτῶν, ὧν θάτερον τῶν ἀντικειμένων ἀνάγκη ὑπάρχειν), φανερόν ὅτι ἐκ τοιούτων τινῶν ἂν εἴη ὁ ἀποδεικτικὸς συλλογισμὸς· ἅπαν γὰρ ἢ οὕτως ὑπάρχει ἢ κατὰ συμβεβηκός, τὰ δὲ συμβεβηκότα οὐκ ἀναγκαῖα.

## Κεφάλαιο 6

Ἦ δὲ οὕτω λεκτέον, ἢ ἀρχὴν θεμένοις ὅτι ἢ ἀπόδειξις ἀναγκαίων ἐστὶ, καὶ εἰ ἀποδέδεικται, οὐχ οἷόν τ' ἄλλως ἔχειν· ἐξ ἀναγκαίων ἄρα δεῖ εἶναι τὸν συλλογισμόν. ἐξ ἀληθῶν μὲν γὰρ ἔστι καὶ μὴ ἀποδεικνύντα συλλογίσασθαι,

ἐξ ἀναγκαίων δ' οὐκ ἔστιν ἄλλ' ἢ ἀποδεικνύντα· τοῦτο γὰρ ἤδη ἀποδείξεώς ἐστιν. σημείον δ' ὅτι ἡ ἀπόδειξις ἐξ ἀναγκαίων, ὅτι καὶ τὰς ἐνστάσεις οὕτω φέρομεν πρὸς τοὺς οἰομένους ἀποδεικνύναι, ὅτι οὐκ ἀνάγκη, ἂν οἴωμεθα ἢ ὅλως ἐνδέχεσθαι ἄλλως ἢ ἔνεκά γε τοῦ λόγου. δῆλον δ' ἐκ τούτων καὶ ὅτι εὐήθεις οἱ λαμβάνειν οἰόμενοι καλῶς τὰς ἀρχάς, ἐὰν ἔνδοξος ἢ ἡ πρότασις καὶ ἀληθής, οἷον οἱ σοφισταὶ ὅτι τὸ ἐπίστασθαι τὸ ἐπιστήμην ἔχειν. οὐ γὰρ τὸ ἔνδοξον ἡμῖν ἀρχή ἐστιν, ἀλλὰ τὸ πρῶτον τοῦ γένους περὶ ὃ δείκνυται· καὶ τὰληθές οὐ πᾶν οἰκεῖον. ὅτι δ' ἐξ ἀναγκαίων εἶναι δεῖ τὸν συλλογισμόν, φανερόν καὶ ἐκ τῶνδε. εἰ γὰρ ὁ μὴ ἔχων λόγον τοῦ διὰ τί οὕσης ἀποδείξεως οὐκ ἐπιστήμων, εἴη δ' ἂν ὥστε τὸ Α κατὰ τοῦ Γ ἐξ ἀνάγκης ὑπάρχειν, τὸ δὲ Β τὸ μέσον, δι' οὗ ἀπεδείχθη, μὴ ἐξ ἀνάγκης, οὐκ οἶδε διότι. οὐ γάρ ἐστι τοῦτο διὰ τὸ μέσον· τὸ μὲν γὰρ ἐνδέχεται μὴ εἶναι, τὸ δὲ συμπέρασμα ἀναγκαῖον. ἔτι εἴ τις μὴ οἶδε νῦν ἔχων τὸν λόγον καὶ σωζόμενος, σωζομένου τοῦ πράγματος, μὴ ἐπιλεησμένος, οὐδὲ πρότερον ἦδει. φθαρεῖ δ' ἂν τὸ μέσον, εἰ μὴ ἀναγκαῖον, ὥστε ἔξει μὲν τὸν λόγον σωζόμενος σωζομένου τοῦ πράγματος, οὐκ οἶδε δέ. οὐδ' ἄρα πρότερον ἦδει. εἰ δὲ μὴ ἔφθαρται, ἐνδέχεται δὲ φθαρῆναι, τὸ συμβαῖνον ἂν εἴη δυνατόν καὶ ἐνδεχόμενον. ἄλλ' ἔστιν ἀδύνατον οὕτως ἔχοντα εἶδέναι.

(75a.) Ὅταν μὲν οὖν τὸ συμπέρασμα ἐξ ἀνάγκης ἦ, οὐδὲν κωλύει τὸ μέσον μὴ ἀναγκαῖον εἶναι δι' οὗ ἐδείχθη (ἔστι γὰρ τὸ ἀναγκαῖον καὶ μὴ ἐξ ἀναγκαίων συλλογίσασθαι, ὥσπερ καὶ ἀληθές μὴ ἐξ ἀληθῶν)· ὅταν δὲ τὸ μέσον ἐξ ἀνάγκης, καὶ τὸ συμπέρασμα ἐξ ἀνάγκης, ὥσπερ καὶ ἐξ ἀληθῶν ἀληθές αἰεὶ (ἔστω γὰρ τὸ Α κατὰ τοῦ Β ἐξ ἀνάγκης, καὶ τοῦτο κατὰ τοῦ Γ· ἀναγκαῖον τοίνυν καὶ τὸ Α τῷ Γ ὑπάρχειν)· ὅταν δὲ μὴ ἀναγκαῖον ἦ τὸ συμπέρασμα, οὐδὲ τὸ μέσον ἀναγκαῖον οἷον τ' εἶναι (ἔστω γὰρ τὸ Α τῷ Γ μὴ ἐξ ἀνάγκης ὑπάρχειν, τῷ δὲ Β, καὶ τοῦτο τῷ Γ ἐξ ἀνάγκης· καὶ τὸ Α ἄρα τῷ Γ ἐξ ἀνάγκης ὑπάρξει· ἄλλ' οὐχ ὑπέκειτο).

Ἐπεὶ τοίνυν εἰ ἐπίσταται ἀποδεικτικῶς, δεῖ ἐξ ἀνάγκης ὑπάρχειν, δῆλον ὅτι καὶ διὰ μέσου ἀναγκαίου δεῖ ἔχειν τὴν ἀπόδειξιν· ἢ οὐκ ἐπιστήσεται οὔτε διότι οὔτε ὅτι ἀνάγκη ἐκεῖνο εἶναι, ἄλλ' ἢ οἰήσεται οὐκ εἰδώς, ἐὰν ὑπολάβῃ ὥς ἀναγκαῖον τὸ μὴ ἀναγκαῖον, ἢ οὐδ' οἰήσεται, ὁμοίως ἐάν τε τὸ ὅτι εἰδῇ διὰ μέσων ἐάν τε τὸ διότι καὶ δι' ἀμέσων.

Τῶν δὲ συμβεβηκότων μὴ καθ' αὐτά, ὃν τρόπον διωρίσθη τὰ καθ' αὐτά, οὐκ ἔστιν ἐπιστήμη ἀποδεικτική. οὐ γὰρ ἔστιν ἐξ ἀνάγκης δεῖξαι τὸ συμπέρασμα· τὸ συμβεβηκὸς γὰρ ἐνδέχεται μὴ ὑπάρχειν· περὶ τοῦ τοιούτου γὰρ λέγω συμβεβηκός. καίτοι ἀπορήσειεν ἂν τις ἴσως τίνος ἔνεκα ταῦτα δεῖ ἐρωτᾶν

περὶ τούτων, εἰ μὴ ἀνάγκη τὸ συμπέρασμα εἶναι· οὐδὲν γὰρ διαφέρει εἴ τις ἐρόμενος τὰ τυχόντα εἴτα εἴπειν τὸ συμπέρασμα. δεῖ δ' ἐρωτᾶν οὐχ ὥς ἀναγκαῖον εἶναι διὰ τὰ ἡρωτημένα, ἀλλ' ὅτι λέγειν ἀνάγκη τῷ ἐκεῖνα λέγοντι, καὶ ἀληθῶς λέγειν, ἔάν ἀληθῶς ἢ ὑπάρχοντα.

Ἐπεὶ δ' ἐξ ἀνάγκης ὑπάρχει περὶ ἕκαστον γένος ὅσα καθ' αὐτὰ ὑπάρχει καὶ ἡ ἕκαστον, φανερόν ὅτι περὶ τῶν καθ' αὐτὰ ὑπαρχόντων αἱ ἐπιστημονικαὶ ἀποδείξεις καὶ ἐκ τῶν τοιούτων εἰσίν. τὰ μὲν γὰρ συμβεβηκότα οὐκ ἀναγκαῖα, ὥστ' οὐκ ἀνάγκη τὸ συμπέρασμα εἰδέναι διότι ὑπάρχει, οὐδ' εἰ ἀεὶ εἴη, μὴ καθ' αὐτὸ δέ, οἷον οἱ διὰ σημείων συλλογισμοί. τὸ γὰρ καθ' αὐτὸ οὐ καθ' αὐτὸ ἐπιστήσεται, οὐδὲ διότι (τὸ δὲ διότι ἐπίστασθαί ἐστι τὸ διὰ τοῦ αἰτίου ἐπίστασθαι), δι' αὐτὸ ἄρα δεῖ καὶ τὸ μέσον τῷ τρίτῳ καὶ τὸ πρῶτον τῷ μέσῳ ὑπάρχειν.

## Κεφάλαιο 7

Οὐκ ἄρα ἔστιν ἐξ ἄλλου γένους μεταβάντα δεῖξαι, οἷον τὸ γεωμετρικὸν ἀριθμητικῇ. τρία γάρ ἐστι τὰ ἐν ταῖς ἀποδείξεσιν, ἐν μὲν τὸ ἀποδεικνύμενον, τὸ συμπέρασμα (τοῦτο δ' ἐστὶ τὸ ὑπάρχον γένει τινὶ καθ' αὐτό), ἐν δὲ τὰ ἐξιώματα (ἀξιώματα δ' ἐστὶν ἐξ ὧν)· τρίτον τὸ γένος τὸ ὑποκείμενον, (75b.) οὐ τὰ πάθη καὶ τὰ καθ' αὐτὰ συμβεβηκότα δηλοῖ ἢ ἀπόδειξις. ἐξ ὧν μὲν οὖν ἢ ἀπόδειξις, ἐνδέχεται τὰ αὐτὰ εἶναι· ὧν δὲ τὸ γένος ἕτερον, ὥσπερ ἀριθμητικῆς καὶ γεωμετρίας, οὐκ ἔστι τὴν ἀριθμητικὴν ἀπόδειξιν ἐφαρμόσαι ἐπὶ τὰ τοῖς μεγέθεσι συμβεβηκότα, εἰ μὴ τὰ μεγέθη ἀριθμοὶ εἴσι· τοῦτο δ' ὥς ἐνδέχεται ἐπὶ τινων, ὕστερον λεχθήσεται. ἡ δ' ἀριθμητικὴ ἀπόδειξις ἀεὶ ἔχει τὸ γένος περὶ ὃ ἡ ἀπόδειξις, καὶ αἱ ἄλλαι ὁμοίως. ὥστ' ἡ ἀπλῶς ἀνάγκη τὸ αὐτὸ εἶναι γένος ἢ πῆ, εἰ μέλλει ἢ ἀπόδειξις μεταβαίνειν. ἄλλως δ' ὅτι ἀδύνατον, δῆλον· ἐκ γὰρ τοῦ αὐτοῦ γένους ἀνάγκη τὰ ἅκρα καὶ τὰ μέσα εἶναι. εἰ γὰρ μὴ καθ' αὐτά, συμβεβηκότα ἔσται. διὰ τοῦτο τῇ γεωμετρίᾳ οὐκ ἔστι δεῖξαι ὅτι τῶν ἐναντίων μία ἐπιστήμη, ἀλλ' οὐδ' ὅτι οἱ δύο κύβοι κύβος· οὐδ' ἄλλη ἐπιστήμη τὸ ἐτέρας, ἀλλ' ἡ ὅσα οὕτως ἔχει πρὸς ἄλληλα ὥστ' εἶναι θάτερον ὑπὸ θάτερον, οἷον τὰ ὀπτικὰ πρὸς γεωμετρίαν καὶ τὰ ἀρμονικὰ πρὸς ἀριθμητικὴν. οὐδ' εἴ τι ὑπάρχει ταῖς γραμμαῖς μὴ ἢ γραμμαὶ καὶ ἢ ἐκ τῶν ἀρχῶν τῶν ἰδίων, οἷον εἰ καλλίστη τῶν γραμμῶν ἢ εὐθεῖα ἢ εἰ ἐναντίως ἔχει τῇ περιφερεῖ· οὐ γὰρ ἢ τὸ ἴδιον γένος αὐτῶν, ὑπάρχει, ἀλλ' ἢ κοινόν τι.

## Κεφάλαιο 8

Φανερόν δὲ καὶ ἐὰν ὧσιν αἱ προτάσεις καθόλου ἐξ ὧν ὁ συλλογισμός, ὅτι

ἀνάγκη καὶ τὸ συμπέρασμα αἰδίων εἶναι τῆς τοιαύτης ἀποδείξεως καὶ τῆς ἀπλῶς εἰπεῖν ἀποδείξεως. οὐκ ἔστιν ἄρα ἀπόδειξις τῶν φθαρτῶν οὐδ' ἐπιστήμη ἀπλῶς, ἀλλ' οὕτως ὥσπερ κατὰ συμβεβηκός, ὅτι οὐ καθ' ὅλου αὐτοῦ ἔστιν ἀλλὰ ποτὲ καὶ πῶς. ὅταν δ' ἦ, ἀνάγκη τὴν ἑτέραν μὴ καθόλου εἶναι πρότασιν καὶ φθαρτήν-φθαρτὴν μὲν ὅτι ἔσται καὶ τὸ συμπέρασμα οὔσης, μὴ καθόλου δὲ ὅτι τῷ μὲν ἔσται τῷ δ' οὐκ ἔσται ἐφ' ὧν-ὥστ' οὐκ ἔστι συλλογίσασθαι καθόλου, ἀλλ' ὅτι νῦν. ὁμοίως δ' ἔχει καὶ περὶ ὁρισμούς, ἐπεὶ περ ἔστιν ὁ ὁρισμὸς ἢ ἀρχὴ ἀποδείξεως ἢ ἀπόδειξις θέσει διαφέρουσα ἢ συμπέρασμα τι ἀποδείξεως. αἱ δὲ τῶν πολλάκις γινομένων ἀποδείξεις καὶ ἐπιστήμαι, οἷον σελήνης ἐκλείψεως, δῆλον ὅτι ἡ μὲν τοιοῦδ' εἰσίν, αἰεὶ εἰσίν, ἡ δ' οὐκ αἰεὶ, κατὰ μέρος εἰσίν. ὥσπερ δ' ἡ ἐκλειψις, ὡσαύτως τοῖς ἄλλοις.

## Κεφάλαιο 9

Ἐπεὶ δὲ φανερόν ὅτι ἕκαστον ἀποδείξαι οὐκ ἔστιν ἀλλ' ἢ ἐκ τῶν ἐκάστου ἀρχῶν, ἂν τὸ δεικνύμενον ὑπάρχῃ ἢ ἐκεῖνο, οὐκ ἔστι τὸ ἐπίστασθαι τοῦτο, ἂν ἐξ ἀληθῶν καὶ ἀναποδείκτων δειχθῇ καὶ ἀμέσων. ἔστι γὰρ οὕτω δεῖξαι, ὥσπερ Βρύσων τὸν τετραγωνισμόν. κατὰ κοινόν τε γὰρ δεικνύουσιν οἱ τοιοῦτοι λόγοι, ὃ καὶ ἐτέρῳ ὑπάρξει· διὸ καὶ ἐπ' ἄλλων ἐφαρμόττουσιν (76a.) οἱ λόγοι οὐ συγγενῶν. οὐκοῦν οὐχ ἡ ἐκεῖνο ἐπίσταται, ἀλλὰ κατὰ συμβεβηκός· οὐ γὰρ ἂν ἐφήρμοττεν ἡ ἀπόδειξις καὶ ἐπ' ἄλλο γένος.

Ἐκαστον δ' ἐπιστάμεθα μὴ κατὰ συμβεβηκός, ὅταν κατ' ἐκεῖνο γινώσκωμεν καθ' ὃ ὑπάρχει, ἐκ τῶν ἀρχῶν τῶν ἐκείνου ἢ ἐκεῖνο, οἷον τὸ δυσὶν ὀρθαῖς ἴσας ἔχειν, ὃ ὑπάρχει καθ' αὐτὸ τὸ εἰρημένον, ἐκ τῶν ἀρχῶν τῶν τούτου. ὥστ' εἰ καθ' αὐτὸ κάκεῖνο ὑπάρχει ὃ ὑπάρχει, ἀνάγκη τὸ μέσον ἐν τῇ αὐτῇ συγγενείᾳ εἶναι. εἰ δὲ μή, ἀλλ' ὥς τὰ ἀρμονικὰ δι' ἀριθμητικῆς. τὰ δὲ τοιαῦτα δεικνύται μὲν ὡσαύτως, διαφέρει δέ· τὸ μὲν γὰρ ὅτι ἑτέρας ἐπιστήμης (τὸ γὰρ ὑποκείμενον γένος ἕτερον), τὸ δὲ διότι τῆς ἄνω, ἥς καθ' αὐτὰ τὰ πάθη ἔστιν. ὥστε καὶ ἐκ τούτων φανερόν ὅτι οὐκ ἔστιν ἀποδείξαι ἕκαστον ἀπλῶς ἀλλ' ἢ ἐκ τῶν ἐκάστου ἀρχῶν. ἀλλὰ τούτων αἱ ἀρχαὶ ἔχουσι τὸ κοινόν.

Εἰ δὲ φανερόν τοῦτο, φανερόν καὶ ὅτι οὐκ ἔστι τὰς ἐκάστου ἰδίας ἀρχὰς ἀποδείξαι· ἔσονταί γὰρ ἐκεῖναι ἀπάντων ἀρχαί, καὶ ἐπιστήμη ἡ ἐκείνων κυρία πάντων. καὶ γὰρ ἐπίσταται μᾶλλον ὁ ἐκ τῶν ἀνώτερον αἰτίων εἰδώς· ἐκ τῶν προτέρων γὰρ οἶδεν, ὅταν ἐκ μὴ αἰτιατῶν εἰδῇ αἰτίων. ὥστ' εἰ μᾶλλον οἶδε καὶ μάλιστα, κἂν ἐπιστήμη ἐκείνη εἴη καὶ μᾶλλον καὶ μάλιστα. ἡ δ' ἀπόδειξις οὐκ ἐφαρμόττει ἐπ' ἄλλο γένος, ἀλλ' ἢ ὡς εἴρηται αἱ γεωμετρικαὶ



ἐπὶ τὰς μηχανικὰς ἢ ὀπτικὰς καὶ αἱ ἀριθμητικαὶ ἐπὶ τὰς ἀρμονικὰς.

Χαλεπὸν δ' ἐστὶ τὸ γνῶναι εἰ οἶδεν ἢ μή· χαλεπὸν γὰρ τὸ γνῶναι εἰ ἐκ τῶν ἐκάστου ἀρχῶν ἴσμεν ἢ μή· ὅπερ ἐστὶ τὸ εἰδέναι. οἴομεθα δ', ἂν ἔχωμεν ἐξ ἀληθινῶν τινῶν συλλογισμὸν καὶ πρώτων, ἐπίστασθαι. τὸ δ' οὐκ ἔστιν, ἀλλὰ συγγενῇ δεῖ εἶναι τοῖς πρώτοις.

## Κεφάλαιο 10

Λέγω δ' ἀρχὰς ἐν ἐκάστῳ γένει ταύτας ἃς ὅτι ἔστι μὴ ἐνδέχεται δεῖξαι. τί μὲν οὖν σημαίνει καὶ τὰ πρῶτα καὶ τὰ ἐκ τούτων, λαμβάνεται, ὅτι δ' ἔστι, τὰς μὲν ἀρχὰς ἀνάγκη λαμβάνειν, τὰ δ' ἄλλα δεικνύναι· οἷον τί μονὰς ἢ τί τὸ εὐθύ καὶ τρίγωνον, εἶναι δὲ τὴν μονάδα λαβεῖν καὶ μέγεθος, τὰ δ' ἕτερα δεικνύναι.

Ἔστι δ' ὧν χρῶνται ἐν ταῖς ἀποδεικτικαῖς ἐπιστήμας τὰ μὲν ἴδια ἐκάστης ἐπιστήμης τὰ δὲ κοινὰ, κοινὰ δὲ κατ' ἀναλογίαν, ἐπεὶ χρήσιμόν γε ὅσον ἐν τῷ ὑπὸ τὴν ἐπιστήμην γένει· ἴδια μὲν οἷον γραμμὴν εἶναι τοιανδὶ καὶ τὸ εὐθύ, κοινὰ δὲ οἷον τὸ ἴσα ἀπὸ ἴσων ἂν ἀφέλῃ, ὅτι ἴσα τὰ λοιπά. ἱκανὸν δ' ἕκαστον τούτων ὅσον ἐν τῷ γένει· ταὐτὸ γὰρ ποιήσει, (76b.) κἂν μὴ κατὰ πάντων λάβῃ ἀλλ' ἐπὶ μεγεθῶν μόνον, τῷ δ' ἀριθμητικῷ ἐπ' ἀριθμῶν.

Ἔστι δ' ἴδια μὲν καὶ ἃ λαμβάνεται εἶναι, περὶ ἃ ἡ ἐπιστήμη θεωρεῖ τὰ ὑπάρχοντα καθ' αὐτά, οἷον μονάδας ἢ ἀριθμητικὴ, ἢ δὲ γεωμετρία σημεῖα καὶ γραμμάς. ταῦτα γὰρ λαμβάνουσι τὸ εἶναι καὶ τοδὶ εἶναι. τὰ δὲ τούτων πάθη καθ' αὐτά, τί μὲν σημαίνει ἕκαστον, λαμβάνουσιν, οἷον ἢ μὲν ἀριθμητικὴ τί περιττὸν ἢ ἄρτιον ἢ τετράγωνον ἢ κύβος, ἢ δὲ γεωμετρία τί τὸ ἄλογον ἢ τὸ κεκλάσθαι ἢ νεύειν, ὅτι δ' ἔστι, δεικνύουσι διὰ τε τῶν κοινῶν καὶ ἐκ τῶν ἀποδεδειγμένων. καὶ ἡ ἀστρολογία ὡσαύτως. πᾶσα γὰρ ἀποδεικτικὴ ἐπιστήμη περὶ τρία ἐστίν, ὅσα τε εἶναι τίθεται (ταῦτα δ' ἐστὶ τὸ γένος, οὗ τῶν καθ' αὐτὰ παθημάτων ἐστὶ θεωρητικὴ), καὶ τὰ κοινὰ λεγόμενα ἀξιώματα, ἐξ ὧν πρώτων ἀποδείκνυσι, καὶ τρίτον τὰ πάθη, ὧν τί σημαίνει ἕκαστον λαμβάνει. ἐνίας μέντοι ἐπιστήμας οὐδὲν κωλύει ἔνια τούτων παρορᾶν, οἷον τὸ γένος μὴ ὑποτίθεσθαι εἶναι, ἂν ἡ φανερόν ὅτι ἔστιν (οὐ γὰρ ὁμοίως δῆλον ὅτι ἀριθμὸς ἔστι καὶ ὅτι ψυχρὸν καὶ θερμόν), καὶ τὰ πάθη μὴ λαμβάνειν τί σημαίνει, ἂν ἡ δῆλα· ὥσπερ οὐδὲ τὰ κοινὰ οὐ λαμβάνει τί σημαίνει τὸ ἴσα ἀπὸ ἴσων ἀφελεῖν, ὅτι γνώριμον. ἀλλ' οὐδὲν ἥττον τῇ γε φύσει τρία ταῦτα ἐστὶ, περὶ ὅ τε δείκνυσι καὶ ἃ δείκνυσι καὶ ἐξ ὧν.

Οὐκ ἔστι δ' ὑπόθεσις οὐδ' αἴτημα, ὃ ἀνάγκη εἶναι δι' αὐτὸ καὶ δοκεῖν

ἀνάγκη. οὐ γὰρ πρὸς τὸν ἔξω λόγον ἢ ἀπόδειξις, ἀλλὰ πρὸς τὸν ἐν τῇ ψυχῇ, ἐπεὶ οὐδὲ συλλογισμός. ἀεὶ γὰρ ἔστιν ἐνστῆναι πρὸς τὸν ἔξω λόγον, ἀλλὰ πρὸς τὸν ἔσω λόγον οὐκ ἀεὶ. ὅσα μὲν οὖν δεικτὰ ὄντα λαμβάνει αὐτὸς μὴ δείξας, ταῦτ', ἐὰν μὲν δοκοῦντα λαμβάνῃ τῷ μανθάνοντι, ὑποτίθεται, καὶ ἔστιν οὐχ ἀπλῶς ὑπόθεσις ἀλλὰ πρὸς ἐκεῖνον μόνον, ἂν δὲ ἢ μηδεμιᾶς ἐνούσης δόξης ἢ καὶ ἐναντίας ἐνούσης λαμβάνῃ τὸ αὐτό, αἰτεῖται. καὶ τούτῳ διαφέρει ὑπόθεσις καὶ αἴτημα· ἔστι γὰρ αἴτημα τὸ ὑπεναντίον τοῦ μανθάνοντος τῇ δόξει, ἢ ὃ ἂν τις ἀποδεικτὸν ὄν λαμβάνῃ καὶ χρῆται μὴ δείξας.

Οἱ μὲν οὖν ὅροι οὐκ εἰσὶν ὑποθέσεις (οὐδὲν γὰρ εἶναι ἢ μὴ λέγεται), ἀλλ' ἐν ταῖς προτάσεσιν αἱ ὑποθέσεις, τοὺς δ' ὅρους μόνον ξυνίεσθαι δεῖ· τοῦτο δ' οὐχ ὑπόθεσις (εἰ μὴ καὶ τὸ ἀκούειν ὑπόθεσιν τις εἶναι φήσῃ), ἀλλ' ὅσων ὄντων τῷ ἐκεῖνα εἶναι γίνεται τὸ συμπέρασμα. (οὐδ' ὁ γεωμέτρης ψευδῇ ὑποτίθεται, ὥσπερ τινὲς ἔφασαν, λέγοντες ὡς οὐ δεῖ τῷ ψεύδει χρῆσθαι, τὸν δὲ γεωμέτρην ψεύδεσθαι λέγοντα ποδιαίαν τὴν οὐ ποδιαίαν ἢ εὐθεῖαν τὴν γεγραμμένην οὐκ εὐθεῖαν (77a.) οὔσαν. ὁ δὲ γεωμέτρης οὐδὲν συμπεραίνεται τῷ τήνδε εἶναι γραμμὴν ἣν αὐτὸς ἔφθεγκται, ἀλλὰ τὰ διὰ τούτων δηλούμενα.) ἔτι τὸ αἴτημα καὶ ὑπόθεσις πᾶσα ἢ ὡς ὅλον ἢ ὡς ἐν μέρει, οἱ δ' ὅροι οὐδέτερον τούτων.

## Κεφάλαιο 11

Εἶδη μὲν οὖν εἶναι ἢ ἐν τι παρὰ τὰ πολλὰ οὐκ ἀνάγκη, εἰ ἀπόδειξις ἔσται, εἶναι μέντοι ἐν κατὰ πολλῶν ἀληθὲς εἰπεῖν ἀνάγκη - οὐ γὰρ ἔσται τὸ καθόλου, ἂν μὴ τοῦτο ἦ - ἐὰν δὲ τὸ καθόλου μὴ ἦ, τὸ μέσον οὐκ ἔσται, ὥστ' οὐδ' ἀπόδειξις. δεῖ ἄρα τι ἐν καὶ τὸ αὐτὸ ἐπὶ πλειόνων εἶναι μὴ ὁμώνυμον. τὸ δὲ μὴ ἐνδέχεσθαι ἅμα φάναι καὶ ἀποφάναι οὐδεμία λαμβάνει ἀπόδειξις, ἀλλ' ἢ ἐὰν δέῃ δεῖξαι καὶ τὸ συμπέρασμα οὕτως. δείκνυται δὲ λαβοῦσι τὸ πρῶτον κατὰ τοῦ μέσου, ὅτι ἀληθές, ἀποφάναι δ' οὐκ ἀληθές. τὸ δὲ μέσον οὐδὲν διαφέρει εἶναι καὶ μὴ εἶναι λαβεῖν, ὡς δ' αὕτως καὶ τὸ τρίτον. εἰ γὰρ ἐδόθη, καθ' οὗ ἄνθρωπον ἀληθὲς εἰπεῖν, εἰ καὶ μὴ ἄνθρωπον ἀληθές, ἀλλ' εἰ μόνον ἄνθρωπον ζῶον εἶναι, μὴ ζῶον δὲ μή, ἔσται [γὰρ] ἀληθὲς εἰπεῖν Καλλίαν, εἰ καὶ μὴ Καλλίαν, ὅμως ζῶον, μὴ ζῶον δ' οὔ. αἴτιον δ' ὅτι τὸ πρῶτον οὐ μόνον κατὰ τοῦ μέσου λέγεται ἀλλὰ καὶ κατ' ἄλλου διὰ τὸ εἶναι ἐπὶ πλειόνων, ὥστ' οὐδ' εἰ τὸ μέσον καὶ αὐτό ἐστι καὶ μὴ αὐτό, πρὸς τὸ συμπέρασμα οὐδὲν διαφέρει. τὸ δ' ἅπαν φάναι ἢ ἀποφάναι ἢ εἰς τὸ ἀδύνατον ἀπόδειξις λαμβάνει, καὶ ταῦτα οὐδ' ἀεὶ καθόλου, ἀλλ' ὅσον ἱκανόν, ἱκανὸν δ' ἐπὶ τοῦ γένους. λέγω δ' ἐπὶ τοῦ γένους οἷον περὶ ὃ γένος τὰς ἀποδείξεις

φέρει, ὥσπερ εἴρηται καὶ πρότερον.

Ἐπικοινωνοῦσι δὲ πᾶσαι αἱ ἐπιστήμαι ἀλλήλαις κατὰ τὰ κοινά (κοινὰ δὲ λέγω οἷς χρῶνται ὡς ἐκ τούτων ἀποδεικνύντες, ἀλλ' οὐ περὶ ὧν δεικνύουσιν οὐδ' ὃ δεικνύουσιν), καὶ ἡ διαλεκτικὴ πάσαις, καὶ εἴ τις καθόλου πειρῶτο δεικνύναι τὰ κοινά, οἷον ὅτι ἅπαν φάναι ἢ ἀποφάναι, ἢ ὅτι ἴσα ἀπὸ ἴσων, ἢ τῶν τοιούτων ἄττα. ἡ δὲ διαλεκτικὴ οὐκ ἔστιν οὕτως ὠρισμένων τινῶν, οὐδὲ γένους τινὸς ἑνός. οὐ γὰρ ἂν ἡρώταο ἀποδεικνύντα γὰρ οὐκ ἔστιν ἐρωτᾶν διὰ τὸ τῶν ἀντικειμένων ὄντων μὴ δείκνυσθαι τὸ αὐτό. δέδεικται δὲ τοῦτο ἐν τοῖς περὶ συλλογισμοῦ.

## Κεφάλαιο 12

Εἰ δὲ τὸ αὐτό ἐστὶν ἐρώτημα συλλογιστικὸν καὶ πρότασις ἀντιφάσεως, προτάσεις δὲ καθ' ἑκάστην ἐπιστήμην ἐξ ὧν ὁ συλλογισμὸς ὁ καθ' ἑκάστην, εἴη ἂν τι ἐρώτημα ἐπιστημονικόν, ἐξ ὧν ὁ καθ' ἑκάστην οἰκεῖος γίνεται συλλογισμός. δῆλον ἄρα ὅτι οὐ πᾶν ἐρώτημα γεωμετρικὸν ἂν εἴη οὐδ' ἰατρικόν, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ἀλλ' ἐξ (77b.) ὧν δείκνυται τι περὶ ὧν ἡ γεωμετρία ἐστίν, ἢ ἃ ἐκ τῶν αὐτῶν δείκνυται τῇ γεωμετρίᾳ, ὥσπερ τὰ ὀπτικά. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. καὶ περὶ μὲν τούτων καὶ λόγον ὑφεκτέον ἐκ τῶν γεωμετρικῶν ἀρχῶν καὶ συμπερασμάτων, περὶ δὲ τῶν ἀρχῶν λόγον οὐχ ὑφεκτέον τῷ γεωμέτρῃ ἢ γεωμέτρῃς· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων ἐπιστημῶν. οὔτε πᾶν ἄρα ἕκαστον ἐπιστήμονα ἐρώτημα ἐρωτητέον, οὔθ' ἅπαν τὸ ἐρωτώμενον ἀποκριτέον περὶ ἑκάστου, ἀλλὰ τὰ κατὰ τὴν ἐπιστήμην διορισθέντα. εἰ δὲ διαλέξεται γεωμέτρῃ ἢ γεωμέτρῃς οὕτως, φανερόν ὅτι καὶ καλῶς, ἐὰν ἐκ τούτων τι δεικνύῃ· εἰ δὲ μὴ, οὐ καλῶς. δῆλον δ' ὅτι οὐδ' ἐλέγχει γεωμέτρην ἀλλ' ἢ κατὰ συμβεβηκός· ὥστ' οὐκ ἂν εἴη ἐν ἀγεωμετρήτοις περὶ γεωμετρίας διαλεκτέον· λήσει γὰρ ὁ φαύλως διαλεγόμενος. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων ἔχει ἐπιστημῶν.

Ἐπεὶ δ' ἔστι γεωμετρικὰ ἐρωτήματα, ἅρ' ἔστι καὶ ἀγεωμέτρητα; καὶ παρ' ἑκάστην ἐπιστήμην τὰ κατὰ τὴν ἄγνοιαν τὴν ποίαν γεωμετρικά ἐστίν; καὶ πότερον ὁ κατὰ τὴν ἄγνοιαν συλλογισμὸς ὁ ἐκ τῶν ἀντικειμένων συλλογισμός, ἢ ὁ παραλογισμός, κατὰ γεωμετρίαν δέ, ἢ <ὁ> ἐξ ἄλλης τέχνης, οἷον τὸ μουσικόν ἐστὶν ἐρώτημα ἀγεωμέτρητον περὶ γεωμετρίας, τὸ δὲ τὰς παραλλήλους συμπίπτειν οἶεσθαι γεωμετρικόν πως καὶ ἀγεωμέτρητον ἄλλον τρόπον; διττὸν γὰρ τοῦτο, ὥσπερ τὸ ἄρρυθμον, καὶ τὸ μὲν ἕτερον ἀγεωμέτρητον τῷ μὴ ἔχειν [ὥσπερ τὸ ἄρρυθμον], τὸ δ' ἕτερον τῷ φαύλως ἔχειν· καὶ ἡ ἄγνοια αὕτη καὶ ἡ ἐκ τῶν τοιούτων ἀρχῶν ἐναντία. ἐν δὲ τοῖς

μαθήμασιν οὐκ ἔστιν ὁμοίως ὁ παραλογισμός, ὅτι τὸ μέσον ἐστὶν ἀεὶ τὸ διπτόν· κατὰ τε γὰρ τούτου παντός, καὶ τοῦτο πάλιν κατ' ἄλλου λέγεται παντός (τὸ δὲ κατηγορούμενον οὐ λέγεται πᾶν), ταῦτα δ' ἔστιν οἷον ὁρᾶν τῇ νοήσει, ἐν δὲ τοῖς λόγοις λανθάνει. ἄρα πᾶς κύκλος σχῆμα; ἂν δὲ γράψῃ, δῆλον. τί δέ; τὰ ἔπη κύκλος; φανερόν ὅτι οὐκ ἔστιν.

Οὐ δεῖ δ' ἔνστασιν εἰς αὐτὸ φέρειν, ἂν ἡ ἢ πρότασις ἐπακτική. ὥσπερ γὰρ οὐδὲ πρότασις ἐστὶν ἡ μὴ ἔστιν ἐπὶ πλειόνων (οὐ γὰρ ἔσται ἐπὶ πάντων, ἐκ τῶν καθόλου δ' ὁ συλλογισμός), δῆλον ὅτι οὐδ' ἔνστασις. αἱ αὐταὶ γὰρ προτάσεις καὶ ἐνστάσεις· ἦν γὰρ φέρει ἔνστασιν, αὕτη γένοιτ' ἂν πρότασις ἢ ἀποδεικτική ἢ διαλεκτική.

Συμβαίνει δ' ἐνίους ἀσυλλογίστως λέγειν διὰ τὸ λαμβάνειν ἀμφοτέροις τὰ ἐπόμενα, οἷον καὶ ὁ Καινεὺς ποιεῖ, (78a.) ὅτι τὸ πῦρ ἐν τῇ πολλαπλασίᾳ ἀναλογίᾳ· καὶ γὰρ τὸ πῦρ ταχὺ γεννᾶται, ὥς φησι, καὶ αὕτη ἡ ἀναλογία. οὕτω δ' οὐκ ἔστι συλλογισμός· ἀλλ' εἰ τῇ ταχίστῃ ἀναλογίᾳ ἔπεται ἡ πολλαπλάσιος καὶ τῷ πυρὶ ἡ ταχίστη ἐν τῇ κινήσει ἀναλογία. ἐνίστε μὲν οὖν οὐκ ἐνδέχεται συλλογίσασθαι ἐκ τῶν εἰλημμένων, ὅτε δ' ἐνδέχεται, ἀλλ' οὐχ ὁρᾶται.

Εἰ δ' ἦν ἀδύνατον ἐκ ψεύδους ἀληθὲς δεῖξαι, ῥᾶδιον ἂν ἦν τὸ ἀναλύειν· ἀντέστρεφε γὰρ ἂν ἐξ ἀνάγκης. ἔστω γὰρ τὸ Α ὄν· τούτου δ' ὄντος ταδὶ ἔστιν, ἃ οἶδα ὅτι ἔστιν, οἷον τὸ Β. ἐκ τούτων ἄρα δείξω ὅτι ἔστιν ἐκεῖνο. ἀντιστρέφει δὲ μᾶλλον τὰ ἐν τοῖς μαθήμασιν, ὅτι οὐδὲν συμβεβηκὸς λαμβάνουσιν (ἀλλὰ καὶ τούτῳ διαφέρουσι τῶν ἐν τοῖς διαλόγοις) ἀλλ' ὀρισμούς. Αὔξεται δ' οὐ διὰ τῶν μέσων, ἀλλὰ τῷ προσλαμβάνειν, οἷον τὸ Α τοῦ Β, τοῦτο δὲ τοῦ Γ, πάλιν τοῦτο τοῦ Δ, καὶ τοῦτ' εἰς ἄπειρον· καὶ εἰς τὸ πλάγιον, οἷον τὸ Α καὶ κατὰ τοῦ Γ καὶ κατὰ τοῦ Ε, οἷον ἔστιν ἀριθμὸς ποσὸς ἢ καὶ ἄπειρος τοῦτο ἐφ' ὧ Α, ὁ περιττὸς ἀριθμὸς ποσὸς ἐφ' οὗ Β, ἀριθμὸς περιττὸς ἐφ' οὗ Γ· ἔστιν ἄρα τὸ Α κατὰ τοῦ Γ. καὶ ἔστιν ὁ ἄρτιος ποσὸς ἀριθμὸς ἐφ' οὗ Δ, ὁ ἄρτιος ἀριθμὸς ἐφ' οὗ Ε· ἔστιν ἄρα τὸ Α κατὰ τοῦ Ε.

## Κεφάλαιο 13

Τὸ δ' ὅτι διαφέρει καὶ τὸ διότι ἐπίστασθαι, πρῶτον μὲν ἐν τῇ αὐτῇ ἐπιστήμῃ, καὶ ἐν ταύτῃ διχῶς, ἓνα μὲν τρόπον ἐὰν μὴ δι' ἀμέσων γίνηται ὁ συλλογισμός (οὐ γὰρ λαμβάνεται τὸ πρῶτον αἴτιον, ἡ δὲ τοῦ διότι ἐπιστήμη κατὰ τὸ πρῶτον αἴτιον), ἄλλον δὲ εἰ δι' ἀμέσων μὲν, ἀλλὰ μὴ διὰ τοῦ αἰτίου ἀλλὰ τῶν ἀντιστροφόντων διὰ τοῦ γνωριμωτέρου. κωλύει γὰρ οὐδὲν τῶν

ἀντικατηγορουμένων γνωριμώτερον εἶναι ἐνίοτε τὸ μὴ αἴτιον, ὥστ' ἔσται διὰ τούτου ἡ ἀπόδειξις, οἷον ὅτι ἐγγὺς οἱ πλάνητες διὰ τοῦ μὴ στίλβειν. ἔστω ἐφ' ὧ Γ πλάνητες, ἐφ' ὧ Β τὸ μὴ στίλβειν, ἐφ' ὧ Α τὸ ἐγγὺς εἶναι. ἀληθὲς δὴ τὸ Β κατὰ τοῦ Γ εἰπεῖν· οἱ γὰρ πλάνητες οὐ στίλβουσιν. ἀλλὰ καὶ τὸ Α κατὰ τοῦ Β· τὸ γὰρ μὴ στίλβον ἐγγὺς ἐστὶ· τοῦτο δ' εἰλήφθω δι' ἐπαγωγῆς ἢ δι' αἰσθήσεως. ἀνάγκη οὖν τὸ Α τῷ Γ ὑπάρχειν, ὥστ' ἀποδέδεικται ὅτι οἱ πλάνητες ἐγγὺς εἰσιν. οὗτος οὖν ὁ συλλογισμὸς οὐ τοῦ διότι ἀλλὰ τοῦ ὅτι ἐστίν· οὐ γὰρ διὰ τὸ μὴ στίλβειν ἐγγὺς εἰσιν, ἀλλὰ διὰ τὸ ἐγγὺς εἶναι οὐ στίλβουσιν. ἐγχωρεῖ δὲ καὶ διὰ θατέρου θάτερον δειχθῆναι, καὶ ἔσται τοῦ διότι ἡ ἀπόδειξις, οἷον ἔστω τὸ Γ πλάνητες, ἐφ' ὧ Β (78b.) τὸ ἐγγὺς εἶναι, τὸ Α τὸ μὴ στίλβειν· ὑπάρχει δὴ καὶ τὸ Β τῷ Γ καὶ τὸ Α τῷ Β, ὥστε καὶ τῷ Γ τὸ Α [τὸ μὴ στίλβειν]. καὶ ἔστι τοῦ διότι ὁ συλλογισμὸς· εἴληπται γὰρ τὸ πρῶτον αἴτιον. πάλιν ὡς τὴν σελήνην δεικνύουσιν ὅτι σφαιροειδής, διὰ τῶν αὐξήσεων· εἰ γὰρ τὸ αὐξανόμενον οὕτω σφαιροειδές, αὐξάνει δ' ἡ σελήνη, φανερόν ὅτι σφαιροειδής· οὕτω μὲν οὖν τοῦ ὅτι γέγονεν ὁ συλλογισμὸς, ἀνάπαλιν δὲ τεθέντος τοῦ μέσου τοῦ διότι· οὐ γὰρ διὰ τὰς αὐξήσεις σφαιροειδής ἐστίν, ἀλλὰ διὰ τὸ σφαιροειδὲς εἶναι λαμβάνει τὰς αὐξήσεις τοιαύτας. σελήνη ἐφ' ὧ Γ, σφαιροειδὲς ἐφ' ὧ Β, αὐξήσις ἐφ' ὧ Α. ἐφ' ὧν δὲ τὰ μέσα μὴ ἀντιστρέφει καὶ ἔστι γνωριμώτερον τὸ ἀναίτιον, τὸ ὅτι μὲν δείκνυται, τὸ διότι δ' οὐ.

Ἔτι ἐφ' ὧν τὸ μέσον ἔξω τίθεται. καὶ γὰρ ἐν τούτοις τοῦ ὅτι καὶ οὐ τοῦ διότι ἡ ἀπόδειξις· οὐ γὰρ λέγεται τὸ αἴτιον. οἷον διὰ τί οὐκ ἀναπνεῖ ὁ τοῖχος; ὅτι οὐ ζῶον. εἰ γὰρ τοῦτο τοῦ μὴ ἀναπνεῖν αἴτιον, ἔδει τὸ ζῶον εἶναι αἴτιον τοῦ ἀναπνεῖν, οἷον εἰ ἡ ἀπόφασις αἰτία τοῦ μὴ ὑπάρχειν, ἡ κατάφασις τοῦ ὑπάρχειν, ὥσπερ εἰ τὸ ἀσύμμετρα εἶναι τὰ θερμὰ καὶ τὰ ψυχρὰ τοῦ μὴ ὑγιαίνειν, τὸ σύμμετρα εἶναι τοῦ ὑγιαίνειν, -ὁμοίως δὲ καὶ εἰ ἡ κατάφασις τοῦ ὑπάρχειν, ἡ ἀπόφασις τοῦ μὴ ὑπάρχειν. ἐπὶ δὲ τῶν οὕτως ἀποδεδομένων οὐ συμβαίνει τὸ λεχθέν· οὐ γὰρ ἅπαν ἀναπνεῖ ζῶον. ὁ δὲ συλλογισμὸς γίνεται τῆς τοιαύτης αἰτίας ἐν τῷ μέσω σχήματι. οἷον ἔστω τὸ Α ζῶον, ἐφ' ὧ Β τὸ ἀναπνεῖν, ἐφ' ὧ Γ τοῖχος. τῷ μὲν οὖν Β παντὶ ὑπάρχει τὸ Α (πάν γὰρ τὸ ἀναπνέον ζῶον), τῷ δὲ Γ οὐθενί, ὥστε οὐδὲ τὸ Β τῷ Γ οὐθενί· οὐκ ἄρα ἀναπνεῖ ὁ τοῖχος. εἰκόσκει δ' αἰ τοιαῦται τῶν αἰτιῶν τοῖς καθ' ὑπερβολὴν εἰρημένοις· τοῦτο δ' ἔστι τὸ πλέον ἀποστήσαντα τὸ μέσον εἰπεῖν, οἷον τὸ τοῦ Ἀναχάρσιος, ὅτι ἐν Σκύθαις οὐκ εἰσὶν αὐλητρίδες, οὐδὲ γὰρ ἄμπελοι.

Κατὰ μὲν δὴ τὴν αὐτὴν ἐπιστήμην καὶ κατὰ τὴν τῶν μέσων θέσιν αὐτὰι διαφοραὶ εἰσι τοῦ ὅτι πρὸς τὸν τοῦ διότι συλλογισμόν· ἄλλον δὲ τρόπον διαφέρει τὸ διότι τοῦ ὅτι τῷ δι' ἄλλης ἐπιστήμης ἐκάτερον θεωρεῖν. τοιαῦτα

δ' ἐστὶν ὅσα οὕτως ἔχει πρὸς ἄλληλα ὥστ' εἶναι θάτερον ὑπὸ θάτερον, οἷον τὰ ὀπτικά πρὸς γεωμετρίαν καὶ τὰ μηχανικά πρὸς στερεομετρίαν καὶ τὰ ἁρμονικά πρὸς ἀριθμητικὴν καὶ τὰ φαινόμενα πρὸς ἀστρολογικὴν. σχεδὸν δὲ συνώνυμοί εἰσιν ἔναι τούτων τῶν ἐπιστημῶν, οἷον ἀστρολογία ἢ τε μαθηματικὴ (79a.) καὶ ἡ ναυτικὴ, καὶ ἁρμονικὴ ἢ τε μαθηματικὴ καὶ ἡ κατὰ τὴν ἀκοήν. ἐνταῦθα γὰρ τὸ μὲν ὅτι τῶν αἰσθητικῶν εἰδέναι, τὸ δὲ διότι τῶν μαθηματικῶν· οὗτοι γὰρ ἔχουσι τῶν αἰτίων τὰς ἀποδείξεις, καὶ πολλάκις οὐκ ἴσασι τὸ ὅτι, καθάπερ οἱ τὸ καθόλου θεωροῦντες πολλάκις ἔναι τῶν καθ' ἕκαστον οὐκ ἴσασι δι' ἀνεπισκεψίαν. ἔστι δὲ ταῦτα ὅσα ἕτερόν τι ὄντα τὴν οὐσίαν κέχρηται τοῖς εἶδεσιν. τὰ γὰρ μαθήματα περὶ εἶδη ἐστίν· οὐ γὰρ καθ' ὑποκειμένου τινός· εἰ γὰρ καὶ καθ' ὑποκειμένου τινὸς τὰ γεωμετρικά ἐστίν, ἀλλ' οὐχ ἢ γε καθ' ὑποκειμένου. ἔχει δὲ καὶ πρὸς τὴν ὀπτικήν, ὡς αὕτη πρὸς τὴν γεωμετρίαν, ἄλλη πρὸς ταύτην, οἷον τὸ περὶ τῆς ἱρίδος· τὸ μὲν γὰρ ὅτι φυσικοῦ εἰδέναι, τὸ δὲ διότι ὀπτικοῦ, ἢ ἀπλῶς ἢ τοῦ κατὰ τὸ μάθημα. πολλὰ δὲ καὶ τῶν μὴ ὑπ' ἀλλήλας ἐπιστημῶν ἔχουσιν οὕτως, οἷον ἰατρικὴ πρὸς γεωμετρίαν· ὅτι μὲν γὰρ τὰ ἔλκη τὰ περιφερῆ βραδύτερον ὑγιάζεται, τοῦ ἱατροῦ εἰδέναι, διότι δὲ τοῦ γεωμέτρου.

## Κεφάλαιο 14

Τῶν δὲ σχημάτων ἐπιστημονικὸν μάλιστα τὸ πρῶτόν ἐστιν. αἱ τε γὰρ μαθηματικαὶ τῶν ἐπιστημῶν διὰ τούτου φέρουσι τὰς ἀποδείξεις, οἷον ἀριθμητικὴ καὶ γεωμετρία καὶ ὀπτικὴ, καὶ σχεδὸν ὡς εἰπεῖν ὅσαι τοῦ διότι ποιοῦνται τὴν σκέψιν· ἢ γὰρ ὅλως ἢ ὡς ἐπὶ τὸ πολὺ καὶ ἐν τοῖς πλείστοις διὰ τούτου τοῦ σχήματος ὁ τοῦ διότι συλλογισμός. ὥστε καὶ διὰ τοῦτ' εἴη μάλιστα ἐπιστημονικόν· κυριώτατον γὰρ τοῦ εἰδέναι τὸ διότι θεωρεῖν. εἴτα τὴν τοῦ τί ἐστίν ἐπιστήμην διὰ μόνου τούτου θηρεῦσαι δυνατόν. ἐν μὲν γὰρ τῷ μέσῳ σχήματι οὐ γίνεται κατηγορικὸς συλλογισμός, ἢ δὲ τοῦ τί ἐστίν ἐπιστήμη καταφάσεως· ἐν δὲ τῷ ἐσχάτῳ γίνεται μὲν ἀλλ' οὐ καθόλου, τὸ δὲ τί ἐστὶ τῶν καθόλου ἐστίν· οὐ γὰρ πῇ ἐστὶ ζῶον δίπουν ὁ ἄνθρωπος. ἔτι τοῦτο μὲν ἐκείνων οὐδὲν προσδεῖται, ἐκεῖνα δὲ διὰ τούτου καταπυκνοῦνται καὶ αὐξεται, ἕως ἂν εἰς τὰ ἄμεσα ἔλθῃ. φανερόν οὖν ὅτι κυριώτατον τοῦ ἐπίστασθαι τὸ πρῶτον σχῆμα.

## Κεφάλαιο 15

Ὡσπερ δὲ ὑπάρχειν τὸ Α τῷ Β ἐνεδέχετο ἀτόμως, οὕτω καὶ μὴ ὑπάρχειν ἐγχωρεῖ. λέγω δὲ τὸ ἀτόμως ὑπάρχειν ἢ μὴ ὑπάρχειν τὸ μὴ εἶναι αὐτῶν μέσον· οὕτω γὰρ οὐκέτι ἔσται κατ' ἄλλο τὸ ὑπάρχειν ἢ μὴ ὑπάρχειν. ὅταν

μὲν οὖν ἢ τὸ Α ἢ τὸ Β ἐν ὅλῳ τινὶ ἤ, ἢ καὶ ἄμφω, οὐκ ἐνδέχεται τὸ Α τῷ Β πρῶτως μὴ ὑπάρχειν. ἔστω γὰρ τὸ Α ἐν ὅλῳ τῷ Γ. οὐκοῦν εἰ τὸ Β μὴ ἔστιν ἐν ὅλῳ τῷ Γ (ἐγχωρεῖ γὰρ τὸ μὲν Α εἶναι ἐν τινὶ ὅλῳ, τὸ δὲ Β μὴ εἶναι ἐν τούτῳ), συλλογισμὸς ἔσται τοῦ μὴ ὑπάρχειν τὸ Α τῷ Β· εἰ γὰρ τῷ μὲν (79b.) Α παντὶ τὸ Γ, τῷ δὲ Β μηδενί, οὐδενὶ τῷ Β τὸ Α. ὁμοίως δὲ καὶ εἰ τὸ Β ἐν ὅλῳ τινὶ ἔστιν, οἷον ἐν τῷ Δ· τὸ μὲν γὰρ Δ παντὶ τῷ Β ὑπάρχει, τὸ δὲ Α οὐδενὶ τῷ Δ, ὥστε τὸ Α οὐδενὶ τῷ Β ὑπάρξει διὰ συλλογισμοῦ. τὸν αὐτὸν δὲ τρόπον δειχθήσεται καὶ εἰ ἄμφω ἐν ὅλῳ τινὶ ἔστιν. ὅτι δ' ἐνδέχεται τὸ Β μὴ εἶναι ἐν ὅλῳ ἔστι τὸ Α, ἢ πάλιν τὸ Α ἐν ὅλῳ τὸ Β, φανερὸν ἐκ τῶν συστοιχιῶν, ὅσαι μὴ ἐπαλλάττουσιν ἀλλήλαις. εἰ γὰρ μηδὲν τῶν ἐν τῇ Α Γ Δ συστοιχία κατὰ μηδενὸς κατηγορεῖται τῶν ἐν τῇ Β Ε Ζ, τὸ δ' Α ἐν ὅλῳ ἔστι τῷ Θ συστοίχῳ ὄντι, φανερὸν ὅτι τὸ Β οὐκ ἔσται ἐν τῷ Θ· ἐπαλλάξουσιν γὰρ αἱ συστοιχίαι. ὁμοίως δὲ καὶ εἰ τὸ Β ἐν ὅλῳ τινὶ ἔστιν. ἔὰν δὲ μηδέτερον ἢ ἐν ὅλῳ μηδενί, μὴ ὑπάρχει δὲ τὸ Α τῷ Β, ἀνάγκη ἀτόμως μὴ ὑπάρχειν. εἰ γὰρ ἔσται τι μέσον, ἀνάγκη θάτερον αὐτῶν ἐν ὅλῳ τινὶ εἶναι. ἢ γὰρ ἐν τῷ πρῶτῳ σχήματι ἢ ἐν τῷ μέσῳ ἔσται ὁ συλλογισμὸς. εἰ μὲν οὖν ἐν τῷ πρῶτῳ, τὸ Β ἔσται ἐν ὅλῳ τινὶ (καταφατικὴν γὰρ δεῖ τὴν πρὸς τοῦτο γενέσθαι πρότασιν), εἰ δ' ἐν τῷ μέσῳ, ὁπότερον ἔτυχεν (πρὸς ἀμφοτέροις γὰρ ληφθέντος τοῦ στερητικοῦ γίνεται συλλογισμὸς· ἀμφοτέρων δ' ἀποφατικῶν οὐσῶν οὐκ ἔσται).

Φανερὸν οὖν ὅτι ἐνδέχεται τε ἄλλο ἄλλῳ μὴ ὑπάρχειν ἀτόμως, καὶ πότ' ἐνδέχεται καὶ πῶς, εἰρήκαμεν.

## Κεφάλαιο 16

Ἄγνοια δ' ἢ μὴ κατ' ἀπόφασιν ἀλλὰ κατὰ διάθεσιν λεγομένη ἔστι μὲν ἢ διὰ συλλογισμοῦ γινομένη ἀπάτη, αὕτη δ' ἐν μὲν τοῖς πρῶτως ὑπάρχουσιν ἢ μὴ ὑπάρχουσι συμβαίνει διχῶς· ἢ γὰρ ὅταν ἀπλῶς ὑπολάβῃ ὑπάρχειν ἢ μὴ ὑπάρχειν, ἢ ὅταν διὰ συλλογισμοῦ λάβῃ τὴν ὑπόληψιν. τῆς μὲν οὖν ἀπλῆς ὑπολήψεως ἀπλῆ ἢ ἀπάτη, τῆς δὲ διὰ συλλογισμοῦ πλείους. μὴ ὑπαρχέτω γὰρ τὸ Α μηδενὶ τῷ Β ἀτόμως· οὐκοῦν ἔὰν συλλογίζηται ὑπάρχειν τὸ Α τῷ Β, μέσον λαβὼν τὸ Γ, ἡπατημένος ἔσται διὰ συλλογισμοῦ. ἐνδέχεται μὲν οὖν ἀμφοτέρας τὰς προτάσεις εἶναι ψευδεῖς, ἐνδέχεται δὲ τὴν ἑτέραν μόνον. εἰ γὰρ μήτε τὸ Α μηδενὶ τῶν Γ ὑπάρχει μήτε τὸ Γ μηδενὶ τῶν Β, εἴληπται δ' ἑκάτερα ἀνάπαλιν, ἄμφω ψευδεῖς ἔσονται. ἐγχωρεῖ δ' οὕτως ἔχειν τὸ Γ πρὸς τὸ Α καὶ Β ὥστε μήτε ὑπὸ τὸ Α εἶναι μήτε καθόλου τῷ Β. τὸ μὲν γὰρ Β ἀδύνατον εἶναι ἐν ὅλῳ τινὶ (πρῶτως γὰρ ἐλέγετο αὐτῷ τὸ Α μὴ ὑπάρχειν), τὸ δὲ Α οὐκ ἀνάγκη πᾶσι τοῖς οὖσιν εἶναι καθόλου, ὥστ' ἀμφοτέραι ψευδεῖς.

ἀλλὰ καὶ τὴν ἑτέραν ἐνδέχεται ἀληθῆ λαμβάνειν, οὐ μέντοι ὁποτέραν ἔτυχεν, ἀλλὰ τὴν (80a.)  $A \cdot \Gamma$ · ἢ γὰρ  $\Gamma \cdot B$  πρότασις ἀεὶ ψευδῆς ἔσται διὰ τὸ ἐν μηδενὶ εἶναι τὸ  $B$ , τὴν δὲ  $A \cdot \Gamma$  ἐγχωρεῖ, οἷον εἰ τὸ  $A$  καὶ τῷ  $\Gamma$  καὶ τῷ  $B$  ὑπάρχει ἀτόμως (ὅταν γὰρ πρώτως κατηγορηῖται ταῦτο πλειόνων, οὐδέτερον ἐν οὐδέτερω ἔσται). διαφέρει δ' οὐδέν, οὐδ' εἰ μὴ ἀτόμως ὑπάρχει.

Ἡ μὲν οὖν τοῦ ὑπάρχειν ἀπάτη διὰ τούτων τε καὶ οὕτω γίνεται μόνως (οὐ γὰρ ἦν ἐν ἄλλῳ σχήματι τοῦ ὑπάρχειν συλλογισμός), ἡ δὲ τοῦ μὴ ὑπάρχειν ἐν τε τῷ πρώτῳ καὶ ἐν τῷ μέσῳ σχήματι. πρῶτον οὖν εἵπωμεν ποσαχῶς ἐν τῷ πρώτῳ γίνεται, καὶ πῶς ἐχουσῶν τῶν προτάσεων. ἐνδέχεται μὲν οὖν ἀμφοτέρων ψευδῶν οὐσῶν, οἷον εἰ τὸ  $A$  καὶ τῷ  $\Gamma$  καὶ τῷ  $B$  ὑπάρχει ἀτόμως· ἐὰν γὰρ ληφθῇ τὸ μὲν  $A$  τῷ  $\Gamma$  μηδενί, τὸ δὲ  $\Gamma$  παντὶ τῷ  $B$ , ψευδεῖς αἱ προτάσεις. ἐνδέχεται δὲ καὶ τῆς ἑτέρας ψευδοῦς οὔσης, καὶ ταύτης ὁποτέρας ἔτυχεν. ἐγχωρεῖ γὰρ τὴν μὲν  $A \cdot \Gamma$  ἀληθῆ εἶναι, τὴν δὲ  $\Gamma \cdot B$  ψευδῆ, τὴν μὲν  $A \cdot \Gamma$  ἀληθῆ ὅτι οὐ πᾶσι τοῖς οὖσιν ὑπάρχει τὸ  $A$ , τὴν δὲ  $\Gamma \cdot B$  ψευδῆ ὅτι ἀδύνατον ὑπάρχειν τῷ  $B$  τὸ  $\Gamma$ , ὥς μηδενὶ ὑπάρχει τὸ  $A$ · οὐ γὰρ ἔτι ἀληθὲς ἔσται ἢ  $A \cdot \Gamma$  πρότασις· ἅμα δέ, εἰ καὶ εἰσὶν ἀμφοτέραι ἀληθεῖς, καὶ τὸ συμπέρασμα ἔσται ἀληθές. ἀλλὰ καὶ τὴν  $\Gamma \cdot B$  ἐνδέχεται ἀληθῆ εἶναι τῆς ἑτέρας οὔσης ψευδοῦς, οἷον εἰ τὸ  $B$  καὶ ἐν τῷ  $\Gamma$  καὶ ἐν τῷ  $A$  ἐστίν· ἀνάγκη γὰρ θάτερον ὑπὸ θάτερον εἶναι, ὥστ' ἂν λάβῃ τὸ  $A$  μηδενὶ τῷ  $\Gamma$  ὑπάρχειν, ψευδὴς ἔσται ἢ πρότασις. φανερόν οὖν ὅτι καὶ τῆς ἑτέρας ψευδοῦς οὔσης καὶ ἀμφοῖν ἔσται ψευδὴς ὁ συλλογισμός.

Ἐν δὲ τῷ μέσῳ σχήματι ὅλας μὲν εἶναι τὰς προτάσεις ἀμφοτέρας ψευδεῖς οὐκ ἐνδέχεται· ὅταν γὰρ τὸ  $A$  παντὶ τῷ  $B$  ὑπάρχῃ, οὐδέν ἔσται λαβεῖν ὃ τῷ μὲν ἑτέρῳ παντὶ θατέρῳ δ' οὐδενὶ ὑπάρξει· δεῖ δ' οὕτω λαμβάνειν τὰς προτάσεις ὥστε τῷ μὲν ὑπάρχειν τῷ δὲ μὴ ὑπάρχειν, εἴπερ ἔσται συλλογισμός. εἰ οὖν οὕτω λαμβανόμεναι ψευδεῖς, δῆλον ὡς ἐναντίως ἀνάπαλιν ἔξουσι· τοῦτο δ' ἀδύνατον. ἐπὶ τι δ' ἑκατέραν οὐδὲν κωλύει ψευδῆ εἶναι, οἷον εἰ τὸ  $\Gamma$  καὶ τῷ  $A$  καὶ τῷ  $B$  τινὲς ὑπάρχοι· ἂν γὰρ τῷ μὲν  $A$  παντὶ ληφθῇ ὑπάρχον, τῷ δὲ  $B$  μηδενί, ψευδεῖς μὲν ἀμφοτέραι αἱ προτάσεις, οὐ μέντοι ὅλαι ἀλλ' ἐπὶ τι. καὶ ἀνάπαλιν δὲ τεθέντος τοῦ στερητικοῦ ὡσαύτως. τὴν δ' ἑτέραν εἶναι ψευδῆ καὶ ὁποτερανοῦν ἐνδέχεται. ὃ γὰρ ὑπάρχει τῷ  $A$  παντί, καὶ τῷ  $B$  ὑπάρχει· ἐὰν οὖν ληφθῇ τῷ μὲν  $A$  ὅλῳ ὑπάρχειν (80b.) τὸ  $\Gamma$ , τῷ δὲ  $B$  ὅλῳ μὴ ὑπάρχειν, ἢ μὲν  $\Gamma \cdot A$  ἀληθὲς ἔσται, ἢ δὲ  $\Gamma \cdot B$  ψευδής. πάλιν ὃ τῷ  $B$  μηδενὶ ὑπάρχει, οὐδὲ τῷ  $A$  παντὶ ὑπάρξει· εἰ γὰρ τῷ  $A$ , καὶ τῷ  $B$ · ἀλλ' οὐχ ὑπῆρχεν. ἐὰν οὖν ληφθῇ τὸ  $\Gamma$  τῷ μὲν  $A$  ὅλῳ ὑπάρχειν, τῷ δὲ  $B$  μηδενί, ἢ μὲν  $\Gamma \cdot B$  πρότασις ἀληθής, ἢ δ' ἑτέρα ψευδής. ὁμοίως δὲ καὶ μετατεθέντος τοῦ στερητικοῦ. ὃ γὰρ μηδενὶ ὑπάρχει τῷ  $A$ , οὐδὲ τῷ  $B$  οὐδενὶ ὑπάρξει· ἐὰν



οὖν ληφθῇ τὸ Γ τῷ μὲν Α ὅλω μὴ ὑπάρχειν, τῷ δὲ Β ὅλω ὑπάρχειν, ἢ μὲν Γ Α πρότασις ἀληθὴς ἔσται, ἢ ἑτέρα δὲ ψευδής. καὶ πάλιν, ὃ παντὶ τῷ Β ὑπάρχει, μηδενὶ λαβεῖν τῷ Α ὑπάρχον ψεῦδος. ἀνάγκη γάρ, εἰ τῷ Β παντί, καὶ τῷ Α τινὶ ὑπάρχειν· ἐὰν οὖν ληφθῇ τῷ μὲν Β παντὶ ὑπάρχειν τὸ Γ, τῷ δὲ Α μηδενί, ἢ μὲν Γ Β ἀληθὴς ἔσται, ἢ δὲ Γ Α ψευδής. φανερόν οὖν ὅτι καὶ ἀμφοτέρων οὐσῶν ψευδῶν καὶ τῆς ἑτέρας μόνον ἔσται συλλογισμὸς ἀπατητικὸς ἐν τοῖς ἀτόμοις.

## Κεφάλαιο 17

Ἐν δὲ τοῖς μὴ ἀτόμως ὑπάρχουσιν [ἢ μὴ ὑπάρχουσιν], ὅταν μὲν διὰ τοῦ οἰκείου μέσου γίνηται τοῦ ψεύδους ὁ συλλογισμὸς, οὐχ οἷον τε ἀμφοτέρας ψευδεῖς εἶναι τὰς προτάσεις, ἀλλὰ μόνον τὴν πρὸς τῷ μείζονι ἄκρῳ. (λέγω δ' οἰκεῖον μέσον δι' οὗ γίνεται τῆς ἀντιφάσεως ὁ συλλογισμὸς.) ὑπαρχέτω γὰρ τὸ Α τῷ Β διὰ μέσου τοῦ Γ. ἐπεὶ οὖν ἀνάγκη τὴν Γ Β καταφατικὴν λαμβάνεσθαι συλλογισμοῦ γινομένου, δῆλον ὅτι ἀεὶ αὕτη ἔσται ἀληθής· οὐ γὰρ ἀντιστρέφεται. ἢ δὲ Α Γ ψευδής· ταύτης γὰρ ἀντιστρεφόμενης ἐναντίος γίνεται ὁ συλλογισμὸς. ὁμοίως δὲ καὶ εἰ ἐξ ἄλλης συστοιχίας ληφθῇ τὸ μέσον, οἷον τὸ Δ εἰ καὶ ἐν τῷ Α ὅλω ἐστὶ καὶ κατὰ τοῦ Β κατηγορεῖται παντός· ἀνάγκη γὰρ τὴν μὲν Δ Β πρότασιν μένειν, τὴν δ' ἑτέραν ἀντιστρέφεσθαι, ὥσθ' ἢ μὲν ἀεὶ ἀληθής, ἢ δ' ἀεὶ ψευδής. καὶ σχεδὸν ἡ γε τοιαύτη ἀπάτη ἢ αὐτὴ ἐστὶ τῇ διὰ τοῦ οἰκείου μέσου. ἐὰν δὲ μὴ διὰ τοῦ οἰκείου μέσου γίνηται ὁ συλλογισμὸς, ὅταν μὲν ὑπὸ τὸ Α ἢ τὸ μέσον, τῷ δὲ Β μηδενὶ ὑπάρχει, ἀνάγκη ψευδεῖς εἶναι ἀμφοτέρας. ληπτέαι γὰρ ἐναντίως ἢ ὡς ἔχουσιν αἱ προτάσεις, εἰ μέλλει συλλογισμὸς ἔσεσθαι· οὕτω δὲ λαμβανομένων ἀμφοτέραι γίνονται ψευδεῖς. οἷον εἰ τὸ μὲν Α ὅλω τῷ Δ ὑπάρχει, τὸ δὲ Δ μηδενὶ τῶν Β· ἀντιστραφέντων γὰρ τούτων συλλογισμὸς τ' ἔσται καὶ αἱ προτάσεις ἀμφοτέραι ψευδεῖς. ὅταν δὲ μὴ ἢ ὑπὸ τὸ Α τὸ μέσον, οἷον τὸ Δ, ἢ (81a.) μὲν Α Δ ἀληθὴς ἔσται, ἢ δὲ Δ Β ψευδής. ἢ μὲν γὰρ Α Δ ἀληθής, ὅτι οὐκ ἦν ἐν τῷ Α τὸ Δ, ἢ δὲ Δ Β ψευδής, ὅτι εἰ ἦν ἀληθής, κἂν τὸ συμπέρασμα ἦν ἀληθές· ἀλλ' ἦν ψεῦδος.

Διὰ δὲ τοῦ μέσου σχήματος γινομένης τῆς ἀπάτης, ἀμφοτέρας μὲν οὐκ ἐνδέχεται ψευδεῖς εἶναι τὰς προτάσεις ὅλας (ὅταν γὰρ ἢ τὸ Β ὑπὸ τὸ Α, οὐδὲν ἐνδέχεται τῷ μὲν παντὶ τῷ δὲ μηδενὶ ὑπάρχειν, καθάπερ ἐλέχθη καὶ πρότερον), τὴν ἑτέραν δ' ἐγχωρεῖ, καὶ ὁποτέραν ἔτυχεν. εἰ γὰρ τὸ Γ καὶ τῷ Α καὶ τῷ Β ὑπάρχει, ἐὰν ληφθῇ τῷ μὲν Α ὑπάρχειν τῷ δὲ Β μὴ ὑπάρχειν, ἢ μὲν Γ Α ἀληθὴς ἔσται, ἢ δ' ἑτέρα ψευδής. πάλιν δ' εἰ τῷ μὲν Β ληφθῇ τὸ Γ ὑπάρχον, τῷ δὲ Α μηδενί, ἢ μὲν Γ Β ἀληθὴς ἔσται, ἢ δ' ἑτέρα ψευδής.

Ἐὰν μὲν οὖν στερητικὸς ἦ τῆς ἀπάτης ὁ συλλογισμὸς, εἴρηται πότε καὶ διὰ τίνων ἔσται ἡ ἀπάτη· ἔὰν δὲ καταφατικὸς, ὅταν μὲν διὰ τοῦ οἰκείου μέσου, ἀδύνατον ἀμφοτέρας εἶναι ψευδεῖς· ἀνάγκη γὰρ τὴν Γ Β μένειν, εἴπερ ἔσται συλλογισμὸς, καθάπερ ἐλέχθη καὶ πρότερον. ὥστε ἡ Α Γ ἀεὶ ἔσται ψευδής· αὕτη γὰρ ἐστὶν ἡ ἀντιστρεφόμενη. ὁμοίως δὲ καὶ εἰ ἐξ ἄλλης συστοιχίας λαμβάνοιτο τὸ μέσον, ὥσπερ ἐλέχθη καὶ ἐπὶ τῆς στερητικῆς ἀπάτης· ἀνάγκη γὰρ τὴν μὲν Δ Β μένειν, τὴν δ' Α Δ ἀντιστρέφεσθαι, καὶ ἡ ἀπάτη ἡ αὕτη τῇ πρότερον. ὅταν δὲ μὴ διὰ τοῦ οἰκείου, ἔὰν μὲν ἦ τὸ Δ ὑπὸ τὸ Α, αὕτη μὲν ἔσται ἀληθής, ἡ ἑτέρα δὲ ψευδής· ἐγγωρεῖ γὰρ τὸ Α πλείοσιν ὑπάρχειν ἢ οὐκ ἔστιν ὑπ' ἄλληλα. ἔὰν δὲ μὴ ἦ τὸ Δ ὑπὸ τὸ Α, αὕτη μὲν ἀεὶ δῆλον ὅτι ἔσται ψευδής (καταφατικὴ γὰρ λαμβάνεται), τὴν δὲ Δ Β ἐνδέχεται καὶ ἀληθῆ εἶναι καὶ ψευδῆ· οὐδὲν γὰρ κωλύει τὸ μὲν Α τῷ Δ μηδενὶ ὑπάρχειν, τὸ δὲ Δ τῷ Β παντί, οἷον ζῶον ἐπιστήμη, ἐπιστήμη δὲ μουσικῇ. οὐδ' αὖ μήτε τὸ Α μηδενὶ τῶν Δ μήτε τὸ Δ μηδενὶ τῶν Β. [φανερὸν οὖν ὅτι μὴ ὄντος τοῦ μέσου ὑπὸ τὸ Α καὶ ἀμφοτέρας ἐγγωρεῖ ψευδεῖς εἶναι καὶ ὁποτέραν ἔτυχεν.]

Ποσαχῶς μὲν οὖν καὶ διὰ τίνων ἐγγωρεῖ γίνεσθαι τὰς κατὰ συλλογισμὸν ἀπάτας ἔν τε τοῖς ἀμέσοις καὶ ἐν τοῖς δι' ἀποδείξεως, φανερόν.

## Κεφάλαιο 18

Φανερόν δὲ καὶ ὅτι, εἴ τις αἴσθησις ἐκκλείοιπεν, ἀνάγκη καὶ ἐπιστήμην τινὰ ἐκκλείοιπεναι, ἣν ἀδύνατον λαβεῖν, εἴπερ μανθάνομεν ἢ ἐπαγωγῇ ἢ ἀποδείξει, ἔστι δ' ἡ μὲν ἀπόδειξις (81b.) ἐκ τῶν καθόλου, ἡ δ' ἐπαγωγὴ ἐκ τῶν κατὰ μέρος, ἀδύνατον δὲ τὰ καθόλου θεωρῆσαι μὴ δι' ἐπαγωγῆς (ἐπεὶ καὶ τὰ ἐξ ἀφαιρέσεως λεγόμενα ἔσται δι' ἐπαγωγῆς γνώριμα ποιεῖν, ὅτι ὑπάρχει ἐκάστω γένει ἕνια, καὶ εἰ μὴ χωριστά ἐστίν, ἢ τοιονδὶ ἕκαστον), ἐπαχθῆναι δὲ μὴ ἔχοντας αἴσθησιν ἀδύνατον. τῶν γὰρ καθ' ἕκαστον ἢ αἴσθησις· οὐ γὰρ ἐνδέχεται λαβεῖν αὐτῶν τὴν ἐπιστήμην· οὔτε γὰρ ἐκ τῶν καθόλου ἄνευ ἐπαγωγῆς, οὔτε δι' ἐπαγωγῆς ἄνευ τῆς αἰσθήσεως.

## Κεφάλαιο 19

Ἔστι δὲ πᾶς συλλογισμὸς διὰ τριῶν ὅρων, καὶ ὁ μὲν δεικνύναι δυνάμενος ὅτι ὑπάρχει τὸ Α τῷ Γ διὰ τὸ ὑπάρχειν τῷ Β καὶ τοῦτο τῷ Γ, ὁ δὲ στερητικὸς, τὴν μὲν ἑτέραν πρότασιν ἔχων ὅτι ὑπάρχει τι ἄλλο ἄλλω, τὴν δ' ἑτέραν ὅτι οὐχ ὑπάρχει. φανερόν οὖν ὅτι αἱ μὲν ἀρχαὶ καὶ αἱ λεγόμεναι ὑποθέσεις αὐταὶ εἰσι· λαβόντα γὰρ ταῦτα οὕτως ἀνάγκη δεικνύναι, οἷον ὅτι τὸ Α τῷ Γ ὑπάρχει διὰ τοῦ Β, πάλιν δ' ὅτι τὸ Α τῷ Β δι' ἄλλου μέσου, καὶ ὅτι τὸ Β τῷ Γ

ὡσαύτως. κατὰ μὲν οὖν δόξαν συλλογιζόμενοις καὶ μόνον διαλεκτικῶς δῆλον ὅτι τοῦτο μόνον σκεπτέον, εἰ ἐξ ὧν ἐνδέχεται ἐνδοξοτάτων γίνεται ὁ συλλογισμός, ὥστ' εἰ καὶ μὴ ἔστι τι τῇ ἀληθείᾳ τῶν Α Β μέσον, δοκεῖ δὲ εἶναι, ὁ διὰ τούτου συλλογιζόμενος συλλελόγισται διαλεκτικῶς· πρὸς δ' ἀλήθειαν ἐκ τῶν ὑπαρχόντων δεῖ σκοπεῖν. ἔχει δ' οὕτως· ἐπειδὴ ἔστιν ὃ αὐτὸ μὲν κατ' ἄλλου κατηγορεῖται μὴ κατὰ συμβεβηκός-λέγω δὲ τὸ κατὰ συμβεβηκός, οἷον τὸ λευκόν ποτ' ἐκεῖνό φαμεν εἶναι ἄνθρωπον, οὐχ ὁμοίως λέγοντες καὶ τὸν ἄνθρωπον λευκόν· ὁ μὲν γὰρ οὐχ ἕτερόν τι ὧν λευκός ἐστι, τὸ δὲ λευκόν, ὅτι συμβέβηκε τῷ ἀνθρώπῳ εἶναι λευκῷ-ἔστιν οὖν ἕνια τοιαῦτα ὥστε καθ' αὐτὰ κατηγορεῖσθαι.

Ἐστω δὴ τὸ Γ τοιοῦτον ὃ αὐτὸ μὲν μηκέτι ὑπάρχει ἄλλῳ, τούτῳ δὲ τὸ Β πρώτῳ, καὶ οὐκ ἔστιν ἄλλο μεταξύ. καὶ πάλιν τὸ Ε τῷ Ζ ὡσαύτως, καὶ τοῦτο τῷ Β. ἄρ' οὖν τοῦτο ἀνάγκη στήναι, ἢ ἐνδέχεται εἰς ἄπειρον ἰέναι; καὶ πάλιν εἰ τοῦ μὲν Α μηδὲν κατηγορεῖται καθ' αὐτό, τὸ δὲ Α τῷ Θ ὑπάρχει πρώτῳ, μεταξύ δὲ μηδενὶ προτέρῳ, καὶ τὸ Θ τῷ Η, καὶ τοῦτο τῷ Β, ἄρα καὶ τοῦτο ἴστασθαι ἀνάγκη, ἢ καὶ τοῦτ' ἐνδέχεται εἰς ἄπειρον ἰέναι; διαφέρει δὲ τοῦτο τοῦ πρότερον τοσοῦτον, ὅτι τὸ μὲν ἐστιν, ἄρα ἐνδέχεται ἀρξάμενῳ ἀπὸ τοιούτου ὃ μηδενὶ ὑπάρχει ἐτέρῳ ἄλλ' ἄλλο ἐκείνῳ, ἐπὶ τὸ ἄνω εἰς ἄπειρον ἰέναι, θάτερον δὲ ἀρξάμενον ἀπὸ τοιούτου (82a.) ὃ αὐτὸ μὲν ἄλλου, ἐκείνου δὲ μηδὲν κατηγορεῖται, ἐπὶ τὸ κάτω σκοπεῖν εἰ ἐνδέχεται εἰς ἄπειρον ἰέναι. Ἐπὶ τὰ μεταξύ ἄρ' ἐνδέχεται ἄπειρα εἶναι ὠρισμένων τῶν ἄκρων; λέγω δ' οἷον εἰ τὸ Α τῷ Γ ὑπάρχει, μέσον δ' αὐτῶν τὸ Β, τοῦ δὲ Β καὶ τοῦ Α ἕτερα, τούτων δ' ἄλλα, ἄρα καὶ ταῦτα εἰς ἄπειρον ἐνδέχεται ἰέναι, ἢ ἀδύνατον; ἔστι δὲ τοῦτο σκοπεῖν ταῦτ' καὶ εἰ αἱ ἀποδείξεις εἰς ἄπειρον ἔρχονται, καὶ εἰ ἔστιν ἀπόδειξις ἅπαντος, ἢ πρὸς ἄλληλα περαίνεται.

Ὅμοίως δὲ λέγω καὶ ἐπὶ τῶν στερητικῶν συλλογισμῶν καὶ προτάσεων, οἷον εἰ τὸ Α μὴ ὑπάρχει τῷ Β μηδενί, ἥτοι πρώτῳ, ἢ ἔσται τι μεταξύ ὧ προτέρῳ οὐχ ὑπάρχει (οἷον εἰ τῷ Η, ὃ τῷ Β ὑπάρχει παντί), καὶ πάλιν τούτου ἔτι ἄλλῳ προτέρῳ, οἷον εἰ τῷ Θ, ὃ τῷ Η παντὶ ὑπάρχει. καὶ γὰρ ἐπὶ τούτων ἡ ἄπειρα οἷς ὑπάρχει προτέροις, ἢ ἴσταται.

Ἐπὶ δὲ τῶν ἀντιστροφόντων οὐχ ὁμοίως ἔχει. οὐ γὰρ ἔστιν ἐν τοῖς ἀντικατηγορουμένοις οὐ πρώτου κατηγορεῖται ἢ τελευταίου πάντα γὰρ πρὸς πάντα ταύτῃ γε ὁμοίως ἔχει, εἴτ' ἐστὶν ἄπειρα τὰ κατ' αὐτοῦ κατηγορούμενα, εἴτ' ἀμφοτέρ' ἐστὶ τὰ ἀπορηθέντα ἄπειρα· πλὴν εἰ μὴ ὁμοίως ἐνδέχεται ἀντιστρέφειν, ἀλλὰ τὸ μὲν ὡς συμβεβηκός, τὸ δ' ὡς κατηγορίαν.

## Κεφάλαιο 20

Ὅτι μὲν οὖν τὰ μεταξὺ οὐκ ἐνδέχεται ἄπειρα εἶναι, εἰ ἐπὶ τὸ κάτω καὶ τὸ ἄνω ἴστανται αἱ κατηγορίαι, δῆλον. λέγω δ' ἄνω μὲν τὴν ἐπὶ τὸ καθόλου μᾶλλον, κάτω δὲ τὴν ἐπὶ τὸ κατὰ μέρος. εἰ γὰρ τοῦ Α κατηγορουμένου κατὰ τοῦ Ζ ἄπειρα τὰ μεταξὺ, ἐφ' ὧν Β, δῆλον ὅτι ἐνδέχονται ἂν ὥστε καὶ ἀπὸ τοῦ Α ἐπὶ τὸ κάτω ἕτερον ἑτέρου κατηγορεῖσθαι εἰς ἄπειρον (πρὶν γὰρ ἐπὶ τὸ Ζ ἐλθεῖν, ἄπειρα τὰ μεταξὺ) καὶ ἀπὸ τοῦ Ζ ἐπὶ τὸ ἄνω ἄπειρα, πρὶν ἐπὶ τὸ Α ἐλθεῖν. ὥστ' εἰ ταῦτα ἀδύνατα, καὶ τοῦ Α καὶ Ζ ἀδύνατον ἄπειρα εἶναι μεταξὺ. οὐδὲ γὰρ εἴ τις λέγοι ὅτι τὰ μὲν ἐστὶ τῶν Α Β Ζ ἐχόμενα ἀλλήλων ὥστε μὴ εἶναι μεταξὺ, τὰ δ' οὐκ ἔστι λαβεῖν, οὐδὲν διαφέρει. ὁ γὰρ ἂν λάβω τῶν Β, ἔσται πρὸς τὸ Α ἢ πρὸς τὸ Ζ ἢ ἄπειρα τὰ μεταξὺ ἢ οὐ. ἀφ' οὗ δὴ πρῶτον ἄπειρα, εἴτ' εὐθύς εἴτε μὴ εὐθύς, οὐδὲν διαφέρει· τὰ γὰρ μετὰ ταῦτα ἄπειρά ἐστιν.

## Κεφάλαιο 21

Φανερόν δὲ καὶ ἐπὶ τῆς στερητικῆς ἀποδείξεως ὅτι στήσεται, εἴπερ ἐπὶ τῆς κατηγορικῆς ἴσταται ἐπ' ἀμφοτέρα. ἔστω γὰρ μὴ ἐνδεχόμενον μήτε ἐπὶ τὸ ἄνω ἀπὸ τοῦ ὑστάτου εἰς ἄπειρον ἵεναι (λέγω δ' ὑστάτον ὃ αὐτὸ μὲν ἄλλω (82b.) μηδενὶ ὑπάρχει, ἐκείνῳ δὲ ἄλλο, οἷον τὸ Ζ) μήτε ἀπὸ τοῦ πρώτου ἐπὶ τὸ ὑστάτον (λέγω δὲ πρῶτον ὃ αὐτὸ μὲν κατ' ἄλλου, κατ' ἐκείνου δὲ μηδὲν ἄλλο). εἰ δὴ ταῦτ' ἔστι, καὶ ἐπὶ τῆς ἀποφάσεως στήσεται. τριχῶς γὰρ δείκνυται μὴ ὑπάρχον. ἢ γὰρ ὥ μὲν τὸ Γ, τὸ Β ὑπάρχει παντί, ὥ δὲ τὸ Β, οὐδενὶ τὸ Α. τοῦ μὲν τοίνυν Β Γ, καὶ ἀεὶ τοῦ ἑτέρου διαστήματος, ἀνάγκη βαδίζειν εἰς ἄμεσα· κατηγορικὸν γὰρ τοῦτο τὸ διάστημα. τὸ δ' ἕτερον δῆλον ὅτι εἰ ἄλλω οὐχ ὑπάρχει προτέρῳ, οἷον τῷ Δ, τοῦτο δεήσει τῷ Β παντὶ ὑπάρχειν. καὶ εἰ πάλιν ἄλλω τοῦ Δ προτέρῳ οὐχ ὑπάρχει, ἐκεῖνο δεήσει τῷ Δ παντὶ ὑπάρχειν. ὥστ' ἐπεὶ ἢ ἐπὶ τὸ ἄνω ἴσταται ὁδός, καὶ ἢ ἐπὶ τὸ Α στήσεται, καὶ ἔσται τι πρῶτον ὧ οὐχ ὑπάρχει.

Πάλιν εἰ τὸ μὲν Β παντὶ τῷ Α, τῷ δὲ Γ μηδενί, τὸ Α τῶν Γ οὐδενὶ ὑπάρχει. πάλιν τοῦτο εἰ δεῖ δεῖξαι, δῆλον ὅτι ἢ διὰ τοῦ ἄνω τρόπου δειχθήσεται ἢ διὰ τούτου ἢ τοῦ τρίτου. ὁ μὲν οὖν πρῶτος εἴρηται, ὁ δὲ δεύτερος δειχθήσεται. οὕτω δ' ἂν δεικνύοι, οἷον τὸ Δ τῷ μὲν Β παντὶ ὑπάρχει, τῷ δὲ Γ οὐδενί, εἰ ἀνάγκη ὑπάρχειν τι τῷ Β. καὶ πάλιν εἰ τοῦτο τῷ Γ μὴ ὑπάρξει, ἄλλο τῷ Δ ὑπάρχει, ὃ τῷ Γ οὐχ ὑπάρχει. οὐκοῦν ἐπεὶ τὸ ὑπάρχειν ἀεὶ τῷ ἀνωτέρῳ ἴσταται, στήσεται καὶ τὸ μὴ ὑπάρχειν.

Ὁ δὲ τρίτος τρόπος ἦν· εἰ τὸ μὲν Α τῷ Β παντὶ ὑπάρχει, τὸ δὲ Γ μὴ ὑπάρχει, οὐ παντὶ ὑπάρχει τὸ Γ ὥς τὸ Α. πάλιν δὲ τοῦτο ἢ διὰ τῶν ἄνω εἰρημένων ἢ ὁμοίως δειχθήσεται. ἐκείνως μὲν δὴ ἴσταται, εἰ δ' οὕτω, πάλιν λήψεται τὸ Β τῷ Ε ὑπάρχειν, ὥς τὸ Γ μὴ παντὶ ὑπάρχει. καὶ τοῦτο πάλιν ὁμοίως. ἐπεὶ δ' ὑπόκειται ἴστασθαι καὶ ἐπὶ τὸ κάτω, δῆλον ὅτι στήσεται καὶ τὸ Γ οὐχ ὑπάρχον.

Φανερόν δ' ὅτι καὶ ἐὰν μὴ μιᾷ ὁδῷ δεικνύηται ἀλλὰ πάσαις, ὅτε μὲν ἐκ τοῦ πρώτου σχήματος, ὅτε δὲ ἐκ τοῦ δευτέρου ἢ τρίτου, ὅτι καὶ οὕτω στήσεται· πεπερασμένα γάρ εἰσιν αἱ ὁδοί, τὰ δὲ πεπερασμένα πεπερασμέναις ἀνάγκη πεπεράνθαι πάντα.

Ὅτι μὲν οὖν ἐπὶ τῆς στερήσεως, εἴπερ καὶ ἐπὶ τοῦ ὑπάρχειν, ἴσταται, δῆλον. ὅτι δ' ἐπ' ἐκείνων, λογικῶς μὲν θεωροῦσιν ὥδε φανερόν. Ἐπὶ μὲν οὖν τῶν ἐν τῷ τί ἐστι κατηγορουμένων δῆλον· εἰ γὰρ ἔστιν ὀρίσασθαι ἢ εἰ γνωστὸν τὸ τί ἦν εἶναι, τὰ δ' ἄπειρα μὴ ἔστι διελθεῖν, ἀνάγκη πεπεράνθαι τὰ ἐν τῷ τί (83a.) ἐστι κατηγορούμενα. καθόλου δὲ ὥδε λέγομεν. ἔστι γὰρ εἰπεῖν ἀληθῶς τὸ λευκὸν βαδίζειν καὶ τὸ μέγα ἐκεῖνο ξύλον εἶναι, καὶ πάλιν τὸ ξύλον μέγα εἶναι καὶ τὸν ἄνθρωπον βαδίζειν. ἕτερον δὲ ἐστι τὸ οὕτως εἰπεῖν καὶ τὸ ἐκείνως. ὅταν μὲν γὰρ τὸ λευκὸν εἶναι φῶ ξύλον, τότε λέγω ὅτι ὥς συμβέβηκε λευκῷ εἶναι ξύλον ἐστίν, ἀλλ' οὐχ ὥς τὸ ὑποκείμενον τῷ ξύλῳ τὸ λευκὸν ἐστι· καὶ γὰρ οὕτε λευκὸν ὄν οὕθ' ὅπερ λευκόν τι ἐγένετο ξύλον, ὥστ' οὐκ ἔστιν ἀλλ' ἢ κατὰ συμβεβηκός. ὅταν δὲ τὸ ξύλον λευκὸν εἶναι φῶ, οὐχ ὅτι ἕτερόν τι ἐστι λευκόν, ἐκείνῳ δὲ συμβέβηκε ξύλῳ εἶναι, οἷον ὅταν τὸ μουσικὸν λευκὸν εἶναι φῶ (τότε γὰρ ὅτι ὁ ἄνθρωπος λευκός ἐστιν, ὥς συμβέβηκεν εἶναι μουσικῷ, λέγω), ἀλλὰ τὸ ξύλον ἐστὶ τὸ ὑποκείμενον, ὅπερ καὶ ἐγένετο, οὐχ ἕτερόν τι ὄν ἢ ὅπερ ξύλον ἢ ξύλον τί. εἰ δὴ δεῖ νομοθετῆσαι, ἔστω τὸ οὕτω λέγειν κατηγορεῖν, τὸ δ' ἐκείνως ἦτοι μηδαμῶς κατηγορεῖν, ἢ κατηγορεῖν μὲν μὴ ἀπλῶς, κατὰ συμβεβηκός δὲ κατηγορεῖν. ἔστι δ' ὥς μὲν τὸ λευκὸν τὸ κατηγορούμενον, ὥς δὲ τὸ ξύλον τὸ οὐ κατηγορεῖται. ὑποκείσθω δὴ τὸ κατηγορούμενον κατηγορεῖσθαι ἀεὶ, οὐ κατηγορεῖται, ἀπλῶς, ἀλλὰ μὴ κατὰ συμβεβηκός· οὕτω γὰρ αἱ ἀποδείξεις ἀποδεικνύουσιν. ὥστε ἢ ἐν τῷ τί ἐστιν ἢ ὅτι ποιὸν ἢ ποσὸν ἢ πρὸς τι ἢ ποιοῦν τι ἢ πάσχον ἢ ποῦ ἢ ποτέ, ὅταν ἐν καθ' ἑνὸς κατηγορηθῇ.

## Κεφάλαιο 22

Ἔτι τὰ μὲν οὐσίαν σημαίνοντα ὅπερ ἐκεῖνο ἢ ὅπερ ἐκεῖνό τι σημαίνει καθ' οὐ κατηγορεῖται· ὅσα δὲ μὴ οὐσίαν σημαίνει, ἀλλὰ κατ' ἄλλου ὑποκειμένου

λέγεται ὃ μὴ ἔστι μήτε ὅπερ ἐκεῖνο μήτε ὅπερ ἐκεῖνό τι, συμβεβηκότα, οἷον κατὰ τοῦ ἀνθρώπου τὸ λευκόν. οὐ γάρ ἐστιν ὁ ἄνθρωπος οὔτε ὅπερ λευκὸν οὔτε ὅπερ λευκόν τι, ἀλλὰ ζῶον ἴσως· ὅπερ γὰρ ζῶόν ἐστιν ὁ ἄνθρωπος. ὅσα δὲ μὴ οὐσίαν σημαίνει, δεῖ κατὰ τινος ὑποκειμένου κατηγορεῖσθαι, καὶ μὴ εἶναί τι λευκὸν ὃ οὐχ ἕτερόν τι ὄν λευκὸν ἐστιν. τὰ γὰρ εἶδη χαιρέτω· τερετίσματά τε γάρ ἐστι, καὶ εἰ ἔστιν, οὐδὲν πρὸς τὸν λόγον ἐστίν· αἱ γὰρ ἀποδείξεις περὶ τῶν τοιούτων εἰσίν.

Ἔτι εἰ μὴ ἔστι τόδε τοῦδε ποιότης κἀκεῖνο τούτου, μηδὲ ποιότητος ποιότης, ἀδύνατον ἀντικατηγορεῖσθαι ἀλλήλων οὕτως, ἀλλ' ἀληθὲς μὲν ἐνδέχεται εἰπεῖν, ἀντικατηγορῆσαι δ' ἀληθῶς οὐκ ἐνδέχεται. ἡ γὰρ τοι ὡς οὐσία κατηγορηθήσεται, (83b.) οἷον ἡ γένος ὄν ἡ διαφορὰ τοῦ κατηγορουμένου. ταῦτα δὲ δέδεικται ὅτι οὐκ ἔστι ἀπειρα, οὔτ' ἐπὶ τὸ κάτω οὔτ' ἐπὶ τὸ ἄνω (οἷον ἄνθρωπος δίπουν, τοῦτο ζῶον, τοῦτο δ' ἕτερον· οὐδὲ τὸ ζῶον κατ' ἀνθρώπου, τοῦτο δὲ κατὰ Καλλίου, τοῦτο δὲ κατ' ἄλλου ἐν τῷ τί ἐστιν), τὴν μὲν γὰρ οὐσίαν ἅπασαν ἔστιν ὀρίσασθαι τὴν τοιαύτην, τὰ δ' ἀπειρα οὐκ ἔστι διεξελεῖν νοοῦντα. ὥστ' οὔτ' ἐπὶ τὸ ἄνω οὔτ' ἐπὶ τὸ κάτω ἀπειρα· ἐκείνην γὰρ οὐκ ἔστιν ὀρίσασθαι ἥς τὰ ἀπειρα κατηγορεῖται. ὡς μὲν δὴ γένη ἀλλήλων οὐκ ἀντικατηγορηθήσεται· ἔστι γὰρ αὐτὸ ὅπερ αὐτό τι. οὐδὲ μὴν τοῦ ποιοῦ ἢ τῶν ἄλλων οὐδέν, ἂν μὴ κατὰ συμβεβηκὸς κατηγορηθῇ· πάντα γὰρ ταῦτα συμβέβηκε καὶ κατὰ τῶν οὐσιῶν κατηγορεῖται. ἀλλὰ δὴ ὅτι οὐδ' εἰς τὸ ἄνω ἀπειρα ἔστι· ἐκάστου γὰρ κατηγορεῖται ὃ ἂν σημαίνει ἢ ποιόν τι ἢ ποσόν τι ἢ τι τῶν τοιούτων ἢ τὰ ἐν τῇ οὐσίᾳ· ταῦτα δὲ πεπέρανται, καὶ τὰ γένη τῶν κατηγοριῶν πεπέρανται· ἡ γὰρ ποιὸν ἢ ποσὸν ἢ πρὸς τι ἢ ποιοῦν ἢ πάσχον ἢ ποὺ ἢ ποτέ. Ὑπόκειται δὴ ἐν καθ' ἑνὸς κατηγορεῖσθαι, αὐτὰ δὲ αὐτῶν, ὅσα μὴ τί ἐστι, μὴ κατηγορεῖσθαι. συμβεβηκότα γὰρ ἐστι πάντα, ἀλλὰ τὰ μὲν καθ' αὐτά, τὰ δὲ καθ' ἕτερον τρόπον· ταῦτα δὲ πάντα καθ' ὑποκειμένου τινὸς κατηγορεῖσθαι φαμεν, τὸ δὲ συμβεβηκὸς οὐκ εἶναι ὑποκειμένον τι· οὐδὲν γὰρ τῶν τοιούτων τίθεμεν εἶναι ὃ οὐχ ἕτερόν τι ὄν λέγεται ὃ λέγεται, ἀλλ' αὐτὸ ἄλλου καὶ τοῦτο καθ' ἑτέρου. οὔτ' εἰς τὸ ἄνω ἄρα ἐν καθ' ἑνὸς οὔτ' εἰς τὸ κάτω ὑπάρχειν λεχθήσεται. καθ' ὧν μὲν γὰρ λέγεται τὰ συμβεβηκότα, ὅσα ἐν τῇ οὐσίᾳ ἐκάστου, ταῦτα δὲ οὐκ ἀπειρα· ἄνω δὲ ταῦτά τε καὶ τὰ συμβεβηκότα, ἀμφοτέρω οὐκ ἀπειρα. ἀνάγκη ἄρα εἶναί τι οὐ πρῶτόν τι κατηγορεῖται καὶ τούτου ἄλλο, καὶ τοῦτο ἴστασθαι καὶ εἶναί τι ὃ οὐκέτι οὔτε κατ' ἄλλου προτέρου οὔτε κατ' ἐκείνου ἄλλο πρότερον κατηγορεῖται.

Εἰς μὲν οὖν τρόπος λέγεται ἀποδείξεως οὗτος, ἔτι δ' ἄλλος, εἰ ὧν πρότερα ἄττα κατηγορεῖται, ἔστι τούτων ἀπόδειξις, ὧν δ' ἔστιν ἀπόδειξις, οὔτε βέλτιον

ἔχειν ἐγχωρεῖ πρὸς αὐτὰ τοῦ εἰδέναι, οὗτ' εἰδέναι ἄνευ ἀποδείξεως, εἰ δὲ τότε διὰ τῶνδε γνώριμον, τάδε δὲ μὴ ἴσμεν μηδὲ βέλτιον ἔχομεν πρὸς αὐτὰ τοῦ εἰδέναι, οὐδὲ τὸ διὰ τούτων γνώριμον ἐπιστησόμεθα. εἰ οὖν ἔστι τι εἰδέναι δι' ἀποδείξεως ἀπλῶς καὶ μὴ ἐκ τινῶν μηδ' ἐξ ὑποθέσεως, ἀνάγκη ἴστασθαι τὰς (84a.) κατηγορίας τὰς μεταξύ. εἰ γὰρ μὴ ἴστανται, ἀλλ' ἔστιν ἀεὶ τοῦ ληφθέντος ἐπάνω, ἀπάντων ἔσται ἀπόδειξις· ὥστ' εἰ τὰ ἄπειρα μὴ ἐγχωρεῖ διελθεῖν, ὧν ἔστιν ἀπόδειξις, ταῦτ' οὐκ εἰσόμεθα δι' ἀποδείξεως. εἰ οὖν μηδὲ βέλτιον ἔχομεν πρὸς αὐτὰ τοῦ εἰδέναι, οὐκ ἔσται οὐδὲν ἐπίστασθαι δι' ἀποδείξεως ἀπλῶς, ἀλλ' ἐξ ὑποθέσεως.

Λογικῶς μὲν οὖν ἐκ τούτων ἂν τις πιστεύσειε περὶ τοῦ λεχθέντος, ἀναλυτικῶς δὲ διὰ τῶνδε φανερόν συντομώτερον, ὅτι οὗτ' ἐπὶ τὸ ἄνω οὗτ' ἐπὶ τὸ κάτω ἄπειρα τὰ κατηγορούμενα ἐνδέχεται εἶναι ἐν ταῖς ἀποδεικτικαῖς ἐπιστήμαις, περὶ ὧν ἡ σκέψις ἐστίν. ἡ μὲν γὰρ ἀπόδειξις ἐστὶ τῶν ὅσα ὑπάρχει καθ' αὐτὰ τοῖς πράγμασιν. καθ' αὐτὰ δὲ διττῶς· ὅσα τε γὰρ [ἐν] ἐκείνοις ἐνυπάρχει ἐν τῷ τί ἐστὶ, καὶ οἷς αὐτὰ ἐν τῷ τί ἐστὶν ὑπάρχουσιν αὐτοῖς· οἷον τῷ ἀριθμῷ τὸ περιττόν, ὃ ὑπάρχει μὲν ἀριθμῷ, ἐνυπάρχει δ' αὐτὸς ὁ ἀριθμὸς ἐν τῷ λόγῳ αὐτοῦ, καὶ πάλιν πλήθος ἢ τὸ διαιρετὸν ἐν τῷ λόγῳ τῷ τοῦ ἀριθμοῦ ἐνυπάρχει. τούτων δ' οὐδέτερα ἐνδέχεται ἄπειρα εἶναι, οὗθ' ὥς τὸ περιττόν τοῦ ἀριθμοῦ (πάλιν γὰρ ἂν τῷ περιττῷ ἄλλο εἴη ὃ ἐνυπῆρχεν ὑπάρχοντι· τοῦτο δ' εἰ ἔστι, πρῶτον ὁ ἀριθμὸς ἐνυπάρξει ὑπάρχουσιν αὐτῷ· εἰ οὖν μὴ ἐνδέχεται ἄπειρα τοιαῦτα ὑπάρχειν ἐν τῷ ἐνί, οὐδ' ἐπὶ τὸ ἄνω ἔσται ἄπειρα· ἀλλὰ μὴν ἀνάγκη γε πάντα ὑπάρχειν τῷ πρώτῳ, οἷον τῷ ἀριθμῷ, καὶ ἐκείνοις τὸν ἀριθμόν, ὥστ' ἀντιστρέφοντα ἔσται, ἀλλ' οὐχ ὑπερτείνοντα)· οὐδὲ μὴν ὅσα ἐν τῷ τί ἐστὶν ἐνυπάρχει, οὐδὲ ταῦτα ἄπειρα· οὐδὲ γὰρ ἂν εἴη ὀρίσασθαι. ὥστ' εἰ τὰ μὲν κατηγορούμενα καθ' αὐτὰ πάντα λέγεται, ταῦτα δὲ μὴ ἄπειρα, ἴσταιτο ἂν τὰ ἐπὶ τὸ ἄνω, ὥστε καὶ ἐπὶ τὸ κάτω.

Εἰ δ' οὕτω, καὶ τὰ ἐν τῷ μεταξύ δύο ὅρων ἀεὶ πεπερασμένα. εἰ δὲ τοῦτο, δῆλον ἤδη καὶ τῶν ἀποδείξεων ὅτι ἀνάγκη ἀρχὰς τε εἶναι, καὶ μὴ πάντων εἶναι ἀπόδειξιν, ὅπερ ἔφαμέν τινας λέγειν κατ' ἀρχάς. εἰ γὰρ εἰσὶν ἀρχαί, οὐτε πάντ' ἀποδεικτὰ οὗτ' εἰς ἄπειρον οἷόν τε βαδίζειν· τὸ γὰρ εἶναι τούτων ὀποτερονοῦν οὐδὲν ἄλλο ἐστὶν ἢ τὸ εἶναι μηδὲν διάστημα ἄμεσον καὶ ἀδιαίρετον, ἀλλὰ πάντα διαιρετά. τῷ γὰρ ἐντὸς ἐμβάλλεσθαι ὅρον, ἀλλ' οὐ τῷ προσλαμβάνεσθαι ἀποδείκνυται τὸ ἀποδεικνύμενον, ὥστ' εἰ τοῦτ' εἰς ἄπειρον ἐνδέχεται ἵεναι, ἐνδέχοιτ' ἂν δύο ὅρων ἄπειρα μεταξύ εἶναι μέσα. ἀλλὰ τοῦτ' ἀδύνατον, εἰ ἴστανται αἱ κατηγορίαι (84b.) ἐπὶ τὸ ἄνω καὶ τὸ κάτω. ὅτι δὲ ἴστανται, δέδεικται λογικῶς μὲν πρότερον, ἀναλυτικῶς δὲ νῦν.

## Κεφάλαιο 23

Δεδειγμένων δὲ τούτων φανερόν ὅτι, ἐάν τι τὸ αὐτὸ δυσὶν ὑπάρχη, οἷον τὸ Α τῷ τε Γ καὶ τῷ Δ, μὴ κατηγορουμένου θατέρου κατὰ θατέρου, ἢ μηδαμῶς ἢ μὴ κατὰ παντός, ὅτι οὐκ ἀεὶ κατὰ κοινόν τι ὑπάρξει. οἷον τῷ ἰσοσκελεῖ καὶ τῷ σκαληνεῖ τὸ δυσὶν ὀρθαῖς ἴσας ἔχειν κατὰ κοινόν τι ὑπάρχει (ἢ γὰρ σχῆμά τι, ὑπάρχει, καὶ οὐχ ἢ ἕτερον), τοῦτο δ' οὐκ ἀεὶ οὕτως ἔχει. ἔστω γὰρ τὸ Β καθ' ὃ τὸ Α τῷ Γ Δ ὑπάρχει. δῆλον τοίνυν ὅτι καὶ τὸ Β τῷ Γ καὶ Δ κατ' ἄλλο κοινόν, κἀκεῖνο καθ' ἕτερον, ὥστε δύο ὅρων μεταξὺ ἄπειροι ἂν ἐμπίπτοιεν ὅροι. ἀλλ' ἀδύνατον. κατὰ μὲν τοίνυν κοινόν τι ὑπάρχειν οὐκ ἀνάγκη ἀεὶ τὸ αὐτὸ πλείοσιν, εἴπερ ἔσται ἅμεσα διαστήματα. ἐν μέντοι τῷ αὐτῷ γένει καὶ ἐκ τῶν αὐτῶν ἀτόμων ἀνάγκη τοὺς ὅρους εἶναι, εἴπερ τῶν καθ' αὐτὸ ὑπαρχόντων ἔσται τὸ κοινόν· οὐ γὰρ ἦν ἐξ ἄλλου γένους εἰς ἄλλο διαβῆναι τὰ δεικνύμενα.

Φανερόν δὲ καὶ ὅτι, ὅταν τὸ Α τῷ Β ὑπάρχη, εἰ μὲν ἔστι τι μέσον, ἔστι δεῖξαι ὅτι τὸ Α τῷ Β ὑπάρχει, καὶ στοιχεῖα τούτου ἔστι ταῦτά καὶ τοσαῦθ' ὅσα μέσα ἐστίν· αἱ γὰρ ἅμεσοι προτάσεις στοιχεῖα, ἢ πᾶσαι ἢ αἱ καθόλου. εἰ δὲ μὴ ἔστιν, οὐκέτι ἔστιν ἀπόδειξις, ἀλλ' ἢ ἐπὶ τὰς ἀρχὰς ὁδὸς αὕτη ἐστίν. ὁμοίως δὲ καὶ εἰ τὸ Α τῷ Β μὴ ὑπάρχει, εἰ μὲν ἔστιν ἢ μέσον ἢ πρότερον ὧ οὐχ ὑπάρχει, ἔστιν ἀπόδειξις, εἰ δὲ μὴ, οὐκ ἔστιν, ἀλλ' ἀρχή, καὶ στοιχεῖα τοσαῦτ' ἔστιν ὅσοι ὅροι· αἱ γὰρ τούτων προτάσεις ἀρχαὶ τῆς ἀποδείξεως εἰσιν. καὶ ὥσπερ ἔναι ἀρχαὶ εἰσιν ἀναπόδεικτοι, ὅτι ἐστὶ τόδε τοδὶ καὶ ὑπάρχει τόδε τωδί, οὕτω καὶ ὅτι οὐκ ἔστι τόδε τοδὶ οὐδ' ὑπάρχει τόδε τωδί, ὥσθ' αἱ μὲν εἶναι τι, αἱ δὲ μὴ εἶναι τι ἔσσονται ἀρχαί.

Ὅταν δὲ δέη δεῖξαι, ληπτέον ὃ τοῦ Β πρῶτον κατηγορεῖται. ἔστω τὸ Γ, καὶ τούτου ὁμοίως τὸ Δ. καὶ οὕτως ἀεὶ βαδίζοντι οὐδέποτ' ἐξωτέρω πρότασις οὐδ' ὑπάρχον λαμβάνεται τοῦ Α ἐν τῷ δεικνύναι, ἀλλ' ἀεὶ τὸ μέσον πυκνοῦται, ἕως ἀδιαίρετα γένηται καὶ ἔν. ἔστι δ' ἐν ὅταν ἅμεσον γένηται, καὶ μία πρότασις ἀπλῶς ἢ ἅμεσος. καὶ ὥσπερ ἐν τοῖς ἄλλοις ἢ ἀρχὴ ἀπλοῦν, τοῦτο δ' οὐ ταῦτο πανταχοῦ, ἀλλ' ἐν βάρει μὲν μνᾶ, ἐν δὲ μέλει δίεσις, ἄλλο δ' ἐν ἄλλῳ, οὕτως ἐν συλλογισμῷ τὸ ἐν (85a.) πρότασις ἅμεσος, ἐν δ' ἀποδείξει καὶ ἐπιστήμῃ ὁ νοῦς. ἐν μὲν οὖν τοῖς δεικτικοῖς συλλογισμοῖς τοῦ ὑπαρχόντος οὐδὲν ἔξω πίπτει, ἐν δὲ τοῖς στερητικοῖς, ἔνθα μὲν ὃ δεῖ ὑπάρχειν, οὐδὲν τούτου ἔξω πίπτει, οἷον εἰ τὸ Α τῷ Β διὰ τοῦ Γ μὴ (εἰ γὰρ τῷ μὲν Β παντὶ τὸ Γ, τῷ δὲ Γ μηδενὶ τὸ Α)· πάλιν ἂν δέη ὅτι τῷ Γ τὸ Α οὐδενὶ ὑπάρχει, μέσον ληπτέον τοῦ Α καὶ Γ, καὶ οὕτως ἀεὶ πορεύσεται. ἐὰν δὲ δέη δεῖξαι ὅτι τὸ Δ τῷ Ε οὐχ ὑπάρχει τῷ τὸ Γ τῷ μὲν Δ παντὶ ὑπάρχειν,



τῷ δὲ Ε μηδενί [ἢ μὴ παντί], τοῦ Ε οὐδέποτε ἔξω πεσεῖται· τοῦτο δ' ἐστὶν ὧ δεῖ ὑπάρχειν. ἐπὶ δὲ τοῦ τρίτου τρόπου, οὔτε ἄφ' οὗ δεῖ οὔτε ὃ δεῖ στερεῖσθαι οὐδέποτε ἔξω βαδιεῖται.

## Κεφάλαιο 24

Οὕσης δ' ἀποδείξεως τῆς μὲν καθόλου τῆς δὲ κατὰ μέρος, καὶ τῆς μὲν κατηγορικῆς τῆς δὲ στερητικῆς, ἀμφισβητεῖται ποτέρα βελτίων· ὡς δ' αὐτως καὶ περὶ τῆς ἀποδεικνύου λέγομένης καὶ τῆς εἰς τὸ ἀδύνατον ἀγούσης ἀποδείξεως. πρῶτον μὲν οὖν ἐπισκεψώμεθα περὶ τῆς καθόλου καὶ τῆς κατὰ μέρος· δηλώσαντες δὲ τοῦτο, καὶ περὶ τῆς δεικνύου λέγομένης καὶ τῆς εἰς τὸ ἀδύνατον εἰπώμεν. Δόξειε μὲν οὖν τάχ' ἂν τισιν ὡδὶ σκοποῦσιν ἢ κατὰ μέρος εἶναι βελτίων. εἰ γὰρ καθ' ἣν μᾶλλον ἐπιστάμεθα ἀπόδειξιν βελτίων ἀπόδειξις (αὕτη γὰρ ἀρετὴ ἀποδείξεως), μᾶλλον δ' ἐπιστάμεθα ἕκαστον ὅταν αὐτὸ εἰδῶμεν καθ' αὐτὸ ἢ ὅταν κατ' ἄλλο (οἷον τὸν μουσικὸν Κορίσκον ὅταν ὅτι ὁ Κορίσκος μουσικὸς ἢ ὅταν ὅτι ἄνθρωπος μουσικός· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων), ἢ δὲ καθόλου ὅτι ἄλλο, οὐχ ὅτι αὐτὸ τετύχηκεν ἐπιδείκνυσιν (οἷον ὅτι τὸ ἰσοσκελὲς οὐχ ὅτι ἰσοσκελὲς ἀλλ' ὅτι τρίγωνον), ἢ δὲ κατὰ μέρος ὅτι αὐτό· -εἰ δὲ βελτίων μὲν ἢ καθ' αὐτό, τοιαύτη δ' ἢ κατὰ μέρος τῆς καθόλου μᾶλλον, καὶ βελτίων ἂν ἢ κατὰ μέρος ἀπόδειξις εἴη. ἔτι εἰ τὸ μὲν καθόλου μὴ ἔστι τι παρὰ τὰ καθ' ἕκαστα, ἢ δ' ἀπόδειξις δόξαν ἐμποιεῖ εἶναι τι τοῦτο καθ' ὃ ἀποδείκνυσιν, καὶ τινὰ φύσιν ὑπάρχειν ἐν τοῖς οὗσι ταύτην, οἷον τριγώνου παρὰ τὰ τινὰ καὶ σχήματος παρὰ τὰ τινὰ καὶ ἀριθμοῦ παρὰ τοὺς τινὰς ἀριθμούς, βελτίων δ' ἢ περὶ ὄντος ἢ μὴ ὄντος καὶ δι' ἣν μὴ ἀπατηθήσεται ἢ δι' ἣν, ἔστι δ' ἢ μὲν καθόλου τοιαύτη (προϊόντες γὰρ δεικνύουσιν ὥσπερ περὶ τοῦ ἀνὰ λόγον, οἷον ὅτι ὃ ἂν ἦ τι τοιοῦτον ἔσται ἀνὰ λόγον ὃ οὔτε γραμμὴ οὔτ' ἀριθμὸς οὔτε στερεὸν οὔτ' ἐπίπεδον, (85b.) ἀλλὰ παρὰ ταῦτά τι)· -εἰ οὖν καθόλου μὲν μᾶλλον αὕτη, περὶ ὄντος δ' ἥττον τῆς κατὰ μέρος καὶ ἐμποιεῖ δόξαν ψευδῆ, χείρων ἂν εἴη ἢ καθόλου τῆς κατὰ μέρος.

Ἡ πρῶτον μὲν οὐδὲν μᾶλλον ἐπὶ τοῦ καθόλου ἢ τοῦ κατὰ μέρος ἄτερος λόγος ἐστίν; εἰ γὰρ τὸ δυσὶν ὀρθαῖς ὑπάρχει μὴ ἢ ἰσοσκελὲς ἀλλ' ἢ τρίγωνον, ὃ εἰδὼς ὅτι ἰσοσκελὲς ἥττον οἶδεν ἢ αὐτὸ ἢ ὃ εἰδὼς ὅτι τρίγωνον. ὅλως τε, εἰ μὲν μὴ ὄντος ἢ τρίγωνον εἶτα δεικνύουσιν, οὐκ ἂν εἴη ἀπόδειξις, εἰ δὲ ὄντος, ὃ εἰδὼς ἕκαστον ἢ ἕκαστον ὑπάρχει μᾶλλον οἶδεν. εἰ δὲ τὸ τρίγωνον ἐπὶ πλεον ἐστί, καὶ ὁ αὐτὸς λόγος, καὶ μὴ καθ' ὁμωνυμίαν τὸ τρίγωνον, καὶ ὑπάρχει παντὶ τριγώνῳ τὸ δύο, οὐκ ἂν τὸ τρίγωνον ἢ ἰσοσκελὲς, ἀλλὰ τὸ ἰσοσκελὲς ἢ τρίγωνον, ἔχει τοιαύτας τὰς γωνίας. ὥστε ὃ καθόλου εἰδὼς μᾶλλον οἶδεν ἢ ὑπάρχει ἢ ὃ κατὰ μέρος. βελτίων ἄρα ἢ

καθόλου τῆς κατὰ μέρος. ἔτι εἰ μὲν εἴη τις λόγος εἷς καὶ μὴ ὁμωνυμία τὸ καθόλου, εἴη τ' ἂν οὐδὲν ἦττον ἐνίων τῶν κατὰ μέρος, ἀλλὰ καὶ μᾶλλον, ὅσω τὰ ἀφθαρτὰ ἐν ἐκείνοις ἐστί, τὰ δὲ κατὰ μέρος φθαρτὰ μᾶλλον, ἔτι τε οὐδεμία ἀνάγκη ὑπολαμβάνειν τι εἶναι τοῦτο παρὰ ταῦτα, ὅτι ἐν δηλοῖ, οὐδὲν μᾶλλον ἢ ἐπὶ τῶν ἄλλων ὅσα μὴ τὶ σημαίνει ἄλλ' ἢ ποιὸν ἢ πρὸς τι ἢ ποιεῖν. εἰ δὲ ἄρα, οὐχ ἡ ἀπόδειξις αἰτία ἄλλ' ὁ ἀκούων.

Ἔτι εἰ ἡ ἀπόδειξις μὲν ἔστι συλλογισμὸς δεικτικὸς αἰτίας καὶ τοῦ διὰ τί, τὸ καθόλου δ' αἰτιώτερον (ὥ γὰρ καθ' αὐτὸ ὑπάρχει τι, τοῦτο αὐτὸ αὐτῷ αἴτιον· τὸ δὲ καθόλου πρῶτον· αἴτιον ἄρα τὸ καθόλου)· ὥστε καὶ ἡ ἀπόδειξις βελτίων· μᾶλλον γὰρ τοῦ αἰτίου καὶ τοῦ διὰ τί ἐστίν.

Ἔτι μέχρι τούτου ζητοῦμεν τὸ διὰ τί, καὶ τότε οἰόμεθα εἰδέναι, ὅταν μὴ ἢ ὅτι τι ἄλλο τοῦτο ἢ γινόμενον ἢ ὄν· τέλος γὰρ καὶ πέρας τὸ ἔσχατον ἤδη οὕτως ἐστίν. οἷον τίνος ἔνεκα ἦλθεν; ὅπως λάβῃ τἀργύριον, τοῦτο δ' ὅπως ἀποδῶ ὃ ὤφειλε, τοῦτο δ' ὅπως μὴ ἀδικήσῃ· καὶ οὕτως ἰόντες, ὅταν μηκέτι δι' ἄλλο μηδ' ἄλλου ἔνεκα, διὰ τοῦτο ὡς τέλος φαμὲν ἐλθεῖν καὶ εἶναι καὶ γίνεσθαι, καὶ τότε εἰδέναι μάλιστα διὰ τί ἦλθεν. εἰ δὲ ὁμοίως ἔχει ἐπὶ πασῶν τῶν αἰτιῶν καὶ τῶν διὰ τί, ἐπὶ δὲ τῶν ὅσα αἴτια οὕτως ὡς οὐ ἔνεκα οὕτως ἴσμεν μάλιστα, καὶ ἐπὶ τῶν ἄλλων ἄρα τότε μάλιστα ἴσμεν, ὅταν μηκέτι ὑπάρχῃ τοῦτο ὅτι ἄλλο. ὅταν μὲν οὖν γινώσκωμεν ὅτι τέτταρσιν αἰ ἕξω ἴσαι ὅτι ἰσοσκελές, ἔτι λείπεται διὰ (86a.) τί τὸ ἰσοσκελές-ὅτι τρίγωνον, καὶ τοῦτο, ὅτι σχῆμα εὐθύγραμμον. εἰ δὲ τοῦτο μηκέτι διότι ἄλλο, τότε μάλιστα ἴσμεν. καὶ καθόλου δὲ τότε· ἡ καθόλου ἄρα βελτίων.

Ἔτι ὅσω ἂν μᾶλλον κατὰ μέρος ἦ, εἰς τὰ ἄπειρα ἐμπίπτει, ἡ δὲ καθόλου εἰς τὸ ἀπλοῦν καὶ τὸ πέρας. ἔστι δ', ἡ μὲν ἄπειρα, οὐκ ἐπιστητά, ἡ δὲ πεπέρανται, ἐπιστητά. ἡ ἄρα καθόλου, μᾶλλον ἐπιστητά ἢ ἡ κατὰ μέρος. ἀποδεικτὰ ἄρα μᾶλλον τὰ καθόλου. τῶν δ' ἀποδεικτῶν μᾶλλον μᾶλλον ἀπόδειξις· ἅμα γὰρ μᾶλλον τὰ πρὸς τι. βελτίων ἄρα ἡ καθόλου, ἐπεὶ καὶ μᾶλλον ἀπόδειξις. Ἔτι εἰ αἰρετωτέρα καθ' ἣν τοῦτο καὶ ἄλλο ἢ καθ' ἣν τοῦτο μόνον οἶδεν· ὁ δὲ τὴν καθόλου ἔχων οἶδε καὶ τὸ κατὰ μέρος, οὗτος δὲ τὴν καθόλου οὐκ οἶδεν· ὥστε κἂν οὕτως αἰρετωτέρα εἴη. Ἔτι δὲ ὥδε. τὸ γὰρ καθόλου μᾶλλον δεικνύναι ἐστὶ τὸ διὰ μέσου δεικνύναι ἐγγυτέρω ὄντος τῆς ἀρχῆς. ἐγγυτάτω δὲ τὸ ἄμεσον· τοῦτο δ' ἀρχή. εἰ οὖν ἡ ἐξ ἀρχῆς τῆς μὴ ἐξ ἀρχῆς, ἡ μᾶλλον ἐξ ἀρχῆς τῆς ἦττον ἀκριβεστέρα ἀπόδειξις. ἔστι δὲ τοιαύτη ἡ καθόλου μᾶλλον· κρείττων <ἄρ' > ἂν εἴη ἡ καθόλου. οἷον εἰ ἔδει ἀποδειῖναι τὸ Α κατὰ τοῦ Δ· μέσα τὰ ἐφ' ὧν Β Γ· ἀνωτέρω δὲ τὸ Β, ὥστε ἡ διὰ τούτου καθόλου μᾶλλον.

Ἀλλὰ τῶν μὲν εἰρημένων ἓνια λογικά ἐστι· μάλιστα δὲ δῆλον ὅτι ἡ καθόλου κυριώτερα, ὅτι τῶν προτάσεων τὴν μὲν προτέραν ἔχοντες ἴσμεν πως καὶ τὴν ὑστέραν καὶ ἔχομεν δυνάμει, οἷον εἴ τις οἶδεν ὅτι πᾶν τρίγωνον δυσὶν ὀρθαῖς, οἶδέ πως καὶ τὸ ἰσοσκελὲς ὅτι δύο ὀρθαῖς, δυνάμει, καὶ εἰ μὴ οἶδε τὸ ἰσοσκελὲς ὅτι τρίγωνον· ὁ δὲ ταύτην ἔχων τὴν πρότασιν τὸ καθόλου οὐδαμῶς οἶδεν, οὔτε δυνάμει οὔτ' ἐνεργείᾳ. καὶ ἡ μὲν καθόλου νοητή, ἡ δὲ κατὰ μέρος εἰς αἴσθησιν τελευτᾷ.

## Κεφάλαιο 25

Ὅτι μὲν οὖν ἡ καθόλου βελτίων τῆς κατὰ μέρος, τοσαῦθ' ἡμῖν εἰρήσθω· ὅτι δ' ἡ δεικτική τῆς στερητικῆς, ἐντεῦθεν δῆλον. ἔστω γὰρ αὕτη ἡ ἀπόδειξις βελτίων τῶν ἄλλων τῶν αὐτῶν ὑπαρχόντων, ἡ ἐξ ἐλαττόνων αἰτημάτων ἢ ὑποθέσεων ἢ προτάσεων. εἰ γὰρ γνώριμοι ὁμοίως, τὸ θᾶπτον γινῶναι διὰ τούτων ὑπάρξει· τοῦτο δ' αἰρετώτερον. λόγος δὲ τῆς προτάσεως, ὅτι βελτίων ἡ ἐξ ἐλαττόνων, καθόλου ὅδε· εἰ γὰρ ὁμοίως εἴη τὸ γνώριμα εἶναι τὰ μέσα, τὰ δὲ πρότερα γνωριμώτερα, ἔστω ἡ μὲν διὰ μέσων ἀπόδειξις τῶν (86b.) Β Γ Δ ὅτι τὸ Α τῷ Ε ὑπάρχει, ἡ δὲ διὰ τῶν Ζ Η ὅτι τὸ Α τῷ Ε. ὁμοίως δὲ ἔχει τὸ ὅτι τὸ Α τῷ Δ ὑπάρχει καὶ τὸ Α τῷ Ε. τὸ δ' ὅτι τὸ Α τῷ Δ πρότερον καὶ γνωριμώτερον ἢ ὅτι τὸ Α τῷ Ε· διὰ γὰρ τούτου ἐκεῖνο ἀποδείκνυται, πιστότερον δὲ τὸ δι' οὗ. καὶ ἡ διὰ τῶν ἐλαττόνων ἄρα ἀπόδειξις βελτίων τῶν ἄλλων τῶν αὐτῶν ὑπαρχόντων. ἀμφοτέραι μὲν οὖν διὰ τε ὅρων τριῶν καὶ προτάσεων δύο δείκνυνται, ἀλλ' ἡ μὲν εἶναι τι λαμβάνει, ἡ δὲ καὶ εἶναι καὶ μὴ εἶναι τι· διὰ πλειόνων ἄρα, ὥστε χείρων.

Ἔτι ἐπειδὴ δέδεικται ὅτι ἀδύνατον ἀμφοτέρων οὐσῶν στερητικῶν τῶν προτάσεων γενέσθαι συλλογισμόν, ἀλλὰ τὴν μὲν δεῖ τοιαύτην εἶναι, τὴν δ' ὅτι ὑπάρχει, ἔτι πρὸς τούτῳ δεῖ τόδε λαβεῖν. τὰς μὲν γὰρ κατηγορικὰς αὐξανομένης τῆς ἀποδείξεως ἀναγκαῖον γίνεσθαι πλείους, τὰς δὲ στερητικὰς ἀδύνατον πλείους εἶναι μιᾶς ἐν ἅπαντι συλλογισμῷ. ἔστω γὰρ μηδενὶ ὑπάρχον τὸ Α ἐφ' ὅσων τὸ Β, τῷ δὲ Γ ὑπάρχον παντὶ τὸ Β. ἂν δὲ δέη πάλιν αὖξιν ἀμφοτέρας τὰς προτάσεις, μέσον ἐμβλητέον. τοῦ μὲν Α Β ἔστω τὸ Δ, τοῦ δὲ Β Γ τὸ Ε. τὸ μὲν δὲ Ε φανερόν ὅτι κατηγορικόν, τὸ δὲ Δ τοῦ μὲν Β κατηγορικόν, πρὸς δὲ τὸ Α στερητικόν κεῖται. τὸ μὲν γὰρ Δ παντὸς τοῦ Β, τὸ δὲ Α οὐδενὶ δεῖ τῶν Δ ὑπάρχειν. γίνεται οὖν μία στερητικὴ πρότασις ἡ τὸ Α Δ. ὁ δ' αὐτὸς τρόπος καὶ ἐπὶ τῶν ἑτέρων συλλογισμῶν. αἰ γὰρ τὸ μέσον τῶν κατηγορικῶν ὅρων κατηγορικόν ἐπ' ἀμφοτέρα· τοῦ δὲ στερητικοῦ ἐπὶ θάτερα στερητικόν ἀναγκαῖον εἶναι, ὥστε αὕτη μία τοιαύτη γίνεται πρότασις, αἱ δ' ἄλλαι κατηγορικαί. εἰ δὲ γνωριμώτερον δι' οὗ δείκνυται καὶ πιστότερον,

δείκνυται δ' ἡ μὲν στερητικὴ διὰ τῆς κατηγορικῆς, αὕτη δὲ δι' ἐκείνης οὐ δείκνυται, προτέρα καὶ γνωριμωτέρα οὕσα καὶ πιστοτέρα βελτίων ἂν εἴη. ἔτι εἰ ἀρχὴ συλλογισμοῦ ἢ καθόλου πρότασις ἄμεσος, ἔστι δ' ἐν μὲν τῇ δεικτικῇ καταφατικῇ ἐν δὲ τῇ στερητικῇ ἀποφατικῇ ἢ καθόλου πρότασις, ἢ δὲ καταφατικῇ τῆς ἀποφατικῆς προτέρα καὶ γνωριμωτέρα (διὰ γὰρ τὴν κατάφασιν ἢ ἀπόφασιν γνώριμος, καὶ προτέρα ἢ κατάφασις, ὥσπερ καὶ τὸ εἶναι τοῦ μὴ εἶναι). ὥστε βελτίων ἢ ἀρχὴ τῆς δεικτικῆς ἢ τῆς στερητικῆς· ἢ δὲ βελτίοσιν ἀρχαῖς χρωμένῃ βελτίων. ἔτι ἀρχοειδεστέρα· ἄνευ γὰρ τῆς δεικνυούσης οὐκ ἔστιν ἡ στερητικὴ.

## Κεφάλαιο 26

(87a.) Ἐπεὶ δ' ἡ κατηγορικὴ τῆς στερητικῆς βελτίων, δῆλον ὅτι καὶ τῆς εἰς τὸ ἀδύνατον ἀγούσης. δεῖ δ' εἰδέναι τίς ἡ διαφορὰ αὐτῶν. ἔστω δὴ τὸ Α μηδενὶ ὑπάρχον τῷ Β, τῷ δὲ Γ τὸ Β παντί· ἀνάγκη δὴ τῷ Γ μηδενὶ ὑπάρχειν τὸ Α. οὕτω μὲν οὖν ληφθέντων δεικτικὴ ἢ στερητικὴ ἂν εἴη ἀπόδειξις ὅτι τὸ Α τῷ Γ οὐχ ὑπάρχει. ἢ δ' εἰς τὸ ἀδύνατον ὧδ' ἔχει. εἰ δέοι δεῖξαι ὅτι τὸ Α τῷ Β οὐχ ὑπάρχει, ληπτέον ὑπάρχειν, καὶ τὸ Β τῷ Γ, ὥστε συμβαίνει τὸ Α τῷ Γ ὑπάρχειν. τοῦτο δ' ἔστω γνώριμον καὶ ὁμολογούμενον ὅτι ἀδύνατον. οὐκ ἄρα οἷόν τε τὸ Α τῷ Β ὑπάρχειν. εἰ οὖν τὸ Β τῷ Γ ὁμολογεῖται ὑπάρχειν, τὸ Α τῷ Β ἀδύνατον ὑπάρχειν. οἱ μὲν οὖν ὅροι ὁμοίως τάττονται, διαφέρει δὲ τὸ ὁποτέρα ἂν ἢ γνωριμωτέρα ἢ πρότασις ἢ στερητικὴ, πότερον ὅτι τὸ Α τῷ Β οὐχ ὑπάρχει ἢ ὅτι τὸ Α τῷ Γ. ὅταν μὲν οὖν ἢ τὸ συμπέρασμα γνωριμώτερον ὅτι οὐκ ἔστιν, ἢ εἰς τὸ ἀδύνατον γίνεται ἀπόδειξις, ὅταν δ' ἢ ἐν τῷ συλλογισμῷ, ἢ ἀποδεικτικῇ. φύσει δὲ προτέρα ἢ ὅτι τὸ Α τῷ Β ἢ ὅτι τὸ Α τῷ Γ. πρότερα γάρ ἐστι τοῦ συμπεράσματος ἐξ ὧν τὸ συμπέρασμα· ἔστι δὲ τὸ μὲν Α τῷ Γ μὴ ὑπάρχειν συμπέρασμα, τὸ δὲ Α τῷ Β ἐξ οὗ τὸ συμπέρασμα. οὐ γὰρ εἰ συμβαίνει ἀναιρεῖσθαι τι, τοῦτο συμπέρασμά ἐστιν, ἐκεῖνα δὲ ἐξ ὧν, ἀλλὰ τὸ μὲν ἐξ οὗ συλλογισμός ἐστιν ὃ ἂν οὕτως ἔχη ὥστε ἢ ὅλον πρὸς μέρος ἢ μέρος πρὸς ὅλον ἔχειν, αἱ δὲ τὸ Α Γ καὶ Β Γ προτάσεις οὐκ ἔχουσιν οὕτω πρὸς ἀλλήλας. εἰ οὖν ἢ ἐκ γνωριμωτέρων καὶ προτέρων κρείττων, εἰσὶ δ' ἀμφοτέραι ἐκ τοῦ μὴ εἶναι τι πισταί, ἀλλ' ἢ μὲν ἐκ προτέρου ἢ δ' ἐξ ὑστέρου, βελτίων ἀπλῶς ἂν εἴη τῆς εἰς τὸ ἀδύνατον ἢ στερητικὴ ἀπόδειξις, ὥστε καὶ ἡ ταύτης βελτίων ἢ κατηγορικὴ δῆλον ὅτι καὶ τῆς εἰς τὸ ἀδύνατον ἐστὶ βελτίων.

## Κεφάλαιο 27

Ἀκριβεστέρα δ' ἐπιστήμη ἐπιστήμης καὶ προτέρα ἢ τε τοῦ ὅτι καὶ διότι ἢ

αὐτή, ἀλλὰ μὴ χωρὶς τοῦ ὅτι τῆς τοῦ διότι, καὶ ἢ μὴ καθ' ὑποκειμένου τῆς καθ' ὑποκειμένου, οἷον ἀριθμητικὴ ἀρμονικῆς, καὶ ἢ ἐξ ἐλαττόνων τῆς ἐκ προσθέσεως, οἷον γεωμετρίας ἀριθμητικῆς. λέγω δ' ἐκ προσθέσεως, οἷον μονὰς οὐσία ἄθετος, στιγμὴ δὲ οὐσία θετός· ταύτην ἐκ προσθέσεως.

## Κεφάλαιο 28

Μία δ' ἐπιστήμη ἐστὶν ἡ ἐνὸς γένους, ὅσα ἐκ τῶν πρώτων σύγκειται καὶ μέρη ἐστὶν ἡ πάθη τούτων καθ' αὐτά. ἑτέρα δ' ἐπιστήμη ἐστὶν ἑτέρας, ὅσων αἱ ἀρχαὶ μήτ' ἐκ τῶν αὐτῶν (87b.) μήθ' ἄτεραι ἐκ τῶν ἑτέρων. τούτου δὲ σημεῖον, ὅταν εἰς τὰ ἀναπόδεικτα ἔλθῃ· δεῖ γὰρ αὐτὰ ἐν τῷ αὐτῷ γένει εἶναι τοῖς ἀποδεδειγμένοις. σημεῖον δὲ καὶ τούτου, ὅταν τὰ δεικνύμενα δι' αὐτῶν ἐν ταύτῳ γένει ὥσι καὶ συγγενῇ.

## Κεφάλαιο 29

Πλείους δ' ἀποδείξεις εἶναι τοῦ αὐτοῦ ἐγχωρεῖ οὐ μόνον ἐκ τῆς αὐτῆς συστοιχίας λαμβάνοντι μὴ τὸ συνεχὲς μέσον, οἷον τῶν Α Β τὸ Γ καὶ Δ καὶ Ζ, ἀλλὰ καὶ ἐξ ἑτέρας. οἷον ἔστω τὸ Α μεταβάλλειν, τὸ δ' ἐφ' ᾧ Δ κινεῖσθαι, τὸ δὲ Β ἡδεσθαι, καὶ πάλιν τὸ Η ἡρεμίζεσθαι. ἀληθὲς οὖν καὶ τὸ Δ τοῦ Β καὶ τὸ Α τοῦ Δ κατηγορεῖν· ὁ γὰρ ἡδόμενος κινεῖται καὶ τὸ κινούμενον μεταβάλλει. πάλιν τὸ Α τοῦ Η καὶ τὸ Η τοῦ Β ἀληθὲς κατηγορεῖν· πᾶς γὰρ ὁ ἡδόμενος ἡρεμίζεται καὶ ὁ ἡρεμιζόμενος μεταβάλλει. ὥστε δι' ἑτέρων μέσων καὶ οὐκ ἐκ τῆς αὐτῆς συστοιχίας ὁ συλλογισμός. οὐ μὴν ὥστε μηδέτερον κατὰ μηδέτερου λέγεσθαι τῶν μέσων· ἀνάγκη γὰρ τῷ αὐτῷ τινι ἄμφω ὑπάρχειν. ἐπισκέψασθαι δὲ καὶ διὰ τῶν ἄλλων σχημάτων ὅσαχῶς ἐνδέχεται τοῦ αὐτοῦ γενέσθαι συλλογισμόν.

## Κεφάλαιο 30

Τοῦ δ' ἀπὸ τύχης οὐκ ἔστιν ἐπιστήμη δι' ἀποδείξεως. οὔτε γὰρ ὥς ἀναγκαῖον οὔθ' ὥς ἐπὶ τὸ πολὺ τὸ ἀπὸ τύχης ἐστίν, ἀλλὰ τὸ παρὰ ταῦτα γινόμενον· ἢ δ' ἀπόδειξις θατέρου τούτων. πᾶς γὰρ συλλογισμὸς ἢ δι' ἀναγκαίων ἢ διὰ τῶν ὥς ἐπὶ τὸ πολὺ προτάσεων· καὶ εἰ μὲν αἱ προτάσεις ἀναγκαῖαι, καὶ τὸ συμπέρασμα ἀναγκαῖον, εἰ δ' ὥς ἐπὶ τὸ πολὺ, καὶ τὸ συμπέρασμα τοιοῦτον. ὥστ' εἰ τὸ ἀπὸ τύχης μήθ' ὥς ἐπὶ τὸ πολὺ μήτ' ἀναγκαῖον, οὐκ ἂν εἴη αὐτοῦ ἀπόδειξις.

## Κεφάλαιο 31

Οὐδὲ δι' αἰσθήσεως ἔστιν ἐπίστασθαι. εἰ γὰρ καὶ ἔστιν ἡ αἴσθησις τοῦ τοιοῦδε καὶ μὴ τοῦδέ τινος, ἀλλ' αἰσθάνεσθαι γε ἀναγκαῖον τόδε τι καὶ ποῦ καὶ νῦν. τὸ δὲ καθόλου καὶ ἐπὶ πᾶσιν ἀδύνατον αἰσθάνεσθαι· οὐ γὰρ τόδε οὐδὲ νῦν· οὐ γὰρ ἂν ἦν καθόλου· τὸ γὰρ ἀεὶ καὶ πανταχοῦ καθόλου φαμέν εἶναι. ἐπεὶ οὖν αἱ μὲν ἀποδείξεις καθόλου, ταῦτα δ' οὐκ ἔστιν αἰσθάνεσθαι, φανερόν ὅτι οὐδ' ἐπίστασθαι δι' αἰσθήσεως ἔστιν, ἀλλὰ δῆλον ὅτι καὶ εἰ ἦν αἰσθάνεσθαι τὸ τρίγωνον ὅτι δυσὶν ὀρθαῖς ἴσας ἔχει τὰς γωνίας, ἐζητοῦμεν ἂν ἀπόδειξιν καὶ οὐχ ὥσπερ φασί τινες ἠπιστάμεθα· αἰσθάνεσθαι μὲν γὰρ ἀνάγκη καθ' ἕκαστον, ἡ δ' ἐπιστήμη τὸ τὸ καθόλου γνωρίζειν ἐστίν. διὸ καὶ εἰ ἐπὶ τῆς σελήνης ὄντες ἐωρῶμεν ἀντιφράττουσαν τὴν γῆν, οὐκ ἂν ᾔδειμεν τὴν αἰτίαν (88a.) τῆς ἐκλείψεως. ἠσθανόμεθα γὰρ ἂν ὅτι νῦν ἐκλείπει, καὶ οὐ διότι ὅλως· οὐ γὰρ ἦν τοῦ καθόλου αἴσθησις. οὐ μὴν ἀλλ' ἐκ τοῦ θεωρεῖν τοῦτο πολλάκις συμβαῖνον τὸ καθόλου ἂν θηρεύσαντες ἀπόδειξιν εἴχομεν· ἐκ γὰρ τῶν καθ' ἕκαστα πλειόνων τὸ καθόλου δῆλον. τὸ δὲ καθόλου τίμιον, ὅτι δηλοῖ τὸ αἴτιον· ὥστε περὶ τῶν τοιούτων ἡ καθόλου τιμιώτερα τῶν αἰσθήσεων καὶ τῆς νοήσεως, ὅσων ἕτερον τὸ αἴτιον· περὶ δὲ τῶν πρώτων ἄλλος λόγος.

Φανερόν οὖν ὅτι ἀδύνατον τῷ αἰσθάνεσθαι ἐπίστασθαί τι τῶν ἀποδεικτῶν, εἰ μή τις τὸ αἰσθάνεσθαι τοῦτο λέγει, τὸ ἐπιστήμην ἔχειν δι' ἀποδείξεως. ἔστι μέντοι ἔνια ἀναγόμενα εἰς αἰσθήσεως ἔκλειψιν ἐν τοῖς προβλήμασιν. ἔνια γὰρ εἰ ἐωρῶμεν οὐκ ἂν ἐζητοῦμεν, οὐχ ὥς εἰδότες τῷ ὁρᾶν, ἀλλ' ὥς ἔχοντες τὸ καθόλου ἐκ τοῦ ὁρᾶν. οἷον εἰ τὴν ὕαλον τετρυπημένην ἐωρῶμεν καὶ τὸ φῶς διόν, δῆλον ἂν ἦν καὶ διὰ τί καίει, τῷ ὁρᾶν μὲν χωρὶς ἐφ' ἐκάστης, νοῆσαι δ' ἅμα ὅτι ἐπὶ πασῶν οὕτως.

## Κεφάλαιο 32

Τὰς δ' αὐτὰς ἀρχὰς ἀπάντων εἶναι τῶν συλλογισμῶν ἀδύνατον, πρῶτον μὲν λογικῶς θεωροῦσιν. οἱ μὲν γὰρ ἀληθεῖς εἰσι τῶν συλλογισμῶν, οἱ δὲ ψευδεῖς. καὶ γὰρ εἰ ἔστιν ἀληθὲς ἐκ ψευδῶν συλλογίσασθαι, ἀλλ' ἅπαξ τοῦτο γίνεται, οἷον εἰ τὸ Α κατὰ τοῦ Γ ἀληθές, τὸ δὲ μέσον τὸ Β ψεῦδος· οὔτε γὰρ τὸ Α τῷ Β ὑπάρχει οὔτε τὸ Β τῷ Γ. ἀλλ' ἐὰν τούτων μέσα λαμβάνηται τῶν προτάσεων, ψευδεῖς ἔσονται διὰ τὸ πᾶν συμπέρασμα ψεῦδος ἐκ ψευδῶν εἶναι, τὰ δ' ἀληθῆ ἐξ ἀληθῶν, ἕτερα δὲ τὰ ψευδῆ καὶ τὰ ληθῆ. εἴτα οὐδὲ τὰ ψευδῆ ἐκ τῶν αὐτῶν ἑαυτοῖς· ἔστι γὰρ ψευδῆ ἀλλήλοις καὶ ἐναντία καὶ ἀδύνατα ἅμα εἶναι, οἷον τὸ τὴν δικαιοσύνην εἶναι ἀδικίαν ἢ δειλίαν, καὶ τὸν ἄνθρωπον ἵππον ἢ βοῦν, ἢ τὸ ἴσον μεῖζον ἢ ἔλαττον.

Ἐκ δὲ τῶν κειμένων ὧδε· οὐδὲ γὰρ τῶν ἀληθῶν αἱ αὐταὶ ἀρχαὶ πάντων. ἕτεραι γὰρ πολλῶν τῷ γένει αἱ ἀρχαί, καὶ οὐδ' ἐφαρμόττουσαι, οἷον αἱ μονάδες ταῖς στιγμαῖς οὐκ ἐφαρμόττουσιν· αἱ μὲν γὰρ οὐκ ἔχουσι θέσιν, αἱ δὲ ἔχουσιν. ἀνάγκη δέ γε ἢ εἰς μέσα ἀρμόττειν ἢ ἄνωθεν ἢ κάτωθεν, ἢ τοὺς μὲν εἴσω ἔχειν τοὺς δ' ἔξω τῶν ὅρων. ἀλλ' οὐδὲ τῶν κοινῶν ἀρχῶν οἷόν τ' εἶναι τινὰς ἐξ ὧν ἅπαντα δειχθήσεται· λέγω δὲ κοινὰς (88b.) οἷον τὸ πᾶν φάναι ἢ ἀποφάναι. τὰ γὰρ γένη τῶν ὄντων ἕτερα, καὶ τὰ μὲν τοῖς ποσοῖς τὰ δὲ τοῖς ποιοῖς ὑπάρχει μόνοις, μεθ' ὧν δαίχνυται διὰ τῶν κοινῶν. ἔτι αἱ ἀρχαὶ οὐ πολλῶ ἐλάττους τῶν συμπερασμάτων· ἀρχαὶ μὲν γὰρ αἱ προτάσεις, αἱ δὲ προτάσεις ἢ προσλαμβανομένου ὅρου ἢ ἐμβαλλομένου εἰσίν. ἔτι τὰ συμπεράσματα ἅπειρα, οἱ δ' ὅροι πεπερασμένοι. ἔτι αἱ ἀρχαὶ αἱ μὲν ἐξ ἀνάγκης, αἱ δ' ἐνδεχόμεναι.

Οὕτω μὲν οὖν σκοπούμενοις ἀδύνατον τὰς αὐτὰς εἶναι πεπερασμένας, ἀπείρων ὄντων τῶν συμπερασμάτων. εἰ δ' ἄλλως πως λέγοι τις, οἷον ὅτι αἰδὶ μὲν γεωμετρίας αἰδὶ δὲ λογισμῶν αἰδὶ δὲ ἰατρικῆς, τί ἂν εἴη τὸ λεγόμενον ἄλλο πλὴν ὅτι εἰσὶν ἀρχαὶ τῶν ἐπιστημῶν; τὸ δὲ τὰς αὐτὰς φάναι γελοῖον, ὅτι αὐταὶ αὐταῖς αἱ αὐταί· πάντα γὰρ οὕτω γίγνεται ταῦτά. ἀλλὰ μὴν οὐδὲ τὸ ἐξ ἀπάντων δαίχνυσθαι ὅτιοῦν, τοῦτ' ἐστὶ τὸ ζητεῖν ἀπάντων εἶναι τὰς αὐτὰς ἀρχὰς· λίαν γὰρ εὐθης. οὔτε γὰρ ἐν τοῖς φανεροῖς μαθήμασι τοῦτο γίνεται, οὔτ' ἐν τῇ ἀναλύσει δυνατόν· αἱ γὰρ ἅμεσοι προτάσεις ἀρχαί, ἕτερον δὲ συμπέρασμα προσληφθείσης γίνεται προτάσεως ἀμέσου. εἰ δὲ λέγοι τις τὰς πρῶτας ἀμέσους προτάσεις, ταύτας εἶναι ἀρχὰς, μία ἐν ἑκάστῳ γένει ἐστίν. εἰ δὲ μήτ' ἐξ ἀπασῶν ὥς δέον δαίχνυσθαι ὅτιοῦν μήθ' οὕτως ἑτέρας ὥσθ' ἑκάστης ἐπιστήμης εἶναι ἑτέρας, λείπεται εἰ συγγενεῖς αἱ ἀρχαὶ πάντων, ἀλλ'

ἐκ τωνδὶ μὲν ταδί, ἐκ δὲ τωνδὶ ταδί. φανερόν δὲ καὶ τοῦθ' ὅτι οὐκ ἐνδέχεται· δέδεικται γὰρ ὅτι ἄλλα ἀρχαὶ τῷ γένει εἰσὶν αἱ τῶν διαφορῶν τῷ γένει. αἱ γὰρ ἀρχαὶ διτταί, ἐξ ὧν τε καὶ περὶ ὅ· αἱ μὲν οὖν ἐξ ὧν κοιναί, αἱ δὲ περὶ ὃ ἴδια, οἷον ἀριθμός, μέγεθος.

### Κεφάλαιο 33

Τὸ δ' ἐπιστητὸν καὶ ἐπιστήμη διαφέρει τοῦ δοξαστοῦ καὶ δόξης, ὅτι ἡ μὲν ἐπιστήμη καθόλου καὶ δι' ἀναγκαιῶν, τὸ δ' ἀναγκαῖον οὐκ ἐνδέχεται ἄλλως ἔχειν. ἔστι δέ τινα ἀληθῆ μὲν καὶ ὄντα, ἐνδεχόμενα δὲ καὶ ἄλλως ἔχειν. δῆλον οὖν ὅτι περὶ μὲν ταῦτα ἐπιστήμη οὐκ ἔστιν· εἴη γὰρ ἂν ἀδύνατα ἄλλως ἔχειν τὰ δυνατὰ ἄλλως ἔχειν. ἀλλὰ μὴν οὐδὲ νοῦς (λέγω γὰρ νοῦν ἀρχὴν ἐπιστήμης) οὐδ' ἐπιστήμη ἀναπόδεικτος· τοῦτο δ' ἐστὶν ὑπόληψις τῆς ἀμέσου προτάσεως. ἀληθὴς δ' (89a.) ἐστὶ νοῦς καὶ ἐπιστήμη καὶ δόξα καὶ τὸ διὰ τούτων λεγόμενον· ὥστε λείπεται δόξαν εἶναι περὶ τὸ ἀληθὲς μὲν ἢ ψεῦδος, ἐνδεχόμενον δὲ καὶ ἄλλως ἔχειν. τοῦτο δ' ἐστὶν ὑπόληψις τῆς ἀμέσου προτάσεως καὶ μὴ ἀναγκαίας. καὶ ὁμολογούμενον δ' οὕτω τοῖς φαινομένοις· ἢ τε γὰρ δόξα ἀβέβαιον, καὶ ἡ φύσις ἢ τοιαύτη. πρὸς δὲ τούτοις οὐδεὶς οἶται δοξάζειν, ὅταν οἴηται ἀδύνατον ἄλλως ἔχειν, ἀλλ' ἐπίστασθαι· ἀλλ' ὅταν εἶναι μὲν οὕτως, οὐ μὴν ἀλλὰ καὶ ἄλλως οὐδὲν κωλύειν, τότε δοξάζειν, ὡς τοῦ μὲν τοιούτου δόξαν οὔσαν, τοῦ δ' ἀναγκαίου ἐπιστήμην.

Πῶς οὖν ἔστι τὸ αὐτὸ δοξάσαι καὶ ἐπίστασθαι, καὶ διὰ τί οὐκ ἔστι ἡ δόξα ἐπιστήμη, εἴ τις θήσει ἅπαν ὃ οἶδεν ἐνδέχεσθαι δοξάζειν; ἀκολουθήσει γὰρ ὁ μὲν εἰδῶς ὃ δὲ δοξάζων διὰ τῶν μέσων, ἕως εἰς τὰ ἄμεσα ἔλθῃ, ὥστ' εἴπερ ἐκεῖνος οἶδε, καὶ ὁ δοξάζων οἶδεν. ὥσπερ γὰρ καὶ τὸ ὅτι δοξάζειν ἔστι, καὶ τὸ διότι· τοῦτο δὲ τὸ μέσον. ἢ εἰ μὲν οὕτως ὑπολήπεται τὰ μὴ ἐνδεχόμενα ἄλλως ἔχειν ὥσπερ [ἔχει] τοὺς ὀρισμοὺς δι' ὧν αἱ ἀποδείξεις, οὐ δοξάσει ἀλλ' ἐπιστήσεται· εἰ δ' ἀληθῆ μὲν εἶναι, οὐ μέντοι ταῦτά γε αὐτοῖς ὑπάρχειν κατ' οὐσίαν καὶ κατὰ τὸ εἶδος, δοξάσει καὶ οὐκ ἐπιστήσεται ἀληθῶς, καὶ τὸ ὅτι καὶ τὸ διότι, ἐὰν μὲν διὰ τῶν ἀμέσων δοξάσῃ· ἐὰν δὲ μὴ διὰ τῶν ἀμέσων, τὸ ὅτι μόνον δοξάσει; τοῦ δ' αὐτοῦ δόξα καὶ ἐπιστήμη οὐ πάντως ἐστίν, ἀλλ' ὥσπερ καὶ ψευδῆς καὶ ἀληθῆς τοῦ αὐτοῦ τρόπον τινά, οὕτω καὶ ἐπιστήμη καὶ δόξα τοῦ αὐτοῦ. καὶ γὰρ δόξαν ἀληθῆ καὶ ψευδῆ ὡς μὲν τινες λέγουσι τοῦ αὐτοῦ εἶναι, ἄτοπα συμβαίνει αἰρεῖσθαι ἄλλα τε καὶ μὴ δοξάζειν ὃ δοξάζει ψευδῶς· ἐπεὶ δὲ τὸ αὐτὸ πλεοναχῶς λέγεται, ἔστιν ὡς ἐνδέχεται, ἔστι δ' ὡς οὐ. τὸ μὲν γὰρ σύμμετρον εἶναι τὴν διάμετρον ἀληθῶς δοξάζειν ἄτοπον· ἀλλ' ὅτι ἡ διάμετρος, περὶ ἣν αἱ δόξαι, τὸ αὐτό, οὕτω τοῦ αὐτοῦ, τὸ δὲ τί ἦν εἶναι ἐκατέρω κατὰ τὸν λόγον οὐ τὸ αὐτό. ὁμοίως δὲ καὶ ἐπιστήμη



καὶ δόξα τοῦ αὐτοῦ. ἢ μὲν γὰρ οὕτως τοῦ ζώου ὥστε μὴ ἐνδέχεσθαι μὴ εἶναι ζῶον, ἢ δ' ὥστ' ἐνδέχεσθαι, οἷον εἰ ἢ μὲν ὅπερ ἀνθρώπου ἐστίν, ἢ δ' ἀνθρώπου μὲν, μὴ ὅπερ δ' ἀνθρώπου. τὸ αὐτὸ γὰρ ὅτι ἄνθρωπος, τὸ δ' ὡς οὐ τὸ αὐτό.

Φανερόν δ' ἐκ τούτων ὅτι οὐδὲ δοξάζειν ἅμα τὸ αὐτὸ καὶ ἐπίστασθαι ἐνδέχεται. ἅμα γὰρ ἂν ἔχοι ὑπόληψιν τοῦ (89b.) ἄλλως ἔχειν καὶ μὴ ἄλλως τὸ αὐτό· ὅπερ οὐκ ἐνδέχεται. ἐν ἄλλῳ μὲν γὰρ ἐκότερον εἶναι ἐνδέχεται τοῦ αὐτοῦ ὡς εἴρηται, ἐν δὲ τῷ αὐτῷ οὐδ' οὕτως οἷόν τε· ἔξει γὰρ ὑπόληψιν ἅμα, οἷον ὅτι ὁ ἄνθρωπος ὅπερ ζῶον (τοῦτο γὰρ ἦν τὸ μὴ ἐνδέχεσθαι εἶναι μὴ ζῶον) καὶ μὴ ὅπερ ζῶον· τοῦτο γὰρ ἔστω τὸ ἐνδέχεσθαι.

Τὰ δὲ λοιπὰ πῶς δεῖ διανεῖμαι ἐπὶ τε διανοίας καὶ νοῦ καὶ ἐπιστήμης καὶ τέχνης καὶ φρονήσεως καὶ σοφίας, τὰ μὲν φυσικῆς τὰ δὲ ἠθικῆς θεωρίας μᾶλλον ἐστίν.

## Κεφάλαιο 34

Ἡ δ' ἀγχίνουσα ἐστὶν εὐστοχία τις ἐν ἀσκέπτῳ χρόνῳ τοῦ μέσου, οἷον εἴ τις ἰδὼν ὅτι ἡ σελήνη τὸ λαμπρὸν ἀεὶ ἔχει πρὸς τὸν ἥλιον, ταχὺ ἐνενόησε διὰ τί τοῦτο, ὅτι διὰ τὸ λάμπειν ἀπὸ τοῦ ἡλίου· ἡ διαλεγόμενον πλουσίῳ ἔγνω διότι δανείζεται· ἡ διότι φίλοι, ὅτι ἐχθροὶ τοῦ αὐτοῦ. πάντα γὰρ τὰ αἷτια τὰ μέσα [ὁ] ἰδὼν τὰ ἅκρα ἐγνώρισεν. τὸ λαμπρὸν εἶναι τὸ πρὸς τὸν ἥλιον ἐφ' οὗ Α, τὸ λάμπειν ἀπὸ τοῦ ἡλίου Β, σελήνη τὸ Γ. ὑπάρχει δὴ τῇ μὲν σελήνῃ τῷ Γ τὸ Β, τὸ λάμπειν ἀπὸ τοῦ ἡλίου· τῷ δὲ Β τὸ Α, τὸ πρὸς τοῦτ' εἶναι τὸ λαμπρόν, ἀφ' οὗ λάμπει· ὥστε καὶ τῷ Γ τὸ Α διὰ τοῦ Β.

## Βιβλίο 2

### Κεφάλαιο 1

Τὰ ζητούμενά ἐστὶν ἴσα τὸν ἀριθμὸν ὅσαπερ ἐπιστάμεθα. ζητοῦμεν δὲ τέτταρα, τὸ ὅτι, τὸ διότι, εἰ ἔστι, τί ἐστίν. ὅταν μὲν γὰρ πότερον τότε ἢ τότε ζητῶμεν, εἰς ἀριθμὸν θέντες, οἷον πότερον ἐκλείπει ὁ ἥλιος ἢ οὐ, τὸ ὅτι ζητοῦμεν. σημεῖον δὲ τούτου· εὐρόντες γὰρ ὅτι ἐκλείπει πεπαύμεθα· καὶ ἐὰν ἐξ ἀρχῆς εἰδῶμεν ὅτι ἐκλείπει, οὐ ζητοῦμεν πότερον. ὅταν δὲ εἰδῶμεν τὸ ὅτι, τὸ διότι ζητοῦμεν, οἷον εἰδότες ὅτι ἐκλείπει καὶ ὅτι κινεῖται ἡ γῆ, τὸ διότι ἐκλείπει ἢ διότι κινεῖται ζητοῦμεν. ταῦτα μὲν οὖν οὕτως, ἔνια δ' ἄλλον τρόπον ζητοῦμεν, οἷον εἰ ἔστιν ἢ μὴ ἔστι κένταυρος ἢ θεός· τὸ δ' εἰ ἔστιν ἢ

μὴ ἀπλῶς λέγω, ἀλλ' οὐκ εἰ λευκὸς ἢ μὴ. γνόντες δὲ ὅτι ἔστι, τί ἐστι  
ζητοῦμεν, οἷον τί οὖν ἐστι θεός, ἢ τί ἐστὶν ἄνθρωπος;

## Κεφάλαιο 2

Ἄ μὲν οὖν ζητοῦμεν καὶ ἃ εὐρόντες ἴσμεν, ταῦτα καὶ τοσαῦτά ἐστιν.  
ζητοῦμεν δέ, ὅταν μὲν ζητῶμεν τὸ ὅτι ἢ τὸ εἰ ἔστιν ἀπλῶς, ἄρ' ἔστι μέσον  
αὐτοῦ ἢ οὐκ ἔστιν· ὅταν δὲ γνόντες ἢ τὸ ὅτι ἢ εἰ ἔστιν, ἢ τὸ ἐπὶ μέρους ἢ τὸ  
ἀπλῶς, πάλιν [90a] τὸ διὰ τί ζητῶμεν ἢ τὸ τί ἐστι, τότε ζητοῦμεν τί τὸ μέσον.  
λέγω δὲ τὸ ὅτι ἔστιν ἐπὶ μέρους καὶ ἀπλῶς, ἐπὶ μέρους μὲν, ἄρ' ἐκλείπει ἢ  
σελήνη ἢ αὕξειται; εἰ γάρ ἐστι τὸ ἢ μὴ ἔστι τί, ἐν τοῖς τοιούτοις ζητοῦμεν·  
ἀπλῶς δ', εἰ ἔστιν ἢ μὴ σελήνη ἢ νύξ. συμβαίνει ἄρα ἐν ἀπάσαις ταῖς  
ζητήσεσι ζητεῖν ἢ εἰ ἔστι μέσον ἢ τί ἐστι τὸ μέσον. τὸ μὲν γὰρ αἷτιον τὸ  
μέσον, ἐν ἅπασιν δὲ τοῦτο ζητεῖται. ἄρ' ἐκλείπει; ἄρ' ἔστι τι αἷτιον ἢ οὐ; μετὰ  
ταῦτα γνόντες ὅτι ἔστι τι, τί οὖν τοῦτ' ἔστι ζητοῦμεν. τὸ γὰρ αἷτιον τοῦ εἶναι  
μὴ τοδὶ ἢ τοδὶ ἄλλ' ἀπλῶς τὴν οὐσίαν, ἢ τοῦ μὴ ἀπλῶς ἄλλά τι τῶν καθ'  
αὐτὸ ἢ κατὰ συμβεβηκός, τὸ μέσον ἐστίν. λέγω δὲ τὸ μὲν ἀπλῶς τὸ  
ὑποκείμενον, οἷον σελήνην ἢ γῆν ἢ ἥλιον ἢ τρίγωνον, τὸ δὲ τὸ ἐκλειψιν,  
ἰσότητα ἀνισότητα, εἰ ἐν μέσῳ ἢ μὴ. ἐν ἅπασιν γὰρ τούτοις φανερόν ἐστιν ὅτι  
τὸ αὐτὸ ἐστι τὸ τί ἐστι καὶ διὰ τί ἔστιν. τί ἐστιν ἐκλειψις; στέρησις φωτὸς  
ἀπὸ σελήνης ὑπὸ γῆς ἀντιφράξεως. διὰ τί ἔστιν ἐκλειψις, ἢ διὰ τί ἐκλείπει ἢ  
σελήνη; διὰ τὸ ἀπολείπειν τὸ φῶς ἀντιφραττούσης τῆς γῆς. τί ἐστι συμφωνία;  
λόγος ἀριθμῶν ἐν ὁξεῖ καὶ βαρεῖ. διὰ τί συμφωνεῖ τὸ ὁξὺ τῷ βαρεῖ; διὰ τὸ  
λόγον ἔχειν ἀριθμῶν τὸ ὁξὺ καὶ τὸ βαρὺ. ἄρ' ἔστι συμφωνεῖν τὸ ὁξὺ καὶ τὸ  
βαρὺ; ἄρ' ἐστὶν ἐν ἀριθμοῖς ὁ λόγος αὐτῶν; λαβόντες δ' ὅτι ἔστι, τίς οὖν  
ἐστὶν ὁ λόγος;

## Κεφάλαιο 3

Ὅτι δ' ἐστὶ τοῦ μέσου ἡ ζήτησις, δηλοῖ ὅσων τὸ μέσον αἰσθητόν. ζητοῦμεν  
γὰρ μὴ ἡσθημένοι, οἷον τῆς ἐκλείψεως, εἰ ἔστιν ἢ μὴ. εἰ δ' ἤμεν ἐπὶ τῆς  
σελήνης, οὐκ ἂν ἐζητοῦμεν οὗτ' εἰ γίνεται οὔτε διὰ τί, ἀλλ' ἅμα δῆλον ἂν  
ἦν. ἐκ γὰρ τοῦ αἰσθέσθαι καὶ τὸ καθόλου ἐγένετο ἂν ἡμῖν εἰδέναι. ἡ μὲν γὰρ  
αἰσθησις ὅτι νῦν ἀντιφράττει (καὶ γὰρ δῆλον ὅτι νῦν ἐκλείπει)· ἐκ δὲ τούτου  
τὸ καθόλου ἂν ἐγένετο.

Ὡσπερ οὖν λέγομεν, τὸ τί ἐστὶν εἰδέναι ταῦτό ἐστι καὶ διὰ τί ἔστιν, τοῦτο δ'  
ἢ ἀπλῶς καὶ μὴ τῶν ὑπαρχόντων τι, ἢ τῶν ὑπαρχόντων, οἷον ὅτι δύο ὀρθαί,  
ἢ ὅτι μεῖζον ἢ ἔλαττον.

Ὅτι μὲν οὖν πάντα τὰ ζητούμενα μέσου ζητησίς ἐστι, δῆλον· πῶς δὲ τὸ τί ἐστι δείκνυται, καὶ τίς ὁ τρόπος τῆς ἀναγωγῆς, καὶ τί ἐστὶν ὀρισμὸς καὶ τίνων, εἵπωμεν, διαπορήσαντες πρῶτον περὶ αὐτῶν. ἀρχὴ δ' ἔστω τῶν μελλόντων [90b] ἥπερ ἐστὶν οἰκειοτάτη τῶν ἐχομένων λόγων. ἀπορήσειε γὰρ ἂν τις, ἄρ' ἔστι τὸ αὐτὸ καὶ κατὰ τὸ αὐτὸ ὀρισμῷ εἰδέναι καὶ ἀποδείξει, ἢ ἀδύνατον; ὁ μὲν γὰρ ὀρισμὸς τοῦ τί ἐστὶν εἶναι δοκεῖ, τὸ δὲ τί ἐστὶν ἅπαν καθόλου καὶ κατηγορικόν· συλλογισμοὶ δ' εἰσὶν οἱ μὲν στερητικοί, οἱ δ' οὐ καθόλου, οἷον οἱ μὲν ἐν τῷ δευτέρῳ σχήματι στερητικοὶ πάντες, οἱ δ' ἐν τῷ τρίτῳ οὐ καθόλου. εἴτα οὐδὲ τῶν ἐν τῷ πρώτῳ σχήματι κατηγορικῶν ἀπάντων ἐστὶν ὀρισμός, οἷον ὅτι πᾶν τρίγωνον δυσὶν ὀρθαῖς ἴσας ἔχει. τούτου δὲ λόγος, ὅτι τὸ ἐπίστασθαί ἐστι τὸ ἀποδεικτὸν τὸ ἀπόδειξιν ἔχειν, ὥστ' ἐπεὶ τῶν τοιούτων ἀπόδειξις ἔστι, δῆλον ὅτι οὐκ ἂν εἴη αὐτῶν καὶ ὀρισμός· ἐπίσταιτο γὰρ ἂν τις καὶ κατὰ τὸν ὀρισμόν, οὐκ ἔχων τὴν ἀπόδειξιν· οὐδὲν γὰρ κωλύει μὴ ἅμα ἔχειν. ἱκανὴ δὲ πίστις καὶ ἐκ τῆς ἐπαγωγῆς· οὐδὲν γὰρ πώποτε ὀρισάμενοι ἔγνωμεν, οὔτε τῶν καθ' αὐτὸ ὑπαρχόντων οὔτε τῶν συμβεβηκότων. ἔτι εἰ ὁ ὀρισμὸς οὐσίας τινὸς γνωρισμός, τά γε τοιαῦτα φανερόν ὅτι οὐκ οὐσίαι.

Ὅτι μὲν οὖν οὐκ ἐστὶν ὀρισμὸς ἅπαντος οὔπερ καὶ ἀπόδειξις, δῆλον. τί δαί, οὗ ὀρισμός, ἄρα παντὸς ἀπόδειξις ἐστὶν ἢ οὐ; εἷς μὲν δὴ λόγος καὶ περὶ τούτου ὁ αὐτός. τοῦ γὰρ ἑνός, ἢ ἓν, μία ἐπιστήμη. ὥστ' εἴπερ τὸ ἐπίστασθαί τὸ ἀποδεικτὸν ἐστὶ τὸ τὴν ἀπόδειξιν ἔχειν, συμβήσεται τι ἀδύνατον· ὁ γὰρ τὸν ὀρισμόν ἔχων ἄνευ τῆς ἀποδείξεως ἐπιστήσεται. ἔτι αἱ ἀρχαὶ τῶν ἀποδείξεων ὀρισμοί, ὧν ὅτι οὐκ ἔσονται ἀποδείξεις δέδεικται πρότερον· ἢ ἔσονται αἱ ἀρχαὶ ἀποδεικταὶ καὶ τῶν ἀρχῶν ἀρχαί, καὶ τοῦτ' εἰς ἄπειρον βαδιεῖται, ἢ τὰ πρῶτα ὀρισμοὶ ἔσονται ἀναπόδεικτοι.

Ἀλλ' ἄρα, εἰ μὴ παντὸς τοῦ αὐτοῦ, ἀλλὰ τινὸς τοῦ αὐτοῦ ἐστὶν ὀρισμὸς καὶ ἀπόδειξις; ἢ ἀδύνατον; οὐ γὰρ ἐστὶν ἀπόδειξις οὗ ὀρισμός. ὀρισμὸς μὲν γὰρ τοῦ τί ἐστὶ καὶ οὐσίας· αἱ δ' ἀποδείξεις φαίνονται πᾶσαι ὑποτιθέμεναι καὶ λαμβάνουσαι τὸ τί ἐστὶν, οἷον αἱ μαθηματικαὶ τί μονὰς καὶ τί τὸ περιττόν, καὶ αἱ ἄλλαι ὁμοίως. ἔτι πᾶσα ἀπόδειξις τὴν κατὰ τινὸς δείκνυσιν, οἷον ὅτι ἐστὶν ἢ οὐκ ἐστὶν· ἐν δὲ τῷ ὀρισμῷ οὐδὲν ἕτερον ἑτέρου κατηγορεῖται, οἷον οὔτε τὸ ζῶον κατὰ τοῦ δίποδος οὔτε τοῦτο κατὰ τοῦ ζώου, οὐδὲ δὴ κατὰ τοῦ ἐπιπέδου τὸ σχῆμα· οὐ γάρ ἐστὶ τὸ ἐπίπεδον σχῆμα, οὐδὲ τὸ σχῆμα ἐπίπεδον. ἔτι ἕτερον τὸ τί ἐστὶ καὶ ὅτι ἐστὶ δεῖξαι. [91a] ὁ μὲν οὖν ὀρισμὸς τί ἐστὶ δηλοῖ, ἢ δὲ ἀπόδειξις ὅτι ἐστὶ τότε κατὰ τοῦδε ἢ οὐκ ἐστὶν. ἑτέρου δὲ ἑτέρα ἀπόδειξις, ἐὰν μὴ ὡς μέρος ἢ τι τῆς ὅλης. τοῦτο δὲ λέγω, ὅτι δέδεικται τὸ ἰσοσκελὲς δύο ὀρθαί, εἰ πᾶν τρίγωνον δέδεικται· μέρος γάρ, τὸ δ' ὅλον. ταῦτα

δὲ πρὸς ἄλληλα οὐκ ἔχει οὕτως, τὸ ὅτι ἔστι καὶ τί ἐστίν· οὐ γὰρ ἐστὶ θατέρου θάτερον μέρος.

Φανερόν ἄρα ὅτι οὔτε οὗ ὁρισμός, τούτου παντὸς ἀπόδειξις, οὔτε οὗ ἀπόδειξις, τούτου παντὸς ὁρισμός, οὔτε ὅλως τοῦ αὐτοῦ οὐδενὸς ἐνδέχεται ἄμφω ἔχειν. ὥστε δῆλον ὡς οὐδὲ ὁρισμός καὶ ἀπόδειξις οὔτε τὸ αὐτὸ ἂν εἴη οὔτε θάτερον ἐν θατέρῳ· καὶ γὰρ ἂν τὰ ὑποκείμενα ὁμοίως εἶχεν.

## Κεφάλαιο 4

Ταῦτα μὲν οὖν μέχρι τούτου διηπορήσθω· τοῦ δὲ τί ἐστὶ πότερον ἔστι συλλογισμὸς καὶ ἀπόδειξις ἢ οὐκ ἔστι, καθάπερ νῦν ὁ λόγος ὑπέθετο; ὁ μὲν γὰρ συλλογισμὸς τὶ κατὰ τινὸς δείκνυσι διὰ τοῦ μέσου· τὸ δὲ τί ἐστὶν ἰδιόν τε, καὶ ἐν τῷ τί ἐστὶ κατηγορεῖται. ταῦτα δ' ἀνάγκη ἀντιστρέφειν. εἰ γὰρ τὸ Α τοῦ Γ ἰδιόν, δῆλον ὅτι καὶ τοῦ Β καὶ τοῦτο τοῦ Γ, ὥστε πάντα ἀλλήλων. ἀλλὰ μὴν καὶ εἰ τὸ Α ἐν τῷ τί ἐστὶν ὑπάρχει παντὶ τῷ Β, καὶ καθόλου τὸ Β παντὸς τοῦ Γ ἐν τῷ τί ἐστὶ λέγεται, ἀνάγκη καὶ τὸ Α ἐν τῷ τί ἐστὶ τοῦ Γ λέγεσθαι. εἰ δὲ μὴ οὕτω τις λήψεται διπλώσας, οὐκ ἀνάγκη ἔσται τὸ Α τοῦ Γ κατηγορεῖσθαι ἐν τῷ τί ἐστίν, εἰ τὸ μὲν Α τοῦ Β ἐν τῷ τί ἐστὶ, μὴ καθ' ὅσων δὲ τὸ Β, ἐν τῷ τί ἐστίν. τὸ δὲ τί ἐστὶν ἄμφω ταῦτα ἔξει· ἔσται ἄρα καὶ τὸ Β κατὰ τοῦ Γ τὸ τί ἐστίν. εἰ δὴ τὸ τί ἐστὶ καὶ τὸ τί ἦν εἶναι ἄμφω ἔχει, ἐπὶ τοῦ μέσου ἔσται πρότερον τὸ τί ἦν εἶναι. ὅλως τε, εἰ ἔστι δεῖξαι τί ἐστὶν ἄνθρωπος, ἔστω τὸ Γ ἄνθρωπος, τὸ δὲ Α τὸ τί ἐστίν, εἴτε ζῶον δίπουν εἴτ' ἄλλο τι. εἰ τοίνυν συλλογιεῖται, ἀνάγκη κατὰ τοῦ Β τὸ Α παντὸς κατηγορεῖσθαι. τοῦτο δ' ἔσται ἄλλος λόγος μέσος, ὥστε καὶ τοῦτο ἔσται τί ἐστὶν ἄνθρωπος. λαμβάνει οὖν ὁ δεῖ δεῖξαι· καὶ γὰρ τὸ Β ἔσται τί ἐστὶν ἄνθρωπος.

Δεῖ δ' ἐν ταῖς δυσὶ προτάσεσι καὶ τοῖς πρώτοις καὶ ἀμέσοις σκοπεῖν· μάλιστα γὰρ φανερόν τὸ λεγόμενον γίνεται. οἱ μὲν οὖν διὰ τοῦ ἀντιστρέφειν δεικνύντες τί ἐστὶ ψυχὴ, ἢ τί ἐστὶν ἄνθρωπος ἢ ἄλλο ὅτιοῦν τῶν ὄντων, τὸ ἐξ ἀρχῆς αἰτοῦνται, οἷον εἰ τις ἀξιώσκει ψυχὴν εἶναι τὸ αὐτὸ αὐτῷ αἵτιον τοῦ ζῆν, τοῦτο δ' ἀριθμὸν αὐτὸν αὐτὸν κινοῦντα· ἀνάγκη γὰρ αἰτῆσαι τὴν ψυχὴν ὅπερ ἀριθμὸν εἶναι αὐτὸν αὐτὸν κινοῦντα, οὕτως ὡς τὸ αὐτὸ ὄν. οὐ γὰρ εἰ ἀκολουθεῖ τὸ Α τῷ Β καὶ τοῦτο τῷ Γ, ἔσται τῷ Γ τὸ Α τὸ τί ἦν εἶναι, ἀλλ' ἀληθὲς εἰπεῖν ἔσται μόνον· οὐδ' εἰ ἔστι τὸ Α ὅπερ τι καὶ κατὰ τοῦ Β κατηγορεῖται παντός. καὶ γὰρ τὸ ζῶν εἶναι κατηγορεῖται κατὰ τοῦ ἀνθρώπου εἶναι (ἀληθὲς γὰρ πᾶν τὸ ἀνθρώπου εἶναι ζῶν εἶναι, ὥσπερ καὶ πάντα ἄνθρωπον ζῶον), ἀλλ' οὐχ οὕτως ὥστε ἔν εἶναι. ἐὰν μὲν οὖν μὴ οὕτω λάβῃ,

οὐ συλλογιέται ὅτι τὸ Α ἐστὶ τῷ Γ τὸ τί ἦν εἶναι καὶ ἡ οὐσία· ἐὰν δὲ οὕτω λάβῃ, πρότερον ἔσται εἰληφώς τῷ Γ τί ἐστὶ τὸ τί ἦν εἶναι [τὸ Β]. ὥστ' οὐκ ἀποδέδεικται· τὸ γὰρ ἐν ἀρχῇ εἴληφεν.

## Κεφάλαιο 5

Ἀλλὰ μὴν οὐδ' ἡ διὰ τῶν διαιρέσεων ὁδὸς συλλογίζεται, καθάπερ ἐν τῇ ἀναλύσει τῇ περὶ τὰ σχήματα εἴρηται. οὐδαμοῦ γὰρ ἀνάγκη γίνεται τὸ πρᾶγμα ἐκεῖνο εἶναι τωνδὶ ὄντων, ἀλλ' ὥσπερ οὐδ' ὁ ἐπάγων ἀποδείκνυσιν. οὐ γὰρ δεῖ τὸ συμπέρασμα ἐρωτᾶν, οὐδὲ τῷ δοῦναι εἶναι, ἀλλ' ἀνάγκη εἶναι ἐκείνων ὄντων, κἂν μὴ φῇ ὁ ἀποκρινόμενος. ἄρ' ὁ ἄνθρωπος ζῶον ἢ ἄψυχον; εἴτ' ἔλαβε ζῶον, οὐ συλλελόγισται. πάλιν ἅπαν ζῶον ἢ πεζόν ἢ ἔνυδρον· ἔλαβε πεζόν. καὶ τὸ εἶναι τὸν ἄνθρωπον τὸ ὅλον, ζῶον πεζόν, οὐκ ἀνάγκη ἐκ τῶν εἰρημένων, ἀλλὰ λαμβάνει καὶ τοῦτο. διαφέρει δ' οὐδὲν ἐπὶ πολλῶν ἢ ὀλίγων οὕτω ποιεῖν· τὸ αὐτὸ γάρ ἐστιν. (ἀσυλλόγιστος μὲν οὖν καὶ ἡ χρῆσις γίνεται τοῖς οὕτω μετιοῦσι καὶ τῶν ἐνδεχομένων συλλογισθῆναι.) τί γὰρ κωλύει τοῦτο ἀληθὲς μὲν τὸ πᾶν εἶναι κατὰ τοῦ ἀνθρώπου, μὴ μέντοι τὸ τί ἐστὶ μηδὲ τὸ τί ἦν εἶναι δηλοῦν; ἔτι τί κωλύει ἢ προσθεῖναι τι ἢ ἀφελεῖν ἢ ὑπερβεβηκέναι τῆς οὐσίας; Ταῦτα μὲν οὖν παρίεται μὲν, ἐνδέχεται δὲ λῦσαι τῷ λαμβάνειν ἐν τῷ τί ἐστὶ πάντα, καὶ τὸ ἐφεξῆς τῇ διαιρέσει ποιεῖν, αἰτούμενον τὸ πρῶτον, καὶ μηδὲν παραλείπειν. τοῦτο δ' ἀναγκαῖον, εἰ ἅπαν εἰς τὴν διαίρεσιν ἐμπίπτει καὶ μηδὲν ἐλλείπει· [τοῦτο δ' ἀναγκαῖον,] ἄτομον γὰρ ἤδη δεῖ εἶναι. ἀλλὰ συλλογισμὸς ὅμως οὐκ ἔστι, ἀλλ' εἴπερ, ἄλλον τρόπον γνωρίζειν ποιεῖ. καὶ τοῦτο μὲν οὐδὲν ἄτοπον· οὐδὲ γὰρ ὁ ἐπάγων ἴσως ἀποδείκνυσιν, ἀλλ' ὅμως δηλοῖ τι. συλλογισμὸν δ' οὐ λέγει ὁ ἐκ τῆς διαιρέσεως λέγων τὸν ὀρισμόν. ὥσπερ γὰρ ἐν τοῖς συμπεράσμασι τοῖς ἄνευ τῶν μέσων, ἐάν τις εἴπῃ ὅτι τούτων ὄντων ἀνάγκη τοδὶ εἶναι, ἐνδέχεται ἐρωτῆσαι διὰ τί, οὕτως καὶ ἐν τοῖς διαιρετικοῖς ὅροις. τί ἐστίν [92a] ἄνθρωπος; ζῶον θνητόν, ὑπόπουν, δίπουν, ἅπτερον. διὰ τί, παρ' ἐκάστην πρόσθεσιν; ἐρεῖ γάρ, καὶ δείξει τῇ διαιρέσει, ὡς οἴεται, ὅτι πᾶν ἢ θνητὸν ἢ ἀθάνατον. ὁ δὲ τοιοῦτος λόγος ἅπας οὐκ ἔστιν ὀρισμός, ὥστ' εἰ καὶ ἀπεδείκνυτο τῇ διαιρέσει, ἀλλ' ὁ γ' ὀρισμὸς οὐ συλλογισμὸς γίνεται.

## Κεφάλαιο 6

Ἄλλ' ἄρα ἔστι καὶ ἀποδείξαι τὸ τί ἐστὶ κατ' οὐσίαν, ἐξ ὑποθέσεως δέ, λαβόντα τὸ μὲν τί ἦν εἶναι τὸ ἐκ τῶν ἐν τῷ τί ἐστίν ἴδιον, ταδὶ δὲ ἐν τῷ τί ἐστὶ μόνα, καὶ ἴδιον τὸ πᾶν; τοῦτο γὰρ ἐστὶ τὸ εἶναι ἐκείνω. ἢ πάλιν εἴληφε τὸ τί ἦν εἶναι καὶ ἐν τούτῳ; ἀνάγκη γὰρ διὰ τοῦ μέσου δεῖξαι. ἔτι ὥσπερ

οὐδ' ἐν συλλογισμῷ λαμβάνεται τί ἐστὶ τὸ συλλελογίσθαι (ἀεὶ γὰρ ὅλη ἡ μέρος ἢ πρότασις, ἐξ ὧν ὁ συλλογισμός), οὕτως οὐδὲ τὸ τί ἦν εἶναι δεῖ ἐνεῖναι ἐν τῷ συλλογισμῷ, ἀλλὰ χωρὶς τοῦτο τῶν κειμένων εἶναι, καὶ πρὸς τὸν ἀμφισβητοῦντα εἰ συλλελόγισται ἢ μή, τοῦτο ἀπαντᾷ ὅτι “τοῦτο γὰρ ἦν συλλογισμός”, καὶ πρὸς τὸν ὅτι οὐ τὸ τί ἦν εἶναι συλλελόγισται, ὅτι “ναί· τοῦτο γὰρ ἔκειτο ἡμῖν τὸ τί ἦν εἶναι”. ὥστε ἀνάγκη καὶ ἄνευ τοῦ τί συλλογισμὸς ἢ τὸ τί ἦν εἶναι συλλελογίσθαι τι.

Κὰν ἐξ ὑποθέσεως δὲ δεικνύη, οἷον εἰ τὸ κακῷ ἐστὶ τὸ διαιρετῷ εἶναι, τὸ δ' ἐναντίῳ τὸ τῷ ἐναντίῳ <ἐναντίῳ > εἶναι, ὅσοις ἔστι τι ἐναντίον· τὸ δ' ἀγαθὸν τῷ κακῷ ἐναντίον καὶ τὸ ἀδιαίρετον τῷ διαιρετῷ· ἔστιν ἄρα τὸ ἀγαθῷ εἶναι τὸ ἀδιαίρετῳ εἶναι. καὶ γὰρ ἐνταῦθα λαβὼν τὸ τί ἦν εἶναι δείκνυσι· λαμβάνει δ' εἰς τὸ δεῖξαι τὸ τί ἦν εἶναι. “ἕτερον μέντοι”. ἔστω· καὶ γὰρ ἐν ταῖς ἀποδείξεσιν, ὅτι ἐστὶ τόδε κατὰ τοῦδε· ἀλλὰ μὴ αὐτό, μηδὲ οὐ ὁ αὐτὸς λόγος, καὶ ἀντιστρέφει. πρὸς ἀμφοτέρους δέ, τὸν τε κατὰ διαίρεσιν δεικνύντα καὶ πρὸς τὸν οὕτω συλλογισμὸν, τὸ αὐτὸ ἀπόρημα· διὰ τί ἔσται ὁ ἄνθρωπος ζῶον πεζὸν δίπουν, ἀλλ' οὐ ζῶον καὶ πεζόν <καὶ δίπουν >; ἐκ γὰρ τῶν λαμβανομένων οὐδεμία ἀνάγκη ἐστὶν ἐν γίνεσθαι τὸ κατηγορούμενον, ἀλλ' ὥσπερ ἂν ἄνθρωπος ὁ αὐτὸς εἴη μουσικὸς καὶ γραμματικὸς.

## Κεφάλαιο 7

>Πῶς οὖν δὴ ὁ ὀριζόμενος δείξει τὴν οὐσίαν ἢ τὸ τί ἐστίν; οὔτε γὰρ ὡς ἀποδεικνὺς ἐξ ὁμολογουμένων εἶναι δῆλον ποιήσει ὅτι ἀνάγκη ἐκείνων ὄντων ἕτερόν τι εἶναι (ἀπόδειξις γὰρ τοῦτο), οὔθ' ὡς ὁ ἐπάγων διὰ τῶν καθ' ἕκαστα δῆλων ὄντων, ὅτι πᾶν οὕτως τῷ μηδὲν ἄλλως· οὐ γὰρ τί [92b] ἐστὶ δείκνυσιν, ἀλλ' ὅτι ἢ ἔστιν ἢ οὐκ ἔστιν. τίς οὖν ἄλλος τρόπος λοιπός; οὐ γὰρ δὴ δείξει γε τῇ αἰσθήσει ἢ τῷ δακτύλῳ.

Ἔτι πῶς δείξει τὸ τί ἐστίν; ἀνάγκη γὰρ τὸν εἰδότα τὸ τί ἐστίν ἄνθρωπος ἢ ἄλλο ὅτιον, εἰδέναι καὶ ὅτι ἔστιν (τὸ γὰρ μὴ ὄν οὐδεὶς οἶδεν ὅ τι ἐστίν, ἀλλὰ τί μὲν σημαίνει ὁ λόγος ἢ τὸ ὄνομα, ὅταν εἴπω τραγέλαφος, τί δ' ἐστὶ τραγέλαφος ἀδύνατον εἰδέναι). ἀλλὰ μὴν εἰ δείξει τί ἐστὶ καὶ ὅτι ἔστι, πῶς τῷ αὐτῷ λόγῳ δείξει; ὅ τε γὰρ ὀρισμὸς ἔν τι δηλοῖ καὶ ἡ ἀπόδειξις· τὸ δὲ τί ἐστίν ἄνθρωπος καὶ τὸ εἶναι ἄνθρωπον ἄλλο.

Εἴτα καὶ δι' ἀποδείξεώς φαμεν ἀναγκαῖον εἶναι δείκνυσθαι ἅπαν ὅ τι ἐστίν, εἰ μὴ οὐσία εἴη. τὸ δ' εἶναι οὐκ οὐσία οὐδενί· οὐ γὰρ γένος τὸ ὄν. ἀπόδειξις ἄρ' ἔσται ὅτι ἔστιν. ὅπερ καὶ νῦν ποιοῦσιν αἱ ἐπιστῆμαι. τί μὲν γὰρ σημαίνει τὸ

τρίγωνον, ἔλαβεν ὁ γεωμέτρης, ὅτι δ' ἔστι, δείκνυσιν. τί οὖν δείξει ὁ ὀριζόμενος ἢ τί ἐστὶ τὸ τρίγωνον; εἰδὼς ἄρα τις ὀρισμῶ τί ἐστὶν, εἰ ἔστιν οὐκ εἴσεται. ἀλλ' ἀδύνατον.

Φανερόν δὲ καὶ κατὰ τοὺς νῦν τρόπους τῶν ὅρων ὡς οὐ δεικνύουσιν οἱ ὀριζόμενοι ὅτι ἔστιν. εἰ γὰρ καὶ ἔστιν ἐκ τοῦ μέσου τι ἴσον, ἀλλὰ διὰ τί ἔστι τὸ ὀρισθέν; καὶ διὰ τί τοῦτ' ἔστι κύκλος; εἴη γὰρ ἂν καὶ ὀρειχάλκου φάναι εἶναι αὐτόν. οὔτε γὰρ ὅτι δυνατόν εἶναι τὸ λεγόμενον προσδηλοῦσιν οἱ ὅροι, οὔτε ὅτι ἐκεῖνο οὐ φασὶν εἶναι ὀρισμοί, ἀλλ' ἀεὶ ἔξεστι λέγειν τὸ διὰ τί.

Εἰ ἄρα ὁ ὀριζόμενος δείκνυσιν ἢ τί ἐστὶν ἢ τί σημαίνει τοῦνομα, εἰ μὴ ἔστι μηδαμῶς τοῦ τί ἐστὶν, εἴη ἂν ὁ ὀρισμὸς λόγος ὀνόματι τὸ αὐτὸ σημαίνων. ἀλλ' ἄτοπον. πρῶτον μὲν γὰρ καὶ μὴ οὐσιῶν ἂν εἴη καὶ τῶν μὴ ὄντων· σημαίνειν γὰρ ἔστι καὶ τὰ μὴ ὄντα. ἔτι πάντες οἱ λόγοι ὀρισμοὶ ἂν εἶεν· εἴη γὰρ ἂν ὄνομα θέσθαι ὁποιοῦν λόγῳ, ὥστε ὅρους ἂν διαλεγοίμεθα πάντες καὶ ἡ Ἰλιάς ὀρισμὸς ἂν εἴη. ἔτι οὐδεμία ἀποδείξεις ἀποδείξειεν ἂν ὅτι τοῦτο τοῦνομα τουτὶ δηλοῖ· οὐδ' οἱ ὀρισμοὶ τοίνυν τοῦτο προσδηλοῦσιν.

Ἐκ μὲν τοίνυν τούτων οὔτε ὀρισμὸς καὶ συλλογισμὸς φαίνεται ταῦτόν ὄν, οὔτε ταῦτοῦ συλλογισμὸς καὶ ὀρισμός· πρὸς δὲ τούτοις, ὅτι οὔτε ὁ ὀρισμὸς οὐδὲν οὔτε ἀποδείκνυσιν οὔτε δείκνυσιν, οὔτε τὸ τί ἐστὶν οὔθ' ὀρισμῶ οὔτ' ἀποδείξει ἔστι γινῶναι.

## Κεφάλαιο 8

[93a] Πάλιν δὲ σκεπτέον τί τούτων λέγεται καλῶς καὶ τί οὐ καλῶς, καὶ τί ἐστὶν ὁ ὀρισμός, καὶ τοῦ τί ἐστὶν ἄρα πως ἔστιν ἀπόδειξις καὶ ὀρισμὸς ἢ οὐδαμῶς. ἐπεὶ δ' ἐστίν, ὡς ἔφαμεν, ταῦτόν τὸ εἰδέναι τί ἐστὶ καὶ τὸ εἰδέναι τὸ αἴτιον τοῦ εἰ ἔστι (λόγος δὲ τούτου, ὅτι ἔστι τι τὸ αἴτιον, καὶ τοῦτο ἢ τὸ αὐτὸ ἢ ἄλλο, κἂν ἢ ἄλλο, ἢ ἀποδεικτὸν ἢ ἀναπόδεικτον)-εἰ τοίνυν ἐστὶν ἄλλο καὶ ἐνδέχεται ἀποδείξαι, ἀνάγκη μέσον εἶναι τὸ αἴτιον καὶ ἐν τῷ σχήματι τῷ πρώτῳ δείκνυσθαι· καθόλου τε γὰρ καὶ κατηγορικὸν τὸ δεικνύμενον. εἰς μὲν δὴ τρόπος ἂν εἴη ὁ νῦν ἐξητασμένος, τὸ δι' ἄλλου τοῦ τί ἐστὶ δείκνυσθαι. τῶν τε γὰρ τί ἐστὶν ἀνάγκη τὸ μέσον εἶναι τί ἐστὶ, καὶ τῶν ἰδίων ἴδιον. ὥστε τὸ μὲν δείξει, τὸ δ' οὐ δείξει τῶν τί ἦν εἶναι τῷ αὐτῷ πράγματι.

Οὗτος μὲν οὖν ὁ τρόπος ὅτι οὐκ ἂν εἴη ἀπόδειξις, εἴρηται πρότερον· ἀλλ' ἔστι λογικὸς συλλογισμὸς τοῦ τί ἐστὶν. ὃν δὲ τρόπον ἐνδέχεται, λέγωμεν,

εἰπόντες πάλιν ἐξ ἀρχῆς. ὥσπερ γὰρ τὸ διότι ζητοῦμεν ἔχοντες τὸ ὅτι, ἐνίστε δὲ καὶ ἅμα δῆλα γίνεται, ἀλλ' οὐτὶ πρότερόν γε τὸ διότι δυνατὸν γνωρίσαι τοῦ ὅτι, δῆλον ὅτι ὁμοίως καὶ τὸ τί ἦν εἶναι οὐκ ἄνευ τοῦ ὅτι ἔστιν· ἀδύνατον γὰρ εἰδέναι τί ἐστίν, ἀγνοοῦντας εἰ ἔστιν. τὸ δ' εἰ ἔστιν ὅτε μὲν κατὰ συμβεβηκὸς ἔχομεν, ὅτε δ' ἔχοντές τι αὐτοῦ τοῦ πράγματος, οἷον βροντὴν, ὅτι ψόφος τις νεφῶν, καὶ ἔκλειψιν, ὅτι στέρησις τις φωτός, καὶ ἄνθρωπον, ὅτι ζῶόν τι, καὶ ψυχὴν, ὅτι αὐτὸ αὐτὸ κινεῖν. ὅσα μὲν οὖν κατὰ συμβεβηκὸς οἶδαμεν ὅτι ἔστιν, ἀναγκαῖον μηδαμῶς ἔχειν πρὸς τὸ τί ἐστίν· οὐδὲ γὰρ ὅτι ἔστιν ἴσμεν· τὸ δὲ ζητεῖν τί ἐστὶ μὴ ἔχοντας ὅτι ἔστι, μηδὲν ζητεῖν ἐστίν. καθ' ὅσων δ' ἔχομέν τι, ῥᾶον. ὥστε ὡς ἔχομεν ὅτι ἔστιν, οὕτως ἔχομεν καὶ πρὸς τὸ τί ἐστίν. ὣν οὖν ἔχομέν τι τοῦ τί ἐστίν, ἔστω πρῶτον μὲν ὧδε· ἔκλειψις ἐφ' οὗ τὸ Α, σελήνη ἐφ' οὗ Γ, ἀντίφραξις γῆς ἐφ' οὗ Β. τὸ μὲν οὖν πότερον ἐκλείπει ἢ οὐ, τὸ Β ζητεῖν ἐστίν, ἄρ' ἔστιν ἢ οὐ. τοῦτο δ' οὐδὲν διαφέρει ζητεῖν ἢ εἰ ἔστι λόγος αὐτοῦ· καὶ ἐὰν ἦ τοῦτο, κάκεϊνό φαμεν εἶναι. ἢ ποτέρας τῆς ἀντιφάσεως ἐστίν ὁ λόγος, πότερον τοῦ ἔχειν δύο ὀρθὰς ἢ τοῦ μὴ ἔχειν. ὅταν δ' εὖρωμεν, ἅμα τὸ ὅτι καὶ τὸ διότι ἴσμεν, ἂν δι' ἀμέσων ἢ· εἰ δὲ μή, τὸ ὅτι, τὸ διότι δ' οὐ. σελήνη Γ, ἔκλειψις Α, τὸ πανσελήνου σκιὰν μὴ δύνασθαι ποιεῖν μηδενὸς ἡμῶν μεταξὺ ὄντος φανεροῦ, ἐφ' οὗ Β. εἰ τοίνυν τῷ Γ ὑπάρχει τὸ Β τὸ μὴ δύνασθαι ποιεῖν [93b] σκιὰν μηδενὸς μεταξὺ ἡμῶν ὄντος, τούτῳ δὲ τὸ Α τὸ ἐκλελοιπέναι, ὅτι μὲν ἐκλείπει δῆλον, διότι δ' οὐπω, καὶ ὅτι μὲν ἔστιν ἔκλειψις ἴσμεν, τί δ' ἐστὶν οὐκ ἴσμεν. δήλου δ' ὄντος ὅτι τὸ Α τῷ Γ ὑπάρχει, ἀλλὰ διὰ τί ὑπάρχει, τὸ ζητεῖν τὸ Β τί ἐστὶ, πότερον ἀντίφραξις ἢ στροφὴ τῆς σελήνης ἢ ἀπόσβεσις. τοῦτο δ' ἐστὶν ὁ λόγος τοῦ ἐτέρου ἄκρου, οἷον ἐν τούτοις τοῦ Α· ἔστι γὰρ ἢ ἔκλειψις ἀντίφραξις ὑπὸ γῆς. τί ἐστὶ βροντῆ; πυρὸς ἀπόσβεσις ἐν νέφει. διὰ τί βροντᾶ; διὰ τὸ ἀποσβέννυσθαι τὸ πῦρ ἐν τῷ νέφει. νέφος Γ, βροντὴ Α, ἀπόσβεσις πυρὸς τὸ Β. τῷ δὲ Γ τῷ νέφει ὑπάρχει τὸ Β (ἀποσβέννυται γὰρ ἐν αὐτῷ τὸ πῦρ), τούτῳ δὲ τὸ Α, ψόφος· καὶ ἔστι γε λόγος τὸ Β τοῦ Α τοῦ πρώτου ἄκρου. ἂν δὲ πάλιν τούτου ἄλλο μέσον ἢ, ἐκ τῶν παραλοιπῶν ἔσται λόγων.

Ὡς μὲν τοίνυν λαμβάνεται τὸ τί ἐστὶ καὶ γίνεται γνῶριμον, εἴρηται, ὥστε συλλογισμὸς μὲν τοῦ τί ἐστίν οὐ γίνεται οὐδ' ἀποδείξεις, δῆλον μέντοι διὰ συλλογισμοῦ καὶ δι' ἀποδείξεως· ὥστ' οὗτ' ἄνευ ἀποδείξεως ἔστι γινῶναι τὸ τί ἐστίν, οὗ ἔστιν αἴτιον ἄλλο, οὗτ' ἔστιν ἀποδείξεις αὐτοῦ, ὥσπερ καὶ ἐν τοῖς διαπορήμασιν εἶπομεν.

## Κεφάλαιο 9

Ἔστι δὲ τῶν μὲν ἕτερόν τι αἴτιον, τῶν δ' οὐκ ἔστιν. ὥστε δῆλον ὅτι καὶ τῶν



τί ἐστι τὰ μὲν ἄμεσα καὶ ἀρχαί εἰσιν, ἃ καὶ εἶναι καὶ τί ἐστὶν ὑποθέσθαι δεῖ ἢ ἄλλον τρόπον φανερὰ ποιῆσαι (ὅπερ ὁ ἀριθμητικὸς ποιεῖ· καὶ γὰρ τί ἐστὶ τὴν μονάδα ὑποτίθεται, καὶ ὅτι ἔστιν)· τῶν δ' ἐχόντων μέσον, καὶ ὧν ἔστι τι ἕτερον αἴτιον τῆς οὐσίας, ἔστι δι' ἀποδείξεως, ὥσπερ εἵπομεν, δηλῶσαι, μὴ τὸ τί ἐστὶν ἀποδεικνύοντας.

## Κεφάλαιο 10

Ὅρισμός δ' ἐπειδὴ λέγεται εἶναι λόγος τοῦ τί ἐστὶ, φανερόν ὅτι ὁ μὲν τις ἔσται λόγος τοῦ τί σημαίνει τὸ ὄνομα ἢ λόγος ἕτερος ὀνοματώδης, οἷον τί σημαίνει [τί ἐστὶ] τρίγωνον. ὅπερ ἔχοντες ὅτι ἔστι, ζητοῦμεν διὰ τί ἔστιν· χαλεπὸν δ' οὕτως ἐστὶ λαβεῖν ἢ μὴ ἴσμεν ὅτι ἔστιν. ἢ δ' αἰτία εἴρηται πρότερον τῆς χαλεπότητος, ὅτι οὐδ' εἰ ἔστιν ἢ μὴ ἴσμεν, ἀλλ' ἢ κατὰ συμβεβηκός. (λόγος δ' εἷς ἐστὶ διχῶς, ὁ μὲν συνδέσμων, ὥσπερ ἡ Ἰλιάς, ὁ δὲ τῷ ἐν καθ' ἑνὸς δηλοῦν μὴ κατὰ συμβεβηκός.)

Εἷς μὲν δὴ ὅρος ἐστὶν ὅρου ὁ εἰρημένος, ἄλλος δ' ἐστὶν ὅρος λόγος ὁ δηλῶν διὰ τί ἔστιν. ὥστε ὁ μὲν πρότερος σημαί[94a] νει μὲν, δείκνυσι δ' οὐ, ὁ δ' ὕστερος φανερόν ὅτι ἔσται οἷον ἀπόδειξις τοῦ τί ἐστὶ, τῇ θέσει διαφέρων τῆς ἀποδείξεως. διαφέρει γὰρ εἰπεῖν διὰ τί βροντᾷ καὶ τί ἐστὶ βροντή· ἐρεῖ γὰρ οὕτω μὲν “διότι ἀποσβέννυται τὸ πῦρ ἐν τοῖς νέφεσι”· τί δ' ἐστὶ βροντή; ψόφος ἀποσβεννυμένου πυρὸς ἐν νέφεσιν. ὥστε ὁ αὐτὸς λόγος ἄλλον τρόπον λέγεται, καὶ ὡδὶ μὲν ἀπόδειξις συνεχής, ὡδὶ δὲ ὁρισμός. (ἔτι ἐστὶν ὅρος βροντῆς ψόφος ἐν νέφεσι· τοῦτο δ' ἐστὶ τῆς τοῦ τί ἐστὶν ἀποδείξεως συμπέρασμα.) ὁ δὲ τῶν ἀμέσων ὁρισμὸς θέσις ἐστὶ τοῦ τί ἐστὶν ἀναπόδεικτος.

Ἔστιν ἄρα ὁρισμὸς εἷς μὲν λόγος τοῦ τί ἐστὶν ἀναπόδεικτος, εἷς δὲ συλλογισμὸς τοῦ τί ἐστὶ, πτώσει διαφέρων τῆς ἀποδείξεως, τρίτος δὲ τῆς τοῦ τί ἐστὶν ἀποδείξεως συμπέρασμα. φανερόν οὖν ἐκ τῶν εἰρημένων καὶ πῶς ἔστι τοῦ τί ἐστὶν ἀπόδειξις καὶ πῶς οὐκ ἔστι, καὶ τίνων ἔστι καὶ τίνων οὐκ ἔστι, ἔτι δ' ὁρισμὸς ποσαχῶς τε λέγεται καὶ πῶς τὸ τί ἐστὶ δείκνυσι καὶ πῶς οὐ, καὶ τίνων ἔστι καὶ τίνων οὐ, ἔτι δὲ πρὸς ἀπόδειξιν πῶς ἔχει, καὶ πῶς ἐνδέχεται τοῦ αὐτοῦ εἶναι καὶ πῶς οὐκ ἐνδέχεται.

## Κεφάλαιο 11

Ἐπεὶ δὲ ἐπίστασθαι οἴομεθα ὅταν εἰδῶμεν τὴν αἰτίαν, αἰτίαι δὲ τέτταρες, μία μὲν τὸ τί ἦν εἶναι, μία δὲ τὸ τίνων ὄντων ἀνάγκη τοῦτ' εἶναι, ἑτέρα δὲ ἡ τί

πρῶτον ἐκίνησε, τετάρτη δὲ τὸ τίνος ἔνεκα, πᾶσαι αὗται διὰ τοῦ μέσου δείκνυνται. τό τε γὰρ οὐ ὄντος τοδὶ ἀνάγκη εἶναι μιᾶς μὲν προτάσεως ληφθείσης οὐκ ἔστι, δυοῖν δὲ τοῦλάχιστον· τοῦτο δ' ἐστίν, ὅταν ἐν μέσον ἔχωσιν. τούτου οὖν ἐνὸς ληφθέντος τὸ συμπέρασμα ἀνάγκη εἶναι. δῆλον δὲ καὶ ὧδε. διὰ τί ὀρθὴ ἢ ἐν ἡμικυκλίῳ; τίνος ὄντος ὀρθή; ἔστω δὲ ὀρθὴ ἐφ' ἧς Α, ἡμίσεια δυοῖν ὀρθαῖν ἐφ' ἧς Β, ἢ ἐν ἡμικυκλίῳ ἐφ' ἧς Γ. τοῦ δὲ τὸ Α τὴν ὀρθὴν ὑπάρχειν τῷ Γ τῇ ἐν τῷ ἡμικυκλίῳ αἴτιον τὸ Β. αὕτη μὲν γὰρ τῇ Α ἴση, ἢ δὲ τὸ Γ τῇ Β· δύο γὰρ ὀρθῶν ἡμίσεια. τοῦ Β οὖν ὄντος ἡμίσεος δύο ὀρθῶν τὸ Α τῷ Γ ὑπάρχει (τοῦτο δ' ἦν τὸ ἐν ἡμικυκλίῳ ὀρθὴν εἶναι). τοῦτο δὲ ταῦτόν ἐστι τῷ τί ἦν εἶναι, τῷ τοῦτο σημαίνει τὸν λόγον. ἀλλὰ μὴν καὶ τὸ τί ἦν εἶναι αἴτιον δέδεικται τὸ μέσον <ὄν>.

Τὸ δὲ διὰ τί ὁ Μηδικὸς πόλεμος ἐγένετο Ἀθηναίοις; τίς αἰτία τοῦ πολεμεῖσθαι Ἀθηναίους; ὅτι [94b] εἰς Σάρδεις μετ' Ἑρετριέων ἐνέβαλον· τοῦτο γὰρ ἐκίνησε πρῶτον. πόλεμος ἐφ' οὗ Α, προτέρους εἰσβαλεῖν Β, Ἀθηναῖοι τὸ Γ. ὑπάρχει δὲ τὸ Β τῷ Γ, τὸ πρότερος ἐμβαλεῖν τοῖς Ἀθηναίοις, τὸ δὲ Α τῷ Β· πολεμοῦσι γὰρ τοῖς πρότερον ἀδικήσασιν. ὑπάρχει ἄρα τῷ μὲν Β τὸ Α, τὸ πολεμεῖσθαι τοῖς πρότερος ἄρξασιν· τοῦτο δὲ τὸ Β τοῖς Ἀθηναίοις· πρότεροι γὰρ ἦρξαν. μέσον ἄρα καὶ ἐνταῦθα τὸ αἴτιον, τὸ πρῶτον κινήσαν.

Ὅσων δ' αἴτιον τὸ ἔνεκα τίνος - οἷον διὰ τί περιπατεῖ; ὅπως ὑγιαίνει· διὰ τί οἰκία ἔστιν; ὅπως σώζεται τὰ σκεύη-τὸ μὲν ἔνεκα τοῦ ὑγιαίνειν, τὸ δ' ἔνεκα τοῦ σώζεσθαι. διὰ τί δὲ ἀπὸ δείπνου δεῖ περιπατεῖν, καὶ ἔνεκα τίνος δεῖ, οὐδὲν διαφέρει. περίπατος ἀπὸ δείπνου Γ, τὸ μὴ ἐπιπολάζειν τὰ σιτία ἐφ' οὗ Β, τὸ ὑγιαίνειν ἐφ' οὗ Α. ἔστω δὲ τῷ ἀπὸ δείπνου περιπατεῖν ὑπάρχον τὸ ποιεῖν μὴ ἐπιπολάζειν τὰ σιτία πρὸς τῷ στόματι τῆς κοιλίας, καὶ τοῦτο ὑγιεινόν. δοκεῖ γὰρ ὑπάρχειν τῷ περιπατεῖν τῷ Γ τὸ Β τὸ μὴ ἐπιπολάζειν τὰ σιτία, τούτῳ δὲ τὸ Α τὸ ὑγιεινόν. τί οὖν αἴτιον τῷ Γ τοῦ τὸ Α ὑπάρχειν τὸ οὐ ἔνεκα; τὸ Β τὸ μὴ ἐπιπολάζειν. τοῦτο δ' ἐστὶν ὥσπερ ἐκείνου λόγος· τὸ γὰρ Α οὕτως ἀποδοθήσεται. διὰ τί δὲ τὸ Β τῷ Γ ἔστιν; ὅτι τοῦτ' ἔστι τὸ ὑγιαίνειν, τὸ οὕτως ἔχειν. δεῖ δὲ μεταλαμβάνειν τοὺς λόγους, καὶ οὕτως μᾶλλον ἕκαστα φανεῖται. αἱ δὲ γενέσεις ἀνάπαλιν ἐνταῦθα καὶ ἐπὶ τῶν κατὰ κίνησιν αἰτίων· ἐκεῖ μὲν γὰρ τὸ μέσον δεῖ γενέσθαι πρῶτον, ἐνταῦθα δὲ τὸ Γ, τὸ ἔσχατον, τελευταῖον δὲ τὸ οὐ ἔνεκα.

Ἐνδέχεται δὲ τὸ αὐτὸ καὶ ἔνεκά τινος εἶναι καὶ ἐξ ἀνάγκης, οἷον διὰ τοῦ λαμπτήρος τὸ φῶς· καὶ γὰρ ἐξ ἀνάγκης διέρχεται τὸ μικρομερέστερον διὰ τῶν μειζόνων πόρων, εἴπερ φῶς γίνεται τῷ διέναι, καὶ ἔνεκά τινος, ὅπως μὴ πταίωμεν. ἄρ' οὖν εἰ εἶναι ἐνδέχεται, καὶ γίνεσθαι ἐνδέχεται· ὥσπερ εἰ βροντᾷ

<ὅτι> ἀποσβεννυμένου τε τοῦ πυρὸς ἀνάγκη σίζειν καὶ ψοφεῖν καί, εἰ ὡς οἱ Πυθαγόρειοί φασιν, ἀπειλῆς ἔνεκα τοῖς ἐν τῷ ταρτάρῳ, ὅπως φοβῶνται; πλεῖστα δὲ τοιαῦτ' ἔστι, καὶ μάλιστα ἐν τοῖς κατὰ φύσιν συνισταμένοις καὶ συνεστῶσιν· ἢ μὲν γὰρ ἔνεκά του ποιεῖ φύσις, ἢ δ' ἐξ ἀνάγκης. ἢ δ' ἀνάγκη διττή· ἢ μὲν γὰρ κατὰ φύσιν [95a] καὶ τὴν ὁρμήν, ἢ δὲ βία ἢ παρὰ τὴν ὁρμήν, ὥσπερ λίθος ἐξ ἀνάγκης καὶ ἄνω καὶ κάτω φέρεται, ἀλλ' οὐ διὰ τὴν αὐτὴν ἀνάγκην. ἐν δὲ τοῖς ἀπὸ διανοίας τὰ μὲν οὐδέποτε ἀπὸ τοῦ αὐτομάτου ὑπάρχει, οἷον οἰκία ἢ ἀνδριάς, οὐδ' ἐξ ἀνάγκης, ἀλλ' ἔνεκά του, τὰ δὲ καὶ ἀπὸ τύχης, οἷον ὑγίεια καὶ σωτηρία. μάλιστα δὲ ἐν ὅσοις ἐνδέχεται καὶ ὧδε καὶ ἄλλως, ὅταν, μὴ ἀπὸ τύχης, ἢ γένεσις ἢ ὥστε τὸ τέλος ἀγαθόν, ἔνεκά του γίνεται, καὶ ἢ φύσει ἢ τέχνῃ. ἀπὸ τύχης δ' οὐδὲν ἔνεκά του γίνεται.

## Κεφάλαιο 12

Τὸ δ' αὐτὸ αἰτιὸν ἔστι τοῖς γινομένοις καὶ τοῖς γεγενημένοις καὶ τοῖς ἐσομένοις ὅπερ καὶ τοῖς οὖσι (τὸ γὰρ μέσον αἴτιον), πλὴν τοῖς μὲν οὖσιν ὄν, τοῖς δὲ γινομένοις γινόμενον, τοῖς δὲ γεγενημένοις γεγενημένον καὶ ἐσομένοις ἐσόμενον. οἷον διὰ τί γέγονεν ἔκλειψις; διότι ἐν μέσῳ γέγονεν ἡ γῆ· γίνεται δὲ διότι γίνεται, ἔσται δὲ διότι ἔσται ἐν μέσῳ, καὶ ἔστι διότι ἔστιν. τί ἔστι κρύσταλλος; εἰλήφθω δὴ ὅτι ὕδωρ πεπηγός. ὕδωρ ἐφ' οὗ Γ, πεπηγὸς ἐφ' οὗ Α, αἴτιον τὸ μέσον ἐφ' οὗ Β, ἔκλειψις θερμοῦ παντελούς. ὑπάρχει δὴ τῷ Γ τὸ Β, τούτῳ δὲ τὸ πεπηγέναι τὸ ἐφ' οὗ Α. γίνεται δὲ κρύσταλλος γινομένου τοῦ Β, γεγένηται δὲ γεγενημένου, ἔσται δ' ἐσομένου.

Τὸ μὲν οὖν οὕτως αἴτιον καὶ οὗ αἴτιον ἅμα γίνεται, ὅταν γίνηται, καὶ ἔστιν, ὅταν ἢ· καὶ ἐπὶ τοῦ γεγονέναι καὶ ἔσεσθαι ὡσαύτως. ἐπὶ δὲ τῶν μὴ ἅμα ἄρ' ἔστιν ἐν τῷ συνεχεῖ χρόνῳ, ὥσπερ δοκεῖ ἡμῖν, ἀλλὰ ἄλλων αἴτια εἶναι, τοῦ τόδε γενέσθαι ἕτερον γενόμενον, καὶ τοῦ ἔσεσθαι ἕτερον ἐσόμενον, καὶ τοῦ γίνεσθαι δέ, εἴ τι ἔμπροσθεν ἐγένετο; ἔστι δὴ ἀπὸ τοῦ ὕστερον γεγονότος ὁ συλλογισμός (ἀρχὴ δὲ καὶ τούτων τὰ γεγονότα)· διὸ καὶ ἐπὶ τῶν γινομένων ὡσαύτως. ἀπὸ δὲ τοῦ προτέρου οὐκ ἔστιν, οἷον ἐπεὶ τόδε γέγονεν, ὅτι τόδ' ὕστερον γέγονεν· καὶ ἐπὶ τοῦ ἔσεσθαι ὡσαύτως. οὔτε γὰρ ἀορίστου οὐθ' ὀρισθέντος ἔσται τοῦ χρόνου ὥστ' ἐπεὶ τοῦτ' ἀληθὲς εἰπεῖν γεγονέναι, τόδ' ἀληθὲς εἰπεῖν γεγονέναι τὸ ὕστερον. ἐν γὰρ τῷ μεταξὺ ψεῦδος ἔσται τὸ εἰπεῖν τοῦτο, ἤδη θατέρου γεγονότος. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τοῦ ἐσομένου, οὐδ' ἐπεὶ τόδε γέγονε, τόδ' ἔσται. τὸ γὰρ μέσον ὁμόγονον δεῖ εἶναι, τῶν γενομένων γενόμενον, τῶν ἐσομένων ἐσόμενον, τῶν γινομένων γινόμενον, τῶν ὄντων ὄν· τοῦ δὲ γέγονε καὶ τοῦ ἔσται οὐκ ἐνδέχεται εἶναι ὁμόγονον. ἔτι οὔτε ἀόριστον ἐνδέχεται εἶναι τὸν χρόνον τὸν μεταξὺ οὐθ' ὠρισμένον· [95b]

ψεῦδος γὰρ ἔσται τὸ εἰπεῖν ἐν τῷ μεταξύ. ἐπισκεπτέον δὲ τί τὸ συνέχον ὥστε μετὰ τὸ γεγονέναι τὸ γίνεσθαι ὑπάρχειν ἐν τοῖς πράγμασιν. ἢ δῆλον ὅτι οὐκ ἔστιν ἐχόμενον γεγονότος γινόμενον; οὐδὲ γὰρ γινόμενον γενομένου· πέρατα γὰρ καὶ ἄτομα· ὥσπερ οὖν οὐδὲ στιγμαὶ εἰσιν ἀλλήλων ἐχόμεναι, οὐδὲ γενόμενα· ἄμφω γὰρ ἀδιαίρετα. οὐδὲ δὴ γινόμενον γεγενημένου διὰ τὸ αὐτό· τὸ μὲν γὰρ γινόμενον διαιρετόν, τὸ δὲ γεγονὸς ἀδιαίρετον. ὥσπερ οὖν γραμμὴ πρὸς στιγμὴν ἔχει, οὕτω τὸ γινόμενον πρὸς τὸ γεγονός· ἐνυπάρχει γὰρ ἄπειρα γεγονότα ἐν τῷ γινομένῳ. μᾶλλον δὲ φανερώς ἐν τοῖς καθόλου περὶ κινήσεως δεῖ λεχθῆναι περὶ τούτων.

Περὶ μὲν οὖν τοῦ πῶς ἂν ἐφεξῆς γινομένης τῆς γενέσεως ἔχοι τὸ μέσον τὸ αἴτιον ἐπὶ τοσοῦτον εἰλήφθω. ἀνάγκη γὰρ καὶ ἐν τούτοις τὸ μέσον καὶ τὸ πρῶτον ἄμεσα εἶναι. οἷον τὸ Α γέγονεν, ἐπεὶ τὸ Γ γέγονεν (ὑστερον δὲ τὸ Γ γέγονεν, ἔμπροσθεν δὲ τὸ Α· ἀρχὴ δὲ τὸ Γ διὰ τὸ ἐγγύτερον τοῦ νῦν εἶναι, ὃ ἔστιν ἀρχὴ τοῦ χρόνου). τὸ δὲ Γ γέγονεν, εἰ τὸ Δ γέγονεν. τοῦ δὲ Δ γενομένου ἀνάγκη τὸ Α γεγονέναι. αἴτιον δὲ τὸ Γ· τοῦ γὰρ Δ γενομένου τὸ Γ ἀνάγκη γεγονέναι, τοῦ δὲ Γ γεγονότος ἀνάγκη πρότερον τὸ Α γεγονέναι. οὕτω δὲ λαμβάνοντι τὸ μέσον στήσεται που εἰς ἄμεσον, ἢ ἀεὶ παρεμπεσεῖται διὰ τὸ ἄπειρον; οὐ γὰρ ἔστιν ἐχόμενον γεγονὸς γεγονότος, ὥσπερ ἐλέχθη. ἀλλ' ἄρξασθαί γε ὅμως ἀνάγκη ἀπ' ἀμέσου καὶ ἀπὸ τοῦ νῦν πρώτου. ὁμοίως δὲ (25) καὶ ἐπὶ τοῦ ἔσται. εἰ γὰρ ἀληθὲς εἰπεῖν ὅτι ἔσται τὸ Δ, ἀνάγκη πρότερον ἀληθὲς εἰπεῖν ὅτι τὸ Α ἔσται. τούτου δ' αἴτιον τὸ Γ· εἰ μὲν γὰρ τὸ Δ ἔσται, πρότερον τὸ Γ ἔσται· εἰ δὲ τὸ Γ ἔσται, πρότερον τὸ Α ἔσται. ὁμοίως δ' ἄπειρος ἡ τομὴ καὶ ἐν τούτοις· οὐ γὰρ ἔστιν ἐσόμενα ἐχόμενα ἀλλήλων. ἀρχὴ δὲ καὶ ἐν τούτοις ἄμεσος ληπτέα. ἔχει δὲ οὕτως ἐπὶ τῶν ἔργων· εἰ γέγονεν οἰκία, ἀνάγκη τετμῆσθαι λίθους καὶ γεγονέναι. τοῦτο διὰ τί; ὅτι ἀνάγκη θεμέλιον γεγονέναι, εἴπερ καὶ οἰκία γέγονεν· εἰ δὲ θεμέλιον, πρότερον λίθους γεγονέναι ἀνάγκη. πάλιν εἰ ἔσται οἰκία, ὡσαύτως πρότερον ἔσονται λίθοι. δείκνυται δὲ διὰ τοῦ μέσου ὁμοίως· ἔσται γὰρ θεμέλιος πρότερον.

Ἐπεὶ δ' ὁρῶμεν ἐν τοῖς γινομένοις κύκλῳ τινὰ γενέσιν οὔσαν, ἐνδέχεται τοῦτο εἶναι, εἴπερ ἔποιντο ἀλλήλοις τὸ μέσον καὶ οἱ ἄκροι· ἐν γὰρ τούτοις τὸ ἀντιστρέφειν ἐστίν.

Δέδεικται [96a] δὲ τοῦτο ἐν τοῖς πρώτοις, ὅτι ἀντιστρέφει τὰ συμπεράσματα· τὸ δὲ κύκλῳ τοῦτό ἐστιν. ἐπὶ δὲ τῶν ἔργων φαίνεται ὡδε· βεβρεγμένης τῆς γῆς ἀνάγκη ἀτμίδα γενέσθαι, τούτου δὲ γενομένου νέφος, τούτου δὲ γενομένου ὕδωρ· τούτου δὲ γενομένου ἀνάγκη βεβρέχθαι τὴν γῆν· τοῦτο δ' ἦν τὸ ἐξ ἀρχῆς, ὥστε κύκλῳ περιελήλυθεν· ἐνδὸς γὰρ αὐτῶν ὅτου οὖν ὄντος ἕτερον

ἔστι, κάκεινου ἄλλο, καὶ τούτου τὸ πρῶτον.

Ἔστι δ' ἓνια μὲν γινόμενα καθόλου (ἀεὶ τε γὰρ καὶ ἐπὶ παντὸς οὕτως ἢ ἔχει ἢ γίνεται), τὰ δὲ ἀεὶ μὲν οὐ, ὡς ἐπὶ τὸ πολὺ δέ, οἷον οὐ πᾶς ἄνθρωπος ἄρρην τὸ γένειον τριχοῦται, ἀλλ' ὡς ἐπὶ τὸ πολὺ. τῶν δὴ τοιούτων ἀνάγκη καὶ τὸ μέσον ὡς ἐπὶ τὸ πολὺ εἶναι. εἰ γὰρ τὸ Α κατὰ τοῦ Β καθόλου κατηγορεῖται, καὶ τοῦτο κατὰ τοῦ Γ καθόλου, ἀνάγκη καὶ τὸ Α κατὰ τοῦ Γ ἀεὶ καὶ ἐπὶ παντὸς κατηγορεῖσθαι· τοῦτο γὰρ ἔστι τὸ καθόλου, τὸ ἐπὶ παντὶ καὶ ἀεὶ. ἀλλ' ὑπέκειτο ὡς ἐπὶ τὸ πολὺ· ἀνάγκη ἄρα καὶ τὸ μέσον ὡς ἐπὶ τὸ πολὺ εἶναι τὸ ἐφ' οὗ τὸ Β. ἔσονται τοίνυν καὶ τῶν ὡς ἐπὶ τὸ πολὺ ἀρχαὶ ἄμεσοι, ὅσα ὡς ἐπὶ τὸ πολὺ οὕτως ἔστιν ἢ γίνεται.

### Κεφάλαιο 13

Πῶς μὲν οὖν τὸ τί ἔστιν εἰς τοὺς ὅρους ἀποδίδεται, καὶ τίνα τρόπον ἀπόδειξις ἢ ὀρισμὸς ἔστιν αὐτοῦ ἢ οὐκ ἔστιν, εἴρηται πρότερον· πῶς δὲ δεῖ θηρεύειν τὰ ἐν τῷ τί ἔστι κατηγορούμενα, νῦν λέγωμεν. Τῶν δὴ ὑπαρχόντων ἀεὶ ἐκάστω ἓνια ἐπεκτείνει ἐπὶ πλεόν, οὐ μέντοι ἔξω τοῦ γένους. λέγω δὲ ἐπὶ πλεόν ὑπάρχειν ὅσα ὑπάρχει μὲν ἐκάστω καθόλου, οὐ μὴν ἀλλὰ καὶ ἄλλω. οἷον ἔστι τι ὃ πάση τριάδι ὑπάρχει, ἀλλὰ καὶ μὴ τριάδι, ὥσπερ τὸ ὄν ὑπάρχει τῇ τριάδι, ἀλλὰ καὶ μὴ ἀριθμῷ, ἀλλὰ καὶ τὸ περιττὸν ὑπάρχει τε πάση τριάδι καὶ ἐπὶ πλεόν ὑπάρχει (καὶ γὰρ τῇ πεντάδι ὑπάρχει), ἀλλ' οὐκ ἔξω τοῦ γένους· ἡ μὲν γὰρ πεντὰς ἀριθμὸς, οὐδὲν δὲ ἔξω ἀριθμοῦ περιττόν. τὰ δὴ τοιαῦτα ληπτέον μέχρι τούτου, ἕως τοσαῦτα ληφθῇ πρῶτον ὧν ἕκαστον μὲν ἐπὶ πλεόν ὑπάρξει, ἅπαντα δὲ μὴ ἐπὶ πλεόν· ταύτην γὰρ ἀνάγκη οὐσίαν εἶναι τοῦ πράγματος. οἷον τριάδι ὑπάρχει πάση ἀριθμὸς, τὸ περιττόν, τὸ πρῶτον ἀμφοτέρως, καὶ ὡς μὴ μετρεῖσθαι ἀριθμῷ καὶ ὡς μὴ συγκεῖσθαι ἐξ ἀριθμῶν. τοῦτο τοίνυν ἤδη ἔστιν ἡ τριάς, ἀριθμὸς περιττὸς πρῶτος καὶ ὠδὶ πρῶτος. τούτων γὰρ ἕκαστον, τὰ μὲν καὶ τοῖς περιττοῖς πᾶσιν ὑπάρχει, [96b] τὸ δὲ τελευταῖον καὶ τῇ δυάδι, πάντα δὲ οὐδενί. ἐπεὶ δὲ δεδήλωται ἡμῖν ἐν τοῖς ἄνω ὅτι καθόλου μὲν ἔστι τὰ ἐν τῷ τί ἔστι κατηγορούμενα (τὰ καθόλου δὲ ἀναγκαῖα), τῇ δὲ τριάδι, καὶ ἐφ' οὗ ἄλλου οὕτω λαμβάνεται, ἐν τῷ τί ἔστι τὰ λαμβανόμενα, οὕτως ἐξ ἀνάγκης μὲν ἂν εἴη τριάς ταῦτα. ὅτι δ' οὐσία, ἐκ τῶνδε δῆλον. ἀνάγκη γάρ, εἰ μὴ τοῦτο ἦν τριάδι εἶναι, οἷον γένος τι εἶναι τοῦτο, ἢ ὠνομασμένον ἢ ἀνώνυμον. ἔσται τοίνυν ἐπὶ πλεόν ἢ τῇ τριάδι ὑπάρχον. ὑποκείσθω γὰρ τοιοῦτον εἶναι τὸ γένος ὥστε ὑπάρχειν κατὰ δύναμιν ἐπὶ πλεόν. εἰ τοίνυν μηδενὶ ὑπάρχει ἄλλω ἢ ταῖς ἀτόμοις τριάσι, τοῦτ' ἂν εἴη τὸ τριάδι εἶναι (ὑποκείσθω γὰρ καὶ τοῦτο, ἢ οὐσία ἢ ἐκάστου εἶναι ἢ ἐπὶ τοῖς ἀτόμοις ἔσχατος τοιαύτη κατηγορία)· ὥστε ὁμοίως καὶ ἄλλω ὁπωσοῦν τῶν

οὕτω δειχθέντων τὸ αὐτῷ εἶναι ἔσται.

Χρὴ δέ, ὅταν ὅλον τι πραγματεύηται τις, διελεῖν τὸ γένος εἰς τὰ ἄτομα τῷ εἶδει τὰ πρῶτα, οἷον ἀριθμὸν εἰς τριάδα καὶ δυάδα, εἴθ' οὕτως ἐκείνων ὀρισμοὺς πειρᾶσθαι λαμβάνειν, οἷον εὐθείας γραμμῆς καὶ κύκλου, καὶ ὀρθῆς γωνίας, μετὰ δὲ τοῦτο λαβόντα τί τὸ γένος, οἷον πότερον τῶν ποσῶν ἢ τῶν ποιῶν, τὰ ἴδια πάθη θεωρεῖν διὰ τῶν κοινῶν πρώτων. τοῖς γὰρ συντιθεμένοις ἐκ τῶν ἀτόμων τὰ συμβαίνοντα ἐκ τῶν ὀρισμῶν ἔσται δῆλα, διὰ τὸ ἀρχὴν εἶναι πάντων τὸν ὀρισμὸν καὶ τὸ ἀπλοῦν καὶ τοῖς ἀπλοῖς καθ' αὐτὰ ὑπάρχειν τὰ συμβαίνοντα μόνοις, τοῖς δ' ἄλλοις κατ' ἐκεῖνα. αἱ δὲ διαιρέσεις αἱ κατὰ τὰς διαφορὰς χρήσιμοί εἰσιν εἰς τὸ οὕτω μετέναι· ὥς μέντοι δεικνύουσιν, εἴρηται ἐν τοῖς πρότερον. χρήσιμοι δ' ἂν εἶεν ὧδε μόνον πρὸς τὸ συλλογίζεσθαι τὸ τί ἐστίν. καίτοι δόξειεν γ' ἂν οὐδέν, ἀλλ' εὐθὺς λαμβάνειν ἅπαντα, ὥσπερ ἂν εἰ ἐξ ἀρχῆς ἐλάμβανέ τις ἄνευ τῆς διαιρέσεως. διαφέρει δέ τι τὸ πρῶτον καὶ ὕστερον τῶν κατηγορουμένων κατηγορεῖσθαι, οἷον εἰπεῖν ζῶον ἡμερον δίπουν ἢ δίπουν ζῶον ἡμερον. εἰ γὰρ ἅπαν ἐκ δύο ἐστί, καὶ ἐν τι τὸ ζῶον ἡμερον, καὶ πάλιν ἐκ τούτου καὶ τῆς διαφορᾶς ὁ ἄνθρωπος ἢ ὅ τι δήποτ' ἐστὶ τὸ ἐν γινόμενον, ἀναγκαῖον διελόμενον αἰτεῖσθαι.

Ἔτι πρὸς τὸ μηδὲν παραλιπεῖν ἐν τῷ τί ἐστίν οὕτω μόνως ἐνδέχεται. ὅταν γὰρ τὸ πρῶτον ληφθῇ γένος, ἂν μὲν τῶν κάτωθεν τινα διαιρέσεων λαμβάνῃ, οὐκ ἐμπεσεῖται ἅπαν εἰς τοῦτο, οἷον οὐ πᾶν ζῶον ἢ ὀλόπτερον ἢ σχιζόπτερον, ἀλλὰ πτηνὸν ζῶον ἅπαν· τούτου [97a] γὰρ διαφορὰ αὕτη. πρώτη δὲ διαφορὰ ἐστὶ ζώου εἰς ἣν ἅπαν ζῶον ἐμπίπτει. ὁμοίως δὲ καὶ τῶν ἄλλων ἐκάστου, καὶ τῶν ἔξω γενῶν καὶ τῶν ὑπ' αὐτό, οἷον ὄρνιθος, εἰς ἣν ἅπας ὄρνις, καὶ ἰχθύος, εἰς ἣν ἅπας ἰχθύς. οὕτω μὲν οὖν βαδίζοντι ἔστιν εἰδέναι ὅτι οὐδὲν παραλέλειπται· ἄλλως δὲ καὶ παραλιπεῖν ἀναγκαῖον καὶ μὴ εἰδέναι. οὐδὲν δὲ δεῖ τὸν ὀριζόμενον καὶ διαιρούμενον ἅπαντα εἰδέναι τὰ ὄντα. καίτοι ἀδύνατόν φασι τινες εἶναι τὰς διαφορὰς εἰδέναι τὰς πρὸς ἕκαστον μὴ εἰδότα ἕκαστον· ἄνευ δὲ τῶν διαφορῶν οὐκ εἶναι ἕκαστον εἰδέναι· οὐ γὰρ μὴ διαφέρει, ταῦτόν εἶναι τούτῳ, οὐ δὲ διαφέρει, ἕτερον τούτου. πρῶτον μὲν οὖν τοῦτο ψεῦδος· οὐ γὰρ κατὰ πᾶσαν διαφορὰν ἕτερον· πολλὰ γὰρ διαφορὰ ὑπάρχουσι τοῖς αὐτοῖς τῷ εἶδει, ἀλλ' οὐ κατ' οὐσίαν οὐδὲ καθ' αὐτά. εἴτα ὅταν λάβῃ τάντικείμενα καὶ τὴν διαφορὰν καὶ ὅτι πᾶν ἐμπίπτει ἐνταῦθα ἢ ἐνταῦθα, καὶ λάβῃ ἐν θατέρῳ τὸ ζητούμενον εἶναι, καὶ τοῦτο γινώσκη, οὐδὲν διαφέρει εἰδέναι ἢ μὴ εἰδέναι ἐφ' ὅσων κατηγοροῦνται ἄλλων αἱ διαφοραί. φανερόν γὰρ ὅτι ἂν οὕτω βαδίζων ἔλθῃ εἰς ταῦτα ὧν μηκέτι ἔστι διαφορὰ, ἔξει τὸν λόγον τῆς οὐσίας. τὸ δ' ἅπαν ἐμπίπτειν εἰς τὴν διαίρεσιν, ἂν ἢ ἀντικείμενα ὧν μὴ ἔστι μεταξύ, οὐκ αἴτημα· ἀνάγκη γὰρ ἅπαν ἐν θατέρῳ

αὐτῶν εἶναι, εἴπερ ἐκείνου διαφορά ἐστι.

Εἰς δὲ τὸ κατασκευάζειν ὅρον διὰ τῶν διαιρέσεων τριῶν δεῖ στοχάζεσθαι, τοῦ λαβεῖν τὰ κατηγορούμενα ἐν τῷ τί ἐστι, καὶ ταῦτα τάξαι τί πρῶτον ἢ δεύτερον, καὶ ὅτι ταῦτα πάντα. ἔστι δὲ τούτων ἐν πρῶτον διὰ τοῦ δύνασθαι, ὥσπερ πρὸς συμβεβηκὸς συλλογίσασθαι ὅτι ὑπάρχει, καὶ διὰ τοῦ γένους κατασκευάσαι. τὸ δὲ τάξαι ὡς δεῖ ἔσται, ἐὰν τὸ πρῶτον λάβῃ. τοῦτο δ' ἔσται, ἐὰν ληφθῇ ὃ πᾶσιν ἀκολουθεῖ, ἐκείνῳ δὲ μὴ πάντα· ἀνάγκη γὰρ εἶναί τι τοιοῦτον. ληφθέντος δὲ τούτου ἤδη ἐπὶ τῶν κάτω ὁ αὐτὸς τρόπος· δεύτερον γὰρ τὸ τῶν ἄλλων πρῶτον ἔσται, καὶ τρίτον τὸ τῶν ἐχομένων· ἀφαιρεθέντος γὰρ τοῦ ἄνωθεν τὸ ἐχόμενον τῶν ἄλλων πρῶτον ἔσται. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ὅτι δ' ἅπαντα ταῦτα, φανερὸν ἐκ τοῦ λαβεῖν τό τε πρῶτον κατὰ διαίρεσιν, ὅτι ἅπαν ἢ τόδε ἢ τόδε ζῶον, ὑπάρχει δὲ τόδε, καὶ πάλιν τούτου ὅλου τὴν διαφοράν, τοῦ δὲ τελευταίου μηκέτι εἶναι διαφοράν, ἢ καὶ εὐθὺς μετὰ τῆς τελευταίας διαφορᾶς τοῦ συνόλου μὴ διαφέρειν εἶδει ἔτι τοῦτο. [97b] δῆλον γὰρ ὅτι οὔτε πλεῖον πρόσκειται (πάντα γὰρ ἐν τῷ τί ἐστὶν εἴληπται τούτων) οὔτε ἀπολείπει οὐδέν· ἢ γὰρ γένος ἢ διαφορὰ ἂν εἴη. γένος μὲν οὖν τό τε πρῶτον, καὶ μετὰ τῶν διαφορῶν τοῦτο προσλαμβάνομενον· αἱ διαφοραὶ δὲ πᾶσαι ἔχονται· οὐ γὰρ ἔτι ἔστιν ὑστέρα· εἶδει γὰρ ἂν διέφερε τὸ τελευταῖον, τοῦτο δ' εἴρηται μὴ διαφέρειν.

Ζητεῖν δὲ δεῖ ἐπιβλέποντα ἐπὶ τὰ ὅμοια καὶ ἀδιάφορα, πρῶτον τί ἅπαντα ταῦτόν ἔχουσιν, εἴτα πάλιν ἐφ' ἑτέροις, ἃ ἐν ταύτῳ μὲν γένει ἐκείνοις, εἰσὶ δὲ αὐτοῖς μὲν ταῦτ' αὖ εἶδει, ἐκείνων δ' ἕτερα. ὅταν δ' ἐπὶ τούτων ληφθῇ τί πάντα ταῦτόν, καὶ ἐπὶ τῶν ἄλλων ὁμοίως, ἐπὶ τῶν εἰλημμένων πάλιν σκοπεῖν εἰ ταῦτόν, ἕως ἂν εἰς ἓνα ἔλθῃ λόγον· οὗτος γὰρ ἔσται τοῦ πράγματος ὀρισμός. ἐὰν δὲ μὴ βαδίζῃ εἰς ἓνα ἄλλ' εἰς δύο ἢ πλείους, δῆλον ὅτι οὐκ ἂν εἴη ἓν τι εἶναι τὸ ζητούμενον, ἀλλὰ πλείω. οἷον λέγω, εἰ τί ἐστι μεγαλοψυχία ζητοῖμεν, σκεπτέον ἐπὶ τινων μεγαλοψύχων, οὓς ἴσμεν, τί ἔχουσιν ἐν πάντες ἢ τοιοῦτοι. οἷον εἰ Ἀλκιβιάδης μεγαλόψυχος ἢ ὁ Ἀχιλλεὺς καὶ ὁ Αἴας, τί ἐν ἅπαντες; τὸ μὴ ἀνέχεσθαι ὑβριζόμενοι· ὁ μὲν γὰρ ἐπολέμησεν, ὁ δ' ἐμήνισεν, ὁ δ' ἀπέκτεινεν ἑαυτόν. πάλιν ἐφ' ἑτέρων, οἷον Λυσάνδρου ἢ Σωκράτους. εἰ δὴ τὸ ἀδιάφοροι εἶναι εὐτυχοῦντες καὶ ἀτυχοῦντες, ταῦτα δύο λαβὼν σκοπῶ τί τὸ αὐτὸ ἔχουσιν ἢ τε ἀπάθεια ἢ περὶ τὰς τύχας καὶ ἢ μὴ ὑπομονὴ ἀτιμαζομένων. εἰ δὲ μηδέν, δύο εἶδη ἂν εἴη τῆς μεγαλοψυχίας. αἰεὶ δ' ἐστὶ πᾶς ὅρος καθόλου· οὐ γάρ τινι ὀφθαλμῷ λέγει τὸ ὑγιεινὸν ὁ ἰατρός, ἀλλ' ἢ παντὶ ἢ εἶδει ἀφορίσας. ῥᾶόν τε τὸ καθ' ἕκαστον ὀρίσασθαι ἢ τὸ καθόλου, διὸ δεῖ ἀπὸ τῶν καθ' ἕκαστα ἐπὶ τὰ καθόλου μεταβαίνειν· καὶ γὰρ αἱ ὁμωνυμῖαι λανθάνουσι μᾶλλον ἐν τοῖς καθόλου ἢ ἐν τοῖς ἀδιαφόροις. ὥσπερ

δὲ ἐν ταῖς ἀποδείξεσι δεῖ τό γε συλλελογίσθαι ὑπάρχειν, οὕτω καὶ ἐν τοῖς ὅροις τὸ σαφές. τοῦτο δ' ἔσται, ἐὰν διὰ τῶν καθ' ἕκαστον εἰλημμένων ἢ τὸ ἐν ἑκάστω γένει ὀρίζεσθαι χωρίς, οἷον τὸ ὅμοιον μὴ πᾶν ἀλλὰ τὸ ἐν χρώμασι καὶ σχήμασι, καὶ ὅξυ τὸ ἐν φωνῇ, καὶ οὕτως ἐπὶ τὸ κοινὸν βαδίζειν, εὐλαβούμενον μὴ ὁμωνυμία ἐντύχη. εἰ δὲ μὴ διαλέγεσθαι δεῖ μεταφοραῖς, δῆλον ὅτι οὐδ' ὀρίζεσθαι οὔτε μεταφοραῖς οὔτε ὅσα λέγεται μεταφοραῖς· διαλέγεσθαι γὰρ ἀνάγκη ἔσται μεταφοραῖς.

## Κεφάλαιο 14

[98a] Πρὸς δὲ τὸ ἔχειν τὰ προβλήματα ἐκλέγειν δεῖ τὰς τε ἀνατομὰς καὶ τὰς διαιρέσεις, οὕτω δὲ ἐκλέγειν, ὑποθέμενον τὸ γένος τὸ κοινὸν ἀπάντων, οἷον εἰ ζῶα εἴη τὰ τεθεωρημένα, ποῖα παντὶ ζῶῳ ὑπάρχει, ληφθέντων δὲ τούτων, πάλιν τῶν λοιπῶν τῷ πρώτῳ ποῖα παντὶ ἔπεται, οἷον εἰ τοῦτο ὄρνις, ποῖα παντὶ ἔπεται ὄρνιθι, καὶ οὕτως αἰεὶ τῷ ἐγγύτατα· δῆλον γὰρ ὅτι ἔξομεν ἤδη λέγειν τὸ διὰ τί ὑπάρχει τὰ ἐπόμενα τοῖς ὑπὸ τὸ κοινόν, οἷον διὰ τί ἀνθρώπῳ ἢ ἵππῳ ὑπάρχει. ἔστω δὲ ζῶον ἐφ' οὗ Α, τὸ δὲ Β τὰ ἐπόμενα παντὶ ζῶῳ, ἐφ' ὧν δὲ Γ Δ Ε τὰ τινὰ ζῶα. δῆλον δὲ διὰ τί τὸ Β ὑπάρχει τῷ Δ· διὰ γὰρ τὸ Α. ὁμοίως δὲ καὶ τοῖς ἄλλοις· καὶ αἰεὶ ἐπὶ τῶν κάτω ὁ αὐτὸς λόγος.

Νῦν μὲν οὖν κατὰ τὰ παραδεδομένα κοινὰ ὀνόματα λέγομεν, δεῖ δὲ μὴ μόνον ἐπὶ τούτων σκοπεῖν, ἀλλὰ καὶ ἂν ἄλλο τι ὀφθῇ ὑπάρχον κοινόν, ἐκλαμβάνοντα, εἴτα τίσι τοῦτ' ἀκολουθεῖ καὶ ποῖα τούτῳ ἔπεται, οἷον τοῖς κέρατα ἔχουσι τὸ ἔχειν ἐχῖνον, τὸ μὴ ἀμφώδοντ' εἶναι· πάλιν τὸ κέρατ' ἔχειν τίσιν ἔπεται. δῆλον γὰρ διὰ τί ἐκείνοις ὑπάρξει τὸ εἰρημένον· διὰ γὰρ τὸ κέρατ' ἔχειν ὑπάρξει.

Ἔτι δ' ἄλλος τρόπος ἐστὶ κατὰ τὸ ἀνάλογον ἐκλέγειν. ἐν γὰρ λαβεῖν οὐκ ἔστι τὸ αὐτό, ὃ δεῖ καλέσαι σήπιον καὶ ἄκανθαν καὶ ὀστοῦν· ἔσται δ' ἐπόμενα καὶ τούτοις ὥσπερ μιᾶς τινος φύσεως τῆς τοιαύτης οὔσης.

## Κεφάλαιο 15

Τὰ δ' αὐτὰ προβλήματά ἐστι τὰ μὲν τῷ τὸ αὐτὸ μέσον ἔχειν, οἷον ὅτι πάντα ἀντιπερίστασις. τούτων δ' ἓν τῷ γένει ταῦτά, ὅσα ἔχει διαφορὰς τῷ ἄλλων ἢ ἄλλως εἶναι, οἷον διὰ τί ἡχεῖ, ἢ διὰ τί ἐμφαίνεται, καὶ διὰ τί ἴρις· ἅπαντα γὰρ ταῦτα τὸ αὐτὸ πρόβλημά ἐστι γένει (πάντα γὰρ ἀνάκλασις), ἀλλ' εἶδει ἕτερα. τὰ δὲ τῷ τὸ μέσον ὑπὸ τὸ ἕτερον μέσον εἶναι διαφέρει τῶν προβλημάτων, οἷον διὰ τί ὁ Νεῖλος φθίνοντος τοῦ μηνὸς μᾶλλον ῥεῖ; διότι



χειμεριώτερος φθίνων ὁ μείς. διὰ τί δὲ χειμεριώτερος φθίνων; διότι ἡ σελήνη ἀπολείπει. ταῦτα γὰρ οὕτως ἔχει πρὸς ἄλληλα.

## Κεφάλαιο 16

Περὶ δ' αἰτίου καὶ οὗ αἴτιον ἀπορήσειε μὲν ἂν τις, ἄρα ὅτε ὑπάρχει τὸ αἰτιατόν, καὶ τὸ αἴτιον ὑπάρχει (ὥσπερ εἰ φυλλορροεῖ ἢ ἐκλείπει, καὶ τὸ αἴτιον τοῦ ἐκλείπειν ἢ φυλλορροεῖν ἔσται· οἷον εἰ τοῦτ' ἔστι τὸ πλατέα ἔχειν τὰ [98b] φύλλα, τοῦ δ' ἐκλείπειν τὸ τὴν γῆν ἐν μέσῳ εἶναι· εἰ γὰρ μὴ ὑπάρχει, ἄλλο τι ἔσται τὸ αἴτιον αὐτῶν), εἴ τε τὸ αἴτιον ὑπάρχει, ἅμα καὶ τὸ αἰτιατόν (οἷον εἰ ἐν μέσῳ ἢ γῆ, ἐκλείπει, ἢ εἰ πλατύφυλλον, φυλλορροεῖ). εἰ δ' οὕτως, ἅμ' ἂν εἴη καὶ δεικνύοιτο δι' ἀλλήλων. ἔστω γὰρ τὸ φυλλορροεῖν ἐφ' οὗ Α, τὸ δὲ πλατύφυλλον ἐφ' οὗ Β, ἄμπελος δὲ ἐφ' οὗ Γ. εἰ δὴ τῷ Β ὑπάρχει τὸ Α (πᾶν γὰρ πλατύφυλλον φυλλορροεῖ), τῷ δὲ Γ ὑπάρχει τὸ Β (πᾶσα γὰρ ἄμπελος πλατύφυλλος), τῷ Γ ὑπάρχει τὸ Α, καὶ πᾶσα ἄμπελος φυλλορροεῖ. αἴτιον δὲ τὸ Β τὸ μέσον. ἀλλὰ καὶ ὅτι πλατύφυλλον ἢ ἄμπελος, ἔστι διὰ τοῦ φυλλορροεῖν ἀποδειῖσαι. ἔστω γὰρ τὸ μὲν Δ πλατύφυλλον, τὸ δὲ Ε τὸ φυλλορροεῖν, ἄμπελος δὲ ἐφ' οὗ Ζ. τῷ δὴ Ζ ὑπάρχει τὸ Ε (φυλλορροεῖ γὰρ πᾶσα ἄμπελος), τῷ δὲ Ε τὸ Δ (ἅπαν γὰρ τὸ φυλλορροοῦν πλατύφυλλον)· πᾶσα ἄρα ἄμπελος πλατύφυλλον. αἴτιον δὲ τὸ φυλλορροεῖν. εἰ δὲ μὴ ἐνδέχεται αἴτια εἶναι ἀλλήλων (τὸ γὰρ αἴτιον πρότερον οὗ αἴτιον, καὶ τοῦ μὲν ἐκλείπειν αἴτιον τὸ ἐν μέσῳ τὴν γῆν εἶναι, τοῦ δ' ἐν μέσῳ τὴν γῆν εἶναι οὐκ αἴτιον τὸ ἐκλείπειν)-εἰ οὖν ἢ μὲν διὰ τοῦ αἰτίου ἀπόδειξις τοῦ διὰ τί, ἢ δὲ μὴ διὰ τοῦ αἰτίου τοῦ ὅτι, ὅτι μὲν ἐν μέσῳ, οἶδε, διότι δ' οὐ. ὅτι δ' οὐ τὸ ἐκλείπειν αἴτιον τοῦ ἐν μέσῳ, ἀλλὰ τοῦτο τοῦ ἐκλείπειν, φανερόν· ἐν γὰρ τῷ λόγῳ τῷ τοῦ ἐκλείπειν ἐνυπάρχει τὸ ἐν μέσῳ, ὥστε δῆλον ὅτι διὰ τούτου ἐκεῖνο γνωρίζεται, ἀλλ' οὐ τοῦτο δι' ἐκείνου.

Ἡ ἐνδέχεται ἐνὸς πλείω αἴτια εἶναι; καὶ γὰρ εἰ ἔστι τὸ αὐτὸ πλειόνων πρώτων κατηγορεῖσθαι, ἔστω τὸ Α τῷ Β πρώτῳ ὑπάρχον, καὶ τῷ Γ ἄλλῳ πρώτῳ, καὶ ταῦτα τοῖς Δ Ε. ὑπάρξει ἄρα τὸ Α τοῖς Δ Ε· αἴτιον δὲ τῷ μὲν Δ τὸ Β, τῷ δὲ Ε τὸ Γ· ὥστε τοῦ μὲν αἰτίου ὑπάρχοντος ἀνάγκη τὸ πρᾶγμα ὑπάρχειν, τοῦ δὲ πράγματος ὑπάρχοντος οὐκ ἀνάγκη πᾶν ὃ ἂν ἢ αἴτιον, ἀλλ' αἴτιον μὲν, οὐ μέντοι πᾶν. ἢ εἰ ἀεὶ καθόλου τὸ πρόβλημά ἐστι, καὶ τὸ αἴτιον ὅλον τι, καὶ οὗ αἴτιον, καθόλου; οἷον τὸ φυλλορροεῖν ὅλῳ τινὶ ἀφωρισμένον, κἂν εἶδη αὐτοῦ ἢ, καὶ τοισδὶ καθόλου, ἢ φυτοῖς ἢ τοιοισδὶ φυτοῖς· ὥστε καὶ τὸ μέσον ἴσον δεῖ εἶναι ἐπὶ τούτων καὶ οὗ αἴτιον, καὶ ἀντιστρέφειν. οἷον διὰ τί τὰ δένδρα φυλλορροεῖ; εἰ δὴ διὰ πῆξιν τοῦ ὑγροῦ, εἴτε φυλλορροεῖ δένδρον, δεῖ ὑπάρχειν πῆξιν, εἴτε πῆξις ὑπάρχει, μὴ ὅτω οὖν ἀλλὰ δένδρῳ,

φυλλορροεῖν.

## Κεφάλαιο 17

[99a] Πότερον δ' ἐνδέχεται μὴ τὸ αὐτὸ αἴτιον εἶναι τοῦ αὐτοῦ πᾶσιν ἄλλ' ἑτερον, ἢ οὐ; ἢ εἰ μὲν καθ' αὐτὸ ἀποδέδεικται καὶ μὴ κατὰ σημεῖον ἢ συμβεβηκός, οὐχ οἷόν τε· ὁ γὰρ λόγος τοῦ ἄκρου τὸ μέσον ἐστίν· εἰ δὲ μὴ οὕτως, ἐνδέχεται. ἔστι δὲ καὶ οὐ αἴτιον καὶ ὧ σκοπεῖν κατὰ συμβεβηκός· οὐ μὴν δοκεῖ προβλήματα εἶναι. εἰ δὲ μή, ὁμοίως ἔξει τὸ μέσον· εἰ μὲν ὁμώνυμα, ὁμώνυμον τὸ μέσον, εἰ δ' ὡς ἐν γένει, ὁμοίως ἔξει. οἷον διὰ τί καὶ ἐναλλάξ ἀνάλογον; ἄλλο γὰρ αἴτιον ἐν γραμμαῖς καὶ ἀριθμοῖς καὶ τὸ αὐτό γε, ἢ μὲν γραμμῇ, ἄλλο, ἢ δ' ἔχον αὕξησιν τοιανδί, τὸ αὐτό. οὕτως ἐπὶ πάντων. τοῦ δ' ὅμοιον εἶναι χρῶμα χρώματι καὶ σχῆμα σχήματι ἄλλο ἄλλω. ὁμώνυμον γὰρ τὸ ὅμοιον ἐπὶ τούτων· ἐνθα μὲν γὰρ ἴσως τὸ ἀνάλογον ἔχειν τὰς πλευρὰς καὶ ἴσας τὰς γωνίας, ἐπὶ δὲ χρωμάτων τὸ τὴν αἴσθησιν μίαν εἶναι ἢ τι ἄλλο τοιοῦτον. τὰ δὲ κατ' ἀναλογίαν τὰ αὐτὰ καὶ τὸ μέσον ἔξει κατ' ἀναλογίαν. ἔχει δ' οὕτω τὸ παρακολουθεῖν τὸ αἴτιον ἀλλήλοις καὶ οὐ αἴτιον καὶ ὧ αἴτιον· καθ' ἕκαστον μὲν λαμβάνοντι τὸ οὐ αἴτιον ἐπὶ πλεόν, οἷον τὸ τέτταρσιν ἴσας τὰς ἔξω ἐπὶ πλεόν ἢ τρίγωνον ἢ τετράγωνον, ἅπασι δὲ ἐπ' ἴσον (ὅσα γὰρ τέτταρσιν ὀρθαῖς ἴσας τὰς ἔξω)· καὶ τὸ μέσον ὁμοίως. ἔστι δὲ τὸ μέσον λόγος τοῦ πρώτου ἄκρου, διὸ πᾶσαι αἱ ἐπιστῆμαι δι' ὀρισμοῦ γίνονται. οἷον τὸ φυλλορροεῖν ἅμα ἀκολουθεῖ τῇ ἀμπέλῳ καὶ ὑπερέχει, καὶ συκῇ, καὶ ὑπερέχει· ἄλλ' οὐ πάντων, ἄλλ' ἴσον. εἰ δὲ λάβοις τὸ πρῶτον μέσον, λόγος τοῦ φυλλορροεῖν ἐστίν. ἔσται γὰρ πρῶτον μὲν ἐπὶ θάτερα μέσον, ὅτι τοιαδὶ ἅπαντα· εἴτα τούτου μέσον, ὅτι ὁπὸς πηγνυται ἢ τι ἄλλο τοιοῦτον. τί δ' ἐστὶ τὸ φυλλορροεῖν; τὸ πηγνυσθαι τὸν ἐν τῇ συνάψει τοῦ σπέρματος ὁπόν.

Ἐπὶ δὲ τῶν σχημάτων ὧδε ἀποδώσει ζητοῦσι τὴν παρακολούθησιν τοῦ αἰτίου καὶ οὐ αἴτιον. ἔστω τὸ A τῷ B ὑπάρχειν παντί, τὸ δὲ B ἐκάστω τῶν Δ, ἐπὶ πλεόν δέ. τὸ μὲν δὴ B καθόλου ἂν εἴη τοῖς Δ· τοῦτο γὰρ λέγω καθόλου ὧ μὴ ἀντιστρέφει, πρῶτον δὲ καθόλου ὧ ἕκαστον μὲν μὴ ἀντιστρέφει, ἅπαντα δὲ ἀντιστρέφει καὶ παρεκτείνει. τοῖς δὴ Δ αἴτιον τοῦ A τὸ B. δεῖ ἄρα τὸ A ἐπὶ πλεόν τοῦ B ἐπεκτείνειν· εἰ δὲ μή, τί μᾶλλον αἴτιον ἔσται τοῦτο ἐκείνου; εἰ δὲ πᾶσιν ὑπάρχει τοῖς E τὸ A, ἔσται τι ἐκεῖνα ἐν ἅπαντα ἄλλο τοῦ B. εἰ γὰρ μή, πῶς ἔσται εἰπεῖν ὅτι ὧ τὸ E, τὸ [99b] A παντί, ὧ δὲ τὸ A, οὐ παντὶ τὸ E; διὰ τί γὰρ οὐκ ἔσται τι αἴτιον οἷον [τὸ A] ὑπάρχει πᾶσι τοῖς Δ; ἄλλ' ἄρα καὶ τὰ E ἔσται τι ἐν; ἐπισκέψασθαι δεῖ τοῦτο, καὶ ἔστω τὸ Γ. ἐνδέχεται δὲ τοῦ αὐτοῦ πλείω αἴτια εἶναι, ἄλλ' οὐ τοῖς αὐτοῖς τῷ εἶδει, οἷον τοῦ μακρόβια εἶναι τὰ

μὲν τετράποδα τὸ μὴ ἔχειν χολήν, τὰ δὲ πτηνὰ τὸ ξηρὰ εἶναι ἢ ἕτερόν τι.

## Κεφάλαιο 18

Εἰ δὲ εἰς τὸ ἄτομον μὴ εὐθὺς ἔρχονται, καὶ μὴ μόνον ἐν τὸ μέσον ἀλλὰ πλείω, καὶ τὰ αἷτια πλείω. πότερον δ' αἷτιον τῶν μέσων, τὸ πρὸς τὸ καθόλου πρῶ τον ἢ τὸ πρὸς τὸ καθ' ἕκαστον, τοῖς καθ' ἕκαστον; δῆλον δὲ ὅτι τὸ ἐγγύτατα ἐκάστω ὡς αἷτιον. τοῦ γὰρ τὸ πρῶτον ὑπὸ τὸ καθόλου ὑπάρχειν τοῦτο αἷτιον, οἷον τῷ Δ τὸ Γ τοῦ τὸ Β ὑπάρχειν αἷτιον. τῷ μὲν οὖν Δ τὸ Γ αἷτιον τοῦ Α, τῷ δὲ Γ τὸ Β, τούτω δὲ αὐτό.

## Κεφάλαιο 19

Περὶ μὲν οὖν συλλογισμοῦ καὶ ἀποδείξεως, τί τε ἐκότερόν ἐστι καὶ πῶς γίνεται, φανερόν, ἅμα δὲ καὶ περὶ ἐπιστήμης ἀποδεικτικῆς· ταῦτόν γάρ ἐστιν. περὶ δὲ τῶν ἀρχῶν, πῶς τε γίνονται γνώριμοι καὶ τίς ἡ γνωρίζουσα ἕξις, ἐντεῦθεν ἔσται δῆλον προαπορήσασι πρῶτον.

Ὅτι μὲν οὖν οὐκ ἐνδέχεται ἐπίστασθαι δι' ἀποδείξεως μὴ γινώσκοντι τὰς πρώτας ἀρχὰς τὰς ἀμέσους, εἴρηται πρότερον. τῶν δ' ἀμέσων τὴν γνῶσιν, καὶ πότερον ἢ αὐτὴ ἐστὶν ἢ οὐχ ἢ αὐτὴ, διαπορήσειεν ἂν τις, καὶ πότερον ἐπιστήμη ἐκατέρου ἢ οὐ, ἢ τοῦ μὲν ἐπιστήμη τοῦ δ' ἕτερόν τι γένος, καὶ πότερον οὐκ ἐνοῦσαι αἰ ἕξεις ἐγγίνονται ἢ ἐνοῦσαι λελήθασιν. εἰ μὲν δὲ ἔχομεν αὐτάς, ἄτοπον· συμβαίνει γὰρ ἀκριβεστέρας ἔχοντας γνώσεις ἀποδείξεως λανθάνειν. εἰ δὲ λαμβάνομεν μὴ ἔχοντες πρότερον, πῶς ἂν γνωρίζοιμεν καὶ μανθάνοιμεν ἐκ μὴ προϋπαρχούσης γνώσεως; ἀδύνατον γάρ, ὥσπερ καὶ ἐπὶ τῆς ἀποδείξεως ἐλέγομεν. φανερόν τοίνυν ὅτι οὗτ' ἔχειν οἷόν τε, οὗτ' ἀγνοοῦσι καὶ μηδεμίαν ἔχουσιν ἕξιν ἐγγίγνεσθαι. ἀνάγκη ἄρα ἔχειν μὲν τινα δύναμιν, μὴ τοιαύτην δ' ἔχειν ἢ ἔσται τούτων τιμιωτέρα κατ' ἀκρίβειαν. φαίνεται δὲ τοῦτό γε πᾶσιν ὑπάρχον τοῖς ζώοις. ἔχει γὰρ δύναμιν σύμφυτον κριτικήν, ἣν καλοῦσιν αἴσθησιν· ἐνούσης δ' αἰσθήσεως τοῖς μὲν τῶν ζώων ἐγγίγνεται μονὴ τοῦ αἰσθήματος, τοῖς δ' οὐκ ἐγγίγνεται. ὅσοις μὲν οὖν μὴ ἐγγίγνεται, ἢ ὅλως ἢ περὶ ἃ μὴ ἐγγίγνεται, οὐκ ἔστι τούτοις γνῶσις ἕξω τοῦ αἰσθάνεσθαι· ἐν οἷς δ' ἔνεστιν αἰσθομένοις ἔχειν [100a] ἔτι ἐν τῇ ψυχῇ. πολλῶν δὲ τοιούτων γινομένων ἤδη διαφορὰ τις γίνεται, ὥστε τοῖς μὲν γίνεσθαι λόγον ἐκ τῆς τῶν τοιούτων μονῆς, τοῖς δὲ μή.

Ἐκ μὲν οὖν αἰσθήσεως γίνεται μνήμη, ὥσπερ λέγομεν, ἐκ δὲ μνήμης πολλάκις τοῦ αὐτοῦ γινομένης ἐμπειρία· αἰ γὰρ πολλὰ μνημαὶ τῷ ἀριθμῷ ἐμπειρία μία

ἐστίν. ἐκ δ' ἐμπειρίας ἢ ἐκ παντὸς ἡρεμήσαντος τοῦ καθόλου ἐν τῇ ψυχῇ, τοῦ ἐνὸς παρὰ τὰ πολλά, ὃ ἂν ἐν ἅπασιν ἐν ἐνῇ ἐκείνοις τὸ αὐτό, τέχνης ἀρχὴ καὶ ἐπιστήμης, ἐὰν μὲν περὶ γένεσιν, τέχνης, ἐὰν δὲ περὶ τὸ ὄν, ἐπιστήμης. οὔτε δὴ ἐνυπάρχουσιν ἀφωρισμένοι αἱ ἕξεις, οὔτ' ἀπ' ἄλλων ἕξεων γίνονται γνωστικωτέρων, ἀλλ' ἀπὸ αἰσθήσεως, οἷον ἐν μάχῃ τροπῆς γενομένης ἐνὸς στάντος ἕτερος ἔσται, εἴθ' ἕτερος, ἕως ἐπὶ ἀρχὴν ἦλθεν. ἡ δὲ ψυχὴ ὑπάρχει τοιαύτη οὔσα οἷα δύνασθαι πάσχειν τοῦτο. ὃ δ' ἐλέχθη μὲν πάλαι, οὐ σαφῶς δὲ ἐλέχθη, πάλιν εἴπωμεν. στάντος γὰρ τῶν ἀδιαφόρων ἐνός, πρῶτον μὲν ἐν τῇ ψυχῇ καθόλου (καὶ γὰρ αἰσθάνεται μὲν τὸ καθ' ἕκαστον, ἡ δ' αἰσθησις τοῦ καθόλου [100b] ἐστίν, οἷον ἀνθρώπου, ἀλλ' οὐ Καλλίου ἀνθρώπου). πάλιν ἐν τούτοις ἴσταται, ἕως ἂν τὰ ἀμερῇ στῇ καὶ τὰ καθόλου, οἷον τοιονδὶ ζῶον, ἕως ζῶον, καὶ ἐν τούτῳ ὡσαύτως. δῆλον δὴ ὅτι ἡμῖν τὰ πρῶτα ἐπαγωγῇ γνωρίζειν ἀναγκαῖον· καὶ γὰρ ἡ αἰσθησις οὕτω τὸ καθόλου ἐμποιεῖ.

Ἐπεὶ δὲ τῶν περὶ τὴν διάνοιαν ἕξεων αἷς ἀληθεύομεν αἱ μὲν ἀεὶ ἀληθεῖς εἰσιν, αἱ δὲ ἐπιδέχονται τὸ ψεῦδος, οἷον δόξα καὶ λογισμός, ἀληθὴ δ' ἀεὶ ἐπιστήμη καὶ νοῦς, καὶ οὐδὲν ἐπιστήμης ἀκριβέστερον ἄλλο γένος ἢ νοῦς, αἱ δ' ἀρχαὶ τῶν ἀποδείξεων γνωριμώτεραι, ἐπιστήμη δ' ἅπασα μετὰ λόγου ἐστί, τῶν ἀρχῶν ἐπιστήμη μὲν οὐκ ἂν εἴη, ἐπεὶ δ' οὐδὲν ἀληθέστερον ἐνδέχεται εἶναι ἐπιστήμης ἢ νοῦν, νοῦς ἂν εἴη τῶν ἀρχῶν, ἕκ τε τούτων σκοποῦσι καὶ ὅτι ἀποδείξεως ἀρχὴ οὐκ ἀπόδειξις, ὥστ' οὐδ' ἐπιστήμης ἐπιστήμη. εἰ οὖν μηδὲν ἄλλο παρ' ἐπιστήμην γένος ἔχομεν ἀληθές, νοῦς ἂν εἴη ἐπιστήμης ἀρχή. καὶ ἡ μὲν ἀρχὴ τῆς ἀρχῆς εἴη ἂν, ἡ δὲ πᾶσα ὁμοίως ἔχει πρὸς τὸ πᾶν πρᾶγμα.

## Τοπικοὶ (100a) Topics



## CONTENTS

[Α](#)

[Β](#)

[Γ](#)

[Δ](#)

[Ε](#)

[Ζ](#)

[Η](#)

[Θ](#)

## A

[100a] Ἡ μὲν πρόθεσις τῆς πραγματείας μέθοδον εὐρεῖν ἅφ' ἧς δυνησόμεθα συλλογίζεσθαι περὶ παντὸς τοῦ προτεθέντος προβλήματος ἐξ ἐνδόξων, καὶ αὐτοῖς λόγον ὑπέχοντες μηθὲν ἐροῦμεν ὑπεναντίον. πρῶτον οὖν ῥητέον τί ἐστὶ συλλογισμὸς καὶ τίνες αὐτοῦ διαφοραί, ὅπως ληφθῇ ὁ διαλεκτικὸς συλλογισμός· τοῦτον γὰρ ζητοῦμεν κατὰ τὴν προκειμένην πραγματείαν.

Ἔστι δὲ συλλογισμὸς λόγος ἐν ᾧ τεθέντων τινῶν ἕτερόν τι τῶν κειμένων ἐξ ἀνάγκης συμβαίνει διὰ τῶν κειμένων. ἀπόδειξις μὲν οὖν ἐστίν, ὅταν ἐξ ἀληθῶν καὶ πρώτων ὁ συλλογισμὸς ᾗ, ἢ ἐκ τοιούτων ἃ διὰ τινων πρώτων καὶ ἀληθῶν τῆς περὶ αὐτὰ γνώσεως τὴν ἀρχὴν εἵληφεν, διαλεκτικὸς δὲ συλλογισμὸς ὁ ἐξ ἐνδόξων συλλογιζόμενος. ἔστι [100b] δὲ ἀληθῆ μὲν καὶ πρῶτα τὰ μὴ δι' ἐτέρων ἀλλὰ δι' αὐτῶν ἔχοντα τὴν πίστιν (οὐ δεῖ γὰρ ἐν ταῖς ἐπιστημονικαῖς ἀρχαῖς ἐπιζητεῖσθαι τὸ διὰ τί, ἀλλ' ἐκάστην τῶν ἀρχῶν αὐτὴν καθ' ἑαυτὴν εἶναι πιστήν), ἔνδοξα δὲ τὰ δοκοῦντα πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς σοφοῖς, καὶ τούτοις ἢ πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς μάλιστα γνωρίμοις καὶ ἐνδόξοις. ἐριστικὸς δ' ἐστὶ συλλογισμὸς ὁ ἐκ φαινομένων ἐνδόξων μὴ ὄντων δέ, καὶ ὁ ἐξ ἐνδόξων ἢ φαινομένων ἐνδόξων φαινόμενος· οὐ γὰρ πᾶν τὸ φαινόμενον ἔνδοξον καὶ ἔστιν ἔνδοξον. οὐθὲν γὰρ τῶν λεγομένων ἐνδόξων ἐπιπόλαιον ἔχει παντελῶς τὴν φαντασίαν, καθάπερ περὶ τὰς τῶν ἐριστικῶν λόγων ἀρχὰς συμβέβηκεν ἔχειν· παραχρῆμα γὰρ καὶ ὥς ἐπὶ τὸ πολὺ τοῖς καὶ μικρὰ συνορᾶν δυναμένοις κατάδηλος ἐν αὐτοῖς ἢ τοῦ [101a] ψεύδους ἐστὶ φύσις. ὁ μὲν οὖν πρότερος τῶν ῥηθέντων ἐριστικῶν συλλογισμῶν καὶ συλλογισμὸς λεγέσθω, ὁ δὲ λοιπὸς ἐριστικὸς μὲν συλλογισμός, συλλογισμὸς δ' οὐ, ἐπειδὴ φαίνεται μὲν συλλογίζεσθαι, συλλογίζεται δ' οὐ.

Ἔτι δὲ παρὰ τοὺς εἰρημένους ἅπαντας συλλογισμοὺς οἱ ἐκ τῶν περί τινας

ἐπιστήμας οἰκείων γινόμενοι παραλογισμοί, καθάπερ ἐπὶ τῆς γεωμετρίας καὶ τῶν ταύτη συγγενῶν συμβέβηκεν ἔχειν. ἔοικε γὰρ ὁ τρόπος οὗτος διαφέρειν τῶν εἰρημένων συλλογισμῶν· οὔτε γὰρ ἐξ ἀληθῶν καὶ πρώτων συλλογίζεται ὁ ψευδογραφῶν οὔτ' ἐξ ἐνδόξων. εἰς γὰρ τὸν ὅρον οὐκ ἐμπίπτει· οὔτε γὰρ τὰ πᾶσι δοκοῦντα λαμβάνει οὔτε τὰ τοῖς πλείστοις οὔτε τὰ τοῖς σοφοῖς, καὶ τούτοις οὔτε πᾶσιν οὔτε τοῖς πλείστοις οὔτε τοῖς ἐνδοξοτάτοις, ἀλλ' ἐκ τῶν οἰκείων μὲν τῇ ἐπιστήμῃ λημμάτων οὐκ ἀληθῶν δὲ τὸν συλλογισμὸν ποιεῖται. τῷ γὰρ ἢ τὰ ἡμικύκλια περιγράφειν μὴ ὥς δεῖ ἢ γραμμὰς τινὰς ἄγειν μὴ ὥς ἂν ἀχθείησαν τὸν παραλογισμὸν ποιεῖται.

Εἶδη μὲν οὖν τῶν συλλογισμῶν ὥς τύπῳ περιλαβεῖν ἔστω τὰ εἰρημένα. καθόλου δ' εἰπεῖν περὶ πάντων τῶν εἰρημένων καὶ τῶν μετὰ ταῦτα ῥηθησομένων ἐπὶ τοσοῦτον ἡμῖν διωρίσθω, διότι περὶ οὐδενὸς αὐτῶν τὸν ἀκριβῆ λόγον ἀποδοῦναι προαιρούμεθα, ἀλλ' ὅσον τύπῳ περὶ αὐτῶν βουλόμεθα διελθεῖν, παντελῶς ἱκανὸν ἡγούμενοι κατὰ τὴν προκειμένην μέθοδον τὸ δύνασθαι γνωρίζειν ὅπως οὖν ἕκαστον αὐτῶν.

Ἐπόμενον δ' ἂν εἴη τοῖς εἰρημένοις εἰπεῖν πρὸς πόσα τε καὶ τίνα χρήσιμος ἡ πραγματεία. ἔστι δὲ πρὸς τρία, πρὸς γυμνασίαν, πρὸς τὰς ἐντεύξεις, πρὸς τὰς κατὰ φιλοσοφίαν ἐπιστήμας. ὅτι μὲν οὖν πρὸς γυμνασίαν χρήσιμος, ἐξ αὐτῶν καταφανές ἐστι· μέθοδον γὰρ ἔχοντες ῥᾶον περὶ τοῦ προτεθέντος ἐπιχειρεῖν δυνησόμεθα· πρὸς δὲ τὰς ἐντεύξεις, διότι τὰς τῶν πολλῶν κατηριθμημένοι δόξας οὐκ ἐκ τῶν ἀλλοτρίων ἀλλ' ἐκ τῶν οἰκείων δογμάτων ὁμιλήσομεν πρὸς αὐτούς, μεταβιβάζοντες ὅ τι ἂν μὴ καλῶς φαίνωνται λέγειν ἡμῖν· πρὸς δὲ τὰς κατὰ φιλοσοφίαν ἐπιστήμας, ὅτι δυνάμενοι πρὸς ἀμφοτέρω διαπορῆσαι ῥᾶον ἐν ἐκάστοις κατοψόμεθα τᾷ ἀληθές τε καὶ τὸ ψεῦδος· ἔτι δὲ πρὸς τὰ πρῶτα τῶν περὶ ἐκάστην ἐπιστήμην. ἐκ μὲν γὰρ τῶν οἰκείων τῶν κατὰ τὴν προτεθεῖσαν ἐπιστήμην ἀρχῶν ἀδύνατον εἰπεῖν τι περὶ αὐτῶν, ἐπειδὴ πρῶται αἱ ἀρχαὶ ἀπάντων [101b] εἰσί, διὰ δὲ τῶν περὶ ἕκαστα ἐνδόξων ἀνάγκη περὶ αὐτῶν διελθεῖν. τοῦτο δ' ἴδιον ἢ μάλιστα οἰκεῖον τῆς διαλεκτικῆς ἐστίν· ἐξεταστικὴ γὰρ οὖσα πρὸς τὰς ἀπασῶν τῶν μεθόδων ἀρχὰς ὁδὸν ἔχει.

Ἐξομεν δὲ τελέως τὴν μέθοδον ὅταν ὁμοίως ἔχωμεν ὥσπερ ἐπὶ ῥητορικῆς καὶ ἱατρικῆς καὶ τῶν τοιούτων δυνάμεων· τοῦτο δ' ἐστὶ τὸ ἐκ τῶν ἐνδεχομένων ποιεῖν ἃ προαιρούμεθα. οὔτε γὰρ ὁ ῥητορικὸς ἐκ παντὸς τρόπου πείσει οὔθ' ὁ ἱατρικὸς ὑγιάσει, ἀλλ' ἐὰν τῶν ἐνδεχομένων μηδὲν παραλίπη, ἱκανῶς αὐτὸν ἔχειν τὴν ἐπιστήμην φήσομεν.

Πρῶτον οὖν θεωρητέον ἐκ τίνων ἡ μέθοδος. εἰ δὲ λάβοιμεν πρὸς πόσα καὶ ποῖα καὶ ἐκ τίνων οἱ λόγοι, καὶ πῶς τούτων εὐπορήσομεν, ἔχοιμεν ἂν ἱκανῶς τὸ προκείμενον. ἔστι δ' ἀριθμῶ ἴσα καὶ τὰ αὐτὰ ἐξ ὧν τε οἱ λόγοι καὶ περὶ ὧν οἱ συλλογισμοί. γίνονται μὲν γὰρ οἱ λόγοι ἐκ τῶν προτάσεων· περὶ ὧν δὲ οἱ συλλογισμοί, τὰ προβλήματα ἐστὶ. πᾶσα δὲ πρότασις καὶ πᾶν πρόβλημα ἢ ἴδιον ἢ γένος ἢ συμβεβηκὸς δηλοῖ· καὶ γὰρ τὴν διαφορὰν ὥς οὕσαν γενικὴν ὁμοῦ τῷ γένει τακτέον. ἐπεὶ δὲ τοῦ ἰδίου τὸ μὲν τὸ τί ἦν εἶναι σημαίνει, τὸ δ' οὐ σημαίνει, διηρήσθω τὸ ἴδιον εἰς ἄμφω τὰ προειρημένα μέρη, καὶ καλείσθω τὸ μὲν τὸ τί ἦν εἶναι σημαῖνον ὅρος, τὸ δὲ λοιπὸν κατὰ τὴν κοινὴν περὶ αὐτῶν ἀποδοθεῖσαν ὀνομασίαν προσαγορευέσθω ἴδιον. δῆλον οὖν ἐκ τῶν εἰρημένων ὅτι κατὰ τὴν νῦν διαίρεσιν τέτταρα τὰ πάντα συμβαίνει γίνεσθαι, ἢ ὅρον ἢ ἴδιον ἢ γένος ἢ συμβεβηκός. μηδεὶς δ' ἡμᾶς ὑπολάβῃ λέγειν ὡς ἕκαστον τούτων καθ' αὐτὸ λεγόμενον πρότασις ἢ πρόβλημά ἐστιν, ἀλλ' ὅτι ἀπὸ τούτων καὶ τὰ προβλήματα καὶ αἱ προτάσεις γίνονται. διαφέρει δὲ τὸ πρόβλημα καὶ ἡ πρότασις τῷ τρόπῳ. οὕτω μὲν γὰρ ῥηθέντος, “ἄρά γε τὸ ζῶον πεζὸν δίπουν ὀρισμός ἐστιν ἀνθρώπου;” καὶ “ἄρά γε τὸ ζῶον γένος τοῦ ἀνθρώπου;”, πρότασις γίνεται· ἐὰν δὲ “πότερον τὸ ζῶον πεζὸν δίπουν ὀρισμός ἐστιν ἀνθρώπου ἢ οὐ;”, πρόβλημα γίνεται· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ὥστ' εἰκότως ἴσα τῷ ἀριθμῶ τὰ προβλήματα καὶ αἱ προτάσεις εἰσὶν· ἀπὸ πάσης γὰρ προτάσεως πρόβλημα ποιήσεις μεταβάλλων τῷ τρόπῳ.

Λεκτέον δὲ τί ὅρος, τί ἴδιον, τί γένος, τί συμβεβηκός. ἔστι δ' ὅρος μὲν λόγος ὁ τὸ τί ἦν εἶναι σημαίνων, ἀποδίδεται [102a] δὲ ἢ λόγος ἄντ' ὀνόματος ἢ λόγος ἄντὶ λόγου· δυνατὸν γὰρ καὶ τῶν ὑπὸ λόγου τινὰ σημασινομένων ὀρίσασθαι. ὅσοι δ' ὅπως οὖν ὀνόματι τὴν ἀπόδοσιν ποιοῦνται, δῆλον ὡς οὐκ ἀποδιδόασιν οὗτοι τὸν τοῦ πράγματος ὀρισμὸν, ἐπειδὴ πᾶς ὀρισμὸς λόγος τίς ἐστιν. ὀρικὸν μέντοι καὶ τὸ τοιοῦτον θετέον, οἷον ὅτι <τὸ> καλὸν ἐστὶ τὸ πρέπον. ὁμοίως δὲ καὶ τὸ πότερον ταῦτόν αἴσθησις καὶ ἐπιστήμη ἢ ἕτερον· καὶ γὰρ περὶ τοὺς ὀρισμοὺς πότερον ταῦτόν ἢ ἕτερον ἢ πλείστη γίνεται διατριβή. ἀπλῶς δὲ ὀρικὰ πάντα λεγέσθω τὰ ὑπὸ τὴν αὐτὴν ὄντα μέθοδον τοῖς ὀρισμοῖς. ὅτι δὲ πάντα τὰ νῦν ῥηθέντα τοιαῦτ' ἐστὶ, δῆλον ἐξ αὐτῶν. δυνάμενοι γὰρ ὅτι ταῦτόν καὶ ὅτι ἕτερον διαλέγεσθαι, τῷ αὐτῷ τρόπῳ καὶ πρὸς τοὺς ὀρισμοὺς ἐπιχειρεῖν εὐπορήσομεν· δείξαντες γὰρ ὅτι οὐ ταῦτόν ἐστιν ἀνηρηκότες ἐσόμεθα τὸν ὀρισμὸν. οὐ μὲν ἀντιστρέφει γε τὸ νῦν ῥηθέν· οὐ γὰρ ἱκανὸν πρὸς τὸ κατασκευάσαι τὸν ὀρισμὸν τὸ δεῖξαι ταῦτόν ὄν. πρὸς μέντοι τὸ ἀνασκευάσαι αὐταρκές τὸ δεῖξαι ὅτι οὐ ταῦτόν.

Ἰδιον δ' ἐστὶν ὃ μὴ δηλοῖ μὲν τὸ τί ἦν εἶναι, μόνῳ δ' ὑπάρχει καὶ ἀντικατηγορεῖται τοῦ πράγματος. οἷον ἴδιον ἀνθρώπου τὸ γραμματικῆς εἶναι

δεκτικόν· εἰ γὰρ ἄνθρωπός ἐστι, γραμματικῆς δεκτικός ἐστι, καὶ εἰ γραμματικῆς δεκτικός ἐστιν, ἄνθρωπός ἐστιν. οὐθεὶς γὰρ ἴδιον λέγει τὸ ἐνδεχόμενον ἄλλω ὑπάρχειν, οἷον τὸ καθεύδειν ἄνθρωπῳ, οὐδ' ἂν τύχη κατὰ τινα χρόνον μόνῳ ὑπάρχον. εἰ δ' ἄρα τι καὶ λέγοιτο τῶν τοιούτων ἴδιον, οὐχ ἀπλῶς ἀλλὰ ποτὲ ἢ πρὸς τι ἴδιον ῥηθήσεται· τὸ μὲν γὰρ ἐκ δεξιῶν εἶναι ποτὲ ἴδιόν ἐστι, τὸ δὲ δίπουν πρὸς τι ἴδιον τυγχάνει λεγόμενον, οἷον τῷ ἄνθρωπῳ πρὸς ἵππον καὶ κύνα. ὅτι δὲ τῶν ἐνδεχομένων ἄλλῳ ὑπάρχειν οὐθὲν ἀντικατηγορεῖται, δῆλον· οὐ γὰρ ἀναγκαῖον, εἴ τι καθεύδει, ἄνθρωπον εἶναι.

Γένος δ' ἐστὶ τὸ κατὰ πλειόνων καὶ διαφερόντων τῷ εἶδει ἐν τῷ τί ἐστι κατηγορούμενον. ἐν τῷ τί ἐστι δὲ κατηγορεῖσθαι τὰ τοιαῦτα λεγέσθω ὅσα ἀρμόττει ἀποδοῦναι ἐρωτηθέντα τί ἐστι τὸ προκείμενον· καθάπερ ἐπὶ τοῦ ἀνθρώπου ἀρμόττει, ἐρωτηθέντα τί ἐστιν, εἰπεῖν ὅτι ζῶν. γενικὸν δὲ καὶ τὸ πότερον ἐν τῷ αὐτῷ γένει ἄλλο ἄλλῳ ἢ ἐν ἑτέρῳ· καὶ γὰρ τὸ τοιοῦτον ὑπὸ τὴν αὐτὴν μέθοδον πίπτει τῷ γένει. διαλεχθέντες γὰρ ὅτι τὸ ζῶν γένος τοῦ ἀνθρώπου, ὁμοίως δὲ καὶ τοῦ βοός, διειλεγμένοι ἐσόμεθα ὅτι ἐν τῷ αὐτῷ [102b] γένει· ἐὰν δὲ τοῦ μὲν ἑτέρου δείξωμεν ὅτι γένος ἐστί, τοῦ δὲ ἑτέρου ὅτι οὐκ ἔστι, διειλεγμένοι ἐσόμεθα ὅτι οὐκ ἐν τῷ αὐτῷ γένει ταῦτ' ἐστίν.

Συμβεβηκὸς δὲ ἐστίν ὃ μηδὲν μὲν τούτων ἐστί, μήτε ὅρος μήτε ἴδιον μήτε γένος, ὑπάρχει δὲ τῷ πράγματι, καὶ ὃ ἐνδέχεται ὑπάρχειν ὅτωσὺν ἐνὶ καὶ τῷ αὐτῷ καὶ μὴ ὑπάρχειν· οἷον τὸ καθῆσθαι ἐνδέχεται ὑπάρχειν τινὶ τῷ αὐτῷ καὶ μὴ ὑπάρχειν· ὁμοίως δὲ καὶ τὸ λευκόν· τὸ γὰρ αὐτὸ οὐθὲν κωλύει ὅτε μὲν λευκὸν ὅτε δὲ μὴ λευκὸν εἶναι. ἔστι δὲ τῶν τοῦ συμβεβηκότος ὁρισμῶν ὁ δεύτερος βελτίων· τοῦ μὲν γὰρ πρώτου ῥηθέντος ἀναγκαῖον, εἰ μέλλει τις συνήσειν, προειδέναι τί ἐστίν ὅρος καὶ ἴδιον καὶ γένος· ὁ δὲ δεύτερος αὐτοτελής ἐστι πρὸς τὸ γνωρίζειν τί ποτ' ἐστὶ τὸ λεγόμενον καθ' αὐτό. προσκείμεσαν δὲ τῷ συμβεβηκότι καὶ αἱ πρὸς ἄλληλα συγκρίσεις ὁπωσοῦν ἀπὸ τοῦ συμβεβηκότος λεγόμεναι, οἷον πότερον τὸ καλὸν ἢ τὸ συμφέρον αἰρετώτερον, καὶ πότερον ὁ κατ' ἀρετὴν ἢ ὁ κατ' ἀπόλαυσιν ἡδίων βίος, καὶ εἴ τι ἄλλο παραπλησίως τυγχάνει τούτοις λεγόμενον· ἐπὶ πάντων γὰρ τῶν τοιούτων ποτέρῳ μᾶλλον τὸ κατηγορούμενον συμβέβηκεν ἢ ζήτησις γίνεται. δῆλον δ' ἐξ αὐτῶν ὅτι τὸ συμβεβηκὸς οὐθὲν κωλύει ποτὲ καὶ πρὸς τι ἴδιον γίνεσθαι· οἷον τὸ καθῆσθαι, συμβεβηκὸς ὢν, ὅταν τις μόνος καθῆται, τότε ἴδιον ἔσται, μὴ μόνου δὲ καθημένου πρὸς τοὺς μὴ καθημένους ἴδιον. ὥστε καὶ πρὸς τι καὶ ποτὲ οὐθὲν κωλύει τὸ συμβεβηκὸς ἴδιον γίνεσθαι. ἀπλῶς δ' ἴδιον οὐκ ἔσται.

Μὴ λανθανέτω δ' ἡμᾶς ὅτι τὰ πρὸς τὸ ἴδιον καὶ τὸ γένος καὶ τὸ



συμβεβηκὸς πάντα καὶ πρὸς τοὺς ὁρισμοὺς ἀρμόσει λέγεσθαι. δείξαντες γὰρ ὅτι οὐ μόνω ὑπάρχει τῷ ὑπὸ τὸν ὁρισμόν, ὥσπερ καὶ ἐπὶ τοῦ ἰδίου, ἢ ὅτι οὐ γένος τὸ ἀποδοθὲν ἐν τῷ ὁρισμῷ, ἢ ὅτι οὐχ ὑπάρχει τι τῶν ἐν τῷ λόγῳ ῥηθέντων, ὅπερ καὶ ἐπὶ τοῦ συμβεβηκότητος ἂν ῥηθείη, ἀνηρηκότες ἐσόμεθα τὸν ὁρισμόν· ὥστε κατὰ τὸν ἔμπροσθεν ἀποδοθέντα λόγον ἅπαντ' ἂν εἴη τρόπον τινὰ ὀρικὰ τὰ κατηριθμημένα. ἀλλ' οὐ διὰ τοῦτο μίαν ἐπὶ πάντων καθόλου μέθοδον ζητητέον· οὔτε γὰρ ῥᾶδιον εὑρεῖν τοῦτ' ἐστίν, εἴ θ' εὑρεθείη, παντελῶς ἀσαφὲς καὶ δύσχρηστος ἂν εἴη πρὸς τὴν προκειμένην πραγματείαν. ἰδίας δὲ καθ' ἕκαστον τῶν διορισθέντων γενῶν ἀποδοθείσης μεθόδου ῥᾶον ἐκ τῶν περὶ ἕκαστον [103a] οἰκείων ἢ διέξοδος τοῦ προκειμένου γίνοιτ' ἂν. ὥστε τύπῳ μὲν, καθάπερ εἴρηται πρότερον, διαιρετέον, τῶν δὲ λοιπῶν τὰ μάλισθ' ἐκάστοις οἰκεῖα προσαπτέον, ὀρικά τε καὶ γενικὰ προσαγορεύοντας αὐτά. σχεδὸν δὲ προσῆπται τὰ ῥηθέντα πρὸς ἐκάστοις.

Πρῶτον δὲ πάντων περὶ ταῦτοῦ διοριστέον ποσαχῶς λέγεται. δόξειε δ' ἂν τὸ ταῦτόν ὡς τύπῳ λαβεῖν τριχῇ διαιρεῖσθαι. ἢ γὰρ ἀριθμῷ ἢ εἴδει ἢ γένει τὸ ταῦτόν εἰώθαμεν προσαγορεύειν· ἀριθμῷ μὲν ὧν ὀνόματα πλείω τὸ δὲ πρᾶγμα ἓν, οἷον λώπιον καὶ ἱμάτιον· εἴδει δὲ ὅσα πλείω ὄντα ἀδιάφορα κατὰ τὸ εἶδός ἐστι, καθάπερ ἄνθρωπος ἀνθρώπῳ καὶ ἵππος ἵππῳ· τὰ γὰρ τοιαῦτα τῷ εἴδει λέγεται ταῦτ' ὅσα ὑπὸ ταῦτόν ἐἶδος ἐστίν· ὁμοίως δὲ καὶ γένει ταῦτ' ὅσα ὑπὸ ταῦτόν γένος ἐστίν, οἷον ἵππος ἀνθρώπῳ. δόξειε δ' ἂν τὸ ἀπὸ τῆς αὐτῆς κρήνης ὕδωρ ταῦτόν λεγόμενον ἔχειν τινὰ διαφορὰν παρὰ τοὺς εἰρημένους τρόπους. οὐ μὴν ἀλλὰ καὶ τὸ τοιοῦτόν γε ἐν τῷ αὐτῷ τετάχθω τοῖς καθ' ἓν εἶδος ὅπως οὖν λεγομένοις· ἅπαντα γὰρ τὰ τοιαῦτα συγγενῇ καὶ παραπλήσια ἀλλήλοις ἔοικεν εἶναι. πᾶν μὲν γὰρ ὕδωρ παντὶ ταῦτόν τῷ εἴδει λέγεται διὰ τὸ ἔχειν τινὰ ὁμοιότητα· τὸ δ' ἀπὸ τῆς αὐτῆς κρήνης ὕδωρ οὐδενὶ ἄλλῳ διαφέρει ἀλλ' ἢ τῷ σφοδροτέραν εἶναι τὴν ὁμοιότητα, διὸ οὐ χωρίζομεν αὐτὸ τῶν καθ' ἓν εἶδος ὅπως οὖν λεγομένων. μάλιστα δ' ὁμολογουμένως τὸ ἐν ἀριθμῷ ταῦτόν παρὰ πᾶσι δοκεῖ λέγεσθαι. εἴωθε δὲ καὶ τοῦτο ἀποδίδοσθαι πλεοναχῶς· κυριώτατα μὲν καὶ πρώτως ὅταν ὀνόματι ἢ ὄρω τὸ ταῦτόν ἀποδοθῇ, καθάπερ ἱμάτιον λωπίῳ καὶ ζῶον πεζὸν δίπουν ἀνθρώπῳ· δεύτερον δ' ὅταν τῷ ἰδίῳ, καθάπερ τὸ ἐπιστήμης δεκτικὸν ἀνθρώπῳ καὶ τὸ τῇ φύσει ἄνω φερόμενον πυρί· τρίτον δ' ὅταν ἀπὸ τοῦ συμβεβηκότητος, οἷον τὸ καθήμενον ἢ τὸ μουσικὸν Σωκράτει· πάντα γὰρ ταῦτα τὸ ἐν ἀριθμῷ βούλεται σημαίνειν. ὅτι δ' ἀληθὲς τὸ νῦν ῥηθέν ἐστίν, ἐκ τῶν μεταβαλλόντων τὰς προσηγορίας μάλιστ' ἂν τις καταμάθοι· πολλάκις γάρ, ἐπιτάσσοντες ὀνόματι καλέσαι τινὰ τῶν καθημένων, μεταβάλλομεν ὅταν τύχη μὴ συνιῆς ὧ τὴν πρόσταξιν ποιούμεθα, ὡς ἀπὸ τοῦ συμβεβηκότητος αὐτοῦ μᾶλλον συνήσοντος, καὶ κελεύομεν τὸν καθήμενον ἢ διαλεγόμενον καλέσαι

πρὸς ἡμᾶς, δῆλον ὡς ταῦτόν ὑπολαμβάνοντες κατὰ τε τοῦνομα καὶ κατὰ τὸ συμβεβηκὸς σημαίνειν.

[103b] Τὸ μὲν οὖν ταῦτόν, καθάπερ εἴρηται, τριχῇ διηρήσθω. ὅτι δ' ἐκ τῶν πρότερον εἰρημένων οἱ λόγοι καὶ διὰ τούτων καὶ πρὸς ταῦτα, μία μὲν πίστις ἡ διὰ τῆς ἐπαγωγῆς· εἰ γάρ τις ἐπισκοποῖ ἐκάστην τῶν προτάσεων καὶ τῶν προβλημάτων, φαίνοιτ' ἂν ἢ ἀπὸ τοῦ ὅρου ἢ ἀπὸ τοῦ ἰδίου ἢ ἀπὸ τοῦ γένους ἢ ἀπὸ τοῦ συμβεβηκὸς γεγεννημένη. ἄλλη δὲ πίστις ἡ διὰ συλλογισμοῦ. ἀνάγκη γὰρ πᾶν τὸ περί τινος κατηγορούμενον ἦτοι ἀντικατηγορεῖσθαι τοῦ πράγματος ἢ μή. καὶ εἰ μὲν ἀντικατηγορεῖται, ὅρος ἢ ἴδιον ἂν εἴη (εἰ μὲν γὰρ σημαίνει τὸ τί ἦν εἶναι, ὅρος, εἰ δὲ μὴ σημαίνει, ἴδιον· τοῦτο γὰρ ἦν ἴδιον, τὸ ἀντικατηγορούμενον μὲν μὴ σημαῖνον δὲ τὸ τί ἦν εἶναι). εἰ δὲ μὴ ἀντικατηγορεῖται τοῦ πράγματος, ἦτοι τῶν ἐν τῷ ὀρισμῷ τοῦ ὑποκειμένου λεγομένων ἐστὶν ἢ οὐ. καὶ εἰ μὲν τῶν ἐν τῷ ὀρισμῷ λεγομένων, γένος ἢ διαφορὰ ἂν εἴη, ἐπειδὴ ὁ ὀρισμὸς ἐκ γένους καὶ διαφορῶν ἐστίν· εἰ δὲ μὴ τῶν ἐν τῷ ὀρισμῷ λεγομένων ἐστί, δῆλον ὅτι συμβεβηκὸς ἂν εἴη· τὸ γὰρ συμβεβηκὸς ἐλέγετο ὃ μήτε ὅρος μήτε ἴδιον μήτε γένος ἐστίν, ὑπάρχει δὲ τῷ πράγματι.

Μετὰ τοίνυν ταῦτα δεῖ διορίσασθαι τὰ γένη τῶν κατηγοριῶν, ἐν οἷς ὑπάρχουσιν αἱ ῥηθεῖσαι τέτταρες. ἔστι δὲ ταῦτα τὸν ἀριθμὸν δέκα, τί ἐστι, ποσόν, ποιόν, πρὸς τι, ποῦ, ποτέ, κεῖσθαι, ἔχειν, ποιεῖν, πάσχειν. ἀεὶ γὰρ τὸ συμβεβηκὸς καὶ τὸ γένος καὶ τὸ ἴδιον καὶ ὁ ὀρισμὸς ἐν μιᾷ τούτων τῶν κατηγοριῶν ἔσται· πᾶσαι γὰρ αἱ διὰ τούτων προτάσεις ἢ τί ἐστίν ἢ ποσόν ἢ ποιόν ἢ τῶν ἄλλων τινὰ κατηγοριῶν σημαίνουσιν. δῆλον δ' ἐξ αὐτῶν ὅτι ὁ τὸ τί ἐστι σημαίνων ὅτε μὲν οὐσίαν σημαίνει, ὅτε δὲ ποσόν, ὅτε δὲ ποιόν, ὅτε δὲ τῶν ἄλλων τινὰ κατηγοριῶν. ὅταν μὲν γὰρ ἐκκειμένου ἀνθρώπου φῇ τὸ ἐκκείμενον ἄνθρωπον εἶναι ἢ ζῶον, τί ἐστι λέγει καὶ οὐσίαν σημαίνει· ὅταν δὲ χρώματος λευκοῦ ἐκκειμένου φῇ τὸ ἐκκείμενον λευκὸν εἶναι ἢ χρῶμα, τί ἐστι λέγει καὶ ποιόν σημαίνει. ὁμοίως δὲ καὶ ἐὰν πηχυαίου μεγέθους ἐκκειμένου φῇ τὸ ἐκκείμενον πηχυαῖον εἶναι μέγεθος, τί ἐστι λέγει καὶ ποσόν σημαίνει. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ἕκαστον γὰρ τῶν τοιούτων, ἐὰν τε αὐτὸ περὶ αὐτοῦ λέγεται ἐὰν τε τὸ γένος περὶ τούτου, τί ἐστι σημαίνει· ὅταν δὲ περὶ ἑτέρου, οὐ τί ἐστι σημαίνει ἀλλὰ ποσόν ἢ ποιόν ἢ τινὰ τῶν ἄλλων κατηγοριῶν. ὥστε περὶ ὧν μὲν οἱ λόγοι καὶ ἐξ ὧν, [104a] ταῦτα καὶ τοσαῦτά ἐστι· πῶς δὲ ληψόμεθα καὶ δι' ὧν εὐπορήσομεν, μετὰ ταῦτα λεκτέον.

Πρῶτον τοίνυν διορίσθω τί ἐστι πρότασις διαλεκτικὴ καὶ τί πρόβλημα διαλεκτικόν. οὐ γὰρ πᾶσαν πρότασιν οὐδὲ πᾶν πρόβλημα διαλεκτικὸν θετέον·

οὐδεὶς γὰρ ἂν προτείνειε νοῦν ἔχων τὸ μηδενὶ δοκοῦν οὐδὲ προβάλοι τὸ πᾶσι φανερόν ἢ τοῖς πλείστοις· τὰ μὲν γὰρ οὐκ ἔχει ἀπορίαν, τὰ δ' οὐδεὶς ἂν θεῖη. ἔστι δὲ πρότασις διαλεκτικὴ ἐρώτησις ἔνδοξος ἢ πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς σοφοῖς, καὶ τούτοις ἢ πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς μάλιστα γνωρίμοις, μὴ παράδοξος· θεῖη γὰρ ἂν τις τὸ δοκοῦν τοῖς σοφοῖς, ἔαν μὴ ἐναντίον ταῖς τῶν πολλῶν δόξαις ᾗ. εἰσὶ δὲ προτάσεις διαλεκτικαὶ καὶ τὰ τοῖς ἐνδόξοις ὅμοια, καὶ τάναντία τοῖς δοκοῦσιν ἐνδόξοις εἶναι, κατ' ἀντίφασιν προτεινόμενα, καὶ ὅσαι δόξαι κατὰ τέχνας εἰσὶ τὰς εὐρημένας. εἰ γὰρ ἔνδοξον τὸ τὴν αὐτὴν εἶναι τῶν ἐναντίων ἐπιστήμην, καὶ τὸ αἰσθῆσιν τὴν αὐτὴν εἶναι τῶν ἐναντίων ἔνδοξον ἂν φανείη· καὶ εἰ μίαν ἀριθμῶ γραμματικὴν εἶναι, καὶ ἀύλητικὴν μίαν, εἰ δὲ πλείους γραμματικάς, καὶ ἀύλητικάς πλείους· πάντα γὰρ ὅμοια καὶ συγγενῇ ταῦτ' ἔοικεν εἶναι. ὁμοίως δὲ καὶ τὰ τοῖς ἐνδόξοις ἐναντία, κατ' ἀντίφασιν προτεινόμενα, ἔνδοξα φανεῖται· εἰ γὰρ ἔνδοξον ὅτι δεῖ τοὺς φίλους εὖ ποιεῖν, καὶ ὅτι οὐ δεῖ κακῶς ποιεῖν ἔνδοξον. ἔστι δ' ἐναντίον μὲν ὅτι δεῖ κακῶς ποιεῖν τοὺς φίλους, κατ' ἀντίφασιν δὲ ὅτι οὐ δεῖ κακῶς ποιεῖν. ὁμοίως δὲ καὶ εἰ δεῖ τοὺς φίλους εὖ ποιεῖν, τοὺς ἐχθροὺς οὐ δεῖ. ἔστι δὲ καὶ τοῦτο κατ' ἀντίφασιν τῶν ἐναντίων· τὸ γὰρ ἐναντίον ἐστὶν ὅτι δεῖ τοὺς ἐχθροὺς εὖ ποιεῖν. ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων. ἔνδοξον δὲ ἐν παραβολῇ φανεῖται καὶ τὸ ἐναντίον περὶ τοῦ ἐναντίου· οἷον εἰ τοὺς φίλους δεῖ εὖ ποιεῖν, καὶ τοὺς ἐχθροὺς δεῖ κακῶς. φανείη δ' ἂν καὶ ἐναντίον τὸ τοὺς φίλους εὖ ποιεῖν τῷ τοὺς ἐχθροὺς κακῶς· πότερον δὲ καὶ κατ' ἀλήθειαν οὕτως ἔχει ἢ οὐ, ἐν τοῖς ὑπὲρ τῶν ἐναντίων λεγομένοις ῥηθήσεται. δῆλον δ' ὅτι καὶ ὅσαι δόξαι κατὰ τέχνας εἰσὶ, διαλεκτικαὶ προτάσεις εἰσὶ· θεῖη γὰρ ἂν τις τὰ δοκοῦντα τοῖς ὑπὲρ τούτων ἐπεσκεμμένοις, οἷον περὶ μὲν τῶν ἐν ἱατρικῇ ὡς ὁ ἱατρός, περὶ δὲ τῶν ἐν γεωμετρίᾳ ὡς ὁ γεωμετρικός· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

[104b] Πρόβλημα δ' ἐστὶ διαλεκτικὸν θεώρημα τὸ συντεῖνον ἢ πρὸς αἴρεσιν καὶ φυγὴν ἢ πρὸς ἀλήθειαν καὶ γνῶσιν, ἢ αὐτὸ ἢ ὡς συνεργὸν πρὸς τι ἕτερον τῶν τοιούτων, περὶ οὗ ἢ οὐδετέρως δοξάζουσιν ἢ ἐναντίως [οἱ πολλοὶ τοῖς σοφοῖς ἢ] οἱ σοφοὶ τοῖς πολλοῖς ἢ ἑκάτεροι αὐτοὶ ἑαυτοῖς. ἔνια μὲν γὰρ τῶν προβλημάτων χρήσιμον εἶδέναι πρὸς τὸ ἐλέσθαι ἢ φυγεῖν, οἷον πότερον ἢ ἡδονὴ αἰρετὸν ἢ οὐ· ἔνια δὲ πρὸς τὸ εἶδέναι μόνον, οἷον πότερον ὁ κόσμος αἰδῖος ἢ οὐ. ἔνια δὲ αὐτὰ μὲν καθ' αὐτὰ πρὸς οὐδέτερον τούτων, συνεργὰ δὲ ἐστὶ πρὸς τινα τῶν τοιούτων· πολλὰ γὰρ αὐτὰ μὲν καθ' αὐτὰ οὐ βουλόμεθα γνωρίζειν, ἑτέρων δ' ἕνεκα, ὅπως διὰ τούτων ἄλλο τι γνωρίσωμεν. ἔστι δὲ προβλήματα καὶ ὧν ἐναντίοι εἰσὶ συλλογισμοὶ (ἀπορίαν γὰρ ἔχει πότερον οὕτως ἔχει ἢ οὐχ οὕτως, διὰ τὸ περὶ ἀμφοτέρων εἶναι λόγους πιθανούς), καὶ περὶ ὧν λόγον μὴ ἔχομεν, ὄντων μεγάλων, χαλεπὸν οἰόμενοι εἶναι τὸ διὰ τί

ἀποδοῦναι, οἷον πότερον ὁ κόσμος αἰδῖος ἢ οὐ· καὶ γὰρ τὰ τοιαῦτα ζητήσκειν ἄν τις.

Τὰ μὲν οὖν προβλήματα καὶ αἱ προτάσεις καθάπερ εἴρηται διωρίσθω. θέσις δέ ἐστιν ὑπόληψις παράδοξος τῶν γνωρίμων τινὸς κατὰ φιλοσοφίαν, οἷον ὅτι οὐκ ἔστιν ἀντιλέγειν, καθάπερ ἔφη Ἀντισθένης, ἢ ὅτι πάντα κινεῖται, καθ' Ἡράκλειτον, ἢ ὅτι ἓν τὸ ὄν, καθάπερ Μέλισσός φησιν (τὸ γὰρ τοῦ τυχόντος ἐναντία ταῖς δόξαις ἀποφηνάμενου φροντίζειν εὐηθες)· ἢ περὶ ὧν λόγον ἔχομεν ἐναντίον ταῖς δόξαις, οἷον ὅτι οὐ πᾶν τὸ ὄν ἦτοι γενόμενόν ἐστιν ἢ αἰδῖον, καθάπερ οἱ σοφισταὶ φασιν· μουσικὸν γὰρ ὄντα γραμματικὸν εἶναι οὔτε γενόμενον οὔτε αἰδῖον ὄντα· τοῦτο γάρ, εἰ καὶ τινι μὴ δοκεῖ, δόξειεν ἄν διὰ τὸ λόγον ἔχειν.

Ἔστι μὲν οὖν καὶ ἡ θέσις πρόβλημα· οὐ πᾶν δὲ πρόβλημα θέσις, ἐπειδὴ ἓνια τῶν προβλημάτων τοιαῦτ' ἐστὶ περὶ ὧν οὐδετέρως δοξάζομεν. ὅτι δέ ἐστι καὶ ἡ θέσις πρόβλημα, δῆλον· ἀνάγκη γὰρ ἐκ τῶν εἰρημένων ἢ τοὺς πολλοὺς τοῖς σοφοῖς περὶ τὴν θέσιν ἀμφισβητεῖν ἢ ὁποτέρουσοῦν ἑαυτοῖς, ἐπειδὴ ὑπόληψις τις παράδοξος ἢ θέσις ἐστίν. σχεδὸν δὲ νῦν πάντα τὰ διαλεκτικὰ προβλήματα θέσεις καλοῦνται. διαφερέτω δὲ μηδὲν ὁπωσοῦν λεγόμενον· οὐ γὰρ ὀνοματοποιῆσαι βουλόμενοι διείλομεν οὕτως αὐτά, ἀλλ' ἵνα [105a] μὴ λανθάνωσιν ἡμᾶς τίνες αὐτῶν τυγχάνουσιν οὔσαι διαφοραί.

Οὐ δεῖ δὲ πᾶν πρόβλημα οὐδὲ πᾶσαν θέσιν ἐπισκοπεῖν, ἀλλ' ἣν ἀπορήσειεν ἄν τις τῶν λόγου δεομένων καὶ μὴ κολάσεως ἢ αἰσθήσεως· οἱ μὲν γὰρ ἀποροῦντες “πότερον δεῖ τοὺς θεοὺς τιμᾶν καὶ τοὺς γονεῖς ἀγαπᾶν ἢ οὐ” κολάσεως δέονται, οἱ δὲ “πότερον ἢ χιῶν λευκὴ ἢ οὐ” αἰσθήσεως. οὐδὲ δὴ ὧν σύνεγγυς ἢ ἀπόδειξις, οὐδ' ὧν λίαν πόρρω· τὰ μὲν γὰρ οὐκ ἔχει ἀπορίαν, τὰ δὲ πλείω ἢ κατὰ γυμναστικήν.

Διωρισμένων δὲ τούτων χρὴ διελέσθαι πόσα τῶν λόγων εἶδη τῶν διαλεκτικῶν. ἔστι δὲ τὸ μὲν ἐπαγωγή, τὸ δὲ συλλογισμός, καὶ συλλογισμὸς μὲν τί ἐστιν, εἴρηται πρότερον. ἐπαγωγή δὲ ἡ ἀπὸ τῶν καθ' ἕκαστα ἐπὶ τὸ καθόλου ἔφοδος· οἷον εἰ ἔστι κυβερνήτης ὁ ἐπιστάμενος κράτιστος, καὶ ἡνίοχος, καὶ ὅλως ἐστὶν ὁ ἐπιστάμενος περὶ ἕκαστον ἄριστος. ἔστι δ' ἡ μὲν ἐπαγωγή πιθανώτερον καὶ σαφέστερον καὶ κατὰ τὴν αἴσθησιν γνωριμώτερον καὶ τοῖς πολλοῖς κοινόν, ὁ δὲ συλλογισμὸς βιαστικώτερον καὶ πρὸς τοὺς ἀντιλογικοὺς ἐνεργέστερον.

Τὰ μὲν οὖν γένη περὶ ὧν τε οἱ λόγοι καὶ ἐξ ὧν καθάπερ ἔμπροσθεν

εἴρηται διωρίσθω. τὰ δ' ὄργανα δι' ὧν εὐπορήσομεν τῶν συλλογισμῶν ἐστὶ τέτταρα, ἓν μὲν τὸ προτάσεις λαβεῖν, δεύτερον δὲ τὸ ποσαχῶς ἕκαστον λέγεται δύνασθαι διελεῖν, τρίτον <δὲ> τὸ τὰς διαφορὰς εὐρεῖν, τέταρτον δὲ ἡ τοῦ ὁμοίου σκέψις. ἔστι δὲ τρόπον τινὰ καὶ τὰ τρία τούτων προτάσεις· ἔστι γὰρ καθ' ἕκαστον αὐτῶν ποιῆσαι πρότασιν, οἷον ὅτι αἰρετόν ἐστι τὸ καλὸν ἢ τὸ ἡδὺ ἢ τὸ συμφέρον, καὶ ὅτι διαφέρει αἴσθησις ἐπιστήμης τῷ τὴν μὲν ἀποβαλόντα δυνατόν εἶναι πάλιν λαβεῖν, τὴν δ' ἀδύνατον, καὶ ὅτι ὁμοίως ἔχει τὸ ὑγιεινὸν πρὸς ὑγίειαν καὶ τὸ εὐεκτικὸν πρὸς εὐεξίαν. ἔστι δ' ἡ μὲν πρώτη πρότασις ἀπὸ τοῦ πολλαχῶς λεγομένου, ἡ δὲ δευτέρα ἀπὸ τῶν διαφορῶν, ἡ δὲ τρίτη ἀπὸ τῶν ὁμοίων.

Τὰς μὲν οὖν προτάσεις ἐκλεκτέον ὁσαχῶς διωρίσθη περὶ προτάσεως, ἡ τὰς πάντων δόξας προχειριζόμενον ἢ τὰς τῶν πλείστων ἢ τὰς τῶν σοφῶν, καὶ τούτων ἢ πάντων ἢ τῶν πλείστων ἢ τῶν γνωριμωτάτων, ἢ τὰς <μὴ> ἐναντίας ταῖς [105b] φαινομέναις, καὶ ὅσαι δόξαι κατὰ τέχνας εἰσίν. δεῖ δὲ προτείνειν καὶ τὰς ἐναντίας ταῖς φαινομέναις ἐνδόξοις κατ' ἀντίφασιν, καθάπερ εἴρηται πρότερον. χρήσιμον δὲ καὶ τὸ ποιεῖν αὐτάς ἐν τῷ ἐκλέγειν μὴ μόνον τὰς οὔσας ἐνδόξους ἀλλὰ καὶ τὰς ὁμοίας ταύταις, οἷον ὅτι τῶν ἐναντίων ἡ αὐτὴ αἴσθησις (καὶ γὰρ ἡ ἐπιστήμη), καὶ ὅτι ὁρῶμεν εἰσδεχόμενοί τι, οὐκ ἐκπέμποντες· καὶ γὰρ ἐπὶ τῶν ἄλλων αἰσθήσεων οὕτως· ἀκούομέν τε γὰρ εἰσδεχόμενοί τι, οὐκ ἐκπέμποντες, καὶ γευόμεθα ὡσαύτως· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ἔτι ὅσα ἐπὶ πάντων ἢ τῶν πλείστων φαίνεται, ληπτέον ὡς ἀρχὴν καὶ δοκοῦσαν θέσιν· τιθέασι γὰρ οἱ μὴ συνορῶντες ἐπὶ τίνος οὐχ οὕτως. ἐκλέγειν δὲ χρὴ καὶ ἐκ τῶν γεγραμμένων λόγων, τὰς δὲ διαγραφὰς ποιεῖσθαι περὶ ἐκάστου γένους ὑποτιθέντας χωρίς, οἷον περὶ ἀγαθοῦ ἢ περὶ ζώου, καὶ περὶ ἀγαθοῦ παντός, ἀρξάμενον ἀπὸ τοῦ τί ἐστίν. παρασημαίνεσθαι δὲ καὶ τὰς ἐκάστων δόξας, οἷον ὅτι Ἐμπεδοκλῆς τέτταρα ἔφησε τῶν σωμάτων στοιχεῖα εἶναι· θεῖη γὰρ ἂν τις τὸ ὑπὸ τινος εἰρημένον ἐνδόξου.

Ἔστι δ' ὡς τύπῳ περιλαβεῖν τῶν προτάσεων καὶ τῶν προβλημάτων μέρη τρία· αἱ μὲν γὰρ ἠθικαὶ προτάσεις εἰσίν, αἱ δὲ φυσικαί, αἱ δὲ λογικαί. ἠθικαὶ μὲν οὖν αἱ τοιαῦται, οἷον πότερον δεῖ τοῖς γονεῦσι μᾶλλον ἢ τοῖς νόμοις πειθαρχεῖν, ἐὰν διαφωνῶσιν· λογικαὶ δὲ οἷον πότερον τῶν ἐναντίων ἡ αὐτὴ ἐπιστήμη ἢ οὐ· φυσικαὶ δὲ οἷον πότερον ὁ κόσμος αἰδῖος ἢ οὐ. ὁμοίως δὲ καὶ τὰ προβλήματα. ποῖαι δ' ἕκασται τῶν προειρημένων, ὁρισμῶ μὲν οὐκ εὐπετέες ἀποδοῦναι περὶ αὐτῶν· τῇ δὲ διὰ τῆς ἐπαγωγῆς συνηθεία πειρατέον γνωρίζειν ἐκάστην αὐτῶν, κατὰ τὰ προειρημένα παραδείγματα ἐπισκοποῦντα.

Πρὸς μὲν οὖν φιλοσοφίαν κατ' ἀλήθειαν περὶ αὐτῶν πραγματευτέον,

διαλεκτικῶς δὲ πρὸς δόξαν. ληπτέον δ' ὅτι μάλιστα καθόλου πάσας τὰς προτάσεις, καὶ τὴν μίαν πολλὰς ποιητέον, οἷον ὅτι τῶν ἀντικειμένων ἡ αὐτὴ ἐπιστήμη, εἴθ' ὅτι τῶν ἐναντίων καὶ ὅτι τῶν πρὸς τι. τὸν αὐτὸν δὲ τρόπον καὶ ταύτας πάλιν διαιρετέον, ἕως ἂν ἐνδέχεται διαιρεῖν, οἷον ὅτι ἀγαθοῦ καὶ κακοῦ, καὶ λευκοῦ καὶ μέλανος, καὶ ψυχροῦ καὶ θερμοῦ. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

[106a] Περὶ μὲν οὖν προτάσεως ἱκανὰ τὰ προειρημένα. τὸ δὲ ποσαχῶς, πραγματευτέον μὴ μόνον ὅσα λέγεται καθ' ἕτερον τρόπον, ἀλλὰ καὶ τοὺς λόγους αὐτῶν πειρατέον ἀποδιδόναι, οἷον μὴ μόνον ὅτι ἀγαθὸν καθ' ἕτερον μὲν τρόπον λέγεται δικαιοσύνη καὶ ἀνδρεία, εὐεκτικὸν δὲ καὶ ὑγιεινὸν καθ' ἕτερον, ἀλλ' ὅτι καὶ τὰ μὲν τῷ αὐτῷ ποιά τινα εἶναι, τὰ δὲ τῷ ποιητικά τινος καὶ οὐ τῷ αὐτῷ ποιά τινα εἶναι. ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων.

Πότερον δὲ πολλαχῶς ἢ μοναχῶς τῷ εἶδει λέγεται, διὰ τῶνδε θεωρητέον. πρῶτον μὲν ἐπὶ τοῦ ἐναντίου σκοπεῖν εἰ πολλαχῶς λέγεται, ἐάν τε τῷ εἶδει ἐάν τε τῷ ὀνόματι διαφωνῇ. ἕνια γὰρ εὐθύς καὶ τοῖς ὀνόμασιν ἕτερά ἐστιν· οἷον τῷ ὀξεῖ ἐν φωνῇ μὲν ἐναντίον τὸ βαρὺ, ἐν ὄγκῳ δὲ τὸ ἀμβλύ. δῆλον οὖν ὅτι τὸ ἐναντίον τῷ ὀξεῖ πολλαχῶς λέγεται. εἰ δὲ τοῦτο, καὶ τὸ ὀξύ· καθ' ἑκάτερον γὰρ ἐκείνων ἕτερον ἔσται τὸ ἐναντίον. οὐ γὰρ τὸ αὐτὸ ὀξύ τῷ ἀμβλεῖ καὶ τῷ βαρεῖ ἔσται ἐναντίον· ἐκατέρῳ δὲ τὸ ὀξύ ἐναντίον. πάλιν τῷ βαρεῖ ἐν φωνῇ μὲν τὸ ὀξύ ἐναντίον, ἐν ὄγκῳ δὲ τὸ κοῦφον· ὥστε πολλαχῶς τὸ βαρὺ λέγεται, ἐπειδὴ καὶ τὸ ἐναντίον. ὁμοίως δὲ καὶ τῷ καλῷ τῷ μὲν ἐπὶ τοῦ ζώου τὸ αἰσχρόν, τῷ δ' ἐπὶ τῆς οἰκίας τὸ μοχθηρόν, ὥστε ὁμώνυμον τὸ καλόν.

Ἐπ' ἐνίων δὲ τοῖς μὲν ὀνόμασιν οὐδαμῶς διαφωνεῖ, τῷ δ' εἶδει κατάδηλος ἐν αὐτοῖς εὐθέως ἡ διαφορὰ ἐστίν, οἷον ἐπὶ τοῦ λευκοῦ καὶ μέλανος. φωνὴ γὰρ λευκὴ καὶ μέλαινα λέγεται, ὁμοίως δὲ καὶ χρῶμα. τοῖς μὲν οὖν ὀνόμασιν οὐδὲν διαφωνεῖ· τῷ δ' εἶδει κατάδηλος ἐν αὐτοῖς εὐθέως ἡ διαφορὰ· οὐ γὰρ ὁμοίως τό τε χρῶμα λευκὸν λέγεται καὶ ἡ φωνή. δῆλον δὲ τοῦτο καὶ διὰ τῆς αἰσθήσεως· τῶν γὰρ αὐτῶν τῷ εἶδει ἡ αὐτὴ αἰσθησις· τὸ δὲ λευκὸν τὸ ἐπὶ τῆς φωνῆς καὶ τοῦ χρώματος οὐ τῇ αὐτῇ αἰσθήσει κρίνομεν, ἀλλὰ τὸ μὲν ὄψει τὸ δ' ἀκοῇ. ὁμοίως δὲ καὶ τὸ ὀξύ καὶ τὸ ἀμβλὺ ἐν χυμοῖς καὶ ἐν ὄγκοις, ἀλλὰ τὸ μὲν ἀφῇ, τὸ δὲ γεύσει. οὐδὲ γὰρ ταῦτα διαφωνεῖ τοῖς ὀνόμασιν, οὗτ' ἐπ' αὐτῶν οὗτ' ἐπὶ τῶν ἐναντίων· ἀμβλὺ γὰρ καὶ τὸ ἐναντίον ἐκατέρῳ.

Ἔτι εἰ τῷ μὲν ἔστι τι ἐναντίον τῷ δ' ἀπλῶς μηδέν· οἷον τῇ μὲν ἀπὸ τοῦ

πίνειν ἡδονῇ ἢ ἀπὸ τοῦ διψῆν λύπη ἐναντίον, τῇ δ' ἀπὸ τοῦ θεωρεῖν ὅτι ἡ διάμετρος τῇ πλευρᾷ [106b] ἀσύμμετρος οὐδέν, ὥστε πλεοναχῶς ἡ ἡδονὴ λέγεται. καὶ τῷ μὲν κατὰ τὴν διάνοιαν φιλεῖν τὸ μισεῖν ἐναντίον, τῷ δὲ κατὰ τὴν σωματικὴν ἐνέργειαν οὐδέν· δῆλον οὖν ὅτι τὸ φιλεῖν ὁμώνυμον. ἔτι ἐπὶ τῶν ἀνὰ μέσον, εἰ τῶν μὲν ἔστι τι ἀνὰ μέσον τῶν δὲ μηδέν, ἢ εἰ ἀμφοῖν μὲν ἔστι <τι>, μὴ ταύτὸν δέ· οἷον λευκοῦ καὶ μέλανος ἐν χρώμασι μὲν τὸ φαιόν, ἐν φωνῇ δ' οὐδέν, ἢ εἰ ἄρα, τὸ σομφόν, καθάπερ τινὲς φασὶ σομφὴν φωνὴν ἀνὰ μέσον εἶναι· ὥσθ' ὁμώνυμον τὸ λευκόν, ὁμοίως δὲ καὶ τὸ μέλαν. ἔτι εἰ τῶν μὲν πλείω τὰ ἀνὰ μέσον, τῶν δὲ ἕν, καθάπερ ἐπὶ τοῦ λευκοῦ καὶ μέλανος· ἐπὶ μὲν γὰρ τῶν χρωμάτων πολλὰ τὰ ἀνὰ μέσον, ἐπὶ δὲ τῆς φωνῆς ἕν, τὸ σομφόν.

Πάλιν ἐπὶ τοῦ κατ' ἀντίφασιν ἀντικειμένου σκοπεῖν εἰ πλεοναχῶς λέγεται· εἰ γὰρ τοῦτο πλεοναχῶς λέγεται, καὶ τὸ τούτῳ ἀντικείμενον πλεοναχῶς ῥηθήσεται. οἷον τὸ μὴ βλέπειν πλεοναχῶς λέγεται, ἐν μὲν τὸ μὴ ἔχειν ὄψιν, ἐν δὲ τὸ μὴ ἐνεργεῖν τῇ ὄψει· εἰ δὲ τοῦτο πλεοναχῶς, ἀναγκαῖον καὶ τὸ βλέπειν πλεοναχῶς λέγεσθαι· ἐκατέρῳ γὰρ τῷ μὴ βλέπειν ἀντικείμεται τι, οἷον τῷ μὲν μὴ ἔχειν ὄψιν τὸ ἔχειν, τῷ δὲ μὴ ἐνεργεῖν τῇ ὄψει τὸ ἐνεργεῖν.

Ἔτι ἐπὶ τῶν κατὰ στέρησιν καὶ ἔξιν λεγομένων ἐπισκοπεῖν· εἰ γὰρ θάτερον πλεοναχῶς λέγεται, καὶ τὸ λοιπόν. οἷον εἰ τὸ αἰσθάνεσθαι πλεοναχῶς λέγεται, κατὰ τε τὴν ψυχὴν καὶ τὸ σῶμα, καὶ τὸ ἀναίσθητον εἶναι πλεοναχῶς ῥηθήσεται, κατὰ τε τὴν ψυχὴν καὶ τὸ σῶμα. ὅτι δὲ κατὰ στέρησιν καὶ ἔξιν ἀντίκειται τὰ νῦν λεγόμενα, δῆλον, ἐπειδὴ πέφυκεν ἐκατέραν τῶν αἰσθήσεων ἔχειν τὰ ζῶα, καὶ κατὰ τὴν ψυχὴν καὶ κατὰ τὸ σῶμα.

Ἔτι δ' ἐπὶ τῶν πτώσεων ἐπισκεπτέον. εἰ γὰρ τὸ δικαίως πλεοναχῶς λέγεται, καὶ τὸ δίκαιον πλεοναχῶς ῥηθήσεται· καθ' ἐκάτερον γὰρ τῶν δικαίως ἔστι δίκαιον· οἷον εἰ τὸ δικαίως λέγεται τό τε κατὰ τὴν ἑαυτοῦ γνώμην κρῖναι καὶ τὸ ὡς δεῖ, ὁμοίως καὶ τὸ δίκαιον. ὡσαύτως δὲ καὶ εἰ τὸ ὑγιεινὸν πλεοναχῶς, καὶ τὸ ὑγιεινῶς πλεοναχῶς ῥηθήσεται· οἷον εἰ ὑγιεινὸν τὸ μὲν ὑγιείας ποιητικὸν τὸ δὲ φυλακτικὸν τὸ δὲ σημαντικόν, καὶ τὸ ὑγιεινῶς ἢ ποιητικῶς ἢ φυλακτικῶς ἢ σημαντικῶς ῥηθήσεται. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, ὅταν αὐτὸ πλεοναχῶς λέγεται, καὶ [107a] ἡ πτώσις ἢ ἀπ' αὐτοῦ πλεοναχῶς ῥηθήσεται, καὶ εἰ ἡ πτώσις, καὶ αὐτό.

Σκοπεῖν δὲ καὶ τὰ γένη τῶν κατὰ τοῦνομα κατηγοριῶν, εἰ ταῦτά ἐστιν ἐπὶ πάντων· εἰ γὰρ μὴ ταῦτά, δῆλον ὅτι ὁμώνυμον τὸ λεγόμενον. οἷον τὸ ἀγαθὸν ἐν ἐδέσματι μὲν τὸ ποιητικὸν ἡδονῆς, ἐν ἱατρικῇ δὲ τὸ ποιητικόν

ὑγείας, ἐπὶ δὲ ψυχῆς τὸ ποιὰν εἶναι, οἷον σώφρονα ἢ ἀνδρείαν ἢ δικαίαν· ὁμοίως δὲ καὶ ἐπὶ ἀνθρώπου. ἐνιαχοῦ δὲ τὸ ποτέ, οἷον τὸ ἐν τῷ καιρῷ ἀγαθόν· ἀγαθὸν γὰρ λέγεται τὸ ἐν τῷ καιρῷ. πολλάκις δὲ τὸ ποσόν, οἷον ἐπὶ τοῦ μετρίου· λέγεται γὰρ καὶ τὸ μέτριον ἀγαθόν. ὥστε ὁμώνυμον τὸ ἀγαθόν. ὡσαύτως δὲ καὶ τὸ λευκὸν ἐπὶ σώματος μὲν χρῶμα, ἐπὶ δὲ φωνῆς τὸ εὐήκοον. παραπλησίως δὲ καὶ τὸ ὀξύ· οὐ γὰρ ὡσαύτως ἐπὶ πάντων τὸ αὐτὸ λέγεται· φωνὴ μὲν γὰρ ὀξεῖα ἢ ταχεῖα, καθάπερ φασὶν οἱ κατὰ τοὺς ἀριθμοὺς ἀρμονικοί, γωνία δ' ὀξεῖα ἢ ἐλάσσων ὀρθῆς, μάχαιρα δὲ ἢ ὀξυγώνιος.

Σκοπεῖν δὲ καὶ τὰ γένη τῶν ὑπὸ τὸ αὐτὸ ὄνομα, εἰ ἕτερα καὶ μὴ ὑπ' ἄλληλα. οἷον ὄνος τό τε ζῶον καὶ τὸ σκεῦος· ἕτερος γὰρ ὁ κατὰ τοῦνομα λόγος αὐτῶν· τὸ μὲν γὰρ ζῶον ποιόν τι ῥηθήσεται, τὸ δὲ σκεῦος ποιόν τι. ἐὰν δὲ ὑπ' ἄλληλα τὰ γένη ἦ, οὐκ ἀναγκαῖον ἐτέρους τοὺς λόγους εἶναι. οἷον τοῦ κόρακος τὸ ζῶον καὶ τὸ ὄρνεον γένος ἐστίν· ὅταν οὖν λέγωμεν τὸν κόρακα ὄρνεον εἶναι, καὶ ζῶον ποιόν τί φαμεν αὐτὸν εἶναι, ὥστ' ἀμφοτέρω τὰ γένη περὶ αὐτοῦ κατηγορεῖται. ὁμοίως δὲ καὶ ὅταν ζῶον πτηνὸν δίπουν τὸν κόρακα λέγωμεν, ὄρνεόν φαμεν αὐτὸν εἶναι· καὶ οὕτως οὖν ἀμφοτέρω τὰ γένη κατηγορεῖται κατὰ τοῦ κόρακος, καὶ ὁ λόγος αὐτῶν. ἐπὶ δὲ τῶν μὴ ὑπ' ἄλληλα γενῶν οὐ συμβαίνει τοῦτο· οὔτε γὰρ ὅταν σκεῦος λέγωμεν, ζῶον λέγομεν, οὔθ' ὅταν ζῶον, σκεῦος.

Σκοπεῖν δὲ μὴ μόνον ἐπὶ τοῦ προκειμένου εἰ ἕτερα τὰ γένη καὶ μὴ ὑπ' ἄλληλα, ἀλλὰ καὶ ἐπὶ τοῦ ἐναντίου· εἰ γὰρ τὸ ἐναντίον πολλαχῶς λέγεται, δῆλον ὅτι καὶ τὸ προκείμενον.

Χρήσιμον δὲ καὶ τὸ ἐπὶ τὸν ὅρισμόν ἐπιβλέπειν τὸν τοῦ συντιθεμένου γινόμενον, οἷον λευκοῦ σώματος καὶ λευκῆς φωνῆς· ἀφαιρουμένου γὰρ τοῦ ἰδίου τὸν αὐτὸν λόγον δεῖ λείπεσθαι. τοῦτο δ' οὐ συμβαίνει ἐπὶ τῶν ὁμωνύμων, οἷον [107b] ἐπὶ τῶν νῦν εἰρημένων· τὸ μὲν γὰρ ἔσται σῶμα τοιόνδε χρῶμα ἔχον, τὸ δὲ φωνὴ εὐήκοος. ἀφαιρεθέντος οὖν τοῦ σώματος καὶ τῆς φωνῆς οὐ ταῦτόν ἐν ἑκατέρῳ τὸ λειπόμενον· ἔδει δέ γε, εἴπερ συνώνυμον ἦν τὸ λευκὸν τὸ ἐφ' ἑκατέρου λεγόμενον.

Πολλάκις δὲ καὶ ἐν αὐτοῖς τοῖς λόγοις λανθάνει παρακολουθοῦν τὸ ὁμώνυμον· διὸ καὶ ἐπὶ τῶν λόγων σκεπτέον. οἷον ἐάν τις τὸ σημαντικὸν καὶ τὸ ποιητικὸν ὑγείας τὸ συμμέτρως ἔχον πρὸς ὑγίειαν φῆ εἶναι, οὐκ ἀποστατέον ἀλλ' ἐπισκεπτέον τί τὸ συμμέτρως καθ' ἑκατέρου εἴρηκεν, οἷον εἰ τὸ μὲν τὸ τοιοῦτον εἶναι ὥστε ποιεῖν ὑγίειαν, τὸ δὲ τὸ τοιοῦτον οἷον σημαίνειν ποία τις ἡ ἕξις.



Ἔτι εἰ μὴ συμβλητὰ κατὰ τὸ μᾶλλον ἢ ὁμοίως, οἶον λευκὴ φωνὴ καὶ λευκὸν ἱμάτιον, καὶ ὀξύς χυμὸς καὶ ὀξεῖα φωνή· ταῦτα γὰρ οὐθ' ὁμοίως λέγεται λευκὰ ἢ ὀξεῖα, οὔτε μᾶλλον θάτερον. ὥσθ' ὁμώνυμον τὸ λευκὸν καὶ τὸ ὀξύ. τὸ γὰρ συνώνυμον πᾶν συμβλητόν· ἢ γὰρ ὁμοίως ῥηθήσεται ἢ μᾶλλον θάτερον.

Ἐπεὶ δὲ τῶν ἐτέρων γενῶν καὶ μὴ ὑπ' ἄλληλα ἕτεραι τῷ εἶδει καὶ αἱ διαφοραί, οἶον ζώου καὶ ἐπιστήμης (ἕτεραι γὰρ τούτων αἱ διαφοραί), σκοπεῖν εἰ τὰ ὑπὸ τὸ αὐτὸ ὄνομα ἐτέρων γενῶν καὶ μὴ ὑπ' ἄλληλα διαφοραὶ εἰσιν, οἶον τὸ ὀξύ φωνῆς καὶ ὄγκου· διαφέρει γὰρ φωνὴ φωνῆς τῷ ὀξεῖα εἶναι, ὁμοίως δὲ καὶ ὄγκος ὄγκου. ὥστε ὁμώνυμον τὸ ὀξύ· ἐτέρων γὰρ γενῶν καὶ οὐχ ὑπ' ἄλληλα διαφοραὶ εἰσιν.

Πάλιν εἰ αὐτῶν τῶν ὑπὸ τὸ αὐτὸ ὄνομα ἕτεραι αἱ διαφοραί, οἶον χρώματος τοῦ τε ἐπὶ τῶν σωμάτων καὶ τοῦ ἐν τοῖς μέλεσιν· τοῦ μὲν γὰρ ἐπὶ τῶν σωμάτων διακριτικὸν καὶ συγκριτικὸν ὄψεως, τοῦ δ' ἐπὶ τῶν μελῶν οὐχ αἱ αὐταὶ διαφοραί. ὥστε ὁμώνυμον τὸ χρῶμα· τῶν γὰρ αὐτῶν αἱ αὐταὶ διαφοραί.

Ἔτι ἐπεὶ τὸ εἶδος οὐδενός ἐστι διαφορά, σκοπεῖν τῶν ὑπὸ τὸ αὐτὸ ὄνομα εἰ τὸ μὲν εἶδος ἐστι τὸ δὲ διαφορά· οἶον τὸ λευκὸν τὸ μὲν ἐπὶ τοῦ σώματος εἶδος χρώματος, τὸ δ' ἐπὶ τῆς φωνῆς διαφορά· διαφέρει γὰρ φωνὴ φωνῆς τῷ λευκῇ εἶναι.

Περὶ μὲν οὖν τοῦ πολλαχῶς διὰ τούτων καὶ τῶν τοιούτων σκεπτέον. τὰς δὲ διαφορὰς ἐν αὐτοῖς τε τοῖς γένεσι [108a] πρὸς ἄλληλα θεωρητέον, οἶον τίνι διαφέρει δικαιοσύνη ἀνδρείας καὶ φρόνησις σωφροσύνης (ταῦτα γὰρ ἅπαντα ἐκ τοῦ αὐτοῦ γένους ἐστίν), καὶ ἐξ ἄλλου πρὸς ἄλλο τῶν μὴ πολὺ λίαν διεστηκότων, οἶον τίνι αἴσθησις ἐπιστήμης· ἐπὶ μὲν γὰρ τῶν πολὺ διεστηκότων κατάδηλοι παντελῶς αἱ διαφοραί.

Τὴν δὲ ὁμοιότητα σκεπτέον ἐπὶ τε τῶν ἐν ἐτέροις γένεσιν, ὡς ἕτερον πρὸς ἕτερόν τι, οὕτως ἄλλο πρὸς ἄλλο (οἶον ὡς ἐπιστήμη πρὸς ἐπιστητόν, οὕτως αἴσθησις πρὸς αἰσθητόν), καὶ ὡς ἕτερον ἐν ἐτέρῳ τινί, οὕτως ἄλλο ἐν ἄλλῳ (οἶον ὡς ὄψις ἐν ὀφθαλμῷ, νοῦς ἐν ψυχῇ, καὶ ὡς γαλήνη ἐν θαλάσῃ, νηγεμία ἐν ἀέρι). μάλιστα δ' ἐν τοῖς πολὺ διεστῶσι γυμνάζεσθαι δεῖ· ῥᾶον γὰρ ἐπὶ τῶν λοιπῶν δυνησόμεθα τὰ ὅμοια συνορᾶν. σκεπτέον δὲ καὶ τὰ ἐν τῷ αὐτῷ γένει ὄντα, εἴ τι ἅπασιν ὑπάρχει ταύτόν, οἶον ἀνθρώπῳ καὶ ἵππῳ καὶ κυνί· ἢ γὰρ ὑπάρχει τι αὐτοῖς ταύτόν, ταύτῃ ὁμοιά ἐστιν.

Χρήσιμον δὲ τὸ μὲν ποσαχῶς λέγεται ἐπεσκέφθαι πρὸς τε τὸ σαφές (μᾶλλον γὰρ ἂν τις εἰδείη τί τίθησιν, ἐμφανισθέντος ποσαχῶς λέγεται) καὶ πρὸς τὸ γίνεσθαι κατ' αὐτὸ τὸ πρᾶγμα καὶ μὴ πρὸς τὸ ὄνομα τοὺς συλλογισμούς· ἀδήλου γὰρ ὄντος ποσαχῶς λέγεται, ἐνδέχεται μὴ ἐπὶ ταῦτόν τόν τε ἀποκρινόμενον καὶ τὸν ἐρωτῶντα φέρειν τὴν διάνοιαν· ἐμφανισθέντος δὲ ποσαχῶς λέγεται καὶ ἐπὶ τί φέρων τίθησι, γελοῖος ἂν φαίνοιτο ὁ ἐρωτῶν, εἰ μὴ πρὸς τοῦτο τὸν λόγον ποιοῖτο. χρήσιμον δὲ καὶ πρὸς τὸ μὴ παραλογισθῆναι καὶ πρὸς τὸ παραλογίσασθαι. εἰδότες γὰρ ποσαχῶς λέγεται οὐ μὴ παραλογισθῶμεν, ἀλλ' εἰδήσομεν ἔαν μὴ πρὸς τὸ αὐτὸ τὸν λόγον ποιῇται ὁ ἐρωτῶν· αὐτοὶ τε ἐρωτῶντες δυνησόμεθα παραλογίσασθαι, ἔαν μὴ τυγχάνῃ εἰδῶς ὁ ἀποκρινόμενος ποσαχῶς λέγεται. τοῦτο δ' οὐκ ἐπὶ πάντων δυνατόν, ἀλλ' ὅταν ἢ τῶν πολλαχῶς λεγομένων τὰ μὲν ἀληθῆ τὰ δὲ ψευδῆ. ἔστι δὲ οὐκ οἰκείος ὁ τρόπος οὗτος τῆς διαλεκτικῆς· διὸ παντελῶς εὐλαβητέον τοῖς διαλεκτικοῖς τὸ τοιοῦτον, τὸ πρὸς τοῦνομα διαλέγεσθαι, ἔαν μή τις ἄλλως ἐξαδυνατῇ περὶ τοῦ προκειμένου διαλέγεσθαι.

Τὸ δὲ τὰς διαφορὰς εὐρεῖν χρήσιμον πρὸς τε τοὺς συλλογισμοὺς τοὺς περὶ ταῦτο καὶ ἑτέρου καὶ πρὸς τὸ γνωρίζειν τί ἕκαστόν ἐστιν. ὅτι μὲν οὖν πρὸς τοὺς συλλογισμοὺς τοὺς περὶ ταῦτο καὶ ἑτέρου χρήσιμον, δῆλον (εὐρόντες γὰρ διαφορὰν τῶν προκειμένων ὁποιοῦν δεδειχότες ἐσόμεθα ὅτι οὐ ταῦτόν)· πρὸς δὲ τὸ γνωρίζειν τί ἐστι, διότι τὸν ἴδιον τῆς οὐσίας ἑκάστου λόγον ταῖς περὶ ἕκαστον οἰκείαις διαφοραῖς χωρίζειν εἰώθαμεν.

Ἡ δὲ τοῦ ὁμοίου θεωρία χρήσιμος πρὸς τε τοὺς ἐπακτικοὺς λόγους καὶ πρὸς τοὺς ἐξ ὑποθέσεως συλλογισμοὺς καὶ πρὸς τὴν ἀπόδοσιν τῶν ὀρισμῶν. πρὸς μὲν οὖν τοὺς ἐπακτικοὺς λόγους, διότι τῇ καθ' ἕκαστα ἐπὶ τῶν ὁμοίων ἐπαγωγῇ τὸ καθόλου ἀξιοῦμεν ἐπάγειν· οὐ γὰρ ῥαδίον ἐστὶν ἐπάγειν μὴ εἰδότας τὰ ὅμοια. πρὸς δὲ τοὺς ἐξ ὑποθέσεως συλλογισμούς, διότι ἔνδοξόν ἐστιν, ὥς ποτε ἐφ' ἑνὸς τῶν ὁμοίων ἔχει, οὕτως καὶ ἐπὶ τῶν λοιπῶν. ὥστε πρὸς ὃ τι ἂν αὐτῶν εὐπορῶμεν διαλέγεσθαι, προδιομολογησόμεθα, ὥς ποτε ἐπὶ τούτων ἔχει, οὕτω καὶ ἐπὶ τοῦ προκειμένου ἔχειν, δείξαντες δὲ ἐκεῖνο καὶ τὸ προκείμενον ἐξ ὑποθέσεως δεδειχότες ἐσόμεθα· ὑποθέμενοι γάρ, ὥς ποτε ἐπὶ τούτων ἔχει, οὕτω καὶ ἐπὶ τοῦ προκειμένου ἔχειν, τὴν ἀπόδειξιν πεποιήμεθα. πρὸς δὲ τὴν τῶν ὀρισμῶν ἀπόδοσιν, διότι δυνάμενοι συνορᾶν τί ἐν ἑκάστῳ ταῦτόν οὐκ ἀπορήσομεν εἰς τί δεῖ γένος ὀριζομένους τὸ προκείμενον τιθέναι· τῶν γὰρ κοινῶν τὸ μάλιστα ἐν τῷ τί ἐστι κατηγορούμενον γένος ἂν εἴη. ὁμοίως δὲ καὶ ἐν τοῖς πολὺ διεστῶσι χρήσιμος πρὸς τοὺς ὀρισμοὺς ἢ τοῦ ὁμοίου θεωρία, οἷον ὅτι ταῦτόν γαλήνη μὲν ἐν θαλάσσῃ, νηνεμία δ' ἐν ἀέρι (ἐκάτερον γὰρ ἡσυχία), καὶ στιγμὴ ἐν γραμμῇ

καὶ μονὰς ἐν ἀριθμῷ (ἐκάτερον γὰρ ἀρχή). ὥστε τὸ κοινὸν ἐπὶ πάντων γένος ἀποδιδόντες δόξομεν οὐκ ἄλλοτρίως ὀρίζεσθαι. σχεδὸν δὲ καὶ οἱ ὀριζόμενοι οὕτως εἰώθασιν ἀποδιδόναι· τὴν τε γὰρ μονάδα ἀρχὴν ἀριθμοῦ φασιν εἶναι καὶ τὴν στιγμὴν ἀρχὴν γραμμῆς. δῆλον οὖν ὅτι εἰς τὸ κοινὸν ἀμφοτέρων γένος τιθέασιν.

Τὰ μὲν οὖν ὄργανα δι' ὧν οἱ συλλογισμοὶ ταῦτ' ἐστίν· οἱ δὲ τόποι πρὸς οὓς χρήσιμα τὰ λεχθέντα οἶδε εἰσίν.

## B

Ἔστι δὲ τῶν προβλημάτων τὰ μὲν καθόλου τὰ δ' ἐπὶ μέρους. καθόλου μὲν οὖν οἶον ὅτι πᾶσα ἡδονὴ ἀγαθὸν καὶ ὅτι οὐδεμία ἡδονὴ ἀγαθόν· ἐπὶ μέρους δὲ οἶον ὅτι ἔστι τις ἡδονὴ [109a] ἀγαθὸν καὶ ὅτι ἔστι τις ἡδονὴ οὐκ ἀγαθόν. ἔστι δὲ πρὸς ἀμφοτέρα τὰ γένη τῶν προβλημάτων κοινὰ τὰ καθόλου κατασκευαστικὰ καὶ ἀνασκευαστικά· δείξαντες γὰρ ὅτι παντὶ ὑπάρχει, καὶ ὅτι τινὶ ὑπάρχει δεδειχότες ἐσόμεθα· ὁμοίως δὲ κἂν ὅτι οὐδενὶ ὑπάρχει δείξωμεν, καὶ ὅτι οὐ παντὶ ὑπάρχει δεδειχότες ἐσόμεθα. πρῶτον οὖν περὶ τῶν καθόλου ἀνασκευαστικῶν ρητέον διὰ τε τὸ κοινὰ εἶναι τὰ τοιαῦτα πρὸς τὰ καθόλου καὶ τὰ ἐπὶ μέρους, καὶ διὰ τὸ μᾶλλον τὰς θέσεις κομίζειν ἐν τῷ ὑπάρχειν ἢ μὴ, τοὺς δὲ διαλεγόμενους ἀνασκευάζειν. ἔστι δὲ χαλεπώτατον τὸ ἀντιστρέφειν τὴν ἀπὸ τοῦ συμβεβηκότος οἰκείαν ὀνομασίαν· τὸ γὰρ πῇ καὶ μὴ καθόλου ἐπὶ μόνων ἐνδέχεται τῶν συμβεβηκότων. ἀπὸ μὲν γὰρ τοῦ ὅρου καὶ τοῦ ἰδίου καὶ τοῦ γένους ἀναγκαῖον ἀντιστρέφειν. οἶον εἰ ὑπάρχει τινὶ ζῳῷ πεζῷ δίποδι εἶναι, ἀντιστρέψαντι ἀληθὲς ἔσται λέγειν ὅτι ζῶον πεζὸν δίπουν ἐστίν. ὁμοίως δὲ καὶ ἀπὸ τοῦ γένους· εἰ γὰρ ζῳῷ ὑπάρχει τινὶ εἶναι, ζῶόν ἐστιν. τὰ δ' αὐτὰ καὶ ἐπὶ τοῦ ἰδίου· εἰ γὰρ ὑπάρχει τινὶ γραμματικῆς δεκτικῷ εἶναι, γραμματικῆς δεκτικὸν ἔσται. οὐδὲν γὰρ τούτων ἐνδέχεται κατὰ τι ὑπάρχειν ἢ μὴ ὑπάρχειν, ἀλλ' ἀπλῶς ὑπάρχειν ἢ μὴ ὑπάρχειν. ἐπὶ δὲ τῶν συμβεβηκότων οὐδὲν κωλύει κατὰ τι ὑπάρχειν, οἶον λευκότητα ἢ δικαιοσύνην, ὥστε οὐκ ἀπόχρη τὸ δεῖξαι ὅτι ὑπάρχει λευκότης ἢ δικαιοσύνη πρὸς τὸ δεῖξαι ὅτι λευκὸς ἢ δίκαιός ἐστιν· ἔχει γὰρ ἀμφισβήτησιν ὅτι κατὰ τι λευκὸς ἢ δίκαιός ἐστιν. ὥστ' οὐκ ἀναγκαῖον ἐπὶ τῶν συμβεβηκότων τὸ ἀντιστρέφειν.

Διορίσασθαι δὲ δεῖ καὶ τὰς ἀμαρτίας τὰς ἐν τοῖς προβλήμασιν, ὅτι εἰσὶ διτταί, ἢ τῷ ψεύδεσθαι ἢ τῷ παραβαίνειν τὴν κειμένην λέξιν· οἳ τε γὰρ ψευδόμενοι καὶ τὸ μὴ ὑπάρχον ὑπάρχειν τινὶ λέγοντες ἀμαρτάνουσι, καὶ οἳ, τοῖς ἄλλοτρίοις ὀνόμασι τὰ πράγματα προσαγορεύοντες, οἶον τὴν πλάτανον ἄνθρωπον, παραβαίνουσι τὴν κειμένην ὀνομασίαν.

Εἷς μὲν δὴ τόπος τὸ ἐπιβλέπειν εἰ τὸ κατ' ἄλλον τινὰ τρόπον ὑπάρχον ὡς συμβεβηκὸς ἀποδέδωκεν. ἀμαρτάνεται δὲ μάλιστα τοῦτο περὶ τὰ γένη, οἷον εἴ τις τῷ λευκῷ φαίη συμβεβηκέναι χρώματι εἶναι· οὐ γὰρ συμβέβηκε τῷ λευκῷ χρώματι εἶναι, ἀλλὰ γένος αὐτοῦ τὸ χρώμά ἐστιν. ἐνδέχεται μὲν οὖν καὶ κατὰ τὴν ὀνομασίαν διορίσαι τὸν τιθέμενον, [109b] οἷον ὅτι συμβέβηκε τῇ δικαιοσύνῃ ἀρετῇ εἶναι· πολλάκις δὲ καὶ μὴ διορίσαντος κατάδηλον ὅτι τὸ γένος ὡς συμβεβηκὸς ἀποδέδωκεν, οἷον εἴ τις τὴν λευκότητα κεχρῶσθαι φήσειεν ἢ τὴν βάδισιν κινεῖσθαι. ἀπ' οὐδενὸς γὰρ γένους παρωνύμως ἡ κατηγορία κατὰ τοῦ εἶδους λέγεται, ἀλλὰ πάντα συνωνύμως τὰ γένη τῶν εἰδῶν κατηγορεῖται· καὶ γὰρ τοῦνομα καὶ τὸν λόγον ἐπιδέχεται τὸν τῶν γενῶν τὰ εἶδη. ὁ οὖν κεχρωσμένον εἶπας τὸ λευκὸν οὔτε ὡς γένος ἀποδέδωκεν, ἐπειδὴ παρωνύμως εἴρηκεν, οὔθ' ὡς ἴδιον ἢ ὡς ὀρισμὸν· ὁ γὰρ ὀρισμὸς καὶ τὸ ἴδιον οὐδενὶ ἄλλῳ ὑπάρχει, κέχρωσται δὲ πολλὰ καὶ τῶν ἄλλων, οἷον ξύλον λίθος ἄνθρωπος ἵππος. δῆλον οὖν ὅτι ὡς συμβεβηκὸς ἀποδέδωκεν.

Ἄλλος τὸ ἐπιβλέπειν οἷς ὑπάρχειν ἢ πᾶσιν ἢ μηδενὶ εἴρηται. σκοπεῖν δὲ κατ' εἶδη καὶ μὴ ἐν τοῖς ἀπείροις· ὁδῷ γὰρ μᾶλλον καὶ ἐν ἐλάττοσιν ἢ σκέψις. δεῖ δὲ σκοπεῖν καὶ ἄρχεσθαι ἀπὸ τῶν πρώτων, εἴτ' ἐφεξῆς ἕως τῶν ἀτόμων. οἷον εἰ τῶν ἀντικειμένων τὴν αὐτὴν ἐπιστήμην ἔφησεν εἶναι, σκεπτέον εἰ τῶν πρὸς τι καὶ τῶν ἐναντίων καὶ τῶν κατὰ στέρησιν καὶ ἕξιν καὶ τῶν κατ' ἀντίφασιν λεγομένων ἢ αὐτὴ ἐπιστήμη. κἂν ἐπὶ τούτων μήπω φανερόν ᾤ, πάλιν ταῦτα διαιρετέον μέχρι τῶν ἀτόμων· οἷον εἰ τῶν δικαίων καὶ ἀδίκων, ἢ τοῦ διπλασίου καὶ ἡμίσεος, ἢ τυφλότητος καὶ ὄψεως, ἢ τοῦ εἶναι καὶ μὴ εἶναι. ἐὰν γὰρ ἐπὶ τινὸς δειχθῇ ὅτι οὐχ ἡ αὐτή, ἀνηρηκότες ἐσόμεθα τὸ πρόβλημα· ὁμοίως δὲ καὶ ἐὰν μηδενὶ ὑπάρχει. οὗτος δ' ὁ τόπος ἀντιστρέφει πρὸς τὸ κατασκευάζειν καὶ ἀνασκευάζειν. ἐὰν γὰρ ἐπὶ πάντων φαίνεται διαίρεσιν προενέγκασιν ἢ ἐπὶ πολλῶν, ἀξιωτέον καὶ καθόλου τιθέναι ἢ ἔνστασιν φέρειν ἐπὶ τίνος οὐχ οὕτως· ἐὰν γὰρ μηδέτερον τούτων ποιῇ, ἄτοπος φανεῖται μὴ τιθεῖς.

Ἄλλος τὸ λόγους ποιεῖν τοῦ τε συμβεβηκόντος καὶ ὧ συμβέβηκεν, ἢ ἀμφοτέρων καθ' ἑκάτερον ἢ τοῦ ἑτέρου, εἴτα σκοπεῖν εἴ τι μὴ ἀληθὲς ἐν τοῖς λόγοις ὡς ἀληθὲς εἴληπται. οἷον εἰ ἔστι θεὸν ἀδικεῖν, τί τὸ ἀδικεῖν; εἰ γὰρ τὸ βλάπτειν ἐκουσίως, δῆλον ὡς οὐκ ἔστι θεὸν ἀδικεῖσθαι· οὐ γὰρ ἐνδέχεται βλάπτεσθαι τὸν θεόν. καὶ εἰ φθονερὸς ὁ σπουδαῖος, τίς ὁ φθονερὸς καὶ τί ὁ φθόνος; εἰ γὰρ ὁ φθόνος ἐστὶ λύπη ἐπὶ φαινομένη εὐπραγία τῶν ἐπαικῶν τινος, δῆλον ὅτι ὁ σπουδαῖος οὐ φθονερός· φαῦλος γὰρ ἂν εἴη. καὶ εἰ ὁ νεμεσητικὸς φθονερός, τίς ἑκάτερος αὐτῶν; οὕτω γὰρ καταφανὲς [110a] ἔσται

πότερον ἀληθὲς ἢ ψεῦδος τὸ ῥηθέν· οἷον εἰ φθονερός μὲν ὁ λυπούμενος ἐπὶ ταῖς τῶν ἀγαθῶν εὐπραγίαις, νεμεσητικός δ' ὁ λυπούμενος ἐπὶ ταῖς τῶν κακῶν εὐπραγίαις, δῆλον ὅτι οὐκ ἂν εἴη φθονερός ὁ νεμεσητικός. λαμβάνειν δὲ καὶ ἀντὶ τῶν ἐν τοῖς λόγοις ὀνομάτων λόγους, καὶ μὴ προαφίστασθαι ἕως ἂν εἷς τι γνώριμον ἔλθῃ· πολλάκις γὰρ ὅλου μὲν τοῦ λόγου ἀποδοθέντος οὐπω δῆλον τὸ ζητούμενον, ἀντὶ δέ τινος τῶν ἐν τῷ λόγῳ ὀνομάτων λόγου ῥηθέντος κατάδηλον γίνεται.

Ἔτι τὸ πρόβλημα πρότασιν ἑαυτῷ ποιούμενον ἐνίστασθαι· ἡ γὰρ ἔνστασις ἔσται ἐπιχείρημα πρὸς τὴν θέσιν. ἔστι δ' ὁ τόπος οὗτος σχεδὸν ὁ αὐτὸς τῷ ἐπιβλέπειν οἷς ὑπάρχειν ἢ πᾶσιν ἢ μηδενὶ εἴρηται· διαφέρει δὲ τῷ τρόπῳ.

Ἔτι διορίζεσθαι ποῖα δεῖ καλεῖν ὡς οἱ πολλοὶ καὶ ποῖα οὐ· χρήσιμον γὰρ καὶ πρὸς τὸ κατασκευάζειν καὶ πρὸς τὸ ἀνασκευάζειν· οἷον ὅτι ταῖς μὲν ὀνομασίαις τὰ πράγματα προσαγορευτέον καθάπερ οἱ πολλοί, ποῖα δὲ τῶν πραγμάτων ἐστὶ τοιαῦτα ἢ οὐ τοιαῦτα, οὐκέτι προσεκτέον τοῖς πολλοῖς. οἷον ὑγιεινὸν μὲν ῥητέον τὸ ποιητικὸν ὑγιείας, ὡς οἱ πολλοὶ λέγουσιν· πότερον δὲ τὸ προκείμενον ποιητικὸν ὑγιείας ἢ οὐ, οὐκέτι ὡς οἱ πολλοὶ κλητέον ἄλλ' ὡς ὁ ἰατρός.

Ἔτι ἐὰν πολλαχῶς λέγηται, κείμενον δὲ ἢ ὡς ὑπάρχει ἢ ὡς οὐχ ὑπάρχει, θάτερον δεικνύει τῶν πλεοναχῶς λεγομένων, ἐὰν μὴ ἄμφω ἐνδέχῃται. χρηστέον δ' ἐπὶ τῶν λανθανόντων· ἐὰν γὰρ μὴ λανθάνῃ πολλαχῶς λεγόμενον, ἐνστήσεται ὅτι οὐ διείλεκται ὅπερ αὐτὸς ἠπόρει ἄλλὰ θάτερον. οὗτος δ' ὁ τόπος ἀντιστρέφει καὶ πρὸς τὸ κατασκευάσαι καὶ πρὸς τὸ ἀνασκευάσαι. κατασκευάζειν μὲν γὰρ βουλόμενοι δείξομεν ὅτι θάτερον ὑπάρχει, ἐὰν μὴ ἄμφω δυνώμεθα· ἀνασκευάζοντες δὲ ὅτι οὐχ ὑπάρχει θάτερον δείξομεν, ἐὰν μὴ ἄμφω δυνώμεθα. πλὴν ἀνασκευάζοντι μὲν οὐδὲν δεῖ ἐξ ὁμολογίας διαλέγεσθαι, οὔτ' εἰ παντὶ οὔτ' εἰ μηδενὶ ὑπάρχειν εἴρηται· ἐὰν γὰρ δείξωμεν ὅτι οὐχ ὑπάρχει ὁπωσοῦν, ἀνηρηκότες ἐσόμεθα τὸ παντὶ ὑπάρχειν· ὁμοίως δὲ κἂν ἐνὶ δείξωμεν ὑπάρχον, ἀναιρήσομεν τὸ μηδενὶ ὑπάρχειν. κατασκευάζουσι δὲ προδιομολογητέον ὅτι, εἰ ὁπωσοῦν ὑπάρχει, παντὶ ὑπάρχει, ἂν πιθανὸν ἢ τὸ ἀξίωμα. οὐ γὰρ [110b] ἀπόχρη πρὸς τὸ δεῖξαι ὅτι παντὶ ὑπάρχει τὸ ἐφ' ἐνὸς διαλεχθῆναι, οἷον εἰ ἡ τοῦ ἀνθρώπου ψυχὴ ἀθάνατος, ὅτι ψυχὴ πᾶσα ἀθάνατος· ὥστε προομολογητέον ὅτι, εἰ ἥτισοῦν ψυχὴ ἀθάνατος, πᾶσα ἀθάνατος. τοῦτο δ' οὐκ ἀεὶ ποιητέον, ἀλλ' ὅταν μὴ εὐπορῶμεν κοινὸν ἐπὶ πάντων ἓνα λόγον εἰπεῖν, καθάπερ ὁ γεωμέτρης ὅτι τὸ τρίγωνον δυσὶν ὀρθαῖς ἴσας ἔχει.

Ἐὰν δὲ μὴ λανθάνῃ πολλαχῶς λεγόμενον, διελόμενον ὁσαυχῶς λέγεται καὶ ἀναιρεῖν καὶ κατασκευάζειν. οἷον εἰ τὸ δέον ἐστὶ τὸ συμφέρον ἢ τὸ καλόν, πειρατέον ἄμφω κατασκευάζειν ἢ ἀναιρεῖν περὶ τοῦ προκειμένου, οἷον ὅτι καλὸν καὶ συμφέρον, ἢ ὅτι οὔτε καλὸν οὔτε συμφέρον. ἔὰν δὲ μὴ ἐνδέχῃται ἁμφοτέρω, θάτερον δεικτέον, ἐπισημαινόμενον ὅτι τὸ μὲν τὸ δ' οὐ. ὁ δ' αὐτὸς λόγος καὶ πλείω ἢ εἰς ἃ διαιρεῖται.

Πάλιν ὅσα μὴ καθ' ὁμωνυμίαν λέγεται πολλαχῶς ἀλλὰ κατ' ἄλλον τρόπον, οἷον ἐπιστήμη μία πλειόνων ἢ ὡς τοῦ τέλους καὶ τῶν πρὸς τὸ τέλος, οἷον ἱατρικὴ τοῦ ὑγίαιαν ποιῆσαι καὶ τοῦ διαιτῆσαι, ἢ ὡς ἀμφοτέρων τελῶν, καθάπερ τῶν ἐναντίων ἢ αὐτὴ λέγεται ἐπιστήμη (οὐδὲν γὰρ μᾶλλον τέλος τὸ ἕτερον τοῦ ἑτέρου), ἢ ὡς τοῦ καθ' αὐτὸ καὶ τοῦ κατὰ συμβεβηκός, οἷον καθ' αὐτὸ μὲν ὅτι τὸ τρίγωνον δυσὶν ὀρθαῖς ἴσας ἔχει, κατὰ συμβεβηκός δὲ ὅτι τὸ ἰσόπλευρον· ὅτι γὰρ συμβέβηκε τῷ ἰσοπλεύρῳ τριγώνῳ εἶναι, κατὰ τοῦτο γνωρίζομεν ὅτι δυσὶν ὀρθαῖς ἴσας ἔχει. εἰ οὖν μηδαμῶς ἐνδέχεται τὴν αὐτὴν εἶναι πλειόνων ἐπιστήμην, δῆλον ὅτι ὅλως οὐκ ἐνδέχεται εἶναι, ἢ εἰ πῶς ἐνδέχεται, δῆλον ὅτι ἐνδέχεται. διαιρεῖσθαι δὲ ὁσαυχῶς χρήσιμον. οἷον ἔὰν βουλώμεθα κατασκευάσαι, τὰ τοιαῦτα προοιστέον ὅσα ἐνδέχεται, καὶ διαιρετέον εἰς ταῦτα μόνον ὅσα καὶ χρήσιμα πρὸς τὸ κατασκευάσαι· ἂν δ' ἀνασκευάσαι, ὅσα μὴ ἐνδέχεται, τὰ δὲ λοιπὰ παραλείπτεον. ποιητέον δὲ καὶ ἐπὶ τούτων, ὅταν λανθάνῃ ποσαυχῶς λέγεται. καὶ εἶναι δὲ τότε τοῦδε ἢ μὴ εἶναι ἐκ τῶν αὐτῶν τόπων κατασκευαστέον, οἷον ἐπιστήμην τήνδε τοῦδε ἢ ὡς τέλους ἢ ὡς τῶν πρὸς τὸ τέλος ἢ ὡς τῶν κατὰ συμβεβηκός, ἢ πάλιν μὴ εἶναι κατὰ μηδένα τῶν ῥηθέντων τρόπων. ὁ δ' αὐτὸς λόγος καὶ περὶ ἐπιθυμίας καὶ ὅσα ἄλλα λέγεται πλειόνων· ἔστι γὰρ ἡ [111a] ἐπιθυμία τούτου ἢ ὡς τέλους, οἷον ὑγείας, ἢ ὡς τῶν πρὸς τὸ τέλος, οἷον τοῦ φαρμακευθῆναι, ἢ ὡς τοῦ κατὰ συμβεβηκός, καθάπερ ἐπὶ τοῦ οἴνου ὁ φιλόγλυκος, οὐχ ὅτι οἶνος ἀλλ' ὅτι γλυκύς ἐστιν. καθ' αὐτὸ μὲν γὰρ τοῦ γλυκέος ἐπιθυμεῖ, τοῦ δ' οἴνου κατὰ συμβεβηκός· ἔὰν γὰρ αὐστηρὸς ᾖ, οὐκέτι ἐπιθυμεῖ. κατὰ συμβεβηκός οὖν ἐπιθυμεῖ. χρήσιμος δ' ὁ τόπος οὗτος ἐν τοῖς πρὸς τι· σχεδὸν γὰρ τὰ τοιαῦτα τῶν πρὸς τί ἐστιν.

Ἐπὶ τὸ μεταλαμβάνειν εἰς τὸ γνωριμώτερον ὄνομα, οἷον ἀντὶ τοῦ ἀκριβοῦς ἐν ὑπολήψει τὸ σαφές καὶ ἀντὶ τῆς πολυπραγμοσύνης τὴν φιλοπραγμοσύνην· γνωριμωτέρου γὰρ γενομένου τοῦ ῥηθέντος εὐεπιχειρητοτέρα ἢ θέσις. ἔστι δὲ καὶ οὗτος ὁ τόπος πρὸς ἄμφω κοινός, καὶ πρὸς τὸ κατασκευάζειν καὶ πρὸς τὸ ἀνασκευάζειν.

Πρὸς δὲ τὸ δεῖξαι τὰ ἐναντία τῷ αὐτῷ ὑπάρχοντα σκοπεῖν ἐπὶ τοῦ

γένους, οἷον, ἐὰν βουλώμεθα δεῖξαι ὅτι ἔστι περὶ αἴσθησιν ὀρθότης καὶ ἁμαρτία, “ἐπεὶ τὸ αἰσθάνεσθαι κρίνειν ἐστί, κρίνειν δ’ ἔστιν ὀρθῶς καὶ μὴ ὀρθῶς, καὶ περὶ αἴσθησιν ἂν εἴη ὀρθότης καὶ ἁμαρτία”. νῦν μὲν οὖν ἐκ τοῦ γένους περὶ τὸ εἶδος ἢ ἀπόδειξις· τὸ γὰρ κρίνειν γένος τοῦ αἰσθάνεσθαι· ὁ γὰρ αἰσθανόμενος κρίνει πως, πάλιν δ’ ἐκ τοῦ εἶδους τῷ γένει· ὅσα γὰρ τῷ εἶδει ὑπάρχει, καὶ τῷ γένει· οἷον εἰ ἔστιν ἐπιστήμη φαύλη καὶ σπουδαία, καὶ διάθεσις φαύλη καὶ σπουδαία· ἢ γὰρ διάθεσις τῆς ἐπιστήμης γένος· ὁ μὲν οὖν πρότερος τόπος ψευδής ἐστι πρὸς τὸ κατασκευάσαι, ὁ δὲ δεύτερος ἀληθής. οὐ γὰρ ἀναγκαῖον, ὅσα τῷ γένει ὑπάρχει, καὶ τῷ εἶδει ὑπάρχειν· ζῶον μὲν γὰρ ἔστι πτηνὸν καὶ τετράπουν, ἄνθρωπος δ’ οὐ. ὅσα δὲ τῷ εἶδει ὑπάρχει, ἀναγκαῖον καὶ τῷ γένει· εἰ γὰρ ἔστιν ἄνθρωπος σπουδαῖος, καὶ ζῶον ἔστι σπουδαῖον. πρὸς δὲ τὸ ἀνασκευάζειν ὁ μὲν πρότερος ἀληθής, ὁ δὲ ὕστερος ψευδής· ὅσα γὰρ τῷ γένει οὐχ ὑπάρχει, οὐδὲ τῷ εἶδει· ὅσα δὲ τῷ εἶδει μὴ ὑπάρχει, οὐκ ἀνάγκη τῷ γένει μὴ ὑπάρχειν.

Ἐπεὶ δ’ ἀναγκαῖον, ὣν τὸ γένος κατηγορεῖται, καὶ τῶν εἰδῶν τι κατηγορεῖσθαι, καὶ ὅσα ἔχει τὸ γένος ἢ παρωνύμως ἀπὸ τοῦ γένους λέγεται, καὶ τῶν εἰδῶν τι ἀναγκαῖον ἔχειν ἢ παρωνύμως ἀπὸ τίνος τῶν εἰδῶν λέγεσθαι (οἷον εἴ τινος ἐπιστήμη κατηγορεῖται, καὶ γραμματικὴ ἢ μουσικὴ ἢ τῶν ἄλλων τις ἐπιστημῶν κατηγορηθήσεται, καὶ εἴ τις ἔχει [111b] ἐπιστήμην ἢ παρωνύμως ἀπὸ τῆς ἐπιστήμης λέγεται, καὶ γραμματικὴν ἔξει ἢ μουσικὴν ἢ τινὰ τῶν ἄλλων ἐπιστημῶν ἢ παρωνύμως ἀπὸ τίνος αὐτῶν ῥηθήσεται, οἷον γραμματικὸς ἢ μουσικός)· ἐὰν οὖν τι τεθῇ λεγόμενον ἀπὸ τοῦ γένους ὅπως οὖν, οἷον τὴν ψυχὴν κινεῖσθαι, σκοπεῖν εἰ κατὰ τι τῶν εἰδῶν τῶν τῆς κινήσεως ἐνδέχεται τὴν ψυχὴν κινεῖσθαι, οἷον αὔξεσθαι ἢ φθίρεσθαι ἢ γίγνεσθαι ἢ ὅσα ἄλλα κινήσεως εἶδη· εἰ γὰρ κατὰ μηδέν, δῆλον ὅτι οὐ κινεῖται. οὗτος δ’ ὁ τόπος κοινὸς πρὸς ἄμφω, πρὸς τε τὸ ἀνασκευάζειν καὶ κατασκευάζειν· εἰ γὰρ κατὰ τι τῶν εἰδῶν κινεῖται, δῆλον ὅτι κινεῖται, καὶ εἰ κατὰ μηδέν τῶν εἰδῶν κινεῖται, δῆλον ὅτι οὐ κινεῖται. Μὴ εὐποροῦντι δὲ ἐπιχειρήματος πρὸς τὴν θέσιν σκοπεῖν ἐκ τῶν ὀρισμῶν, ἢ τῶν ὄντων τοῦ προκειμένου πράγματος ἢ τῶν δοκούντων, καὶ εἰ μὴ ἀφ’ ἑνός, ἀλλ’ ἀπὸ πλειόνων. ῥᾶον γὰρ ὀρισσάμενοις ἐπιχειρεῖν ἔσται· πρὸς γὰρ τοὺς ὀρισμοὺς ῥᾶον ἢ ἐπιχείρησις.

Σκοπεῖν δὲ ἐπὶ τοῦ προκειμένου, τίνος ὄντος τὸ προκείμενον ἔστιν, ἢ τί ἔστιν ἐξ ἀνάγκης εἰ τὸ προκείμενον ἔστι - κατασκευάζειν μὲν βουλομένῳ, τίνος ὄντος τὸ προκείμενον ἔσται (ἐὰν γὰρ ἐκεῖνο δειχθῇ ὑπάρχον, καὶ τὸ προκείμενον δεδειγμένον ἔσται), ἀνασκευάζειν δὲ βουλομένῳ, τί ἔστιν εἰ τὸ προκείμενον ἔστιν· ἐὰν γὰρ δεῖξωμεν τὸ ἀκόλουθον τῷ προκειμένῳ μὴ ὄν,

ἀνηρηκότες ἐσόμεθα τὸ προκείμενον.

Ἔτι ἐπὶ τὸν χρόνον ἐπιβλέπειν, εἴ που διαφωνεῖ, οἷον εἰ τὸ τρεφόμενον ἔφησεν ἐξ ἀνάγκης αὖξεσθαι· τρέφεται μὲν γὰρ ἀεὶ τὰ ζῶα, αὖξεται δ' οὐκ ἀεὶ. ὁμοίως δὲ καὶ εἰ τὸ ἐπίστασθαι ἔφησε μεμνηῖσθαι· τὸ μὲν γὰρ τοῦ παρεληλυθότος χρόνου ἐστί, τὸ δὲ καὶ τοῦ παρόντος καὶ τοῦ μέλλοντος. ἐπίστασθαι μὲν γὰρ λεγόμεθα τὰ παρόντα καὶ τὰ μέλλοντα, οἷον ὅτι ἔσται ἔκλειψις· μνημονεύειν δ' οὐκ ἐνδέχεται ἄλλο ἢ τὸ παρεληλυθός.

Ἔτι ὁ σοφιστικὸς τρόπος, τὸ ἄγειν εἰς τοιοῦτον πρὸς ὃ εὐπορήσομεν ἐπιχειρημάτων· τοῦτο δ' ἔσται ὅτε μὲν ἀναγκαῖον, ὅτε δὲ φαινόμενον ἀναγκαῖον, ὅτε δ' οὔτε φαινόμενον οὔτ' ἀναγκαῖον. ἀναγκαῖον μὲν οὖν ὅταν, ἀρνησαμένου τοῦ ἀποκρινομένου τῶν πρὸς τὴν θέσιν τι χρησίμων, πρὸς τοῦτο τοὺς λόγους ποιῇται, τυγχάνη δὲ τοῦτο τῶν τοιούτων ὃν πρὸς ᾧ εὐπορεῖν ἐστὶν ἐπιχειρημάτων. ὁμοίως δὲ καὶ ὅταν, ἐπαγωγὴν [112a] πρὸς τι διὰ τοῦ κειμένου ποιησαμένου, ἀναιρεῖν ἐπιχειρῇ· τούτου γὰρ ἀναιρεθέντος καὶ τὸ προκείμενον ἀναιρεῖται. φαινόμενον δ' ἀναγκαῖον, ὅταν φαίνεται μὲν χρήσιμον καὶ οἰκεῖον τῆς θέσεως, μὴ ἢ δέ, πρὸς ὃ γίνονται οἱ λόγοι, εἴτε ἀρνησαμένου τοῦ τὸν λόγον ὑπέχοντος, εἴτε ἐπαγωγῆς ἐνδόξου διὰ τῆς θέσεως πρὸς αὐτὸ γενομένης, ἀναιρεῖν ἐπιχειροῖ αὐτό. τὸ δὲ λοιπόν, ὅταν μήτ' ἀναγκαῖον ἢ μήτε φαινόμενον πρὸς ὃ γίνονται οἱ λόγοι, ἄλλως δὲ παρεξελέγχεσθαι συμβαίνει τῷ ἀποκρινομένῳ. δεῖ δ' εὐλαβεῖσθαι τὸν ἔσχατον τῶν ῥηθέντων τρόπων· παντελῶς γὰρ ἀπηρτημένος καὶ ἀλλότριος ἔοικεν εἶναι τῆς διαλεκτικῆς. διὸ δεῖ καὶ τὸν ἀποκρινόμενον μὴ δυσκολαίνειν, ἀλλὰ τιθέναι τὰ μὴ χρήσιμα πρὸς τὴν θέσιν, ἐπισημαινόμενον ὅσα μὴ δοκεῖ μὲν τίθησι δέ. μᾶλλον γὰρ ἀπορεῖν ὥς ἐπὶ τὸ πολὺ συμβαίνει τοῖς ἐρωτῶσι πάντων τιθεμένων αὐτοῖς τῶν τοιούτων, ἐὰν μὴ περαίνωσιν.

Ἔτι πᾶς ὁ εἰρηκῶς ὀτιοῦν τρόπον τινὰ πολλὰ εἴρηκεν, ἐπειδὴ πλείω ἐκάστω ἐξ ἀνάγκης ἀκόλουθά ἐστιν· οἷον ὁ εἰρηκῶς ἄνθρωπον εἶναι καὶ ὅτι ζῶόν ἐστιν εἴρηκε καὶ ὅτι ἔμψυχον καὶ ὅτι δίπουν καὶ ὅτι νοῦ καὶ ἐπιστήμης δεκτικόν, ὥστε ὅποιουοῦν ἐνὸς τῶν ἀκολουθῶν ἀναιρεθέντος ἀναιρεῖται καὶ τὸ ἐν ἀρχῇ. εὐλαβεῖσθαι δὲ χρὴ εἰς τὸ χαλεπώτερον τὴν μετάληψιν ποιεῖσθαι· ἐνίστε μὲν γὰρ ῥᾶον τὸ ἀκόλουθον ἀνελεῖν, ἐνίστε δ' αὐτὸ τὸ προκείμενον.

Ὅσοις δ' ἀνάγκη θάτερον μόνον ὑπάρχειν, οἷον τῷ ἀνθρώπῳ τὴν νόσον ἢ τὴν ὑγίειαν, ἐὰν πρὸς θάτερον εὐπορῶμεν διαλέγεσθαι ὅτι ὑπάρχει ἢ οὐχ ὑπάρχει, καὶ πρὸς τὸ λοιπὸν εὐπορήσομεν. τοῦτο δ' ἀντιστρέφει πρὸς ἄμφω· δείξαντες μὲν γὰρ ὅτι ὑπάρχει θάτερον, ὅτι οὐχ ὑπάρχει τὸ λοιπὸν δεδειχότες



ἐσόμεθα· ἐὰν δ' ὅτι οὐχ ὑπάρχει δείξωμεν, τὸ λοιπὸν ὅτι ὑπάρχει δεδειχότες ἐσόμεθα. δῆλον οὖν ὅτι πρὸς ἄμφω χρήσιμος ὁ τόπος.

Ἔτι τὸ ἐπιχειρεῖν, μεταφέροντα τοῦνομα κατὰ τὸν λόγον, ὡς μᾶλλον προσῆκον ἐκλαμβάνειν ἢ ὡς κεῖται τοῦνομα, οἷον εὐψυχον μὴ τὸν ἀνδρεῖον, καθάπερ νῦν κεῖται, ἀλλὰ τὸν εὐ τὴν ψυχὴν ἔχοντα, καθάπερ καὶ εὐέλπιν τὸν ἀγαθὰ ἐλπίζοντα· ὁμοίως δὲ καὶ εὐδαίμονα οὗ ἂν ὁ δαίμων ἢ σπουδαῖος, καθάπερ Ξενοκράτης φησὶν εὐδαίμονα εἶναι τὸν τὴν ψυχὴν ἔχοντα σπουδαίαν· ταύτην γὰρ ἐκάστου εἶναι δαίμονα.

[112b] Ἐπεὶ δὲ τῶν πραγμάτων τὰ μὲν ἐξ ἀνάγκης ἐστί, τὰ δ' ὡς ἐπὶ τὸ πολὺ, τὰ δ' ὁπότερ' ἔτυχεν, ἐὰν τὸ ἐξ ἀνάγκης ὡς ἐπὶ τὸ πολὺ τεθῇ ἢ τὸ ὡς ἐπὶ τὸ πολὺ ἐξ ἀνάγκης (ἢ αὐτὸ ἢ τὸ ἐναντίον τῷ ὡς ἐπὶ τὸ πολὺ), ἀεὶ δίδωσι τόπον ἐπιχειρήματος. ἐὰν γὰρ τὸ ἐξ ἀνάγκης ὡς ἐπὶ τὸ πολὺ τεθῇ, δῆλον ὅτι οὐ παντὶ φησιν ὑπάρχειν, ὑπάρχοντος παντί, ὥστε ἡμάρτηκεν· εἴ τε τὸ ὡς ἐπὶ τὸ πολὺ λεγόμενον ἐξ ἀνάγκης ἔφησε· παντὶ γὰρ φησιν ὑπάρχειν, οὐχ ὑπάρχοντος παντί. ὁμοίως δὲ καὶ εἰ τὸ ἐναντίον τῷ ὡς ἐπὶ τὸ πολὺ ἐξ ἀνάγκης εἴρηκεν· ἀεὶ γὰρ ἐπ' ἔλαττον λέγεται τὸ ἐναντίον τῷ ὡς ἐπὶ τὸ πολὺ· οἷον εἰ ὡς ἐπὶ τὸ πολὺ φαῦλοι οἱ ἄνθρωποι, ἀγαθοὶ ἐπ' ἔλαττον, ὥστ' ἔτι μᾶλλον ἡμάρτηκεν, εἰ ἀγαθοὺς ἐξ ἀνάγκης εἴρηκεν. ὡσαύτως δὲ καὶ εἰ τὸ ὁπότερ' ἔτυχεν ἐξ ἀνάγκης ἔφησεν ἢ ὡς ἐπὶ τὸ πολὺ· οὔτε γὰρ ἐξ ἀνάγκης τὸ ὁπότερ' ἔτυχεν οὔθ' ὡς ἐπὶ τὸ πολὺ. ἐνδέχεται δέ, κἂν μὴ διορίσας εἴπη πότερον ὡς ἐπὶ τὸ πολὺ ἢ ἐξ ἀνάγκης εἴρηκεν, ἢ δὲ τὸ πρᾶγμα ὡς ἐπὶ τὸ πολὺ, διαλέγεσθαι ὡς ἐξ ἀνάγκης εἰρηκότος αὐτοῦ, οἷον, εἰ φαύλους τοὺς ἀποκλήρους ἔφησεν εἶναι μὴ διορίσας, ὡς ἐξ ἀνάγκης εἰρηκότος αὐτοῦ διαλέγεσθαι.

Ἔτι καὶ εἰ αὐτὸ αὐτῷ συμβεβηκὸς ἔθηκεν ὡς ἕτερον διὰ τὸ ἕτερον εἶναι ὄνομα, καθάπερ Πρόδικος διηρεῖτο τὰς ἡδονὰς εἰς χαρὰν καὶ τέρψιν καὶ εὐφροσύνην· ταῦτα γὰρ πάντα τοῦ αὐτοῦ, τῆς ἡδονῆς, ὀνόματά ἐστιν. εἰ οὖν τις τὸ χαίρειν τῷ εὐφραίνεισθαι φήσει συμβεβηκέναι, αὐτὸ ἂν αὐτῷ φαίη συμβεβηκέναι.

Ἐπεὶ δὲ τὰ ἐναντία συμπλέκεται μὲν ἀλλήλοις ἐξαχῶς, ἐναντίωσιν δὲ ποιεῖ τετραχῶς συμπλεκόμενα, δεῖ λαμβάνειν τὰ ἐναντία ὅπως ἂν χρήσιμον ἢ καὶ ἀναιροῦντι καὶ κατασκευάζοντι. ὅτι μὲν οὖν ἐξαχῶς συμπλέκεται, δῆλον. ἢ γὰρ ἐκάτερον τῶν ἐναντίων ἐκατέρω τῶν ἐναντίων συμπλακῆσεται (τοῦτο δὲ διχῶς, οἷον τὸ τοὺς φίλους εὖ ποιεῖν καὶ τὸ τοὺς ἐχθροὺς κακῶς, ἢ ἀνάπαλιν τὸ τοὺς φίλους κακῶς καὶ τὸ τοὺς ἐχθροὺς εὖ), ἢ ἀμφοτέρω περὶ

τοῦ ἑνός (διχῶς δὲ καὶ τοῦτο, οἷον τὸ τοὺς φίλους εὖ καὶ τὸ τοὺς φίλους κακῶς, ἢ τὸ τοὺς ἐχθροὺς εὖ καὶ τὸ τοὺς ἐχθροὺς κακῶς), ἢ τὸ ἐν περὶ ἀμφοτέρων (διχῶς δὲ καὶ τοῦτο, οἷον τὸ τοὺς φίλους εὖ καὶ τὸ τοὺς ἐχθροὺς εὖ, ἢ τοὺς φίλους κακῶς καὶ τοὺς ἐχθροὺς κακῶς).

[113a] Αἱ μὲν οὖν πρῶται δύο ῥηθεῖσαι συμπλοκαὶ οὐ ποιοῦσιν ἐναντίωσιν. τὸ γὰρ τοὺς φίλους εὖ ποιεῖν τῷ τοὺς ἐχθροὺς κακῶς οὐκ ἔστιν ἐναντίον· ἀμφοτέρα γὰρ αἰρετὰ καὶ τοῦ αὐτοῦ ἦθους· οὐδὲ τὸ τοὺς φίλους κακῶς τῷ τοὺς ἐχθροὺς εὖ· καὶ γὰρ ταῦτα ἀμφοτέρα φευκτὰ καὶ τοῦ αὐτοῦ ἦθους. οὐ δοκεῖ δὲ φευκτὸν φευκτῷ ἐναντίον εἶναι, ἐὰν μὴ ἢ τὸ μὲν καθ' ὑπερβολὴν τὸ δὲ κατ' ἔνδειαν λεγόμενον· ἢ τε γὰρ ὑπερβολὴ τῶν φευκτῶν δοκεῖ εἶναι, ὁμοίως δὲ καὶ ἡ ἔνδεια. τὰ δὲ λοιπὰ πάντα τέτταρα ποιεῖ ἐναντίωσιν. τὸ γὰρ τοὺς φίλους εὖ ποιεῖν τῷ τοὺς φίλους κακῶς ἐναντίον· ἀπὸ τε γὰρ ἐναντίου ἦθους ἐστί, καὶ τὸ μὲν αἰρετὸν τὸ δὲ φευκτόν. ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων· καθ' ἐκάστην γὰρ συζυγίαν τὸ μὲν αἰρετὸν τὸ δὲ φευκτόν, καὶ τὸ μὲν ἐπαικοῦς ἦθους τὸ δὲ φαύλου. δῆλον οὖν ἐκ τῶν εἰρημένων ὅτι τῷ αὐτῷ πλείονα ἐναντία συμβαίνει γίνεσθαι· τῷ γὰρ τοὺς φίλους εὖ ποιεῖν καὶ τὸ τοὺς ἐχθροὺς εὖ ποιεῖν ἐναντίον καὶ τὸ τοὺς φίλους κακῶς, ὁμοίως δὲ καὶ τῶν ἄλλων ἐκάστω τὸν αὐτὸν τρόπον ἐπισκοποῦσι δύο τὰ ἐναντία φανήσεται λαμβάνειν οὖν τῶν ἐναντίων ὁπότερον ἂν ἢ πρὸς τὴν θέσιν χρήσιμον.

Ἔτι εἰ ἔστι τι ἐναντίον τῷ συμβεβηκότι, σκοπεῖν εἰ ὑπάρχει ὥπερ τὸ συμβεβηκὸς εἴρηται ὑπάρχειν· εἰ γὰρ τοῦτο ὑπάρχει, ἐκεῖνο οὐκ ἂν ὑπάρχοι· ἀδύνατον γὰρ τὰ ἐναντία ἅμα τῷ αὐτῷ ὑπάρχειν.

Ἡ εἴ τι τοιοῦτον εἴρηται κατὰ τινος, οὗ ὄντος ἀνάγκη τὰ ἐναντία ὑπάρχειν· οἷον εἰ τὰς ιδέας ἐν ἡμῖν ἔφησεν εἶναι· κινεῖσθαι τε γὰρ καὶ ἡρεμεῖν αὐτάς συμβήσεται, ἔτι δὲ αἰσθητὰς καὶ νοητὰς εἶναι. δοκοῦσι γὰρ αἱ ιδέαι ἡρεμεῖν καὶ νοηταὶ εἶναι τοῖς τιθεμένοις ιδέας εἶναι· ἐν ἡμῖν δὲ οὐσας ἀδύνατον ἀκινήτους εἶναι· κινουμένων γὰρ ἡμῶν ἀναγκαῖον καὶ τὰ ἐν ἡμῖν πάντα συγκινεῖσθαι. δῆλον δ' ὅτι καὶ αἰσθηταί, εἴπερ ἐν ἡμῖν εἰσι· διὰ γὰρ τῆς περὶ τὴν ὄψιν αἰσθήσεως τὴν ἐν ἐκάστω μορφήν γνωρίζομεν.

Πάλιν εἰ κεῖται συμβεβηκὸς ὃ ἔστι τι ἐναντίον, σκοπεῖν εἰ καὶ τοῦ ἐναντίου δεκτικὸν ὅπερ καὶ τοῦ συμβεβηκότος· τὸ γὰρ αὐτὸ τῶν ἐναντίων δεκτικόν. οἷον εἰ τὸ μῖσος ἔπεσθαι ὀργῇ ἔφησεν, εἴη ἂν τὸ μῖσος ἐν τῷ θυμοειδεῖ· ἐκεῖ γὰρ [113b] ἡ ὀργή. σκεπτέον οὖν εἰ καὶ τὸ ἐναντίον ἐν τῷ θυμοειδεῖ· εἰ γὰρ μή, ἀλλ' ἐν τῷ ἐπιθυμητικῷ ἐστὶν ἡ φιλία, οὐκ ἂν ἔποιτο τὸ μῖσος ὀργῇ. ὁμοίως δὲ καὶ εἰ τὸ ἐπιθυμητικὸν ἀγνοεῖν ἔφησεν· εἴη γὰρ ἂν

καὶ ἐπιστήμης δεκτικόν, εἴπερ καὶ ἀγνοίας· ὅπερ οὐ δοκεῖ, τὸ ἐπιθυμητικὸν δεκτικὸν εἶναι ἐπιστήμης. ἀνασκευάζοντι μὲν οὖν καθάπερ εἴρηται χρηστέον. κατασκευάζοντι δέ, ὅτι μὲν ὑπάρχει τὸ συμβεβηκός, οὐ χρήσιμος ὁ τόπος· ὅτι δ' ἐνδέχεται ὑπάρχειν, χρήσιμος. δείξαντες μὲν γὰρ ὅτι οὐ δεκτικὸν τοῦ ἐναντίου, δεδειχότες ἐσόμεθα ὅτι οὔτε ὑπάρχει τὸ συμβεβηκός οὔτ' ἐνδέχεται ὑπάρξαι· ἐὰν δὲ δείξωμεν ὅτι ὑπάρχει τὸ ἐναντίον ἢ ὅτι δεκτικὸν τοῦ ἐναντίου ἐστίν, οὐδέπω δεδειχότες ἐσόμεθα ὅτι καὶ τὸ συμβεβηκός ὑπάρχει, ἀλλ' ὅτι ἐνδέχεται ὑπάρχειν, ἐπὶ τοσοῦτον μόνον δεδειγμένον ἔσται.

Ἐπεὶ δ' αἱ ἀντιθέσεις τέτταρες, σκοπεῖν ἐπὶ μὲν τῶν ἀντιφάσεων ἀνάπαλιν ἐκ τῆς ἀκολουθήσεως, καὶ ἀναιροῦντα καὶ κατασκευάζοντα, λαμβάνειν δ' ἐξ ἐπαγωγῆς. οἷον εἰ ὁ ἄνθρωπος ζῶον, τὸ μὴ ζῶον οὐκ ἄνθρωπος· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ἐνταῦθα γὰρ ἀνάπαλιν ἡ ἀκολουθήσις· τῷ μὲν γὰρ ἀνθρώπῳ τὸ ζῶον ἔπεται, τῷ δὲ μὴ ἀνθρώπῳ τὸ μὴ ζῶον οὐ, ἀλλ' ἀνάπαλιν τῷ μὴ ζῶντι τὸ οὐκ ἄνθρωπος. ἐπὶ πάντων οὖν τὸ τοιοῦτον ἀξιωτέον· οἷον εἰ τὸ καλὸν ἡδύ, καὶ τὸ μὴ ἡδὺ οὐ καλόν· εἰ δὲ τοῦτο μὴ, οὐδ' ἐκεῖνο· ὁμοίως δὲ καὶ εἰ τὸ μὴ ἡδὺ οὐ καλόν, τὸ καλὸν ἡδύ. δῆλον οὖν ὅτι πρὸς ἅμφω ἀντιστρέφει ἡ κατὰ τὴν ἀντίφασιν ἀκολουθήσις ἀνάπαλιν γινομένη.

Ἐπὶ δὲ τῶν ἐναντίων σκοπεῖν εἰ τῷ ἐναντίῳ τὸ ἐναντίον ἔπεται, ἢ ἐπὶ ταῦτά ἢ ἀνάπαλιν, καὶ ἀναιροῦντι καὶ κατασκευάζοντι· λαμβάνειν δὲ καὶ τὰ τοιαῦτα ἐξ ἐπαγωγῆς ἐφ' ὅσον χρήσιμον. ἐπὶ ταῦτά μὲν οὖν ἡ ἀκολουθήσις, οἷον τῇ ἀνδρείᾳ καὶ τῇ δειλίᾳ· τῇ μὲν γὰρ ἀρετῇ ἀκολουθεῖ, τῇ δὲ κακία, καὶ τῇ μὲν ἀκολουθεῖ τὸ αἰρετόν, τῇ δὲ τὸ φευκτόν. ἐπὶ ταῦτά οὖν καὶ ἡ τούτων ἀκολουθήσις· ἐναντίον γὰρ τὸ αἰρετόν τῷ φευκτῷ. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ἀνάπαλιν δὲ ἡ ἀκολουθήσις, οἷον εὐεξία μὲν ὑγείᾳ ἀκολουθεῖ, καχεξία δὲ νόσος οὐ, ἀλλὰ νόσῳ καχεξία. δῆλον οὖν ὅτι [114a] ἀνάπαλιν ἐπὶ τούτων ἡ ἀκολουθήσις. σπάνιον δὲ τὸ ἀνάπαλιν ἐπὶ τῶν ἐναντίων συμβαίνει, ἀλλὰ τοῖς πλείστοις ἐπὶ ταῦτά ἡ ἀκολουθήσις. εἰ οὖν μήτ' ἐπὶ ταῦτά τῷ ἐναντίῳ τὸ ἐναντίον ἀκολουθεῖ μήτε ἀνάπαλιν, δῆλον ὅτι οὐδ' ἐπὶ τῶν ῥηθέντων ἀκολουθεῖ τὸ ἕτερον τῷ ἑτέρῳ. εἰ δ' ἐπὶ τῶν ἐναντίων, καὶ ἐπὶ τῶν ῥηθέντων ἀναγκαῖον τὸ ἕτερον τῷ ἑτέρῳ ἀκολουθεῖν.

Ὅμοίως δὲ τοῖς ἐναντίοις καὶ ἐπὶ τῶν στερήσεων καὶ ἔξεων σκεπτέον· πλὴν οὐκ ἔστιν ἐπὶ τῶν στερήσεων τὸ ἀνάπαλιν, ἀλλ' ἐπὶ ταῦτά τὴν ἀκολουθήσιν ἀναγκαῖον αἰεὶ γίνεσθαι, καθάπερ ὅψει μὲν αἴσθησιν, τυφλότητι δ' ἀναισθησίαν. ἀντίκειται γὰρ ἡ αἴσθησις τῇ ἀναισθησίᾳ ὡς ἕξις καὶ στέρησις· τὸ μὲν γὰρ ἕξις αὐτῶν, τὸ δὲ στέρησις ἐστίν.

Ὅμοίως δὲ τῇ ἔξει καὶ τῇ στερήσει καὶ ἐπὶ τῶν πρὸς τι χρηστέον· ἐπὶ ταῦτά γὰρ καὶ τούτων ἡ ἀκολουθήσις. οἷον εἰ τὸ τριπλάσιον πολλαπλάσιον, καὶ τὸ τριτημόριον πολλοστημόριον· λέγεται γὰρ τὸ μὲν τριπλάσιον πρὸς τὸ τριτημόριον, τὸ δὲ πολλαπλάσιον πρὸς τὸ πολλοστημόριον. πάλιν εἰ ἡ ἐπιστήμη ὑπόληψις, καὶ τὸ ἐπιστητὸν ὑποληπτόν· καὶ εἰ ἡ ὄρασις αἴσθησις, καὶ τὸ ὀρατὸν αἰσθητόν. (ἔνστασις ὅτι οὐκ ἀνάγκη ἐπὶ τῶν πρὸς τι τὴν ἀκολουθήσιν γίνεσθαι καθάπερ εἴρηται· τὸ γὰρ αἰσθητὸν ἐπιστητόν ἐστιν, ἡ δ' αἴσθησις οὐκ ἐπιστήμη. οὐ μὴν ἀληθὴς γε ἡ ἔνστασις δοκεῖ εἶναι· πολλοὶ γὰρ οὗ φασι τῶν αἰσθητῶν ἐπιστήμην εἶναι.) ἔτι πρὸς τοῦναντίον οὐχ ἥττον χρήσιμον τὸ ῥηθέν, οἷον ὅτι τὸ αἰσθητὸν οὐκ ἔστιν ἐπιστητόν· οὐδὲ γὰρ ἡ αἴσθησις ἐπιστήμη.

Πάλιν ἐπὶ τῶν συστοίχων καὶ ἐπὶ τῶν πτώσεων, καὶ ἀναιροῦντα καὶ κατασκευάζοντα. λέγεται δὲ σύστοιχα μὲν τὰ τοιάδε οἷον τὰ δίκαια καὶ ὁ δίκαιος τῇ δικαιοσύνῃ, καὶ τὰ ἀνδρεῖα καὶ ὁ ἀνδρεῖος τῇ ἀνδρείᾳ. ὁμοίως δὲ καὶ τὰ ποιητικὰ ἢ φυλακτικὰ σύστοιχα ἐκείνῳ οὗ ἐστὶ ποιητικὰ ἢ φυλακτικά, οἷον τὰ ὑγιεινὰ ὑγιείας καὶ τὰ εὐεκτικὰ εὐεξίας· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων. σύστοιχα μὲν οὖν τὰ τοιαῦτα εἴωθε λέγεσθαι, πτώσεις δὲ οἷον τὸ δικαίως καὶ ἀνδρεῖως καὶ ὑγιεινῶς καὶ ὅσα τοῦτον τὸν τρόπον λέγεται. δοκεῖ δὲ καὶ τὰ κατὰ τὰς πτώσεις σύστοιχα εἶναι, οἷον τὸ μὲν δικαίως τῇ δικαιοσύνῃ, τὸ δὲ ἀνδρεῖως τῇ ἀνδρείᾳ. σύστοιχα δὲ λέγεται τὰ κατὰ τὴν αὐτὴν συστοιχίαν ἅπαντα, οἷον δικαιοσύνη, δίκαιος, δίκαιον, δικαίως. δῆλον οὖν ὅτι ἐνὸς ὁποιοῦν δειχθέντος τῶν κατὰ τὴν αὐτὴν συστοιχίαν ἀγαθοῦ ἢ [114b] ἐπαινετοῦ καὶ τὰ λοιπὰ πάντα δεδειγμένα γίνεται· οἷον εἰ ἡ δικαιοσύνη τῶν ἐπαινετῶν, καὶ ὁ δίκαιος καὶ τὸ δίκαιον καὶ τὸ δικαίως τῶν ἐπαινετῶν. ῥηθήσεται δὲ τὸ [δικαίως καὶ] ἐπαινετῶς κατὰ τὴν αὐτὴν πτῶσιν ἀπὸ τοῦ ἐπαινετοῦ καθάπερ τὸ δικαίως ἀπὸ τῆς δικαιοσύνης.

Σκοπεῖν δὲ μὴ μόνον ἐπ' αὐτοῦ τοῦ εἰρημένου, ἀλλὰ καὶ ἐπὶ τοῦ ἐναντίου τὸ ἐναντίον, οἷον ὅτι τὸ ἀγαθὸν οὐκ ἐξ ἀνάγκης ἡδύ· οὐδὲ γὰρ τὸ κακὸν λυπηρόν· ἢ εἰ τοῦτο, κἀκεῖνο. καὶ εἰ ἡ δικαιοσύνη ἐπιστήμη, καὶ ἡ ἀδικία ἄγνοια· καὶ εἰ τὸ δικαίως ἐπιστημονικῶς καὶ ἐμπείρως, τὸ ἀδίκως ἀγνοοῦντως καὶ ἀπείρως. εἰ δὲ ταῦτα μή, οὐδ' ἐκεῖνα, καθάπερ ἐπὶ τοῦ νῦν ῥηθέντος· μᾶλλον γὰρ ἂν φανείη τὸ ἀδίκως ἐμπείρως ἢ ἀπείρως. οὗτος δ' ὁ τόπος εἴρηται πρότερον ἐν ταῖς τῶν ἐναντίων ἀκολουθήσεσιν· οὐδὲν γὰρ ἄλλο νῦν ἀξιοῦμεν ἢ τὸ ἐναντίον τῷ ἐναντίῳ ἀκολουθεῖν.

Ἔτι ἐπὶ τῶν γενέσεων καὶ φθορῶν καὶ ποιητικῶν καὶ φθαρτικῶν, καὶ ἀναιροῦντι καὶ κατασκευάζοντι. ὧν γὰρ αἱ γενέσεις τῶν ἀγαθῶν, καὶ αὐτὰ

ἀγαθά, καὶ εἰ αὐτὰ ἀγαθά, καὶ αἱ γενέσεις· εἰ δὲ αἱ γενέσεις τῶν κακῶν, καὶ αὐτὰ τῶν κακῶν, «καὶ εἰ αὐτὰ τῶν κακῶν, καὶ αἱ γενέσεις τῶν κακῶν». ἐπὶ δὲ τῶν φθορῶν ἀνάπαλιν· εἰ γὰρ αἱ φθοραὶ τῶν ἀγαθῶν, αὐτὰ τῶν κακῶν, εἰ δ' αἱ φθοραὶ τῶν κακῶν, αὐτὰ τῶν ἀγαθῶν. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ ποιητικῶν καὶ φθαρτικῶν· ὧν μὲν γὰρ τὰ ποιητικὰ ἀγαθά, καὶ αὐτὰ τῶν ἀγαθῶν, ὧν δὲ τὰ φθαρτικὰ ἀγαθά, αὐτὰ τῶν κακῶν.

Πάλιν ἐπὶ τῶν ὁμοίων εἰ ὁμοίως ἔχει· οἷον εἰ ἐπιστήμη μία πλειόνων, καὶ δόξα, καὶ εἰ τὸ ὄψιν ἔχειν ὁρᾶν, καὶ τὸ ἀκοῇ ἔχειν ἀκούειν. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, καὶ τῶν ὄντων καὶ τῶν δοκούντων. χρήσιμος δ' ὁ τόπος πρὸς ἄμφω· εἰ μὲν γὰρ ἐπὶ τινος τῶν ὁμοίων οὕτως ἔχει, καὶ ἐπὶ τῶν ἄλλων τῶν ὁμοίων, εἰ δὲ ἐπὶ τινος μὴ, οὐδ' ἐπὶ τῶν ἄλλων. σκοπεῖν δὲ καὶ εἰ ἐφ' ἐνὸς καὶ ἐπὶ πολλῶν ὁμοίως ἔχει· ἐνιαχοῦ γὰρ διαφωνεῖ. οἷον εἰ τὸ ἐπίστασθαι διανοεῖσθαι, καὶ τὸ πολλὰ ἐπίστασθαι πολλὰ διανοεῖσθαι· τοῦτο δ' οὐκ ἀληθές· ἐπίστασθαι μὲν γὰρ ἐνδέχεται πολλά, διανοεῖσθαι δ' οὔ. εἰ οὖν τοῦτο μὴ, οὐδ' ἐκεῖνο τὸ ἐφ' ἐνός, ὅτι τὸ ἐπίστασθαι διανοεῖσθαι ἐστίν.

Ἔτι ἐκ τοῦ μᾶλλον καὶ ἥττον. εἰσὶ δὲ τόποι τοῦ μᾶλλον καὶ ἥττον τέσσαρες· εἷς μὲν εἰ ἀκολουθεῖ τὸ μᾶλλον τῷ μᾶλλον, οἷον εἰ ἡδονὴ ἀγαθόν, καὶ ἡ μᾶλλον ἡδονὴ μᾶλλον [115a] ἀγαθόν, καὶ εἰ τὸ ἀδικεῖν κακόν, καὶ τὸ μᾶλλον ἀδικεῖν μᾶλλον κακόν. χρήσιμος δὲ πρὸς ἄμφω ὁ τόπος· εἰ μὲν γὰρ ἀκολουθεῖ τῇ τοῦ ὑποκειμένου ἐπιδόσει ἢ τοῦ συμβεβηκότος ἐπίδοσις, καθάπερ εἴρηται, δῆλον ὅτι συμβέβηκεν· εἰ δὲ μὴ ἀκολουθεῖ, οὐ συμβέβηκεν. τοῦτο δ' ἐπαγωγῇ ληπτέον. ἄλλος ἐνὸς περὶ δύο λεγομένου, εἰ ὥ μᾶλλον εἰκὸς ὑπάρχειν μὴ ὑπάρχει, οὐδ' ὥ ἥττον, καὶ εἰ ὥ ἥττον εἰκὸς ὑπάρχειν ὑπάρχει, καὶ ὥ μᾶλλον. πάλιν δυοῖν περὶ ἐνός λεγομένων, εἰ τὸ μᾶλλον ὑπάρχειν δοκοῦν μὴ ὑπάρχει, οὐδὲ τὸ ἥττον, εἰ δὲ τὸ ἥττον δοκοῦν ὑπάρχειν ὑπάρχει, καὶ τὸ μᾶλλον. ἔτι δυοῖν περὶ δύο λεγομένων, εἰ τὸ θατέρω μᾶλλον ὑπάρχειν δοκοῦν μὴ ὑπάρχει, οὐδὲ τὸ λοιπὸν τῷ λοιπῷ, εἰ δὲ τὸ ἥττον δοκοῦν τῷ ἐτέρω ὑπάρχειν ὑπάρχει, καὶ τὸ λοιπὸν τῷ λοιπῷ.

Ἔτι ἐκ τοῦ ὁμοίως ὑπάρχειν ἢ δοκεῖν ὑπάρχειν τριχῶς, καθάπερ ἐκ τοῦ μᾶλλον ἐπὶ τῶν ὕστερον ῥηθέντων τριῶν τόπων ἐλέγετο. εἴτε γὰρ ἓν τι δυσὶν ὁμοίως ὑπάρχει ἢ δοκεῖ ὑπάρχειν, εἰ τῷ ἐτέρω μὴ ὑπάρχει, οὐδὲ τῷ ἐτέρω, εἰ δὲ θατέρω ὑπάρχει, καὶ τῷ λοιπῷ· εἴτε δύο τῷ αὐτῷ ὁμοίως, εἰ τὸ ἕτερον μὴ ὑπάρχει, οὐδὲ τὸ λοιπόν, εἰ δὲ θάτερον, καὶ τὸ λοιπόν. τὸν αὐτὸν δὲ τρόπον καὶ εἰ δύο δυσὶν ὁμοίως ὑπάρχει· εἰ γὰρ τὸ ἕτερον τῷ ἐτέρω μὴ ὑπάρχει, οὐδὲ τὸ λοιπὸν τῷ λοιπῷ· εἰ δὲ ὑπάρχει τὸ ἕτερον τῷ ἐτέρω, καὶ τὸ λοιπὸν τῷ λοιπῷ.

Ἐκ μὲν οὖν τοῦ μᾶλλον καὶ ἥττον καὶ τοῦ ὁμοίως τοσαυταχῶς ἐνδέχεται ἐπιχειρεῖν. ἔτι δ' ἐκ τῆς προσθέσεως, ἐὰν ἕτερον πρὸς ἕτερον προστεθὲν ποιῇ ἀγαθὸν ἢ λευκὸν μὴ ὄν πρότερον ἀγαθὸν ἢ λευκόν, τὸ προστεθὲν ἔσται ἀγαθὸν ἢ λευκόν, οἷόνπερ καὶ τὸ ὅλον ποιεῖ. ἔτι εἰ πρὸς τὸ ὑπάρχον προστεθὲν τι μᾶλλον ποιεῖ τοιοῦτον οἷον ὑπῆρχε, καὶ αὐτὸ ἔσται τοιοῦτον. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. χρήσιμος δὲ οὐκ ἐν ἅπασιν ὁ τόπος, ἀλλ' ἐν οἷς τὴν τοῦ μᾶλλον ὑπεροχὴν συμβαίνει γίνεσθαι. οὗτος δὲ ὁ τόπος οὐκ ἀντιστρέφει πρὸς τὸ ἀνασκευάζειν. εἰ γὰρ μὴ ποιεῖ τὸ προστιθέμενον ἀγαθόν, οὐδέπω δῆλον εἰ αὐτὸ μὴ ἀγαθόν· τὸ γὰρ [115b] ἀγαθὸν κακῶ προστιθέμενον οὐκ ἐξ ἀνάγκης ἀγαθὸν τὸ ὅλον ποιεῖ, οὐδὲ λευκὸν τὸ λευκὸν μέλανι.

Πάλιν εἴ τι μᾶλλον καὶ ἥττον λέγεται, καὶ ἀπλῶς ὑπάρχει· τὸ γὰρ μὴ ὄν ἀγαθὸν ἢ λευκὸν οὐδὲ μᾶλλον ἢ ἥττον ἀγαθὸν ἢ λευκὸν ῥηθήσεται· τὸ γὰρ κακὸν οὐδενὸς μᾶλλον ἢ ἥττον ἀγαθὸν ἀλλὰ μᾶλλον κακὸν ἢ ἥττον ῥηθήσεται. οὐκ ἀντιστρέφει δ' οὐδ' οὗτος ὁ τόπος πρὸς τὸ ἀνασκευάσαι· πολλὰ γὰρ τῶν μὴ λεγομένων μᾶλλον καὶ ἥττον ἀπλῶς ὑπάρχει· ἄνθρωπος γὰρ οὐ λέγεται μᾶλλον καὶ ἥττον, ἀλλ' οὐ διὰ τοῦτο οὐκ ἔστιν ἄνθρωπος.

Τὸν αὐτὸν δὲ τρόπον σκεπτέον καὶ ἐπὶ τοῦ κατὰ τι καὶ ποτὲ καὶ πού· εἰ γὰρ κατὰ τι ἐνδέχεται, καὶ ἀπλῶς ἐνδέχεται· ὁμοίως δὲ καὶ τὸ ποτὲ ἢ πού· τὸ γὰρ ἀπλῶς ἀδύνατον οὔτε κατὰ τι οὔτε ποτὲ οὔτε πού ἐνδέχεται. (ἐνστασις ὅτι κατὰ τι μὲν εἰσι φύσει σπουδαῖοι, οἷον ἐλευθέριοι ἢ σωφρονικοί, ἀπλῶς δὲ οὐκ εἰσὶ φύσει σπουδαῖοι. ὁμοίως δὲ καὶ ποτὲ μὲν ἐνδέχεται τῶν φθαρτῶν τι μὴ φθαρῆναι, ἀπλῶς δ' οὐκ ἐνδέχεται μὴ φθαρῆναι. τὸν αὐτὸν δὲ τρόπον καὶ πού μὲν συμφέρει τοιαύτη διαίτη χρῆσθαι, οἷον ἐν τοῖς νοσώδεσι τόποις, ἀπλῶς δ' οὐ συμφέρει. ἔτι δὲ πού μὲν ἓνα μόνον δυνατὸν εἶναι, ἀπλῶς δὲ οὐ δυνατὸν ἓνα μόνον εἶναι. τὸν αὐτὸν δὲ τρόπον καὶ πού μὲν καλὸν τὸν πατέρα θύειν, οἷον ἐν Τριβαλλοῖς, ἀπλῶς δ' οὐ καλόν. ἢ τοῦτο μὲν οὐ πού σημαίνει ἀλλὰ τισίν· οὐδὲν γὰρ διαφέρει ὅπου ἂν ὦσιν· πανταχοῦ γὰρ αὐτοῖς ἔσται καλόν, οὔσι Τριβαλλοῖς. πάλιν ποτὲ μὲν συμφέρει φαρμακεύεσθαι, οἷον ὅταν νοσῇ, ἀπλῶς δ' οὐ. ἢ οὐδὲ τοῦτο ποτὲ σημαίνει ἀλλὰ τῷ διακειμένῳ πως· οὐδὲν γὰρ διαφέρει ὅποτεοῦν, ἐὰν οὕτω μόνον διακείμενος ᾖ.) τὸ δ' ἀπλῶς ἔστιν ὁ μηδενὸς προστεθέντος ἔρεῖς ὅτι καλόν ἐστιν ἢ τὸ ἐναντίον· οἷον τὸ τὸν πατέρα θύειν οὐκ ἔρεῖς καλὸν εἶναι ἀλλὰ τισὶ καλὸν εἶναι· οὐκ ἄρα ἀπλῶς καλόν· ἀλλὰ τὸ τοὺς θεοὺς τιμᾶν ἔρεῖς καλὸν οὐδὲν προσθείς· ἀπλῶς γὰρ καλόν ἐστιν. ὥστε ὁ ἂν μηδενὸς προστιθεμένου δοκῇ εἶναι καλὸν ἢ αἰσχροὺν ἢ ἄλλο τι τῶν τοιούτων, ἀπλῶς ῥηθήσεται.

## Γ

[116a] Πότερον δ' αἰρετώτερον ἢ βέλτιον δυεῖν ἢ πλειόνων, ἐκ τῶνδε σκεπτέον. πρῶτον δὲ διωρίσθω ὅτι τὴν σκέψιν ποιούμεθα οὐχ ὑπὲρ τῶν πολὺ διεστώτων καὶ μεγάλην πρὸς ἄλληλα διαφορὰν ἔχόντων (οὐδεὶς γὰρ ἀπορεῖ πότερον ἢ εὐδαιμονία ἢ ὁ πλοῦτος αἰρετώτερον), ἀλλ' ὑπὲρ τῶν σύνεγγυς, καὶ περὶ ὧν ἀμφισβητοῦμεν ποτέρῳ δεῖ προσθέσθαι μᾶλλον, διὰ τὸ μηδεμίαν ὁρᾶν τοῦ ἑτέρου πρὸς τὸ ἕτερον ὑπεροχὴν. δῆλον οὖν ἐπὶ τῶν τοιούτων ὅτι δειχθείσης ὑπεροχῆς ἢ μιᾶς ἢ πλειόνων συγκαταθήσεται ἡ διάνοια ὅτι τοῦτ' ἐστὶν αἰρετώτερον, ὁπότερον τυγχάνει αὐτῶν ὑπερέχον.

Πρῶτον μὲν οὖν τὸ πολυχρονιώτερον ἢ βεβαιότερον αἰρετώτερον τοῦ ἥττον τοιούτου. καὶ ὁ μᾶλλον ἂν ἔλοιτο ὁ φρόνιμος ἢ ὁ ἀγαθὸς ἀνὴρ ἢ ὁ νόμος ὁ ὀρθὸς ἢ οἱ σπουδαῖοι περὶ ἕκαστα αἰρούμενοι ἢ τοιοῦτοί εἰσιν ἢ οἱ ἐν ἑκάστῳ γένει ἐπιστήμονες, ἢ οἱ πλείους ἢ πάντες, οἷον ἐν ἱατρικῇ ἢ τεκτονικῇ ἢ οἱ πλείους τῶν ἰατρῶν ἢ πάντες, ἢ ὅσα ὅλως οἱ πλείους ἢ πάντες ἢ πάντα, οἷον τὰγαθόν· πάντα γὰρ τὰγαθοῦ ἐφίεται. δεῖ δ' ἄγειν πρὸς ὅ τι ἂν ἦ χρήσιμον τὸ ῥηθησόμενον. ἔστι δ' ἀπλῶς μὲν βέλτιον καὶ αἰρετώτερον τὸ κατὰ τὴν βελτίω ἐπιστήμην, τινὲ δὲ τὸ κατὰ τὴν οἰκείαν.

Ἐπειτα δὲ τὸ ὅπερ τόδε τι τοῦ μὴ ἐν γένει, οἷον ἡ δικαιοσύνη τοῦ δικαίου· τὸ μὲν γὰρ ἐν γένει τῷ ἀγαθῷ, τὸ δ' οὐ, καὶ τὸ μὲν ὅπερ ἀγαθόν, τὸ δ' οὐ. οὐδὲν γὰρ λέγεται ὅπερ τὸ γένος ὃ μὴ τυγχάνει ἐν τῷ γένει ὅν· οἷον ὁ λευκὸς ἄνθρωπος οὐκ ἔστιν ὅπερ χρῶμα. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

Καὶ τὸ δι' αὐτὸ αἰρετὸν τοῦ δι' ἕτερον αἰρετοῦ αἰρετώτερον, οἷον τὸ ὑγιαίνειν τοῦ γυμνάζεσθαι· τὸ μὲν γὰρ δι' αὐτὸ αἰρετόν, τὸ δὲ δι' ἕτερον. καὶ τὸ καθ' αὐτὸ τοῦ κατὰ συμβεβηκός, οἷον τὸ τοὺς φίλους δικαίους εἶναι τοῦ τοὺς ἐχθρούς. τὸ μὲν γὰρ καθ' αὐτὸ αἰρετόν, τὸ δὲ κατὰ συμβεβηκός· τὸ γὰρ τοὺς ἐχθροὺς δικαίους εἶναι κατὰ συμβεβηκός αἰρούμεθα, ὅπως μηδὲν ἡμᾶς βλάπτωσιν. ἔστι δὲ τοῦτο ταῦτό τῷ πρὸ αὐτοῦ, διαφέρει δὲ τῷ τρόπῳ· τὸ μὲν γὰρ τοὺς φίλους δικαίους εἶναι δι' αὐτὸ αἰρούμεθα, καὶ εἰ μηδὲν ἡμῖν μέλλει ἔσεσθαι, κἂν ἐν Ἰνδοῖς ὦσιν· τὸ δὲ τοὺς ἐχθροὺς δι' ἕτερον, ὅπως μηθὲν ἡμᾶς βλάπτωσιν.

[116b] Καὶ τὸ αἴτιον ἀγαθοῦ καθ' αὐτὸ τοῦ κατὰ συμβεβηκός αἰτίου, καθάπερ ἡ ἀρετὴ τῆς τύχης (ἡ μὲν γὰρ καθ' αὐτήν, ἡ δὲ κατὰ συμβεβηκός, αἰτία τῶν ἀγαθῶν) καὶ εἴ τι ἄλλο τοιοῦτον. ὁμοίως δὲ καὶ ἐπὶ τοῦ ἐναντίου·

τὸ γὰρ καθ' αὐτὸ κακοῦ αἴτιον φευκτότερον τοῦ κατὰ συμβεβηκός, οἷον ἡ κακία καὶ ἡ τύχη· τὸ μὲν γὰρ καθ' αὐτὸ κακόν, ἡ δὲ τύχη κατὰ συμβεβηκός.

Καὶ τὸ ἀπλῶς ἀγαθὸν τοῦ τινὶ αἰρετώτερον, οἷον τὸ ὑγιάζεσθαι τοῦ τέμνεσθαι· τὸ μὲν γὰρ ἀπλῶς ἀγαθόν, τὸ δὲ τινί, τῷ δεομένῳ τομῆς. καὶ τὸ φύσει τοῦ μὴ φύσει, οἷον ἡ δικαιοσύνη τοῦ δικαίου· τὸ μὲν γὰρ φύσει, τὸ δ' ἐπίκτητον. καὶ τὸ τῷ βελτίονι καὶ τιμιωτέρῳ ὑπάρχον αἰρετώτερον, οἷον θεῷ ἢ ἀνθρώπῳ, καὶ ψυχῇ ἢ σώματι. καὶ τὸ τοῦ βελτίονος ἴδιον βέλτιον ἢ τὸ τοῦ χείρονος, οἷον τὸ τοῦ θεοῦ ἢ τὸ τοῦ ἀνθρώπου· κατὰ μὲν γὰρ τὰ κοινὰ ἐν ἀμφοτέροις οὐδὲν διαφέρει ἀλλήλων, τοῖς δ' ἰδίοις τὸ ἕτερον τοῦ ἑτέρου ὑπερέχει. καὶ τὸ ἐν βελτίοσιν ἢ προτέροις ἢ τιμιωτέροις βέλτιον, οἷον ὑγίεια ἰσχύος καὶ κάλλους· ἢ μὲν γὰρ ἐν ὑγροῖς καὶ ξηροῖς καὶ θερμοῖς καὶ ψυχροῖς, ἀπλῶς δ' εἰπεῖν ἐξ ὧν πρώτων συνέστηκε τὸ ζῶον, τὰ δ' ἐν τοῖς ὑστέροις. ἢ μὲν γὰρ ἰσχύς ἐν τοῖς νεύροις καὶ ὀστοῖς, τὸ δὲ κάλλος τῶν μελῶν τις συμμετρία δοκεῖ εἶναι. καὶ τὸ τέλος τῶν πρὸς τὸ τέλος αἰρετώτερον δοκεῖ εἶναι, καὶ δυοῖν τὸ ἕγγιον τοῦ τέλους. καὶ ὅλως τὸ πρὸς τὸ τοῦ βίου τέλος αἰρετώτερον μᾶλλον ἢ τὸ πρὸς ἄλλο τι, οἷον τὸ πρὸς εὐδαιμονίαν συντεῖνον ἢ τὸ πρὸς φρόνησιν. καὶ τὸ δυνατόν τοῦ ἀδυνάτου. ἔτι δύο ποιητικῶν οὗ τὸ τέλος βέλτιον· ποιητικοῦ δὲ καὶ τέλους ἐκ τοῦ ἀνάλογον, ὅταν πλείονι ὑπερέχη τὸ τέλος τοῦ τέλους ἢ ἐκεῖνο τοῦ οἰκείου ποιητικοῦ, οἷον εἰ ἡ εὐδαιμονία πλείονι ὑπερέχει ὑγείας ἢ ὑγίεια ὑγεινοῦ, τὸ ποιητικὸν εὐδαιμονίας βέλτιον ὑγείας. ὅσω γὰρ ἡ εὐδαιμονία ὑγείας ὑπερέχει, τοσούτω καὶ τὸ ποιητικὸν τὸ τῆς εὐδαιμονίας τοῦ ὑγεινοῦ ὑπερέχει· ἢ δὲ ὑγίεια τοῦ ὑγεινοῦ ἐλάττονι ὑπερεῖχεν· ὥστε πλείονι ὑπερέχει τὸ ποιητικὸν εὐδαιμονίας τοῦ ὑγεινοῦ ἢ ἡ ὑγίεια τοῦ ὑγεινοῦ. δῆλον ἄρα ὅτι αἰρετώτερον τὸ ποιητικὸν εὐδαιμονίας τῆς ὑγείας· τοῦ γὰρ αὐτοῦ πλείονι ὑπερέχει.

Ἔτι τὸ κάλλιον καθ' αὐτὸ καὶ τιμιώτερον καὶ ἐπαινετώτερον, οἷον φιλία πλούτου καὶ δικαιοσύνη ἰσχύος· τὰ μὲν γὰρ καθ' αὐτὰ τῶν τιμῶν καὶ ἐπαινετῶν, τὰ δ' [117a] οὐ καθ' αὐτὰ ἀλλὰ δι' ἕτερον. οὐδεὶς γὰρ τιμᾷ τὸν πλοῦτον δι' ἑαυτόν, ἀλλὰ δι' ἕτερον· τὴν δὲ φιλίαν καθ' αὐτό, καὶ εἰ μηδὲν μέλλει ἡμῖν ἕτερον ἀπ' αὐτῆς ἔσεσθαι.

Ἔτι ὅταν δύο τινὰ ἢ σφόδρα αὐτοῖς παραπλήσια καὶ μὴ δυνώμεθα ὑπεροχὴν μηδεμίαν συνιδεῖν τοῦ ἑτέρου πρὸς τὸ ἕτερον, ὅρᾱν ἀπὸ τῶν παρεπομένων. ὧ γὰρ ἔπεται μεῖζον ἀγαθόν, τοῦθ' αἰρετώτερον· ἂν δ' ἢ τὰ ἐπόμενα κακά, ὧ τὸ ἐλάττον ἀκολουθεῖ κακόν, τοῦθ' αἰρετώτερον· ὄντων γὰρ ἀμφοτέρων αἰρετῶν οὐδὲν κωλύει δυσχερές τι παρέπεσθαι. διχῶς δ' ἀπὸ τοῦ ἔπεσθαι ἢ σκέψις· καὶ γὰρ πρότερον καὶ ὕστερον ἔπεται, οἷον τῷ μανθάνοντι



τὸ μὲν ἀγνοεῖν πρότερον, τὸ δ' ἐπίστασθαι ὕστερον. βέλτιον δ' ὥς ἐπὶ πολὺ τὸ ὕστερον ἐπόμενον. λαμβάνειν οὖν τῶν ἐπομένων ὁπότερον ἂν ᾖ χρήσιμον.

Ἔτι τὰ πλείω ἀγαθὰ τῶν ἐλαττόνων, ἢ ἀπλῶς ἢ ὅταν τὰ ἕτερα ἐν τοῖς ἑτέροις ἐνυπάρχη, τὰ ἐλάττω ἐν τοῖς πλείοσιν. (ἔνστασις, εἴ που θάτερον θατέρου χάριν· οὐδὲν γὰρ αἰρετώτερα τὰ ἄμφω τοῦ ἐνός, οἷον τὸ ὑγιάζεσθαι καὶ ἡ ὑγίεια τῆς ὑγιείας, ἐπειδὴ τὸ ὑγιάζεσθαι τῆς ὑγιείας ἔνεκεν αἰρούμεθα.) καὶ μὴ ἀγαθὰ δὲ ἀγαθῶν οὐδὲν κωλύει εἶναι αἰρετώτερα, οἷον εὐδαιμονίαν καὶ ἄλλο τι ὃ μὴ ἔστιν ἀγαθὸν δικαιοσύνης καὶ ἀνδρείας. καὶ ταῦτά μεθ' ἡδονῆς μᾶλλον ἢ ἄνευ ἡδονῆς. καὶ ταῦτά μετ' ἀλυπίας ἢ μετὰ λύπης.

Καὶ ἕκαστον ἐν ᾧ καιρῷ μεῖζον δύναται, ἐν τούτῳ καὶ αἰρετώτερον, οἷον τὸ ἀλύπως ἐν τῷ γήρᾳ μᾶλλον ἢ ἐν τῇ νεότητι· μεῖζον γὰρ ἐν τῷ γήρᾳ δύναται. κατὰ ταῦτα δὲ καὶ ἡ φρόνησις ἐν τῷ γήρᾳ αἰρετώτερον· οὐδεὶς γὰρ τοὺς νέους αἰρεῖται ἡγεμόνας, διὰ τὸ μὴ ἀξιοῦν φρονίμους εἶναι. ἡ δ' ἀνδρεία ἀνάπαλιν· ἐν τῇ νεότητι γὰρ ἀναγκαιοτέρα ἢ κατὰ τὴν ἀνδρείαν ἐνέργεια. ὁμοίως δὲ καὶ ἡ σωφροσύνη· μᾶλλον γὰρ οἱ νέοι τῶν πρεσβυτέρων ὑπὸ τῶν ἐπιθυμιῶν ἐνοχλοῦνται.

Καὶ ὃ ἐν παντὶ καιρῷ ἢ ἐν τοῖς πλείστοις χρησιμώτερον, οἷον δικαιοσύνη καὶ σωφροσύνη ἀνδρείας· αἱ μὲν γὰρ αἰεὶ, ἡ δὲ ποτὲ χρησίμη. καὶ ὃ πάντων ἔχόντων μηδὲν θατέρου δεόμεθα ἢ ὃ ἔχόντων προσδεόμεθα τοῦ λοιποῦ, καθάπερ ἐπὶ δικαιοσύνης καὶ ἀνδρείας· δικαίων μὲν γὰρ πάντων [117b] ὄντων οὐδὲν χρήσιμος ἡ ἀνδρεία, ἀνδρείων δὲ πάντων ὄντων χρήσιμος ἡ δικαιοσύνη.

Ἔτι ἐκ τῶν φθορῶν καὶ τῶν ἀποβολῶν, καὶ τῶν γενέσεων καὶ τῶν λήψεων, καὶ τῶν ἐναντίων. ὧν γὰρ αἱ φθοραὶ φευκτότεραι, αὐτὰ αἰρετώτερα. ὁμοίως δὲ καὶ ἐπὶ τῶν ἀποβολῶν καὶ τῶν ἐναντίων· εἰ γὰρ ἡ ἀποβολὴ ἢ τὸ ἐναντίον φευκτότερον, αὐτὸ αἰρετώτερον. ἐπὶ δὲ τῶν γενέσεων καὶ τῶν λήψεων ἀνάπαλιν· ὧν γὰρ αἱ λήψεις καὶ αἱ γενέσεις αἰρετώτεραι, καὶ αὐτὰ αἰρετώτερα.

Ἄλλος τόπος, τὸ ἐγγύτερον τάγαθοῦ βέλτιον καὶ αἰρετώτερον, καὶ τὸ ὁμοιότερον τάγαθῷ, οἷον ἡ δικαιοσύνη δικαίου. καὶ τὸ τῷ βελτίονι αὐτοῦ ὁμοιότερον, καθάπερ τὸν Αἴαντα τοῦ Ὀδυσσέως φασὶ βελτίῳ τινὲς εἶναι, διότι ὁμοιότερος τῷ Ἀχιλλεῖ. (ἔνστασις τούτου ὅτι οὐκ ἀληθές· οὐδὲν γὰρ κωλύει μὴ ἢ βέλτιστος ὁ Ἀχιλλεύς, ταύτῃ ὁμοιότερον εἶναι τὸν Αἴαντα, τοῦ ἑτέρου ὄντος μὲν ἀγαθοῦ μὴ ὁμοίου δέ.) σκοπεῖν δὲ καὶ εἰ ἐπὶ τὰ γελοιότερα εἴη ὅμοιον, καθάπερ ὁ πίθηκος τῷ ἀνθρώπῳ, τοῦ ἵππου μὴ ὄντος ὁμοίου· οὐ γὰρ

κάλλιον ὁ πίθηκος, ὁμοιότερον δὲ τῷ ἀνθρώπῳ. πάλιν ἐπὶ δυοῖν, εἰ τὸ μὲν τῷ βελτίονι τὸ δὲ τῷ χείρονι ὁμοιότερον, εἴη ἂν βέλτιον τὸ τῷ βελτίονι ὁμοιότερον. (ἔχει δὲ καὶ τοῦτο ἔνστασιν· οὐδὲν γὰρ κωλύει τὸ μὲν τῷ βελτίονι ἡρέμα ὅμοιον εἶναι, τὸ δὲ τῷ χείρονι σφόδρα, οἷον εἰ ὁ μὲν Αἴας τῷ Ἀχιλλεῖ ἡρέμα, ὁ δ' Ὀδυσσεὺς τῷ Νέστορι σφόδρα. καὶ εἰ τὸ μὲν τῷ βελτίονι ἐπὶ τὰ χεῖρῳ ὅμοιον εἴη, τὸ δὲ τῷ χείρονι ἐπὶ τὰ βελτίῳ, καθάπερ ἵππος ὄνῳ καὶ πίθηκος ἀνθρώπῳ.)

Ἄλλος, τὸ ἐπιφανέστερον τοῦ ἥττον τοιούτου, καὶ τὸ χαλεπώτερον· μᾶλλον γὰρ ἀγαπῶμεν ἔχοντες ἢ μὴ ἔστι ῥαδίως λαβεῖν. καὶ τὸ ἰδιαίτερον τοῦ κοινοτέρου. καὶ τὸ τοῖς κακοῖς ἀκοινωνητότερον· αἰρετώτερον γὰρ ὧ μὴδεμία δυσχέρεια ἀκολουθεῖ ἢ ὧ ἀκολουθεῖ.

Ἔτι εἰ ἀπλῶς τοῦτο τούτου βέλτιον, καὶ τὸ βέλτιστον τῶν ἐν τούτῳ βέλτιον τοῦ ἐν τῷ ἑτέρῳ βελτίστου· οἷον εἰ βέλτιον ἄνθρωπος ἵππου, καὶ ὁ βέλτιστος ἄνθρωπος τοῦ βελτίστου ἵππου βελτίων. καὶ εἰ τὸ βέλτιστον τοῦ βελτίστου βέλτιον, καὶ ἀπλῶς τοῦτο τούτου βέλτιον· οἷον εἰ ὁ βέλτιστος ἄνθρωπος τοῦ βελτίστου ἵππου βελτίων, καὶ ἀπλῶς ἄνθρωπος ἵππου βελτίων.

[118a] Ἔτι ὧν ἔστι τοὺς φίλους μετασχεῖν, αἰρετώτερα ἢ ὧν μή. καὶ ἃ πρὸς τὸν φίλον πρᾶξαι μᾶλλον βουλόμεθα ἢ ἃ πρὸς τὸν τυχόντα, ταῦτα αἰρετώτερα, οἷον τὸ δικαιοπραγεῖν καὶ εὖ ποιεῖν μᾶλλον ἢ τὸ δοκεῖν· τοὺς γὰρ φίλους εὖ ποιεῖν βουλόμεθα μᾶλλον ἢ δοκεῖν, τοὺς δὲ τυχόντας ἀνάπαλιν.

Καὶ τὰ ἐκ περιουσίας τῶν ἀναγκαίων βελτίῳ, ἐνίστε δὲ καὶ αἰρετώτερα· βέλτιον γὰρ τοῦ ζῆν τὸ εὖ ζῆν, τὸ δὲ εὖ ζῆν ἔστιν ἐκ περιουσίας, αὐτὸ δὲ τὸ ζῆν ἀναγκαῖον. ἐνίστε δὲ τὰ βελτίῳ οὐχὶ καὶ αἰρετώτερα· οὐ γὰρ εἰ βελτίῳ, ἀναγκαῖον καὶ αἰρετώτερα· τὸ γοῦν φιλοσοφεῖν βέλτιον τοῦ χρηματίζεσθαι, ἀλλ' οὐχ αἰρετώτερον τῷ ἐνδεεῖ τῶν ἀναγκαίων. τὸ δ' ἐκ περιουσίας ἔστιν ὅταν ὑπαρχόντων τῶν ἀναγκαίων ἄλλα τινὰ προσκατασκευάζεται τις τῶν καλῶν. σχεδὸν δὲ ἴσως αἰρετώτερόν ἐστι τὸ ἀναγκαῖον, βέλτιον δὲ τὸ ἐκ περιουσίας.

Καὶ ὃ μὴ ἔστι παρ' ἄλλου πορίσασθαι ἢ ὃ ἔστι καὶ παρ' ἄλλου, οἷον πέπονθεν ἢ δικαιοσύνη πρὸς τὴν ἀνδρείαν. καὶ εἰ τότε μὲν ἄνευ τοῦδε αἰρετόν, τότε δὲ ἄνευ τοῦδε μή· οἷον δύναμις ἄνευ φρονήσεως οὐχ αἰρετόν, φρόνησις δ' ἄνευ δυνάμεως αἰρετόν. καὶ δυοῖν εἰ θάτερον ἀρνούμεθα, ἵνα τὸ λοιπὸν δόξη ἡμῖν ὑπάρχειν, ἐκεῖνο αἰρετώτερον ὃ βουλόμεθα δοκεῖν ὑπάρχειν· οἷον φιλοπονεῖν ἀρνούμεθα, ἵν' εὐφυεῖς εἶναι δόξωμεν.

Ἔτι οὖν τῇ ἀπουσίᾳ ἦττον ἐπιτιμητέον δυσφοροῦσι, τοῦτο αἰρετώτερον.  
καὶ οὖν τῇ ἀπουσίᾳ μὴ δυσφοροῦσι μᾶλλον ἐπιτιμητέον, τοῦτο αἰρετώτερον.

Ἔτι τῶν ὑπὸ τὸ εἶδος τὸ ἔχον τὴν οἰκείαν ἀρετὴν τοῦ μὴ ἔχοντος· ἄμφω  
δ' ἐχόντων τὸ μᾶλλον ἔχον.

Ἔτι εἰ τὸ μὲν ποιεῖ ἀγαθὸν ἐκεῖνο ὧς ἂν παρῇ, τὸ δὲ μὴ ποιεῖ, τὸ ποιοῦν  
αἰρετώτερον, καθάπερ καὶ θερμότερον τὸ θερμαῖνον τοῦ μή. εἰ δ' ἄμφω ποιεῖ,  
τὸ μᾶλλον ποιοῦν· ἢ εἰ τὸ βέλτιον καὶ κυριώτερον ποιεῖ ἀγαθόν, οἷον εἰ τὸ  
μὲν τὴν ψυχὴν τὸ δὲ τὸ σῶμα.

Ἔτι ἀπὸ τῶν πτώσεων καὶ τῶν χρήσεων καὶ τῶν πράξεων καὶ τῶν ἔργων.  
καὶ ταῦτα δὲ ἀπ' ἐκείνων· ἀκολουθεῖ γὰρ ἀλλήλοις. οἷον εἰ τὸ δικαίως  
αἰρετώτερον τοῦ ἀνδρείως, καὶ ἡ δικαιοσύνη τῆς ἀνδρείας αἰρετώτερον· καὶ  
εἰ ἡ δικαιοσύνη τῆς ἀνδρείας αἰρετώτερον, καὶ τὸ δικαίως τοῦ ἀνδρείως.  
παραπλησίως δὲ καὶ ἐπὶ τῶν ἄλλων.

[118b] Ἔτι εἴ τις τοῦ αὐτοῦ τὸ μὲν μείζον ἀγαθόν ἐστι τὸ δὲ ἔλαττον,  
αἰρετώτερον τὸ μείζον. ἢ εἰ μείζονος μείζον θάτερον. ἀλλὰ καὶ εἰ δύο τινὰ  
ἐνός τινος εἴη αἰρετώτερα, τὸ μᾶλλον αἰρετώτερον τοῦ ἦττον αἰρετωτέρου  
αἰρετώτερον. ἔτι οὖν ἡ ὑπερβολὴ τῆς ὑπερβολῆς αἰρετωτέρα, καὶ αὐτὸ  
αἰρετώτερον· οἷον φιλία χρημάτων· αἰρετωτέρα γὰρ ἢ τῆς φιλίας ὑπερβολὴ  
τῆς τῶν χρημάτων. καὶ οὖν μᾶλλον ἂν ἔλοιτο αὐτὸς αὐτῷ αἷτιος εἶναι ἢ οὐ  
ἕτερον, οἷον τοὺς φίλους τῶν χρημάτων.

Ἔτι ἐκ τῆς προσθέσεως, εἰ τῷ αὐτῷ προστιθέμενόν τι τὸ ὅλον  
αἰρετώτερον ποιεῖ. εὐλαβεῖσθαι δὲ δεῖ προτείνειν ἐφ' ὧν τῷ μὲν ἑτέρῳ τῶν  
προστιθεμένων χρήται τὸ κοινὸν ἢ ἄλλως πως συνεργόν ἐστι, τῷ δὲ λοιπῷ μὴ  
χρήται μηδὲ συνεργόν ἐστίν, οἷον πρίονα καὶ δρέπανον μετὰ τεκτονικῆς·  
αἰρετώτερον γὰρ ὁ πρίων συνδυαζομένοι, ἀπλῶς δὲ οὐχ αἰρετώτερον. πάλιν  
εἰ ἐλάττονι προστεθέν τι τὸ ὅλον μείζον ποιεῖ. ὁμοίως δὲ καὶ ἐκ τῆς  
ἀφαιρέσεως· οὐ γὰρ ἀφαιρεθέντος ἀπὸ τοῦ αὐτοῦ τὸ λειπόμενον ἔλαττον,  
ἐκεῖνο μείζον ἂν εἴη, ὅποτε ἀφαιρεθὲν τὸ λειπόμενον ἔλαττον ποιεῖ.

Καὶ εἰ τὸ μὲν δι' αὐτὸ τὸ δὲ διὰ τὴν δόξαν αἰρετόν, οἷον ὑγίεια κάλλους.  
ὅρος δὲ τοῦ πρὸς δόξαν τὸ μηδενὸς συνειδότος μὴ ἂν σπουδάσαι ὑπάρχειν.  
καὶ εἰ τὸ μὲν δι' αὐτὸ καὶ διὰ τὴν δόξαν αἰρετόν, τὸ δὲ διὰ θάτερον μόνον.  
καὶ ὁπότερον μᾶλλον δι' αὐτὸ τίμιον, τοῦτο καὶ βέλτιον καὶ αἰρετώτερον.  
τιμώτερον δ' ἂν εἴη καθ' αὐτὸ ὃ μηδενὸς ἄλλου μέλλοντος ὑπάρξειν δι' αὐτὸ

αἰρούμεθα μᾶλλον.

Ἔτι διελέσθαι ποσαχῶς τὸ αἰρετὸν λέγεται καὶ τίνων χάριν, οἷον τοῦ συμφέροντος ἢ τοῦ καλοῦ ἢ τοῦ ἡδέος· τὸ γὰρ πρὸς ἅπαντα ἢ πρὸς τὰ πλείω χρήσιμον αἰρετώτερον ἂν ὑπάρχοι τοῦ μὴ ὁμοίως. τῶν δ' αὐτῶν ἀμφοτέροις ὑπαρχόντων, ὁποτέρῳ μᾶλλον ὑπάρχει σκεπτέον, οἷον πότερον ἡδίων ἢ κάλλιον ἢ συμφορώτερον. πάλιν τὸ τοῦ βελτίονος ἔνεκεν αἰρετώτερον, οἷον τὸ ἀρετῆς ἔνεκεν ἢ ἡδονῆς. ὁμοίως δὲ καὶ ἐπὶ τῶν φευκτῶν· φευκτότερον γὰρ τὸ μᾶλλον ἐμποδιστικὸν τῶν αἰρετῶν, οἷον νόσος αἵσχους· καὶ γὰρ ἡδονῆς καὶ τοῦ σπουδαῖον εἶναι κωλυτικώτερον ἢ νόσος.

Ἔτι ἐκ τοῦ ὁμοίως δεικνύναι φευκτὸν καὶ αἰρετὸν τὸ προκείμενον· ἦττον γὰρ αἰρετὸν τὸ τοιοῦτον ὃ καὶ ἔλοιτ' ἂν τις ὁμοίως καὶ φύγοι, τοῦ ἑτέρου ὄντος αἰρετοῦ μόνον.

[119a] Τὰς μὲν οὖν πρὸς ἄλληλα συγκρίσεις καθάπερ εἴρηται ποιητέον. οἱ αὐτοὶ δὲ τόποι χρήσιμοι καὶ πρὸς τὸ δεικνύναι ὅτιοῦν αἰρετὸν ἢ φευκτόν· ἀφαιρεῖν γὰρ μόνον δεῖ τὴν πρὸς ἕτερον ὑπεροχήν. εἰ γὰρ τὸ τιμιώτερον αἰρετώτερον, καὶ τὸ τίμιον αἰρετόν, καὶ εἰ τὸ χρησιμώτερον αἰρετώτερον, καὶ τὸ χρήσιμον αἰρετόν. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, ὅσα τοιαύτην ἔχει τὴν σύγκρισιν. ἐπ' ἐνίων γὰρ εὐθέως κατὰ τὴν πρὸς ἕτερον σύγκρισιν καὶ ὅτι αἰρετὸν ἐκάτερον ἢ τὸ ἕτερον λέγομεν, οἷον ὅταν τὸ μὲν φύσει ἀγαθὸν τὸ δὲ μὴ φύσει λέγωμεν· τὸ γὰρ φύσει ἀγαθὸν δῆλον ὅτι αἰρετόν ἐστιν.

Ληπτέον δ' ὅτι μάλιστα καθόλου τοὺς τρόπους περὶ τοῦ μᾶλλον καὶ τοῦ μείζονος· ληφθέντες γὰρ οὕτως πρὸς πλείω χρήσιμοι ἂν εἴησαν. ἔστι δ' αὐτῶν τῶν εἰρημένων ἐνίους καθόλου μᾶλλον ποιεῖν μικρὸν παραλλάσσοντα τῇ προσηγορίᾳ, οἷον τὸ φύσει τοιοῦτο τοῦ μὴ φύσει τοιούτου μᾶλλον τοιοῦτο. καὶ εἰ τὸ μὲν ποιεῖ τὸ δὲ μὴ ποιεῖ τὸ ἔχον τοιόνδε ὥς ἂν ὑπάρχη, μᾶλλον τοιοῦτο ὃ ποτε ποιεῖ ἢ ὃ μὴ ποιεῖ, εἰ δ' ἄμφω ποιεῖ, τὸ μᾶλλον ποιοῦν τοιοῦτο.

Ἔτι εἰ τοῦ αὐτοῦ τινος τὸ μὲν μᾶλλον τὸ δὲ ἦττον τοιοῦτο· καὶ εἰ τὸ μὲν τοιούτου μᾶλλον τοιοῦτο, τὸ δὲ μὴ τοιούτου, δῆλον ὅτι τὸ πρῶτον μᾶλλον τοιοῦτο. ἔτι ἐκ τῆς προσθέσεως, εἰ τῷ αὐτῷ προστιθέμενον τὸ ὅλον μᾶλλον ποιεῖ τοιοῦτο, ἢ εἰ τῷ ἦττον τοιούτῳ προστιθέμενον τὸ ὅλον μᾶλλον ποιεῖ τοιοῦτο. ὁμοίως δὲ καὶ ἐκ τῆς ἀφαιρέσεως· οὐ γὰρ ἀφαιρεθέντος τὸ λειπόμενον ἦττον τοιοῦτο, αὐτὸ μᾶλλον τοιοῦτο. καὶ τὰ τοῖς ἐναντίοις ἀμιγέστερα μᾶλλον τοιαῦτα, οἷον λευκότερον τὸ τῷ μέλανι ἀμιγέστερον. ἔτι

παρὰ τὰ εἰρημένα πρότερον τὸ μᾶλλον ἐπιδεχόμενον τὸν οἰκεῖον τοῦ προκειμένου λόγον· οἷον εἰ τοῦ λευκοῦ ἐστὶ λόγος χρῶμα διακριτικὸν ὅψεως, λευκότερον ὃ ἐστὶ μᾶλλον χρῶμα διακριτικὸν ὅψεως.

Ἄν δ' ἐπὶ μέρους καὶ μὴ καθόλου τὸ πρόβλημα τεθῇ, πρῶτον μὲν οἱ εἰρημένοι καθόλου κατασκευαστικοὶ ἢ ἀνασκευαστικοὶ τόποι πάντες χρήσιμοι. καθόλου γὰρ ἀναιροῦντες ἢ κατασκευάζοντες καὶ ἐπὶ μέρους δείκνυμεν· εἰ γὰρ παντὶ ὑπάρχει, καὶ τινί, καὶ εἰ μηδενί, οὐδὲ τινί. μάλιστα δ' ἐπικαιροὶ καὶ κοινοὶ τῶν τόπων οἳ τ' ἐκ τῶν ἀντικειμένων καὶ τῶν συστοίχων καὶ τῶν πτώσεων. ὁμοίως γὰρ ἔνδοξον τὸ ἀξιῶσαι, εἰ πᾶσα ἡδονὴ ἀγαθόν, καὶ λύπην πᾶσαν εἶναι κακόν, [119b] τῷ εἴ τις ἡδονὴ ἀγαθόν, καὶ λύπην εἶναι τινα κακόν. ἔτι εἴ τις αἴσθησις μὴ ἔστι δύναμις, καὶ ἀναισθησία τις οὐκ ἔστιν ἀδυναμία. καὶ εἴ τι ὑποληπτὸν ἐπιστητόν, καὶ ὑπόληψις τις ἐπιστήμη. πάλιν εἴ τι τῶν ἀδίκων ἀγαθόν, καὶ τῶν δικαίων τι κακόν· πάλιν εἴ τι τῶν δικαίως κακόν, καὶ τῶν ἀδίκως τι ἀγαθόν. καὶ εἴ τι τῶν ἡδέων φευκτόν, ἡδονή τις φευκτόν. κατὰ ταῦτα δὲ καὶ εἴ τι τῶν ἡδέων ὠφέλιμον, ἡδονή τις ὠφέλιμον. καὶ ἐπὶ τῶν φθαρτικῶν δὲ καὶ τῶν γενέσεων καὶ φθορῶν ὡσαύτως. εἰ γὰρ τι φθαρτικὸν ἡδονῆς ἢ ἐπιστήμης ὄν ἀγαθόν ἐστίν, εἴη ἂν τις ἡδονὴ ἢ ἐπιστήμη τῶν κακῶν. ὁμοίως δὲ καὶ εἰ φθορά τις ἐπιστήμης τῶν ἀγαθῶν ἢ γενέσεις τῶν κακῶν, ἔσται τις ἐπιστήμη τῶν κακῶν· οἷον εἰ τὸ ἐπιλανθάνεσθαι ἃ τις αἰσchrὰ ἔπραξε τῶν ἀγαθῶν, ἢ τὸ ἀναμνησθεσθαι τῶν κακῶν, εἴη ἂν τὸ ἐπίστασθαι ἃ τις αἰσchrὰ ἔπραξε τῶν κακῶν. ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων· ἐν ἅπασιν γὰρ ὁμοίως τὸ ἔνδοξον.

Ἔτι ἐκ τοῦ μᾶλλον καὶ ἥττον καὶ ὁμοίως. εἰ γὰρ μᾶλλον μὲν τῶν ἐξ ἄλλου γένους τι τοιοῦτο, ἐκείνων δὲ μηδέν ἐστίν, οὐδ' ἂν τὸ εἰρημένον εἴη τοιοῦτον· οἷον εἰ μᾶλλον μὲν ἐπιστήμη τις ἀγαθόν ἢ ἡδονή, μηδεμία δ' ἐπιστήμη ἀγαθόν, οὐδ' ἂν ἡδονὴ εἴη. καὶ ἐκ τοῦ ὁμοίως δὲ καὶ ἥττον ὡσαύτως· ἔσται γὰρ καὶ ἀναιρεῖν καὶ κατασκευάζειν, πλὴν ἐκ μὲν τοῦ ὁμοίως ἀμφοτέρω, ἐκ δὲ τοῦ ἥττον κατασκευάζειν μόνον, ἀνασκευάζειν δὲ οὐ. εἰ γὰρ ὁμοίως δύναμις τις ἀγαθόν καὶ ἐπιστήμη, ἔστι δὲ τις δύναμις ἀγαθόν, καὶ ἐπιστήμη ἐστίν· εἰ δὲ μηδεμία δύναμις, οὐδ' ἐπιστήμη. εἰ δ' ἥττον δύναμις τις ἀγαθόν ἢ ἐπιστήμη, ἔστι δὲ τις δύναμις ἀγαθόν, καὶ ἐπιστήμη. εἰ δὲ μηδεμία δύναμις ἀγαθόν, οὐκ ἀνάγκη καὶ ἐπιστήμην μηδεμίαν εἶναι ἀγαθόν. δῆλον οὖν ὅτι κατασκευάζειν μόνον ἐκ τοῦ ἥττον ἔστιν.

Οὐ μόνον δ' ἐξ ἄλλου γένους ἔστιν ἀνασκευάζειν, ἀλλὰ καὶ ἐκ τοῦ αὐτοῦ, λαμβάνοντα τὸ μάλιστα τοιοῦτον· οἷον εἰ κεῖται ἐπιστήμη τις ἀγαθόν, δειχθεῖν δ' ὅτι φρόνησις οὐκ ἀγαθόν, οὐδ' ἄλλη οὐδεμία ἔσται, ἐπεὶ οὐδ' ἡ

μάλιστα δοκοῦσα. ἔτι ἐξ ὑποθέσεως, ὁμοίως ἀξιώσαντα, εἰ ἐνί, καὶ πᾶσιν ὑπάρχειν ἢ μὴ ὑπάρχειν, οἷον εἰ ἡ τοῦ ἀνθρώπου ψυχὴ ἀθάνατος, καὶ τὰς ἄλλας, εἰ δ' αὕτη μὴ, μηδὲ τὰς ἄλλας. εἰ μὲν οὖν ὑπάρχειν τινὶ κεῖται, δεικτέον ὅτι οὐχ ὑπάρχει τινί· ἀκολουθήσει γὰρ διὰ τὴν ὑπόθεσιν τὸ μηδενὶ ὑπάρχειν. εἰ δὲ [120a] τινὶ μὴ ὑπάρχειν κεῖται, δεικτέον ὅτι ὑπάρχει τινί· καὶ γὰρ οὕτως ἀκολουθήσει τὸ πᾶσιν ὑπάρχειν. δῆλον δ' ἐστὶν ὅτι ὁ ὑποτιθέμενος ποιεῖ τὸ πρόβλημα καθόλου, ἐπὶ μέρους τεθέντος· τὸν γὰρ ἐπὶ μέρους ὁμολογοῦντα καθόλου ἀξιοῖ ὁμολογεῖν, ἐπειδὴ, εἰ ἐνί, καὶ πᾶσιν ὁμοίως ἀξιοῖ ὑπάρχειν.

Ἀδιορίστου μὲν οὖν ὄντος τοῦ προβλήματος μοναχῶς ἀνασκευάζειν ἐνδέχεται, οἷον εἰ ἔφησεν ἡδονὴν ἀγαθὸν εἶναι ἢ μὴ ἀγαθὸν καὶ μηδὲν ἄλλο προσδιώρισεν. εἰ μὲν γὰρ τινὰ ἔφησεν ἡδονὴν ἀγαθὸν εἶναι, δεικτέον καθόλου ὅτι οὐδεμία, εἰ μέλλει ἀναιρεῖσθαι τὸ προκείμενον· ὁμοίως δὲ καὶ εἰ τινὰ ἔφησεν ἡδονὴν μὴ εἶναι ἀγαθόν, δεικτέον καθόλου ὅτι πᾶσα. ἄλλως δ' οὐκ ἐνδέχεται ἀναιρεῖν· ἐὰν γὰρ δείξωμεν ὅτι ἐστὶ τις ἡδονὴ οὐκ ἀγαθὸν ἢ ἀγαθόν, οὐπω ἀναιρεῖται τὸ προκείμενον. δῆλον οὖν ὅτι ἀναιρεῖν μὲν μοναχῶς ἐνδέχεται, κατασκευάζειν δὲ διχῶς· ἂν τε γὰρ καθόλου δείξωμεν ὅτι πᾶσα ἡδονὴ ἀγαθόν, ἂν τε ὅτι ἐστὶ τις ἡδονὴ ἀγαθόν, δεδειγμένον ἔσται τὸ προκείμενον. ὁμοίως δὲ καὶ δέη διαλεχθῆναι ὅτι ἐστὶ τις ἡδονὴ οὐκ ἀγαθόν, ἐὰν δείξωμεν ὅτι οὐδεμία ἀγαθὸν ἢ ὅτι τις οὐκ ἀγαθόν, διειλεγμένοι ἐσόμεθα ἀμφοτέρως, καὶ καθόλου καὶ ἐπὶ μέρους, ὅτι ἐστὶ τις ἡδονὴ οὐκ ἀγαθόν. διωρισμένης δὲ τῆς θέσεως οὔσης, διχῶς ἀναιρεῖν ἔσται, οἷον εἰ τεθείη τινὶ μὲν ὑπάρχειν ἡδονῇ ἀγαθῷ εἶναι, τινὶ δ' οὐχ ὑπάρχειν· εἴτε γὰρ πᾶσα δειχθείη ἡδονὴ ἀγαθὸν εἴτε μηδεμία, ἀνηρημένον ἔσται τὸ προκείμενον. εἰ δὲ μίαν ἡδονὴν μόνην ἀγαθὸν ἔθηκεν εἶναι, τριχῶς ἐνδέχεται ἀναιρεῖν· δείξαντες γὰρ ὅτι πᾶσα ἢ ὅτι οὐδεμία ἢ ὅτι πλείους μῖας ἀγαθόν, ἀνηρηκότες ἐσόμεθα τὸ προκείμενον. ἐπὶ πλεῖον δὲ τῆς θέσεως διορισθείσης, οἷον ὅτι ἡ φρόνησις μόνη τῶν ἀρετῶν ἐπιστήμη, τετραχῶς ἔστιν ἀναιρεῖν· δειχθέντος γὰρ ὅτι πᾶσα ἀρετὴ ἐπιστήμη ἢ ὅτι οὐδεμία ἢ ὅτι καὶ ἄλλη τις, οἷον ἡ δικαιοσύνη, ἢ ὅτι αὐτὴ ἡ φρόνησις οὐκ ἐπιστήμη, ἀνηρημένον ἔσται τὸ προκείμενον.

Χρήσιμον δὲ καὶ τὸ ἐπιβλέπειν ἐπὶ τὰ καθ' ἕκαστα, ἐν οἷς ὑπάρχειν τι ἢ μὴ εἴρηται, καθάπερ ἐν τοῖς καθόλου προβλήμασιν. ἔτι δ' ἐν τοῖς γένεσιν ἐπιβλεπτέον διαιροῦντα κατ' εἴδη μέχρι τῶν ἀτόμων, καθάπερ εἴρηται πρότερον· ἂν τε γὰρ παντὶ φαίνεται ὑπάρχον ἂν τε μηδενί, πολλὰ προενέγκαντι ἀξιωτέον καθόλου ὁμολογεῖν ἢ φέρειν ἔνστασιν ἐπὶ τίνος οὐχ οὕτως. ἔτι ἐφ' ὧν ἔστιν ἢ εἶδει ἢ ἀριθμῷ διορίσαι τὸ συμβεβηκός, σκεπτέον εἰ μηδὲν τούτων ὑπάρχει, οἷον ὅτι ὁ χρόνος [120b] οὐ κινεῖται οὐδ' ἐστὶ

κίνησις, καταριθμησάμενον πόσα εἶδη κινήσεως· εἰ γὰρ μηδὲν τούτων ὑπάρχει τῷ χρόνῳ, δῆλον ὅτι οὐ κινεῖται οὐδ' ἐστὶ κίνησις. ὁμοίως δὲ καὶ ὅτι ἡ ψυχὴ οὐκ ἀριθμός, διελόμενον ὅτι πᾶς ἀριθμὸς ἢ περιττὸς ἢ ἄρτιος· εἰ γὰρ ἡ ψυχὴ μήτε περιττὸν μήτε ἄρτιον, δῆλον ὅτι οὐκ ἀριθμός.

Πρὸς μὲν οὖν τὸ συμβεβηκὸς διὰ τῶν τοιούτων καὶ οὕτως ἐπιχειρητέον.

## Δ

Μετὰ δὲ ταῦτα περὶ τῶν πρὸς τὸ γένος καὶ τὸ ἴδιον ἐπισκεπτέον. ἔστι δὲ ταῦτα στοιχεῖα τῶν πρὸς τοὺς ὅρους· περὶ αὐτῶν δὲ τούτων ὀλιγάκις αἰσκέψεις γίνονται τοῖς διαλεγόμενοις. ἂν δὴ τεθῇ γένος τινὸς τῶν ὄντων, πρῶτον μὲν ἐπιβλέπειν ἐπὶ πάντα τὰ συγγενῇ τῷ λεχθέντι, εἴ τις μὴ κατηγορεῖται, καθάπερ ἐπὶ τοῦ συμβεβηκότος, οἶον, εἰ τῆς ἡδονῆς τάγαθὸν γένος κεῖται, εἴ τις ἡδονὴ μὴ ἀγαθόν· εἰ γὰρ τοῦτο, δῆλον ὅτι οὐ γένος τάγαθὸν τῆς ἡδονῆς· τὸ γὰρ γένος κατὰ πάντων τῶν ὑπὸ τὸ αὐτὸ εἶδος κατηγορεῖται. εἴτα εἰ μὴ ἐν τῷ τί ἐστὶ κατηγορεῖται ἄλλ' ὥς συμβεβηκός, καθάπερ τὸ λευκὸν τῆς χιόνος, ἢ ψυχῆς τὸ κινούμενον ὑφ' αὐτοῦ· οὔτε γὰρ ἡ χιών ὅπερ λευκόν, διόπερ οὐ γένος τὸ λευκὸν τῆς χιόνος, οὔθ' ἡ ψυχὴ ὅπερ κινούμενον, συμβέβηκε δ' αὐτῇ κινεῖσθαι, καθάπερ καὶ τῷ ζῳῳ πολλάκις βαδίζειν τε καὶ βαδίζοντι εἶναι. ἔτι τὸ κινούμενον οὐ τί ἐστὶν ἀλλὰ τι ποιοῦν ἢ πάσχον σημαίνειν ἔοικεν. ὁμοίως δὲ καὶ τὸ λευκόν· οὐ γὰρ τί ἐστὶν ἢ χιών, ἀλλὰ ποῖόν τι, δηλοῖ. ὥστ' οὐδέτερον αὐτῶν ἐν τῷ τί ἐστὶ κατηγορεῖται, τὸ δὲ γένος ἐν τῷ τί ἐστὶ κατηγορεῖται.

Μάλιστα δ' ἐπὶ τὸν τοῦ συμβεβηκότος ὀρισμὸν ἐπιβλέπειν, εἰ ἐφαρμόττει ἐπὶ τὸ ῥηθὲν γένος, οἶον καὶ τὰ νῦν εἰρημμένα· ἐνδέχεται γὰρ κινεῖν τι αὐτὸ ἑαυτὸ καὶ μή, ὁμοίως δὲ καὶ λευκὸν εἶναι καὶ μή, ὥστ' οὐδέτερον αὐτῶν γένος ἀλλὰ συμβεβηκός, ἐπειδὴ συμβεβηκὸς ἐλέγομεν ὃ ἐνδέχεται ὑπάρχειν τινὶ καὶ μή.

Ἔτι εἰ μὴ ἐν τῇ αὐτῇ διαιρέσει τὸ γένος καὶ τὸ εἶδος, ἀλλὰ τὸ μὲν οὐσία τὸ δὲ ποιόν, ἢ τὸ μὲν πρὸς τι τὸ δὲ ποιόν· οἶον ἢ μὲν χιών καὶ ὁ κύκνος οὐσία, τὸ δὲ λευκὸν οὐκ οὐσία ἀλλὰ ποιόν, ὥστ' οὐ γένος τὸ λευκὸν τῆς χιόνος οὐδὲ τοῦ κύκνου.

[121a] πάλιν ἢ μὲν ἐπιστήμη τῶν πρὸς τι, τὸ δ' ἀγαθὸν καὶ τὸ καλὸν ποιόν, ὥστ' οὐ γένος τὸ ἀγαθὸν ἢ τὸ καλὸν τῆς ἐπιστήμης· τὰ γὰρ τῶν πρὸς τι γένη καὶ αὐτὰ τῶν πρὸς τι δεῖ εἶναι, καθάπερ ἐπὶ τοῦ διπλασίου· καὶ γὰρ τὸ

πολλαπλάσιον, γένος ὃν τοῦ διπλασίου, καὶ αὐτὸ τῶν πρὸς τί ἐστίν. καθόλου δ' εἰπεῖν ὑπὸ τὴν αὐτὴν διαίρεσιν δεῖ τὸ γένος τῷ εἶδει εἶναι· εἰ γὰρ τὸ εἶδος οὐσία, καὶ τὸ γένος, καὶ εἰ ποιόν τι τὸ εἶδος, καὶ τὸ γένος ποιόν τι· οἶον εἰ τὸ λευκὸν ποιόν τι, καὶ τὸ χρῶμα. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

Πάλιν εἰ ἀνάγκη ἢ ἐνδέχεται τοῦ τεθέντος ἐν τῷ γένει μετέχειν τὸ γένος. ὅρος δὲ τοῦ μετέχειν τὸ ἐπιδέχεσθαι τὸν τοῦ μετεχομένου λόγον. δῆλον οὖν ὅτι τὰ μὲν εἶδη μετέχει τῶν γενῶν, τὰ δὲ γένη τῶν εἰδῶν οὐ· τὸ μὲν γὰρ εἶδος ἐπιδέχεται τὸν τοῦ γένους λόγον, τὸ δὲ γένος τὸν τοῦ εἶδους οὐ. σκεπτέον οὖν εἰ μετέχει ἢ ἐνδέχεται μετέχειν τοῦ εἶδους τὸ ἀποδοθὲν γένος, οἶον εἰ τις τοῦ ὄντος ἢ τοῦ ἐνὸς γένος τι ἀποδοίη· συμβήσεται γὰρ μετέχειν τὸ γένος τοῦ εἶδους· κατὰ πάντων γὰρ τῶν ὄντων τὸ ὄν καὶ τὸ ἐν κατηγορεῖται, ὥστε καὶ ὁ λόγος αὐτῶν.

Ἔτι εἰ κατὰ τινος τὸ ἀποδοθὲν εἶδος ἀληθεύεται, τὸ δὲ γένος μή, οἶον εἰ τὸ ὄν ἢ τὸ ἐπιστητὸν τοῦ δοξαστοῦ γένος τεθείη. κατὰ γὰρ τοῦ μὴ ὄντος τὸ δοξαστὸν κατηγορηθήσεται (πολλὰ γὰρ τῶν μὴ ὄντων δοξαστά), ὅτι δὲ τὸ ὄν ἢ τὸ ἐπιστητὸν οὐ κατηγορεῖται κατὰ τοῦ μὴ ὄντος, δῆλον. ὥστ' οὐ γένος τὸ ὄν οὐδὲ τὸ ἐπιστητὸν τοῦ δοξαστοῦ· καθ' ὧν γὰρ τὸ εἶδος κατηγορεῖται, καὶ τὸ γένος δεῖ κατηγορεῖσθαι.

Πάλιν εἰ μηδενὸς τῶν εἰδῶν ἐνδέχεται μετέχειν τὸ τεθὲν ἐν τῷ γένει· ἀδύνατον γὰρ τοῦ γένους μετέχειν μηδενὸς τῶν εἰδῶν μετέχον, ἂν μὴ τι τῶν κατὰ τὴν πρώτην διαίρεσιν εἰδῶν ἢ· ταῦτα δὲ τοῦ γένους μόνον μετέχει. ἂν οὖν ἡ κίνησις γένος τῆς ἡδονῆς τεθῇ, σκεπτέον εἰ μήτε φορὰ μήτ' ἀλλοίωσις ἢ ἡδονὴ μήτε τῶν λοιπῶν τῶν ἀποδοθεισῶν κινήσεων μηδεμία. δῆλον γὰρ ὅτι οὐδενὸς ἂν τῶν εἰδῶν μετέχοι· ὥστ' οὐδὲ τοῦ γένους, ἐπειδὴ ἀναγκαῖόν ἐστι τὸ τοῦ γένους μετέχον καὶ τῶν εἰδῶν τινος μετέχειν. ὥστ' οὐκ ἂν εἴη εἶδος ἢ ἡδονὴ τῆς κινήσεως, οὐδὲ τῶν ἀτόμων οὐδὲν τῶν ὑπὸ τι εἶδος τῆς κινήσεως ὄντων· καὶ γὰρ τὰ ἅτομα μετέχει τοῦ γένους καὶ τοῦ εἶδους, οἶον ὁ τις ἄνθρωπος καὶ ἀνθρώπου μετέχει καὶ ζώου.

[121b] Ἔτι εἰ ἐπὶ πλέον λέγεται τοῦ γένους τὸ ἐν τῷ γένει τεθὲν, οἶον τὸ δοξαστὸν τοῦ ὄντος· καὶ γὰρ τὸ ὄν καὶ τὸ μὴ ὄν δοξαστόν, ὥστ' οὐκ ἂν εἴη τὸ δοξαστὸν εἶδος τοῦ ὄντος· ἐπὶ πλέον γὰρ ἀεὶ τὸ γένος τοῦ εἶδους λέγεται. πάλιν εἰ ἐπ' ἴσων τὸ εἶδος καὶ τὸ γένος λέγεται, οἶον εἰ τῶν πᾶσιν ἐπομένων τὸ μὲν εἶδος τὸ δὲ γένος τεθείη, καθάπερ τὸ ὄν καὶ τὸ ἐν· παντὶ γὰρ τὸ ὄν καὶ τὸ ἐν· ὥστ' οὐδέτερον οὐδετέρου γένος, ἐπειδὴ ἐπ' ἴσων λέγεται. ὁμοίως δὲ καὶ εἰ τὸ πρῶτον καὶ ἡ ἀρχὴ εἰς ἄλληλα τεθείη· ἢ τε γὰρ ἀρχὴ πρῶτον καὶ



τὸ πρῶτον ἀρχή, ὥστ' ἢ ἀμφοτέρω τὰ εἰρημένα ταῦτόν ἐστιν ἢ οὐδέτερον οὐδετέρου γένος. στοιχεῖον δὲ πρὸς ἅπαντα τὰ τοιαῦτα τὸ ἐπὶ πλέον τὸ γένος ἢ τὸ εἶδος καὶ τὴν διαφορὰν λέγεσθαι· ἐπ' ἑλαττον γὰρ καὶ ἡ διαφορὰ τοῦ γένους λέγεται.

Ὅρᾶν δὲ καὶ εἴ τινας τῶν ἀδιαφόρων εἶδει μὴ ἔστι τὸ εἰρημένον γένος ἢ μὴ δόξαι ἄν, κατασκευάζοντι δέ, εἰ ἔστι τινός. ταῦτόν γὰρ πάντων τῶν ἀδιαφόρων εἶδει γένος· ἄν οὖν ἐνὸς δειχθῇ, δῆλον ὅτι πάντων, καὶ ἐνὸς μὴ, δῆλον ὅτι οὐδενός. οἷον εἴ τις ἀτόμους τιθέμενος γραμμὰς τὸ ἀδιαίρετον γένος αὐτῶν φήσειεν εἶναι· τῶν γὰρ διαίρεσιν ἔχουσῶν γραμμῶν οὐκ ἔστι τὸ εἰρημένον γένος, ἀδιαφόρων οὐσῶν κατὰ τὸ εἶδος· ἀδιάφοροι γὰρ ἀλλήλαις κατὰ τὸ εἶδος αἰ εὐθεῖαι γραμμαὶ πᾶσαι.

Σκοπεῖν δὲ καὶ εἴ τι ἄλλο γένος ἐστὶ τοῦ ἀποδοθέντος εἶδους, ὃ μῆτε περιέχει τὸ ἀποδοθὲν γένος μήθ' ὑπ' ἐκεῖνό ἐστιν. οἷον εἴ τις τῆς δικαιοσύνης τὴν ἐπιστήμην θεῖν γένος· ἔστι γὰρ καὶ ἡ ἀρετὴ γένος, καὶ οὐδέτερον τῶν γενῶν τὸ λοιπὸν περιέχει. ὥστ' οὐκ ἂν εἴη ἡ ἐπιστήμη γένος τῆς δικαιοσύνης· δοκεῖ γάρ, ὅταν ἐν εἶδος ὑπὸ δύο γένη ἦ, τὸ ἕτερον ὑπὸ τοῦ ἑτέρου περιέχεσθαι. ἔχει δ' ἀπορίαν ἐπ' ἐνίων τὸ τοιοῦτο· δοκεῖ γὰρ ἐνίοις ἡ φρόνησις ἀρετὴ τε καὶ ἐπιστήμη εἶναι καὶ οὐδέτερον τῶν γενῶν ὑπ' οὐδετέρου περιέχεσθαι. οὐ μὲν ὑπὸ πάντων γε συγχωρεῖται τὴν φρόνησιν ἐπιστήμην εἶναι. εἰ δ' οὖν τις συγχωροίη τὸ λεγόμενον ἀληθὲς εἶναι, ἀλλὰ τό γε ὑπ' ἄλληλα ἢ ὑπὸ ταῦτόν ἄμφω γίνεσθαι τὰ τοῦ αὐτοῦ γένη τῶν ἀναγκαίων δόξειεν ἂν εἶναι, καθάπερ καὶ ἐπὶ τῆς ἀρετῆς καὶ τῆς ἐπιστήμης συμβαίνει· ἄμφω γὰρ ὑπὸ τὸ αὐτὸ γένος ἐστίν· ἑκάτερον γὰρ αὐτῶν ἕξις καὶ διάθεσις ἐστίν. σκεπτέον οὖν εἰ μηδέτερον ὑπάρχει τῷ ἀποδοθέντι γένει. εἰ [122a] γὰρ μήθ' ὑπ' ἄλληλά ἐστι τὰ γένη μήθ' ὑπὸ ταῦτόν ἄμφω, οὐκ ἂν εἴη τὸ ἀποδοθὲν γένος.

Σκοπεῖν δὲ καὶ τὸ γένος τοῦ ἀποδοθέντος γένους καὶ οὕτως ἀεὶ τὸ ἐπάνω γένος, εἰ πάντα κατηγορεῖται τοῦ εἶδους, καὶ εἰ ἐν τῷ τί ἐστιν κατηγορεῖται· πάντα γὰρ τὰ ἐπάνω γένη κατηγορεῖσθαι δεῖ τοῦ εἶδους ἐν τῷ τί ἐστίν. εἰ οὖν που διαφωνεῖ, δῆλον ὅτι οὐ γένος τὸ ἀποδοθὲν. πάλιν εἰ μετέχει τὸ γένος τοῦ εἶδους, ἢ αὐτὸ ἢ τῶν ἐπάνω τι γενῶν· οὐδενὸς γὰρ τῶν ὑποκάτω τὸ ἐπάνω μετέχει. ἀνασκευάζοντι μὲν οὖν καθάπερ εἴρηται χρηστέον. κατασκευάζοντι δέ, ὁμολογουμένου μὲν ὑπάρχειν τῷ εἶδει τοῦ ῥηθέντος γένους, ὅτι δ' ὡς γένος ὑπάρχει ἀμφισβητουμένου, ἀπόχρη τὸ δεῖξαι τι τῶν ἐπάνω γενῶν ἐν τῷ τί ἐστὶ τοῦ εἶδους κατηγορούμενον. ἐνὸς γὰρ ἐν τῷ τί ἐστὶν κατηγορούμενον πάντα καὶ τὰ ἐπάνω τούτου καὶ τὰ ὑποκάτω, ἄνπερ κατηγορῇται τοῦ εἶδους,

ἐν τῷ τί ἐστι κατηγορηθήσεται· ὥστε καὶ τὸ ἀποδοθὲν γένος ἐν τῷ τί ἐστι κατηγορεῖται. ὅτι δ' ἐνὸς ἐν τῷ τί ἐστι κατηγορουμένου πάντα τὰ λοιπὰ, ἄνπερ κατηγορῇται, ἐν τῷ τί ἐστι κατηγορηθήσεται, δι' ἐπαγωγῆς ληπτέον. εἰ δ' ἀπλῶς ὑπάρχειν ἀμφισβητεῖται τὸ ἀποδοθὲν γένος, οὐκ ἀπόχρη τὸ δεῖξαι τῶν ἐπάνω τι γενῶν ἐν τῷ τί ἐστι τοῦ εἴδους κατηγορούμενον. οἷον εἴ τις τῆς βαδίσσεως γένος ἀποδέδωκε τὴν φορὰν, οὐκ ἀπόχρη τὸ δεῖξαι ὅτι κινήσις ἐστίν ἢ βάδις πρὸς τὸ δεῖξαι ὅτι φορὰ ἐστίν, ἐπειδὴ καὶ ἄλλαι κινήσεις εἰσίν, ἀλλὰ προσδεικτέον ὅτι οὐδενὸς μετέχει ἢ βάδις τῶν κατὰ τὴν αὐτὴν διαίρεσιν εἰ μὴ τῆς φορᾶς· ἀνάγκη γὰρ τὸ τοῦ γένους μετέχον καὶ τῶν εἰδῶν τινος μετέχειν τῶν κατὰ τὴν πρώτην διαίρεσιν. εἰ οὖν ἢ βάδις μὴτ' αὐξήσεως μῆτε μειώσεως μῆτε τῶν ἄλλων κινήσεων μετέχει, δῆλον ὅτι τῆς φορᾶς ἂν μετέχοι· ὥστ' εἴη ἂν γένος ἢ φορὰ τῆς βαδίσσεως.

Πάλιν ἐφ' ὧν τὸ εἶδος τὸ τεθὲν ὡς γένος κατηγορεῖται, σκοπεῖν εἰ καὶ τὸ ἀποδοθὲν γένος ἐν τῷ τί ἐστίν αὐτῶν τούτων κατηγορεῖται ὥνπερ καὶ τὸ εἶδος, ὁμοίως δὲ καὶ εἰ τὰ ἐπάνω τοῦ γένους πάντα. εἰ γὰρ που διαφωνεῖ, δῆλον ὅτι οὐ γένος τὸ ἀποδοθέν· εἰ γὰρ ἦν γένος, ἅπαντ' ἂν καὶ τὰ ἐπάνω τούτου καὶ αὐτὸ ἐν τῷ τί ἐστι κατηγορεῖτο, ὥνπερ καὶ τὸ εἶδος ἐν τῷ τί ἐστι κατηγορεῖται. ἀνασκευάζοντι μὲν οὖν χρήσιμον, εἰ μὴ κατηγορεῖται τὸ γένος ἐν τῷ τί ἐστίν ὥνπερ καὶ τὸ εἶδος κατηγορεῖται· κατασκευάζοντι δ', εἰ [122b] κατηγορεῖται ἐν τῷ τί ἐστι, χρήσιμον. συμβήσεται γὰρ τὸ γένος καὶ τὸ εἶδος τοῦ αὐτοῦ ἐν τῷ τί ἐστι κατηγορεῖσθαι, ὥστε τὸ αὐτὸ ὑπὸ δύο γένη γίνεται. ἀναγκαῖον οὖν ὑπ' ἄλληλα τὰ γένη εἶναι. ἂν οὖν δειχθῇ ὁ βουλόμεθα ὡς γένος κατασκευάσαι μὴ ὄν ὑπὸ τὸ εἶδος, δῆλον ὅτι τὸ εἶδος ὑπὸ τοῦτ' ἂν εἴη, ὥστε δεδειγμένον ἂν εἴη ὅτι γένος τοῦτο.

Σκοπεῖν δὲ καὶ τοὺς λόγους τῶν γενῶν, εἰ ἐφαρμόττουσιν ἐπὶ τε τὸ ἀποδοθὲν εἶδος καὶ ἐπὶ τὰ μετέχοντα τοῦ εἴδους· ἀνάγκη γὰρ τοὺς τῶν γενῶν λόγους κατηγορεῖσθαι τοῦ εἴδους καὶ τῶν μετεχόντων τοῦ εἴδους. εἰ οὖν που διαφωνεῖ, δῆλον ὅτι οὐ γένος τὸ ἀποδοθέν.

Πάλιν εἰ τὴν διαφορὰν ὡς γένος ἀποδέδωκεν, οἷον εἰ τὸ ἀθάνατον γένος θεοῦ· διαφορὰ γὰρ ἐστὶ ζώου τὸ ἀθάνατον, ἐπειδὴ τῶν ζώων τὰ μὲν θνητὰ τὰ δ' ἀθάνατα. δῆλον οὖν ὅτι διημάρτηται· οὐδενὸς γὰρ ἢ διαφορὰ γένος ἐστίν. ὅτι δὲ τοῦτ' ἀληθές, δῆλον· οὐδεμία γὰρ διαφορὰ σημαίνει τί ἐστίν ἀλλὰ μᾶλλον ποιόν τι, καθάπερ τὸ πεζὸν καὶ τὸ δίπουν.

Καὶ εἰ τὴν διαφορὰν ὡς εἶδος εἰς τὸ γένος ἔθηκεν, οἷον τὸ περιττὸν ὅπερ ἀριθμὸν· διαφορὰ γὰρ ἀριθμοῦ τὸ περιττόν, οὐκ εἰδός ἐστίν. οὐ δοκεῖ δὲ

μετέχειν ἢ διαφορὰ τοῦ γένους· πᾶν γὰρ τὸ μετέχον τοῦ γένους ἢ εἶδος ἢ ἄτομόν ἐστιν, ἢ δὲ διαφορὰ οὔτε εἶδος οὔτε ἄτομόν ἐστιν. δῆλον οὖν ὅτι οὐ μετέχει τοῦ γένους ἢ διαφορὰ· ὥστ' οὐδὲ τὸ περιττὸν εἶδος ἂν εἴη ἀλλὰ διαφορὰ, ἐπειδὴ οὐ μετέχει τοῦ γένους.

Ἔτι εἰ τὸ γένος εἰς τὸ εἶδος ἔθηκεν, οἷον τὴν ἄψιν ὅπερ συνοχὴν ἢ τὴν μεῖξιν ὅπερ κρᾶσιν, ἢ ὡς Πλάτων ὀρίζεται φορὰν τὴν κατὰ τόπον κίνησιν. οὐ γὰρ ἀναγκαῖον τὴν ἄψιν συνοχὴν εἶναι, ἀλλ' ἀνάπαλιν τὴν συνοχὴν ἄψιν· οὐ γὰρ πᾶν τὸ ἀπτόμενον συνέχεται, ἀλλὰ τὸ συνεχόμενον ἄπτεται. ὁμοίως δὲ καὶ ἐπὶ τῶν λοιπῶν· οὔτε γὰρ ἡ μεῖξις ἅπασα κρᾶσις (ἢ γὰρ τῶν ξηρῶν μεῖξις οὐκ ἐστὶ κρᾶσις) οὔθ' ἡ κατὰ τόπον μεταβολὴ πᾶσα φορὰ· ἡ γὰρ βάδισις οὐ δοκεῖ φορὰ εἶναι· σχεδὸν γὰρ ἡ φορὰ ἐπὶ τῶν ἀκουσίως τόπον ἐκ τόπου μεταβαλλόντων λέγεται, καθάπερ ἐπὶ τῶν ἀψύχων συμβαίνει. δῆλον δ' ὅτι καὶ ἐπὶ πλέον λέγεται τὸ εἶδος τοῦ γένους ἐν τοῖς ἀποδοθεῖσι, δέον ἀνάπαλιν γίνεσθαι.

Πάλιν εἰ τὴν διαφορὰν εἰς τὸ εἶδος ἔθηκεν, οἷον τὸ ἀθάνατον ὅπερ θεόν. συμβήσεται γὰρ ἐπ' ἴσης ἢ ἐπὶ πλεῖον τὸ εἶδος λέγεσθαι· ἀεὶ δ' ἡ διαφορὰ ἐπ' ἴσης ἢ ἐπὶ [123a] πλεῖον τοῦ εἶδους λέγεται. ἔτι εἰ τὸ γένος εἰς τὴν διαφορὰν, οἷον τὸ χρῶμα ὅπερ συγκριτικὸν ἢ τὸν ἀριθμὸν ὅπερ περιττόν. καὶ εἰ τὸ γένος ὡς διαφορὰν εἶπεν· ἐγχωρεῖ γάρ τινα καὶ τοιαύτην κομίσαι θέσιν, οἷον κράσεως τὴν μεῖξιν διαφορὰν ἢ φορᾶς τὴν κατὰ τόπον μεταβολήν. σκεπτέον δὲ πάντα τὰ τοιαῦτα διὰ τῶν αὐτῶν· ἐπικοινωνοῦσι γὰρ οἱ τόποι· ἐπὶ πλέον τε γὰρ τὸ γένος τῆς διαφορᾶς δεῖ λέγεσθαι καὶ μὴ μετέχειν τῆς διαφορᾶς, οὕτω δ' ἀποδοθέντος οὐδέτερον τῶν εἰρημένων δυνατόν συμβαίνειν· ἐπ' ἔλαττόν τε γὰρ ῥηθήσεται καὶ μεθέξει τὸ γένος τῆς διαφορᾶς.

Πάλιν εἰ μηδεμία διαφορὰ κατηγορεῖται τῶν τοῦ γένους κατὰ τοῦ ἀποδοθέντος εἶδους, οὐδὲ τὸ γένος κατηγορηθήσεται· οἷον ψυχῆς οὔτε τὸ περιττὸν οὔτε τὸ ἄρτιον κατηγορεῖται, ὥστ' οὐδ' ἀριθμός. ἔτι εἰ πρότερον φύσει τὸ εἶδος καὶ συναναιρεῖ τὸ γένος· δοκεῖ γὰρ τὸ ἐναντίον. ἔτι εἰ ἐνδέχεται ἀπολιπεῖν τὸ εἰρημένον γένος ἢ τὴν διαφορὰν, οἷον ψυχὴν τὸ κινεῖσθαι ἢ δόξαν τὸ ἀληθὲς καὶ ψεῦδος, οὐκ ἂν εἴη τῶν εἰρημένων οὐδέτερον γένος οὐδὲ διαφορὰ· δοκεῖ γὰρ τὸ γένος καὶ ἡ διαφορὰ παρακολουθεῖν, ἕως ἂν ἢ τὸ εἶδος.

Σκοπεῖν δὲ καὶ εἰ τὸ ἐν τῷ γένει κείμενον μετέχει τινὸς ἐναντίου τῷ γένει ἢ ἐνδέχεται μετέχειν· τὸ γὰρ αὐτὸ τῶν ἐναντίων ἅμα μεθέξει, ἐπειδὴ τὸ μὲν γένος οὐδέποτ' ἀπολείπει, μετέχει δὲ καὶ τοῦ ἐναντίου ἢ ἐνδέχεται μετέχειν.

ἔτι εἴ τινας κοινωνεῖ τὸ εἶδος ὃ ἀδύνατον ὅλως ὑπάρχειν τοῖς ὑπὸ τὸ γένος οἶον εἰ ἢ ψυχὴ τῆς ζωῆς κοινωνεῖ, τῶν δ' ἀριθμῶν μηδένα δυνατὸν ζῆν, οὐκ ἂν εἴη εἶδος ἀριθμοῦ ἢ ψυχῆ.

Σκεπτέον δὲ καὶ εἰ ὁμώνυμον τὸ εἶδος τῷ γένει, στοιχείοις χρώμενον τοῖς εἰρημένοις πρὸς τὸ ὁμώνυμον· συνώνυμον γὰρ τὸ γένος καὶ τὸ εἶδος.

Ἐπεὶ δὲ παντὸς γένους εἶδη πλείω, σκοπεῖν εἰ μὴ ἐνδέχεται ἕτερον εἶδος εἶναι τοῦ εἰρημένου γένους· εἰ γὰρ μὴ ἔστι, δῆλον ὅτι οὐκ ἂν εἴη ὅλως γένος τὸ εἰρημένον.

Σκοπεῖν δὲ καὶ εἰ τὸ μεταφορᾷ λεγόμενον ὡς γένος ἀποδέδωκεν, οἶον τὴν σωφροσύνην συμφωνίαν· πᾶν γὰρ γένος κυρίως κατὰ τῶν εἰδῶν κατηγορεῖται, ἢ δὲ συμφωνία κατὰ τῆς σωφροσύνης οὐ κυρίως ἀλλὰ μεταφορᾷ· πᾶσα γὰρ συμφωνία ἐν φθόγγοις.

[123b] Ἐπεὶ ἂν ἢ ἐναντίον τι τῷ εἶδει, σκοπεῖν. ἔστι δὲ πλεοναχῶς ἢ σκέψις· πρῶτον μὲν εἰ ἐν τῷ αὐτῷ γένει καὶ τὸ ἐναντίον, μὴ ὄντος ἐναντίου τῷ γένει· δεῖ γὰρ τὰ ἐναντία ἐν τῷ αὐτῷ γένει εἶναι, ἂν μηδὲν ἐναντίον τῷ γένει ἦ. ὄντος δ' ἐναντίου τῷ γένει, σκοπεῖν εἰ τὸ ἐναντίον ἐν τῷ ἐναντίῳ· ἀνάγκη γὰρ τὸ ἐναντίον ἐν τῷ ἐναντίῳ εἶναι, ἅνπερ ἢ ἐναντίον τι τῷ γένει. φανερόν δὲ τούτων ἕκαστον διὰ τῆς ἐπαγωγῆς. πάλιν εἰ ὅλως ἐν μηδενὶ γένει τὸ τῷ εἶδει ἐναντίον ἄλλ' αὐτὸ γένος, οἶον τὰγαθόν· εἰ γὰρ τοῦτο μὴ ἐν γένει, οὐδὲ τὸ ἐναντίον τούτου ἐν γένει ἔσται ἄλλ' αὐτὸ γένος, καθάπερ ἐπὶ τοῦ ἀγαθοῦ καὶ τοῦ κακοῦ συμβαίνει· οὐδέτερον γὰρ τούτων ἐν γένει, ἄλλ' ἑκάτερον αὐτὸ γένος. ἔτι εἰ ἐναντίον τινὶ καὶ τὸ γένος καὶ τὸ εἶδος, καὶ τῶν μὲν ἔστι τι μεταξύ, τῶν δὲ μή. εἰ γὰρ τῶν γενῶν ἔστι τι μεταξύ, καὶ τῶν εἰδῶν, καὶ εἰ τῶν εἰδῶν, καὶ τῶν γενῶν, καθάπερ ἐπ' ἀρετῆς καὶ κακίας καὶ δικαιοσύνης καὶ ἀδικίας· ἑκατέρων γὰρ ἔστι τι μεταξύ. (ἔνστασις τούτου ὅτι ὑγιείας καὶ νόσου οὐδὲν μεταξύ, κακοῦ δὲ καὶ ἀγαθοῦ.) ἢ εἰ ἔστι μὲν τι ἀμφοῖν ἀνὰ μέσον, καὶ τῶν εἰδῶν καὶ τῶν γενῶν, μὴ ὁμοίως δέ, ἀλλὰ τῶν μὲν κατὰ ἀπόφασιν τῶν δ' ὡς ὑποκείμενον. ἔνδοξον γὰρ τὸ ὁμοίως ἀμφοῖν, καθάπερ ἐπ' ἀρετῆς καὶ κακίας, καὶ δικαιοσύνης καὶ ἀδικίας· ἀμφοῖν γὰρ κατὰ ἀπόφασιν τὰ ἀνὰ μέσον. ἔτι ὅταν μὴ ἢ ἐναντίον τῷ γένει, σκοπεῖν μὴ μόνον εἰ τὸ ἐναντίον ἐν τῷ αὐτῷ γένει, ἀλλὰ καὶ τὸ ἀνὰ μέσον· ἐν ᾧ γὰρ τὰ ἄκρα, καὶ τὸ ἀνὰ μέσον, οἶον ἐπὶ λευκοῦ καὶ μέλανος· τὸ γὰρ χρῶμα γένος τούτων τε καὶ τῶν ἀνὰ μέσον χρωμάτων ἀπάντων. (ἔνστασις ὅτι ἢ μὲν ἔνδεια καὶ ἢ ὑπερβολὴ ἐν τῷ αὐτῷ γένει - ἐν τῷ κακῷ γὰρ ἄμφω - τὸ δὲ μέτριον ἀνὰ μέσον ὃν τούτων οὐκ ἐν τῷ κακῷ ἀλλ' ἐν τῷ ἀγαθῷ.) σκοπεῖν δὲ καὶ εἰ τὸ

μὲν γένος ἐναντίον τινί, τὸ δὲ εἶδος μηδενί. εἰ γὰρ τὸ γένος ἐναντίον τινί, καὶ τὸ εἶδος, καθάπερ ἄρετὴ κακία καὶ δικαιοσύνη ἀδικία. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων σκοποῦντι φανερόν ἂν δόξειεν εἶναι τὸ τοιοῦτον. (Ἔνστασις ἐπὶ τῆς ὑγείας καὶ νόσου· ἀπλῶς μὲν γὰρ ὑγεία νόσῳ ἐναντίον, ἡ δὲ τις νόσος εἶδος οὕσα νόσου οὐδενὶ ἐναντίον, οἷον ὁ πυρετὸς καὶ ἡ ὀφθαλμία καὶ τῶν ἄλλων ἕκαστον.)

[124a] Ἀναιροῦντι μὲν οὖν τοσαυταχῶς ἐπισκεπτέον· εἰ γὰρ μὴ ὑπάρχει τὰ εἰρημένα, δῆλον ὅτι οὐ γένος τὸ ἀποδοθέν. κατασκευάζοντι δὲ τριχῶς· πρῶτον μὲν εἰ τὸ ἐναντίον τῷ εἶδει ἐν τῷ εἰρημένῳ γένει, μὴ ὄντος ἐναντίου τῷ γένει· εἰ γὰρ τὸ ἐναντίον ἐν τούτῳ, δῆλον ὅτι καὶ τὸ προκείμενον. ἔτι εἰ τὸ ἀνὰ μέσον ἐν τῷ εἰρημένῳ γένει· ἐν ᾧ γὰρ τὸ ἀνὰ μέσον, καὶ τὰ ἅκρα. πάλιν ἂν ἢ ἐναντίον τι τῷ γένει, σκοπεῖν εἰ καὶ τὸ ἐναντίον ἐν τῷ ἐναντίῳ· ἂν γὰρ ἢ, δῆλον ὅτι καὶ τὸ προκείμενον ἐν τῷ προκειμένῳ.

Πάλιν ἐπὶ τῶν πτώσεων καὶ ἐπὶ τῶν συστοίχων, εἰ ὁμοίως ἀκολουθοῦσι, καὶ ἀναιροῦντι καὶ κατασκευάζοντι· ἅμα γὰρ ἐνὶ καὶ πᾶσιν ὑπάρχει ἢ οὐχ ὑπάρχει. οἷον εἰ ἡ δικαιοσύνη ἐπιστήμη τις, καὶ τὸ δικαίως ἐπιστημόνως καὶ ὁ δίκαιος ἐπιστήμων· εἰ δὲ τούτων τι μὴ, οὐδὲ τῶν λοιπῶν οὐδέν.

Πάλιν ἐπὶ τῶν ὁμοίως ἐχόντων πρὸς ἄλληλα· οἷον τὸ ἡδὺ ὁμοίως ἔχει πρὸς τὴν ἡδονὴν καὶ τὸ ὠφέλιμον πρὸς τὸ ἀγαθόν· ἐκάτερον γὰρ ἐκατέρου ποιητικόν. εἰ οὖν ἐστὶν ἡ ἡδονὴ ὅπερ ἀγαθόν, καὶ τὸ ἡδὺ ὅπερ ὠφέλιμον ἔσται· δῆλον γὰρ ὅτι ἀγαθοῦ ἂν εἴη ποιητικόν, ἐπειδὴ ἡ ἡδονὴ ἀγαθόν. ὡσαύτως δὲ καὶ ἐπὶ τῶν γενέσεων καὶ φθορῶν· οἷον εἰ τὸ οἰκοδομεῖν ἐνεργεῖν, τὸ ὠκοδομηκεῖναι ἐνηργηκεῖναι, καὶ εἰ τὸ μανθάνειν ἀναμνησκεισθαι, καὶ τὸ μεμαθηκεῖναι ἀναμεμνήσθαι, καὶ εἰ τὸ διαλύεσθαι φθείρεσθαι, καὶ τὸ διαλελύσθαι ἐφθάρθαι καὶ ἡ διάλυσις φθορά τις. καὶ ἐπὶ τῶν γεννητικῶν δὲ καὶ φθαρτικῶν ὡσαύτως, καὶ ἐπὶ τῶν δυνάμεων καὶ χρήσεων, καὶ ὅλως καθ' ὅποιαν οὖν ὁμοιότητα καὶ ἀναιροῦντι καὶ κατασκευάζοντι σκεπτέον καθάπερ ἐπὶ τῆς γενέσεως καὶ φθορᾶς ἐλέγομεν. εἰ γὰρ τὸ φθαρτικὸν διαλυτικόν, καὶ τὸ φθείρεσθαι διαλύεσθαι· καὶ εἰ τὸ γεννητικὸν ποιητικόν, καὶ τὸ γίνεσθαι ποιεῖσθαι καὶ ἡ γένεσις ποίησις. ὁμοίως δὲ καὶ ἐπὶ τῶν δυνάμεων καὶ χρήσεων· εἰ γὰρ ἡ δύναμις διάθεσις, καὶ τὸ δύνασθαι διακεῖσθαι, καὶ εἴ τις ἢ χρῆσις ἐνέργεια, τὸ χρῆσθαι ἐνεργεῖν καὶ τὸ κεχρῆσθαι ἐνηργηκεῖναι.

Ἄν δὲ στέρησις ἢ τὸ ἀντικείμενον τῷ εἶδει, διχῶς ἔστιν ἀνελεῖν. πρῶτον μὲν, εἰ ἐν τῷ ἀποδοθέντι γένει τὸ ἀντικείμενον· ἢ γὰρ ἀπλῶς ἐν οὐδενὶ γένει

τῷ αὐτῷ ἢ στέρησις ἢ οὐκ ἐν τῷ ἐσχάτῳ· οἶον εἰ ἢ ὄψις ἐν ἐσχάτῳ γένει τῇ αἰσθήσει, ἢ τυφλότης οὐκ ἔσται αἰσθησις. δεύτερον δ', εἰ καὶ τῷ γένει [124b] καὶ τῷ εἶδει ἀντίκειται στέρησις, μὴ ἔστι δὲ τὸ ἀντικείμενον ἐν τῷ ἀντικειμένῳ, οὐδ' ἂν τὸ ἀποδοθὲν ἐν τῷ ἀποδοθέντι εἴη. ἀναιροῦντι μὲν οὖν καθάπερ εἴρηται χρηστέον, κατασκευάζοντι δὲ μοναχῶς· εἰ γὰρ τὸ ἀντικείμενον ἐν τῷ ἀντικειμένῳ, καὶ τὸ προκείμενον ἐν τῷ προκειμένῳ ἂν εἴη· οἶον εἰ ἢ τυφλότης ἀναισθησία τις, ἢ ὄψις αἰσθησίς τις.

Πάλιν ἐπὶ τῶν ἀποφάσεων σκοπεῖν ἀνάπαλιν, καθάπερ ἐπὶ τοῦ συμβεβηκότος ἐλέγετο· οἶον εἰ τὸ ἡδὺ ὅπερ ἀγαθόν, τὸ μὴ ἀγαθὸν οὐχ ἡδύ. εἰ γὰρ μὴ οὕτως ἔχοι, εἴη ἅν τι καὶ οὐκ ἀγαθὸν ἡδύ, ἀδύνατον δέ, εἴπερ τὸ ἀγαθὸν γένος τοῦ ἡδέος, εἶναί τι μὴ ἀγαθὸν ἡδύ· ὧν γὰρ τὸ γένος μὴ κατηγορεῖται, οὐδὲ τῶν εἰδῶν οὐδέν. καὶ κατασκευάζοντι δὲ ὡσαύτως σκεπτέον· εἰ γὰρ τὸ μὴ ἀγαθὸν οὐχ ἡδύ, τὸ ἡδὺ ἀγαθόν, ὥστε γένος τὸ ἀγαθὸν τοῦ ἡδέος.

Ἐὰν δ' ἢ πρὸς τι τὸ εἶδος, σκοπεῖν εἰ καὶ τὸ γένος πρὸς τι· εἰ γὰρ τὸ εἶδος τῶν πρὸς τι, καὶ τὸ γένος, καθάπερ ἐπὶ τοῦ διπλασίου καὶ πολλαπλασίου· ἐκάτερον γὰρ τῶν πρὸς τι. εἰ δὲ τὸ γένος τῶν πρὸς τι, οὐκ ἀνάγκη καὶ τὸ εἶδος· ἢ μὲν γὰρ ἐπιστήμη τῶν πρὸς τι, ἢ δὲ γραμματικὴ οὐ. (ἢ οὐδὲ τὸ πρότερον ῥηθὲν ἀληθὲς ἂν δόξειεν εἶναι· ἢ γὰρ ἀρετὴ ὅπερ καλὸν καὶ ὅπερ ἀγαθόν, καὶ ἢ μὲν ἀρετὴ τῶν πρὸς τι, τὸ δ' ἀγαθὸν καὶ τὸ καλὸν οὐ τῶν πρὸς τι ἀλλὰ ποιά.)

Πάλιν εἰ μὴ πρὸς ταῦτόν λέγεται τὸ εἶδος καθ' αὐτό τε καὶ κατὰ τὸ γένος· οἶον εἰ τὸ διπλάσιον ἡμίσεος λέγεται διπλάσιον, καὶ τὸ πολλαπλάσιον ἡμίσεος δεῖ λέγεσθαι. εἰ δὲ μή, οὐκ ἂν εἴη τὸ πολλαπλάσιον γένος τοῦ διπλασίου.

Ἔτι εἰ μὴ πρὸς τὸ αὐτὸ κατὰ τε τὸ γένος λέγεται καὶ κατὰ πάντα τὰ τοῦ γένους γένη. εἰ γὰρ τὸ διπλάσιον ἡμίσεος πολλαπλάσιόν ἐστι, καὶ ὑπερέχον ἡμίσεος ῥηθήσεται, καὶ ἀπλῶς κατὰ πάντα τὰ ἐπάνω γένη πρὸς τὸ ἡμισυ ῥηθήσεται. (ἐνστασις ὅτι οὐκ ἀνάγκη καθ' αὐτό καὶ κατὰ τὸ γένος πρὸς ταῦτόν λέγεσθαι· ἢ γὰρ ἐπιστήμη ἐπιστητοῦ λέγεται, ἕξις δὲ καὶ διάθεσις οὐκ ἐπιστητοῦ ἀλλὰ ψυχῆς.)

Πάλιν εἰ ὡσαύτως λέγεται τὸ γένος καὶ τὸ εἶδος κατὰ τὰς πτώσεις, οἶον εἰ τινὶ ἢ τινὸς ἢ ὁσαυχὼς ἄλλως. ὥς γὰρ τὸ εἶδος, καὶ τὸ γένος, καθάπερ ἐπὶ τοῦ διπλασίου καὶ τῶν ἐπάνω· τινὸς γὰρ καὶ τὸ διπλάσιον καὶ τὸ πολλαπλάσιον. ὁμοίως δὲ καὶ ἐπὶ τῆς ἐπιστήμης· τινὸς γὰρ [125a] καὶ αὐτὴ καὶ τὰ γένη,

οἶον ἢ τε διάθεσις καὶ ἡ ἔξις. (ἔνστασις ὅτι ἐνιαχοῦ οὐχ οὕτως· τὸ μὲν γὰρ διάφορον καὶ τὸ ἐναντίον τινί, τὸ δ' ἕτερον, γένος ὄν τούτων, οὐ τινὶ ἀλλὰ τινός· ἕτερον γὰρ τινος λέγεται.)

Πάλιν εἰ ὁμοίως τὰ πρὸς τι κατὰ τὰς πτώσεις λεγόμενα μὴ ὁμοίως ἀντιστρέφει, καθάπερ ἐπὶ τοῦ διπλασίου καὶ τοῦ πολλαπλασίου. ἑκάτερον γὰρ τούτων τινὸς καὶ αὐτὸ καὶ κατὰ τὴν ἀντιστροφὴν λέγεται· τινὸς γὰρ καὶ τὸ ἥμισυ καὶ τὸ πολλοστημόριον. ὡσαύτως δὲ καὶ ἐπὶ τῆς ἐπιστήμης καὶ τῆς ὑπολήψεως· αὐταί τε γὰρ τινὸς καὶ ἀντιστρέφει ὁμοίως τό τε ἐπιστητὸν καὶ τὸ ὑποληπτὸν τινί. εἰ οὖν ἐπὶ τινων μὴ ὁμοίως ἀντιστρέφει, δῆλον ὅτι οὐ γένος θάτερον θατέρου.

Πάλιν εἰ μὴ πρὸς ἴσα τὸ εἶδος καὶ τὸ γένος λέγεται. ὁμοίως γὰρ καὶ ἴσαχῶς ἑκάτερον δοκεῖ λέγεσθαι, καθάπερ ἐπὶ τῆς δωρεᾶς καὶ τῆς δόσεως· ἢ τε γὰρ δωρεὰ τινὸς καὶ τινὶ λέγεται, καὶ ἡ δόσις τινὸς καὶ τινί. ἔστι δὲ ἡ δόσις γένος τῆς δωρεᾶς· ἡ γὰρ δωρεὰ δόσις ἐστὶν ἀναπόδοτος. ἐπ' ἐνίων δ' οὐ συμβαίνει πρὸς ἴσα λέγεσθαι· τὸ μὲν γὰρ διπλάσιον τινὸς διπλάσιον, τὸ δ' ὑπερέχον καὶ τὸ μεῖζον τινὸς καὶ τινί· πᾶν γὰρ τὸ ὑπερέχον καὶ τὸ μεῖζον τινὶ ὑπερέχει καὶ τινὸς ὑπερέχει. ὥστ' οὐ γένη τὰ εἰρημένα τοῦ διπλασίου, ἐπειδὴ οὐ πρὸς ἴσα τῷ εἶδει λέγεται. (ἢ οὐ καθόλου ἀληθὲς τὸ πρὸς ἴσα τὸ εἶδος καὶ τὸ γένος λέγεσθαι.)

Ὅρᾶν δὲ καὶ εἰ τοῦ ἀντικειμένου τὸ ἀντικείμενον γένος· οἶον εἰ τοῦ διπλασίου τὸ πολλαπλάσιον, καὶ τοῦ ἡμίσεος τὸ πολλοστημόριον· δεῖ γὰρ τὸ ἀντικείμενον τοῦ ἀντικειμένου γένος εἶναι. εἰ οὖν τις θείη τὴν ἐπιστήμην ὅπερ αἴσθησιν, δεήσει καὶ τὸ ἐπιστητὸν ὅπερ αἰσθητὸν εἶναι. οὐκ ἔστι δέ· οὐ γὰρ πᾶν τὸ ἐπιστητὸν αἰσθητόν· καὶ γὰρ τῶν νοητῶν ἓνα ἐπιστητά. ὥστ' οὐ γένος τὸ αἰσθητὸν τοῦ ἐπιστητοῦ. εἰ δὲ τοῦτο μή, οὐδ' αἴσθησις ἐπιστήμης.

Ἐπεὶ δὲ τῶν πρὸς τι λεγομένων τὰ μὲν ἐξ ἀνάγκης ἐν ἐκείνοις ἢ περὶ ἐκεῖνά ἐστι πρὸς ἃ ποτε τυγχάνει λεγόμενα (οἶον ἡ διάθεσις καὶ ἡ ἔξις καὶ ἡ συμμετρία· ἐν ἄλλῳ γὰρ οὐδενὶ δυνατὸν ὑπάρχειν τὰ εἰρημένα ἢ ἐν ἐκείνοις πρὸς ἃ λέγεται), τὰ δ' οὐκ ἀνάγκη μὲν ἐν ἐκείνοις ὑπάρχειν πρὸς ἃ ποτε λέγεται, ἐνδέχεται δέ (οἶον εἰ ἐπιστητὸν ἢ ψυχὴ· οὐδὲν γὰρ κωλύει τὴν αὐτῆς ἐπιστήμην ἔχειν τὴν ψυχὴν, οὐκ ἀναγκαῖον δέ· δυνατὸν γὰρ καὶ ἐν ἄλλῳ [125b] ὑπάρχειν τὴν αὐτὴν ταύτην), τὰ δ' ἀπλῶς οὐκ ἐνδέχεται ἐν ἐκείνοις ὑπάρχειν πρὸς ἃ ποτε τυγχάνει λεγόμενα (οἶον τὸ ἐναντίον ἐν τῷ ἐναντίῳ οὐδὲ τὴν ἐπιστήμην ἐν τῷ ἐπιστητῷ, ἐὰν μὴ τυγχάνῃ τὸ ἐπιστητὸν ψυχὴ ἢ ἄνθρωπος ὄν), σκοπεῖν οὖν χρὴ ἐάν τις εἰς γένος θῇ τὸ τοιοῦτον εἰς τὸ μὴ

τοιοῦτον. οἷον εἰ τὴν μνήμην μονὴν ἐπιστήμης εἶπεν· πᾶσα γὰρ μονὴ ἐν τῷ μένοντι καὶ περὶ ἐκεῖνο, ὥστε καὶ ἡ τῆς ἐπιστήμης μονὴ ἐν τῇ ἐπιστήμῃ. ἡ μνήμη ἄρα ἐν τῇ ἐπιστήμῃ, ἐπειδὴ μονὴ τῆς ἐπιστήμης ἐστίν. τοῦτο δ' οὐκ ἐνδέχεται· μνήμη γὰρ πᾶσα ἐν ψυχῇ. ἔστι δ' ὁ εἰρημένος τόπος καὶ πρὸς τὸ συμβεβηκὸς κοινός· οὐδὲν γὰρ διαφέρει τῆς μνήμης γένος τὴν μονὴν εἶπεν ἢ συμβεβηκέναι φάσκειν αὐτῇ τοῦτο· εἰ γὰρ ὅπως οὖν ἐστὶν ἡ μνήμη μονὴ ἐπιστήμης, ὁ αὐτὸς ἀρμόσει περὶ αὐτῆς λόγος.

Πάλιν εἰ τὴν ἔξιν εἰς τὴν ἐνέργειαν ἔθηκεν ἢ τὴν ἐνέργειαν εἰς τὴν ἔξιν, οἷον τὴν αἴσθησιν κίνησιν διὰ σώματος· ἡ μὲν γὰρ αἴσθησις ἔξις, ἡ δὲ κίνησις ἐνέργεια. ὁμοίως δὲ καὶ εἰ τὴν μνήμην ἔξιν καθεκτικὴν ὑπολήψεως εἶπεν· οὐδεμία γὰρ μνήμη ἔξις, ἀλλὰ μᾶλλον ἐνέργεια.

Διαμαρτάνουσι δὲ καὶ οἱ τὴν ἔξιν εἰς τὴν ἀκολουθοῦσαν δύναμιν τάττοντες, οἷον τὴν πραότητα ἐγκράτειαν ὀργῆς καὶ τὴν ἀνδρείαν καὶ τὴν δικαιοσύνην φόβων καὶ κερδῶν· ἀνδρείος μὲν γὰρ καὶ πρᾶος ὁ ἀπαθὴς λέγεται, ἐγκρατὴς δ' ὁ πάσχων καὶ μὴ ἀγόμενος. ἴσως μὲν οὖν ἀκολουθεῖ δύναμις ἐκατέρῳ τοιαύτῃ ὥστ', εἰ πάθοι, μὴ ἄγεσθαι ἀλλὰ κρατεῖν· οὐ μὴν τοῦτο γ' ἐστὶ τῷ μὲν <τὸ> ἀνδρείῳ τῷ δὲ <τὸ> πρᾶῳ εἶναι, ἀλλὰ τὸ ὅλως μὴ πάσχειν ὑπὸ τῶν τοιούτων μηδέν.

Ἐνίστε δὲ καὶ τὸ παρακολουθοῦν ὅπως οὖν ὡς γένος τιθέασιν, οἷον τὴν λύπην τῆς ὀργῆς καὶ τὴν ὑπόληψιν τῆς πίστεως· ἄμφω γὰρ τὰ εἰρημένα παρακολουθεῖ μὲν τρόπον τινὰ τοῖς ἀποδοθεῖσιν εἶδεσιν, οὐδέτερον δ' αὐτῶν γένος ἐστίν. ὁ μὲν γὰρ ὀργιζόμενος λυπεῖται προτέρας ἐν αὐτῷ τῆς λύπης γενομένης· οὐ γὰρ ἡ ὀργὴ τῆς λύπης ἀλλ' ἡ λύπη τῆς ὀργῆς αἰτία, ὥσθ' ἀπλῶς ἡ ὀργὴ οὐκ ἔστι λύπη. κατὰ ταῦτα δ' οὐδ' ἡ πίστις ὑπόληψις· ἐνδέχεται γὰρ τὴν αὐτὴν ὑπόληψιν καὶ μὴ πιστεύοντα ἔχειν, οὐκ ἐνδέχεται δ', εἶπερ εἶδος ἡ πίστις ὑπολήψεως· οὐ γὰρ ἐνδέχεται τὸ αὐτὸ ἔτι διαμένειν, ἄνπερ ἐκ τοῦ εἶδους ὅλως μεταβάλῃ, καθάπερ οὐδὲ τὸ αὐτὸ ζῶον ὅτε μὲν ἄνθρωπον εἶναι ὅτε δὲ μή. ἂν δέ τις φῇ ἐξ ἀνάγκης τὸν ὑπολαμβάνοντα καὶ πιστεύειν, [126a] ἐπ' ἴσον ἢ ὑπόληψις καὶ ἡ πίστις ῥηθήσεται, ὥστ' οὐδ' ἂν οὕτως εἴη γένος· ἐπὶ πλεον γὰρ δεῖ λέγεσθαι τὸ γένος.

Ὅρᾳν δὲ καὶ εἰ ἐν τινι τῷ αὐτῷ πέφυκεν ἄμφω γίνεσθαι· ἐν ᾧ γὰρ τὸ εἶδος, καὶ τὸ γένος, οἷον ἐν ᾧ τὸ λευκόν, καὶ τὸ χρῶμα, καὶ ἐν ᾧ γραμματικὴ, καὶ ἐπιστήμη. ἐὰν οὖν τις τὴν αἰσχύνην φόβον εἴπῃ ἢ τὴν ὀργὴν λύπην, οὐ συμβήσεται ἐν τῷ αὐτῷ τὸ εἶδος καὶ τὸ γένος ὑπάρχειν· ἡ μὲν γὰρ αἰσχύνη ἐν τῷ λογιστικῷ, ὁ δὲ φόβος ἐν τῷ θυμοειδεῖ· καὶ ἡ μὲν λύπη ἐν τῷ



ἐπιθυμητικῶ (ἐν τούτῳ γὰρ καὶ ἡ ἡδονή), ἡ δὲ ὀργὴ ἐν τῷ θυμοειδεῖ. ὥστ' οὐ γένη τὰ ἀποδοθέντα, ἐπειδὴ οὐκ ἐν τῷ αὐτῷ τοῖς εἵδεσι πέφυκε γίνεσθαι. ὁμοίως δὲ καὶ εἰ ἡ φιλία ἐν τῷ ἐπιθυμητικῷ, οὐκ ἂν εἴη βούλησίς τις· πᾶσα γὰρ βούλησις ἐν τῷ λογιστικῷ. χρήσιμος δ' ὁ τόπος καὶ πρὸς τὸ συμβεβηκός· ἐν τῷ αὐτῷ γὰρ τὸ συμβεβηκός καὶ ὧ συμβέβηκεν, ὥστ' ἂν μὴ ἐν τῷ αὐτῷ φαίνεται, δῆλον ὅτι οὐ συμβέβηκεν.

Πάλιν εἰ κατὰ τι τὸ εἶδος τοῦ εἰρημένου γένους μετέχει· οὐ δοκεῖ γὰρ κατὰ τι μετέχεσθαι τὸ γένος. οὐ γάρ ἐστίν ὁ ἄνθρωπος κατὰ τι ζῶον, οὐδ' ἡ γραμματικὴ κατὰ τι ἐπιστήμη· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. σκοπεῖν οὖν εἰ ἐπὶ τινων κατὰ τι μετέχεται τὸ γένος, οἷον εἰ τὸ ζῶον ὅπερ αἰσθητὸν ἢ ὁρατὸν εἴρηται. κατὰ τι γὰρ αἰσθητὸν ἢ ὁρατὸν τὸ ζῶον· κατὰ τὸ σῶμα γὰρ αἰσθητὸν καὶ ὁρατόν, κατὰ δὲ τὴν ψυχὴν οὔ. ὥστ' οὐκ ἂν εἴη γένος τὸ ὁρατὸν καὶ τὸ αἰσθητὸν τοῦ ζώου.

Λανθάνουσι δ' ἐνίοτε καὶ τὸ ὅλον εἰς τὸ μέρος τιθέντες, οἷον τὸ ζῶον σῶμα ἔμψυχον. οὐδαμῶς δὲ τὸ μέρος τοῦ ὅλου κατηγορεῖται· ὥστ' οὐκ ἂν εἴη τὸ σῶμα γένος τοῦ ζώου, ἐπειδὴ μέρος ἐστίν.

Ὅρᾱν δὲ καὶ εἴ τι τῶν ψεκτῶν ἢ φευκτῶν εἰς δύναμιν ἢ τὸ δυνατόν ἔθηκεν, οἷον τὸν σοφιστὴν ἢ διάβολον ἢ κλέπτην τὸν δυνάμενον λάθρα τὰ ἀλλότρια κλέπτειν· οὐδεὶς γὰρ τῶν εἰρημένων τῷ δυνατὸς εἶναί τι τούτων τοιοῦτος λέγεται. δύναται μὲν γὰρ καὶ ὁ θεὸς καὶ ὁ σπουδαῖος τὰ φαῦλα δρᾶν, ἀλλ' οὐκ εἰσὶ τοιοῦτοι· πάντες γὰρ οἱ φαῦλοι κατὰ προαίρεσιν λέγονται. ἔτι πᾶσα δύναμις τῶν αἰρετῶν· καὶ γὰρ αἱ τῶν φαύλων δυνάμεις αἰρεταί, διὸ καὶ τὸν θεὸν καὶ τὸν σπουδαῖον ἔχειν φαμὲν αὐτάς· δυνατοὺς γὰρ φαμεν εἶναι [126b] τὰ φαῦλα πράσσειν. ὥστ' οὐδενὸς ἂν εἴη ψεκτοῦ γένος ἢ δύναμις. εἰ δὲ μή, συμβήσεται τῶν ψεκτῶν τι αἰρετὸν εἶναι· ἔσται γὰρ τις δύναμις ψεκτή.

Καὶ εἴ τι τῶν δι' αὐτὰ τιμίων ἢ αἰρετῶν εἰς δύναμιν ἢ τὸ δυνατόν ἢ τὸ ποιητικὸν ἔθηκεν· πᾶσα γὰρ δύναμις καὶ πᾶν τὸ δυνατόν ἢ τὸ ποιητικὸν δι' ἄλλο αἰρετόν.

Ἡ εἴ τι τῶν ἐν δύο γένεσιν ἢ πλείοσιν εἰς θάτερον ἔθηκεν. ἕνα γὰρ οὐκ ἔστιν εἰς ἕν γένος θεῖναι, οἷον τὸν φένακα καὶ τὸν διάβολον· οὔτε γὰρ ὁ προαιρούμενος ἀδυνατῶν δέ, οὔθ' ὁ δυνάμενος μὴ προαιρούμενος δέ, διάβολος ἢ φέναξ, ἀλλ' ὁ ἄμφω ταῦτα ἔχων. ὥστ' οὐ θετέον εἰς ἕν γένος ἀλλ' εἰς ἀμφοτέρα τὰ εἰρημένα.

Ἔτι ἐνίστε ἀνάπαλιν τὸ μὲν γένος ὡς διαφορὰν τὴν δὲ διαφορὰν ὡς γένος ἀποδιδόασιν, οἷον τὴν ἔκπληξιν ὑπερβολὴν θαυμασιότητος καὶ τὴν πίστιν σφοδρότητα ὑπολήψεως. οὐτε γὰρ ἡ ὑπερβολὴ οὐθ' ἡ σφοδρότης γένος, ἀλλὰ διαφορὰ· δοκεῖ γὰρ ἡ ἔκπληξις θαυμασιότης εἶναι ὑπερβάλλουσα καὶ ἡ πίστις ὑπόληψις σφοδρά, ὥστε γένος ἡ θαυμασιότης καὶ ἡ ὑπόληψις, ἡ δ' ὑπερβολὴ καὶ ἡ σφοδρότης διαφορὰ. ἔτι εἴ τις τὴν ὑπερβολὴν καὶ τὴν σφοδρότητα ὡς γένη ἀποδώσει, τὰ ἄψυχα πιστεύσει καὶ ἐκπλαγήσεται. ἡ γὰρ ἐκάστου σφοδρότης καὶ ὑπερβολὴ πάρεστιν ἐκείνῳ οὗ ἐστὶ σφοδρότης καὶ ὑπερβολή. εἰ οὖν ἡ ἔκπληξις ὑπερβολὴ ἐστὶ θαυμασιότητος, παρέσται τῇ θαυμασιότητι ἡ ἔκπληξις, ὡσθ' ἡ θαυμασιότης ἐκπλαγήσεται. ὁμοίως δὲ καὶ ἡ πίστις παρέσται τῇ ὑπολήψει, εἴπερ σφοδρότης ὑπολήψεως ἐστίν, ὥστε ἡ ὑπόληψις πιστεύσει. ἔτι συμβήσεται τῷ οὕτως ἀποδιδόντι σφοδρότητα σφοδρὰν λέγειν καὶ ὑπερβολὴν ὑπερβάλλουσαν. ἔστι γὰρ πίστις σφοδρά [καὶ ἔκπληξις ὑπερβάλλουσα]· εἰ οὖν ἡ πίστις σφοδρότης ἐστί, σφοδρότης ἂν εἴη σφοδρά. ὁμοίως δὲ καὶ ἔκπληξις ἔστιν ὑπερβάλλουσα· εἰ οὖν ἡ ἔκπληξις ὑπερβολὴ ἐστίν, ὑπερβολὴ ἂν εἴη ὑπερβάλλουσα. οὐ δοκεῖ δ' οὐδέτερον τούτων, ὥσπερ οὐδὲ ἡ ἐπιστήμη ἐπιστήμον οὐδ' ἡ κίνησις κινούμενον.

Ἐνίστε δὲ διαμαρτάνουσι καὶ τὸ πάθος εἰς γένος τὸ πεπονθὸς τιθέντες, οἷον ὅσοι τὴν ἀθανασίαν ζωὴν αἰδιὸν φασιν εἶναι· πάθος γὰρ τι ζωῆς ἢ σύμπτωμα ἢ ἀθανασία ἔοικεν εἶναι. ὅτι δ' ἀληθὲς τὸ λεγόμενον, δῆλον ἂν γένοιτο εἴ τις συγχωρήσειεν ἐκ θνητοῦ τινα ἀθάνατον γίνεσθαι· οὐδεὶς γὰρ φήσει ἑτέραν αὐτὸν ζωὴν λαμβάνειν, ἀλλὰ σύμπτωμά τι [127a] ἢ πάθος αὐτῇ ταύτῃ παραγίνεσθαι. ὥστ' οὐ γένος ἡ ζωὴ τῆς ἀθανασίας.

Πάλιν εἰ τοῦ πάθους, οὗ ἐστὶ πάθος, ἐκεῖνο γένος φασὶν εἶναι, οἷον τὸ πνεῦμα ἀέρα κινούμενον. μᾶλλον γὰρ κίνησις ἀέρος τὸ πνεῦμα· ὁ γὰρ αὐτὸς ἀῆρ διαμένει, ὅταν τε κινῆται καὶ ὅταν μένη. ὥστ' οὐκ ἔστιν ὅλως ἀῆρ τὸ πνεῦμα· ἦν γὰρ ἂν καὶ μὴ κινουμένου τοῦ ἀέρος πνεῦμα, εἴπερ ὁ αὐτὸς ἀῆρ διαμένει ὥσπερ ἦν πνεῦμα. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων. εἰ δ' ἄρα καὶ ἐπὶ τούτου δεῖ συγχωρῆσαι ὅτι ἀῆρ ἐστὶ κινούμενος τὸ πνεῦμα, ἀλλ' οὐτε γε ἐπὶ πάντων τὸ τοιοῦτον ἀποδεκτέον καθ' ὧν μὴ ἀληθεύεται τὸ γένος, ἀλλ' ἐφ' ὅσων ἀληθῶς κατηγορεῖται τὸ ἀποδοθὲν γένος. ἐπ' ἐνίων γὰρ οὐ δοκεῖ ἀληθεύεσθαι, οἷον ἐπὶ τοῦ πηλοῦ καὶ τῆς χιόνος. τὴν μὲν γὰρ χιόνα φασὶν ὕδωρ εἶναι πεπηγός, τὸν δὲ πηλὸν γῆν ὑγρῷ πεφυραμένην· ἔστι δ' οὐθ' ἡ χιών ὕδωρ οὐθ' ὁ πηλὸς γῆ. ὥστ' οὐκ ἂν εἴη γένος οὐδέτερον τῶν ἀποδοθέντων· δεῖ γὰρ τὸ γένος ἀληθεύεσθαι ἀεὶ κατὰ τῶν εἰδῶν. ὁμοίως δ' οὐδ' ὁ οἶνός ἐστὶν ὕδωρ σεσηπός, καθάπερ Ἐμπεδοκλῆς φησι “σαπὲν ἐν ξύλῳ ὕδωρ”· ἀπλῶς γὰρ οὐκ ἔστιν ὕδωρ.

Ἔτι εἰ ὅλως τὸ ἀποδοθὲν μηδενός ἐστι γένος· δῆλον γὰρ ὡς οὐδὲ τοῦ λεχθέντος. σκοπεῖν δ' ἐκ τοῦ μηδὲν διαφέρειν εἶδει τὰ μετέχοντα τοῦ ἀποδοθέντος γένους, οἷον τὰ λευκά· οὐδὲν γὰρ διαφέρει τῷ εἶδει ταῦτ' ἀλλήλων, παντὸς δὲ γένους ἔστιν εἶδη διάφορα· ὥστ' οὐκ ἂν εἴη τὸ λευκὸν γένος οὐδενός.

Πάλιν εἰ τὸ πᾶσιν ἀκολουθοῦν γένος ἢ διαφορὰν εἶπεν· πλείω γὰρ τὰ πᾶσιν ἐπόμενα, οἷον τὸ ὄν καὶ τὸ ἐν τῶν πᾶσιν ἐπομένων ἐστίν. εἰ οὖν τὸ ὄν γένος ἀποδέδωκε, δῆλον ὅτι πάντων ἂν εἴη γένος, ἐπειδὴ κατηγορεῖται αὐτῶν· κατ' οὐδενός γὰρ τὸ γένος ἄλλ' ἢ κατὰ τῶν εἰδῶν κατηγορεῖται. ὥστε καὶ τὸ ἐν εἶδος ἂν εἴη τοῦ ὄντος. συμβαίνει οὖν κατὰ πάντων ὧν τὸ γένος κατηγορεῖται καὶ τὸ εἶδος κατηγορεῖσθαι, ἐπειδὴ τὸ ὄν καὶ τὸ ἐν κατὰ πάντων ἀπλῶς κατηγορεῖται, δέον ἐπ' ἑλαττον τὸ εἶδος κατηγορεῖσθαι. εἰ δὲ τὸ πᾶσιν ἐπόμενον διαφορὰν εἶπε, δῆλον ὅτι ἐπ' ἴσον ἢ ἐπὶ πλέον ἢ διαφορὰ τοῦ γένους ῥηθήσεται· εἰ μὲν γὰρ καὶ τὸ γένος τῶν πᾶσιν ἐπομένων, ἐπ' ἴσον· εἰ δὲ μὴ πᾶσιν ἔπεται τὸ γένος, ἐπὶ πλέον ἢ διαφορὰ λέγοιτ' ἂν αὐτοῦ.

[127b] Ἔτι εἰ ἐν ὑποκειμένῳ τῷ εἶδει τὸ ἀποδοθὲν γένος λέγεται, καθάπερ τὸ λευκὸν ἐπὶ τῆς χιόνος, ὥστε δῆλον ὅτι οὐκ ἂν εἴη γένος· καθ' ὑποκειμένου γὰρ τοῦ εἶδους μόνον τὸ γένος λέγεται.

Σκοπεῖν δὲ καὶ εἰ μὴ συνώνυμον τὸ γένος τῷ εἶδει· κατὰ πάντων γὰρ τῶν εἰδῶν συνωνύμως τὸ γένος κατηγορεῖται.

Ἔτι ὅταν ὄντος καὶ τῷ εἶδει καὶ τῷ γένει ἐναντίου τὸ βέλτιον τῶν ἐναντίων εἰς τὸ χεῖρον γένος θῇ· συμβήσεται γὰρ τὸ λοιπὸν ἐν τῷ λοιπῷ εἶναι, ἐπειδὴ τὰ ἐναντία ἐν τοῖς ἐναντίοις γένεσιν, ὥστε τὸ βέλτιον ἐν τῷ χεῖρονι ἔσται καὶ τὸ χεῖρον ἐν τῷ βελτίονι· δοκεῖ δὲ τοῦ βελτίονος καὶ τὸ γένος βέλτιον εἶναι. καὶ εἰ τοῦ αὐτοῦ εἶδους ὁμοίως πρὸς ἄμφω ἔχοντος εἰς τὸ χεῖρον καὶ μὴ εἰς τὸ βέλτιον γένος ἔθηκεν, οἷον τὴν ψυχὴν ὅπερ κίνησιν ἢ κινούμενον. ὁμοίως γὰρ αὕτη στατικὴ καὶ κινητικὴ δοκεῖ εἶναι· ὥστ' εἰ βέλτιον ἢ στάσις, εἰς τοῦτο ἔδει τὸ γένος θεῖναι.

Ἔτι ἐκ τοῦ μᾶλλον καὶ ἥττον, ἀνασκευάζοντι μὲν, εἰ τὸ γένος δέχεται τὸ μᾶλλον, τὸ δ' εἶδος μὴ δέχεται, μήτ' αὐτὸ μήτε τὸ κατ' ἐκεῖνο λεγόμενον. οἷον εἰ ἡ ἀρετὴ δέχεται τὸ μᾶλλον, καὶ ἡ δικαιοσύνη καὶ ὁ δίκαιος· λέγεται γὰρ δικαιότερος ἕτερος ἑτέρου. εἰ οὖν τὸ μὲν ἀποδοθὲν γένος τὸ μᾶλλον δέχεται, τὸ δ' εἶδος μὴ δέχεται, μήτ' αὐτὸ μήτε τὸ κατ' ἐκεῖνο λεγόμενον, οὐκ ἂν εἴη γένος τὸ ἀποδοθέν.

Πάλιν εἰ τὸ μᾶλλον δοκοῦν ἢ ὁμοίως μὴ ἔστι γένος, δῆλον ὅτι οὐδὲ τὸ ἀποδοθέν. χρήσιμος δ' ὁ τόπος ἐπὶ τῶν τοιούτων μάλιστα, ἐφ' ὧν πλείω φαίνεται τοῦ εἵδους ἐν τῷ τί ἐστὶ κατηγορούμενα καὶ μὴ διώριστα μὴδ' ἔχομεν εἰπεῖν ποῖον αὐτῶν γένος. οἷον τῆς ὀργῆς καὶ ἡ λύπη καὶ ἡ ὑπόληψις ὀλιγωρίας ἐν τῷ τί ἐστὶ κατηγορεῖσθαι δοκεῖ· λυπεῖται τε γὰρ ὁ ὀργιζόμενος καὶ ὑπολαμβάνει ὀλιγωρεῖσθαι. ἡ αὐτὴ δὲ σκέψις καὶ ἐπὶ τοῦ εἵδους πρὸς ἄλλο τι συγκρίνοντι· εἰ γὰρ τὸ μᾶλλον ἢ τὸ ὁμοίως δοκοῦν εἶναι ἐν τῷ ἀποδοθέντι γένει μὴ ἔστιν ἐν τῷ γένει, δῆλον ὅτι οὐδὲ τὸ ἀποδοθέν εἶδος εἴη ἂν ἐν τῷ γένει.

Ἀναιροῦντι μὲν οὖν καθάπερ εἴρηται χρηστέον. κατασκευάζοντι δέ, εἰ μὲν ἐπιδέχεται τὸ μᾶλλον τό τε ἀποδοθέν [128a] γένος καὶ τὸ εἶδος, οὐ χρήσιμος ὁ τόπος· οὐδὲν γὰρ κωλύει ἀμφοτέρων ἐπιδεχομένων μὴ εἶναι θάτερον θατέρου γένος· τό τε γὰρ καλὸν καὶ τὸ λευκὸν ἐπιδέχεται τὸ μᾶλλον, καὶ οὐδέτερον οὐδετέρου γένος. ἡ δὲ τῶν γενῶν καὶ τῶν εἰδῶν πρὸς ἄλληλα σύγκρισις χρήσιμος· οἷον εἰ ὁμοίως τόδε καὶ τόδε γένος, εἰ θάτερον γένος, καὶ θάτερον. ὁμοίως δὲ καὶ εἰ τὸ ἥττον, καὶ τὸ μᾶλλον· οἷον εἰ τῆς ἐγκρατείας μᾶλλον ἢ δύναμις ἢ ἡ ἀρετὴ γένος, ἢ δ' ἀρετὴ γένος, καὶ ἡ δύναμις. τὰ δ' αὐτὰ καὶ ἐπὶ τοῦ εἵδους ἀρμόσει λέγεσθαι· εἰ γὰρ ὁμοίως τόδε καὶ τόδε τοῦ προκειμένου εἶδος, εἰ θάτερον εἶδος, καὶ τὸ λοιπόν· καὶ εἰ τὸ ἥττον δοκοῦν εἶδος ἐστὶ, καὶ τὸ μᾶλλον.

Ἔτι πρὸς τὸ κατασκευάζειν σκεπτέον εἰ καθ' ὧν ἀπεδόθη τὸ γένος, ἐν τῷ τί ἐστὶ κατηγορεῖται, μὴ ὄντος ἐνὸς τοῦ ἀποδοθέντος εἵδους ἀλλὰ πλειόνων καὶ διαφόρων· δῆλον γὰρ ὅτι γένος ἔσται. εἰ δ' ἐν τὸ ἀποδοθέν εἶδος ἐστὶ, σκοπεῖν εἰ καὶ κατ' ἄλλων εἰδῶν τὸ γένος ἐν τῷ τί ἐστὶ κατηγορεῖται· πάλιν γὰρ συμβήσεται κατὰ πλειόνων καὶ διαφόρων αὐτὸ κατηγορεῖσθαι.

Ἐπεὶ δὲ δοκεῖ τισι καὶ ἡ διαφορὰ ἐν τῷ τί ἐστὶ τῶν εἰδῶν κατηγορεῖσθαι, χωριστέον τὸ γένος ἀπὸ τῆς διαφορᾶς χρώμενον τοῖς εἰρημένοις στοιχείοις, πρῶτον μὲν ὅτι τὸ γένος ἐπὶ πλέον λέγεται τῆς διαφορᾶς, εἴθ' ὅτι κατὰ τὴν τοῦ τί ἐστὶν ἀπόδοσιν μᾶλλον ἀρμόττει τὸ γένος ἢ τὴν διαφορὰν εἰπεῖν (ὁ γὰρ ζῶον εἶπας τὸν ἄνθρωπον μᾶλλον δηλοῖ τί ἐστὶν ὁ ἄνθρωπος ἢ ὁ πεζόν), καὶ ὅτι ἡ μὲν διαφορὰ ποιότητα τοῦ γένους ἀεὶ σημαίνει, τὸ δὲ γένος τῆς διαφορᾶς οὐ· ὁ μὲν γὰρ εἶπας πεζὸν ποιόν τι ζῶον λέγει, ὁ δὲ ζῶον εἶπας οὐ λέγει ποιόν τι πεζόν.

Τὴν μὲν οὖν διαφορὰν ἀπὸ τοῦ γένους οὕτω χωριστέον. Ἐπεὶ δὲ δοκεῖ, «εἰ» τὸ μουσικόν, ἢ μουσικόν ἐστίν, ἐπιστῆμόν τί ἐστὶ, καὶ ἡ μουσικὴ

ἐπιστήμη τις εἶναι, καὶ εἰ τὸ βαδίζον τῷ βαδίζειν κινεῖται, ἡ βάδις κίνησις τις εἶναι, σκοπεῖν, ἐν ᾧ ἂν γένει βούληται κατασκευάσαι, τὸν εἰρημένον τρόπον, οἷον εἰ τὴν ἐπιστήμην ὅπερ πίστις, εἰ ὁ ἐπιστάμενος ἢ ἐπίσταται πιστεύει· δῆλον γὰρ ὅτι ἡ ἐπιστήμη πίστις ἂν τις εἴη. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων.

Ἔτι ἐπεὶ τὸ παρεπόμενον τινὶ ἀεὶ καὶ μὴ ἀντιστρέφον χαλεπὸν χωρίσαι τοῦ μὴ γένος εἶναι, ἂν τόδε μὲν τῷδ' ἔπεται [128b] παντί, τόδε δὲ τῷδε μὴ παντί, οἷον τῇ νηνεμία ἢ ἡρεμία καὶ τῷ ἀριθμῷ τὸ διαιρετόν, ἀνάπαλιν δ' οὐ (τὸ γὰρ διαιρετόν οὐ πᾶν ἀριθμός, οὐδ' ἡ ἡρεμία νηνεμία), αὐτὸν μὲν χρῆσθαι ὡς γένους ὄντος τοῦ ἀεὶ ἀκολουθοῦντος, ὅταν μὴ ἀντιστρέφῃ θάτερον, ἄλλου δὲ προτείνοντος μὴ ἐπὶ πάντων ὑπακούειν. ἔνστασις δ' αὐτοῦ ὅτι τὸ μὴ ὄν ἔπεται παντὶ τῷ γινομένῳ (τὸ γὰρ γινόμενον οὐκ ἔστι) καὶ οὐκ ἀντιστρέφει (οὐ γὰρ πᾶν τὸ μὴ ὄν γίνεται), ἀλλ' ὅμως οὐκ ἔστι γένος τὸ μὴ ὄν τοῦ γινομένου· ἀπλῶς γὰρ οὐκ ἔστι τοῦ μὴ ὄντος εἶδη.

Περὶ μὲν οὖν τοῦ γένους καθάπερ εἴρηται μετιτέον.

## Ε

Πότερον δ' ἴδιον ἢ οὐκ ἴδιόν ἐστι τὸ εἰρημένον, διὰ τῶνδε σκεπτέον.

Ἀποδίδεται [δὲ] τὸ ἴδιον ἢ καθ' αὐτὸ καὶ ἀεὶ, ἢ πρὸς ἕτερον καὶ ποτέ, οἷον καθ' αὐτὸ μὲν ἀνθρώπου τὸ ζῶον ἡμερον φύσει, πρὸς ἕτερον δὲ οἷον ψυχῆς πρὸς σῶμα, ὅτι τὸ μὲν προστακτικὸν τὸ δ' ὑπηρετικόν ἐστιν, ἀεὶ δὲ οἷον θεοῦ τὸ ζῶον ἀθάνατον, ποτέ δ' οἷον τοῦ τινὸς ἀνθρώπου τὸ περιπατεῖν ἐν τῷ γυμνασίῳ.

Ἔστι δὲ τοῦ πρὸς ἕτερον ἰδίου ἀποδιδόμενον ἢ δύο προβλήματα ἢ τέτταρα. ἔαν μὲν γὰρ τοῦ μὲν ἀποδῶ τοῦ δ' ἀρνήσῃται ταῦτο τοῦτο, δύο μόνον προβλήματα γίνονται, καθάπερ τὸ ἀνθρώπου πρὸς ἵππον ἴδιον ὅτι δίπουν ἐστίν. καὶ γὰρ ὅτι ἄνθρωπος οὐ δίπουν ἐστίν ἐπιχειροίη τις ἂν, καὶ ὅτι ὁ ἵππος δίπουν· ἀμφοτέρως δ' ἂν κινεῖτο τὸ ἴδιον. ἔαν δ' ἑκατέρου ἑκάτερον ἀποδῶ καὶ ἑκατέρου ἀπαρνηθῇ, τέτταρα προβλήματα ἔσται, καθάπερ τὸ ἀνθρώπου ἴδιον πρὸς ἵππον, ὅτι τὸ μὲν δίπουν τὸ δὲ τετράπουν ἐστίν. καὶ γὰρ ὅτι ἄνθρωπος οὐ δίπουν καὶ ὅτι τετράπουν πέφυκεν ἔστιν ἐπιχειρεῖν, καὶ ὅτι ὁ ἵππος δίπουν καὶ ὅτι οὐ τετράπουν οἷόν τ' ἐπιχειρεῖν. ὅπως δ' οὖν δειχθέντος ἀναιρεῖται τὸ κείμενον.

Ἔστι δὲ τὸ μὲν καθ' αὐτὸ ἴδιον ὃ πρὸς ἅπαντα ἀποδίδεται καὶ παντὸς χωρίζει, καθάπερ ἀνθρώπου τὸ ζῶον θνητὸν ἐπιστήμης δεκτικόν· τὸ δὲ πρὸς ἕτερον ὃ μὴ ἀπὸ παντὸς ἀλλ' ἀπὸ τινος τακτοῦ διορίζει, καθάπερ ἀρετῆς πρὸς ἐπιστήμην, ὅτι τὸ μὲν ἐν πλείοσι, τὸ δ' ἐν λογιστικῷ μόνον καὶ τοῖς ἔχουσι λογιστικὸν πέφυκε γίνεσθαι. τὸ δ' αἰὲρ ὃ [129a] κατὰ πάντα χρόνον ἀληθεύεται καὶ μηδέποτε ἀπολείπεται, καθάπερ τοῦ ζώου τὸ ἐκ ψυχῆς καὶ σώματος συγκείμενον, τὸ δὲ ποτὲ ὃ κατὰ τινά χρόνον ἀληθεύεται καὶ μὴ ἐξ ἀνάγκης αἰὲρ παρέπεται, καθάπερ τοῦ τινὸς ἀνθρώπου τὸ περιπατεῖν ἐν ἀγορᾷ.

Ἔστι δὲ τὸ πρὸς ἄλλο ἴδιον ἀποδοῦναι τὸ διαφορὰν εἰπεῖν ἢ ἐν ἅπασιν καὶ αἰεὶ, ἢ ὡς ἐπὶ τὸ πολὺ καὶ ἐν τοῖς πλείστοις. οἷον ἐν ἅπασιν μὲν καὶ αἰεὶ καθάπερ τὸ ἀνθρώπου ἴδιον πρὸς ἵππον ὅτι δίπουν· ἀνθρώπος μὲν γὰρ καὶ αἰεὶ καὶ πᾶς ἐστὶ δίπους, ἵππος δ' οὐδεὶς ἐστὶ δίπους οὐδέποτε. ὡς ἐπὶ τὸ πολὺ δὲ καὶ ἐν τοῖς πλείστοις καθάπερ τὸ λογιστικοῦ ἴδιον πρὸς ἐπιθυμητικὸν καὶ θυμικὸν τὸ μὲν προστάττειν τὸ δ' ὑπηρετεῖν· οὔτε γὰρ τὸ λογιστικὸν πάντοτε προστάττει, ἀλλ' ἐνίοτε καὶ προστάττεται, οὔτε τὸ ἐπιθυμητικὸν καὶ θυμικὸν αἰεὶ προστάττεται, ἀλλὰ καὶ προστάττει ποτέ, ὅταν ᾗ μοχθηρὰ ἡ ψυχὴ τοῦ ἀνθρώπου.

Τῶν δ' ἰδίων ἐστὶ λογικὰ μάλιστα τὰ τε καθ' αὐτὰ καὶ αἰεὶ καὶ τὰ πρὸς ἕτερον. τοῦ μὲν γὰρ πρὸς ἕτερον ἰδίου πλείω προβλήματά ἐστι, καθάπερ εἵπομεν καὶ πρότερον· ἢ γὰρ δύο ἢ τέτταρα ἐξ ἀνάγκης γίνονται τὰ προβλήματα. πλείους οὖν οἱ λόγοι γίνονται πρὸς ταῦτα. τὸ δὲ καθ' αὐτὸ καὶ τὸ αἰεὶ πρὸς πολλὰ ἔστιν ἐπιχειρεῖν ἢ πρὸς πλείους χρόνους παρατηρεῖν, τὸ μὲν καθ' αὐτὸ πρὸς πολλὰ (πρὸς ἕκαστον γὰρ τῶν ὄντων δεῖ ὑπάρχειν αὐτῷ τὸ ἴδιον, ὥστ' εἰ μὴ πρὸς ἅπαντα χωρίζεται, οὐκ ἂν εἴη καλῶς ἀποδεδομένον τὸ ἴδιον), τὸ δ' αἰεὶ πρὸς πολλοὺς χρόνους παρατηρεῖν· κἂν εἰ γὰρ μὴ ὑπάρχει κἂν εἰ μὴ ὑπῆρξε κἂν εἰ μὴ ὑπάρξει, οὐκ ἔσται ἴδιον. τὸ δὲ ποτὲ πρὸς τὸν νῦν μόνον χρόνον ἐπισκοποῦμεν· οὔκουν εἰσὶ λόγοι πρὸς αὐτὸ πολλοί· λογικὸν δὲ τοῦτ' ἔστι πρόβλημα πρὸς ὃ λόγοι γένοιντ' ἂν καὶ συχνοὶ καὶ καλοί.

Τὸ μὲν οὖν πρὸς ἕτερον ἴδιον ῥηθὲν ἐκ τῶν περὶ τὸ συμβεβηκὸς τόπων ἐπισκεπτέον ἐστίν, εἰ τῷ μὲν συμβέβηκε τῷ δὲ μὴ συμβέβηκεν. περὶ δὲ τῶν αἰεὶ καὶ τῶν καθ' αὐτὸ διὰ τῶνδε θεωρητέον.

[129b] Πρῶτον μὲν εἰ μὴ καλῶς ἀποδέδοται τὸ ἴδιον ἢ καλῶς. τοῦ δὲ μὴ καλῶς ἢ καλῶς ἐστὶν ἐν μέν, εἰ μὴ διὰ γνωριμωτέρων ἢ διὰ γνωριμωτέρων

κεῖται τὸ ἴδιον, ἀνασκευάζοντα μὲν εἰ μὴ διὰ γνωριμωτέρων, κατασκευάζοντα δὲ εἰ διὰ γνωριμωτέρων. τοῦ δὲ μὴ διὰ γνωριμωτέρων ἔστι τὸ μὲν εἰ ὅλως ἀγνωστότερόν ἐστι τὸ ἴδιον ὃ ἀποδίδωσι τούτου οὐ τὸ ἴδιον εἴρηκεν· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. γνώσεως γὰρ ἔνεκα τὸ ἴδιον ποιούμεθα· διὰ γνωριμωτέρων οὖν ἀποδοτέον· οὕτω γὰρ ἔσται κατανοεῖν ἱκανῶς μᾶλλον. οἷον ἐπεὶ ὁ θεὸς πυρὸς ἴδιον εἶναι τὸ ὁμοιότατον ψυχῇ ἀγνωστοτέρῳ κέχρηται τοῦ πυρὸς τῇ ψυχῇ (μᾶλλον γὰρ ἴσμεν τί ἐστὶ πῦρ ἢ ψυχή), οὐκ ἂν εἴη καλῶς κείμενον ἴδιον πυρὸς τὸ ὁμοιότατον ψυχῇ. τὸ δ' εἰ μὴ γνωριμωτέρον ἐστὶ τόδε τῷδ' ὑπάρχον. δεῖ γὰρ μὴ μόνον εἶναι γνωριμώτερον τοῦ πράγματος, ἀλλὰ καὶ ὅτι τῷδ' ὑπάρχει γνωριμώτερον· ὁ μὴ γὰρ εἰδῶς εἰ τῷδ' ὑπάρχει οὐδ' εἰ τῷδε ὑπάρχει μόνῳ γνωριεῖ, ὥσθ' ὁποτέρου τούτων συμβάντος ἀσαφὲς γίνεται τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς πυρὸς ἴδιον τὸ ἐν ᾧ πρώτῳ ψυχῇ πέφυκεν εἶναι ἀγνωστοτέρῳ κέχρηται τοῦ πυρὸς τῷ εἰ ἐν τούτῳ ὑπάρχει ψυχῇ καὶ εἰ ἐν πρώτῳ ὑπάρχει, οὐκ ἂν εἴη καλῶς κείμενον ἴδιον πυρὸς τὸ ἐν ᾧ πρώτῳ ψυχῇ πέφυκεν εἶναι. κατασκευάζοντα δὲ εἰ διὰ γνωριμωτέρων κεῖται τὸ ἴδιον, καὶ εἰ διὰ γνωριμωτέρων καθ' ἑκάτερον τῶν τρόπων. ἔσται γὰρ καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον· τῶν γὰρ κατασκευαστικῶν τόπων τοῦ καλῶς οἱ μὲν κατὰ τοῦτο μόνον, οἱ δ' ἀπλῶς δείξουσιν ὅτι καλῶς. οἷον ἐπεὶ ὁ εἶπας ζώου ἴδιον τὸ αἰσθησιν ἔχειν διὰ γνωριμωτέρων καὶ γνωριμώτερον ἀποδέδωκε τὸ ἴδιον καθ' ἑκάτερον τῶν τρόπων, εἴη ἂν καλῶς ἀποδεδομένον κατὰ τοῦτο τοῦ ζώου ἴδιον τὸ αἰσθησιν ἔχειν.

Ἐπειτ' ἀνασκευάζοντα μὲν εἴ τι τῶν ὀνομάτων τῶν ἐν τῷ ἰδίῳ ἀποδεδομένων πλεοναχῶς λέγεται, ἢ καὶ ὅλος ὁ λόγος πλείῳ σημαίνει· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ τὸ αἰσθάνεσθαι πλείῳ σημαίνει, ἐν μὲν τὸ αἰσθησιν ἔχειν ἐν δὲ τὸ αἰσθήσει χρῆσθαι, οὐκ ἂν εἴη τοῦ ζώου ἴδιον καλῶς κείμενον τὸ αἰσθάνεσθαι πεφυκός. διὰ τοῦτο [130a] δ' οὐ χρηστέον ἐστὶν οὗτ' ὀνόματι πλεοναχῶς λεγομένῳ οὔτε λόγῳ τῷ τὸ ἴδιον σημαίνοντι, διότι τὸ πλεοναχῶς λεγόμενον ἀσαφὲς ποιεῖ τὸ ῥηθέν, ἀποροῦντος τοῦ μέλλοντος ἐπιχειρεῖν πότερον λέγει τῶν πλεοναχῶς λεγομένων· τὸ γὰρ ἴδιον τοῦ μαθεῖν χάριν ἀποδίδοται. ἔτι δὲ πρὸς τούτοις ἀναγκαῖον ἐστὶν ἔλεγχόν τινα γίνεσθαι τοῖς οὕτως ἀποδιδούσι τὸ ἴδιον, ὅταν ἐπὶ τοῦ διαφωνοῦντός τις ποιῇ τὸν συλλογισμόν τοῦ πλεοναχῶς λεγομένου. κατασκευάζοντα δὲ εἰ μὴ πλείῳ σημαίνει μήτε τῶν ὀνομάτων μηδὲν μήθ' ὅλος ὁ λόγος· ἔσται γὰρ καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον. οἷον ἐπεὶ οὔτε τὸ σῶμα πολλὰ δηλοῖ οὔτε τὸ εὐκίνητότατον εἰς τὸν ἄνω τόπον οὔτε τὸ σύνολον τὸ ἐκ τούτων συντιθέμενον, εἴη ἂν καλῶς κείμενον κατὰ τοῦτο πυρὸς ἴδιον σῶμα τὸ εὐκίνητότατον εἰς τὸν ἄνω τόπον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ πλεοναχῶς λέγεται τοῦτο οὐ τὸ ἴδιον ἀποδίδωσι, μὴ διώρισται δὲ τὸ τίνος αὐτῶν ἴδιον τίθησιν· οὐ γὰρ ἔσται καλῶς ἀποδεδομένον τὸ ἴδιον. δι' ἃς δ' αἰτίας, οὐκ ἄδηλόν ἐστιν ἐκ τῶν πρότερον εἰρημένων· τὰ γὰρ αὐτὰ συμβαίνειν ἀναγκαῖόν ἐστιν. οἷον ἐπεὶ τὸ ἐπίστασθαι τοῦτο πολλὰ σημαίνει (τὸ μὲν γὰρ ἐπιστήμην ἔχειν αὐτό, τὸ δ' ἐπιστήμη χρῆσθαι αὐτό, τὸ δ' ἐπιστήμην ἔχειν αὐτοῦ, τὸ δ' ἐπιστήμη χρῆσθαι αὐτοῦ), οὐκ ἂν εἴη τοῦ ἐπίστασθαι τοῦτο καλῶς ἴδιον ἀποδεδομένον, μὴ διορισθέντος τοῦ τίνος τίθησιν αὐτῶν τὸ ἴδιον. κατασκευάζοντα δὲ εἰ μὴ λέγεται πολλαχῶς τοῦτο οὐ τὸ ἴδιον τίθησιν, ἀλλ' ἔστιν ἓν καὶ ἀπλοῦν· ἔσται γὰρ καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ ἄνθρωπος μοναχῶς λέγεται ἓν, εἴη ἂν καλῶς κείμενον κατὰ τοῦτο ἀνθρώπου ἴδιον τὸ ζῶον ἡμερον φύσει.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ πλεονάκις εἴρηται τὸ αὐτὸ ἐν τῷ ἰδίῳ· πολλάκις γὰρ λανθάνουσι τοῦτο ποιοῦντες καὶ ἐν τοῖς ἰδίοις, καθάπερ καὶ ἐν τοῖς ὅροις. οὐκ ἔσται δὲ καλῶς κείμενον τὸ τοῦτο πεπονθὸς ἴδιον· ταραττει γὰρ τὸν ἀκούοντα πλεονάκις λεχθέν. ἀσαφὲς οὖν ἀναγκαῖόν ἐστι γίνεσθαι, καὶ πρὸς τούτοις ἀδολεσχεῖν δοκοῦσιν. ἔσται δὲ συμπῖπτον τὸ πλεονάκις εἰπεῖν τὸ αὐτὸ κατὰ δύο τρόπους· καθ' ἓνα μὲν, ὅταν ὀνομάσῃ πλεονάκις τὸ αὐτό, καθάπερ εἴ τις ἴδιον ἀποδοίῃ πυρὸς σῶμα τὸ λεπτότατον τῶν σωμάτων (οὗτος γὰρ πλεονάκις εἴρηκε τὸ “σῶμα”)· δεύτερον δ', ἃν τις μεταλαμβάνῃ τοὺς λόγους ἀντὶ τῶν ὀνομάτων, καθάπερ εἴ [130b] τις ἀποδοίῃ γῆς ἴδιον “οὐσία ἢ μάλιστα κατὰ φύσιν φερομένη τῶν σωμάτων εἰς τὸν κάτω τόπον”, ἔπειτα μεταλάβοι ἀντὶ τῶν “σωμάτων” τὸ “οὐσιῶν τοιωνδί”. ἐν γὰρ καὶ ταύτόν ἐστι σῶμα καὶ οὐσία τοιαδί· ἔσται γὰρ οὗτος τὸ “οὐσία” πλεονάκις εἰρηκώς. ὥστ' οὐδέτερον ἂν εἴη καλῶς κείμενον τῶν ἰδίων. κατασκευάζοντα δὲ εἰ μηδενὶ χρῆται πλεονάκις ὀνόματι τῷ αὐτῷ· ἔσται γὰρ κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας ἀνθρώπου ἴδιον ζῶον ἐπιστήμης δεκτικὸν οὐ κέχρηται τῷ αὐτῷ πλεονάκις ὀνόματι, εἴη ἂν κατὰ τοῦτο καλῶς ἀποδεδομένον τοῦ ἀνθρώπου τὸ ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τοιοῦτόν τι ἀποδέδωκεν ἐν τῷ ἰδίῳ ὃ πᾶσιν ὑπάρχει. ἀχρεῖον γὰρ ἔσται τὸ μὴ χωρίζον ἀπὸ τινων· τὸ δ' ἐν τοῖς ἰδίοις λεγόμενον χωρίζειν δεῖ, καθάπερ καὶ τὸ ἐν τοῖς ὅροις. οὐκ οὖν ἔσται καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ἐπιστήμης ἴδιον ὑπόληψιν ἀμετάπειστον ὑπὸ λόγου ἐν οὕσαν τοιούτῳ τινὶ κέχρηται ἐν τῷ ἰδίῳ, τῷ ἐνί, ὃ πᾶσιν ὑπάρχει, οὐκ ἂν εἴη καλῶς κείμενον τὸ τῆς ἐπιστήμης ἴδιον. κατασκευάζοντα δὲ εἰ μηδενὶ κέχρηται κοινῷ ἄλλ' ἀπὸ τινος χωρίζοντι· ἔσται γὰρ καλῶς κείμενον κατὰ τοῦτο τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας ζώου ἴδιον τὸ



ψυχὴν ἔχειν οὐδενὶ κέχρηται κοινῶ, εἴη ἂν κατὰ τοῦτο καλῶς κείμενον ζώου ἴδιον τὸ ψυχὴν ἔχειν.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ πλείω ἴδια ἀποδίδωσι τοῦ αὐτοῦ, μὴ διορίσας ὅτι πλείω τίθησιν· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. καθάπερ γὰρ οὐδ' ἐν τοῖς ὅροις δεῖ παρὰ τὸν δηλοῦντα λόγον τὴν οὐσίαν προσκεῖσθαι τι πλεον, οὕτως οὐδ' ἐν τοῖς ἰδίοις παρὰ τὸν ποιοῦντα λόγον ἴδιον τὸ ῥηθὲν οὐδὲν προσαποδοτέον· ἀχρεῖον γὰρ γίνεται τὸ τοιοῦτον. οἷον ἐπεὶ ὁ εἶπας ἴδιον πυρὸς σῶμα τὸ λεπτότατον καὶ κουφότατον πλείω ἀποδέδωκεν ἴδια (ἐκάτερον γὰρ κατὰ μόνου τοῦ πυρὸς ἀληθές ἐστιν εἰπεῖν), οὐκ ἂν εἴη καλῶς κείμενον ἴδιον πυρὸς σῶμα τὸ λεπτότατον καὶ κουφότατον. κατασκευάζοντα δ' εἰ μὴ πλείω τοῦ αὐτοῦ τὰ ἴδια ἀποδέδωκεν ἄλλ' ἐν· ἔσται γὰρ κατὰ τοῦτο καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας ὑγροῦ ἴδιον σῶμα τὸ εἰς ἅπαν σχῆμα ἀγόμενον ἐν ἀποδέδωκε τὸ ἴδιον ἄλλ' οὐ πλείω, εἴη ἂν κατὰ τοῦτο καλῶς κείμενον τὸ τοῦ ὑγροῦ ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ αὐτῷ προσκέχρηται οὗ τὸ ἴδιον ἀποδίδωσιν ἢ τῶν αὐτοῦ τινι· οὐ γὰρ ἔσται καλῶς [131a] κείμενον τὸ ἴδιον. τοῦ γὰρ μαθεῖν χάριν ἀποδίδεται τὸ ἴδιον· αὐτὸ μὲν οὖν αὐτῷ ὁμοίως ἄγνωστόν ἐστι, τὸ δέ τι τῶν αὐτοῦ ὕστερον· οὐκ οὐν ἐστὶ γνωριμώτερον. ὥστ' οὐ γίνεται διὰ τούτων μᾶλλον τι μαθεῖν, οἷον· ἐπεὶ ὁ εἶπας ζώου ἴδιον οὐσίαν ἧς εἰδός ἐστιν ἄνθρωπος τινὶ προσκέχρηται τῶν τούτου, οὐκ ἂν εἴη καλῶς κείμενον τὸ ἴδιον. κατασκευάζοντα δὲ εἰ μήτε αὐτῷ μήτε τῶν αὐτοῦ μηδενὶ κέχρηται· ἔσται γὰρ καλῶς κατὰ τοῦτο κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ζώου ἴδιον τὸ ἐκ ψυχῆς καὶ σώματος συγκεείμενον οὔτε αὐτῷ οὔτε τῶν αὐτοῦ οὐδενὶ προσκέχρηται, εἴη ἂν καλῶς κατὰ τοῦτο ἀποδεδομένον τὸ τοῦ ζώου ἴδιον.

Τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων σκεπτέον ἐστὶ τῶν μὴ ποιούντων ἢ ποιούντων γνωριμώτερον, ἀνασκευάζοντα μὲν εἰ τινι προσκέχρηται ἢ ἀντικειμένῳ ἢ ὅλως ἅμα τῇ φύσει ἢ ὑστέρω τινι· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. τὸ μὲν γὰρ ἀντικείμενον ἅμα τῇ φύσει· τὸ δ' ἅμα τῇ φύσει καὶ τὸ ὕστερον οὐ ποιεῖ γνωριμώτερον. οἷον ἐπεὶ ὁ εἶπας ἀγαθοῦ ἴδιον “ὃ κακῶ μάλιστ' ἀντίκειται” τῷ ἀντικειμένῳ προσκέχρηται τοῦ ἀγαθοῦ, οὐκ ἂν εἴη τοῦ ἀγαθοῦ καλῶς ἀποδεδομένον τὸ ἴδιον. κατασκευάζοντα δὲ εἰ μηδενὶ προσκέχρηται μήτ' ἀντικειμένῳ μήτε ὅλως ἅμα τῇ φύσει μήτ' ὑστέρω· ἔσται γὰρ κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ἐπιστήμης ἴδιον ὑπόληψιν τὴν πιστοτάτην οὐδενὶ προσκέχρηται οὗτ' ἀντικειμένῳ οὐθ' ἅμα τῇ φύσει οὐθ' ὑστέρω, εἴη ἂν κατὰ τοῦτο καλῶς κείμενον τὸ τῆς ἐπιστήμης ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ μὴ τὸ ἀεὶ παρεπόμενον ἴδιον ἀποδέδωκεν, ἀλλὰ τοῦτο ὃ γίνεται ποτε μὴ ἴδιον· οὐ γὰρ ἔσται καλῶς εἰρημένον τὸ ἴδιον. οὔτε γὰρ ἐφ' ᾧ καταλαμβάνομεν ὑπάρχον αὐτό, κατὰ τούτου καὶ τοῦνομα ἐξ ἀνάγκης ἀληθεύεται, οὔτ' ἐφ' ᾧ καταλαμβάνεται μὴ ὑπάρχον, κατὰ τούτου ἐξ ἀνάγκης οὐ ῥηθήσεται τοῦνομα, ὥστ' οὐκ ἂν εἴη καλῶς κείμενον τὸ ἴδιον. ἔτι δὲ πρὸς τούτοις οὐδ' ὅτε ἀποδέδωκε τὸ ἴδιον ἔσται φανερόν εἰ ὑπάρχει, εἵπερ τοιοῦτόν ἐστιν οἷον ἀπολείπειν. οὐκ οὖν ἔσται σαφὲς τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ζῶου ἴδιον τὸ κινεῖσθαι ποτε καὶ ἐστάναι τοιοῦτον ἀποδέδωκε τὸ ἴδιον ὃ οὐ γίνεται ποτε ἴδιον, οὐκ ἂν εἴη καλῶς κείμενον τὸ ἴδιον. κατασκευάζοντα δὲ εἰ τὸ ἐξ ἀνάγκης ἀεὶ ὃν ἴδιον ἀποδέδωκεν· ἔσται γὰρ [131b] καλῶς κείμενον κατὰ τοῦτο τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ἀρετῆς ἴδιον “ὃ τὸν ἔχοντα ποιεῖ σπουδαῖον” τὸ ἀεὶ παρεπόμενον ἴδιον ἀποδέδωκεν, εἴη ἂν κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ τῆς ἀρετῆς ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ νῦν ἴδιον ἀποδιδούς μὴ διωρίσατο ὅτι τὸ νῦν ἴδιον ἀποδίδωσιν· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. πρῶτον μὲν γὰρ τὸ παρὰ τὸ ἔθος γινόμενον ἅπαν διορισμοῦ προσδεῖται· εἰώθασι δ' ὥς ἐπὶ τὸ πολὺ πάντες τὸ ἀεὶ παρακολουθοῦν ἴδιον ἀποδιδόναι. δεύτερον δὲ ἄδηλός ἐστιν ὁ μὴ διορισάμενος εἰ τὸ νῦν ἴδιον ἐβούλετο θεῖναι· οὐκ οὖν δοτέον ἐστὶν ἐπιτιμήσεως σκῆψιν. οἷον ἐπεὶ ὁ θέμενος τοῦ τινὸς ἀνθρώπου ἴδιον τὸ καθῆσθαι μετὰ τινος τὸ νῦν ἴδιον τίθησιν, οὐκ ἂν εἴη καλῶς τὸ ἴδιον ἀποδεδοκώς, εἵπερ μὴ διορισάμενος εἶπεν. κατασκευάζοντα δ' εἰ τὸ νῦν ἴδιον ἀποδιδούς διορισάμενος ἔθηκεν ὅτι τὸ νῦν ἴδιον τίθησιν· ἔσται γὰρ καλῶς κείμενον κατὰ τοῦτο τὸ ἴδιον. οἷον ἐπεὶ ὁ εἴπας τοῦ τινὸς ἀνθρώπου ἴδιον τὸ περιπατεῖν νῦν διαστειλάμενος ἔθηκε τοῦτο, καλῶς ἂν εἴη κείμενον τὸ ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τοιοῦτο ἀποδέδωκε τὸ ἴδιον, ὃ φανερόν μὴ ἔστιν ἄλλως ὑπάρχον ἢ αἰσθήσει· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον. ἅπαν γὰρ τὸ αἰσθητὸν ἔξω γινόμενον τῆς αἰσθήσεως ἄδηλον γίνεται· ἀφανὲς γὰρ ἐστὶν εἰ ἔτι ὑπάρχει, διὰ τὸ τῇ αἰσθήσει μόνον γνωρίζεσθαι. ἔσται δ' ἀληθὲς τοῦτο ἐπὶ τῶν μὴ ἐξ ἀνάγκης ἀεὶ παρακολουθούντων. οἷον ἐπεὶ ὁ θέμενος ἡλίου ἴδιον ἄστρον φερόμενον ὑπὲρ γῆς τὸ λαμπρότατον τοιούτῳ κέχρηται ἐν τῷ ἰδίῳ, τῷ ὑπὲρ γῆς φέρεσθαι, ὃ τῇ αἰσθήσει γνωρίζεται, οὐκ ἂν εἴη καλῶς τὸ τοῦ ἡλίου ἀποδεδομένον ἴδιον· ἄδηλον γὰρ ἔσται, ὅταν δύῃ ὁ ἥλιος, εἰ φέρεται ὑπὲρ γῆς, διὰ τὸ τὴν αἴσθησιν τότε ἀπολείπειν ἡμᾶς. κατασκευάζοντα δ' εἰ τοιοῦτον ἀποδέδωκε τὸ ἴδιον ὃ μὴ τῇ αἰσθήσει φανερόν ἐστιν ἢ ὃ αἰσθητὸν ὃν ἐξ ἀνάγκης ὑπάρχον δῆλόν ἐστιν· ἔσται γὰρ κατὰ τοῦτο καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ θέμενος ἐπιφανείας ἴδιον “ὃ πρῶτον κέχρωσται” αἰσθητῷ μὲν τινι προσκέχρηται τῷ κεχρῶσθαι, τοιούτῳ δ'

ὃ φανερόν ἐστιν ὑπάρχον αἰεὶ, εἴη ἂν κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ τῆς ἐπιφανείας ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸν ὅρον ὡς ἴδιον ἀποδέδωκεν· οὐ γὰρ ἔσται καλῶς κείμενον τὸ ἴδιον· οὐ γὰρ δεῖ [132a] δηλοῦν τὸ τί ἦν εἶναι τὸ ἴδιον. οἷον ἐπεὶ ὁ εἶπας ἀνθρώπου ἴδιον ζῶον πεζὸν δίπουν τὸ τί ἦν εἶναι σημαῖνον ἀποδέδωκε τοῦ ἀνθρώπου ἴδιον, οὐκ ἂν εἴη τὸ τοῦ ἀνθρώπου ἴδιον καλῶς ἀποδεδομένον. κατασκευάζοντα δὲ εἰ ἀντικατηγορούμενον μὲν ἀποδέδωκε τὸ ἴδιον, μὴ τὸ τί ἦν εἶναι δὲ δηλοῦν· ἔσται γὰρ κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ἀνθρώπου ἴδιον ζῶον ἡμερον φύσει ἀντικατηγορούμενον μὲν ἀποδέδωκε τὸ ἴδιον, οὐ τὸ τί ἦν εἶναι δὲ δηλοῦν, εἴη ἂν κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ ἴδιον τοῦ ἀνθρώπου.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ μὴ εἰς τὸ τί ἐστιν θεὸς ἀποδέδωκε τὸ ἴδιον. δεῖ γὰρ τῶν ιδίων, καθάπερ καὶ τῶν ὅρων, τὸ πρῶτον ἀποδίδοσθαι γένος, ἔπειθ' οὕτως ἤδη προσάπτεσθαι τὰ λοιπὰ καὶ χωρίζειν. ὥστε τὸ μὴ τοῦτον τὸν τρόπον κείμενον ἴδιον οὐκ ἂν εἴη καλῶς ἀποδεδομένον. οἷον ἐπεὶ ὁ εἶπας ζώου ἴδιον τὸ ψυχὴν ἔχειν οὐκ ἔθηκεν εἰς τὸ τί ἐστὶ τὸ ζῶον, οὐκ ἂν εἴη καλῶς κείμενον τὸ τοῦ ζώου ἴδιον. κατασκευάζοντα δὲ εἴ τις εἰς τὸ τί ἐστὶ θεὸς οὐ τὸ ἴδιον ἀποδίδωσι τὰ λοιπὰ προσάπτει· ἔσται γὰρ κατὰ τοῦτο καλῶς ἀποδεδομένον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ἀνθρώπου ἴδιον ζῶον ἐπιστήμης δεκτικὸν εἰς τὸ τί ἐστὶ θεὸς ἀποδέδωκε τὸ ἴδιον, εἴη ἂν κατὰ τοῦτο καλῶς κείμενον τὸ ἴδιον τοῦ ἀνθρώπου.

Πότερον μὲν οὖν καλῶς ἢ οὐ καλῶς ἀποδέδοται τὸ ἴδιον, διὰ τῶνδε σκεπτέον. πότερον δ' ἴδιόν ἐστιν ὅλως τὸ εἰρημένον ἢ οὐκ ἴδιον, ἐκ τῶνδε θεωρητέον. οἱ γὰρ ἀπλῶς κατασκευάζοντες τὸ ἴδιον ὅτι καλῶς κεῖται τόποι οἱ αὐτοὶ ἔσονται τοῖς ἴδιον ὅλως ποιοῦσιν· ἐν ἐκείνοις οὖν ῥηθήσονται.

Πρῶτον μὲν οὖν ἀνασκευάζοντα ἐπιβλέπειν ἐφ' ἑκάστον οὐ τὸ ἴδιον ἀποδέδωκεν, οἷον εἰ μηδενὶ ὑπάρχει, ἢ εἰ μὴ κατὰ τοῦτο ἀληθεύεται, ἢ εἰ μὴ ἐστὶν ἴδιον ἐκάστου αὐτῶν κατ' ἐκεῖνο οὐ τὸ ἴδιον ἀποδέδωκεν· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ κατὰ τοῦ γεωμετρικοῦ οὐκ ἀληθεύεται τὸ ἀνεξαπάτητον εἶναι ὑπὸ λόγου (ἀπατᾶται γὰρ ὁ γεωμετρικὸς ἐν τῷ ψευδογραφεῖσθαι), οὐκ ἂν εἴη τοῦ ἐπιστήμονος ἴδιον τὸ μὴ ἀπατᾶσθαι ὑπὸ λόγου. κατασκευάζοντα δ' εἰ κατὰ παντὸς ἀληθεύεται καὶ κατὰ τοῦτ' ἀληθεύεται ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ τὸ [132b] ζῶον ἐπιστήμης δεκτικὸν κατὰ παντὸς ἀνθρώπου ἀληθεύεται καὶ ἡ ἀνθρωπος, εἴη ἂν ἀνθρώπου ἴδιον τὸ ζῶον ἐπιστήμης δεκτικόν. [ἔστι δ' ὁ

τόπος οὗτος ἀνασκευάζοντι μὲν, εἰ μὴ καθ' οὗ τοῦνομα, καὶ ὁ λόγος ἀληθεύεται, καὶ εἰ μὴ καθ' οὗ ὁ λόγος, καὶ τοῦνομα ἀληθεύεται· κατασκευάζοντι δέ, εἰ καθ' οὗ τοῦνομα, καὶ ὁ λόγος, καὶ εἰ καθ' οὗ ὁ λόγος, καὶ τοῦνομα κατηγορεῖται.]

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ μὴ καθ' οὗ τοῦνομα, καὶ ὁ λόγος, καὶ εἰ μὴ καθ' οὗ ὁ λόγος, καὶ τοῦνομα λέγεται· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον ἴδιον εἶναι. οἷον ἐπεὶ τὸ μὲν ζῶον ἐπιστήμης μετέχον ἀληθεύεται κατὰ τοῦ θεοῦ, ὁ δ' ἄνθρωπος οὐ κατηγορεῖται, οὐκ ἂν εἴη τοῦ ἀνθρώπου ἴδιον ζῶον ἐπιστήμης μετέχον. κατασκευάζοντα δὲ εἰ καθ' οὗ ὁ λόγος, καὶ τοῦνομα κατηγορεῖται, καὶ καθ' οὗ τοῦνομα, καὶ ὁ λόγος κατηγορεῖται· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ καθ' οὗ τὸ ψυχὴν ἔχειν, τὸ ζῶον ἀληθεύεται, καὶ καθ' οὗ τὸ ζῶον, τὸ ψυχὴν ἔχειν, εἴη ἂν τὸ ψυχὴν ἔχειν τοῦ ζώου ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ ὑποκείμενον ἴδιον ἀποδέδωκε τοῦ ἐν τῷ ὑποκειμένῳ λεγομένου· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον ἴδιον. οἷον ἐπεὶ ὁ ἀποδοὺς ἴδιον τοῦ λεπτομερεστάτου σώματος τὸ πῦρ τὸ ὑποκείμενον ἀποδέδωκε τοῦ κατηγορουμένου ἴδιον, οὐκ ἂν εἴη τὸ πῦρ σώματος τοῦ λεπτομερεστάτου ἴδιον. διὰ τοῦτο δ' οὐκ ἔσται τὸ ὑποκείμενον τοῦ ἐν τῷ ὑποκειμένῳ ἴδιον, ὅτι τὸ αὐτὸ πλειόνων ἔσται καὶ διαφορῶν τῷ εἶδει ἴδιον. τῷ γὰρ αὐτῷ πλείω τινὰ διάφορα τῷ εἶδει ὑπάρχει κατὰ μόνου λεγόμενα, ὧν ἔσται πάντων ἴδιον τὸ ὑποκείμενον, ἐάν τις οὕτω τιθῇται τὸ ἴδιον. κατασκευάζοντα δ' εἰ τὸ τῷ ὑποκειμένῳ ἀποδέδωκεν ἴδιον τοῦ ὑποκειμένου· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον, ἐάνπερ κατὰ μόνων κατηγορῇται ὧν εἴρηται [τὸ] ἴδιον. οἷον ἐπεὶ ὁ εἴπας γῆς ἴδιον σῶμα τὸ βαρύτατον τῷ εἶδει τοῦ ὑποκειμένου ἀπέδωκε τὸ ἴδιον κατὰ μόνου λεγόμενον τοῦ πράγματος καὶ ὥς τὸ ἴδιον κατηγορεῖται, εἴη ἂν τὸ τῆς γῆς ἴδιον ὀρθῶς κείμενον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ κατὰ μέθεξιν ἀποδέδωκε τὸ ἴδιον· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. τὸ γὰρ [133a] κατὰ μέθεξιν ὑπάρχον εἰς τὸ τί ἦν εἶναι συμβάλλεται· εἴη δ' ἂν τὸ τοιοῦτο διαφορὰ τις κατὰ τινος ἐνὸς εἶδους λεγομένη. οἷον ἐπεὶ ὁ εἴπας ἀνθρώπου ἴδιον τὸ πεζὸν δίπουν κατὰ μέθεξιν ἀποδέδωκε τὸ ἴδιον, οὐκ ἂν εἴη ἀνθρώπου ἴδιον τὸ πεζὸν δίπουν. κατασκευάζοντα δὲ εἰ μὴ κατὰ μέθεξιν ἀποδέδωκε τὸ ἴδιον μηδὲ τὸ τί ἦν εἶναι δηλοῦν, ἀντικατηγορουμένου τοῦ πράγματος· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ὁ θεὸς ζῶου ἴδιον τὸ αἰσθάνεσθαι πεφυκὸς οὔτε κατὰ μέθεξιν ἀποδέδωκεν ἴδιον οὔτε τὸ τί ἦν εἶναι δηλοῦν,

ἀντικατηγορουμένου τοῦ πράγματος, εἴη ἂν ζώου ἴδιον τὸ αἰσθάνεσθαι πεφυκός.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ ἐνδέχεται μὴ ἅμα ὑπάρχειν τὸ ἴδιον, ἀλλ' ἢ ὕστερον ἢ πρότερον ἢ [οὐ] τοῦνομα· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον, ἢ οὐδέποτε ἢ οὐκ αἰεί. οἷον ἐπεὶ ἐνδέχεται καὶ πρότερόν τι ὑπάρξει καὶ ὕστερον τοῦ βαδίζειν διὰ τῆς ἀγορᾶς τὸ ἄνθρωπος, οὐκ ἂν εἴη τὸ βαδίζειν διὰ τῆς ἀγορᾶς τοῦ ἀνθρώπου ἴδιον, ἢ οὐδέποτ' ἢ οὐκ αἰεί. κατασκευάζοντα δὲ εἰ ἅμα ἐξ ἀνάγκης αἰεί ὑπάρχει, μήτε ὅρος ὃν μήτε διαφορά· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ τὸ ζῶον ἐπιστήμης δεκτικὸν ἅμα ἐξ ἀνάγκης αἰεί ὑπάρχει καὶ τὸ ἄνθρωπος, οὔτε διαφορὰ ὃν οὔθ' ὅρος, εἴη ἂν τὸ ζῶον ἐπιστήμης δεκτικὸν τοῦ ἀνθρώπου ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τῶν αὐτῶν, ἢ ταῦτά ἐστι, μὴ ἔστι τὸ αὐτὸ ἴδιον· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ οὐκ ἔστι διωκτοῦ τὸ φαίνεσθαι τισιν ἀγαθὸν ἴδιον, οὐδ' ἂν αἰρετοῦ εἴη ἴδιον τὸ φαίνεσθαι τισιν ἀγαθόν· ταῦτόν γάρ ἐστι τὸ διωκτὸν καὶ τὸ αἰρετόν. κατασκευάζοντα δ' εἰ τοῦ αὐτοῦ, ἢ ταῦτό ἐστι, ταῦτό ἴδιον· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ἀνθρώπου, ἢ ἀνθρωπός ἐστι, λέγεται ἴδιον τὸ τριμερῆ ψυχὴν ἔχειν, καὶ βροτοῦ, ἢ βροτός ἐστιν, εἴη ἂν ἴδιον τὸ τριμερῆ ψυχὴν ἔχειν. χρήσιμος δ' ὁ τόπος οὗτος καὶ ἐπὶ τοῦ συμβεβηκότος· τοῖς γὰρ αὐτοῖς, ἢ ταῦτά ἐστι, ταῦτά δεῖ ὑπάρχειν ἢ μὴ ὑπάρχειν.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τῶν αὐτῶν τῷ εἶδει μὴ ταῦτόν αἰεί τῷ εἶδει [τὸ] ἴδιόν ἐστιν· οὐδὲ γὰρ τοῦ εἰρημένου ἔσται [133b] ἴδιον τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ ταῦτόν ἐστι τῷ εἶδει ἄνθρωπος καὶ ἵππος, οὐκ αἰεί δὲ τοῦ ἵππου ἐστὶν ἴδιον τὸ ἐστάναι ὑφ' αὐτοῦ, οὐκ ἂν εἴη τοῦ ἀνθρώπου ἴδιον τὸ κινεῖσθαι ὑφ' αὐτοῦ· ταῦτόν γάρ ἐστι τῷ εἶδει τὸ κινεῖσθαι καὶ τὸ ἐστάναι ὑφ' αὐτοῦ, ἢ ζῶον <δ'> ἐστὶν ἐκατέρω αὐτῶν συμβέβηκεν. κατασκευάζοντα δ' εἰ τῶν αὐτῶν τῷ εἶδει ταῦτόν αἰεί τῷ εἶδει τὸ ἴδιον· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ἀνθρώπου ἐστὶν ἴδιον τὸ εἶναι πεζὸν δίπουν, καὶ ὄρνιθος ἂν εἴη ἴδιον τὸ εἶναι πτηνὸν δίπουν· ἐκάτερον γὰρ τούτων ἐστὶ ταῦτόν τῷ εἶδει, ἢ τὰ μὲν ὡς ὑπὸ τὸ αὐτὸ γένος ἐστὶν εἶδη, ὑπὸ τὸ ζῶον ὄντα, τὰ δὲ ὡς γένους διαφοραί, τοῦ ζώου. οὗτος δ' ὁ τόπος ψευδής ἐστιν ὅταν τὸ μὲν ἕτερον τῶν λεχθέντων ἐνὶ τινὶ μόνῳ ὑπάρχη εἶδει, τὸ δ' ἕτερον πολλοῖς, καθάπερ τὸ πεζὸν τετράπουν.

Ἐπεὶ δὲ τὸ ταῦτόν καὶ τὸ ἕτερον πολλαχῶς λέγεται, ἔργον ἐστὶ

σοφιστικῶς λαμβάνοντι ἐνὸς ἀποδοῦναι καὶ μόνου τινὸς τὸ ἴδιον· τὸ γὰρ ὑπάρχον τινὶ ὧ συμβέβηκε τι καὶ τῷ συμβεβηκότι ὑπάρξει λαμβανομένῳ μετὰ τοῦ ὧ συμβέβηκεν. οἷον τὸ ὑπάρχον ἀνθρώπῳ καὶ λευκῷ ἀνθρώπῳ ὑπάρξει, ἂν ἢ λευκὸς ἄνθρωπος· καὶ τὸ λευκῷ δὲ ἀνθρώπῳ ὑπάρχον καὶ ἀνθρώπῳ ὑπάρξει. διαβάλλοι δ' ἂν τις τὰ πολλὰ τῶν ἰδίων τὸ ὑποκείμενον ἄλλο μὲν καθ' αὐτὸ ποιῶν ἄλλο δὲ μετὰ τοῦ συμβεβηκότος, οἷον ἄλλο μὲν ἄνθρωπον εἶναι λέγων ἄλλο δὲ λευκὸν ἄνθρωπον, ἔτι δὲ ἕτερον ποιῶν τὴν ἕξιν καὶ τὸ κατὰ τὴν ἕξιν λεγόμενον. τὸ γὰρ τῇ ἕξει ὑπάρχον καὶ τῷ κατὰ τὴν ἕξιν λεγομένῳ ὑπάρξει, καὶ τὸ τῷ κατὰ τὴν ἕξιν λεγομένῳ ὑπάρχον καὶ τῇ ἕξει ὑπάρξει. οἷον ἐπεὶ ὁ ἐπιστήμων κατὰ τὴν ἐπιστήμην λέγεται διακεῖσθαι, οὐκ ἂν εἴη τῆς ἐπιστήμης ἴδιον τὸ ἀμετάπειστον ὑπὸ λόγου· καὶ γὰρ ὁ ἐπιστήμων ἔσται ἀμετάπειστος ὑπὸ λόγου. κατασκευάζοντα δὲ ῥητέον ὅτι οὐκ ἔστιν ἕτερον ἀπλῶς τὸ ὧ συμβέβηκε καὶ τὸ συμβεβηκὸς μετὰ τοῦ ὧ συμβέβηκε λαμβανομένον, ἀλλ' ἄλλο λέγεται τῷ ἕτερον εἶναι αὐτοῖς τὸ εἶναι· οὐ ταῦτόν γάρ ἐστιν ἀνθρώπῳ τε τὸ εἶναι ἀνθρώπῳ καὶ λευκῷ ἀνθρώπῳ τὸ εἶναι ἀνθρώπῳ λευκῷ. ἔτι δὲ θεωρητέον ἐστὶ παρὰ τὰς πτώσεις, λέγοντα ὅτι [134a] οὐθ' ὁ ἐπιστήμων ἐστὶ τὸ ἀμετάπειστον ὑπὸ λόγου ἀλλ' ὁ ἀμετάπειστος ὑπὸ λόγου, οὐθ' ἡ ἐπιστήμη τὸ ἀμετάπειστον ὑπὸ λόγου ἀλλ' ἡ ἀμετάπειστος ὑπὸ λόγου· πρὸς γὰρ τὸν πάντα ἐνιστάμενον πάντως ἀντιτακτέον ἐστίν.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ τὸ φύσει ὑπάρχον βουλόμενος ἀποδοῦναι τοῦτον τὸν τρόπον τίθησι τῇ λέξει ὥστε τὸ ἀεὶ ὑπάρχον σημαίνειν· δόξειε γὰρ ἂν κινεῖσθαι τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ ὁ εἶπας ἀνθρώπου ἴδιον τὸ δίπουν βούλεται μὲν τὸ φύσει ὑπάρχον ἀποδιδόναι, σημαίνει δὲ τῇ λέξει τὸ ἀεὶ ὑπάρχον, οὐκ ἂν εἴη ἀνθρώπου ἴδιον τὸ δίπουν· οὐ γὰρ πᾶς ἄνθρωπός ἐστι δύο πόδας ἔχων. κατασκευάζοντα δ' εἰ βούλεται τὸ φύσει ὑπάρχον ἴδιον ἀποδιδόναι καὶ τῇ λέξει τοῦτον τὸν τρόπον σημαίνει· οὐ γὰρ κινήσεται κατὰ τοῦτο τὸ ἴδιον. οἷον ἐπεὶ ὁ ἀνθρώπου ἴδιον ἀποδιδούς τὸ ζῶον ἐπιστήμης δεκτικὸν καὶ βούλεται καὶ τῇ λέξει σημαίνει τὸ φύσει ὑπάρχον ἴδιον, οὐκ ἂν κινεῖτο κατὰ τοῦτο ὡς οὐκ ὄν ἀνθρώπου ἴδιον τὸ ζῶον ἐπιστήμης δεκτικόν.

Ἐτι ὅσα λέγεται ὡς κατ' ἄλλο τι πρῶτον ἢ ὡς πρῶτον αὐτό, ἔργον ἐστὶν ἀποδοῦναι τῶν τοιούτων τὸ ἴδιον· ἐὰν μὲν γὰρ τοῦ κατ' ἄλλο τι ἴδιον ἀποδῶς, καὶ κατὰ τοῦ πρώτου ἀληθεύσεται· ἐὰν δὲ τοῦ πρώτου θῆς, καὶ τοῦ κατ' ἄλλο κατηγορηθήσεται. οἷον ἐὰν μὲν τις ἐπιφανείας ἴδιον ἀποδῶ τὸ κεχρῶσθαι, καὶ κατὰ σώματος ἀληθεύσεται τὸ κεχρῶσθαι· ἐὰν δὲ σώματος, καὶ κατ' ἐπιφανείας κατηγορηθήσεται. ὥστε οὐ καθ' οὐ ὁ λόγος, καὶ τοῦνομα ἀληθεύσεται.

Συμβαίνει δ' ἐν ἐνίοις τῶν ἰδίων ὡς ἐπὶ τὸ πολὺ γίνεσθαι τινα ἁμαρτίαν παρὰ τὸ μὴ διορίζεσθαι πῶς καὶ τίνων τίθησι τὸ ἴδιον. ἅπαντες γὰρ ἐπιχειροῦσιν ἀποδιδόναι [τὸ] ἴδιον ἢ τὸ φύσει ὑπάρχον, καθάπερ ἀνθρώπου τὸ δίπουν, ἢ τὸ ὑπάρχον, καθάπερ ἀνθρώπου τινὸς τὸ τέτταρας δακτύλους ἔχειν, ἢ εἶδει, καθάπερ πυρὸς τὸ λεπτομερέστατον, ἢ ἀπλῶς, καθάπερ ζώου τὸ ζῆν, ἢ κατ' ἄλλο, καθάπερ ψυχῆς τὸ φρόνιμον, ἢ ὡς τὸ πρῶτον, καθάπερ λογιστικοῦ τὸ φρόνιμον, ἢ ὡς τῷ ἔχειν, καθάπερ ἐπιστήμονος τὸ ἀμετάπειστον ὑπὸ λόγου (οὐδὲν γὰρ ἕτερον ἢ τῷ ἔχειν τι ἔσται ἀμετάπειστος ὑπὸ λόγου), ἢ τῷ ἔχεσθαι, [134b] καθάπερ ἐπιστήμης τὸ ἀμετάπειστον ὑπὸ λόγου, ἢ τῷ μετέχεσθαι, καθάπερ ζώου τὸ αἰσθάνεσθαι (αἰσθάνεται μὲν γὰρ καὶ ἄλλο τι, οἷον ἄνθρωπος, ἀλλ' «ὡς» μετέχον ἤδη τοῦτο αἰσθάνεται), ἢ τῷ μετέχειν, καθάπερ τοῦ τινὸς ζώου τὸ ζῆν. μὴ προσθεὶς μὲν οὖν τὸ φύσει ἁμαρτάνει, διότι ἐνδέχεται τὸ φύσει ὑπάρχον μὴ ὑπάρχειν ἐκείνῳ ὃ φύσει ὑπάρχει, καθάπερ ἀνθρώπῳ τὸ δύο πόδας ἔχειν. μὴ διορίσας δ' ὅτι τὸ ὑπάρχον ἀποδίδωσιν, διότι οὐκ ἔστι τοιοῦτον οἷον ὑπάρχειν ἐκείνῳ, καθάπερ τὸ τέτταρας δακτύλους ἔχειν τὸν ἄνθρωπον. μὴ δηλώσας δὲ ὅτι ὡς πρῶτον ἢ ὡς κατ' ἄλλο τίθησιν, διότι οὐ καθ' οὗ ὁ λόγος, καὶ τοῦνομα ἀληθεύσεται, καθάπερ τὸ κεχρῶσθαι, εἴτε τῆς ἐπιφανείας εἴτε τοῦ σώματος ἀποδοθὲν ἴδιον. μὴ προείπας δὲ ὅτι ἢ τῷ ἔχειν ἢ τῷ ἔχεσθαι τὸ ἴδιον ἀποδέδωκε, διότι οὐκ ἔστιν ἴδιον· ὑπάρξει γάρ, ἐὰν μὲν τῷ ἔχεσθαι ἀποδιδῶ τὸ ἴδιον, τῷ ἔχοντι, ἐὰν δὲ τῷ ἔχειν, τῷ ἐχομένῳ, καθάπερ τὸ ἀμετάπειστον ὑπὸ λόγου τῆς ἐπιστήμης ἢ τοῦ ἐπιστήμονος τεθὲν ἴδιον. μὴ προσσημήνας δὲ τῷ μετέχειν ἢ τῷ μετέχεσθαι, διότι καὶ ἄλλοις τισὶν ὑπάρξει τὸ ἴδιον· ἐὰν μὲν γὰρ τῷ μετέχεσθαι ἀποδῶ, τοῖς μετέχουσιν, ἐὰν δὲ τῷ μετέχειν, τοῖς μετεχομένοις, καθάπερ εἰ τοῦ τινὸς ζώου ἢ τοῦ ζώου τιθεῖν τὸ ζῆν ἴδιον. μὴ διαστείλας δὲ τὸ τῷ εἶδει, διότι ἐνὶ μόνῳ ὑπάρξει τῶν ὑπὸ τοῦτο ὄντων οὐ τὸ ἴδιον τίθησι· τὸ γὰρ καθ' ὑπερβολὴν ἐνὶ μόνῳ ὑπάρχει, καθάπερ τοῦ πυρὸς τὸ κουφότατον. ἐνίστε δὲ καὶ τὸ τῷ εἶδει προσθεὶς διήμαρτεν. δεήσει γὰρ ἐν εἶδος εἶναι τῶν λεχθέντων, ὅταν τὸ τῷ εἶδει προστεθῇ· τοῦτο δ' ἐπ' ἐνίων οὐ συμπίπτει, καθάπερ οὐδ' ἐπὶ τοῦ πυρός. οὐ γὰρ ἔστιν ἐν εἶδος τοῦ πυρός· ἕτερον γὰρ ἔστι τῷ εἶδει ἄνθραξ καὶ φλόξ καὶ φῶς, ἕκαστον αὐτῶν πῦρ ὄν. διὰ τοῦτο δ' οὐ δεῖ, ὅταν τὸ τῷ εἶδει προστεθῇ, ἕτερον εἶναι εἶδος τοῦ λεχθέντος, ὅτι τοῖς μὲν μᾶλλον τοῖς δ' ἥττον ὑπάρξει τὸ λεχθὲν ἴδιον, καθάπερ ἐπὶ τοῦ πυρὸς τὸ λεπτομερέστατον· λεπτομερέστερον γὰρ ἔστι τὸ φῶς τοῦ ἄνθρακος καὶ τῆς φλογός. τοῦτο δ' οὐ δεῖ γίνεσθαι ὅταν μὴ καὶ τὸ ὄνομα μᾶλλον κατηγορῇται καθ' οὗ ὁ λόγος μᾶλλον ἀληθεύεται· εἰ δὲ μή, οὐκ ἔσται, καθ' οὗ ὁ λόγος μᾶλλον, καὶ [135a] τοῦνομα μᾶλλον. ἔτι δὲ πρὸς τούτοις ταῦτόν ἐστιν συμβήσεται τὸ ἴδιον τοῦ τε ἀπλῶς καὶ τοῦ μάλιστα ὄντος ἐν τῷ ἀπλῶς τοιούτῳ, καθάπερ ἐπὶ τοῦ πυρὸς ἔχει τὸ

λεπτομερέστατον· καὶ γὰρ τοῦ φωτὸς ἔσται ταῦτο τοῦτο ἴδιον· λεπτομερέστατον γὰρ ἔστι τὸ φῶς. ἄλλου μὲν οὖν οὕτως ἀποδιδόντος τὸ ἴδιον ἐπιχειρητέον· αὐτῷ δ' οὐ δοτέον ἐστὶ ταύτην τὴν ἔνστασιν, ἀλλ' εὐθὺς τιθεμένῳ τὸ ἴδιον διοριστέον ὃν τρόπον τίθῃσι τὸ ἴδιον.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ αὐτὸ αὐτοῦ ἴδιον ἔθηκεν· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. αὐτὸ γὰρ αὐτῷ πᾶν τὸ εἶναι δηλοῖ· τὸ δὲ τὸ εἶναι δηλοῦν οὐκ ἴδιον ἀλλ' ὅρος ἐστίν. οἷον ἐπεὶ ὁ εἶπας καλοῦ τὸ πρέπον ἴδιον εἶναι αὐτὸ ἑαυτοῦ ἴδιον ἀποδέδωκε (ταῦτόν γάρ ἐστι τὸ καλὸν καὶ τὸ πρέπον), οὐκ ἂν εἶη τὸ πρέπον τοῦ καλοῦ ἴδιον. κατασκευάζοντα δὲ εἰ μὴ αὐτὸ μὲν αὐτοῦ ἴδιον ἀποδέδωκεν, ἀντικατηγορούμενον δ' ἔθηκεν· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ὁ θεὸς ζώου ἴδιον τὸ οὐσία ἔμψυχος οὐκ αὐτὸ μὲν αὐτοῦ ἴδιον ἔθηκεν, ἀντικατηγορούμενον δ' ἀποδέδωκεν, εἶη ἂν ἴδιον τοῦ ζώου τὸ οὐσία ἔμψυχος.

Ἐπειτ' ἐπὶ τῶν ὁμοιομερῶν σκεπτέον ἐστίν, ἀνασκευάζοντα μὲν εἰ τὸ τοῦ συνόλου ἴδιον μὴ ἀληθεύεται κατὰ τοῦ μέρους, ἢ εἰ τὸ τοῦ μέρους μὴ λέγεται κατὰ τοῦ σύμπαντος· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον ἴδιον εἶναι. συμβαίνει δ' ἐπ' ἐνίων τοῦτο γίνεσθαι· ἀποδοίη γὰρ ἂν τις ἐπὶ τῶν ὁμοιομερῶν ἴδιον ἐνίῳτε μὲν ἐπὶ τὸ σύμπαν βλέψας, ἐνίῳτε δ' ἐπὶ τὸ κατὰ μέρος λεγόμενον αὐτὸς αὐτόν ἐπιστήσας. ἔσται δ' οὐδέτερον ὀρθῶς ἀποδεδομένον. οἷον ἐπὶ μὲν τοῦ σύμπαντος, ἐπεὶ ὁ εἶπας θαλάττης ἴδιον τὸ πλεῖστον ὕδωρ ἀλμυρὸν ὁμοιομεροῦς μὲν τινος ἔθηκε τὸ ἴδιον, τοιοῦτον δ' ἀποδέδωκε ὃ οὐκ ἀληθεύεται κατὰ τοῦ μέρους (οὐ γάρ ἐστιν ἢ τις θάλαττα τὸ πλεῖστον ὕδωρ ἀλμυρόν), οὐκ ἂν εἶη τῆς θαλάττης ἴδιον τὸ πλεῖστον ὕδωρ ἀλμυρόν. ἐπὶ δὲ τοῦ μέρους, οἷον ἐπεὶ ὁ θεὸς ἀέρος ἴδιον τὸ ἀναπνευστὸν ὁμοιομεροῦς μὲν τινος εἶρηκε τὸ ἴδιον, τοιοῦτον δ' ἀποδέδωκεν ὃ κατὰ τοῦ τινὸς ἀέρος ἀληθεύεται, κατὰ δὲ τοῦ σύμπαντος οὐ λέγεται (οὐ γάρ ἐστιν ὁ σύμπας ἀναπνευστός), οὐκ ἂν εἶη τοῦ ἀέρος ἴδιον τὸ ἀναπνευστόν.

[135b] κατασκευάζοντα δὲ εἰ ἀληθεύεται μὲν καθ' ἑκάστου τῶν ὁμοιομερῶν, ἔστι δ' ἴδιον αὐτῶν κατὰ τὸ σύμπαν· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ἀληθεύεται κατὰ πάσης γῆς τὸ κάτω φέρεσθαι κατὰ φύσιν, ἔστι δὲ τοῦτο ἴδιον καὶ τῆς τινὸς γῆς κατὰ τὸ γῆν εἶναι, εἶη ἂν τῆς γῆς ἴδιον τὸ κάτω φέρεσθαι κατὰ φύσιν.

Ἐπειτ' ἐκ τῶν ἀντικειμένων σκεπτέον ἐστί, πρῶτον μὲν ἐκ τῶν ἐναντίων, ἀνασκευάζοντα μὲν εἰ τοῦ ἐναντίου μὴ ἔστι τὸ ἐναντίον ἴδιον· οὐδὲ γὰρ τοῦ ἐναντίου ἔσται τὸ ἐναντίον ἴδιον. οἷον ἐπεὶ ἐναντίον ἐστὶ δικαιοσύνη μὲν



ἀδικία, τῷ βελτίστῳ δὲ τὸ χεীরιστον, οὐκ ἔστι δὲ τῆς δικαιοσύνης ἴδιον τὸ βέλτιστον, οὐκ ἂν εἴη τῆς ἀδικίας ἴδιον τὸ χεীরιστον. κατασκευάζοντα δὲ εἰ τοῦ ἐναντίου τὸ ἐναντίον ἴδιόν ἐστιν· καὶ γὰρ τοῦ ἐναντίου τὸ ἐναντίον ἴδιον ἔσται. οἷον ἐπεὶ ἐναντίον ἐστὶν ἀγαθῷ μὲν κακόν, αἰρετῷ δὲ φευκτόν, ἔστι δὲ τοῦ ἀγαθοῦ ἴδιον τὸ αἰρετόν, εἴη ἂν κακοῦ ἴδιον τὸ φευκτόν.

Δεύτερον δ' ἐκ τῶν πρὸς τι, ἀνασκευάζοντα μὲν εἰ τὸ πρὸς τι τοῦ πρὸς τι μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τὸ πρὸς τι τοῦ πρὸς τι ἔσται ἴδιον. οἷον ἐπεὶ λέγεται διπλάσιον μὲν πρὸς ἡμισυ, ὑπερέχον δὲ πρὸς ὑπερεχόμενον, οὐκ ἔστι δὲ τοῦ διπλασίου τὸ ὑπερέχον ἴδιον, οὐκ ἂν εἴη τοῦ ἡμίσεος τὸ ὑπερεχόμενον ἴδιον. κατασκευάζοντα δὲ εἰ τοῦ πρὸς τι τὸ πρὸς τί ἐστιν ἴδιον· καὶ γὰρ τοῦ πρὸς τι τὸ πρὸς τι ἔσται ἴδιον. οἷον ἐπεὶ λέγεται τὸ μὲν διπλάσιον πρὸς τὸ ἡμισυ, τὸ δὲ δύο πρὸς ἓν πρὸς τὸ ἓν πρὸς δύο, ἔστι δὲ τοῦ διπλασίου ἴδιον τὸ ὡς δύο πρὸς ἓν, εἴη ἂν τοῦ ἡμίσεος ἴδιον τὸ ὡς ἓν πρὸς δύο.

Τρίτον δ' ἀνασκευάζοντα μὲν εἰ τῆς ἕξεως τὸ καθ' ἕξιν λεγόμενον μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τῆς στερήσεως τὸ κατὰ στέρησιν λεγόμενον ἔσται ἴδιον. κἂν εἰ δὲ τῆς στερήσεως τὸ κατὰ στέρησιν λεγόμενον μὴ ἔστιν ἴδιον, οὐδὲ τῆς ἕξεως τὸ κατὰ τὴν ἕξιν λεγόμενον ἴδιον ἔσται· οἷον ἐπεὶ οὐ λέγεται τῆς κωφότητος ἴδιον τὸ ἀναισθησίαν εἶναι, οὐδ' ἂν τῆς ἀκούσεως εἴη ἴδιον τὸ αἰσθησιν εἶναι. κατασκευάζοντα δὲ εἰ τὸ καθ' ἕξιν λεγόμενόν ἐστι τῆς ἕξεως ἴδιον· καὶ γὰρ τῆς στερήσεως τὸ κατὰ στέρησιν λεγόμενον ἔσται ἴδιον. κἂν εἰ τῆς στερήσεως τὸ κατὰ στέρησιν λεγόμενόν ἐστιν ἴδιον, καὶ τῆς ἕξεως [136a] τὸ καθ' ἕξιν λεγόμενον ἔσται ἴδιον. οἷον ἐπεὶ τῆς ὀψεώς ἐστιν ἴδιον τὸ βλέπειν, καθὼ ἔχομεν ὄψιν, εἴη ἂν τῆς τυφλότητος ἴδιον τὸ μὴ βλέπειν, καθὼ οὐκ ἔχομεν ὄψιν πεφυκότες ἔχειν.

Ἐπειτα ἐκ τῶν φάσεων καὶ τῶν ἀποφάσεων, πρῶτον μὲν ἐξ αὐτῶν τῶν κατηγορουμένων. ἔστι δ' ὁ τόπος οὗτος χρήσιμος ἀνασκευάζοντι μόνον. οἷον εἰ ἡ φάσις ἢ τὸ κατὰ τὴν φάσιν λεγόμενον αὐτοῦ ἴδιόν ἐστιν· οὐ γὰρ ἔσται αὐτοῦ ἡ ἀπόφασις οὐδὲ τὸ κατὰ τὴν ἀπόφασιν λεγόμενον ἴδιον. κἂν εἰ δ' ἡ ἀπόφασις ἢ τὸ κατὰ τὴν ἀπόφασιν λεγόμενόν ἐστιν αὐτοῦ ἴδιον, οὐκ ἔσται ἡ φάσις οὐδὲ τὸ κατὰ τὴν φάσιν λεγόμενον ἴδιον. οἷον ἐπεὶ τοῦ ζώου ἐστὶν ἴδιον τὸ ἔμψυχον, οὐκ ἂν εἴη τοῦ ζώου ἴδιον τὸ οὐκ ἔμψυχον.

Δεύτερον δ' ἐκ τῶν κατηγορουμένων ἢ μὴ κατηγορουμένων καὶ ἐξ ὧν κατηγορεῖται ἢ μὴ κατηγορεῖται, ἀνασκευάζοντα μὲν εἰ ἡ φάσις τῆς φάσεως μὴ ἔστιν ἴδιον· οὐδὲ γὰρ ἡ ἀπόφασις τῆς ἀποφάσεως ἔσται ἴδιον. κἂν εἰ δ' ἡ ἀπόφασις τῆς ἀποφάσεως μὴ ἔστιν ἴδιον, οὐδ' ἡ φάσις τῆς φάσεως ἔσται

ἴδιον. οἶον ἐπεὶ οὐκ ἔστι τοῦ ἀνθρώπου ἴδιον τὸ ζῶον, οὐδ' ἂν τοῦ μὴ ἀνθρώπου εἶη ἴδιον τὸ μὴ ζῶον· κἂν εἰ δὲ τοῦ μὴ ἀνθρώπου φαίνεται μὴ ἴδιον τὸ μὴ ζῶον, οὐδὲ τοῦ ἀνθρώπου ἔσται ἴδιον τὸ ζῶον. κατασκευάζοντα δ' εἰ τῆς φάσεως ἢ φάσις ἐστὶν ἴδιον· καὶ γὰρ τῆς ἀποφάσεως ἢ ἀπόφασις ἔσται ἴδιον. κἂν εἰ δὲ τῆς ἀποφάσεως ἢ ἀπόφασις ἐστὶν ἴδιον, καὶ ἡ φάσις τῆς φάσεως ἔσται ἴδιον. οἶον ἐπεὶ τοῦ μὴ ζώου ἴδιον ἐστὶ τὸ μὴ ζῆν, εἶη ἂν τοῦ ζώου ἴδιον τὸ ζῆν· κἂν εἰ δὲ τοῦ ζώου φαίνεται ἴδιον τὸ ζῆν, καὶ τοῦ μὴ ζώου φανεῖται ἴδιον τὸ μὴ ζῆν.

Τρίτον δὲ ἐξ αὐτῶν τῶν ὑποκειμένων, ἀνασκευάζοντα μὲν εἰ τὸ ἀποδοστέον ἴδιον τῆς φάσεως ἐστὶν ἴδιον· οὐ γὰρ ἔσται τὸ αὐτὸ καὶ τῆς ἀποφάσεως ἴδιον. κἂν εἰ δὲ τῆς ἀποφάσεως ἐστὶν ἴδιον τὸ ἀποδοθέν, οὐκ ἔσται τῆς φάσεως ἴδιον. οἶον ἐπεὶ τοῦ ζώου ἴδιον τὸ ἔμψυχον, οὐκ ἂν εἶη τοῦ μὴ ζώου ἴδιον τὸ ἔμψυχον. κατασκευάζοντα δέ, εἰ τὸ ἀποδοθέν μὴ ἔστι τῆς φάσεως ἴδιον, εἶη ἂν τῆς ἀποφάσεως. οὗτος δ' ὁ τόπος ψευδῆς ἐστὶν· φάσις γὰρ ἀποφάσεως καὶ ἀπόφασις φάσεως οὐκ ἔστιν ἴδιον. φάσις μὲν γὰρ ἀποφάσει οὐδ' ὅλως ὑπάρχει, [136b] ἀπόφασις δὲ φάσει ὑπάρχει μὲν, οὐχ ὡς ἴδιον δὲ ὑπάρχει.

Ἐπειτα δ' ἐκ τῶν ἀντιδιηρημένων, ἀνασκευάζοντα μὲν εἰ τῶν ἀντιδιηρημένων μηδὲν μηδενὸς τῶν λοιπῶν ἀντιδιηρημένων ἐστὶν ἴδιον· οὐδὲ γὰρ τὸ κείμενον ἔσται ἴδιον τούτου οὐ κεῖται ἴδιον. οἶον ἐπεὶ ζῶον αἰσθητὸν οὐδενὸς τῶν ἄλλων ζώων ἐστὶν ἴδιον, οὐκ ἂν εἶη τὸ ζῶον νοητὸν τοῦ θεοῦ ἴδιον. κατασκευάζοντα δ' εἰ τῶν λοιπῶν τῶν ἀντιδιηρημένων ὅτιοῦν ἐστὶν ἴδιον τούτων ἐκάστου τῶν ἀντιδιηρημένων· καὶ γὰρ τὸ λοιπὸν ἔσται τούτου ἴδιον οὐ κεῖται μὴ εἶναι ἴδιον. οἶον ἐπεὶ φρονήσεως ἐστὶν ἴδιον τὸ καθ' αὐτὸ πεφυκέναι λογιστικοῦ ἀρετὴν εἶναι, καὶ τῶν ἄλλων ἀρετῶν οὕτως ἐκάστης λαμβανομένης, εἶη ἂν σωφροσύνης ἴδιον τὸ καθ' αὐτὸ πεφυκέναι ἐπιθυμητικοῦ ἀρετὴν εἶναι.

Ἐπειτ' ἐκ τῶν πώσεων, ἀνασκευάζοντα μὲν εἰ ἡ πῶσις τῆς πώσεως μὴ ἔστιν ἴδιον· οὐδὲ γὰρ ἡ πῶσις τῆς πώσεως ἔσται ἴδιον. οἶον ἐπεὶ οὐκ ἔστι τοῦ δικαίως ἴδιον τὸ καλῶς, οὐδ' ἂν τοῦ δικαίου εἶη ἴδιον τὸ καλόν. κατασκευάζοντα δὲ εἰ ἡ πῶσις τῆς πώσεως ἐστὶν ἴδιον· καὶ γὰρ ἡ πῶσις τῆς πώσεως ἔσται ἴδιον. οἶον ἐπεὶ τοῦ ἀνθρώπου ἐστὶν ἴδιον τὸ πεζὸν δίπουν, καὶ τοῦ ἀνθρώπου εἶη ἂν ἴδιον τὸ πεζῷ δίποδι λέγεσθαι. οὐ μόνον δ' ἐπ' αὐτοῦ τοῦ εἰρημένου κατὰ τὰς πώσεις ἐστὶ σκεπτέον ἀλλὰ καὶ ἐπὶ τῶν ἀντικειμένων, καθάπερ καὶ ἐπὶ τῶν προτέρων τόπων εἴρηται, ἀνασκευάζοντα μὲν εἰ ἡ τοῦ ἀντικειμένου πῶσις μὴ ἔστιν ἴδιον τῆς τοῦ ἀντικειμένου

πτώσεως· οὐδὲ γὰρ ἢ τοῦ ἀντικειμένου πτώσις ἔσται ἴδιον τῆς τοῦ ἀντικειμένου πτώσεως. οἷον ἐπεὶ οὐκ ἔστι τοῦ δικαίως ἴδιον τὸ ἀγαθῶς, οὐδ' ἂν τοῦ ἀδίκως εἴη ἴδιον τὸ κακῶς. κατασκευάζοντα δὲ εἰ ἢ τοῦ ἀντικειμένου πτώσις ἐστὶν ἴδιον τῆς τοῦ ἀντικειμένου πτώσεως· καὶ γὰρ ἢ τοῦ ἀντικειμένου πτώσις ἔσται ἴδιον τῆς τοῦ ἀντικειμένου πτώσεως. οἷον ἐπεὶ τοῦ ἀγαθοῦ ἐστὶν ἴδιον τὸ βέλτιστον, καὶ τοῦ κακοῦ ἂν εἴη ἴδιον τὸ χείριστον.

Ἔπειτ' ἐκ τῶν ὁμοίως ἐχόντων, ἀνασκευάζοντα μὲν εἰ τὸ ὁμοίως ἔχον τοῦ ὁμοίως ἔχοντος μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τὸ ὁμοίως ἔχον τοῦ ὁμοίως ἔχοντος ἔσται ἴδιον. οἷον ἐπεὶ ὁμοίως ἔχει ὁ οἰκοδόμος πρὸς τὸ ποιεῖν οἰκίαν καὶ ὁ ἰατρὸς πρὸς τὸ ποιεῖν ὑγίειαν, οὐκ ἔστι δὲ ἰατροῦ ἴδιον τὸ ποιεῖν ὑγίειαν, [137a] οὐκ ἂν εἴη οἰκοδόμου ἴδιον τὸ ποιεῖν οἰκίαν. κατασκευάζοντα δὲ εἰ τὸ ὁμοίως ἔχον τοῦ ὁμοίως ἔχοντός ἐστιν ἴδιον· καὶ γὰρ τὸ ὁμοίως ἔχον τοῦ ὁμοίως ἔχοντος ἔσται ἴδιον. οἷον ἐπεὶ ὁμοίως ἔχει ἰατρός τε πρὸς τὸ ποιητικὸς ὑγείας εἶναι καὶ γυμναστῆς πρὸς τὸ ποιητικὸς εὐεξίας, ἔστι δ' ἴδιον γυμναστοῦ τὸ ποιητικὸν εἶναι εὐεξίας, εἴη ἂν ἴδιον ἰατροῦ τὸ ποιητικὸν εἶναι ὑγείας.

Ἔπειτ' ἐκ τῶν ὡσαύτως ἐχόντων, ἀνασκευάζοντα μὲν εἰ τὸ ὡσαύτως ἔχον τοῦ ὡσαύτως ἔχοντος μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τὸ ὡσαύτως ἔχον τοῦ ὡσαύτως ἔχοντος ἔσται ἴδιον. εἰ δ' ἐστὶ τοῦ ὡσαύτως ἔχοντος τὸ ὡσαύτως ἔχον ἴδιον, τούτου οὐκ ἔσται ἴδιον οὗ κεῖται εἶναι ἴδιον. οἷον ἐπεὶ ὡσαύτως ἔχει φρόνησις πρὸς τὸ καλὸν καὶ τὸ αἰσχρόν, τῷ ἐπιστήμῃ ἐκατέρου αὐτῶν εἶναι, οὐκ ἔστι δ' ἴδιον φρονήσεως τὸ ἐπιστήμην εἶναι καλοῦ, οὐκ ἂν εἴη ἴδιον φρονήσεως τὸ ἐπιστήμην εἶναι αἰσχροῦ. [εἰ δ' ἐστὶν ἴδιον φρονήσεως τὸ ἐπιστήμην εἶναι καλοῦ, οὐκ ἂν εἴη ἴδιον αὐτῆς τὸ ἐπιστήμην εἶναι αἰσχροῦ· ἀδύνατον γὰρ εἶναι τὸ αὐτὸ πλείονων ἴδιον.] κατασκευάζοντι δὲ οὐδὲν οὗτος ὁ τόπος ἐστὶ χρήσιμος· τὸ γὰρ ὡσαύτως ἔχον ἐν πρὸς πλείῳ συγκρίνεται.

Ἔπειτ' ἀνασκευάζοντα μὲν εἰ τὸ κατὰ τὸ εἶναι λεγόμενον μὴ ἔστι τοῦ κατὰ τὸ εἶναι λεγομένου ἴδιον· οὐδὲ γὰρ τὸ φθεῖρεσθαι τοῦ κατὰ τὸ φθεῖρεσθαι, οὐδὲ τὸ γίνεσθαι τοῦ κατὰ τὸ γίνεσθαι λεγομένου, ἔσται ἴδιον. οἷον ἐπεὶ οὐκ ἔστιν ἀνθρώπου ἴδιον τὸ εἶναι ζῶον, οὐδ' ἂν τοῦ ἀνθρώπου γίνεσθαι εἴη ἴδιον τὸ γίνεσθαι ζῶον, οὐδ' ἂν τοῦ ἀνθρώπου φθεῖρεσθαι εἴη ἴδιον τὸ φθεῖρεσθαι ζῶον. τὸν αὐτὸν δὲ τρόπον ληπτέον ἐστὶ καὶ ἐκ τοῦ γίνεσθαι πρὸς τὸ εἶναι καὶ φθεῖρεσθαι, καὶ ἐκ τοῦ φθεῖρεσθαι πρὸς τὸ εἶναι καὶ πρὸς τὸ γίνεσθαι, καθάπερ εἴρηται νῦν ἐκ τοῦ εἶναι πρὸς τὸ γίνεσθαι καὶ φθεῖρεσθαι. κατασκευάζοντα δὲ εἰ τοῦ κατὰ τὸ εἶναι τεταγμένου ἐστὶ τὸ κατ' αὐτὸ τεταγμένον ἴδιον· καὶ γὰρ τοῦ κατὰ τὸ γίνεσθαι λεγομένου ἔσται τὸ

κατὰ τὸ γίνεσθαι λεγόμενον ἴδιον, καὶ τοῦ κατὰ τὸ φθείρεσθαι τὸ κατὰ τοῦτο ἀποδιδόμενον. οἷον ἐπεὶ τοῦ ἀνθρώπου ἐστὶν ἴδιον τὸ εἶναι βροτόν, καὶ τοῦ γίνεσθαι ἄνθρωπον εἶη ἂν ἴδιον τὸ γίνεσθαι βροτόν, καὶ τοῦ φθείρεσθαι ἄνθρωπον τὸ φθείρεσθαι βροτόν. τὸν αὐτὸν δὲ τρόπον ληπτέον [137b] ἐστὶ καὶ ἐκ τοῦ γίνεσθαι καὶ φθείρεσθαι πρὸς τὸ εἶναι καὶ πρὸς τὰ ἐξ αὐτῶν, καθάπερ καὶ ἀνασκευάζοντι εἴρηται.

Ἐπειτ' ἐπιβλέπειν ἐπὶ τὴν ιδέαν τοῦ κειμένου, ἀνασκευάζοντα μὲν εἰ τῇ ιδέᾳ μὴ ὑπάρχει, ἢ εἰ μὴ κατὰ τοῦτο καθ' ὃ λέγεται τοῦτο οὐ τὸ ἴδιον ἀπεδόθη· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον· οἷον ἐπεὶ αὐτοανθρώπῳ οὐχ ὑπάρχει τὸ ἡρεμεῖν ἢ ἄνθρωπός ἐστιν, ἀλλ' ἢ ιδέα, οὐκ ἂν εἶη ἀνθρώπου ἴδιον τὸ ἡρεμεῖν. κατασκευάζοντα δὲ εἰ τῇ ιδέᾳ ὑπάρχει καὶ κατὰ τοῦτο ὑπάρχει ἢ λέγεται κατ' αὐτοῦ ἐκεῖνο οὐ κεῖται μὴ εἶναι ἴδιον· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ὑπάρχει τῷ αὐτοζώῳ τὸ ἐκ ψυχῆς καὶ σώματος συγκεῖσθαι, καὶ ἢ ζῶον αὐτῷ ὑπάρχει τοῦτο, εἶη ἂν ζώου ἴδιον τὸ ἐκ ψυχῆς καὶ σώματος συγκεῖσθαι.

Ἐπειτα ἐκ τοῦ μᾶλλον καὶ ἥττον, πρῶτον μὲν ἀνασκευάζοντα εἰ τὸ μᾶλλον τοῦ μᾶλλον μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τὸ ἥττον τοῦ ἥττον ἔσται ἴδιον, οὐδὲ τὸ ἥκιστα τοῦ ἥκιστα, οὐδὲ τὸ μάλιστα τοῦ μάλιστα, οὐδὲ τὸ ἀπλῶς τοῦ ἀπλῶς. οἷον ἐπεὶ οὐκ ἔστι τὸ μᾶλλον κεχρῶσθαι τοῦ μᾶλλον σώματος ἴδιον, οὐδὲ τὸ ἥττον κεχρῶσθαι τοῦ ἥττον σώματος εἶη ἂν ἴδιον, οὐδὲ τὸ κεχρῶσθαι σώματος ὅλως. κατασκευάζοντα δὲ εἰ τὸ μᾶλλον τοῦ μᾶλλον ἐστὶν ἴδιον· καὶ γὰρ τὸ ἥττον τοῦ ἥττον ἔσται ἴδιον, καὶ τὸ ἥκιστα τοῦ ἥκιστα, καὶ τὸ μάλιστα τοῦ μάλιστα, καὶ τὸ ἀπλῶς τοῦ ἀπλῶς. οἷον ἐπεὶ τοῦ μᾶλλον ζώντος τὸ μᾶλλον αἰσθάνεσθαι ἐστὶν ἴδιον, καὶ τοῦ ἥττον ζώντος τὸ ἥττον αἰσθάνεσθαι εἶη ἂν ἴδιον, καὶ τοῦ μάλιστα δὴ τὸ μάλιστα, καὶ τοῦ ἥκιστα τὸ ἥκιστα, καὶ τοῦ ἀπλῶς τὸ ἀπλῶς.

Καὶ ἐκ τοῦ ἀπλῶς δὲ πρὸς ταῦτα σκεπτέον ἐστίν, ἀνασκευάζοντα μὲν εἰ τὸ ἀπλῶς τοῦ ἀπλῶς μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τὸ μᾶλλον τοῦ μᾶλλον, οὐδὲ τὸ ἥττον τοῦ ἥττον, οὐδὲ τὸ μάλιστα τοῦ μάλιστα, οὐδὲ τὸ ἥκιστα τοῦ ἥκιστα ἔσται ἴδιον. οἷον ἐπεὶ οὐκ ἔστι τοῦ ἀνθρώπου τὸ σπουδαῖον ἴδιον, οὐδ' ἂν τοῦ μᾶλλον ἀνθρώπου τὸ μᾶλλον σπουδαῖον ἴδιον εἶη. κατασκευάζοντα δὲ εἰ τὸ ἀπλῶς τοῦ ἀπλῶς ἐστὶν ἴδιον· καὶ γὰρ τὸ μᾶλλον τοῦ μᾶλλον καὶ τὸ ἥττον τοῦ ἥττον καὶ τὸ ἥκιστα τοῦ ἥκιστα καὶ τὸ μάλιστα τοῦ μάλιστα ἔσται ἴδιον. οἷον ἐπεὶ τοῦ πυρός ἐστὶν ἴδιον τὸ ἄνω φέρεσθαι κατὰ φύσιν, καὶ τοῦ μᾶλλον [138a] πυρὸς εἶη ἂν ἴδιον τὸ μᾶλλον ἄνω φέρεσθαι κατὰ φύσιν. τὸν αὐτὸν δὲ τρόπον σκεπτέον ἐστὶ καὶ ἐκ τῶν ἄλλων πρὸς ἅπαντα ταῦτα.

Δεύτερον δ' ἀνασκευάζοντα μὲν εἰ τὸ μᾶλλον οὐ μᾶλλον μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τὸ ἦττον οὐ ἦττον ἔσται ἴδιον. οἷον ἐπεὶ μᾶλλον ἔστιν ἴδιον ζώου τὸ αἰσθάνεσθαι ἢ ἀνθρώπου τὸ ἐπίστασθαι, οὐκ ἔστι δὲ ζώου ἴδιον τὸ αἰσθάνεσθαι, οὐκ ἂν εἴη ἀνθρώπου ἴδιον τὸ ἐπίστασθαι. κατασκευάζοντα δ' εἰ τὸ ἦττον οὐ ἦττόν ἐστιν ἴδιον· καὶ γὰρ τὸ μᾶλλον οὐ μᾶλλον ἔσται ἴδιον. οἷον ἐπεὶ ἦττόν ἐστιν ἴδιον ἀνθρώπου τὸ ἡμερον φύσει ἢ ζώου τὸ ζῆν, ἔστι δ' ἀνθρώπου ἴδιον τὸ ἡμερον φύσει, εἴη ἂν ζώου ἴδιον τὸ ζῆν.

Τρίτον δ' ἀνασκευάζοντα μὲν εἰ οὐ μᾶλλον ἔστιν ἴδιον μὴ ἔστιν ἴδιον· οὐδὲ γὰρ οὐ ἦττόν ἐστιν ἴδιον, ἔσται τούτου ἴδιον. εἰ δ' ἐκείνου ἔστιν ἴδιον, οὐκ ἔσται τούτου ἴδιον. οἷον ἐπεὶ τὸ κεχρῶσθαι μᾶλλον τῆς ἐπιφανείας ἢ τοῦ σώματος ἔστιν ἴδιον, οὐκ ἔστι δὲ τῆς ἐπιφανείας ἴδιον, οὐκ ἂν εἴη τοῦ σώματος ἴδιον τὸ κεχρῶσθαι. εἰ δ' ἐστὶ τῆς ἐπιφανείας ἴδιον, οὐκ ἂν εἴη τοῦ σώματος ἴδιον. κατασκευάζοντι δὲ ὁ τόπος οὗτος οὐκ ἔστι χρήσιμος· ἀδύνατον γάρ ἐστι ταῦτ' ὅτι πλείονων ἴδιον εἶναι.

Τέταρτον δ' ἀνασκευάζοντα μὲν εἰ τὸ μᾶλλον αὐτοῦ ἴδιον μὴ ἔστιν ἴδιον· οὐδὲ γὰρ τὸ ἦττον αὐτοῦ ἴδιον ἔσται ἴδιον. οἷον ἐπεὶ μᾶλλον ἔστι τοῦ ζώου ἴδιον τὸ αἰσθητὸν ἢ τὸ μεριστόν, οὐκ ἔστι δὲ τοῦ ζώου τὸ αἰσθητὸν ἴδιον, οὐκ ἂν εἴη τοῦ ζώου τὸ μεριστόν ἴδιον. κατασκευάζοντα δὲ εἰ τὸ ἦττον αὐτοῦ ὃν ἴδιόν ἐστιν ἴδιον· καὶ γὰρ τὸ μᾶλλον αὐτοῦ ὃν ἴδιον ἔσται ἴδιον. οἷον ἐπεὶ ἦττόν ἐστιν ἴδιον ζώου τὸ αἰσθάνεσθαι ἢ τὸ ζῆν, ἔστι δὲ τοῦ ζώου τὸ αἰσθάνεσθαι ἴδιον, εἴη ἂν τοῦ ζώου τὸ ζῆν ἴδιον.

Ἐπειτ' ἐκ τῶν ὁμοίως ὑπαρχόντων, πρῶτον μὲν ἀνασκευάζοντα εἰ τὸ ὁμοίως ὃν ἴδιον μὴ ἔστιν ἴδιον τούτου οὐ ὁμοίως ἔστιν ἴδιον· οὐδὲ γὰρ τὸ ὁμοίως ὃν ἴδιον ἔσται ἴδιον τούτου οὐ ὁμοίως ἔστιν ἴδιον. οἷον ἐπεὶ ὁμοίως ἔστιν ἴδιον ἐπιθυμητικοῦ τὸ ἐπιθυμεῖν καὶ λογιστικοῦ τὸ λογίζεσθαι, οὐκ ἔστι δ' ἴδιον ἐπιθυμητικοῦ τὸ ἐπιθυμεῖν, οὐκ ἂν εἴη ἴδιον λογιστικοῦ τὸ λογίζεσθαι. κατασκευάζοντα δὲ εἰ τὸ ὁμοίως ὃν ἴδιόν ἐστι τούτου ἴδιον οὐ ὁμοίως ἔστιν ἴδιον· ἔσται γὰρ καὶ τὸ ὁμοίως ὃν [138b] ἴδιον τούτου ἴδιον οὐ ὁμοίως ἔστιν ἴδιον. οἷον ἐπεὶ ὁμοίως ἔστιν ἴδιον λογιστικοῦ τὸ πρῶτον φρόνιμον καὶ ἐπιθυμητικοῦ τὸ πρῶτον σῶφρον, ἔστι δὲ [τοῦ] λογιστικοῦ ἴδιον τὸ πρῶτον φρόνιμον, εἴη ἂν ἐπιθυμητικοῦ ἴδιον τὸ πρῶτον σῶφρον.

Δεύτερον δ' ἀνασκευάζοντα μὲν εἰ τὸ ὁμοίως ὃν ἴδιον μὴ ἔστιν ἴδιον αὐτοῦ· οὐδὲ γὰρ τὸ ὁμοίως ὃν ἴδιον ἔσται ἴδιον αὐτοῦ. οἷον ἐπεὶ ὁμοίως ἔστιν ἴδιον ἀνθρώπου τὸ ὁρᾶν καὶ τὸ ἀκούειν, οὐκ ἔστι δ' ἀνθρώπου ἴδιον τὸ ὁρᾶν, οὐκ ἂν εἴη ἀνθρώπου ἴδιον τὸ ἀκούειν. κατασκευάζοντα δὲ εἰ τὸ

ὁμοίως αὐτοῦ ὃν ἴδιόν ἐστιν ἴδιον· καὶ γὰρ τὸ ὁμοίως αὐτοῦ ὃν ἴδιον ἔσται ἴδιον. οἷον ἐπεὶ ὁμοίως ἐστὶν ἴδιον ψυχῆς τὸ μέρος αὐτῆς ἐπιθυμητικὸν εἶναι πρῶτον καὶ λογιστικὸν πρῶτον, ἔστι δὲ ψυχῆς ἴδιον τὸ μέρος αὐτῆς εἶναι ἐπιθυμητικὸν πρῶτον, εἴη ἂν ἴδιον ψυχῆς τὸ μέρος αὐτῆς εἶναι λογιστικὸν πρῶτον.

Τρίτον δ' ἀνασκευάζοντα μὲν εἰ οὗ ὁμοίως ἐστὶν ἴδιον μὴ ἔστιν ἴδιον· οὐδὲ γὰρ οὗ ὁμοίως ἐστὶν ἴδιον ἔσται ἴδιον. εἰ δ' ἐκείνου ἐστὶν ἴδιον, οὐκ ἔσται θατέρου ἴδιον. οἷον ἐπεὶ ὁμοίως ἐστὶν ἴδιον τὸ καίειν φλογὸς καὶ ἄνθρακος, οὐκ ἔστι δ' ἴδιον φλογὸς τὸ καίειν, οὐκ ἂν εἴη ἴδιον ἄνθρακος τὸ καίειν. εἰ δ' ἐστὶ φλογὸς ἴδιον, οὐκ ἂν εἴη ἄνθρακος ἴδιον. κατασκευάζοντι δὲ οὐδὲν οὗτος ὁ τύπος ἐστὶ χρήσιμος.

Διαφέρει δ' ὁ ἐκ τῶν ὁμοίως ἐχόντων τοῦ ἐκ τῶν ὁμοίως ὑπαρχόντων, ὅτι τὸ μὲν κατ' ἀναλογίαν λαμβάνεται, οὐκ ἐπὶ τοῦ ὑπάρχειν τι θεωρούμενον, τὸ δ' ἐκ τοῦ ὑπάρχειν τι συγκρίνεται.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ, δυνάμει τὸ ἴδιον ἀποδιδούς, καὶ πρὸς μὴ ὃν ἀποδέδωκε τὸ ἴδιον τῇ δυνάμει, μὴ ἐνδεχομένης τῆς δυνάμεως ὑπάρχειν τῷ μὴ ὄντι· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. οἷον ἐπεὶ ὁ εἶπας ἀέρος ἴδιον τὸ ἀναπνευστὸν τῇ δυνάμει μὲν ἀποδέδωκε τὸ ἴδιον (τὸ γὰρ τοιοῦτον οἷον ἀναπνεῖσθαι ἀναπνευστόν ἐστιν), ἀποδέδωκε δὲ καὶ πρὸς τὸ μὴ ὃν τὸ ἴδιον (καὶ γὰρ μὴ ὄντος ζώου οἷον ἀναπνεῖν πέφυκε τὸν ἀέρα ἐνδέχεται ἀέρα εἶναι· οὐ μέντοι μὴ ὄντος ζώου δυνατόν ἐστιν ἀναπνεῖν· ὥστ' οὐδ' ἀέρος ἔσται ἴδιον τὸ τοιοῦτον οἷον ἀναπνεῖσθαι τότε ὅτε ζῶον οὐκ ἔσται τοιοῦτον οἷον ἀναπνεῖν), οὐκ ἂν οὖν εἴη ἀέρος ἴδιον τὸ ἀναπνευστόν.

[139a] κατασκευάζοντα δὲ εἰ τῇ δυνάμει ἀποδιδούς τὸ ἴδιον ἢ πρὸς ὃν ἀποδίδωσι τὸ ἴδιον ἢ πρὸς μὴ ὄν, ἐνδεχομένης τῆς δυνάμεως τῷ μὴ ὄντι ὑπάρχειν· ἔσται γὰρ ἴδιον τὸ κείμενον μὴ εἶναι ἴδιον. οἷον ἐπεὶ ὁ ἀποδιδούς ἴδιον τοῦ ὄντος τὸ δυνατόν παθεῖν ἢ ποιῆσαι, δυνάμει ἀποδιδούς τὸ ἴδιον, πρὸς ὃν ἀποδέδωκε τὸ ἴδιον (ὅτε γὰρ ὄν ἐστι, καὶ δυνατόν παθεῖν τι ἢ ποιῆσαι ἔσται) - ὥστε εἴη ἂν ἴδιον τοῦ ὄντος τὸ δυνατόν παθεῖν ἢ ποιῆσαι.

Ἐπειτ' ἀνασκευάζοντα μὲν εἰ ὑπερβολὴν τέθεικε τὸ ἴδιον· οὐ γὰρ ἔσται ἴδιον τὸ κείμενον εἶναι ἴδιον. συμβαίνει γὰρ τοῖς οὕτως ἀποδιδούσι τὸ ἴδιον μή, καθ' οὗ ὁ λόγος, τοῦνομα ἀληθεύεσθαι· φθαρέντος γὰρ τοῦ πράγματος οὐδὲν ἦττον ἔσται ὁ λόγος· τῶν γὰρ ὄντων τινὲς μάλιστα ὑπάρξει. οἷον εἴ τις ἀποδοίη τοῦ πυρὸς ἴδιον σῶμα τὸ κουφότατον· φθαρέντος γὰρ τοῦ πυρὸς

ἔσται τι τῶν σωμάτων ὃ κουφότατον ἔσται. ὥστ' οὐκ ἂν εἴη τοῦ πυρὸς ἴδιον σῶμα τὸ κουφότατον. κατασκευάζοντα δὲ εἰ μὴ ὑπερβολὴν τέθεικε τὸ ἴδιον· ἔσται γὰρ κατὰ τοῦτο καλῶς κείμενον τὸ ἴδιον. οἷον ἐπεὶ ὁ θεὸς ἀνθρώπου ἴδιον ζῶον ἡμερον φύσει οὐχ ὑπερβολῇ ἀποδέδωκε τὸ ἴδιον, εἴη ἂν κατὰ τοῦτο καλῶς κείμενον τὸ ἴδιον.

## Z

Τῆς δὲ περὶ τοὺς ὅρους πραγματείας μέρη πέντε ἔστιν· ἢ γὰρ ὅτι ὅλως οὐκ ἀληθὲς εἶπεῖν, καθ' οὗ τοῦνομα, καὶ τὸν λόγον (δεῖ γὰρ τὸν τοῦ ἀνθρώπου ὀρισμὸν κατὰ παντὸς ἀνθρώπου ἀληθεύεσθαι), ἢ ὅτι ὄντος γένους οὐκ ἔθηκεν εἰς τὸ γένος, ἢ οὐκ εἰς τὸ οἰκεῖον γένος ἔθηκεν (δεῖ γὰρ τὸν ὀριζόμενον εἰς τὸ γένος θέντα τὰς διαφορὰς προσάπτειν· μάλιστα γὰρ τῶν ἐν τῷ ὀρισμῷ τὸ γένος δοκεῖ τὴν τοῦ ὀριζομένου οὐσίαν σημαίνειν), ἢ ὅτι οὐκ ἴδιος ὁ λόγος (δεῖ γὰρ τὸν ὀρισμὸν ἴδιον εἶναι, καθάπερ καὶ πρότερον εἴρηται), ἢ εἰ πάντα τὰ εἰρημένα πεποιηκῶς μὴ ὥριστα μὴδ' εἴρηκε τὸ τί ἦν εἶναι τῷ ὀριζομένῳ. λοιπὸν δὲ παρὰ τὰ εἰρημένα, εἰ ὥριστα μὲν, μὴ καλῶς δ' ὥριστα.

Εἰ μὲν οὖν μὴ ἀληθεύεται, καθ' οὗ τοῦνομα, καὶ ὁ λόγος, ἐκ τῶν πρὸς τὸ συμβεβηκὸς τόπων ἐπισκεπτέον· καὶ γὰρ ἐκεῖ· πότερον ἀληθὲς ἢ οὐκ ἀληθὲς πᾶσα ἢ σκέψις [139b] γίνεται. ὅταν μὲν γὰρ ὅτι ὑπάρχει τὸ συμβεβηκὸς διαλεγώμεθα, ὅτι ἀληθὲς λέγομεν· ὅταν δ' ὅτι οὐχ ὑπάρχει, ὅτι οὐκ ἀληθὲς. εἰ δὲ μὴ ἐν τῷ οἰκείῳ γένει ἔθηκεν, ἢ εἰ μὴ ἴδιος ὁ ἀποδοθεὶς λόγος, ἐκ τῶν πρὸς τὸ γένος καὶ τὸ ἴδιον ῥηθέντων τόπων ἐπισκεπτέον.

Λοιπὸν δ', εἰ μὴ ὥριστα ἢ εἰ μὴ καλῶς ὥριστα, πῶς μετιτέον εἶπεῖν. πρῶτον μὲν οὖν ἐπισκεπτέον εἰ μὴ καλῶς ὥριστα. ῥᾶον γὰρ ὀτιοῦν ποιῆσαι ἢ καλῶς ποιῆσαι· δῆλον οὖν ὅτι ἡ ἀμαρτία περὶ τοῦτο πλείων, ἐπειδὴ ἐργωδέστερον· ὥσθ' ἡ ἐπιχείρησις ῥᾶον ἢ περὶ τοῦτο ἢ ἡ περὶ ἐκεῖνο γίνεται.

Ἔστι δὲ τοῦ μὴ καλῶς μέρη δύο· ἓν μὲν τὸ ἀσαφεῖ τῇ ἐρμηνείᾳ κεχρηῆσθαι (δεῖ γὰρ τὸν ὀριζόμενον ὡς ἐνδέχεται σαφεστάτῃ τῇ ἐρμηνείᾳ κεχρηῆσθαι, ἐπειδὴ τοῦ γνωρίσαι χάριν ἀποδίδοται ὁ ὀρισμός), δεύτερον δ' εἰ ἐπὶ πλεῖον εἴρηκε τὸν λόγον τοῦ δέοντος· πᾶν γὰρ τὸ προσκείμενον ἐν τῷ ὀρισμῷ περίεργον. πάλιν δ' ἑκάτερον τῶν εἰρημένων εἰς πλείω μέρη διείληπται.

Εἷς μὲν οὖν τόπος τοῦ ἀσαφῶς, εἰ ὁμώνυμόν ἐστί τι τὸ εἰρημένον, οἷον ὅτι ἡ γένεσις ἀγωγὴ εἰς οὐσίαν καὶ ὅτι ἡ ὑγίεια συμμετρία θερμῶν καὶ ψυχρῶν· ὁμώνυμος γὰρ ἡ ἀγωγὴ καὶ ἡ συμμετρία. ἄδηλον οὖν ὀπότερον βούλεται λέγειν τῶν δηλουμένων ὑπὸ τοῦ πλεοναχῶς λεγομένου. ὁμοίως δὲ καὶ εἰ τοῦ ὀριζομένου πλεοναχῶς λεγομένου μὴ διελὼν εἶπεν· ἄδηλον γὰρ



ὁποτέρου τὸν ὅρον ἀποδέδωκεν, ἐνδέχεται τε συκοφαντεῖν ὥς οὐκ ἐφαρμόττοντος τοῦ λόγου ἐπὶ πάντα ὧν τὸν ὅρισμὸν ἀποδέδωκεν. μάλιστα δ' ἐνδέχεται τὸ τοιοῦτον ποιεῖν λανθανούσης τῆς ὁμωνυμίας. ἐνδέχεται δὲ καί, διελόμενον αὐτὸν ποσαχῶς λέγεται τὸ ἐν τῷ ὅρισμῳ ἀποδοθέν, συλλογισμὸν ποιῆσαι· εἰ γὰρ κατὰ μηδένα τῶν τρόπων ἱκανῶς εἴρηται, δῆλον ὅτι οὐκ ἂν ὠρισμένος εἴη κατὰ τρόπον.

Ἄλλος, εἰ κατὰ μεταφορὰν εἴρηκεν, οἷον εἰ τὴν ἐπιστήμην ἀμετάπτωτον ἢ τὴν γῆν τιθήνην ἢ τὴν σωφροσύνην συμφωνίαν· πᾶν γὰρ ἀσαφὲς τὸ κατὰ μεταφορὰν λεγόμενον. ἐνδέχεται δὲ καὶ τὸν μεταφορὰν εἰπόντα συκοφαντεῖν ὥς κυρίως εἰρηκότα· οὐ γὰρ ἐφαρμόσει ὁ λεχθεὶς ὅρος, οἷον ἐπὶ σωφροσύνης· πᾶσα γὰρ συμφωνία ἐν φθόγγοις. ἔτι εἰ γένος ἢ συμφωνία τῆς σωφροσύνης, ἐν δύο γένεσιν [140a] ἔσται ταῦτόν οὐ περιέχουσιν ἄλληλα· οὔτε γὰρ ἡ συμφωνία τὴν ἀρετὴν οὔθ' ἡ ἀρετὴ τὴν συμφωνίαν περιέχει.

Ἔτι εἰ μὴ κειμένοις ὀνόμασι χρῆται, οἷον Πλάτων ὄφρυόσκιον τὸν ὀφθαλμόν, ἢ τὸ φαλάγγιον σηψιδακές, ἢ τὸν μυελὸν ὀστεογενές· πᾶν γὰρ ἀσαφὲς τὸ μὴ εἰωθός.

Ἔνια δ' οὔτε καθ' ὁμωνυμίαν οὔτε κατὰ μεταφορὰν οὔτε κυρίως εἴρηται, οἷον ὁ νόμος μέτρον ἢ εἰκὼν τῶν φύσει δικαίων. ἔστι δὲ τὰ τοιαῦτα χεῖρω τῆς μεταφορᾶς. ἡ μὲν γὰρ μεταφορὰ ποιεῖ πῶς γνώριμον τὸ σημαινόμενον διὰ τὴν ὁμοιότητα (πάντες γὰρ οἱ μεταφέροντες κατὰ τινὰ ὁμοιότητα μεταφέρουσιν), τὸ δὲ τοιοῦτον οὐ ποιεῖ γνώριμον· οὔτε γὰρ ὁμοιότης ὑπάρχει καθ' ἣν μέτρον ἢ εἰκὼν ὁ νόμος ἐστίν, οὔτε εἴωθε λέγεσθαι. ὥστε εἰ μὲν κυρίως μέτρον ἢ εἰκόνα τὸν νόμον φησὶν εἶναι, ψεύδεται (εἰκὼν γὰρ ἐστὶν οὗ ἢ γένεσις διὰ μιμήσεως· τοῦτο δ' οὐχ ὑπάρχει τῷ νόμῳ)· εἰ δὲ μὴ κυρίως, δῆλον ὅτι ἀσαφῶς εἴρηκε καὶ χεῖρον ὁτιοῦν τῶν κατὰ μεταφορὰν λεγομένων.

Ἔτι εἰ μὴ δῆλος ὁ τοῦ ἐναντίου λόγος ἐκ τοῦ λεχθέντος· οἱ γὰρ καλῶς ἀποδιδόμενοι καὶ τοὺς ἐναντίους προσσημαίνουσιν. ἢ εἰ καθ' αὐτὸν λεχθεὶς μὴ φανερός εἴη τίνος ἐστὶν ὅρισμός, ἀλλὰ καθάπερ τὰ τῶν ἀρχαίων γραφῶν, εἰ μὴ τις ἐπέγραψεν, οὐκ ἐγνωρίζετο τί ἐστὶν ἕκαστον.

Εἰ μὲν οὖν μὴ σαφῶς, ἐκ τῶν τοιούτων ἐστὶν ἐπισκεπτέον. εἰ δ' ἐπὶ πλεῖον εἴρηκε τὸν ὅρον, πρῶτον μὲν σκοπεῖν εἴ τι κέχρηται ὃ πᾶσιν ὑπάρχει, ἢ ὅλως τοῖς οὖσιν ἢ τοῖς ὑπὸ ταὐτὸ γένος τῷ ὀριζομένῳ· ἐπὶ πλεῖον γὰρ εἰρῆσθαι ἀναγκαῖον τοῦτο. δεῖ γὰρ τὸ μὲν γένος ἀπὸ τῶν ἄλλων χωρίζειν, τὴν δὲ διαφορὰν ἀπὸ τῶν ἐν τῷ αὐτῷ γένει. τὸ μὲν οὖν πᾶσιν

ὑπάρχον ἀπλῶς ἀπ’ οὐδενὸς χωρίζει· τὸ δὲ τοῖς ὑπὸ ταὐτὸ γένος πᾶσιν ὑπάρχον οὐ χωρίζει ἀπὸ τῶν ἐν ταύτῳ γένει, ὥστε μάταιον τὸ τοιοῦτον προσκείμενον.

Ἦ εἰ ἔστι μὲν ἴδιον τὸ προσκείμενον, ἀφαιρεθέντος δὲ τούτου καὶ ὁ λοιπὸς λόγος ἴδιός ἐστι καὶ δηλοῖ τὴν οὐσίαν. οἷον ἐν τῷ τοῦ ἀνθρώπου λόγῳ τὸ ἐπιστήμης δεκτικὸν προστεθὲν περιέργον· καὶ γὰρ ἀφαιρεθέντος τούτου ὁ λοιπὸς λόγος ἴδιος καὶ δηλοῖ τὴν οὐσίαν. ἀπλῶς δ’ εἶπεῖν ἅπαν [140b] περιέργον οὐ ἀφαιρεθέντος τὸ λοιπὸν δῆλον ποιεῖ τὸ ὀριζόμενον. τοιοῦτος δὲ καὶ ὁ τῆς ψυχῆς ὅρος, εἴπερ “ἀριθμὸς αὐτὸς αὐτὸν κινῶν” ἐστίν· καὶ γὰρ τὸ αὐτὸ αὐτὸ κινεῖν ψυχὴ, καθάπερ Πλάτων ὥριται. ἢ ἴδιον μὲν ἐστὶ τὸ εἰρημένον, οὐ δηλοῖ δὲ τὴν οὐσίαν ἀφαιρεθέντος τοῦ ἀριθμοῦ. ποτέρως μὲν οὖν ἔχει, χαλεπὸν διασαφῆσαι· χρηστέον δ’ ἐπὶ πάντων τῶν τοιούτων πρὸς τὸ συμφέρον· οἷον ὅτι ὁ τοῦ φλέγματος ὅρος “ὑγρὸν πρῶτον ἀπὸ τροφῆς ἄπεπτον”. ἐν γὰρ τὸ πρῶτον, οὐ πολλά, ὥστε περιέργον τὸ ἄπεπτον προσκείμενον· καὶ γὰρ τούτου ἀφαιρεθέντος ὁ λοιπὸς ἔσται ἴδιος λόγος· οὐ γὰρ ἐνδέχεται ἀπὸ τῆς τροφῆς καὶ τοῦτο καὶ ἄλλο τι πρῶτον εἶναι. ἢ οὐχ ἀπλῶς πρῶτον ἀπὸ τροφῆς τὸ φλέγμα ἀλλὰ τῶν ἀπέπτων πρῶτον, ὥστε προσθετέον τὸ “ἄπεπτον” (ἐκείνως μὲν γὰρ ῥηθέντος οὐκ ἀληθὴς ὁ λόγος, εἴπερ μὴ πάντων πρῶτόν ἐστιν);

Ἔτι εἴ τι τῶν ἐν τῷ λόγῳ μὴ πᾶσιν ὑπάρχει τοῖς ὑπὸ ταὐτὸ εἶδος· ὁ γὰρ τοιοῦτος χεῖρον ὥριται τῶν χρωμένων ὃ πᾶσιν ὑπάρχει τοῖς οὖσιν. ἐκείνως μὲν γάρ, ἂν ὁ λοιπὸς ἴδιος ἢ λόγος, καὶ ὁ πᾶς ἴδιος ἔσται· ἀπλῶς γὰρ πρὸς τὸ ἴδιον ὁπουοῦν προστεθέντος ἀληθοῦς ὅλος ὁ λόγος ἴδιος γίνεται. εἰ δέ τι τῶν ἐν τῷ λόγῳ μὴ πᾶσιν ὑπάρχει τοῖς ὑπὸ ταὐτὸ εἶδος, ἀδύνατον ὅλον τὸν λόγον ἴδιον εἶναι· οὐ γὰρ ἀντικατηγορηθήσεται τοῦ πράγματος. οἷον “ζῶον πεζὸν δίπουν τετράπηχυ”. ὁ γὰρ τοιοῦτος λόγος οὐκ ἀντικατηγορεῖται τοῦ πράγματος διὰ τὸ μὴ πᾶσιν ὑπάρχειν τοῖς ὑπὸ ταὐτὸν εἶδος τὸ τετράπηχυ.

Πάλιν εἰ ταὐτὸν πλεονάκις εἴρηκεν, οἷον τὴν ἐπιθυμίαν ὄρεξιν ἡδέος εἰπών· πᾶσα γὰρ ἐπιθυμία ἡδέος ἐστίν, ὥστε καὶ τὸ ταὐτὸν τῇ ἐπιθυμίᾳ ἡδέος ἔσται. γίνεται οὖν ὅρος τῆς ἐπιθυμίας ὄρεξις ἡδέος ἡδέος· οὐδὲν γὰρ διαφέρει ἐπιθυμίαν εἶπεῖν ἢ ὄρεξιν ἡδέος, ὥσθ’ ἐκάτερον αὐτῶν ἡδέος ἔσται. ἢ τοῦτο μὲν οὐδὲν ἄτοπον· καὶ γὰρ ὁ ἄνθρωπος δίπουν ἐστίν, ὥστε καὶ τὸ ταὐτὸν τῷ ἀνθρώπῳ δίπουν ἔσται, ἔστι δὲ ταὐτὸν τῷ ἀνθρώπῳ ζῶον πεζὸν δίπουν, ὥστε ζῶον πεζὸν δίπουν δίπουν ἔσται, ἀλλ’ οὐ διὰ τοῦτο ἄτοπόν τι συμβαίνει· οὐ γὰρ κατὰ ζώου πεζοῦ τὸ δίπουν κατηγορεῖται (οὕτω μὲν γὰρ δις ἂν περὶ τοῦ αὐτοῦ τὸ δίπουν κατηγοροῖτο), ἀλλὰ περὶ ζώου πεζοῦ

δίποδος [141a] τὸ δίπουν λέγεται, ὥστε ἅπαξ μόνον τὸ δίπουν κατηγορεῖται. ὁμοίως δὲ καὶ ἐπὶ τῆς ἐπιθυμίας· οὐ γὰρ κατὰ τῆς ὀρέξεως τὸ ἡδέος εἶναι κατηγορεῖται ἀλλὰ κατὰ τοῦ σύμπαντος, ὥστε ἅπαξ καὶ ἐνταῦθα ἡ κατηγορία γίνεται. οὐκ ἔστι δὲ τὸ δις φθέγξασθαι ταῦτὸν ὄνομα τῶν ἀτόπων, ἀλλὰ τὸ πλεονάκις περί τινος τὸ αὐτὸ κατηγορεῖσθαι, ὡς Ξενοκράτης τὴν φρόνησιν ὀριστικὴν καὶ θεωρητικὴν τῶν ὄντων φησὶν εἶναι· ἡ γὰρ ὀριστικὴ θεωρητικὴ τίς ἐστίν, ὥστε δις τὸ αὐτὸ λέγει, προσθεὶς πάλιν καὶ θεωρητικὴν. ὁμοίως δὲ καὶ ὅσοι τὴν κατάψυξιν στέρησιν τοῦ κατὰ φύσιν θερμοῦ φασιν εἶναι· πᾶσα γὰρ στέρησις ἐστὶ τοῦ κατὰ φύσιν ὑπάρχοντος, ὥστε περιέργον τὸ προσθεῖναι τοῦ κατὰ φύσιν, ἀλλ' ἱκανὸν ἦν εἰπεῖν στέρησιν θερμοῦ, ἐπειδὴ αὐτὴ ἡ στέρησις γνώριμον ποιεῖ ὅτι τοῦ κατὰ φύσιν λέγεται.

Πάλιν εἰ τοῦ καθόλου εἰρημένου προσθεῖναι καὶ ἐπὶ μέρους, οἷον εἰ τὴν ἐπιείκειαν ἐλάττωσιν τῶν συμφερόντων καὶ δικαίων· τὸ γὰρ δίκαιον συμφέρον τι, ὥστε περιέχεται ἐν τῷ συμφέροντι. περιττὸν οὖν τὸ δίκαιον· καθόλου γὰρ εἶπας ἐπὶ μέρους προσέθηκεν. καὶ εἰ τὴν ἱατρικὴν ἐπιστήμην τῶν ὑγιεινῶν ζώῳ καὶ ἀνθρώπῳ, ἢ τὸν νόμον εἰκόνα τῶν φύσει καλῶν καὶ δικαίων· τὸ γὰρ δίκαιον καλόν τι, ὥστε πλεονάκις τὸ αὐτὸ λέγει.

Πότερον μὲν οὖν καλῶς ἢ οὐ καλῶς, διὰ τούτων καὶ τῶν τοιούτων ἐπισκεπτέον· πότερον δ' ὠρίσται καὶ εἴρηκε τὸ τί ἦν εἶναι ἢ οὐχί, ἐκ τῶνδε.

Πρῶτον μὲν εἰ μὴ διὰ προτέρων καὶ γνωριμωτέρων πεποιήται τὸν ὀρισμόν. ἐπεὶ γὰρ ὁ ὅρος ἀποδίδεται τοῦ γνωρίσαι χάριν τὸ λεχθέν, γνωρίζομεν δ' οὐκ ἐκ τῶν τυχόντων ἀλλ' ἐκ τῶν προτέρων καὶ γνωριμωτέρων, καθάπερ ἐν ταῖς ἀποδείξεσιν (οὕτω γὰρ πᾶσα διδασκαλία καὶ μάθησις ἔχει), φανερόν ὅτι ὁ μὴ διὰ τοιούτων ὀριζόμενος οὐχ ὠρίσται. εἰ δὲ μή, πλείους ἔσσονται τοῦ αὐτοῦ ὀρισμοί· δῆλον γὰρ ὅτι καὶ ὁ διὰ προτέρων καὶ γνωριμωτέρων βέλτιον ὠρίσται, ὥστε ἀμφοτέρω ἂν εἴησαν ὅροι τοῦ αὐτοῦ. τὸ δὲ τοιοῦτον οὐ δοκεῖ· ἐκάστῳ γὰρ τῶν ὄντων ἓν ἐστὶ τὸ εἶναι ὅπερ ἐστίν. ὥστ' εἰ πλείους ἔσσονται τοῦ αὐτοῦ ὀρισμοί, ταῦτὸν ἔσται τῷ ὀριζομένῳ τὸ εἶναι ὅπερ καθ' ἐκάτερον τῶν ὀρισμῶν δηλοῦται. ταῦτα δ' [141b] οὐ ταῦτά ἐστίν, ἐπειδὴ οἱ ὀρισμοὶ ἕτεροι. δῆλον οὖν ὅτι οὐχ ὠρίσται ὁ μὴ διὰ προτέρων καὶ γνωριμωτέρων ὀρισάμενος.

Τὸ μὲν οὖν μὴ διὰ γνωριμωτέρων εἰρηῇσθαι τὸν ὅρον διχῶς ἔστιν ἐκλαβεῖν· ἡ γὰρ εἰ ἀπλῶς ἐξ ἀγνωστοτέρων ἢ ἡμῖν ἀγνωστοτέρων· ἐνδέχεται γὰρ ἀμφοτέρως. ἀπλῶς μὲν οὖν γνωριμώτερον τὸ πρότερον τοῦ ὑστέρου, οἷον στιγμὴ γραμμῆς καὶ γραμμὴ ἐπιπέδου καὶ ἐπίπεδον στερεοῦ, καθάπερ καὶ

μονὰς ἀριθμοῦ· πρότερον γὰρ καὶ ἀρχὴ παντὸς ἀριθμοῦ. ὁμοίως δὲ καὶ στοιχεῖον συλλαβῆς. ἡμῖν δ' ἀνάπαλιν ἐνίστε συμβαίνει· μάλιστα γὰρ τὸ στερεὸν ὑπὸ τὴν αἴσθησιν πίπτει, τὸ δ' ἐπίπεδον μᾶλλον τῆς γραμμῆς, γραμμὴ δὲ σημείου μᾶλλον. οἱ πολλοὶ γὰρ τὰ τοιαῦτα προγνωρίζουσιν· τὰ μὲν γὰρ τῆς τυχούσης, τὰ δ' ἀκριβοῦς καὶ περιττῆς διανοίας καταμαθεῖν ἐστίν.

Ἀπλῶς μὲν οὖν βέλτιον τὸ διὰ τῶν προτέρων τὰ ὕστερα πειρᾶσθαι γνωρίζειν· ἐπιστημονικώτερον γὰρ τὸ τοιοῦτόν ἐστιν. οὐ μὴν ἀλλὰ πρὸς τοὺς ἀδυνατοῦντας γνωρίζειν διὰ τῶν τοιούτων ἀναγκαῖον ἴσως διὰ τῶν ἐκείνοις γνωρίμων ποιεῖσθαι τὸν λόγον. εἰσὶ δὲ τῶν τοιούτων ὀρισμῶν ὃ τε τῆς στιγμῆς καὶ ὁ τῆς γραμμῆς καὶ ὁ τοῦ ἐπιπέδου· πάντες γὰρ διὰ τῶν ὑστέρων τὰ πρότερα δηλοῦσιν· τὸ μὲν γὰρ γραμμῆς, τὸ δ' ἐπιπέδου, τὸ δὲ στερεοῦ φασὶ πέρας εἶναι. οὐ δεῖ δὲ λανθάνειν ὅτι τοὺς οὕτως ὀριζομένους οὐκ ἐνδέχεται τὸ τί ἦν εἶναι τῷ ὀριζομένῳ δηλοῦν, ἐὰν μὴ τυγχάνῃ ταῦτόν ἡμῖν τε γνωριμώτερον ὢν καὶ ἀπλῶς γνωριμώτερον, εἴπερ δεῖ μὲν διὰ τοῦ γένους καὶ τῶν διαφορῶν ὀρίζεσθαι τὸν καλῶς ὀριζόμενον, ταῦτα δὲ τῶν ἀπλῶς γνωριμωτέρων καὶ προτέρων τοῦ εἵδους ἐστίν. συναναιρεῖ γὰρ τὸ γένος καὶ ἡ διαφορὰ τὸ εἶδος, ὥστε πρότερα ταῦτα τοῦ εἵδους. ἔστι δὲ καὶ γνωριμώτερα· τοῦ μὲν γὰρ εἵδους γνωριζομένου ἀνάγκη καὶ τὸ γένος καὶ τὴν διαφορὰν γνωρίζεσθαι (ὁ γὰρ ἄνθρωπον γνωρίζων καὶ ζῶον καὶ πεζὸν γνωρίζει), τοῦ δὲ γένους ἢ τῆς διαφορᾶς γνωριζομένης οὐκ ἀνάγκη καὶ τὸ εἶδος γνωρίζεσθαι, ὥστε ἀγνωστότερον τὸ εἶδος. ἔτι τοῖς κατ' ἀλήθειαν τοὺς τοιούτους ὀρισμοὺς φάσκουσιν εἶναι, τοὺς ἐκ τῶν ἐκάστω γνωρίμων, πολλοὺς τοῦ αὐτοῦ συμβήσεται λέγειν ὀρισμοὺς εἶναι· ἕτερα γὰρ ἑτέροις καὶ οὐ ταῦτά πᾶσι τυγχάνει γνωριμώτερα ὄντα, ὥστε πρὸς ἕκαστον [142a] ἕτερος ἂν εἴη ὀρισμὸς ἀποδοτέος, εἴπερ ἐκ τῶν ἐκάστω γνωριμωτέρων τὸν ὀρισμὸν ποιεῖσθαι χρή. ἔτι τοῖς αὐτοῖς ἄλλοτ' ἄλλα μᾶλλον γνώριμα, ἐξ ἀρχῆς μὲν τὰ αἰσθητά, ἀκριβεστέροις δὲ γενομένοις ἀνάπαλιν, ὥστ' οὐδὲ πρὸς τὸν αὐτὸν ἀεὶ ὁ αὐτὸς ὀρισμὸς ἀποδοτέος τοῖς διὰ τῶν ἐκάστοις γνωριμωτέρων τὸν ὀρισμὸν φάσκουσιν ἀποδοτέον εἶναι. δῆλον οὖν ὅτι οὐχ ὀριστέον διὰ τῶν τοιούτων ἀλλὰ διὰ τῶν ἀπλῶς γνωριμωτέρων· μόνως γὰρ ἂν οὕτως εἷς καὶ ὁ αὐτὸς ὀρισμὸς ἀεὶ γίνοιτο. ἴσως δὲ καὶ τὸ ἀπλῶς γνώριμον οὐ τὸ πᾶσι γνώριμόν ἐστιν ἀλλὰ τὸ τοῖς εὖ διακειμένοις τὴν διάνοιαν, καθάπερ καὶ τὸ ἀπλῶς ὑγιεινὸν τὸ τοῖς εὖ ἔχουσι τὸ σῶμα. δεῖ μὲν οὖν ἕκαστα τῶν τοιούτων ἐξακριβοῦν, χρῆσθαι δὲ διαλεγόμενους πρὸς τὸ συμφέρον. μάλιστα δ' ὁμολογουμένως ἀναιρεῖν ἐνδέχεται τὸν ὀρισμόν, ἐὰν μήτ' ἐκ τῶν ἀπλῶς γνωριμωτέρων μήτ' ἐκ τῶν ἡμῖν τυγχάνῃ τὸν λόγον πεποιημένους.

Εἷς μὲν οὖν τρόπος τοῦ μὴ διὰ γνωριμωτέρων ἐστὶ τὸ διὰ τῶν ὑστέρων

τὰ πρότερα δηλοῦν, καθάπερ πρότερον εἶπαμεν· ἄλλος δὲ εἰ τοῦ ἐν ἡρεμίᾳ καὶ τοῦ ὠρισμένου διὰ τοῦ ἀορίστου καὶ τοῦ ἐν κινήσει ἀποδέδοται ὁ λόγος ἡμῖν· πρότερον γὰρ τὸ μένον καὶ τὸ ὠρισμένον τοῦ ἀορίστου καὶ ἐν κινήσει ὄντος.

Τοῦ δὲ μὴ ἐκ προτέρων τρεῖς εἰσι τρόποι· πρῶτος μὲν, εἰ διὰ τοῦ ἀντικειμένου τὸ ἀντικείμενον ὠρίσται, οἷον διὰ τοῦ κακοῦ τὸ ἀγαθόν· ἅμα γὰρ τῇ φύσει τὰ ἀντικείμενα. ἐνίοις δὲ καὶ ἡ αὐτὴ ἐπιστήμη ἀμφοτέρων δοκεῖ εἶναι, ὥστ' οὐδὲ γνωριμώτερον τὸ ἕτερον τοῦ ἑτέρου. δεῖ δὲ μὴ λανθάνειν ὅτι ἕνια ἴσως οὐκ ἔστιν ὀρίσασθαι ἄλλως, οἷον τὸ διπλάσιον ἄνευ τοῦ ἡμίσεος, καὶ ὅσα καθ' αὐτὰ πρὸς τι λέγεται. πᾶσι γὰρ τοῖς τοιούτοις ταῦτόν τὸ εἶναι τῷ πρὸς τί πως ἔχειν, ὥστ' ἀδύνατον ἄνευ θατέρου θάτερον γνωρίζειν· διόπερ ἀναγκαῖον ἐν τῷ τοῦ ἑτέρου λόγῳ συμπεριελῆφθαι καὶ θάτερον. γνωρίζειν μὲν οὖν δεῖ τὰ τοιαῦτα πάντα, χρῆσθαι δ' αὐτοῖς ὡς ἂν δοκῇ συμφέρειν.

Ἄλλος, εἰ αὐτῷ κέχρηται τῷ ὀριζομένῳ. λανθάνει δ' ὅταν μὴ αὐτῷ τῷ τοῦ ὀριζομένου ὀνόματι χρήσῃται, οἷον εἰ [142b] τὸν ἥλιον ἄστρον ἡμεροφανὲς ὠρίσατο· ὁ γὰρ ἡμέρα χρώμενος ἡλίῳ χρήται. δεῖ δ', ὅπως φωραθῇ τὰ τοιαῦτα, μεταλαμβάνειν ἀντὶ τοῦ ὀνόματος τὸν λόγον, οἷον ὅτι ἡμέρα ἡλίου φορὰ ὑπὲρ γῆς ἐστίν· δῆλον γὰρ ὅτι ὁ τὴν φορὰν ἡλίου ὑπὲρ γῆς εἰρηκῶς τὸν ἥλιον εἴρηκεν, ὥστε χρήται τῷ ἡλίῳ ὁ τῇ ἡμέρᾳ χρησάμενος.

Πάλιν εἰ τῷ ἀντιδιηρημένῳ τὸ ἀντιδιηρημένον ὠρίσται, οἷον περιττὸν τὸ μονάδι μεῖζον ἀρτίου. ἅμα γὰρ τῇ φύσει τὰ ἐκ τοῦ αὐτοῦ γένους ἀντιδιηρημένα· τὸ δὲ περιττὸν καὶ τὸ ἄρτιον ἀντιδιήρηται· ἅμφω γὰρ ἀριθμοῦ διαφοραί.

Ὅμοίως δὲ καὶ εἰ διὰ τῶν ὑποκάτω τὸ ἐπάνω ὠρίσται, οἷον ἄρτιον ἀριθμὸν τὸν δίχα διαιρούμενον ἢ τὸ ἀγαθὸν ἔξιν ἀρετῆς· τό τε γὰρ δίχα ἀπὸ τῶν δύο εἴληπται, ἀρτίων ὄντων, καὶ ἡ ἀρετὴ ἀγαθόν τί ἐστίν, ὥσθ' ὑποκάτω ταῦτα ἐκείνων ἐστίν. ἔτι δ' ἀνάγκη τὸν τῷ ὑποκάτω χρώμενον καὶ αὐτῷ χρῆσθαι. ὁ τε γὰρ τῇ ἀρετῇ χρώμενος χρήται τῷ ἀγαθῷ, ἐπειδὴ ἀγαθόν τι ἡ ἀρετὴ, ὁμοίως δὲ καὶ ὁ τῷ δίχα χρώμενος τῷ ἀρτίῳ χρήται, ἐπειδὴ εἰς δύο διηρῆσθαι σημαίνει τὸ δίχα διηρῆσθαι, τὰ δὲ δύο ἄρτιά ἐστίν.

Καθόλου μὲν οὖν εἰπεῖν εἷς ἐστὶ τόπος τὸ μὴ διὰ προτέρων καὶ γνωριμωτέρων πεποιῆσθαι τὸν λόγον, μέρη δ' αὐτοῦ τὰ εἰρημένα. δεύτερος δὲ

εἰ ἐν γένει τοῦ πράγματος ὄντος μὴ κεῖται ἐν γένει. ἐν ἅπασιν δὲ τὸ τοιοῦτον ἀμάρτημα ἔστιν ἐν οἷς οὐ πρόκειται τοῦ λόγου τὸ τί ἐστίν, οἷον ὁ τοῦ σώματος ὀρισμὸς “τὸ ἔχον τρεῖς διαστάσεις”, ἢ εἴ τις τὸν ἄνθρωπον ὀρίσαιοτο τὸ ἐπιστάμενον ἀριθμεῖν. οὐ γὰρ εἴρηται τί ὂν τρεῖς ἔχει διαστάσεις, ἢ τί ὂν ἐπίσταται ἀριθμεῖν· τὸ δὲ γένος βούλεται τὸ τί ἐστὶ σημαίνειν, καὶ πρῶτον ὑποτίθεται τῶν ἐν τῷ ὀρισμῷ λεγομένων.

Ἔτι εἰ πρὸς πλείω λεγομένου τοῦ ὀριζομένου μὴ πρὸς πάντα ἀποδέδωκεν, οἷον εἰ τὴν γραμματικὴν ἐπιστήμην τοῦ γράψαι τὸ ὑπαγορευθέν· προσδεῖται γὰρ ὅτι καὶ τοῦ ἀναγνῶναι. οὐδὲν γὰρ μᾶλλον <ὁ> τοῦ γράψαι ἢ <ὁ> τοῦ ἀναγνῶναι ἀποδοὺς ὠρισταί, ὥστ’ οὐδέτερος, ἀλλ’ ὁ ἄμφω ταῦτ’ εἰπών, ἐπειδὴ πλείους οὐκ ἐνδέχεται ταῦτο τοῦ ὀρισμοὺς εἶναι. ἐπ’ ἐνίων [143a] μὲν οὖν κατ’ ἀλήθειαν ἔχει καθάπερ εἴρηται, ἐπ’ ἐνίων δ’ οὗ, οἷον ἐφ’ ὅσων μὴ καθ’ αὐτὸ πρὸς ἄμφω λέγεται, καθάπερ ἡ ἰατρικὴ τοῦ ὑγίαιαν καὶ νόσον ποιῆσαι· τοῦ μὲν γὰρ καθ’ αὐτὴν λέγεται, τοῦ δὲ κατὰ συμβεβηκός· ἀπλῶς γὰρ ἀλλότριον τῆς ἰατρικῆς τὸ νόσον ποιεῖν. ὥστ’ οὐδὲν μᾶλλον ὠρισταί ὁ πρὸς ἄμφω ἀποδοὺς τοῦ πρὸς θάτερον, ἀλλ’ ἴσως καὶ χειρόν, ἐπειδὴ καὶ τῶν λοιπῶν ὅστισοῦν δυνατός ἐστὶ νόσον ποιῆσαι.

Ἔτι εἰ μὴ πρὸς τὸ βέλτιον ἀλλὰ πρὸς τὸ χειρόν ἀποδέδωκε, πλειόνων ὄντων πρὸς ἃ λέγεται τὸ ὀριζόμενον· πᾶσα γὰρ ἐπιστήμη καὶ δύναμις τοῦ βελτίστου δοκεῖ εἶναι.

Πάλιν εἰ μὴ κεῖται ἐν τῷ οἰκείῳ γένει τὸ λεχθέν, σκοπεῖν ἐκ τῶν περὶ τὰ γένη στοιχείων, καθάπερ πρότερον εἴρηται.

Ἔτι εἰ ὑπερβαίνων λέγει τὰ γένη, οἷον τὴν δικαιοσύνην ἕξιν ἰσότητος ποιητικὴν ἢ διανεμητικὴν τοῦ ἴσου· ὑπερβαίνει γὰρ ὁ οὕτως ὀριζόμενος τὴν ἀρετὴν. ἀπολιπὼν οὖν τὸ τῆς δικαιοσύνης γένος οὐ λέγει τὸ τί ἦν εἶναι· ἢ γὰρ οὐσία ἐκάστω μετὰ τοῦ γένους. ἔστι δὲ τοῦτο ταῦτόν τῷ μὴ εἰς τὸ ἐγγυτάτω γένος θεῖναι· ὁ γὰρ εἰς τὸ ἐγγυτάτω θεὸς πάντα τὰ ἐπάνω εἴρηκεν, ἐπειδὴ πάντα τὰ ἐπάνω γένη τῶν ὑποκάτω κατηγορεῖται. ὥστ’ ἢ εἰς τὸ ἐγγυτάτω γένος θετέον, ἢ πάσας τὰς διαφορὰς τῷ ἐπάνω γένει προσαπτέον δι’ ὧν ὀρίζεται τὸ ἐγγυτάτω γένος· οὕτω γὰρ οὐδὲν ἂν εἴη παραλελοιπώς, ἀλλ’ ἂντ’ ὀνόματος λόγῳ εἰρηκῶς ἂν εἴη τὸ ὑποκάτω γένος. ὁ δ’ αὐτὸ μόνον τὸ ἐπάνω γένος εἶπας οὐ λέγει καὶ τὸ ὑποκάτω γένος· ὁ γὰρ φυτὸν εἶπας οὐ λέγει δένδρον.

Πάλιν ἐπὶ τῶν διαφορῶν ὁμοίως σκεπτέον εἰ καὶ τὰς διαφορὰς εἶπε τὰς

τοῦ γένους. εἰ γὰρ μὴ ταῖς τοῦ πράγματος ἰδίαις ὥρισται διαφοραῖς, ἢ καὶ παντελῶς τι τοιοῦτον εἴρηκεν ὃ μηδενὸς ἐνδέχεται διαφορὰν εἶναι, οἷον τὸ ζῶον ἢ τὴν οὐσίαν, δῆλον ὅτι οὐχ ὥρισται· οὐδενὸς γὰρ διαφοραὶ τὰ εἰρημένα. ὁρᾷν δὲ καὶ εἰ ἔστιν ἀντιδιηρημένον τι τῇ εἰρημένῃ διαφορᾷ. εἰ γὰρ μὴ ἔστι, δῆλον ὅτι οὐκ ἂν εἴη ἡ εἰρημένη τοῦ γένους διαφορά· πᾶν γὰρ γένος ταῖς ἀντιδιηρημέναις διαφοραῖς [143b] διαιρεῖται, καθάπερ τὸ ζῶον τῷ πεζῷ καὶ τῷ πτηνῷ καὶ <τῷ> ἐνύδρῳ [καὶ τῷ δίποδι]. ἢ εἰ ἔστι μὲν ἀντιδιηρημένη διαφορά, μὴ ἀληθεύεται δὲ κατὰ τοῦ γένους. δῆλον γὰρ ὅτι οὐδετέρα ἂν εἴη τοῦ γένους διαφορά· πᾶσαι γὰρ αἱ ἀντιδιηρημέναι διαφοραὶ ἀληθεύονται κατὰ τοῦ οἰκείου γένους. ὁμοίως δὲ καὶ εἰ ἀληθεύεται μὲν, μὴ ποιεῖ δὲ προστιθεμένη τῷ γένει εἶδος. δῆλον γὰρ ὅτι οὐκ ἂν εἴη αὕτη εἰδοποιὸς διαφορὰ τοῦ γένους· πᾶσα γὰρ εἰδοποιὸς διαφορὰ μετὰ τοῦ γένους εἶδος ποιεῖ. εἰ δ' αὕτη μὴ ἔστι διαφορά, οὐδ' ἡ λεχθεῖσα, ἐπεὶ ταύτη ἀντιδιήρηται.

Ἔτι ἐὰν ἀποφάσκει διαιρῆ τὸ γένος, καθάπερ οἱ τὴν γραμμὴν ὀριζόμενοι μῆκος ἀπλατὲς εἶναι· οὐδὲν γὰρ ἄλλο σημαίνει ἢ ὅτι οὐκ ἔχει πλάτος. συμβήσεται οὖν τὸ γένος μετέχειν τοῦ εἴδους· πᾶν γὰρ μῆκος ἢ ἀπλατὲς ἢ πλάτος ἔχον ἐστίν, ἐπεὶ κατὰ παντὸς ἢ ἡ κατάφασις ἢ ἡ ἀπόφασις ἀληθεύεται, ὥστε καὶ τὸ γένος τῆς γραμμῆς, μῆκος ὢν, ἢ ἀπλατὲς ἢ πλάτος ἔχον ἔσται. μῆκος δ' ἀπλατὲς εἶδους ἐστὶ λόγος· ὁμοίως δὲ καὶ μῆκος πλάτος ἔχον. τὸ γὰρ ἀπλατὲς καὶ τὸ πλάτος ἔχον διαφοραὶ εἰσιν· ἐκ δὲ τῆς διαφορᾶς καὶ τοῦ γένους ὁ τοῦ εἴδους ἐστὶ λόγος, ὥστε τὸ γένος ἐπιδέχοιτ' ἂν τὸν τοῦ εἴδους λόγον. ὁμοίως δὲ καὶ τὸν τῆς διαφορᾶς, ἐπειδὴ ἡ ἑτέρα τῶν εἰρημένων διαφορῶν ἐξ ἀνάγκης κατηγορεῖται τοῦ γένους. ἔστι δ' ὁ εἰρημένος τόπος χρήσιμος πρὸς τοὺς τιθεμένους ιδέας εἶναι. εἰ γὰρ ἔστιν αὐτὸ μῆκος, πῶς κατηγορηθήσεται κατὰ τοῦ γένους ὅτι πλάτος ἔχον ἐστίν ἢ ἀπλατὲς ἐστίν; δεῖ γὰρ κατὰ παντὸς μήκους τὸ ἕτερον αὐτῶν ἀληθεύεσθαι, εἴπερ κατὰ τοῦ γένους ἀληθεύεσθαι μέλλει. τοῦτο δ' οὐ συμβαίνει· ἔστι γὰρ καὶ ἀπλατῇ καὶ πλάτος ἔχοντα μήκη. ὥστε πρὸς ἐκείνους μόνους χρήσιμος ὁ τόπος οἱ πᾶν γένος ἐν ἀριθμῷ φασιν εἶναι. τοῦτο δὲ ποιοῦσιν οἱ τὰς ιδέας τιθέμενοι· αὐτὸ γὰρ μῆκος καὶ αὐτὸ ζῶον γένος φασὶν εἶναι.

Ἴσως δ' ἐπ' ἐνίων ἀναγκαῖον καὶ ἀποφάσκει χρῆσθαι τὸν ὀριζόμενον, οἷον ἐπὶ τῶν στερήσεων· τυφλὸν γὰρ ἐστὶ τὸ μὴ ἔχον ὄψιν, ὅτε πέφυκεν ἔχειν. διαφέρει δ' οὐδὲν ἀποφάσκει διελεῖν τὸ γένος ἢ τοιαύτη καταφάσκει ἢ ἀπόφασιν [144a] ἀναγκαῖον ἀντιδιαιρεῖσθαι, οἷον εἰ μῆκος πλάτος ἔχον ὥρισται· τῷ γὰρ πλάτος ἔχοντι τὸ μὴ ἔχον πλάτος ἀντιδιήρηται, ἄλλο δ' οὐδέν, ὥστε ἀποφάσκει πάλιν διαιρεῖται τὸ γένος.

Πάλιν εἰ τὸ εἶδος ὡς διαφορὰν ἀποδέδωκε, καθάπερ οἱ τὸν προπηλακισμόν ὕβριν μετὰ χλευασίας ὀριζόμενοι· ἡ γὰρ χλευασία ὕβρις τις, ὥστ' οὐ διαφορὰ ἀλλ' εἶδος ἡ χλευασία.

Ἔτι εἰ τὸ γένος ὡς διαφορὰν εἵρηκεν, οἶον τὴν ἀρετὴν ἔξιν ἀγαθὴν ἢ σπουδαίαν· γένος γὰρ τἀγαθὸν τῆς ἀρετῆς ἐστίν. ἡ οὐ γένος τἀγαθὸν ἀλλὰ διαφορὰ, εἵπερ ἀληθὲς ὅτι οὐκ ἐνδέχεται ταῦτὸν ἐν δύο γένεσιν εἶναι μὴ περιέχουσιν ἄλληλα. οὐτε γὰρ τἀγαθὸν τὴν ἔξιν περιέχει οὔθ' ἡ ἔξις τἀγαθόν· οὐ γὰρ πᾶσα ἔξις ἀγαθόν, οὐδὲ πᾶν ἀγαθὸν ἔξις, ὥστ' οὐκ ἂν εἴη γένη ἀμφοτέρω. εἰ οὖν ἡ ἔξις τῆς ἀρετῆς γένος, δῆλον ὅτι τἀγαθὸν οὐ γένος ἀλλὰ μᾶλλον διαφορὰ. ἔτι ἡ μὲν ἔξις τί ἐστὶ σημαίνει ἡ ἀρετή, τὸ δ' ἀγαθὸν οὐ τί ἐστὶν ἀλλὰ ποῖον· δοκεῖ δ' ἡ διαφορὰ ποῖον τι σημαίνειν.

Ὅρᾶν δὲ καὶ εἰ μὴ ποῖον τι ἀλλὰ τόδε τι σημαίνει ἡ ἀποδοθεῖσα διαφορὰ· δοκεῖ γὰρ ποῖον τι πᾶσα διαφορὰ δηλοῦν.

Σκοπεῖν δὲ καὶ εἰ κατὰ συμβεβηκὸς ὑπάρχει τῷ ὀριζομένῳ ἡ διαφορὰ. οὐδεμία γὰρ διαφορὰ τῶν κατὰ συμβεβηκὸς ὑπαρχόντων ἐστὶ, καθάπερ οὐδὲ τὸ γένος· οὐ γὰρ ἐνδέχεται τὴν διαφορὰν ὑπάρχειν τινὶ καὶ μὴ ὑπάρχειν.

Ἔτι εἰ κατηγορεῖται τοῦ γένους ἡ διαφορὰ ἢ τὸ εἶδος ἢ τῶν κάτωθεν τι τοῦ εἶδους, οὐκ ἂν εἴη ὠρισμένος· οὐδὲν γὰρ τῶν εἰρημένων ἐνδέχεται τοῦ γένους κατηγορεῖσθαι, ἐπειδὴ τὸ γένος ἐπὶ πλεῖστον πάντων λέγεται. πάλιν εἰ κατηγορεῖται τὸ γένος τῆς διαφορᾶς· οὐ γὰρ κατὰ τῆς διαφορᾶς, ἀλλὰ καθ' ὧν ἡ διαφορὰ, τὸ γένος δοκεῖ κατηγορεῖσθαι, οἶον τὸ ζῶον κατὰ τοῦ ἀνθρώπου καὶ τοῦ βοῦς καὶ τῶν ἄλλων πεζῶν ζώων, οὐ κατ' αὐτῆς τῆς διαφορᾶς τῆς κατὰ τοῦ εἶδους λεγομένης. εἰ γὰρ καθ' ἑκάστης τῶν διαφορῶν τὸ ζῶον κατηγορηθήσεται, πολλὰ ζῶα τοῦ εἶδους ἂν κατηγοροῖτο· αἱ [144b] γὰρ διαφοραὶ τοῦ εἶδους κατηγοροῦνται. ἔτι αἱ διαφοραὶ πᾶσαι ἢ εἶδη ἢ ἄτομα ἔσσονται, εἵπερ ζῶα· ἕκαστον γὰρ τῶν ζώων ἢ εἶδος ἐστὶν ἢ ἄτομον.

Ὅμοίως δὲ σκεπτέον καὶ εἰ τὸ εἶδος ἢ τῶν ὑποκάτω τι τοῦ εἶδους τῆς διαφορᾶς κατηγορεῖται· ἀδύνατον γάρ, ἐπειδὴ ἐπὶ πλέον ἡ διαφορὰ τῶν εἰδῶν λέγεται. ἔτι συμβήσεται τὴν διαφορὰν εἶδος εἶναι, εἵπερ κατηγορεῖται τι αὐτῆς τῶν εἰδῶν· εἰ γὰρ κατηγορηθήσεται ἄνθρωπος, δῆλον ὅτι ἡ διαφορὰ ἀνθρωπὸς ἐστίν. πάλιν εἰ μὴ πρότερον ἡ διαφορὰ τοῦ εἶδους· τοῦ μὲν γὰρ γένους ὕστερον, τοῦ δ' εἶδους πρότερον τὴν διαφορὰν δεῖ εἶναι.

Σκοπεῖν δὲ καὶ εἰ ἐτέρου γένους ἡ ῥηθεῖσα διαφορὰ μὴ περιεχομένου



μηδὲ περιέχοντος· οὐ δοκεῖ γὰρ ἡ αὐτὴ διαφορὰ δύο γενῶν εἶναι μὴ περιεχόντων ἄλληλα. εἰ δὲ μή, συμβήσεται καὶ εἶδος τὸ αὐτὸ ἐν δύο γένεσιν εἶναι μὴ περιέχουσιν ἄλληλα. ἐπιφέρει γὰρ ἐκάστη τῶν διαφορῶν τὸ οἰκεῖον γένος, καθάπερ τὸ πεζὸν καὶ τὸ δίπουν τὸ ζῶον συνεπιφέρει. ὥστε καθ' οὗ ἡ διαφορὰ, καὶ τῶν γενῶν ἐκάτερον· δῆλον οὖν ὅτι τὸ εἶδος ἐν δύο γένεσιν οὐ περιέχουσιν ἄλληλα. ἢ οὐκ ἀδύνατον τὴν αὐτὴν διαφορὰν δύο γενῶν εἶναι μὴ περιεχόντων ἄλληλα, ἀλλὰ προσθετέον “μηδ' ἄμφω ὑπὸ ταύτων ὄντων”. τὸ γὰρ πεζὸν ζῶον καὶ τὸ πτηνὸν ζῶον γένη ἐστὶν οὐ περιέχοντα ἄλληλα, καὶ ἀμφοτέρων αὐτῶν ἐστὶ τὸ δίπουν διαφορὰ. ὥστε προσθετέον ὅτι μηδ' ὑπὸ ταύτων ὄντων ἄμφω· ταῦτα γὰρ ἄμφω ὑπὸ τὸ ζῶον ἐστὶν. δῆλον δὲ καὶ ὅτι οὐκ ἀνάγκη τὴν διαφορὰν πᾶν οἰκεῖον ἐπιφέρειν γένος, ἐπειδὴ ἐνδέχεται τὴν αὐτὴν δύο γενῶν εἶναι μὴ περιεχόντων ἄλληλα, ἀλλὰ τὸ ἕτερον μόνον ἀνάγκη συνεπιφέρειν καὶ τὰ ἐπάνω τούτου πάντα, καθάπερ τὸ δίπουν τὸ πτηνὸν ἢ τὸ πεζὸν συνεπιφέρει ζῶον.

Ὅρᾶν δὲ καὶ εἰ τὸ ἐν τινι διαφορὰν ἀποδέδωκεν οὐσίας· οὐ δοκεῖ γὰρ διαφέρειν οὐσία οὐσίας τῷ ποῦ εἶναι. διὸ καὶ τοῖς τῷ πεζῷ καὶ τῷ ἐνύδρῳ διαιροῦσι τὸ ζῶον ἐπιτιμῶσιν ὡς τὸ πεζὸν καὶ τὸ ἐνυδρον ποῦ σημαίνουν. ἢ ἐπὶ μὲν τούτων οὐκ ὀρθῶς ἐπιτιμῶσιν· οὐ γὰρ ἐν τινι οὐδὲ ποῦ σημαίνει τὸ ἐνυδρον, ἀλλὰ ποιόν τι. καὶ γὰρ ἂν ἢ ἐν τῷ ξηρῷ, ὁμοίως ἐνυδρον· ὁμοίως δὲ τὸ χερσαῖον, κἂν ἐν ὑγρῷ, χερσαῖον [145a] ἀλλ' οὐκ ἐνυδρον ἔσται. ἀλλ' ὅμως ἐάν ποτε σημαίνῃ τὸ ἐν τινι ἢ διαφορὰ, δῆλον ὅτι διημαρτηκῶς ἔσται.

Πάλιν εἰ τὸ πάθος διαφορὰν ἀποδέδωκεν· πᾶν γὰρ πάθος μᾶλλον γινόμενον ἐξίστησι τῆς οὐσίας, ἢ δὲ διαφορὰ οὐ τοιοῦτον· μᾶλλον γὰρ σώζειν δοκεῖ ἡ διαφορὰ οὗ ἐστὶ διαφορὰ, καὶ ἀπλῶς ἀδύνατον εἶναι ἄνευ τῆς οἰκείας διαφορᾶς ἕκαστον· πεζοῦ γὰρ μὴ ὄντος οὐκ ἔσται ἄνθρωπος. ἀπλῶς δ' εἰπεῖν, καθ' ὅσα ἀλλοιοῦται τὸ ἔχον, οὐδὲν τούτων διαφορὰ ἐκείνου· ἅπαντα γὰρ τὰ τοιαῦτα μᾶλλον γινόμενα ἐξίστησι τῆς οὐσίας. ὥστ' εἴ τινα τοιαύτην διαφορὰν ἀποδέδωκεν, ἡμάρτηκεν· ἀπλῶς γὰρ οὐκ ἀλλοιούμεθα κατὰ τὰς διαφοράς.

Καὶ εἴ τις τῶν πρὸς τι μὴ πρὸς ἄλλο τὴν διαφορὰν ἀποδέδωκεν· τῶν γὰρ πρὸς τι καὶ αἱ διαφοραὶ πρὸς τι, καθάπερ καὶ τῆς ἐπιστήμης. θεωρητικῇ γὰρ καὶ πρακτικῇ καὶ ποιητικῇ λέγεται· ἕκαστον δὲ τούτων πρὸς τι σημαίνει· θεωρητικῇ γὰρ τινὸς καὶ ποιητικῇ τινὸς καὶ πρακτικῇ τινός.

Σκοπεῖν δὲ καὶ εἰ πρὸς ὃ πέφυκεν ἕκαστον τῶν πρὸς τι ἀποδίδωσιν ὁ ὀριζόμενος. ἐνίοις μὲν γὰρ πρὸς ὃ πέφυκεν [ἕκαστον τῶν πρὸς τι] μόνον ἔστι

χρησθαι, πρὸς ἄλλο δ' οὐδέν, ἐνίοις δὲ καὶ πρὸς ἄλλο, οἷον τῇ ὄψει πρὸς τὸ ἰδεῖν μόνον, τῇ δὲ στλεγγίδι καὶ ἀρύσειέ τις. ἀλλ' ὅμως εἴ τις ὀρίσαιτο τὴν στλεγγίδα ὄργανον πρὸς τὸ ἀρύειν, ἡμάρτηκεν· οὐ γὰρ πρὸς τοῦτο πέφυκεν. ὅρος δὲ τοῦ πρὸς ὃ πέφυκεν “ἐφ’ ὃ ἂν χρήσαιτο ὁ φρόνιμος ἢ φρόνιμος καὶ ἡ περὶ ἕκαστον οἰκεία ἐπιστήμη”.

Ἦ εἰ μὴ τοῦ πρώτου ἀποδέδωκεν, ὅταν τυγχάνῃ πρὸς πλείω λεγόμενον, οἷον τὴν φρόνησιν ἀρετὴν ἀνθρώπου ἢ ψυχῆς καὶ μὴ τοῦ λογιστικοῦ. πρώτου γὰρ τοῦ λογιστικοῦ ἀρετὴ ἡ φρόνησις· κατὰ γὰρ τοῦτο καὶ ἡ ψυχὴ καὶ ὁ ἄνθρωπος φρονεῖν λέγεται.

Ἔτι εἰ μὴ δεκτικόν ἐστιν οὗ εἴρηται τὸ ὠρισμένον πάθος ἢ [ἡ] διάθεσις ἢ ὅτιοῦν ἄλλο, ἡμάρτηκεν· πᾶσα γὰρ διάθεσις καὶ πᾶν πάθος ἐν ἐκείνῳ πέφυκε γίνεσθαι οὗ ἐστὶ διάθεσις ἢ πάθος, καθάπερ καὶ ἡ ἐπιστήμη ἐν ψυχῇ, διάθεσις οὕσα ψυχῆς. ἐνίοτε δὲ διαμαρτάνουσιν ἐν τοῖς τοιούτοις, οἷον ὅσοι [145b] λέγουσιν ὅτι ὁ ὕπνος ἐστὶν ἀδυναμία αἰσθήσεως, καὶ ἡ ἀπορία ἰσότης ἐναντίων λογισμῶν, καὶ ἡ ἀλγηδὼν διάστασις τῶν συμφύτων μερῶν μετὰ βίας. οὔτε γὰρ ὁ ὕπνος ὑπάρχει τῇ αἰσθήσει (ἔδει δ', εἴπερ ἀδυναμία αἰσθήσεως ἐστίν)· ὁμοίως δ' οὐδ' ἡ ἀπορία ὑπάρχει τοῖς ἐναντίοις λογισμοῖς, οὐδ' ἡ ἀλγηδὼν τοῖς συμφύτοις μέρεσιν· ἀλγήσει γὰρ τὰ ἄψυχα, εἴπερ ἀλγηδὼν αὐτοῖς παρέσται. τοιοῦτος δὲ καὶ ὁ τῆς ὑγιείας ὀρισμός, εἴπερ “συμμετρία θερμῶν καὶ ψυχρῶν” ἐστίν· ἀνάγκη γὰρ ὑγιαίνειν τὰ θερμὰ καὶ ψυχρά. ἡ γὰρ ἐκάστου συμμετρία ἐν ἐκείνοις ὑπάρχει ὧν ἐστὶ συμμετρία, ὥσθ' ἡ ὑγίεια ὑπάρχοι ἂν αὐτοῖς. ἔτι τὸ ποιούμενον εἰς τὸ ποιητικὸν ἢ ἀνάπαλιν συμβαίνει τιθέναι τοῖς οὕτως ὀριζομένοις. οὐ γὰρ ἐστὶν ἀλγηδὼν ἢ διάστασις τῶν συμφύτων μερῶν, ἀλλὰ ποιητικὸν ἀλγηδόνο· οὐδ' ἡ ἀδυναμία τῆς αἰσθήσεως ὕπνος, ἀλλὰ ποιητικὸν θάτερον θατέρου· ἥτοι γὰρ διὰ τὴν ἀδυναμίαν ὑπνώσσομεν ἢ διὰ τὸν ὕπνον ἀδυνατοῦμεν. ὁμοίως δὲ καὶ τῆς ἀπορίας δόξειεν ἂν ποιητικὸν εἶναι ἢ τῶν ἐναντίων ἰσότης λογισμῶν· ὅταν γὰρ ἐπ' ἀμφοτέρω λογιζομένοις ἡμῖν ὁμοίως ἅπαντα φαίνεται καθ' ἑκάτερον γίνεσθαι, ἀποροῦμεν ὁπότερον πράξωμεν.

Ἔτι κατὰ τοὺς χρόνους πάντας ἐπισκοπεῖν εἴ που διαφωνεῖ, οἷον εἰ τὸ ἀθάνατον ὠρίσατο ζῶον ἄφθαρτον νῦν εἶναι· τὸ γὰρ νῦν ἄφθαρτον ζῶον νῦν ἀθάνατον ἔσται. ἢ ἐπὶ μὲν τούτου οὐ συμβαίνει· ἀμφίβολον γὰρ τὸ νῦν ἄφθαρτον εἶναι· ἢ γὰρ ὅτι οὐκ ἔφθαρται νῦν σημαίνει, ἢ ὅτι οὐ δύναται φθαρῆναι νῦν, ἢ ὅτι τοιοῦτόν ἐστι νῦν οἷον μηδέποτε φθαρῆναι. ὅταν οὖν λέγωμεν ὅτι ἄφθαρτον νῦν ἐστὶ ζῶον, τοῦτο λέγομεν, ὅτι νῦν τοιοῦτόν ἐστι ζῶον οἷον μηδέποτε φθαρῆναι· τοῦτο δὲ τῷ ἀθανάτῳ τὸ αὐτὸ ἦν, ὥστ' οὐ

συμβαίνει νῦν αὐτὸ ἀθάνατον εἶναι. ἀλλ' ὅμως, ἂν συμβαίνει τὸ μὲν κατὰ τὸν λόγον ἀποδοθὲν ὑπάρχειν νῦν ἢ πρότερον, τὸ δὲ κατὰ τοῦνομα μὴ ὑπάρχειν, οὐκ ἂν εἴη ταυτόν. χρηστέον οὖν τῷ τόπῳ καθάπερ εἴρηται.

Σκεπτέον δὲ καὶ εἰ καθ' ἕτερόν τι μᾶλλον λέγεται τὸ ὀρισθὲν ἢ κατὰ τὸν ἀποδοθέντα λόγον, οἷον εἰ ἡ δικαιοσύνη δύναμις τοῦ ἴσου διανεμητική. δίκαιος γὰρ μᾶλλον ὁ προαιρούμενος τὸ ἴσον διανεῖμαι τοῦ δυναμένου, ὥστ' οὐκ ἂν εἴη [146a] ἡ δικαιοσύνη δύναμις τοῦ ἴσου διανεμητική· καὶ γὰρ δίκαιος εἴη ἂν μάλιστα ὁ δυνάμενος μάλιστα τὸ ἴσον διανεῖμαι.

Ἔτι εἰ τὸ μὲν πρᾶγμα δέχεται τὸ μᾶλλον, τὸ δὲ κατὰ τὸν λόγον ἀποδοθὲν μὴ δέχεται, ἢ ἀνάπαλιν τὸ μὲν κατὰ τὸν λόγον ἀποδοθὲν δέχεται, τὸ δὲ πρᾶγμα μὴ· δεῖ γὰρ ἢ ἀμφοτέρα δέχεσθαι ἢ μηδέτερον, εἴπερ δὴ ταυτόν ἐστι τὸ κατὰ τὸν λόγον ἀποδοθὲν τῷ πράγματι. ἔτι εἰ δέχεται μὲν ἀμφοτέρα τὸ μᾶλλον, μὴ ἅμα δὲ τὴν ἐπίδοσιν ἀμφοτέρα λαμβάνει, οἷον εἰ ὁ ἔρως ἐπιθυμία συνουσίας ἐστίν· ὁ γὰρ μᾶλλον ἐρῶν οὐ μᾶλλον ἐπιθυμεῖ τῆς συνουσίας, ὥστ' οὐχ ἅμα ἀμφοτέρα τὸ μᾶλλον ἐπιδέχεται· ἔδει δέ γε, εἴπερ ταυτόν ἦν.

Ἔτι εἰ, δύο τινῶν προτεθέντων, καθ' οὗ τὸ πρᾶγμα μᾶλλον λέγεται τὸ κατὰ τὸν λόγον ἥττον λέγεται, οἷον εἰ τὸ πῦρ ἐστι σῶμα τὸ λεπτομερέστατον. πῦρ μὲν γὰρ μᾶλλον ἢ φλόξ ἐστι τοῦ φωτός, σῶμα δὲ τὸ λεπτομερέστατον ἥττον ἢ φλόξ τοῦ φωτός· ἔδει δ' ἀμφοτέρα μᾶλλον τῷ αὐτῷ ὑπάρχειν, εἴπερ ταύτ' ἦν. πάλιν εἰ τὸ μὲν ὁμοίως ἀμφοτέροις ὑπάρχει τοῖς προτεθεῖσι, τὸ δ' ἕτερον μὴ ὁμοίως ἀμφοτέροις ἀλλὰ τῷ ἑτέρῳ μᾶλλον.

Ἔτι ἐὰν πρὸς δύο τὸν ὀρισμὸν ἀποδῷ καθ' ἑκάτερον, οἷον τὸ καλὸν τὸ δι' ὅψεως ἢ δι' ἀκοῆς ἡδύ, καὶ τὸ ὄν τὸ δυνατόν παθεῖν ἢ ποιῆσαι· ἅμα γὰρ ταυτόν καλόν τε καὶ οὐ καλὸν ἔσται, ὁμοίως δὲ καὶ ὄν τε καὶ οὐκ ὄν. τὸ γὰρ δι' ἀκοῆς ἡδὺ ταυτόν τῷ καλῷ ἔσται, ὥστε τὸ μὴ ἡδὺ δι' ἀκοῆς τῷ μὴ καλῷ ταυτόν· τοῖς γὰρ αὐτοῖς καὶ τὰ ἀντικείμενα τὰ αὐτά· ἀντίκειται δὲ τῷ μὲν καλῷ τὸ οὐ καλόν, τῷ δὲ δι' ἀκοῆς ἡδεῖ τὸ δι' ἀκοῆς οὐχ ἡδύ. δῆλον οὖν ὅτι ταυτόν τὸ οὐχ ἡδὺ δι' ἀκοῆς τῷ οὐ καλῷ. εἰ οὖν τί ἐστι δι' ὅψεως μὲν ἡδὺ δι' ἀκοῆς δὲ μὴ, καλόν τε καὶ οὐ καλὸν ἔσται. ὁμοίως δὲ δείξομεν καὶ ὅτι ταυτόν ὄν τε καὶ οὐκ ὄν ἐστίν.

Ἔτι τῶν γενῶν καὶ τῶν διαφορῶν καὶ τῶν ἄλλων ἀπάντων τῶν ἐν τοῖς ὀρισμοῖς ἀποδιδομένων λόγους ἀντὶ τῶν ὀνομάτων ποιοῦντα σκοπεῖν εἴ τι διαφωνεῖ.

Ἐὰν δ' ἢ πρὸς τι τὸ ὀριζόμενον ἢ καθ' αὐτὸ ἢ κατὰ τὸ γένος, σκοπεῖν εἰ μὴ εἴρηται ἐν τῷ ὀρισμῷ πρὸς ὃ λέγεται [146b] ἢ αὐτὸ ἢ κατὰ τὸ γένος, οἷον εἰ τὴν ἐπιστήμην ὠρίσατο ὑπόληψιν ἀμετάπειστον, ἢ τὴν βούλησιν ὄρεξιν ἄλυπον· παντὸς γὰρ τοῦ πρὸς τι ἡ οὐσία πρὸς ἕτερον, ἐπειδὴ ταῦτ' ἦν ἐκάστω τῶν πρὸς τι τὸ εἶναι ὅπερ τὸ πρὸς τί πως ἔχειν. ἔδει οὖν τὴν ἐπιστήμην εἰπεῖν ὑπόληψιν ἐπιστητοῦ καὶ τὴν βούλησιν ὄρεξιν ἀγαθοῦ. ὁμοίως δὲ καὶ εἰ τὴν γραμματικὴν ὠρίσατο ἐπιστήμην γραμμάτων· ἔδει γὰρ ἢ πρὸς ὃ αὐτὸ λέγεται, ἢ πρὸς ὃ τὸ γένος, ἐν τῷ ὀρισμῷ ἀποδίδοσθαι. ἢ εἰ πρὸς τι εἰρημένον μὴ πρὸς τὸ τέλος ἀποδέδοται· τέλος δ' ἐν ἐκάστω τὸ βέλτιστον ἢ οὐ χάριν τᾶλλα. ῥητέον δὲ ἢ τὸ βέλτιστον ἢ τὸ ἔσχατον, οἷον τὴν ἐπιθυμίαν οὐχ ἡδέος ἀλλ' ἡδονῆς· ταύτης γὰρ χάριν καὶ τὸ ἡδὺ αἰρούμεθα.

Σκοπεῖν δὲ καὶ εἰ γένεσις ἐστὶ πρὸς ὃ ἀποδέδωκεν, ἢ ἐνέργεια· οὐδὲν γὰρ τῶν τοιούτων τέλος· μᾶλλον γὰρ τὸ ἐνηργηκέναι καὶ γεγενῆσθαι τέλος ἢ τὸ γίνεσθαι καὶ ἐνεργεῖν. (ἢ οὐκ ἐπὶ πάντων ἀληθὲς τὸ τοιοῦτον· σχεδὸν γὰρ οἱ πλεῖστοι ἥδεσθαι μᾶλλον βούλονται ἢ πεπαῦσθαι ἡδόμενοι, ὥστε τὸ ἐνεργεῖν μᾶλλον τέλος ἂν ποιοῖντο τοῦ ἐνηργηκέναι.)

Πάλιν ἐπ' ἐνίων εἰ μὴ διώρικε τὸ πόσου ἢ ποίου ἢ ποῦ ἢ κατὰ τὰς ἄλλας διαφοράς, οἷον φιλότιμος ὁ ποίας καὶ ὁ πόσης ὀρεγόμενος τιμῆς· πάντες γὰρ ὀρέγονται τιμῆς, ὥστ' οὐκ ἀπόχρη φιλότιμον εἰπεῖν τὸν ὀρεγόμενον τιμῆς, ἀλλὰ προσθετέον τὰς εἰρημένας διαφοράς. ὁμοίως δὲ καὶ φιλοχρήματος ὁ πόσων ὀρεγόμενος χρημάτων, ἢ ἀκρατῆς ὁ περὶ ποίας ἡδονάς· οὐ γὰρ ὁ ὑφ' οἰασποτοῦν ἡδονῆς κρατούμενος ἀκρατῆς λέγεται, ἀλλ' ὁ ὑπὸ τινός. ἢ πάλιν, ὡς ὀρίζονται τὴν νύκτα σκιὰν γῆς, ἢ τὸν σεισμὸν κίνησιν γῆς, ἢ τὸ νέφος πύκνωσιν ἀέρος, ἢ τὸ πνεῦμα κίνησιν ἀέρος· προσθετέον γὰρ πόσου καὶ ποίου καὶ ποῦ καὶ ὑπὸ τίνος. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων· ἀπολείπων γὰρ διαφορὰν ἡντινοῦν οὐ λέγει τὸ τί ἦν εἶναι. δεῖ δ' ἀεὶ πρὸς τὸ ἐνδεὲς ἐπιχειρεῖν· οὐ γὰρ ὅπως οὖν γῆς κινηθείσης οὐδ' ὅπως οὖν σεισμὸς ἔσται, ὁμοίως δ' οὐδ' ἀέρος ὅπως οὖν οὐδ' ὅπως οὖν κινηθέντος πνεῦμα.

Ἐπὶ ἐπὶ τῶν ὀρέξεων εἰ μὴ πρόσκειται τὸ φαινόμενον, καὶ ἐφ' ὅσων ἄλλων ἀρμόττει, οἷον ὅτι ἡ βούλησις [147a] ὄρεξις ἀγαθοῦ, ἢ δ' ἐπιθυμία ὄρεξις ἡδέος, ἀλλὰ μὴ φαινομένου ἀγαθοῦ ἢ ἡδέος. πολλάκις γὰρ λανθάνει τοὺς ὀρεγομένους ὅτι ἀγαθὸν ἢ ἡδὺ ἐστίν, ὥστ' οὐκ ἀναγκαῖον ἀγαθὸν ἢ ἡδὺ εἶναι ἀλλὰ φαινόμενον μόνον. ἔδει οὖν οὕτω καὶ τὴν ἀπόδοσιν ποιήσασθαι. ἐὰν δὲ καὶ προσαποδῶ τὸ εἰρημένον, ἐπὶ τὰ εἶδη ἀκτέον τὸν τιθέμενον ἰδέας εἶναι. οὐ γὰρ ἔστιν ἰδέα φαινομένου οὐδενός, τὸ δ' εἶδος πρὸς τὸ εἶδος δοκεῖ λέγεσθαι, οἷον αὐτὴ ἐπιθυμία αὐτοῦ ἡδέος καὶ αὐτὴ βούλησις

αὐτοῦ ἀγαθοῦ. οὐκ ἔσται οὖν φαινομένου ἀγαθοῦ οὐδὲ φαινομένου ἡδέος· ἄτοπον γὰρ τὸ εἶναι αὐτὸ φαινόμενον ἀγαθὸν ἢ ἡδύ.

Ἔτι ἐὰν μὲν ἢ τῆς ἕξεως ὁ ὀρισμός, σκοπεῖν ἐπὶ τοῦ ἔχοντος, ἐὰν δὲ τοῦ ἔχοντος, ἐπὶ τῆς ἕξεως· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων· οἷον εἰ τὸ ἡδὺ ὅπερ ὠφέλιμον, καὶ ὁ ἡδόμενος ὠφελούμενος. καθόλου δ' εἶπεῖν ἐν τοῖς τοιούτοις ὀρισμοῖς τρόπον τινὰ πλείω ἐνδὸς συμβαίνει τὸν ὀριζόμενον ὀρίζεσθαι. ὁ γὰρ τὴν ἐπιστήμην ὀριζόμενος τρόπον τινὰ καὶ τὴν ἄγνοιαν ὀρίζεται, ὁμοίως δὲ καὶ τὸ ἐπιστῆμον καὶ τὸ ἀνεπιστῆμον, καὶ τὸ ἐπίστασθαι καὶ τὸ ἀγνοεῖν· τοῦ γὰρ πρώτου δήλου γενομένου τρόπον τινὰ καὶ τὰ λοιπὰ δῆλα γίνεται. σκεπτέον οὖν ἐπὶ πάντων τῶν τοιούτων μή τι διαφωνῇ, στοιχείοις χρώμενον τοῖς ἐκ τῶν ἐναντίων καὶ τῶν συστοίχων.

Ἔτι ἐπὶ τῶν πρὸς τι σκοπεῖν εἰ πρὸς ὃ τὸ γένος ἀποδίδεται, τὸ εἶδος πρὸς ἐκεῖνό τι ἀποδίδεται. οἷον εἰ ἢ ὑπόληψις πρὸς τὸ ὑποληπτόν, ἢ τις ὑπόληψις πρὸς τὸ τὶ ὑποληπτόν, καὶ εἰ τὸ πολλαπλάσιον πρὸς τὸ πολλοστημόριον, τὸ τὶ πολλαπλάσιον πρὸς τὸ τὶ πολλοστημόριον· εἰ γὰρ μὴ οὕτως ἀποδέδοται, δῆλον ὅτι ἡμάρτηται.

Ὅρᾶν δὲ καὶ εἰ τοῦ ἀντικειμένου ὁ ἀντικείμενος λόγος, οἷον τοῦ ἡμίσεος ὁ ἀντικείμενος τῷ τοῦ διπλασίου· εἰ γὰρ διπλάσιον τὸ ἴσω ὑπερέχον, ἥμισυ τὸ ἴσω ὑπερεχόμενον. καὶ ἐπὶ τῶν ἐναντίων δ' ὡσαύτως· ὁ γὰρ ἐναντίος τοῦ ἐναντίου λόγος ἔσται κατὰ μίαν τινὰ συμπλοκὴν τῶν ἐναντίων. οἷον εἰ ὠφέλιμον τὸ ποιητικὸν ἀγαθοῦ, βλαβερὸν τὸ ποιητικὸν κακοῦ ἢ τὸ φθαρτικὸν ἀγαθοῦ· θάτερον γὰρ τούτων ἀναγκαῖον ἐναντίον [147b] εἶναι τῷ ἐξ ἀρχῆς ῥηθέντι. εἰ οὖν μηδέτερον ἐναντίον τῷ ἐξ ἀρχῆς ῥηθέντι, δῆλον ὅτι οὐδέτερος ἂν εἴη τῶν ὕστερον ἀποδοθέντων τοῦ ἐναντίου λόγος, ὥστ' οὐδ' ὁ ἐξ ἀρχῆς ἀποδοθεὶς ὀρθῶς ἀποδέδοται. ἐπεὶ δ' ἔνια τῶν ἐναντίων στερήσει θατέρου λέγεται, οἷον ἢ ἀνισότης στέρησις ἰσότητος δοκεῖ εἶναι (ἄνισα γὰρ τὰ μὴ ἴσα λέγεται), δῆλον οὖν ὅτι τὸ μὲν κατὰ στέρησιν λεγόμενον ἐναντίον ἀναγκαῖον ὀρίζεσθαι διὰ θατέρου, τὸ δὲ λοιπὸν οὐκέτι διὰ τοῦ κατὰ στέρησιν λεγομένου· συμβαίνοι γὰρ ἂν ἑκάτερον δι' ἑκατέρου γνωρίζεσθαι. ἐπισκεπτέον οὖν ἐν τοῖς ἐναντίοις τὴν τοιαύτην ἀμαρτίαν, οἷον εἴ τις ὀρίσαιτο τὴν ἰσότητα τὸ ἐναντίον ἀνισότητι· διὰ γὰρ τοῦ κατὰ στέρησιν λεγομένου ὀρίζεται. ἔτι τὸν οὕτως ὀριζόμενον ἀναγκαῖον αὐτῷ τῷ ὀριζομένῳ χρῆσθαι. δῆλον δὲ τοῦτο, ἐὰν μεταληφθῇ ἀντὶ τοῦ ὀνόματος ὁ λόγος· εἶπεῖν γὰρ ἢ ἀνισότητα οὐδὲν διαφέρει ἢ στέρησιν ἰσότητος. ἔσται οὖν ἢ ἰσότης τὸ ἐναντίον στερήσει ἰσότητος, ὥστ' αὐτῷ ἂν εἴη κεχρημένος. ἂν δὲ μηδέτερον τῶν ἐναντίων κατὰ στέρησιν λέγηται, ἀποδοθῇ δ' ὁ λόγος ὁμοίως, οἷον ἀγαθὸν τὸ ἐναντίον

κακῶ, δῆλον ὅτι κακὸν τὸ ἐναντίον ἀγαθῶ ἔσται· τῶν γὰρ οὕτως ἐναντίων ὁμοίως ὁ λόγος ἀποδοτέος. ὥστε πάλιν αὐτῷ τῷ ὀριζομένῳ συμβαίνει χρῆσθαι· ἐνυπάρχει γὰρ ἐν τῷ τοῦ κακοῦ λόγῳ τὸ ἀγαθόν. ὥστ' εἰ ἀγαθόν ἐστὶ τὸ κακῶ ἐναντίον, τὸ δὲ κακὸν οὐδὲν διαφέρει ἢ τὸ τῷ ἀγαθῶ ἐναντίον, ἔσται ἀγαθὸν τὸ ἐναντίον τῷ τοῦ ἀγαθοῦ ἐναντίῳ. δῆλον οὖν ὅτι αὐτῷ κέχρηται.

Ἔτι εἰ τὸ κατὰ στέρησιν λεγόμενον ἀποδιδούς μὴ ἀποδέδωκεν οὗ ἔστι στέρησις, οἷον τῆς ἕξεως ἢ τοῦ ἐναντίου ἢ ὅτουοῦν ἐστὶν ἡ στέρησις. καὶ εἰ μὴ ἐν ᾧ πέφυκε γίνεσθαι προσέθηκεν, ἢ ἀπλῶς ἢ ἐν ᾧ πρώτῳ πέφυκε γίνεσθαι. οἷον εἰ τὴν ἄγνοιαν εἰπὼν στέρησιν μὴ ἐπιστήμης στέρησιν εἶπεν, ἢ μὴ προσέθηκεν ἐν ᾧ πέφυκε γίνεσθαι, ἢ προσθεὶς μὴ ἐν ᾧ πρώτῳ ἀπέδωκεν, οἷον ὅτι οὐκ ἐν τῷ λογιστικῷ ἀλλ' ἐν ἀνθρώπῳ ἢ ψυχῇ· ἔαν γὰρ ὅτιοῦν τούτων μὴ ποιήσῃ, ἡμάρτηκεν. ὁμοίως δὲ καὶ εἰ τὴν τυφλότητα μὴ ὥσεως στέρησιν ἐν ὀφθαλμῷ εἶπεν· δεῖ γὰρ τὸν καλῶς ἀποδιδόντα τὸ [148a] τί ἐστὶ καὶ τίνας ἐστὶν ἡ στέρησις ἀποδιδόναι καὶ τί ἐστὶ τὸ ἐστερημένον.

Ὅρᾶν δὲ καὶ εἰ μὴ λεγομένου κατὰ στέρησιν στερήσῃ ὠρίσατο, οἷον καὶ ἐπὶ τῆς ἀγνοίας δόξειεν ἂν ὑπάρχειν ἡ τοιαύτη ἀμαρτία τοῖς μὴ κατ' ἀπόφασιν τὴν ἄγνοιαν λέγουσιν. τὸ γὰρ μὴ ἔχον ἐπιστήμην οὐ δοκεῖ ἀγνοεῖν, ἀλλὰ μᾶλλον τὸ διηπατημένον· διὸ οὐτε τὰ ἄψυχα οὐτε τὰ παιδιά φαμὲν ἀγνοεῖν. ὥστ' οὐ κατὰ στέρησιν ἐπιστήμης ἡ ἀγνοία λέγεται.

Ἔτι ἐπὶ τῶν ὁμοίων τοῦ ὀνόματος πτώσεων αἱ ὅμοιαι τοῦ λόγου πτώσεις ἐφαρμόττουσιν· οἷον εἰ ὠφελίμον τὸ ποιητικὸν ὑγιείας, ὠφελίμως τὸ ποιητικῶς ὑγιείας καὶ ὠφεληκὸς τὸ πεποιηκὸς ὑγίειαν.

Σκοπεῖν δὲ καὶ ἐπὶ τὴν ἰδέαν εἰ ἐφαρμόσει ὁ λεχθεὶς ὅρος. ἐπ' ἐνίων γὰρ οὐ συμβαίνει, οἷον ὡς Πλάτων ὀρίζειται, τὸ θνητὸν προσάπτων ἐν τοῖς τῶν ζώων ὀρισμοῖς· ἡ γὰρ ἰδέα οὐκ ἔσται θνητή, οἷον αὐτοάνθρωπος, ὥστ' οὐκ ἐφαρμόσει ὁ λόγος ἐπὶ τὴν ἰδέαν. ἀπλῶς δ' ἐν οἷς πρόσκειται τὸ ποιητικὸν ἢ παθητικόν, ἀνάγκη διαφωνεῖν ἐπὶ τῆς ἰδέας τὸν ὅρον· ἀπαθεῖς γὰρ καὶ ἀκίνητοι δοκοῦσιν εἶναι αἱ ἰδέαι τοῖς λέγουσιν ἰδέας εἶναι, πρὸς δὲ τούτους καὶ οἱ τοιοῦτοι λόγοι χρήσιμοι.

Ἔτι εἰ τῶν καθ' ὁμωνυμίαν λεγομένων ἓνα λόγον ἀπάντων κοινὸν ἀποδέδωκεν· συνώνυμα γὰρ ὧν εἷς ὁ κατὰ τοῦνομα λόγος· ὥστ' οὐδενὸς τῶν ὑπὸ τοῦνομα ὁ ἀποδοθεὶς ὅρος, εἰ δὴ ὁμοίως ἐπὶ πᾶν τὸ ὁμώνυμον ἐφαρμόττει. πέπονθε δὲ τοῦτο καὶ ὁ Διονυσίου τῆς ζωῆς ὅρος, εἶπερ ἐστὶ

“κίνησις γένους θρεπτοῦ σύμφυτος παρακολουθοῦσα”. οὐδὲν γὰρ μᾶλλον τοῦτο τοῖς ζώοις ἢ τοῖς φυτοῖς ὑπάρχει. ἡ δὲ ζωὴ οὐ καθ’ ἓν εἶδος δοκεῖ λέγεσθαι, ἀλλ’ ἑτέρα μὲν τοῖς ζώοις ἑτέρα δὲ τοῖς φυτοῖς ὑπάρχειν. ἐνδέχεται μὲν οὖν καὶ κατὰ προαίρεσιν οὕτως ἀποδοῦναι τὸν ὅρον ὡς συνωνύμου καὶ καθ’ ἓν εἶδος πάσης τῆς ζωῆς λεγομένης. οὐδὲν δὲ κωλύει καὶ συνορῶντα τὴν ὁμωνυμίαν καὶ θατέρου βουλόμενον τὸν ὀρισμὸν ἀποδοῦναι λαθεῖν μὴ ἴδιον ἀλλὰ κοινὸν ἀμφοῖν λόγον ἀποδόντα. ἀλλ’ οὐδὲν ἥττον, εἰ ὁποτερωσοῦν πεποίηκεν, ἡμάρτηκεν. ἐπεὶ δ’ ἔνια λανθάνει τῶν ὁμωνύμων, ἐρωτῶντι [148b] μὲν ὡς συνωνύμοις χρηστέον (οὐ γὰρ ἐφαρμόσει ὁ θατέρου ὅρος ἐπὶ θάτερον, ὥστε δόξει οὐχ ὠρίσθαι κατὰ τρόπον· δεῖ γὰρ ἐπὶ πᾶν τὸ συνώνυμον ἐφαρμόττειν), αὐτῷ δ’ ἀποκρινομένῳ διαιρετέον. ἐπεὶ δ’ ἔνιοι τῶν ἀποκρινομένων τὸ μὲν συνώνυμον ὁμώνυμόν φασιν εἶναι ὅταν μὴ ἐφαρμόττη ἐπὶ πᾶν ὁ ἀποδοθεὶς λόγος, τὸ δ’ ὁμώνυμον συνώνυμον ἔαν ἐπ’ ἄμφω ἐφαρμόττη, προδιομολογητέον ὑπὲρ τῶν τοιούτων ἢ προσυλλογιστέον ὅτι ὁμώνυμον ἢ συνώνυμον, ὁπότερον ἂν ᾖ· μᾶλλον γὰρ συγχωροῦσιν οὐ προορῶντες τὸ συμβησόμενον. ἂν δὲ μὴ γενομένης ὁμολογίας φῇ τις τὸ συνώνυμον ὁμώνυμον εἶναι διὰ τὸ μὴ ἐφαρμόττειν καὶ ἐπὶ τοῦτο τὸν ἀποδοθέντα λόγον, σκοπεῖν εἰ ὁ τούτου λόγος ἐφαρμόττει καὶ ἐπὶ τὰ λοιπὰ· δῆλον γὰρ ὅτι συνώνυμον ἂν εἴη τοῖς λοιποῖς. εἰ δὲ μή, πλείους ἔσσονται ὀρισμοὶ τῶν λοιπῶν· δύο γὰρ [οἱ] κατὰ τοῦνομα λόγοι ἐφαρμόττουσιν ἐπ’ αὐτά, ὃ τε πρότερον ἀποδοθεὶς καὶ ὁ ὕστερον. πάλιν εἴ τις, ὀρισάμενός τι τῶν πολλαχῶς λεγομένων, καὶ τοῦ λόγου μὴ ἐφαρμόττοντος ἐπὶ πάντα, ὅτι μὲν ὁμώνυμον μὴ λέγοι, τὸ δ’ ὄνομα μὴ φαίη ἐπὶ πάντα ἐφαρμόττειν, ὅτι οὐδ’ ὁ λόγος, ῥητέον πρὸς τὸν τοιοῦτον ὅτι τῇ μὲν ὀνομασίᾳ δεῖ χρῆσθαι τῇ παραδεδομένῃ καὶ παρεπομένῃ καὶ μὴ κινεῖν τὰ τοιαῦτα, ἔνια δ’ οὐ λεκτέον ὁμοίως τοῖς πολλοῖς.

Ἐὰν δὲ τῶν συμπεπλεγμένων τινὸς ἀποδοθῇ ὅρος, σκοπεῖν, ἀφαιροῦντα τὸν θατέρου τῶν συμπεπλεγμένων λόγον, εἰ καὶ ὁ λοιπὸς τοῦ λοιποῦ· εἰ γὰρ μή, δῆλον ὅτι οὐδ’ ὁ ὅλος τοῦ ὅλου. οἷον εἰ ὀρίσαιτο γραμμὴν πεπερασμένην εὐθεῖαν “πέρας ἐπιπέδου ἔχοντος πέρατα, οὐ τὸ μέσον ἐπιπροσθεῖ τοῖς πέρασιν”, εἰ τῆς πεπερασμένης γραμμῆς ὁ λόγος ἐστὶ “πέρας ἐπιπέδου ἔχοντος πέρατα”, τοῦ εὐθέος δεῖ εἶναι τὸ λοιπόν, “οὐ τὸ μέσον ἐπιπροσθεῖ τοῖς πέρασιν”. ἀλλ’ ἡ ἄπειρος οὔτε μέσον οὔτε πέρατα ἔχει, εὐθεῖα δ’ ἐστίν, ὥστ’ οὐκ ἔστιν ὁ λοιπὸς τοῦ λοιποῦ λόγος.

Ἔτι εἰ συνθέτου ὄντος τοῦ ὀριζομένου ἰσόκωλος ὁ λόγος ἀπεδόθη τῷ ὀριζομένῳ. ἰσόκωλος δὲ λέγεται ὁ λόγος εἶναι, ὅταν ὅσαπερ ἂν ἢ τὰ συγκείμενα, τοσαῦτα καὶ ἐν τῷ λόγῳ ὀνόματα καὶ ῥήματα ᾖ. ἀνάγκη γὰρ

αὐτῶν τῶν ὀνομάτων ἐν τοῖς τοιοῦτοις μεταλλαγῇν γίνεσθαι, ἢ πάντων ἢ τινῶν, ἐπειδὴ [149a] οὐδὲν πλείω νῦν ἢ πρότερον ὀνόματα εἴρηται. δεῖ δὲ τὸν ὀριζόμενον λόγον ἀντὶ τῶν ὀνομάτων ἀποδοῦναι, μάλιστα μὲν πάντων, εἰ δὲ μή, τῶν πλείστων. οὕτω γὰρ καὶ ἐπὶ τῶν ἀπλῶν ὁ τοῦνομα μεταλαβὼν ὠρισμένος ἂν εἴη, οἷον ἀντὶ λωπίου ἱμάτιον.

Ἔτι δὲ μείζων ἁμαρτία, εἰ καὶ ἀγνωστοτέρων ὀνομάτων τὴν μετάληψιν ἐποιήσατο, οἷον ἀντὶ ἀνθρώπου λευκοῦ βροτὸν ἀργόν· οὔτε γὰρ ὠρισταί ἦττον τε σαφεῖς οὕτω ῥηθέν.

Σκοπεῖν δὲ καὶ ἐν τῇ μεταλλαγῇ τῶν ὀνομάτων εἰ οὐ ταῦτόν ἐστι σημαίνει, οἷον ὁ τὴν θεωρητικὴν ἐπιστήμην ὑπόληψιν θεωρητικὴν εἰπών. ἢ γὰρ ὑπόληψις τῇ ἐπιστήμῃ οὐ ταῦτόν· ἔδει δέ γε, εἴπερ μέλλει καὶ τὸ ὅλον ταῦτόν εἶναι. τὸ μὲν γὰρ θεωρητικὸν κοινὸν ἐν ἀμφοτέροις τοῖς λόγοις ἐστί, τὸ δὲ λοιπὸν διάφορον.

Ἔτι εἰ θατέρου τῶν ὀνομάτων τὴν μετάληψιν ποιούμενος μὴ τῆς διαφορᾶς ἀλλὰ τοῦ γένους τὴν μεταλλαγῇν ἐποιήσατο, καθάπερ ἐπὶ τοῦ ἀρτίως ῥηθέντος. ἀγνωστότερον γὰρ ἢ θεωρητικὴ τῆς ἐπιστήμης· τὸ μὲν γὰρ γένος, τὸ δὲ διαφορὰ, πάντων δὲ γνωριμώτατον τὸ γένος. ὥστ' οὐ τοῦ γένους ἀλλὰ τῆς διαφορᾶς ἔδει τὴν μετάληψιν ποιήσασθαι, ἐπειδὴ ἀγνωστότερόν ἐστιν. (ἢ τοῦτο μὲν γελοῖον τὸ ἐπιτίμημα· οὐδὲν γὰρ κωλύει τὴν μὲν διαφορὰν τῷ γνωριμωτάτῳ ὀνόματι εἰρηῇσθαι, τὸ δὲ γένος μή. οὕτω δ' ἐχόντων δῆλον ὅτι τοῦ γένους καὶ οὐ τῆς διαφορᾶς κατὰ τοῦνομα τὴν μετάληψιν ποιητέον.) εἰ δὲ μὴ ὄνομα ἀντ' ὀνόματος ἀλλὰ λόγον ἀντ' ὀνόματος μεταλαμβάνει, δῆλον ὅτι τῆς διαφορᾶς μᾶλλον ἢ τοῦ γένους ὀρισμὸν ἀποδοτέον, ἐπειδὴ τοῦ γνωρίσαι χάριν ὁ ὀρισμὸς ἀποδίδοται· ἦττον γὰρ ἢ διαφορὰ τοῦ γένους γνώριμον.

Εἰ δὲ τῆς διαφορᾶς τὸν ὅρον ἀποδέδωκε, σκοπεῖν εἰ καὶ ἄλλου τινὸς κοινὸς ὁ ἀποδοθεὶς ὀρισμός. οἷον ὅταν τὸν περιττὸν ἀριθμὸν ἀριθμὸν μέσον ἔχοντα εἴπῃ, ἐπιδιοριστέον τὸ πῶς μέσον ἔχοντα. ὁ μὲν γὰρ ἀριθμὸς κοινὸς ἐν ἀμφοτέροις τοῖς λόγοις ὑπάρχει, τοῦ δὲ περιττοῦ μετείληπται ὁ λόγος· ἔχει δὲ καὶ γραμμὴ καὶ σῶμα μέσον, οὐ περιττὰ ὄντα. ὥστ' οὐκ ἂν εἴη ὀρισμὸς οὗτος τοῦ περιττοῦ. εἰ δὲ πολλαχῶς λέγεται τὸ μέσον ἔχον, διοριστέον τὸ πῶς μέσον ἔχον. ὥστ' ἢ ἐπιτίμησις ἔσται, ἢ συλλογισμὸς ὅτι οὐχ ὠρισταί.

Πάλιν εἰ οὗ μὲν τὸν λόγον ἀποδίδωσι τῶν ὄντων ἐστί, τὸ δ' ὑπὸ τὸν λόγον μὴ τῶν ὄντων, οἷον εἰ τὸ λευκὸν ὠρίσατο [149b] χρῶμα πυρὶ μεμειγμένον· ἀδύνατον γὰρ τὸ ἀσώματον σώματι μεμεῖχθαι, ὥστ' οὐκ ἂν εἴη



χρῶμα πυρὶ μεμειγμένον· λευκὸν δ' ἔστιν.

Ἔτι ὅσοι μὴ διαιροῦσιν ἐν τοῖς πρὸς τι πρὸς ὃ λέγεται, ἀλλ' ἐν πλείοσι περιλαβόντες εἶπαν, ἢ ὅλως ἢ ἐπὶ τι ψεύδονται, οἷον εἴ τις ἰατρικὴν ἐπιστήμην ὄντος εἶπεν. εἰ μὲν γὰρ μηδενὸς τῶν ὄντων ἡ ἰατρικὴ ἐπιστήμη, δῆλον ὅτι ὅλως ἔψευσται, εἰ δὲ τινὸς μὲν τινὸς δὲ μή, ἐπὶ τι ἔψευσται· δεῖ γὰρ παντός, εἴπερ καθ' αὐτὸ καὶ μὴ κατὰ συμβεβηκὸς ὄντος εἶναι λέγεται, καθάπερ ἐπὶ τῶν ἄλλων ἔχει τῶν πρὸς τι· πᾶν γὰρ ἐπιστητὸν πρὸς ἐπιστήμην λέγεται. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, ἐπειδὴ ἀντιστρέφει πάντα τὰ πρὸς τι. ἔτι εἶπερ ὁ μὴ καθ' αὐτὸ ἀλλὰ κατὰ συμβεβηκὸς τὴν ἀπόδοσιν ποιούμενος ὀρθῶς ἀποδίδωσιν, οὐ πρὸς ἐν ἀλλὰ πρὸς πλείω ἕκαστον ἂν τῶν πρὸς τι λέγοιτο. οὐδὲν γὰρ κωλύει τὸ αὐτὸ καὶ ὄν καὶ λευκὸν καὶ ἀγαθὸν εἶναι, ὥστε πρὸς ὅποιονοῦν τούτων ἀποδοὺς ὀρθῶς ἂν εἴη ἀποδοῦς, εἴπερ ὁ κατὰ συμβεβηκὸς ἀποδιδούς ὀρθῶς ἀποδίδωσιν. ἔτι δ' ἀδύνατον τὸν τοιοῦτον λόγον ἴδιον τοῦ ἀποδοθέντος εἶναι· οὐ γὰρ μόνον ἡ ἰατρικὴ ἀλλὰ καὶ τῶν ἄλλων ἐπιστημῶν αἱ πολλαὶ πρὸς ὃν λέγονται, ὥσθ' ἐκάστη ὄντος ἐπιστήμη ἔσται. δῆλον οὖν ὅτι ὁ τοιοῦτος οὐδεμιᾶς ἐστὶν ἐπιστήμης ὀρισμός· ἴδιον γὰρ καὶ οὐ κοινὸν δεῖ τὸν ὀρισμὸν εἶναι.

Ἐνίστε δ' ὀρίζονται οὐ τὸ πρᾶγμα ἀλλὰ τὸ πρᾶγμα εὖ ἔχον ἢ τετελεσμένον. τοιοῦτος δ' ὁ τοῦ ῥήτορος καὶ ὁ τοῦ κλέπτου ὅρος, εἴπερ ἐστὶ ῥήτωρ μὲν ὁ δυνάμενος τὸ ἐν ἐκάστῳ πιθανὸν θεωρεῖν καὶ μηδὲν παραλείπων, κλέπτης δ' ὁ λάθρᾳ λαμβάνων· δῆλον γὰρ ὅτι τοιοῦτος ὢν ἐκάτερος ὁ μὲν ἀγαθὸς ῥήτωρ ὁ δ' ἀγαθὸς κλέπτης ἔσται. οὐ γὰρ ὁ λάθρᾳ λαμβάνων ἀλλ' ὁ βουλόμενος λάθρᾳ λαμβάνειν κλέπτης ἐστίν.

Πάλιν εἰ τὸ δι' αὐτὸ αἰρετὸν ὡς ποιητικὸν ἢ πρακτικὸν ἢ ὅπωςοῦν δι' ἄλλο αἰρετὸν ἀποδέδωκεν, οἷον τὴν δικαιοσύνην νόμων σωστικὴν εἰπὼν ἢ τὴν σοφίαν ποιητικὴν εὐδαιμονίας· τὸ γὰρ ποιητικὸν ἢ σωστικὸν τῶν δι' ἄλλο αἰρετῶν. ἢ οὐδὲν μὲν κωλύει τὸ δι' αὐτὸ αἰρετὸν καὶ δι' ἄλλο εἶναι αἰρετόν, οὐ μὴν ἀλλ' οὐδὲν ἥττον ἡμάρτηκεν ὁ οὕτως ὀρισάμενος τὸ δι' αὐτὸ αἰρετόν· ἐκάστου γὰρ τὸ βέλτιστον ἐν τῇ οὐσίᾳ μάλιστα, βέλτιον δὲ τὸ δι' αὐτὸ αἰρετὸν εἶναι τοῦ δι' ἕτερον, ὥστε τοῦτο καὶ τὸν ὀρισμὸν ἔδει μᾶλλον σημαίνειν.

[150a] Σκοπεῖν δὲ καὶ εἴ τινος ὀρισμὸν ἀποδιδούς τάδε ἢ τὸ ἐκ τούτων ἢ τόδε μετὰ τοῦδε ὠρίσατο. εἰ μὲν γὰρ τάδε, συμβήσεται ἀμφοῖν καὶ μηδετέρῳ ὑπάρχειν, οἷον εἰ τὴν δικαιοσύνην σωφροσύνην καὶ ἀνδρείαν ὠρίσατο· δύο γὰρ ὄντων ἕαν ἐκάτερος θάτερον ἔχη, ἀμφοτέροι δίκαιοι ἔσονται καὶ

οὐδέτερος, ἐπεὶ ἀμφοτέροι μὲν ἔχουσι δικαιοσύνην, ἑκάτερος δ' οὐκ ἔχει. εἰ δὲ μήπω τὸ εἰρημένον σφόδρα ἄτοπον διὰ τὸ καὶ ἐπ' ἄλλων συμβαίνειν τὸ τοιοῦτον (οὐδὲν γὰρ κωλύει ἀμφοτέρους ἔχειν μὲν μὴδετέρου ἔχοντος), ἀλλ' οὖν τό γε τάναντία ὑπάρχειν αὐτοῖς παντελῶς ἄτοπον ἂν δόξειεν εἶναι. συμβήσεται δὲ τοῦτο, ἐὰν ὁ μὲν αὐτῶν σωφροσύνην καὶ δειλίαν ἔχῃ, ὁ δὲ ἀνδρείαν καὶ ἀκολασίαν· ἄμφω γὰρ δικαιοσύνην καὶ ἀδικίαν ἔξουσιν· εἰ γὰρ ἡ δικαιοσύνη σωφροσύνη καὶ ἀνδρεία ἐστίν, ἡ ἀδικία δειλία καὶ ἀκολασία ἔσται. ὅλως τε ὅσα ἔστιν ἐπιχειρεῖν ὅτι οὐ ταῦτόν ἐστι τὰ μέρη καὶ τὸ ὅλον, πάντα χρήσιμα πρὸς τὸ νῦν εἰρημένον· ἔοικε γὰρ ὁ οὕτως ὀριζόμενος τὰ μέρη τῷ ὅλῳ ταῦτ' ἀφαιρῆναι εἶναι. μάλιστα δ' οἰκεῖοι γίνονται οἱ λόγοι ἐφ' ὧν κατάδηλός ἐστιν ἡ τῶν μερῶν σύνθεσις, καθάπερ ἐπ' οἰκίας καὶ τῶν ἄλλων τῶν τοιούτων· δῆλον γὰρ ὅτι τῶν μερῶν ὄντων οὐδὲν κωλύει τὸ ὅλον μὴ εἶναι, ὥστ' οὐ ταῦτόν τ' ἀμφοτέρω ὅλῳ.

Εἰ δὲ μὴ ταῦτα ἀλλὰ τὸ ἐκ τούτων ἔφησεν εἶναι τὸ ὀριζόμενον, πρῶτον μὲν ἐπισκοπεῖν εἰ μὴ πέφυκεν ἐν γίνεσθαι ἐκ τῶν εἰρημένων· ἔνια γὰρ οὕτως ἔχει πρὸς ἄλληλα ὥστε μὴδὲν ἐν ἐξ αὐτῶν γίνεσθαι, οἷον γραμμὴ καὶ ἀριθμός. ἔτι εἰ τὸ μὲν ὠρισμένον ἐν ἐνὶ τινὶ πέφυκε τῷ πρώτῳ γίνεσθαι, ἐξ ὧν δ' ἔφησεν αὐτὸ εἶναι μὴ ἐν ἐνὶ τῷ πρώτῳ ἀλλ' ἑκάτερον ἐν ἑκατέρῳ. δῆλον γὰρ ὅτι οὐκ ἂν εἴη ἐκ τούτων ἐκεῖνο· ἐν οἷς γὰρ τὰ μέρη, καὶ τὸ ὅλον ἀνάγκη ὑπάρχειν, ὥστ' οὐκ ἐν ἐνὶ τὸ ὅλον πρῶτον ἀλλ' ἐν πλείοσιν. εἰ δὲ καὶ τὰ μέρη καὶ τὸ ὅλον ἐν ἐνὶ τινὶ πρώτῳ, σκοπεῖν εἰ μὴ ἐν τῷ αὐτῷ, ἀλλ' ἐν ἑτέρῳ τὸ ὅλον καὶ ἐν ἑτέρῳ τὰ μέρη. πάλιν εἰ τῷ ὅλῳ συμφθείρεται τὰ μέρη· ἀνάπαλιν γὰρ δεῖ συμβαίνειν, τῶν μερῶν φθαρέντων φθείρεσθαι τὸ ὅλον, τοῦ δ' ὅλου φθαρέντος οὐκ ἀναγκαῖον καὶ τὰ μέρη ἐφθάρθαι. ἢ εἰ τὸ μὲν ὅλον ἀγαθὸν ἢ καλόν, τὰ δὲ μὴδέτερα, ἢ ἀνάπαλιν τὰ μὲν ἀγαθὰ ἢ κακά, τὸ δ' ὅλον μὴδέτερον· οὔτε γὰρ ἐκ μὴδετέρων δυνατόν ἢ ἀγαθόν τι ἢ κακόν [150b] γενέσθαι, οὔτ' ἐκ κακῶν ἢ ἀγαθῶν μὴδέτερον. ἢ εἰ μᾶλλον μὲν θάτερον ἀγαθὸν ἢ θάτερον κακόν, τὸ δ' ἐκ τούτων μὴ μᾶλλον ἀγαθὸν ἢ κακόν, οἷον εἰ ἡ ἀναίδεια ἐξ ἀνδρείας καὶ ψευδοῦς δόξης· μᾶλλον γὰρ ἀγαθὸν ἢ ἀνδρεία ἢ κακὸν ἢ ψευδὴς δόξα. ἔδει οὖν καὶ τὸ ἐκ τούτων ἀκολουθεῖν τῷ μᾶλλον, καὶ εἶναι ἢ ἀπλῶς ἀγαθόν, ἢ μᾶλλον ἀγαθὸν ἢ κακόν. ἢ τοῦτο μὲν οὐκ ἀναγκαῖον, ἐὰν μὴ ἑκάτερον ἢ καθ' αὐτὸ ἀγαθὸν ἢ κακόν· πολλὰ γὰρ τῶν ποιητικῶν καθ' αὐτὰ μὲν οὐκ ἔστιν ἀγαθὰ, μειχθέντα δέ, ἢ ἀνάπαλιν ἑκάτερον μὲν ἀγαθόν, μειχθέντα δὲ κακόν ἢ οὐδέτερον. μάλιστα δὲ καταφανὲς τὸ νῦν ῥηθὲν ἐπὶ τῶν ὑγιεινῶν καὶ νοσῶντων· ἔνια γὰρ τῶν φαρμάκων οὕτως ἔχει ὥσθ' ἑκάτερον μὲν εἶναι ἀγαθόν, ἐὰν δ' ἀμφω δοθῇ μειχθέντα, κακόν.

Πάλιν εἰ ἐκ βελτίονος καὶ χείρονος ὄν μὴ ἔστι τὸ ὅλον τοῦ μὲν βελτίονος χεῖρον, τοῦ δὲ χείρονος βέλτιον. (ἢ οὐδὲ τοῦτ' ἀναγκαῖον, ἐὰν μὴ καθ' αὐτὰ ἢ τὰ ἐξ ὧν σύγκειται ἀγαθὰ, ἀλλ' οὐδὲν κωλύει τὸ ὅλον μὴ γίνεσθαι ἀγαθόν, καθάπερ ἐπὶ τῶν ἀρτίως ῥηθέντων.)

Ἔτι εἰ συνώνυμον τὸ ὅλον θατέρω· οὐ δεῖ γάρ, καθάπερ οὐδ' ἐπὶ τῶν συλλαβῶν· οὐδενὶ γὰρ τῶν στοιχείων ἐξ ὧν σύγκειται ἡ συλλαβὴ συνώνυμός ἐστιν.

Ἔτι εἰ μὴ εἴρηκε τὸν τρόπον τῆς συνθέσεως· οὐ γὰρ αὐτάρκες πρὸς τὸ γνωρίσαι τὸ εἰπεῖν ἐκ τούτων. οὐ γὰρ τὸ ἐκ τούτων ἀλλὰ τὸ οὕτως ἐκ τούτων ἐκάστου τῶν συνθέτων ἢ οὐσία, καθάπερ ἐπ' οἰκίας· οὐ γάρ, ἂν ὁπωσοῦν συντεθῇ ταῦτα, οἰκία ἐστίν.

Εἰ δὲ τότε μετὰ τοῦδε ἀποδέδωκε, πρῶτον μὲν ῥητέον ὅτι τότε μετὰ τοῦδε ἢ τοῖσδε ταῦτόν ἢ τῷ ἐκ τῶνδε· ὁ γὰρ λέγων μέλι μεθ' ὕδατος ἦτοι μέλι καὶ ὕδωρ λέγει ἢ τὸ ἐκ μέλιτος καὶ ὕδατος. ὥστ' ἐὰν ὁποτέρω τῶν εἰρημένων ταῦτόν ὁμολογήσῃ εἶναι τὸ τότε μετὰ τοῦδε, ταῦτ' ἀρμόσει λέγειν ἄπερ πρὸς ἐκάτερον τούτων ἔμπροσθεν εἴρηται. ἔτι διελόμενον ὁσαυτὶς λέγεται ἕτερον μεθ' ἑτέρου σκοπεῖν εἰ μηδαμῶς τότε μετὰ τοῦδε. οἷον εἰ λέγεται ἕτερον μεθ' ἑτέρου ἢ ὥς ἓν τινι ταύτῳ δεκτικῷ, καθάπερ ἡ δικαιοσύνη καὶ ἡ ἀνδρεία ἐν ψυχῇ, ἢ ἐν τόπῳ τῷ αὐτῷ ἢ ἐν χρόνῳ τῷ αὐτῷ, μηδαμῶς δ' ἀληθὲς τὸ εἰρημένον ἐπὶ τούτων, δῆλον ὅτι οὐδενὸς ἂν εἴη ὁ ἀποδοθεὶς ὁρισμός, ἐπειδὴ οὐδαμῶς τότε μετὰ [151a] τοῦδε ἐστίν. εἰ δὲ τῶν διαιρεθέντων ἀληθὲς τὸ ἐν ταύτῳ χρόνῳ ἐκάτερον ὑπάρχειν, σκοπεῖν εἰ ἐνδέχεται μὴ πρὸς ταῦτόν λεγέσθαι ἐκάτερον. οἷον εἰ τὴν ἀνδρείαν ὠρίσατο τόλμαν μετὰ διανοίας ὀρθῆς· ἐνδέχεται γὰρ τόλμαν μὲν ἔχειν τοῦ ἀποστερεῖν, ὀρθὴν δὲ διάνοιαν περὶ τὰ ὑγιεινά, ἀλλ' οὕτω ἀνδρεῖος ὁ ἐν τῷ αὐτῷ χρόνῳ τότε μετὰ τοῦδε ἔχων. ἔτι εἰ καὶ πρὸς ταῦτόν ἄμφω λέγεται, οἷον πρὸς τὰ ἱατρικά· οὐδὲν γὰρ κωλύει καὶ τόλμαν καὶ ὀρθὴν διάνοιαν ἔχειν πρὸς τὰ ἱατρικά· ἀλλ' ὅμως οὐδ' οὕτως ἀνδρεῖος ὁ τότε μετὰ τοῦδε ἔχων. οὔτε γὰρ πρὸς ἕτερον αὐτῶν ἐκάτερον δεῖ λέγεσθαι οὔτε πρὸς ταῦτόν τὸ τυχόν, ἀλλὰ πρὸς τὸ τῆς ἀνδρείας τέλος, οἷον πρὸς τοὺς πολεμικοὺς κινδύνους ἢ εἴ τι μᾶλλον τούτου τέλος.

Ἐνια δὲ τῶν οὕτως ἀποδιδομένων οὐδαμῶς ὑπὸ τὴν εἰρημένην πίπτει διαίρεσιν, οἷον εἰ ἡ ὀργὴ λύπη μεθ' ὑπολήψεως τοῦ ὀλιγωρεῖσθαι. ὅτι γὰρ διὰ τὴν ὑπόληψιν τὴν τοιαύτην ἡ λύπη γίνεται, τοῦτο βούλεται δηλοῦν· τὸ δὲ διὰ τότε γίνεσθαι τι οὐκ ἔστι ταῦτό τῷ μετὰ τούτου τόδ' εἶναι κατ' οὐδένα τῶν

εἰρημένων τρόπων.

Πάλιν εἰ τὴν τούτων σύνθεσιν εἴρηκε τὸ ὅλον, οἷον τῆς ψυχῆς καὶ τοῦ σώματος σύνθεσιν ζῶον, πρῶτον μὲν σκοπεῖν εἰ μὴ εἴρηκε ποία σύνθεσις, καθάπερ εἰ σάρκα ὀριζόμενος ἢ ὅστοῦν τὴν πυρὸς καὶ γῆς καὶ ἀέρος εἶπε σύνθεσιν. οὐ γὰρ ἀπόχρη τὸ σύνθεσιν εἰπεῖν, ἀλλὰ καὶ ποία τις προσδιοριστέον· οὐ γὰρ ὅπως οὖν συντεθέντων τούτων σὰρξ γίνεται, ἀλλ’ οὕτως μὲν συντεθέντων σὰρξ, οὕτως δ’ ὅστοῦν. ἔοικε δ’ οὐδ’ εἶναι τὸ παράπαν συνθέσει ταῦτ’ οὐδέτερον τῶν εἰρημένων· συνθέσει μὲν γὰρ πάση διάλυσις ἐναντίον, τῶν δ’ εἰρημένων οὐδετέρῳ οὐδέν. ἔτι εἰ ὁμοίως πιθανὸν πᾶν τὸ σύνθετον σύνθεσιν εἶναι ἢ μηδέν, τῶν δὲ ζώων ἕκαστον σύνθετον ὃν μὴ ἔστι σύνθεσις, οὐδὲ τῶν ἄλλων οὐδέν τῶν συνθέτων σύνθεσις ἂν εἴη.

Πάλιν εἰ ὁμοίως ἔν τινι πέφυκεν ὑπάρχειν τάναντία, ὥριστα δὲ διὰ θατέρου, δῆλον ὅτι οὐχ ὥριστα. εἰ δὲ μή, πλείους τοῦ αὐτοῦ συμβήσεται ὀρισμοὺς εἶναι· τί γὰρ μᾶλλον ὁ διὰ τούτου ἢ ὁ διὰ τοῦ ἑτέρου ὀρισάμενος εἴρηκεν, ἐπεὶ ὁμοίως ἀμφοτέρω πέφυκε γίνεσθαι ἐν αὐτῷ; τοιοῦτος δ’ ὁ [151b] τῆς ψυχῆς ὅρος, εἰ ἔστιν “οὐσία ἐπιστήμης δεκτική”. ὁμοίως γὰρ καὶ ἀγνοίας ἐστὶ δεκτική.

Δεῖ δὲ καὶ ἐὰν μὴ πρὸς ὅλον ἔχη τις ἐπιχειρεῖν τὸν ὀρισμὸν διὰ τὸ μὴ γνῶριμον εἶναι τὸ ὅλον, πρὸς τῶν μερῶν τι ἐπιχειρεῖν, ἐὰν ἢ γνῶριμον καὶ μὴ καλῶς ἀποδεδομένον φαίνεται· τοῦ γὰρ μέρους ἀναιρεθέντος καὶ ὁ πᾶς ὀρισμὸς ἀναιρεῖται. ὅσοι τ’ ἀσαφεῖς τῶν ὀρισμῶν, συνδιορθώσαντα καὶ συσχηματίσαντα πρὸς τὸ δηλοῦν τι καὶ ἔχειν ἐπιχείρημα οὕτως ἐπισκοπεῖν· ἀναγκαῖον γὰρ τῷ ἀποκρινομένῳ ἢ δέχεσθαι τὸ ἐκλαμβανόμενον ὑπὸ τοῦ ἐρωτῶντος ἢ αὐτὸν διασαφεῖσαι τί ποτε τυγχάνει τὸ δηλούμενον ὑπὸ τοῦ λόγου. ἔτι καθάπερ ἐν ταῖς ἐκκλησίαις νόμον εἰώθασιν ἐπιδείκναι, καὶ ἢ βελτίων ὁ ἐπιδεικνόμενος, ἀναιροῦσι τὸν ἔμπροσθεν, οὕτω καὶ ἐπὶ τῶν ὀρισμῶν ποιητέον καὶ αὐτὸν ὀρισμὸν ἕτερον οἰστέον· ἐὰν γὰρ φαίνεται βελτίων καὶ μᾶλλον δηλῶν τὸ ὀριζόμενον, δῆλον ὅτι ἀνηρημένος ἔσται ὁ κείμενος, ἐπειδὴ οὐκ εἰσὶ πλείους τοῦ αὐτοῦ ὀρισμοί.

Πρὸς ἅπαντας δὲ τοὺς ὀρισμοὺς οὐκ ἐλάχιστον στοιχεῖον τὸ πρὸς ἑαυτὸν εὐστόχως ὀρίσασθαι τὸ προκείμενον ἢ καλῶς εἰρημένον ὅρον ἀναλαβεῖν· ἀνάγκη γὰρ ὥσπερ πρὸς παράδειγμα θεώμενον τό τ’ ἐλλείπον ὧν προσῆκεν ἔχειν τὸν ὀρισμὸν καὶ τὸ προσκείμενον περιέργως καθορᾶν ὥστε μᾶλλον ἐπιχειρημάτων εὐπορεῖν.

Τὰ μὲν οὖν περὶ τοὺς ὀρισμοὺς ἐπὶ τοσοῦτον εἰρήσθω.

## Η

Πότερον δὲ ταῦτόν ἢ ἕτερον κατὰ τὸν κυριώτατον τῶν ῥηθέντων περὶ ταῦτοῦ τρόπων (ἐλέγετο δὲ κυριώτατα ταῦτόν τὸ τῷ ἀριθμῷ ἔν) σκοπεῖν ἔκ τε τῶν πώσεων καὶ τῶν συστοίχων καὶ τῶν ἀντικειμένων. εἰ γὰρ ἡ δικαιοσύνη ταῦτόν τῇ ἀνδρείᾳ, καὶ ὁ δίκαιος τῷ ἀνδρείῳ καὶ τὸ δικαίως τῷ ἀνδρείως. ὁμοίως δὲ καὶ ἐπὶ τῶν ἀντικειμένων· εἰ γὰρ τάδε ταῦτά, καὶ τὰ ἀντικείμενα τούτοις ταῦτὰ καθ' ὅποιανοῦν τῶν λεγομένων ἀντιθέσεων· οὐδὲν γὰρ διαφέρει τὸ τούτῳ ἢ τούτῳ ἀντικείμενον λαβεῖν, ἐπειδὴ ταῦτόν ἐστιν. πάλιν ἐκ τῶν ποιητικῶν [152a] καὶ φθαρτικῶν καὶ γενέσεων καὶ φθορῶν καὶ ὅλως τῶν ὁμοίως ἐχόντων πρὸς ἑκάτερον· ὅσα γὰρ ἀπλῶς ταῦτά, καὶ αἱ γενέσεις αὐτῶν καὶ αἱ φθοραὶ αἱ αὐταὶ καὶ τὰ ποιητικὰ καὶ τὰ φθαρτικά.

Σκοπεῖν δὲ καὶ ὧν θάτερον μάλιστα λέγεται ὀτιοῦν, εἰ καὶ θάτερον τῶν αὐτῶν τούτων κατὰ τὸ αὐτὸ μάλιστα λέγεται, καθάπερ Ξενοκράτης τὸν εὐδαίμονα βίον καὶ τὸν σπουδαῖον ἀποδείκνυσι τὸν αὐτόν, ἐπειδὴ πάντων τῶν βίων αἰρετώτατος ὁ σπουδαῖος καὶ ὁ εὐδαίμων· ἔν γὰρ τὸ αἰρετώτατον καὶ μέγιστον. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων. δεῖ δ' ἑκάτερον ἐν ἀριθμῷ εἶναι τὸ λεγόμενον μέγιστον ἢ αἰρετώτατον· εἰ δὲ μή, οὐκ ἔσται δεδειγμένον ὅτι ταῦτόν. οὐ γὰρ ἀναγκαῖον, εἰ ἀνδρειότατοι τῶν Ἑλλήνων Πελοποννήσιοι καὶ Λακεδαιμόνιοι, τοὺς αὐτοὺς εἶναι Πελοποννησίους Λακεδαιμονίους, ἐπειδὴ οὐχ εἰς ἀριθμῷ Πελοποννήσιος καὶ Λακεδαιμόνιος, ἀλλὰ περιέχεσθαι μὲν τὸν ἕτερον ὑπὸ τοῦ ἑτέρου ἀναγκαῖον, καθάπερ οἱ Λακεδαιμόνιοι ὑπὸ τῶν Πελοποννησίων, εἰ δὲ μή, συμβήσεται ἀλλήλων εἶναι βελτίους, ἂν μὴ περιέχωνται οἱ ἕτεροι ὑπὸ τῶν ἑτέρων. ἀναγκαῖον γὰρ τοὺς Πελοποννησίους βελτίους εἶναι τῶν Λακεδαιμονίων, εἴπερ μὴ περιέχονται οἱ ἕτεροι ὑπὸ τῶν ἑτέρων· πάντων γὰρ τῶν λοιπῶν εἰσι βελτίους. ὁμοίως δὲ καὶ τοὺς Λακεδαιμονίους ἀνάγκη βελτίους εἶναι τῶν Πελοποννησίων· καὶ γὰρ οὗτοι πάντων τῶν λοιπῶν εἰσι βελτίους. ὥστε ἀλλήλων βελτίους γίνονται. δῆλον οὖν ὅτι ἐν ἀριθμῷ δεῖ εἶναι τὸ βέλτιστον καὶ μέγιστον λεγόμενον, εἰ μέλλει ὅτι ταῦτόν ἀποδείκνυσθαι. διὸ καὶ Ξενοκράτης οὐκ ἀποδείκνυσιν· οὐ γὰρ εἰς ἀριθμῷ ὁ εὐδαίμων καὶ ὁ σπουδαῖος βίος, ὥστ' οὐκ ἀναγκαῖον τὸν αὐτόν εἶναι, διότι ἄμφω αἰρετώτατοι, ἀλλὰ τὸν ἕτερον ὑπὸ τὸν ἕτερον.

Πάλιν σκοπεῖν εἰ ὧ θάτερον ταῦτόν, καὶ θάτερον· εἰ γὰρ μὴ ἀμφοτέρα τῷ αὐτῷ ταῦτά, δῆλον ὅτι οὐδ' ἀλλήλοις.

Ἔτι ἐκ τῶν τούτοις συμβεβηκότων καὶ οἷς ταῦτα συμβέβηκεν ἐπισκοπεῖν· ὅσα γὰρ θατέρω συμβέβηκε, καὶ θατέρω δεῖ συμβεβηκέναι, καὶ οἷς θάτερον αὐτῶν συμβέβηκε, καὶ θάτερον δεῖ συμβεβηκέναι. εἰ δέ τι τούτων διαφωνεῖ, δῆλον ὅτι οὐ ταῦτά.

Ὅρᾶν δὲ καὶ εἰ μὴ ἐν ἐνὶ γένει κατηγορίας ἀμφοτέρω, ἀλλὰ τὸ μὲν ποιὸν τὸ δὲ ποσὸν ἢ πρὸς τι δηλοῖ. πάλιν εἰ [152b] τὸ γένος ἑκατέρου μὴ ταυτόν, ἀλλὰ τὸ μὲν ἀγαθὸν τὸ δὲ κακόν, ἢ τὸ μὲν ἀρετὴ τὸ δ' ἐπιστήμη. ἢ εἰ τὸ μὲν γένος ταυτόν, αἱ δὲ διαφοραὶ μὴ αἱ αὐταὶ ἑκατέρου κατηγοροῦνται, ἀλλὰ τοῦ μὲν ὅτι θεωρητικὴ ἐπιστήμη, τοῦ δ' ὅτι πρακτικὴ. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

Ἔτι ἐκ τοῦ μᾶλλον, εἰ τὸ μὲν δέχεται τὸ μᾶλλον τὸ δὲ μή, ἢ εἰ ἄμφω μὲν δέχεται μὴ ἅμα δέ· καθάπερ ὁ μᾶλλον ἔρων οὐ μᾶλλον ἐπιθυμεῖ τῆς συνουσίας, ὥστ' οὐ ταυτόν ἔρων καὶ ἐπιθυμία συνουσίας.

Ἔτι ἐκ τῆς προσθέσεως, εἰ τῷ αὐτῷ ἑκάτερον προστιθέμενον μὴ ποιεῖ τὸ ὅλον ταυτόν. ἢ εἰ τοῦ αὐτοῦ ἀφ' ἑκατέρου ἀφαιρεθέντος τὸ λοιπὸν ἕτερον, οἷον εἰ διπλάσιον ἡμίσεος καὶ πολλαπλάσιον ἡμίσεος ταυτόν ἔφησεν εἶναι. ἀφαιρεθέντος γὰρ ἀφ' ἑκατέρου τοῦ ἡμίσεος τὰ λοιπὰ ταυτόν ἔδει δηλοῦν· οὐ δηλοῖ δέ· τὸ γὰρ διπλάσιον καὶ πολλαπλάσιον οὐ ταυτόν δηλοῖ.

Σκοπεῖν δὲ μὴ μόνον εἰ ἤδη τι συμβαίνει ἀδύνατον διὰ τῆς θέσεως, ἀλλὰ καὶ εἰ δυνατόν ἐξ ὑποθέσεως ὑπάρξει, καθάπερ τοῖς τὸ κενὸν καὶ τὸ πλήρες ἀέρος ταυτόν φάσκουσιν· δῆλον γὰρ ὅτι ἐὰν ἐξέλθῃ ὁ ἀήρ, κενὸν μὲν οὐχ ἦττον ἀλλὰ μᾶλλον ἔσται, πλήρες δ' ἀέρος οὐκέτι ἔσται. ὥστε ὑποτεθέντος τινὸς εἴτε ψευδοῦς εἴτ' ἀληθοῦς (οὐδὲν γὰρ διαφέρει) τὸ μὲν ἕτερον ἀναιρεῖται αὐτῶν, τὸ δ' ἕτερον οὐ. ὥστ' οὐ ταυτόν.

Καθόλου δ' εἰπεῖν ἐκ τῶν ὁπωσοῦν ἑκατέρου κατηγορουμένων καὶ ὧν ταῦτα κατηγορεῖται σκοπεῖν εἴ που διαφωνεῖ· ὅσα γὰρ θατέρου κατηγορεῖται, καὶ θατέρου κατηγορεῖσθαι δεῖ, καὶ ὧν θάτερον κατηγορεῖται, καὶ θάτερον κατηγορεῖσθαι δεῖ.

Ἔτι ἐπεὶ πολλαχῶς τὸ ταυτόν λέγεται, σκοπεῖν εἰ καθ' ἕτερόν τινα τρόπον ταῦτά ἐστιν· τὰ γὰρ εἶδει ἢ γένει ταῦτά ἢ οὐκ ἀνάγκῃ ἢ οὐκ ἐνδέχεται ἀριθμῷ ταῦτά εἶναι· ἐπισκοποῦμεν δὲ πότερον οὕτω ταῦτά ἢ οὐχ οὕτως.

Ἔτι εἰ δυνατόν θάτερον ἄνευ θατέρου εἶναι· οὐ γὰρ ἂν εἴη ταυτόν.

Οἱ μὲν οὖν πρὸς τὸ ταῦτόν τόποι τοσοῦτοι λέγονται. δῆλον δ' ἐκ τῶν εἰρημένων ὅτι ἅπαντες οἱ πρὸς τὸ ταῦτόν ἀνασκευαστικοὶ τόποι καὶ πρὸς ὅρον χρήσιμοι, καθάπερ ἔμπροσθεν εἴρηται· εἰ γὰρ μὴ ταῦτόν δηλοῖ τό τ' ὄνομα καὶ ὁ λόγος, [153a] δῆλον ὅτι οὐκ ἂν εἴη ὁρισμὸς ὁ ἀποδοθεὶς λόγος. τῶν δὲ κατασκευαστικῶν τόπων οὐδεὶς χρήσιμος πρὸς ὅρον· οὐ γὰρ ἀπόχρη δεῖξαι ταῦτόν τὸ ὑπὸ τὸν λόγον καὶ τοῦνομα πρὸς τὸ κατασκευάσαι ὅτι ὁρισμός, ἀλλὰ καὶ τὰ ἄλλα πάντα δεῖ ἔχειν τὰ παρηγγελμένα τὸν ὁρισμόν.

Ἀναιρεῖν μὲν οὖν ὅρον οὕτως καὶ διὰ τούτων ἀεὶ πειρατέον. ἐὰν δὲ κατασκευάζειν βουλώμεθα, πρῶτον μὲν εἰδέναι δεῖ ὅτι οὐδεὶς ἢ ὀλίγοι τῶν διαλεγόμενων ὅρον συλλογίζονται, ἀλλὰ πάντες ἀρχὴν τὸ τοιοῦτον λαμβάνουσιν, οἷον οἷ τε περὶ γεωμετρίαν καὶ ἀριθμοὺς καὶ τὰς ἄλλας τὰς τοιαύτας μαθήσεις. εἴθ' ὅτι δι' ἀκριβείας μὲν ἄλλης ἐστὶ πραγματείας ἀποδοῦναι καὶ τί ἐστὶν ὅρος καὶ πῶς ὀρίζεσθαι δεῖ, νῦν δ' ὅσον ἱκανὸν πρὸς τὴν παροῦσαν χρεῖαν, ὥστε τοσοῦτον μόνον λεκτέον ὅτι δυνατόν γενέσθαι ὁρισμοῦ καὶ τοῦ τί ἦν εἶναι συλλογισμόν. εἰ γὰρ ἐστὶν ὅρος λόγος ὁ τὸ τί ἦν εἶναι τῷ πράγματι δηλῶν, καὶ δεῖ τὰ ἐν τῷ ὅρῳ κατηγορούμενα ἐν τῷ τί ἐστὶ τοῦ πράγματος μόνον κατηγορεῖσθαι, κατηγορεῖται δ' ἐν τῷ τί ἐστὶ τὰ γένη καὶ αἱ διαφοραί, φανερόν ὡς εἴ τις λάβοι ταῦτα ἅ μόνον ἐν τῷ τί ἐστὶ τοῦ πράγματος κατηγορεῖται, ὅτι ὁ ταῦτα ἔχων λόγος ὅρος ἐξ ἀνάγκης ἂν εἴη· οὐ γὰρ ἐνδέχεται ἕτερον εἶναι ὅρον, ἐπειδὴ οὐδὲν ἕτερον ἐν τῷ τί ἐστὶ τοῦ πράγματος κατηγορεῖται.

Ὅτι μὲν οὖν ἐγχωρεῖ συλλογισμόν ὅρου γενέσθαι, φανερόν. ἐκ τίνων δὲ δεῖ κατασκευάζειν, διώρισται μὲν ἐν ἑτέροις ἀκριβέστερον, πρὸς δὲ τὴν προκειμένην μέθοδον οἱ αὐτοὶ τόποι χρήσιμοι. σκεπτέον γὰρ ἐπὶ τῶν ἐναντίων καὶ τῶν ἄλλων τῶν ἀντικειμένων, καὶ ὅλους τοὺς λόγους καὶ κατὰ μέρος ἐπισκοποῦντα· εἰ γὰρ ὁ ἀντικείμενος τοῦ ἀντικειμένου, καὶ τὸν εἰρημένον τοῦ προκειμένου ἀνάγκη εἶναι. ἐπεὶ δὲ τῶν ἐναντίων πλείους συμπλοκαί, ληπτέον τῶν ἐναντίων οἰοῦν ἂν μάλιστα φανερόν ἢ ὁ ἐναντίος ὁρισμός. ὅλους μὲν οὖν τοὺς λόγους καθάπερ εἴρηται σκεπτέον, κατὰ μέρος δ' ὡδε. πρῶτον μὲν οὖν ὅτι τὸ ἀποδοθὲν γένος ὀρθῶς ἀποδέδοται. εἰ γὰρ τὸ ἐναντίον ἐν τῷ ἐναντίῳ, τὸ δὲ προκείμενον μὴ ἔστιν ἐν τῷ αὐτῷ, δῆλον ὅτι ἐν τῷ ἐναντίῳ ἂν εἴη, ἐπειδὴ ἀνάγκη τὰ ἐναντία ἐν τῷ αὐτῷ ἢ ἐν τοῖς ἐναντίοις γένεσιν εἶναι. καὶ τὰς διαφορὰς δὲ τὰς ἐναντίας τῶν ἐναντίων ἀξιοῦμεν κατηγορεῖσθαι, καθάπερ λευκοῦ καὶ μέλανος· τὸ μὲν γὰρ διακριτικὸν τὸ [153b] δὲ συγκριτικὸν ὅψεως. ὥστ' εἰ τοῦ ἐναντίου αἱ ἐναντίαι κατηγοροῦνται, τοῦ προκειμένου αἱ ἀποδοθεῖσαι κατηγοροῦντ' ἅν, ὥστ' ἐπεὶ καὶ τὸ γένος καὶ αἱ διαφοραὶ ὀρθῶς ἀποδέδονται, δῆλον ὅτι ὁρισμὸς ἂν εἴη ὁ

ἀποδοθείς. ἢ οὐκ ἀναγκαῖον τῶν ἐναντίων τὰς ἐναντίας διαφορὰς κατηγορεῖσθαι, ἂν μὴ ἐν τῷ αὐτῷ γένει ἢ τὰ ἐναντία, ὧν δὲ τὰ γένη ἐναντία, οὐδὲν κωλύει τὴν αὐτὴν διαφορὰν κατ' ἀμφοῖν λέγεσθαι, οἷον κατὰ δικαιοσύνης καὶ ἀδικίας· τὸ μὲν γὰρ ἀρετὴ τὸ δὲ κακία ψυχῆς, ὥστε τὸ ψυχῆς διαφορὰ ἐν ἀμφοῖν λέγεται, ἐπειδὴ καὶ σώματος ἔστιν ἀρετὴ καὶ κακία. ἀλλ' οὖν τοῦτό γ' ἀληθές, ὅτι τῶν ἐναντίων ἢ ἐναντίαι ἢ αἱ αὐταὶ διαφοραὶ εἰσιν. εἰ οὖν τοῦ ἐναντίου ἢ ἐναντία κατηγορεῖται, τούτου δὲ μή, δῆλον ὅτι ἢ εἰρημένη τούτου ἂν κατηγοροῖτο. καθόλου δ' εἰπεῖν, ἐπεὶ ὁ ὁρισμός ἐστιν ἐκ γένους καὶ διαφορῶν, ἂν ὁ τοῦ ἐναντίου ὁρισμὸς φανερός ᾖ, καὶ ὁ τοῦ προκειμένου ὁρισμὸς φανερός ἔσται. ἐπεὶ γὰρ τὸ ἐναντίον ἢ ἐν τῷ αὐτῷ γένει ἢ ἐν τῷ ἐναντίῳ, ὁμοίως δὲ καὶ αἱ διαφοραὶ ἢ αἱ ἐναντίαι τῶν ἐναντίων ἢ αἱ αὐταὶ κατηγοροῦνται, δῆλον ὅτι τοῦ προκειμένου ἦτοι τὸ αὐτὸ γένος ἂν κατηγοροῖτο ὅπερ καὶ τοῦ ἐναντίου, αἱ δὲ διαφοραὶ ἐναντίαι, ἢ ἅπασαι ἢ τινές, αἱ δὲ λοιπαὶ αἱ αὐταί· ἢ ἀνάπαλιν αἱ μὲν διαφοραὶ αἱ αὐταὶ τὰ δὲ γένη ἐναντία· ἢ ἄμφω ἐναντία, καὶ τὰ γένη καὶ αἱ διαφοραὶ. ἀμφοτέρω γὰρ ταῦτα εἶναι οὐκ ἐνδέχεται· εἰ δὲ μή, ὁ αὐτὸς ὁρισμὸς τῶν ἐναντίων ἔσται.

Ἔτι ἐκ τῶν πτώσεων καὶ τῶν συστοίχων· ἀνάγκη γὰρ ἀκολουθεῖν τὰ γένη τοῖς γένεσι καὶ τοὺς ὅρους τοῖς ὅροις. οἷον εἰ ἡ λήθη ἐστὶν ἀποβολὴ ἐπιστήμης, καὶ τὸ ἐπιλανθάνεσθαι ἀποβάλλειν ἐπιστήμην ἔσται καὶ τὸ ἐπιλελησθαι ἀποβεβληκέναι ἐπιστήμην. ἐνὸς οὖν ὁποιοῦν τῶν εἰρημένων ὁμολογηθέντος ἀνάγκη καὶ τὰ λοιπὰ ὁμολογεῖσθαι. ὁμοίως δὲ καὶ εἰ ἡ φθορὰ διάλυσις οὐσίας, καὶ τὸ φθεῖρεσθαι διαλύεσθαι οὐσίαν καὶ τὸ φθαρτικῶς διαλυτικῶς, εἴ τε τὸ φθαρτικὸν διαλυτικὸν οὐσίας, καὶ ἡ φθορὰ διάλυσις οὐσίας. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ὥσθ' ἐνὸς ὁποιοῦν ληφθέντος καὶ τὰ λοιπὰ πάντα ὁμολογεῖται.

Καὶ ἐκ τῶν ὁμοίως δ' ἐχόντων πρὸς ἄλληλα. εἰ γὰρ τὸ ὑγιεινὸν ποιητικὸν ὑγιείας, καὶ τὸ εὐεκτικὸν ποιητικὸν εὐεξίας ἔσται καὶ τὸ ὠφέλιμον ποιητικὸν ἀγαθοῦ. ὁμοίως [154a] γὰρ ἕκαστον τῶν εἰρημένων πρὸς τὸ οἰκεῖον τέλος ἔχει, ὥστ' εἰ ἐνὸς αὐτῶν ὁρισμὸς ἐστὶ τὸ ποιητικὸν εἶναι τοῦ τέλους, καὶ τῶν λοιπῶν ἕκαστου οὗτος ἂν εἴη ὁρισμὸς.

Ἔτι ἐκ τοῦ μᾶλλον καὶ τοῦ ὁμοίως, ὅσαχῶς ἐνδέχεται κατασκευάσαι δύο πρὸς δύο συγκρίνοντα. οἷον εἰ μᾶλλον ὅδε τοῦδε ἢ ὅδε τοῦδε ὁρισμὸς, ὁ δὲ ἥττον ὁρισμὸς, καὶ ὁ μᾶλλον. καὶ εἰ ὁμοίως ὅδε τοῦδε καὶ ὅδε τοῦδε, εἰ ὁ ἕτερος τοῦ ἑτέρου, καὶ ὁ λοιπὸς τοῦ λοιποῦ. ἐνὸς δ' ὁρισμοῦ πρὸς δύο συγκρινομένου ἢ δύο ὁρισμῶν πρὸς ἓν, οὐδὲν χρήσιμος ἢ ἐκ τοῦ μᾶλλον



ἐπίσκεψις· οὔτε γὰρ ἓνα δυοῖν οὔτε δύο τοῦ αὐτοῦ ὅρους δυνατόν ἐστὶν εἶναι.

Εἰσὶ δὲ [καὶ] ἐπικαιρότατοι τῶν τόπων οἳ τε νῦν εἰρημένοι καὶ οἱ ἐκ τῶν συστοίχων καὶ τῶν πτώσεων. διὸ καὶ δεῖ μάλιστα κατέχειν καὶ προχείρους ἔχειν τούτους· χρησιμώτατοι γὰρ πρὸς πλεῖστα. καὶ τῶν ἄλλων δὲ τοὺς μάλιστα κοινούς· οὗτοι γὰρ ἐνεργότατοι τῶν λοιπῶν, οἷον τό τ' ἐπιβλέπειν ἐπὶ τὰ καθ' ἕκαστα καὶ τὸ ἐπὶ τῶν εἰδῶν σκοπεῖν εἰ ἐφαρμόττει ὁ λόγος, ἐπειδὴ συνώνυμον τὸ εἶδος ἐστίν. ἔστι δὲ χρήσιμον τὸ τοιοῦτον πρὸς τοὺς τιθεμένους ιδέας εἶναι, καθάπερ πρότερον εἴρηται. ἔτι εἰ μεταφέρων εἴρηκε τοῦνομα ἢ αὐτὸ αὐτοῦ κατηγορήκεν ὡς ἕτερον. καὶ εἴ τις ἄλλος κοινὸς καὶ ἐνεργὸς τῶν τόπων ἐστί, τούτῳ χρηστέον.

Ὅτι δὲ χαλεπώτερον κατασκευάζειν ἢ ἀνασκευάζειν ὅρον, ἐκ τῶν μετὰ ταῦτα ῥηθησομένων φανερόν. καὶ γὰρ ἰδεῖν αὐτὸν καὶ λαβεῖν παρὰ τῶν ἐρωτωμένων τὰς τοιαύτας προτάσεις οὐκ εὐπετές, οἷον ὅτι τῶν ἐν τῷ ἀποδοθέντι λόγῳ τὸ μὲν γένος τὸ δὲ διαφορά, καὶ ὅτι ἐν τῷ τί ἐστὶ τὸ γένος καὶ αἱ διαφοραὶ κατηγοροῦνται· ἄνευ δὲ τούτων ἀδύνατον ὀρισμοῦ γενέσθαι συλλογισμόν. εἰ γὰρ τινα καὶ ἄλλα ἐν τῷ τί ἐστὶ τοῦ πράγματος κατηγορεῖται, ἄδηλον πότερον ὁ ῥηθεὶς ἢ ἕτερος αὐτοῦ ὀρισμὸς ἐστίν, ἐπειδὴ ὀρισμὸς ἐστὶ λόγος ὁ τὸ τί ἦν εἶναι σημαίνων. δῆλον δὲ καὶ ἐκ τῶνδε. ῥᾶον γὰρ ἐν συμπεράνασθαι ἢ πολλά. ἀναιροῦντι μὲν οὖν ἀπόχρη πρὸς ἐν διαλεγῆναι· ἐν γὰρ ὁποιοῦν ἀνασκευάσαντες ἀνηρηκότες ἐσόμεθα τὸν ὅρον· κατασκευάζοντι δὲ πάντα ἀνάγκη συμβιβάζειν ὅτι ὑπάρχει τὰ ἐν τῷ ὅρῳ. ἔτι κατασκευάζοντι μὲν καθόλου οἰστέον συλλογισμόν· δεῖ γὰρ κατὰ [154b] παντὸς οὗ τοῦνομα «κατηγορεῖται» κατηγορεῖσθαι τὸν ὅρον, καὶ ἔτι πρὸς τούτοις ἀντιστρέφειν, εἰ μέλλει ἴδιος εἶναι ὁ ἀποδοθεὶς ὅρος. ἀνασκευάζοντα δ' οὐκέτι ἀνάγκη δεῖξαι τὸ καθόλου· ἀπόχρη γὰρ τὸ δεῖξαι ὅτι οὐκ ἀληθεύεται περὶ τινος τῶν ὑπὸ τοῦνομα ὁ λόγος. εἴ τε καὶ καθόλου δέοι ἀνασκευάσαι, οὐδ' ὥς τὸ ἀντιστρέφειν ἀναγκαῖον ἐπὶ τοῦ ἀνασκευάζειν· ἀπόχρη γὰρ ἀνασκευάζοντι καθόλου τὸ δεῖξαι ὅτι κατ' οὐδενὸς ὧν τοῦνομα κατηγορεῖται καὶ ὁ λόγος κατηγορεῖται. τὸ δ' ἀνάπαλιν οὐκ ἀναγκαῖον προσδεῖξαι, ὅτι καθ' ὧν ὁ λόγος μὴ κατηγορεῖται τοῦνομα κατηγορεῖται. ἔτι εἰ καὶ παντὶ ὑπάρχει τῷ ὑπὸ τοῦνομα μὴ μόνῳ δέ, ἀνηρημένος γίνεται ὁ ὀρισμός.

Ὅμοίως δὲ καὶ περὶ τὸ ἴδιον καὶ τὸ γένος ἔχει· ἐν ἀμφοτέροις γὰρ ἀνασκευάζειν ἢ κατασκευάζειν ῥᾶον. περὶ μὲν οὖν τοῦ ἰδίου φανερόν ἐκ τῶν εἰρημένων· ὡς γὰρ ἐπὶ τὸ πολὺ ἐν συμπλοκῇ τὸ ἴδιον ἀποδίδεται, ὥστ'

ἀνασκευάζειν μὲν ἔστιν ἐν ἀνελόντα, κατασκευάζοντι δὲ ἀνάγκη πάντα συλλογίζεσθαι, σχεδὸν δὲ καὶ τὰ λοιπὰ πάντα, ὅσα πρὸς τὸν ὀρισμὸν, καὶ πρὸς τὸ ἴδιον ἀρμόσει λέγεσθαι (παντί τε γὰρ δεῖ τῷ ὑπὸ τοῦνομα τὸν κατασκευάζοντα δεικνύναι ὅτι ὑπάρχει, ἀνασκευάζοντι δ' ἀπόχρη ἐνὶ δεῖξαι μὴ ὑπάρχον· εἴ τε καὶ παντὶ ὑπάρχει μὴ μόνῳ δέ, καὶ οὕτως ἀνεσκευασμένον γίνεται, καθάπερ ἐπὶ τοῦ ὀρισμοῦ ἐλέγετο)· περὶ δὲ τοῦ γένους, ὅτι κατασκευάζειν μὲν ἀνάγκη μοναχῶς παντὶ δείξαντα ὑπάρχον, ἀνασκευάζεται δὲ διχῶς· καὶ γὰρ εἰ μηδενὶ καὶ εἰ τινὶ δέδεικται μὴ ὑπάρχον, ἀνήρηται τὸ ἐν ἀρχῇ. ἔτι κατασκευάζοντι μὲν οὐκ ἀπόχρη ὅτι ὑπάρχει δεῖξαι, ἀλλὰ καὶ ὅτι ὡς γένος ὑπάρχει δεικτέον· ἀνασκευάζοντι δ' ἱκανὸν τὸ δεῖξαι μὴ ὑπάρχον ἢ τινὶ ἢ παντί. ἔοικε δ', ὥσπερ καὶ ἐν τοῖς ἄλλοις τὸ διαφθεῖραι τοῦ ποιῆσαι ῥᾶον, οὕτω καὶ ἐπὶ τούτων τὸ ἀνασκευάσαι τοῦ κατασκευάσαι.

Ἐπὶ δὲ τοῦ συμβεβηκότος τὸ μὲν καθόλου ῥᾶον ἀνασκευάζειν ἢ κατασκευάζειν· κατασκευάζοντι μὲν γὰρ δεικτέον ὅτι παντί, ἀνασκευάζοντι δ' ἀπόχρη ἐνὶ δεῖξαι μὴ ὑπάρχον. τὸ δ' ἐπὶ μέρους ἀνάπαλιν ῥᾶον κατασκευάσαι ἢ ἀνασκευάσαι· κατασκευάζοντι μὲν γὰρ ἀπόχρη δεῖξαι [155a] τινὶ ὑπάρχον, ἀνασκευάζοντι δὲ δεικτέον ὅτι οὐδενὶ ὑπάρχει.

Φανερόν δὲ καὶ ὅτι πάντων ῥᾶστον ὅρον ἀνασκευάσαι· πλεῖστα γὰρ ἐν αὐτῷ τὰ δεδομένα πολλῶν εἰρημένων, ἐκ δὲ τῶν πλειόνων θᾶττον γίνεται συλλογισμός· εἰκὸς γὰρ ἐν τοῖς πολλοῖς μᾶλλον ἢ ἐν τοῖς ὀλίγοις ἀμάρτημα γίνεσθαι. ἔτι πρὸς μὲν ὅρον ἐνδέχεται καὶ διὰ τῶν ἄλλων ἐπιχειρεῖν· εἴτε γὰρ μὴ ἴδιος ὁ λόγος, εἴτε μὴ γένος τὸ ἀποδοθὲν, εἴτε μὴ ὑπάρχει τι τῶν ἐν τῷ λόγῳ, ἀνηρημένος γίνεται ὁ ὀρισμός. πρὸς δὲ τὰ ἄλλα οὐτε τὰ ἐκ τῶν ὅρων οὐτε τὰ ἄλλα ἐνδέχεται πάντ' ἐπιχειρεῖν· μόνα γὰρ τὰ πρὸς τὸ συμβεβηκὸς κοινὰ πάντων τῶν εἰρημένων ἐστίν. ὑπάρχειν μὲν γὰρ δεῖ ἕκαστον τῶν εἰρημένων· εἰ δὲ μὴ ὡς ἴδιον ὑπάρχει τὸ γένος, οὐδέπω ἀνήρηται τὸ γένος· ὁμοίως δὲ καὶ τὸ ἴδιον οὐκ ἀναγκαῖον ὡς γένος, οὐδὲ τὸ συμβεβηκὸς ὡς γένος ἢ ἴδιον, ἀλλ' ὑπάρχειν μόνον. ὥστ' οὐ δυνατὸν ἐκ τῶν ἐτέρων πρὸς τὰ ἕτερα ἐπιχειρεῖν ἀλλ' ἢ ἐπὶ τοῦ ὀρισμοῦ. δῆλον οὖν ὅτι ῥᾶστον πάντων ὅρον ἀναιρεῖν, κατασκευάζειν δὲ χαλεπώτατον· ἐκεῖνά τε γὰρ δεῖ πάντα συλλογίσασθαι (καὶ γὰρ ὅτι ὑπάρχει τὰ εἰρημένα καὶ ὅτι γένος τὸ ἀποδοθὲν καὶ ὅτι ἴδιος ὁ λόγος), καὶ ἔτι παρὰ ταῦτα ὅτι δηλοῖ τὸ τί ἦν εἶναι ὁ λόγος, καὶ τοῦτο καλῶς δεῖ πεποιηκέναι.

Τῶν δ' ἄλλων τὸ ἴδιον μάλιστα τοιοῦτον· ἀναιρεῖν μὲν γὰρ ῥᾶον διὰ τὸ ἐκ πολλῶν ὡς ἐπὶ τὸ πολὺ· κατασκευάζειν δὲ χαλεπώτατον, ὅτι τε πολλὰ δεῖ συμβιβάσαι, καὶ πρὸς τούτῳ ὅτι μόνῳ ὑπάρχει καὶ ἀντικατηγορεῖται τοῦ

πράγματος.

Ῥᾶστον δὲ πάντων κατασκευάσαι τὸ συμβεβηκός· ἐν μὲν γὰρ τοῖς ἄλλοις οὐ μόνον ὑπάρχον, ἀλλὰ καὶ ὅτι οὕτως ὑπάρχει, δεικτέον· ἐπὶ δὲ τοῦ συμβεβηκότος ὅτι ὑπάρχει μόνον ἱκανὸν δεῖξαι. ἀνασκευάζειν δὲ χαλεπώτατον τὸ συμβεβηκός, ὅτι ἐλάχιστα ἐν αὐτῷ δέδοται· οὐ γὰρ προσσημαίνεται ἐν τῷ συμβεβηκότι πῶς ὑπάρχει. ὥστ' ἐπὶ μὲν τῶν ἄλλων διχῶς ἔστιν ἀνελεῖν, ἢ δείξαντα ὅτι οὐχ ὑπάρχει ἢ ὅτι οὐχ οὕτως ὑπάρχει· ἐπὶ δὲ τοῦ συμβεβηκότος οὐκ ἔστιν ἀνελεῖν ἀλλ' ἢ δείξαντα ὅτι οὐχ ὑπάρχει.

Οἱ μὲν οὖν τόποι δι' ὧν εὐπορήσομεν πρὸς ἕκαστα τῶν προβλημάτων ἐπιχειρεῖν σχεδὸν ἱκανῶς ἐξηρίθμηνται.



[155b] Μετὰ δὲ ταῦτα περὶ τάξεως καὶ πῶς δεῖ ἐρωτᾶν λεκτέον. δεῖ δὲ πρῶτον μὲν ἐρωτηματίζειν μέλλοντα τὸν τόπον εὐρεῖν ὅθεν ἐπιχειρητέον, δεύτερον δὲ ἐρωτηματίσαι καὶ τάξαι καθ' ἕκαστα πρὸς ἑαυτόν, τὸ δὲ λοιπὸν καὶ τρίτον εἰπεῖν ἤδη ταῦτα πρὸς ἕτερον. μέχρι μὲν οὖν τοῦ εὐρεῖν τὸν τόπον ὁμοίως τοῦ φιλοσόφου καὶ τοῦ διαλεκτικοῦ ἡ σκέψις, τὸ δ' ἤδη ταῦτα τάττειν καὶ ἐρωτηματίζειν ἴδιον τοῦ διαλεκτικοῦ· πρὸς ἕτερον γὰρ πᾶν τὸ τοιοῦτον. τῷ δὲ φιλοσόφῳ καὶ ζητοῦντι καθ' ἑαυτὸν οὐδὲν μέλει, ἐὰν ἀληθῆ μὲν ἢ καὶ γνῶριμα δι' ὧν ὁ συλλογισμός, μὴ θῆ δ' αὐτὰ ὁ ἀποκρινόμενος διὰ τὸ σύνεγγυς εἶναι τοῦ ἐξ ἀρχῆς καὶ προορᾶν τὸ συμβησόμενον, ἀλλ' ἴσως κἂν σπουδάσειεν ὅτι μάλιστα γνῶριμα καὶ σύνεγγυς εἶναι τὰ ἀξιώματα· ἐκ τούτων γὰρ οἱ ἐπιστημονικοὶ συλλογισμοί.

Τοὺς μὲν οὖν τόπους ὅθεν δεῖ λαμβάνειν, εἴρηται πρότερον. περὶ τάξεως δὲ καὶ τοῦ ἐρωτηματίσαι λεκτέον διελόμενον τὰς προτάσεις, ὅσαι ληπτέαι παρὰ τὰς ἀναγκαίας· ἀναγκαῖαι δὲ λέγονται δι' ὧν ὁ συλλογισμὸς γίνεται. αἱ δὲ παρὰ ταύτας λαμβανόμεναι τέτταρές εἰσιν· ἢ γὰρ ἐπαγωγῆς χάριν «καὶ» τοῦ δοθῆναι τὸ καθόλου, ἢ εἰς ὄγκον τοῦ λόγου, ἢ πρὸς κρύψιν τοῦ συμπεράσματος, ἢ πρὸς τὸ σαφέστερον εἶναι τὸν λόγον. παρὰ δὲ ταύτας οὐδεμίαν ληπτέον πρότασιν, ἀλλὰ διὰ τούτων αὖξιν καὶ ἐρωτηματίζειν πειρατέον. εἰσὶ δ' αἱ πρὸς κρύψιν ἀγῶνος χάριν· ἀλλ' ἐπειδὴ πᾶσα ἡ τοιαύτη πραγματεία πρὸς ἕτερόν ἐστιν, ἀνάγκη καὶ ταύταις χρῆσθαι.

Τὰς μὲν οὖν ἀναγκαίας, δι' ὧν ὁ συλλογισμὸς, οὐκ εὐθὺς αὐτάς προτατέον, ἀλλ' ἀποστατέον ὅτι ἀνωτάτω, οἷον μὴ τῶν ἐναντίων ἀξιοῦντα

τὴν αὐτὴν ἐπιστήμην, ἂν τοῦτο βούληται λαβεῖν, ἀλλὰ τῶν ἀντικειμένων· τεθέντος γὰρ τούτου καὶ ὅτι τῶν ἐναντίων ἡ αὐτὴ συλλογιεῖται, ἐπειδὴ ἀντικείμενα τὰ ἐναντία. ἂν δὲ μὴ τιθῇ, δι' ἐπαγωγῆς ληπτέον προτείνοντα ἐπὶ τῶν κατὰ μέρος ἐναντίων. ἢ γὰρ διὰ συλλογισμοῦ ἢ δι' ἐπαγωγῆς τὰς ἀναγκαίας ληπτέον, ἢ τὰς μὲν ἐπαγωγῇ τὰς δὲ συλλογισμῷ, ὅσαι δὲ λίαν προφανεῖς εἴσι, καὶ αὐτὰς προτείνοντα· ἀδηλότερόν τε γὰρ ἀεὶ ἐν τῇ ἀποστάσει [156a] καὶ τῇ ἐπαγωγῇ τὸ συμβησόμενον, καὶ ἅμα τὸ αὐτὰς τὰς χρησίμους προτείνει μὴ δυνάμενον ἐκείνως λαβεῖν ἔτοιμον. τὰς δὲ παρὰ ταύτας εἰρημένας ληπτέον μὲν τούτων χάριν, ἐκάστη δ' ὧδε χρηστέον, ἐπάγοντα μὲν ἀπὸ τῶν καθ' ἕκαστον ἐπὶ τὸ καθόλου καὶ ἀπὸ τῶν γνωρίμων ἐπὶ τὰ ἄγνωστα· γνώριμα δὲ μᾶλλον τὰ κατὰ τὴν αἴσθησιν, ἢ ἀπλῶς ἢ τοῖς πολλοῖς. κρύπτοντα δὲ προσυλλογίζεσθαι δι' ὧν ὁ συλλογισμὸς τοῦ ἐξ ἀρχῆς μέλλει γίνεσθαι, καὶ ταῦτα ὡς πλεῖστα. εἴη δ' ἂν τοῦτο, εἴ τις μὴ μόνον τὰς ἀναγκαίας ἀλλὰ καὶ τῶν πρὸς ταύτας χρησίμων τινὰ συλλογίζοιτο. ἔτι τὰ συμπεράσματα μὴ λέγειν ἄλλ' ὕστερον ἀθρόα συλλογίζεσθαι· οὕτω γὰρ ἂν πορρωτάτῳ ἀποστήσειε τῆς ἐξ ἀρχῆς θέσεως. καθόλου δ' εἰπεῖν οὕτω δεῖ ἐρωτᾶν τὸν κρυπτικῶς πυνθανόμενον, ὥστ' ἠρωτημένου τοῦ παντὸς λόγου καὶ εἰπόντος τὸ συμπέρασμα ζητεῖσθαι τὸ διὰ τί. τοῦτο δ' ἔσται μάλιστα διὰ τοῦ λεχθέντος ἔμπροσθεν τρόπου· μόνου γὰρ τοῦ ἐσχάτου ῥηθέντος συμπεράσματος ἄδηλον πῶς συμβαίνει, διὰ τὸ μὴ προορᾶν τὸν ἀποκρινόμενον ἐκ τίνων συμβαίνει, μὴ διαρθρωθέντων τῶν προτέρων συλλογισμῶν. ἥκιστα δ' ἂν διαρθροῖτο ὁ συλλογισμὸς τοῦ συμπεράσματος μὴ τὰ τούτου λήμματα ἡμῶν τιθέντων, ἀλλ' ἐκεῖνα ὅφ' ὧν ὁ συλλογισμὸς γίνεται.

Χρήσιμον δὲ καὶ τὸ μὴ συνεχῇ τὰ ἀξιώματα λαμβάνειν ἐξ ὧν οἱ συλλογισμοί, ἀλλ' ἐναλλάξ τὸ πρὸς ἕτερον καὶ ἕτερον συμπέρασμα· τιθεμένων γὰρ τῶν οἰκείων παρ' ἄλληλα μᾶλλον τὸ συμβησόμενον ἐξ αὐτῶν προφανές.

Χρὴ δὲ καὶ ὀρισμῷ λαμβάνειν, ἐφ' ὧν ἐνδέχεται, τὴν καθόλου πρότασιν μὴ ἐπ' αὐτῶν ἀλλ' ἐπὶ τῶν συστοίχων. παραλογίζονται γὰρ ἑαυτούς, ὅταν ἐπὶ τοῦ συστοίχου ληφθῇ ὁ ὀρισμός, ὡς οὐ τὸ καθόλου συγχωροῦντες, οἷον εἰ δέοι λαβεῖν ὅτι ὁ ὀργιζόμενος ὀρέγεται τιμωρίας διὰ φαινομένην ὀλιγωρίαν, ληφθεῖν δ' ἡ ὀργὴ ὄρεξις εἶναι τιμωρίας διὰ φαινομένην ὀλιγωρίαν· δῆλον γὰρ ὅτι τούτου ληφθέντος ἔχοιμεν ἂν καθόλου ὃ προαιρούμεθα. τοῖς δ' ἐπ' αὐτῶν προτείνουσι πολλάκις ἀνανεύειν συμβαίνει τὸν ἀποκρινόμενον διὰ τὸ μᾶλλον ἔχειν ἐπ' αὐτοῦ τὴν ἐνστασιν, οἷον ὅτι ὁ ὀργιζόμενος οὐκ ὀρέγεται τιμωρίας· τοῖς γὰρ γονεῦσιν ὀργιζόμεθα μὲν, οὐκ ὀρεγόμεθα δὲ τιμωρίας. ἴσως μὲν οὖν

οὐκ ἀληθῆς ἡ ἔνστασις· παρ' ἐνίων γὰρ ἱκανὴ τιμωρία τὸ λυπῆσαι μόνον καὶ [156b] ποιῆσαι μεταμέλεσθαι· οὐ μὴν ἄλλ' ἔχει τι πιθανὸν πρὸς τὸ μὴ δοκεῖν ἀλόγως ἀρνεῖσθαι τὸ προτεινόμενον. ἐπὶ δὲ τοῦ τῆς ὀργῆς ὀρισμοῦ οὐχ ὁμοίως ῥᾶδιόν ἐστιν εὐρεῖν ἔνστασιν.

Ἔτι τὸ προτείνειν μὴ ὥς δι' αὐτὸ ἄλλ' ἄλλου χάριν προτείνοντα· εὐλαβοῦνται γὰρ τὰ πρὸς τὴν θέσιν χρήσιμα. ἀπλῶς δ' εἶπεῖν ὅτι μάλιστα ποιεῖν ἄδηλον πότερον τὸ προτεινόμενον ἢ τὸ ἀντικείμενον βούλεται λαβεῖν· ἀδήλου γὰρ ὄντος τοῦ πρὸς τὸν λόγον χρησίμου μᾶλλον τὸ δοκοῦν αὐτοῖς τιθέασιν.

Ἔτι διὰ τῆς ὁμοιότητος πυνθάνεσθαι· καὶ γὰρ πιθανὸν καὶ λανθάνει μᾶλλον τὸ καθόλου. οἷον ὅτι ὥσπερ ἐπιστήμη καὶ ἄγνοια τῶν ἐναντίων ἡ αὐτή, οὕτω καὶ αἴσθησις τῶν ἐναντίων ἡ αὐτή· ἢ ἀνάπαλιν, ἐπειδὴ αἴσθησις ἡ αὐτή, καὶ ἐπιστήμη. τοῦτο δ' ἐστὶν ὅμοιον ἐπαγωγῇ, οὐ μὴν ταυτόν γε· ἐκεῖ μὲν γὰρ ἀπὸ τῶν καθ' ἕκαστα τὸ καθόλου λαμβάνεται, ἐπὶ δὲ τῶν ὁμοίων οὐκ ἔστι τὸ λαμβανόμενον τὸ καθόλου ὑφ' ὃ πάντα τὰ ὅμοιά ἐστιν.

Δεῖ δὲ καὶ αὐτόν ποτε ἑαυτῷ ἔνστασιν φέρειν· ἀνυπόπτως γὰρ ἔχουσιν οἱ ἀποκρινόμενοι πρὸς τοὺς δοκοῦντας δικαίως ἐπιχειρεῖν. χρήσιμον δὲ καὶ τὸ ἐπιλέγειν ὅτι σύνηθες καὶ λεγόμενον τὸ τοιοῦτον· ὁκνοῦσι γὰρ κινεῖν τὸ εἰωθὸς ἔνστασιν μὴ ἔχοντες, ἅμα δὲ καὶ διὰ τὸ χρῆσθαι καὶ αὐτοὶ τοῖς τοιούτοις φυλάττονται κινεῖν αὐτά. ἔτι τὸ μὴ σπουδάζειν, κἂν ὅλως χρήσιμον ᾖ· πρὸς γὰρ τοὺς σπουδάζοντας μᾶλλον ἀντιτείνουσιν. καὶ τὸ ὥς ἐν παραβολῇ προτείνειν· τὸ γὰρ δι' ἄλλο προτεινόμενον καὶ μὴ δι' αὐτὸ χρήσιμον τιθέασιν μᾶλλον. ἔτι μὴ αὐτὸ προτείνειν ὃ δεῖ ληφθῆναι, ἀλλ' ὧ τοῦτο ἔπεται ἐξ ἀνάγκης· μᾶλλον τε γὰρ συγχωροῦσι διὰ τὸ μὴ ὁμοίως ἐκ τούτου φανερόν εἶναι τὸ συμβησόμενον, καὶ ληφθέντος τούτου εἴληπται κάκεῖνο. καὶ τὸ ἐπ' ἐσχάτῳ ἐρωτᾶν ὃ μάλιστα βούλεται λαβεῖν· μάλιστα γὰρ τὰ πρῶτα ἀνανεύουσι διὰ τὸ τοὺς πλείστους τῶν ἐρωτῶντων πρῶτα λέγειν περὶ ἃ μάλιστα σπουδάζουσιν. πρὸς ἐνίους δὲ πρῶτα τὰ τοιαῦτα προτείνειν· οἱ γὰρ δύσκολοι τὰ πρῶτα μάλιστα συγχωροῦσιν, ἂν μὴ παντελῶς φανερόν ᾖ τὸ συμβησόμενον, ἐπὶ τελευτῆς δὲ δυσκολαίνουσιν. ὁμοίως δὲ καὶ ὅσοι οἶονται δριμεῖς εἶναι ἐν τῷ ἀποκρίνεσθαι· θέντες γὰρ τὰ πρῶτα ἐπὶ τέλους τερθεύονται ὥς οὐ συμβαίνοντος ἐκ τῶν κειμένων· τιθέασιν δὲ προχείρως, πιστεύοντες τῇ ἔξει καὶ ὑπολαμβάνοντες [157a] οὐδὲν πείσεσθαι. ἔτι τὸ μηκύνειν καὶ παρεμβάλλειν τὰ μηδὲν χρήσιμα πρὸς τὸν λόγον, καθάπερ οἱ ψευδογραφοῦντες· πολλῶν γὰρ ὄντων ἄδηλον ἐν ὁποίῳ τὸ ψεῦδος. διὸ καὶ λανθάνουσιν ἐνίστε οἱ ἐρωτῶντες ἐν παραβύστῳ προστιθέντες ἃ καθ' αὐτὰ

προτεινόμενα οὐκ ἂν τεθείη.

Εἰς μὲν οὖν κρύψιν τοῖς εἰρημένοις χρηστέον, εἰς δὲ κόσμον ἐπαγωγῇ καὶ διαιρέσει τῶν συγγενῶν. ἢ μὲν οὖν ἐπαγωγὴ ὁποῖόν τί ἐστι, δῆλον. τὸ δὲ διαιρεῖσθαι τοιοῦτον, οἷον ὅτι ἐπιστήμη ἐπιστήμης βελτίων ἢ τῷ ἀκριβεστέρα εἶναι ἢ τῷ βελτιόνων, καὶ ὅτι τῶν ἐπιστημῶν αἱ μὲν θεωρητικαὶ αἱ δὲ πρακτικαὶ αἱ δὲ ποιητικαί. τῶν γὰρ τοιούτων ἕκαστον συνεπικοσμεῖ μὲν τὸν λόγον, οὐκ ἀναγκαῖα δὲ ῥηθῆναι πρὸς τὸ συμπέρασμα.

Εἰς δὲ σαφήνειαν παραδείγματα καὶ παραβολὰς οἰστέον, παραδείγματα δὲ οἰκεῖα καὶ ἐξ ὧν ἴσμεν, οἷα Ὅμηρος, μὴ οἷα Χοιρίλος· οὕτω γὰρ ἂν σαφέστερον εἴη τὸ προτεινόμενον.

Χρηστέον δ' ἐν τῷ διαλέγεσθαι τῷ μὲν συλλογισμῷ πρὸς τοὺς διαλεκτικούς μᾶλλον ἢ πρὸς τοὺς πολλούς, τῇ δ' ἐπαγωγῇ τοῦναντίον πρὸς τοὺς πολλούς μᾶλλον· εἴρηται δ' ὑπὲρ τούτου καὶ πρότερον. ἔστι δὲ ἐπ' ἐνίων μὲν ἐπάγοντα δυνατόν ἐρωτῆσαι τὸ καθόλου, ἐπ' ἐνίων δ' οὐ ῥᾶδιον διὰ τὸ μὴ κεῖσθαι ταῖς ὁμοιότησιν ὄνομα πάσαις κοινόν, ἀλλ' ὅταν δέη τὸ καθόλου λαβεῖν, “οὕτως ἐπὶ πάντων τῶν τοιούτων” φασίν· τοῦτο δὲ διορίσαι τῶν χαλεπωτάτων ἐστίν, ὅποια τῶν προφερομένων τοιαῦτα καὶ ὅποια οὐ. καὶ παρὰ τοῦτο πολλάκις ἀλλήλους παρακρούονται κατὰ τοὺς λόγους, οἱ μὲν φάσκοντες ὅμοια εἶναι τὰ μὴ ὄντα ὅμοια, οἱ δ' ἀμφισβητοῦντες τὰ ὅμοια μὴ εἶναι ὅμοια. διὸ πειρατέον ἐπὶ πάντων τῶν τοιούτων ὀνοματοποιεῖν αὐτόν, ὅπως μήτε τῷ ἀποκρινομένῳ ἐξῆ ἀμφισβητεῖν ὥς οὐχ ὁμοίως τὸ ἐπιφερόμενον λέγεται, μήτε τῷ ἐρωτῶντι συκοφαντεῖν ὥς ὁμοίως λεγομένου, ἐπειδὴ πολλὰ τῶν οὐχ ὁμοίως λεγομένων ὁμοίως φαίνεται λέγεσθαι.

Ὅταν δ' ἐπάγοντος ἐπὶ πολλῶν μὴ διδῷ τὸ καθόλου, τότε δίκαιον ἀπαιτεῖν ἔνστασιν. μὴ εἰπόντα δ' αὐτὸν ἐπὶ τίνων οὕτως, οὐ δίκαιον ἀπαιτεῖν ἐπὶ τίνων οὐχ οὕτως· δεῖ γὰρ ἐπαγαγόντα πρότερον οὕτω τὴν ἔνστασιν ἀπαιτεῖν. ἀξιωτέον τε τὰς ἐνστάσεις μὴ ἐπ' αὐτοῦ τοῦ προτεινομένου φέρειν, ἐὰν μὴ ἐν μόνον ἢ τὸ τοιοῦτον, καθάπερ ἡ δυὰς τῶν ἀρτίων μόνος [157b] ἀριθμὸς πρῶτος· δεῖ γὰρ τὸν ἐνιστάμενον ἐφ' ἑτέρου τὴν ἔνστασιν φέρειν, ἢ λέγειν ὅτι τοῦτο μόνον τοιοῦτο. πρὸς δὲ τοὺς ἐνισταμένους τῷ καθόλου, μὴ ἐν αὐτῷ δὲ τὴν ἔνστασιν φέροντας ἀλλ' ἐν τῷ ὁμωνύμῳ, οἷον ὅτι ἔχοι ἂν τις τὸ μὴ αὐτοῦ χρῶμα ἢ πόδα ἢ χεῖρα (ἔχοι γὰρ ἂν ὁ ζωγράφος χρῶμα καὶ ὁ μάγειρος πόδα τὸν μὴ αὐτοῦ) - διελόμενον οὖν ἐπὶ τῶν τοιούτων ἐρωτητέον· λανθανούσης γὰρ τῆς ὁμωνυμίας εὖ δόξει ἐνστήναι τῇ προτάσει. ἐὰν δὲ μὴ ἐν τῷ ὁμωνύμῳ ἀλλ' ἐν αὐτῷ ἐνιστάμενος κωλύῃ τὴν ἐρώτησιν, ἀφαιροῦντα

δεῖ ἐν ᾧ ἡ ἔνστασις προτείνειν τὸ λοιπὸν καθόλου ποιοῦντα, ἕως ἂν λάβῃ τὸ χρήσιμον. οἷον ἐπὶ τῆς λήθης καὶ τοῦ ἐπιλελῆσθαι· οὐ γὰρ συγχωροῦσι τὸν ἀποβεβληκότα ἐπιστήμην ἐπιλελῆσθαι, διότι μεταπεσόντος τοῦ πράγματος ἀποβέβληκε μὲν τὴν ἐπιστήμην, ἐπιλέλησται δ' οὐ. ῥητέον οὖν, ἀφελόντα ἐν ᾧ ἡ ἔνστασις, τὸ λοιπόν, οἷον εἰ διαμένοντος τοῦ πράγματος ἀποβέβληκε τὴν ἐπιστήμην, ὅτι ἐπιλέλησται. ὁμοίως δὲ καὶ πρὸς τοὺς ἐνισταμένους ὅτι τῷ μείζονι ἀγαθῷ <οὐ> μείζον ἀντίκειται κακόν· προφέρουσι γὰρ ὅτι τῇ ὑγείᾳ ἐλάττονι ὄντι ἀγαθῷ τῆς εὐεξίας μείζον κακὸν ἀντίκειται· τὴν γὰρ νόσον μείζον κακὸν εἶναι τῆς καχεξίας. ἀφαιρετέον οὖν καὶ ἐπὶ τούτου ἐν ᾧ ἡ ἔνστασις· ἀφαιρεθέντος γὰρ μᾶλλον ἂν θείῃ, οἷον ὅτι τῷ μείζονι ἀγαθῷ μείζον κακὸν ἀντίκειται, ἐὰν μὴ συνεπιφέρῃ θάτερον θάτερον, καθάπερ ἡ εὐεξία τὴν ὑγίαιαν. οὐ μόνον δ' ἐνισταμένου τοῦτο ποιητέον, ἀλλὰ κἂν ἄνευ ἐνστάσεως ἀρνηῖται διὰ τὸ προορᾶν τι τῶν τοιούτων. ἀφαιρεθέντος γὰρ ἐν ᾧ ἡ ἔνστασις, ἀναγκασθήσεται τιθέναι διὰ τὸ μὴ προορᾶν ἐν τῷ λοιπῷ ἐπὶ τίνος οὐχ οὕτως· ἐὰν δὲ μὴ τιθῇ, ἀπαιτούμενος ἔνστασιν οὐ μὴ ἔχη ἀποδοῦναι. εἰσὶ δὲ τοιαῦτα τῶν προτάσεων αἱ ἐπὶ τὸ μὲν ψευδεῖς ἐπὶ τὸ δ' ἀληθεῖς· ἐπὶ τούτων γὰρ ἔστι <τι> ἀφελόντα τὸ λοιπὸν ἀληθὲς καταλιπεῖν. ἐὰν δ' ἐπὶ πολλῶν προτείνοντος μὴ φέρῃ ἔνστασιν, ἀξιωτέον τιθέναι· διαλεκτικὴ γάρ ἐστι πρότασις πρὸς ἣν οὕτως ἐπὶ πολλῶν ἔχουσιν μὴ ἔστιν ἔνστασις.

Ὅταν δ' ἐνδέχεται τὸ αὐτὸ ἄνευ τε τοῦ ἀδυνάτου καὶ διὰ τοῦ ἀδυνάτου συλλογίσασθαι, ἀποδεικνύντι μὲν καὶ μὴ διαλεγομένῳ οὐδὲν διαφέρει οὕτως ἢ ἐκείνως συλλογίσασθαι, διαλεγομένῳ δὲ πρὸς ἄλλον οὐ χρηστέον τῷ διὰ τοῦ ἀδυνάτου συλλογισμῷ. ἄνευ μὲν γὰρ τοῦ ἀδυνάτου συλλογισαμένῳ οὐκ ἔστιν ἀμφισβητεῖν· ὅταν δὲ τὸ ἀδύνατον συλλογίσῃται, [158a] ἂν μὴ λίαν ἢ περιφανὲς ψεῦδος ὦν, οὐκ ἀδύνατόν φασι εἶναι, ὥστ' οὐ γίνεται τοῖς ἐρωτῶσιν ὁ βούλονται.

Δεῖ δὲ προτείνειν ὅσα ἐπὶ πολλῶν μὲν οὕτως ἔχει, ἔνστασις δὲ ἢ ὅλως μὴ ἔστιν ἢ μὴ ἐπιπολῆς τὸ συνιδεῖν· μὴ δυνάμενοι γὰρ συνορᾶν ἐφ' ὧν οὐχ οὕτως, ὡς ἀληθὲς ὄν τιθέασιν.

Οὐ δεῖ δὲ τὸ συμπέρασμα ἐρώτημα ποιεῖν· εἰ δὲ μή, ἀνανεύσαντος οὐ δοκεῖ γεγονέναι συλλογισμός. πολλάκις γὰρ καὶ μὴ ἐρωτῶντος ἄλλ' ὡς συμβαῖνον ἐπιφέροντος ἀρνοῦνται, καὶ τοῦτο ποιοῦντες οὐ δοκοῦσιν ἐλέγχεσθαι τοῖς μὴ συνορῶσιν ὅ τι συμβαίνει ἐκ τῶν τεθέντων. ὅταν οὖν μηδὲ φήσας συμβαίνειν ἐρωτήσῃ, ὁ δ' ἀρνηθῇ, παντελῶς οὐ δοκεῖ γεγονέναι συλλογισμός.

Οὐ δοκεῖ δὲ πᾶν τὸ καθόλου διαλεκτικὴ πρότασις εἶναι, οἷον “τί ἐστὶν ἄνθρωπος;” ἢ “ποσαχῶς λέγεται τᾶγαθόν;” ἔστι γὰρ πρότασις διαλεκτικὴ πρὸς ἣν ἔστιν ἀποκρίνασθαι “ναί” ἢ “οὐ”. πρὸς δὲ τὰς εἰρημένας οὐκ ἔστιν. διὸ οὐ διαλεκτικὰ ἐστὶ τὰ τοιαῦτα τῶν ἐρωτημάτων, ἂν μὴ αὐτὸς διορίσας ἢ διελόμενος εἴπῃ, οἷον “ἄρα γε τὸ ἀγαθὸν οὕτως ἢ οὕτως λέγεται;” πρὸς γὰρ τὰ τοιαῦτα ῥαδία ἢ ἀπόκρισις ἢ καταφήσαντι ἢ ἀποφήσαντι. διὸ πειρατέον οὕτω προτείνειν τὰς τοιαύτας τῶν προτάσεων. ἅμα δὲ καὶ δίκαιον ἴσως παρ’ ἐκείνου ζητεῖν ποσαχῶς λέγεται τὸ ἀγαθόν, ὅταν αὐτοῦ διαιρουμένου καὶ προτείνοντος μηδαμῶς συγχωρῇ.

Ὅστις δ’ ἓνα λόγον πολὺν χρόνον ἐρωτᾷ, κακῶς πυθάνεται. εἰ μὲν γὰρ ἀποκρινόμενου τοῦ ἐρωτώμενου τὸ ἐρωτώμενον, δῆλον ὅτι πολλὰ ἐρωτήματα ἐρωτᾷ ἢ πολλάκις ταῦτά, ὥστε ἢ ἀδολεσχεῖ ἢ οὐκ ἔχει συλλογισμόν (ἐξ ὀλίγων γὰρ πᾶς συλλογισμός). εἰ δὲ μὴ ἀποκρινόμενου, ὅτι οὐκ ἐπιτιμᾷ, ἢ ἀφίσταται.

Ἔστι δ’ ἐπιχειρεῖν τε χαλεπὸν καὶ ὑπέχειν ῥάδιον τὰς αὐτὰς ὑποθέσεις. ἔστι δὲ τοιαῦτα τὰ τε φύσει πρῶτα καὶ τὰ ἔσχατα. τὰ μὲν γὰρ πρῶτα ὅρου δεῖται, τὰ δ’ ἔσχατα διὰ πολλῶν περαίνεται βουλομένῳ τὸ συνεχὲς λαμβάνειν ἀπὸ τῶν πρώτων, ἢ σοφισματώδη φαίνεται τὰ ἐπιχειρήματα. ἀδύνατον γὰρ ἀποδεῖξαι τι μὴ ἀρξάμενον ἀπὸ τῶν οἰκείων ἀρχῶν καὶ συνείραντα μέχρι τῶν ἐσχάτων. ὀρίζεσθαι μὲν οὖν οὕτ’ ἀξιοῦσιν οἱ ἀποκρινόμενοι οὕτ’, ἂν ὁ ἐρωτῶν ὀρίζηται, προσέχουσιν. μὴ γενομένου δὲ φανεροῦ τί ποτ’ ἐστὶ τὸ [158b] προκείμενον, οὐ ῥάδιον ἐπιχειρεῖν. μάλιστα δὲ τὸ τοιοῦτον περὶ τὰς ἀρχὰς συμβαίνει. τὰ μὲν γὰρ ἄλλα διὰ τούτων δείκνυται, ταῦτα δ’ οὐκ ἐνδέχεται δι’ ἐτέρων, ἀλλ’ ἀναγκαῖον ὀρισμῷ τῶν τοιούτων ἕκαστον γνωρίζειν.

Ἔστι δὲ δυσεπιχείρητα καὶ τὰ λίαν ἐγγὺς τῆς ἀρχῆς. οὐ γὰρ ἐνδέχεται πολλοὺς πρὸς αὐτὰ λόγους πορίσασθαι, ὀλίγων ὄντων τῶν ἀνὰ μέσον αὐτῶν τε καὶ τῆς ἀρχῆς, δι’ ὧν ἀνάγκη δείκνυσθαι τὰ μετὰ ταῦτα. τῶν δὲ ὅρων δυσεπιχειρητότατοι πάντων εἰσὶν ὅσοι κέχρηται τοιούτοις ὀνόμασιν ἃ πρῶτον μὲν ἄδηλά ἐστιν εἴτε ἀπλῶς εἴτε πολλαχῶς λέγεται, πρὸς δὲ τούτοις μηδὲ γνώριμα πότερον κυρίως ἢ κατὰ μεταφορὰν ὑπὸ τοῦ ὀρισμένου λέγεται. διὰ μὲν γὰρ τὸ ἀσαφὲς εἶναι οὐκ ἔχει ἐπιχειρήματα. διὰ δὲ τὸ ἀγνοεῖσθαι εἰ παρὰ τὸ κατὰ μεταφορὰν λέγεσθαι τοιαῦτ’ ἐστίν, οὐκ ἔχει ἐπιτίμησιν.

Ὅλως δὲ πᾶν πρόβλημα, ὅταν ἢ δυσεπιχείρητον, ἢ ὅρου δεῖσθαι ὑποληπτέον ἢ τῶν πολλαχῶς ἢ τῶν κατὰ μεταφορὰν εἶναι λεγομένων ἢ οὐ



πόρρω τῶν ἀρχῶν, διὰ τὸ μὴ φανερόν εἶναι πρῶτον ἡμῖν τοῦτ' αὐτό, κατὰ τίνα ποτὲ τῶν εἰρημένων τρόπων ἐστὶν ὃ τὴν ἀπορίαν παρέχεται· φανεροῦ γὰρ ὄντος τοῦ τρόπου δῆλον ὅτι ἢ ὀρίζεσθαι ἂν δέοι ἢ διαιρεῖσθαι ἢ τὰς ἀνὰ μέσον προτάσεις πορίζεσθαι· διὰ τούτων γὰρ δέκνυται τὰ ἔσχατα.

Πολλαῖς τε τῶν θέσεων μὴ καλῶς ἀποδιδομένου τοῦ ὀρισμοῦ οὐ ῥᾶδιον διαλέγεσθαι καὶ ἐπιχειρεῖν, οἷον πότερον ἐν ἐνὶ ἐναντίον ἢ πλείω· ὀρισθέντων δὲ τῶν ἐναντίων κατὰ τρόπον ῥᾶδιον συμβιβάσαι πότερον ἐνδέχεται πλείω τῷ αὐτῷ εἶναι ἐναντία ἢ οὐ. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων τῶν ὀρισμοῦ δεομένων. ἔοικε δὲ καὶ ἐν τοῖς μαθήμασιν ἕνια δι' ὀρισμοῦ ἔλλειψιν οὐ ῥαδίως γράφεσθαι, οἷον ὅτι ἢ παρὰ τὴν πλευρὰν τέμνουσα τὸ ἐπίπεδον ὁμοίως διαιρεῖ τὴν τε γραμμὴν καὶ τὸ χωρίον. τοῦ δὲ ὀρισμοῦ ῥηθέντος εὐθέως φανερόν τὸ λεγόμενον· τὴν γὰρ αὐτὴν ἀνταίρεσιν ἔχει τὰ χωρία καὶ αἱ γραμμαί· ἔστι δ' ὀρισμὸς τοῦ αὐτοῦ λόγου οὗτος. ἀπλῶς δὲ τὰ πρῶτα τῶν στοιχείων τιθεμένων μὲν τῶν ὀρισμῶν, οἷον τί γραμμὴ καὶ τί κύκλος, ῥᾶστα δεῖξαι (πλὴν οὐ πολλά γε πρὸς ἕκαστον ἔστι τούτων ἐπιχειρεῖν διὰ τὸ μὴ πολλὰ τὰ ἀνὰ μέσον εἶναι)· ἂν δὲ μὴ τιθῶνται οἱ τῶν ἀρχῶν ὀρισμοί, χαλεπόν, τάχα δ' ὅλως [159a] ἀδύνατον. ὁμοίως δὲ τούτοις καὶ ἐπὶ τῶν κατὰ τοὺς λόγους ἔχει.

Οὕκουν δεῖ λανθάνειν, ὅταν δυσεπιχείρητος ἢ ἡ θέσις, ὅτι πέπονθέ τι τῶν εἰρημένων. ὅταν δ' ἢ πρὸς τὸ ἀξίωμα καὶ τὴν πρότασιν μεῖζον ἔργον διαλεγῆναι ἢ τὴν θέσιν, διαπορήσειεν ἂν τις πότερον θετέον τὰ τοιαῦτα ἢ οὐ. εἰ γὰρ μὴ θήσῃ ἄλλ' ἀξιώσει καὶ πρὸς τοῦτο διαλέγεσθαι, μεῖζον προστάξει τοῦ ἐν ἀρχῇ κειμένου· εἰ δὲ θήσῃ, πιστεύσει ἐξ ἥττον πιστῶν. εἰ μὲν οὖν δεῖ μὴ χαλεπώτερον τὸ πρόβλημα ποιεῖν, θετέον· εἰ δὲ διὰ γνωριμωτέρων συλλογίζεσθαι, οὐ θετέον. ἢ τῷ μὲν μανθάνοντι οὐ θετέον, ἂν μὴ γνωριμώτερον ἢ· τῷ δὲ γυμναζομένῳ θετέον, ἂν ἀληθὲς μόνον φαίνεται. ὥστε φανερόν ὅτι οὐχ ὁμοίως ἐρωτῶντί τε καὶ διδάσκοντι ἀξιωτέον τιθέναι.

Πῶς μὲν οὖν ἐρωτηματίζειν καὶ τάττειν δεῖ, σχεδὸν ἱκανὰ τὰ εἰρημένα. περὶ δ' ἀποκρίσεως πρῶτον μὲν διοριστέον τί ἐστὶν ἔργον τοῦ καλῶς ἀποκρινομένου, καθάπερ τοῦ καλῶς ἐρωτῶντος. ἔστι δὲ τοῦ μὲν ἐρωτῶντος τὸ οὕτως ἐπαγαγεῖν τὸν λόγον ὥστε ποιῆσαι τὸν ἀποκρινόμενον τὰ ἀδοξότατα λέγειν τῶν διὰ τὴν θέσιν ἀναγκαίων, τοῦ δ' ἀποκρινομένου τὸ μὴ δι' αὐτὸν φαίνεσθαι συμβαίνειν τὸ ἀδύνατον ἢ τὸ παράδοξον, ἀλλὰ διὰ τὴν θέσιν· ἑτέρα γὰρ ἴσως ἀμαρτία τὸ θέσθαι πρῶτον ὃ μὴ δεῖ καὶ τὸ θέμενον μὴ φυλάξαι κατὰ τρόπον.

Ἐπεὶ δ' ἔστιν ἀδιόριστα τοῖς γυμνασίας καὶ πείρας ἔνεκα τοὺς λόγους ποιούμενοις (οὐ γὰρ οἱ αὐτοὶ σκοποὶ τοῖς διδάσκουσιν ἢ μανθάνουσι καὶ τοῖς ἀγωνιζομένοις, οὐδὲ τούτοις τε καὶ τοῖς διατρίβουσι μετ' ἀλλήλων σκέψεως χάριν· τῷ μὲν γὰρ μανθάνοντι θετέον ἀεὶ τὰ δοκοῦντα· καὶ γὰρ οὐδ' ἐπιχειρεῖ ψεῦδος οὐδεὶς διδάσκειν· τῶν δ' ἀγωνιζομένων τὸν μὲν ἐρωτῶντα φαίνεσθαι τι δεῖ ποιεῖν πάντως, τὸν δ' ἀποκρινόμενον μηδὲν φαίνεσθαι πάσχειν· ἐν δὲ ταῖς διαλεκτικαῖς συνόδοις τοῖς μὴ ἀγῶνος χάριν ἀλλὰ πείρας καὶ σκέψεως τοὺς λόγους ποιούμενοις οὐ διήρθρωταί πω τίνας δεῖ στοχάζεσθαι τὸν ἀποκρινόμενον καὶ ποῖα διδόναι καὶ ποῖα μὴ, πρὸς τὸ καλῶς ἢ μὴ καλῶς φυλάττειν τὴν θέσιν). Ἐπεὶ οὖν οὐδὲν ἔχομεν παραδεδομένον ὑπ' ἄλλων, αὐτοὶ τι πειραθῶμεν εἰπεῖν.

Ἀνάγκη δὴ τὸν ἀποκρινόμενον ὑπέχειν λόγον θέμενον ἥτοι ἔνδοξον ἢ ἄδοξον θέσιν ἢ μηδέτερον, καὶ ἥτοι ἀπλῶς [159b] ἔνδοξον ἢ ἄδοξον ἢ ὠρισμένως, οἷον τωδὶ τινι, ἢ αὐτῷ ἢ ἄλλῳ. διαφέρει δ' οὐδὲν ὁπωσοῦν ἐνδόξου ἢ ἀδόξου οὔσης· ὁ γὰρ αὐτὸς τρόπος ἔσται τοῦ καλῶς ἀποκρίνασθαι καὶ δοῦναι ἢ μὴ δοῦναι τὸ ἐρωτηθέν. ἀδόξου μὲν οὖν οὔσης τῆς θέσεως ἔνδοξον ἀνάγκη τὸ συμπέρασμα γίνεσθαι, ἐνδόξου δ' ἄδοξον· τὸ γὰρ ἀντικείμενον ἀεὶ τῇ θέσει ὁ ἐρωτῶν συμπεραίνεται. εἰ δὲ μήτ' ἄδοξον μήτ' ἔνδοξον τὸ κείμενον, καὶ τὸ συμπέρασμα ἔσται τοιοῦτον. Ἐπεὶ δ' ὁ καλῶς συλλογιζόμενος ἐξ ἐνδοξοτέρων καὶ γνωριμωτέρων τὸ προβληθὲν ἀποδείκνυσι, φανερόν ὡς ἀδόξου μὲν ὄντος ἀπλῶς τοῦ κειμένου οὐ δοτέον τῷ ἀποκρινομένῳ οὔθ' ὃ μὴ δοκεῖ ἀπλῶς, οὔθ' ὃ δοκεῖ μὲν ἦττον δὲ τοῦ συμπεράσματος δοκεῖ. ἀδόξου γὰρ οὔσης τῆς θέσεως ἔνδοξον τὸ συμπέρασμα, ὥστε δεῖ τὰ λαμβανόμενα ἔνδοξα πάντ' εἶναι καὶ μᾶλλον ἔνδοξα τοῦ προκειμένου, εἰ μέλλει διὰ τῶν γνωριμωτέρων τὸ ἦττον γνώριμον περαίνεισθαι. ὥστ' εἴ τι μὴ τοιοῦτόν ἐστι τῶν ἐρωτωμένων, οὐ θετέον τῷ ἀποκρινομένῳ. εἰ δ' ἔνδοξος ἀπλῶς ἢ θέσις, δῆλον ὅτι τὸ συμπέρασμα ἀπλῶς ἄδοξον. θετέον οὖν τὰ τε δοκοῦντα πάντα καὶ τῶν μὴ δοκούντων ὅσα ἦττόν ἐστιν ἄδοξα τοῦ συμπεράσματος· ἱκανῶς γὰρ ἂν δόξειε διειλέχθαι. ὁμοίως δέ, εἰ μήτ' ἄδοξος μήτ' ἔνδοξός ἐστιν ἢ θέσις· καὶ γὰρ οὕτως τὰ τε φαινόμενα πάντα δοτέον καὶ τῶν μὴ δοκούντων ὅσα μᾶλλον ἔνδοξα τοῦ συμπεράσματος· οὕτω γὰρ ἐνδοξοτέρους συμβήσεται τοὺς λόγους γίνεσθαι. εἰ μὲν οὖν ἀπλῶς ἔνδοξον ἢ ἄδοξον τὸ κείμενον, πρὸς τὰ δοκοῦντα ἀπλῶς τὴν σύγκρισιν ποιητέον. εἰ δὲ μὴ ἀπλῶς ἔνδοξον ἢ ἄδοξον τὸ κείμενον ἀλλὰ τῷ ἀποκρινομένῳ, πρὸς αὐτὸν τὸ δοκοῦν καὶ τὸ μὴ δοκοῦν κρίνοντα θετέον ἢ οὐ θετέον. ἂν δ' ἑτέρου δόξαν διαφυλάττη ὁ ἀποκρινόμενος, δῆλον ὅτι πρὸς τὴν ἐκείνου διάνοιαν ἀποβλέποντα θετέον ἕκαστα καὶ ἀρνητέον. διὸ καὶ οἱ κομίζοντες ἀλλοτρίας δόξας, οἷον ἀγαθὸν καὶ κακὸν εἶναι ταῦτόν, καθάπερ Ἡράκλειτός φησιν, οὐ

διδόασι μὴ παρεῖναι ἅμα τῷ αὐτῷ τάναντία, οὐχ ὥς οὐ δοκοῦν αὐτοῖς τοῦτο, ἀλλ' ὅτι καθ' Ἡράκλειτον οὕτω λεκτέον. ποιοῦσι δὲ τοῦτο καὶ οἱ παρ' ἀλλήλων δεχόμενοι τὰς θέσεις· στοχάζονται γὰρ ὥς ἂν εἴπειεν ὁ θέμενος.

Φανερόν οὖν τίνων στοχαστέον τῷ ἀποκρινομένῳ, εἴτε ἀπλῶς ἔνδοξον εἴτε τινὶ τὸ κείμενόν ἐστιν. ἐπεὶ δ' ἀνάγκη πᾶν τὸ ἐρωτώμενον ἢ ἔνδοξον εἶναι ἢ ἄδοξον ἢ μηδέτερον, καὶ ἢ πρὸς τὸν λόγον ἢ μὴ πρὸς τὸν λόγον εἶναι τὸ ἐρωτώμενον, [160a] ἐὰν μὲν ἢ δοκοῦν καὶ μὴ πρὸς τὸν λόγον, δοτέον φήσαντα δοκεῖν, ἐὰν δὲ μὴ δοκοῦν καὶ μὴ πρὸς τὸν λόγον, δοτέον μὲν, ἐπισημαντέον δὲ τὸ μὴ δοκεῖν, πρὸς εὐλάβειαν εὐηθείας. ὄντος δὲ πρὸς τὸν λόγον καὶ δοκοῦντος λεκτέον ὅτι δοκεῖ μὲν, ἀλλὰ λίαν σύνεγγυς τοῦ ἐν ἀρχῇ ἐστὶ καὶ ἀναιρεῖται τούτου τεθέντος τὸ κείμενον. εἰ δὲ πρὸς τὸν λόγον, λίαν δ' ἄδοξον τὸ ἀξίωμα, συμβαίνειν μὲν φατέον τούτου τεθέντος, ἀλλὰ λίαν εὐηθες εἶναι τὸ προτεινόμενον. εἰ δὲ μήτ' ἄδοξον μήτ' ἔνδοξον, εἰ μὲν μηδὲν πρὸς τὸν λόγον, δοτέον μηδὲν διορίσαντι, εἰ δὲ πρὸς τὸν λόγον, ἐπισημαντέον ὅτι ἀναιρεῖται τεθέντος τὸ ἐν ἀρχῇ. οὕτω γὰρ ὅ τ' ἀποκρινόμενος οὐδὲν δόξει δι' αὐτὸν πάσχειν, ἐὰν προορῶν ἕκαστα τιθῇ, ὅ τ' ἐρωτῶν τεύζεται συλλογισμοῦ τιθεμένων αὐτῷ πάντων τῶν ἐνδοξοτέρων τοῦ συμπεράσματος. ὅσοι δ' ἐξ ἀδοξοτέρων τοῦ συμπεράσματος ἐπιχειροῦσι συλλογίζεσθαι, δῆλον ὥς οὐ καλῶς συλλογίζονται· διὸ τοῖς ἐρωτῶσιν οὐ θετέον.

Ὅμοίως δὲ καὶ ἐπὶ τῶν ἀσαφῶς καὶ πλεοναχῶς λεγομένων ἀπαντητέον. ἐπεὶ γὰρ δέδοται τῷ ἀποκρινομένῳ μὴ μανθάνοντι εἰπεῖν ὅτι “οὐ μανθάνω”, καὶ πλεοναχῶς λεγομένου μὴ ἐξ ἀνάγκης ὁμολογῆσαι ἢ ἀρνήσασθαι, δῆλον ὥς πρῶτον μὲν, ἂν μὴ σαφές ἢ τὸ ῥηθέν, οὐκ ἀποκνητέον τὸ φάναι μὴ συνιέναι· πολλάκις γὰρ ἐκ τοῦ μὴ σαφῶς ἐρωτηθέντας διδόναι ἀπαντᾶ τι δυσχερές. ἂν δὲ γνώριμον μὲν ἢ πλεοναχῶς δὲ λεγόμενον, ἐὰν μὲν ἐπὶ πάντων ἀληθές ἢ ψεῦδος ἢ τὸ λεγόμενον, δοτέον ἀπλῶς ἢ ἀρνητέον, ἐὰν δ' ἐπὶ τὶ μὲν ψεῦδος ἢ ἐπὶ τὶ δ' ἀληθές, ἐπισημαντέον ὅτι πλεοναχῶς λέγεται καὶ ὅτι τὸ μὲν ψεῦδος τὸ δ' ἀληθές· ὕστερον γὰρ διαιρουμένου ἄδηλον εἰ καὶ ἐν ἀρχῇ συνεώρα τὸ ἀμφίβολον. ἐὰν δὲ μὴ προῖδῃ τὸ ἀμφίβολον ἀλλ' εἰς θάτερον βλέψας θῇ, ῥητέον πρὸς τὸν ἐπὶ θάτερον ἄγοντα ὅτι “οὐκ εἰς τοῦτο βλέπων ἔδωκα ἀλλ' εἰς θάτερον αὐτῶν”. πλειόνων γὰρ ὄντων τῶν ὑπὸ ταῦτόν ὄνομα ἢ λόγον ῥαδία ἢ ἀμφισβήτησις. ἐὰν δὲ καὶ σαφές ἢ καὶ ἀπλοῦν τὸ ἐρωτώμενον, ἢ “ναί” ἢ “οὐ” ἀποκριτέον.

Ἐπεὶ δὲ πᾶσα πρότασις συλλογιστικὴ ἢ τούτων τίς ἐστὶν ἐξ ὧν ὁ συλλογισμὸς ἢ τίνος τούτων ἔνεκα (δῆλον δ' ὅταν ἐτέρου χάριν λαμβάνηται τῷ πλείῳ τὰ ὅμοια ἐρωτᾶν· ἢ γὰρ δι' ἐπαγωγῆς ἢ δι' ὁμοιότητος ὥς ἐπὶ τὸ

πολὺ τὸ καθόλου λαμβάνουσιν), τὰ μὲν οὖν καθ' ἑκάστα πάντα θετέον, ἂν [160b] ἢ ἀληθῆ καὶ ἔνδοξα, πρὸς δὲ τὸ καθόλου πειρατέον ἔνστασιν φέρειν· τὸ γὰρ ἄνευ ἐνστάσεως ἢ οὔσης ἢ δοκούσης κωλύειν τὸν λόγον δυσκολαίνειν ἐστίν. εἰ οὖν ἐπὶ πολλῶν φαινομένου μὴ δίδωσι τὸ καθόλου, μὴ ἔχων ἔνστασιν, φανερόν ὅτι δυσκολαίνει. ἔτι εἰ μὴδ' ἀντεπιχειρεῖν ἔχει ὅτι οὐκ ἀληθές, πολλῶ μᾶλλον ἂν δόξειε δυσκολαίνειν. (καίτοι οὐδὲ τοῦθ' ἱκανόν· πολλοὺς γὰρ λόγους ἔχομεν ἐναντίους ταῖς δόξαις, οὓς χαλεπὸν λύειν, καθάπερ τὸν Ζήνωνος ὅτι οὐκ ἐνδέχεται κινεῖσθαι οὐδὲ τὸ στάδιον διελθεῖν, ἀλλ' οὐ διὰ τοῦτο τάντικείμενα τούτοις οὐ θετέον.) εἰ οὖν μήτ' ἀντεπιχειρεῖν ἔχων μήτ' ἐνίστασθαι μὴ τίθῃσι, δῆλον ὅτι δυσκολαίνει· ἔστι γὰρ ἢ ἐν λόγοις δυσκολία ἀπόκρισις παρὰ τοὺς εἰρημένους τρόπους, συλλογισμοῦ φθαρτική.

Ὑπέχειν δὲ καὶ θέσιν καὶ ὀρισμὸν αὐτὸν αὐτῷ δεῖ προεπιχειρήσαντα· ἐξ ὧν γὰρ ἀναιροῦσιν οἱ πυνθανόμενοι τὸ κείμενον, δῆλον ὅτι τούτοις ἐναντιωτέον.

Ἄδοξον δ' ὑπόθεσιν εὐλαβητέον ὑπέχειν. εἴη δ' ἂν ἄδοξος διχῶς· καὶ γὰρ ἐξ ἧς ἄτοπα συμβαίνει λέγειν, οἷον εἰ πάντα φαίη τις κινεῖσθαι ἢ μηδέν, καὶ ὅσα χείρονος ἦθους ἐλέσθαι καὶ ὑπεναντία ταῖς βουλήσεσιν, οἷον ὅτι ἡδονὴ τἀγαθόν, καὶ τὸ ἀδικεῖν βέλτιον τοῦ ἀδικεῖσθαι· οὐ γὰρ ὥς λόγου χάριν ὑπέχοντα ἀλλ' ὥς τὰ δοκοῦντα λέγοντα μισοῦσιν.

Ὅσοι δὲ τῶν λόγων ψεῦδος συλλογίζονται, λυτέον ἀναιροῦντα παρ' ὃ γίνεται τὸ ψεῦδος· οὐ γὰρ ὁ ὀτιοῦν ἀνελὼν λέλυκεν, οὐδ' εἰ ψεῦδός ἐστι τὸ ἀναιρούμενον. ἔχοι γὰρ ἂν πλείω ψεύδη ὁ λόγος, οἷον ἐάν τις λάβῃ τὸν καθήμενον γράφειν, Σωκράτη δὲ καθῆσθαι· συμβαίνει γὰρ ἐκ τούτων Σωκράτη γράφειν. ἀναιρεθέντος οὖν τοῦ Σωκράτη καθῆσθαι οὐδὲν μᾶλλον λέλυται ὁ λόγος· καίτοι ψεῦδος τὸ ἀξίωμα. ἀλλ' οὐ παρὰ τοῦτο ὁ λόγος ψευδής· ἂν γὰρ τις τύχῃ καθήμενος μὲν μὴ γράφων δέ, οὐκέτι ἐπὶ τοῦ τοιούτου ἢ αὐτὴ λύσις ἀρμόσει. ὥστε οὐ τοῦτο ἀναιρετέον, ἀλλὰ τὸ τὸν καθήμενον γράφειν· οὐ γὰρ πᾶς ὁ καθήμενος γράφει. λέλυκε μὲν οὖν πάντως ὁ ἀνελὼν παρ' ὃ γίνεται τὸ ψεῦδος, οἶδε δὲ τὴν λύσιν ὁ εἰδὼς ὅτι παρὰ τοῦτο ὁ λόγος, καθάπερ ἐπὶ τῶν ψευδογραφουμένων. οὐ γὰρ ἀπόχρη τὸ ἐνστήναι, οὐδ' ἂν ψεῦδος ἢ τὸ ἀναιρούμενον, ἀλλὰ καὶ διότι ψεῦδος ἀποδεικτέον· οὕτω γὰρ ἂν εἴη φανερόν ποτερον προορῶν τι ἢ οὐ ποιεῖται τὴν ἔνστασιν.

[161a] Ἔστι δὲ λόγον κωλύσαι συμπεράνασθαι τετραχῶς. ἢ γὰρ ἀνελόντα παρ' ὃ γίνεται τὸ ψεῦδος, ἢ πρὸς τὸν ἐρωτῶντα ἔνστασιν εἰπόντα· πολλάκις γὰρ οὐ λέλυκε μὲν, ὁ μέντοι πυνθανόμενος οὐ δύναται πορρωτέρω προαγαγεῖν.

τρίτον δὲ πρὸς τὰ ἡρωτημένα· συμβαίη γὰρ ἂν ἐκ μὲν τῶν ἡρωτημένων μὴ γίνεσθαι ὃ βούλεται διὰ τὸ κακῶς ἡρωτῆσθαι, προστεθέντος δέ τινος γίνεσθαι τὸ συμπέρασμα. εἰ μὲν οὖν μηκέτι δύναται προάγειν ὁ ἐρωτῶν, πρὸς τὸν ἐρωτῶντα εἴη ἂν ἡ ἔνστασις, εἰ δὲ δύναται, πρὸς τὰ ἡρωτημένα. τετάρτη δὲ καὶ χειρίστη τῶν ἐνστάσεων ἡ πρὸς τὸν χρόνον· ἔνιοι γὰρ τοιαῦτα ἐνίστανται πρὸς ἃ διαλεχθῆναι πλείονός ἐστι χρόνου [ἧ] τῆς παρούσης διατριβῆς.

Αἱ μὲν οὖν ἐνστάσεις, καθάπερ εἵπαμεν, τετραχῶς γίνονται· λύσις δ' ἐστὶ τῶν εἰρημένων ἢ πρώτη μόνον, αἱ δὲ λοιπαὶ κωλύσεις τινὲς καὶ ἐμποδισμοὶ τῶν συμπερασμάτων.

Ἐπιτίμησις δὲ λόγου κατ' αὐτόν τε τὸν λόγον καὶ ὅταν ἐρωτᾶται οὐχ ἡ αὐτή. πολλάκις γὰρ τοῦ μὴ καλῶς διειλέχθαι τὸν λόγον ὁ ἐρωτώμενος αἴτιος διὰ τὸ μὴ συγχωρεῖν ἐξ ὧν ἦν διαλεχθῆναι καλῶς πρὸς τὴν θέσιν· οὐ γὰρ ἔστιν ἐπὶ θατέρῳ μόνον τὸ καλῶς ἐπιτελεσθῆναι τὸ κοινὸν ἔργον. ἀναγκαῖον οὖν ἐνίστε πρὸς τὸν λέγοντα καὶ μὴ πρὸς τὴν θέσιν ἐπιχειρεῖν, ὅταν ὁ ἀποκρινόμενος τᾶναντία τῷ ἐρωτῶντι παρατηρῇ προσεπηρεάζων. δυσκολαίνοντες οὖν ἀγωνιστικὰς καὶ οὐ διαλεκτικὰς ποιοῦνται τὰς διατριβάς. ἔτι δ' ἐπεὶ γυμνασίας καὶ πείρας χάριν ἄλλ' οὐ διδασκαλίας οἱ τοιοῦτοι τῶν λόγων, δῆλον ὡς οὐ μόνον ἀληθῆ συλλογιστέον ἀλλὰ καὶ ψεῦδος, οὐδὲ δι' ἀληθῶν ἀεὶ ἄλλ' ἐνίστε καὶ ψευδῶν· πολλάκις γὰρ ἀληθοῦς τεθέντος ἀναιρεῖν ἀνάγκη τὸν διαλεγόμενον, ὥστε προτατέον τὰ ψευδῆ. ἐνίστε δὲ καὶ ψεύδους τεθέντος ἀναιρετέον διὰ ψευδῶν· οὐδὲν γὰρ κωλύει τινὶ δοκεῖν τὰ μὴ ὄντα μᾶλλον τῶν ἀληθῶν, ὥστ' ἐκ τῶν ἐκείνῳ δοκούντων τοῦ λόγου γινομένου μᾶλλον ἔσται πεπεισμένος ἢ ὠφελής. δεῖ δὲ τὸν καλῶς μεταβιβάζοντα διαλεκτικῶς καὶ μὴ ἐριστικῶς μεταβιβάζειν, καθάπερ τὸν γεωμέτρην γεωμετρικῶς, ἅν τε ψεῦδος ἅν τ' ἀληθὲς ἢ τὸ συμπεραίνόμενον· ποῖοι δὲ διαλεκτικοὶ συλλογισμοί, πρότερον εἴρηται. ἐπεὶ δὲ φαῦλος κοινωνὸς ὁ ἐμποδίζων τὸ κοινὸν ἔργον, δῆλον ὅτι καὶ ἐν λόγῳ. κοινὸν γάρ τι καὶ ἐν τούτοις προκείμενόν ἐστι, πλὴν τῶν ἀγωνιζομένων. τούτοις δ' οὐκ ἔστιν ἀμφοτέροις τυχεῖν τοῦ αὐτοῦ τέλους· πλείους γὰρ ἐνὸς ἀδύνατον [161b] νικᾶν. διαφέρει δ' οὐδέν, ἅν τε διὰ τοῦ ἀποκρίνεσθαι ἅν τε διὰ τοῦ ἐρωτᾶν ποιῇ τοῦτο· ὅ τε γὰρ ἐριστικῶς ἐρωτῶν φαύλως διαλέγεται, ὅ τ' ἐν τῷ ἀποκρίνεσθαι μὴ διδοὺς τὸ φαινόμενον μὴδ' ἐκδεχόμενος ὅ τί ποτε βούλεται ὁ ἐρωτῶν πυθέσθαι. δῆλον οὖν ἐκ τῶν εἰρημένων ὅτι οὐχ ὁμοίως ἐπιτιμητέον καθ' αὐτόν τε τῷ λόγῳ καὶ τῷ ἐρωτῶντι· οὐδὲν γὰρ κωλύει τὸν μὲν λόγον φαῦλον εἶναι, τὸν δ' ἐρωτῶντα ὡς ἐνδέχεται βέλτιστα πρὸς τὸν ἀποκρινόμενον διειλέχθαι. πρὸς γὰρ τοὺς δυσκολαίνοντας οὐ δυνατόν ἴσως εὐθὺς οἷους τις βούλεται ἄλλ' οἷους ἐνδέχεται ποιεῖσθαι τοὺς συλλογισμούς.

Ἐπεὶ δ' ἐστὶν ἀδιόριστον πότε τ'ἀναντία καὶ πότε τὰ ἐν ἀρχῇ λαμβάνουσιν οἱ ἄνθρωποι (πολλάκις γὰρ καθ' αὐτοὺς λέγοντες τὰ ἐναντία λέγουσι, καὶ ἀνανεύσαντες πρότερον διδόασιν ὕστερον· διόπερ ἐρωτώμενοι τ'ἀναντία καὶ τὸ ἐν ἀρχῇ πολλάκις ὑπακούουσιν), ἀνάγκη φαύλους γίνεσθαι τοὺς λόγους. αἷτιος δ' ὁ ἀποκρινόμενος, τὰ μὲν οὐ διδούς, τὰ δὲ τοιαῦτα διδούς. φανερόν οὖν ὡς οὐχ ὁμοίως ἐπιτιμητέον τοῖς ἐρωτῶσι καὶ τοῖς λόγοις.

Καθ' αὐτὸν δὲ τῷ λόγῳ πέντ' εἰσὶν ἐπιτιμήσεις· πρώτη μὲν ὅταν ἐκ τῶν ἐρωτωμένων μὴ συμπεραίνεται μήτε τὸ προτεθὲν μήτε ὅλως μηδέν, ὄντων ψευδῶν ἢ ἀδόξων, ἢ ἀπάντων ἢ τῶν πλείστων, ἐν οἷς τὸ συμπέρασμα, καὶ μήτ' ἀφαιρεθέντων τινῶν μήτε προστεθέντων μήτε τῶν μὲν ἀφαιρεθέντων τῶν δὲ προστεθέντων γίνηται τὸ συμπέρασμα. δευτέρα δὲ εἰ πρὸς τὴν θέσιν μὴ γίνοιτο ὁ συλλογισμὸς ἐκ τοιούτων τε καὶ οὕτως ὡς εἴρηται πρότερον. τρίτη δ' εἰ προστεθέντων τινῶν γίνοιτο συλλογισμὸς, ταῦτα δ' εἴη χεῖρω τῶν ἐρωτηθέντων καὶ ἥττον ἔνδοξα τοῦ συμπεράσματος. πάλιν εἰ ἀφαιρεθέντων τινῶν· ἐνίστε γὰρ πλείω λαμβάνουσι τῶν ἀναγκαίων, ὥστε οὐ τῷ ταῦτ' εἶναι γίνεται ὁ συλλογισμὸς. ἔτι εἰ ἐξ ἀδοξοτέρων καὶ ἥττον πιστῶν τοῦ συμπεράσματος, ἢ εἰ ἐξ ἀληθῶν ἀλλὰ πλείονος ἔργου δεομένων ἀποδείξει τοῦ προβλήματος.

Οὐ δεῖ δὲ πάντων τῶν προβλημάτων ὁμοίως ἀξιοῦν τοὺς συλλογισμοὺς ἐνδόξους εἶναι καὶ πιθανούς· φύσει γὰρ εὐθύς ὑπάρχει τὰ μὲν ῥάω τὰ δὲ χαλεπώτερα τῶν ζητουμένων, ὥστ' ἐὰν ἐξ ὧν ἐνδέχεται μάλιστα ἐνδόξων συμβιβάσῃ, δείλεκται καλῶς. φανερόν οὖν ὅτι οὐδὲ λόγῳ ἢ αὐτῇ ἐπιτίμησις πρὸς τε τὸ προβληθὲν καὶ καθ' αὐτόν· οὐδὲν γὰρ κωλύει καθ' αὐτὸν μὲν εἶναι τὸν λόγον ψεκτόν, πρὸς δὲ τὸ [162a] πρόβλημα ἐπαινετόν, καὶ πάλιν ἀντεστραμμένως καθ' αὐτόν μὲν ἐπαινετόν, πρὸς δὲ τὸ πρόβλημα ψεκτόν, ὅταν ἐκ πολλῶν ἢ ῥάδιον ἐνδόξων συμπεράνασθαι καὶ ἀληθῶν. εἴη δ' ἂν ποτε λόγος καὶ συμπεπερασμένος μὴ συμπεπερασμένου χείρων, ὅταν ὁ μὲν ἐξ εὐήθων συμπεραίνεται μὴ τοιούτου τοῦ προβλήματος ὄντος, ὁ δὲ προσδέηται τοιούτων ἃ ἐστὶν ἔνδοξα καὶ ἀληθῆ, καὶ μὴ ἐν τοῖς προσλαμβανομένοις ἢ ὁ λόγος. τοῖς δὲ διὰ ψευδῶν ἀληθὲς συμπεραينوμένοις οὐ δίκαιον ἐπιτιμᾶν· ψεῦδος μὲν γὰρ ἀεὶ ἀνάγκη διὰ ψευδῶν συλλογίζεσθαι, τὸ δ' ἀληθὲς ἔστι καὶ διὰ ψευδῶν ποτε συλλογίζεσθαι. φανερόν δ' ἐκ τῶν Ἀναλυτικῶν.

Ὅταν δ' ἀπόδειξις ἢ τινος ὁ εἰρημένος λόγος, εἴ τί ἐστιν ἄλλο πρὸς τὸ συμπέρασμα μηδαμῶς ἔχον, οὐκ ἔσται περὶ ἐκείνου συλλογισμὸς· ἂν δὲ φαίνεται, σόφισμα ἔσται, οὐκ ἀπόδειξις. ἔστι δὲ φιλοσόφημα μὲν συλλογισμὸς ἀποδεικτικός, ἐπιχείρημα δὲ συλλογισμὸς διαλεκτικός, σόφισμα δὲ

συλλογισμὸς ἐριστικός, ἀπόρημα δὲ συλλογισμὸς διαλεκτικὸς ἀντιφάσεως.

Εἰ δ' ἐξ ἀμφοτέρων τι δοκούντων δειχθεῖη, μὴ ὁμοίως δὲ δοκούντων, οὐδὲν κωλύει τὸ δειχθὲν μᾶλλον ἑκατέρου δοκεῖν. ἀλλ' εἰ τὸ μὲν δοκοίη τὸ δὲ μηδετέρως, ἢ εἰ τὸ μὲν δοκοίη τὸ δὲ μὴ δοκοίη, εἰ μὲν ὁμοίως, ὁμοίως ἂν εἴη καὶ <δοκοῦν καὶ> μὴ, εἰ δὲ μᾶλλον θάτερον, ἀκολουθήσει τῷ μᾶλλον.

Ἔστι δέ τις ἀμαρτία καὶ αὕτη περὶ τοὺς συλλογισμούς, ὅταν δείξη διὰ μακροτέρων, ἐνὸν δι' ἐλαττόνων καὶ ἐν τῷ λόγῳ ὑπαρχόντων, οἷον ὅτι ἔστι δόξα μᾶλλον ἑτέρα ἑτέρας, εἴ τις αἰτήσαιο αὐτοέκαστον μάλιστ' εἶναι, εἶναι δὲ δοξαστὸν ἀληθῶς αὐτό, ὥστε τῶν τινῶν μᾶλλον εἶναι αὐτό· πρὸς δὲ τὸ μᾶλλον μᾶλλον τὸ λεγόμενον εἶναι· εἶναι δὲ καὶ αὐτοδόξαν ἀληθῆ, ἢ ἔσται μᾶλλον ἀκριβῆς τῶν τινῶν· ἥττηται δὲ καὶ αὐτοδόξαν ἀληθῆ εἶναι καὶ αὐτοέκαστον μάλιστ' εἶναι· ὥστε αὕτη δόξα ἀκριβεστέρα ἐστίν. τίς δὲ ἢ μοχθηρία; ἢ ὅτι ποιεῖ, παρ' ὃ ὁ λόγος, λανθάνειν τὸ αἴτιον;

Λόγος δ' ἐστὶ δῆλος ἓνα μὲν τρόπον καὶ δημοσιώτατον, ἐὰν ἢ συμπεπερασμένος οὕτως ὥστε μηδὲν δεῖν ἐπερωτῆσαι· ἓνα δὲ καὶ ὃς μάλιστα λέγεται, ὅταν εἰλημμένα [162b] μὲν ἢ ἐξ ὧν ἀναγκαῖον εἶναι, ἢ δὲ διὰ συμπερασμάτων συμπεραινόμενος· ἔτι εἰ ἐλλείπει τι σφόδρα ἔνδοξον.

Ψευδὴς δὲ λόγος καλεῖται τετραχῶς· ἓνα μὲν τρόπον ὅταν φαίνεται συμπεραίνεσθαι μὴ συμπεραινόμενος, ὃ καλεῖται ἐριστικὸς συλλογισμὸς. ἄλλον δὲ ὅταν συμπεραίνεται μὲν, μὴ μέντοι πρὸς τὸ προκείμενον (ὅπερ συμβαίνει μάλιστα τοῖς εἰς ἀδύνατον ἄγουσιν), ἢ πρὸς τὸ προκείμενον μὲν συμπεραίνεται, μὴ μέντοι κατὰ τὴν οἰκείαν μέθοδον. τοῦτο δ' ἐστίν, ὅταν μὴ ὧν ἱατρικὸς δοκῇ ἱατρικὸς εἶναι, ἢ γεωμετρικὸς μὴ ὧν γεωμετρικός, ἢ διαλεκτικὸς μὴ ὧν διαλεκτικός, ἢ τε ψεῦδος ἢ τ' ἀληθὲς ἢ τὸ συμβαῖνον. ἄλλον δὲ τρόπον ἐὰν διὰ ψευδῶν συμπεραίνεται. τούτου δ' ἔσται ποτὲ μὲν τὸ συμπέρασμα ψεῦδος, ποτὲ δ' ἀληθές· τὸ μὲν γὰρ ψεῦδος αἰεὶ διὰ ψευδῶν περαίνεται, τὸ δ' ἀληθὲς ἐγχωρεῖ καὶ μὴ ἐξ ἀληθῶν, ὥσπερ εἴρηται καὶ πρότερον.

Τὸ μὲν οὖν ψευδὴ τὸν λόγον εἶναι τοῦ λέγοντος ἀμάρτημα μᾶλλον ἢ τοῦ λόγου, καὶ οὐδὲ τοῦ λέγοντος αἰεὶ, ἀλλ' ὅταν λανθάνῃ αὐτόν· ἐπεὶ καθ' αὐτόν γε πολλῶν ἀληθῶν ἀποδεχόμεθα μᾶλλον, ἢ ἐξ ὅτι μάλιστα δοκούντων ἀναιρῇ τι τῶν ἀληθῶν. τοιοῦτος γὰρ ὧν ἑτέρων ἀληθῶν ἀπόδειξις ἐστίν· δεῖ γὰρ τῶν κειμένων τι μὴ εἶναι παντελῶς, ὥστ' ἔσται τούτου ἀπόδειξις. εἰ δ' ἀληθὲς συμπεραίνοιτο διὰ ψευδῶν καὶ λίαν εὐήθων, πολλῶν ἂν εἴη χείρων

ψεῦδος συλλογιζομένων· εἴη δ' ἂν τοιοῦτος καὶ ψεῦδος συμπεραινόμενος· ὥστε δῆλον ὅτι πρώτη μὲν ἐπίσκεψις λόγου καθ' αὐτὸν εἰ συμπεραίνεται, δευτέρα δὲ πότερον ἀληθὲς ἢ ψεῦδος, τρίτη δ' ἐκ ποίων τινῶν. εἰ μὲν γὰρ ἐκ ψευδῶν ἐνδόξων δέ, λογικός· εἰ δ' ἐξ ὄντων μὲν ἀδόξων δέ, φαῦλος· εἰ δὲ καὶ ψευδῇ καὶ λῖαν ἄδοξα, δῆλον ὅτι φαῦλος ἢ ἀπλῶς ἢ τοῦ πράγματος.

Τὸ δὲ ἐν ἀρχῇ καὶ τὰ ἐναντία πῶς αἰτεῖται ὁ ἐρωτῶν, κατ' ἀλήθειαν μὲν ἐν τοῖς Ἀναλυτικοῖς εἴρηται, κατὰ δόξαν δὲ νῦν λεκτέον.

Αἰτεῖσθαι δὲ φαίνονται τὸ ἐν ἀρχῇ πενταχῶς. φανερώτατα μὲν καὶ πρῶτον, εἴ τις αὐτὸ τὸ δείκνυσθαι δέον αἰτήσκειν. τοῦτο δ' ἐπ' αὐτοῦ μὲν οὐ ῥάδιον λανθάνειν, ἐν δὲ τοῖς συνωνύμοις καὶ ἐν ὅσοις τὸ ὄνομα καὶ ὁ λόγος τὸ αὐτὸ [163a] σημαίνει, μᾶλλον. δεύτερον δέ, ὅταν κατὰ μέρος δέον ἀποδείξαι καθόλου τις αἰτήσῃ, οἷον «εἰ», ἐπιχειρῶν ὅτι τῶν ἐναντίων μία ἐπιστήμη, ὅλως τῶν ἀντικειμένων ἀξιώσκει μίαν εἶναι· δοκεῖ γὰρ ὁ ἔδει καθ' αὐτὸ δεῖξαι μετ' ἄλλων αἰτεῖσθαι πλειόνων. τρίτον εἴ τις καθόλου δεῖξαι προκειμένου κατὰ μέρος αἰτήσκειν, οἷον εἰ πάντων τῶν ἐναντίων προκειμένου τῶνδ' ἐκ τινῶν ἀξιώσκει· δοκεῖ γὰρ καὶ οὗτος, ὁ μετὰ πλειόνων ἔδει δεῖξαι, καθ' αὐτὸ χωρὶς αἰτεῖσθαι. πάλιν εἴ τις διελὼν αἰτεῖται τὸ πρόβλημα, οἷον εἰ, δέον δεῖξαι τὴν ἱατρικὴν ὑγιεινοῦ καὶ νοσώδους, χωρὶς ἐκάτερον ἀξιώσκειν, ἢ εἴ τις τῶν ἐπομέγων ἀλλήλοις ἐξ ἀνάγκης θάτερον αἰτήσκειν, οἷον τὴν πλευρὰν ἀσύμμετρον εἶναι τῇ διαμέτρῳ, δέον ἀποδείξαι ὅτι ἡ διάμετρος τῇ πλευρᾷ.

Ἰσαχῶς δὲ καὶ τὰναντία αἰτοῦνται τῷ ἐξ ἀρχῆς. πρῶτον μὲν γὰρ εἴ τις τὰ ἀντικείμενα αἰτήσαιτο, φάσιν καὶ ἀπόφασιν, δεύτερον δὲ τὰναντία κατὰ τὴν ἀντίθεσιν, οἷον ἀγαθὸν καὶ κακὸν ταῦτόν. τρίτον εἴ τις τὸ καθόλου ἀξιώσας ἐπὶ μέρους αἰτοῖτο τὴν ἀντίφασιν, οἷον εἰ, λαβὼν τῶν ἐναντίων μίαν ἐπιστήμην, ὑγιεινοῦ καὶ νοσώδους ἑτέραν ἀξιώσκειν, ἢ, τοῦτο αἰτησάμενος, ἐπὶ τοῦ καθόλου τὴν ἀντίφασιν πειρᾷτο λαμβάνειν. πάλιν ἐάν τις αἰτήσῃ τὸ ἐναντίον τῷ ἐξ ἀνάγκης συμβαίνοντι διὰ τῶν κειμένων, κἂν εἴ τις αὐτὰ μὲν μὴ λάβοι τὰ ἀντικείμενα, τοιαῦτα δ' αἰτήσαιτο δύο ἐξ ὧν ἔσται ἡ ἀντικείμενη ἀντίφασις. διαφέρει δὲ τὸ τὰναντία λαμβάνειν τοῦ «τὸ» ἐν ἀρχῇ, ὅτι τοῦ μὲν ἔστιν ἡ ἁμαρτία πρὸς τὸ συμπέρασμα (πρὸς γὰρ ἐκεῖνο βλέποντες τὸ ἐν ἀρχῇ λέγομεν αἰτεῖσθαι), τὰ δ' ἐναντία ἔστιν ἐν ταῖς προτάσεσι τῷ ἔχειν πῶς ταύτας πρὸς ἀλλήλας.

Πρὸς δὲ γυμνασίαν καὶ μελέτην τῶν τοιούτων λόγων πρῶτον μὲν ἀντιστρέφειν ἐθίζεσθαι χρὴ τοὺς λόγους· οὕτως γὰρ πρὸς τε τὸ λεγόμενον εὐπορώτερον ἔξομεν καὶ ἐν ὀλίγοις πολλοὺς ἐξεπιστησόμεθα λόγους. τὸ γὰρ



ἀντιστρέφειν ἐστὶ τὸ μεταλαβόντα τὸ συμπέρασμα μετὰ τῶν λοιπῶν ἐρωτημάτων ἀνελεῖν ἐν τῶν δοθέντων· ἀνάγκη γάρ, εἰ τὸ συμπέρασμα μὴ ἔστι, μίαν τινὰ ἀναιρεῖσθαι τῶν προτάσεων, εἴπερ πασῶν τεθεισῶν ἀνάγκη ἦν τὸ συμπέρασμα εἶναι. πρὸς ἅπασάν τε θέσιν, καὶ ὅτι οὕτως καὶ ὅτι οὐχ οὕτως, τὸ ἐπιχείρημα [163b] σκεπτέον, καὶ εὐρόντα τὴν λύσιν εὐθὺς ζητητέον· οὕτω γὰρ ἅμα συμβήσεται πρὸς τε τὸ ἐρωτᾶν καὶ πρὸς τὸ ἀποκρίνεσθαι γεγυμνάσθαι, κἂν πρὸς μηδένα ἄλλον ἔχωμεν, πρὸς αὐτούς. παράλληλά τε παραβάλλειν ἐκλέγοντα πρὸς τὴν αὐτὴν θέσιν ἐπιχειρήματα· τοῦτο γὰρ πρὸς τε τὸ βιάζεσθαι πολλὴν εὐπορίαν ποιεῖ καὶ πρὸς τὸ ἐλέγχειν μεγάλην ἔχει βοήθειαν, ὅταν εὐπορῇ τις καὶ ὅτι οὕτως καὶ ὅτι οὐχ οὕτως (πρὸς τὰ ἐναντία γὰρ συμβαίνει ποιεῖσθαι τὴν φυλακὴν)· πρὸς τε γνῶσιν καὶ τὴν κατὰ φιλοσοφίαν φρόνησιν τὸ δύνασθαι συνορᾶν καὶ συνεωρακέναι τὰ ἀφ' ἑκατέρας συμβαίνοντα τῆς ὑποθέσεως οὐ μικρὸν ὄργανον· λοιπὸν γὰρ τούτων ὀρθῶς ἐλέσθαι θάτερον. δεῖ δὲ πρὸς τὸ τοιοῦτον ὑπάρχειν εὐφυᾶ, καὶ τοῦτ' ἔστιν ἢ κατ' ἀλήθειαν εὐφυῖα, τὸ δύνασθαι καλῶς ἐλέσθαι τάληθές καὶ φυγεῖν τὸ ψεῦδος· ὅπερ οἱ πεφυκότες εὖ δύνανται ποιεῖν· εὖ γὰρ φιλοῦντες καὶ μισοῦντες τὸ προσφερόμενον εὖ κρίνουσι τὸ βέλτιστον.

Πρὸς τε τὰ πλειστάκις ἐμπίπτοντα τῶν προβλημάτων ἐξεπίστασθαι δεῖ λόγους, καὶ μάλιστα περὶ τῶν πρώτων θέσεων· ἐν τούτοις γὰρ ἀποδυσπετοῦσιν οἱ ἀποκρινόμενοι πολλάκις. ἔτι τε ὅρων εὐπορεῖν δεῖ καὶ τῶν ἐνδόξων τε καὶ τῶν πρώτων ἔχειν προχείρους· διὰ γὰρ τούτων οἱ συλλογισμοὶ γίνονται. πειρατέον δὲ καὶ εἰς ἃ πλειστάκις ἐμπίπτουσιν οἱ λόγοι κατέχειν. ὥσπερ γὰρ ἐν γεωμετρίᾳ πρὸ ἔργου τὸ περὶ τὰ στοιχεῖα γεγυμνάσθαι, καὶ ἐν ἀριθμοῖς τὸ περὶ τοὺς κεφαλισμοὺς προχείρως ἔχειν μέγα διαφέρει πρὸς τὸ καὶ τὸν ἄλλον ἀριθμὸν γινώσκειν πολλαπλασιούμενον, ὁμοίως καὶ ἐν τοῖς λόγοις τὸ πρόχειρον εἶναι περὶ τὰς ἀρχάς, καὶ τὰς προτάσεις ἀπὸ στόματος ἐξεπίστασθαι. καθάπερ γὰρ ἐν τῷ μνημονικῷ μόνον οἱ τόποι τεθέντες εὐθὺς ποιοῦσιν αὐτὰ μνημονεύειν, καὶ ταῦτα ποιήσει συλλογιστικώτερον διὰ τὸ πρὸς ὠρισμένας αὐτὰς βλέπειν κατ' ἀριθμόν. πρότασιν τε κοινὴν μᾶλλον ἢ λόγον εἰς μνήμην θετέον· ἀρχῆς γὰρ καὶ ὑποθέσεως εὐπορῆσαι μετρίως χαλεπόν.

Ἔτι τὸν ἕνα λόγον πολλοὺς ποιεῖν ἐθιστέον, ὥς ἀδηλότατα κρύπτοντας. εἴη δ' ἂν τὸ τοιοῦτον εἴ τις ὅτι πλεῖστον ἀφισταίῃ τῆς συγγενείας περὶ ὧν ὁ λόγος. ἔσονται δὲ δυνατοὶ τῶν λόγων οἱ μάλιστα καθόλου τοῦτο πάσχειν, οἷον ὅτι [164a] οὐκ ἔστι μία πλειόνων ἐπιστήμη· οὕτω γὰρ καὶ ἐπὶ τῶν πρὸς τι καὶ ἐπὶ τῶν ἐναντίων καὶ συστοίχων ἐστίν.

Δεῖ δὲ καὶ τὰς ἀπομνημονεύσεις καθόλου ποιεῖσθαι τῶν λόγων, κἂν ἢ διειλεγμένος ἐπὶ μέρους· οὕτω γὰρ καὶ πολλοὺς ἐξέσται τὸν ἕνα ποιεῖν. ὁμοίως δὲ καὶ ἐν ῥητορικοῖς ἐπὶ τῶν ἐνθυμημάτων. αὐτὸν δ' ὅτι μάλιστα φεύγειν ἐπὶ τὸ καθόλου φέρειν τοὺς συλλογισμούς. αἰεὶ τε δεῖ σκοπεῖν τοὺς λόγους, εἰ ἐπὶ κοινῶν διαλέγονται· πάντες γὰρ οἱ ἐν μέρει καὶ καθόλου διειλεγμένοι εἰσὶ, καὶ ἔνεστιν ἐν τῇ κατὰ μέρος ἢ τοῦ καθόλου ἀπόδειξις διὰ τὸ μὴ εἶναι συλλογίσασθαι μηδὲν ἄνευ τῶν καθόλου.

Τὴν δὲ γυμνασίαν ἀποδοτέον τῶν μὲν ἐπακτικῶν πρὸς νέον, τῶν δὲ συλλογιστικῶν πρὸς ἔμπειρον. πειρατέον δὲ λαμβάνειν παρὰ μὲν τῶν συλλογιστικῶν τὰς προτάσεις, παρὰ δὲ τῶν ἐπακτικῶν τὰς παραβολάς· ἐν τούτῳ γὰρ ἑκάτεροι γεγυμνασμένοι εἰσὶν. ὅλως δ' ἐκ τοῦ γυμνάζεσθαι διαλεγόμενον πειρατέον ἀποφέρεσθαι ἢ συλλογισμόν περί τινος ἢ λύσιν ἢ πρότασιν ἢ ἔνστασιν, ἢ εἰ ὀρθῶς τις ἤρετο ἢ εἰ μὴ ὀρθῶς, ἢ αὐτὸς ἢ ἕτερος, καὶ παρὰ τί ἑκάτερον.

[164b] ἐκ τούτων γὰρ ἡ δύναμις, τὸ δὲ γυμνάζεσθαι δυνάμεως χάριν, καὶ μάλιστα περὶ τὰς προτάσεις καὶ ἐνστάσεις· ἔστι γὰρ ὡς ἀπλῶς εἰπεῖν διαλεκτικὸς ὁ προτατικὸς καὶ ἐνστατικὸς. ἔστι δὲ τὸ μὲν προτείνεισθαι ἐν ποιεῖν τὰ πλείω (δεῖ γὰρ ἐν ὅλως ληφθῆναι πρὸς ὃ ὁ λόγος), τὸ δ' ἐνίστασθαι τὸ ἐν πολλὰ· ἢ γὰρ διαιρεῖ ἢ ἀναιρεῖ, τὸ μὲν διδοὺς τὸ δ' οὐ τῶν προτεινομένων.

Οὐχ ἅπαντι δὲ διαλεκτέον, οὐδὲ πρὸς τὸν τυχόντα γυμναστέον. ἀνάγκη γὰρ πρὸς ἐνίους φαύλους γίνεσθαι τοὺς λόγους· πρὸς γὰρ τὸν πάντως πειρώμενον φαίνεσθαι διαφεύγειν δίκαιον μὲν πάντως πειρᾶσθαι συλλογίσασθαι, οὐκ εὐσχημον δέ. διόπερ οὐ δεῖ συνεστάναι εὐχερῶς πρὸς τοὺς τυχόντας· ἀνάγκη γὰρ πονηρολογίαν συμβαίνειν· καὶ γὰρ οἱ γυμναζόμενοι ἀδυνατοῦσιν ἀπέχεσθαι τοῦ διαλέγεσθαι ἀγωνιστικῶς.

Δεῖ δὲ καὶ πεποιημένους ἔχειν λόγους πρὸς τὰ τοιαῦτα τῶν προβλημάτων ἐν οἷς ἐλαχίστων εὐπορήσαντες πρὸς πλεῖστα χρησίμους ἔξομεν· οὗτοι δ' εἰσὶν οἱ καθόλου καὶ οὓς προσπορίζεσθαι χαλεπώτερον ἐκ τῶν παρὰ πόδας.

## Περὶ τῶν Σοφιστικῶν Ἑλεγχῶν (164a) Sophistical Refutations



Περὶ δὲ τῶν σοφιστικῶν ἐλεγχῶν καὶ τῶν φαινομένων μὲν ἐλεγχῶν, ὄντων δὲ παραλογισμῶν ἄλλ' οὐκ ἐλεγχῶν, λέγωμεν ἀρξάμενοι κατὰ φύσιν ἀπὸ τῶν πρώτων.

Ὅτι μὲν οὖν οἱ μὲν εἰσὶ συλλογισμοί, οἱ δ' οὐκ ὄντες δοκοῦσι, φανερόν. ὥσπερ γὰρ καὶ ἐπὶ τῶν ἄλλων τοῦτο γίνεται διὰ τινος ὁμοιότητος, καὶ ἐπὶ τῶν λόγων ὡσαύτως ἔχει. καὶ γὰρ τὴν ἕξιν οἱ μὲν ἔχουσιν εὖ, οἱ δὲ φαίνονται, φυλετικῶς φυσήσαντες καὶ ἐπισκευάσαντες αὐτούς, καὶ καλοὶ οἱ μὲν διὰ κάλλος, οἱ δὲ φαίνονται, κομμώσαντες αὐτούς. ἐπὶ τε τῶν ἀψύχων ὡσαύτως· καὶ γὰρ τούτων τὰ μὲν ἄργυρος τὰ δὲ χρυσός ἐστιν ἀληθῶς, τὰ δ' ἔστι μὲν οὐ, φαίνεται δὲ κατὰ τὴν αἴσθησιν, οἷον τὰ μὲν λιθαργύρινα καὶ τὰ καττιτέρινα ἀργυρᾶ, τὰ δὲ χολοβάφινα χρυσᾶ. τὸν αὐτὸν δὲ τρόπον καὶ συλλογισμὸς καὶ ἔλεγχος ὁ μὲν ἔστιν, ὁ δ' οὐκ ἔστι μὲν, φαίνεται δὲ διὰ τὴν ἀπειρίαν· οἱ γὰρ ἀπειροὶ ὥσπερ ἂν ἀπέχοντες πόρρωθεν θεωροῦσιν. ὁ μὲν γὰρ συλλογισμὸς ἐκ τινῶν ἐστὶ τεθέντων ὥστε λέγειν ἕτερον ἐξ ἀνάγκης τι τῶν κειμένων διὰ τῶν κειμένων, ἔλεγχος δὲ συλλογισμὸς μετ' ἀντιφάσεως τοῦ συμπεράσματος. οἱ δὲ τοῦτο ποιοῦσι μὲν οὐ, δοκοῦσι δὲ διὰ πολλὰς αἰτίας· ὧν εἷς τόπος εὐφυέστατός ἐστι καὶ δημοσιώτατος, ὁ διὰ τῶν ὀνομάτων. ἐπεὶ γὰρ οὐκ ἔστιν αὐτὰ τὰ πράγματα διαλέγεσθαι φέροντας, ἀλλὰ τοῖς ὀνόμασιν ἀντὶ τῶν πραγμάτων χρώμεθα ὡς συμβόλοις, τὸ συμβαῖνον ἐπὶ τῶν ὀνομάτων καὶ ἐπὶ τῶν πραγμάτων ἡγούμεθα συμβαίνειν, καθάπερ ἐπὶ τῶν ψήφων τοῖς λογιζομένοις. τὸ δ' οὐκ ἔστιν ὅμοιον· τὰ μὲν γὰρ ὀνόματα πεπέρανται καὶ τὸ τῶν λόγων πλῆθος, τὰ δὲ πράγματα τὸν ἀριθμὸν ἀπειρά ἐστιν. ἀναγκαῖον οὖν πλείω τὸν αὐτὸν λόγον καὶ τοῦνομα τὸ ἓν σημαίνειν. ὥσπερ οὖν κάκεῖ οἱ μὴ δεινοὶ τὰς ψήφους φέρειν ὑπὸ τῶν ἐπιστημόνων παρακρούονται, τὸν αὐτὸν τρόπον καὶ ἐπὶ τῶν λόγων οἱ τῶν ὀνομάτων τῆς δυνάμεως ἀπειροὶ παραλογίζονται καὶ αὐτοὶ διαλεγόμενοι καὶ ἄλλων ἀκούοντες. διὰ μὲν οὖν ταύτην τὴν αἰτίαν καὶ τὰς λεχθησομένας ἔστι καὶ συλλογισμὸς καὶ ἔλεγχος φαινόμενος οὐκ ὧν δέ. ἐπεὶ δ' ἐστὶ τισι μᾶλλον πρὸ ἔργου τὸ δοκεῖν εἶναι σοφοῖς ἢ τὸ εἶναι καὶ μὴ δοκεῖν (ἔστι γὰρ ἡ σοφιστικὴ φαινομένη σοφία οὕσα δ' οὐ, καὶ ὁ σοφιστὴς χρηματιστὴς ἀπὸ φαινομένης σοφίας ἄλλ' οὐκ οὔσης), δῆλον ὅτι ἀναγκαῖον τούτοις καὶ τοῦ σοφοῦ ἔργον δοκεῖν ποιεῖν, μᾶλλον ἢ ποιεῖν καὶ μὴ δοκεῖν. ἔστι δ' ὡς ἔν

πρὸς ἓν εἰπεῖν ἔργον περὶ ἕκαστον τοῦ εἰδότος ἀψευδεῖν μὲν αὐτὸν περὶ ὧν οἶδε, τὸν δὲ ψευδόμενον ἐμφανίζειν δύνασθαι. ταῦτα δ' ἐστὶ τὸ μὲν ἐν τῷ δύνασθαι δοῦναι λόγον, τὸ δ' ἐν τῷ λαβεῖν. ἀνάγκη οὖν τοὺς βουλομένους σοφιστεύειν τὸ τῶν εἰρημένων λόγων γένος ζητεῖν· πρὸ ἔργου γὰρ ἐστίν· ἡ γὰρ τοιαύτη δύναμις ποιήσει φαίνεσθαι σοφόν, οὐ τυγχάνουσι τὴν προαίρεσιν ἔχοντες.

Ὅτι μὲν οὖν ἔστι τι τοιοῦτον λόγων γένος, καὶ ὅτι τοιαύτης ἐφίενται δυνάμεως οὐκ καλοῦμεν σοφιστάς, δῆλον. πόσα δ' ἔστιν εἴδη τῶν λόγων τῶν σοφιστικῶν, καὶ ἐκ πόσων τὸν ἀριθμὸν ἡ δύναμις αὕτη συνέστηκε, καὶ πόσα μέρη τυγχάνει τῆς πραγματείας ὄντα, καὶ περὶ τῶν ἄλλων τῶν συντελούντων εἰς τὴν τέχνην ταύτην ἤδη λέγωμεν.

Ἔστι δὲ τῶν ἐν τῷ διαλέγεσθαι λόγων τέτταρα γένη, διδασκαλικοὶ καὶ διαλεκτικοὶ καὶ πειραστικοὶ καὶ ἐριστικοί· διδασκαλικοὶ μὲν οἱ ἐκ τῶν οἰκείων ἀρχῶν ἐκάστου μαθήματος καὶ οὐκ ἐκ τῶν τοῦ ἀποκρινομένου δοξῶν συλλογιζόμενοι (δεῖ γὰρ πιστεύειν τὸν μανθάνοντα), διαλεκτικοὶ δ' οἱ ἐκ τῶν ἐνδόξων συλλογιστικοὶ ἀντιφάσεως, πειραστικοὶ δ' οἱ ἐκ τῶν δοκούντων τῷ ἀποκρινομένῳ καὶ ἀναγκαίων εἶδέναι τῷ προσποιουμένῳ ἔχειν τὴν ἐπιστήμην (ὃν τρόπον δέ, διώριται ἐν ἑτέροις), ἐριστικοὶ δ' οἱ ἐκ τῶν φαινομένων ἐνδόξων, μὴ ὄντων δέ, συλλογιστικοὶ ἢ φαινόμενοι συλλογιστικοί. περὶ μὲν οὖν τῶν ἀποδεικτικῶν ἐν τοῖς Ἀναλυτικοῖς εἴρηται, περὶ δὲ τῶν διαλεκτικῶν καὶ πειραστικῶν ἐν ἄλλοις· περὶ δὲ τῶν ἀγωνιστικῶν καὶ ἐριστικῶν νῦν λέγωμεν.

Πρῶτον δὲ ληπτέον πόσων στοχάζονται οἱ ἐν τοῖς λόγοις ἀγωνιζόμενοι καὶ διαφιλονεικοῦντες. ἔστι δὲ πέντε ταῦτα τὸν ἀριθμὸν, ἔλεγχος καὶ ψεῦδος καὶ παράδοξον καὶ σολοικισμὸς καὶ πέμπτον τὸ ποιῆσαι ἀδολεσχήσαι τὸν προσδιαλεγόμενον (τοῦτο δ' ἐστὶ τὸ πολλάκις ἀναγκάζεσθαι ταὐτὸ λέγειν), ἢ τὸ μὴ ὄν ἀλλὰ [τὸ] φαινόμενον ἕκαστον εἶναι τούτων. μάλιστα μὲν γὰρ προαιροῦνται φαίνεσθαι ἐλέγχοντες, δεύτερον δὲ ψευδόμενόν τι δεικνύναι, τρίτον εἰς παράδοξον ἄγειν, τέταρτον δὲ σολοικίζειν ποιεῖν (τοῦτο δ' ἐστὶ τὸ ποιῆσαι τῇ λέξει βαρβαρίζειν ἐκ τοῦ λόγου τὸν ἀποκρινόμενον)· τελευταῖον δὲ τὸ πλεονάκις ταὐτὸ λέγειν.

Τρόποι δ' εἰσὶ τοῦ μὲν ἐλέγχειν δύο· οἱ μὲν γὰρ εἰσι παρὰ τὴν λέξιν, οἱ δ' ἔξω τῆς λέξεως. ἔστι δὲ τὰ μὲν παρὰ τὴν λέξιν ἐμποιοῦντα τὴν φαντασίαν ἔξ τὸν ἀριθμὸν· ταῦτα δ' ἐστὶν ὁμωνυμία, ἀμφιβολία, σύνθεσις, διαίρεσις, προσωδία, σχῆμα λέξεως. τούτου δὲ πίστις ἢ τε διὰ τῆς ἐπαγωγῆς καὶ

συλλογισμός, ἂν τε ληφθῇ τις ἄλλος καὶ ὅτι τοσαυταχῶς ἂν τοῖς αὐτοῖς ὀνόμασι καὶ λόγοις μὴ ταὐτὸ δηλώσαιμεν. εἰσὶ δὲ παρὰ μὲν τὴν ὁμωνυμίαν οἱ τοιοῖδε τῶν λόγων, οἷον ὅτι μανθάνουσιν οἱ ἐπιστάμενοι, τὰ γὰρ ἀποστοματιζόμενα μανθάνουσιν οἱ γραμματικοί· τὸ γὰρ μανθάνειν ὁμώνυμον, τό τε ξυνιέναι χρώμενον τῇ ἐπιστήμῃ καὶ τὸ λαμβάνειν ἐπιστήμην. καὶ πάλιν ὅτι τὰ κακὰ ἀγαθὰ· τὰ γὰρ δέοντα ἀγαθὰ, τὰ δὲ κακὰ δέοντα· διττὸν γὰρ τὸ δέον, τό τ' ἀναγκαῖον, ὃ συμβαίνει πολλάκις καὶ ἐπὶ τῶν κακῶν (ἔστι γὰρ κακόν τι ἀναγκαῖον) - καὶ τὰγαθὰ δὲ δέοντά φαμεν εἶναι. ἔτι <τὸ> τὸν αὐτὸν καθῆσθαι καὶ ἐστάναι, καὶ κάμνειν καὶ ὑγιαίνειν. ὅσπερ γὰρ ἀνίστατο, ἔστηκεν, καὶ ὅσπερ ὑγιάζετο, ὑγιαίνει· ἀνίστατο δ' ὁ καθήμενος καὶ ὑγιάζετο ὁ κάμνων. τὸ γὰρ τὸν κάμνοντα ὀτιοῦν ποιεῖν ἢ πάσχειν οὐχ ἔν σημαίνει, ἀλλ' ὅτε μὲν ὅτι ὁ νῦν κάμνων [ἢ καθήμενος], ὅτε δ' ὅς ἔκαμνε πρότερον. πλὴν ὑγιάζετο μὲν καὶ κάμνων καὶ ὁ κάμνων· ὑγιαίνει δ' οὐ κάμνων ἀλλ' ὁ κάμνων, οὐ νῦν, ἀλλ' ὁ πρότερον. παρὰ δὲ τὴν ἀμφιβολίαν οἱ τοιοῖδε· τὸ βούλεσθαι λαβεῖν με τοὺς πολεμίους. καὶ “ἄρ' ὃ τις γινώσκει, τοῦτο γινώσκει;” καὶ γὰρ τὸν γινώσκοντα καὶ τὸ γινωσκόμενον ἐνδέχεται ὥς γινώσκοντα σημῆναι τούτῳ τῷ λόγῳ. καὶ “ἄρα ὃ ὁρᾷ τις, τοῦτο ὁρᾷ; ὁρᾷ δὲ τὸν κίονα, ὥστε ὁρᾷ ὁ κίων”. καὶ “ἄρα ὃ σὺ φῆς εἶναι, τοῦτο σὺ φῆς εἶναι; φῆς δὲ λίθον εἶναι· σὺ ἄρα φῆς λίθος εἶναι”. καὶ “ἄρ' ἔστι σιγῶντα λέγειν;” διττὸν γὰρ καὶ τὸ σιγῶντα λέγειν, τό τε τὸν λέγοντα σιγᾶν καὶ τὸ τὰ λεγόμενα. εἰσὶ δὲ τρεῖς τρόποι τῶν παρὰ τὴν ὁμωνυμίαν καὶ τὴν ἀμφιβολίαν· εἰς μὲν ὅταν ἢ ὁ λόγος ἢ τοῦνομα κυρίως σημαίνῃ πλείω, οἷον ἀετὸς καὶ κύων· εἰς δὲ ὅταν εἰωθότες ὦμεν οὕτω λέγειν· τρίτος δὲ ὅταν τὸ συντεθὲν πλείω σημαίνῃ, κεχωρισμένον δὲ ἀπλῶς. οἷον τὸ “ἐπίσταται γράμματα”· ἑκάτερον μὲν γάρ, εἰ ἔτυχεν, ἔν τι σημαίνει, τὸ “ἐπίσταται” καὶ τὸ “γράμματα”· ἄμφω δὲ πλείω, ἢ τὸ τὰ γράμματα αὐτὰ ἐπιστήμην ἔχειν ἢ τῶν γραμμάτων ἄλλον.

Ἡ μὲν οὖν ἀμφιβολία καὶ ὁμωνυμία παρὰ τούτους τοὺς τρόπους ἐστίν. παρὰ δὲ τὴν σύνθεσιν τὰ τοιάδε, οἷον τὸ δύνασθαι καθήμενον βαδίζειν καὶ μὴ γράφοντα γράφειν (οὐ γὰρ ταὐτὸ σημαίνει ἂν διελὼν τις εἴπη καὶ συνθεὶς ὥς δυνατὸν τὸ “καθήμενον βαδίζειν” [καὶ “μὴ γράφοντα γράφειν”]· καὶ τοῦθ' ὡσαύτως, ἂν τις συνθῇ τὸ “μὴ γράφοντα γράφειν”· σημαίνει γὰρ ὥς ἔχει δύναμιν τοῦ μὴ γράφον γράφειν· ἐὰν δὲ μὴ συνθῇ, ὅτι ἔχει δύναμιν, ὅτε οὐ γράφει, τοῦ γράφειν), καὶ “μανθάνει νῦν γράμματα, εἴπερ μανθάνει ἃ ἐπίσταται”. ἔτι τὸ ἐν μόνον δυνάμενον φέρειν πολλὰ δύνασθαι φέρειν.

Παρὰ δὲ τὴν διαίρεσιν ὅτι τὰ πέντ' ἐστὶ δύο καὶ τρία, καὶ περιττὰ καὶ ἄρτια, καὶ τὸ μείζον ἴσον· τοσοῦτον γὰρ καὶ ἔτι πρὸς. ὁ γὰρ αὐτὸς λόγος διηρημένος καὶ συγκείμενος οὐκ ἀεὶ ταὐτὸ σημαίνειν ἂν δόξειεν, οἷον “ἐγώ

σ’ ἔθηκα δοῦλον ὄντ’ ἐλεύθερον” καὶ τὸ “πεντήκοντ’ ἀνδρῶν ἑκατὸν λίπε δῖος Ἀχιλλεύς”.

Παρὰ δὲ τὴν προσωδίαν ἐν μὲν τοῖς ἄνευ γραφῆς διαλεκτικοῖς οὐ ῥάδιον ποιῆσαι λόγον, ἐν δὲ τοῖς γεγραμμένοις καὶ ποιήμασι μᾶλλον. οἶον καὶ τὸν Ὅμηρον ἔνιοι διορθοῦνται πρὸς τοὺς ἐλέγχοντας ὡς ἄτοπον εἰρηκότα “τὸ μὲν οὐ καταπύθεται ὄμβρω”· λύουσι γὰρ αὐτὸ τῇ προσωδία, λέγοντες τὸ “ου” ὀξύτερον. καὶ τὸ περὶ τὸ ἐνύπνιον τοῦ Ἀγαμέμνονος, ὅτι οὐκ αὐτὸς ὁ Ζεὺς εἶπεν “δίδομεν δέ οἱ εὖχος ἀρέσθαι”, ἀλλὰ τῷ ἐνυπνίῳ ἐνετέλλετο δίδόναι. τὰ μὲν οὖν τοιαῦτα παρὰ τὴν προσωδίαν ἐστίν.

Οἱ δὲ παρὰ τὸ σχῆμα τῆς λέξεως συμβαίνουσιν ὅταν τὸ μὴ ταῦτο ὡσαύτως ἐρμηνεύηται, οἶον τὸ ἄρρεν θῆλυ ἢ τὸ θῆλυ ἄρρεν ἢ τὸ μεταξὺ θάτερον τούτων, ἢ πάλιν τὸ ποιὸν προσὸν ἢ τὸ ποσὸν ποιόν, ἢ τὸ ποιοῦν πάσχον ἢ τὸ διακείμενον ποιοῦν, καὶ τᾶλλα δ’ ὡς διήρηται πρότερον· ἔστι γὰρ τὸ μὴ τῶν ποιεῖν ὄν ὡς τῶν ποιεῖν τι τῇ λέξει σημαίνειν. οἶον τὸ ὑγιαίνειν ὁμοίως τῷ σχήματι τῆς λέξεως λέγεται τῷ τέμνειν ἢ οἰκοδομεῖν· καίτοι τὸ μὲν ποιόν τι καὶ διακείμενόν πως δηλοῖ, τὸ δὲ ποιεῖν τι. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων.

Οἱ μὲν οὖν παρὰ τὴν λέξιν ἔλεγχοι ἐκ τούτων τῶν τόπων εἰσίν. τῶν δ’ ἕξω τῆς λέξεως παραλογισμῶν εἵδη ἔστιν ἑπτὰ, ἐν μὲν παρὰ τὸ συμβεβηκός, δεύτερον δὲ τὸ ἀπλῶς ἢ μὴ ἀπλῶς ἀλλὰ πῇ ἢ ποῦ ἢ ποτὲ ἢ πρὸς τι λέγεσθαι, τρίτον δὲ τὸ παρὰ τὴν τοῦ ἐλέγχου ἄγνοιαν, τέταρτον δὲ τὸ παρὰ τὸ ἐπόμενον, πέμπτον δὲ τὸ παρὰ τὸ <τὸ> ἐν ἀρχῇ λαμβάνειν, ἕκτον δὲ τὸ <τὸ> μὴ αἴτιον ὡς αἴτιον τιθέναι, ἑβδομον δὲ τὸ τὰ πλείω ἐρωτήματα ἐν ποιεῖν.

Οἱ μὲν οὖν παρὰ τὸ συμβεβηκός παραλογισμοὶ εἰσιν ὅταν ὁμοίως ὁποῦν ἀξιωθῇ τῷ πράγματι καὶ τῷ συμβεβηκότι ὑπάρχειν. ἐπεὶ γὰρ τῷ αὐτῷ πολλὰ συμβέβηκεν, οὐκ ἀνάγκη πᾶσι τοῖς κατηγορουμένοις καὶ καθ’ οὗ κατηγορεῖται ταῦτά πάντα ὑπάρχειν. οἶον “εἰ ὁ Κορίσκος ἕτερον ἀνθρώπου, αὐτὸς αὐτοῦ ἕτερος· ἔστι γὰρ ἄνθρωπος”. ἢ εἰ Σωκράτους ἕτερος, ὁ δὲ Σωκράτης ἄνθρωπος, ἕτερον ἀνθρώπου φασὶν ὠμολογηκέναι διὰ τὸ συμβεβηκέναι οὐ ἔφησεν ἕτερον εἶναι, τοῦτον εἶναι ἄνθρωπον.

Οἱ δὲ παρὰ τὸ ἀπλῶς τόδε ἢ πῇ λέγεσθαι καὶ μὴ κυρίως, ὅταν τὸ ἐν μέρει λεγόμενον ὡς ἀπλῶς εἰρημένον ληφθῇ, οἶον, εἰ τὸ μὴ ὄν ἐστι δοξαστόν, ὅτι τὸ μὴ ὄν ἔστιν· οὐ γὰρ ταῦτο τὸ εἶναί τέ τι καὶ εἶναι ἀπλῶς. ἢ πάλιν ὅτι τὸ ὄν οὐκ ἔστιν ὄν, εἰ τῶν ὄντων τι μὴ ἔστιν, οἶον εἰ μὴ ἄνθρωπος· οὐ γὰρ

ταὐτὸ τὸ μὴ εἶναι τι καὶ ἀπλῶς μὴ εἶναι. φαίνεται δὲ διὰ τὸ πάρεγγυς τῆς λέξεως καὶ μικρὸν διαφέρειν τὸ εἶναι τι τοῦ εἶναι, καὶ τὸ μὴ εἶναι τι τοῦ μὴ εἶναι. ὁμοίως δὲ καὶ τὸ παρὰ τὸ πῆ καὶ τὸ ἀπλῶς· οἶον ὁ Ἰνδός, ὅλος μέλας ὢν, λευκός ἐστι τοὺς ὀδόντας· λευκὸς ἄρα καὶ οὐ λευκός ἐστιν. ἢ εἰ ἄμφω πῆ, ὅτι ἅμα τὰ ἐναντία ὑπάρχει. τὸ δὲ τοιοῦτον ἐπ' ἐνίων μὲν παντὶ θεωρῆσαι ῥάδιον, οἶον εἰ, λαβὼν τὸν Αἰθίοπα εἶναι μέλανα, τοὺς ὀδόντας ἔροιτ' εἰ λευκός· εἰ οὖν ταύτῃ λευκός, ὅτι μέλας καὶ οὐ μέλας οἶοιτ' «ἂν» διειλέχθαι, συλλογιστικῶς τελειώσας τὴν ἐρώτησιν. ἐπ' ἐνίων δὲ λανθάνει πολλάκις, ἐφ' ὅσων, ὅταν πῆ λέγηται, κἂν τὸ ἀπλῶς δόξειεν ἀκολουθεῖν, καὶ ἐν ὅσοις μὴ ῥάδιον θεωρῆσαι πότερον αὐτῶν κυρίως ἀποδοτέον. γίνεται δὲ τὸ τοιοῦτον ἐν οἷς ὁμοίως ὑπάρχει τὰ ἀντικείμενα· δοκεῖ γὰρ ἢ ἄμφω ἢ μηδέτερον δοτέον ἀπλῶς εἶναι [κατηγορεῖν]· οἶον, εἰ τὸ μὲν ἥμισυ λευκὸν τὸ δ' ἥμισυ μέλαν, πότερον λευκὸν ἢ μέλαν;

Οἱ δὲ παρὰ τὸ μὴ διωρίσθαι τί ἐστὶ συλλογισμὸς ἢ τί ἔλεγχος ἄλλως παρὰ τὴν ἔλλειψιν γίνονται τοῦ λόγου· ἔλεγχος μὲν γάρ ἐστιν ἀντίφασις τοῦ αὐτοῦ καὶ ἐνός, μὴ ὀνόματος ἀλλὰ πράγματος, καὶ ὀνόματος μὴ συνωνύμου ἀλλὰ τοῦ αὐτοῦ, ἐκ τῶν δοθέντων ἐξ ἀνάγκης (μὴ συναριθμουμένου τοῦ ἐν ἀρχῇ), κατὰ ταὐτὸ καὶ πρὸς ταὐτὸ καὶ ὡσαύτως καὶ ἐν τῷ αὐτῷ χρόνῳ. τὸν αὐτὸν δὲ τρόπον καὶ τὸ ψεύσασθαι περί τινος. ἔνιοι δὲ ἀπολιπόντες τι τῶν λεχθέντων φαίνονται ἐλέγχειν, οἶον ὅτι ταὐτὸ διπλάσιον καὶ οὐ διπλάσιον· τὰ γὰρ δύο τοῦ μὲν ἐνὸς διπλάσια, τῶν δὲ τριῶν οὐ διπλάσια. ἢ εἰ τὸ αὐτὸ τοῦ αὐτοῦ διπλάσιον καὶ οὐ διπλάσιον, ἀλλ' οὐ κατὰ ταὐτό· κατὰ μὲν γὰρ τὸ μήκος διπλάσιον, κατὰ δὲ τὸ πλάτος οὐ διπλάσιον. ἢ εἰ τοῦ αὐτοῦ καὶ κατὰ ταὐτὸ καὶ ὡσαύτως, ἀλλ' οὐχ ἅμα· διόπερ ἐστὶ φαινόμενος ἔλεγχος. ἔλκοι δ' ἂν τις τοῦτον καὶ εἰς τοὺς παρὰ τὴν λέξιν.

Οἱ δὲ παρὰ τὸ τὸ ἐν ἀρχῇ λαμβάνειν γίνονται μὲν οὕτως καὶ τοσαυταχῶς ὅσαχῶς ἐνδέχεται τὸ ἐξ ἀρχῆς αἰτεῖσθαι, φαίνονται δ' ἐλέγχειν διὰ τὸ μὴ δύνασθαι συνορᾶν τὸ ταὐτὸν καὶ τὸ ἕτερον.

Ὁ δὲ παρὰ τὸ ἐπόμενον ἔλεγχος διὰ τὸ οἶεσθαι ἀντιστρέφειν τὴν ἀκολουθήσιν· ὅταν γὰρ τοῦδε ὄντος ἐξ ἀνάγκης τόδε ἦ, καὶ τοῦδε ὄντος οἶονται καὶ θάτερον εἶναι ἐξ ἀνάγκης. ὅθεν καὶ αἱ περὶ τὴν δόξαν ἐκ τῆς αἰσθήσεως ἀπάται γίνονται· πολλάκις γὰρ τὴν χολὴν μέλι ὑπέλαβον διὰ τὸ ἔπεσθαι τὸ ξανθὸν χρῶμα τῷ μέλιτι· καὶ ἐπεὶ συμβαίνει τὴν γῆν ὕσαντος γίνεσθαι διάβροχον, κἂν ἢ διάβροχος, ὑπολαμβάνομεν ὕσαι. τὸ δ' οὐκ ἀναγκαῖον. ἐν τε τοῖς ῥητορικοῖς αἱ κατὰ τὸ σημεῖον ἀποδείξεις ἐκ τῶν ἐπομένων εἰσὶν· βουλόμενοι γὰρ δεῖξαι ὅτι μοιχός, τὸ ἐπόμενον ἔλαβον, ὅτι

καλλωπιστῆς ἢ ὅτι νύκτωρ ὁράται πλανώμενος. πολλοῖς δὲ ταῦτα μὲν ὑπάρχει, τὸ δὲ κατηγορούμενον οὐχ ὑπάρχει. ὁμοίως δὲ καὶ ἐν τοῖς συλλογιστικοῖς, οἷον ὁ Μελίσσου λόγος ὅτι ἄπειρον τὸ ἅπαν, λαβὼν τὸ μὲν ἅπαν ἀγέννητον (ἐκ γὰρ μὴ ὄντος οὐδὲν ἂν γενέσθαι), τὸ δὲ γενόμενον ἐξ ἀρχῆς γενέσθαι· εἰ μὴ οὖν γέγονεν, ἀρχὴν οὐκ ἔχειν τὸ πᾶν, ὥστ' ἄπειρον. οὐκ ἀνάγκη δὲ τοῦτο συμβαίνειν· οὐ γὰρ εἰ τὸ γενόμενον ἅπαν ἀρχὴν ἔχει, καὶ εἴ τι ἀρχὴν ἔχει, γέγονεν, ὥσπερ οὐδ' εἰ ὁ πυρέττων θερμός, καὶ τὸν θερμὸν ἀνάγκη πυρέττειν.

Ὁ δὲ παρὰ τὸ <τὸ> μὴ αἴτιον ὡς αἴτιον, ὅταν προσληφθῇ τὸ ἀναίτιον ὡς παρ' ἐκεῖνο γινομένου τοῦ ἐλέγχου. συμβαίνει δὲ τὸ τοιοῦτον ἐν τοῖς εἰς τὸ ἀδύνατον συλλογισμοῖς· ἐν τούτοις γὰρ ἀναγκαῖον ἀναιρεῖν τι τῶν κειμένων. ἔαν οὖν ἐγκαταριθμηθῇ <τι> ἐν τοῖς ἀναγκαίοις ἐρωτήμασι πρὸς τὸ συμβαῖνον ἀδύνατον, δόξει παρὰ τοῦτο γίνεσθαι πολλάκις ὁ ἔλεγχος, οἷον ὅτι οὐκ ἔστι ψυχὴ καὶ ζωὴ ταυτόν. εἰ γὰρ φθορᾷ γένεσις ἐναντίον, καὶ τῇ τινὶ φθορᾷ ἔσται τις γένεσις· ὁ δὲ θάνατος φθορὰ τις καὶ ἐναντίον ζωῆς, ὥστε γένεσις ἢ ζωὴ καὶ τὸ ζῆν γίνεσθαι· τοῦτο δ' ἀδύνατον· οὐκ ἄρα ταυτόν ἢ ψυχὴ καὶ ἡ ζωὴ. οὐ δὲ συλλελογίσται· συμβαίνει γάρ, κἂν μὴ τις ταὐτὸ φῇ τὴν ζωὴν τῇ ψυχῇ, τὸ ἀδύνατον, ἀλλὰ μόνον ἐναντίον ζωὴν μὲν θανάτῳ, ὄντι φθορᾷ, φθορᾷ δὲ γένεσιν. ἀσυλλόγιστοι μὲν οὖν ἀπλῶς οὐκ εἰσὶν οἱ τοιοῦτοι λόγοι, πρὸς δὲ τὸ προκείμενον ἀσυλλόγιστοι. καὶ λανθάνει πολλάκις οὐχ ἥττον αὐτοὺς τοὺς ἐρωτῶντας τὸ τοιοῦτον.

Οἱ μὲν οὖν παρὰ τὸ ἐπόμενον καὶ παρὰ τὸ μὴ αἴτιον λόγοι τοιοῦτοὶ εἰσιν· οἱ δὲ παρὰ τὰ δύο ἐρωτήματα ἐν ποιεῖν, ὅταν λανθάνῃ πλείω ὄντα καὶ ὡς ἐνὸς ὄντος ἀποδοθῇ ἀπόκρισις μία. ἐπ' ἐνίων μὲν οὖν ῥάδιον ἰδεῖν ὅτι πλείω καὶ ὅτι οὐ δοτέον μίαν ἀπόκρισιν, οἷον “πότερον ἢ γῆ θάλαττά ἐστιν ἢ ὁ οὐρανός;” ἐπ' ἐνίων δ' ἥττον, καὶ ὡς ἐνὸς ὄντος ἢ ὁμολογοῦσι τῷ μὴ ἀποκρίνεσθαι τὸ ἐρωτώμενον ἢ ἐλέγχεσθαι φαίνονται. οἷον ἄρ' οὗτος καὶ οὗτός ἐστιν ἄνθρωπος; ὥστ' ἂν τις τύπῃ τοῦτον καὶ τοῦτον, ἄνθρωπον ἀλλ' οὐκ ἀνθρώπους τυπτήσῃ. ἢ πάλιν, ὧν τὰ μὲν ἐστὶν ἀγαθὰ τὰ δ' οὐκ ἀγαθὰ, πάντα ἀγαθὰ ἢ οὐκ ἀγαθὰ; ὁπότερον γὰρ ἂν φῇ, ἔστι μὲν ὡς ἔλεγχον ἢ ψεῦδος φαινόμενον δόξειεν ἂν ποιεῖν· τὸ γὰρ φάναι τῶν μὴ ἀγαθῶν τι εἶναι ἀγαθὸν ἢ τῶν ἀγαθῶν μὴ ἀγαθὸν ψεῦδος. ὅτε δὲ προσληφθέντων τινῶν κἂν ἔλεγχος γίνοιτο ἀληθινός, οἷον εἴ τις δοιῇ ὁμοίως ἐν καὶ πολλὰ λέγεσθαι λευκὰ καὶ γυμνὰ καὶ τυφλά. εἰ γὰρ τυφλὸν τὸ μὴ ἔχον ὄψιν πεφυκὸς δ' ἔχειν, καὶ τυφλὰ ἔσται τὰ μὴ ἔχοντα ὄψιν πεφυκότα δ' ἔχειν. ὅταν οὖν τὸ μὲν ἔχῃ τὸ δὲ μὴ ἔχῃ, τὰ ἄμφω ἔσται ἢ ὁρῶντα ἢ τυφλά· ὅπερ ἀδύνατον.



Ἡ δὲ οὕτως διαιρετέον τοὺς φαινομένους συλλογισμοὺς καὶ ἐλέγχους, ἢ πάντας ἀνακτέον εἰς τὴν τοῦ ἐλέγχου ἄνοιαν, ἀρχὴν ταύτην ποιησαμένους· ἔστι γὰρ ἅπαντας ἀναλῦσαι τοὺς λεχθέντας τρόπους εἰς τὸν τοῦ ἐλέγχου διορισμόν. πρῶτον μὲν εἰ ἀσυλλόγιστοι· δεῖ γὰρ ἐκ τῶν κειμένων συμβαίνειν τὸ συμπέρασμα ὥστε λέγειν ἐξ ἀνάγκης ἀλλὰ μὴ φαίνεσθαι. ἔπειτα καὶ κατὰ τὰ μέρη τοῦ διορισμοῦ. τῶν μὲν γὰρ ἐν τῇ λέξει οἱ μὲν εἰσι παρὰ τὸ διττόν, οἷον ἢ τε ὁμωνυμία καὶ ὁ λόγος καὶ ἡ ὁμοιοσημοσύνη (σύνηθες γὰρ τὸ πάντα ὡς τόδε τι σημαίνειν), ἢ δὲ σύνθεσις καὶ διαίρεσις καὶ προσωδία τῷ μὴ τὸν αὐτὸν εἶναι τὸν λόγον ἢ τὸ ὄνομα τὸ διαφέρον. ἔδει δὲ καὶ τοῦτο, καθάπερ καὶ τὸ πρᾶγμα ταυτόν, εἰ μέλλει ἔλεγχος ἢ συλλογισμὸς ἔσεσθαι, οἷον εἰ λώπιον, μὴ ἱμάτιον συλλογίσασθαι ἀλλὰ λώπιον. ἀληθὲς μὲν γὰρ κᾶκεῖνο, ἀλλ' οὐ συλλελόγισται, ἀλλ' ἔτι ἐρωτήματος δεῖ εἰ ταυτόν σημαίνει, πρὸς τὸν ζητοῦντα τὸ διὰ τί.

Οἱ δὲ παρὰ τὸ συμβεβηκὸς ὀρισθέντος τοῦ συλλογισμοῦ φανεροὶ γίνονται. τὸν αὐτὸν γὰρ ὀρισμὸν δεῖ καὶ τοῦ ἐλέγχου γίνεσθαι, πλὴν προσκεῖσθαι τὴν ἀντίφασιν· ὁ γὰρ ἔλεγχος συλλογισμὸς ἀντιφάσεως. εἰ οὖν μὴ ἔστι συλλογισμὸς τοῦ συμβεβηκότος, οὐ γίνεται ἔλεγχος. οὐ γὰρ εἰ τούτων ὄντων ἀνάγκη τόδ' εἶναι (τοῦτο δ' ἐστὶ λευκόν), ἀνάγκη λευκὸν εἶναι διὰ τὸν συλλογισμόν. οὐδ' εἰ τὸ τρίγωνον δυοῖν ὀρθαῖν ἴσας ἔχει, συμβέβηκε δ' αὐτῷ σχήματι εἶναι ἢ πρώτῳ ἢ ἀρχῇ, ὅτι σχῆμα ἢ ἀρχὴ ἢ πρῶτον τοῦτό ἐστιν· οὐ γὰρ ἢ σχῆμα οὐδ' ἢ πρῶτον ἀλλ' ἢ τρίγωνον ἢ ἀπόδειξις. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ὥστ' εἰ ὁ ἔλεγχος συλλογισμὸς τις, οὐκ ἂν εἴη ὁ κατὰ συμβεβηκὸς ἔλεγχος. ἀλλὰ παρὰ τοῦτο καὶ οἱ τεχνῖται καὶ ὅλως οἱ ἐπιστήμονες ὑπὸ τῶν ἀνεπιστημόνων ἐλέγχονται· κατὰ συμβεβηκὸς γὰρ ποιοῦνται τοὺς συλλογισμοὺς πρὸς τοὺς εἰδότας· οἱ δ' οὐ δυνάμενοι διαιρεῖν ἢ ἐρωτώμενοι διδόασιν ἢ οὐ δόντες οἴονται δεδωκέναι.

Οἱ δὲ παρὰ τὸ πῇ καὶ ἀπλῶς, ὅτι οὐ τοῦ αὐτοῦ ἢ κατάφασις καὶ ἢ ἀπόφασις. τοῦ γὰρ πῇ λευκοῦ τὸ πῇ οὐ λευκόν, τοῦ δ' ἀπλῶς λευκοῦ τὸ ἀπλῶς οὐ λευκὸν ἀπόφασις· εἰ οὖν δόντος πῇ εἶναι λευκὸν ὡς ἀπλῶς εἰρημένου λαμβάνει, οὐ ποιεῖ ἔλεγχον, φαίνεται δὲ διὰ τὴν ἄνοιαν τοῦ τί ἐστὶν ἔλεγχος.

Φανερώτατοι δὲ πάντων οἱ πρότερον λεχθέντες παρὰ τὸν τοῦ ἐλέγχου διορισμόν· διὸ καὶ προσηγορεύθησαν οὕτως· παρὰ γὰρ τοῦ λόγου τὴν ἔλλειψιν ἢ φαντασία γίνεται, καὶ διαιρουμένοις οὕτως κοινὸν ἐπὶ πᾶσι τούτοις θετέον τὴν τοῦ λόγου ἔλλειψιν.

Οἱ δὲ παρὰ τὸ λαμβάνειν τὸ ἐν ἀρχῇ καὶ τὸ ἀναίτιον ὡς αἴτιον τιθέναι δῆλοι διὰ τοῦ ὀρισμοῦ. δεῖ γὰρ τὸ συμπέρασμα “τῷ ταῦτ’ εἶναι” συμβαίνειν, ὅπερ οὐκ ἦν ἐν τοῖς ἀναιτίοις· καὶ πάλιν “μὴ ἐναριθμουμένου τοῦ ἐξ ἀρχῆς”, ὅπερ οὐκ ἔχουσιν οἱ παρὰ τὴν αἴτησιν τοῦ ἐν ἀρχῇ.

Οἱ δὲ παρὰ τὸ ἐπόμενον μέρος εἰσὶ τοῦ συμβεβηκότος· τὸ γὰρ ἐπόμενον συμβέβηκε. διαφέρει δὲ τοῦ συμβεβηκότος, ὅτι τὸ μὲν συμβεβηκὸς ἔστιν ἐφ’ ἑνὸς μόνου λαβεῖν, οἷον ταῦτὸ εἶναι τὸ ξανθὸν καὶ μέλι, καὶ τὸ λευκὸν καὶ κύκνον, τὸ δὲ παρὰ τὸ ἐπόμενον ἀεὶ ἐν πλείοσιν· τὰ γὰρ ἐνὶ καὶ ταύτῳ ταῦτ’ καὶ ἀλλήλοις ἀξιοῦμεν εἶναι ταῦτά· διὸ γίνεται παρὰ τὸ ἐπόμενον ἔλεγχος. ἔστι δ’ οὐ πάντως ἀληθές, οἷον ἂν ἦ κατὰ συμβεβηκός· καὶ γὰρ ἡ χιὼν καὶ ὁ κύκνος τῷ λευκῷ ταῦτόν. ἢ πάλιν, ὡς ἐν τῷ Μελίσσου λόγῳ, τὸ αὐτὸ εἶναι λαμβάνει τὸ γεγονέναι καὶ ἀρχὴν ἔχειν, ἢ τὸ ἴσοις γίνεσθαι καὶ ταῦτὸ μέγεθος λαμβάνειν. ὅτι γὰρ τὸ γεγονὸς ἔχει ἀρχήν, καὶ τὸ ἔχον ἀρχὴν γεγονέναι ἀξιοῖ, ὡς ἄμφω ταῦτ’ ὄντα τῷ ἀρχὴν ἔχειν, τό τε γεγονὸς καὶ τὸ πεπερασμένον. ὁμοίως δὲ καὶ ἐπὶ τῶν ἴσων γινομένων, εἰ τὰ τὸ αὐτὸ μέγεθος καὶ ἐν λαμβάνοντα ἴσα γίνεται, καὶ τὰ ἴσα γινόμενα ἐν μέγεθος λαμβάνειν. ὥστε τὸ ἐπόμενον λαμβάνει. ἐπεὶ οὖν ὁ παρὰ τὸ συμβεβηκὸς ἔλεγχος ἐν τῇ ἀγνοίᾳ τοῦ ἐλέγχου, φανερόν ὅτι καὶ ὁ παρὰ τὸ ἐπόμενον. ἐπισκεπτέον δὲ τοῦτο καὶ ἄλλως.

Οἱ δὲ παρὰ τὸ τὰ πλείω ἐρωτήματα ἐν ποιεῖν ἐν τῷ μὴ διαρθροῦν ἡμᾶς τὸν τῆς προτάσεως λόγον. ἡ γὰρ πρότασις ἔστιν ἐν καθ’ ἑνός· ὁ γὰρ αὐτὸς ὅρος ἐνὸς μόνου καὶ ἀπλῶς τοῦ πράγματος, οἷον ἀνθρώπου καὶ ἐνὸς μόνου ἀνθρώπου· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. εἰ οὖν μία πρότασις ἢ ἐν καθ’ ἑνός ἀξιοῦσα, καὶ ἀπλῶς ἔσται πρότασις ἢ τοιαύτη ἐρώτησις. ἐπεὶ δ’ ὁ συλλογισμὸς ἐκ προτάσεων, ὁ δ’ ἔλεγχος συλλογισμὸς, καὶ ὁ ἔλεγχος ἔσται ἐκ προτάσεων. εἰ οὖν ἡ πρότασις ἐν καθ’ ἑνός, φανερόν ὅτι καὶ οὗτος ἐν τῇ τοῦ ἐλέγχου ἀγνοίᾳ· φαίνεται γὰρ εἶναι πρότασις ἢ οὐκ οὕσα πρότασις. εἰ μὲν οὖν δέδωκεν ἀπόκρισιν ὡς πρὸς μίαν ἐρώτησιν, ἔσται ἔλεγχος· εἰ δὲ μὴ δέδωκεν ἀλλὰ φαίνεται, φαινόμενος ἔλεγχος. ὥστε πάντες οἱ τόποι πίπτουσιν εἰς τὴν τοῦ ἐλέγχου ἀγνοίαν, οἱ μὲν οὖν παρὰ τὴν λέξιν, ὅτι φαινομένη <ἡ> ἀντίφασις, ὅπερ ἦν ἴδιον τοῦ ἐλέγχου, οἱ δ’ ἄλλοι παρὰ τὸν τοῦ συλλογισμοῦ ὅρον.

Ἡ δ’ ἀπάτη γίνεται τῶν μὲν παρὰ τὴν ὁμωνυμίαν καὶ τὸν λόγον τῷ μὴ δύνασθαι διαιρεῖν τὸ πολλαχῶς λεγόμενον (ἐνια γὰρ οὐκ εὖπορον διελεῖν, οἷον τὸ ἐν καὶ τὸ ὄν καὶ τὸ ταῦτόν), τῶν δὲ παρὰ σύνθεσιν καὶ διαίρεσιν τῷ μηδὲν οἶεσθαι διαφέρειν συντιθέμενον ἢ διαιρούμενον τὸν λόγον, καθάπερ ἐπὶ τῶν πλείστων. ὁμοίως δὲ καὶ τῶν παρὰ τὴν προσωδίαν· οὐ γὰρ ἄλλο δοκεῖ

σημαίνειν ἀνιέμενος καὶ ἐπιτεινόμενος ὁ λόγος, ἐπ' οὐδενὸς ἢ οὐκ ἐπὶ πολλῶν. τῶν δὲ παρὰ τὸ σχῆμα διὰ τὴν ὁμοιότητα τῆς λέξεως. χαλεπὸν γὰρ διελεῖν ποῖα ὡσαύτως καὶ ποῖα ὡς ἑτέρως λέγεται (σχεδὸν γὰρ ὁ τοῦτο δυνάμενος ποιεῖν ἐγγύς ἐστι τοῦ θεωρεῖν τᾷ ἀληθές, μάλιστα δ' ἐπίσταται συνεπινεύειν), ὅτι πᾶν τὸ κατηγορούμενόν τινος ὑπολαμβάνομεν τόδε τι, καὶ ὡς ἐν ὑπακούομεν· τῷ γὰρ ἐνὶ καὶ τῇ οὐσίᾳ μάλιστα δοκεῖ παρέπεσθαι τὸ τόδε τι καὶ τὸ ὄν. διὸ καὶ τῶν παρὰ τὴν λέξιν οὗτος ὁ τρόπος θετέος, πρῶτον μὲν ὅτι μᾶλλον ἢ ἀπάτη γίνεται μετ' ἄλλων σκοπούμενοις ἢ καθ' αὐτούς (ἡ μὲν γὰρ μετ' ἄλλου σκέψις διὰ λόγων, ἡ δὲ καθ' αὐτὸν οὐχ ἥττον δι' αὐτοῦ τοῦ πράγματος)· εἴτα καὶ καθ' αὐτὸν ἀπατᾶσθαι συμβαίνει, ὅταν ἐπὶ τοῦ λόγου ποιῇται τὴν σκέψιν· ἔτι ἡ μὲν ἀπάτη ἐκ τῆς ὁμοιότητος, ἡ δ' ὁμοιότης ἐκ τῆς λέξεως. τῶν δὲ παρὰ τὸ συμβεβηκὸς διὰ τὸ μὴ δύνασθαι διακρίνειν τὸ ταῦτόν καὶ τὸ ἕτερον, καὶ ἐν καὶ πολλά, μηδὲ τοῖς ποίοις τῶν κατηγορημάτων πάντα ταῦτ' καὶ τῷ πράγματι συμβέβηκεν. ὁμοίως δὲ καὶ τῶν παρὰ τὸ ἐπόμενον· μέρος γάρ τι τοῦ συμβεβηκότος τὸ ἐπόμενον. ἔτι καὶ ἐπὶ πολλῶν φαίνεται καὶ ἀξιοῦται οὕτως, εἰ τόδε ἀπὸ τοῦδε μὴ χωρίζεται, μηδ' ἀπὸ θατέρου χωρίζεσθαι θάτερον. τῶν δὲ παρὰ τὴν ἑλλειψιν τοῦ λόγου καὶ τῶν παρὰ τὸ πῆ καὶ ἀπλῶς ἐν τῷ παρὰ μικρὸν ἢ ἀπάτη· ὡς γὰρ οὐδὲν προσσημαῖνον τὸ τί ἢ πῆ ἢ τὸ πῶς ἢ τὸ νῦν καθόλου συγχωροῦμεν. ὁμοίως δὲ καὶ ἐπὶ τῶν τὸ ἐν ἀρχῇ λαμβανόντων καὶ τῶν ἀναιτίων καὶ ὅσοι τὰ πλείω ἐρωτήματα ὡς ἐν ποιοῦσιν· ἐν ἅπασιν γὰρ ἡ ἀπάτη διὰ τὸ παρὰ μικρόν· οὐ γὰρ διακριβοῦμεν οὔτε τῆς προτάσεως οὔτε τοῦ συλλογισμοῦ τὸν ὅρον διὰ τὴν εἰρημένην αἰτίαν.

Ἐπεὶ δ' ἔχομεν παρ' ὅποσα γίνονται οἱ φαινόμενοι συλλογισμοί, ἔχομεν καὶ παρ' ὅποσα οἱ σοφιστικοὶ γένοιντ' ἂν συλλογισμοὶ καὶ ἔλεγχοι. λέγω δὲ σοφιστικὸν ἔλεγχον καὶ συλλογισμόν οὐ μόνον τὸν φαινόμενον συλλογισμόν ἢ ἔλεγχον μὴ ὄντα δέ, ἀλλὰ καὶ τὸν ὄντα μὲν φαινόμενον δὲ οἰκεῖον τοῦ πράγματος. εἰσὶ δ' οὗτοι οἱ μὴ κατὰ τὸ πρᾶγμα ἐλέγχοντες καὶ δεικνύντες ἀγνοοῦντας, ὅπερ ἦν τῆς πειραστικῆς. ἔστι δ' ἡ πειραστικὴ μέρος τῆς διαλεκτικῆς· αὕτη δὲ δύναται συλλογίζεσθαι ψεῦδος δι' ἀγνοίαν τοῦ διδόντος τὸν λόγον. οἱ δὲ σοφιστικοὶ ἔλεγχοι, ἂν καὶ συλλογίζωνται τὴν ἀντίφασιν, οὐ ποιοῦσι δῆλον εἰ ἀγνοεῖ· καὶ γὰρ τὸν εἰδότα ἐμποδίζουσι τούτοις τοῖς λόγοις.

Ὅτι δ' ἔχομεν αὐτοὺς τῇ αὐτῇ μεθόδῳ, δῆλον· παρ' ὅσα γὰρ φαίνεται τοῖς ἀκούουσιν ὡς ἡρωτημένα συλλελογίσθαι, παρὰ τοσαῦτα καὶ τῷ ἀποκρινομένῳ δόξειεν, ὥστ' ἔσονται συλλογισμοὶ ψευδεῖς διὰ τούτων ἢ πάντων ἢ ἐνίων· ὁ γὰρ μὴ ἐρωτηθεὶς οἶται δεδοκέναι, καὶ ἐρωτηθεὶς θείη. πλὴν ἐπὶ γέ τινων ἅμα συμβαίνει προσερωτᾶν τὸ ἐνδεές καὶ τὸ ψεῦδος

ἐμφανίζειν, οἷον ἐν τοῖς παρὰ τὴν λέξιν καὶ τὸν σολοικισμόν. εἰ οὖν οἱ παραλογισμοὶ τῆς ἀντιφάσεως παρὰ τὸν φαινόμενον ἔλεγχόν εἰσι, δῆλον ὅτι παρὰ τοσαῦτα ἂν καὶ τῶν ψευδῶν εἴησαν συλλογισμοὶ παρ' ὅσα καὶ ὁ φαινόμενος ἔλεγχος. ὁ δὲ φαινόμενος παρὰ τὰ μόρια τοῦ ἀληθινοῦ· ἐκάστου γὰρ ἐκλείποντος φανείη ἂν ἔλεγχος, οἷον ὁ παρὰ τὸ μὴ συμβαῖνον διὰ τὸν λόγον (ὁ εἰς τὸ ἀδύνατον), καὶ ὁ τὰς δύο ἐρωτήσεις μίαν ποιῶν παρὰ τὴν πρότασιν, καὶ ἀντὶ τοῦ καθ' αὐτὸ ὁ παρὰ τὸ συμβεβηκός, καὶ τὸ τούτου μόριον, ὁ παρὰ τὸ ἐπόμενον· ἔτι τὸ μὴ ἐπὶ τοῦ πράγματος ἀλλ' ἐπὶ τοῦ λόγου συμβαίνειν· εἴτ', ἀντὶ τοῦ καθόλου τὴν ἀντίφασιν καὶ κατὰ ταῦτ' οὐ καὶ πρὸς ταῦτ' οὐ καὶ ὡσαύτως, παρὰ τὸ ἐπὶ τι, ἢ παρ' ἑκάστον τούτων· ἔτι παρὰ τὸ “μὴ ἐναριθμουμένου τοῦ ἐν ἀρχῇ” <τὸ> τὸ ἐν ἀρχῇ λαμβάνειν. ὥστ' ἔχομεν ἂν παρ' ὅσα γίνονται οἱ παραλογισμοὶ· παρὰ πλείω μὲν γὰρ οὐκ ἂν εἶεν, παρὰ δὲ τὰ εἰρημένα ἔσσονται πάντες.

Ἔστι δ' ὁ σοφιστικὸς ἔλεγχος οὐχ ἀπλῶς ἔλεγχος ἀλλὰ πρὸς τινα· καὶ ὁ συλλογισμὸς ὡσαύτως. ἂν μὲν γὰρ μὴ λάβῃ ὁ τε παρὰ τὸ ὁμῶνυμον ἐν σημαίνειν καὶ ὁ παρὰ τὴν ὁμοιοσημοσύνην τὸ μόνον τόδε, καὶ οἱ ἄλλοι ὡσαύτως, οὔτ' ἔλεγχοι οὔτε συλλογισμοὶ ἔσσονται, οὔθ' ἀπλῶς οὔτε πρὸς τὸν ἐρωτώμενον. ἐὰν δὲ λάβωσι, πρὸς μὲν τὸν ἐρωτώμενον ἔσσονται, ἀπλῶς δ' οὐκ ἔσσονται· οὐ γὰρ ἐν σημαίνειν εἰλήφασιν ἀλλὰ φαινόμενον, καὶ παρὰ τοῦδε.

Παρὰ πόσα δ' ἐλέγχονται οἱ ἐλεγχόμενοι, οὐ δεῖ πειρᾶσθαι λαμβάνειν ἄνευ τῆς τῶν ὄντων ἐπιστήμης ἀπάντων. τοῦτο δ' οὐ μιᾶς ἔστι τέχνης· ἅπειροι γὰρ ἴσως αἱ ἐπιστῆμαι, ὥστε δῆλον ὅτι καὶ αἱ ἀποδείξεις. ἔλεγχοι δ' εἰσὶ καὶ ἀληθεῖς· ὅσα γὰρ ἔστιν ἀποδείξει, ἔστι καὶ ἐλέγξει τὸν θέμενον τὴν ἀντίφασιν τοῦ ἀληθοῦς· οἷον εἰ σύμμετρον τὴν διάμετρον ἔθηκεν, ἐλέγξειεν ἂν τις τῇ ἀποδείξει ὅτι ἀσύμμετρος. ὥστε πάντων δεήσει ἐπιστήμονας εἶναι· οἱ μὲν γὰρ ἔσσονται παρὰ τὰς ἐν γεωμετρίας ἀρχὰς καὶ τὰ τούτων συμπεράσματα, οἱ δὲ παρὰ τὰς ἐν ἰατρικῇ, οἱ δὲ παρὰ τὰς τῶν ἄλλων ἐπιστημῶν. ἀλλὰ μὴν καὶ οἱ ψευδεῖς ἔλεγχοι ὁμοίως ἂν εἶεν ἐν ἀπείροις· καθ' ἑκάστην γὰρ τέχνην ἔστι ψευδὴς συλλογισμὸς, οἷον κατὰ γεωμετρίαν ὁ γεωμετρικὸς καὶ κατὰ ἰατρικὴν ὁ ἰατρικὸς· λέγω δὲ τὸ κατὰ τὴν τέχνην τὸ κατὰ τὰς ἐκείνης ἀρχάς. δῆλον οὖν ὅτι οὐ πάντων τῶν ἐλέγχων ἀλλὰ τῶν παρὰ τὴν διαλεκτικὴν ληπτέον τοὺς τόπους· οὔτοι γὰρ κοινοὶ πρὸς ἅπασαν τέχνην καὶ δύναμιν. καὶ τὸν μὲν καθ' ἑκάστην ἐπιστήμην ἔλεγχον τοῦ ἐπιστήμονός ἐστι θεωρεῖν, εἴ τε μὴ ὦν φαίνεται, εἴ τ' ἔστι, διὰ τί ἔστι· τὸν δ' ἐκ τῶν κοινῶν καὶ ὑπὸ μηδεμίαν τέχνην τῶν διαλεκτικῶν. εἰ γὰρ ἔχομεν ἐξ ὧν οἱ ἔνδοξοι συλλογισμοὶ περὶ ὁτιοῦν, ἔχομεν ἐξ ὧν οἱ ἔλεγχοι· ὁ γὰρ

ἔλεγχος ἐστὶν ἀντιφάσεως συλλογισμός, ὥστ' ἢ εἷς ἢ δύο συλλογισμοὶ ἀντιφάσεως ἔλεγχος ἐστὶν. ἔχομεν ἄρα παρ' ὅποσα πάντες εἰσὶν οἱ τοιοῦτοι. εἰ δὲ τοῦτ' ἔχομεν, καὶ τὰς λύσεις ἔχομεν· αἱ γὰρ τούτων ἐνστάσεις λύσεις εἰσὶν. ἔχομεν δέ, παρ' ὅποσα γίνονται, καὶ τοὺς φαινομένους, φαινομένους δὲ οὐχ ὁπωοῦν ἀλλὰ τοῖς τοιοῖσδε· ἀόριστα γὰρ ἐστὶν ἔάν τις σκοπῇ παρ' ὅποσα φαίνονται τοῖς τυχοῦσιν. ὥστε φανερόν ὅτι τοῦ διαλεκτικοῦ ἐστὶ τὸ δύνασθαι λαβεῖν παρ' ὅσα γίνεται διὰ τῶν κοινῶν ἢ ὧν ἔλεγχος ἢ φαινόμενος ἔλεγχος, καὶ ἢ διαλεκτικὸς ἢ φαινόμενος διαλεκτικὸς ἢ πειραστικός.

Οὐκ ἔστι δὲ διαφορὰ τῶν λόγων ἣν λέγουσιν τινες, τὸ εἶναι τοὺς μὲν πρὸς τοῦνομα λόγους, ἑτέρους δὲ πρὸς τὴν διάνοιαν· ἀτοπον γὰρ τὸ ὑπολαμβάνειν ἄλλους μὲν εἶναι πρὸς τοῦνομα λόγους, ἑτέρους δὲ πρὸς τὴν διάνοιαν, ἀλλ' οὐ τοὺς αὐτοὺς. τί γὰρ ἐστὶ τὸ μὴ πρὸς τὴν διάνοιαν ἀλλ' ἢ ὅταν μὴ χρῆται τῷ ὀνόματι ἐφ' ᾧ οἰόμενος ἐρωτᾶσθαι ὁ ἐρωτώμενος ἔδωκεν; τὸ δ' αὐτὸ τοῦτό ἐστὶ καὶ πρὸς τοῦνομα· τὸ δὲ πρὸς τὴν διάνοιαν, ὅταν ἐφ' ᾧ ἔδωκεν διανοηθεῖς. εἰ δὴ τινες πλείω σημαίνοντος τοῦ ὀνόματος οἰοῖντο ἐν σημαίνειν - καὶ ὁ ἐρωτῶν καὶ ὁ ἐρωτώμενος (οἷον ἴσως τὸ ὄν ἢ τὸ ἐν πολλὰ σημαίνει, ἀλλὰ καὶ ὁ ἀποκρινόμενος καὶ ὁ ἐρωτῶν [Ζήνων] ἐν οἰόμενοι εἶναι εἰρήκασιν, καὶ ἔστιν ὁ λόγος ὅτι ἐν πάντα), <ἄρ'> οὗτος πρὸς τοῦνομα ἔσται ἢ πρὸς τὴν διάνοιαν τοῦ ἐρωτωμένου διειλεγμένος; εἰ δέ γέ τις πολλὰ οἶεται σημαίνειν, δῆλον ὅτι οὐ πρὸς τὴν διάνοιαν. πρῶτον μὲν γὰρ περὶ τοὺς τοιούτους ἐστὶ λόγους τὸ πρὸς τοῦνομα καὶ πρὸς τὴν διάνοιαν ὅσοι πλείω σημαίνουσιν, εἴτα περὶ ὀντινοῦν ἐστὶν· οὐ γὰρ ἐν τῷ λόγῳ ἐστὶ τὸ πρὸς τὴν διάνοιαν εἶναι, ἀλλ' ἐν τῷ τὸν ἀποκρινόμενον ἔχειν πῶς πρὸς τὰ δεδομένα. εἴτα πρὸς τοῦνομα πάντας ἐνδέχεται αὐτοὺς εἶναι· τὸ γὰρ πρὸς τοῦνομα τὸ μὴ πρὸς τὴν διάνοιαν εἶναί ἐστιν ἐνταῦθα. εἰ γὰρ μὴ πάντες, ἔσονταί τινες ἕτεροι οὔτε πρὸς τοῦνομα οὔτε πρὸς τὴν διάνοιαν· οἱ δέ φασιν πάντας, καὶ διαιροῦνται ἢ πρὸς τοῦνομα ἢ πρὸς τὴν διάνοιαν εἶναι πάντας, ἄλλους δ' οὔ. ἀλλὰ μὴν ὅσοι συλλογισμοὶ εἰσὶ παρὰ τὸ πλεοναχῶς, τούτων εἰσὶ τινες οἱ παρὰ τοῦνομα. ἀτόπως μὲν γὰρ καὶ εἴρηται τὸ παρὰ τοῦνομα φάναι πάντας τοὺς παρὰ τὴν λέξιν· ἀλλ' οὖν εἰσὶ τινες παραλογισμοὶ οὐ τῷ τὸν ἀποκρινόμενον πρὸς τούτους ἔχειν πῶς, ἀλλὰ τῷ τοιονδὶ ἐρώτημα τὸν λόγον αὐτὸν ἔχειν ὃ πλείω σημαίνει.

Ὅλως τε ἀτοπον τὸ περὶ ἐλέγχου διαλέγεσθαι ἀλλὰ μὴ πρότερον περὶ συλλογισμοῦ· ὁ γὰρ ἔλεγχος συλλογισμός ἐστὶν, ὥστε χρὴ καὶ περὶ συλλογισμοῦ πρότερον ἢ περὶ ψευδοῦς ἐλέγχου· ἔστι γὰρ ὁ τοιοῦτος ἔλεγχος φαινόμενος συλλογισμὸς ἀντιφάσεως. διὸ ἢ ἐν τῷ συλλογισμῷ ἔσται τὸ αἴτιον ἢ ἐν τῇ ἀντιφάσει (προσκεῖσθαι γὰρ δεῖ τὴν ἀντίφασιν), ὅτε δ' ἐν

ἀμφοῖν, ἂν ἢ φαινόμενος ἔλεγχος. ἔστι δὲ ὁ μὲν τοῦ “σιγῶντα λέγειν” ἐν τῇ ἀντιφάσει, οὐκ ἐν τῷ συλλογισμῷ, ὁ δὲ “ἂ μὴ ἔχοι τις, δοίη ἄν” ἐν ἀμφοῖν, ὁ δὲ ὅτι ἡ Ὀμήρου ποίησις σχῆμα διὰ τοῦ “κύκλος” ἐν τῷ συλλογισμῷ. ὁ δ’ ἐν μηδετέρῳ ἀληθῆς συλλογισμός.

Ἀλλὰ δὴ, ὅθεν ὁ λόγος ἦλθε, πότερον οἱ ἐν τοῖς μαθήμασι λόγοι πρὸς τὴν διάνοιαν εἰσιν ἢ οὐ; καὶ εἴ τι δοκεῖ πολλὰ σημαίνειν τὸ τρίγωνον, καὶ ἔδωκε μὴ ὡς τοῦτο τὸ σχῆμα ἐφ’ οὗ συνεπεράνατο ὅτι δύο ὀρθαί, πότερον πρὸς τὴν διάνοιαν οὗτος διείλεκται τὴν ἐκείνου ἢ οὐ;

Ἔτι εἰ πολλὰ μὲν σημαίνει τοῦνομα, ὁ δὲ μὴ νοεῖ μηδ’ οἶεται, πῶς οὗτος οὐ πρὸς τὴν διάνοιαν διείλεκται; ἢ πῶς δεῖ ἐρωτᾶν πλὴν διδόντα διαίρεσιν, εἴ τ’ ἐρωτήσῃ τις εἰ ἔστι σιγῶντα λέγειν ἢ οὐ, ἢ ἔστι μὲν ὡς οὐ, ἔστι δ’ ὡς ναί, εἰ δὴ τις δοίη μηδαμῶς, ὁ δὲ διαλεχθεῖν, ἄρ’ οὐ πρὸς τὴν διάνοιαν διείλεκται; καίτοι ὁ λόγος δοκεῖ τῶν παρὰ τὸ ὄνομα εἶναι. οὐκ ἄρα ἐστὶ γένος τι λόγων τὸ πρὸς τὴν διάνοιαν. ἀλλ’ οἱ μὲν πρὸς τοῦνομά εἰσι· καίτοι οὗτοι οὐ πάντες, οὐχ ὅτι οἱ ἔλεγχοι ἀλλ’ οὐδ’ οἱ φαινόμενοι ἔλεγχοι. εἰσὶ γὰρ καὶ μὴ παρὰ τὴν λέξιν φαινόμενοι ἔλεγχοι, οἷον οἱ παρὰ τὸ συμβεβηκὸς καὶ ἕτεροι.

Εἰ δέ τις ἀξιοῖ διαιρεῖν, ὅτι “λέγω δὲ σιγῶντα λέγειν τὰ μὲν ὡδὶ τὰ δ’ ὡδί”, ἀλλὰ τοῦτο γ’ ἐστὶ πρῶτον μὲν ἄτοπον, τὸ ἀξιοῦν· ἐνίστε γὰρ οὐ δοκεῖ τὸ ἐρωτώμενον πολλαχῶς ἔχειν, ἀδύνατον δὲ διαιρεῖν ὃ μὴ οἶεται. ἔπειτα τὸ διδάσκειν τί ἄλλο ἔσται; φανερόν γὰρ ποιήσει ὡς ἔχει τῷ μήτ’ ἐσκεμμένῳ μήτ’ εἰδότι μήθ’ ὑπολαμβάνοντι ὅτι ἄλλως λέγεται· ἐπεὶ καὶ ἐν τοῖς διπλοῖς τί κωλύει τοῦτο παθεῖν; “ἄρα ἴσαι αἱ μονάδες ταῖς δυάσιν ἐν τοῖς τέτταρσιν; εἰσὶ δὲ [δυάδες] αἱ μὲν ὡδὶ ἐνοῦσαι αἱ δὲ ὡδί.” καὶ “ἄρα τῶν ἐναντίων μία ἐπιστήμη ἢ οὐ; ἔστι δ’ ἐναντία τὰ μὲν γνωστὰ τὰ δ’ ἄγνωστα”. ὥστ’ ἔοικεν ἀγνοεῖν ὁ τοῦτο ἀξιῶν ὅτι ἕτερον τὸ διδάσκειν τοῦ διαλέγεσθαι, καὶ ὅτι δεῖ τὸν μὲν διδάσκοντα μὴ ἐρωτᾶν ἀλλ’ αὐτὸν δῆλα ποιεῖν, τὸν δ’ ἐρωτᾶν.

Ἔτι τὸ φάναι ἢ ἀποφάναι ἀξιοῦν οὐ δεικνύντος ἐστὶν ἀλλὰ πεῖραν λαμβάνοντος· ἢ γὰρ πειραστική ἐστὶ διαλεκτική τις καὶ θεωρεῖ οὐ τὸν εἰδότα ἀλλὰ τὸν ἀγνοοῦντα καὶ προσποιούμενον. ὁ μὲν οὖν κατὰ τὸ πρᾶγμα θεωρῶν τὰ κοινὰ διαλεκτικός, ὁ δὲ τοῦτο φαινομένως ποιῶν σοφιστικός, καὶ συλλογισμὸς ἐριστικός καὶ σοφιστικός ἐστὶν εἷς μὲν ὁ φαινόμενος συλλογιστικὸς περὶ ὧν ἡ διαλεκτικὴ πειραστικὴ ἐστὶ, κἂν ἀληθὲς τὸ συμπέρασμα ἢ (τοῦ γὰρ διὰ τί ἀπατητικός ἐστὶ), καὶ ὅσοι μὴ ὄντες κατὰ τὴν ἐκάστου μέθοδον παραλογισμοὶ δοκοῦσιν εἶναι κατὰ τὴν τέχνην. τὰ γὰρ

ψευδογραφήματα οὐκ ἐριστικά (κατὰ γὰρ τὰ ὑπὸ τὴν τέχνην οἱ παραλογισμοί), οὐδέ γ' εἴ τί ἐστι ψευδογράφημα περὶ ἀληθές, οἷον τὸ Ἴπποκράτους ἢ ὁ τετραγωνισμὸς ὁ διὰ τῶν μηνίσκων. ἀλλ' ὡς Βρύσων ἐτετραγώνιζε τὸν κύκλον, εἰ καὶ τετραγωνίζεται ὁ κύκλος, ἀλλ' ὅτι οὐ κατὰ τὸ πρᾶγμα, διὰ τοῦτο σοφιστικός. ὥστε ὁ τε περὶ τῶνδε φαινόμενος συλλογισμὸς ἐριστικὸς λόγος, καὶ ὁ κατὰ τὸ πρᾶγμα φαινόμενος συλλογισμὸς, καὶ ἢ συλλογισμὸς, ἐριστικὸς λόγος· φαινόμενος γάρ ἐστι κατὰ τὸ πρᾶγμα, ὥστ' ἀπατητικὸς καὶ ἄδικος. ὥσπερ γὰρ ἡ ἐν ἀγῶνι ἀδικία εἰδὸς τι ἔχει καὶ ἔστιν ἀδικομαχία τις, οὕτως ἐν ἀντιλογίᾳ ἀδικομαχία ἢ ἐριστική ἐστιν· ἐκεῖ τε γὰρ οἱ πάντως νικᾶν προαιρούμενοι πάντων ἄπτονται, καὶ ἐνταῦθα οἱ ἐριστικοί. οἱ μὲν οὖν τῆς νίκης αὐτῆς χάριν τοιοῦτοι ἐριστικοὶ ἄνθρωποι καὶ φιλέριδες δοκοῦσιν εἶναι, οἱ δὲ δόξης χάριν τῆς εἰς χρηματισμὸν σοφιστικοί· ἡ γὰρ σοφιστική ἐστιν, ὥσπερ εἴπομεν, χρηματιστική τις ἀπὸ σοφίας φαινομένης· διὸ φαινομένης ἀποδείξεως ἐφίενται, καὶ τῶν λόγων τῶν αὐτῶν μὲν [εἴσιν] οἱ φιλέριδες καὶ οἱ σοφισταί, ἀλλ' οὐ τῶν αὐτῶν ἔνεκεν, καὶ λόγος ὁ αὐτὸς μὲν ἔσται σοφιστικὸς καὶ ἐριστικός, ἀλλ' οὐ κατὰ ταύτόν, ἀλλ' ἢ μὲν νίκης φαινομένης «ἔνεκα», ἐριστικός, ἢ δὲ σοφίας, σοφιστικός· καὶ γὰρ ἡ σοφιστική ἐστι φαινομένη σοφία τις ἀλλ' οὐκ οὕσα. ὁ δ' ἐριστικός ἐστὶ πως οὕτως ἔχων πρὸς τὸν διαλεκτικὸν ὡς ὁ ψευδογράφος πρὸς τὸν γεωμετρικόν· ἐκ γὰρ τῶν αὐτῶν τῷ διαλεκτικῷ παραλογίζεται, καὶ ὁ ψευδογράφος τῷ γεωμέτρῳ. ἀλλ' ὁ μὲν οὐκ ἐριστικός, ὅτι ἐκ τῶν ἀρχῶν καὶ συμπερασμάτων τῶν ὑπὸ τὴν τέχνην ψευδογραφεῖ· ὁ δ' ὑπὸ τὴν διαλεκτικὴν περὶ τᾶλλα ὅτι ἐριστικὸς ἔσται δῆλον. οἷον ὁ τετραγωνισμὸς ὁ μὲν διὰ τῶν μηνίσκων οὐκ ἐριστικός, ὁ δὲ Βρύσωνος ἐριστικός· καὶ τὸν μὲν οὐκ ἔστι μετενεγκεῖν ἀλλ' ἢ πρὸς γεωμετρίαν μόνον, διὰ τὸ ἐκ τῶν ἰδίων εἶναι ἀρχῶν, τὸν δὲ πρὸς πολλούς, ὅσοι μὴ ἴσασι τὸ δυνατόν ἐν ἐκάστῳ καὶ τὸ ἀδύνατον· ἀρμόσει γάρ. ἢ ὡς Ἀντιφῶν ἐτετραγώνιζεν. ἢ εἴ τις μὴ φαίη βέλτιον εἶναι ἀπὸ δειπνοῦ περιπατεῖν διὰ τὸν Ζήνωνος λόγον, οὐκ ἰατρικός· κοινὸς γάρ. εἰ μὲν οὖν πάντῃ ὁμοίως εἶχεν ὁ ἐριστικὸς πρὸς τὸν διαλεκτικὸν τῷ ψευδογράφῳ πρὸς τὸν γεωμέτρην, οὐκ ἂν ἦν περὶ ἐκείνων ἐριστικός· νῦν δ' οὐκ ἔστιν ὁ διαλεκτικὸς περὶ γένος τι ὠρισμένον, οὐδὲ δεικτικὸς οὐδενός, οὐδὲ τοιοῦτος οἷος ὁ καθόλου. οὔτε γάρ ἐστιν ἅπαντα ἐν ἐνί τινι γένει, οὔτε, εἰ εἴη, οἷόν τε ὑπὸ τὰς αὐτὰς ἀρχὰς εἶναι τὰ ὄντα. ὥστ' οὐδεμία τέχνη τῶν δεικνουσῶν τινα φύσιν ἐρωτητική ἐστιν· οὐ γὰρ ἔξεστιν ὁποτερονοῦν τῶν μορίων δοῦναι· συλλογισμὸς γὰρ οὐ γίνεται ἐξ ἀμφοῖν. ἡ δὲ διαλεκτικὴ ἐρωτητική ἐστιν, εἰ δ' ἐδείκνυεν, εἰ καὶ μὴ πάντα, ἀλλὰ τὰ γε πρῶτα καὶ τὰς οἰκείας ἀρχὰς οὐκ ἂν ἠρώτα· μὴ διδόντος γὰρ οὐκ ἂν ἔτι εἶχεν ἐξ ὧν ἔτι διαλέξεται πρὸς τὴν ἔνστασιν. ἢ δ' αὐτὴ καὶ πειραστική· οὐδὲ γὰρ ἡ πειραστικὴ τοιαύτη ἐστὶν οἷα ἡ γεωμετρία, ἀλλ' ἦν ἂν ἔχοι καὶ μὴ εἰδὼς τις. ἔξεστι γὰρ πεῖραν λαβεῖν καὶ

τὸν μὴ εἰδότα τὸ πρᾶγμα τοῦ μὴ εἰδότος, εἴπερ καὶ δίδωσιν, οὐκ ἐξ ὧν οἶδεν οὐδ' ἐκ τῶν ἰδίων ἄλλ' ἐκ τῶν ἐπομένων, ὅσα τοιαῦτά ἐστιν ἃ εἰδότα μὲν οὐδὲν κωλύει μὴ εἰδέναι τὴν τέχνην, μὴ εἰδότα δ' ἀνάγκη ἀγνοεῖν. (ὥστε φανερόν ὅτι οὐδενὸς ὠρισμένου ἢ πειραστικῆ ἐπιστήμη ἐστίν. διὸ καὶ περὶ πάντων ἐστί· πᾶσαι γὰρ αἱ τέχναι χρῶνται καὶ κοινοῖς τισιν. διὸ πάντες καὶ οἱ ἰδιῶται τρόπον τινὰ χρῶνται τῇ διαλεκτικῇ καὶ πειραστικῇ· πάντες γὰρ μέχρι τινὸς ἐπιχειροῦσιν ἀνακρίνειν τοὺς ἐπαγγελλομένους.) ταῦτα δ' ἐστὶ τὰ κοινά· ταῦτα γὰρ οὐδὲν ἥττον ἴσασιν αὐτοί, κἂν δοκῶσι λίαν ἔξω λέγειν. ἐλέγχουσιν οὖν ἅπαντες· ἀτέχνως γὰρ μετέχουσι τούτου οὗ ἐντέχνως ἢ διαλεκτικῇ ἐστί, καὶ ὁ τέχνη συλλογιστικῇ πειραστικὸς διαλεκτικός. ἐπεὶ δ' ἐστὶ πολλὰ μὲν ταῦτά κατὰ πάντων, οὐ τοιαῦτα δ' ὥστε φύσιν τινὰ εἶναι καὶ γένος ἄλλ' οἷα αἱ ἀποφάσεις, τὰ δ' οὐ τοιαῦτα ἀλλὰ ἴδια, ἔστιν ἐκ τούτων περὶ ἀπάντων πείραν λαμβάνειν καὶ εἶναι τέχνην τινά, καὶ μὴ τοιαύτην εἶναι οἷα αἱ δεικνύουσαι. διόπερ ὁ ἐριστικός οὐκ ἔστιν οὕτως ἔχων πάντη ὡς ὁ ψευδογράφος· οὐ γὰρ ἔσται παραλογιστικός ἐξ ὠρισμένου τινὸς γένους ἀρχῶν, ἀλλὰ περὶ πᾶν γένος ἔσται ὁ ἐριστι❖

Τρόποι μὲν οὖν εἰσιν οὗτοι τῶν σοφιστικῶν ἐλέγχων. ὅτι δ' ἐστὶ τοῦ διαλεκτικοῦ τὸ θεωρῆσαι περὶ τούτων καὶ δύνασθαι ταῦτα ποιεῖν, οὐ χαλεπὸν ἰδεῖν· ἢ γὰρ περὶ τὰς προτάσεις μέθοδος ἅπασαν ἔχει ταύτην τὴν θεωρίαν.

Καὶ περὶ μὲν τῶν ἐλέγχων εἴρηται τῶν φαινομένων. περὶ δὲ τοῦ ψευδόμενον τι δεῖξαι καὶ τὸν λόγον εἰς ἄδοξόν τι ἀγαγεῖν (τοῦτο γὰρ ἦν δεύτερον τῆς σοφιστικῆς προαιρέσεως) - πρῶτον μὲν οὖν ἐκ τοῦ πυνθάνεσθαι πως καὶ διὰ τῆς ἐρωτήσεως συμβαίνει μάλιστα. τὸ γὰρ [πρὸς] μηδὲν ὀρίσαντα κείμενον ἐρωτᾶν θηρευτικόν ἐστί τούτων· εἰκῇ γὰρ λέγοντες ἀμαρτάνουσι μᾶλλον· εἰκῇ δὲ λέγουσιν ὅταν μηδὲν ἔχωσι προκείμενον. τό τε ἐρωτᾶν πολλά, κἂν ὠρισμένον ἢ πρὸς ὃ διαλέγεται, καὶ τὸ τὰ δοκοῦντα λέγειν ἀξιοῦν, ποιεῖ τιν' εὐπορίαν τοῦ εἰς ἄδοξον ἀγαγεῖν ἢ ψεῦδος, ἐάν τε ἐρωτώμενος φῇ ἢ ἀποφῇ τούτων τι, ἅγει πρὸς ἃ ἐπιχειρήματος εὐπορεῖ. δύνανται δὲ νῦν ἥττον κακουργεῖν διὰ τούτων ἢ πρότερον· ἀπαιτοῦνται γὰρ τί τοῦτο πρὸς τὸ ἐν ἀρχῇ. στοιχεῖον δὲ τοῦ τυχεῖν ἢ ψεύδους τινὸς ἢ ἀδόξου τὸ μηδεμίαν εὐθὺς ἐρωτᾶν θέσιν, ἀλλὰ φάσκειν ἐρωτᾶν μαθεῖν βουλόμενον· χώραν γὰρ ἐπιχειρήματος ἢ σκῆψις ποιεῖ.

Πρὸς δὲ τὸ ψευδόμενον δεῖξαι ἴδιος τόπος ὁ σοφιστικός, τὸ ἄγειν πρὸς τοιαῦτα πρὸς ἃ εὐπορεῖ λόγων. ἔστι δὲ καὶ καλῶς καὶ μὴ καλῶς τοῦτο ποιεῖν, καθάπερ ἐλέχθη πρότερον.



Πάλιν πρὸς τὸ παράδοξα λέγειν σκοπεῖν ἐκ τίνος γένους ὁ διαλεγόμενος, εἴτ' ἐπερωτᾷν ὃ τοῖς πολλοῖς οὗτοι λέγουσι παράδοξον· ἔστι γὰρ ἐκάστοις τι τοιοῦτον. στοιχεῖον δὲ τούτων τὸ τὰς ἐκάστων εἰληφέναι θέσεις ἐν ταῖς προτάσεσιν. λύσις δὲ καὶ τούτων ἡ προσήκουσα φέρεται τῷ ἐμφανίζειν ὅτι οὐ διὰ τὸν λόγον συμβαίνει τὸ ἄδοξον· ἀεὶ δὲ τοῦτο καὶ βούλεται ὁ ἀγωνιζόμενος.

Ἐπεὶ δ' ἐκ τῶν βουλήσεων καὶ τῶν φανερῶν δοξῶν. οὐ γὰρ ταῦτά βούλονται τε καὶ φασίν, ἀλλὰ λέγουσι μὲν τοὺς εὐσημονεστάτους τῶν λόγων, βούλονται δὲ τὰ φαινόμενα λυσιτελεῖν· οἷον τεθνάναι καλῶς μᾶλλον ἢ ζῆν ἢδέως φασὶ δεῖν, καὶ πένεσθαι δικαίως μᾶλλον ἢ πλουτεῖν αἰσchrῶς, βούλονται δὲ τάναντία. τὸν μὲν οὖν λέγοντα κατὰ τὰς βουλήσεις εἰς τὰς φανεράς δόξας ἀκτέον, τὸν δὲ κατὰ ταύτας εἰς τὰς ἀποκεκρυμμένας· ἀμφοτέρως γὰρ ἀναγκαῖον παράδοξα λέγειν· ἡ γὰρ πρὸς τὰς φανεράς ἢ πρὸς τὰς ἀφανεῖς δόξας ἐροῦσιν ἐναντία.

Πλεῖστος δὲ τόπος ἐστὶ τοῦ ποιεῖν παράδοξα λέγειν, ὥσπερ καὶ ὁ Καλλικλῆς ἐν τῷ Γοργίᾳ γέγραπται λέγων, καὶ οἱ ἀρχαῖοι δὲ πάντες ὥροντο συμβαίνειν, παρὰ τὸ κατὰ φύσιν καὶ κατὰ τὸν νόμον· ἐναντία γὰρ εἶναι φύσιν καὶ νόμον, καὶ τὴν δικαιοσύνην κατὰ νόμον μὲν εἶναι καλόν, κατὰ φύσιν δ' οὐ καλόν. δεῖ οὖν πρὸς μὲν τὸν εἰπόντα κατὰ φύσιν κατὰ νόμον ἀπαντᾶν, πρὸς δὲ τὸν κατὰ νόμον ἐπὶ τὴν φύσιν ἄγειν· ἀμφοτέρως γὰρ συμβαίνει λέγειν παράδοξα. ἦν δὲ τὸ μὲν κατὰ φύσιν αὐτοῖς τὸ ἀληθές, τὸ δὲ κατὰ νόμον τὸ τοῖς πολλοῖς δοκοῦν. ὥστε δῆλον ὅτι κἀκεῖνοι, καθάπερ καὶ οἱ νῦν, ἢ ἐλέγξει ἢ παράδοξα λέγειν τὸν ἀποκρινόμενον ἐπεχείρουν ποιεῖν.

Ἐνια δὲ τῶν ἐρωτημάτων ἔχει τὸ ἀμφοτέρως ἄδοξον εἶναι τὴν ἀπόκρισιν, οἷον πότερον τοῖς σοφοῖς ἢ τῷ πατρὶ δεῖ πείθεσθαι, καὶ τὰ συμφέροντα πράττειν ἢ τὰ δίκαια, καὶ ἀδικεῖσθαι αἰρετώτερον ἢ βλάπτειν. δεῖ δ' ἄγειν εἰς τὰ τοῖς πολλοῖς καὶ <τὰ> τοῖς σοφοῖς ἐναντία - ἐὰν μὲν λέγη τις ὡς οἱ περὶ τοὺς λόγους, εἰς τὰ τοῖς πολλοῖς, ἐὰν δ' ὡς οἱ πολλοί, ἐπὶ τὰ τοῖς σοφοῖς. φασὶ γὰρ οἱ μὲν ἐξ ἀνάγκης τὸν εὐδαίμονα δίκαιον εἶναι· τοῖς δὲ πολλοῖς ἄδοξον τὸ βασιλέα μὴ εὐδαιμονεῖν. ἔστι δὲ τὸ εἰς τὰ οὕτως ἄδοξα ἄγειν τὸ αὐτὸ τῷ εἰς τὴν κατὰ φύσιν καὶ κατὰ νόμον ὑπεναντίωσιν ἄγειν· ὁ μὲν γὰρ νόμος δόξα τῶν πολλῶν, οἱ δὲ σοφοὶ κατὰ φύσιν καὶ κατ' ἀλήθειαν λέγουσιν.

Καὶ τὰ μὲν παράδοξα ἐκ τούτων δεῖ ζητεῖν τῶν τόπων· περὶ δὲ τοῦ ποιῆσαι ἀδολεσχεῖν, ὃ μὲν λέγομεν τὸ ἀδολεσχεῖν εἰρήκαμεν ἤδη· πάντες δὲ οἱ τοιοῖδε λόγοι τοῦτο βούλονται ποιεῖν· εἰ μηδὲν διαφέρει τὸ ὄνομα ἢ τὸν

λόγον εἰπεῖν, διπλάσιον δὲ καὶ διπλάσιον ἡμίσεος ταῦτό· εἰ ἄρα ἐστὶ διπλάσιον ἡμίσεος διπλάσιον, ἔσται ἡμίσεος ἡμίσεος διπλάσιον. καὶ πάλιν ἂν ἀντὶ τοῦ “διπλάσιον” “διπλάσιον ἡμίσεος” τεθῇ, τρὶς ἔσται εἰρημένον, ἡμίσεος ἡμίσεος ἡμίσεος διπλάσιον. καὶ ἄρα ἐστὶν ἡ ἐπιθυμία ἡδέος; τοῦτο δ’ ἐστὶν ὄρεξις ἡδέος· ἔστιν ἄρα ἡ ἐπιθυμία ὄρεξις ἡδέος ἡδέος.

Εἰσὶ δὲ πάντες οἱ τοιοῦτοι τῶν λόγων ἔν τε τοῖς πρὸς τι, ὅσα μὴ μόνον τὰ γένη ἀλλὰ καὶ αὐτὰ πρὸς τι λέγεται καὶ πρὸς τὸ αὐτὸ καὶ ἔν ἀποδίδοται (οἶον ἢ τε ὄρεξις τινὸς ὄρεξις καὶ ἡ ἐπιθυμία τινὸς ἐπιθυμία, καὶ τὸ διπλάσιον τινὸς διπλάσιον, καὶ διπλάσιον ἡμίσεος), καὶ ὅσων ἡ οὐσία, οὐκ ὄντων πρὸς τι ὅλως ὧν εἰσιν ἕξεις ἢ πάθη ἢ τι τοιοῦτον ἐν τῷ λόγῳ αὐτῶν προσδηλοῦται, κατηγορουμένων ἐπὶ τούτοις. οἶον τὸ περιττὸν ἀριθμὸς μέσον ἔχων· ἔστι δ’ ἀριθμὸς περιττός· ἔστιν ἄρα ἀριθμὸς ἀριθμὸς μέσον ἔχων. καὶ εἰ τὸ σιμὸν κοιλότης ῥινός ἐστὶν, ἔστι δὲ ῥὶς σιμή, ἔστιν ἄρα ῥὶς ῥὶς κοίλη.

Φαίνονται δὲ ποιεῖν οὐ ποιοῦντες ἐνίοτε διὰ τὸ μὴ προσπυνθάνεσθαι εἰ σημαίνει τι καθ’ αὐτὸ λεχθὲν τὸ διπλάσιον ἢ οὐδέν, καὶ εἴ τι σημαίνει, πότερον τὸ αὐτὸ ἢ ἕτερον, ἀλλὰ τὸ συμπέρασμα λέγειν εὐθύς. ἀλλὰ φαίνεται, διὰ τὸ τὸ ὄνομα ταῦτό εἶναι, ταῦτό καὶ σημαίνειν.

Σολοικισμὸς δ’ οἶον μὲν ἐστὶν εἴρηται πρότερον· ἔστι δὲ τοῦτο καὶ ποιεῖν καὶ μὴ ποιοῦντα φαίνεσθαι καὶ ποιοῦντα μὴ δοκεῖν, καθάπερ, ὃ Πρωταγόρας ἔλεγεν, εἰ “ὁ μῆνις” καὶ “ὁ πῆληξ” ἄρρενά ἐστιν· ὁ μὲν γὰρ λέγων “οὐλομένην” σολοικίζει μὲν κατ’ ἐκεῖνον, οὐ φαίνεται δὲ τοῖς ἄλλοις, ὁ δὲ “οὐλόμενον” φαίνεται μὲν, ἀλλ’ οὐ σολοικίζει. δῆλον οὖν ὅτι κἂν τέχνη τις τοῦτο δύναιτο ποιεῖν· διὸ πολλοὶ τῶν λόγων οὐ συλλογιζόμενοι σολοικισμὸν φαίνονται συλλογίζεσθαι, καθάπερ ἐν τοῖς ἐλέγχοις.

Εἰσὶ δὲ πάντες σχεδὸν οἱ φαινόμενοι σολοικισμοὶ παρὰ τόδε, [καὶ] ὅταν ἡ πτώσις μήτε ἄρρεν μήτε θῆλυ δηλοῖ ἀλλὰ τὸ μεταξύ. τὸ μὲν γὰρ “οὔτος” ἄρρεν σημαίνει, τὸ δ’ “αὕτη” θῆλυ· τὸ δὲ “τοῦτο” θέλει μὲν τὸ μεταξύ σημαίνειν, πολλάκις δὲ σημαίνει κἀκείνων ἑκάτερον, οἶον “τί τοῦτο;” “Καλλιόπη, ξύλον, Κορίσκος”. τοῦ μὲν οὖν ἄρρενος καὶ τοῦ θήλεος διαφέρουσιν αἱ πτώσεις ἅπασαι, τοῦ δὲ μεταξύ αἱ μὲν αἱ δ’ οὔ. δοθέντος δὲ πολλάκις “τοῦτο”, συλλογίζονται ὡς εἰρημένου “τοῦτον”. ὁμοίως δὲ καὶ ἄλλην πτώσιν ἀντ’ ἄλλης. ὁ δὲ παραλογισμὸς γίνεται διὰ τὸ κοινὸν εἶναι τὸ “τοῦτο” πλειόνων πτώσεων· τὸ γὰρ “τοῦτο” σημαίνει ὅτε μὲν “οὔτος” ὅτε δὲ “τοῦτον”. δεῖ δ’ ἐναλλάξ σημαίνειν μετὰ μὲν τοῦ “ἔστι” τὸ “οὔτος”, μετὰ δὲ τοῦ “εἶναι” τὸ “τοῦτον”, οἶον “ἔστι Κορίσκος”, “εἶναι Κορίσκον”. καὶ ἐπὶ

τῶν θήλεων ὀνομάτων ὡσαύτως, καὶ ἐπὶ τῶν λεγομένων μὲν σκευῶν, ἔχοντων δὲ θηλείας ἢ ἄρρενος κληῖσιν. ὅσα γὰρ εἰς τὸ ο καὶ τὸ ν τελευτᾷ, ταῦτα μόνον σκεύους ἔχει κληῖσιν, οἷον ξύλον, σχοινίον· τὰ δὲ μὴ οὕτως ἄρρενος ἢ θήλεος, ὧν ἕνια φέρομεν ἐπὶ τὰ σκεύη, οἷον ἄσκος μὲν ἄρρεν τοῦνομα, κλίνη δὲ θήλυ. διόπερ καὶ ἐπὶ τῶν τοιούτων ὡσαύτως τὸ “ἔστι” καὶ τὸ “εἶναι” διοίσει. καὶ τρόπον τινὰ ὅμοιός ἐστιν ὁ σολοικισμὸς τοῖς “παρὰ τὸ τὰ μὴ ὅμοια ὁμοίως” λεγομένοις ἐλέγχους. ὥσπερ γὰρ ἐκείνοις ἐπὶ τῶν πραγμάτων, τούτοις ἐπὶ τῶν ὀνομάτων συμπίπτει σολοικίζειν· ἄνθρωπος γὰρ καὶ λευκὸν καὶ πρᾶγμα καὶ ὄνομα ἐστίν.

Φανερόν οὖν ὅτι τὸν σολοικισμόν πειρατέον ἐκ τῶν εἰρημένων πτώσεων συλλογίζεσθαι.

Εἶδη μὲν οὖν ταῦτα τῶν ἀγωνιστικῶν λόγων καὶ μέρη τῶν εἰδῶν καὶ τρόποι οἱ εἰρημένοι· διαφέρει δ’ οὐ μικρὸν ἐὰν ταχθῇ πως τὰ περὶ τὴν ἐρώτησιν πρὸς τὸ λανθάνειν, ὥσπερ ἐν τοῖς διαλεκτικοῖς. ἐφεξῆς οὖν τοῖς εἰρημένοις ταῦτα πρῶτον λεκτέον.

Ἔστι δὲ πρὸς τὸ ἐλέγχειν ἐν μὲν μῆκος· χαλεπὸν γὰρ ἅμα πολλὰ συνορᾶν· εἰς δὲ τὸ μῆκος τοῖς προειρημένοις στοιχείοις χρηστέον. ἐν δὲ τάχος· ὑστερίζοντες γὰρ ἥττον προορῶσιν. ἔτι δ’ ὀργὴ καὶ φιλονεικία· ταραττόμενοι γὰρ ἥττον δύνανται φυλάττεσθαι πάντες· στοιχεῖα δὲ τῆς ὀργῆς τό τε φανερόν ἐαυτὸν ποιεῖν βουλόμενον ἀδικεῖν καὶ τὸ παράπαν ἀναισχυντεῖν. ἔτι τὸ ἐναλλάξ τὰ ἐρωτήματα τιθέναι, ἐὰν τε πρὸς ταῦτό πλείους τις ἔχη λόγους, ἐὰν τε καὶ ὅτι οὕτως καὶ ὅτι οὐχ οὕτως· ἅμα γὰρ συμβαίνει ἢ πρὸς πλείω ἢ πρὸς τὰ ἐναντία ποιεῖσθαι τὴν φυλακὴν. ὅλως δὲ πάντα τὰ πρὸς τὴν κρύψιν λεχθέντα πρότερον χρήσιμα καὶ πρὸς τοὺς ἀγωνιστικοὺς λόγους· ἢ γὰρ κρύψις ἐστὶ τοῦ λαθεῖν χάριν, τὸ δὲ λαθεῖν τῆς ἀπάτης.

Πρὸς δὲ τοὺς ἀνανεύοντας ἅττ’ ἂν οἰηθῶσιν εἶναι πρὸς τὸν λόγον, ἐξ ἀποφάσεως ἐρωτητέον ὡς τοῦναντίον βουλόμενον, ἢ καὶ ἐξ ἴσου ποιοῦντα τὴν ἐρώτησιν· ἀδήλου γὰρ ὄντος τοῦ τί βούλεται λαβεῖν ἥττον δυσκολαίνουσιν. ὅταν τ’ ἐπὶ τῶν μερῶν διδῶ τις τὸ καθ’ ἕκαστον, ἐπάγοντα τὸ καθόλου πολλάκις οὐκ ἐρωτητέον ἀλλ’ ὡς δεδομένῳ χρηστέον· ἐνίοτε γὰρ καὶ αὐτοὶ οἶονται δεδοκέναι καὶ τοῖς ἀκούουσι φαίνονται διὰ τὴν τῆς ἐπαγωγῆς μνείαν, ὡς οὐκ ἂν ἠρωτημένα μάτην. ἐν οἷς τε μὴ ὀνόματι σημαίνεται τὸ καθόλου ἀλλὰ τῇ ὁμοιότητι, χρηστέον πρὸς τὸ συμφέρον· λανθάνει γὰρ ἢ ὁμοιότης πολλάκις. πρὸς τε τὸ λαβεῖν τὴν πρότασιν τοῦναντίον παραβάλλοντα χρὴ πυνθάνεσθαι· οἷον, εἰ δεοὶ λαβεῖν ὅτι δεῖ πάντα τῷ πατρὶ

πείθεσθαι, “πότερον ἅπαντα δεῖ πείθεσθαι τοῖς γονεῦσιν ἢ πάντ’ ἀπειθεῖν;” καὶ “τὸ πολλάκις πολλά, πότερον πολλὰ συγχωρητέον ἢ ὀλίγα;” μᾶλλον γάρ, εἶπερ ἀνάγκη, δόξειεν ἂν εἶναι πολλά· παρατιθεμένων γὰρ ἐγγὺς τῶν ἐναντίων καὶ μείω καὶ μείζω φαίνεται καὶ χείρω καὶ βελτίω τοῖς ἀνθρώποις.

Σφόδρα δὲ καὶ πολλάκις ποιεῖ δοκεῖν ἐληλέγχθαι τὸ μάλιστα σοφιστικὸν συκοφάντημα τῶν ἐρωτῶντων, τὸ μηδὲν συλλογισαμένους μὴ ἐρώτημα ποιεῖν τὸ τελευταῖον ἀλλὰ συμπεραντικῶς εἶπεῖν, ὡς συλλελογισμένους, “οὐκ ἄρα τὸ καὶ τό”.

Σοφιστικὸν δὲ καὶ τὸ κειμένου παραδόξου τὸ φαινόμενον ἀξιοῦν ἀποκρίνεσθαι, προκειμένου τοῦ δοκοῦντος ἐξ ἀρχῆς, καὶ τὴν ἐρώτησιν τῶν τοιούτων οὕτω ποιεῖσθαι, “πότερόν σοι δοκεῖ;” ἀνάγκη γάρ, ἂν ἢ τὸ ἐρώτημα ἐξ ὧν ὁ συλλογισμός, ἢ ἔλεγχον ἢ παράδοxon γίνεσθαι, δόντος μὲν ἔλεγχον, μὴ δόντος δὲ μηδὲ δοκεῖν φάσκοντος ἄδοxon, μὴ δόντος δέ, δοκεῖν δ’ ὁμολογοῦντος, ἐλεγχοειδές.

Ἔτι καθάπερ καὶ ἐν τοῖς ῥητορικοῖς, καὶ ἐν τοῖς ἐλεγκτικοῖς ὁμοίως τὰ ἐναντιώματα θεωρητέον ἢ πρὸς τὰ ὑφ’ ἑαυτοῦ λεγόμενα ἢ πρὸς οὓς ὁμολογεῖ καλῶς λέγειν ἢ πράττειν, ἔτι πρὸς τοὺς δοκοῦντας τοιούτους ἢ πρὸς τοὺς ὁμοίους, ἢ πρὸς τοὺς πλείστους ἢ πρὸς πάντας. ὥσπερ τε καὶ ἀποκρινόμενοι πολλάκις, ὅταν ἐλέγχωνται, ποιοῦσι διπτόν, ἂν μέλλῃ συμβαίνειν ἐλεγχθῆσεσθαι, καὶ ἐρωτῶντας χρηστέον ποτὲ τούτῳ πρὸς τοὺς ἐνισταμένους - ἂν ὡδὶ μὲν συμβαίνει ὡδὶ δὲ μή, ὅτι οὕτως εἴληφεν, οἷον ὁ Κλεοφῶν ποιεῖ ἐν τῷ Μανδροβούλῳ. δεῖ δὲ καὶ ἀφισταμένους τοῦ λόγου τὰ λοιπὰ τῶν ἐπιχειρημάτων ἐπιτέμνειν, καὶ ἀποκρινόμενον, ἂν προαισθάνηται, προενίστασθαι καὶ προαγορεύειν. ἐπιχειρητέον δ’ ἐνίστε καὶ πρὸς ἄλλα τοῦ εἰρημένου, ἐκεῖνο ἐκλαβόντας, ἐὰν μὴ πρὸς τὸ κείμενον ἔχη τις ἐπιχειρεῖν· ὅπερ ὁ Λυκόφρων ἐποίησε προβληθέντος λύραν ἐγκωμιάζειν. πρὸς δὲ τοὺς ἀπαιτοῦντας πρὸς τί ἐπιχειρεῖ, ἐπειδὴ δοκεῖ δεῖν ἀποδιδόναι τὴν αἰτίαν, λεχθέντων δ’ ἐνίων εὐφυλακτότερον (τὸ καθόλου συμβαῖνον ἐν τοῖς ἐλέγχοις), λέγειν τὴν ἀντίφασιν, ὅτι ὃ ἔφησεν ἀπόφησι, ἢ ὃ ἀπέφησε φησί, ἀλλὰ μὴ ὅτι τῶν ἐναντίων ἢ αὐτὴ ἐπιστήμη ἢ οὐχ ἡ αὐτή. οὐ δεῖ δὲ τὸ συμπέρασμα προτατικῶς ἐρωτᾶν. ἔνια δ’ οὐδ’ ἐρωτητέον ἀλλ’ ὡς ὁμολογουμένοις χρηστέον.

Ἐξ ὧν μὲν οὖν αἱ ἐρωτήσεις καὶ πῶς ἐρωτητέον ἐν ταῖς ἀγωνιστικαῖς διατριβαῖς, εἴρηται. περὶ δὲ ἀποκρίσεως καὶ πῶς χρὴ λύειν καὶ τί, καὶ πρὸς τίνα χρῆσιν οἱ τοιοῦτοι τῶν λόγων ὠφέλιμοι, μετὰ ταῦτα λεκτέον.

Χρήσιμοι μὲν οὖν εἰσι πρὸς μὲν φιλοσοφίαν διὰ δύο. πρῶτον μὲν γὰρ ὡς ἐπὶ τὸ πολὺ γινόμενοι παρὰ τὴν λέξιν ἄμεινον ἔχειν ποιοῦσι πρὸς τὸ ποσαχῶς ἕκαστον λέγεται καὶ ποῖα ὁμοίως καὶ ποῖα ἑτέρως ἐπὶ τε τῶν πραγμάτων συμβαίνει καὶ ἐπὶ τῶν ὀνομάτων. δεύτερον δὲ πρὸς τὰς καθ' αὐτὸν ζητήσεις· ὁ γὰρ ὑφ' ἑτέρου ῥαδίως παραλογιζόμενος καὶ τοῦτο μὴ διαισθανόμενος κἂν αὐτὸς ὑφ' αὐτοῦ τοῦτο πάθοι πολλάκις. τρίτον δὲ καὶ τὸ λοιπὸν ἔτι πρὸς δόξαν, τὸ περὶ πάντα γεγυμνάσθαι δοκεῖν καὶ μηδενὸς ἀπείρως ἔχειν· τὸ γὰρ κοινωνοῦντα λόγων ψέγειν λόγους, μηδὲν ἔχοντα διορίζειν περὶ τῆς φαυλότητος αὐτῶν, ὑποψίαν δίδωσι τοῦ δοκεῖν δυσχεραίνειν οὐ διὰ τᾰληθές ἀλλὰ δι' ἀπειρίαν.

Ἀποκρινομένοις δὲ πῶς ἀπαντητέον πρὸς τοὺς τοιούτους λόγους, φανερόν, εἴπερ ὀρθῶς εἰρήκαμεν πρότερον ἐξ ὧν εἰσιν οἱ παραλογισμοί, καὶ τὰς ἐν τῷ πυκνᾶνεσθαι πλεονεξίας ἱκανῶς διείλομεν. οὐ ταῦτ' οὖν δ' ἐστὶ λαβόντα τε τὸν λόγον ἰδεῖν καὶ λῦσαι τὴν μοχθηρίαν, καὶ ἐρωτώμενον ἀπαντᾶν δύνασθαι ταχέως· ὁ γὰρ ἴσμεν, πολλάκις μετατιθέμενον ἀγνοοῦμεν. ἔτι δ', ὥσπερ ἐν τοῖς ἄλλοις τὸ θᾰπτον καὶ τὸ βραδύτερον ἐκ τοῦ γεγυμνάσθαι γίνεται μᾰλλον, οὕτω καὶ ἐπὶ τῶν λόγων ἔχει, ὥστε, ἂν δῆλον μὲν ἡμῖν ᾗ, ἀμελέτητοι δ' ὦμεν, ὑστεροῦμεν τῶν καιρῶν πολλάκις. συμβαίνει δὲ ποτε καθάπερ ἐν τοῖς διαγράμμασιν· καὶ γὰρ ἐκεῖ ἀναλύσαντες ἐνίοτε συνθεῖναι πάλιν ἀδυνατοῦμεν· οὕτω καὶ ἐν τοῖς ἐλέγχοις, εἰδότες παρ' ὃ ὁ λόγος συμβαίνει συνεῖραι, διαλῦσαι τὸν λόγον ἀποροῦμεν.

Πρῶτον μὲν οὖν, ὥσπερ συλλογίζεσθαι φαμεν ἐνδόξως ποτὲ μᾰλλον ἢ ἀληθῶς προαιρεῖσθαι δεῖν, οὕτω καὶ λυτέον ποτὲ μᾰλλον ἐνδόξως ἢ κατὰ τᾰληθές. ὅλως γὰρ πρὸς τοὺς ἐριστικούς μαχετέον οὐχ ὡς ἐλέγχοντας ἀλλ' ὡς φαινομένους· οὐ γὰρ φαμεν συλλογίζεσθαι γε αὐτούς, ὥστε πρὸς τὸ μὴ δοκεῖν διορθωτέον. εἰ γὰρ ἐστὶν ὁ ἔλεγχος ἀντίφασις μὴ ὁμώνυμος ἐκ τινων, οὐδὲν ἂν δεοί διαιρεῖσθαι πρὸς ἀμφίβολα καὶ τὴν ὁμωνυμίαν (οὐ γὰρ ποιεῖ συλλογισμόν), ἀλλ' οὐδενὸς ἄλλου χάριν προσδιαιρετέον ἀλλ' ἢ ὅτι τὸ συμπέρασμα φαίνεται ἐλεγχοειδές. οὐκ οὖν τὸ ἐλεγχθῆναι ἀλλὰ τὸ δοκεῖν εὐλαβητέον, ἐπεὶ τό γ' ἐρωτᾶν ἀμφίβολα καὶ τὰ παρὰ τὴν ὁμωνυμίαν ὅσαι τ' ἄλλαι τοιαῦται παρακρούσεις καὶ τὸν ἀληθινὸν ἔλεγχον ἀφανίζει καὶ τὸν ἐλεγχόμενον καὶ μὴ ἐλεγχόμενον ἄδηλον ποιεῖ. ἐπεὶ γὰρ ἔξεστιν ἐπὶ τέλει συμπεραναμένον μὴ ὅπερ ἔφησεν ἀποφῆσαι λέγειν, ἀλλ' <ἢ> ὁμωνύμως, εἰ καὶ ὅτι μάλιστα ἔτυχεν ἐπὶ ταῦτ' οὕτως φέρων, ἄδηλον εἰ ἐλήλεγκται· ἄδηλον γὰρ εἰ ἀληθῆ λέγει νῦν. εἰ δὲ διελὼν ἦρετο τὸ ὁμώνυμον ἢ τὸ ἀμφίβολον, οὐκ ἂν ἄδηλος ἦν ὁ ἔλεγχος, ὃ τ' ἐπιζητοῦσι νῦν μὲν ἦττον πρότερον δὲ μᾰλλον οἱ ἐριστικοί, τὸ ἢ “ναί” ἢ “οὐ” ἀποκρίνεσθαι τὸν ἐρωτώμενον, ἐγίνετ' ἂν. νῦν

δὲ διὰ τὸ μὴ καλῶς ἐρωτᾶν τοὺς πυκθανομένους ἀνάγκη προσ αποκρίνεσθαι τι τὸν ἐρωτώμενον, διορθοῦντα τὴν μοχθηρίαν τῆς προτάσεως· ἐπεὶ διελομένου γε ἱκανῶς ἢ “ναί” ἢ “οὐ” ἀνάγκη λέγειν τὸν ἀποκρινόμενον.

Εἰ δέ τις ὑπολήψεται τὸν κατὰ ὁμωνυμίαν ἔλεγχον <ἔλεγχον> εἶναι, τρόπον τινὰ οὐκ ἔσται διαφυγεῖν τὸ ἐλέγχεσθαι τὸν ἀποκρινόμενον· ἐπὶ γὰρ τῶν ὁρατῶν ἀναγκαῖον ὃ ἔφησεν ἀποφῆσαι ὄνομα καὶ ὃ ἀπέφησε φῆσαι. ὥς γὰρ διορθοῦνται τινες, οὐδὲν ὄφελος. οὐ γὰρ Κορίσκον φασὶν εἶναι μουσικὸν καὶ ἄμουσον, ἀλλὰ τοῦτον τὸν Κορίσκον μουσικὸν καὶ τοῦτον τὸν Κορίσκον ἄμουσον. ὁ γὰρ αὐτὸς ἔσται λόγος τὸ τοῦτον τὸν Κορίσκον τῷ τοῦτον τὸν Κορίσκον ἄμουσον εἶναι (ἢ μουσικόν), ὅπερ ἅμα φησί τε καὶ ἀπόφησιν. ἀλλ’ ἴσως οὐ ταῦτ’ σημαίνει (οὐδὲ γὰρ ἐκεῖ τοῦτομα), ὥστε τί διαφέρει; εἰ δὲ τῷ μὲν τὸ ἀπλῶς λέγειν Κορίσκον ἀποδώσει, τῷ δὲ προσθήσει τὸ τινὰ ἢ τόνδε, ἄτοπον· οὐδὲν γὰρ μᾶλλον θατέρω· ὁποτέρω γὰρ ἂν οὐδὲν διαφέρει.

Οὐ μὴν ἀλλ’ ἐπειδὴ ἄδηλος μὲν ἔστιν ὁ μὴ διορισάμενος τὴν ἀμφιβολίαν πότερον ἐλήλεγκται ἢ οὐκ ἐλήλεγκται, δέδοται δ’ ἐν τοῖς λόγοις τὸ διελεῖν, φανερόν ὅτι τὸ μὴ διορίσαντα δοῦναι τὴν ἐρώτησιν, ἀλλ’ ἀπλῶς, ἀμάρτημά ἐστιν, ὥστε καὶ εἰ μὴ αὐτός, ἀλλ’ ὅ γε λόγος ἐληλεγκμένῳ ὅμοιός ἐστιν. συμβαίνει μέντοι πολλάκις ὀρῶντας τὴν ἀμφιβολίαν ὀκνεῖν διαιρεῖσθαι διὰ τὴν πυκνότητα τῶν τὰ τοιαῦτα προτεινόντων, ὅπως μὴ πρὸς ἅπαν δοκῶσι δυσκολαίνειν· εἴτ’ οὐκ ἂν οἰηθέντων παρὰ τοῦτο γενέσθαι τὸν λόγον, πολλάκις ἀπήντησε παράδοξον. ὥστ’ ἐπειδὴ δέδοται διαιρεῖν, οὐκ ὀκνητέον, καθάπερ ἐλέχθη πρότερον.

Εἰ δὲ τὰ δύο ἐρωτήματα μὴ ἔν ἐποίει τις ἐρώτημα, οὐδ’ ἂν ὁ παρὰ τὴν ὁμωνυμίαν καὶ τὴν ἀμφιβολίαν ἐγίνετο παραλογισμός, ἀλλ’ ἢ ἔλεγχος ἢ οὐ. τί γὰρ διαφέρει ἐρωτῆσαι εἰ Καλλίας καὶ Θεμιστοκλῆς μουσικοὶ εἰσιν ἢ εἰ ἀμφοτέροις ἐν ὄνομα ἦν ἑτέροις οὐσιν; εἰ γὰρ πλείω δηλοῖ ἑνός, πλείω ἠρώτησεν. εἰ οὖν μὴ ὀρθὸν πρὸς δύο ἐρωτήσεις μίαν ἀπόκρισιν ἀξιοῦν λαμβάνειν ἀπλῶς, φανερόν ὅτι οὐδενὶ προσήκει τῶν ὁμωνύμων ἀποκρίνεσθαι ἀπλῶς, οὐδ’ εἰ κατὰ πάντων ἀληθές, ὥσπερ ἀξιοῦσιν τινες. οὐδὲν γὰρ τοῦτο διαφέρει ἢ εἰ ἤρετο, Κορίσκος καὶ Καλλίας πότερον οἴκοι εἰσιν ἢ οὐκ οἴκοι, εἴτε παρόντων ἀμφοῖν εἴτε μὴ παρόντων· ἀμφοτέρως γὰρ πλείους αἱ προτάσεις· οὐ γὰρ εἰ ἀληθές εἶπεῖν, διὰ τοῦτο μία ἡ ἐρώτησις. ἐγχωρεῖ γὰρ καὶ μυρία ἕτερα ἐρωτηθέντα ἐρωτήματα ἀπλῶς ἢ “ναί” ἢ “οὐ” ἀληθές εἶναι λέγειν· ἀλλ’ ὅμως οὐκ ἀποκριτέον μιᾷ ἀποκρίσει· ἀναιρεῖται γὰρ τὸ διαλέγεσθαι. τοῦτο δ’ ὅμοιον ὥς εἰ καὶ τὸ αὐτὸ ὄνομα τεθεῖη τοῖς ἑτέροις. εἰ οὖν μὴ δεῖ πρὸς δύο ἐρωτήσεις μίαν ἀπόκρισιν διδόναι, φανερόν ὅτι οὐδ’ ἐπὶ

τῶν ὁμωνύμων τὸ “ναί” ἢ “οὐ” λεκτέον· οὐδὲ γὰρ ὁ εἰπὼν ἀποκέκριται, ἀλλ’ εἴρηκεν. ἀλλ’ ἀξιοῦται πως ἐν τοῖς διαλεγομένοις διὰ τὸ λανθάνειν τὸ συμβαῖνον.

Ὡσπερ οὖν εἵπομεν, ἐπειδήπερ οὐδ’ ἔλεγχοί τινες ὄντες δοκοῦσιν εἶναι, κατὰ τὸν αὐτὸν τρόπον καὶ λύσεις δόξουσιν εἶναι τινες οὐκ οὔσαι λύσεις· ἃς δὴ φαμεν ἐνίοτε μᾶλλον δεῖν φέρειν ἢ τὰς ἀληθεῖς ἐν τοῖς ἀγωνιστικοῖς λόγοις καὶ τῇ πρὸς τὸ διττὸν ἀπαντήσῃ. ἀποκριτέον δ’ ἐπὶ μὲν τῶν δοκούντων τὸ “ἔστω” λέγοντα· καὶ γὰρ οὕτως ἡκιστα γίνοιτ’ ἂν παρεξέλεγχος. ἂν δέ τι παράδοξον ἀναγκάζεται λέγειν, ἐνταῦθα μάλιστα προσθετέον τὸ δοκεῖν· οὕτω γὰρ ἂν οὕτ’ ἔλεγχος οὔτε παράδοξον γίνεσθαι δόξειεν. ἐπεὶ δὲ πῶς αἰτεῖται τὸ ἐν ἀρχῇ δῆλον, οἶοντα δὲ πάντως ἂν ἢ σύνεγγυς ἀναιρετέον, καὶ μὴ συγχωρητέον εἶναι ἕνια, ὡς τὸ ἐν ἀρχῇ αἰτοῦντος, ὅταν τι τοιοῦτον ἀξιοῖ τις ὃ ἀναγκαῖον μὲν συμβαίνειν ἐκ τῆς θέσεως, ἢ δὲ ψεῦδος ἢ ἄδοξον, ταῦτό λεκτέον· τὰ γὰρ ἐξ ἀνάγκης συμβαίνοντα τῆς αὐτῆς εἶναι δοκεῖ θέσεως. ἔτι ὅταν τὸ καθόλου μὴ ὀνόματι ληφθῇ ἀλλὰ παραβολῇ, λεκτέον ὅτι οὐχ ὡς ἐδόθη οὐδ’ ὡς προὔτεινε λαμβάνει· καὶ γὰρ παρὰ τοῦτο γίνεται πολλάκις ἔλεγχος.

Ἐξαιργόμενον δὲ τούτων ἐπὶ τὸ μὴ καλῶς δεδεῖχθαι πορευτέον, ἀπαντῶντα κατὰ τὸν εἰρημένον διορισμόν.

Ἐν μὲν οὖν τοῖς κυρίως λεγομένοις ὀνόμασιν ἀνάγκη ἀποκρίνεσθαι ἢ ἀπλῶς ἢ διαιρούμενον. ἃ δὲ συνυπονοοῦντες τίθεμεν, οἷον ὅσα μὴ σαφῶς ἀλλὰ κολοβῶς ἐρωτᾶται, παρὰ τοῦτο συμβαίνει ὁ ἔλεγχος. οἷον “ἄρ’ ὃ ἂν ἢ Ἀθηναίων κτῆμά ἐστιν Ἀθηναίων;” “ναί.” “ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ἀλλὰ μὴν ὁ ἄνθρωπος ἐστὶ τῶν ζώων;” “ναί.” “κτῆμα ἄρα ὁ ἄνθρωπος τῶν ζώων.” τὸν γὰρ ἄνθρωπον τῶν ζώων λέγομεν ὅτι ζῷόν ἐστι, καὶ Λύσανδρον τῶν Λακώνων ὅτι Λάκων. δῆλον οὖν ὡς ἐν οἷς ἀσαφὲς τὸ προτεινόμενον οὐ συγχωρητέον ἀπλῶς.

Ὅταν δὲ δυοῖν ὄντοι θατέρου μὲν ὄντος ἐξ ἀνάγκης θάτερον εἶναι δοκῇ, θατέρου δὲ τοῦτο μὴ ἐξ ἀνάγκης, ἐρωτώμενον πότερον, δεῖ τὸ ἔλαττον διδόναι (χαλεπώτερον γὰρ συλλογίσασθαι ἐκ πλειόνων)· ἐὰν δ’ ἐπιχειρῇ ὅτι τῷ μὲν ἔστιν ἐναντίον τῷ δ’ οὐκ ἔστιν, ἂν ὁ λόγος ἀληθὴς ἢ, ἐναντίον <εἶναι> φάναί, ὄνομα δὲ μὴ κεῖσθαι τοῦ ἐτέρου.

Ἐπεὶ δ’ ἕνια μὲν ὧν λέγουσιν οἱ πολλοὶ τὸν μὴ συγχωροῦντα ψεύδεσθαι ἂν φαῖεν ἕνια δ’ οὐ, οἷον ὅσα ἀμφιδοξοῦσιν (πότερον γὰρ φθαρτὴ ἢ

ἀθάνατος ἢ ψυχὴ τῶν ζώων, οὐ διώρισται τοῖς πολλοῖς) - ἐν οἷς οὖν ἄδηλον ποτέρως εἶωθε λέγεσθαι τὸ προτεινόμενον, πότερον ὡς αἱ γινώμαι (καλοῦσι γὰρ γνῶμας καὶ τὰς ἀληθεῖς δόξας καὶ τὰς ὅλας ἀποφάνσεις) ἢ ὡς “ἡ διάμετρος ἀσύμμετρός ἐστι”, οὐ τὸ ἀληθὲς ἀμφιδοξεῖται, μάλιστα μεταφέρων ἂν τις λανθάνοι τὰ ὀνόματα περὶ τούτων. διὰ μὲν γὰρ τὸ ἄδηλον εἶναι ποτέρως ἔχει τᾷ ἀληθές, οὐ δόξει σοφίζεσθαι, διὰ δὲ τὸ ἀμφιδοξεῖν οὐ δόξει ψεύδεσθαι· ἢ γὰρ μεταφορὰ ποιήσει τὸν λόγον ἀνεξέλεγκτον.

Ἔτι ὅσα ἂν τις προαισθάνηται τῶν ἐρωτημάτων, προενστατέον καὶ προαγορευτέον· οὕτω γὰρ ἂν μάλιστα τὸν πυνθανόμενον κωλύσειεν.

Ἐπεὶ δ’ ἐστὶν ἡ μὲν ὀρθὴ λύσις ἐμφάνις ψευδοῦς συλλογισμοῦ, παρ’ ὁποῖαν ἐρώτησιν συμβαίνει τὸ ψεῦδος, ὁ δὲ ψευδὴς συλλογισμὸς λέγεται διχῶς (ἢ γὰρ εἰ συλλελογίσται ψεῦδος, ἢ εἰ μὴ ὧν συλλογισμὸς δοκεῖ εἶναι συλλογισμὸς), εἴη ἂν ἢ τε εἰρημένη νῦν λύσις καὶ ἡ τοῦ φαινομένου συλλογισμοῦ παρ’ ὃ τι φαίνεται τῶν ἐρωτημάτων διόρθωσις, ὥστε συμβαίνει τῶν λόγων τοὺς μὲν συλλελογισμένους ἀνελόντα, τοὺς δὲ φαινομένους διελόντα λύειν. πάλιν δ’ ἐπεὶ τῶν συλλελογισμένων λόγων οἱ μὲν ἀληθὲς οἱ δὲ ψεῦδος ἔχουσι τὸ συμπέρασμα, τοὺς μὲν κατὰ τὸ συμπέρασμα ψευδεῖς διχῶς ἐνδέχεται λύειν· καὶ γὰρ τῷ ἀνελεῖν τι τῶν ἠρωτημένων καὶ τῷ δεῖξαι τὸ συμπέρασμα ἔχον οὐχ οὕτως· τοὺς δὲ κατὰ τὰς προτάσεις τῷ ἀνελεῖν τι μόνον· τὸ γὰρ συμπέρασμα ἀληθές. ὥστε τοῖς βουλομένοις λύειν λόγον πρῶτον μὲν σκεπτέον εἰ συλλελογίσται ἢ ἀσυλλόγιστος, εἴτα πότερον ἀληθὲς τὸ συμπέρασμα ἢ ψεῦδος, ὅπως ἢ διαιροῦντες ἢ ἀναιροῦντες λύωμεν, καὶ ἀναιροῦντες ἢ ὧδε ἢ ὧδε, καθάπερ ἐλέχθη πρότερον. διαφέρει δὲ πλεῖστον ἐρωτώμενόν τε καὶ μὴ λύειν λόγον· τὸ μὲν γὰρ προῖδεῖν χαλεπὸν, τὸ δὲ κατὰ σχολὴν ἰδεῖν ῥᾶον.

Τῶν μὲν οὖν παρὰ τὴν ὁμωνυμίαν καὶ τὴν ἀμφιβολίαν ἐλέγχων οἱ μὲν ἔχουσι τῶν ἐρωτημάτων τι πλείω σημαῖνον, οἱ δὲ τὸ συμπέρασμα πολλαχῶς λεγόμενον· οἷον ἐν μὲν τῷ “σιγῶντα λέγειν” τὸ συμπέρασμα διττόν, ἐν δὲ τῷ “μὴ συνεπίστασθαι τὸν ἐπιστάμενον” ἐν τῶν ἐρωτημάτων ἀμφίβολον. καὶ τὸ διττὸν ὅτε μὲν ἔστιν ὅτε δ’ οὐκ ἔστιν, ἀλλὰ σημαίνει τὸ διττὸν τὸ μὲν ὄν τὸ δ’ οὐκ ὄν.

Ὅσοις μὲν οὖν ἐν τῷ τέλει τὸ πολλαχῶς, ἂν μὴ προσλάβῃ τὴν ἀντίφασιν οὐ γίνεται ἔλεγχος, οἷον ἐν τῷ τὸν τυφλὸν ὁρᾶν· ἄνευ γὰρ ἀντιφάσεως οὐκ ἔστιν ἔλεγχος. ὅσοις δ’ ἐν τοῖς ἐρωτήμασιν, οὐκ ἀνάγκη προαποφῆσαι τὸ διττόν· οὐ γὰρ πρὸς τοῦτο ἀλλὰ διὰ τοῦτο ὁ λόγος. ἐν ἀρχῇ μὲν οὖν πρὸς τὸ



διπλοῦν καὶ ὄνομα καὶ λόγον οὕτως ἀποκριτέον, ὅτι ἔστιν ὥς, ἔστι δ' ὥς οὐ, ὥσπερ τῷ “σιγῶντα λέγειν” ὅτι ἔστιν ὥς, ἔστι δ' ὥς οὐ, καὶ τὰ δέοντα πρακτέον ἔστιν ἅ, ἔστι δ' ἅ οὐ· τὰ γὰρ δέοντα λέγεται πολλαχῶς· ἐὰν δὲ λάθῃ, ἐπὶ τέλει προστιθέντα τῇ ἐρωτήσῃ διορθωτέον· “ἄρ' ἔστι σιγῶντα λέγειν;”, “οὐ, ἀλλὰ τόνδε σιγῶντα”. καὶ ἐν τοῖς ἔχουσι δὲ τὸ πλεοναχῶς ἐν ταῖς προτάσεσιν ὁμοίως· “οὐκ ἄρα συνεπίστανται ὅ τι ἐπίστανται;”, “ναί, ἀλλ' οὐχ οἱ οὕτως ἐπιστάμενοι”. οὐ γὰρ ταῦτόν ἐστιν ὅτι οὐκ ἔστι συνεπίστασθαι καὶ ὅτι τοὺς ὡδὶ ἐπισταμένους οὐκ ἔστιν. ὅλως τε μαχετέον, ἂν καὶ ἀπλῶς συλλογίζεται, ὅτι οὐχ ὃ ἔφησεν ἀπέφησε πρᾶγμα ἀλλ' ὄνομα, ὥστ' οὐκ ἔλεγχος.

Φανερόν δὲ καὶ τοὺς παρὰ τὴν διαίρεσιν καὶ σύνθεσιν πῶς λυτέον· ἂν γὰρ διαιρούμενος καὶ συντιθέμενος ὁ λόγος ἕτερον σημαίνει, συμπερινομένου τοῦναντίον λεκτέον· εἰσὶ δὲ πάντες οἱ τοιοῦτοι λόγοι παρὰ τὴν σύνθεσιν ἢ διαίρεσιν· “ἄρ' ὧ εἶδες σὺ τοῦτον τυπτόμενον, τούτῳ ἐτύπτετο οὗτος; καὶ ὧ ἐτύπτετο, τούτῳ σὺ εἶδες;”. ἔχει μὲν οὖν τι κακὸν τῶν ἀμφιβόλων ἐρωτημάτων, ἀλλ' ἔστι παρὰ σύνθεσιν· οὐ γὰρ ἐστι διττὸν τὸ παρὰ τὴν διαίρεσιν· οὐ γὰρ ὁ αὐτὸς λόγος γίνεται, διαιρούμενος, εἴπερ μὴ <ὥς> καὶ τὸ “ὅρος”, [καὶ] “ὅρος” τῇ προσωδία λεχθέν, σημαίνει ἕτερον· ἀλλ' ἐν μὲν τοῖς γεγραμμένοις τὸ αὐτὸ <τὸ> ὄνομα, ὅταν ἐκ τῶν αὐτῶν στοιχείων γεγραμμένον ἢ καὶ ὡσαύτως (κάκεϊ δ' ἤδη παράσημα ποιοῦνται), τὰ δὲ φθεγγόμενα οὐ ταῦτά· ὥστ' οὐ διττὸν τὸ παρὰ διαίρεσιν· φανερόν δὲ καὶ ὅτι οὐ πάντες οἱ ἔλεγχοι παρὰ τὸ διττόν, καθάπερ τινὲς φασιν.

Διαιρετέον οὖν τῷ ἀποκρινομένῳ· οὐ γὰρ ταῦτό <τὸ> ἰδεῖν “τοῖς ὀφθαλμοῖς τυπτόμενον” καὶ τὸ φάναι “ἰδεῖν τοῖς ὀφθαλμοῖς” τυπτόμενον· καὶ ὁ Εὐθυδήμου δὲ λόγος “ἄρ' οἶδας σὺ νῦν οὕσας ἐν Πειραιεῖ τριήρεις ἐν Σικελίᾳ ὦν;” καὶ πάλιν “ἄρ' ἔστιν ἀγαθὸν ὄντα σκυτέα μοχθηρὸν εἶναι; εἴη δ' ἂν τις ἀγαθὸς ὦν σκυτεὺς μοχθηρός· ὥστ' ἔσται ἀγαθὸς σκυτεὺς μοχθηρός”. “ἄρ' ὦν αἱ ἐπιστήμαι σπουδαῖαι, σπουδαῖα τὰ μαθήματα; τοῦ δὲ κακοῦ σπουδαία ἢ ἐπιστήμη· σπουδαῖον ἄρα μάθημα τὸ κακόν· ἀλλὰ μὴν καὶ κακὸν καὶ μάθημα τὸ κακόν, ὥστε κακὸν μάθημα τὸ κακόν· ἀλλ' ἔστι κακῶν σπουδαία ἢ ἐπιστήμη.” “ἄρ' ἀληθὲς εἰπεῖν νῦν ὅτι σὺ γέγονας; γέγονας ἄρα νῦν.” ἢ ἄλλο σημαίνει διαιρεθέν; ἀληθὲς γὰρ εἰπεῖν νῦν ὅτι σὺ γέγονας, ἀλλ' οὐ “νῦν γέγονας”. “ἄρ' ὥς δύνασαι καὶ ἅ δύνασαι, οὕτως καὶ ταῦτα ποιήσῃς ἅν; οὐ κιθαρίζων δ' ἔχεις δύναμιν τοῦ κιθαρίζειν· κιθαρίσῃς ἂν ἄρα οὐ κιθαρίζων.” ἢ οὐ τούτου ἔχει τὴν δύναμιν, τοῦ οὐ κιθαρίζων κιθαρίζειν, ἀλλ', ὅτε οὐ ποιεῖ, τοῦ ποιεῖν.

Λύουσι δέ τινες τοῦτον καὶ ἄλλως. εἰ γὰρ ἔδωκεν ὥς δύναται ποιεῖν, οὐ φασὶ συμβαίνειν μὴ καθαρίζοντα καθαρίζειν· οὐ γὰρ πάντως ὥς δύναται ποιεῖν δεδόσθαι ποιήσιν· οὐ ταῦτ' οὖν εἶναι ὥς δύναται καὶ πάντως ὥς δύναται ποιεῖν. ἀλλὰ φανερόν ὅτι οὐ καλῶς λύουσιν· τῶν γὰρ παρὰ ταῦτον λόγων ἡ αὐτὴ λύσις, αὕτη δ' οὐχ ἀρμόσει ἐπὶ πάντας οὐδὲ πάντως ἐρωτωμένοις, ἀλλ' ἔστι πρὸς τὸν ἐρωτῶντα, οὐ πρὸς τὸν λόγον. Παρὰ δὲ τὴν προσωδίαν λόγοι μὲν οὐκ εἰσίν, οὔτε τῶν γεγραμμένων οὔτε τῶν λεγομένων, πλὴν εἴ τινες ὀλίγοι γένοιντ' ἄν, οἷον οὗτος ὁ λόγος· “ἄρα γ' ἐστὶ τὸ οὐ καταλύεις οἰκία;” “ναί.” “οὐκοῦν τὸ ‘οὐ καταλύεις’ τοῦ ‘καταλύεις’ ἀπόφασις;” “ναί.” “ἔφησας δ' εἶναι τὸ οὐ καταλύεις οἰκίαν· ἡ οἰκία ἄρα ἀπόφασις.” ὥς δὴ λυτέον, δῆλον· οὐ γὰρ τὸ αὐτὸ σημαίνει ὁξύτερον τὸ δὲ βαρύτερον ῥηθέν.

Δῆλον δὲ καὶ τοῖς παρὰ τὸ ὡσαύτως λέγεσθαι τὰ μὴ ταῦτ' αὖ πῶς ἀπαντητέον, ἐπεὶ περ ἔχομεν τὰ γένη τῶν κατηγοριῶν. ὁ μὲν γὰρ ἔδωκεν ἐρωτηθεὶς μὴ ὑπάρχειν τι τούτων ὅσα τί ἐστι σημαίνει· ὁ δ' ἔδειξεν ὑπάρχον τι τῶν πρὸς τι ἢ ποσῶν, δοκούντων δὲ τί ἐστι σημαίνειν διὰ τὴν λέξιν· οἷον ἐν τῷδε τῷ λόγῳ· “ἄρ' ἐνδέχεται τὸ αὐτὸ ἅμα ποιεῖν τε καὶ πεποιηκέναι;” “οὐ.” “ἀλλὰ μὴν ὁρᾷν γέ τι ἅμα καὶ ἐωρακέναι τὸ αὐτὸ καὶ κατὰ ταῦτ' ἐνδέχεται.” “ἄρ' ἔστι τι τῶν πάσχειν ποιεῖν τι;” “οὐ.” “οὐκοῦν τὸ τέμνεται καίεται αἰσθάνεται ὁμοίως λέγεται καὶ πάντα πάσχειν τι σημαίνει; πάλιν δὲ τὸ λέγειν τρέχειν ὁρᾷν ὁμοίως ἀλλήλοις λέγεται· ἀλλὰ μὴν τό γ' ὁρᾷν αἰσθάνεσθαι τί ἐστίν, ὥστε καὶ πάσχειν τι ἅμα καὶ ποιεῖν.” εἰ δὴ τις ἐκεῖ, δοὺς μὴ ἐνδέχεσθαι ἅμα ταῦτ' οὖν ποιεῖν καὶ πεποιηκέναι, τὸ ὁρᾷν καὶ ἐωρακέναι φαίη ἐγχωρεῖν, οὐπω ἐλήλεγκται, εἰ μὴ λέγοι τὸ ὁρᾷν ποιεῖν τι ἀλλὰ πάσχειν· προσδεῖται γὰρ τούτου τοῦ ἐρωτήματος. ἀλλ' ὑπὸ τοῦ ἀκούοντος ὑπολαμβάνεται δεδωκέναι, ὅτε τὸ τέμνειν ποιεῖν τι καὶ τὸ τετμηκέναι πεποιηκέναι ἔδωκε καὶ ὅσα ἄλλα ὁμοίως λέγεται· τὸ γὰρ λοιπὸν αὐτὸς προστίθῃσιν ὁ ἀκούων ὥς ὁμοίως λεγόμενον. τὸ δὲ λέγεται μὲν οὐχ ὁμοίως, φαίνεται δὲ διὰ τὴν λέξιν. τὸ αὐτὸ δὲ συμβαίνει ὅπερ ἐν ταῖς ὁμωνυμίαις· οἷεται γὰρ ἐν τοῖς ὁμωνύμοις ὁ ἀγνῶς τῶν λόγων ὃ ἔφησεν ἀποφῆσαι πρᾶγμα, οὐκ ὄνομα. τῷ δὲ ἔτι προσδεῖ ἐρωτήματος εἰ ἐφ' ἐν βλέπων λέγει τὸ ὁμωνυμον· οὕτως γὰρ δόντος ἔσται ἔλεγχος.

Ὅμοιοι δὲ καὶ οἶδε οἱ λόγοι τούτοις, “εἰ ὁ τις ἔχων ὕστερον μὴ ἔχει, ἀπέβαλεν· ὁ γὰρ ἓνα μόνον ἀποβαλὼν ἀστράγαλον οὐχ ἔξει δέκα ἀστραγάλους”. ἢ ὁ μὲν μὴ ἔχει πρότερον ἔχων, ἀποβέβληκεν, ὅσα δὲ μὴ ἔχει ἢ ὅσα, οὐκ ἀνάγκη τοσαῦτα ἀποβαλεῖν; ἐρωτήσας οὖν ὃ ἔχει, συνάγει ἐπὶ τοῦ ὅσα· τὰ γὰρ δέκα ποσά. εἰ οὖν ἤρετο ἐξ ἀρχῆς, [εἰ] “ὅσα τις μὴ ἔχει πρότερον ἔχων, ἄρα γε ἀποβέβληκε τοσαῦτα;”, οὐδεὶς ἂν ἔδωκεν, ἀλλ' ἢ

τοσαῦτα ἢ τούτων τι. καὶ ὅτι δοίη ἄν τις ὃ μὴ ἔχει· οὐ γὰρ ἔχει ἓνα μόνον ἀστράγαλον. ἢ οὐ δέδωκεν ὃ οὐκ εἶχεν, ἀλλ’ ὥς οὐκ εἶχε, τὸν ἓνα· τὸ γὰρ μόνον οὐ τότε σημαίνει οὐδὲ τοιόνδε οὐδὲ τοσόνδε, ἀλλ’ ὥς ἔχει πρὸς τι, οἷον ὅτι οὐ μετ’ ἄλλου, ὥσπερ ἂν εἰ ἦρετο “ἄρ’ ὃ μὴ τις ἔχει δοίη ἄν;”, μὴ φάντος δὲ ἔροιτο εἰ δοίη ἄν τις τι ταχέως μὴ ἔχων ταχέως, φήσαντος δὲ συλλογίζοιτο ὅτι δοίη ἄν τις ὃ μὴ ἔχει. καὶ φανερόν ὅτι οὐ συλλελόγισται· τὸ γὰρ ταχέως οὐ τότε διδόναι ἀλλ’ ὥδε διδόναι ἐστίν· ὥς δὲ μὴ ἔχει τις, δοίη ἄν, οἷον ἡδέως ἔχων δοίη ἄν λυπηρῶς.

Ὅμοιοι δὲ καὶ οἱ τοιοῖδε πάντες· “ἄρ’ ἢ μὴ ἔχει χειρὶ τύπτοι ἄν”, ἢ “ὦ μὴ ἔχει ὀφθαλμῷ ἴδοι ἄν;” οὐ γὰρ ἔχει ἓνα μόνον. λύουσι μὲν οὖν τινες λέγοντες ὥς καὶ ἔχει ἓνα μόνον καὶ ὀφθαλμόν καὶ ἄλλ’ ὅτιοῦν ὁ πλείω ἔχων· οἱ δὲ ὥς καὶ ὃ ἔχει ἔλαβεν· ἐδίδου γὰρ μίαν μόνον οὗτος ψῆφον· “καὶ οὗτός γ’ ἔχει”, φασί, “μίαν μόνον παρὰ τούτου ψῆφον”. οἱ δέ, εὐθύς τὴν ἐρώτησιν ἀναιροῦντες, ὅτι ἐνδέχεται ὃ μὴ ἔλαβεν ἔχειν, οἷον οἶνον λαβόντα ἡδύν, διαφθαρέντος ἐν τῇ λήψει ἔχειν ὀξύ. ἀλλ’ ὅπερ ἐλέχθη καὶ πρότερον, οὗτοι πάντες οὐ πρὸς τὸν λόγον ἀλλὰ πρὸς τὸν ἄνθρωπον λύουσιν. εἰ γὰρ ἦν αὕτη λύσις, δόντα τὸ ἀντικείμενον οὐχ οἷόν τε λύειν, καθάπερ ἐπὶ τῶν ἄλλων. οἷον εἰ “ἔστι μὲν ὅ, ἔστι δ’ ὃ οὐ” ἢ λύσις, ἂν ἀπλῶς δῶ λέγεσθαι, συμπεραίνεται· ἐὰν δὲ μὴ συμπεραίνεται, οὐκ ἂν εἴη <ἡ> λύσις. ἐν δὲ τοῖς προειρημένοις οὐδὲ πάντων διδομένων φαρμὲν γίνεσθαι συλλογισμόν.

Ἔτι δὲ καὶ οἶδ’ εἰσὶ τούτων τῶν λόγων· “ἄρ’ ὃ γέγραπται, γέγραφέ τις; γέγραπται δὲ νῦν ὅτι σὺ κάθησαι, ψευδῆς λόγος· ἦν δ’ ἀληθής, ὅτ’ ἐγράφετο· ἅμα ἄρα ἐγράφετο ψευδῆς καὶ ἀληθής.” τὸ γὰρ ψευδῆ ἢ ἀληθῆ λόγον ἢ δόξαν εἶναι οὐ τότε ἀλλὰ τοιόνδε σημαίνει· ὁ γὰρ αὐτὸς λόγος καὶ ἐπὶ τῆς δόξης. καὶ “ἄρ’ ὃ μανθάνει ὁ μανθάνων, τοῦτ’ ἔστιν ὃ μανθάνει; μανθάνει δέ τις τὸ βραδὺ ταχύ.” οὐ τοίνυν ὃ μανθάνει ἀλλ’ ὥς μανθάνει εἴρηκεν. καὶ “ἄρ’ ὃ βαδίζει τις πατεῖ; βαδίζει δὲ τὴν ἡμέραν ὅλην.” ἢ οὐχ ὃ βαδίζει ἀλλ’ ὅτε βαδίζει εἴρηκεν, οὐδὲ τὸ τὴν κύλικα πίνειν ὃ πίνει ἀλλ’ ἐξ οὗ. καὶ “ἄρ’ ὃ τις οἶδεν, ἢ μαθὼν ἢ εὐρὼν οἶδεν; ὧν δὲ τὸ μὲν εὗρε τὸ δ’ ἔμαθε, τὰ ἄμφω οὐδέτερον.” ἢ ὃ μὲν ἅπαν, ἅ δ’ οὐχ ἅπαντα; καὶ ὅτι ἔστι τις τρίτος ἄνθρωπος παρ’ αὐτὸν καὶ τοὺς καθ’ ἕκαστον· τὸ γὰρ ἄνθρωπος καὶ ἅπαν τὸ κοινὸν οὐ τότε τι ἀλλὰ τοιόνδε τι ἢ ποσὸν ἢ πρὸς τι ἢ τῶν τοιούτων τι σημαίνει. ὁμοίως δὲ καὶ ἐπὶ τοῦ Κορίσκος καὶ Κορίσκος μουσικός, πότερον ταῦτόν ἢ ἕτερον; τὸ μὲν γὰρ τότε τι, τὸ δὲ τοιόνδε σημαίνει, ὥστ’ οὐκ ἔστιν αὐτὸ ἐκθέσθαι. οὐ τὸ ἐκτίθεσθαι δὲ ποιεῖ τὸν τρίτον ἄνθρωπον, ἀλλὰ τὸ ὅπερ τότε τι εἶναι συγχωρεῖν· οὐ γὰρ ἔστι τότε τι εἶναι, ὥσπερ Καλλίας, καὶ ὅπερ ἄνθρωπος ἐστίν. οὐδ’ εἴ τις τὸ ἐκτιθέμενον μὴ ὅπερ τότε τι εἶναι λέγοι ἀλλ’ ὅπερ ποιόν,

οὐδὲν διοίσει· ἔσται γὰρ τὸ παρὰ τοὺς πολλοὺς ἔν τι, οἷον τὸ ἄνθρωπος. φανερόν οὖν ὅτι οὐ δοτέον τόδε τι εἶναι τὸ κοινῇ κατηγορούμενον ἐπὶ πᾶσιν, ἀλλ’ ἥτοι ποιὸν ἢ πρὸς τι ἢ ποσὸν ἢ τῶν τοιούτων τι σημαίνειν.

Ὅλως δ’ ἐν τοῖς παρὰ τὴν λέξιν λόγοις ἀεὶ κατὰ τὸ ἀντικείμενον ἔσται ἡ λύσις ἢ παρ’ ὃ ἔστιν ὁ λόγος. οἷον εἰ παρὰ σύνθεσιν ὁ λόγος, ἡ λύσις διελόντι, εἰ δὲ παρὰ διαίρεσιν, συνθέντι. πάλιν εἰ παρὰ προσωδίαν ὀξεῖαν, ἡ βαρεῖα προσωδία λύσις, εἰ δὲ παρὰ βαρεῖαν, ἡ ὀξεῖα. εἰ δὲ παρ’ ὁμωνυμίαν, ἔστι τὸ ἀντικείμενον ὄνομα εἰπόντα λύειν· οἷον, εἰ ἄψυχον συμβαίνει λέγειν, ἀποφῆσαντα μὴ εἶναι δηλοῦν ὡς ἔστιν ἔμψυχον· εἰ δ’ ἄψυχον ἔφησεν, ὁ δ’ ἔμψυχον συνελογίσαστο, [λέγειν] ὡς ἔστιν ἄψυχον. ὁμοίως δὲ καὶ ἐπὶ τῆς ἀμφιβολίας. εἰ δὲ παρ’ ὁμοιότητα λέξεως, τὸ ἀντικείμενον ἔσται λύσις. “ἄρ’ ὃ μὴ ἔχει, δοίη ἄν τις;” ἢ οὐχ ὃ μὴ ἔχει, ἀλλ’ ὡς οὐκ ἔχει, οἷον ἓνα μόνον ἀστράγαλον. “ἄρ’ ὃ ἐπίσταται, μαθὼν ἢ εὐρὼν ἐπίσταται;” ἀλλ’ οὐχ ἃ ἐπίσταται. καὶ εἰ ὃ βαδίζει πατεῖ, ἀλλ’ οὐχ ὅτε. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

Πρὸς δὲ τοὺς παρὰ τὸ συμβεβηκὸς μία μὲν ἡ αὐτὴ λύσις πρὸς ἅπαντας. ἐπεὶ γὰρ ἀδιόριστόν ἐστι τὸ πότε λεκτέον ἐπὶ τοῦ πράγματος ὅταν ἐπὶ τοῦ συμβεβηκότος ὑπάρχη, καὶ ἐπ’ ἐνίων μὲν δοκεῖ καὶ φασίν, ἐπ’ ἐνίων δ’ οὐ φασιν ἀναγκαῖον εἶναι, ῥητέον οὖν συμβιβασθέντος ὁμοίως πρὸς ἅπαντας ὅτι οὐκ ἀναγκαῖον, ἔχειν δὲ δεῖ προφέρειν τὸ “οἷον”. εἰσὶ δὲ πάντες οἱ τοιοῦδε τῶν λόγων παρὰ τὸ συμβεβηκός· “ἄρ’ οἶδας ὃ μέλλω σε ἐρωτᾶν;” “ἄρ’ οἶδας τὸν προσιόντα, ἢ τὸν ἐγκεκαλυμμένον;” “ἄρ’ ὁ ἀνδριᾶς σὸν ἐστίν ἔργον, ἢ σὸς ὁ κύων πατήρ;” “ἄρα τὰ ὀλιγάκις ὀλίγα ὀλίγα;” φανερόν γὰρ ἐν ἅπασιν τούτοις ὅτι οὐκ ἀνάγκη τὸ κατὰ τοῦ συμβεβηκότος καὶ κατὰ τοῦ πράγματος ἀληθεύεσθαι· μόνοις γὰρ τοῖς κατὰ τὴν οὐσίαν ἀδιαφόροις καὶ ἐν οὖσιν ἅπαντα δοκεῖ ταῦτά ὑπάρχειν. τῷ δ’ ἀγαθῷ οὐ ταυτόν ἐστιν ἀγαθῷ τ’ εἶναι καὶ μέλλοντι ἐρωτᾶσθαι, οὐδὲ τῷ προσιόντι ἢ ἐγκεκαλυμμένῳ προσιόντι τε εἶναι καὶ Κορίσκῳ· ὥστ’ οὐκ εἰ οἶδα τὸν Κορίσκον, ἀγνοῶ δὲ τὸν προσιόντα, τὸν αὐτὸν οἶδα καὶ ἀγνοῶ· οὐδ’ εἰ τοῦτ’ ἔστιν ἐμόν, ἔστι δ’ ἔργον, ἐμόν ἐστιν ἔργον, ἀλλ’ ἢ κτῆμα ἢ πρᾶγμα ἢ ἄλλο τι. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων.

Λύουσι δέ τινες διαιροῦντες τὴν ἐρώτησιν. φασὶ γὰρ ἐνδέχεσθαι ταὐτὸ πρᾶγμα εἰδέναι καὶ ἀγνοεῖν, ἀλλὰ μὴ κατὰ ταυτό· τὸν οὖν προσιόντα οὐκ εἰδότες, τὸν δὲ Κορίσκον εἰδότες, ταὐτὸ μὲν εἰδέναι καὶ ἀγνοεῖν φασιν, ἀλλ’ οὐ κατὰ ταυτό. καίτοι πρῶτον μὲν, καθάπερ ἤδη εἵπομεν, δεῖ τῶν παρὰ ταὐτὸ λόγων τὴν αὐτὴν εἶναι διόρθωσιν. αὕτη δ’ οὐκ ἔσται, ἄν τις μὴ ἐπὶ τοῦ

εἰδέναι ἄλλ’ ἐπὶ τοῦ εἶναι ἢ πως ἔχειν τὸ αὐτὸ ἀξίωμα λαμβάνη, οἷον “εἰ ὅδε ἐστὶ πατήρ, ἔστι δὲ σός”· εἰ γὰρ ἐπ’ ἐνίων τοῦτ’ ἔστιν ἀληθὲς καὶ ἐνδέχεται τὸ αὐτὸ εἰδέναι καὶ ἀγνοεῖν, ἄλλ’ ἐνταῦθα οὐδὲν κοινωνεῖ τὸ λεχθέν. οὐδὲν δὲ κωλύει τὸν αὐτὸν λόγον πλείους μοχθηρίας ἔχειν, ἄλλ’ οὐχ ἡ πάσης μοχθηρίας ἐμφάνισις λύσις ἐστίν· ἐγγωρεῖ γὰρ ὅτι μὲν ψεῦδος συλλελόγισται δεῖξαί τινα, παρ’ ὃ δὲ μὴ δεῖξαι, οἷον τὸν Ζήνωνος λόγον, ὅτι οὐκ ἔστι κινήθηται. ὥστε καὶ εἴ τις ἐπιχειρεῖ συνάγειν ὡς δυνατόν, ἀμαρτάνει, κἂν [εἰ] μυριάκις ἢ συλλελογισμένος· οὐ γάρ ἐστὶν αὕτη λύσις· ἦν γὰρ ἡ λύσις ἐμφάνισις ψευδοῦς συλλογισμοῦ παρ’ ὃ ψευδής. εἰ οὖν μὴ συλλελόγισται, εἰ καὶ ἀληθὲς ἢ ψεῦδος ἐπιχειρεῖ συνάγειν, ἢ ἐκείνου δήλωσις λύσις ἐστίν. ἴσως δὲ καὶ τοῦτ’ ἐπ’ ἐνίων οὐδὲν κωλύει συμβαίνειν· πλὴν ἐπὶ γε τούτων οὐδὲ τοῦτο δόξειεν ἄν· καὶ γὰρ τὸν Κορίσκον ὅτι Κορίσκος οἶδε καὶ τὸ προσιὸν ὅτι προσιόν. ἐνδέχεσθαι δὲ δοκεῖ τὸ αὐτὸ εἰδέναι καὶ μὴ, οἷον ὅτι μὲν λευκὸν εἰδέναι, ὅτι δὲ μουσικὸν μὴ γνωρίζειν· οὕτω γὰρ τὸ αὐτὸ οἶδε καὶ οὐκ οἶδεν, ἄλλ’ οὐ κατὰ ταύτόν. τὸ δὲ προσιὸν καὶ Κορίσκον <ὄν>, καὶ ὅτι προσιὸν καὶ ὅτι Κορίσκος, οἶδεν.

Ὅμοίως δ’ ἀμαρτάνουσι καὶ οἱ λύοντες ὅτι ἅπας ἀριθμὸς ὀλίγος, ὥσπερ οὓς εἵπομεν· εἰ γάρ, μὴ συμπεραινομένου, τοῦτο παραλιπόντες ἀληθὲς συμπεπεράνθαι φασί (πάντα γὰρ εἶναι καὶ πολὺν καὶ ὀλίγον), ἀμαρτάνουσιν.

Ἐνιοὶ δὲ καὶ τῷ διττῷ λύουσι τοὺς συλλογισμούς, οἷον ὅτι σός ἐστὶ πατήρ ἢ υἱὸς ἢ δοῦλος. καίτοι φανερόν ὡς εἰ παρὰ τὸ πολλαχῶς λέγεσθαι φαίνεται ὁ ἔλεγχος, δεῖ τοῦνομα ἢ τὸν λόγον κυρίως εἶναι πλειόνων. τὸ δὲ τόνδ’ εἶναι τοῦδε τέκνον οὐδεὶς λέγει κυρίως, εἰ δεσπότης ἐστὶ τέκνου, ἀλλὰ παρὰ τὸ συμβεβηκὸς ἢ σύνθεσις ἐστίν· “ἄρ’ ἐστὶ τοῦτο σόν;” “ναί.” “ἔστι δὲ τοῦτο τέκνον· σὸν ἄρα τοῦτο τέκνον.” ἄλλ’ οὐ σὸν τέκνον ὅτι συμβέβηκεν εἶναι καὶ σὸν καὶ τέκνον.

Καὶ τὸ εἶναι τῶν κακῶν τι ἀγαθόν· “ἡ γὰρ φρόνησις ἐστὶν ἐπιστήμη τῶν κακῶν”. τὸ δὲ τοῦτο τούτων εἶναι οὐ λέγεται πολλαχῶς, ἀλλὰ κτῆμα. εἰ δ’ ἄρα πολλαχῶς (καὶ γὰρ τὸν ἄνθρωπον τῶν ζώων φαμὲν εἶναι, ἄλλ’ οὐ τι κτῆμα· καὶ ἐάν τι πρὸς τὰ κακὰ λέγεται ὡς τινός, διὰ τοῦτο τῶν κακῶν ἐστίν, ἄλλ’ οὐ τοῦτο τῶν κακῶν), παρὰ τὸ πῇ οὖν καὶ ἀπλῶς φαίνεται. καίτοι ἐνδέχεται ἴσως ἀγαθὸν εἶναί τι τῶν κακῶν διττῶς, ἄλλ’ οὐκ ἐπὶ τοῦ λόγου τούτου, ἀλλ’ εἴ τι δοῦλον εἴη ἀγαθὸν μοχθηροῦ, μᾶλλον. ἴσως δ’ οὐδ’ οὕτως· οὐ γὰρ εἰ ἀγαθὸν καὶ τούτου, ἀγαθὸν τούτου ἅμα. οὐδὲ τὸν ἄνθρωπον φάναι τῶν ζώων εἶναι [οὐ] λέγεται πολλαχῶς· οὐ γὰρ εἴ ποτέ τι σημαίνομεν ἀφελόντες, τοῦτο λέγεται πολλαχῶς· καὶ γὰρ τὸ ἥμισυ εἰπόντες τοῦ ἔπους

“δός μοι Ἰλιάδα” σημαίνομεν, οἶον τὸ “μῆνιν ἄειδε, θεά”.

Τοὺς δὲ παρὰ τὸ κυρίως τόδε ἢ πῇ ἢ ποῦ ἢ πῶς ἢ πρὸς τι λέγεσθαι, καὶ μὴ ἀπλῶς, λυτέον σκοποῦντι τὸ συμπέρασμα πρὸς τὴν ἀντίφασιν, εἰ ἐνδέχεται τούτων τι πεπονθέναι. τὰ γὰρ ἐναντία καὶ τὰ ἀντικείμενα καὶ φάσιν καὶ ἀπόφασιν ἀπλῶς μὲν ἀδύνατον ὑπάρχειν τῷ αὐτῷ, πῇ μέντοι ἐκάτερον ἢ πρὸς τι ἢ πῶς, ἢ τὸ μὲν πῇ τὸ δ’ ἀπλῶς, οὐδὲν κωλύει. ὥστ’ εἰ τόδε μὲν ἀπλῶς τόδε δὲ πῇ, οὐπω ἔλεγχος, τοῦτο δ’ ἐν τῷ συμπεράσματι θεωρητέον πρὸς τὴν ἀντίφασιν.

Εἰσὶ δὲ πάντες οἱ τοιοῦτοι λόγοι τοῦτ’ ἔχοντες· “ἄρ’ ἐνδέχεται τὸ μὴ ὄν εἶναι; ἀλλὰ μὴν ἔστι γέ τι μὴ ὄν.” ὁμοίως δὲ καὶ τὸ ὄν οὐκ ἔσται· οὐ γὰρ ἔσται τι τῶν ὄντων. “ἄρ’ ἐνδέχεται τὸν αὐτὸν ἅμα εὐορκεῖν καὶ ἐπιορκεῖν;” “ἄρ’ ἐγχωρεῖ τὸν αὐτὸν ἅμα τῷ αὐτῷ πείθεσθαι καὶ ἀπειθεῖν;” ἢ οὔτε τὸ εἶναι τι καὶ εἶναι ταυτόν (τὸ γὰρ μὴ ὄν οὐκ εἰ ἔστι τι, καὶ ἔστιν ἀπλῶς), οὔτ’ εἰ εὐορκεῖ τόδε ἢ τῇδε, ἀνάγκη καὶ εὐορκεῖν (ὁ γὰρ ὁμόσας ἐπιορκήσκειν εὐορκεῖ ἐπιορκῶν τοῦτο μόνον, εὐορκεῖ δὲ οὐ). οὐδ’ ὁ ἀπειθῶν πείθεται, ἀλλὰ τὶ πείθεται. ὅμοιος δ’ ὁ λόγος καὶ περὶ τοῦ ψεύδεσθαι τὸν αὐτὸν ἅμα καὶ ἀληθεύειν, ἀλλὰ διὰ τὸ μὴ εἶναι εὐθεώρητον πότερον ἂν τις ἀποδοίῃ, τὸ ἀπλῶς ἀληθεύειν ἢ ψεύδεσθαι, δύσκολον φαίνεται. κωλύει δ’ αὐτὸν οὐδὲν ἀπλῶς μὲν εἶναι ψευδῇ πῇ δ’ ἀληθῇ ἢ τινος, καὶ εἶναι ἀληθῇ τινά, ἀληθῇ δὲ αὐτὸν μὴ. ὁμοίως δὲ καὶ ἐπὶ τῶν πρὸς τι καὶ ποῦ καὶ ποτέ· πάντες γὰρ οἱ τοιοῦτοι λόγοι παρὰ τοῦτο συμβαίνουσιν. “ἄρ’ ἡ ὑγίεια ἢ ὁ πλοῦτος ἀγαθόν; ἀλλὰ τῷ ἄφρονι καὶ μὴ ὀρθῶς χρωμένῳ οὐκ ἀγαθόν· ἀγαθὸν ἄρα καὶ οὐκ ἀγαθόν.” “ἄρα τὸ ὑγιαίνειν ἢ δύνασθαι ἐν πόλει βέλτιον; ἀλλ’ ἔστιν ὅτε οὐ βέλτιον· ταυτόν ἄρα τῷ αὐτῷ ἀγαθὸν καὶ οὐκ ἀγαθόν.” ἢ οὐδὲν κωλύει ἀπλῶς ὄν ἀγαθὸν τῷδε μὴ εἶναι ἀγαθόν, ἢ τῷδε μὲν ἀγαθόν, ἀλλ’ οὐ νῦν ἢ οὐκ ἐνταῦθ’ ἀγαθόν; “ἄρ’ ὃ μὴ βούλοισ’ ἂν ὁ φρόνιμος, κακόν; ἀποβαλεῖν δ’ οὐ βούλεται τάγαθόν· κακὸν ἄρα τάγαθόν.” οὐ γὰρ ταυτόν εἶπεν τάγαθόν εἶναι κακὸν καὶ τὸ ἀποβαλεῖν τάγαθόν. ὁμοίως δὲ καὶ ὁ τοῦ κλέπτου λόγος· οὐ γάρ, εἰ κακόν ἐστιν ὁ κλέπτης, καὶ τὸ λαβεῖν ἐστι κακόν. οὐκ οὐκ τὸ κακὸν βούλεται, ἀλλὰ τάγαθόν· τὸ γὰρ λαβεῖν ἀγαθόν. καὶ ἡ νόσος κακόν ἐστιν, ἀλλ’ οὐ τὸ ἀποβαλεῖν νόσον. “ἄρα τὸ δίκαιον τοῦ ἀδίκου καὶ τὸ δικαίως τοῦ ἀδίκως αἰρετώτερον; ἀλλ’ ἀποθανεῖν ἀδίκως αἰρετώτερον.” “ἄρα δίκαιόν ἐστι τὰ αὐτοῦ ἔχειν ἕκαστον; ἃ δ’ ἂν τις κρίνῃ κατὰ δόξαν τὴν αὐτοῦ, κἂν ἢ ψευδής, κύρια ἐστὶν ἐκ τοῦ νόμου· τὸ αὐτὸ ἄρα δίκαιον καὶ οὐ δίκαιον”· καὶ “πότερον δεῖ κρίνειν, τὸν τὰ δίκαια λέγοντα ἢ τὸν τὰ ἄδικα; ἀλλὰ μὴν καὶ τὸν ἀδικούμενον δίκαιόν ἐστιν ἱκανῶς λέγειν ἃ ἔπαθεν· ταῦτα δ’ ἦν ἄδικα.” οὐ γάρ, εἰ παθεῖν τι ἀδίκως αἰρετόν, τὸ ἀδίκως αἰρετώτερον τοῦ δικαίως, ἀλλ’

ἀπλῶς μὲν τὸ δικαίως, τοδὶ μέντοι οὐδὲν κωλύει ἀδίκως ἢ δικαίως. καὶ τὸ ἔχειν τὰ αὐτοῦ δίκαιον, τὸ δὲ τὰλλότρια οὐ δίκαιον· κρίσιν μέντοι ταύτην δικαίαν εἶναι οὐδὲν κωλύει, οἷον ἂν ἢ κατὰ δόξαν τοῦ κρίναντος· οὐ γάρ, εἰ δίκαιον τῷδὶ ἢ ὠδί, καὶ ἀπλῶς δίκαιον. ὁμοίως δὲ καὶ ἄδικα ὄντα οὐδὲν κωλύει λέγειν γε αὐτὰ δίκαιον εἶναι· οὐ γάρ, εἰ λέγειν δίκαιον, ἀνάγκη δίκαια εἶναι, ὥσπερ οὐδ’ εἰ ὠφέλιμον λέγειν, ὠφέλιμα. ὁμοίως δὲ καὶ ἐπὶ τῶν δικαίων. ὥστ’ οὐκ εἰ τὰ λεγόμενα ἄδικα, ὁ λέγων ἄδικα νικᾶται· λέγει γὰρ ἃ λέγειν ἐστὶ δίκαια, ἀπλῶς δὲ καὶ παθεῖν ἄδικα.

Τοῖς δὲ παρὰ τὸν ὅρισμόν γινομένοις τοῦ ἐλέγχου, καθάπερ ὑπεγράφη πρότερον, ἀπαντητέον σκοποῦσι τὸ συμπέρασμα πρὸς τὴν ἀντίφασιν, ὅπως ἔσται τὸ αὐτὸ καὶ κατὰ τὸ αὐτὸ καὶ πρὸς τὸ αὐτὸ καὶ ὡσαύτως καὶ ἐν τῷ αὐτῷ χρόνῳ. Ἐὰν δ’ ἐν ἀρχῇ προσέρηται, οὐχ ὁμολογητέον ὡς ἀδύνατον τὸ αὐτὸ εἶναι διπλάσιον καὶ μὴ διπλάσιον, ἀλλὰ φατέον, μὴ μέντοι ὠδί ὥς ποτ’ ἦν τὸ ἐλέγχεσθαι διωμολογημένον. εἰσὶ δὲ πάντες οἶδ’ οἱ λόγοι παρὰ τὸ τοιοῦτο. “ἄρ’ ὁ εἰδὼς ἕκαστον ὅτι ἕκαστον οἶδε τὸ πρᾶγμα; καὶ ὁ ἀγνοῶν ὡσαύτως; εἰδὼς δέ τις τὸν Κορίσκον ὅτι Κορίσκος ἀγνοοίη ἂν ὅτι μουσικός, ὥστε ταῦτ’ ἐπίσταται καὶ ἀγνοεῖ.” “ἄρα τὸ τετράπηχυ τοῦ τριπήχεος μεῖζον; γένοιτο δ’ ἂν ἐκ τριπήχεος τετράπηχυ κατὰ τὸ μῆκος· τὸ δὲ μεῖζον ἐλάττονος μεῖζον· αὐτὸ ἄρα αὐτοῦ κατὰ ταῦτ’ μεῖζον καὶ ἔλαττον.”

Τοὺς δὲ παρὰ τὸ αἰτεῖσθαι καὶ λαμβάνειν τὸ ἐν ἀρχῇ πυκθανομένῳ, ἂν ἢ δῆλον, οὐ δοτέον, οὐδ’ ἂν ἔνδοξον ἢ λέγοντι τᾷληθές. ἂν δὲ λάθῃ, τὴν ἀγνοίαν διὰ τὴν μοχθηρίαν τῶν τοιούτων λόγων εἰς τὸν ἐρωτῶντα μεταστρεπτέον ὡς οὐ διειλεγμένον· ὁ γὰρ ἔλεγχος ἄνευ τοῦ ἐξ ἀρχῆς. εἴθ’ ὅτι ἐδόθη οὐχ ὡς τούτῳ χρησομένου, ἀλλ’ ὡς πρὸς τοῦτο συλλογιούμενου, τούναντίον ἢ ἐπὶ τῶν παρεξελέγχων.

Καὶ τοὺς διὰ τοῦ παρεπομένου συμβιβάζοντας ἐπ’ αὐτοῦ τοῦ λόγου δεικτέον. ἔστι δὲ διττὴ ἡ τῶν ἐπομένων ἀκολουθήσις· ἢ γὰρ ὡς τῷ ἐν μέρει τὸ καθόλου, οἷον ἀνθρώπῳ ζῶον (ἄξιοῦται γάρ, εἰ τόδε μετὰ τοῦδε, καὶ τόδ’ εἶναι μετὰ τοῦδε), ἢ κατὰ τὰς ἀντιθέσεις (εἰ γὰρ τόδε τῷδε ἀκολουθεῖ, τῷ ἀντικειμένῳ τὸ ἀντικείμενον)· παρ’ ὃ καὶ ὁ τοῦ Μελίσσου λόγος· εἰ γὰρ τὸ γεγονός ἔχει ἀρχήν, τὸ ἀγένητον ἀξιοῖ μὴ ἔχειν, ὥστ’ εἰ ἀγένητος ὁ οὐρανός, καὶ ἄπειρος. τὸ δ’ οὐκ ἔστιν· ἀνάπαλιν γὰρ ἢ ἀκολούθησις.

Ὅσοι τε παρὰ τὸ προστιθέναι τι συλλογίζονται, σκοπεῖν εἰ ἀφαιρουμένου συμβαίνει μηδὲν ἥττον τὸ ἀδύνατον. κᾷπειτα τοῦτο ἐμφανιστέον, καὶ λεκτέον ὡς ἔδωκεν οὐχ ὡς δοκοῦν ἀλλ’ ὡς πρὸς τὸν λόγον, ὁ δὲ κέχρηται οὐδὲν

πρὸς τὸν λόγον.

Πρὸς δὲ τοὺς τὰ πλείω ἐρωτήματα ἐν ποιοῦντας εὐθὺς ἐν ἀρχῇ διοριστέον· ἐρώτησις γὰρ μία πρὸς ἣν μία ἀπόκρισις ἔστιν, ὥστ' οὔτε πλείω καθ' ἐνὸς οὔτε ἐν κατὰ πολλῶν, ἀλλ' ἐν καθ' ἐνὸς φατέον ἢ ἀποφατέον. ὥσπερ δὲ ἐπὶ τῶν ὁμωνύμων ὅτε μὲν ἀμφοῖν ὅτε δ' οὐδετέρῳ ὑπάρχει, ὥστε μὴ ἀπλοῦ ὄντος τοῦ ἐρωτήματος ἀπλῶς ἀποκρινομένοις οὐδὲν συμβαίνει πάσχειν, ὁμοίως καὶ ἐπὶ τούτων. ὅταν μὲν οὖν τὰ πλείω τῷ ἐνὶ ἢ τὸ ἐν τοῖς πολλοῖς ὑπάρχη, τῷ ἀπλῶς δόντι καὶ ἀμαρτόντι ταύτην τὴν ἀμαρτίαν οὐδὲν ὑπεναντίωμα συμβαίνει, ὅταν δὲ τῷ μὲν τῷ δὲ μὴ, ἢ πλείω κατὰ πλειόνων. καὶ ἔστιν ὡς ὑπάρχει ἀμφοτέρω ἀμφοτέροις, ἔστι δ' ὡς οὐχ ὑπάρχει πάλιν, ὥστε τοῦτ' εὐλαβητέον· οἷον ἐν τοῖσδε τοῖς λόγοις· “εἰ τὸ μὲν ἔστιν ἀγαθὸν τὸ δὲ κακόν, ὅτι ταῦτα ἀληθεῶς εἶπεῖν ἀγαθὸν καὶ κακόν, καὶ πάλιν μήτ' ἀγαθὸν μήτε κακόν (οὐκ ἔστι γὰρ ἐκάτερον ἐκάτερον), ὥστε ταὐτὸ ἀγαθὸν καὶ κακὸν καὶ οὐτ' ἀγαθὸν οὔτε κακόν”, καὶ “εἰ ἕκαστον αὐτὸ αὐτῷ ταὐτὸ καὶ ἄλλου ἕτερον, ἐπειδὴ οὐκ ἄλλοις ταῦτά ἄλλ' αὐτοῖς καὶ ἕτερα αὐτῶν, τὰ αὐτὰ ἑαυτοῖς ἕτερα καὶ τὰ αὐτά”. ἔτι “εἰ τὸ μὲν ἀγαθὸν κακὸν γίνεται, τὸ δὲ κακὸν ἀγαθόν, δύο γένοιντ' ἅν· δυοῖν δὲ καὶ ἀνίσων ἐκάτερον αὐτὸ αὐτῷ ἴσον· ὥστε ἴσα καὶ ἄνισα αὐτὰ αὐτοῖς”.

Ἐμπίπτουσι μὲν οὖν οὗτοι καὶ εἰς ἄλλας λύσεις· καὶ γὰρ τὸ ἄμφω καὶ τὸ ἅπαντα πλείω σημαίνει· οὐκ οὖν ταύτόν, πλὴν ὄνομα, συμβαίνει φῆσαι καὶ ἀποφῆσαι. τοῦτο δ' οὐκ ἦν ἔλεγχος, ἀλλὰ φανερόν ὅτι μὴ μιᾶς ἐρωτήσεως τῶν πλειόνων γινομένης, ἀλλ' ἐν καθ' ἐνὸς φάντος ἢ ἀποφάντος, οὐκ ἔσται τὸ ἀδύνατον.

Περὶ δὲ τῶν ἀπαγόντων εἰς <τὸ> τὸ αὐτὸ πολλάκις εἶπεῖν φανερόν ὡς οὐ δοτέον τῶν πρὸς τι λεγομένων σημαίνειν τι χωριζομένης καθ' αὐτάς τὰς κατηγορίας, οἷον “διπλάσιον” ἀντὶ τοῦ “διπλάσιον ἡμίσεος”, ὅτι ἐμφαίνεται. καὶ γὰρ τὸ δέκα ἐν τοῖς ἐνὸς δέουσι δέκα καὶ τὸ ποιῆσαι ἐν τῷ μὴ ποιῆσαι καὶ ὅλως ἐν τῇ ἀποφάσει ἢ φάσις· ἀλλ' ὅμως οὐκ εἴ τις λέγει τοδὶ μὴ εἶναι λευκόν, λέγει αὐτὸ λευκὸν εἶναι. τὸ δὲ “διπλάσιον” οὐδὲ σημαίνει οὐδὲν ἴσως, ὥσπερ οὐδὲ τὸ “ἡμισυ”· εἰ δ' ἄρα καὶ σημαίνει, ἀλλ' οὐ ταὐτὸ καὶ συνηρημένον. οὐδ' ἡ ἐπιστήμη ἐν τῷ εἶδει (οἷον εἰ ἔστιν ἡ ἰατρικὴ ἐπιστήμη), ὅπερ τὸ κοινόν· ἐκεῖνο δ' ἦν ἐπιστήμη ἐπιστητοῦ. ἐν δὲ τοῖς <τούτων> δι' ὧν δηλοῦται κατηγορουμένοις τοῦτο λεκτέον, ὡς οὐ τὸ αὐτὸ χωρὶς καὶ ἐν τῷ λόγῳ τὸ δηλούμενον. τὸ γὰρ κοῖλον κοινῇ μὲν τὸ αὐτὸ δηλοῖ ἐπὶ τοῦ σιμοῦ καὶ τοῦ ῥοικοῦ, προστιθέμενον δὲ οὐδὲν κωλύει ἄλλα, τὸ μὲν τῇ ῥινὶ τὸ δὲ τῷ σκέλει, σημαίνειν· ἔνθα μὲν γὰρ τὸ σιμόν, ἔνθα δὲ τὸ



ροικὸν σημαίνει, καὶ οὐδὲν διαφέρει εἰπεῖν ῥίς σιμὴ ἢ ῥίς κοίλη. ἔτι οὐ δοτέον τὴν λέξιν κατ' εὐθύ· ψεῦδος γάρ ἐστιν. οὐ γάρ ἐστι τὸ σιμὸν ῥίς κοίλη ἀλλὰ ῥινὸς τοδί, οἶον πάθος, ὥστ' οὐδὲν ἄτοπον εἰ ἢ ῥίς ἢ σιμὴ ῥίς ἐστιν ἔχουσα κοιλότητα ῥινός.

Περὶ δὲ τῶν σολοικισμῶν, παρ' ὃ τι μὲν φαίνονται συμβαίνειν εἴπομεν πρότερον. ὥς δὲ λυτέον, ἐπ' αὐτῶν τῶν λόγων ἔσται φανερόν· ἅπαντες γὰρ οἱ τοιοῖδε τοῦτο βούλονται κατασκευάζειν. “ἄρ' ὃ λέγεις ἀληθῶς, καὶ ἔστι τοῦτο ἀληθῶς; φῆς δ' εἶναι τι λίθον· ἔστιν ἄρα τι λίθον.” ἢ τὸ λέγειν λίθον οὐκ ἔστι λέγειν ὃ ἄλλ' ὄν, οὐδὲ τοῦτο ἀλλὰ τοῦτον. εἰ οὖν ἔροιτό τις, “ἄρ' ὄν ἀληθῶς λέγεις, ἔστι τοῦτον;”, οὐκ ἂν δοκοίη ἐλληνίζειν, ὥσπερ οὐδ' εἰ ἔροιτο, “ἄρ' ἦν λέγεις εἶναι, ἔστιν οὗτος;”. ξύλον δ' εἰπεῖν οὗτος, ἢ ὅσα μήτε θῆλυ μήτ' ἄρρεν σημαίνει, οὐδὲν διαφέρει· διὸ καὶ οὐ γίνεται σολοικισμός· “εἰ ὃ λέγεις εἶναι, ἔστι τοῦτο, ξύλον δὲ λέγεις εἶναι, ἔστιν ἄρα ξύλον”. τὸ δὲ “λίθος” καὶ τὸ “οὗτος” ἄρρενος ἔχει κλίσιν. εἰ δὴ τις ἔροιτο “ἄρ' οὗτός ἐστιν αὕτη;”, εἴτα πάλιν “τί δ'; οὐχ οὗτός ἐστι Κορίσκος;”, εἴτ' εἴπειεν “ἔστιν ἄρα οὗτος αὕτη”, οὐ συλλελόγισται τὸν σολοικισμόν, οὐδ' εἰ τὸ “Κορίσκος” σημαίνει ὅπερ αὕτη, μὴ δίδωσι δὲ ὁ ἀποκρινόμενος, ἀλλὰ δεῖ τοῦτο προσερωτηθῆναι. εἰ δὲ μήτ' ἔστιν μήτε δίδωσιν, οὐ συλλελόγισται οὔτε τῷ ὄντι οὔτε πρὸς τὸν ἠρωτημένον. ὁμοίως οὖν δεῖ κάκεῖ τὸν λίθον σημαίνειν “οὗτος”. εἰ δὲ μήτε ἔστι μήτε δέδοται, οὐ λεκτέον τὸ συμπέρασμα· φαίνεται δὲ παρὰ τὸ τὴν ἀνόμοιον πτῶσιν τοῦ ὀνόματος ὁμοίαν φαίνεσθαι. “ἄρ' ἀληθές ἐστιν εἰπεῖν ὅτι ἔστιν αὕτη ὅπερ εἶναι φῆς αὐτήν; εἶναι δὲ φῆς ἀσπίδα· ἔστιν ἄρα αὕτη ἀσπίδα.” ἢ οὐκ ἀνάγκη, εἰ μὴ τὸ “αὕτη” ἀσπίδα σημαίνει ἀλλ' ἀσπίς, τὸ δὲ “ταύτην” ἀσπίδα. οὐδ' εἰ ὃ φῆς εἶναι τοῦτον, ἔστιν οὗτος, φῆς δ' εἶναι Κλέωνα, ἔστιν ἄρα οὗτος Κλέωνα· οὐ γὰρ ἔστιν οὗτος Κλέωνα· εἴρηται γὰρ ὅτι ὁ φημι εἶναι τοῦτον, ἔστιν οὗτος, οὐ τοῦτον· οὐδὲ γὰρ ἂν ἐλληνίζοι οὕτως τὸ ἐρώτημα λεχθέν, “ἄρ' ἐπίστασαι τοῦτο; τοῦτο δ' ἐστὶ λίθος· ἐπίστασαι ἄρα λίθος”. ἢ οὐ ταὐτὸ σημαίνει τὸ “τοῦτο” ἐν τῷ “ἄρ' ἐπίστασαι τοῦτο;” καὶ ἐν τῷ “τοῦτο δὲ λίθος”, ἀλλ' ἐν μὲν τῷ πρώτῳ τοῦτον, ἐν δὲ τῷ ὑστέρῳ οὗτος. “ἄρ' οὐ ἐπιστήμην ἔχεις, ἐπίστασαι τοῦτο; ἐπιστήμην δ' ἔχεις λίθου· ἐπίστασαι ἄρα λίθου.” ἢ τὸ μὲν “οὐ” λίθου λέγει, τὸ δὲ “τοῦτο” λίθον· ἐδόθη δ', οὐ ἐπιστήμην ἔχεις, ἐπίστασθαι οὐ τούτου ἀλλὰ τοῦτο, ὥστ' οὐ τοῦ λίθου ἀλλὰ τὸν λίθον.

Ὅτι μὲν οὖν οἱ τοιοῦτοι τῶν λόγων οὐ συλλογίζονται σολοικισμόν ἀλλὰ φαίνονται, καὶ διὰ τί τε φαίνονται καὶ πῶς ἀπαντητέον πρὸς αὐτούς, φανερόν ἐκ τῶν εἰρημένων.

Δεῖ δὲ καὶ κατανοεῖν ὅτι πάντων τῶν λόγων οἱ μὲν εἰσι ῥάους κατιδεῖν, οἱ δὲ χαλεπώτεροι, παρὰ τί καὶ ἐν τίνι παραλογίζονται τὸν ἀκούοντα, πολλάκις οἱ αὐτοὶ ἐκείνοις ὄντες· τὸν αὐτὸν γὰρ λόγον δεῖ καλεῖν τὸν παρὰ ταὐτὸ γινόμενον. ὁ αὐτὸς δὲ λόγος τοῖς μὲν παρὰ τὴν λέξιν τοῖς δὲ παρὰ τὸ συμβεβηκὸς τοῖς δὲ παρ' ἕτερον δόξειεν ἂν εἶναι διὰ τὸ μεταφερόμενον ἕκαστον μὴ ὁμοίως εἶναι δῆλον. ὥσπερ οὖν ἐν τοῖς παρὰ τὴν ὁμωνυμίαν, ὅσπερ δοκεῖ τρόπος εὐηθέστατος εἶναι τῶν παραλογισμῶν, τὰ μὲν καὶ τοῖς τυχοῦσιν ἐστὶ δῆλα (καὶ γὰρ οἱ λόγοι σχεδὸν οἱ γελοῖοι πάντες εἰσὶ παρὰ τὴν λέξιν, οἷον “ἀνὴρ ἐφέρετο κατὰ κλίμακος δίφρον”, καὶ “ποῖ στέλλεσθε;” “πρὸς τὴν κεραίαν”, καὶ “ποτέρα τῶν βοῶν ἔμπροσθεν τέσσεται;” “οὐδετέρα, ἀλλ' ὀπισθεν ἄμφω”, καὶ “καθαρὸς ὁ βορέας;” “οὐ δῆτα· ἀπεκτόνηκε γὰρ τὸν πτωχὸν κατωνωμένον”. “ἄρ' Εὐαρχος;” “οὐ δῆτα, ἀλλ' Ἀπολλωνίδης”· τὸν αὐτὸν δὲ τρόπον καὶ τῶν ἄλλων σχεδὸν οἱ πλεῖστοι)· τὰ δὲ καὶ τοὺς ἐμπειροτάτους φαίνεται λανθάνειν (σημεῖον δὲ τούτου ὅτι μάχονται πολλάκις περὶ τῶν ὀνομάτων, οἷον πότερον ταὐτὸ σημαίνει κατὰ πάντων τὸ ὄν καὶ τὸ ἔν, ἢ ἕτερον· τοῖς μὲν γὰρ δοκεῖ ταὐτὸ σημαίνειν τὸ ὄν καὶ τὸ ἔν, οἱ δὲ τὸν Ζήνωνος λόγον καὶ Παρμενίδου λύουσι διὰ τὸ πολλαχῶς φάναι τὸ ἐν λέγεσθαι καὶ τὸ ὄν). ὁμοίως δὲ καὶ <τῶν> παρὰ τὸ συμβεβηκὸς καὶ παρὰ τῶν ἄλλων ἕκαστον οἱ μὲν ἔσσονται ῥάους ἰδεῖν οἱ δὲ χαλεπώτεροι τῶν λόγων, καὶ λαβεῖν ἐν τίνι γένει, καὶ πότερον ἔλεγχος ἢ οὐκ ἔλεγχος, οὐ ῥάδιον ὁμοίως περὶ πάντων.

Ἔστι δὲ δριμύς λόγος ὅστις ἀπορεῖν ποιεῖ μάλιστα· δάκνει γὰρ οὗτος μάλιστα. ἀπορία δ' ἐστὶ διττή, ἡ μὲν ἐν τοῖς συλλελογισμένοις, ὅ τι ἀνέλη τις τῶν ἐρωτημάτων, ἡ δ' ἐν τοῖς ἐριστικοῖς, πῶς εἴπη τις τὸ προταθέν. διόπερ ἐν τοῖς συλλογιστικοῖς οἱ δριμύτεροι λόγοι ζητεῖν μᾶλλον ποιοῦσιν. ἔστι δὲ συλλογιστικὸς μὲν λόγος δριμύτατος ἂν ἐξ ὅτι μάλιστα δοκούντων ὅτι μάλιστα ἔνδοξον ἀναιρῇ. εἷς γὰρ ὢν ὁ λόγος μετατιθεμένης τῆς ἀντιφάσεως ἅπαντας ὁμοίους ἔξει τοὺς συλλογισμούς· ἀεὶ γὰρ ἐξ ἐνδόξων ὁμοίως ἔνδοξον ἀναιρήσει [ἢ κατασκευάσει], διόπερ ἀπορεῖν ἀναγκαῖον. μάλιστα μὲν οὖν ὁ τοιοῦτος δριμύς, ὁ ἐξ ἴσου τὸ συμπέρασμα ποιῶν τοῖς ἐρωτήμασι, δεύτερος δ' ὁ ἐξ ἀπάντων ὁμοίων· οὗτος γὰρ ὁμοίως ποιήσει ἀπορεῖν ὅποιον τῶν ἐρωτημάτων ἀναιρετέον. τοῦτο δὲ χαλεπὸν· ἀναιρετέον μὲν γάρ, ὅ τι δ' ἀναιρετέον ἄδηλον. τῶν δ' ἐριστικῶν δριμύτατος μὲν ὁ πρῶτον εὐθὺς ἄδηλος πότερον συλλελόγισται ἢ οὐ, καὶ πότερον παρὰ ψεῦδος ἢ διαίρεσιν ἐστὶν ἢ λύσις· δεύτερος δὲ τῶν ἄλλων ὁ δῆλος μὲν ὅτι παρὰ διαίρεσιν ἢ ἀναίρεσιν ἐστὶ, μὴ φανερὸς δ' ὢν διὰ τίνος τῶν ἠρωτημένων ἀναίρεσιν ἢ διαίρεσιν λυτέος ἐστίν, ἢ πότερον αὕτη παρὰ τὸ συμπέρασμα ἢ παρὰ τι τῶν ἐρωτημάτων ἐστίν.

Ἐνίοτε μὲν οὖν ὁ μὴ συλλογισθεὶς λόγος εὐήθης ἐστίν, ἐὰν ἢ λίαν ἄδοξα ἢ ψευδῇ τὰ λήμματα· ἐνίοτε δ' οὐκ ἄξιος καταφρονεῖσθαι. ὅταν μὲν γὰρ ἐλλείπη τι τῶν τοιούτων ἐρωτημάτων περὶ ἃ ὁ λόγος καὶ δι' ἃ, [καὶ] μὴ προσλαβὼν τοῦτο καὶ μὴ συλλογισάμενος εὐήθης ὁ συλλογισμός· ὅταν δὲ τῶν ἔξωθεν, οὐκ εὐκαταφρόνητος οὐδαμῶς, ἀλλ' ὁ μὲν λόγος ἐπεικῆς, ὁ δ' ἐρωτῶν ἠρώτηκεν οὐ καλῶς.

Ἔστι δέ, ὥσπερ λύειν ὅτε μὲν πρὸς τὸν λόγον ὅτε δὲ πρὸς τὸν ἐρωτῶντα καὶ τὴν ἐρώτησιν ὅτε δὲ πρὸς οὐδέτερον τούτων - ὁμοίως καὶ ἐρωτᾶν ἔστι καὶ συλλογίζεσθαι καὶ πρὸς τὴν θέσιν καὶ πρὸς τὸν ἀποκρινόμενον καὶ πρὸς τὸν χρόνον, ὅταν ἢ πλείονος χρόνου δεομένη ἡ λύσις [ἢ] τοῦ παρόντος καιροῦ τοῦ διαλεχθῆναι πρὸς τὴν λύσιν.

Ἐκ πόσων μὲν οὖν καὶ ποίων γίνονται τοῖς διαλεγόμενοις οἱ παραλογισμοί, καὶ πῶς δείξομέν τε ψευδόμενον καὶ παράδοξα λέγειν ποιήσομεν, ἔτι δ' ἐκ τίνων συμβαίνει ὁ συλλογισμός, καὶ πῶς ἐρωτητέον καὶ τίς ἡ τάξις τῶν ἐρωτημάτων, ἔτι δὲ πρὸς τί χρήσιμοι πάντες εἰσὶν οἱ τοιοῦτοι λόγοι, καὶ περὶ ἀποκρίσεως ἀπλῶς τε πάσης καὶ πῶς λυτέον τοὺς λόγους καὶ τοὺς συλλογισμούς, εἰρήσθω περὶ ἀπάντων ἡμῖν ταῦτα. λοιπὸν δὲ περὶ τῆς ἐξ ἀρχῆς προθέσεως ἀναμνήσασιν εἰπεῖν τι βραχὺ περὶ αὐτῆς καὶ τέλος ἐπιθεῖναι τοῖς εἰρημένοις.

Προειλόμεθα μὲν οὖν εὐρεῖν δύναμιν τινα συλλογιστικὴν περὶ τοῦ προβληθέντος ἐκ τῶν ὑπαρχόντων ὡς ἐνδοξοτάτων· τοῦτο γὰρ ἔργον ἐστὶ τῆς διαλεκτικῆς καθ' αὐτὴν καὶ τῆς πειραστικῆς. ἐπεὶ δὲ προκατασκευαστέον πρὸς αὐτὴν διὰ τὴν τῆς σοφιστικῆς γειτνίασιν, ὥστ' οὐ μόνον πεῖραν δύνασθαι λαβεῖν διαλεκτικῶς ἀλλὰ καὶ ὡς εἰδώς, διὰ τοῦτο οὐ μόνον τὸ λεχθὲν ἔργον ὑπεθέμεθα τῆς πραγματείας, τὸ λόγον δύνασθαι λαβεῖν, ἀλλὰ καὶ ὅπως λόγον ὑπέχοντες φυλάξομεν τὴν θέσιν ὡς δι' ἐνδοξοτάτων ὁμοτρόπως. τὴν δ' αἰτίαν εἰρήκαμεν τούτου, ἐπεὶ καὶ διὰ τοῦτο Σωκράτης ἠρώτα ἀλλ' οὐκ ἀπεκρίνετο· ὡμολόγει γὰρ οὐκ εἰδέναι. δεδήλωται δ' ἐν τοῖς πρότερον καὶ πρὸς πόσα καὶ ἐκ πόσων τοῦτο ἔσται, καὶ πόθεν εὐπορήσομεν τούτων, ἔτι δὲ πῶς ἐρωτητέον καὶ τακτέον τὴν ἐρώτησιν πᾶσαν, καὶ περὶ τε ἀποκρίσεων καὶ λύσεων τῶν πρὸς τοὺς συλλογισμούς. δεδήλωται δὲ καὶ περὶ τῶν ἄλλων ὅσα τῆς αὐτῆς μεθόδου τῶν λόγων ἐστίν. πρὸς δὲ τούτοις περὶ τῶν παραλογισμῶν διεληλύθαμεν, ὥσπερ εἰρήκαμεν ἤδη πρότερον. ὅτι μὲν οὖν ἔχει τέλος ἱκανῶς ἃ προειλόμεθα, φανερόν· δεῖ δ' ἡμᾶς μὴ λεληθέναι τὸ συμβεβηκὸς περὶ ταύτην τὴν πραγματείαν. τῶν γὰρ εὕρισκομένων ἀπάντων τὰ μὲν παρ' ἐτέρων ληφθέντα πρότερον πεπονημένα κατὰ μέρος ἐπιδέδωκεν

ὕπὸ τῶν παραλαβόντων ὕστερον, τὰ δ' ἐξ ὑπαρχῆς εὕρισκόμενα μικρὰν τὸ πρῶτον ἐπίδοσιν λαμβάνειν εἴωθε, χρησιμωτέραν μέντοι πολλῶ τῆς ὕστερον ἐκ τούτων αὐξήσεως· μέγιστον γὰρ ἴσως ἀρχὴ παντός, ὥσπερ λέγεται. διὸ καὶ χαλεπώτατον· ὅσω γὰρ κράτιστον τῇ δυνάμει, τοσούτῳ μικρότατον ὂν τῷ μεγέθει χαλεπώτατόν ἐστιν ὀφθῆναι. ταύτης δ' εὐρημένης ῥᾶον τὸ προστιθέναι καὶ συναύξειν τὸ λοιπὸν ἐστιν· ὅπερ καὶ περὶ τοὺς ῥητορικοὺς λόγους συμβέβηκε, σχεδὸν δὲ καὶ περὶ τὰς ἄλλας ἀπάσας τέχνας. οἱ μὲν γὰρ τὰς ἀρχὰς εὐρόντες παντελῶς ἐπὶ μικρόν τι προήγαγον· οἱ δὲ νῦν εὐδοκιμοῦντες, παραλαβόντες παρὰ πολλῶν οἷον ἐκ διαδοχῆς κατὰ μέρος προαγαγόντων, οὕτως ηὐξήκασι, Τεισίας μὲν μετὰ τοὺς πρώτους, Θρασύμαχος δὲ μετὰ Τεισίαν, Θεόδωρος δὲ μετὰ τοῦτον, καὶ πολλοὶ πολλὰ συνενηνόχασι μέρος· διόπερ οὐδὲν θαυμαστὸν ἔχειν τι πλῆθος τὴν τέχνην. ταύτης δὲ τῆς πραγματείας οὐ τὸ μὲν ἦν τὸ δ' οὐκ ἦν προεξεργασμένον, ἀλλ' οὐδὲν παντελῶς ὑπῆρχεν. καὶ γὰρ τῶν περὶ τοὺς ἐριστικοὺς λόγους μισθαρνούντων ὁμοία τις ἦν ἡ παιδείσις τῇ Γοργίου πραγματεία· λόγους γὰρ οἱ μὲν ῥητορικοὺς οἱ δὲ ἐρωτητικοὺς ἐδίδοσαν ἐκμανθάνειν, εἰς οὓς πλειστάκις ἐμπίπτειν ὥθησαν ἑκάτεροι τοὺς ἀλλήλων λόγους. διόπερ ταχεῖα μὲν ἄτεχνος δ' ἦν ἡ διδασκαλία τοῖς μανθάνουσι παρ' αὐτῶν· οὐ γὰρ τέχνην ἀλλὰ τὰ ἀπὸ τῆς τέχνης διδόντες παιδεύειν ὑπελάμβανον, ὥσπερ ἂν εἴ τις, ἐπιστήμην φάσκων παραδώσειν ἐπὶ τὸ μηδὲν πονεῖν τοὺς πόδας, εἴτα σκυτοτομικὴν μὲν μὴ διδάσκει μηδ' ὅθεν δυνήσεται πορίζεσθαι τὰ τοιαῦτα, δοίη δὲ πολλὰ γένη παντοδαπῶν ὑποδημάτων· οὗτος γὰρ βεβοήθηκε μὲν πρὸς τὴν χρεῖαν, τέχνην δ' οὐ παρέδωκεν. καὶ περὶ μὲν τῶν ῥητορικῶν ὑπῆρχε πολλὰ καὶ παλαιὰ τὰ λεγόμενα, περὶ δὲ τοῦ συλλογίζεσθαι παντελῶς οὐδὲν εἵχομεν πρότερον λέγειν ἢ τριβῇ ζητοῦντες πολὺν χρόνον ἐπονοῦμεν. εἰ δὲ φαίνεται θεασαμένοις ὑμῖν, ὥς ἐκ τοιούτων ἐξ ἀρχῆς ὑπαρχόντων, ἔχειν ἡ μέθοδος ἱκανῶς παρὰ τὰς ἄλλας πραγματείας τὰς ἐκ παραδόσεως ηὐξημένας, λοιπὸν ἂν εἴη πάντων ὑμῶν [ἡ] τῶν ἡκροαμένων ἔργον τοῖς μὲν παραλελειμμένοις τῆς μεθόδου συγγνώμην τοῖς δ' εὐρημένοις πολλὴν ἔχειν χάριν.

## Φυσικά - Physics

### Φυσικῆς ἀκροάσεως (184a) Physics



## CONTENTS

## Βιβλίο 1

### Κεφάλαιο 1

### Κεφάλαιο 2

### Κεφάλαιο 3

### Κεφάλαιο 4

### Κεφάλαιο 5

### Κεφάλαιο 6

### Κεφάλαιο 7

### Κεφάλαιο 8

### Κεφάλαιο 9

## Βιβλίο 2

### Κεφάλαιο 1

### Κεφάλαιο 2

### Κεφάλαιο 3

### Κεφάλαιο 4

### Κεφάλαιο 5

### Κεφάλαιο 6

### Κεφάλαιο 7

### Κεφάλαιο 8

### Κεφάλαιο 9

## Βιβλίο 3

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Βιβλίο 4](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Βιβλίο 5](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Βιβλίο 6](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Βιβλίο 7](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Βιβλίο 8](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

## **Βιβλίο 1**

### **Κεφάλαιο 1**

[184a] Ἐπειδὴ τὸ εἰδέναι καὶ τὸ ἐπίστασθαι συμβαίνει περὶ πάσας τὰς μεθόδους, ὧν εἰσὶν ἀρχαὶ ἢ αἷτια ἢ στοιχεῖα, ἐκ τοῦ ταῦτα γνωρίζειν (τότε γὰρ οἴομεθα γινώσκειν ἕκαστον, ὅταν τὰ αἷτια γνωρίσωμεν τὰ πρῶτα καὶ



τὰς ἀρχὰς τὰς πρώτας καὶ μέχρι τῶν στοιχείων), δῆλον ὅτι καὶ τῆς περὶ φύσεως ἐπιστήμης πειρατέον διορίσασθαι πρῶτον τὰ περὶ τὰς ἀρχάς.

πέφυκε δὲ ἐκ τῶν γνωριμωτέρων ἡμῖν ἡ ὁδὸς καὶ σαφεστέρων ἐπὶ τὰ σαφέστερα τῇ φύσει καὶ γνωριμώτερα· οὐ γὰρ ταῦτα ἡμῖν τε γνώριμα καὶ ἀπλῶς. διόπερ ἀνάγκη τὸν τρόπον τοῦτον προάγειν ἐκ τῶν ἀσαφεστέρων μὲν τῇ φύσει ἡμῖν δὲ σαφεστέρων ἐπὶ τὰ σαφέστερα τῇ φύσει καὶ γνωριμώτερα.

ἔστι δ' ἡμῖν τὸ πρῶτον δῆλα καὶ σαφῆ τὰ συγκεχυμένα μᾶλλον· ὕστερον δ' ἐκ τούτων γίγνεται γνώριμα τὰ στοιχεῖα καὶ αἱ ἀρχαὶ διαιροῦσι ταῦτα. διὸ ἐκ τῶν καθόλου ἐπὶ τὰ καθ' ἕκαστα δεῖ προῖεναι· τὸ γὰρ ὅλον κατὰ τὴν αἴσθησιν γνωριμώτερον, τὸ δὲ καθόλου ὅλον τί ἐστι· πολλὰ γὰρ περιλαμβάνει ὡς μέρη τὸ καθόλου. πέπονθε δὲ [184b] ταῦτο τοῦτο τρόπον τινὰ καὶ τὰ ὀνόματα πρὸς τὸν λόγον· ὅλον γάρ τι καὶ ἀδιορίστως σημαίνει, οἷον ὁ κύκλος, ὁ δὲ ὀρισμὸς αὐτοῦ διαιρεῖ εἰς τὰ καθ' ἕκαστα. καὶ τὰ παῖδια τὸ μὲν πρῶτον προσαγορεύει πάντας τοὺς ἄνδρας πατέρας καὶ μητέρας τὰς γυναῖκας, ὕστερον δὲ διορίζει τούτων ἑκάτερον.

## Κεφάλαιο 2

Ἀνάγκη δ' ἦτοι μίαν εἶναι τὴν ἀρχὴν ἢ πλείους, καὶ εἰ μίαν, ἦτοι ἀκίνητον, ὥς φησι Παρμενίδης καὶ Μέλισσος, ἢ κινουμένην, ὥσπερ οἱ φυσικοί, οἱ μὲν ἀέρα φάσκοντες εἶναι οἱ δ' ὕδωρ τὴν πρώτην ἀρχήν· εἰ δὲ πλείους, ἢ πεπερασμένους ἢ ἀπείρους, καὶ εἰ πεπερασμένους πλείους δὲ μῖας, ἢ δύο ἢ τρεῖς ἢ τέτταρας ἢ ἄλλον τινὰ ἀριθμόν, καὶ εἰ ἀπείρους, ἢ οὕτως ὥσπερ Δημόκριτος, τὸ γένος ἓν, σχήματι δὲ <διαφερούσας>, ἢ εἶδει διαφερούσας ἢ καὶ ἐναντίας.

ὁμοίως δὲ ζητοῦσι καὶ οἱ τὰ ὄντα ζητοῦντες πόσα· ἐξ ὧν γὰρ τὰ ὄντα ἐστὶ πρώτων, ζητοῦσι ταῦτα πότερον ἓν ἢ πολλά, καὶ εἰ πολλά, πεπερασμένα ἢ ἄπειρα, ὥστε τὴν ἀρχὴν καὶ τὸ στοιχεῖον ζητοῦσι πότερον ἓν ἢ πολλά. τὸ μὲν οὖν εἰ ἓν καὶ ἀκίνητον τὸ ὃν σκοπεῖν οὐ περὶ φύσεώς ἐστι σκο[185a] πεῖν· ὥσπερ γὰρ καὶ τῷ γεωμέτρῃ οὐκέτι λόγος ἔστι πρὸς τὸν ἀνελόντα τὰς ἀρχάς, ἀλλ' ἦτοι ἐτέρας ἐπιστήμης ἢ πασῶν κοινῆς, οὕτως οὐδὲ τῷ περὶ ἀρχῶν· οὐ γὰρ ἔτι ἀρχὴ ἔστιν, εἰ ἓν μόνον καὶ οὕτως ἓν ἔστιν. ἢ γὰρ ἀρχὴ τινὸς ἢ τινῶν.

ὅμοιον δὲ τὸ σκοπεῖν εἰ οὕτως ἓν καὶ πρὸς ἄλλην θέσιν ὁποιοῦν διαλέγεσθαι τῶν λόγου ἕνεκα λεγομένων (οἷον τὴν Ἡρακλείτειον, ἢ εἴ τις φαίη ἄνθρωπον ἓνα τὸ ὃν εἶναι), ἢ λύειν λόγον ἐριστικόν, ὅπερ ἀμφοτέρω μὲν

ἔχουσιν οἱ λόγοι, καὶ ὁ Μελίσσου καὶ ὁ Παρμενίδου· καὶ γὰρ ψευδῆ λαμβάνουσι καὶ ἀσυλλόγιστοί εἰσιν· μᾶλλον δ' ὁ Μελίσσου φορτικὸς καὶ οὐκ ἔχων ἀπορίαν, ἀλλ' ἐνὸς ἀτόπου δοθέντος τὰ ἄλλα συμβαίνει· τοῦτο δὲ οὐδὲν χαλεπόν.

ἡμῖν δ' ὑποκείσθω τὰ φύσει ἢ πάντα ἢ ἕνια κινούμενα εἶναι· δῆλον δ' ἐκ τῆς ἐπαγωγῆς. ἅμα δ' οὐδὲ λύειν ἅπαντα προσήκει, ἀλλ' ἢ ὅσα ἐκ τῶν ἀρχῶν τις ἐπιδεικνὺς ψεύδεται, ὅσα δὲ μή, οὗ, οἷον τὸν τετραγωνισμόν τὸν μὲν διὰ τῶν τμημάτων γεωμετρικοῦ διαλῦσαι, τὸν δὲ Ἀντιφώντος οὐ γεωμετρικοῦ· οὐ μὴν ἀλλ' ἐπειδὴ περὶ φύσεως μὲν οὗ, φυσικὰς δὲ ἀπορίας συμβαίνει λέγειν αὐτοῖς, ἴσως ἔχει καλῶς ἐπὶ μικρὸν διαλεχθῆναι περὶ αὐτῶν· ἔχει γὰρ φιλοσοφίαν ἢ σκέψις.

ἀρχὴ δὲ οἰκειοτάτη πασῶν, ἐπειδὴ πολλαχῶς λέγεται τὸ ὄν, πῶς λέγουσιν οἱ λέγοντες εἶναι ἓν τὰ πάντα, πότερον οὐσίαν τὰ πάντα ἢ ποσὰ ἢ ποιὰ, καὶ πάλιν πότερον οὐσίαν μίαν τὰ πάντα, οἷον ἄνθρωπον ἓνα ἢ ἵππον ἓνα ἢ ψυχὴν μίαν, ἢ ποιὸν ἓν δὲ τοῦτο, οἷον λευκὸν ἢ θερμὸν ἢ τῶν ἄλλων τι τῶν τοιούτων. ταῦτα γὰρ πάντα διαφέρει τε πολὺ καὶ ἀδύνατα λέγειν.

εἰ μὲν γὰρ ἔσται καὶ οὐσία καὶ ποιὸν καὶ ποσόν, καὶ ταῦτα εἴτ' ἀπολελυμένα ἀπ' ἀλλήλων εἴτε μή, πολλὰ τὰ ὄντα·

εἰ δὲ πάντα ποιὸν ἢ ποσόν, εἴτ' οὕσης οὐσίας εἴτε μὴ οὕσης, ἄτοπον, εἰ δεῖ ἄτοπον λέγειν τὸ ἀδύνατον. οὐθὲν γὰρ τῶν ἄλλων χωριστόν ἐστι παρὰ τὴν οὐσίαν· πάντα γὰρ καθ' ὑποκειμένου λέγεται τῆς οὐσίας.

Μελίσσος δὲ τὸ ὄν ἄπειρον εἶναι φησιν. ποσὸν ἄρα τι τὸ ὄν· τὸ γὰρ ἄπειρον ἐν τῷ ποσῷ, οὐσίαν δὲ ἄπειρον εἶναι ἢ ποιότητα ἢ [185b] πάθος οὐκ ἐνδέχεται εἰ μὴ κατὰ συμβεβηκός, εἰ ἅμα καὶ ποσὰ ἄττα εἶεν· ὁ γὰρ τοῦ ἀπείρου λόγος τῷ ποσῷ προσχρῆται, ἀλλ' οὐκ οὐσία οὐδὲ τῷ ποιῷ. εἰ μὲν τοίνυν καὶ οὐσία ἔστι καὶ ποσόν, δύο καὶ οὐχ ἓν τὸ ὄν· εἰ δ' οὐσία μόνον, οὐκ ἄπειρον, οὐδὲ μέγεθος ἔξει οὐδέν· ποσὸν γάρ τι ἔσται.

ἔτι ἐπεὶ καὶ αὐτὸ τὸ ἓν πολλαχῶς λέγεται ὥσπερ καὶ τὸ ὄν, σκεπτέον τίνα τρόπον λέγουσιν εἶναι ἓν τὸ πᾶν. λέγεται δ' ἓν ἢ τὸ συνεχές ἢ τὸ ἀδιαίρετον ἢ ὧν ὁ λόγος ὁ αὐτὸς καὶ εἷς ὁ τοῦ τί ἦν εἶναι, ὥσπερ μέθυ καὶ οἶνος.

εἰ μὲν τοίνυν συνεχές, πολλὰ τὸ ἓν· εἰς ἄπειρον γὰρ διαιρετὸν τὸ συνεχές.

(ἔχει δ' ἀπορίαν περὶ τοῦ μέρους καὶ τοῦ ὅλου, ἴσως δὲ οὐ πρὸς τὸν λόγον

ἀλλ' αὐτὴν καθ' αὐτήν, πότερον ἐν ἡ πλείω τὸ μέρος καὶ τὸ ὅλον, καὶ πῶς ἐν ἡ πλείω, καὶ εἰ πλείω, πῶς πλείω, καὶ περὶ τῶν μερῶν τῶν μὴ συνεχῶν· καὶ εἰ τῷ ὅλῳ ἐν ἑκάτερον ὡς ἀδιαίρετον, ὅτι καὶ αὐτὰ αὐτοῖς.)

ἀλλὰ μὴν εἰ ὡς ἀδιαίρετον, οὐθὲν ἔσται ποσὸν οὐδὲ ποιόν, οὐδὲ δὴ ἄπειρον τὸ ὄν, ὥσπερ Μέλισσός φησιν, οὐδὲ πεπερασμένον, ὥσπερ Παρμενίδης· τὸ γὰρ πέρας ἀδιαίρετον, οὐ τὸ πεπερασμένον.

ἀλλὰ μὴν εἰ τῷ λόγῳ ἐν τὰ ὄντα πάντα ὡς λώπιον καὶ ἱμάτιον, τὸν Ἡρακλείτου λόγον συμβαίνει λέγειν αὐτοῖς· ταὐτὸν γὰρ ἔσται ἀγαθῷ καὶ κακῷ εἶναι, καὶ ἀγαθῷ καὶ μὴ ἀγαθῷ εἶναι-ὥστε ταὐτὸν ἔσται ἀγαθὸν καὶ οὐκ ἀγαθόν, καὶ ἄνθρωπος καὶ ἵππος, καὶ οὐ περὶ τοῦ ἐν εἶναι τὰ ὄντα ὁ λόγος ἔσται ἀλλὰ περὶ τοῦ μηδέν-καὶ τὸ τοιῶδὲ εἶναι καὶ τοσῶδὲ ταῦτόν.

ἐθορυβοῦντο δὲ καὶ οἱ ὕστεροι τῶν ἀρχαίων ὅπως μὴ ἅμα γένηται αὐτοῖς τὸ αὐτὸ ἐν καὶ πολλά. διὸ οἱ μὲν τὸ ἐστὶν ἀφεῖλον, ὥσπερ Λυκόφρων, οἱ δὲ τὴν λέξιν μετερρύθμιζον, ὅτι ὁ ἄνθρωπος οὐ λευκός ἐστίν ἀλλὰ λελεύκωται, οὐδὲ βαδίζων ἐστὶν ἀλλὰ βαδίζει, ἵνα μὴ ποτε τὸ ἐστὶ προσάπτοντες πολλά εἶναι ποιῶσι τὸ ἐν, ὡς μοναχῶς λεγομένου τοῦ ἐνὸς ἢ τοῦ ὄντος. πολλά δὲ τὰ ὄντα ἢ λόγῳ (οἷον ἄλλο τὸ λευκῷ εἶναι καὶ μουσικῷ, τὸ δ' αὐτὸ ἄμφω· πολλά ἄρα τὸ ἐν) ἢ διαιρέσει, ὥσπερ τὸ ὅλον καὶ τὰ μέρη. ἐνταῦθα [186a] δὲ ἤδη ἠπόρουν, καὶ ὠμολόγουν τὸ ἐν πολλά εἶναι-ὥσπερ οὐκ ἐνδεχόμενον ταὐτὸν ἐν τε καὶ πολλά εἶναι, μὴ τάντικείμενα δέ· ἔστι γὰρ τὸ ἐν καὶ δυνάμει καὶ ἐντελεχείᾳ.

### Κεφάλαιο 3

Τόν τε δὴ τρόπον τοῦτον ἐπιούσιν ἀδύνατον φαίνεται τὰ ὄντα ἐν εἶναι, καὶ ἐξ ὧν ἐπιδεικνύουσι, λύειν οὐ χαλεπόν. ἀμφοτέρω γὰρ ἐριστικῶς συλλογίζονται, καὶ Μέλισσος καὶ Παρμενίδης [καὶ γὰρ ψευδῇ λαμβάνουσι καὶ ἀσυλλόγιστοί εἰσιν αὐτῶν οἱ λόγοι· μᾶλλον δ' ὁ Μελίσσου φορτικὸς καὶ οὐκ ἔχων ἀπορίαν, ἀλλ' ἐνὸς ἀτόπου δοθέντος τᾶλλα συμβαίνει· τοῦτο δ' οὐθὲν χαλεπόν]. ὅτι μὲν οὖν πα ραλογίζεται Μέλισσος, δῆλον· οἴεται γὰρ εἰληφέναι, εἰ τὸ γενόμενον ἔχει ἀρχὴν ἅπαν, ὅτι καὶ τὸ μὴ γενόμενον οὐκ ἔχει. εἶτα καὶ τοῦτο ἄτοπον, τὸ παντὸς εἶναι ἀρχήντοῦ πράγματος καὶ μὴ τοῦ χρόνου, καὶ γενέσεως μὴ τῆς ἀπλῆς ἀλλὰ καὶ ἀλλοιώσεως, ὥσπερ οὐκ ἀθρόας γιγνομένης μεταβολῆς. ἔπειτα διὰ τί ἀκίνητον, εἰ ἐν; ὥσπερ γὰρ καὶ τὸ μέρος ἐν ὄν, τοδὶ τὸ ὕδωρ, κινεῖται ἐν ἑαυτῷ, διὰ τί οὐ καὶ τὸ πᾶν; ἔπειτα ἀλλοιώσεις διὰ τί οὐκ ἂν εἴη; ἀλλὰ μὴν οὐδὲ τῷ εἶδει οἷόν τε ἐν εἶναι, πλὴν τῷ ἐξ οὗ (οὕτως

δὲ ἓν καὶ τῶν φυσικῶν τινες λέγουσιν, ἐκείνως δ' οὕ). ἄνθρωπος γὰρ ἵππου ἕτερον τῷ εἶδει καὶ τάναντία ἀλλήλων.

καὶ πρὸς Παρμενίδην δὲ ὁ αὐτὸς τρόπος τῶν λόγων, καὶ εἴ τινες ἄλλοι εἰσὶν ἴδιοι· καὶ ἡ λύσις τῇ μὲν ὅτι ψευδῆς τῇ δὲ ὅτι οὐ συμπεραίνεται, ψευδῆς μὲν ἢ ἀπλῶς λαμβάνει τὸ ὄν λέγεσθαι, λεγομένου πολλαχῶς, ἀσυμπεράντος δὲ ὅτι, εἰ μόνον τὰ λευκὰ ληφθεῖη, σημαίνοντος ἓν τοῦ λευκοῦ, οὐθὲν ἦττον πολλὰ τὰ λευκὰ καὶ οὐχ ἓν· οὔτε γὰρ τῇ συνεχείᾳ ἓν ἔσται τὸ λευκὸν οὔτε τῷ λόγῳ. ἄλλο γὰρ ἔσται τὸ εἶναι λευκῷ καὶ τῷ δεδεγμένῳ. καὶ οὐκ ἔσται παρὰ τὸ λευκὸν οὐθὲν χωριστόν· οὐ γὰρ ἢ χωριστὸν ἀλλὰ τῷ εἶναι ἕτερον τὸ λευκὸν καὶ ὧ ὑπάρχει. ἀλλὰ τοῦτο Παρμενίδης οὕτω συνεώρα.

ἀνάγκη δὲ λαβεῖν μὴ μόνον ἓν σημαίνειν τὸ ὄν, καθ' οὗ ἂν κατηγορηθῇ, ἀλλὰ καὶ ὅπερ ὄν καὶ ὅπερ ἓν. τὸ γὰρ συμβεβηκὸς καθ' ὑποκειμένου τινὸς λέγεται, ὥστε ὧ συμβέβηκε τὸ ὄν, οὐκ ἔσται (ἕτερον γὰρ [186b] τοῦ ὄντος)· ἔσται τι ἄρα οὐκ ὄν. οὐ δὲ ἔσται ἄλλῳ ὑπάρχον τὸ ὅπερ ὄν. οὐ γὰρ ἔσται ὄν τι αὐτὸ εἶναι, εἰ μὴ πολλὰ τὸ ὄν σημαίνει οὕτως ὥστε εἶναι τι ἕκαστον. ἀλλ' ὑπόκειται τὸ ὄν σημαίνειν ἓν.

εἰ οὖν τὸ ὅπερ ὄν μηδενὶ συμ βέβηκεν ἀλλὰ <τὰ ἄλλα> ἐκείνῳ, τί μᾶλλον τὸ ὅπερ ὄν σημαίνει τὸ ὄν ἢ μὴ ὄν; εἰ γὰρ ἔσται τὸ ὅπερ ὄν [ταῦτό] καὶ λευκόν, τὸ λευκῷ δ' εἶναι μὴ ἔστιν ὅπερ ὄν (οὐδὲ γὰρ συμβεβηκέναι αὐτῷ οἶόν τε τὸ ὄν· οὐδὲν γὰρ ὄν ὃ οὐχ ὅπερ ὄν), οὐκ ἄρα ὄν τὸ λευκόν· οὐχ οὕτω δὲ ὥσπερ τι μὴ ὄν, ἀλλ' ὅλως μὴ ὄν. τὸ ἄρα ὅπερ ὄν οὐκ ὄν· ἀληθές γὰρ εἶπεῖν ὅτι λευκόν, τοῦτο δὲ οὐκ ὄν ἐσήμαινεν. ὥστε καὶ τὸ λευκὸν σημαίνει ὅπερ ὄν· πλείῳ ἄρα σημαίνει τὸ ὄν.

οὐ τοίνυν οὐδὲ μέγεθος ἔξει τὸ ὄν, εἴπερ ὅπερ ὄν τὸ ὄν· ἐκατέρῳ γὰρ ἕτερον τὸ εἶναι τῶν μορίων.

ὅτι δὲ διαιρεῖται τὸ ὅπερ ὄν εἰς ὅπερ ὄν τι ἄλλο, καὶ τῷ λόγῳ φανερόν, οἶον ὁ ἄνθρωπος εἰ ἔστιν ὅπερ ὄν τι, ἀνάγκη καὶ τὸ ζῶον ὅπερ ὄν τι εἶναι καὶ τὸ δίπουν. εἰ γὰρ μὴ ὅπερ ὄν τι, συμβεβηκότα ἔσται. ἢ οὖν τῷ ἀνθρώπῳ ἢ ἄλλῳ τινὶ ὑποκειμένῳ. ἀλλ' ἀδύνατον·

συμβεβηκός τε γὰρ λέγεται τοῦτο, ἢ ὃ ἐνδέχεται ὑπάρχειν καὶ μὴ ὑπάρχειν, ἢ οὗ ἐν τῷ λόγῳ ὑπάρχει τὸ ὧ συμβέβηκεν [ἢ ἐν ὧ ὁ λόγος ὑπάρχει ὧ συμβέβηκεν] (οἶον τὸ μὲν καθῆσθαι ὡς χωριζόμενον, ἐν δὲ τῷ σιμῷ ὑπάρχει ὁ λόγος ὁ τῆς ρίνος ἢ φαμὲν συμβεβηκέναι τὸ σιμόν)· ἔτι ὅσα ἐν τῷ ὀριστικῷ

λόγῳ ἔνεστιν ἢ ἐξ ὧν ἐστίν, ἐν τῷ λόγῳ τῷ τούτων οὐκ ἐνυπάρχει ὁ λόγος ὁ τοῦ ὅλου, οἷον ἐν τῷ δίποδι ὁ τοῦ ἀνθρώπου ἢ ἐν τῷ λευκῷ ὁ τοῦ λευκοῦ ἀνθρώπου. εἰ τοίνυν ταῦτα τοῦτον ἔχει τὸν τρόπον καὶ τῷ ἀνθρώπῳ συμβέβηκε τὸ δίπουν, ἀνάγκη χωριστὸν εἶναι αὐτό, ὥστε ἐνδέχοιτο ἂν μὴ δίπουν εἶναι τὸν ἄνθρωπον, ἢ ἐν τῷ λόγῳ τῷ τοῦ δίποδος ἐνέσται ὁ τοῦ ἀνθρώπου λόγος. ἀλλ' ἀδύνατον· ἐκεῖνο γὰρ ἐν τῷ ἐκείνου λόγῳ ἔνεστιν.

εἰ δ' ἄλλῳ συμβέβηκε τὸ δίπουν καὶ τὸ ζῶον, καὶ μὴ ἔστιν ἐκάτερον ὅπερ ὄν τι, καὶ ὁ ἄνθρωπος ἂν εἴη τῶν συμβεβηκότων ἐτέρῳ. ἀλλὰ τὸ ὅπερ ὄν ἔστω μηδενὶ συμβεβηκός, καὶ καθ' οὗ ἄμφω [καὶ ἐκάτερον], καὶ τὸ ἐκ τούτων λεγέσθω.

ἐξ ἀδιαιρέτων ἄρα τὸ πᾶν; [187a] ἔνιοι δ' ἐνέδοσαν τοῖς λόγοις ἀμφοτέροις, τῷ μὲν ὅτι πάντα ἔν, εἰ τὸ ὄν ἐν σημαίνει, ὅτι ἔστι τὸ μὴ ὄν, τῷ δὲ ἐκ τῆς διχοτομίας, ἄτομα ποιήσαντες μεγέθη. φανερόν δὲ καὶ ὅτι οὐκ ἀληθὲς ὥς, εἰ ἐν σημαίνει τὸ ὄν καὶ μὴ οἷόν τε ἅμα τὴν ἀντίφασιν, οὐκ ἔσται οὐθὲν μὴ ὄν· οὐθὲν γὰρ κωλύει, μὴ ἀπλῶς εἶναι, ἀλλὰ μὴ ὄν τι εἶναι τὸ μὴ ὄν. τὸ δὲ δὴ φάναι, παρ' αὐτὸ τὸ ὄν εἰ μὴ τι ἔσται ἄλλο, ἐν πάντα ἔσεσθαι, ἄτοπον. τίς γὰρ μανθάνει αὐτὸ τὸ ὄν εἰ μὴ τὸ ὅπερ ὄν τι εἶναι; εἰ δὲ τοῦτο, οὐδὲν ὅμως κωλύει πολλὰ εἶναι τὰ ὄντα, ὥσπερ εἴρηται.

ὅτι μὲν οὖν οὕτως ἐν εἶναι τὸ ὄν ἀδύνατον, δῆλον.

## Κεφάλαιο 4

Ὡς δ' οἱ φυσικοὶ λέγουσι, δύο τρόποι εἰσίν.

οἱ μὲν γὰρ ἐν ποιήσαντες τὸ [ὄν] σῶμα τὸ ὑποκείμενον, ἢ τῶν τριῶν τι ἢ ἄλλο ὃ ἐστὶ πυρὸς μὲν πυκνότερον ἀέρος δὲ λεπτότερον, τᾶλλα γεννῶσι πυκνότητι καὶ μανότητι πολλὰ ποιοῦντες (ταῦτα δ' ἐστὶν ἐναντία, καθόλου δ' ὑπεροχὴ καὶ ἔλλειψις, ὥσπερ τὸ μέγα φησὶ Πλάτων καὶ τὸ μικρόν, πλὴν ὅτι ὁ μὲν ταῦτα ποιεῖ ὕλην τὸ δὲ ἐν τὸ εἶδος, οἱ δὲ τὸ μὲν ἐν τὸ ὑποκείμενον ὕλην, τὰ δ' ἐναντία διαφορὰς καὶ εἶδη).

οἱ δ' ἐκ τοῦ ἐνὸς ἐνούσας τὰς ἐναντιότητας ἐκ κρίνεσθαι, ὥσπερ Ἀναξίμανδρος φησι, καὶ ὅσοι δ' ἐν καὶ πολλὰ φασιν εἶναι, ὥσπερ Ἐμπεδοκλῆς καὶ Ἀναξαγόρας· ἐκ τοῦ μίγματος γὰρ καὶ οὗτοι ἐκκρίνουσι τᾶλλα. διαφέρουσι δὲ ἀλλήλων τῷ τὸν μὲν περίοδον ποιεῖν τούτων, τὸν δ' ἅπαξ, καὶ τὸν μὲν ἄπειρα, τὰ τε ὁμοιομερῆ καὶ τάναντία, τὸν δὲ τὰ καλούμενα στοιχεῖα

μόνον.

ἔοικε δὲ Ἀναξαγόρας ἄπειρα οὕτως οἰηθῆναι διὰ τὸ ὑπολαμβάνειν τὴν κοινὴν δόξαν τῶν φυσικῶν εἶναι ἀληθῆ, ὥς οὐ γιγνομένου οὐδε νὸς ἐκ τοῦ μὴ ὄντος (διὰ τοῦτο γὰρ οὕτω λέγουσιν, ἦν ὁμοῦ πάντα, καὶ τὸ γίγνεσθαι τοιόνδε καθέστηκεν ἀλλοιοῦσθαι, οἱ δὲ σύγκρισιν καὶ διάκρισιν). ἔτι δ' ἐκ τοῦ γίγνεσθαι ἐξ ἀλλήλων τάναντία· ἐνυπῆρχεν ἄρα· εἰ γὰρ πᾶν μὲν τὸ γιγνόμενον ἀνάγκη γίγνεσθαι ἢ ἐξ ὄντων ἢ ἐκ μὴ ὄντων, τούτων δὲ τὸ μὲν ἐκ μὴ ὄντων γίγνεσθαι ἀδύνατον (περὶ γὰρ ταύτης ὁμογνωμονοῦσι τῆς δόξης ἅπαντες οἱ περὶ φύσεως), τὸ λοιπὸν ἤδη συμβαίνειν ἐξ ἀνάγκης ἐνόμισαν, ἐξ ὄντων μὲν καὶ ἐνυπαρχόντων γίγνεσθαι, διὰ μικρότητα δὲ τῶν ὄγκων ἐξ [187b] ἀναισθήτων ἡμῖν. διό φασι πᾶν ἐν παντὶ μεμῖχθαι, διότι πᾶν ἐκ παντὸς ἐώρων γιγνόμενον· φαίνεσθαι δὲ διαφέροντα καὶ προσαγορεύεσθαι ἕτερα ἀλλήλων ἐκ τοῦ μάλιστα ὑπερέχοντος διὰ πλῆθος ἐν τῇ μίξει τῶν ἀπείρων· εἰλικρινῶς μὲν γὰρ ὅλον λευκὸν ἢ μέλαν ἢ γλυκὺ ἢ σάρκα ἢ ὀστοῦν οὐκ εἶναι, ὅτου δὲ πλεῖστον ἕκαστον ἔχει, τοῦτο δοκεῖν εἶναι τὴν φύσιν τοῦ πράγματος.

εἰ δὴ τὸ μὲν ἄπειρον ἢ ἄπειρον ἄγνωστον, τὸ μὲν κατὰ πλῆθος ἢ κατὰ μέγεθος ἄπειρον ἄγνωστον πόσον τι, τὸ δὲ κατ' εἶδος ἄπειρον ἄγνωστον ποῖόν τι. τῶν δ' ἀρχῶν ἀπείρων οὐσῶν καὶ κατὰ πλῆθος καὶ κατ' εἶδος, ἀδύνατον εἰδέναι τὰ ἐκ τούτων. οὕτω γὰρ εἰδέναι τὸ σύνθετον ὑπολαμβάνομεν, ὅταν εἰδῶμεν ἐκ τίνων καὶ πόσων ἐστίν. ἔτι δ' εἰ ἀνάγκη, οὐ τὸ μόριον ἐνδέχεται ὀπηλικονοῦν εἶναι κατὰ μέγεθος καὶ μικρότητα, καὶ αὐτὸ ἐνδέχεσθαι (λέγω δὲ τῶν τοιούτων τι μορίων, εἰς ὃ ἐνυπάρχον διαιρεῖται τὸ ὅλον), εἰ δὴ ἀδύνατον ζῶον ἢ φυτὸν ὀπηλικονοῦν εἶναι κατὰ μέγεθος καὶ μικρότητα, φανερόν ὅτι οὐδὲ τῶν μορίων ὀτιοῦν· ἔσται γὰρ καὶ τὸ ὅλον ὁμοίως. σὰρξ δὲ καὶ ὀστοῦν καὶ τὰ τοιαῦτα μόρια ζώου, καὶ οἱ καρποὶ τῶν φυτῶν. δῆλον τοίνυν ὅτι ἀδύνατον σάρκα ἢ ὀστοῦν ἢ ἄλλο τι ὀπηλι κονοῦν εἶναι τὸ μέγεθος ἢ ἐπὶ τὸ μεῖζον ἢ ἐπὶ τὸ ἔλαττον.

ἔτι εἰ πάντα μὲν ἐνυπάρχει τὰ τοιαῦτα ἐν ἀλλήλοις, καὶ μὴ γίγνεται ἀλλ' ἐκκρίνεται ἐνόντα, λέγεται δὲ ἀπὸ τοῦ πλείονος, γίγνεται δὲ ἐξ ὅτουοῦν ὀτιοῦν (οἷον ἐκ σαρκὸς ὕδωρ ἐκκρινόμενον καὶ σὰρξ ἐξ ὕδατος), ἅπαν δὲ σῶμα πεπερασμένον ἀναιρεῖται ὑπὸ σώματος πεπερασμένου, φανερόν ὅτι οὐκ ἐνδέχεται ἐν ἐκάστω ἕκαστον ὑπάρχειν. ἀφαιρεθείσης γὰρ ἐκ τοῦ ὕδατος σαρκός, καὶ πάλιν ἄλλης γενομένης ἐκ τοῦ λοιποῦ ἀποκρίσει, εἰ καὶ ἀεὶ ἐλάττων ἔσται ἢ ἐκκρινόμενη, ἀλλ' ὅμως οὐχ ὑπερβαλεῖ μέγεθός τι τῇ μικρότητι. ὥστ' εἰ μὲν στήσεται ἡ ἔκκρισις, οὐχ ἅπαν ἐν παντὶ ἐνέσται (ἐν

γὰρ τῷ λοιπῷ ὕδατι οὐκ ἐνυπάρξει σὰρξ), εἰ δὲ μὴ στήσεται ἀλλ' ἀεὶ ἔξει ἀφαίρεσιν, ἐν πεπερασμένῳ μεγέθει ἴσα πεπερασμένα ἐνέσται ἅπειρα τὸ πλῆθος· τοῦτο δ' ἀδύνατον. πρὸς δὲ τούτοις, εἰ ἅπαν μὲν σῶμα ἀφαιρεθέντος τινὸς ἔλαττον ἀνάγκη γίγνεσθαι, τῆς δὲ σαρκὸς ὥριστα τὸ ποσὸν καὶ μεγέθει καὶ μικρότητι, φανερόν ὅτι ἐκ τῆς ἐλαχίστης [188a] σαρκὸς οὐθὲν ἐκκριθήσεται σῶμα· ἔσται γὰρ ἐλάττων τῆς ἐλαχίστης.

ἔτι δ' ἐν τοῖς ἀπείροις σώμασιν ἐνυπάρχοντες ἂν ἤδη σὰρξ ἅπειρος καὶ αἷμα καὶ ἐγκέφαλος, κεχωρισμένα μέντοι ἀπ' ἀλλήλων <οὐ>, οὐθὲν δ' ἦττον ὄντα, καὶ ἅπειρον ἕκαστον· τοῦτο δ' ἄλογον.

τὸ δὲ μηδέποτε διακριθήσεσθαι οὐκ εἰδότης μὲν λέγεται, ὀρθῶς δὲ λέγεται· τὰ γὰρ πάθη ἀχώριστα· εἰ οὖν μέμικται τὰ χρώματα καὶ αἱ ἔξεις, ἐὰν διακριθῶσιν, ἔσται τι λευκὸν καὶ ὑγιεινὸν οὐχ ἕτερόν τι ὄν οὐδὲ καθ' ὑποκειμένου. ὥστε ἄτοπος τὰ ἀδύνατα ζητῶν ὁ νοῦς, εἴπερ βούλεται μὲν διακρίναι, τοῦτο δὲ ποιῆσαι ἀδύνατον καὶ κατὰ τὸ ποσὸν καὶ κατὰ τὸ ποιόν, κατὰ μὲν τὸ ποσὸν ὅτι οὐκ ἔστιν ἐλάχιστον μέγεθος, κατὰ δὲ τὸ ποιόν ὅτι ἀχώριστα τὰ πάθη.

οὐκ ὀρθῶς δὲ οὐδὲ τὴν γένεσιν λαμβάνει τῶν ὁμοειδῶν. ἔστι μὲν γὰρ ὡς ὁ πηλὸς εἰς πηλοὺς διαιρεῖται, ἔστι δ' ὡς οὐ. καὶ οὐχ ὁ αὐτὸς τρόπος, ὡς πλίνθοι ἐξ οἰκίας καὶ οἰκία ἐκ πλίνθων, οὕτω [δὲ] καὶ ὕδωρ καὶ ἀήρ ἐξ ἀλλήλων καὶ εἰσὶ καὶ γίνονται. βέλτιόν τε ἐλάττω καὶ πεπερασμένα λαβεῖν, ὅπερ ποιεῖ Ἐμπεδοκλῆς.

## Κεφάλαιο 5

Πάντες δὲ τάναντία ἀρχὰς ποιοῦσιν οἳ τε λέγοντες ὅτι ἐν τὸ πᾶν καὶ μὴ κινούμενον (καὶ γὰρ Παρμενίδης θερμὸν καὶ ψυχρὸν ἀρχὰς ποιεῖ, ταῦτα δὲ προσαγορεύει πῦρ καὶ γῆν) καὶ οἱ μανὸν καὶ πυκνόν, καὶ Δημόκριτος τὸ πλῆρες καὶ κενόν, ὧν τὸ μὲν ὡς ὄν τὸ δὲ ὡς οὐκ ὄν εἶναι φησιν· ἔτι θέσει, σχήματι, τάξει. ταῦτα δὲ γένη ἐναντίων· θέσεως ἄνω κάτω, πρόσθεν ὀπίσθεν, σχήματος γεγωνιωμένον ἀγώνιον, εὐθὺ περιφερές.

ὅτι μὲν οὖν τάναντία πως πάντες ποιοῦσι τὰς ἀρχάς, δῆλον. καὶ τοῦτο εὐλόγως· δεῖ γὰρ τὰς ἀρχὰς μήτε ἐξ ἀλλήλων εἶναι μήτε ἐξ ἄλλων, καὶ ἐκ τούτων πάντα· τοῖς δὲ ἐναντίοις τοῖς πρώτοις ὑπάρχει ταῦτα, διὰ μὲν τὸ πρῶτα εἶναι μὴ ἐξ ἄλλων, διὰ δὲ τὸ ἐναντία μὴ ἐξ ἀλλήλων.

ἀλλὰ δεῖ τοῦτο καὶ ἐπὶ τοῦ λόγου σκέψασθαι πῶς συμβαίνει.

ληπτέον δὴ πρῶτον ὅτι πάντων τῶν ὄντων οὐθὲν οὔτε ποιεῖν πέφυκεν οὔτε πάσχειν τὸ τυχὸν ὑπὸ τοῦ τυχόντος, οὐδὲ γίγνεται ὅτιοῦν ἐξ ὅτουοῦν, ἂν μή τις λαμβάνη κατὰ συμβεβηκός· πῶς γὰρ ἂν γένοιτο λευκὸν ἐκ μουσικοῦ, πλὴν εἰ μὴ συμβεβηκὸς εἴη τῷ μὴ λευκῷ ἢ τῷ μέλανι τὸ μουσικόν; ἀλλὰ λευκὸν μὲν γίγνεται ἐξ οὐ λευκοῦ, καὶ τούτου οὐκ ἐκ παντὸς [188b] ἀλλ' ἐκ μέλανος ἢ τῶν μεταξύ, καὶ μουσικὸν οὐκ ἐκ μουσικοῦ, πλὴν οὐκ ἐκ παντὸς ἀλλ' ἐξ ἀμούσου ἢ εἴ τι αὐτῶν ἐστὶ μεταξύ.

οὐδὲ δὴ φθείρεται εἰς τὸ τυχὸν πρῶτον, οἷον τὸ λευκὸν οὐκ εἰς τὸ μουσικόν, πλὴν εἰ μὴ ποτε κατὰ συμβεβηκός, ἀλλ' εἰς τὸ μὴ λευκόν, καὶ οὐκ εἰς τὸ τυχὸν ἀλλ' εἰς τὸ μέλαν ἢ τὸ μεταξύ· ὥς δ' αὐτως καὶ τὸ μουσικὸν εἰς τὸ μὴ μουσικόν, καὶ τοῦτο οὐκ εἰς τὸ τυχὸν ἀλλ' εἰς τὸ ἄμουσον ἢ εἴ τι αὐτῶν ἐστὶ μεταξύ.

ὁμοίως δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων, ἐπεὶ καὶ τὰ μὴ ἀπλᾶ τῶν ὄντων ἀλλὰ σύνθετα κατὰ τὸν αὐτὸν ἔχει λόγον· ἀλλὰ διὰ τὸ μὴ τὰς ἀντικειμένους διαθέσεις ὠνομάσθαι λανθάνει τοῦτο συμβαῖνον. ἀνάγκη γὰρ πᾶν τὸ ἡρμωσμένον ἐξ ἀναρμόστου γίνεσθαι καὶ τὸ ἀναρμόστον ἐξ ἡρμωσμένου, καὶ φθείρεσθαι τὸ ἡρμωσμένον εἰς ἀναρμοστίαν, καὶ ταύτην οὐ τὴν τυχοῦσαν ἀλλὰ τὴν ἀντικειμένην. διαφέρει δ' οὐθὲν ἐπὶ ἀρμονίας εἰπεῖν ἢ τάξεως ἢ συνθέσεως· φανερόν γὰρ ὅτι ὁ αὐτὸς λόγος. ἀλλὰ μὴν καὶ οἰκία καὶ ἀνδριάς καὶ ὅτιοῦν ἄλλο γίγνεται ὁμοίως· ἢ τε γὰρ οἰκία γίγνεται ἐκ τοῦ μὴ συγκεῖσθαι ἀλλὰ διηρῆσθαι ταδὶ ὠδί, καὶ ὁ ἀνδριάς καὶ τῶν ἐσχηματισμένων τι ἐξ ἀσχημοσύνης· καὶ ἕκαστον τούτων τὰ μὲν τάξις, τὰ δὲ σύνθεσις τίς ἐστίν.

εἰ τοίνυν τοῦτ' ἔστιν ἀληθές, ἅπαν ἂν γίγνοιτο τὸ γιγνόμενον καὶ φθείροιτο τὸ φθειρόμενον ἢ ἐξ ἐναντίων ἢ εἰς ἐναντία καὶ τὰ τούτων μεταξύ. τὰ δὲ μεταξύ ἐκ τῶν ἐναντίων ἐστίν, οἷον χρώματα ἐκ λευκοῦ καὶ μέλανος· ὥστε πάντ' ἂν εἴη τὰ φύσει γιγνόμενα ἢ ἐναντία ἢ ἐξ ἐναντίων.

μέχρι μὲν οὖν ἐπὶ τοσοῦτον σχεδὸν συνηκολουθήκασι καὶ τῶν ἄλλων οἱ πλεῖστοι, καθάπερ εἴπομεν πρότερον· πάντες γὰρ τὰ στοιχεῖα καὶ τὰς ὑπ' αὐτῶν καλουμένας ἀρχάς, καίπερ ἄνευ λόγου τιθέντες, ὅμως τὰναντία λέγουσιν, ὥσπερ ὑπ' αὐτῆς τῆς ἀληθείας ἀναγκασθέντες. διαφέρουσι δ' ἀλλήλων τῷ τοὺς μὲν πρότερα τοὺς δ' ὕστερα λαμβάνειν, καὶ τοὺς μὲν γνωριμώτερα κατὰ τὸν λόγον τοὺς δὲ κατὰ τὴν αἴσθησιν (οἱ μὲν γὰρ θερμὸν



καὶ ψυχρόν, οἱ δ' ὑγρὸν καὶ ξηρόν, ἕτεροι δὲ περιττὸν καὶ ἄρτιον ἢ νεῖκος καὶ φιλίαν αἱ τίας τίθενται τῆς γενέσεως· ταῦτα δ' ἀλλήλων διαφέρει κατὰ τὸν εἰρημένον τρόπον),

ὥστε ταῦτ' ἀ λέγειν πως καὶ ἕτερα ἀλλήλων, ἕτερα μὲν ὥσπερ καὶ δοκεῖ τοῖς πλείστοις, ταῦτ' [189a] δὲ ἢ ἀνάλογον· λαμβάνουσι γὰρ ἐκ τῆς αὐτῆς συστοιχίας· τὰ μὲν γὰρ περιέχει, τὰ δὲ περιέχεται τῶν ἐναντίων. ταύτη τε δὴ ὡσαύτως λέγουσι καὶ ἐτέρως, καὶ χεῖρον καὶ βέλτιον, καὶ οἱ μὲν γνωριμώτερα κατὰ τὸν λόγον, ὥσπερ εἴρηται πρότερον, οἱ δὲ κατὰ τὴν αἴσθησιν (τὸ μὲν γὰρ καθόλου κατὰ τὸν λόγον γνώριμον, τὸ δὲ καθ' ἕκαστον κατὰ τὴν αἴσθησιν· ὁ μὲν γὰρ λόγος τοῦ καθόλου, ἡ δ' αἴσθησις τοῦ κατὰ μέρος), οἷον τὸ μὲν μέγα καὶ τὸ μικρὸν κατὰ τὸν λόγον, τὸ δὲ μανὸν καὶ τὸ πυκνὸν κατὰ τὴν αἴσθησιν.

ὅτι μὲν οὖν ἐναντίας δεῖ τὰς ἀρχὰς εἶναι, φανερόν.

## Κεφάλαιο 6

Ἐχόμενον δ' ἂν εἶη λέγειν πότερον δύο ἢ τρεῖς ἢ πλείους εἰσίν.

μίαν μὲν γὰρ οὐχ οἷόν τε, ὅτι οὐχ ἓν τὰ ἐναντία, ἀπείρους δ', ὅτι οὐκ ἐπιστητὸν τὸ ὄν ἔσται, μία τε ἐναντιώσις ἐν παντὶ γένει ἐνί, ἡ δ' οὐσία ἐν τι γένος, καὶ ὅτι ἐνδέχεται ἐκ πεπερασμένων, βέλτιον δ' ἐκ πεπερασμένων, ὥσπερ Ἐμπεδοκλῆς, ἡ ἐξ ἀπείρων· πάντα γὰρ ἀποδιδόναι οἴεται ὅσαπερ Ἀναξαγόρας ἐκ τῶν ἀπείρων. ἔτι δὲ ἔστιν ἄλλα ἄλλων πρότερα ἐναντία, καὶ γίγνεται ἕτερα ἐξ ἀλλήλων, οἷον γλυκὺ καὶ πικρὸν καὶ λευκὸν καὶ μέλαν, τὰς δὲ ἀρχὰς ἀεὶ δεῖ μένειν.

ὅτι μὲν οὖν οὔτε μία οὔτε ἀπειροί, δῆλον ἐκ τούτων·

ἐπεὶ δὲ πεπερασμένοι, τὸ μὴ ποιεῖν δύο μόνον ἔχει τινὰ λόγον· ἀπορήσειε γὰρ ἂν τις πῶς ἢ ἡ πυκνότης τὴν μανότητα ποιεῖν τι πέφυκεν ἢ αὕτη τὴν πυκνότητα. ὁμοίως δὲ καὶ ἄλλη ὅποια οὖν ἐναντιότης· οὐ γὰρ ἡ φιλία τὸ νεῖκος συνάγει καὶ ποιεῖ τι ἐξ αὐτοῦ, οὐδὲ τὸ νεῖκος ἐξ ἐκείνης, ἀλλ' ἄμφω ἕτερόν τι τρίτον. ἔνιοι δὲ καὶ πλείω λαμβάνουσιν ἐξ ὧν κατασκευάζουσι τὴν τῶν ὄντων φύσιν.

πρὸς δὲ τούτοις ἔτι κἂν τόδε τις ἀπορήσειεν, εἰ μή τις ἐτέραν ὑποθήσει τοῖς ἐναντίοις φύσιν· οὐθενὸς γὰρ ὁρῶμεν τῶν ὄντων οὐσίαν τάναντία, τὴν δ' ἀρχὴν οὐ καθ' ὑποκειμένου δεῖ λέγεσθαι τινος. ἔσται γὰρ ἀρχὴ τῆς ἀρχῆς· τὸ

γὰρ ὑποκείμενον ἀρχή, καὶ πρότερον δοκεῖ τοῦ κατηγορουμένου εἶναι. ἔτι οὐκ εἶναι φαμεν οὐσίαν ἐναντίαν οὐσίᾳ· πῶς οὖν ἐκ μὴ οὐσιῶν οὐσία ἂν εἴη; ἢ πῶς ἂν πρότερον μὴ οὐσία οὐσίας εἴη;

διόπερ εἴ τις τὸν τε πρότερον ἀληθῆ νομίσειεν εἶναι λόγον καὶ τοῦτον, ἀναγκαῖον, [189b] εἰ μέλλει διασώσειν ἀμφοτέρους αὐτούς, ὑποτιθέναι τι τρίτον, ὥσπερ φασὶν οἱ μίαν τινὰ φύσιν εἶναι λέγοντες τὸ πᾶν, οἶον ὕδωρ ἢ πῦρ ἢ τὸ μεταξὺ τούτων. δοκεῖ δὲ τὸ μεταξὺ μᾶλλον· πῦρ γὰρ ἤδη καὶ γῆ καὶ ἀήρ καὶ ὕδωρ μετ' ἐναντιοτήτων συμπεπλεγμένα ἐστίν. διὸ καὶ οὐκ ἀλόγως ποιοῦσιν οἱ τὸ ὑποκείμενον ἕτερον τούτων ποιοῦντες, τῶν δ' ἄλλων οἱ ἄερα· καὶ γὰρ ὁ ἀήρ ἥκιστα ἔχει τῶν ἄλλων διαφορὰς αἰσθητάς· ἐχόμενον δὲ τὸ ὕδωρ. ἀλλὰ πάντες γε τὸ ἐν τοῦτο τοῖς ἐναντίοις σχηματίζουσιν, πυκνότητι καὶ μανότητι καὶ τῷ μᾶλλον καὶ ἥττον. ταῦτα δ' ἐστὶν ὅλως ὑπεροχὴ δηλονότι καὶ ἔλλειψις, ὥσπερ εἴρηται πρότερον. καὶ ἔοικε παλαιὰ εἶναι καὶ αὕτη ἡ δόξα, ὅτι τὸ ἐν καὶ ὑπεροχὴ καὶ ἔλλειψις ἀρχαὶ τῶν ὄντων εἰσὶ, πλὴν οὐ τὸν αὐτὸν τρόπον, ἀλλ' οἱ μὲν ἀρχαῖοι τὰ δύο μὲν ποιεῖν τὸ δὲ ἐν πάσχειν, τῶν δ' ὑστέρων τινὲς τούναντίον τὸ μὲν ἐν ποιεῖν τὰ δὲ δύο πάσχειν φασὶ μᾶλλον.

τὸ μὲν οὖν τρία φάσκειν τὰ στοιχεῖα εἶναι ἔκ τε τούτων καὶ ἐκ τοιούτων ἄλλων ἐπισκοποῦσι δόξειεν ἂν ἔχειν τινὰ λόγον, ὥσπερ εἵπομεν, τὸ δὲ πλείω τριῶν οὐκέτι·

πρὸς μὲν γὰρ τὸ πάσχειν ἱκανὸν τὸ ἐν, εἰ δὲ τεττάρων ὄντων δύο ἔσονται ἐναντιώσεις, δεήσει χωρὶς ἑκατέρᾳ ὑπάρχειν ἑτέραν τινὰ μεταξὺ φύσιν· εἰ δ' ἐξ ἀλλήλων δύνανται γεννᾶν δύο οὐσαι, περίεργος ἂν ἡ ἑτέρα τῶν ἐναντιώσεων εἴη. ἅμα δὲ καὶ ἀδύνατον πλείους εἶναι ἐναντιώσεις τὰς πρώτας. ἢ γὰρ οὐσία ἐν τι γένος ἐστὶ τοῦ ὄντος, ὥστε τῷ πρότερον καὶ ὕστερον διοίσουσιν ἀλλήλων αἱ ἀρχαὶ μόνον, ἀλλ' οὐ τῷ γένει· ἀεὶ γὰρ ἐν ἐνὶ γένει μία ἐναντιώσις ἐστίν, πᾶσαί τε αἱ ἐναντιώσεις ἀνάγεσθαι δοκοῦσιν εἰς μίαν.

ὅτι μὲν οὖν οὔτε ἐν τὸ στοιχεῖον οὔτε πλείω δυοῖν ἢ τριῶν, φανερόν· τούτων δὲ πότερον, καθάπερ εἵπομεν, ἀπορίαν ἔχει πολλήν.

## Κεφάλαιο 7

Ὡδ' οὖν ἡμεῖς λέγωμεν πρῶτον περὶ πάσης γενέσεως ἐπελθόντες· ἔστι γὰρ κατὰ φύσιν τὰ κοινὰ πρῶτον εἰπόντας οὕτω τὰ περὶ ἕκαστον ἴδια θεωρεῖν.

φαμέν γὰρ γίνεσθαι ἐξ ἄλλου ἄλλο καὶ ἐξ ἑτέρου ἕτερον ἢ τὰ ἀπλᾶ λέγοντες ἢ τὰ συγκείμενα. λέγω δὲ τοῦτο ὡδί. ἔστι γὰρ γίνεσθαι ἄνθρωπον μουσικόν, ἔστι δὲ τὸ μὴ μουσικὸν γίνεσθαι μουσικόν ἢ τὸν [190a] μὴ μουσικὸν ἄνθρωπον ἄνθρωπον μουσικόν. ἀπλοῦν μὲν οὖν λέγω τὸ γιγνόμενον τὸν ἄνθρωπον καὶ τὸ μὴ μουσικόν, καὶ ὃ γίγνεται ἀπλοῦν, τὸ μουσικόν· συγκείμενον δὲ καὶ ὃ γίγνεται καὶ τὸ γιγνόμενον, ὅταν τὸν μὴ μουσικὸν ἄνθρωπον φῶμεν γίνεσθαι μουσικὸν ἄνθρωπον.

τούτων δὲ τὸ μὲν οὐ μόνον λέγεται τόδε γίνεσθαι ἀλλὰ καὶ ἐκ τοῦδε, οἷον ἐκ μὴ μουσικοῦ μουσικός, τὸ δ' οὐ λέγεται ἐπὶ πάντων· οὐ γὰρ ἐξ ἀνθρώπου ἐγένετο μουσικός, ἀλλ' ἄνθρωπος ἐγένετο μουσικός.

τῶν δὲ γιγνομένων ὡς τὰ ἀπλᾶ λέγομεν γίνεσθαι, τὸ μὲν ὑπομένον γίγνεται τὸ δ' οὐχ ὑπομένον· ὁ μὲν γὰρ ἄνθρωπος ὑπομένει μουσικὸς γιγνόμενος ἄνθρωπος καὶ ἔστι, τὸ δὲ μὴ μουσικὸν καὶ τὸ ἄμουσον οὔτε ἀπλῶς οὔτε συντεθειμένον ὑπομένει.

διωρισμένων δὲ τούτων, ἐξ ἀπάντων τῶν γιγνομένων τοῦτο ἔστι λαβεῖν, ἐάν τις ἐπιβλέψῃ ὥσπερ λέγομεν, ὅτι δεῖ τι αἰεὶ ὑποκεῖσθαι τὸ γιγνόμενον, καὶ τοῦτο εἰ καὶ ἀριθμῶ ἐστὶν ἕν, ἀλλ' εἶδει γε οὐχ ἕν· τὸ γὰρ εἶδει λέγω καὶ λόγῳ ταῦτόν· οὐ γὰρ ταῦτόν τὸ ἀνθρώπῳ καὶ τὸ ἀμούσῳ εἶναι. καὶ τὸ μὲν ὑπομένει, τὸ δ' οὐχ ὑπομένει· τὸ μὲν μὴ ἀντικείμενον ὑπομένει (ὁ γὰρ ἄνθρωπος ὑπομένει), τὸ μὴ μουσικὸν δὲ καὶ τὸ ἄμουσον οὐχ ὑπομένει, οὐδὲ τὸ ἐξ ἀμφοῖν συγκείμενον, οἷον ὁ ἄμουσος ἄνθρωπος.

τὸ δ' ἔκ τινος γίνεσθαί τι, καὶ μὴ τόδε γίνεσθαί τι, μᾶλλον μὲν λέγεται ἐπὶ τῶν μὴ ὑπομενόντων, οἷον ἐξ ἀμούσου μουσικὸν γίνεσθαι, ἐξ ἀνθρώπου δὲ οὐ· οὐ μὴν ἀλλὰ καὶ ἐπὶ τῶν ὑπομενόντων ἐνίοτε λέγεται ὡσαύτως· ἐκ γὰρ χαλκοῦ ἀνδριάντα γίνεσθαί φαμεν, οὐ τὸν χαλκὸν ἀνδριάντα. τὸ μέντοι ἐκ τοῦ ἀντικειμένου καὶ μὴ ὑπομένοντος ἀμφοτέρως λέγεται, καὶ ἐκ τοῦδε τόδε καὶ τόδε τόδε· καὶ γὰρ ἐξ ἀμούσου καὶ ὁ ἄμουσος γίγνεται μουσικός. διὸ καὶ ἐπὶ τοῦ συγκειμένου ὡσαύτως· καὶ γὰρ ἐξ ἀμούσου ἀνθρώπου καὶ ὁ ἄμουσος ἄνθρωπος γίνεσθαι λέγεται μουσικός.

πολλαχῶς δὲ λεγομένου τοῦ γίνεσθαι, καὶ τῶν μὲν οὐ γίνεσθαι ἀλλὰ τόδε τι γίνεσθαι, ἀπλῶς δὲ γίνεσθαι τῶν οὐσιῶν μόνον,

κατὰ μὲν τᾶλλα φανερόν ὅτι ἀνάγκη ὑποκεῖσθαι τι τὸ γιγνόμενον (καὶ γὰρ ποσὸν καὶ ποιὸν καὶ πρὸς ἕτερον [καὶ ποτὲ] καὶ ποῦ γίγνεται ὑποκειμένου

τινὸς διὰ τὸ μόνην τὴν οὐσίαν μηθενὸς κατ' ἄλλου λέγεσθαι ὑποκειμένου, [190b] τὰ δ' ἄλλα πάντα κατὰ τῆς οὐσίας).

ὅτι δὲ καὶ αἱ οὐσίαι καὶ ὅσα [ἄλλα] ἀπλῶς ὄντα ἐξ ὑποκειμένου τινὸς γίγνεται, ἐπισκοποῦντι γένοιτο ἂν φανερόν. ἀεὶ γὰρ ἔστι ὃ ὑπόκειται, ἐξ οὗ τὸ γινόμενον, οἷον τὰ φυτὰ καὶ τὰ ζῶα ἐκ σπέρματος.

γίγνεται δὲ τὰ γινόμενα ἀπλῶς τὰ μὲν μετασχηματίζει, οἷον ἀνδριάς, τὰ δὲ προσθέσει, οἷον τὰ αὐξανόμενα, τὰ δ' ἀφαιρέσει, οἷον ἐκ τοῦ λίθου ὁ Ἑρμῆς, τὰ δὲ συνθέσει, οἷον οἰκία, τὰ δ' ἀλλοιώσει, οἷον τὰ τρεπόμενα κατὰ τὴν ὕλην.

πάντα δὲ τὰ οὕτω γινόμενα φανερόν ὅτι ἐξ ὑποκειμένων γίγνεται.

ὥστε δῆλον ἐκ τῶν εἰρημένων ὅτι τὸ γινόμενον ἅπαν ἀεὶ συνθετόν ἐστι, καὶ ἔστι μὲν τι γινόμενον, ἔστι δέ τι ὃ τοῦτο γίγνεται, καὶ τοῦτο διττόν· ἢ γὰρ τὸ ὑποκείμενον ἢ τὸ ἀντικείμενον. λέγω δὲ ἀντικεῖσθαι μὲν τὸ ἄμουσον, ὑποκεῖσθαι δὲ τὸν ἄνθρωπον, καὶ τὴν μὲν ἀσχημοσύνην καὶ τὴν ἀμορφίαν καὶ τὴν ἀταξίαν τὸ ἀντικείμενον, τὸν δὲ χαλκὸν ἢ τὸν λίθον ἢ τὸν χρυσὸν τὸ ὑποκείμενον.

φανερόν οὖν ὥς, εἴπερ εἰσὶν αἰτίαι καὶ ἀρχαὶ τῶν φύσει ὄντων, ἐξ ὧν πρώτων εἰσὶ καὶ γεγόνاسι μὴ κατὰ συμβεβηκὸς ἀλλ' ἕκαστον ὃ λέγεται κατὰ τὴν οὐσίαν, ὅτι γίγνεται πᾶν ἕκ τε τοῦ ὑποκειμένου καὶ τῆς μορφῆς· σύγκειται γὰρ ὁ μουσικὸς ἄνθρωπος ἐξ ἀνθρώπου καὶ μουσικοῦ τρόπου τινά· διαλύσεις γὰρ [τοὺς λόγους] εἰς τοὺς λόγους τοὺς ἐκείνων. δῆλον οὖν ὥς γίγνεται ἂν τὰ γινόμενα ἐκ τούτων.

ἔστι δὲ τὸ μὲν ὑποκείμενον ἀριθμῷ μὲν ἓν, εἶδει δὲ δύο (ὁ μὲν γὰρ ἄνθρωπος καὶ ὁ χρυσὸς καὶ ὅλως ἡ ὕλη ἀριθμητή· τόδε γάρ τι μᾶλλον, καὶ οὐ κατὰ συμβεβηκὸς ἐξ αὐτοῦ γίγνεται τὸ γινόμενον· ἡ δὲ στέρησις καὶ ἡ ἐναντίωσις συμβεβηκός). ἔν δὲ τὸ εἶδος, οἷον ἡ τάξις ἢ ἡ μουσικὴ ἢ τῶν ἄλλων τι τῶν οὕτω κατηγορουμένων. διὸ ἔστι μὲν ὥς δύο λεκτέον εἶναι τὰς ἀρχάς, ἔστι δ' ὥς τρεῖς· καὶ ἔστι μὲν ὥς τάναντία, οἷον εἴ τις λέγοι τὸ μουσικὸν καὶ τὸ ἄμουσον ἢ τὸ θερμὸν καὶ τὸ ψυχρὸν ἢ τὸ ἡρμοσμένον καὶ τὸ ἀνάρμοστον, ἔστι δ' ὥς οὗ· ὑπ' ἀλλήλων γὰρ πάσχειν τάναντία ἀδύνατον. λύεται δὲ καὶ τοῦτο διὰ τὸ ἄλλο εἶναι τὸ ὑποκείμενον· τοῦτο γὰρ οὐκ ἐναντίον. ὥστε οὔτε πλείους τῶν ἐναντίων αἱ ἀρχαὶ τρόπον τινά, ἀλλὰ δύο ὥς εἰπεῖν τῷ ἀριθμῷ, οὗτ' αὖ παντελῶς δύο διὰ [191a] τὸ ἕτερον ὑπάρχειν

τὸ εἶναι αὐτοῖς, ἀλλὰ τρεῖς· ἕτερον γὰρ τὸ ἀνθρώπῳ καὶ τὸ ἀμούσῳ εἶναι, καὶ τὸ ἀσχηματίστῳ καὶ χαλκῷ.

πόσαι μὲν οὖν αἱ ἀρχαὶ τῶν περὶ γενέσιν φυσικῶν, καὶ πῶς ποσαί, εἴρηται· καὶ δῆλόν ἐστιν ὅτι δεῖ ὑποκεῖσθαι τι τοῖς ἐναντίοις καὶ τὰναντία δύο εἶναι. τρόπον δέ τινα ἄλλον οὐκ ἀναγκαῖον· ἱκανὸν γὰρ ἔσται τὸ ἕτερον τῶν ἐναντίων ποιεῖν τῇ ἀπουσίᾳ καὶ παρουσίᾳ τὴν μεταβολήν.

ἡ δὲ ὑποκειμένη φύσις ἐπιστητὴ κατ' ἀναλογίαν. ὥς γὰρ πρὸς ἀνδριάντα χαλκὸς ἢ πρὸς κλίνην ξύλον ἢ πρὸς τῶν ἄλλων τι τῶν ἐχόντων μορφήν [ἢ ὕλη καὶ] τὸ ἀμορφον ἔχει πρὶν λαβεῖν τὴν μορφήν, οὕτως αὕτη πρὸς οὐσίαν ἔχει καὶ τὸ τόδε τι καὶ τὸ ὄν.

μία μὲν οὖν ἀρχὴ αὕτη, οὐχ οὕτω μία οὔσα οὐδὲ οὕτως ὄν ὥς τὸ τόδε τι, μία δὲ ἣς ὁ λόγος, ἔτι δὲ τὸ ἐναντίον τούτῳ, ἡ στέρησις. ταῦτα δὲ πῶς δύο καὶ πῶς πλείω, εἴρηται ἐν τοῖς ἄνω. πρῶτον μὲν οὖν ἐλέχθη ὅτι ἀρ καὶ τὰναντία μόνον, ὕστερον δ' ὅτι ἀνάγκη καὶ ἄλλο τι ὑποκεῖσθαι καὶ εἶναι τρία· ἐκ δὲ τῶν νῦν φανερόν τίς ἡ διαφορὰ τῶν ἐναντίων, καὶ πῶς ἔχουσιν αἱ ἀρχαὶ πρὸς ἀλλήλας, καὶ τί τὸ ὑποκείμενον. πότερον δὲ οὐσία τὸ εἶδος ἢ τὸ ὑποκείμενον, οὕτω δῆλον. ἀλλ' ὅτι αἱ ἀρχαὶ τρεῖς καὶ πῶς τρεῖς, καὶ τίς ὁ τρόπος αὐτῶν, δῆλον. πόσαι μὲν οὖν καὶ τίνες εἰσὶν αἱ ἀρχαί, ἐκ τούτων θεωρεῖσθωσαν.

## Κεφάλαιο 8

Ὅτι δὲ μοναχῶς οὕτω λύεται καὶ ἡ τῶν ἀρχαίων ἀπορία, λέγωμεν μετὰ ταῦτα.

ζητοῦντες γὰρ οἱ κατὰ φιλοσοφίαν πρῶτοι τὴν ἀλήθειαν καὶ τὴν φύσιν τῶν ὄντων ἐξετράπησαν οἷον ὁδὸν τινα ἄλλην ἀπωσθέντες ὑπὸ ἀπειρίας, καὶ φασιν οὔτε γίνεσθαι τῶν ὄντων οὐδὲν οὔτε φθείρεσθαι διὰ τὸ ἀναγκαῖον μὲν εἶναι γίνεσθαι τὸ γιγνόμενον ἢ ἐξ ὄντος ἢ ἐκ μὴ ὄντος, ἐκ δὲ τούτων ἀμφοτέρων ἀδύνατον εἶναι· οὔτε γὰρ τὸ ὄν γίνεσθαι (εἶναι γὰρ ἤδη) ἔκ τε μὴ ὄντος οὐδὲν ἂν γενέσθαι· ὑποκεῖσθαι γάρ τι δεῖν. καὶ οὕτω δὴ τὸ ἐφεξῆς συμβαῖνον αὖξοντες οὐδ' εἶναι πολλά φασιν ἀλλὰ μόνον αὐτὸ τὸ ὄν. ἐκεῖνοι μὲν οὖν ταύτην ἔλαβον τὴν δόξαν διὰ τὰ εἰρημένα·

ἡμεῖς δὲ λέγομεν ὅτι τὸ ἐξ ὄντος ἢ μὴ ὄντος γίνεσθαι, ἢ τὸ μὴ ὄν ἢ τὸ ὄν ποιεῖν τι ἢ πάσχειν ἢ ὁτιοῦν τόδε γίνεσθαι, ἓνα μὲν τρόπον οὐθὲν

[191b]διαφέρει ἢ τὸ τὸν ἰατρὸν ποιεῖν τι ἢ πάσχειν ἢ ἐξ ἱατροῦ εἶναι τι ἢ γίνεσθαι, ὥστ' ἐπειδὴ τοῦτο διχῶς λέγεται, δῆλον ὅτι καὶ τὸ ἐξ ὄντος καὶ τὸ ὄν ἢ ποιεῖν ἢ πάσχειν. οἰκοδομεῖ μὲν οὖν ὁ ἰατρὸς οὐχ ἢ ἰατρὸς ἀλλ' ἢ οἰκοδόμος, καὶ λευκὸς γίγνεται οὐχ ἢ ἰατρὸς ἀλλ' ἢ μέλας· ἰατρεύει δὲ καὶ ἀνίατρος γίγνεται ἢ ἰατρός. ἐπεὶ δὲ μάλιστα λέγομεν κυρίως τὸν ἰατρὸν ποιεῖν τι ἢ πάσχειν ἢ γίνεσθαι ἐξ ἱατροῦ, ἐὰν ἢ ἰατρὸς ταῦτα πάσχη ἢ ποιῇ ἢ γίγνηται, δῆλον ὅτι καὶ τὸ ἐκ μὴ ὄντος γίνεσθαι τοῦτο σημαίνει, τὸ ἢ μὴ ὄν.

ὅπερ ἐκεῖνοι μὲν οὐ διελόντες ἀπέστησαν, καὶ διὰ ταύτην τὴν ἄγνοιαν τοσοῦτον προσηγνόησαν, ὥστε μηθὲν οἶεσθαι γίνεσθαι μηδ' εἶναι τῶν ἄλλων, ἀλλ' ἀνελεῖν πᾶσαν τὴν γένεσιν·

ἡμεῖς δὲ καὶ αὐτοὶ φαμεν γίνεσθαι μὲν μηθὲν ἀπλῶς ἐκ μὴ ὄντος, πῶς μέντοι γίνεσθαι ἐκ μὴ ὄντος, οἷον κατὰ συμβεβηκός (ἐκ γὰρ τῆς στερήσεως, ὅ ἐστι καθ' αὐτὸ μὴ ὄν, οὐκ ἐνυπάρχοντος γίγνεται τι· θαυμάζεται δὲ τοῦτο καὶ ἀδύνατον οὕτω δοκεῖ γίνεσθαι τι, ἐκ μὴ ὄντος)·

ὡσαύτως δὲ οὐδ' ἐξ ὄντος οὐδὲ τὸ ὄν γίνεσθαι, πλὴν κατὰ συμβεβηκός· οὕτω δὲ καὶ τοῦτο γίνεσθαι, τὸν αὐτὸν τρόπον οἷον εἰ ἐκ ζώου ζῶον γίγνοιτο καὶ ἐκ τινὸς ζώου τι ζῶον· οἷον εἰ κύων <ἐκ κυνὸς ἢ ἵππος> ἐξ ἵππου γίγνοιτο. γίγνοιτο μὲν γὰρ ἂν οὐ μόνον ἐκ τινὸς ζώου ὁ κύων, ἀλλὰ καὶ ἐκ ζώου, ἀλλ' οὐχ ἢ ζῶον· ὑπάρχει γὰρ ἤδη τοῦτο· εἰ δέ τι μέλλει γίνεσθαι ζῶον μὴ κατὰ συμβεβηκός, οὐκ ἐκ ζώου ἔσται, καὶ εἴ τι ὄν, οὐκ ἐξ ὄντος· οὐδ' ἐκ μὴ ὄντος· τὸ γὰρ ἐκ μὴ ὄντος εἴρηται ἡμῖν τί σημαίνει, ὅτι ἢ μὴ ὄν.

ἔτι δὲ καὶ τὸ εἶναι ἅπαν ἢ μὴ εἶναι οὐκ ἀναιροῦμεν.

εἷς μὲν δὴ τρόπος οὗτος, ἄλλος δ' ὅτι ἐνδέχεται ταῦτ' ἀλέγειν κατὰ τὴν δύναμιν καὶ τὴν ἐνέργειαν· τοῦτο δ' ἐν ἄλλοις διώρισται δι' ἀκριβεΐας μᾶλλον. ὥσθ' (ὅπερ ἐλέγομεν) αἱ ἀπορίαι λύονται δι' ἃς ἀναγκαζόμενοι ἀναιροῦσι τῶν εἰρημένων ἔνια· διὰ γὰρ τοῦτο τοσοῦτον καὶ οἱ πρότερον ἐξετράπησαν τῆς ὁδοῦ τῆς ἐπὶ τὴν γένεσιν καὶ φθορὰν καὶ ὅλως μεταβολήν· αὕτη γὰρ ἂν ὀφθεῖσα ἡ φύσις ἅπασαν ἔλυσεν αὐτῶν τὴν ἄγνοιαν.

## Κεφάλαιο 9

Ἡμμένοι μὲν οὖν καὶ ἕτεροί τινές εἰσιν αὐτῆς, ἀλλ' οὐχ ἱκανῶς.

πρῶτον μὲν γὰρ ὁμολογοῦσιν ἀπλῶς γίνεσθαι τι ἐκ μὴ [192a] ὄντος, ἢ Παρμενίδην ὀρθῶς λέγειν· εἴτα φαίνεται αὐτοῖς, εἴπερ ἐστὶν ἀριθμῷ μία, καὶ δυνάμει μία μόνον εἶναι. τοῦτο δὲ διαφέρει πλεῖστον.

ἡμεῖς μὲν γὰρ ὕλην καὶ στέρησιν ἕτερόν φαμεν εἶναι, καὶ τούτων τὸ μὲν οὐκ ὄν εἶναι κατὰ συμβεβηκός, τὴν ὕλην, τὴν δὲ στέρησιν καθ' αὐτήν, καὶ τὴν μὲν ἐγγὺς καὶ οὐσίαν πως, τὴν ὕλην, τὴν δὲ οὐδαμῶς· οἱ δὲ τὸ μὴ ὄν τὸ μέγα καὶ τὸ μικρὸν ὁμοίως, ἢ τὸ συναμφοτέρων ἢ τὸ χωρὶς ἐκάτερον. ὥστε παντελῶς ἕτερος ὁ τρόπος οὗτος τῆς τριάδος κάκεῖνος. μέχρι μὲν γὰρ δεῦρο προῆλθον, ὅτι δεῖ τινὰ ὑποκεῖσθαι φύσιν, ταύτην μέντοι μίαν ποιοῦσιν· καὶ γὰρ εἴ τις δυάδα ποιεῖ, λέγων μέγα καὶ μικρὸν αὐτήν, οὐθὲν ἦττον ταῦτό ποιεῖ· τὴν γὰρ ἑτέραν παρεῖδεν. ἡ μὲν γὰρ ὑπομένουσα συναιτία τῇ μορφῇ τῶν γιγνομένων ἐστίν, ὥσπερ μήτηρ· ἡ δ' ἑτέρα μοῖρα τῆς ἐναντιώσεως πολλάκις ἂν φαντασθεῖη τῷ πρὸς τὸ κακοποιὸν αὐτῆς ἀτενίζοντι τὴν διάνοιαν οὐδ' εἶναι τὸ παράπαν. ὄντος γάρ τινος θεοῦ καὶ ἀγαθοῦ καὶ ἐφετοῦ, τὸ μὲν ἐναντίον αὐτῷ φαμεν εἶναι, τὸ δὲ ὃ πέφυκεν ἐφίεσθαι καὶ ὀρέγεσθαι αὐτοῦ κατὰ τὴν αὐτοῦ φύσιν. τοῖς δὲ συμβαίνει τὸ ἐναντίον ὀρέγεσθαι τῆς αὐτοῦ φθορᾶς. καίτοι οὔτε αὐτὸ αὐτοῦ οἶόν τε ἐφίεσθαι τὸ εἶδος διὰ τὸ μὴ εἶναι ἐνδεές, οὔτε τὸ ἐναντίον (φθαρτικὰ γὰρ ἀλλήλων τὰ ἐναντία), ἀλλὰ τοῦτ' ἐστὶν ἡ ὕλη, ὥσπερ ἂν εἰ θῆλυ ἄρρενος καὶ αἰσχροῦ καλοῦ· πλὴν οὐ καθ' αὐτὸ αἰσχρόν, ἀλλὰ κατὰ συμβεβηκός, οὐδὲ θῆλυ, ἀλλὰ κατὰ συμβεβηκός.

φθείρεται δὲ καὶ γίγνεται ἔστι μὲν ὥς, ἔστι δ' ὥς οὔ. ὥς μὲν γὰρ τὸ ἐν ὧ, καθ' αὐτὸ φθείρεται (τὸ γὰρ φθειρόμενον ἐν τούτῳ ἐστίν, ἢ στέρησις)· ὥς δὲ κατὰ δύναμιν, οὐ καθ' αὐτό, ἀλλ' ἄφθαρτον καὶ ἀγέννητον ἀνάγκη αὐτὴν εἶναι. εἴτε γὰρ ἐγίγνετο, ὑποκεῖσθαι τι δεῖ πρῶτον ἐξ οὗ ἐνυπάρχοντος· τοῦτο δ' ἐστὶν αὐτὴ ἡ φύσις, ὥστ' ἔσται πρὶν γενέσθαι (λέγω γὰρ ὕλην τὸ πρῶτον ὑποκείμενον ἐκάστω, ἐξ οὗ γίγνεται τι ἐνυπάρχοντος μὴ κατὰ συμβεβηκός)· εἴτε φθείρεται, εἰς τοῦτο ἀφίξεται ἔσχατον, ὥστε ἐφθαρμένη ἔσται πρὶν φθαρῆναι.

περὶ δὲ τῆς κατὰ τὸ εἶδος ἀρχῆς, πότερον μία ἢ πολλὰ καὶ τίς ἢ τίνες εἰσὶν, δι' ἀκριβείας τῆς πρώτης φιλοσοφίας ἔργον ἐστὶν διορίσαι, ὥστ' εἰς ἐκεῖνον τὸν και[192b] ρὸν ἀποκείσθω. περὶ δὲ τῶν φυσικῶν καὶ φθαρτῶν εἰδῶν ἐν τοῖς ὕστερον δεικνυμένοις ἐροῦμεν.

ὅτι μὲν οὖν εἰσὶν ἀρχαί, καὶ τίνες, καὶ πόσαι τὸν ἀριθμόν, διωρίσθω ἡμῖν οὕτως· πάλιν δ' ἄλλην ἀρχὴν ἀρξάμενοι λέγωμεν.

## Βιβλίο 2

❖ός.



## Κεφάλαιο 1

Τῶν ὄντων τὰ μὲν ἔστι φύσει, τὰ δὲ δι' ἄλλας αἰτίας,

φύσει μὲν τὰ τε ζῶα καὶ τὰ μέρη αὐτῶν καὶ τὰ φυτὰ καὶ τὰ ἀπλᾶ τῶν σωμάτων, οἷον γῆ καὶ πῦρ καὶ ἀήρ καὶ ὕδωρ (ταῦτα γὰρ εἶναι καὶ τὰ τοιαῦτα φύσει φαμέν), πάντα δὲ ταῦτα φαίνεται διαφέροντα πρὸς τὰ μὴ φύσει συνεστῶτα. τούτων μὲν γὰρ ἕκαστον ἐν ἑαυτῷ ἀρχὴν ἔχει κινήσεως καὶ στάσεως, τὰ μὲν κατὰ τόπον, τὰ δὲ κατ' αὔξησιν καὶ φθίσιν, τὰ δὲ κατ' ἀλλοίωσιν· κλίνη δὲ καὶ ἱμάτιον, καὶ εἴ τι τοιοῦτον ἄλλο γένος ἐστίν, ἢ μὲν τετύχηκε τῆς κατηγορίας ἐκάστης καὶ καθ' ὅσον ἐστὶν ἀπὸ τέχνης, οὐδεμίαν ὁρμὴν ἔχει μεταβολῆς ἔμφυτον, ἢ δὲ συμβέβηκεν αὐτοῖς εἶναι λιθίνοις ἢ γηϊνοῖς ἢ μικτοῖς ἐκ τούτων, ἔχει, καὶ κατὰ τοσοῦτον, ὥς οὔσης τῆς φύσεως ἀρχῆς τινὸς καὶ αἰτίας τοῦ κινεῖσθαι καὶ ἡρεμεῖν ἐν ᾧ ὑπάρχει πρῶτως καθ' αὐτὸ καὶ μὴ κατὰ συμβεβηκός

(λέγω δὲ τὸ μὴ κατὰ συμβεβηκός, ὅτι γένοιτ' ἂν αὐτὸς αὐτῷ τις αἴτιος ὑγιείας ὣν ἱατρός· ἀλλ' ὅμως οὐ καθὸ ὑγιαίνεται τὴν ἱατρικὴν ἔχει, ἀλλὰ συμβέβηκεν τὸν αὐτὸν ἱατρὸν εἶναι καὶ ὑγιαζόμενον· διὸ καὶ χωρίζεται ποτ' ἀπ' ἀλλήλων). ὁμοίως δὲ καὶ τῶν ἄλλων ἕκαστον τῶν ποιουμένων· οὐδὲν γὰρ αὐτῶν ἔχει τὴν ἀρχὴν ἐν ἑαυτῷ τῆς ποιήσεως, ἀλλὰ τὰ μὲν ἐν ἄλλοις καὶ ἔξωθεν, οἷον οἰκία καὶ τῶν ἄλλων τῶν χειροκμήτων ἕκαστον, τὰ δ' ἐν αὐτοῖς μὲν ἀλλ' οὐ καθ' αὐτά, ὅσα κατὰ συμβεβηκός αἴτια γένοιτ' ἂν αὐτοῖς.

φύσις μὲν οὖν ἐστὶ τὸ ῥηθέν· φύσιν δὲ ἔχει ὅσα τοιαύτην ἔχει ἀρχήν. καὶ ἔστιν πάντα ταῦτα οὐσία· ὑποκείμενον γάρ τι, καὶ ἐν ὑποκειμένῳ ἐστὶν ἡ φύσις αἰεί.

κατὰ φύσιν δὲ ταῦτά τε καὶ ὅσα τούτοις ὑπάρχει καθ' αὐτά, οἷον τῷ πυρὶ φέρεσθαι ἄνω· τοῦτο γὰρ φύσις μὲν οὐκ [193a] ἔστιν οὐδ' ἔχει φύσιν, φύσει δὲ καὶ κατὰ φύσιν ἐστίν.

τί μὲν οὖν ἐστὶν ἡ φύσις, εἴρηται, καὶ τί τὸ φύσει καὶ κατὰ φύσιν. ὥς δ' ἔστιν ἡ φύσις, πειρᾶσθαι δεικνύναι γελοῖον· φανερόν γὰρ ὅτι τοιαῦτα τῶν ὄντων ἐστὶν πολλά. τὸ δὲ δεικνύναι τὰ φανερά διὰ τῶν ἀφανῶν οὐ δυναμένου κρίνειν ἐστὶ τὸ δι' αὐτὸ καὶ μὴ δι' αὐτὸ γνῶριμον (ὅτι δ' ἐνδέχεται τοῦτο πάσχειν, οὐκ ἄδηλον· συλλογίσαιτο γὰρ ἂν τις ἐκ γενετῆς ὣν τυφλὸς περὶ χρωμάτων), ὥστε ἀνάγκη τοῖς τοιούτοις περὶ τῶν ὀνομάτων εἶναι τὸν λόγον,

νοεῖν δὲ μηδέν.

δοκεῖ δ' ἡ φύσις καὶ ἡ οὐσία τῶν φύσει ὄντων ἐνίοις εἶναι τὸ πρῶτον ἐνυπάρχον ἐκάστω, ἀρρύθμιστον <ὄν>καθ' ἑαυτό, οἷον κλίνης φύσις τὸ ξύλον, ἀνδριάντος δ' ὁ χαλκός.

σημεῖον δέ φησιν Ἀντιφῶν ὅτι, εἴ τις κατορύξειε κλίνην καὶ λάβοι δύναμιν ἢ σηπεδῶν ὥστε ἀνεῖναι βλαστόν, οὐκ ἂν γενέσθαι κλίνην ἀλλὰ ξύλον, ὡς τὸ μὲν κατὰ συμβεβηκὸς ὑπάρχον, τὴν κατὰ νόμον διάθεσιν καὶ τὴν τέχνην, τὴν δ' οὐσίαν οὖσαν ἐκείνην ἣ καὶ διαμένει ταῦτα πάσχουσα συνεχῶς.

εἰ δὲ καὶ τούτων ἕκαστον πρὸς ἕτερόν τι ταῦτὸ τοῦτο πέπονθεν (οἷον ὁ μὲν χαλκὸς καὶ ὁ χρυσοὺς πρὸς ὕδωρ, τὰ δ' ὅστ' αἱ καὶ ξύλα πρὸς γῆν, ὁμοίως δὲ καὶ τῶν ἄλλων ὁποῦν), ἐκεῖνο τὴν φύσιν εἶναι καὶ τὴν οὐσίαν αὐτῶν. διόπερ οἱ μὲν πῦρ, οἱ δὲ γῆν, οἱ δ' ἀέρα φασίν, οἱ δὲ ὕδωρ, οἱ δ' ἔνια τούτων, οἱ δὲ πάντα ταῦτα τὴν φύσιν εἶναι τὴν τῶν ὄντων. ὁ γάρ τις αὐτῶν ὑπέλαβε τοιοῦτον, εἴτε ἐν εἴτε πλείω, τοῦτο καὶ τοσαῦτά φησιν εἶναι τὴν ἅπασαν οὐσίαν, τὰ δὲ ἄλλα πάντα πάθη τούτων καὶ ἕξεις καὶ διαθέσεις, καὶ τούτων μὲν ὁποῦν ἰδίον (οὐ γὰρ εἶναι μεταβολὴν αὐτοῖς ἐξ αὐτῶν), τὰ δ' ἄλλα γίνεσθαι καὶ φθείρεσθαι ἀπειράκις.

ἓνα μὲν οὖν τρόπον οὕτως ἡ φύσις λέγεται, ἡ πρώτη ἐκάστω ὑποκειμένη ὕλη τῶν ἐχόντων ἐν αὐτοῖς ἀρχὴν κινήσεως καὶ μεταβολῆς,

ἄλλον δὲ τρόπον ἡ μορφή καὶ τὸ εἶδος τὸ κατὰ τὸν λόγον.

ὥσπερ γὰρ τέχνη λέγεται τὸ κατὰ τέχνην καὶ τὸ τεχνικόν, οὕτω καὶ φύσις τὸ κατὰ φύσιν [λέγεται] καὶ τὸ φυσικόν, οὔτε δὲ ἐκεῖ πω φαῖμεν ἂν ἔχειν κατὰ τὴν τέχνην οὐδέν, εἰ δυνάμει μόνον ἐστὶ κλίνη, μή πω δ' ἔχει τὸ εἶδος τῆς κλίνης, οὐδ' εἶναι τέχνην, οὔτ' ἐν τοῖς φύσει συνισταμένοις· τὸ γὰρ δυνάμει σὰρξ ἢ ὅστοῦν οὔτ' [193b] ἔχει πω τὴν ἑαυτοῦ φύσιν, πρὶν ἂν λάβῃ τὸ εἶδος τὸ κατὰ τὸν λόγον, ὃ ὀριζόμενοι λέγομεν τί ἐστὶ σὰρξ ἢ ὅστοῦν, οὔτε φύσει ἐστίν. ὥστε ἄλλον τρόπον ἡ φύσις ἂν εἴη τῶν ἐχόντων ἐν αὐτοῖς κινήσεως ἀρχὴν ἢ μορφή καὶ τὸ εἶδος, οὐ χωριστὸν ὃν ἀλλ' ἢ κατὰ τὸν λόγον. (τὸ δ' ἐκ τούτων φύσις μὲν οὐκ ἔστιν, φύσει δέ, οἷον ἄνθρωπος.)

καὶ μᾶλλον αὕτη φύσις τῆς ὕλης· ἕκαστον γὰρ τότε λέγεται ὅταν ἐντελεχεῖα ᾖ, μᾶλλον ἢ ὅταν δυνάμει. ἔτι γίνεταί ἄνθρωπος ἐξ ἀνθρώπου, ἀλλ' οὐ κλίνη ἐκ κλίνης· διὸ καὶ φασιν οὐ τὸ σχῆμα εἶναι τὴν φύσιν ἀλλὰ τὸ ξύλον, ὅτι γένοιτ' ἂν, εἰ βλαστάνοι, οὐ κλίνη ἀλλὰ ξύλον. εἰ δ' ἄρα τοῦτο φύσις, καὶ ἡ

μορφὴ φύσις· γίνεται γὰρ ἐξ ἀνθρώπου ἄνθρωπος.

ἔτι δ' ἡ φύσις ἢ λεγομένη ὡς γένεσις ὁδὸς ἐστὶν εἰς φύσιν. οὐ γὰρ ὥσπερ ἡ ἰατρεὺσις λέγεται οὐκ εἰς ἰατρικὴν ὁδὸν ἀλλ' εἰς ὑγίειαν· ἀνάγκη μὲν γὰρ ἀπὸ ἰατρικῆς οὐκ εἰς ἰατρικὴν εἶναι τὴν ἰατρεὺσιν, οὐχ οὕτω δ' ἡ φύσις ἔχει πρὸς τὴν φύσιν, ἀλλὰ τὸ φύομενον ἐκ τινὸς εἰς τὸ ἔρχεται ἢ φύεται. τί οὖν φύεται; οὐχὶ ἐξ οὗ, ἀλλ' εἰς ὅ. ἡ ἄρα μορφὴ φύσις.

ἡ δὲ μορφὴ καὶ ἡ φύσις διχῶς λέγεται· καὶ γὰρ ἡ στέρησις εἰδὸς πῶς ἐστὶν. εἰ δ' ἔστιν στέρησις καὶ ἐναντίον τι περὶ τὴν ἀπλήν γένεσιν ἢ μὴ ἔστιν, ὕστερον ἐπισκεπτέον.

## Κεφάλαιο 2

Ἐπεὶ δὲ διώρισταί ποσαχῶς ἡ φύσις, μετὰ τοῦτο θεωρητέον τί διαφέρει ὁ μαθηματικὸς τοῦ φυσικοῦ (καὶ γὰρ ἐπίπεδα καὶ στερεὰ ἔχει τὰ φυσικὰ σώματα καὶ μήκη καὶ στιγμάς, περὶ ὧν σκοπεῖ ὁ μαθηματικός).

ἔτι εἰ ἡ ἀστρολογία ἑτέρα ἢ μέρος τῆς φυσικῆς· εἰ γὰρ τοῦ φυσικοῦ τὸ τί ἐστὶν ἥλιος ἢ σελήνη εἰδέναι, τῶν δὲ συμβεβηκότων καθ' αὐτὰ μηδέν, ἄτοπον, ἄλλως τε καὶ ὅτι φαίνονται λέγοντες οἱ περὶ φύσεως καὶ περὶ σχήματος σελήνης καὶ ἡλίου, καὶ δὴ καὶ πότερον σφαιροειδῆς ἢ γῆ καὶ ὁ κόσμος ἢ οὐ.

περὶ τούτων μὲν οὖν πραγματεύεται καὶ ὁ μαθηματικός, ἀλλ' οὐχ ἡ φυσικοῦ σώματος πέρας ἕκαστον· οὐδὲ τὰ συμβεβηκότα θεωρεῖ ἢ τοιούτοις οὖσι συμβέβηκεν· διὸ καὶ χωρίζει· χωριστὰ γὰρ τῇ νοήσει κινήσεώς ἐστι, καὶ οὐδὲν διαφέρει, οὐδὲ γίνεται ψεῦδος χωριζόντων. λανθάνουσι δὲ τοῦτο ποιοῦντες καὶ οἱ τὰς ιδέας λέγοντες· τὰ γὰρ φυσικὰ [194a] χωρίζουσιν ἥττον ὄντα χωριστὰ τῶν μαθηματικῶν. γίγνοιτο δ' ἂν τοῦτο δῆλον, εἴ τις ἐκατέρων πειρῶτο λέγειν τοὺς ὅρους, καὶ αὐτῶν καὶ τῶν συμβεβηκότων. τὸ μὲν γὰρ περιττὸν ἔσται καὶ τὸ ἄρτιον καὶ τὸ εὐθὺ καὶ τὸ καμπύλον, ἔτι δὲ ἀριθμὸς καὶ γραμμὴ καὶ σχῆμα, ἄνευ κινήσεως, σὰρξ δὲ καὶ ὅστοῦν καὶ ἄνθρωπος οὐκέτι, ἀλλὰ ταῦτα ὥσπερ ῥίσι σιμὴ ἀλλ' οὐχ ὡς τὸ καμπύλον λέγεται.

δηλοῖ δὲ καὶ τὰ φυσικώτερα τῶν μαθημάτων, οἷον ὀπτική καὶ ἀρμονική καὶ ἀστρολογία· ἀνάπαλιν γὰρ τρόπον τιν' ἔχουσιν τῇ γεωμετρίας. ἡ μὲν γὰρ γεωμετρία περὶ γραμμῆς φυσικῆς σκοπεῖ, ἀλλ' οὐχ ἡ φυσική, ἡ δ' ὀπτική μαθηματικὴν μὲν γραμμὴν, ἀλλ' οὐχ ἡ μαθηματικὴ ἀλλ' ἡ φυσική.

ἐπεὶ δ' ἡ φύσις διχῶς, τό τε εἶδος καὶ ἡ ὕλη, ὥς ἂν εἰ περὶ σιμότητος σκοποῖμεν τί ἐστίν, οὕτω θεωρητέον· ὥστ' οὔτ' ἄνευ ὕλης τὰ τοιαῦτα οὔτε κατὰ τὴν ὕλην. καὶ γὰρ δὴ καὶ περὶ τούτου ἀπορήσειεν ἂν τις, ἐπεὶ δύο αἱ φύσεις, περὶ ποτέρας τοῦ φυσικοῦ. ἢ περὶ τοῦ ἐξ ἀμφοῖν; ἀλλ' εἰ περὶ τοῦ ἐξ ἀμφοῖν, καὶ περὶ ἑκατέρας. πότερον οὖν τῆς αὐτῆς ἢ ἄλλης ἑκατέραν γνωρίζειν;

εἰς μὲν γὰρ τοὺς ἀρχαίους ἀποβλέψαντι δόξειεν ἂν εἶναι τῆς ὕλης (ἐπὶ μικρὸν γάρ τι μέρος Ἐμπεδοκλῆς καὶ Δημόκριτος τοῦ εἶδους καὶ τοῦ τί ἦν εἶναι ἥψαντο)·

εἰ δὲ ἡ τέχνη μιμεῖται τὴν φύσιν, τῆς δὲ αὐτῆς ἐπιστήμης εἰδέναι τὸ εἶδος καὶ τὴν ὕλην μέχρι τοῦ (οἶον ἱατροῦ ὑγίειαν καὶ χολὴν καὶ φλέγμα, ἐν οἷς ἡ ὑγίεια, ὁμοίως δὲ καὶ οἰκοδόμου τό τε εἶδος τῆς οἰκίας καὶ τὴν ὕλην, ὅτι πλίνθοι καὶ ξύλα· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων), καὶ τῆς φυσικῆς ἂν εἴη τὸ γνωρίζειν ἀμφοτέρας τὰς φύσεις.

ἔτι τὸ οὗ ἔνεκα καὶ τὸ τέλος τῆς αὐτῆς, καὶ ὅσα τούτων ἔνεκα. ἡ δὲ φύσις τέλος καὶ οὗ ἔνεκα (ὧν γὰρ συνεχοῦς τῆς κινήσεως οὔσης ἔστι τι τέλος, τοῦτο <τὸ> ἔσχατον καὶ τὸ οὗ ἔνεκα· διὸ καὶ ὁ ποιητὴς γελοίως προήχθη εἰπεῖν “ἔχει τελευτήν, ἥσπερ οὔνεκ' ἐγένετο”· βούλεται γὰρ οὐ πᾶν εἶναι τὸ ἔσχατον τέλος, ἀλλὰ τὸ βέλτιστον)· ἐπεὶ καὶ ποιοῦσιν αἱ τέχναι τὴν ὕλην αἱ μὲν ἀπλῶς αἱ δὲ εὐεργόν, καὶ χρώμεθα ὥς ἡμῶν ἔνεκα πάντων ὑπαρχόντων (ἔσμεν γάρ πως καὶ ἡμεῖς τέλος· διχῶς γὰρ τὸ οὗ ἔνεκα· εἴρηται δ' ἐν τοῖς περὶ φιλοσοφίας). δύο [194b] δὲ αἱ ἀρχουσαι τῆς ὕλης καὶ γνωρίζουσαι τέχναι, ἡ τε χρωμένη καὶ τῆς ποιητικῆς ἢ ἀρχιτεκτονικῆς. διὸ καὶ ἡ χρωμένη ἀρχιτεκτονικὴ πως, διαφέρει δὲ ἢ ἡ μὲν τοῦ εἶδους γνωριστική, ἢ ἀρχιτεκτονική, ἡ δὲ ὡς ποιητική, τῆς ὕλης· ὁ μὲν γὰρ κυβερνήτης ποῖόν τι τὸ εἶδος τοῦ πηδαλίου γνωρίζει καὶ ἐπιτάττει, ὁ δ' ἐκ ποίου ξύλου καὶ ποίων κινήσεων ἔσται. ἐν μὲν οὖν τοῖς κατὰ τέχνην ἡμεῖς ποιοῦμεν τὴν ὕλην τοῦ ἔργου ἔνεκα, ἐν δὲ τοῖς φυσικοῖς ὑπάρχει οὔσα.

ἔτι τῶν πρὸς τι ἡ ὕλη· ἄλλω γὰρ εἶδει ἄλλη ὕλη. μέχρι δὲ πόσου τὸν φυσικὸν δεῖ εἰδέναι τὸ εἶδος καὶ τὸ τί ἐστίν; ἢ ὥσπερ ἱατρὸν νεῦρον ἢ χαλκέα χαλκόν, μέχρι τοῦ τίνος [γὰρ] ἔνεκα ἕκαστον, καὶ περὶ ταῦτα ἃ ἐστὶ χωριστὰ μὲν εἶδει, ἐν ὕλῃ δέ; ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ καὶ ἥλιος. πῶς δ' ἔχει τὸ χωριστὸν καὶ τί ἐστὶ, φιλοσοφίας ἔργον διορίσαι τῆς πρώτης.

### Κεφάλαιο 3

Διωρισμένων δὲ τούτων ἐπισκεπτέον περὶ τῶν αἰτίων, ποῖά τε καὶ πόσα τὸν ἀριθμὸν ἐστίν. Ἐπεὶ γὰρ τοῦ εἶδέναι χάριν ἢ πραγματεία, εἶδέναι δὲ οὐ πρότερον οἰόμεθα ἕκαστον πρὶν ἂν λάβωμεν τὸ διὰ τί περὶ ἕκαστον (τοῦτο δ' ἐστὶ τὸ λαβεῖν τὴν πρώτην αἰτίαν), δῆλον ὅτι καὶ ἡμῖν τοῦτο ποιητέον καὶ περὶ γενέσεως καὶ φθορᾶς καὶ πάσης τῆς φυσικῆς μεταβολῆς, ὅπως εἰδότες αὐτῶν τὰς ἀρχὰς ἀνάγειν εἰς αὐτὰς πειρώμεθα τῶν ζητουμένων ἕκαστον. ἓνα μὲν οὖν τρόπον αἴτιον λέγεται τὸ ἐξ οὗ γίγνεται τι ἐνυπάρχοντος, οἷον ὁ χαλκὸς τοῦ ἀνδριάντος καὶ ὁ ἄργυρος τῆς φιάλης καὶ τὰ τούτων γένη.

ἄλλον δὲ τὸ εἶδος καὶ τὸ παράδειγμα, τοῦτο δ' ἐστὶν ὁ λόγος ὁ τοῦ τί ἦν εἶναι καὶ τὰ τούτου γένη (οἷον τοῦ διὰ πασῶν τὰ δύο πρὸς ἓν, καὶ ὅλως ὁ ἀριθμὸς) καὶ τὰ μέρη τὰ ἐν τῷ λόγῳ.

ἔτι ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς ἡ πρώτη ἢ τῆς ἡρεμήσεως, οἷον ὁ βουλευσας αἴτιος, καὶ ὁ πατὴρ τοῦ τέκνου, καὶ ὅλως τὸ ποιοῦν τοῦ ποιουμένου καὶ τὸ μεταβάλλον τοῦ μεταβαλλομένου.

ἔτι ὡς τὸ τέλος· τοῦτο δ' ἐστὶν τὸ οὗ ἕνεκα, οἷον τοῦ περιπατεῖν ἡ ὑγίεια· διὰ τί γὰρ περιπατεῖ; φαμέν “ἵνα ὑγιαίνη”, καὶ εἰπόντες οὕτως οἰόμεθα ἀποδεδωκέναι τὸ αἴτιον. καὶ ὅσα δὴ κινήσαντος ἄλλου μεταξὺ γίγνεται τοῦ τέλους, οἷον τῆς ὑγείας ἡ ἰσχυασία ἢ ἡ [195a] κάθαρσις ἢ τὰ φάρμακα ἢ τὰ ὄργανα· πάντα γὰρ ταῦτα τοῦ τέλους ἕνεκά ἐστιν, διαφέρει δὲ ἀλλήλων ὡς ὄντα τὰ μὲν ἔργα τὰ δ' ὄργανα.

τὰ μὲν οὖν αἴτια σχεδὸν τοσαυταχῶς λέγεται,

συμβαίνει δὲ πολλαχῶς λεγομένων τῶν αἰτίων καὶ πολλὰ τοῦ αὐτοῦ αἴτια εἶναι, οὐ κατὰ συμβεβηκός, οἷον τοῦ ἀνδριάντος καὶ ἡ ἀνδριαντοποιικὴ καὶ ὁ χαλκός, οὐ καθ' ἕτερόν τι ἄλλ' ἢ ἀνδριάς, ἄλλ' οὐ τὸν αὐτὸν τρόπον, ἀλλὰ τὸ μὲν ὡς ὕλη τὸ δ' ὡς ὅθεν ἡ κίνησις. ἔστιν δέ τινα καὶ ἀλλήλων αἴτια, οἷον τὸ πονεῖν τῆς εὐεξίας καὶ αὕτη τοῦ πονεῖν· ἄλλ' οὐ τὸν αὐτὸν τρόπον, ἀλλὰ τὸ μὲν ὡς τέλος τὸ δ' ὡς ἀρχὴ κινήσεως. ἔτι δὲ τὸ αὐτὸ τῶν ἐναντίων ἐστίν· ὃ γὰρ παρὸν αἴτιον τοῦδε, τοῦτο καὶ ἀπὸν αἰτιώμεθα ἐνίστε τοῦ ἐναντίου, οἷον τὴν ἀπουσίαν τοῦ κυβερνήτου τῆς τοῦ πλοίου ἀνατροπῆς, οὗ ἦν ἡ παρουσία αἰτία τῆς σωτηρίας.

ἅπαντα δὲ τὰ νῦν εἰρημένα αἴτια εἰς τέτταρας πίπτει τρόπους τοὺς φανερωτάτους. τὰ μὲν γὰρ στοιχεῖα τῶν συλλαβῶν καὶ ἡ ὕλη τῶν σκευαστῶν καὶ τὸ πῦρ καὶ τὰ τοιαῦτα τῶν σωμάτων καὶ τὰ μέρη τοῦ ὅλου

καὶ αἱ ὑποθέσεις τοῦ συμπεράσματος ὡς τὸ ἐξ οὗ αἰτία ἐστίν, τούτων δὲ τὰ μὲν ὡς τὸ ὑποκείμενον, οἷον τὰ μέρη, τὰ δὲ ὡς τὸ τί ἦν εἶναι, τό τε ὅλον καὶ ἡ σύνθεσις καὶ τὸ εἶδος· τὸ δὲ σπέρμα καὶ ὁ ἰατρὸς καὶ ὁ βουλευσας καὶ ὅλως τὸ ποιοῦν, πάντα ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς ἢ στάσεως [ἢ κινήσεως]· τὰ δ' ὡς τὸ τέλος καὶ τ' ἀγαθὸν τῶν ἄλλων· τὸ γὰρ οὗ ἕνεκα βέλτιστον καὶ τέλος τῶν ἄλλων ἐθέλει εἶναι· διαφερέτω δὲ μηδὲν εἰπεῖν αὐτὸ ἀγαθὸν ἢ φαινόμενον ἀγαθόν.

τὰ μὲν οὖν αἰτία ταῦτα καὶ τοσαῦτά ἐστι τῷ εἶδει·

τρόποι δὲ τῶν αἰτίων ἀριθμῶ μὲν εἰσὶ πολλοί, κεφαλαιούμενοι δὲ καὶ οὗτοι ἐλάττους. λέγεται γὰρ αἰτία πολλαχῶς, καὶ αὐτῶν τῶν ὁμοειδῶν προτέρως καὶ ὑστέρωσ ἄλλο ἄλλου, οἷον ὑγιείας ἰατρὸς καὶ τεχνίτης, καὶ τοῦ διὰ πασῶν τὸ διπλάσιον καὶ ἀριθμός, καὶ ἀεὶ τὰ περιέχοντα πρὸς τὰ καθ' ἕκαστον. ἔτι δ' ὡς τὸ συμβεβηκὸς καὶ τὰ τούτων γένη, οἷον ἀνδριάντος ἄλλως Πολύκλειτος καὶ ἄλλως ἀνδριαντοποιός, ὅτι συμβέβηκε τῷ ἀνδριαντοποιῷ τὸ Πολυκλείτω εἶναι. καὶ τὰ περιέχοντα δὲ τὸ συμβεβηκός, οἷον εἰ ὁ ἄνθρωπος αἴτιος εἶη ἀνδριάντος ἢ [195b] ὅλως ζῶον. ἔστι δὲ καὶ τῶν συμβεβηκόντων ἄλλα ἄλλων πορρώτερον καὶ ἐγγύτερον, οἷον εἰ ὁ λευκὸς καὶ ὁ μουσικὸς αἴτιος λέγοιτο τοῦ ἀνδριάντος.

πάντα δὲ καὶ τὰ οἰκείως λεγόμενα καὶ τὰ κατὰ συμβεβηκὸς τὰ μὲν ὡς δυνάμενα λέγεται τὰ δ' ὡς ἐνεργοῦντα, οἷον τοῦ οἰκοδομεῖσθαι οἰκίαν οἰκοδόμος ἢ οἰκοδομῶν οἰκοδόμος.

ὁμοίως δὲ λεχθήσεται καὶ ἐφ' ὧν αἰτία τὰ αἰτία τοῖς εἰρημένοις, οἷον τοῦ ἀνδριάντος ἢ ἀνδριάντος ἢ ὅλως εἰκόνας, καὶ χαλκοῦ τοῦδε ἢ χαλκοῦ ἢ ὅλως ὕλης· καὶ ἐπὶ τῶν συμβεβηκόντων ὡσαύτως. ἔτι δὲ συμπλεκόμενα καὶ ταῦτα κάκεῖνα λεχθήσεται, οἷον οὐ Πολύκλειτος οὐδὲ ἀνδριαντοποιός, ἀλλὰ Πολύκλειτος ἀνδριαντοποιός. ἀλλ' ὅμως ἅπαντα ταῦτά ἐστι τὸ μὲν πλῆθος ἔξ, λεγόμενα δὲ διχῶς· ἢ γὰρ ὡς τὸ καθ' ἕκαστον, ἢ ὡς τὸ γένος, ἢ ὡς τὸ συμβεβηκός, ἢ ὡς τὸ γένος τοῦ συμβεβηκότος, ἢ ὡς συμπλεκόμενα ταῦτα ἢ ὡς ἀπλῶς λεγόμενα· πάντα δὲ ἢ ἐνεργοῦντα ἢ κατὰ δύναμιν. διαφέρει δὲ τοσοῦτον, ὅτι τὰ μὲν ἐνεργοῦντα καὶ τὰ καθ' ἕκαστον ἅμα ἔστι καὶ οὐκ ἔστι καὶ ὧν αἰτία, οἷον ὅδ' ὁ ἰατρεύων τῷδε τῷ ὑγιαζομένῳ καὶ ὅδε ὁ οἰκοδομῶν τῷδε τῷ οἰκοδομουμένῳ, τὰ δὲ κατὰ δύναμιν οὐκ ἀεὶ. φθίρεται γὰρ οὐχ ἅμα ἢ οἰκία καὶ ὁ οἰκοδόμος.

δεῖ δ' ἀεὶ τὸ αἴτιον ἐκάστου τὸ ἀκρότατον ζητεῖν, ὥσπερ καὶ ἐπὶ τῶν ἄλλων

(οἷον ἄνθρωπος οἰκοδομεῖ ὅτι οἰκοδόμος, ὁ δ' οἰκοδόμος κατὰ τὴν οἰκοδομικὴν· τοῦτο τοίνυν πρότερον τὸ αἷτιον, καὶ οὕτως ἐπὶ πάντων)· ἔτι τὰ μὲν γένη τῶν γενῶν, τὰ δὲ καθ' ἕκαστον τῶν καθ' ἕκαστον (οἷον ἀνδριαντοποιὸς μὲν ἀνδριάντος, ὁδὶ δὲ τουδὶ)· καὶ τὰς μὲν δυνάμεις τῶν δυνατῶν, τὰ δ' ἐνεργοῦντα πρὸς τὰ ἐνεργούμενα.

Ὅσα μὲν οὖν τὰ αἷτια καὶ ὃν τρόπον αἷτια, ἔστω ἡμῖν διωρισμένα ἱκανῶς.

## Κεφάλαιο 4

Λέγεται δὲ καὶ ἡ τύχη καὶ τὸ αὐτόματον τῶν αἰτίων, καὶ πολλὰ καὶ εἶναι καὶ γίνεσθαι διὰ τύχην καὶ διὰ τὸ αὐτόματον· τίνα οὖν τρόπον ἐν τούτοις ἐστὶ τοῖς αἰτίοις ἡ τύχη καὶ τὸ αὐτόματον, καὶ πότερον τὸ αὐτὸ ἢ τύχη καὶ τὸ αὐτόματον ἢ ἕτερον, καὶ ὅλως τί ἐστὶν ἡ τύχη καὶ τὸ αὐτόματον, ἐπισκεπτέον.

ἔνιοι γὰρ καὶ εἰ ἔστιν ἢ μὴ ἀποροῦσιν· [196a] οὐδὲν γὰρ δὴ γίνεσθαι ἀπὸ τύχης φασίν, ἀλλὰ πάντων εἶναί τι αἷτιον ὠρισμένον ὅσα λέγομεν ἀπὸ ταῦτομάτου γίνεσθαι ἢ τύχης, οἷον τοῦ ἐλθεῖν ἀπὸ τύχης εἰς τὴν ἀγοράν, καὶ καταλαβεῖν ὃν ἐβούλετο μὲν οὐκ ᾔετο δέ, αἷτιον τὸ βούλεσθαι ἀγοράσαι ἐλθόντα· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν ἀπὸ τύχης λεγομένων αἰεὶ τι εἶναι λαβεῖν τὸ αἷτιον, ἀλλ' οὐ τύχην, ἐπεὶ εἴ γέ τι ἦν ἡ τύχη, ἄτοπον ἂν φανεῖν ὡς ἀληθῶς, καὶ ἀπορήσειεν ἂν τις διὰ τί ποτ' οὐδεὶς τῶν ἀρχαίων σοφῶν τὰ αἷτια περὶ γενέσεως καὶ φθορᾶς λέγων περὶ τύχης οὐδὲν διώρισεν, ἀλλ' ὡς ἔοικεν, οὐδὲν ᾔοντο οὐδ' ἐκεῖνοι εἶναι ἀπὸ τύχης. ἀλλὰ καὶ τοῦτο θαυμαστόν· πολλὰ γὰρ καὶ γίνεταί καὶ ἔστιν ἀπὸ τύχης καὶ ἀπὸ ταῦτομάτου, ἃ οὐκ ἀγνοοῦντες ὅτι ἔστιν ἐπανενεγκεῖν ἕκαστον ἐπὶ τι αἷτιον τῶν γιγνομένων, καθάπερ ὁ παλαιὸς λόγος εἶπεν ὁ ἀναιρῶν τὴν τύχην, ὅμως τούτων τὰ μὲν εἶναί φασι πάντες ἀπὸ τύχης τὰ δ' οὐκ ἀπὸ τύχης· διὸ καὶ ἁμῶς γέ πως ἦν ποιητέον αὐτοῖς μνεῖαν. ἀλλὰ μὴν οὐδ' ἐκείνων γέ τι ᾔοντο εἶναι τὴν τύχην, οἷον φιλίαν ἢ νεῖκος ἢ νοῦν ἢ πῦρ ἢ ἄλλο γέ τι τῶν τοιούτων. ἄτοπον οὖν εἴτε μὴ ὑπελάμβανον εἶναι εἴτε οἰόμενοι παρέλειπον, καὶ ταῦτ' ἐνίστε χρώμενοι, ὥσπερ Ἐμπεδοκλῆς οὐκ αἰεὶ τὸν ἄερα ἀνωτάτω ἀποκρίνεσθαι φησιν, ἀλλ' ὅπως ἂν τύχη. λέγει γοῦν ἐν τῇ κοσμοποιίᾳ ὡς “οὕτω συνέκυρσε θεῶν τοτέ, πολλὰκι δ' ἄλλως”· καὶ τὰ μόρια τῶν ζώων ἀπὸ τύχης γενέσθαι τὰ πλεῖστά φησιν. εἰσὶ δὲ τινες οἱ καὶ τοῦρανοῦ τοῦδε καὶ τῶν κόσμων πάντων αἰτιῶνται τὸ αὐτόματον· ἀπὸ ταῦτομάτου γὰρ γενέσθαι τὴν δίνην καὶ τὴν κίνησιν τὴν διακρίνασαν καὶ καταστήσασαν εἰς ταύτην τὴν τάξιν τὸ πᾶν. καὶ μάλα τοῦτό γε αὐτὸ θαυμάσαι ἄξιον· λέγοντες γὰρ τὰ μὲν ζῶα καὶ τὰ φυτὰ ἀπὸ τύχης μήτε εἶναι μήτε γίνεσθαι, ἀλλ' ἥτοι φύσιν ἢ νοῦν ἢ τι

τοιοῦτον ἕτερον εἶναι τὸ αἷτιον (οὐ γὰρ ὅ τι ἔτυχεν ἐκ τοῦ σπέρματος ἐκάστου γίνεται, ἀλλ' ἐκ μὲν τοῦ τοιουδὶ ἐλαία ἐκ δὲ τοῦ τοιουδὶ ἄνθρωπος), τὸν δ' οὐρανὸν καὶ τὰ θειότατα τῶν φανερῶν ἀπὸ τοῦ αὐτομάτου γενέσθαι, τοιαύτην δ' αἰτίαν μηδεμίαν εἶναι οἷαν τῶν ζώων καὶ τῶν φυτῶν. καίτοι εἰ οὕτως ἔχει, τοῦτ' αὐτὸ ἄξιον ἐπιστάσεως, καὶ καλῶς ἔχει λεχ[196b] θῆναί τι περὶ αὐτοῦ. πρὸς γὰρ τῷ καὶ ἄλλως ἄτοπον εἶναι τὸ λεγόμενον, ἔτι ἄτοπώτερον τὸ λέγειν ταῦτα ὀρῶντας ἐν μὲν τῷ οὐρανῷ οὐδὲν ἀπὸ αὐτομάτου γινόμενον, ἐν δὲ τοῖς οὐκ ἀπὸ τύχης πολλὰ συμβαίνοντα ἀπὸ τύχης· καίτοι εἰκὸς γε ἦν τοῦναντίον γίνεσθαι.

εἰσὶ δέ τινες οἷς δοκεῖ εἶναι μὲν αἰτία ἡ τύχη, ἄδηλος δὲ ἀνθρωπίνη διανοία ὡς θεῖόν τι οὐσα καὶ δαιμονιώτερον.

ὥστε σκεπτέον καὶ τί ἐκότερον, καὶ εἰ ταῦτόν ἢ ἕτερον τό τε αὐτόματον καὶ ἡ τύχη, καὶ πῶς εἰς τὰ διωρισμένα αἷτια ἐμπίπτουσιν.

## Κεφάλαιο 5

Πρῶτον μὲν οὖν, ἐπειδὴ ὀρῶμεν τὰ μὲν ἀεὶ ὡσαύτως γινόμενα τὰ δὲ ὡς ἐπὶ τὸ πολὺ, φανερόν ὅτι οὐδετέρου τούτων αἰτία ἡ τύχη λέγεται οὐδὲ τὸ ἀπὸ τύχης, οὔτε τοῦ ἐξ ἀνάγκης καὶ αἰεὶ οὔτε τοῦ ὡς ἐπὶ τὸ πολὺ. ἀλλ' ἐπειδὴ ἔστιν ἃ γίνεται καὶ παρὰ ταῦτα, καὶ ταῦτα πάντες φασὶν εἶναι ἀπὸ τύχης, φανερόν ὅτι ἔστι τι ἡ τύχη καὶ τὸ αὐτόματον· τὰ τε γὰρ τοιαῦτα ἀπὸ τύχης καὶ τὰ ἀπὸ τύχης τοιαῦτα ὄντα ἴσμεν.

τῶν δὲ γιγνομένων τὰ μὲν ἔνεκά του γίνεται τὰ δ' οὐ (τούτων δὲ τὰ μὲν κατὰ προαίρεσιν, τὰ δ' οὐ κατὰ προαίρεσιν, ἄμφω δ' ἐν τοῖς ἔνεκά του), ὥστε δῆλον ὅτι καὶ ἐν τοῖς παρὰ τὸ ἀναγκαῖον καὶ τὸ ὡς ἐπὶ τὸ πολὺ ἔστιν ἓνια περὶ ἃ ἐνδέχεται ὑπάρχειν τὸ ἔνεκά του. ἔστι δ' ἔνεκά του ὅσα τε ἀπὸ διανοίας ἂνπραχθεῖη καὶ ὅσα ἀπὸ φύσεως. τὰ δὲ τοιαῦτα ὅταν κατὰ συμβεβηκὸς γένηται, ἀπὸ τύχης φασὶν εἶναι (ὥσπερ γὰρ καὶ ὅν ἐστι τὸ μὲν καθ' αὐτὸ τὸ δὲ κατὰ συμβεβηκός, οὕτω καὶ αἷτιον ἐνδέχεται εἶναι, οἷον οἰκίας καθ' αὐτὸ μὲν αἷτιον τὸ οἰκοδομικόν, κατὰ συμβεβηκὸς δὲ τὸ λευκὸν ἢ τὸ μουσικόν· τὸ μὲν οὖν καθ' αὐτὸ αἷτιον ὠρισμένον, τὸ δὲ κατὰ συμβεβηκὸς ἀόριστον· ἅπειρα γὰρ ἂν τῷ ἐνὶ συμβαίῃ). καθάπερ οὖν ἐλέχθη, ὅταν ἐν τοῖς ἔνεκά του γιγνομένοις τοῦτο γένηται, τότε λέγεται ἀπὸ αὐτομάτου καὶ ἀπὸ τύχης (αὐτῶν δὲ πρὸς ἄλληλα τὴν διαφορὰν τούτων ὕστερον διοριστέον· νῦν δὲ τοῦτο ἔστω φανερόν, ὅτι ἄμφω ἐν τοῖς ἔνεκά του ἔστιν).



οἷον ἔνεκα τοῦ ἀπολαβεῖν τὸ ἀργύριον ἦλθεν ἂν κομιζομένου τὸν ἔρανον, εἰ ἦδει· ἦλθε δ' οὐ τούτου ἔνεκα, ἀλλὰ συνέβη αὐτῷ ἐλθεῖν, καὶ ποιῆσαι τοῦτο τοῦ κομίσασθαι ἔνεκα· τοῦτο δὲ οὐθ' ὥς ἐπὶ τὸ πολὺ φοιτῶν εἰς τὸ [197a] χωρίον οὗτ' ἐξ ἀνάγκης· ἔστι δὲ τὸ τέλος, ἡ κομιδὴ, οὐ τῶν ἐν αὐτῷ αἰτίων, ἀλλὰ τῶν προαιρετῶν καὶ ἀπὸ διανοίας· καὶ λέγεται γε τότε ἀπὸ τύχης ἐλθεῖν, εἰ δὲ προελόμενος καὶ τούτου ἔνεκα ἢ ἀεὶ φοιτῶν ἢ ὥς ἐπὶ τὸ πολὺ [κομιζόμενος], οὐκ ἀπὸ τύχης.

δῆλον ἄρα ὅτι ἡ τύχη αἰτία κατὰ συμβεβηκὸς ἐν τοῖς κατὰ προαίρεσιν τῶν ἔνεκά του. διὸ περὶ τὸ αὐτὸ διάνοια καὶ τύχη· ἡ γὰρ προαίρεσις οὐκ ἄνευ διανοίας.

ἀόριστα μὲν οὖν τὰ αἷτια ἀνάγκη εἶναι ἀφ' ὧν ἂν γένοιτο τὸ ἀπὸ τύχης. ὅθεν καὶ ἡ τύχη τοῦ ἀορίστου εἶναι δοκεῖ καὶ ἄδηλος ἀνθρώπῳ, καὶ ἔστιν ὥς οὐδὲν ἀπὸ τύχης δόξειεν ἂν γίνεσθαι. πάντα γὰρ ταῦτα ὀρθῶς λέγεται, εὐλόγως. ἔστιν μὲν γὰρ ὥς γίνεταί ἀπὸ τύχης· κατὰ συμβεβηκὸς γὰρ γίνεταί, καὶ ἔστιν αἷτιον ὥς συμβεβηκὸς ἡ τύχη· ὥς δ' ἀπλῶς οὐδενός· οἷον οἰκίας οἰκοδόμος μὲν αἷτιος, κατὰ συμβεβηκὸς δὲ ἀύλητής,

καὶ τοῦ ἐλθόντα κομίσασθαι τὸ ἀργύριον, μὴ τούτου ἔνεκα ἐλθόντα, ἄπειρα τὸ πλῆθος· καὶ γὰρ ἰδεῖν τινὰ βουλόμενος καὶ διώκων καὶ φεύγων καὶ θεασόμενος. καὶ τὸ φάναι εἶναί τι παράλογον τὴν τύχην ὀρθῶς· ὁ γὰρ λόγος ἢ τῶν ἀεὶ ὄντων ἢ τῶν ὥς ἐπὶ τὸ πολὺ, ἡ δὲ τύχη ἐν τοῖς γιγνομένοις παρὰ ταῦτα. ὥστ' ἐπεὶ ἀόριστα τὰ οὕτως αἷτια, καὶ ἡ τύχη ἀόριστον. ὅμως δ' ἐπ' ἐνίων ἀπορήσειεν ἂν τις, ἅρ' οὖν τὰ τυχόντα αἷτι' ἂν γένοιτο τῆς τύχης· οἷον ὑγιείας ἢ πνεῦμα ἢ εἴλησις, ἀλλ' οὐ τὸ ἀποκεκάρθαι· ἔστιν γὰρ ἄλλα ἄλλων ἐγγύτερα τῶν κατὰ συμβεβηκὸς αἰτίων.

τύχη δὲ ἀγαθὴ μὲν λέγεται ὅταν ἀγαθόν τι ἀποβῇ, φαύλη δὲ ὅταν φαῦλόν τι, εὐτυχία δὲ καὶ δυστυχία ὅταν μέγεθος ἔχοντα ταῦτα· διὸ καὶ τὸ παρὰ μικρὸν κακὸν ἢ ἀγαθὸν λαβεῖν μέγα ἢ εὐτυχεῖν ἢ ἀτυχεῖν ἐστίν, ὅτι ὥς ὑπάρχον λέγει ἡ διάνοια· τὸ γὰρ παρὰ μικρὸν ὥσπερ οὐδὲν ἀπέχειν δοκεῖ. ἔτι ἀβέβαιον ἢ εὐτυχία εὐλόγως· ἡ γὰρ τύχη ἀβέβαιος· οὐτε γὰρ ἀεὶ οὐθ' ὥς ἐπὶ τὸ πολὺ οἷόν τ' εἶναι τῶν ἀπὸ τύχης οὐθέν.

ἔστι μὲν οὖν ἄμφω αἷτια, καθάπερ εἴρηται, κατὰ συμβεβηκός· καὶ ἡ τύχη καὶ τὸ αὐτόματον· ἐν τοῖς ἐνδεχομένοις γίνεσθαι μὴ ἀπλῶς μηδ' ὥς ἐπὶ τὸ πολὺ, καὶ τούτων ὅσ' ἂν γένοιτο ἔνεκά του.

## Κεφάλαιο 6

Διαφέρει δ' ὅτι τὸ αὐτόματον ἐπὶ πλεῖόν ἐστι· τὸ μὲν γὰρ ἀπὸ τύχης πᾶν ἀπὸ ταῦτομάτου, τοῦτο δ' οὐ πᾶν [197b] ἀπὸ τύχης.

ἡ μὲν γὰρ τύχη καὶ τὸ ἀπὸ τύχης ἐστὶν ὅσοις καὶ τὸ εὐτυχῆσαι ἂν ὑπάρξειεν καὶ ὅλως πρᾶξις. διὸ καὶ ἀνάγκη περὶ τὰ πρακτὰ εἶναι τὴν τύχην (σημεῖον δ' ὅτι δοκεῖ ἥτοι ταῦτόν εἶναι τῇ εὐδαιμονίᾳ ἢ εὐτυχίᾳ ἢ ἐγγύς, ἡ δ' εὐδαιμονία πρᾶξις τις· εὐπραξία γάρ), ὥσθ' ὁπόσοις μὴ ἐνδέχεται πρᾶξαι, οὐδὲ τὸ ἀπὸ τύχης τι ποιῆσαι. καὶ διὰ τοῦτο οὔτε ἄψυχον οὐδὲν οὔτε θηρίον οὔτε παιδίον οὐδὲν ποιεῖ ἀπὸ τύχης, ὅτι οὐκ ἔχει προαίρεσιν· οὐδ' εὐτυχία οὐδ' ἀτυχία ὑπάρχει τούτοις, εἰ μὴ καθ' ὁμοιότητα, ὥσπερ ἔφη Πρώταρχος εὐτυχεῖς εἶναι τοὺς λίθους ἐξ ὧν οἱ βωμοί, ὅτι τιμῶνται, οἱ δὲ ὁμόζυγες αὐτῶν καταπατοῦνται. τὸ δὲ πάσχειν ἀπὸ τύχης ὑπάρχει πως καὶ τούτοις, ὅταν ὁ πράττων τι περὶ αὐτὰ πράξῃ ἀπὸ τύχης, ἄλλως δὲ οὐκ ἔστιν.

τὸ δ' αὐτόματον καὶ τοῖς ἄλλοις ζώοις καὶ πολλοῖς τῶν ἀψύχων, οἷον ὁ ἵππος αὐτόματος, φαμέν, ἦλθεν, ὅτι ἐσώθη μὲν ἐλθὼν, οὐ τοῦ σωθῆναι δὲ ἔνεκα ἦλθε· καὶ ὁ τρίπους αὐτόματος κατέπεσεν· ἔστη μὲν γὰρ τοῦ καθῆσθαι ἔνεκα, ἀλλ' οὐ τοῦ καθῆσθαι ἔνεκα κατέπεσεν.

ὥστε φανερόν ὅτι ἐν τοῖς ἀπλῶς ἔνεκά του γιγνομένοις, ὅταν μὴ τοῦ συμβάντος ἔνεκα γένηται ὧν ἔξω τὸ αἷτιον, τότε ἀπὸ τοῦ αὐτομάτου λέγομεν· ἀπὸ τύχης δέ, τούτων ὅσα ἀπὸ τοῦ αὐτομάτου γίγνεται τῶν προαιρετῶν τοῖς ἔχουσι προαίρεσιν. σημεῖον δὲ τὸ μάτην, ὅτι λέγεται ὅταν μὴ γένηται τὸ ἔνεκα ἄλλου ἐκείνου ἔνεκα, οἷον εἰ τὸ βαδίσαι λαπάξεως ἔνεκά ἐστιν, εἰ δὲ μὴ ἐγένετο βαδίσαντι, μάτην φαμέν βαδίσαι καὶ ἡ βάδις ματαία, ὥς τοῦτο ὂν τὸ μάτην, τὸ πεφυκὸς ἄλλου ἔνεκα, ὅταν μὴ περαίνει ἐκεῖνο οὐ ἔνεκα ἦν καὶ ἐπεφύκει, ἐπεὶ εἴ τις λούσασθαι φαίη μάτην ὅτι οὐκ ἐξέλιπεν ὁ ἥλιος, γελοῖος ἂν εἴη· οὐ γὰρ ἦν τοῦτο ἐκείνου ἔνεκα. οὕτω δὲ τὸ αὐτόματον καὶ κατὰ τὸ ὄνομα ὅταν αὐτὸ μάτην γένηται· κατέπεσεν γὰρ οὐ τοῦ πατάξαι ἔνεκεν ὁ λίθος· ἀπὸ τοῦ αὐτομάτου ἄρα κατέπεσεν ὁ λίθος, ὅτι πέσοι ἂν ὑπὸ τινὸς καὶ τοῦ πατάξαι ἔνεκα. μάλιστα δ' ἐστὶ χωριζόμενον τοῦ ἀπὸ τύχης ἐν τοῖς φύσει γιγνομένοις· ὅταν γὰρ γένηται τι παρὰ φύσιν, τότε οὐκ ἀπὸ τύχης ἀλλὰ μᾶλλον ἀπὸ ταῦτομάτου γεγενῆσθαι φαμέν. ἔστι δὲ καὶ τοῦτο ἕτερον· τοῦ μὲν γὰρ ἔξω τὸ αἷτιον, τοῦ δ' ἐντός. [198a]

τί μὲν οὖν ἐστὶν τὸ αὐτόματον καὶ τί ἡ τύχη, εἴρηται, καὶ τί διαφέρουσιν ἀλλήλων. τῶν δὲ τρόπων τῆς αἰτίας ἐν τοῖς ὅθεν ἡ ἀρχὴ τῆς κινήσεως

ἐκότερον αὐτῶν· ἥ γὰρ τῶν φύσει τι ἢ τῶν ἀπὸ διανοίας αἰτίων αἰεί ἐστίν· ἀλλὰ τούτων τὸ πλήθος ἀόριστον.

ἐπεὶ δ' ἐστὶ τὸ αὐτόματον καὶ ἡ τύχη αἷτια ὧν ἂν ἡ νοῦς γένοιτο αἷτιος ἢ φύσις, ὅταν κατὰ συμβεβηκὸς αἷτιόν τι γένηται τούτων αὐτῶν, οὐδὲν δὲ κατὰ συμβεβηκὸς ἐστὶ πρότερον τῶν καθ' αὐτό, δῆλον ὅτι οὐδὲ τὸ κατὰ συμβεβηκὸς αἷτιον πρότερον τοῦ καθ' αὐτό. ὕστερον ἄρα τὸ αὐτόματον καὶ ἡ τύχη καὶ νοῦ καὶ φύσεως· ὥστ' εἰ ὅτι μάλιστα τοῦ οὐρανοῦ αἷτιον τὸ αὐτόματον, ἀνάγκη πρότερον νοῦν αἷτιον καὶ φύσιν εἶναι καὶ ἄλλων πολλῶν καὶ τοῦδε τοῦ παντός.

## Κεφάλαιο 7

Ὅτι δὲ ἐστίν αἷτια, καὶ ὅτι τοσαῦτα τὸν ἀριθμὸν ὅσα φαμέν, δῆλον· τοσαῦτα γὰρ τὸν ἀριθμὸν τὸ διὰ τί περιεῖληφεν· ἡ γὰρ εἰς τὸ τί ἐστίν ἀνάγεται τὸ διὰ τί ἔσχατον, ἐν τοῖς ἀκινήτοις (οἷον ἐν τοῖς μαθήμασιν· εἰς ὀρισμὸν γὰρ τοῦ εὐθέος ἢ συμμέτρου ἢ ἄλλου τινὸς ἀνάγεται ἔσχατον), ἢ εἰς τὸ κινήσαν πρῶτον (οἷον διὰ τί ἐπολέμησαν; ὅτι ἐσύλησαν), ἢ τίνος ἔνεκα (ἵνα ἄρξωσιν), ἢ ἐν τοῖς γιγνομένοις ἢ ὕλῃ. ὅτι μὲν οὖν τὰ αἷτια ταῦτα καὶ τοσαῦτα, φανερόν·

ἐπεὶ δ' αἱ αἰτίαι τέτταρες, περὶ πασῶν τοῦ φυσικοῦ εἰδέναι, καὶ εἰς πάσας ἀνάγων τὸ διὰ τί ἀποδώσει φυσικῶς, τὴν ὕλῃν, τὸ εἶδος, τὸ κινήσαν, τὸ οὐ ἔνεκα. ἔρχεται δὲ τὰ τρία εἰς [τὸ] ἐν πολλάκις· τὸ μὲν γὰρ τί ἐστὶ καὶ τὸ οὐ ἔνεκα ἐν ἐστὶ, τὸ δ' ὅθεν ἢ κινήσεις πρῶτον τῷ εἶδει ταῦτὸ τούτοις· ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ-καὶ ὅλως ὅσα κινούμενα κινεῖ (ὅσα δὲ μή, οὐκέτι φυσικῆς· οὐ γὰρ ἐν αὐτοῖς ἔχοντα κίνησιν οὐδ' ἀρχὴν κινήσεως κινεῖ, ἀλλ' ἀκίνητα ὄντα· διὸ τρεῖς αἱ πραγματεῖαι, ἡ μὲν περὶ ἀκινήτων, ἡ δὲ περὶ κινουμένων μὲν ἀφθάρτων δέ, ἡ δὲ περὶ τὰ φθαρτά).

ὥστε τὸ διὰ τί καὶ εἰς τὴν ὕλῃν ἀνάγοντι ἀποδίδονται, καὶ εἰς τὸ τί ἐστίν, καὶ εἰς τὸ πρῶτον κινήσαν. περὶ γενέσεως γὰρ μάλιστα τοῦτον τὸν τρόπον τὰς αἰτίας σκοποῦσι, τί μετὰ τί γίγνεται, καὶ τί πρῶτον ἐποίησεν ἢ τί ἔπαθεν, καὶ οὕτως αἰεὶ τὸ ἐφεξῆς.

διτταὶ δὲ αἱ ἀρχαὶ αἱ κινεῖσαι φυσικῶς, ὧν ἡ ἑτέρα οὐ φυσική· οὐ [198b] γὰρ ἔχει κινήσεως ἀρχὴν ἐν αὐτῇ. τοιοῦτον δ' ἐστὶν εἴ τι κινεῖ μὴ κινούμενον, ὥσπερ τό τε παντελῶς ἀκίνητον καὶ [τὸ] πάντων πρῶτον καὶ τὸ τί ἐστίν καὶ ἡ μορφή· τέλος γὰρ καὶ οὐ ἔνεκα· ὥστε ἐπεὶ ἡ φύσις ἔνεκά του, καὶ

ταύτην εἶδέναι δεῖ, καὶ πάντως ἀποδοτέον τὸ διὰ τί, οἷον ὅτι ἐκ τοῦδε ἀνάγκη τόδε (τὸ δὲ ἐκ τοῦδε ἢ ἀπλῶς ἢ ὡς ἐπὶ τὸ πολὺ), καὶ εἰ μέλλει τοδὶ ἔσσεσθαι (ὥσπερ ἐκ τῶν προτάσεων τὸ συμπέρασμα), καὶ ὅτι τοῦτ' ἦν τὸ τί ἦν εἶναι, καὶ διότι βέλτιον οὕτως, οὐχ ἀπλῶς, ἀλλὰ τὸ πρὸς τὴν ἐκάστου οὐσίαν.

## Κεφάλαιο 8

Λεκτέον δὴ πρῶτον μὲν διότι ἡ φύσις τῶν ἔνεκά του αἰτίων, ἔπειτα περὶ τοῦ ἀναγκαίου, πῶς ἔχει ἐν τοῖς φυσικοῖς· εἰς γὰρ ταύτην τὴν αἰτίαν ἀνάγουσι πάντες, ὅτι ἐπειδὴ τὸ θερμὸν τοιονδὶ πέφυκεν καὶ τὸ ψυχρὸν καὶ ἕκαστον δὴ τῶν τοιούτων, ταδὶ ἐξ ἀνάγκης ἐστὶ καὶ γίγνεται· καὶ γὰρ ἐὰν ἄλλην αἰτίαν εἴπωσιν, ὅσον ἀψάμενοι χαίρειν ἐῷσιν, ὁ μὲν τὴν φιλίαν καὶ τὸ νεῖκος, ὁ δὲ τὸν νοῦν·

ἔχει δ' ἀπορίαν τί κωλύει τὴν φύσιν μὴ ἔνεκά του ποιεῖν μηδ' ὅτι βέλτιον, ἀλλ' ὥσπερ ὕει ὁ Ζεὺς οὐχ ὅπως τὸν σῖτον αὐξήσῃ, ἀλλ' ἐξ ἀνάγκης (τὸ γὰρ ἀναχθὲν ψυχθῆναι δεῖ, καὶ τὸ ψυχθὲν ὕδωρ γενόμενον κατελθεῖν· τὸ δ' αὐξάνεσθαι τούτου γενομένου τὸν σῖτον συμβαίνει), ὁμοίως δὲ καὶ εἴ τῷ ἀπόλλυται ὁ σῖτος ἐν τῇ ἄλλῳ, οὐ τούτου ἔνεκα ὕει ὅπως ἀπόληται, ἀλλὰ τοῦτο συμβέβηκεν-ὥστε τί κωλύει οὕτω καὶ τὰ μέρη ἔχειν ἐν τῇ φύσει, οἷον τοὺς ὀδόντας ἐξ ἀνάγκης ἀνατεῖλαι τοὺς μὲν ἐμπροσθίους ὀξεῖς, ἐπιτηδεῖους πρὸς τὸ διαιρεῖν, τοὺς δὲ γομφίους πλατεῖς καὶ χρησίμους πρὸς τὸ λεαίνειν τὴν τροφήν, ἐπεὶ οὐ τούτου ἔνεκα γενέσθαι, ἀλλὰ συμπεσεῖν· ὁμοίως δὲ καὶ περὶ τῶν ἄλλων μερῶν, ἐν ὅσοις δοκεῖ ὑπάρχειν τὸ ἔνεκά του. ὅπου μὲν οὖν ἅπαντα συνέβη ὥσπερ κἂν εἰ ἔνεκά του ἐγίγνετο, ταῦτα μὲν ἐσώθη ἀπὸ τοῦ αὐτομάτου συστάντα ἐπιτηδείως· ὅσα δὲ μὴ οὕτως, ἀπώλετο καὶ ἀπόλλυται, καθάπερ Ἐμπεδοκλῆς λέγει τὰ βουγενῆ ἀνδρόπρωρα.

ὁ μὲν οὖν λόγος, ὃ ἂν τις ἀπορήσειεν, οὗτος, καὶ εἴ τις ἄλλος τοιοῦτός ἐστιν· ἀδύνατον δὲ τοῦτον ἔχειν τὸν τρόπον. ταῦτα μὲν γὰρ καὶ πάντα τὰ φύσει ἢ αἰεὶ οὕτω γίγνεται ἢ ὡς ἐπὶ τὸ πολὺ, τῶν δ' ἀπὸ τύχης καὶ τοῦ αὐτομάτου οὐδέν. οὐ [199a] γὰρ ἀπὸ τύχης οὐδ' ἀπὸ συμπτώματος δοκεῖ ὕειν πολλάκις τοῦ χειμῶνος, ἀλλ' ἐὰν ὑπὸ κύνα· οὐδὲ καύματα ὑπὸ κύνα, ἀλλ' ἂν χειμῶνος. εἰ οὖν ἢ ἀπὸ συμπτώματος δοκεῖ ἢ ἔνεκά του εἶναι, εἰ μὴ οἷόν τε ταῦτ' εἶναι μήτε ἀπὸ συμπτώματος μήτ' ἀπὸ αὐτομάτου, ἔνεκά του ἂν εἴη. ἀλλὰ μὴν φύσει γ' ἐστὶ τὰ τοιαῦτα πάντα, ὡς κἂν αὐτοὶ φαῖεν οἱ ταῦτα λέγοντες. ἔστιν ἄρα τὸ ἔνεκά του ἐν τοῖς φύσει γιγνομένοις καὶ οὖσιν.

ἔτι ἐν ὅσοις τέλος ἔστι τι, τούτου ἔνεκα πράττεται τὸ πρότερον καὶ τὸ ἐφεξῆς.

οὐκοῦν ὡς πράττεται, οὕτω πέφυκε, καὶ ὡς πέφυκεν, οὕτω πράττεται ἕκαστον, ἂν μὴ τι ἐμποδίζῃ. πράττεται δ' ἕνεκά του· καὶ πέφυκεν ἄρα ἕνεκά του. οἶον εἰ οἰκία τῶν φύσει γιγνομένων ἦν, οὕτως ἂν ἐγίγνετο ὡς νῦν ὑπὸ τῆς τέχνης· εἰ δὲ τὰ φύσει μὴ μόνον φύσει ἀλλὰ καὶ τέχνῃ γίγνοιτο, ὡσαύτως ἂν γίγνοιτο ἢ πέφυκεν. ἕνεκα ἄρα θατέρου θάτερον. ὅλως δὲ ἡ τέχνη τὰ μὲν ἐπιτελεῖ ἃ ἡ φύσις ἀδυνατεῖ ἀπεργάσασθαι, τὰ δὲ μιμεῖται. εἰ οὖν τὰ κατὰ τέχνην ἕνεκά του, δῆλον ὅτι καὶ τὰ κατὰ φύσιν· ὁμοίως γὰρ ἔχει πρὸς ἀλλήλα ἐν τοῖς κατὰ τέχνην καὶ ἐν τοῖς κατὰ φύσιν τὰ ὕστερα πρὸς τὰ πρότερα. μάλιστα δὲ φανερόν ἐπὶ τῶν ζώων τῶν ἄλλων, ἃ οὔτε τέχνη οὔτε ζητήσαντα οὔτε βουλευσάμενα ποιεῖ· ὅθεν διαποροῦσί τινες πότερον νῦν ἢ τινι ἄλλῳ ἐργάζονται οἳ τ' ἀράχνη καὶ οἱ μύρμηκες καὶ τὰ τοιαῦτα. κατὰ μικρὸν δ' οὕτω προϊόντι καὶ ἐν τοῖς φυτοῖς φαίνεται τὰ συμφέροντα γιγνόμενα πρὸς τὸ τέλος, οἶον τὰ φύλλα τῆς τοῦ καρποῦ ἕνεκα σκέπης. ὥστ' εἰ φύσει τε ποιεῖ καὶ ἕνεκά του ἡ χελιδὼν τὴν νεοττιὰν καὶ ὁ ἀράχνης τὸ ἀράχνιον, καὶ τὰ φυτὰ τὰ φύλλα ἕνεκα τῶν καρπῶν καὶ τὰς ρίζας οὐκ ἄνω ἀλλὰ κάτω τῆς τροφῆς, φανερόν ὅτι ἔστιν ἡ αἰτία ἡ τοιαύτη ἐν τοῖς φύσει γιγνομένοις καὶ οὖσιν. καὶ ἐπεὶ ἡ φύσις διττή, ἡ μὲν ὡς ὕλη ἡ δ' ὡς μορφή, τέλος δ' αὕτη, τοῦ τέλους δὲ ἕνεκα τάλλα, αὕτη ἂν εἴη ἡ αἰτία, ἡ οὐ ἕνεκα. ἀμαρτία δὲ γίγνεται καὶ ἐν τοῖς κατὰ τέχνην (ἔγραψε γὰρ οὐκ ὀρθῶς ὁ γραμματικός, καὶ ἐπότισεν [οὐκ ὀρθῶς] ὁ ἱατρὸς τὸ φάρμακον), ὥστε δῆλον ὅτι ἐνδέχεται καὶ ἐν τοῖς κατὰ [199b] φύσιν. εἰ δὲ ἔστιν ἕνια κατὰ τέχνην ἐν οἷς τὸ ὀρθῶς ἕνεκά του, ἐν δὲ τοῖς ἀμαρτανομένοις ἕνεκα μὲν τινος ἐπιχειρεῖται ἀλλ' ἀποτυγχάνεται, ὁμοίως ἂν ἔχοι καὶ ἐν τοῖς φυσικοῖς, καὶ τὰ τέρατα ἀμαρτήματα ἐκείνου τοῦ ἕνεκά του. καὶ ἐν ταῖς ἐξ ἀρχῆς ἄρα συστάσεσι τὰ βουγενῆ, εἰ μὴ πρὸς τινὰ ὅρον καὶ τέλος δυνατὰ ἦν ἐλθεῖν, διαφθειρομένης ἂν ἀρχῆς τινὸς ἐγίγνετο, ὥσπερ νῦν τοῦ σπέρματος.

ἔτι ἀνάγκη σπέρμα γενέσθαι πρῶτον, ἀλλὰ μὴ εὐθὺς τὰ ζῶα· καὶ τὸ “οὐλοφυεὲς μὲν πρῶτα” σπέρμα ἦν.

ἔτι καὶ ἐν τοῖς φυτοῖς ἔνεστι τὸ ἕνεκά του, ἥττον δὲ διήρθρωται· πότερον οὖν καὶ ἐν τοῖς φυτοῖς ἐγίγνετο, ὥσπερ τὰ βουγενῆ ἀνδρόπρωρα, οὕτω καὶ ἀμπελογενῆ ἐλαιόπρωρα, ἢ οὐ; ἄτοπον γάρ· ἀλλὰ μὴν ἔδει γε, εἴπερ καὶ ἐν τοῖς ζώοις.

ἔτι ἔδει καὶ ἐν τοῖς σπέρμασι γίγνεσθαι ὅπως ἔτυχεν· ὅλως δ' ἀναιρεῖ ὁ οὕτως λέγων τὰ φύσει τε καὶ φύσιν· φύσει γάρ, ὅσα ἀπὸ τινος ἐν αὐτοῖς ἀρχῆς συνεχῶς κινούμενα ἀφικνεῖται εἰς τι τέλος· ἀφ' ἐκάστης δὲ οὐ τὸ αὐτὸ ἐκάστοις οὐδὲ τὸ τυχόν, ἀεὶ μέντοι ἐπὶ τὸ αὐτό, ἂν μὴ τι ἐμποδίσῃ.

τὸ δὲ οὐ ἔνεκα, καὶ ὃ τούτου ἔνεκα, γένοιτο ἂν καὶ ἀπὸ τύχης, οἷον λέγομεν ὅτι ἀπὸ τύχης ἦλθεν ὁ ξένος καὶ λυ σάμενος ἀπῆλθεν, ὅταν ὥσπερ ἔνεκα τούτου ἐλθὼν πράξῃ, μὴ ἔνεκα δὲ τούτου ἔλθῃ. καὶ τοῦτο κατὰ συμβεβηκός (ἢ γὰρ τύχη τῶν κατὰ συμβεβηκὸς αἰτίων, καθάπερ καὶ πρότερον εἵπομεν), ἀλλ' ὅταν τοῦτο αἰεὶ ἢ ὡς ἐπὶ τὸ πολὺ γένηται, οὐ συμβεβηκὸς οὐδ' ἀπὸ τύχης· ἐν δὲ τοῖς φυσι κοῖς αἰεὶ οὕτως, ἂν μὴ τι ἐμποδίση.

ἄτοπον δὲ τὸ μὴ οἶσθαι ἔνεκά του γίγνεσθαι, ἐὰν μὴ ἴδωσι τὸ κινεῖν βουλευσάμενον. καίτοι καὶ ἡ τέχνη οὐ βουλεύεται· καὶ εἰ ἐνῆν ἐν τῷ ξύλῳ ἡ ναυπηγική, ὁμοίως ἂν τῇ φύσει ἐποίει· ὥστ' εἰ ἐν τῇ τέχνῃ ἔνεστι τὸ ἔνεκά του, καὶ ἐν τῇ φύσει. μάλιστα δὲ δῆλον, ὅταν τις ἰατρεύῃ αὐτὸς ἑαυτόν· τούτῳ γὰρ ἔοικεν ἡ φύσις. ὅτι μὲν οὖν αἰτία ἡ φύσις, καὶ οὕτως ὡς ἔνεκά του, φανερόν.

## Κεφάλαιο 9

Τὸ δ' ἐξ ἀνάγκης πότερον ἐξ ὑποθέσεως ὑπάρχει ἢ καὶ ἀπλῶς; νῦν μὲν γὰρ οἴονται τὸ ἐξ ἀνάγκης εἶναι [200a] ἐν τῇ γενέσει ὥσπερ ἂν εἴ τις τὸν τοῖχον ἐξ ἀνάγκης γεγενῆσθαι νομίζοι, ὅτι τὰ μὲν βαρέα κάτω πέφυκε φέρεσθαι τὰ δὲ κοῦφα ἐπιπολῆς, διὸ οἱ λίθοι μὲν κάτω καὶ τὰ θεμέλια, ἡ δὲ γῆ ἄνω διὰ κουφότητα, ἐπιπολῆς δὲ μάλιστα τὰ ξύλα· κουφότατα γάρ. ἀλλ' ὅμως οὐκ ἄνευ μὲν τούτων γέγονεν, οὐ μέντοι διὰ ταῦτα πλὴν ὡς δι' ὕλην, ἀλλ' ἔνεκα τοῦ κρύπτειν ἅττα καὶ σώζειν. ὁμοίως δὲ καὶ ἐν τοῖς ἄλλοις πᾶσιν, ἐν ὅσοις τὸ ἔνεκά του ἔστιν, οὐκ ἄνευ μὲν τῶν ἀναγκαῖαν ἐχόντων τὴν φύσιν, οὐ μέντοι γε διὰ ταῦτα ἀλλ' ἢ ὡς ὕλην, ἀλλ' ἔνεκά του, οἷον διὰ τί ὁ πρίων τοιοσδί; ὅπως τοδί καὶ ἔνεκα τουδί. τοῦτο μέντοι τὸ οὐ ἔνεκα ἀδύνατον γενέσθαι, ἂν μὴ σιδηροῦς ἦ· ἀνάγκη ἄρα σιδηροῦν εἶναι, εἰ πρίων ἔσται καὶ τὸ ἔργον αὐτοῦ. ἐξ ὑποθέσεως δὲ τὸ ἀναγκαῖον, ἀλλ' οὐχ ὡς τέλος· ἐν γὰρ τῇ ὕλῃ τὸ ἀναγκαῖον, τὸ δ' οὐ ἔνεκα ἐν τῷ λόγῳ.

ἔστι δὲ τὸ ἀναγκαῖον ἐν τε τοῖς μαθήμασι καὶ ἐν τοῖς κατὰ φύσιν γιγνομένοις τρόπον τινὰ παραπλησίως· ἐπεὶ γὰρ τὸ εὐθὺ τοδί ἐστιν, ἀνάγκη τὸ τρίγωνον δύο ὀρθαῖς ἴσας ἔχειν· ἀλλ' οὐκ ἐπεὶ τοῦτο, ἐκεῖνο· ἀλλ' εἴ γε τοῦτο μὴ ἔστιν, οὐδὲ τὸ εὐθὺ ἔστιν. ἐν δὲ τοῖς γιγνομένοις ἔνεκά του ἀνάπαλιν, εἰ τὸ τέλος ἔσται ἢ ἔστι, καὶ τὸ ἔμπροσθεν ἔσται ἢ ἔστιν· εἰ δὲ μή, ὥσπερ ἐκεῖ μὴ ὄντος τοῦ συμπεράσματος ἡ ἀρχὴ οὐκ ἔσται, καὶ ἐνταῦθα τὸ τέλος καὶ τὸ οὐ ἔνεκα. ἀρχὴ γὰρ καὶ αὕτη, οὐ τῆς πράξεως ἀλλὰ τοῦ λογισμοῦ (ἐκεῖ δὲ τοῦ λογισμοῦ· πράξεις γὰρ οὐκ εἰσίν). ὥστ' εἰ ἔσται οἰκία, ἀνάγκη ταῦτα γενέσθαι ἢ ὑπάρχειν, ἢ εἶναι [ἢ] ὅλως τὴν ὕλην τὴν ἔνεκά του, οἷον πλίνθους

καὶ λίθους, εἰ οἰκία· οὐ μέντοι διὰ ταῦτά ἐστι τὸ τέλος ἄλλ' ἢ ὡς ὕλην, οὐδ' ἔσται διὰ ταῦτα. ὅλως μέντοι μὴ ὄντων οὐκ ἔσται οὕθ' ἢ οἰκία οὕθ' ὁ πρίων, ἢ μὲν εἰ μὴ οἱ λίθοι, ὁ δ' εἰ μὴ ὁ σίδηρος· οὐδὲ γὰρ ἐκεῖ αἱ ἀρχαί, εἰ μὴ τὸ τρίγωνον δύο ὀρθαί.

φανερὸν δὴ ὅτι τὸ ἀναγκαῖον ἐν τοῖς φυσικοῖς τὸ ὡς ὕλη λεγόμενον καὶ αἱ κινήσεις αἱ ταύτης. καὶ ἄμφω μὲν τῷ φυσικῷ λεκτέαι αἱ αἰτίαι, μᾶλλον δὲ ἡ τίνος ἔνεκα· αἴτιον γὰρ τοῦτο τῆς ὕλης, ἄλλ' οὐχ αὕτη τοῦ τέλους· καὶ τὸ τέλος τὸ οὗ ἔνεκα, καὶ ἡ ἀρχὴ ἀπὸ τοῦ ὀρισμοῦ καὶ τοῦ λόγου, ὥσπερ ἐν τοῖς κατὰ [200b] τέχνην, ἐπεὶ ἡ οἰκία τοιόνδε, τάδε δεῖ γενέσθαι καὶ ὑπάρχειν ἐξ ἀνάγκης, καὶ ἐπεὶ ἡ ὑγίεια τοδί, τάδε δεῖ γενέσθαι ἐξ ἀνάγκης καὶ ὑπάρχειν-οὕτως καὶ εἰ ἄνθρωπος τοδί, ταδί· εἰ δὲ ταδί, ταδί. ἴσως δὲ καὶ ἐν τῷ λόγῳ ἔστιν τὸ ἀναγκαῖον. ὀρισμένῳ γὰρ τὸ ἔργον τοῦ πρίειν ὅτι διαίρεσις τοιαδί, αὕτη γ' οὐκ ἔσται, εἰ μὴ ἔξει ὀδόντας τοιουσδί· οὗτοι δ' οὐ, εἰ μὴ σιδηροῦς. ἔστι γὰρ καὶ ἐν τῷ λόγῳ ἔνια μόρια ὡς ὕλη τοῦ λόγου.

### **Βιβλίο 3**

#### **Κεφάλαιο 1**

Ἐπεὶ δ' ἡ φύσις μὲν ἐστὶν ἀρχὴ κινήσεως καὶ μεταβολῆς, ἡ δὲ μέθοδος ἡμῖν περὶ φύσεως ἐστὶ, δεῖ μὴ λανθάνειν τί ἐστὶ κίνησις· ἀναγκαῖον γὰρ ἀγνοουμένης αὐτῆς ἀγνοεῖσθαι καὶ τὴν φύσιν.

διορισμένοις δὲ περὶ κινήσεως πειρατέον τὸν αὐτὸν ἐπελθεῖν τρόπον περὶ τῶν ἐφεξῆς. δοκεῖ δ' ἡ κίνησις εἶναι τῶν συνεχῶν, τὸ δ' ἄπειρον ἐμφαίνεται πρῶτον ἐν τῷ συνεχεῖ· διὸ καὶ τοῖς ὀριζομένοις τὸ συνεχὲς συμβαίνει προσχρήσασθαι πολλάκις τῷ λόγῳ τῷ τοῦ ἀπείρου, ὡς τὸ εἰς ἄπειρον διαιρετὸν συνεχὲς ὄν. πρὸς δὲ τούτοις ἄνευ τόπου καὶ κενοῦ καὶ χρόνου κίνησιν ἀδύνατον εἶναι.

δηλὸν οὖν ὡς διὰ τε ταῦτα, καὶ διὰ τὸ πάντων εἶναι κοινὰ καὶ καθόλου ταῦτα, σκεπτέον προχειρισάμενοις περὶ ἐκάστου τούτων (ὕστερα γὰρ ἢ περὶ τῶν ἰδίων θεωρία τῆς περὶ τῶν κοινῶν ἐστίν).

καὶ πρῶτον, καθάπερ εἴπαμεν, περὶ κινήσεως. ἔστι δὴ [τι] τὸ μὲν ἐντελεχεῖα μόνον, τὸ δὲ δυνάμει καὶ ἐντελεχεῖα, τὸ μὲν τόδε τι, τὸ δὲ τοσόνδε, τὸ δὲ τοιόνδε, καὶ τῶν ἄλλων τῶν τοῦ ὄντος κατηγοριῶν ὁμοίως. τοῦ δὲ πρὸς τι τὸ μὲν καθ' ὑπεροχὴν λέγεται καὶ κατ' ἔλλειψιν, τὸ δὲ κατὰ τὸ ποιητικὸν καὶ

παθητικόν, καὶ ὅλως κινητικόν τε καὶ κινητόν· τὸ γὰρ κινητικὸν κινητικὸν τοῦ κινητοῦ καὶ τὸ κινητὸν κινητὸν ὑπὸ τοῦ κινητικοῦ.

οὐκ ἔστι δὲ κίνησις παρὰ τὰ πράγματα· μεταβάλλει γὰρ ἀεὶ τὸ μεταβάλλον ἢ κατ' οὐσίαν ἢ κατὰ ποσὸν ἢ κατὰ ποιὸν ἢ κατὰ τόπον, κοινὸν δ' ἐπὶ τούτων οὐδὲν ἔστι λαβεῖν, ὡς φαμέν, ὃ οὔτε τόδε οὔτε πο [201a] σὸν οὔτε ποιὸν οὔτε τῶν ἄλλων κατηγορημάτων οὐθέν· ὥστ' οὐδὲ κίνησις οὐδὲ μεταβολὴ οὐθενὸς ἔσται παρὰ τὰ εἰρημένα, μηθενός γε ὄντος παρὰ τὰ εἰρημένα.

ἕκαστον δὲ διχῶς ὑπάρχει πᾶσιν, οἷον τὸ τόδε (τὸ μὲν γὰρ μορφὴ αὐτοῦ, τὸ δὲ στέρησις), καὶ κατὰ τὸ ποιόν (τὸ μὲν γὰρ λευκὸν τὸ δὲ μέλαν), καὶ κατὰ τὸ ποσὸν τὸ μὲν τέλειον τὸ δ' ἀτελές. ὁμοίως δὲ καὶ κατὰ τὴν φορὰν τὸ μὲν ἄνω τὸ δὲ κάτω, ἢ τὸ μὲν κοῦφον τὸ δὲ βαρύ.

ὥστε κινήσεως καὶ μεταβολῆς ἔστιν εἶδη τοσαῦτα ὅσα τοῦ ὄντος.

διηρημένου δὲ καθ' ἕκαστον γένος τοῦ μὲν ἐντελεχείᾳ τοῦ δὲ δυνάμει, ἢ τοῦ δυνάμει ὄντος ἐντελέχεια, ἢ τοιοῦτον, κίνησις ἔστιν, οἷον τοῦ μὲν ἀλλοιωτοῦ, ἢ ἀλλοιωτόν, ἀλλοίωσις, τοῦ δὲ αὐξητοῦ καὶ τοῦ ἀντικειμένου φθιτοῦ (οὐδὲν γὰρ ὄνομα κοινὸν ἐπ' ἀμφοῖν) αὔξεις καὶ φθίσις, τοῦ δὲ γενητοῦ καὶ φθαρτοῦ γένεσις καὶ φθορά, τοῦ δὲ φορητοῦ φορά.

ὅτι δὲ τοῦτο ἔστιν ἡ κίνησις, ἐντεῦθεν δῆλον. ὅταν γὰρ τὸ οἰκοδομητόν, ἢ τοιοῦτον αὐτὸ λέγομεν εἶναι, ἐντελεχείᾳ ἢ, οἰκοδομεῖται, καὶ ἔστιν τοῦτο οἰκοδόμησις· ὁμοίως δὲ καὶ μάθησις καὶ ἰατρευσις καὶ κύλισις καὶ ἄλσις καὶ ἄδρυνσις καὶ γήρανσις.

ἐπεὶ δ' ἔνια ταῦτ' αὐτὰ καὶ δυνάμει καὶ ἐντελεχείᾳ ἐστίν, οὐχ ἅμα δὲ ἢ οὐ κατὰ τὸ αὐτό, ἀλλ' οἷον θερμὸν μὲν ἐντελεχείᾳ ψυχρὸν δὲ δυνάμει, πολλὰ ἤδη ποιήσει καὶ πείσεται ὑπ' ἀλλήλων· ἅπαν γὰρ ἔσται ἅμα ποιητικὸν καὶ παθητικόν. ὥστε καὶ τὸ κινοῦν φυσικῶς κινητόν· πᾶν γὰρ τὸ τοιοῦτον κινεῖ κινούμενον καὶ αὐτό. δοκεῖ μὲν οὖν τισιν ἅπαν κινεῖσθαι τὸ κινοῦν, οὐ μὲν ἀλλὰ περὶ τούτου μὲν ἐξ ἄλλων ἔσται δῆλον ὅπως ἔχει (ἔστι γὰρ τι κινοῦν καὶ ἀκίνητον),

ἢ δὲ τοῦ δυνάμει ὄντος <ἐντελέχεια>, ὅταν ἐντελεχείᾳ ὃν ἐνεργῇ οὐχ ἢ αὐτὸ ἀλλ' ἢ κινητόν, κίνησις ἔστιν. λέγω δὲ τὸ ἢ ὡδί. ἔστι γὰρ ὁ χαλκὸς δυνάμει ἀνδριάς, ἀλλ' ὅμως οὐχ ἢ τοῦ χαλκοῦ ἐντελέχεια, ἢ χαλκός, κίνησις ἔστιν·

οὐ γὰρ τὸ αὐτὸ τὸ χαλκῷ εἶναι καὶ δυνάμει τινί [κινητῷ], ἐπεὶ εἰ ταύτὸν ἦν



ἀπλῶς καὶ κατὰ τὸν λόγον, ἦν ἂν ἡ τοῦ χαλκοῦ, ἢ χαλκός, ἐντελέχεια κινήσεις· οὐκ ἔστιν δὲ ταῦτόν, ὡς εἴρηται (δῆλον δ' ἐπὶ τῶν ἐναντίων· τὸ μὲν γὰρ δύνασθαι ὑγιαίνειν [201b] καὶ δύνασθαι κάμνειν ἕτερον-καὶ γὰρ ἂν τὸ κάμνειν καὶ τὸ ὑγιαίνειν ταῦτόν ἦν-τὸ δὲ ὑποκείμενον καὶ τὸ ὑγιαῖνον καὶ τὸ νοσοῦν, εἴθ' ὑγρότης εἴθ' αἷμα, ταῦτόν καὶ ἔν).

ἐπεὶ δ' οὐ ταῦτόν, ὥσπερ οὐδὲ χρῶμα ταῦτόν καὶ ὁρατόν, ἡ τοῦ δυνατοῦ, ἢ δυνατόν, ἐντελέχεια φανερόν ὅτι κινήσις ἔστιν.

ὅτι μὲν οὖν ἔστιν αὕτη, καὶ ὅτι συμβαίνει τότε κινεῖσθαι ὅταν ἡ ἐντελέχεια ἢ αὕτη, καὶ οὔτε πρότερον οὔτε ὕστερον, δῆλον· ἐνδέχεται γὰρ ἕκαστον ὅτε μὲν ἐνεργεῖν ὅτε δὲ μὴ, οἷον τὸ οἰκοδομητόν, καὶ ἡ τοῦ οἰκοδομητοῦ ἐνέργεια, ἢ οἰκοδομητόν, οἰκοδόμησις ἔστιν (ἢ γὰρ οἰκοδόμησις ἡ ἐνέργεια [τοῦ οἰκοδομητοῦ] ἢ ἡ οἰκία· ἀλλ' ὅταν οἰκία ἦ, οὐκέτ' οἰκοδομητόν ἔστιν· οἰκοδομεῖται δὲ τὸ οἰκοδομητόν· ἀνάγκη οὖν οἰκοδόμησιν τὴν ἐνέργειαν εἶναι)· ἢ δ' οἰκοδόμησις κινήσις τις. ἀλλὰ μὴν ὁ αὐτὸς ἐφαρμόσει λόγος καὶ ἐπὶ τῶν ἄλλων κινήσεων.

## Κεφάλαιο 2

Ὅτι δὲ καλῶς εἴρηται, δῆλον καὶ ἐξ ὧν οἱ ἄλλοι περὶ αὐτῆς λέγουσιν, καὶ ἐκ τοῦ μὴ ῥᾶδιον εἶναι διορίσαι ἄλλως αὐτήν.

οὔτε γὰρ τὴν κίνησιν καὶ τὴν μεταβολὴν ἐν ἄλλῳ γένει θεῖναι δύναιτ' ἂν τις, δῆλόν τε σκοποῦσιν ὡς τιθέασιν αὐτὴν ἔνιοι, ἑτερότητα καὶ ἀνισότητα καὶ τὸ μὴ ὄν φάσκοντες εἶναι τὴν κίνησιν· ὧν οὐδὲν ἀναγκαῖον κινεῖσθαι, οὔτ' ἂν ἕτερα ἢ οὔτ' ἂν ἄνισα οὔτ' ἂν οὐκ ὄντα· ἀλλ' οὐδ' ἡ μεταβολὴ οὔτ' εἰς ταῦτα οὔτ' ἐκ τούτων μᾶλλον ἔστιν ἢ ἐκ τῶν ἀντικειμένων.

αἴτιον δὲ τοῦ εἰς ταῦτα τιθέναι ὅτι ἀόριστόν τι δοκεῖ εἶναι ἡ κίνησις, τῆς δὲ ἑτέρας συστοιχίας αἱ ἀρχαὶ διὰ τὸ στερητικαὶ εἶναι ἀόριστοι· οὔτε γὰρ τόδε οὔτε τοιόνδε οὐδεμία αὐτῶν ἔστιν, [ὅτι] οὐδὲ τῶν ἄλλων κατηγοριῶν. τοῦ δὲ δοκεῖν ἀόριστον εἶναι τὴν κίνησιν αἴτιον ὅτι οὔτε εἰς δύναμιν τῶν ὄντων οὔτε εἰς ἐνέργειαν ἔστιν θεῖναι αὐτήν· οὔτε γὰρ τὸ δυνατόν ποσὸν εἶναι κινεῖται ἐξ ἀνάγκης οὔτε τὸ ἐνεργεῖα ποσόν, ἢ τε κινήσις ἐνέργεια μὲν εἶναι τις δοκεῖ, ἀτελὴς δέ· αἴτιον δ' ὅτι ἀτελὲς τὸ δυνατόν, οὐ ἔστιν ἐνέργεια. καὶ διὰ τοῦτο δὴ χαλεπὸν αὐτὴν λαβεῖν τί ἔστιν· ἢ γὰρ εἰς στέρησιν ἀναγκαῖον θεῖναι ἢ εἰς δύναμιν ἢ εἰς ἐνέργειαν ἀπλήν, τούτων δ' οὐδὲν φαίνεται ἐνδεχόμενον. λείπεται [202a] τοίνυν ὁ εἰρημένος τρόπος, ἐνέργειαν μὲν τινα εἶναι, τοιαύτην

δ' ἐνέργειαν οἷαν εἶπαμεν, χαλεπὴν μὲν ἰδεῖν, ἐνδεχομένην δ' εἶναι.

κινεῖται δὲ καὶ τὸ κινεῖν ὥσπερ εἴρηται πᾶν, τὸ δυνάμει ὄν κινήσιον, καὶ οὐ ἡ ἀκίνησις ἡρεμία ἐστίν (ὥ γὰρ ἡ κίνησις ὑπάρχει, τούτου ἡ ἀκίνησις ἡρεμία). τὸ γὰρ πρὸς τοῦτο ἐνεργεῖν, ἢ τοιοῦτον, αὐτὸ τὸ κινεῖν ἐστὶ· τοῦτο δὲ ποιεῖ θίξει, ὥστε ἅμα καὶ πάσχει· διὸ ἡ κίνησις ἐντελέχεια τοῦ κινήσιου, ἢ κινήσιον, συμβαίνει δὲ τοῦτο θίξει τοῦ κινήσιου, ὥσθ' ἅμα καὶ πάσχει. εἶδος δὲ αἰεὶ οἴσεται τι τὸ κινεῖν, ἢτοι τόδε ἢ τοιόνδε ἢ τοσόνδε, ὃ ἔσται ἀρχὴ καὶ αἴτιον τῆς κινήσεως, ὅταν κινή, οἷον ὁ ἐντελεχέας ἄνθρωπος ποιεῖ ἐκ τοῦ δυνάμει ὄντος ἀνθρώπου ἄνθρωπον.

### Κεφάλαιο 3

Καὶ τὸ ἀπορούμενον δὲ φανερόν, ὅτι ἐστὶν ἡ κίνησις ἐν τῷ κινήσι· ἐντελέχεια γὰρ ἐστὶ τούτου [καὶ] ὑπὸ τοῦ κινήσιου. καὶ ἡ τοῦ κινήσιου δὲ ἐνέργεια οὐκ ἄλλη ἐστίν· δεῖ μὲν γὰρ εἶναι ἐντελέχειαν ἀμφοῖν· κινήσιον μὲν γὰρ ἐστὶν τῷ δύνασθαι, κινεῖν δὲ τῷ ἐνεργεῖν, ἀλλ' ἔστιν ἐνεργητικὸν τοῦ κινήσιου, ὥστε ὁμοίως μία ἡ ἀμφοῖν ἐνέργεια ὥσπερ τὸ αὐτὸ διάστημα ἐν πρὸς δύο καὶ δύο πρὸς ἓν, καὶ τὸ ἀναντες καὶ τὸ κάταντες· ταῦτα γὰρ ἐν μὲν ἐστὶν, ὁ μὲντοι λόγος οὐχ εἷς· ὁμοίως δὲ καὶ ἐπὶ τοῦ κινήσιου καὶ κινουμένου.

ἔχει δ' ἀπορίαν λογικὴν· ἀναγκαῖον γὰρ ἴσως εἶναί τινα ἐνέργειαν τοῦ ποιητικοῦ καὶ τοῦ παθητικοῦ· τὸ μὲν δὴ ποίησις, τὸ δὲ πάθησις, ἔργον δὲ καὶ τέλος τοῦ μὲν ποίημα, τοῦ δὲ πάθος. ἐπεὶ οὖν ἄμφω κινήσεις, εἰ μὲν ἕτεροι, ἐν τίνι; ἢ γὰρ ἄμφω ἐν τῷ πάσχοντι καὶ κινουμένῳ, ἢ ἡ μὲν ποίησις ἐν τῷ ποιοῦντι, ἢ δὲ πάθησις ἐν τῷ πάσχοντι (εἰ δὲ δεῖ καὶ ταύτην ποίησιν καλεῖν, ὁμώνυμος ἂν εἴη).

ἀλλὰ μὴν εἰ τοῦτο, ἡ κίνησις ἐν τῷ κινεῖν ἔσται (ὁ γὰρ αὐτὸς λόγος ἐπὶ κινήσιου καὶ κινουμένου), ὥστ' ἢ πᾶν τὸ κινεῖν κινήσεται, ἢ ἔχον κίνησιν οὐ κινήσεται.

εἰ δ' ἄμφω ἐν τῷ κινουμένῳ καὶ πάσχοντι, καὶ ἡ ποίησις καὶ ἡ πάθησις, καὶ ἡ δίδαξις καὶ ἡ μάθησις δύο οὐσαι ἐν τῷ μανθάνοντι, πρῶτον μὲν ἡ ἐνέργεια ἡ ἐκάστου οὐκ ἐν ἐκάστῳ ὑπάρξει, εἴτα ἄτοπον δύο κινήσεις ἅμα κινεῖσθαι· τίνες γὰρ ἔσονται ἀλλοιώσεις δύο τοῦ ἐνὸς καὶ εἰς ἓν εἶδος; ἀλλ' ἀδύνατον. ἀλλὰ μία ἔσται ἡ ἐνέργεια.

ἀλλ' [202b] ἄλογον δύο ἐτέρων τῷ εἶδει τὴν αὐτὴν καὶ μίαν εἶναι ἐνέργειαν· καὶ ἔσται, εἴπερ ἡ δίδαξις καὶ ἡ μάθησις τὸ αὐτὸ καὶ ἡ ποίησις καὶ ἡ πάθησις, καὶ τὸ διδάσκειν τῷ μανθάνειν τὸ αὐτὸ καὶ τὸ ποιεῖν τῷ πάσχειν, ὥστε τὸν διδάσκοντα ἀνάγκη ἔσται πάντα μανθάνειν καὶ τὸν ποιοῦντα πάσχειν.

ἢ οὔτε τὸ τὴν ἄλλου ἐνέργειαν ἐν ἐτέρῳ εἶναι ἄτοπον (ἔστι γὰρ ἡ δίδαξις ἐνέργεια τοῦ διδασκαλικοῦ, ἐν τινι μέντοι, καὶ οὐκ ἀποτετμημένη, ἀλλὰ τοῦδε ἐν τῷδε),

οὔτε μίαν δυοῖν κωλύει οὐθὲν τὴν αὐτὴν εἶναι (μὴ ὡς τῷ εἶναι τὸ αὐτό, ἀλλ' ὡς ὑπάρχει τὸ δυνάμει ὄν πρὸς τὸ ἐνεργοῦν),

οὔτ' ἀνάγκη τὸν διδάσκοντα μανθάνειν, οὐδ' εἰ τὸ ποιεῖν καὶ πάσχειν τὸ αὐτό ἐστίν, μὴ μέντοι ὥστε τὸν λόγον εἶναι ἓνα τὸν <τὸ> τί ἦν εἶναι λέγοντα, οἷον ὡς λώπιον καὶ ἱμάτιον, ἀλλ' ὡς ἡ ὁδὸς ἡ Θήβηθεν Ἀθήναζε καὶ ἡ Ἀθήνηθεν εἰς Θήβας, ὥσπερ εἴρηται καὶ πρότερον; οὐ γὰρ ταῦτά πάντα ὑπάρχει τοῖς ὁπωσοῦν τοῖς αὐτοῖς, ἀλλὰ μόνον οἷς τὸ εἶναι τὸ αὐτό. οὐ μὴν ἀλλ' οὐδ' εἰ ἡ δίδαξις τῇ μαθήσει τὸ αὐτό, καὶ τὸ μανθάνειν τῷ διδάσκειν, ὥσπερ οὐδ' εἰ ἡ διάστασις μία τῶν διεστηκότων, καὶ τὸ διίστασθαι ἐνθένθε ἐκεῖσε κάκεῖθεν δεῦρο ἐν καὶ τὸ αὐτό. ὅλως δ' εἰπεῖν οὐδ' ἡ δίδαξις τῇ μαθήσει οὐδ' ἡ ποίησις τῇ παθήσει τὸ αὐτὸ κυρίως, ἀλλ' ὧς ὑπάρχει ταῦτα, ἡ κίνησις· τὸ γὰρ τοῦδε ἐν τῷδε καὶ τὸ τοῦδε ὑπὸ τοῦδε ἐνέργειαν εἶναι ἕτερον τῷ λόγῳ.

τί μὲν οὖν ἐστὶν κίνησις εἴρηται καὶ καθόλου καὶ κατὰ μέρος· οὐ γὰρ ἄδηλον πῶς ὀρισθήσεται τῶν εἰδῶν ἕκαστον αὐτῆς· ἀλλοιώσις μὲν γὰρ ἡ τοῦ ἀλλοιωτοῦ, ἢ ἀλλοιωτόν, ἐντελέχεια. ἔτι δὲ γνωριμώτερον, ἢ τοῦ δυνάμει ποιητικοῦ καὶ παθητικοῦ, ἢ τοιοῦτον, ἀπλῶς τε καὶ πάλιν καθ' ἕκαστον, ἢ οἰκοδόμησις ἢ ἰάτρευσις. τὸν αὐτὸν δὲ λεχθήσεται τρόπον καὶ περὶ τῶν ἄλλων κινήσεων ἑκάστης.

## Κεφάλαιο 4

Ἐπεὶ δ' ἐστὶν ἡ περὶ φύσεως ἐπιστήμη περὶ μεγέθη καὶ κίνησιν καὶ χρόνον, ὧν ἕκαστον ἀναγκαῖον ἢ ἄπειρον ἢ πεπερασμένον εἶναι, εἰ καὶ μὴ πᾶν ἐστὶν ἄπειρον ἢ πεπερασμένον, οἷον πάθος ἢ στιγμή (τῶν γὰρ τοιούτων ἴσως οὐδὲν ἀναγκαῖον ἐν θατέρῳ τούτων εἶναι), προσῆκον ἂν εἴη τὸν περὶ φύσεως πραγματευόμενον θεωρῆσαι περὶ ἀπείρου, εἰ ἔστιν ἢ μή, καὶ εἰ ἔστιν, τί ἐστίν.

σημείον δ' ὅτι ταύτης τῆς [203a] ἐπιστήμης οἰκεία ἡ θεωρία ἡ περὶ αὐτοῦ· πάντες γὰρ οἱ δοκοῦντες ἀξιολόγως ἤφθαι τῆς τοιαύτης φιλοσοφίας πεποιήνται λόγον περὶ τοῦ ἀπείρου, καὶ πάντες ὡς ἀρχὴν τινα τιθέασι τῶν ὄντων, οἱ μὲν, ὥσπερ οἱ Πυθαγόρειοι καὶ Πλάτων, καθ' αὐτό, οὐχ ὡς συμβεβηκός τινι ἑτέρῳ ἀλλ' οὐσίαν αὐτὸ ὄν τὸ ἄπειρον. πλὴν οἱ μὲν Πυθαγόρειοι ἐν τοῖς αἰσθητοῖς (οὐ γὰρ χωριστὸν ποιοῦσιν τὸν ἀριθμόν), καὶ εἶναι τὸ ἔξω τοῦ οὐρανοῦ ἄπειρον, Πλάτων δὲ ἔξω μὲν οὐδὲν εἶναι σῶμα, οὐδὲ τὰς ἰδέας, διὰ τὸ μηδὲ ποῦ εἶναι αὐτάς, τὸ μέντοι ἄπειρον καὶ ἐν τοῖς αἰσθητοῖς καὶ ἐν ἐκείναις εἶναι·

καὶ οἱ μὲν τὸ ἄπειρον εἶναι τὸ ἄρτιον (τοῦτο γὰρ ἐναπολαμβανόμενον καὶ ὑπὸ τοῦ περιττοῦ περαινόμενον παρέχειν τοῖς οὖσι τὴν ἀπειρίαν· σημείον δ' εἶναι τούτου τὸ συμβαῖνον ἐπὶ τῶν ἀριθμῶν· περιτιθεμένων γὰρ τῶν γνωμόνων περὶ τὸ ἐν καὶ χωρὶς ὅτε μὲν ἄλλο ἀεὶ γίνεσθαι τὸ εἶδος, ὅτε δὲ ἔν), Πλάτων δὲ δύο τὰ ἄπειρα, τὸ μέγα καὶ τὸ μικρόν.

οἱ δὲ περὶ φύσεως πάντες [ἀεὶ] ὑποτιθέασιν ἑτέραν τινὰ φύσιν τῷ ἀπείρῳ τῶν λεγομένων στοιχείων, οἷον ὕδωρ ἢ ἀέρα ἢ τὸ μεταξὺ τούτων. τῶν δὲ πεπερασμένα ποιούντων στοιχεῖα οὐθεὶς ἄπειρα ποιεῖ· ὅσοι δ' ἄπειρα ποιοῦσι τὰ στοιχεῖα, καθάπερ Ἀναξαγόρας καὶ Δημόκριτος, ὁ μὲν ἐκ τῶν ὁμοιομερῶν, ὁ δ' ἐκ τῆς πανσπερμίας τῶν σχημάτων, τῇ ἀφ᾽ ἧς συνεχὲς τὸ ἄπειρον εἶναι φασίν·

καὶ ὁ μὲν ὅτιοῦν τῶν μορίων εἶναι μίγμα ὁμοίως τῷ παντὶ διὰ τὸ ὁρᾶν ὅτιοῦν ἐξ ὅτουοῦν γινόμενον· ἐντεῦθεν γὰρ ἔοικε καὶ ὁμοῦ ποτε πάντα χρήματα φάναι εἶναι, οἷον ἥδε ἢ σὰρξ καὶ τόδε τὸ ὅστοῦν, καὶ οὕτως ὅτιοῦν· καὶ πάντα ἄρα· καὶ ἅμα τοίνυν· ἀρχὴ γὰρ οὐ μόνον ἐν ἐκάστῳ ἔστι τῆς διακρίσεως, ἀλλὰ καὶ πάντων. ἐπεὶ γὰρ τὸ γινόμενον ἐκ τοῦ τοιούτου γίγνεται σώματος, πάντων δ' ἔστι γένεσις πλὴν οὐχ ἅμα, καὶ τινα ἀρχὴν δεῖ εἶναι τῆς γενέσεως, αὕτη δ' ἐστὶν μία, οἷον ἐκεῖνος καλεῖ νοῦν, ὁ δὲ νοῦς ἀπ' ἀρχῆς τινος ἐργάζεται νοήσας· ὥστε ἀνάγκη ὁμοῦ ποτε πάντα εἶναι καὶ ἄρξασθαι ποτε κινούμενα.

Δημόκριτος δ' οὐδὲν ἕτερον ἐξ ἑτέρου γίνεσθαι τῶν πρώτων φησίν· ἀλλ' ὅμως γε αὐτῷ τὸ κοινὸν [203b] σῶμα πάντων ἐστὶν ἀρχή· μεγέθει κατὰ μόρια καὶ σχήματι διαφέρειν.

ὅτι μὲν οὖν προσήκουσα τοῖς φυσικοῖς ἡ θεωρία, δῆλον ἐκ τούτων· εὐλόγως δὲ καὶ ἀρχὴν αὐτὸ τιθέασι πάντες· οὔτε γὰρ μάτην οἷόν τε αὐτὸ εἶναι, οὔτε

ἄλλην ὑπάρχειν αὐτῷ δύναμιν πλὴν ὡς ἀρχήν· ἅπαντα γὰρ ἢ ἀρχὴ ἢ ἐξ ἀρχῆς, τοῦ δὲ ἀπείρου οὐκ ἔστιν ἀρχή· εἴη γὰρ ἂν αὐτοῦ πέρας. ἔτι δὲ καὶ ἀγέννητον καὶ ἀφθαρτον ὡς ἀρχή τις οὐσα· τό τε γὰρ γενόμενον ἀνάγκη τέλος λαβεῖν, καὶ τελευτὴ πάσης ἔστιν φθορᾶς. διό, καθάπερ λέγομεν, οὐ ταύτης ἀρχή, ἀλλ' αὕτη τῶν ἄλλων εἶναι δοκεῖ καὶ περιέχειν ἅπαντα καὶ πάντα κυβερνᾶν, ὡς φασιν ὅσοι μὴ ποιοῦσι παρὰ τὸ ἀπειρον ἄλλας αἰτίας, οἷον νοῦν ἢ φιλίαν· καὶ τοῦτ' εἶναι τὸ θεῖον· ἀθάνατον γὰρ καὶ ἀνώλεθρον, ὥσπερ φησὶν Ἀναξίμανδρος καὶ οἱ πλεῖστοι τῶν φυσιολόγων.

τοῦ δ' εἶναι τι ἀπειρον ἢ πίστις ἐκ πέντε μάλιστα· ἂν συμβαίνοι σκοποῦσιν,

1. ἔκ τε τοῦ χρόνου (οὗτος γὰρ ἀπειρος)
2. καὶ ἐκ τῆς ἐν τοῖς μεγέθεσι διαιρέσεως (χρῶνται γὰρ καὶ οἱ μαθηματικοὶ τῷ ἀπείρῳ).
3. ἔτι τῷ οὕτως ἂν μόνως μὴ ὑπολείπειν γένεσιν καὶ φθοράν, εἰ ἀπειρον εἴη ὅθεν ἀφαιρεῖται τὸ γινόμενον.
4. ἔτι τῷ τὸ πεπερασμένον ἀεὶ πρὸς τι περαίνειν, ὥστε ἀνάγκη μηδὲν εἶναι πέρας, εἰ ἀεὶ περαίνειν ἀνάγκη ἕτερον πρὸς ἕτερον.
5. μάλιστα δὲ καὶ κυριώτατον, ὃ τὴν κοινὴν ποιεῖ ἀπορίαν πᾶσι· διὰ γὰρ τὸ ἐν τῇ νοήσει μὴ ὑπολείπειν καὶ ὁ ἀριθμὸς δοκεῖ ἀπειρος εἶναι καὶ τὰ μαθηματικὰ μεγέθη καὶ τὸ ἔξω τοῦ οὐρανοῦ.

ἀπείρου δ' ὄντος τοῦ ἔξω, καὶ σῶμα ἀπειρον εἶναι δοκεῖ καὶ κόσμοι· τί γὰρ μᾶλλον τοῦ κενοῦ ἐνταῦθα ἢ ἐνταῦθα; ὥστ' εἴπερ μοναχοῦ, καὶ πανταχοῦ εἶναι τὸν ὄγκον. ἅμα δ' εἰ καὶ ἔστι κενὸν καὶ τόπος ἀπειρος, καὶ σῶμα εἶναι ἀναγκαῖον· ἐνδέχεσθαι γὰρ ἢ εἶναι οὐδὲν διαφέρει ἐν τοῖς αἰδίοις. ἔχει δ' ἀπορίαν ἢ περὶ τοῦ ἀπείρου θεωρία· καὶ γὰρ μὴ εἶναι τιθεμένοις πόλλ' ἀδύνατα συμβαίνει καὶ εἶναι. ἔτι δὲ ποτέρως ἔστιν, πότερον ὡς οὐσία ἢ ὡς συμβεβηκὸς καθ' αὐτὸ φύσει τινί; ἢ οὐδετέρως, ἀλλ' οὐδὲν ἥττον ἔστιν ἀπειρον ἢ ἀπειρα [204a] τῷ πλήθει;

μάλιστα δὲ φυσικοῦ ἔστιν σκέψασθαι εἰ ἔστι μέγεθος αἰσθητὸν ἀπειρον.

πρῶτον οὖν διοριστέον ποσαχῶς λέγεται τὸ ἀπειρον.

1. ἓνα μὲν δὴ τρόπον τὸ ἀδύνατον διελθεῖν τῷ μὴ πεφυκέναι διέναι, ὥσπερ ἢ

φωνή ἄόρατος·

2. ἄλλως δὲ τὸ διέξοδον ἔχον ἀτελεύτητον, ἢ ὃ μόγῃς,

3. ἢ ὃ πεφυκὸς ἔχειν μὴ ἔχει διέξοδον ἢ πέρας.

ἔτι ἄπειρον ἅπαν ἢ κατὰ πρόσθεσιν ἢ κατὰ διαίρεσιν ἢ ἀμφοτέρως.

## Κεφάλαιο 5

Χωριστὸν μὲν οὖν εἶναι τὸ ἄπειρον τῶν αἰσθητῶν, αὐτό τι ὄν ἄπειρον, οὐχ οἷόν τε. εἰ γὰρ μήτε μέγεθός ἐστιν μήτε πλῆθος, ἀλλ' οὐσία αὐτό ἐστι τὸ ἄπειρον καὶ μὴ συμβεβη κός, ἀδιαίρετον ἔσται (τὸ γὰρ διαιρετὸν ἢ μέγεθος ἔσται ἢ πλῆθος)· εἰ δὲ τοιοῦτον, οὐκ ἄπειρον, εἰ μὴ ὡς ἡ φωνὴ ἄόρατος. ἀλλ' οὐχ οὕτως οὔτε φασὶν εἶναι οἱ φάσκοντες εἶναι τὸ ἄπειρον οὔτε ἡμεῖς ζητοῦμεν, ἀλλ' ὡς ἀδιεξίτητον. εἰ δὲ κατὰ συμβεβηκὸς ἔστιν τὸ ἄπειρον, οὐκ ἂν εἴη στοιχεῖον τῶν ὄντων, ἢ ἄπειρον, ὥσπερ οὐδὲ τὸ ἄόρατον τῆς διαλέκτου, καίτοι ἡ φωνὴ ἐστὶν ἄόρατος.

ἔτι πῶς ἐνδέχεται εἶναι τι αὐτὸ ἄπειρον, εἴπερ μὴ καὶ ἀριθμὸν καὶ μέγεθος, ὧν ἐστὶ καθ' αὐτὸ πάθος τι τὸ ἄπειρον; ἔτι γὰρ ἦττον ἀνάγκη ἢ τὸν ἀριθμὸν ἢ τὸ μέγεθος.

φανερὸν δὲ καὶ ὅτι οὐκ ἐνδέχεται εἶναι τὸ ἄπειρον ὡς ἐνεργείᾳ ὄν καὶ ὡς οὐσίαν καὶ ἀρχήν· ἔσται γὰρ ὅτιοῦν αὐτοῦ ἄπειρον τὸ λαμβανόμενον, εἰ μεριστόν (τὸ γὰρ ἀπείρῳ εἶναι καὶ ἄπειρον τὸ αὐτό, εἴπερ οὐσία τὸ ἄπειρον καὶ μὴ καθ' ὑποκειμένου), ὥστ' ἢ ἀδιαίρετον ἢ εἰς ἄπειρα διαιρετόν· πολλὰ δ' ἄπειρα εἶναι τὸ αὐτὸ ἀδύνατον (ἀλλὰ μὴν ὥσπερ ἀέρος ἀῆρ μέρος, οὕτω καὶ ἄπειρον ἀπείρου, εἴ γε οὐσία ἐστὶ καὶ ἀρχή)· ἀμέριστον ἄρα καὶ ἀδιαίρετον. ἀλλ' ἀδύνατον τὸ ἐντελεχείᾳ ὄν ἄπειρον· ποσὸν γάρ τι εἶναι ἀναγκαῖον.

κατὰ συμβεβηκὸς ἄρα ὑπάρχει τὸ ἄπειρον. ἀλλ' εἰ οὕτως, εἴρηται ὅτι οὐκ ἐνδέχεται αὐτὸ λέγειν ἀρχήν, ἀλλ' ὥ συμβέβηκε, τὸν ἀέρα ἢ τὸ ἄρτιον.

ὥστε ἀτόπως ἂν ἀποφαίνοντο οἱ λέγοντες οὕτως ὥσπερ οἱ Πυθαγόρειοί φασιν· ἅμα γὰρ οὐσίαν ποιοῦσι τὸ ἄπειρον καὶ μερίζουσιν.

ἀλλ' ἴσως αὕτη μὲν [ἐστὶ] καθόλου ἢ ζήτησις, εἰ ἐνδέχεται ἄπειρον καὶ ἐν τοῖς μαθηματικοῖς [204b] εἶναι καὶ ἐν τοῖς νοητοῖς καὶ μηδὲν ἔχουσι μέγεθος·

ἡμεῖς δ' ἐπισκοποῦμεν περὶ τῶν αἰσθητῶν καὶ περὶ ὧν ποιούμεθα τὴν μέθοδον, ἅρ' ἔστιν ἐν αὐτοῖς ἢ οὐκ ἔστι σῶμα ἄπειρον ἐπὶ τὴν αὔξησιν.

λογικῶς μὲν οὖν σκοπούμενοις ἐκ τῶν τοιῶνδε δόξειεν ἂν οὐκ εἶναι· εἰ γὰρ ἔστι σώματος λόγος τὸ ἐπιπέδῳ ὠρισμένον, οὐκ ἂν εἴη σῶμα ἄπειρον, οὔτε νοητὸν οὔτε αἰσθητὸν (ἀλλὰ μὴν οὐδ' ἀριθμὸς οὕτως ὡς κεχωρισμένος καὶ ἄπειρος· ἀριθμητὸν γὰρ ἀριθμὸς ἢ τὸ ἔχον ἀριθμόν· εἰ οὖν τὸ ἀριθμητὸν ἐνδέχεται ἀριθμῆσαι, καὶ διεξελθεῖν ἂν εἴη δυνατόν τὸ ἄπειρον).

φυσικῶς δὲ μᾶλλον θεωροῦσιν ἐκ τῶνδε.

οὔτε γὰρ σύνθετον οἶόν τε εἶναι οὔτε ἀπλοῦν.

σύνθετον μὲν οὖν οὐκ ἔσται τὸ ἄπειρον σῶμα, εἰ πεπερασμένα τῷ πλήθει τὰ στοιχεῖα. ἀνάγκη γὰρ πλείω εἶναι, καὶ ἰσάζειν ἀεὶ τάναντία, καὶ μὴ εἶναι ἐν αὐτῶν ἄπειρον (εἰ γὰρ ὅποσῳ οὖν λείπεται ἢ ἐν ἐνὶ σώματι δύναμις θατέρου, οἶον εἰ τὸ πῦρ πεπέρανται, ὃ δ' ἄηρ ἄπειρος, ἔστιν δὲ τὸ ἴσον πῦρ τοῦ ἴσου ἀέρος τῇ δυνάμει ὅποσαπλασιονοῦν, μόνον δὲ ἀριθμόν τινα ἔχον, ὅμως φανερόν ὅτι τὸ ἄπειρον ὑπερβαλεῖ καὶ φθερεῖ τὸ πεπερασμένον). ἕκαστον δ' ἄπειρον εἶναι ἀδύνατον· σῶμα μὲν γὰρ ἔστιν τὸ πάντῃ ἔχον διάστασιν, ἄπειρον δὲ τὸ ἀπεράντως διεστηκός, ὥστε τὸ ἄπειρον σῶμα πανταχῇ ἔσται διεστηκὸς εἰς ἄπειρον.

ἀλλὰ μὴν οὐδὲ ἐν καὶ ἀπλοῦν εἶναι σῶμα ἄπειρον ἐνδέχεται, οὔτε ὡς λέγουσί τινες τὸ παρὰ τὰ στοιχεῖα, ἐξ οὗ ταῦτα γεννῶσιν, οὔθ' ἀπλῶς.

εἰσὶν γὰρ τινες οἱ τοῦτο ποιοῦσι τὸ ἄπειρον, ἀλλ' οὐκ ἀέρα ἢ ὕδωρ, ὅπως μὴ τᾶλλα φθείρηται ὑπὸ τοῦ ἀπείρου αὐτῶν· ἔχουσι γὰρ πρὸς ἄλληλα ἐναντίωσιν, οἶον ὃ μὲν ἄηρ ψυχρός, τὸ δ' ὕδωρ ὑγρόν, τὸ δὲ πῦρ θερμόν· ὧν εἰ ἦν ἐν ἄπειρον, ἔφθαρτο ἂν ἤδη τᾶλλα· νῦν δ' ἕτερον εἶναί φασιν ἐξ οὗ ταῦτα.

ἀδύνατον δ' εἶναι τοιοῦτον, οὐχ ὅτι ἄπειρον (περὶ τούτου μὲν γὰρ κοινόν τι λεκτέον ἐπὶ παντὸς ὁμοίως, καὶ ἀέρος καὶ ὕδατος καὶ ὁτουοῦν), ἀλλ' ὅτι οὐκ ἔστιν τοιοῦτον σῶμα αἰσθητὸν παρὰ τὰ καλούμενα στοιχεῖα· ἅπαντα γὰρ ἐξ οὗ ἔστι, καὶ διαλύεται εἰς τοῦτο, ὥστε ἦν ἂν ἐνταῦθα παρὰ ἀέρα καὶ πῦρ καὶ γῆν καὶ ὕδωρ· φαίνεται δ' οὐδέν.

οὐδὲ δὴ πῦρ οὐδ' ἄλλο τι [205a] τῶν στοιχείων οὐδὲν ἄπειρον ἐνδέχεται εἶναι. ὅλως γὰρ καὶ χωρὶς τοῦ ἄπειρον εἶναί τι αὐτῶν, ἀδύνατον τὸ πᾶν, κἂν

ἢ πεπερασμένον, ἢ εἶναι ἢ γίνεσθαι ἓν τι αὐτῶν, ὥσπερ Ἡράκλειτός φησιν ἅπαντα γίνεσθαι ποτε πῦρ (ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τοῦ ἑνός, οἷον ποιοῦσι παρὰ τὰ στοιχεῖα οἱ φυσικοί). πάντα γὰρ μεταβάλλει ἐξ ἐναντίου εἰς ἐναντίον, οἷον ἐκ θερμοῦ εἰς ψυχρόν.

δεῖ δὲ κατὰ παντὸς ἐκ τῶνδε σκοπεῖν, εἰ ἐνδέχεται ἢ οὐκ ἐνδέχεται εἶναι [σῶμα ἄπειρον αἰσθητόν]. ὅτι δὲ ὅλως ἀδύνατον εἶναι σῶμα ἄπειρον αἰσθητόν, ἐκ τῶνδε δῆλον.

πέφυκε γὰρ πᾶν τὸ αἰσθητόν που εἶναι, καὶ ἔστιν τόπος τις ἐκάστου, καὶ ὁ αὐτὸς τοῦ μορίου καὶ παντός, οἷον ὅλης τε τῆς γῆς καὶ βώλου μιᾶς, καὶ πυρὸς καὶ σπινθῆρος.

ὥστε εἰ μὲν ὁμοειδές, ἀκίνητον ἔσται ἢ ἀεὶ οἰσθήσεται· καίτοι ἀδύνατον (τί γὰρ μᾶλλον κάτω ἢ ἄνω ἢ ὅπουοῦν; λέγω δὲ οἷον, εἰ βῶλος εἴη, ποῦ αὕτη κινηθήσεται ἢ ποῦ μενεῖ; ὁ γὰρ τόπος ἄπειρος τοῦ συγγενοῦς αὐτῇ σώματος. πότερον οὖν καθεξεί τὸν ὅλον τόπον; καὶ πῶς; τίς οὖν ἢ ποῦ ἢ μονὴ καὶ ἡ κίνησις αὐτῆς; ἢ πανταχοῦ μενεῖ; οὐ κινηθήσεται ἄρα. ἢ πανταχοῦ κινηθήσεται; οὐκ ἄρα στήσεται).

εἰ δ' ἀνόμοιον τὸ πᾶν, ἀνόμοιοι καὶ οἱ τόποι· καὶ πρῶτον μὲν οὐχ ἓν τὸ σῶμα τοῦ παντὸς ἄλλ' ἢ τῷ ἅπτεσθαι. ἔπειτα ἥτοι πεπερασμένα ταῦτ' ἔσται ἢ ἄπειρα τῷ εἶδει. πεπερασμένα μὲν οὖν οὐχ οἷόν τε (ἔσται γὰρ τὰ μὲν ἄπειρα τὰ δ' οὐ, εἰ τὸ πᾶν ἄπειρον, οἷον τὸ πῦρ ἢ τὸ ὕδωρ· φθορὰ δὲ τὸ τοιοῦτον τοῖς ἐναντίοις [καθάπερ εἴρηται πρότερον· (καὶ διὰ τοῦτ' οὐθεὶς τὸ ἓν καὶ ἄπειρον πῦρ ἐποίησεν οὐδὲ γῆν τῶν φυσιολόγων, ἀλλ' ἢ ὕδωρ ἢ ἀέρα ἢ τὸ μέσον αὐτῶν, ὅτι τόπος ἐκατέρου δῆλος ἦν διωρισμένος, ταῦτα δ' ἐπαμφοτερίζει τῷ ἄνω καὶ κάτω.) εἰ δ' ἄπειρα καὶ ἀπλᾶ, καὶ οἱ τόποι ἄπειροι, καὶ ἔσται ἄπειρα τὰ στοιχεῖα· εἰ δὲ τοῦτ' ἀδύνατον καὶ πεπερασμένοι οἱ τόποι, καὶ τὸ ὅλον [πεπεράνθαι ἀναγκαῖον]· ἀδύνατον γὰρ μὴ ἀπαρτίζειν τὸν τόπον καὶ τὸ σῶμα· οὔτε γὰρ ὁ τόπος ὁ πᾶς μείζων ἢ ὅσον ἐνδέχεται τὸ σῶμα εἶναι (ἅμα δ' οὐδ' ἄπειρον ἔσται τὸ σῶμα ἔτι), οὔτε τὸ σῶμα μείζον ἢ ὁ τόπος· ἢ γὰρ κενὸν [205b] ἔσται τι ἢ σῶμα οὐδαμοῦ πεφυκὸς εἶναι.

Ἀναξαγόρας δ' ἀτόπως λέγει περὶ τῆς τοῦ ἀπείρου μονῆς· στηρίζει γὰρ αὐτὸ αὐτό φησιν τὸ ἄπειρον· τοῦτο δέ, ὅτι ἐν αὐτῷ (ἄλλο γὰρ οὐδὲν περιέχειν), ὥς ὅπου ἂν τι ἦ, πεφυκὸς ἐνταῦθα εἶναι. τοῦτο δ' οὐκ ἀληθές· εἴη γὰρ ἂν τί που βιᾷ καὶ οὐχ οὐ πέφυκεν.



εἰ οὖν ὅτι μάλιστα μὴ κινεῖται τὸ ὅλον (τὸ γὰρ αὐτῷ στηριζόμενον καὶ ἐν αὐτῷ ὄν ἀκίνητον εἶναι ἀνάγκη), ἀλλὰ διὰ τί οὐ πέφυκε κινεῖσθαι, λεκτέον. οὐ γὰρ ἰκανὸν τὸ οὕτως εἰπόντα ἀπηλλάχθαι· εἴη γὰρ ἂν καὶ ὅτι οὐκ ἔχει ἀλλαχῇ κινεῖσθαι οὐ κινούμενον, ἀλλὰ πεφυκέναι οὐδὲν κωλύει· ἐπεὶ καὶ ἡ γῆ οὐ φέρεται, οὐδ' εἰ ἄπειρος ἦν, εἰργμένη μέντοι ὑπὸ τοῦ μέσου· ἀλλ' οὐχ ὅτι οὐκ ἔστιν ἄλλο οὗ ἐνεχθήσεται, μείνειεν ἂν [ἐπὶ τοῦ μέσου], ἀλλ' ὅτι πέφυκεν οὕτω. καίτοι ἐξεῖη ἂν λέγειν ὅτι στηρίζει αὐτήν. εἰ οὖν μὴδ' ἐπὶ τῆς γῆς τοῦτο αἴτιον ἀπείρου οὔσης, ἀλλ' ὅτι βάρος ἔχει, τὸ δὲ βαρὺ μένει ἐπὶ τοῦ μέσου, ἡ δὲ γῆ ἐπὶ τοῦ μέσου, ὁμοίως ἂν καὶ τὸ ἄπειρον μένοι ἐν αὐτῷ διὰ τιν' ἄλλην αἰτίαν, καὶ οὐχ ὅτι ἄπειρον καὶ στηρίζει αὐτὸ ἐαυτό.

ἅμα δὲ δῆλον ὅτι κἂν ὅτιοῦν μέρος δύοι μένειν· ὥς γὰρ τὸ ἄπειρον ἐν ἐαυτῷ μένει στηρίζον, οὕτως κἂν ὅτιοῦν ληφθῇ μέρος ἐν ἐαυτῷ μενεῖ· τοῦ γὰρ ὅλου καὶ τοῦ μέρους ὁμοειδεῖς οἱ τόποι, οἷον ὅλης γῆς καὶ βώλου κάτω καὶ παντὸς πυρὸς καὶ σπινθῆρος ἄνω. ὥστε εἰ τοῦ ἀπείρου τόπος τὸ ἐν αὐτῷ, καὶ τοῦ μέρους ὁ αὐτός. μενεῖ ἄρα ἐν ἐαυτῷ.

ὅλως δὲ φανερόν ὅτι ἀδύνατον ἄπειρον ἅμα λέγειν σῶμα καὶ τόπον τινὰ εἶναι τοῖς σώμασιν, εἰ πᾶν σῶμα αἰσθητὸν ἢ βάρος ἔχει ἢ κουφότητα, καὶ εἰ μὲν βαρὺ, ἐπὶ τὸ μέσον ἔχει τὴν φορὰν φύσει, εἰ δὲ κοῦφον, ἄνω· ἀνάγκη γὰρ καὶ τὸ ἄπειρον, ἀδύνατον δὲ ἢ ἅπαν ὁποτερονοῦν ἢ τὸ ἥμισυ ἐκάτερον πεπονθέναι· πῶς γὰρ διελεῖς; ἢ πῶς τοῦ ἀπείρου ἔσται τὸ μὲν ἄνω τὸ δὲ κάτω, ἢ ἔσχατον καὶ μέσον;

ἔτι πᾶν σῶμα αἰσθητὸν ἐν τόπῳ, τόπου δὲ εἶδη καὶ διαφοραὶ τᾶνω καὶ κάτω καὶ ἔμπροσθεν καὶ ὀπίσθεν καὶ δεξιὸν καὶ ἀριστερόν· καὶ ταῦτα οὐ μόνον πρὸς ἡμᾶς καὶ θέσει, ἀλλὰ καὶ ἐν αὐτῷ τῷ ὅλῳ διώριστα. ἀδύνατον δ' ἐν τῷ ἀπείρῳ εἶναι ταῦτα. ἀπλῶς δ' εἰ ἀδύνατον [206a] τόπον ἄπειρον εἶναι, ἐν τόπῳ δὲ πᾶν σῶμα, ἀδύνατον ἄπειρον [τι] εἶναι σῶμα.

ἀλλὰ μὴν τό γε ποῦ ἐν τόπῳ, καὶ τὸ ἐν τόπῳ πού. εἰ οὖν μὴδὲ ποσὸν οἷόν τ' εἶναι τὸ ἄπειρον-ποσὸν γὰρ τί ἔσται, οἷον δίπηχυ ἢ τρίπηχυ· ταῦτα γὰρ σημαίνει τὸ ποσόν-οὔτω καὶ τὸ ἐν τόπῳ ὅτι πού, τοῦτο δὲ ἢ ἄνω ἢ κάτω ἢ ἐν ἄλλῃ τινὶ διαστάσει τῶν ἑξ, τούτων δ' ἕκαστον πέρας τί ἐστίν.

ὅτι μὲν οὖν ἐνεργεία οὐκ ἔστι σῶμα ἄπειρον, φανερόν ἐκ τούτων.

## Κεφάλαιο 6

Ὅτι δ' εἰ μὴ ἔστιν ἄπειρον ἀπλῶς, πολλὰ ἀδύνατα συμβαίνει, δῆλον. τοῦ τε γὰρ χρόνου ἔσται τις ἀρχὴ καὶ τελευτή, καὶ τὰ μεγέθη οὐ διαιρετὰ εἰς μεγέθη, καὶ ἀριθμὸς οὐκ ἔσται ἄπειρος. ὅταν δὲ διωρισμένων οὕτως μηδετέρως φαίνεται ἐνδέχασθαι, διαιτητοῦ δεῖ, καὶ δῆλον ὅτι πῶς μὲν ἔστιν πῶς δ' οὔ.

λέγεται δὴ τὸ εἶναι τὸ μὲν δυνάμει τὸ δὲ ἐντελεχείᾳ, καὶ τὸ ἄπειρον ἔστι μὲν προσθέσει ἔστι δὲ καὶ διαιρέσει.

τὸ δὲ μέγεθος ὅτι μὲν κατ' ἐνέργειαν οὐκ ἔστιν ἄπειρον, εἴρηται, διαιρέσει δ' ἔστιν· οὐ γὰρ χαλεπὸν ἀνελεῖν τὰς ἀτόμους γραμμάς· λείπεται οὖν δυνάμει εἶναι τὸ ἄπειρον.

οὐ δεῖ δὲ τὸ δυνάμει ὄν λαμβάνειν, ὥσπερ εἰ δυνατὸν τοῦτ' ἀνδριάντα εἶναι, ὡς καὶ ἔσται τοῦτ' ἀνδριάς, οὕτω καὶ ἄπειρον ὃ ἔσται ἐνεργείᾳ· ἄλλ' ἐπεὶ πολλαχῶς τὸ εἶναι, ὥσπερ ἡ ἡμέρα ἔστι καὶ ὁ ἀγὼν τῷ ἀεὶ ἄλλο καὶ ἄλλο γίνεσθαι, οὕτω καὶ τὸ ἄπειρον (καὶ γὰρ ἐπὶ τούτων ἔστι καὶ δυνάμει καὶ ἐνεργείᾳ· Ὀλύμπια γὰρ ἔστι καὶ τῷ δύνασθαι τὸν ἀγῶνα γίνεσθαι καὶ τῷ γίνεσθαι).

ἄλλως δ' ἔν τε τῷ χρόνῳ δῆλον [τὸ ἄπειρον] καὶ ἐπὶ τῶν ἀνθρώπων, καὶ ἐπὶ τῆς διαιρέσεως τῶν μεγεθῶν. ὅλως μὲν γὰρ οὕτως ἔστιν τὸ ἄπειρον, τῷ ἀεὶ ἄλλο καὶ ἄλλο λαμβάνεσθαι, καὶ τὸ λαμβανόμενον μὲν ἀεὶ εἶναι πεπερασμένον, ἄλλ' ἀεὶ γε ἕτερον καὶ ἕτερον· [ἔτι τὸ εἶναι πλεοναχῶς λέγεται, ὥστε τὸ ἄπειρον οὐ δεῖ λαμβάνειν ὡς τόδε τι, οἷον ἄνθρωπον ἢ οἰκίαν, ἄλλ' ὡς ἡ ἡμέρα λέγεται καὶ ὁ ἀγὼν, οἷς τὸ εἶναι οὐχ ὡς οὐσία τις γέγονεν, ἀλλ' ἀεὶ ἐν γενέσει ἢ φθορᾷ, πεπερασμένον, ἄλλ' ἀεὶ γε ἕτερον καὶ ἕτερον.]

ἄλλ' ἐν [206b] τοῖς μεγέθεσιν ὑπομένοντος τοῦ ληφθέντος [τοῦτο συμβαίνει], ἐπὶ δὲ τοῦ χρόνου καὶ τῶν ἀνθρώπων φθειρομένων οὕτως ὥστε μὴ ἐπιλείπειν.

τὸ δὲ κατὰ πρόσθεσιν τὸ αὐτὸ ἐστὶ πῶς καὶ τὸ κατὰ διαίρεσιν· ἐν γὰρ τῷ πεπερασμένῳ κατὰ πρόσθεσιν γίνεταί ἀντεστραμμένως· ἢ γὰρ διαιρούμενον ὁρᾶται εἰς ἄπειρον, ταύτῃ προστιθέμενον φανεῖται πρὸς τὸ ὠρισμένον. ἐν γὰρ τῷ πεπερασμένῳ μεγέθει ἂν λαβὼν τις ὠρισμένον προσλαμβάνῃ τῷ αὐτῷ λόγῳ, μὴ τὸ αὐτὸ τι τοῦ ὅλου μέγεθος περιλαμβάνων, οὐ διέξεισι τὸ πεπερασμένον· ἐὰν δ' οὕτως αὔξη τὸν λόγον ὥστε ἀεὶ τι τὸ αὐτὸ περιλαμβάνειν μέγεθος, διέξεισι, διὰ τὸ πᾶν πεπερασμένον ἀναιρεῖσθαι

ὁτῶοῦν ὠρισμένῳ.

ἄλλως μὲν οὖν οὐκ ἔστιν, οὕτως δ' ἔστι τὸ ἄπειρον, δυνάμει τε καὶ ἐπὶ καθαιρέσει (καὶ ἐντελεχείᾳ δὲ ἔστιν, ὡς τὴν ἡμέραν εἶναι λέγομεν καὶ τὸν ἄγῶνα)· καὶ δυνάμει οὕτως ὡς ἡ ὕλη, καὶ οὐ καθ' αὐτό, ὡς τὸ πεπερασμένον. καὶ κατὰ πρόσθεσιν δὴ οὕτως ἄπειρον δυνάμει ἔστιν, ὃ ταῦτ' οὖν λέγομεν τρόπον τινὰ εἶναι τῷ κατὰ διαίρεσιν· ἀεὶ μὲν γάρ τι ἔξω ἔσται λαμβάνειν, οὐ μέντοι ὑπερβαλεῖ παντὸς μεγέθους, ὥσπερ ἐπὶ τὴν διαίρεσιν ὑπερβάλλει παντὸς ὠρισμένου καὶ ἀεὶ ἔσται ἔλαττον.

ὥστε δὲ παντὸς ὑπερβάλλειν κατὰ τὴν πρόσθεσιν, οὐδὲ δυνάμει οἶόν τε εἶναι, εἴπερ μὴ ἔστι κατὰ συμβεβηκὸς ἐντελεχείᾳ ἄπειρον, ὥσπερ φασὶν οἱ φυσιολόγοι τὸ ἔξω σῶμα τοῦ κόσμου, οὐ ἢ οὐσία ἢ ἀήρ ἢ ἄλλο τι τοιοῦτον, ἄπειρον εἶναι. ἀλλ' εἰ μὴ οἶόν τε εἶναι ἄπειρον ἐντελεχείᾳ σῶμα αἰσθητὸν οὕτω, φανερόν ὅτι οὐδὲ δυνάμει ἂν εἴη κατὰ πρόσθεσιν, ἀλλ' ἢ ὥσπερ εἴρηται ἀντεστραμμένως τῇ διαίρεσει, ἐπεὶ καὶ Πλάτων διὰ τοῦτο δύο τὰ ἄπειρα ἐποίησεν, ὅτι καὶ ἐπὶ τὴν αὕξιν δοκεῖ ὑπερβάλλειν καὶ εἰς ἄπειρον ἰέναι καὶ ἐπὶ τὴν καθαίρεσιν. ποιήσας μέντοι δύο οὐ χρῆται· οὔτε γὰρ ἐν τοῖς ἀριθμοῖς τὸ ἐπὶ τὴν καθαίρεσιν ἄπειρον ὑπάρχει (ἢ γὰρ μονὰς ἐλάχιστον), οὔτε <τὸ> ἐπὶ τὴν αὕξιν (μέχρι γὰρ δεκάδος ποιεῖ τὸν ἀριθμόν).

συμβαίνει δὲ τοῦναντίον εἶναι ἄπειρον ἢ ὡς λέγουσιν. [207a] οὐ γὰρ οὐ μηδὲν ἔξω, ἀλλ' οὐ αἰεὶ τι ἔξω ἐστί, τοῦτο ἄπειρόν ἐστιν. σημεῖον δέ· καὶ γὰρ τοὺς δακτυλίους ἀπείρους λέγουσι τοὺς μὴ ἔχοντας σφενδόνην, ὅτι αἰεὶ τι ἔξω ἔστι λαμβάνειν, καθ' ὁμοιότητα μὲν τινα λέγοντες, οὐ μέντοι κυρίως· δεῖ γὰρ τοῦτό τε ὑπάρχειν καὶ μηδέποτε τὸ αὐτὸ λαμβάνεσθαι· ἐν δὲ τῷ κύκλῳ οὐ γίγνεται οὕτως, ἀλλ' αἰεὶ τὸ ἐφεξῆς μόνον ἕτερον. ἄπειρον μὲν οὖν ἐστιν οὐ κατὰ τὸ ποσὸν λαμβάνουσιν αἰεὶ τι λαμβάνειν ἔστιν ἔξω. οὐ δὲ μηδὲν ἔξω, τοῦτ' ἔστι τέλειον καὶ ὅλον· οὕτω γὰρ ὀριζόμεθα τὸ ὅλον, οὐ μηδὲν ἄπειρον, οἶον ἄνθρωπον ὅλον ἢ κιβώτιον. ὥσπερ δὲ τὸ καθ' ἕκαστον, οὕτω καὶ τὸ κυρίως, οἶον τὸ ὅλον οὐ μηδὲν ἐστιν ἔξω· οὐ δ' ἔστιν ἀπουσία ἔξω, οὐ πᾶν, ὅτι ἂν ἀπῇ. ὅλον δὲ καὶ τέλειον ἢ τὸ αὐτὸ πᾶμπαν ἢ σύνεγγυς τὴν φύσιν. τέλειον δ' οὐδὲν μὴ ἔχον τέλος· τὸ δὲ τέλος πέρας.

διὸ βέλτιον οἰητέον Παρμενίδην Μελίσσου εἰρηκέναι· ὁ μὲν γὰρ τὸ ἄπειρον ὅλον φησὶν, ὁ δὲ τὸ ὅλον πεπεράνθαι, “μεσσόθεν ἰσοπαλές”. οὐ γὰρ λίνον λίνῳ συνάπτειν ἐστὶν τῷ ἅπαντι καὶ ὅλῳ τὸ ἄπειρον, ἐπεὶ ἐντεῦθεν γε λαμβάνουσι τὴν σεμνότητα κατὰ τοῦ ἀπείρου, τὸ πάντα περιέχειν καὶ τὸ πᾶν ἐν ἑαυτῷ ἔχειν, διὰ τὸ ἔχειν τινὰ ὁμοιότητα τῷ ὅλῳ. ἔστι γὰρ τὸ ἄπειρον

τῆς τοῦ μεγέθους τελειότητος ὕλη καὶ τὸ δυνάμει ὅλον, ἐντελεχεία δ' οὐ, διαιρετὸν δ' ἐπὶ τε τὴν καθαίρεσιν καὶ τὴν ἀντεστραμμένην πρόσθεσιν, ὅλον δὲ καὶ πεπερασμένον οὐ καθ' αὐτὸ ἀλλὰ κατ' ἄλλο· καὶ οὐ περιέχει ἀλλὰ περιέχεται, ἢ ἄπειρον. διὸ καὶ ἄγνωστον ἢ ἄπειρον· εἶδος γὰρ οὐκ ἔχει ἢ ὕλη. ὥστε φανερόν ὅτι μᾶλλον ἐν μορίου λόγῳ τὸ ἄπειρον ἢ ἐν ὅλου· μόριον γὰρ ἢ ὕλη τοῦ ὅλου ὥσπερ ὁ χαλκὸς τοῦ χαλκοῦ ἀνδριάντος, ἐπεὶ εἴ γε περιέχει ἐν τοῖς αἰσθητοῖς, καὶ ἐν τοῖς νοητοῖς τὸ μέγα καὶ τὸ μικρὸν ἔδει περιέχειν τὰ νοητά. ἄτοπον δὲ καὶ ἀδύνατον τὸ ἄγνωστον καὶ ἄοριστον περιέχειν καὶ ὀρίζειν.

## Κεφάλαιο 7

Κατὰ λόγον δὲ συμβαίνει καὶ τὸ κατὰ πρόσθεσιν μὲν μὴ εἶναι δοκεῖν ἄπειρον οὕτως ὥστε παντὸς ὑπερβάλλειν μεγέθους, ἐπὶ τὴν διαίρεσιν δὲ εἶναι (περιέχεται γὰρ ἢ ὕλη [207b] ἐντὸς καὶ τὸ ἄπειρον, περιέχει δὲ τὸ εἶδος)· εὐλόγως δὲ καὶ τὸ ἐν μὲν τῷ ἀριθμῷ εἶναι ἐπὶ μὲν τὸ ἐλάχιστον πέρας ἐπὶ δὲ τὸ πλεῖον ἀεὶ παντὸς ὑπερβάλλειν πλήθους, ἐπὶ δὲ τῶν μεγεθῶν τούναντίον ἐπὶ μὲν τὸ ἔλαττον παντὸς ὑπερβάλλειν μεγέθους ἐπὶ δὲ τὸ μεῖζον μὴ εἶναι μέγεθος ἄπειρον. αἴτιον δ' ὅτι τὸ ἐν ἐστὶν ἀδιαίρετον, ὃ τι περ ἂν ἐν ἢ (οἷον ἄνθρωπος εἰς ἄνθρωπος καὶ οὐ πολλοί), ὁ δ' ἀριθμὸς ἐστὶν ἓνα πλείω καὶ πόσ' ἄττα, ὥστ' ἀνάγκη στήναι ἐπὶ τὸ ἀδιαίρετον (τὸ γὰρ τρία καὶ δύο παρώνυμα ὀνόματά ἐστιν, ὁμοίως δὲ καὶ τῶν ἄλλων ἀριθμῶν ἕκαστος), ἐπὶ δὲ τὸ πλεῖον ἀεὶ ἔστι νοῆσαι· ἄπειροι γὰρ αἱ διχοτομίαι τοῦ μεγέθους. ὥστε δυνάμει μὲν ἔστιν, ἐνεργεία δ' οὐ· ἀλλ' ἀεὶ ὑπερβάλλει τὸ λαμβανόμενον παντὸς ὠρισμένου πλήθους. ἀλλ' οὐ χωριστὸς ὁ ἀριθμὸς οὗτος [τῆς διχοτομίας], οὐδὲ μένει ἢ ἀπειρία ἀλλὰ γίνεταί, ὥσπερ καὶ ὁ χρόνος καὶ ὁ ἀριθμὸς τοῦ χρόνου.

ἐπὶ δὲ τῶν μεγεθῶν τούναντίον ἐστὶ· διαιρεῖται μὲν γὰρ εἰς ἄπειρα τὸ συνεχές, ἐπὶ δὲ τὸ μεῖζον οὐκ ἔστιν ἄπειρον. ὅσον γὰρ ἐνδέχεται δυνάμει εἶναι, καὶ ἐνεργεία ἐνδέχεται τοσοῦτον εἶναι. ὥστε ἐπεὶ ἄπειρον οὐδέν ἐστι μέγεθος αἰσθητόν, οὐκ ἐνδέχεται παντὸς ὑπερβολὴν εἶναι ὠρισμένου μεγέθους· εἴη γὰρ ἂν τι τοῦ οὐρανοῦ μεῖζον.

τὸ δ' ἄπειρον οὐ ταῦτὸν ἐν μεγέθει καὶ κινήσει καὶ χρόνῳ, ὡς μία τις φύσις, ἀλλὰ τὸ ὕστερον λέγεται κατὰ τὸ πρότερον, οἷον κίνησις μὲν ὅτι τὸ μέγεθος ἐφ' οὗ κινεῖται ἢ ἀλλοιοῦται ἢ αὐξάνεται, ὁ χρόνος δὲ διὰ τὴν κίνησιν. νῦν μὲν οὖν χρώμεθα τούτοις, ὕστερον δὲ ἐροῦμεν καὶ τί ἐστὶν ἕκαστον, καὶ διότι πᾶν μέγεθος εἰς μεγέθη διαιρετόν.

οὐκ ἀφαιρεῖται δ' ὁ λόγος οὐδὲ τοὺς μαθηματικοὺς τὴν θεωρίαν, ἀναιρῶν οὕτως εἶναι ἄπειρον ὥστε ἐνεργεῖα εἶναι ἐπὶ τὴν αὕξησιν ἀδιεξίτητον· οὐδὲ γὰρ νῦν δέονται τοῦ ἀπείρου (οὐ γὰρ χρῶνται), ἀλλὰ μόνον εἶναι ὅσῃ ἂν βούλωνται πεπερασμένην· τῷ δὲ μεγίστῳ μεγέθει τὸν αὐτὸν ἔστι τετμηθῆσθαι λόγον ὀπηλικονοῦν μέγεθος ἕτερον. ὥστε πρὸς μὲν τὸ δεῖξαι ἐκείνοις οὐδὲν διοίσει τὸ [δ'] εἶναι ἐν τοῖς οὖσιν μεγέθεσιν.

ἐπεὶ δὲ τὰ αἷτια διήρηται τετραχῶς, φανερόν ὅτι ὡς ὕλη τὸ ἄπειρον αἷτιόν ἐστι, καὶ ὅτι [208a] τὸ μὲν εἶναι αὐτῷ στέρησις, τὸ δὲ καθ' αὐτὸ ὑποκείμενον τὸ συνεχὲς καὶ αἰσθητόν. φαίνονται δὲ πάντες καὶ οἱ ἄλλοι ὡς ὕλη χρώμενοι τῷ ἀπείρῳ· διὸ καὶ ἄτοπον τὸ περιέχον ποιεῖν αὐτὸ ἀλλὰ μὴ περιεχόμενον.

## Κεφάλαιο 8

Λοιπὸν δ' ἐπελθεῖν καθ' οὓς λόγους τὸ ἄπειρον εἶναι δοκεῖ οὐ μόνον δυνάμει ἀλλ' ὡς ἀφωρισμένον· τὰ μὲν γὰρ ἐστὶν αὐτῶν οὐκ ἀναγκαῖα, τὰ δ' ἔχει τινὰς ἑτέρας ἀληθεῖς ἀπαντήσεις.

οὔτε γὰρ ἵνα ἡ γένεσις μὴ ἐπιλείπη, ἀναγκαῖον ἐνεργεῖα ἄπειρον εἶναι σῶμα αἰσθητόν· ἐνδέχεται γὰρ τὴν θατέρου φθορὰν θατέρου εἶναι γένεσιν, πεπερασμένου ὄντος τοῦ παντός.

ἔτι τὸ ἄπτεσθαι καὶ τὸ πεπεράνθαι ἕτερον. τὸ μὲν γὰρ πρὸς τι καὶ τινός (ἄπτεται γὰρ πᾶν τινός), καὶ τῶν πεπερασμένων τινὶ συμβέβηκεν, τὸ δὲ πεπερασμένον οὐ πρὸς τι· οὐδ' ἄψασθαι τῷ τυχόντι τοῦ τυχόντος ἔστιν. τὸ δὲ τῇ νοήσει πιστεύειν ἄτοπον· οὐ γὰρ ἐπὶ τοῦ πράγματος ἡ ὑπεροχὴ καὶ ἡ ἔλλειψις, ἀλλ' ἐπὶ τῆς νοήσεως. ἕκαστον γὰρ ἡμῶν νοήσειεν ἂν τις πολλαπλάσιον ἑαυτοῦ αὕξων εἰς ἄπειρον· ἀλλ' οὐ διὰ τοῦτο ἔξω [τοῦ ἄστεός] τίς ἐστὶν [ἡ] τοῦ τηλικούτου μεγέθους ὃ ἔχομεν, ὅτι νοεῖ τις, ἀλλ' ὅτι ἔστι· τοῦτο δὲ συμβέβηκεν. ὁ δὲ χρόνος καὶ ἡ κίνησις ἄπειρά ἐστι καὶ ἡ νόησις οὐχ ὑπομένοντος τοῦ λαμβανομένου.

μέγεθος δὲ οὔτε τῇ καθαιρέσει οὔτε τῇ νοητικῇ αὐξήσει ἔστιν ἄπειρον.

ἀλλὰ περὶ μὲν τοῦ ἀπείρου, πῶς ἔστι καὶ πῶς οὐκ ἔστι καὶ τί ἐστὶν, εἴρηται.

## Βιβλίο 4

### Κεφάλαιο 1

Ὁμοίως δ' ἀνάγκη καὶ περὶ τόπου τὸν φυσικὸν ὥσπερ καὶ περὶ ἀπείρου γνωρίζειν, εἰ ἔστιν ἢ μή, καὶ πῶς ἔστι, καὶ τί ἐστίν. τὰ τε γὰρ ὄντα πάντες ὑπολαμβάνουσιν εἶναι· που (τὸ γὰρ μὴ ὄν οὐδαμοῦ εἶναι· ποῦ γάρ ἐστι τραγέλαφος ἢ σφίγξ;) καὶ τῆς κινήσεως ἡ κοινὴ μάλιστα καὶ κυριωτάτη κατὰ τόπον ἐστίν, ἣν καλοῦμεν φοράν. ἔχει δὲ πολλὰς ἀπορίας τί ποτ' ἐστὶν ὁ τόπος· οὐ γὰρ ταῦτόν φαίνεται θεωροῦσιν ἐξ ἀπάντων τῶν ὑπαρχόντων. ἔτι δ' οὐδ' ἔχομεν οὐδὲν παρὰ τῶν ἄλλων οὔτε προηπορημένον οὔτε προηπορημένον περὶ [208b] αὐτοῦ. ὅτι μὲν οὖν ἔστιν ὁ τόπος, δοκεῖ δῆλον εἶναι ἐκ τῆς ἀντιμεταστάσεως. ὅπου γὰρ ἔστι νῦν ὕδωρ, ἐνταῦθα ἐξελθόντος ὥσπερ ἐξ ἀγγείου πάλιν ἀῆρ ἔνεστιν, ὅτε δὲ τὸν αὐτὸν τόπον τοῦτον ἄλλο τι τῶν σωμάτων κατέχει· τοῦτο δὴ τῶν ἐγγιγνομένων καὶ μεταβαλλόντων ἕτερον πάντων εἶναι δοκεῖ. ἐν ᾧ γὰρ ἀῆρ ἔστι νῦν, ὕδωρ ἐν τούτῳ πρότερον ἦν, ὥστε δῆλον ὡς ἦν ὁ τόπος τι καὶ ἡ χώρα ἕτερον ἀμφοῖν, εἰς ἣν καὶ ἐξ ἧς μετέβαλον.

ἔτι δὲ αἱ φοραὶ τῶν φυσικῶν σωμάτων καὶ ἀπλῶν, οἷον πυρὸς καὶ γῆς καὶ τῶν τοιούτων, οὐ μόνον δηλοῦσιν ὅτι ἐστὶ τι ὁ τόπος, ἀλλ' ὅτι καὶ ἔχει τινὰ δύναμιν. φέρεται γὰρ ἕκαστον εἰς τὸν αὐτοῦ τόπον μὴ κωλυόμενον, τὸ μὲν ἄνω τὸ δὲ κάτω· ταῦτα δ' ἐστὶ τόπου μέρη καὶ εἶδη, τό τε ἄνω καὶ τὸ κάτω καὶ αἱ λοιπαὶ τῶν ἐξ διαστάσεων. ἔστι δὲ τὰ τοιαῦτα οὐ μόνον πρὸς ἡμᾶς, τὸ ἄνω καὶ κάτω καὶ δεξιὸν καὶ ἀριστερόν· ἡμῖν μὲν γὰρ οὐκ ἀεὶ τὸ αὐτό, ἀλλὰ κατὰ τὴν θέσιν, ὅπως ἂν στραφῶμεν, γίγνεται (διὸ καὶ ταῦτό πολλὰκις δεξιὸν καὶ ἀριστερόν καὶ ἄνω καὶ κάτω καὶ πρόσθεν καὶ ὀπίσθεν), ἐν δὲ τῇ φύσει διώριστα χωρὶς ἕκαστον. οὐ γὰρ ὅ τι ἔτυχεν ἐστὶ τὸ ἄνω, ἀλλ' ὅπου φέρεται τὸ πῦρ καὶ τὸ κοῦφον· ὁμοίως δὲ καὶ τὸ κάτω οὐχ ὅ τι ἔτυχεν, ἀλλ' ὅπου τὰ ἔχοντα βάρος καὶ τὰ γεηρά, ὡς οὐ τῇ θέσει διαφέροντα μόνον ἀλλὰ καὶ τῇ δυνάμει. δηλοῖ δὲ καὶ τὰ μαθηματικά· οὐκ ὄντα γὰρ ἐν τόπῳ ὅμως κατὰ τὴν θέσιν τὴν πρὸς ἡμᾶς ἔχει δεξιὰ καὶ ἀριστερὰ ὡς τὰ μόνον λεγόμενα διὰ θέσιν, οὐκ ἔχοντα φύσει τούτων ἕκαστον. ἔτι οἱ τὸ κενὸν φάσκοντες εἶναι τόπον λέγουσιν· τὸ γὰρ κενὸν τόπος ἂν εἴη ἐστερημένος σώματος.

ὅτι μὲν οὖν ἐστὶ τι ὁ τόπος παρὰ τὰ σώματα, καὶ πᾶν σῶμα αἰσθητὸν ἐν τόπῳ, διὰ τούτων ἂν τις ὑπολάβοι· δόξειε δ' ἂν καὶ Ἡσίοδος ὀρθῶς λέγειν ποιήσας πρῶτον τὸ χάος. λέγει γοῦν

“πάντων μὲν πρώτιστα χάος γένητ', αὐτὰρ ἔπειτα γαῖ' εὐρύστερνος,” ὡς δέον πρῶτον ὑπάρξαι χώραν τοῖς οὕσι, διὰ τὸ νομίζειν, ὥσπερ οἱ πολλοί, πάντα εἶναι· που καὶ ἐν τόπῳ. εἰ δ' ἐστὶ τοιοῦτο, θαυμαστή τις ἂν εἴη ἡ τοῦ τόπου δύναμις καὶ προτέρα πάντων· οὐ γὰρ ἄνευ τῶν ἄλλων οὐδὲν ἔστιν, ἐκεῖνο δ'

[209a] ἄνευ τῶν ἄλλων, ἀνάγκη πρῶτον εἶναι· οὐ γὰρ ἀπόλλυται ὁ τόπος τῶν ἐν αὐτῷ φθειρομένων.

οὐ μὴν ἄλλ' ἔχει γε ἀπορίαν, εἰ ἔστι, τί ἔστι, πότερον ὄγκος τις σώματος ἢ τις ἑτέρα φύσις· ζητητέον γὰρ τὸ γένος αὐτοῦ πρῶτον.

διαστήματα μὲν οὖν ἔχει τρία, μῆκος καὶ πλάτος καὶ βάθος, οἷς ὀρίζεται σῶμα πᾶν. ἀδύνατον δὲ σῶμα εἶναι τὸν τόπον· ἐν ταύτῳ γὰρ ἂν εἴη δύο σώματα.

ἔτι εἴπερ ἔστι σώματος τόπος καὶ χώρα, δῆλον ὅτι καὶ ἐπιφανείας καὶ τῶν λοιπῶν περάτων· ὁ γὰρ αὐτὸς ἀρμόσει λόγος· ὅπου γὰρ ἦν πρότερον τὰ τοῦ ὕδατος ἐπίπεδα, ἔσται πάλιν τὰ τοῦ ἀέρος. ἀλλὰ μὴν οὐδεμίαν διαφορὰν ἔχομεν στιγμῆς καὶ τόπου στιγμῆς, ὥστ' εἰ μηδὲ ταύτης ἕτερόν ἐστίν ὁ τόπος, οὐδὲ τῶν ἄλλων οὐδενός, οὐδ' ἐστὶ τι παρ' ἑκάστον τούτων ὁ τόπος.

τί γὰρ ἂν ποτε καὶ θείημεν εἶναι τὸν τόπον; οὔτε γὰρ στοιχεῖον οὔτ' ἐκ στοιχείων οἷόν τε εἶναι τοιαύτην ἔχοντα φύσιν, οὔτε τῶν σω ματικῶν οὔτε τῶν ἀσωμάτων· μέγεθος μὲν γὰρ ἔχει, σῶμα δ' οὐδέν· ἔστι δὲ τὰ μὲν τῶν αἰσθητῶν στοιχεῖα σώματα, ἐκ δὲ τῶν νοητῶν οὐδὲν γίγνεται μέγεθος.

ἔτι δὲ καὶ τίνας ἂν τις θείη τοῖς οὖσιν αἵτιον εἶναι τὸν τόπον; οὐδεμία γὰρ αὐτῷ ὑπάρχει αἰτία τῶν τεττάρων· οὔτε γὰρ ὡς ὕλη τῶν ὄντων (οὐδὲν γὰρ ἐξ αὐτοῦ συνέστηκεν) οὔτε ὡς εἶδος καὶ λόγος τῶν πραγμάτων οὔθ' ὡς τέλος, οὔτε κινεῖ τὰ ὄντα.

ἔτι δὲ καὶ αὐτὸς εἰ ἔστι τι τῶν ὄντων, ποὺ ἔσται. ἢ γὰρ Ζήνωνος ἀπορία ζητεῖ τινὰ λόγον· εἰ γὰρ πᾶν τὸ ὄν ἐν τόπῳ, δῆλον ὅτι καὶ τοῦ τόπου τόπος ἔσται, καὶ τοῦτο εἰς ἄπειρον.

ἔτι ὥσπερ ἅπαν σῶμα ἐν τόπῳ, οὕτω καὶ ἐν τόπῳ ἅπαντι σῶμα· πῶς οὖν ἐροῦμεν περὶ τῶν αὐξανομένων; ἀνάγκη γὰρ ἐκ τούτων συναύξεσθαι αὐτοῖς τὸν τόπον, εἰ μήτ' ἐλάττων μήτε μείζων ὁ τόπος ἐκάστου.

διὰ μὲν οὖν τούτων οὐ μόνον τί ἐστίν, ἀλλὰ καὶ εἰ ἔστιν, ἀπορεῖν ἀναγκαῖον.

## Κεφάλαιο 2

Ἐπεὶ δὲ τὸ μὲν καθ' αὐτὸ τὸ δὲ κατ' ἄλλο λέγεται, καὶ τόπος ὁ μὲν κοινός, ἐν ᾧ ἅπαντα τὰ σώματά ἐστιν, ὁ δ' ἴδιος, ἐν ᾧ πρῶτῳ (λέγω δὲ οἷον σὺ νῦν ἐν τῷ οὐρανῷ ὅτι ἐν τῷ ἀέρι οὗτος δ' ἐν τῷ οὐρανῷ, καὶ ἐν τῷ ἀέρι δὲ ὅτι

ἐν τῇ γῇ, ὁμοίως δὲ καὶ ἐν ταύτῃ ὅτι ἐν τῷδε τῷ τόπῳ, [209b] ὃς περιέχει οὐδὲν πλέον ἢ σέ), εἰ δὴ ἐστὶν ὁ τόπος τὸ πρῶτον περιέχον ἕκαστον τῶν σωμάτων, πέρας τι ἂν εἴη, ὥστε δόξειεν ἂν τὸ εἶδος καὶ ἡ μορφή ἐκάστου ὁ τόπος εἶναι, ὃ ὀρίζεται τὸ μέγεθος καὶ ἡ ὕλη ἢ τοῦ μεγέθους· τοῦτο γὰρ ἐκάστου πέρας. οὕτω μὲν οὖν σκοποῦσιν ὁ τόπος τὸ ἐκάστου εἶδος ἐστὶν· ἡ δὲ δοκεῖ ὁ τόπος εἶναι τὸ διάστημα τοῦ μεγέθους, ἡ ὕλη· τοῦτο γὰρ ἕτερον τοῦ μεγέθους, τοῦτο δ' ἐστὶ τὸ περιεχόμενον ὑπὸ τοῦ εἶδους καὶ ὠρισμένον, οἷον ὑπὸ ἐπιπέδου καὶ πέρατος, ἔστι δὲ τοιοῦτον ἡ ὕλη καὶ τὸ ἀόριστον· ὅταν γὰρ ἀφαιρεθῇ τὸ πέρας καὶ τὰ πάθη τῆς σφαίρας, λείπεται οὐδὲν παρὰ τὴν ὕλην.

διὸ καὶ Πλάτων τὴν ὕλην καὶ τὴν χώραν ταῦτό φησιν εἶναι ἐν τῷ Τιμαίῳ· τὸ γὰρ μεταληπτικὸν καὶ τὴν χώραν ἐν καὶ ταυτόν. ἄλλον δὲ τρόπον ἐκεῖ τε λέγων τὸ μεταληπτικὸν καὶ ἐν τοῖς λεγομένοις ἀγράφοις δόγμασιν, ὅμως τὸν τόπον καὶ τὴν χώραν τὸ αὐτὸ ἀπεφάνετο. λέγουσι μὲν γὰρ πάντες εἶναί τι τὸν τόπον, τί δ' ἐστίν, οὗτος μόνος ἐπεχείρησεν εἰπεῖν.

εἰκότως δ' ἐκ τούτων σκοπούμενοις δόξειεν ἂν εἶναι χαλεπὸν γνωρίσαι τί ἐστὶν ὁ τόπος, εἴπερ τούτων ὁποτερονοῦν ἐστίν, εἴτε ἡ ὕλη εἴτε τὸ εἶδος· ἄλλως τε γὰρ τὴν ἀκροτάτην ἔχει θεάν, καὶ χωρὶς ἀλλήλων οὐ ῥάδιον γνωρίζειν.

ἀλλὰ μὴν ὅτι γε ἀδύνα τον ὁποτερονοῦν τούτων εἶναι τὸν τόπον, οὐ χαλεπὸν ἰδεῖν. τὸ μὲν γὰρ εἶδος καὶ ἡ ὕλη οὐ χωρίζεται τοῦ πράγματος, τὸν δὲ τόπον ἐνδέχεται· ἐν ᾧ γὰρ ἀῆρ ἦν, ἐν τούτῳ πάλιν ὕδωρ, ὥσπερ ἔφαμεν, γίγνεται, ἀντιμεθισταμένων ἀλλήλοις τοῦ τε ὕδατος καὶ τοῦ ἀέρος, καὶ τῶν ἄλλων σωμάτων ὁμοίως, ὥστε οὔτε μόνιον οὔθ' ἕξις ἀλλὰ χωριστὸς ὁ τόπος ἐκάστου ἐστί. καὶ γὰρ δοκεῖ τοιοῦτό τι εἶναι ὁ τόπος οἷον τὸ ἀγγεῖον (ἔστι γὰρ τὸ ἀγγεῖον τόπος μεταφορητός)· τὸ δ' ἀγγεῖον οὐδὲν τοῦ πράγματος ἐστίν.

ἢ μὲν οὖν χωριστὸς [ἐστὶ] τοῦ πράγματος, ταύτῃ μὲν οὐκ ἔστι τὸ εἶδος· ἢ δὲ περιέχει, ταύτῃ δ' ἕτερος τῆς ὕλης.

δοκεῖ δὲ ἀεὶ τὸ ὄν που αὐτό τε εἶναί τι καὶ ἕτερόν τι ἐκτὸς αὐτοῦ. (Πλάτωνι μέντοι λεκτέον, εἰ δεῖ παρεκβάντας εἰπεῖν, διὰ τί οὐκ ἐν τόπῳ τὰ εἶδη καὶ οἱ ἀριθμοί, εἴπερ τὸ μεθεκτικὸν ὁ τόπος, εἴτε τοῦ μεγάλου [210a] καὶ τοῦ μικροῦ ὄντος τοῦ μεθεκτικοῦ εἴτε τῆς ὕλης, ὥσπερ ἐν τῷ Τιμαίῳ γέγραφεν.)

ἔτι πῶς ἂν φέροιτο εἰς τὸν αὐτοῦ τόπον, εἰ ὁ τόπος ἡ ὕλη ἢ τὸ εἶδος;



ἀδύνατον γὰρ οὐ μὴ κίνησις μηδὲ τὸ ἄνω ἢ κάτω ἐστί, τόπον εἶναι. ὥστε ζητητέος ἐν τοῖς τοιούτοις ὁ τόπος.

εἰ δ' ἐν αὐτῷ ὁ τόπος (δεῖ γάρ, εἴπερ ἢ μορφὴ ἢ ὕλη), ἔσται ὁ τόπος ἐν τόπῳ· μεταβάλλει γὰρ ἅμα τῷ πράγματι καὶ κινεῖται καὶ τὸ εἶδος καὶ τὸ ἀόριστον, οὐκ ἀεὶ ἐν τῷ αὐτῷ ἀλλ' οὐπὲρ καὶ τὸ πρᾶγμα· ὥστε τοῦ τόπου ἔσται τόπος.

ἔτι ὅταν ἐξ ἀέρος ὕδωρ γένηται, ἀπόλωλεν ὁ τόπος· οὐ γὰρ ἐν τῷ αὐτῷ τόπῳ τὸ γενόμενον σῶμα· τίς οὖν ἡ φθορά; ἐξ ὧν μὲν τοίνυν ἀναγκαῖον εἶναι τι τὸν τόπον, καὶ πάλιν ἐξ ὧν ἀπορήσειεν ἂν τις αὐτοῦ περὶ τῆς οὐσίας, εἴρηται.

### Κεφάλαιο 3

Μετὰ δὲ ταῦτα ληπτέον ποσαχῶς ἄλλο ἐν ἄλλῳ λέγεται.

ἓνα μὲν δὴ τρόπον ὡς ὁ δάκτυλος ἐν τῇ χειρὶ καὶ ὅλως τὸ μέρος ἐν τῷ ὅλῳ.

ἄλλον δὲ ὡς τὸ ὅλον ἐν τοῖς μέρεσιν· οὐ γάρ ἐστι παρὰ τὰ μέρη τὸ ὅλον.

ἄλλον δὲ τρόπον ὡς ὁ ἄνθρωπος ἐν ζώῳ καὶ ὅλως εἶδος ἐν γένει.

ἄλλον δὲ ὡς τὸ γένος ἐν τῷ εἶδει καὶ ὅλως τὸ μέρος τοῦ εἶδους ἐν τῷ λόγῳ.

ἔτι ὡς ἡ ὑγίεια ἐν θερμοῖς καὶ ψυχροῖς καὶ ὅλως τὸ εἶδος ἐν τῇ ὕλῃ.

ἔτι ὡς ἐν βασιλεῖ τὰ τῶν Ἑλλήνων καὶ ὅλως ἐν τῷ πρώτῳ κινητικῷ.

ἔτι ὡς ἐν τῷ ἀγαθῷ καὶ ὅλως ἐν τῷ τέλει· τοῦτο δ' ἐστὶ τὸ οὐ ἔνεκα.

πάντων δὲ κυριώτατον τὸ ὡς ἐν ἀγγείῳ καὶ ὅλως ἐν τόπῳ.

ἀπορήσειε δ' ἂν τις, ἄρα καὶ αὐτό τι ἐν ἑαυτῷ ἐνδέχεται εἶναι, ἢ οὐδέν, ἀλλὰ πᾶν ἢ οὐδαμοῦ ἢ ἐν ἄλλῳ. διχῶς δὲ τοῦτ' ἔστιν, ἥτοι καθ' αὐτὸ ἢ καθ' ἕτερον.

ὅταν μὲν γὰρ ἡ μέρη τοῦ ὅλου τὸ ἐν ᾧ καὶ τὸ ἐν τούτῳ, λεχθήσεται τὸ ὅλον ἐν αὐτῷ· λέγεται γὰρ καὶ κατὰ τὰ μέρη, οἷον λευκὸς ὅτι ἡ ἐπιφάνεια λευκή, καὶ ἐπιστήμων ὅτι τὸ λογιστικόν. ὁ μὲν οὖν ἀμφορεὺς οὐκ ἔσται ἐν αὐτῷ, οὐδ' ὁ οἶνος· ὁ δὲ τοῦ οἴνου ἀμφορεὺς ἔσται· ὅ τε γὰρ καὶ ἐν ᾧ, ἀμφοτέρω τοῦ αὐτοῦ μέρη.

οὕτω μὲν οὖν ἐνδέχεται αὐτό τι ἐν αὐτῷ εἶναι, πρῶτως δ' οὐκ ἐνδέχεται.

οἶον τὸ λευκὸν ἐν σώματι (ἢ [210b] ἐπιφάνεια γὰρ ἐν σώματι), ἢ δ' ἐπιστήμη ἐν ψυχῇ· κατὰ ταῦτα δὲ αἱ προσηγορίαι μέρη ὄντα, ὥς γε ἐν ἀνθρώπῳ (ὃ δὲ ἀμφορεὺς καὶ ὁ οἶνος χωρὶς μὲν ὄντα οὐ μέρη, ἅμα δέ· διὸ ὅταν ἡ μέρη, ἔσται αὐτὸ ἐν αὐτῷ)· οἶον τὸ λευκὸν ἐν ἀνθρώπῳ ὅτι ἐν σώματι, καὶ ἐν τούτῳ ὅτι ἐν ἐπιφανείᾳ· ἐν δὲ ταύτῃ οὐκέτι κατ' ἄλλο. καὶ ἕτερά γε τῷ εἶδει ταῦτα, καὶ ἄλλην φύσιν ἔχει ἐκάτερον καὶ δύναμιν, ἢ τ' ἐπιφάνεια καὶ τὸ λευκόν.

οὔτε δὴ ἐπακτικῶς σκοποῦσιν οὐδὲν ὁρῶμεν ἐν ἑαυτῷ κατ' οὐδένα τῶν διορισμῶν, τῷ τε λόγῳ δῆλον ὅτι ἀδύνατον· δεήσει γὰρ ἀμφοτέρα ἐκάτερον ὑπάρχειν, οἶον τὸν ἀμφορέα ἀγγεῖον τε καὶ οἶνον εἶναι καὶ τὸν οἶνον οἶνον τε καὶ ἀμφορέα, εἴπερ ἐνδέχεται αὐτό τι ἐν αὐτῷ εἶναι. ὥστ' εἰ ὅτι μάλιστα ἐν ἀλλήλοις εἶεν, ὃ μὲν ἀμφορεὺς δέξεται τὸν οἶνον οὐχ ἢ αὐτὸς οἶνος ἀλλ' ἢ ἐκεῖνος, ὃ δ' οἶνος ἐνέσται ἐν τῷ ἀμφορεῖ οὐχ ἢ αὐτὸς ἀμφορεὺς ἀλλ' ἢ ἐκεῖνος. κατὰ μὲν οὖν τὸ εἶναι ὅτι ἕτερον, δῆλον· ἄλλος γὰρ ὁ λόγος τοῦ ἐν ᾧ καὶ τοῦ ἐν τούτῳ. ἀλλὰ μὴν οὐδὲ κατὰ συμβεβηκὸς ἐνδέχεται· ἅμα γὰρ δύο ἐν ταύτῳ ἔσται· αὐτὸς τε γὰρ ἐν αὐτῷ ὁ ἀμφορεὺς ἔσται, εἰ οὐ ἢ φύσις δεκτική, τοῦτ' ἐνδέχεται ἐν αὐτῷ εἶναι, καὶ ἔτι ἐκεῖνο οὐ δεκτικόν, οἶον, εἰ οἶνου, ὁ οἶνος. ὅτι μὲν οὖν ἀδύνατον ἐν αὐτῷ τι εἶναι πρῶτως, δῆλον· ὃ δὲ Ζήνων ἠπόρει, ὅτι εἰ ὁ τόπος ἐστί τι, ἐν τινι ἔσται, λύειν οὐ χαλεπόν· οὐδὲ γὰρ κωλύει ἐν ἄλλῳ εἶναι τὸν πρῶτον τόπον, μὴ μέντοι ὥς ἐν τόπῳ ἐκείνῳ, ἀλλ' ὥσπερ ἢ μὲν ὑγίεια ἐν τοῖς θερμοῖς ὥς ἕξις, τὸ δὲ θερμὸν ἐν σώματι ὥς πάθος. ὥστε οὐκ ἀνάγκη εἰς ἄπειρον ἰέναι.

ἐκεῖνο δὲ φανερόν, ὅτι ἐπεὶ οὐδὲν τὸ ἀγγεῖον τοῦ ἐν αὐτῷ (ἕτερον γὰρ τὸ πρῶτως ὃ τε καὶ ἐν ᾧ), οὐκ ἂν εἴη οὔτε ἡ ὕλη οὔτε τὸ εἶδος ὁ τόπος, ἀλλ' ἕτερον. ἐκείνου γάρ τι ταῦτα τοῦ ἐνόντος, καὶ ἡ ὕλη καὶ ἡ μορφή. ταῦτα μὲν οὖν ἔστω διηπορημένα.

## Κεφάλαιο 4

Τί δέ ποτ' ἐστὶν ὁ τόπος, ὧδ' ἂν γένοιτο φανερόν.

λάβωμεν δὲ περὶ αὐτοῦ ὅσα δοκεῖ ἀληθῶς καθ' αὐτὸ ὑπάρχειν αὐτῷ.

ἀξιοῦμεν δὴ τὸν τόπον εἶναι

1. πρῶτον μὲν [211a] περιέχον ἐκεῖνο οὗ τόπος ἐστί,
2. καὶ μηδὲν τοῦ πράγματος, ἔτι τὸν πρῶτον μήτ' ἐλάττω μήτε μείζω,
3. ἔτι ἀπολείπεσθαι ἐκάστου καὶ χωριστὸν εἶναι,
4. πρὸς δὲ τούτοις πάντα τόπον ἔχειν τὸ ἄνω καὶ κάτω, καὶ φέρεσθαι φύσει καὶ μένειν ἐν τοῖς οἰκείοις τόποις ἕκαστον τῶν σωμάτων, τοῦτο δὲ ποιεῖν ἢ ἄνω ἢ κάτω.

ὑποκειμένων δὲ τούτων τὰ λοιπὰ θεωρητέον. δεῖ δὲ πειρᾶσθαι τὴν σκέψιν οὕτω ποιεῖσθαι ὅπως τὸ τί ἐστὶν ἀποδοθήσεται, ὥστε τὰ τε ἀπορούμενα λύεσθαι, καὶ τὰ δοκοῦντα ὑπάρχειν τῷ τόπῳ ὑπάρχοντα ἔσται, καὶ ἔτι τὸ τῆς δυσκολίας αἴτιον καὶ τῶν περὶ αὐτὸν ἀπορημάτων ἔσται φανερόν· οὕτω γὰρ ἂν κάλλιστα δεικνύοιτο ἕκαστον. πρῶτον μὲν οὖν δεῖ κατανοῆσαι ὅτι οὐκ ἂν ἐζητεῖτο ὁ τόπος, εἰ μὴ κίνησις ἦν ἢ κατὰ τόπον· διὰ γὰρ τοῦτο καὶ τὸν οὐρανὸν μάλιστ' οἰόμεθα ἐν τόπῳ, ὅτι ἀεὶ ἐν κινήσει. ταύτης δὲ τὸ μὲν φορά, τὸ δὲ αὐξήσις καὶ φθίσις· καὶ γὰρ ἐν τῇ αὐξήσει καὶ φθίσει μεταβάλλει, καὶ ὁ πρότερον ἦν ἐνταῦθα, πάλιν μεθέστηκεν εἰς ἕλαττον ἢ μείζον.

ἔστι δὲ κινούμενον τὸ μὲν καθ' αὐτὸ ἐνεργεία, τὸ δὲ κατὰ συμβεβηκός· κατὰ συμβεβηκός δὲ τὸ μὲν ἐνδεχόμενον κινεῖσθαι καθ' αὐτό, οἷον τὰ μόρια τοῦ σώματος καὶ ὁ ἐν τῷ πλοίῳ ἦλος, τὰ δ' οὐκ ἐνδεχόμενα ἄλλ' αἰεὶ κατὰ συμβεβηκός, οἷον ἡ λευκότης καὶ ἡ ἐπιστήμη· ταῦτα γὰρ οὕτω μεταβέβληκε τὸν τόπον, ὅτι ἐν ᾧ ὑπάρχουσι μεταβάλλει.

ἐπεὶ δὲ λέγομεν εἶναι ὡς ἐν τόπῳ ἐν τῷ οὐρανῷ, διότι ἐν τῷ ἀέρι οὗτος δὲ ἐν τῷ οὐρανῷ· καὶ ἐν τῷ ἀέρι δὲ οὐκ ἐν παντί, ἀλλὰ διὰ τὸ ἔσχατον αὐτοῦ καὶ περιέχον ἐν τῷ ἀέρι φανέν εἶναι (εἰ γὰρ πᾶς ὁ ἄηρ τόπος, οὐκ ἂν ἴσος εἴη ἐκάστου ὁ τόπος καὶ ἕκαστον, δοκεῖ δέ γε ἴσος εἶναι, τοιοῦτος δ' ὁ πρῶτος ἐν ᾧ ἐστίν)·

ὅταν μὲν οὖν μὴ διηρημένον ἦ τὸ περιέχον ἀλλὰ συνεχές, οὐχ ὡς ἐν τόπῳ λέγεται εἶναι ἐν ἐκείνῳ, ἀλλ' ὡς μέρος ἐν ὅλῳ· ὅταν δὲ διηρημένον ἦ καὶ ἀπτόμενον, ἐν πρώτῳ ἐστὶ τῷ ἐσχάτῳ τοῦ περιέχοντος, ὃ οὐτε ἐστὶ μέρος τοῦ ἐν αὐτῷ οὐτε μείζον τοῦ διαστήματος ἀλλ' ἴσον· ἐν γὰρ τῷ αὐτῷ τὰ ἔσχατα τῶν ἀπτομένων.

καὶ συνεχές μὲν ὃν οὐκ ἐν ἐκείνῳ κινεῖται ἀλλὰ μετ' ἐκείνου, διηρημένον δὲ ἐν ἐκείνῳ· καὶ ἐάν τε κινῆται τὸ περιέχον ἐάν τε μή, [211b] οὐδὲν ἥττον.

[ἔτι ὅταν μὴ διηρημένον ἦ, ὡς μέρος ἐν ὅλῳ λέγεται, οἶον ἐν τῷ ὀφθαλμῷ ἢ ὄψις ἢ ἐν τῷ σώματι ἢ χεῖρ, ὅταν δὲ διηρημένον, οἶον ἐν τῷ κάδῳ τὸ ὕδωρ ἢ ἐν τῷ κεραμίῳ ὁ οἶνος· ἢ μὲν γὰρ χεῖρ μετὰ τοῦ σώματος κινεῖται, τὸ δὲ ὕδωρ ἐν τῷ κάδῳ.]

ἤδη τοίνυν φανερόν ἐκ τούτων τί ἐστὶν ὁ τόπος. σχεδὸν γὰρ τέτταρά ἐστιν ὧν ἀνάγκη τὸν τόπον εἶναι· ἢ γὰρ μορφή ἢ ὕλη ἢ διάστημά τι τὸ μεταξὺ τῶν ἐσχάτων, ἢ τὰ ἔσχατα εἰ μὴ ἔστι μηδὲν διάστημα παρὰ τὸ τοῦ ἐγγιγνομένου σώματος μέγεθος.

τούτων δ' ὅτι οὐκ ἐνδέχεται τὰ τρία εἶναι, φανερόν· ἀλλὰ διὰ μὲν τὸ περιέχειν δοκεῖ ἢ μορφή εἶναι· ἐν ταύτῳ γὰρ τὰ ἔσχατα τοῦ περιέχοντος καὶ τοῦ περιεχομένου. ἔστι μὲν οὖν ἄμφω πέρατα, ἀλλ' οὐ τοῦ αὐτοῦ, ἀλλὰ τὸ μὲν εἶδος τοῦ πράγματος, ὁ δὲ τόπος τοῦ περιέχοντος σώματος.

διὰ δὲ τὸ μεταβάλλειν πολλάκις μένοντος τοῦ περιέχοντος τὸ περιεχόμενον καὶ διηρημένον, οἶον ἐξ ἀγγείου ὕδωρ, τὸ μεταξὺ εἶναί τι δοκεῖ διάστημα, ὡς ὅν τι παρὰ τὸ σῶμα τὸ μεθιστάμενον. τὸ δ' οὐκ ἔστιν, ἀλλὰ τὸ τυχὸν ἐμπίπτει σῶμα τῶν μεθισταμένων καὶ ἄπτεσθαι πεφυκότων.

εἰ δ' ἦν τι [τὸ] διάστημα <καθ' αὐ>τὸ πεφυκὸς <εἶναι> καὶ μένον, ἐν τῷ αὐτῷ ἄπειροι ἂν ἦσαν τόποι (μεθισταμένου γὰρ τοῦ ὕδατος καὶ τοῦ ἀέρος ταύτῃ ποιήσει τὰ μόρια πάντα ἐν τῷ ὅλῳ ὅπερ ἅπαν τὸ ὕδωρ ἐν τῷ ἀγγεῖῳ)· ἅμα δὲ καὶ ὁ τόπος ἔσται μεταβάλλων· ὥστ' ἔσται τοῦ τόπου τ' ἄλλος τόπος, καὶ πολλοὶ τόποι ἅμα ἔσονται. οὐκ ἔστι δὲ ἄλλος ὁ τόπος τοῦ μορίου, ἐν ᾧ κινεῖται, ὅταν ὅλον τὸ ἀγγεῖον μεθίστηται, ἀλλ' ὁ αὐτός· ἐν ᾧ γὰρ ἔστιν, ἀντιμεθίσταται ὁ ἀήρ καὶ τὸ ὕδωρ ἢ τὰ μόρια τοῦ ὕδατος, ἀλλ' οὐκ ἐν ᾧ γίνονται τόπῳ, ὃς μέρος ἐστὶ τοῦ τόπου ὃς ἐστὶ τόπος ὅλου τοῦ οὐρανοῦ.

καὶ ἡ ὕλη δὲ δόξειεν ἂν εἶναι τόπος, εἴ γε ἐν ἡρεμοῦντί τις σκοποῖ καὶ μὴ κεχωρισμένῳ ἀλλὰ συνεχεῖ. ὥσπερ γὰρ εἰ ἀλλοιοῦνται, ἔστι τι ὃ νῦν μὲν λευκὸν πάλαι δὲ μέλαν, καὶ νῦν μὲν σκληρὸν πάλαι δὲ μαλακόν (διό φαμεν εἶναί τι τὴν ὕλην), οὕτω καὶ ὁ τόπος διὰ τοιαύτης τινὸς εἶναι δοκεῖ φαντασίας, πλὴν ἐκεῖνο μὲν διότι ὃ ἦν ἀήρ, τοῦτο νῦν ὕδωρ, ὁ δὲ τόπος ὅτι οὐ ἦν ἀήρ, ἐνταῦθ' ἔστι νῦν ὕδωρ. ἀλλ' ἡ μὲν ὕλη, [212a] ὥσπερ ἐλέχθη ἐν τοῖς πρότερον, οὔτε χωριστὴ τοῦ πράγματος οὔτε περιέχει, ὁ δὲ τόπος ἄμφω.

εἰ τοίνυν μηδὲν τῶν τριῶν ὁ τόπος ἐστίν, μήτε τὸ εἶδος μήτε ἡ ὕλη μήτε διάστημά τι ἀεὶ ὑπάρχον ἕτερον παρὰ τὸ τοῦ πράγματος τοῦ μεθισταμένου,

ἀνάγκη τὸν τόπον εἶναι τὸ λοιπὸν τῶν τεττάρων, τὸ πέρας τοῦ περιέχοντος σώματος <καθ' ὃ συνάπτει τῷ περιεχομένῳ>. λέγω δὲ τὸ περιεχόμενον σῶμα τὸ κινητὸν κατὰ φοράν.

δοκεῖ δὲ μέγα τι εἶναι καὶ χαλεπὸν ληφθῆναι ὁ τόπος διὰ τε τὸ παρεμφαίνεσθαι τὴν ὕλην καὶ τὴν μορφήν, καὶ διὰ τὸ ἐν ἡρεμοῦντι τῷ περιέχοντι γίνεσθαι τὴν μετάστασιν τοῦ φερομένου· ἐνδέχεσθαι γὰρ φαίνεται εἶναι διάστημα μεταξὺ ἄλλο τι τῶν κινουμένων μεγεθῶν. συμβάλλεται δέ τι καὶ ὁ ἄηρ δοκῶν ἄσώματος εἶναι· φαίνεται γὰρ οὐ μόνον τὰ πέρατα τοῦ ἀγγείου εἶναι ὁ τόπος, ἀλλὰ καὶ τὸ μεταξὺ ὡς κενὸν <ὄν>. ἔστι δ' ὥσπερ τὸ ἀγγεῖον τόπος μεταφορητός, οὕτως καὶ ὁ τόπος ἀγγεῖον ἀμετακίνητον. διὸ ὅταν μὲν ἐν κινουμένῳ κινῆται καὶ μεταβάλλῃ τὸ ἐντός, οἷον ἐν ποταμῷ πλοῖον, ὡς ἀγγεῖῳ χρῆται μᾶλλον ἢ τόπῳ τῷ περιέχοντι. βούλεται δ' ἀκίνητος εἶναι ὁ τόπος· διὸ ὁ πᾶς μᾶλλον ποταμὸς τόπος, ὅτι ἀκίνητος ὁ πᾶς.

ὥστε τὸ τοῦ περιέχοντος πέρας ἀκίνητον πρῶτον, τοῦτ' ἔστιν ὁ τόπος.

καὶ διὰ τοῦτο τὸ μέσον τοῦ οὐρανοῦ καὶ τὸ ἔσχατον τὸ πρὸς ἡμᾶς τῆς κύκλῳ φορᾶς δοκεῖ εἶναι τὸ μὲν ἄνω τὸ δὲ κάτω μάλιστα πᾶσι κυρίως, ὅτι τὸ μὲν αἰεὶ μένει, τοῦ δὲ κύκλῳ τὸ ἔσχατον ὡσαύτως ἔχον μένει. ὥστ' ἐπεὶ τὸ μὲν κοῦφον τὸ ἄνω φερόμενόν ἐστι φύσει, τὸ δὲ βαρὺ τὸ κάτω, τὸ μὲν πρὸς τὸ μέσον περιέχον πέρας κάτω ἐστίν, καὶ αὐτὸ τὸ μέσον, τὸ δὲ πρὸς τὸ ἔσχατον ἄνω, καὶ αὐτὸ τὸ ἔσχατον·

καὶ διὰ τοῦτο δοκεῖ ἐπίπεδόν τι εἶναι καὶ οἷον ἀγγεῖον ὁ τόπος καὶ περιέχον.

ἔτι ἅμα τῷ πράγματι ὁ τόπος· ἅμα γὰρ τῷ πεπερασμένῳ τὰ πέρατα.

## Κεφάλαιο 5

Ὡς μὲν οὖν σώματι ἔστι τι ἐκτὸς σῶμα περιέχον αὐτό, τοῦτο ἔστιν ἐν τόπῳ, ὃ δὲ μή, οὐ. διὸ καὶ ὕδωρ γένηται τοιοῦτο, τὰ μὲν μόρια κινήσεται αὐτοῦ (περιέχεται γὰρ ὑπ' ἀλλήλων), τὸ δὲ πᾶν ἔστι μὲν ὡς κινήσεται ἔστι δ' ὡς οὐ. ὡς μὲν γὰρ ὅλον, ἅμα τὸν τόπον οὐ μεταβάλλει, κύκλῳ [212b] δὲ κινεῖται-τῶν μορίων γὰρ οὗτος ὁ τόπος-καὶ ἄνω μὲν καὶ κάτω οὐ, κύκλῳ δ' ἔνια· τὰ δὲ καὶ ἄνω καὶ κάτω, ὅσα ἔχει πύκνωσιν καὶ μάνωσιν.

ὥσπερ δ' ἐλέχθη, τὰ μὲν ἐστὶν ἐν τόπῳ κατὰ δύναμιν, τὰ δὲ κατ' ἐνέργειαν. διὸ ὅταν μὲν συνεχὲς ἢ τὸ ὁμοιομερές, κατὰ δύναμιν ἐν τόπῳ τὰ μέρη, ὅταν

δὲ χωρισθῇ μὲν ἄπτηται δ' ὥσπερ σωρός, κατ' ἐνέργειαν. καὶ τὰ μὲν καθ' αὐτά (οἷον πᾶν σῶμα ἢ κατὰ φορὰν ἢ κατ' αὕξησιν κινητὸν καθ' αὐτό που, ὁ δ' οὐρανός, ὥσπερ εἴρηται, οὗ που ὅλος οὐδ' ἐν τινι τόπῳ ἐστίν, εἴ γε μηδὲν αὐτὸν περιέχει σῶμα· ἐφ' ᾧ δὲ κινεῖται, ταύτῃ καὶ τόπος ἔστι τοῖς μορίοις· ἕτερον γὰρ ἑτέρου ἐχόμενον τῶν μορίων ἐστίν)·

τὰ δὲ κατὰ συμβεβηκός, οἷον ἡ ψυχὴ καὶ ὁ οὐρανός· τὰ γὰρ μόρια ἐν τόπῳ πως πάντα· ἐπὶ τῷ κύκλῳ γὰρ περιέχει ἄλλο ἄλλο. διὸ κινεῖται μὲν κύκλῳ τὸ ἄνω, τὸ δὲ πᾶν οὗ που. τὸ γὰρ που αὐτό τέ ἐστὶ τι, καὶ ἔτι ἄλλο τι δεῖ εἶναι παρὰ τοῦτο ἐν ᾧ, ὃ περιέχει· παρὰ δὲ τὸ πᾶν καὶ ὅλον οὐδὲν ἐστὶν ἔξω τοῦ παντός, καὶ διὰ τοῦτο ἐν τῷ οὐρανῷ πάντα· ὁ γὰρ οὐρανὸς τὸ πᾶν ἴσως· ἔστι δ' ὁ τόπος οὐχ ὁ οὐρανός, ἀλλὰ τοῦ οὐρανοῦ τι τὸ ἔσχατον καὶ ἀπτόμενον τοῦ κινητοῦ σώματος [πέρας ἡρεμοῦν]. καὶ διὰ τοῦτο ἢ μὲν γῆ ἐν τῷ ὕδατι, τοῦτο δ' ἐν τῷ ἀέρι, οὗτος δ' ἐν τῷ αἰθέρι, ὁ δ' αἰθήρ ἐν τῷ οὐρανῷ, ὁ δ' οὐρανὸς οὐκέτι ἐν ἄλλῳ.

φανερὸν δ' ἐκ τούτων ὅτι καὶ αἱ ἀπορίαι πᾶσαι λύονται ἂν οὕτω λεγομένου τοῦ τόπου.

1. οὔτε γὰρ συναύξεσθαι ἀνάγκη τὸν τόπον,
2. οὔτε στιγμῆς εἶναι τόπον, οὔτε δύο σώματα ἐν τῷ αὐτῷ τόπῳ,
3. οὔτε διάστημά τι εἶναι σωματικόν (σῶμα γὰρ τὸ μεταξὺ τοῦ τόπου τὸ τυχόν, ἀλλ' οὐ διάστημα σώματος).
4. καὶ ἔστιν ὁ τόπος καὶ πού, οὐχ ὥς ἐν τόπῳ δέ, ἀλλ' ὥς τὸ πέρας ἐν τῷ πεπερασμένῳ. οὐ γὰρ πᾶν τὸ ὄν ἐν τόπῳ, ἀλλὰ τὸ κινητὸν σῶμα.
5. καὶ φέρεται δὴ εἰς τὸν αὐτοῦ τόπον ἕκαστον εὐλόγως (ὃ γὰρ ἐφεξῆς καὶ ἀπτόμενον μὴ βία, συγγενές· καὶ συμπεφυκότα μὲν ἀπαθῆ, ἀπτόμενα δὲ παθητικὰ καὶ ποιητικὰ ἀλλήλων)· καὶ μένει δὴ φύσει πᾶν ἐν τῷ οἰκείῳ τόπῳ οὐκ ἀλόγως· καὶ γὰρ τὸ μέρος, τὸ δὲ ἐν [τῷ] τόπῳ ὥς διαιρετὸν μέρος πρὸς ὅλον ἐστίν, οἷον ὅταν ὕδατος κινήσῃ τις [213a] μόριον ἢ ἀέρος. οὕτω δὲ καὶ ἄηρ ἔχει πρὸς ὕδωρ· οἷον ὕλη γάρ, τὸ δὲ εἶδος, τὸ μὲν ὕδωρ ὕλη ἀέρος, ὁ δ' ἄηρ οἷον ἐνέργειά τις ἐκείνου· τὸ γὰρ ὕδωρ δυνάμει ἄηρ ἐστίν, ὁ δ' ἄηρ δυνάμει ὕδωρ ἄλλον τρόπον.

διοριστέον δὲ περὶ τούτων ὕστερον· ἀλλὰ διὰ τὸν καιρὸν ἀνάγκη μὲν εἰπεῖν, ἀσαφῶς δὲ νῦν ῥηθὲν τότε· ἔσται σαφέστερον. εἰ οὖν τὸ αὐτὸ [ἡ] ὕλη καὶ

έντελέχεια (ὔδωρ γὰρ ἄμφω, ἀλλὰ τὸ μὲν δυνάμει τὸ δ' έντελεχείᾳ), ἔχει ἂν ὡς μόνιον πὼς πρὸς ὅλον. διὸ καὶ τούτοις ἀφ' ἑστίν· σύμφυσις δέ, ὅταν ἄμφω ἐνεργείᾳ ἐν γένωνται. καὶ περὶ μὲν τόπου, καὶ ὅτι ἔστι καὶ τί ἔστιν, εἴρηται.

## Κεφάλαιο 6

Τὸν αὐτὸν δὲ τρόπον ὑποληπτέον εἶναι τοῦ φυσικοῦ θεωρῆσαι καὶ περὶ κενοῦ, εἰ ἔστιν ἢ μή, καὶ πῶς ἔστι, καὶ τί ἔστιν, ὥσπερ καὶ περὶ τόπου· καὶ γὰρ παραπλησίαν ἔχει τὴν τε ἀπιστίαν καὶ τὴν πίστιν διὰ τῶν ὑπολαμβανομένων· οἷον γὰρ τρόπον τινὰ καὶ ἀγγεῖον τὸ κενὸν τιθέασιν οἱ λέγοντες, δοκεῖ δὲ πλήρες μὲν εἶναι, ὅταν ἔχη τὸν ὄγκον οὗ δεκτικόν ἔστιν, ὅταν δὲ στερηθῇ, κενόν, ὡς τὸ αὐτὸ μὲν ὄν κενὸν καὶ πλήρες καὶ τρόπον, τὸ δ' εἶναι αὐτοῖς οὐ ταῦτ' ὄν.

ἄρξασθαι δὲ δεῖ τῆς σκέψεως λαβοῦσιν ἃ τε λέγουσιν οἱ φάσκοντες εἶναι καὶ πάλιν ἃ λέγουσιν οἱ μὴ φάσκοντες, καὶ τρίτον τὰς κοινὰς περὶ αὐτῶν δόξας.

οἱ μὲν οὖν δεικνύναι πειρώμενοι ὅτι οὐκ ἔστιν, οὐχ ὃ βούλονται λέγειν οἱ ἄνθρωποι κενόν, τοῦτ' ἐξελέγχουσιν, ἀλλ' <ὃ> ἁμαρτάνοντες λέγουσιν. ὥσπερ Ἀναξαγόρας καὶ οἱ τοῦτον τὸν τρόπον ἐλέγχοντες. ἐπιδεικνύουσι γὰρ ὅτι ἔστιν τι ὃ ἀήρ, στρεβλοῦντες τοὺς ἄσκούς καὶ δεικνύντες ὡς ἰσχυρὸς ὃ ἀήρ, καὶ ἐναπολαμβάνοντες ἐν ταῖς κλεψύδραις. οἱ δὲ ἄνθρωποι βούλονται κενὸν εἶναι διάστημα ἐν ᾧ μηδέν ἔστι σῶμα αἰσθητόν· οἰόμενοι δὲ τὸ ὄν ἅπαν εἶναι σῶμα φασίν, ἐν ᾧ ὅλως μηδέν ἔστι, τοῦτ' εἶναι κενόν, διὸ τὸ πλήρες ἄερος κενὸν εἶναι. οὐκ οὖν τοῦτο δεῖ δεικνύναι, ὅτι ἔστι τι ὃ ἀήρ, ἀλλ' ὅτι οὐκ ἔστι διάστημα ἕτερον τῶν σωμάτων, οὔτε χωριστὸν οὔτε ἐνεργείᾳ ὄν, ὃ διαλαμβάνει τὸ πᾶν σῶμα ὥστε εἶναι μὴ συνεχές, καθάπερ λέγουσιν Δημόκριτος καὶ Λεύκιππος καὶ [213b] ἕτεροι πολλοὶ τῶν φυσιολόγων, ἢ καὶ εἰ τι ἕξω τοῦ παντὸς σώματός ἔστιν ὄντος συνεχοῦς.

οὗτοι μὲν οὖν οὐ κατὰ θύρας πρὸς τὸ πρόβλημα ἀπαντῶσιν, ἀλλ' οἱ φάσκοντες εἶναι μᾶλλον.

λέγουσιν δ' ἐν μὲν ὅτι κίνησις ἢ κατὰ τρόπον οὐκ ἂν εἴη (αὕτη δ' ἐστὶ φορὰ καὶ αὐξησις)· οὐ γὰρ ἂν δοκεῖν εἶναι κίνησιν, εἰ μὴ εἴη κενόν· τὸ γὰρ πλήρες ἀδύνατον εἶναι δέξασθαι τι. εἰ δὲ δέξεται καὶ ἔσται δύο ἐν ταύτῳ, ἐνδέχοιτ' ἂν καὶ ὁποσαοῦν εἶναι ἅμα σώματα· τὴν γὰρ διαφοράν, δι' ἣν οὐκ ἂν εἴη τὸ λεχθέν, οὐκ ἔστιν εἰπεῖν. εἰ δὲ τοῦτο ἐνδέχεται, καὶ τὸ μικρότατον δέξεται τὸ μέγιστον· πολλὰ γὰρ μικρὰ τὸ μέγα ἐστίν· ὥστε εἰ πολλὰ ἴσα ἐνδέχεται ἐν

ταύτῳ εἶναι, καὶ πολλὰ ἄνισα.

Μέλισσος μὲν οὖν καὶ δείκνυσιν ὅτι τὸ πᾶν ἀκίνητον ἐκ τούτων· εἰ γὰρ κινήσεται, ἀνάγκη εἶναι (φησί) κενόν, τὸ δὲ κενὸν οὐ τῶν ὄντων.

ἓνα μὲν οὖν τρόπον ἐκ τούτων δεικνύουσιν ὅτι ἔστιν τι κενόν,

ἄλλον δ' ὅτι φαίνεται ἓνια συνιόντα καὶ πλούμενα, οἶον καὶ τὸν οἶνον φασὶ δέχεσθαι μετὰ τῶν ἀσκῶν τοὺς πίθους, ὡς εἰς τὰ ἐνόντα κενὰ συνιόντος τοῦ πυκνουμένου σώματος.

ἔτι δὲ καὶ ἡ αὕξησις δοκεῖ πᾶσι γίνεσθαι διὰ κενοῦ· τὴν μὲν γὰρ τροφήν σῶμα εἶναι, δύο δὲ σώματα ἀδύνατον ἅμα εἶναι. μαρτύριον δὲ καὶ τὸ περὶ τῆς τέφρας ποιοῦνται, ἣ δέχεται ἴσον ὕδωρ ὅσον τὸ ἀγγεῖον τὸ κενόν. εἶναι δ' ἔφασαν καὶ οἱ Πυθαγόρειοι κενόν, καὶ ἐπεισιέναι αὐτὸ τῷ οὐρανῷ ἐκ τοῦ ἀπείρου πνεύματος ὡς ἀναπνέοντι καὶ τὸ κενόν, ὃ διορίζει τὰς φύσεις, ὡς ὄντος τοῦ κενοῦ χωρισμοῦ τινὸς τῶν ἐφεξῆς καὶ [τῆς] διορίσεως· καὶ τοῦτ' εἶναι πρῶτον ἐν τοῖς ἀριθμοῖς· τὸ γὰρ κενὸν διορίζει τὴν φύσιν αὐτῶν.

ἐξ ὧν μὲν οὖν οἱ μὲν φασιν εἶναι οἱ δ' οὐ φασι, σχεδὸν τοιαῦτα καὶ τοσαῦτά ἐστιν.

## Κεφάλαιο 7

Πρὸς δὲ τὸ ποτέρως ἔχει δεῖ λαβεῖν τί σημαίνει τοῦνομα.

δοκεῖ δὴ τὸ κενὸν τόπος εἶναι ἐν ᾧ μηδέν ἐστι. τούτου δ' αἴτιον ὅτι τὸ ὄν σῶμα οἶονται εἶναι, πᾶν δὲ σῶμα ἐν τόπῳ, κενὸν δὲ ἐν ᾧ τόπῳ μηδέν ἐστι σῶμα, ὥστ' εἴ που μὴ ἔστι σῶμα, οὐδὲν εἶναι ἐνταῦθα.

σῶμα δὲ πάλιν ἅπαν [214a] οἶονται εἶναι ἄπτόν· τοιοῦτο δὲ ὃ ἂν ἔχη βάρος ἢ κουφότητα.

συμβαίνει οὖν ἐκ συλλογισμοῦ τοῦτο εἶναι κενόν, ἐν ᾧ μηδέν ἐστι βαρὺ ἢ κοῦφον.

ταῦτα μὲν οὖν, ὥσπερ εἵπομεν καὶ πρότερον, ἐκ συλλογισμοῦ συμβαίνει. ἄτοπον δὲ εἰ ἡ στιγμή κενόν· δεῖ γὰρ τόπον εἶναι ἐν ᾧ σώματος ἔστι διὰ στήμα ἄπτοῦ.



ἀλλ' οὖν φαίνεται λέγεσθαι τὸ κενὸν ἓνα μὲν τρόπον τὸ μὴ πλήρες αἰσθητοῦ σώματος κατὰ τὴν ἀφήν· αἰσθητὸν δ' ἐστὶ κατὰ τὴν ἀφήν τὸ βάρος ἔχον ἢ κουφότητα (διὸ κἂν ἀπορήσειέ τις, τί ἂν φαῖεν, εἰ ἔχοι τὸ διάστημα χρῶμα ἢ ψόφον, πότερον κενὸν ἢ οὐ; ἢ δῆλον ὅτι εἰ μὲν δέχοιτο σῶμα ἄπτόν, κενόν, εἰ δὲ μή, οὐ).

ἄλλον δὲ τρόπον, ἐν ᾧ μὴ τόδε τι μηδ' οὐσία τις σωματική. διό φασίν τινες εἶναι τὸ κενὸν τὴν τοῦ σώματος ὕλην (οἷπερ καὶ τὸν τόπον τὸ αὐτὸ τοῦτο), λέγοντες οὐ καλῶς· ἢ μὲν γὰρ ὕλη οὐ χωριστὴ τῶν πραγμάτων, τὸ δὲ κενὸν ζητοῦσιν ὡς χωριστόν.

ἐπεὶ δὲ περὶ τόπου διώρισται, καὶ τὸ κενὸν ἀνάγκη τόπον εἶναι, εἰ ἔστιν, ἑστερημένον σώματος, τόπος δὲ καὶ πῶς ἔστι καὶ πῶς οὐκ ἔστιν εἴρηται, φανερόν ὅτι οὕτω μὲν κενὸν οὐκ ἔστιν, οὔτε κεχωρισμένον οὔτε ἀχώριστον. τὸ γὰρ κενὸν οὐ σῶμα ἀλλὰ σώματος διάστημα βούλεται εἶναι· διὸ καὶ τὸ κενὸν δοκεῖ τι εἶναι, ὅτι καὶ ὁ τόπος, καὶ διὰ ταῦτά. ἥκει γὰρ δὴ ἡ κίνησις ἢ κατὰ τόπον καὶ τοῖς τὸν τόπον φάσκουσιν εἶναί τι παρὰ τὰ σώματα τὰ ἐμπίπτοντα καὶ τοῖς τὸ κενόν. αἴτιον δὲ κινήσεως οἶοντα εἶναι τὸ κενὸν οὕτως ὡς ἐν ᾧ κινεῖται· τοῦτο δ' ἂν εἴη οἶον τὸν τόπον φασί τινες εἶναι.

οὐδεμία δ' ἀνάγκη, εἰ κίνησις ἔστιν, εἶναι κενόν. ὅλως μὲν οὖν πάσης κινήσεως οὐδαμῶς, δι' ὃ καὶ Μέλισσον ἔλαθεν· ἀλλοιοῦσθαι γὰρ τὸ πλήρες ἐνδέχεται.

ἀλλὰ δὴ οὐδὲ τὴν κατὰ τόπον κίνησιν· ἅμα γὰρ ἐνδέχεται ὑπεξίεναι ἀλλήλοις, οὐδενὸς ὄντος διαστήματος χωριστοῦ παρὰ τὰ σώματα τὰ κινούμενα. καὶ τοῦτο δῆλον καὶ ἐν ταῖς τῶν συνεχῶν δίναις, ὥσπερ καὶ ἐν ταῖς τῶν ὑγρῶν.

ἐνδέχεται δὲ καὶ πυκνοῦσθαι μὴ εἰς τὸ κενὸν ἀλλὰ διὰ τὸ τὰ ἐνόντα [214b] ἐκπυρηνίζειν (οἶον ὕδατος συνθλιβομένου τὸν ἐνόντα ἀέρα), καὶ αὐξάνεσθαι οὐ μόνον εἰσιόντος τινὸς ἀλλὰ καὶ ἀλλοιώσει, οἶον εἰ ἐξ ὕδατος γίγνοιτο ἀήρ.

ὅλως δὲ ὅ τε περὶ τῆς αὐξήσεως λόγος καὶ τοῦ εἰς τὴν τέφραν ἐγχεομένου ὕδατος αὐτὸς αὐτὸν ἐμποδίζει. ἢ γὰρ οὐκ αὐξάνεται ὅτιοῦν, ἢ οὐ σῶματι, ἢ ἐνδέχεται δύο σώματα ἐν ταύτῳ εἶναι (ἀπορίαν οὖν κοινήν ἀξιοῦσι λύειν, ἀλλ' οὐ κενὸν δεικνύουσιν ὡς ἔστιν), ἢ πᾶν εἶναι ἀναγκαῖον τὸ σῶμα κενόν, εἰ πάντῃ αὐξάνεται καὶ αὐξάνεται διὰ κενοῦ. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῆς

τέφρας.

ὅτι μὲν οὖν ἐξ ὧν δεικνύουσιν εἶναι τὸ κενὸν λύειν ῥάδιον, φανερόν.

## Κεφάλαιο 8

Ὅτι δ' οὐκ ἔστιν κενὸν οὕτω κεχωρισμένον, ὥς ἔνιοί φασι, λέγωμεν πάλιν. εἰ γὰρ ἔστιν ἐκάστου φορά τις τῶν ἀπλῶν σωμάτων φύσει, οἷον τῷ πυρὶ μὲν ἄνω τῇ δὲ γῇ κάτω καὶ πρὸς τὸ μέσον, δῆλον ὅτι οὐκ ἂν τὸ κενὸν αἴτιον εἴη τῆς φορᾶς. τίνος οὖν αἴτιον ἔσται τὸ κενόν; δοκεῖ γὰρ αἴτιον εἶναι κινήσεως τῆς κατὰ τόπον, ταύτης δ' οὐκ ἔστιν.

ἔτι εἰ ἔστιν τι οἷον τόπος ἐστερημένος σώματος, ὅταν ἦ κενόν, ποῦ οἰσθήσεται τὸ εἰσθεθὲν εἰς αὐτὸ σῶμα; οὐ γὰρ δὴ εἰς ἅπαν. ὁ δ' αὐτὸς λόγος καὶ πρὸς τοὺς τὸν τόπον οἰομένους εἶναί τι κεχωρισμένον, εἰς ὃν φέρεται· πῶς γὰρ οἰσθήσεται τὸ ἐντεθὲν ἢ μενεῖ; καὶ περὶ τοῦ ἄνω καὶ κάτω καὶ περὶ τοῦ κενοῦ ὁ αὐτὸς ἀρμόσει λόγος εἰκότως· τὸ γὰρ κενὸν τόπον ποιοῦσιν οἱ εἶναι φάσκοντες·

καὶ πῶς δὴ ἐνέσται ἢ ἐν [τῷ] τόπῳ ἢ ἐν τῷ κενῷ; οὐ γὰρ συμβαίνει, ὅταν ὅλον τεθῇ ὥς ἐν κεχωρισμένῳ τόπῳ καὶ ὑπομένοντι σῶμά τι· τὸ γὰρ μέρος, ἂν μὴ χωρὶς τιθῇται, οὐκ ἔσται ἐν τόπῳ ἄλλ' ἐν τῷ ὅλῳ. ἔτι εἰ μὴ τόπος, οὐδὲ κενὸν ἔσται.

συμβαίνει δὲ τοῖς λέγουσιν εἶναι κενὸν ὥς ἀναγκαῖον, εἴπερ ἔσται κίνησις, τοῦναντίον μᾶλλον, ἂν τις ἐπισκοπῇ, μὴ ἐνδέχεσθαι μηδὲ ἐν κινεῖσθαι, ἐὰν ἦ κενόν· ὥσπερ γὰρ οἱ διὰ τὸ ὅμοιον φάμενοι τὴν γῆν ἡρεμεῖν, οὕτω καὶ ἐν τῷ κενῷ ἀνάγκη ἡρεμεῖν· οὐ γὰρ ἔστιν οὐ μᾶλλον ἢ ἥττον κινήσεται· ἢ γὰρ κενόν, οὐκ [215a] ἔχει διαφοράν.

ἔπειθ' ὅτι πᾶσα κίνησις ἢ βία ἢ κατὰ φύσιν. ἀνάγκη δὲ ἂν περ ἢ <ή> βίαιος, εἶναι καὶ τὴν κατὰ φύσιν (ἢ μὲν γὰρ βίαιος παρὰ φύσιν, ἢ δὲ παρὰ φύσιν ὑστέρα τῆς κατὰ φύσιν)· ὥστ' εἰ μὴ κατὰ φύσιν ἔστιν ἐκάστῳ τῶν φυσικῶν σωμάτων κίνησις, οὐδὲ τῶν ἄλλων ἔσται κινήσεων οὐδεμία. ἀλλὰ μὴν φύσει γε πῶς ἔσται μηδεμιᾶς οὔσης διαφορᾶς κατὰ τὸ κενὸν καὶ τὸ ἄπειρον; ἢ μὲν γὰρ ἄπειρον, οὐδὲν ἔσται ἄνω οὐδὲ κάτω οὐδὲ μέσον, ἢ δὲ κενόν, οὐδὲν διάφορον τὸ ἄνω τοῦ κάτω (ὥσπερ γὰρ τοῦ μηδενὸς οὐδεμία ἔστι διαφορά, οὕτω καὶ τοῦ κενοῦ· τὸ γὰρ κενὸν μὴ ὄν τι καὶ στέρησις δοκεῖ εἶναι). ἢ δὲ φύσει πορὰ διάφορος, ὥστε ἔσται φύσει διάφορα. ἢ οὖν οὐκ ἔστι φύσει

οὐδαμοῦ οὐδενὶ φορὰ, ἢ εἰ τοῦτ' ἔστιν, οὐκ ἔστι κενόν.

ἔτι νῦν μὲν κινεῖται τὰ ῥιπτούμενα τοῦ ὤσαντος οὐχ ἀπτομένου, ἢ δι' ἀντιπερίστασιν, ὥσπερ ἔνιοί φασιν, ἢ διὰ τὸ ὠθεῖν τὸν ὠσθέντα ἀέρα θάπτω κίνησιν τῆς τοῦ ὠσθέντος φορᾶς ἣν φέρεται εἰς τὸν οἰκεῖον τόπον· ἐν δὲ τῷ κενῷ οὐδὲν τούτων ὑπάρχει, οὐδ' ἔσται φέρεσθαι ἄλλ' ἢ ὡς τὸ ὀχούμενον.

ἔτι οὐδεὶς ἂν ἔχοι εἰπεῖν διὰ τί κινήθην στήσεταιί που· τί γὰρ μᾶλλον ἐνταῦθα ἢ ἐνταῦθα; ὥστε ἢ ἡρεμήσει ἢ εἰς ἄπειρον ἀνάγκη φέρεσθαι, ἐὰν μὴ τι ἐμποδίσῃ κρεῖττον.

ἔτι νῦν μὲν εἰς τὸ κενὸν διὰ τὸ ὑπεῖκιν φέρεσθαι δοκεῖ· ἐν δὲ τῷ κενῷ πάντῃ ὁμοίως τὸ τοιοῦτον, ὥστε πάντῃ οἰσθήσεται. ἔτι δὲ καὶ ἐκ τῶνδε φανερόν τὸ λεγόμενον. ὁρῶμεν γὰρ τὸ αὐτὸ βάρος καὶ σῶμα θάπτον φερόμενον διὰ δύο αἰτίας, ἢ τῷ διαφέρειν τὸ δι' οὐ, οἷον δι' ὕδατος ἢ γῆς ἢ δι' ὕδατος ἢ ἀέρος, ἢ τῷ διαφέρειν τὸ φερόμενον, ἐὰν τᾶλλα ταῦτα ὑπάρχη, διὰ τὴν ὑπεροχὴν τοῦ βάρους ἢ τῆς κουφότητος.

τὸ μὲν οὖν δι' οὗ φέρεται αἴτιον, ὅτι ἐμποδίζει μάλιστα μὲν ἀντιφερόμενον, ἔπειτα καὶ μένον· μᾶλλον δὲ τὸ μὴ εὐδιαίρετον· τοιοῦτο δὲ τὸ παχύτερον. τὸ δὴ ἐφ' οὗ [215b] Α οἰσθήσεται διὰ τοῦ Β τὸν ἐφ' ᾧ Γ χρόνον, διὰ δὲ τοῦ Δ λεπτοτέρου ὄντος τὸν ἐφ' ᾧ Ε, εἰ ἴσον τὸ μῆκος τὸ τοῦ Β τῷ Δ, κατὰ τὴν ἀναλογίαν τοῦ ἐμποδίζοντος σώματος. ἔστω γὰρ τὸ μὲν Β ὕδωρ, τὸ δὲ Δ ἀήρ· ὅσω δὴ λεπτότερον ἀήρ ὕδατος καὶ ἀσωματώτερον, τοσοῦτω θάπτον τὸ Α διὰ τοῦ Δ οἰσθήσεται ἢ διὰ τοῦ Β. ἔχέτω δὴ τὸν αὐτὸν λόγον ὅνπερ διέστηκεν ἀήρ πρὸς ὕδωρ, τὸ τάχος πρὸς τὸ τάχος. ὥστε εἰ διπλασίως λεπτόν, ἐν διπλασίῳ χρόνῳ τὴν τὸ Β δίεισιν ἢ τὴν τὸ Δ, καὶ ἔσται ὁ ἐφ' ᾧ Γ χρόνος διπλάσιος τοῦ ἐφ' ᾧ Ε. καὶ ἀεὶ δὴ ὅσω ἂν ἢ ἀσωματώτερον καὶ ἥττον ἐμποδιστικὸν καὶ εὐδιαιρετώτερον δι' οὗ φέρεται, θάπτον οἰσθήσεται.

τὸ δὲ κενὸν οὐδένα ἔχει λόγον ᾧ ὑπερέχεται ὑπὸ τοῦ σώματος, ὥσπερ οὐδὲ τὸ μηδὲν πρὸς ἀριθμόν. εἰ γὰρ τὰ τέτταρα τῶν τριῶν ὑπερέχει ἐνί, πλείονι δὲ τοῖν δυοῖν, καὶ ἔτι πλείονι τοῦ ἐνὸς ἢ τοῖν δυοῖν, τοῦ δὲ μηδενὸς οὐκέτι ἔχει λόγον ᾧ ὑπερέχει· ἀνάγκη γὰρ τὸ ὑπερέχον διαιρεῖσθαι εἰς τε τὴν ὑπεροχὴν καὶ τὸ ὑπερεχόμενον, ὥστε ἔσται τὰ τέτταρα ὅσω τε ὑπερέχει καὶ οὐδέν. διὸ οὐδὲ γραμμὴ στιγμῆς ὑπερέχει, εἰ μὴ σύγκειται ἐκ στιγμῶν. ὁμοίως δὲ καὶ τὸ κενὸν πρὸς τὸ πλῆρες οὐδένα οἷόν τε ἔχειν λόγον, ὥστε οὐδὲ τὴν κίνησιν, ἄλλ' εἰ διὰ τοῦ λεπτοτάτου ἐν τοσῶδὶ τὴν τοσήνδε φέρεται, διὰ τοῦ κενοῦ παντὸς ὑπερβάλλει λόγου. ἔστω γὰρ τὸ Ζ κενόν, ἴσον δὲ [τῷ μεγέθει] τοῖς Β

καὶ Δ. τὸ δὴ Α εἰ δίδεισι καὶ κινηθήσεται ἐν τινὶ μὲν χρόνῳ, τῷ ἐφ' οὗ Η, ἐν ἐλάττω δὲ τοῦ ἐφ' οὗ Ε, τοῦτον ἔξει τὸν λόγον τὸ κενὸν πρὸς τὸ πλήρες. ἀλλ' ἐν τοσοῦτῳ χρόνῳ ὅσος ἐφ' οὗ τὸ Η, τοῦ Δ τὸ Α δίδεισι τὴν τὸ Θ. δίδεισι δὲ γε καὶ ἢ τι λεπτότητι διαφέρον τοῦ ἄερος ἐφ' ᾧ τὸ Ζ ταύτην τὴν ἀναλογίαν ἣν ἔχει ὁ χρόνος ἐφ' ᾧ Ε πρὸς τὸν ἐφ' ᾧ Η. ἂν γὰρ ἢ τοσοῦτῳ λεπτότερον τὸ ἐφ' ᾧ Ζ σῶμα τοῦ Δ, ὅσω ὑπερέχει τὸ Ε τοῦ Η, ἀντεστραμμένως δίδεισι τῷ [216a] τάχει ἐν τῷ τοσοῦτῳ ὅσον τὸ Η, τὴν τὸ Ζ τὸ ἐφ' οὗ Α, ἐὰν φέρηται. ἐὰν τοίνυν μηδὲν ἢ σῶμα ἐν τῷ Ζ, ἔτι θάττον. ἀλλ' ἦν ἐν τῷ Η. ὥστ' ἐν ἴσῳ χρόνῳ δίδεισι πλήρῃς τε ὄν καὶ κενόν. ἀλλ' ἀδύνατον. φανερόν τοίνυν ὅτι, εἰ ἔστι χρόνος ἐν ᾧ τοῦ κενοῦ ὅτιοῦν οἰσθήσεται, συμβήσεται τοῦτο τὸ ἀδύνατον. ἐν ἴσῳ γὰρ ληφθήσεται πλήρῃς τε ὄν διεξιέναι τι καὶ κενόν. ἔσται γὰρ τι ἀνάλογον σῶμα ἕτερον πρὸς ἕτερον ὡς χρόνος πρὸς χρόνον.

ὥς δ' ἐν κεφαλαίῳ εἶπεῖν, δῆλον τὸ τοῦ συμβαινόντος αἵτιον, ὅτι κινήσεως μὲν πρὸς κίνησιν πάσης ἔστι λόγος (ἐν χρόνῳ γὰρ ἔστι, χρόνου δὲ παντὸς ἔστι πρὸς χρόνον, πεπερασμένων ἀμφοῖν), κενοῦ δὲ πρὸς πλήρες οὐκ ἔστιν. ἢ μὲν οὖν διαφέρουσι δι' ὧν φέρονται, ταῦτα συμβαίνει, κατὰ δὲ τὴν τῶν φερομένων ὑπεροχὴν τάδε· ὁρῶμεν γὰρ τὰ μείζω ῥοπὴν ἔχοντα ἢ βάρους ἢ κουφότητος, ἐὰν τάλλα ὁμοίως ἔχη [τοῖς σχήμασι], θάττον φερόμενα τὸ ἴσον χωρίον, καὶ κατὰ λόγον ὄν ἔχουσι τὰ μεγέθη πρὸς ἄλληλα. ὥστε καὶ διὰ τοῦ κενοῦ. ἀλλ' ἀδύνατον· διὰ τίνα γὰρ αἰτίαν οἰσθήσεται θάττον; ἐν μὲν γὰρ τοῖς πλήρεσιν ἐξ ἀνάγκης· θάττον γὰρ διαιρεῖ τῇ ἰσχύϊ τὸ μείζον· ἢ γὰρ σχήματι διαιρεῖ, ἢ ῥοπῇ ἣν ἔχει τὸ φερόμενον ἢ τὸ ἀφεθέν. ἰσοταχῇ ἄρα πάντ' ἔσται. ἀλλ' ἀδύνατον. ὅτι μὲν οὖν εἰ ἔστι κενόν, συμβαίνει τούναντίον ἢ δι' ὃ κατασκευάζουσιν οἱ φάσκοντες εἶναι κενόν, φανερόν ἐκ τῶν εἰρημένων. οἱ μὲν οὖν οἴονται τὸ κενὸν εἶναι, εἴπερ ἔσται ἢ κατὰ τόπον κίνησις, ἀποκεκριμένον καθ' αὐτό· τοῦτο δὲ ταῦτόν ἐστι τῷ τὸν τόπον φάναι εἶναί τι κεχωρισμένον· τοῦτο δ' ὅτι ἀδύνατον, εἴρηται πρότερον. καὶ καθ' αὐτὸ δὲ σκοποῦσιν φανείη ἂν τὸ λεγόμενον κενὸν ὡς ἀληθῶς κενόν. ὥσπερ γὰρ ἐὰν ἐν ὕδατι τιθῇ τις κύβον, ἐκστήσεται τοσοῦτον ὕδωρ ὅσος ὁ κύβος, οὕτω καὶ ἐν ἀέρι· ἀλλὰ τῇ αἰσθήσει ἄδηλον. καὶ αἰεὶ δὴ ἐν παντὶ σώματι ἔχοντι μετάστασιν, ἐφ' ᾧ πέφυκε μεθίστασθαι, ἀνάγκη, ἂν μὴ συμπιλήται, μεθίστασθαι ἢ κάτω αἰεὶ, εἰ κάτω ἢ φορὰ ὥσπερ γῆς, ἢ ἄνω, εἰ πῦρ, ἢ ἐπ' ἄμφω, [ἢ] ὁποῖον ἂν τι ἢ τὸ ἐντιθέμενον· ἐν δὲ δὴ τῷ κενῷ τοῦτο μὲν ἀδύνατον (οὐδὲν γὰρ σῶμα), διὰ δὲ τοῦ κύβου τὸ ἴσον διάστημα διεληλυθέναι, ὅπερ ἦν καὶ πρότερον [216b] ἐν τῷ κενῷ, ὥσπερ ἂν εἰ τὸ ὕδωρ μὴ μεθίστατο τῷ ξυλίνῳ κύβῳ μηδ' ὁ ἄήρ, ἀλλὰ πάντη διήεσαν δι' αὐτοῦ. ἀλλὰ μὴν καὶ ὁ κύβος γε ἔχει τοσοῦτον μέγεθος, ὅσον κατέχει κενόν· ὃ εἰ καὶ θερμὸν ἢ ψυχρὸν ἔστιν ἢ βαρὺ ἢ κοῦφον, οὐδὲν ἥττον ἕτερον τῷ εἶναι

πάντων τῶν παθημάτων ἐστί, καὶ εἰ μὴ χωριστόν· λέγω δὲ τὸν ὄγκον τοῦ ξυλίνου κύβου. ὥστ' εἰ καὶ χωρισθείη τῶν ἄλλων πάντων καὶ μήτε βαρὺ μήτε κοῦφον εἴη, καθέξει τὸ ἴσον κενὸν καὶ ἐν τῷ αὐτῷ ἔσται τῷ τοῦ τόπου καὶ τῷ τοῦ κενοῦ μέρει ἴσῳ ἑαυτῷ. τί οὖν διοίσει τὸ τοῦ κύβου σῶμα τοῦ ἴσου κενοῦ καὶ τόπου; καὶ εἰ δύο τοιαῦτα, διὰ τί οὐ καὶ ὁποσαοῦν ἐν τῷ αὐτῷ ἔσται;

Ἐν μὲν δὴ τοῦτο ἄτοπον καὶ ἀδύνατον. ἔτι δὲ φανερόν ὅτι τοῦτο ὁ κύβος ἔξει καὶ μεθιστάμενος, ὃ καὶ τὰ ἄλλα σώματα πάντ' ἔχει. ὥστ' εἰ τοῦ τόπου μηδὲν διαφέρει, τί δεῖ ποιεῖν τόπον τοῖς σώμασιν παρὰ τὸν ἐκάστου ὄγκον, εἰ ἀπαθὲς ὁ ὄγκος; οὐδὲν γὰρ συμβάλλεται, εἰ ἕτερον περὶ αὐτὸν ἴσον διάστημα τοιοῦτον εἴη. [ἔτι δεῖ δῆλον εἶναι οἶον κενὸν ἐν τοῖς κινουμένοις. νῦν δ' οὐδαμοῦ ἐντὸς τοῦ κόσμου· ὁ γὰρ ἀήρ ἔστιν τι, οὐ δοκεῖ δὲ γε-οὐδὲ τὸ ὕδωρ, εἰ ἦσαν οἱ ἰχθύες σιδηροῖ· τῇ ἀφῇ γὰρ ἡ κρίσις τοῦ ἀπτοῦ.]

Ὅτι μὲν τοίνυν οὐκ ἔστι κεχωρισμένον κενόν, ἐκ τούτων ἐστὶ δῆλον.

## Κεφάλαιο 9

Εἰσὶν δέ τινες οἱ διὰ τοῦ μανοῦ καὶ πυκνοῦ οἶονται φανερόν εἶναι ὅτι ἔστι κενόν. εἰ μὲν γὰρ μὴ ἔστι μανὸν καὶ πυκνόν, οὐδὲ συνιέναι καὶ πιλεῖσθαι οἶόν τε· εἰ δὲ τοῦτο μὴ εἴη, ἢ ὅλως κίνησις οὐκ ἔσται, ἢ κυμανεῖ τὸ ὅλον, ὥσπερ ἔφη Ξοῦθος, ἢ εἰς ἴσον ἀεὶ <δεῖ> μεταβάλλειν ἀέρα καὶ ὕδωρ (λέγω δὲ οἶον εἰ ἐξ ὕδατος κυάθου γέγονεν ἀήρ, ἅμα ἐξ ἴσου ἀέρος ὕδωρ τοσοῦτον γεγενῆσθαι), ἢ κενὸν εἶναι ἐξ ἀνάγκης· συμπιλεῖσθαι γὰρ καὶ ἐπεκτείνεσθαι οὐκ ἐνδέχεται ἄλλως.

εἰ μὲν οὖν τὸ μανὸν λέγουσι τὸ πολλὰ κενὰ κεχωρισμένα ἔχον, φανερόν ὡς εἰ μηδὲ κενὸν ἐνδέχεται εἶναι χωριστὸν ὥσπερ μηδὲ τόπον ἔχοντα διάστημα αὐτοῦ, οὐδὲ μανὸν οὕτως· εἰ δὲ μὴ χωριστόν, ἀλλ' ὅμως ἐνεῖναί τι κενόν, ἥττον μὲν ἀδύνατον, συμβαίνει δὲ πρῶτον μὲν οὐ πάσης κινήσεως αἴτιον τὸ κενόν, ἀλλὰ τῆς ἄνω (τὸ γὰρ μανὸν κοῦφον, διὸ [217a] καὶ τὸ πῦρ μανὸν εἶναι φασιν), ἔπειτα κινήσεως αἴτιον οὐχ οὕτω τὸ κενὸν ὡς ἐν ᾧ, ἀλλ' ὥσπερ οἱ ἄσκοι τῷ φέρεσθαι αὐτοὶ ἄνω φέρουσι τὸ συνεχές, οὕτω τὸ κενὸν ἄνω φέρει. καίτοι πῶς οἶόν τε φορὰν εἶναι κενοῦ ἢ τόπον κενοῦ; κενοῦ γὰρ γίγνεται κενόν, εἰς ὃ φέρεται.

ἔτι δὲ πῶς ἐπὶ τοῦ βαρέος ἀποδώσουσιν τὸ φέρεσθαι κάτω; καὶ δῆλον ὅτι εἰ ὅσῳ ἂν μανότερον καὶ κενώτερον ἢ ἄνω οἰσθήσεται, εἰ ὅλως εἴη κενόν,

τάχιστ' ἂν φέροιτο. ἴσως δὲ καὶ τοῦτ' ἀδύνατον κινηθῆναι· λόγος δ' ὁ αὐτός, ὥσπερ ὅτι ἐν τῷ κενῷ ἀκίνητα πάντα, οὕτω καὶ τὸ κενὸν ὅτι ἀκίνητον· ἀσύμβλητα γὰρ τὰ τάχη. ἐπεὶ δὲ κενὸν μὲν οὐ φαμεν εἶναι, τὰ ἄλλα δ' ἠπόρηται ἀληθῶς, ὅτι ἡ κίνησις οὐκ ἔσται, εἰ μὴ ἔσται πύκνωσις καὶ μάνωσις, ἢ κυμανεῖ ὁ οὐρανός, ἢ αἰεὶ ἴσον ὕδωρ ἐξ ἀέρος ἔσται καὶ ἀῆρ ἐξ ὕδατος (δῆλον γὰρ ὅτι πλείων ἀῆρ ἐξ ὕδατος γίνεταί· ἀνάγκη τοίνυν, εἰ μὴ ἔστι πίλησις, ἢ ἐξωθούμενον τὸ ἐχόμενον τὸ ἔσχατον κυμαίνειν ποιεῖν, ἢ ἄλλοθί που ἴσον μεταβάλλειν ἐξ ἀέρος ὕδωρ, ἵνα ὁ πᾶς ὄγκος τοῦ ὅλου ἴσος ᾖ, ἢ μηδὲν κινεῖσθαι· ἀεὶ γὰρ μεθισταμένου τοῦτο συμβήσεται, ἂν μὴ κύκλω περιίστηται· οὐκ ἀεὶ δ' εἰς τὸ κύκλω ἢ φορά, ἀλλὰ καὶ εἰς εὐθύ).

οἱ μὲν δὴ διὰ ταῦτα κενόν τι φαῖεν ἂν εἶναι, ἡμεῖς δὲ λέγομεν ἐκ τῶν ὑποκειμένων ὅτι ἔστιν ὕλη μία τῶν ἐναντίων, θερμοῦ καὶ ψυχροῦ καὶ τῶν ἄλλων τῶν φυσικῶν ἐναντιώσεων, καὶ ἐκ δυνάμει ὄντος ἐνεργείᾳ ὃν γίνεταί, καὶ οὐ χωριστὴ μὲν ἡ ὕλη, τὸ δ' εἶναι ἕτερον, καὶ μία τῷ ἀριθμῷ, εἰ ἔτυχε, χροιάς καὶ θερμοῦ καὶ ψυχροῦ.

ἔστι δὲ καὶ σώματος ὕλη καὶ μεγάλου καὶ μικροῦ ἢ αὐτῇ. δῆλον δέ· ὅταν γὰρ ἐξ ὕδατος ἀῆρ γένηται, ἢ αὐτὴ ὕλη οὐ προσλαβοῦσά τι ἄλλο ἐγένετο, ἀλλ' ὃ ἦν δυνάμει, ἐνεργείᾳ ἐγένετο, καὶ πάλιν ὕδωρ ἐξ ἀέρος ὡσαύτως, ὅτε μὲν εἰς μέγεθος ἐκ μικρότητος, ὅτε δ' εἰς μικρὸν ἐκ μεγέθους. ὁμοίως τοίνυν καὶ ὁ ἀῆρ πολὺς ὢν ἐν ἐλάττονι γίνεταί ὄγκῳ καὶ ἐξ ἐλάττονος μείζων, ἢ δυνάμει οὕσα ὕλη γίνεταί ἄμφω.

ὥσπερ γὰρ καὶ ἐκ ψυχροῦ θερμόν καὶ ἐκ θερμοῦ ψυχρόν ἢ αὐτῇ, ὅτι ἦν δυνάμει, οὕτω καὶ ἐκ θερμοῦ [217b] μᾶλλον θερμόν, οὐδενὸς γενομένου ἐν τῇ ὕλῃ θερμοῦ ὃ οὐκ ἦν θερμόν ὅτε ἦττον ἦν θερμόν, ὥσπερ γε οὐδ' ἢ τοῦ μείζονος κύκλου περιφέρεια καὶ κυρτότης ἐὰν γίγνηται ἐλάττονος κύκλου, <ἢ> ἢ αὐτῇ οὕσα ἢ ἄλλη, ἐν οὐθενὶ ἐγγέγονε τὸ κυρτόν ὃ ἦν οὐ κυρτόν ἀλλ' εὐθύ (οὐ γὰρ τῷ διαλείπειν τὸ ἦττον ἢ τὸ μᾶλλον ἔστιν)· οὐδ' ἔστι τῆς φλογὸς λαβεῖν τι μέγεθος ἐν ᾧ οὐ καὶ θερμότης καὶ λευκότης ἔνεστιν. οὕτω τοίνυν καὶ ἢ πρότερον θερμότης <πρὸς> τὴν ὕστερον. ὥστε καὶ τὸ μέγεθος καὶ ἢ μικρότης τοῦ αἰσθητοῦ ὄγκου οὐ προσλαβούσης τι τῆς ὕλης ἐπεκτείνεται, ἀλλ' ὅτι δυνάμει ἐστὶν ὕλη ἀμφοῖν· ὥστ' ἐστὶ τὸ αὐτὸ πυκνὸν καὶ μανόν, καὶ μία ὕλη αὐτῶν. ἔστι δὲ τὸ μὲν πυκνὸν βαρὺ, τὸ δὲ μανὸν κοῦφον. [ἔτι ὥσπερ ἢ τοῦ κύκλου περιφέρεια συναγομένη εἰς ἕλαττον οὐκ ἄλλο τι λαμβάνει τὸ κοῖλον, ἀλλ' ὃ ἦν συνήχθη, καὶ τοῦ πυρὸς ὃ τι ἂν τις λάβῃ πᾶν ἔσται θερμόν, οὕτω καὶ τὸ πᾶν συναγωγὴ καὶ διαστολὴ τῆς αὐτῆς ὕλης.] δύο γὰρ ἔστιν ἐφ' ἑκατέρου, τοῦ τε πυκνοῦ καὶ τοῦ μανοῦ· τό τε γὰρ

βαρὺ καὶ τὸ σκληρὸν πυκνὰ δοκεῖ εἶναι, καὶ τάναντία μανὰ τό τε κοῦφον καὶ τὸ μαλακόν· διαφωνεῖ δὲ τὸ βαρὺ καὶ τὸ σκληρὸν ἐπὶ μολίβδου καὶ σιδήρου.

ἐκ δὴ τῶν εἰρημένων φανερόν ὡς οὔτ' ἀποκεκριμένον κενὸν ἔστιν, οὔθ' ἀπλῶς οὔτ' ἐν τῷ μανῶ, οὔτε δυνάμει, εἰ μὴ τις βούλεται πάντως καλεῖν κενὸν τὸ αἵτιον τοῦ φέρεσθαι. οὔτω δ' ἢ τοῦ βαρέος καὶ κούφου ὕλη, ἢ τοιαύτη, εἴη ἂν τὸ κενόν· τὸ γὰρ πυκνὸν καὶ τὸ μανὸν κατὰ ταύτην τὴν ἐναντίωσιν φορᾶς ποιητικά, κατὰ δὲ τὸ σκληρὸν καὶ μαλακὸν πάθους καὶ ἀπαθείας, καὶ οὐ φορᾶς ἀλλ' ἑτεροιώσεως μᾶλλον.

καὶ περὶ μὲν κενοῦ, πῶς ἔστι καὶ πῶς οὐκ ἔστι, διωρίσθω τὸν τρόπον τοῦτον.

## Κεφάλαιο 10

Ἐχόμενον δὲ τῶν εἰρημένων ἔστιν ἐπελθεῖν περὶ χρόνου· πρῶτον δὲ καλῶς ἔχει διαπορῆσαι περὶ αὐτοῦ καὶ διὰ τῶν ἐξωτερικῶν λόγων, πότερον τῶν ὄντων ἔστιν ἢ τῶν μὴ ὄντων, εἴτα τίς ἢ φύσις αὐτοῦ. ὅτι μὲν οὖν ἢ ὅλως οὐκ ἔστιν ἢ μόλις καὶ ἀμυδρῶς, ἐκ τῶνδὲ τις ἂν ὑποπτεύσειεν. τὸ μὲν γὰρ αὐτοῦ γέγονε καὶ οὐκ ἔστιν, τὸ δὲ μέλλει καὶ οὔπω ἔστιν. [218a] ἐκ δὲ τούτων καὶ ὁ ἄπειρος καὶ ὁ ἀεὶ λαμβανόμενος χρόνος σύγκειται. τὸ δ' ἐκ μὴ ὄντων συγκείμενον ἀδύνατον ἂν εἶναι δόξειε μετέχειν οὐσίας.

πρὸς δὲ τούτοις παντὸς μεριστοῦ, ἅνπερ ἢ, ἀνάγκη, ὅτε ἔστιν, ἥτοι πάντα τὰ μέρη εἶναι ἢ ἕνια· τοῦ δὲ χρόνου τὰ μὲν γέγονε τὰ δὲ μέλλει, ἔστι δ' οὐδέν, ὄντος μεριστοῦ. τὸ δὲ νῦν οὐ μέρος· μετρεῖ τε γὰρ τὸ μέρος, καὶ συγκεκριθαι δεῖ τὸ ὅλον ἐκ τῶν μερῶν· ὁ δὲ χρόνος οὐ δοκεῖ συγκεκριθαι ἐκ τῶν νῦν.

ἔτι δὲ τὸ νῦν, ὃ φαίνεται διορίζειν τὸ παρελθὸν καὶ τὸ μέλλον, πότερον ἓν καὶ ταῦτόν ἀεὶ διαμένει ἢ ἄλλο καὶ ἄλλο, οὐ ῥάδιον ἰδεῖν.

εἰ μὲν γὰρ αἰεὶ ἕτερον καὶ ἕτερον, μηδὲν δ' ἔστι τῶν ἐν τῷ χρόνῳ ἄλλο καὶ ἄλλο μέρος ἅμα (ὃ μὴ περιέχει, τὸ δὲ περιέχεται, ὥσπερ ὁ ἐλάττων χρόνος ὑπὸ τοῦ πλείονος), τὸ δὲ νῦν μὴ ὄν πρότερον δὲ ὄν ἀνάγκη ἐφθάρθαι ποτέ, καὶ τὰ νῦν ἅμα μὲν ἀλλήλοις οὐκ ἔσται, ἐφθάρθαι δὲ ἀνάγκη ἀεὶ τὸ πρότερον. ἐν αὐτῷ μὲν οὖν ἐφθάρθαι οὐχ οἷόν τε διὰ τὸ εἶναι τότε, ἐν ἄλλῳ δὲ νῦν ἐφθάρθαι τὸ πρότερον νῦν οὐκ ἐνδέχεται. ἔστω γὰρ ἀδύνατον ἐχόμενα εἶναι ἀλλήλων τὰ νῦν, ὥσπερ στιγμὴν στιγμῆς. εἴπερ οὖν ἐν τῷ ἐφεξῆς οὐκ ἐφθαρταὶ ἀλλ' ἐν ἄλλῳ, ἐν τοῖς μεταξὺ [τοῖς] νῦν ἀπείροις οὐσιν ἅμα ἂν εἴη· τοῦτο δὲ ἀδύνατον.

ἀλλὰ μὴν οὐδ' αἰεὶ τὸ αὐτὸ διαμένειν δυνατόν· οὐδενὸς γὰρ διαιρετοῦ πεπερασμένου ἐν πέρας ἔστιν, οὔτε ἂν ἐφ' ἐν ἧ συνεχὲς οὔτε ἂν ἐπὶ πλείω· τὸ δὲ νῦν πέρας ἐστίν, καὶ χρόνον ἔστι λαβεῖν πεπερασμένον. ἔτι εἰ τὸ ἅμα εἶναι κατὰ χρόνον καὶ μήτε πρότερον μήτε ὕστερον τὸ ἐν τῷ αὐτῷ εἶναι καὶ ἐνὶ [τῷ] νῦν ἐστίν, εἰ τὰ τε πρότερον καὶ τὰ ὕστερον ἐν τῷ νῦν τωδί ἐστιν, ἅμα ἂν εἴη τὰ ἔτος γεγνημένα μυριοστὸν τοῖς γε νομένοις τήμερον, καὶ οὔτε πρότερον οὔτε ὕστερον οὐδὲν ἄλλο ἄλλου.

περὶ μὲν οὖν τῶν ὑπαρχόντων αὐτῷ τοσαῦτ' ἔστω διη πορημένα·

τί δ' ἐστὶν ὁ χρόνος καὶ τίς αὐτοῦ ἡ φύσις, ὁμοίως ἔκ τε τῶν παραδεδομένων ἀδηλόν ἐστιν, καὶ περὶ ὧν τυγχάνομεν διεληλυθότες πρότερον.

οἱ μὲν γὰρ τὴν τοῦ ὅλου [218b] κίνησιν εἶναί φασιν, οἱ δὲ τὴν σφαῖραν αὐτήν.

καίτοι τῆς περιφορᾶς καὶ τὸ μέρος χρόνος τίς ἐστὶ, περιφορὰ δέ γε οὐ· μέρος γὰρ περιφορᾶς τὸ ληφθέν, ἀλλ' οὐ περιφορὰ. ἔτι δ' εἰ πλείους ἦσαν οἱ οὐρανοί, ὁμοίως ἂν ἦν ὁ χρόνος ἢ ὅτουοῦν αὐτῶν κίνησις, ὥστε πολλοὶ χρόνοι ἅμα.

ἡ δὲ τοῦ ὅλου σφαῖρα ἔδοξε μὲν τοῖς εἰποῦσιν εἶναι ὁ χρόνος, ὅτι ἐν τε τῷ χρόνῳ πάντα ἐστὶν καὶ ἐν τῇ τοῦ ὅλου σφαίρᾳ· ἔστιν δ' εὐηθικώτερον τὸ εἰρημένον ἢ ὥστε περὶ αὐτοῦ τὰ ἀδύνατα ἐπισκοπεῖν.

ἐπεὶ δὲ δοκεῖ μάλιστα κίνησις εἶναι καὶ μεταβολή τις ὁ χρόνος, τοῦτ' ἂν εἴη σκεπτέον.

ἡ μὲν οὖν ἐκάστου μεταβολή καὶ κίνησις ἐν αὐτῷ τῷ μεταβάλλοντι μόνον ἐστίν, ἢ οὐ ἂν τύχη ὃν αὐτὸ τὸ κινούμενον καὶ μεταβάλλον· ὁ δὲ χρόνος ὁμοίως καὶ πανταχοῦ καὶ παρὰ πᾶσιν.

ἔτι δὲ μεταβολή μὲν ἐστὶ θάπτων καὶ βραδυτέρα, χρόνος δ' οὐκ ἔστιν· τὸ γὰρ βραδὺ καὶ ταχὺ χρόνῳ ὥριται, ταχὺ μὲν τὸ ἐν ὀλίγῳ πολὺ κινούμενον, βραδὺ δὲ τὸ ἐν πολλῷ ὀλίγον· ὁ δὲ χρόνος οὐχ ὥριται χρόνῳ, οὔτε τῷ ποσός τις εἶναι οὔτε τῷ ποιός.

ὅτι μὲν τοίνυν οὐκ ἔστιν κίνησις, φανερόν· μηδὲν δὲ διαφερέτω λέγειν ἡμῖν ἐν τῷ παρόντι κίνησιν ἢ μεταβολήν.



## Κεφάλαιο 11

Ἀλλὰ μὴν οὐδ' ἄνευ γε μεταβολῆς· ὅταν γὰρ μηδὲν αὐτοὶ μεταβάλλωμεν τὴν διάνοιαν ἢ λάθωμεν μεταβάλλοντες, οὐ δοκεῖ ἡμῖν γεγονέναι χρόνος, καθάπερ οὐδὲ τοῖς ἐν Σαρδοῖ μυθολογουμένοις καθεύδειν παρὰ τοῖς ἥρωσιν, ὅταν ἐγερθῶσι· συνάπτουσι γὰρ τῷ πρότερον νῦν τὸ ὕστερον νῦν καὶ ἐν ποιοῦσιν, ἐξαιροῦντες διὰ τὴν ἀναισθησίαν τὸ μεταξύ. ὥσπερ οὖν εἰ μὴ ἦν ἕτερον τὸ νῦν ἀλλὰ ταῦτό καὶ ἐν, οὐκ ἂν ἦν χρόνος, οὕτως καὶ ἐπεὶ λανθάνει ἕτερον ὄν, οὐ δοκεῖ εἶναι τὸ μεταξύ χρόνος. εἰ δὴ τὸ μὴ οἶεσθαι εἶναι χρόνον τότε συμβαίνει ἡμῖν, ὅταν μὴ ὀρίσωμεν μηδεμίαν μεταβολήν, ἀλλ' ἐν ἐνὶ καὶ ἀδιαιρέτῳ φαίνεται ἡ ψυχὴ μένειν, ὅταν δ' αἰσθώμεθα καὶ ὀρίσωμεν, τότε φαμὲν γεγονέναι χρόνον, φανερόν ὅτι οὐκ ἔστιν ἄνευ κινήσεως καὶ μεταβολῆς [219a] χρόνος. ὅτι μὲν οὖν οὔτε κίνησις οὔτ' ἄνευ κινήσεως ὁ χρόνος ἐστὶ, φανερόν·

ληπτέον δέ, ἐπεὶ ζητοῦμεν τί ἐστὶν ὁ χρόνος, ἐντεῦθεν ἀρχομένοις, τί τῆς κινήσεως ἐστὶν.

ἅμα γὰρ κινήσεως αἰσθανόμεθα καὶ χρόνου· καὶ γὰρ ἐὰν ἦ σκότος καὶ μηδὲν διὰ τοῦ σώματος πάσχωμεν, κίνησις δέ τις ἐν τῇ ψυχῇ ἐνῇ, εὐθὺς ἅμα δοκεῖ τις γεγονέναι καὶ χρόνος. ἀλλὰ μὴν καὶ ὅταν γε χρόνος δοκῇ γεγονέναι τις, ἅμα καὶ κινήσις τις δοκεῖ γεγονέναι. ὥστε ἤτοι κίνησις ἢ τῆς κινήσεως τί ἐστὶν ὁ χρόνος. ἐπεὶ οὖν οὐ κίνησις, ἀνάγκη τῆς κινήσεως τι εἶναι αὐτόν.

ἐπεὶ δὲ τὸ κινούμενον κινεῖται ἔκ τινος εἷς τι καὶ πᾶν μέγεθος συνεχές, ἀκολουθεῖ τῷ μεγέθει ἡ κίνησις· διὰ γὰρ τὸ τὸ μέγεθος εἶναι συνεχές καὶ ἡ κίνησις ἐστὶν συνεχής, διὰ δὲ τὴν κίνησιν ὁ χρόνος· ὅση γὰρ ἡ κίνησις, τοσοῦτος καὶ ὁ χρόνος αἰεὶ δοκεῖ γεγονέναι.

τὸ δὴ πρότερον καὶ ὕστερον ἐν τόπῳ πρῶτόν ἐστιν. ἐνταῦθα μὲν δὴ τῇ θέσει· ἐπεὶ δ' ἐν τῷ μεγέθει ἔστι τὸ πρότερον καὶ ὕστερον, ἀνάγκη καὶ ἐν κινήσει εἶναι τὸ πρότερον καὶ ὕστερον, ἀνάλογον τοῖς ἐκεῖ. ἀλλὰ μὴν καὶ ἐν χρόνῳ ἔστιν τὸ πρότερον καὶ ὕστερον διὰ τὸ ἀκολουθεῖν ἀεὶ θατέρῳ θάτερον αὐτῶν. ἔστι δὲ τὸ πρότερον καὶ ὕστερον ἐν τῇ κινήσει ὃ μὲν ποτε ὄν κίνησις [ἐστὶν]· τὸ μέντοι εἶναι αὐτῷ ἕτερον καὶ οὐ κίνησις. ἀλλὰ μὴν καὶ τὸν χρόνον γε γνωρίζομεν ὅταν ὀρίσωμεν τὴν κίνησιν, τῷ πρότερον καὶ ὕστερον ὀρίζοντες· καὶ τότε φαμὲν γεγονέναι χρόνον, ὅταν τοῦ προτέρου καὶ ὑστέρου ἐν τῇ κινήσει αἰσθησιν λάβωμεν. ὀρίζομεν δὲ τῷ ἄλλο καὶ ἄλλο ὑπολαβεῖν αὐτά, καὶ μεταξύ τι αὐτῶν ἕτερον· ὅταν γὰρ ἕτερα τὰ ἅκρα τοῦ μέσου

νοήσωμεν, καὶ δύο εἴπη ἡ ψυχὴ τὰ νῦν, τὸ μὲν πρότερον τὸ δ' ὕστερον, τότε καὶ τοῦτο φαμεν εἶναι χρόνον· τὸ γὰρ ὀριζόμενον τῷ νῦν χρόνος εἶναι δοκεῖ· καὶ ὑποκείσθω.

ὅταν μὲν οὖν ὥς ἐν τὸ νῦν αἰσθανώμεθα, καὶ μὴ ᾗτοι ὥς πρότερον καὶ ὕστερον ἐν τῇ κινήσει ἢ ὥς τὸ αὐτὸ μὲν προτέρου δὲ καὶ ὑστέρου τινός, οὐ δοκεῖ χρόνος γεγονέναι οὐδεὶς, ὅτι οὐδὲ κίνησις. ὅταν δὲ τὸ πρότερον [219b] καὶ ὕστερον, τότε λέγομεν χρόνον· τοῦτο γὰρ ἐστὶν ὁ χρόνος, ἀριθμὸς κινήσεως κατὰ τὸ πρότερον καὶ ὕστερον.

οὐκ ἄρα κί νησις ὁ χρόνος ἀλλ' ἢ ἀριθμὸν ἔχει ἡ κίνησις. σημεῖον δέ· τὸ μὲν γὰρ πλεῖον καὶ ἔλαττον κρίνομεν ἀριθμῷ, κίνησιν δὲ πλείω καὶ ἐλάττω χρόνῳ· ἀριθμὸς ἄρα τις ὁ χρόνος. ἐπεὶ δ' ἀριθμὸς ἐστὶ διχῶς (καὶ γὰρ τὸ ἀριθμούμενον καὶ τὸ ἀριθμητὸν ἀριθμὸν λέγομεν, καὶ ὡ ἀριθμοῦμεν), ὁ δὴ χρόνος ἐστὶν τὸ ἀριθμούμενον καὶ οὐχ ὡ ἀριθμοῦμεν. ἔστι δ' ἕτερον ὡ ἀριθμοῦμεν καὶ τὸ ἀριθμούμενον. καὶ ὥσπερ ἡ κίνησις αἰεὶ ἄλλη καὶ ἄλλη, καὶ ὁ χρόνος (ὁ δ' ἅμα πᾶς χρόνος ὁ αὐτός· τὸ γὰρ νῦν τὸ αὐτὸ ὅ ποτ' ᾗν-τὸ δ' εἶναι αὐτῷ ἕτερον-τὸ δὲ νῦν τὸν χρόνον ὀρίζει, ἢ πρότερον καὶ ὕστερον).

τὸ δὲ νῦν ἔστι μὲν ὥς τὸ αὐτό, ἔστι δ' ὥς οὐ τὸ αὐτό· ἢ μὲν γὰρ ἐν ἄλλῳ καὶ ἄλλῳ, ἕτερον (τοῦτο δ' ᾗν αὐτῷ τὸ νῦν <εἶναι>, ὃ δὲ ποτε ὄν ἐστὶ τὸ νῦν, τὸ αὐτό. ἀκολουθεῖ γὰρ, ὥς ἐλέχθη, τῷ μὲν μεγέθει ἡ κίνησις, ταύτῃ δ' ὁ χρόνος, ὥς φαμεν· καὶ ὁμοίως δὴ τῇ στιγμῇ τὸ φερόμενον, ὡ τὴν κίνησιν γνωρίζομεν καὶ τὸ πρότερον ἐν αὐτῇ καὶ τὸ ὕστερον. τοῦτο δὲ ὃ μὲν ποτε ὄν τὸ αὐτό (ἢ στιγμή γὰρ ἢ λίθος ἢ τι ἄλλο τοιοῦτόν ἐστι), τῷ λόγῳ δὲ ἄλλο, ὥσπερ οἱ σοφισταὶ λαμβάνουσιν ἕτερον τὸ Κορίσκον ἐν Λυκείῳ εἶναι καὶ τὸ Κορίσκον ἐν Ἀγορᾷ. καὶ τοῦτο δὴ τῷ ἄλλοθι καὶ ἄλλοθι εἶναι ἕτερον· τῷ δὲ φερομένῳ ἀκολουθεῖ τὸ νῦν, ὥσπερ ὁ χρόνος τῇ κινήσει (τῷ γὰρ φερομένῳ γνωρίζομεν τὸ πρότερον καὶ ὕστερον ἐν κινήσει, ἢ δ' ἀριθμητὸν τὸ πρότερον καὶ ὕστερον, τὸ νῦν ἔστιν)· ὥστε καὶ ἐν τούτοις ὃ μὲν ποτε ὄν νῦν ἐστὶ, τὸ αὐτό (τὸ πρότερον γὰρ καὶ ὕστερόν ἐστὶ τὸ ἐν κινήσει), τὸ δ' εἶναι ἕτερον (ἢ ἀριθμητὸν γὰρ τὸ πρότερον καὶ ὕστερον, τὸ νῦν ἔστιν). καὶ γνώριμον δὲ μάλιστα τοῦτ' ἔστιν· καὶ γὰρ ἡ κίνησις διὰ τὸ κινούμενον καὶ ἡ φορὰ διὰ τὸ φερόμενον· τόδε γὰρ τι τὸ φερόμενον, ἡ δὲ κίνησις οὗ. ἔστι μὲν οὖν ὥς τὸ αὐτὸ τὸ νῦν αἰεὶ, ἔστι δ' ὥς οὐ τὸ αὐτό· καὶ γὰρ τὸ φερόμενον. φανερόν δὲ καὶ ὅτι εἴτε χρόνος μὴ εἴη, τὸ νῦν οὐκ ἂν [220a] εἴη, εἴτε τὸ νῦν μὴ εἴη, χρόνος οὐκ ἂν εἴη· ἅμα γὰρ ὥσπερ τὸ φερόμενον καὶ ἡ φορὰ, οὕτως καὶ ὁ ἀριθμὸς ὁ τοῦ φερομένου καὶ ὁ τῆς φορᾶς.

χρόνος μὲν γὰρ ὁ τῆς φορᾶς ἀριθμός, τὸ νῦν δὲ ὡς τὸ φερόμενον, οἷον μονὰς ἀριθμοῦ. καὶ συνεχῆς τε δὴ ὁ χρόνος τῷ νῦν, καὶ διήρηται κατὰ τὸ νῦν· ἀκολουθεῖ γὰρ καὶ τοῦτο τῇ φορᾷ καὶ τῷ φερομένῳ. καὶ γὰρ ἡ κίνησις καὶ ἡ φορὰ μία τῷ φερομένῳ, ὅτι ἔν (καὶ οὐχ ὅ ποτε ὄν-καὶ γὰρ ἂν διαλίποι-ἀλλὰ τῷ λόγῳ)· καὶ ὀρίζει δὲ τὴν πρότερον καὶ ὕστερον κίνησιν τοῦτο. ἀκολουθεῖ δὲ καὶ τοῦτό πως τῇ στιγμῇ· καὶ γὰρ ἡ στιγμή καὶ συνέχει τὸ μῆκος καὶ ὀρίζει· ἔστι γὰρ τοῦ μὲν ἀρχῇ τοῦ δὲ τελευτῇ. ἀλλ' ὅταν μὲν οὕτω λαμβάνη τις ὡς δυσὶ χρώμενος τῇ μιᾷ, ἀνάγκη ἵστασθαι, εἰ ἔσται ἀρχὴ καὶ τελευτὴ ἡ αὐτὴ στιγμή· τὸ δὲ νῦν διὰ τὸ κινεῖσθαι τὸ φερόμενον αἰεὶ ἕτερον.

ὥσθ' ὁ χρόνος ἀριθμὸς οὐχ ὡς τῆς αὐτῆς στιγμῆς, ὅτι ἀρχὴ καὶ τελευτῇ, ἀλλ' ὡς τὰ ἔσχατα τῆς γραμμῆς μᾶλλον-καὶ οὐχ ὡς τὰ μέρη, διὰ τε τὸ εἰρημένον (τῇ γὰρ μέσῃ στιγμῇ ὡς δυσὶ χρήσεται, ὥστε ἡρεμεῖν συμβήσεται), καὶ ἔτι φανερόν ὅτι οὐδὲν μόνιον τὸ νῦν τοῦ χρόνου, οὐδ' ἡ διαίρεσις τῆς κινήσεως, ὥσπερ οὐδ' ἡ στιγμή τῆς γραμμῆς· αἱ δὲ γραμμαὶ αἱ δύο τῆς μιᾶς μόρια.

ἡ μὲν οὖν πέρας τὸ νῦν, οὐ χρόνος, ἀλλὰ συμβέβηκεν· ἡ δ' ἀριθμεῖ, ἀριθμός· τὰ μὲν γὰρ πέρατα ἐκείνου μόνον ἐστὶν οὐ ἐστὶν πέρατα, ὁ δ' ἀριθμὸς ὁ τῶνδε τῶν ἵππων, ἡ δεκάς, καὶ ἄλλοθι.

ὅτι μὲν τοίνυν ὁ χρόνος ἀριθμός ἐστὶν κινήσεως κατὰ τὸ πρότερον καὶ ὕστερον, καὶ συνεχῆς (συνεχοῦς γάρ), φανερόν.

## Κεφάλαιο 12

Ἐλάχιστος δὲ ἀριθμὸς ὁ μὲν ἀπλῶς ἐστὶν ἡ δυάς· τὶς δὲ ἀριθμὸς ἔστι μὲν ὡς ἔστιν, ἔστι δ' ὡς οὐκ ἔστιν, οἷον γραμμῆς ἔλάχιστος πλήθει μὲν ἐστὶν αἱ δύο ἢ ἡ μία, μεγέθει δ' οὐκ ἔστιν ἔλάχιστος· αἰεὶ γὰρ διαιρεῖται πᾶσα γραμμὴ. ὥστε ὁμοίως καὶ χρόνος· ἔλάχιστος γὰρ κατὰ μὲν ἀριθμόν ἐστὶν ὁ εἷς ἢ οἱ δύο, κατὰ μέγεθος δ' οὐκ ἔστιν.

φανερόν [220b] δὲ καὶ ὅτι ταχὺς μὲν καὶ βραδὺς οὐ λέγεται, πολὺς δὲ καὶ ὀλίγος καὶ μακρὸς καὶ βραχύς. ἡ μὲν γὰρ συνεχῆς, μακρὸς καὶ βραχύς, ἡ δὲ ἀριθμὸς, πολὺς καὶ ὀλίγος.

ταχὺς δὲ καὶ βραδὺς οὐκ ἔστιν· οὐδὲ γὰρ ἀριθμὸς ἡ ἀριθμοῦμεν ταχὺς καὶ βραδὺς οὐδεὶς. καὶ ὁ αὐτὸς δὲ πανταχοῦ ἅμα· πρότερον δὲ καὶ ὕστερον οὐχ ὁ αὐτός, ὅτι καὶ ἡ μεταβολὴ ἡ μὲν παροῦσα μία, ἡ δὲ γεγεννημένη καὶ ἡ

μέλλουσα ἑτέρα, ὁ δὲ χρόνος ἀριθμός ἐστιν οὐχ ὧς ἀριθμοῦμεν ἀλλ' ὁ ἀριθμούμενος, οὗτος δὲ συμβαίνει πρότερον καὶ ὕστερον ἀεὶ ἕτερος· τὰ γὰρ νῦν ἕτερα. ἔστι δὲ ὁ ἀριθμὸς εἷς μὲν καὶ ὁ αὐτὸς ὁ τῶν ἑκατὸν ἵππων καὶ ὁ τῶν ἑκατὸν ἀνθρώπων, ὧν δ' ἀριθμός, ἕτερα, οἱ ἵπποι τῶν ἀνθρώπων. ἔτι ὡς ἐνδέχεται κίνησιν εἶναι τὴν αὐτὴν καὶ μίαν πάλιν καὶ πάλιν, οὕτω καὶ χρόνον, οἷον ἐνιαυτὸν ἢ ἔαρ ἢ μετόπωρον.

οὐ μόνον δὲ τὴν κίνησιν τῷ χρόνῳ μετροῦμεν, ἀλλὰ καὶ τῇ κινήσει τὸν χρόνον διὰ τὸ ὀρίζεσθαι ὑπ' ἀλλήλων· ὁ μὲν γὰρ χρόνος ὀρίζει τὴν κίνησιν ἀριθμὸς ὧν αὐτῆς, ἡ δὲ κίνησις τὸν χρόνον. καὶ λέγομεν πολὺν καὶ ὀλίγον χρόνον τῇ κινήσει μετροῦντες, καθάπερ καὶ τῷ ἀριθμητῷ τὸν ἀριθμόν, οἷον τῷ ἐνὶ ἵππῳ τὸν τῶν ἵππων ἀριθμόν. τῷ μὲν γὰρ ἀριθμῷ τὸ τῶν ἵππων πλῆθος γνωρίζομεν, πάλιν δὲ τῷ ἐνὶ ἵππῳ τὸν τῶν ἵππων ἀριθμόν αὐτόν. ὁμοίως δὲ καὶ ἐπὶ τοῦ χρόνου καὶ τῆς κινήσεως· τῷ μὲν γὰρ χρόνῳ τὴν κίνησιν, τῇ δὲ κινήσει τὸν χρόνον μετροῦμεν. καὶ τοῦτ' εὐλόγως συμβέβηκεν· ἀκολουθεῖ γὰρ τῷ μὲν μεγέθει ἡ κίνησις, τῇ δὲ κινήσει ὁ χρόνος, τῷ καὶ ποσὰ καὶ συνεχῇ καὶ διαιρετὰ εἶναι· διὰ μὲν γὰρ τὸ τὸ μέγεθος εἶναι τοιοῦτον ἡ κίνησις ταῦτα πέπονθεν, διὰ δὲ τὴν κίνησιν ὁ χρόνος. καὶ μετροῦμεν καὶ τὸ μέγεθος τῇ. κινήσει καὶ τὴν κίνησιν τῷ μεγέθει· πολλὴν γὰρ εἶναι φαμεν τὴν ὁδόν, ἂν ἡ πορεία πολλή, καὶ ταύτην πολλήν, ἂν ἡ ὁδὸς [ἢ] πολλή· καὶ τὸν χρόνον, ἂν ἡ κίνησις, καὶ τὴν κίνησιν, ἂν ὁ χρόνος.

ἐπεὶ δ' ἐστὶν ὁ χρόνος μέτρον [221a] κινήσεως καὶ τοῦ κινεῖσθαι, μετρεῖ δ' οὗτος τὴν κίνησιν τῷ ὀρίσαι τινὰ κίνησιν ἢ καταμετρήσει τὴν ὅλην (ὥσπερ καὶ τὸ μῆκος ὁ πῆχυς τῷ ὀρίσαι τι μέγεθος ὃ ἀναμετρήσει τὸ ὅλον), καὶ ἔστιν τῇ κινήσει τὸ ἐν χρόνῳ εἶναι τὸ μετρεῖσθαι τῷ χρόνῳ καὶ αὐτὴν καὶ τὸ εἶναι αὐτῆς (ἅμα γὰρ τὴν κίνησιν καὶ τὸ εἶναι τῆς κινήσεως μετρεῖ, καὶ τοῦτ' ἔστιν αὐτῇ τὸ ἐν χρόνῳ εἶναι, τὸ μετρεῖσθαι αὐτῆς τὸ εἶναι), δῆλον ὅτι καὶ τοῖς ἄλλοις τοῦτ' ἔστι τὸ ἐν χρόνῳ εἶναι, τὸ μετρεῖσθαι αὐτῶν τὸ εἶναι ὑπὸ τοῦ χρόνου. τὸ γὰρ ἐν χρόνῳ εἶναι δυοῖν ἐστὶν θάτερον, ἐν μὲν τὸ εἶναι τότε ὅτε ὁ χρόνος ἔστιν, ἐν δὲ ὥσπερ ἕνια λέγομεν ὅτι ἐν ἀριθμῷ ἐστὶν. τοῦτο δὲ σημαίνει ἥτοι ὡς μέρος ἀριθμοῦ καὶ πάθος, καὶ ὅλως ὅτι τοῦ ἀριθμοῦ τι, ἢ ὅτι ἔστιν αὐτοῦ ἀριθμός.

ἐπεὶ δ' ἀριθμὸς ὁ χρόνος, τὸ μὲν νῦν καὶ τὸ πρότερον καὶ ὅσα τοιαῦτα οὕτως ἐν χρόνῳ ὡς ἐν ἀριθμῷ μονὰς καὶ τὸ περιττὸν καὶ ἄρτιον (τὰ μὲν γὰρ τοῦ ἀριθμοῦ τι, τὰ δὲ τοῦ χρόνου τί ἐστὶν)· τὰ δὲ πράγματα ὡς ἐν ἀριθμῷ τῷ χρόνῳ ἐστὶν. εἰ δὲ τοῦτο, περιέχεται ὑπὸ χρόνου ὥσπερ <καὶ τὰ ἐν ἀριθμῷ ὑπ' ἀριθμοῦ> καὶ τὰ ἐν τόπῳ ὑπὸ τόπου.

φανερὸν δὲ καὶ ὅτι οὐκ ἔστιν τὸ ἐν χρόνῳ εἶναι τὸ εἶναι ὅτε ὁ χρόνος ἔστιν, ὥσπερ οὐδὲ τὸ ἐν κινήσει εἶναι οὐδὲ τὸ ἐν τόπῳ ὅτε ἡ κίνησις καὶ ὁ τόπος ἔστιν. εἰ γὰρ ἔσται τὸ ἐν τινι οὕτω, πάντα τὰ πράγματα ἐν ὅτῳ οὖν ἔσται, καὶ ὁ οὐρανὸς ἐν τῇ κέγχρῳ· ὅτε γὰρ ἡ κέγχρος ἔστιν, ἔστι καὶ ὁ οὐρανός. ἀλλὰ τοῦτο μὲν συμβέβηκεν, ἐκεῖνο δ' ἀνάγκη παρακολουθεῖν, καὶ τῷ ὄντι ἐν χρόνῳ εἶναί τινα χρόνον ὅτε καὶ ἐκεῖνο ἔστιν, καὶ τῷ ἐν κινήσει ὄντι εἶναι τότε κίνησιν.

ἐπεὶ δὲ ἔστιν ὡς ἐν ἀριθμῷ τὸ ἐν χρόνῳ, ληφθήσεται τις πλείων χρόνος παντὸς τοῦ ἐν χρόνῳ ὄντος· διὸ ἀνάγκη πάντα τὰ ἐν χρόνῳ ὄντα περιέχεσθαι ὑπὸ χρόνου, ὥσπερ καὶ τὰ ἄλλα ὅσα ἐν τινί ἔστιν, οἷον τὰ ἐν τόπῳ ὑπὸ τοῦ τόπου.

καὶ πάσχει δὴ τι ὑπὸ τοῦ χρόνου, καθάπερ καὶ λέγειν εἰώθαμεν ὅτι κατατῆκε ὁ χρόνος, καὶ γηράσκει πάνθ' ὑπὸ τοῦ χρόνου, καὶ ἐπιλανθάνεται διὰ τὸν χρόνον, ἀλλ' [221b] οὐ μεμάθηκεν, οὐδὲ νέον γέγονεν οὐδὲ καλόν· φθορᾶς γὰρ αἴτιος καθ' ἑαυτὸν μᾶλλον ὁ χρόνος· ἀριθμὸς γὰρ κινήσεως, ἡ δὲ κίνησις ἐξίστησιν τὸ ὑπάρχον· ὥστε φανερὸν ὅτι τὰ αἰεὶ ὄντα, ἢ αἰεὶ ὄντα, οὐκ ἔστιν ἐν χρόνῳ· οὐ γὰρ περιέχεται ὑπὸ χρόνου, οὐδὲ μετρεῖται τὸ εἶναι αὐτῶν ὑπὸ τοῦ χρόνου· σημεῖον δὲ τούτου ὅτι οὐδὲ πάσχει οὐδὲν ὑπὸ τοῦ χρόνου ὡς οὐκ ὄντα ἐν χρόνῳ. ἐπεὶ δ' ἔστιν ὁ χρόνος μέτρον κινήσεως, ἔσται καὶ ἡρεμίας μέτρον [κατὰ συμβεβηκός]· πᾶσα γὰρ ἡρεμία ἐν χρόνῳ. οὐ γὰρ ὥσπερ τὸ ἐν κινήσει ὄν ἀνάγκη κινεῖσθαι, οὕτω καὶ τὸ ἐν χρόνῳ· οὐ γὰρ κίνησις ὁ χρόνος, ἀλλ' ἀριθμὸς κινήσεως, ἐν ἀριθμῷ δὲ κινήσεως ἐνδέχεται εἶναι καὶ τὸ ἡρεμοῦν. οὐ γὰρ πᾶν τὸ ἀκίνητον ἡρεμεῖ, ἀλλὰ τὸ ἐστερημένον κινήσεως πεφυκὸς δὲ κινεῖσθαι, καθάπερ εἴρηται ἐν τοῖς πρότερον.

τὸ δ' εἶναι ἐν ἀριθμῷ ἔστιν τὸ εἶναί τινα ἀριθμὸν τοῦ πράγματος, καὶ μετρεῖσθαι τὸ εἶναι αὐτοῦ τῷ ἀριθμῷ ἐν ᾧ ἔστιν, ὥστ' εἰ ἐν χρόνῳ, ὑπὸ χρόνου. μετρήσει δ' ὁ χρόνος τὸ κινούμενον καὶ τὸ ἡρεμοῦν, ἢ τὸ μὲν κινούμενον τὸ δὲ ἡρεμοῦν· τὴν γὰρ κίνησιν αὐτῶν μετρήσει καὶ τὴν ἡρεμίαν, πόση τις.

ὥστε τὸ κινούμενον οὐχ ἀπλῶς ἔσται μετρητὸν ὑπὸ χρόνου, ἢ ποσόν τί ἔστιν, ἀλλ' ἢ ἡ κίνησις αὐτοῦ ποσὴ. ὥστε ὅσα μήτε κινεῖται μήτ' ἡρεμεῖ, οὐκ ἔστιν ἐν χρόνῳ· τὸ μὲν γὰρ ἐν χρόνῳ εἶναι τὸ μετρεῖσθαι ἔστι χρόνῳ, ὁ δὲ χρόνος κινήσεως καὶ ἡρεμίας μέτρον.

φανερὸν οὖν ὅτι οὐδὲ τὸ μὴ ὄν ἔσται πᾶν ἐν χρόνῳ, οἷον ὅσα μὴ ἐνδέχεται

ἄλλως, ὥσπερ τὸ τὴν διάμετρον εἶναι τῇ πλευρᾷ σύμμετρον.

## Κεφάλαιο 13

Τὸ δὲ νῦν ἔστιν συνέχεια χρόνου, ὥσπερ ἐλέχθη· συνέχει γὰρ τὸν χρόνον τὸν παρεληλυθότα καὶ ἐσόμενον, καὶ πέρας χρόνου ἔστιν· ἔστι γὰρ τοῦ μὲν ἀρχή, τοῦ δὲ τελευτή. ἀλλὰ τοῦτ' οὐχ ὥσπερ ἐπὶ τῆς στιγμῆς μενούσης φανερόν. διαιρεῖ δὲ δυνάμει. καὶ ἡ μὲν τοιοῦτο, αἰεὶ ἕτερον τὸ νῦν, ἡ δὲ συνδεῖ, αἰεὶ τὸ αὐτό, ὥσπερ ἐπὶ τῶν μαθηματικῶν γραμμῶν (οὐ γὰρ ἡ αὐτὴ αἰεὶ στιγμή τῇ νοήσει· διαιρούντων γὰρ ἄλλη καὶ ἄλλη· ἡ δὲ μία, ἡ αὐτὴ πάντη)

-οὕτω καὶ τὸ νῦν τὸ μὲν τοῦ χρόνου διαίρεσις κατὰ δύναμιν, τὸ δὲ πέρας ἀμφοῖν καὶ ἐνότης· ἔστι δὲ ταῦτό καὶ κατὰ ταῦτό ἡ διαίρεσις καὶ ἡ ἔνωσις, τὸ δ' εἶναι οὐ ταῦτό.

τὸ μὲν οὖν οὕτω λέγεται τῶν νῦν, ἄλλο δ' ὅταν ὁ χρόνος ὁ τούτου ἐγγὺς ἦ. ἥξει νῦν, ὅτι τήμερον ἥξει· ἡκεῖ νῦν, ὅτι ἦλθε τήμερον. τὰ δ' ἐν Ἰλίῳ γέγονεν οὐ νῦν, οὐδ' ὁ κατακλυσμὸς [γέγονε] νῦν· καίτοι συνεχῆς ὁ χρόνος εἰς αὐτά, ἀλλ' ὅτι οὐκ ἐγγύς.

τὸ δὲ ποτέ χρόνος ὠρισμένος πρὸς τὸ πρότερον νῦν, οἷον ποτὲ ἐλήφθη Τροία, καὶ ποτὲ ἔσται κατακλυσμός· δεῖ γὰρ πεπεράνθαι πρὸς τὸ νῦν. ἔσται ἄρα ποσὸς τις ἀπὸ τοῦδε χρόνος εἰς ἐκεῖνο, καὶ ἦν εἰς τὸ παρελθόν. εἰ δὲ μηδεὶς χρόνος ὅς οὐ ποτε, πᾶς ἂν εἴη χρόνος πεπερασμένος.

ἄρ' οὖν ὑπολείψει; ἢ οὐ, εἴπερ αἰεὶ ἔστι κίνησις; ἄλλος οὖν ἢ ὁ αὐτός πολλάκις; δῆλον ὅτι ὡς ἂν ἡ κίνησις, οὕτω καὶ ὁ χρόνος· εἰ μὲν γὰρ ἡ αὐτὴ καὶ μία γίνεταί ποτε, ἔσται καὶ χρόνος εἷς καὶ ὁ αὐτός, εἰ δὲ μή, οὐκ ἔσται.

ἐπεὶ δὲ τὸ νῦν τελευτῇ [222b] καὶ ἀρχῇ χρόνου, ἀλλ' οὐ τοῦ αὐτοῦ, ἀλλὰ τοῦ μὲν παρήκοντος τελευτῇ, ἀρχῇ δὲ τοῦ μέλλοντος, ἔχοι ἂν ὥσπερ ὁ κύκλος ἐν τῷ αὐτῷ πῶς τὸ κυρτὸν καὶ τὸ κοῖλον, οὕτως καὶ ὁ χρόνος αἰεὶ ἐν ἀρχῇ καὶ τελευτῇ. καὶ διὰ τοῦτο δοκεῖ αἰεὶ ἕτερος· οὐ γὰρ τοῦ αὐτοῦ ἀρχὴ καὶ τελευτῇ τὸ νῦν· ἅμα γὰρ ἂν καὶ κατὰ τὸ αὐτὸ τάναντία ἂν εἴη. καὶ οὐχ ὑπολείψει δὴ· αἰεὶ γὰρ ἐν ἀρχῇ.

τὸ δ' ἤδη τὸ ἐγγύς ἔστι τοῦ παρόντος νῦν ἀτόμου μέρος τοῦ μέλλοντος χρόνου (πότε βαδίζεις; ἤδη, ὅτι ἐγγὺς ὁ χρόνος ἐν ᾧ μέλλει), καὶ τοῦ παρεληλυθότος χρόνου τὸ μὴ πόρρω τοῦ νῦν (πότε βαδίζεις; ἤδη βεβάδικα). τὸ δὲ Ἴλιον φάναι ἤδη ἐαλωκέναι οὐ λέγομεν, ὅτι λίαν πόρρω τοῦ νῦν. καὶ τὸ ἄρτι τὸ ἐγγύς τοῦ παρόντος νῦν [τὸ] μόριον τοῦ παρελθόντος. πότε ἦλθες;

ἄρτι, ἐὰν ἦ ὁ χρόνος ἐγγὺς τοῦ ἐνεστώτος νῦν. πάλαι δὲ τὸ πόρρω. τὸ δ' ἐξαίφνης τὸ ἐν ἀναισθήτῳ χρόνῳ διὰ μικρότητα ἐκστάν· μεταβολὴ δὲ πᾶσα φύσει ἐκστατικόν. ἐν δὲ τῷ χρόνῳ πάντα γίνεταί καὶ φθείρεται· διὸ καὶ οἱ μὲν σοφώτατον ἔλεγον, ὁ δὲ Πυθαγόρειος Πάρων ἀμαθέστατον, ὅτι καὶ ἐπιλανθάνονται ἐν τούτῳ, λέγων ὀρθότερον. δῆλον οὖν ὅτι φθορᾶς μᾶλλον ἔσται καθ' αὐτὸν αἴτιος ἢ γενέσεως, καθάπερ ἐλέχθη καὶ πρότερον (ἐκστατικὸν γὰρ ἡ μεταβολὴ καθ' αὐτήν), γενέσεως δὲ καὶ τοῦ εἶναι κατὰ συμβεβηκός. σημεῖον δὲ ἱκανὸν ὅτι γίνεταί μὲν οὐδὲν ἄνευ τοῦ κινεῖσθαι πῶς αὐτὸ καὶ πράττειν, φθείρεται δὲ καὶ μηδὲν κινούμενον. καὶ ταύτην μάλιστα λέγειν εἰώθαμεν ὑπὸ τοῦ χρόνου φθοράν. οὐ μὴν ἄλλ' οὐδὲ ταύτην ὁ χρόνος ποιεῖ, ἀλλὰ συμβαίνει ἐν χρόνῳ γίνεσθαι καὶ ταύτην τὴν μεταβολήν.

ὅτι μὲν οὖν ἔστιν ὁ χρόνος καὶ τί, καὶ ποσαχῶς λέγεται τὸ νῦν, καὶ τί τὸ ποτέ καὶ τὸ ἄρτι καὶ τὸ ἤδη καὶ τὸ πάλαι καὶ τὸ ἐξαίφνης, εἴρηται.

## Κεφάλαιο 14

Τούτων δ' ἡμῖν οὕτω διωρισμένων φανερόν ὅτι πᾶσα μεταβολὴ καὶ ἅπαν τὸ κινούμενον ἐν χρόνῳ. τὸ γὰρ θᾶπτον καὶ βραδύτερον κατὰ πᾶσάν ἐστιν μεταβολήν (ἐν πᾶσι γὰρ οὕτω φαίνεται)· λέγω δὲ θᾶπτον κινεῖσθαι τὸ πρότερον [223a] μεταβάλλον εἰς τὸ ὑποκείμενον κατὰ τὸ αὐτὸ διάστημα καὶ ὁμαλήν κίνησιν κινούμενον (οἷον ἐπὶ τῆς φορᾶς, εἰ ἄμφω κατὰ τὴν περιφερῆ κινεῖται ἢ ἄμφω κατὰ τὴν εὐθεΐαν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων). ἀλλὰ μὴν τό γε πρότερον ἐν χρόνῳ ἐστὶ· πρότερον γὰρ καὶ ὕστερον λέγομεν κατὰ τὴν πρὸς τὸ νῦν ἀπόστασιν, τὸ δὲ νῦν ὅρος τοῦ παρήκοντος καὶ τοῦ μέλλοντος· ὥστ' ἐπεὶ τὰ νῦν ἐν χρόνῳ, καὶ τὸ πρότερον καὶ ὕστερον ἐν χρόνῳ ἔσται· ἐν ᾧ γὰρ τὸ νῦν, καὶ ἡ τοῦ νῦν ἀπόστασις. (ἐναντίως δὲ λέγεται τὸ πρότερον κατὰ τε τὸν παρεληλυθότα χρόνον καὶ τὸν μέλλοντα· ἐν μὲν γὰρ τῷ παρεληλυθότι πρότερον λέγομεν τὸ πορρώτερον τοῦ νῦν, ὕστερον δὲ τὸ ἐγγύτερον, ἐν δὲ τῷ μέλλοντι πρότερον μὲν τὸ ἐγγύτερον, ὕστερον δὲ τὸ πορρώτερον.) ὥστε ἐπεὶ τὸ μὲν πρότερον ἐν χρόνῳ, πάσῃ δ' ἀκολουθεῖ κινήσει τὸ πρότερον, φανερόν ὅτι πᾶσα μεταβολὴ καὶ πᾶσα κίνησις ἐν χρόνῳ ἐστίν. ἄξιον δ' ἐπισκέψεως καὶ πῶς ποτε ἔχει ὁ χρόνος πρὸς τὴν ψυχὴν, καὶ διὰ τί ἐν παντὶ δοκεῖ εἶναι ὁ χρόνος, καὶ ἐν γῇ καὶ ἐν θαλάττῃ καὶ ἐν οὐρανῷ. ἢ ὅτι κινήσεώς τι πάθος ἢ ἕξις, ἀριθμός γε ὢν, ταῦτα δὲ κινητὰ πάντα (ἐν τόπῳ γὰρ πάντα), ὁ δὲ χρόνος καὶ ἡ κίνησις ἅμα κατὰ τε δύναμιν καὶ κατ' ἐνέργειαν;

πότερον δὲ μὴ οὔσης ψυχῆς εἴη ἂν ὁ χρόνος ἢ οὔ, ἀπορήσειεν ἂν τις.



ἀδυνάτου γὰρ ὄντος εἶναι τοῦ ἀριθμήσοντος ἀδύνατον καὶ ἀριθμητόν τι εἶναι, ὥστε δῆλον ὅτι οὐδ' ἀριθμός. ἀριθμὸς γὰρ ἢ τὸ ἠριθμημένον ἢ τὸ ἀριθμητόν. εἰ δὲ μηδὲν ἄλλο πέφυκεν ἀριθμεῖν ἢ ψυχὴ καὶ ψυχῆς νοῦς, ἀδύνατον εἶναι χρόνον ψυχῆς μὴ οὔσης, ἀλλ' ἢ τοῦτο ὃ ποτε ὄν ἔστιν ὁ χρόνος, οἷον εἰ ἐνδέχεται κίνησιν εἶναι ἄνευ ψυχῆς. τὸ δὲ πρότερον καὶ ὕστερον ἐν κινήσει ἐστίν· χρόνος δὲ ταῦτ' ἐστὶν ἢ ἀριθμητὰ ἐστίν.

ἀπορήσειε δ' ἂν τις καὶ ποίας κινήσεως ὁ χρόνος ἀριθμός. ἢ ὁποιασοῦν; καὶ γὰρ γίνεταί ἐν χρόνῳ καὶ φθείρεται καὶ αὐξάνεται καὶ ἀλλοιοῦται καὶ φέρεται· ἢ οὖν κινήσις ἐστὶ, ταύτῃ ἐστὶν ἐκάστης κινήσεως ἀριθμός. διὸ κινήσεώς ἐστιν ἀπλῶς ἀριθμὸς [223b] συνεχοῦς, ἀλλ' οὐ τινός.

ἀλλ' ἔστι νῦν κεκινήσθαι καὶ ἄλλο· ὧν ἑκατέρας τῆς κινήσεως εἴη ἂν ἀριθμός. ἕτερος οὖν χρόνος ἔστιν, καὶ ἅμα δύο ἴσοι χρόνοι ἂν εἶεν· ἢ οὐ; ὁ αὐτὸς γὰρ χρόνος καὶ εἷς ὁ ἴσος καὶ ἅμα· εἶδει δὲ καὶ οἱ μὴ ἅμα· εἰ γὰρ εἶεν κύνες, οἱ δ' ἵπποι, ἑκάτεροι δ' ἐπτά, ὁ αὐτὸς ἀριθμός. οὕτω δὲ καὶ τῶν κινήσεων τῶν ἅμα περαινομένων ὁ αὐτὸς χρόνος, ἀλλ' ἢ μὲν ταχεῖα ἴσως ἢ δ' οὐ, καὶ ἢ μὲν φορὰ ἢ δ' ἀλλοίωσις· ὁ μέντοι χρόνος ὁ αὐτός, εἴπερ καὶ [ὁ ἀριθμὸς] ἴσος καὶ ἅμα, τῆς τε ἀλλοιώσεως καὶ τῆς φορᾶς. καὶ διὰ τοῦτο αἱ μὲν κινήσεις ἕτεραι καὶ χωρὶς, ὁ δὲ χρόνος πανταχοῦ ὁ αὐτός, ὅτι καὶ ὁ ἀριθμὸς εἷς καὶ ὁ αὐτὸς πανταχοῦ ὁ τῶν ἴσων καὶ ἅμα. ἐπεὶ δ' ἔστι φορὰ καὶ ταύτης ἢ κύκλῳ, ἀριθμεῖται δ' ἕκαστον ἐνὶ τινι συγγενεῖ, μονάδες μονάδι, ἵπποι δ' ἵππῳ, οὕτω <δὲ> καὶ ὁ χρόνος χρόνῳ τινὶ ὠρισμένῳ, μετρεῖται δ', ὥσπερ εἴπομεν, ὅ τε χρόνος κινήσει καὶ ἡ κίνησις χρόνῳ (τοῦτο δ' ἐστίν, ὅτι ὑπὸ τῆς ὠρισμένης κινήσεως χρόνῳ μετρεῖται τῆς τε κινήσεως τὸ ποσὸν καὶ τοῦ χρόνου)-εἰ οὖν τὸ πρῶτον μέτρον πάντων τῶν συγγενῶν, ἡ κυκλοφορία ἢ ὁμαλῆς μέτρον μάλιστα, ὅτι ὁ ἀριθμὸς ὁ ταύτης γνωριμώτατος. ἀλλοίωσις μὲν οὖν οὐδὲ αὔξησις οὐδὲ γένεσις οὐκ εἰσὶν ὁμαλεῖς, φορὰ δ' ἔστιν. διὸ καὶ δοκεῖ ὁ χρόνος εἶναι ἢ τῆς σφαίρας κινήσις, ὅτι ταύτῃ μετροῦνται αἱ ἄλλαι κινήσεις καὶ ὁ χρόνος ταύτῃ τῇ κινήσει.

διὰ δὲ τοῦτο καὶ τὸ εἰωθὸς λέγεσθαι συμβαίνει· φασὶν γὰρ κύκλον εἶναι τὰ ἀνθρώπινα πράγματα, καὶ τῶν ἄλλων τῶν κινήσιν ἐχόντων φυσικὴν καὶ γένεσιν καὶ φθοράν. τοῦτο δέ, ὅτι ταῦτα πάντα τῷ χρόνῳ κρίνεται, καὶ λαμβάνει τελευτήν καὶ ἀρχὴν ὥσπερ ἂν εἰ κατὰ τινα περίοδον. καὶ γὰρ ὁ χρόνος αὐτὸς εἶναι δοκεῖ κύκλος τις· τοῦτο δὲ πάλιν δοκεῖ, διότι τοιαύτης ἐστὶ φορᾶς μέτρον καὶ μετρεῖται αὐτὸς ὑπὸ τοιαύτης. ὥστε τὸ λέγειν εἶναι τὰ γινόμενα τῶν πραγμάτων κύκλον τὸ λέγειν ἐστὶν τοῦ χρόνου εἶναί τινα κύκλον· τοῦτο δέ, ὅτι μετρεῖται τῇ κυκλοφορίᾳ· παρὰ γὰρ τὸ μέτρον οὐδὲν

[224a] ἄλλο παρεμφαίνεται τῷ μετρομένῳ, ἀλλ' ἢ πλείω μέτρα τὸ ὅλον.

λέγεται δὲ ὀρθῶς καὶ ὅτι ἀριθμὸς μὲν ὁ αὐτὸς ὁ τῶν προβάτων καὶ τῶν κυνῶν, εἰ ἴσος ἑκάτερος, δεκάς δὲ οὐχ ἡ αὐτὴ οὐδὲ δέκα τὰ αὐτά, ὥσπερ οὐδὲ τρίγωνα τὰ αὐτὰ τὸ ἰσόπλευρον καὶ τὸ σκαληνές, καίτοι σχῆμά γε ταῦτό, ὅτι τρίγωνα ἄμφω· ταῦτό γὰρ λέγεται οὐ μὴ διαφέρει διαφορᾶ, ἀλλ' οὐχὶ οὐ διαφέρει, οἷον τρίγωνον τριγώνου <τριγώνου> διαφορᾶ διαφέρει· τοιγαροῦν ἕτερα τρίγωνα· σχήματος δὲ οὐ, ἀλλ' ἐν τῇ αὐτῇ διαιρέσει καὶ μιᾷ. σχῆμα γὰρ τὸ μὲν τοιόνδε κύκλος, τὸ δὲ τοιόνδε τρίγωνον, τούτου δὲ τὸ μὲν τοιόνδε ἰσόπλευρον, τὸ δὲ τοιόνδε σκαληνές. σχῆμα μὲν οὖν τὸ αὐτό, καὶ τοῦτο τρίγωνον, τρίγωνον δ' οὐ τὸ αὐτό. καὶ ἀριθμὸς δὴ ὁ αὐτός (οὐ γὰρ διαφέρει ἀριθμοῦ διαφορᾶ ὁ ἀριθμὸς αὐτῶν), δεκάς δ' οὐχ ἡ αὐτή· ἐφ' ὧν γὰρ λέγεται, διαφέρει· τὰ μὲν γὰρ κύνες, τὰ δ' ἵπποι.

καὶ περὶ μὲν χρόνου καὶ αὐτοῦ καὶ τῶν περὶ αὐτὸν οἰκείων τῇ σκέψει εἴρηται.

## Βιβλίο 5

### Κεφάλαιο 1

Μεταβάλλει δὲ τὸ μεταβάλλον πᾶν τὸ μὲν κατὰ συμβεβηκός, οἷον ὅταν λέγωμεν τὸ μουσικὸν βαδίζειν, ὅτι ὧ συμβέβηκεν μουσικῶ εἶναι, τοῦτο βαδίζει· τὸ δὲ τῷ τούτου τι μεταβάλλειν ἀπλῶς λέγεται μεταβάλλειν, οἷον ὅσα λέγεται κατὰ μέρη (ὑγιάζεται γὰρ τὸ σῶμα, ὅτι ὁ ὀφθαλμὸς ἢ ὁ θώραξ, ταῦτα δὲ μέρη τοῦ ὅλου σώματος)· ἔστι δέ τι ὃ οὔτε κατὰ συμβεβηκὸς κινεῖται οὔτε τῷ ἄλλο τι τῶν αὐτοῦ, ἀλλὰ τῷ αὐτὸ κινεῖσθαι πρῶτον. καὶ τοῦτ' ἔστι τὸ καθ' αὐτὸ κινητόν, κατ' ἄλλην δὲ κίνησιν ἕτερον, οἷον ἀλλοιωτόν, καὶ ἀλλοιώσεως ὑγιαντὸν ἢ θερμαντὸν ἕτερον. ἔστι δὲ καὶ ἐπὶ τοῦ κινουῦντος ὡσαύτως· τὸ μὲν γὰρ κατὰ συμβεβηκὸς κινεῖ, τὸ δὲ κατὰ μέρος τῷ τῶν τούτου τι, τὸ δὲ καθ' αὐτὸ πρῶτον, οἷον ὁ μὲν ἰατρὸς ἰᾶται, ἡ δὲ χεὶρ πλήττει. ἐπεὶ δ' ἔστι μὲν τι τὸ κινουῦν πρῶτον, ἔστι δέ τι τὸ κινούμενον, ἔτι ἐν ᾧ, ὁ χρόνος, καὶ παρὰ ταῦτα ἐξ οὗ καὶ εἰς (224b.) ὅ — πᾶσα γὰρ κίνησις ἔκ τινος καὶ εἰς τι· ἕτερον γὰρ τὸ πρῶτον κινούμενον καὶ εἰς ὃ κινεῖται καὶ ἐξ οὗ, οἷον τὸ ξύλον καὶ τὸ θερμὸν καὶ τὸ ψυχρόν· τούτων δὲ τὸ μὲν ὅ, τὸ δ' εἰς ὅ, τὸ δ' ἐξ οὗ — ἡ δὴ κίνησις δῆλον ὅτι ἐν τῷ ξύλῳ, οὐκ ἐν τῷ εἶδει· οὔτε γὰρ κινεῖ οὔτε κινεῖται τὸ εἶδος ἢ ὁ τόπος ἢ τὸ τοσόνδε, ἀλλ' ἔστι κινουῦν καὶ κινούμενον καὶ εἰς ὃ κινεῖται. μᾶλλον γὰρ εἰς ὃ ἢ ἐξ οὗ κινεῖται ὀνομάζεται ἢ μεταβολή. διὸ καὶ ἡ φθορὰ εἰς τὸ μὴ ὂν μεταβολή ἐστίν· καίτοι καὶ ἐξ ὄντος

μεταβάλλει τὸ φθειρόμενον· καὶ ἡ γένεσις εἰς ὄν, καίτοι καὶ ἐκ μὴ ὄντος. τί μὲν οὖν ἐστὶν ἡ κίνησις, εἴρηται πρότερον· τὰ δὲ εἶδη καὶ τὰ πάθη καὶ ὁ τόπος, εἰς ᾧ κινοῦνται τὰ κινούμενα, ἀκίνητά ἐστιν, οἷον ἡ ἐπιστήμη καὶ ἡ θερμότης. καίτοι ἀπορήσειεν ἄν τις, εἰ τὰ πάθη κινήσεις, ἡ δὲ λευκότης πάθος· ἔσται γὰρ εἰς κίνησιν μεταβολή. ἀλλ' ἴσως οὐχ ἡ λευκότης κίνησις, ἀλλ' ἡ λεύκαν σις. ἔστιν δὲ καὶ ἐν ἐκείνοις καὶ τὸ κατὰ συμβεβηκὸς καὶ τὸ κατὰ μέρος καὶ [τὸ] κατ' ἄλλο καὶ τὸ πρώτως καὶ μὴ κατ' ἄλλο, οἷον τὸ λευκαινόμενον εἰς μὲν τὸ νοούμενον μεταβάλλει κατὰ συμβεβηκός (τῷ γὰρ χρώματι συμβέβηκε νοεῖσθαι), εἰς δὲ χρῶμα ὅτι μέρος τὸ λευκὸν τοῦ χρώματος (καὶ εἰς τὴν Εὐρώπην ὅτι μέρος αἱ Ἀθηναίαι τῆς Εὐρώπης), εἰς δὲ τὸ λευκὸν χρῶμα καθ' αὐτό. πῶς μὲν οὖν καθ' αὐτὸ κινεῖται καὶ πῶς κατὰ συμβεβηκός, καὶ πῶς κατ' ἄλλο τι καὶ πῶς τῷ αὐτὸ πρῶτον, καὶ ἐπὶ κινουντος καὶ ἐπὶ κινουμένου, δῆλον, καὶ ὅτι ἡ κίνησις οὐκ ἐν τῷ εἶδει ἀλλ' ἐν τῷ κινουμένῳ καὶ κινητῷ κατ' ἐνέργειαν. ἡ μὲν οὖν κατὰ συμβεβηκὸς μεταβολὴ ἀφείσθω· ἐν ἅπασί τε γὰρ ἐστὶ καὶ αἰεὶ καὶ πάντων· ἡ δὲ μὴ κατὰ συμβεβηκὸς οὐκ ἐν ἅπασιν, ἀλλ' ἐν τοῖς ἐναντίοις καὶ τοῖς μεταξὺ καὶ ἐν ἀντιφάσει· τούτου δὲ πίστις ἐκ τῆς ἐπαγωγῆς. ἐκ δὲ τοῦ μεταξὺ μεταβάλλει· χρῆται γὰρ αὐτῷ ὡς ἐναντίῳ ὄντι πρὸς ἑκάτερον· ἔστι γάρ πως τὸ μεταξὺ τὰ ἅκρα. διὸ καὶ τοῦτο πρὸς ἐκεῖνα κάκεῖνα πρὸς τοῦτο λέγεται πως ἐναντία, οἷον ἡ μέση ὀξεῖα πρὸς τὴν ὑπάτην καὶ βαρεῖα πρὸς τὴν νητήν, καὶ τὸ φαιὸν λευκὸν πρὸς τὸ μέλαν καὶ μέλαν πρὸς τὸ λευκόν.

ἐπεὶ δὲ (225a.) πᾶσα μεταβολὴ ἐστὶν ἕκ τινος εἰς τι (δηλοῖ δὲ καὶ τοῦνομα· μετ' ἄλλο γάρ τι καὶ τὸ μὲν πρότερον δηλοῖ, τὸ δ' ὕστερον), μεταβάλλοι ἂν τὸ μεταβάλλον τετραχῶς· ἢ γὰρ ἐξ ὑποκειμένου εἰς ὑποκείμενον, ἢ ἐξ ὑποκειμένου εἰς μὴ ὑποκείμενον, ἢ οὐκ ἐξ ὑποκειμένου εἰς ὑποκείμενον, ἢ οὐκ ἐξ ὑποκειμένου εἰς μὴ ὑποκείμενον· λέγω δὲ ὑποκείμενον τὸ καταφάσει δηλούμενον. ὅστε ἀνάγκη ἐκ τῶν εἰρημένων τρεῖς εἶναι μεταβολάς, τὴν τε ἐξ ὑποκειμένου εἰς ὑποκείμενον, καὶ τὴν ἐξ ὑποκειμένου εἰς μὴ ὑποκείμενον, καὶ τὴν ἐκ μὴ ὑποκειμένου εἰς ὑποκείμενον. ἡ γὰρ οὐκ ἐξ ὑποκειμένου εἰς μὴ ὑποκείμενον οὐκ ἔστιν μεταβολὴ διὰ τὸ μὴ εἶναι κατ' ἀντίθεσιν· οὔτε γὰρ ἐναντία οὔτε ἀντίφασίς ἐστίν.

ἡ μὲν οὖν οὐκ ἐξ ὑποκειμένου εἰς ὑποκείμενον μεταβολὴ κατ' ἀντίφασιν γένεσις ἐστίν, ἡ μὲν ἀπλῶς ἀπλῆ, ἡ δὲ τις τινός (οἷον ἡ μὲν ἐκ μὴ λευκοῦ εἰς λευκὸν γένεσις τούτου, ἡ δ' ἐκ τοῦ μὴ ὄντος ἀπλῶς εἰς οὐσίαν γένεσις ἀπλῶς, καθ' ἣν ἀπλῶς γίνεσθαι καὶ οὐ τι γίνεσθαι λέγομεν)· ἡ δ' ἐξ ὑποκειμένου εἰς οὐχ ὑποκείμενον φθορά, ἀπλῶς μὲν ἡ ἐκ τῆς οὐσίας εἰς τὸ μὴ εἶναι, τὶς δὲ ἡ εἰς τὴν ἀντικειμένην ἀπόφασιν, καθάπερ ἐλέχθη καὶ ἐπὶ τῆς

γενέσεως.

εἰ δὴ τὸ μὴ ὄν λέγεται πλεοναχῶς, καὶ μήτε τὸ κατὰ σύνθεσιν ἢ διαίρεσιν ἐνδέχεται κινεῖσθαι μήτε τὸ κατὰ δύναμιν, τὸ τῷ ἀπλῶς κατ' ἐνέργειαν ὄντι ἀντικείμενον (τὸ μὲν γὰρ μὴ λευκὸν ἢ μὴ ἀγαθὸν ὅμως ἐνδέχεται κινεῖσθαι κατὰ συμβεβηκός, εἴη γὰρ <ἄν> ἄνθρωπος τὸ μὴ λευκόν· τὸ δ' ἀπλῶς μὴ τόδε οὐδαμῶς), ἀδύνατον [γὰρ] τὸ μὴ ὄν κινεῖσθαι (εἰ δὲ τοῦτο, καὶ τὴν γένεσιν κίνησιν εἶναι· γίγνεται γὰρ τὸ μὴ ὄν· εἰ γὰρ καὶ ὅτι μάλιστα κατὰ συμβεβηκός γίγνεται, ἀλλ' ὅμως ἀληθὲς εἶπεῖν ὅτι ὑπάρχει τὸ μὴ ὄν κατὰ τοῦ γιγνομένου ἀπλῶς)-ὁμοίως δὲ καὶ τὸ ἡρεμεῖν.

ταῦτά τε δὴ συμβαίνει δυσχερῇ [τῷ κινεῖσθαι τὸ μὴ ὄν] καὶ εἰ πᾶν τὸ κινούμενον ἐν τόπῳ, τὸ δὲ μὴ ὄν οὐκ ἔστιν ἐν τόπῳ· εἴη γὰρ ἄν που.

οὐδὲ δὴ ἡ φθορὰ κίνησις· ἐναντίον μὲν γὰρ κινήσει ἢ κίνησις ἢ ἡρεμία, ἡ δὲ φθορὰ γενέσει ἐναντίον. ἐπεὶ δὲ πᾶσα κίνησις μεταβολή τις, μεταβολαὶ δὲ τρεῖς αἰ εἰρημένα, τούτων δὲ αἰ κατὰ γένεσιν καὶ φθορὰν (225b.) οὐ κινήσεις, αὗται δ' εἰσὶν αἰ κατ' ἀντίφασιν, ἀνάγκη τὴν ἐξ ὑποκειμένου εἰς ὑποκείμενον μεταβολὴν κίνησιν εἶναι μόνην. τὰ δ' ὑποκείμενα ἢ ἐναντία ἢ μεταξύ (καὶ γὰρ ἡ στέρησις κείσθω ἐναντίον), καὶ δηλοῦνται καταφάσει, τὸ γυμνὸν καὶ νωδὸν καὶ μέλαν. εἰ οὖν αἰ κατηγορίαι διήρηνται οὐσίᾳ καὶ ποιότητι καὶ τῷ ποῦ [καὶ τῷ ποτὲ] καὶ τῷ πρὸς τι καὶ τῷ ποσῶ καὶ τῷ ποιεῖν ἢ πάσχειν, ἀνάγκη τρεῖς εἶναι κινήσεις, τὴν τε τοῦ ποιοῦ καὶ τὴν τοῦ ποσοῦ καὶ τὴν κατὰ τόπον.

## Κεφάλαιο 2

Κατ' οὐσίαν δ' οὐκ ἔστιν κίνησις διὰ τὸ μηδὲν εἶναι οὐσίᾳ τῶν ὄντων ἐναντίον. οὐδὲ δὴ τοῦ πρὸς τι· ἐνδέχεται γὰρ θατέρου μεταβάλλοντος <ἀληθεύεσθαι καὶ μὴ> ἀληθεύεσθαι θάτερον μηδὲν μεταβάλλον, ὥστε κατὰ συμβεβηκός ἡ κίνησις αὐτῶν. οὐδὲ δὴ ποιοῦντος καὶ πάσχοντος, ἢ κινουμένου καὶ κινουόντος, ὅτι οὐκ ἔστι κινήσεως κίνησις οὐδὲ γενέσεως γένεσις, οὐδ' ὅλως μεταβολῆς μεταβολή.

πρῶτον μὲν γὰρ διχῶς ἐνδέχεται κινήσεως εἶναι κίνησιν, ἢ ὥς ὑποκειμένου (οἷον ἄνθρωπος κινεῖται ὅτι ἐκ λευκοῦ εἰς μέλαν μεταβάλλει· ἄρά γε οὕτω καὶ ἡ κίνησις ἢ θερμαίνεται ἢ ψύχεται ἢ τόπον ἀλλάττει ἢ αὐξάνεται ἢ φθίνει; τοῦτο δὲ ἀδύνατον· οὐ γὰρ τῶν ὑποκειμένων τι ἡ μεταβολή), ἢ τῷ ἑτερόν τι ὑποκείμενον ἐκ μεταβολῆς μεταβάλλειν εἰς ἕτερον εἶδος [οἷον ἄνθρωπος ἐκ νόσου εἰς ὑγίειαν]. ἀλλ' οὐδὲ τοῦτο δυνατόν πλην κατὰ συμβεβηκός· αὐτὴ

γὰρ ἡ κίνησις ἐξ ἄλλου εἶδους εἰς ἄλλο ἐστὶ μεταβολή <οἷον ἀνθρώπου ἐκ νόσου εἰς ὑγίαν>· καὶ ἡ γένεσις δὲ καὶ ἡ φθορά ὡσαύτως, πλὴν αἱ μὲν εἰς ἀντικείμενα ὡδί, ἡ δὲ ὡδί, ἡ κίνησις. ἅμα οὖν μεταβάλλει ἐξ ὑγιείας εἰς νόσον καὶ ἐξ αὐτῆς ταύτης τῆς μεταβολῆς εἰς ἄλλην. δῆλον δὲ ὅτι ὅταν νοσήσῃ, μεταβεβληκὸς ἔσται εἰς ὅποιονοῦν (ἐνδέχεται γὰρ ἡρεμεῖν), καὶ ἔτι εἰς μὴ τὴν τυχοῦσαν αἰεὶ, κἀκείνη ἔκ τινος εἷς τι ἕτερον ἔσται, ὥστε καὶ ἡ ἀντι κειμένη ἔσται ὑγίανσις· ἀλλὰ τῷ συμβεβηκέναι, οἷον ἐξ ἀναμνήσεως εἰς λήθην μεταβάλλει, ὅτι ὧ ὑπάρχει, ἐκεῖνο μεταβάλλει ὅτε μὲν εἰς ἐπιστήμην ὅτε δ' εἰς ἄγνοιαν.

ἔτι εἰς ἄπειρον βαδιεῖται, εἰ ἔσται μεταβολῆς μεταβολή καὶ γενέσεως γένεσις. ἀνάγκη δὲ καὶ τὴν προτέραν, εἰ ἡ ὑστέρα (226a.) ἔσται, οἷον εἰ ἡ ἀπλὴ γένεσις ἐγίγνετό ποτε, καὶ τὸ γιγνόμενον ἐγίγνετο, ὥστε οὐπω ἦν τὸ γιγνόμενον ἀπλῶς, ἀλλὰ τι γιγνόμενον γιγνόμενον ἤδη, καὶ πάλιν τοῦτ' ἐγίγνετό ποτε, ὥστ' οὐκ ἦν πω τότε γιγνόμενον γιγνόμενον. ἐπεὶ δὲ τῶν ἀπείρων οὐκ ἔστιν τι πρῶτον, οὐκ ἔσται τὸ πρῶτον, ὥστ' οὐδὲ τὸ ἐχόμενον· οὔτε γίγνεσθαι οὖν οὔτε κινεῖσθαι οἷόν τε οὔτε μεταβάλλειν οὐδέν.

ἔτι τοῦ αὐτοῦ κίνησις ἡ ἐναντία (καὶ ἔτι ἡρέμησις), καὶ γένεσις καὶ φθορά, ὥστε τὸ γιγνόμενον γιγνόμενον ὅταν χένηται γιγνόμενον, τότε φθείρεται· οὔτε γὰρ εὐθὺς γιγνόμενον οὔθ' ὕστερον· εἶναι γὰρ δεῖ τὸ φθειρόμενον.

ἔτι ὕλην δεῖ ὑπεῖναι καὶ τῷ γιγνομένῳ καὶ τῷ μεταβάλλοντι. τίς οὖν ἔσται — ὥσπερ τὸ ἀλλοιωτὸν σῶμα ἢ ψυχή, οὕτω τί τὸ γιγνόμενον κίνησις ἢ γένεσις; καὶ πάλιν τί εἰς ὃ κινοῦνται; δεῖ γὰρ εἶναι [τι] τὴν τοῦδε ἐκ τοῦδε εἰς τόδε κίνησιν [καὶ μὴ κίνησιν] ἢ γένεσιν. ἅμα δὲ πῶς καὶ ἔσται; οὐ γὰρ ἔσται μάθησις ἢ τῆς μαθήσεως γένεσις, ὥστ' οὐδὲ γενέσεως γένεσις, οὐδέ τις τινός.

ἔτι εἰ τρία εἶδη κινήσεως ἔστιν, τούτων τινὰ ἀνάγκη εἶναι καὶ τὴν ὑποκειμένην φύσιν καὶ εἰς ἃ κινοῦνται, οἷον τὴν φορὰν ἀλλοιοῦσθαι ἢ φέρεσθαι.

ὅλως δὲ ἐπεὶ κινεῖται [τὸ κινούμενον] πᾶν τριχῶς, ἢ κατὰ συμβεβηκὸς ἢ τῷ μέρος τι ἢ [τῷ] καθ' αὐτό, κατὰ συμβεβηκὸς μόνον ἂν ἐνδέχοιτο μεταβάλλειν τὴν μεταβολήν, οἷον εἰ ὁ ὑγιαζόμενος τρέχοι ἢ μανθάνοι· τὴν δὲ κατὰ συμβεβηκὸς ἀφεῖμεν πάλαι.

ἐπεὶ δὲ οὔτε οὐσίας οὔτε τοῦ πρὸς τι οὔτε τοῦ ποιεῖν καὶ πάσχειν, λείπεται κατὰ τὸ ποιὸν καὶ τὸ ποσὸν καὶ τὸ ποὺ κίνησιν εἶναι μόνον· ἐν ἐκάστῳ γὰρ

ἔστι τούτων ἐναντίωσις. ἢ μὲν οὖν κατὰ τὸ ποιὸν κίνησις ἀλλοίωσις ἔστω· τοῦτο γὰρ ἐπέzeugται κοινὸν ὄνομα. λέγω δὲ τὸ ποιὸν οὐ τὸ ἐν τῇ οὐσίᾳ (καὶ γὰρ ἡ διαφορὰ ποιότης) ἀλλὰ τὸ παθητικόν, καθ' ὃ λέγεται πάσχειν ἢ ἀπαθεῖς εἶναι. ἢ δὲ κατὰ τὸ ποσὸν τὸ μὲν κοινὸν ἀνώνυμος, καθ' ἑκάτερον δ' αὖξησις καὶ φθίσις, ἢ μὲν εἰς τὸ τέλειον μέγεθος αὖξησις, ἢ δ' ἐκ τούτου φθίσις. ἢ δὲ κατὰ τόπον καὶ τὸ κοινὸν καὶ τὸ ἴδιον ἀνώνυμος, ἔστω δὲ φορὰ καλουμένη τὸ κοινόν· καίτοι λέγεται γε ταῦτα φέρεσθαι μόνον κυρίως, ὅταν μὴ ἐφ' αὐτοῖς ἢ τὸ στήναι τοῖς μεταβάλλουσι τὸν τόπον, καὶ ὅσα (226b.) μὴ αὐτὰ ἑαυτὰ κινεῖ κατὰ τόπον.

ἢ δ' ἐν τῷ αὐτῷ εἶδει μεταβολὴ ἐπὶ τὸ μᾶλλον καὶ ἥττον ἀλλοίωσις ἐστίν· ἢ γὰρ ἐξ ἐναντίου ἢ εἰς ἐναντίον κίνησις ἐστίν, ἢ ἀπλῶς ἢ πῆ· ἐπὶ μὲν γὰρ τὸ ἥττον ἰοῦσα εἰς τὸ ἐναντίον λεχθήσεται μεταβάλλειν, ἐπὶ δὲ τὸ μᾶλλον ὡς ἐκ τὸ ἐναντίου εἰς αὐτό. διαφέρει γὰρ οὐδὲν πῆ μεταβάλλειν ἢ ἀπλῶς, πλὴν πῆ δεήσει τὰ ἐναντία ὑπάρχειν· τὸ δὲ μᾶλλον καὶ ἥττον ἐστὶ τὸ πλεόν ἢ ἔλαττον ἐνυπάρχειν τοῦ ἐναντίου καὶ μή. ὅτι μὲν οὖν αὐταὶ τρεῖς μόναι κινήσεις εἰσίν, ἐκ τούτων δῆλον·

ἀκίνητον δ' ἐστὶ τό τε ὅλως ἀδύνατον κινηθῆναι, ὥσπερ ὁ ψόφος ἀόρατος, καὶ τὸ ἐν πολλῷ χρόνῳ μόλις κινούμενον ἢ τὸ βραδέως ἀρχόμενον, ὃ λέγεται δυσκίνητον, καὶ τὸ πεφυκὸς μὲν κινεῖσθαι καὶ δυνάμενον, μὴ κινούμενον δὲ τότε ὅτε πέφυκε καὶ οὐ καὶ ὥς, ὅπερ ἡρεμεῖν καλῶ τῶν ἀκινήτων μόνον· ἐναντίον γὰρ ἡρεμία κινήσει, ὥστε στήρησις ἂν εἴη τοῦ δεκτικοῦ.

τί μὲν οὖν ἐστὶ κίνησις καὶ τί ἡρεμία, καὶ πόσαι μεταβολαὶ καὶ ποῖαι κινήσεις, φανερόν ἐκ τῶν εἰρημένων.

### Κεφάλαιο 3

Μετὰ δὲ ταῦτα λέγωμεν τί ἐστὶν τὸ ἅμα καὶ χωρίς, καὶ τί τὸ ἄπτεσθαι, καὶ τί τὸ μεταξὺ καὶ τί τὸ ἐφεξῆς καὶ τί τὸ ἐχόμενον καὶ συνεχές, καὶ τοῖς ποίοις ἕκαστον τούτων ὑπάρχειν πέφυκεν.

ἅμα μὲν οὖν λέγω ταῦτ' εἶναι κατὰ τόπον, ὅσα ἐν ἐνὶ τόπῳ ἐστὶ πρῶτῳ, χωρὶς δὲ ὅσα ἐν ἑτέρῳ,

ἄπτεσθαι δὲ ὧν τὰ ἅκρα ἅμα.

μεταξὺ δὲ εἰς ὃ πέφυκε πρότερον ἀφικνεῖσθαι τὸ μεταβάλλον ἢ εἰς ὃ ἔσχατον

μεταβάλλει κατὰ φύσιν συνεχῶς μεταβάλλον. [ἐν ἐλαχίστοις δ' ἔστι τὸ μεταξὺ τρισίν· ἔσχατον μὲν γάρ ἐστι τῆς μεταβολῆς τὸ ἐναντίον.] συνεχῶς δὲ κινεῖται τὸ μὴθὲν ἢ ὅτι ὀλίγιστον διαλείπον τοῦ πράγματος — μὴ τοῦ χρόνου (οὐδὲν γὰρ κωλύει διαλείποντα, καὶ εὐθὺς δὲ μετὰ τὴν ὑπάτην φθέγξασθαι τὴν νεάτην) ἀλλὰ τοῦ πράγματος ἐν ᾧ κινεῖται. [<ἐπεὶ δὲ πᾶσα μεταβολὴ ἐν τοῖς ἀντικειμένοις, τὰ δ' ἀντικείμενα τὰ τε ἐναντία καὶ τὰ κατὰ ἀντίφασιν, ἀντιφάσεως δ' οὐδὲν ἀνὰ μέσον, φανερόν ὅτι ἐν τοῖς ἐναντίοις ἔσται τὸ μεταξύ. (226b.) ἐν ἐλαχίστοις δ' ἔστι τὸ μεταξύ τρισίν· ἔσχατον μὲν γάρ ἐστι τῆς μεταβολῆς τὸ ἐναντίον,>] τοῦτο δὲ ἔν τε ταῖς κατὰ τόπον καὶ ἐν ταῖς ἄλλαις μεταβολαῖς φανερόν. ἐναντίον δὲ κατὰ τόπον τὸ κατ' εὐθείαν ἀπέχον πλεῖστον· ἢ γὰρ ἐλαχίστη πεπέρανται, μέτρον δὲ τὸ πεπερασμένον.

ἐφεξῆς δὲ οὗ μετὰ τὴν ἀρχὴν ὄντος ἢ θέσει ἢ εἴδει ἢ ἄλλῳ τινὶ οὕτως ἀφορισθέντος (227a.) μὴδὲν μεταξύ ἐστι τῶν ἐν ταύτῳ γένει καὶ οὗ ἐφεξῆς ἐστίν (λέγω δ' οἷον γραμμὴ γραμμῆς ἢ γραμμαί, ἢ μονάδος μονὰς ἢ μονάδες, ἢ οἰκίας οἰκία· ἄλλο δ' οὐδὲν κωλύει μεταξύ εἶναι). τὸ γὰρ ἐφεξῆς τινὶ ἐφεξῆς καὶ ὕστερόν τι· οὐ γὰρ τὸ ἐν ἐφεξῆς τοῖν δυοῖν, οὐδ' ἡ νοηματικὴ τῇ δευτέρᾳ ἐφεξῆς, ἀλλὰ ταῦτ' ἐκείνοις.

ἐχόμενον δὲ ὃ ἂν ἐφεξῆς ὄν ἄπτηται. τὸ δὲ συνεχὲς ἔστι μὲν ὅπερ ἐχόμενον τι, λέγω δ' εἶναι συνεχὲς ὅταν ταῦτὸ γένηται καὶ ἐν τὸ ἐκατέρου πέρας οἷς ἄπτονται, καὶ ὥσπερ σημαίνει τοῦνομα, συνέχεται. τοῦτο δ' οὐχ οἷόν τε δυοῖν ὄντοιν εἶναι τοῖν ἐσχάτοιν. τούτου δὲ διωρισμένου φανερόν ὅτι ἐν τούτοις ἔστι τὸ συνεχές, ἐξ ὧν ἔν τι πέφυκε γίνεσθαι κατὰ τὴν σύναψιν. καὶ ὥς ποτε γίνεσθαι τὸ συνέχον ἔν, οὕτω καὶ τὸ ὅλον ἔσται ἔν, οἷον ἢ γόμφῳ ἢ κόλλῃ ἢ ἀφῇ ἢ προσφύσει.

φανερόν δὲ καὶ ὅτι πρῶτον τὸ ἐφεξῆς ἐστίν· τὸ μὲν γὰρ ἀπτόμενον ἐφεξῆς ἀνάγκη εἶναι, τὸ δ' ἐφεξῆς οὐ πᾶν ἄπτεσθαι (διὸ καὶ ἐν προτέροις τῷ λόγῳ τὸ ἐφεξῆς ἔστιν, οἷον ἐν ἀριθμοῖς, ἀφῇ δ' οὐκ ἔστιν), καὶ εἰ μὲν συνεχές, ἀνάγκη ἄπτεσθαι, εἰ δ' ἄπτεται, οὐπω συνεχές· οὐ γὰρ ἀνάγκη ἐν εἶναι αὐτῶν τὰ ἅκρα, εἰ ἅμα εἶεν· ἀλλ' εἰ ἔν, ἀνάγκη καὶ ἅμα. ὥστε ἡ σύμφυσις ὑστάτη κατὰ τὴν γένεσιν· ἀνάγκη γὰρ ἄψασθαι εἰ συμφύσεται τὰ ἅκρα, τὰ δὲ ἀπτόμενα οὐ πάντα συμπέφυκεν· ἐν οἷς δὲ μὴ ἔστιν ἀφή, δῆλον ὅτι οὐκ ἔστιν οὐδὲ σύμφυσις ἐν τούτοις. ὥστ' εἰ ἔστι στιγμή καὶ μονὰς οἷας λέγουσι κεχωρισμένας, οὐχ οἷόν τε εἶναι μονάδα καὶ στιγμήν τὸ αὐτό· ταῖς μὲν γὰρ ὑπάρχει τὸ ἄπτεσθαι, ταῖς δὲ μονάσιν τὸ ἐφεξῆς, καὶ τῶν μὲν ἐνδέχεται εἶναί τι μεταξύ (πᾶσα γὰρ γραμμὴ μεταξύ στιγμῶν), τῶν δ' οὐκ ἀνάγκη· οὐδὲ γὰρ μεταξύ δυάδος καὶ μονάδος.

τί μὲν οὖν ἐστὶ τὸ ἅμα καὶ χωρὶς, καὶ τί τὸ ἄπτεσθαι, καὶ τί τὸ μεταξὺ (227b.) καὶ τὸ ἐφεξῆς, καὶ τί τὸ ἐχόμενον καὶ τὸ συνεχές, καὶ τοῖς ποίοις ἕκαστον τούτων ὑπάρχει, εἴρηται. Μία δὲ κίνησις λέγεται πολλαχῶς· τὸ γὰρ ἐν πολλαχῶς λέγομεν.

## Κεφάλαιο 4

γένει μὲν οὖν μία κατὰ τὰ σχήματα τῆς κατηγορίας ἐστὶ

(φορὰ μὲν γὰρ πάση φορᾷ τῷ γένει μία, ἀλλοιώσις δὲ φορᾷς ἑτέρα τῷ γένει),

εἶδει δὲ μία, ὅταν τῷ γένει μία οὖσα καὶ ἐν ἀτόμῳ εἶδει ἦ. οἷον χρώματος μὲν εἰσὶ διαφοραὶ — τοιγαροῦν ἄλλη τῷ εἶδει μέλανσις καὶ λεύκανσις [πᾶσα οὖν λεύκανσις πάση λευκάνσει ἢ αὐτὴ κατ' εἶδος ἔσται καὶ πᾶσα μέλανσις μελάνσει] — λευκότητος δ' οὐκέτι· διὸ τῷ εἶδει μία λεύκανσις λευκάνσει πάση. εἰ δ' ἔστιν ἄθ' ἃ καὶ γένη ἅμα καὶ εἶδη ἐστίν, δῆλον ὡς ἔστιν ὡς εἶδει μία ἔσται, ἀπλῶς δὲ μία εἶδει οὗ, οἷον ἡ μάθησις, εἰ ἡ ἐπιστήμη εἶδος μὲν ὑπολήψεως, γένος δὲ τῶν ἐπιστημῶν. ἀπορήσειε δ' ἂν τις εἰ εἶδει μία <ἡ> κίνησις, ὅταν ἐκ τοῦ αὐτοῦ τὸ αὐτὸ εἰς τὸ αὐτὸ μεταβάλλῃ, οἷον ἡ μία στιγμή ἐκ τοῦδε τοῦ τόπου εἰς τόνδε τὸν τόπον πάλιν καὶ πάλιν. εἰ δὲ τοῦτ', ἔσται ἡ κυκλοφορία τῇ εὐθυφορία ἢ αὐτὴ καὶ ἡ κύλισις τῇ βαδίσει. ἡ διώρισται, τὸ ἐν ᾧ ἂν ἕτερον ἢ τῷ εἶδει, ὅτι ἑτέρα ἡ κίνησις, τὸ δὲ περιφερὲς τοῦ εὐθέος ἕτερον τῷ εἶδει; γένει μὲν οὖν καὶ εἶδει κίνησις μία οὕτως,

ἀπλῶς δὲ μία κίνησις ἢ τῇ οὐσίᾳ μία καὶ τῷ ἀριθμῷ· τίς δ' ἡ τοιαύτη, δῆλον διελομένοις. τρία γὰρ ἐστὶ τὸν ἀριθμὸν περὶ ἃ λέγομεν τὴν κίνησιν, ὃ καὶ ἐν ᾧ καὶ ὅτε. λέγω δ' ὅτι ἀνάγκη εἶναι τι τὸ κινούμενον, οἷον ἄνθρωπον ἢ χρυσόν, καὶ ἐν τινι τοῦτο κινεῖσθαι, οἷον ἐν τόπῳ ἢ ἐν πάθει, καὶ ποτέ· ἐν χρόνῳ γὰρ πᾶν κινεῖται. τούτων δὲ τὸ μὲν εἶναι τῷ γένει ἢ τῷ εἶδει μίαν ἐστὶν ἐν τῷ πράγματι ἐν ᾧ κινεῖται, τὸ δ' ἐχομένην ἐν τῷ χρόνῳ, τὸ δ' ἀπλῶς μίαν ἐν ἅπασιν τούτοις· καὶ ἐν ᾧ γὰρ ἐν δεῖ εἶναι καὶ ἄτομον, οἷον τὸ εἶδος, καὶ τὸ ὅτε, οἷον τὸν χρόνον ἓνα καὶ μὴ διαλείπειν, καὶ τὸ κινούμενον ἐν εἶναι μὴ κατὰ συμβεβηκός, ὥσπερ τὸ λευκὸν μελαίνεσθαι καὶ Κορίσκον βαδίζειν (ἐν δὲ Κορίσκῳ καὶ λευκόν, ἀλλὰ κατὰ συμβεβηκός), (228a.) μηδὲ κοινόν· εἴη γὰρ ἂν ἅμα δύο ἀνθρώπους ὑγιάζεσθαι τὴν αὐτὴν ὑγίανσιν, οἷον ὀφθαλμίας· ἀλλ' οὐ μία αὕτη, ἀλλ' εἶδει μία. τὸ δὲ Σωκράτη τὴν αὐτὴν μὲν ἀλλοίωσιν ἀλλοιοῦσθαι τῷ εἶδει, ἐν ἄλλῳ δὲ χρόνῳ καὶ πάλιν ἐν ἄλλῳ, εἰ μὲν ἐνδέχεται τὸ φθαρὲν πάλιν ἐν γίγνεσθαι τῷ ἀριθμῷ, εἴη ἂν καὶ αὕτη μία, εἰ δὲ μή, ἢ αὐτὴ μὲν, μία δ' οὗ. ἔχει δ' ἀπορίαν ταύτη παραπλησίαν καὶ



πότερον μία ἢ ὑγίεια καὶ ὅλως αἱ ἕξεις καὶ τὰ πάθη τῇ οὐσίᾳ εἰσὶν ἐν τοῖς σώμασιν· κινούμενα γὰρ φαίνεται τὰ ἔχοντα καὶ ῥέοντα. εἰ δὲ ἡ αὐτὴ καὶ μία ἢ ἔωθεν καὶ νῦν ὑγίεια, διὰ τί οὐκ ἂν καὶ ὅταν διαλιπὼν λάβῃ πάλιν τὴν ὑγίειαν, καὶ αὕτη κάκεινη μία τῷ ἀριθμῷ ἂν εἴη; ὁ γὰρ αὐτὸς λόγος· πλὴν τοσοῦτον διαφέρει, ὅτι εἰ μὲν δύο, δι' αὐτὸ τοῦτο, ὡς τῷ ἀριθμῷ, καὶ τὰς ἐνεργείας ἀνάγκη (μία γὰρ ἀριθμῷ ἐνέργεια ἐνὸς ἀριθμῷ)· εἰ δ' ἡ ἕξις μία, ἴσως οὐκ ἂν τῷ δόξειέ πω μία καὶ ἡ ἐνέργεια εἶναι (ὅταν γὰρ παύσῃται βαδίζων, οὐκέτι ἔστιν ἡ βάδισις, πάλιν δὲ βαδίζοντος ἔσται). εἰ δ' οὖν μία καὶ ἡ αὐτὴ, ἐνδέχοιτ' ἂν τὸ αὐτὸ καὶ ἐν καὶ φθείρεσθαι καὶ εἶναι πολλάκις. αὗται μὲν οὖν εἰσιν αἱ ἀπορίαι ἕξω τῆς νῦν σκέψεως·

ἐπεὶ δὲ συνεχῆς πᾶσα κίνησις, τὴν τε ἀπλῶς μίαν ἀνάγκη καὶ συνεχῆ εἶναι, εἵπερ πᾶσα διαιρετὴ, καὶ εἰ συνεχῆς, μίαν. οὐ γὰρ πᾶσα γένοιτ' ἂν συνεχῆς πάσῃ, ὥσπερ οὐδ' ἄλλο οὐδὲν τῷ τυχόντι τὸ τυχόν, ἀλλ' ὅσων ἐν τὰ ἔσχατα. ἔσχατα δὲ τῶν μὲν οὐκ ἔστι, τῶν δ' ἔστιν ἄλλα τῷ εἶδει καὶ ὁμώνυμα· πῶς γὰρ ἂν ἄψαιτο ἢ ἐν γένοιτο τὸ ἔσχατον γραμμῆς καὶ βαδίσεως; ἐχόμενα μὲν οὖν εἶεν ἂν καὶ αἱ μὴ αἱ αὐταὶ τῷ εἶδει μηδὲ τῷ γένει (δραμῶν γὰρ ἂν τις πυρέξειεν εὐθύς), καὶ οἶον ἢ λαμπὰς <ἢ> ἐκ διαδοχῆς φορὰ ἐχομένη, συνεχῆς δ' οὐ. κεῖται γὰρ τὸ συνεχές, ὧν τὰ ἔσχατα ἐν. ὥστ' ἐχόμενα καὶ ἐφεξῆς εἰσὶ τῷ τὸν χρόνον εἶναι συνεχῆ, συνεχῆς δὲ τῷ τὰς κινήσεις· τοῦτο δ', (228b.) ὅταν ἐν τὸ ἔσχατον γένηται ἀμφοῖν. διὸ ἀνάγκη τὴν αὐτὴν εἶναι τῷ εἶδει καὶ ἐνὸς καὶ ἐν ἐνὶ χρόνῳ τὴν ἀπλῶς συνεχῆ κίνησιν καὶ μίαν, τῷ χρόνῳ μὲν, ὅπως μὴ ἀκινήσις μεταξὺ ἢ (ἐν τῷ διαλείποντι γὰρ ἡρεμεῖν ἀνάγκη· πολλὰ οὖν καὶ οὐ μία ἢ κινήσεις, ὧν ἐστὶν ἡρεμία μεταξύ, ὥστε εἴ τις κινήσεις στάσει διαλαμβάνεται, οὐ μία οὐδὲ συνεχῆς· διαλαμβάνεται δέ, εἰ μεταξὺ χρόνος)· τῆς δὲ τῷ εἶδει μὴ μιᾶς, καὶ εἰ μὴ διαλείπεται [ὁ χρόνος], ὁ μὲν [γὰρ] χρόνος εἷς, τῷ εἶδει δ' ἡ κινήσεις ἄλλη· τὴν μὲν γὰρ μίαν ἀνάγκη καὶ τῷ εἶδει μίαν εἶναι, ταύτην δ' ἀπλῶς μίαν οὐκ ἀνάγκη. τίς μὲν οὖν κινήσεις ἀπλῶς μία, εἴρηται· ἔτι δὲ λέγεται μία καὶ ἡ τέλειος, ἐὰν τε κατὰ γένος ἐὰν τε κατ' εἶδος ἢ ἐὰν τε κατ' οὐσίαν, ὥσπερ καὶ ἐπὶ τῶν ἄλλων τὸ τέλειον καὶ ὅλον τοῦ ἐνός. ἔστι δ' ὅτε καὶ ἀτελής ἢ μία λέγεται, ἐὰν μόνον ἢ συνεχῆς. ἔτι δ' ἄλλως παρὰ τὰς εἰρημένους λέγεται μία κινήσεις ἢ ὁμαλής. ἢ γὰρ ἀνώμαλος ἔστιν ὡς οὐ δοκεῖ μία, ἀλλὰ μᾶλλον ἢ ὁμαλής, ὥσπερ ἢ εὐθεῖα· ἢ γὰρ ἀνώμαλος διαιρετὴ. ἔοικε δὲ διαφέρειν ὡς τὸ μᾶλλον καὶ ἥττον. ἔστιν δὲ ἐν ἀπάσῃ κινήσει τὸ ὁμαλῶς ἢ μή· καὶ γὰρ ἂν ἄλλοιοῖτο ὁμαλῶς, καὶ φέροιτο ἐφ' ὁμαλοῦ οἶον κύκλου ἢ εὐθείας, καὶ περὶ αὐξήσιν ὡσαύτως καὶ φθίσιν. ἀνωμαλία δ' ἐστὶν διαφορὰ ὅτε μὲν ἐφ' ᾧ κινεῖται (ἀδύνατον γὰρ ὁμαλὴν εἶναι τὴν κίνησιν μὴ ἐπὶ ὁμαλῷ μεγέθει, οἶον ἢ τῆς κεκλασμένης κινήσεις ἢ ἢ τῆς ἑλικος ἢ ἄλλου μεγέθους, ὧν μὴ ἐφαρμόττει τὸ

τυχὸν ἐπὶ τὸ τυχὸν μέρος)· ἡ δὲ οὔτε ἐν τῷ ὃ οὔτ' ἐν τῷ πότε οὔτε ἐν τῷ εἰς ὅ, ἀλλ' ἐν τῷ ὥς. ταχυτῆτι γὰρ καὶ βραδυτῆτι ἐνίοτε διώρισται· ἥς μὲν γὰρ τὸ αὐτὸ τάχος, ὁμαλῆς, ἥς δὲ μή, ἀνώμαλος. διὸ οὐκ εἶδη κινήσεως οὐδὲ διαφορὰν τάχος καὶ βραδυτής, ὅτι πάσαις ἀκολουθεῖ ταῖς διαφοραῖς κατ' εἶδος. ὥστε οὐδὲ βαρύτης καὶ κουφότης ἢ εἰς τὸ αὐτό, οἷον γῆς πρὸς αὐτὴν ἢ πυρὸς πρὸς (229a.) αὐτό. μία μὲν οὖν ἡ ἀνώμαλος τῷ συνεχῆς <εἶναι>, ἥττον δέ, ὅπερ τῇ κεκλασμένῃ συμβαίνει φορᾶ· τὸ δ' ἥττον μίξις αἰεὶ τοῦ ἐναντίου. εἰ δὲ πᾶσαν τὴν μίαν ἐνδέχεται καὶ ὁμαλὴν εἶναι καὶ μή, οὐκ ἂν εἶησαν αἱ ἐχόμεναι αἱ μὴ κατ' εἶδος αἱ αὐταὶ μία καὶ συνεχῆς· πῶς γὰρ ἂν εἴη ὁμαλῆς ἢ ἐξ ἁλλοιωσέως συγκειμένη καὶ φορᾶς; δέοι γὰρ ἂν ἐφαρμόττειν.

## Κεφάλαιο 5

Ἔτι δὲ διοριστέον ποία κινήσεις ἐναντία κινήσει, καὶ περὶ μονῆς δὲ τὸν αὐτὸν τρόπον. διαιρετέον δὲ πρῶτον πότερον ἐναντία κινήσεις ἢ ἐκ τοῦ αὐτοῦ τῇ εἰς τὸ αὐτό (οἷον ἢ ἐξ ὑγείας τῇ εἰς ὑγίαν), οἷον καὶ γένεσις καὶ φθορὰ δοκεῖ, ἢ ἢ ἐξ ἐναντίων (οἷον ἢ ἐξ ὑγείας τῇ ἐκ νόσου), ἢ ἢ εἰς ἐναντία (οἷον ἢ εἰς ὑγίαν τῇ εἰς νόσον), ἢ ἢ ἐξ ἐναντίου τῇ εἰς ἐναντίον (οἷον ἢ ἐξ ὑγείας τῇ εἰς νόσον), ἢ ἢ ἐξ ἐναντίου εἰς ἐναντίον τῇ ἐξ ἐναντίου εἰς ἐναντίον (οἷον ἢ ἐξ ὑγείας εἰς νόσον τῇ ἐκ νόσου εἰς ὑγίαν). ἀνάγκη γὰρ ἢ ἓνα τινὰ τούτων εἶναι τῶν τρόπων ἢ πλείους· οὐ γὰρ ἔστιν ἄλλως ἀντιτιθέναι.

ἔστι δ' ἢ μὲν ἐξ ἐναντίου τῇ εἰς ἐναντίον οὐκ ἐναντία, οἷον ἢ ἐξ ὑγείας τῇ εἰς νόσον· ἢ αὐτὴ γὰρ καὶ μία. τὸ μέντοι γ' εἶναι οὐ ταὐτὸ αὐταῖς, ὥσπερ οὐ ταὐτὸ τὸ ἐξ ὑγείας μεταβάλλειν καὶ τὸ εἰς νόσον. οὐδ' ἢ ἐξ ἐναντίου τῇ ἐξ ἐναντίου· ἅμα μὲν γὰρ συμβαίνει ἐξ ἐναντίου καὶ εἰς ἐναντίον ἢ μεταξύ — ἀλλὰ περὶ τούτου μὲν ὕστερον ἐροῦμεν, ἀλλὰ μᾶλλον τὸ εἰς ἐναντίον μεταβάλλειν δόξειεν ἂν εἶναι αἴτιον τῆς ἐναντιώσεως ἢ τὸ ἐξ ἐναντίου· ἢ μὲν γὰρ ἀπαλλαγὴ ἐναντιότητος, ἢ δὲ λῆψις. καὶ λέγεται δ' ἐκάστη εἰς ὃ μεταβάλλει μᾶλλον ἢ ἐξ οὗ, οἷον ὑγίανσις ἢ εἰς ὑγίαν, νόσανσις δ' ἢ εἰς νόσον.λείπεται δὲ ἢ εἰς ἐναντία καὶ ἢ εἰς ἐναντία ἐξ ἐναντίων. τάχα μὲν οὖν συμβαίνει τὰς εἰς ἐναντία καὶ ἐξ ἐναντίων εἶναι, ἀλλὰ τὸ εἶναι ἴσως οὐ ταὐτό, λέγω δὲ τὸ εἰς ὑγίαν τῷ ἐκ νόσου καὶ τὸ ἐξ ὑγείας τῷ εἰς νόσον.

ἐπεὶ δὲ διαφέρει μεταβολὴ κινήσεως (ἢ ἔκ τινος γὰρ ὑποκειμένου εἷς τι ὑποκείμενον μεταβολὴ κινήσεως ἐστίν), ἢ ἐξ ἐναντίου (229b.) εἰς ἐναντίον τῇ ἐξ ἐναντίου εἰς ἐναντίον κινήσεις ἐναντία, οἷον ἢ ἐξ ὑγείας εἰς νόσον τῇ ἐκ νόσου εἰς ὑγίαν. δῆλον δὲ καὶ ἐκ τῆς ἐπαγωγῆς ὅποια δοκεῖ τὰ ἐναντία εἶναι· τὸ νοσάζεσθαι γὰρ τῷ ὑγιάζεσθαι καὶ τὸ μανθάνειν τῷ ἀπατᾶσθαι μὴ

δι' αὐτοῦ (εἰς ἐναντία γάρ· ὥσπερ γὰρ ἐπιστήμην, ἔστι καὶ ἀπάτην καὶ δι' αὐτοῦ κτᾶσθαι καὶ δι' ἄλλου), καὶ ἡ ἄνω φορὰ τῇ κάτω (ἐναντία γὰρ ταῦτα ἐν μήκει), καὶ ἡ εἰς δεξιὰ τῇ εἰς ἀριστερά (ἐναντία γὰρ ταῦτα ἐν πλάτει), καὶ ἡ εἰς τὸ ἔμπροσθεν τῇ εἰς τὸ ὀπίσθεν (ἐναντία γὰρ καὶ ταῦτα). ἡ δ' εἰς ἐναντίον μόνον οὐ κίνησις ἀλλὰ μεταβολή, οἷον τὸ γίνεσθαι λευκὸν μὴ ἔκτινος. καὶ ὅσοις δὲ μὴ ἔστιν ἐναντία, ἡ ἐξ αὐτοῦ τῇ εἰς αὐτὸ μεταβολῇ ἐναντία· διὸ γένεσις φθορᾶ ἐναντία καὶ ἀποβολὴ λήψει· αὗται δὲ μεταβολαὶ μὲν, κινήσεις δ' οὐ. τὰς δ' εἰς τὸ μεταξὺ κινήσεις, ὅσοις τῶν ἐναντίων ἔστι μεταξύ, ὥς εἰς ἐναντία πως θετέον· ὥς ἐναντίῳ γὰρ χρῆται τῷ μεταξύ ἡ κίνησις, ἐφ' ὁπότερα ἂν μεταβάλλῃ, οἷον ἐκ φαιοῦ μὲν εἰς τὸ λευκὸν ὥς ἐκ μέλανος, καὶ ἐκ λευκοῦ εἰς φαιὸν ὥς εἰς μέλαν, ἐκ δὲ μέλανος εἰς φαιὸν ὥς εἰς λευκὸν τὸ φαιόν· τὸ γὰρ μέσον πρὸς ἑκάτερον λέγεται πως ἑκάτερον τῶν ἄκρων, καθάπερ εἴρηται καὶ πρότερον. κινήσεις μὲν δὴ κινήσει ἐναντία οὕτως ἡ ἐξ ἐναντίου εἰς ἐναντίον τῇ ἐξ ἐναντίου εἰς ἐναντίον.

## Κεφάλαιο 6

Ἐπεὶ δὲ κινήσει οὐ μόνον δοκεῖ κίνησις εἶναι ἐναντία ἀλλὰ καὶ ἡρεμία, τοῦτο διοριστέον. ἀπλῶς μὲν γὰρ ἐναντίον κίνησις κινήσει, ἀντίκειται δὲ καὶ ἡρεμία (στέρησις γάρ, ἔστι δ' ὥς καὶ ἡ στέρησις ἐναντία λέγεται), ποιᾶ δὲ ποιᾶ, οἷον τῇ κατὰ τόπον ἢ κατὰ τόπον. ἀλλὰ τοῦτο νῦν λέγεται ἀπλῶς· πότερον γὰρ τῇ ἐνταῦθα μονῇ ἢ ἐκ τούτου ἢ ἡ εἰς τοῦτο κίνησις ἀντίκειται; δῆλον δὲ ὅτι, ἐπεὶ ἐν δυσὶν ἡ κίνησις ὑποκειμένοις, τῇ μὲν ἐκ τούτου εἰς τὸ ἐναντίον ἢ ἐν τούτῳ μονῇ, τῇ δ' ἐκ τοῦ ἐναντίου εἰς τοῦτο ἢ ἐν τῷ ἐναντίῳ. ἅμα δὲ καὶ ἀλλήλαις ἐναντία αὗται· καὶ γὰρ ἄτοπον, εἰ κινήσεις (230a.) μὲν ἐναντία εἰσὶν, ἡρεμίαι δ' ἀντικείμεναι οὐκ εἰσὶν. εἰσὶν δὲ αἱ ἐν τοῖς ἐναντίοις, οἷον ἡ ἐν ὑγιείᾳ τῇ ἐν νόσῳ ἡρεμία (κινήσει δὲ τῇ ἐξ ὑγιείας εἰς νόσον· τῇ γὰρ ἐκ νόσου εἰς ὑγίειαν ἄλογον — ἡ γὰρ εἰς αὐτὸ κίνησις ἐν ᾧ ἔστηκεν, ἡρέμησις μᾶλλον ἔστιν, ἢ συμβαίνει γε ἅμα γίνεσθαι τῇ κινήσει ἀνάγκη δὲ ἡ ταύτην ἢ ἐκείνην εἶναι)· οὐ γὰρ ἢ γ' ἐν λευκότητι ἡρεμία ἐναντία τῇ ἐν ὑγιείᾳ.

ὅσοις δὲ μὴ ἔστιν ἐναντία, τούτων μεταβολὴ μὲν ἔστιν ἀντικειμένη ἡ ἐξ αὐτοῦ τῇ εἰς αὐτό, κίνησις δ' οὐκ ἔστιν, οἷον ἡ ἐξ ὄντος τῇ εἰς ὄν, καὶ μονὴ μὲν τούτων οὐκ ἔστιν, ἀμεταβλησία δέ. καὶ εἰ μὲν τι εἴη ὑποκείμενον, ἢ ἐν τῷ ὄντι ἀμεταβλησία τῇ ἐν τῷ μὴ ὄντι ἐναντία. εἰ δὲ μὴ ἔστι τι τὸ μὴ ὄν, ἀπορήσειεν ἂν τις τίνι ἐναντία ἢ ἐν τῷ ὄντι ἀμεταβλησία, καὶ εἰ ἡρεμία ἐστίν. εἰ δὲ τοῦτο, ἢ οὐ πᾶσα ἡρεμία κινήσει ἐναντία, ἢ ἡ γένεσις καὶ φθορὰ κινήσις. δῆλον τοίνυν ὅτι ἡρεμία μὲν οὐ λεκτέα, εἰ μὴ καὶ αὗται κινήσεις, ὅμοιον δέ τι καὶ ἀμεταβλησία· ἐναντία δὲ ἢ οὐδενὶ ἢ τῇ ἐν τῷ μὴ ὄντι ἢ τῇ

φθορᾶ· αὕτη γὰρ ἐξ αὐτῆς, ἡ δὲ γένεσις εἰς ἐκείνην.

ἀπορήσειε δ' ἂν τις διὰ τί ἐν μὲν τῇ κατὰ τόπον μεταβολῇ εἰσὶ καὶ κατὰ φύσιν καὶ παρὰ φύσιν καὶ μοναὶ καὶ κινήσεις, ἐν δὲ ταῖς ἄλλαις οὐ, οἷον ἀλλοιώσεις ἢ μὲν κατὰ φύσιν ἢ δὲ παρὰ φύσιν (οὐδὲν γὰρ μᾶλλον ἢ ὑγίανσις ἢ ἡ νόσανσις κατὰ φύσιν ἢ παρὰ φύσιν, οὐδὲ λεύκανσις ἢ μέλανσις)· ὁμοίως δὲ καὶ ἐπ' αὐξήσεως καὶ φθίσεως (οὔτε γὰρ αὗται ἀλλήλαις ἐναντίαί ὡς φύσει ἢ δὲ παρὰ φύσιν, οὔτ' αὕξησις αὕξῃ σει)· καὶ ἐπὶ γενέσεως δὲ καὶ φθορᾶς ὁ αὐτὸς λόγος· οὔτε γὰρ ἡ μὲν γένεσις κατὰ φύσιν ἢ δὲ φθορὰ παρὰ φύσιν (τὸ γὰρ γηρᾶν κατὰ φύσιν), οὔτε γένεσιν ὁρῶμεν τὴν μὲν κατὰ φύσιν τὴν δὲ παρὰ φύσιν. ἢ εἰ ἔστιν τὸ βίᾳ παρὰ φύσιν, καὶ φθορὰ ἂν εἴη φθορᾶ ἐναντία ἢ βίαιος ὡς παρὰ φύσιν οὕσα τῇ κατὰ φύσιν; ἂρ' οὖν καὶ γενέσεις εἰσὶν ἔναι βίαιοι καὶ οὐχ εἰμαρμέναι, αἷς ἐναντίαί αἱ κατὰ φύσιν, (230b.) καὶ αὕξεις βίαιοι καὶ φθίσεις, οἷον αὕξεις αἱ τῶν ταχὺ διὰ τρυφὴν ἡβώντων, καὶ οἱ σῖτοι οἱ ταχὺ ἀδρυνόμενοι καὶ μὴ πιληθέντες; ἐπὶ δ' ἀλλοιώσεως πῶς; ἢ ὡσαύτως; εἶεν γὰρ ἂν τινες βίαιοι, αἱ δὲ φυσικαί, οἷον οἱ ἀφιέμενοι μὴ ἐν κρισίμοις ἡμέραις, οἱ δ' ἐν κρισίμοις· οἱ μὲν οὖν παρὰ φύσιν ἡλλοιώνται, οἱ δὲ κατὰ φύσιν. ἔσσονται δὲ καὶ φθοραὶ ἐναντίαί ἀλλήλαις, οὐ γενέσεσι. καὶ τί γε κωλύει ἔστιν ὡς; καὶ γὰρ εἰ ἡ μὲν ἡδεῖα ἢ δὲ λυπηρὰ εἴη· ὥστε οὐχ ἀπλῶς φθορὰ φθορᾶ ἐναντία, ἀλλ' ἢ ἡ μὲν τοιαδὶ ἢ δὲ τοιαδὶ αὐτῶν ἔστιν.

ὅλως μὲν οὖν ἐναντίαί κινήσεις καὶ ἡρεμίαι τὸν εἰρημένον τρόπον εἰσὶν, οἷον ἢ ἄνω τῇ κάτω· τόπου γὰρ ἐναντιώσεις αὗται. φέρεται δὲ τὴν μὲν ἄνω φορὰν φύσει τὸ πῦρ, τὴν δὲ κάτω ἢ γῆ· καὶ ἐναντία γ' αὐτῶν αἱ φοραί. τὸ δὲ πῦρ ἄνω μὲν φύσει, κάτω δὲ παρὰ φύσιν· καὶ ἐναντία γε ἢ κατὰ φύσιν αὐτοῦ τῇ παρὰ φύσιν. καὶ μοναὶ δ' ὡσαύτως· ἢ γὰρ ἄνω μονὴ τῇ ἄνωθεν κάτω κινήσει ἐναντία. γίγνεται δὲ τῇ γῇ ἢ μὲν μονὴ ἐκείνη παρὰ φύσιν, ἢ δὲ κίνησις αὕτη κατὰ φύσιν. ὥστε κινήσει μονὴ ἐναντία ἢ παρὰ φύσιν τῇ κατὰ φύσιν τοῦ αὐτοῦ· καὶ γὰρ ἡ κίνησις ἢ τοῦ αὐτοῦ ἐναντία οὕτως· ἢ μὲν γὰρ κατὰ φύσιν [ἔσται] αὐτῶν, ἢ ἄνω ἢ ἢ κάτω, ἢ δὲ παρὰ φύσιν. ἔχει δ' ἀπορίαν εἰ ἔστιν πάσης ἡρεμίας τῆς μὴ αἰεὶ γένεσις, καὶ αὕτη τὸ ἴστασθαι. τοῦ δὲ παρὰ φύσιν μένοντος, οἷον τῆς γῆς ἄνω, εἴη ἂν γένεσις. ὅτε ἄρα ἐφέρετο ἄνω βίᾳ, ἴστατο. ἀλλὰ τὸ ἰστάμενον ἀεὶ δοκεῖ φέρεσθαι θᾶπτον, τὸ δὲ βίᾳ τούναντίον. οὐ γενόμενον ἄρα ἡρεμοῦν ἔσται ἡρεμοῦν. ἔτι δοκεῖ τὸ ἴστασθαι ἢ ὅλως εἶναι τὸ εἰς τὸν αὐτοῦ τρόπον φέρεσθαι ἢ συμβαίνειν ἅμα.

ἔχει δ' ἀπορίαν εἰ ἐναντία ἢ μονὴ ἢ ἐνταῦθα τῇ ἐντεῦθεν κινήσει· ὅταν γὰρ κινῆται ἐκ τουδὶ καὶ ἀποβάλλῃ, ἔτι δοκεῖ ἔχειν τὸ ἀποβαλλόμενον, ὥστ' εἰ αὕτη ἢ ἡρεμία ἐναντία τῇ ἐντεῦθεν εἰς τούναντίον κινήσει, ἅμα ὑπάρξει

τάναντία. ἢ πῆ ἡρεμεῖ, εἰ ἔτι μένει, ὅλως δὲ τοῦ κινουμένου τὸ μὲν (231a.) ἔκεῖ, τὸ δ' εἰς ὃ μεταβάλλει; διὸ καὶ μᾶλλον κίνησις κινήσει ἐναντίον ἢ ἡρέμησις.

καὶ περὶ μὲν κινήσεως καὶ ἡρεμίας, πῶς ἑκατέρα μία, καὶ τίνες ἐναντίαι τίσιν, εἴρηται.

[ἀπορήσειε δ' ἂν τις καὶ περὶ τοῦ ἴστασθαι, εἰ καὶ ὅσαι παρὰ φύσιν κινήσεις, ταύταις ἔστιν ἡρεμία ἀντικειμένη. εἰ μὲν οὖν μὴ ἔσται, ἄτοπον· μένει γάρ, βίᾳ δέ. ὥστε ἡρεμοῦν τι ἔσται οὐκ ἀεὶ ἄνευ τοῦ γενέσθαι. ἀλλὰ δῆλον ὅτι ἔσται· ὥσπερ γὰρ κινεῖται παρὰ φύσιν, καὶ ἡρεμοῖη ἂν τι παρὰ φύσιν. ἐπεὶ δ' ἔστιν ἐνίοις κίνησις κατὰ φύσιν καὶ παρὰ φύσιν, οἷον πυρὶ ἢ ἄνω κατὰ φύσιν ἢ δὲ κάτω παρὰ φύσιν, πότερον αὕτη ἐναντία ἢ ἡ τῆς γῆς; αὕτη γὰρ φέρεται κατὰ φύσιν κάτω. ἢ δῆλον ὅτι ἄμφω, ἀλλ' οὐχ ὡσαύτως, ἀλλ' ἢ μὲν κατὰ φύσιν ὡς κατὰ φύσιν οὔσης τῆς αὐτοῦ· ἢ δ' ἄνω τοῦ πυρὸς τῇ κάτω, ὡς ἢ κατὰ φύσιν οὔσα τῇ παρὰ φύσιν οὔση. ὁμοίως δὲ καὶ ταῖς μοναῖς. ἴσως δ' ἡρεμία κίνησις πῇ ἀντίκειται.]

## Βιβλίο 6

### Κεφάλαιο 1

Εἰ δ' ἐστὶ συνεχὲς καὶ ἀπτόμενον καὶ ἐφεξῆς, ὡς διώρισται πρότερον, συνεχὴ μὲν ὧν τὰ ἔσχατα ἓν, ἀπτόμενα δ' ὧν ἅμα, ἐφεξῆς δ' ὧν μηδὲν μεταξὺ συγγενές, ἀδύνατον ἐξ ἀδιαίρετων εἶναι τι συνεχές, οἷον γραμμὴν ἐκ στιγμῶν, εἴπερ ἡ γραμμὴ μὲν συνεχές, ἡ στιγμή δὲ ἀδιαίρετον. οὔτε γὰρ ἐν τὰ ἔσχατα τῶν στιγμῶν (οὐ γάρ ἐστι τὸ μὲν ἔσχατον τὸ δ' ἄλλο τι μόριον τοῦ ἀδιαίρετου), οὔθ' ἅμα τὰ ἔσχατα (οὐ γάρ ἐστιν ἔσχατον τοῦ ἀμεροῦς οὐδέν· ἕτερον γὰρ τὸ ἔσχατον καὶ οὐ ἔσχατον).

ἔτι δ' ἀνάγκη ἦτοι συνεχεῖς εἶναι τὰς στιγμὰς ἢ ἀπτομένας ἀλλήλων, ἐξ ὧν ἐστι τὸ συνεχές· ὁ δ' αὐτὸς λόγος καὶ ἐπὶ πάντων τῶν (231b.) ἀδιαίρετων. συνεχεῖς μὲν δὴ οὐκ ἂν εἶεν διὰ τὸν εἰρημένον λόγον· ἄπτεται δ' ἅπαν ἢ ὅλον ὅλου ἢ μέρος μέρους ἢ ὅλου μέρος. ἐπεὶ δ' ἀμερὲς τὸ ἀδιαίρετον, ἀνάγκη ὅλον ὅλου ἄπτεσθαι. ὅλον δ' ὅλου ἀπτόμενον οὐκ ἔσται συνεχές. τὸ γὰρ συνεχές ἔχει τὸ μὲν ἄλλο τὸ δ' ἄλλο μέρος, καὶ διαιρεῖται εἰς οὕτως ἕτερα καὶ τόπῳ κεχωρισμένα.

ἀλλὰ μὴν οὐδὲ ἐφεξῆς ἔσται στιγμή στιγμή ἢ τὸ νῦν τῷ νῦν, ὥστ' ἐκ τούτων

εἶναι τὸ μῆκος ἢ τὸν χρόνον· ἐφεξῆς μὲν γάρ ἐστιν ὧν μηθέν ἐστι μεταξὺ συγγενές, στιγμῶν δ' αἰεὶ [τὸ] μεταξὺ γραμμῇ καὶ τῶν νῦν χρόνος. ἔτι διαιροῖτ' ἂν εἰς ἀδιαίρετα, εἴπερ ἐξ ὧν ἐστιν ἐκάτερον, εἰς ταῦτα διαιρεῖται· ἄλλ' οὐθὲν ἦν τῶν συνεχῶν εἰς ἀμερῇ διαιρετόν. ἄλλο δὲ γένος οὐχ οἶόν τ' εἶναι μεταξὺ [τῶν στιγμῶν καὶ τῶν νῦν οὐθέν]. ἢ γὰρ [ἔσται, δῆλον ὡς ἦτοι] ἀδιαίρετον ἔσται ἢ διαιρετόν, καὶ εἰ διαιρετόν, ἢ εἰς ἀδιαίρετα ἢ εἰς αἰεὶ διαιρετά· τοῦτο δὲ συνεχές.

φανερὸν δὲ καὶ ὅτι πᾶν συνεχές διαιρετόν εἰς αἰεὶ διαιρετά· εἰ γὰρ εἰς ἀδιαίρετα, ἔσται ἀδιαίρετον ἀδιαίρετου ἀπτόμενον· ἔν γὰρ τὸ ἔσχατον καὶ ἄπτεται τῶν συνεχῶν.

τοῦ δ' αὐτοῦ λόγου μέγεθος καὶ χρόνον καὶ κίνησιν ἐξ ἀδιαιρέτων συγκεῖσθαι, καὶ διαιρεῖσθαι εἰς ἀδιαίρετα, ἢ μηθέν. δῆλον δ' ἐκ τῶνδε. εἰ γὰρ τὸ μέγεθος ἐξ ἀδιαιρέτων σύγκειται, καὶ ἡ κίνησις ἢ τούτου ἐξ ἴσων κινήσεων ἔσται ἀδιαιρέτων, οἷον εἰ τὸ ΑΒΓ ἐκ τῶν Α Β Γ ἐστὶν ἀδιαιρέτων, ἢ κίνησις ἐφ' ἧς ΔΕΖ, ἣν ἐκινήθη τὸ Ω ἐπὶ τῆς ΑΒΓ, ἕκαστον τὸ μέρος ἔχει ἀδιαίρετον. εἰ δὲ παρούσης κινήσεως ἀνάγκη κινεῖσθαι τι, καὶ εἰ κινεῖται τι, παρεῖναι κίνησιν, καὶ τὸ κινεῖσθαι ἔσται ἐξ ἀδιαιρέτων. τὸ μὲν δὲ Α ἐκινήθη τὸ Ω τὴν τὸ Δ κινούμενον κίνησιν, τὸ δὲ Β τὴν τὸ Ε, καὶ τὸ Γ ὡσαύτως τὴν τὸ Ζ. εἰ δὲ ἀνάγκη τὸ κινούμενον ποθέν ποι μὴ ἅμα κινεῖσθαι καὶ κεκινήσθαι οὐ ἐκινεῖτο ὅτε ἐκινεῖτο (οἷον εἰ Θήβαζε τι βαδίζει, ἀδύνατον ἅμα βαδίζειν Θήβαζε καὶ βεβαδικέναι (232a.) Θήβαζε), τὴν δὲ τὸ Α τὴν ἀμερῇ ἐκινεῖτο τὸ Ω, ἢ ἢ τὸ Δ κίνησις παρῆν· ὥστ' εἰ μὲν ὕστερον διεληλύθει ἢ διήει, διαιρετὴ ἂν εἴη (ὅτε γὰρ διήει, οὔτε ἡρέμει οὔτε διεληλύθει, ἀλλὰ μεταξὺ ἦν), εἰ δ' ἅμα διέρχεται καὶ διελήλυθε, τὸ βαδίζον, ὅτε βαδίζει, βεβαδικὸς ἐκεῖ ἔσται καὶ κεκινημένον οὐ κινεῖται. εἰ δὲ τὴν μὲν ὅλην τὴν ΑΒΓ κινεῖται τι, καὶ ἡ κίνησις ἦν κινεῖται τὰ Δ Ε Ζ ἐστι, τὴν δ' ἀμερῇ τὴν Α οὐθὲν κινεῖται ἀλλὰ κεκίνηται, εἴη ἂν ἡ κίνησις οὐκ ἐκ κινήσεων ἀλλ' ἐκ κινήσεων καὶ τῷ κεκινήσθαι τι μὴ κινούμενον· τὴν γὰρ Α διελήλυθεν οὐ διεξιόν. ὥστε ἔσται τι βεβαδικέναι μὴ δέποτε βαδίζον· ταύτην γὰρ βεβάδικεν οὐ βαδίζον ταύτην. εἰ οὖν ἀνάγκη ἢ ἡρεμεῖν ἢ κινεῖσθαι πᾶν, ἡρεμεῖ καθ' ἕκαστον τῶν Α Β Γ, ὥστ' ἔσται τι συνεχῶς ἡρεμοῦν ἅμα καὶ κινούμενον. τὴν γὰρ ΑΒΓ ὅλην ἐκινεῖτο καὶ ἡρέμει ὅτιοῦν μέρος, ὥστε καὶ πᾶσαν. καὶ εἰ μὲν τὰ ἀδιαίρετα τῆς ΔΕΖ κινήσεις, κινήσεως παρούσης ἐνδέχοιτ' ἂν μὴ κινεῖσθαι ἀλλ' ἡρεμεῖν· εἰ δὲ μὴ κινήσεις, τὴν κίνησιν μὴ ἐκ κινήσεων εἶναι. ὁμοίως δ' ἀνάγκη τῷ μήκει καὶ τῇ κινήσει ἀδιαίρετον εἶναι τὸν χρόνον, καὶ συγκεῖσθαι ἐκ τῶν νῦν ὄντων ἀδιαιρέτων· εἰ γὰρ πᾶσα διαιρετός, ἐν τῷ ἐλάττονι δὲ τὸ ἰσοταχὲς δίεισιν ἔλαττον, διαιρετὸς ἔσται καὶ ὁ χρόνος. εἰ δ' ὁ χρόνος διαιρετὸς ἐν ᾧ φέρεται

τι τὴν Α, καὶ ἢ τὸ Α ἔσται διαιρετὴ.

## Κεφάλαιο 2

Ἐπεὶ δὲ πᾶν μέγεθος εἰς μεγέθη διαιρετόν (δέδεικται γὰρ ὅτι ἀδύνατον ἔξ ἀτόμων εἶναι τι συνεχές, μέγεθος δ' ἐστὶν ἅπαν συνεχές), ἀνάγκη τὸ θᾶπτον ἐν τῷ ἴσῳ χρόνῳ μείζον καὶ ἐν τῷ ἐλάττονι ἴσον καὶ ἐν τῷ ἐλάττονι πλεῖον κινεῖσθαι, καθάπερ ὀρίζονται τινες τὸ θᾶπτον. ἔστω γὰρ τὸ ἐφ' ᾧ Α τοῦ ἐφ' ᾧ Β θᾶπτον. ἐπεὶ τοίνυν θᾶπτόν ἐστιν τὸ πρότερον μεταβάλλον, ἐν ᾧ χρόνῳ τὸ Α μεταβέβληκεν ἀπὸ τοῦ Γ εἰς τὸ Δ, οἷον τῷ ΖΗ, ἐν τούτῳ τὸ Β οὕτω ἔσται πρὸς τῷ Δ, ἀλλ' ἀπολείψει, ὥστε ἐν τῷ ἴσῳ χρόνῳ πλεῖον δίεισιν τὸ θᾶπτον. ἀλλὰ μὴν καὶ ἐν τῷ ἐλάττονι πλεῖον· ἐν ᾧ γὰρ τὸ Α γεγένηται πρὸς τῷ Δ, τὸ Β ἔστω πρὸς τῷ Ε τὸ βραδύτερον ὄν. οὐκοῦν ἐπεὶ (232b.) τὸ Α πρὸς τῷ Δ γεγένηται ἐν ἅπαντι τῷ ΖΗ χρόνῳ, πρὸς τῷ Θ ἔσται ἐν ἐλάττονι τούτου· καὶ ἔστω ἐν τῷ ΖΚ. τὸ μὲν οὖν ΓΘ, ὃ διελήλυθε τὸ Α, μείζον ἐστὶ τοῦ ΓΕ, ὃ δὲ χρόνος ὁ ΖΚ ἐλάττων τοῦ παντός τοῦ ΖΗ, ὥστε ἐν ἐλάττονι μείζον δίεισιν. φανερόν δὲ ἐκ τούτων καὶ ὅτι τὸ θᾶπτον ἐν ἐλάττονι χρόνῳ δίεισιν τὸ ἴσον. ἐπεὶ γὰρ τὴν μείζω ἐν ἐλάττονι διέρχεται τοῦ βραδυτέρου, αὐτὸ δὲ καθ' αὐτὸ λαμβανόμενον ἐν πλείονι χρόνῳ τὴν μείζω τῆς ἐλάττονος, οἷον τὴν ΛΜ τῆς ΛΞ, πλείων ἂν εἴη ὁ χρόνος ὁ ΠΡ, ἐν ᾧ τὴν ΛΜ διέρχεται, ἢ ὁ ΠΣ, ἐν ᾧ τὴν ΛΞ. ὥστε εἰ ὁ ΠΡ χρόνος ἐλάττων ἐστὶν τοῦ Χ, ἐν ᾧ τὸ βραδύτερον διέρχεται τὴν ΛΞ, καὶ ὁ ΠΣ ἐλάττων ἔσται τοῦ ἐφ' ᾧ Χ· τοῦ γὰρ ΠΡ ἐλάττων, τὸ δὲ τοῦ ἐλάττονος ἔλαττον καὶ αὐτὸ ἔλαττον. ὥστε ἐν ἐλάττονι κινήσεται τὸ ἴσον. ἔτι δ' εἰ πᾶν ἀνάγκη ἢ ἐν ἴσῳ ἢ ἐν ἐλάττονι ἢ ἐν πλείονι κινεῖσθαι, καὶ τὸ μὲν ἐν πλείονι βραδύτερον, τὸ δ' ἐν ἴσῳ ἰσοταχές, τὸ δὲ θᾶπτον οὔτε ἰσοταχές οὔτε βραδύτερον, οὔτ' ἂν ἐν ἴσῳ οὔτ' ἐν πλείονι κινεῖτο τὸ θᾶπτον.λείπεται οὖν ἐν ἐλάττονι, ὥστ' ἀνάγκη καὶ τὸ ἴσον μέγεθος ἐν ἐλάττονι χρόνῳ διέναι τὸ θᾶπτον. ἐπεὶ δὲ πᾶσα μὲν κίνησις ἐν χρόνῳ καὶ ἐν ἅπαντι χρόνῳ δυνατὸν κινήθῃναι, πᾶν δὲ τὸ κινούμενον ἐνδέχεται καὶ θᾶπτον κινεῖσθαι καὶ βραδύτερον, ἐν ἅπαντι χρόνῳ ἔσται τὸ θᾶπτον κινεῖσθαι καὶ βραδύτερον. τούτων δ' ὄντων ἀνάγκη καὶ τὸν χρόνον συνεχῇ εἶναι. λέγω δὲ συνεχές τὸ διαιρετὸν εἰς αἰεὶ διαιρετά· τούτου γὰρ ὑποκειμένου τοῦ συνεχούς, ἀνάγκη συνεχῇ εἶναι τὸν χρόνον. ἐπεὶ γὰρ δέδεικται ὅτι τὸ θᾶπτον ἐν ἐλάττονι χρόνῳ δίεισιν τὸ ἴσον, ἔστω τὸ μὲν ἐφ' ᾧ Α θᾶπτον, τὸ δ' ἐφ' ᾧ Β βραδύτερον, καὶ κεκινήσθω τὸ βραδύτερον τὸ ἐφ' ᾧ ΓΔ μέγεθος ἐν τῷ ΖΗ χρόνῳ. δῆλον τοίνυν ὅτι τὸ θᾶπτον ἐν ἐλάττονι τούτου κινήσεται τὸ αὐτὸ μέγεθος· καὶ κεκινήσθω ἐν τῷ ΖΘ. πάλιν δ' ἐπεὶ τὸ θᾶπτον ἐν τῷ ΖΘ διελήλυθεν τὴν ὅλην τὴν ΓΔ, τὸ βραδύτερον ἐν τῷ αὐτῷ χρόνῳ τὴν ἐλάττω δίεισιν· ἔστω οὖν ἐφ' (233a.) ἧς ΓΚ. ἐπεὶ δὲ τὸ βραδύτερον τὸ Β ἐν τῷ ΖΘ

χρόνῳ τὴν ΓΚ διελήλυθεν, τὸ θᾶπτον ἐν ἐλάττονι δίεισιν, ὥστε πάλιν διαιρεθήσεται ὁ ΖΘ χρόνος. τούτου δὲ διαιρουμένου καὶ τὸ ΓΚ μέγεθος διαιρεθήσεται κατὰ τὸν αὐτὸν λόγον. εἰ δὲ τὸ μέγεθος, καὶ ὁ χρόνος. καὶ αἰὲ τοῦτ' ἔσται μεταλαμβάνουσιν ἀπὸ τοῦ θάπτονος τὸ βραδύτερον καὶ ἀπὸ τοῦ βραδυτέρου τὸ θᾶπτον, καὶ τῷ ἀποδεδειγμένῳ χρωμένοις· διαιρήσει γὰρ τὸ μὲν θᾶπτον τὸν χρόνον, τὸ δὲ βραδύτερον τὸ μῆκος. εἰ οὖν αἰεὶ μὲν ἀντιστρέφειν ἀληθές, ἀντιστρεφομένου δὲ αἰεὶ γίνεταί διαίρεσις, φανερόν ὅτι πᾶς χρόνος ἔσται συνεχής.

ἅμα δὲ δῆλον καὶ ὅτι μέγεθος ἅπαν ἐστὶ συνεχές· τὰς αὐτὰς γὰρ καὶ τὰς ἴσας διαιρέσεις ὁ χρόνος διαιρεῖται καὶ τὸ μέγεθος. ἔτι δὲ καὶ ἐκ τῶν εἰωθότων λόγων λέγεσθαι φανερόν ὡς εἴπερ ὁ χρόνος ἐστὶ συνεχής, ὅτι καὶ τὸ μέγεθος, εἴπερ ἐν τῷ ἡμίσει χρόνῳ ἡμισυ διέρχεται καὶ ἀπλῶς ἐν τῷ ἐλάττονι ἔλαττον· αἱ γὰρ αὐταὶ διαιρέσεις ἔσονται τοῦ χρόνου καὶ τοῦ μεγέθους. καὶ εἰ ὅποτερονοῦν ἄπειρον, καὶ θάτερον, καὶ ὡς θάτερον, καὶ θάτερον, οἷον εἰ μὲν τοῖς ἐσχάτοις ἄπειρος ὁ χρόνος, καὶ τὸ μῆκος τοῖς ἐσχάτοις, εἰ δὲ τῇ διαιρέσει, τῇ διαιρέσει καὶ τὸ μῆκος, εἰ δὲ ἀμφοῖν, ἀμφοῖν καὶ τὸ μέγεθος.

διὸ καὶ ὁ Ζήνωνος λόγος ψεῦδος λαμβάνει τὸ μὴ ἐνδέχεσθαι τὰ ἄπειρα διελθεῖν ἢ ἄψασθαι τῶν ἀπείρων καθ' ἕκαστον ἐν πεπερασμένῳ χρόνῳ. διχῶς γὰρ λέγεται καὶ τὸ μῆκος καὶ ὁ χρόνος ἄπειρον, καὶ ὅλως πᾶν τὸ συνεχές, ἥτοι κατὰ διαίρεσιν ἢ τοῖς ἐσχάτοις. τῶν μὲν οὖν κατὰ τὸ ποσὸν ἀπείρων οὐκ ἐνδέχεται ἄψασθαι ἐν πεπερασμένῳ χρόνῳ, τῶν δὲ κατὰ διαίρεσιν ἐνδέχεται· καὶ γὰρ αὐτὸς ὁ χρόνος οὕτως ἄπειρος. ὥστε ἐν τῷ ἀπείρῳ καὶ οὐκ ἐν τῷ πεπερασμένῳ συμβαίνει διέναι τὸ ἄπειρον, καὶ ἄπτεσθαι τῶν ἀπείρων τοῖς ἀπείροις, οὐ τοῖς πεπερασμένοις. οὔτε δὲ τὸ ἄπειρον οἷον τε ἐν πεπερασμένῳ χρόνῳ διελθεῖν, οὔτ' ἐν ἀπείρῳ τὸ πεπερασμένον· ἀλλ' ἐάν τε ὁ χρόνος ἄπειρος ἦ, καὶ τὸ μέγεθος ἔσται ἄπειρον, ἐάν τε τὸ μέγεθος, καὶ ὁ χρόνος. ἔστω γὰρ πεπερασμένον μέγεθος ἐφ' οὗ ΑΒ, χρόνος δὲ ἄπειρος ἐφ' ᾧ Γ· εἰλήφθω δέ τι τοῦ (233b.) χρόνου πεπερασμένον, ἐφ' ᾧ ΓΔ. ἐν τούτῳ οὖν δίεισί τι τοῦ μεγέθους, καὶ ἔστω διεληλυθὸς ἐφ' ᾧ ΒΕ. τοῦτο δὲ ἢ καταμετρήσει τὸ ἐφ' ᾧ ΑΒ, ἢ ἐλλείψει, ἢ ὑπερβαλεῖ· διαφέρει γὰρ οὐθέν· εἰ γὰρ αἰὲ τὸ ἴσον τῷ ΒΕ μέγεθος ἐν ἴσῳ χρόνῳ δίεισιν, τοῦτο δὲ καταμετρεῖ τὸ ὅλον, πεπερασμένος ἔσται ὁ πᾶς χρόνος ἐν ᾧ διήλθεν· εἰς ἴσα γὰρ διαιρεθήσεται καὶ τὸ μέγεθος. ἔτι δ' εἰ μὴ πᾶν μέγεθος ἐν ἀπείρῳ χρόνῳ δίεισιν, ἀλλ' ἐνδέχεται τι καὶ ἐν πεπερασμένῳ διελθεῖν, οἷον τὸ ΒΕ, τοῦτο δὲ καταμετρήσει τὸ πᾶν, καὶ τὸ ἴσον ἐν ἴσῳ δίεισιν, ὥστε πεπερασμένος ἔσται καὶ ὁ χρόνος. ὅτι δ' οὐκ ἐν ἀπείρῳ δίεισιν τὸ ΒΕ, φανερόν, εἰ ληφθεῖ ἐπὶ θάτερα πεπερασμένος ὁ χρόνος· εἰ γὰρ ἐν ἐλάττονι τὸ μέρος δίεισιν, τοῦτο



ἀνάγκη πεπεράνθαι, θατέρου γε πέραςτος ὑπάρχοντος. ἡ αὐτὴ δὲ ἀπόδειξις καὶ εἰ τὸ μὲν μῆκος ἄπειρον ὁ δὲ χρόνος πεπερασμένος. φανερόν οὖν ἐκ τῶν εἰρημένων ὡς οὔτε γραμμὴ οὔτε ἐπίπεδον οὔτε ὅλως τῶν συνεχῶν οὐθέν ἔσται ἄτομον,

οὐ μόνον διὰ τὸ νῦν λεχθέν, ἀλλὰ καὶ ὅτι συμβήσεται διαιρεῖσθαι τὸ ἄτομον. ἐπεὶ γὰρ ἐν ἅπαντι χρόνῳ τὸ θᾶπτον καὶ βραδύτερον ἔστι, τὸ δὲ θᾶπτον πλεῖον διέρχεται ἐν τῷ ἴσῳ χρόνῳ, ἐνδέχεται δὲ καὶ διπλάσιον καὶ ἡμιόλιον διέναι μῆκος (εἴη γὰρ ἂν οὗτος ὁ λόγος τοῦ τάχους), ἐνηνέχθω οὖν τὸ θᾶπτον ἡμιόλιον ἐν τῷ αὐτῷ χρόνῳ, καὶ διηρήσθω τὰ μεγέθη τὸ μὲν τοῦ θάπτονος εἰς τρία ἄτομα, ἐφ' ὧν AB BG ΓΔ, τὸ δὲ τοῦ βραδυτέρου εἰς δύο, ἐφ' ὧν EZ ZH. οὐκοῦν καὶ ὁ χρόνος διαιρεθήσεται εἰς τρία ἄτομα· τὸ γὰρ ἴσον ἐν τῷ ἴσῳ χρόνῳ δίδεισιν. διηρήσθω οὖν ὁ χρόνος εἰς τὰ ΚΛ ΛΜ ΜΝ. πάλιν δ' ἐπεὶ τὸ βραδύτερον ἐνήνεκται τὴν EZH, καὶ ὁ χρόνος τμηθήσεται δίχα. διαιρεθήσεται ἄρα τὸ ἄτομον, καὶ τὸ ἀμερὲς οὐκ ἐν ἀτόμῳ δίδεισιν ἄλλ' ἐν πλείονι. φανερόν οὖν ὅτι οὐδέν ἐστι τῶν συνεχῶν ἀμερές.

### Κεφάλαιο 3

Ἀνάγκη δὲ καὶ τὸ νῦν τὸ μὴ καθ' ἕτερον ἀλλὰ καθ' αὐτὸ καὶ πρῶτον λεγόμενον ἀδιαίρετον εἶναι, καὶ ἐν ἅπαντι τὸ τοιοῦτο χρόνῳ ἐνυπάρχειν. ἔστιν γὰρ ἔσχατόν τι τοῦ (234a.) γεγονότος, οὗ ἐπὶ τάδε οὐθέν ἐστι τοῦ μέλλοντος, καὶ πάλιν τοῦ μέλλοντος, οὗ ἐπὶ τάδε οὐθέν ἐστι τοῦ γεγονότος· ὃ δὴ φαμεν ἀμφοῖν εἶναι πέρας. τοῦτο δὲ ἐὰν δειχθῇ ὅτι τοιοῦτόν ἐστιν [καθ' αὐτὸ] καὶ ταῦτόν, ἅμα φανερόν ἔσται καὶ ὅτι ἀδιαίρετον. ἀνάγκη δὴ τὸ αὐτὸ εἶναι τὸ νῦν τὸ ἔσχατον ἀμφοτέρων τῶν χρόνων· εἰ γὰρ ἕτερον, ἐφεξῆς μὲν οὐκ ἂν εἴη θάτερον θατέρῳ διὰ τὸ μὴ εἶναι συνεχὲς ἐξ ἀμερῶν, εἰ δὲ χωρὶς ἑκάτερον, μεταξὺ ἔσται χρόνος· πᾶν γὰρ τὸ συνεχὲς τοιοῦτον ὥστ' εἶναι τι συνώνυμον μεταξὺ τῶν περάτων. ἀλλὰ μὴν εἰ χρόνος τὸ μεταξύ, διαιρετὸν ἔσται· πᾶς γὰρ χρόνος δέδεικται ὅτι διαιρετός. ὥστε διαιρετὸν τὸ νῦν. εἰ δὲ διαιρετὸν τὸ νῦν, ἔσται τι τοῦ γεγονότος ἐν τῷ μέλλοντι καὶ τοῦ μέλλοντος ἐν τῷ γεγονότι· καθ' ὃ γὰρ ἂν διαιρεθῇ, τοῦτο διοριεῖ τὸν παρήκοντα καὶ τὸν μέλλοντα χρόνον. ἅμα δὲ καὶ οὐκ ἂν καθ' αὐτὸ εἴη τὸ νῦν, ἀλλὰ καθ' ἕτερον· ἡ γὰρ διαίρεσις οὐ καθ' αὐτό. πρὸς δὲ τούτοις τοῦ νῦν τὸ μὲν τι γεγονὸς ἔσται τὸ δὲ μέλλον, καὶ οὐκ ἀεὶ τὸ αὐτὸ γεγονὸς ἢ μέλλον. οὐδὲ δὴ τὸ νῦν τὸ αὐτό· πολλαχῇ γὰρ διαιρετός ὁ χρόνος. ὥστ' εἰ ταῦτα ἀδύνατον ὑπάρχειν, ἀνάγκη τὸ αὐτὸ εἶναι τὸ ἐν ἑκατέρῳ νῦν. ἀλλὰ μὴν εἰ ταῦτό, φανερόν ὅτι καὶ ἀδιαίρετον· εἰ γὰρ διαιρετόν, πάλιν ταῦτά συμβήσεται ἅ καὶ ἐν τῷ πρότερον. ὅτι μὲν τοίνυν ἔστιν τι ἐν τῷ χρόνῳ ἀδιαίρετον, ὃ φαμεν

εἶναι τὸ νῦν, δῆλόν ἐστιν ἐκ τῶν εἰρημένων·

ὅτι δ' οὐθὲν ἐν τῷ νῦν κινεῖται, ἐκ τῶνδε φανερόν ἐστιν. εἰ γάρ, ἐνδέχεται καὶ θᾶπτον κινεῖσθαι καὶ βραδύτερον. ἔστω δὴ τὸ νῦν ἐφ' ὧ N, κεκινήσθω δ' ἐν αὐτῷ τὸ θᾶπτον τὴν AB. οὐκοῦν τὸ βραδύτερον ἐν τῷ αὐτῷ ἐλάττω τῆς AB κινήσεται, οἷον τὴν AG. ἐπεὶ δὲ τὸ βραδύτερον ἐν ὅλῳ τῷ νῦν κινείται τὴν AG, τὸ θᾶπτον ἐν ἐλάττονι τούτου κινήσεται, ὥστε διαιρεθήσεται τὸ νῦν. ἀλλ' ἦν ἀδιαίρετον. οὐκ ἄρα ἔστιν κινεῖσθαι ἐν τῷ νῦν.

ἀλλὰ μὴν οὐδ' ἡρεμεῖν· ἡρεμεῖν γὰρ λέγομεν τὸ πεφυκὸς κινεῖσθαι μὴ κινούμενον ὅτε πέφυκεν καὶ οὐ καὶ ὥς, ὥστ' ἐπεὶ ἐν τῷ νῦν οὐθὲν πέφυκε κινεῖσθαι, δῆλον ὡς οὐδ' ἡρεμεῖν.

ἔτι δ' εἰ τὸ αὐτὸ μὲν ἐστὶ τὸ νῦν ἐν ἀμφοῖν τοῖν χρόνοις, (234b.) ἐνδέχεται δὲ τὸν μὲν κινεῖσθαι τὸν δ' ἡρεμεῖν ὅλον, τὸ δ' ὅλον κινούμενον τὸν χρόνον ἐν ὁπωσὺν κινήσεται τῶν τούτου καθ' ὃ πέφυκε κινεῖσθαι, καὶ τὸ ἡρεμοῦν ὡσαύτως ἡρεμήσει, συμβήσεται τὸ αὐτὸ ἅμα ἡρεμεῖν καὶ κινεῖσθαι· τὸ γὰρ αὐτὸ ἔσχατον τῶν χρόνων ἀμφοτέρων, τὸ νῦν.

ἔτι δ' ἡρεμεῖν μὲν λέγομεν τὸ ὁμοίως ἔχον καὶ αὐτὸ καὶ τὰ μέρη νῦν καὶ πρότερον· ἐν δὲ τῷ νῦν οὐκ ἔστι τὸ πρότερον, ὥστ' οὐδ' ἡρεμεῖν.

ἀνάγκη ἄρα καὶ κινεῖσθαι τὸ κινούμενον ἐν χρόνῳ καὶ ἡρεμεῖν τὸ ἡρεμοῦν.

## Κεφάλαιο 4

Τὸ δὲ μεταβάλλον ἅπαν ἀνάγκη διαιρετὸν εἶναι. ἐπεὶ γὰρ ἔκ τινος εἷς τι πᾶσα μεταβολή, καὶ ὅταν μὲν ἦ ἐν τούτῳ εἷς ὃ μετέβαλλεν, οὐκέτι μεταβάλλει, ὅταν δὲ ἐξ οὗ μετέβαλλεν, καὶ αὐτὸ καὶ τὰ μέρη πάντα, οὕτω μεταβάλλει (τὸ γὰρ ὡσαύτως ἔχον καὶ αὐτὸ καὶ τὰ μέρη οὐ μεταβάλλει), ἀνάγκη οὖν τὸ μὲν τι ἐν τούτῳ εἶναι, τὸ δ' ἐν θατέρῳ τοῦ μεταβάλλοντος· οὔτε γὰρ ἐν ἀμφοτέροις οὔτ' ἐν μηδετέρῳ δυνατόν. λέγω δ' εἷς ὃ μεταβάλλει τὸ πρῶτον κατὰ τὴν μεταβολήν, οἷον ἐκ τοῦ λευκοῦ τὸ φαιόν, οὐ τὸ μέλαν· οὐ γὰρ ἀνάγκη τὸ μεταβάλλον ἐν ὁποτέρῳ εἶναι τῶν ἄκρων. φανερόν οὖν ὅτι πᾶν τὸ μεταβάλλον ἔσται διαιρετόν.

κίνησις δ' ἐστὶν διαιρετὴ διχῶς, ἓνα μὲν τρόπον τῷ χρόνῳ, ἄλλον δὲ κατὰ τὰς τῶν μερῶν τοῦ κινουμένου κινήσεις, οἷον εἰ τὸ AG κινεῖται ὅλον, καὶ τὸ AB κινήσεται καὶ τὸ BG. ἔστω δὴ τοῦ μὲν AB ἢ ΔΕ, τοῦ δὲ BG ἢ ΕΖ κίνησις

τῶν μερῶν. ἀνάγκη δὴ τὴν ὅλην, ἐφ' ἧς ΔΖ, τοῦ ΑΓ εἶναι κίνησιν. κινήσεται γὰρ κατὰ ταύτην, ἐπεὶ περ ἐκάτερον τῶν μερῶν κινεῖται καθ' ἐκατέραν· οὐθὲν δὲ κινεῖται κατὰ τὴν ἄλλου κίνησιν· ὥστε ἡ ὅλη κίνησις τοῦ ὅλου ἐστὶν μεγέθους κίνησις.

ἔτι δ' εἰ πᾶσα μὲν κίνησις τινός, ἡ δ' ὅλη κίνησις ἡ ἐφ' ἧς ΔΖ μήτε τῶν μερῶν ἐστὶν μηδετέρου (μέρους γὰρ ἐκατέρα) μήτ' ἄλλου μηδενός (οὐ γὰρ ὅλη ὅλου, καὶ τὰ μέρη τῶν μερῶν· τὰ δὲ μέρη τῶν ΑΒ ΒΓ καὶ οὐδένων ἄλλων· πλειόνων γὰρ οὐκ ἦν μία κίνησις), κἂν ἡ ὅλη κίνησις εἴη τοῦ ΑΒΓ μεγέθους.

ἔτι δ' εἰ ἔστιν ἄλλη τοῦ ὅλου κίνησις, οἷον ἐφ' ἧς ΘΙ, ἀφαιρεθήσεται ἀπ' αὐτῆς (235a.) ἡ ἐκατέρων τῶν μερῶν κίνησις· αὐταὶ δ' ἴσαι ἔσονται ταῖς ΔΕ ΕΖ· μία γὰρ ἐνός κίνησις. ὥστ' εἰ μὲν ὅλη διαιρεθήσεται ἡ ΘΙ εἰς τὰς τῶν μερῶν κινήσεις, ἴση ἔσται ἡ ΘΙ τῇ ΔΖ· εἰ δ' ἀπολείπει τι, οἷον τὸ ΚΙ, αὕτη οὐδενός ἔσται κίνησις (οὔτε γὰρ τοῦ ὅλου οὔτε τῶν μερῶν διὰ τὸ μίαν εἶναι ἐνός, οὔτε ἄλλου οὐθενός· ἡ γὰρ συνεχῆς κίνησις ἐστὶ συνεχῶν τινῶν), ὡσαύτως δὲ καὶ εἰ ὑπερβάλλει κατὰ τὴν διαίρεσιν· ὥστ' εἰ τοῦτο ἀδύνατον, ἀνάγκη τὴν αὐτὴν εἶναι καὶ ἴσην.

αὕτη μὲν οὖν ἡ διαίρεσις κατὰ τὰς τῶν μερῶν κινήσεις ἐστίν, καὶ ἀνάγκη παντὸς εἶναι τοῦ μεριστοῦ αὐτῇ· ἄλλη δὲ κατὰ τὸν χρόνον· ἐπεὶ γὰρ ἅπαντα κίνησις ἐν χρόνῳ, χρόνος δὲ πᾶς διαιρετός, ἐν δὲ τῷ ἐλάττονι ἐλάττων ἡ κίνησις, ἀνάγκη πᾶσαν κίνησιν διαιρεῖσθαι κατὰ τὸν χρόνον. ἐπεὶ δὲ πᾶν τὸ (13) κινούμενον ἐν τινι κινεῖται καὶ χρόνον τινά, καὶ παντὸς ἔστι κίνησις, ἀνάγκη τὰς αὐτὰς εἶναι διαίρεσεις τοῦ τε χρόνου καὶ τῆς κινήσεως καὶ τοῦ κινεῖσθαι καὶ τοῦ κινουμένου καὶ ἐν ᾧ ἡ κίνησις (πλὴν οὐ πάντων ὁμοίως ἐν οἷς ἡ κίνησις, ἀλλὰ τοῦ μὲν τόπου καθ' αὐτό, τοῦ δὲ ποιοῦ κατὰ συμβεβηκός). εἰλήφθω γὰρ ὁ χρόνος ἐν ᾧ κινεῖται ἐφ' ᾧ Α, καὶ ἡ κίνησις ἐφ' ᾧ Β. εἰ οὖν τὴν ὅλην ἐν τῷ παντὶ χρόνῳ κεκίνηται, ἐν τῷ ἡμίσει ἐλάττω, καὶ πάλιν τούτου διαιρεθέντος ἐλάττω ταύτης, καὶ ἀεὶ οὕτως.

ὁμοίως δὲ καί, εἰ ἡ κίνησις διαιρετή, καὶ ὁ χρόνος διαιρετός· εἰ γὰρ τὴν ὅλην ἐν τῷ παντί, τὴν ἡμίσειαν ἐν τῷ ἡμίσει, καὶ πάλιν τὴν ἐλάττω ἐν τῷ ἐλάττονι. τὸν αὐτὸν δὲ τρόπον καὶ τὸ κινεῖσθαι διαιρεθήσεται. ἔστω γὰρ ἐφ' ᾧ Γ τὸ κινεῖσθαι. κατὰ δὴ τὴν ἡμίσειαν κίνησιν ἐλάττον ἔσται τοῦ ὅλου, καὶ πάλιν κατὰ τὴν τῆς ἡμισείας ἡμίσειαν, καὶ αἰεὶ οὕτως. ἔστι δὲ καὶ ἐκθέμενον τὸ καθ' ἐκατέραν τῶν κινήσεων κινεῖσθαι, οἷον κατὰ τε τὴν ΔΓ καὶ τὴν ΓΕ, λέγειν ὅτι τὸ ὅλον ἔσται κατὰ τὴν ὅλην (εἰ γὰρ ἄλλο, πλείω ἔσται κινεῖσθαι

κατὰ τὴν αὐτὴν κίνησιν), ὥσπερ ἐδείξαμεν καὶ τὴν κίνησιν διαιρετὴν εἰς τὰς τῶν μερῶν κινήσεις οὕσαν· ληφθέντος γὰρ τοῦ κινεῖσθαι καθ' ἑκατέραν συνεχῆς ἔσται τὸ ὅλον.

ὡσαύτως δὲ δειχθήσεται καὶ τὸ μῆκος διαιρετόν, καὶ ὅλως πᾶν ἐν ᾧ ἔστιν ἡ μεταβολή (πλὴν ἔνια κατὰ συμβεβηκός, ὅτι τὸ μεταβάλλον ἔστιν διαιρετόν)· ἐνὸς γὰρ διαιρουμένου πάντα διαιρεθήσεται. καὶ ἐπὶ τοῦ (235b.) πεπερασμένα εἶναι ἢ ἄπειρα ὁμοίως ἔξει κατὰ πάντων. ἡκολούθηκεν δὲ μάλιστα τὸ διαιρεῖσθαι πάντα καὶ ἄπειρα εἶναι ἀπὸ τοῦ μεταβάλλοντος· εὐθύς γὰρ ἐνυπάρχει τῷ μεταβάλλοντι τὸ διαιρετόν καὶ τὸ ἄπειρον. τὸ μὲν οὖν διαιρετόν δέδεικται πρότερον, τὸ δ' ἄπειρον ἐν τοῖς ἐπομένοις ἔσται δῆλον.

## Κεφάλαιο 5

Ἐπεὶ δὲ πᾶν τὸ μεταβάλλον ἔκ τινος εἷς τι μεταβάλλει, ἀνάγκη τὸ μεταβεβληκός, ὅτε πρῶτον μεταβέβληκεν, εἶναι ἐν ᾧ μεταβέβληκεν. τὸ γὰρ μεταβάλλον, ἐξ οὗ μεταβάλλει, ἐξίσταται ἢ ἀπολείπει αὐτό, καὶ ἥτοι ταῦτόν ἐστι τὸ μεταβάλλειν καὶ τὸ ἀπολείπειν, ἢ ἀκολουθεῖ τῷ μεταβάλλειν τὸ ἀπολείπειν. εἰ δὲ τῷ μεταβάλλειν τὸ ἀπολείπειν, τῷ μεταβεβληκέναι τὸ ἀπολελοιπέναι· ὁμοίως γὰρ ἑκάτερον ἔχει πρὸς ἑκάτερον.

ἐπεὶ οὖν μία τῶν μεταβολῶν ἢ κατ' ἀντίφασιν, ὅτε μεταβέβληκεν ἐκ τοῦ μὴ ὄντος εἰς τὸ ὄν, ἀπολέλοιπεν τὸ μὴ ὄν. ἔσται ἄρα ἐν τῷ ὄντι· πᾶν γὰρ ἀνάγκη ἢ εἶναι ἢ μὴ εἶναι. φανερόν οὖν ὅτι ἐν τῇ κατ' ἀντίφασιν μεταβολῇ τὸ μεταβεβληκός ἔσται ἐν ᾧ μεταβέβληκεν. εἰ δ' ἐν ταύτῃ, καὶ ἐν ταῖς ἄλλαις· ὁμοίως γὰρ ἐπὶ μιᾶς καὶ τῶν ἄλλων.

ἔτι δὲ καὶ καθ' ἑκάστην λαμβάνουσι φανερόν, εἴπερ ἀνάγκη τὸ μεταβεβληκός εἶναί που ἢ ἐν τινι. ἐπεὶ γὰρ ἐξ οὗ μεταβέβληκεν ἀπολέλοιπεν, ἀνάγκη δ' εἶναί που, ἢ ἐν τούτῳ ἢ ἐν ἄλλῳ ἔσται. εἰ μὲν οὖν ἐν ἄλλῳ, οἷον ἐν τῷ Γ, τὸ εἰς τὸ Β μεταβεβληκός, πάλιν ἐκ τοῦ Γ μεταβάλλει εἰς τὸ Β· οὐ γὰρ ἦν ἐχόμενον τὸ Β, ἢ δὲ μεταβολὴ συνεχῆς. ὥστε τὸ μεταβεβληκός, ὅτε μεταβέβληκεν, μεταβάλλει εἰς ὃ μεταβέβληκεν. τοῦτο δ' ἀδύνατον· ἀνάγκη ἄρα τὸ μεταβεβληκός εἶναι ἐν τούτῳ εἰς ὃ μεταβέβληκεν. φανερόν οὖν ὅτι καὶ τὸ γεγονός, ὅτε γέγονεν, ἔσται, καὶ τὸ ἐφθαρμένον οὐκ ἔσται· καθόλου τε γὰρ εἴρηται περὶ πάσης μεταβολῆς, καὶ μάλιστα δῆλον ἐν τῇ κατ' ἀντίφασιν. ὅτι μὲν τοίνυν τὸ μεταβεβληκός, ὅτε μεταβέβληκε πρῶτον, ἐν ἐκείνῳ ἐστίν, δῆλον.

ἐν ᾧ δὲ πρώτῳ μεταβέβληκεν τὸ μεταβεβληκός, ἀνάγκη ἄτομον εἶναι. λέγω δὲ πρῶτον ὃ μὴ τῷ ἑτερόν τι αὐτοῦ εἶναι τοιοῦτόν ἐστιν. ἔστω γὰρ διαιρετὸν τὸ ΑΓ, καὶ διηρήσθω κατὰ τὸ Β. εἰ μὲν οὖν ἐν τῷ ΑΒ μεταβέβληκεν ἢ πάλιν ἐν τῷ ΒΓ, οὐκ ἂν ἐν πρώτῳ τῷ ΑΓ μεταβεβληκὸς εἴη. εἰ δ' ἐν ἑκατέρῳ μετέβαλλεν (ἀνάγκη γὰρ (236a.) ἢ μεταβεβληκέναι ἢ μεταβάλλειν ἐν ἑκατέρῳ), καὶ ἐν τῷ ὅλῳ μεταβάλλοι· ἀλλ' ἦν μεταβεβληκός. ὁ αὐτὸς δὲ λόγος καὶ εἰ ἐν τῷ μὲν μεταβάλλει, ἐν δὲ τῷ μεταβέβληκεν· ἔσται γὰρ τι τοῦ πρώτου πρότερον· ὥστ' οὐκ ἂν εἴη διαιρετὸν ἐν ᾧ μεταβέβληκεν. φανερόν οὖν ὅτι καὶ τὸ ἐφθαρμένον καὶ τὸ γεγονὸς ἐν ἀτόμῳ τὸ μὲν ἐφθαρταὶ τὸ δὲ γέγονεν.

λέγεται δὲ τὸ ἐν ᾧ πρώτῳ μεταβέβληκε διχῶς, τὸ μὲν ἐν ᾧ πρώτῳ ἐπιτελέσθη ἢ μεταβολή (τότε γὰρ ἀληθὲς εἰπεῖν ὅτι μεταβέβληκεν), τὸ δ' ἐν ᾧ πρώτῳ ἤρξατο μεταβάλλειν. τὸ μὲν οὖν κατὰ τὸ τέλος τῆς μεταβολῆς πρῶτον λεγόμενον ὑπάρχει τε καὶ ἔστιν (ἐνδέχεται γὰρ ἐπιτελεσθῆναι μεταβολὴν καὶ ἔστι μεταβολῆς τέλος, ὃ δὴ καὶ δέδεικται ἀδιαίρετον ὂν διὰ τὸ πέραν εἶναι)· τὸ δὲ κατὰ τὴν ἀρχὴν ὅλως οὐκ ἔστιν· οὐ γὰρ ἔστιν ἀρχὴ μεταβολῆς, οὐδ' ἐν ᾧ πρώτῳ τοῦ χρόνου μετέβαλλεν. ἔστω γὰρ πρῶτον ἐφ' ᾧ τὸ ΑΔ. τοῦτο δὲ ἀδιαίρετον μὲν οὐκ ἔστιν· συμβήσεται γὰρ ἐχόμενα εἶναι τὰ νῦν. ἔτι δ' εἰ ἐν τῷ ΓΑ χρόνῳ παντὶ ἡρεμεῖ (κείσθω γὰρ ἡρεμοῦν), καὶ ἐν τῷ Α ἡρεμεῖ, ὥστ' εἰ ἡμέρες ἐστὶ τὸ ΑΔ, ἅμα ἡρεμήσει καὶ μεταβεβληκὸς ἔσται· ἐν μὲν γὰρ τῷ Α ἡρεμεῖ, ἐν δὲ τῷ Δ μεταβέβληκεν. ἐπεὶ δ' οὐκ ἔστιν ἡμέρες, ἀνάγκη διαιρετὸν εἶναι καὶ ἐν ὅτωοῦν τῶν τούτου μεταβεβληκέναι· διαιρεθέντος γὰρ τοῦ ΑΔ, εἰ μὲν ἐν μηδετέρῳ μεταβέβληκεν, οὐδ' ἐν τῷ ὅλῳ· εἰ δ' ἐν ἀμφοῖν μεταβάλλει καὶ ἐν τῷ παντί, εἴτ' ἐν θατέρῳ μεταβέβληκεν, οὐκ ἐν τῷ ὅλῳ πρώτῳ. ὥστε ἀνάγκη ἐν ὅτωοῦν μεταβεβληκέναι. φανερόν τοίνυν ὅτι οὐκ ἔστιν ἐν ᾧ πρώτῳ μεταβέβληκεν· ἅπειροι γὰρ αἱ διαιρέσεις. οὐδὲ δὴ τοῦ μεταβεβληκότος ἔστιν τι πρῶτον ὃ μεταβέβληκεν. ἔστω γὰρ τὸ ΔΖ πρῶτον μεταβεβληκὸς τοῦ ΔΕ· πᾶν γὰρ δέδεικται διαιρετὸν τὸ μεταβάλλον. ὁ δὲ χρόνος ἐν ᾧ τὸ ΔΖ μεταβέβληκεν ἔστω ἐφ' ᾧ ΘΙ. εἰ οὖν ἐν τῷ παντί τὸ ΔΖ μεταβέβληκεν, ἐν τῷ ἡμίσει ἔλαττον ἔσται τι μεταβεβληκὸς καὶ πρότερον τοῦ ΔΖ, καὶ πάλιν τούτου ἄλλο, κάκεινου ἕτερον, καὶ αἰεὶ οὕτως. ὥστ' οὐθεν ἔσται πρῶτον τοῦ μεταβάλλοντος ὃ μεταβέβληκεν. ὅτι μὲν οὖν οὔτε τοῦ μεταβάλλοντος οὔτ' ἐν ᾧ μεταβάλλει χρόνῳ πρῶτον οὐθεν ἔστιν, φανερόν ἐκ τῶν εἰρημένων.

(236b.) αὐτὸ δὲ ὃ μεταβάλλει ἢ καθ' ὃ μεταβάλλει, οὐκέθ' ὁμοίως ἔξει. τρία γὰρ ἐστὶν ἃ λέγεται κατὰ τὴν μεταβολήν, τό τε μεταβάλλον καὶ ἐν ᾧ καὶ εἰς ὃ μεταβάλλει, οἷον ὁ ἄνθρωπος καὶ ὁ χρόνος καὶ τὸ λευκόν. ὁ μὲν οὖν

ἄνθρωπος καὶ ὁ χρόνος διαιρετοί, περὶ δὲ τοῦ λευκοῦ ἄλλος λόγος. πλὴν κατὰ συμβεβηκός γε πάντα διαιρετά· ὥ γὰρ συμβέβηκεν τὸ λευκὸν ἢ τὸ ποιόν, ἐκεῖνο διαιρετόν ἐστιν· ἐπεὶ ὅσα γε καθ' αὐτὰ λέγεται διαιρετά καὶ μὴ κατὰ συμβεβηκός, οὐδ' ἐν τούτοις ἔσται τὸ πρῶτον, οἷον ἐν τοῖς μεγέθεσιν. ἔστω γὰρ τὸ ἐφ' ὃ AB μέγεθος, κεκινήσθω δ' ἐκ τοῦ B εἰς τὸ Γ πρῶτον. οὐκοῦν εἰ μὲν ἀδιαίρετον ἔσται τὸ ΒΓ, ἀμερὲς ἀμεροῦς ἔσται ἐχόμενον· εἰ δὲ διαιρετόν, ἔσται τι τοῦ Γ πρότερον, εἰς ὃ μεταβέβληκεν, κάκεινου πάλιν ἄλλο, καὶ ἀεὶ οὕτως διὰ τὸ μηδέποτε ὑπολείπειν τὴν διαίρεσιν. ὥστ' οὐκ ἔσται πρῶτον εἰς ὃ μεταβέβληκεν. ὁμοίως δὲ καὶ ἐπὶ τῆς τοῦ ποσοῦ μεταβολῆς· καὶ γὰρ αὕτη ἐν συνεχεῖ ἐστιν. φανερόν οὖν ὅτι ἐν μόνῃ τῶν κινήσεων τῇ κατὰ τὸ ποιὸν ἐνδέχεται ἀδιαίρετον καθ' αὐτὸ εἶναι.

## Κεφάλαιο 6

Ἐπεὶ δὲ τὸ μεταβάλλον ἅπαν ἐν χρόνῳ μεταβάλλει, λέγεται δ' ἐν χρόνῳ μεταβάλλειν καὶ ὡς ἐν πρώτῳ καὶ ὡς καθ' ἕτερον, οἷον ἐν τῷ ἐνιαυτῷ ὅτι ἐν τῇ ἡμέρᾳ μεταβάλλει, ἐν ὃ πρώτῳ χρόνῳ μεταβάλλει τὸ μεταβάλλον, ἐν ὁπωοῦν ἀνάγκη τούτου μεταβάλλειν. δῆλον μὲν οὖν καὶ ἐκ τοῦ ὀρισμοῦ (τὸ γὰρ πρῶτον οὕτως ἐλέγομεν), οὐ μὴν ἀλλὰ καὶ ἐκ τῶνδε φανερόν. ἔστω γὰρ ἐν ὃ πρώτῳ κινεῖται τὸ κινούμενον ἐφ' ὃ ΧΡ, καὶ διηρήσθω κατὰ τὸ Κ· πᾶς γὰρ χρόνος διαιρετός. ἐν δὲ τῷ ΧΚ χρόνῳ ἦτοι κινεῖται ἢ οὐ κινεῖται, καὶ πάλιν ἐν τῷ ΚΡ ὡσαύτως. εἰ μὲν οὖν ἐν μηδετέρῳ κινεῖται, ἡρεμοίῃ ἂν ἐν τῷ παντί (κινεῖσθαι γὰρ ἐν μηθενὶ τῶν τούτου κινούμενον ἀδύνατον)· εἰ δ' ἐν θατέρῳ μόνῳ κινεῖται, οὐκ ἂν ἐν πρώτῳ κινεῖτο τῷ ΧΡ· καθ' ἕτερον γὰρ ἢ κίνησις. ἀνάγκη ἄρα ἐν ὁπωοῦν τοῦ ΧΡ κινεῖσθαι.

δεδειγμένου δὲ τούτου φανερόν ὅτι πᾶν τὸ κινούμενον ἀνάγκη κεκινήσθαι πρότερον. εἰ γὰρ ἐν τῷ ΧΡ πρώτῳ χρόνῳ τὸ ΚΛ κεκίνηται μέγεθος, ἐν τῷ ἡμίσει τὸ ὁμοταχῶς κινούμενον καὶ ἅμα ἀρξάμενον τὸ ἡμισυ ἔσται κεκινημένον. εἰ δὲ τὸ (237a.) ὁμοταχὲς ἐν τῷ αὐτῷ χρόνῳ κεκίνηταί τι, καὶ θάτερον ἀνάγκη ταῦτὸ κεκινήσθαι μέγεθος, ὥστε κεκινημένον ἔσται τὸ κινούμενον.

ἔτι δὲ εἰ ἐν τῷ παντὶ χρόνῳ τῷ ΧΡ κεκινήσθαι λέγομεν, ἢ ὅλως ἐν ὁπωοῦν χρόνῳ, τῷ λαβεῖν τὸ ἔσχατον αὐτοῦ νῦν (τοῦτο γὰρ ἐστὶ τὸ ὀρίζον, καὶ τὸ μεταξὺ τῶν νῦν χρόνος), κἂν ἐν τοῖς ἄλλοις ὁμοίως λέγοιτο κεκινήσθαι. τοῦ δ' ἡμίσεος ἔσχατον ἢ διαίρεσις. ὥστε καὶ ἐν τῷ ἡμίσει κεκινημένον ἔσται καὶ ὅλως ἐν ὁπωοῦν τῶν μερῶν· ἀεὶ γὰρ ἅμα τῇ τομῇ χρόνος ἔστιν ὠρισμένος ὑπὸ τῶν νῦν. εἰ οὖν ἅπας μὲν χρόνος διαιρετός, τὸ δὲ μεταξὺ τῶν νῦν χρό

νος, ἅπαν τὸ μεταβάλλον ἄπειρα ἔσται μεταβεβληκός.

ἔτι δ' εἰ τὸ συνεχῶς μεταβάλλον καὶ μὴ φθαρὲν μηδὲ πεπαυμένον τῆς μεταβολῆς ἢ μεταβάλλειν ἢ μεταβεβληκέναι ἀναγκαῖον ἐν ὅτῳ, ἐν δὲ τῷ νῦν οὐκ ἔστιν μεταβάλλειν, ἀνάγκη μεταβεβληκέναι καθ' ἕκαστον τῶν νῦν· ὥστ' εἰ τὰ νῦν ἄπειρα, πᾶν τὸ μεταβάλλον ἄπειρα ἔσται μεταβεβληκός.

οὐ μόνον δὲ τὸ μεταβάλλον ἀνάγκη μεταβεβληκέναι, ἀλλὰ καὶ τὸ μεταβεβληκὸς ἀνάγκη μεταβάλλειν πρότερον· ἅπαν γὰρ τὸ ἐκ τινος εἰς τι μεταβεβληκὸς ἐν χρόνῳ μεταβέβληκεν. ἔστω γὰρ ἐν τῷ νῦν ἐκ τοῦ Α εἰς τὸ Β μεταβεβληκός. οὐκοῦν ἐν μὲν τῷ αὐτῷ νῦν ἐν ᾧ ἔστιν ἐν τῷ Α, οὐ μεταβέβληκεν (ἅμα γὰρ ἂν εἶη ἐν τῷ Α καὶ ἐν τῷ Β)· τὸ γὰρ μεταβεβληκός, ὅτε μεταβέβληκεν, ὅτι οὐκ ἔστιν ἐν τούτῳ, δέδεικται πρότερον· εἰ δ' ἐν ἄλλῳ, μεταξὺ ἔσται χρόνος· οὐ γὰρ ἦν ἐχόμενα τὰ νῦν. ἐπεὶ οὖν ἐν χρόνῳ μεταβέβληκεν, χρόνος δ' ἅπας διαιρετός, ἐν τῷ ἡμίσει ἄλλο ἔσται μεταβεβληκός, καὶ πάλιν ἐν τῷ ἐκείνου ἡμίσει ἄλλο, καὶ αἰεὶ οὕτως· ὥστε μεταβάλλοι ἂν πρότερον.

ἔτι δ' ἐπὶ τοῦ μεγέθους φανερώτερον τὸ λεχθὲν διὰ τὸ συνεχὲς εἶναι τὸ μέγεθος ἐν ᾧ μεταβάλλει τὸ μεταβάλλον. ἔστω γὰρ τι μεταβεβληκὸς ἐκ τοῦ Γ εἰς τὸ Δ. οὐκοῦν εἰ μὲν ἀδιαίρετόν ἐστι τὸ ΓΔ, ἄμερès ἀμεροῦς ἔσται ἐχόμενον· ἐπεὶ δὲ τοῦτο ἀδύνατον, ἀνάγκη μέγεθος εἶναι τὸ μεταξὺ καὶ εἰς ἄπειρα διαιρετόν· ὥστ' εἰς ἐκείνα μεταβάλλει πρότερον. ἀνάγκη ἄρα πᾶν τὸ μεταβεβληκὸς μεταβάλλειν πρότερον. ἢ γὰρ αὐτὴ ἀπόδειξις (237b.) καὶ ἐν τοῖς μὴ συνεχέσιν, οἷον ἔν τε τοῖς ἐναντίοις καὶ ἐν ἀντιφάσει· ληψόμεθα γὰρ τὸν χρόνον ἐν ᾧ μεταβέβληκεν, καὶ πάλιν ταῦτά ἐροῦμεν. ὥστε ἀνάγκη τὸ μεταβεβληκὸς μεταβάλλειν καὶ τὸ μεταβάλλον μεταβεβληκέναι, καὶ ἔσται τοῦ μὲν μεταβάλλειν τὸ μεταβεβληκέναι πρότερον, τοῦ δὲ μεταβεβληκέναι τὸ μεταβάλλειν, καὶ οὐδέποτε ληφθήσεται τὸ πρῶτον. αἴτιον δὲ τούτου τὸ μὴ εἶναι ἀμερès ἀμεροῦς ἐχόμενον· ἄπειρος γὰρ ἡ διαίρεσις, καθάπερ ἐπὶ τῶν ἀύξανων καὶ καθαιρουμένων γραμμῶν.

φανερόν οὖν ὅτι καὶ τὸ γεγονὸς ἀνάγκη γίγνεσθαι πρότερον καὶ τὸ γιγνόμενον γεγονέναι, ὅσα διαιρετὰ καὶ συνεχῆ, οὐ μέντοι αἰεὶ ὃ γίγνεται, ἀλλ' ἄλλο ἐνίοτε, οἷον τῶν ἐκείνου τι, ὥσπερ τῆς οἰκίας τὸν θεμέλιον. ὁμοίως δὲ καὶ ἐπὶ τοῦ φθειρομένου καὶ ἐφθαρμένου· εὐθὺς γὰρ ἐνυπάρχει τῷ γιγνομένῳ καὶ τῷ φθειρομένῳ ἄπειρόν τι συνεχεῖ γε ὄντι, καὶ οὐκ ἔστιν οὔτε γίγνεσθαι μὴ γεγονὸς τι οὔτε γεγονέναι μὴ γιγνόμενόν τι, ὁμοίως δὲ καὶ ἐπὶ τοῦ φθείρεσθαι καὶ ἐπὶ τοῦ ἐφθάρθαι· αἰεὶ γὰρ ἔσται τοῦ μὲν φθείρεσθαι τὸ

ἐφθάρθαι πρότερον, τοῦ δ' ἐφθάρθαι τὸ φθείρεσθαι. φανερόν οὖν ὅτι καὶ τὸ γεγονὸς ἀνάγκη γίνεσθαι πρότερον καὶ τὸ γιγνόμενον γεγονέναι· πᾶν γὰρ μέγεθος καὶ πᾶς χρόνος ἀεὶ διαιρετά.

ὥστ' ἐν ᾧ ἂν ᾗ, οὐκ ἂν εἴη ὡς πρώτῳ.

## Κεφάλαιο 7

Ἐπεὶ δὲ πᾶν τὸ κινούμενον ἐν χρόνῳ κινεῖται, καὶ ἐν τῷ πλείονι μεῖζον μέγεθος, ἐν τῷ ἀπείρῳ χρόνῳ ἀδύνατόν ἐστιν πεπερασμένην κινεῖσθαι, μὴ τὴν αὐτὴν αἰεὶ καὶ τῶν ἐκείνης τι κινούμενον, ἀλλ' ἐν ἅπαντι ἅπασαν. ὅτι μὲν οὖν εἴ τι ἰσοταχῶς κινοῖτο, ἀνάγκη τὸ πεπερασμένον ἐν πεπερασμένῳ κινεῖσθαι, δῆλον (ληφθέντος γὰρ μορίου ὃ καταμετρήσει τὴν ὅλην, ἐν ἴσοις χρόνοις τοσούτοις ὅσα τὰ μόριά ἐστιν, τὴν ὅλην κεκίνηται, ὥστ' ἐπεὶ ταῦτα πεπέρανται καὶ τῷ πόσον ἕκαστον καὶ τῷ ποσάκις ἅπαντα, καὶ ὁ χρόνος ἂν εἴη πεπερασμένος· τοσαυτάκις γὰρ ἔσται τοσοῦτος, ὅσος ὁ τοῦ μορίου χρόνος πολλαπλασιασθεὶς τῷ πλήθει τῶν μορίων).

ἀλλὰ δὴ καὶ μὴ ἰσοταχῶς, διαφέρει οὐθέν. ἔστω γὰρ ἐφ' ἧς τὸ AB διάστημα πεπερασμένον, ὃ κεκίνηται (238a.) ἐν τῷ ἀπείρῳ, καὶ ὁ χρόνος ἄπειρος ἐφ' οὗ τὸ ΓΔ. εἰ δὴ ἀνάγκη πρότερον ἕτερον ἑτέρου κεκινήσθαι (τοῦτο δὲ δῆλον, ὅτι τοῦ χρόνου ἐν τῷ προτέρῳ καὶ ὑστέρῳ ἕτερον κεκίνηται· ἀεὶ γὰρ ἐν τῷ πλείονι ἕτερον ἔσται κεκινημένον, ἐάν τε ἰσοταχῶς ἐάν τε μὴ ἰσοταχῶς μεταβάλλῃ, καὶ ἐάν τε ἐπιτείνῃ ἢ κίνησις ἐάν τε ἀνιῇ ἐάν τε μένῃ, οὐθὲν ἥττον), εἰλήφθω δὴ τι τοῦ AB διαστήματος, τὸ AE, ὃ καταμετρήσει τὴν AB. τοῦτο δὴ τοῦ ἀπείρου ἐν τινι ἐγένετο χρόνῳ· ἐν ἀπείρῳ γὰρ οὐχ οἶόν τε· τὸ γὰρ ἅπαν ἐν ἀπείρῳ. καὶ πάλιν ἕτερον δὴ ἐάν λάβω ὅσον τὸ AE, ἀνάγκη ἐν πεπερασμένῳ χρόνῳ· τὸ γὰρ ἅπαν ἐν ἀπείρῳ. καὶ οὕτω δὴ λαμβάνων, ἐπειδὴ τοῦ μὲν ἀπείρου οὐθὲν ἔστι μόριον ὃ καταμετρήσει (ἀδύνατον γὰρ τὸ ἄπειρον εἶναι ἐκ πεπερασμένων καὶ ἴσων καὶ ἀνίσων, διὰ τὸ καταμετρηθῆσεσθαι τὰ πεπερασμένα πλήθει καὶ μεγέθει ὑπὸ τινος ἑνός, ἐάν τε ἴσα ἢ ἐάν τε ἄνισα, ὠρισμένα δὲ τῷ μεγέθει, οὐθὲν ἥττον), τὸ δὲ διάστημα τὸ πεπερασμένον ποσοῖς τοῖς AE μετρεῖται, ἐν πεπερασμένῳ ἂν χρόνῳ τὸ AB κινοῖτο (ὡσαύτως δὲ καὶ ἐπὶ ἡρεμῆσεως). ὥστε οὐτε γίνεσθαι οὐτε φθείρεσθαι οἶόν τε αἰεὶ τι τὸ αὐτὸ καὶ ἔν. ὁ αὐτὸς δὲ λόγος καὶ ὅτι οὐδ' ἐν πεπερασμένῳ χρόνῳ ἄπειρον οἶόν τε κινεῖσθαι οὐδ' ἡρεμίζεσθαι, οὐθ' ὁμαλῶς κινούμενον οὐτ' ἀνωμάλως. ληφθέντος γὰρ τινος μέρους ὃ ἀναμετρήσει τὸν ὅλον χρόνον, ἐν τούτῳ πόσον τι διέξεισιν τοῦ μεγέθους καὶ οὐχ ὅλον (ἐν γὰρ τῷ παντὶ τὸ ὅλον), καὶ πάλιν ἐν τῷ ἴσῳ ἄλλο, καὶ ἐν



ἐκάστω ὁμοίως, εἴτε ἴσον εἴτε ἄνισον τῷ ἐξ ἀρχῆς· διαφέρει γὰρ οὐδέν, εἰ μόνον πεπερασμένον ἕκαστον· δῆλον γὰρ ὡς ἀναιρουμένου τοῦ χρόνου τὸ ἄπειρον οὐκ ἀναιρεθήσεται, πεπερασμένης τῆς ἀφαιρέσεως γιγνομένης καὶ τῷ ποσῷ καὶ τῷ ποσάκις· ὥστ' οὐ δίδεισιν ἐν πεπερασμένῳ χρόνῳ τὸ ἄπειρον. οὐδέν τε διαφέρει τὸ μέγεθος ἐπὶ θάτερα ἢ ἐπ' ἀμφοτέρω εἶναι ἄπειρον· ὁ γὰρ αὐτὸς ἔσται λόγος.

ἀποδεδειγμένων δὲ τούτων φανερόν ὅτι οὐδὲ τὸ πεπερασμένον μέγεθος τὸ ἄπειρον ἐνδέχεται διελθεῖν ἐν πεπερασμένῳ διὰ τὴν αὐτὴν αἰτίαν· ἐν γὰρ τῷ μορίῳ τοῦ χρόνου πεπερασμένον δίδεισι, καὶ ἐν ἐκάστω ὡσαύτως, ὥστ' ἐν τῷ παντὶ πεπερασμένον.

ἐπεὶ δὲ τὸ πεπερασμένον οὐ δίδεισι τὸ ἄπειρον (238b.) ἐν πεπερασμένῳ χρόνῳ, δῆλον ὡς οὐδὲ τὸ ἄπειρον τὸ πεπερασμένον· εἰ γὰρ τὸ ἄπειρον τὸ πεπερασμένον, ἀνάγκη καὶ τὸ πεπερασμένον διέναι τὸ ἄπειρον. οὐδὲν γὰρ διαφέρει ὅποτερονοῦν εἶναι τὸ κινούμενον· ἀμφοτέρως γὰρ τὸ πεπερασμένον δίδεισι τὸ ἄπειρον. ὅταν γὰρ κινῆται τὸ ἄπειρον ἐφ' ὧ τὸ Α, ἔσται τι αὐτοῦ κατὰ τὸ Β τὸ πεπερασμένον, οἷον τὸ ΓΔ, καὶ πάλιν ἄλλο καὶ ἄλλο, καὶ αἰεὶ οὕτως. ὥσθ' ἅμα συμβήσεται τὸ ἄπειρον κεκινῆσθαι τὸ πεπερασμένον καὶ τὸ πεπερασμένον διεληλυθέναι τὸ ἄπειρον· οὐδὲ γὰρ ἴσως δυνατόν ἄλλως τὸ ἄπειρον κινηθῆναι τὸ πεπερασμένον ἢ τῷ τὸ πεπερασμένον διέναι τὸ ἄπειρον, ἢ φερόμενον ἢ ἀναμετροῦν. ὥστ' ἐπεὶ τοῦτ' ἀδύνατον, οὐκ ἂν δίοι τὸ ἄπειρον τὸ πεπερασμένον. ἀλλὰ μὴν οὐδὲ τὸ ἄπειρον ἐν πεπερασμένῳ χρόνῳ τὸ ἄπειρον· δίδεισιν· εἰ γὰρ τὸ ἄπειρον, καὶ τὸ πεπερασμένον· ἐνυπάρχει γὰρ τῷ ἀπείρῳ τὸ πεπερασμένον. ἔτι δὲ καὶ τοῦ χρόνου ληφθέντος ἢ αὐτὴ ἔσται ἀπόδειξις. ἐπεὶ δ' οὔτε τὸ πεπερασμένον τὸ ἄπειρον οὔτε τὸ ἄπειρον τὸ πεπερασμένον οὔτε τὸ ἄπειρον τὸ ἄπειρον ἐν πεπερασμένῳ χρόνῳ κινεῖται, φανερόν ὅτι οὐδὲ κίνησις ἔσται ἄπειρος ἐν πεπερασμένῳ χρόνῳ· τί γὰρ διαφέρει τὴν κίνησιν ἢ τὸ μέγεθος ποιεῖν ἄπειρον; ἀνάγκη γάρ, εἰ ὅποτερονοῦν, καὶ θάτερον εἶναι ἄπειρον· πᾶσα γὰρ φορὰ ἐν τόπῳ.

## Κεφάλαιο 8

Ἐπεὶ δὲ πᾶν ἢ κινεῖται ἢ ἡρεμεῖ τὸ πεφυκὸς ὅτε πέφυκε καὶ οὗ καὶ ὥς, ἀνάγκη τὸ ἰστάμενον ὅτε ἴσταται κινεῖσθαι· εἰ γὰρ μὴ κινεῖται, ἡρεμήσει, ἀλλ' οὐκ ἐνδέχεται ἡρεμίζεσθαι τὸ ἡρεμοῦν. τούτου δ' ἀποδεδειγμένου φανερόν ὅτι καὶ ἐν χρόνῳ ἴστασθαι ἀνάγκη (τὸ γὰρ κινούμενον ἐν χρόνῳ κινεῖται, τὸ δ' ἰστάμενον δέδεικται κινούμενον, ὥστε ἀνάγκη ἐν χρόνῳ ἴστασθαι).

ἔτι δ' εἰ τὸ μὲν θᾶπτον καὶ βραδύτερον ἐν χρόνῳ λέγομεν, ἴστασθαι δ' ἔστιν θᾶπτον καὶ βραδύτερον. ἐν ᾧ δὲ χρόνῳ πρώτῳ τὸ ἰστάμενον ἴσταται, ἐν ὅτῳ οὖν ἀνάγκη τούτου ἴστασθαι. διαιρεθέντος γὰρ τοῦ χρόνου εἰ μὲν ἐν μηδετέρῳ τῶν μερῶν ἴσταται, οὐδ' ἐν τῷ ὅλῳ, ὥστ' οὐκ ἂν ἴσταιτο τὸ ἰστάμενον· εἰ δ' ἐν θατέρῳ, οὐκ ἂν ἐν πρώτῳ τῷ ὅλῳ ἴσταιτο· καθ' ἕτερον γὰρ ἐν τούτῳ ἴσταται, καθάπερ ἐλέχθη καὶ ἐπὶ τοῦ κινουμένου πρότερον. ὥσπερ δὲ τὸ κινούμενον οὐκ ἔστιν (239a.) ἐν ᾧ πρώτῳ κινεῖται, οὕτως οὐδ' ἐν ᾧ ἴσταται τὸ ἰστάμενον· οὔτε γὰρ τοῦ κινεῖσθαι οὔτε τοῦ ἴστασθαι ἐστὶν τι πρῶτον. ἔστω γὰρ ἐν ᾧ πρώτῳ ἴσταται ἐφ' ᾧ τὸ AB. τοῦτο δὴ ἀμερὲς μὲν οὐκ ἐνδέχεται εἶναι (κίνησις γὰρ οὐκ ἔστιν ἐν τῷ ἀμερεῖ διὰ τὸ κεκινήσθαι τι ἂν αὐτοῦ, τὸ δ' ἰστάμενον δέδεικται κινούμενον)· ἀλλὰ μὴν εἰ διαιρετόν ἐστιν, ἐν ὅτῳ οὖν αὐτοῦ τῶν μερῶν ἴσταται· τοῦτο γὰρ δέδεικται πρότερον, ὅτι ἐν ᾧ πρώτῳ ἴσταται, ἐν ὅτῳ οὖν τῶν ἐκείνου ἴσταται. ἐπεὶ οὖν χρόνος ἐστὶν ἐν ᾧ πρώτῳ ἴσταται, καὶ οὐκ ἄτομον, ἅπας δὲ χρόνος εἰς ἄπειρα μεριστός, οὐκ ἔσται ἐν ᾧ πρώτῳ ἴσταται.

οὐδὲ δὴ τὸ ἡρεμοῦν ὅτε πρῶτον ἡρέμησεν ἔστιν. ἐν ἀμερεῖ μὲν γὰρ οὐκ ἡρέμησεν διὰ τὸ μὴ εἶναι κίνησιν ἐν ἀτόμῳ, ἐν ᾧ δὲ τὸ ἡρεμεῖν, καὶ τὸ κινεῖσθαι (τότε γὰρ ἔφαμεν ἡρεμεῖν, ὅτε καὶ ἐν ᾧ πεφυκὸς κινεῖσθαι μὴ κινεῖται τὸ πεφυκός)· ἔτι δὲ καὶ τότε λέγομεν ἡρεμεῖν, ὅταν ὁμοίως ἔχη νῦν καὶ πρότερον, ὡς οὐχ ἐνί τινι κρίνοντες ἀλλὰ δυοῖν τοῖν ἐλαχίστοις· ὥστ' οὐκ ἔσται ἐν ᾧ ἡρεμεῖ ἀμερὲς. εἰ δὲ μεριστόν, χρόνος ἂν εἴη, καὶ ἐν ὅτῳ οὖν αὐτοῦ τῶν μερῶν ἡρεμήσει. τὸν αὐτὸν γὰρ τρόπον δειχθήσεται ὅν καὶ ἐπὶ τῶν πρότερον·

ὥστ' οὐθὲν ἔσται πρῶτον. τούτου δ' αἴτιον ὅτι ἡρεμεῖ μὲν καὶ κινεῖται πᾶν ἐν χρόνῳ, χρόνος δ' οὐκ ἔστι πρῶτος οὐδὲ μέγεθος οὐδ' ὅλως συνεχὲς οὐδέν· ἅπαν γὰρ εἰς ἄπειρα μεριστόν.

ἐπεὶ δὲ πᾶν τὸ κινούμενον ἐν χρόνῳ κινεῖται καὶ ἕκ τινος εἰς τι μεταβάλλει, ἐν ᾧ χρόνῳ κινεῖται καθ' αὐτὸν καὶ μὴ τῷ ἐν ἐκείνου τινί, ἀδύνατον τότε κατὰ τι εἶναι πρῶτον τὸ κινούμενον. τὸ γὰρ ἡρεμεῖν ἐστὶν τὸ ἐν τῷ αὐτῷ εἶναι χρόνον τινὰ καὶ αὐτὸ καὶ τῶν μερῶν ἕκαστον. οὕτως γὰρ λέγομεν ἡρεμεῖν, ὅταν ἐν ἄλλῳ καὶ ἄλλῳ τῶν νῦν ἀληθὲς ἢ εἰπεῖν ὅτι ἐν τῷ αὐτῷ καὶ αὐτὸ καὶ τὰ μέρη. εἰ δὲ τοῦτ' ἔστι τὸ ἡρεμεῖν, οὐκ ἐνδέχεται τὸ μεταβάλλον κατὰ τι εἶναι ὅλον κατὰ τὸν πρῶτον χρόνον· ὁ γὰρ χρόνος διαιρετὸς ἅπας, ὥστε ἐν ἄλλῳ καὶ ἄλλῳ αὐτοῦ μέρει ἀληθὲς ἔσται εἰπεῖν ὅτι ἐν ταύτῳ ἐστὶν καὶ αὐτὸ καὶ τὰ μέρη. εἰ γὰρ μὴ οὕτως ἄλλ' ἐν ἐνὶ μόνῳ τῶν νῦν, οὐκ ἔσται χρόνον οὐδένα κατὰ τι, ἀλλὰ κατὰ τὸ πέρας τοῦ χρόνου.

ἐν δὲ τῷ νῦν ἔστιν μὲν αἰεὶ κατὰ τι μὲν (239b.) ὄν, οὐ μέντοι ἡρεμεῖ· οὔτε γὰρ κινεῖσθαι οὔτ' ἡρεμεῖν ἔστιν ἐν τῷ νῦν, ἀλλὰ μὴ κινεῖσθαι μὲν ἀληθὲς ἐν τῷ νῦν καὶ εἶναι κατὰ τι, ἐν χρόνῳ δ' οὐκ ἐνδέχεται εἶναι κατὰ τι ἡρεμοῦν· συμβαίνει γὰρ τὸ φερόμενον ἡρεμεῖν.

## Κεφάλαιο 9

Ζήνων δὲ παραλογίζεται· εἰ γὰρ αἰεὶ, φησίν, ἡρεμεῖ πᾶν [ἢ κινεῖται] ὅταν ἢ κατὰ τὸ ἴσον, ἔστιν δ' αἰεὶ τὸ φερόμενον ἐν τῷ νῦν, ἀκίνητον τὴν φερομένην εἶναι ὁῖστόν. τοῦτο δ' ἐστὶ ψεῦδος· οὐ γὰρ σύγκειται ὁ χρόνος ἐκ τῶν νῦν τῶν ἀδιαιρέτων, ὥσπερ οὐδ' ἄλλο μέγεθος οὐδέν.

τέτταρες δ' εἰσὶν οἱ λόγοι περὶ κινήσεως Ζήνωνος οἱ παρέχοντες τὰς δυσκολίας τοῖς λύουσιν, πρῶτος μὲν ὁ περὶ τοῦ μὴ κινεῖσθαι διὰ τὸ πρότερον εἰς τὸ ἥμισυ δεῖν ἀφικέσθαι τὸ φερόμενον ἢ πρὸς τὸ τέλος, περὶ οὗ διείλομεν ἐν τοῖς πρότερον λόγοις.

δεύτερος δ' ὁ καλούμενος Ἀχιλλεύς· ἔστι δ' οὗτος, ὅτι τὸ βραδύτατον οὐδέποτε καταληφθήσεται θεόν ὑπὸ τοῦ ταχίστου· ἔμπροσθεν γὰρ ἀναγκαῖον ἐλθεῖν τὸ διώκον ὅθεν ὥρμησεν τὸ φεῦγον, ὥστε αἰεὶ τι προέχειν ἀναγκαῖον τὸ βραδύτερον. ἔστιν δὲ καὶ οὗτος ὁ αὐτὸς λόγος τῷ διχοτομεῖν, διαφέρει δ' ἐν τῷ διαιρεῖν μὴ δίχα τὸ προσλαμβανόμενον μέγεθος. τὸ μὲν οὖν μὴ καταλαμβάνεσθαι τὸ βραδύτερον συμβέβηκεν ἐκ τοῦ λόγου, γίγνεται δὲ παρὰ ταῦτο τῇ διχοτομίᾳ (ἐν ἀμφοτέροις γὰρ συμβαίνει μὴ ἀφικνεῖσθαι πρὸς τὸ πέρας διαιρουμένου πῶς τοῦ μεγέθους· ἀλλὰ πρόσκειται ἐν τούτῳ ὅτι οὐδὲ τὸ τάχιστον τετραγωδημένον ἐν τῷ διώκειν τὸ βραδύτατον), ὥστ' ἀνάγκη καὶ τὴν λύσιν εἶναι τὴν αὐτήν. τὸ δ' ἄξιόν ἐστι τὸ προέχον οὐ καταλαμβάνεται, ψεῦδος· ὅτε γὰρ προέχει, οὐ καταλαμβάνεται· ἀλλ' ὅμως καταλαμβάνεται, εἴπερ δώσει διεξιέναι τὴν πεπερασμένην. οὗτοι μὲν οὖν οἱ δύο λόγοι,

τρίτος δ' ὁ νῦν ῥηθείς, ὅτι ἢ ὁῖστός φερομένη ἔστηκεν. συμβαίνει δὲ παρὰ τὸ λαμβάνειν τὸν χρόνον συγκεῖσθαι ἐκ τῶν νῦν· μὴ διδομένου γὰρ τούτου οὐκ ἔσται ὁ συλλογισμός.

τέταρτος δ' ὁ περὶ τῶν ἐν τῷ σταδίῳ κινουμένων ἐξ ἐναντίας ἴσων ὄγκων παρ' ἴσους, τῶν μὲν ἀπὸ τέλους τοῦ σταδίου τῶν δ' ἀπὸ μέσου, ἴσῳ τάχει, ἐν ᾧ συμβαίνειν (240a.) οἴεται ἴσον εἶναι χρόνον τῷ διπλασίῳ τὸν ἥμισυν. ἔστι δ' ὁ παραλογισμὸς ἐν τῷ τὸ μὲν παρὰ κινούμενον τὸ δὲ παρ' ἡρεμοῦν τὸ ἴσον μέγεθος ἀξιοῦν τῷ ἴσῳ τάχει τὸν ἴσον φέρεσθαι χρόνον· τοῦτο δ' ἐστὶ

ψεῦδος. οἷον ἔστωσαν οἱ ἐστῶτες ἴσοι ὄγκοι ἐφ' ὧν τὰ ΑΑ, οἱ δ' ἐφ' ὧν τὰ ΒΒ ἀρχόμενοι ἀπὸ τοῦ μέσου, ἴσοι τὸν ἀριθμὸν τούτοις ὄντες καὶ τὸ μέγεθος, οἱ δ' ἐφ' ὧν τὰ ΓΓ ἀπὸ τοῦ ἐσχάτου, ἴσοι τὸν ἀριθμὸν ὄντες τούτοις καὶ τὸ μέγεθος, καὶ ἰσοταχεῖς τοῖς Β. συμβαίνει δὴ τὸ πρῶτον Β ἅμα ἐπὶ τῷ ἐσχάτῳ εἶναι καὶ τὸ πρῶτον Γ, παρ' ἄλληλα κινουμένων.

συμβαίνει δὲ τὸ Γ παρὰ πάντα [τὰ Β] διεξεληλυθέναι, τὸ δὲ Β παρὰ τὰ ἡμίση· ὥστε ἡμισυν εἶναι τὸν χρόνον· ἴσον γὰρ ἐκάτερόν ἐστιν παρ' ἑκάστον. ἅμα δὲ συμβαίνει τὸ πρῶτον Β παρὰ πάντα τὰ Γ παρεληλυθέναι· ἅμα γὰρ ἔσται τὸ πρῶτον Γ καὶ τὸ πρῶτον Β ἐπὶ τοῖς ἐναντίοις ἐσχάτοις, [ἴσον χρόνον παρ' ἑκάστον γιγνόμενον τῶν Β ὅσον περ τῶν Α, ὡς φησιν,] διὰ τὸ ἀμφοτέρω ἴσον χρόνον παρὰ τὰ Α γίνεσθαι. ὁ μὲν οὖν λόγος οὕτως ἐστίν, συμβαίνει δὲ παρὰ τὸ εἰρημένον ψεῦδος.

οὐδὲ δὴ κατὰ τὴν ἐν τῇ ἀντιφάσει μεταβολὴν οὐθὲν ἡμῖν ἔσται ἀδύνατον, οἷον εἰ ἐκ τοῦ μὴ λευκοῦ εἰς τὸ λευκὸν μεταβάλλει καὶ ἐν μηδετέρῳ ἐστίν, ὡς ἄρα οὔτε λευκὸν ἔσται οὔτε οὐ λευκόν· οὐ γὰρ εἰ μὴ ὅλον ἐν ὁποτέρῳ ἐστίν, οὐ λεχθήσεται λευκὸν ἢ οὐ λευκόν· λευκὸν γὰρ λέγομεν ἢ οὐ λευκὸν οὐ τῷ ὅλον εἶναι τοιοῦτον, ἀλλὰ τῷ τὰ πλεῖστα ἢ τὰ κυριώτατα μέρη· οὐ ταῦτ' οὖν δ' ἐστὶν μὴ εἶναι τε ἐν τούτῳ καὶ μὴ εἶναι ἐν τούτῳ ὅλον. ὁμοίως δὲ καὶ ἐπὶ τοῦ ὄντος καὶ ἐπὶ τοῦ μὴ ὄντος καὶ τῶν ἄλλων τῶν κατ' ἀντιφασιν· ἔσται μὲν γὰρ ἐξ ἀνάγκης ἐν θατέρῳ τῶν ἀντικειμένων, ἐν οὐδετέρῳ δ' ὅλον αἰεὶ.

πάλιν δ' ἐπὶ τοῦ κύκλου καὶ ἐπὶ τῆς σφαίρας καὶ ὅλως τῶν ἐν αὐτοῖς κινουμένων, ὅτι συμβήσεται αὐτὰ ἡρεμεῖν· ἐν γὰρ τῷ αὐτῷ τόπῳ χρόνον τινὰ ἔσται καὶ αὐτὰ καὶ τὰ μέρη, ὥστε ἡρεμήσει ἅμα καὶ κινήσεται. πρῶτον μὲν γὰρ τὰ μέρη οὐκ ἔστιν ἐν τῷ αὐτῷ οὐθένᾳ χρόνῳ (240b.) νον, εἴτα καὶ τὸ ὅλον μεταβάλλει αἰεὶ εἰς ἕτερον· οὐ γὰρ ἡ αὐτὴ ἐστὶν ἢ ἀπὸ τοῦ Α λαμβανομένη περιφέρεια καὶ ἢ ἀπὸ τοῦ Β καὶ τοῦ Γ καὶ τῶν ἄλλων ἐκάστου σημείων, πλὴν ὡς ὁ μουσικὸς ἄνθρωπος καὶ ἄνθρωπος, ὅτι συμβέβηκεν. ὥστε μεταβάλλει αἰεὶ ἢ ἑτέρα εἰς τὴν ἑτέραν, καὶ οὐδέποτε ἡρεμήσει. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῆς σφαίρας καὶ ἐπὶ τῶν ἄλλων τῶν ἐν αὐτοῖς κινουμένων.

## Κεφάλαιο 10

Ἀποδεδειγμένων δὲ τούτων λέγομεν ὅτι τὸ ἀμερὲς οὐκ ἐνδέχεται κινεῖσθαι πλὴν κατὰ συμβεβηκός, οἷον κινουμένου τοῦ σώματος ἢ τοῦ μεγέθους τῷ ἐνυπάρχειν, καθάπερ ἂν εἰ τὸ ἐν τῷ πλοίῳ κινοῖτο ὑπὸ τῆς τοῦ πλοίου φορᾶς

ἢ τὸ μέρος τῇ τοῦ ὅλου κινήσει. (ἀμερὲς δὲ λέγω τὸ κατὰ ποσὸν ἀδιαίρετον.) καὶ γὰρ αἱ τῶν μερῶν κινήσεις ἕτεραί εἰσι κατ' αὐτά τε τὰ μέρη καὶ κατὰ τὴν τοῦ ὅλου κίνησιν. ἴδοι δ' ἂν τις ἐπὶ τῆς σφαίρας μάλιστα τὴν διαφορὰν· οὐ γὰρ ταύτῃ τὰχος ἐστὶ τῶν τε πρὸς τῷ κέντρῳ καὶ τῶν ἐκτὸς καὶ τῆς ὅλης, ὡς οὐ μιᾶς οὔσης κινήσεως. καθάπερ οὖν εἵπομεν, οὕτω μὲν ἐνδέχεται κινεῖσθαι τὸ ἀμερὲς ὡς ὁ ἐν τῷ πλοίῳ καθήμενος τοῦ πλοίου θεόντος, καθ' αὐτὸ δ' οὐκ ἐνδέχεται. μεταβαλλέτω γὰρ ἐκ τοῦ AB εἰς τὸ BG, εἴτ' ἐκ μεγέθους εἰς μέγεθος εἴτ' ἐξ εἶδους εἰς εἶδος εἴτε κατ' ἀντίφασιν· ὁ δὲ χρόνος ἔστω ἐν ᾧ πρῶτῳ μεταβάλλει ἐφ' οὗ Δ. οὐκοῦν ἀνάγκη αὐτὸ καθ' ὃν μεταβάλλει χρόνον ἢ ἐν τῷ AB εἶναι ἢ ἐν τῷ BG, ἢ τὸ μὲν τι αὐτοῦ ἐν τούτῳ τὸ δ' ἐν θατέρῳ· πᾶν γὰρ τὸ μεταβάλλον οὕτως εἶχεν. ἐν ἑκατέρῳ μὲν οὖν οὐκ ἔσται τι αὐτοῦ· μεριστὸν γὰρ ἂν εἴη. ἀλλὰ μὴν οὐδ' ἐν τῷ BG· μεταβεβληκὸς γὰρ ἔσται, ὑπόκειται δὲ μεταβάλλειν. λείπεται δὲ αὐτὸ ἐν τῷ AB εἶναι, καθ' ὃν μεταβάλλει χρόνον. ἡρεμήσει ἄρα· τὸ γὰρ ἐν τῷ αὐτῷ εἶναι χρόνον τινὰ ἡρεμεῖν ἦν. ὥστ' οὐκ ἐνδέχεται τὸ ἀμερὲς κινεῖσθαι οὐδ' ὅλως μεταβάλλειν· μοναχῶς γὰρ ἂν οὕτως ἦν αὐτοῦ κινήσις, εἰ ὁ χρόνος ἦν ἐκ τῶν νῦν· αἰεὶ γὰρ ἐν τῷ νῦν κεκινημένον ἂν ἦν καὶ μετα(241a.) βεβληκός, ὥστε κινεῖσθαι μὲν μηδέποτε, κεκινῆσθαι δ' αἰεὶ. τοῦτο δ' ὅτι ἀδύνατον, δέδεικται καὶ πρότερον· οὔτε γὰρ ὁ χρόνος ἐκ τῶν νῦν οὔθ' ἡ γραμμὴ ἐκ στιγμῶν οὔθ' ἡ κινήσις ἐκ κινήματων· οὔθεν γὰρ ἄλλο ποιεῖ ὁ τοῦτο λέγων ἢ τὴν κίνησιν ἐξ ἀμερῶν, καθάπερ ἂν εἰ τὸν χρόνον ἐκ τῶν νῦν ἢ τὸ μῆκος ἐκ στιγμῶν.

ἔτι δὲ καὶ ἐκ τῶνδε φανερόν ὅτι οὔτε στιγμὴν οὔτ' ἄλλο ἀδιαίρετον οὔθεν ἐνδέχεται κινεῖσθαι. ἅπαν γὰρ τὸ κινούμενον ἀδύνατον πρότερον μεῖζον κινηθῆναι αὐτοῦ, πρὶν ἢ ἴσον ἢ ἔλαττον. εἰ δὲ τοῦτο, φανερόν ὅτι καὶ ἡ στιγμή ἔλαττον ἢ ἴσον κινηθήσεται πρῶτον. ἐπεὶ δὲ ἀδιαίρετος, ἀδύνατον ἔλαττον κινηθῆναι πρότερον· ἴσην ἄρα αὐτῇ. ὥστε ἔσται ἡ γραμμὴ ἐκ στιγμῶν· αἰεὶ γὰρ ἴσην κινουμένη τὴν πᾶσαν γραμμὴν στιγμή καταμετρήσει. εἰ δὲ τοῦτο ἀδύνατον, καὶ τὸ κινεῖσθαι τὸ ἀδιαίρετον ἀδύνατον.

ἔτι δ' εἰ ἅπαν ἐν χρόνῳ κινεῖται, ἐν δὲ τῷ νῦν μηθέν, ἅπας δὲ χρόνος διαιρετός, εἴη ἂν τις χρόνος ἐλάττων ὅτῳ τῶν κινουμένων ἢ ἐν ᾧ κινεῖται ὅσον αὐτό. οὗτος μὲν γὰρ ἔσται χρόνος ἐν ᾧ κινεῖται διὰ τὸ πᾶν ἐν χρόνῳ κινεῖσθαι, χρόνος δὲ πᾶς διαιρετός δέδεικται πρότερον. εἰ δ' ἄρα στιγμή κινεῖται, ἔσται τις χρόνος ἐλάττων ἢ ἐν ᾧ αὐτὴν ἐκινήθη. ἀλλὰ ἀδύνατον· ἐν γὰρ τῷ ἐλάττονι ἔλαττον ἀνάγκη κινεῖσθαι. ὥστε ἔσται διαιρετὸν τὸ ἀδιαίρετον εἰς τὸ ἔλαττον, ὥσπερ καὶ ὁ χρόνος εἰς τὸν χρόνον. μοναχῶς γὰρ ἂν κινεῖτο τὸ ἀμερὲς καὶ ἀδιαίρετον, εἰ ἦν ἐν τῷ νῦν κινεῖσθαι δυνατόν τῷ ἀτόμῳ· τοῦ γὰρ αὐτοῦ λόγου ἐν τῷ νῦν κινεῖσθαι καὶ ἀδιαίρετόν τι

κινεῖσθαι.

μεταβολὴ δ' οὐκ ἔστιν οὐδεμία ἄπειρος· ἅπαντα γὰρ ἦν ἕκ τινος εἰς τι, καὶ ἡ ἐν ἀντιφάσει καὶ ἡ ἐν ἐναντίοις. ὥστε τῶν μὲν κατ' ἀντίφασιν ἡ φάσις καὶ ἡ ἀπόφασις πέρας (οἷον γενέσεως μὲν τὸ ὄν, φθορᾶς δὲ τὸ μὴ ὄν), τῶν δ' ἐν τοῖς ἐναντίοις τὰ ἐναντία· ταῦτα γὰρ ἄκρα τῆς μεταβολῆς, ὥστε καὶ ἀλλοιώσεως πάσης (ἐξ ἐναντίων γὰρ τινων ἡ ἀλλοίωσις), ὁμοίως δὲ καὶ αὐξήσεως καὶ φθίσεως· αὐξήσεως μὲν γὰρ τὸ πέρας τοῦ (241b.) κατὰ τὴν οἰκείαν φύσιν τελείου μεγέθους, φθίσεως δὲ ἡ τούτου ἔκστασις. ἡ δὲ φορὰ οὕτω μὲν οὐκ ἔσται πεπερασμένη· οὐ γὰρ πᾶσα ἐν ἐναντίοις· ἀλλ' ἐπειδὴ τὸ ἀδύνατον τμηθῆναι οὕτω, τῷ μὴ ἐνδέχεσθαι τμηθῆναι (πλεοναχῶς γὰρ λέγεται τὸ ἀδύνατον), οὐκ ἐνδέχεται τὸ οὕτως ἀδύνατον τέμνεσθαι, οὐδὲ ὅλως τὸ ἀδύνατον γενέσθαι γίνεσθαι, οὐδὲ τὸ μεταβαλεῖν ἀδύνατον ἐνδέχοιτ' ἂν μεταβάλλειν εἰς τὸ ἀδύνατον μεταβαλεῖν. εἰ οὖν τὸ φερόμενον μεταβάλλοι εἰς τι, καὶ δυνατὸν ἔσται μεταβαλεῖν.

ὥστ' οὐκ ἄπειρος ἡ κίνησις, οὐδ' οἰσθήσεται τὴν ἄπειρον· ἀδύνατον γὰρ διελθεῖν αὐτήν. ὅτι μὲν οὖν οὕτως οὐκ ἔστιν ἄπειρος μεταβολὴ ὥστε μὴ ὠρίσθαι πέρασι, φανερόν. ἀλλ' εἰ οὕτως ἐνδέχεται ὥστε τῷ χρόνῳ εἶναι ἄπειρον τὴν αὐτὴν οὕσαν καὶ μίαν, σκεπτέον. μὴ μίᾳς μὲν γὰρ γιγνομένης οὐθέν ἴσως κωλύει, οἷον εἰ μετὰ τὴν φορὰν ἀλλοίωσις εἴη καὶ μετὰ τὴν ἀλλοίωσιν αὕξησις καὶ πάλιν γένεσις· οὕτω γὰρ αἰεὶ μὲν ἔσται τῷ χρόνῳ κίνησις, ἀλλ' οὐ μία διὰ τὸ μὴ εἶναι μίαν ἐξ ἀπασῶν. ὥστε δὲ γίνεσθαι μίαν, οὐκ ἐνδέχεται ἄπειρον εἶναι τῷ χρόνῳ πλὴν μίᾳς· αὕτη δ' ἐστὶν ἡ κύκλω φορὰ.

## Βιβλίο 7

### Κεφάλαιο 1

Ἄπαν τὸ κινούμενον ὑπὸ τινος ἀνάγκη κινεῖσθαι· εἰ μὲν γὰρ ἐν ἑαυτῷ μὴ ἔχει τὴν ἀρχὴν τῆς κινήσεως, φανερόν ὅτι ὑφ' ἑτέρου κινεῖται (ἄλλο γὰρ ἔσται τὸ κινοῦν)· εἰ δ' ἐν αὐτῷ, ἔστω [τὸ] εἰλημμένον ἐφ' οὗ τὸ AB ὃ κινεῖται καθ' αὐτό, ἀλλὰ μὴ <τῷ τῶν> τούτου τι κινεῖσθαι. πρῶτον μὲν οὖν τὸ ὑπολαμβάνειν τὸ AB ὑφ' ἑαυτοῦ κινεῖσθαι διὰ τὸ ὅλον τε κινεῖσθαι καὶ ὑπ' οὐδενὸς τῶν ἕξωθεν ὁμοιόν ἐστιν ὥσπερ εἰ τοῦ ΚΛ κινοῦντος τὸ ΛΜ καὶ αὐτοῦ κινουμένου εἰ μὴ φάσκοι τις τὸ ΚΜ κινεῖσθαι ὑπὸ τινος, διὰ τὸ μὴ φανερόν εἶναι πότερον τὸ κινοῦν καὶ πότερον τὸ κινούμενον· εἴτα τὸ μὴ ὑπὸ τινος κινούμενον (242a.) οὐκ ἀνάγκη παύσασθαι κινούμενον τῷ ἄλλο ἡρεμεῖν,

ἀλλ' εἴ τι ἡρεμεῖ τῷ ἄλλο πεπαῦσθαι κινούμενον, ἀνάγκη ὑπό τινος αὐτὸ κινεῖσθαι. τούτου δ' εἰλημμένου πᾶν τὸ κινούμενον κινήσεται ὑπό τινος. ἐπεὶ γὰρ εἴληπται [τὸ] κινούμενον ἐφ' ᾧ τὸ AB, ἀνάγκη διαιρετὸν αὐτὸ εἶναι· πᾶν γὰρ τὸ κινούμενον διαιρετόν. διηρήσθω δὴ κατὰ τὸ Γ. τοῦ δὴ ΓΒ μὴ κινουμένου οὐ κινήσεται τὸ AB. εἰ γὰρ κινήσεται, δῆλον ὅτι τὸ ΑΓ κινεῖται· ἂν τοῦ ΓΒ ἡρεμοῦντος, ὥστε οὐ καθ' αὐτὸ κινήσεται καὶ πρῶτον. ἀλλ' ὑπέκειτο καθ' αὐτὸ κινεῖσθαι καὶ πρῶτον. ἀνάγκη ἄρα τοῦ ΓΒ μὴ κινουμένου ἡρεμεῖν τὸ AB. ὁ δὲ ἡρεμεῖ (45) μὴ κινουμένου τινός, ὡμολόγηται ὑπό τινος κινεῖσθαι, ὥστε πᾶν ἀνάγκη τὸ κινούμενον ὑπό τινος κινεῖσθαι· ἀεὶ γὰρ ἔσται τὸ κινούμενον διαιρετόν, τοῦ δὲ μέρους μὴ κινουμένου ἀνάγκη καὶ τὸ ὅλον ἡρεμεῖν.

ἐπεὶ δὲ πᾶν τὸ κινούμενον ἀνάγκη κινεῖσθαι ὑπό τινος, ἐάν γέ τι κινῆται τὴν ἐν τόπῳ κίνησιν ὑπ' ἄλλου κινουμένου, καὶ πάλιν τὸ κινεῖν ὑπ' ἄλλου κινουμένου κινῆται κάκεῖνο ὑφ' ἐτέρου καὶ ἀεὶ οὕτως, ἀνάγκη εἶναι τι τὸ πρῶτον κινεῖν, καὶ μὴ βαδίζειν εἰς ἄπειρον· μὴ γὰρ ἔστω, ἀλλὰ γενέσθω ἄπειρον. κινεῖσθω δὴ τὸ μὲν A ὑπὸ τοῦ B, τὸ δὲ B ὑπὸ τοῦ Γ, τὸ δὲ Γ ὑπὸ τοῦ Δ, καὶ ἀεὶ τὸ ἐχόμενον ὑπὸ τοῦ ἐχομένου. ἐπεὶ οὖν ὑπόκειται τὸ κινεῖν κινούμενον κινεῖν, ἀνάγκη ἅμα γίνεσθαι τὴν τοῦ κινουμένου καὶ τὴν τοῦ κινεῖντος κίνησιν (ἅμα γὰρ κινεῖ τὸ κινεῖν καὶ κινεῖται τὸ κινούμενον)· φανερόν <οὖν> ὅτι ἅμα ἔσται τοῦ A καὶ τοῦ B καὶ τοῦ Γ καὶ ἐκάστου τῶν κινούντων καὶ κινουμένων ἢ κινήσις. εἰλήφθω οὖν ἢ ἐκάστου κίνησις, καὶ ἔστω τοῦ μὲν A ἐφ' ἧς E, τοῦ δὲ B ἐφ' ἧς Z, τῶν <δὲ> Γ Δ ἐφ' ὧν H Θ. εἰ γὰρ ἀεὶ κινεῖται ἕκαστον ὑφ' ἐκάστου, ὅμως ἔσται λαβεῖν μίαν ἐκάστου κίνησιν τῷ ἀριθμῷ· πᾶσα γὰρ κίνησις ἔκ τινος εἷς τι, καὶ οὐκ ἄπειρος τοῖς ἐσχάτοις· λέγω δὴ ἀριθμῷ μίαν κίνησιν τὴν ἐκ τοῦ αὐτοῦ εἰς τὸ αὐτὸ τῷ ἀριθμῷ ἐν τῷ αὐτῷ χρόνῳ τῷ ἀριθμῷ γιγνομένην. ἔστι γὰρ κίνησις καὶ γένει καὶ εἶδει καὶ ἀριθμῷ ἢ αὐτῇ, (242b.) γένει μὲν ἢ τῆς αὐτῆς κατηγορίας, οἷον οὐσίας ἢ ποιότητος, εἶδει δὲ <ἢ> ἐκ τοῦ αὐτοῦ τῷ εἶδει εἰς τὸ αὐτὸ τῷ εἶδει, οἷον ἐκ λευκοῦ εἰς μέλαν ἢ ἐξ ἀγαθοῦ εἰς κακὸν ἀδιάφορον τῷ εἶδει· ἀριθμῷ δὲ ἢ ἐξ ἐνὸς τῷ ἀριθμῷ <εἰς ἐν τῷ ἀριθμῷ> ἐν τῷ αὐτῷ χρόνῳ, οἷον ἐκ τοῦδε τοῦ λευκοῦ εἰς τόδε τὸ μέλαν, ἢ ἐκ τοῦδε τοῦ τόπου εἰς τόνδε, ἐν τῷδε τῷ χρόνῳ· εἰ γὰρ ἐν ἄλλῳ, οὐκέτι ἔσται ἀριθμῷ μία κίνησις, ἀλλ' εἶδει.

εἴρηται δὲ περὶ τούτων ἐν τοῖς πρότερον. εἰλήφθω δὲ καὶ ὁ χρόνος ἐν ᾧ κεκίνηται τὴν αὐτοῦ κίνησιν τὸ A, καὶ ἔστω ἐφ' ᾧ K. πεπερασμένης δ' οὐσης τῆς τοῦ A κινήσεως καὶ ὁ χρόνος ἔσται πεπερασμένος. ἐπεὶ δὴ ἄπειρα τὰ κινεῖντα καὶ τὰ κινούμενα, καὶ ἢ κίνησις ἢ EZHΘ ἢ ἐξ ἀπασῶν ἄπειρος

ἔσται· ἐνδέχεται μὲν γὰρ ἴσην εἶναι τὴν τοῦ Α καὶ τοῦ Β καὶ τὴν τῶν ἄλλων, ἐνδέχεται δὲ μείζους τὰς τῶν ἄλλων, ὥστε εἴ τε ἴσαι εἴ τε μείζους, ἀμφοτέρως ἄπειρος ἢ ὅλη· λαμβάνομεν γὰρ τὸ ἐνδεχόμενον. ἐπεὶ δ' ἅμα κινεῖται καὶ τὸ Α καὶ τῶν ἄλλων ἕκαστον, ἢ ὅλη κίνησις ἐν τῷ αὐτῷ χρόνῳ ἔσται καὶ ἢ τοῦ Α· ἢ δὲ τοῦ Α ἐν πεπερασμένῳ· ὥστε εἴη ἂν ἄπειρος ἐν πεπερασμένῳ, τοῦτο δ' ἀδύνατον.

οὕτω μὲν οὖν δόξειεν ἂν δεδειχθαι τὸ ἐξ ἀρχῆς, οὐ μὴν ἀποδείκνυται διὰ τὸ μηδὲν δείκνυσθαι ἀδύνατον· ἐνδέχεται γὰρ ἐν πεπερασμένῳ χρόνῳ ἄπειρον εἶναι κίνησιν, μὴ ἐνὸς ἀλλὰ πολλῶν. ὅπερ συμβαίνει καὶ ἐπὶ τούτων· ἕκαστον γὰρ κινεῖται τὴν ἑαυτοῦ κίνησιν, ἅμα δὲ πολλὰ κινεῖσθαι οὐκ ἀδύνατον. ἀλλ' εἰ τὸ κινεῖν πρῶτως κατὰ τόπον καὶ σωματικὴν κίνησιν ἀνάγκη ἢ ἄπτεσθαι ἢ συνεχὲς εἶναι τῷ κινουμένῳ, καθάπερ ὁρῶμεν ἐπὶ πάντων, ἀνάγκη τὰ κινούμενα καὶ τὰ κινεῖντα συνεχῆ εἶναι ἢ ἄπτεσθαι ἀλλήλων, ὥστ' εἶναι τι ἐξ ἀπάντων ἔν. τοῦτο δὲ εἴτε πεπερασμένον εἴτε ἄπειρον, οὐδὲν διαφέρει πρὸς τὰ νῦν· πάντως γὰρ ἡ κίνησις ἔσται ἄπειρος ἀπείρων ὄντων, εἴπερ ἐνδέχεται καὶ ἴσας εἶναι καὶ μείζους ἀλλήλων· ὃ γὰρ ἐνδέχεται, ληψόμεθα ὡς ὑπάρχον. εἰ οὖν τὸ μὲν ἐκ τῶν Α Β Γ Δ <ἢ πεπερασμένον ἢ> ἄπειρόν τι ἔστιν, κινεῖται δὲ τὴν ΕΖΗΘ κίνησιν ἐν τῷ χρόνῳ τῷ Κ, οὗτος δὲ πεπέρανται, συμβαίνει ἐν πεπερασμένῳ χρόνῳ ἄπειρον διέναι ἢ τὸ πεπερασμένον ἢ τὸ ἄπειρον. ἀμφοτέρως δὲ ἀδύνατον· ὥστε ἀνάγκη ἴστασθαι καὶ εἶναι τι πρῶτον κινεῖν καὶ κινούμενον. οὐδὲν γὰρ διαφέρει τὸ συμβαίνειν ἐξ ὑποθέσεως τὸ ἀδύνατον· (243a.) ἢ γὰρ ὑπόθεσις εἴληπται ἐνδεχομένη, τοῦ δ' ἐνδεχομένου τεθέντος οὐδὲν προσήκει γίνεσθαι διὰ τοῦτο ἀδύνατον.

## Κεφάλαιο 2

Τὸ δὲ πρῶτον κινεῖν, μὴ ὡς τὸ οὐ ἔνεκεν, ἀλλ' ὅθεν ἡ ἀρχὴ τῆς κινήσεως, ἅμα τῷ κινουμένῳ ἐστί (λέγω δὲ τὸ ἅμα, ὅτι οὐδὲν ἔστιν αὐτῶν μεταξύ)· τοῦτο γὰρ κοινὸν ἐπὶ παντὸς κινουμένου καὶ κινεῖντός ἐστιν. ἐπεὶ δὲ τρεῖς αἱ κινήσεις, ἢ τε κατὰ τόπον καὶ ἢ κατὰ τὸ ποιὸν καὶ ἢ κατὰ τὸ ποσόν, ἀνάγκη καὶ τὰ κινεῖντα τρία εἶναι, τό τε φέρον καὶ τὸ ἀλλοιοῦν καὶ τὸ αὔξον ἢ φθίνον.

πρῶτον οὖν εἴπωμεν περὶ τῆς φορᾶς· πρώτη γὰρ αὕτη τῶν κινήσεων. ἅπαν δὲ τὸ φερόμενον ἢ ὑφ' ἑαυτοῦ κινεῖται ἢ ὑπ' ἄλλου. ὅσα μὲν οὖν αὐτὰ ὑφ' αὐτῶν κινεῖται, φανερόν ἐν τούτοις ὅτι ἅμα τὸ κινούμενον καὶ τὸ κινεῖν ἔστιν· ἐνυπάρχει γὰρ αὐτοῖς τὸ πρῶτον κινεῖν, ὥστ' οὐδὲν ἔστιν ἀναμεταξύ· ὅσα δ' ὑπ' ἄλλου κινεῖται, τετραχῶς ἀνάγκη γίνεσθαι· τέτταρα γὰρ εἶδη τῆς



ὕπ' ἄλλου φορᾶς, ἔλξης, ὤσις, ὄχησις, δίνησις. ἅπασαι γὰρ αἱ κατὰ τόπον κινήσεις ἀνάγονται εἰς ταύτας· ἡ μὲν γὰρ ἔπωσις ὥσις τίς ἐστίν, ὅταν τὸ ἀφ' αὐτοῦ κινοῦν ἐπακολουθοῦν ὠθῇ, ἡ δ' ἄπωσις, ὅταν μὴ ἐπακολουθῇ κινήσαν, ἡ δὲ ῥῖψις, ὅταν σφο (243b.) δροτέραν ποιήσῃ τὴν ἀφ' αὐτοῦ κίνησιν τῆς κατὰ φύσιν φορᾶς, καὶ μέχρι τοσούτου φέρεται ἕως ἂν κρατῇ ἡ κίνησις. πάλιν ἡ δίωσις καὶ σύνωσις ἄπωσις καὶ ἔλξης εἰσὶν· ἡ μὲν γὰρ δίωσις ἄπωσις (ἡ γὰρ ἀφ' αὐτοῦ ἢ ἀπ' ἄλλου ἐστὶν ἡ ἄπωσις), ἡ δὲ σύνωσις ἔλξης (καὶ γὰρ πρὸς αὐτὸ καὶ πρὸς ἄλλο ἢ ἔλξης). ὥστε καὶ ὅσα τούτων εἶδη, οἷον σπάθησις καὶ κέρκισις· ἡ μὲν γὰρ σύνωσις, ἡ δὲ δίωσις. ὁμοίως δὲ καὶ αἱ ἄλλαι συγκρίσεις καὶ διακρίσεις — ἅπασαι γὰρ ἔσονται διώσεις ἢ συνώσεις — πλὴν ὅσαι ἐν γενέσει καὶ φθορᾷ εἰσιν. ἅμα δὲ φανερόν ὅτι οὐδ' ἐστὶν ἄλλο τι γένος κινήσεως ἢ σύγκρισις καὶ διάκρισις· ἅπασαι γὰρ διανέμονται εἰς τινὰς τῶν εἰρημένων. ἔτι δ' ἡ μὲν εἰσπνοὴ ἔλξης, ἡ δ' ἐκπνοὴ ὤσις. ὁμοίως δὲ καὶ ἡ πτύσις, καὶ ὅσαι ἄλλαι διὰ τοῦ σώματος ἢ ἐκκριτικαὶ ἢ ληπτικαὶ κινήσεις· αἱ μὲν γὰρ ἔλξεις εἰσὶν, αἱ δ' ἀώσεις. δεῖ δὲ καὶ τὰς ἄλλας τὰς κατὰ τόπον ἀνάγειν· ἅπασαι γὰρ πίπτουσιν εἰς τέσσαρας ταύτας. τούτων δὲ πάλιν ἡ ὄχησις καὶ ἡ δίνησις εἰς ἔλξιν καὶ ὤσιν. ἡ μὲν γὰρ ὄχησις κατὰ τούτων τινὰ τῶν τριῶν τρόπων ἐστίν (τὸ μὲν γὰρ ὀχούμενον κινεῖται κατὰ συμβεβηκός, ὅτι ἐν κινουμένῳ ἐστὶν ἢ ἐπὶ κινουμένου τινός, τὸ δ' ὀχοῦν ὀχεῖ ἢ ἐλκόμενον ἢ (244a.) ὠθούμενον ἢ δινούμενον, ὥστε κοινὴ ἐστὶν ἀπασῶν τῶν τριῶν ἢ ὄχησις)· ἡ δὲ δίνησις σύγκειται ἐξ ἔλξεως τε καὶ ὤσεως· ἀνάγκη γὰρ τὸ δινοῦν τὸ μὲν ἔλκειν τὸ δ' ὠθεῖν· τὸ μὲν γὰρ ἀφ' αὐτοῦ τὸ δὲ πρὸς αὐτὸ ἄγει. ὥστ' εἰ τὸ ὠθοῦν καὶ τὸ ἔλκον ἅμα τῷ ὠθουμένῳ καὶ τῷ ἐλκομένῳ, φανερόν ὅτι τοῦ κατὰ τόπον κινουμένου καὶ κινοῦντος οὐδέν ἐστι μεταξύ. ἀλλὰ μὴν τοῦτο δῆλον καὶ ἐκ τῶν ὀρισμῶν· ὤσις μὲν γὰρ ἐστὶν ἡ ἀφ' αὐτοῦ ἢ ἀπ' ἄλλου πρὸς ἄλλο κίνησις, ἔλξης δὲ ἡ ἀπ' ἄλλου πρὸς αὐτὸ ἢ πρὸς ἄλλο, ὅταν θάπτων ἢ κίνησις ἢ [τοῦ ἔλκοντος] τῆς χωριζούσης ἀπ' ἀλλήλων τὰ συνεχῇ· οὕτω γὰρ συνεφέλκεται θάτερον. (τάχα δὲ δόξειεν ἂν εἶναι τις ἔλξης καὶ ἄλλως· τὸ γὰρ ξύλον ἔλκει τὸ πῦρ οὐχ οὕτως. τὸ δ' οὐθὲν διαφέρει κινουμένου τοῦ ἔλκοντος ἢ μένοντος ἔλκειν· ὅτε μὲν γὰρ ἔλκει οὐκ ἐστίν, ὅτε δὲ οὐκ ἔν.) ἀδύνατον δὲ ἢ ἀφ' αὐτοῦ πρὸς ἄλλο ἢ ἀπ' ἄλλου πρὸς αὐτὸ κινεῖν (244b.) μὴ ἀπτόμενον, ὥστε φανερόν ὅτι τοῦ κατὰ τόπον κινουμένου καὶ κινοῦντος οὐδέν ἐστι μεταξύ.

ἀλλὰ μὴν οὐδὲ τοῦ ἀλλοιουμένου καὶ τοῦ ἀλλοιοῦντος. τοῦτο δὲ δῆλον ἐξ ἐπαγωγῆς· ἐν ἅπασιν γὰρ συμβαίνει ἅμα εἶναι τὸ ἔσχατον ἀλλοιοῦν καὶ τὸ πρῶτον ἀλλοιούμενον· <ὑπόκειται γὰρ ἡμῖν τὸ τὰ ἀλλοιούμενα κατὰ τὰς παθητικὰς καλουμένας ποιότητας πάσχοντα ἀλλοιοῦσθαι>. ἅπαν γὰρ σῶμα σώματος διαφέρει τοῖς αἰσθητοῖς ἢ πλείοσιν ἢ ἐλάττωσιν ἢ τῷ μᾶλλον καὶ

ἦττον τοῖς αὐτοῖς· ἀλλὰ μὴν καὶ ἀλλοιοῦται τὸ ἀλλοιούμενον ὑπὸ τῶν εἰρημένων. ταῦτα γὰρ ἐστὶ πάθη τῆς ὑποκειμένης ποιότητος· ἢ γὰρ θερμαινόμενον ἢ γλυκαινόμενον ἢ πυκνούμενον ἢ ξηραινόμενον ἢ λευκαινόμενον ἀλλοιοῦσθαί φαμεν, ὁμοίως τὸ τε ἄψυχον καὶ τὸ ἔμψυχον λέγοντες, καὶ πάλιν τῶν ἐμψύχων τά τε μὴ αἰσθητικὰ τῶν μερῶν καὶ αὐτὰς τὰς αἰσθήσεις. ἀλλοιοῦνται γὰρ πῶς καὶ αἱ αἰσθήσεις· ἢ γὰρ αἰσθησις ἢ κατ' ἐνέργειαν κίνησις ἐστὶ διὰ τοῦ σώματος, πασχούσης τι τῆς αἰσθήσεως. καθ' ὅσα μὲν οὖν τὸ ἄψυχον ἀλλοιοῦται, καὶ τὸ ἔμψυχον, καθ' ὅσα δὲ τὸ ἔμψυχον, οὐ κατὰ ταῦτα πάντα τὸ ἄψυχον (οὐ γὰρ ἀλλοιοῦται κατὰ τὰς αἰσθήσεις)· καὶ τὸ μὲν λανθάνει, τὸ δ' οὐ (245a.) λανθάνει πάσχον. οὐδὲν δὲ κωλύει καὶ τὸ ἔμψυχον λανθάνειν, ὅταν μὴ κατὰ τὰς αἰσθήσεις γίγνηται ἢ ἀλλοίωσις. εἴπερ οὖν ἀλλοιοῦται τὸ ἀλλοιούμενον ὑπὸ τῶν αἰσθητῶν, ἐν ἅπασί γε τούτοις φανερόν ὅτι ἅμα ἐστὶ τὸ ἔσχατον ἀλλοιοῦν καὶ τὸ πρῶτον ἀλλοιούμενον· τῷ μὲν γὰρ συνεχῆς ὁ ἀήρ, τῷ δ' ἀέρι τὸ σῶμα. πάλιν δὲ τὸ μὲν χρῶμα τῷ φωτί, τὸ δὲ φῶς τῇ ὄψει. τὸν αὐτὸν δὲ τρόπον καὶ ἡ ἀκοὴ καὶ ἡ ὄσφρησις· πρῶτον γὰρ κινεῖν πρὸς τὸ κινούμενον ὁ ἀήρ. καὶ ἐπὶ τῆς γεύσεως ὁμοίως· ἅμα γὰρ τῇ γεύσει ὁ χυμός. ὡσαύτως δὲ καὶ ἐπὶ τῶν ἀψύχων καὶ ἀναισθήτων. ὥστ' οὐδὲν ἔσται μεταξὺ τοῦ ἀλλοιουμένου καὶ τοῦ ἀλλοιοῦντος.

οὐδὲ μὴν τοῦ αὐξανομένου τε καὶ αὔξοντος· αὐξάνει γὰρ τὸ πρῶτον αὔξον προσγιγνόμενον, ὥστε ἐν γίνεσθαι τὸ ὅλον. καὶ πάλιν φθίνει τὸ φθίνον ἀπογιγνόμενον τινὸς τῶν τοῦ φθίνοντος. ἀνάγκη οὖν συνεχῆς εἶναι καὶ τὸ αὔξον καὶ τὸ φθίνον, τῶν δὲ συνεχῶν οὐδὲν μεταξύ.

φανερόν οὖν ὅτι τοῦ κινουμένου καὶ (245b.) τοῦ κινουντος πρώτου καὶ ἐσχάτου πρὸς τὸ κινούμενον οὐδὲν ἐστὶν ἀνὰ μέσον.

### Κεφάλαιο 3

Ὅτι δὲ τὸ ἀλλοιούμενον ἅπαν ἀλλοιοῦται ὑπὸ τῶν αἰσθητῶν, καὶ ἐν μόνοις ὑπάρχει τούτοις ἀλλοίωσις ὅσα καθ' αὐτὰ λέγεται πάσχειν ὑπὸ τῶν αἰσθητῶν, ἐκ τῶνδε θεωρητέον. τῶν γὰρ ἄλλων μάλιστ' ἂν τις ὑπολάβοι ἐν τε τοῖς σχήμασι καὶ ταῖς μορφαῖς καὶ ἐν ταῖς ἔξεσι καὶ ταῖς τούτων λήψεσι καὶ ἀποβολαῖς ἀλλοίωσιν ὑπάρχειν· ἐν οὐδετέροις δ' ἔστιν.

τὸ μὲν γὰρ σχηματιζόμενον καὶ ῥυθμιζόμενον ὅταν ἐπιτελεσθῇ, οὐ λέγομεν ἐκεῖνο ἐξ οὗ ἐστίν, οἷον τὸν ἀνδριάντα χαλκὸν ἢ τὴν πυραμίδα κηρὸν ἢ τὴν κλίνην ξύλον, ἀλλὰ παρωνυμιάζοντες τὸ μὲν χαλκοῦν, τὸ δὲ κήρινον, τὸ δὲ

ξύλινον. τὸ δὲ πεπονθὸς καὶ ἡλλοιωμένον προσαγορεύομεν· ὑγρὸν γὰρ καὶ θερμὸν καὶ σκληρὸν τὸν χαλκὸν λέγομεν καὶ τὸν κηρόν

(καὶ οὐ μόνον οὕτως, ἀλλὰ καὶ τὸ ὑγρὸν καὶ τὸ θερμὸν χαλκὸν λέγομεν), ὁμωνύμως τῷ πάθει προσαγορεύοντες τὴν (246a.) ὕλην.

ὥστ' εἰ κατὰ μὲν τὸ σχῆμα καὶ τὴν μορφήν οὐ λέγεται τὸ γεγονὸς ἐν ᾧ ἐστὶ τὸ σχῆμα, κατὰ δὲ τὰ πάθη καὶ τὰς ἀλλοιώσεις λέγεται, φανερόν ὅτι οὐκ ἂν εἶεν αἱ γενέσεις ἀλλοιώσεις.

ἔτι δὲ καὶ εἰπεῖν οὕτως ἄτοπον ἂν δόξειεν, ἡλλοιωῖσθαι τὸν ἄνθρωπον ἢ τὴν οἰκίαν ἢ ἄλλο ὅτιοῦν τῶν γεγεννημένων· ἀλλὰ γίνεσθαι μὲν ἴσως ἕκαστον ἀναγκαῖον ἀλλοιουμένου τινός, οἷον τῆς ὕλης πυκνουμένης ἢ μανουμένης ἢ θερμαινομένης ἢ ψυχομένης, οὐ μέντοι τὰ γιγνόμενά γε ἀλλοιοῦται, οὐδ' ἡ γενέσεις αὐτῶν ἀλλοιώσις ἐστίν.

ἀλλὰ μὴν οὐδ' αἱ ἕξεις οὔθ' αἱ τοῦ σώματος οὔθ' αἱ τῆς ψυχῆς ἀλλοιώσεις. αἱ μὲν γὰρ ἀρεταὶ αἱ δὲ κακίαι τῶν ἕξεων· οὐκ ἔστι δὲ οὔτε ἡ ἀρετὴ οὔτε ἡ κακία ἀλλοιώσεις, ἀλλ' ἡ μὲν ἀρετὴ τελειώσις τις (ὅταν γὰρ λάβῃ τὴν αὐτοῦ ἀρετήν, τότε λέγεται τέλειον ἕκαστον — τότε γὰρ ἔστι μάλιστα [τὸ] κατὰ φύσιν — ὥσπερ κύκλος τέλειος, ὅταν μάλιστα γένηται κύκλος καὶ ὅταν βέλτιστος), ἡ δὲ κακία φθορὰ τούτου καὶ ἕκστασις· ὥσπερ οὖν οὐδὲ τὸ τῆς οἰκίας τελείωμα λέγομεν ἀλλοίωσιν (ἄτοπον γὰρ εἰ ὁ θριγκὸς καὶ ὁ κέραμος ἀλλοίωσις, ἢ εἰ θριγκουμένη καὶ κεραμουμένη ἀλλοιοῦται ἀλλὰ μὴ τελειοῦται ἢ οἰκία), τὸν αὐτὸν τρόπον καὶ ἐπὶ τῶν ἀρε(246b.) τῶν καὶ τῶν κακιῶν καὶ τῶν ἐχόντων ἢ λαμβανόντων· αἱ μὲν γὰρ τελειώσεις αἱ δὲ ἕκστασις εἰσὶν, ὥστ' οὐκ ἀλλοιώσεις. ἔτι δὲ καὶ φαμεν ἀπάσας εἶναι τὰς ἀρετὰς ἐν τῷ πρὸς τι πῶς ἔχειν. τὰς μὲν γὰρ τοῦ σώματος, οἷον ὑγίειαν καὶ εὐεξίαν, ἐν κράσει καὶ συμμετρίᾳ θερμῶν καὶ ψυχρῶν τίθεμεν, ἢ αὐτῶν πρὸς αὐτὰ τῶν ἐντὸς ἢ πρὸς τὸ περιέχον· ὁμοίως δὲ καὶ τὸ κάλλος καὶ τὴν ἰσχὺν καὶ τὰς ἄλλας ἀρετὰς καὶ κακίας. ἑκάστη γὰρ ἐστὶ τῷ πρὸς τι πῶς ἔχειν, καὶ περὶ τὰ οἰκεῖα πάθη εὖ ἢ κακῶς διατίθησι τὸ ἔχον· οἰκεῖα δ' ὑφ' ὧν γίνεσθαι καὶ φθείρεσθαι πέφυκεν. ἐπεὶ οὖν τὰ πρὸς τι οὔτε αὐτὰ ἐστὶν ἀλλοιώσεις, οὔτε ἔστιν αὐτῶν ἀλλοιώσεις οὐδὲ γενέσεις οὐδ' ὅλως μεταβολὴ οὐδεμία, φανερόν ὅτι οὔθ' αἱ ἕξεις οὔθ' αἱ τῶν ἕξεων ἀποβολαὶ καὶ λήψεις ἀλλοιώσεις εἰσὶν, ἀλλὰ γίνεσθαι μὲν ἴσως αὐτὰς καὶ φθείρεσθαι ἀλλοιουμένων τινῶν ἀνάγκη, καθάπερ καὶ τὸ εἶδος καὶ τὴν μορφήν, οἷον θερμῶν καὶ ψυχρῶν ἢ ξηρῶν καὶ ὑγρῶν, ἢ ἐν οἷς τυγχάνουσιν οὔσαι πρῶτοις. περὶ ταῦτα γὰρ ἑκάστη λέγεται κακία καὶ ἀρετὴ, ὑφ' ὧν

ἄλλοιοῦσθαι πέφυκε τὸ ἔχον· ἡ μὲν γὰρ ἀρετὴ ποιεῖ ἢ ἀπαθὲς ἢ ὠδὶ παθητικόν, ἡ δὲ κακία παθητικὸν ἢ ἐναντίως ἀπαθὲς.

ὁμοίως (247a.) δὲ καὶ ἐπὶ τῶν τῆς ψυχῆς ἔξεων· ἅπασαι γὰρ καὶ αὗται τῷ πρὸς τι πῶς ἔχειν, καὶ αἱ μὲν ἀρεταὶ τελειώσεις, αἱ δὲ κακίαι ἐκστάσεις. ἔτι δὲ ἡ μὲν ἀρετὴ εὖ διατίθησι πρὸς τὰ οἰκεῖα πάθη, ἡ δὲ κακία κακῶς. ὥστ' οὐδ' αὗται ἔσονται ἀλλοιώσεις· οὐδὲ δὴ αἱ ἀποβολαὶ καὶ αἱ λήψεις αὐτῶν. γίνεσθαι δ' αὐτὰς ἀναγκαῖον ἀλλοιουμένου τοῦ αἰσθητικοῦ μέρους. ἀλλοιωθήσεται δ' ὑπὸ τῶν αἰσθητῶν· ἅπασα γὰρ ἡ ἠθικὴ ἀρετὴ περὶ ἡδονᾶς καὶ λύπας τὰς σωματικὰς, αὗται δὲ ἢ ἐν τῷ πράττειν ἢ ἐν τῷ μεμνηῖσθαι ἢ ἐν τῷ ἐλπίζειν. αἱ μὲν οὖν ἐν τῇ πράξει κατὰ τὴν αἴσθησιν εἰσιν, ὥσθ' ὑπ' αἰσθητοῦ τινὸς κινεῖσθαι, αἱ δ' ἐν τῇ μνήμῃ καὶ ἐν τῇ ἐλπίδι ἀπὸ ταύτης εἰσιν· ἡ γὰρ οἷα ἔπαθον μεμνημένοι ἡδονταί, ἡ ἐλπίζοντες οἷα μέλλουσιν. ὥστ' ἀνάγκη πᾶσαν τὴν τοιαύτην ἡδονὴν ὑπὸ τῶν αἰσθητῶν γίνεσθαι. ἐπεὶ δ' ἡδονῆς καὶ λύπης ἐγγιγνομένης καὶ ἡ κακία καὶ ἡ ἀρετὴ ἐγγίγνεται (περὶ ταύτας γὰρ εἰσιν), αἱ δ' ἡδοναὶ καὶ αἱ λύπαι ἀλλοιώσεις τοῦ αἰσθητικοῦ, φανερόν ὅτι ἀλλοιουμένου τινὸς ἀνάγκη καὶ ταύτας ἀποβάλλειν καὶ λαμβάνειν. ὥσθ' ἡ μὲν γένεσις αὐτῶν μετ' ἀλλοιώσεως, αὐταὶ δ' οὐκ εἰσιν ἀλλοιώσεις.

(247b.) ἀλλὰ μὴν οὐδ' αἱ τοῦ νοητικοῦ μέρους ἔξεις ἀλλοιώσεις, οὐδ' ἔστιν αὐτῶν γένεσις. πολὺ γὰρ μάλιστα τὸ ἐπιστήμον ἐν τῷ πρὸς τι πῶς ἔχειν λέγομεν. ἔτι δὲ καὶ φανερόν ὅτι οὐκ ἔστιν αὐτῶν γένεσις· τὸ γὰρ κατὰ δύναμιν ἐπιστήμον οὐδὲν αὐτὸ κινηθὲν ἀλλὰ τῷ ἄλλο ὑπάρξαι γίγνεται ἐπιστήμον. ὅταν γὰρ γένηται τὸ κατὰ μέρος, ἐπίσταται πῶς τὰ καθόλου τῷ ἐν μέρει. πάλιν δὲ τῆς χρήσεως καὶ τῆς ἐνεργείας οὐκ ἔστι γένεσις, εἰ μὴ τις καὶ τῆς ἀναβλέψεως καὶ τῆς ἀφῆς οἶεται γένεσιν εἶναι· τὸ γὰρ χρῆσθαι καὶ τὸ ἐνεργεῖν ὅμοιον τούτοις. ἡ δ' ἐξ ἀρχῆς λήψις τῆς ἐπιστήμης γένεσις οὐκ ἔστιν οὐδ' ἀλλοίωσις· τῷ γὰρ ἡρεμῆσαι καὶ στήναι τὴν διάνοιαν ἐπίστασθαι καὶ φρονεῖν λεγόμεθα, εἰς δὲ τὸ ἡρεμεῖν οὐκ ἔστι γένεσις· ὅλως γὰρ οὐδεμιᾶς μεταβολῆς, καθάπερ εἴρηται πρότερον. ἔτι δ' ὥσπερ ὅταν ἐκ τοῦ μεθύειν ἢ καθεύδειν ἢ νοσεῖν εἰς τᾶναντία μεταστῇ τις, οὗ φαμεν ἐπιστήμονα γεγονέναι πάλιν (καίτοι ἀδύνατος ἦν τῇ ἐπιστήμῃ χρῆσθαι πρότερον), οὕτως οὐδ' ὅταν ἐξ ἀρχῆς λαμβάνῃ τὴν ἔξιν· τῷ γὰρ καθίστασθαι τὴν ψυχὴν ἐκ τῆς φυσικῆς ταραχῆς φρόνιμόν τι γίγνεται καὶ ἐπιστήμον. διὸ καὶ τὰ παιδιά οὔτε μανθάνειν δύνανται οὔτε κατὰ τὰς αἰσθήσεις (248a.) ὁμοίως κρίνειν τοῖς πρεσβυτέροις· πολλὴ γὰρ ἡ ταραχὴ καὶ ἡ κίνησις. καθίσταται δὲ καὶ ἡρεμίζεται πρὸς ἓνια μὲν ὑπὸ τῆς φύσεως αὐτῆς, πρὸς ἓνια δ' ὑπ' ἄλλων, ἐν ἀμφοτέροις δὲ ἀλλοιουμένων τινῶν τῶν ἐν τῷ σώματι, καθάπερ ἐπὶ τῆς χρήσεως καὶ τῆς

ἐνεργείας, ὅταν νήφων γένηται καὶ ἐγερθῇ. φανερόν οὖν ἐκ τῶν εἰρημένων ὅτι τὸ ἀλλοιοῦσθαι καὶ ἡ ἀλλοίωσις ἔν τε τοῖς αἰσθητοῖς γίγνεται καὶ ἐν τῷ αἰσθητικῷ μορίῳ τῆς ψυχῆς, ἐν ἄλλῳ δ' οὐδενὶ πλὴν κατὰ συμβεβηκός.

## Κεφάλαιο 4

Ἀπορήσειε δ' ἂν τις πότερόν ἐστι κίνησις πᾶσα πάσῃ συμβλητῇ ἢ οὐ. εἰ δὴ ἐστὶν πᾶσα συμβλητή, καὶ ὁμοταχὲς τὸ ἐν ἴσῳ χρόνῳ ἴσον κινούμενον, ἔσται περιφερὴς τις ἴση εὐθείᾳ, καὶ μείζων δὴ καὶ ἐλάττων. ἔτι ἀλλοίωσις καὶ φορὰ τις ἴση, ὅταν ἐν ἴσῳ χρόνῳ τὸ μὲν ἀλλοιωθῇ τὸ δ' ἐνεχθῇ. ἔσται ἄρα ἴσον πάθος μήκει. ἀλλ' ἀδύνατον. ἀλλ' ἄρα ὅταν ἐν ἴσῳ ἴσον κινηθῇ, τότε ἰσοταχές, ἴσον δ' οὐκ ἔστιν πάθος μήκει, ὥστε οὐκ ἔστιν ἀλλοίωσις φορᾷ ἴση οὐδ' ἐλάττων, ὥστ' οὐ πᾶσα συμβλητή;

ἐπὶ δὲ τοῦ κύκλου καὶ τῆς εὐθείας πῶς συμβήσεται; ἄτοπόν τε γὰρ εἰ μὴ ἔστιν κύκλῳ ὁμοίως τουτὶ κινεῖσθαι καὶ τουτὶ ἐπὶ τῆς εὐθείας, ἀλλ' εὐθὺς ἀνάγκη ἢ θᾶττον ἢ βραδύτερον, ὥσπερ ἂν εἰ κάταντες, τὸ δ' ἄναντες· οὐδὲ διαφέρει οὐδὲν τῷ λόγῳ, εἴ τις φησιν ἀνάγκην εἶναι θᾶττον εὐθὺς ἢ βραδύτερον κινεῖσθαι· ἔσται γὰρ μείζων καὶ ἐλάττων ἡ περιφερὴς τῆς εὐθείας, ὥστε καὶ ἴση. εἰ γὰρ ἐν τῷ Α χρόνῳ (248b.) τὴν Β διελήλυθε τὸ δὲ τὴν Γ, μείζων ἂν εἴη ἢ Β τῆς Γ· οὕτω γὰρ τὸ θᾶττον ἐλέγετο. οὐκοῦν καὶ εἰ ἐν ἐλάττονι ἴσον, θᾶττον· ὥστ' ἔσται τι μέρος τοῦ Α ἐν ᾧ τὸ Β τοῦ κύκλου τὸ ἴσον δίδεισι καὶ τὸ Γ ἐν ὅλῳ τῷ Α [τὴν Γ]. ἀλλὰ μὴν εἰ ἔστιν συμβλητά, συμβαίνει τὸ ἄρτι ῥηθέν, ἴσην εὐθεῖαν εἶναι κύκλῳ. ἀλλ' οὐ συμβλητά· οὐδ' ἄρα αἱ κινήσεις, ἀλλ' ὅσα μὴ συνώνυμα, πάντ' ἀσύμβλητα.

οἷον διὰ τί οὐ συμβλητὸν πότερον ὀξύτερον τὸ γραφεῖον ἢ ὁ οἶνος ἢ ἡ νήτη; ὅτι ὁμώνυμα, οὐ συμβλητά· ἀλλ' ἡ νήτη τῇ παρανήτῃ συμβλητή, ὅτι τὸ αὐτὸ σημαίνει τὸ ὀξὺ ἐπ' ἀμφοῖν. ἄρ' οὖν οὐ ταῦτόν τὸ ταχὺ ἐνταῦθα κάκει, πολὺ δ' ἔτι ἦττον ἐν ἀλλοιώσει καὶ φορᾷ;

ἢ πρῶτον μὲν τοῦτο οὐκ ἀληθές, ὡς εἰ μὴ ὁμώνυμα συμβλητά; τὸ γὰρ πολὺ τὸ αὐτὸ σημαίνει ἐν ὕδατι καὶ ἀέρι, καὶ οὐ συμβλητά. εἰ δὲ μή, τό γε διπλάσιον ταῦτό (δύο γὰρ πρὸς ἓν), καὶ οὐ συμβλητά. ἢ καὶ ἐπὶ τούτων ὁ αὐτὸς λόγος; καὶ γὰρ τὸ πολὺ τὸ ὁμώνυμον. ἀλλ' ἐνίων καὶ οἱ λόγοι ὁμώνυμοι, οἷον εἰ λέγοι τις ὅτι τὸ πολὺ τὸ τοσοῦτον καὶ ἔτι, ἄλλο τὸ τοσοῦτον· καὶ τὸ ἴσον ὁμώνυμον, καὶ τὸ ἐν δέ, εἰ ἔτυχεν, εὐθὺς ὁμώνυμον. εἰ δὲ τοῦτο, καὶ τὰ δύο, ἐπεὶ διὰ τί τὰ μὲν συμβλητὰ τὰ δ' οὐ, εἴπερ ἦν μία φύσις; ἢ ὅτι ἐν ἄλλῳ πρῶτῳ δεκτικῷ; ὁ μὲν οὖν ἵππος καὶ ὁ κύων συμβλητά, πότερον λευκότερον

(ἐν ᾧ γὰρ πρώτῳ, τὸ αὐτό, ἢ ἐπιφάνεια), καὶ κατὰ μέγεθος ὡσαύτως· ὕδωρ δὲ καὶ φωνὴ οὐ· ἐν ἄλλῳ γάρ. ἢ δῆλον ὅτι ἔσται οὕτω γε πάντα ἐν ποιεῖν, ἐν ἄλλῳ (249a.) δὲ ἕκαστον φάσκειν εἶναι, καὶ ἔσται ταῦτὸ <τὸ> ἴσον καὶ γλυκὺ καὶ λευκόν, ἀλλ' ἄλλο ἐν ἄλλῳ; ἔτι δεκτικὸν οὐ τὸ τυχόν <τοῦ τυχόντος> ἐστίν, ἀλλ' ἐν ἐνὸς τὸ πρῶτον.

ἀλλ' ἄρα οὐ μόνον δεῖ τὰ συμβλητὰ μὴ ὁμώνυμα εἶναι ἀλλὰ καὶ μὴ ἔχειν διαφοράν, μήτε ὃ μήτε ἐν ᾧ; λέγω δὲ οἶον χρῶμα ἔχει διαίρεσιν· τοιγαροῦν οὐ συμβλητὸν κατὰ τοῦτο (οἶον πότερον κεχρωμάτισται μᾶλλον, μὴ κατὰ τὸ χρῶμα, ἀλλ' ἢ χρῶμα), ἀλλὰ κατὰ τὸ λευκόν.

οὕτω καὶ περὶ κίνησιν ὁμοταχεῖς τῷ ἐν ἴσῳ χρόνῳ κινεῖσθαι ἴσον τοσονδί· εἰ δὴ τοῦ μήκους ἐν τῷδὲ τὸ μὲν ἡλλοιώθη τὸ δ' ἠνέχθη, ἴση ἄρα αὕτη ἢ ἀλλοίωσις καὶ ὁμοταχῆς τῇ φορᾷ; ἀλλ' ἄτοπον. αἴτιον δ' ὅτι ἢ κίνησις ἔχει εἶδη, ὥστ' εἰ τὰ ἐν ἴσῳ χρόνῳ ἐνεχθέντα ἴσον μήκος ἰσοταχῇ ἔσται, ἴση ἢ εὐθεῖα καὶ ἢ περιφερής. πότερον οὖν αἴτιον, ὅτι ἢ φορὰ γένος ἢ ὅτι ἢ γραμμὴ γένος; ὁ μὲν γὰρ χρόνος ὁ αὐτός, ἂν δὲ τῷ εἶδει ἢ ἄλλα, καὶ ἐκεῖνα εἶδει διαφέρει. καὶ γὰρ ἢ φορὰ εἶδη ἔχει, ἂν ἐκεῖνο ἔχη εἶδη ἐφ' οὗ κινεῖται (ὅτε δὲ ἐὰν ᾧ, οἶον εἰ πόδες, βάδισις, εἰ δὲ πτέρυγες, πτῆσις. ἢ οὐ, ἀλλὰ τοῖς σχήμασιν ἢ φορὰ ἄλλη;). ὥστε τὰ ἐν ἴσῳ ταῦτὸ μέγεθος κινούμενα ἰσοταχῇ, τὸ αὐτὸ δὲ καὶ ἀδιάφορον εἶδει καὶ κινήσει ἀδιάφορον· ὥστε τοῦτο σκεπτέον, τίς διαφορὰ κινήσεως. καὶ σημαίνει ὁ λόγος οὗτος ὅτι τὸ γένος οὐχ ἔν τι, ἀλλὰ παρὰ τοῦτο λανθάνει πολλά, εἰσὶν τε τῶν ὁμωνυμιῶν αἱ μὲν πολὺ ἀπέχουσαι, αἱ δὲ ἔχουσά τινα ὁμοιότητα, αἱ δ' ἐγγὺς ἢ γένει ἢ ἀναλογίᾳ, διὸ οὐ δοκοῦσιν ὁμωνυμίαι εἶναι οὕσαι.

πότε οὖν ἕτερον τὸ εἶδος, ἐὰν ταῦτὸ ἐν ἄλλῳ, ἢ ἂν ἄλλο ἐν ἄλλῳ; καὶ τίς ὅρος; ἢ τῷ κρινοῦμεν ὅτι ταῦτὸν τὸ λευκὸν καὶ τὸ γλυκὺ ἢ ἄλλο — ὅτι ἐν ἄλλῳ φαίνεται ἕτερον, ἢ ὅτι ὅλως οὐ ταυτό; περὶ δὲ δὴ ἀλλοιώσεως, πῶς ἔσται ἰσοταχῆς ἐτέρᾳ ἐτέρα; εἰ δὴ ἐστὶ τὸ ὑγιάζεσθαι ἀλλοιοῦσθαι, ἔστι τὸν μὲν ταχὺ τὸν δὲ βραδέως ἰαθῆναι, καὶ ἅμα τινάς, ὥστ' (249b.) ἔσται ἀλλοίωσις ἰσοταχῆς· ἐν ἴσῳ γὰρ χρόνῳ ἡλλοιώθη. ἀλλὰ τί ἡλλοιώθη; τὸ γὰρ ἴσον οὐκ ἔστιν ἐνταῦθα λεγόμενον, ἀλλ' ὥς ἐν τῷ ποσῷ ἰσότης, ἐνταῦθα ὁμοιότης. ἀλλ' ἔστω ἰσοταχεῖς τὸ ἐν ἴσῳ χρόνῳ τὸ αὐτὸ μεταβάλλον. πότερον οὖν ἐν ᾧ τὸ πάθος ἢ τὸ πάθος δεῖ συμβάλλειν; ἐνταῦθα μὲν δὴ ὅτι ὑγίεια ἢ αὐτή, ἔστιν λαβεῖν ὅτι οὔτε μᾶλλον οὔτε ἥττον ἀλλ' ὁμοίως ὑπάρχει. ἐὰν δὲ τὸ πάθος ἄλλο ἢ, οἶον ἀλλοιοῦται τὸ λευκαινόμενον καὶ τὸ ὑγιαζόμενον, τούτοις οὐδὲν τὸ αὐτὸ οὐδ' ἴσον οὐδ' ὅμοιον, ἢ ἤδη ταῦτα εἶδη ποιεῖ ἀλλοιώσεως, καὶ οὐκ ἔστι μία ὥσπερ οὐδ' αἱ φοραί. ὥστε ληπτέον πόσα

εἶδη ἀλλοιώσεως καὶ πόσα φορᾶς. εἰ μὲν οὖν τὰ κινούμενα εἶδει διαφέρει, ὧν εἰσὶν αἱ κινήσεις καθ' αὐτὰ καὶ μὴ κατὰ συμβεβηκός, καὶ αἱ κινήσεις εἶδει διοίσουσιν· εἰ δὲ γένει, γένει, εἰ δ' ἀριθμῷ, ἀριθμῷ. ἀλλὰ δὴ πότερον εἰς τὸ πάθος δεῖ βλέψαι, ἔαν ἢ τὸ αὐτὸ ἢ ὅμοιον, εἰ ἰσοταχεῖς αἱ ἀλλοιώσεις, ἢ εἰς τὸ ἀλλοιούμενον, οἷον εἰ τοῦ μὲν τοσονδὶ λελεύκονται τοῦ δὲ τοσονδί; ἢ εἰς ἄμφω, καὶ ἡ αὐτὴ μὲν ἢ ἄλλη τῷ πάθει, εἰ τὸ αὐτὸ <ἢ μὴ τὸ> αὐτό, ἴση δ' ἢ ἄνιστος, εἰ ἐκεῖνο <ἴσον ἢ> ἄνιστον;

καὶ ἐπὶ γενέσεως δὲ καὶ φθορᾶς τὸ αὐτὸ σκεπτέον. πῶς ἰσοταχῆς ἡ γένεσις; εἰ ἐν ἴσῳ χρόνῳ τὸ αὐτὸ καὶ ἄτομον, οἷον ἄνθρωπος ἀλλὰ μὴ ζῶον· θάπτων δ', εἰ ἐν ἴσῳ ἕτερον (οὐ γὰρ ἔχομέν τινα δύο ἐν οἷς ἡ ἑτερότης ὡς ἡ ἀνομοιότης), ἢ, εἰ ἔστιν ἀριθμὸς ἡ οὐσία, πλείων καὶ ἐλάττων ἀριθμὸς ὁμοειδής· ἀλλ' ἀνώνυμον τὸ κοινόν, καὶ τὸ ἐκάτερον [ποιόν· τὸ μὲν ποιόν,] ὥσπερ τὸ πλεῖον πάθος ἢ τὸ ὑπερέχον μᾶλλον, τὸ δὲ ποσὸν μεῖζον.

## Κεφάλαιο 5

Ἐπεὶ δὲ τὸ κινοῦν κινεῖ τι ἀεὶ καὶ ἐν τινι καὶ μέχρι του (λέγω δὲ τὸ μὲν ἐν τινι, ὅτι ἐν χρόνῳ, τὸ δὲ μέχρι του, ὅτι ποσόν τι μῆκος· ἀεὶ γὰρ ἅμα κινεῖ καὶ κεκίνηκεν, ὥστε ποσόν τι ἔσται ὃ ἐκινήθη, καὶ ἐν ποσῷ), εἰ δὴ τὸ μὲν Α τὸ κινοῦν, τὸ δὲ Β τὸ κινούμενον, ὅσον δὲ κεκίνηται μῆ(250a.) κος τὸ Γ, ἐν ὅσῳ δέ, ὁ χρόνος, ἐφ' οὗ τὸ Δ, ἐν δὴ τῷ ἴσῳ χρόνῳ ἢ ἴση δύναμις ἢ ἐφ' οὗ τὸ Α τὸ ἥμισυ τοῦ Β διπλασίαν τῆς Γ κινήσει, τὴν δὲ τὸ Γ ἐν τῷ ἡμίσει τοῦ Δ· οὕτω γὰρ ἀνάλογον ἔσται. καὶ εἰ ἡ αὐτὴ δύναμις τὸ αὐτὸ ἐν τῷ δὲ τῷ χρόνῳ τοσήνδε κινεῖ καὶ τὴν ἡμίσειαν ἐν τῷ ἡμίσει, καὶ ἡ ἡμίσεια ἰσχύς τὸ ἥμισυ κινήσει ἐν τῷ ἴσῳ χρόνῳ τὸ ἴσον. οἷον τῆς Α δυνάμεως ἔστω ἡμίσεια ἢ τὸ Ε καὶ τοῦ Β τὸ Ζ ἥμισυ· ὁμοίως δὲ ἔχουσι καὶ ἀνάλογον ἢ ἰσχύς πρὸς τὸ βάρος, ὥστε ἴσον ἐν ἴσῳ χρόνῳ κινήσουσιν. καὶ εἰ τὸ Ε τὸ Ζ κινεῖ ἐν τῷ Δ τὴν Γ, οὐκ ἀνάγκη ἐν τῷ ἴσῳ χρόνῳ τὸ ἐφ' οὗ Ε τὸ διπλάσιον τοῦ Ζ κινεῖν τὴν ἡμίσειαν τῆς Γ· εἰ δὴ τὸ Α τὴν τὸ Β κινεῖ ἐν τῷ Δ ὅσην ἢ τὸ Γ, τὸ ἥμισυ τοῦ Α τὸ ἐφ' ὃ Ε τὴν τὸ Β οὐ κινήσει ἐν τῷ χρόνῳ ἐφ' ὃ τὸ Δ οὐδ' ἐν τινι τοῦ Δ τι τῆς Γ ἀνάλογον πρὸς τὴν ὅλην τὴν Γ ὡς τὸ Α πρὸς τὸ Ε· ὅλως γὰρ εἰ ἔτυχεν οὐ κινήσει οὐδέν· οὐ γὰρ εἰ ἡ ὅλη ἰσχύς τοσήνδε ἐκίνησεν, ἢ ἡμίσεια οὐ κινήσει οὔτε ποσὴν οὔτ' ἐν ὁποσῶοῦν· εἰς γὰρ ἂν κινοίη τὸ πλοῖον, εἴπερ ἢ τε τῶν νεωλκῶν τέμνεται ἰσχύς εἰς τὸν ἀριθμὸν καὶ τὸ μῆκος ὃ πάντες ἐκίνησαν. διὰ τοῦτο ὁ Ζήνωνος λόγος οὐκ ἀληθής, ὡς ψοφεῖ τῆς κέγχρου ὀτιοῦν μέρος· οὐδὲν γὰρ κωλύει μὴ κινεῖν τὸν ἀέρα ἐν μηδενὶ χρόνῳ τοῦτον ὃν ἐκίνησεν πεσὼν ὁ ὅλος μέδιμνος. οὐδὲ δὴ τοσοῦτον μόριον, ὅσον ἂν κινήσειεν τοῦ ὅλου εἰ εἴη καθ' αὐτὸ τοῦτο, οὐ κινεῖ. οὐδὲ γὰρ οὐδὲν ἔστιν

ἀλλ' ἢ δυνάμει ἐν τῷ ὅλῳ.

εἰ δὲ τὰ <κινεῖντα> δύο, καὶ ἐκάτερον τῶνδε ἐκάτερον κινεῖ τὸ τοσόνδε ἐν τοσῶδε, καὶ συντιθέμενα αἱ δυνάμεις τὸ σύνθετον ἐκ τῶν βαρῶν τὸ ἴσον κινήσουσιν μῆκος καὶ ἐν ἴσῳ χρόνῳ· ἀνάλογον γάρ.

ἄρ' οὖν οὕτω καὶ ἐπ' ἀλλοιώσεως καὶ ἐπ' αὐξήσεως; τὸ μὲν γὰρ τὸ αὖξον, τὸ δὲ τὸ αὐξανόμενον, ἐν ποσῷ δὲ χρόνῳ καὶ ποσὸν τὸ μὲν αὖξει τὸ δὲ αὐξάνεται. καὶ τὸ ἀλλοιοῦν καὶ τὸ ἀλλοιούμενον ὡσαύτως — τὸ καὶ ποσὸν (250b.) κατὰ τὸ μᾶλλον καὶ ἥττον ἡλλοίωται, καὶ ἐν ποσῷ χρόνῳ, ἐν διπλασίῳ διπλάσιον, καὶ τὸ διπλάσιον ἐν διπλασίῳ· τὸ δ' ἥμισυ ἐν ἡμίσει χρόνῳ (ἢ ἐν ἡμίσει ἥμισυ), ἢ ἐν ἴσῳ διπλάσιον.

εἰ δὲ τὸ ἀλλοιοῦν ἢ αὖξον τὸ τοσόνδε ἐν τῷ τοσῶδε αὖξει ἢ ἀλλοιοῖ, οὐκ ἀνάγκη καὶ τὸ ἥμισυ ἐν ἡμίσει καὶ ἐν ἡμίσει ἥμισυ, ἀλλ' οὐδέν, εἰ ἔτυχεν, ἀλλοιώσει ἢ αὐξήσει, ὥσπερ καὶ ἐπὶ τοῦ βάρους.

## Βιβλίο 8

### Κεφάλαιο 1

Πότερον γέγονέ ποτε κίνησις οὐκ οὔσα πρότερον, καὶ φθείρεται πάλιν οὕτως ὥστε κινεῖσθαι μηδέν, ἢ οὐτ' ἐγένετο οὔτε φθείρεται, ἀλλ' αἰεὶ ἦν καὶ αἰεὶ ἔσται, καὶ τοῦτ' ἀθάνατον καὶ ἄπαυστον ὑπάρχει τοῖς οὖσιν, οἷον ζωὴ τις οὔσα τοῖς φύσει συνεστῶσι πᾶσιν;

εἶναι μὲν οὖν κίνησιν πάντες φασὶν οἱ περὶ φύσεώς τι λέγοντες διὰ τὸ κοσμοποιεῖν καὶ περὶ γενέσεως καὶ φθορᾶς εἶναι τὴν θεωρίαν πᾶσαν αὐτοῖς, ἦν ἀδύνατον ὑπάρχειν μὴ κινήσεως οὔσης· ἀλλ' ὅσοι μὲν ἀπείρους τε κόσμους εἶναί φασιν, καὶ τοὺς μὲν γίνεσθαι τοὺς δὲ φθείρεσθαι τῶν κόσμων, αἰεὶ φασιν εἶναι κίνησιν (ἀναγκαῖον γὰρ τὰς γενέσεις καὶ τὰς φθορὰς εἶναι μετὰ κινήσεως αὐτῶν)· ὅσοι δ' ἓνα <ἢ αἰεὶ> ἢ μὴ αἰεὶ, καὶ περὶ τῆς κινήσεως ὑποτίθενται κατὰ λόγον. εἰ δὲ ἐνδέχεται ποτε μηδέν κινεῖσθαι, διχῶς ἀνάγκη τοῦτο συμβαίνειν· ἢ γὰρ ὡς Ἀναξαγόρας λέγει (φησὶν γὰρ ἐκεῖνος, ὁμοῦ πάντων ὄντων καὶ ἡρεμούντων τὸν ἄπειρον χρόνον, κίνησιν ἐμποιῆσαι τὸν νοῦν καὶ διακρίναι), ἢ ὡς Ἐμπεδοκλῆς ἐν μέρει κινεῖσθαι καὶ πάλιν ἡρεμεῖν, κινεῖσθαι μὲν ὅταν ἡ φιλία ἐκ πολλῶν ποιῇ τὸ ἐν ἢ τὸ νεῖκος πολλὰ ἐξ ἐνός, ἡρεμεῖν δ' ἐν τοῖς μεταξὺ χρόνοις, λέγων οὕτως ἢ μὲν ἐν ἐκ πλεόνων μεμάθηκε φύεσθαι, ἢ δὲ πάλιν διαφύντος ἐνὸς πλέον' ἐκτελέθουσιν, (251a.) τῇ



μὲν γίνονται τε καὶ οὗ σφισιν ἔμπεδος αἰών· ἥ δὲ τάδ' ἀλλάσσοντα διαμπερὲς οὐδαμὰ λήγει, ταύτη δ' αἰὲν ἔασιν ἀκίνητοι κατὰ κύκλον. τὸ γὰρ “ἥ δὲ τάδ' ἀλλάσσοντα” ἐνθένδε ἐκέϊσε λέγειν αὐτὸν ὑποληπτέον. σκεπτέον δὴ περὶ τούτων πῶς ἔχει·

πρὸ ἔργου γὰρ οὐ μόνον πρὸς τὴν περὶ φύσεως θεωρίαν ἰδεῖν τὴν ἀλήθειαν, ἀλλὰ καὶ πρὸς τὴν μέθοδον τὴν περὶ τῆς ἀρχῆς τῆς πρώτης. ἀρξώμεθα δὲ πρῶτον ἐκ τῶν διωρισμένων ἡμῖν ἐν τοῖς φυσικοῖς πρότερον. φαμέν δὴ τὴν κίνησιν εἶναι ἐνέργειαν τοῦ κινητοῦ ἢ κινητόν. ἀναγκαῖον ἄρα ὑπάρχειν τὰ πράγματα τὰ δυνάμενα κινεῖσθαι καθ' ἐκάστην κίνησιν. καὶ χωρὶς δὲ τοῦ τῆς κινήσεως ὀρισμοῦ, πᾶς ἂν ὁμολογήσειεν ἀναγκαῖον εἶναι κινεῖσθαι τὸ δυνατόν κινεῖσθαι καθ' ἐκάστην κίνησιν, οἷον ἀλλοιοῦσθαι μὲν τὸ ἀλλοιωτόν, φέρεσθαι δὲ τὸ κατὰ τόπον μεταβλητόν, ὥστε δεῖ πρότερον καυστὸν εἶναι πρὶν κάεσθαι καὶ καυστικὸν πρὶν κάειν. οὐκοῦν καὶ ταῦτα ἀναγκαῖον ἢ γενέσθαι ποτὲ οὐκ ὄντα ἢ αἰδία εἶναι. εἰ μὲν τοίνυν ἐγένετο τῶν κινητῶν ἕκαστον, ἀναγκαῖον πρότερον τῆς ληφθείσης ἄλλην γενέσθαι μεταβολὴν καὶ κίνησιν, καθ' ἣν ἐγένετο τὸ δυνατόν κινηθῆναι ἢ κινῆσαι· εἰ δ' ὄντα προϋπῆρχεν αἰὲ κινήσεως μὴ οὔσης, ἄλογον μὲν φαίνεται καὶ αὐτόθεν ἐπιστήσασιν, οὐ μὴν ἀλλὰ μᾶλλον ἔτι προάγουσι τοῦτο συμβαίνειν ἀναγκαῖον. εἰ γὰρ τῶν μὲν κινητῶν ὄντων τῶν δὲ κινητικῶν ὅτε μὲν ἔσται τι πρῶτον κινούμενον, τὸ δὲ κινούμενον, ὅτε δ' οὐθέν, ἀλλ' ἡρεμεῖ, ἀναγκαῖον τοῦτο μεταβάλειν πρότερον· ἦν γάρ τι αἴτιον τῆς ἡρεμίας· ἢ γὰρ ἡρέμησις στέρησις κινήσεως. ὥστε πρὸ τῆς πρώτης μεταβολῆς ἔσται μεταβολὴ προτέρα. τὰ μὲν γὰρ κινεῖ μοναχῶς, τὰ δὲ καὶ τὰς ἐναντίας κινήσεις, οἷον τὸ μὲν πῦρ θερμαίνει, ψύχει δ' οὗ, ἢ δ' ἐπιστήμη δοκεῖ τῶν ἐναντίων εἶναι μία. φαίνεται μὲν οὖν κάκεῖ τι εἶναι ὁμοιότροπον· τὸ γὰρ ψυχρὸν θερμαίνει στραφέν πως καὶ ἀπελθόν, ὥσπερ καὶ ἀμαρτάνει ἐκὼν ὁ ἐπιστήμων, ὅταν ἀνάπαλιν χρήσεται τῇ ἐπι(251b.) στήμῃ. ἀλλ' οὖν ὅσα γε δυνατὰ ποιεῖν καὶ πάσχειν ἢ κινεῖν, τὰ δὲ κινεῖσθαι, οὐ πάντως δυνατὰ ἐστίν, ἀλλ' ὡδὶ ἔχοντα καὶ πλησιάζοντα ἀλλήλοις. ὥσθ' ὅταν πλησιάσῃ, κινεῖ, τὸ δὲ κινεῖται, καὶ ὅταν ὑπάρξῃ ὡς ἦν τὸ μὲν κινητικὸν τὸ δὲ κινητόν. εἰ τοίνυν μὴ αἰὲ ἐκινεῖτο, δῆλον ὡς οὐχ οὕτως εἶχον ὡς ἦν δυνάμενα τὸ μὲν κινεῖσθαι τὸ δὲ κινεῖν, ἀλλ' ἔδει μεταβάλλειν θάτερον αὐτῶν· ἀνάγκη γὰρ ἐν τοῖς πρὸς τι τοῦτο συμβαίνειν, οἷον εἰ μὴ ὃν διπλάσιον νῦν διπλάσιον, μεταβάλλειν, εἰ μὴ ἀμφοτέρω, θάτερον. ἔσται ἄρα τις προτέρα μεταβολὴ τῆς πρώτης. πρὸς δὲ τούτοις τὸ πρότερον καὶ ὕστερον πῶς ἔσται χρόνου μὴ ὄντος; ἢ χρόνος μὴ οὔσης κινήσεως; εἰ δὴ ἐστίν ὁ χρόνος κινήσεως ἀριθμὸς ἢ κινήσις τις, εἴπερ αἰὲ χρόνος ἔστιν, ἀνάγκη καὶ κίνησιν αἰδίου εἶναι. ἀλλὰ μὴν περί γε χρόνου ἔξω ἐνὸς ὁμονοητικῶς ἔχοντες φαίνονται πάντες· ἀγέννητον γὰρ εἶναι

λέγουσιν. καὶ διὰ τούτου Δημόκριτός γε δείκνυσιν ὡς ἀδύνατον ἅπαντα γεγονέναι· τὸν γὰρ χρόνον ἀγέννητον εἶναι. Πλάτων δὲ γεννᾷ μόνος· ἅμα μὲν γὰρ αὐτὸν τῷ οὐρανῷ [γεγονέναι], τὸν δ' οὐρανὸν γεγονέναι φησίν. εἰ οὖν ἀδύνατόν ἐστιν καὶ εἶναι καὶ νοῆσαι χρόνον ἄνευ τοῦ νῦν, τὸ δὲ νῦν ἐστὶ μεσότης τις, καὶ ἀρχὴν καὶ τελευτὴν ἔχον ἅμα, ἀρχὴν μὲν τοῦ ἐσομένου χρόνου, τελευτὴν δὲ τοῦ παρελθόντος, ἀνάγκη ἀεὶ εἶναι χρόνον. τὸ γὰρ ἔσχατον τοῦ τελευταίου ληφθέντος χρόνου ἔν τι τῶν νῦν ἔσται (οὐδὲν γὰρ ἔστι λαβεῖν ἐν τῷ χρόνῳ παρὰ τὸ νῦν), ὥστ' ἐπεὶ ἐστὶν ἀρχή τε καὶ τελευτή τὸ νῦν, ἀνάγκη αὐτοῦ ἐπ' ἀμφοτέρα εἶναι ἀεὶ χρόνον. ἀλλὰ μὴν εἴ γε χρόνον, φανερόν ὅτι ἀνάγκη εἶναι καὶ κίνησιν, εἴπερ ὁ χρόνος πάθος τι κινήσεως.

ὁ δ' αὐτὸς λόγος καὶ περὶ τοῦ ἀφθαρτον εἶναι τὴν κίνησιν· καθάπερ γὰρ ἐπὶ τοῦ γενέσθαι κίνησιν συνέβαινε προτέραν εἶναι τινα μεταβολὴν τῆς πρώτης, οὕτως ἐνταῦθα ὑστέραν τῆς τελευταίας· οὐ γὰρ ἅμα παύεται κινούμενον καὶ κινητὸν ὄν, οἷον καίόμενον καὶ καυστὸν ὄν (ἐνδέχεται γὰρ καυστὸν εἶναι μὴ καίόμενον), οὐδὲ (252a.) κινητικὸν καὶ κινοῦν. καὶ τὸ φθαρτικὸν δὴ δεήσει φθαρῆναι ὅταν φθείρη· καὶ τὸ τούτου φθαρτικὸν πάλιν ὕστερον· καὶ γὰρ ἡ φθορὰ μεταβολή τις ἐστίν. εἰ δὴ ταῦτ' ἀδύνατα, δῆλον ὡς ἔστιν αἰδῖος κίνησις, ἀλλ' οὐχ ὅτε μὲν ἦν ὅτε δ' οὐ· καὶ γὰρ ἔοικε τὸ οὕτω λέγειν πλάσματι μᾶλλον.

ὁμοίως δὲ καὶ τὸ λέγειν ὅτι πέφυκεν οὕτως καὶ ταύτην δεῖ νομίζειν εἶναι ἀρχήν, ὅπερ ἔοικεν Ἐμπεδοκλῆς ἂν εἴπειν, ὡς τὸ κρατεῖν καὶ κινεῖν ἐν μέρει τὴν φιλίαν καὶ τὸ νεῖκος ὑπάρχει τοῖς πράγμασιν ἐξ ἀνάγκης, ἡρεμεῖν δὲ τὸν μεταξὺ χρόνον. τάχα δὲ καὶ οἱ μίαν ἀρχὴν ποιοῦντες, ὥσπερ Ἀναξαγόρας, οὕτως ἂν εἴποιεν. ἀλλὰ μὴν οὐδὲν γε ἄτακτον τῶν φύσει καὶ κατὰ φύσιν· ἡ γὰρ φύσις αἰτία πᾶσιν τάξεως. τὸ δ' ἄπειρον πρὸς τὸ ἄπειρον οὐδένα λόγον ἔχει· τάξεις δὲ πᾶσα λόγος. τὸ δ' ἄπειρον χρόνον ἡρεμεῖν, εἴτα κινηθῆναι ποτε, τούτου δὲ μηδεμίαν εἶναι διαφοράν, ὅτι νῦν μᾶλλον ἢ πρότερον, μηδ' αὖτις τινὰ τάξιν ἔχειν, οὐκέτι φύσεως ἔργον. ἡ γὰρ ἀπλῶς ἔχει τὸ φύσει, καὶ οὐχ ὅτε μὲν οὕτως ὅτε δ' ἄλλως, οἷον τὸ πῦρ ἄνω φύσει φέρεται καὶ οὐχ ὅτε μὲν ὅτε δ' οὐ· ἡ λόγον ἔχει τὸ μὴ ἀπλοῦν. διόπερ βέλτιον ὡς Ἐμπεδοκλῆς, κἂν εἴ τις ἕτερος εἴρηκεν οὕτως ἔχειν, ἐν μέρει τὸ πᾶν ἡρεμεῖν καὶ κινεῖσθαι πάλιν· τάξιν γὰρ ἤδη τιν' ἔχει τὸ τοιοῦτον. ἀλλὰ καὶ τοῦτο δεῖ τὸν λέγοντα μὴ φάναι μόνον, ἀλλὰ καὶ τὴν αἰτίαν αὐτοῦ λέγειν, καὶ μὴ τίθεσθαι μηδὲν μηδ' ἀξιοῦν ἀξίωμ' ἄλογον, ἀλλ' ἡ ἐπαγωγὴν ἢ ἀπόδειξιν φέρειν· αὐτὰ μὲν γὰρ οὐκ αἰτία τὰ ὑποτεθέντα, οὐδὲ τοῦτ' ἦν τὸ φιλότῃ ἢ νείκει εἶναι, ἀλλὰ τῆς μὲν τὸ συνάγειν, τοῦ δὲ τὸ διακρίνειν. εἰ δὲ προσοριεῖται τὸ ἐν μέρει, λεκτέον ἐφ'

ὧν οὕτως, ὥσπερ ὅτι ἔστιν τι ὃ συνάγει τοὺς ἀνθρώπους, ἢ φιλία, καὶ φεύγουσιν οἱ ἐχθροὶ ἀλλήλους· τοῦτο γὰρ ὑποτίθεται καὶ ἐν τῷ ὅλῳ εἶναι· φαίνεται γὰρ ἐπὶ τινων οὕτως, τὸ δὲ καὶ δι' ἴσων χρόνων δεῖται λόγου τινός. ὅλως δὲ τὸ νομίζειν ἀρχὴν εἶναι ταύτην ἱκανήν, εἴ τι αἰεὶ ἢ ἔστιν οὕτως ἢ γίνεταί, οὐκ ὀρθῶς ἔχει ὑπολαβεῖν, ἐφ' ὃ Δημόκριτος ἀνάγει τὰς περὶ φύσεως αἰτίας, ὡς οὕτω καὶ τὸ πρότερον ἐγίνετο· τοῦ δὲ ἀεὶ οὐκ (252b.) ἀξιοῖ ἀρχὴν ζητεῖν, λέγων ἐπὶ τινων ὀρθῶς, ὅτι δ' ἐπὶ πάντων, οὐκ ὀρθῶς. καὶ γὰρ τὸ τρίγωνον ἔχει δυσὶν ὀρθαῖς ἀεὶ τὰς γωνίας ἴσας, ἀλλ' ὅμως ἐστὶν τι τῆς ἀϊδιότητος ταύτης ἕτερον αἴτιον· τῶν μέντοι ἀρχῶν οὐκ ἔστιν ἕτερον αἴτιον ἀϊδίων οὐσῶν. ὅτι μὲν οὖν οὐδεὶς ἦν χρόνος οὐδ' ἔσται ὅτε κίνησις οὐκ ἦν ἢ οὐκ ἔσται, εἰρήσθω τοσαῦτα.

## Κεφάλαιο 2

Τὰ δὲ ἐναντία τούτοις οὐ χαλεπὸν λύειν. δόξειε δ' ἂν ἐκ τῶν τοιῶνδε σκοποῦσιν ἐνδέχεσθαι μάλιστα κίνησιν εἶναι ποτε μὴ οὔσαν ὅλως,

πρῶτον μὲν ὅτι οὐδεμία ἀϊδιος μεταβολή· μεταβολὴ γὰρ ἅπασα πέφυκεν ἐκ τινος εἰς τι, ὥστε ἀνάγκη πάσης μεταβολῆς εἶναι πέρας τὰ ἐναντία ἐν οἷς γίνεταί, εἰς ἄπειρον δὲ κινεῖσθαι μηδέν.

ἔτι ὁρῶμεν ὅτι δυνατόν κινήσθαι μήτε κινούμενον μήτ' ἔχον ἐν ἑαυτῷ μηδεμίαν κίνησιν, οἷον ἐπὶ τῶν ἀψύχων, ὧν οὔτε μέρος οὐδὲν οὔτε τὸ ὅλον κινούμενον ἀλλ' ἡρεμοῦν κινεῖται ποτε· προσῆκεν δὲ ἢ ἀεὶ κινεῖσθαι ἢ μηδέποτε, εἴπερ μὴ γίνεταί οὐκ οὔσα.

πολὺ δὲ μάλιστα τὸ τοιοῦτον ἐπὶ τῶν ἐμψύχων εἶναι φανερόν· οὐδεμιᾶς γὰρ ἐν ἡμῖν ἐνούσης κινήσεως ἐνίστε, ἀλλ' ἡσυχάζοντες ὅμως κινούμεθα ποτε, καὶ ἐγγίγνεταί ἐν ἡμῖν ἐξ ἡμῶν αὐτῶν ἀρχὴ κινήσεως, καὶ μὴθὲν ἔξωθεν κίνησις. τοῦτο γὰρ ἐπὶ τῶν ἀψύχων οὐχ ὁρῶμεν ὁμοίως, ἀλλ' ἀεὶ κινεῖται αὐτὰ τῶν ἔξωθεν ἕτερον· τὸ δὲ ζῶον αὐτό φάμεν ἑαυτὸ κινεῖν. ὥστ' εἴπερ ἡρεμεῖ ποτὲ πάμπαν, ἐν ἀκινήτῳ κίνησις ἂν γίγνοιτο ἐξ αὐτοῦ καὶ οὐκ ἔξωθεν. εἰ δ' ἐν ζῳῳ τοῦτο δυνατόν γενέσθαι, τί κωλύει τὸ αὐτὸ συμβῆναι καὶ κατὰ τὸ πᾶν; εἰ γὰρ ἐν μικρῷ κόσμῳ γίνεταί, καὶ ἐν μεγάλῳ· καὶ εἰ ἐν τῷ κόσμῳ, καὶ ἐν τῷ ἀπείρῳ, εἴπερ ἐνδέχεται κινεῖσθαι τὸ ἄπειρον καὶ ἡρεμεῖν ὅλον.

τούτων δὴ τὸ μὲν πρῶτον λεχθέν, τὸ μὴ τὴν αὐτὴν ἀεὶ καὶ μίαν τῷ ἀριθμῷ εἶναι τὴν κίνησιν τὴν εἰς τὰ ἀντικείμενα, ὀρθῶς λέγεται. τοῦτο μὲν γὰρ ἴσως

ἀναγκαῖον, εἴπερ μὴ ἀεὶ μίαν καὶ τὴν αὐτὴν εἶναι δυνατὸν τὴν τοῦ αὐτοῦ καὶ ἐνὸς κίνησιν· λέγω δ' οἷον πότερον τῆς μιᾶς χορδῆς εἶς καὶ ὁ αὐτὸς φθόγγος, ἢ ἀεὶ ἕτερος, ὁμοίως ἐχούσης καὶ κινουμένης. ἀλλ' ὅμως ὁποτέρως ποτ' ἔχει, οὐδὲν κωλύει τὴν αὐ(253a.) τὴν εἶναι τινα τῷ συνεχῇ εἶναι καὶ αἰδίων· δῆλον δ' ἔσται μᾶλλον ἐκ τῶν ὕστερον.

τὸ δὲ κινεῖσθαι μὴ κινούμενον οὐδὲν ἄτοπον, ἂν ὅτε μὲν ἢ τὸ κινῆσον ἔξωθεν, ὅτε δὲ μή. τοῦτο μέντοι πῶς ἂν εἴη, ζητητέον, λέγω δὲ ὥστε τὸ αὐτὸ ὑπὸ τοῦ αὐτοῦ κινητικοῦ ὄντος ὅτε μὲν κινεῖσθαι ὅτε δὲ μή· οὐδὲν γὰρ ἄλλ' ἀπορεῖ ὁ τοῦτο λέγων ἢ διὰ τί οὐκ ἀεὶ τὰ μὲν ἡρεμεῖ τῶν ὄντων τὰ δὲ κινεῖται.

μάλιστα δ' ἂν δόξειεν τὸ τρίτον ἔχειν ἀπορίαν, ὡς ἐγγιγνομένης οὐκ ἐνούσης πρότερον κινήσεως, τὸ συμβαῖνον ἐπὶ τῶν ἐμπύχων· ἡρεμοῦν γὰρ πρότερον μετὰ ταῦτα βαδίζει, κινήσαντος τῶν ἔξωθεν οὐδενός, ὡς δοκεῖ. τοῦτο δ' ἐστὶ ψεῦδος. ὁρῶμεν γὰρ ἀεὶ τι κινούμενον ἐν τῷ ζῳῷ τῶν συμφύτων· τούτου δὲ τῆς κινήσεως οὐκ αὐτὸ τὸ ζῶον αἴτιον, ἀλλὰ τὸ περιέχον ἴσως. αὐτὸ δὲ φαμεν αὐτὸ κινεῖν οὐ πᾶσαν κίνησιν, ἀλλὰ τὴν κατὰ τόπον. οὐδὲν οὖν κωλύει, μᾶλλον δ' ἴσως ἀναγκαῖον, ἐν μὲν τῷ σώματι πολλὰς ἐγγίγνεσθαι κινήσεις ὑπὸ τοῦ περιέχοντος, τούτων δ' ἐνίας τὴν διάνοιαν ἢ τὴν ὄρεξιν κινεῖν, ἐκείνην δὲ τὸ ὅλον ἤδη ζῶον κινεῖν, οἷον συμβαίνει περὶ τοὺς ὕπνους· αἰσθητικῆς μὲν γὰρ οὐδεμιᾶς ἐνούσης κινήσεως, ἐνούσης μέντοι τινός, ἐγείρεται τὰ ζῶα πάλιν. ἀλλὰ γὰρ φανερόν ἐσται καὶ περὶ τούτων ἐκ τῶν ἐπομένων.

### Κεφάλαιο 3

Ἀρχὴ δὲ τῆς σκέψεως ἥπερ καὶ περὶ τῆς λεχθείσης ἀπορίας, διὰ τί ποτε ἔνια τῶν ὄντων ὅτε μὲν κινεῖται ὅτε δὲ ἡρεμεῖ πάλιν. ἀνάγκη δὴ ἥτοι πάντα ἡρεμεῖν ἀεὶ, ἢ πάντα ἀεὶ κινεῖσθαι, ἢ τὰ μὲν κινεῖσθαι τὰ δ' ἡρεμεῖν, καὶ πάλιν τούτων ἥτοι τὰ μὲν κινούμενα κινεῖσθαι ἀεὶ τὰ δ' ἡρεμοῦντα ἡρεμεῖν, ἢ πάντα πεφυκέναι ὁμοίως κινεῖσθαι καὶ ἡρεμεῖν, ἢ τὸ λοιπὸν ἔτι καὶ τρίτον. ἐνδέχεται γὰρ τὰ μὲν ἀεὶ τῶν ὄντων ἀκίνητα εἶναι, τὰ δ' ἀεὶ κινούμενα, τὰ δ' ἀμφοτέρων μεταλαμβάνειν· ὅπερ ἡμῖν λεκτέον ἐστίν· τοῦτο γὰρ ἔχει λύσιν τε πάντων τῶν ἀπορουμένων, καὶ τέλος ἡμῖν ταύτης τῆς πραγματείας ἐστίν.

τὸ μὲν οὖν πάντ' ἡρεμεῖν, καὶ τούτου ζητεῖν λόγον ἀφέντας τὴν αἴσθησιν, ἄρρωστία τίς ἐστὶν διανοίας, καὶ περὶ ὅλου τινὸς ἄλλ' οὐ περὶ μέρους ἀμφισβήτησις· οὐδὲ μόνον πρὸς τὸν φυσικόν, ἀλλὰ πρὸς πάσας τὰς (253b.)

ἐπιστήμας ὡς εἶπεῖν καὶ πάσας τὰς δόξας διὰ τὸ κινήσει χρῆσθαι πάσας. ἔτι δ' αἱ περὶ τῶν ἀρχῶν ἐνστάσεις, ὥσπερ ἐν τοῖς περὶ τὰ μαθήματα λόγοις οὐδὲν εἰσιν πρὸς τὸν μαθηματικόν, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, οὕτως οὐδὲ περὶ τοῦ νῦν ῥηθέντος πρὸς τὸν φυσικόν· ὑπόθεσις γὰρ ὅτι ἡ φύσις ἀρχὴ τῆς κινήσεως.

σχεδὸν δὲ καὶ τὸ φάναι κινεῖσθαι πάντα ψεῦδος μὲν, ἦττον δὲ τούτου παρὰ τὴν μέθοδον· ἐτέθη μὲν γὰρ ἡ φύσις ἐν τοῖς φυσικοῖς ἀρχή, καθάπερ κινήσεως, καὶ ἡρεμίας, ὅμως δὲ φυσικὸν ἡ κίνησις· καὶ φασὶ τινες κινεῖσθαι τῶν ὄντων οὐ τὰ μὲν τὰ δ' οὐ, ἀλλὰ πάντα καὶ ἀεί, ἀλλὰ λανθάνειν τοῦτο τὴν ἡμετέραν αἴσθησιν· πρὸς οὓς καίπερ οὐ διορίζοντας ποῖαν κίνησιν λέγουσιν, ἢ πάσας, οὐ χαλεπὸν ἀπαντῆσαι. οὔτε γὰρ αὐξάνεσθαι οὔτε φθίνειν οἶόν τε συνεχῶς, ἀλλ' ἔστι καὶ τὸ μέσον. ἔστι δ' ὁμοιος ὁ λόγος τῷ περὶ τοῦ τὸν σταλαγμὸν κατατρίβειν καὶ τὰ ἐκφυόμενα τοὺς λίθους διαιρεῖν· οὐ γὰρ εἰ τοσόνδε ἐξέωσεν ἢ ἀφεῖλεν ὁ σταλαγμός, καὶ τὸ ἥμισυ ἐν ἡμίσει χρόνῳ πρότερον· ἀλλ' ὥσπερ ἡ νεωλκία, καὶ οἱ σταλαγμοὶ οἱ τοσοῖδι τοσονδὶ κινουῖσιν, τὸ δὲ μέρος αὐτῶν ἐν οὐδενὶ χρόνῳ τοσοῦτον. διαιρεῖται μὲν οὖν τὸ ἀφαιρεθὲν εἰς πλείω, ἀλλ' οὐδὲν αὐτῶν ἐκινήθη χωρίς, ἀλλ' ἅμα. φανερόν οὖν ὡς οὐκ ἀναγκαῖον ἀεὶ τι ἀπιέναι, ὅτι διαιρεῖται ἡ φθίσις εἰς ἅπειρα, ἀλλ' ὅλον ποτὲ ἀπιέναι. ὁμοίως δὲ καὶ ἐπ' ἀλλοιώσεως ὁποιασοῦν· οὐ γὰρ εἰ μεριστὸν εἰς ἅπειρα τὸ ἀλλοιούμενον, διὰ τοῦτο καὶ ἡ ἀλλοίωσις, ἀλλ' ἀθρόα γίνεται πολλάκις, ὥσπερ ἡ πῆξις. ἔτι ὅταν τι νοσήσῃ, ἀνάγκη χρόνον γενέσθαι ἐν ᾧ ὑγιασθήσεται, καὶ μὴ ἐν πέρατι χρόνου μεταβάλλειν· ἀνάγκη δὲ εἰς ὑγίειαν μεταβάλλειν καὶ μὴ εἰς ἄλλο μηθέν. ὥστε τὸ φάναι συνεχῶς ἀλλοιοῦσθαι λίαν ἐστὶ τοῖς φανεροῖς ἀμφισβητεῖν. εἰς τοῦναντίον γὰρ ἡ ἀλλοίωσις· ὁ δὲ λίθος οὔτε σκληρότερος γίνεται οὔτε μαλακώτερος. κατὰ τε τὸ φέρεσθαι θαυμαστὸν εἰ λέληθεν ὁ λίθος κάτω φερόμενος ἢ μένων ἐπὶ τῆς γῆς. ἔτι δ' ἡ γῆ καὶ τῶν ἄλλων ἕκαστον ἐξ ἀνάγκης μένουσι μὲν ἐν τοῖς οἰκείοις τόποις, κινουῖνται δὲ βιαίως ἐκ τούτων· εἴπερ οὖν ἔνι' αὐτῶν ἐστὶν ἐν τοῖς οἰκείοις τόποις, (254a.) ἀνάγκη μηδὲ κατὰ τόπον πάντα κινεῖσθαι. ὅτι μὲν οὖν ἀδύνατον ἢ ἀεὶ πάντα κινεῖσθαι ἢ ἀεὶ πάντα ἡρεμεῖν, ἐκ τούτων καὶ ἄλλων τοιούτων πιστεύσειεν ἂν τις.

ἀλλὰ μὴν οὐδὲ τὰ μὲν ἀεὶ ἐνδέχεται ἡρεμεῖν, τὰ δ' ἀεὶ κινεῖσθαι, ποτὲ δ' ἡρεμεῖν καὶ ποτὲ κινεῖσθαι μηδέν. λεκτέον δ' ὅτι ἀδύνατον, ὥσπερ ἐπὶ τῶν εἰρημένων πρότερον, καὶ ἐπὶ τούτων (ὁρῶμεν γὰρ ἐπὶ τῶν αὐτῶν γιγνομένων τὰς εἰρημένας μεταβολάς), καὶ πρὸς τούτοις ὅτι μάχεται τοῖς φανεροῖς ὁ ἀμφισβητῶν· οὔτε γὰρ αὕξησης οὔθ' ἡ βίαιος ἔσται κίνησις, εἰ μὴ κινήσεται παρὰ φύσιν ἡρεμοῦν πρότερον. γένεσιν οὖν ἀναιρεῖ καὶ φθορὰν οὗτος ὁ

λόγος. σχεδὸν δὲ καὶ τὸ κινεῖσθαι γίνεσθαι τι καὶ φθείρεσθαι δοκεῖ πᾶσιν· εἰς ὃ μὲν γὰρ μεταβάλλει, γίνεταί τοῦτο ἢ ἐν τούτῳ, ἐξ οὗ δὲ μεταβάλλει, φθείρεται τοῦτο ἢ ἐντεῦθεν. ὥστε δῆλον ὅτι τὰ μὲν κινεῖται, τὰ δ' ἡρεμεῖ ἐνίοτε.

τὸ δὲ πάντα ἀξιοῦν ὅτε μὲν ἡρεμεῖν ὅτε δὲ κινεῖσθαι, τοῦτ' ἤδη συναπτεόν πρὸς τοὺς πάλαι λόγους. ἀρχὴν δὲ πάλιν ποιητέον ἀπὸ τῶν νῦν διορισθέντων, τὴν αὐτὴν ἥπερ ἡρξάμεθα πρότερον. ἢ γὰρ τοι πάντα ἡρεμεῖ, ἢ πάντα κινεῖται, ἢ τὰ μὲν ἡρεμεῖ τὰ δὲ κινεῖται τῶν ὄντων. καὶ εἰ τὰ μὲν ἡρεμεῖ τὰ δὲ κινεῖται, ἀνάγκη ἥτοι πάντα ὅτε μὲν ἡρεμεῖν ὅτε δὲ κινεῖσθαι, <ἢ τὰ μὲν ἀεὶ ἡρεμεῖν τὰ δὲ ἀεὶ κινεῖσθαι>, ἢ τὰ μὲν ἀεὶ ἡρεμεῖν τὰ δὲ ἀεὶ κινεῖσθαι αὐτῶν, τὰ δ' ὅτε μὲν ἡρεμεῖν ὅτε δὲ κινεῖσθαι. ὅτι μὲν τοίνυν οὐχ οἷόν τε πάντ' ἡρεμεῖν, εἴρηται μὲν καὶ πρότερον, εἴπωμεν δὲ καὶ νῦν. εἰ γὰρ καὶ κατ' ἀλήθειαν οὕτως ἔχει καθάπερ φασί τινες, εἶναι τὸ ὄν ἄπειρον καὶ ἀκίνητον, ἀλλ' οὗτι φαίνεται γε κατὰ τὴν αἴσθησιν, ἀλλὰ κινεῖσθαι πολλὰ τῶν ὄντων. εἴπερ οὖν ἔστιν δόξα ψευδῆς ἢ ὅλως δόξα, καὶ κίνησις ἔστιν, κἂν εἰ φαντασία, κἂν εἰ ὅτε μὲν οὕτως δοκεῖ ὅτε δ' ἑτέρως· ἢ γὰρ φαντασία καὶ ἡ δόξα κινήσεις τινὲς εἶναι δοκοῦσιν. ἀλλὰ τὸ μὲν περὶ τούτου σκοπεῖν, καὶ ζητεῖν λόγον ὧν βέλτιον ἔχομεν ἢ λόγου δεῖσθαι, κακῶς κρίνειν ἐστὶν τὸ βέλτιον καὶ τὸ χεῖρον, καὶ τὸ πιστὸν καὶ τὸ μὴ πιστόν, καὶ ἀρχὴν καὶ μὴ ἀρχήν. ὁμοίως δὲ ἀδύνατον καὶ τὸ πάντα κινεῖσθαι, ἢ τὰ μὲν ἀεὶ κινεῖσθαι τὰ δ' ἀεὶ ἡρεμεῖν. πρὸς ἅπαντα γὰρ ταῦτα ἱκανὴ μία πίστις· (254b.) ὁρῶμεν γὰρ ἔνια ὅτε μὲν κινούμενα ὅτε δ' ἡρεμοῦντα. ὥστε φανερόν ὅτι ἀδύνατον ὁμοίως τὸ πάντα ἡρεμεῖν καὶ τὸ πάντα κινεῖσθαι συνεχῶς τῷ τὰ μὲν ἀεὶ κινεῖσθαι τὰ δ' ἡρεμεῖν ἀεὶ. λοιπὸν οὖν θεωρήσαι πότερον πάντα τοιαῦτα οἷα κινεῖσθαι καὶ ἡρεμεῖν, ἢ ἔνια μὲν οὕτως, ἔνια δ' ἀεὶ ἡρεμεῖ, ἔνια δ' ἀεὶ κινεῖται· τοῦτο γὰρ δεικτέον ἡμῖν.

## Κεφάλαιο 4

Τῶν δὲ κινούντων καὶ κινουμένων τὰ μὲν κατὰ συμβεβηκὸς κινεῖ καὶ κινεῖται, τὰ δὲ καθ' αὐτά, κατὰ συμβεβηκὸς μὲν οἷον ὅσα τε τῷ ὑπάρχειν τοῖς κινοῦσιν ἢ κινουμένοις καὶ τὰ κατὰ μόριον, τὰ δὲ καθ' αὐτά, ὅσα μὴ τῷ ὑπάρχειν τῷ κινοῦντι ἢ τῷ κινουμένῳ, μηδὲ τῷ μόριόν τι αὐτῶν κινεῖν ἢ κινεῖσθαι.

τῶν δὲ καθ' αὐτά τὰ μὲν ὑφ' ἑαυτοῦ τὰ δ' ὑπ' ἄλλου, καὶ τὰ μὲν φύσει τὰ δὲ βίᾳ καὶ παρὰ φύσιν. τό τε γὰρ αὐτὸ ὑφ' αὐτοῦ κινούμενον φύσει κινεῖται, οἷον ἕκαστον τῶν ζώων (κινεῖται γὰρ τὸ ζῶον αὐτὸ ὑφ' αὐτοῦ, ὅσων δ' ἢ

ἀρχὴ ἐν αὐτοῖς τῆς κινήσεως, ταῦτα φύσει φαμὲν κινεῖσθαι· διὸ τὸ μὲν ζῶον ὅλον φύσει αὐτὸ ἐαυτὸ κινεῖ, τὸ μέντοι σῶμα ἐνδέχεται καὶ φύσει καὶ παρὰ φύσιν κινεῖσθαι· διαφέρει γὰρ ὅποιαν τε ἂν κίνησιν κινούμενον τύχη καὶ ἐκ ποίου στοιχείου συνεστηκός), καὶ τῶν ὑπ' ἄλλου κινουμένων τὰ μὲν φύσει κινεῖται τὰ δὲ παρὰ φύσιν, παρὰ φύσιν μὲν οἶον τὰ γεηρὰ ἄνω καὶ τὸ πῦρ κάτω, ἔτι δὲ τὰ μόρια τῶν ζώων πολλάκις κινεῖται παρὰ φύσιν, παρὰ τὰς θέσεις καὶ τοὺς τρόπους τῆς κινήσεως. καὶ μάλιστα τὸ ὑπὸ τινος κινεῖσθαι τὸ κινούμενον ἐν τοῖς παρὰ φύσιν κινουμένοις ἐστὶ φανερόν διὰ τὸ δῆλον εἶναι ὑπ' ἄλλου κινούμενον. μετὰ δὲ τὰ παρὰ φύσιν τῶν κατὰ φύσιν τὰ αὐτὰ ὑφ' αὐτῶν, οἶον τὰ ζῶα· οὐ γὰρ τοῦτ' ἄδηλον, εἰ ὑπὸ τινος κινεῖται, ἀλλὰ πῶς δεῖ διαλαβεῖν αὐτοῦ τὸ κινεῖν καὶ τὸ κινούμενον· ἔοικεν γὰρ ὥσπερ ἐν τοῖς πλοίοις καὶ τοῖς μὴ φύσει συνισταμένοις, οὕτω καὶ ἐν τοῖς ζώοις εἶναι διηρημένον τὸ κινεῖν καὶ τὸ κινούμενον, καὶ οὕτω τὸ ἅπαν αὐτὸ αὐτὸ κινεῖν.

μάλιστα δ' ἀπορεῖται τὸ λοιπὸν τῆς εἰρημένης τελευταίας διαιρέσεως· τῶν γὰρ ὑπ' ἄλλου κινουμένων τὰ μὲν παρὰ φύσιν ἐθήκαμεν κινεῖσθαι, τὰ δὲ λείπεται ἀντιθεῖναι (255a.) ὅτι φύσει. ταῦτα δ' ἐστὶν ἃ τὴν ἀπορίαν παράσχοι ἂν ὑπὸ τίνος κινεῖται, οἶον τὰ κοῦφα καὶ τὰ βαρέα. ταῦτα γὰρ εἰς μὲν τοὺς ἀντικειμένους τόπους βίᾳ κινεῖται, εἰς δὲ τοὺς οἰκείους, τὸ μὲν κοῦφον ἄνω τὸ δὲ βαρὺ κάτω, φύσει· τὸ δ' ὑπὸ τίνος οὐκέτι φανερόν, ὥσπερ ὅταν κινῶνται παρὰ φύσιν. τό τε γὰρ αὐτὰ ὑφ' αὐτῶν φάναι ἀδύνατον· ζωτικόν τε γὰρ τοῦτο καὶ τῶν ἐμψύχων ἴδιον, καὶ ἰστάναι ἂν ἐδύνατο αὐτὰ αὐτά (λέγω δ' οἶον, εἰ τοῦ βαδίζειν αἴτιον αὐτῷ, καὶ τοῦ μὴ βαδίζειν), ὥστ' εἰ ἐπ' αὐτῷ τὸ ἄνω φέρεσθαι τῷ πυρί, δῆλον ὅτι ἐπ' αὐτῷ καὶ τὸ κάτω. ἄλογον δὲ καὶ τὸ μίαν κίνησιν κινεῖσθαι μόνην ὑφ' αὐτῶν, εἴγε αὐτὰ ἐαυτὰ κινεῖσιν. ἔτι πῶς ἐνδέχεται συνεχές τι καὶ συμφυὲς αὐτὸ ἐαυτὸ κινεῖν; ἢ γὰρ ἐν καὶ συνεχές μὴ ἀφῆ, ταύτη ἀπαθές· ἀλλ' ἢ κεχώρισται, ταύτη τὸ μὲν πέφυκε ποιεῖν τὸ δὲ πάσχειν. οὗτ' ἄρα τούτων οὐθὲν αὐτὸ ἐαυτὸ κινεῖ (συμφυῆ γάρ), οὗτ' ἄλλο συνεχές οὐδέν, ἀλλ' ἀνάγκη διηρηῆσθαι τὸ κινεῖν ἐν ἐκάστω πρὸς τὸ κινούμενον, οἶον ἐπὶ τῶν ἀψύχων ὁρῶμεν, ὅταν κινῇ τι τῶν ἐμψύχων. ἀλλὰ συμβαίνει καὶ ταῦτα ὑπὸ τινος ἀεὶ κινεῖσθαι· γένοιτο δ' ἂν φανερόν διαιροῦσι τὰς αἰτίας.

ἔστιν δὲ καὶ ἐπὶ τῶν κινούντων λαβεῖν τὰ εἰρημένα· τὰ μὲν γὰρ παρὰ φύσιν αὐτῶν κινητικά ἐστίν, οἶον ὁ μοχλὸς οὐ φύσει τοῦ βάρους κινητικός, τὰ δὲ φύσει, οἶον τὸ ἐνεργεῖα θερμὸν κινητικὸν τοῦ δυνάμει θερμοῦ. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων.

καὶ κινητὸν δ' ὡσαύτως φύσει τὸ δυνάμει ποιὸν ἢ ποσὸν ἢ πού, ὅταν ἔχη τὴν ἀρχὴν τὴν τοιαύτην ἐν αὐτῷ καὶ μὴ κατὰ συμβεβηκός (εἴη γὰρ ἂν τὸ αὐτὸ καὶ ποιὸν καὶ ποσόν, ἀλλὰ θατέρω θάτερον συμβέβηκεν καὶ οὐ καθ' αὐτὸ ὑπάρχει). τὸ δὴ πῦρ καὶ ἡ γῆ κινεῦνται ὑπὸ τινος βίᾳ μὲν ὅταν παρὰ φύσιν, φύσει δ' ὅταν εἰς τὰς αὐτῶν ἐνεργείας δυνάμει ὄντα. ἐπεὶ δὲ τὸ δυνάμει πλεοναχῶς λέγεται, τοῦτ' αἴτιον τοῦ μὴ φανερόν εἶναι ὑπὸ τίνος τὰ τοιαῦτα κινεῖται, οἷον τὸ πῦρ ἄνω καὶ ἡ γῆ κάτω. ἔστι δὲ δυνάμει ἄλλως ὁ μανθάνων ἐπιστήμων καὶ ὁ ἔχων ἥδη καὶ μὴ ἐνεργῶν. ἀεὶ δ', ὅταν ἅμα τὸ ποιητικὸν καὶ τὸ παθητικὸν ὣσιν, γίγνεται ἐνεργεία τὸ δυ(255b.) νατόν, οἷον τὸ μανθάνον ἐκ δυνάμει ὄντος ἕτερον γίγνεται δυνάμει (ὁ γὰρ ἔχων ἐπιστήμην μὴ θεωρῶν δὲ δυνάμει ἐστὶν ἐπιστήμων πως, ἀλλ' οὐχ ὡς καὶ πρὶν μαθεῖν), ὅταν δ' οὕτως ἔχη, ἐάν τι μὴ κωλύῃ, ἐνεργεῖ καὶ θεωρεῖ, ἢ ἔσται ἐν τῇ ἀντιφάσει καὶ ἐν ἀγνοίᾳ. ὁμοίως δὲ ταῦτ' ἔχει καὶ ἐπὶ τῶν φυσικῶν· τὸ γὰρ ψυχρὸν δυνάμει θερμόν, ὅταν δὲ μεταβάλλῃ, ἥδη πῦρ, καίει δέ, ἂν μὴ τι κωλύῃ καὶ ἐμποδίζῃ. ὁμοίως δ' ἔχει καὶ περὶ τὸ βαρὺ καὶ κοῦφον· τὸ γὰρ κοῦφον γίγνεται ἐκ βαρέος, οἷον ἐξ ὕδατος ἀήρ (τοῦτο γὰρ δυνάμει πρῶτον), καὶ ἥδη κοῦφον, καὶ ἐνεργήσῃ γ' εὐθύς, ἂν μὴ τι κωλύῃ. ἐνέργεια δὲ τοῦ κούφου τὸ ποῦ εἶναι καὶ ἄνω, κωλύεται δ', ὅταν ἐν τῷ ἐναντίῳ τόπῳ ᾗ. καὶ τοῦθ' ὁμοίως ἔχει καὶ ἐπὶ τοῦ ποσοῦ καὶ ἐπὶ τοῦ ποιοῦ. καίτοι τοῦτο ζητεῖται, διὰ τί ποτε κινεῖται εἰς τὸν αὐτῶν τόπον τὰ κοῦφα καὶ τὰ βαρέα. αἴτιον δ' ὅτι πέφυκέν ποι, καὶ τοῦτ' ἔστιν τὸ κούφῳ καὶ βαρεῖ εἶναι, τὸ μὲν τῷ ἄνω τὸ δὲ τῷ κάτω διωρισμένον. δυνάμει δ' ἐστὶν κοῦφον καὶ βαρὺ πολλαχῶς, ὥσπερ εἴρηται· ὅταν τε γὰρ ᾗ ὕδωρ, δυνάμει γέ πως ἐστὶ κοῦφον, καὶ ὅταν ἀήρ, ἔστιν ὡς ἔτι δυνάμει (ἐνδέχεται γὰρ ἐμποδιζόμενον μὴ ἄνω εἶναι)· ἀλλ' ἐάν ἀφαιρεθῇ τὸ ἐμποδίζον, ἐνεργεῖ καὶ ἀεὶ ἀνωτέρω γίγνεται. ὁμοίως δὲ καὶ τὸ ποιὸν εἰς τὸ ἐνεργείᾳ εἶναι μεταβάλλει· εὐθύς γὰρ θεωρεῖ τὸ ἐπιστήμον, ἐάν μὴ τι κωλύῃ· καὶ τὸ ποσὸν ἐκτείνεται, ἐάν μὴ τι κωλύῃ. ὁ δὲ τὸ ὑφιστάμενον καὶ κωλῦον κινήσας ἔστιν ὡς κινεῖ ἔστι δ' ὡς οὕ, οἷον ὁ τὸν κίονα ὑποσπᾶσας ἢ ὁ τὸν λίθον ἀφελὼν ἀπὸ τοῦ ἀσκοῦ ἐν τῷ ὕδατι· κατὰ συμβεβηκός γὰρ κινεῖ, ὥσπερ καὶ ἡ ἀνακλασθεῖσα σφαῖρα οὐχ ὑπὸ τοῦ τοίχου ἐκινήθη ἀλλ' ὑπὸ τοῦ βάλλοντος. ὅτι μὲν τοίνυν οὐδὲν τούτων αὐτὸ κινεῖ ἑαυτό, δῆλον· ἀλλὰ κινήσεως ἀρχὴν ἔχει, οὐ τοῦ κινεῖν οὐδὲ τοῦ ποιεῖν, ἀλλὰ τοῦ πάσχειν.

εἰ δὴ πάντα τὰ κινούμενα ἢ φύσει κινεῖται ἢ παρὰ φύσιν καὶ βίᾳ, καὶ τὰ τε βίᾳ καὶ παρὰ φύσιν πάντα ὑπὸ τινος καὶ ὑπ' ἄλλου, τῶν δὲ φύσει πάλιν τὰ θ' ὑφ' αὐτῶν κινούμενα ὑπὸ τινος κινεῖται καὶ τὰ μὴ ὑφ' αὐτῶν, οἷον τὰ κοῦφα καὶ τὰ βαρέα (256a.) (ἢ γὰρ ὑπὸ τοῦ γεννήσαντος καὶ ποιήσαντος κοῦφον ἢ βαρὺ, ἢ ὑπὸ τοῦ τὰ ἐμποδίζοντα καὶ κωλύοντα λύσαντος), ἅπαντα ἂν τὰ



κινούμενα ὑπό τινος κινοῖτο.

## Κεφάλαιο 5

Τοῦτο δὲ διχῶς· ἢ γὰρ οὐ δι' αὐτὸ τὸ κινεῖν, ἀλλὰ δι' ἕτερον ὃ κινεῖ τὸ κινεῖν, ἢ δι' αὐτό, καὶ τοῦτο ἢ πρῶτον μετὰ τὸ ἔσχατον ἢ διὰ πλειόνων, οἷον ἢ βακτηρία κινεῖ τὸν λίθον καὶ κινεῖται ὑπὸ τῆς χειρὸς κινουμένης ὑπὸ τοῦ ἀνθρώπου, οὗτος δ' οὐκέτι τῷ ὑπ' ἄλλου κινεῖσθαι. ἄμφω δὲ κινεῖν φαμέν, καὶ τὸ τελευταῖον καὶ τὸ πρῶτον τῶν κινούντων, ἀλλὰ μᾶλλον τὸ πρῶτον· ἐκεῖνο γὰρ κινεῖ τὸ τελευταῖον, ἀλλ' οὐ τοῦτο τὸ πρῶτον, καὶ ἄνευ μὲν τοῦ πρώτου τὸ τελευταῖον οὐ κινήσει, ἐκεῖνο δ' ἄνευ τούτου, οἷον ἢ βακτηρία οὐ κινήσει μὴ κινούντος τοῦ ἀνθρώπου. εἰ δὲ ἀνάγκη πᾶν τὸ κινούμενον ὑπὸ τινός τε κινεῖσθαι, καὶ ἢ ὑπὸ κινουμένου ὑπ' ἄλλου ἢ μή, καὶ εἰ μὲν ὑπ' ἄλλου [κινουμένου], ἀνάγκη τι εἶναι κινεῖν ὃ οὐχ ὑπ' ἄλλου πρῶτον, εἰ δὲ τοιοῦτο τὸ πρῶτον, οὐκ ἀνάγκη θάτερον (ἀδύνατον γὰρ εἰς ἄπειρον ἰέναι τὸ κινεῖν καὶ κινούμενον ὑπ' ἄλλου αὐτό· τῶν γὰρ ἀπείρων οὐκ ἔστιν οὐδὲν πρῶτον) — εἰ οὖν ἅπαν μὲν τὸ κινούμενον ὑπὸ τινος κινεῖται, τὸ δὲ πρῶτον κινεῖται μὲν, οὐχ ὑπ' ἄλλου δέ, ἀνάγκη αὐτὸ ὑφ' αὐτοῦ κινεῖσθαι.

ἔτι δὲ καὶ ὧδε τὸν αὐτὸν τοῦτον λόγον ἔστιν ἐπελθεῖν. πᾶν γὰρ τὸ κινεῖν τί τε κινεῖ καὶ τινί. ἢ γὰρ αὐτῷ κινεῖ τὸ κινεῖν ἢ ἄλλῳ, οἷον ἄνθρωπος ἢ αὐτός ἢ τῇ βακτηρίᾳ, καὶ ὁ ἄνεμος κατέβαλεν ἢ αὐτός ἢ ὁ λίθος ὃν ἔωσεν. ἀδύνατον δὲ κινεῖν ἄνευ τοῦ αὐτὸ αὐτῷ κινούντος τὸ ὧ κινεῖ· ἀλλ' εἰ μὲν αὐτὸ αὐτῷ κινεῖ, οὐκ ἀνάγκη ἄλλο εἶναι ὧ κινεῖ, ἂν δὲ ἢ ἕτερον τὸ ὧ κινεῖ, ἔστιν τι ὃ κινήσει οὐ τινὶ ἄλλ' αὐτῷ, ἢ εἰς ἄπειρον εἰσιν. εἰ οὖν κινούμενόν τι κινεῖ, ἀνάγκη στῆναι καὶ μὴ εἰς ἄπειρον ἰέναι· εἰ γὰρ ἢ βακτηρία κινεῖ τῷ κινεῖσθαι ὑπὸ τῆς χειρὸς, ἢ χεὶρ κινεῖ τὴν βακτηρίαν· εἰ δὲ καὶ ταύτη ἄλλο κινεῖ, καὶ ταύτην ἕτερόν τι τὸ κινεῖν. ὅταν δὲ τινι κινήσῃ ἀεὶ ἕτερον, ἀνάγκη εἶναι πρότερον τὸ αὐτὸ αὐτῷ κινεῖν. εἰ οὖν κινεῖται μὲν τοῦτο, μὴ ἄλλο δὲ τὸ κινεῖν αὐτό, ἀνάγκη αὐτὸ αὐτὸ (256b.) κινεῖν· ὥστε καὶ κατὰ τοῦτον τὸν λόγον ἥτοι εὐθύς τὸ κινούμενον ὑπὸ τοῦ αὐτὸ κινούντος κινεῖται, ἢ ἔρχεται ποτε εἰς τὸ τοιοῦτον.

πρὸς δὲ τοῖς εἰρημένοις καὶ ὧδε σκοποῦσι ταῦτ' ἀ συμβήσεται ταῦτα. εἰ γὰρ ὑπὸ κινουμένου κινεῖται τὸ κινούμενον πᾶν, ἥτοι τοῦτο ὑπάρχει τοῖς πράγμασιν κατὰ συμβεβηκός, ὥστε κινεῖν μὲν κινούμενον, οὐ μέντοι διὰ τὸ κινεῖσθαι αὐτό, ἢ οὐ, ἀλλὰ καθ' αὐτό. πρῶτον μὲν οὖν εἰ κατὰ συμβεβηκός, οὐκ ἀνάγκη κινεῖσθαι τὸ κινεῖν. εἰ δὲ τοῦτο, δῆλον ὡς ἐνδέχεται ποτε μηδὲν κινεῖσθαι τῶν ὄντων· οὐ γὰρ ἀναγκαῖον τὸ συμβεβηκός, ἀλλ' ἐνδεχόμενον μὴ εἶναι. ἐὰν οὖν θῶμεν τὸ δυνατόν εἶναι, οὐδὲν ἀδύνατον συμβήσεται, ψεῦδος

δ' ἴσως. ἀλλὰ τὸ κίνησιν μὴ εἶναι ἀδύνατον· δέδεικται γὰρ πρότερον ὅτι ἀνάγκη κίνησιν ἀεὶ εἶναι.

καὶ εὐλόγως δὲ τοῦτο συμβέβηκεν. τρία γὰρ ἀνάγκη εἶναι, τό τε κινούμενον καὶ τὸ κινοῦν καὶ τὸ ὧ κινεῖ. τὸ μὲν οὖν κινούμενον ἀνάγκη κινεῖσθαι, κινεῖν δ' οὐκ ἀνάγκη· τὸ δ' ὧ κινεῖ, καὶ κινεῖν καὶ κινεῖσθαι (συμμεταβάλλει γὰρ τοῦτο ἅμα καὶ κατὰ τὸ αὐτὸ τῷ κινουμένῳ ὄν· δῆλον δ' ἐπὶ τῶν κατὰ τόπον κινούντων· ἄπτεσθαι γὰρ ἀλλήλων ἀνάγκη μέχρι τινός)· τὸ δὲ κινοῦν οὕτως ὥστ' εἶναι μὴ ὧ κινεῖ, ἀκίνητον. ἐπεὶ δ' ὁρῶμεν τὸ ἔσχατον, ὃ κινεῖσθαι μὲν δύναται, κινήσεως δ' ἀρχὴν οὐκ ἔχει, καὶ ὃ κινεῖται μὲν, οὐχ ὑπ' ἄλλου δὲ ἄλλ' ὑφ' αὐτοῦ, εὐλογον, ἵνα μὴ ἀναγκαῖον εἴπωμεν, καὶ τὸ τρίτον εἶναι ὃ κινεῖ ἀκίνητον ὄν. διὸ καὶ Ἀναξαγόρας ὀρθῶς λέγει, τὸν νοῦν ἀπαθῆ φάσκων καὶ ἀμιγῆ εἶναι, ἐπειδὴ γε κινήσεως ἀρχὴν αὐτὸν εἶναι ποιεῖ· οὕτω γὰρ μόνως ἂν κινοίη ἀκίνητος ὢν καὶ κρατοίη ἀμιγῆς ὢν.

ἀλλὰ μὴν εἰ μὴ κατὰ συμβεβηκὸς ἀλλ' ἐξ ἀνάγκης κινεῖται τὸ κινοῦν, εἰ δὲ μὴ κινοῖτο, οὐκ ἂν κινοίη, ἀνάγκη τὸ κινοῦν, ἢ κινεῖται, ἥτοι οὕτω κινεῖσθαι ὥς γε κατὰ τὸ αὐτὸ εἶδος τῆς κινήσεως, ἢ καθ' ἕτερον. λέγω δ' ἥτοι τὸ θερμαῖνον καὶ αὐτὸ θερμαίνεσθαι καὶ τὸ ὑγιάζον ὑγιαζεσθαι καὶ τὸ φέρον φέρεσθαι, ἢ τὸ ὑγιάζον φέρεσθαι, τὸ δὲ φέρον αὐξάνεσθαι. ἀλλὰ φανερόν ὅτι ἀδύνατον· δεῖ γὰρ μέχρι (257a.) τῶν ἀτόμων διαιροῦντα λέγειν, οἷον εἴ τι διδάσκει γεωμετερεῖν, τοῦτο διδάσκεσθαι γεωμετερεῖν τὸ αὐτό, ἢ εἰ ῥιπτεῖ, ῥιπτεῖσθαι τὸν αὐτὸν τρόπον τῆς ῥίψεως· ἢ οὕτως μὲν μή, ἄλλο δ' ἐξ ἄλλου γένους, οἷον τὸ φέρον μὲν αὐξάνεσθαι, τὸ δὲ τοῦτο αὖξον ἀλλοιοῦσθαι ὑπ' ἄλλου, τὸ δὲ τοῦτο ἀλλοιοῦν ἑτέραν τινὰ κινεῖσθαι κίνησιν. ἀλλ' ἀνάγκη στῆναι· πεπερασμένοι γὰρ αἱ κινήσεις. τὸ δὲ πάλιν ἀνακάμπτειν καὶ τὸ ἀλλοιοῦν φάναι φέρεσθαι τὸ αὐτὸ ποιεῖν ἐστὶ κἂν εἰ εὐθύς ἔφη τὸ φέρον φέρεσθαι καὶ διδάσκεσθαι τὸ διδάσκον (δῆλον γὰρ ὅτι κινεῖται καὶ ὑπὸ τοῦ ἀνωτέρω κινοῦντος τὸ κινούμενον πᾶν, καὶ μᾶλλον ὑπὸ τοῦ προτέρου τῶν κινούντων). ἀλλὰ μὴν τοῦτό γε ἀδύνατον· τὸ διδάσκον γὰρ συμβαίνει μανθάνειν, ὢν τὸ μὲν μὴ ἔχειν τὸ δὲ ἔχειν ἐπιστήμην ἀναγκαῖον. ἔτι δὲ μᾶλλον τούτων ἄλογον, ὅτι συμβαίνει πᾶν τὸ κινητικὸν κινητόν, εἴπερ ἅπαν ὑπὸ κινουμένου κινεῖται τὸ κινούμενον· ἔσται γὰρ κινητόν, ὥσπερ εἴ τις λέγοι πᾶν τὸ ὑγιαστικὸν [καὶ ὑγιάζον] ὑγιαστὸν εἶναι, καὶ τὸ οἰκοδομητικὸν οἰκοδομητόν, ἢ εὐθύς ἢ διὰ πλειόνων· λέγω δ' οἷον εἰ κινητὸν μὲν ὑπ' ἄλλου πᾶν τὸ κινητικόν, ἀλλ' οὐ ταύτην τὴν κίνησιν κινητόν ἦν κινεῖ τὸ πλησίον, ἀλλ' ἑτέραν, οἷον τὸ ὑγιαστικὸν μαθητικόν, ἀλλὰ τοῦτο ἐπαναβαῖνον ἥξει ποτὲ εἰς τὸ αὐτὸ εἶδος, ὥσπερ εἴπομεν πρότερον. τὸ μὲν οὖν τούτων ἀδύνατον, τὸ δὲ πλασματῶδες· ἄτοπον γὰρ τὸ ἐξ ἀνάγκης τὸ ἀλλοιωτικὸν

αύξητὸν εἶναι. οὐκ ἄρα ἀνάγκη ἀεὶ κινεῖσθαι τὸ κινούμενον ὑπ' ἄλλου, καὶ τούτου κινουμένου· στήσεται ἄρα. ὥστε ἥτοι ὑπὸ ἡρεμοῦντος κινήσεται τὸ κινούμενον πρῶτον, ἢ αὐτὸ ἐαυτὸ κινήσει. ἀλλὰ μὴν καὶ εἴ γε δέοι σκοπεῖν πότερον αἴτιον κινήσεως καὶ ἀρχὴ τὸ αὐτὸ αὐτὸ κινοῦν ἢ τὸ ὑπ' ἄλλου κινούμενον, ἐκεῖνο πᾶς ἂν θείη· τὸ γὰρ αὐτὸ καθ' αὐτὸ ὃν ἀεὶ πρότερον αἴτιον τοῦ καθ' ἕτερον καὶ αὐτοῦ ὄντος. ὥστε τοῦτο σκεπτέον λαβοῦσιν ἄλλην ἀρχήν, εἴ τι κινεῖ αὐτὸ αὐτό, πῶς κινεῖ καὶ τίνα τρόπον. ἀναγκαῖον δὲ τὸ κινούμενον ἅπαν εἶναι διαιρετὸν εἰς ἀεὶ διαιρετά· τοῦτο γὰρ δέδεικται πρότερον ἐν τοῖς (257b.) καθόλου τοῖς περὶ φύσεως, ὅτι πᾶν τὸ καθ' αὐτὸ κινούμενον συνεχές. ἀδύνατον δὲ τὸ αὐτὸ αὐτὸ κινοῦν πάντῃ κινεῖν αὐτὸ αὐτό· φέροιτο γὰρ ἂν ὅλον καὶ φέροι τὴν αὐτὴν φοράν, ἐν ὃν καὶ ἄτομον τῷ εἶδει, καὶ ἄλλοιοῖτο καὶ ἄλλοιοῖ, ὥστε διδάσκοι ἂν καὶ μανθάνοι ἅμα, καὶ ὑγιάζοι καὶ ὑγιάζοιτο τὴν αὐτὴν ὑγίειαν. ἔτι διώρισται ὅτι κινεῖται τὸ κινητόν· τοῦτο δ' ἐστὶν δυνάμει κινούμενον, οὐκ ἐντελεχείᾳ, τὸ δὲ δυνάμει εἰς ἐντελέχειαν βαδίζει, ἔστιν δ' ἡ κίνησις ἐντελέχεια κινητοῦ ἀτελῆς. τὸ δὲ κινοῦν ἤδη ἐνεργείᾳ ἔστιν, οἷον θερμαίνει τὸ θερμὸν καὶ ὅλως γεννᾷ τὸ ἔχον τὸ εἶδος. ὥσθ' ἅμα τὸ αὐτὸ κατὰ τὸ αὐτὸ θερμὸν ἔσται καὶ οὐ θερμόν. ὁμοίως δὲ καὶ τῶν ἄλλων ἕκαστον, ὅσων τὸ κινοῦν ἀνάγκη ἔχειν τὸ συνώνυμον. τὸ μὲν ἄρα κινεῖ τὸ δὲ κινεῖται τοῦ αὐτοῦ αὐτὸ κινοῦντος. ὅτι δ' οὐκ ἔστιν αὐτὸ αὐτὸ κινοῦν οὕτως ὥσθ' ἐκάτερον ὑφ' ἐκατέρου κινεῖσθαι, ἐκ τῶνδε φανερόν. οὔτε γὰρ ἔσται πρῶτον κινοῦν οὐδέν, εἴ γε αὐτὸ ἐαυτὸ κινήσει ἐκάτερον (τὸ γὰρ πρότερον αἰτιώτερον τοῦ κινεῖσθαι τοῦ ἐχομένου καὶ κινήσει μᾶλλον· διχῶς γὰρ κινεῖν ἦν, τὸ μὲν τὸ ὑπ' ἄλλου κινούμενον αὐτό, τὸ δ' αὐτῷ· ἐγγύτερον δὲ τὸ πορρώτερον τοῦ κινουμένου τῆς ἀρχῆς ἢ τὸ μεταξύ). ἔτι οὐκ ἀνάγκη τὸ κινοῦν κινεῖσθαι εἰ μὴ ὑφ' αὐτοῦ· κατὰ συμβεβηκὸς ἄρα ἀντικινεῖ θάτερον. ἔλαβον τοίνυν ἐνδέχεσθαι μὴ κινεῖν· ἔστιν ἄρα τὸ μὲν κινούμενον τὸ δὲ κινοῦν ἀκίνητον. ἔτι οὐκ ἀνάγκη τὸ κινοῦν ἀντικινεῖσθαι, ἀλλ' ἢ ἀκίνητόν γε τι κινεῖν ἀνάγκη ἢ αὐτὸ ὑφ' αὐτοῦ κινούμενον, εἴπερ ἀνάγκη ἀεὶ κίνησιν εἶναι. ἔτι ἦν κινεῖ κίνησιν, κινεῖτ' ἂν, ὥστε τὸ θερμαῖνον θερμαίνεται. ἀλλὰ μὴν οὐδὲ τοῦ πρώτως αὐτὸ αὐτὸ κινοῦντος οὔτε ἐν μόριον οὔτε πλείω κινήσει αὐτὸ αὐτὸ ἕκαστον. τὸ γὰρ ὅλον εἰ κινεῖται αὐτὸ ὑφ' αὐτοῦ, ἥτοι ὑπὸ τῶν αὐτοῦ τινὸς κινήσεται ἢ ἢ ὅλον ὑφ' ὅλου. εἰ μὲν οὖν τῷ κινεῖσθαι τι μόριον αὐτὸ ὑφ' αὐτοῦ, τοῦτ' ἂν εἴη τὸ πρῶτον αὐτὸ αὐτὸ κινοῦν (χωρισθὲν γὰρ τοῦτο μὲν κινήσει αὐτὸ αὐτό, τὸ δὲ ὅλον οὐκέτι). εἰ δὲ ὅλον ὑφ' ὅλου κινεῖται, κατὰ συμβεβηκὸς ἂν ταῦτα κινεῖ αὐτὰ ἐαυτά. ὥστε εἰ μὴ ἀναγκαῖον, εἰλήφθω μὴ κινούμενα (258a.) ὑφ' αὐτῶν. τῆς ὅλης ἄρα τὸ μὲν κινήσει ἀκίνητον ὃν τὸ δὲ κινηθήσεται· μόνως γὰρ οὕτως οἷόν τέ τι αὐτοκίνητον εἶναι. ἔτι εἴπερ ἡ ὅλη

αὐτὴ αὐτὴν κινεῖ, τὸ μὲν κινήσει αὐτῆς, τὸ δὲ κινήσεται. ἢ ἄρα AB ὑφ' αὐτῆς τε κινηθήσεται καὶ ὑπὸ τῆς A. ἐπεὶ δὲ κινεῖ τὸ μὲν κινούμενον ὑπ' ἄλλου τὸ δ' ἀκίνητον ὄν, καὶ κινεῖται τὸ μὲν κινοῦν τὸ δὲ οὐδὲν κινοῦν, τὸ αὐτὸ αὐτὸ κινοῦν ἀνάγκη ἐξ ἀκινήτου εἶναι κινοῦντος δέ, καὶ ἔτι ἐκ κινουμένου μὴ κινοῦντος δ' ἐξ ἀνάγκης, ἀλλ' ὁπότερ' ἔτυχεν. ἔστω γὰρ τὸ A κινοῦν μὲν ἀκίνητον δέ, τὸ δὲ B κινούμενον τε ὑπὸ τοῦ A καὶ κινοῦν τὸ ἐφ' ὧ Γ, τοῦτο δὲ κινούμενον μὲν ὑπὸ τοῦ B, μὴ κινοῦν δὲ μηδέν· εἴπερ γὰρ καὶ διὰ πλειόνων ἥξει ποτὲ εἰς τὸ Γ, ἔστω δι' ἐνὸς μόνου. τὸ δὲ ἅπαν ABΓ αὐτὸ ἐαυτὸ κινεῖ. ἀλλ' ἐὰν ἀφέλῃ τὸ Γ, τὸ μὲν AB κινήσει αὐτὸ ἐαυτό, τὸ μὲν A κινοῦν τὸ δὲ B κινούμενον, τὸ δὲ Γ οὐ κινήσει αὐτὸ ἐαυτό, οὐδ' ὅλως κινήσεται. ἀλλὰ μὴν οὐδ' ἡ BΓ κινήσει αὐτὴ ἐαυτὴν ἄνευ τοῦ A· τὸ γὰρ B κινεῖ τῷ κινεῖσθαι ὑπ' ἄλλου, οὐ τῷ ὑφ' αὐτοῦ τινὸς μέρους. τὸ ἄρα AB μόνον αὐτὸ ἐαυτὸ κινεῖ. ἀνάγκη ἄρα τὸ αὐτὸ ἐαυτὸ κινοῦν ἔχειν τὸ κινοῦν ἀκίνητον δέ, καὶ τὸ κινούμενον μηδέν δὲ κινοῦν ἐξ ἀνάγκης, ἀπτόμενα ἦτοι ἄμφω ἀλλήλων ἢ θατέρου θάτερον. εἰ μὲν οὖν συνεχές ἐστὶ τὸ κινοῦν (τὸ μὲν γὰρ κινούμενον ἀναγκαῖον εἶναι συνεχές), ἄψεται ἐκάτερον ἐκατέρου. δῆλον δὲ ὅτι τὸ πᾶν αὐτὸ ἐαυτὸ κινεῖ οὐ τῷ αὐτοῦ τι εἶναι τοιοῦτον οἷον αὐτὸ αὐτὸ κινεῖν, ἀλλ' ὅλον κινεῖ αὐτὸ ἐαυτό, κινούμενόν τε καὶ κινοῦν τῷ αὐτοῦ τι εἶναι τὸ κινοῦν καὶ τὸ κινούμενον. οὐ γὰρ ὅλον κινεῖ οὐδ' ὅλον κινεῖται, ἀλλὰ κινεῖ μὲν ἢ τὸ A, κινεῖται δὲ ἢ τὸ B μόνον [τὸ δὲ Γ ὑπὸ τοῦ A οὐκέτι· ἀδύνατον γ

ἀπορίαν δ' ἔχει, ἐὰν ἀφέλῃ τις ἢ τῆς A, εἰ συνεχές τὸ κινοῦν μὲν ἀκίνητον δέ, ἢ τῆς B τῆς κινουμένης· ἢ λοιπὴ ἄρα κινήσει τῆς A ἢ τῆς B κινηθήσεται; εἰ γὰρ τοῦτο, οὐκ ἂν εἴη πρῶτως κινουμένη ὑφ' αὐτῆς ἢ τὸ AB· ἀφαιρεθείσης γὰρ ἀπὸ τῆς AB, ἔτι κινήσει αὐτὴν ἢ λοιπὴ AB. ἢ δυνάμει μὲν (258b.) ἐκάτερον οὐδὲν κωλύει ἢ θάτερον, τὸ κινούμενον, διαιρετὸν εἶναι, ἐντελεχείᾳ δ' ἀδιαίρετον· ἐὰν δὲ διαιρεθῇ, μηκέτι εἶναι ἔχον τὴν αὐτὴν φύσιν· ὥστ' οὐδὲν κωλύει ἐν διαιρετοῖς δυνάμει πρῶτως ἐνεῖναι.

φανερὸν τοίνυν ἐκ τούτων ὅτι ἔστιν τὸ πρῶτως κινοῦν ἀκίνητον· εἴτε γὰρ εὐθὺς ἴσταται τὸ κινούμενον, ὑπὸ τι νος δὲ κινούμενον, εἰς ἀκίνητον τὸ πρῶτον, εἴτε εἰς κινούμενον μὲν, αὐτὸ δ' αὐτὸ κινοῦν καὶ ἰστάν, ἀμφοτέρως συμβαίνει τὸ πρῶτως κινοῦν ἅπασιν εἶναι τοῖς κινουμένοις ἀκίνητον.

## Κεφάλαιο 6

Ἐπεὶ δὲ δεῖ κίνησιν αἰεὶ εἶναι καὶ μὴ διαλείπειν, ἀνάγκη εἶναί τι αἰδῖον ὁ πρῶτον κινεῖ, εἴτε ἐν εἴτε πλείω· καὶ τὸ πρῶτον κινοῦν ἀκίνητον. ἕκαστον

μὲν οὖν αἰδίων εἶναι τῶν ἀκινήτων μὲν κινούντων δὲ οὐδὲν πρὸς τὸν νῦν λόγον· ὅτι δ' ἀναγκαῖον εἶναί τι τὸ ἀκίνητον μὲν αὐτὸ πάσης ἐκτὸς μεταβολῆς, καὶ ἀπλῶς καὶ κατὰ συμβεβηκός, κινητικὸν δ' ἑτέρου, δῆλον ὧδε σκοποῦσιν. ἔστω δὴ, εἴ τις βούλεται, ἐπὶ τινων ἐνδεχόμενον ὥστε εἶναι ποτε καὶ μὴ εἶναι ἄνευ γενέσεως καὶ φθορᾶς (τάχα γὰρ ἀναγκαῖον, εἴ τι ἄμερές ὅτε μὲν ἔστιν ὅτε δὲ μὴ ἔστιν, ἄνευ τοῦ μεταβάλλειν ὅτε μὲν εἶναι ὅτε δὲ μὴ εἶναι πᾶν τὸ τοιοῦτον). καὶ τῶν ἀρχῶν τῶν ἀκινήτων μὲν κινητικῶν δ' ἐνίας ὅτε μὲν εἶναι ὅτε δὲ μὴ εἶναι, ἐνδεχέσθω καὶ τοῦτο. ἀλλ' οὐ τί γε πάσας δυνατόν· δῆλον γὰρ ὡς αἴτιον τοῖς αὐτὰ ἑαυτὰ κινοῦσιν ἐστὶ τι τοῦ ὅτε μὲν εἶναι ὅτε δὲ μὴ. τὸ μὲν γὰρ αὐτὸ ἑαυτὸ κινοῦν ἅπαν ἔχειν ἀνάγκη μέγεθος, εἰ μηδὲν κινεῖται ἄμερές, τὸ δὲ κινοῦν οὐδεμία ἀνάγκη ἐκ τῶν εἰρημένων. τοῦ δὴ τὰ μὲν γίνεσθαι τὰ δὲ φθεῖρεσθαι, καὶ τοῦτ' εἶναι συνεχῶς, οὐδὲν αἴτιον τῶν ἀκινήτων μὲν μὴ ἀεὶ δ' ὄντων, οὐδ' αὖ τινδὶ μὲν ταδί [κινούντων], τούτων δ' ἕτερα. τοῦ γὰρ ἀεὶ καὶ συνεχοῦς οὔτε ἕκαστον αὐτῶν οὔτε πάντα αἴτια· τὸ μὲν γὰρ οὕτως ἔχειν αἰδίων καὶ ἐξ ἀνάγκης, τὰ δὲ πάντα ἄπειρα, καὶ οὐχ ἅμα πάντα ὄντα. δῆλον τοίνυν ὅτι, εἰ καὶ μυριάκις ἔνια [ἀρχαὶ] (259a.) τῶν ἀκινήτων μὲν κινούντων δέ, καὶ πολλὰ τῶν αὐτὰ ἑαυτὰ κινούντων, φθείρεται, τὰ δ' ἐπιγίγνεται, καὶ τότε μὲν ἀκίνητον ὃν τότε κινεῖ, ἕτερον δὲ τοδί, ἀλλ' οὐδὲν ἥττον ἔστιν τι ὃ περιέχει, καὶ τοῦτο παρ' ἕκαστον, ὃ ἔστιν αἴτιον τοῦ τὰ μὲν εἶναι τὰ δὲ μὴ καὶ τῆς συνεχοῦς μεταβολῆς· καὶ τοῦτο μὲν τούτοις, ταῦτα δὲ τοῖς ἄλλοις αἴτια κινήσεως. εἴπερ οὖν αἰδῖος ἢ κίνησις, αἰδῖος καὶ τὸ κινοῦν ἔσται πρῶτον, εἰ ἔν· εἰ δὲ πλείω, πλείω τὰ αἰδῖα. ἐν δὲ μᾶλλον ἢ πολλὰ, καὶ πεπερασμένα ἢ ἄπειρα, δεῖ νομίζειν. τῶν αὐτῶν γὰρ συμβαινόντων αἰεὶ τὰ πεπερασμένα μᾶλλον ληπτέον· ἐν γὰρ τοῖς φύσει δεῖ τὸ πεπερασμένον καὶ τὸ βέλτιον, ἂν ἐνδέχεται, ὑπάρχειν μᾶλλον. ἱκανὸν δὲ καὶ ἔν, ὃ πρῶτον τῶν ἀκινήτων αἰδῖον ὃν ἔσται ἀρχὴ τοῖς ἄλλοις κινήσεως.

φανερὸν δὲ καὶ ἐκ τοῦδε ὅτι ἀνάγκη εἶναι τι ἔν καὶ αἰδῖον τὸ πρῶτον κινοῦν. δέδεικται γὰρ ὅτι ἀνάγκη ἀεὶ κίνησιν εἶναι. εἰ δὲ ἀεὶ, ἀνάγκη συνεχῇ εἶναι· καὶ γὰρ τὸ ἀεὶ συνεχές, τὸ δ' ἐφεξῆς οὐ συνεχές. ἀλλὰ μὴν εἴ γε συνεχές, μία. μία δ' ἢ ὑφ' ἐνός τε τοῦ κινοῦντος καὶ ἐνὸς τοῦ κινουμένου· εἰ γὰρ ἄλλο καὶ ἄλλο κινήσει, οὐ συνεχές ἢ ὅλη κίνησις, ἀλλ' ἐφεξῆς.

ἔκ τε δὴ τούτων πιστεύσειεν ἂν τις εἶναί τι πρῶτον ἀκίνητον, καὶ πάλιν ἐπιβλέψας ἐπὶ τὰς ἀρχάς [τῶν κινούντων]. τὸ μὲν δὴ εἶναι ἅττα τῶν ὄντων ἃ ὅτε μὲν κινεῖται ὅτε δὲ ἡρεμεῖ φανερόν. καὶ διὰ τούτου γέγονε δῆλον ὅτι οὔτε πάντα κινεῖται οὔτε πάντα ἡρεμεῖ οὔτε τὰ μὲν ἀεὶ ἡρεμεῖ τὰ δὲ ἀεὶ κινεῖται· τὰ γὰρ ἐπαμφοτερί ζοντα καὶ δύναμιν ἔχοντα τοῦ κινεῖσθαι καὶ

ἡρεμεῖν δείκνυσιν περὶ αὐτῶν. ἐπεὶ δὲ τὰ μὲν τοιαῦτα δῆλα πᾶσι, βουλόμεθα δὲ δεῖξαι καὶ τοῖν δυοῖν ἑκατέρου τὴν φύσιν, ὅτι ἔστιν τὰ μὲν ἀεὶ ἀκίνητα τὰ δὲ ἀεὶ κινούμενα, προϊόντες δ' ἐπὶ τοῦτο καὶ θέντες ἅπαν τὸ κινούμενον ὑπὸ τινος κινεῖσθαι, καὶ τοῦτ' εἶναι ἢ ἀκίνητον ἢ κινούμενον, καὶ κινούμενον ἢ ὑφ' αὐτοῦ ἢ ὑπ' ἄλλου ἀεὶ, προήλθομεν ἐπὶ τὸ λαβεῖν ὅτι τῶν κινουμένων ἐστὶν ἀρχὴ κινουμένων μὲν ὃ αὐτὸ ἑαυτὸ (259b.) κινεῖ, πάντων δὲ τὸ ἀκίνητον, ὁρῶμεν δὲ καὶ φανερώς ὄντα τοιαῦτα ἃ κινεῖ αὐτὰ ἑαυτά, οἷον τὸ τῶν ἐμψύχων καὶ τὸ τῶν ζώων γένος, ταῦτα δὲ καὶ δόξαν παρεῖχε μὴ ποτε ἐνδέχεται κίνησιν ἐγγίγνεσθαι μὴ οὕσαν ὅλως, διὰ τὸ ἐν τούτοις ὁρᾶν ἡμᾶς τοῦτο συμβαῖνον (ἀκίνητα γὰρ ποτε ὄντα κινεῖται πάλιν, ὡς δοκεῖ), τοῦτο δὲ δεῖ λαβεῖν, ὅτι μίαν κίνησιν αὐτὰ κινεῖ, καὶ ὅτι ταύτην οὐ κυρίως· οὐ γὰρ ἐξ αὐτοῦ τὸ αἴτιον, ἀλλ' ἐνείσιν ἄλλαι κινήσεις φυσικαὶ τοῖς ζώοις, ἃς οὐ κινοῦνται δι' αὐτῶν, οἷον αὖξησης φθίσις ἀναπνοή, ἃς κινεῖται τῶν ζώων ἕκαστον ἡρεμοῦν καὶ οὐ κινούμενον τὴν ὑφ' αὐτοῦ κίνησιν. τούτου δ' αἴτιον τὸ περιέχον καὶ πολλὰ τῶν εἰσιόντων, οἷον ἐνίων ἢ τροφή· πεττομένης μὲν γὰρ καθεύδουσιν, διακρινομένης δ' ἐγείρονται καὶ κινοῦσιν ἑαυτούς, τῆς πρώτης ἀρχῆς ἕξωθεν οὔσης, διὸ οὐκ ἀεὶ κινοῦνται συνεχῶς ὑφ' αὐτῶν· ἄλλο γὰρ τὸ κινοῦν, αὐτὸ κινούμενον καὶ μεταβάλλον πρὸς ἕκαστον τῶν κινούντων ἑαυτά. ἐν πᾶσι δὲ τούτοις κινεῖται τὸ κινοῦν πρῶτον καὶ τὸ αἴτιον τοῦ αὐτὸ ἑαυτὸ κινεῖν ὑφ' αὐτοῦ, κατὰ συμβεβηκὸς μέντοι· μεταβάλλει γὰρ τὸν τόπον τὸ σῶμα, ὥστε καὶ τὸ ἐν τῷ σώματι ὄν καὶ τῇ μοχλείᾳ κινοῦν ἑαυτό. ἐξ ὧν ἔστιν πιστεῦσαι ὅτι εἴ τί ἐστι τῶν ἀκινήτων μὲν κινούντων δὲ καὶ αὐτὰ κατὰ συμβεβηκός, ἀδύνατον συνεχῇ κίνησιν κινεῖν. ὥστ' εἴπερ ἀνάγκη συνεχῶς εἶναι κίνησιν, εἶναι τι δεῖ τὸ πρῶτον κινοῦν ἀκίνητον καὶ κατὰ συμβεβηκός, εἰ μέλλει, καθάπερ εἴπομεν, ἔσεσθαι ἐν τοῖς οὖσιν ἄπαυστός τις καὶ ἀθάνατος κίνησις, καὶ μενεῖν τὸ ὄν αὐτὸ ἐν αὐτῷ καὶ ἐν τῷ αὐτῷ· τῆς γὰρ ἀρχῆς μενούσης ἀνάγκη καὶ τὸ πᾶν μένειν συνεχῆς ὄν πρὸς τὴν ἀρχήν. οὐκ ἔστιν δὲ τὸ αὐτὸ τὸ κινεῖσθαι κατὰ συμβεβηκὸς ὑφ' αὐτοῦ καὶ ὑφ' ἑτέρου· τὸ μὲν γὰρ ὑφ' ἑτέρου ὑπάρχει καὶ τῶν ἐν τῷ οὐρανῷ ἐνίαις ἀρχαῖς, ὅσα πλείους φέρεται φοράς, θάτερον δὲ τοῖς φθαρτοῖς μόνον. ἀλλὰ μὴν εἴ γε ἔστιν τι ἀεὶ τοιοῦτον, κινοῦν μὲν τι ἀκίνητον δὲ αὐτὸ καὶ αἶδιον, ἀνάγκη καὶ τὸ πρῶτον ὑπὸ τούτου (260a.) κινούμενον αἶδιον εἶναι. ἔστιν δὲ τοῦτο δῆλον μὲν καὶ ἐκ τοῦ μὴ ἂν ἄλλως εἶναι γένεσιν καὶ φθορὰν καὶ μεταβολὴν τοῖς ἄλλοις, εἰ μὴ τι κινήσει κινούμενον· τὸ μὲν γὰρ ἀκίνητον [τὴν αὐτὴν] ἀεὶ τὸν αὐτὸν κινήσει τρόπον καὶ μίαν κίνησιν, ἅτε οὐδὲν αὐτὸ μεταβάλλον πρὸς τὸ κινούμενον. τὸ δὲ κινούμενον ὑπὸ τοῦ κινουμένου μὲν, ὑπὸ τοῦ ἀκινήτου δὲ κινουμένου ἤδη, διὰ τὸ ἄλλως καὶ ἄλλως ἔχειν πρὸς τὰ πράγματα, οὐ τῆς αὐτῆς ἔσται κινήσεως αἴτιον, ἀλλὰ διὰ τὸ ἐν ἐναντίοις εἶναι τόποις ἢ εἴδεσιν ἐναντίως παρέξεται κινούμενον ἕκαστον τῶν ἄλλων, καὶ

ὅτε μὲν ἡρεμοῦν ὅτε δὲ κινούμενον.

φανερὸν δὴ γέγονεν ἐκ τῶν εἰρημένων καὶ ὃ κατ' ἀρχὰς ἡποροῦμεν, τί δὴ ποτε οὐ πάντα ἢ κινεῖται ἢ ἡρεμεῖ, ἢ τὰ μὲν κινεῖται ἀεὶ τὰ δ' ἀεὶ ἡρεμεῖ, ἀλλ' ἔνια ὅτε μὲν ὅτε δ' οὐ. τούτου γὰρ τὸ αἴτιον δῆλόν ἐστι νῦν, ὅτι τὰ μὲν ὑπὸ ἀκινήτου κινεῖται αἰδίου, διὸ ἀεὶ κινεῖται, τὰ δ' ὑπὸ κινουμένου καὶ μεταβάλλοντος, ὥστε καὶ αὐτὰ ἀναγκαῖον μεταβάλλειν. τὸ δ' ἀκίνητον, ὥσπερ εἴρηται, ἅτε ἀπλῶς καὶ ὡσαύτως καὶ ἐν τῷ αὐτῷ διαμένον, μίαν καὶ ἀπλῆν κινήσει κίνησιν.

## Κεφάλαιο 7

Οὐ μὴν ἀλλὰ καὶ ἄλλην ποιησαμένοις ἀρχὴν μᾶλλον ἔσται περὶ τούτων φανερόν. σκεπτέον γὰρ πότερον ἐνδέχεται τινα κίνησιν εἶναι συνεχῇ ἢ οὐ, καὶ εἰ ἐνδέχεται, τίς αὕτη, καὶ τίς πρώτη τῶν κινήσεων· δῆλον γὰρ ὡς εἴπερ ἀναγκαῖον μὲν ἀεὶ κίνησιν εἶναι, πρώτη δὲ ἦδε καὶ συνεχῆς, ὅτι τὸ πρῶτον κινοῦν κινεῖ ταύτην τὴν κίνησιν, ἣν ἀναγκαῖον μίαν καὶ τὴν αὐτὴν εἶναι καὶ συνεχῇ καὶ πρώτῃ.

τριῶν δ' οὐσῶν κινήσεων, τῆς τε κατὰ μέγεθος καὶ τῆς κατὰ πάθος καὶ τῆς κατὰ τόπον, ἣν καλοῦμεν φορὰν, ταύτην ἀναγκαῖον εἶναι πρώτην. ἀδύνατον γὰρ αὕξησιν εἶναι ἀλλοιώσεως μὴ προϋπαρχούσης· τὸ γὰρ αὐξανόμενον ἔστιν μὲν ὡς ὁμοίῳ αὐξάνεται, ἔστιν δ' ὡς ἀνομοίῳ· τροφή γὰρ λέγεται τῷ ἐναντίῳ τὸ ἐναντίον. προσγίγνεται δὲ πᾶν γιγνόμενον ὅμοιον ὁμοίῳ. ἀνάγκη οὖν ἀλλοιώσιν εἶναι τὴν εἰς τάναντία μεταβολήν. (260b.) ἀλλὰ μὴν εἰ γε ἀλλοιοῦται, δεῖ τι εἶναι τὸ ἀλλοιοῦν καὶ ποιοῦν ἐκ τοῦ δυνάμει θερμοῦ ἐνεργείᾳ θερμόν. δῆλον οὖν ὅτι τὸ κινοῦν οὐχ ὁμοίως ἔχει, ἀλλ' ὅτε μὲν ἐγγύτερον ὅτε δὲ πορρώτερον τοῦ ἀλλοιουμένου ἐστίν. ταῦτα δ' ἄνευ φορᾶς οὐκ ἐνδέχεται ὑπάρχειν. εἰ ἄρα ἀνάγκη ἀεὶ κίνησιν εἶναι, ἀνάγκη καὶ φορὰν ἀεὶ εἶναι πρώτην τῶν κινήσεων, καὶ φορᾶς, εἰ ἔστιν ἢ μὲν πρώτη ἢ δ' ὑστέρα, τὴν πρώτην. ἔτι δὲ πάντων τῶν παθημάτων ἀρχὴ πύκνωσις καὶ μάνωσις· καὶ γὰρ βαρὺ καὶ κοῦφον καὶ μαλακὸν καὶ σκληρὸν καὶ θερμὸν καὶ ψυχρὸν πυκνότητες δοκοῦσιν καὶ ἀραιότητες εἶναί τινες. πύκνωσις δὲ καὶ μάνωσις σύγκρισις καὶ διάκρισις, καθ' ἧς γένεσις καὶ φθορὰ λέγεται τῶν οὐσιῶν. συγκρινόμενα δὲ καὶ διακρινόμενα ἀνάγκη κατὰ τόπον μεταβάλλειν. ἀλλὰ μὴν καὶ τοῦ αὐξανομένου καὶ φθίνοντος μεταβάλλει κατὰ τόπον τὸ μέγεθος.

ἔτι καὶ ἐντεῦθεν ἐπισκοποῦσιν ἔσται φανερόν ὅτι ἡ φορὰ πρώτη. τὸ γὰρ πρῶτον, ὥσπερ ἐφ' ἐτέρων, οὕτω καὶ ἐπὶ κινήσεως ἂν λέγοιτο πλεοναχῶς.



λέγεται δὲ πρότερον οὐ τε μὴ ὄντος οὐκ ἔσται τᾶλλα, ἐκεῖνο δὲ ἄνευ τῶν ἄλλων, καὶ τὸ τῷ χρόνῳ, καὶ τὸ κατ' οὐσίαν. ὥστ' ἐπεὶ κίνησιν μὲν ἀναγκαῖον εἶναι συνεχῶς, εἴη δ' ἂν συνεχῶς ἢ συνεχῆς οὐσα ἢ ἐφεξῆς, μᾶλλον δ' ἢ συνεχῆς, καὶ βέλτιον συνεχῇ ἢ ἐφεξῆς εἶναι, τὸ δὲ βέλτιον ἄει ὑπολαμβάνομεν ἐν τῇ φύσει ὑπάρχειν, ἂν ἢ δυνατόν, δυνατόν δὲ συνεχῇ εἶναι (δειχθήσεται δ' ὕστερον· νῦν δὲ τοῦτο ὑποκείσθω), καὶ ταύτην οὐδεμίαν ἄλλην οἶόν τε εἶναι ἄλλ' ἢ φορὰν, ἀνάγκη τὴν φορὰν εἶναι πρώτην. οὐδεμία γὰρ ἀνάγκη οὔτε αὖξεσθαι οὔτε ἀλλοιοῦσθαι τὸ φερόμενον, οὐδὲ δὴ γίγνεσθαι ἢ φθείρεσθαι· τούτων δὲ οὐδεμίαν ἐνδέχεται τῆς συνεχοῦς μὴ οὔσης, ἣν κινεῖ τὸ πρῶτον κινουῦν.

ἔτι χρόνῳ πρώτην· τοῖς γὰρ αἰδίοις μόνον ἐνδέχεται κινεῖσθαι ταύτην. ἄλλ' ἐφ' ἐνὸς μὲν ὅτουοῦν τῶν ἐχόντων γενέσιν τὴν φορὰν ἀναγκαῖον ὑστάτην εἶναι τῶν κινήσεων· μετὰ γὰρ τὸ γενέσθαι πρῶτον ἀλλοίωσις καὶ αὖξησης, φορὰ δ' ἤδη τετελειωμένων κινήσις ἐστίν. (261a.) ἄλλ' ἕτερον ἀνάγκη κινούμενον εἶναι κατὰ φορὰν πρότερον, ὃ καὶ τῆς γενέσεως αἴτιον ἔσται τοῖς γιγνομένοις, οὐ γιγνόμενον, οἶον τὸ γεννηῆσαν τοῦ γεννηθέντος, ἐπεὶ δόξειέ γ' ἂν ἢ γενέσεις εἶναι πρώτη τῶν κινήσεων διὰ τοῦτο, ὅτι γενέσθαι δεῖ τὸ πρᾶγμα πρῶτον. τὸ δ' ἐφ' ἐνὸς μὲν ὅτουοῦν τῶν γιγνομένων οὕτως ἔχει, ἄλλ' ἕτερον ἀναγκαῖον πρότερόν τι κινεῖσθαι τῶν γιγνομένων ὃν αὐτὸ καὶ μὴ γιγνόμενον, καὶ τούτου ἕτερον πρότερον. ἐπεὶ δὲ γενέσιν ἀδύνατον εἶναι πρώτην (πάντα γὰρ ἂν εἴη τὰ κινούμενα φθαρτά), δῆλον ὡς οὐδὲ τῶν ἐφεξῆς κινήσεων οὐδεμία προτέρα· λέγω δ' ἐφεξῆς αὖξησης, εἴτ' ἀλλοίωσις καὶ φθίσις καὶ φθοράν· πᾶσαι γὰρ ὕστεραι γενέσεως, ὥστ' εἰ μὴδὲ γενέσεις προτέρα φορᾶς, οὐδὲ τῶν ἄλλων οὐδεμία μεταβολῶν.

ὅλως τε φαίνεται τὸ γιγνόμενον ἀτελὲς καὶ ἐπ' ἀρχὴν ἰόν, ὥστε τὸ τῇ γενέσει ὕστερον τῇ φύσει πρότερον εἶναι. τελευταῖον δὲ φορὰ πᾶσιν ὑπάρχει τοῖς ἐν γενέσει. διὸ τὰ μὲν ὅλως ἀκίνητα τῶν ζώων δι' ἑνδειαν [τοῦ ὀργάνου], οἶον τὰ φυτὰ καὶ πολλὰ γένη τῶν ζώων, τοῖς δὲ τελειομένοις ὑπάρχει. ὥστ' εἰ μᾶλλον ὑπάρχει φορὰ τοῖς μᾶλλον ἀπειληφόσιν τὴν φύσιν, καὶ ἡ κίνησις αὕτη πρώτη τῶν ἄλλων ἂν εἴη κατ' οὐσίαν, διὰ τε ταῦτα καὶ διότι ἥκιστα τῆς οὐσίας ἐξίσταται τὸ κινούμενον τῶν κινήσεων ἐν τῷ φέρεσθαι· κατὰ μόνην γὰρ οὐδὲν μεταβάλλει τοῦ εἶναι, ὥσπερ ἀλλοιουμένου μὲν τὸ ποιόν, αὖξανομένου δὲ καὶ φθίνοντος τὸ ποσόν. μάλιστα δὲ δῆλον ὅτι τὸ κινουῦν αὐτὸ αὐτὸ μάλιστα ταύτην κινεῖ κυρίως, τὴν κατὰ τόπον· καίτοι φαμέν τοῦτο εἶναι τῶν κινουμένων καὶ κινούντων ἀρχὴν καὶ πρῶτον τοῖς κινουμένοις, τὸ αὐτὸ αὐτὸ κινουῦν.

ὅτι μὲν τοίνυν τῶν κινήσεων ἡ φορὰ πρώτη, φανερόν ἐκ τούτων· τίς δὲ φορὰ πρώτη, νῦν δεικτέον. ἅμα δὲ καὶ τὸ νῦν καὶ πρότερον ὑποτεθέν, ὅτι ἐνδέχεται τινα κίνησιν εἶναι συνεχῇ καὶ αἰδίον, φανερόν ἔσται τῇ αὐτῇ μεθόδῳ. ὅτι μὲν οὖν τῶν ἄλλων κινήσεων οὐδεμίαν ἐνδέχεται συνεχῇ εἶναι, ἐκ τῶνδε φανερόν. ἅπασαι γὰρ ἐξ ἀντικειμένων εἰς ἀντικείμενά εἰσιν αἱ κινήσεις καὶ μεταβολαί, οἷον γενέσκει μὲν καὶ φθορᾶ τὸ ὄν καὶ τὸ μὴ ὄν ὅροι, ἀλλοιῶσει δὲ τὰ ἐναντία πάθη, αὐξήσκει δὲ καὶ φθίσει ἢ μέγεθος καὶ μικρότης ἢ τελειότης μεγέθους καὶ ἀτέλεια· ἐναντία δ' αἱ (261b.) εἰς τὰ ἐναντία. τὸ δὲ μὴ αἰεὶ κινούμενον τήνδε τὴν κίνησιν, ὃν δὲ πρότερον, ἀνάγκη πρότερον ἡρεμεῖν. φανερόν οὖν ὅτι ἡρεμήσκει ἐν τῷ ἐναντίῳ τὸ μεταβάλλον. ὁμοίως δὲ καὶ ἐπὶ τῶν μεταβολῶν· ἀντίκειται γὰρ φθορὰ καὶ γενέσεις ἀπλῶς καὶ ἡ καθ' ἕκαστον τῇ καθ' ἕκαστον. ὥστ' εἰ ἀδύνατον ἅμα μεταβάλλειν τὰς ἀντικείμενας, οὐκ ἔσται συνεχῆς ἡ μεταβολή, ἀλλὰ μεταξὺ ἔσται αὐτῶν χρόνος. οὐδὲν γὰρ διαφέρει ἐναντίας ἢ μὴ ἐναντίας εἶναι τὰς κατ' ἀντίφασιν μεταβολάς, εἰ μόνον ἀδύνατον ἅμα τῷ αὐτῷ παρεῖναι (τοῦτο γὰρ τῷ λόγῳ οὐδὲν χρήσιμον), οὐδ' εἰ μὴ ἀνάγκη ἡρεμῆσαι ἐν τῇ ἀντιφάσει, μὴδ' ἐστὶν μεταβολὴ ἡρεμίας ἐναντίον (οὐ γὰρ ἴσως ἡρεμεῖ τὸ μὴ ὄν, ἢ δὲ φθορὰ εἰς τὸ μὴ ὄν), ἀλλ' εἰ μόνον μεταξὺ γίγνεται χρόνος· οὕτω γὰρ οὐκ ἔστιν ἡ μεταβολὴ συνεχῆς· οὐδὲ γὰρ ἐν τοῖς πρότερον ἢ ἐναντίωσις χρήσιμον, ἀλλὰ τὸ μὴ ἐνδέχεσθαι ἅμα ὑπάρχειν. οὐ δεῖ δὲ ταραττεσθαι ὅτι τὸ αὐτὸ πλείοσιν ἔσται ἐναντίον, οἷον ἡ κινήσεις καὶ στάσει καὶ κινήσει τῇ εἰς τοῦναντίον, ἀλλὰ μόνον τοῦτο λαμβάνειν, ὅτι ἀντίκειται πῶς καὶ τῇ κινήσει καὶ τῇ ἡρεμίας ἢ κινήσεις ἢ ἐναντία, καθάπερ τὸ ἴσον καὶ τὸ μέτριον τῷ ὑπερέχοντι καὶ τῷ ὑπερεχομένῳ, καὶ ὅτι οὐκ ἐνδέχεται ἅμα τὰς ἀντικείμενας οὔτε κινήσεις οὔτε μεταβολὰς ὑπάρχειν. ἔτι δ' ἐπὶ τε τῆς γενέσεως καὶ τῆς φθορᾶς καὶ παντελῶς ἄτοπον ἂν εἶναι δόξειεν, εἰ γενόμενον εὐθὺς ἀνάγκη φθαρῆναι καὶ μηδένα χρόνον διαμεῖναι. ὥστε ἐκ τούτων ἂν ἡ πίστις γένοιτο ταῖς ἄλλαις· φυσικὸν γὰρ τὸ ὁμοίως ἔχειν ἐν ἀπάσαις.

**τὸν αὐτὸν δὲ τρόπον ἀπαντητέον καὶ πρὸς τοὺς ἐρωτῶντας  
τὸν Ζήνωνος λόγον, [καὶ ἀξιοῦντας,] εἰ αἰεὶ τὸ ἥμισυ διέναι  
δεῖ, ταῦτα δ' ἄπειρα, τὰ δ' ἄπειρα ἀδύνατον διεξελθεῖν, ἢ ὥς  
τὸν αὐτὸν τοῦτον λόγον τινὲς ἄλλως ἐρωτῶσιν, ἀξιοῦντες ἅμα  
τῷ κινεῖσθαι τὴν ἡμίσειαν πρότερον ἀριθμεῖν καθ' ἕκαστον  
γιγνόμενον τὸ ἥμισυ, ὥστε διελθόντος τὴν ὅλην ἄπειρον  
συμβαίνει ἡριθμηκέναι ἀριθμόν· τοῦτο δ' ὁμολογουμένως ἐστὶν  
ἀδύνατον. ἐν μὲν οὖν τοῖς πρώτοις λόγοις τοῖς περὶ κινήσεως**

ἐλύομεν διὰ τοῦ τὸν χρόνον ἄπειρα ἔχειν ἐν αὐτῷ· οὐδὲν γὰρ ἄτοπον εἰ ἐν ἀπείρῳ χρόνῳ ἄπειρα διέρχεται τις· ὁμοίως δὲ τὸ ἄπειρον ἔν τε τῷ μήκει ὑπάρχει καὶ ἐν τῷ χρόνῳ. ἀλλ' αὕτη ἡ λύσις πρὸς μὲν τὸν ἐρωτῶντα ἱκανῶς ἔχει (ἠρωτᾷτο γὰρ εἰ ἐν πεπερασμένῳ ἄπειρα ἐνδέχεται διεξελθεῖν ἢ ἀριθμῆσαι), πρὸς δὲ τὸ πρᾶγμα καὶ τὴν ἀλήθειαν οὐχ ἱκανῶς· ἂν γάρ τις ἀφόμενος τοῦ μήκους καὶ τοῦ ἐρωτᾶν εἰ ἐν πεπερασμένῳ χρόνῳ ἐνδέχεται ἄπειρα διεξελθεῖν, πυνθάνηται ἐπ' αὐτοῦ τοῦ χρόνου ταῦτα (ἔχει γὰρ ὁ χρόνος ἀπείρους διαιρέσεις), οὐκέτι ἱκανὴ ἔσται αὕτη ἡ λύσις, ἀλλὰ τὸ ἀληθὲς λεκτέον, ὅπερ εἵπομεν ἐν τοῖς ἄρτι λόγοις. ἐὰν γάρ τις τὴν συνεχῇ διαιρῇ εἰς δύο ἡμίση, οὗτος τῷ ἐνὶ σημείῳ ὥς δυσὶ χρῆται· ποιεῖ γὰρ αὐτὸ ἀρχὴν καὶ τελευτήν. οὕτω δὲ ποιεῖ ὅ τε ἀριθμῶν καὶ ὁ εἰς τὰ ἡμίση διαιρῶν. οὕτω δὲ διαιροῦντος οὐκ ἔσται συνεχῆς οὐθ' ἡ γραμμὴ οὐθ' ἡ κίνησις· ἡ γὰρ συνεχῆς κίνησις συνεχοῦς ἐστίν, ἐν δὲ τῷ συνεχεῖ ἐνεστί μὲν ἄπειρα ἡμίση, ἀλλ' οὐκ ἐντελεχεία ἀλλὰ δυνάμει. ἂν δὲ ποιῇ ἐντελεχεία, οὐ ποιήσει συνεχῇ, ἀλλὰ στήσει, ὅπερ ἐπὶ τοῦ ἀριθμοῦντος τὰ ἡμίσηα φανερόν ἐστιν ὅτι συμβαίνει· τὸ γὰρ ἐν σημείῳ ἀνάγκη (263b.) αὐτῷ ἀριθμεῖν δύο· τοῦ μὲν γὰρ ἐτέρου τελευτὴ ἡμίσεος τοῦ δ' ἐτέρου ἀρχὴ ἔσται, ἂν μὴ μίαν ἀριθμῇ τὴν συνεχῇ, ἀλλὰ δύο ἡμισείας. ὥστε λεκτέον πρὸς τὸν ἐρωτῶντα εἰ ἐνδέχεται ἄπειρα διεξελθεῖν ἢ ἐν χρόνῳ ἢ ἐν μήκει, ὅτι ἔστιν ὥς, ἔστιν δ' ὥς οὐ. ἐντελεχεία μὲν γὰρ ὄντα οὐκ ἐνδέχεται, δυνάμει δὲ ἐνδέχεται· ὁ γὰρ συνεχῶς κινούμενος κατὰ συμβεβηκὸς ἄπειρα διελήλυθεν, ἀπλῶς δ' οὐ· συμβέβηκε γὰρ τῇ γραμμῇ ἄπειρα ἡμίσηα εἶναι, ἡ δ' οὐσία ἐστὶν ἑτέρα καὶ τὸ εἶναι. δῆλον δὲ καὶ ὅτι ἐὰν μή τις ποιῇ τοῦ χρόνου τὸ διαιροῦν σημεῖον τὸ πρότερον καὶ ὕστερον ἀεὶ τοῦ ὑστέρου τῷ πράγματι, ἔσται ἅμα τὸ αὐτὸ ὄν καὶ οὐκ ὄν, καὶ ὅτε γέγονεν οὐκ ὄν. τὸ σημεῖον μὲν οὖν ἀμφοῖν κοινόν, καὶ τοῦ προτέρου καὶ τοῦ ὑστέρου, καὶ ταῦτόν καὶ ἐν ἀριθμῷ, λόγῳ δ' οὐ ταῦτόν (τοῦ μὲν γὰρ τελευτή, τοῦ δ' ἀρχή)· τῷ δὲ πράγματι ἀεὶ τοῦ

ὑστέρου πάθους ἐστίν. χρόνος ἐφ' ᾧ ΑΓΒ, πρᾶγμα ἐφ' ᾧ Δ.  
 τοῦτο ἐν μὲν τῷ Α χρόνῳ λευκόν, ἐν δὲ τῷ Β οὐ λευκόν· ἐν τῷ  
 ἄρα Γ λευκὸν καὶ οὐ λευκόν. ἐν ὅτῳ οὖν γὰρ τοῦ Α λευκὸν  
 ἀληθὲς εἰπεῖν, εἰ πάντα τὸν χρόνον τοῦτον ἦν λευκόν, καὶ ἐν  
 τῷ Β οὐ λευκόν· τὸ δὲ Γ ἐν ἀμφοῖν. οὐκ ἄρα δοτέον ἐν παντί,  
 ἀλλὰ πλὴν τοῦ τελευταίου νῦν ἐφ' οὗ τὸ Γ· τοῦτο δ' ἤδη τοῦ  
 ὑστέρου. καὶ εἰ ἐγίγνετο οὐ λευκὸν καὶ ἐφθείρετο <τὸ> λευκὸν  
 ἐν τῷ Α παντί, γέγονεν ἢ ἔφθαρται ἐν τῷ Γ. ὥστε λευκὸν ἢ μὴ  
 λευκὸν ἐν ἐκείνῳ πρῶτον ἀληθὲς εἰπεῖν, ἢ ὅτε γέγονεν οὐκ  
 ἔσται, καὶ ὅτε ἔφθαρται ἔσται, ἢ ἅμα λευκὸν καὶ οὐ λευκὸν  
 καὶ ὅλως ὄν καὶ μὴ ὄν ἀνάγκη εἶναι. εἰ δ' ὁ ἂν ἦ πρότερον μὴ  
 ὄν, ἀνάγκη γίνεσθαι ὄν, καὶ ὅτε γίνεταί μὴ ἔστιν, οὐχ οἷόν τε  
 εἰς ἀτόμους χρόνους διαιρεῖσθαι τὸν χρόνον. εἰ γὰρ ἐν τῷ Α τὸ  
 Δ ἐγίγνετο λευκόν, γέγονε δ' ἅμα καὶ ἔστιν ἐν ἑτέρῳ ἀτόμῳ  
 χρόνῳ ἐχομένῳ δ', ἐν τῷ Β-εἰ ἐν τῷ Α ἐγίγνετο, οὐκ ἦν, ἐν δὲ  
 τῷ Β ἐστί-, γένεσιν δεῖ τινὰ εἶναι μεταξύ, ὥστε καὶ (264a.)  
 χρόνον ἐν ᾧ ἐγίγνετο. οὐ γὰρ ὁ αὐτὸς ἔσται λόγος καὶ τοῖς μὴ  
 ἅτομα λέγουσιν, ἀλλ' αὐτοῦ τοῦ χρόνου, ἐν ᾧ ἐγίγνετο, γέγονε  
 καὶ ἔστιν ἐν τῷ ἐσχάτῳ σημείῳ, οὐ οὐδὲν ἐχόμενόν ἐστιν  
 οὐδ' ἐφεξῆς· οἱ δὲ ἅτομοι χρόνοι ἐφεξῆς. φανερόν δ' ὅτι εἰ ἐν  
 τῷ Α ὅλῳ χρόνῳ ἐγίγνετο, οὐκ ἔστιν πλείων χρόνος ἐν ᾧ  
 γέγονεν καὶ ἐγίγνετο ἢ ἐν ᾧ ἐγίγνετο μόνον παντί.

οἷς μὲν οὖν ἂν τις ὥς οἰκείοις πιστεύσειε λόγοις, οὗτοι καὶ  
 τοιοῦτοί τινές εἰσιν· λογικῶς δ' ἐπισκοποῦσι καὶ ἐκ τῶνδε  
 δόξειέ τῳ ταῦτο συμβαίνειν. ἅπαν γὰρ τὸ κινούμενον  
 συνεχῶς, ἂν ὑπὸ μηδενὸς ἐκκρούηται, εἰς ὅπερ ἦλθεν κατὰ  
 τὴν φοράν, εἰς τοῦτο καὶ ἐφέρετο πρότερον, οἷον εἰ ἐπὶ τὸ Β  
 ἦλθε, καὶ ἐφέρετο ἐπὶ τὸ Β, καὶ οὐχ ὅτε πλησίον ἦν, ἀλλ'  
 εὐθὺς ὥς ἤρξατο κινεῖσθαι· τί γὰρ μᾶλλον νῦν ἢ πρότερον;  
 ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. τὸ δὲ ἀπὸ τοῦ Α [ἐπὶ τὸ Γ]  
 φερόμενον, ὅταν ἐπὶ τὸ Γ ἔλθῃ, πάλιν ἥξει ἐπὶ τὸ Α συν εχῶς  
 κινούμενον. ὅτε ἄρα ἀπὸ τοῦ Α φέρεται πρὸς τὸ Γ, τότε καὶ εἰς

τὸ Α φέρεται τὴν ἀπὸ τοῦ Γ κίνησιν, ὥσθ' ἅμα τὰς ἐναντίας· ἐναντίαι γὰρ αἱ κατ' εὐθεΐαν. ἅμα δὲ καὶ ἐκ τούτου μεταβάλλει ἐν ᾧ οὐκ ἔστιν. εἰ οὖν τοῦτ' ἀδύνατον, ἀνάγκη ἵστασθαι ἐπὶ τοῦ Γ. οὐκ ἄρα μία ἡ κίνησις· ἡ γὰρ διαλαμβανομένη στάσει οὐ μία.

ἔτι καὶ ἐκ τῶνδε φανερόν καθόλου μᾶλλον περὶ πάσης κινήσεως. εἰ γὰρ ἅπαν τὸ κινούμενον τῶν εἰρημένων τινὰ κινεῖται κινήσεων καὶ ἡρεμεῖ τῶν ἀντικειμένων ἡρεμιῶν (οὐ γὰρ ἦν ἄλλη παρὰ ταύτας), τὸ δὲ μὴ αἰεὶ κινούμενον τήνδε τὴν κίνησιν (λέγω δ' ὅσαι ἕτεραι τῷ εἶδει, καὶ μὴ εἴ τι μόριόν ἐστιν τῆς ὅλης) ἀνάγκη πρότερον ἡρεμεῖν τὴν ἀντικειμένην ἡρεμίαν (ἡ γὰρ ἡρεμία στέρησις κινήσεως)· εἰ οὖν ἐναντίαι μὲν κινήσεις αἱ κατ' εὐθεΐαν, ἅμα δὲ μὴ ἐνδέχεται κινεῖσθαι τὰς ἐναντίας, τὸ ἀπὸ τοῦ Α πρὸς τὸ Γ φερόμενον οὐκ ἂν φέροιτο ἅμα καὶ ἀπὸ τοῦ Γ πρὸς τὸ Α· ἐπεὶ δ' οὐχ ἅμα φέρεται, κινήσεται δὲ ταύτην τὴν κίνησιν, ἀνάγκη πρότερον ἡρεμῆσαι πρὸς τῷ Γ· αὕτη γὰρ ἦν ἡ ἀντικειμένη ἡρεμία τῇ ἀπὸ τοῦ Γ κινήσει. δῆλον τοίνυν (264b.) ἐκ τῶν εἰρημένων ὅτι οὐκ ἔσται συνεχῆς ἡ κίνησις.

ἔτι δὲ καὶ ὁδε ὁ λόγος μᾶλλον οἰκεῖος τῶν εἰρημένων. ἅμα γὰρ ἔφθαρται τὸ οὐ λευκὸν καὶ γέγονε λευκόν. εἰ οὖν συνεχῆς ἡ ἀλλοίωσις εἰς λευκὸν καὶ ἐκ λευκοῦ καὶ μὴ μένει τινὰ χρόνον, ἅμα ἔφθαρται τὸ οὐ λευκὸν καὶ γέγονε λευκὸν καὶ γέγονεν οὐ λευκόν· τριῶν γὰρ ἔσται ὁ αὐτὸς χρόνος.

ἔτι οὐκ εἰ συνεχῆς ὁ χρόνος, καὶ ἡ κίνησις, ἀλλ' ἐφεξῆς. πῶς δ' ἂν εἴη τὸ ἔσχατον τὸ αὐτὸ τῶν ἐναντίων, οἷον λευκότητος καὶ μελανίας;

ἡ δ' ἐπὶ τῆς περιφεροῦς ἔσται μία καὶ συνεχῆς· οὐθὲν γὰρ ἀδύνατον συμβαίνει· τὸ γὰρ ἐκ τοῦ Α κινούμενον ἅμα κινήσεται εἰς τὸ Α κατὰ τὴν αὐτὴν πρόθεσιν (εἰς ὃ γὰρ ἥξει, καὶ

κινεῖται εἰς τοῦτο), ἀλλ' οὐχ ἅμα κινήσεται τὰς ἐναντίας οὐδὲ τὰς ἀντικειμένας· οὐ γὰρ ἅπασα ἢ εἰς τοῦτο τῇ ἐκ τούτου ἐναντία οὐδ' ἀντικειμένη, ἀλλ' ἐναντία μὲν ἢ κατ' εὐθεΐαν (ταύτῃ γὰρ ἔστιν ἐναντία κατὰ τόπον, οἷον τὰ κατὰ διάμετρον· ἀπέχει γὰρ πλεῖστον), ἀντικειμένη δὲ ἢ κατὰ τὸ αὐτὸ μήκος. ὥστ' οὐδὲν κωλύει συνεχῶς κινεῖσθαι καὶ μηδένα χρόνον διαλείπειν· ἢ μὲν γὰρ κύκλῳ κινήσις ἔστιν ἀφ' αὐτοῦ εἰς αὐτό, ἢ δὲ κατ' εὐθεΐαν ἀφ' αὐτοῦ εἰς ἄλλο· καὶ ἢ μὲν ἐν τῷ κύκλῳ οὐδέποτε ἐν τοῖς αὐτοῖς, ἢ δὲ κατ' εὐθεΐαν πολλάκις ἐν τοῖς αὐτοῖς. τὴν μὲν οὖν ἀεὶ ἐν ἄλλῳ καὶ ἄλλῳ γιγνομένην ἐνδέχεται κινεῖσθαι συνεχῶς, τὴν δ' ἐν τοῖς αὐτοῖς πολλάκις οὐκ ἐνδέχεται· ἀνάγκη γὰρ ἅμα κινεῖσθαι τὰς ἀντικειμένας. ὥστ' οὐδ' ἐν τῷ ἡμικυκλίῳ οὐδ' ἐν ἄλλῃ περιφερείᾳ οὐδεμιᾷ ἐνδέχεται συνεχῶς κινεῖσθαι· πολλάκις γὰρ ἀνάγκη ταῦτ' κινεῖσθαι καὶ τὰς ἐναντίας μεταβάλλειν μεταβολάς· οὐ γὰρ συνάπτει τῇ ἀρχῇ τὸ πέρας. ἢ δὲ τοῦ κύκλου συνάπτει, καὶ ἔστι μόνη τέλειος.

φανερὸν δὲ ἐκ ταύτης τῆς διαιρέσεως ὅτι οὐδὲ τὰς ἄλλας ἐνδέχεται κινήσεις εἶναι συνεχεῖς· ἐν ἀπάσαις γὰρ ταῦτ' συμβαίνει κινεῖσθαι πολλάκις, οἷον ἐν ἀλλοιώσει τὰ μετὰ, καὶ ἐν τῇ τοῦ ποσοῦ τὰ ἀνὰ μέσον μεγέθη, καὶ ἐν γενέσει καὶ φθορᾷ ὡσαύτως· οὐδὲν γὰρ διαφέρει ὀλίγα ἢ πολλὰ ποιῆσαι, ἐν (265a.) οἷς ἔστιν ἢ μεταβολή, οὐδὲ μετὰ θεῖναι τι ἢ ἀφελεῖν· ἀμφοτέρως γὰρ συμβαίνει ταῦτ' κινεῖσθαι πολλάκις. δῆλον οὖν ἐκ τούτων ὅτι οὐδ' οἱ φυσιολόγοι καλῶς λέγουσιν οἱ πάντα τὰ αἰσθητὰ κινεῖσθαι φάσκοντες ἀεὶ· κινεῖσθαι γὰρ ἀνάγκη τούτων τινὰ τῶν κινήσεων, καὶ μάλιστα κατ' ἐκείνους [ἔστιν] ἀλλοιοῦσθαι· ῥεῖν γάρ φασιν ἀεὶ καὶ φθίνειν, ἔτι δὲ καὶ τὴν γένεσιν καὶ τὴν φθορὰν ἀλλοιώσιν λέγουσιν. ὁ δὲ λόγος νῦν εἴρηκε καθόλου περὶ πάσης κινήσεως ὅτι κατ' οὐδεμίαν κίνησιν ἐνδέχεται κινεῖσθαι συνεχῶς ἔξω τῆς κύκλῳ, ὥστε οὔτε κατ' ἀλλοιώσιν οὔτε κατ' αὔξησιν. ὅτι μὲν οὖν οὔτ'

ἄπειρός ἐστι μεταβολὴ οὐδεμία οὔτε συνεχῆς ἔξω τῆς κύκλω  
φορᾶς ἔστω τοσαῦθ' ἡμῖν εἰρημένα.

## Κεφάλαιο 9

Ὅτι δὲ τῶν φορῶν ἡ κυκλοφορία πρώτη, δῆλον. πᾶσα γὰρ  
φορά, ὥσπερ καὶ πρότερον εἵπομεν, ἢ κύκλω ἢ ἐπ' εὐθείας ἢ  
μικτή. ταύτης δὲ ἀνάγκη προτέρας εἶναι ἐκείνας· ἐξ ἐκείνων  
γὰρ συνέστηκεν. τῆς δ' εὐθείας ἡ κύκλω· ἀπλῆ γὰρ καὶ  
τέλειος μᾶλλον. ἄπειρον μὲν γὰρ οὐκ ἔστιν εὐθεῖαν φέρεσθαι  
(τὸ γὰρ οὕτως ἄπειρον οὐκ ἔστιν· ἅμα δ' οὐδ' εἰ ἦν, ἐκινεῖτ'  
ἂν οὐδέν· οὐ γὰρ γίγνεται τὸ ἀδύνατον, διελθεῖν δὲ τὴν  
ἄπειρον ἀδύνατον)· ἡ δ' ἐπὶ τῆς πεπερασμένης ἀνακάμπτουσα  
μὲν συνθετὴ καὶ δύο κινήσεις, μὴ ἀνακάμπτουσα δὲ ἀτελὴς  
καὶ φθαρτή. πρότερον δὲ καὶ φύσει καὶ λόγῳ καὶ χρόνῳ τὸ  
τέλειον μὲν τοῦ ἀτελοῦς, τοῦ φθαρτοῦ δὲ τὸ ἀφθαρτον. ἔτι  
προτέρα ἦν ἐνδέχεται αἰδῖον εἶναι τῆς μὴ ἐνδεχομένης· τὴν μὲν  
οὖν κύκλω ἐνδέχεται αἰδῖον εἶναι, τῶν δὲ ἄλλων οὔτε φορὰν  
οὔτε ἄλλην οὐδεμίαν· στάσιν γὰρ δεῖ γενέσθαι, εἰ δὲ στάσις,  
ἔφθαρται ἢ κίνησις. εὐλόγως δὲ συμβέβηκε τὸ τὴν κύκλω μίαν  
εἶναι καὶ συνεχῆ, καὶ μὴ τὴν ἐπ' εὐθείας· τῆς μὲν γὰρ ἐπ'  
εὐθείας ὠρίσται καὶ ἀρχὴ καὶ τέλος καὶ μέσον, καὶ πάντ' ἔχει  
ἐν αὐτῇ, ὥστ' ἔστιν ὅθεν ἄρξεται τὸ κινούμενον καὶ οὐ  
τελευτήσκει (πρὸς γὰρ τοῖς πέρασιν ἡρεμεῖ πᾶν, ἢ ὅθεν ἢ οὐ),  
τῆς δὲ περιφεροῦς ἀόριστα· τί γὰρ μᾶλλον ὁποιοιοῦν πέρας  
τῶν ἐπὶ τῆς γραμμῆς; ὁμοίως γὰρ ἕκαστον καὶ ἀρχὴ καὶ  
μέσον καὶ τέλος, ὥστ' αἰεὶ τε (265b.) εἶναι ἐν ἀρχῇ καὶ ἐν τέλει  
καὶ μηδέποτε. διὸ κινεῖται τε καὶ ἡρεμεῖ πῶς ἡ σφαῖρα· τὸν  
αὐτὸν γὰρ κατέχει τόπον. αἴτιον δ' ὅτι πάντα συμβέβηκε ταῦτα  
τῷ κέντρῳ· καὶ γὰρ ἀρχὴ καὶ μέσον τοῦ μεγέθους καὶ τέλος  
ἐστίν, ὥστε διὰ τὸ ἔξω εἶναι τοῦτο τῆς περιφερείας οὐκ ἔστιν  
ὅπου τὸ φερόμενον ἡρεμήσει ὥς διεληλυθός (αἰεὶ γὰρ φέρεται  
περὶ τὸ μέσον, ἀλλ' οὐ πρὸς τὸ ἔσχατον), διὰ δὲ τὸ τοῦτο

μένειν αἰετὶ ἡρεμεῖ πῶς τὸ ὅλον καὶ κινεῖται συνεχῶς. συμβαίνει δ' ἀντιστρόφως· καὶ γὰρ ὅτι μέτρον τῶν κινήσεων ἡ περιφορά, πρώτην ἀναγκαῖον αὐτὴν εἶναι (ἅπαντα γὰρ μετρεῖται τῷ πρώτῳ), καὶ διότι πρώτη, μέτρον ἐστὶν τῶν ἄλλων. ἔτι δὲ καὶ ὁμαλῇ ἐνδέχεται εἶναι τὴν κύκλῳ μόνην· τὰ γὰρ ἐπ' εὐθείας ἀνωμαλῶς ἀπὸ τῆς ἀρχῆς φέρεται καὶ πρὸς τὸ τέλος· πάντα γὰρ ὅσωπερ ἂν ἀφίστηται [πλεῖον] τοῦ ἡρεμοῦντος, φέρεται θᾶττον· τῆς δὲ κύκλῳ μόνης οὔτ' ἀρχὴ οὔτε τέλος ἐν αὐτῇ πέφυκεν, ἀλλ' ἐκτός. ὅτι δ' ἡ κατὰ τόπον φορὰ πρώτη τῶν κινήσεων, μαρτυροῦσι πάντες ὅσοι περὶ κινήσεως πεποίηνται μνείαν· τὰς γὰρ ἀρχὰς αὐτῆς ἀποδιδόασιν τοῖς κινουμένοι τοιαύτην κίνησιν. διάκρισις γὰρ καὶ σύγκρισις κινήσεις κατὰ τόπον εἰσὶν, οὕτω δὲ κινουσὶν ἢ φιλία καὶ τὸ νεῖκος· τὸ μὲν γὰρ διακρίνει, τὸ δὲ συγκρίνει αὐτῶν. καὶ τὸν νοῦν δὲ φησὶν Ἀναξαγόρας διακρίνειν τὸν κινήσαντα πρῶτον. ὁμοίως δὲ καὶ ὅσοι τοιαύτην μὲν οὐδεμίαν αἰτίαν λέγουσιν, διὰ δὲ τὸ κενὸν κινεῖσθαι φασιν· καὶ γὰρ οὗτοι τὴν κατὰ τόπον κίνησιν κινεῖσθαι τὴν φύσιν λέγουσιν (ἡ γὰρ διὰ τὸ κενὸν κινήσις φορὰ ἐστὶν καὶ ὡς ἐν τόπῳ), τῶν δ' ἄλλων οὐδεμίαν ὑπάρχειν τοῖς πρώτοις ἀλλὰ τοῖς ἐκ τούτων οἴονται· αὐξάνεσθαι γὰρ καὶ φθίνειν καὶ ἀλλοιοῦσθαι συγκρινομένων καὶ διακρινομένων τῶν ἀτόμων σωμάτων φασίν. τὸν αὐτὸν δὲ τρόπον καὶ ὅσοι διὰ πυκνότητα ἢ μανότητα κατασκευάζουσι γένεσιν καὶ φθοράν· συγκρίσει γὰρ καὶ διακρίσει ταῦτα διακοσμοῦσιν. ἔτι δὲ παρὰ τούτους οἱ τὴν ψυχὴν αἰτίαν ποιοῦντες κινήσεως· τὸ γὰρ αὐτὸ αὐτὸ κινοῦν ἀρχὴν εἶναι φασιν τῶν κινουμένων, κινεῖ δὲ τὸ ζῶον καὶ πᾶν τὸ ἔμ(266a.) ψυχὸν τὴν κατὰ τόπον αὐτὸ κίνησιν. καὶ κυρίως δὲ κινεῖσθαι φαμεν μόνον τὸ κινούμενον [τὴν] κατὰ τόπον [κίνησιν]· ἂν δ' ἡρεμῇ μὲν ἐν τῷ αὐτῷ, αὐξάνηται δ' ἢ φθίνη ἢ ἀλλοιούμενον τυγχάνη, πῇ κινεῖσθαι, ἀπλῶς δὲ κινεῖσθαι οὐ φαμεν. ὅτι μὲν οὖν αἰετὶ κινήσις ἦν καὶ ἔσται τὸν ἅπαντα χρόνον, καὶ τίς ἀρχὴ τῆς αἰδίου κινήσεως, ἔτι δὲ τίς πρώτη κίνησις, καὶ τίνα



κίνησιν αἴδιον ἐνδέχεται μόνην εἶναι, καὶ τὸ κινοῦν πρῶτον ὅτι ἀκίνητον, εἴρηται.

## Κεφάλαιο 10

Ὅτι δὲ τοῦτ' ἀμερὲς ἀναγκαῖον εἶναι καὶ μηδὲν ἔχειν μέγεθος, νῦν λέγωμεν, πρῶτον περὶ τῶν προτέρων αὐτοῦ διορίσαντες.

τούτων δ' ἐν μὲν ἐστὶν ὅτι οὐχ οἷόν τε οὐδὲν πεπερασμένον κινεῖν ἄπειρον χρόνον. τρία γὰρ ἔστιν, τὸ κινοῦν, τὸ κινούμενον, τὸ ἐν ᾧ τρίτον, ὁ χρόνος. ταῦτα δὲ ἢ πάντα ἄπειρα ἢ πάντα πεπερασμένα ἢ ἓν, οἷον τὰ δύο ἢ τὸ ἓν. ἔστω δὴ τὸ Α τὸ κινοῦν, τὸ δὲ κινούμενον Β, χρόνος ἄπειρος ἐφ' οὗ Γ. τὸ δὲ Δ τῆς Β κινεῖται τι μέρος, τὸ ἐφ' οὗ Ε. οὐ δὲ ἐν ἴσῳ τῷ Γ· ἐν πλείονι γὰρ τὸ μείζον. ὥστ' οὐκ ἄπειρος ὁ χρόνος ὁ τὸ Ζ. οὕτω δὲ τῇ Δ προστιθεὶς καταναλώσω τὸ Α καὶ τῇ Ε τὸ Β· τὸν δὲ χρόνον οὐ καταναλώσω ἀεὶ ἀφαιρῶν ἴσον· ἄπειρος γάρ· ὥστε ἡ πᾶσα Α τὴν ὅλην Β κινήσει ἐν πεπερασμένῳ χρόνῳ τοῦ Γ. οὐκ ἄρα οἷόν τε ὑπὸ πεπερασμένου κινεῖσθαι οὐδὲν ἄπειρον κίνησιν.

ὅτι μὲν οὖν οὐκ ἐνδέχεται τὸ πεπερασμένον ἄπειρον κινεῖν χρόνον, φανερόν· ὅτι δ' ὅλως οὐκ ἐνδέχεται ἐν πεπερασμένῳ μεγέθει ἄπειρον εἶναι δύναμιν, ἐκ τῶνδε δῆλον. ἔστω γὰρ ἡ πλείων δύναμις ἀεὶ ἢ τὸ ἴσον ἐν ἐλάττονι χρόνῳ ποιοῦσα, οἷον θερμαίνουσα ἢ γλυκαίνουσα ἢ ῥιπτοῦσα καὶ ὅλως κινοῦσα. ἀνάγκη ἄρα καὶ ὑπὸ τοῦ πεπερασμένου μὲν ἄπειρον δ' ἔχοντος δύναμιν πᾶσχειν τι τὸ πᾶσχον, καὶ πλεῖον ἢ ὑπ' ἄλλου· πλείων γὰρ ἢ ἄπειρος. ἀλλὰ μὴν χρόνον γε οὐκ ἐνδέχεται εἶναι οὐδένα. εἰ γὰρ ἐστὶν ὁ ἐφ' οὗ Α χρόνος ἐν ᾧ ἡ ἄπειρος ἰσχὺς ἐθέρμανεν ἢ ἔωσεν, ἐν τῷ δὲ ΑΒ πεπερασμένη τις, πρὸς ταύτην (266b.) μείζω λαμβάνων ἀεὶ πεπερασμένην ἥξω ποτὲ εἰς τὸ ἐν τῷ Α χρόνῳ κεκινήκεναι· πρὸς πεπερασμένον γὰρ ἀεὶ

προστιθεὶς ὑπερβαλῶ παντὸς ὠρισμένου, καὶ ἀφαιρῶν ἐλλείψω ὡσαύτως. ἐν ἴσῳ ἄρα χρόνῳ κινήσει τῇ ἀπείρῳ ἢ πεπερασμένην. τοῦτο δὲ ἀδύνατον· οὐδὲν ἄρα πεπερασμένον ἐνδέχεται ἀπειρον δύναμιν ἔχειν. οὐ τοίνυν οὐδ' ἐν ἀπείρῳ πεπε(6) ρασμένην· καίτοι ἐνδέχεται ἐν ἐλάττονι μεγέθει πλείω δύναμιν εἶναι· ἀλλ' ἔτι μᾶλλον ἐν μείζονι πλείω. ἔστω δὴ τὸ ἐφ' οὗ AB ἀπειρον. τὸ δὴ BG ἔχει δύναμιν τινα, ἣ ἐν τινι χρόνῳ ἐκίνησεν τὴν Δ, ἐν τῷ χρόνῳ ἐφ' οὗ EZ. ἂν δὴ τῆς BG διπλασίαν λαμβάνω, ἐν ἡμίσει χρόνῳ τοῦ EZ (ἔστω γὰρ αὕτη ἡ ἀναλογία), ὥστε ἐν τῷ ZΘ κινήσει. οὐκοῦν οὕτω λαμβάνων ἀεὶ τὴν μὲν AB οὐδέποτε διέξειμι, τοῦ χρόνου δὲ τοῦ δοθέντος αἰεὶ ἐλάττω λήψομαι. ἀπειρος ἄρα ἡ δύναμις ἔσται· πάσης γὰρ πεπερασμένης ὑπερβάλλει δυνάμεως, εἴ γε πάσης πεπερασμένης δυνάμεως ἀνάγκη πεπερασμένον εἶναι καὶ τὸν χρόνον (εἰ γὰρ ἐν τινι ἢ τοσηδί, ἢ μείζον ἐν ἐλάττονι μὲν ὠρισμένῳ δὲ χρόνῳ κινήσει, κατὰ τὴν ἀντιστροφὴν τῆς ἀναλογίας)· ἀπειρος δὲ πᾶσα δύναμις, ὥσπερ καὶ πλῆθος καὶ μέγεθος τὸ ὑπερβάλλον παντὸς ὠρισμένου. ἔστιν δὲ καὶ ὧδε δεῖξαι τοῦτο· ληψόμεθα γὰρ τινα δύναμιν τὴν αὐτὴν τῷ γένει τῇ ἐν τῷ ἀπείρῳ μεγέθει, ἐν πεπερασμένῳ μεγέθει οὖσαν, ἣ καταμετρήσει τὴν ἐν τῷ ἀπείρῳ πεπερασμένην δύναμιν.

ὅτι μὲν οὖν οὐκ ἐνδέχεται ἀπειρον εἶναι δύναμιν ἐν πεπερασμένῳ μεγέθει, οὐδ' ἐν ἀπείρῳ πεπερασμένην, ἐκ τούτων δῆλον. περὶ δὲ τῶν φερομένων ἔχει καλῶς διαπορῆσαί τινα ἀπορίαν πρῶτον. εἰ γὰρ πᾶν τὸ κινούμενον κινεῖται ὑπὸ τινός, ὅσα μὴ αὐτὰ ἐαυτὰ κινεῖ, πῶς κινεῖται ἓνια συνεχῶς μὴ ἀπτομένου τοῦ κινήσαντος, οἷον τὰ ῥιπτούμενα; εἰ δ' ἅμα κινεῖ καὶ ἄλλο τι ὁ κινήσας, οἷον τὸν ἀέρα, ὃς κινούμενος κινεῖ, ὁμοίως ἀδύνατον τοῦ πρώτου μὴ ἀπτομένου μηδὲ κινουῦντος κινεῖσθαι, ἀλλ' ἅμα πάντα <καὶ> κινεῖσθαι καὶ (267a.) πεπαῦσθαι ὅταν τὸ πρῶτον κινουῦν παύσηται, καὶ εἰ ποιεῖ, ὥσπερ ἡ λίθος, οἷόν τε κινεῖν ὃ ἐκίνησεν. ἀνάγκη δὴ τοῦτο μὲν

λέγειν, ὅτι τὸ πρῶτον κινήσαν ποιεῖ οἷόν τε κινεῖν ἢ τὸν ἀέρα [τοιοῦτον] ἢ τὸ ὕδωρ ἢ τι ἄλλο τοιοῦτον ὃ πέφυκε κινεῖν καὶ κινεῖσθαι· ἀλλ' οὐχ ἅμα παύεται κινοῦν καὶ κινούμενον, ἀλλὰ κινούμενον μὲν ἅμα ὅταν ὁ κινῶν παύσηται κινῶν, κινοῦν δὲ ἔτι ἐστίν. διὸ καὶ κινεῖ τι ἄλλο ἐχόμενον· καὶ ἐπὶ τούτου ὁ αὐτὸς λόγος. παύεται δέ, ὅταν αἰεὶ ἐλάττων ἢ δύναμις τοῦ κινεῖν ἐγγίγνηται τῷ ἐχομένῳ. τέλος δὲ παύεται, ὅταν μηκέτι ποιήσῃ τὸ πρότερον κινοῦν, ἀλλὰ κινούμενον μόνον. ταῦτα δ' ἀνάγκη ἅμα παύεσθαι, τὸ μὲν κινοῦν τὸ δὲ κινούμενον, καὶ τὴν ὅλην κίνησιν. αὕτη μὲν οὖν ἐν τοῖς ἐνδεχομένοις ὅτε μὲν κινεῖσθαι ὅτε δ' ἡρεμεῖν ἐγγίγνεται ἢ κίνησις, καὶ οὐ συνεχής, ἀλλὰ φαίνεται· ἢ γὰρ ἐφεξῆς ὄντων ἢ ἀποτομένων ἐστίν· οὐ γὰρ ἐν τὸ κινοῦν, ἀλλ' ἐχόμενα ἀλλήλων. διὸ ἐν ἀέρι καὶ ὕδατι γίνεται ἢ τοιαύτη κίνησις, ἣν λέγουσί τινες ἀντιπερίστασιν εἶναι. ἀδύνατον δὲ ἄλλως τὰ ἀπορηθέντα λύειν, εἰ μὴ τὸν εἰρημένον τρόπον. ἢ δ' ἀντιπερίστασις ἅμα πάντα κινεῖσθαι ποιεῖ καὶ κινεῖν, ὥστε καὶ παύεσθαι· νῦν δὲ φαίνεται τι ἐν κινούμενον συνεχῶς· ὑπὸ τίνος οὖν; οὐ γὰρ ὑπὸ τοῦ αὐτοῦ. ἐπεὶ δ' ἐν τοῖς οὖσιν ἀνάγκη κίνησιν εἶναι συνεχῇ, αὕτη δὲ μία ἐστίν, ἀνάγκη δὲ τὴν μίαν μεγέθους τέ τινος εἶναι (οὐ γὰρ κινεῖται τὸ ἀμέγεθες) καὶ ἐνὸς καὶ ὑφ' ἐνός (οὐ γὰρ ἔσται συνεχής, ἀλλ' ἐχομένη ἑτέρα ἑτέρας καὶ διηρημένη), τὸ δὲ κινοῦν εἰ ἓν, ἢ κινούμενον κινεῖ ἢ ἀκίνητον ὄν. εἰ μὲν δὲ κινού μενον, συνακολουθεῖν δεήσει καὶ μεταβάλλειν αὐτό, ἅμα δὲ (267b.) κινεῖσθαι ὑπὸ τίνος, ὥστε στήσεται καὶ ἥξει εἰς τὸ κινεῖσθαι ὑπὸ ἀκινήτου. τοῦτο γὰρ οὐκ ἀνάγκη συμμεταβάλλειν, ἀλλ' αἰεὶ τε δυνήσεται κινεῖν (ἄπονον γὰρ τὸ οὕτω κινεῖν) καὶ ὁμαλῆς αὕτη ἢ κίνησις ἢ μόνη ἢ μάλιστα· οὐ γὰρ ἔχει μεταβολὴν τὸ κινοῦν οὐδεμίαν. δεῖ δὲ οὐδὲ τὸ κινούμενον πρὸς ἐκεῖνο ἔχειν μεταβολήν, ἵνα ὁμοία ἢ ἡ κίνησις. ἀνάγκη δὲ ἢ ἐν μέσῳ ἢ ἐν κύκλῳ εἶναι· αὗται γὰρ αἱ ἀρχαί. ἀλλὰ τάχιστα κινεῖται τὰ ἐγγύτατα τοῦ κινοῦντος. τοιαύτη δ' ἢ τοῦ κύκλου κίνησις· ἐκεῖ ἄρα τὸ κινοῦν. ἔχει δ' ἀπορίαν εἰ

ἐνδέχεται τι κινούμενον κινεῖν συνεχῶς, ἀλλὰ μὴ ὥσπερ τὸ ὠθοῦν πάλιν καὶ πάλιν, τῷ ἐφεξῆς εἶναι συνεχῶς· ἢ γὰρ αὐτὸ δεῖ ἀεὶ ὠθεῖν ἢ ἔλκειν ἢ ἄμφω, ἢ ἕτερόν τι ἐκδεχόμενον ἄλλο παρ' ἄλλου, ὥσπερ πάλαι ἐλέχθη ἐπὶ τῶν ριπτουμένων, εἰ διαιρετὸς ὢν ὁ ἀήρ [ἢ τὸ ὕδωρ] κινεῖ ἄλλος ἀεὶ κινούμενος. ἀμφοτέρως δ' οὐχ οἶόν τε μίαν εἶναι, ἀλλ' ἐχομένην. μόνη ἄρα συνεχῆς ἦν κινεῖ τὸ ἀκίνητον· ἀεὶ γὰρ ὁμοίως ἔχον καὶ πρὸς τὸ κινούμενον ὁμοίως ἔξει καὶ συνεχῶς.

διωρισμένων δὲ τούτων φανερόν ὅτι ἀδύνατον τὸ πρῶτον κινεῖν καὶ ἀκίνητον ἔχειν τι μέγεθος. εἰ γὰρ μέγεθος ἔχει, ἀνάγκη ἦτοι πεπερασμένον αὐτὸ εἶναι ἢ ἄπειρον. ἄπειρον μὲν οὖν ὅτι οὐκ ἐνδέχεται μέγεθος εἶναι, δέδεικται πρότερον ἐν τοῖς φυσικοῖς· ὅτι δὲ τὸ πεπερασμένον ἀδύνατον ἔχειν δύναμιν ἄπειρον, καὶ ὅτι ἀδύνατον ὑπὸ πεπερασμένου κινεῖσθαι τι ἄπειρον χρόνον, δέδεικται νῦν. τὸ δέ γε πρῶτον κινεῖν αἴδιον κινεῖ κίνησιν καὶ ἄπειρον χρόνον. φανερόν τοίνυν ὅτι ἀδιαίρετόν ἐστι καὶ ἀμερές καὶ οὐδὲν ἔχον μέγεθος.

## Περὶ οὐρανοῦ (268a) On the Heavens



### CONTENTS

[Βιβλίο 1](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Βιβλίο 2](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Βιβλίο 3](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Βιβλίο 4](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

## Κεφάλαιο 4

## Κεφάλαιο 5

## Κεφάλαιο 6

### Βιβλίο 1

#### Κεφάλαιο 1

(268a.) Ἡ περὶ φύσεως ἐπιστήμη σχεδὸν ἢ πλείστη φαίνεται περὶ τε σώματα καὶ μεγέθη καὶ τὰ τούτων οὕσα πάθη καὶ τὰς κινήσεις, ἔτι δὲ περὶ τὰς ἀρχάς, ὅσαι τῆς τοιαύτης οὐσίας εἰσὶν· τῶν γὰρ φύσει συνεστώτων τὰ μὲν ἐστὶ σώματα καὶ μεγέθη, τὰ δ' ἔχει σῶμα καὶ μέγεθος, τὰ δ' ἀρχαὶ τῶν ἐχόντων εἰσὶν.

Συνεχὲς μὲν οὖν ἐστὶ τὸ διαιρετὸν εἰς ἀεὶ διαιρετά, σῶμα δὲ τὸ πάντῃ διαιρετόν. Μεγέθους δὲ τὸ μὲν ἐφ' ἓν γραμμὴ, τὸ δ' ἐπὶ δύο ἐπίπεδον, τὸ δ' ἐπὶ τρία σῶμα· καὶ παρὰ ταῦτα οὐκ ἔστιν ἄλλο μέγεθος διὰ τὸ τὰ τρία πάντα εἶναι καὶ τὸ τρὶς πάντῃ. Καθάπερ γάρ φασι καὶ οἱ Πυθαγόρειοι, τὸ πᾶν καὶ τὰ πάντα τοῖς τρισὶν ὥριστα· τελευτὴ γὰρ καὶ μέσον καὶ ἀρχὴ τὸν ἀριθμὸν ἔχει τὸν τοῦ παντός, ταῦτα δὲ τὸν τῆς τριάδος. Διὸ παρὰ τῆς φύσεως εἰληφότες ὥσπερ νόμους ἐκείνης, καὶ πρὸς τὰς ἀγιστείας χρώμεθα τῶν θεῶν τῷ ἀριθμῷ τούτῳ. Ἀποδίδομεν δὲ καὶ τὰς προσηγορίας τὸν τρόπον τοῦτον· τὰ γὰρ δύο ἄμφω μὲν λέγομεν καὶ τοὺς δύο ἀμφοτέρους, πάντας δ' οὐ λέγομεν, ἀλλὰ κατὰ τῶν τριῶν ταύτην τὴν κατηγορίαν κατάφαμεν πρῶτον. Ταῦτα δ', ὥσπερ εἴρηται, διὰ τὸ τὴν φύσιν αὐτὴν οὕτως ἐπάγειν ἀκολουθοῦμεν.

Ὡστ' ἐπεὶ τὰ πάντα καὶ τὸ πᾶν καὶ τὸ τέλειον οὐ κατὰ τὴν ἰδέαν διαφέρουσιν ἀλλήλων, ἀλλ' εἴπερ, ἐν τῇ ὕλῃ καὶ ἐφ' ὧν λέγονται, τὸ σῶμα μόνον ἂν εἴη τῶν μεγεθῶν τέλειον· μόνον γὰρ ὥριστα τοῖς τρισίν, τοῦτο δ' ἐστὶ πᾶν. Τριχῇ δὲ ὄν διαιρετὸν πάντῃ διαιρετὸν ἐστίν· τῶν δ' ἄλλων τὸ μὲν ἐφ' ἐν τὸ δ' ἐπὶ δύο· ὡς γὰρ τοῦ ἀριθμοῦ τετυχήκασιν, οὕτω καὶ τῆς διαιρέσεως καὶ τοῦ συνεχοῦς· τὸ μὲν γὰρ ἐφ' ἐν συνεχές, τὸ δ' ἐπὶ δύο, τὸ δὲ πάντῃ τοιοῦτον. Ὅσα μὲν οὖν διαιρετὰ τῶν μεγεθῶν, καὶ συνεχῇ ταῦτα· εἰ δὲ καὶ τὰ συνεχῇ πάντα διαιρετά, οὕπω δῆλον ἐκ τῶν νῦν.

Ἀλλ' ἐκεῖνο μὲν δῆλον, ὡς οὐκ (268b.) ἔστιν εἰς ἄλλο γένος μετάβασις, ὥσπερ ἐκ μήκους εἰς ἐπιφάνειαν, εἰς δὲ σῶμα ἐξ ἐπιφανείας· οὐ γὰρ ἂν ἔτι τὸ τοιοῦτον τέλειον εἴη μέγεθος· ἀνάγκη γὰρ γίνεσθαι τὴν ἔκβασιν κατὰ τὴν ἔλλειψιν, οὐχ οἶόν τε δὲ τὸ τέλειον ἐλλείπειν· πάντῃ γάρ ἐστιν.

Τῶν μὲν οὖν ἐν μορίου εἶδει σωμάτων κατὰ τὸν λόγον ἕκαστον τοιοῦτόν ἐστιν· πάσας γὰρ ἔχει τὰς διαστάσεις· ἀλλ' ὥριστα πρὸς τὸ πλησίον ἀφῆ· διὸ τρόπον τινὰ πολλὰ τῶν σωμάτων ἕκαστόν ἐστιν. Τὸ δὲ πᾶν οὐ ταῦτα μόρια, τέλειον ἀναγκαῖον εἶναι καὶ καθάπερ τοῦνομα ημαίνει πάντῃ, καὶ μὴ τῇ μὲν τῇ δὲ μή.

## Κεφάλαιο 2

Περὶ μὲν οὖν τῆς τοῦ παντός φύσεως, εἴτ' ἀπειρός ἐστι κατὰ τὸ μέγεθος εἴτε πεπέρανται τὸν σύνολον ὄγκον, ὕστερον ἐπισκεπτέον· περὶ δὲ τῶν κατ' εἶδος αὐτοῦ μορίων νῦν λέγωμεν ἀρχὴν ποιησάμενοι τήνδε.

Πάντα γὰρ τὰ φυσικὰ σώματα καὶ μεγέθη καθ' αὐτὰ κινητὰ λέγομεν εἶναι κατὰ τόπον· τὴν γὰρ φύσιν κινήσεως ἀρχὴν εἶναί φαμεν αὐτοῖς.



Πᾶσα δὲ κίνησις ὅση κατὰ τόπον, ἣν καλοῦμεν φοράν, ἢ εὐθεΐα ἢ κύκλω ἢ ἐκ τούτων μικτή· ἀπλαῖ γὰρ αὗται δύο μόναι. Αἴτιον δ' ὅτι καὶ τὰ μεγέθη ταῦτα ἀπλᾶ μόνον, ἢ τ' εὐθεΐα καὶ ἡ περιφερής. Κύκλω μὲν οὖν ἐστὶν ἡ περὶ τὸ μέσον, εὐθεΐα δ' ἡ ἄνω καὶ κάτω. Λέγω δ' ἄνω μὲν τὴν ἀπὸ τοῦ μέσου, κάτω δὲ τὴν ἐπὶ τὸ μέσον. Ὡστ' ἀνάγκη πᾶσαν εἶναι τὴν ἀπλῆν φοράν τὴν μὲν ἀπὸ τοῦ μέσου, τὴν δ' ἐπὶ τὸ μέσον, τὴν δὲ περὶ τὸ μέσον. Καὶ ἔοικεν ἠκολουθηκέναι κατὰ λόγον τοῦτο τοῖς ἐξ ἀρχῆς· τό τε γὰρ σῶμα ἀπετελέσθη ἐν τρισὶ καὶ ἡ κίνησις αὐτοῦ. Ἐπεὶ δὲ τῶν σωμάτων τὰ μὲν ἐστὶν ἀπλᾶ τὰ δὲ σύνθετα ἐκ τούτων (λέγω δ' ἀπλᾶ μὲν ὅσα κινήσεως ἀρχὴν ἔχει κατὰ φύσιν, οἷον πῦρ καὶ γῆν καὶ τὰ τούτων εἶδη καὶ τὰ συγγενῇ τούτοις), ἀνάγκη καὶ τὰς κινήσεις εἶναι τὰς μὲν ἀπλᾶς τὰς δὲ μικτάς πως, (269a.) καὶ τῶν μὲν ἀπλῶν ἀπλᾶς, μικτάς δὲ τῶν συνθέτων, κινεῖσθαι δὲ κατὰ τὸ ἐπικρατοῦν.

Εἴπερ οὖν ἐστὶν ἀπλῆ κίνησις, ἀπλῆ δ' ἡ κύκλω κίνησις, καὶ τοῦ τε ἀπλοῦ σώματος ἀπλῆ ἡ κίνησις καὶ ἡ ἀπλῆ κίνησις ἀπλοῦ σώματος (καὶ γὰρ ἂν συνθέτου ἦ, κατὰ τὸ ἐπικρατοῦν ἔσται), ἀναγκαῖον εἶναί τι σῶμα ἀπλοῦν ὃ πέφυκε φέρεσθαι τὴν κύκλω κίνησιν κατὰ τὴν ἑαυτοῦ φύσιν· βία μὲν γὰρ ἐνδέχεται τὴν ἄλλου καὶ ἑτέρου, κατὰ φύσιν δὲ ἀδύνατον, εἴπερ μία ἐκάστου κίνησις ἢ κατὰ φύσιν τῶν ἀπλῶν.

Ἔτι εἰ ἡ παρὰ φύσιν ἐναντία τῇ κατὰ φύσιν καὶ ἐν ἐνὶ ἐναντίον, ἀνάγκη, ἐπεὶ ἀπλῆ ἡ κύκλω, εἰ μὴ ἔσται κατὰ φύσιν τοῦ φερομένου σώματος, παρὰ φύσιν αὐτοῦ εἶναι. Εἰ οὖν πῦρ ἢ ἄλλο τι τῶν τοιούτων ἐστὶ τὸ κύκλω φερόμενον, ἐναντία ἢ κατὰ φύσιν αὐτοῦ φορὰ ἔσται τῇ κύκλω. Ἀλλ' ἐν ἐνὶ ἐναντίον· ἢ δ' ἄνω καὶ κάτω ἀλλήλαις ἐναντίαι. Εἰ δ' ἕτερόν τί ἐστὶ σῶμα τὸ φερόμενον κύκλω παρὰ φύσιν, ἔσται τις αὐτοῦ ἄλλη κίνησις κατὰ φύσιν. Ἀλλὰ τοῦτ' ἀδύνατον· εἰ μὲν γὰρ ἡ

ἄνω, πῦρ ἔσται ἢ ἀήρ, εἰ δ' ἢ κάτω, ὕδωρ ἢ γῆ.

Ἀλλὰ μὴν καὶ πρώτην γε ἀναγκαῖον εἶναι τὴν τοιαύτην φορὰν. Τὸ γὰρ τέλειον πρότερον τῇ φύσει τοῦ ἀτελοῦς, ὃ δὲ κύκλος τῶν τελείων, εὐθεῖα δὲ γραμμὴ οὐδεμία· οὔτε γὰρ ἡ ἄπειρος (ἔχοι γὰρ ἂν πέρας καὶ τέλος) οὔτε τῶν πεπερασμένων οὐδεμία (πασῶν γάρ ἐστὶ τι ἐκτός· ἀύξησαι γὰρ ἐνδέχεται ὅποιανοῦν). Ὡστ' εἶπερ ἡ μὲν προτέρα κίνησις προτέρου τῇ φύσει σώματος, ἡ δὲ κύκλῳ προτέρα τῆς εὐθείας, ἡ δ' ἐπ' εὐθείας τῶν ἀπλῶν σωμάτων ἐστὶ (τό τε γὰρ πῦρ ἐπ' εὐθείας ἄνω φέρεται καὶ τὰ γεηρὰ κάτω πρὸς τὸ μέσον), ἀνάγκη καὶ τὴν κύκλῳ κίνησιν τῶν ἀπλῶν τινος εἶναι σωμάτων· τῶν γὰρ μικτῶν τὴν φορὰν ἔφαμεν εἶναι κατὰ τὸ ἐπικρατοῦν ἐν τῇ μίξει τῶν ἀπλῶν. Ἐκ τε δὴ τούτων φανερόν ὅτι πέφυκέ τις οὐσία σώματος ἄλλη παρὰ τὰς ἐνταῦθα συστάσεις, θειότερα καὶ προτέρα τούτων ἀπάντων, καὶ εἴ τις ἔτι λάβοι πᾶσαν εἶναι κίνησιν ἢ κατὰ φύσιν ἢ παρὰ φύσιν, καὶ τὴν ἄλλῳ παρὰ φύσιν ἑτέρῳ κατὰ φύσιν, οἷον ἡ ἄνω καὶ ἡ κάτω πέπονθεν· ἡ μὲν γὰρ τῷ πυρί, ἡ δὲ τῇ γῇ παρὰ φύσιν καὶ κατὰ φύσιν· (269b.) ὣστ' ἀναγκαῖον καὶ τὴν κύκλῳ κίνησιν, ἐπειδὴ τούτοις παρὰ φύσιν, ἑτέρου τινὸς εἶναι κατὰ φύσιν. Πρὸς δὲ τούτοις εἰ μὲν ἐστὶν ἡ κύκλῳ τινὲ φορὰ κατὰ φύσιν, δῆλον ὡς εἴη ἂν τι σῶμα τῶν ἀπλῶν καὶ πρώτων, ὃ πέφυκεν, ὥσπερ τὸ πῦρ ἄνω καὶ ἡ γῆ κάτω, ἐκεῖνο κύκλῳ φέρεσθαι κατὰ φύσιν. Εἰ δὲ παρὰ φύσιν φέρεται τὰ φερόμενα κύκλῳ τὴν περίξ φορὰν, θαυμαστὸν καὶ παντελῶς ἄλογον τὸ μόνην εἶναι συνεχῇ ταύτην τὴν κίνησιν καὶ αἰδίων, οὔσαν παρὰ φύσιν· φαίνεται γὰρ ἓν γε τοῖς ἄλλοις τάχιστα φθειρόμενα τὰ παρὰ φύσιν.

Ὡστ' εἶπερ ἐστὶ πῦρ τὸ φερόμενον, καθάπερ φασὶ τινες, οὐδὲν ἦττον αὐτῷ παρὰ φύσιν ἢ κινήσίς ἐστιν αὕτη ἢ ἡ κάτω· πυρὸς γὰρ κίνησιν ὁρῶμεν τὴν ἀπὸ τοῦ μέσου κατ' εὐθεΐαν.

Διόπερ ἐξ ἀπάντων ἄν τις τούτων συλλογιζόμενος πιστεύσειεν ὡς ἔστι τι παρὰ τὰ σώματα τὰ δεῦρο καὶ περὶ ἡμᾶς ἕτερον κεχωρισμένον, τοσούτῳ τιμιωτέραν ἔχον τὴν φύσιν ὅσωπερ ἀφέστηκε τῶν ἐνταῦθα πλεῖον.

### Κεφάλαιο 3

Ἐπεὶ δὲ τὰ μὲν ὑπόκειται τὰ δ' ἀποδέδεικται τῶν εἰρημένων, φανερόν ὅτι οὔτε κουφότητα οὔτε βάρος ἔχει σῶμα ἅπαν, δεῖ δὲ ὑποθέσθαι τί λέγομεν τὸ βαρὺ καὶ τὸ κοῦφον, νῦν μὲν ἱκανῶς ὡς πρὸς τὴν παροῦσαν χρεῖαν, ἀκριβέστερον δὲ πάλιν, ὅταν ἐπισκοπῶμεν περὶ τῆς οὐσίας αὐτῶν. Βαρὺ μὲν οὖν ἔστω τὸ φέρεσθαι πεφυκὸς ἐπὶ τὸ μέσον, κοῦφον δὲ τὸ ἀπὸ τοῦ μέσου, βαρύτερον δὲ τὸ πᾶσιν ὑφιστάμενον τοῖς κάτω φερομένοις, κουφότερον δὲ τὸ πᾶσιν ἐπιπολάζον τοῖς ἄνω φερομένοις.

Ἀνάγκη δὴ πᾶν τὸ φερόμενον ἢ κάτω ἢ ἄνω ἢ κουφότητ' ἔχειν ἢ βάρος ἢ ἄμφω, μὴ πρὸς τὸ αὐτὸ δέ· πρὸς ἄλληλα γάρ ἐστι βαρέα καὶ κοῦφα, οἷον ἀήρ πρὸς ὕδωρ, καὶ πρὸς γῆν ὕδωρ. Τὸ δὲ κύκλῳ σῶμα φερόμενον ἀδύνατον ἔχειν βάρος ἢ κουφότητα· οὔτε γὰρ κατὰ φύσιν οὔτε παρὰ φύσιν ἐνδέχεται αὐτῷ κινηθῆναι ἐπὶ τὸ μέσον ἢ ἀπὸ τοῦ μέσου. Κατὰ φύσιν μὲν γὰρ οὐκ ἔστιν αὐτῷ ἢ ἐπ' εὐθείας φορὰ· μία γὰρ ἦν ἐκάστου τῶν ἀπλῶν, ὥστ' ἔσται τὸ αὐτὸ τῶν οὕτω τινὶ φερομένων. Παρὰ φύσιν δ' ἐνεχθέντος, εἰ μὲν ἢ κάτω (270a.) παρὰ φύσιν, ἢ ἄνω ἔσται κατὰ φύσιν, εἰ δ' ἢ ἄνω παρὰ φύσιν, ἢ κάτω κατὰ φύσιν· ἔθεμεν γὰρ τῶν ἐναντίων ὧ ἢ ἑτέρα παρὰ φύσιν, τὴν ἑτέραν εἶναι κατὰ φύσιν.

Ἐπεὶ δ' εἰς τὸ αὐτὸ φέρεται τὸ ὅλον καὶ τὸ μόριον κατὰ φύσιν, οἷον πᾶσα γῆ καὶ μικρὰ βῶλος, συμβαίνει πρῶτον μὲν μήτε κουφότητ' ἔχειν αὐτὸ μηδεμίαν μήτε βάρος (ἢ γὰρ ἂν πρὸς τὸ μέσον ἢ ἀπὸ τοῦ μέσου ἡδύνατο φέρεσθαι κατὰ τὴν ἑαυτοῦ

φύσιν), ἔπειθ' ὅτι ἀδύνατον κινηθῆναι τὴν κατὰ τόπον κίνησιν ἢ ἄνω ἢ κάτω κατασπώμενον· οὔτε γὰρ κατὰ φύσιν ἐνδέχεται κινηθῆναι κίνησιν αὐτῷ ἄλλην οὔτε παρὰ φύσιν, οὔτ' αὐτῷ οὔτε τῶν μορίων οὐδενί· ὁ γὰρ αὐτὸς λόγος περὶ ὅλου καὶ μέρους.

Ὅμοίως δ' εὖλογον ὑπολαβεῖν περὶ αὐτοῦ καὶ ὅτι ἀγέννητον καὶ ἄφθαρτον καὶ ἀναυξὲς καὶ ἀναλλοίωτον, διὰ τὸ γίνεσθαι μὲν ἅπαν τὸ γινόμενον ἐξ ἐναντίου τε καὶ ὑποκειμένου τινός, καὶ φθείρεσθαι ὡσαύτως ὑποκειμένου τέ τινος καὶ ὑπ' ἐναντίου καὶ εἰς ἐναντίον, καθάπερ ἐν τοῖς πρώτοις εἴρηται λόγοις· τῶν δ' ἐναντίων καὶ αἱ φοραὶ ἐναντία. Εἰ δὴ τούτῳ μηδὲν ἐναντίον ἐνδέχεται εἶναι διὰ τὸ καὶ τῇ φορᾷ τῇ κύκλῳ μὴ εἶναι ἄν τιν' ἐναντίαν κίνησιν, ὀρθῶς ἔοικεν ἢ φύσις τὸ μέλλον ἔσεσθαι ἀγέννητον καὶ ἄφθαρτον ἐξελέσθαι ἐκ τῶν ἐναντίων· ἐν τοῖς ἐναντίοις γὰρ ἡ γένεσις καὶ ἡ φθορά.

Ἀλλὰ μὴν καὶ τὸ αὐξανόμενον ἅπαν αὐξάνεται [καὶ τὸ φθίνον φθίνει] ὑπὸ συγγενοῦς προσιόντος καὶ ἀναλυομένου εἰς τὴν ὕλην· τούτῳ δ' οὐκ ἔστιν ἐξ οὗ γέγονεν.

Εἰ δ' ἐστὶ καὶ ἀναύξητον καὶ ἄφθαρτον, τῆς αὐτῆς διανοίας ἐστὶν ὑπολαβεῖν καὶ ἀναλλοίωτον εἶναι. Ἔστι μὲν γὰρ ἡ ἀλλοίωσις κινήσις κατὰ τὸ ποιόν, τοῦ δὲ ποιοῦ αἱ μὲν ἔξεις καὶ διαθέσεις οὐκ ἄνευ τῶν κατὰ τὰ πάθη γίνονται μεταβολῶν, οἷον ὑγίεια καὶ νόσος. Κατὰ δὲ πάθος ὅσα μεταβάλλει τῶν φυσικῶν σωμάτων, ἔχονθ' ὁρῶμεν πάντα καὶ αὕξησιν καὶ φθίσιν, οἷον τὰ τε τῶν ζώων σώματα καὶ τὰ μόρια αὐτῶν καὶ τὰ τῶν φυτῶν, ὁμοίως δὲ καὶ τὰ τῶν στοιχείων· ὥστ' εἴπερ τὸ κύκλῳ σῶμα μήτ' αὕξησιν ἔχειν ἐνδέχεται μήτε φθίσιν, εὖλογον καὶ ἀναλλοίωτον εἶναι.

(270b.) Διότι μὲν οὖν αἰδίδιον καὶ οὔτ' αὕξησιν ἔχον οὔτε φθίσιν, ἀλλ' ἀγήρατον καὶ ἀναλλοίωτον καὶ ἀπαθές ἐστὶ τὸ πρῶτον

τῶν σωμάτων, εἴ τις τοῖς ὑποκειμένοις πιστεύει, φανερόν ἐκ τῶν εἰρημένων ἐστίν.

Ἔοικε δ' ὁ τε λόγος τοῖς φαινομένοις μαρτυρεῖν καὶ τὰ φαινόμενα τῷ λόγῳ· πάντες γὰρ ἄνθρωποι περὶ θεῶν ἔχουσιν ὑπόληψιν, καὶ πάντες τὸν ἀνωτάτω τῷ θεῷ τόπον ἀποδιδόασιν, καὶ βάρβαροι καὶ Ἕλληνες, ὅσοι περ εἶναι νομίζουσι θεούς, δῆλον ὅτι ὡς τῷ ἀθανάτῳ τὸ ἀθάνατον συνηρτημένον· ἀδύνατον γὰρ ἄλλως.

Εἴπερ οὖν ἔστι τι θεῖον, ὥσπερ ἔστι, καὶ τὰ νῦν εἰρημένα περὶ τῆς πρώτης οὐσίας τῶν σωμάτων εἴρηται καλῶς. Συμβαίνει δὲ τοῦτο καὶ διὰ τῆς αἰσθήσεως ἱκανῶς, ὥς γε πρὸς ἀνθρωπίνην εἰπεῖν πίστιν· ἐν ἅπαντι γὰρ τῷ παρεληλυθότι χρόνῳ κατὰ τὴν παραδεδομένην ἀλλήλοις μνήμην οὐθὲν φαίνεται μεταβεβληκὸς οὔτε καθ' ὅλον τὸν ἔσχατον οὐρανὸν οὔτε κατὰ μόριον αὐτοῦ τῶν οἰκείων οὐθέν.

Ἔοικε δὲ καὶ τοῦνομα παρὰ τῶν ἀρχαίων παραδεδόσθαι μέχρι καὶ τοῦ νῦν χρόνου, τοῦτον τὸν τρόπον ὑπολαμβάνόντων ὄνπερ καὶ ἡμεῖς λέγομεν· οὐ γὰρ ἅπαξ οὐδὲ δις ἄλλ' ἀπειράκις δεῖ νομίζειν τὰς αὐτὰς ἀφικνεῖσθαι δόξας εἰς ἡμᾶς. Διόπερ ὡς ἑτέρου τινὸς ὄντος τοῦ πρώτου σώματος παρὰ γῆν καὶ πῦρ καὶ ἀέρα καὶ ὕδωρ, αἰθέρα προσωνόμασαν τὸν ἀνωτάτω τόπον, ἀπὸ τοῦ θεῖν ἀεὶ τὸν αἶδιον χρόνον θέμενοι τὴν ἐπωνυμίαν αὐτῷ. Ἀναξαγόρας δὲ καταχρῆται τῷ ὀνόματι τούτῳ οὐ καλῶς· ὀνομάζει γὰρ αἰθέρα ἀντὶ πυρός.

Φανερόν δ' ἐκ τῶν εἰρημένων καὶ διότι τὸν ἀριθμὸν ἀδύνατον εἶναι πλείω τὸν τῶν λεγομένων σωμάτων ἀπλῶν· τοῦ μὲν γὰρ ἀπλοῦ σώματος ἀνάγκη τὴν κίνησιν ἀπλῆν εἶναι, μόνας δὲ ταύτας εἶναί φαμεν ἀπλᾶς, τὴν τε κύκλῳ καὶ τὴν ἐπ' εὐθείας, καὶ ταύτης τὰ δύο μόρια, τὴν μὲν ἀπὸ τοῦ μέσου, τὴν δ' ἐπὶ τὸ μέσον.

## Κεφάλαιο 4

Ὅτι δ' οὐκ ἔστι τῇ κύκλῳ φορᾷ ἐναντία ἄλλη φορά, πλεοναχόθεν ἂν τις λάβοι τὴν πίστιν· πρῶτον μὲν ὅτι τῇ περιφερεῖ τὴν εὐθείαν ἀντικεῖσθαι μάλιστα τίθεμεν· τὸ γὰρ κοῖλον καὶ τὸ κυρτὸν οὐ μόνον ἀλλήλοις ἀντικεῖσθαι δοκεῖ (271a.) ἀλλὰ καὶ τῷ εὐθεῖ, συνδυαζόμενα καὶ λαβόντα σύνθεσιν· ὥστ' εἴπερ ἐναντία τίς ἐστι, τὴν ἐπὶ τῆς εὐθείας μάλιστα ἀναγκαῖον ἐναντίαν εἶναι πρὸς τὴν κύκλῳ κίνησιν. Αἱ δ' ἐπὶ τῆς εὐθείας ἀλλήλαις ἀντίκεινται διὰ τοὺς τόπους· τὸ γὰρ ἄνω κάτω τόπου τέ ἐστι διαφορὰ καὶ ἐναντίωσις.

Ἐπειτ' εἴ τις ὑπολαμβάνει τὸν αὐτὸν εἶναι λόγον ὅνπερ ἐπὶ τῆς εὐθείας καὶ ἐπὶ τῆς περιφεροῦς (τὴν γὰρ ἀπὸ τοῦ Α πρὸς τὸ Β φορὰν ἐναντίαν εἶναι τῇ ἀπὸ τοῦ Β πρὸς τὸ Α), τὴν ἐπὶ τῆς εὐθείας λέγει· αὕτη γὰρ πεπέρανται, περιφερεῖς δ' ἄπειροι ἂν εἶεν περὶ τὰ αὐτὰ σημεία.

Ὅμοίως δὲ καὶ ἐπὶ τοῦ ἡμικυκλίου τοῦ ἐνός, οἷον ἀπὸ τοῦ Γ ἐπὶ τὸ Δ καὶ ἀπὸ τοῦ Δ ἐπὶ τὸ Γ· ἡ γὰρ αὐτὴ τῇ ἐπὶ τῆς διαμέτρου ἐστίν· ἀεὶ γὰρ ἕκαστον ἀπέχειν τὴν εὐθείαν τίθεμεν.

Ὅμοίως δὲ καὶ εἴ τις κύκλον ποιήσας τὴν ἐπὶ θατέρου ἡμικυκλίου φορὰν ἐναντίαν θείῃ τῇ ἐπὶ θατέρου, οἷον ἐν τῷ ὅλῳ κύκλῳ τὴν ἀπὸ τοῦ Ε πρὸς τὸ Ζ τοῦ Η ἡμικυκλίου τῇ ἀπὸ τοῦ Ζ πρὸς τὸ Ε ἐν τῷ Θ ἡμικυκλίῳ.

Εἰ δὲ καὶ αὗται ἐναντίαι, ἀλλ' οὔτι γε αἱ ἐπὶ τοῦ ὅλου κύκλου φοραὶ ἀλλήλαις διὰ τοῦτο ἐναντίαι. - Ἀλλὰ μὴν οὐδ' ἡ ἀπὸ τοῦ Α ἐπὶ τὸ Β κύκλῳ φορὰ ἐναντία τῇ ἀπὸ τοῦ Α ἐπὶ τὸ Γ· ἐκ ταύτου γὰρ εἰς ταὐτὸ ἡ κίνησις, ἡ δ' ἐναντία διωρίσθη φορὰ ἐκ τοῦ ἐναντίου εἰς τὸ ἐναντίον.

Εἰ δὲ καὶ ἦν ἡ κύκλω τῇ κύκλω ἐναντία, μάτην ἂν ἦν ἡ ἑτέρα· ἐπὶ τὸ αὐτὸ γάρ, ὅτι ἀνάγκη τὸ κύκλω φερόμενον ὁποθενοῦν ἀρξάμενον εἰς πάντας ὁμοίως ἀφικνεῖσθαι τοὺς ἐναντίους τόπους (εἰσὶ δὲ τόπου ἐναντιότητες τὸ ἄνω καὶ κάτω καὶ τὸ πρόσθιον καὶ ὀπίσθιον καὶ τὸ δεξιὸν καὶ ἀριστερόν), αἱ δὲ τῆς φορᾶς ἐναντιώσεις κατὰ τὰς τῶν τόπων εἰσὶν ἐναντιώσεις· εἰ μὲν γὰρ ἴσαι ἦσαν, οὐκ ἂν ἦν κινήσεις αὐτῶν, εἰ δ' ἡ ἑτέρα κινήσεις ἐκράτει, ἡ ἑτέρα οὐκ ἂν ἦν. Ὡστ' εἰ ἀμφοτέρω ἦν, μάτην ἂν θάτερον ἦν σῶμα μὴ κινούμενον τὴν αὐτοῦ κίνησιν· μάτην γὰρ ὑπόδημα τοῦτο λέγομεν, οὐ μὴ ἔστιν ὑπόδεσις. Ὁ δὲ θεὸς καὶ ἡ φύσις οὐδὲν μάτην ποιοῦσιν.

## Κεφάλαιο 5

(271b.) Ἄλλ' ἐπεὶ δῆλον περὶ τούτων, περὶ τῶν λοιπῶν σκεπτέον, καὶ πρῶτον πότερον ἔστι τι σῶμα ἄπειρον, ὥσπερ οἱ πλεῖστοι τῶν ἀρχαίων φιλοσόφων ᾤκηθησαν, ἢ τοῦτ' ἔστιν ἓν τι τῶν ἀδυνάτων· τὸ γὰρ οὕτως ἢ ἐκείνως ἔχειν οὐ τι μικρὸν ἀλλ' ὅλον διαφέρει καὶ πᾶν πρὸς τὴν περὶ τῆς ἀληθείας θεωρίαν· σχεδὸν γὰρ αὕτη πασῶν ἀρχῇ τῶν ἐναντιώσεων τοῖς ἀποφηναμένοις τι περὶ τῆς ὅλης φύσεως καὶ γέγονε καὶ γένοιτ' ἂν, εἴπερ καὶ τὸ μικρὸν παραβῆναι τῆς ἀληθείας ἀφισταμένοις γίνεται πόρρω μυριοπλάσιον. Οἷον εἴ τις ἐλάχιστον εἶναί τι φαίη μέγεθος· οὗτος γὰρ τοῦλάχιστον εἰσαγαγὼν τὰ μέγιστ' ἂν κινήσειε τῶν μαθηματικῶν. Τούτου δ' αἷτιον ὅτι ἡ ἀρχὴ δυνάμει μείζων ἢ μεγέθει, διόπερ τὸ ἐν ἀρχῇ μικρὸν ἐν τῇ τελευτῇ γίνεται παμμέγεθες. Τὸ δ' ἄπειρον καὶ ἀρχῆς ἔχει δύναμιν καὶ τοῦ ποσοῦ τὴν μεγίστην, ὥστ' οὐδὲν ἄτοπον οὐδ' ἄλογον τὸ θαυμαστὴν εἶναι τὴν διαφορὰν ἐκ τοῦ λαβεῖν ὥς ἔστι τι σῶμα ἄπειρον. Διὸ περὶ αὐτοῦ λεκτέον ἐξ ἀρχῆς ἀναλαβοῦσιν.

Ἀνάγκη δὲ πᾶν σῶμα ἦτοι τῶν ἀπλῶν εἶναι ἢ τῶν συνθέτων,

ὥστε καὶ τὸ ἄπειρον ἢ ἀπλοῦν ἔσται ἢ σύνθετον. Ἀλλὰ μὴν καὶ ὅτι γε πεπερασμένων τῶν ἀπλῶν ἀνάγκη πεπερασμένον εἶναι τὸ σύνθετον, δῆλον· τὸ γὰρ ἐκ πεπερασμένων καὶ πλήθει καὶ μεγέθει συγκείμενον πεπέρανται καὶ πλήθει καὶ μεγέθει· τοσοῦτον γάρ ἐστιν ἐξ ὅσων ἐστὶ συγκείμενον.

Λοιπὸν τοίνυν ἰδεῖν πότερον ἐνδέχεται τι τῶν ἀπλῶν ἄπειρον εἶναι τὸ μέγεθος, ἢ τοῦτ' ἀδύνατον. Προχειρισάμενοι δὴ περὶ τοῦ πρώτου τῶν σωμάτων, οὕτω σκοπῶμεν καὶ περὶ τῶν λοιπῶν.

Ὅτι μὲν τοίνυν ἀνάγκη τὸ σῶμα τὸ κύκλῳ φερόμενον πεπεράνθαι πᾶν, ἐκ τῶνδε δῆλον.

Εἰ γὰρ ἄπειρον τὸ κύκλῳ φερόμενον σῶμα, ἄπειροι ἔσονται αἱ ἀπὸ τοῦ μέσου ἐκβαλλόμεναι. Τῶν δ' ἀπείρων τὸ διάστημα ἄπειρον· διάστημα δὲ λέγω τῶν γραμμῶν, οὐ μὴδὲν ἔστιν ἔξω λαβεῖν μέγεθος ἀπτόμενον τῶν γραμμῶν. Τοῦτ' οὖν ἀνάγκη ἄπειρον εἶναι· τῶν γὰρ πεπερασμένων ἀεὶ ἔσται πεπερασμένον. Ἔτι δ' ἀεὶ ἔστι τοῦ (272a.) δοθέντος μεῖζον λαβεῖν, ὥστε καθάπερ ἀριθμὸν λέγομεν ἄπειρον, ὅτι μέγιστος οὐκ ἔστιν, ὁ αὐτὸς λόγος καὶ περὶ τοῦ διαστήματος· εἰ οὖν τὸ μὲν ἄπειρον μὴ ἔστι διελθεῖν, ἀπείρου δ' ὄντος ἀνάγκη τὸ διάστημα ἄπειρον εἶναι, οὐκ ἂν ἐνδέχοιτο κινηθῆναι κύκλῳ· τὸν δ' οὐρανὸν ὀρῶμεν κύκλῳ στρεφόμενον, καὶ τῷ λόγῳ δὲ διωρίσαμεν ὅτι ἐστὶ τινος ἢ κύκλῳ κίνησις.

Ἔτι ἀπὸ πεπερασμένου χρόνου ἐὰν ἀφέλης πεπερασμένον, ἀνάγκη καὶ τὸν λοιπὸν εἶναι πεπερασμένον καὶ ἔχειν ἀρχήν. Εἰ δ' ὁ χρόνος ὁ τῆς βαδίσεως ἔχει ἀρχήν, ἔστιν ἀρχὴ καὶ τῆς κινήσεως, ὥστε καὶ τοῦ μεγέθους ὃ βεβάδικεν. Ὅμοίως δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων.

Ἔστω δὲ γραμμὴ ἄπειρος, ἐφ' ἣ ΑΓΕ, ἐπὶ θάτερα, ἣ τὸ Ε· ἢ



δ' ἐφ' ἧ τὰ ΒΒ, ἐπ' ἀμφοτέρω ἀπειρος. Εἰ δὲ γράψει κύκλον ἢ τὸ ΑΓΕ ἀπὸ τοῦ Γ κέντρου, τέμνουσά ποτε οἰσθήσεται κύκλῳ τὴν τὰ ΒΒ ἢ τὸ ΑΓΕ πεπερασμένον χρόνον· ὁ γὰρ πᾶς χρόνος, ἐν ὧσιν κύκλῳ ἠνέχθη ὁ οὐρανός, πεπερασμένος. Καὶ ὁ ἀφηρημένος ἄρα, ὃν ἡ τέμνουσα ἐφέρετο. Ἔσται ἄρα τις ἀρχὴ ἢ πρῶτον ἢ τὸ ΑΓΕ τὴν τὰ ΒΒ ἔτεμεν. Ἄλλ' ἀδύνατον. Οὐκ ἄρα ἔστι κύκλῳ στραφῆναι τὸ ἀπειρον. Ὡστ' οὐδὲ τὸν κόσμον, εἰ ἦν ἀπειρος.

Ἔτι δὲ καὶ ἐκ τῶνδε φανερόν, ὅτι τὸ ἀπειρον ἀδύνατον κινηθῆναι. Ἔστω γὰρ ἡ τὸ Α φερομένη παρὰ τὴν Β, πεπερασμένη παρὰ πεπερασμένην. Ἀνάγκη δὲ ἅμα τὴν τε Α τῆς Β ἀπολελύσθαι καὶ τὴν Β τῆς Α· ὅσον γὰρ ἡ ἑτέρα ἐπιβάλλει τῆς ἑτέρας, καὶ ἡ ἑτέρα ἐκείνης τοσοῦτον. Εἰ μὲν οὖν ἄμφω κινοῖντο εἰς τοῦναντίον, θᾶττον ἂν ἀπολύοιντο, εἰ δὲ παρὰ μένουσιν φέροιτο, βραδύτερον, τῷ αὐτῷ τάχει κινουμένου τοῦ παραφερομένου. Ἄλλ' ἐκεῖνό γε φανερόν, ὅτι ἀδύνατον τὴν ἀπειρον διελθεῖν ἐν πεπερασμένῳ χρόνῳ. Ἐν ἀπείρῳ ἄρα· δέδεικται γὰρ τοῦτο πρότερον ἐν τοῖς περὶ κινήσεως. Διαφέρει δὲ γε οὐθὲν ἢ τὴν πεπερασμένην φέρεσθαι παρὰ τὴν ἀπειρον ἢ τὴν ἀπειρον παρ' ἐκείνην· ὅταν γὰρ (272b.) ἐκείνη παρ' ἐκείνην, καὶ ἐκείνη παραλλάττει ἐκείνην, ὁμοίως κινουμένη καὶ ἀκίνητος· πλὴν θᾶττον, ἔαν κινῶνται ἀμφοτέρω, ἀπολυθήσονται. Καίτοι γ' ἐνίοτ' οὐθὲν κωλύει τὴν κινουμένην παρ' ἡρεμοῦσαν θᾶττον παρελθεῖν ἢ τὴν ἀντικινουμένην, ἔαν τις ποιήσῃ τὰς μὲν ἀντικινουμένας ἀμφοτέρω φερομένας βραδέως, τὴν δὲ παρὰ τὴν ἡρεμοῦσαν πολλῷ ἐκείνων θᾶττον φερομένην.

Οὐδὲν οὖν πρὸς τὸν λόγον ἐμπόδιον ὅτι παρ' ἡρεμοῦσαν, ἐπεὶ κινουμένην ἐνδέχεται τὴν Α παρὰ κινουμένην τὴν Β βραδύτερον παρελθεῖν. Εἰ οὖν ἀπειρος ὁ χρόνος ὃν ἡ πεπερασμένη ἀπολύεται κινουμένη, καὶ ἐν ᾧ ἡ ἀπειρος τὴν

πεπερασμένην ἐκινήθη ἀνάγκη ἄπειρον εἶναι.

Ἀδύνατον ἄρα τὸ ἄπειρον κινεῖσθαι ὅλον· ἐὰν γὰρ καὶ τοῦλάχιστον κινηθῇ, ἀνάγκη ἄπειρον γίνεσθαι χρόνον. Ἀλλὰ μὴν ὅ γ' οὐρανὸς περιέρχεται καὶ στρέφεται ὅλος κύκλῳ ἐν πεπερασμένῳ χρόνῳ, ὥστε περίεισιν ἅπασαν τὴν ἐντός, οἷον τὴν AB πεπερασμένην. Ἀδύνατον ἄρα ἄπειρον εἶναι τὸ κύκλῳ.

Ἔτι ὥσπερ γραμμὴν ἣ πέρας ἐστὶν ἀδύνατον εἶναι ἄπειρον, ἀλλ' εἴπερ, ἐπὶ μῆκος, καὶ ἐπίπεδον ὡσαύτως ἣ πέρας οὐκ ἐνδέχεται· ὅταν δ' ὀρισθῇ, οὐθαμῇ, οἷον τετράγωνον ἄπειρον ἢ κύκλον ἢ σφαῖραν, ὥσπερ οὐδὲ ποδιαίαν ἄπειρον. Εἰ οὖν μήτε σφαῖρα [μήτε τετράγωνον] μήτε κύκλος ἐστὶν ἄπειρος, μὴ ὄντος δὲ κύκλου οὐδ' ἂν ἢ κύκλῳ εἶη φορά, ὁμοίως δὲ μηδ' ἀπείρου ὄντος οὐκ ἂν εἶη ἄπειρος, εἰ μηδ' ὁ κύκλος ἄπειρός ἐστιν, οὐκ ἂν κινοῖτο κυκλικῶς ἄπειρον σῶμα.

Ἔτι εἰ τὸ Γ κέντρον, ἢ δὲ τὸ AB ἄπειρος καὶ ἢ τὸ E πρὸς ὀρθὴν ἄπειρος καὶ ἢ τὸ ΓΔ κινουμένη, οὐδέποτ' ἀπολυθήσεται τῆς E, ἀλλ' ἀεὶ ἔξει ὥσπερ ἢ ΓΕ· τέμνει γὰρ ἢ τὸ Z. Οὐκ ἄρα περίεισι κύκλῳ ἢ ἄπειρος. Ἔτι εἴπερ ἄπειρος ὁ οὐρανός, κινεῖται δὲ κύκλῳ, ἐν πεπερασμένῳ χρόνῳ ἄπειρον ἔσται διεληλυθώς. Ἐστω γὰρ ὁ μὲν μένων οὐρανὸς ἄπειρος, ὁ δ' ἐν τούτῳ κινούμενος ἴσος. Ὡστ' εἴπερ περιελήλυθε κύκλῳ ἄπειρος ὢν, ἄπειρον τὸν ἴσον αὐτῷ διελήλυθεν ἐν πεπερασμένῳ χρόνῳ. Ἀλλὰ τοῦτ' ἦν ἀδύνατον. (273a.)

Ἔστι δὲ καὶ ἀντεστραμμένως εἰπεῖν, ὅτι εἰ πεπερασμένος ὁ χρόνος ἐν ᾧ περιστρέφη, καὶ τὸ μέγεθος ὃ διελήλυθεν ἀναγκαῖον εἶναι πεπερασμένον· ἴσον δ' αὐτῷ διελήλυθεν· πεπέρανται ἄρα καὶ αὐτός.

Ὅτι μὲν οὖν τὸ κύκλῳ κινούμενον οὐκ ἔστιν ἀτελεύτητον οὐδ' ἄπειρον, ἀλλ' ἔχει τέλος, φανερόν.

## Κεφάλαιο 6

Ἀλλὰ μὴν οὐδὲ τὸ ἐπὶ τὸ μέσον οὐδὲ τὸ ἀπὸ τοῦ μέσου φερόμενον ἄπειρον ἔσται· ἐναντία γὰρ αἱ φοραὶ ἢ ἄνω καὶ ἢ κάτω, αἱ δ' ἐναντία εἰς ἐναντίους τόπους. Τῶν δ' ἐναντίων εἰ θάτερον ὥριστα, καὶ θάτερον ὠρισμένον ἔσται. Τὸ δὲ μέσον ὥριστα· εἰ γὰρ ὁποθενοῦν φέροιτο κάτω τὸ ὑφιστάμενον, οὐκ ἐνδέχεται πορρωτέρω διελθεῖν τοῦ μέσου. Ὀρισμένου οὖν τοῦ μέσου, καὶ τὸν ἄνω τόπον ἀνάγκη ὠρίσθαι. Εἰ δ' οἱ τόποι ὠρισμένοι καὶ πεπερασμένοι, καὶ τὰ σώματα ἔσται πεπερασμένα. Ἔτι εἰ τὸ ἄνω καὶ τὸ κάτω ὥριστα, καὶ τὸ μεταξὺ ἀνάγκη ὠρίσθαι. Εἰ γὰρ μὴ ὥριστα, ἄπειρος ἂν εἴη ἡ κίνησις τοῦτο δ' ὅτι ἀδύνατον, δέδεικται πρότερον. Ὀριστα ἄρα τὸ μέσον, ὥστε καὶ τὸ ἐν τούτῳ σῶμα ἢ ὄν ἢ γενέσθαι δυνατόν. Ἀλλὰ μὴν τὸ ἄνω καὶ κάτω φερόμενον σῶμα δύναται ἐν τούτῳ γενέσθαι· πέφυκε γὰρ τὸ μὲν ἀπὸ τοῦ μέσου κινεῖσθαι, τὸ δ' ἐπὶ τὸ μέσον.

Ἐκ τε δὴ τούτων φανερόν ὅτι οὐκ ἐνδέχεται σῶμα εἶναι ἄπειρον, καὶ πρὸς τούτοις εἰ βάρος μὴ ἐστὶν ἄπειρον, οὐδ' ἂν τούτων τῶν σωμάτων οὐθὲν εἴη ἄπειρον· ἀνάγκη γὰρ τοῦ ἀπείρου σώματος ἄπειρον εἶναι καὶ τὸ βάρος. (Ὁ δ' αὐτὸς λόγος ἔσται καὶ ἐπὶ τοῦ κούφου· εἰ γὰρ ἐστὶν ἄπειρος βαρύτης, ἔστι καὶ κουφότης, ἐὰν ἄπειρον ἢ τὸ ἐπιπολάζον). Δῆλον δ' ἐκ τῶνδε.

Ἐστω γὰρ πεπερασμένον, καὶ εἰλήφθω τὸ μὲν ἄπειρον σῶμα ἐφ' ᾧ τὸ ΑΒ, τὸ δὲ βάρος αὐτοῦ ἐφ' ᾧ τὸ Γ. Ἀφηρήσθω οὖν ἀπὸ τοῦ ἀπείρου πεπερασμένον μέγεθος ἐφ' ᾧ τὸ ΒΔ· καὶ τὸ βάρος αὐτοῦ ἔστω ἐφ' ᾧ τὸ Ε. Τὸ δὲ Ε τοῦ Γ ἔλαττον ἔσται· τὸ γὰρ τοῦ ἐλάττονος βάρος ἔλαττον. Καταμετρεῖτω δὴ τὸ ἔλαττον ὁποσακισοῦν, (273b.) καὶ ὥς τὸ βάρος τοῦ ἐλάττονος πρὸς τὸ μείζον, τὸ ΒΔ πρὸς τὸ ΒΖ γεγενήσθω· ἐνδέχεται γὰρ

ἀφελεῖν τοῦ ἀπείρου ὅποσονοῦν. Εἰ τοίνυν ἀνάλογον τὰ μεγέθη τοῖς βάρεσι, τὸ δ' ἔλαττον βάρος τοῦ ἐλάττονός ἐστι μεγέθους, καὶ τὸ μείζον ἂν εἴη τοῦ μείζονος. Ἴσον ἄρα ἔσται τὸ τοῦ πεπερασμένου καὶ τὸ τοῦ ἀπείρου βάρος.

Ἔτι δ' εἰ τοῦ μείζονος σώματος μείζον τὸ βάρος, τὸ τοῦ ΗΒ μείζον ἔσται βάρος ἢ τὸ τοῦ ΖΒ, ὥστε τὸ τοῦ πεπερασμένου ἢ τὸ τοῦ ἀπείρου [μείζον ἔσται βάρος]. Καὶ τὸ τῶν ἀνίσων δὲ μεγεθῶν ταῦτόν ἐσται βάρος· ἀνισον γὰρ τῷ πεπερασμένῳ τὸ ἄπειρον.

Οὐθὲν δὲ διαφέρει τὰ βάρη σύμμετρα εἶναι ἢ ἀσύμμετρα· καὶ γὰρ ἀσυμμέτρων ὄντων ὁ αὐτὸς ἔσται λόγος· οἷον εἰ [τὸ Ε] τρίτον ὑπερβάλλει μετροῦν τὸ βάρος· τῶν γὰρ ΒΔ μεγεθῶν τριῶν ὅλων ληφθέντων μείζον ἔσται τὸ βάρος ἢ τὸ ἐφ' ᾧ τὸ Γ. Ὡστε τὸ αὐτὸ ἔσται ἀδύνατον. Ἔτι δὲ καὶ ἐγχωρεῖ σύμμετρα λαβεῖν· οὐδὲν γὰρ διαφέρει ἄρχεσθαι ἀπὸ τοῦ βάρους ἢ ἀπὸ τοῦ μεγέθους· οἷον ἐὰν ληφθῇ σύμμετρον βάρος τῷ Γ τὸ ἐφ' ᾧ τὸ Ε, καὶ ἀπὸ τοῦ ἀπείρου ἀφαιρεθῇ τὸ ἔχον τὸ ἐφ' ᾧ Ε βάρος, οἷον τὸ ΒΔ, εἴτα ὥς τὸ βάρος πρὸς τὸ βάρος, τὸ ΒΔ πρὸς ἄλλο γένηται μέγεθος, οἷον πρὸς τὸ ΒΖ· ἐνδέχεται γὰρ ἀπείρου ὄντος τοῦ μεγέθους ὅποσονοῦν ἀφαιρεθῆναι· τούτων γὰρ ληφθέντων σύμμετρα ἔσται καὶ τὰ μεγέθη καὶ τὰ βάρη ἀλλήλοις.

Οὐδὲ δὴ τὸ μέγεθος ὁμοιοβαρὲς εἶναι ἢ ἀνομοιοβαρὲς οὐδὲν διοίσει πρὸς τὴν ἀπόδειξιν· ἀεὶ γὰρ ἔσται λαβεῖν ἰσοβαρῇ σώματα τῷ ΒΔ, ἀπὸ τοῦ ἀπείρου ὅποσαοῦν ἢ ἀφαιροῦντας ἢ προστιθέντας.

Ὡστε δῆλον ἐκ τῶν εἰρημένων ὅτι οὐκ ἔσται τοῦ ἀπείρου σώματος πεπερασμένον τὸ βάρος. Ἄπειρον ἄρα. Εἰ τοίνυν τοῦτ' ἀδύνατον, καὶ τὸ ἄπειρόν τι εἶναι σῶμα ἀδύνατον.

Ἀλλὰ μὴν ὅτι ἄπειρόν τι εἶναι βάρος ἀδύνατον, ἐκ τῶνδε φανερόν. Εἰ γὰρ τοσόνδε βάρος τὴν τοσήνδε ἐν τῷδε τῷ χρόνῳ κινεῖται, τὸ τοσοῦτον καὶ ἔτι ἐν ἐλάττονι, καὶ τὴν ἀναλογίαν ἦν τὰ βάρη ἔχει, οἱ χρόνοι ἀνάπαλιν ἔξου(274a.) σιν, οἷον εἰ τὸ ἥμισυ βάρος ἐν τῷδε, τὸ διπλάσιον ἐν ἡμίσει τούτου. Ἔτι τὸ πεπερασμένον βάρος ἅπασαν πεπερασμένην δίεισιν ἐν τινι χρόνῳ πεπερασμένῳ. Ἀνάγκη ἄρα ἐκ τούτων, εἴ τι ἔστιν ἄπειρον βάρος, κινεῖσθαι μὲν ἢ τοσόνδε ὅσον τὸ πεπερασμένον καὶ ἔτι, μὴ κινεῖσθαι δέ, ἢ ἀνάλογον μὲν δεῖ κατὰ τὰς ὑπεροχὰς κινεῖσθαι, ἐναντίως δὲ τὸ μείζον ἐν τῷ ἐλάττονι. Λόγος δ' οὐθείς ἐστι τοῦ ἀπείρου πρὸς τὸ πεπερασμένον, τοῦ δ' ἐλάττονος χρόνου πρὸς τὸν μείζω πεπερασμένον· ἀλλ' ἀεὶ ἐν ἐλάττονι. Ἐλάχιστος δ' οὐκ ἔστιν.

Οὐδ' εἰ ἦν, ὄφελός τι ἂν ἦν· ἄλλο γὰρ ἂν τι πεπερασμένον ἐλήφθη ἐν τῷ αὐτῷ λόγῳ, ἐν ᾧ τὸ ἄπειρον πρὸς ἕτερον, μείζον, ὥστ' ἐν ἴσῳ χρόνῳ τὴν ἴσην ἂν ἐκινεῖτο τὸ ἄπειρον τῷ πεπερασμένῳ. Ἀλλ' ἀδύνατον. Ἀλλὰ μὴν ἀνάγκη γε, εἴπερ ἐν ὀπηλικῶν χρόνῳ πεπερασμένῳ δὲ κινεῖται τὸ ἄπειρον, καὶ ἄλλο ἐν τῷ αὐτῷ τούτῳ πεπερασμένον βάρος κινεῖσθαι τινα πεπερασμένην.

Ἀδύνατον ἄρα ἄπειρον εἶναι βάρος, ὁμοίως δὲ καὶ κουφότητα. Καὶ σώματα ἅρ' ἄπειρον βάρος ἔχοντα καὶ κουφότητα ἀδύνατον. Ὅτι μὲν οὖν οὐκ ἔστιν ἄπειρον σῶμα, δῆλον διὰ τε τῶν κατὰ μέρος θεωροῦσι τοῦτον τὸν τρόπον, καὶ καθόλου σκοπουμένοις μὴ μόνον κατὰ τοὺς λόγους τοὺς ἐν τοῖς περὶ τὰς ἀρχὰς εἰρημένους ἡμῖν (διωρίσθη γὰρ κάκεῖ καθόλου πρότερον περὶ ἀπείρου πῶς ἔστι καὶ πῶς οὐκ ἔστιν) ἀλλὰ καὶ νῦν ἄλλον τρόπον.

Μετὰ δὲ ταῦτ' ἐπισκεπτέον κἂν εἰ μὴ ἄπειρον μὲν τὸ σῶμα τὸ πᾶν, οὐ μὴν ἀλλὰ τοσοῦτόν γε ὥστ' εἶναι πλείους οὐρανούς·

τάχα γὰρ ἂν τις τοῦτ' ἀπορήσειεν, ὅτι καθάπερ ὁ περὶ ἡμᾶς κόσμος συνέστηκεν, οὐδὲν κωλύει καὶ ἑτέρους εἶναι πλείους μὲν ἑνός, μὴ μέντοι γε ἀπείρους. Πρῶτον δ' εἵπωμεν καθόλου περὶ τοῦ ἀπείρου.

## Κεφάλαιο 7

Ἀνάγκη δὴ σῶμα πᾶν ἦτοι ἄπειρον εἶναι ἢ πεπερασμένον, καὶ εἰ ἄπειρον, ἦτοι ἀνομοιομερές ἅπαν ἢ ὁμοιομερές, καὶ εἰ ἀνομοιομερές, ἦτοι ἐκ πεπερασμένων εἰδῶν ἢ ἐξ ἀπείρων. Ὅτι μὲν τοίνυν οὐχ οἷόν τε ἐξ ἀπείρων, φανερόν, εἴ τις ἡμῖν ἑάσει μένειν τὰς πρώτας ὑποθέσεις· πεπερασ(274b.) μένων γὰρ τῶν πρώτων κινήσεων οὐσῶν, ἀνάγκη καὶ τὰς ἰδέας τῶν ἀπλῶν σωμάτων εἶναι πεπερασμένας. Ἀπλῇ μὲν γὰρ ἡ τοῦ ἀπλοῦ σώματος κινήσεις, αἱ δ' ἀπλαῖ πεπερασμέναι κινήσεις εἰσὶν· ἀνάγκη δὲ κίνησιν ἔχειν σῶμα πᾶν φυσικόν.

Ἀλλὰ μὴν εἴ γε ἐκ πεπερασμένων ἔσται τὸ ἄπειρον, ἀνάγκη καὶ τῶν μορίων ἕκαστον εἶναι ἄπειρον, λέγω δ' οἷον τὸ ὕδωρ ἢ τὸ πῦρ. Ἀλλ' ἀδύνατον· δέδεικται γὰρ ὅτι οὔτε βάρος οὔτε κουφότης ἐστὶν ἄπειρος.

Ἔτι ἀναγκαῖον ἀπείρους τῷ μεγέθει εἶναι καὶ τοὺς τόπους αὐτῶν, ὥστε καὶ τὰς κινήσεις ἀπείρους εἶναι πάντων. Τοῦτο δ' ἀδύνατον, εἰ θήσομεν ἀληθεῖς εἶναι τὰς πρώτας ὑποθέσεις, καὶ μήτε τὸ κάτω φερόμενον εἰς ἄπειρον ἐνδέχεσθαι φέρεσθαι μήτε τὸ ἄνω κατὰ τὸν αὐτὸν λόγον. Ἀδύνατον γὰρ γίνεσθαι ὃ μὴ ἐνδέχεται γενέσθαι, ὁμοίως ἐπὶ τοῦ τοιόνδε καὶ τοσόνδε καὶ τοῦ ποῦ. Λέγω δ', εἰ ἀδύνατον γενέσθαι λευκὸν ἢ πηχυαῖον ἢ ἐν Αἰγύπτῳ, καὶ γίνεσθαι τι τούτων ἀδύνατον. Ἀδύνατον ἄρα καὶ φέρεσθαι ἐκεῖ οὐ μὴθὲν δυνατὸν ἀφικέσθαι φερόμενον. Ἔτι εἰ καὶ διεσπασμένα ἐστίν, οὐδὲν ἥττον ἐνδέχονται ἂν τὸ ἐξ ἀπάντων [πῦρ] ἄπειρον εἶναι. Ἀλλὰ σῶμα ἦν τὸ πάντη διάστασιν ἔχον· ὥστε πῶς οἷόν τε πλείω μὲν ἀνόμοια, ἕκαστον

δ' αὐτῶν ἄπειρον εἶναι; πάντα γὰρ ἕκαστον δεῖ ἄπειρον εἶναι.

Ἀλλὰ μὴν οὐδὲ πᾶν ὁμοιομερὲς ἐνδέχεται τὸ ἄπειρον εἶναι. Πρῶτον μὲν γὰρ οὐκ ἔστιν ἄλλη παρὰ ταύτας κίνησις. Ἐξεῖ οὖν μίαν τούτων. Εἰ δὲ τοῦτο, συμβήσεται ἢ βάρος ἄπειρον ἢ κουφότητα εἶναι ἄπειρον.

Ἀλλὰ μὴν οὐδ' οἷόν τε τὸ κύκλῳ σῶμα φερόμενον [εἶναι ἄπειρον]. Ἀδύνατον γὰρ τὸ ἄπειρον φέρεσθαι κύκλῳ· οὐθὲν γὰρ διαφέρει τοῦτο λέγειν ἢ τὸ τὸν οὐρανὸν φάναι ἄπειρον εἶναι, τοῦτο δὲ δέδεικται ὅτι ἀδύνατον. Ἀλλὰ μὴν οὐδ' ὅλως γε τὸ ἄπειρον ἐνδέχεται κινεῖσθαι. Ἡ γὰρ κατὰ φύσιν κινηθήσεται ἢ βία· καὶ εἰ βία, ἔστιν αὐτῷ καὶ ἡ κατὰ φύσιν, ὥστε καὶ τόπος ἄλλος ἴσος εἰς ὃν οἰσθήσεται. Τοῦτο δ' ἀδύνατον.

Ὅτι δ' ὅλως ἀδύνατον ἄπειρον ὑπὸ πεπερασμένου παθεῖν τι ἢ ποιῆσαι τὸ πεπερασμένον, ἐκ τῶνδε φανερόν. Ἐστω (275a.) γὰρ ἄπειρον ἐφ' οὗ Α, πεπερασμένον ἐφ' οὗ Β, χρόνος ἐν ᾧ ἐκίνησέ τι ἢ ἐκινήθη Γ. Εἰ δὴ ὑπὸ τοῦ Β τὸ Α ἐθερμάνθη ἢ ὥσθη ἢ ἄλλο τι ἔπαθεν ἢ καὶ ὀτιοῦν ἐκινήθη ἐν τῷ χρόνῳ ἐφ' οὗ Γ, ἔστω τὸ Δ τοῦ Β ἔλαττον, καὶ τὸ ἔλαττον ἐν τῷ ἴσῳ χρόνῳ ἔλαττον κινεῖται· ἔστω δὲ τὸ ἐφ' οὗ Ε ὑπὸ τοῦ Δ ἡλλοιωμένον. Ὅ δὴ ἐστὶ τὸ Δ πρὸς τὸ Β, τὸ Ε ἔσται πρὸς πεπερασμένον τι. Ἐστω δὴ τὸ μὲν ἴσον ἐν ἴσῳ χρόνῳ ἴσον ἡλλοιοῦν, τὸ δ' ἔλαττον ἐν τῷ ἴσῳ ἔλαττον, τὸ δὲ μείζον μείζον, τοσοῦτον δὲ ὅσον ἀνάλογον ἔσται ὅπερ τὸ μείζον πρὸς τὸ ἔλαττον. Οὐκ ἄρα τὸ ἄπειρον ὑπ' οὐδενὸς πεπερασμένου κινηθήσεται ἐν οὐθενὶ χρόνῳ· ἔλαττον γὰρ ἄλλο ἐν τῷ ἴσῳ χρόνῳ ὑπὸ ἐλάττονος κινηθήσεται, πρὸς ὃ τὸ ἀνάλογον πεπερασμένον ἔσται· τὸ γὰρ ἄπειρον πρὸς τὸ πεπερασμένον ἐν οὐθενὶ λόγῳ ἐστίν. Ἀλλὰ μὴν οὐδὲ τὸ ἄπειρον ἐν οὐθενὶ χρόνῳ κινήσει τὸ πεπερασμένον. Ἐστω γὰρ ἐφ' οὗ Α ἄπειρον, τὸ δὲ Β

πεπερασμένον, χρόνος ἐν ᾧ τὸ Γ. Οὐκοῦν τὸ Δ ἐν τῷ Γ ἔλαττον τοῦ Β κινήσει· ἔστω τὸ Ζ. Ὁ δὴ ἐστὶ τὸ ΒΖ ὅλον πρὸς τὸ Ζ, τὸ Ε ἔχον τὸν λόγον τοῦτον ἔστω πρὸς τὸ Δ. Κινήσει ἄρα τὸ Ε τὸ ΒΖ ἐν τῷ Γ. Τὸ πεπερασμένον τοίνυν καὶ τὸ ἄπειρον ἐν τῷ ἴσῳ χρόνῳ ἀλλοιῶσθαι. Ἀλλ' ἀδύνατον· ἐν ἐλάττονι γὰρ τὸ μείζον ὑπέκειτο. Ἀλλ' αἰὲν ὁ ληφθεὶς χρόνος ταῦτ' οὕτως ποιήσει, ὥστ' οὐκ ἔσται χρόνος οὐθενὶς ἐν ᾧ κινήσει. Ἀλλὰ μὴν ἐν ἀπείρῳ γε οὐκ ἔστι κινήσας οὐδὲ κινήσας· πέρας γὰρ οὐκ ἔχει, ἢ δὲ ποίησις καὶ τὸ πάθος ἔχει.

Οὐδ' ἄπειρον δὴ ὑπ' ἀπείρου ἐνδέχεται οὐθενὶ παθεῖν. Ἐστω γὰρ τὸ Α ἄπειρον καὶ τὸ Β, χρόνος δ' ἐν ᾧ ἔπαθε τὸ Β ὑπὸ τοῦ Α, ἐφ' ᾧ ΓΔ. Τὸ δὴ ἐφ' ᾧ τὸ Ε τοῦ ἀπείρου μέρος, ἐπεὶ ὅλον πέπονθε τὸ Β, οὐκ ἐν ἴσῳ χρόνῳ τὸ αὐτό· ὑποκείσθω γὰρ ἐν ἐλάττονι κινεῖσθαι τὸ ἔλαττον χρόνῳ. Ἐστω τὸ Ε κεκινημένον ὑπὸ τοῦ Α ἐν τῷ Δ.

Ὁ δὴ τὸ Δ πρὸς τὸ ΓΔ, τὸ Ε ἐστὶ πρὸς τι τοῦ Β πεπερασμένον. Τοῦτο τοίνυν ἀνάγκη ὑπὸ τοῦ Α κινήσας ἐν τῷ ΓΔ χρόνῳ· ὑπὸ γὰρ τοῦ αὐτοῦ ὑποκείσθω ἐν τῷ πλείονι καὶ ἐλάττονι (275b.) χρόνῳ τὸ μείζον καὶ τὸ ἔλαττον πάσχειν, ὅσα ἀνάλογον τῷ χρόνῳ διήρηται. Ἐν οὐδενὶ ἄρα χρόνῳ δυνατὸν πεπερασμένῳ ἄπειρον ὑπ' ἀπείρου κινήσας· ἐν ἀπείρῳ ἄρα. Ἀλλ' ὁ μὲν ἄπειρος χρόνος οὐκ ἔχει τέλος, τὸ δὲ κεκινημένον ἔχει.

Εἰ τοίνυν πᾶν σῶμα αἰσθητὸν ἔχει δύναμιν ποιητικὴν ἢ παθητικὴν ἢ ἄμφω, ἀδύνατον σῶμα ἄπειρον αἰσθητὸν εἶναι. Ἀλλὰ μὴν καὶ ὅσα γε σώματα ἐν τόπῳ, πάντα αἰσθητά. Οὐκ ἔστιν ἄρα σῶμα ἄπειρον ἔξω τοῦ οὐρανοῦ οὐθέν. Ἀλλὰ μὴν οὐδὲ μέχρι τινός. Οὐθενὶ ἄρα ὅλως σῶμα ἔξω τοῦ οὐρανοῦ. Εἰ μὲν γὰρ νοητόν, ἔσται ἐν τόπῳ· τὸ γὰρ ἔξω καὶ ἔσω τόπον σημαίνει. Ὡστ' ἔσται αἰσθητόν. Αἰσθητὸν δ' οὐθενὶ μὴ ἐν



τόπω.

Λογικώτερον δ' ἔστιν ἐπιχειρεῖν καὶ ᾧδε. Οὔτε γὰρ κύκλω οἷόν τε κινεῖσθαι τὸ ἄπειρον ὁμοιομερές ὄν· μέσον μὲν γὰρ τοῦ ἀπείρου οὐκ ἔστι, τὸ δὲ κύκλω περὶ τὸ μέσον κινεῖται. Ἀλλὰ μὴν οὐδ' ἐπ' εὐθείας οἷόν τε φέρεσθαι τὸ ἄπειρον· δεήσει γὰρ ἕτερον εἶναι τοσοῦτον τόπον ἄπειρον εἰς ὃν οἰσθήσεται κατὰ φύσιν, καὶ ἄλλον τοσοῦτον εἰς ὃν παρὰ φύσιν.

Ἔτι εἴτε φύσει ἔχει κίνησιν τοῦ εἰς εὐθὺ εἴτε βίᾳ κινεῖται, ἀμφοτέρως δεήσει ἄπειρον εἶναι τὴν κινουῦσαν ἰσχύν· ἢ τε γὰρ ἄπειρος ἀπείρου καὶ τοῦ ἀπείρου ἄπειρος ἢ ἰσχύς· ὥστ' ἔσται καὶ τὸ κινοῦν ἄπειρον (λόγος δ' ἐν τοῖς περὶ κινήσεως ὅτι οὐθὲν ἔχει ἄπειρον δύναμιν τῶν πεπερασμένων, οὐδὲ τῶν ἀπείρων πεπερασμένην). Εἰ οὖν τὸ κατὰ φύσιν καὶ παρὰ φύσιν ἐνδέχεται κινηθῆναι, ἔσται δύο ἄπειρα, τό τε κινοῦν οὕτω καὶ τὸ κινούμενον. Ἔτι τὸ κινοῦν τὸ ἄπειρον τί ἐστίν; εἰ μὲν γὰρ αὐτὸ ἐαυτό, ἔμψυχον ἔσται. Τοῦτο δὲ πῶς δυνατόν, ἄπειρον εἶναι ζῶον; εἰ δ' ἄλλο [τι] τὸ κινοῦν, δύο ἔσται ἄπειρα, τό τε κινοῦν καὶ τὸ κινούμενον, διαφέροντα τὴν μορφήν καὶ τὴν δύναμιν.

Εἰ δὲ μὴ συνεχὲς τὸ πᾶν, ἀλλ' ὥσπερ λέγει Δημόκριτος καὶ Λεύκιππος, διωρισμένα τῷ κενῷ, μίαν ἀναγκαῖον εἶναι πάντων τὴν κίνησιν. Διώριστα μὲν γὰρ τοῖς σχήμασιν· τὴν δὲ φύσιν φασὶν αὐτῶν εἶναι μίαν, ὥσ(276a.) περ ἂν εἰ χρυσὸς ἕκαστον εἴη κεχωρισμένος. Τούτων δέ, καθάπερ λέγομεν, ἀναγκαῖον εἶναι τὴν αὐτὴν κίνησιν· ὅπου γὰρ μία βῶλος, καὶ ἡ σύμπασα γῆ φέρεται, καὶ τό τε πᾶν πῦρ καὶ σπινθὴρ εἰς τὸν αὐτὸν τόπον. Ὡστ' οὔτε κοῦφον ἀπλῶς οὐθὲν ἔσται τῶν σωμάτων, εἰ πάντ' ἔχει βάρος· εἰ δὲ κουφότητα, βαρὺ οὐδέν.

Ἔτι εἰ βάρος ἔχει ἢ κουφότητα, ἔσται ἢ ἔσχατόν τι τοῦ παντός ἢ μέσον. Τοῦτο δ' ἀδύνατον ἀπείρου γ' ὄντος. Ὅλως δ', οὐ μὴ

ἔστι μέσον μηδ' ἔσχατον, μηδὲ τὸ μὲν ἄνω τὸ δὲ κάτω, τόπος οὐθεὶς ἔσται τοῖς σώμασι τῆς φορᾶς. Τούτου δὲ μὴ ὄντος κίνησις οὐκ ἔσται· ἀνάγκη γὰρ κινεῖσθαι ἢτοι κατὰ φύσιν ἢ παρὰ φύσιν, ταῦτα δ' ὥριστα τοῖς τόποις τοῖς τ' οἰκείοις καὶ τοῖς ἀλλοτρίοις.

Ἔτι εἰ οὗ παρὰ φύσιν τι μένει ἢ φέρεται, ἀνάγκη ἄλλου τινὸς εἶναι τοῦτον τὸν τόπον κατὰ φύσιν (τοῦτο δὲ πιστὸν ἐκ τῆς ἐπαγωγῆς), ἀνάγκη δὴ μὴ πάντα ἢ βάρος ἔχειν ἢ κουφότητα, ἀλλὰ τὰ μὲν τὰ δὲ μή. Ὅτι μὲν τοίνυν οὐκ ἔστι τὸ σῶμα τοῦ παντὸς ἄπειρον, ἐκ τούτων φανερόν.

## Κεφάλαιο 8

Διότι δ' οὐδὲ πλείους οἶόν τ' οὐρανοὺς εἶναι, λέγωμεν· τοῦτο γὰρ ἔφαμεν ἐπισκεπτέον, εἴ τις μὴ νομίζει καθόλου δεδεῖχθαι περὶ τῶν σωμάτων ὅτι ἀδύνατον ἐκτὸς εἶναι τοῦ κόσμου τοῦδε ὁτιοῦν αὐτῶν, ἀλλὰ μόνον ἐπὶ τῶν ἀορίστως κειμένων εἰρῆσθαι τὸν λόγον.

Ἄπαντα γὰρ καὶ μένει καὶ κινεῖται καὶ κατὰ φύσιν καὶ βία, καὶ κατὰ φύσιν μὲν, ἐν ᾧ μένει μὴ βία, καὶ φέρεται, καὶ εἰς ὃν φέρεται, καὶ μένει· ἐν ᾧ δὲ βία, καὶ φέρεται βία, καὶ εἰς ὃν βία φέρεται, βία καὶ μένει. Ἔτι εἰ βία ἢδε ἡ φορὰ, ἡ ἐναντία κατὰ φύσιν. Ἐπὶ δὲ τὸ μέσον τὸ ἐνταῦθα εἰ βία οἰσθήσεται ἢ γῆ ἐκεῖθεν, ἐντεῦθεν οἰσθήσεται ἐκεῖ κατὰ φύσιν· καὶ εἰ μένει ἐνταῦθα ἢ ἐκεῖθεν μὴ βία, καὶ οἰσθήσεται δεῦρο κατὰ φύσιν. Μία γὰρ ἡ κατὰ φύσιν.

Ἔτι ἀνάγκη πάντας τοὺς κόσμους ἐκ τῶν αὐτῶν εἶναι σωμάτων, ὁμοίους γ' ὄντας τὴν φύσιν.

Ἀλλὰ μὴν καὶ τῶν σωμάτων ἕκαστον ἀναγκαῖον τὴν αὐτὴν (276b.) ἔχειν δύναμιν, οἷον λέγω πῦρ καὶ γῆν καὶ τὰ μεταξὺ

τούτων· εἰ γὰρ ὁμώνυμα ταῦτα καὶ μὴ κατὰ τὴν αὐτὴν ἰδέαν λέγονται τὰ κεῖ τοῖς παρ' ἡμῖν, καὶ τὸ πᾶν ὁμωνύμως ἂν λέγοιτο κόσμος. Δῆλον τοίνυν ὅτι τὸ μὲν ἀπὸ τοῦ μέσου φέρεσθαι πέφυκε, τὸ δ' ἐπὶ τὸ μέσον αὐτῶν, εἵπερ πᾶν ὁμοειδὲς τὸ πῦρ τῷ πυρὶ καὶ τῶν ἄλλων ἕκαστον, ὥσπερ καὶ τὰ ἐν τούτῳ μόρια τοῦ πυρός.

Ὅτι δ' ἀναγκαῖον οὕτως ἔχειν, ἐκ τῶν περὶ τὰς κινήσεις ὑποθέσεων φανερόν· αἱ τε γὰρ κινήσεις πεπερασμέναι, ἕκαστόν τε τῶν στοιχείων λέγεται καθ' ἑκάστην τῶν κινήσεων. Ὡστ' εἵπερ καὶ αἱ κινήσεις αἱ αὐταί, καὶ τὰ στοιχεῖα ἀναγκαῖον εἶναι πανταχοῦ ταῦτά.

Πέφυκεν ἄρα φέρεσθαι καὶ ἐπὶ τόδε τὸ μέσον τὰ ἐν ἄλλῳ κόσμῳ τῆς γῆς μόρια, καὶ πρὸς τόδε τὸ ἔσχατον τὸ ἐκεῖ πῦρ. Ἄλλ' ἀδύνατον· τούτου γὰρ συμβαίνοντος ἀνάγκη φέρεσθαι ἄνω μὲν τὴν γῆν ἐν τῷ οἰκείῳ κόσμῳ, τὸ δὲ πῦρ ἐπὶ τὸ μέσον, ὁμοίως δὲ καὶ τὴν ἐντεῦθεν γῆν ἀπὸ τοῦ μέσου φέρεσθαι κατὰ φύσιν πρὸς τὸ ἐκεῖ φερομένην μέσον, διὰ τὸ τοὺς κόσμους οὕτω κεῖσθαι πρὸς ἀλλήλους. Ἡ γὰρ οὐ θετέον τὴν αὐτὴν εἶναι φύσιν τῶν ἀπλῶν σωμάτων ἐν τοῖς πλείοσιν οὐρανοῖς, ἢ λέγοντας οὕτως τὸ μέσον ἐν ποιεῖν ἀνάγκη καὶ τὸ ἔσχατον· τούτου δ' ὄντος ἀδύνατον εἶναι κόσμους πλείους ἑνός.

Τὸ δ' ἀξιοῦν ἄλλην εἶναι φύσιν τῶν ἀπλῶν σωμάτων, ἂν ἀποσχῶσιν ἔλαττον ἢ πλεῖον τῶν οἰκείων τόπων, ἄλογον· τί γὰρ διαφέρει τὸ τοσονδὶ φάναι μῆκος ἀπέχειν ἢ τοσονδί; Διοίσει γὰρ κατὰ λόγον, ὅσω πλεῖον μᾶλλον, τὸ δ' εἶδος τὸ αὐτό.

Ἀλλὰ μὴν ἀνάγκη γ' εἶναί τινα κίνησιν αὐτῶν· ὅτι μὲν γὰρ κινεῦνται, φανερόν. Πότερον οὖν βίᾳ πάσας ἐροῦμεν κινεῖσθαι καὶ τὰς ἐναντίας; ἀλλ' ὃ μὴ πέφυκεν ὅλως κινεῖσθαι, ἀδύνατον τοῦτο κινεῖσθαι βίᾳ. Εἰ τοίνυν ἐστί τις κίνησις αὐτῶν κατὰ

φύσιν, ἀνάγκη τῶν ὁμοειδῶν καὶ τῶν καθ' ἕκαστον πρὸς ἓνα ἀριθμῷ τόπον ὑπάρχειν τὴν κίνησιν, οἷον πρὸς τόδε τι μέσον καὶ πρὸς τόδε τι ἔσχατον. Εἰ δὲ πρὸς εἶδει ταῦτά, (277a.) πλείω δέ, διότι καὶ τὰ καθ' ἕκαστα πλείω μὲν, εἶδει δ' ἕκαστον ἀδιάφορον, οὐ τῷ μὲν τῷ δ' οὐ τοιοῦτον ἔσται τῶν μορίων, ἀλλ' ὁμοίως πᾶσιν· ὁμοίως γὰρ ἅπαντα κατ' εἶδος ἀδιάφορα ἀλλήλων, ἀριθμῷ δ' ἕτερον ὅτιοῦν ὅτουοῦν. Λέγω δὲ τοῦτο, ὅτι εἰ τὰ ἐνταῦθα μόρια πρὸς ἀλλήλα καὶ τὰ ἐν ἑτέρῳ κόσμῳ ὁμοίως ἔχει, καὶ τὸ ληφθὲν ἐντεῦθεν οὐδὲν διαφερόντως πρὸς τῶν ἐν ἄλλῳ τινὶ κόσμῳ μορίων καὶ πρὸς τῶν ἐν τῷ αὐτῷ, ἀλλ' ὡσαύτως διαφέρουσι γὰρ οὐθὲν εἶδει ἀλλήλων. Ὡστ' ἀναγκαῖον ἢ κινεῖν ταύτας τὰς ὑποθέσεις, ἢ τὸ μέσον ἐν εἶναι καὶ τὸ ἔσχατον. Τούτου δ' ὄντος ἀνάγκη καὶ τὸν οὐρανὸν ἓνα μόνον εἶναι καὶ μὴ πλείους, τοῖς αὐτοῖς τεκμηρίοις τούτοις καὶ ταῖς αὐταῖς ἀνάγκαις.

Ὅτι δ' ἔστι τι οὗ πέφυκεν ἢ γῆ φέρεσθαι καὶ τὸ πῦρ, δῆλον καὶ ἐκ τῶν ἄλλων. Ὅλως γὰρ τὸ κινούμενον ἔκ τινος εἰς τι μεταβάλλει, καὶ ταῦτα ἐξ οὗ καὶ εἰς ὃ εἶδει διαφέρει· πᾶσα δὲ πεπερασμένη μεταβολή· οἷον τὸ ὑγιαζόμενον ἐκ νόσου εἰς ὑγίειαν καὶ τὸ αὐξανόμενον ἐκ μικρότητος εἰς μέγεθος. Καὶ τὸ φερόμενον ἄρα· καὶ γὰρ τοῦτο γίνεται ποθέν ποι. Δεῖ ἄρα εἶδει διαφέρειν ἐξ οὗ καὶ εἰς ὃ πέφυκε φέρεσθαι, ὥσπερ τὸ ὑγιαζόμενον οὐχ οὗ ἔτυχεν, οὐδ' οὗ βούλεται ὁ κινῶν.

Καὶ τὸ πῦρ ἄρα καὶ ἡ γῆ οὐκ εἰς ἄπειρον φέρονται, ἀλλ' εἰς ἀντικείμενα· ἀντίκειται δὲ κατὰ τόπον τὸ ἄνω τῷ κάτω, ὥστε ταῦτα ἔσται πέρατα τῆς φορᾶς. Ἐπεὶ καὶ ἡ κύκλῳ ἔχει πως ἀντικείμενα τὰ κατὰ διάμετρον, τῇ δ' ὅλη οὐκ ἔστιν ἐναντίον οὐδέν, ὥστε καὶ τούτοις τρόπον τινὰ ἢ κινήσεις εἰς ἀντικείμενα καὶ πεπερασμένα. Ἀνάγκη ἄρα εἶναί τι τέλος καὶ μὴ εἰς ἄπειρον φέρεσθαι.

Τεκμήριον δὲ τοῦ μὴ εἰς ἄπειρον φέρεσθαι καὶ τὸ τὴν γῆν μὲν, ὅσω ἂν ἐγγυτέρω ἢ τοῦ μέσου, θᾶττον φέρεσθαι, τὸ δὲ πῦρ, ὅσω ἂν τοῦ ἄνω. Εἰ δ' ἄπειρον ἦν, ἄπειρος ἂν ἦν καὶ ἡ ταχυτής, εἰ δ' ἡ ταχυτής, καὶ τὸ βάρος καὶ ἡ κουφότης· ὥς γὰρ <εἰ> τῷ κατωτέρω ταχὺ ἦν τι, ἕτερον τῷ βάρει ἂν ἦν ταχύ, οὕτως εἰ ἄπειρος ἦν ἡ τούτου ἐπίδοσις, καὶ ἡ τῆς ταχυτήτος ἐπίδοσις ἄπειρος ἂν ἦν.

Ἀλλὰ (277b.) μὴν οὐδ' ὑπ' ἄλλου φέρεται αὐτῶν τὸ μὲν ἄνω τὸ δὲ κάτω· οὐδὲ βία, ὥσπερ τινές φασι τῇ ἐκθλίψει. Βραδύτερον γὰρ ἂν ἐκινεῖτο τὸ πλεῖον πῦρ ἄνω καὶ ἡ πλείων γῆ κάτω· νῦν δὲ τοῦναντίον ἀεὶ τὸ πλεῖον πῦρ θᾶττον φέρεται καὶ ἡ πλείων γῆ εἰς τὸν αὐτῶν τόπον. Οὐδὲ θᾶττον ἂν πρὸς τῷ τέλει ἐφέρετο, εἰ βία καὶ ἐκθλίψει· πάντα γὰρ τοῦ βιασαμένου πορρωτέρω γιγνόμενα βραδύτερον φέρεται, καὶ ὅθεν βία, ἐκεῖ φέρεται οὐ βία. Ὡστ' ἐκ τούτων θεωροῦσιν ἔστι λαβεῖν τὴν πίστιν περὶ τῶν λεγομένων ἱκανῶς.

Ἔτι δὲ καὶ διὰ τῶν ἐκ τῆς πρώτης φιλοσοφίας λόγων δειχθεῖν ἂν, καὶ ἐκ τῆς κύκλῳ κινήσεως, ἦν ἀναγκαῖον αἰδίων ὁμοίως ἐνταῦθα τ' εἶναι καὶ ἐν τοῖς ἄλλοις κόσμοις.

Δῆλον δὲ καὶ ὥδε γένοιτο σκοπούμενοις ὅτι ἀνάγκη ἓνα εἶναι τὸν οὐρανόν. Τριῶν γὰρ ὄντων τῶν σωματικῶν στοιχείων, τρεῖς ἔσονται καὶ οἱ τόποι τῶν στοιχείων, εἷς μὲν ὁ τοῦ ὑφισταμένου σώματος ὁ περὶ τὸ μέσον, ἄλλος δὲ ὁ τοῦ κύκλῳ φερομένου, ὅσπερ ἐστὶν ἔσχατος, τρίτος δ' ὁ μεταξὺ τούτων ὁ τοῦ μέσου σώματος. Ἀνάγκη γὰρ ἐν τούτῳ εἶναι τὸ ἐπιπολάζον. Εἰ γὰρ μὴ ἐν τούτῳ, ἔξω ἔσται· ἀλλ' ἀδύνατον ἔξω. Τὸ μὲν γὰρ ἀβαρὲς τὸ δ' ἔχον βάρος, κατωτέρω δὲ ὁ τοῦ βάρους ἔχοντος σώματος τόπος, εἴπερ ὁ πρὸς τῷ μέσῳ τοῦ βαρέος. Ἀλλὰ μὴν οὐδὲ παρὰ φύσιν· ἄλλῳ γὰρ ἔσται κατὰ φύσιν, ἄλλο δ' οὐκ ἦν. Ἀνάγκη ἄρα ἐν τῷ μεταξὺ εἶναι. Τούτου δ'

αὐτοῦ τίνες εἰσὶ διαφοραί, ὕστερον ἐροῦμεν.

Περὶ μὲν οὖν τῶν σωματικῶν στοιχείων, ποῖά τ' ἐστὶ καὶ πόσα, καὶ τίς ἐκάστου τόπος, ἔτι δ' ὅλως πόσοι τὸ πλῆθος οἱ τόποι, δῆλον ἡμῖν ἐκ τῶν εἰρημένων.

## Κεφάλαιο 9

Ὅτι δ' οὐ μόνον εἷς ἐστίν, ἀλλὰ καὶ ἀδύνατον γενέσθαι πλείους, ἔτι δ' ὡς αἰδῖος ἄφθαρτος ὢν καὶ ἀγέννητος, λέγωμεν, πρῶτον διαπορήσαντες περὶ αὐτοῦ.

Δόξειε γὰρ ἂν ὡδὶ σκοπούμενοις ἀδύνατον ἓνα καὶ μόνον εἶναι αὐτόν· ἐν ἅπασι γὰρ καὶ τοῖς φύσει καὶ τοῖς ἀπὸ τέχνης συνεστῶσι καὶ γεγενημένοις ἕτερόν ἐστιν αὐτὴ τε καθ' αὐτήν ἢ μορφή καὶ μεμιγμένη μετὰ τῆς ὕλης· οἷον τῆς σφαίρας ἕτερον τὸ εἶδος (278a.) καὶ ἡ χρυσῇ καὶ ἡ χαλκῇ σφαῖρα, καὶ πάλιν τοῦ κύκλου ἕτερα ἡ μορφή καὶ ὁ χαλκοῦς καὶ ὁ ξύλινος κύκλος· τὸ γὰρ τί ἦν εἶναι λέγοντες σφαῖρα ἢ κύκλω οὐκ ἐροῦμεν ἐν τῷ λόγῳ χρυσὸν ἢ χαλκόν, ὡς οὐκ ὄντα ταῦτα τῆς οὐσίας· ἂν δὲ τὴν χαλκῆν ἢ χρυσῆν, ἐροῦμεν, καὶ ἐὰν μὴ δυνώμεθα νοῆσαι μηδὲ λαβεῖν ἄλλο τι παρὰ τὸ καθ' ἕκαστον. Ἐνίοτε γὰρ οὐθὲν κωλύει τοῦτο συμβαίνειν, οἷον εἰ μόνος εἷς ληφθεὶς κύκλος· οὐθὲν γὰρ ἦττον ἄλλο ἔσται τὸ κύκλω εἶναι καὶ τῷδε τῷ κύκλω, καὶ τὸ μὲν εἶδος, τὸ δ' εἶδος ἐν τῇ ὕλῃ καὶ τῶν καθ' ἕκαστον.

Ἐπεὶ οὖν ἐστὶν ὁ οὐρανὸς αἰσθητός, τῶν καθ' ἕκαστον ἂν εἴη· τὸ γὰρ αἰσθητὸν ἅπαν ἐν τῇ ὕλῃ ὑπῆρχεν. Εἰ δὲ τῶν καθ' ἕκαστον, ἕτερον ἂν εἴη τῷδε τῷ οὐρανῷ εἶναι καὶ οὐρανῷ ἀπλῶς. Ἔτερον ἄρα ὅδε ὁ οὐρανὸς καὶ οὐρανὸς ἀπλῶς, καὶ τὸ μὲν ὡς εἶδος καὶ μορφή, τὸ δ' ὡς τῇ ὕλῃ μεμιγμένον. Ὡν δ' ἐστὶ μορφή τις καὶ εἶδος, ἥτοι ἔστιν ἢ ἐνδέχεται πλείω γενέσθαι τὰ καθ' ἕκαστα. Εἴτε γὰρ ἔστιν εἶδη,

καθάπερ φασί τινες, ἀνάγκη τοῦτο συμβαίνειν, εἴτε καὶ χωριστὸν μηθὲν τῶν τοιούτων, οὐθὲν ἦττον· ἐπὶ πάντων γὰρ οὕτως ὀρώμεν, ὅσων ἡ οὐσία ἐν ὕλῃ ἐστίν, πλείω καὶ ἄπειρα ὄντα τὰ ὁμοειδῆ. Ὅστε ἦτοι εἰσὶ πλείους οὐρανοὶ ἢ ἐνδέχεται πλείους εἶναι. Ἐκ μὲν δὴ τούτων ὑπολάβοι τις ἂν καὶ εἶναι καὶ ἐνδέχεσθαι πλείους εἶναι οὐρανούς· σκεπτέον δὲ πάλιν τί τούτων λέγεται καλῶς καὶ τί οὐ καλῶς.

Τὸ μὲν οὖν ἕτερον εἶναι τὸν λόγον τὸν ἄνευ τῆς ὕλης καὶ τὸν ἐν τῇ ὕλῃ τῆς μορφῆς καλῶς τε λέγεται, καὶ ἔστω τοῦτ' ἀληθές. Ἀλλ' οὐδὲν ἦττον οὐδεμία ἀνάγκη διὰ τοῦτο πλείους εἶναι κόσμους, οὐδ' ἐνδέχεται γενέσθαι πλείους, εἴπερ οὗτος ἐξ ἀπάσης ἐστὶ τῆς ὕλης, ὥσπερ ἔστιν.

Ὡδὲ δὲ μᾶλλον ἴσως τὸ λεγόμενον ἔσται δῆλον. Εἰ γὰρ ἐστὶν ἡ γρυπότης καμπυλότης ἐν ῥινὶ ἢ σαρκί, καὶ ἔστιν ὕλη τῇ γρυπότητι ἢ σάρξ, εἰ ἐξ ἀπασῶν τῶν σαρκῶν μία γένοιτο σὰρξ καὶ ὑπάρξειεν ταύτῃ τὸ γρυπόν, οὐθὲν ἂν ἄλλ' οὕτ' εἴη γρυπὸν οὕτ' ἐνδέχοιτο γενέσθαι. Ὅμοίως δὲ καὶ εἰ τῷ ἀνθρώπῳ ἐστὶν ὕλη σάρκες καὶ ὀστέα, εἰ ἐκ πάσης τῆς σαρκὸς καὶ πάντων τῶν ὀστέων ἄνθρωπος γένοιτο ἀδυνάτων ὄντων διαλυθῆναι, οὐκ ἂν ἐνδέχοιτο εἶναι ἄλλον ἄνθρωπον. Ὡσαύ(278b.) τως δὲ καὶ ἐπὶ τῶν ἄλλων· ὅλως γὰρ ὅσων ἐστὶν ἡ οὐσία ἐν ὑποκειμένη τινὶ ὕλῃ, τούτων οὐδὲν ἐνδέχεται γίνεσθαι μὴ ὑπαρχούσης τινὸς ὕλης.

Ὁ δ' οὐρανὸς ἔστι μὲν τῶν καθ' ἕκαστα καὶ τῶν ἐκ τῆς ὕλης· ἄλλ' εἰ μὴ ἐκ μορίου αὐτῆς συνέστηκεν ἄλλ' ἐξ ἀπάσης, τὸ μὲν εἶναι αὐτῷ οὐρανῷ καὶ τῷδε τῷ οὐρανῷ ἕτερόν ἐστιν, οὐ μέντοι οὕτ' ἂν εἴη ἄλλος οὕτ' ἂν ἐνδέχοιτο γενέσθαι πλείους, διὰ τὸ πᾶσαν τὴν ὕλην περιειληφέναι τοῦτον. Λείπεται ἄρα αὐτὸ τοῦτο δεῖξαι, ὅτι ἐξ ἀπαντος τοῦ φυσικοῦ καὶ τοῦ αἰσθητοῦ συνέστηκε σῶματος.

Εἵπωμεν δὲ πρῶτον τί λέγομεν εἶναι τὸν οὐρανὸν καὶ ποσαχῶς, ἵνα μᾶλλον ἡμῖν δῆλον γένηται τὸ ζητούμενον. Ἐνα μὲν οὖν τρόπον οὐρανὸν λέγομεν τὴν οὐσίαν τὴν τῆς ἐσχάτης τοῦ παντός περιφορᾶς, ἣ σῶμα φυσικὸν τὸ ἐν τῇ ἐσχάτῃ περιφορᾷ τοῦ παντός· εἰώθαμεν γὰρ τὸ ἔσχατον καὶ τὸ ἄνω μάλιστα καλεῖν οὐρανόν, ἐν ᾧ καὶ τὸ θεῖον πᾶν ἰδρῦσθαί φαμεν.

Ἄλλον δ' αὖ τρόπον τὸ συνεχὲς σῶμα τῇ ἐσχάτῃ περιφορᾷ τοῦ παντός, ἐν ᾧ σελήνη καὶ ἥλιος καὶ ἕνια τῶν ἄστρον· καὶ γὰρ ταῦτα ἐν τῷ οὐρανῷ εἶναί φαμεν.

Ἔτι δ' ἄλλως λέγομεν οὐρανὸν τὸ περιεχόμενον σῶμα ὑπὸ τῆς ἐσχάτης περιφορᾶς· τὸ γὰρ ὅλον καὶ τὸ πᾶν εἰώθαμεν λέγειν οὐρανόν.

Τριχῶς δὴ λεγομένου τοῦ οὐρανοῦ, τὸ ὅλον τὸ ὑπὸ τῆς ἐσχάτης περιεχόμενον περιφορᾶς ἐξ ἅπαντος ἀνάγκη συνεστάναι τοῦ φυσικοῦ καὶ τοῦ αἰσθητοῦ σώματος διὰ τὸ μήτ' εἶναι μηδὲν ἔξω σῶμα τοῦ οὐρανοῦ μήτ' ἐνδέχεσθαι γενέσθαι.

Εἰ γὰρ ἔστιν ἔξω τῆς ἐσχάτης περιφορᾶς σῶμα φυσικόν, ἀνάγκη αὐτὸ ἢτοι τῶν ἀπλῶν εἶναι σωμάτων ἢ τῶν συνθέτων, καὶ ἢ κατὰ φύσιν ἢ παρὰ φύσιν ἔχειν. Τῶν μὲν οὖν ἀπλῶν οὐθὲν ἂν εἴη. Τὸ μὲν γὰρ κύκλῳ φερόμενον δέδεικται ὅτι οὐκ ἐνδέχεται μεταλλάξαι τὸν αὐτοῦ τόπον. Ἀλλὰ μὴν οὐδὲ τὸ ἀπὸ τοῦ μέσου δυνατόν, οὐδὲ τὸ ὑφιστάμενον. Κατὰ φύσιν μὲν γὰρ οὐκ ἂν εἴησαν (ἄλλοι γὰρ αὐτῶν οἰκεῖοι τόποι), παρὰ φύσιν δ' εἴπερ εἰσὶν, ἄλλω τινὶ ἔσται κατὰ φύσιν ὁ ἔξω τόπος· τὸν γὰρ τούτῳ παρὰ φύσιν ἀναγκαῖον ἄλλω εἶναι κατὰ φύσιν. Ἀλλ' οὐκ ἦν ἄλλο σῶμα παρὰ ταῦτα. Οὐκ ἄρ' ἐστὶ δυνατόν οὐθὲν τῶν ἀπλῶν ἔξω εἶναι τοῦ (279a.) οὐρανοῦ σῶμα. Εἰ δὲ μὴ τῶν ἀπλῶν, οὐδὲ τῶν μικτῶν· ἀνάγκη γὰρ εἶναι καὶ τὰ



ἀπλᾶ τοῦ μικτοῦ ὄντος.

Ἀλλὰ μὴν οὐδὲ γενέσθαι δυνατόν· ἦτοι γὰρ κατὰ φύσιν ἔσται ἢ παρὰ φύσιν, καὶ ἢ ἀπλοῦν ἢ μικτόν. Ὡστε πάλιν ὁ αὐτὸς ἥξει λόγος· οὐδὲν γὰρ διαφέρει σκοπεῖν εἰ ἔστιν ἢ εἰ γενέσθαι δυνατόν.

Φανερόν τοίνυν ἐκ τῶν εἰρημένων ὅτι οὔτ' ἔστιν ἔξω οὔτ' ἐγγωρεῖ γενέσθαι σώματος ὄγκον οὐθενός· ἐξ ἀπάσης ἅρ' ἐστὶ τῆς οἰκείας ὕλης ὁ πᾶς κόσμος· ὕλη γὰρ ἦν αὐτῷ τὸ φυσικὸν σῶμα καὶ αἰσθητόν. Ὡστ' οὔτε νῦν εἰσὶ πλείους οὐρανοὶ οὔτ' ἐγένοντο, οὔτ' ἐνδέχεται γενέσθαι πλείους· ἀλλ' εἷς καὶ μόνος καὶ τέλειος οὗτος οὐρανός ἐστιν.

Ἄμα δὲ δῆλον ὅτι οὐδὲ τόπος οὐδὲ κενὸν οὐδὲ χρόνος ἐστὶν ἔξω τοῦ οὐρανοῦ. Ἐν ἅπαντι γὰρ τόπῳ δυνατόν ὑπάρξαι σῶμα· κενὸν δ' εἶναί φασιν ἐν ᾧ μὴ ἐνυπάρχει σῶμα, δυνατόν δ' ἐστὶ γενέσθαι· χρόνος δὲ ἀριθμὸς κινήσεως· κίνησις δ' ἄνευ φυσικοῦ σώματος οὐκ ἔστιν. Ἐξω δὲ τοῦ οὐρανοῦ δέδεικται ὅτι οὔτ' ἔστιν οὔτ' ἐνδέχεται γενέσθαι σῶμα. Φανερόν ἄρα ὅτι οὔτε τόπος οὔτε κενὸν οὔτε χρόνος ἐστὶν ἔξω.

Διόπερ οὔτ' ἐν τόπῳ τάκεῖ πέφυκεν, οὔτε χρόνος αὐτὰ ποιεῖ γηράσκειν, οὐδ' ἐστὶν οὐδενὸς οὐδεμίας μεταβολῆς τῶν ὑπὲρ τὴν ἐξωτάτω τεταγμένων φορὰν, ἀλλ' ἀναλλοίωτα καὶ ἀπαθῆ τὴν ἀρίστην ἔχοντα ζωὴν καὶ τὴν αὐταρκεστάτην διατελεῖ τὸν ἅπαντα αἰῶνα. (Καὶ γὰρ τοῦτο τοῦνομα θείως ἔφθεγκται παρὰ τῶν ἀρχαίων. Τὸ γὰρ τέλος τὸ περιέχον τὸν τῆς ἐκάστου ζωῆς χρόνον, οὗ μηθὲν ἔξω κατὰ φύσιν, αἰῶν ἐκάστου κέκληται. Κατὰ τὸν αὐτὸν δὲ λόγον καὶ τὸ τοῦ παντὸς οὐρανοῦ τέλος καὶ τὸ τὸν πάντα χρόνον καὶ τὴν ἀπειρίαν περιέχον τέλος αἰῶν ἐστίν, ἀπὸ τοῦ αἰεὶ εἶναι τὴν ἐπωνυμίαν εἰληφώς, ἀθάνατος καὶ θεῖος). Ὅθεν καὶ τοῖς ἄλλοις ἐξήρτηται, τοῖς μὲν ἀκριβέστερον τοῖς δ' ἀμαυρῶς, τὸ εἶναί τε καὶ ζῆν.

Καὶ γάρ, καθάπερ ἐν τοῖς ἐγκυκλίοις φιλοσοφήμασι περὶ τὰ θεῖα, πολλάκις προφαίνεται τοῖς λόγοις ὅτι τὸ θεῖον ἀμετάβλητον ἀναγκαῖον εἶναι πᾶν τὸ πρῶτον καὶ ἀκρότατον· ὃ οὕτως ἔχον μαρτυρεῖ τοῖς εἰρημένοις. Οὔτε γὰρ ἄλλο κρεῖττον ἐστὶν ὅ τι κινήσει (ἐκεῖνο γὰρ ἂν εἴη θειότερον) οὔτ' ἔχει φαῦλον οὐδέν, οὔτ' ἐνδεές τῶν αὐτοῦ καλῶν οὐδενός ἐστίν.

(279b.) Καὶ ἄπαυστον δὴ κίνησιν κινεῖται εὐλόγως· πάντα γὰρ παύεται κινούμενα ὅταν ἔλθῃ εἰς τὸν οἰκεῖον τόπον, τοῦ δὲ κύκλω σώματος ὁ αὐτὸς τόπος ὅθεν ἤρξατο καὶ εἰς ὃν τελευτᾷ.

## Κεφάλαιο 10

Τούτων δὲ διωρισμένων λέγωμεν μετὰ ταῦτα πότερον ἀγέννητος ἢ γενητὸς καὶ ἀφθαρτος ἢ φθαρτός, διεξελθόντες πρότερον τὰς τῶν ἄλλων ὑπολήψεις· αἱ γὰρ τῶν ἐναντίων ἀποδείξεις ἀπορίαι περὶ τῶν ἐναντίων εἰσὶν. Ἄμα δὲ καὶ μᾶλλον ἂν εἴη πιστὰ τὰ μέλλοντα λεχθήσεσθαι προακηκοόσι τὰ τῶν ἀμφισβητούντων λόγων δικαιώματα. Τὸ γὰρ ἐρήμην καταδικάζεσθαι δοκεῖν ἥττον ἂν ἡμῖν ὑπάρχοι· καὶ γὰρ δεῖ διαιτητὰς ἄλλ' οὐκ ἀντιδίκους εἶναι τοὺς μέλλοντας τάληθές κρίνειν ἱκανῶς.

Γενόμενον μὲν οὖν ἅπαντες εἶναί φασιν, ἀλλὰ γενόμενον οἱ μὲν αἰδίων, οἱ δὲ φθαρτὸν ὥσπερ ὅτιοῦν ἄλλο τῶν συνισταμένων, οἱ δ' ἐναλλάξ ὅτε μὲν οὕτως ὅτε δὲ ἄλλως ἔχειν [φθειρόμενον], καὶ τοῦτο αἰεὶ διατελεῖν οὕτως, ὥσπερ Ἐμπεδοκλῆς ὁ Ἀκραγαντῖνος καὶ Ἡράκλειτος ὁ Ἐφέσιος.

Τὸ μὲν οὖν γενέσθαι μὲν αἰδίων δ' ὅμως εἶναι φάναι τῶν ἀδυνάτων. Μόνα γὰρ ταῦτα θετέον εὐλόγως ὅσα ἐπὶ πολλῶν ἢ

πάντων ὁρῶμεν ὑπάρχοντα, περὶ δὲ τούτου συμβαίνει  
τοῦναντίον· ἅπαντα γὰρ τὰ γινόμενα καὶ φθειρόμενα φαίνεται.

Ἔτι δὲ τὸ μὴ ἔχον ἀρχὴν τοῦ ὧδὶ ἔχειν, ἀλλ' ἀδύνατον  
ἄλλως ἔχειν πρότερον τὸν ἅπαντα αἰῶνα, ἀδύνατον καὶ  
μεταβάλλειν· ἔσται γάρ τι αἷτιον, ὃ εἰ ὑπῆρχε πρότερον,  
δυνατὸν ἂν ἦν ἄλλως ἔχειν τὸ ἀδύνατον ἄλλως ἔχειν. Εἰ δὲ  
πρότερον ἐξ ἄλλως ἐχόντων συνέστη ὁ κόσμος, εἰ μὲν αἰεὶ  
οὕτως ἐχόντων καὶ ἀδυνάτων ἄλλως ἔχειν, οὐκ ἂν ἐγένετο· εἰ  
δὲ γέγονεν, ἀνάγκη δηλονότι κάκεῖνα δυνατὰ εἶναι ἄλλως ἔχειν  
καὶ μὴ αἰεὶ οὕτως ἔχειν, ὥστε καὶ συνεστῶτα διαλυθήσεται  
καὶ διαλελυμένα συνέστη ἔμπροσθεν, καὶ τοῦτ' ἀπειράκις ἢ  
οὕτως εἶχεν ἢ δυνατὸν ἦν. Εἰ δὲ τοῦτ', οὐκ ἂν εἴη ἀφθαρτος,  
οὔτ' εἰ ἄλλως εἶχε ποτε οὔτ' εἰ δυνατὸν ἄλλως ἔχειν.

Ἦν δέ τινες βοήθειαν ἐπιχειροῦσι φέρειν ἑαυτοῖς τῶν λεγόντων  
ἀφθαρτον μὲν εἶναι γενόμενον δέ, οὐκ ἔστιν ἀληθές· ὁμοίως  
γάρ φασι τοῖς τὰ διαγράμματα γράφουσι καὶ σφᾶς εἰρηκέναι  
περὶ τῆς γενέσεως, οὐχ ὥς γενομένου ποτέ, ἀλλὰ (280a.)  
διδασκαλίας χάριν ὥς μᾶλλον γνωρίζοντων, ὥσπερ τὸ  
διάγραμμα γιγνόμενον θεασαμένους. Τοῦτο δ' ἐστίν, ὥσπερ  
λέγομεν, οὐ τὸ αὐτό· ἐν μὲν γὰρ τῇ ποιήσει τῶν διαγραμμάτων  
πάντων τεθέντων εἶναι ἅμα τὸ αὐτὸ συμβαίνει, ἐν δὲ ταῖς  
τούτων ἀποδείξεσιν οὐ ταυτόν, ἀλλ' ἀδύνατον· τὰ γὰρ  
λαμβανόμενα πρότερον καὶ ὕστερον ὑπεναντία ἐστίν· ἐξ  
ἀτάκτων γὰρ τεταγμένα γενέσθαι φασίν, ἅμα δὲ ἄτακτον εἶναι  
καὶ τεταγμένον ἀδύνατον, ἀλλ' ἀνάγκη γένεσιν εἶναι τὴν  
χωρίζουσιν καὶ χρόνον· ἐν δὲ τοῖς διαγράμμασιν οὐδὲν τῷ  
χρόνῳ κεχώρισται. Ὅτι μὲν οὖν ἀδύνατον ἅμ' αἰδίων αὐτὸν  
εἶναι καὶ γενέσθαι, φανερόν.

Τὸ δ' ἐναλλάξ συνιστάναι καὶ διαλύειν οὐδὲν ἀλλοιότερον  
ποιεῖν ἐστίν ἢ τὸ κατασκευάζειν αὐτὸν αἰδίων μὲν, ἀλλὰ

μεταβάλλοντα τὴν μορφήν, ὥσπερ εἴ τις ἐκ παιδὸς ἄνδρα γινόμενον καὶ ἐξ ἀνδρὸς παῖδα ὅτε μὲν φθείρεσθαι ὅτε δ' εἶναι οἶοιτο· δῆλον γὰρ ὅτι καὶ εἰς ἄλληλα τῶν στοιχείων συνιόντων οὐχ ἡ τυχοῦσα τάξις γίγνεται καὶ σύστασις, ἀλλ' ἡ αὐτή, ἄλλως τε καὶ κατὰ τοὺς τοῦτον τὸν λόγον εἰρηκότας, οἱ τῆς διαθέσεως ἑκατέρας αἰτιῶνται τὸ ἐναντίον. Ὡστ' εἰ τὸ ὅλον σῶμα συνεχές ὂν ὅτε μὲν οὕτως ὅτε δ' ἐκείνως διατίθεται καὶ διακεκόσμηται, ἡ δὲ τοῦ ὅλου σύστασις ἐστὶ κόσμος καὶ οὐρανός, οὐκ ἂν ὁ κόσμος γίγνοιτο καὶ φθείροιτο, ἀλλ' αἱ διαθέσεις αὐτοῦ.

Τὸ δ' ὅλως γεγόμενον φθαρῆναι καὶ μὴ ἀνακάμπτειν ὄντος μὲν ἑνὸς ἀδύνατόν ἐστιν· πρὶν γὰρ γενέσθαι ἀεὶ ὑπῆρχεν ἡ πρὸ αὐτοῦ σύστασις, ἣν μὴ γενομένην οὐχ οἶόν τ' εἶναί φαμεν μεταβάλλειν· ἀπείρων δ' ὄντων ἐνδέχεται μᾶλλον.

Οὐ μὲν ἀλλὰ καὶ τοῦτο πότερον ἀδύνατον ἢ δυνατόν, ἔσται δῆλον ἐκ τῶν ὕστερον· εἰσὶ γάρ τινες οἷς ἐνδέχεσθαι δοκεῖ καὶ ἀγέννητόν τι ὂν φθαρῆναι καὶ γεγόμενον ἀφθαρτον διατελεῖν, ὥσπερ ἐν τῷ Τιμαίῳ· ἐκεῖ γάρ φησι τὸν οὐρανὸν γενέσθαι μὲν, οὐ μὲν ἀλλ' ἔσεσθαι γε τὸν λοιπὸν ἀεὶ χρόνον. Πρὸς οὓς φυσικῶς μὲν περὶ οὐρανοῦ μόνον εἴρηται, καθόλου δὲ περὶ ἅπαντος σκεψαμένοις ἔσται καὶ περὶ τούτου δῆλον.

## Κεφάλαιο 11

(280b.) Πρῶτον δὲ διαιρετέον πῶς ἀγέννητα καὶ γενητά φαμεν καὶ φθαρτὰ καὶ ἀφθαρτα· πολλαχῶς γὰρ λεγομένων, κἂν μηδὲν διαφέρει πρὸς τὸν λόγον, ἀνάγκη τὴν διάνοιαν ἀορίστως ἔχειν, ἂν τις τῷ διαιρουμένῳ πολλαχῶς ὡς ἀδιαιρέτῳ χρῆται· ἄδηλον γὰρ κατὰ ποίαν φύσιν αὐτῶν συμβαίνει τὸ λεχθέν.

Λέγεται δ' ἀγέννητον ἓνα μὲν τρόπον ἐὰν ἢ τι νῦν πρότερον μὴ ὂν ἄνευ γενέσεως καὶ μεταβολῆς, καθάπερ ἔνιοι τὸ ἄπτεσθαι

καὶ τὸ κινεῖσθαι λέγουσιν· οὐ γὰρ εἶναι γενέσθαι φασὶν ἀπτόμενον, οὐδὲ κινούμενον. Ἐνα δ' εἴ τι ἐνδεχόμενον γίνεσθαι ἢ γενέσθαι μὴ ἐστίν· ὁμοίως γὰρ καὶ τοῦτο ἀγέννητον, ὅτι ἐνδέχεται γενέσθαι. Ἐνα δ' εἴ τι ὅλως ἀδύνατον γενέσθαι, ὥσθ' ὅτε μὲν εἶναι ὅτε δὲ μὴ. (Τὸ δ' ἀδύνατον λέγεται διχῶς. Ἡ γὰρ τῷ μὴ ἀληθὲς εἶναι εἰπεῖν ὅτι γένοιτ' ἄν, ἢ τῷ μὴ ῥαδίως μηδὲ ταχὺ ἢ καλῶς.)

Τὸν αὐτὸν δὲ τρόπον καὶ τὸ γενητὸν ἓνα μὲν εἰ μὴ ὄν πρότερον ὕστερον ἔστιν, εἴτε γινόμενον εἴτ' ἄνευ τοῦ γίνεσθαι, ὅτε μὲν μὴ ὄν, πάλιν δ' ὄν. Ἐνα δ' εἰ δυνατόν, εἴτε τῷ ἀληθεῖ διορισθέντος τοῦ δυνατοῦ εἴτε τῷ ῥαδίως. Ἐνα δ' ἐὰν ἡ γένεσις αὐτοῦ ἐκ τοῦ μὴ ὄντος εἰς τὸ ὄν, εἴτ' ἤδη ὄντος, διὰ τοῦ γίνεσθαι δ' ὄντος, εἴτε καὶ μήπω ὄντος, ἀλλ' ἐνδεχομένου.

Καὶ φθαρτὸν δὲ καὶ ἀφθαρτον ὡσαύτως· εἴτε γὰρ πρότερόν τι ὄν ὕστερον ἢ μὴ ἐστίν ἢ ἐνδέχεται μὴ εἶναι, φθαρτὸν εἶναί φαμεν, εἴτε φθειρόμενόν ποτε καὶ μεταβάλλον, εἴτε μὴ. Ἔστι δ' ὅτε καὶ τὸ διὰ τοῦ φθείρεσθαι ἐνδεχόμενον μὴ εἶναι φθαρτὸν εἶναί φαμεν, καὶ ἔτι ἄλλως τὸ ῥαδίως φθειρόμενον, ὃ εἴποι ἄν τις εὐφθαρτον. Καὶ περὶ τοῦ ἀφθάρτου ὁ αὐτὸς λόγος· Ἡ γὰρ τὸ ἄνευ φθορᾶς ὅτε μὲν ὄν ὅτε δὲ μὴ ὄν, οἶον τὰς ἀφάς, ὅτι ἄνευ τοῦ φθείρεσθαι πρότερον οὔσαι ὕστερον οὐκ εἰσίν. Ἡ τὸ ὄν μὲν, δυνατόν δὲ μὴ εἶναι, ἢ καὶ οὐκ ἐσόμενόν ποτε, νῦν δ' ὄν· σὺ γὰρ εἶ, καὶ ἡ ἀφὴ νῦν· ἀλλ' ὅμως φθαρτόν, ὅτι ἔσται ποτὲ ὅτε οὐκ ἀληθὲς εἰπεῖν ὅτι εἶ, οὐδὲ ταῦτα ἄπτεσθαι. Τὸ δὲ μάλιστα κυρίως, τὸ ὄν μὲν, ἀδύνατον δὲ φθαρῆναι οὕτως ὥστε νῦν ὄν ὕστερον μὴ εἶναι ἢ ἐνδέχεσθαι μὴ εἶναι. Ἡ καὶ τὸ μήπω ἐφθαρμένον, ἐνδεχόμενον δ' ὕστερον μὴ εἶναι. Λέγεται δ' (281a.) ἀφθαρτον καὶ τὸ μὴ ῥαδίως φθειρόμενον.

Εἰ δὲ ταῦθ' οὕτως ἔχει, σκεπτέον πῶς λέγομεν τὸ δυνατόν καὶ ἀδύνατον· τό τε γὰρ κυριώτατα λεγόμενον ἀφθαρτον τῷ μὴ

δύνασθαι ἂν φθαρῆναι, μηδ' ὅτε μὲν εἶναι ὅτε δὲ μή· λέγεται δὲ καὶ τὸ ἀγέννητον τὸ ἀδύνατον καὶ μὴ δυνάμενον γενέσθαι οὕτως ὥστε πρότερον μὲν μὴ εἶναι ὕστερον δὲ εἶναι, οἷον τὴν διάμετρον σύμμετρον. Εἰ δὴ τι δύναται κινηθῆναι [στάδια ἑκατὸν] ἢ ἄραι βάρος, ἀεὶ πρὸς τὸ πλεῖστον λέγομεν, οἷον τάλαντα ἄραι ἑκατὸν ἢ στάδια βαδίσαι ἑκατόν (καίτοι καὶ τὰ μόρια δύναται τὰ ἐντός, εἴπερ καὶ τὴν ὑπεροχὴν), ὥς δέον ὀρίζεσθαι πρὸς τὸ τέλος καὶ τὴν ὑπεροχὴν τὴν δύναμιν. Ἀνάγκη μὲν οὖν τὸ δυνατόν καθ' ὑπεροχὴν τοσαδὶ καὶ τὰ ἐντός δύνασθαι, οἷον εἰ τάλαντα ἑκατὸν ἄραι, καὶ δύο, κἂν εἰ στάδια ἑκατόν, καὶ δύο δύνασθαι βαδίσαι. Ἡ δὲ δύναμις τῆς ὑπεροχῆς ἐστίν· κἂν εἴ τι ἀδύνατον τοσονδὶ καθ' ὑπερβολὴν εἰπόντων, καὶ τὰ πλείω ἀδύνατον, οἷον ὁ χίλια βαδίσαι στάδια μὴ δυνάμενος δῆλον ὅτι καὶ χίλια καὶ ἕν.

Μηδὲν δ' ἡμᾶς παρενοχλείτω· διωρίσθω γὰρ κατὰ τῆς ὑπεροχῆς τὸ τέλος λεγόμενον τὸ κυρίως δυνατόν. Τάχα γὰρ ἐνσταίη τις ἂν ὡς οὐκ ἀνάγκη τὸ λεχθέν· ὁ γὰρ ὁρῶν στάδιον οὐ καὶ τὰ ἐντός ὄψεται μεγέθη, ἀλλὰ τοῦναντίον μᾶλλον ὁ δυνάμενος ἰδεῖν στιγμήν ἢ ἀκοῦσαι μικροῦ ψόφου καὶ τῶν μειζόνων ἔξει αἴσθησιν. Ἀλλ' οὐδὲν διαφέρει πρὸς τὸν λόγον· διωρίσθω γὰρ ἥτοι ἐπὶ τῆς δυνάμεως ἢ ἐπὶ τοῦ πράγματος ἢ ὑπερβολή. Τὸ γὰρ λεγόμενον δῆλον· ἢ μὲν γὰρ ὅψις ἢ τοῦ ἐλάττονος ὑπερέχει, ἢ δὲ ταχυτῆς ἢ τοῦ πλείονος.

## Κεφάλαιο 12

Διωρισμένων δὲ τούτων λεκτέον τὸ ἐφεξῆς. Εἰ δὴ ἐστὶν ἕνια δυνατὰ καὶ εἶναι καὶ μή, ἀνάγκη χρόνον τινὰ ὠρίσθαι τὸν πλεῖστον καὶ τοῦ εἶναι καὶ τοῦ μή, λέγω δ' ὃν δυνατόν τὸ πρᾶγμα εἶναι καὶ ὃν δυνατόν μὴ εἶναι καθ' ὅποιανοῦν κατηγορίαν, οἷον ἄνθρωπον ἢ λευκὸν ἢ τρίπηχυν ἢ ἄλλ' ὅτιοῦν τῶν τοιούτων. Εἰ γὰρ μὴ ἔσται ποσός τις, ἀλλ' ἀεὶ πλείων τοῦ

προτεθέντος καὶ οὐκ ἔστιν οὗ ἑλάττων, ἄπειρον (281b.) ἔσται χρόνον δυνατὸν εἶναι, καὶ μὴ εἶναι ἄλλον ἄπειρον· ἀλλὰ τοῦτ' ἀδύνατον.

Ἀρχὴ δ' ἔστω ἐντεῦθεν· τὸ γὰρ ἀδύνατον καὶ τὸ ψεῦδος οὐ ταῦτ' σημαίνει. Ἔστι δὲ τὸ ἀδύνατον καὶ δυνατὸν καὶ ψεῦδος καὶ ἀληθὲς τὸ μὲν ἐξ ὑποθέσεως (λέγω δ', οἷον τὸ τρίγωνον ἀδύνατον δύο ὀρθὰς ἔχειν, εἰ τάδε, καὶ ἡ διάμετρος σύμμετρος). Ἔστι δ' ἀπλῶς καὶ δυνατὰ καὶ ἀδύνατα καὶ ψευδῆ καὶ ἀληθῆ. Οὐ δὲ ταῦτ' ἔστι ψεῦδος τέ τι εἶναι ἀπλῶς καὶ ἀδύνατον ἀπλῶς. Τὸ γὰρ σε μὴ ἐστῶτα φάναι ἐστάναι ψεῦδος μὲν, οὐκ ἀδύνατον δέ. Ὅμοίως δὲ τὸν κιθαρίζοντα, μὴ ἄδοντα δέ, ἄδειν φάναι ψεῦδος, ἀλλ' οὐκ ἀδύνατον. Τὸ δ' ἅμα ἐστάναι καὶ καθῆσθαι, καὶ τὴν διάμετρον σύμμετρον εἶναι, οὐ μόνον ψεῦδος, ἀλλὰ καὶ ἀδύνατον. Οὐ δὲ ταῦτόν ἐστιν ὑποθέσθαι ψεῦδος καὶ ἀδύνατον. Συμβαίνει δ' ἀδύνατον ἐξ ἀδυνάτου.

Τοῦ μὲν οὖν καθῆσθαι καὶ ἐστάναι ἅμα ἔχει τὴν δύναμιν, ὅτι ὅτε ἔχει ἐκείνην, καὶ τὴν ἑτέραν· ἀλλ' οὐχ ὥστε ἅμα καθῆσθαι καὶ ἐστάναι, ἀλλ' ἐν ἄλλῳ χρόνῳ. Εἰ δέ τι ἄπειρον χρόνον ἔχει πλειόνων δύναμιν, οὐκ ἔστιν ἐν ἄλλῳ χρόνῳ, ἀλλὰ τοῦθ' ἅμα.

Ὡστ' εἴ τι ἄπειρον χρόνον ὃν φθαρτόν ἐστι, δύναμιν ἔχει ἂν τοῦ μὴ εἶναι. Εἰ δὲ ἄπειρον χρόνον, ἔστω ὑπάρχον ὃ δύναται. Ἄμα ἄρ' ἔσται τε καὶ οὐκ ἔσται κατ' ἐνέργειαν. Πσεῦδος μὲν οὖν συμβαίνοι ἂν, ὅτι ψεῦδος ἐτέθη. Ἀλλ' εἰ μὴ ἀδύνατον ἦν, οὐκ ἂν καὶ ἀδύνατον ἦν τὸ συμβαῖνον. Ἄπαν ἄρα τὸ ἀεὶ ὃν ἀπλῶς ἀφθαρτον.

Ὅμοίως δὲ καὶ ἀγέννητον· εἰ γὰρ γενητόν, ἔσται δυνατὸν χρόνον τινὰ μὴ εἶναι-φθαρτόν μὲν γὰρ ἐστι τὸ πρότερον μὲν ὄν, νῦν

δὲ μὴ ὄν ἢ ἐνδεχόμενόν ποτε ὕστερον μὴ εἶναι· γενητὸν δὲ ὃ ἐνδέχεται πρότερον μὴ εἶναι-ἀλλ' οὐκ ἔστιν ἐν ᾧ χρόνῳ δυνατόν τὸ ἀεὶ ὄν ὥστε μὴ εἶναι, οὔτ' ἄπειρον οὔτε πεπερασμένον· καὶ γὰρ τὸν πεπερασμένον χρόνον δύναται εἶναι, εἴπερ καὶ τὸν ἄπειρον. Οὐκ ἄρα ἐνδέχεται τὸ αὐτὸ καὶ ἐν ἀεί τε δύνασθαι εἶναι καὶ ἀεὶ μὴ εἶναι. Ἀλλὰ μὴν οὐδὲ τὴν ἀπόφασιν, οἷον λέγω μὴ ἀεὶ εἶναι. Ἀδύνατον ἄρα καὶ ἀεὶ μέν τι εἶναι, φθαρτὸν (282a.) δ' εἶναι. Ὅμοίως δ' οὐδὲ γενητόν· δυοῖν γὰρ ὅροις εἰ ἀδύνατον τὸ ὕστερον ἄνευ τοῦ προτέρου ὑπάρξαι, ἐκεῖνο δ' ἀδύνατον ὑπάρχειν, καὶ τὸ ὕστερον. Ὡστ' εἰ τὸ ἀεὶ ὄν μὴ ἐνδέχεται ποτε μὴ εἶναι, ἀδύνατον καὶ γενητὸν εἶναι.

Ἐπεὶ δ' ἀπόφασις τοῦ μὲν ἀεὶ δυνάμενου εἶναι τὸ μὴ ἀεὶ δυνάμενον εἶναι, τὸ δ' ἀεὶ δυνατόν μὴ εἶναι ἐναντίον, οὗ ἀπόφασις τὸ μὴ ἀεὶ δυνάμενον μὴ εἶναι, ἀνάγκη τὰς ἀποφάσεις ἀμφοῖν τῷ αὐτῷ ὑπάρχειν, καὶ εἶναι μέσον τοῦ ἀεὶ ὄντος καὶ τοῦ ἀεὶ μὴ ὄντος τὸ δυνάμενον εἶναι καὶ μὴ εἶναι· ἢ γὰρ ἑκατέρου ἀπόφασίς ποτε ὑπάρξει, εἰ μὴ ἀεὶ. Ὡστ' εἰ τὸ μὴ ἀεὶ μὴ ὄν ἔσται ποτὲ καὶ οὐκ ἔσται, καὶ τὸ μὴ ἀεὶ δυνάμενον εἶναι δηλονότι, ἀλλὰ ποτε ὄν, ὥστε καὶ μὴ εἶναι. Τὸ αὐτὸ ἄρ' ἔσται δυνατόν εἶναι καὶ μή, καὶ τοῦτ' ἔστιν ἀμφοῖν μέσον. Λόγος δὲ καθόλου ὅδε. Ἐστω γὰρ τὸ Α καὶ τὸ Β μηδενὶ τῷ αὐτῷ δυνάμενα ὑπάρχειν, ἅπαντι δὲ τὸ Α ἢ τὸ Γ καὶ τὸ Β ἢ τὸ Δ. Ἀνάγκη δὴ ᾧ μήτε τὸ Α ὑπάρχει μήτε τὸ Β, παντὶ ὑπάρχειν τὰ ΓΔ. Ἐστω δὴ τὸ Ε τὸ μεταξὺ τῶν ΑΒ· ἐναντίων γὰρ τὸ μηθέτερον μέσον. Τούτῳ δὴ ἀνάγκη ἅμφω ὑπάρχειν τό τε Γ καὶ τὸ Δ. Παντὶ γὰρ ἢ τὸ Α ἢ τὸ Γ, ὥστε καὶ τῷ Ε· ἐπεὶ οὖν τὸ Α ἀδύνατον, τὸ Γ ὑπάρξει. Ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τοῦ Δ. Οὔτε δὴ τὸ ἀεὶ ὄν γενητὸν οὐδὲ φθαρτόν, οὔτε τὸ ἀεὶ μὴ ὄν. Δῆλον δ' ὅτι καὶ εἰ γενητὸν ἢ φθαρτόν, οὐκ αἰδίων. Ἄμα γὰρ ἔσται δυνάμενον ἀεὶ εἶναι καὶ δυνάμενον μὴ ἀεὶ εἶναι· τοῦτο δ' ὅτι ἀδύνατον, δέδεικται πρότερον.



ἀεὶ ὄν      ἀεὶ μὴ ὄν

A      B

γενητόν

E

μὴ ἀεὶ ὄν      μὴ ἀεὶ μὴ ὄν

Γ      Δ

Ἄρ' οὖν εἰ καὶ ἀγέννητον, ὄν δέ, τοῦτ' ἀνάγκη αἰδίων εἶναι, ὁμοίως δὲ καὶ εἰ ἄφθαρτον, ὄν δέ; (Λέγω δὲ τὸ ἀγέννητον καὶ ἄφθαρτον τὰ κυρίως λεγόμενα, ἀγέννητον μὲν ὃ ἔστι νῦν, καὶ πρότερον οὐκ ἀληθὲς ἦν εἰπεῖν τὸ μὴ εἶναι, ἄφθαρτον δὲ ὃ νῦν ὄν ὕστερον μὴ ἀληθὲς ἔσται εἰπεῖν μὴ εἶναι). Ἢ εἰ μὲν ταῦτα ἀλλήλοις ἀκολουθεῖ καὶ τό τε ἀγέννητον ἄφθαρτον καὶ τὸ ἄφθαρτον ἀγέννητον, ἀνάγκη καὶ τὸ αἰδίων ἑκατέρω

ἀκολουθεῖν, καὶ εἴτε ἀγέννη (282b.) τον, αἰδίου, εἴτε ἄφθαρτον, αἰδίου. Δῆλον δὲ καὶ ἐκ τοῦ ὀρισμοῦ αὐτῶν· καὶ γὰρ ἀνάγκη, εἰ φθαρτόν, γενητόν. Ἡ γὰρ ἀγέννητον ἢ γενητόν· εἰς δὲ ἀγέννητον, ἄφθαρτον ὑπόκειται.

Καὶ εἰ γενητόν δὴ, φθαρτόν ἀνάγκη· ἢ γὰρ φθαρτόν ἢ ἄφθαρτον· ἀλλ' εἰ ἄφθαρτον, ἀγέννητον ὑπέκειτο. Εἰ δὲ μὴ ἀκολουθοῦσιν ἀλλήλοις τὸ ἄφθαρτον καὶ τὸ ἀγέννητον, οὐκ ἀνάγκη οὔτε τὸ ἀγέννητον οὔτε τὸ ἄφθαρτον αἰδίου εἶναι. Ὅτι δ' ἀνάγκη ἀκολουθεῖν, ἐκ τῶνδε φανερόν. Τὸ γὰρ γενητόν καὶ τὸ φθαρτόν ἀκολουθοῦσιν ἀλλήλοις. Δῆλον δὲ καὶ τοῦτο ἐκ τῶν πρότερον· τοῦ γὰρ αἰεὶ ὄντος καὶ τοῦ αἰεὶ μὴ ὄντος ἐστὶ μεταξὺ ὧ μῆδέτερον ἀκολουθεῖ, τοῦτο δ' ἐστὶ τὸ γενητόν καὶ φθαρτόν. Δυνατὸν γὰρ καὶ εἶναι καὶ μὴ εἶναι ὠρισμένον χρόνον ἑκάτερον· λέγω δ' ἑκάτερον καὶ εἶναι ποσόν τινα χρόνον καὶ μὴ εἶναι.

Εἰ τοίνυν ἐστὶ τι γενητόν ἢ φθαρτόν, ἀνάγκη τοῦτο μεταξὺ εἶναι. Ἐστω γὰρ τὸ Α τὸ αἰεὶ ὄν, τὸ δὲ Β τὸ αἰεὶ μὴ ὄν, τὸ δὲ Γ γενητόν, τὸ δὲ Δ φθαρτόν. Ἀνάγκη δὴ τὸ Γ μεταξὺ εἶναι τοῦ Α καὶ τοῦ Β. Τῶν μὲν γὰρ οὐκ ἔστι χρόνος ἐπ' οὐδέτερον τὸ πέρας ἐν ὧ ἢ τὸ Α οὐκ ἦν ἢ τὸ Β ἦν· τῷ δὲ γενητῷ ἀνάγκη ἢ ἐνεργεῖα εἶναι ἢ δυνάμει, τοῖς δὲ ΑΒ οὐδετέρως. Ποσὸν ἄρα τινὰ καὶ ὠρισμένον χρόνον καὶ ἔσται καὶ πάλιν οὐκ ἔσται. Ὅμοίως δὲ καὶ ἐπὶ τοῦ Δ. Γενητόν ἄρα καὶ φθαρτόν ἑκάτερον.

Ἀκολουθοῦσιν ἄρα ἀλλήλοις τὸ γενητόν καὶ τὸ φθαρτόν.

αἰεὶ ὄν            γενητόν

Α            Γ

φθαρτόν      ἀεὶ μὴ ὄν

Δ                      Β

Ἐστω δὴ τὸ ἐφ' ᾧ Ε ἀγέννητον, τὸ δ' ἐφ' ᾧ Ζ γενητόν, τὸ δ' ἐφ' ᾧ Η ἄφθαρτον, τὸ δ' ἐφ' ᾧ Θ φθαρτόν. Τὰ δὲ ΖΘ δέ) δεικται ὅτι ἀκολουθεῖ ἀλλήλοις. Ὅταν δ' ἡ οὕτω κείμενα ὡς ταῦτα, οἷον τὸ μὲν Ζ καὶ τὸ Θ ἀκολουθοῦντα, τὸ δὲ Ε καὶ τὸ Ζ μηθενὶ τῷ αὐτῷ, ἅπαντι δὲ θάτερον, ὁμοίως δὲ καὶ τὰ ΗΘ, ἀνάγκη καὶ τὰ ΕΗ ἀκολουθεῖν ἀλλήλοις. Ἐστω γὰρ τῷ Η τὸ Ε μὴ ἀκολουθοῦν. Τὸ ἄρα Ζ ἀκολουθήσει· παντὶ γὰρ τὸ Ε ἢ τὸ Ζ. Ἀλλὰ μὴν ᾧ τὸ Ζ, καὶ τὸ Θ. Τῷ ἄρα Η τὸ Θ ἀκολουθήσει. Ἀλλ' ὑπέκειτο ἀδύνατον (283a.) εἶναι. Ὁ δ' αὐτὸς λόγος καὶ ὅτι τὸ Η τῷ Ε. Ἀλλὰ μὴν οὕτως ἔχει τὸ ἀγέννητον, ἐφ' ᾧ Ε, πρὸς τὸ γενητόν, ἐφ' ᾧ Ζ, καὶ τὸ ἄφθαρτον, ἐφ' ᾧ Η, πρὸς τὸ φθαρτόν, ἐφ' ᾧ Θ.

ἀγέννητον      γενητόν

Ε                      Ζ

ἄφθαρτον      φθαρτόν

Η                    Θ

Τὸ δὲ φάναι μηδὲν κωλύειν γινόμενόν τι ἄφθαρτον εἶναι καὶ ἀγέννητον ὃν φθαρήναι, ἅπαξ ὑπαρχούσης τῷ μὲν τῆς γενέσεως τῷ δὲ τῆς φθορᾶς, ἀναιρεῖν ἔστι τῶν δεδομένων τι. Ἡ γὰρ ἄπειρον ἢ ποσόν τινα ὠρισμένον χρόνον δύναται ἅπαντα ἢ ποιεῖν ἢ πάσχειν, ἢ εἶναι ἢ μὴ εἶναι καὶ τὸν ἄπειρον διὰ τοῦτο, ὅτι ὠρισταί πως ὁ ἄπειρος, οὗ οὐκ ἔστι πλείων. Τὸ δὲ πῇ ἄπειρον οὐτ' ἄπειρον οὕθ' ὠρισμένον.

Ἔτι τί μᾶλλον ἐπὶ τῷδε τῷ σημείῳ ἀεὶ ὃν πρότερον ἐφθάρη ἢ μὴ ὃν ἄπειρον ἐγένετο; εἰ γὰρ μηθὲν μᾶλλον, ἄπειρα δὲ τὰ σημεία, δῆλον ὅτι ἄπειρον χρόνον ἦν τι γενητὸν καὶ φθαρτόν. Δύναται ἄρα μὴ εἶναι ἄπειρον χρόνον· ἅμα γὰρ ἔξει δύναμιν τοῦ μὴ εἶναι καὶ εἶναι, τὸ μὲν πρότερον, εἰ φθαρτόν, τὸ δ' ὕστερον, εἰ γενητόν. Ὡστ' ἐὰν ὑπάρχειν θῶμεν ἃ δύναται, τὰ ἀντικείμενα ἅμα ὑπάρξει.

Ἔτι δὲ καὶ τοῦθ' ὁμοίως ἐν ἅπαντι σημείῳ ὑπάρξει, ὥστ' ἄπειρον χρόνον τοῦ μὴ εἶναι καὶ τοῦ εἶναι ἔξει δύναμιν· ἀλλὰ δέδεικται ὅτι ἀδύνατον τοῦτο.

Ἔτι εἰ πρότερον ἢ δύναμις ὑπάρχει τῆς ἐνεργείας, ἅπανθ' ὑπάρξει τὸν χρόνον, καὶ ὃν ἀγέννητον ἦν καὶ μὴ ὅν [τὸν ἄπειρον χρόνον], γίγνεσθαι δὲ δυνάμενον. Ἄμα δὲ οὐκ ἦν καὶ τοῦ εἶναι δύναμιν εἶχε, καὶ τοῦ τότε εἶναι καὶ ὕστερον· ἄπειρον ἄρα χρόνον.

Φανερόν δὲ καὶ ἄλλως ὅτι ἀδύνατον φθαρτὸν ὃν μὴ φθαρήναι ποτε. Αἰὲ γὰρ ἔσται ἅμα καὶ φθαρτὸν καὶ ἄφθαρτον

ἐντελεχεία, ὥστε ἅμα ἔσται δυνατόν ἀεὶ τε εἶναι καὶ μὴ ἀεὶ·  
φθείρεται ἄρα ποτὲ τὸ φθαρτόν. Καὶ εἰ γενητόν, γέγονεν·  
δυνατόν γὰρ γεγονέναι, καὶ μὴ ἀεὶ ἄρα εἶναι.

Ἔστι δὲ καὶ ὧδε θεωρῆσαι ὅτι ἀδύνατον ἢ γενόμενόν ποτε  
ἄφθαρτον διατελεῖν, ἢ ἀγέννητον ὄν καὶ ἀεὶ πρότερον ὄν  
φθαρεῖναι. Οὐδὲν γὰρ ἀπὸ τοῦ αὐτομάτου οὔτ' ἄφθαρτον οὔτ'  
ἀγέννητον οἶόν τ' εἶναι. Τὸ μὲν γὰρ αὐτόματόν ἐστι καὶ τὸ ἀπὸ  
τύχης παρὰ τὸ ἀεὶ καὶ τὸ ὡς ἐπὶ (283b.) τὸ πολὺ ἢ ὄν ἢ  
γινόμενον· τὸ δ' ἄπειρον χρόνον ἢ ἀπλῶς ἢ ἀπὸ τινος, ἢ ἀεὶ ἢ  
ὡς ἐπὶ τὸ πολὺ ὑπάρχει ὄν. Ἀνάγκη τοίνυν φύσει τὰ τοιαῦτα  
ὅτε μὲν εἶναι ὅτε δὲ μὴ. Τῶν δὲ τοιούτων ἡ αὐτὴ δύναμις τῆς  
ἀντιφάσεως, καὶ ἡ ὕλη αἰτία τοῦ εἶναι καὶ μὴ. Ὡστ' ἀνάγκη  
ἅμα ὑπάρχειν ἐνεργείᾳ τὰ ἀντικείμενα. Ἀλλὰ μὴν οὐδέν γ'  
ἀληθὲς εἰπεῖν νῦν ὅτι ἔστι πέρυσιν, οὐδὲ πέρυσιν ὅτι νῦν  
ἔστιν. Ἀδύνατον ἄρα μὴ ὄν ποτε ὕστερον αἰδίων εἶναι· ἔξει γὰρ  
ὕστερον καὶ τὴν τοῦ μὴ εἶναι δύναμιν, πλὴν οὐ τοῦ τότε μὴ  
εἶναι ὅτε ἔστιν (ὑπάρχει γὰρ ἐνεργείᾳ ὄν), ἀλλὰ τοῦ πέρυσιν  
καὶ ἐν τῷ παρελθόντι χρόνῳ. Ἐστω δὲ οὗ ἔχει τὴν δύναμιν  
ὑπάρχον ἐνεργείᾳ· ἔσται ἄρα ἀληθὲς εἰπεῖν νῦν ὅτι οὐκ ἔστι  
πέρυσιν. Ἀλλ' ἀδύνατον· οὐδεμία γὰρ δύναμις τοῦ γεγονέναι  
ἐστίν, ἀλλὰ τοῦ εἶναι ἢ ἔσεσθαι. Ὁμοίως δὲ καὶ εἰ πρότερον  
ὄν αἰδίων ὕστερον μὴ ἔσται· ἔξει γὰρ δύναμιν οὗ ἐνεργείᾳ οὐκ  
ἔστιν. Ὡστ' ἂν θῶμεν τὸ δυνατόν, ἀληθὲς ἔσται εἰπεῖν νῦν ὅτι  
τοῦτ' ἔστι πέρυσιν καὶ ὅλως ἐν τῷ παρελθόντι χρόνῳ.

Καὶ φυσικῶς δὲ καὶ μὴ καθόλου σκοποῦσιν ἀδύνατον ἢ αἰδίων  
ὄν πρότερον φθαρεῖναι ὕστερον, ἢ πρότερον μὴ ὄν ὕστερον  
αἰδίων εἶναι. Τὰ γὰρ φθαρτὰ καὶ γενητὰ καὶ ἀλλοιωτὰ πάντα·  
ἀλλοιοῦνται δὲ τοῖς ἐναντίοις, καὶ ἐξ ὧν συνίσταται τὰ φύσει  
ὄντα, καὶ ὑπὸ τῶν αὐτῶν τούτων φθείρεται.

## Κεφάλαιο 1

Ὅτι μὲν οὖν οὔτε γέγονεν ὁ πᾶς οὐρανὸς οὔτ' ἐνδέχεται φθαρῆναι, καθάπερ τινὲς φασιν αὐτόν, ἀλλ' ἔστιν εἷς καὶ αἰδῖος, ἀρχὴν μὲν καὶ τελευτὴν οὐκ ἔχων τοῦ παντός αἰῶνος, ἔχων δὲ καὶ περιέχων ἐν αὐτῷ τὸν ἄπειρον χρόνον, ἔκ τε τῶν εἰρημένων ἔξεστι λαμβάνειν τὴν πίστιν, καὶ διὰ τῆς δόξης τῆς παρὰ τῶν ἄλλως λεγόντων καὶ γεννώντων αὐτόν· εἰ γὰρ οὕτως μὲν ἔχειν ἐνδέχεται, καθ' ὃν δὲ τρόπον ἐκεῖνοι γενέσθαι λέγουσιν οὐκ ἐνδέχεται, μεγάλην ἂν ἔχοι καὶ τοῦτο (284a.) ῥοπὴν εἰς πίστιν περὶ τῆς ἀθανασίας αὐτοῦ καὶ τῆς αἰδιότητος. Διόπερ καλῶς ἔχει συμπεῖθαι ἑαυτὸν τοὺς ἀρχαίους καὶ μάλιστα πατρίους ἡμῶν ἀληθεῖς εἶναι λόγους, ὡς ἔστιν ἀθάνατόν τι καὶ θεῖον τῶν ἐχόντων μὲν κίνησιν, ἐχόντων δὲ τοιαύτην ὥστε μηθὲν εἶναι πέρας αὐτῆς, ἀλλὰ μᾶλλον ταύτην τῶν ἄλλων πέρας· τό τε γὰρ πέρας τῶν περιεχόντων ἐστί, καὶ αὕτη τέλειος οὔσα περιέχει τὰς ἀτελεῖς καὶ τὰς ἐχούσας πέρας καὶ παῦλαν, αὐτὴ μὲν οὐδεμίαν οὔτ' ἀρχὴν ἔχουσα οὔτε τελευτὴν, ἀλλ' ἄπαυστος οὔσα τὸν ἄπειρον χρόνον, τῶν δ' ἄλλων τῶν μὲν αἰτία τῆς ἀρχῆς, τῶν δὲ δεχομένη τὴν παῦλαν.

Τὸν δ' οὐρανὸν καὶ τὸν ἄνω τόπον οἱ μὲν ἀρχαῖοι τοῖς θεοῖς ἀπένειμαν ὡς ὄντα μόνον ἀθάνατον· ὁ δὲ νῦν μαρτυρεῖ λόγος ὡς ἄφθαρτος καὶ ἀγέννητος, ἔτι δ' ἀπαθὲς πάσης θνητῆς δυσχερείας ἐστίν, πρὸς δὲ τούτοις ἄπονός διὰ τὸ μηδεμιᾶς προσδεῖσθαι βιαίας ἀνάγκης, ἣ κατέχει κωλύουσα φέρεσθαι πεφυκότα αὐτόν ἄλλως· πᾶν γὰρ τὸ τοιοῦτον ἐπίπονόν, ὅσωπερ ἂν αἰδιώτερον ἦ, καὶ διαθέσεως τῆς ἀρίστης ἄμοιρον.

Διόπερ οὔτε κατὰ τὸν τῶν παλαιῶν μῦθον ὑποληπτέον ἔχειν, οἱ φασιν Ἄτλαντός τινος αὐτῷ προσδεῖσθαι τὴν σωτηρίαν· εἰκότα γὰρ καὶ τοῦτον οἱ συστήσαντες τὸν λόγον τὴν αὐτὴν

ἔχειν ὑπόληψιν τοῖς ὕστερον· ὥς γὰρ περὶ βάρος ἔχόντων καὶ γενητῶν ἀπάντων τῶν ἄνω σωμάτων ὑπέστησαν αὐτῷ μυθικῶς ἀνάγκην ἔμψυχον.

Οὐτε δὴ τοῦτον τὸν τρόπον ὑποληπτέον, οὐτε διὰ τὴν δίνησιν θάπτονος τυγχάνοντα φορᾶς τῆς οἰκείας ῥοπῆς ἔτι σώζεσθαι τοσοῦτον χρόνον, καθάπερ Ἐμπεδοκλῆς φησιν.

Ἀλλὰ μὴν οὐδ' ὑπὸ ψυχῆς εὖλογον ἀναγκαζούσης μένειν αἰδίδιον· οὐδὲ γὰρ τῆς ψυχῆς οἶόν τ' εἶναι τὴν τοιαύτην ζωὴν ἄλυπον καὶ μακαρίαν· ἀνάγκη γὰρ καὶ τὴν κίνησιν μετὰ βίας οὔσαν, εἴπερ κινεῖ φέρεσθαι πεφυκότος τοῦ πρώτου σώματος ἄλλως καὶ κινεῖ συνεχῶς, ἄσχολον εἶναι καὶ πάσης ἀπηλλαγμένην ῥαστώνης ἔμφορος, εἴ γε μηδ' ὥσπερ τῇ ψυχῇ τῇ τῶν θνητῶν ζώων ἐστὶν ἀνάπαυσις ἢ περὶ τὸν ὕπνον γινομένη τοῦ σώματος ἄνεσις, ἀλλ' ἀναγκαῖον Ἰξίωνός τινος μοῖραν κατέχειν αὐτὴν αἰδίδιον καὶ ἄτρυτον.

Εἰ δὴ, καθάπερ (284b.) εἵπομεν, ἐνδέχεται τὸν εἰρημένον ἔχειν τρόπον περὶ τῆς πρώτης φορᾶς, οὐ μόνον αὐτοῦ περὶ τῆς αἰδιότητος οὕτως ὑπολαβεῖν ἐμμελέστερον, ἀλλὰ καὶ τῇ μαντείᾳ τῇ περὶ τὸν θεὸν μόνως ἂν ἔχοιμεν οὕτως ὁμολογουμένως ἀποφαίνεσθαι συμφώνους λόγους. Ἀλλὰ τῶν μὲν τοιούτων λόγων ἅλις ἔστω τὸ νῦν.

## Κεφάλαιο 2

Ἐπειδὴ δέ τινες εἰσιν οἳ φασιν εἶναί τι δεξιὸν καὶ ἀριστερὸν τοῦ οὐρανοῦ, καθάπερ οἱ καλούμενοι Πυθαγόρειοι (ἐκείνων γὰρ οὗτος ὁ λόγος ἐστίν), σκεπτέον πότερον τοῦτον ἔχει τὸν τρόπον ὥς ἐκεῖνοι λέγουσιν, ἢ μᾶλλον ἐτέρως, εἴπερ δεῖ προσάπτειν τῷ τοῦ παντὸς σώματι ταύτας τὰς ἀρχάς.

Εὐθὺς γὰρ πρῶτον, εἰ τὸ δεξιὸν ὑπάρχει καὶ τὸ ἀριστερόν, ἔτι

πρότερον τὰς προτέρας ὑποληπτέον ὑπάρχειν ἀρχὰς ἐν αὐτῷ. Διώριστα μὲν οὖν περὶ τούτων ἐν τοῖς περὶ τὰς τῶν ζώων κινήσεις διὰ τὸ τῆς φύσεως οἰκεῖα τῆς ἐκείνων εἶναι· φανερώς γὰρ ἐν γε τοῖς ζώοις ὑπάρχοντα φαίνεται τοῖς μὲν πάντα τὰ τοιαῦτα μόρια, λέγω δ' οἷον τό τε δεξιὸν καὶ τὸ ἀριστερόν, τοῖς δ' ἔνια, τοῖς δὲ φυτοῖς τὸ ἄνω καὶ τὸ κάτω μόνον. Εἰ δὲ δεῖ καὶ τῷ οὐρανῷ προσάπτειν τι τῶν τοιούτων, καὶ τὸ πρῶτον, καθάπερ εἵπομεν, ἐν τοῖς ζώοις ὑπάρχον εὐλογον ὑπάρχειν ἐν αὐτῷ· τριῶν γὰρ ὄντων ἕκαστον οἷον ἀρχή τις ἐστίν. Λέγω δὲ τὰ τρία τὸ ἄνω καὶ τὸ κάτω, καὶ τὸ πρόσθιον καὶ τὸ ἀντικείμενον, καὶ τὸ δεξιὸν καὶ τὸ ἀριστερόν· ταύτας γὰρ τὰς διαστάσεις εὐλογον ὑπάρχειν τοῖς σώμασι τοῖς τελείοις πάσας. Ἔστι δὲ τὸ μὲν ἄνω τοῦ μήκους ἀρχή, τὸ δὲ δεξιὸν τοῦ πλάτους, τὸ δ' ἔμπροσθεν τοῦ βάθους. Ἔτι δ' ἄλλως κατὰ τὰς κινήσεις· ἀρχὰς γὰρ ταύτας λέγω ὅθεν ἄρχονται πρῶτον αἱ κινήσεις τοῖς ἔχουσιν. Ἔστι δὲ ἀπὸ μὲν τοῦ ἄνω ἡ αὐξησης, ἀπὸ δὲ τῶν δεξιῶν ἡ κατὰ τόπον, ἀπὸ δὲ τῶν ἔμπροσθεν ἡ κατὰ τὴν αἴσθησιν· ἔμπροσθεν γὰρ λέγω ἐφ' ὃ αἱ αἰσθήσεις.

Διὸ καὶ οὐκ ἐν ἅπαντι σώματι τὸ ἄνω καὶ κάτω καὶ τὸ δεξιὸν καὶ ἀριστερόν καὶ τὸ ἔμπροσθεν καὶ ὀπίσθεν ζητητέον, ἀλλ' ὅσα ἔχει κινήσεως ἀρχὴν ἐν αὐτοῖς ἔμψυχα ὄντα· τῶν γὰρ ἀψύχων ἐν οὐθενὶ ὀρώμεν ὅθεν ἡ ἀρχή τῆς κινήσεως. Τὰ μὲν γὰρ ὅλως οὐ κινεῖται, τὰ δὲ κινεῖται μὲν ἀλλ' οὐ πανταχόθεν ὁμοίως, οἷον τὸ πῦρ ἄνω μό(285a.) νον καὶ ἡ γῆ ἐπὶ τὸ μέσον. Ἀλλ' ἐν μὲν τούτοις λέγομεν τὸ ἄνω καὶ τὸ κάτω καὶ τὸ δεξιὸν καὶ τὸ ἀριστερόν πρὸς ἡμᾶς ἐπαναφέροντες· ἡ γὰρ κατὰ τὰ ἡμέτερα δεξιὰ, ὥσπερ οἱ μάντις, ἡ καθ' ὁμοιότητα τοῖς ἡμετέροις, ὥσπερ τὰ τοῦ ἀνδριάντος, ἡ τὰ ἐναντίως ἔχοντα τῇ θέσει, δεξιὸν μὲν τὸ κατὰ τὸ ἡμέτερον ἀριστερόν, ἀριστερόν δὲ τὸ κατὰ τὸ ἡμέτερον δεξιόν, [καὶ ὀπίσθεν τὸ κατὰ τὸ ἡμέτερον ἔμπροσθεν]. Ἐν αὐτοῖς δὲ τούτοις οὐδεμίαν ὀρώμεν διαφορὰν· ἐὰν γὰρ ἀνάπαλιν στραφῇ, τὰ ἐναντία ἐροῦμεν



δεξιὰ καὶ ἀριστερὰ καὶ ἄνω καὶ κάτω καὶ ἔμπροσθεν καὶ ὀπίσθεν.

Διὸ καὶ τῶν Πυθαγορείων ἄν τις θαυμάσειεν ὅτι δύο μόνας ταύτας ἀρχὰς ἔλεγον, τὸ δεξιὸν καὶ τὸ ἀριστερόν, τὰς δὲ τέτταρας παρέλιπον οὐθὲν ἦττον κυρίας οὐσας· οὐθὲν γὰρ ἐλάττω διαφορὰν ἔχει τὰ ἄνω πρὸς τὰ κάτω καὶ τὰ ἔμπροσθεν πρὸς τὰ ὀπίσθεν ἢ τὰ δεξιὰ πρὸς τὰ ἀριστερὰ ἐν ἅπασιν τοῖς ζώοις. Τὰ μὲν γὰρ τῇ δυνάμει διαφέρει μόνον, τὰ δὲ καὶ τοῖς σχήμασι, καὶ τὸ μὲν ἄνω καὶ τὸ κάτω πᾶσι τοῖς ἐμψύχοις ἐστὶν ὁμοίως ζώοις καὶ φυτοῖς, τὸ δὲ δεξιὸν καὶ τὸ ἀριστερόν οὐκ ἐνυπάρχει τοῖς φυτοῖς.

Ἔτι δ' ὥς τὸ μήκος τοῦ πλάτους πρότερον, εἰ τὸ μὲν ἄνω τοῦ μήκους ἀρχή, τὸ δὲ δεξιὸν τοῦ πλάτους, ἢ δὲ τοῦ προτέρου ἀρχὴ προτέρα, πρότερον ἂν εἴη τὸ ἄνω τοῦ δεξιοῦ κατὰ γένεσιν, ἐπειδὴ πολλαχῶς λέγεται τὸ πρότερον. Πρὸς δὲ τούτοις, εἰ τὸ μὲν ἄνω ἐστὶ τὸ ὄθεν ἡ κίνησις, τὸ δὲ δεξιὸν ἀφ' οὗ, τὸ δ' ἔμπροσθεν ἐφ' ὅ, κἂν οὕτως ἔχοι τινὰ δύναμιν ἀρχῆς τὸ ἄνω πρὸς τὰς ἄλλας ἰδέας.

Διὰ τε δὴ τὸ παραλείπειν τὰς κυριωτέρας ἀρχὰς δίκαιον αὐτοῖς ἐπιτιμᾶν, καὶ διότι ταύτας ἐν ἅπασιν ὁμοίως ἐνόμιζον ὑπάρχειν.

Ἡμῖν δ' ἐπεὶ διώρισται πρότερον ὅτι ἐν τοῖς ἔχουσιν ἀρχὴν κινήσεως αἱ τοιαῦται δυνάμεις ἐνυπάρχουσιν, ὁ δ' οὐρανὸς ἔμψυχος καὶ ἔχει κινήσεως ἀρχήν, δῆλον ὅτι ἔχει καὶ τὸ ἄνω καὶ τὸ κάτω καὶ τὸ δεξιὸν καὶ τὸ ἀριστερόν.

Οὐ δεῖ γὰρ ἀπορεῖν διὰ τὸ σφαιροειδὲς εἶναι τὸ σχῆμα τοῦ παντός, ὅπως ἔσται τούτου τὸ μὲν δεξιὸν τὸ δὲ ἀριστερόν ὁμοίων γ' ὄντων τῶν μο(285b.) ρίων ἀπάντων καὶ κινουμένων τὸν ἅπαντα χρόνον, ἀλλὰ νοεῖν ὥσπερ ἂν εἴ τις, ἐν οἷς ἔχει τὸ

δεξιὸν πρὸς τὸ ἀριστερὸν διαφορὰν καὶ τοῖς σχήμασιν, εἴτα περιθεῖη σφαῖραν· ἔξει μὲν γὰρ τὴν δύναμιν διαφέρουσιν, δόξει δ' οὕτως, διὰ τὴν ὁμοιότητα τοῦ σχήματος. Τὸν αὐτὸν δὲ τρόπον καὶ περὶ τῆς ἀρχῆς τοῦ κινεῖσθαι· καὶ γὰρ εἰ μηδέποτε ἤρξατο, ὅμως ἔχειν ἀναγκαῖον ἀρχήν, ὅθεν ἂν ἤρξατο, εἰ ἤρχετο κινούμενον, καὶ εἰ σταίη, κινήθει ἂν πάλιν.

Λέγω δὲ μῆκος μὲν αὐτοῦ τὸ κατὰ τοὺς πόλους διάστημα, καὶ τῶν πόλων τὸν μὲν ἄνω τὸν δὲ κάτω· διαφορὰν γὰρ ἐν τούτοις μόνοις ὁρῶμεν τῶν ἡμισφαιρίων, τῷ μὴ κινεῖσθαι τοὺς πόλους. Ἄμα δὲ καὶ εἰώθαμεν λέγειν τὰ πλάγια ἐν τῷ κόσμῳ οὐ τὸ ἄνω καὶ τὸ κάτω, ἀλλὰ τὸ παρὰ τοὺς πόλους, ὡς τούτου μήκους ὄντος· τὸ γὰρ εἰς τὸ πλάγιόν ἐστι τὸ παρὰ τὸ ἄνω καὶ τὸ κάτω.

Τῶν δὲ πόλων ὁ μὲν ὑπὲρ ἡμᾶς φαινόμενος τὸ κάτω μέρος ἐστίν, ὁ δ' ἡμῖν ἄδηλος τὸ ἄνω. Δεξιὸν γὰρ ἐκάστου λέγομεν, ὅθεν ἡ ἀρχὴ τῆς κατὰ τόπον κινήσεως· τοῦ δ' οὐρανοῦ ἀρχὴ τῆς περιφορᾶς, ὅθεν αἱ ἀνατολαὶ τῶν ἀστρῶν, ὥστε τοῦτ' ἂν εἴη δεξιόν, οὗ δ' αἱ δύσεις, ἀριστερόν. Εἰ οὖν ἄρχεται ἀπὸ τῶν δεξιῶν καὶ ἐπὶ τὰ δεξιὰ περιφέρεται, ἀνάγκη τὸ ἄνω εἶναι τὸν ἀφανῆ πόλον· εἰ γὰρ ἔσται ὁ φανερός, ἐπ' ἀριστερὰ ἔσται ἡ κίνησις, ὅπερ οὐ φαμεν. Δῆλον τοίνυν ὅτι ὁ ἀφανὴς πόλος ἐστὶ τὸ ἄνω. Καὶ οἱ μὲν ἐκεῖ οἰκοῦντες ἐν τῷ ἄνω εἰσὶν ἡμισφαίριῳ καὶ πρὸς τοῖς δεξιοῖς, ἡμεῖς δ' ἐν τῷ κάτω καὶ πρὸς τοῖς ἀριστεροῖς, ἐναντίως ἢ ὡς οἱ Πυθαγόρειοι λέγουσιν· ἐκεῖνοι γὰρ ἡμᾶς ἄνω ποιοῦσι καὶ ἐν τῷ δεξιῷ μέρει, τοὺς δ' ἐκεῖ κάτω καὶ ἐν τῷ ἀριστερῷ. Συμβαίνει δὲ τὸναντίον.

Ἀλλὰ τῆς μὲν δευτέρας περιφορᾶς, οἷον τῆς τῶν πλανήτων, ἡμεῖς μὲν ἐν τοῖς ἄνω καὶ ἐν τοῖς δεξιοῖς ἐσμεν, ἐκεῖνοι δὲ ἐν τοῖς κάτω καὶ ἐν τοῖς ἀριστεροῖς· ἀνάπαλιν γὰρ τούτοις ἡ ἀρχὴ τῆς κινήσεως ἐστὶ διὰ τὸ ἐναντίας εἶναι τὰς φοράς, ὥστε

συμβαίνειν ἡμᾶς μὲν εἶναι πρὸς τῇ ἀρχῇ, ἐκείνους δὲ πρὸς τῷ τέλει. Περὶ μὲν οὖν τῶν κατὰ τὰς δια(286a.) στάσεις τῶν μορίων καὶ τῶν κατὰ τόπον ὠρισμένων τοσαῦτα εἰρήσθω.

### Κεφάλαιο 3

Ἐπεὶ δ' οὐκ ἔστιν ἐναντία κίνησις ἢ κύκλω τῇ κύκλω, σκεπτέον διὰ τί πλείους εἰσὶ φοραί, καίπερ πόρρωθεν πειρωμένοις ποιεῖσθαι τὴν ζήτησιν, πόρρω δ' οὐχ οὕτω τῷ τόπῳ, πολὺ δὲ μᾶλλον τῷ τῶν συμβεβηκότων αὐτοῖς περὶ πάνπαν ὀλίγων ἔχειν αἴσθησιν. Ὅμως δὲ λέγωμεν.

Ἡ δ' αἰτία περὶ αὐτῶν ἐνθένδε ληπτέα. Ἐκαστόν ἐστιν, ὧν ἐστιν ἔργον, ἔνεκα τοῦ ἔργου. Θεοῦ δ' ἐνέργεια ἀθανασία· τοῦτο δ' ἐστὶ ζωὴ αἰδίου. ὥστ' ἀνάγκη τῷ θεῷ κίνησιν αἰδίου ὑπάρχειν. Ἐπεὶ δ' ὁ οὐρανὸς τοιοῦτος (σῶμα γάρ τι θεῖον), διὰ τοῦτο ἔχει τὸ ἐγκύκλιον σῶμα, ὃ φύσει κινεῖται κύκλω αἰεί.

Διὰ τί οὖν οὐχ ὅλον τὸ σῶμα τοῦ οὐρανοῦ τοιοῦτον; ὅτι ἀνάγκη μένειν τι τοῦ σώματος τοῦ φερομένου κύκλω, τὸ ἐπὶ τοῦ μέσου, τούτου δ' οὐθὲν οἶόν τε μένειν μόριον, οὔθ' ὅλως οὔτ' ἐπὶ τοῦ μέσου. Καὶ γὰρ ἂν ἡ κατὰ φύσιν κίνησις ἦν αὐτοῦ ἐπὶ τὸ μέσον· φύσει δὲ κύκλω κινεῖται· οὐ γὰρ ἂν ἦν αἰδίου ἢ κίνησις· οὐθὲν γὰρ παρὰ φύσιν αἰδίου. Ὑστερον δὲ τὸ παρὰ φύσιν τοῦ κατὰ φύσιν, καὶ ἔκστασις τίς ἐστιν ἐν τῇ γενέσει τὸ παρὰ φύσιν τοῦ κατὰ φύσιν. Ἀνάγκη τοίνυν γῆν εἶναι· τοῦτο γὰρ ἡρεμεῖ ἐπὶ τοῦ μέσου. Νῦν μὲν οὖν ὑποκείσθω τοῦτο, ὕστερον δὲ δειχθήσεται περὶ αὐτοῦ.

Ἀλλὰ μὴν εἰ γῆν, ἀνάγκη καὶ πῦρ εἶναι· τῶν γὰρ ἐναντίων εἰ θάτερον φύσει, ἀνάγκη καὶ θάτερον εἶναι φύσει, ἐάν περ ἡ ἐναντίον, καὶ εἶναί τινα αὐτοῦ φύσιν· ἡ γὰρ αὕτη ὕλη τῶν ἐναντίων, καὶ τῆς στερήσεως πρότερον ἢ κατάφασις (λέγω δ' οἶον τὸ θερμὸν τοῦ ψυχροῦ), ἡ δ' ἡρεμία καὶ τὸ βαρὺ λέγεται

κατὰ στέρησιν κουφότητος καὶ κινήσεως. Ἀλλὰ μὴν εἴπερ ἔστι πῦρ καὶ γῆ, ἀνάγκη καὶ τὰ μεταξὺ αὐτῶν εἶναι σώματα· ἐναντίωσιν γὰρ ἔχει ἕκαστον τῶν στοιχείσων πρὸς ἕκαστον. Ὑποκείσθω δὲ καὶ τοῦτο νῦν, ὥστερον δὲ πειρατέον δεῖξαι. Τούτων δ' ὑπαρχόντων φανερόν ὅτι ἀνάγκη γένεσιν εἶναι διὰ τὸ μηδὲν οἶόν τ' αὐτῶν εἶναι αἶδιον· πάσχει γὰρ καὶ ποιεῖ τὰναντία ὑπ' ἀλλήλων, καὶ φθαρτικὰ ἀλλήλων ἐστίν. Ἔτι δ' οὐκ εὐλογον εἶναί τι κινητὸν αἶδιον, οὐ μὴ ἐνδέχεται εἶναι κατὰ φύσιν τὴν κίνησιν αἶδιον· (286b.) τούτων δ' ἔστι κίνησις. Ὅτι μὲν τοίνυν ἀναγκαῖον εἶναι γένεσιν, ἐκ τούτων δῆλον.

Εἰ δὲ γένεσιν, ἀναγκαῖον καὶ ἄλλην εἶναι φοράν, ἢ μίαν ἢ πλείους· κατὰ γὰρ τὴν τοῦ ὅλου ὡσαύτως ἀναγκαῖον ἔχειν τὰ στοιχεῖα τῶν σωμάτων πρὸς ἄλληλα. Λεχθήσεται δὲ καὶ περὶ τούτου ἐν τοῖς ἐπομένοις σαφέστερον. Νῦν δὲ τοσοῦτόν ἐστι δῆλον, διὰ τίνα αἰτίαν πλείω τὰ ἐγκύκλιά ἐστι σώματα, ὅτι ἀνάγκη γένεσιν εἶναι, γένεσιν δ', εἴπερ καὶ πῦρ, τοῦτο δὲ καὶ τᾶλλα, εἴπερ καὶ γῆν· ταύτην δ' ὅτι ἀνάγκη μένειν τι ἀεί, εἴπερ καὶ κινεῖσθαι τι ἀεί.

## 80">Κεφάλαιο 8

άρ].

## Κεφάλαιο 4

Σχῆμα δ' ἀνάγκη σφαιροειδὲς ἔχειν τὸν οὐρανόν· τοῦτο γὰρ οἰκειότατόν τε τῇ οὐσίᾳ καὶ τῇ φύσει πρῶτον. Εἵπωμεν δὲ καθόλου περὶ τῶν σχημάτων, τὸ ποῖόν ἐστι πρῶτον, καὶ ἐν ἐπιπέδοις καὶ ἐν στερεοῖς. Ἄπαν δὴ σχῆμα ἐπίπεδον ἢ εὐθύγραμμόν ἐστιν ἢ περιφερόγραμμον. Καὶ τὸ μὲν εὐθύγραμμον ὑπὸ πλειόνων περιέχεται γραμμῶν, τὸ δὲ περιφερόγραμμον ὑπὸ μιᾶς. Ἐπεὶ δὲ πρότερον [τῇ φύσει] ἐν ἑκάστω γένει τὸ ἐν τῶν πολλῶν καὶ τὸ ἀπλοῦν τῶν συνθέτων, πρῶτον ἂν εἴη τῶν ἐπιπέδων σχημάτων ὁ κύκλος.

Ἔτι δὲ εἵπερ τέλειόν ἐστιν οὗ μηδὲν ἔξω τῶν αὐτοῦ λαβεῖν δυνατόν, ὥσπερ ὥριστα πρότερον, καὶ τῇ μὲν εὐθείᾳ πρόσθεσίς ἐστιν ἀεί, τῇ δὲ τοῦ κύκλου οὐδέποτε, φανερόν ὅτι τέλειος ἂν εἴη ἢ περιέχουσα τὸν κύκλον· ὥστ' εἰ τὸ τέλειον πρότερον τοῦ ἀτελοῦς, καὶ διὰ ταῦτα πρότερον ἂν εἴη τῶν σχημάτων ὁ κύκλος.

Ὡσαύτως δὲ καὶ ἡ σφαῖρα τῶν στερεῶν· μόνη γὰρ περιέχεται μιᾷ ἐπιφανείᾳ, τὰ δ' εὐθύγραμμα πλείοσιν· ὥς γὰρ ἔχει ὁ κύκλος ἐν τοῖς ἐπιπέδοις, οὕτως ἡ σφαῖρα ἐν τοῖς στερεοῖς.

Ἔτι δὲ καὶ οἱ διαιροῦντες εἰς ἐπίπεδα καὶ ἐξ ἐπιπέδων τὰ σώματα γεννῶντες μεμαρτυρηκέναι φαίνονται τούτοις· μόνην γὰρ τῶν στερεῶν οὐ διαιροῦσι τὴν σφαῖραν ὥς οὐκ ἔχουσιν πλείους ἐπιφανείας ἢ μίαν· ἡ γὰρ εἰς τὰ ἐπίπεδα διαίρεσις οὐχ ὥς ἂν τέμνων τις εἰς τὰ μέρη διέλοι τὸ ὅλον, τοῦτον διαιρεῖται τὸν τρόπον, ἀλλ' ὥς εἰς ἕτερα τῷ εἶδει.

Ὅτι μὲν οὖν πρῶτόν ἐστιν ἡ σφαῖρα τῶν στερεῶν σχημάτων, δῆλον. Ἔστι δὲ καὶ κατὰ τὸν ἀριθμὸν τὴν τάξιν ἀποδιδούσιν οὕτω τιθεμένοις εὐλογώτατον, τὸν μὲν κύκλον κατὰ τὸ ἓν, τὸ δὲ τρίγωνον (287a.) κατὰ τὴν δυάδα, ἐπειδὴ ὀρθαὶ δύο. Ἐὰν δὲ τὸ ἓν κατὰ τὸ τρίγωνον, ὁ κύκλος οὐκέτι ἔσται σχῆμα.

Ἐπεὶ δὲ τὸ μὲν πρῶτον σχῆμα τοῦ πρώτου σώματος, πρῶτον δὲ σῶμα τὸ ἐν τῇ ἐσχάτῃ περιφορᾷ, σφαιροειδὲς ἂν εἴη τὸ τὴν κύκλῳ περιφερόμενον φοράν. Καὶ τὸ συνεχὲς ἄρα ἐκείνω· τὸ γὰρ τῷ σφαιροειδεῖ συνεχὲς σφαιροειδὲς. Ὡσαύτως δὲ καὶ τὰ πρὸς τὸ μέσον τούτων· τὰ γὰρ ὑπὸ τοῦ σφαιροειδοῦς περιεχόμενα καὶ ἀπτόμενα ὅλα σφαιροειδῇ ἀνάγκῃ εἶναι· τὰ δὲ κάτω τῆς τῶν πλανήτων ἄπτεται τῆς ἐπάνω σφαίρας. Ὡστε σφαιροειδὴς ἂν εἴη πᾶσα· πάντα γὰρ ἄπτεται καὶ συνεχῇ ἐστὶ ταῖς σφαίραις.

Ἔτι δὲ ἐπεὶ φαίνεται καὶ ὑπόκειται κύκλῳ περιφέρεσθαι τὸ πᾶν, δέδεικται δ' ὅτι τῆς ἐσχάτης περιφορᾶς οὔτε κενὸν ἐστὶν ἕξωθεν οὔτε τόπος, ἀνάγκη καὶ διὰ ταῦτα σφαιροειδῆ εἶναι αὐτόν. Εἰ γὰρ ἔσται εὐθύγραμμος, συμβήσεται καὶ τόπον εἶναι ἕξω καὶ σῶμα καὶ κενόν. Κύκλῳ γὰρ στρεφόμενον τὸ εὐθέγραμμον οὐδέποτε τὴν αὐτὴν ἐφέξει χώραν, ἀλλ' ὅπου πρότερον ἦν σῶμα, νῦν οὐκ ἔσται, καὶ οὐ νῦν οὐκ ἔστι, πάλιν ἔσται, διὰ τὴν παράλλαξιν τῶν γωνιῶν.

Ὅμοίως δὲ κἂν εἴ τι ἄλλο σχῆμα γένοιτο μὴ ἴσας ἔχον τὰς ἐκ τοῦ μέσου γραμμάς, οἷον φακοειδὲς ἢ ῥοειδές· ἐν ἅπασιν γὰρ συμβήσεται καὶ τόπον ἕξω καὶ κενὸν εἶναι τῆς φορᾶς, διὰ τὸ μὴ τὴν αὐτὴν χώραν κατέχειν τὸ ὅλον. Ἔτι δ' εἰ τῶν μὲν κινήσεων τὸ μέτρον ἢ τοῦ οὐρανοῦ φορὰ διὰ τὸ εἶναι μόνη συνεχῆς καὶ ὁμαλῆς καὶ ἀίδιος, ἐν ἐκάστῳ δὲ μέτρον τὸ ἐλάχιστον, ἐλαχίστη δὲ κίνησις ἢ ταχίστη, δηλὸν ὅτι ταχίστη ἂν εἴη πασῶν τῶν κινήσεων ἢ τοῦ οὐρανοῦ κίνησις.

Ἀλλὰ μὴν τῶν ἀφ' αὐτοῦ ἐφ' αὐτὸ ἐλάχιστη ἐστὶν ἢ τοῦ κύκλου γραμμή· κατὰ δὲ τὴν ἐλαχίστην ταχίστη ἢ κίνησις· ὥστ' εἰ ὁ οὐρανὸς κύκλῳ τε φέρεται καὶ τάχιστα κινεῖται, σφαιροειδῆ αὐτὸν ἀνάγκη εἶναι.

Λάβοι δ' ἂν τις καὶ ἐκ τῶν περὶ τὸ μέσον ἰδρυμένων σωμάτων ταύτην τὴν πίστιν. Εἰ γὰρ τὸ μὲν ὕδωρ ἐστὶ περὶ τὴν γῆν, ὁ δ' ἀήρ περὶ τὸ ὕδωρ, τὸ δὲ πῦρ περὶ τὸν ἀέρα, καὶ τὰ ἄνω σώματα κατὰ τὸν αὐτὸν λόγον (συνεχῆ μὲν γὰρ οὐκ ἔστιν, ἄπτεται δὲ (287b.) τούτων), ἢ δὲ τοῦ ὕδατος ἐπιφάνεια σφαιροειδὴς ἐστὶν, τὸ δὲ τῷ σφαιροειδεῖ συνεχὲς ἢ κείμενον περὶ τὸ σφαιροειδὲς καὶ αὐτὸ τοιοῦτον ἀναγκαῖον εἶναι· ὥστε κἂν διὰ τοῦτο φανερόν εἴη ὅτι σφαιροειδὴς ἐστὶν ὁ οὐρανός.

Ἀλλὰ μὴν ὅτι γε ἢ τοῦ ὕδατος ἐπιφάνεια τοιαύτη φανερόν, ὑπόθεσιν λαμβάνουσιν ὅτι πέφυκεν αἰεὶ συρρεῖν τὸ ὕδωρ εἰς τὸ κοιλότερον· κοιλότερον δὲ ἐστὶ τὸ τοῦ κέντρου ἐγγύτερον. Ἦχθωσαν οὖν ἐκ τοῦ κέντρου ἡ ΑΒ καὶ ἡ ΑΓ, καὶ ἐπεζεύχθω ἐφ' ἧς ΒΓ. Ἡ οὖν ἀχθεῖσα ἐπὶ τὴν βάσιν, ἐφ' ἧς ΑΔ, ἐλάττων ἐστὶ τῶν ἐκ τοῦ κέντρου· κοιλότερος ἄρα ὁ τόπος. Ὡστε περιρρεύσεται τὸ ὕδωρ, ἕως ἂν ἴσασθῇ. Ἰση δὲ ταῖς ἐκ τοῦ κέντρου ἡ ΑΕ. Ὡστ' ἀνάγκη πρὸς ταῖς ἐκ τοῦ κέντρου εἶναι τὸ ὕδωρ· τότε γὰρ ἡρεμήσει. Ἡ δὲ τῶν ἐκ τοῦ κέντρου ἀπτομένη περιφερὴς· σφαιροειδὴς ἄρα ἢ τοῦ ὕδατος ἐπιφάνεια, ἐφ' ἧς ΒΕΓ.

Ὅτι μὲν οὖν σφαιροειδὴς ἐστὶν ὁ κόσμος, δηλὸν ἐκ τούτων, καὶ ὅτι κατ'

ἀκρίβειαν ἔντορνος οὕτως ὥστε μηθὲν μήτε χειρόκμητον ἔχειν παραπλησίως μήτ' ἄλλο μηθὲν τῶν ἡμῖν ἐν ὀφθαλμοῖς φαινομένων. Ἐξ ὧν γὰρ τὴν σύστασιν εἴληφεν, οὐδὲν οὕτω δυνατὸν ὁμαλότητα δέξασθαι καὶ ἀκρίβειαν ὥς ἡ τοῦ περίξ σώματος φύσις· δῆλον γὰρ ὡς ἀνάλογον ἔχει, καθάπερ ὕδωρ πρὸς γῆν, καὶ τὰ πλεῖον ἀεὶ ἀπέχοντα τῶν συστοίχων.

## Κεφάλαιο 5

Ἐπεὶ δ' ἔστι διχῶς ἐπὶ τοῦ κύκλου κινηθῆναι, οἷον ἀπὸ τοῦ Α τὴν μὲν ἐπὶ τὸ Β τὴν δ' ἐπὶ τὸ Γ, ὅτι μὲν οὖν οὐκ εἰσὶν ἐναντία αὐταί, πρότερον εἴρηται. Ἀλλ' εἰ μηδὲν ὡς ἔτυχε μηδ' ἀπὸ ταῦτομάτου ἐνδέχεται ἐν τοῖς αἰδίοις εἶναι, ὁ δ' οὐρανὸς αἰδῖος καὶ ἡ κύκλῳ φορά, διὰ τίνα ποτ' αἰτίαν ἐπὶ θάτερα φέρεται, ἀλλ' οὐκ ἐπὶ θάτερα; ἀνάγκη γὰρ καὶ τοῦτο ἢ ἀρχὴν εἶναι ἢ εἶναι αὐτοῦ ἀρχήν.

Ἴσως μὲν οὖν τὸ περὶ ἐνίων ἀποφαίνεσθαι τι πειρᾶσθαι καὶ τὸ περὶ πάντων καὶ τὸ παριέναι μηθὲν τάχ' ἂν δόξειεν εἶναι σημεῖον ἢ πολλῆς εὐηθείας ἢ πολλῆς προθυμίας. Οὐ μὴν δίκαιόν γε πᾶσιν ὁμοίως ἐπιτιμᾶν, ἀλλ' ὁρᾶν δεῖ τὴν αἰτίαν τοῦ λέγειν τίς ἐστίν, ἔτι δὲ πῶς ἔχων τῷ πιστεύειν, πότερον ἀνθρωπίνως ἢ καρτερώτερον. Τὰς μὲν οὖν ἀκριβεστέρας ἀνάγκας, ὅταν (288a.) τις ἐπιτύχη, τότε χάριν ἔχειν δεῖ τοῖς εὐρίσκουσι, νῦν δὲ τὸ φαινόμενον ῥητέον.

Εἰ γὰρ ἡ φύσις ἀεὶ ποιεῖ τῶν ἐνδεχομένων τὸ βέλτιστον, ἔστι δὲ καθάπερ τῶν ἐπὶ τῆς εὐθείας φορῶν ἢ πρὸς τὸν ἄνω τόπον τιμιώτερα (θειότερος γὰρ τόπος ὁ ἄνω τοῦ κάτω), τὸν αὐτὸν τρόπον καὶ ἡ εἰς τὸ πρόσθεν τῆς εἰς τοῦπισθεν, ἔχει, εἴπερ καὶ τὸ δεξιὸν καὶ τὸ ἀριστερόν, καθάπερ ἐλέχθη πρότερον, (καὶ μαρτυρεῖ δ' ἡ ῥηθεῖσα ἀπορία ὅτι ἔχει) τὸ πρότερον καὶ ὕστερον· αὕτη γὰρ ἡ αἰτία λύει τὴν ἀπορίαν. Εἰ γὰρ ἔχει ὡς ἐνδέχεται βέλτιστα, αὕτη ἂν εἴη αἰτία καὶ τοῦ εἰρημένου· βέλτιστον γὰρ κινεῖσθαι ἀπλῆν τε κίνησιν καὶ ἄπαυστον, καὶ ταύτην ἐπὶ τὸ τιμιώτερον.

## Κεφάλαιο 6

Περὶ δὲ τῆς κινήσεως αὐτοῦ, ὅτι ὁμαλῆς ἐστὶ καὶ οὐκ ἀνώματος, ἐφεξῆς ἂν εἴη τῶν εἰρημένων διελθεῖν. Λέγω δὲ τοῦτο περὶ τοῦ πρώτου οὐρανοῦ καὶ περὶ τῆς πρώτης φορᾶς· ἐν γὰρ τοῖς ὑποκάτω πλείους ἤδη αἱ φοραὶ συνεληλύθασιν εἰς ἓν.

Εἰ γὰρ ἀνωμάλως κινήσεται, δῆλον ὅτι ἐπίτασις ἔσται καὶ ἀκμὴ καὶ ἄνεσις τῆς φορᾶς· ἅπαντα γὰρ ἢ ἀνώμαλος φορὰ καὶ ἄνεσιν ἔχει καὶ ἐπίτασιν καὶ ἀκμὴν. Ἀκμὴ δ' ἐστὶν ἢ ὅθεν φέρεται ἢ οἷ ἢ ἀνὰ μέσον, οἷον ἴσως τοῖς μὲν κατὰ φύσιν οἷ φέρονται, τοῖς δὲ παρὰ φύσιν ὅθεν, τοῖς δὲ ῥιπτουμένοις ἀνὰ μέσον. Τῆς δὲ κύκλῳ φορᾶς οὐκ ἔστιν οὔτε ὅθεν οὔτε οἷ οὔτε μέσον· οὔτε γὰρ ἀρχὴ οὔτε πέρας οὔτε μέσον ἐστὶν αὐτῆς ἀπλῶς· τῷ τε γὰρ χρόνῳ αἰδῖος καὶ τῷ μήκει συνηγμένα καὶ ἄκλαστος· ὥστ' εἰ μὴ ἐστὶν ἀκμὴ αὐτοῦ τῆς φορᾶς, οὐδ' ἂν ἀνωμαλία εἴη· ἢ γὰρ ἀνωμαλία γίγνεται διὰ τὴν ἄνεσιν καὶ ἐπίτασιν.

Ἔτι δ' ἐπεὶ πᾶν τὸ κινούμενον ὑπὸ τινος κινεῖται, ἀνάγκη τὴν ἀνωμαλίαν γίνεσθαι τῆς κινήσεως ἢ διὰ τὸ κινεῖν ἢ διὰ τὸ κινούμενον ἢ δι' ἄμφω· εἴτε γὰρ τὸ κινεῖν μὴ τῇ αὐτῇ δυνάμει κινεῖ, εἴτε τὸ κινούμενον ἄλλοιοῖτο καὶ μὴ διαμένει τὸ αὐτό, εἴτε ἄμφω μεταβάλλοι, οὐθὲν κωλύει ἀνωμάλως κινεῖσθαι τὸ κινούμενον. Οὐθὲν δὲ τούτων δυνατόν περὶ τὸν οὐρανὸν γενέσθαι· τὸ μὲν γὰρ κινούμενον δέδεικται ὅτι πρῶτον καὶ ἀπλοῦν καὶ (288b.) ἀγέννητον καὶ ἄφθαρτον καὶ ὅλως ἀμετάβλητον, τὸ δὲ κινεῖν πολὺ μᾶλλον εὐλογον εἶναι τοιοῦτον· τὸ γὰρ πρῶτον τοῦ πρώτου καὶ τὸ ἀπλοῦν τοῦ ἀπλοῦ καὶ τὸ ἄφθαρτον καὶ ἀγέννητον τοῦ ἀφθάρτου καὶ ἀγενήτου κινητικόν. Ἐπεὶ οὖν τὸ κινούμενον οὐ μεταβάλλει σῶμα ὄν, οὐδ' ἂν τὸ κινεῖν μεταβάλλοι ἀσώματον ὄν. Ὡστε καὶ τὴν φορὰν ἀδύνατον ἀνώμαλον εἶναι.

Καὶ γὰρ εἰ γίνεται ἀνώμαλος, ἥτοι ὅλη μεταβάλλει καὶ ὅτε μὲν γίνεται θάπτων ὅτε δὲ βραδυτέρα πάλιν, ἢ τὰ μέρη αὐτῆς. Τὰ μὲν οὖν μέρη ὅτι οὐκ ἔστιν ἀνώμαλα, φανερόν· ἥδη γὰρ ἂν ἐγεγόνει διάστασις τῶν ἄστρον ἐν τῷ ἀπείρῳ χρόνῳ, τοῦ μὲν θάπτων κινουμένου τοῦ δὲ βραδυτέρου. Οὐ φαίνεται δ' οὐθὲν ἄλλως ἔχον τοῖς διαστήμασιν. Ἀλλὰ μὴν οὐδὲ τὴν ὅλην ἐγχωρεῖ μεταβάλλειν· ἢ γὰρ ἄνεσις ἐκάστου γίνεται δι' ἀδυναμίαν, ἢ δ' ἀδυναμία παρὰ φύσιν· καὶ γὰρ αἱ ἐν τοῖς ζώοις ἀδυναμίαι πᾶσαι παρὰ φύσιν εἰσὶν, οἷον γῆρας καὶ φθίσις. Ὅλη γὰρ ἴσως ἢ σύστασις τῶν ζώων ἐκ τοιούτων συνέστηκεν ἃ διαφέρει τοῖς οἰκείοις τόποις· οὐθὲν γὰρ τῶν μερῶν ἔχει τὴν αὐτοῦ χώραν.

Εἰ οὖν ἐν τοῖς πρώτοις μὴ ἐστὶ τὸ παρὰ φύσιν (ἀπλᾶ γὰρ καὶ ἁμικτα καὶ ἐν τῇ οἰκείᾳ χώρᾳ, καὶ οὐθὲν αὐτοῖς ἐναντίον), οὐδ' ἂν ἀδυναμία εἴη, ὥστ' οὐδ' ἄνεσις οὐδ' ἐπίτασις· εἰ γὰρ ἐπίτασις, καὶ ἄνεσις.

Ἔτι δὲ καὶ ἄλογον ἄπειρον χρόνον ἀδύνατον εἶναι τὸ κινεῖν, καὶ πάλιν ἄλλον ἄπειρον δυνατόν· οὐθὲν γὰρ φαίνεται ὃν ἄπειρον χρόνον παρὰ φύσιν



(ἢ δ' ἀδυναμία παρὰ φύσιν), οὐδὲ τὸν ἴσον χρόνον παρὰ φύσιν καὶ κατὰ φύσιν, οὐδ' ὅλως δυνατόν καὶ ἀδύνατον· ἀνάγκη δ', εἰ ἀνίησιν ἢ κίνησις, ἅπειρον ἀνιέναι χρόνον. Ἀλλὰ μὴν οὐδ' ἐπιτείνειν ἀεὶ ἢ πάλιν ἀνιένται δυνατόν· ἅπειρος γὰρ ἂν εἴη καὶ ἀόριστος ἢ κίνησις, ἅπασαν δέ φαμεν ἕκτινος εἶς τι εἶναι καὶ ὠρισμένην.

Ἔτι δ' εἴ τις λάβοι εἶναι τινα χρόνον ἐλάχιστον, οὗ οὐκ ἐνδέχεται ἐν ἐλάττω κινήθῃναι τὸν οὐρανόν (ὥσπερ γὰρ οὐδὲ κιθαρίσαι οὐδὲ βαδίσαι ἐν ὀτῳοῦν χρόνῳ δυνατόν, ἀλλ' ἔστιν ἐκάστης πράξεως ὠρισμένος ὁ ἐλάχιστος χρόνος κατὰ τὸ μὴ ὑπερβάλλειν, οὕτως οὐδὲ κινήθῃναι τὸν οὐρανόν (289a.) ἐν ὀτῳοῦν χρόνῳ δυνατόν)· εἰ οὖν τοῦτ' ἀληθές, οὐκ ἂν εἴη ἀεὶ ἐπίτασις τῆς φορᾶς (εἰ δὲ μὴ ἐπίτασις, οὐδ' ἄνεσις· ὁμοίως γὰρ ἄμφω καὶ θάτερον), εἴπερ τῷ αὐτῷ τε ἐπιτείνει τάχει ἢ μείζονι, καὶ ἅπειρον χρόνον.

Λείπεται δὴ λέγειν ἐναλλάξ εἶναι τῇ κινήσει τὸ θᾶπτον καὶ τὸ βραδύτερον· τοῦτο δὲ παντελῶς ἄλογον καὶ πλάσματι ὅμοιον. Ἔτι δὲ καὶ τὸ μὴ λανθάνειν ἐπὶ τούτων εὐλογώτερον· εὐαισθητότερα γὰρ τὰ παρ' ἄλληλα τιθέμενα.

Ὅτι μὲν οὖν εἶς τε μόνος ἐστὶν ὁ οὐρανός, καὶ οὗτος ἀγέννητος καὶ αἰδῖος, ἔτι δὲ κινούμενος ὁμαλῶς, ἐπὶ τοσοῦτον ἡμῖν εἰρήσθω.

## Κεφάλαιο 7

Περὶ δὲ τῶν καλουμένων ἄστρον ἐπόμενον ἂν εἴη λέγειν, ἐκ τίνων τε συνεστᾶσι καὶ ἐν ποίοις σχήμασι καὶ τίνες αἱ κινήσεις αὐτῶν.

Εὐλογώτατον δὴ καὶ τοῖς εἰρημένοις ἐπόμενον ἡμῖν τὸ ἕκαστον τῶν ἄστρον ποιεῖν ἐκ τούτου τοῦ σώματος ἐν ᾧ τυγχάνει τὴν φορὰν ἔχον, ἐπειδὴ ἔφαμέν τι εἶναι ὃ κύκλῳ φέρεσθαι πέφυκεν· ὥσπερ γὰρ οἱ πύρινα φάσκοντες εἶναι διὰ τοῦτο λέγουσιν, ὅτι τὸ ἄνω σῶμα πῦρ εἶναι φασιν, ὡς εὐλογον ὃν ἕκαστον συνεστάναι ἐκ τούτων ἐν οἷς ἕκαστόν ἐστιν, ὁμοίως καὶ ἡμεῖς λέγομεν.

Ἡ δὲ θερμότης ἀπ' αὐτῶν καὶ τὸ φῶς γίνεται παρεκτριβομένου τοῦ ἀέρος ὑπὸ τῆς ἐκείνων φορᾶς. Πέφυκε γὰρ ἢ κίνησις ἐκπυροῦν καὶ ξύλα καὶ λίθους καὶ σίδηρον· εὐλογώτερον οὖν τὸ ἐγγύτερον τοῦ πυρός, ἐγγύτερον δὲ ὁ ἀήρ· οἷον καὶ ἐπὶ τῶν φερομένων βελῶν· ταῦτα γὰρ αὐτὰ ἐκπυροῦνται οὕτως ὥστε τήκεσθαι τὰς μολυβδίδας, καὶ ἐπείπερ αὐτὰ ἐκπυροῦνται, ἀνάγκη καὶ τὸν κύκλῳ αὐτῶν ἀέρα τὸ αὐτὸ τοῦτο πάσχειν. Ταῦτα μὲν οὖν αὐτὰ ἐκθερμαίνεται διὰ τὸ ἐν ἀέρι φέρεσθαι, ὃς διὰ τὴν πληγὴν τῇ κινήσει γίγνεται

πῦρ.

Τῶν δὲ ἄνω ἕκαστον ἐν τῇ σφαίρᾳ φέρεται, ὥστ' αὐτὰ μὲν μὴ ἐκπυροῦσθαι, τοῦ δ' αἰέρος ὑπὸ τὴν τοῦ κυκλικοῦ σώματος σφαῖραν ὄντος ἀνάγκη φερομένης ἐκείνης ἐκθερμαίνεσθαι, καὶ ταύτῃ μάλιστα ἢ ὁ ἥλιος τετύχηκεν ἐνδεδεμένος· διὸ δὲ πλησιάζοντός τε αὐτοῦ καὶ ἀνίσχοντος καὶ ὑπὲρ ἡμῶν ὄντος γίγνεται ἡ θερμότης. Ὅτι μὲν οὖν οὔτε πύρινά ἐστιν οὔτ' ἐν πυρὶ φέρεται, ταῦθ' ἡμῖν εἰρήσθω περὶ αὐτῶν.

## Κεφάλαιο 8

(289b.) Ἐπεὶ δὲ φαίνεται καὶ τὰ ἄστρα μεθιστάμενα καὶ ὅλος ὁ οὐρανός, ἀναγκαῖον ἦτοι ἡρεμοῦντων ἀμφοτέρων γίνεσθαι τὴν μεταβολήν, ἢ κινουμένων, ἢ τοῦ μὲν ἡρεμοῦντος τοῦ δὲ κινουμένου.

Ἀμφοτέρα μὲν τοίνυν ἡρεμεῖν ἀδύνατον ἡρεμούσης γε τῆς γῆς· οὐ γὰρ ἂν ἐγίγνετο τὰ φαινόμενα. Τὴν δὲ γῆν ὑποκείσθω ἡρεμεῖν. Λείπεται δὲ ἀμφοτέρα κινεῖσθαι, ἢ τὸ μὲν κινεῖσθαι τὸ δ' ἡρεμεῖν.

Εἰ μὲν οὖν ἀμφοτέρα κινήσεται, ἄλογον τὸ ταῦτ' ἀτάχῃ τῶν ἄστρον εἶναι καὶ τῶν κύκλων· ἕκαστον γὰρ δὴ ὁμοταχὲς ἔσται τῷ κύκλῳ καθ' ὃν φέρεται. Φαίνεται γὰρ ἅμα τοῖς κύκλοις καθιστάμενα πάλιν εἰς τὸ αὐτό. Συμβαίνει οὖν ἅμα τό τε ἄστρον διεληλυθέναι τὸν κύκλον καὶ τὸν κύκλον ἐννηνέχθαι τὴν αὐτοῦ φοράν, διεληλυθότα τὴν περιφέρειαν. Οὐκ ἔστι δ' εὐλογον τὸ τὸν αὐτὸν λόγον ἔχειν τὰ ἀτάχῃ τῶν ἄστρον καὶ τὰ μεγέθη τῶν κύκλων. Τοὺς μὲν γὰρ κύκλους οὐθὲν ἄτοπον ἄλλ' ἀναγκαῖον ἀνάλογον ἔχειν τὰ ἀτάχῃ τοῖς μεγέθεσι, τῶν δ' ἄστρον ἕκαστον τῶν ἐν τούτοις οὐθαμῶς εὐλογον· εἴτε γὰρ ἐξ ἀνάγκης τὸ τὸν μείζω κύκλον φερόμενον θᾶττον ἔσται, δῆλον ὅτι καὶ μετατεθῇ τὰ ἄστρα εἰς τοὺς ἀλλήλων κύκλους, τὸ μὲν ἔσται θᾶττον τὸ δὲ βραδύτερον (οὕτω δ' οὐκ ἂν ἔχοιεν οἰκείαν κίνησιν, ἀλλὰ φέροντ' ἂν ὑπὸ τῶν κύκλων), εἴτε ἀπὸ ταῦτομάτου συνέπεσεν, οὐδ' οὕτως εὐλογον ὥστ' ἐν ἅπασιν ἅμα τὸν τε κύκλον εἶναι μείζω καὶ τὴν φοράν θάττω τοῦ ἐν αὐτῷ ἄστρου· τὸ μὲν γὰρ ἐν ἡ δύο τοῦτον τὸν τρόπον ἔχειν οὐθὲν ἄτοπον, τὸ δὲ πάνθ' ὁμοίως πλάσματι ἔοικεν. Ἄμα δὲ καὶ οὐκ ἔστιν ἐν τοῖς φύσει τὸ ὥς ἔτυχεν, οὐδὲ τὸ πανταχοῦ καὶ πᾶσιν ὑπάρχον τὸ ἀπὸ τύχης.

Ἀλλὰ μὴν πάλιν εἰ οἱ μὲν κύκλοι μένουσιν, αὐτὰ δὲ τὰ ἄστρα κινεῖται, τὰ αὐτὰ καὶ ὁμοίως ἔσται ἄλογα· συμβήσεται γὰρ θᾶττον κινεῖσθαι τὰ ἔξω, καὶ τὰ ἀτάχῃ εἶναι κατὰ τὰ μεγέθη τῶν κύκλων.

Ἐπεὶ τοίνυν οὗτ' ἀμφοτέρωθεν κινεῖσθαι εὐλογον οὔτε τὸ ἕτερον μόνον, λείπεται τοὺς μὲν κύκλους κινεῖσθαι, τὰ δὲ ἄστρα ἡρεμεῖν καὶ ἐνδεδεμένα τοῖς κύκλοις φέρεσθαι· μόνως γὰρ οὕτως οὐθὲν ἄλογον συμβαίνει· τό τε γὰρ θᾶπτον εἶναι τοῦ μείζονος κύκλου τὸ τάχος εὐλογον περὶ τὸ αὐτὸ κέντρον ἐνδεδεμένων (290a.) (ὥσπερ γὰρ ἐν τοῖς ἄλλοις τὸ μείζον σῶμα θᾶπτον φέρεται τὴν οἰκείαν φοράν, οὕτως καὶ ἐν τοῖς ἐγκυκλίοις· μείζον γὰρ τῶν ἀφαιρουμένων ὑπὸ τῶν ἐκ τοῦ κέντρου τὸ τοῦ μείζονος κύκλου τμήμα, ὥστ' εὐλόγως ἐν τῷ ἴσῳ χρόνῳ ὁ μείζων περιοισθήσεται κύκλος), τό τε μὴ διασπᾶσθαι τὸν οὐρανὸν διὰ τε τοῦτο συμβήσεται καὶ ὅτι δέδεικται συνεχῆς ὂν τὸ ὅλον.

Ἔτι δ' ἐπεὶ σφαιροειδῆ τὰ ἄστρα, καθάπερ οἱ τ' ἄλλοι φασὶ καὶ ἡμῖν ὁμολογούμενον εἶπεῖν, ἐξ ἐκείνου γε τοῦ σώματος γεννῶσιν, τοῦ δὲ σφαιροειδοῦς δύο κινήσεις εἰςὶ καθ' αὐτό, κύλισις καὶ δίνησις, εἴπερ οὖν κινεῖται τὰ ἄστρα δι' αὐτῶν, τὴν ἑτέραν ἂν κινεῖτο τούτων· ἄλλ' οὐδετέραν φαίνεται.

Δινοούμενα μὲν γὰρ ἂν ἔμενεν ἐν ταύτῳ καὶ οὐ μετέβαλλε τὸν τόπον, ὅπερ φαίνεται τε καὶ πάντες φασίν. Ἔτι δὲ πάντα μὲν εὐλογον τὴν αὐτὴν κίνησιν κινεῖσθαι, μόνος δὲ δοκεῖ τῶν ἄστρον ὁ ἥλιος τοῦτο δρᾶν ἀνατέλλων καὶ δύων, καὶ οὗτος οὐ δι' αὐτὸν ἀλλὰ διὰ τὴν ἀπόστασιν τῆς ἡμετέρας ὀψεως· ἢ γὰρ ὄψις ἀποτεينوμένη μακρὰν ἐλίσσεται διὰ τὴν ἀσθένειαν. Ὅπερ αἴτιον ἴσως καὶ τοῦ στίλβειν φαίνεσθαι τοὺς ἀστέρας τοὺς ἐνδεδεμένους, τοὺς δὲ πλάνητας μὴ στίλβειν· οἱ μὲν γὰρ πλάνητες ἐγγύς εἰσιν, ὥστ' ἐγκρατὴς οὖσα πρὸς αὐτοὺς ἀφικνεῖται ἢ ὄψις· πρὸς δὲ τοὺς μένοντας κραδαίνεται διὰ τὸ μῆκος, ἀποτεينوμένη πόρρω λίαν. Ὁ δὲ τρόμος αὐτῆς ποιεῖ τοῦ ἄστρου δοκεῖν εἶναι τὴν κίνησιν· οὐθὲν γὰρ διαφέρει κινεῖν τὴν ὄψιν ἢ τὸ ὀρώμενον.

Ἀλλὰ μὴν ὅτι οὐδὲ κυλίνεται τὰ ἄστρα, φανερόν· τὸ μὲν γὰρ κυλιόμενον στρέφεσθαι ἀνάγκη, τῆς δὲ σελήνης αἰεὶ δῆλόν ἐστι τὸ καλούμενον πρόσωπον. Ὡστ' ἐπεὶ κινούμενα μὲν δι' αὐτῶν τὰς οἰκείας κινεῖσθαι κινήσεις εὐλογον, ταύτας δ' οὐ φαίνεται κινούμενα, δῆλον ὅτι οὐκ ἂν κινεῖτο δι' αὐτῶν.

Πρὸς δὲ τούτοις ἄλογον τὸ μηθὲν ὄργανον αὐτοῖς ἀποδοῦναι τὴν φύσιν πρὸς τὴν κίνησιν (οὐθὲν γὰρ ὡς ἔτυχε ποιεῖ ἢ φύσις), οὐδὲ τῶν μὲν ζώων φροντίσαι, τῶν δ' οὕτω τιμίων ὑπεριδεῖν, ἄλλ' ἔοικεν ὥσπερ ἐπίτηδες ἀφελεῖν πάντα δι' ὧν ἐνεδέχeto προϊέναι καθ' αὐτά, καὶ ὅτι πλεῖστον ἀποστῆσαι τῶν ἐχόντων ὄργανα πρὸς κίνησιν.

Διὸ καὶ εὐλόγως ἂν δόξειεν ὅ τε (290b.) ὅλος οὐρανὸς σφαιροειδὴς εἶναι καὶ ἕκαστον τῶν ἄστρον. Πρὸς μὲν γὰρ τὴν ἐν ἑαυτῷ κίνησιν ἢ σφαῖρα τῶν σχημάτων χρησιμώτατον (οὕτω γὰρ ἂν καὶ τάχιστα κινεῖτο καὶ μάλιστα κατέχοι τὸν αὐτὸν τόπον), πρὸς δὲ τὴν εἰς τὸ πρόσθεν ἀχρηστότατον· ἥκιστα γὰρ ὅμοιον τοῖς δι' αὐτῶν κινητικοῖς· οὐδὲν γὰρ ἀπηρτημένον ἔχει οὐδὲ προέχον, ὥσπερ τὸ εὐθύγραμμον, ἀλλὰ πλεῖστον ἀφέστηκε τῷ σχήματι τῶν πορευτικῶν σωμάτων.

Ἐπεὶ οὖν δεῖ τὸν μὲν οὐρανὸν κινεῖσθαι τὴν ἐν ἑαυτῷ κίνησιν, τὰ δ' ἄλλα [ἄστρο] μὴ προϊέναι δι' αὐτῶν, εὐλόγως ἂν ἑκάτερον εἴη σφαιροειδές· οὕτω γὰρ μάλιστα τὸ μὲν κινήσεται τὸ δ' ἡρεμήσει.

## Κεφάλαιο 9

Φανερόν δ' ἐκ τούτων ὅτι καὶ τὸ φάναι γίνεσθαι φερομένων ἁρμονίαν, ὡς συμφώνων γινομένων τῶν ψόφων, κομψῶς μὲν εἴρηται καὶ περιττῶς ὑπὸ τῶν εἰπόντων, οὐ μὴν οὕτως ἔχει τάληθές. Δοκεῖ γάρ τισιν ἀναγκαῖον εἶναι τηλικούτων φερομένων σωμάτων γίνεσθαι ψόφον, ἐπεὶ καὶ τῶν παρ' ἡμῖν οὔτε τοὺς ὄγκους ἔχόντων ἴσους οὔτε τοιοῦτω τάχει φερομένων· ἡλίου δὲ καὶ σελήνης, ἔτι τε τοσούτων τὸ πλῆθος ἄστρον καὶ τὸ μέγεθος φερομένων τῷ τάχει τοιαύτην φορὰν ἀδύνατον μὴ γίνεσθαι ψόφον ἀμήχανόν τινα τὸ μέγεθος. Ὑποθέμενοι δὲ ταῦτα καὶ τὰς ταχυτήτας ἐκ τῶν ἀποστάσεων ἔχειν τοὺς τῶν συμφωνιῶν λόγους, ἐναρμόνιον γίνεσθαί φασι τὴν φωνὴν φερομένων κύκλῳ τῶν ἄστρον.

Ἐπεὶ δ' ἄλογον δοκεῖ τὸ μὴ συνακούειν ἡμᾶς τῆς φωνῆς ταύτης, αἴτιον τούτου φασὶν εἶναι τὸ γινομένων εὐθύς ὑπάρχειν τὸν ψόφον, ὥστε μὴ διάδηλον εἶναι πρὸς τὴν ἐναντίαν σιγὴν· πρὸς ἄλληλα γὰρ φωνῆς καὶ σιγῆς εἶναι τὴν διάγνωσιν· ὥστε καθάπερ τοῖς χαλκοτύποις διὰ συνήθειαν οὐθὲν δοκεῖ διαφέρειν, καὶ τοῖς ἀνθρώποις ταῦτ' συμβαίνειν.

Ταῦτα δὴ, καθάπερ εἴρηται πρότερον, ἐμμελῶς μὲν λέγεται καὶ μουσικῶς, ἀδύνατον δὲ τοῦτον ἔχειν τὸν τρόπον. Οὐ γὰρ μόνον τὸ μηθὲν ἀκούειν ἄτοπον, περὶ οὗ λέγειν ἐγχειροῦσι τὴν αἰτίαν, ἀλλὰ καὶ τὸ μηδὲν πάσχειν χωρὶς αἰσθήσεως. Οἱ γὰρ ὑπερβάλλοντες ψόφοι διακναίουσι καὶ τῶν ἀψύχων σωμάτων τοὺς ὄγκους, οἷον ὁ τῆς βροντῆς δίστησι λίθους καὶ (291a.) τὰ καρτερώτατα τῶν σωμάτων. Τοσούτων δὲ φερομένων, καὶ τοῦ ψόφου διόντος πρὸς τὸ φερόμενον μέγεθος, πολλαπλάσιον μέγεθος ἀναγκαῖον ἀφικνεῖσθαι τε δεῦρο καὶ τὴν ἰσχὺν ἀμήχανον εἶναι τῆς βίας. Ἀλλ' εὐλόγως οὗτ' ἀκούομεν

οὔτε πάσχοντα φαίνεται τὰ σώματα βίαιον οὐδὲν πάθος, διὰ τὸ μὴ ψοφεῖν. Ἄμα δ' ἐστὶ τό τ' αἴτιον τούτων δῆλον, καὶ μαρτύριον τῶν εἰρημένων ἡμῖν λόγων, ὥς εἰσιν ἀληθεῖς· τὸ γὰρ ἀπορηθὲν καὶ ποιῆσαν τοὺς Πυθαγορείους φάναι γίνεσθαι συμφωνίαν τῶν φερομένων ἡμῖν ἐστὶ τεκμήριον. Ὅσα (9) μὲν γὰρ αὐτὰ φέρεται, ποιεῖ ψόφον καὶ πληγὴν· ὅσα δ' ἐν φερομένῳ ἐνδέδεται ἢ ἐνυπάρχει, καθάπερ ἐν τῷ πλοίῳ τὰ μόρια, οὐχ οἷόν τε ψοφεῖν, οὐδ' αὐτὸ τὸ πλοῖον, εἰ φέροιτο ἐν ποταμῷ. Καίτοι τοὺς αὐτοὺς λόγους ἂν ἐξείη λέγειν, ὥς ἄτοπον εἰ μὴ φερόμενος ὁ ἰσθὺς καὶ ἡ πρύμνα ποιεῖ ψόφον πολὺν τηλικαύτης νεώς, ἢ πάλιν αὐτὸ τὸ πλοῖον κινούμενον. Τὸ δ' ἐν μὴ φερομένῳ φερόμενον ποιεῖ ψόφον· ἐν φερομένῳ δὲ συνεχὲς καὶ μὴ ποιοῦν πληγὴν ἀδύνατον ψοφεῖν. Ὡστ' ἐνταῦθα λεκτέον ὥς εἶπερ ἐφέρετο τὰ σώματα τούτων εἴτ' ἐν ἀέρος πλήθει κεχυμένῳ κατὰ τὸ πᾶν εἴτε πυρός, ὥσπερ πάντες φασίν, ἀναγκαῖον ποιεῖν ὑπερφυᾶ τῷ μεγέθει τὸν ψόφον, τούτου δὲ γινομένου καὶ δεῦρ' ἀφικνεῖσθαι καὶ διακναίειν. Ὡστ' ἐπεὶ οὐ φαίνεται τοῦτο συμβαῖνον, οὐτ' ἂν ἔμψυχον οὔτε βίαιον φέροιτο φορὰν οὐθὲν αὐτῶν, ὥσπερ τὸ μέλλον ἔσεσθαι προνοούσης τῆς φύσεως, ὅτι μὴ τοῦτον τὸν τρόπον ἐχούσης τῆς κινήσεως οὐθὲν ἂν ἦν τῶν περὶ τὸν δεῦρο τόπον ὁμοίως ἔχον.

Ὅτι μὲν οὖν σφαιροειδῆ τὰ ἄστρα καὶ ὅτι οὐ κινεῖται δι' αὐτῶν, εἴρηται.

## Κεφάλαιο 10

Περὶ δὲ τῆς τάξεως αὐτῶν, ὃν μὲν τρόπον ἕκαστα κινεῖται τῷ τὰ μὲν εἶναι πρότερα τὰ δ' ὕστερα, καὶ πῶς ἔχει πρὸς ἄλληλα τοῖς ἀποστήμασιν, ἐκ τῶν περὶ ἀστρολογίαν θεωρεῖσθαι λέγεται γὰρ ἱκανῶς. Συμβαίνει δὲ κατὰ λόγον γίνεσθαι τὰς ἐκάστου κινήσεις τοῖς ἀποστήμασι τῷ τὰς μὲν εἶναι θάττους τὰς δὲ βραδυτέρας· ἐπεὶ γὰρ ὑπόκειται τὴν μὲν ἐσχάτην τοῦ οὐρανοῦ περιφορὰν ἀπλῆν τ' εἶναι (291b.) καὶ ταχίστην, τὰς δὲ τῶν ἄλλων βραδυτέρας τε καὶ πλείους (ἕκαστον γὰρ ἀντιφέρεται τῷ οὐρανῷ κατὰ τὸν αὐτοῦ κύκλον), εὐλόγον ἦδη τὸ μὲν ἐγγυτάτῳ τῆς ἀπλῆς καὶ πρώτης περιφορᾶς ἐν πλείστῳ χρόνῳ διέναι τὸν αὐτοῦ κύκλον, τὸ δὲ πορρωτάτῳ ἐν ἐλαχίστῳ, τῶν δ' ἄλλων τὸ ἐγγύτερον ἀεὶ ἐν πλείονι, τὸ δὲ πορρώτερον ἐν ἐλάττονι. Τὸ μὲν γὰρ ἐγγυτάτῳ μάλιστα κρατεῖται, τὸ δὲ πορρωτάτῳ πάντων ἥκιστα διὰ τὴν ἀπόστασιν· τὰ δὲ μεταξὺ κατὰ λόγον ἦδη τῆς ἀποστάσεως, ὥσπερ καὶ δεικνύουσιν οἱ μαθηματικοί.

## Κεφάλαιο 11

Τὸ δὲ σχῆμα τῶν ἄστρων ἐκάστου σφαιροειδὲς μάλιστ' ἂν τις εὐλόγως

ὑπολάβοι. Ἐπεὶ γὰρ δέδεικται ὅτι οὐ πεφύκασι κινεῖσθαι δι' αὐτῶν, ἡ δὲ φύσις οὐδὲν ἀλόγως οὐδὲ μάτην ποιεῖ, δῆλον ὅτι καὶ σχῆμα τοιοῦτον ἀπέδωκε τοῖς ἀκινήτοις ὃ ἥκιστα ἐστὶ κινητικόν. Ἦκιστα δὲ κινητικὸν ἡ σφαῖρα διὰ τὸ μηδὲν ἔχειν ὄργανον πρὸς τὴν κίνησιν. Ὡστε δῆλον ὅτι σφαιροειδῆ ἂν εἴη τὸν ὄγκον.

Ἔτι δ' ὁμοίως μὲν ἅπαντα καὶ ἓν, ἡ δὲ σελήνη δείκνυται διὰ τῶν περὶ τὴν ὄψιν ὅτι σφαιροειδῆς· οὐ γὰρ ἂν ἐγίνετο αὐξανομένη καὶ φθίνουσα τὰ μὲν πλεῖστα μηνοειδῆς ἢ ἀμφίκυρτος, ἅπαξ δὲ διχότομος. Καὶ πάλιν διὰ τῶν ἀστρολογικῶν, ὅτι οὐκ ἂν ἦσαν αἱ τοῦ ἡλίου ἐκλείψεις μηνοειδεῖς. Ὡστ' εἶπερ ἓν τοιοῦτον, δῆλον ὅτι καὶ τὰλλα ἂν εἴη σφαιροειδῆ.

## Κεφάλαιο 12

Δυοῖν δ' ἀπορίαιν οὔσαιν, περὶ ὧν εἰκότως ἂν ὅστισοῦν ἀπορήσειε, πειρατέον λέγειν τὸ φαινόμενον, αἰδοῦς ἀξίαν εἶναι νομίζοντας τὴν προθυμίαν μᾶλλον ἢ θράσους, εἴ τις διὰ τὸ φιλοσοφίας διψῇ καὶ μικρὰς εὐπορίας ἀγαπᾷ περὶ ὧν τὰς μεγίστας ἔχομεν ἀπορίας. Ἔστι δὲ πολλῶν ὄντων τοιούτων οὐχ ἥκιστα θαυμαστόν, διὰ τίνα ποτ' αἰτίαν οὐκ ἀεὶ τὰ πλεῖον ἀπέχοντα τῆς πρώτης φορᾶς κινεῖται πλείους κινήσεις, ἀλλὰ τὰ μεταξὺ πλείστας. Εὐλόγον γὰρ ἂν δόξειεν εἶναι τοῦ πρώτου σώματος μίαν κινουμένου φορὰν τὸ πλησιαιτάτον ἐλαχίστας κινεῖσθαι κινήσεις, οἷον δύο, τὸ δ' ἐχόμενον τρεῖς ἢ τίνα ἄλλην τοιαύτην τάξιν. Νῦν δὲ συμβαίνει τὸναντίον· ἐλάττους γὰρ ἡλῖος καὶ σελήνη κινεῖνται (292a.) κινήσεις ἢ τῶν πλανωμένων ἄστρον ἓνια· καίτοι πορρώτερον τοῦ μέσου καὶ πλησιαιότερον τοῦ πρώτου σώματος εἰσιν αὐτῶν. Δῆλον δὲ τοῦτο περὶ ἐνίων καὶ τῇ ὄψει γέγονεν· τὴν γὰρ σελήνην ἐωράκαμεν διχότομον μὲν οὔσαν, ὑπελθοῦσαν δὲ τῶν ἀστέρων τὸν τοῦ Ἄρεος, καὶ ἀποκρυφέντα μὲν κατὰ τὸ μέλαν αὐτῆς, ἐξελθόντα δὲ κατὰ τὸ φανὸν καὶ λαμπρόν.

Ὅμοίως δὲ καὶ περὶ τοὺς ἄλλους ἀστέρας λέγουσιν οἱ πάλοι τετηρηκότες ἐκ πλείστων ἐτῶν Αἰγύπτιοι καὶ Βαβυλώνιοι, παρ' ὧν πολλὰς πίστεις ἔχομεν περὶ ἐκάστου τῶν ἄστρον.

Τοῦτό τε δὴ δικαίως ἀπορήσειεν ἂν τις, καὶ διὰ τίνα ποτ' αἰτίαν ἓν μὲν τῇ πρώτῃ φορᾷ τοσοῦτόν ἐστὶν ἄστρον πλῆθος ὥστε τῶν ἀναριθμῆτων εἶναι δοκεῖν τὴν πᾶσαν τάξιν, τῶν δ' ἄλλων ἓν χωρὶς ἕκαστον, δύο δ' ἢ πλείω οὐ φαίνεται ἓν τῇ αὐτῇ ἐνδεδεμένα φορᾷ.

Περὶ δὴ τούτων ζητεῖν μὲν καλῶς ἔχει καὶ τὴν ἐπὶ πλεῖον σύνεσιν, καίπερ μικρὰς ἔχοντας ἀφορμὰς καὶ τοσαύτην ἀπόστασιν ἀπέχοντας τῶν περὶ αὐτὰ συμβαινόντων· ὅμως δ' ἐκ τῶν τοιούτων θεωροῦσιν οὐδὲν ἄλογον ἂν δόξειεν εἶναι τὸ νῦν ἀπορούμενον. Ἀλλ' ἡμεῖς ὡς περὶ σωμάτων αὐτῶν μόνον, καὶ μονάδων τάξιν μὲν ἐχόντων, ἀψύχων δὲ πάμπαν, διανοοῦμεθα· δεῖ δ' ὡς μετεχόντων ὑπολαμβάνειν πράξεως καὶ ζωῆς· οὕτω γὰρ οὐθὲν δόξει παράλογον εἶναι τὸ συμβαῖνον. Ἔοικε γὰρ τῷ μὲν ἄριστα ἔχοντι ὑπάρχειν τὸ εὖ ἄνευ πράξεως, τῷ δ' ἐγγύτατα διὰ ὀλίγης καὶ μιᾶς, τοῖς δὲ πορρωτέρω διὰ πλειόνων, ὥσπερ ἐπὶ σώματος τὸ μὲν οὐδὲ γυμναζόμενον εὖ ἔχει, τὸ δὲ μικρὰ περιπατῆσαν, τῷ δὲ καὶ δρόμου δεῖ καὶ πάλης καὶ κονίσεως, πάλιν δ' ἑτέρω οὐδ' ὅποσαοῦν πονοῦντι τοῦτο γ' ἂν ἔτι ὑπάρξαι τάγαθόν, ἀλλ' ἕτερόν τι.

Ἔστι δὲ τὸ κατορθοῦν χαλεπὸν ἢ τὸ πολλὰ ἢ τὸ πολλάκις, οἷον μυρίους ἀστραγάλους Χίους βαλεῖν ἀμήχανον, ἀλλ' ἓνα ἢ δύο ῥᾶον. Καὶ πάλιν ὅταν τοδὶ μὲν δέη τοῦδ' ἔνεκα ποιῆσαι, τοῦτο δ' ἄλλου καὶ τοῦτο ἑτέρου, ἐν μὲν ἐνὶ ἢ δυσὶ ῥᾶδιον ἐπιτυχεῖν, ὅσω δ' ἂν διὰ πλειόνων, (292b.) χαλεπώτερον.

Διὸ δεῖ νομίζειν καὶ τὴν τῶν ἄστρον πρᾶξιν εἶναι τοιαύτην οἷα περ ἡ τῶν ζώων καὶ φυτῶν. Καὶ γὰρ ἐνταῦθα αἱ τοῦ ἀνθρώπου πλεῖσται πράξεις· πολλῶν γὰρ τῶν εὖ δύναται τυχεῖν, ὥστε πολλὰ πράττειν, καὶ ἄλλων ἔνεκα. (Τῷ δ' ὡς ἄριστα ἔχοντι οὐθὲν δεῖ πράξεως· ἔστι γὰρ αὐτὸ τὸ οὗ ἔνεκα, ἢ δὲ πρᾶξις ἀεὶ ἐστὶν ἐν δυσὶν, ὅταν καὶ οὗ ἔνεκα ἢ καὶ τὸ τούτου ἔνεκα). Τῶν δ' ἄλλων ζώων ἐλάττους, τῶν δὲ φυτῶν μικρά τις καὶ μία ἴσως· ἢ γὰρ ἐν τί ἐστὶν οὐ τύχοι ἂν, ὥσπερ καὶ ἄνθρωπος, ἢ καὶ τὰ πολλὰ πάντα πρὸ ὁδοῦ ἐστὶ πρὸς τὸ ἄριστον. Τὸ μὲν οὖν ἔχει καὶ μετέχει τοῦ ἀρίστου, τὸ δ' ἀφικνεῖται [ἐγγὺς] δι' ὀλίγων, τὸ δὲ διὰ πολλῶν, τὸ δ' οὐδ' ἐγχειρεῖ, ἀλλ' ἱκανὸν εἰς τὸ ἐγγὺς τοῦ ἐσχάτου ἐλθεῖν· οἷον εἰ ὑγίεια τέλος, τὸ μὲν δὴ ἀεὶ ὑγιαίνει, τὸ δ' ἰσχνανθέν, τὸ δὲ δραμὸν καὶ ἰσχνανθέν, τὸ δὲ καὶ ἄλλο τι πρᾶξαν τοῦ δραμεῖν ἔνεκα, ὥστε πλείους αἱ κινήσεις· ἕτερον δ' ἀδυνατεῖ πρὸς τὸ ὑγιᾶναι ἐλθεῖν, ἀλλὰ πρὸς τὸ δραμεῖν μόνον ἢ ἰσχνανθῆναι, καὶ τούτων θάτερον τέλος αὐτοῖς. Μάλιστα μὲν γὰρ ἐκείνου τυχεῖν ἄριστον πᾶσι τοῦ τέλους· εἰ δὲ μή, ἀεὶ ἄμεινόν ἐστὶν ὅσω ἂν ἐγγύτερον ἢ τοῦ ἀρίστου.

Καὶ διὰ τοῦτο ἡ μὲν γῆ ὅλως οὐ κινεῖται, τὰ δ' ἐγγὺς ὀλίγας (20) κινήσεις· οὐ γὰρ ἀφικνεῖται πρὸς τὸ ἔσχατον, ἀλλὰ μέχρι ὅτου δύναται τυχεῖν τῆς θειοτάτης ἀρχῆς. Ὁ δὲ πρῶτος οὐρανὸς εὐθὺς τυγχάνει διὰ μιᾶς κινήσεως. Τὰ δ' ἐν μέσῳ τοῦ πρώτου καὶ τῶν ἐσχάτων ἀφικνεῖται μὲν, διὰ πλειόνων δ' ἀφικνεῖται κινήσεων. Περὶ δὲ τῆς ἀπορίας ὅτι κατὰ μὲν τὴν πρώτην μίαν

οὕσαν φορὰν πολὺ πλῆθος συνέστηκεν ἄστρον, τῶν δ' ἄλλων χωρὶς ἕκαστον εἴληφεν ἰδίας κινήσεις, δι' ἓν μὲν ἂν τις πρῶτον εὐλόγως οἰηθείη τοῦθ' ὑπάρχειν· νοῆσαι γὰρ δεῖ τῆς ζωῆς καὶ τῆς ἀρχῆς ἐκάστης πολλὴν ὑπεροχὴν εἶναι τῆς πρώτης πρὸς τὰς ἄλλας, εἴη δ' ἂν ἥδε συμβαίνουσα κατὰ λόγον· ἡ μὲν γὰρ πρώτη μία οὕσα πολλὰ κινεῖ τῶν σωμάτων τῶν θείων, αἱ δὲ πολλαὶ οὕσαι ἓν μόνον (293a.) ἐκάστη· τῶν γὰρ πλανωμένων ἓν ὅτιοῦν πλείους φέρεται φοράς. Ταύτη τε οὖν ἀνισάζει ἡ φύσις καὶ ποιεῖ τινὰ τάξιν, τῇ μὲν μιᾷ φορᾷ πολλὰ ἀποδοῦσα σώματα, τῷ δ' ἐνὶ σώματι πολλὰς φοράς.

Καὶ ἔτι διὰ τόδε ἓν ἔχουσι σῶμα αἱ ἄλλαι φοραί, ὅτι πολλὰ σώματα κινοῦσιν αἱ πρὸ τῆς τελευταίας καὶ τῆς ἓν ἄστρον ἐχούσης· ἓν πολλαῖς γὰρ σφαίραις ἡ τελευταία σφαῖρα ἐνδεδεμένη φέρεται, ἐκάστη δὲ σφαῖρα σῶμά τι τυγχάνει ὄν. Ἐκείνης ἂν οὖν κοινὸν εἴη τὸ ἔργον· αὐτῇ μὲν γὰρ ἐκάστη ἡ ἴδιος φύσει φορά, αὕτη δὲ οἶον πρόσκειται, παντὸς δὲ πεπερασμένου σώματος πρὸς πεπερασμένον ἢ δυνάμεις ἐστίν.

Ἀλλὰ περὶ μὲν τῶν τὴν ἐγκύκλιον φερομένων κινήσιν ἄστρον εἴρηται ποῖ' ἅττα κατὰ τε τὴν οὐσίαν ἐστὶ καὶ κατὰ τὸ σχῆμα, περὶ τε τῆς φορᾶς καὶ τῆς τάξεως αὐτῶν.

## Κεφάλαιο 13

Λοιπὸν δὲ περὶ τῆς γῆς εἰπεῖν, οὗ τε τυγχάνει κειμένη, καὶ πότερον τῶν ἡρεμούντων ἐστὶν ἢ τῶν κινουμένων, καὶ περὶ τοῦ σχήματος αὐτῆς.

Περὶ μὲν οὖν τῆς θέσεως οὐ τὴν αὐτὴν ἅπαντες ἔχουσι δόξαν, ἀλλὰ τῶν πλείστων ἐπὶ τοῦ μέσου κεῖσθαι λεγόντων, ὅσοι τὸν ὅλον οὐρανὸν πεπερασμένον εἶναί φασιν, ἐναντίως οἱ περὶ τὴν Ἰταλίαν, καλούμενοι δὲ Πυθαγόρειοι λέγουσιν· ἐπὶ μὲν γὰρ τοῦ μέσου πῦρ εἶναί φασι, τὴν δὲ γῆν, ἓν τῶν ἄστρον οὕσαν, κύκλῳ φερομένην περὶ τὸ μέσον νύκτα τε καὶ ἡμέραν ποιεῖν. Ἔτι δ' ἐναντίαν ἄλλην ταύτη κατασκευάζουσι γῆν, ἣν ἀντίχθονα ὄνομα καλοῦσιν, οὐ πρὸς τὰ φαινόμενα τοὺς λόγους καὶ τὰς αἰτίας ζητοῦντες, ἀλλὰ πρὸς τινας λόγους καὶ δόξας αὐτῶν τὰ φαινόμενα προσέλκοντες καὶ πειρώμενοι συγκοσμεῖν.

Πολλοῖς δ' ἂν καὶ ἑτέροις συνδόξειε μὴ δεῖν τῇ γῇ τὴν τοῦ μέσου χώραν ἀποδιδόναι, τὸ πιστὸν οὐκ ἐκ τῶν φαινομένων ἀθροῦσιν ἀλλὰ μᾶλλον ἐκ τῶν λόγων. Τῷ γὰρ τιμιωτάτῳ οἶονται προσήκειν τὴν τιμιωτάτην ὑπάρχειν χώραν, εἶναι δὲ πῦρ μὲν γῆς τιμιώτερον, τὸ δὲ πέρας τοῦ μεταξύ, τὸ δ'



ἔσχατον καὶ τὸ μέσον πέρας· ὥστ' ἐκ τούτων ἀναλογιζόμενοι οὐκ οἴονται ἐπὶ τοῦ μέσου τῆς σφαίρας κεῖσθαι αὐτήν, ἀλλὰ μᾶλλον (293b.) τὸ πῦρ. Ἐπεὶ δ' οἷ γε Πυθαγόρειοι καὶ διὰ τὸ μάλιστα προσήκειν φυλάττεσθαι τὸ κυριώτατον τοῦ παντός, τὸ δὲ μέσον εἶναι τοιοῦτον, [ὃ] Διὸς φυλακὴν ὀνομάζουσι τὸ ταύτην ἔχον τὴν χώραν πῦρ· ὥσπερ τὸ μέσον ἀπλῶς λεγόμενον, καὶ τὸ τοῦ μεγέθους μέσον καὶ τοῦ πράγματος ὃν μέσον καὶ τῆς φύσεως. Καίτοι καθάπερ ἐν τοῖς ζώοις οὐ ταῦτόν τοῦ ζώου καὶ τοῦ σώματος μέσον, οὕτως ὑποληπτέον μᾶλλον καὶ περὶ τὸν ὅλον οὐρανόν. Διὰ μὲν οὖν ταύτην τὴν αἰτίαν οὐθὲν αὐτοὺς δεῖ θορυβεῖσθαι περὶ τὸ πᾶν, οὐδ' εἰσάγειν φυλακὴν ἐπὶ τὸ κέντρον, ἀλλ' ἐκεῖνο ζητεῖν τὸ μέσον, ποῖόν τι καὶ ποῦ πέφυκεν. Ἐκεῖνο μὲν γὰρ ἀρχὴ τὸ μέσον καὶ τίμιον, τὸ δὲ τοῦ τόπου μέσον ἔοικε τελευτῇ μᾶλλον ἢ ἀρχῇ· τὸ μὲν γὰρ ὀριζόμενον τὸ μέσον, τὸ δ' ὀρίζον τὸ πέρας. Τιμιώτερον δὲ τὸ περιέχον καὶ τὸ πέρας ἢ τὸ περαινόμενον· τὸ μὲν γὰρ ὕλη, τὸ δ' οὐσία τῆς συστάσεώς ἐστιν.

Περὶ μὲν οὖν τοῦ τόπου τῆς γῆς ταύτην ἔχουσί τινες τὴν δόξαν, ὁμοίως δὲ καὶ περὶ μονῆς καὶ κινήσεως· οὐ γὰρ τὸν αὐτὸν τρόπον ἅπαντες ὑπολαμβάνουσιν, ἀλλ' ὅσοι μὲν μὴδ' ἐπὶ τοῦ μέσου κεῖσθαι φασιν αὐτήν, κινεῖσθαι κύκλῳ περὶ τὸ μέσον, οὐ μόνον δὲ ταύτην, ἀλλὰ καὶ τὴν ἀντίχθονα, καθάπερ εἶπομεν πρότερον.

Ἐνίοις δὲ δοκεῖ καὶ πλείω σώματα τοιαῦτα ἐνδέχεσθαι φέρεσθαι περὶ τὸ μέσον, ἡμῖν ἄδηλα διὰ τὴν ἐπιπρόσθησιν τῆς γῆς. Διὸ καὶ τὰς τῆς σελήνης ἐκλείψεις πλείους ἢ τὰς τοῦ ἡλίου γίνεσθαι φασιν· τῶν γὰρ φερομένων ἕκαστον ἀντιφράττειν αὐτήν, ἀλλ' οὐ μόνον τὴν γῆν. Ἐπεὶ γὰρ οὐκ ἔστιν ἡ γῆ κέντρον, ἀλλ' ἀπέχει τὸ ἡμισφαίριον αὐτῆς ὅλον, οὐθὲν κωλύειν οἴονται τὰ φαινόμενα συμβαίνειν ὁμοίως μὴ κατοικοῦσιν ἡμῖν ἐπὶ τοῦ κέντρου, ὥσπερ κἂν εἰ ἐπὶ τοῦ μέσου ἦν ἡ γῆ· οὐθὲν γὰρ οὐδὲ νῦν ποιεῖν ἐπίδηλον τὴν ἡμίσειαν ἀπεχόντων τῆς διαμέτρου.

Ἐνιοὶ δὲ καὶ κειμένην ἐπὶ τοῦ κέντρου φασὶν αὐτὴν ἵλλεσθαι καὶ κινεῖσθαι περὶ τὸν διὰ παντὸς τεταμένον πόλον, ὥσπερ ἐν τῷ Τιμαίῳ γέγραπται.

Παραπλησίως δὲ καὶ περὶ τοῦ σχήματος ἀμφισβητεῖται· τοῖς μὲν γὰρ δοκεῖ εἶναι σφαιροειδής, τοῖς δὲ πλατεῖα καὶ τὸ σχῆμα τυμπανο(294a.) εἰδής· ποιοῦνται δὲ τεκμήριον ὅτι δύνων καὶ ἀνατέλλων ὁ ἥλιος εὐθεῖαν ἀλλ' οὐ περιφερῆ τὴν ἀπόκρυψιν φαίνεται ποιούμενος ὑπὸ τῆς γῆς, ὡς δέον, εἴπερ ἦν σφαιροειδής, περιφερῆ γίνεσθαι τὴν ἀποτομήν, οὐ προσλογιζόμενοι τό τε ἀπόστημα τοῦ ἡλίου πρὸς τὴν γῆν καὶ τὸ τῆς περιφερείας μέγεθος, ὡς ἐν τοῖς

φαινομένοις μικροῖς κύκλοις εὐθεῖα φαίνεται πόρρωθεν. Διὰ μὲν οὖν ταύτην τὴν φαντασίαν οὐδὲν αὐτοὺς ἀπιστεῖν δεῖ μὴ κυκλοτερῇ τὸν ὄγκον εἶναι τῆς γῆς· ἀλλ’ ἔτι προστιθέασι, καὶ φασὶ διὰ τὴν ἡρεμίαν ἀναγκαῖον τὸ σχῆμα τοῦτ’ ἔχειν αὐτήν.

Καὶ γὰρ δὴ οἱ περὶ τῆς κινήσεως καὶ τῆς μονῆς εἰρημένοι τρόποι πολλοὶ τυγχάνουσιν. Τὸ μὲν οὖν ἀπορῆσαι πᾶσιν ἀναγκαῖον ἐπελθεῖν· τάχα γὰρ ἀλυποτέρας διανοίας τὸ μὴ θαυμάζειν πῶς ποτε μικρὸν μὲν μόριον τῆς γῆς, ἂν μετεωρισθὲν ἀφεθῇ, φέρεται καὶ μένειν οὐκ ἐθέλει, καὶ τὸ πλεῖον ἀεὶ θᾶπτον, πᾶσαν δὲ τὴν γῆν εἴ τις ἀφείη μετεωρίσας, οὐκ ἂν φέροιτο. Νῦν δ’ ἡρεμεῖ τοσοῦτον βάρος. Ἀλλὰ μὴν κἂν εἴ τις τῶν φερομένων μορίων αὐτῆς, πρὶν πεσεῖν, ὑφαιροίη τὴν γῆν, οἴσθησεται κάτω μηθενὸς ἀντερείσαντος.

Ὡστε τὸ μὲν ἀπορεῖν εἰκότως ἐγένετο φιλοσόφημα πᾶσιν· τὸ δὲ τὰς περὶ τούτου λύσεις μὴ μᾶλλον ἀτόπους εἶναι δοκεῖν τῆς ἀπορίας, θαυμάσειεν ἂν τις. Οἱ μὲν γὰρ διὰ ταῦτα ἄπειρον τὸ κάτω τῆς γῆς εἶναί φασιν, ἐπ’ ἄπειρον αὐτὴν ἐρριζῶσθαι λέγοντες, ὥσπερ Ξενοφάνης ὁ Κολοφώνιος, ἵνα μὴ πράγματ’ ἔχωσι ζητοῦντες τὴν αἰτίαν· διὸ καὶ Ἐμπεδοκλῆς οὕτως ἐπέπληξεν, εἰπὼν ὡς εἴ περ ἀπείρονα γῆς τε βάθη καὶ δαψιλὸς αἰθήρ, ὡς διὰ πολλῶν δὴ γλώσσης ῥηθέντα ματαίως ἐκκέχυται στομάτων, ὀλίγον τοῦ παντὸς ἰδόντων.

Οἱ δ’ ἐφ’ ὕδατος κεῖσθαι. Τοῦτον γὰρ ἀρχαιότατον παρειλήφαμεν τὸν λόγον, ὃν φασιν εἰπεῖν Θαλῆν τὸν Μιλήσιον, ὡς διὰ τὸ πλωτὴν εἶναι μένουσαν ὥσπερ ξύλον ἢ τι τοιοῦτον ἕτερον (καὶ γὰρ τούτων ἐπ’ ἀέρος μὲν οὐθὲν πέφυκε μένειν, ἀλλ’ ἐφ’ ὕδατος), ὥσπερ οὐ τὸν αὐτὸν λόγον ὄντα περὶ τῆς γῆς καὶ τοῦ ὕδατος τοῦ ὀχοῦντος τὴν γῆν· οὐδὲ γὰρ τὸ ὕδωρ πέφυκε μένειν μετέωρον, ἀλλ’ ἐπὶ τινός (294b.) ἐστίν.

Ἔτι δ’ ὥσπερ ἄηρ ὕδατος κουφότερον, καὶ γῆς ὕδωρ· ὥστε πῶς οἶόν τε τὸ κουφότερον κατωτέρω κεῖσθαι τοῦ βαρυτέρου τὴν φύσιν; Ἔτι δ’ εἴπερ ὅλη πέφυκε μένειν ἐφ’ ὕδατος, δῆλον ὅτι καὶ τῶν μορίων ἕκαστον· νῦν δ’ οὐ φαίνεται τοῦτο γιγνόμενον, ἀλλὰ τὸ τυχὸν μόριον φέρεται εἰς βυθόν, καὶ θᾶπτον τὸ μεῖζον.

Ἀλλ’ εἰκότα μέχρι τινὸς ζητεῖν, ἀλλ’ οὐ μέχρι περ οὐ δυνατὸν τῆς ἀπορίας. Πᾶσι γὰρ ἡμῖν τοῦτο σύνηθες, μὴ πρὸς τὸ πρᾶγμα ποιεῖσθαι τὴν ζήτησιν ἀλλὰ πρὸς τὸν τάναντία λέγοντα· καὶ γὰρ αὐτὸς ἐν αὐτῷ ζητεῖ μέχρι περ ἂν οὐ μηκέτι ἔχῃ ἀντιλέγειν αὐτὸς αὐτῷ. Διὸ δεῖ τὸν μέλλοντα καλῶς ζητήσιν ἐνστατικὸν εἶναι διὰ τῶν οἰκείων ἐνστάσεων τῷ γένει, τοῦτο δ’ ἐστὶν ἐκ τοῦ

πάσας τεθεωρηκέναι τὰς διαφοράς.

Ἀναξιμένης δὲ καὶ Ἀναξαγόρας καὶ Δημόκριτος τὸ πλάτος αἴτιον εἶναί φασι τοῦ μένειν αὐτήν. Οὐ γὰρ τέμνειν ἄλλ' ἐπιωμάζειν τὸν ἀέρα τὸν κάτωθεν, ὅπερ φαίνεται τὰ πλάτος ἔχοντα τῶν σωμάτων ποιεῖν· ταῦτα γὰρ καὶ πρὸς τοὺς ἀνέμους ἔχει δυσκινήτως διὰ τὴν ἀντέρεισιν. Ταῦτ' οὖν τοῦτο ποιεῖν τῷ πλάτει φασὶ τὴν γῆν πρὸς τὸν ὑποκείμενον ἀέρα, (τὸν δ' οὐκ ἔχοντα μεταστῆναι τόπον ἱκανὸν ἀθρόως [τῷ] κάτωθεν ἡρεμεῖν,) ὥσπερ τὸ ἐν ταῖς κλεψύδραις ὕδωρ. Ὅτι δὲ δύναται πολὺ βάρος φέρειν ἀπολαμβανόμενος καὶ μένων ὁ ἀήρ, τεκμήρια πολλὰ λέγουσιν. Πρῶτον μὲν οὖν εἰ μὴ πλατὺ τὸ σχῆμα τῆς γῆς ἐστὶ, διὰ τοῦτο μὲν οὐκ ἂν ἡρεμοῖ. Καίτοι τῆς μονῆς οὐ τὸ πλάτος αἴτιον ἐξ ὧν λέγουσιν, ἀλλὰ τὸ μέγεθος μᾶλλον· διὰ γὰρ τὴν στενοχωρίαν οὐκ ἔχων τὴν πάροδον ὁ ἀήρ μένει διὰ τὸ πλῆθος· πολλὺς δ' ἐστὶ διὰ τὸ ὑπὸ μεγέθους πολλοῦ ἐναπολαμβάνεσθαι τοῦ τῆς γῆς. Ὡστε τοῦτο μὲν ὑπάρξει, κἂν σφαιροειδὴς μὲν ᾗ, τηλικαύτη δὲ τὸ μέγεθος· μενεῖ γὰρ κατὰ τὸν ἐκείνων λόγον.

Ὅλως δὲ πρὸς τοὺς οὕτω λέγοντας περὶ τῆς κινήσεως οὐ περὶ μορίων ἐστὶν ἡ ἀμφισβήτησις, ἀλλὰ περὶ ὅλου τινὸς καὶ παντός. Ἐξ ἀρχῆς γὰρ διοριστέον πότερόν ἐστὶ τις τοῖς σώμασι φύσει κίνησις ἢ οὐδεμία, καὶ πότερον φύσει μὲν οὐκ ἐστὶ, βία δ' ἐστίν. Ἐπεὶ δὲ (295a.) περὶ τούτων διώριστα πρότερον ὅσα κατὰ τὴν παροῦσαν δύναμιν εἴχομεν, χρηστέον ὡς ὑπάρχουσιν.

Εἰ γὰρ μηδεμία φύσει κίνησις ἐστὶν αὐτῶν, οὐδὲ βίαιος ἔσται· εἰ δὲ μή ἐστὶ μήτε φύσει μήτε βία, ὅλως οὐδὲν κινηθήσεται· περὶ γὰρ τούτων ὅτι ἀναγκαῖον συμβαίνειν, διώριστα πρότερον, καὶ πρὸς τούτοις ὅτι οὐδ' ἡρεμεῖν ἐνδέχεται· ὥσπερ γὰρ κίνησις ὑπάρχει ἢ βία ἢ φύσει, οὕτω καὶ ἡρεμία.

Ἀλλὰ μὴν εἴ γε ἐστὶ κίνησις τις κατὰ φύσιν, οὐκ ἂν ἡ βίαιος εἴη φορὰ μόνον οὐδ' ἡρέμησις· ὥστ' εἰ βία νῦν ἢ γῆ μένει, καὶ συνῆλθεν ἐπὶ τὸ μέσον φερομένη διὰ τὴν δίνην· ταύτην γὰρ τὴν αἰτίαν πάντες λέγουσιν ἐκ τῶν ἐν τοῖς ὑγροῖς καὶ περὶ τὸν ἀέρα συμβαινόντων· ἐν τούτοις γὰρ ἀεὶ φέρεται τὰ μείζω καὶ βαρύτερα πρὸς τὸ μέσον τῆς δίνης. Διὸ δὲ τὴν γῆν πάντες ὅσοι τὸν οὐρανὸν γεννῶσιν, ἐπὶ τὸ μέσον συνελθεῖν φασίν· ὅτι δὲ μένει, ζητοῦσι τὴν αἰτίαν, καὶ λέγουσιν οἱ μὲν τοῦτον τὸν τρόπον, ὅτι τὸ πλάτος καὶ τὸ μέγεθος αὐτῆς αἴτιον, οἱ δ' ὥσπερ Ἐμπεδοκλῆς, τὴν τοῦ οὐρανοῦ φορὰν κύκλῳ περιθέουσαν καὶ θᾶπτον φερομένην ἢ τὴν τῆς γῆς φορὰν κωλύειν, καθάπερ τὸ ἐν τοῖς κυάθοις ὕδωρ· καὶ γὰρ τοῦτο κύκλῳ τοῦ κυάθου φερομένου πολλάκις κάτω τοῦ χαλκοῦ γινόμενον ὅμως οὐ φέρεται κάτω, πεφυκὸς φέρεσθαι, διὰ

τὴν αὐτὴν αἰτίαν. Καίτοι μήτε τῆς δίνης κωλυούσης μήτε τοῦ πλάτους, ἀλλ' ὑπείκοντος τοῦ ἀέρος, ποῖ ποτ' οἰσθήσεται; Πρὸς μὲν γὰρ τὸ μέσον βία, καὶ μένει βία· κατὰ φύσιν δέ γε ἀναγκαῖον εἶναι τινὰ αὐτῆς φοράν. Αὕτη οὖν πότερον ἄνω ἢ κάτω, ἢ ποῦ ἐστίν; Εἶναι μὲν γάρ τινὰ ἀναγκαῖον· εἰ δὲ μηδὲν μᾶλλον κάτω ἢ ἄνω, ὃ δ' ἄνω ἀπὸ μὴ κωλύει τὴν ἄνω φοράν, οὐδ' ἂν ὃ ὑπὸ τῇ γῇ κωλύει τὴν κάτω· τὰ γὰρ αὐτὰ τῶν αὐτῶν ἀναγκαῖον εἶναι αἷτια τοῖς αὐτοῖς.

Ἔτι δὲ πρὸς Ἐμπεδοκλέα καὶ ἐκεῖνό τις εἴπειεν. Ὅτε γὰρ τὰ στοιχεῖα διειστήκει χωρὶς ὑπὸ τοῦ νείκους, τίς αἰτία τῇ γῇ τῆς μονῆς ἦν; Οὐ γὰρ δὴ καὶ τότε αἰτιάσεται τὴν δίνην. Ἀποπον δὲ καὶ τὸ μὴ συννοεῖν ὅτι πρότερον μὲν διὰ τὴν δίνην ἐφέρετο τὰ μόρια τῆς γῆς πρὸς τὸ μέσον· νῦν δὲ διὰ τίν' αἰτίαν πάντα τὰ βάρος ἔχοντα φέρεται πρὸς αὐτήν; Οὐ γὰρ ἢ γε δίνη πλησιάζει πρὸς ἡμᾶς. Ἔτι δὲ καὶ τὸ πῦρ ἄνω φέρεται διὰ τίν' αἰτίαν; Οὐ γὰρ διὰ γε τὴν δίνην. Εἰ δὲ τοῦτο φέρεσθαι που πέφυκεν, δῆλον ὅτι καὶ τὴν γῆν οἰητέον. Ἀλλὰ μὴν οὐδὲ τῇ δίνῃ γε τὸ βαρὺ καὶ κοῦφον ὥριται, ἀλλὰ τῶν πρότερον ὑπαρχόντων βαρέων καὶ κοῦφων τὰ μὲν εἰς τὸ μέσον ἔρχεται, τὰ δ' ἐπιπολάζει διὰ τὴν κίνησιν. Ἦν ἄρα καὶ πρὶν γενέσθαι τὴν δίνην τὸ μὲν βαρὺ τὸ δὲ κοῦφον, ἃ τίτι διώριστο καὶ πῶς ἐπεφύκει φέρεσθαι ἢ ποῦ; ἀπείρου γὰρ ὄντος ἀδύνατον εἶναι ἄνω ἢ κάτω, διώριται δὲ τούτοις τὸ βαρὺ καὶ κοῦφον.

Οἱ μὲν οὖν πλεῖστοι περὶ τὰς αἰτίας ταύτας διατρίβουσιν· εἰσὶ δὲ τινες οἱ διὰ τὴν ὁμοιότητά φασιν αὐτὴν μένειν, ὥσπερ τῶν ἀρχαίων Ἀναξίμανδρος· μᾶλλον μὲν γὰρ οὐθὲν ἄνω ἢ κάτω ἢ εἰς τὰ πλάγια φέρεσθαι προσήκει τὸ ἐπὶ τοῦ μέσου ἰδρυμένον καὶ ὁμοίως πρὸς τὰ ἔσχατα ἔχον· ἅμα δ' ἀδύνατον εἰς τὸ ἐναντίον ποιεῖσθαι τὴν κίνησιν· ὥστ' ἐξ ἀνάγκης μένειν.

Τοῦτο δὲ λέγεται κομψῶς μὲν, οὐκ ἀληθῶς δέ· κατὰ γὰρ τοῦτον τὸν λόγον ἀναγκαῖον ἅπαν ὃ τι ἂν τεθῇ ἐπὶ τοῦ μέσου, μένειν, ὥστε καὶ τὸ πῦρ ἡρεμήσει· τὸ γὰρ εἰρημένον οὐκ ἴδιόν ἐστι τῆς γῆς. Ἀλλὰ μὴν οὐκ ἀναγκαῖον. Οὐ γὰρ μόνον φαίνεται μένουσα ἐπὶ τοῦ μέσου, ἀλλὰ καὶ φερομένη πρὸς τὸ μέσον. Ὅπου γὰρ ὁτιοῦν φέρεται μόνιον αὐτῆς, ἀναγκαῖον ἐνταῦθα φέρεσθαι καὶ τὴν ὅλην· οὐ δὲ φέρεται κατὰ φύσιν, καὶ μένει ἐνταυθοῖ κατὰ φύσιν. Οὐκ ἄρα διὰ τὸ ὁμοίως ἔχειν πρὸς τὰ ἔσχατα· τοῦτο μὲν γὰρ πᾶσι κοινόν, τὸ δὲ φέρεσθαι πρὸς τὸ μέσον ἴδιον τῆς γῆς.

Ἀποπον δὲ καὶ τοῦτο μὲν ζητεῖν, διὰ τί ποτε μένει ἡ γῇ ἐπὶ τοῦ μέσου, τὸ δὲ πῦρ μὴ ζητεῖν διὰ τί ἐπὶ τοῦ ἐσχάτου. Εἰ μὲν γὰρ κάκείνῳ φύσει τόπος ὁ

ἔσχατος, δῆλον ὅτι ἀναγκαῖον εἶναι τινὰ καὶ τῇ γῇ φύσει τόπον· εἰ δὲ μὴ ταύτη οὗτος ὁ τόπος, ἀλλὰ διὰ τὴν ἀνάγκην μένει τὴν τῆς ὁμοιότητος (ὥσπερ ὁ περὶ τῆς τριχὸς λόγος τῆς ἰσχυρῶς μὲν ὁμοίως δὲ πάντα τεινομένης, ὅτι οὐ διαρραγήσεται, καὶ τοῦ πεινῶντος καὶ διψῶντος σφόδρα μὲν, ὁμοίως δέ, καὶ τῶν ἐδωδίων καὶ ποτῶν ἴσον ἀπέχοντος· καὶ γὰρ τοῦτον ἡρεμεῖν ἀναγκαῖον), ζητητέον αὐτοῖς περὶ τῆς τοῦ πυρὸς μονῆς ἐπὶ τῶν ἐσχάτων.

(296a.) Θαυμαστὸν δὲ καὶ τὸ περὶ μὲν τῆς μονῆς ζητεῖν, περὶ δὲ τῆς φορᾶς αὐτῶν μὴ ζητεῖν, διὰ τίν' αἰτίαν τὸ μὲν ἄνω φέρεται, τὸ δ' ἐπὶ τὸ μέσον, μηδενὸς ἐμποδίζοντος.

Ἀλλὰ μὴν οὐδ' ἀληθές ἐστι τὸ λεγόμενον. Κατὰ συμβεβηκὸς μέντοι τοῦτο γ' ἀληθές, ὡς ἀναγκαῖον μένειν ἐπὶ τοῦ μέσου πᾶν ὧ μὴθὲν μᾶλλον δεῦρο ἢ δεῦρο κινεῖσθαι προσήκει. Ἀλλὰ διὰ γε τοῦτον τὸν λόγον οὐ μενεῖ, ἀλλὰ κινηθήσεται, οὐ μέντοι ὅλον, ἀλλὰ διεσπασμένον. Ὁ γὰρ αὐτὸς ἀρμόσει λόγος καὶ ἐπὶ τοῦ πυρός· ἀνάγκη γὰρ τεθὲν μένειν ὁμοίως ὥσπερ τὴν γῆν· ὁμοίως γὰρ ἔξει πρὸς τῶν σημείων τῶν ἐσχάτων ὅτιοῦν· ἀλλ' ὅμως οἰσθήσεται ἀπὸ τοῦ μέσου, ὥσπερ καὶ φαίνεται φερόμενον, ἂν μὴ τι κωλύη, πρὸς τὸ ἔσχατον· πλὴν οὐχ ὅλον πρὸς ἓν σημεῖον (τοῦτο γὰρ ἀναγκαῖον μόνον συμβαίνειν ἐκ τοῦ λόγου τοῦ περὶ τῆς ὁμοιότητος) ἀλλὰ τὸ ἀνάλογον μόριον πρὸς τὸ ἀνάλογον τοῦ ἐσχάτου, λέγω δ' οἶον τὸ τέταρτον μέρος πρὸς τὸ τέταρτον μέρος τοῦ περιέχοντος· οὐθὲν γὰρ στιγμή τῶν σωμάτων ἐστίν. Ὡσπερ δὲ κἂν ἐκ μεγάλου συνέλθοι πυκνούμενον εἰς ἐλάττω τόπον, οὕτω κἂν ἐξ ἐλάττονος εἰς μείζω μανότερον γιγνόμενον· ὥστε κἂν ἡ γῇ τοῦτον τὸν τρόπον ἐκινεῖτο ἀπὸ τοῦ μέσου διὰ γε τὸν τῆς ὁμοιότητος λόγον, εἰ μὴ φύσει τῆς γῆς οὗτος ὁ τόπος ἦν. Ὅσα μὲν οὖν τυγχάνει περί τε τοῦ σχήματος αὐτῆς ὑπολαμβάνόμενα καὶ περὶ τόπου καὶ μονῆς καὶ κινήσεως, σχεδὸν ταῦτ' ἐστίν.

## Κεφάλαιο 14

Ἡμεῖς δὲ λέγωμεν πρῶτον πότερον ἔχει κίνησιν ἢ μένει· καθάπερ γὰρ εἵπομεν, οἱ μὲν αὐτὴν ἐν τῶν ἄστρον εἶναι ποιοῦσιν, οἱ δ' ἐπὶ τοῦ μέσου θέντες ἴλλεσθαι καὶ κινεῖσθαι φασὶ περὶ τὸν πόλον μέσον. Ὅτι δ' ἐστὶν ἀδύνατον, δῆλον λαβοῦσιν ἀρχὴν ὡς εἴπερ φέρεται εἶτ' ἐκτὸς οὕσα τοῦ μέσου εἶτ' ἐπὶ τοῦ μέσου, ἀναγκαῖον αὐτὴν βίᾳ κινεῖσθαι ταύτην τὴν κίνησιν· οὐ γὰρ αὐτῆς γε τῆς γῆς ἐστίν· καὶ γὰρ ἂν τῶν μορίων ἕκαστον ταύτην εἶχε τὴν φορὰν· νῦν δ' ἐπ' εὐθείας πάντα φέρεται πρὸς τὸ μέσον. Διόπερ οὐχ οἶόν τ' αἰδίου εἶναι, βίαιόν γ' οὖσαν καὶ παρὰ φύσιν· ἡ δὲ γε τοῦ κόσμου τάξις αἰδίου.

Ἔτι πάντα τὰ φερόμενα τὴν φορὰν τὴν ἐγκύκλιον ὑπολειπόμενα φαίνεται καὶ κινούμενα πλείους (296b.) μιᾷς φορᾶς ἔξω τῆς πρώτης, ὥστε καὶ τὴν γῆν ἀναγκαῖον, εἴτε περὶ τὸ μέσον εἴτ' ἐπὶ τοῦ μέσου κειμένη φέρεται, δύο κινεῖσθαι φορᾶς. Τούτου δὲ συμβαίνοντος ἀναγκαῖον γίνεσθαι πάροδον καὶ τροπὰς τῶν ἐνδεδεμένων ἄστρον. Τοῦτο δ' οὐ φαίνεται γινόμενον, ἀλλ' αἰεὶ ταῦτά κατὰ τοὺς αὐτοὺς ἀνατέλλει καὶ δύεται τόπους αὐτῆς. Ἔτι δ' ἡ φορὰ τῶν μορίων καὶ ὅλης αὐτῆς ἡ κατὰ φύσιν ἐπὶ τὸ μέσον τοῦ παντός ἐστίν· διὰ τοῦτο γὰρ καὶ τυγχάνει κειμένη νῦν ἐπὶ τοῦ κέντρου· διαπορήσειε δ' ἂν τις, ἐπεὶ ταῦτόν ἀμφοτέρων ἐστὶ τὸ μέσον, πρὸς πότερον φέρεται τὰ βάρος ἔχοντα καὶ τὰ μόρια τῆς γῆς κατὰ φύσιν· πότερον ὅτι τοῦ παντός ἐστὶ μέσον, ἢ διότι τῆς γῆς. Ἀνάγκη δὴ πρὸς τὸ τοῦ παντός· καὶ γὰρ τὰ κοῦφα καὶ τὸ πῦρ εἰς τοῦναντίον φερόμενα τοῖς βάρεσι πρὸς τὸ ἔσχατον φέρεται τοῦ περιέχοντος τόπου τὸ μέσον. Συμβέβηκε δὲ ταῦτὸ μέσον εἶναι τῆς γῆς καὶ τοῦ παντός· φέρεται γὰρ καὶ ἐπὶ τὸ τῆς γῆς μέσον, ἀλλὰ κατὰ συμβεβηκός, ἢ τὸ μέσον ἔχει ἐν τῷ τοῦ παντός μέσῳ. Ὅτι δὲ φέρεται καὶ πρὸς τὸ τῆς γῆς μέσον, σημεῖον ὅτι τὰ φερόμενα βάρη ἐπὶ ταύτην οὐ παρ' ἄλληλα φέρεται ἀλλὰ πρὸς ὁμοίας γωνίας, ὥστε πρὸς ἐν τὸ μέσον φέρεται, καὶ τὸ τῆς γῆς.

Φανερόν τοίνυν ὅτι ἀνάγκη ἐπὶ τοῦ μέσου εἶναι τὴν γῆν καὶ ἀκίνητον, διὰ τε τὰς εἰρημένας αἰτίας, καὶ διότι τὰ βίᾳ ῥιπτούμενα ἄνω βάρη κατὰ στάθμην πάλιν φέρεται εἰς ταυτό, κἂν εἰς ἄπειρον ἢ δύναμις ἐκριπτῇ. Ὅτι μὲν οὖν οὔτε κινεῖται οὔτ' ἐκτὸς κεῖται τοῦ μέσου, φανερόν ἐκ τούτων· πρὸς δὲ τούτοις δῆλον ἐκ τῶν εἰρημένων τὸ αἴτιον τῆς μονῆς. Εἰ γὰρ φύσει πέφυκε φέρεσθαι πάντοθεν πρὸς τὸ μέσον, ὥσπερ φαίνεται, καὶ τὸ πῦρ ἀπὸ τοῦ μέσου πάλιν πρὸς τὸ ἔσχατον, ἀδύνατον ἐνεχθῆναι ὅτιοῦν μόριον αὐτῆς ἀπὸ τοῦ μέσου μὴ βιασθέν· μία γὰρ φορὰ τοῦ ἐνὸς καὶ ἀπλῆ τοῦ ἀπλοῦ, ἀλλ' οὐχ αἰ ἐναντία· ἢ δ' ἀπὸ τοῦ μέσου τῇ ἐπὶ τὸ μέσον ἐναντία. Εἰ τοίνυν ὅτιοῦν μόριον ἀδύνατον ἐνεχθῆναι ἀπὸ τοῦ μέσου, φανερόν ὅτι καὶ τὴν ὅλην ἔτι ἀδυνατώτερον· εἰς ὃ γὰρ τὸ μόριον πέφυκε φέρεσθαι, καὶ τὸ ὅλον ἐνταῦθα πέφυκεν· ὥστ' (297a.) εἴπερ ἀδύνατον κινηθῆναι μὴ ὑπὸ κρείττονος ἰσχύος, ἀναγκαῖον ἂν εἴη μένειν αὐτὴν ἐπὶ τοῦ μέσου.

Μαρτυρεῖ δὲ τούτοις καὶ τὰ παρὰ τῶν μαθηματικῶν λεγόμενα περὶ τὴν ἀστρολογίαν· τὰ γὰρ φαινόμενα συμβαίνει μεταβαλλόντων τῶν σχημάτων οἷς ὠρίσται τῶν ἄστρον ἡ τάξις, ὥς ἐπὶ τοῦ μέσου κειμένης τῆς γῆς.

Περὶ μὲν οὖν τοῦ τόπου καὶ μονῆς καὶ κινήσεως, ὃν τρόπον ἔχει, τοσαῦτα εἰρήσθω περὶ αὐτῆς.

Σχήμα δ' ἔχειν σφαιροειδὲς ἀναγκαῖον αὐτήν· ἕκαστον γὰρ τῶν μορίων βάρος ἔχει μέχρι πρὸς τὸ μέσον, καὶ τὸ ἔλαττον ὑπὸ τοῦ μείζονος ὠθούμενον οὐχ οἷόν τε κυμαίνειν, ἀλλὰ συμπίεζεσθαι μᾶλλον καὶ συγχωρεῖν ἕτερον ἑτέρῳ, ἕως ἂν ἔλθῃ ἐπὶ τὸ μέσον. Δεῖ δὲ νοῆσαι τὸ λεγόμενον ὥσπερ ἂν εἰ γιγνομένης τὸν τρόπον ὃν καὶ τῶν φυσιολόγων λέγουσιν τινες γενέσθαι. Πλὴν ἐκεῖνοι μὲν βίαν αἰτιῶνται τῆς κάτω φορᾶς· βέλτιον δὲ τιθέναι τάληθές, καὶ φάναι τοῦτο συμβαίνειν διὰ τὸ φύσιν ἔχειν φέρεσθαι τὸ βάρος ἔχον πρὸς τὸ μέσον. Ἐν δυνάμει οὖν ὄντος τοῦ μίγματος τὰ διακρινόμενα ἐφέρετο ὁμοίως πάντοθεν πρὸς τὸ μέσον. Εἴτ' οὖν ὁμοίως ἀπὸ τῶν ἐσχάτων διηρημένα τὰ μόρια συνήχθη πρὸς τὸ μέσον, εἴτ' ἄλλως ἔχοντα, ποιήσει ταῦτόν. Ὅτι μὲν οὖν ὁμοίως γε πανταχόθεν ἀπὸ τῶν ἐσχάτων φερομένων πρὸς ἓν μέσον ἀναγκαῖον ὅμοιον γίνεσθαι πάντῃ τὸν ὄγκον, φανερόν· ἴσου γὰρ πάντῃ προστιθεμένου ἴσον ἀνάγκη ἀπέχειν τοῦ μέσου τὸ ἔσχατον· τοῦτο δὲ τὸ σχῆμα σφαίρας ἐστίν. Οὐδὲν δὲ διοίσει πρὸς τὸν λόγον, οὐδ' εἰ μὴ πανταχόθεν ὁμοίως συνέθει πρὸς τὸ μέσον τὰ μόρια αὐτῆς. Τὸ γὰρ πλεῖον ἀεὶ τὸ πρὸ αὐτοῦ ἔλαττον προωθεῖν ἀναγκαῖον μέχρι τοῦ μέσου τὴν ῥοπὴν ἐχόντων ἀμφοῖν, καὶ τοῦ βαρυτέρου προωθοῦντος μέχρι τούτου τὸ ἔλαττον βάρος.

Ὅ γὰρ ἂν τις ἀπορήσειε, τὴν αὐτὴν ἔχει τούτοις λύσιν· εἰ γὰρ οὔσης ἐπὶ τοῦ μέσου καὶ σφαιροειδοῦς τῆς γῆς πολλαπλάσιον βάρος ἐπιγένοιτο πρὸς θάτερον ἡμισφαίριον, οὐκ ἔσται τὸ αὐτὸ μέσον τοῦ ὅλου καὶ τὸ τῆς γῆς· ὥστε ἢ οὐ μενεῖ ἐπὶ τοῦ μέσου, ἢ εἴπερ, ἡρεμήσει γε καὶ (297b.) μὴ τὸ μέσον ἔχουσα, ἢ πέφυκε κινεῖσθαι καὶ νῦν.

Τὸ μὲν οὖν ἀπορούμενον τοῦτ' ἔστιν· ἰδεῖν δ' οὐ χαλεπὸν μικρὸν ἐπιτείναντας, καὶ διελόντας πῶς ἀξιοῦμεν ὅποσον οὖν μέγεθος φέρεσθαι πρὸς τὸ μέσον, βάρος ἔχον. Δῆλον γὰρ ὡς οὐχὶ μέχρι τοῦ ἄψασθαι τοῦ κέντρου τὸ ἔσχατον, ἀλλὰ δεῖ κρατεῖν τὸ πλεόν ἕως ἂν λάβῃ τῷ αὐτοῦ μέσῳ τὸ μέσον· μέχρι τούτου γὰρ ἔχει τὴν ῥοπὴν. Οὐδὲν τοίνυν τοῦτο διαφέρει λέγειν ἐπὶ βώλου καὶ μορίου τοῦ τυχόντος ἢ ἐπὶ ὅλης τῆς γῆς· οὐ γὰρ διὰ μικρότητα ἢ μέγεθος εἴρηται τὸ συμβαῖνον, ἀλλὰ κατὰ παντὸς τοῦ ῥοπὴν ἔχοντος ἐπὶ τὸ μέσον.

Ὡστε εἴτε ὅλη ποθὲν ἐφέρετο εἴτε κατὰ μέρος, ἀναγκαῖον μέχρι τούτου φέρεσθαι ἕως ἂν πανταχόθεν ὁμοίως λάβῃ τὸ μέσον, ἀνισαζομένων τῶν ἐλαττόνων ὑπὸ τῶν μειζόνων τῇ προώσει τῆς ῥοπῆς.

Εἴτ' οὖν ἐγένετο, τοῦτον ἀναγκαῖον γενέσθαι τὸν τρόπον, ὥστε φανερόν ὅτι

σφαιροειδῆς ἢ γένεσις αὐτῆς, εἴτ' ἀγέννητος ἀεὶ διατελεῖ μένουσα, τὸν αὐτὸν τρόπον ἔχειν ὄνπερ καὶ εἰ γιγνομένη τὸ πρῶτον ἐγένετο.

Κατὰ τοῦτόν τε δὴ τὸν λόγον ἀναγκαῖον εἶναι τὸ σχῆμα σφαιροειδὲς αὐτῆς, καὶ ὅτι πάντα φέρεται τὰ βαρέα πρὸς ὁμοίας γωνίας, ἀλλ' οὐ παρ' ἄλληλα· τοῦτο δὲ πέφυκε πρὸς τὸ φύσει σφαιροειδές. Ἡ οὖν ἐστὶ σφαιροειδής, ἣ φύσει γε σφαιροειδής. Δεῖ δ' ἕκαστον λέγειν τοιοῦτον εἶναι ὃ φύσει βούλεται εἶναι καὶ ὑπάρχειν, ἀλλὰ μὴ ὃ βίᾳ καὶ παρὰ φύσιν.

Ἔτι δὲ καὶ διὰ τῶν φαινομένων κατὰ τὴν αἴσθησιν· οὔτε γὰρ ἂν αἱ τῆς σελήνης ἐκλείψεις τοιαύτας ἂν εἶχον τὰς ἀποτομάς· νῦν γὰρ ἐν μὲν τοῖς κατὰ μῆνα σχηματισμοῖς πάσας λαμβάνει τὰς διαιρέσεις (καὶ γὰρ εὐθεῖα γίνεται καὶ ἀμφίκυρτος καὶ κοίλη), περὶ δὲ τὰς ἐκλείψεις ἀεὶ κυρτὴν ἔχει τὴν ὀρίζουσαν γραμμὴν, ὥστ' ἐπεὶ ἐκλείπει διὰ τὴν τῆς γῆς ἐπιπρόσθησιν, ἢ τῆς γῆς ἂν εἴη περιφέρεια τοῦ σχήματος αἰτία σφαιροειδῆς οὕσα. Ἔτι δὲ διὰ τῆς τῶν ἄστρων φαντασίας οὐ μόνον φανερόν ὅτι περιφερής, ἀλλὰ καὶ τὸ μέγεθος οὐκ οὕσα μεγάλη· μικρὰς γὰρ γιγνομένης μεταστάσεως ἡμῖν πρὸς μεσημβρίαν καὶ ἄρκτον ἐπιδήλως ἕτερος γίνεταί ὁ ὀρίζων κύκλος, ὥστε τὰ (298a.) ὑπὲρ κεφαλῆς ἄστρα μεγάλην ἔχειν τὴν μεταβολήν, καὶ μὴ ταῦτα φαίνεσθαι πρὸς ἄρκτον τε καὶ μεσημβρίαν μεταβαίνουσιν· ἔνιοι γὰρ ἐν Αἰγύπτῳ μὲν ἀστέρες ὀρῶνται καὶ περὶ Κύπρον, ἐν τοῖς πρὸς ἄρκτον δὲ χωρίοις οὐχ ὀρῶνται, καὶ τὰ διὰ παντὸς ἐν τοῖς πρὸς ἄρκτον φαινόμενα τῶν ἄστρων ἐν ἐκείνοις τοῖς τόποις ποιεῖται δύσιν. Ὡστ' οὐ μόνον ἐκ τούτων δῆλον περιφερὲς ὂν τὸ σχῆμα τῆς γῆς, ἀλλὰ καὶ σφαίρας οὐ μεγάλης· οὐ γὰρ ἂν οὕτω ταχὺ ἐπίδηλον ἐποίει μεθισταμένοις οὕτω βραχύ.

Διὸ τοὺς ὑπολαμβάνοντας συνάπτειν τὸν περὶ τὰς Ἡρακλείας στήλας τόπον τῷ περὶ τὴν Ἰνδικήν, καὶ τοῦτον τὸν τρόπον εἶναι τὴν θάλατταν μίαν, μὴ λίαν ὑπολαμβάνειν ἄπιστα δοκεῖν· λέγουσι δὲ τεκμαιρόμενοι καὶ τοῖς ἐλέφασιν, ὅτι περὶ ἀμφοτέρους τοὺς τόπους τοὺς ἐσχάτους ὄντας τὸ γένος αὐτῶν ἐστίν, ὡς τῶν ἐσχάτων διὰ τὸ συνάπτειν ἀλλήλοις τοῦτο πεπονθότων.

Καὶ τῶν μαθηματικῶν δὲ ὅσοι τὸ μέγεθος ἀναλογίζεσθαι πειρῶνται τῆς περιφερείας, εἰς τετταράκοντα λέγουσιν εἶναι μυριάδας.

Ἐξ ὧν τεκμαιρόμενοις οὐ μόνον σφαιροειδῆ τὸν ὄγκον ἀναγκαῖον εἶναι τῆς γῆς, ἀλλὰ καὶ μὴ μέγαν πρὸς τὸ τῶν ἄλλων ἄστρων μέγεθος.

### Βιβλίο 3



## Κεφάλαιο 1

Περὶ μὲν οὖν τοῦ πρώτου οὐρανοῦ καὶ τῶν μερῶν, ἔτι δὲ περὶ τῶν ἐν αὐτῷ φερομένων ἄστρον, ἐκ τίνων τε συνεστᾶσι καὶ ποῖ' ἅττα τὴν φύσιν ἐστί, πρὸς δὲ τούτοις ὅτι ἀγέννητα καὶ ἄφθαρτα, διεληλύθαμεν πρότερον. Ἐπεὶ δὲ τῶν φύσει λεγομένων τὰ μὲν ἐστὶν οὐσίαι, τὰ δ' ἔργα καὶ πάθη τούτων (λέγω δ' οὐσίας μὲν τὰ τε ἀπλᾶ σώματα, οἷον πῦρ καὶ γῆν καὶ τὰ σύστοιχα τούτοις, καὶ ὅσα ἐκ τούτων, οἷον τὸν τε σύνολον οὐρανὸν καὶ τὰ μόρια αὐτοῦ, καὶ πάλιν τὰ τε ζῶα καὶ τὰ φυτὰ καὶ τὰ μόρια τούτων, πάθη δὲ καὶ ἔργα τὰς τε κινήσεις τὰς τούτων ἐκάστου καὶ τῶν ἄλλων, ὅσων ἐστὶν αἷτια ταῦτα κατὰ τὴν δύναμιν τὴν ἑαυτῶν, ἔτι δὲ τὰς ἀλ(298b.) λοιώσεις καὶ τὰς εἰς ἀλληλα μεταβάσεις), φανερόν ὅτι τὴν πλείστην συμβαίνει τῆς περὶ φύσεως ἱστορίας περὶ σωμάτων εἶναι· πᾶσαι γὰρ αἱ φυσικαὶ οὐσίαι ἢ σώματα ἢ μετὰ σωμάτων γίνονται καὶ μεγεθῶν. Τοῦτο δὲ δῆλον ἔκ τε τοῦ διωρίσθαι τὰ ποῖά ἐστι φύσει, καὶ ἐκ τῆς καθ' ἕκαστα θεωρίας.

Περὶ μὲν οὖν τοῦ πρώτου τῶν στοιχείων εἴρηται, καὶ ποῖόν τι τὴν φύσιν, καὶ ὅτι ἄφθαρτον καὶ ἀγέννητον· λοιπὸν δὲ περὶ τοῖν δυοῖν εἰπεῖν. Ἄμα δὲ συμβήσεται περὶ τούτων λέγουσι καὶ περὶ γενέσεως καὶ φθορᾶς διασκέψασθαι· γενέσεις γὰρ ἦτοι τὸ παράπαν οὐκ ἔστιν, ἢ μόνον ἐν τούτοις τοῖς στοιχείοις καὶ τοῖς ἐκ τούτων ἐστίν. Αὐτὸ δὲ τοῦτο πρῶτον ἴσως θεωρητέον, πότερον ἔστιν ἢ οὐκ ἔστιν.

Οἱ μὲν οὖν πρότερον φιλοσοφήσαντες περὶ τῆς ἀληθείας καὶ πρὸς οὓς νῦν λέγομεν ἡμεῖς λόγους καὶ πρὸς ἀλλήλους διηνέχθησαν.

Οἱ μὲν γὰρ αὐτῶν ὅλως ἀνεῖλον γενέσιν καὶ φθοράν· οὐθὲν γὰρ οὔτε γίνεσθαι φασιν οὔτε φθείρεσθαι τῶν ὄντων, ἀλλὰ μόνον δοκεῖν ἡμῖν, οἷον οἱ περὶ Μέλισσόν τε καὶ Παρμενίδην, οὓς, εἰ καὶ τᾶλλα λέγουσι καλῶς, ἀλλ' οὐ φυσικῶς γε δεῖ νομίσαι λέγειν· τὸ γὰρ εἶναι ἅττα τῶν ὄντων ἀγέννητα καὶ ὅλως ἀκίνητα μᾶλλον ἐστὶν ἐτέρας καὶ προτέρας ἢ τῆς φυσικῆς σκέψεως.

Ἐκεῖνοι δὲ διὰ τὸ μηδὲν μὲν ἄλλο παρὰ τὴν τῶν αἰσθητῶν οὐσίαν ὑπολαμβάνειν εἶναι, τοιαύτας δέ τινας νοῆσαι πρῶτοι φύσεις, εἴπερ ἔσται τις γνῶσις ἢ φρόνησις, οὕτω μετήνεγκαν ἐπὶ ταῦτα τοὺς ἐκεῖθεν λόγους. Ἄτεροι δέ τινες ὥσπερ ἐπίτηδες τὴν ἐναντίαν τούτοις ἔσχον δόξαν. Εἰσὶ γάρ τινες οἱ φασιν οὐθὲν ἀγέννητον εἶναι τῶν πραγμάτων, ἀλλὰ πάντα γίνεσθαι, γενόμενα δὲ τὰ μὲν ἄφθαρτα διαμένειν, τὰ δὲ πάλιν φθείρεσθαι, μάλιστα μὲν οἱ περὶ Ἡσίοδον, εἴτα καὶ τῶν ἄλλων οἱ πρῶτοι φυσιολογήσαντες.

Οἱ δὲ τὰ μὲν ἄλλα πάντα γίνεσθαι φασὶ καὶ ῥεῖν, εἶναι δὲ παγίως οὐθέν, ἔν δέ τι μόνον ὑπομένειν, ἐξ οὗ ταῦτα πάντα μετασχηματίζεσθαι πέφυκεν· ὅπερ εὐόικασι βούλεσθαι λέγειν ἄλλοι τε πολλοὶ καὶ Ἡράκλειτος ὁ Ἐφέσιος. Εἰσὶ δέ τινες καὶ οἱ πᾶν σῶμα γενητὸν ποιοῦσι, συντιθέντες καὶ διαλύοντες εἰς (299a.) ἐπίπεδα καὶ ἐξ ἐπιπέδων.

Περὶ μὲν οὖν τῶν ἄλλων ἕτερος ἔστω λόγος· τοῖς δὲ τοῦτον τὸν τρόπον λέγουσι καὶ πάντα τὰ σώματα συνιστᾶσιν ἐξ ἐπιπέδων ὅσα μὲν ἄλλα συμβαίνει λέγειν ὑπεναντία τοῖς μαθήμασιν, ἐπιπολῆς ἰδεῖν· καίτοι δίκαιον ἢ μὴ κινεῖν ἢ πιστοτέροις αὐτὰ λόγοις κινεῖν τῶν ὑποθέσεων. Ἐπειτα δῆλον ὅτι τοῦ αὐτοῦ λόγου ἐστὶ στερεὰ μὲν ἐξ ἐπιπέδων συγκεῖσθαι, ἐπίπεδα δ' ἐκ γραμμῶν, ταύτας δ' ἐκ στιγμῶν· οὕτω δ' ἐχόντων οὐκ ἀνάγκη τὸ τῆς γραμμῆς μέρος γραμμὴν εἶναι· περὶ δὲ τούτων ἐπέσκεπται πρότερον ἐν τοῖς περὶ κινήσεως λόγοις, ὅτι οὐκ ἔστιν ἀδιαίρετα μήκη.

Ὅσα δὲ περὶ τῶν φυσικῶν σωμάτων ἀδύνατα συμβαίνει λέγειν τοῖς ποιοῦσι τὰς ἀτόμους γραμμάς, ἐπὶ μικρὸν θεωρήσωμεν καὶ νῦν· τὰ μὲν γὰρ ἐπ' ἐκείνων ἀδύνατα συμβαίνοντα καὶ τοῖς φυσικοῖς ἀκολουθήσει, τὰ δὲ τούτοις ἐπ' ἐκείνων οὐχ ἅπαντα διὰ τὸ τὰ μὲν ἐξ ἀφαιρέσεως λέγεσθαι, τὰ μαθηματικά, τὰ δὲ φυσικὰ ἐκ προσθέσεως. Πολλὰ δ' ἐστὶν ἃ τοῖς ἀδιαίρετοις οὐχ οἷόν τε ὑπάρχειν, τοῖς δὲ φυσικοῖς ἀναγκαῖον. [Οἷον εἴ τί ἐστιν ἀδιαίρετον·] ἐν ἀδιαίρετῳ γὰρ διαιρετὸν ἀδύνατον ὑπάρχειν, τὰ δὲ πάθη διαιρετὰ πάντα διχῶς· ἢ γὰρ κατ' εἶδος ἢ κατὰ συμβεβηκός, κατ' εἶδος μὲν οἷον χρώματος τὸ λευκὸν ἢ τὸ μέλαν, κατὰ συμβεβηκὸς δέ, ἃν ὧ ὑπάρχει ἢ διαιρετόν, ὥστε ὅσα ἀπλᾶ τῶν παθημάτων, πάντ' ἐστὶ διαιρετὰ τοῦτον τὸν τρόπον. Διὸ τὸ ἀδύνατον ἐν τοῖς τοιούτοις ἐπισκεπτέον.

Εἰ δὴ τῶν ἀδυνάτων ἐστὶν ἑκατέρου μέρους μηδὲν ἔχοντος βάρος τὰ ἄμφω ἔχειν βάρος, τὰ δ' αἰσθητὰ σώματα ἢ πάντα ἢ ἓνια βάρος ἔχει, οἷον ἡ γῆ καὶ τὸ ὕδωρ, ὡς κἂν αὐτοὶ φαῖεν, εἰ ἡ στιγμή μηδὲν ἔχει βάρος, δῆλον ὅτι οὐδ' αἱ γραμμαί, εἰ δὲ μὴ αὐται, οὐδὲ τὰ ἐπίπεδα· ὥστ' οὐδὲ τῶν σωμάτων οὐθέν.

Ἀλλὰ μὴν ὅτι τὴν στιγμήν οὐχ οἷόν τε βάρος ἔχειν, φανερόν. Τὸ μὲν γὰρ βαρὺ ἅπαν καὶ βαρύτερον καὶ τὸ κοῦφον καὶ κουφότερον ἐνδέχεται (299b.) ταί τινος εἶναι. Τὸ δὲ βαρύτερον ἢ κουφότερον ἴσως οὐκ ἀνάγκη βαρὺ ἢ κοῦφον εἶναι, ὡσπερ καὶ τὸ μὲν μέγα μείζον, τὸ δὲ μείζον οὐ πᾶν μέγα· πολλὰ γάρ ἐστιν ἃ μικρὰ ὄντα ἀπλῶς ὅμως μείζω ἐτέρων ἐστίν. Εἰ δὴ ὁ ἂν βαρὺ ὢν βαρύτερον ἢ, ἀνάγκη βάρει μείζον εἶναι, τὸ βαρὺ ἅπαν διαιρετὸν ἂν εἴη. Ἡ δὲ στιγμή ἀδιαίρετον ὑπόκειται.

Ἔτι εἰ τὸ μὲν βαρὺ πυκνὸν τι, τὸ δὲ κοῦφον μανόν, ἔστι δὲ πυκνὸν μανοῦ διαφέρον τῷ ἐν ἴσῳ ὄγκῳ πλεῖον ἐνυπάρχειν· εἰ οὖν ἐστὶ στιγμή βαρεῖα καὶ κούφη, ἔστι καὶ πυκνὴ καὶ μανή. Ἀλλὰ τὸ μὲν πυκνὸν διαιρετόν, ἡ δὲ στιγμή ἀδιαίρετος.

Εἰ δὲ πᾶν τὸ βαρὺ ἢ μαλακὸν ἢ σκληρὸν ἀνάγκη εἶναι, ῥάδιον ἐκ τούτων ἀδύνατόν τι συναγαγεῖν. Μαλακὸν μὲν γὰρ τὸ εἰς ἑαυτὸ ὑπεῖκον, σκληρὸν δὲ τὸ μὴ ὑπεῖκον· τὸ δὲ ὑπεῖκον διαιρετόν.

Ἀλλὰ μὴν οὐδ' ἐκ μὴ ἐχόντων βάρος ἔσται βάρος. Καὶ γὰρ ἐπὶ πόσων συμβήσεται τοῦτο καὶ ἐπὶ ποίων; Ἡ πῶς διοριῶσι μὴ βουλόμενοι πλάττειν; καὶ εἰ πᾶν μεῖζον βάρος βάρους βάρει, συμβήσεται καὶ ἕκαστον τῶν ἀβαρῶν βάρος ἔχειν· εἰ γὰρ αἱ τέτταρες στιγμαὶ βάρος ἔχουσι, τὸ δ' ἐκ πλειόνων ἢ τοδὶ βαρέος ὄντος βαρύτερον, τὸ δὲ βαρέος βαρύτερον ἀνάγκη βάρει εἶναι, ὥσπερ καὶ τὸ λευκοῦ λευκότερον λευκῷ, ἔσται τὸ μεῖζον μιᾷ στιγμή βαρύτερον, ὥστε, ἀφαιρεθέντος τοῦ ἴσου, [ὥστε] καὶ ἡ μία στιγμή βάρος ἔξει.

Ἔτι εἰ μὲν τὰ ἐπίπεδα μόνον κατὰ γραμμὴν ἐνδέχεται συντίθεσθαι, ἄτοπον· ὥσπερ γὰρ γραμμὴ πρὸς γραμμὴν ἀμφοτέρως συντίθεται, καὶ κατὰ μήκος καὶ κατὰ πλάτος, δεῖ καὶ ἐπίπεδον ἐπιπέδῳ τὸν αὐτὸν τρόπον. Γραμμὴ δὲ δύναται γραμμῇ συντίθεσθαι κατὰ γραμμὴν ἐπιτιθεμένη ἀλλ' οὐ προστιθεμένη. Ἀλλὰ μὴν εἴ γε καὶ κατὰ πλάτος ἐνδέχεται συντίθεσθαι, ἔσται τι σῶμα ὃ οὔτε στοιχεῖον οὔτε ἐκ στοιχείων, συντιθέμενον ἐκ τῶν οὕτω συντιθεμένων ἐπιπέδων.

Ἔτι εἰ μὲν πλήθει βαρύτερα τὰ σώματα τῶν ἐπιπέδων, ὥσπερ ἐν τῷ (300a.) Τιμαίῳ διώρισται, δῆλον ὡς ἔξει καὶ ἡ γραμμὴ καὶ ἡ στιγμή βάρος· ἀνάλογον γὰρ πρὸς ἀλλήλα ἔχουσιν, ὥσπερ καὶ πρότερον εἰρήκαμεν. Εἰ δὲ μὴ τοῦτον διαφέρει τὸν τρόπον ἀλλὰ τῷ τὴν μὲν γῆν εἶναι βαρὺ τὸ δὲ πῦρ κοῦφον, ἔσται καὶ τῶν ἐπιπέδων τὸ μὲν κοῦφον τὸ δὲ βαρὺ. Καὶ τῶν γραμμῶν δὴ καὶ τῶν στιγμῶν ὡσαύτως· τὸ γὰρ τῆς γῆς ἐπίπεδον ἔσται βαρύτερον ἢ τὸ τοῦ πυρός. Ὅλως δὲ συμβαίνει ἢ μηδέν ποτ' εἶναι μέγεθος, ἢ δύνασθαί γε ἀναιρεθῆναι, εἴπερ ὁμοίως ἔχει στιγμή μὲν πρὸς γραμμὴν, γραμμὴ δὲ πρὸς ἐπίπεδον, τοῦτο δὲ πρὸς σῶμα· πάντα γὰρ εἰς ἀλλήλα ἀναλυόμενα εἰς τὰ πρῶτα ἀναλυθήσεται· ὥστ' ἐνδέχοιτ' ἂν στιγμᾶς μόνον εἶναι, σῶμα δὲ μηθέν.

Πρὸς δὲ τούτοις καὶ εἰ ὁ χρόνος ὁμοίως ἔχει, ἀναιροῖτ' ἂν ποτε ἢ ἐνδέχοιτ' ἂν ἀναιρεθῆναι· τὸ γὰρ νῦν τὸ ἄτομον οἶον στιγμή γραμμῆς ἐστίν.

Τὸ δ' αὐτὸ συμβαίνει καὶ τοῖς ἐξ ἀριθμῶν συντιθεῖσι τὸν οὐρανόν· ἔνιοι γὰρ τὴν φύσιν ἐξ ἀριθμῶν συνιστᾶσιν, ὥσπερ τῶν Πυθαγορείων τινές· τὰ μὲν γὰρ φυσικὰ σώματα φαίνεται βάρος ἔχοντα καὶ κουφότητα, τὰς δὲ μονάδας οὔτε σώματα ποιεῖν οἷόν τε συντιθεμένας οὔτε βάρος ἔχειν.

## Κεφάλαιο 2

Ὅτι δ' ἀναγκαῖον ὑπάρχειν κίνησιν τοῖς ἀπλοῖς σώμασι φύσει τινὰ πᾶσιν, ἐκ τῶνδε δῆλον. Ἐπεὶ γὰρ κινούμενα φαίνεται, κινεῖσθαι γε ἀναγκαῖον βία, εἰ μὴ οἰκείαν ἔχει κίνησιν· τὸ δὲ βία καὶ παρὰ φύσιν ταύτόν. Ἀλλὰ μὴν εἰ παρὰ φύσιν ἐστὶ τις κίνησις, ἀνάγκη εἶναι καὶ κατὰ φύσιν, παρ' ἣν αὕτη· καὶ εἰ πολλὰ αἰ παρὰ φύσιν, τὴν κατὰ φύσιν μίαν· κατὰ φύσιν μὲν γὰρ ἀπλῶς, παρὰ φύσιν δ' ἔχει πολλὰς ἑκάστον.

Ἔτι δὲ καὶ ἐκ τῆς ἡρεμίας δῆλον· καὶ γὰρ ἡρεμεῖν ἀναγκαῖον ἢ βία ἢ κατὰ φύσιν· βία δὲ μένει οὐ καὶ φέρεται βία, καὶ κατὰ φύσιν οὐ κατὰ φύσιν.

Ἐπεὶ οὖν φαίνεται τι μένον ἐπὶ τοῦ μέσου, εἰ μὲν κατὰ φύσιν, δῆλον ὅτι καὶ ἡ φορά ἢ ἐνταῦθα κατὰ φύσιν αὐτῷ· εἰ δὲ βία, τί τὸ φέρεσθαι κωλύον; Εἰ μὲν ἡρεμοῦν, τὸν αὐτὸν κυκλήσομεν λόγον· ἀνάγκη γὰρ ἢ κατὰ φύσιν εἶναι τὸ (300b.) πρῶτον ἡρεμοῦν ἢ εἰς ἄπειρον ἰέναι, ὅπερ ἀδύνατον· εἰ δὲ κινούμενον τὸ κωλύον φέρεσθαι, καθάπερ φησὶν Ἐμπεδοκλῆς τὴν γῆν ὑπὸ τῆς δίνης ἡρεμεῖν, ποῦ ἂν ἐφέρετο, ἐπειδὴ εἰς ἄπειρον ἀδύνατον; Οὐθὲν γὰρ γίγνεται ἀδύνατον, τὸ δ' ἄπειρον διελθεῖν ἀδύνατον. Ὡστ' ἀνάγκη στήναί που τὸ φερόμενον, κάκεῖ μὴ βία μένειν ἀλλὰ κατὰ φύσιν. Εἰ δ' ἐστὶν ἡρεμία κατὰ φύσιν, ἔστι καὶ κίνησις κατὰ φύσιν, ἢ εἰς τοῦτον τὸν τόπον φορά. Διὸ καὶ Λευκίπῳ καὶ Δημοκρίτῳ, τοῖς λέγουσιν ἀεὶ κινεῖσθαι τὰ πρῶτα σώματα ἐν τῷ κενῷ καὶ τῷ ἀπείρῳ, λεκτέον τίνα κίνησιν καὶ τίς ἢ κατὰ φύσιν αὐτῶν κίνησις. Εἰ γὰρ ἄλλο ὑπ' ἄλλου κινεῖται βία τῶν στοιχείων, ἀλλὰ καὶ κατὰ φύσιν ἀνάγκη τινὰ εἶναι κίνησιν ἐκάστου, παρ' ἣν ἡ βίαιός ἐστιν· καὶ δεῖ τὴν πρώτην κινοῦσαν μὴ βία κινεῖν, ἀλλὰ κατὰ φύσιν· εἰς ἄπειρον γὰρ εἴσιν, εἰ μή τι ἔσται κατὰ φύσιν κινοῦν πρῶτον, ἀλλ' ἀεὶ τὸ πρότερον βία κινούμενον κινήσει.

Τὸ αὐτὸ δὲ τοῦτο συμβαίνειν ἀναγκαῖον κἂν εἰ καθάπερ ἐν τῷ Τιμαίῳ γέγραπται, πρὶν γενέσθαι τὸν κόσμον ἐκινεῖτο τὰ στοιχεῖα ἀτάκτως. Ἀνάγκη γὰρ ἢ βίαιον εἶναι τὴν κίνησιν ἢ κατὰ φύσιν. Εἰ δὲ κατὰ φύσιν ἐκινεῖτο, ἀνάγκη κόσμον εἶναι, ἐάν τις βούληται θεωρεῖν ἐπιστήσας· τό τε γὰρ πρῶτον κινοῦν ἀνάγκη κινεῖν ἑαυτὸ κινούμενον κατὰ φύσιν, καὶ τὰ κινούμενα μὴ βία,

ἐν τοῖς οἰκείοις ἡρεμοῦντα τόποις, ποιεῖν ἥνπερ ἔχουσι νῦν τάξιν, τὰ μὲν βάρος ἔχοντα ἐπὶ τὸ μέσον, τὰ δὲ κουφότητα ἔχοντα ἀπὸ τοῦ μέσου· ταύτην δ' ὁ κόσμος ἔχει τὴν διάταξιν.

Ἔτι δὲ τοσοῦτον ἐπανεροῖτ' ἂν τις, πότερον οὐχ οἷόν τ' ἦν κινούμενα ἀτάκτως καὶ μίγνυσθαι τοιαύτας μίξεις ἔνια, ἐξ ὧν συνίσταται τὰ κατὰ φύσιν συνιστάμενα σώματα, λέγω δ' οἷον ὅστ' αἱ καὶ σάρκας, καθάπερ Ἐμπεδοκλῆς φησὶ γίνεσθαι ἐπὶ τῆς φιλότητος· λέγει γὰρ ὡς πολλὰ μὲν κόρσαι ἀναύχενες ἐβλάστησαν.

Τοῖς δ' ἄπειρα ἐν ἀπείρῳ τὰ κινούμενα ποιοῦσιν, εἰ μὲν ἐν τὸ κινοῦν, ἀνάγκη μίαν φέρεσθαι φοράν, ὥστ' οὐκ ἀτάκτως κινηθήσεται, εἰ δ' ἄπειρα τὰ (301a.) κινοῦντα, καὶ τὰς φορὰς ἀναγκαῖον ἀπείρους εἶναι· εἰ γὰρ πεπερασμένα, τάξεις τις ἔσται· οὐ γὰρ τῷ μὴ φέρεσθαι εἰς τὸ αὐτὸ ἡ ἀταξία συμβαίνει· οὐδὲ γὰρ νῦν εἰς τὸ αὐτὸ φέρεται πάντα, ἀλλὰ τὰ συγγενῇ μόνον.

Ἔτι τὸ ἀτάκτως οὐθέν ἐστιν ἕτερον ἢ τὸ παρὰ φύσιν· ἡ γὰρ τάξις ἡ οἰκεία τῶν αἰσθητῶν φύσις ἐστίν. Ἀλλὰ μὴν καὶ τοῦτο ἄτοπον καὶ ἀδύνατον, τὸ ἄπειρον ἄτακτον ἔχειν κίνησιν· ἔστι γὰρ φύσις ἐκείνη τῶν πραγμάτων οἷαν ἔχει τὰ πλείω καὶ τὸν πλείω χρόνον· συμβαίνει οὖν αὐτοῖς τοῦναντίον τὴν μὲν ἀταξίαν εἶναι κατὰ φύσιν, τὴν δὲ τάξιν καὶ τὸν κόσμον παρὰ φύσιν· καίτοι οὐδὲν ὡς ἔτυχε γίγνεται τῶν κατὰ φύσιν. Ἔοικε δὲ τοῦτό γε αὐτὸ καλῶς Ἀναξαγόρας λαβεῖν· ἐξ ἀκινήτων γὰρ ἄρχεται κοσμοποιεῖν. Πειρῶνται δὲ καὶ οἱ ἄλλοι συγκρίνοντές πως πάλιν κινεῖν καὶ διακρίνειν. Ἐκ διεστώτων δὲ καὶ κινουμένων οὐκ εὐλογον ποιεῖν τὴν γένεσιν. Διὸ καὶ Ἐμπεδοκλῆς παραλείπει τὴν ἐπὶ τῆς φιλότητος· οὐ γὰρ ἂν ἡδύνατο συστήσαι τὸν οὐρανὸν ἐκ κεχωρισμένων μὲν κατασκευάζων, σύγκρισιν δὲ ποιῶν διὰ τὴν φιλότητα· ἐκ διακεκριμένων γὰρ συνέστηκεν ὁ κόσμος τῶν στοιχείων· ὥστ' ἀναγκαῖον γίνεσθαι ἐξ ἐνὸς καὶ συγκεκριμένου.

Ὅτι μὲν οὖν ἐστὶ φυσικὴ τις κίνησις ἐκάστου τῶν σωμάτων, ἣν οὐ βίᾳ κινοῦνται οὐδὲ παρὰ φύσιν, φανερὸν ἐκ τούτων.

Ὅτι δ' ἔχειν ἔνια ἀναγκαῖον ῥοπὴν βάρους καὶ κουφότητος, ἐκ τῶνδε δῆλον. Κινεῖσθαι μὲν γὰρ φαμεν ἀναγκαῖον εἶναι· εἰ δὲ μὴ ἔξει φύσει ῥοπὴν τὸ κινούμενον, ἀδύνατον κινεῖσθαι ἢ πρὸς τὸ μέσον ἢ ἀπὸ τοῦ μέσου. Ἔστω γὰρ τὸ μὲν ἐφ' οὗ Α ἀβαρές, τὸ δ' ἐφ' οὗ Β βάρος ἔχον, ἐννεχθῶ δὲ τὸ ἀβαρές τὴν ΓΔ, τὸ δὲ Β ἐν τῷ ἴσῳ χρόνῳ τὴν ΓΕ· μείζω γὰρ οἰσθήσεται τὸ βάρος ἔχον. Ἐὰν δὲ διαιρεθῇ τὸ σῶμα τὸ ἔχον βάρος ὡς ἡ ΓΕ πρὸς τὴν ΓΔ

(δυνατὸν γὰρ οὕτως ἔχειν πρὸς τι τῶν ἐν αὐτῷ μορίων), εἰ τὸ ὅλον φέρεται τὴν ὅλην τὴν ΓΕ, τὸ μόριον ἀνάγκη ἐν τῷ αὐτῷ χρόνῳ τὴν ΓΔ φέρεσθαι, ὥστε ἴσον οἰσθήσεται τὸ ἀβαρές καὶ τὸ βάρος ἔχον· ὅπερ ἀδύνα(301b.) τον. Ὁ δ' αὐτὸς λόγος καὶ ἐπὶ κουφότητος.

Ἐτι δ' εἰ ἔσται τι σῶμα κινούμενον μήτε κουφότητα μήτε βάρος ἔχον, ἀνάγκη τοῦτο βίᾳ κινεῖσθαι, βίᾳ δὲ κινούμενον ἄπειρον ποιεῖ τὴν κίνησιν. Ἐπεὶ γὰρ δυνάμεις τις ἢ κινούσα, τὸ δ' ἔλαττον καὶ τὸ κουφότερον ὑπὸ τῆς αὐτῆς δυνάμεως πλεῖον κινηθήσεται, κεκινήσθω τὸ μὲν ἐφ' ᾧ τὸ Α, τὸ ἀβαρές, τὴν ΓΕ, τὸ δ' ἐφ' ᾧ τὸ Β, τὸ βάρος ἔχον, ἐν τῷ ἴσῳ χρόνῳ τὴν ΓΔ.

Διαιρεθέντος δὴ τοῦ βάρους ἔχοντος σώματος ὡς ἡ ΓΕ πρὸς τὴν ΓΔ, συμβήσεται τὸ ἀφαιρούμενον ἀπὸ τοῦ βάρους ἔχοντος σώματος τὴν ΓΕ φέρεσθαι ἐν τῷ ἴσῳ χρόνῳ, ἐπεὶ τὸ ὅλον ἐφέρετο τὴν ΓΔ. Τὸ γὰρ τάχος ἔξει τὸ τοῦ ἐλάττονος πρὸς τὸ τοῦ μείζονος ὡς τὸ μείζον σῶμα πρὸς τὸ ἔλαττον. Ἴσον ἄρα τὸ ἀβαρές οἰσθήσεται σῶμα καὶ τὸ βάρος ἔχον ἐν τῷ αὐτῷ χρόνῳ. Τοῦτο δ' ἀδύνατον. Ὡστ' ἐπεὶ παντὸς τοῦ προτεθέντος μείζον κινηθήσεται διάστημα τὸ ἀβαρές, ἄπειρον ἂν φέροιτο. Φανερόν οὖν ὅτι ἀνάγκη σῶμα πᾶν βάρος ἔχειν ἢ κουφότητα διωρισμένον. Ἐπεὶ δὲ φύσις μὲν ἐστὶν ἡ ἐν αὐτῷ ὑπάρχουσα κινήσεως ἀρχή, δύναμις δ' ἡ ἐν ἄλλῳ ἢ ἡ ἄλλο, κίνησις δὲ ἡ μὲν κατὰ φύσιν ἢ δὲ βίᾳ πᾶσα, τὴν μὲν κατὰ φύσιν, οἷον τῷ λίθῳ τὴν κάτω, θάττω ποιήσει τὸ κατὰ δύναμιν, τὴν δὲ παρὰ φύσιν ὅλως αὐτή. Πρὸς ἀμφοτέρω δὲ ὥσπερ ὀργάνῳ χρῆται τῷ ἀέρι (πέφυκε γὰρ οὗτος καὶ κοῦφος εἶναι καὶ βαρύς)· τὴν μὲν οὖν ἄνω ποιήσει φορὰν ἢ κοῦφος, ὅταν ὠσθῇ καὶ λάβῃ τὴν ἀρχὴν ἀπὸ τῆς δυνάμεως, τὴν δὲ κάτω πάλιν ἢ βαρύς· ὥσπερ γὰρ ἐναφάψασα παραδίδωσιν ἑκατέρω. Διὸ καὶ οὐ παρακολουθοῦντος τοῦ κινήσαντος φέρεται τὸ βίᾳ κινήθην. Εἰ γὰρ μὴ τοιοῦτόν τι σῶμα ὑπῆρχεν, οὐκ ἂν ἦν βίᾳ κίνησις. Καὶ τὴν κατὰ φύσιν δ' ἐκάστου κίνησιν συνεπουρίζει τὸν αὐτὸν τρόπον. Ὅτι μὲν οὖν ἅπαν ἢ κοῦφον ἢ βαρύ, καὶ πῶς αἱ παρὰ φύσιν κινήσεις ἔχουσι ἐν τούτοις, φανερόν.

Ὅτι δ' οὔτε πάντων ἐστὶ γενέσεις οὔθ' ἀπλῶς οὐθενός, δῆλον ἐκ τῶν προειρημένων· ἀδύνατον γὰρ παντὸς σώματος εἶναι γενέσιν, (302a.) εἰ μὴ καὶ κενὸν εἶναι τι δυνατὸν κεχωρισμένον· ἐν ᾧ γὰρ ἔσται τόπῳ τὸ νῦν γιγνόμενον εἰ ἐγίγνετο, ἐν τούτῳ πρότερον τὸ κενὸν ἀναγκαῖον εἶναι σώματος μηθενὸς ὄντος. Ἄλλο μὲν γὰρ ἐξ ἄλλου σῶμα γίνεσθαι δυνατόν, οἷον ἐξ ἀέρος πῦρ, ὅλως δ' ἐκ μηθενὸς ἄλλου προϋπάρχοντος μεγέθους ἀδύνατον· μάλιστα γὰρ ἂν ἐκ δυνάμει τινὸς ὄντος σώματος ἐνεργείᾳ γένοιτ' ἂν σῶμα. Ἀλλ' εἰ τὸ δυνάμει ὄν σῶμα μηθέν ἐστὶν ἄλλο σῶμα ἐνεργείᾳ πρότερον, κενὸν ἔσται

κεχωρισμένον.

### Κεφάλαιο 3

Λοιπὸν δ' εἰπεῖν τίνων τέ ἐστὶ γένεσις [σωμάτων], καὶ διὰ τί ἐστίν. Ἐπεὶ οὖν ἐν ἅπασιν ἡ γνῶσις διὰ τῶν πρώτων, πρῶτα δὲ τῶν ἐνυπαρχόντων τὰ στοιχεῖα, σκεπτέον ποῖα τῶν τοιούτων σωμάτων ἐστὶ στοιχεῖα, καὶ διὰ τί ἐστίν, ἔπειτα μετὰ ταῦτα πόσα καὶ ποῖ' ἄττα.

Τοῦτο δ' ἔσται φανερόν ὑποθεμένοις τίς ἐστίν ἡ τοῦ στοιχείου φύσις. Ἐστω δὴ στοιχεῖον τῶν σωμάτων, εἰς ὃ τᾶλλα σώματα διαιρεῖται, ἐνυπάρχον δυνάμει ἢ ἐνεργείᾳ (τοῦτο γὰρ ποτέρως, ἔτι ἀμφισβητήσιμον), αὐτὸ δ' ἐστὶν ἀδιαίρετον εἰς ἕτερα τῷ εἶδει· τοιοῦτον γάρ τι τὸ στοιχεῖον ἅπαντες καὶ ἐν ἅπασι βούλονται λέγειν. Εἰ δὴ τὸ εἰρημένον ἐστὶ στοιχεῖον, ἀνάγκη εἶναι ἄττα τοιαῦτα τῶν σωμάτων. Ἐν μὲν γὰρ σαρκὶ καὶ ξύλῳ καὶ ἐκάστῳ τῶν τοιούτων ἔνεστι δυνάμει πῦρ καὶ γῆ· φανερά γὰρ ταῦτα ἐξ ἐκείνων ἐκκρινόμενα. Ἐν δὲ πυρὶ σὰρξ ἢ ξύλον οὐκ ἐνυπάρχουσιν, οὔτε κατὰ δύναμιν οὔτε κατ' ἐνέργειαν· ἐξεκρίνετο γὰρ ἅν. Ὀμοίως δ' οὐδ' εἰ ἐν τι μόνον εἴη τοιοῦτον, οὐδ' ἐν ἐκείνῳ· οὐ γὰρ εἰ ἔσται σὰρξ ἢ ὀστοῦν ἢ τῶν ἄλλων ὀτιοῦν, οὐπω φατέον ἐνυπάρχειν δυνάμει, ἀλλὰ προσθεωρητέον τίς ὁ τρόπος τῆς γενέσεως.

Ἀναξαγόρας δ' ἐναντίως Ἐμπεδοκλεῖ λέγει περὶ τῶν στοιχείων. Ὁ μὲν γὰρ πῦρ καὶ γῆν καὶ τὰ σύστοιχα τούτοις στοιχεῖα φησὶν εἶναι τῶν σωμάτων καὶ συγκεῖσθαι πάντ' ἐκ τούτων, Ἀναξαγόρας δὲ τούναντίον· τὰ γὰρ ὁμοιομερῆ στοιχεῖα (λέγω δ' οἷον σάρκα καὶ ὀστοῦν καὶ τῶν τοι(302b.) ούτων ἕκαστον), ἄερα δὲ καὶ πῦρ μίγματα τούτων καὶ τῶν ἄλλων σπερμάτων πάντων· εἶναι γὰρ ἐκάτερον αὐτῶν ἐξ ἀοράτων τῶν ὁμοιομερῶν πάντων ἡθροισμένον. Διὸ καὶ γίνεσθαι πάντ' ἐκ τούτων· τὸ γὰρ πῦρ καὶ τὸν αἰθέρα προσαγορεύει ταῦτό.

Ἐπεὶ δ' ἐστὶ παντὸς φυσικοῦ σώματος κίνησις οἰκεία, τῶν δὲ κινήσεων αἱ μὲν ἀπλαῖ αἱ δὲ μικταί, καὶ αἱ μὲν μικταὶ τῶν μικτῶν, αἱ δὲ ἀπλαῖ τῶν ἀπλῶν εἰσι, φανερόν ὅτι ἔσται ἄττα σώματα ἀπλᾶ. Εἰσὶ γὰρ καὶ κινήσεις ἀπλαῖ. Ὡστε δῆλον καὶ ὅτι ἐστὶ στοιχεῖα καὶ διὰ τί ἐστίν.

### Κεφάλαιο 4

Πότερον δὲ πεπερασμένα ἢ ἄπειρα, καὶ εἰ πεπερασμένα, πόσα τὸν ἀριθμόν,

ἐπόμενον ἂν εἴη σκοπεῖν.

Πρῶτον μὲν οὖν ὅτι οὐκ ἔστιν ἄπειρα, καθάπερ οἴονταί τινες, θεωρητέον, καὶ πρῶτον τοὺς πάντα τὰ ὁμοιομερῆ στοιχεῖα ποιοῦντας, καθάπερ καὶ Ἀναξαγόρας. Οὐθεὶς γὰρ τῶν οὕτως ἀξιούντων ὀρθῶς λαμβάνει τὸ στοιχεῖον· ὀρῶμεν γὰρ πολλὰ καὶ τῶν μικτῶν σωμάτων εἰς ὁμοιομερῆ διαιρούμενα, λέγω δ' οἷον σάρκα καὶ ὀστοῦν καὶ ξύλον καὶ λίθον. Ὡστ' εἴπερ τὸ σύνθετον οὐκ ἔστι στοιχεῖον, οὐχ ἅπαν ἔσται τὸ ὁμοιομερὲς στοιχεῖον, ἀλλὰ τὸ ἀδιαίρετον εἰς ἕτερα τῷ εἶδει, καθάπερ εἴρηται πρότερον.

Ἔτι δ' οὐδ' οὕτως λαμβάνοντας τὸ στοιχεῖον ἀνάγκη ποιεῖν ἄπειρα· πάντα γὰρ ταῦτά ἀποδοθήσεται καὶ πεπερασμένων ὄντων, ἐάν τις λάβῃ· τὸ αὐτὸ γὰρ ποιήσει, καὶ δύο ἢ τρία μόνον ἢ τοιαῦτα, καθάπερ ἐγχειρεῖ καὶ Ἑμπεδοκλῆς. Ἐπεὶ γὰρ καὶ ὥς αὐτοῖς συμβαίνει μὴ πάντα ποιεῖν ἐξ ὁμοιομερῶν (πρόσωπον γὰρ οὐκ ἐκ προσώπων ποιοῦσιν, οὐδ' ἄλλο τῶν κατὰ φύσιν ἐσχηματισμένων οὐθέν), φανερόν ὅτι πολλῷ βέλτιον πεπερασμένας ποιεῖν τὰς ἀρχάς, καὶ ταύτας ὡς ἐλαχίστας πάντων γε τῶν αὐτῶν μελλόντων δείκνυσθαι, καθάπερ ἀξιοῦσι καὶ οἱ ἐν τοῖς μαθήμασιν· ἀεὶ γὰρ πεπερασμένας λαμβάνουσιν ἀρχὰς ἢ τῷ εἶδει ἢ τῷ ποσῷ.

Ἔτι εἰ σῶμα σώματος ἕτερον λέγεται κατὰ τὰς οἰκείας διαφοράς, αἱ δὲ τῶν σωμάτων διαφοραὶ πεπερασμέναι (δια(303a.) φέρουσι γὰρ τοῖς αἰσθητοῖς, ταῦτα δὲ πεπέρανται· δεῖ δὲ τοῦτο δειχθῆναι), φανερόν ὅτι καὶ τὰ στοιχεῖα ἀνάγκη πεπερασμένα εἶναι.

Ἀλλὰ μὴν οὐδ' ὡς ἕτεροί τινες λέγουσιν, οἷον Λεύκιππος τε καὶ Δημόκριτος ὁ Ἀβδηρίτης, εὐλόγα τὰ συμβαίνοντα· φασὶ γὰρ εἶναι τὰ πρῶτα μεγέθη πλήθει μὲν ἄπειρα, μεγέθει δὲ ἀδιαίρετα, καὶ οὗτ' ἐξ ἑνὸς πολλὰ γίνεσθαι οὔτε ἐκ πολλῶν ἓν, ἀλλὰ τῇ τούτων συμπλοκῇ καὶ περιπαλάξει πάντα γεννᾶσθαι. Τρόπον γάρ τινα καὶ οὗτοι πάντα τὰ ὄντα ποιοῦσιν ἀριθμοὺς καὶ ἐξ ἀριθμῶν· καὶ γὰρ εἰ μὴ σαφῶς δηλοῦσιν, ὅμως τοῦτο βούλονται λέγειν. Καὶ πρὸς τούτοις, ἐπεὶ διαφέρει τὰ σώματα σχήμασιν, ἄπειρα δὲ τὰ σχήματα, ἄπειρα καὶ τὰ ἀπλᾶ σώματά φασιν εἶναι. Ποῖον δὲ καὶ τί ἐκάστου τὸ σχῆμα τῶν στοιχείων, οὐθέν ἐπιδιώρισαν, ἀλλὰ μόνον τῷ πυρὶ τὴν σφαῖραν ἀπέδωκαν· ἀέρα δὲ καὶ ὕδωρ καὶ τάλλα μεγέθει καὶ μικρότητι διεΐλον, ὡς οὖσαν αὐτῶν τὴν φύσιν οἷον πανσπερμίαν πάντων τῶν στοιχείων.

Πρῶτον μὲν οὖν ταῦτόν καὶ τούτοις ἀμάρτημα τὸ μὴ πεπερασμένας λαβεῖν τὰς ἀρχάς, ἐξὸν ἅπαντα ταῦτά λέγειν. Ἔτι δ' εἰ μὴ ἄπειροι τῶν σχημάτων αἱ



διαφοραί, δῆλον ὅτι οὐκ ἔσται τὰ στοιχεῖα ἄπειρα.

Πρὸς δὲ τούτοις ἀνάγκη μάχεσθαι ταῖς μαθηματικαῖς ἐπιστήμας ἄτομα σώματα λέγοντας, καὶ πολλὰ τῶν ἐνδόξων καὶ τῶν φαινομένων κατὰ τὴν αἴσθησιν ἀναιρεῖν, περὶ ὧν εἴρηται πρότερον ἐν τοῖς περὶ χρόνου καὶ κινήσεως. Ἄμα δὲ καὶ ἐναντία λέγειν αὐτοὺς αὐτοῖς ἀνάγκη· ἀδύνατον γὰρ ἀτόμων ὄντων τῶν στοιχείων μεγέθει καὶ μικρότητι διαφέρειν ἀέρα καὶ γῆν καὶ ὕδωρ· οὐ γὰρ οἶόν τ' ἐξ ἀλλήλων γίνεσθαι· ὑπολείψει γὰρ ἀεὶ τὰ μέγιστα σώματα ἐκκρινόμενα, φασὶ δ' οὕτω γίνεσθαι ὕδωρ καὶ ἀέρα καὶ γῆν ἐξ ἀλλήλων.

Ἔτι οὐδὲ κατὰ τὴν τούτων ὑπόληψιν δόξειεν ἂν ἄπειρα γίνεσθαι τὰ στοιχεῖα, εἴπερ τὰ μὲν σώματα διαφέρει σχήμασι, τὰ δὲ σχήματα πάντα σύγκειται ἐκ πυραμίδων, τὰ μὲν εὐθύγραμμα ἐξ εὐθύ(303b.) γραμμῶν, ἡ δὲ σφαῖρα ἐξ ὀκτώ μορίων. Ἀνάγκη γὰρ εἶναί τινας ἀρχὰς τῶν σχημάτων. Ὡστε εἴτε μία εἴτε δύο εἴτε πλείους, καὶ τὰ ἀπλᾶ σώματα τοσαῦτα ἔσται τὸ πλῆθος.

Ἔτι δ' εἰ ἐκάστω μὲν τῶν στοιχείων ἐστί τις οἰκεία κίνησις, καὶ ἡ τοῦ ἀπλοῦ σώματος ἀπλῆ, μή εἰσι δ' αἱ ἀπλᾶί κινήσεις ἄπειροι διὰ τὸ μήτε τὰς ἀπλᾶς φορὰς πλείους εἶναι δυοῖν μήτε τοὺς τόπους ἀπείρους, οὐκ ἂν εἴη οὐδ' οὕτως ἄπειρα τὰ στοιχεῖα.

## Κεφάλαιο 5

Ἐπεὶ δ' ἀνάγκη πεπεράνθαι τὰ στοιχεῖα, λοιπὸν σκέψασθαι πότερον πλείω ἔσται ἢ ἔν. Ἐνιοὶ γὰρ ἐν μόνον ὑποτίθενται, καὶ τοῦτο οἱ μὲν ὕδωρ, οἱ δ' ἀέρα, οἱ δὲ πῦρ, οἱ δ' ὕδατος μὲν λεπτότερον, ἀέρος δὲ πυκνότερον, ὃ περιέχειν φασὶ πάντας τοὺς οὐρανοὺς ἄπειρον ὄν.

Ὅσοι μὲν οὖν τὸ ἐν τοῦτο ποιοῦσιν ὕδωρ ἢ ἀέρα ἢ ὕδατος μὲν λεπτότερον, ἀέρος δὲ πυκνότερον, εἴτ' ἐκ τούτου μανότητι καὶ πυκνότητι τᾶλλα γεννῶσιν, οὗτοι λανθάνουσιν αὐτοὶ αὐτοὺς ἄλλο τι πρότερον τοῦ στοιχείου ποιοῦντες· ἔστι γὰρ ἡ μὲν ἐκ τῶν στοιχείων γένεσις σύνθεσις, ὥς φασιν, ἡ δ' εἰς τὰ στοιχεῖα διάλυσις, ὥστ' ἀνάγκη πρότερον εἶναι τῇ φύσει τὸ λεπτομερέστερον. Ἐπεὶ οὖν φασὶ πάντων τῶν σωμάτων τὸ πῦρ λεπτότατον εἶναι, πρῶτον ἂν εἴη τῇ φύσει τὸ πῦρ· διαφέρει δ' οὐθέν, ἀνάγκη γὰρ ἐν τι τῶν ἄλλων εἶναι πρῶτον, καὶ μὴ τὸ μέσον. Ἔτι δὲ τὸ μὲν πυκνότητι καὶ μανότητι τᾶλλα γεννᾶν οὐθέν διαφέρει ἢ λεπτότητι καὶ παχύτητι· τὸ μὲν γὰρ λεπτὸν μανόν, τὸ δὲ παχὺ βούλονται εἶναι πυκνόν. Πάλιν δὲ τὸ λεπτότητι καὶ παχύτητι ταῦτόν

καὶ τὸ μεγέθει καὶ μικρότητι· λεπτὸν μὲν γὰρ τὸ μικρομερές, παχὺ δὲ τὸ μεγαλομερές· τὸ γὰρ ἐπεκτεινόμενον ἐπὶ πολὺ λεπτόν, τοιοῦτον δὲ τὸ ἐκ μικρῶν μερῶν συνεστός, ὥστ' αὐτοῖς συμβαίνει μεγέθει καὶ μικρότητι διαιρεῖν τὴν τῶν ἄλλων οὐσίαν. Οὕτω δὲ διοριζόμενοις ἅπαντα συμβήσεται λέγειν πρὸς τι, καὶ οὐκ ἔσται ἀπλῶς τὸ μὲν πῦρ τὸ δ' ὕδωρ τὸ δ' ἀήρ, ἀλλὰ τὸ αὐτὸ πρὸς μὲν τόδε (304a.) πῦρ, πρὸς δέ τι ἄλλο ἀήρ, ὅπερ συμβαίνει καὶ τοῖς πλείω μὲν τὰ στοιχεῖα λέγουσι, μεγέθει δὲ καὶ μικρότητι διαφέρειν φάσκουσιν· ἐπεὶ γὰρ τῷ ποσῷ διώριστα ἕκαστον, ἔσται τις λόγος πρὸς ἄλληλα τῶν μεγεθῶν, ὥστε τὰ τοῦτον ἔχοντα τὸν λόγον πρὸς ἄλληλα ἀνάγκη τὸ μὲν ἀέρα εἶναι τὸ δὲ πῦρ τὸ δὲ γῆν τὸ δ' ὕδωρ, διὰ τὸ ἐνυπάρχειν ἐν τοῖς μείζοσι τοὺς τῶν ἐλαττόνων λόγους.

Ὅσοι δὲ πῦρ ὑποτίθενται τὸ στοιχεῖον, τοῦτο μὲν διαφεύγουσιν, ἄλλα δ' αὐτοῖς ἀναγκαῖον ἄλογα συμβαίνειν. Οἱ μὲν γὰρ αὐτῶν σχῆμα περιάπτουσι τῷ πυρί, καθάπερ οἱ τὴν πυραμίδα ποιοῦντες, καὶ τούτων οἱ μὲν ἀπλουστέως λέγοντες ὅτι τῶν μὲν σχημάτων τμητικώτατον ἡ πυραμὶς, τῶν δὲ σωμάτων τὸ πῦρ, οἱ δὲ κομψοτέως τῷ λόγῳ προσάγοντες ὅτι τὰ μὲν σώματα πάντα σύγκειται ἐκ τοῦ λεπτομερεστάτου, τὰ δὲ σχήματα τὰ στερεὰ ἐκ πυραμίδων, ὥστ' ἐπεὶ τῶν μὲν σωμάτων τὸ πῦρ λεπτότατον, τῶν δὲ σχημάτων ἡ πυραμὶς μικρομερέστατον καὶ πρῶτον, τὸ δὲ πρῶτον σχῆμα τοῦ πρώτου σώματος, πυραμὶς ἂν εἴη τὸ πῦρ.

Οἱ δὲ περὶ μὲν σχήματος οὐδὲν ἀποφαίνονται, λεπτομερέστατον δὲ μόνον ποιοῦσιν, ἔπειτ' ἐκ τούτου συντιθεμένου φασὶ γίνεσθαι τάλλα καθάπερ ἂν εἰ συμφυσωμένου ψήγματος.

Ἀμφοτέροις δὲ ταῦτά συμβαίνει δυσχερῆ· εἰ μὲν γὰρ ἄτομον τὸ πρῶτον σῶμα ποιοῦσι, πάλιν ἥξουσιν οἱ πρότερον εἰρημένοι λόγοι πρὸς ταύτην τὴν ὑπόθεσιν.

Ἔτι οὐκ ἐνδέχεται τοῦτο λέγειν φυσικῶς βουλομένοις θεωρεῖν. Εἰ γὰρ ἅπαν σῶμα σώματι συμβλητὸν κατὰ τὸ ποσόν, ἔχει δ' ἀνάλογον τὰ μεγέθη τὰ τε τῶν ὁμοιομερῶν πρὸς ἄλληλα καὶ τὰ τῶν στοιχείων (οἷον τὰ τοῦ παντός ὕδατος πρὸς τὸν ἅπαντα ἀέρα καὶ τοῦ στοιχείου πρὸς τὸ στοιχεῖον, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων), ὁ δ' ἀήρ πλείων τοῦ ὕδατος καὶ ὅλως τὸ λεπτομερέστερον τοῦ παχυμερεστέρου, φανερόν ὅτι καὶ τὸ στοιχεῖον ἔλαττον ἔσται τὸ τοῦ ὕδατος ἢ τὸ τοῦ ἀέρος. Εἰ οὖν τὸ ἔλαττον μέγεθος ἐνυπάρχει τῷ μείζονι, διαιρετὸν ἂν εἴη τὸ τοῦ ἀέρος (304b.) στοιχεῖον. Ὡσαύτως δὲ καὶ τὸ τοῦ πυρός καὶ ὅλως τῶν λεπτομερεστέρων.

Εἰ δὲ διαιρετόν, τοῖς μὲν σχηματίζουσι τὸ πῦρ συμβήσεται μὴ εἶναι τὸ τοῦ πυρὸς μέρος πῦρ διὰ τὸ μὴ συγκεῖσθαι τὴν πυραμίδα ἐκ πυραμίδων, ἔτι δὲ μὴ πᾶν σῶμα εἶναι ἢ στοιχεῖον ἢ ἐκ στοιχείων (τὸ γὰρ μέρος τοῦ πυρὸς οὔτε πῦρ οὔθ' ἕτερον στοιχεῖον οὐδέν)· τοῖς δὲ τῷ μεγέθει διορίζουσι πρότερόν τι τοῦ στοιχείου στοιχεῖον εἶναι, καὶ τοῦτ' εἰς ἄπειρον βαδίζειν, εἴπερ ἅπαν σῶμα διαιρετόν καὶ τὸ μικρομερέστατον στοιχεῖον. Ἔτι δὲ καὶ τούτοις συμβαίνει λέγειν ὡς ταύτὸν πρὸς μὲν τότε πῦρ ἐστὶ, πρὸς ἄλλο δ' ἀήρ, καὶ πάλιν ὕδωρ καὶ γῆ.

Κοινὸν δὲ πᾶσιν ἀμάρτημα τοῖς ἐν τὸ στοιχεῖον ὑποτιθεμένοις τὸ μίαν μόνην κίνησιν ποιεῖν φυσικὴν, καὶ πάντων τὴν αὐτήν. Ὁρῶμεν γὰρ πᾶν τὸ φυσικὸν σῶμα κινήσεως ἔχον ἀρχήν. Εἰ οὖν ἅπαντα τὰ σώματα ἐν τί ἐστὶ, πάντων ἂν εἴη μία κίνησις· καὶ ταύτην ἀναγκαῖον ὥσπερ ἂν πλείω γίγνηται, κινεῖσθαι μᾶλλον, ὥσπερ καὶ τὸ πῦρ ὅσῳ ἂν πλεῖον γίγνηται, φέρεται θάττον ἄνω τὴν αὐτοῦ φοράν. Συμβαίνει δὲ πολλὰ κάτω φέρεσθαι θάττον.

Ὡστε διὰ τε ταῦτα καὶ πρὸς τούτοις ἐπεὶ διώρισται πρότερον ὅτι πλείους αἱ φυσικαὶ κινήσεις, δῆλον ὅτι ἀδύνατον ἐν εἶναι τὸ στοιχεῖον. Ἐπειδὴ δὲ οὔτε ἄπειρα οὔτε ἓν, ἀνάγκη πλείω εἶναι καὶ πεπερασμένα.

## Κεφάλαιο 6

Ἐπισκεπτέον δὲ πρῶτον πότερον αἰδία ἐστὶν ἢ γινόμενα φθείρεται· τούτου γὰρ δειχθέντος φανερόν ἔσται καὶ πόσ' ἄττα καὶ ποῖά ἐστιν. Αἰδία μὲν οὖν εἶναι ἀδύνατον· ὁρῶμεν γὰρ καὶ πῦρ καὶ ὕδωρ καὶ ἕκαστον τῶν ἀπλῶν σωμάτων διαλυόμενον. Ἀνάγκη δὲ ἢ ἄπειρον εἶναι ἢ ἴστασθαι τὴν διάλυσιν. Εἰ μὲν οὖν ἄπειρος, ἔσται καὶ ὁ χρόνος ὁ τῆς διαλύσεως ἄπειρος, καὶ πάλιν ὁ τῆς συνθέσεως· ἕκαστον γὰρ ἐν ἄλλῳ χρόνῳ διαλύεται καὶ συντίθεται τῶν μορίων. Ὡστε συμβήσεται ἔξω τοῦ ἀπείρου χρόνου ἄλλον εἶναι ἄπειρον, ὅταν ὅ τε τῆς συνθέσεως ἄπειρος ἢ καὶ ἔτι πρότερος τούτου ὁ τῆς διαλύσεως. Ὡστε τοῦ ἀπείρου ἔξω γίγνεται ἄπειρον· (305a.) ὅπερ ἀδύνατον.

Εἰ δὲ στήσεται πού ἢ διάλυσιν, ἥτοι ἄτομον ἔσται τὸ σῶμα ἐν ᾧ ἴσταται, ἢ διαιρετόν μὲν οὐ μέντοι διαιρεθησόμενον οὐδέποτε, καθάπερ ἔοικεν Ἐμπεδοκλῆς βούλεσθαι λέγειν.

Ἄτομον μὲν οὖν οὐκ ἔσται διὰ τοὺς πρότερον εἰρημένους λόγους· ἀλλὰ μὴν οὐδὲ διαιρετόν μὲν οὐδέποτε δὲ διαλυθησόμενον. Τὸ γὰρ ἔλαττον σῶμα τοῦ μεζονος εὐφρατότερόν ἐστιν. Εἴπερ οὖν καὶ τὸ πολὺ φθείρεται κατὰ ταύτην

τὴν φθοράν, ὥστε διαλύεσθαι εἰς ἐλάττω, ἔτι μᾶλλον τοῦτο πάσχειν εὐλογον τὸ ἔλαττον. Δύο δὲ τρόπους ὀρῶμεν φθειρόμενον τὸ πῦρ· ὑπὸ τε γὰρ τοῦ ἐναντίου φθείρεται σβεννύμενον, καὶ αὐτὸ ὑφ' αὐτοῦ μαραινόμενον. Τοῦτο δὲ πάσχει τὸ ἔλαττον ὑπὸ τοῦ πλείονος, καὶ θᾶπτον, ὅσῳ ἂν ᾖ ἔλαττον. Ὡστ' ἀνάγκη φθαρτὰ καὶ γενητὰ εἶναι τὰ στοιχεῖα τῶν σωμάτων.

Ἐπεὶ δ' ἐστὶ γενητά, ἥτοι ἐξ ἀσωμάτου ἢ ἐκ σώματος ἔσται ἡ γένεσις, καὶ εἰ ἐκ σώματος, ἥτοι ἐξ ἄλλου ἢ ἐξ ἀλλήλων.

Ὁ μὲν οὖν ἐξ ἀσωμάτου γεννῶν λόγος ποιεῖ κεχωρισμένον κενόν. Πᾶν γὰρ τὸ γινόμενον <ἔν τινι γίνεται καὶ> ἥτοι ἀσώματον ἔσται ἐν ᾧ ἡ γένεσις, ἢ ἔξει σῶμα· καὶ εἰ μὲν ἔξει σῶμα, δύο ἅμα ἔσται σώματα ἐν τῷ αὐτῷ, τό τε γινόμενον καὶ τὸ προϋπάρχον· εἰ δ' ἀσώματον, ἀνάγκη κενὸν εἶναι ἀφωρισμένον· τοῦτο δ' ὅτι ἀδύνατον, δέδεικται πρότερον.

Ἀλλὰ μὴν οὐδ' ἐκ σώματος τινος ἐγχωρεῖ γίνεσθαι τὰ στοιχεῖα· συμβήσεται γὰρ ἄλλο σῶμα πρότερον εἶναι τῶν στοιχείων. Τοῦτο δ' εἰ μὲν ἔξει βάρος ἢ κουφότητα, τῶν στοιχείων ἔσται τι, μηδεμίαν δ' ἔχον ῥοπήν ἀκίνητον ἔσται καὶ μαθηματικόν· τοιοῦτον δὲ ὄν οὐκ ἔσται ἐν τόπῳ. Ἐν ᾧ γὰρ ἡρεμεῖ, ἐν τούτῳ καὶ κινεῖσθαι δυνατόν. Καὶ εἰ μὲν βία, παρὰ φύσιν, εἰ δὲ μὴ βία, κατὰ φύσιν. Εἰ μὲν οὖν ἔσται ἐν τόπῳ καὶ που, ἔσται τι τῶν στοιχείων· εἰ δὲ μὴ ἐν τόπῳ, οὐδὲν ἐξ αὐτοῦ ἔσται· τὸ γὰρ γινόμενον, καὶ ἐξ οὗ γίγνεται, ἀνάγκη ἅμα εἶναι. Ἐπεὶ δ' οὔτε ἐξ ἀσωμάτου γίνεσθαι δυνατόν οὔτ' ἐξ ἄλλου σώματος, λείπεται ἐξ ἀλλήλων γίνεσθαι.

## Κεφάλαιο 7

Πάλιν οὖν ἐπισκεπτέον τίς ὁ τρόπος τῆς ἐξ ἀλλήλων γενέσεως, πότερον ὡς Ἐμπεδοκλῆς λέγει καὶ Δημόκριτος, ἢ ὡς οἱ εἰς τὰ ἐπίπεδα διαλύοντες, ἢ ἔστιν ἄλλος τις τρόπος (305b.) παρὰ τούτους.

Οἱ μὲν οὖν περὶ Ἐμπεδοκλέα καὶ Δημόκριτον λανθάνουσιν αὐτοὶ αὐτοὺς οὐ γένεσιν ἐξ ἀλλήλων ποιοῦντες, ἀλλὰ φαινομένην γένεσιν· ἐνυπάρχον γὰρ ἕκαστον ἐκκρίνεσθαι φασιν, ὥσπερ ἐξ ἀγγείου τῆς γενέσεως οὔσης, ἀλλ' οὐκ ἐκ τινος ὕλης, οὐδὲ γίνεσθαι μεταβάλλοντος.

Ἐπειτα κἂν οὕτως οὐδὲν ἦττον ἄλογα τὰ συμβαίνοντα. Τὸ γὰρ αὐτὸ μέγεθος οὐ δοκεῖ συμπληθὲν γίνεσθαι βαρύτερον. Ἀνάγκη δὲ τοῦτο λέγειν τοῖς φάσκουσιν ἐκκρίνεσθαι τὸ ὕδωρ ἐκ τοῦ ἀέρος ἐνυπάρχον· ὅταν γὰρ ὕδωρ ἐξ

ἀέρος γένηται, βαρύτερόν ἐστιν.

Ἔτι δὲ τῶν μεμιγμένων σωμάτων οὐκ ἀνάγκη χωρισθὲν θάτερον ἀεὶ πλείω τόπον ἐπέχειν· ὅταν δ' ἐξ ὕδατος ἀὴρ γένηται, πλείω καταλαμβάνει τόπον· τὸ γὰρ λεπτομερέστερον ἐν πλείονι τόπῳ γίγνεται. Φανερόν δὲ τοῦτό γε καὶ ἐν τῇ μεταβάσει· διατμιζομένου γὰρ καὶ πνευματουμένου τοῦ ὑγροῦ ῥήγνυται τὰ περιέχοντα τοὺς ὄγκους ἀγγεῖα διὰ τὴν στενοχωρίαν. Ὡστ' εἰ μὲν ὅλως μὴ ἐστὶ κενὸν μηδ' ἐπεκτείνεται τὰ σώματα, καθάπερ φασὶν οἱ ταῦτα λέγοντες, φανερόν τὸ ἀδύνατον· εἰ δ' ἐστὶ κενὸν καὶ ἐπέκτασις, ἄλογον τὸ ἐξ ἀνάγκης ἀεὶ πλείω τόπον ἐπιλαμβάνειν τὸ χωριζόμενον.

Ἀνάγκη δὲ καὶ ὑπολείπειν τὴν ἐξ ἀλλήλων γένεσιν, εἴπερ ἐν τῷ πεπερασμένῳ μεγέθει μὴ ἐνυπάρχει ἄπειρα πεπερασμένα. Ὅταν γὰρ ἐκ γῆς ὕδωρ γένηται, ἀφήρηταί τι τῆς γῆς, εἴπερ ἐκκρίσει ἡ γένεσις· καὶ πάλιν ὅταν ἐκ τῆς ὑπολειπομένης, ὡσαύτως. Εἰ μὲν οὖν ἀεὶ τοῦτ' ἔσται, συμβήσεται ἐν τῷ πεπερασμένῳ ἄπειρα ἐνυπάρχειν· ἐπεὶ δὲ τοῦτ' ἀδύνατον, οὐκ ἂν ἀεὶ γίγνοιτο ἐξ ἀλλήλων. Ὅτι μὲν οὖν οὐκ ἔστι τῇ ἐκκρίσει ἡ εἰς ἄλληλα μετάβασις, εἴρηται.

Λείπεται δ' εἰς ἄλληλα μεταβάλλοντα γίνεσθαι. Τοῦτο δὲ διχῶς· ἢ γὰρ τῇ μετασχηματίσει, καθάπερ ἐκ τοῦ αὐτοῦ κηροῦ γίγνεται ἂν σφαῖρα καὶ κύβος, ἢ τῇ διαλύσει τῇ εἰς τὰ ἐπίπεδα, ὥσπερ ἔνιοι φασιν.

Εἰ μὲν οὖν τῇ μετασχηματίσει γίνεται, συμβαίνει ἐξ ἀνάγκης ἄτομα λέγειν τὰ σώματα· διαιρετῶν γὰρ ὄντων οὐκ ἔσται τὸ τοῦ πυρὸς μέρος πῦρ, οὐδὲ τὸ τῆς γῆς γῆ, διὰ τὸ μὴ εἶναι μήτε τὸ τῆς πυραμίδος μέρος πάντως πυραμίδα μήτε τὸ τοῦ κύβου (306a.) κύβον.

Εἰ δὲ τῇ τῶν ἐπιπέδων διαλύσει, πρῶτον μὲν ἄτοπον τὸ μὴ πάντα γεννᾶν ἐξ ἀλλήλων, ὅπερ ἀνάγκη λέγειν αὐτοῖς, καὶ λέγουσιν. Οὔτε γὰρ εὐλογον ἐν μόνον ἄμοιρον γενέσθαι τῆς μεταβάσεως, οὔτε φαίνεται κατὰ τὴν αἴσθησιν, ἀλλ' ὁμοίως πάντα μεταβάλλειν εἰς ἄλληλα. Συμβαίνει δὲ περὶ τῶν φαινομένων λέγουσι μὴ ὁμολογούμενα λέγειν τοῖς φαινομένοις. Τούτου δ' αἴτιον τὸ μὴ καλῶς λαβεῖν τὰς πρώτας ἀρχάς, ἀλλὰ πάντα βούλεσθαι πρὸς τινὰς δόξας ὠρισμένας ἀνάγειν. Δεῖ γὰρ ἴσως τῶν μὲν αἰσθητῶν αἰσθητάς, τῶν δὲ ἀϊδίων ἀϊδίους, τῶν δὲ φθαρτῶν φθαρτὰς εἶναι τὰς ἀρχάς, ὅλως δ' ὁμογενεῖς τοῖς ὑποκειμένοις. Οἱ δὲ διὰ τὴν τούτων φιλίαν ταῦτό ποιεῖν εἰκόασιν τοῖς τὰς θέσεις ἐν τοῖς λόγοις διαφυλάττουσιν· ἅπαν γὰρ ὑπομένουσι τὸ συμβαῖνον ὡς ἀληθεῖς ἔχοντες ἀρχάς, ὥσπερ οὐκ ἐνίας δέον κρίνειν ἐκ

τῶν ἀποβαινόντων, καὶ μάλιστα ἐκ τοῦ τέλους.

Τέλος δὲ τῆς μὲν ποιητικῆς ἐπιστήμης τὸ ἔργον, τῆς δὲ φυσικῆς τὸ φαινόμενον ἀεὶ κυρίως κατὰ τὴν αἴσθησιν. Συμβαίνει δ' αὐτοῖς μάλιστα τὴν γῆν εἶναι στοιχεῖον, καὶ μόνην ἄφθαρτον, εἴπερ τὸ ἀδιάλυτον ἄφθαρτόν τ' ἐστὶ καὶ στοιχεῖον· ἡ γὰρ γῆ μόνη ἀδιάλυτος εἰς ἄλλο σῶμα.

Ἀλλὰ μὴν οὐδ' ἐν τοῖς διαλυομένοις ἡ τῶν τριγώνων παραιώρησις εὐλογος. Συμβαίνει δὲ καὶ τοῦτο ἐν τῇ εἰς ἄλληλα μεταβάσει διὰ τὸ ἐξ ἀνίσων τῶ πλήθει συνεστάναι τριγώνων.

Ἔτι δ' ἀνάγκη τοῖς ταῦτα λέγουσιν οὐκ ἐκ σώματος ποιεῖν γενέσιν· ὅταν γὰρ ἐξ ἐπιπέδων γένηται, οὐκ ἐκ σώματος ἔσται γεγονός.

Πρὸς δὲ τούτοις ἀνάγκη μὴ πᾶν σῶμα λέγειν διαιρετόν, ἀλλὰ μάχεσθαι ταῖς ἀκριβεστάταις ἐπιστήμαις· αἱ μὲν γὰρ καὶ τὸ νοητὸν λαμβάνουσι διαιρετόν, αἱ μαθηματικά, οἱ δὲ οὐδὲ τὸ αἰσθητὸν ἅπαν συγχωροῦσι διὰ τὸ βούλεσθαι σώζειν τὴν ὑπόθεσιν. Ἀνάγκη γὰρ ὅσοι σχῆμα ποιοῦσιν ἐκάστου τῶν στοιχείων καὶ τούτῳ διορίζουσι τὰς οὐσίας αὐτῶν, ἀδιαίρετα ποιεῖν αὐτά· τῆς γὰρ πυραμίδος ἢ τῆς σφαίρας διαιρεθείσης πως οὐκ ἔσται τὸ λειπόμενον σφαῖρα ἢ πυραμὶς.

Ὡστε ἢ τὸ τοῦ πυρὸς μέρος οὐ πῦρ, ἀλλ' ἔσται τι πρότερον τοῦ (306b.) στοιχείου, διὰ τὸ πᾶν εἶναι ἢ στοιχεῖον ἢ ἐκστοιχείων· ἢ οὐχ ἅπαν σῶμα διαιρετόν.

## Κεφάλαιο 8

Ὅλως δὲ τὸ πειρᾶσθαι τὰ ἀπλᾶ σώματα σχηματίζειν ἄλογόν ἐστι, πρῶτον μὲν ὅτι συμβήσεται μὴ ἀναπληροῦσθαι τὸ ὅλον· ἐν μὲν γὰρ τοῖς ἐπιπέδοις τρία σχήματα δοκεῖ συμπληροῦν τὸν τόπον, τρίγωνον καὶ τετράγωνον καὶ ἑξάγωνον, ἐν δὲ τοῖς στερεοῖς δύο μόνον, πυραμὶς καὶ κύβος· ἀνάγκη δὲ πλείω τούτων λαμβάνειν διὰ τὸ πλείω τὰ στοιχεῖα ποιεῖν.

Ἐπειτα φαίνεται πάντα μὲν τὰ ἀπλᾶ σώματα σχηματιζόμενα τῷ περιέχοντι τόπῳ, μάλιστα δὲ τὸ ὕδωρ καὶ ὁ ἀήρ. Διαμένειν μὲν οὖν τὸ τοῦ στοιχείου σχῆμα ἀδύνατον· οὐ γὰρ ἂν ἦπτετο πανταχῇ τοῦ περιέχοντος τὸ ὅλον. Ἀλλὰ μὴν εἰ μεταρρυθμισθήσεται, οὐκέτι ἔσται ὕδωρ, εἴπερ τῷ σχήματι διέφερεν. Ὡστε φανερόν ὅτι οὐκ ἔστιν ὠρισμένα τὰ σχήματα αὐτῶν.

Ἄλλ' ἔοικεν ἡ φύσις αὐτὴ τοῦτο σημαίνειν ἡμῖν, ὃ καὶ κατὰ λόγον ἐστίν· ὥσπερ γὰρ ἐν τοῖς ἄλλοις ἀείδες καὶ ἄμορφον δεῖ τὸ ὑποκείμενον εἶναι (μάλιστα γὰρ ἂν οὕτω δύναιτο ῥυθμίζεσθαι, καθάπερ ἐν τῷ Τιμαίῳ γέγραπται, τὸ πανδεχές), οὕτω καὶ τὰ στοιχεῖα δεῖ νομίζειν ὥσπερ ὕλην εἶναι τοῖς συνθέτοις· διὸ καὶ δύναται μεταβάλλειν εἰς ἄλληλα χωριζομένων τῶν κατὰ τὰ πάθη διαφορῶν.

Πρὸς δὲ τούτοις πῶς ἐνδέχεται γίνεσθαι σάρκα καὶ ὀστοῦν ἢ ὀπιῶν τῶν συνεχῶν σωμάτων; οὔτε γὰρ ἐξ αὐτῶν τῶν στοιχείων ἐγχωρεῖ διὰ τὸ μὴ γίνεσθαι συνεχὲς ἐκ τῆς συνθέσεως, οὔτ' ἐκ τῶν ἐπιπέδων συντιθεμένων· τὰ γὰρ στοιχεῖα γεννᾶται τῇ συνθέσει καὶ οὐ τὰ ἐκ τῶν στοιχείων. Ὡστ' ἐάν τις ἀκριβολογεῖσθαι βούληται καὶ μὴ ἐκ παρόδου τοὺς λόγους ἀποδέχεσθαι τοὺς τοιούτους, ἀναιροῦντας ὅψεται τὴν γένεσιν ἐκ τῶν ὄντων.

Ἀλλὰ μὴν καὶ πρὸς τὰ πάθη τε καὶ τὰς δυνάμεις καὶ τὰς κινήσεις ἀσύμφωνα τὰ σχήματα τοῖς σώμασιν, εἰς ἃ μάλιστα βλέψαντες οὕτω διένειμαν. Οἷον ἐπεὶ τὸ πῦρ εὐκίνητόν ἐστι καὶ θερμαντικὸν καὶ καυστικόν, οἱ μὲν ἐποίησαν αὐτὸ σφαῖραν, οἱ δὲ πυραμίδα· ταῦτα γὰρ εὐκίνητότατα μὲν διὰ τὸ ἐλαχίστων ἄπτεσθαι καὶ ἥκι(307a.) στα βεβηκέναι, θερμαντικώτατα δὲ καὶ καυστικώτατα, διότι τὸ μὲν ὅλον ἐστὶ γωνία, τὸ δὲ ὀξυγωνιώτατον, καίει δὲ καὶ θερμαίνει ταῖς γωνίαις, ὥς φασιν.

Πρῶτον μὲν οὖν κατὰ τὴν κίνησιν ἀμφοτέρω διημαρτήκασιν· εἰ γὰρ καὶ ἔστιν εὐκίνητότατα ταῦτα τῶν σχημάτων, ἄλλ' οὐ τὴν τοῦ πυρὸς κίνησιν εὐκίνητα· ἢ μὲν γὰρ τοῦ πυρὸς ἄνω καὶ κατ' εὐθεΐαν, ταῦτα δ' εὐκίνητα κύκλῳ, τὴν καλουμένην κύλινδρον. Ἐπειτ' εἰ ἔστιν ἡ γῆ κύβος διὰ τὸ βεβηκέναι καὶ μένειν, μένει δ' οὐχ οὗ ἔτυχεν ἄλλ' ἐν τῷ αὐτῆς τόπῳ, ἐκ δὲ τοῦ ἄλλοτρίου φέρεται μὴ κωλυομένη, καὶ τὸ πῦρ δὲ καὶ τὰ ἄλλα ὡσαύτως, δῆλον ὅτι καὶ τὸ πῦρ καὶ ἕκαστον τῶν στοιχείων ἐν μὲν τῷ ἄλλοτρίῳ τόπῳ σφαῖρα ἔσται ἢ πυραμῖς, ἐν δὲ τῷ οἰκείῳ κύβος. Ἔτι δ' εἰ θερμαίνει καὶ καίει τὸ πῦρ διὰ τὰς γωνίας, ἅπαντα ἔσται τὰ στοιχεῖα θερμαντικά, μᾶλλον δ' ἴσως ἕτερον ἑτέρου· πάντα γὰρ ἔχει γωνίας, οἷον τὸ τε ὀκτάεδρον καὶ τὸ δωδεκάεδρον. (Δημοκρίτῳ δὲ καὶ ἡ σφαῖρα, ὥς γωνία τις οὔσα, τέμνει ὥς εὐκίνητον).

Ὡστε διοίσει τῷ μᾶλλον καὶ ἥττον. Τοῦτο δ' ὅτι ψεῦδος, φανερόν. Ἄμα δὲ συμβήσεται καὶ τὰ μαθηματικὰ σώματα καίειν καὶ θερμαίνειν· ἔχει γὰρ κάκεῖνα γωνίας, καὶ ἔννευσιν ἐν αὐτοῖς ἄτομοι καὶ σφαῖραι καὶ πυραμίδες, ἄλλως τε καὶ εἰ ἔστιν ἄτομα μεγέθη, καθάπερ φασίν. Εἰ γὰρ τὰ μὲν τὰ δὲ μὴ, λεκτέον τὴν διαφοράν, ἄλλ' οὐχ ἀπλῶς οὕτω λεκτέον ὥς λέγουσιν.

Ἔτι εἰ τὸ καιόμενον πυροῦται, τὸ δὲ πῦρ ἐστὶ σφαῖρα ἢ πυραμὶς, ἀνάγκη τὸ καιόμενον γίνεσθαι σφαίρας ἢ πυραμίδας. Τὸ μὲν οὖν τέμνειν καὶ διαιρεῖν ἔστω κατὰ λόγον συμβαῖνον τῷ σχήματι· τὸ δ' ἐξ ἀνάγκης τὴν πυραμίδα ποιεῖν πυραμίδας ἢ τὴν σφαῖραν σφαίρας παντελῶς ἄλογον, καὶ ὅμοιον ὥσπερ εἴ τις ἀξιοίῃ τὴν μάχαιραν εἰς μαχαίρας διαιρεῖν ἢ τὸν πρίονα εἰς πρίονας.

Ἔτι δὲ γελοῖον πρὸς τὸ διαιρεῖν μόνον ἀποδοῦναι τὸ σχῆμα τῷ πυρί· δοκεῖ γὰρ μᾶλλον συγκρίνειν καὶ συνορίζειν ἢ διακρίνειν. Διακρίνει μὲν γὰρ τὰ μὴ (307b.) ὁμόφυλα, συγκρίνει δὲ τὰ ὁμόφυλα· καὶ ἡ μὲν σύγκρισις καθ' αὐτό ἐστὶ (τὸ γὰρ συνορίζειν καὶ ἐνοῦν τοῦ πυρός), ἡ δὲ διάκρισις κατὰ συμβεβηκός (συγκρίνον γὰρ τὸ ὁμόφυλον ἐξαιρεῖ τὸ ἀλλότριον). Ὡστ' ἢ πρὸς ἄμφω ἐχρῆν ἀποδοῦναι ἢ μᾶλλον ἐπὶ τὸ συγκρίνειν.

Πρὸς δὲ τούτοις, ἐπεὶ τὸ θερμὸν καὶ τὸ ψυχρὸν ἐναντία τῇ δυνάμει, ἀδύνατον ἀποδοῦναι τῷ ψυχρῷ σχῆμά τι· δεῖ γὰρ ἐναντίον εἶναι τὸ ἀποδιδόμενον, οὐθὲν δ' ἐναντίον ἐστὶ σχῆμα σχήματι. Διὸ καὶ πάντες ἀπολελοίπασι τοῦτο· καίτοι προσῆκεν ἢ πάντα ἀφορίσαι σχήμασιν ἢ μηδέν. Ἔνιοι δὲ περὶ τῆς δυνάμεως αὐτοῦ πειραθέντες εἰπεῖν ἐναντία λέγουσιν αὐτοὶ αὐτοῖς.

Φασὶ γὰρ εἶναι ψυχρὸν τὸ μεγαλομερές διὰ τὸ συνθλίβειν καὶ μὴ διέναι διὰ τῶν πόρων. Δῆλον τοίνυν ὅτι καὶ τὸ θερμὸν ἂν εἴη τὸ διόν· τοιοῦτον δ' ἀεὶ τὸ λεπτομερές. Ὡστε συμβαίνει μικρότητι καὶ μεγέθει διαφέρειν τὸ θερμὸν καὶ τὸ ψυχρὸν, ἀλλ' οὐ τοῖς σχήμασιν. Ἔτι δ' εἰ ἄνισοι αἱ πυραμίδες, αἱ μεγάλαι ἂν εἶεν οὐ πῦρ οὐδ' αἷτιον τὸ σχῆμα τοῦ καίειν, ἀλλὰ τοῦναντίον.

Ὅτι μὲν οὖν οὐ τοῖς σχήμασι διαφέρει τὰ στοιχεῖα, φανερόν ἐκ τῶν εἰρημένων· ἐπεὶ δὲ κυριώταται διαφοραὶ τῶν σωμάτων αἷ τε κατὰ τὰ πάθη καὶ τὰ ἔργα καὶ τὰς δυνάμεις (ἐκάστου γὰρ εἶναι φαμεν τῶν φύσει καὶ ἔργα καὶ πάθη καὶ δυνάμεις), πρῶτον ἂν εἴη περὶ τούτων λεκτέον, ὅπως θεωρήσαντες ταῦτα λάβωμεν τὰς ἐκάστου πρὸς ἕκαστον διαφοράς.

## **Βιβλίο 4**

### **Κεφάλαιο 1**

Περὶ δὲ βαρέος καὶ κούφου, τί τ' ἐστὶν ἑκάτερον καὶ τίς ἡ φύσις αὐτῶν, σκεπτέον, καὶ διὰ τίν' αἰτίαν ἔχουσι τὰς δυνάμεις ταύτας. Ἔστι γὰρ ἡ περὶ αὐτῶν θεωρία τοῖς περὶ κινήσεως λόγοις οἰκεία· βαρὺ γὰρ καὶ κούφον τῷ δύνασθαι κινεῖσθαι φυσικῶς πως λέγομεν. (Ταῖς δὲ ἐνεργείαις ὀνόματ' αὐτῶν



οὐ κεῖται, πλὴν εἴ τις οἴοιτο τὴν ῥοπὴν εἶναι τοιοῦτον.) (308a.) Διὰ δὲ τὸ τὴν φυσικὴν μὲν εἶναι πραγματείαν περὶ κίνησιν, ταῦτα δ' ἔχειν ἐν ἑαυτοῖς οἶον ζώπυρ' ἅττα κινήσεως, πάντες μὲν χρῶνται ταῖς δυνάμεσιν αὐτῶν, οὐ μὴν διωρίκασί γε, πλὴν ὀλίγων. Ἰδόντες οὖν πρῶτον τὰ παρὰ τῶν ἄλλων εἰρημένα, καὶ διαπορήσαντες ὅσα πρὸς τὴν σκέψιν ταύτην διελεῖν ἀναγκαῖον, οὕτω καὶ τὸ φαινόμενον ἡμῖν εἵπωμεν περὶ αὐτῶν.

Λέγεται δὴ τὸ μὲν ἀπλῶς βαρὺ καὶ κοῦφον, τὸ δὲ πρὸς ἕτερον· τῶν γὰρ ἐχόντων βάρος φαμὲν τὸ μὲν εἶναι κουφότερον, τὸ δὲ βαρύτερον, οἶον ξύλου χαλκόν. Περὶ μὲν οὖν τῶν ἀπλῶς λεγομένων οὐδὲν εἴρηται παρὰ τῶν πρότερον, περὶ δὲ τῶν πρὸς ἕτερον· οὐ γὰρ λέγουσι τί ἐστὶ τὸ βαρὺ καὶ τί τὸ κοῦφον, ἀλλὰ τί τὸ βαρύτερον καὶ κουφότερον ἐν τοῖς ἔχουσι βάρος. Μᾶλλον δ' ἔσται δῆλον ὃ λέγομεν ὧδε. Τὰ μὲν γὰρ ἀεὶ πέφυκεν ἀπὸ τοῦ μέσου φέρεσθαι, τὰ δ' ἀεὶ πρὸς τὸ μέσον. Τούτων δὲ τὸ μὲν ἀπὸ τοῦ μέσου φερόμενον ἄνω λέγω φέρεσθαι, κάτω δὲ τὸ πρὸς τὸ μέσον.

Ἄτοπον γὰρ τὸ μὴ νομίζειν εἶναι τι ἐν τῷ οὐρανῷ τὸ μὲν ἄνω τὸ δὲ κάτω, καθάπερ τινὲς ἀξιοῦσιν· οὐ γὰρ εἶναι τὸ μὲν ἄνω τὸ δὲ κάτω φασίν, εἴπερ πάντῃ ὁμοίός ἐστι, καὶ πανταχόθεν ἀντίπους ἔσται πορευόμενος ἕκαστος αὐτὸς αὐτῷ. Ἡμεῖς δὲ τὸ τοῦ παντὸς ἔσχατον ἄνω λέγομεν, ὃ καὶ κατὰ τὴν θέσιν ἐστὶν ἄνω καὶ τῇ φύσει πρῶτον· ἐπεὶ δ' ἐστὶ τι τοῦ οὐρανοῦ ἔσχατον καὶ μέσον, δῆλον ὅτι ἔσται καὶ ἄνω καὶ κάτω, ὥσπερ καὶ οἱ πολλοὶ λέγουσι, πλὴν οὐχ ἱκανῶς.

Τούτου δ' αἴτιον ὅτι νομίζουσιν οὐχ ὅμοιον εἶναι πάντῃ τὸν οὐρανόν, ἀλλ' ἐν εἶναι μόνον τὸ ὑπὲρ ἡμᾶς ἡμισφαίριον, ἐπεὶ προσυπολαβόντες καὶ κύκλῳ τοιοῦτον, καὶ τὸ μέσον ὁμοίως ἔχειν πρὸς ἅπαν, τὸ μὲν ἄνω φήσουσιν εἶναι, τὸ δὲ μέσον κάτω.

Ἀπλῶς μὲν οὖν κοῦφον λέγομεν τὸ ἄνω φερόμενον καὶ πρὸς τὸ ἔσχατον, βαρὺ δὲ ἀπλῶς τὸ κάτω καὶ πρὸς τὸ μέσον· πρὸς ἄλλο δὲ κοῦφον καὶ κουφότερον, ὅτε, δυοῖν ἐχόντων βάρος καὶ τὸν ὄγκον ἴσον, κάτω φέρεται θάτερον φύσει θᾶπτον.

## Κεφάλαιο 2

Τῶν δὴ πρότερον ἐλθόντων ἐπὶ τὴν περὶ τούτων σκέψιν σχεδὸν οἱ πλεῖστοι περὶ τῶν οὕτω βαρέων καὶ κούφων εἰρήκασι μόνον, ὥσων ἀμφοτέρων ἐχόντων βάρος θάτερόν ἐστι (308b.) κουφότερον· οὕτω δὲ διελθόντες οἴονται

διωρίσθαι καὶ περὶ τοῦ ἀπλῶς κούφου καὶ βαρέος· ὁ δὲ λόγος αὐτοῖς οὐκ ἐφαρμόττει. Δῆλον δ' ἔσται τοῦτο μᾶλλον προελθοῦσιν.

Λέγουσι γὰρ τὸ κουφότερον καὶ βαρύτερον οἱ μὲν ὥσπερ ἐν τῷ Τιμαίῳ τυγχάνει γεγραμμένον, βαρύτερον μὲν τὸ ἐκ πλειόνων τῶν αὐτῶν συνεστός, κουφότερον δὲ τὸ ἐξ ἐλαττόνων, ὥσπερ μολίβδου μόλιβδος ὁ πλείων βαρύτερος καὶ χαλκοῦ χαλκός. Ὁμοίως δὲ καὶ τῶν ἄλλων τῶν ὁμοειδῶν ἕκαστον· ἐν ὑπεροχῇ γὰρ τῶν ἴσων μορίων βαρύτερον ἕκαστόν ἐστιν. Τὸν αὐτὸν δὲ τρόπον καὶ ξύλου μόλιβδόν φασιν· ἕκ τινων γὰρ τῶν αὐτῶν εἶναι πάντα τὰ σώματα καὶ μιᾶς ὕλης, ἀλλ' οὐ δοκεῖν.

Οὕτω δὴ διωρισμένων οὐκ εἴρηται περὶ τοῦ ἀπλῶς κούφου καὶ βαρέος· νῦν γὰρ τὸ μὲν πῦρ ἀεὶ κοῦφον καὶ ἄνω φέρεται, ἡ δὲ γῆ καὶ τὰ γεηρὰ πάντα κάτω καὶ πρὸς τὸ μέσον. Ὅστ' οὐ δι' ὀλιγότητα τῶν τριγώνων, ἐξ ὧν συνεστάναι φασὶν ἕκαστον αὐτῶν, τὸ πῦρ ἄνω φέρεσθαι πέφυκεν· τό τε γὰρ πλεῖον ἦττον ἂν ἐφέρετο καὶ βαρύτερον ἦν ἐκ πλειόνων ὄν τριγώνων. Νῦν δὲ φαίνεται τοῦναντίον· ὅσω γὰρ ἂν ἡ πλεῖον, κουφότερόν ἐστι καὶ ἄνω φέρεται θᾶττον. Καὶ ἄνωθεν δὲ κάτω τὸ ὀλίγον οἰσθήσεται θᾶττον πῦρ, τὸ δὲ πολὺ βραδύτερον.

Πρὸς δὲ τούτοις, ἐπεὶ τὸ μὲν ἐλάσσω ἔχον τὰ ὁμογενῆ κουφότερον εἶναί φασι, τὸ δὲ πλείω βαρύτερον, ἀέρα δὲ καὶ ὕδωρ καὶ πῦρ ἐκ τῶν αὐτῶν εἶναι τριγώνων, ἀλλὰ διαφέρειν ὀλιγότητι καὶ πλήθει, διὸ τὸ μὲν αὐτῶν εἶναι κουφότερον τὸ δὲ βαρύτερον, ἔσται τι πλῆθος ἀέρος ὃ βαρύτερον ὕδατος ἔσται. Συμβαίνει δὲ πᾶν τοῦναντίον· ἀεὶ τε γὰρ ὁ πλείων ἀὴρ ἄνω φέρεται μᾶλλον, καὶ ὅλως ὅτιοῦν μέρος ἀέρος ἄνω φέρεται ἐκ τοῦ ὕδατος.

Οἱ μὲν οὖν τοῦτον τὸν τρόπον περὶ κούφου καὶ βαρέος διώρισαν· τοῖς δ' οὐχ ἱκανὸν ἔδοξεν οὕτω διελεῖν, ἀλλὰ καίπερ ὄντες ἀρχαιότεροι ταῖς ἡλικίαις καινότερως ἐνόησαν περὶ τῶν νῦν λεχθέντων. Φαίνεται γὰρ ἓνια τὸν ὄγκον μὲν ἐλάττω τῶν σωμάτων, ὄντα δὲ βαρύτερα. Δῆλον οὖν ὡς οὐχ ἱκανὸν τὸ φάσκειν ἐξ ἴσων συγκεῖσθαι τῶν πρώτων τὰ ἰσοβαρῆ· ἴσα γὰρ ἂν ἦν τὸν ὄγκον. Τὰ δὲ πρῶτα καὶ ἄτομα τοῖς μὲν ἐπίπεδα λέγουσιν ἐξ ὧν συνέστηκε τὰ βάρος ἔχοντα (309a.) τῶν σωμάτων, ἄτοπον τὸ φάναι· τοῖς δὲ στερεὰ μᾶλλον ἐνδέχεται λέγειν τὸ μεῖζον εἶναι βαρύτερον αὐτῶν. Τῶν δὲ συνθέτων, ἐπειδήπερ οὐ φαίνεται τοῦτον ἕκαστον ἔχειν τὸν τρόπον, ἀλλὰ πολλὰ βαρύτερα ὁρῶμεν ἐλάττω τὸν ὄγκον ὄντα, καθάπερ ἐρίου χαλκόν, ἕτερον τὸ αἴτιον οἶονταί τε καὶ λέγουσιν ἔνιοι· τὸ γὰρ κενὸν ἐμπεριλαμβανόμενον κουφίζειν τὰ σώματά φασι καὶ ποιεῖν ἔστιν ὅτε τὰ μείζω κουφότερα· πλεῖον

γὰρ ἔχειν κενόν. Διὰ τοῦτο γὰρ καὶ τὸν ὄγκον εἶναι μείζω συγκείμενα πολλάκις ἐξ ἴσων στερεῶν ἢ καὶ ἐλαττόνων. Ὅλως δὲ καὶ παντὸς αἵτιον εἶναι τοῦ κουφοτέρου τὸ πλεῖον ἐνυπάρχειν κενόν.

Λέγουσι μὲν οὖν τοῦτον τὸν τρόπον, ἀνάγκη δὲ προσθεῖναι τοῖς οὕτω διορίζουσι μὴ μόνον τὸ κενὸν ἔχειν πλεῖον, ἀν ἢ κουφότερον, ἀλλὰ καὶ τὸ στερεὸν ἐλαττον· εἰ γὰρ ὑπερέξει τῆς τοιαύτης ἀναλογίας, οὐκ ἔσται κουφότερον. Διὰ γὰρ τοῦτο καὶ τὸ πῦρ εἶναι φασι κουφότατον, ὅτι πλεῖστον ἔχει κενόν. Συμβήσεται οὖν μικροῦ πυρὸς πολὺν χρυσὸν πλεῖον ἔχοντα τὸ κενὸν εἶναι κουφότερον, εἰ μὴ καὶ στερεὸν ἔξει πολλαπλάσιον· ὥστε τοῦτο λεκτέον. Ἔνιοι μὲν οὖν τῶν μὴ φασκόντων εἶναι κενὸν οὐδὲν διώρισαν περὶ κούφου καὶ βαρέος, οἷον Ἀναξαγόρας καὶ Ἐμπεδοκλῆς· οἱ δὲ διορίσαντες μὲν, οὐ φάσκοντες δὲ εἶναι κενόν, οὐδὲν εἶπον διὰ τί τὰ μὲν ἀπλῶς κοῦφα τὰ δὲ βαρέα τῶν σωμάτων, καὶ φέρεται τὰ μὲν ἀεὶ ἄνω τὰ δὲ κάτω, οὐδὲ περὶ τοῦ ἔνια μείζω τὸν ὄγκον ὄντα κουφότερα τῶν ἐλαττόνων εἶναι σωμάτων οὐδὲν ἐπεμνήσθησαν, οὐδὲ δῆλον πῶς ἐκ τῶν εἰρημένων ὁμολογούμενα τοῖς φαινομένοις συμβήσεται λέγειν αὐτοῖς.

Ἀναγκαῖον δὲ καὶ τοῖς περὶ τῆς τοῦ πυρὸς κουφότητος αἰτιωμένοις τὸ πολὺ κενὸν ἔχειν σχεδὸν ἐν ταῖς αὐταῖς ἐνέχεσθαι δυσχερείαις. Ἐλαττον μὲν γὰρ ἔξει στερεὸν τῶν ἄλλων σωμάτων, καὶ τὸ κενὸν πλεῖον· ἀλλ' ὅμως ἔσται τι πυρὸς πλῆθος ἐν ᾧ τὸ στερεὸν καὶ τὸ πλῆρες ὑπερβάλλει τῶν περιεχομένων στερεῶν ἐν τινι μικρῷ πλήθει γῆς. Ἐὰν δὲ φῶσι καὶ τὸ κενόν, πῶς διοριοῦσι τὸ ἀπλῶς βαρὺ; Ἡ γὰρ τῷ πλεῖον στερεὸν ἔχειν ἢ τῷ ἐλαττον κενόν. Εἰ μὲν οὖν τοῦτο (309b.) φήσουσιν, ἔσται τι πλῆθος γῆς οὕτως ὀλίγον ἐν ᾧ στερεὸν ἔσται ἐλαττον ἢ ἐν πολλῷ πλήθει πυρός. Ὁμοίως δὲ κἂν τῷ κενῷ διορίσωσιν, ἔσται τι κουφότερον τοῦ ἀπλῶς κούφου καὶ φερομένου ἀεὶ ἄνω αὐτὸ φερόμενον ἀεὶ κάτω. Τοῦτο δὲ ἀδύνατον· τὸ γὰρ ἀπλῶς κοῦφον ἀεὶ κουφότερον τῶν ἐχόντων βάρος καὶ κάτω φερομένων, τὸ δὲ κουφότερον οὐκ ἀεὶ κοῦφον διὰ τὸ λέγεσθαι καὶ ἐν τοῖς ἔχουσι βάρος ἕτερον ἑτέρου κουφότερον, οἷον γῆς ὕδωρ.

Ἀλλὰ μὴν οὐδὲ τῷ τὸ κενὸν ἀνάλογον ἔχειν πρὸς τὸ πλῆρες ἱκανὸν λῦσαι τὴν λεγομένην νῦν ἀπορίαν. Συμβήσεται γὰρ καὶ τοῦτον τὸν τρόπον λέγουσιν ὡσαύτως τὸ ἀδύνατον. Ἐν γὰρ τῷ πλείονι πυρὶ καὶ ἐν τῷ ἐλάττονι τὸν αὐτὸν ἔξει λόγον τὸ στερεὸν πρὸς τὸ κενόν. Φέρεται δέ γε θᾶπτον τὸ πλεῖον ἄνω πῦρ τοῦ ἐλάττονος, καὶ κάτω δὲ πάλιν ὡσαύτως ὁ πλείων χρυσὸς καὶ ὁ μόλιβδος· ὁμοίως δὲ καὶ τῶν ἄλλων ἕκαστον τῶν ἐχόντων βάρος. Οὐκ ἔδει δὲ τοῦτο συμβαίνειν, εἴπερ τούτῳ διώρισται τὸ βαρὺ καὶ κοῦφον.

Ἄτοπον δὲ καὶ εἰ διὰ τὸ κενὸν μὲν ἄνω φέρονται, τὸ δὲ κενὸν αὐτὸ μή. Ἀλλὰ μὴν εἴ γε τὸ μὲν κενὸν ἄνω πέφυκε φέρεσθαι, κάτω δὲ τὸ πλήρες, καὶ διὰ τοῦτο τοῖς ἄλλοις αἷτια τῆς φορᾶς ἑκατέρας, οὐθὲν περὶ τῶν συνθέτων ἔδει σκοπεῖν διὰ τί τὰ μὲν κοῦφα τὰ δὲ βαρέα τῶν σωμάτων, ἀλλὰ περὶ τούτων αὐτῶν εἰπεῖν διὰ τί τὸ μὲν κοῦφον, τὸ δ' ἔχει βάρος, ἔτι δὲ τί τὸ αἷτιον τοῦ μὴ διεστάναι τὸ πλήρες καὶ τὸ κενόν.

Ἄλογον δὲ καὶ τὸ χώραν τῷ κενῷ ποιεῖν, ὥσπερ οὐκ αὐτὸ χώραν τινὰ οὔσαν· ἀναγκαῖον δ', εἴπερ κινεῖται τὸ κενόν, εἶναι αὐτοῦ τινὰ τόπον, ἐξ οὗ μεταβάλλει καὶ εἰς ὄν.

Πρὸς δὲ τούτοις τί τῆς κινήσεως αἷτιον; Οὐ γὰρ δὴ τό γε κενόν· οὐ γὰρ αὐτὸ κινεῖται μόνον, ἀλλὰ καὶ τὸ στερεόν.

Ὡσαύτως δὲ συμβαίνει καὶ τις ἄλλως διορίζη, μεγέθει καὶ σμικρότητι ποιῶν βαρύτερα καὶ κουφότερα ρων, καὶ ἄλλον ὄντινοῦν τρόπον κατασκευάζων, μόνον δὲ τὴν αὐτὴν ὕλην ἅπασιν ἀποδιδούς, ἢ πλείους μὲν ὑπεναντίας δὲ μόνον.

Μιᾶς μὲν γὰρ οὔσης οὐκ ἔσται τὸ ἀπλῶς βαρὺ καὶ κοῦφον, ὥσπερ τοῖς ἐκ τῶν τριγώνων συνιστᾶσιν· ἐναντίας δέ, (310a.) καθάπερ οἱ τὸ κενὸν καὶ πλήρες, οὐκ ἔσται τὰ μεταξὺ τῶν ἀπλῶς βαρέων καὶ κούφων διὰ τίν' αἷτίαν βαρύτερα καὶ κουφότερα ἀλλήλων καὶ τῶν ἀπλῶν ἔστιν.

Τὸ δὲ μεγέθει καὶ μικρότητι διορίζειν πεπλασμένῳ μὲν ἔοικε μᾶλλον τῶν πρότερον, ὅτι δ' ἐνδέχεται καθ' ἕκαστον ποιεῖν διαφορὰς τῶν τεττάρων στοιχείων, ἀσφαλεστέως ἔχει πρὸς τὰς ἔμπροσθεν ἀπορίας.

Τῷ δὲ μίαν ποιεῖν φύσιν τῶν τῷ μεγέθει διαφερόντων ἀναγκαῖον ταῦτόν συμβαίνειν τοῖς μίαν ποιοῦσιν ὕλην, καὶ μήθ' ἀπλῶς εἶναι μηθὲν κοῦφον μήτε φερόμενον ἄνω, ἀλλ' ἢ ὑστερίζον ἢ ἐκθλιβόμενον, καὶ πολλὰ μικρὰ ὀλίγων μεγάλων βαρύτερα εἶναι. Εἰ δὲ τοῦτο ἔσται, συμβήσεται πολὺν ἀέρα καὶ πολὺ πῦρ ὕδατος εἶναι βαρύτερα καὶ γῆς ὀλίγης. Τοῦτο δ' ἐστὶν ἀδύνατον.

### Κεφάλαιο 3

Τὰ μὲν οὖν παρὰ τῶν ἄλλων εἰρημένα ταῦτα, καὶ τοῦτον λέγεται τὸν τρόπον.

Ἡμεῖς δὲ λέγωμεν πρῶτον διορίσαντες περὶ οὗ μάλιστα ἀποροῦσί τινες, διὰ τί τὰ μὲν ἄνω φέρεται τὰ δὲ κάτω τῶν σωμάτων ἀεὶ κατὰ φύσιν, τὰ δὲ καὶ ἄνω

καὶ κάτω, μετὰ δὲ ταῦτα περὶ βαρέος καὶ κούφου καὶ τῶν συμβαινόντων περὶ αὐτὰ παθημάτων, διὰ τίν' αἰτίαν ἕκαστον γίνεται.

Περὶ μὲν οὖν τοῦ φέρεσθαι εἰς τὸν αὐτοῦ τόπον ἕκαστον ὁμοίως ὑποτῶν ἐτέληπτόν ὥσπερ καὶ περὶ τὰς ἄλλας γενέσεις καὶ μεταβολάς. Ἐπεὶ γὰρ εἴσι τρεῖς αἱ κινήσεις (ἢ μὲν κατὰ μέγεθος, ἢ δὲ κατ' εἶδος, ἢ δὲ κατὰ τόπον), ἐν ἑκάστη τούτων τὴν μεταβολὴν ὁρῶμεν γινομένην ἐκ τῶν ἐναντίων εἰς τὰ ἐναντία καὶ τὰ μετξύ, καὶ οὐκ εἰς τὸ τυχὸν τῷ τυχόντι μεταβολὴν οὖσαν· ὁμοίως δὲ οὐδὲ κινητικὸν τὸ τυχὸν τοῦ τυχόντος· ἀλλ' ὥσπερ τὸ ἀλλοιωτὸν καὶ τὸ αὐξητὸν ἕτερον, οὕτω καὶ τὸ ἀλλοιωτικὸν καὶ τὸ αὐξητικόν. Τὸν αὐτὸν δὴ τρόπον ὑποληπτέον καὶ τὸ κατὰ τόπον κινητικὸν καὶ κινητὸν οὐ τὸ τυχὸν εἶναι τοῦ τυχόντος.

Εἰ οὖν εἰς τὸ ἄνω καὶ τὸ κάτω κινητικὸν μὲν τὸ βαρυντικὸν καὶ τὸ κουφιστικόν, κινητὸν δὲ τὸ δυνάμει βαρὺ καὶ κοῦφον, τὸ δ' εἰς τὸν αὐτοῦ τόπον φέρεσθαι ἕκαστον τὸ εἰς τὸ αὐτοῦ εἶδός ἐστι φέρε(310b.) σθαι (καὶ ταύτη μᾶλλον ἂν τις ὑπολάβοι ὃ ἔλεγον οἱ ἀρχαῖοι, ὅτι τὸ ὅμοιον φέροιο πρὸς τὸ ὅμοιον. Τοῦτο γὰρ οὐ συμβαίνει πάντως· οὐ γὰρ ἐάν τις μεταθῇ τὴν γῆν οὐ νῦν ἢ σελήνη, οἰσθήσεται τῶν μορίων ἕκαστον πρὸς αὐτήν, ἀλλ' ὅπου περ καὶ νῦν. Ὅλως μὲν οὖν τοῖς ὁμοίοις καὶ ἀδιαφόροις ὑπὸ τῆς αὐτῆς κινήσεως ἀνάγκη τοῦτο συμβαίνειν, ὥσθ' ὅπου πέφυκεν ἔν τι φέρεσθαι μόριον, καὶ τὸ πᾶν. Ἐπεὶ δ' ὁ τόπος ἐστὶ τὸ τοῦ περιέχοντος πέρας, περιέχει δὲ πάντα τὰ κινούμενα ἄνω καὶ κάτω τό τε ἔσχατον καὶ τὸ μέσον, τοῦτο δὲ τρόπον τινὰ γίνεται τὸ εἶδος τοῦ περιεχομένου, τὸ εἰς τὸν αὐτοῦ τόπον φέρεσθαι πρὸς τὸ ὅμοιον ἐστὶ φέρεσθαι· τὰ γὰρ ἐφεξῆς ὅμοιά ἐστὶν ἀλλήλοις, οἷον ὕδωρ ἀέρι καὶ ἀήρ πυρί. Ἀνάπαλιν δὲ λέγειν τοῖς μέσοις ἐστὶ, τοῖς δ' ἄκροις οὐ, οἷον ἀέρα μὲν ὕδατι, ὕδωρ δὲ γῇ· αἰὲ γὰρ τὸ ἀνώτερον πρὸς τὸ ὑφ' αὐτὸ, ὡς εἶδος πρὸς ὕλην, οὕτως ἔχει πρὸς ἀλλήλα), τὸ δὲ ζητεῖν διὰ τί φέρεται τὸ πῦρ ἄνω καὶ ἡ γῆ κάτω, τὸ αὐτό ἐστὶ καὶ διὰ τί τὸ ὑγιαστὸν ἂν κινῆται καὶ μεταβάλλῃ ἢ ὑγιαστόν, εἰς ὑγίειαν ἔρχεται ἀλλ' οὐκ εἰς λευκότητα. Ὅμοίως δὲ καὶ τὰλλα πάντα τὰ ἀλλοιωτά. Ἀλλὰ μὴν καὶ τὸ αὐξητὸν ὅταν μεταβάλλῃ ἢ αὐξητόν, οὐκ εἰς ὑγίειαν ἔρχεται ἀλλ' εἰς μεγέθους ὑπεροχὴν. Ὅμοίως δὲ καὶ τούτων ἕκαστον τὸ μὲν ἐν τῷ ποιῶ, τὸ δ' ἐν τῷ ποσῶ μεταβάλλει, καὶ ἐν τόπῳ τὰ μὲν κοῦφα ἄνω, τὰ δὲ βαρέα κάτω.

Πλὴν ὅτι τὰ μὲν ἐν αὐτοῖς δοκεῖ ἔχειν ἀρχὴν τῆς μεταβολῆς (λέγω δὲ τὸ βαρὺ καὶ τὸ κοῦφον), τὰ δ' οὐ, ἀλλ' ἔξωθεν, οἷον τὸ ὑγιαστὸν καὶ τὸ αὐξητόν. Καίτοι ἐνίοτε καὶ ταῦτα ἐξ αὐτῶν μεταβάλλει, καὶ μικρᾶς γενομένης ἐν τοῖς ἔξω κινήσεως τὸ μὲν εἰς ὑγίειαν ἔρχεται, τὸ δ' εἰς αὕξην· καὶ ἐπεὶ

ταῦτόν τὸ ὑγιαστόν καὶ τὸ νόσου δεκτικόν, ἐὰν μὲν κινηθῇ ἢ ὑγιαστόν, εἰς ὑγίειαν φέρεται, ἐὰν δ' ἢ νοσερόν, εἰς νόσον.

Μᾶλλον δὲ τὸ βαρὺ καὶ τὸ κοῦφον τούτων ἐν ἑαυτοῖς ἔχειν φαίνεται τὴν ἀρχὴν διὰ τὸ ἐγγύτατα τῆς οὐσίας εἶναι τὴν τούτων ὕλην· σημεῖον δ' ὅτι ἡ φορὰ ἀπολελυμένων ἐστί, καὶ γενέσκει ὑστάτη τῶν κινήσεων, ὥστε πρώτη (311a.) ἂν εἴη κατὰ τὴν οὐσίαν αὕτη ἡ κίνησις. Ὅταν μὲν οὖν γίγνηται ἐξ ὕδατος ἀῆρ καὶ ἐκ βαρέος κοῦφον, ἔρχεται εἰς τὸ ἄνω.

Ἄμα δ' ἐστὶ κοῦφον, καὶ οὐκέτι γίνεται, ἀλλ' ἐκεῖ ἐστίν. Φανερόν δὲ ὅτι δυνάμει ὄν, εἰς ἐντελέχειαν ἰὼν ἔρχεται ἐκεῖ καὶ εἰς τὸ τοσοῦτον καὶ τὸ τοιοῦτον, οὗ ἡ ἐντελέχεια καὶ ὅσου καὶ οἴου [καὶ ὅπου]. Τὸ δ' αὐτὸ αἴτιον καὶ τοῦ ἤδη ὑπάρχοντα καὶ ὄντα γῆν καὶ πῦρ κινεῖσθαι εἰς τοὺς αὐτῶν τόπους μηδενὸς ἐμποδίζοντος. Καὶ γὰρ ἡ τροφή, ὅταν τὸ κωλύον, καὶ τὸ ὑγιαστόν, ὅταν τὸ ἐπίσχον μὴ ᾖ, φέρεται εὐθύς. Κινεῖ δὲ τό τε ἐξ ἀρχῆς ποιῆσαν καὶ τὸ ὑποσπᾶσαν ἢ ὅθεν ἀπεπήδησεν, καθάπερ εἴρηται ἐν τοῖς πρώτοις λόγοις, ἐν οἷς διωρίζομεν ὅτι οὐθέν τούτων αὐτὸ ἑαυτὸ κινεῖ.

Διὰ τίνα μὲν οὖν αἰτίαν φέρεται τῶν φερομένων ἕκαστον, καὶ τὸ φέρεσθαι εἰς τὸν αὐτοῦ τρόπον τί ἐστίν, εἴρηται.

## Κεφάλαιο 4

Τὰς δὲ διαφορὰς καὶ τὰ συμβαίνοντα περὶ αὐτὰ νῦν λέγωμεν. Πρῶτον μὲν οὖν διωρίσθω, καθάπερ φαίνεται πᾶσι, βαρὺ μὲν ἀπλῶς τὸ πᾶσιν ὑφίσταμενον, κοῦφον δὲ τὸ πᾶσιν ἐπιπολάζον. Ἀπλῶς δὲ λέγω εἷς τε τὸ γένος βλέπων, καὶ ὅσοις μὴ ἀμφοτέρα ὑπάρχει· οἷον φαίνεται πυρὸς μὲν τὸ τυχὸν μέγεθος ἄνω φερόμενον, ἐὰν μή τι τύχη κωλύον ἕτερον, γῆς δὲ κάτω· τὸν αὐτὸν δὲ τρόπον καὶ θᾶττον τὸ πλεῖον.

Ἄλλως δὲ βαρὺ καὶ κοῦφον, οἷς ἀμφοτέρα ὑπάρχει· καὶ γὰρ ἐπιπολάζουσί τισι καὶ ὑφίστανται, καθάπερ ἀῆρ καὶ ὕδωρ· ἀπλῶς μὲν γὰρ οὐδέτερον τούτων κοῦφον ἢ βαρὺ· γῆς μὲν γὰρ ἄμφω κουφότερα (ἐπιπολάζει γὰρ αὐτῇ τὸ τυχὸν αὐτῶν μόριον), πυρὸς δὲ βαρύτερα (ὑφίσταται γὰρ αὐτῶν ὁπόσον ἂν ἢ μόριον), πρὸς ἑαυτὰ δὲ ἀπλῶς τὸ μὲν βαρὺ τὸ δὲ κοῦφον· ἀῆρ μὲν γὰρ ὁπόσος ἂν ἢ, ἐπιπολάζει ὕδατι, ὕδωρ δὲ ὁπόσον ἂν ἢ, ἀέρι ὑφίσταται.

Ἐπεὶ δὲ καὶ τῶν ἄλλων τὰ μὲν ἔχει βάρος τὰ δὲ κουφότητα, δῆλον ὅτι τούτων μὲν αἰτία πάντων ἡ ἐν τοῖς ἀσυνθέτοις διαφορά· κατὰ γὰρ τὸ ἐκείνων

τετυχηκέναι τοῦ μὲν πλεῖον τοῦ δ' ἔλαττον, ἔσται τὰ μὲν κοῦφα τὰ δὲ βαρέα τῶν σωμάτων. Ὡστε περὶ ἐκείνων λεκτέον· τᾶλλα γὰρ ἀκολουθεῖ τοῖς πρώτοις, ὅπερ ἔφαμεν χρῆναι ποιεῖν καὶ τοὺς διὰ τὸ πλήρες τὸ βαρὺ λέγοντας (311b.) καὶ διὰ τὸ κενὸν τὸ κοῦφον.

Συμβαίνει δὴ μὴ πανταχοῦ ταῦτά βαρέα δοκεῖν εἶναι καὶ κοῦφα διὰ τὴν τῶν πρώτων διαφοράν· λέγω δ' οἷον ἐν μὲν ἀέρι βαρύτερον ἔσται ταλαντιαῖον ξύλον μολίβδου μναΐαιου, ἐν δὲ ὕδατι κουφότερον· αἴτιον δ' ὅτι πάντα βάρος ἔχει πλὴν πυρὸς καὶ κουφότητα πλὴν γῆς.

Γῆν μὲν οὖν καὶ ὅσα γῆς ἔχει πλεῖστον, πανταχοῦ βάρος ἔχειν ἀναγκαῖον, ὕδωρ δὲ πανταχοῦ πλὴν ἐν γῇ, ἀέρα δὲ πλὴν ἐν ὕδατι καὶ γῇ· ἐν τῇ αὐτοῦ γὰρ χώρᾳ πάντα βάρος ἔχει πλὴν πυρός, καὶ ὁ ἀήρ. Σημεῖον δ' ὅτι ἔλκει πλεῖον ὁ πεφυσημένος ἀσκὸς τοῦ κενοῦ. Ὡστ' εἴ τι ἀέρος ἔχει πλεῖον ἢ γῆς καὶ ὕδατος, ἐν μὲν ὕδατι ἐνδέχεται κουφότερον εἶναι τινος, ἐν δὲ ἀέρι βαρύτερον· ἀέρι μὲν γὰρ οὐκ ἐπιπολάζει, τῷ δὲ ὕδατι ἐπιπολάζει. Ὅτι δ' ἐστὶ τι ἀπλῶς κοῦφον καὶ ἀπλῶς βαρὺ, ἐκ τῶνδ' ἐστὶ φανερόν. Λέγω δ' ἀπλῶς κοῦφον ὃ ἀεὶ ἄνω καὶ βαρὺ ὃ ἀεὶ κάτω πέφυκε φέρεσθαι μὴ κωλυόμενον· τοιαῦτα γὰρ ἐστὶ τινα, καὶ οὐχ ὥσπερ οἴονται τινες πάντ' ἔχειν βάρος· βαρὺ μὲν γὰρ δοκεῖ τισιν εἶναι καὶ ἑτέροις, καὶ ἀεὶ φέρεσθαι πρὸς τὸ μέσον. Ἔστι δ' ὁμοίως καὶ τὸ κοῦφον. Ὁρῶμεν γάρ, καθάπερ εἴρηται πρότερον, ὅτι τὰ γεηρὰ πᾶσιν ὑφίσταται καὶ φέρεται πρὸς τὸ μέσον. Ἀλλὰ μὴν ὥρισται τὸ μέσον. Εἰ τοίνυν ἐστὶ τι ὃ πᾶσιν ἐπιπολάζει, καθάπερ φαίνεται τὸ πῦρ καὶ ἐν αὐτῷ τῷ ἀέρι ἄνω φερόμενον, ὃ δ' ἀήρ ἡσυχάζων, δῆλον ὅτι τοῦτο φέρεται πρὸς τὸ ἔσχατον. Ὡστε βάρος οὐδὲν οἷόν τ' ἔχειν αὐτό· ὑφίστατο γὰρ ἂν ἄλλω· εἰ δὲ τοῦτο, εἴη ἂν τι ἄλλο, ὃ φέρεται ἐπὶ τὸ ἔσχατον, ὃ πᾶσι τοῖς φερομένοις ἐπιπολάζει. Νῦν δ' οὐδὲν φαίνεται. Τὸ ἄρα πῦρ οὐδὲν ἔχει βάρος, οὐδὲ ἡ γῆ κουφότητα οὐδεμίαν, εἴπερ ὑφίσταται πᾶσι καὶ τὸ ὑφιστάμενον φέρεται ἐπὶ τὸ μέσον.

Ἀλλὰ μὴν ὅτι γ' ἐστὶ μέσον πρὸς ὃ ἡ φορὰ τοῖς ἔχουσι βάρος καὶ ἀφ' οὗ τοῖς κούφοις, δῆλον πολλαχόθεν. Πρῶτον μὲν τῷ εἰς ἅπειρον μὴ ἐνδέχεσθαι φέρεσθαι μηθέν. Ὡσπερ γὰρ οὐκ ἔστιν οὐθὲν ἀδύνατον, οὕτως οὐδὲ γίγνεται· ἡ δὲ φορὰ γένεσίς ποθὲν ποι.

Ἐπειτα πρὸς ὁμοίας φαίνεται γωνίας τὸ μὲν πῦρ ἄνω φερόμενον, ἡ δὲ γῆ κάτω καὶ πᾶν τὸ βάρος ἔχον. Ὡστ' ἀνάγκη φέρεσθαι (312a.) πρὸς τὸ μέσον. (Τοῦτο δὲ πότερον συμβαίνει πρὸς τὸ τῆς γῆς μέσον ἢ πρὸς τὸ τοῦ παντός, ἐπεὶ ταῦτόν αὐτῶν ἐστίν, ἄλλος λόγος.) Ἐπεὶ δὲ τὸ πᾶσιν ὑφιστάμενον

φέρεται πρὸς τὸ μέσον, ἀνάγκη τὸ πᾶσιν ἐπιπολάζον φέρεσθαι πρὸς τὸ ἔσχατον τῆς χώρας, ἐν ᾗ ποιοῦνται τὴν κίνησιν· ἐναντίον γὰρ τὸ μὲν μέσον τῷ ἐσχάτῳ, τὸ δὲ ὑφίστάμενον ἀεὶ τῷ ἐπιπολάζοντι.

Διὸ καὶ εὐλόγως τὸ βαρὺ καὶ κοῦφον δύο ἐστίν· καὶ γὰρ οἱ τόποι δύο, τὸ μέσον καὶ τὸ ἔσχατον.

Ἔστι δὲ δὴ τι καὶ μεταξὺ τούτων, ὃ πρὸς ἐκάτερον αὐτῶν λέγεται θάτερον· ἔστι γὰρ ὡς ἔσχατον καὶ μέσον ἀμφοτέρων ἐστὶ τὸ μεταξύ· διὰ τοῦτο ἐστὶ τι καὶ ἄλλο βαρὺ καὶ κοῦφον, οἷον ὕδωρ καὶ ἀήρ.

Φαμὲν δὲ τὸ μὲν περιέχον τοῦ εἶδους εἶναι, τὸ δὲ περιεχόμενον τῆς ὕλης. Ἔστι δ' ἐν πᾶσι τοῖς γένεσιν αὕτη ἡ διάστασις· καὶ γὰρ ἐν τῷ ποιῶ καὶ ἐν τῷ ποσῶ ἐστὶ τὸ μὲν ὡς εἶδος μᾶλλον, τὸ δ' ὡς ὕλη. Καὶ ἐν τοῖς κατὰ τόπον ὡσαύτως τὸ μὲν ἄνω τοῦ ὠρισμένου, τὸ δὲ κάτω τῆς ὕλης.

Ὡστε καὶ ἐν αὐτῇ τῇ ὕλῃ τῇ τοῦ βαρέος καὶ κούφου, ἥ μὲν τοιοῦτον δυνάμει, βαρέος ὕλη, ἥ δὲ τοιοῦτον, κούφου· καὶ ἔστι μὲν ἡ αὕτη, τὸ δ' εἶναι οὐ ταυτόν, ὥσπερ καὶ τὸ νοσερὸν καὶ τὸ ὑγιαστόν. Τὸ γὰρ εἶναι οὐ ταυτόν· διόπερ οὐδὲ τὸ νοσώδει εἶναι ἢ ὑγιεινῶ.

## Κεφάλαιο 5

Τὸ μὲν οὖν ἔχον τοιαύτην ὕλην κοῦφον καὶ ἀεὶ ἄνω, τὸ δὲ τὴν ἐναντίαν βαρὺ καὶ ἀεὶ κάτω· τὸ δ' ἐτέρας μὲν τούτων, ἐχούσας δ' οὕτω πρὸς ἀλλήλας ὡς αὗται ἀπλῶς, καὶ ἄνω καὶ κάτω [φερομένας]· διὸ ἀήρ καὶ ὕδωρ ἔχουσι καὶ κουφότητα καὶ βάρος ἐκάτερον, καὶ ὕδωρ μὲν πλὴν γῆς πᾶσιν ὑφίσταται, ἀήρ δὲ πλὴν πυρὸς πᾶσιν ἐπιπολάζει. Ἐπεὶ δ' ἐστὶν ἐν μόνον ὃ πᾶσιν ἐπιπολάζει καὶ ἐν ὃ πᾶσιν ὑφίσταται, ἀνάγκη δύο ἄλλα εἶναι ἃ καὶ ὑφίσταταιί τινι καὶ ἐπιπολάζει τινί.

Ὡστε ἀνάγκη καὶ τὰς ὕλας τοσαύτας εἶναι ὅσαπερ ταῦτα, τέτταρας, οὕτω δὲ τέτταρας ὡς μίαν μὲν ἀπάντων τὴν κοινήν, ἄλλως τε καὶ εἰ γίνονται ἐξ ἀλλήλων, ἀλλὰ τὸ εἶναι ἕτερον. Οὐδὲν γὰρ κωλύει τῶν (312b.) ἐναντίων εἶναι μεταξὺ καὶ ἐν καὶ πλείω, ὥσπερ ἐν χρώμασιν· πολλαχῶς γὰρ λέγεται τὸ μεταξύ καὶ τὸ μέσον.

Ἐν μὲν οὖν τῇ αὐτοῦ χώρᾳ τῶν ἐχόντων καὶ βάρος καὶ κουφότητα ἕκαστον ἔχει βάρος (ἢ δὲ γῆ ἐν ἅπασιν)· κουφότητα δ' οὐκ ἔχει, ἀλλ' ἢ ἐν οἷς ἐπιπολάζει.



Διὸ καὶ ὑποσπωμένων μὲν φέρεται εἰς τὰ ἐφεξῆς κάτω, ἀήρ μὲν εἰς τὴν τοῦ ὕδατος χώραν, ὕδωρ δὲ εἰς τὴν τῆς γῆς. Ἄνω δ' εἰς τὴν τοῦ πυρός, ἀναιρουμένου τοῦ πυρός, οὐκ οἰσθήσεται ὁ ἀήρ, εἰ μὴ βία, ὥσπερ καὶ τὸ ὕδωρ σπᾶται, ὅταν γένηται τὸ ἐπίπεδον ἐν καὶ θᾶπτον σπάσῃ τις ἄνω τῆς φορᾶς, ἣν φέρεται τὸ ὕδωρ κάτω. Οὐδὲ τὸ ὕδωρ εἰς τὴν τοῦ ἀέρος, ἀλλ' ἢ ὡς νῦν εἴρηται. Ἡ γῆ δὲ τοῦτο οὐ πάσχει, ὅτι οὐχ ἐν τὸ ἐπίπεδον. Διὸ τὸ μὲν ὕδωρ εἰς τὸ ἀγγεῖον πυρωθὲν σπᾶται, γῆ δ' οὐ. Ὡσπερ δὲ οὐδ' ἡ γῆ ἄνω, οὐδὲ τὸ πῦρ κάτω εἴσιν ὑφαιρουμένου τοῦ ἀέρος· οὐδὲν γὰρ ἔχει βάρος οὐδ' ἐν τῇ αὐτοῦ χώρᾳ, ὥσπερ οὐδ' ἡ γῆ κουφότητα. Φέρεται δὲ κάτω τὰ δύο ὑποσπωμένων, ὅτι τὸ μὲν ἀπλῶς βαρὺ ἐστὶν ὃ πᾶσιν ὑφίσταται, τὸ δὲ πρὸς τι βαρὺ ὃν εἰς τὴν αὐτοῦ χώραν ἢ οἷς ἐπιπολάζει, δι' ὁμοιότητα τῆς ὕλης.

Ὅτι δ' ἀναγκαῖον ποιεῖν ἴσας τὰς διαφορὰς αὐτοῖς, δῆλον. Εἰ μὲν γὰρ μία ὕλη πάντων, οἷον ἢ τὸ κενὸν ἢ τὸ πλήρες ἢ τὸ μέγεθος ἢ τὰ τρίγωνα, ἢ πάντα ἄνω ἢ πάντα κάτω οἰσθήσεται, ἢ δὲ ἑτέρα φορὰ οὐκέτι ἔσται· ὥστ' ἢ κοῦφον οὐδὲν ἔσται ἀπλῶς, εἰ πάντα ῥέπει μᾶλλον τῷ ἐκ μειζόνων εἶναι σωμάτων ἢ ἐκ πλειόνων ἢ ὅτι πλήρη (τοῦτο δὲ ὀρῶμέν τε, καὶ δέδεικται ὅτι ὁμοίως κάτω τε ἀεὶ καὶ πανταχοῦ φέρεται καὶ ἄνω)· ἐὰν δὲ τὸ κενὸν ἢ τι τοιοῦτον ὃ ἀεὶ ἄνω, οὐκ ἔσται ὃ ἀεὶ κάτω. Καὶ τῶν μεταξὺ δὴ ἓν ἔσται κάτω θᾶπτον γῆς· ἐν γὰρ τῷ πολλῷ ἀέρι τρίγωνα πλείω ἢ τὰ στερεὰ ἢ τὰ μικρὰ ἔσται. Οὐ φαίνεται δ' οὐδὲ ἐν μόριον ἀέρος κάτω φερόμενον. Ὅμοίως δὲ καὶ ἐπὶ τοῦ κούφου, ἐὰν ἐκεῖνο ποιῇ τις ὑπερέχειν τῇ ὕλῃ.

Ἐὰν δὲ δύο, τὰ μεταξὺ πῶς ἔσται ποιοῦντα ἃ ποιεῖ ἀήρ τε καὶ ὕδωρ; (Οἷον εἴ τις (313a.) φαίη εἶναι τὸ κενὸν καὶ πλήρες· τὸ μὲν οὖν πῦρ κενόν, διὸ ἄνω, τὴν δὲ γῆν πλήρες, διὸ κάτω· ἀέρα δὲ πλεῖον πυρὸς ἔχειν, ὕδωρ δὲ γῆς). Ἔσται γάρ τι ὕδωρ ὃ πλεῖον ἔξει πῦρ ὀλίγου ἀέρος, καὶ ἀήρ πολὺς ὀλίγου ὕδατος γῆν πλείω, ὥστε δεήσει ἀέρος τι πλήθος θᾶπτον φέρεσθαι κάτω ὕδατος ὀλίγου. Τοῦτο δ' οὐ φαίνεται οὐδαμοῦ οὐδέποτε.

Ἀνάγκη τοίνυν, ὥσπερ καὶ τὸ πῦρ ἄνω, ὅτι τοδὶ ἔχει, οἷον τὸ κενόν, τὰ δ' ἄλλα οὐ, καὶ τὴν γῆν κάτω, ὅτι τὸ πλήρες ἔχει, καὶ τὸν ἀέρα εἰς τὴν αὐτοῦ καὶ ἀνώτερον τοῦ ὕδατος, ὅτι τοδί τι ἔχει, καὶ τὸ ὕδωρ κάτω, ὅτι τοιόνδε τι.

Εἰ δὲ ἦν ἐν τι ἄμφω ἢ δύο, ἄμφω δ' ὑπάρξει ταῦτα ἑκατέρω, ἔσται τι πλήθος ἑκατέρου ὃ ὑπερέξει ὕδωρ τε ἀέρος ὀλίγου τῷ ἄνω καὶ ἀήρ ὕδατος τῷ κάτω, καθάπερ εἴρηται πολλάκις.

## Κεφάλαιο 6

Τὰ δὲ σχήματα οὐκ αἵτια τοῦ φέρεσθαι ἀπλῶς ἢ κάτω ἢ ἄνω, ἀλλὰ τοῦ θᾶπτον ἢ βραδύτερον. Δι' ἃς δ' αἰτίας, οὐ χαλεπὸν ἰδεῖν· ἀπορεῖται γὰρ νῦν διὰ τί τὰ πλατέα σιδήρια καὶ μόλιβδος ἐπιπλεῖ ἐπὶ τοῦ ὕδατος, ἄλλα δὲ ἐλάττω καὶ ἥττον βαρέα, ἃν ἢ στρογγύλα ἢ μακρά, οἷον βελόνη, κάτω φέρεται, καὶ ὅτι ἔνια διὰ μικρότητα ἐπιπλεῖ, οἷον τὸ ψῆγμα καὶ ἄλλα γεώδη καὶ κονιορτώδη ἐπὶ τοῦ ἀέρος.

Περὶ δὴ τούτων ἀπάντων τὸ μὲν νομίζειν αἴτιον εἶναι ὥσπερ Δημόκριτος οὐκ ὀρθῶς ἔχει. Ἐκεῖνος γὰρ φησι τὰ ἀναφερόμενα θερμὰ ἐκ τοῦ ὕδατος ἀνακωχεύειν (313b.) τὰ πλατέα τῶν ἐχόντων βάρος, τὰ δὲ στενὰ διαπίπτειν· ὀλίγα γὰρ εἶναι τὰ ἀντικρούοντα αὐτοῖς.

Ἔδει δ' ἐν τῷ ἀέρι ἔτι μᾶλλον τοῦτο ποιεῖν, ὥσπερ ἐνίσταται κἀκεῖνος αὐτός.

Ἄλλ' ἐνστάς λύει μαλακῶς· φησὶ γὰρ οὐκ εἰς ἓν ὁρμᾶν τὸν σοῦν, λέγων τὸν σοῦν τὴν κίνησιν τῶν ἄνω φερομένων σωμάτων.

Ἐπεὶ δ' ἐστὶ τὰ μὲν εὐδιαίρετα τῶν συνεχῶν τὰ δ' ἥττον, καὶ διαιρετικὰ δὴ τὸν αὐτὸν τρόπον τὰ μὲν μᾶλλον τὰ δ' ἥττον, ταύτας εἶναι νομιστέον αἰτίας. Εὐδιαίρετον μὲν οὖν τὸ εὐόριστον, καὶ μᾶλλον τὸ μᾶλλον· ἀπὸ δὲ μᾶλλον ὕδατος τοιοῦτον, ὕδωρ δὲ γῆς. Καὶ τὸ ἐλάττον δὴ ἐν ἐκάστῳ γένει εὐδιαιρετώτερον καὶ διασπᾶται ῥᾶον. Τὰ μὲν οὖν ἔχοντα πλάτος διὰ τὸ πολὺ περιλαμβάνειν ἐπιμένει, διὰ τὸ μὴ διασπᾶσθαι τὸ πλεῖον ῥαδίως· τὰ δ' ἐναντίως ἔχοντα τοῖς σχήμασι διὰ τὸ ὀλίγον περιλαμβάνειν φέρεται κάτω, διὰ τὸ διαρεῖν ῥαδίως. Καὶ ἐν ἀέρι πολὺ μᾶλλον, ὅσω εὐδιαιρετώτερος ὕδατός ἐστιν.

Ἐπεὶ δὲ τό τε βάρος ἔχει τινὰ ἰσχὺν καθ' ἣν φέρεται κάτω, καὶ τὰ συνεχῆ πρὸς τὸ μὴ διασπᾶσθαι, ταῦτα δεῖ πρὸς ἄλληλα συμβάλλειν· ἐὰν γὰρ ὑπερβάλλῃ ἡ ἰσχὺς ἢ τοῦ βάρους τῆς ἐν τῷ συνεχεῖ πρὸς τὴν διάσπασιν καὶ διαίρεσιν, βιάσεται κάτω θᾶπτον, ἐὰν δὲ ἀσθενεστέρα ἢ, ἐπιπολάσει.

Περὶ μὲν οὖν βαρέος καὶ κούφου καὶ τῶν περὶ αὐτὰ συμβεβηκότων διωρίσθω τοῦτον ἡμῖν τὸν τρόπον.

## Περὶ γενέσεως καὶ φθορᾶς (314a) On Generation and

# Corruption



## CONTENTS

[Βιβλίο 1](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Βιβλίο 2](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

## **Βιβλίο 1**

### **Κεφάλαιο 1**

(314a.) Περὶ δὲ γενέσεως καὶ φθορᾶς τῶν φύσει γενομένων καὶ φθειρομένων, ὁμοίως κατὰ πάντων, τάς τε αἰτίας διαιρετέον καὶ τοὺς λόγους αὐτῶν, ἔτι δὲ περὶ αὐξήσεως καὶ ἀλλοιώσεως, τί ἐκάτερον, καὶ πότερον τὴν αὐτὴν ὑποληπτέον φύσιν εἶναι ἀλλοιώσεως καὶ γενέσεως, ἢ χωρίς, ὥσπερ διώριστα καὶ τοῖς ὀνόμασιν. Τῶν μὲν οὖν ἀρχαίων οἱ μὲν τὴν καλουμένην ἀπλὴν γένεσιν ἀλλοίωσιν εἶναί φασιν, οἱ δ' ἕτεροι ἀλλοίωσιν καὶ γένεσιν. Ὅσοι μὲν γὰρ ἓν τι τὸ πᾶν λέγουσιν εἶναι καὶ πάντα ἐξ ἑνὸς γεννῶσι, τούτοις μὲν ἀνάγκη τὴν γένεσιν ἀλλοίωσιν φάναι καὶ τὸ κυρίως γινόμενον ἀλλοιοῦσθαι.

Ὅσοι δὲ πλείω τὴν ὕλην ἑνὸς τιθέασιν, οἷον Ἐμπεδοκλῆς καὶ Ἀναξαγόρας καὶ Λεύκιππος, τούτοις δὲ ἕτερον. Καίτοι Ἀναξαγόρας γε τὴν οἰκίαν φωνὴν ἠγνόησεν· λέγει γοῦν ὥς τὸ γίνεσθαι καὶ ἀπόλλυσθαι ταῦτόν καθέστηκε τῷ ἀλλοιοῦσθαι, πολλὰ δὲ λέγει τὰ στοιχεῖα, καθάπερ καὶ ἕτεροι. Ἐμπεδοκλῆς μὲν γὰρ τὰ μὲν σωματικὰ τέτταρα, τὰ δὲ πάντα μετὰ τῶν κινούντων ἐξ τὸν ἀριθμόν, Ἀναξαγόρας δὲ ἄπειρα καὶ Λεύκιππος καὶ Δημόκριτος. Ὁ μὲν γὰρ τὰ ὁμοιομερῆ στοιχεῖα τίθησιν, οἷον ὅστοῦν καὶ σάρκα καὶ μυελόν, καὶ τῶν ἄλλων ὧν ἐκάστῳ συνώνυμον τὸ μέρος ἐστίν.

Δημόκριτος δὲ καὶ Λεύκιππος ἐκ σωμάτων ἀδιαιρέτων τᾶλλα συγκεῖσθαι φασί, ταῦτα δ' ἄπειρα καὶ τὸ πλῆθος εἶναι καὶ τὰς μορφάς, αὐτὰ δὲ πρὸς αὐτὰ διαφέρειν τούτοις ἐξ ὧν εἰσὶ καὶ θέσει καὶ τάξει τούτων. Ἐναντίως δὲ

φαίνονται λέγοντες οἱ περὶ Ἀναξαγόραν τοῖς περὶ Ἐμπεδοκλέα· ὁ μὲν γάρ φησι πῦρ καὶ ὕδωρ καὶ ἀέρα καὶ γῆν στοιχεῖα τέσσαρα καὶ ἀπλᾶ εἶναι μᾶλλον ἢ σάρκα καὶ ὀστοῦν καὶ τὰ τοιαῦτα τῶν ὁμοιομερῶν, οἱ δὲ ταῦτα μὲν ἀπλᾶ καὶ στοιχεῖα, γῆν δὲ καὶ πῦρ καὶ ὕδωρ καὶ ἀέρα σύνθετα· (314b.) πανσπερμίαν γὰρ εἶναι τούτων. Τοῖς μὲν οὖν ἐξ ἑνὸς πάντα κατασκευάζουσιν ἀναγκαῖον λέγειν τὴν γένεσιν καὶ τὴν φθορὰν ἀλλοίωσιν· ἀεὶ γὰρ μένειν τὸ ὑποκείμενον ταὐτὸ καὶ ἓν· τὸ δὲ τοιοῦτον ἀλλοιοῦσθαί φαμεν· τοῖς δὲ τὰ γένη πλείω ποιοῦσι διαφέρειν τὴν ἀλλοίωσιν τῆς γενέσεως· συνιόντων γὰρ καὶ διαλυομένων ἡ γένεσις συμβαίνει καὶ ἡ φθορά. Διὸ λέγει τοῦτον τὸν τρόπον καὶ Ἐμπεδοκλῆς, ὅτι “φύσις οὐδενός ἐστιν, ... ἀλλὰ μόνον μίξις τε διάλλαξις τε μιγέντων.” Ὅτι μὲν οὖν οἴκεῖος ὁ λόγος αὐτῶν τῇ ὑποθέσει οὕτω φάναι, δῆλον, καὶ ὅτι λέγουσι τὸν τρόπον τοῦτον· ἀναγκαῖον δὲ καὶ τούτοις τὴν ἀλλοίωσιν εἶναι μὲν τι φάναι παρὰ τὴν γένεσιν, ἀδύνατον μέντοι κατὰ τὰ ὑπ’ ἐκείνων λεγόμενα. Τοῦτο δ’ ὅτι λέγομεν ὀρθῶς, ῥάδιον συνιδεῖν. Ὡς περ γὰρ ὀρώμεν ἡρεμούσης τῆς οὐσίας ἐν αὐτῇ μεταβολὴν κατὰ μέγεθος, τὴν καλουμένην αὔξησιν καὶ φθίσιν, οὕτω καὶ ἀλλοίωσιν. Οὐ μὴν ἄλλ’ ἐξ ὧν λέγουσιν οἱ πλείους ἀρχὰς ποιοῦντες μίᾳς ἀδύνατον ἀλλοιοῦσθαι. Τὰ γὰρ πάθη, καθ’ ἃ φαμεν τοῦτο συμβαίνειν, διαφοραὶ τῶν στοιχείων εἰσίν, λέγω δ’ οἷον θερμὸν ψυχρόν, λευκὸν μέλαν, ξηρὸν ὑγρόν, μαλακὸν σκληρόν καὶ τῶν ἄλλων ἕκαστον, ὥς περ καὶ φησὶν Ἐμπεδοκλῆς “ἡέλιον μὲν λευκὸν ὀρᾶν καὶ θερμὸν ἀπάντη, ὄμβρον δ’ ἐν πᾶσιν δνοφόεντά τε ῥιγαλέον τε”. Ὁμοίως δὲ διορίζει καὶ ἐπὶ τῶν λοιπῶν. Ὡστ’ εἰ μὴ δυνατόν ἐκ πυρὸς γενέσθαι ὕδωρ μηδ’ ἐξ ὕδατος γῆν, οὐδ’ ἐκ λευκοῦ μέλαν ἔσται οὐδὲν οὐδ’ ἐκ μαλακοῦ σκληρόν· ὁ δ’ αὐτὸς λόγος καὶ περὶ τῶν ἄλλων· τοῦτο δ’ ἦν ἀλλοίωσις. Ἦι καὶ φανερόν ὅτι μίαν ἀεὶ τοῖς ἐναντίοις ὑποθετέον ὕλην, ἃν τε μεταβάλλῃ κατὰ τόπον, ἃν τε κατ’ αὔξησιν καὶ φθίσιν, ἃν τε κατ’ ἀλλοίωσιν. Ἐπὶ δ’ ὁμοίως ἀναγκαῖον εἶναι τοῦτο καὶ ἀλλοίωσιν· εἴτε γὰρ ἀλλοίωσις (315a.) ἐστὶ, καὶ τὸ ὑποκείμενον ἐν στοιχείῳ καὶ μία πάντων ὕλη τῶν ἐχόντων εἰς ἄλληλα μεταβολήν, κἂν εἰ τὸ ὑποκείμενον ἓν, ἔστιν ἀλλοίωσις.

Ἐμπεδοκλῆς μὲν οὖν ἔοικεν ἐναντία λέγειν καὶ πρὸς τὰ φαινόμενα καὶ πρὸς αὐτὸν αὐτός. Ἄμα μὲν γὰρ οὗ φησιν ἕτερον ἐξ ἑτέρου γίνεσθαι τῶν στοιχείων οὐδέν, ἀλλὰ τᾶλλα πάντα ἐκ τούτων, ἅμα δ’ ὅταν εἰς ἓν συναγάγῃ τὴν ἅπασαν φύσιν πλὴν τοῦ νείκους, ἐκ τοῦ ἑνὸς γίνεσθαι πάλιν ἕκαστον. Ὡστ’ ἐξ ἑνός τινος δῆλον ὅτι διαφοραῖς τισι χωριζομένων καὶ πάθεσιν ἐγένετο τὸ μὲν ὕδωρ τὸ δὲ πῦρ, καθάπερ λέγει τὸν μὲν ἥλιον λευκὸν καὶ θερμόν, τὴν δὲ γῆν βαρὺ καὶ σκληρόν· ἀφαιρουμένων οὖν τούτων τῶν διαφορῶν (εἰσὶ γὰρ ἀφαιρεταὶ γενόμεναί γε) δῆλον ὡς ἀνάγκη γίνεσθαι καὶ γῆν ἐξ ὕδατος καὶ ὕδωρ ἐκ γῆς, ὁμοίως δὲ καὶ τῶν ἄλλων ἕκαστον, οὐ τότε μόνον ἀλλὰ καὶ

νῦν, μεταβάλλοντά γε τοῖς πάθεσιν. Ἔστι δ' ἐξ ὧν εἴρηκε δυνάμενα προσγίνεσθαι καὶ χωρίζεσθαι πάλιν, ἄλλως τε καὶ μαχομένων ἀλλήλοις ἔτι τοῦ νείκους καὶ τῆς φιλίας. Διόπερ καὶ τότε ἐξ ἐνὸς ἐγεννήθησαν· οὐ γὰρ δὴ πῦρ γε καὶ γῆ καὶ ὕδωρ ὄντα ἔν ἦν τὸ πᾶν. Ἄδηλον δὲ καὶ πότερον ἀρχὴν αὐτῶν θετέον τὸ ἐν ἢ τὰ πολλά, λέγω δὲ πῦρ καὶ γῆν καὶ τὰ σύστοιχα τούτων. Ἡ μὲν γὰρ ὡς ὕλη ὑπόκειται, ἐξ οὗ μεταβάλλοντα διὰ τὴν κίνησιν γίνονται γῆ καὶ πῦρ, τὸ ἐν στοιχεῖον· ἡ δὲ τοῦτο μὲν ἐκ συνθέσεως γίνεται συνιόντων ἐκείνων, ἐκεῖνα δ' ἐκ διαλύσεως, στοιχειωδέστερα ἐκεῖνα καὶ πρότερα τὴν φύσιν.

## Κεφάλαιο 2

Ὅλως τε δὴ περὶ γενέσεως καὶ φθορᾶς τῆς ἀπλῆς λεκτέον, πότερον ἔστιν ἢ οὐκ ἔστι καὶ πῶς ἔστιν, καὶ περὶ τῶν ἄλλων ἀπλῶν κινήσεων, οἷον περὶ αὐξήσεως καὶ ἀλλοιώσεως.

Πλάτων μὲν οὖν μόνον περὶ γενέσεως ἐσκέψατο καὶ φθορᾶς, ὅπως ὑπάρχει τοῖς πράγμασι, καὶ περὶ γενέσεως οὐ πάσης ἀλλὰ τῆς τῶν στοιχείων· πῶς δὲ σάρκες ἢ ὅσῃ ἢ τῶν ἄλλων τι τῶν τοιούτων, οὐδέν· ἔτι οὔτε περὶ ἀλλοιώσεως οὔτε περὶ αὐξήσεως, τίνα τρόπον ὑπάρχουσι τοῖς πράγμασιν. Ὅλως δὲ παρὰ τὰ ἐπιπολῆς περὶ οὐδενὸς οὐδεὶς ἐπέστησεν ἔξω Δημοκρίτου. Οὗτος δ' ἔοικε μὲν περὶ ἀπάντων φροντίσαι, ἤδη (315b.) δὲ ἐν τῷ πῶς διαφέρειν. Οὔτε γὰρ περὶ αὐξήσεως οὐδεὶς οὐδὲν διώρισεν, ὥσπερ λέγομεν, ὅ τι μὴ κἂν ὁ τυχὼν εἴπειεν, ὅτι προσιόντος αὐξάνονται τῷ ὁμοίῳ (πῶς δὲ τοῦτο, οὐκέτι), οὐδὲ περὶ μίξεως, οὔτε περὶ τῶν ἄλλων ὡς εἶπεῖν οὐδενός, οἷον τοῦ ποιεῖν καὶ τοῦ πάσχειν, τίνα τρόπον τὸ μὲν ποιεῖ τὸ δὲ πάσχει τὰς φυσικὰς ποιήσεις. Δημόκριτος δὲ καὶ Λεύκιππος ποιήσαντες τὰ σχήματα τὴν ἀλλοίωσιν καὶ τὴν γένεσιν ἐκ τούτων ποιοῦσι, διακρίσει μὲν καὶ συγκρίσει γένεσιν καὶ φθοράν, τάξει δὲ καὶ θέσει ἀλλοίωσιν. Ἐπεὶ δ' ὥοντο τάληθές ἐν τῷ φαίνεσθαι, ἐναντία δὲ καὶ ἄπειρα τὰ φαινόμενα, τὰ σχήματα ἄπειρα ἐποίησαν, ὥστε ταῖς μεταβολαῖς τοῦ συγκεκριμένου τὸ αὐτὸ ἐναντίον δοκεῖν ἄλλῳ καὶ ἄλλῳ, καὶ μετακινεῖσθαι μικροῦ ἐμμιγνυμένου καὶ ὅλως ἕτερον φαίνεσθαι ἐνὸς μετακινήθέντος· ἐκ τῶν αὐτῶν γὰρ τραγωδία καὶ κωμωδία γίνεται γραμμάτων.

Ἐπεὶ δὲ δοκεῖ σχεδὸν πᾶσιν ἕτερον εἶναι γένεσις καὶ ἀλλοίωσις, καὶ γίνεσθαι μὲν καὶ φθεῖρεσθαι συγκρινόμενα καὶ διακρινόμενα, ἀλλοιοῦσθαι δὲ μεταβαλλόντων τῶν παθημάτων, περὶ τούτων ἐπιστήσασι θεωρητέον. Ἀπορίας γὰρ ἔχει ταῦτα καὶ πολλὰς καὶ εὐλόγους. Εἰ μὲν γάρ ἐστι σύγκρισις ἢ γένεσις,

πολλὰ ἀδύνατα συμβαίνει· εἰσὶ δ' αὖ λόγοι ἕτεροι ἀναγκαστικοὶ καὶ οὐκ εὖποροι διαλύειν ὥς οὐκ ἐνδέχεται ἄλλως ἔχειν. Εἴτε μὴ ἐστὶ σύγκρισις ἢ γένεσις, ἢ ὅλως οὐκ ἔστι γένεσις ἢ ἀλλοιώσις, ἢ εἰ καὶ τοῦτο διαλυῖσαι χαλεπὸν ὄν πειρατέον.

Ἀρχὴ δὲ τούτων πάντων, πότερον οὕτω γίνεται καὶ ἀλλοιοῦται καὶ αὐξάνεται τὰ ὄντα καὶ τὰναντία τούτοις πάσχει, τῶν πρώτων ὑπαρχόντων μεγεθῶν ἀδιαιρέτων, ἢ οὐθέν ἐστὶ μέγεθος ἀδιαίρετον· διαφέρει γὰρ τοῦτο πλεῖστον. Καὶ πάλιν εἰ μεγέθη, πότερον, ὥς Δημόκριτος καὶ Λεύκιππος, σώματα ταῦτ' ἐστίν, ἢ ὥσπερ ἐν τῷ Τιμαίῳ ἐπίπεδα. Τοῦτο μὲν οὖν αὐτό, καθάπερ καὶ ἐν ἄλλοις εἰρήκαμεν, ἄλογον μέχρι ἐπιπέδων διαλυῖσαι. Διὸ μᾶλλον εὐλογον σώματα εἶναι ἀδιαίρετα.

Ἀλλὰ καὶ ταῦτα πολλὴν ἔχει ἀλογίαν. Ὅμως δὲ τούτοις ἀλλοιώσιν καὶ γένεσιν ἐνδέχεται ποιεῖν, καθάπερ εἴρηται, τροπῇ καὶ διαθιγῇ μετακινουῖν τὸ αὐτὸ καὶ ταῖς τῶν σχημάτων(316a.) των διαφοραῖς, ὅπερ ποιεῖ Δημόκριτος. Διὸ καὶ χροιάν οὗ φησιν εἶναι· τροπῇ γὰρ χρωματίζεσθαι. Τοῖς δ' εἰς ἐπίπεδα διαιροῦσιν οὐκέτι· οὐδὲν γὰρ γίνεται πλὴν στερεὰ συντιθεμένων· πάθος γὰρ οὐδ' ἐγχειροῦσι γεννᾶν οὐδὲν ἐξ αὐτῶν.

Αἴτιον δὲ τοῦ ἐπ' ἔλαττον δύνασθαι τὰ ὁμολογούμενα συνορᾶν ἢ ἀπειρία. Διὸ ὅσοι ἐνωκῆκασιν μᾶλλον ἐν τοῖς φυσικοῖς μᾶλλον δύνανται ὑποτίθεσθαι τοιαύτας ἀρχὰς αἱ ἐπὶ πολὺ δύνανται συνεῖρειν· οἱ δ' ἐκ τῶν πολλῶν λόγων ἀθεώρητοι τῶν ὑπαρχόντων ὄντες, πρὸς ὀλίγα βλέψαντες, ἀποφαίνονται ῥᾶον. Ἴδοι δ' ἂν τις καὶ ἐκ τούτων ὅσον διαφέρουσιν οἱ φυσικῶς καὶ λογικῶς σκοποῦντες· περὶ γὰρ τοῦ ἄτομα εἶναι μεγέθη οἱ μὲν φασιν ὅτι τὸ αὐτοτρίγωνον πολλὰ ἔσται, Δημόκριτος δ' ἂν φανείη οἰκείοις καὶ φυσικοῖς λόγοις πεπεῖσθαι. Δῆλον δ' ἔσται ὃ λέγομεν προιοῦσιν.

Ἐχει γὰρ ἀπορίαν, εἴ τις θεῖη σῶμά τι εἶναι καὶ μέγεθος πάντῃ διαιρετόν, καὶ τοῦτο δυνατόν. Τί γὰρ ἔσται ὅπερ τὴν διαίρεσιν διαφεύγει; εἰ γὰρ πάντῃ διαιρετόν, καὶ τοῦτο δυνατόν, κἂν ἅμα εἴῃ τοῦτο πάντῃ διηρημένον, καὶ εἰ μὴ ἅμα διήρηται· κἂν εἰ τοῦτο γένοιτο, οὐδὲν ἂν εἴῃ ἀδύνατον. Οὐκοῦν καὶ κατὰ τὸ μέσον ὡσαύτως, καὶ ὅλως δέ, εἰ πάντῃ πέφυκε διαιρετόν, ἂν διαιρεθῇ, οὐδὲν ἔσται ἀδύνατον γεγονός, ἐπεὶ οὐδ' ἂν εἰς μυρία μυριάκις διηρημένα ἦ, οὐδὲν ἀδύνατον· καίτοι ἴσως οὐδεὶς ἂν διέλοι. Ἐπεὶ τοίνυν πάντῃ τοιοῦτόν ἐστὶ τὸ σῶμα, διηρήσθω. Τί οὖν ἔσται λοιπόν; μέγεθος; οὐ γὰρ οἷόν τε· ἔσται γάρ τι οὐ διηρημένον, ἣν δὲ πάντῃ διαιρετόν. Ἀλλὰ μὴν εἰ μηδὲν ἔσται σῶμα μηδὲ μέγεθος, διαίρεσις δ' ἔσται, ἢ ἐκ στιγμῶν ἔσται, καὶ ἀμεγέθη ἐξ ὧν

σύγκειται, ἢ οὐδὲν παντάπασιν, ὥστε κἂν γίνοιτο ἐκ μηδενὸς κἂν εἴη συγκείμενον, καὶ τὸ πᾶν δὴ οὐδὲν ἄλλ' ἢ φαινόμενον. Ὅμοίως δὲ κἂν ἢ ἐκ στιγμῶν, οὐκ ἔσται ποσόν. Ὅποτε γὰρ ἤπτοντο καὶ ἐν ἣν μέγεθος καὶ ἅμα ἦσαν, οὐδὲν ἐποιοῦν μεῖζον τὸ πᾶν. Διαιρεθέντος γὰρ εἰς δύο καὶ πλείω, οὐδὲν ἔλαττον οὐδὲ μεῖζον τὸ πᾶν τοῦ πρότερον, ὥστε κἂν πᾶσαι συντεθῶσιν, οὐδὲν ποιήσουσι μέγεθος. Ἀλλὰ μὴν καὶ εἴ τι διαιρουμένου οἶον ἔκπρισμα (316b.) γίνεται τοῦ σώματος, καὶ οὕτως ἐκ τοῦ μεγέθους σῶμά τι ἀπέρχεται, ὁ αὐτὸς λόγος, ἐκεῖνο πῶς διαιρετόν. Εἰ δὲ μὴ σῶμα ἄλλ' εἶδός τι χωριστόν ἢ πάθος ὃ ἀπῆλθεν, καὶ ἔστι τὸ μέγεθος στιγμᾷ ἢ ἀφᾷ τοδὶ παθοῦσαι, ἄτοπον ἐκ μὴ μεγεθῶν μέγεθος εἶναι. Ἐπεὶ δὲ ποῦ ἔσσονται, καὶ ἀκίνητοι ἢ κινούμεναι αἱ στιγμαί; ἀφᾷ τε ἀεὶ μία δυοῖν τινων, ὡς ὄντος τινὸς παρὰ τὴν ἀφὴν καὶ τὴν διαίρεσιν καὶ τὴν στιγμήν. Εἰ δὴ τις θήσεται ὅτιοῦν ἢ ὀπηλικονοῦν σῶμα εἶναι πάντῃ διαιρετόν, πάντα ταῦτα συμβαίνει. Ἐπεὶ ἐὰν διελὼν συνθῶ τὸ ξύλον ἢ τι ἄλλο, πάλιν ἴσον τε καὶ ἔν. Οὐκοῦν οὕτως ἔχει δηλονότι κἂν τέμω τὸ ξύλον καθ' ὅτιοῦν σημεῖον. Πάντῃ ἄρα διήρηται δυνάμει. Τί οὖν ἔστι παρὰ τὴν διαίρεσιν; εἰ γὰρ καὶ ἔστι τι πάθος, ἀλλὰ πῶς εἰς ταῦτα διαλύεται καὶ γίνεται ἐκ τούτων; ἢ πῶς χωρίζεται ταῦτα; ὥστ' εἴπερ ἀδύνατον ἐξ ἀφῶν ἢ στιγμῶν εἶναι τὰ μεγέθη, ἀνάγκη εἶναι σώματα ἀδιαίρετα καὶ μεγέθη. Οὐ μὴν ἀλλὰ καὶ ταῦτα θεμένοις οὐχ ἥττον συμβαίνει ἀδύνατα. Ἐσκεπται δὲ περὶ αὐτῶν ἐν ἑτέροις. Ἀλλὰ ταῦτα πειρατέον λύειν· διὸ πάλιν ἐξ ἀρχῆς τὴν ἀπορίαν λεκτέον.

Τὸ μὲν οὖν ἅπαν σῶμα αἰσθητὸν εἶναι διαιρετόν καθ' ὅτιοῦν σημεῖον καὶ ἀδιαίρετον οὐδὲν ἄτοπον· τὸ μὲν γὰρ δυνάμει διαιρετόν, τὸ δ' ἐντελεχεῖα ὑπάρξει. Τὸ δ' εἶναι ἅμα πάντῃ διαιρετόν δυνάμει ἀδύνατον δόξειεν ἂν εἶναι. Εἰ γὰρ δυνατόν, κἂν γένοιτο, οὐχ ὥστε εἶναι ἅμα ἅμφω ἐντελεχεῖα ἀδιαίρετον καὶ διηρημένον, ἀλλὰ διηρημένον καθ' ὅτιοῦν σημεῖον. Οὐδὲν ἄρα ἔσται λοιπόν, καὶ ἀσώματον ἐφθαρμένον τὸ σῶμα, καὶ γίνοιτο δ' ἂν πάλιν ἥτοι ἐκ στιγμῶν ἢ ὅλως ἐξ οὐδενός. Καὶ τοῦτο πῶς δυνατόν; ἀλλὰ μὴν ὅτι γε διαιρεῖται εἰς χωριστὰ καὶ ἀεὶ εἰς ἐλάττω μεγέθη καὶ εἰς ἀπέχοντα καὶ κεχωρισμένα, φανερόν. Οὔτε δὲ κατὰ μέρος διαιροῦντι εἴη ἂν ἄπειρος ἢ θρύψις, οὔτε ἅμα οἶόν τε διαιρεθῆναι κατὰ πᾶν σημεῖον (οὐ γὰρ δυνατόν), ἀλλὰ μέχρι του. Ἀνάγκη ἄρα ἄτομα ἐνυπάρχειν μεγέθη ἀόρατα, ἄλλως τε καὶ εἴπερ ἔσται γένεσις καὶ φθορὰ ἢ μὲν διακρίσει ἢ δὲ συγκρίσει. Ὁ μὲν οὖν ἀναγκάζειν δοκῶν (317a.) λόγος εἶναι μεγέθη ἄτομα οὗτός ἐστιν· ὅτι δὲ λανθάνει παραλογιζόμενος, καὶ ἢ λανθάνει, λέγωμεν.

Ἐπεὶ γὰρ οὐκ ἔστι στιγμή στιγμής ἐχομένη, τὸ πάντῃ εἶναι διαιρετόν ἔστι μὲν ὡς ὑπάρχει τοῖς μεγέθεσιν, ἔστι δ' ὡς οὔ. Δοκεῖ δ', ὅταν τοῦτο τεθῇ, καὶ



ὀπιοῦν καὶ πάντη στιγμὴν εἶναι, ὥστ' ἀναγκαῖον εἶναι διαιρεθῆναι τὸ μέγεθος εἰς μηδέν· πάντη γὰρ εἶναι στιγμὴν, ὥστε ἢ ἐξ ἀφῶν ἢ ἐκ στιγμῶν εἶναι. Τὸ δ' ἐστὶν ὡς ὑπάρχει πάντη, ὅτι μία ὀπιοῦν ἐστὶ, καὶ πᾶσαι ὡς ἐκάστη· πλείους δὲ μιᾶς οὐκ εἰσὶν· ἐφεξῆς γὰρ οὐκ εἰσὶν, ὥστ' οὐ πάντη· εἰ γὰρ κατὰ μέσον διαιρετόν, καὶ κατ' ἐχομένην στιγμὴν ἔσται διαιρετόν· οὐ γάρ ἐστὶν ἐχόμενον σημεῖον σημείου ἢ στιγμὴ στιγμῆς. Τοῦτο δ' ἐστὶ διαίρεσις ἢ σύνθεσις. Ὡστ' ἔστι καὶ διάκρισις καὶ σύγκρισις, ἀλλ' οὗτ' εἰς ἄτομα καὶ ἐξ ἀτόμων (πολλὰ γὰρ τὰ ἀδύνατα) οὕτε οὕτως ὥστε πάντη διαίρεσιν γενέσθαι (εἰ γὰρ ἢν ἐχομένη στιγμὴ στιγμῆς, τοῦτ' ἂν ἢν), ἀλλ' εἰς μικρὰ καὶ ἐλάττω ἐστὶ, καὶ σύγκρισις ἐξ ἐλαττόνων. Ἀλλ' οὐχ ἡ ἀπλῆ καὶ τελεία γένεσις συγκρίσει καὶ διακρίσει ὥριστα, ὡς τινὲς φασιν, τὴν δ' ἐν τῷ συνεχεῖ μεταβολὴν ἀλλοίωσιν. Ἀλλὰ τοῦτ' ἔστιν ἐν ᾧ σφάλλεται πάντα. Ἔστι γὰρ γένεσις ἀπλῆ καὶ φθορὰ οὐ συγκρίσει καὶ διακρίσει, ἀλλ' ὅταν μεταβάλλῃ ἐκ τοῦδε εἰς τόδε ὅλον. Οἱ δὲ οἴονται ἀλλοίωσιν πᾶσαν εἶναι τὴν τοιαύτην μεταβολήν· τὸ δὲ διαφέρει. Ἐν γὰρ τῷ ὑποκειμένῳ τὸ μὲν ἐστὶ κατὰ τὸν λόγον, τὸ δὲ κατὰ τὴν ὕλην.

Ὅταν μὲν οὖν ἐν τούτοις ἢ ἡ μεταβολή, γένεσις ἔσται ἢ φθορά, ὅταν δ' ἐν τοῖς πάθεσι καὶ κατὰ συμβεβηκός, ἀλλοίωσις. Διακρινόμενα δὲ καὶ συγκρινόμενα εὐφθαρτα γίνεται. Ἐὰν μὲν γὰρ εἰς ἐλάττω ὑδάτια διαιρεθῇ, θᾶπτον ἀήρ γίνεται, ἐὰν δὲ συγκριθῇ, βραδύτερον. Μᾶλλον δ' ἔσται δῆλον ἐν τοῖς ὕστερον. Νῦν δὲ τοσοῦτον διωρίσθω, ὅτι ἀδύνατον εἶναι τὴν γένεσιν σύγκρισιν, οἷαν δὴ τινὲς φασιν.

### Κεφάλαιο 3

Διωρισμένων δὲ τούτων, πρῶτον θεωρητέον πότερόν ἐστί τι γινόμενον ἀπλῶς καὶ φθειρόμενον, ἢ κυρίως μὲν οὐδέν, ἀεὶ δ' ἕκ τινος καὶ τί, λέγω δ' οἶον ἐκ κάμνοντος ὑγιαῖνον καὶ κάμνον ἐξ ὑγιαίνοντος, ἢ μικρὸν ἐκ μεγάλου καὶ (317b.) μέγα ἐκ μικροῦ, καὶ τᾶλλα πάντα τοῦτον τὸν τρόπον. Εἰ γὰρ ἀπλῶς ἔσται γενεσις, ἀπλῶς ἂν τι γίνοιτο ἐκ μὴ ὄντος, ὥστ' ἀληθὲς ἂν εἴη λέγειν ὅτι ὑπάρχει τισὶ τὸ μὴ ὄν. Τίς μὲν γὰρ γενεσις ἐκ μὴ ὄντος τινός, οἶον ἐκ μὴ λευκοῦ ἢ μὴ καλοῦ, ἢ δὲ ἀπλῆ ἐξ ἀπλῶς μὴ ὄντος. Τὸ δ' ἀπλῶς ἦτοι τὸ πρῶτον σημαίνει καθ' ἐκάστην κατηγορίαν τοῦ ὄντος, ἢ τὸ καθόλου καὶ τὸ πάντα περιέχον. Εἰ μὲν οὖν τὸ πρῶτον, οὐσίας ἔσται γενεσις ἐκ μὴ οὐσίας. Ὡς δὲ μὴ ὑπάρχει οὐσία μηδὲ τὸ τότε, δῆλον ὡς οὐδὲ τῶν ἄλλων οὐδεμία κατηγοριῶν, οἶον οὔτε ποιὸν οὔτε ποσὸν οὔτε τὸ ποῦ· χωριστὰ γὰρ ἂν εἴη τὰ πάθη τῶν οὐσιῶν. Εἰ δὲ τὸ μὴ ὄν ὅλως, ἀπόφασις ἔσται καθόλου πάντων, ὥστε ἐκ μηδενὸς ἀνάγκη γίνεσθαι τὸ γινόμενον. Περὶ μὲν οὖν τούτων ἐν ἄλλοις τε διηπόρηται καὶ διώριστα τοῖς λόγοις ἐπὶ πλεῖον· συντόμως δὲ καὶ νῦν λεκτέον, ὅτι τρόπον μὲν τινα ἐκ μὴ ὄντος ἀπλῶς γίνεται, τρόπον δὲ ἄλλον ἐξ ὄντος ἀεὶ· τὸ γὰρ δυνάμει ὄν ἐντελεχείᾳ δὲ μὴ ὄν ἀνάγκη προυπάρχειν λεγόμενον ἀμφοτέρως. Ὁ δὲ καὶ τούτων διωρισμένων ἔχει θαυμαστὴν ἀπορίαν, πάλιν ἐπαναποδιστέον, πῶς ἔστιν ἀπλῆ γενεσις, εἴτ' ἐκ δυνάμει ὄντος οὐσα εἴτε καὶ πῶς ἄλλως. Ἀπορήσειε γὰρ ἂν τις ἅρ' ἔστιν οὐσίας γενεσις καὶ τοῦ τοῦδε, ἀλλὰ μὴ τοῦ τοιοῦδε καὶ τοσοῦδε καὶ ποῦ. Τὸν αὐτὸν δὲ τρόπον καὶ περὶ φθορᾶς. Εἰ γὰρ τι γίνεται, δῆλον ὡς ἔσται δυνάμει τις οὐσία, ἐντελεχείᾳ δ' οὐ, ἐξ ἧς ἡ γενεσις ἔσται καὶ εἰς ἣν ἀνάγκη μεταβάλλειν τὸ φθειρόμενον. Πότερον οὖν ὑπάρξει τι τούτῳ τῶν ἄλλων ἐντελεχείᾳ; λέγω δ' οἶον ἅρ' ἔσται ποσὸν ἢ ποιὸν ἢ ποῦ τὸ δυνάμει μόνον τότε καὶ ὄν, ἀπλῶς δὲ μὴ τότε μηδ' ὄν; εἰ γὰρ μηδὲν ἀλλὰ πάντα δυνάμει, χωριστόν τε συμβαίνει τὸ μὴ οὕτως ὄν, καὶ ἔτι, ὃ μάλιστα φοβούμενοι διετέλεσαν οἱ πρῶτοι φιλοσοφήσαντες, τὸ ἐκ μηδενὸς γίνεσθαι προυπάρχοντος· εἰ δὲ τὸ μὲν εἶναι τότε τι ἢ οὐσίαν οὐχ ὑπάρξει, τῶν δ' ἄλλων τι τῶν εἰρημένων, ἔσται, καθάπερ εἵπομεν, χωριστὰ τὰ πάθη τῶν οὐσιῶν.

Περὶ τε τούτων οὖν ὅσον ἐνδέχεται πραγματευτέον, καὶ τίς αἰτία τοῦ γενέσθαι ἀεὶ εἶναι, καὶ τὴν ἀπλῆν καὶ τὴν κατὰ μέρος. (318a.) Οὕσης δ' αἰτίας μίᾳ μὲν ὅθεν τὴν ἀρχὴν εἶναι φαμεν τῆς κινήσεως, μίᾳ δὲ τῆς ὕλης, τὴν τοιαύτην αἰτίαν λεκτέον.

Περὶ μὲν γὰρ ἐκείνης εἴρηται πρότερον ἐν τοῖς περὶ κινήσεως λόγοις, ὅτι ἐστὶ

τὸ μὲν ἀκίνητον τὸν ἅπαντα χρόνον, τὸ δὲ κινούμενον ἀεί. Τούτων δὲ περὶ μὲν τῆς ἀκινήτου ἀρχῆς τῆς ἑτέρας καὶ προτέρας διελεῖν ἔστι φιλοσοφίας ἔργον· περὶ δὲ τοῦ διὰ τὸ συνεχῶς κινεῖσθαι τὰλλα κινούντος ὕστερον ἀποδοτέον, τί τοιοῦτον τῶν καθ' ἕκαστα λεγομένων αἰτιῶν ἔστιν, νῦν δὲ τὴν ὡς ἐν ὕλης εἶδει τιθεμένην αἰτίαν εἴπωμεν, δι' ἣν ἀεὶ φθορὰ καὶ γένεσις οὐχ ὑπολείπει τὴν φύσιν· ἅμα γὰρ ἂν ἴσως τοῦτο γένοιτο δῆλον, καὶ περὶ τοῦ νῦν ἀπορηθέντος, πῶς ποτὲ δεῖ λέγειν καὶ περὶ τῆς ἀπλῆς φθορᾶς καὶ γενέσεως. Ἐχει δ' ἀπορίαν ἱκανὴν καὶ τί τὸ αἶτιον τοῦ συνεῖρειν τὴν γένεσιν, εἴπερ τὸ φθειρόμενον εἰς τὸ μὴ ὄν ἀπέρχεται, τὸ δὲ μὴ ὄν μηδὲν ἔστιν· οὔτε γὰρ τί οὔτε ποιὸν οὔτε ποσὸν οὔτε ποῦ τὸ μὴ ὄν. Εἴπερ οὖν ἀεὶ τι τῶν ὄντων ἀπέρχεται, διὰ τί ποτ' οὐκ ἀνήλωται πάσαι καὶ φροῦδον τὸ πᾶν, εἴ γε πεπερασμένον ἦν ἐξ οὗ γίνεται τῶν γινομένων ἕκαστον; οὐ γὰρ δὴ διὰ τὸ ἄπειρον εἶναι ἐξ οὗ γίνεται, οὐχ ὑπολείπει· τοῦτο γὰρ ἀδύνατον. Κατ' ἐνέργειαν μὲν γὰρ οὐδὲν ἔστιν ἄπειρον, δυνάμει δ' ἐπὶ τὴν διαίρεσιν, ὥστ' ἔδει ταύτην εἶναι μόνην τὴν μὴ ὑπολείπουσαν τῷ γίνεσθαι τι ἀεὶ ἔλαττον· νῦν δὲ τοῦτο οὐχ ὁρῶμεν. Ἄρ' οὖν διὰ τὸ τὴν τοῦδε φθορὰν ἄλλου εἶναι γένεσιν καὶ τὴν τοῦδε γένεσιν ἄλλου εἶναι φθορὰν ἀπαυστον ἀναγκαῖον εἶναι τὴν μεταβολήν;

Περὶ μὲν οὖν τοῦ γένεσιν εἶναι καὶ φθορὰν ὁμοίως περὶ ἕκαστον τῶν ὄντων, ταύτην οἰητέον εἶναι πᾶσιν ἱκανὴν αἰτίαν. Διὰ τί δέ ποτε τὰ μὲν ἀπλῶς γίνεσθαι λέγεται καὶ φθείρεσθαι τὰ δ' οὐχ ἀπλῶς, πάλιν σκεπτέον, εἴπερ τὸ αὐτὸ ἔστι γένεσις μὲν τουδὶ φθορὰ δὲ τουδί, καὶ φθορὰ μὲν τουδὶ γένεσις δὲ τουδί· ζητεῖ γὰρ τινα τοῦτο λόγον. Λέγομεν γὰρ ὅτι φθείρεται νῦν ἀπλῶς, καὶ οὐ μόνον τοδί· καὶ αὕτη μὲν γένεσις ἀπλῶς, αὕτη δὲ φθορά. Τοδὶ δὲ γίνεται μὲν τι, γίνεται δ' ἀπλῶς οὔ· φανερὸν γὰρ τὸν μανθάνοντα γίνεσθαι μὲν ἐπιστήμονα, γίνεσθαι δ' ἀπλῶς οὔ. Καθάπερ οὖν πολλάκις (318b.) διορίζομεν λέγοντες ὅτι τὰ μὲν τότε τι σημαίνει τὰ δ' οὔ, διὰ τοῦτο συμβαίνει τὸ ζητούμενον.

Διαφέρει γὰρ εἰς ἃ μεταβάλλει τὸ μεταβάλλον, οἷον ἴσως ἢ μὲν εἰς πῦρ ὁδὸς γένεσις μὲν ἀπλῆ, φθορὰ δὲ <τίς> τινός ἔστιν, οἷον γῆς, ἢ δὲ γῆς γένεσις τὶς γένεσις, γένεσις δ' οὐχ ἀπλῶς, φθορὰ δ' ἀπλῶς, οἷον πυρός, ὥσπερ Παρμενίδης λέγει δύο, τὸ ὄν καὶ τὸ μὴ ὄν εἶναι φάσκων πῦρ καὶ γῆν. Τὸ δὲ ταῦτα ἢ τοιαῦθ' ἕτερα ὑποτίθεσθαι διαφέρει οὐδέν· τὸν γὰρ τρόπον ζητοῦμεν, ἄλλ' οὐ τὸ ὑποκείμενον.

Ἡ μὲν οὖν εἰς τὸ μὴ ὄν ἀπλῶς ὁδὸς φθορὰ ἀπλῆ, ἢ δ' εἰς τὸ ἀπλῶς ὄν γένεσις ἀπλῆ. Οἷς οὖν διώρισται εἴτε πυρὶ καὶ γῇ εἴτε ἄλλοις τισί, τούτων

ἔσται τὸ μὲν ὄν τὸ δὲ μὴ ὄν. Ἐνα μὲν οὖν τρόπον τούτῳ διοίσει τὸ ἀπλῶς τι γίνεσθαι καὶ φθείρεσθαι τοῦ μὴ ἀπλῶς, ἄλλον δὲ τῇ ὕλῃ ὅποια τις ἂν ᾖ· ἥς μὲν γὰρ μᾶλλον αἰ διαφοραὶ τόδε τι σημαίνουσι, μᾶλλον οὐσία, ἥς δὲ στέρησιν, μὴ ὄν, οἷον τὸ μὲν θερμὸν κατηγορία τις καὶ εἶδος, ἡ δὲ ψυχρότης στέρησις, διαφέρουσι δὲ γῆ καὶ πῦρ καὶ ταύταις ταῖς διαφοραῖς. Δοκεῖ δὲ μᾶλλον τοῖς πολλοῖς τῷ αἰσθητῷ καὶ μὴ αἰσθητῷ διαφέρειν· ὅταν μὲν γὰρ εἰς αἰσθητὴν μεταβάλλῃ ὕλην, γίνεσθαι φασιν, ὅταν δ' εἰς ἀφανῆ, φθείρεσθαι· τὸ γὰρ ὄν καὶ τὸ μὴ ὄν τῷ αἰσθάνεσθαι καὶ τῷ μὴ αἰσθάνεσθαι διορίζουσιν, ὥσπερ τὸ μὲν ἐπιστητὸν ὄν, τὸ δ' ἄγνωστον μὴ ὄν· ἡ γὰρ αἴσθησις ἐπιστήμης ἔχει δύναμιν. Καθάπερ οὖν αὐτοὶ τῷ αἰσθάνεσθαι ἢ τῷ δύνασθαι καὶ ζῆν καὶ εἶναι νομίζουσιν, οὕτω καὶ τὰ πράγματα, τρόπον τινὰ διώκοντες τ' ἀληθές, αὐτὸ δὲ λέγοντες οὐκ ἄληθές. Συμβαίνει δὲ κατὰ δόξαν καὶ κατ' ἀλήθειαν ἄλλως τὸ γίνεσθαι τε ἀπλῶς καὶ τὸ φθείρεσθαι· πνεῦμα γὰρ καὶ ἀήρ κατὰ μὲν τὴν αἴσθησιν ἥττον ἐστίν (διὸ καὶ τὰ φθειρόμενα ἀπλῶς τῇ εἰς ταῦτα μεταβολῇ φθείρεσθαι λέγουσιν, γίνεσθαι δ' ὅταν εἰς ἀπτὸν καὶ εἰς γῆν μεταβάλλῃ), κατὰ δ' ἀλήθειαν μᾶλλον τόδε τι καὶ εἶδος ταῦτα τῆς γῆς.

Τοῦ μὲν οὖν εἶναι τὴν μὲν ἀπλῆν γένεσιν φθορὰν οὐσάν τινος, τὴν δὲ φθορὰν [τὴν] ἀπλῆν γένεσιν οὐσάν τινος, εἴρηται τὸ αἶτιον· διὰ γὰρ τὸ τὴν ὕλην διαφέρειν ἢ τῷ οὐσίαν (319a.) εἶναι ἢ τῷ μή, ἢ τῷ τὴν μὲν μᾶλλον τὴν δὲ μή, ἢ τῷ τὴν μὲν μᾶλλον αἰσθητὴν εἶναι τὴν ὕλην ἐξ ἥς καὶ εἰς ἦν, τὴν δὲ ἥττον εἶναι. Τοῦ δὲ τὰ μὲν ἀπλῶς γίνεσθαι λέγεσθαι, τὰ δὲ τι μόνον, μὴ τῇ ἐξ ἀλλήλων γενέσει καθ' ὃν εἴπομεν νῦν τρόπον· νῦν μὲν γὰρ τοσοῦτον διώριστα, τί δή ποτε πάσης γενέσεως οὐσης φθορᾶς ἄλλου, καὶ πάσης φθορᾶς οὐσης ἑτέρου τινὸς γενέσεως, οὐχ ὁμοίως ἀποδίδομεν τὸ γίνεσθαι καὶ τὸ φθείρεσθαι τοῖς εἰς ἄλληλα μεταβάλλουσιν· τὸ δ' ὕστερον εἰρημένον οὐ τοῦτο διαπορεῖ, ἀλλὰ τί ποτε τὸ μανθάνον μὲν οὐ λέγεται ἀπλῶς γίνεσθαι ἀλλὰ γίνεσθαι ἐπιστῆμον, τὸ δὲ φυόμενον γίνεσθαι. Ταῦτα δὲ διώριστα ταῖς κατηγορίαις· τὰ μὲν γὰρ τόδε τι σημαίνει, τὰ δὲ τοιόνδε, τὰ δὲ ποσόν.

Ὅσα οὖν μὴ οὐσίαν σημαίνει, οὐ λέγεται ἀπλῶς, ἀλλὰ τι γίνεσθαι. Οὐ μὴν ἀλλ' ὁμοίως ἐν πᾶσι γένεσις μὲν κατὰ τὰ ἐν τῇ ἐτέρᾳ συστοιχίᾳ λέγεται, οἷον ἐν μὲν οὐσίᾳ ἐὰν πῦρ ἀλλ' οὐκ ἐὰν γῆ, ἐν δὲ τῷ ποιῶ ἐὰν ἐπιστῆμον ἀλλ' οὐχ ὅταν ἀνεπιστῆμον.

Περὶ μὲν οὖν τοῦ τὰ μὲν ἀπλῶς γίνεσθαι τὰ δὲ μή, καὶ ὅλως καὶ ἐν ταῖς οὐσίαις αὐταῖς, εἴρηται, καὶ διότι τοῦ γένεσιν εἶναι συνεχῶς αἰτία ὡς ὕλη τὸ ὑποκείμενον, ὅτι μεταβλητικόν ἐστι εἰς τάναντία, καὶ ἔστιν ἡ θατέρου γένεσις ἀεὶ ἐπὶ τῶν οὐσιῶν ἄλλου φθορὰ καὶ ἡ ἄλλου φθορὰ ἄλλου γένεσις. Ἀλλὰ

μὴν οὐδ' ἀπορῆσαι δεῖ διὰ τί γίνεται ἀεὶ ἀπολλυμένων· ὥσπερ γὰρ καὶ τὸ φθείρεσθαι ἀπλῶς φασιν, ὅταν εἰς ἀναίσθητον ἔλθῃ καὶ τὸ μὴ ὄν, ὁμοίως καὶ γίνεσθαι ἐκ μὴ ὄντος φασίν, ὅταν ἐξ ἀναισθήτου. Εἴτ' οὖν ὄντος τινὸς τοῦ ὑποκειμένου εἴτε μὴ, γίνεται ἐκ μὴ ὄντος. Ὡστε ὁμοίως καὶ γίνεται ἐκ μὴ ὄντος καὶ φθείρεται εἰς τὸ μὴ ὄν. Εἰκότως οὖν οὐχ ὑπολείπει· ἡ γὰρ γένεσις φθορὰ τοῦ μὴ ὄντος, ἡ δὲ φθορὰ γένεσις τοῦ μὴ ὄντος. Ἀλλὰ τοῦτο τὸ μὴ ὄν ἀπλῶς ἀπορήσειεν ἂν τις πότερον τὸ ἕτερον τῶν ἐναντίων ἐστίν, οἷον γῆ καὶ τὸ βαρὺ μὴ ὄν, πῦρ δὲ καὶ τὸ κοῦφον τὸ ὄν, ἢ οὐ, ἀλλ' ἐστὶ καὶ γῆ τὸ ὄν, τὸ δὲ μὴ ὄν ὕλη ἢ τῆς γῆς, καὶ πυρὸς ὡσαύτως. Καὶ ἄρά γε ἑτέρα ἐκατέρου ἢ ὕλη, ἢ οὐκ ἂν γί(319b.) νοιτο ἐξ ἀλλήλων οὐδ' ἐξ ἐναντίων; τούτοις γὰρ ὑπάρχει τὰναντία, πυρί, γῆ, ὕδατι, ἀέρι. Ἡ ἔστι μὲν ὡς ἡ αὐτή, ἔστι δ' ὡς ἡ ἑτέρα· ὁ μὲν γάρ ποτε ὄν ὑπόκειται τὸ αὐτό, τὸ δ' εἶναι οὐ τὸ αὐτό. Περὶ μὲν οὖν τούτων ἐπὶ τοσοῦτον εἰρήσθω.

## Κεφάλαιο 4

Περὶ δὲ γενέσεως καὶ ἀλλοιώσεως λέγωμεν τί διαφέρουσιν· φαμὲν γὰρ ἑτέρας εἶναι ταύτας τὰς μεταβολὰς ἀλλήλων. Ἐπειδὴ οὖν ἐστὶ τι τὸ ὑποκείμενον καὶ ἕτερον τὸ πάθος ὃ κατὰ τοῦ ὑποκειμένου λέγεσθαι πέφυκεν, καὶ ἔστι μεταβολὴ ἐκατέρου τούτων, ἀλλοίωσις μὲν ἐστίν, ὅταν ὑπομένοντος τοῦ ὑποκειμένου, αἰσθητοῦ ὄντος, μεταβάλλῃ ἐν τοῖς αὐτοῦ πάθεσιν, ἢ ἐναντίοις οὖσιν ἢ μεταξὺ, οἷον τὸ σῶμα ὑγιαίνει καὶ πάλιν κάμνει ὑπομένον γε ταῦτό, καὶ ὁ χαλκὸς στρογγύλος, ὅτε δὲ γωνιοειδὴς ὁ αὐτός γε ὢν. Ὅταν δ' ὅλον μεταβάλλῃ μὴ ὑπομένοντος αἰσθητοῦ τινὸς ὡς ὑποκειμένου τοῦ αὐτοῦ, ἀλλ' οἷον ἐκ τῆς γονῆς αἶμα πάσης ἢ ἐξ ὕδατος ἀῆρ ἢ ἐξ ἀέρος παντὸς ὕδωρ, γένεσις ἥδη τὸ τοιοῦτον, τοῦ δὲ φθορά, μάλιστα δέ, ἂν ἡ μεταβολὴ γίνηται ἐξ ἀναισθήτου εἰς αἰσθητὸν ἢ ἀφῆ ἢ πάσαις ταῖς αἰσθήσεσιν, οἷον ὅταν ὕδωρ γένηται ἢ φθαρῇ εἰς ἀέρα· ὁ γὰρ ἀῆρ ἐπικρῶς ἀναίσθητον. Ἐν δὲ τούτοις ἂν τι ὑπομένη πάθος τὸ αὐτὸ ἐναντιώσεως ἐν τῷ γενομένῳ καὶ τῷ φθαρέντι, οἷον ὅταν ἐξ ἀέρος ὕδωρ, εἰ ἄμφω διαφανῇ ἢ ψυχρά, οὐ δεῖ τούτου θάτερον πάθος εἶναι εἰς ὃ μεταβάλλει. Εἰ δὲ μὴ, ἔσται ἀλλοίωσις, οἷον ὁ μουσικὸς ἄνθρωπος ἐφθάρῃ, ἄνθρωπος δ' ἄμουσος ἐγένετο, ὁ δ' ἄνθρωπος ὑπομένει τὸ αὐτό. Εἰ μὲν οὖν τούτου μὴ πάθος ἦν καθ' αὐτὸ ἢ μουσικὴ καὶ ἢ ἀμουσία, τοῦ μὲν γένεσις ἦν ἂν, τοῦ δὲ φθορά· διὸ ἀνθρώπου μὲν ταῦτα πάθη, ἀνθρώπου δὲ μουσικοῦ καὶ ἀνθρώπου ἀμούσου γένεσις καὶ φθορά· νῦν δὲ πάθος τοῦτο τοῦ ὑπομένοντος. Διὸ ἀλλοίωσις τὰ τοιαῦτα. Ὅταν μὲν οὖν κατὰ τὸ ποσὸν ἢ ἢ μεταβολὴ τῆς ἐναντιώσεως, αὔξη καὶ φθίσις, ὅταν δὲ κατὰ τόπον, φθορά, ὅταν δὲ κατὰ πάθος καὶ τὸ ποιόν, ἀλλοίωσις, ὅταν δὲ μηδὲν (320a.) ὑπομένη οὐ θάτερον πάθος ἢ συμβεβηκὸς ὅλως, γένεσις, τὸ δὲ φθορά.

Ἔστι δὲ ὕλη μάλιστα μὲν καὶ κυρίως τὸ ὑποκείμενον γενέσεως καὶ φθορᾶς δεκτικόν, τρόπον δέ τινα καὶ τὸ ταῖς ἄλλαις μεταβολαῖς, ὅτι πάντα δεκτικὰ τὰ ὑποκείμενα ἐναντιώσεων τινων. Περὶ μὲν οὖν γενέσεως, εἴτε ἔστιν εἴτε μὴ, καὶ πῶς ἔστι, καὶ περὶ ἀλλοιώσεως διωρίσθω τοῦτον τὸν τρόπον.

## Κεφάλαιο 5

Περὶ δὲ αὐξήσεως λοιπὸν εἰπεῖν, τί τε διαφέρει γενέσεως καὶ ἀλλοιώσεως, καὶ πῶς αὐξάνεται τῶν αὐξανομένων ἕκαστον καὶ φθίνει ὅτιοῦν τῶν φθινόντων. Σκεπτέον δὴ πρῶτον πότερον μόνως ἐν τῷ περὶ ὃ ἔστιν αὐτῶν ἢ πρὸς ἄλληλα διαφορά, οἷον ὅτι ἢ μὲν ἐκ τοῦδε εἰς τόδε μεταβολή, οἷον ἐκ δυνάμει οὐσίας εἰς ἐντελεχείᾳ οὐσίαν, γένεσις ἔστιν, ἢ δὲ περὶ μέγεθος αὐξήσις, ἢ δὲ περὶ πάθος ἀλλοιώσις· ἀμφοτέρω δὲ ἐκ δυνάμει ὄντων εἰς ἐντελέχειαν μεταβολή τῶν εἰρημένων ἔστιν, ἢ καὶ ὁ τρόπος διαφέρει τῆς μεταβολῆς· φαίνεται γὰρ τὸ μὲν ἀλλοιούμενον οὐκ ἐξ ἀνάγκης μεταβάλλον κατὰ τόπον, οὐδὲ τὸ γινόμενον, τὸ δ' αὐξανόμενον καὶ τὸ φθίνον, ἄλλον δὲ τρόπον τοῦ φερομένου. Τὸ μὲν γὰρ φερόμενον ὅλον ἀλλάττει τόπον, τὸ δ' αὐξανόμενον ὥσπερ τὸ ἐλαυνόμενον· τούτου γὰρ μένοντος τὰ μόρια μεταβάλλει κατὰ τόπον, οὐχ ὥσπερ τὰ τῆς σφαίρας· τὰ μὲν γὰρ ἐν τῷ ἴσῳ τόπῳ μεταβάλλει τοῦ ὅλου μένοντος, τὰ δὲ τοῦ αὐξανομένου ἀεὶ ἐπὶ πλείῳ τόπον, ἐπ' ἐλάττω δὲ τὰ τοῦ φθίνοντος. Ὅτι μὲν οὖν ἡ μεταβολή διαφέρει οὐ μόνον περὶ ὃ ἀλλὰ καὶ ὡς τοῦ τε γινομένου καὶ ἀλλοιουμένου καὶ αὐξανομένου, δῆλον. Περὶ δὲ ὃ ἔστιν ἡ μεταβολή ἢ τῆς αὐξήσεως καὶ ἢ τῆς φθίσεως (περὶ μέγεθος δὲ δοκεῖ εἶναι τὸ αὐξάνεσθαι καὶ φθίνειν), ποτέρως ὑποληπτέον, πότερον ἐκ δυνάμει μὲν μεγέθους καὶ σώματος, ἐντελεχείᾳ δ' ἀσωμάτου καὶ ἀμεγέθους γίνεσθαι σῶμα καὶ μέγεθος, καὶ τούτου διχῶς ἐνδεχομένου λέγειν, ποτέρως ἢ αὐξήσις γίνεται; πότερον ἐκ κεχωρισμένης αὐτῆς καθ' αὐτὴν τῆς ὕλης, ἢ ἐνυπαρχούσης ἐν ἄλλῳ σώματι; ἢ ἀδύνατον ἀμφοτέρως. Χω(320b.) ριστὴ μὲν γὰρ οὕσα ἢ οὐδένα καθέξει τόπον, [ἢ] οἷον στιγμή τις, ἢ κενὸν ἔσται καὶ σῶμα οὐκ αἰσθητόν. Τούτων δὲ τὸ μὲν οὐκ ἐνδέχεται, τὸ δὲ ἀναγκαῖον ἐν τινι εἶναι· ἀεὶ γὰρ που ἔσται τὸ γινόμενον ἐξ αὐτοῦ, ὥστε κάκεῖνο, ἢ καθ' αὐτὸ ἢ κατὰ συμβεβηκός. Ἀλλὰ μὴν εἴ γ' ἐν τινι ὑπάρξει, εἰ μὲν κεχωρισμένον οὕτως ὥστε μὴ ἐκείνου καθ' αὐτὸ ἢ κατὰ συμβεβηκός τι εἶναι, συμβήσεται πολλὰ καὶ ἀδύνατα. Λέγω δ' οἷον εἰ γίνεται ἀἷρ ἐξ ὕδατος, οὐ τοῦ ὕδατος ἔσται μεταβάλλοντος, ἀλλὰ διὰ τὸ ὥσπερ ἐν ἀγγεῖῳ τῷ ὕδατι ἐνεῖναι τὴν ὕλην αὐτοῦ. Ἀπείρους γὰρ οὐδὲν κωλύει ὕλας εἶναι, ὥστε καὶ γίνεσθαι ἐντελεχείᾳ. Ἔτι δ' οὐδ' οὕτω φαίνεται γινόμενος ἀἷρ ἐξ ὕδατος, οἷον ἐξιώων ὑπομένοντος. Βέλτιον τοίνυν ποιεῖν πᾶσιν ἀχώριστον τὴν ὕλην ὡς οὕσαν τὴν αὐτὴν καὶ μίαν τῷ ἀριθμῷ, τῷ λόγῳ δὲ μὴ μίαν. Ἀλλὰ μὴν οὐδὲ στιγμήας θετέον οὐδὲ

γραμμάς τὴν τοῦ σώματος ὕλην διὰ τὰς αὐτὰς αἰτίαις. Ἐκεῖνο δὲ οὐ ταῦτα ἔσχατα ἢ ὕλη, ἣν οὐδέποτε ἄνευ πάθους οἶον τε εἶναι οὐδ' ἄνευ μορφῆς.

Γίνεται μὲν οὖν ἀπλῶς ἕτερον ἐξ ἑτέρου, ὥσπερ καὶ ἐν ἄλλοις διώρισται, καὶ ὑπὸ τινος δὲ ἐντελεχείᾳ ὄντος, ἢ ὁμοιοειδοῦς ἢ ὁμογενοῦς, οἶον πῦρ ὑπὸ πυρὸς ἢ ἄνθρωπος ὑπ' ἀνθρώπου, ἢ ὑπ' ἐντελεχείας· σκληρὸν γὰρ οὐχ ὑπὸ σκληροῦ γίνεται.

Ἐπεὶ δ' ἐστὶ καὶ οὐσίας ὕλη σωματικῆς, σώματος δ' ἤδη τοιουδί (σῶμα γὰρ κοινὸν οὐδέν), ἢ αὐτὴ καὶ μεγέθους καὶ πάθους ἐστί, τῷ μὲν λόγῳ χωριστῇ, τόπῳ δ' οὐ χωριστῇ, εἰ μὴ καὶ τὰ πάθη χωριστά.

Φανερόν δὴ ἐκ τῶν διηπορημένων ὅτι οὐκ ἔστιν ἡ αὔξησις μεταβολὴ ἐκ δυνάμει μεγέθους, ἐντελεχείᾳ δὲ μηδὲν ἔχοντος μέγεθος· χωριστὸν γὰρ ἂν εἴη τὸ κενόν, τοῦτο δ' ὅτι ἀδύνατον, εἴρηται ἐν ἑτέροις πρότερον. Ἔτι δ' ἢ γε τοιαύτη μεταβολὴ οὐκ αὐξήσεως ἴδιος ἀλλὰ γενέσεως ὅλως. Ἡ γὰρ αὔξησις ἐστὶ τοῦ ἐνυπάρχοντος μεγέθους ἐπίδοσις, ἢ δὲ φθίσις μείωσις. Διὸ δὴ ἔχειν τι δεῖ μέγεθος τὸ αὐξανόμενον, ὥστ' οὐκ ἐξ ἀμεγέθους ὕλης δεῖ εἶναι τὴν αὔξησιν εἰς ἐντελέχειαν μεγέθους· γενεαὶς γὰρ ἂν εἴη σώματος μᾶλλον, οὐκ αὔξησις.

Ληπτέον δὴ μᾶλλον οἶον ἀπτομένους (321a.) τῆς ζητήσεως ἐξ ἀρχῆς, ποίου τινὸς ὄντος τοῦ αὐξάνεσθαι ἢ τοῦ φθίνειν τὰ αἷτια ζητοῦμεν. Φαίνεται δὴ τοῦ αὐξανομένου ὅτιοῦν μέρος ἠϋξῆσθαι, ὁμοίως δὲ καὶ ἐν τῷ φθίνειν ἔλαττον γεγονέναι, ἔτι δὲ προσιόντος τινὸς αὐξάνεσθαι καὶ ἀπίνοντος φθίνειν. Ἀναγκαῖον δὴ ἢ ἀσωμάτῳ αὐξάνεσθαι ἢ σώματι· εἰ μὲν οὖν ἀσωμάτῳ, ἔσται χωριστὸν τὸ κενόν· ἀδύνατον δὲ μεγέθους ὕλην εἶναι χωριστήν, ὥσπερ εἴρηται πρότερον. Εἰ δὲ σώματι, δύο ἐν τῷ αὐτῷ σώματα τόπῳ ἔσται, τό τε αὐξόμενον καὶ τὸ αὔξον· ἔστι δὲ καὶ τοῦτο ἀδύνατον. Ἀλλὰ μὴν οὐδ' οὕτως ἐνδέχεται λέγειν γίνεσθαι τὴν αὔξησιν ἢ τὴν φθίσιν, ὥσπερ ὅταν ἐξ ὕδατος ἀήρ· τότε γὰρ μείζων ὁ ὄγκος γέγονεν· οὐ γὰρ αὔξησις τοῦτο ἀλλὰ γενεαὶς μὲν τοῦ εἰς ὃ μεταβάλλει ἔσται, φθορὰ δὲ τοῦ ἐναντίου, αὔξησις δὲ οὐδετέρου, ἀλλ' ἢ οὐδενὸς ἢ εἴ τι κοινὸν ἀμφοῖν ὑπάρχει, τῷ γινομένῳ καὶ τῷ φθαρέντι, οἶον εἰ σῶμα. Τὸ δ' ὕδωρ οὐκ ἠϋξῆται οὐδ' ὁ ἀήρ, ἀλλὰ τὸ μὲν ἀπόλωλε τὸ δὲ γέγονεν· τὸ σῶμα δέ, εἴπερ, ἠϋξῆται. Ἀλλὰ καὶ τοῦτ' ἀδύνατον· δεῖ γὰρ σώζειν τῷ λόγῳ τὰ ὑπάρχοντα τῷ αὐξανομένῳ καὶ φθίνοντι. Ταῦτα δὲ τρία ἐστίν, ὧν ἓν μὲν ἐστὶ τὸ ὅτιοῦν μέρος μείζον γίνεσθαι τοῦ αὐξανομένου μεγέθους, οἶον εἰ σὰρξ τῆς σαρκός, καὶ προσιόντος τινός, καὶ τρίτον σωζομένου τοῦ αὐξανομένου καὶ ὑπομένουτος· ἐν μὲν γὰρ τῷ

γίνεσθαι τι ἀπλῶς ἢ φθείρεσθαι οὐχ ὑπομένει, ἐν δὲ τῷ ἀλλοιοῦσθαι ἢ αὐξάνεσθαι ἢ φθίνειν ὑπομένει τὸ αὐτὸ τὸ αὐξανόμενον καὶ ἀλλοιούμενον.

Ἀλλ' ἔνθα μὲν τὸ πάθος ἔνθα δὲ τὸ μέγεθος τὸ αὐτὸ οὐ μένει. Εἰ δὴ ἔσται ἡ εἰρημένη αὕξησις, ἐνδέχοιτ' ἂν μηδενός γε προσιόντος μηδὲ ὑπομένοντος αὐξάνεσθαι καὶ μηδενὸς ἀπιόντος φθίνειν καὶ μὴ ὑπομένειν τὸ αὐξανόμενον. Ἀλλὰ δεῖ τοῦτο σώζειν· ὑπόκειται γὰρ ἡ αὕξησις τοιοῦτον.

Ἀπορήσειε δ' ἂν τις καὶ τί ἐστὶ τὸ αὐξανόμενον, πότερον ὧς προστίθεται τι, οἶον εἰ τὴν κνήμην αὐξάνει, αὕτη μείζων, ὧς δὲ αὐξάνει, ἡ τροφή, οὐ. Διὰ τί δὴ οὖν οὐκ ἄμφω ἡύξηται; μείζον γὰρ καὶ ὃ καὶ ὧς, ὥσπερ ὅταν μίξης οἶνον ὕδατι· ὁμοίως γὰρ πλεῖον ἐκάτερον. Ἡ ὅτι τοῦ μὲν μένει ἡ οὐσία, τοῦ δ' οὐ, οἶον τῆς τροφῆς, ἐπεὶ καὶ ἐνταῦθα τὸ ἐπικρατοῦν λέγεται ἐν (321b.) τῇ μίξει, οἶον ὅτι οἶνος· ποιεῖ γὰρ τὸ τοῦ οἶνου ἔργον ἄλλ' οὐ τὸ τοῦ ὕδατος τὸ συνόλον μίγμα.

Ὅμοίως δὲ καὶ ἐπ' ἀλλοιώσεως, εἰ μένει σὰρξ οὔσα καὶ τὸ τί ἐστὶ, πάθος δέ τι ὑπάρχει τῶν καθ' αὐτό, ὃ πρότερον οὐχ ὑπῆρχεν, ἡλλοίωται τοῦτο· ὧς δ' ἡλλοίωται, ὅτε μὲν οὐδὲν πέπονθεν, ὅτε δὲ κἀκεῖνο. Ἀλλὰ τὸ ἀλλοιοῦν καὶ ἡ ἀρχὴ τῆς κινήσεως ἐν τῷ αὐξανομένῳ καὶ τῷ ἀλλοιουμένῳ· ἐν τούτοις γὰρ τὸ κινεῖν, ἐπεὶ καὶ τὸ εἰσελθὼν γένοιτ' ἂν ποτε μείζον, καὶ τὸ ἀπολαῦσαν αὐτοῦ σῶμα, οἶον εἰ εἰσελθὼν γένοιτο πνεῦμα. Ἀλλ' ἔφθαρταί γε τοῦτο παθόν, καὶ τὸ κινεῖν οὐκ ἐν τούτῳ.

Ἐπεὶ δὲ διηπόρηται περὶ αὐτῶν ἱκανῶς, δεῖ καὶ τῆς ἀπορίας πειρᾶσθαι λύσιν εὑρεῖν, σώζοντας τὸ ὑπομένοντός τε τοῦ αὐξανομένου καὶ προσιόντος τινὸς αὐξάνεσθαι, ἀπιόντος δὲ φθίνειν, ἔτι δὲ τὸ ὅτι οὖν σημεῖον αἰσθητὸν ἢ μείζον ἢ ἔλαττον γεγονέναι, καὶ μήτε κενὸν εἶναι τὸ σῶμα μήτε δύο ἐν τῷ αὐτῷ τόπῳ μεγέθη μήτε ἄσωμάτῳ αὐξάνεσθαι. Ληπτέον δὲ τὸ αἷτιον διορισμένοις πρῶτον ἐν μὲν ὅτι τὰ ἀνομοιομερῆ αὐξάνεται τῷ τὰ ὁμοιομερῆ αὐξάνεσθαι (σύγκειται γὰρ ἐκ τούτων ἕκαστον), ἔπειθ' ὅτι σὰρξ καὶ ὀστοῦν καὶ ἕκαστον τῶν τοιούτων μορίων ἐστὶ διττόν, ὥσπερ καὶ τῶν ἄλλων τῶν ἐν ὕλῃ εἶδος ἐχόντων· καὶ γὰρ ἡ ὕλη λέγεται καὶ τὸ εἶδος σὰρξ ἢ ὀστοῦν. Τὸ οὖν ὅτι οὖν μέρος αὐξάνεσθαι καὶ προσιόντος τινὸς κατὰ μὲν τὸ εἶδος ἐστὶν ἐνδεχόμενον, κατὰ δὲ τὴν ὕλην οὐκ ἔστιν· δεῖ γὰρ νοῆσαι ὥσπερ εἴ τις μετροίῃ τῷ αὐτῷ μέτρῳ ὕδωρ· ἀεὶ γὰρ ἄλλο καὶ ἄλλο τὸ γινόμενον. Οὕτω δ' αὐξάνεται ἡ ὕλη τῆς σαρκός, καὶ οὐχ ὅτῳ οὖν παντὶ προσγίνεται, ἀλλὰ τὸ μὲν ὑπεκρεῖ τὸ δὲ προσέρχεται, τοῦ δὲ σχήματος καὶ τοῦ εἶδους ὅτῳ οὖν μορίῳ. Ἐπὶ δὲ τῶν ἀνομοιομερῶν τοῦτο μᾶλλον δῆλον, οἶον χειρός, ὅτι ἀνάλογον ἡύξηται· ἡ



γὰρ ὕλη ἑτέρα οὕσα δήλη μᾶλλον τοῦ εἶδους ἐνταῦθα ἢ ἐπὶ σαρκὸς καὶ τῶν ὁμοιομερῶν· διὸ καὶ τεθνεῶτος μᾶλλον ἂν δόξειεν εἶναι ἔτι σὰρξ καὶ ὀστοῦν ἢ χεῖρ καὶ βραχίων. Ὡστε ἔστι μὲν ὡς ὅτιοῦν τῆς σαρκὸς ἠΰξεται, ἔστι δ' ὡς οὐ. Κατὰ μὲν γὰρ τὸ εἶδος ὁτῶοῦν προσελήλυθεν, κατὰ δὲ τὴν ὕλην οὐ.

Μεῖζον μέντοι τὸ ὅλον γέγονε προσελθόντος μὲν τινος, ὃ κα(322a.) λεῖται τροφή καὶ ἐναντίον, μεταβάλλοντος δὲ εἰς τὸ αὐτὸ εἶδος, οἷον εἰ ξηρῶ προσίει ὑγρόν, προσελθὼν δὲ μεταβάλει καὶ γένοιτο ξηρόν· ἔστι μὲν γὰρ ὡς τὸ ὅμοιον ὁμοίῳ ἀυξάνεται, ἔστι δ' ὡς ἀνομοίῳ.

Ἀπορήσειε δ' ἂν τις ποῖόν τι δεῖ εἶναι τὸ ὧ ἀυξάνεται. Φανερόν δὲ ὅτι δυνάμει ἐκεῖνο, οἷον εἰ σὰρξ, δυνάμει σάρκα. Ἐντελεχεία ἄρα ἄλλο· φθαρὲν δὲ τοῦτο σὰρξ γέγονεν. Οὐκοῦν οὐ τοῦτο αὐτὸ καθ' αὐτό· γένεσις γὰρ ἂν ἦν, οὐκ αὔξησις· ἀλλὰ τὸ ἀυξανόμενον τούτῳ. Τί οὖν παθὼν ὑπὸ τούτου [ἠύξθη]; ἢ μυχθέν, ὥσπερ οἶνω εἴ τις ἐπιχέει ὕδωρ, ὃ δὲ δύναται οἶνον ποιεῖν τὸ μυχθέν; καὶ ὥσπερ τὸ πῦρ ἀψάμενον τοῦ καυστοῦ, οὕτως ἐν τῷ ἀυξανομένῳ καὶ ὄντι ἐντελεχεία σαρκὶ τὸ ἐνδὸν αὔξητικὸν προσελθόντος δυνάμει σαρκὸς ἐποίησεν ἐντελεχεία σάρκα. Οὐκοῦν ἅμα ὄντος· εἰ γὰρ χωρὶς, γένεσις. Ἔστι μὲν γὰρ οὕτω πῦρ ποιῆσαι ἐπὶ τὸ ὑπάρχον ἐπιθέντα ξύλα. Ἄλλ' οὕτω μὲν αὔξησις, ὅταν δὲ αὐτὰ τὰ ξύλα ἀφθῇ, γένεσις. Ποσὸν δὲ τὸ μὲν καθόλου οὐ γίνεται, ὥσπερ οὐδὲ ζῶον ὃ μήτ' ἄνθρωπος μήτε τῶν καθ' ἕκαστα· ἀλλ' ὡς ἐνταῦθα τὸ καθόλου, κάκει τὸ ποσόν.

Σὰρξ δὲ ἢ ὀστοῦν ἢ χεῖρ καὶ τούτων τὰ ὁμοιομερῆ. Προσελθόντος μὲν δὲ τινος ποσοῦ, ἀλλ' οὐ σαρκὸς ποσῆς. Ἦι μὲν οὖν δυνάμει τὸ συναμφοτέρων, οἷον ποσὴ σὰρξ, ταύτῃ μὲν αὔξει· καὶ γὰρ ποσὴν δεῖ γενέσθαι καὶ σάρκα· ἢ δὲ μόνον σὰρξ, τρέφει· ταύτῃ γὰρ διαφέρει τροφή καὶ αὔξησις τῷ λόγῳ. Διὸ τρέφεται μὲν ἕως ἂν σώζεται καὶ φθῖνον, ἀυξάνεται δὲ οὐκ αἰεὶ, καὶ ἡ τροφή τῇ αὔξῃσει τὸ αὐτὸ μὲν, τὸ δ' εἶναι ἄλλο· ἢ μὲν γὰρ ἔστι τὸ προσιὸν δυνάμει ποσὴ σὰρξ, ταύτῃ μὲν αὔξητικὸν σαρκός, ἢ δὲ μόνον δυνάμει σὰρξ, τροφή. Τοῦτο δὲ τὸ εἶδος ἄνευ ὕλης, οἷον αὐλός, δυνάμεις τις ἐν ὕλῃ ἐστίν. Ἐὰν δὲ τις προσίῃ ὕλῃ, οὕσα δυνάμει αὐλός, ἔχουσα καὶ τὸ ποσὸν δυνάμει, οὗτοι ἔσσονται μείζους αὐλοί. Ἐὰν δὲ μηκέτι ποιεῖν δύνηται, ἀλλ' οἷον ὕδωρ οἶνω αἰεὶ πλεῖον μιγνύμενον τέλος ὑδαρῇ ποιεῖ καὶ ὕδωρ, τότε φθίσιν ποιεῖται τοῦ ποσοῦ, τὸ δ' εἶδος μένει.

## Κεφάλαιο 6

(322b.) Ἐπεὶ δὲ πρῶτον δεῖ περὶ τῆς ὕλης καὶ τῶν καλουμένων στοιχείων

εἰπεῖν, εἴτ' ἔστιν εἴτε μή, καὶ πότερον αἰδῖον ἕκαστον ἢ γίνεται πως, καὶ εἰ γίνεται, πότερον ἐξ ἀλλήλων γίνεται πάντα τὸν αὐτὸν τρόπον ἢ τι πρῶτον ἐν αὐτῶν ἔστιν, ἀνάγκη δὴ πρότερον εἰπεῖν περὶ ὧν ἀδιορίστως λέγεται νῦν.

Πάντες γὰρ οἱ τε τὰ στοιχεῖα γεννῶντες καὶ οἱ τὰ ἐκ τῶν στοιχείων διακρίσει χρῶνται καὶ συγκρίσει καὶ τῷ ποιεῖν καὶ πάσχειν. Ἔστι δ' ἡ σύγκρισις μίξις· πῶς δὲ μίγνυσθαι λέγομεν, οὐ διώριστα σαφῶς. Ἀλλὰ μὴν οὐδ' ἀλλοιοῦσθαι δυνατόν, οὐδὲ διακρίνεσθαι καὶ συγκρίνεσθαι, μηδενὸς ποιοῦντος μηδὲ πάσχοντος· καὶ γὰρ οἱ πλείω τὰ στοιχεῖα ποιοῦντες γεννῶσι τῷ ποιεῖν καὶ πάσχειν ὑπ' ἀλλήλων, καὶ τοῖς ἐξ ἐνὸς ἀνάγκη λέγειν τὴν ποίησιν, καὶ τοῦτ' ὀρθῶς λέγει Διογένης, ὅτι εἰ μὴ ἐξ ἐνὸς ἦν ἅπαντα, οὐκ ἂν ἦν τὸ ποιεῖν καὶ τὸ πάσχειν ὑπ' ἀλλήλων, οἷον τὸ θερμὸν ψύχεσθαι καὶ τοῦτο θερμαίνεσθαι πάλιν· οὐ γὰρ ἡ θερμότης μεταβάλλει καὶ ἡ ψυχρότης εἰς ἄλληλα, ἀλλὰ δῆλον ὅτι τὸ ὑποκείμενον, ὥστε ἐν οἷς τὸ ποιεῖν ἔστι καὶ τὸ πάσχειν, ἀνάγκη τούτων μίαν εἶναι τὴν ὑποκειμένην φύσιν. Τὸ μὲν οὖν πάντα εἶναι τοιαῦτα φάσκειν οὐκ ἀληθές, ἀλλ' ἐν ὅσοις τὸ ὑπ' ἀλλήλων ἔστιν. Ἀλλὰ μὴν εἰ περὶ τοῦ ποιεῖν καὶ πάσχειν καὶ περὶ μίξεως θεωρητέον, ἀνάγκη καὶ περὶ ἀφῆς· οὔτε γὰρ ποιεῖν ταῦτα καὶ πάσχειν δύναται κυρίως ἢ μὴ οἷόν τε ἄψασθαι ἀλλήλων, οὔτε μὴ ἀψάμενά πως ἐνδέχεται μιχθῆναι πρῶτον. Ὡστε περὶ τριῶν τούτων διοριστέον, τί ἀφῆ καὶ τί μίξις καὶ τί ποίησις. Ἀρχὴν δὲ λάβωμεν τήνδε. Ἀνάγκη γὰρ τῶν ὄντων ὅσοις ἔστι μίξις, εἶναι ταῦτ' ἀλλήλων ἀπτικά· κἂν εἴ τι ποιεῖ, τὸ δὲ πάσχει κυρίως, καὶ τούτοις ὡσαύτως. Διὸ πρῶτον λεκτέον περὶ ἀφῆς.

Σχεδὸν μὲν οὖν, ὥσπερ καὶ τῶν ἄλλων ὀνομάτων ἕκαστον λέγεται πολλαχῶς, καὶ τὰ μὲν ὁμωνύμως τὰ δὲ θάτερα ἀπὸ τῶν ἐτέρων καὶ τῶν προτέρων, οὕτως ἔχει καὶ περὶ ἀφῆς. Ὅμως δὲ τὸ κυρίως λεγόμενον ὑπάρχει τοῖς ἔχουσι θέσιν, θέσις δ' οἷσπερ (323a.) καὶ τόπος· καὶ γὰρ τοῖς μαθηματικοῖς ὁμοίως ἀποδοτέον ἀφῆν καὶ τόπον, εἴτ' ἔστι κεχωρισμένον ἕκαστον αὐτῶν εἴτ' ἄλλον τρόπον. Εἰ οὖν ἔστιν, ὥσπερ διωρίσθη πρότερον, τὸ ἄπτεσθαι τὸ τὰ ἔσχατα ἔχειν ἅμα, ταῦτα ἂν ἄπτοιτο ἀλλήλων ὅσα διωρισμένα μεγέθη καὶ θέσιν ἔχοντα ἅμα ἔχει τὰ ἔσχατα. Ἐπεὶ δὲ θέσις μὲν ὅσοις καὶ τόπος ὑπάρχει, τόπου δὲ διαφορὰ πρώτη τὸ ἄνω καὶ τὸ κάτω καὶ τὰ τοιαῦτα τῶν ἀντικειμένων, ἅπαντα τὰ ἀλλήλων ἀπτόμενα βάρος ἂν ἔχοι ἢ κουφότητα, ἢ ἄμφω ἢ θάτερον. Τὰ δὲ τοιαῦτα παθητικὰ καὶ ποιητικὰ· ὥστε φανερόν ὅτι ταῦτα ἄπτεσθαι πέφυκεν ἀλλήλων, ὧν διηρημένων μεγεθῶν ἅμα τὰ ἔσχατά ἔστιν, ὄντων κινητικῶν καὶ κινητῶν ὑπ' ἀλλήλων.

Ἐπεὶ δὲ τὸ κινεῖν οὐχ ὁμοίως κινεῖ τὸ κινούμενον, ἀλλὰ τὸ μὲν ἀνάγκη

κινούμενον καὶ αὐτὸ κινεῖν, τὸ δ' ἀκίνητον ὄν, δῆλον ὅτι καὶ ἐπὶ τοῦ ποιοῦντος ἐροῦμεν ὡσαύτως· καὶ γὰρ τὸ κινοῦν ποιεῖν τί φασι καὶ τὸ ποιοῦν κινεῖν. Οὐ μὴν ἀλλὰ διαφέρει γε καὶ δεῖ διορίζειν· οὐ γὰρ οἷόν τε πᾶν τὸ κινοῦν ποιεῖν, εἴπερ τὸ ποιοῦν ἀντιθήσομεν τῷ πάσχοντι, τοῦτο δ' οἷς ἡ κίνησις πάθος.

Πάθος δὲ καθ' ὅσον ἀλλοιοῦται μόνον, οἷον τὸ λευκὸν καὶ τὸ θερμόν· ἀλλὰ τὸ κινεῖν ἐπὶ πλεον τοῦ ποιεῖν ἐστίν. Ἐκεῖνο δ' οὖν φανερόν, ὅτι ἔστι μὲν ὡς τὰ κινοῦντα τῶν κινητῶν ἅπτοι' ἄν, ἔστι δ' ὡς οὗ. Ἀλλ' ὁ διορισμὸς τοῦ ἅπτεσθαι καθόλου μὲν ὁ τῶν θέσιν ἐχόντων καὶ τοῦ μὲν κινητικοῦ τοῦ δὲ κινητοῦ, πρὸς ἄλληλα δὲ κινητικοῦ καὶ κινητοῦ, ἐν οἷς ὑπάρχει τὸ ποιεῖν καὶ τὸ πάσχειν. Ἔστι μὲν οὖν ὡς ἐπὶ τὸ πολὺ τὸ ἀπτόμενον ἀπτομένου ἀπτόμενον· καὶ γὰρ κινεῖ κινούμενα πάντα σχεδὸν τὰ ἐμποδῶν, ὅσοις ἀνάγκη καὶ φαίνεται τὸ ἀπτόμενον ἅπτεσθαι ἀπτομένου· ἔστι δ' ὡς ἐνίοτέ φαμεν τὸ κινοῦν ἅπτεσθαι μόνου τοῦ κινουμένου, τὸ δ' ἀπτόμενον μὴ ἅπτεσθαι ἀπτομένου· ἀλλὰ διὰ τὸ κινεῖν κινούμενα τὰ ὁμογενῆ, ἀνάγκη δοκεῖ εἶναι ἀπτομένου ἅπτεσθαι. Ὡστε εἴ τι κινεῖ ἀκίνητον ὄν, ἐκεῖνο μὲν ἂν ἅπτοιο τοῦ κινητοῦ, ἐκείνου δὲ οὐδέν· φαμὲν γὰρ ἐνίοτε τὸν λυποῦντα ἅπτεσθαι ἡμῶν, ἀλλ' οὐκ αὐτοῖ ἐκείνου. Περὶ μὲν οὖν ἀφῆς τῆς ἐν τοῖς φυσικοῖς διωρίσθω τοῦτον τὸν τρόπον.

## Κεφάλαιο 7

(323b.) Περὶ δὲ τοῦ ποιεῖν καὶ πάσχειν λεκτέον ἐφεξῆς· παρειλήφαμεν δὲ παρὰ τῶν πρότερον ὑπεναντίους ἀλλήλοις λόγους. Οἱ μὲν γὰρ πλεῖστοι τοῦτό γε ὁμονοητικῶς λέγουσιν, ὡς τὸ μὲν ὅμοιον ὑπὸ τοῦ ὁμοίου πᾶν ἀπαθές ἐστι διὰ τὸ μηδὲν μᾶλλον ποιητικὸν ἢ παθητικὸν εἶναι θάτερον θατέρου (πάντα γὰρ ὁμοίως ὑπάρχειν ταῦτά τοῖς ὁμοίοις), τὰ δ' ἀνόμοια καὶ τὰ διάφορα ποιεῖν καὶ πάσχειν εἰς ἄλληλα πέφυκεν.

Καὶ γὰρ ὅταν τὸ ἔλαττον πῦρ ὑπὸ τοῦ πλείονος φθείρηται, διὰ τὴν ἐναντίωσιν τοῦτό φασι πάσχειν· ἐναντίον γὰρ εἶναι τὸ πολὺ τῷ ὀλίγῳ. Δημόκριτος δὲ παρὰ τοὺς ἄλλους ἰδίως ἔλεξε μόνος· φησὶ γὰρ τὸ αὐτὸ καὶ ὅμοιον εἶναι τό τε ποιοῦν καὶ τὸ πάσχον· οὐ γὰρ ἐγχωρεῖν τὰ ἕτερα καὶ ἰαφέροντα πάσχειν ὑπ' ἀλλήλων, ἀλλὰ κἂν ἕτερα ὄντα ποιῇ τι εἰς ἄλληλα, οὐχ ἢ ἕτερα ἀλλ' ἢ ταῦτόν τι ὑπάρχει, ταύτη τοῦτο συμβαίνειν αὐτοῖς.

Τὰ μὲν οὖν λεγόμενα ταῦτ' ἐστίν, εἰκόασι δὲ οἱ τοῦτον τὸν τρόπον λέγοντες ὑπεναντία φαίνεσθαι λέγειν. Αἴτιον δὲ τῆς ἐναντιολογίας ὅτι δέον ὅλον τι

θεωρήσαι μέρος τι τυγχάνουσι λέγοντες ἑκάτεροι· τό τε γὰρ ὅμοιον καὶ τὸ πάντη πάντως ἀδιάφορον εὐλογον μὴ πάσχειν ὑπὸ τοῦ ὁμοίου μηθέν· τί γὰρ μᾶλλον θάτερον ἔσται ποιητικὸν ἢ θάτερον; εἴ τε ὑπὸ τοῦ ὁμοίου τι πάσχειν δυνατόν, καὶ αὐτὸ ὑφ' αὐτοῦ· καίτοι τούτων οὕτως ἐχόντων οὐδὲν ἂν εἴη οὔτε ἄφθαρτον οὔτε ἀκίνητον, εἴπερ τὸ ὅμοιον ἢ ὅμοιον ποιητικόν· αὐτὸ γὰρ αὐτὸ κινήσει πᾶν, τό τε παντελῶς ἕτερον καὶ τὸ μηθαμῇ ταῦτόν ὡσαύτως· οὐδὲν γὰρ ἂν πάθοι λευκότης ὑπὸ γραμμῆς ἢ γραμμὴ ὑπὸ λευκότητος, πλην εἰ μὴ που κατὰ συμβεβηκός, οἷον εἰ συμβέβηκε λευκὴν ἢ μέλαιναν εἶναι τὴν γραμμὴν· οὐκ ἐξίστησι γὰρ ἀλλήλα τῆς φύσεως ὅσα μὴτ' ἐναντία μὴτ' ἐξ ἐναντίων ἐστίν.

Ἄλλ' ἐπεὶ οὐ τὸ τυχὸν πέφυκε πάσχειν καὶ ποιεῖν, ἀλλ' ὅσα ἢ ἐναντία ἐστὶν ἢ ἐναντίωσιν ἔχει, ἀνάγκη καὶ τὸ ποιοῦν καὶ τὸ πάσχον τῷ γένει μὲν ὅμοιον εἶναι καὶ ταῦτό, τῷ δ' εἶδει ἀνόμοιον καὶ ἐναντίον· πέφυκε γὰρ σῶμα μὲν ὑπὸ σώματος, χυμὸς δ' ὑπὸ χυμοῦ, χρῶμα δ' ὑπὸ χρώματος πάσχειν, (324a.) ὅλως δὲ τὸ ὁμογενὲς ὑπὸ τοῦ ὁμογενοῦς. Τούτου δ' αἴτιον ὅτι τάναντία ἐν ταύτῳ γένει πάντα, ποιεῖ δὲ καὶ πάσχει τάναντία ὑπ' ἀλλήλων. Ὡστ' ἀνάγκη πῶς μὲν εἶναι ταῦτά τό τε ποιοῦν καὶ τὸ πάσχον, πῶς δ' ἕτερα καὶ ἀνόμοια ἀλλήλοις. Ἐπεὶ δὲ καὶ τὸ πάσχον καὶ τὸ ποιοῦν τῷ μὲν γένει ταῦτά καὶ ὅμοια τῷ δ' εἶδει ἀνόμοια, τοιαῦτα δὲ τάναντία, φανερόν ὅτι παθητικὰ καὶ ποιητικὰ ἀλλήλων ἐστὶ τὰ τ' ἐναντία καὶ τὰ μεταξύ· καὶ γὰρ ὅλως φθορὰ καὶ γένεσις ἐν τούτοις. Διὸ καὶ εὐλογον ἤδη τό τε πῦρ θερμαίνειν καὶ τὸ ψυχρὸν ψύχειν, καὶ ὅλως τὸ ποιητικὸν ὁμοιοῦν ἑαυτῷ τὸ πάσχον· τό τε γὰρ ποιοῦν καὶ τὸ πάσχον ἐναντία ἐστί, καὶ ἡ γένεσις εἰς τοῦναντίον. Ὡστ' ἀνάγκη τὸ πάσχον εἰς τὸ ποιοῦν μεταβάλλειν· οὕτω γὰρ ἔσται εἰς τοῦναντίον ἡ γένεσις. Καὶ κατὰ λόγον δὴ τὸ μὴ ταῦτά λέγοντας ἀμφοτέρους ὅμως ἄπτεσθαι τῆς φύσεως. Λέγομεν γὰρ πάσχειν ὅτε μὲν τὸ ὑποκείμενον, οἷον ὑγιάζεσθαι τὸν ἄνθρωπον καὶ θερμαίνεσθαι καὶ ψύχεσθαι καὶ τᾶλλα τὸν αὐτὸν τρόπον, ὅτε δὲ θερμαίνεσθαι μὲν τὸ ψυχρόν, ὑγιάζεσθαι δὲ τὸ κάμνον· ἀμφοτέρα δ' ἐστὶν ἀληθῆ.

Τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τοῦ ποιοῦντος· ὅτε μὲν γὰρ τὸν ἄνθρωπον φάμεν θερμαίνειν, ὅτε δὲ τὸ θερμόν· ἔστι μὲν γὰρ ὡς ἡ ὕλη πάσχει, ἔστι δ' ὡς τοῦναντίον. Οἱ μὲν οὖν εἰς ἐκεῖνο βλέψαντες ταῦτόν τι δεῖν ὥθήσαν τὸ ποιοῦν ἔχειν καὶ τὸ πάσχον, οἱ δ' εἰς θάτερα τοῦναντίον. Τὸν αὐτὸν δὲ λόγον ὑποληπτέον εἶναι περὶ τοῦ ποιεῖν καὶ πάσχειν ὥνπερ καὶ περὶ τοῦ κινεῖν καὶ κινεῖσθαι· διχῶς γὰρ λέγεται καὶ τὸ κινεῖν· ἐν ᾧ τε γὰρ ἡ ἀρχὴ τῆς κινήσεως, δοκεῖ τοῦτο κινεῖν (ἢ γὰρ ἀρχὴ πρώτη τῶν αἰτίων), καὶ πάλιν τὸ ἔσχατον πρὸς τὸ κινούμενον καὶ τὴν γένεσιν. Ὅμοίως δὲ καὶ περὶ τοῦ ποιοῦντος· καὶ

γὰρ τὸν ἰατρὸν φαμεν ὑγιάζειν καὶ τὸν οἶνον. Τὸ μὲν οὖν πρῶτον κινεῖν οὐδὲν κωλύει ἐν μὲν κινήσει ἀκίνητον εἶναι· ἐπ’ ἐνίων δὲ καὶ ἀναγκαῖον· τὸ δ’ ἔσχατον ἀεὶ κινεῖν κινούμενον. Ἐπὶ δὲ ποιήσεως τὸ μὲν πρῶτον ἀπαθές, τὸ δ’ ἔσχατον καὶ αὐτὸ πάσχον· ὅσα γὰρ μὴ ἔχει τὴν αὐτὴν ὕλην, ποιεῖ ἀπαθῆ ὄντα, οἶον ἡ ἰατρικὴ· αὐτὴ γὰρ ποιοῦσα ὑγίειαν οὐδὲν πάσχει (324b.) ὑπὸ τοῦ ὑγιαζομένου. Τὸ δὲ σιτίον ποιοῦν καὶ αὐτὸ πάσχει τι· ἢ γὰρ θερμαίνεται ἢ ψύχεται ἢ ἄλλο τι πάσχει ἅμα ποιοῦν. Ἔστι δὲ ἢ μὲν ἰατρικὴ ὡς ἀρχή, τὸ δὲ σιτίον τὸ ἔσχατον καὶ ἀπτόμενον. Ὅσα μὲν οὖν μὴ ἐν ὕλῃ ἔχει τὴν μορφήν, ταῦτα μὲν ἀπαθῆ τῶν ποιητικῶν, ὅσα δ’ ἐν ὕλῃ, παθητικά. Τὴν μὲν γὰρ ὕλην λέγομεν ὁμοίως ὡς εἰπεῖν τὴν αὐτὴν εἶναι τῶν ἀντικειμένων ὅποτερουοῦν, ὥσπερ γένος ὄν, τὸ δὲ δυνάμενον θερμὸν εἶναι παρόντος τοῦ θερμαντικοῦ καὶ πλησιάζοντος ἀνάγκη θερμαίνεσθαι· διό, καθάπερ εἴρηται, τὰ μὲν τῶν ποιητικῶν ἀπαθῆ τὰ δὲ παθητικά. Καὶ ὥσπερ ἐπὶ κινήσεως τὸν αὐτὸν ἔχει τρόπον καὶ ἐπὶ τῶν ποιητικῶν· ἐκεῖ τε γὰρ τὸ πρῶτον κινεῖν ἀκίνητον, καὶ ἐπὶ τῶν ποιητικῶν τὸ πρῶτον ποιοῦν ἀπαθές.

Ἔστι δὲ τὸ ποιητικὸν αἷτιον ὡς ὅθεν ἡ ἀρχὴ τῆς κινήσεως. Τὸ δ’ οὐ ἔνεκα οὐ ποιητικόν. Διὸ ἡ ὑγίεια οὐ ποιητικόν, εἰ μὴ κατὰ μεταφοράν· καὶ γὰρ τοῦ μὲν ποιοῦντος ὅταν ὑπάρχη, γίνεται τι τὸ πάσχον, τῶν δ’ ἔξω παρουσῶν οὐκέτι γίνεται, ἀλλ’ ἔστιν ἤδη· τὰ δ’ εἶδη καὶ τὰ τέλη ἔξεις τινές, ἢ δ’ ὕλη ἢ ὕλη παθητικόν. Τὸ μὲν οὖν πῦρ ἔχει ἐν ὕλῃ τὸ θερμόν· εἰ δέ τι εἶη θερμὸν χωριστόν, τοῦτο οὐθὲν ἂν πάσχοι. Τοῦτο μὲν οὖν ἴσως ἀδύνατον εἶναι χωριστόν· εἰ δ’ ἐστὶν ἔνια τοιαῦτα, ἐπ’ ἐκείνων ἂν εἶη τὸ λεγόμενον ἀληθές. Τί μὲν οὖν τὸ ποιεῖν καὶ πάσχειν ἐστὶ καὶ τίσιν ὑπάρχει καὶ διὰ τί καὶ πῶς, διωρίσθω τοῦτον τὸν τρόπον.

Πῶς δὲ ἐνδέχεται τοῦτο συμβαίνειν, πάλιν λέγωμεν.

## Κεφάλαιο 8

Τοῖς μὲν οὖν δοκεῖ πάσχειν ἕκαστον διὰ τινων πόρων εἰσιόντος τοῦ ποιοῦντος ἐσχάτου καὶ κυριωτάτου, καὶ τοῦτον τὸν τρόπον καὶ ὁρᾶν καὶ ἀκούειν ἡμᾶς φασὶ καὶ τὰς ἄλλας αἰσθήσεις αἰσθάνεσθαι πάσας, ἔτι δὲ ὁρᾶσθαι διὰ τε ἀέρος καὶ ὕδατος καὶ τῶν διαφανῶν, διὰ τὸ πόρους ἔχειν ἀοράτους μὲν διὰ μικρότητα, πυκνοὺς δὲ καὶ κατὰ στοῖχον, καὶ μᾶλλον ἔχειν τὰ διαφανῆ μᾶλλον. Οἱ μὲν οὖν ἐπὶ τινων οὕτω διώρισαν, ὥσπερ καὶ Ἐμπεδοκλῆς, οὐ μόνον ἐπὶ τῶν ποιοῦντων καὶ πασχόντων, ἀλλὰ καὶ μίγνυσθαι φησιν ὅσων οἱ πόροι σύμμετροι πρὸς ἀλλήλους εἰσίν. Ὅδῳ δὲ μάλιστα καὶ περὶ (325a.) πάντων ἐνὶ λόγῳ διωρίκασι Λεύκιππος καὶ Δημόκριτος, ἀρχὴν ποιησάμενοι

κατὰ φύσιν ἥπερ ἐστίν.

Ἐνίοις γὰρ τῶν ἀρχαίων ἔδοξε τὸ ὄν ἐξ ἀνάγκης ἔν εἶναι καὶ ἀκίνητον· τὸ μὲν γὰρ κενὸν οὐκ ὄν, κινηθῆναι δ' οὐκ ἂν δύνασθαι μὴ ὄντος κενοῦ κεχωρισμένου. Οὐδ' αὖ πολλὰ εἶναι μὴ ὄντος τοῦ διείργοντος· τοῦτο δὲ μηδὲν διαφέρειν, εἴ τις οἶεται μὴ συνεχὲς εἶναι τὸ πᾶν ἄλλ' ἄπτεσθαι διηρημένον, τοῦ φάναι πολλὰ καὶ μὴ ἔν εἶναι καὶ κενόν. Εἰ μὲν γὰρ πάντῃ διαιρετόν, οὐδὲν εἶναι ἔν, ὥστε οὐδὲ πολλά, ἀλλὰ κενὸν τὸ ὅλον· εἰ δὲ τῇ μὲν τῇ δὲ μή, πεπλασμένῳ τινὶ τοῦτ' εἰσικέναι· μέχρι πόσου γὰρ καὶ διὰ τί τὸ μὲν οὕτως ἔχει τοῦ ὅλου καὶ πληρὲς ἐστὶ, τὸ δὲ διηρημένον; ἔτι ὁμοίως φάναι ἀναγκαῖον μὴ εἶναι κίνησιν. Ἐκ μὲν οὖν τούτων τῶν λόγων, ὑπερβάντες τὴν αἴσθησιν καὶ παριδόντες αὐτὴν ὡς τῷ λόγῳ δεόν ἀκολουθεῖν, ἔν καὶ ἀκίνητον τὸ πᾶν εἶναί φασι καὶ ἄπειρον ἔνιοι· τὸ γὰρ πέρας περαίνειν ἂν πρὸς τὸ κενόν. Οἱ μὲν οὖν οὕτως καὶ διὰ ταύτας τὰς αἰτίας ἀπεφώνησαν περὶ τῆς ἀληθείας· ἐπεὶ δὲ ἐπὶ μὲν τῶν λόγων δοκεῖ ταῦτα συμβαίνειν, ἐπὶ δὲ τῶν πραγμάτων μανίᾳ παραπλήσιον εἶναι τὸ δοξάζειν οὕτως· οὐδένα γὰρ τῶν μαινομένων ἐξεστάναι τοσοῦτον ὥστε τὸ πῦρ ἔν εἶναι δοκεῖν καὶ τὸν κρύσταλλον, ἀλλὰ μόνον τὰ καλὰ καὶ τὰ φαινόμενα διὰ συνήθειαν, ταῦτ' ἐνίοις διὰ τὴν μανίαν οὐθὲν δοκεῖ διαφέρειν.

Λεύκιππος δ' ἔχειν ὠήθη λόγους οἳ τινες πρὸς τὴν αἴσθησιν ὁμολογούμενα λέγοντες οὐκ ἀναιρήσουσιν οὔτε γένεσιν οὔτε φθορὰν οὔτε κίνησιν καὶ τὸ πλῆθος τῶν ὄντων Ὁμολογήσας δὲ ταῦτα μὲν τοῖς φαινομένοις, τοῖς δὲ τὸ ἔν κατασκευάζουσιν ὡς οὐκ ἂν κίνησιν οὔσαν ἄνευ κενοῦ τό τε κενὸν μὴ ὄν, καὶ τοῦ ὄντος οὐθὲν μὴ ὄν φησιν εἶναι.

Τὸ γὰρ κυρίως ὄν παμπλήρες ὄν· ἄλλ' εἶναι τὸ τοιοῦτον οὐχ ἔν, ἀλλ' ἄπειρα τὸ πλῆθος καὶ ἀόρατα διὰ σμικρότητα τῶν ὄγκων. Ταῦτα δ' ἔν τῷ κενῷ φέρεσθαι (κενὸν γὰρ εἶναι), καὶ συνιστάμενα μὲν γένεσιν ποιεῖν, διαλυόμενα δὲ φθοράν. Ποιεῖν δὲ καὶ πάσχειν ἢ τυγχάνουσιν ἀπτόμενα· ταύτῃ γὰρ οὐχ ἔν εἶναι. Καὶ συντιθέμενα δὲ καὶ περιπλεκόμενα γεννᾶν· ἐκ δὲ τοῦ κατ' ἀλήθειαν ἑνὸς οὐκ ἂν γενέσθαι πλῆθος, οὐδ' ἐκ τῶν ἀληθῶς πολλῶν ἔν, ἀλλ' εἶναι τοῦτ' ἀδύνατον, ἀλλ' (325b.) ὥσπερ Ἐμπεδοκλῆς καὶ τῶν ἄλλων τινὲς φασὶ πάσχειν διὰ πόρων, οὕτω πᾶσαν ἀλλοίωσιν καὶ πᾶν τὸ πάσχειν τοῦτον γίνεσθαι τὸν τρόπον, διὰ τοῦ κενοῦ γινομένης τῆς διαλύσεως καὶ τῆς φθορᾶς, ὁμοίως δὲ καὶ τῆς αὐξήσεως, ὑπεισδυομένων στερεῶν. Σχεδὸν δὲ καὶ Ἐμπεδοκλεῖ ἀναγκαῖον λέγειν, ὥσπερ καὶ Λεύκιππός φησιν· εἶναι γὰρ ἅττα στερεά, ἀδιαίρετα δέ, εἰ μὴ πάντῃ πόροι συνεχεῖς εἰσιν. Τοῦτο δ' ἀδύνατον· οὐθὲν γὰρ ἔσται ἕτερον στερεὸν παρὰ τοὺς πόρους, ἀλλὰ πᾶν κενόν. Ἀνάγκη

ἄρα τὰ μὲν ἀπτόμενα εἶναι ἀδιαίρετα, τὰ δὲ μεταξὺ αὐτῶν κενά, οὓς ἐκεῖνος λέγει πόρους. Οὕτως δὲ καὶ Λευκίππος λέγει περὶ τοῦ ποιεῖν καὶ πάσχειν.

Οἱ μὲν οὖν τρόποι καθ' οὓς τὰ μὲν ποιεῖ τὰ δὲ πάσχει σχεδὸν οὕτοι λέγονται· καὶ περὶ μὲν τούτων, καὶ πῶς λέγουσι, δῆλον, καὶ πρὸς τὰς αὐτῶν θέσεις αἷς χρῶνται σχεδὸν ὁμολογουμένως φαίνεται συμβαῖνον. Τοῖς δ' ἄλλοις ἥττον, οἷον Ἐμπεδοκλεῖ τίνα τρόπον ἔσται γένεσις καὶ φθορὰ καὶ ἀλλοίωσις οὐ δῆλον. Τοῖς μὲν γὰρ ἔστιν ἀδιαίρετα τὰ πρῶτα τῶν σωμάτων, σχήματι διαφέροντα μόνον, ἐξ ὧν πρώτων σύγκειται καὶ εἰς ἃ ἔσχατα διαλύεται· Ἐμπεδοκλεῖ δὲ τὰ μὲν ἄλλα φανερόν ὅτι μέχρι τῶν στοιχείων ἔχει τὴν γένεσιν καὶ τὴν φθοράν, αὐτῶν δὲ τούτων πῶς γίνεται καὶ φθείρεται τὸ σωρευόμενον μέγεθος, οὔτε δῆλον οὔτε ἐνδέχεται λέγειν αὐτῷ μὴ λέγοντι καὶ τοῦ πυρὸς εἶναι στοιχεῖον, ὁμοίως δὲ καὶ τῶν ἄλλων ἀπάντων, ὥσπερ ἐν τῷ Τιμαίῳ γέγραφε Πλάτων.

Τοσοῦτον γὰρ διαφέρει τοῦ μὴ τὸν αὐτὸν τρόπον Λευκίππῳ λέγειν, ὅτι ὁ μὲν στερεὰ ὁ δ' ἐπίπεδα λέγει τὰ ἀδιαίρετα, καὶ ὁ μὲν ἀπείροις ὠρίσθαι σχήμασι τῶν ἀδιαιρέτων στερεῶν ἕκαστον ὁ δὲ ὠρισμένοις, ἐπεὶ ἀδιαίρετά γε ἀμφοτέρωτεροι λέγουσι καὶ ὠρισμένα σχήμασιν. Ἐκδὴ τούτων αἱ γενέσεις καὶ αἱ διακρίσεις Λευκίππῳ μὲν δύο τρόποι ἂν εἶεν, διὰ τε τοῦ κενοῦ καὶ διὰ τῆς ἀφῆς (ταύτη γὰρ διαιρετὸν ἕκαστον), Πλάτωνι δὲ κατὰ τὴν ἀφήν μόνον· κενὸν γὰρ οὐκ εἶναι φησιν· καὶ περὶ μὲν τῶν ἀδιαιρέτων ἐπιπέδων εἰρήκαμεν ἐν τοῖς πρότερον λόγοις· περὶ δὲ τῶν ἀδιαιρέτων στερεῶν τὸ μὲν ἐπὶ πλέον θεωρῆσαι τὸ συμβαῖνον ἀφείσθω τὸ νῦν, ὥς δὲ μικρὸν παρεκβᾶσιν εἰπεῖν, (326a.) ἀναγκαῖον ἀπαθές τε ἕκαστον λέγειν τῶν ἀδιαιρέτων (οὐ γὰρ οἷόν τε πάσχειν ἄλλ' ἢ διὰ τοῦ κενοῦ) καὶ μηθενὸς ποιητικὸν πάθους· οὔτε γὰρ ψυχρὸν οὔτε σκληρὸν οἷόν τ' εἶναι. Καίτοι τοῦτό γε ἄτοπον, τὸ μόνον ἀποδοῦναι τῷ περιφερεῖ σχήματι τὸ θερμόν· ἀνάγκη γὰρ καὶ τοῦναντίον τὸ ψυχρὸν ἄλλῳ τινὶ προσήκειν τῶν σχημάτων. Ἄτοπον δὲ καὶ εἰ ταῦτα μὲν ὑπάρχει, λέγω δὲ θερμότης καὶ ψυχρότης, βαρύτης δὲ καὶ κουφότης καὶ σκληρότης καὶ μαλακότης μὴ ὑπάρξει· καίτοι βαρύτερόν γε κατὰ τὴν ὑπεροχὴν φησιν εἶναι Δημόκριτος ἕκαστον τῶν ἀδιαιρέτων, ὥστε δῆλον ὅτι καὶ θερμότερον. Τοιαῦτα δ' ὄντα μὴ πάσχειν ὑπ' ἀλλήλων ἀδύνατον, οἷον ὑπὸ τοῦ πολὺ ὑπερβάλλοντος θερμοῦ τὸ ἥρεμα θερμόν.

Ἀλλὰ μὴν εἰ σκληρόν, καὶ μαλακόν. Τὸ δὲ μαλακὸν ἤδη τῷ πάσχειν τι λέγεται· τὸ γὰρ ὑπαικτικὸν μαλακόν. Ἀλλὰ μὴν ἄτοπον καὶ εἰ μηθὲν ὑπάρχει ἄλλ' ἢ μόνον σχῆμα· καὶ εἰ ὑπάρχει, ἐν δὲ μόνον, οἷον τὸ μὲν ψυχρὸν τὸ δὲ θερμόν· οὐδὲ γὰρ ἂν μία τις εἴη ἡ φύσις αὐτῶν. Ὅμοίως δὲ ἀδύνατον καὶ εἰ

πλείω τῷ ἐνί· ἀδιαίρετον γὰρ ὄν ἐν τῷ αὐτῷ ἔξει τὰ πάθη, ὥστε καὶ ἐὰν πάσῃ ἤπερ ψύχεται, ταύτῃ τι καὶ ἄλλο ποιήσει ἢ πείσεται. Τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων παθημάτων· τοῦτο γὰρ καὶ τοῖς στερεὰ καὶ τοῖς ἐπίπεδα λέγουσιν ἀδιαίρετα συμβαίνει τὸν αὐτὸν τρόπον· οὔτε γὰρ μανότερα οὔτε πυκνότερα οἷόν τε γίνεσθαι κενοῦ μὴ ὄντος ἐν τοῖς ἀδιαίρετοις.

Ἔτι δ' ἄτοπον καὶ τὸ μικρὰ μὲν ἀδιαίρετα εἶναι, μεγάλα δὲ μή· νῦν μὲν γὰρ εὐλόγως τὰ μείζω θραύεται μᾶλλον τῶν μικρῶν· τὰ μὲν γὰρ διαλύεται ῥαδίως, οἷον τὰ μεγάλα· προσκόπτει γὰρ πολλοῖς· τὸ δὲ ἀδιαίρετον ὅλως διὰ τί μᾶλλον ὑπάρχει τῶν μεγάλων τοῖς μικροῖς; ἔτι δὲ πότερον μία πάντων ἢ φύσις ἐκείνων τῶν στερεῶν, ἢ διαφέρει θάτερα τῶν ἐτέρων, ὥσπερ ἂν εἰ τὰ μὲν εἴη πύρινα, τὰ δὲ γήινα τὸν ὄγκον; εἰ μὲν γὰρ μία φύσις ἐστὶν ἀπάντων, τί τὸ χωρίσαν; ἢ διὰ τί οὐ γίνεται ἀψάμενα ἓν, ὥσπερ ὕδωρ ὕδατος ὅταν θίγῃ; οὐδὲν γὰρ διαφέρει τὸ ὕστερον τοῦ προτέρου. Εἰ δ' ἕτερα, ποῖα ταῦτα; καὶ δῆλον ὡς ταῦτα θετέον ἀρχὰς καὶ αἰτίας τῶν (326b.) συμβαινόντων μᾶλλον ἢ τὰ σχήματα. Ἔτι δὲ διαφέροντα τὴν φύσιν, κἂν ποιοῖ κἂν πάσχοι θιγγάνοντα ἀλλήλων. Ἔτι δὲ τί τὸ κινεῖν; εἰ μὲν γὰρ ἕτερον, παθητικόν· εἰ δ' αὐτὸ αὐτὸ ἕκαστον, ἢ διαιρετὸν ἔσται, κατ' ἄλλο μὲν κινεῖν κατ' ἄλλο δὲ κινούμενον, ἢ κατὰ ταῦτὸ τάναντία ὑπάρξει, καὶ ἡ ὕλη οὐ μόνον ἀριθμῷ ἔσται μία ἀλλὰ καὶ δυνάμει.

Ὅσοι (6) μὲν οὖν διὰ τῆς <διὰ> τῶν πόρων κινήσεώς φασι τὰ πάθη συμβαίνειν, εἰ μὲν καὶ πεπληρωμένων τῶν πόρων, περίεργον οἱ πόροι· εἰ γὰρ ταύτῃ τι πάσχει τὸ πᾶν, κἂν μὴ πόρους ἔχον ἄλλ' αὐτὸ συνεχὲς ὄν πάσχοι τὸν αὐτὸν τρόπον. Ἔτι δὲ πῶς ἐνδέχεται περὶ τοῦ διορᾶν συμβαίνειν ὡς λέγουσιν; οὔτε γὰρ κατὰ τὰς ἀφὰς ἐνδέχεται διέναι διὰ τῶν διαφανῶν, οὔτε διὰ τῶν πόρων, εἰ πλήρης ἕκαστος· τί γὰρ διοίσει τοῦ μὴ ἔχειν πόρους; πᾶν γὰρ ὁμοίως ἔσται πλήρες.

Ἀλλὰ μὴν εἰ καὶ κενὰ μὲν ταῦτα, ἀνάγκη δὲ σώματα ἐν αὐτοῖς ἔχειν, ταῦτὸ συμβήσεται πάλιν. Εἰ δὲ τηλικαῦτα τὸ μέγεθος ὥστε μὴ δέχεσθαι σῶμα μηδέν, γελοῖον τὸ μικρὸν μὲν οἶεσθαι κενὸν εἶναι, μέγα δὲ μὴ μὴδ' ὀπηλικονοῦν, ἢ τὸ κενὸν ἄλλο τι οἶεσθαι λέγειν πλὴν χώραν σώματος, ὥστε δῆλον ὅτι παντὶ σώματι τὸν ὄγκον ἴσον ἔσται κενόν.

Ὅλως δὲ τὸ πόρους ποιεῖν περίεργον· εἰ μὲν γὰρ μηδὲν ποιεῖ κατὰ τὴν ἀφήν, οὐδὲ διὰ τῶν πόρων ποιήσει διόν· εἰ δὲ τῷ ἄπτεσθαι, καὶ μὴ πόρων ὄντων τὰ μὲν πείσεται τὰ δὲ ποιήσει τῶν πρὸς ἄλληλα τοῦτον τὸν τρόπον πεφυκόντων.



Ὅτι μὲν οὖν οὕτως λέγειν τοὺς πόρους, ὥς τινες ὑπολαμβάνουσιν, ἢ ψεῦδος ἢ μάταιον, φανερόν ἐκ τούτων ἐστίν· διαιρετῶν δ' ὄντων πάντη τῶν σωμάτων πόρους ποιεῖν γελοῖον· ἢ γὰρ διαιρετά, δύναται χωρίζεσθαι.

## Κεφάλαιο 9

Τίνα δὲ τρόπον ὑπάρχει τοῖς οὕσι γεννᾶν καὶ ποιεῖν καὶ πάσχειν, λέγωμεν λαβόντες ἀρχὴν τὴν πολλάκις εἰρημένην.

Εἰ γὰρ ἐστὶ τὸ μὲν δυνάμει τὸ δ' ἐντελεχείᾳ τοιοῦτον, πέφυκεν οὐ τῇ μὲν τῇ δ' οὐ πάσχειν, ἀλλὰ πάντη καθ' ὅσον ἐστὶ τοιοῦτον, ἥττον δὲ καὶ μᾶλλον ἢ τοιοῦτον μᾶλλον ἐστὶ καὶ ἥττον· καὶ ταύτῃ πόρους ἂν τις λέγοι μᾶλλον, καθάπερ ἐν τοῖς μεταλλευομένοις διατείνουσι τοῦ παθητικοῦ φλέβες (327a.) συνεχεῖς. Συμφυῆς μὲν οὖν ἕκαστον καὶ ἐν ὃν ἀπαθές.

Ὅμοίως δὲ καὶ μὴ θιγγάνοντα μήτε αὐτῶν μήτ' ἄλλων, ἃ ποιεῖν πέφυκε καὶ πάσχειν. Λέγω δ' οἶον οὐ μόνον ἀπτόμενον θερμαίνει τὸ πῦρ, ἀλλὰ κἂν ἄποθεν ἢ τὸν μὲν γὰρ ἀέρα τὸ πῦρ, ὁ δ' ἄῃρ τὸ σῶμα θερμαίνει, πεφυκῶς ποιεῖν καὶ πάσχειν.

Τὸ δὲ τῇ μὲν οἶεσθαι πάσχειν τῇ δὲ μή, διορίσαντας ἐν ἀρχῇ τοῦτο λεκτέον. Εἰ μὲν γὰρ μὴ πάντη διαιρετὸν τὸ μέγεθος, ἀλλ' ἐστὶ σῶμα ἀδιαίρετον ἢ πλάτος, οὐκ ἂν εἴη πάντη παθητικόν, ἀλλ' οὐδὲ συνεχὲς οὐδέν· εἰ δὲ τοῦτο ψεῦδος καὶ πᾶν σῶμα διαιρετόν, οὐδὲν διαφέρει διηρηθῆναι μὲν ἄπτεσθαι δέ, ἢ διαιρετὸν εἶναι· εἰ γὰρ διακρίνεσθαι δύναται κατὰ τὰς ἀφάς, ὥσπερ φασί τινες, κἂν μήπω ἢ διηρημένον, ἔσται διηρημένον· δυνατόν γὰρ διαιρεθῆναι· γίνεται γὰρ οὐθὲν ἀδύνατον.

Ὅλως δὲ τὸ τοῦτον γίνεσθαι τὸν τρόπον μόνον σχιζομένων τῶν σωμάτων ἄτοπον· ἀναιρεῖ γὰρ οὗτος ὁ λόγος ἀλλοίωσιν, ὁρῶμεν δὲ τὸ αὐτὸ σῶμα συνεχὲς ὃν ὅτε μὲν ὑγρὸν ὅτε δὲ πεπηγός, οὐ διαιρέσει καὶ συνθέσει τοῦτο παθόν, οὐδὲ τροπῇ καὶ διαθιγῇ, καθάπερ λέγει Δημόκριτος· οὔτε γὰρ μεταταχθὲν οὔτε μετατεθὲν τὴν φύσιν πεπηγὸς ἐξ ὑγροῦ γέγονεν· οὐδ' ἐνυπάρχει τὰ σκληρὰ καὶ πεπηγότα ἀδιαίρετα τοὺς ὄγκους· ἀλλ' ὁμοίως ἅπαν ὑγρόν, ὅτε δὲ σκληρόν καὶ πεπηγός ἐστίν.

Ἔτι δ' οὐδ' αὖξησιν οἶόν τ' εἶναι καὶ φθίσιν· οὐ γὰρ ὅτιοῦν ἔσται γεγονὸς μεῖζον, εἴπερ ἔσται πρόσθεσις, καὶ μὴ πᾶν μεταβεβληκός, ἢ μιχθέντος τινὸς ἢ καθ' αὐτὸ μεταβαλόντος.

Ὅτι μὲν οὖν ἐστὶ τὸ γεννᾶν καὶ τὸ ποιεῖν καὶ τὸ γίνεσθαι τε καὶ πάσχειν ὑπ' ἀλλήλων, καὶ τίνα τρόπον ἐνδέχεται, καὶ τίνα φασὶ μὲν τινες οὐκ ἐνδέχεται δέ, διωρίσθω τοῦτον τὸν τρόπον.

## Κεφάλαιο 10

Λοιπὸν δὲ θεωρήσαι περὶ μίξεως κατὰ τὸν αὐτὸν τρόπον τῆς μεθόδου· τοῦτο γὰρ ἦν τρίτον τῶν προτεθέντων ἐξ ἀρχῆς. Σκεπτέον δὲ τί τ' ἐστὶν ἡ μίξις καὶ τί τὸ μικτόν, καὶ τίσιν ὑπάρχει τῶν ὄντων καὶ πῶς, ἔτι δὲ πότερον ἔστι μίξις ἢ τοῦτο ψεῦδος· ἀδύνατον γὰρ ἐστὶ μιχθῆναί τι ἕτερον ἑτέρῳ, καθάπερ λέγουσί τινες· ὄντων μὲν γὰρ ἔτι τῶν (327b.) μιχθέντων καὶ μὴ ἡλλοιωμένων οὐδὲν μᾶλλον νῦν μεμίχθαι φασὶν ἢ πρότερον, ἀλλ' ὁμοίως ἔχειν, θατέρου δὲ φθαρέντος οὐ μεμίχθαι, ἀλλὰ τὸ μὲν εἶναι τὸ δ' οὐκ εἶναι, τὴν δὲ μίξιν ὁμοίως ἐχόντων εἶναι τὸν αὐτὸν δὲ τρόπον καὶ εἰ ἀμφοτέρων συνελθόντων ἔφθαρται τῶν μιγνυμένων ἑκάτερον· οὐ γὰρ εἶναι μεμιγμένα τὰ γε ὅλως οὐκ ὄντα. Οὗτος μὲν οὖν ὁ λόγος ἔοικε ζητεῖν διορίσαι τί διαφέρει μίξις γενέσεως καὶ φθορᾶς, καὶ τί τὸ μικτόν τοῦ γεννητοῦ καὶ φθαρτοῦ· δῆλον γὰρ ὡς δεῖ διαφέρειν, εἴπερ ἔστιν. Ὡστε τούτων ὄντων φανερών τὰ διαπορηθέντα λύοιεν ἅν.

Ἀλλὰ μὴν οὐδὲ τὴν ὕλην τῷ πυρὶ μεμίχθαι φαμὲν οὐδὲ μίγνυσθαι καιομένην, οὔτ' αὐτὴν αὐτῆς τοῖς μορίοις οὔτε τῷ πυρὶ, ἀλλὰ τὸ μὲν πῦρ γίνεσθαι, τὴν δὲ φθεῖρεσθαι. Τὸν αὐτὸν δὲ τρόπον οὔτε τῷ σώματι τὴν τροφήν οὔτε τὸ σχῆμα τῷ κηρῷ μιγνύμενον σχηματίζειν τὸν ὄγκον· οὐδὲ τὸ σῶμα καὶ τὸ λευκὸν οὐδ' ὅλως τὰ πάθη καὶ τὰς ἕξεις οἷόν τε μίγνυσθαι τοῖς πράγμασιν· σωζόμενα γὰρ ὁράται. Ἀλλὰ μὴν οὐδὲ τὸ λευκὸν γε καὶ τὴν ἐπιστήμην ἐνδέχεται μιχθῆναι, οὐδ' ἄλλο τῶν μὴ χωριστῶν οὐδέν. Ἀλλὰ τοῦτο λέγουσιν οὐ καλῶς οἱ πάντα ποτὲ ὁμοῦ φάσκοντες εἶναι καὶ μεμίχθαι· οὐ γὰρ ἅπαν ἅπαντι μικτόν, ἀλλ' ὑπάρχειν δεῖ χωριστὸν ἑκάτερον τῶν μιχθέντων· τῶν δὲ παθῶν οὐθὲν χωριστόν. Ἐπεὶ δ' ἐστὶ τὰ μὲν δυνάμει τὰ δ' ἐνεργείᾳ τῶν ὄντων, ἐνδέχεται τὰ μιχθέντα εἶναί πως καὶ μὴ εἶναι, ἐνεργείᾳ μὲν ἑτέρου ὄντος τοῦ γεγονότος ἐξ αὐτῶν, δυνάμει δ' ἔτι ἑκατέρου ἅπερ ἦσαν πρὶν μιχθῆναι, καὶ οὐκ ἀπολωλότα· τοῦτο γὰρ ὁ λόγος διηπόρει πρότερον· φαίνεται δὲ τὰ μιγνύμενα πρότερόν τε ἐκ κεχωρισμένων συνιόντα καὶ δυνάμενα χωρίζεσθαι πάλιν· οὔτε διαμένουσιν οὖν ἐνεργείᾳ ὥσπερ τὸ σῶμα καὶ τὸ λευκόν, οὔτε φθείρονται, οὔτε θάτερον οὔτ' ἄμφω· σώζεται γὰρ ἡ δύναμις αὐτῶν.

Διὸ ταῦτα μὲν ἀφείσθω· τὸ δὲ συνεχὲς τούτοις ἀπόρημα διαιρετέον, πότερον ἢ

μίξις πρὸς τὴν αἴσθησιν τί ἐστίν. Ὅταν γὰρ οὕτως εἰς μικρὰ διαιρεθῇ τὰ μιγνύμενα, καὶ τεθῇ παρ' ἄλληλα τοῦτον τὸν τρόπον ὥστε μὴ δῆλον ἕκαστον εἶναι τῇ αἰσθήσει, τότε μέμικται (328a.) ἢ οὐ, ἀλλ' ἔστιν ὥστε ὅτιοῦν εἶναι μόριον τῶν मिथέντων; λέγεται μὲν οὖν ἐκείνως, οἷον κριθᾶς μεμίχθαι πυροῖς, ὅταν ἡτισοῦν παρ' ὄντινοῦν τεθῇ. Εἰ δ' ἐστὶ πᾶν σῶμα διαιρετόν, εἴπερ ἐστὶ σῶμα σώματι μικτὸν ὁμοιομερές, ὅτιοῦν ἂν δέοι μέρος γίνεσθαι παρ' ὅτιοῦν. Ἐπεὶ δ' οὐκ ἔστιν εἰς τάλαχιστα διαιρεθῆναι, <οὐδὲ> σύνθεσις ταὐτὸ καὶ μίξις ἀλλ' ἕτερον, δῆλον ὡς οὔτε κατὰ μικρὰ σωζόμενα δεῖ τὰ μιγνύμενα φάναι μεμίχθαι. Σύνθεσις γὰρ ἔσται καὶ οὐ κρᾶσις οὐδὲ μίξις, οὐδ' ἔξει τὸν αὐτὸν λόγον τῷ ὅλῳ τὸ μόριον.

Φαμὲν δ', εἴπερ δεῖ μεμίχθαι τι, τὸ मिथέν ὁμοιομερές εἶναι, καὶ ὥσπερ τοῦ ὕδατος τὸ μέρος ὕδωρ, οὕτω καὶ τοῦ κραθέντος. Ἄν δ' ἢ κατὰ μικρὰ σύνθεσις ἢ μίξις, οὐθὲν συμβήσεται τούτων, ἀλλὰ μόνον μεμιγμένα πρὸς τὴν αἴσθησιν (καὶ τὸ αὐτὸ τῷ μὲν μεμιγμένον, ἐὰν μὴ βλέπη ὀξύ, τῷ Λυγκεῖ δ' οὐθὲν μεμιγμένον), <οὐδὲ> τῇ διαφρέσει, ὥστε ὅτιοῦν παρ' ὅτιοῦν μέρος, ἀδύνατον γὰρ οὕτω διαιρεθῆναι. Ἡ οὖν οὐκ ἔστι μίξις, ἢ λεκτέον τοῦτο πῶς ἐνδέχεται γίνεσθαι πάλιν.

Ἔστι δὴ, ὡς ἔφαμεν, τῶν ὄντων τὰ μὲν ποιητικὰ τὰ δ' ὑπὸ τούτων παθητικά. Τὰ μὲν οὖν ἀντιστρέφει, ὅσων ἢ αὐτὴ ὕλη ἐστί, καὶ ποιητικὰ ἀλλήλων καὶ παθητικὰ ὑπ' ἀλλήλων· τὰ δὲ ποιεῖ ἀπαθῆ ὄντα, ὅσων μὴ ἢ αὐτὴ ὕλη. Τούτων μὲν οὖν οὐκ ἔστι μίξις· διὸ οὐδ' ἡ ἰατρικὴ ποιεῖ ὑγίειαν οὐδ' ἡ ὑγίεια μιγνυμένα τοῖς σώμασιν. Τῶν δὲ ποιητικῶν καὶ παθητικῶν ὅσα εὐδιαίρετα, πολλὰ μὲν ὀλίγοις καὶ μεγάλα μικροῖς συντιθέμενα οὐ ποιεῖ μίξιν, ἀλλ' αὐξήσιν τοῦ κρατοῦντος· μεταβάλλει γὰρ θάτερον εἰς τὸ κρατοῦν, οἷον σταλαγμὸς οἴνου μυρίοις χοεῦσιν ὕδατος οὐ μίγνυται· λύεται γὰρ τὸ εἶδος καὶ μεταβάλλει εἰς τὸ πᾶν ὕδωρ. Ὅταν δὲ ταῖς δυνάμεσιν ἰσάζῃ πως, τότε μεταβάλλει μὲν ἑκάτερον εἰς τὸ κρατοῦν ἐκ τῆς αὐτοῦ φύσεως, οὐ γίνεται δὲ θάτερον, ἀλλὰ μεταξύ καὶ κοινόν.

Φανερόν οὖν ὅτι ταῦτ' ἐστὶ μικτὰ ὅσα ἐναντίωσιν ἔχει τῶν ποιούντων· ταῦτα γὰρ δὴ ὑπ' ἀλλήλων ἐστὶ παθητικά. Καὶ μικρὰ δὲ μικροῖς παρατιθέμενα μίγνυται μᾶλλον· ῥᾶον γὰρ καὶ θᾶττον ἄλληλα μεθίστησιν.

Τὸ δὲ πολὺ καὶ ὑπὸ πολλοῦ χρονίως τοῦτο δρᾷ. Διὸ τὰ (328b.) εὐόριστα τῶν διαιρετῶν καὶ παθητικῶν μικτὰ (διαιρεῖται γὰρ εἰς μικρὰ ταῦτα ῥαδίως· τοῦτο γὰρ ἦν τὸ εὐορίστω εἶναι), οἷον τὰ ὑγρὰ μικτὰ μάλιστα τῶν σωμάτων· εὐόριστον γὰρ μάλιστα τὸ ὑγρὸν τῶν διαιρετῶν, ἐὰν μὴ γλίσχρον ἦ· ταῦτα

γὰρ δὴ πλείω καὶ μείζω μόνον ποιεῖ τὸν ὄγκον.

Ὅταν δ' ἢ θάτερον μόνον παθητικὸν ἢ σφόδρα, τὸ δὲ πάμπαν ἡρέμα, ἢ οὐθὲν πλεῖον τὸ μιχθὲν ἐξ ἀμφοῖν ἢ μικρόν, ὅπερ συμβαίνει περὶ τὸν καττίτερον καὶ τὸν χαλκόν. Ἐνια γὰρ ψελλίζεται πρὸς ἀλλήλα τῶν ὄντων καὶ ἐπαμφοτερίζει· φαίνεται γάρ πως καὶ μικτὰ ἡρέμα, καὶ ὡς θάτερον μὲν δεκτικὸν θάτερον δ' εἶδος. Ὅπερ ἐπὶ τούτων συμβαίνει· ὁ γὰρ καττίτερος ὡς πάθος τι ὦν ἄνευ ὕλης τοῦ χαλκοῦ σχεδὸν ἀφανίζεται καὶ μιχθεὶς ἅπεισι χρωματίσας μόνον. Ταῦτὸ δὲ τοῦτο συμβαίνει καὶ ἐφ' ἑτέρων.

Φανερόν τοίνυν ἐκ τῶν εἰρημένων καὶ ὅτι ἔστι μίξις καὶ τί ἐστι καὶ διὰ τί, καὶ ποῖα μικτὰ τῶν ὄντων, ἐπεὶ ἐστὶν ἔνια τοιαῦτα οἷα παθητικά τε ὑπ' ἀλλήλων καὶ εὐόριστα καὶ εὐδιαίρετα· ταῦτα γὰρ οὐτ' ἐφθάρθαι ἀνάγκη μεμιγμένα οὐτ' ἔτι ταῦτά ἀπλῶς εἶναι, οὔτε σύνθεσιν εἶναι τὴν μίξιν αὐτῶν, οὔτε πρὸς τὴν αἴσθησιν· ἀλλ' ἔστι μικτὸν μὲν ὃ ἂν εὐόριστον ὄν παθητικὸν ἢ καὶ ποιητικὸν καὶ τοιούτῳ μικτόν (πρὸς ὁμώνυμον γὰρ τὸ μικτόν), ἡ δὲ μίξις τῶν μικτῶν ἀλλοιωθέντων ἔνωσις.

## Βιβλίο 2

### Κεφάλαιο 1

Περὶ μὲν οὖν μίξεως καὶ ἀφῆς καὶ τοῦ ποιεῖν καὶ πάσχειν εἴρηται πῶς ὑπάρχει τοῖς μεταβάλλουσι κατὰ φύσιν, ἔτι δὲ περὶ γενέσεως καὶ φθορᾶς τῆς ἀπλῆς, τίνος καὶ πῶς ἐστὶ καὶ διὰ τίν' αἰτίαν. Ὅμοίως δὲ καὶ περὶ ἀλλοιώσεως εἴρηται, τί τὸ ἀλλοιοῦσθαι καὶ τίν' ἔχει διαφορὰν αὐτῶν.

Λοιπὸν δὲ θεωρῆσαι περὶ τὰ καλούμενα στοιχεῖα τῶν σωμάτων. Γένεσις μὲν γὰρ καὶ φθορὰ πάσαις ταῖς φύσει συνεστώσαις οὐσίαις οὐκ ἄνευ τῶν αἰσθητῶν σωμάτων.

Τούτων δὲ τὴν ὑποκειμένην ὕλην οἱ μὲν φασιν εἶναι μίαν, οἷον ἀέρα τιθέντες ἢ πῦρ ἢ τι μεταξὺ τούτων, σῶμά τε ὄν καὶ χωριστόν, (329a.) οἱ δὲ πλείω τὸν ἀριθμὸν ἑνός, οἱ μὲν πῦρ καὶ γῆν, οἱ δὲ ταῦτά τε καὶ ἀέρα τρίτον, οἱ δὲ καὶ ὕδωρ τούτων τέταρτον, ὥσπερ Ἐμπεδοκλῆς· ἐξ ὧν συγκρινομένων καὶ διακρινομένων ἢ ἀλλοιουμένων συμβαίνειν τὴν γένεσιν καὶ τὴν φθορὰν τοῖς πράγμασιν.

Ὅτι μὲν οὖν τὰ πρῶτα ἀρχὰς καὶ στοιχεῖα καλῶς ἔχει λέγειν, ἔστω

συνομολογούμενον, ἐξ ὧν μεταβαλλόντων ἢ κατὰ σύγκρισιν καὶ διάκρισιν ἢ κατ' ἄλλην μεταβολὴν συμβαίνει γένεσιν εἶναι καὶ φθοράν. Ἀλλ' οἱ μὲν ποιοῦντες μίαν ὕλην παρὰ τὰ εἰρημένα, ταύτην δὲ σωματικὴν καὶ χωριστήν, ἀμαρτάνουσιν· ἀδύνατον γὰρ ἄνευ ἐναντιώσεως εἶναι τὸ σῶμα τοῦτο αἰσθητῆς· ἢ γὰρ κοῦφον ἢ βαρὺ ἢ ψυχρὸν ἢ θερμὸν ἀνάγκη εἶναι τὸ ἄπειρον τοῦτο, ὃ λέγουσί τινες εἶναι τὴν ἀρχήν. Ὡς δ' ἐν τῷ Τιμαίῳ γέγραπται, οὐδένα ἔχει διορισμόν· οὐ γὰρ εἴρηκε σαφῶς τὸ πανδεχές, εἰ χωρίζεται τῶν στοιχείων. Οὐδὲ χρῆται οὐδέν, φήσας εἶναι ὑποκείμενόν τι τοῖς καλουμένοις στοιχείοις πρότερον, οἷον χρυσὸν τοῖς ἔργοις τοῖς χρυσοῖς. Καίτοι καὶ τοῦτο οὐ καλῶς λέγεται τοῦτον τὸν τρόπον λεγόμενον, ἀλλ' ὧν μὲν ἀλλοίωσις, ἐστὶν οὕτως, ὧν δὲ γένεσις καὶ φθορά, ἀδύνατον ἐκεῖνο προσαγορεύεσθαι ἐξ οὗ γέγονεν. Καίτοι γέ φησι μακρῷ ἀληθέστατον εἶναι χρυσὸν λέγειν ἕκαστον εἶναι. Ἀλλὰ τῶν στοιχείων ὄντων στερεῶν μέχρι ἐπιπέδων ποιεῖται τὴν ἀνάλυσιν· ἀδύνατον δὲ τὴν τιθήνην καὶ τὴν ὕλην τὴν πρώτην τὰ ἐπίπεδα εἶναι. Ἡμεῖς δὲ φαμέν μὲν εἶναι τινα ὕλην τῶν σωμάτων τῶν αἰσθητῶν, ἀλλὰ ταύτην οὐ χωριστὴν ἀλλ' αἰετ' ἐναντιώσεως, ἐξ ἧς γίνεται τὰ καλούμενα στοιχεῖα.

Διόρισται δὲ περὶ αὐτῶν ἐν ἑτέροις ἀκριβέστερον. Οὐ μὴν ἀλλ' ἐπειδὴ καὶ τὸν τρόπον τοῦτόν ἐστιν ἐκ τῆς ὕλης τὰ σώματα τὰ πρῶτα, διοριστέον καὶ περὶ τούτων, ἀρχὴν μὲν καὶ πρώτην οἰομένοις εἶναι τὴν ὕλην τὴν ἀχώριστον μὲν, ὑποκειμένην δὲ τοῖς ἐναντίοις· οὔτε γὰρ τὸ θερμὸν ὕλη τῷ ψυχρῷ οὔτε τοῦτο τῷ θερμῷ, ἀλλὰ τὸ ὑποκείμενον ἀμφοῖν. Ὡστε πρῶτον μὲν τὸ δυνάμει σῶμα αἰσθητὸν ἀρχή, δεύτερον δ' αἱ ἐναντιώσεις, λέγω δ' οἷον θερμότης καὶ ψυχρότης, τρίτον δ' ἤδη πῦρ καὶ ὕδωρ καὶ τὰ τοιαῦτα· ταῦτα μὲν γὰρ μεταβάλλει εἰς ἄλληλα, καὶ οὐχ ὥς Ἐμπεδοκλῆς καὶ (329b.) ἕτεροι λέγουσιν (οὐδὲ γὰρ ἂν ἦν ἀλλοίωσις), αἱ δ' ἐναντιώσεις οὐ μεταβάλλουσιν. Ἀλλ' οὐδὲν ἦττον καὶ ὥς σώματος ποίας καὶ πόσας λεκτέον ἀρχάς· οἱ μὲν γὰρ ἄλλοι ὑποθέμενοι χρῶνται, καὶ οὐδὲν λέγουσι διὰ τί αὐταὶ ἢ τοσαῦται.

## Κεφάλαιο 2

Ἐπεὶ οὖν ζητοῦμεν αἰσθητοῦ σώματος ἀρχάς, τοῦτο δ' ἐστὶν ἄπτοῦ, ἄπτὸν δ' οὐ ἢ αἰσθησις ἀφή, φανερόν ὅτι οὐ πᾶσαι αἱ ἐναντιώσεις σώματος εἶδη καὶ ἀρχάς ποιοῦσιν, ἀλλὰ μόνον αἱ κατὰ τὴν ἀφήν· κατ' ἐναντιώσιν τε γὰρ διαφέρουσι, καὶ κατὰ ἄπτὴν ἐναντιώσιν. Διὸ οὔτε λευκότης καὶ μελανία οὔτε γλυκύτης καὶ πικρότης, ὁμοίως δ' οὐδὲ τῶν ἄλλων τῶν αἰσθητῶν ἐναντιώσεων οὐδὲν ποιεῖ στοιχεῖον. Καίτοι πρότερον ὅψις ἀφῆς, ὥστε καὶ τὸ ὑποκείμενον πρότερον.

Ἄλλ' οὐκ ἔστι σώματος ἀπτοῦ πάθος ἢ ἀπτόν, ἀλλὰ καθ' ἕτερον, καὶ εἰ ἔτυχε τῇ φύσει πρότερον. Αὐτῶν δὲ πρῶτον τῶν ἀπτῶν διαιρετέον ποῖαι πρῶται διαφοραὶ καὶ ἐναντιώσεις. Εἰσὶ δ' ἐναντιώσεις κατὰ τὴν ἀφὴν αἶδε, θερμὸν ψυχρὸν, ξηρὸν ὑγρὸν, βαρὺ κοῦφον, σκληρὸν μαλακόν, γλίσχρον κραῦρον, τραχὺ λεῖον, παχὺ λεπτόν. Τούτων δὲ βαρὺ μὲν καὶ κοῦφον οὐ ποιητικὰ οὐδὲ παθητικά· οὐ γὰρ τῷ ποιεῖν τε ἕτερον ἢ πάσχειν ὑφ' ἑτέρου λέγονται. Δεῖ δὲ ποιητικὰ καὶ παθητικὰ εἶναι ἀλλήλων τὰ στοιχεῖα· μίγνυται γὰρ καὶ μεταβάλλει εἰς ἄλληλα. Θερμὸν δὲ καὶ ψυχρὸν καὶ ὑγρὸν καὶ ξηρὸν τὰ μὲν τῷ ποιητικῷ εἶναι τὰ δὲ τῷ παθητικῷ λέγεται· θερμὸν γάρ ἐστι τὸ συγκρίνον τὰ ὁμογενῇ (τὸ γὰρ διακρίνειν, ὅπερ φασὶ ποιεῖν τὸ πῦρ, συγκρίνειν ἐστὶ τὰ ὁμόφυλα· συμβαίνει γὰρ ἐξαιρεῖν τὰ ἀλλότρια), ψυχρὸν δὲ τὸ συνάγον καὶ συγκρίνον ὁμοίως τὰ τε συγγενῇ καὶ τὰ μὴ ὁμόφυλα, ὑγρὸν δὲ τὸ ἀόριστον οἰκείῳ ὄρω εὐόριστον ὄν, ξηρὸν δὲ τὸ εὐόριστον μὲν οἰκείῳ ὄρω, δυσόριστον δέ. Τὸ δὲ λεπτὸν καὶ παχὺ καὶ γλίσχρον καὶ κραῦρον καὶ σκληρὸν καὶ μαλακὸν καὶ αἱ ἄλλαι διαφοραὶ ἐκ τούτων· ἐπεὶ γὰρ τὸ ἀναπληστικόν ἐστι τοῦ ὑγροῦ διὰ τὸ μὴ ὠρίσθαι μὲν εὐόριστον δ' εἶναι καὶ ἀκολουθεῖν τῷ (330a.) ἀπτομένῳ, τὸ δὲ λεπτὸν ἀναπληστικόν (λεπτομερὲς γάρ, καὶ τὸ μικρομερὲς ἀναπληστικόν· ὅλον γὰρ ὅλου ἄπτεται· τὸ δὲ λεπτὸν μάλιστα τοιοῦτον), φανερόν ὅτι τὸ μὲν λεπτὸν ἔσται τοῦ ὑγροῦ, τὸ δὲ παχὺ τοῦ ξηροῦ. Πάλιν δὲ τὸ μὲν γλίσχρον τοῦ ὑγροῦ (τὸ γὰρ γλίσχρον ὑγρὸν πεπονθὸς τί ἐστίν, οἷον τὸ ἔλαιον), τὸ δὲ κραῦρον τοῦ ξηροῦ· κραῦρον γὰρ τὸ τελέως ξηρόν, ὥστε καὶ πεπηγέναι δι' ἔλλειψιν ὑγρότητος.

Ἔτι τὸ μὲν μαλακὸν τοῦ ὑγροῦ (μαλακὸν γὰρ τὸ ὑπεῖκον εἰς ἑαυτὸ καὶ μὴ μεθιστάμενον, ὅπερ ποιεῖ τὸ ὑγρὸν· διὸ καὶ οὐκ ἔστι τὸ ὑγρὸν μαλακόν, ἀλλὰ τὸ μαλακὸν τοῦ ὑγροῦ), τὸ δὲ σκληρὸν τοῦ ξηροῦ· σκληρὸν γὰρ ἐστι τὸ πεπηγός, τὸ δὲ πεπηγὸς ξηρόν. Λέγεται δὲ ξηρὸν καὶ ὑγρὸν πλεοναχῶς· ἀντίκειται γὰρ τῷ ξηρῷ καὶ τὸ ὑγρὸν καὶ τὸ διερὸν, καὶ πάλιν τῷ ὑγρῷ καὶ τὸ ξηρὸν καὶ τὸ πεπηγός· ἅπαντα δὲ ταῦτ' ἐστὶ τοῦ ξηροῦ καὶ τοῦ ὑγροῦ τῶν πρῶτως λεχθέντων.

Ἐπεὶ γὰρ ἀντίκειται τῷ διερῷ τὸ ξηρόν, καὶ διερὸν μὲν ἐστὶ τὸ ἔχον ἀλλοτρίαν ὑγρότητα ἐπιπολῆς, βεβρεγμένον δὲ τὸ εἰς βάθος, ξηρὸν δὲ τὸ ἐστερημένον ταύτης, φανερόν ὅτι τὸ μὲν διερὸν ἔσται τοῦ ὑγροῦ, τὸ δ' ἀντικείμενον ξηρὸν τοῦ πρῶτως ξηροῦ. Πάλιν δὲ τὸ ὑγρὸν καὶ τὸ πεπηγὸς ὡσαύτως· ὑγρὸν μὲν γὰρ ἐστὶ τὸ ἔχον οἰκείαν ὑγρότητα, βεβρεγμένον δὲ τὸ ἔχον ἀλλοτρίαν ὑγρότητα ἐν τῷ βάθει, πεπηγὸς δὲ τὸ ἐστερημένον ταύτης. Ὡστε καὶ τούτων ἔσται τὸ μὲν ξηροῦ τὸ δὲ ὑγροῦ. Δῆλον τοίνυν ὅτι πᾶσαι αἱ ἄλλαι διαφοραὶ ἀνάγονται εἰς τὰς πρῶτας τέτταρας. Αὗται δὲ οὐκέτι εἰς

ἐλάττους· οὔτε γὰρ τὸ θερμὸν ὅπερ ὑγρὸν ἢ ὅπερ ξηρόν, οὔτε τὸ ὑγρὸν ὅπερ θερμὸν ἢ ὅπερ ψυχρόν, οὔτε τὸ ψυχρὸν καὶ τὸ ξηρὸν οὔθ' ὑπ' ἄλληλ' οὔθ' ὑπὸ τὸ θερμὸν καὶ τὸ ὑγρὸν εἰσιν ὥστ' ἀνάγκη τέτταρας εἶναι ταύτας.

### Κεφάλαιο 3

Ἐπεὶ δὲ τέτταρα τὰ στοιχεῖα, τῶν δὲ τεττάρων ἕξ αἱ συζεύξεις, τὰ δ' ἐναντία οὐ πέφυκε συνδυάζεσθαι (θερμὸν γὰρ καὶ ψυχρὸν εἶναι τὸ αὐτὸ καὶ πάλιν ξηρὸν καὶ ὑγρὸν ἀδύνατον), φανερόν ὅτι τέτταρες ἔσονται αἱ τῶν στοιχείων συζεύξεις, θερμοῦ καὶ ξηροῦ, καὶ θερμοῦ καὶ ὑγροῦ, καὶ (330b.) πάλιν ψυχροῦ καὶ ὑγροῦ, καὶ ψυχροῦ καὶ ξηροῦ. Καὶ ἠκολούθηκε κατὰ λόγον τοῖς ἀπλοῖς φαινομένοις σώμασι, πυρὶ καὶ ἀέρι καὶ ὕδατι καὶ γῇ· τὸ μὲν γὰρ πῦρ θερμὸν καὶ ξηρόν, ὁ δ' ἀήρ θερμὸν καὶ ὑγρὸν (οἷον ἀτμὶς γὰρ ὁ ἀήρ), τὸ δ' ὕδωρ ψυχρὸν καὶ ὑγρὸν, ἡ δὲ γῆ ψυχρὸν καὶ ξηρόν, ὥστ' εὐλόγως διανέμεσθαι τὰς διαφορὰς τοῖς πρώτοις σώμασι, καὶ τὸ πλῆθος αὐτῶν εἶναι κατὰ λόγον. Ἄπαντες γὰρ οἱ τὰ ἀπλᾶ σώματα στοιχεῖα ποιοῦντες οἱ μὲν ἕν, οἱ δὲ δύο, οἱ δὲ τρία, οἱ δὲ τέτταρα ποιοῦσιν. Ὅσοι μὲν οὖν ἕν μόνον λέγουσιν, εἴτα πυκνῶσει καὶ μανῶσει τᾶλλα γεννῶσι, τούτοις συμβαίνει δύο ποιεῖν τὰς ἀρχάς, τό τε μανὸν καὶ τὸ πυκνὸν ἢ τὸ θερμὸν καὶ τὸ ψυχρόν· ταῦτα γὰρ τὰ δημιουργοῦντα, τὸ δ' ἕν ὑπόκειται καθάπερ ὕλη.

Οἱ δ' εὐθὺς δύο ποιοῦντες, ὥσπερ Παρμενίδης πῦρ καὶ γῆν, τὰ μεταξὺ μίγματα ποιοῦσι τούτων, οἷον ἀέρα καὶ ὕδωρ. Ὡσαύτως δὲ καὶ οἱ τρία λέγοντες, καθάπερ Πλάτων ἕν ταῖς διαιρέσεσιν· τὸ γὰρ μέσον μίγμα ποιεῖ. Καὶ σχεδὸν ταῦτα λέγουσιν οἱ τε δύο καὶ οἱ τρία ποιοῦντες· πλὴν οἱ μὲν τέμνουσιν εἰς δύο τὸ μέσον, οἱ δ' ἕν μόνον ποιοῦσιν. Ἐνιοὶ δ' εὐθὺς τέτταρα λέγουσιν, οἷον Ἐμπεδοκλῆς. Συνάγει δὲ καὶ οὗτος εἰς τὰ δύο· τῷ γὰρ πυρὶ τᾶλλα πάντα ἀντιτίθησιν. Οὐκ ἔστι δὲ τὸ πῦρ καὶ ὁ ἀήρ καὶ ἕκαστον τῶν εἰρημένων ἀπλοῦν, ἀλλὰ μικτόν.

Τὰ δ' ἀπλᾶ τοιαῦτα μὲν ἔστιν, οὐ μέντοι ταῦτά, οἷον εἴ τι τῷ πυρὶ ὅμοιον, πυροειδές, οὐ πῦρ, καὶ τὸ τῷ ἀέρι ἀεροειδές· ὁμοίως δὲ κάπὶ τῶν ἄλλων. Τὸ δὲ πῦρ ἔστιν ὑπερβολὴ θερμότητος, ὥσπερ καὶ κρύσταλλος ψυχρότητος· ἡ γὰρ πῆξις καὶ ἡ ζέσις ὑπερβολαί τινές εἰσιν, ἡ μὲν ψυχρότητος, ἡ δὲ θερμότητος. Εἰ οὖν ὁ κρύσταλλός ἐστι πῆξις ὑγροῦ ψυχροῦ, καὶ τὸ πῦρ ἔσται ζέσις ξηροῦ θερμοῦ. Διὸ καὶ οὐδὲν οὔτ' ἐκ κρυστάλλου γίνεται οὔτ' ἐκ πυρός.

Ὦντων δὲ τεττάρων τῶν ἀπλῶν σωμάτων, ἑκάτερα τοῖν δυοῖν ἑκατέρου τῶν

τόπων ἐστίν· πῦρ μὲν γὰρ καὶ ἀήρ τοῦ πρὸς τὸν ὄρον φερομένου, γῆ δὲ καὶ ὕδωρ τοῦ πρὸς τὸ μέσον. Καὶ ἄκρα μὲν καὶ εἰλικρινέστατα πῦρ καὶ γῆ, μέσα δὲ καὶ μεμιγμένα μᾶλλον (331a.) ὕδωρ καὶ ἀήρ. Καὶ ἑκάτερα ἑκατέροις ἐναντία· πυρὶ μὲν γὰρ ἐναντίον ὕδωρ, ἀέρι δὲ γῆ· ταῦτα γὰρ ἐκ τῶν ἐναντίων παθημάτων συνέστηκεν. Οὐ μὴν ἀλλ' ἀπλῶς γε τέτταρα ὄντα ἐνὸς ἑκαστόν ἐστι, γῆ μὲν ξηροῦ μᾶλλον ἢ ψυχροῦ, ὕδωρ δὲ ψυχροῦ μᾶλλον ἢ ὑγροῦ, ἀήρ δ' ὑγροῦ μᾶλλον ἢ θερμοῦ, πῦρ δὲ θερμοῦ μᾶλλον ἢ ξηροῦ.

## Κεφάλαιο 4

Ἐπεὶ δὲ διώρισται πρότερον ὅτι τοῖς ἀπλοῖς σώμασιν ἐξ ἀλλήλων ἡ γένεσις, ἅμα δὲ καὶ κατὰ τὴν αἴσθησιν φαίνεται γινόμενα (οὐ γὰρ ἂν ἦν ἀλλοιώσις· κατὰ γὰρ τὰ τῶν ἀπτῶν πάθη ἀλλοιώσις ἐστίν), λεκτέον τίς ὁ τρόπος τῆς εἰς ἄλληλα μεταβολῆς, καὶ πότερον ἅπαν ἐξ ἁπαντος γίνεσθαι δυνατόν ἢ τὰ μὲν δυνατόν τὰ δ' ἀδύνατον. Ὅτι μὲν οὖν ἅπαντα πέφυκεν εἰς ἄλληλα μεταβάλλειν, φανερόν· ἡ γὰρ γένεσις εἰς ἐναντία καὶ ἐξ ἐναντίων, τὰ δὲ στοιχεῖα πάντα ἔχει ἐναντίωσιν πρὸς ἄλληλα διὰ τὸ τὰς διαφορὰς ἐναντίας εἶναι· τοῖς μὲν γὰρ ἀμφοτέραι ἐναντία, οἷον πυρὶ καὶ ὕδατι (τὸ μὲν γὰρ ξηρὸν καὶ θερμόν, τὸ δ' ὑγρὸν καὶ ψυχρόν), τοῖς δ' ἡ ἑτέρα μόνον, οἷον ἀέρι καὶ ὕδατι (τὸ μὲν γὰρ ὑγρὸν καὶ θερμόν, τὸ δὲ ὑγρὸν καὶ ψυχρόν).

Ὡστε καθόλου μὲν φανερόν ὅτι πᾶν ἐκ παντὸς γίνεσθαι πέφυκεν, ἥδη δὲ καθ' ἑκαστον οὐ χαλεπὸν ἰδεῖν πῶς· ἅπαντα μὲν γὰρ ἐξ ἀπάντων ἔσται, διοίσει δὲ τῷ θάττον καὶ βραδύτερον καὶ τῷ ῥᾶον καὶ χαλεπώτερον. Ὅσα μὲν γὰρ ἔχει σύμβολα πρὸς ἄλληλα, ταχεῖα τούτων ἡ μετάβασις, ὅσα δὲ μὴ ἔχει, βραδεῖα, διὰ τὸ ῥᾶον εἶναι τὸ ἐν ἢ τὰ πολλὰ μεταβάλλειν, οἷον ἐκ πυρὸς μὲν ἔσται ἀήρ θατέρου μεταβάλλοντος (τὸ μὲν γὰρ ἦν θερμόν καὶ ξηρόν, τὸ δὲ θερμόν καὶ ὑγρόν, ὥστε ἂν κρατηθῇ τὸ ξηρὸν ὑπὸ τοῦ ὑγροῦ, ἀήρ ἔσται), πάλιν δὲ ἐξ ἀέρος ὕδωρ, ἐὰν κρατηθῇ τὸ θερμόν ὑπὸ τοῦ ψυχροῦ (τὸ μὲν γὰρ ἦν θερμόν καὶ ὑγρόν, τὸ δὲ ψυχρόν καὶ ὑγρόν, ὥστε μεταβάλλοντος τοῦ θερμοῦ ὕδωρ ἔσται). Τὸν αὐτὸν δὲ τρόπον καὶ ἐξ ὕδατος γῆ καὶ ἐκ γῆς πῦρ· ἔχει γὰρ ἄμφω πρὸς ἄμφω σύμβολα· τὸ μὲν γὰρ ὕδωρ ὑγρὸν καὶ ψυχρόν, ἡ δὲ γῆ ψυχρόν καὶ ξηρόν, ὥστε κρατηθέντος τοῦ ὑγροῦ γῆ ἔσται. Καὶ πάλιν ἐπεὶ τὸ μὲν πῦρ ξηρόν καὶ θερμόν, ἡ δὲ (331b.) γῆ ψυχρόν καὶ ξηρόν, ἐὰν φθαρῇ τὸ ψυχρόν, πῦρ ἔσται ἐκ γῆς. Ὡστε φανερόν ὅτι κύκλῳ τε ἔσται ἡ γένεσις τοῖς ἀπλοῖς σώμασι, καὶ ῥᾶστος οὗτος ὁ τρόπος τῆς μεταβολῆς διὰ τὸ σύμβολα ἐνυπάρχειν τοῖς ἐφεξῆς.

Ἐκ πυρὸς δὲ ὕδωρ καὶ ἐξ ἀέρος γῆν καὶ πάλιν ἐξ ὕδατος καὶ γῆς ἀέρα καὶ



πῦρ ἐνδέχεται μὲν γίνεσθαι, χαλεπώτερον δὲ διὰ τὸ πλειόνων εἶναι τὴν μεταβολήν· ἀνάγκη γάρ, εἰ ἔσται ἐξ ὕδατος πῦρ, φθαρήναι καὶ τὸ ψυχρὸν καὶ τὸ ὑγρὸν, καὶ πάλιν εἰ ἐκ γῆς ἀήρ, φθαρήναι καὶ τὸ ψυχρὸν καὶ τὸ ξηρόν. Ὡσαύτως δὲ καὶ εἰ ἐκ πυρὸς καὶ ἀέρος ὕδωρ καὶ γῆ, ἀνάγκη ἀμφοτέρα μεταβάλλειν. Αὕτη μὲν οὖν χρονιωτέρα ἢ γένεσις· ἐὰν δ' ἐκατέρου φθαρῇ θάτερον, ῥάων μὲν, οὐκ εἰς ἄλληλα δὲ ἢ μετάβασις, ἀλλ' ἐκ πυρὸς μὲν καὶ ὕδατος ἔσται γῆ καὶ ἀήρ, ἐξ ἀέρος δὲ καὶ γῆς πῦρ καὶ ὕδωρ. Ὅταν μὲν γὰρ τοῦ ὕδατος φθαρῇ τὸ ψυχρὸν τοῦ δὲ πυρὸς τὸ ξηρόν, ἀήρ ἔσται (λείπεται γὰρ τοῦ μὲν τὸ θερμὸν τοῦ δὲ τὸ ὑγρὸν), ὅταν δὲ τοῦ μὲν πυρὸς τὸ θερμὸν τοῦ δ' ὕδατος τὸ ὑγρὸν, γῆ, διὰ τὸ λείπεσθαι τοῦ μὲν τὸ ξηρόν τοῦ δὲ τὸ ψυχρὸν. Ὡσαύτως δὲ καὶ ἐξ ἀέρος καὶ γῆς πῦρ καὶ ὕδωρ· ὅταν μὲν γὰρ τοῦ ἀέρος φθαρῇ τὸ θερμὸν τῆς δὲ γῆς τὸ ξηρόν, ὕδωρ ἔσται (λείπεται γὰρ τοῦ μὲν τὸ ὑγρὸν τῆς δὲ τὸ ψυχρὸν), ὅταν δὲ τοῦ μὲν ἀέρος τὸ ὑγρὸν τῆς δὲ γῆς τὸ ψυχρὸν, πῦρ, διὰ τὸ λείπεσθαι τοῦ μὲν τὸ θερμὸν τῆς δὲ τὸ ξηρόν, ἅπερ ἦν πυρός.

Ὁμολογουμένη δὲ καὶ τῇ αἰσθήσει ἡ τοῦ πυρὸς γένεσις. Μάλιστα μὲν γὰρ πῦρ ἢ φλόξ, αὕτη δ' ἐστὶ καπνὸς καίόμενος, ὁ δὲ καπνὸς ἐξ ἀέρος καὶ γῆς. Ἐν δὲ τοῖς ἐφεξῆς οὐκ ἐνδέχεται φθαρέντος ἐν ἐκατέρῳ θατέρου τῶν στοιχείων γενέσθαι μετάβασιν εἰς οὐδέν τῶν σωμάτων διὰ τὸ λείπεσθαι ἐν ἀμφοῖν ἢ ταῦτ' ἢ τ' ἀναντία. Ἐξ οὐδετέρων δὲ ἐγχωρεῖ γίνεσθαι σῶμα, οἷον εἰ μὲν τοῦ πυρὸς φθαρεῖ τὸ ξηρόν, τοῦ δ' ἀέρος τὸ ὑγρὸν· λείπεται γὰρ ἐν ἀμφοῖν τὸ θερμόν· ἐὰν δ' ἐξ ἐκατέρου τὸ θερμόν, λείπεται τ' ἀναντία, ξηρόν καὶ ὑγρὸν. Ὁμοίως δὲ καὶ ἐν τοῖς ἄλλοις· ἐν ἅπασιν γὰρ τοῖς ἐφεξῆς ἐνυπάρχει τὸ μὲν ταῦτ' ὁ δ' ἐναντίον.

Ὡσθ' ἅμα δῆλον ὅτι τὰ μὲν ἐξ ἐνὸς εἰς ἐν μεταβαίνοντα ἐνὸς φθαρέντος γίνεται, τὰ δ' ἐκ δυοῖν εἰς ἐν πλειόνων. Ὅτι (332a.) μὲν οὖν ἅπαντα ἐκ παντὸς γίνεται, καὶ τίνα τρόπον εἰς ἄλληλα μετάβασις γίνεται, εἴρηται. Οὐ μὴν ἀλλ' ἔτι καὶ ὧδε θεωρήσωμεν περὶ αὐτῶν.

## Κεφάλαιο 5

Εἰ γὰρ ἐστὶ τῶν φυσικῶν σωμάτων ὕλη, ὥσπερ καὶ δοκεῖ ἐνίοις, ὕδωρ καὶ ἀήρ καὶ τὰ τοιαῦτα, ἀνάγκη ἥτοι ἐν ἡ δύο εἶναι ταῦτα ἢ πλείω. Ἐν μὲν δὲ πάντα οὐχ οἷόν τε, οἷον ἀέρα πάντα ἢ ὕδωρ ἢ πῦρ ἢ γῆν, εἴπερ ἢ μεταβολὴ εἰς τ' ἀναντία. Εἰ γὰρ εἴη ἀήρ, εἰ μὲν ὑπομένει, ἀλλοίωσις ἔσται ἀλλ' οὐ γένεσις. Ἄμα δ' οὐδ' οὕτω δοκεῖ, ὥστε ὕδωρ εἶναι ἅμα καὶ ἀέρα ἢ ἄλλ' ὅτιοῦν. Ἔσται δὲ τις ἐναντίωσις καὶ διαφορὰ ἧς ἕξει τι θάτερον μόριον, τὸ

πῦρ οἶον θερμότητα. Ἀλλὰ μὴν οὐκ ἔσται τό γε πῦρ ἀήρ θερμός· ἀλλοίωσίς τε γὰρ τὸ τοιοῦτον, καὶ οὐ φαίνεται. Ἄμα δὲ πάλιν εἰ ἔσται ἐκ πυρὸς ἀήρ, τοῦ θερμοῦ εἰς τοῦναντίον μεταβάλλοντος ἔσται. Ὑπάρξει ἄρα τῷ ἀέρι τοῦτο, καὶ ἔσται ὁ ἀήρ ψυχρόν τι. Ὡστε ἀδύνατον τὸ πῦρ ἀέρα θερμὸν εἶναι· ἅμα γὰρ τὸ αὐτὸ θερμὸν καὶ ψυχρὸν ἔσται. Ἄλλο τι ἄρ' ἀμφοτέρω τὸ αὐτὸ ἔσται, καὶ ἄλλη τις ὕλη κοινή.

Ὁ δ' αὐτὸς λόγος περὶ ἀπάντων, ὅτι οὐκ ἔστιν ἐν τούτων ἐξ οὗ τὰ πάντα. Οὐ μὴν οὐδ' ἄλλο τί γε παρὰ ταῦτα, οἶον μέσον τι ἀέρος καὶ ὕδατος ἢ ἀέρος καὶ πυρός, ἀέρος μὲν παχύτερον καὶ πυρός, τῶν δὲ λεπτότερον· ἔσται γὰρ ἀήρ καὶ πῦρ ἐκεῖνο μετ' ἐναντιότητος· ἀλλὰ στέρησις τὸ ἕτερον τῶν ἐναντίων· ὥστ' οὐκ ἐνδέχεται μονοῦσθαι ἐκεῖνο οὐδέποτε, ὥσπερ φασί τινες τὸ ἄπειρον καὶ τὸ περιέχον. Ὁμοίως ἄρα ὁτιοῦν τούτων ἢ οὐδέν. Εἰ οὖν μηδὲν αἰσθητόν γε πρότερον τούτων, ταῦτα ἂν εἴη πάντα. Ἀνάγκη τοίνυν ἢ αἰεὶ μένοντα καὶ ἀμετάβλητα εἰς ἄλληλα, ἢ μεταβάλλοντα, καὶ ἢ ἅπαντα, ἢ τὰ μὲν τὰ δ' οὐ, ὥσπερ ἐν τῷ Τιμαίῳ Πλάτων ἔγραψεν. Ὅτι μὲν τοίνυν μεταβάλλειν ἀνάγκη εἰς ἄλληλα, δέδεικται πρότερον· ὅτι δ' οὐχ ὁμοίως ταχέως ἄλλο ἐξ ἄλλου, εἴρηται πρότερον, ὅτι τὰ μὲν ἔχοντα σύμβολον θᾶπτον γίνεται ἐξ ἀλλήλων, τὰ δ' οὐκ ἔχοντα βραδύτερον.

Εἰ μὲν τοίνυν ἡ ἐναντιότης μία ἐστὶ καθ' ἣν μεταβάλλουσιν, ἀνάγκη δύο εἶναι· ἡ γὰρ ὕλη τὸ μέσον ἀναίσθητος οὕσα (332b.) καὶ ἀχώριστος. Ἐπεὶ δὲ πλείω ὁράται ὄντα, δύο ἂν εἶεν αἱ ἐλάχισται. Δύο δ' οὐσῶν οὐχ οἶόν τε τρία εἶναι, ἀλλὰ τέσσαρα, ὥσπερ φαίνεται· τοσαῦται γὰρ αἱ συζυγίαι· ἐξ γὰρ οὐσῶν τὰς δύο ἀδύνατον γενέσθαι διὰ τὸ ἐναντίας εἶναι ἀλλήλαις. Περὶ μὲν οὖν τούτων εἴρηται πρότερον.

Ὅτι δ' ἐπειδὴ μεταβάλλουσιν εἰς ἄλληλα, ἀδύνατον ἀρχὴν τινα εἶναι αὐτῶν ἢ ἐπὶ τῷ ἄκρῳ ἢ μέσῳ, ἐκ τῶνδε δῆλον. Ἐπὶ μὲν οὖν τοῖς ἄκροις οὐκ ἔσται, ὅτι πῦρ ἔσται ἢ γῆ πάντα· καὶ ὁ αὐτὸς λόγος τῷ φάναι ἐκ πυρὸς ἢ γῆς εἶναι πάντα.

Ὅτι δ' οὐδὲ μέσον, ὥσπερ δοκεῖ τισιν ἀήρ μὲν καὶ εἰς πῦρ μεταβάλλειν καὶ εἰς ὕδωρ, ὕδωρ δὲ καὶ εἰς ἀέρα καὶ εἰς γῆν· τὰ δ' ἔσχατα οὐκέτι εἰς ἄλληλα· δεῖ μὲν γὰρ στήναι καὶ μὴ εἰς ἄπειρον τοῦτο ἵεναι ἐπ' εὐθείας ἐφ' ἐκάτερα.

Ἄπειροι γὰρ ἐναντιότητες ἐπὶ τοῦ ἐνὸς ἔσσονται. Γῆ ἐφ' ᾧ Γ, ὕδωρ ἐφ' ᾧ Υ, ἀήρ ἐφ' ᾧ Α, πῦρ ἐφ' ᾧ Π. Εἰ δὴ τὸ Α μεταβάλλει εἰς τὸ Π καὶ Υ, ἐναντιότης ἔσται τῶν Α Π.

Ἐστω ταῦτα λευκότης καὶ μελανία. Πάλιν εἰ εἰς τὸ Υ τὸ Α, ἔσται ἄλλη· οὐ γὰρ ταῦτὸ τὸ Υ καὶ Π. Ἐστω δὲ ξηρότης καὶ ὑγρότης, τὸ μὲν Ξ ξηρότης, τὸ δὲ Υ ὑγρότης.

Οὐκοῦν εἰ μὲν μένει τὸ λευκόν, ὑπάρξει τὸ ὕδωρ ὑγρὸν καὶ λευκόν, εἰ δὲ μή, μέλαν ἔσται τὸ ὕδωρ· εἰς τάναντία γὰρ ἡ μεταβολή. Ἀνάγκη ἄρα ἢ λευκὸν ἢ μέλαν εἶναι τὸ ὕδωρ.

Ἐστω δὴ τὸ πρῶτον. Ὅμοίως τοίνυν καὶ τῷ Π τὸ Ξ ὑπάρξει ἢ ξηρότης. Ἐσται ἄρα καὶ τῷ Π τῷ πυρὶ μεταβολὴ εἰς τὸ ὕδωρ· ἐναντία γὰρ ὑπάρχει· τὸ μὲν γὰρ πῦρ τὸ πρῶτον μέλαν ἦν, ἔπειτα δὲ ξηρόν, τὸ δ' ὕδωρ ὑγρόν, ἔπειτα δὲ λευκόν. Φανερόν δὴ ὅτι πᾶσιν ἐξ ἀλλήλων ἔσται ἡ μεταβολή, καὶ ἐπὶ γε τούτων, ὅτι καὶ ἐν τῷ Γ τῇ γῇ ὑπάρξει τὰ λοιπά, καὶ δύο σύμβολα τὸ μέλαν καὶ τὸ ὑγρόν· ταῦτα γὰρ οὐ συνδεδυάσται πως.

Ὅτι δ' εἰς ἄπειρον οὐχ οἶόν τ' ἰέναι, ὅπερ μελλήσαντες δείξειν ἐπὶ τοῦτο ἔμπροσθεν ἤλθομεν, δῆλον ἐκ τῶνδε. Εἰ γὰρ πάλιν τὸ πῦρ, ἐφ' ᾧ Π, εἰς ἄλλο μεταβαλεῖ καὶ μὴ ἀνακάμψει, οἷον εἰς τὸ Ψ, ἐναντιότης τις τῷ πυρὶ καὶ τῷ Ψ ἄλλη ὑπάρξει τῶν εἰρημένων· οὐδενὶ γὰρ τὸ αὐτὸ ὑπόκειται τῶν Γ Υ Α Π (333a.) τὸ Ψ. Ἐστω δὴ τῷ μὲν Π τὸ Κ, τῷ δὲ Ψ τὸ Φ. Τὸ δὴ Κ πᾶσιν ὑπάρξει τοῖς Γ Υ Α Π· μεταβάλλουσι γὰρ εἰς ἄλληλα. Ἀλλὰ γὰρ τοῦτο μὲν ἔστω μήπω δεδειγμένον· ἀλλ' ἐκεῖνο δῆλον, ὅτι εἰ πάλιν τὸ Ψ εἰς ἄλλο, ἄλλη ἐναντιότης καὶ τῷ Ψ ὑπάρξει καὶ τῷ πυρὶ τῷ Π. Ὅμοίως δ' αἰεὶ μετὰ τοῦ προστιθεμένου ἐναντιότης τις ὑπάρξει τοῖς ἔμπροσθεν, ὥστ' εἰ ἄπειρα, καὶ ἐναντιότητες ἄπειροι τῷ ἐνὶ ὑπάρξουσιν. Εἰ δὲ τοῦτο, οὐκ ἔσται οὔτε ὀρίσασθαι οὐδὲν οὔτε γενέσθαι· δεήσει γάρ, εἰ ἄλλο ἔσται ἐξ ἄλλου, τοσαύτας διεξελεθεῖν ἐναντιότητας, καὶ ἔτι πλείους, ὥστ' εἰς ἕνια μὲν οὐδέποτ' ἔσται μεταβολή, οἷον εἰ ἄπειρα τὰ μεταξύ· ἀνάγκη δ', εἴπερ ἄπειρα τὰ στοιχεῖα· ἔτι δ' οὐδ' ἐξ ἀέρος εἰς πῦρ, εἰ ἄπειροι αἱ ἐναντιότητες. Γίνεται δὲ καὶ πάντα ἕν· ἀνάγκη γὰρ πάσας ὑπάρχειν τοῖς μὲν κάτω τοῦ Π τὰς τῶν ἄνωθεν, τούτοις δὲ τὰς τῶν κάτωθεν, ὥστε πάντα ἕν ἔσται.

## Κεφάλαιο 6

Θαυμάσειε δ' ἂν τις τῶν λεγόντων πλείω ἐνὸς τὰ στοιχεῖα τῶν σωμάτων ὥστε μὴ μεταβάλλειν εἰς ἄλληλα, καθάπερ Ἐμπεδοκλῆς φησι, πῶς ἐνδέχεται λέγειν αὐτοῖς εἶναι συμβλητὰ τὰ στοιχεῖα. Καίτοι λέγει οὕτω· “ταῦτα γὰρ ἴσα τε πάντα”. Εἰ μὲν οὖν κατὰ τὸ ποσόν, ἀνάγκη ταυτό τι εἶναι ὑπάρχον ἅπασι τοῖς συμβλητοῖς ᾧ μετροῦνται, οἷον εἰ ἐξ ὕδατος κοτύλης εἶεν ἀέρος δέκα· τὸ

αὐτό τι ἦν ἄρα ἄμφω, εἰ μετρεῖται τῷ αὐτῷ. Εἰ δὲ μὴ οὕτω κατὰ τὸ ποσὸν συμβλητὰ ὡς ποσὸν ἐκ ποσοῦ, ἀλλ' ὅσον δύναται, οἷον εἰ κοτύλη ὕδατος ἴσον δύναται ψύχειν καὶ δέκα ἀέρος, καὶ οὕτως κατὰ τὸ ποσὸν οὐχ ἢ ποσὸν συμβλητά, ἀλλ' ἢ δύναταί τι. Εἴη δ' ἂν καὶ μὴ τῷ τοῦ ποσοῦ μέτρῳ συμβάλλεσθαι τὰς δυνάμεις, ἀλλὰ κατ' ἀναλογίαν, οἷον ὡς τόδε λευκὸν τόδε θερμόν. Τὸ δ' ὡς τόδε σημαίνει ἐν μὲν ποιῶ τὸ ὅμοιον, ἐν δὲ τῷ ποσῷ τὸ ἴσον. Ἀτοπον δὴ φαίνεται, εἰ τὰ σώματα ἀμετάβλητα ὄντα μὴ ἀναλογία συμβλητά ἐστίν, ἀλλὰ μέτρῳ τῶν δυνάμεων καὶ τῷ εἶναι ἴσον θερμόν ἢ ὅμοιον πυρὸς τοσονδὶ καὶ ἀέρος πολλαπλάσιον· τὸ γὰρ αὐτὸ πλεῖον τῷ ὁμογενὲς εἶναι τοιοῦτον ἔξει τὸν λόγον.

Ἀλλὰ μὴν οὐδ' αὖξησης ἂν εἴη κατ' Ἐμπεδοκλέα, ἀλλ' ἢ (333b.) κατὰ πρόσθεσιν· πυρὶ γὰρ αὖξει τὸ πῦρ· “αὖξει δὲ χθῶν μὲν σφέτερον δέμας, αἰθέρα δ' αἰθήρ”. Ταῦτα δὲ προστίθεται· δοκεῖ δ' οὐχ οὕτως αὖξεσθαι τὰ αὐξανόμενα.

Πολὺν δὲ χαλεπώτερον ἀποδοῦναι περὶ γενέσεως τῆς κατὰ φύσιν. Τὰ γὰρ γινόμενα φύσει πάντα γίνεται ἢ ἀεὶ ἢ ὡς ἐπὶ τὸ πολὺ, τὰ δὲ παρὰ τὸ ἀεὶ καὶ ὡς ἐπὶ τὸ πολὺ ἀπὸ ταῦτομάτου καὶ ἀπὸ τύχης. Τί οὖν τὸ αἴτιον τοῦ ἐξ ἀνθρώπου ἄνθρωπον ἢ ἀεὶ ἢ ὡς ἐπὶ τὸ πολὺ, καὶ ἐκ τοῦ πυροῦ πυρὸν ἀλλὰ μὴ ἐλαίαν; ἢ καὶ ἐὰν ὡδὶ συντεθῇ ὅστοῦν; οὐ γὰρ ὅπως ἔτυχε συνελθόντων οὐδὲν γίνεται, καθ' ἃ ἐκεῖνός φησιν, ἀλλὰ λόγῳ τινί. Τί οὖν τούτων αἴτιον; οὐ γὰρ δὴ πῦρ γε ἢ γῆ. Ἀλλὰ μὴν οὐδ' ἡ φιλία καὶ τὸ νεῖκος· συγκρίσεως γὰρ <τὸ μὲν>, τὸ δὲ διακρίσεως αἴτιον. Τοῦτο δ' ἐστὶν ἡ οὐσία ἢ ἐκάστου, ἀλλ' οὐ “μόνον μίξις τε διάλλαξις τε μιγέντων”, ὥσπερ ἐκεῖνός φησιν. Τύχη δ' ἐπὶ τούτοις ὀνομάζεται, ἀλλ' οὐ λόγος· ἔστι γὰρ मिथῆναι ὡς ἔτυχεν. Τῶν δὲ φύσει ὄντων αἴτιον τὸ οὕτως ἔχειν, καὶ ἡ ἐκάστου φύσις αὕτη, περὶ ἧς οὐδὲν λέγει. Οὐδὲν ἄρα περὶ φύσεως λέγει.

Ἀλλὰ μὴν καὶ τὸ εὖ τοῦτο καὶ ἀγαθόν· ὁ δὲ τὴν μίξιν μόνον ἐπαινεῖ. Καίτοι τά γε στοιχεῖα διακρίνει οὐ τὸ νεῖκος, ἀλλ' ἡ φιλία τὰ φύσει πρότερα τοῦ θεοῦ· θεοὶ δὲ καὶ ταῦτα.

Ἔτι δὲ περὶ κινήσεως ἀπλῶς λέγει· οὐ γὰρ ἱκανὸν εἰπεῖν διότι ἡ φιλία καὶ τὸ νεῖκος κινεῖ, εἰ μὴ τοῦτ' ἦν φιλία εἶναι τὸ κινήσει τοιαδί, νεῖκει δὲ τὸ τοιαδί. Ἔδει οὖν ἢ ὀρίσασθαι ἢ ὑποθέσθαι ἢ ἀποδείξαι, ἢ ἀκριβῶς ἢ μαλακῶς, ἢ ἄλλως γέ πως. Ἔτι δ' ἐπεὶ φαίνεται καὶ βία καὶ παρὰ φύσιν κινούμενα τὰ σώματα καὶ κατὰ φύσιν, οἷον τὸ πῦρ ἄνω μὲν οὐ βία, κάτω δὲ βία, τῷ δὲ βία τὸ κατὰ φύσιν ἐναντίον, ἔστι δὲ τὸ βία, ἔστιν ἄρα καὶ τὸ κατὰ φύσιν

κινεῖσθαι. Ταύτην οὖν ἡ φιλία κινεῖ; ἢ οὐ; τοῦναντίον γὰρ τὴν γῆν ἄνω καὶ διακρίσει ἔοικεν, καὶ μᾶλλον τὸ νεῖκος αἴτιον τῆς κατὰ φύσιν κινήσεως ἢ ἡ φιλία. Ὡστε καὶ ὅλως παρὰ φύσιν ἡ φιλία ἂν εἴη μᾶλλον. Ἀπλῶς δὲ εἰ μὴ ἡ φιλία ἢ τὸ νεῖκος κινῶι, αὐτῶν τῶν σωμάτων οὐδεμία κίνησις ἐστὶν οὐδὲ μονή· ἀλλ’ ἄτοπον. Ἔτι δὲ καὶ φαίνεται κινούμενα· (334a.) διέκρινε μὲν γὰρ τὸ νεῖκος, ἠνέχθη δ’ ἄνω ὁ αἰθήρ οὐχ ὑπὸ τοῦ νείκους, ἀλλ’ ὅτε μὲν φησιν ὥσπερ ἀπὸ τύχης “οὕτω γὰρ συνέκυρσε θεῶν τοτέ, πολλάκι δ’ ἄλλως” ὅτε δὲ φησι πεφυκέναι τὸ πῦρ ἄνω φέρεσθαι, ὁ δ’ αἰθήρ, φησί, “<δ’ αὖ> μακρῆσι κατὰ χθόνα δύετο ῥίζαις”. Ἄμα δὲ καὶ τὸν κόσμον ὁμοίως ἔχειν φησὶν ἐπὶ τε τοῦ νείκους νῦν καὶ πρότερον ἐπὶ τῆς φιλίας. Τί οὖν ἐστὶ τὸ κινῶν πρῶτον καὶ αἴτιον τῆς κινήσεως; οὐ γὰρ δὴ ἡ φιλία καὶ τὸ νεῖκος, ἀλλὰ τινος κινήσεως ταῦτα αἴτια· εἰ δ’ ἔστιν, ἐκεῖνο ἀρχή· ἄτοπον δὲ καὶ εἰ ἡ ψυχὴ ἐκ τῶν στοιχείων ἢ ἓν τι αὐτῶν· αἱ γὰρ ἀλλοιώσεις αἱ τῆς ψυχῆς πῶς ἔσονται, οἷον τὸ μουσικὸν εἶναι καὶ πάλιν ἄμουςον, ἢ μνήμη ἢ λήθη; δῆλον γὰρ ὅτι εἰ μὲν πῦρ ἢ ψυχὴ, τὰ πάθη ὑπάρξει αὐτῇ ὅσα πυρὶ ἢ πῦρ· εἰ δὲ μικτόν, τὰ σωματικά· τούτων δ’ οὐδὲν σωματικόν. Ἀλλὰ περὶ μὲν τούτων ἑτέρας ἔργον ἐστὶ θεωρίας.

## Κεφάλαιο 7

Περὶ δὲ τῶν στοιχείων ἐξ ὧν τὰ σώματα συνέστηκεν, ὅσοις μὲν δοκεῖ τι εἶναι κοινὸν ἢ μεταβάλλειν εἰς ἄλληλα, ἀνάγκη εἰ θάτερον τούτων, καὶ θάτερον συμβαίνειν· ὅσοι δὲ μὴ ποιοῦσιν ἐξ ἀλλήλων γενεσὶν μηδ’ ὥς ἐξ ἐκάστου, πλὴν ὥς ἐκ τοίχου πλίνθους, ἄτοπον πῶς ἐξ ἐκείνων ἔσονται σάρκες καὶ ὅστ’ αὖ καὶ τῶν ἄλλων ὁτιοῦν. Ἐχει δὲ τὸ λεγόμενον ἀπορίαν καὶ τοῖς ἐξ ἀλλήλων γεννῶσιν, τίνα τρόπον γίνεται ἐξ αὐτῶν ἕτερόν τι παρ’ αὐτά. Λέγω δ’ οἷον ἔστιν ἐκ πυρὸς ὕδωρ καὶ ἐκ τούτου γίνεσθαι πῦρ· ἔστι γάρ τι κοινὸν ὑποκείμενον.

Ἀλλὰ δὴ καὶ σὰρξ ἐξ αὐτῶν γίνεται καὶ μυελός· ταῦτα δὴ γίνεται πῶς; ἐκείνοις τε γὰρ τοῖς λέγουσιν ὥς Ἐμπεδοκλῆς τίς ἐστὶ τρόπος; ἀνάγκη γὰρ σύνθεσιν εἶναι καθάπερ ἐξ πλίνθων καὶ λίθων τοῖχος· καὶ τὸ μίγμα δὲ τοῦτο ἐκ σωζομένων μὲν ἔσται τῶν στοιχείων, κατὰ μικρὰ δὲ παρ’ ἄλληλα συγκειμένων. Οὕτω δὴ σὰρξ καὶ τῶν ἄλλων ἕκαστον. Συμβαίνει δὴ μὴ ἐξ ὅτουοῦν μέρους σαρκὸς γίνεσθαι πῦρ καὶ ὕδωρ, ὥσπερ ἐκ κηροῦ γένοιτ’ ἂν ἐκ μὲν τουδὶ τοῦ μέρους σφαῖρα, πυραμὶς δ’ ἐξ ἄλλου τινός· ἀλλ’ ἐνεδέχετό γε ἐξ ἐκατέρου ἐκάτερον γενέσθαι. Τοῦτο μὲν δὴ τοῦτον γίνεται τὸν τρόπον ἐκ τῆς σαρκὸς ἐξ ὅτουοῦν ἄμφω· τοῖς δ’ ἐκείνως λέγουσιν οὐκ ἐνδέχεται, ἀλλ’ ὥς ἐκ τοίχου λίθος καὶ πλίνθος, (334b.) ἐκάτερον ἐξ ἄλλου τόπου καὶ

μέρους. Ὅμοίως δὲ καὶ τοῖς ποιοῦσι μίαν αὐτῶν ὕλην ἔχει τινὰ ἀπορίαν, πῶς ἔσται τι ἐξ ἀμφοτέρων, οἷον ψυχροῦ καὶ θερμοῦ ἢ πυρὸς καὶ γῆς. Εἰ ἐστὶν ἡ σὰρξ ἐξ ἀμφοῖν καὶ μηδέτερον ἐκείνων, μηδ' αὖ σύνθεσις σωζομένων, τί λείπεται πλὴν τὴν ὕλην εἶναι τὸ ἐξ ἐκείνων; ἢ γὰρ θατέρου φθορὰ ἢ θάτερον ποεῖ ἢ τὴν ὕλην.

Ἄρ' οὖν ἐπειδὴ ἐστὶ καὶ μᾶλλον καὶ ἥττον θερμὸν καὶ ψυχρόν, ὅταν μὲν ἀπλῶς ἢ θάτερον ἐντελεχείᾳ, δυνάμει θάτερον ἔσται. ὅταν δὲ μὴ παντελῶς, ἀλλ' ὡς μὲν θερμὸν ψυχρόν, ὡς δὲ ψυχρὸν θερμὸν διὰ τὸ μιγνύμενα φθείρειν τὰς ὑπεροχὰς ἀλλήλων, τότε οὐθ' ἡ ὕλη ἔσται οὔτε ἐκείνων τῶν ἐναντίων ἐκάτερον ἐντελεχείᾳ ἀπλῶς, ἀλλὰ μεταξύ· κατὰ δὲ τὸ δυνάμει μᾶλλον εἶναι θερμὸν ἢ ψυχρὸν ἢ τούναντίον, κατὰ τοῦτον τὸν λόγον διπλασίως θερμὸν δυνάμει ἢ ψυχρόν, ἢ τριπλασίως, ἢ κατ' ἄλλον τρόπον τοιοῦτον.

Ἔσται δὲ μὴ μὲν τῶν ἐναντίων ἢ τῶν στοιχείων, καὶ τὰ στοιχεῖα ἐξ ἐκείνων δυνάμει πῶς ὄντων, οὐχ οὕτω δὲ ὡς ἡ ὕλη, ἀλλὰ τὸν εἰρημένον τρόπον· καὶ ἔστιν οὕτω μὲν μίξις, ἐκείνως δὲ ὕλη τὸ γινόμενον. Ἐπεὶ δὲ καὶ πάσχει τάναντία κατὰ τὸν ἐν τοῖς πρώτοις διορισμόν· ἔστι γὰρ τὸ ἐνεργεῖα θερμὸν δυνάμει ψυχρὸν καὶ τὸ ἐνεργεῖα ψυχρὸν δυνάμει θερμόν, ὥστε ἐὰν μὴ ἰσάζῃ, μεταβάλλει εἰς ἄλληλα· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων ἐναντίων. Καὶ πρῶτον οὕτω τὰ στοιχεῖα μεταβάλλει, ἐκ δὲ τούτων σάρκες καὶ ὅστ' αὖ καὶ τὰ τοιαῦτα, τοῦ μὲν θερμοῦ γινόμενου ψυχροῦ, τοῦ δὲ ψυχροῦ θερμοῦ, ὅταν πρὸς τὸ μέσον ἔλθῃ· ἐνταῦθα γὰρ οὐδέτερον, τὸ δὲ μέσον πολὺ καὶ οὐκ ἀδιαίρετον. Ὅμοίως δὲ καὶ τὸ ξηρὸν καὶ ὑγρὸν καὶ τὰ τοιαῦτα κατὰ μεσότητα ποιοῦσι σάρκα καὶ ὅστον καὶ τάλλα.

## Κεφάλαιο 8

Ἄπαντα δὲ τὰ μικτὰ σώματα, ὅσα περὶ τὸν τοῦ μέσου τόπον ἐστίν, ἐξ ἀπάντων σύγκειται τῶν ἀπλῶν. Γῆ μὲν γὰρ ἐνυπάρχει πᾶσι διὰ τὸ ἕκαστον εἶναι μάλιστα καὶ πλεῖστον ἐν τῷ οἰκείῳ τόπῳ, ὕδωρ δὲ διὰ τὸ δεῖν μὲν ὀρίζεσθαι τὸ σύνθετον, μόνον δ' εἶναι τῶν ἀπλῶν εὐόριστον τὸ (335a.) ὕδωρ, ἔτι δὲ καὶ τὴν γῆν ἄνευ τοῦ ὑγροῦ μὴ δύνασθαι συμμένειν, ἀλλὰ τοῦτ' εἶναι τὸ συνέχον· εἰ γὰρ ἐξαιρεθείη τελέως ἐξ αὐτῆς τὸ ὑγρὸν, διαπίπτει ἅν. Γῆ μὲν οὖν καὶ ὕδωρ διὰ ταύτας ἐνυπάρχει τὰς αἰτίας, ἀτὴρ δὲ καὶ πῦρ, ὅτι ἐναντία ἐστὶ γῆ καὶ ὕδατι· γῆ μὲν γὰρ ἄερί, ὕδωρ δὲ πυρὶ ἐναντίον ἐστίν, ὡς ἐνδέχεται οὐσίαν οὐσίᾳ ἐναντίαν εἶναι. Ἐπεὶ οὖν αἱ γενέσεις ἐκ τῶν ἐναντίων εἰσίν, ἐνυπάρχει δὲ θάτερα ἅκρα τῶν ἐναντίων, ἀνάγκη καὶ θάτερον ἐνυπάρχειν, ὥστ' ἐν ἅπαντι τῷ συνθέτῳ πάντα τὰ ἀπλᾶ ἐνέσται. Μαρτυρεῖν

δ' ἔοικε καὶ ἡ τροφή ἐκάστων· ἅπαντα μὲν γὰρ τρέφεται τοῖς αὐτοῖς ἐξ ὧνπέρ ἐστιν, ἅπαντα δὲ πλείοσι τρέφεται. Καὶ γὰρ ἅπερ ἂν δόξειεν ἐνὶ μόνῳ τρέφεσθαι, τῷ ὕδατι τὰ φυτά, πλείοσι τρέφεται· μέμικται γὰρ τῷ ὕδατι γῆ· διὸ καὶ οἱ γεωργοὶ πειρῶνται μίξαντες ἄρδεν.

Ἐπεὶ δ' ἐστὶν ἡ μὲν τροφή τῆς ὕλης, τὸ δὲ τρεφόμενον συνειλημμένον τῇ ὕλῃ ἡ μορφή καὶ τὸ εἶδος, εὖλογον ἦδη τὸ μόνον τῶν ἀπλῶν σωμάτων τρέφεσθαι τὸ πῦρ ἀπάντων ἐξ ἀλλήλων γινομένων, ὥσπερ καὶ οἱ πρότεροι λέγουσιν· μόνον γάρ ἐστι καὶ μάλιστα τοῦ εἶδους τὸ πῦρ διὰ τὸ πεφυκέναι φέρεσθαι πρὸς τὸν ὅρον. Ἐκαστον δὲ πέφυκεν εἰς τὴν ἑαυτοῦ χώραν φέρεσθαι· ἡ δὲ μορφή καὶ τὸ εἶδος ἀπάντων ἐν τοῖς ὅροις. Ὅτι μὲν οὖν ἅπαντα τὰ σώματα ἐξ ἀπάντων συνέστηκε τῶν ἀπλῶν, εἴρηται.

## Κεφάλαιο 9

Ἐπεὶ δ' ἐστὶν ἓν ἡ γενητὰ καὶ φθαρτά, καὶ ἡ γένεσις τυγχάνει οὕσα ἐν τῷ περὶ τὸ μέσον τόπῳ, λεκτέον περὶ πάσης γενέσεως ὁμοίως πόσαι τε καὶ τίνες αὐτῆς ἀρχαί· ῥᾶον γὰρ οὕτω τὰ καθ' ἕκαστον θεωρήσομεν, ὅταν περὶ τῶν καθόλου λάβωμεν πρῶτον. Εἰσὶν οὖν καὶ τὸν ἀριθμὸν ἴσαι καὶ τῷ γένει αἱ αὐταὶ αἴπερ ἐν τοῖς αἰδίοις τε καὶ πρώτοις· ἡ μὲν γὰρ ἐστὶν ὡς ὕλη, ἡ δ' ὡς μορφή. Δεῖ δὲ καὶ τὴν τρίτην ἔτι προσυπάρχειν· οὐ γὰρ ἱκαναὶ πρὸς τὸ γεννηῖσαι αἱ δύο, καθάπερ οὐδ' ἐν τοῖς πρώτοις. Ὡς μὲν οὖν ὕλη τοῖς γενητοῖς ἐστὶν αἴτιον τὸ δυνατόν εἶναι καὶ μὴ εἶναι. Τὰ μὲν γὰρ ἐξ ἀνάγκης ἐστίν, οἷον τὰ αἰδία, τὰ δ' ἐξ ἀνάγκης οὐκ ἔστιν. Τούτων δὲ τὰ μὲν ἀδύνατον μὴ εἶναι, τὰ δὲ ἀδύνατον (335b.) εἶναι διὰ τὸ μὴ ἐνδέχεσθαι παρὰ τὸ ἀναγκαῖον ἄλλως ἔχειν. Ἐν ἓν δὲ καὶ εἶναι καὶ μὴ εἶναι δυνατόν, ὅπερ ἐστὶ τὸ γενητὸν καὶ φθαρτόν· ποτὲ μὲν γὰρ ἔστι τοῦτο, ποτὲ δ' οὐκ ἔστιν. Ὡστ' ἀνάγκη γένεσιν εἶναι καὶ φθορὰν περὶ τὸ δυνατόν εἶναι καὶ μὴ εἶναι. Διὸ καὶ ὡς μὲν ὕλη τοῦτ' ἐστὶν αἴτιον τοῖς γενητοῖς, ὡς δὲ τὸ οὐ ἔνεκεν ἡ μορφή καὶ τὸ εἶδος· τοῦτο δ' ἐστὶν ὁ λόγος ὁ τῆς ἐκάστου οὐσίας.

Δεῖ δὲ προσεῖναι καὶ τὴν τρίτην, ἣν ἅπαντες μὲν ὀνειρώπτουσι, λέγει δ' οὐδεὶς, ἀλλ' οἱ μὲν ἱκανὴν ὥθησαν αἰτίαν εἶναι πρὸς τὸ γίνεσθαι τὴν τῶν εἰδῶν φύσιν, ὥσπερ ὁ ἐν Φαίδωνι Σωκράτης· καὶ γὰρ ἐκεῖνος, ἐπιτιμήσας τοῖς ἄλλοις ὡς οὐδὲν εἰρηκόσιν, ὑποτίθεται ὅτι ἐστὶ τῶν ὄντων τὰ μὲν εἶδη τὰ δὲ μεθεκτικὰ τῶν εἰδῶν, καὶ ὅτι εἶναι μὲν ἕκαστον λέγεται κατὰ τὸ εἶδος, γίνεσθαι δὲ κατὰ τὴν μετάληψιν καὶ φθείρεσθαι κατὰ τὴν ἀποβολήν, ὥστ' εἰ ταῦτα ἀληθῆ, τὰ εἶδη οἶται ἐξ ἀνάγκης αἴτια εἶναι καὶ γενέσεως καὶ φθορᾶς. Οἱ δ' αὐτὴν τὴν ὕλην· ἀπὸ ταύτης γὰρ εἶναι τὴν κίνησιν. Οὐδέτεροι δὲ

λέγουσι καλῶς.

Εἰ μὲν γάρ ἐστιν αἷτια τὰ εἶδη, διὰ τί οὐκ ἀεὶ γεννᾷ συνεχῶς, ἀλλὰ ποτὲ μὲν ποτὲ δ' οὐ, ὄντων καὶ τῶν εἰδῶν ἀεὶ καὶ τῶν μεθεκτικῶν; ἔτι δ' ἐπ' ἐνίων θεωροῦμεν ἄλλο τὸ αἷτιον ὄν· ὑγίειαν γὰρ ὁ ἰατρὸς ἐμποιεῖ καὶ ἐπιστήμην ὁ ἐπιστήμων, οὔσης καὶ ὑγιείας αὐτῆς καὶ ἐπιστήμης καὶ τῶν μεθεκτικῶν· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν κατὰ δύναμιν πραττομένων. Εἰ δὲ τὴν ὕλην τις φήσειε γεννᾷν διὰ τὴν κίνησιν, φυσικώτερον μὲν ἂν λέγοι τῶν οὕτω λεγόντων· τὸ γὰρ ἀλλοιοῦν καὶ τὸ μετασχηματίζον αἰτιώτερόν τε τοῦ γεννᾷν, καὶ ἐν ἅπασιν εἰώθαμεν τοῦτο λέγειν τὸ ποιοῦν, ὁμοίως ἔν τε τοῖς φύσει καὶ ἐν τοῖς ἀπὸ τέχνης, ὃ ἂν ἦ κινητικόν.

Οὐ μὴν ἀλλὰ καὶ οὗτοι οὐκ ὀρθῶς λέγουσιν· τῆς μὲν γὰρ ὕλης τὸ πάσχειν ἐστὶ καὶ τὸ κινεῖσθαι, τὸ δὲ κινεῖν καὶ ποιεῖν ἑτέρας δυνάμεως. Δῆλον δὲ καὶ ἐπὶ τῶν τέχνη καὶ ἐπὶ τῶν φύσει γινομένων· οὐ γὰρ αὐτὸ ποιεῖ τὸ ὕδωρ ζῶον ἐξ αὐτοῦ, οὐδὲ τὸ ξύλον κλίνην, ἀλλ' ἡ τέχνη. Ὡστε καὶ οὗτοι διὰ τοῦτο λέγουσιν οὐκ ὀρθῶς, καὶ ὅτι παραλείπουσι τὴν κυριωτέραν αἷτιαν· ἐξαιροῦσι γὰρ τὸ τί ἦν εἶναι καὶ τὴν μορφήν.

(336a.) Ἔτι δὲ καὶ τὰς δυνάμεις ἀποδιδόρασι τοῖς σώμασι, δι' ἃς γεννῶσι, λίαν ὀργανικῶς, ἀφαιροῦντες τὴν κατὰ τὸ εἶδος αἷτιαν. Ἐπειδὴ γὰρ πέφυκεν, ὡς φασι, τὸ μὲν θερμὸν διακρίνειν τὸ δὲ ψυχρὸν συνιστάναι, καὶ τῶν ἄλλων ἕκαστον τὸ μὲν ποιεῖν τὸ δὲ πάσχειν, ἐκ τούτων λέγουσι καὶ διὰ τούτων ἅπαντα τᾶλλα γίνεσθαι καὶ φθείρεσθαι· φαίνεται δὲ καὶ τὸ πῦρ αὐτὸ κινούμενον καὶ πάσχον. Ἔτι δὲ παραπλήσιον ποιοῦσιν ὥσπερ εἴ τις τῷ πρίονι καὶ ἐκάστω τῶν ὀργάνων ἀπονέμοι τὴν αἷτιαν τῶν γινομένων· ἀνάγκη γὰρ πρίονος ὄντος διαιρεῖσθαι καὶ ξέοντος λεαίνεσθαι, καὶ ἐπὶ τῶν ἄλλων ὁμοίως. Ὡστ' εἰ ὅτι μάλιστα ποιεῖ καὶ κινεῖ τὸ πῦρ, ἀλλὰ πῶς κινεῖ οὐχ ὀρῶσιν, ὅτι χεῖρον ἢ τὰ ὄργανα.

## Κεφάλαιο 10

Ἡμῖν δὲ καθόλου τε πρότερον εἴρηται περὶ τῶν αἷτίων, καὶ νῦν διώρισται περὶ τε τῆς ὕλης καὶ τῆς μορφῆς.

Ἔτι δὲ ἐπεὶ ἡ κατὰ τὴν φορὰν κίνησις δέδεικται ὅτι αἰδῖος, ἀνάγκη τούτων ὄντων καὶ γένεσιν εἶναι συνεχῶς· ἡ γὰρ φορὰ ποιήσει τὴν γένεσιν ἐνδελεχῶς διὰ τὸ προσάγειν καὶ ἀπάγειν τὸ γεννητικόν. Ἄμα δὲ δῆλον ὅτι καὶ τὸ πρότερον καλῶς εἴρηται, τὸ πρῶτην τῶν μεταβολῶν τὴν φορὰν ἀλλὰ μὴ τὴν



γένεσιν εἰπεῖν· πολὺ γὰρ εὐλογώτερον τὸ ὄν τῷ μὴ ὄντι γενέσεως αἴτιον εἶναι ἢ τὸ μὴ ὄν τῷ ὄντι τοῦ εἶναι. Τὸ μὲν οὖν φερόμενον ἔστι, τὸ δὲ γινόμενον οὐκ ἔστιν· διὸ καὶ ἡ φορὰ προτέρα τῆς γενέσεως. Ἐπεὶ δ' ὑπόκειται καὶ δέδεικται συνεχῆς οὖσα τοῖς πράγμασι καὶ γένεσις καὶ φθορά, φαμέν δ' αἰτίαν εἶναι τὴν φορὰν τοῦ γίνεσθαι, φανερόν ὅτι μιᾶς μὲν οὔσης τῆς φορᾶς οὐκ ἐνδέχεται γίνεσθαι ἄμφω διὰ τὸ ἐναντία εἶναι· τὸ γὰρ αὐτὸ καὶ ὡσαύτως ἔχον ἀεὶ τὸ αὐτὸ πέφυκε ποιεῖν. Ὡστε ἦτοι γένεσις ἀεὶ ἔσται ἢ φθορά. Δεῖ <δὴ> πλείους εἶναι τὰς κινήσεις καὶ ἐναντίας, ἢ τῇ φορᾷ ἢ τῇ ἀνωμαλίᾳ· τῶν γὰρ ἐναντίων τάναντία αἴτια· διὸ καὶ οὐχ ἡ πρώτη φορὰ αἰτία ἐστὶ γενέσεως καὶ φθορᾶς, ἀλλ' ἡ κατὰ τὸν λοξὸν κύκλον· ἐν ταύτῃ γὰρ καὶ τὸ συνεχές ἐστὶ καὶ τὸ κινεῖσθαι δύο κινήσεις· ἀνάγκη γάρ, εἴ γε ἀεὶ ἔσται συνεχῆς γένεσις καὶ (336b.) φθορά, ἀεὶ μὲν τι κινεῖσθαι, ἵνα μὴ ἐπιλείπωσιν αὐταὶ αἱ μεταβολαί, δύο δ', ὅπως μὴ θάτερον συμβαίνει μόνον.

Τῆς μὲν οὖν συνεχείας ἡ τοῦ ὅλου φορὰ αἰτία, τοῦ δὲ προσιέναι καὶ ἀπιέναι ἢ ἔγκλισις· συμβαίνει γὰρ ὅτε μὲν πόρρω γίνεσθαι ὅτε δ' ἐγγύς. Ἀνίσου δὲ τοῦ διαστήματος ὄντος ἀνώμαλος ἔσται ἡ κίνησις· ὥστ' εἰ τῷ προσιέναι καὶ ἐγγύς εἶναι γεννᾶ, τῷ ἀπιέναι ταύτῃ τοῦτο καὶ πόρρω γίνεσθαι φθείρει, καὶ εἰ τῷ πολλάκις προσελθεῖν γεννᾶ, καὶ τῷ πολλάκις ἀπελθεῖν φθείρει· τῶν γὰρ ἐναντίων τάναντία αἴτια. Καὶ ἐν ἴσῳ χρόνῳ καὶ ἡ φθορὰ καὶ ἡ γένεσις ἡ κατὰ φύσιν. Διὸ καὶ οἱ χρόνοι καὶ οἱ βίοι ἐκάστων ἀριθμὸν ἔχουσι καὶ τούτῳ διορίζονται· πάντων γὰρ ἐστὶ τάξις, καὶ πᾶς βίος καὶ χρόνος μετρεῖται περιόδῳ, πλὴν οὐ τῇ αὐτῇ πάντες, ἀλλ' οἱ μὲν ἐλάττονι οἱ δὲ πλείονι· τοῖς μὲν γὰρ ἐνιαυτός, τοῖς δὲ μείζων, τοῖς δὲ ἐλάττων ἢ περίοδος ἐστὶ τὸ μέτρον.

Φαίνεται δὲ καὶ κατὰ τὴν αἴσθησιν ὁμολογούμενα τοῖς παρ' ἡμῶν λόγοις· ὁρῶμεν γὰρ ὅτι προσιόντος μὲν τοῦ ἡλίου γένεσις ἐστίν, ἀπιόντος δὲ φθίσις, καὶ ἐν ἴσῳ χρόνῳ ἐκάτερον· ἴσος γὰρ ὁ χρόνος τῆς φθορᾶς καὶ τῆς γενέσεως τῆς κατὰ φύσιν.

Ἀλλὰ συμβαίνει πολλάκις ἐν ἐλάττονι φθείρεσθαι διὰ τὴν πρὸς ἄλληλα σύγκρασιν· ἀνωμάλου γὰρ οὔσης τῆς ὕλης καὶ οὐ πανταχοῦ τῆς αὐτῆς ἀνάγκη καὶ τὰς γενέσεις ἀνωμάλους εἶναι καὶ τὰς μὲν θάπτους τὰς δὲ βραδυτέρας, ὥστε συμβαίνει διὰ τὴν τούτων γένεσιν ἄλλοις γίνεσθαι φθοράν.

Ἀεὶ δ', ὥσπερ εἴρηται, συνεχῆς ἔσται ἡ γένεσις καὶ ἡ φθορά, καὶ οὐδέποτε ὑπολείψει δι' ἣν εἴπομεν αἰτίαν. Τοῦτο δ' εὐλόγως συμβέβηκεν· ἐπεὶ γὰρ ἐν ἅπασιν ἀεὶ τοῦ βελτίονος ὀρέγεσθαι φαμεν τὴν φύσιν, βέλτιον δὲ τὸ εἶναι ἢ τὸ μὴ εἶναι (τὸ δ' εἶναι ποσαχῶς λέγομεν ἐν ἄλλοις εἴρηται), τοῦτο δ'

ἀδύνατον ἐν ἅπασιν ὑπάρχειν διὰ τὸ πόρρω τῆς ἀρχῆς ἀφίστασθαι, τῷ λειπομένῳ τρόπῳ συνεπλήρωσε τὸ ὅλον ὁ θεός, ἐνδελεχῇ ποιήσας τὴν γένεσιν· οὕτω γὰρ ἂν μάλιστα συνείροιο τὸ εἶναι διὰ τὸ ἐγγύτατα εἶναι τῆς οὐσίας τὸ γίνεσθαι ἀεὶ καὶ τὴν γένεσιν. Τούτου δ' αἴτιον, ὥσπερ (337a.) εἴρηται πολλάκις, ἡ κύκλῳ φορά· μόνη γὰρ συνεχῆς. Διὸ καὶ τὰλλα ὅσα μεταβάλλει εἰς ἄλληλα κατὰ τὰ πάθη καὶ τὰς δυνάμεις, οἷον τὰ ἀπλᾶ σώματα, μιμεῖται τὴν κύκλῳ φορὰν· ὅταν γὰρ ἐξ ὕδατος ἀὴρ γένηται καὶ ἐξ ἀέρος πῦρ καὶ πάλιν ἐκ πυρὸς ὕδωρ, κύκλῳ φαμὲν περιεληλυθέναι τὴν γένεσιν διὰ τὸ πάλιν ἀνακάμπειν. Ὡστε καὶ ἡ εὐθεῖα φορὰ μιμουμένη τὴν κύκλῳ συνεχῆς ἐστίν.

Ἄμα δὲ δῆλον ἐκ τούτων ὅτινες ἀποροῦσιν, διὰ τί ἐκάστου τῶν σωμάτων εἰς τὴν οἰκείαν φερομένου χώραν ἐν τῷ ἀπείρῳ χρόνῳ οὐ διεστᾶσι τὰ σώματα. Αἴτιον γὰρ τούτου ἐστὶν ἡ εἰς ἄλληλα μετάβασις· εἰ γὰρ ἕκαστον ἔμενεν ἐν τῇ αὐτοῦ χώρᾳ καὶ μὴ μετέβαλλεν ὑπὸ τοῦ πλησίον, ἤδη ἂν διεστήκεσαν.

Μεταβάλλει μὲν οὖν διὰ τὴν φορὰν διπλὴν οὕσαν· διὰ δὲ τὸ μεταβάλλειν οὐκ ἐνδέχεται μένειν οὐδὲν αὐτῶν ἐν οὐδεμιᾷ χώρᾳ τεταγμένη.

Διότι μὲν οὖν ἔστι γένεσις καὶ φθορὰ καὶ διὰ τίν' αἰτίαν, καὶ τί τὸ γενητὸν καὶ φθαρτόν, φανερόν ἐκ τῶν εἰρημένων. Ἐπεὶ δ' ἀνάγκη εἶναί τι τὸ κινούμενον εἰς κινήσεις ἔσται, ὥσπερ εἴρηται πρότερον ἐν ἑτέροις, καὶ εἰ ἀεὶ, ὅτι ἀεὶ τι δεῖ εἶναι, καὶ εἰ συνεχῆς, ἐν τῷ αὐτῷ καὶ ἀκίνητον καὶ ἀγέννητον καὶ ἀναλλοίωτον, καὶ εἰ πλείους εἶεν αἱ κύκλῳ κινήσεις, πλείους μὲν, πάσας δὲ πως εἶναι ταύτας ἀνάγκη ὑπὸ μίαν ἀρχήν· συνεχοῦς δ' ὄντος τοῦ χρόνου ἀνάγκη τὴν κίνησιν συνεχῇ εἶναι, εἴπερ ἀδύνατον χρόνον χωρὶς κινήσεως εἶναι· συνεχοῦς ἄρα τινὸς ἀριθμὸς ὁ χρόνος, τῆς κύκλῳ ἄρα, καθάπερ ἐν τοῖς ἐν ἀρχῇ λόγοις διωρίσθη. Συνεχῆς δ' ἡ κίνησις πότερον τῷ τὸ κινούμενον συνεχὲς εἶναι ἢ τῷ τὸ ἐν ᾧ κινεῖται, οἷον τὸν τόπον λέγω ἢ τὸ πάθος; δῆλον δὴ ὅτι τῷ τὸ κινούμενον· πῶς γὰρ τὸ πάθος συνεχὲς ἄλλ' ἢ τῷ τὸ πρᾶγμα ᾧ συμβέβηκε συνεχὲς εἶναι; εἰ δὲ καὶ τῷ ἐν ᾧ, μόνῳ τοῦτο τῷ τόπῳ ὑπάρχει μέγεθος γάρ τι ἔχει, τούτου δὲ τὸ κύκλῳ μόνον συνεχές, ὥστε αὐτὸ αὐτῷ ἀεὶ συνεχές. Τοῦτο ἄρα ἐστὶν ὃ ποιεῖ συνεχῇ κίνησιν, τὸ κύκλῳ σῶμα φερόμενον· ἡ δὲ κίνησις τὸν χρόνον.

## Κεφάλαιο 11

Ἐπεὶ δ' ἐν τοῖς συνεχῶς κινουμένοις κατὰ γένεσιν ἢ ἀλλοίωσιν ἢ ὅλως μεταβολὴν ὁρῶμεν τὸ ἐφεξῆς ὄν καὶ (337b.) γινόμενον τότε μετὰ τότε ὥστε

μὴ διαλείπειν, σκεπτέον πότερον ἔστι τι ὃ ἐξ ἀνάγκης ἔσται, ἢ οὐδέν, ἀλλὰ πάντα ἐνδέχεται μὴ γενέσθαι. Ὅτι μὲν γὰρ ἔνια, δῆλον, καὶ εὐθὺς τὸ ἔσται καὶ τὸ μέλλον ἕτερον διὰ τοῦτο· ὃ μὲν γὰρ ἀληθὲς εἶπεῖν ὅτι ἔσται, δεῖ τοῦτο εἶναί ποτε ἀληθὲς ὅτι ἐστίν· ὃ δὲ νῦν ἀληθὲς εἶπεῖν ὅτι μέλλει, οὐδὲν κωλύει μὴ γενέσθαι· μέλλων γὰρ ἂν βαδίζειν τις οὐκ ἂν βαδίσειεν. Ὅλως δ', ἐπεὶ ἐνδέχεται ἔνια τῶν ὄντων καὶ μὴ εἶναι, δῆλον ὅτι καὶ τὰ γινόμενα οὕτως ἔξει, καὶ οὐκ ἐξ ἀνάγκης τοῦτ' ἔσται.

Πότερον οὖν ἅπαντα τοιαῦτα ἢ οὐ, ἀλλ' ἔνια ἀναγκαῖον ἀπλῶς γίνεσθαι, καὶ ἔστιν ὥσπερ ἐπὶ τοῦ εἶναι τὰ μὲν ἀδύνατα μὴ εἶναι τὰ δὲ δυνατά, οὕτως καὶ περὶ τὴν γένεσιν; οἷον τροπᾶς ἄρα ἀνάγκη γενέσθαι, καὶ οὐχ οἷόν τε μὴ ἐνδέχεσθαι;

Εἰ δὴ τὸ πρότερον ἀνάγκη γενέσθαι, εἰ τὸ ὕστερον ἔσται, οἷον εἰ οἰκία, θεμέλιον, εἰ δὲ τοῦτο, πηλόν, ἄρ' οὖν καὶ εἰ θεμέλιος γέγονεν, ἀνάγκη οἰκίαν γενέσθαι; ἢ οὐκέτι, εἰ μὴ κάκεῖνο ἀνάγκη γενέσθαι ἀπλῶς· εἰ δὲ τοῦτο, ἀνάγκη καὶ θεμελίου γενομένου γενέσθαι οἰκίαν· οὕτω γὰρ ἦν τὸ πρότερον ἔχον πρὸς τὸ ὕστερον, ὥστ' εἰ ἐκεῖνο ἔσται, ἀνάγκη ἐκεῖνο πρότερον. Εἰ τοίνυν ἀνάγκη γενέσθαι τὸ ὕστερον, καὶ τὸ πρότερον ἀνάγκη· καὶ εἰ τὸ πρότερον, καὶ τὸ ὕστερον τοίνυν ἀνάγκη, ἀλλ' οὐ δι' ἐκεῖνο, ἀλλ' ὅτι ὑπέκειτο ἐξ ἀνάγκης ἐσόμενον. Ἐν οἷς ἄρα τὸ ὕστερον ἀνάγκη εἶναι, ἐν τούτοις ἀντιστρέφει, καὶ ἀεὶ τοῦ προτέρου γενομένου ἀνάγκη γενέσθαι τὸ ὕστερον. Εἰ μὲν οὖν εἰς ἄπειρον εἴσιν ἐπὶ τὸ κάτω, οὐκ ἔσται ἀνάγκη τὸ ὕστερον τόδε γενέσθαι ἀπλῶς. Ἀλλ' ἐξ ὑποθέσεως· ἀεὶ γὰρ ἕτερον ἔμπροσθεν ἀνάγκη ἔσται, δι' ὃ ἐκεῖνο ἀνάγκη γενέσθαι. Ὡστ' εἰ μὴ ἐστὶν ἀρχὴ τοῦ ἀπείρου, οὐδὲ πρῶτον ἔσται οὐδὲν δι' ὃ ἀναγκαῖον ἔσται γενέσθαι. Ἀλλὰ μὴν οὐδ' ἐν τοῖς πέρας ἔχουσι τοῦτ' ἔσται εἶπεῖν ἀληθῶς, ὅτι ἀπλῶς ἀνάγκη γενέσθαι, οἷον οἰκίαν, ὅταν θεμέλιος γένηται· ὅταν γὰρ γένηται, εἰ μὴ ἀεὶ τοῦτο ἀνάγκη γίνεσθαι, συμβήσεται ἀεὶ εἶναι τὸ ἐνδεχόμενον μὴ ἀεὶ εἶναι. Ἀλλὰ δεῖ τῇ γενέσει ἀεὶ εἶναι, εἰ ἐξ ἀνάγκης αὐτοῦ ἐστὶν ἡ γένεσις· τὸ γὰρ ἐξ ἀνάγκης καὶ ἀεὶ ἅμα· ὃ γὰρ εἶναι ἀνάγκη (338a.) οὐχ οἷόν τε μὴ εἶναι· ὥστ' εἰ ἔστιν ἐξ ἀνάγκης, αἰδιδόν ἐστι, καὶ εἰ αἰδιδόν, ἐξ ἀνάγκης. Καὶ εἰ ἡ γένεσις τοίνυν ἐξ ἀνάγκης, αἰδιδός ἡ γένεσις τούτου, καὶ εἰ αἰδιδός, ἐξ ἀνάγκης.

Εἰ ἄρα τινὸς ἐξ ἀνάγκης ἀπλῶς ἡ γένεσις, ἀνάγκη ἀνακυκλεῖν καὶ ἀνακάμπειν. Ἀνάγκη γὰρ ἦτοι πέρας ἔχειν τὴν γένεσιν ἢ μὴ, καὶ εἰ μὴ, ἢ εἰς εὐθὺ ἢ κύκλῳ. Τούτων δ' εἴπερ ἔσται αἰδιδός, οὐκ εἰς εὐθὺ οἷόν τε διὰ τὸ μηδαμῶς εἶναι ἀρχὴν μῆτ' ἂν κάτω, ὥς ἐπὶ τῶν ἐσομένων λαμβανομένων,

μήτ' ἄνω, ὡς ἐπὶ τῶν γενομένων· ἀνάγκη δ' εἶναι ἀρχήν, μὴ πεπερασμένης οὕσης, καὶ αἰδίου εἶναι. Διὸ ἀνάγκη κύκλῳ εἶναι. Ἀντιστρέφειν ἄρα ἀνάγκη ἔσται, οἷον εἰ τοδὶ ἐξ ἀνάγκης, καὶ τὸ πρότερον ἄρα· ἀλλὰ μὴν εἰ τοῦτο, καὶ τὸ ὕστερον ἀνάγκη γενέσθαι. Καὶ τοῦτο αἰεὶ δὴ συνεχῶς· οὐδὲν γὰρ τοῦτο διαφέρει λέγειν διὰ δύο ἢ πολλῶν. Ἐν τῇ κύκλῳ ἄρα κινήσει καὶ γενέσει ἐστὶ τὸ ἐξ ἀνάγκης ἀπλῶς· καὶ εἴτε κύκλῳ, ἀνάγκη ἕκαστον γίνεσθαι καὶ γεγονέναι, καὶ εἰ ἀνάγκη, ἢ τούτων γένεσις κύκλῳ.

Ταῦτα μὲν δὴ εὐλόγως, ἐπεὶ αἰδίου καὶ ἄλλως ἐφάνη ἡ κύκλῳ κίνησις καὶ ἡ τοῦ οὐρανοῦ, ὅτι ταῦτα ἐξ ἀνάγκης γίνεται καὶ ἔσται, ὅσαι (338b.) ταύτης κινήσεις καὶ ὅσαι διὰ ταύτην· εἰ γὰρ τὸ κύκλῳ κινούμενον αἰεὶ τι κινεῖ, ἀνάγκη καὶ τούτων κύκλῳ εἶναι τὴν κίνησιν, οἷον τῆς ἄνω φορᾶς οὕσης κύκλῳ ὁ ἥλιος ὡδί, ἐπεὶ δ' οὕτως, αἰεὶ ὥραι διὰ τοῦτο κύκλῳ γίνονται καὶ ἀνακάμπουσιν, τούτων δ' οὕτω γινομένων πάλιν τὰ ὑπὸ τούτων.

Τί οὖν δὴ ποτε τὰ μὲν οὕτω φαίνεται, οἷον ὕδατα καὶ ἀῆρ κύκλῳ γινόμενα, καὶ εἰ μὲν νέφος ἔσται, δεῖ ὕσαι, καὶ εἰ ὕσει γε, δεῖ καὶ νέφος εἶναι, ἄνθρωποι δὲ καὶ ζῶα οὐκ ἀνακάμπουσιν εἰς αὐτοὺς ὥστε πάλιν γίνεσθαι τὸν αὐτόν· οὐ γὰρ ἀνάγκη, εἰ ὁ πατήρ ἐγένετο, σὲ γενέσθαι· ἀλλ' εἰ σύ, ἐκεῖνον. Εἰς εὐθὺ δὲ ἔοικεν εἶναι αὕτη ἡ γένεσις.

Ἀρχὴ δὲ τῆς σκέψεως πάλιν αὕτη, πότερον ὁμοίως ἅπαντα ἀνακάμπει ἢ οὐ, ἀλλὰ τὰ μὲν ἀριθμῶ τὰ δὲ εἶδει μόνον.

Ὅσων μὲν οὖν ἄφθαρτος ἡ οὐσία ἢ κινουμένη, φανερόν ὅτι καὶ ἀριθμῶ ταῦτα ἔσται (ἡ γὰρ κίνησις ἀκολουθεῖ τῷ κινουμένῳ), ὅσων δὲ μὴ ἀλλὰ φθαρτή, ἀνάγκη τῷ εἶδει, ἀριθμῶ δὲ μὴ ἀνακάμπειν. Διὸ ὕδωρ ἐξ ἀέρος καὶ ἀῆρ ἐξ ὕδατος εἶδει ὁ αὐτός, οὐκ ἀριθμῶ. Εἰ δὲ καὶ ταῦτα ἀριθμῶ, ἀλλ' οὐχ ὧν ἡ οὐσία γίνεται οὕσα τοιαύτη οἷα ἐνδέχεσθαι μὴ εἶναι.

## Μετεωρολογικά (338a) Meteorology



Βιβλίο Α' Περὶ μὲν οὖν τῶν πρώτων αἰτίων τῆς φύσεως καὶ περὶ πάσης κινήσεως φυσικῆς, ἔτι δὲ περὶ τῶν κατὰ τὴν ἄνω φορὰν διακεκοσμημένων ἄστρον καὶ περὶ τῶν στοιχείων τῶν σωματικῶν, πόσα τε καὶ ποῖα, καὶ τῆς εἰς ἄλληλα μεταβολῆς, καὶ περὶ γενέσεως καὶ φθορᾶς τῆς κοινῆς εἴρηται πρότερον. λοιπὸν δ' ἐστὶ μέρος τῆς μεθόδου ταύτης ἔτι θεωρητέον, ὃ πάντες οἱ πρότεροι μετεωρολογίαν ἐκάλουν· ταῦτα [338b.20] δ' ἐστὶν ὅσα συμβαίνει κατὰ φύσιν μὲν, ἀτακτοτέραν μέντοι τῆς τοῦ πρώτου στοιχείου τῶν σωμάτων, περὶ τὸν γειννιῶντα μάλιστα τόπον τῇ φορᾷ τῇ τῶν ἄστρον, οἷον περί τε γάλακτος καὶ κομητῶν καὶ τῶν ἐκπυρουμένων καὶ κινουμένων φασμάτων, ὅσα τε θεῖημεν ἂν ἀέρος εἶναι κοινὰ πάθη καὶ ὕδατος, ἔτι δὲ γῆς ὅσα μέρη καὶ εἶδη καὶ πάθη τῶν μερῶν, ἐξ ὧν περί τε πνευμάτων καὶ σεισμῶν θεωρήσασιν ἂν τὰς αἰτίας [339a] καὶ περὶ πάντων τῶν γιγνομένων κατὰ τὰς κινήσεις τὰς τούτων· ἐν οἷς τὰ μὲν ἀποροῦμεν, τῶν δὲ ἐφαπτόμεθά τινα τρόπον· ἔτι δὲ περὶ κεραυνῶν πτώσεως καὶ τυφόνων καὶ πρηστήρων καὶ τῶν ἄλλων τῶν ἐγκυκλίων, ὅσα διὰ πῆξιν συμβαίνει πάθη τῶν αὐτῶν σωμάτων τούτων. διελθόντες δὲ περὶ τούτων, θεωρήσωμεν εἴ τι δυνάμεθα κατὰ τὸν ὑψηγημένον τρόπον ἀποδοῦναι περὶ ζώων καὶ φυτῶν, καθόλου τε καὶ χωρὶς· σχεδὸν γὰρ τούτων ῥηθέντων τέλος ἂν εἴη γεγονὸς τῆς ἐξ ἀρχῆς ἡμῖν προαιρέσεως πάσης. ὧδ' οὖν ἀρξάμενοι λέγωμεν περὶ αὐτῶν πρῶτον.

ἐπειδὴ γὰρ διώρισται πρότερον ἡμῖν μία μὲν ἀρχὴ τῶν σωμάτων, ἐξ ὧν συνέστηκεν ἡ τῶν ἐγκυκλίως φερομένων σωμάτων φύσις, ἄλλα δὲ τέτταρα σώματα διὰ τὰς τέτταρας ἀρχάς, ὧν διπλὴν εἶναί φαμεν τὴν κίνησιν, τὴν μὲν ἀπὸ τοῦ μέσου τὴν δ' ἐπὶ τὸ μέσον· τεττάρων δ' ὄντων τούτων, πυρὸς καὶ ἀέρος καὶ ὕδατος καὶ γῆς, τὸ μὲν τούτοις πᾶσιν ἐπιπολάζον εἶναι πῦρ, τὸ δ' ὑφιστάμενον γῆν· δύο δὲ ἅ πρὸς αὐτὰ τούτοις ἀνάλογον ἔχει (ἄηρ μὲν γὰρ πυρὸς ἐγγυτάτω τῶν ἄλλων, ὕδωρ δὲ γῆς)· ὁ δὲ περὶ τὴν γῆν ὅλος κόσμος ἐκ τούτων συνέστηκε τῶν σωμάτων· περὶ οὗ τὰ συμβαίνοντα πάθη φαμέν εἶναι ληπτέον. ἔστιν δ' ἐξ ἀνάγκης συνεχῆς οὗτος ταῖς ἄνω φοραῖς, ὥστε πᾶσαν αὐτοῦ τὴν δύναμιν κυβερνᾶσθαι ἐκεῖθεν· ὅθεν γὰρ ἡ τῆς κινήσεως ἀρχὴ πᾶσιν, ἐκείνην αἰτίαν νομιστέον πρῶτην. πρὸς δὲ τούτοις ἡ μὲν αἰδῖος καὶ τέλος οὐκ ἔχουσα τῷ τόπῳ τῆς κινήσεως, ἀλλ' ἀεὶ ἐν τέλει· ταῦτα δὲ τὰ σώματα πάντα πεπερασμένους διέστηκε τόπους ἀλλήλων. ὥστε τῶν

συμβαινόντων περὶ αὐτὸν πῦρ μὲν καὶ γῆν καὶ τὰ συγγενῇ τούτοις ὡς ἐν ὕλης εἶδει τῶν γιγνομένων αἴτια χρὴ νομίζειν (τὸ γὰρ ὑποκείμενον καὶ πάσχον τοῦτον προσαγορεύομεν τὸν τρόπον), τὸ δ' οὕτως αἴτιον ὅθεν ἡ τῆς κινήσεως ἀρχή, τὴν τῶν ἀεὶ κινουμένων αἰτιατέον δύναμιν.

ἀναλαβόντες οὖν τὰς ἐξ ἀρχῆς θέσεις καὶ τοὺς εἰρημένους πρότερον διορισμούς, λέγωμεν περὶ τε τῆς τοῦ γάλακτος φαντασίας καὶ περὶ κομητῶν καὶ τῶν ἄλλων ὅσα τυγχάνει τούτοις ὄντα συγγενῇ. φαμὲν δὲ πῦρ καὶ ἀέρα καὶ ὕδωρ καὶ γῆν γίνεσθαι ἐξ ἀλλήλων, καὶ ἕκαστον ἐν ἑκάστῳ [339b] ὑπάρχειν τούτων δυνάμει, ὥσπερ καὶ τῶν ἄλλων οἷς ἐν τι καὶ ταῦτόν ὑπόκειται, εἰς ὃ δὲ ἀναλύονται ἔσχατον. πρῶτον μὲν οὖν ἀπορήσειεν ἂν τις περὶ τὸν καλούμενον ἀέρα, τίνα τε χρὴ λαβεῖν αὐτοῦ τὴν φύσιν ἐν τῷ περιέχοντι κόσμῳ τὴν γῆν, καὶ πῶς ἔχει τῇ τάξει πρὸς τᾶλλα τὰ λεγόμενα στοιχεῖα τῶν σωμάτων. ὁ μὲν γὰρ δὴ τῆς γῆς ὄγκος πηλίκος ἂν τις εἴη πρὸς τὰ περιέχοντα μεγέθη, οὐκ ἄδηλον· ἤδη γὰρ ὥπται διὰ τῶν ἀστρολογικῶν θεωρημάτων ἡμῖν ὅτι πολὺ καὶ τῶν ἄστρον ἐνίων ἐλάττων ἐστίν. ὕδατος δὲ φύσιν συνεστηκυῖαν καὶ ἀφωρισμένην οὐθ' ὀρώμεν οὐτ' ἐνδέχεται κεχωρισμένην εἶναι τοῦ περὶ τὴν γῆν ἰδρυμένου σώματος, οἷον τῶν τε φανερῶν, θαλάττης καὶ ποταμῶν, κἂν εἴ τι κατὰ βάθους ἄδηλον ἡμῖν ἐστίν. τὸ δὲ δὴ μεταξὺ τῆς γῆς τε καὶ τῶν ἐσχάτων ἄστρον πότερον ἐν τι νομιστέον εἶναι σῶμα τὴν φύσιν ἢ πλείω, κἂν εἴ πλείω, πόσα, καὶ μέχρι ποῦ διώρισται τοῖς τόποις; ἡμῖν μὲν οὖν εἴρηται πρότερον περὶ τοῦ πρώτου στοιχείου, ποῖόν τι τὴν δυνάμιν ἐστίν, καὶ διότι πᾶς ὁ περὶ τὰς ἄνω φορὰς κόσμος ἐκείνου τοῦ σώματος πλήρης ἐστί. καὶ ταύτην τὴν δόξαν οὐ μόνον ἡμεῖς τυγχάνομεν ἔχοντες, φαίνεται δὲ ἀρχαία τις ὑπόληψις αὕτη καὶ τῶν πρότερον ἀνθρώπων· ὁ γὰρ λεγόμενος αἰθὴρ παλαιὰν εἴληφε τὴν προσηγορίαν, ἣν Ἀναξαγόρας μὲν τῷ πυρὶ ταῦτόν ἡγήσασθαι μοι δοκεῖ σημαίνειν· τὰ τε γὰρ ἄνω πλήρη πυρὸς εἶναι, κἀκεῖνος τὴν ἐκεῖ δύναμιν αἰθέρα καλεῖν ἐνόμισεν, τοῦτο μὲν ὀρθῶς νομίσας· τὸ γὰρ ἀεὶ σῶμα θεὸν ἅμα καὶ θεῖόν τι τὴν φύσιν εἰκόσιν ὑπολαβεῖν, καὶ διώρισαν ὀνομάζειν αἰθέρα τὸ τοιοῦτον ὡς ὃν οὐδενὶ τῶν παρ' ἡμῖν τὸ αὐτό· οὐ γὰρ δὴ φήσομεν ἅπαξ οὐδὲ δις οὐδ' ὀλιγάκις τὰς αὐτὰς δόξας ἀνακυκλεῖν γιγνομένας ἐν τοῖς ἀνθρώποις, ἀλλ' ἀπειράκις. ὅσοι δὲ πῦρ καθαρὸν εἶναί φασι τὸ περιέχον καὶ μὴ μόνον τὰ φερόμενα σώματα, τὸ δὲ μεταξὺ γῆς καὶ τῶν ἄστρον ἀέρα, θεωρήσαντες ἂν τὰ νῦν δεικνύμενα διὰ τῶν μαθημάτων ἱκανῶς ἴσως ἂν ἐπαύσαντο ταύτης τῆς παιδικῆς δόξης· λίαν γὰρ ἀπλοῦν τὸ νομίζειν μικρὸν τοῖς μεγέθεσιν εἶναι τῶν φερομένων ἕκαστον, ὅτι φαίνεται θεωροῦσιν ἐντεῦθεν ἡμῖν οὕτως. εἴρηται μὲν οὖν καὶ πρότερον ἐν τοῖς περὶ τὸν ἄνω τόπον θεωρήμασι· λέγωμεν δὲ τὸν αὐτὸν λόγον καὶ νῦν. [340a] εἰ γὰρ τὰ τε διαστήματα πλήρη πυρὸς καὶ τὰ σώματα συνέστηκεν ἐκ

πυρός, πάλαι φροῦδον ἂν ἦν ἕκαστον τῶν ἄλλων στοιχείων. ἀλλὰ μὴν οὐδ' αἰθέρος γε μόνου πλήρη· πολὺ γὰρ ἂν ὑπερβάλλοι τὴν ἰσότητα τῆς κοινῆς ἀναλογίας πρὸς τὰ σύστοιχα σώματα, κἂν εἰ δύο στοιχείων πλήρης ὁ μεταξὺ γῆς τε καὶ οὐρανοῦ τόπος ἐστίν· οὐδὲν γὰρ ὡς εἰπεῖν μόριον ὁ τῆς γῆς ἐστὶν ὄγκος, ἐν ᾧ συνείληπται πᾶν καὶ τὸ τοῦ ὕδατος πλῆθος, πρὸς τὸ περιέχον μέγεθος. ὁρῶμεν δ' οὐκ ἐν τοσοῦτῳ μεγέθει γιγνομένην τὴν ὑπεροχὴν τῶν ὄγκων, ὅταν ἐξ ὕδατος ἀῆρ γένηται διακριθέντος ἢ πῦρ ἐξ αἰθέρος· ἀνάγκη δὲ τὸν αὐτὸν ἔχειν λόγον ὃν ἔχει τὸ τοσονδὶ καὶ μικρὸν ὕδωρ πρὸς τὸν ἐξ αὐτοῦ γιγνόμενον αἶρα, καὶ τὸν πάντα πρὸς τὸ πᾶν ὕδωρ. διαφέρει δ' οὐδὲν οὐδ' εἴ τις φήσῃ μὲν μὴ γίνεσθαι ταῦτα ἐξ ἀλλήλων, ἴσα μέντοι τὴν δύναμιν εἶναι· κατὰ τοῦτον γὰρ τὸν τρόπον ἀνάγκη τὴν ἰσότητα τῆς δυνάμεως ὑπάρχειν τοῖς μεγέθεσιν αὐτῶν, ὥσπερ κἂν εἰ γιγνόμενα ἐξ ἀλλήλων ὑπῆρχεν. ὅτι μὲν οὖν οὕτ' ἀῆρ οὔτε πῦρ συμπεπλήρωκε μόνον τὸν μεταξὺ τόπον, φανερόν ἐστι· λοιπὸν δὲ διαπορήσαντας εἰπεῖν πῶς τέτακται τὰ δύο πρὸς τὴν τοῦ πρώτου σώματος θέσιν, λέγω δὲ αἶρα τε καὶ πῦρ, καὶ διὰ τίν' αἰτίαν ἢ θερμότης ἀπὸ τῶν ἄνωθεν ἄστρον γίνεται τοῖς περὶ τὴν γῆν τοποῖς. περὶ αἰθέρος οὖν εἰπόντες πρῶτον, ὥσπερ ὑπεθέμεθα, λέγωμεν οὕτω καὶ περὶ τούτων πάλιν. εἰ δὴ γίνεται ὕδωρ ἐξ αἰθέρος καὶ ἀῆρ ἐξ ὕδατος, διὰ τίνα ποτ' αἰτίαν οὐ συνίσταται νέφη κατὰ τὸν ἄνω τόπον; προσῆκε γὰρ μᾶλλον ὅσω πορρώτερον ὁ τόπος τῆς γῆς καὶ ψυχρότερος, διὰ τὸ μήθ' οὕτω πλησίον εἶναι τῶν ἄστρον θερμῶν ὄντων μήτε τῶν ἀπὸ τῆς γῆς ἀνακλωμένων ἀκτίνων, αἱ κωλύουσι πλησίον τῆς γῆς συνίστασθαι, διακρίνουσαι τῇ θερμότητι τὰς συστάσεις· γίνονται γὰρ αἱ τῶν νεφῶν ἀθροίσεις, οὐ λήγουσιν ἤδη διὰ τὸ σχίζεσθαι εἰς ἀχανὲς αἱ ἀκτῖνες. ἢ οὖν οὐκ ἐξ ἅπαντος τοῦ αἰθέρος πέφυκεν ὕδωρ γίνεσθαι, ἢ εἰ ὁμοίως ἐξ ἅπαντος, ὁ περὶ τὴν γῆν οὐ μόνον ἀῆρ ἐστὶν ἀλλ' οἶον ἀτμὶς, διὸ πάλιν συνίσταται εἰς ὕδωρ. ἀλλὰ μὴν εἰ τοσοῦτος ὢν ὁ ἀῆρ ἅπας ἀτμὶς ἐστὶ, δόξειεν ἂν πολὺ ὑπερβάλλειν ἢ τοῦ αἰθέρος φύσις καὶ ἢ τοῦ ὕδατος, εἴπερ τὰ τε διαστήματα τῶν ἄνω πλήρη ἐστὶ [340b] σώματός τινος, καὶ πυρὸς μὲν ἀδύνατον διὰ τὸ κατεξηράνθαι ἂν τᾶλλα πάντα, λείπεται δ' αἰθέρος καὶ τοῦ περὶ τὴν γῆν πᾶσαν ὕδατος· ἢ γὰρ ἀτμὶς ὕδατος διάκρισις ἐστὶν. περὶ μὲν οὖν τούτων ἠπορήσθω τοῦτον τὸν τρόπον· ἡμεῖς δὲ λέγωμεν ἅμα πρὸς τε τὰ λεχθησόμενα διορίζοντες καὶ πρὸς τὰ νῦν εἰρημένα. τὸ μὲν γὰρ ἄνω καὶ μέχρι σελήνης ἕτερον εἶναι σῶμα φαμεν πυρὸς τε καὶ αἰθέρος, οὐ μὴν ἀλλ' ἐν αὐτῷ γε τὸ μὲν καθαρώτερον εἶναι τὸ δ' ἥττον εἰλικρινές, καὶ διαφορὰς ἔχειν, καὶ μάλιστα ἢ καταλήγει πρὸς τὸν αἶρα καὶ πρὸς τὸν περὶ τὴν γῆν κόσμον. φερομένου δὲ τοῦ πρώτου στοιχείου κύκλῳ καὶ τῶν ἐν αὐτῷ σωμάτων, τὸ προσεχὲς αἰεὶ τοῦ κάτω κόσμου καὶ σώματος τῇ κινήσει διακρινόμενον ἐκπυροῦται καὶ ποιεῖ τὴν θερμότητα. δεῖ δὲ νοεῖν οὕτως καὶ

έντεϋθεν άρξαμένους. τὸ γάρ ὑπὸ τὴν ἄνω περιφορὰν σῶμα οἶον ὕλη τις οὔσα καὶ δυνάμει θερμὴ καὶ ψυχρὰ καὶ ξηρὰ καὶ ὑγρὰ, καὶ ὅσα ἄλλα τούτοις ἀκολουθεῖ πάθη, γίνεται τοιαύτη καὶ ἔστιν ὑπὸ κινήσεως καὶ ἀκινήσιας, ἥς τὴν αἰτίαν καὶ τὴν ἀρχὴν εἰρήκαμεν πρότερον. ἐπὶ μὲν οὖν τοῦ μέσου καὶ περὶ τὸ μέσον τὸ βαρύτερόν ἐστιν καὶ ψυχρότατον ἀποκεκριμένον, γῆ καὶ ὕδωρ· περὶ δὲ ταῦτα καὶ ἐχόμενα τούτων, ἀήρ τε καὶ ὁ διὰ συνήθειαν καλοῦμεν πῦρ, οὐκ ἔστι δὲ πῦρ· ὑπερβολὴ γὰρ θερμοῦ καὶ οἶον ζέσις ἐστὶ τὸ πῦρ. ἀλλὰ δεῖ νοῆσαι τοῦ λεγομένου ὑφ' ἡμῶν ἀέρος τὸ μὲν περὶ τὴν γῆν οἶον ὑγρὸν καὶ θερμὸν εἶναι διὰ τὸ ἀτμίζειν τε καὶ ἀναθυμιάσιν ἔχειν γῆς, τὸ δὲ ὑπὲρ τοῦτο θερμὸν ἤδη καὶ ξηρόν. ἔστιν γὰρ ἀτμίδος μὲν φύσις ὑγρὸν καὶ θερμὸν, ἀναθυμιάσεως δὲ θερμὸν καὶ ξηρόν· καὶ ἔστιν ἀτμὶς μὲν δυνάμει οἶον ὕδωρ, ἀναθυμιάσις δὲ δυνάμει οἶον πῦρ. τοῦ μὲν οὖν ἐν τῷ ἄνω τόπῳ μὴ συνίστασθαι νέφη ταύτην ὑποληπτέον αἰτίαν εἶναι, ὅτι οὐκ ἔνεστιν ἀήρ μόνον ἀλλὰ μᾶλλον οἶον πῦρ. οὐδὲν δὲ κωλύει καὶ διὰ τὴν κύκλῳ φορὰν κωλύεσθαι συνίστασθαι νέφη ἐν τῷ ἀνωτέρῳ τόπῳ· ῥεῖν γὰρ ἀναγκαῖον ἅπαντα τὸν κύκλῳ ἀέρα, ὅσος μὴ ἐντὸς τῆς περιφερείας λαμβάνεται τῆς ἀπαρτιζούσης ὥστε τὴν γῆν σφαιροειδῆ εἶναι πᾶσαν· φαίνεται γὰρ καὶ νῦν ἡ τῶν ἀνέμων γενέσις ἐν τοῖς λιμνάζουσι τόποις τῆς γῆς, καὶ οὐχ [341a] ὑπερβάλλειν τὰ πνεύματα τῶν ὑψηλῶν ὀρῶν. ῥεῖ δὲ κύκλῳ διὰ τὸ συνεφέλκεσθαι τῇ τοῦ ὅλου περιφορᾷ. τὸ μὲν γὰρ πῦρ τῷ ἄνω στοιχείῳ, τῷ δὲ πυρὶ ὁ ἀήρ συνεχὴς ἐστιν· ὥστε καὶ διὰ τὴν κίνησιν κωλύεται συγκρίνεσθαι εἰς ὕδωρ, ἀλλ' ἀεὶ ὅ τι ἂν βαρύνηται μόνον αὐτοῦ ἐκθλιβομένου εἰς τὸν ἄνω τόπον τοῦ θερμοῦ κάτω φέρεται, ἄλλα δ' ἐν μέρει συναναφέρεται τῷ ἀναθυμιωμένῳ πυρί, καὶ οὕτω συνεχῶς τὸ [341a.8] μὲν ἀέρος διατελεῖ πλήρες ὃν τὸ δὲ πυρὸς, καὶ ἀεὶ ἄλλο καὶ ἄλλο γίνεται ἕκαστον αὐτῶν. περὶ μὲν οὖν τοῦ μὴ γίνεσθαι νέφη μὴδ' εἰς ὕδωρ σύγκρισιν, καὶ πῶς δεῖ λαβεῖν περὶ τοῦ μεταξὺ τόπου τῶν ἄστρον καὶ τῆς γῆς, καὶ τίνος ἐστὶν σώματος πλήρης, τοσαῦτα εἰρήσθω. περὶ δὲ τῆς γιγνομένης θερμότητος, ἣν παρέχεται ὁ ἥλιος, μᾶλλον μὲν καθ' ἑαυτὸ καὶ ἀκριβῶς ἐν τοῖς περὶ αἰσθήσεως προσήκει λέγειν (πάθος γάρ τι τὸ θερμὸν αἰσθήσεώς ἐστιν), διὰ τίνα δ' αἰτίαν γίνεται μὴ τοιούτων ὄντων ἐκείνων τὴν φύσιν, λεκτέον καὶ νῦν. ὀρῶμεν δὴ τὴν κίνησιν ὅτι δύναται διακρίνειν τὸν ἀέρα καὶ ἐκπυροῦν, ὥστε καὶ τὰ φερόμενα τηκόμενα φαίνεσθαι πολλάκις. τὸ μὲν οὖν γίνεσθαι τὴν ἀλέαν καὶ τὴν θερμότητα ἱκανὴ ἐστὶν παρασκευάζειν καὶ ἡ τοῦ ἡλίου φορὰ μόνον· ταχεῖάν τε γὰρ δεῖ καὶ μὴ πόρρω εἶναι. ἡ μὲν οὖν τῶν ἄστρον ταχεῖα μὲν πόρρω δέ, ἡ δὲ τῆς σελήνης κάτω μὲν βραδεῖα δέ· ἡ δὲ τοῦ ἡλίου ἅμφω ταῦτα ἔχει ἱκανῶς. τὸ δὲ μᾶλλον γίνεσθαι ἅμα τῷ ἡλίῳ αὐτῷ τὴν θερμότητα εὐλογον, λαμβάνοντας τὸ ὅμοιον ἐκ τῶν παρ' ἡμῖν γιγνομένων· καὶ



γὰρ ἐνταῦθα τῶν βία φερομένων ὁ πλησιάζων ἀπὸ μάλιστα γίνεται θερμός. καὶ τοῦτ' εὐλόγως συμβαίνει· μάλιστα γὰρ ἡ τοῦ στερεοῦ διακρίνει κινήσεις αὐτόν. διὰ τε ταύτην οὖν τὴν αἰτίαν ἀφικνεῖται πρὸς τόνδε τὸν τόπον ἡ θερμότης, καὶ διὰ τὸ τὸ περιέχον πῦρ τὸν ἀέρα διαρραίνεσθαι τῇ κινήσει πολλάκις καὶ φέρεσθαι βία κάτω. σημεῖον δ' ἱκανὸν ὅτι ὁ ἄνω τόπος οὐκ ἔστι θερμὸς οὐδ' ἐκπεπρωμένος καὶ αἱ διαδρομαὶ τῶν ἀστέρων. ἐκεῖ μὲν γὰρ οὐ γίνονται, κάτω δέ· καίτοι τὰ μᾶλλον κινούμενα καὶ θάττον, ἐκπυροῦνται θάττον. πρὸς δὲ τούτοις ὁ ἥλιος, ὅσπερ μάλιστα εἶναι δοκεῖ θερμός, φαίνει λευκὸς ἀλλ' οὐ πυρώδης ὢν. [341b] τούτων δὲ διωρισμένων, λέγωμεν διὰ τίν' αἰτίαν αἱ τε φλόγες αἱ καίόμεναι φαίνονται περὶ τὸν οὐρανὸν καὶ οἱ διαθέοντες ἀστέρες καὶ οἱ καλούμενοι ὑπὸ τινων δαλοὶ καὶ αἶγες· ταῦτα γὰρ πάντ' ἐστὶν τὸ αὐτὸ καὶ διὰ τὴν αὐτὴν αἰτίαν, διαφέρει δὲ τῷ μᾶλλον καὶ ἥττον. ἀρχὴ δὲ ἐστὶν καὶ τούτων καὶ πολλῶν ἄλλων ἥδε. θερμαινομένης γὰρ τῆς γῆς ὑπὸ τοῦ ἡλίου τὴν ἀναθυμίασιν ἀναγκαῖον γίνεσθαι μὴ ἀπλῆν, ὥς τινες οἴονται, ἀλλὰ διπλῆν, τὴν μὲν ἀτμιδωδεστέραν τὴν δὲ πνευματωδεστέραν, τὴν μὲν τοῦ ἐν τῇ γῇ καὶ ἐπὶ τῇ γῇ ὑγροῦ ἀτμίδα, τὴν δ' αὐτῆς τῆς γῆς οὔσης ξηρᾶς καπνώδη· καὶ τούτων τὴν μὲν πνευματώδη ἐπιπολάζειν διὰ τὸ θερμόν, τὴν δὲ ὑγροτέραν ὑφίστασθαι διὰ τὸ βάρος. καὶ διὰ ταῦτα τοῦτον τὸν τρόπον κεκόσμηται τὸ περίξ· πρῶτον μὲν γὰρ ὑπὸ τὴν ἐγκύκλιον φορὰν ἐστὶν τὸ θερμόν καὶ ξηρόν, ὃ λέγομεν πῦρ (ἀνώνυμον γὰρ τὸ κοινὸν ἐπὶ πάσης τῆς καπνώδους διακρίσεως· ὅμως δὲ διὰ τὸ μάλιστα πεφυκέναι τὸ τοιοῦτον ἐκκαίεσθαι τῶν σωμάτων οὕτως ἀναγκαῖον χρῆσθαι τοῖς ὀνόμασιν), ὑπὸ δὲ ταύτην τὴν φύσιν ἀήρ. δεῖ δὲ νοῆσαι οἶον ὑπέκκαυμα τοῦτο ὃ νῦν εἶπομεν πῦρ περιτετάσθαι τῆς περὶ τὴν γῆν σφαίρας ἔσχατον, ὥστε μικρᾶς κινήσεως τυχὸν ἐκκαίεσθαι πολλάκις ὥσπερ τὸν καπνόν· ἔστι γὰρ ἡ φλόξ πνεύματος ξηροῦ ζέσις. ἢ ἂν οὖν μάλιστα εὐκαίρως ἔχη ἡ τοιαύτη σύστασις, ὅταν ὑπὸ τῆς περιφορᾶς κινηθῇ πως, ἐκκάεται. διαφέρει δ' ἤδη κατὰ τὴν τοῦ ὑπέκκαυματος θέσιν ἢ τὸ πλῆθος· ἂν μὲν γὰρ πλάτος ἔχη καὶ μῆκος τὸ ὑπέκκαυμα, πολλάκις ὀρεῖται καιομένη φλόξ ὥσπερ ἐν ἀρούρα καιομένης καλάμης, ἐὰν δὲ κατὰ μῆκος μόνον, οἱ καλούμενοι δαλοὶ καὶ αἶγες καὶ ἀστέρες. ἐὰν μὲν πλεον τὸ ὑπέκκαυμα ἢ κατὰ τὸ μῆκος ἢ τὸ πλάτος, ὅταν μὲν οἶον ἀποσπινθηρίζῃ ἅμα καιόμενον (τοῦτο δὲ γίνεται διὰ τὸ παρεκπυροῦσθαι, κατὰ μικρὰ μὲν, ἐπ' ἀρχὴν δέ), αἶξ καλεῖται, ὅταν δ' ἄνευ τούτου τοῦ πάθους, δαλός. ἐὰν δὲ τὰ μήκη τῆς ἀναθυμιάσεως κατὰ μικρά τε καὶ πολλαχῇ διεσπαρμένα ἢ καὶ ὁμοίως κατὰ πλάτος καὶ βάθος, οἱ δοκοῦντες ἀστέρες διάττειν γίνονται. ὅτε μὲν οὖν ὑπὸ τῆς κινήσεως ἡ ἀναθυμίασις ἐκκαίεται γεννᾷ αὐτά· ὅτε δὲ ὑπὸ τοῦ διὰ τὴν ψύξιν [342a] συνισταμένου ἀέρος ἐκθλίβεται καὶ ἐκκρίνεται τὸ θερμόν, διὸ καὶ ἔοικεν ἡ φορὰ ρίψει μᾶλλον αὐτῶν, ἀλλ' οὐκ ἐκκαύσει. ἀπορήσειε γὰρ ἂν τις πότερον ὥσπερ ἡ

ὑπὸ τοὺς λύχνους τιθεμένη ἀναθυμιάσις ἀπὸ τῆς ἄνωθεν φλογὸς ἄπει τὸν κάτωθεν λύχνον (θαυμαστὴ γὰρ καὶ τούτου ἡ ταχυτὴς ἐστίν καὶ ὁμοία ῥίψει, ἀλλ' οὐχ ὡς ἄλλου καὶ ἄλλου γιγνομένου πυρός), ἡ ῥίψεις τοῦ αὐτοῦ τινος σώματός εἰσιν αἱ διαδρομαί. ἔοικε δὲ δι' ἄμφω· καὶ γὰρ οὕτως ὡς ἡ ἀπὸ τοῦ λύχνου γίγνεται, καὶ ἕνια διὰ τὸ ἐκθλίβεσθαι ῥιπτεῖται, ὥσπερ οἱ ἐκ τῶν δακτύλων πυρῆνες, ὥστε καὶ εἰς τὴν γῆν καὶ εἰς τὴν θάλατταν φαίνεσθαι πίπτοντα, καὶ νύκτωρ καὶ μεθ' ἡμέραν καὶ αἰθρίας οὕσης. κάτω δὲ ῥιπτεῖται διὰ τὸ τὴν πύκνωσιν εἰς τὸ κάτω ῥέπειν τὴν ἀπωθοῦσαν. διὸ καὶ οἱ κεραυνοὶ κάτω πίπτουσιν <, τοῦ πυρὸς ἄνω φερομένου [342a.14] κατὰ φύσιν>. πάντων γὰρ τούτων ἡ γένεσις οὐκ ἔκκαυσις ἀλλ' ἔκκρισις ὑπὸ τῆς ἐκθλίψεως ἐστίν, ἐπεὶ κατὰ φύσιν γε τὸ θερμὸν ἄνω πέφυκε φέρεσθαι πᾶν. ὅσα μὲν οὖν μᾶλλον ἐν τῷ ἀνωτάτῳ τόπῳ συνίσταται, ἐκκαυομένης γίγνεται τῆς ἀναθυμιάσεως, ὅσα δὲ κατώτερον, ἐκκρινομένης διὰ τὸ συνιέναι καὶ ψύχεσθαι τὴν ὑγροτέραν ἀναθυμιάσιν· αὕτη γὰρ συνιοῦσα καὶ κάτω ῥέπουσα ἀπωθεῖ πυκνουμένη καὶ κάτω ποιεῖ τοῦ θερμοῦ τὴν ῥῖψιν· διὰ δὲ τὴν θέσιν τῆς ἀναθυμιάσεως, ὅπως ἂν τύχῃ κειμένη τοῦ πλάτους καὶ τοῦ βάθους, οὕτω φέρεται ἢ ἄνω ἢ κάτω ἢ εἰς τὸ πλάγιον. τὰ πλεῖστα δ' εἰς τὸ πλάγιον διὰ τὸ δύο φέρεσθαι φοράς, βία μὲν κάτω, φύσει δ' ἄνω· πάντα γὰρ κατὰ τὴν διάμετρον φέρεται τὰ τοιαῦτα. διὸ καὶ τῶν διαθεόντων ἀστέρων ἡ πλείστη λοξὴ γίγνεται φορά. πάντων δὲ τούτων αἴτιον ὡς μὲν ὕλη ἡ ἀναθυμιάσις, ὡς δὲ τὸ κινεῖν ὅτε μὲν ἡ ἄνω φορά, ὅτε δ' ἡ τοῦ ἀέρος συγκρινομένου πῆξις. πάντα δὲ κάτω ταῦτα σελήνης γίγνεται. σημεῖον δ' ἡ φαινομένη αὐτῶν ταχυτὴς ὁμοία οὕσα τοῖς ὑφ' ἡμῶν ῥιπτουμένοις, ἃ διὰ τὸ πλησίον εἶναι ἡμῶν πολὺ δοκεῖ τῷ τάχει παραλλάττειν ἄστρα τε καὶ ἥλιον καὶ σελήνη

φαίνεται δέ ποτε συνιστάμενα νύκτωρ αἰθρίας οὕσης πολλὰ φάσματα ἐν τῷ οὐρανῷ, οἷον χάσματα τε καὶ βόθυνοι καὶ αἱματώδη χρώματα. αἴτιον δὲ ἐπὶ τούτων τὸ [342b] αὐτό· ἐπεὶ γὰρ φανερός ἐστὶ συνιστάμενος ὁ ἄνω ἀήρ ὥστ' ἐκπυροῦσθαι, καὶ τὴν ἐκπύρωσιν ὅτε μὲν τοιαύτην γίγνεσθαι ὥστε φλόγα δοκεῖν καίεσθαι, ὅτε δὲ οἷον δαλοὺς φέρεσθαι καὶ ἀστέρας, οὐδὲν ἄτοπον εἰ χρωματίζεται ὁ αὐτὸς οὗτος ἀήρ συνιστάμενος παντοδαπὰς χροάς· διὰ τε γὰρ πυκνοτέρου διαφαινόμενον ἔλαττον φῶς καὶ ἀνάκλασιν δεχόμενος ὁ ἀήρ παντοδαπὰ χρώματα ποιήσει, μάλιστα δὲ φοινικοῦν ἢ πορφυροῦν, διὰ τὸ ταῦτα μάλιστα ἐκ τοῦ πυρώδους καὶ λευκοῦ φαίνεσθαι μειγνυμένων κατὰ τὰς ἐπιπροσθήσεις, οἷον ἀνίσχοντα τὰ ἄστρα καὶ δυόμενα, ἐὰν ἡ καῦμα, καὶ διὰ καπνοῦ φοινικᾶ φαίνεται. καὶ τῇ ἀνακλάσει δὲ ποιήσει, ὅταν τὸ ἔνοπτρον ἢ τοιοῦτον ὥστε μὴ τὸ σχῆμα ἀλλὰ τὸ χρῶμα δέχεσθαι. τοῦ δὲ μὴ πολὺν χρόνον μένειν ταῦτα ἢ σύστασις αἰτία ταχεῖα οὕσα. τὰ δὲ χάσματα ἀναρρηγνυμένου τοῦ φωτὸς ἐκ κυανοῦ καὶ μέλανος ποιεῖ τι βάθος ἔχειν

δοκεῖν. πολλάκις δ' ἐκ τῶν τοιούτων καὶ δαλοὶ ἐκπίπτουσιν, ὅταν συγκριθῇ μᾶλλον· συνιδόν δ' ἔτι χάσμα [342b.18] δοκεῖ. ὅλως δ' ἐν τῷ μέλανι τὸ λευκὸν πολλὰς ποιεῖ ποικιλίας, οἷον ἢ φλόξ ἐν τῷ καπνῷ. ἡμέρας μὲν οὖν ὁ ἥλιος κωλύει, νυκτὸς δ' ἔξω τοῦ φοινικοῦ τὰ ἄλλα δι' ὁμόχροιαν οὐ φαίνεται. περὶ μὲν οὖν τῶν διαθεόντων ἀστέρων καὶ τῶν ἐκπυρουμένων, ἔτι δὲ τῶν ἄλλων τῶν τοιούτων φασμάτων ὅσα ταχείας ποιεῖται τὰς φαντασίας, ταύτας ὑπολαβεῖν δεῖ· περὶ δὲ τῶν κομητῶν καὶ τοῦ καλουμένου γάλακτος λέγωμεν, διαπορήσαντες πρὸς τὰ παρὰ τῶν ἄλλων εἰρημένα πρῶτον. Ἀναξαγόρας μὲν οὖν καὶ Δημόκριτός φασιν εἶναι τοὺς κομήτας σύμφασιν τῶν πλανήτων ἀστέρων, ὅταν διὰ τὸ πλησίον ἐλθεῖν δόξωσι θιγγάνειν ἀλλήλων. τῶν δ' Ἰταλικῶν τινες καλουμένων Πυθαγορείων ἓνα λέγουσιν αὐτὸν εἶναι τῶν πλανήτων ἀστέρων, ἀλλὰ διὰ πολλοῦ τε χρόνου τὴν φαντασίαν αὐτοῦ εἶναι καὶ τὴν ὑπερβολὴν ἐπὶ μικρόν, ὅπερ συμβαίνει καὶ περὶ τὸν τοῦ Ἑρμοῦ ἀστέρα· διὰ γὰρ τὸ μικρὸν ἐπαναβαίνειν πολλὰς ἐκλείπει φάσεις, ὥστε διὰ χρόνου φαίνεσθαι πολλοῦ. παραπλησίως δὲ τούτοις καὶ οἱ περὶ Ἱπποκράτην τὸν Χῖον καὶ τὸν μαθητὴν αὐτοῦ [343a] Αἰσχύλον ἀπεφώνησαντο, πλὴν τὴν γε κόμην οὐκ ἐξ αὐτοῦ φασιν ἔχειν, ἀλλὰ πλανώμενον διὰ τὸν τόπον ἐνίοτε λαμβάνειν ἀνακλωμένης τῆς ἡμετέρας ὥσεως ἀπὸ τῆς ἐλκομένης ὑγρότητος ὑπ' αὐτοῦ πρὸς τὸν ἥλιον. διὰ δὲ τὸ ὑπολείπεσθαι βραδύτατα τῷ χρόνῳ διὰ πλείστου χρόνου φαίνεσθαι τῶν ἄλλων ἄστρων, ὥς ὅταν ἐκ ταύτοῦ φανῇ ὑπολειμμένον ὅλον τὸν ἑαυτοῦ κύκλον· ὑπολείπεσθαι δ' αὐτὸν καὶ πρὸς ἄρκτον καὶ πρὸς νότον. ἐν μὲν οὖν τῷ μεταξὺ τόπῳ τῶν τροπικῶν οὐχ ἔλκειν τὸ ὕδωρ πρὸς ἑαυτὸν διὰ τὸ κεκαῦσθαι ὑπὸ τῆς τοῦ ἡλίου φορᾶς· πρὸς δὲ νότον ὅταν φέρεται, δαψίλειαν μὲν ἔχειν τῆς τοιαύτης νοτίδος, ἀλλὰ διὰ τὸ μικρὸν εἶναι τὸ ὑπὲρ τῆς γῆς τμήμα τοῦ κύκλου, τὸ δὲ κάτω πολλαπλάσιον, οὐ δύνασθαι τὴν ὄψιν τῶν ἀνθρώπων φέρεσθαι κλωμένην πρὸς τὸν ἥλιον οὔτε τῷ τροπικῷ τόπῳ πλησιάζοντος οὔτ' ἐπὶ θεριναῖς τροπαῖς ὄντος τοῦ ἡλίου· διόπερ ἐν τούτοις μὲν τοῖς τόποις οὐ γίνεσθαι κομήτην αὐτόν· ὅταν δὲ πρὸς βορέαν ὑπολειφθεὶς τύχη, λαμβάνειν κόμην διὰ τὸ μεγάλην εἶναι τὴν περιφέρειαν τὴν ἄνωθεν τοῦ ὀρίζοντος, τὸ δὲ κάτω μέρος τοῦ κύκλου μικρόν· ῥαδίως γὰρ τὴν ὄψιν τῶν ἀνθρώπων ἀφικνεῖσθαι τότε πρὸς τὸν ἥλιον. πᾶσιν δὲ τούτοις τὰ μὲν κοινῇ συμπίπτει λέγειν ἀδύνατα, τὰ δὲ χωρὶς. πρῶτον μὲν οὖν τοῖς λέγουσιν ὅτι τῶν πλανωμένων ἐστὶν εἷς ἀστέρων ὁ κομήτης· οἱ γὰρ πλανώμενοι πάντες ἐν τῷ κύκλῳ ὑπολείπονται τῷ τῶν ζωδίων, κομῆται δὲ πολλοὶ ἐωραμένοι εἰσὶν ἔξω τοῦ κύκλου. εἴτα καὶ πλείους ἐνὸς ἅμα γεγένηνται πολλάκις. πρὸς δὲ τούτοις, εἰ διὰ τὴν ἀνάκλασιν τὴν κόμην ἴσχουσι, καθάπερ φησὶν Αἰσχύλος καὶ Ἱπποκράτης, ἔδει ποτὲ φαίνεσθαι καὶ ἄνευ κόμης τὸν ἀστέρα τοῦτον, ἐπειδὴπερ ὑπολείπεται μὲν καὶ εἰς ἄλλους τόπους, τὴν δὲ κόμην ἴσχει οὐ πανταχοῦ· νῦν δ' οὐδεὶς ὥπται

παρὰ τοὺς πέντε ἀστέρας· οὗτοι δὲ πολλάκις ἅμα πάντες μετέωροι φαίνονται ὑπὲρ τοῦ ὀρίζοντος. καὶ φανερῶν δὲ ὄντων αὐτῶν ἀπάντων καὶ μὴ φαινομένων πάντων, ἀλλ' ἐνίων ὄντων πρὸς τῷ ἡλίῳ, οὐδὲν ἦττον κομήται φαίνονται γιγνόμενοι πολλάκις. ἀλλὰ μὴν οὐδὲ τοῦτο ἀληθές, ὥς ἐν τῷ πρὸς ἄρκτον τόπῳ γίγνεται κομήτης μόνον, ἅμα καὶ τοῦ ἡλίου [343b] ὄντος περὶ θερινὰς τροπὰς· ὃ τε γὰρ μέγας κομήτης ὁ γενόμενος περὶ τὸν ἐν Ἀχαΐᾳ σεισμόν καὶ τὴν τοῦ κύματος ἔφοδον ἀπὸ δυσμῶν τῶν ἰσημερινῶν ἀνέσχεν, καὶ πρὸς νότον ἤδη πολλοὶ γεγονόασιν. ἐπὶ δ' ἄρχοντος Ἀθήνησιν Εὐκλέους τοῦ Μόλωνος ἐγένετο κομήτης ἀστήρ πρὸς ἄρκτον μηνὸς Γαμηλιῶνος περὶ τροπὰς ὄντος τοῦ ἡλίου χειμερινὰς· καίτοι τοσοῦτον ἀνακλασθῆναι καὶ αὐτοὶ τῶν ἀδυνάτων εἶναί φασι. κοινὸν δὲ καὶ τούτοις καὶ τοῖς τὴν σύναψιν λέγουσιν πρῶτον μὲν ὅτι καὶ τῶν ἀπλανῶν λαμβάνουσι κόμην τινές. καὶ τοῦτ' οὐ μόνον Αἰγυπτίοις πιστεῦσαι δεῖ, καίτοι κἀκεῖνοί φασιν, ἀλλὰ καὶ ἡμεῖς ἐφεωράκαμεν· τῶν γὰρ ἐν τῷ ἰσχύῳ τοῦ κυνὸς ἀστήρ τις ἔσχε κόμην, ἀμαυρὰν μέντοι· ἀτενίζουσιν μὲν γὰρ εἰς αὐτὸν ἀμυδρὸν ἐγίγνετο τὸ φέγγος, παραβλέπουσι δ' ἡρέμα τὴν ὄψιν πλέον. πρὸς δὲ τούτοις ἅπαντες οἱ καθ' ἡμᾶς ὠμμένοι ἄνευ δύσεως ἠφανίσθησαν ἐν τῷ ὑπὲρ τοῦ ὀρίζοντος τόπῳ ἀπομαρανθέντες κατὰ μικρὸν οὕτως, ὥστε μήτε ἐνὸς ἀστέρος ὑπολειφθῆναι σῶμα μήτε πλειόνων, ἐπεὶ καὶ ὁ μέγας ἀστήρ περὶ οὗ πρότερον ἐμνήσθημεν ἐφάνη μὲν χειμῶνος ἐν πάγοις καὶ αἰθρίαις ἀφ' ἐσπέρας, ἐπὶ Ἀστείου ἄρχοντος, καὶ τῇ μὲν πρώτῃ οὐκ ὤφθη ὥς προδεδυκῶς τοῦ ἡλίου, τῇ δ' ὑστεραίᾳ ὤφθη· ὅσον ἐνδέχεται γὰρ ἐλάχιστον ὑπελείφθη, καὶ εὐθὺς ἔδυ· τὸ δὲ φέγγος ἀπέτεινε μέχρι τοῦ τρίτου μέρους τοῦ οὐρανοῦ οἷον ἄλμα· διὸ καὶ ἐκλήθη ὁδός. ἐπανῆλθε δὲ μέχρι τῆς ζώνης τοῦ Ὠρίωνος, καὶ ἐνταυθοῖ διελύθη. καίτοι Δημόκριτός γε προσπεφιλονείκηκεν τῇ δόξῃ τῇ αὐτοῦ· φησὶ γὰρ ὤφθαι διαλυομένων τῶν κομητῶν ἀστέρας τινάς. τοῦτο δὲ οὐχ ὅτε μὲν ἔδει γίγνεσθαι ὅτε δὲ οὐ, ἀλλ' αἰί. πρὸς δὲ τούτοις καὶ οἱ Αἰγύπτιοί φασι καὶ τῶν πλανήτων καὶ πρὸς αὐτοὺς καὶ πρὸς τοὺς ἀπλανεῖς γίγνεσθαι συνόδους, καὶ αὐτοὶ ἐωράκαμεν τὸν ἀστέρα τὸν τοῦ Διὸς τῶν ἐν τοῖς διδύμοις συνελθόντα τινὲς ἤδη καὶ ἀφανίσαντα, ἀλλ' οὐ κομήτην γενόμενον. ἔτι δὲ καὶ ἐκ τοῦ λόγου φανερόν· οἱ γὰρ ἀστέρες κἂν εἰ μείζους καὶ ἐλάττους φαίνονται, ἀλλ' ὅμως ἀδιαίρετοί γε καθ' ἑαυτοὺς εἶναι δοκοῦσιν. ὥσπερ οὖν καὶ εἰ ἦσαν ἀδιαίρετοι, ἀψάμενοι οὐδὲν ἂν ἐποίησαν μέγεθος μεῖζον, οὕτως καὶ ἐπειδὴ οὐκ εἰσὶν μὲν φαίνονται δὲ [344a] ἀδιαίρετοι, καὶ συνελθόντες οὐδὲν φανοῦνται μείζους τὸ μέγεθος ὄντες. ὅτι μὲν οὖν αἱ λεγόμεναι περὶ αὐτῶν αἰτίαι ψευδεῖς οὔσαι τυγχάνουσιν, εἰ μὴ διὰ πλειόνων, ἀλλὰ καὶ διὰ τούτων ἱκανῶς δῆλόν ἐστιν. ἐπεὶ δὲ περὶ τῶν ἀφανῶν τῇ αἰσθήσει νομίζομεν ἱκανῶς ἀποδεδεῖχθαι κατὰ τὸν λόγον, ἔαν εἰς τὸ δυνατόν ἀναγάγωμεν, ἔκ τε τῶν νῦν

φαινομένων ὑπολάβοι τις ἂν ὥδε περὶ τούτων μάλιστα συμβαίνειν· ὑπόκειται γὰρ ἡμῖν τοῦ κόσμου τοῦ περὶ τὴν γῆν, ὅσον ὑπὸ τὴν ἐγκύκλιόν ἐστιν φορὰν, εἶναι τὸ πρῶτον μέρος ἀναθυμίαςιν ξηρὰν καὶ θερμήν· αὕτη δὲ αὕτη τε καὶ τοῦ συνεχοῦς ὑπ’ αὐτὴν ἀέρος ἐπὶ πολὺ συμπεριάγεται περὶ τὴν γῆν ὑπὸ τῆς φορᾶς καὶ τῆς κινήσεως τῆς κύκλω· φερομένη δὲ καὶ κινουμένη τοῦτον τὸν τρόπον, ἥ ἂν τύχη εὐκρατος οὕσα, πολλάκις ἐκπυροῦται· διό φαμεν γίνεσθαι καὶ τὰς τῶν σποράδων ἀστέρων διαδρομάς. ὅταν οὖν εἰς τὴν τοιαύτην πύκνωσιν ἐμπέσῃ διὰ τὴν ἄνωθεν κίνησιν ἀρχὴ πυρώδης, μήτε οὕτω πολλὴ λίαν ὥστε ταχὺ καὶ ἐπὶ πολὺ ἐκκαίειν, μήθ’ οὕτως ἀσθενὴς ὥστε ἀποσβεσθῆναι ταχύ, ἀλλὰ πλείων καὶ ἐπὶ πολὺ, ἅμα δὲ κάτωθεν συμπύπτη ἀναβαίνειν εὐκρατον ἀναθυμίαςιν, ἀστὴρ τοῦτο γίνεται κομήτης, ὅπως ἂν τὸ ἀναθυμιώμενον τύχη ἐσχηματισμένον· ἐὰν μὲν γὰρ πάντῃ ὁμοίως, κομήτης, ἐὰν δ’ ἐπὶ μῆκος, καλεῖται πωγωνίας. ὥσπερ δὲ ἡ τοιαύτη φορὰ ἀστέρος φορὰ δοκεῖ εἶναι, οὕτως καὶ ἡ μονὴ ἡ ὁμοία ἀστέρος μονὴ δοκεῖ εἶναι· παραπλήσιον γὰρ τὸ γινόμενον οἶον εἴ τις εἰς ἀχύρων θημῶνα καὶ πλῆθος ὥσειε δαλὸν ἢ πυρὸς ἀρχὴν ἐμβάλοι μικράν· φαίνεται γὰρ ὁμοία καὶ ἡ τῶν ἀστέρων διαδρομὴ τούτῳ· ταχὺ γὰρ διὰ τὴν εὐφυΐαν τοῦ [344a.29] ὑπεκκαύματος διαδίδωσιν ἐπὶ μῆκος. εἰ δὲ τοῦτο μείνειε καὶ μὴ καταμαρανθείη διελθόν, ἥ μάλιστα ἐπύκνωσε τὸ ὑπέκκαυμα, γένοιτ’ ἂν ἀρχὴ τῆς φορᾶς ἢ τελευτὴ τῆς διαδρομῆς. τοιοῦτον ὁ κομήτης ἐστὶν ἀστὴρ, ὥσπερ διαδρομὴ ἀστέρος, ἔχων ἐν ἑαυτῷ πέρας καὶ ἀρχήν. ὅταν μὲν οὖν ἐν αὐτῷ τῷ κάτω τόπῳ ἢ ἀρχὴ τῆς συστάσεως ἦ, καθ’ ἑαυτὸν φαίνεται κομήτης· ὅταν δ’ ὑπὸ τῶν ἄστρον τινός, ἢ τῶν ἀπλανῶν ἢ τῶν πλανήτων, ὑπὸ τῆς κινήσεως συνιστῇται ἢ [344b] ἀναθυμίαςις, τότε κομήτης γίνεται τούτων τις· οὐ γὰρ πρὸς αὐτοῖς ἢ κόμη γίνεται τοῖς ἀστροῖς, ἀλλ’ ὥσπερ αἱ ἄλλω περὶ τὸν ἥλιον φαίνονται καὶ τὴν σελήνην παρακολουθοῦσαι, καίπερ μεθισταμένων, ὅταν οὕτως ἢ πεπυκνωμένος ὁ ἀῆρ ὥστε τοῦτο γίνεσθαι τὸ πάθος ὑπὸ τὴν τοῦ ἡλίου πορείαν, οὕτω καὶ ἡ κόμη τοῖς ἀστροῖς οἶον ἄλως ἐστίν· πλὴν ἢ μὲν γίνεται δι’ ἀνάκλασιν τοιαύτη τὴν χροάν, ἐκεῖ δ’ ἐπ’ αὐτῶν τὸ χρῶμα φαινόμενόν ἐστιν. ὅταν μὲν οὖν κατ’ ἀστέρα γένηται ἢ τοιαύτη σύγκρισις, τὴν αὐτὴν ἀνάγκη φαίνεσθαι φορὰν κινούμενον τὸν κομήτην ἢνπερ φέρεται ὁ ἀστὴρ· ὅταν δὲ συστῇ καθ’ αὐτόν, τότε ὑπολειπόμενοι φαίνονται. τοιαύτη γὰρ ἢ φορὰ τοῦ κόσμου τοῦ περὶ τὴν γῆν. τοῦτο γὰρ μάλιστα μηνύει μὴ εἶναι ἀνάκλασιν τινα τὸν κομήτην, ὡς ἄλλω ἐν ὑπεκκαύματι καθαρῷ πρὸς αὐτόν τὸν ἀστέρα γιγνομένην, καὶ μὴ ὡς λέγουσιν οἱ περὶ Ἱπποκράτην, πρὸς τὸν ἥλιον, ὅτι καὶ καθ’ αὐτόν γίνεται κομήτης πολλάκις καὶ πλεονάκις ἢ περὶ τῶν ὠρισμένων τινὰς ἀστέρων. περὶ μὲν οὖν τῆς ἄλλω τὴν αἰτίαν ὕστερον ἐροῦμεν· περὶ δὲ τοῦ πυρώδους τὴν σύστασιν αὐτῶν εἶναι τεκμήριον χρὴ

νομίζειν ὅτι σημαίνουσι γιγνόμενοι πλείους πνεύματα καὶ αὐχμούς· δῆλον γὰρ ὅτι γίνονται διὰ τὸ πολλὴν εἶναι τὴν τοιαύτην ἔκκρισιν, ὥστε ξηρότερον ἀναγκαῖον εἶναι τὸν ἀέρα, καὶ διακρίνεσθαι καὶ διαλύεσθαι τὸ διατμίζον ὑγρὸν ὑπὸ τοῦ πλήθους τῆς θερμῆς ἀναθυμιάσεως, ὥστε μὴ συνίστασθαι ῥαδίως εἰς ὕδωρ. σαφέστερον δ' ἐροῦμεν καὶ περὶ τούτου τοῦ πάθους, ὅταν καὶ περὶ πνευμάτων λέγειν ἦ καιρός. ὅταν μὲν οὖν πυκνοὶ καὶ πλείους φαίνωνται, καθάπερ λέγομεν, ξηροὶ καὶ πνευματώδεις γίνονται οἱ ἐνιαυτοὶ ἐπιδήλως· ὅταν δὲ σπανιώτεροι καὶ ἀμαυρότεροι τὸ μέγεθος, ὁμοίως μὲν οὐ γίγνεται τὸ τοιοῦτον, οὐ μὴν ἀλλ' ὥς ἐπὶ τὸ πολὺ γίγνεται τις ὑπερβολὴ πνεύματος ἢ κατὰ χρόνον ἢ κατὰ μέγεθος, ἐπεὶ καὶ ὅτε ὁ ἐν Αἰγὸς ποταμοῖς ἔπεσε λίθος ἐκ τοῦ ἀέρος, ὑπὸ πνεύματος ἀρθεὶς ἐξέπεσε μεθ' ἡμέραν· ἔτυχε δὲ καὶ τότε κομήτης ἀστήρ γενόμενος ἀφ' ἐσπέρας. καὶ περὶ τὸν μέγαν ἀστέρα τὸν κομήτην ξηρὸς ἦν ὁ χειμὼν καὶ βόρειος, καὶ τὸ κύμα δι' ἐναντίωσιν ἐγένετο πνευμάτων· ἐν μὲν γὰρ τῷ κόλπῳ [345a] βορέας κατεῖχεν, ἔξω δὲ νότος ἔπνευσε μέγας. ἔτι δ' ἐπ' ἀρχοντος Νικομάχου ἐγένετο ὀλίγας ἡμέρας κομήτης περὶ τὸν ἰσημερινὸν κύκλον, οὐκ ἀφ' ἐσπέρας ποιησάμενος τὴν ἀνατολήν, ἐφ' ᾧ τὸ περὶ Κόρινθον πνεῦμα γενέσθαι συνέπεσεν. τοῦ δὲ μὴ γίνεσθαι πολλοὺς μηδὲ πολλάκις κομήτας, καὶ μᾶλλον ἐκτὸς τῶν τροπικῶν ἢ ἐντός, αἴτιος ἢ τοῦ ἡλίου καὶ ἢ τῶν ἀστέρων κίνησις, οὐ μόνον ἐκκρίνουσα τὸ θερμόν, ἀλλὰ καὶ διακρίνουσα τὸ συνιστάμενον. μάλιστα δ' αἴτιον ὅτι τὸ πλεῖστον εἰς τὴν τοῦ γάλακτος ἀθροίζεται χώραν. ὅπως δὲ καὶ διὰ τίν' αἰτίαν γίγνεται καὶ τί ἐστὶ τὸ γάλα, λέγωμεν ἤδη. προδιέλθωμεν δὲ καὶ περὶ τούτου τὰ παρὰ τῶν ἄλλων εἰρημέγα πρῶτον. τῶν μὲν οὖν καλουμένων Πυθαγορείων φασὶ τινες ὁδὸν εἶναι ταύτην οἱ μὲν τῶν ἐκπεσόντων τινὸς ἀστέρων, κατὰ τὴν λεγομένην ἐπὶ Φαέθοντος φθοράν, οἱ δὲ τὸν ἥλιον τοῦτον τὸν κύκλον φέρεσθαι ποτέ φασιν· οἷον οὖν διακεκαῦσθαι τὸν τόπον τοῦτον ἢ τι τοιοῦτον ἄλλο πεπονθέναι πάθος ὑπὸ τῆς φορᾶς αὐτῶν. ἄτοπον δὲ τὸ μὴ συννοεῖν ὅτι εἴπερ τοῦτ' ἦν τὸ αἴτιον, ἔδει καὶ τὸν τῶν ζωδίων κύκλον οὕτως ἔχειν, καὶ μᾶλλον ἢ τὸν τοῦ γάλακτος· ἅπαντα γὰρ ἐν αὐτῷ φέρεται τὰ πλανώμενα καὶ οὐχ ὁ ἥλιος μόνος. δῆλος δ' ἡμῖν ἅπας ὁ κύκλος· αἰεὶ γὰρ αὐτοῦ φανερόν ἡμικύκλιον τῆς νυκτός. ἀλλὰ πεπονθὼς οὐδὲν φαίνεται τοιοῦτον, πλὴν εἴ τι συνάπτει μόνιον αὐτοῦ πρὸς τὸν τοῦ γάλακτος κύκλον. οἱ δὲ περὶ Ἀναξαγόραν καὶ Δημόκριτον φῶς εἶναι τὸ γάλα λέγουσιν ἄστρον τινῶν· τὸν γὰρ ἥλιον ὑπὸ τὴν γῆν φερόμενον οὐχ ὁρᾶν ἔνια τῶν ἄστρον. ὅσα μὲν οὖν περιορᾶται ὑπ' αὐτοῦ, τούτων μὲν οὐ φαίνεσθαι τὸ φῶς (κωλύεσθαι γὰρ ὑπὸ τῶν τοῦ ἡλίου ἀκτίνων)· ὅσοις δ' ἀντιφράττει ἡ γῆ ὥστε μὴ ὁρᾶσθαι ὑπὸ τοῦ ἡλίου, τὸ τούτων οἰκεῖον φῶς εἶναι φασὶ τὸ γάλα. φανερόν δ' ὅτι καὶ τοῦτ' ἀδύνατον· τὸ μὲν γὰρ γάλα ἀεὶ τὸ αὐτὸ ἐν τοῖς αὐτοῖς ἐστὶν ἄστροις (φαίνεται γὰρ μέγιστος ὢν κύκλος), ὑπὸ δὲ τοῦ ἡλίου

ἀεὶ ἕτερα τὰ οὐχ ὁρώμενα διὰ τὸ μὴ ἐν ταύτῳ μένειν τόπῳ. ἔδει οὖν μεθισταμένου τοῦ ἡλίου μεθιστασθαι καὶ τὸ γάλα· νῦν δὲ οὐ φαίνεται τοῦτο γιγνόμενον. πρὸς [345b] δὲ τούτοις, εἰ καθάπερ δείκνυται νῦν ἐν τοῖς περὶ ἀστρολογίαν θεωρήμασιν, τὸ τοῦ ἡλίου μέγεθος μεῖζόν ἐστιν ἢ τὸ τῆς γῆς καὶ τὸ διάστημα πολλαπλασίως μεῖζον τὸ τῶν ἄστρον πρὸς τὴν γῆν ἢ τὸ τοῦ ἡλίου, καθάπερ τὸ τοῦ ἡλίου πρὸς τὴν γῆν ἢ τὸ τῆς σελήνης, οὐκ ἂν πόρρω που τῆς γῆς ὁ κῶνος ὁ ἀπὸ τοῦ ἡλίου συμβάλλοι τὰς ἀκτῖνας, οὐδ' ἂν ἡ σκιά πρὸς τοῖς ἄστροις εἴη τῆς γῆς, ἡ καλουμένη νύξ· ἀλλ' ἀνάγκη πάντα τὸν ἥλιον τὰ ἄστρα περιορᾶν, καὶ μηδενὶ τὴν γῆν ἀντιφράττειν αὐτῶν. ἔτι δ' ἐστὶν τρίτη τις ὑπόληψις περὶ αὐτοῦ· λέγουσιν γάρ τινες ἀνάκλασιν εἶναι τὸ γάλα τῆς ἡμετέρας ὄψεως πρὸς τὸν ἥλιον, ὥσπερ καὶ τὸν ἀστέρα τὸν κομήτην. ἀδύνατον δὲ καὶ τοῦτο· εἰ μὲν γὰρ τό τε ὁρῶν ἡρεμοίη καὶ τὸ ἔνοπτρον καὶ τὸ ὁρώμενον ἅπαν, ἐν τῷ αὐτῷ σημείῳ τοῦ ἐνόπτρου τὸ αὐτὸ φαίνοιτο· ἂν μέρος τῆς ἐμφάσεως· εἰ δὲ κινοῖτο τὸ ἔνοπτρον καὶ τὸ ὁρώμενον ἐν τῷ αὐτῷ μὲν ἀποστήματι πρὸς τὸ ὁρῶν καὶ ἡρεμοῦν, πρὸς ἄλληλα δὲ μήτε ἰσοταχῶς μηδ' ἐν τῷ αὐτῷ ἀεὶ διαστήματι, ἀδύνατον τὴν αὐτὴν ἔμφασιν ἐπὶ τοῦ αὐτοῦ εἶναι μέρους τοῦ ἐνόπτρου. τὰ δ' ἐν τῷ τοῦ γάλακτος κύκλῳ φερόμενα ἄστρα κινεῖται καὶ ὁ ἥλιος πρὸς ὃν ἡ ἀνάκλασις, μενόντων ἡμῶν, καὶ ὁμοίως καὶ ἴσον πρὸς ἡμᾶς ἀπέχοντα, αὐτῶν δ' οὐκ ἴσον· ὅτε μὲν γὰρ μέσων νυκτῶν ὁ δελφὶς ἐπιτέλλει, ὅτε δὲ ἔωθεν, τὰ δὲ μόρια τοῦ γάλακτος τὰ αὐτὰ μένει ἐν ἐκάστῳ. καίτοι οὐκ ἔδει, εἰ ἦν ἔμφασις, ἀλλὰ μὴ ἐν αὐτοῖς τι ἦν τοῦτο τὸ πάθος τοῖς τόποις. ἔτι δὲ νύκτωρ ἐν ὕδατι καὶ τοῖς τοιούτοις ἐνόπτροις τὸ μὲν γάλα ἐμφαίνεται θεωροῦσι, τὸ δὲ τὴν ὄψιν ἀνακλᾶσθαι πρὸς τὸν ἥλιον πῶς δυνατόν; ὅτι μὲν οὖν οὔτε ὁδὸς τῶν πλανήτων οὐδενὸς οὔτε φῶς ἐστὶ τῶν μὴ ὁρωμένων ἄστρον οὔτ' ἀνάκλασις, ἐκ τούτων φανερόν. σχεδὸν δὲ ταῦτ' ἐστὶν μόνον τὰ μέχρι τοῦ νῦν παραδεδομένα παρὰ τῶν ἄλλων. ἡμεῖς δὲ λέγωμεν ἀναλαβόντες τὴν ὑποκειμένην ἀρχὴν ἡμῖν. εἴρηται γὰρ πρότερον ὅτι τὸ ἔσχατον τοῦ λεγομένου ἀέρος δύναμιν ἔχει πυρός, ὥστε τῇ κινήσει διακρινομένου τοῦ ἀέρος ἀποκρίνεσθαι τοιαύτην σύστασιν οἷαν καὶ τοὺς κομήτας ἀστέρας εἶναι φαμεν. τοιοῦτον δὲ δεῖ νοῆσαι γιγνόμενον ὅπερ ἐπ' ἐκείνων, ὅταν μὴ αὐτὴ [346a] καθ' αὐτὴν γένηται ἡ τοιαύτη ἔκκρισις, ἀλλ' ὑπὸ τινος τῶν [346a.2] ἄστρον ἢ τῶν ἐνδεδεμένων ἢ τῶν πλανωμένων· τότε γὰρ οὗτοι φαίνονται κομήται διὰ τὸ παρακολουθεῖν αὐτῶν τῇ φορᾷ ὥσπερ τῷ ἡλίῳ τὴν τοιαύτην σύγκρισιν, ἀφ' ἧς διὰ τὴν ἀνάκλασιν τὴν ἄλλω φαίνεσθαι φαμεν, ὅταν οὕτω τύχη κεκραμένος ὁ ἀήρ. ὃ δὲ καθ' ἓνα συμβαίνει τῶν ἀστέρων, τοῦτο δεῖ λαβεῖν γιγνόμενον περὶ ὅλον τὸν οὐρανὸν καὶ τὴν ἄνω φορὰν ἅπασαν· εὐλογον γάρ, εἴπερ ἡ ἐνὸς ἀστρου κίνησις, καὶ τὴν τῶν πάντων ποιεῖν τι τοιοῦτον καὶ

ἐκρίπίζειν ἄερα [346a] τε καὶ διακρίνειν διὰ τὸ τοῦ κύκλου μέγεθος. <ἀνάγκη τοίνυν τῶν αὐτῶν μεγίστων κύκλων μάλιστα τὴν μέλλουσαν τοῦτο ποιήσκειν φορᾶν. . . χρὴ γὰρ τοῦτο, ἵνα πολλὴ κίνησις ἢ διὰ τὸ μέγεθος γιγνομένη καὶ πλείονα τὴν ἕξασιν ποιήσκει.> [346a.10] καὶ πρὸς τούτοις ἔτι καθ' ὃν τρόπον πυκνότατα καὶ πλεῖστα καὶ μέγιστα τυγχάνουσιν ὄντα τῶν ἄστρον. ὁ μὲν οὖν τῶν ζωδίων διὰ τὴν τοῦ ἡλίου φορᾶν καὶ τὴν τῶν πλανητῶν διαλύει τὴν τοιαύτην σύστασιν· διόπερ οἱ πολλοὶ τῶν κομητῶν ἐκτὸς γίνονται τῶν τροπικῶν. ἔτι δ' οὔτε περὶ τὸν ἥλιον οὔτε περὶ σελήνην γίνεταί κόμη· θᾶπτον γὰρ διακρίνουσιν ἢ ὥστε συστήναι τοιαύτην σύγκρισιν. οὗτος δ' ὁ κύκλος ἐν ᾧ τὸ γάλα φαίνεται τοῖς ὀρώσιν, ὃ τε μέγιστος ὢν τυγχάνει καὶ τῇ θέσει κείμενος οὕτως ὥστε πολὺ τοὺς τροπικοὺς ὑπερβάλλειν. πρὸς δὲ τούτοις ἄστρον ὁ τόπος πλήρης ἐστὶν τῶν μεγίστων καὶ λαμπροτάτων, καὶ ἔτι τῶν σποράδων καλουμένων (τοῦτο δ' ἐστὶν καὶ τοῖς ὄμμασιν ἰδεῖν φανερόν), ὥστε διὰ ταῦτα συνεχῶς καὶ ἀεὶ ταύτην πᾶσαν ἀθροίζεσθαι τὴν σύγκρισιν. σημεῖον δέ· καὶ γὰρ αὐτοῦ τοῦ κύκλου πλεόν τὸ φῶς ἐστὶν ἐν θατέρῳ ἡμικυκλίῳ τῷ τὸ δίπλωμα ἔχοντι· ἐν τούτῳ γὰρ πλείω καὶ πυκνότερά ἐστὶν ἄστρα ἢ ἐν θατέρῳ, ὡς οὐ δι' ἑτέραν τιν' αἰτίαν γιγνομένου τοῦ φέγγους ἢ διὰ τὴν τῶν ἄστρον φορᾶν· εἰ γὰρ ἐν τε τῷ κύκλῳ τούτῳ γίνεταί ἐν ᾧ τὰ πλεῖστα κεῖται τῶν ἄστρον, καὶ αὐτοῦ τοῦ κύκλου ἐν ᾧ μᾶλλον φαίνεται καταπεπυκνωθῆαι καὶ μεγέθει καὶ πλήθει ἀστέρων, ταύτην εἰκὸς ὑπολαβεῖν οἰκειοτάτην αἰτίαν εἶναι τοῦ πάθους. θεωρεῖσθω δ' ὃ τε κύκλος καὶ τὰ ἐν αὐτῷ ἄστρα ἐκ τῆς ὑπογραφῆς. τοὺς δὲ σποράδας καλουμένους οὕτω μὲν εἰς τὴν σφαῖραν οὐκ ἔσται τάξαι διὰ τὸ μηδεμίαν διὰ τέλους ἔχειν φανεράν ἑκαστον θέσιν, εἰς δὲ τὸν οὐρανὸν ἀναβλέπουσιν ἐστὶ δῆλον· ἐν μόνῳ γὰρ τούτῳ τῶν κύκλων τὰ μεταξὺ πλήρη τοιούτων ἀστέρων ἐστίν, ἐν δὲ τοῖς ἄλλοις διαλείπει [346b] φανερώς. ὥστ' εἴπερ καὶ περὶ τοῦ φαίνεσθαι κομήτας ἀποδεχόμεθα τὴν αἰτίαν ὡς εἰρημένην μετρίως, καὶ περὶ τοῦ γάλακτος τὸν αὐτὸν ὑποληπτέον τρόπον ἔχειν· ὃ γὰρ ἐκεῖ περὶ ἓνα ἐστὶν πάθος ἢ κόμη, τοῦτο περὶ κύκλον τινὰ συμβαίνει γίνεσθαι τὸ αὐτό, καὶ ἔστιν τὸ γάλα, ὡς εἰπεῖν οἶον ὀριζόμενον, ἢ τοῦ μεγίστου διὰ τὴν ἕκκρισιν κύκλου κόμη. διὸ καθάπερ πρότερον εἵπομεν, οὐ πολλοὶ οὐδὲ πολλάκις γίνονται κομήται, διὰ τὸ συνεχῶς ἀποκεκρίσθαι καὶ ἀποκρίνεσθαι καθ' ἑκάστην περίοδον εἰς τοῦτον τὸν τρόπον αἰεὶ τὴν τοιαύτην σύστασιν. περὶ μὲν οὖν τῶν γιγνομένων ἐν τῷ περὶ τὴν γῆν κόσμῳ τῷ συνεχεῖ ταῖς φοραῖς εἴρηται, περὶ τε τῆς διαδρομῆς τῶν ἄστρον καὶ τῆς ἐκπιμπραμένης φλογός, ἔτι δὲ περὶ τε κομητῶν καὶ τοῦ καλουμένου γάλακτος· σχεδὸν γάρ εἰσιν τοσαῦτα τὰ πάθη τὰ φαινόμενα περὶ τὸν τρόπον τοῦτον.

περὶ δὲ τοῦ τῇ θέσει μὲν δευτέρου τόπου μετὰ τοῦτον, πρώτου δὲ περὶ τὴν γῆν, λέγωμεν· οὗτος γὰρ κοινὸς ὕδατός τε τόπος καὶ ἀέρος καὶ τῶν



συμβαινόντων περὶ τὴν ἄνω γένεσιν αὐτοῦ. ληπτέον δὲ καὶ τούτων τὰς ἀρχὰς καὶ τὰς αἰτίας πάντων ὁμοίως. ἡ μὲν οὖν ὥς κινουῖσα καὶ κυρία καὶ πρώτη τῶν ἀρχῶν ὁ κύκλος ἐστίν, ἐν ᾧ φανερώς ἡ τοῦ ἡλίου φορὰ διακρίνουσα καὶ συγκρίνουσα τῷ γίνεσθαι πλησίον ἢ πορρώτερον αἰτία τῆς γενέσεως καὶ τῆς φθορᾶς ἐστι. μενούσης δὲ τῆς γῆς, τὸ περὶ αὐτὴν ὑγρὸν ὑπὸ τῶν ἀκτίνων καὶ ὑπὸ τῆς ἄλλης τῆς ἄνωθεν θερμότητος ἀτμιδούμενον φέρεται ἄνω· τῆς δὲ θερμότητος ἀπολιπούσης τῆς ἀναγούσης αὐτό, καὶ τῆς μὲν διασκεδαννυμένης πρὸς τὸν ἄνω τόπον, τῆς δὲ καὶ σβεννυμένης διὰ τὸ μετεωρίζεσθαι πορρώτερον εἰς τὸν ὑπὲρ τῆς γῆς ἀέρα, συνίσταται πάλιν ἡ ἀτμὶς ψυχομένη διὰ τε τὴν ἀπόλειψιν τοῦ θερμοῦ καὶ τὸν τόπον, καὶ γίνεται ὕδωρ ἐξ ἀέρος· γενόμενον δὲ πάλιν φέρεται πρὸς τὴν γῆν. ἔστι δ' ἡ μὲν ἐξ ὕδατος ἀναθυμίασις ἀτμὶς, ἡ δ' ἐξ ἀέρος εἰς ὕδωρ νέφος· ὁμίχλη δὲ νεφέλης περίττωμα τῆς εἰς ὕδωρ συγκρίσεως. διὸ σημεῖον μᾶλλον ἐστὶν εὐδίας ἢ ὑδάτων· οἶον γάρ ἐστιν ἡ ὁμίχλη νεφέλη ἄγονος, γίνεται δὲ κύκλος οὗτος μιμούμενος τὸν τοῦ ἡλίου κύκλον· ἅμα γὰρ [347a] ἐκεῖνος εἰς τὰ πλάγια μεταβάλλει καὶ οὗτος ἄνω καὶ κάτω. δεῖ δὲ νοῆσαι τοῦτον ὥσπερ ποταμὸν ῥέοντα κύκλῳ ἄνω καὶ κάτω, κοινὸν ἀέρος καὶ ὕδατος· πλησίον μὲν γὰρ ὄντος τοῦ ἡλίου ὁ τῆς ἀτμίδος ἄνω ῥεῖ ποταμός, ἀφισταμένου δὲ ὁ τοῦ ὕδατος κάτω. καὶ τοῦτ' ἐνδελεχὲς ἐθέλει γίνεσθαι κατὰ γε τὴν τάξιν· ὥστ' εἴπερ ἠνίπτοντο τὸν ὠκεανὸν οἱ πρότερον, τάχ' ἂν τοῦτον τὸν ποταμὸν λέγοιεν τὸν κύκλῳ ῥέοντα περὶ τὴν γῆν. ἀναγομένου δὲ τοῦ ὑγροῦ αἰεὶ διὰ τὴν τοῦ θερμοῦ δύναμιν καὶ πάλιν φερομένου κάτω διὰ τὴν ψύξιν πρὸς τὴν γῆν, οἰκείως τὰ ὀνόματα τοῖς πάθεσιν κεῖται καὶ τισιν διαφοραῖς αὐτῶν· ὅταν μὲν γὰρ κατὰ μικρὰ φέρηται, ψακάδες, ὅταν δὲ κατὰ μείζω μόρια, ὑετὸς καλεῖται.

ἐκ δὲ τοῦ καθ' ἡμέραν ἀτμίζοντος ὅσον ἂν μὴ μετεωρισθῇ δι' ὀλιγότητα τοῦ ἀνάγοντος αὐτὸ πυρὸς πρὸς τὸ ἀναγόμενον ὕδωρ, πάλιν καταφερόμενον ὅταν ψυχθῇ νύκτωρ, καλεῖται δρόσος καὶ πάχνη, πάχνη μὲν ὅταν ἡ ἀτμὶς παγῇ πρὶν εἰς ὕδωρ συγκριθῇ πάλιν (γίνεται δὲ χειμῶνος, καὶ μᾶλλον ἐν τοῖς χειμερινοῖς τόποις), δρόσος δ' ὅταν συγκριθῇ εἰς ὕδωρ ἢ ἀτμὶς, καὶ μήθ' οὕτως ἔχῃ ἢ ἀλέα ὥστε ξηρᾶναι τὸ ἀναχθέν, μήθ' οὕτω ψῦχος ὥστε παγῆναι τὴν ἀτμίδα αὐτὴν διὰ τὸ ἢ τὸν τόπον ἁλεινότερον ἢ τὴν ὥραν εἶναι· γίνεται γὰρ μᾶλλον ἢ δρόσος ἐν εὐδίᾳ καὶ ἐν τοῖς εὐδαινοτέροις τόποις, ἢ δὲ πάχνη, καθάπερ εἴρηται, τοῦναντίον· δῆλον γὰρ ὡς ἡ ἀτμὶς θερμότερον ὕδατος (ἔχει γὰρ τὸ ἀνάγον ἔτι πῦρ), ὥστε πλείονος ψυχρότητος αὐτὴν πῆξαι. γίνεται δ' ἄμφω αἰθρίας τε καὶ νηνεμίας· οὔτε γὰρ ἀναχθήσεται μὴ οὔσης αἰθρίας, οὔτε συστήναι δύναιτ' ἂν ἀνέμου πνέοντος. σημεῖον δ' ὅτι γίνεται ταῦτα διὰ τὸ μὴ πόρρω μετεωρίζεσθαι τὴν ἀτμίδα· ἐν γὰρ τοῖς ὄρεσιν οὐ γίνεται πάχνη. αἰτία

δὲ μία μὲν αὕτη, ὅτι ἀνάγεται ἐκ τῶν κοίλων καὶ ἐφύδρων τόπων, ὥστε καθάπερ φορτίον φέρουσα πλεόν ἢ ἀνάγουσα θερμότης ἢ καθ' ἑαυτὴν οὐ δύναται μετεωρίζειν ἐπὶ πολὺν τόπον αὐτὸ τοῦ ὕψους, ἀλλ' ἐγγὺς ἀφήσει πάλιν· ἑτέρα δ' ὅτι καὶ ῥεῖ μάλιστα ὁ ἀῆρ ῥέων ἐν τοῖς ὑψηλοῖς, ὃς διαλύει τὴν σύστασιν τὴν τοιαύτην. γίνεταί δ' ἡ δρόσος πανταχοῦ νοτίοις, οὐ βορείοις, πλὴν ἐν τῷ Πόντῳ. ἐκεῖ δὲ τοῦναντίον· βορείοις μὲν γὰρ γίνεταί, νοτίοις δ' οὐ [347b] γίνεταί. αἴτιον δ' ὁμοίως ὥσπερ ὅτι εὐδίας μὲν γίνεταί, χειμῶνος δ' οὐ· ὁ μὲν γὰρ νότος εὐδίαν ποιεῖ, ὁ δὲ βορέας χειμῶνα· ψυχρὸς γάρ, ὥστ' ἐκ τοῦ χειμῶνος τῆς ἀναθυμιάσεως σβέννυσιν τὴν θερμότητα. ἐν δὲ τῷ Πόντῳ ὁ μὲν νότος οὐχ οὕτως ποιεῖ εὐδίαν ὥστε γίνεσθαι ἀτμίδα, ὁ δὲ βορέας διὰ τὴν ψυχρότητα ἀντιπεριστὰς τὸ θερμὸν [347b.7] ἀθροίζει, ὥστε πλεόν ἀτμίζει μᾶλλον. πολλάκις δὲ τοῦτο καὶ ἐν τοῖς ἔξω τόποις ἰδεῖν γιγνόμενον ἔστιν· ἀτμίζει γὰρ τὰ φρέατα βορείοις μᾶλλον ἢ νοτίοις· ἀλλὰ τὰ μὲν βόρεια σβέννυσιν πρὶν συστήναι τι πλῆθος, ἐν δὲ τοῖς νοτίοις ἔῃται ἀθροίζεσθαι ἢ ἀναθυμιάσις. αὐτὸ δὲ τὸ ὕδωρ οὐ πήγνυται, καθάπερ ἐν τῷ περὶ τὰ νέφη τόπῳ. ἐκεῖθεν γὰρ τρία φοιτᾷ σώματα συνιστάμενα διὰ τὴν ψύξιν, ὕδωρ καὶ χιῶν καὶ χάλαζα. τούτων δὲ τὰ μὲν δύο ἀνάλογον καὶ διὰ τὰς αὐτὰς αἰτίας γίνεταί τοῖς κάτω, διαφέροντα τῷ μᾶλλον καὶ ἥττον καὶ πλήθει καὶ ὀλιγότητι· χιῶν γὰρ καὶ πάχνη ταύτόν, καὶ ὑετὸς καὶ δρόσος, ἀλλὰ τὸ μὲν πολὺ τὸ δ' ὀλίγον. ὁ μὲν γὰρ ὑετὸς ἐκ πολλῆς ἀτμίδος γίνεταί ψυχομένης· τούτου δ' αἴτιον ὅ τε τόπος πολὺς καὶ ὁ χρόνος ὢν, ἐν ᾧ συλλέγεται καὶ ἐξ οὗ. τὸ δ' ὀλίγον ἢ δρόσος· ἐφήμερος γὰρ ἡ σύστασις καὶ ὁ τόπος μικρός· δηλοῖ τε ἢ τε γένεσις οὕσα ταχεῖα καὶ βραχὺ τὸ πλῆθος. ὁμοίως δὲ καὶ πάχνη καὶ χιῶν· ὅταν γὰρ παγῇ τὸ νέφος, χιῶν ἔστιν, ὅταν δ' ἡ ἀτμίς, πάχνη. διὸ ἢ ὥρας ἢ χώρας ἔστιν σημεῖον ψυχρᾶς· οὐ γὰρ ἂν ἐπήγνυτο ἔτι πολλῆς ἐνούσης θερμότητος, εἰ μὴ ἐπεκράτει τὸ ψυχρός· ἐν γὰρ τῷ νέφει ἔτι ἔνεστιν πολὺ θερμὸν τὸ ὑπόλοιπον τοῦ ἐξατμίσαντος ἐκ τῆς γῆς τὸ ὑγρὸν πυρός. χάλαζα δ' ἐκεῖ μὲν γίνεταί, ἐν δὲ τῷ πλησίον τῆς γῆς ἀτμίζοντι τοῦτ' ἐκλείπει· καθάπερ γὰρ εἶπομεν, ὡς μὲν ἐκεῖ χιῶν, ἐνταῦθα γίνεταί πάχνη, ὡς δ' ἐκεῖ ὑετός, ἐνταῦθα δρόσος· ὡς δ' ἐκεῖ χάλαζα, ἐνταῦθα οὐκ ἀνταποδίδωσι τὸ ὅμοιον. τὸ δ' αἴτιον εἰποῦσι περὶ χαλάζης ἔσται δῆλον.

δεῖ δὲ λαβεῖν ἅμα καὶ τὰ συμβαίνοντα περὶ τὴν γένεσιν αὐτῆς, τά τε μὴ πλανῶντα καὶ τὰ δοκοῦντ' εἶναι παράλογα. ἔστι μὲν γὰρ ἡ χάλαζα κρύσταλλος, πήγνυται δὲ τὸ ὕδωρ τοῦ χειμῶνος· αἱ δὲ χάλαζαι γίνονται ἕαρος μὲν [348a] καὶ μετοπώρου μάλιστα, εἴτα δὲ καὶ τῆς ὁπώρας, χειμῶνος δ' ὀλιγάκις, καὶ ὅταν ἥττον ἢ ψυχρός. καὶ ὅλως δὲ γίνονται χάλαζαι μὲν ἐν τοῖς εὐδαινοτέροις τόποις, αἱ δὲ χιόνες ἐν τοῖς ψυχροτέροις. ἄτοπον δὲ καὶ τὸ πήγνυσθαι ὕδωρ ἐν τῷ ἄνω τόπῳ· οὔτε γὰρ παγῆναι δυνατόν πρὶν γενέσθαι

ὕδωρ, οὔτε τὸ ὕδωρ οὐδένα χρόνον οἷόν τε μένειν μετέωρον ὄν. ἀλλὰ μὴν οὐδ' ὥσπερ αἱ ψακάδες ἄνω μὲν ὀχοῦνται διὰ μικρότητα, ἐνδιατρίψασαι δ' ἐπὶ τοῦ ἀέρος, ὥσπερ καὶ ἐπὶ τοῦ ὕδατος γῆ καὶ χρυσὸς διὰ μικρομέρειαν πολλάκις ἐπιπλέουσιν, οὕτως ἐπὶ τοῦ ἀέρος τὸ ὕδωρ, συνελθόντων δὲ πολλῶν μικρῶν μεγάλαι καταφέρονται ψακάδες· τοῦτο γὰρ οὐκ ἐνδέχεται γενέσθαι ἐπὶ τῆς χαλάζης· οὐ γὰρ συμφύεται τὰ πεπηγότα ὥσπερ τὰ ὑγρά. δῆλον οὖν ὅτι ἄνω τοσοῦτον ὕδωρ ἔμεινεν· οὐ γὰρ ἂν ἐπάγη τοσοῦτον. τοῖς μὲν οὖν δοκεῖ τοῦ πάθους αἴτιον εἶναι τούτου καὶ τῆς γενέσεως, ὅταν ἀπωσθῇ τὸ νέφος εἰς τὸν ἄνω τόπον μᾶλλον ὄντα ψυχρὸν διὰ τὸ λήγειν ἐκεῖ τὰς ἀπὸ τῆς γῆς τῶν ἀκτίνων ἀνακλάσεις, ἐλθὼν δ' ἐκεῖ πηγνυσθαι τὸ ὕδωρ· διὸ καὶ θέρους μᾶλλον καὶ ἐν ταῖς ἀλεειναῖς χώραις γίνεσθαι τὰς χαλάζας, ὅτι ἐπὶ πλέον τὸ θερμὸν ἀνωθεῖ ἀπὸ τῆς γῆς τὰς νεφέλας. συμβαίνει δ' ἐν τοῖς σφόδρα ὑψηλοῖς ἥκιστα γίνεσθαι χάλαζαν· καίτοι ἔδει, ὥσπερ καὶ τὴν χιόνα ὀρώμεν ἐπὶ τοῖς ὑψηλοῖς μάλιστα γιγνομένην. ἔτι δὲ πολλάκις ὥπται νέφη φερόμενα σὺν ψόφῳ πολλῷ παρ' αὐτὴν τὴν γῆν, ὥστε φοβερὸν εἶναι τοῖς ἀκούουσιν καὶ ὀρώσιν ὡς ἐσομένου τινὸς μείζονος. ὅτε δὲ καὶ ἄνευ ψόφου τοιούτων ὀφθέντων νεφῶν χάλαζα γίνεταί πολλή καὶ τὸ μέγεθος ἄπιστος, καὶ τοῖς σχήμασιν οὐ στρογγύλη, διὰ τὸ μὴ πολὺν χρόνον γίνεσθαι τὴν φορὰν αὐτῆς ὡς πλησίον τῆς πήξεως γενομένης τῆς γῆς, ἀλλ' οὐχ ὥσπερ ἐκεῖνοί φασιν. ἀλλὰ μὴν ἀναγκαῖον ὑπὸ τοῦ μάλιστ' αἰτίου τῆς πήξεως μεγάλας γίνεσθαι χαλάζας· κρύσταλλος γὰρ ἢ χάλαζα, καὶ τοῦτο παντὶ δῆλον. μεγάλα δ' εἰσὶν αἱ τοῖς σχήμασιν μὴ στρογγύλαι. τοῦτο δ' ἐστὶ σημεῖον τοῦ παγῆναι πλησίον τῆς γῆς· αἱ γὰρ φερόμεναι πόρρωθεν διὰ τὸ φέρεσθαι μακρὰν περιθραυόμεναι γίνονται τό τε σχῆμα περιφερεῖς καὶ τὸ μέγεθος ἐλάττους. ὅτι μὲν [348b] οὖν οὐ τῷ ἀπωθεῖσθαι εἰς τὸν ἄνω τόπον τὸν ψυχρὸν ἢ πῆξις συμβαίνει, δῆλον· ἀλλ' ἐπειδὴ ὀρώμεν ὅτι γίνεταί ἀντιπερίστασις τῷ θερμῷ καὶ ψυχρῷ ἀλλήλοις (διὸ ἔν τε ταῖς ἀλέαις ψυχρὰ τὰ κάτω τῆς γῆς καὶ ἀλεεινὰ ἐν τοῖς πάγοις), τοῦτο δεῖ νομίζειν καὶ ἐν τῷ ἄνω γίνεσθαι τόπω, ὥστ' ἐν ταῖς ἀλεεινότεραις ὥραις ἀντιπεριστάμενον εἶσω τὸ ψυχρὸν διὰ τὴν κύκλῳ θερμότητα ὅτε μὲν ταχὺ ὕδωρ ἐκ νέφους ποιεῖ· διὸ καὶ αἱ ψακάδες πολὺ μείζους ἐν ταῖς ἀλεειναῖς γίνονται ἡμέραις ἢ ἐν τῷ χειμῶνι, καὶ ὕδατα λαβρότερα· λαβρότερα μὲν γὰρ λέγεται ὅταν ἄθροώτερα, ἄθροώτερα δὲ διὰ τὸ τάχος τῆς πυκνώσεως. (τοῦτο δὲ γίνεταί αὐτὸ τοῦναντίον ἢ ὡς Ἀναξαγόρας λέγει· ὁ μὲν γὰρ ὅταν εἰς τὸν ψυχρὸν ἀέρα ἐπανέλθῃ φησὶ τοῦτο πάσχειν, ἡμεῖς δ' ὅταν εἰς τὸν θερμὸν κατέλθῃ, καὶ μάλιστα ὅταν μάλιστα.) ὅταν δ' ἔτι μᾶλλον ἀντιπεριστῇ ἐντὸς τὸ ψυχρὸν ὑπὸ τοῦ ἔξω θερμοῦ, ὕδωρ ποιῆσαν ἔπηξεν καὶ γίνεταί χάλαζα. συμβαίνει δὲ τοῦτο ὅταν θάττον ἢ ἢ πῆξις ἢ ἢ τοῦ ὕδατος φορὰ ἢ κάτω· εἰ γὰρ φέρεται μὲν ἐν τοσῷδε χρόνῳ, ἢ

δὲ ψυχρότης σφοδρὰ οὕσα ἐν ἐλάττονι ἔπηξεν, οὐδὲν κωλύει μετέωρον παγῆναι, ἐὰν ἢ πῆξις ἐν ἐλάττονι γίνηται χρόνῳ τῆς κάτω φορᾶς. καὶ ὅσω δ' ἂν ἐγγύτερον καὶ ἄθροωτέρα γένηται ἢ πῆξις, τὰ τε ὕδατα λαβρότερα γίνονται καὶ αἱ ψακάδες καὶ αἱ χάλαζαι μείζους διὰ τὸ βραχὺν φέρεσθαι τόπον. καὶ οὐ πυκναὶ αἱ ψακάδες αἱ μεγάλαι πίπτουσιν διὰ τὴν αὐτὴν αἰτίαν. ἦττον δὲ τοῦ θέρους γίνονται ἢ ἔαρος καὶ μετοπώρου, μᾶλλον μέντοι ἢ χειμῶνος, ὅτι ξηρότερος ὁ ἀῆρ τοῦ θέρους· ἐν δὲ τῷ ἔαρι ἔτι ὑγρός, ἐν δὲ τῷ μετοπώρῳ ἤδη ὑγραίνεται. γίνονται δέ ποτε, καθάπερ εἴρηται, καὶ τῆς ὁπώρας χάλαζαι διὰ τὴν αὐτὴν αἰτίαν. συμβάλλεται δ' ἔτι πρὸς τὴν ταχυτῆτα τῆς πήξεως καὶ τὸ προτεθερμάνθαι τὸ ὕδωρ· θᾶττον γὰρ ψύχεται. διὸ πολλοὶ ὅταν τὸ ὕδωρ ψῦξαι ταχὺ βουληθῶσιν, εἰς τὸν ἥλιον τιθέασιν πρῶτον, καὶ οἱ περὶ τὸν Πόντον ὅταν ἐπὶ τοῦ κρυστάλλου σκηνοποιῶνται πρὸς τὰς τῶν ἰχθύων θήρας (θηρεύουσι γὰρ διακόπτοντες τὸν κρύσταλλον), ὕδωρ θερμὸν [349a] περιχέουσι τοῖς καλάμοις διὰ τὸ θᾶττον πήγνυσθαι· χρῶνται γὰρ τῷ κρυστάλλῳ ὥσπερ τῷ μολύβδῳ, ἵν' ἡρεμῶσιν οἱ καλάμοι. θερμὸν δὲ γίνονται ταχὺ τὸ συνιστάμενον ὕδωρ ἔν τε ταῖς χώραις καὶ ταῖς ὥραις ταῖς ἀλεειναῖς. γίνονται δὲ καὶ περὶ τὴν Ἀραβίαν καὶ τὴν Αἰθιοπίαν τοῦ θέρους τὰ ὕδατα καὶ οὐ τοῦ χειμῶνος, καὶ ταῦτα ῥαγδαῖα, καὶ τῆς αὐτῆς ἡμέρας πολλάκις, διὰ τὴν αὐτὴν αἰτίαν· ταχὺ γὰρ ψύχεται τῇ ἀντιπεριστάσει, ἢ γίνονται διὰ τὸ ἀλεεινὴν εἶναι τὴν χώραν ἰσχυρῶς. περὶ μὲν οὖν ὑετοῦ καὶ δρόσου καὶ νιφετοῦ καὶ πάχνης καὶ χαλάζης, διὰ τίν' αἰτίαν γίνονται καὶ τίς ἡ φύσις αὐτῶν ἔστιν, εἰρήσθω τοσαῦτα. περὶ δὲ ἀνέμων καὶ πάντων πνευμάτων, ἔτι δὲ ποταμῶν καὶ θαλάττης λέγωμεν, πρῶτον καὶ περὶ τούτων διαπορήσαντες πρὸς ἡμᾶς αὐτούς· ὥσπερ γὰρ καὶ περὶ ἄλλων, οὕτως καὶ περὶ τούτων οὐδὲν παρειλήφαμεν λεγόμενον τοιοῦτον ὃ μὴ κἂν ὁ τυχὼν εἴπειεν. εἰσὶ δέ τινες οἱ φασὶ τὸν καλούμενον ἄερα κινούμενον μὲν καὶ ῥέοντα ἄνεμον εἶναι, [349a.18] συνιστάμενον δὲ τὸν αὐτὸν τοῦτον πάλιν νέφος καὶ ὕδωρ, ὡς τῆς αὐτῆς φύσεως οὔσης ὕδατος καὶ πνεύματος, καὶ τὸν ἄνεμον εἶναι κίνησιν ἀέρος. διὸ καὶ τῶν σοφῶς βουλομένων λέγειν τινὲς ἓνα φασὶν ἄνεμον εἶναι πάντας τοὺς ἀνέμους, ὅτι συμπέπτωκε καὶ τὸν ἄερα τὸν κινούμενον ἓνα καὶ τὸν αὐτὸν εἶναι πάντα, δοκεῖν δὲ διαφέρειν οὐδὲν διαφέροντα διὰ τοὺς τρόπους ὅθεν ἂν τυγχάνη ῥέων ἐκάστοτε, παραπλησίως λέγοντες ὥσπερ ἂν εἴ τις οἶοιτο καὶ τοὺς ποταμοὺς πάντας ἓνα ποταμὸν εἶναι. διὸ βέλτιον οἱ πολλοὶ λέγουσιν ἄνευ ζητήσεως τῶν μετὰ ζητήσεως οὕτω λεγόντων· εἰ μὲν γὰρ ἐκ μιᾶς ἀρχῆς ἅπαντες ῥέουσι, κάκεῖ τὰ πνεύματα τὸν αὐτὸν τρόπον, τάχα λέγοιεν ἂν τι οἱ λέγοντες οὕτως· εἰ δ' ὁμοίως ἐνταῦθα κάκεῖ, δῆλον ὅτι τὸ κόμψευμα ἂν εἴη τοῦτο ψεῦδος, ἐπεὶ τοῦτό γε προσήκουσαν ἔχει σκέψιν, τί τ' ἔστιν ὁ ἄνεμος, καὶ γίνονται πῶς, καὶ τί τὸ κινεῖν, καὶ ἡ ἀρχὴ πόθεν αὐτῶν, καὶ πότερον ἄρ'

ὥσπερ ἐξ ἀγγείου δεῖ λαβεῖν ῥέοντα τὸν ἄνεμον, καὶ μέχρι τούτου ῥεῖν ἕως ἂν κενωθῇ τὸ ἀγγεῖον, οἷον ἐξ ἀσκῶν ἀφιέμενον, [349b] ἢ καθάπερ καὶ οἱ γραφεῖς γράφουσιν, ἐξ αὐτῶν τὴν ἀρχὴν ἀφιέντας. ὁμοίως δὲ καὶ περὶ τῆς τῶν ποταμῶν γενέσεως δοκεῖ τισιν ἔχειν· τὸ γὰρ ἀναχθὲν ὑπὸ τοῦ ἡλίου ὕδωρ πάλιν ὑόμενον ἀθροισθὲν ὑπὸ γῆν ῥεῖν ἐκ κοιλίας μεγάλης, ἢ πάντας μιᾶς ἢ ἄλλον ἄλλης· καὶ οὐ γίνεσθαι ὕδωρ οὐδέν, ἀλλὰ τὸ συλλεχθὲν ἐκ τοῦ χειμῶνος εἰς τὰς τοιαύτας ὑποδοχάς, τοῦτο γίνεσθαι τὸ πλῆθος τὸ τῶν ποταμῶν. διὸ καὶ μείζους αἰετὸς τοῦ χειμῶνος ῥεῖν ἢ τοῦ θέρους, καὶ τοὺς μὲν ἀενάους εἶναι τοὺς δ' οὐκ ἀενάους· ὅσων μὲν γὰρ διὰ τὸ μέγεθος τῆς κοιλίας πολὺ τὸ συλλεγόμενον ὕδωρ ἐστίν, ὥστε διαρκεῖν καὶ μὴ προαναλίσκεσθαι πρὶν ἐπελθεῖν τὸ ὄμβριον ἐν τῷ χειμῶνι πάλιν, τούτους μὲν ἀενάους εἶναι διὰ τέλους, ὅσοις δὲ ἐλάττους αἰετὸς ὑποδοχαί, τούτους δὲ δι' ὀλιγότητα τοῦ ὕδατος φθάνειν ξηραίνομένους πρὶν ἐπελθεῖν τὸ ἐκ τοῦ οὐρανοῦ, κενουμένου τοῦ ἀγγείου. καίτοι φανερόν, εἴ τις βούλεται ποιήσας οἷον ὑποδοχὴν πρὸ ὀμμάτων τῷ καθ' ἡμέραν ὕδατι ῥέοντι συνεχῶς νοῆσαι τὸ πλῆθος· ὑπερβάλλοι γὰρ ἂν τῷ μεγέθει τὸν τῆς γῆς ὄγκον ἢ οὐ πολὺ ἂν ἐλλείποι τὸ δεχόμενον πᾶν τὸ ῥέον ὕδωρ εἰς τὸν ἐνιαυτόν. ἀλλὰ δῆλον ὅτι συμβαίνει μὲν καὶ πολλὰ τοιαῦτα πολλαχοῦ τῆς γῆς, οὐ μὲν ἄλλ' ἄτοπον εἴ τις μὴ νομίζει διὰ τὴν αὐτὴν αἰτίαν ὕδωρ ἐξ ἀέρος γίνεσθαι δι' ἥνπερ ὑπὲρ γῆς καὶ ἐν τῇ γῇ. ὥστ' εἴπερ κάκεῖ διὰ ψυχρότητα συνίσταται ὁ ἀτμίζων ἀήρ εἰς ὕδωρ, καὶ ὑπὸ τῆς ἐν τῇ γῇ ψυχρότητος τὸ αὐτὸ τοῦτο δεῖ νομίζειν συμβαίνειν, καὶ γίνεσθαι μὴ μόνον τὸ ἀποκεκριμένον ὕδωρ ἐν αὐτῇ, καὶ τοῦτο ῥεῖν, ἀλλὰ καὶ γίνεσθαι συνεχῶς. ἔτι δὲ τοῦ μὴ γιγνομένου ἄλλ' ὑπάρχοντος ὕδατος καθ' ἡμέραν μὴ τοιαύτην εἶναι τὴν ἀρχὴν τῶν ποταμῶν, οἷον ὑπὸ γῆν λίμνας τινὰς ἀποκεκριμένας, καθάπερ ἔνιοι λέγουσιν, ἀλλ' ὁμοίως ὥσπερ καὶ ἐν τῷ ὑπὲρ γῆς τόπῳ μικραὶ συνιστάμεναι ῥανίδες, καὶ πάλιν αὗται ἐτέραις, τέλος μετὰ πλῆθους καταβαίνει τὸ ὑόμενον ὕδωρ, οὕτω καὶ ἐν τῇ γῇ ἐκ μικρῶν συλλείβεσθαι τὸ πρῶτον καὶ εἶναι οἷον πιδώσης εἰς ἐν τῆς γῆς τὰς ἀρχὰς τῶν ποταμῶν. δηλοῖ δ' αὐτὸ τὸ ἔργον· οἱ γὰρ τὰς ὑδραγωγίας [350a] ποιοῦντες ὑπονόμοις καὶ διώρυξι συνάγουσιν, ὥσπερ ἂν ιδιούσης τῆς γῆς ἀπὸ τῶν ὑψηλῶν. διὸ καὶ τὰ ῥεύματα τῶν ποταμῶν ἐκ τῶν ὀρέων φαίνεται ῥέοντα, καὶ πλεῖστοι καὶ μέγιστοι ποταμοὶ ῥέουσιν ἐκ τῶν μεγίστων ὀρέων. ὁμοίως δὲ καὶ αἱ κρήναι αἱ πλεῖσται ὄρεσιν καὶ τόποις ὑψηλοῖς γειτνιῶσιν· ἐν δὲ τοῖς πεδίοις ἄνευ ποταμῶν ὀλίγα γίνονται πάμπαν. οἱ γὰρ ὄρεινοὶ καὶ ὑψηλοὶ τόποι, οἷον σπόγγος πυκνὸς ἐπικρεμάμενος, κατὰ μικρὰ μὲν πολλαχῇ δὲ διαπιδῶσι καὶ συλλείβουσι τὸ ὕδωρ· δέχονταί τε γὰρ τοῦ κατιόντος ὕδατος πολὺ πλῆθος (τί γὰρ διαφέρει κοίλην καὶ ὑπτίαν ἢ πρηνῇ τὴν περιφέρειαν εἶναι καὶ κυρτήν; ἀμφοτέρως γὰρ τὸν ἴσον ὄγκον περιλήψεται σώματος) καὶ τὴν ἀνιοῦσαν ἀτμίδα ψύχουσι καὶ συγκρίνουσι πάλιν εἰς ὕδωρ· διό, καθάπερ

εἶπομεν, οἱ μέγιστοι τῶν ποταμῶν ἐκ τῶν μεγίστων φαίνονται ῥέοντες ὁρῶν. δῆλον δ' ἐστὶ τοῦτο θεωμένοις τὰς τῆς γῆς περιόδους· ταύτας γὰρ ἐκ τοῦ πυνθάνεσθαι παρ' ἐκάστων οὕτως ἀνέγραψαν, ὅσων μὴ συμβέβηκεν αὐτόπτας γενέσθαι τοὺς λέγοντας. ἐν μὲν οὖν τῇ Ἀσίᾳ πλεῖστοι μὲν ἐκ τοῦ Παρνασσοῦ καλουμένου φαίνονται ῥέοντες ὄρους καὶ μέγιστοι ποταμοί, τοῦτο δ' ὁμολογεῖται πάντων εἶναι μέγιστον τὸ ὄρος τῶν πρὸς τὴν ἕω τὴν χειμερινήν· ὑπερβάντι γὰρ ἤδη τοῦτο φαίνεται ἢ ἕξω θάλαττα, ἥς τὸ πέρας οὐ δῆλον τοῖς ἐντεῦθεν. ἐκ μὲν οὖν τούτου ῥέουσιν ἄλλοι τε ποταμοὶ καὶ ὁ Βάκτρος καὶ ὁ Χοάσπης καὶ ὁ Ἀράξης· τούτου δ' ὁ Τάναϊς ἀποσχίζεται μέρος ὧν εἰς τὴν Μαιῶτιν λίμνην. ῥεῖ δὲ καὶ ὁ Ἰνδὸς ἐξ αὐτοῦ, πάντων τῶν ποταμῶν ῥεῦμα πλεῖστον. ἐκ δὲ τοῦ Καυκάσου ἄλλοι τε ῥέουσι πολλοὶ καὶ κατὰ πλῆθος καὶ κατὰ μέγεθος ὑπερβάλλοντες, καὶ ὁ Φᾶσις· ὁ δὲ Καύκασος μέγιστον ὄρος τῶν πρὸς τὴν ἕω τὴν θερινήν ἐστίν καὶ πλήθει καὶ ὕψει. σημεῖα δὲ τοῦ μὲν ὕψους ὅτι ὀρᾷται καὶ ἀπὸ τῶν καλουμένων βαθέων καὶ εἰς τὴν λίμνην εἰσπλεόντων, ἔτι δ' ἡλιοῦται τῆς νυκτὸς αὐτοῦ τὰ ἄκρα μέχρι τοῦ τρίτου μέρους ἀπὸ τε τῆς ἕω καὶ πάλιν ἀπὸ τῆς ἐσπέρας· τοῦ δὲ πλήθους ὅτι πολλὰς ἔχον ἕδρας, ἐν αἷς ἔθνη τε κατοικεῖ πολλὰ καὶ λίμνας εἶναί φασι μεγάλας, ἀλλ' ὅμως πάσας τὰς ἕδρας εἶναί φασι φανεράς μέχρι τῆς ἐσχάτης κορυφῆς. ἐκ δὲ [350b] τῆς Πυρήνης (τοῦτο δ' ἐστὶν ὄρος πρὸς δυσμὴν ἰσημερινήν ἐν τῇ Κελτικῇ) ῥέουσιν ὃ τε Ἰστρος καὶ ὁ Ταρτησσός. οὗτος μὲν οὖν ἕξω στηλῶν, ὁ δ' Ἰστρος δι' ὅλης τῆς Εὐρώπης εἰς τὸν Εὐξείνιον πόντον. τῶν δ' ἄλλων ποταμῶν οἱ πλεῖστοι πρὸς ἄρκτον ἐκ τῶν ὁρῶν τῶν Ἀρκυνίων· ταῦτα δὲ καὶ ὕψει καὶ πλήθει μέγιστα περὶ τὸν τόπον τοῦτόν ἐστιν. ὑπ' αὐτὴν δὲ τὴν ἄρκτον ὑπὲρ τῆς ἐσχάτης Σκυθίας αἱ καλούμεναι Ῥῖπαι, περὶ ὧν τοῦ μεγέθους λίαν εἰσὶν οἱ λεγόμενοι λόγοι μυθώδεις· ῥέουσι δ' οὖν οἱ πλεῖστοι καὶ μέγιστοι μετὰ τὸν Ἰστρον τῶν ἄλλων ποταμῶν ἐντεῦθεν, ὥς φασιν. ὁμοίως δὲ καὶ περὶ τὴν Λιβύην οἱ μὲν ἐκ τῶν Αἰθιοπικῶν ὁρῶν, ὃ τε Αἰγῶν καὶ ὁ Νύσης, οἱ δὲ μέγιστοι τῶν διωνομασμένων, ὃ τε Χρεμέτης καλούμενος, ὃς εἰς τὴν ἕξω ῥεῖ θάλατταν, καὶ τοῦ Νείλου τὸ ῥεῦμα τὸ πρῶτον, ἐκ τοῦ Ἀργυροῦ καλουμένου ὄρους. τῶν δὲ περὶ τὸν Ἑλληνικὸν τόπον ὁ μὲν Ἀχελῷος ἐκ Πίνδου, καὶ ὁ Ἰναχος ἐντεῦθεν, ὁ δὲ Στρυμὼν καὶ Νέσσος καὶ ὁ Ἐβρος ἅπαντες τρεῖς ὄντες ἐκ τοῦ Σκόμβρου· πολλὰ δὲ ῥεύματα καὶ ἐκ τῆς Ῥοδόπης ἐστίν. ὁμοίως δὲ καὶ τοὺς ἄλλους ποταμοὺς εὖροι τις ἂν ῥέοντας· ἀλλὰ μαρτυρίου χάριν τούτους εἶπομεν· ἐπεὶ καὶ ὅσοι αὐτῶν ῥέουσιν ἐξ ἐλῶν, τὰ ἔλη ὑπὸ ὄρη κεῖσθαι συμβαίνει πάντα σχεδὸν ἢ τόπους ὑψηλοὺς ἐκ προσαγωγῆς. ὅτι μὲν οὖν οὐ δεῖ νομίζειν οὕτω γίνεσθαι τὰς ἀρχὰς τῶν ποταμῶν ὥς ἐξ ἀφωρισμένων κοιλιῶν, φανερόν· οὔτε γὰρ ἂν ὁ τόπος ἱκανὸς ἦν ὁ τῆς γῆς ὥς εἰπεῖν, ὥσπερ οὐδ' ὁ τῶν νεφῶν, εἰ τὸ ὄν ἔδει ῥεῖν μόνον, ἀλλὰ μὴ τὸ μὲν ἀπῆγει τὸ δ' ἐγίγνετο, ἀλλ' αἰεὶ ἀπὸ ὄντος ἐταμιεύετο· τό τε

ὕπὸ τοῖς ὄρεσιν ἔχειν τὰς [350b.28] πηγὰς μαρτυρεῖ διότι τῷ συρρεῖν εἰς ὀλίγον καὶ κατὰ μικρὸν ἐκ πολλῶν νοτίδων διαδίδωσιν ὁ τόπος καὶ γίνονται οὕτως αἱ πηγαὶ τῶν ποταμῶν. οὐ μὴν ἀλλὰ καὶ τοιούτους εἶναι τόπους ἔχοντας πλῆθος ὕδατος, οἷον λίμνας, οὐδὲν ἄτοπον, πλὴν οὐτι τηλικαύτας ὥστε τοῦτο συμβαίνειν, οὐδὲν μᾶλλον ἢ εἴ τις οἴοιτο τὰς φανεράς εἶναι πηγὰς τῶν ποταμῶν· σχεδὸν γὰρ ἐκ κρηνῶν οἱ πλεῖστοι ῥέουσιν. ὅμοιον οὖν τὸ ἐκείνας καὶ τὸ ταύτας νομίζειν εἶναι τὸ σῶμα τὸ τοῦ ὕδατος πᾶν. ὅτι δ' εἰσὶν τοιαῦτα φάραγγες καὶ διαστάσεις τῆς γῆς, [351a] δηλοῦσιν οἱ καταπινόμενοι τῶν ποταμῶν. συμβαίνει δὲ τοῦτο πολλαχοῦ τῆς γῆς, οἷον τῆς μὲν Πελοποννήσου πλεῖστα τοιαῦτα περὶ τὴν Ἀρκαδίαν ἐστίν. αἷτιον δὲ διὰ τὸ ὄρεινὴν οὔσαν μὴ ἔχειν ἐκροὰς ἐκ τῶν κοίλων εἰς θάλατταν· πληρούμενοι γὰρ οἱ τόποι καὶ οὐκ ἔχοντες ἔκρυσιν αὐτοῖς εὐρίσκονται τὴν διόδον εἰς βάθος, ἀποβιαζομένου τοῦ ἄνωθεν ἐπρόντος ὕδατος. περὶ μὲν οὖν τὴν Ἑλλάδα μικρὰ τοιαῦτα παντελῶς ἐστὶν γιγνόμενα· ἀλλ' ἢ γε ὑπὸ τὸν Καύκασον λίμνη, ἣν καλοῦσιν οἱ ἐκεῖ θάλατταν· αὕτη γὰρ ποταμῶν πολλῶν καὶ μεγάλων εἰσβαλλόντων οὐκ ἔχουσα ἔκρουν φανερόν ἐκδίδωσιν ὑπὸ γῆν κατὰ Κοραζούς, περὶ τὰ καλούμενα βαθέα τοῦ Πόντου· ταῦτα δ' ἐστὶν ἄπειρόν τι τῆς θαλάττης βάθος· οὐδεὶς γοῦν πώποτε καθεὶς ἐδυνήθη πέρας εὐρεῖν. ταύτη δὲ πόρρω τῆς γῆς σχεδὸν περὶ τριακόσια στάδια πότιμον ἀναδίδωσιν ὕδωρ ἐπὶ πολλὸν τόπον, οὐ συνεχῇ δέ, ἀλλὰ τρισσαχῇ. καὶ περὶ τὴν Λιγυστικὴν οὐκ ἐλάττων τοῦ Ῥοδανοῦ καταπίνεται τις ποταμός, καὶ πάλιν ἀναδίδωσιν κατ' ἄλλον τόπον· ὁ δὲ Ῥοδανὸς ποταμὸς ναυσιπέρατός ἐστιν. οὐκ αἰεὶ δ' οἱ αὐτοὶ τόποι τῆς γῆς οὗτ' ἔνυγροί εἰσιν οὔτε ξηροί, ἀλλὰ μεταβάλλουσιν κατὰ τὰς τῶν ποταμῶν γενέσεις καὶ τὰς ἀπολείψεις· διὸ καὶ τὰ περὶ τὴν ἡπειρον μεταβάλλει καὶ τὴν θάλατταν, καὶ οὐκ αἰεὶ τὰ μὲν γῆ τὰ δὲ θάλαττα διατελεῖ πάντα τὸν χρόνον, ἀλλὰ γίγνεται θάλαττα μὲν ὅπου χέρσος, ἔνθα δὲ νῦν θάλαττα, πάλιν ἐνταῦθα γῆ. κατὰ μέντοι τινὰ τάξιν νομίζειν χρὴ ταῦτα γίνεσθαι καὶ περίοδον. ἀρχὴ δὲ τούτων καὶ αἷτιον ὅτι καὶ τῆς γῆς τὰ ἐντός, ὥσπερ τὰ σώματα τῶν φυτῶν καὶ ζώων, ἀκμὴν ἔχει καὶ γῆρας. πλὴν ἐκείνοις μὲν οὐ κατὰ μέρος ταῦτα συμβαίνει πάσχειν, ἀλλ' ἅμα πᾶν ἀκμάζειν καὶ φθίνειν ἀναγκαῖον· τῇ δὲ γῇ τοῦτο γίγνεται κατὰ μέρος διὰ ψύξιν καὶ θερμότητα. ταῦτα μὲν οὖν αὖξεται καὶ φθίνει διὰ τὸν ἥλιον καὶ τὴν περιφοράν, διὰ δὲ ταῦτα καὶ τὴν δύναμιν τὰ μέρη τῆς γῆς λαμβάνει διαφέρουσιν, ὥστε μέχρι τινὸς ἔνυδρα δύναται διαμένειν, εἴτα ξηραίνεται καὶ γηράσκει πάλιν· ἕτεροι δὲ τόποι βιώσκονται καὶ ἔνυδροι γίνονται κατὰ μέρος. ἀνάγκη δὲ τῶν μὲν τόπων γιγνομένων [351b] ξηροτέρων τὰς πηγὰς ἀφανίζεσθαι, τούτων δὲ συμβαινόντων τοὺς ποταμοὺς πρῶτον μὲν ἐκ μεγάλων μικροῦς, εἴτα τέλος γίνεσθαι ξηροῦς, τῶν δὲ ποταμῶν μεθισταμένων καὶ ἔνθεν μὲν ἀφανιζομένων ἐν ἄλλοις δ' ἀνάλογον γιγνομένων μεταβάλλειν τὴν

θάλατταν· ὅπου μὲν γὰρ ἐξωθουμένη ὑπὸ τῶν ποταμῶν ἐπλεόναζεν, ἀπιοῦσαν ξηρὰν ποιεῖν ἀναγκαῖον, ὅπου δὲ τοῖς ῥεύμασιν πληθύνουσα ἐξηραίνετο προσχουμένη, πάλιν ἐνταῦθα λιμνάζειν. ἀλλὰ διὰ τὸ γίνεσθαι πᾶσαν τὴν φυσικὴν περὶ τὴν γῆν γένεσιν ἐκ προσαγωγῆς καὶ ἐν χρόνοις παμμήκεσι πρὸς τὴν ἡμετέραν ζωὴν, λανθάνει ταῦτα γινόμενα, καὶ πρότερον ὅλων τῶν ἐθνῶν ἀπώλεια γίνονται καὶ φθοραὶ πρὶν μνημονευθῆναι τὴν τούτων μεταβολὴν ἐξ ἀρχῆς εἰς τέλος. μέγισται μὲν οὖν φθοραὶ γίνονται καὶ τάχιστα ἐν τοῖς πολέμοις, ἄλλαι δὲ νόσοις, αἱ δὲ ἀφορίαις, καὶ ταύταις αἱ μὲν μεγάλαί αἱ δὲ κατὰ μικρόν, ὥστε λανθάνουσι τῶν γε τοιούτων ἐθνῶν καὶ αἱ μεταναστάσεις διὰ τὸ τοὺς μὲν λείπειν τὰς χώρας, τοὺς δὲ ὑπομένειν μέχρι τούτου μέχρι περ ἂν μηκέτι δύνηται τρέφειν ἡ χώρα πλῆθος μηδέν. ἀπὸ τῆς πρώτης οὖν ἀπολείψεως εἰς τὴν ὑστέραν εἰκὸς γίνεσθαι μακροὺς χρόνους, ὥστε μηδένα μνημονεύειν, ἀλλὰ σωζομένων ἔτι τῶν ὑπομενόντων ἐπιλελῆσθαι διὰ χρόνου πλῆθος. τὸν αὐτὸν δὲ τρόπον χρὴ νομίζειν καὶ τοὺς κατοικισμοὺς λανθάνειν πότε πρῶτον ἐγένοντο τοῖς ἔθνεσιν ἐκάστοις εἰς τὰ μεταβάλλοντα καὶ γινόμενα ξηρὰ ἐξ ἐλώδων καὶ ἐνύδρων· καὶ γὰρ ἐνταῦθα κατὰ μικρόν ἐν πολλῷ γίγνεται χρόνῳ ἢ ἐπίδοσις, ὥστε μὴ μνημονεύειν τίνες πρῶτοι καὶ πότε καὶ πῶς ἐχόντων ἦλθον τῶν τόπων, οἷον συμβέβηκεν καὶ τὰ περὶ Αἴγυπτον· καὶ γὰρ οὗτος αἰεὶ ξηρότερος ὁ τόπος φαίνεται γινόμενος καὶ πᾶσα ἡ χώρα τοῦ ποταμοῦ πρόσχωσις οὕσα τοῦ Νείλου, διὰ δὲ τὸ κατὰ μικρόν ξηρανομένων τῶν ἐλῶν τοὺς πλησίον εἰσοικίζεσθαι τὸ τοῦ χρόνου μῆκος ἀφήρηται τὴν ἀρχήν. φαίνεται οὖν καὶ τὰ στόματα πάντα, πλην ἐνὸς τοῦ Κανωβικοῦ, χειροποίητα καὶ οὐ τοῦ ποταμοῦ ὄντα, καὶ τὸ ἀρχαῖον ἢ Αἴγυπτος Θῆβαι καλούμεναι. δηλοῖ δὲ καὶ Ὅμηρος, οὕτως πρόσφατος ὢν ὥς εἰπεῖν πρὸς τὰς τοιαύτας μεταβολάς· ἐκείνου γὰρ τοῦ τόπου [352a] ποιεῖται μνείαν ὥς οὕτω Μέμφιος οὔσης ἢ ὅλως ἢ οὐ τηλικαύτης. τοῦτο δ' εἰκὸς οὕτω συμβαίνειν· οἱ γὰρ κάτωθεν τόποι τῶν ἄνωθεν ὕστερον ὠκίσθησαν· ἐλώδεις γὰρ ἐπὶ πλείῳ χρόνον ἀναγκαῖον εἶναι τοὺς ἐγγύτερον τῆς προσχώσεως διὰ τὸ λιμνάζειν ἐν τοῖς ἐσχάτοις αἰεὶ μᾶλλον. μεταβάλλει δὲ τοῦτο καὶ πάλιν εὐθενεῖ· ξηραίνόμενοι γὰρ οἱ τόποι ἔρχονται εἰς τὸ καλῶς ἔχειν, οἱ δὲ πρότερον εὐκραεῖς ὑπερξηραίνόμενοί ποτε γίνονται χεῖρους. ὅπερ συμβέβηκε τῆς Ἑλλάδος καὶ περὶ τὴν Ἀργείων καὶ Μυκηναίων χώραν· ἐπὶ μὲν γὰρ τῶν Τρωικῶν ἡ μὲν Ἀργεῖα διὰ τὸ ἐλώδης εἶναι ὀλίγους ἐδύνατο τρέφειν, ἡ δὲ Μυκηναία καλῶς εἶχεν (διὸ ἐντιμότερα ἦν), νῦν δὲ τοῦναντίον διὰ τὴν προειρημένην αἰτίαν· ἡ μὲν γὰρ ἀργὴ γέγονεν καὶ ξηρὰ πάμπαν, τῆς δὲ τὰ τότε διὰ τὸ λιμνάζειν ἀργὰ νῦν χρήσιμα γέγονεν. ὥσπερ οὖν ἐπὶ τούτου τοῦ τόπου συμβέβηκεν ὄντος μικροῦ, ταῦτο δεῖ νομίζειν τοῦτο συμβαίνειν καὶ περὶ μεγάλους τόπους καὶ χώρας ὅλας. οἱ μὲν οὖν βλέποντες ἐπὶ μικρόν αἰτίαν οἷονται τῶν τοιούτων εἶναι παθημάτων τὴν τοῦ ὅλου μεταβολὴν ὥς



γιγνομένου τοῦ οὐρανοῦ· διὸ καὶ τὴν θάλατταν ἐλάττω γίνεσθαι φασιν ὡς  
ξηρανομένην, ὅτι πλείους φαίνονται τόποι τοῦτο πεπονθότες νῦν ἢ πρότερον.  
ἔστιν δὲ τούτων τὸ μὲν ἀληθές τὸ δ' οὐκ ἀληθές· πλείους μὲν γάρ εἰσιν οἱ  
πρότερον ἔνυδροι νῦν δὲ χερσεύοντες, οὐ μὴν ἀλλὰ καὶ τὸναντίον· πολλαχῇ  
γὰρ σκοποῦντες εὐρήσουσιν ἐπεληλυθυῖαν τὴν θάλατταν. ἀλλὰ τούτου τὴν  
αἰτίαν οὐ τὴν τοῦ κόσμου γένεσιν οἷεσθαι χρή· γελοῖον γὰρ διὰ μικρὰς καὶ  
ἀκαριαίας μεταβολὰς κινεῖν τὸ πᾶν, ὃ δὲ τῆς γῆς ὄγκος καὶ τὸ μέγεθος οὐδὲν  
ἔστι δὴ που πρὸς τὸν ὅλον οὐρανόν· ἀλλὰ πάντων τούτων αἴτιον ὑποληπτέον  
ὅτι γίγνεται διὰ χρόνων εἰμαρμένων, οἷον ἐν ταῖς κατ' ἐνιαυτὸν ὥραις χειμῶν,  
οὕτως περιόδου τινὸς μεγάλης μέγας χειμῶν καὶ ὑπερβολὴ ὄμβρων. αὕτη δὲ  
οὐκ ἀεὶ κατὰ τοὺς αὐτοὺς τόπους, ἀλλ' ὥσπερ ὁ καλούμενος ἐπὶ  
Δευκαλίωνος κατακλυσμός· καὶ γὰρ οὗτος περὶ τὸν Ἑλληνικὸν ἐγένετο τόπον  
μάλιστα, καὶ τούτου περὶ τὴν Ἑλλάδα τὴν ἀρχαίαν. αὕτη δ' ἔστιν ἡ περὶ  
Δωδώνην καὶ τὸν Ἀχελῷον· [352b] οὗτος γὰρ ποταμὸς πολλὰ τοῦ ῥεύματος  
μεταβέβληκεν· ὥκουν γὰρ οἱ Σελλοὶ ἐνταῦθα καὶ οἱ καλούμενοι τότε μὲν  
Γραικοὶ νῦν δ' Ἕλληνες. ὅταν οὖν γένηται τοιαύτη ὑπερβολὴ ὄμβρων,  
[352b.4] νομίζειν χρή ἐπὶ πολὺν χρόνον διαρκεῖν, καὶ ὥσπερ νῦν τοῦ ἀενάους  
εἶναι τινὰ τῶν ποταμῶν τοὺς δὲ μὴ οἱ μὲν φασιν αἴτιον εἶναι τὸ μέγεθος τῶν  
ὑπὸ γῆς χασμάτων, ἡμεῖς δὲ τὸ μέγεθος τῶν ὑψηλῶν τόπων καὶ τὴν  
πυκνότητα καὶ ψυχρότητα αὐτῶν (οὗτοι γὰρ πλεῖστον καὶ δέχονται ὕδωρ καὶ  
στέγουσιν καὶ ποιοῦσιν· ὅσοις δὲ μικρὰ αἰὲς ἐπικρεμάμεναι τῶν ὀρῶν  
συστάσεις ἢ σομφαὶ καὶ λιθώδεις καὶ ἀργιλώδεις, τούτους δὲ προαπολείπειν),  
οὕτως οἷεσθαι δεῖν τότε, ἐν οἷς ἂν γένηται ἡ τοιαύτη τοῦ ὑγροῦ φορά, οἷον  
ἀενάους ποιεῖν τὰς ὑγρότητας τῶν τόπων μᾶλλον. τῷ χρόνῳ δὲ ταῦτα  
ξηραίνεται γινόμενα μᾶλλον, θάτερα δ' ἐλάττω τὰ ἔφυδρα, ἕως ἂν ἔλθῃ  
πάλιν ἡ καταβολὴ τῆς περιόδου τῆς αὐτῆς. ἐπεὶ δ' ἀνάγκη τοῦ ὅλου γίνεσθαι  
μὲν τινὰ μεταβολήν, μὴ μέντοι γένεσιν καὶ φθοράν, εἴπερ μένει τὸ πᾶν,  
ἀνάγκη, καθάπερ ἡμεῖς λέγομεν, μὴ τοὺς αὐτοὺς ἀεὶ τόπους ὑγροὺς τ' εἶναι  
θαλάττη καὶ ποταμοῖς καὶ ξηροῖς. δηλοῖ δὲ τὸ γινόμενον· οὓς γὰρ φαμεν  
ἀρχαιοτάτους εἶναι τῶν ἀνθρώπων Αἰγυπτίους, τούτων ἡ χώρα πᾶσα γεγонуῖα  
φαίνεται καὶ οὕσα τοῦ ποταμοῦ ἔργον. καὶ τοῦτο κατὰ τὴν χώραν αὐτὴν  
ὀρῶντι δῆλόν ἐστιν, καὶ τὰ περὶ τὴν ἐρυθρὰν θάλατταν τεκμήριον ἱκανόν·  
ταύτην γὰρ τῶν βασιλέων τις ἐπειράθη διορύττειν (οὐ γὰρ μικρὰς εἶχεν ἂν  
αὐτοῖς ὠφελείας πλωτὸς πᾶς ὁ τόπος γενόμενος· λέγεται δὲ πρῶτος Σέσωστρις  
ἐγχειρῆσαι τῶν παλαιῶν), ἀλλ' εὗρεν ὑψηλοτέραν οὕσαν τὴν θάλατταν τῆς  
γῆς· διὸ ἐκεῖνός τε πρότερον καὶ Δαρεῖος ὕστερον ἐπαύσατο διορύττων, ὅπως  
μὴ διαφθαρῇ τὸ ῥεῦμα τοῦ ποταμοῦ συμμιγείσης τῆς θαλάττης. φανερόν οὖν  
ὅτι θάλαττα πάντα μία ταύτη συνεχὴς ἦν. διὸ καὶ τὰ περὶ τὴν Λιβύην τὴν  
Ἀμμωνίαν χώραν ταπεινότερα φαίνεται καὶ κοιλότερα παρὰ λόγον τῆς κάτωθεν

χώρας· δῆλον γὰρ ὡς ἐγγώσεως μὲν γενομένης ἐγένοντο λίμναι καὶ χέρσος, χρόνου δὲ γενομένου τὸ ἐναπολειφθὲν καὶ λιμνάσαν ὕδωρ [353a] ξηρανθὲν ἐστὶν ἤδη φροῦδον. ἀλλὰ μὴν καὶ τὰ περὶ τὴν Μαιῶτιν λίμνην ἐπιδέδωκε τῇ προσχώσει τῶν ποταμῶν τοσοῦτον, ὥστε πολλῶ ἐλάττω μεγέθει πλοῖα νῦν εἰσπλεῖν πρὸς τὴν ἐργασίαν ἢ ἔτος ἐξηκοστόν· ὥστε ἐκ τούτου ῥᾶδιον ἀναλογίσασθαι ὅτι καὶ τὸ πρῶτον, ὥσπερ αἱ πολλαὶ τῶν λιμνῶν, καὶ αὕτη ἔργον ἐστὶ τῶν ποταμῶν, καὶ τὸ τελευταῖον πᾶσαν ἀνάγκη γενέσθαι ξηράν. ἔτι δὲ ὁ Βόσπορος ἀεὶ μὲν ῥεῖ διὰ τὸ προσχοῦσθαι, καὶ ἔστιν ἔτι ταῦτα καὶ τοῖς ὅμμασιν ἰδεῖν ὅν τινα συμβαίνει τρόπον· ὅτε γὰρ ἀπὸ τῆς Ἀσίας ἡὶ ὄνα ποιήσκειν ὁ ῥοῦς, τὸ ὀπισθεν λίμνη ἐγίγνετο μικρὰ τὸ πρῶτον, εἴτ' ἐξηράνθη ἅν, μετὰ δὲ τοῦτο ἄλλη ἢ ἀπὸ ταύτης ἡὶ ὄν, καὶ λίμνη ἀπὸ ταύτης· καὶ τοῦτο ἀεὶ οὕτως συνέβαινε ὁμοίως· τούτου δὲ γιγνομένου πολλάκις ἀνάγκη χρόνου προϊόντος ὥσπερ ποταμὸν γενέσθαι, τέλος δὲ καὶ τοῦτον ξηρόν. φανερόν τοίνυν, ἐπεὶ ὁ τε χρόνος οὐχ ὑπολείπει καὶ τὸ ὅλον αἰδίων, ὅτι οὔτε ὁ Τάναϊς οὔτε ὁ Νεῖλος ἀεὶ ἔρρει, ἀλλ' ἦν ποτε ξηρὸς ὁ τόπος ὅθεν ῥέουσιν· τὸ γὰρ ἔργον ἔχει αὐτῶν πέρας, ὁ δὲ χρόνος οὐκ ἔχει. ὁμοίως δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων ἀρμόσει ποταμῶν λέγειν. ἀλλὰ μὴν εἴπερ καὶ οἱ ποταμοὶ γίνονται καὶ φθείρονται καὶ μὴ ἀεὶ οἱ αὐτοὶ τόποι τῆς γῆς ἔνυδροι, καὶ τὴν θάλατταν ἀνάγκη μεταβάλλειν ὁμοίως. τῆς δὲ θαλάττης τὰ μὲν ἀπολειπούσης τὰ δ' ἐπιούσης ἀεὶ φανερόν ὅτι τῆς πάσης γῆς οὐκ ἀεὶ τὰ αὐτὰ τὰ μὲν ἐστὶν θάλαττα τὰ δ' ἡπειρος, ἀλλὰ μεταβάλλει τῷ χρόνῳ πάντα. διότι μὲν οὖν οὐκ ἀεὶ ταῦτα οὔτε χερσεύει τῆς γῆς οὔτε πλωτά ἐστὶν, καὶ διὰ τίν' αἰτίαν ταῦτα συμβαίνει, εἴρηται· ὁμοίως δὲ καὶ διὰ τί οἱ μὲν ἀέναοι οἱ δ' οὐ τῶν ποταμῶν εἰσιν. Βιβλίον Β' Περὶ δὲ θαλάττης, καὶ τίς ἡ φύσις αὐτῆς, καὶ διὰ τίν' αἰτίαν ἄλμυρόν τοσοῦτόν ἐστιν ὕδατος πλῆθος, ἔτι δὲ περὶ τῆς ἐξ ἀρχῆς γενέσεως λέγωμεν. οἱ μὲν οὖν ἀρχαῖοι καὶ διατρίβοντες περὶ τὰς θεολογίας ποιοῦσιν αὐτῆς πηγὰς, ἔν' [353b] αὐτοῖς ὥσιν ἀρχαὶ καὶ ρίζαι γῆς καὶ θαλάττης· τραγικώτερον γὰρ οὕτω καὶ σεμνότερον ὑπέλαβον ἴσως εἶναι τὸ λεγόμενον, ὡς μέγα τι τοῦ παντός τοῦτο μόνον ὅν· καὶ τὸν λοιπὸν οὐρανὸν ὅλον περὶ τοῦτον συνεστάναι τὸν τόπον καὶ τούτου χάριν ὡς ὄντα τιμωτάτον καὶ ἀρχήν. οἱ δὲ σοφώτεροι τὴν ἀνθρωπίνην σοφίαν ποιοῦσιν αὐτῆς γένεσιν· εἶναι γὰρ τὸ πρῶτον ὑγρὸν ἅπαντα τὸν περὶ τὴν γῆν τόπον, ὑπὸ δὲ τοῦ ἡλίου ξηραίνόμενον τὸ μὲν διατμίσαν πνεύματα καὶ τροπὰς ἡλίου καὶ σελήνης φασὶ ποιεῖν, τὸ δὲ λειφθὲν θάλατταν εἶναι· διὸ καὶ ἐλάττω γίνεσθαι ξηραίνομένην οἶονται, καὶ τέλος ἔσεσθαι ποτε πᾶσαν ξηράν. ἔνιοι δ' αὐτῶν θερμαινομένης φασὶν ὑπὸ τοῦ ἡλίου τῆς γῆς οἶον ἰδρῶτα γίνεσθαι· διὸ καὶ ἄλμυρὰν εἶναι· καὶ γὰρ ὁ ἰδρὼς ἄλμυρός. οἱ δὲ τῆς ἄλμυρότητος αἰτίαν τὴν γῆν εἶναι φασιν· καθάπερ γὰρ τὸ διὰ τῆς τέφρας ἡθούμενον ἄλμυρόν γίγνεται, τὸν αὐτὸν τρόπον καὶ ταύτην ἄλμυρὰν εἶναι μειχθείσης αὐτῇ τοιαύτης γῆς. ὅτι μὲν οὖν

πηγάς τῆς θαλάττης ἀδύνατον εἶναι, διὰ τῶν ὑπαρχόντων ἤδη θεωρεῖν δεῖ.  
τῶν γὰρ περὶ τὴν γῆν ὑδάτων τὰ μὲν ῥυτὰ τυγχάνει ὄντα τὰ δὲ στάσιμα. τὰ  
μὲν οὖν ῥυτὰ πάντα πηγαῖα· περὶ δὲ τῶν πηγῶν εἰρήκαμεν πρότερον ὅτι δεῖ  
νοεῖν οὐχ ὥσπερ ἐξ ἀγγείου ταμιευόμενον τὴν ἀρχὴν εἶναι πηγὴν, ἀλλ' εἰς ἔν  
ἀεὶ γιγνόμενον καὶ συρρέον ἀπαντᾶν πρώτην. τῶν δὲ στασίμων τὰ μὲν  
συλλογιμαῖα καὶ ὑποστάσεις, οἷον τὰ τελματιαῖα καὶ ὅσα λιμνώδη, πλήθει καὶ  
ὀλιγότητι διαφέροντα, τὰ δὲ πηγαῖα. ταῦτα δὲ πάντα χειρόκητα, λέγω δ' οἷον  
τὰ φρεατιαῖα καλούμενα· πάντων γὰρ ἀνωτέρω δεῖ τὴν πηγὴν εἶναι τῆς  
ῥύσεως. διὸ τὰ μὲν αὐτόματα ῥεῖ τὰ κρηναῖα καὶ ποτάμια, ταῦτα δὲ τέχνης  
προσδεῖται τῆς ἐργασομένης. αἱ μὲν οὖν διαφοραὶ τοσαῦται καὶ τοιαῦται τῶν  
ὑδάτων εἰσίν· τούτων δ' οὕτω διωρισμένων ἀδύνατον πηγάς εἶναι τῆς  
θαλάττης· ἐν οὐδετέρῳ γὰρ τούτων οἷόν τ' εἶναι τῶν γενῶν αὐτῇ· οὔτε γὰρ  
ἀπόρρυτός ἐστιν οὔτε χειροποίητος, τὰ δὲ πηγαῖα πάντα τούτων θάτερον  
πέπονθεν· αὐτόματον δὲ στάσιμον τοσοῦτον πλῆθος οὐδὲν ὁρῶμεν πηγαῖον  
γιγνόμενον. ἔτι δ' ἐπεὶ πλείους εἰσὶ [354a] θάλατται πρὸς ἀλλήλας οὐ  
συμμειγνύουσαι κατ' οὐδένα τόπον, ὧν ἡ μὲν ἐρυθρὰ φαίνεται κατὰ μικρὸν  
κοινοῦσα πρὸς τὴν ἕξω στηλῶν θάλατταν, ἡ δ' Ὑρκανία καὶ Κασπία  
κεχωρισμέναί τε ταύτης καὶ περιοικούμεναι κύκλῳ, ὥστ' οὐκ ἂν ἐλάνθανον αἱ  
πηγαί, εἰ κατὰ τινὰ τόπον αὐτῶν ἦσαν. ῥέουσα δ' ἡ θάλαττα φαίνεται κατὰ τε  
τὰς στενότητας, εἴ που διὰ τὴν περιέχουσαν γῆν εἰς μικρὸν ἐκ μεγάλου  
συνάγεται πελάγους, διὰ τὸ ταλαντεύεσθαι δεῦρο κάκεῖσε πολλάκις. τοῦτο δ'  
ἐν μὲν πολλῷ πλήθει θαλάττης ἄδηλον· ἡ δὲ διὰ τὴν στενότητα τῆς γῆς  
ὀλίγον ἐπέχει τόπον, ἀναγκαῖον τὴν ἐν τῷ πελάγει μικρὰν ταλάντωσιν ἐκεῖ  
φαίνεσθαι μεγάλην. ἡ δ' ἐντὸς Ἡρακλείων στηλῶν ἅπασα κατὰ τὴν τῆς γῆς  
κοιλότητα ῥεῖ, καὶ τῶν ποταμῶν τὸ πλῆθος· ἡ μὲν γὰρ Μαιῶτις εἰς τὸν  
Πόντον ῥεῖ, οὗτος δ' εἰς τὸν Αἰγαῖον. τὰ δ' ἤδη τούτων ἕξω πελάγη ἦττον  
ποιεῖ τοῦτ' ἐπιδήλως. ἐκείνοις δὲ διὰ τε τὸ τῶν ποταμῶν πλῆθος συμβαίνει  
τοῦτο (πλείους γὰρ εἰς τὸν Εὐξείνιον ῥέουσιν ποταμοὶ καὶ τὴν Μαιῶτιν ἢ τὴν  
πολλαπλασίαν χώραν αὐτῆς) καὶ διὰ τὴν βραχύτητα τοῦ βάθους· ἀεὶ γὰρ ἔτι  
βαθυτέρα φαίνεται οὐσα ἢ θάλαττα, καὶ τῆς [354a.20] μὲν Μαιώτιδος ὁ  
Πόντος, τούτου δ' ὁ Αἰγαῖος, τοῦ δ' Αἰγαίου ὁ Σικελικός· ὁ δὲ Σαρδονικός  
καὶ Τυρρηνικός βαθύτατοι πάντων. τὰ δ' ἕξω στηλῶν βραχέα μὲν διὰ τὸν  
πηλόν, ἄπνοα δ' ἐστὶν ὡς ἐν κοίλῳ τῆς θαλάττης οὔσης. ὥσπερ οὖν καὶ κατὰ  
μέρος ἐκ τῶν ὑψηλῶν οἱ ποταμοὶ φαίνονται ῥέοντες, οὕτω καὶ τῆς ὅλης γῆς  
ἐκ τῶν ὑψηλοτέρων τῶν πρὸς ἄρκτον τὸ ῥεῦμα γίγνεται τὸ πλεῖστον· ὥστε  
τὰ μὲν διὰ τὴν ἔκχυσιν οὐ βαθέα, τὰ δ' ἕξω πελάγη βαθέα μᾶλλον. περὶ δὲ  
τοῦ τὰ πρὸς ἄρκτον εἶναι τῆς γῆς ὑψηλὰ σημείον τι καὶ τὸ πολλοὺς  
πεισθῆναι τῶν ἀρχαίων μετεωρολόγων τὸν ἥλιον μὴ φέρεσθαι ὑπὸ γῆν ἀλλὰ

περὶ τὴν γῆν καὶ τὸν τόπον τοῦτον, ἀφανίζεσθαι δὲ καὶ ποιεῖν νύκτα διὰ τὸ ὑψηλὴν εἶναι πρὸς ἄρκτον τὴν γῆν. ὅτι μὲν οὖν οὔτε πηγὰς οἶόν τ' εἶναι τῆς θαλάττης, καὶ διὰ τίν' αἰτίαν οὕτως φαίνεται ῥέουσα, τοιαῦτα καὶ τοσαῦθ' ἡμῖν εἰρήσθω. [354b] περὶ δὲ τῆς γενέσεως αὐτῆς, εἰ γέγονε, καὶ τοῦ χυμοῦ, τίς ἢ αἰτία τῆς ἀλμυρότητος καὶ πικρότητος, λεκτέον. ἢ μὲν οὖν αἰτία ἢ ποιήσασα τοὺς πρότερον οἶεσθαι τὴν θάλατταν ἀρχὴν εἶναι καὶ σῶμα τοῦ παντὸς ὕδατος ἥδ' ἐστίν· δόξειε γὰρ ἂν εὐλογον εἶναι, καθάπερ καὶ τῶν ἄλλων στοιχείων ἐστὶν ἡθροισμένος ὄγκος καὶ ἀρχὴ διὰ τὸ πλῆθος, ὅθεν μεταβάλλει τε μεριζόμενον καὶ μείγνυται τοῖς ἄλλοις-οἶον πυρὸς μὲν ἐν τοῖς ἄνω τόποις, ἀέρος δὲ πλῆθος τὸ μετὰ τὸν τοῦ πυρὸς τόπον, γῆς δὲ σῶμα περὶ ὃ ταῦτα πάντα κεῖται φανερώς· ὥστε δῆλον ὅτι κατὰ τὸν αὐτὸν λόγον καὶ περὶ ὕδατος ἀνάγκη ζητεῖν. τοιοῦτον δ' οὐδὲν ἄλλο φαίνεται σῶμα κείμενον ἀθρόον, ὥσπερ καὶ τῶν ἄλλων στοιχείων, πλὴν τὸ τῆς θαλάττης μέγεθος· τὸ γὰρ τῶν ποταμῶν οὔτ' ἀθρόον οὔτε στάσιμον, ἀλλ' ὥς γιγνόμενον ἀεὶ φαίνεται καθ' ἡμέραν. ἐκ ταύτης δὲ τῆς ἀπορίας καὶ ἀρχῇ τῶν ὑγρῶν ἔδοξεν εἶναι καὶ τοῦ παντὸς ὕδατος ἡ θάλαττα. διὸ καὶ τοὺς ποταμοὺς οὐ μόνον εἰς ταύτην ἀλλὰ καὶ ἐκ ταύτης φασὶ τινες ῥεῖν· διηθούμενον γὰρ γίνεσθαι τὸ ἀλμυρὸν πότιμον. ἀντίκειται δὲ ἑτέρα πρὸς ταύτην τὴν δόξαν ἀπορία, τί δὴ ποτ' οὐκ ἔστιν τὸ συνεστὸς ὕδωρ τοῦτο πότιμον, εἴπερ ἀρχὴ τοῦ παντὸς ὕδατος, ἀλλ' ἀλμυρόν. τὸ δ' αἴτιον ἅμα ταύτης τε τῆς ἀπορίας λύσις ἔσται, καὶ περὶ θαλάττης τὴν πρώτην λαβεῖν ὑπόληψιν ἀναγκαῖον ὀρθῶς. τοῦ γὰρ ὕδατος περὶ τὴν γῆν περιτεταμένου, καθάπερ περὶ τοῦτο ἢ τοῦ ἀέρος σφαῖρα καὶ περὶ ταύτην ἢ λεγομένη πυρὸς (τοῦτο γὰρ ἐστὶ πάντων ἔσχατον, εἴθ' ὥς οἱ πλεῖστοι λέγουσιν εἴθ' ὥς ἡμεῖς), φερομένου δὲ τοῦ ἡλίου τοῦτον τὸν τρόπον, καὶ διὰ ταῦτα τῆς μεταβολῆς καὶ γενέσεώς τε καὶ φθορᾶς οὔσης, τὸ μὲν λεπτότατον καὶ γλυκύτατον ἀνάγεται καθ' ἑκάστην ἡμέραν καὶ φέρεται διακρινόμενον καὶ ἀτμίζον εἰς τὸν ἄνω τόπον, ἐκεῖ δὲ πάλιν συστὰν διὰ τὴν ψύξιν καταφέρεται πάλιν πρὸς τὴν γῆν. καὶ τοῦτ' ἀεὶ βούλεται ποιεῖν ἡ φύσις οὕτως, καθάπερ εἴρηται πρότερον. διὸ καὶ γελοῖοι πάντες ὅσοι τῶν πρότερον ὑπέλαβον τὸν ἥλιον τρέφεσθαι τῷ ὑγρῷ· καὶ διὰ τοῦτ' ἔνιοί γε [355a] φασιν καὶ ποιεῖσθαι τὰς τροπὰς αὐτόν· οὐ γὰρ αἰεὶ τοὺς αὐτοὺς δύνασθαι τόπους παρασκευάζειν αὐτῷ τὴν τροφήν· ἀναγκαῖον δ' εἶναι τοῦτο συμβαίνειν περὶ αὐτὸν ἢ φθεῖρεσθαι· καὶ γὰρ τὸ φανερόν πῦρ, ἕως ἂν ἔχη τροφήν, μέχρι τούτου ζῆν, τὸ δ' ὑγρὸν τῷ πυρὶ τροφήν εἶναι μόνον, -ὥσπερ ἀφικνούμενον μέχρι πρὸς τὸν ἥλιον τὸ ἀναγόμενον τοῦ ὑγροῦ, ἢ τὴν ἄνοδον τοιαύτην οὔσαν οἶανπερ τῇ γιγνομένῃ φλογί, δι' ἧς τὸ εἶκος λαβόντες οὕτω καὶ περὶ τοῦ ἡλίου ὑπέλαβον. τὸ δ' οὐκ ἔστιν ὁμοιον· ἢ μὲν γὰρ φλόξ διὰ συνεχοῦς ὑγροῦ καὶ ξηροῦ μεταβαλλόντων γίνεταί καὶ οὐ τρέφεται (οὐ γὰρ ἡ αὐτὴ οὔσα διαμένει οὐδένα χρόνον ὥς εἰπεῖν), περὶ δὲ τὸν ἥλιον ἀδύνατον τοῦτο

συμβαίνειν, ἐπεὶ τρεφομένου γε τὸν αὐτὸν τρόπον, ὥσπερ ἐκεῖνοί φασιν, δῆλον ὅτι καὶ ὁ ἥλιος οὐ μόνον καθάπερ Ἡράκλειτός φησιν, νέος ἐφ' ἡμέρῃ ἐστίν, ἀλλ' ἀεὶ νέος συνεχῶς. ἔτι δ' ἡ ὑπὸ τοῦ ἡλίου ἀναγωγὴ τοῦ ὑγροῦ ὁμοία τοῖς θερμαινομένοις ἐστὶν ὕδασι· ὑπὸ πυρός· εἰ οὖν μηδὲ τὸ ὑποκαόμενον τρέφεται πῦρ, οὐδὲ τὸν ἥλιον εἰκὸς ἦν ὑπολαβεῖν, οὐδ' εἰ πᾶν θερμαίνων ἐξατμίσειεν τὸ ὕδωρ. ἄτοπον δὲ καὶ τὸ μόνον φροντίσαι τοῦ ἡλίου, τῶν δ' ἄλλων ἀστρῶν αὐτοὺς παριδεῖν τὴν σωτηρίαν, τοσούτων καὶ τὸ πλῆθος καὶ τὸ μέγεθος ὄντων. τὸ δ' αὐτὸ συμβαίνει καὶ τούτοις ἄλογον καὶ τοῖς φάσκουσι τὸ πρῶτον ὑγρᾶς οὔσης καὶ τῆς γῆς, καὶ τοῦ κόσμου τοῦ περὶ τὴν γῆν ὑπὸ τοῦ ἡλίου θερμαινομένου, ἀέρα γενέσθαι καὶ τὸν ὅλον οὐρανὸν ἀύξηθῆναι, καὶ τοῦτον πνεύματά τε παρέχεσθαι καὶ τὰς τροπὰς αὐτοῦ ποιεῖν· φανερώς γὰρ ἀεὶ τὸ ἀναχθὲν ὀρώμεν καταβαῖνον πάλιν ὕδωρ· κἂν μὴ κατ' ἐνιαυτὸν ἀποδιδῶ καὶ καθ' ἐκάστην ὁμοίως χώραν, ἀλλ' ἐν γέ τισιν τεταγμένοις χρόνοις ἀποδίδωσι πᾶν τὸ ληφθέν, ὥς οὔτε τρεφομένων τῶν ἄνωθεν, οὔτε τοῦ μὲν μένοντος ἀέρος ἤδη μετὰ τὴν γένεσιν, τοῦ δὲ γιγνομένου καὶ φθειρομένου πάλιν εἰς ὕδωρ, ἀλλ' ὁμοίως ἅπαντος διαλυομένου καὶ συνισταμένου πάλιν εἰς ὕδωρ. τὸ μὲν οὖν πότιμον καὶ γλυκὺ διὰ κουφότητα πᾶν ἀνάγεται, τὸ δ' ἄλμυρον ὑπομένει διὰ βάρος οὐκ ἐν τῷ αὐτοῦ οἰκείῳ τόπῳ· τοῦτο γὰρ οἰητέον ἀπορηθῆναί τε προσηκόντως (ἄλογον γὰρ εἰ μὴ [355b] τίς ἐστὶν τόπος ὕδατος ὥσπερ καὶ τῶν ἄλλων στοιχείων) καὶ ταύτην εἶναι λύσιν· ὃν γὰρ ὀρώμεν κατέχουσιν τόπον τὴν θάλατταν, οὗτος οὐκ ἔστιν θαλάττης ἀλλὰ μᾶλλον ὕδατος. φαίνεται δὲ θαλάττης, ὅτι τὸ μὲν ἄλμυρον ὑπομένει διὰ τὸ βάρος, τὸ δὲ γλυκὺ καὶ πότιμον ἀνάγεται διὰ τὴν κουφότητα, καθάπερ ἐν τοῖς τῶν ζώων σώμασιν. καὶ γὰρ ἐν τούτοις τῆς τροφῆς εἰσελθούσης γλυκείας ἢ τῆς ὑγρᾶς τροφῆς ὑπόστασις καὶ τὸ περίττωμα φαίνεται πικρὸν ὃν καὶ ἄλμυρον· τὸ γὰρ γλυκὺ καὶ πότιμον ὑπὸ τῆς ἐμφύτου θερμότητος ἐλकुσθὲν εἰς τὰς σάρκας καὶ τὴν ἄλλην σύνταξιν ἦλθεν τῶν μερῶν, ὥς ἕκαστον πέφυκεν. ὥσπερ οὖν κάκεῖ ἄτοπον εἶ τις τῆς ποτίμου τροφῆς μὴ νομίζοι τόπον εἶναι τὴν κοιλίαν, ὅτι ταχέως ἀφανίζεται, ἀλλὰ τοῦ περιττώματος, ὅτι τοῦθ' ὀρᾷ ὑπομένον, οὐκ ἂν ὑπολαμβάνοι καλῶς. ὁμοίως δὲ καὶ ἐν τούτοις· ἔστιν γάρ, ὥσπερ λέγομεν, οὗτος ὁ τόπος ὕδατος· διὸ καὶ οἱ ποταμοὶ ῥέουσιν εἰς αὐτὸν ἅπαντες καὶ πᾶν τὸ γιγνόμενον ὕδωρ· εἷς τε γὰρ τὸ κοιλότατον ἢ ῥύσις, καὶ ἡ θάλαττα τὸν τοιοῦτον ἐπέχει τῆς γῆς τόπον· ἀλλὰ τὸ μὲν ἀναφέρεται ταχὺ διὰ τὸν ἥλιον ἅπαν, τὸ δ' ὑπολείπεται διὰ τὴν εἰρημένην αἰτίαν. τὸ δὲ ζητεῖν τὴν ἀρχαίαν ἀπορίαν, διὰ τί τοσοῦτον πλῆθος ὕδατος οὐδαμοῦ φαίνεται (καθ' ἐκάστην γὰρ ἡμέραν ποταμῶν ῥεόντων ἀναρίθμων καὶ τὸ μέγεθος ἀπλέτων οὐδὲν ἢ θάλαττα γίγνεται πλείων), τοῦτο οὐδὲν μὲν ἄτοπον ἀπορῆσαί τινος, οὐ μὴν ἐπιβλέψαντά γε χαλεπὸν ἰδεῖν. τὸ γὰρ αὐτὸ πλῆθος ὕδατος εἰς πλάτος τε

διαταθὲν καὶ ἀθρόον οὐκ ἐν ἴσῳ χρόνῳ ἀναξηραίνεται, ἀλλὰ διαφέρει τοσοῦτον ὥστε τὸ μὲν διαμεῖναι ἂν ὅλην τὴν ἡμέραν, τὸ δ' ὥσπερ εἴ τις ἐπὶ τράπεζαν μεγάλην περιτείνειεν ὕδατος κύαθον, ἅμα διανοοῦμένοις ἂν ἀφανισθεῖη πᾶν. ὃ δὴ καὶ περὶ τοὺς ποταμοὺς συμβαίνει· συνεχῶς γὰρ ῥεόντων ἀθρόων ἀεὶ τὸ ἀφικνούμενον εἰς ἀχανῆ καὶ πλατὺν τόπον ἀναξηραίνεται ταχὺ καὶ ἀδήλως. τὸ δ' ἐν τῷ Φαίδωνι γεγραμμένον περὶ τε τῶν ποταμῶν καὶ τῆς θαλάττης [355b.34] ἀδύνατόν ἐστιν. λέγεται γὰρ ὡς ἅπαντα μὲν εἰς ἄλληλα συντέτρηται ὑπὸ γῆν, ἀρχὴ δὲ πάντων εἷη καὶ πηγὴ τῶν [356a] ὑδάτων ὁ καλούμενος Τάρταρος, περὶ τὸ μέσον ὕδατός τι πλῆθος, ἐξ οὗ καὶ τὰ ῥέοντα καὶ τὰ μὴ ῥέοντα ἀναδίδωσιν πάντα· τὴν δ' ἐπίρρυσιν ποιεῖν ἐφ' ἑκάστα τῶν ῥευμάτων διὰ τὸ σαλεύειν ἀεὶ τὸ πρῶτον καὶ τὴν ἀρχήν· οὐκ ἔχειν γὰρ ἔδραν, ἀλλ' ἀεὶ περὶ τὸ μέσον εἰλεῖσθαι· κινούμενον δ' ἄνω καὶ κάτω ποιεῖν τὴν ἐπίχυσιν τοῖς ῥεύμασιν. τὰ δὲ πολλαχοῦ μὲν λιμνάζειν, οἷον καὶ τὴν παρ' ἡμῖν εἶναι θάλατταν, πάντα δὲ πάλιν κύκλῳ περιάγειν εἰς τὴν ἀρχήν, ὅθεν ἥρξαντο ῥεῖν, πολλὰ μὲν κατὰ τὸν αὐτὸν τόπον, τὰ δὲ καὶ καταντικρὺ τῇ θέσει τῆς ἐκροῆς, οἷον εἰ ῥεῖν ἥρξαντο κάτωθεν, ἄνωθεν εἰσβάλλειν. εἶναι δὲ μέχρι τοῦ μέσου τὴν κάθεισιν· τὸ γὰρ λοιπὸν πρὸς ἄναντες ἤδη πᾶσιν εἶναι τὴν φοράν. τοὺς δὲ χυμοὺς καὶ τὰς χροὰς ἴσχειν τὸ ὕδωρ δι' οἷας ἂν τύχωσι ῥέοντα γῆς. συμβαίνει δὲ τοὺς ποταμοὺς ῥεῖν οὐκ ἐπὶ ταῦτόν ἀεὶ κατὰ τὸν λόγον τοῦτον· ἐπεὶ γὰρ εἰς τὸ μέσον εἰσρέουσιν ἀφ' οὐπὲρ ἐκρέουσιν, οὐδὲν μᾶλλον ῥευσοῦνται κάτωθεν ἢ ἄνωθεν, ἀλλ' ἐφ' ὁπότ' ἂν ῥέψῃ κυμαίνων ὁ Τάρταρος. καίτοι τούτου συμβαίνοντος γένοιτ' ἂν τὸ λεγόμενον ἄνω ποταμῶν· ὅπερ ἀδύνατον. ἔτι τὸ γιγνόμενον ὕδωρ καὶ τὸ πάλιν ἀναγόμενον πόθεν ἔσται; τοῦτο γὰρ ἐξαίρειν ὅλον ἀναγκαῖον, εἴπερ ἀεὶ σώζεται τὸ ἴσον· ὅσον γὰρ ἔξω ῥεῖ, πάλιν ῥεῖ πρὸς τὴν ἀρχήν. καίτοι πάντες οἱ ποταμοὶ φαίνονται τελευτῶντες εἰς τὴν θάλατταν, ὅσοι μὴ εἰς ἀλλήλους· εἰς δὲ γῆν οὐδεὶς, ἀλλὰ κἂν ἀφανισθῇ, πάλιν ἀναδύνουσιν. μεγάλοι δὲ γίνονται τῶν ποταμῶν οἱ μακρὰν ῥέοντες διὰ κοίλης· πολλῶν γὰρ δέχονται ῥεύματα ποταμῶν, ὑποτεμνόμενοι τῷ τόπῳ καὶ τῷ μήκει τὰς ὁδοὺς· διόπερ ὃ τ' Ἰστρος καὶ ὁ Νεῖλος μέγιστοι τῶν ποταμῶν εἰσιν τῶν εἰς τήνδε τὴν θάλατταν ἐξιόντων. καὶ περὶ τῶν πηγῶν ἄλλοι λέγουσιν ἐκάστου τῶν ποταμῶν ἄλλας αἰτίας διὰ τὸ πολλοὺς εἰς τὸν αὐτὸν ἐμβάλλειν. ταῦτα δὲ πάντα φανερόν ὡς ἀδύνατόν ἐστι συμβαίνειν ἄλλως τε καὶ τῆς θαλάττης ἐκεῖθεν τὴν ἀρχὴν ἐχούσης. ὅτι μὲν οὖν ὕδατός τε ὁ τόπος ἐστὶν οὗτος καὶ οὐ θαλάττης, καὶ διὰ τίν' αἰτίαν τὸ μὲν πότιμον ἄδηλον πλὴν ῥέον, τὸ δ' ὑπομένον, καὶ διότι τελευτῇ [356b] μᾶλλον ὕδατος ἢ ἀρχὴ ἐστὶν ἡ θάλαττα, καθάπερ τὸ ἐν τοῖς σώμασιν περίττωμα τῆς τροφῆς πάσης, καὶ μάλιστα τὸ τῆς ὑγρᾶς, εἰρήσθω τοσαῦθ' ἡμῖν. περὶ δὲ τῆς ἀλμυρότητος αὐτῆς λεκτέον, καὶ πότερον αἰεὶ ἐστὶν ἢ αὐτῇ, ἢ οὗτ' ἢν οὗτ' ἔσται ἀλλ' ὑπολείψει·

καὶ γὰρ οὕτως οἴονται τινες. τοῦτο μὲν οὖν ἐοίκασι πάντες ὁμολογεῖν, ὅτι γέγονεν, εἴπερ καὶ πᾶς ὁ κόσμος· ἅμα γὰρ αὐτῆς ποιοῦσι τὴν γένεσιν. ὥστε δῆλον ὡς εἴπερ ἀίδιον τὸ πᾶν, καὶ περὶ τῆς θαλάττης οὕτως ὑποληπτέον. τὸ δὲ νομίζειν ἐλάττω τε γίνεσθαι τὸ πλήθος, ὥσπερ φησὶ Δημόκριτος, καὶ τέλος ὑπολείψειν, τῶν Αἰσώπου μύθων οὐδὲν διαφέρειν ἔοικεν ὁ πεπεισμένος οὕτως· καὶ γὰρ ἐκεῖνος ἐμυθολόγησεν ὡς δις μὲν ἡ Χάρυβδις ἀναρροφήσασα τὸ μὲν πρῶτον τὰ ὄρη ἐποίησεν φανερά, τὸ δὲ δεύτερον τὰς νήσους, τὸ δὲ τελευταῖον ῥοφήσασα ξηρὰν ποιήσει πάμπαν. ἐκείνῳ μὲν οὖν ἤρμοττεν ὀργιζομένῳ πρὸς τὸν πορθμέα τοιοῦτον εἰπεῖν μῦθον, τοῖς δὲ τὴν ἀλήθειαν ζητοῦσιν ἦττον· δι' ἣν γὰρ αἰτίαν ἔμεινε τὸ πρῶτον, εἴτε διὰ βάρος, ὥσπερ τινὲς καὶ τούτων φασίν (ἐν προχείρῳ γὰρ τούτου τὴν αἰτίαν ἰδεῖν), εἴτε καὶ δι' ἄλλο τι, δῆλον ὅτι διὰ τοῦτο διαμένειν ἀναγκαῖον καὶ τὸν λοιπὸν χρόνον αὐτήν. ἡ γὰρ λεκτέον αὐτοῖς ὅτι οὐδὲ τὸ ἀναχθὲν ὕδωρ ὑπὸ τοῦ ἡλίου ἥξει πάλιν, ἢ εἴπερ τοῦτ' ἔσται, ἀναγκαῖον ἦτοι ἀεὶ ἢ μέχρι οὐπὲρ ἂν ἡ τοῦτο ὑπολείπεσθαι τὴν θάλατταν, καὶ πάλιν ἀναχθῆναι ἐκεῖνο πρότερον δεήσει τὸ πότιμον. ὥστε οὐδέποτε ξηρανεῖται· πάλιν γὰρ ἐκεῖνο φθήσεται καταβὰν εἰς τὴν αὐτήν τὸ προανελθόν· διαφέρει γὰρ οὐδὲν ἅπαξ τοῦτ' εἰπεῖν ἢ πολλάκις. εἰ μὲν οὖν τὸν ἥλιον παύσει τις τῆς φορᾶς, τί ἔσται τὸ ξηραῖνον; εἰ δ' ἑάσει εἶναι τὴν περιφοράν, ἀεὶ πλησιάζων τὸ πότιμον, καθάπερ εἴπομεν, ἀνάξει, ἀφήσει δὲ πάλιν ἀναχωρῶν. ἔλαβον δὲ ταύτην τὴν διάνοιαν κατὰ τῆς θαλάττης ἐκ τοῦ πολλοὺς τρόπους φαίνεσθαι ξηροτέρους νῦν ἢ πρότερον· περὶ οὗ τὴν αἰτίαν εἴπομεν, ὅτι τῶν κατὰ τινὰ χρόνον ὑπερβολῶν γιγνομένων ὕδατος τοῦτ' ἐστὶν τὸ πάθος, ἀλλ' οὐ διὰ τὴν τοῦ παντὸς γένεσιν καὶ τῶν μορίων· καὶ πάλιν γ' ἔσται τούναντίον· καὶ [357a] ὅταν γένηται, ξηρανεῖται πάλιν· καὶ τοῦθ' οὕτως κατὰ κύκλον ἀναγκαῖον ἀεὶ βαδίζειν· μᾶλλον γὰρ οὕτως εὐλογον ὑπολαβεῖν ἢ διὰ ταῦτα τὸν οὐρανὸν ὅλον μεταβάλλειν. ἀλλὰ περὶ μὲν τούτων πλείω τῆς ἀξίας ἐνδιατέτριφεν ὁ λόγος· περὶ δὲ τῆς ἀλμυρότητος, τοῖς μὲν ἅπαξ γεννήσασι καὶ ὅλως αὐτὴν γεννῶσιν ἀδύνατόν ἐστιν ἀλμυρὰν ποιεῖν. εἰ γὰρ παντὸς τοῦ ὑγροῦ τοῦ περὶ τὴν γῆν ὄντος καὶ ἀναχθέντος ὑπὸ τοῦ ἡλίου τὸ ὑπολειφθὲν ἐγένετο θάλαττα, εἴτ' ἐνυπῆρχε τοσοῦτος χυμὸς ἐν τῷ πολλῷ ὕδατι καὶ γλυκεῖ διὰ τὸ συμμειχθῆναί τινα γῆν τοιαύτην, οὐδὲν ἦττον ἐλθόντος πάλιν τοῦ διατμίσαντος ὕδατος ἀνάγκη, ἴσου γ' ὄντος τοῦ πλήθους, καὶ τὸ πρῶτον· ἢ εἰ μὴδὲ τὸ πρῶτον, μὴδ' ὕστερον ἀλμυρὰν αὐτὴν εἶναι. εἰ δὲ καὶ τὸ πρῶτον εὐθὺς ἦν, λεκτέον τίς ἡ αἰτία, καὶ ἅμα διὰ τί οὐκ εἰ καὶ τότε ἀνήχθη καὶ νῦν πάσχει ταυτό. ἀλλὰ μὴν καὶ ὅσοι τὴν γῆν αἰτιῶνται τῆς ἀλμυρότητος ἐμμειγνυμένην (ἔχειν γὰρ φασὶ πολλοὺς χυμοὺς αὐτήν, ὥσθ' ὑπὸ τῶν ποταμῶν συγκαταφερομένην διὰ τὴν μεῖξιν ποιεῖν ἀλμυράν), ἄτοπον τὸ μὴ καὶ τοὺς ποταμοὺς ἀλμυροὺς εἶναι· πῶς γὰρ

δυνατὸν ἐν πολλῷ μὲν πλήθει ὕδατος ἐπίδηλον οὕτως ποιεῖν τὴν μεῖξιν τῆς τοιαύτης γῆς, ἐν ἑκάστω δὲ μή; δῆλον γὰρ ὅτι ἡ θάλαττα ἐστὶν ἅπαν τὸ ποτάμιον ὕδωρ· οὐδενὶ γὰρ διέφερεν ἄλλ’ ἢ τῷ ἄλμυρᾷ εἶναι τῶν ποταμῶν· τοῦτο δ’ ἐν ἐκείνοις ἔρχεται εἰς τὸν τόπον εἰς ὃν ἄθροοι ῥέουσιν. ὁμοίως δὲ γελοῖον κἂν εἴ τις εἰπὼν ἰδρῶτα τῆς γῆς εἶναι τὴν θάλατταν οἶται τι σαφὲς εἰρηκέναι, καθάπερ Ἐμπεδοκλῆς· πρὸς ποίησιν μὲν γὰρ οὕτως εἰπὼν ἴσως εἴρηκεν ἱκανῶς (ἢ γὰρ μεταφορᾷ ποιητικόν), πρὸς δὲ τὸ γινῶναι τὴν φύσιν οὐχ ἱκανῶς· οὐδὲ γὰρ ἐνταῦθα δῆλον πῶς ἐκ γλυκέος τοῦ πόματος ἄλμυρὸς γίγνεται ὁ ἰδρῶς, πότερον ἀπελθόντος τινὸς μόνον οἶον τοῦ γλυκυτάτου, ἢ συμμειχθέντος τινός, καθάπερ ἐν τοῖς διὰ τῆς τέφρας ἠθουμένοις ὕδασιν. φαίνεται δὲ τὸ αἴτιον ταῦτό καὶ περὶ τὸ εἰς τὴν κύστιν περίπτωμα συλλεγόμενον· καὶ γὰρ ἐκεῖνο πικρὸν καὶ ἄλμυρὸν γίγνεται τοῦ πινομένου καὶ τοῦ ἐν τῇ τροφῇ ὑγροῦ [357b] γλυκέος ὄντος. εἰ δὲ ὥσπερ τὸ διὰ τῆς κονίας ἠθούμενον ὕδωρ γίγνεται πικρὸν, καὶ ταῦτα, τῷ μὲν οὕρῳ συγκαταφερομένης τοιαύτης τινὸς δυνάμεως οἷα καὶ φαίνεται ὑφισταμένη ἐν τοῖς ἀγγείοις ἄλμυρίς, τῷ δ’ ἰδρῶτι συνεκκρινομένης ἐκ τῶν σαρκῶν, οἶον καταπλύνοντος τὸ τοιοῦτον ἐκ τοῦ σώματος τοῦ ἐξιόντος ὑγροῦ, δῆλον ὅτι κἂν τῇ θαλάττῃ τὸ ἐκ τῆς γῆς συγκαταμισγόμενον τῷ ὑγρῷ αἴτιον τῆς ἄλμυρότητος. ἐν μὲν οὖν τῷ σώματι γίγνεται τὸ τοιοῦτον ἢ τῆς τροφῆς ὑπόστασις διὰ τὴν ἀπεψίαν· ἐν δὲ τῇ γῇ τίνα τρόπον ὑπῆρχε, λεκτέον. ὅλως δὲ πῶς οἶόν τε τοσοῦτον ὕδατος πλήθος [357b.11] ξηρανομένης καὶ θερμαινομένης ἐκκριθῆναι; πολλοστὸν γὰρ δεῖ μέρος αὐτὸ τοῦ λειφθέντος εἶναι ἐν τῇ γῇ. ἔτι διὰ τί οὐ καὶ νῦν ὅταν ξηρανομένη τύχη γῆ, εἴτε πλείων εἴτε ἐλάττων, ἰδίει; (ἢ γὰρ ὑγρότης καὶ ὁ ἰδρῶς γίγνεται πικρός.) εἴπερ γὰρ καὶ τότε, καὶ νῦν ἐχρῆν. οὐ φαίνεται δὲ τοῦτο συμβαῖνον, ἀλλὰ ξηρὰ μὲν οὔσα ὑγραίνεται, ὑγρὰ δ’ οὔσα οὐδὲν πάσχει τοιοῦτον. πῶς οὖν οἶόν τε περὶ τὴν πρώτην γένεσιν, ὑγρᾶς οὔσης τῆς γῆς, ἰδίειν ξηρανομένην; ἀλλὰ μάλλον εἰκός, ὥσπερ φασί τινες, ἀπελθόντος τοῦ πλείστου καὶ μετεωρισθέντος τοῦ ὑγροῦ διὰ τὸν ἥλιον, τὸ λειφθὲν εἶναι θάλατταν· ὑγρὰν δ’ οὔσαν ἰδίειν ἀδύνατον. τὰ μὲν οὖν λεγόμενα τῆς ἄλμυρότητος αἴτια διαφεύγειν φαίνεται τὸν λόγον· ἡμεῖς δὲ λέγωμεν ἀρχὴν λαβόντες τὴν αὐτὴν ἣν καὶ πρότερον· ἐπειδὴ γὰρ κεῖται διπλὴν εἶναι τὴν ἀναθυμίασιν, τὴν μὲν ὑγρὰν τὴν δὲ ξηρὰν, δῆλον ὅτι ταύτην οἰητέον ἀρχὴν εἶναι τῶν τοιούτων. καὶ δὴ καὶ περὶ οὗ ἀπορήσαι πρότερον ἀναγκαῖον, πότερον καὶ ἡ θάλαττα ἀεὶ διαμένει τῶν αὐτῶν οὔσα μορίων ἀριθμῷ ἢ τῷ εἶδει καὶ τῷ ποσῷ μεταβαλλόντων ἀεὶ τῶν μερῶν, καθάπερ ἄηρ καὶ τὸ πότιμον ὕδωρ καὶ πῦρ (ἀεὶ γὰρ ἄλλο καὶ ἄλλο γίγνεται τούτων ἕκαστον, τὸ δ’ εἶδος τοῦ πλήθους ἑκάστου τούτων μένει, καθάπερ τὸ τῶν ῥεόντων ὑδάτων καὶ τὸ τῆς φλογὸς ῥεῦμα)· φανερὸν δὲ καὶ τοῦτο καὶ πιθανόν, ὡς ἀδύνατον μὴ τὸν αὐτὸν εἶναι περὶ πάντων τούτων



λόγον, καὶ διαφέρειν ταχυτῆτι καὶ [358a] βραδυτῆτι τῆς μεταβολῆς, ἐπὶ πάντων τε φθορὰν εἶναι καὶ γενέσιν, ταύτην μέντοι τεταγμένως συμβαίνειν πᾶσιν αὐτοῖς. τούτων δ' οὕτως ἐχόντων, πειρατέον ἀποδοῦναι τὴν αἰτίαν καὶ περὶ τῆς ἀλμυρότητος. φανερόν δὴ διὰ πολλῶν σημείων ὅτι γίγνεται τοιοῦτος ὁ χυμὸς διὰ σύμμειξιν τινος. ἔν τε γὰρ τοῖς σώμασι τὸ ἀπεπτότατον ἀλμυρὸν καὶ πικρόν, ὥσπερ καὶ πρότερον εἵπομεν· ἀπεπτότατον γὰρ τὸ περίττωμα τῆς ὑγρᾶς τροφῆς· τοιαύτη δὲ πᾶσα μὲν ἡ ὑπόστασις, μάλιστα δὲ ἡ εἰς τὴν κύστιν (σημεῖον δ' ὅτι λεπτοτάτη ἐστίν· τὰ δὲ πεπτόμενα πάντα συνίστασθαι πέφυκεν)· ἔπειτα ἰδρώς [ἀεὶ]· ἐν οἷς τὸ αὐτὸ σῶμα συνεκκρίνεται, ὃ ποιεῖ τὸν χυμὸν τοῦτον. ὁμοίως δὲ καὶ ἐν τοῖς καομένοις· οὐ γὰρ ἂν μὴ κρατήσῃ τὸ θερμόν, ἐν μὲν τοῖς σώμασι γίγνεται περίττωσις, ἐν δὲ τοῖς καομένοις τέφρα. διὸ καὶ τὴν θάλατταν τινες ἐκ κατακεκαυμένης φασὶ γενέσθαι γῆς. ὃ οὕτω μὲν εἶπεῖν ἄτοπον, τὸ μέντοι ἐκ τοιαύτης ἀληθές· ὥσπερ γὰρ καὶ ἐν τοῖς εἰρημένοις, οὕτω καὶ ἐν τῷ ὄλῳ ἔκ τε τῶν φυομένων καὶ γιγνομένων κατὰ φύσιν ἀεὶ δεῖ νοεῖν, ὥσπερ ἐκ πεπυρωμένων τὸ λειπόμενον τοιαύτην εἶναι γῆν, καὶ δὴ καὶ τὴν ἐν τῇ ξηρᾷ ἀναθυμίασιν πᾶσαν· αὕτη γὰρ καὶ παρέχεται τὸ πολὺ τοῦτο πλῆθος. μεμειγμένης δ' οὔσης, ὥσπερ εἵπομεν, τῆς τε ἀτμιδώδους ἀναθυμιάσεως καὶ τῆς ξηρᾶς, ὅταν συνιστῇται εἰς νέφη καὶ ὕδωρ, ἀναγκαῖον ἐμπεριλαμβάνεσθαι τι πλῆθος ἀεὶ ταύτης τῆς δυνάμεως, καὶ συγκαταφέρεσθαι πάλιν ὕοντος, καὶ τοῦτ' ἀεὶ γίγνεσθαι κατὰ τινα τάξιν, ὡς ἐνδέχεται μετέχειν τὰ ἐνταῦθα τάξεως. ὅθεν μὲν οὖν ἡ γένεσις ἔνεστιν τοῦ ἀλμυροῦ ἐν τῷ ὕδατι, εἴρηται. καὶ διὰ τοῦτο τὰ τε νότια ὕδατα πλατύτερα καὶ τὰ πρῶτα τῶν μετοπωρινῶν· ὅ τε γὰρ νότος καὶ τῷ μεγέθει καὶ τῷ πνεύματι ἀλειυνότατος ἄνεμός ἐστιν, καὶ πνεῖ ἀπὸ τόπων ξηρῶν καὶ θερμῶν, ὥστε μετ' ὀλίγης ἀτμίδος. διὸ καὶ θερμός ἐστιν· εἰ γὰρ καὶ μὴ τοιοῦτος, ἀλλ' ὅθεν ἄρχεται πνεῖν ψυχρός, οὐδὲν ἦττον προῖων διὰ τὸ συμπεριλαμβάνειν πολλὴν ἀναθυμίασιν ξηρὰν ἐκ τῶν σύνεγγυς τόπων θερμός ἐστιν· ὃ δὲ βορέας ἄτε ἀφ' ὑγρῶν τόπων ἀτμιδώδης· διὸ [358b] ψυχρός· τῷ δ' ἀπωθεῖν αἶθριος ἐνταῦθα, ἐν δὲ τοῖς ἐναντίοις ὑδατώδης. ὁμοίως δὲ καὶ ὁ νότος αἶθριος τοῖς περὶ τὴν Λιβύην. πολὺ οὖν ἐν τῷ καταφερομένῳ ὕδατι συμβάλλεται τοιοῦτον, καὶ τοῦ μετοπώρου πλατέα τὰ ὕδατα· ἀνάγκη γὰρ τὰ βαρύτερα πρῶτα φέρεσθαι. ὥστ' ἐν ὅσοις ἔνεστι τῆς τοιαύτης γῆς πλῆθος, ῥέπει τάχιστα κάτω ταῦτα. καὶ θερμὴ γε ἡ θάλαττα διὰ τοῦτό ἐστιν· πάντα γὰρ ὅσα πεπύρωται, ἔχει δυνάμει θερμότητα ἐν αὐτοῖς. ὁρᾷν δ' ἔξεστι καὶ τὴν κονίαν καὶ τὴν τέφραν καὶ τὴν ὑπόστασιν τῶν ζώων καὶ τὴν ξηρὰν καὶ τὴν ὑγρὰν· καὶ τῶν θερμοτάτων γε κατὰ τὴν κοιλίαν ζώων συμβαίνειν θερμοτάτην εἶναι τὴν ὑπόστασιν. γίγνεται μὲν οὖν ἀεὶ τε πλατυτέρα διὰ ταύτην τὴν αἰτίαν, ἀνάγεται δ' ἀεὶ τι μέρος αὐτῆς μετὰ τοῦ γλυκέος (ἀλλ' ἔλαττον τοσοῦτω ὅσω καὶ ἐν τῷ ὑομένῳ τὸ ἀλμυρὸν καὶ πλατὺ τοῦ γλυκέος ἔλαττον· διόπερ ἰσάζει ὡς

ἐπίπαν εἶπεῖν). ὅτι δὲ γίνεταί ἀτμίζουσα πότιμος καὶ οὐκ εἰς θάλατταν συγκρίνεται τὸ ἀτμίζον, ὅταν συνιστῇται πάλιν, πεπειραμένοι λέγωμεν. πάσχει δὲ καὶ τᾶλλα ταύτό· καὶ γὰρ οἶνος καὶ πάντες οἱ χυμοί, ὅσοι ἂν ἀτμίσαντες πάλιν εἰς ὑγρὸν συστῶσιν, ὕδωρ γίνονται· πάθη γὰρ τᾶλλα διὰ τινὰ σύμμιξιν τοῦ ὕδατός ἐστιν, καὶ οἶον ἂν τι ἢ τὸ συμμειχθέν, τοιοῦτον ποιεῖ τὸν χυμόν. ἀλλὰ περὶ μὲν τούτων ἐν ἄλλοις καιροῖς οἰκειότεροι ποιητέον τὴν σκέψιν. νῦν δὲ τοσοῦτον λέγωμεν, ὅτι τῆς θαλάττης ὑπαρχούσης αἰεὶ τι ἀνάγεται καὶ γίνεταί πότιμον καὶ ἄνωθεν ἐν τῷ ὑομένῳ κατέρχεται ἄλλο γεγεννημένον, οὐ τὸ ἀναχθέν· καὶ διὰ βάρος ὑφίσταται τῷ ποτίμῳ. καὶ διὰ τοῦτο οὗτ' ἐπιλείπει, ὥσπερ οἱ ποταμοί, ἀλλ' ἢ τοῖς τόποις (τοῦτο δ' ἐπ' ἀμφοτέρων ἀνάγκη συμβαίνειν ὁμοίως), οὔτε ἀεὶ τὰ αὐτὰ μέρη διαμένει, οὔτε γῆς οὔτε θαλάττης, ἀλλ' ἢ μόνον ὁ πᾶς ὄγκος. καὶ γὰρ καὶ περὶ γῆς ὁμοίως δεῖ ὑπολαβεῖν· τὸ μὲν γὰρ ἀνέρχεται, τὸ δὲ πάλιν συγκαταβαίνει, καὶ τοὺς τόπους μεταβάλλει τὰ τ' ἐπιπολάζοντα καὶ τὰ κατιόντα πάλιν. ὅτι δ' ἐστὶν ἐν μείξει τινὸς τὸ ἄλμυρόν, δῆλον οὐ μόνον ἐκ τῶν εἰρημένων, ἀλλὰ καὶ ἐάν τις ἀγγεῖον [359a] πλάσας θῇ κήρινον εἰς τὴν θάλατταν, περιδήσας τὸ στόμα τοιούτοις ὥστε μὴ παρεγχεῖσθαι τῆς θαλάττης· τὸ γὰρ εἰσιὸν διὰ τῶν τοίχων τῶν κηρίνων γίνεταί πότιμον ὕδωρ· ὥσπερ γὰρ δι' ἡθμοῦ τὸ γεῶδες ἀποκρίνεται καὶ τὸ ποιοῦν τὴν ἄλμυρότητα διὰ τὴν σύμμιξιν. τοῦτο γὰρ αἴτιον καὶ τοῦ βάρους (πλέον γὰρ ἔλκει τὸ ἄλμυρόν ἢ τὸ πότιμον) καὶ τοῦ πάχους· καὶ γὰρ τὸ πάχος διαφέρει τοσοῦτον ὥστε τὰ πλοῖα ἀπὸ τοῦ αὐτοῦ τῶν ἀγωγίμων βάρους ἐν μὲν τοῖς ποταμοῖς ὀλίγου καταδύνειν, ἐν δὲ τῇ θαλάττῃ μετρίως ἔχειν καὶ πλευστικῶς· διόπερ ἐνιοὶ τῶν ἐν τοῖς ποταμοῖς γεμιζόντων διὰ ταύτην τὴν ἄγνοιαν ἐζημιώθησαν. τεκμήριον δὲ τοῦ μειγνυμένου τὸ παχύτερον εἶναι τὸν ὄγκον· ἐάν γάρ τις ὕδωρ ἄλμυρόν ποιήσῃ σφόδρα μείζας ἄλας, ἐπιπλέουσι τὰ ῥα, κἂν ἢ πλήρη· σχεδὸν γὰρ ὥσπερ πηλὸς γίνεταί· τοσοῦτον ἔχει σωματῶδες πλῆθος ἢ θάλαττα. ταῦτόν δὲ τοῦτο δρῶσι καὶ περὶ τὰς ταριχείας. εἰ δ' ἔστιν ὥσπερ μυθολογοῦσιν ἑνὶ Παλαιστίνῃ τοιαύτη λίμνη, εἰς ἣν ἐάν τις ἐμβάλῃ συνδήσας ἄνθρωπον ἢ ὑποζύγιον ἐπιπλεῖν καὶ οὐ καταδύεσθαι κατὰ τοῦ ὕδατος, μαρτύριον ἂν εἴη τι τοῖς εἰρημένοις· λέγουσι γὰρ πικρὰν οὕτως εἶναι τὴν λίμνην καὶ ἄλμυρὰν ὥστε μηδὲν ἰχθὺν ἐγγίγνεσθαι, τὰ δὲ ἰμάτια ῥύπτειν, ἐάν τις διασεῖσῃ βρέξας. ἔστι δὲ καὶ τὰ τοιαῦτα σημεῖα πάντα τῶν εἰρημένων, ὅτι τὸ ἄλμυρόν ποιεῖ σῶμά τι, καὶ γεῶδές ἐστιν τὸ ἐνυπάρχον· ἐν τε γὰρ τῇ Χαονίᾳ κρήνῃ τίς ἐστὶν ὕδατος πλατυτέρου, ἀπορρεῖ δ' [359a.26] αὕτη εἰς ποταμὸν πλησίον γλυκὺν μὲν, ἰχθῦς δ' οὐκ ἔχοντα· εἴλοντο γὰρ δὴ, ὥς οἱ ἐκεῖ μυθολογοῦσιν, ἐξουσίας δοθείσης ὑπὸ τοῦ Ἡρακλέους, ὅτ' ἦλθεν ἄγων ἐκ τῆς Ἐρυθείας τὰς βοῦς, ἄλας ἀντὶ τῶν ἰχθύων, οἳ γίνονται αὐτοῖς ἐκ τῆς κρήνης· τούτου γὰρ τοῦ ὕδατος ἀφέψοντές τι μέρος τιθέασιν, καὶ γίνεταί ψυχθέν, ὅταν ἀπατμίσῃ

τὸ ὑγρὸν ἅμα τῷ θερμῷ, ἅλεις, οὐ χονδροὶ ἀλλὰ χαῦνοι καὶ λεπτοὶ ὥσπερ  
χιών. εἰσὶν τε τὴν τε δύναμιν ἀσθενέστεροι τῶν ἄλλων καὶ πλείους ἡδύνουσιν  
ἐμβληθέντες, καὶ τὴν χροιάν οὐχ ὁμοίως λευκοί. τοιοῦτον δ' ἕτερον γίγνεται  
καὶ ἐν Ὀμβρικοῖς· [359b] ἔστι γάρ τις τόπος ἐν ᾧ πεφύκασι κάλαμοι καὶ  
σχοῖνος· τούτων κατακάουσι, καὶ τὴν τέφραν ἐμβάλλοντες εἰς ὕδωρ  
ἀφέψουσιν· ὅταν δὲ λίπωσί τι μέρος τοῦ ὕδατος, τοῦτο ψυχθὲν ἀλῶν γίγνεται  
πλήθος. ὅσα δ' ἐστὶν ἄλμυρά ῥεύματα ποταμῶν ἢ κρηνῶν, τὰ πλεῖστα θερμά  
ποτε εἶναι δεῖ νομίζειν, εἴτα τὴν μὲν ἀρχὴν ἀπεσβέσθαι τοῦ πυρός, δι' ἧς δὲ  
διηθοῦνται γῆς, ἔτι μένειν οὔσαν οἶον κονίαν καὶ τέφραν. εἰσὶ δὲ πολλαχοῦ  
καὶ κρῆναι καὶ ῥεύματα ποταμῶν παντοδαποὺς ἔχοντα χυμούς, ὧν πάντων  
αἰτιατέον τὴν ἐνοῦσαν ἢ ἐγγιγνομένην δύναμιν πυρός· καομένη γὰρ ἡ γῆ τῷ  
μᾶλλον καὶ ἥττον παντοδαπὰς λαμβάνει μορφὰς καὶ χροὰς χυμῶν· στυπτηρίας  
γὰρ καὶ κονίας καὶ τῶν ἄλλων τῶν τοιούτων γίγνεται πλήρης δυνάμεων, δι'  
ὧν τὰ ἡθούμενα ὕδατα ὄντα γλυκέα μεταβάλλει, καὶ τὰ μὲν ὀξέα γίγνεται,  
καθάπερ ἐν τῇ Σικάνῃ τῆς Σικελίας· ἐκεῖ γὰρ ὀξάλη γίγνεται, καὶ χρῶνται  
καθάπερ ὅξει πρὸς ἔνια τῶν ἐδεσμάτων αὐτῷ. ἔστι δὲ καὶ περὶ Λύγκον κρήνη  
τις ὕδατος ὀξέος, περὶ δὲ τὴν Σκυθικὴν πικρά· τὸ δ' ἀπορρέον αὐτῆς τὸν  
ποταμὸν εἰς ὃν εἰσβάλλει ποιεῖ πικρὸν ὅλον. αἱ δὲ διαφοραὶ τούτων ἐκεῖθεν  
δῆλαι, ποῖοι χυμοὶ ἐκ ποίων γίνονται κράσεων· εἴρηται δὲ περὶ αὐτῶν χωρὶς  
ἐν ἄλλοις. περὶ μὲν οὖν ὕδατος καὶ θαλάττης, δι' ἧς αἰτίας αἰεὶ τε συνεχῶς  
εἰσὶ καὶ πῶς μεταβάλλουσι καὶ τίς ἡ φύσις αὐτῶν, ἔτι δ' ὅσα πάθη κατὰ φύσιν  
αὐτοῖς συμβαίνει ποιεῖν ἢ πάσχειν, εἴρηται σχεδὸν ἡμῖν περὶ τῶν  
πλείστων. περὶ δὲ πνευμάτων λέγωμεν, λαβόντες ἀρχὴν τὴν εἰρημένην ἡμῖν  
ἤδη πρότερον. ἔστι γὰρ δύο εἴδη τῆς ἀναθυμιάσεως, ὧς φαμεν, ἡ μὲν ὑγρὰ ἡ  
δὲ ξηρά· καλεῖται δ' ἡ μὲν ἀτμὶς, ἡ δὲ τὸ μὲν ὅλον ἀνώνυμος, τῷ δ' ἐπὶ  
μέρους ἀνάγκη χρωμένους καθόλου προσαγορεύειν αὐτὴν οἶον καπνόν· ἔστι δ'  
οὔτε τὸ ὑγρὸν ἄνευ τοῦ ξηροῦ οὔτε τὸ ξηρὸν ἄνευ τοῦ ὑγροῦ, ἀλλὰ πάντα  
ταῦτα λέγεται κατὰ τὴν ὑπεροχὴν. φερομένου δὲ τοῦ ἡλίου κύκλῳ, καὶ ὅταν  
μὲν πλησιάζῃ, τῇ θερμότητι ἀνάγοντος τὸ ὑγρὸν, πορρωτέρω [360a] δὲ  
γιγνομένου διὰ τὴν ψύξιν συνισταμένης πάλιν τῆς ἀναχθείσης ἀτμίδος εἰς  
ὕδωρ (διὸ χειμῶνός τε μᾶλλον γίγνεται τὰ ὕδατα, καὶ νύκτωρ ἢ μεθ' ἡμέραν·  
ἀλλ' οὐ δοκεῖ, διὰ τὸ λανθάνειν τὰ νυκτερινὰ τῶν μεθ' ἡμέραν μᾶλλον), τὸ  
δὲ κατιὸν ὕδωρ διαδίδεται πᾶν εἰς τὴν γῆν, ὑπάρχει δ' ἐν τῇ γῇ πολὺ πῦρ καὶ  
πολλὴ θερμότης, καὶ ὁ ἥλιος οὐ μόνον τὸ ἐπιπολάζον τῆς γῆς ὑγρὸν ἔλκει,  
ἀλλὰ καὶ τὴν γῆν αὐτὴν ξηραίνει θερμαίνων· τῆς δ' ἀναθυμιάσεως, ὥσπερ  
εἴρηται, διπλῆς οὔσης, τῆς μὲν ἀτμιδώδους τῆς δὲ καπνώδους, ἀμφοτέρας  
ἀναγκαῖον γίνεσθαι. τούτων δ' ἡ μὲν ὑγροῦ πλεον ἔχουσα πλήθος  
ἀναθυμιάσις ἀρχὴ τοῦ ὑομένου ὕδατός ἐστιν, ὥσπερ εἴρηται πρότερον, ἡ δὲ  
ξηρὰ τῶν πνευμάτων ἀρχὴ καὶ φύσις πάντων. ταῦτα δὲ ὅτι τοῦτον τὸν τρόπον

ἀναγκαῖον συμβαίνειν, καὶ ἐξ αὐτῶν τῶν ἔργων δῆλον· καὶ γὰρ τὴν ἀναθυμίασιν διαφέρειν ἀναγκαῖον, καὶ τὸν ἥλιον καὶ τὴν ἐν τῇ γῇ θερμότητα ταῦτα ποιεῖν οὐ μόνον δυνατόν ἀλλ' ἀναγκαῖόν ἐστιν. ἐπειδὴ δ' ἕτερον ἑκατέρας τὸ εἶδος, φανερόν ὅτι διαφέρει, καὶ οὐχ ἡ αὐτὴ ἐστὶν ἢ τε ἀνέμου φύσις καὶ ἢ τοῦ ὑομένου ὕδατος, καθάπερ τινὲς λέγουσιν· τὸν γὰρ αὐτὸν ἀέρα κινούμενον μὲν ἄνεμον εἶναι, συνιστάμενον δὲ πάλιν ὕδωρ. ὁ μὲν οὖν ἀήρ, καθάπερ ἐν τοῖς πρὸ τούτων λόγοις εἰρήκαμεν, γίγνεται ἐκ τούτων· ἢ μὲν γὰρ ἀτμὶς ὑγρὸν καὶ ψυχρὸν (εὐόριστον μὲν γὰρ ὡς ὑγρόν, διὰ δὲ τὸ ὕδατος εἶναι ψυχρὸν τῇ οἰκείᾳ φύσει, ὥσπερ ὕδωρ μὴ θερμανθέν), ὁ δὲ καπνὸς θερμὸν καὶ ξηρόν· ὥστε καθάπερ ἐκ συμβόλων, συνίσταται ἂν ὁ ἀήρ ὑγρὸς καὶ θερμὸς. καὶ γὰρ ἄτοπον εἰ ὁ περὶ ἑκάστους περικεχυμένος ἀήρ οὗτος γίγνεται κινούμενος πνεῦμα, καὶ ὅθεν ἂν τύχῃ κινηθεῖς, ἄνεμος ἔσται, ἀλλ' οὐ καθάπερ τοὺς ποταμοὺς ὑπολαμβάνομεν οὐχ ὁπωσοῦν τοῦ ὕδατος εἶναι ῥέοντος, οὐδ' ἂν ἔχῃ πλῆθος, ἀλλὰ δεῖ πηγαῖον εἶναι τὸ ῥέον· οὕτω γὰρ καὶ περὶ τῶν ἀνέμων ἔχει· κινηθεῖ γὰρ ἂν πολὺ πλῆθος ἀέρος ὑπὸ τινος μεγάλης πτώσεως, οὐκ ἔχον ἀρχὴν οὐδὲ πηγὴν. μαρτυρεῖ δὲ τὰ γινόμενα τοῖς εἰρημένοις· διὰ γὰρ τὸ συνεχῶς μὲν μᾶλλον δὲ καὶ ἥττον καὶ πλείω καὶ ἐλάττω γίνεσθαι τὴν [360b] ἀναθυμίασιν, ἀεὶ νέφη τε καὶ πνεύματα γίγνεται κατὰ τὴν ὥραν ἑκάστην ὡς πέφυκεν· διὰ δὲ τὸ ἐνίοτε μὲν τὴν ἀτμιδώδῃ γίνεσθαι πολλαπλασίαν ὅτε δὲ τὴν ξηρὰν καὶ καπνώδῃ, ὅτε μὲν ἔπομβρα τὰ ἔτη γίγνεται καὶ ὑγρὰ, ὅτε δὲ ἀνεμώδῃ καὶ αὐχμοί. ὅτε μὲν οὖν συμβαίνει καὶ τοὺς αὐχμοὺς καὶ τὰς ἐπομβρίας πολλοὺς ἅμα καὶ κατὰ συνεχῇ γίνεσθαι χώραν, ὅτε δὲ κατὰ μέρη· πολλάκις γὰρ ἢ μὲν κύκλῳ χώρα λαμβάνει τοὺς ὥραίους ὄμβρους ἢ καὶ πλείους, ἐν δέ τινι μέρει ταύτης αὐχμὸς ἐστίν· ὅτε δὲ τοῦναντίον τῆς κύκλῳ πάσης ἢ μετρίοις χρωμένης ὕδασιν ἢ καὶ μᾶλλον αὐχμώσης, ἐν τι μόριον ὕδατος ἀφθονον λαμβάνει πλῆθος. αἴτιον δ' ὅτι ὡς μὲν τὰ πολλὰ τὸ αὐτὸ πάθος ἐπὶ πλείω διήκειν εἰκὸς χώραν, διὰ τὸ παραπλησίως κεῖσθαι πρὸς τὸν ἥλιον τὰ σύγγεγυς, ἐὰν μή τι διάφορον ἔχωσιν ἴδιον· οὐ μὴν ἀλλ' ἐνίοτε κατὰ τοδὶ μὲν τὸ μέρος ἢ ξηρὰ ἀναθυμιάσις ἐγένετο πλείων, κατὰ δὲ τὸ ἄλλο ἢ ἀτμιδώδης, ὅτε δὲ τοῦναντίον. καὶ αὐτοῦ δὲ τούτου αἴτιον τὸ ἑκατέραν μεταπίπτειν εἰς τὴν τῆς ἐχομένης χώρας ἀναθυμίασιν, οἷον ἢ μὲν ξηρὰ κατὰ τὴν οἰκείαν ῥεῖ χώραν, ἢ δ' ὑγρὰ πρὸς τὴν γειννῶσαν, ἢ καὶ εἰς τῶν πόρρω τινὰ τόπων ἀπεώσθη ὑπὸ πνευμάτων· ὅτε δὲ αὕτη μὲν ἔμεινεν, ἢ δ' ἐναντία ταῦτόν ἐποίησεν. καὶ συμβαίνει τοῦτο πολλάκις, ὥσπερ ἐπὶ τοῦ σώματος, ἐὰν ἢ ἄνω κοιλία ξηρὰ ᾖ, τὴν κάτω ἐναντίως διακεῖσθαι, καὶ ταύτης ξηρᾶς οὔσης ὑγρὰν εἶναι τὴν ἄνω καὶ ψυχράν, οὕτω καὶ περὶ τοὺς τόπους ἀντιπερίστασθαι καὶ μεταβάλλειν τὰς ἀναθυμιάσεις. ἔτι δὲ μετὰ τε τοὺς ὄμβρους ἄνεμος ὡς τὰ πολλὰ γίγνεται ἐν ἐκείνοις τοῖς τόποις καθ' οὓς ἂν συμπέσῃ γενέσθαι τοὺς ὄμβρους, καὶ τὰ

πνεύματα παύεται ὕδατος γενομένου. ταῦτα γὰρ ἀνάγκη συμβαίνειν διὰ τὰς εἰρημένους ἀρχάς· ὕσαντός τε γὰρ ἡ γῆ ξηραίνομένη ὑπὸ τε τοῦ ἐν αὐτῇ θερμοῦ καὶ ὑπὸ τοῦ ἄνωθεν ἀναθυμιάται, τοῦτο δ' ἦν ἀνέμου σῶμα· καὶ ὅταν ἡ τοιαύτη ἀπόκρισις ἢ καὶ ἄνεμοι κατέχωσι, παυομένων διὰ τὸ ἀποκρίνεσθαι τὸ θερμὸν ἀεὶ καὶ ἀναφέρεσθαι εἰς τὸν ἄνω τόπον συνίσταται ἡ ἀτμὶς ψυχομένη καὶ γίγνεται ὕδωρ· [361a] καὶ ὅταν εἰς ταῦτόν συνωσθῶσι τὰ νέφη καὶ ἀντιπεριστῇ εἰς αὐτὰ ἡ ψύξις, ὕδωρ γίγνεται καὶ καταψύχει τὴν ξηρὰν ἀναθυμίασιν. παύουσί τε οὖν τὰ ὕδατα γινόμενα τοὺς ἀνέμους, καὶ παυομένων αὐτὰ γίγνεται διὰ ταύτας τὰς αἰτίας. ἔτι δὲ τοῦ γίνεσθαι μάλιστα πνεύματα ἀπὸ τε τῆς ἄρκτου καὶ [361a.6] μεσημβρίας τὸ αὐτὸ αἴτιον· πλεῖστοι γὰρ βορέαι καὶ νότοι γίνονται τῶν ἀνέμων· ὁ γὰρ ἥλιος τούτους μόνους οὐκ ἐπέρχεται τοὺς τόπους, ἀλλὰ πρὸς τούτους καὶ ἀπὸ τούτων, ἐπὶ δυσμᾶς δὲ καὶ ἐπ' ἀνατολᾶς ἀεὶ φέρεται· διὸ τὰ νέφη συνίσταται ἐν τοῖς πλαγίοις, καὶ γίγνεται προσιόντος μὲν ἡ ἀναθυμίασις τοῦ ὑγροῦ, ἀπιόντος δὲ πρὸς τὸν ἐναντίον τόπον ὕδατα καὶ χειμῶνες. διὰ μὲν οὖν τὴν φορὰν τὴν ἐπὶ τροπᾶς καὶ ἀπὸ τροπῶν θέρος γίγνεται καὶ χειμῶν, καὶ ἀνάγεται τε ἄνω τὸ ὕδωρ καὶ γίγνεται πάλιν· ἐπεὶ δὲ πλεῖστον μὲν καταβαίνει ὕδωρ ἐν τούτοις τοῖς τόποις ἐφ' οὓς τρέπεται καὶ ἀφ' ὧν, οὗτοι δὲ εἰσιν ὅ τε πρὸς ἄρκτον καὶ μεσημβρίαν, ὅπου δὲ πλεῖστον ὕδωρ ἡ γῆ δέχεται, ἐνταῦθα πλεῖστην ἀναγκαῖον γίνεσθαι τὴν ἀναθυμίασιν παραπλησίως οἶον ἐκ χλωρῶν ξύλων καπνόν, ἢ δ' ἀναθυμίασις αὕτη ἄνεμός ἐστιν, εὐλόγως ἂν οὖν ἐντεῦθεν γίγνοιτο τὰ πλεῖστα καὶ κυριώτατα τῶν πνευμάτων. καλοῦνται δ' οἱ μὲν ἀπὸ τῆς ἄρκτου βορέαι, οἱ δὲ ἀπὸ τῆς μεσημβρίας νότοι. ἡ δὲ φορὰ λοξὴ αὐτῶν ἐστίν· περὶ γὰρ τὴν γῆν πνέουσιν εἰς ὀρθὸν γινομένης τῆς ἀναθυμιάσεως, ὅτι πᾶς ὁ κύκλῳ ἀῆρ συνέπεται τῇ φορᾷ. διὸ καὶ ἀπορήσειεν ἂν τις ποτέρωθεν ἢ ἀρχὴ τῶν πνευμάτων ἐστί, πότερον ἄνωθεν ἢ κάτωθεν· ἡ μὲν γὰρ κίνησις ἄνωθεν καὶ πρὶν πνεῖν, ὁ δ' ἀῆρ ἐπίδηλος, κἂν ἢ νέφος ἢ ἀχλύς· σημαίνει γὰρ κινουμένην πνεύματος ἀρχὴν πρὶν φανερῶς ἐληλυθέναι τὸν ἄνεμον, ὡς ἄνωθεν αὐτῶν ἐχόντων τὴν ἀρχήν. ἐπεὶ δ' ἐστὶν ἄνεμος πληθὸς τι τῆς ξηρᾶς ἐκ γῆς ἀναθυμιάσεως κινούμενον περὶ τὴν γῆν, δῆλον ὅτι τῆς μὲν κινήσεως ἡ ἀρχὴ ἄνωθεν, τῆς δὲ ὕλης καὶ τῆς γενέσεως κάτωθεν· ἢ μὲν γὰρ ῥευσεῖται τὸ ἀνιόν, ἐκεῖθεν τὸ αἴτιον· ἢ γὰρ φορὰ τῶν πορρωτέρω κυρία τῆς γῆς· καὶ ἅμα κάτωθεν μὲν εἰς ὀρθὸν ἀναφέρεται, καὶ πᾶν ἰσχύει μᾶλλον ἐγγύς, ἢ δὲ τῆς γενέσεως ἀρχὴ δῆλον ὡς ἐκ τῆς [361b] γῆς ἐστίν. ὅτι δ' ἐκ πολλῶν ἀναθυμιάσεων συνιουσῶν κατὰ μικρόν, ὥσπερ αἱ τῶν ποταμῶν ἀρχαὶ γίνονται νοτιζούσης τῆς γῆς, δῆλον καὶ ἐπὶ τῶν ἔργων· ὅθεν γὰρ ἐκάστοτε πνέουσιν, ἐλάχιστοι πάντες εἰσὶ, προϊόντες δὲ καὶ πόρρω λαμπροὶ πνέουσιν. ἔτι δὲ καὶ τὰ περὶ τὴν ἄρκτον ἐν τῷ χειμῶνι νήνεμα καὶ ἄπνοα, κατ' αὐτὸν ἐκεῖνον τὸν τόπον· ἀλλὰ τὸ κατὰ μικρὸν ἀποπνέον καὶ λανθάνον ἔξω προϊὼν

ἤδη πνεῦμα γίγνεται λαμπρόν. τίς μὲν οὖν ἐστὶν ἡ τοῦ ἀνέμου φύσις καὶ πῶς γίγνεται, ἔτι δὲ αὐχμῶν τε περί καὶ ἐπομβρίας, καὶ διὰ τίν' αἰτίαν καὶ παύονται καὶ γίνονται μετὰ τοὺς ὄμβρους, διὰ τί τε βορέαι καὶ νότοι πλεῖστοι τῶν ἀνέμων εἰσὶν, εἴρηται· πρὸς δὲ τούτοις καὶ περὶ τῆς φορᾶς αὐτῶν. ὁ δ' ἥλιος καὶ παύει καὶ συνεξορμᾷ τὰ πνεύματα· ἀσθενεῖς μὲν γὰρ καὶ ὀλίγας οὔσας τὰς ἀναθυμιάσεις μαραίνει τῷ πλείονι θερμῷ τὸ ἐν τῇ ἀναθυμιάσει ἔλαττον ὄν, καὶ διακρίνει. ἔτι δὲ αὐτὴν τὴν γῆν φθάνει ξηραίνων πρὶν γενέσθαι ἔκκρισιν ἀθρόαν, ὥσπερ εἰς πολὺ πῦρ ἐὰν ὀλίγον ἐμπέσῃ ὑπέκκαυμα, φθάνει πολλάκις πρὶν καπνὸν ποιῆσαι κατακαυθέν. διὰ μὲν οὖν ταύτας τὰς αἰτίας καταπαύει τε τὰ πνεύματα καὶ ἐξ ἀρχῆς γίνεσθαι κωλύει, τῇ μὲν μαράνσει καταπαύων, τῷ δὲ τάχει τῆς ξηρότητος γίνεσθαι κωλύων· διὸ περὶ Ὠρίωνος ἀνατολὴν μάλιστα γίγνεται νηνεμία, καὶ μέχρι τῶν ἐτησίων καὶ προδρόμων. ὅλως δὲ γίνονται αἱ νηνεμίαι διὰ δύο αἰτίας· ἡ γὰρ διὰ ψυχρός ἀποσβεννυμένης τῆς ἀναθυμιάσεως, οἷον ὅταν γένηται πάγος ἰσχυρός, ἡ καταμαραιομένης ὑπὸ τοῦ πνίγους. αἱ δὲ πλεῖσται καὶ ἐν ταῖς ἀνὰ μέσον ὥραις, ἡ τῷ μήπω ἀναθυμιάσθαι, ἡ τῷ ἤδη ἐξεληλυθέναι τὴν ἀναθυμίασιν καὶ ἄλλην μήπω ἐπιρρεῖν. ἄκριτος δὲ καὶ χαλεπὸς ὁ Ὠρίων εἶναι δοκεῖ, καὶ δύνων καὶ ἐπιτέλλων, διὰ τὸ ἐν μεταβολῇ ὥρας συμβαίνειν τὴν δύσιν καὶ τὴν ἀνατολήν, θέρους ἢ χειμῶνος, καὶ διὰ τὸ μέγεθος τοῦ ἄστρου ἡμερῶν γίγνεται πλήθος· αἱ δὲ μεταβολαὶ πάντων ταραχώδεις διὰ τὴν ἀοριστίαν εἰσὶν. οἱ δ' ἐτησῖαι πνέουσι μετὰ τροπᾶς καὶ κυνὸς ἐπιτολήν, καὶ οὔτε τηνικαῦτα ὅτε μάλιστα πλησιάζει ὁ ἥλιος, [362a] οὔτε ὅτε πόρρω· καὶ τὰς μὲν ἡμέρας πνέουσι, τὰς δὲ νύκτας παύονται. αἴτιον δ' ὅτι πλησίον μὲν ὢν φθάνει ξηραίνων πρὶν γενέσθαι τὴν ἀναθυμίασιν· ὅταν δ' ἀπέλθῃ μικρόν, σύμμετρος ἤδη γίγνεται ἡ ἀναθυμίασις καὶ ἡ θερμότης, ὥστε τὰ πεπηγότα ὕδατα τήκεσθαι, καὶ τῆς γῆς ξηρανομένης ὑπὸ τε τῆς οἰκείας θερμότητος καὶ ὑπὸ τῆς τοῦ ἡλίου οἷον τύφεσθαι καὶ θυμιάσθαι. τῆς δὲ νυκτὸς λωφῶσι διὰ τὸ τὰ πεπηγότα τηκόμενα παύεσθαι διὰ τὴν ψυχρότητα τῶν νυκτῶν. θυμιᾶται δ' οὔτε τὸ πεπηγὸς οὔτε τὸ μηδὲν ἔχον ξηρόν, ἀλλ' ὅταν ἔχῃ τὸ ξηρὸν ὑγρότητα, τοῦτο θερμαινόμενον θυμιᾶται. ἀποροῦσι δέ τινες διὰ τί βορέαι μὲν γίνονται συνεχεῖς, οὓς καλοῦμεν ἐτησίας, μετὰ τὰς θερινὰς τροπὰς, νότοι δὲ οὕτως οὐ γίνονται μετὰ τὰς χειμερινὰς. ἔχει δὲ οὐκ ἀλόγως· γίνονται μὲν γὰρ οἱ καλούμενοι λευκόνοτοι τὴν ἀντικειμένην ὥραν, οὐχ οὕτως δὲ γίνονται συνεχεῖς· διὸ λανθάνοντες ποιοῦσιν ἐπιζητεῖν. αἴτιον δ' ὅτι ὁ μὲν βορέας ἀπὸ τῶν ὑπὸ τὴν ἄρκτον πνεῖ τόπων, οἱ πλήρεις ὕδατος καὶ χιόνος εἰσὶ πολλῆς, ὢν τηκομένων ὑπὸ τοῦ ἡλίου μετὰ τὰς θερινὰς τροπὰς μᾶλλον ἢ ἐν αὐταῖς πνέουσιν οἱ ἐτησῖαι· οὕτω γὰρ καὶ τὰ πνίγη γίγνεται, οὐχ ὅταν μάλιστα πλησιάζῃ πρὸς ἄρκτον, ἀλλ' ὅταν πλείων μὲν ἢ χρόνος θερμαίνοντι, ἔτι δὲ

ἐγγύς. ὁμοίως δὲ καὶ μετὰ χειμερινὰς τροπὰς πνέουσιν οἱ ὀρνιθία· καὶ γὰρ οὗτοι ἐτησῖαι εἰσὶν ἀσθενεῖς· ἐλάττους δὲ καὶ ὀψιαίτεροι τῶν ἐτησίων πνέουσιν· ἑβδομηκοστῇ γὰρ ἄρχονται πνεῖν διὰ τὸ πόρρω ὄντα τὸν ἥλιον ἐνισχύειν ἦττον. οὐ συνεχεῖς δ' ὁμοίως πνέουσι, διότι τὰ μὲν ἐπιπολῆς καὶ ἀσθενῇ τότε ἀποκρίνεται, τὰ δὲ μᾶλλον πεπηγότα πλείονος δεῖται θερμότητος. διὸ διαλείποντες οὗτοι πνέουσιν, ἕως ἄν ἐπὶ τροπαῖς πάλιν ταῖς θεριναῖς πνεύσωσιν οἱ ἐτησῖαι, ἐπεὶ θέλει γε ὅτι μάλιστα συνεχῶς ἐντεῦθεν ἀεὶ πνεῖν ἄνεμος. ὁ δὲ νότος ἀπὸ τῆς θερινῆς τροπῆς πνεῖ, καὶ οὐκ ἀπὸ τῆς ἐτέρας ἄρκτου. δύο γὰρ ὄντων τμημάτων τῆς δυνατῆς οἰκεῖσθαι χώρας, τῆς μὲν πρὸς τὸν ἄνω πόλον, καθ' ἡμᾶς, τῆς δὲ πρὸς τὸν ἕτερον καὶ πρὸς μεσημβρίαν, καὶ οὖσης οἶον τυμπάνου (τοιοῦτον γὰρ σχῆμα τῆς γῆς [362b]) ἐκτέμνουσιν αἱ ἐκ τοῦ κέντρου αὐτῆς ἀγόμεναι, καὶ ποιοῦσι δύο κώνους, τὸν μὲν ἔχοντα βάσιν τὸν τροπικόν, τὸν δὲ τὸν διὰ παντὸς φανερόν, τὴν δὲ κορυφὴν ἐπὶ τοῦ μέσου τῆς γῆς· τὸν αὐτὸν δὲ τρόπον πρὸς τὸν κάτω πόλον ἕτεροι δύο κῶνοι τῆς γῆς ἐκτμήματα ποιοῦσι. ταῦτα δ' οἰκεῖσθαι μόνον δυνατόν, καὶ οὐτ' ἐπέκεινα τῶν τροπῶν (σκιὰ γὰρ οὐκ ἄν ἦν πρὸς ἄρκτον, νῦν δ' ἀοίκητοι πρότερον γίνονται οἱ τόποι πρὶν ἢ ὑπολείπειν ἢ μεταβάλλειν τὴν σκιάν πρὸς μεσημβρίαν) τὰ θ' ὑπὸ τὴν ἄρκτον ὑπὸ ψύχους ἀοίκητα. φέρεται δὲ καὶ ὁ στέφανος κατὰ τοῦτον τὸν τόπον· φαίνεται γὰρ ὑπὲρ κεφαλῆς γιγνόμενος ἡμῖν, ὅταν ἡ κατὰ τὸν μεσημβρινόν. διὸ καὶ γελοῖως γράφουσι νῦν τὰς περιόδους τῆς γῆς· γράφουσι γὰρ κυκλοτερῇ τὴν οἰκουμένην, τοῦτο δ' ἐστὶν ἀδύνατον κατὰ τε τὰ φαινόμενα καὶ κατὰ τὸν λόγον. ὅ τε γὰρ λόγος δείκνυσιν ὅτι ἐπὶ πλάτος μὲν ὥρισταί, τὸ δὲ κύκλῳ συνάπτειν ἐνδέχεται διὰ τὴν κρᾶσιν, -οὐ γὰρ ὑπερβάλλει τὰ καύματα καὶ τὸ ψῦχος κατὰ μῆκος, ἀλλ' ἐπὶ [362b.18] πλάτος, ὥστ' εἰ μή που κωλύει θαλάττης πλῆθος, ἅπαν εἶναι πορεύσιμον, -καὶ κατὰ τὰ φαινόμενα περί τε τοὺς πλοῦς καὶ τὰς πορείας· πολὺ γὰρ τὸ μῆκος διαφέρει τοῦ πλάτους. τὸ γὰρ ἀπὸ Ἡρακλείων στηλῶν μέχρι τῆς Ἰνδικῆς τοῦ ἐξ Αἰθιοπίας πρὸς τὴν Μαιώτιν καὶ τοὺς ἐσχατεύοντας τῆς Σκυθίας τόπους πλεόν ἢ πέντε πρὸς τρία τὸ μέγεθός ἐστιν, ἐάν τέ τις τοὺς πλοῦς λογίζεται καὶ τὰς ὁδούς, ὡς ἐνδέχεται λαμβάνειν τῶν τοιούτων τὰς ἀκριβείας. καίτοι ἐπὶ πλάτος μὲν μέχρι τῶν ἀοικήτων ἴσμεν τὴν οἰκουμένην· ἔνθα μὲν γὰρ διὰ ψῦχος οὐκέτι κατοικοῦσιν, ἔνθα δὲ διὰ τὴν ἀλέαν. τὰ δὲ τῆς Ἰνδικῆς ἔξω καὶ τῶν στηλῶν τῶν Ἡρακλείων διὰ τὴν θάλατταν οὐ φαίνεται συνείρειν, τῷ συνεχῶς εἶναι πᾶσαν οἰκουμένην)· ἐπεὶ δ' ὁμοίως ἔχειν ἀνάγκη τόπον τινὰ πρὸς τὸν ἕτερον πόλον ὥσπερ ὃν ἡμεῖς οἰκοῦμεν πρὸς τὸν ὑπὲρ ἡμῶν, δῆλον ὡς ἀνάλογον ἔξει τὰ τ' ἄλλα καὶ τῶν πνευμάτων ἢ στάσις· ὥστε καθάπερ ἐνταῦθα βορέας ἐστίν, κάκεινους ἀπὸ τῆς ἐκεῖ ἄρκτου τις ἄνεμος οὕτως ὢν, ὃν οὐδὲν δυνατόν διέχειν δεῦρο, ἐπεὶ οὐδ' ὁ βορέας οὗτος εἰς τὴν ἐνταῦθα [363a] οἰκουμένην πᾶσάν ἐστιν· ἔστιν γὰρ

ὥσπερ ἀπόγειον τὸ πνεῦμα τὸ βόρειον [[Μετεωρολογικά/Β#ρῥῥῥ ὁ βορέας οὗτος εἰς τὴν ἐνταῦθα οἰκουμένην πνεῖ][ἔως ὁ βορέας οὗτος εἰς τὴν ἐνταῦθα οἰκουμένην πνεῖ]]. ἀλλὰ διὰ τὸ τὴν οἴκησιν κεῖσθαι ταύτην πρὸς ἄρκτον, πλεῖστοι βορέαι πνέουσιν. ὅμως δὲ καὶ ἐνταῦθα ἐλλείπει καὶ οὐ δύναται πόρρω διήκειν, ἐπεὶ περὶ τὴν ἔξω Λιβύης θάλατταν τὴν νοτίαν, ὥσπερ ἐνταῦθα οἱ βορέαι καὶ οἱ νότοι πνέουσιν, οὕτως ἐκεῖ εὖροι καὶ ζέφυροι διαδεχόμενοι συνεχεῖς ἀεὶ πνέουσιν. ὅτι μὲν οὖν ὁ νότος οὐκ ἔστιν ὁ ἀπὸ τοῦ ἐτέρου πόλου πνέων ἄνεμος, δῆλον. ἐπεὶ δ' οὐτ' ἐκεῖνος, οὔτε ὁ ἀπὸ χειμερινῆς τροπῆς (δέοι γὰρ ἂν ἄλλον ἀπὸ θερινῆς εἶναι τροπῆς· οὕτως γὰρ τὸ ἀνάλογον ἀποδώσει· νῦν δ' οὐκ ἔστιν· εἰς γὰρ μόνος φαίνεται πνέων ἐκ τῶν ἐκεῖθεν τόπων)· ὥστ' ἀνάγκη τὸν ἀπὸ τοῦ κατακεκαυμένου τόπου πνέοντα ἄνεμον εἶναι νότον. ἐκεῖνος δ' ὁ τόπος διὰ τὴν τοῦ ἡλίου γειτνίασιν οὐκ ἔχει ὕδατα καὶ νομάς, αἱ διὰ τὴν πῆξιν ποιήσουσιν ἐτησίας· ἀλλὰ διὰ τὸ τὸν τόπον εἶναι πολὺ πλείω ἐκεῖνον καὶ ἀναπεπταμένον, μείζων καὶ πλείων καὶ μᾶλλον ἁλεεινὸς ἄνεμος ὁ νότος ἐστὶ τοῦ βορέου, καὶ διήκει μᾶλλον δεῦρο ἢ οὗτος ἐκεῖ. τίς μὲν οὖν αἰτία τούτων ἐστὶ τῶν ἀνέμων, καὶ πῶς ἔχουσι πρὸς ἀλλήλους, εἴρηται. περὶ δὲ θέσεως αὐτῶν, καὶ τίνες ἐναντίοι τίσι, καὶ ποίους ἅμα πνεῖν ἐνδέχεται καὶ ποίους οὐ, ἔτι δὲ καὶ τίνες καὶ πόσοι τυγχάνουσιν ὄντες, καὶ πρὸς τούτοις περὶ τῶν ἄλλων παθημάτων ὅσα μὴ συμβέβηκεν ἐν τοῖς προβλήμασιν εἰρησθαι τοῖς κατὰ μέρος, νῦν λέγωμεν. δεῖ δὲ περὶ τῆς θέσεως ἅμα τοὺς λόγους ἐκ τῆς ὑπογραφῆς θεωρεῖν. γέγραπται μὲν οὖν, τοῦ μᾶλλον εὐσήμως ἔχειν, ὁ τοῦ ὀρίζοντος κύκλος· διὸ καὶ στρογγύλος. δεῖ δὲ νοεῖν αὐτοῦ τὸ ἕτερον ἔκτμημα τὸ ὑφ' ἡμῶν οἰκούμενον· ἔσται γὰρ κάκεῖνο διελεῖν τὸν αὐτὸν τρόπον. ὑποκείσθω δὲ πρῶτον μὲν ἐναντία κατὰ τόπον εἶναι τὰ πλεῖστον ἀπέχοντα κατὰ τόπον, ὥσπερ κατ' εἶδος ἐναντία τὰ πλεῖστον ἀπέχοντα κατὰ τὸ εἶδος· πλεῖστον δ' ἀπέχει κατὰ τόπον τὰ κείμενα πρὸς ἀλλήλα κατὰ διάμετρον. ἔστω οὖν τὸ μὲν ἐφ' ὧ A δυσμὴ ἰσημερινή, [363b] ἐναντίος δὲ τούτῳ τόπος, ἐφ' οὗ τὸ B, ἀνατολὴ ἰσημερινή· ἄλλη δὲ διάμετρος ταύτην πρὸς ὀρθὴν τέμνουσα, ἥς τὸ ἐφ' οὗ H ἔστω ἄρκτος· τούτῳ δ' ἐναντίον ἐξ ἐναντίας, τὸ ἐφ' οὗ Θ, μεσημβρία· τὸ δ' ἐφ' οὗ Z ἀνατολὴ θερινή, τὸ δ' ἐφ' ὧ E δυσμὴ θερινή, τὸ δ' ἐφ' οὗ Δ ἀνατολὴ χειμερινή, τὸ δ' ἐφ' οὗ Γ δυσμὴ χειμερινή. ἀπὸ δὲ τοῦ Z ἦχθω διάμετρος ἐπὶ τὸ Γ, καὶ ἀπὸ τοῦ Δ ἐπὶ τὸ E. ἐπεὶ οὖν τὰ μὲν πλεῖστον ἀπέχοντα κατὰ τόπον ἐναντία κατὰ τόπον, πλεῖστον δ' ἀπέχει τὰ κατὰ διάμετρον, ἀναγκαῖον καὶ τῶν πνευμάτων ταῦτα ἀλλήλοις ἐναντία εἶναι, ὅσα κατὰ διάμετρον ἐστίν. καλεῖται δὲ κατὰ τὴν θέσιν τῶν τόπων τὰ πνεύματα ὧδε· ζέφυρος μὲν τὸ ἀπὸ τοῦ A· τοῦτο γὰρ δυσμὴ ἰσημερινή. ἐναντίος δὲ τούτῳ ἀπηλιώτης ἀπὸ τοῦ B· τοῦτο γὰρ ἀνατολὴ ἰσημερινή. βορέας δὲ <καὶ> ἀπαρκτίας ἀπὸ τοῦ H· ἐνταῦθα γὰρ ἡ ἄρκτος. ἐναντίος δὲ τούτῳ νότος ἀπὸ



τοῦ Θ· μεσημβρία τε γὰρ αὕτη ἀφ' ἧς πνεῖ, καὶ τὸ Θ τῷ Η ἐναντίον· κατὰ διάμετρον γάρ. ἀπὸ δὲ τοῦ Ζ καικίας· αὕτη γὰρ ἀνατολὴ θερινή. ἐναντίος δ' οὐχ ὁ ἀπὸ τοῦ Ε πνέων, ἀλλ' ὁ ἀπὸ τοῦ Γ λίψ· οὗτος γὰρ ἀπὸ δυσμῆς χειμερινῆς, ἐναντίος δὲ τούτῳ (κατὰ διάμετρον γὰρ κεῖται). ἀπὸ δὲ τοῦ Δ εὖρος· οὗτος γὰρ ἀπ' ἀνατολῆς χειμερινῆς πνεῖ, γειτνιῶν τῷ νότῳ· διὸ καὶ πολλάκις εὐρόνοτοι λέγονται πνεῖν. ἐναντίος δὲ τούτῳ οὐχ ὁ ἀπὸ τοῦ Γ λίψ, ἀλλ' ὁ ἀπὸ τοῦ Ε, ὃν καλοῦσιν οἱ μὲν ἀργέστην; οἱ δ' ὀλυμπίαν, οἱ δὲ σκίρωνα· οὗτος γὰρ ἀπὸ δυσμῆς θερινῆς πνεῖ, καὶ κατὰ διάμετρον αὐτῷ κεῖται μόνος. οὗτοι μὲν οὖν οἱ κατὰ διάμετρον τε κείμενοι ἄνεμοι καὶ οἱ εἰσὶν ἐναντίοι· ἕτεροι δ' εἰσὶν καθ' οὓς οὐκ ἔστιν ἐναντία πνεύματα. ἀπὸ μὲν γὰρ τοῦ Ι ὃν καλοῦσι θρασκίαν· οὗτος γὰρ μέσος ἀργέστου καὶ ἀπαρκτίου· ἀπὸ δὲ τοῦ Κ ὃν καλοῦσιν μέσην· οὗτος γὰρ μέσος καικίου καὶ ἀπαρκτίου. ἡ δὲ τοῦ ΙΚ διάμετρος βούλεται μὲν κατὰ τὸν διὰ παντὸς εἶναι φαινόμενον, οὐκ ἀκριβοῖ δέ. ἐναντία δὲ τούτοις οὐκ ἔστι τοῖς πνεύμασιν, οὔτε τῷ μέσῃ (ἔπνει γὰρ ἂν τις ἐφ' οὗ τὸ Μ· τοῦτο γὰρ κατὰ [364a] διάμετρον) οὔτε τῷ Ι, τῷ θρασκίᾳ (ἔπνει γὰρ ἂν ἀπὸ τοῦ Ν· τοῦτο γὰρ κατὰ διάμετρον τὸ σημεῖον, εἰ μὴ ἀπ' αὐτοῦ καὶ ἐπ' ὀλίγον πνεῖ τις ἄνεμος, ὃν καλοῦσιν οἱ περὶ τὸν τόπον ἐκεῖνον φοινικίαν). τὰ μὲν οὖν κυριώτατα καὶ διωρισμένα πνεύματα ταῦτ' ἐστὶ καὶ τοῦτον τέτακται τὸν τρόπον· τοῦ δ' εἶναι πλείους ἀνέμους ἀπὸ τῶν πρὸς ἄρκτον τόπων ἢ τῶν πρὸς μεσημβρίαν αἴτιον τό τε τὴν οἰκουμένην ὑποκεῖσθαι πρὸς τοῦτον τὸν τόπον, καὶ ὅτι πολλῷ πλέον ὕδωρ καὶ χιὼν ἀπωθεῖται εἰς τοῦτο τὸ μέρος διὰ τὸ ἐκεῖνα ὑπὸ τὸν ἥλιον εἶναι καὶ τὴν ἐκείνου φοράν, ὧν τηκομένων εἰς τὴν γῆν καὶ θερμαινομένων ὑπὸ τοῦ ἡλίου καὶ τῆς γῆς ἀναγκαῖον πλείω καὶ ἐπὶ πλείω τόπον γίνεσθαι τὴν ἀναθυμίασιν διὰ ταύτην τὴν αἰτίαν. ἔστι δὲ τῶν εἰρημένων πνευμάτων βορέας μὲν ὃ τ' ἀπαρκτίας κυριώτατα, καὶ θρασκίας καὶ μέσης· ὁ δὲ καικίας κοινὸς ἀπηλιώτου καὶ βορέου· νότος δὲ ὃ τε ἰθαγενῆς ὁ ἀπὸ μεσημβρίας καὶ λίψ· ἀπηλιώτης δὲ ὃ τε ἀπ' ἀνατολῆς ἰσημερινῆς καὶ ὁ εὖρος· ὁ δὲ φοινικίας κοινός· ζέφυρος δὲ ὃ τε ἰθαγενῆς καὶ ὁ ἀργέστης καλούμενος. ὅλως δὲ τὰ μὲν βόρεια τούτων καλεῖται, τὰ δὲ νότια· προστίθεται δὲ τὰ μὲν ζεφυρικὰ τῷ βορέᾳ (ψυχρότερα γὰρ διὰ τὸ ἀπὸ δυσμῶν πνεῖν), νότῳ δὲ τὰ ἀπηλιωτικά (θερμότερα γὰρ διὰ τὸ ἀπ' ἀνατολῆς πνεῖν). διωρισμένων οὖν τῷ ψυχρῷ καὶ τῷ θερμῷ καὶ ἀλεεινῷ τῶν πνευμάτων οὕτως ἐκάλεσαν. θερμότερα μὲν τὰ ἀπὸ τῆς ἑω τῶν ἀπὸ δυσμῆς, ὅτι πλείω χρόνον ὑπὸ τὸν ἥλιον ἐστὶ τὰ ἀπ' ἀνατολῆς· τὰ δ' ἀπὸ δυσμῆς ἀπολείπει τε θάττον καὶ πλησιάζει τῷ τόπῳ ὀψαίτερον. οὕτω δὲ τεταγμένων τῶν ἀνέμων, δῆλον ὅτι ἅμα πνεῖν τοὺς μὲν ἐναντίους οὐχ οἷόν τε (κατὰ διάμετρον γάρ· ἄτερος οὖν παύσεται ἀποβιασθείς), τοὺς δὲ μὴ οὕτως κειμένους πρὸς ἀλλήλους οὐδὲν κωλύει, οἷον τὸν Ζ καὶ Δ. διὰ [364a.31]

τοῦτο ἅμα πνέουσιν ἐνίοτε ἀμφοτέροι οὐριοι, ἐπὶ τὸ αὐτὸ σημεῖον, οὐκ ἐκ ταύτου οὐδὲ τῷ αὐτῷ πνεύματι. κατὰ δὲ τὰς ὥρας τὰς ἐναντίας οἱ ἐναντίοι μάλιστα πνέουσιν, οἷον περὶ [364b] ἰσημερίαν τὴν μὲν ἑαρινὴν καικίας καὶ ὅλως τὰ ἐπέκεινα τροπῆς θερινῆς, περὶ δὲ τὴν μετοπωρινὴν λίβες, περὶ δὲ τροπὰς θερινὰς μὲν ζέφυρος, χειμερινὰς δὲ εὐρος. ἐπιπίπτουσι δὲ τοῖς ἄλλοις μάλιστα καὶ παύουσι ἀπαρκτίαι καὶ θρασκίαι καὶ ἀργέσται· διὰ τὸ ἐγγυτάτω γὰρ τὴν ὁρμὴν αὐτῶν εἶναι πολλοὶ τε καὶ ἰσχυροὶ πνέουσι μάλιστα οὗτοι. διὸ καὶ αἰθριώτατοί εἰσι τῶν ἀνέμων· πνέοντες γὰρ ἐγγύθεν μάλιστα ἀποβιαζόμενοι τε τὰλλα πνεύματα παύουσι, καὶ ἀποφυσῶντες τὰ συνιστάμενα νέφη ποιοῦσιν αἰθρίαν, ἂν μὴ ψυχροὶ σφόδρα τύχωσιν ἅμα ὄντες. τότε δὲ οὐκ αἰθριοι· ἐὰν γὰρ ὥσι μᾶλλον ψυχροὶ ἢ μεγάλοι, φθάνουσι πηγνύντες ἢ προωθοῦντες. ὁ δὲ καικίας οὐκ αἰθριος, ὅτι ἀνακάμπει εἰς αὐτόν· ὅθεν καὶ λέγεται ἡ παροιμία “ἔλκων ἐφ’ αὐτὸν ὥστε καικίας νέφος.” αἱ δὲ περιστάσεις γίνονται αὐτῶν καταπαυομένων εἰς τοὺς ἐχομένους κατὰ τὴν τοῦ ἡλίου μετάστασιν, διὰ τὸ κινεῖσθαι μάλιστα τὸ ἐχόμενον τῆς ἀρχῆς· ἡ δὲ ἀρχὴ οὕτω κινεῖται τῶν πνευμάτων ὡς ὁ ἥλιος. οἱ ἐναντίοι δὲ ἢ ταῦτο ποιοῦσιν ἢ ἐναντίον, οἷον ὑγροὶ λὶψ καὶ καικίας, ὃν ἐλλησποντίαν ἔνιοι καλοῦσιν, καὶ εὐρος, ὃν ἀπηλιώτην. ξηροὶ δὲ ἀργέστης καὶ εὐρος· ἀπ’ ἀρχῆς δὲ οὗτος ξηρός, τελευτῶν δὲ ὑδατώδης. νιφετώδης δὲ μέσης καὶ ἀπαρκτίας μάλιστα· οὗτοι γὰρ ψυχρότατοι. χαλαζώδεις δὲ ἀπαρκτίας καὶ θρασκίας καὶ ἀργέστης. καυματώδης δὲ νότος καὶ ζέφυρος καὶ εὐρος. νέφεσι δὲ πυκνοῦσι τὸν οὐρανὸν καικίας μὲν σφόδρα, λὶψ δὲ ἀραιότεροις, καικίας μὲν διὰ τε τὸ ἀνακάμπειν πρὸς αὐτὸν καὶ διὰ τὸ κοινὸς εἶναι βορέου καὶ εὐρου, ὥστε διὰ μὲν τὸ ψυχρὸς εἶναι πηγνὺς τὸν ἀτμίζοντα ἀέρα συνίστησι, διὰ δὲ τὸ τῷ τόπῳ ἀπηλιωτικὸς εἶναι ἔχει πολλὴν ὕλην καὶ ἀτμίδα ἣν προωθεῖ. αἰθριοι δὲ ἀπαρκτίας, θρασκίας, ἀργέστης· ἡ δ’ αἰτία εἴρηται πρότερον. ἀστραπὰς δὲ ποιοῦσιν μάλιστα οὗτοί τε καὶ ὁ μέσης· διὰ μὲν γὰρ τὸ ἐγγύθεν πνεῖν ψυχροὶ εἰσιν, διὰ δὲ τὸ ψυχρὸν ἀστραπὴ γίνεταί· ἐκκρίνεται γὰρ συνιόντων τῶν νεφῶν. διὸ καὶ ἔνιοι τῶν αὐτῶν τούτων [365a] χαλαζώδεις εἰσίν· ταχὺ γὰρ πηγνύουσιν. ἐκνεφίαι δὲ γίνονται μετοπώρου μὲν μάλιστα, εἴτα ἔαρος, καὶ μάλιστα ἀπαρκτίας καὶ θρασκίας καὶ ἀργέστης. αἴτιον δ’ ὅτι οἱ ἐκνεφίαι γίνονται μάλιστα ὅταν τῶν ἄλλων πνεόντων ἐμπίπτωσιν ἕτεροι, οὗτοι δὲ μάλιστα ἐμπίπτουσιν τοῖς ἄλλοις πνέουσιν· ἡ δ’ αἰτία εἴρηται καὶ τούτου πρότερον. οἱ δ’ ἐτησίαί περιίστανται τοῖς μὲν περὶ δυσμὰς οἰκοῦσιν ἐκ τῶν ἀπαρκτίων εἰς θρασκίας καὶ ἀργέστας καὶ ζεφύρους (ὁ γὰρ ἀπαρκτίας . . . ζέφυρός ἐστιν), ἀρχόμενοι μὲν ἀπὸ τῆς ἄρκτου, τελευτῶντες δ’ εἰς τοὺς πόρρω· τοῖς δὲ πρὸς ἑὼ περιίστανται μέχρι τοῦ ἀπηλιώτου. περὶ μὲν οὖν ἀνέμων, τῆς τε ἐξ ἀρχῆς αὐτῶν γενέσεως καὶ οὐσίας καὶ τῶν συμβαινόντων κοινῇ τε παθημάτων καὶ περὶ ἕκαστον, τοσαῦθ’ ἡμῖν εἰρήσθω.

περὶ δὲ σεισμοῦ καὶ κινήσεως γῆς μετὰ ταῦτα λεκτέον· ἡ γὰρ αἰτία τοῦ πάθους ἔχομένη τούτου τοῦ γένους ἐστίν. ἔστι δὲ τὰ παρειλημμένα μέχρι γε τοῦ νῦν χρόνου τρία καὶ παρὰ τριῶν. Ἀναξαγόρας τε γὰρ ὁ Κλαζομένιος καὶ πρότερον Ἀναξιμένης ὁ Μιλήσιος ἀπεφώνησαν, καὶ τούτων ὕστερον Δημόκριτος ὁ Ἀβδηρίτης. Ἀναξαγόρας μὲν οὖν φησι τὸν αἰθέρα πεφυκότα φέρεσθαι ἄνω, ἐμπίπτοντα δ' εἰς τὰ κάτω τῆς γῆς καὶ κοῖλα κινεῖν αὐτήν· τὰ μὲν γὰρ ἄνω συναληλεῖσθαι διὰ τοὺς ὄμβρους (ἐπεὶ φύσει γε ἅπασαν ὁμοίως εἶναι σομφήν), ὡς ὄντος τοῦ μὲν ἄνω τοῦ δὲ κάτω τῆς ὅλης σφαίρας, καὶ ἄνω μὲν τούτου ὄντος τοῦ μορίου ἐφ' οὗ τυγχάνομεν οἰκοῦντες, κάτω δὲ θατέρου. πρὸς μὲν οὖν ταύτην τὴν αἰτίαν οὐδὲν ἴσως δεῖ λέγειν ὡς λίαν ἀπλῶς εἰρημένην· τό τε γὰρ ἄνω καὶ τὸ κάτω νομίζειν οὕτως ἔχειν ὥστε μὴ πρὸς μὲν τὴν γῆν πάντῃ φέρεσθαι τὰ βάρος ἔχοντα τῶν σωμάτων, ἄνω δὲ τὰ κοῦφα καὶ τὸ πῦρ, εὐήθες, καὶ ταῦθ' ὀρῶντας τὸν ὀρίζοντα τὴν οἰκουμένην, ὅσῃν ἡμεῖς ἴσμεν, ἕτερον ἀεὶ γιγνόμενον μεθισταμένων, ὡς οὔσης κυρτῆς καὶ σφαιροειδοῦς· καὶ τὸ λέγειν μὲν ὡς διὰ τὸ μέγεθος ἐπὶ τοῦ ἀέρος μένειν, σείεσθαι δὲ φάσκειν τυπτομένην κάτωθεν ἄνω δι' ὅλης. πρὸς δὲ τούτοις οὐδὲν ἀποδίδωσι τῶν συμβαινόντων περὶ τοὺς σεισμούς· οὔτε γὰρ χῶραι οὔτε ὥραι αἱ τυχοῦσαι μετέχουσι τούτου τοῦ πάθους. [365b] Δημόκριτος δὲ φησι πλήρη τὴν γῆν ὕδατος οὔσαν, καὶ πολὺ δεχομένην ἕτερον ὄμβριον ὕδωρ, ὑπὸ τούτου κινεῖσθαι· πλείονός τε γὰρ γιγνομένου διὰ τὸ μὴ δύνασθαι δέχεσθαι τὰς κοιλίας ἀποβιαζόμενον ποιεῖν τὸν σεισμόν, καὶ ξηρανομένην ἔλκουσαν εἰς τοὺς κενοὺς τόπους ἐκ τῶν πληρεστέρων τὸ μεταβάλλον ἐμπίπτον κινεῖν. Ἀναξιμένης δὲ φησιν βρεχομένην τὴν γῆν καὶ ξηρανομένην ῥήγνυσθαι, καὶ ὑπὸ τούτων τῶν ἀπορρηγνυμένων κολωνῶν ἐμπίπτόντων σείεσθαι· διὸ καὶ γίνεσθαι τοὺς σεισμοὺς ἐν τε τοῖς ἀύχοις καὶ πάλιν ἐν ταῖς ἐπομβρίαις· ἐν τε γὰρ τοῖς ἀύχοις, ὥσπερ εἴρηται, ξηρανομένην ῥήγνυσθαι, καὶ ὑπὸ τῶν ὑδάτων ὑπερυγραιομένην διαπίπτειν. ἔδει δὲ τούτου συμβαίνοντος ὑπονοστοῦσαν πολλαχῇ φαίνεσθαι τὴν γῆν. ἔτι δὲ διὰ τίν' αἰτίαν περὶ τόπους τινὰς πολλάκις γίνεται τοῦτο τὸ πάθος οὐδεμιᾷ διαφέροντας ὑπερβολῇ τοιαύτη παρὰ τοὺς ἄλλους; καίτοι ἐχρήν. ὅλως δὲ τοῖς οὕτως ὑπολαμβάνουσιν ἀναγκαῖον ἦττον ἀεὶ τοὺς σεισμοὺς φάναι γίνεσθαι, καὶ τέλος παύσασθαι ποτε σειομένην· τὸ γὰρ σαπτόμενον τοιαύτην ἔχει φύσιν. ὥστ' εἰ τοῦτ' ἀδύνατον, δῆλον ὅτι ἀδύνατον καὶ ταύτην εἶναι τὴν αἰτίαν.

ἄλλ' ἐπειδὴ φανερόν ὅτι ἀναγκαῖον καὶ ἀπὸ ὑγροῦ καὶ ἀπὸ ξηροῦ γίνεσθαι ἀναθυμίαςιν, ὥσπερ εἵπομεν ἐν τοῖς πρότερον, ἀνάγκη τούτων ὑπαρχόντων γίνεσθαι τοὺς σεισμούς. ὑπάρχει γὰρ ἡ γῆ καθ' αὐτήν μὲν ξηρά, διὰ δὲ τοὺς ὄμβρους ἔχουσα ἐν αὐτῇ νοτίδα πολλήν, ὥσθ' ὑπὸ τε τοῦ ἡλίου καὶ τοῦ ἐν αὐτῇ πυρὸς θερμαινομένης πολὺ μὲν ἔξω πολὺ δ' ἐντὸς γίνεσθαι τὸ πνεῦμα·

καὶ τοῦτο ὅτε μὲν συνεχὲς ἔξω ῥεῖ πᾶν, ὅτε δ' εἴσω πᾶν, ἐνίοτε δὲ καὶ μερίζεται. εἰ δὴ τοῦτ' ἀδύνατον ἄλλως ἔχειν, τὸ μετὰ τοῦτο σκεπτέον ἂν εἴη ποῖον κινητικώτατον εἴη τῶν σωμάτων· ἀνάγκη γὰρ τὸ ἐπὶ πλεῖστόν τε πεφυκὸς ἰέναι καὶ σφοδρότατον μάλιστα τοιοῦτον εἶναι. σφοδρότατον μὲν οὖν ἔξ ἀνάγκης τὸ τάχιστα φερόμενον· πλήσσει γὰρ μάλιστα διὰ τὸ τάχος· ἐπὶ πλεῖστον δὲ πέφυκε διέναι τὸ διὰ παντὸς ἰέναι μάλιστα δυνάμενον, τοιοῦτον δὲ τὸ λεπτότατον. ὥστ' εἴπερ ἡ τοῦ [366a] πνεύματος φύσις τοιαύτη, μάλιστα τῶν σωμάτων τὸ πνεῦμα κινητικόν· καὶ γὰρ τὸ πῦρ ὅταν μετὰ πνεύματος ᾖ, γίγνεται φλόξ καὶ φέρεται ταχέως. οὐκ ἂν οὖν ὕδωρ οὐδὲ γῆ αἴτιον εἴη, ἀλλὰ πνεῦμα τῆς κινήσεως, ὅταν εἴσω τύχη ῥυέν τὸ ἔξω ἀναθυμιάμενον. διὸ γίνονται νηνεμίας οἱ πλεῖστοι καὶ μέγιστοι τῶν σεισμῶν· συνεχῆς γὰρ οὖσα ἡ ἀναθυμίασις ἀκολουθεῖ ὡς ἐπὶ τὸ πολὺ τῇ ὁρμῇ τῆς ἀρχῆς, ὥστε ἡ ἔσω ἅμα ἢ ἔξω ὁρμᾷ πᾶσα. τὸ δ' ἐνίους γίνεσθαι καὶ πνεύματος ὄντος οὐδὲν ἄλογον· ὁρῶμεν γὰρ ἐνίοτε ἅμα πλείους πνέοντας ἀνέμους, ὧν ὅταν εἰς τὴν γῆν ὁρμήσῃ θάτερον, ἔσται πνεύματος ὄντος ὁ σεισμός. ἐλάττους δ' οὗτοι τὸ μέγεθος [366a.12] γίνονται διὰ τὸ διηρηῆσθαι τὴν ἀρχὴν καὶ τὴν αἰτίαν αὐτῶν. νυκτὸς δ' οἱ πλείους καὶ μείζους γίνονται τῶν σεισμῶν, οἱ δὲ τῆς ἡμέρας περὶ μεσημβρίαν· νηνεμώτατον γὰρ ἐστὶν ὡς ἐπὶ τὸ πολὺ τῆς ἡμέρας ἡ μεσημβρία (ὁ γὰρ ἥλιος ὅταν μάλιστα κρατῇ, κατακλείει τὴν ἀναθυμίασιν εἰς τὴν γῆν· κρατεῖ δὲ μάλιστα περὶ τὴν μεσημβρίαν), καὶ αἱ νύκτες δὲ τῶν ἡμερῶν νηνεμώτεραι διὰ τὴν ἀπουσίαν τὴν τοῦ ἡλίου· ὥστ' ἔσω γίγνεται πάλιν ἡ ῥύσις, ὥσπερ ἄμπωτις, εἰς τοῦναντίον τῆς ἔξω πλημμυρίδος, καὶ πρὸς ὀρθρον μάλιστα· τηνικαῦτα γὰρ καὶ τὰ πνεύματα πέφυκεν ἄρχεσθαι πνεῖν. ἐὰν οὖν εἴσω τύχη μεταβάλλουσα ἡ ἀρχὴ αὐτῶν ὥσπερ Εὐριπος, διὰ τὸ πλῆθος ἰσχυρότερον ποιεῖ τὸν σεισμόν. ἔτι δὲ περὶ τόπους τοιούτους οἱ ἰσχυρότατοι γίνονται τῶν σεισμῶν, ὅπου θάλαττα ῥοώδης ἢ ἡ χώρα σομφὴ καὶ ὑπαντρος· διὸ καὶ περὶ Ἑλλάσποντον καὶ περὶ Ἀχαΐαν καὶ Σικελίαν, καὶ τῆς Εὐβοίας περὶ τούτους τοὺς τόπους· δοκεῖ γὰρ διαυλωνίζειν ὑπὸ τὴν γῆν ἡ θάλαττα· διὸ καὶ τὰ θερμὰ τὰ περὶ Αἰδηψὸν ἀπὸ τοιαύτης αἰτίας γέγονε. περὶ δὲ τοὺς εἰρημένους τόπους οἱ σειμοὶ γίνονται μάλιστα διὰ τὴν στενότητα· τὸ γὰρ πνεῦμα γιγνόμενον σφοδρὸν καὶ διὰ τὸ πλῆθος τῆς θαλάττης πολλῆς προσφερομένης ἀπωθεῖται πάλιν εἰς τὴν γῆν, τὸ πεφυκὸς ἀποπνεῖν ἐκ τῆς γῆς. αἱ τε χῶραι ὅσαι [366b] σομφοὺς ἔχουσι τοὺς κάτω τόπους, πολὺ δεχόμεναι πνεῦμα σείονται μᾶλλον. καὶ ἔαρος δὲ καὶ μετοπώρου μάλιστα καὶ ἐν ἐπομβρίαις καὶ ἐν αὐχμοῖς γίνονται διὰ τὴν αὐτὴν αἰτίαν· αἱ τε γὰρ ὥραι αὗται πνευματωδέσταται· τὸ γὰρ θέρος καὶ ὁ χειμὼν, τὸ μὲν διὰ τὸν πάγον, τὸ δὲ διὰ τὴν ἀλέαν ποιεῖ τὴν ἀκινήσιαν· τὸ μὲν γὰρ ἄγαν ψυχρόν, τὸ δ' ἄγαν ξηρόν ἐστι· καὶ ἐν μὲν τοῖς αὐχμοῖς πνευματώδης ὁ ἀήρ· τοῦτο γὰρ αὐτὸ ἐστὶν ὁ αὐχμός, ὅταν πλείων ἢ ἀναθυμίασις ἢ ξηρὰ γίγνηται τῆς ὑγραῖς· ἐν δὲ

ταῖς ὑπερομβρίαις πλείω τε ποιεῖ τὴν ἐντὸς ἀναθυμίασιν, καὶ τῷ ἐναπολαμβάνεσθαι ἐν στενοτέροις τόποις καὶ ἀποβιάζεσθαι εἰς ἐλάττω τόπον τὴν τοιαύτην ἀπόκρισιν, πληρουμένων τῶν κοιλιῶν ὕδατος, ὅταν ἄρξηται κρατεῖν διὰ τὸ πολὺ εἰς ὀλίγον πληθῆναι τόπον, ἰσχυρῶς κινεῖ ῥέων ὁ ἄνεμος καὶ προσπίπτων· δεῖ γὰρ νοεῖν ὅτι ὥσπερ ἐν τῷ σώματι ἡμῶν καὶ τρόμων καὶ σφυγμῶν αἷτιόν ἐστιν ἡ τοῦ πνεύματος ἐναπολαμβανομένη δύναμις, οὕτω καὶ ἐν τῇ γῇ τὸ πνεῦμα παραπλήσιον ποιεῖν, καὶ τὸν μὲν τῶν σεισμῶν οἶον τρόπον εἶναι τὸν δ' οἶον σφυγμόν, καὶ καθάπερ συμβαίνει πολλάκις μετὰ τὴν οὕρησιν (διὰ τοῦ σώματος γὰρ γίνεταί ὥσπερ τρόμος τις ἀντιμεθισταμένου τοῦ πνεύματος ἔξωθεν εἴσω ἀθρόου), τοιαῦτα [γὰρ] γίνεσθαι καὶ περὶ τὴν γῆν. ὅσῃ δ' ἔχει τὸ πνεῦμα δύναμιν, οὐ μόνον ἐκ τῶν ἐν τῷ ἀέρι δεῖ θεωρεῖν γιγνομένων (ἐνταῦθα μὲν γὰρ διὰ τὸ μέγεθος ὑπολάβοι τις ἂν τοιαῦτα δύνασθαι ποιεῖν) ἀλλὰ καὶ ἐν τοῖς σώμασι τοῖς τῶν ζώων· οἳ τε γὰρ τέτανοι καὶ οἱ σπασμοὶ πνεύματος μὲν εἰσιν κινήσεις, τοσαύτην δὲ ἔχουσιν ἰσχὺν ὥστε πολλοὺς ἅμα πειρωμένους ἀποβιάζεσθαι μὴ δύνασθαι κρατεῖν τῆς κινήσεως τῶν ἀρρωστούντων. τοιοῦτον δὲ δεῖ νοεῖν τὸ γιγνόμενον καὶ ἐν τῇ γῇ, ὡς εἰκάσαι πρὸς μικρὸν μεῖζον. σημεῖα δὲ τούτων καὶ πρὸς τὴν ἡμετέραν αἴσθησιν πολλαχῇ γέγονεν· ἥδη γὰρ σεισμός ἐν τόποις πῖσιν γιγνόμενος οὐ πρότερον ἔληξε πρὶν ἐκρήξας εἰς τὸν ὑπὲρ τῆς γῆς τόπον φανερώς ὥσπερ ἐκνεφίας ἐξῆλθεν ὁ κινήσας ἄνεμος, [367a] οἶον καὶ περὶ Ἡράκλειαν ἐγένετο τὴν ἐν τῷ Πόντῳ νεωστί, καὶ πρότερον περὶ τὴν Ἰερὰν νῆσον (αὕτη δ' ἐστὶν μία τῶν Αἰόλου καλουμένων νήσων)· ἐν ταύτῃ γὰρ ἀνώδει τι τῆς γῆς, καὶ ἀνήει οἶον λοφώδης ὄγκος μετὰ ψόφου· τέλος δὲ ῥαγέντος ἐξῆλθεν πνεῦμα πολὺ καὶ τὸν φέψαλον καὶ τὴν τέφραν ἀνῆκεν καὶ τὴν τε Λιπαραίων πόλιν οὕσαν οὐ πόρρω πᾶσαν κατετέφρωσε καὶ εἰς ἐνίας τῶν ἐν Ἰταλίᾳ πόλεων ἦλθεν· καὶ νῦν ὅπου τὸ ἀναφύσημα τοῦτο ἐγένετο, δῆλόν ἐστιν. καὶ γὰρ δὴ τοῦ γιγνομένου πυρὸς ἐν τῇ γῇ ταύτην οἰητέον εἶναι τὴν αἰτίαν, ὅταν κοπτόμενον ἐκπρησθῇ πρῶτον εἰς μικρὰ κερματισθέντος τοῦ ἀέρος. τεκμήριον δ' ἐστὶ τοῦ ῥεῖν ὑπὸ γῆν τὰ πνεύματα καὶ τὸ γιγνόμενον περὶ ταύτας τὰς νήσους· ὅταν γὰρ ἄνεμος μέλλῃ πνευσεῖσθαι νότος, προσημαίνει πρότερον· ἡχοῦσι γὰρ οἱ τόποι ἐξ ὧν γίνεταί τὰ ἀναφυσήματα, διὰ τὸ τὴν θάλατταν μὲν προωθεῖσθαι ἥδη πόρρωθεν, ὑπὸ δὲ ταύτης τὸ ἐκ τῆς γῆς ἀναφυσώμενον ἀπωθεῖσθαι πάλιν εἴσω, ἥπερ ἐπέρχεται ἡ θάλαττα ταύτη. ποιεῖ δὲ ψόφον ἄνευ σεισμοῦ διὰ τε τὴν εὐρυχωρίαν τῶν τόπων (ὑπερχεῖται γὰρ εἰς τὸ ἀχανὲς ἔξω) καὶ δι' ὀλιγότητα τοῦ ἀπωθουμένου ἀέρος. ἔτι τὸ γίνεσθαι τὸν ἥλιον ἀχλυώδη καὶ ἀμαυρότερον ἄνευ νέφους, καὶ πρὸ τῶν ὀρθρίων σεισμῶν ἐνίοτε νηνεμίαν τε καὶ κρύος ἰσχυρόν, σημεῖον τῆς εἰρημένης αἰτίας ἐστίν. τόν τε γὰρ ἥλιον ἀχλυώδη καὶ ἀμαυρόν ἀναγκαῖον εἶναι ὑπονοστεῖν ἀρχομένου τοῦ πνεύματος εἰς τὴν γῆν τοῦ διαλύοντος τὸν

ἀέρα καὶ διακρίνοντος, καὶ πρὸς τὴν ἕω καὶ περὶ τοὺς ὀρθροὺς νηνεμίαν τε καὶ ψῦχος. τὴν μὲν γὰρ νηνεμίαν ἀναγκαῖον ὥς ἐπὶ τὸ πολὺ συμβαίνειν, καθάπερ εἴρηται καὶ πρότερον, οἷον μεταρροίας εἴσω γιγνομένης τοῦ πνεύματος, καὶ μᾶλλον πρὸ τῶν μειζόνων σεισμῶν· μὴ διασπώμενον γὰρ τὸ μὲν ἔξω τὸ δ' ἐντός, ἀλλ' ἀθρόως φερόμενον ἀναγκαῖον ἰσχύειν μᾶλλον. τὸ δὲ ψῦχος συμβαίνει διὰ τὸ τὴν ἀναθυμίασιν εἴσω τρέπεσθαι, φύσει θερμὴν οὖσαν καθ' αὐτήν. οὐ δοκοῦσι δ' οἱ ἄνεμοι εἶναι θερμοὶ διὰ τὸ κινεῖν τὸν ἀέρα πλήρη πολλῆς ὄντα καὶ ψυχρᾶς ἀτμίδος, [367b] ὥσπερ τὸ πνεῦμα <τὸ> διὰ τοῦ στόματος φυσώμενον· καὶ γὰρ τοῦτο ἐγγύθεν μὲν ἐστὶ θερμόν, ὥσπερ καὶ ὅταν ἀάζωμεν, ἀλλὰ δι' ὀλιγότητα οὐχ ὁμοίως ἐπίδηλον, πόρρωθεν δὲ ψυχρόν διὰ τὴν αὐτὴν αἰτίαν τοῖς ἀνέμοις. ἐκλειπούσης οὖν εἰς τὴν γῆν τῆς τοιαύτης δυνάμεως, συνιοῦσα δι' ὑγρότητα ἢ ἀτμιδώδης ἀπόρροια ποιεῖ τὸ ψῦχος, ἐν οἷς συμβαίνει τόποις γίνεσθαι τοῦτο τὸ πάθος. τὸ δ' αὐτὸ αἴτιον καὶ τοῦ εἰωθότος ἐνίοτε γίνεσθαι σημείου πρὸ τῶν σεισμῶν· ἡ γὰρ μεθ' ἡμέραν ἡ μικρὸν μετὰ δυσμάς, αἰθρίας οὔσης, νεφέλιον λεπτὸν φαίνεται διατεῖνον καὶ μακρόν, οἷον γραμμῆς μῆκος εὐθύτητι διηκριβωμένον, τοῦ πνεύματος ἀπομαραινόμενου διὰ τὴν μετάστασιν. τὸ δ' ὅμοιον συμβαίνει καὶ ἐν τῇ θαλάττῃ περὶ τοὺς αἰγιαλοὺς· ὅταν μὲν γὰρ κυμαίνουσα ἐκβάλλῃ, σφόδρα παχεῖται καὶ σκολιαὶ γίνονται αἱ ῥηγμῖνες, ὅταν δὲ γαλήνῃ ἡ, διὰ τὸ μικρὰν ποιεῖσθαι τὴν ἔκκρισιν λεπταὶ εἰσι καὶ εὐθεῖαι. ὅπερ οὖν ἡ θάλαττα ποιεῖ περὶ τὴν γῆν, τοῦτο τὸ πνεῦμα περὶ τὴν ἐν τῷ ἀέρι ἀχλύν, ὥσθ' ὅταν γένηται νηνεμία, πάμπαν εὐθεῖαν καὶ λεπτὴν καταλείπεσθαι ὥσπερ ῥηγμῖνα οὖσαν ἀέρος τὴν νεφέλην. διὰ ταῦτα δὲ καὶ περὶ τὰς ἐκλείψεις ἐνίοτε τῆς σελήνης συμβαίνει γίνεσθαι σεισμόν· ὅταν γὰρ ἤδη πλησίον ἡ ἢ ἀντίφραξις, καὶ μήπω μὲν ἡ πάμπαν ἀπολελοιπὸς τὸ φῶς καὶ τὸ ἀπὸ τοῦ ἡλίου θερμόν ἐκ τοῦ ἀέρος, ἤδη δ' ἀπομαραινόμενον, νηνεμία γίνεται ἀντιμεθισταμένου τοῦ πνεύματος εἰς τὴν γῆν, ὃ ποιεῖ τὸν σεισμόν πρὸ τῶν ἐκλείψεων. γίνονται γὰρ καὶ ἄνεμοι πρὸ τῶν ἐκλείψεων πολλάκις, ἀκρόνυχον μὲν πρὸ τῶν μεσονυκτίων ἐκλείψεων, μεσονύκτιον δὲ πρὸ τῶν ἑώων. συμβαίνει δὲ τοῦτο διὰ τὸ ἀμαυροῦσθαι τὸ θερμόν τὸ ἀπὸ τῆς σελήνης, [367b.29] ὅταν πλησίον ἤδη γίγνηται ἡ φορὰ ἐν ᾧ γενομένων ἔσται ἡ ἐκλείψις. ἀνιέμενου οὖν ᾧ κατεῖχετο ὁ ἀήρ καὶ ἡρέμει, πάλιν κινεῖται καὶ γίνεται πνεῦμα τῆς ὀψιαιτέρον ἐκλείψεως ὀψιαιτέρον. ὅταν δ' ἰσχυρὸς γένηται σεισμός, οὐκ εὐθὺς οὐδ' εἰσάπαξ παύεται σείσας, ἀλλὰ τὸ πρῶτον μὲν μέχρι περὶ τετταράκοντα πρόεισι πολλάκις ἡμέρας, ὕστερον δὲ καὶ ἐφ' [368a] ἐν καὶ ἐπὶ δύο ἔτη ἐπισημαίνει κατὰ τοὺς αὐτοὺς τόπους. αἴτιον δὲ τοῦ μὲν μεγέθους τὸ πλῆθος τοῦ πνεύματος καὶ τῶν τόπων τὰ σχήματα δι' οἷων ἂν ῥύῃ· ἡ γὰρ ἂν ἀντιτυπήσῃ καὶ μὴ ῥαδίως διέλθῃ, μάλιστά τε σείει καὶ ἐγκαταλείπεσθαι ἀναγκαῖον ἐν ταῖς δυσχωρίαις, οἷον ὕδωρ ἐν σκεύει οὐ δυνάμενον διεξελθεῖν.

διὸ καθάπερ ἐν σώματι οἱ σφυγμοὶ οὐκ ἐξαίφνης παύονται οὐδὲ ταχέως, ἀλλ' ἐκ προσαγωγῆς ἅμα καταμαραινομένου τοῦ πάθους, καὶ ἡ ἀρχὴ ἀφ' ἧς ἡ ἀναθυμίασις ἐγένετο καὶ ἡ ὁρμὴ τοῦ πνεύματος δῆλον ὅτι οὐκ εὐθὺς ἅπασαν ἀνήλωσεν τὴν ὕλην, ἐξ ἧς ἐποίησε τὸν ἄνεμον, ὃν καλοῦμεν σεισμόν. ἕως ἂν οὖν ἀναλωθῇ τὰ ὑπόλοιπα τούτων, ἀνάγκη σείειν, ἡρεμαιότερον δὲ καὶ μέχρι τούτου ἕως ἂν ἔλαττον ἢ τὸ ἀναθυμιώμενον ἢ ὥστε δύνασθαι κινεῖν ἐπιδήλως. ποιεῖ δὲ καὶ τοὺς ψόφους τοὺς ὑπὸ τὴν γῆν γιγνομένους τὸ πνεῦμα, καὶ τοὺς πρὸ τῶν σεισμῶν· καὶ ἄνευ δὲ σεισμῶν ἤδη που γεγόνασιν ὑπὸ γῆν· ὥσπερ γὰρ καὶ ῥαπιζόμενος ὁ ἀῆρ παντοδαποὺς ἀφίησι ψόφους, οὕτως καὶ τύπτων αὐτός· οὐδὲν γὰρ διαφέρει· τὸ γὰρ τύπτον ἅμα καὶ αὐτὸ τύπτεται πᾶν. προέρχεται δὲ ὁ ψόφος τῆς κινήσεως διὰ τὸ λεπτομερέστερον εἶναι καὶ μᾶλλον διὰ παντὸς ἵεναι τοῦ πνεύματος τὸν ψόφον. ὅταν δ' ἔλαττον ἢ ἢ ὥστε κινῆσαι τὴν γῆν διὰ λεπτότητα, διὰ μὲν τὸ ῥαδίως διηθεῖσθαι οὐ δύναται κινεῖν, διὰ δὲ τὸ προσπίπτειν στερεοῖς ὄγκοις καὶ κοίλοις καὶ παντοδαποῖς σχήμασι παντοδαπὴν ἀφίησι φωνήν, ὥστ' ἐνίοτε δοκεῖν ὅπερ λέγουσιν οἱ τερατολογοῦντες, μυκᾶσθαι τὴν γῆν. ἤδη δὲ καὶ ὕδατα ἀνερράγη γιγνομένων σεισμῶν· ἀλλ' οὐ διὰ τοῦτο αἴτιον τὸ ὕδωρ τῆς κινήσεως, ἀλλ' ἂν ἢ ἐξ ἐπιπολῆς ἢ κάτωθεν βιάζεται τὸ πνεῦμα, ἐκεῖνο τὸ κινεῖν ἐστίν, ὥσπερ τῶν κυμάτων οἱ ἄνεμοι ἀλλ' οὐ τὰ κύματα τῶν ἀνέμων εἰσὶν αἴτια, ἐπεὶ καὶ τὴν γῆν οὕτως ἂν τις αἰτιῶτο τοῦ πάθους· ἀνατρέπεται γὰρ σειομένη, καθάπερ ὕδωρ (ἢ γὰρ ἔκχυσις ἀνάτρεψις τίς ἐστίν). ἀλλ' αἴτια ταῦτα μὲν ἄμφω ὡς ὕλη (πάσχει γάρ, ἀλλ' οὐ ποιεῖ), τὸ δὲ πνεῦμα ὡς ἀρχή. ὅπου δ' ἅμα κύμα σεισμῷ γέγονεν, αἴτιον, ὅταν ἐναντία γίγνηται τὰ πνεύματα. τοῦτο δὲ γίνεταί ὅταν τὸ [368b] σεῖον τὴν γῆν πνεῦμα φερομένην ὑπ' ἄλλου πνεύματος τὴν θάλατταν ἀπῶσαι μὲν ὅλως μὴ δύνηται, προωθοῦν δὲ καὶ συστέλλον εἰς ταῦτόν συναθροίσῃ πολλήν· τότε γὰρ ἀναγκαῖον ἡττηθέντος τούτου τοῦ πνεύματος ἀθρόαν ὠθουμένην ὑπὸ τοῦ ἐναντίου πνεύματος ἐκρήγνυσθαι καὶ ποιεῖν τὸν κατακλυσμόν. ἐγένετο δὲ τοῦτο καὶ περὶ Ἀχαιοῖν· ἔξω μὲν γὰρ ἦν νότος, ἐκεῖ δὲ βορέας, νηνεμίας δὲ γενομένης καὶ ῥυέντος εἴσω τοῦ ἀνέμου ἐγένετο τό τε κύμα καὶ ὁ σεισμὸς ἅμα, καὶ μᾶλλον διὰ τὸ τὴν θάλατταν μὴ διδόναι διαπνοὴν τῷ ὑπὸ τὴν γῆν ὠρμημένῳ πνεύματι, ἀλλ' ἀντιφράττειν· ἀποβιαζόμενα γὰρ ἄλληλα τὸ μὲν πνεῦμα τὸν σεισμόν ἐποίησεν, ἡ δ' ὑπόστασις τοῦ κύματος τὸν κατακλυσμόν. κατὰ μέρος δὲ γίνονται οἱ σειμοὶ τῆς γῆς, καὶ πολλάκις ἐπὶ μικρὸν τόπον, οἱ δ' ἄνεμοι οὗ· κατὰ μέρος μὲν, ὅταν αἱ ἀναθυμιάσεις αἱ κατὰ τὸν τόπον αὐτὸν καὶ τὸν γεινιῶντα συνέλθωσιν εἰς ἓν, ὥσπερ καὶ τοὺς αὖχμοὺς ἔφαμεν γίνεσθαι καὶ τὰς ὑπερομβρίας τὰς κατὰ μέρος. καὶ οἱ μὲν σειμοὶ γίνονται διὰ τοῦτον τὸν τρόπον, οἱ δ' ἄνεμοι οὗ· τὰ μὲν γὰρ ἐν τῇ γῇ τὴν ἀρχὴν ἔχει, ὥστ' ἐφ' ἐν ἀπάσας ὁρμᾶν· ὁ δ' ἥλιος οὐχ ὁμοίως δύναται, τὰς δὲ μετεώρους μᾶλλον,

ὥστε ῥεῖν, ὅταν ἀρχὴν λάβωσιν ἀπὸ τῆς τοῦ ἡλίου φορᾶς ἤδη κατὰ τὰς διαφορὰς τῶν τόπων, ἐφ' ἓν. ὅταν μὲν οὖν ἢ πολὺ τὸ πνεῦμα, κινεῖ τὴν γῆν, ὥσπερ δὲ ὁ τρόμος, ἐπὶ πλάτος· γίγνεται δ' ὀλιγάκις καὶ κατὰ τινὰς τόπους, οἷον σφυγμός, ἄνω κάτωθεν· διὸ καὶ ἐλαττονάκις [δίδωσιν] σείει τοῦτον τὸν τρόπον· οὐ γὰρ ῥάδιον οὕτω πολλὴν συνελθεῖν ἀρχήν· ἐπὶ μῆκος γὰρ πολλαπλασία τῆς ἀπὸ τοῦ βάθους ἢ διάκρισις. ὅπου δ' ἂν γένηται τοιοῦτος σεισμός, ἐπιπολάζει πλῆθος λίθων, ὥσπερ τῶν ἐν τοῖς λίκνοις ἀναβραττομένων· τοῦτον γὰρ τὸν τρόπον γενομένου σειρμοῦ τά τε περὶ Σίτυλον ἀνετράπη καὶ τὸ Φλεγραῖον καλούμενον πεδῖον καὶ τὰ περὶ τὴν Λιγυστικὴν χώραν. ἐν δὲ ταῖς νήσοις ταῖς ποντιαῖς ἤττον γίνονται σεισμοὶ τῶν προσγείων· τὸ γὰρ πλῆθος τῆς θαλάττης καταψύχει τὰς ἀναθυμιάσεις καὶ κωλύει τῷ βάρει καὶ ἀποβιάζεται· ἔτι δὲ ῥεῖ καὶ οὐ σείεται [369a] κρατουμένη ὑπὸ τῶν πνευμάτων· καὶ διὰ τὸ πολὺν ἐπέχειν τόπον οὐκ εἰς ταύτην ἄλλ' ἐκ ταύτης αἱ ἀναθυμιάσεις γίνονται, καὶ ταύταις ἀκολουθοῦσιν αἱ ἐκ τῆς γῆς. αἱ δ' ἐγγὺς τῆς ἡπείρου μόνον εἰσιν τῆς ἡπείρου· τὸ γὰρ μεταξὺ διὰ μικρότητα οὐδεμίαν ἔχει δύναμιν· τὰς δὲ ποντίας οὐκ ἔστιν κινῆσαι ἄνευ τῆς θαλάττης ὅλης, ὑφ' ἧς περιεχόμεναι τυγχάνουσιν. περὶ μὲν οὖν σεισμῶν, καὶ τίς ἡ φύσις, καὶ διὰ τίνα αἰτίαν γίνονται, καὶ περὶ τῶν ἄλλων τῶν συμβαινόντων περὶ αὐτούς, εἴρηται σχεδὸν περὶ τῶν μεγίστων. περὶ δὲ ἀστραπῆς καὶ βροντῆς, ἔτι δὲ περὶ τυφῶνος καὶ πρηστῆρος καὶ κεραυνῶν λέγωμεν· καὶ γὰρ τούτων τὴν αὐτὴν ἀρχὴν ὑπολαβεῖν δεῖ πάντων. τῆς γὰρ ἀναθυμιάσεως, ὥσπερ εἵπομεν, οὔσης διττῆς, τῆς μὲν ὑγρᾶς τῆς δὲ ξηρᾶς, καὶ τῆς συγκρίσεως ἐχούσης ἄμφω ταῦτα δυνάμει καὶ συνισταμένης εἰς νέφος, ὥσπερ εἴρηται πρότερον, ἔτι δὲ πυκνοτέρας τῆς συστάσεως τῶν νεφῶν γιγνομένης πρὸς τὸ ἔσχατον πέρας (ἢ γὰρ ἐκλείπει τὸ θερμὸν διακρινόμενον εἰς τὸν ἄνω τόπον, ταύτη πυκνοτέραν καὶ ψυχροτέραν ἀναγκαῖον εἶναι τὴν σύστασιν· διὸ καὶ οἱ κεραυνοὶ καὶ οἱ ἐκνεφῖαι καὶ πάντα τὰ τοιαῦτα φέρεται κάτω, καίτοι πεφυκότος ἄνω τοῦ θερμοῦ φέρεσθαι παντός· ἄλλ' εἰς τοῦναντίον τῆς πυκνότητος ἀναγκαῖον γίνεσθαι τὴν ἐκθλιψιν, οἷον οἱ πυρῆνες οἱ ἐκ τῶν δακτύλων ἐκπηδῶντες· καὶ γὰρ ταῦτα βάρος ἔχοντα φέρεται πολλάκις ἄνω)· ἢ μὲν οὖν ἐκκρινόμενη θερμότης εἰς τὸν ἄνω διασπείρεται τόπον· ὅση δ' ἐμπεριλαμβάνεται τῆς ξηρᾶς ἀναθυμιάσεως ἐν τῇ μεταβολῇ ψυχομένου τοῦ ἀέρος, αὕτη συνιόντων τῶν νεφῶν ἐκκρίνεται, βίᾳ δὲ φερομένη καὶ προσπίπτουσα τοῖς περιεχομένοις νέφεσι ποιεῖ πληγὴν, ἧς ὁ ψόφος καλεῖται βροντή· γίγνεται δ' ἡ πληγὴ τὸν αὐτὸν τρόπον, ὥς παρεικάσαι μείζονι μικρὸν πάθος, τῷ ἐν τῇ φλογὶ γιγνομένῳ ψόφῳ, ὃν καλοῦσιν οἱ μὲν τὸν Ἥφαιστον γελᾶν, οἱ δὲ τὴν Ἑστίαν, οἱ δ' ἀπειλὴν τούτων. γίγνεται δ' ὅταν ἡ ἀναθυμίασις εἰς τὴν φλόγα συνεστραμμένη φέρηται, ῥηγνυμένων καὶ ξηρανομένων τῶν ξύλων· οὕτως γὰρ καὶ ἐν τοῖς νέφεσι ἡ γιγνομένη τοῦ



πνεύματος ἔκκρισις πρὸς τὴν πυκνότητα τῶν νεφῶν ἐμπίπτουσα [369b] ποιεῖ τὴν βροντὴν. παντοδαποὶ δὲ ψόφοι διὰ τὴν ἄνωμαλίαν τε γίνονται τῶν νεφῶν καὶ διὰ τὰς μεταξὺ κοιλίας, ἥ τὸ συνεχὲς ἐκλείπει τῆς πυκνότητος. ἡ μὲν οὖν βροντὴ τοῦτ' ἔστι, καὶ γίνεται διὰ ταύτην τὴν αἰτίαν· τὸ δὲ πνεῦμα τὸ ἐκθλιβόμενον τὰ πολλὰ μὲν ἐκπυροῦται λεπτῇ καὶ ἀσθενεῖ πυρώσει, καὶ τοῦτ' ἔστιν ἣν καλοῦμεν ἀστραπὴν, ἥ ἂν ὥσπερ [369b.7] ἐκπίπτον τὸ πνεῦμα χρωματισθὲν ὀφθῇ. γίνεται δὲ μετὰ τὴν πληγὴν καὶ ὕστερον τῆς βροντῆς· ἀλλὰ φαίνεται πρότερον διὰ τὸ τὴν ὄψιν προτερεῖν τῆς ἀκοῆς. δηλοῖ δ' ἐπὶ τῆς εἰρεσίας τῶν τριήρων· ἥδη γὰρ ἀναφερόντων πάλιν τὰς κώπας ὁ πρῶτος ἀφικνεῖται ψόφος τῆς κωπηλασίας. καίτοι τινὲς λέγουσιν ὡς ἐν τοῖς νέφεσιν ἐγγίγνεται πῦρ· τοῦτο δ' Ἐμπεδοκλῆς μὲν φησιν εἶναι τὸ ἐμπεριλαμβανόμενον τῶν τοῦ ἡλίου ἀκτίνων, Ἀναξαγόρας δὲ τοῦ ἄνωθεν αἰθέρος, ὃ δὴ ἐκεῖνος καλεῖ πῦρ κατενεχθὲν ἄνωθεν κάτω. τὴν μὲν οὖν διάλαμψιν ἀστραπὴν εἶναι τὴν τούτου τοῦ πυρός, τὸν δὲ ψόφον ἐναποσβεννυμένου καὶ τὴν σίξιν βροντὴν, ὡς καθάπερ φαίνεται καὶ γιγνόμενον οὕτως καὶ πρότερον τὴν ἀστραπὴν οὖσαν τῆς βροντῆς. ἄλογος δὲ καὶ ἡ τοῦ πυρὸς ἐμπερίληψις, ἀμφοτέρως μὲν, μᾶλλον δ' ἡ κατάσπασις τοῦ ἄνωθεν αἰθέρος. τοῦ τε γὰρ κάτω φέρεσθαι τὸ πεφυκὸς ἄνω δεῖ λέγεσθαι τὴν αἰτίαν, καὶ διὰ τί ποτε τοῦτο γίνεται κατὰ τὸν οὐρανὸν ὅταν ἐπινέφελον ἢ μόνον, ἀλλ' οὐ συνεχῶς οὕτως· αἰθρίας δὲ οὔσης οὐ γίνεται. τοῦτο γὰρ παντάπασιν ἔοικεν εἰρῆσθαι προχείρως. ὁμοίως δὲ καὶ τὸ τὴν ἀπὸ τῶν ἀκτίνων θερμότητα φάναι τὴν ἀπολαμβανομένην ἐν τοῖς νέφεσιν εἶναι τούτων αἰτίαν οὐ πιθανόν· καὶ γὰρ οὗτος ὁ λόγος ἀπραγμόνως εἴρηται λίαν· ἀποκεκριμένον τε γὰρ ἀναγκαῖον εἶναι τὸ αἴτιον ἀεὶ καὶ ὠρισμένον, τό τε τῆς βροντῆς καὶ τῆς ἀστραπῆς καὶ τῶν ἄλλων τῶν τοιούτων, καὶ οὕτω γίνεσθαι. τοῦτο δὲ διαφέρει πλεῖστον· ὅμοιον γὰρ κἂν εἴ τις οἴοιτο τὸ ὕδωρ καὶ τὴν χιόνα καὶ τὴν χάλαζαν ἐνυπάρχοντα πρότερον ὕστερον ἐκκρίνεσθαι καὶ μὴ γίνεσθαι, οἷον ὑπὸ χεῖρα ποιούσης ἀεὶ τῆς συγκρίσεως ἕκαστον αὐτῶν· ὡσαύτως γὰρ ἐκεῖνά τε συγκρίσεις καὶ ταῦτα διακρίσεις ὑποληπτέον εἶναι, ὥστ' εἰ θάτερα τούτων μὴ γίνεται ἀλλ' ἔστι, περὶ ἀμφοτέρων ὁ αὐτὸς [370a] ἀρμόσει λόγος. τὴν τ' ἐναπόληψιν τί ἂν ἄλλοιότερον λέγοι τις ἢ καθάπερ ἐν τοῖς πυκνοτέροις; καὶ γὰρ τὸ ὕδωρ ὑπὸ τοῦ ἡλίου καὶ τοῦ πυρὸς γίνεται θερμόν· ἀλλ' ὅμως ὅταν πάλιν συνίη καὶ ψύχῃται τὸ ὕδωρ πηγνύμενον, οὐδεμίαν συμβαίνει γίνεσθαι τοιαύτην ἔκπτωσιν οἷαν ἐκεῖνοι λέγουσιν. καίτοι γ' ἐχρῆν κατὰ λόγον τοῦ μεγέθους τὴν ζέσιν ποιεῖν τὸ ἐγγιγνόμενον πνεῦμα ὑπὸ τοῦ πυρός, ἣν οὔτε δυνατόν ἐνυπάρχειν πρότερον, οὔτ' ἐκεῖνοι τὸν ψόφον ζέσιν ποιοῦσιν ἀλλὰ σίξιν· ἔστι δὲ καὶ ἡ σίξις μικρὰ ζέσις· ἥ γὰρ τὸ προσπίπτον κρατεῖ σβεννύμενον, ταύτη ζέον ποιεῖ τὸν ψόφον. εἰσὶ δέ τινες οἱ τὴν ἀστραπὴν, ὥσπερ καὶ Κλείδημος, οὐκ εἶναί φασιν ἀλλὰ φαίνεσθαι, παρεικάζοντες ὡς τὸ πάθος ὅμοιον ὂν καὶ

ὅταν τὴν θάλατταν τις ῥάβδῳ τύπτῃ· φαίνεται γὰρ τὸ ὕδωρ ἀποστίλβον τῆς νυκτός· οὕτως ἔν τῇ νεφέλῃ ῥαπιζομένου τοῦ ὑγροῦ τὴν φάντασιν τῆς λαμπρότητος εἶναι τὴν ἀστραπὴν. οὗτοι μὲν οὖν οὕτω συνήθεις ἦσαν ταῖς περὶ τῆς ἀνακλάσεως δόξαις, ὅπερ αἴτιον δοκεῖ τοῦ τοιούτου πάθους εἶναι· φαίνεται γὰρ τὸ ὕδωρ στίλβειν τυπτόμενον ἀνακλωμένης ἀπ' αὐτοῦ τῆς ὀψεως πρὸς τι τῶν λαμπρῶν. διὸ καὶ γίνεταί μᾶλλον τοῦτο νύκτωρ· τῆς γὰρ ἡμέρας οὐ φαίνεται διὰ τὸ πλεον ὄν τὸ φέγγος τὸ τῆς ἡμέρας ἀφανίζειν. τὰ μὲν οὖν λεγόμενα περὶ βροντῆς τε καὶ ἀστραπῆς παρὰ τῶν ἄλλων ταῦτ' ἐστὶ, τῶν μὲν ὅτι ἀνάκλασις ἢ ἀστραπή, τῶν δ' ὅτι πυρὸς μὲν ἢ ἀστραπή διάλαμψις, ἢ δὲ βροντὴ σβέσις, οὐκ ἐγγιγνομένου παρ' ἑκαστον πάθος τοῦ πυρὸς ἄλλ' ἐνυπάρχοντος. ἡμεῖς δὲ φαμεν τὴν αὐτὴν εἶναι φύσιν ἐπὶ μὲν τῆς γῆς ἄνεμον, ἐν δὲ τῇ γῇ σεισμόν, ἐν δὲ τοῖς νέφεσι βροντὴν· πάντα γὰρ εἶναι ταῦτα τὴν οὐσίαν ταύτην, ἀναθυμίασιν ξηράν, ἢ ῥέουσα μὲν πως ἄνεμός ἐστιν, ὡδὶ δὲ ποιεῖ τοὺς σεισμούς, ἐν δὲ τοῖς νέφεσι μεταβάλλουσα διακρινομένη, συνιόντων καὶ συγκρινομένων αὐτῶν εἰς ὕδωρ, βροντάς τε καὶ ἀστραπάς καὶ πρὸς τούτοις ἄλλα τὰ τῆς αὐτῆς φύσεως τούτοις ὄντα. καὶ περὶ μὲν βροντῆς εἴρηται καὶ ἀστραπῆς. Βιβλίο Γ' Περὶ δὲ τῶν ὑπολοίπων εἴπωμεν ἔργων τῆς ἐκκρίσεως ταύτης, τὸν ὑφηγημένον ἤδη τρόπον λέγοντες. τὸ γὰρ πνεῦμα τοῦτο ἐκκρινόμενον κατὰ μικρὰ μὲν καὶ σποράδην διαχεόμενον καὶ πολλάκις γιγνόμενον καὶ διαπνέον καὶ λεπτομερέστερον ὄν βροντάς ποιεῖ καὶ ἀστραπάς· ἂν δ' ἁθρόον καὶ πυκνότερον, ἦττον δ' ἐκκριθῇ λεπτόν, ἐκνεφίας ἄνεμος γίνεταί· διὸ καὶ βίαιος (τὸ γὰρ τάχος τῆς ἐκκρίσεως ποιεῖ τὴν ἰσχύν). ὅταν μὲν οὖν συνακολουθήσῃ πολλὴ καὶ συνεχὴς ἐκκρισις, τὸν αὐτὸν γίνεταί τρόπος ὥσπερ ὅταν πάλιν εἰς τοῦναντίον ὁρμήσῃ· τότε γὰρ ὑετὸς καὶ ὕδατος γίνεταί πλῆθος. ὑπάρχει μὲν οὖν ἄμφω δυνάμει ταῦτα κατὰ τὴν ὕλην· ὅταν δὲ ἀρχὴ γένηται τῆς δυνάμεως ὁποτερassoῦν, ἀκολουθεῖ συγκρινόμενον ἐκ τῆς ὕλης ὁποτέρου ἂν ἡ πλῆθος ἐνυπάρχον πλεον, καὶ γίνεταί τὸ μὲν ὄμβρος, τὸ δὲ τῆς ἐτέρας ἀναθυμιάσεως ἐκνεφίας. ὅταν δὲ τὸ ἐκκρινόμενον πνεῦμα τὸ ἐν τῷ νέφει ἐτέρῳ ἀντιτυπήσῃ οὕτως ὥσπερ ὅταν ἐξ εὐρέος εἰς στενὸν βιάζηται ὁ ἄνεμος ἐν πύλαις ἢ ὁδοῖς (συμβαίνει γὰρ πολλάκις ἐν τοῖς τοιούτοις ἀπωσθέντος τοῦ πρώτου μορίου τοῦ ῥέοντος σώματος διὰ τὸ μὴ ὑπεῖκειν, ἢ διὰ στενότητα ἢ διὰ τὸ ἀντιπνεῖν, κύκλον καὶ δίνην γίνεσθαι τοῦ πνεύματος· τὸ μὲν γὰρ εἰς τὸ πρόσθεν κωλύει προῖέναι, τὸ δ' ὀπισθεν ἐπωθεῖ, ὥστε ἀναγκάζεται εἰς τὸ πλάγιον, ἢ οὐ κωλύεται, φέρεσθαι, καὶ οὕτως αἰετὸν τὸ ἐχόμενον, ἕως ἂν ἔν γένηται, τοῦτο δ' ἐστὶ κύκλος· οὗ γὰρ μία φορὰ σχήματος, τοῦτο καὶ αὐτὸ ἀνάγκη ἔν εἶναι). ἐπὶ τε τῆς γῆς οὖν διὰ ταῦτα γίνονται οἱ δῖνοι, καὶ ἐν τοῖς νέφεσιν ὁμοίως κατὰ τὴν ἀρχὴν, πλὴν ὅτι, ὥσπερ, ὅταν ἐκνεφίας γίγνηται, αἰετὸν τὸ νέφος ἐκκρίνεται καὶ γίνεταί συνεχὴς ἄνεμος, οὕτως ἐνταῦθα αἰετὸν τὸ συνεχὲς ἀκολουθεῖ τοῦ

νέφους· διὰ δὲ πυκνότητα οὐ δυνάμενον ἐκκριθῆναι τὸ πνεῦμα ἐκ τοῦ νέφους στρέφεται μὲν κύκλῳ τὸ πρῶτον διὰ τὴν εἰρημένην αἰτίαν, κάτω δὲ φέρεται διὰ [371a] τὸ ἀεὶ τὰ νέφη πυκνοῦσθαι, ἢ ἐκπίπτει τὸ θερμόν. καλεῖται δ', ἂν ἀχρωμάτιστον ἦ, τοῦτο τὸ πάθος τυφῶν, ἄνεμος ὢν, οἶον ἐκνεφίας ἄπεπτος. βορείοις δ' οὐ γίγνεται τυφῶν, οὐδὲ νιπτικῶς ἐχόντων ἐκνεφίας, διὰ τὸ πάντα ταῦτ' εἶναι πνεῦμα, τὸ δὲ πνεῦμα ξηρὰν εἶναι καὶ θερμὴν ἀναθυμίασιν. ὁ οὖν πάγος καὶ τὸ ψῦχος διὰ τὸ κρατεῖν σβέννυσιν εὐθὺς γιγνομένην ἔτι τὴν ἀρχήν. ὅτι δὲ κρατεῖ, δῆλον· οὐδὲ γὰρ ἂν ἦν νιφετός, οὐδὲ βόρεια τὰ ὑγρά· ταῦτα γὰρ συμβαίνει κρατούσης εἶναι τῆς ψυχρότητος. γίγνεται μὲν οὖν τυφῶν, ὅταν ἐκνεφίας γιγνόμενος μὴ δύνηται ἐκκριθῆναι τοῦ νέφους· ἔστι δὲ διὰ τὴν ἀντίκρουσιν τῆς δίνης, ὅταν ἐπὶ γῆν φέρεται ἢ ἔλιξ συγκατάγουσα τὸ νέφος, οὐ δυνάμενη ἀπολυθῆναι. ἢ δὲ κατ' εὐθυωρίαν ἐκπνεῖ, ταύτῃ τῷ πνεύματι κινεῖ, καὶ τῇ κύκλῳ κινήσει στρέφει καὶ ἀναφέρει ὥς ἂν προσπέσῃ βιαζόμενον. ὅταν δὲ κατασπώμενον ἐκπυρωθῇ (τοῦτο δ' ἐστὶν ἔαν λεπτότερον τὸ πνεῦμα γένηται), καλεῖται πρηστήρ· συνεκπίμπρησι γὰρ τὸν ἀέρα τῇ πυρώσει χρωματίζων. ἔαν δ' ἐν αὐτῷ τῷ νέφει πολὺ καὶ λεπτὸν ἐκθλιφθῇ πνεῦμα, τοῦτο γίγνεται κεραυνός, ἔαν μὲν πάνυ λεπτόν, οὐκ ἐπικάων διὰ λεπτότητα, ὃν οἱ ποιηταὶ ἀργῆτα καλοῦσιν, ἔαν δ' ἥττον, ἐπικάων, ὃν ψολόεντα καλοῦσιν· ὁ μὲν γὰρ διὰ τὴν λεπτότητα φέρεται, διὰ δὲ τὸ τάχος φθάνει διωκὼν πρὶν ἢ [371a.23] ἐκπυρῶσαι καὶ ἐπιδιατρίψας μελᾶναι· ὁ δὲ βραδύτερος ἔχρωσε μὲν, ἔκαυσε δ' οὐ, ἀλλ' ἔφθασε. διὸ καὶ τὰ μὲν ἀντιτυπήσαντα πάσχει τι, τὰ δὲ μὴ οὐδέν, οἶον ἀσπίδος ἤδη τὸ μὲν χάλκωμα ἐτάκη, τὸ δὲ ξύλον οὐδέν ἔπαθεν· διὰ γὰρ μανότητα ἔφθασε τὸ πνεῦμα διηθηθὲν καὶ διελθόν· καὶ δι' ἱματίων ὁμοίως οὐ κατέκαυσεν, ἀλλ' οἶον τρυῖχος ἐποίησεν· ὥστε ὅτι γε πνεῦμα ταῦτα πάντα, δῆλον καὶ ἐκ τῶν τοιούτων. ἔστι δ' ἐνίοτε καὶ τοῖς ὄμμασιν θεωρεῖν, οἶον καὶ νῦν ἐθεωροῦμεν περὶ τὸν ἐν Ἐφέσῳ ναὸν καόμενον· πολλαχῇ γὰρ ἢ φλόξ ἐφέρετο συνεχῆς, ἀποσπώμενη χωρίς. ὅτι μὲν γὰρ ὁ τε καπνὸς πνεῦμα καὶ κάεται ὁ καπνός, [371b] φανερόν, καὶ εἴρηται ἐν ἑτέροις πρότερον· ὅταν δ' ἀθρόον χωρῇ, τότε φανερώς δοκεῖ πνεῦμα εἶναι. ὅπερ οὖν ἐν ταῖς μικραῖς πυρκαϊαῖς φαίνεται, τοῦτο καὶ τότε πολλῆς ὕλης καομένης ἐγίγνετο πολλῷ ἰσχυρότερον. ῥηγνυμένων οὖν τῶν ξύλων, ὅθεν ἡ ἀρχὴ τοῦ πνεύματος ἦν, πολὺ ἐχώρει ἀθρόον, ἢ ἐξέπνει, καὶ ἐφέρετο ἄνω πεπυρωμένον. ὥστ' ἐφαίνετο ἡ φλόξ φέρεσθαι καὶ εἰσπίπτειν εἰς τὰς οἰκίας. ἀεὶ γὰρ οἴεσθαι δεῖ ἐπακολουθεῖν τοῖς κεραυνοῖς πνεῦμα καὶ προῖέναι· ἀλλ' οὐχ ὁράται, διὰ τὸ ἀχρωμάτιστον εἶναι. διὸ καὶ ἢ μέλλει πατάξειν, κινεῖται πρὶν πληγῆναι, ἅτε πρότερον προσπιπτούσης τῆς ἀρχῆς τοῦ πνεύματος. καὶ αἱ βρονταὶ δὲ διιστᾷσιν οὐ τῷ ψόφῳ, ἀλλ' ὅτι ἅμα συνεκκρίνεται τὸ τὴν πληγὴν ποιῆσαν καὶ τὸν ψόφον πνεῦμα· ὁ ἔαν πατάξῃ, διέστησεν, ἐπέκαυσε δ' οὐ. περὶ μὲν οὖν βροντῆς καὶ

ἀστραπῆς καὶ ἐκνεφίου, ἔτι δὲ πρηστήρων τε καὶ τυφώνων καὶ κεραυνῶν, εἴρηται, καὶ ὅτι ταῦτ' ὅλα πάντα, καὶ τίς ἢ διαφορὰ πάντων αὐτῶν.

περὶ δὲ ἄλλω καὶ ἱριδος, τί τε ἐκάτερον καὶ διὰ τίν' αἰτίαν γίνεται, λέγωμεν, καὶ περὶ παρηλίων καὶ ῥάβδων· καὶ γὰρ ταῦτα γίνεται πάντα διὰ τὰς αὐτὰς αἰτίας ἀλλήλοις. πρῶτον δὲ δεῖ λαβεῖν τὰ πάθη καὶ τὰ συμβαίνοντα περὶ ἕκαστον αὐτῶν. τῆς μὲν οὖν ἄλλω φαίνεται πολλάκις κύκλος ὅλος, καὶ γίνεται περὶ ἥλιον καὶ σελήνην καὶ περὶ τὰ λαμπρὰ τῶν ἄστρον, ἔτι δ' οὐδὲν ἥττον νυκτὸς ἢ ἡμέρας καὶ περὶ μεσημβρίαν ἢ δείλην· ἔωθεν δ' ἐλαττονάκις καὶ περὶ δύσιν. τῆς δ' ἱριδος οὐδέποτε γίνεται κύκλος οὐδὲ μεῖζον ἡμικυκλίου τμήμα· καὶ δύνοντος μὲν καὶ ἀνατέλλοντος ἐλαχίστου μὲν κύκλου, μεγίστη δ' ἡ ἀψίς, αἶρομένου δὲ μᾶλλον κύκλου μὲν μεῖζονος, ἐλάττων δ' ἡ ἀψίς· καὶ μετὰ μὲν τὴν μετοπωρινὴν ἰσημερίαν, ἐν ταῖς βραχυτέραις ἡμέραις, πᾶσαν ὥραν γίνεται τῆς ἡμέρας, ἐν δὲ ταῖς θεριναῖς οὐ γίνεται περὶ μεσημβρίαν. οὐδὲ δὴ δυοῖν πλείους ἱριδες οὐ γίνονται ἅμα. τούτων δὲ τρίχως μὲν ἐκάτερα, καὶ τὰ [372a] χρώματα ταῦτα καὶ ἴσα τὸν ἀριθμὸν ἔχουσιν ἀλλήλαις, ἀμυδρότερα δ' ἐν τῇ ἐκτὸς καὶ ἐξ ἐναντίας κείμενα κατὰ τὴν θέσιν· ἡ μὲν γὰρ ἐντὸς τὴν πρώτην ἔχει περιφέρειαν τὴν μεγίστην φοινικίαν, ἡ δ' ἔξωθεν τὴν ἐλαχίστην μὲν ἐγγύτατα δὲ πρὸς ταύτην, καὶ τὰς ἄλλας ἀνάλογον. ἔστι δὲ τὰ χρώματα ταῦτα ἅπερ μόνον σχεδὸν οὐ δύνανται ποιεῖν οἱ γραφεῖς· ἕνια γὰρ αὐτοὶ κεραννύουσι, τὸ δὲ φοινικοῦν καὶ πράσινον καὶ ἄλουργὸν οὐ γίνεται κεραννύμενον· ἡ δὲ ἱρίς ταῦτ' ἔχει τὰ χρώματα. τὸ δὲ μεταξὺ τοῦ φοινικοῦ καὶ πρασίνου φαίνεται πολλάκις ξανθόν. παρήλιοι δὲ καὶ ῥάβδοι γίνονται ἐκ πλαγίας αἰεὶ καὶ οὕτ' ἄνωθεν οὕτε πρὸς τῆς γῆς οὕτ' ἐξ ἐναντίας, οὐδὲ δὴ νύκτωρ, ἀλλ' αἰεὶ περὶ τὸν ἥλιον, ἔτι δὲ ἡ αἶρομένου ἢ καταφερομένου· τὰ πλεῖστα δὲ πρὸς δυσμὰς· μεσουρανοῦντος δὲ σπάνιον εἴ τι γέγονεν, οἷον ἐν Βοσπόρῳ ποτὲ συνέπεσε· δι' ὅλης γὰρ τῆς ἡμέρας συνανασχόντες δύο παρήλιοι διετέλεσαν μέχρι δυσμῶν. τὰ μὲν οὖν περὶ ἕκαστον αὐτῶν συμβαίνοντα ταῦτ' ἐστίν· τὸ δ' αἴτιον τούτων ἀπάντων ταῦτό· πάντα γὰρ ἀνάκλασις ταῦτ' ἐστί. διαφέρουσι δὲ τοῖς τρόποις καὶ ἀφ' ὧν, καὶ ὥς συμβαίνει γίνεσθαι τὴν ἀνάκλασιν πρὸς τὸν ἥλιον ἢ πρὸς ἄλλο τι τῶν λαμπρῶν. καὶ μεθ' ἡμέραν μὲν ἱρίς γίνεται, νύκτωρ δ' ἀπὸ σελήνης, ὥς μὲν οἱ ἀρχαῖοι ᾤοντο, οὐκ ἐγένετο· τοῦτο δ' ἔπαθον διὰ τὸ σπάνιον· ἐλάνθανε γὰρ αὐτοὺς· γίνεται μὲν γάρ, ὀλιγάκις δὲ γίνεται. τὸ δ' αἴτιον ὅτι τ' ἐν τῷ σκότει λανθάνει τὰ χρώματα, καὶ ἄλλα πολλὰ δεῖ συμπεσεῖν, καὶ ταῦτα πάντα ἐν ἡμέρᾳ μιᾷ τοῦ μηνός· ἐν τῇ πανσελήνῳ γὰρ γενέσθαι ἀνάγκη τὸ μέλλον ἔσεσθαι, καὶ τότε ἀνατελλούσης ἢ δυνούσης· διόπερ ἐν ἔτεσιν ὑπὲρ τὰ πεντήκοντα δις ἐνετύχομεν μόνον. ὅτι μὲν οὖν ἡ ὄψις ἀνακλᾶται, ὥσπερ καὶ ἀφ' ὕδατος, οὕτω καὶ ἀπὸ ἀέρος καὶ πάντων τῶν ἐχόντων τὴν ἐπιφάνειαν

λείαν, ἐκ τῶν περὶ τὴν ὄψιν δεικνυμένων δεῖ λαμβάνειν τὴν πίστιν, καὶ διότι τῶν ἐνόπτρων ἐν ἐνίοις μὲν καὶ τὰ σχήματα ἐμφαίνεται, ἐν ἐνίοις δὲ τὰ χρώματα μόνον· τοιαῦτα δ' ἐστὶν ὅσα [372b] μικρὰ τῶν ἐνόπτρων, καὶ μηδεμίαν αἰσθητὴν ἔχει διαίρεσιν· ἐν γὰρ τούτοις τὸ μὲν σχῆμα ἀδύνατον ἐμφαίνεσθαι (δόξει γὰρ εἶναι διαιρετόν· πᾶν γὰρ σχῆμα ἅμα δοκεῖ σχῆμά τ' εἶναι καὶ διαίρεσιν ἔχειν), ἐπεὶ δ' ἐμφαίνεσθαί τι ἀναγκαῖον, τοῦτο δὲ ἀδύνατον, λείπεται τὸ χρῶμα μόνον ἐμφαίνεσθαι. τὸ δὲ χρῶμα ὅτε μὲν λαμπρὸν φαίνεται τῶν λαμπρῶν, ὅτε δέ, ἢ τῷ μείγνυσθαι τῷ τοῦ ἐνόπτρου ἢ διὰ τὴν ἀσθένειαν τῆς ὀψεως, ἄλλου χρώματος ἐμποιεῖ φαντασίαν. ἔστω δὲ περὶ τούτων ἡμῖν τεθεωρημένον ἐν τοῖς περὶ τὰς αἰσθήσεις δεικνυμένοις· διὸ τὰ μὲν λέγωμεν, τοῖς δ' ὥς ὑπάρχουσι χρησώμεθα αὐτῶν.

πρῶτον δὲ περὶ τῆς ἄλλω τοῦ σχήματος εἰπωμεν, διότι τε κύκλος γίγνεται, καὶ διότι περὶ τὸν ἥλιον ἢ τὴν σελήνην, ὁμοίως δὲ καὶ περὶ τι τῶν ἄλλων ἄστρον· ὁ γὰρ αὐτὸς ἐπὶ πάντων ἀρμόσει λόγος. γίγνεται μὲν οὖν ἡ ἀνάκλασις τῆς ὀψεως συνισταμένου τοῦ ἀέρος καὶ τῆς ἀτμίδος εἰς νέφος, ἐὰν ὁμαλῆς καὶ μικρομερῆς συνισταμένη τύχη. διὸ καὶ σημεῖον ἡ μὲν σύστασις ὕδατός ἐστιν, αἱ μέντοι διασπάσεις ἢ μαράνσεις, αὗται μὲν εὐδιῶν, αἱ δὲ διασπάσεις πνεύματος. ἐὰν μὲν γὰρ μήτε καταμαρανθῇ μήτε διασπασθῇ, ἀλλ' ἐαθῇ τὴν φύσιν ἀπολαμβάνειν τὴν αὐτῆς, ὕδατος εἰκότως σημεῖόν ἐστι· δηλοῖ γὰρ ἤδη γίνεσθαι τοιαύτην τὴν σύστασιν, ἐξ ἧς τὸ συνεχὲς λαμβανούσης τῆς πυκνώσεως ἀναγκαῖον εἰς ὕδωρ ἐλθεῖν· διὸ καὶ μέλαινα γίνονται τὴν χροάν αὗται μάλιστα τῶν ἄλλων. ὅταν δὲ διασπασθῇ, πνεύματος σημεῖον· ἡ γὰρ διαίρεσις ὑπὸ πνεύματος γέγονεν ἤδη μὲν ὄντος, οὕτω δὲ παρόντος. σημεῖον δὲ τούτου διότι ἐντεῦθεν γίγνεται ὁ ἄνεμος, ὅθεν ἂν ἡ κυρία γίγνηται διάσπασις. ἀπομαραινόμενη δὲ εὐδίας· εἰ γὰρ μὴ ἔχει πῶς οὕτως ὁ ἀήρ ὥστε κρατεῖν τοῦ ἐναπολαμβανομένου θερμοῦ μηδ' ἔρχεσθαι εἰς πύκνωσιν ὕδατώδη, [ἀπὸ] δῆλον ὥς οὕτω ἡ ἀτμὶς ἀποκέκριται τῆς ἀναθυμιάσεως τῆς ξηραῖς καὶ πυρώδους· τοῦτο δὲ εὐδίας αἷτιον. πῶς μὲν οὖν ἔχοντος τοῦ ἀέρος γίγνεται ἡ ἀνάκλασις, εἴρηται. [373a] ἀνακλᾶται δ' ἀπὸ τῆς συνισταμένης ἀχλύος περὶ τὸν ἥλιον ἢ τὴν σελήνην ἢ ὄψις· διὸ οὐκ ἐξ ἐναντίας ὥσπερ ἱρις φαίνεται. πάντοθεν δὲ ὁμοίως ἀνακλωμένης ἀναγκαῖον κύκλον εἶναι ἢ κύκλου μέρος· ἀπὸ γὰρ τοῦ αὐτοῦ σημείου πρὸς τὸ αὐτὸ σημεῖον αἱ ἴσαι κλασθήσονται ἐπὶ κύκλου γραμμῆς ἀεί. ἔστω γὰρ ἀπὸ τοῦ σημείου ἐφ' ᾧ τὸ Α πρὸς τὸ Β κεκλασμένη ἢ τε τὸ ΑΓΒ καὶ ἢ τὸ ΑΖΒ καὶ ἢ τὸ ΑΔΒ· ἴσαι δὲ αὐταί τε αἱ ΑΓ ΑΖ ΑΔ ἀλλήλαις, καὶ [373a.9] αἱ πρὸς τὸ Β ἀλλήλαις, οἷον αἱ ΓΒ ΖΒ ΔΒ· καὶ ἐπεζεύχθω ἡ ΑΕΒ, ὥστε τὰ τρίγωνα ἴσα· καὶ γὰρ ἐπ' ἴσης τῆς ΑΕΒ. ἤχθωσαν δὲ κάθετοι ἐπὶ τὴν ΑΕΒ ἐκ τῶν γωνιῶν, ἀπὸ μὲν τῆς Γ ἢ τὸ ΓΕ, ἀπὸ δὲ τῆς Ζ ἢ τὸ ΖΕ, ἀπὸ δὲ τῆς Δ ἢ τὸ ΔΕ. ἴσαι δὲ αὗται· ἐν ἴσοις γὰρ

τριγώνοις καὶ ἐν ἐνὶ ἐπιπέδῳ πᾶσαι· πρὸς ὀρθὰς γὰρ πᾶσαι τῇ ΑΕΒ, καὶ ἐφ’ ἐν σημείον τὸ Ε συνάπτουσι. κύκλος ἄρα ἔσται ἡ γραφομένη, κέντρον δὲ τὸ Ε. ἔστι δὴ τὸ μὲν Β ὁ ἥλιος, τὸ δὲ Α ἡ ὄψις, ἡ δὲ περὶ τὸ ΓΖΔ περιφέρεια τὸ νέφος ἀφ’ οὗ ἀνακλᾶται ἡ ὄψις πρὸς τὸν ἥλιον. δεῖ δὲ νοεῖν συνεχῆ τὰ ἔνοπτρα· ἀλλὰ διὰ μικρότητα ἕκαστον μὲν ἀόρατον, τὸ δ’ ἐξ ἀπάντων ἐν εἶναι δοκεῖ διὰ τὸ ἐφεξῆς. φαίνεται δὲ τὸ μὲν λευκόν, ὁ ἥλιος, κύκλῳ συνεχῶς ἐν ἑκάστῳ φαινόμενος τῶν ἐνόπτρων, καὶ μηδεμίαν ἔχων αἰσθητὴν διαίρεσιν, πρὸς δὲ τῇ γῇ μᾶλλον διὰ τὸ νηνεμώτερον εἶναι· πνεύματος γὰρ ὄντος οὐκ εἶναι στάσιν φανερόν. παρὰ δὲ τοῦτο μέλαινα ἡ ἐχομένη περιφέρεια, διὰ τὴν ἐκείνης λευκότητα δοκοῦσα εἶναι μελαντέρα. πλεονάκις δὲ γίνονται αἱ ἄλλω περὶ τὴν σελήνην διὰ τὸ τὸν ἥλιον θερμότερον ὄντα θᾶπτον διαλύειν τὰς συστάσεις τοῦ ἀέρος. περὶ δὲ τοὺς ἀστέρας γίνονται μὲν διὰ τὰς αὐτὰς αἰτίας, οὐ σημειώδεις δ’ ὁμοίως, ὅτι μικρὰς πάμπαν ἐπιδηλοῦσι τὰς συστάσεις καὶ οὕτω γονίμους.

ἡ δ’ ἴρις ὅτι μὲν ἐστὶν ἀνάκλασις, εἴρηται πρότερον· ποία δέ τις ἀνάκλασις, καὶ πῶς καὶ διὰ τίν’ αἰτίαν ἕκαστα γίνεταί τῶν συμβαινόντων περὶ ταύτην, λέγωμεν νῦν. ἀνακλωμένη μὲν οὖν ἡ ὄψις ἀπὸ πάντων φαίνεται τῶν λείων, [373b] τούτων δ’ ἐστὶν καὶ ἀήρ καὶ ὕδωρ. γίνεταί δὲ ἀπὸ μὲν ἀέρος, ὅταν τύχη συνιστάμενος. διὰ δὲ τὴν τῆς ὀψεως ἀσθένειαν πολλάκις καὶ ἄνευ συστάσεως ποιεῖ ἀνάκλασιν, οἷόν ποτε συνέβαινέ τι πάθος ἡρέμα καὶ οὐκ ὁξὺ βλέποντι· αἰεὶ γὰρ εἰδῶλον ἐδόκει προηγῆσθαι βαδίζοντι αὐτῷ, ἐξ ἐναντίας βλέπον πρὸς αὐτόν. τοῦτο δ’ ἔπασχε διὰ τὸ τὴν ὄψιν ἀνακλᾶσθαι πρὸς αὐτόν· οὕτω γὰρ ἀσθενὴς ἦν καὶ λεπτὴ πάμπαν ὑπὸ τῆς ἀρρωστίας, ὥστ’ ἔνοπτρον ἐγίγνετο καὶ ὁ πλησίον ἀήρ, καὶ οὐκ ἐδύνατο ἀπωθεῖν-ὥς ὁ πόρρω καὶ πυκνός· διόπερ αἱ τ’ ἄκραι ἀνεσπασμέναι φαίνονται ἐν τῇ θαλάττῃ, καὶ μείζω τὰ μεγέθη πάντων, ὅταν εὗροι πνέωσι, καὶ τὰ ἐν ταῖς ἀχλύσιν, οἷον καὶ ἥλιος καὶ ἄστρα ἀνίσχοντα καὶ δύνοντα μᾶλλον ἢ μεσουρανοῦντα. ἀπὸ δὲ ὕδατος μάλιστα ἀνακλᾶται, καὶ ἀπὸ ἀρχομένου γίνεσθαι μᾶλλον ἔτι ἢ ἀπ’ ἀέρος· ἕκαστον γὰρ τῶν μορίων ἐξ ὧν γίνεταί συνισταμένων ἡ ψακὰς ἔνοπτρον ἀναγκαῖον εἶναι μᾶλλον τῆς ἀχλύος. ἐπεὶ δὲ καὶ δῆλον καὶ εἴρηται πρότερον ὅτι ἐν τοῖς τοιούτοις ἐνόπτροις τὸ χρῶμα μόνον ἐμφαίνεται, τὸ δὲ σχῆμα ἄδηλον, ἀναγκαῖον, ὅταν ἀρχηται ὕειν καὶ ἤδη μὲν συνιστῇται εἰς ψακάδας ὁ ἐν τοῖς νέφεσιν ἀήρ, μήπω δὲ ὕη, ἐὰν ἐξ ἐναντίας ἢ ὁ ἥλιος ἢ ἄλλο τι οὕτω λαμπρὸν ὥστε γίνεσθαι ἔνοπτρον τὸ νέφος, καὶ τὴν ἀνάκλασιν γίνεσθαι πρὸς τὸ λαμπρὸν ἐξ ἐναντίας, γίνεσθαι ἔμφασιν χρώματος, οὐ σχήματος. ἑκάστου δ’ ὄντος τῶν ἐνόπτρων μικροῦ καὶ ἀοράτου, τῆς δ’ ἐξ ἀπάντων αὐτῶν συνεχείας τοῦ μεγέθους ὁρωμένης, ἀνάγκη συνεχὲς μέγεθος τοῦ αὐτοῦ φαίνεσθαι χρώματος· ἕκαστον γὰρ τῶν ἐνόπτρων τὸ αὐτὸ

ἀποδίδωσι χρῶμα τῷ συνεχεῖ. ὥστ' ἐπεὶ ταῦτ' ἐνδέχεται συμβαίνειν, ὅταν τοῦτον ἔχη τὸν τρόπον ὃ τε ἥλιος καὶ τὸ νέφος καὶ ἡμεῖς ὡμεν μεταξὺ αὐτῶν, ἔσται διὰ τὴν ἀνάκλασιν ἔμφασίς τις. ἀλλὰ μὴν καὶ φαίνεται τότε καὶ οὐκ ἄλλως ἐχόντων γιγνομένη ἡ ἴρις. ὅτι μὲν οὖν ἀνάκλασις ἡ ἴρις τῆς ὀψεως πρὸς τὸν ἥλιόν ἐστι, φανερόν· διὸ καὶ ἐξ ἐναντίας αἰεὶ γίγνεται, ἡ δ' ἄλλως περὶ αὐτόν· καίτοι ἄμφω ἀνάκλασις· ἀλλ' ἢ γε τῶν χρωμάτων [374a] ποικιλία διαφέρει· ἡ μὲν γὰρ ἀφ' ὕδατος καὶ μέλανος γίγνεται ἀνάκλασις καὶ πόρρωθεν, ἡ δ' ἐγγύθεν καὶ ἀπὸ ἀέρος λευκοτέρου τὴν φύσιν. φαίνεται δὲ τὸ λαμπρὸν διὰ τοῦ μέλανος ἢ ἐν τῷ μέλανι (διαφέρει γὰρ οὐδέν) φοινικοῦν (ὁρᾶν δ' ἔξεστι τό γε τῶν χλωρῶν ξύλων πῦρ, ὡς ἐρυθρὰν ἔχει τὴν φλόγα διὰ τὸ τῷ καπνῷ πολλῷ μεμεῖχθαι τὸ πῦρ λαμπρὸν ὃν καὶ λευκόν)· καὶ δι' ἀχλύος καὶ καπνοῦ ὃ ἥλιος φαίνεται φοινικοῦς. διὸ ἡ μὲν τῆς ἱριδος ἀνάκλασις ἡ μὲν πρώτη τοιαύτην ἔχειν φαίνεται τὴν χροάν (ἀπὸ ῥανίδων γὰρ μικρῶν γίγνεται ἡ ἀνάκλασις), ἡ δὲ τῆς ἄλλω οὔ. περὶ δὲ τῶν ἄλλων χρωμάτων ὕστερον ἐροῦμεν. ἔτι δὲ περὶ αὐτόν μὲν τὸν ἥλιον οὐ γίγνεται διατριβὴ τοιαύτης συστάσεως, ἀλλ' ἢ ὕει ἢ διαλύεται. ἐκ δὲ τῶν ἐναντίων ἐν τῷ μεταξὺ τῆς τοῦ ὕδατος γενέσεως γίγνεται τις χρόνος· τούτου γὰρ μὴ συμβαίνοντος ἦσαν ἂν κεχρωματισμένοι αἱ ἄλλως ὥσπερ ἡ ἴρις. νῦν δ' ὅλα μὲν οὐ γίγνεται τοιαύτην ἔχοντα τὴν ἔμφασιν, οὐδὲ κύκλω, μικρὰ δὲ καὶ κατὰ μόριον, αἱ καλοῦνται ῥάβδοι, ἐπεὶ εἰ συνίστατο τοιαύτη ἀχλὺς οἷα γένοιτ' ἂν ὕδατος ἢ τινος ἄλλου μέλανος, καθάπερ λέγομεν, ἐφαίνετο ἂν ἡ ἴρις ὅλη, ὥσπερ ἡ περὶ τοὺς λύχνους. περὶ γὰρ τούτους τὰ πλεῖστα νοτίων ὄντων ἴρις γίγνεται τοῦ χειμῶνος, μάλιστα δὲ δήλη γίγνεται τοῖς ὑγροῦς ἔχουσι τοὺς ὀφθαλμούς· τούτων γὰρ ἡ ὄψις ταχὺ δι' ἀσθένειαν ἀνακλᾶται. γίγνεται δ' ἀπὸ τε τῆς τοῦ ἀέρος ὑγρότητος καὶ ἀπὸ λιγνύος τῆς ἀπὸ τῆς φλογὸς ἀπορρεούσης καὶ μειγνυμένης· τότε γὰρ γίγνεται ἔνοπτρον, καὶ διὰ τὴν μελανίαν· καπνώδης γὰρ ἡ λιγνύς· τὸ δὲ τοῦ λύχνου φῶς οὐ λευκὸν ἀλλὰ πορφυροῦν φαίνεται κύκλω καὶ ἱριῶδες, φοινικοῦν δ' οὔ· ἔστι γὰρ ἢ τε ὄψις ὀλίγη ἢ ἀνακλωμένη, καὶ μέλαν τὸ ἔνοπτρον. ἡ δ' ἀπὸ τῶν κωπῶν τῶν ἀναφερομένων ἐκ τῆς θαλάττης ἴρις τῇ μὲν θέσει τὸν αὐτὸν γίγνεται τρόπον τῇ ἐν τῷ οὐρανῷ, τὸ δὲ χρῶμα ὁμοιότερα τῇ περὶ τοὺς λύχνους· οὐ γὰρ φοινικῇν ἀλλὰ πορφυρᾶν ἔχουσα φαίνεται τὴν χροάν. ἡ δ' ἀνάκλασις ἀπὸ τῶν μικροτάτων μὲν συνεχῶν δὲ γίγνεται ῥανίδων· αὗται δ' ὕδωρ ἀποκεκριμένον εἰσὶν ἤδη παντελῶς. γίγνεται δὲ κᾶν [374b] τις λεπταῖς ῥαίνῃ ῥανίσιν εἰς τι τοιοῦτον χωρίον ὃ τὴν θέσιν πρὸς τὸν ἥλιον ἐστραμμένον ἐστὶ καὶ τῇ μὲν ὃ ἥλιος ἀνέχηται δὲ σκιάζει· ἐν τῷ τοιούτῳ γάρ, ἐὰν εἴσω τις ῥαίνῃ, τῷ ἐστῶτι ἐκτός, ἢ ἐπαλλάττουσιν αἱ ἀκτῖνες καὶ ποιοῦσι τὴν σκιάν, φαίνεται ἴρις. ὃ δὲ τρόπος καὶ ἡ χροὰ ὁμοία καὶ τὸ αἷτιον τὸ αὐτὸ τῇ ἀπὸ τῶν κωπῶν· τῇ γὰρ χειρὶ κώπη χρῆται ὁ ῥαίνων. ὅτι δὲ τὸ χρῶμα τοιοῦτον,

ἅμα δῆλον ἔσται καὶ περὶ τῶν ἄλλων χρωμάτων τῆς φαντασίας, ἐκ τῶνδε. δεῖ γὰρ νοήσαντας, ὥσπερ εἴρηται, καὶ ὑποθεμένους πρῶτον μὲν ὅτι τὸ λαμπρὸν ἐν τῷ μέλανι ἢ διὰ τοῦ μέλανος χρῶμα ποιεῖ φοινικοῦν, δεύτερον δ' ὅτι ἡ ὄψις ἐκτεινομένη ἀσθενεστέρα γίνεταί καὶ ἐλάττων, τρίτον δ' ὅτι τὸ μέλαν οἶον ἀπόφασίς ἐστιν· τῷ γὰρ ἐκλείπειν τὴν ὄψιν φαίνεται μέλαν· διὸ τὰ πόρρω πάντα μελάντερα φαίνεται, διὰ τὸ μὴ διικνεῖσθαι τὴν ὄψιν. θεωρεῖσθω μὲν οὖν ταῦτ' ἐκ τῶν περὶ τὰς αἰσθήσεις συμβαινόντων· ἐκείνων γὰρ ἴδιοι οἱ περὶ τούτων λόγοι· νῦν δ' ὅσον ἀνάγκη, τοσοῦτον περὶ αὐτῶν λέγωμεν. φαίνεται δ' οὖν διὰ ταύτην τὴν αἰτίαν τὰ τε πόρρω μελάντερα καὶ ἐλάττω καὶ λειότερα, καὶ τὰ ἐν τοῖς ἐνόπτοις, καὶ τὰ νέφη μελάντερα βλέπουσιν εἰς τὸ ὕδωρ ἢ εἰς αὐτὰ τὰ νέφη. καὶ τοῦτο πάνυ ἐπιδήλως· διὰ γὰρ τὴν [374b.22] ἀνάκλασιν ὀλίγη τῇ ὄψει θεωροῦνται. διαφέρει δ' οὐδὲν τὸ ὁρώμενον μεταβάλλειν ἢ τὴν ὄψιν· ἀμφοτέρως γὰρ ἔσται ταῦτόν. πρὸς δὲ τούτοις δεῖ μὴ λεληθέναι καὶ τόδε· συμβαίνει γὰρ ὅταν ἡ τοῦ ἡλίου νέφος πλησίον, εἰς μὲν αὐτὸ βλέποντι μηδὲν φαίνεσθαι κεχρωματισμένον ἀλλ' εἶναι λευκόν, ἐν δὲ τῷ ὕδατι αὐτὸ τοῦτο θεωροῦντι χρῶμά τι ἔχειν τῆς ἱρίδος. δῆλον τοίνυν ὅτι ἡ ὄψις ὥσπερ καὶ τὸ μέλαν κλωμένη δι' ἀσθένειαν μελάντερον ποιεῖ φαίνεσθαι, καὶ τὸ λευκὸν ἦττον λευκόν, καὶ προσάγει πρὸς τὸ μέλαν. ἡ μὲν οὖν ἰσχυροτέρα ὄψις εἰς φοινικοῦν χρῶμα μετέβαλεν, ἡ δ' ἐχομένη εἰς τὸ πράσινον, ἡ δὲ ἔτι ἀσθενεστέρα εἰς τὸ ἀλουργόν. ἐπὶ δὲ τὸ πλεόν οὐκέτι φαίνεται, ἀλλ' ἐν τοῖς τρισίν, ὥσπερ καὶ τῶν ἄλλων τὰ πλεῖστα, καὶ τούτων ἔσχεν τέλος· τῶν δ' ἄλλων ἀναίσθητος ἡ μεταβολή. διὸ καὶ ἡ [375a] ἱρίς τρίχρως φαίνεται, ἑκατέρα μὲν, ἐναντίως δέ. ἡ μὲν οὖν πρώτη τὴν ἔξω φοινικῇν ἔχει· ἀπὸ μεγίστης γὰρ περιφερείας πλείστη προσπίπτει ὄψις πρὸς τὸν ἡλίον, μεγίστη δ' ἡ ἔξω· ἡ δ' ἐχομένη καὶ ἡ τρίτη ἀνάλογον. ὥστ' εἰ τὰ περὶ τῶν χρωμάτων τῆς φαντασίας εἴρηται καλῶς, ἀνάγκη τρίχρων τε εἶναι αὐτὴν καὶ τούτοις τοῖς χρώμασι κεχρῶσθαι μόνοις. τὸ δὲ ξανθὸν φαίνεται διὰ τὸ παρ' ἄλληλα φαίνεσθαι. τὸ γὰρ φοινικοῦν παρὰ τὸ πράσινον λευκὸν φαίνεται, σημεῖον δὲ τούτου· ἐν γὰρ τῷ μελαντάτῳ νέφει μάλιστα ἄκρατος γίνεταί ἱρίς· συμβαίνει δὲ τότε ξανθότερον εἶναι δοκεῖν τὸ φοινικοῦν. ἔστι δὲ τὸ ξανθὸν ἐν τῇ ἱρίδι χρῶμα μεταξὺ τοῦ τε φοινικοῦ καὶ πρασίνου χρώματος. διὰ τὴν μελανίαν οὖν τοῦ κύκλω νέφους ὅλον αὐτοῦ φαίνεται τὸ φοινικοῦν λευκόν· ἔστι γὰρ πρὸς ἐκεῖνα λευκόν. καὶ πάλιν ἀπομαραιομένης τῆς ἱρίδος ἐγγύτατα, ὅταν λύηται τὸ φοινικοῦν· ἡ γὰρ νεφέλη λευκὴ οὖσα, προσπίπτουσα παρὰ τὸ πράσινον, μεταβάλλει εἰς τὸ ξανθόν. μέγιστον δὲ σημεῖον τούτων ἡ ἀπὸ τῆς σελήνης ἱρίς· φαίνεται γὰρ λευκὴ πάμπαν. γίνεταί δὲ τοῦτο ὅτι ἐν τε τῷ νέφει ζοφερώ φαίνεται καὶ ἐν νυκτί. ὥσπερ οὖν πῦρ ἐπὶ πῦρ, μέλαν παρὰ μέλαν ποιεῖ τὸ ἡρέμα λευκὸν παντελῶς φαίνεσθαι λευκόν· τοῦτο δ' ἐστὶν τὸ φοινικοῦν. γίνεταί δὲ τοῦτο τὸ πάθος καταφανὲς καὶ ἐπὶ τῶν ἀνθῶν· ἐν γὰρ



τοῖς ὑφάσμασιν καὶ ποικίλμασιν ἀμύθητον διαφέρει τῇ φαντασίᾳ ἄλλα παρ' ἄλλα τιθέμενα τῶν χρωμάτων, οἷον καὶ τὰ πορφυρᾶ ἐν λευκοῖς ἢ μέλασιν ἐρίοις, ἔτι δ' ἐν αὐγῇ τοιαδὶ ἢ τοιαδί· διὸ καὶ οἱ ποικιλταὶ φασὶ διαμαρτάνειν ἐργαζόμενοι πρὸς τὸν λύχνον πολλάκις τῶν ἀνθῶν, λαμβάνοντες ἕτερα ἀνθ' ἐτέρων. διότι μὲν οὖν τρίχρως τε, καὶ ὅτι ἐκ τούτων φαίνεται τῶν χρωμάτων μόνων ἡ ἴρις, εἴρηται. διπλῇ δὲ καὶ ἀμαυροτέρα τοῖς χρώμασιν ἡ περιέχουσα, καὶ τῇ θέσει τὰς χροᾶς ἐξ ἐναντίας ἔχει κειμένας διὰ τὴν αὐτὴν αἰτίαν· μακροτέρα γὰρ ἀποτεينوμένη ἢ ὅψις ὥσπερ τὸ πορρώτερον ὄρᾳ, καὶ τὸ ἐνταῦθα τὸν αὐτὸν τρόπον. ἀσθενεστέρα οὖν ἀπὸ τῆς ἕξωθεν ἢ [375b] ἀνάκλασις γίνεταί διὰ τὸ πορρώτερον ποιῆσθαι τὴν ἀνάκλασιν, ὥστ' ἐλάττων προσπίπτουσα τὰ χρώματα ποιῇ ἀμαυρότερα φαίνεσθαι. καὶ ἀντεστραμμένως δὴ διὰ τὸ πλείω ἀπὸ τῆς ἐλάττονος καὶ τῆς ἐντὸς περιφερείας προσπίπτειν πρὸς τὸν ἥλιον· ἐγγυτέρω γὰρ τῆς ὀψεως οὖσα ἀνακλᾶται ἀπὸ τῆς ἐγγυτάτω περιφερείας τῆς πρώτης ἱριδος. ἐγγυτάτω δὲ ἐν τῇ ἕξωθεν ἱριδι ἡ ἐλαχίστη περιφέρεια, ὥστε αὕτη ἔξει τὸ χρῶμα φοινικοῦν· ἡ δ' ἐχομένη καὶ ἡ τρίτη κατὰ λόγον. ἡ ἕξω ἱρίς ἐφ' ὧ τὸ Β· ἡ ἕσω, ἡ πρώτη, ἐφ' ὧ τὸ Α· τὰ χρώματα δ', ἐφ' ὧ τὸ Γ, φοινικοῦν, ἐφ' ὧ τὸ Δ, πράσινον, ἐφ' ὧ Ε, ἀλουργόν· τὸ ξανθὸν δὲ φαίνεται ἐφ' οὗ τὸ Ζ. τρεῖς δ' οὐκέτι γίνονται, οὐδὲ πλείους ἱριδες, διὰ τὸ καὶ τὴν δευτέραν γίνεσθαι ἀμαυροτέραν, ὥστε καὶ τὴν τρίτην ἀνάκλασιν πάμπαν ἀσθενῇ γίνεσθαι καὶ ἀδυνατεῖν ἀφικνεῖσθαι πρὸς τὸν ἥλιον. ὅτι δ' οὔτε κύκλον οἷόν τε γενέσθαι τῆς ἱριδος οὔτε μεῖζον ἡμικυκλίου τμήμα, καὶ περὶ τῶν ἄλλων τῶν συμβαινόντων περὶ αὐτήν, ἐκ τοῦ διαγράμματος ἔσται θεωροῦσι δῆλον. ἡμισφαιρίου γὰρ ὄντος ἐπὶ τοῦ ὀρίζοντος κύκλου τοῦ ἐφ' ὧ τὸ Α, κέντρου δὲ τοῦ Κ, ἄλλου δέ τινος ἀνατέλλοντος σημείου ἐφ' ὧ τὸ Η, ἐὰν ἀπὸ τοῦ Κ γραμμαὶ κατὰ κῶνον ἐκπίπτουσιν ποιῶσιν ὥσπερ εἰ ἄξονα τὴν ἐφ' ἣ ΗΚ, καὶ ἀπὸ τοῦ Κ ἐπὶ τὸ Μ ἐπιζευχθεῖσαι ἀνακλασθῶσιν ἀπὸ τοῦ ἡμισφαιρίου ἐπὶ τὸ Η ἐπὶ τὴν μεῖζον γωνίαν, πρὸς κύκλου περιφέρειαν προσπεσοῦνται αἱ ἀπὸ τοῦ Κ· καὶ ἐὰν μὲν ἐπ' ἀνατολῆς ἢ ἐπὶ δύσεως τοῦ ἄστρου ἡ ἀνάκλασις γένηται, ἡμικύκλιον ἀποληφθήσεται τοῦ κύκλου ὑπὸ τοῦ ὀρίζοντος τὸ ὑπὲρ γῆν γιγνόμενον, ἐὰν δ' ἐπάνω, αἰεὶ ἕλαττον ἡμικυκλίου· ἐλάχιστον δέ, ὅταν ἐπὶ τοῦ μεσημβρινοῦ γένηται τὸ ἄστρον. ἔστω γὰρ ἐπ' ἀνατολῆς πρῶτον, οὗ τὸ Η, καὶ ἀνακεκλᾶσθω ἡ ΚΜ ἐπὶ τὸ Η, καὶ τὸ ἐπίπεδον ἐκβεβλήσθω ἐν ὧ ἡ Α, τὸ ἀπὸ τοῦ τριγώνου ἐν ὧ τὸ ΗΚΜ. κύκλος οὖν ἡ τομὴ ἔσται τῆς σφαίρας ὁ μέγιστος. ἔστω ὁ ἐφ' ὧ Α· διοίσει γὰρ οὐδὲν ἂν ὁποιοῦν τῶν ἐπὶ τῆς ΗΚ κατὰ τὸ τρίγωνον τὸ [376a] ΚΜΗ ἐκβληθῇ τὸ ἐπίπεδον. αἱ οὖν ἀπὸ τῶν Η Κ ἀναγόμεναι γραμμαὶ ἐν τούτῳ τῷ λόγῳ οὐ συσταθήσονται τοῦ ἐφ' ὧ Α ἡμικυκλίου πρὸς ἄλλο καὶ ἄλλο σημεῖον· ἐπεὶ γὰρ τὰ τε Κ Η σημεῖα δέδοται καὶ ἡ ΗΚ, δεδομένη ἂν εἴη καὶ ἡ ΜΗ, ὥστε καὶ λόγος τῆς ΜΗ πρὸς ΜΚ.

δεδομένης οὖν περιφερείας ἐφάπεται τὸ Μ. ἔστω δὲ αὕτη ἐφ' ἧς τὰ Ν Μ·  
 ὥστε ἡ τομὴ τῶν περιφερειῶν δέδοται. πρὸς ἄλλη δέ γε ἡ τῇ ΜΝ περιφερείᾳ  
 ἀπὸ τῶν αὐτῶν σημείων ὁ αὐτὸς λόγος ἐν τῷ αὐτῷ ἐπιπέδῳ οὐ συνίσταται.  
 ἐκκείσθω οὖν τις γραμμὴ ἡ ΔΒ, καὶ τετμήσθω ὡς ἡ ΜΗ πρὸς ΜΚ ἢ Δ πρὸς Β.  
 μείζων δὲ ἡ ΜΗ τῆς ΚΜ, ἐπεὶ ἐπὶ τὴν μείζω γωνίαν ἡ ἀνάκλασις τοῦ  
 κώνου· ὑπὸ γὰρ τὴν μείζω γωνίαν ὑποτείνει τοῦ ΚΜΗ τριγώνου. [μείζων ἄρα  
 καὶ ἡ Δ τῆς Β.] προσπεπορίσθω οὖν πρὸς τὴν Β, ἐφ' ἧς τὸ Ζ· ὥστ' εἶναι ὅπερ  
 τὴν Δ πρὸς τὴν Β, τὴν ΒΖ πρὸς τὴν Δ. εἴτα ὅπερ ἡ Ζ πρὸς τὴν ΚΗ, ἡ τὸ Β  
 πρὸς ἄλλην πεποιήσθω τὴν ΚΠ, καὶ ἀπὸ τοῦ Π ἐπὶ τὸ Μ ἐπεζεύχθω ἡ τὸ ΜΠ.  
 ἔσται οὖν τὸ Π πόλος τοῦ κύκλου, πρὸς ὃν αἱ ἀπὸ τοῦ Κ γραμμαὶ  
 προσπίπτουσιν· ἔσται γὰρ ὅπερ ἡ Ζ πρὸς ΚΗ, καὶ ἡ Β πρὸς ΚΠ, καὶ ἡ Δ πρὸς  
 ΠΜ. μὴ γὰρ ἔστω, ἀλλ' ἡ πρὸς ἐλάττω ἢ πρὸς μείζω τῆς ΠΜ· οὐδὲν γὰρ  
 διοίσει. ἔστω πρὸς ΠΡ. τὸν αὐτὸν ἄρα λόγον αἱ ΗΚ καὶ ΚΠ καὶ ἡ ΠΡ πρὸς  
 ἀλλήλας ἔξουσιν ὥνπερ αἱ Δ Β Ζ. αἱ δὲ Δ Β Ζ ἀνὰ λόγον ἦσαν, ὥνπερ ἡ Δ  
 πρὸς Β, ἡ ΖΒ πρὸς Δ· ὥστε ὅπερ ἡ ΠΗ πρὸς τὴν ΠΡ, ἡ τὸ ΠΡ πρὸς τὴν ΠΚ.  
 ἂν οὖν ἀπὸ τῶν Κ Η αἱ ΗΡ καὶ ΚΡ ἐπὶ τὸ Ρ ἐπιζευχθῶσιν, αἱ ἐπιζευχθεῖσαι  
 αὗται τὸν αὐτὸν ἔξουσι λόγον ὥνπερ ἡ ΗΠ πρὸς τὴν ΠΡ· περὶ γὰρ τὴν αὐτὴν  
 γωνίαν τὴν Π ἀνάλογον αἱ τε τοῦ ΗΠΡ τριγώνου καὶ τοῦ ΚΡΠ. ὥστε καὶ ἡ ΠΡ  
 πρὸς τὴν ΚΡ τὸν αὐτὸν ἔξει λόγον, καὶ ἡ τὸ ΗΠ πρὸς τὴν ΠΡ. ἔχει δὲ καὶ ἡ  
 ΜΗ πρὸς ΚΜ τοῦτον τὸν λόγον· ὥνπερ γὰρ [376b] ἡ τὸ Δ πρὸς τὴν Β  
 ἀμφοτέραι. ὥστε ἀπὸ τῶν Η Κ σημείων οὐ μόνον πρὸς τὴν ΜΝ περιφέρειαν  
 συσταθήσονται τὸν αὐτὸν ἔχουσαι λόγον, ἀλλὰ καὶ ἄλλοθι· ὅπερ ἀδύνατον.  
 ἐπεὶ οὖν ἡ Δ οὔτε πρὸς ἐλάττον τοῦ ΜΠ οὔτε πρὸς μείζω (ὁμοίως [376b.5]  
 γὰρ δειχθήσεται), δῆλον ὅτι πρὸς αὐτὴν ἂν εἴη τὴν ἐφ' ἧς Μ Π. ὥστ' ἔσται  
 ὅπερ ἡ ΜΠ πρὸς ΠΚ, ἡ ΠΗ πρὸς τὴν ΜΠ [καὶ λοιπὴ ἡ τὸ ΜΗ πρὸς ΜΚ]. ἔαν  
 οὖν τῷ ἐφ' ᾧ τὸ Π πόλῳ χρώμενος, διαστήματι δὲ τῷ ἐφ' ᾧ Μ Π, κύκλος  
 γραφῇ, ἀπασῶν ἐφάπεται τῶν γωνιῶν ἃς ἀνακλώμεναι ποιοῦσιν αἱ ἀπὸ τοῦ  
 ΜΑ κύκλου· εἰ δὲ μή, ὁμοίως δειχθήσονται τὸν αὐτὸν ἔχουσαι λόγον αἱ  
 ἄλλοθι καὶ ἄλλοθι τοῦ ἡμικυκλίου συνιστάμεναι, ὅπερ ἦν ἀδύνατον. ἔαν οὖν  
 περιαγάγῃς τὸ ἡμικύκλιον τὸ ἐφ' ᾧ τὸ Α περὶ τὴν ἐφ' ἧς Η Κ Π διάμετρον, αἱ  
 ἀπὸ τοῦ ΗΚ ἀνακλώμεναι πρὸς τὸ ἐφ' ᾧ τὸ Μ ἐν πᾶσι τοῖς ἐπιπέδοις ὁμοίως  
 ἔξουσι, καὶ ἴσην ποιήσουσι γωνίαν τὴν ΚΜΗ· καὶ ἦν ποιήσουσι δὲ γωνίαν αἱ  
 ΗΠ καὶ ΜΠ ἐπὶ τῆς ΗΠ, ἀεὶ ἴση ἔσται. τρίγωνα οὖν ἐπὶ τῆς ΗΠ καὶ ΚΠ ἴσα  
 τῷ ΗΜΠ ΚΜΠ συνεστήκασιν. τούτων δὲ αἱ κάθετοι ἐπὶ τὸ αὐτὸ σημεῖον  
 πεσοῦνται τῆς ΗΠ καὶ ἴσαι ἔσονται. πιπτέωσαν ἐπὶ τὸ Ο. κέντρον ἄρα τοῦ  
 κύκλου τὸ Ο, ἡμικύκλιον δὲ τὸ περὶ τὴν ΜΝ ἀφήρηται ἀπὸ τοῦ ὀρίζοντος·  
 τῶν μὲν γὰρ ἄνω τὸν ἥλιον οὐ κρατεῖν, τῶν δὲ *προσπεριζομένων* κρατεῖν,  
 καὶ διαχεῖν τὸν ἀέρα· καὶ διὰ τοῦτο τὴν ἴριν οὐ συμβάλλειν τὸν κύκλον·

γίνεσθαι δὲ καὶ νύκτωρ ἀπὸ τῆς σελήνης ὀλιγάκις· οὔτε γὰρ αἰὲς πλήρης,  
 ἀσθενεστέρα τε τὴν φύσιν ὥστε κρατεῖν τοῦ ἀέρος· μάλιστα δ' ἵστασθαι τὴν  
 ἴριν, ὅπου μάλιστα κρατεῖται ὁ ἥλιος· πλείστη γὰρ ἐν αὐτῇ ἰκμὰς ἐνέμεινεν.  
 πάλιν ἔστω ὀρίζων μὲν ἐφ' οὗ τὸ ΑΚΓ, ἐπανατεταλκέτω δὲ τὸ Η, ὁ δ' ἄξων  
 ἔστω νῦν ἐφ' οὗ τὸ ΗΠ. τὰ μὲν οὖν ἄλλα πάντα ὁμοίως δειχθήσεται ὡς καὶ  
 πρότερον, ὁ δὲ πόλος τοῦ κύκλου ὁ ἐφ' ᾧ Π κάτω ἔσται τοῦ ὀρίζοντος τοῦ  
 ἐφ' ᾧ τὸ ΑΓ, [377a] ἀρθέντος τοῦ ἐφ' ᾧ τὸ Η σημείου. ἐπὶ δὲ τῆς αὐτῆς ὅ τε  
 πόλος καὶ τὸ κέντρον τοῦ κύκλου καὶ τὸ τοῦ ὀρίζοντος νῦν τὴν ἀνατολήν·  
 ἔστι γὰρ οὗτος ἐφ' ᾧ τὸ ΗΠ. ἐπεὶ δὲ τῆς διαμέτρου τῆς ΑΓ τὸ ΚΗ ἐπάνω, τὸ  
 κέντρον εἴη ἂν ὑποκάτω τοῦ ὀρίζοντος πρότερον τοῦ ἐφ' ᾧ τὸ ΑΓ, ἐπὶ τῆς  
 ΚΠ γραμμῆς, ἐφ' οὗ τὸ Β. ὥστ' ἔλαττον ἔσται τὸ ἐπάνω τμήμα ἡμικυκλίου  
 τὸ ἐφ' ᾧ Ψ Υ· τὸ γὰρ ΨΥΟ ἡμικύκλιον ἦν, νῦν δὲ ἀποτέμνεται ἀπὸ τοῦ ΑΓ  
 ὀρίζοντος. τὸ δὲ ΟΥ ἀφανὲς ἔσται αὐτοῦ, ἐπαρθέντος τοῦ ἡλίου· ἐλάχιστον  
 δ', ὅταν ἐπὶ μεσημβρίας· ὅσον γὰρ ἀνώτερον τὸ Η, κατώτερον ὅ τε πόλος καὶ  
 τὸ κέντρον τοῦ κύκλου ἔσται. ὅτι δ' ἐν μὲν ταῖς ἐλάττωσιν ἡμέραις ταῖς μετ'  
 ἰσημερίαν τὴν μετοπωρινὴν ἐνδέχεται αἰὲς γίνεσθαι ἴριν, ἐν δὲ ταῖς  
 μακροτέραις ἡμέραις ταῖς ἀπὸ ἰσημερίας τῆς ἐτέρας ἐπὶ τὴν ἰσημερίαν τὴν  
 ἐτέραν περὶ μεσημβρίαν οὐ γίνεταί ἴρις, αἵτιον ὅτι τὰ μὲν πρὸς ἄρκτον  
 τμήματα πάντα μείζω ἡμικυκλίου καὶ αἰὲς ἐπὶ μείζω ἡμικυκλίου, τὸ δ' ἀφανὲς  
 μικρόν, τὰ δὲ πρὸς μεσημβρίαν τμήματα τοῦ ἰσημερινοῦ, τὸ μὲν ἄνω τμήμα  
 μικρόν, τὸ δ' ὑπὸ γῆν μέγα, καὶ αἰὲς δὴ μείζω τὰ πορρώτερα· ὥστ' ἐν μὲν ταῖς  
 πρὸς θερινὰς τροπὰς ἡμέραις διὰ τὸ μέγεθος τοῦ τμήματος, πρὶν ἐπὶ τὸ μέσον  
 ἐλθεῖν τοῦ τμήματος καὶ ἐπὶ τὸν μεσημβρινὸν τὴν τὸ Η, κάτω ἤδη τελέως  
 γίνεταί ἢ τὸ Π, διὰ τὸ πόρρω ἀφεστάναι τῆς γῆς τὴν μεσημβρίαν διὰ τὸ  
 μέγεθος τοῦ τμήματος. ἐν δὲ ταῖς πρὸς τὰς χειμερινὰς τροπὰς ἡμέραις, διὰ τὸ  
 μὴ πολὺ ὑπὲρ γῆς εἶναι τὰ τμήματα τῶν κύκλων, τοῦναντίον ἀναγκαῖον  
 γίνεσθαι· βραχὺ γὰρ ἀρθείσης τῆς ἐφ' ᾧ τὸ Η, ἐπὶ τῆς μεσημβρίας γίνεταί ὁ  
 ἥλιος.

τὰς δ' αὐτὰς αἰτίας ὑποληπτέον καὶ περὶ παρηλίων καὶ ῥάβδων ταῖς  
 εἰρημέναις. γίνεταί γὰρ παρήλιος μὲν ἀνακλωμένης τῆς ὄψεως πρὸς τὸν  
 ἥλιον, ῥάβδοι δὲ διὰ τὸ προσπίπτειν τοιαύτην οὖσαν τὴν ὄψιν, οἷαν εἶπομεν  
 αἰὲς γίνεσθαι ὅταν πλησίον ὄντων τοῦ ἡλίου νεφῶν ἀπὸ τινος ἀνακλασθῇ  
 τῶν ὑγρῶν πρὸς τὸ νέφος· φαίνεται γὰρ αὐτὰ μὲν [377b] ἀχρωμάτιστα τὰ  
 νέφη κατ' εὐθυωρίαν εἰσβλέπουσιν, ἐν δὲ τῷ ὕδατι ῥάβδων μεστὸν τὸ νέφος·  
 πλὴν τότε μὲν ἐν τῷ ὕδατι δοκεῖ τὸ χρῶμα τοῦ νέφους εἶναι, ἐν δὲ ταῖς  
 ῥάβδοις ἐπ' αὐτοῦ τοῦ νέφους. γίνεταί δὲ τοῦτο ὅταν ἀνώμαλος ἢ τοῦ  
 νέφους ἢ σύστασις, καὶ τῇ μὲν πυκνότερον τῇ δὲ μανόν, καὶ τῇ μὲν  
 ὑδατωδέστερον τῇ δ' ἥττον· ἀνακλασθείσης γὰρ τῆς [τοῦ ἡλίου] ὄψεως πρὸς

τὸν ἥλιον, τὸ σχῆμα μὲν οὐχ ὁράται [διὰ μικρότητα τῶν ἐνόπτρων], τὸ δὲ χρῶμα· διὰ δὲ τὸ ἐν ἀνωμάλῳ φαίνεσθαι λαμπρὸν καὶ λευκὸν τὸν ἥλιον, πρὸς ὃν ἀνεκλάσθη ἡ ὄψις, τὸ μὲν φοινικοῦν φαίνεται, τὸ δὲ πράσινον ἢ ξανθόν. διαφέρει γὰρ οὐδὲν διὰ τοιούτων ὁρᾶν ἢ ἀπὸ τοιούτων ἀνακλωμένην· ἀμφοτέρως γὰρ φαίνεται τὴν χροάν ὅμοιον, ὥστ' εἰ κἀκείνως φοινικοῦν, καὶ οὕτως. αἱ μὲν οὖν ῥάβδοι γίνονται δι' ἀνωμαλίαν τοῦ ἐνόπτρου οὐ τῷ σχήματι ἀλλὰ τῷ χρώματι· ὁ δὲ παρήλιος, ὅταν ὅτι μάλιστα ὀμαλὸς ἢ ὁ ἀῆρ καὶ πυκνὸς ὁμοίως· διὸ φαίνεται λευκός. ἡ μὲν γὰρ ὀμαλότης τοῦ ἐνόπτρου ποιεῖ χροάν μίαν τῆς ἐμφάσεως· ἡ δ' ἀνάκλασις ἀθρόας τῆς ὀψεως, διὰ τὸ ἅμα προσπίπτειν πρὸς τὸν ἥλιον ἀπὸ πυκνῆς οὕσης τῆς ἀχλύος, [διὰ] καὶ οὐπω μὲν οὕσης ὕδωρ ἐγγὺς δ' ὕδατος, τὸ ὑπάρχον τῷ ἡλίῳ ἐμφαίνεσθαι χρῶμα ποιεῖ, ὥσπερ ἀπὸ χαλκοῦ λείου κλωμένην διὰ τὴν πυκνότητα. ὥστ' ἐπεὶ τὸ χρῶμα τοῦ ἡλίου λευκόν, καὶ ὁ παρήλιος φαίνεται λευκός. διὰ δὲ τὸ αὐτὸ τοῦτο μᾶλλον ὕδατος σημεῖον ὁ παρήλιος τῶν ῥάβδων· μᾶλλον γὰρ συμβαίνει τὸν ἀέρα εὐεργῶς ἔχειν πρὸς γένεσιν ὕδατος. ὁ δὲ νότιος τοῦ βορείου μᾶλλον, ὅτι μᾶλλον ὁ νότιος ἀῆρ εἰς ὕδωρ μεταβάλλει τοῦ πρὸς ἄρκτον. γίνονται δ', ὥσπερ εἵπομεν, περί τε δυσμᾶς καὶ περὶ τὰς ἀνατολάς, καὶ οὔτε ἀνωθεν οὔτε κάτωθεν, ἀλλ' ἐκ τῶν πλαγίων καὶ ῥάβδοι καὶ παρήλιοι· καὶ οὗτ' ἐγγὺς τοῦ ἡλίου λίαν οὔτε πόρρω παντελῶς· ἐγγὺς μὲν γὰρ οὔσαν ὁ ἥλιος διαλύει τὴν σύστασιν, πόρρω δ' οὕσης ἡ ὄψις οὐκ ἀνακλασθήσεται· ἀπὸ γὰρ μικροῦ ἐνόπτρου πόρρω ἀποτεينوμένη ἀσθενὴς γίνεταί· διὸ καὶ αἱ ἄλλως οὐ γίνονται ἐξ ἐναντίας τοῦ ἡλίου. ἄνω [378a] μὲν οὖν ἐὰν γίγνηται καὶ ἐγγύς, διαλύσει ὁ ἥλιος· ἐὰν δὲ πόρρω, ἐλάττων ἢ ὄψις οὔσα ἢ ὥστε ποιεῖν ἀνάκλασιν οὐ [ὑπὸ τὸν ἥλιον] προσπεσεῖται. ἐν δὲ τῷ πλαγίῳ ἐστὶ τοσοῦτον ἀποστῆναι τὸ ἔνοπτρον, ὥστε μήτε τὸν ἥλιον διαλύσαι, τὴν τε ὄψιν ἀθρόαν ἐλθεῖν, διὰ τὸ πρὸς τὴν γῆν φερομένην μὴ διασπᾶσθαι ὥσπερ δι' ἀχανοῦς φερομένην. ὑπὸ δὲ τὸν ἥλιον οὐ γίνεταί διὰ τὸ πλησίον μὲν τῆς γῆς διαλύεσθαι ἂν ὑπὸ τοῦ ἡλίου, ἄνω δὲ μεσουρανίου <γιγνομένης συστάσεως> τὴν ὄψιν διασπᾶσθαι. καὶ ὅλως οὐδ' ἐκ πλαγίου μεσουρανίου γίνεταί· ἡ γὰρ ὄψις οὐχ ὑπὸ τὴν γῆν φέρεται, ὥστε ὀλίγη ἀφικνεῖται πρὸς τὸ ἔνοπτρον, καὶ ἡ ἀνακλωμένη γίνεταί πάμπαν ἀσθενής. ὅσα μὲν οὖν ἔργα συμβαίνει παρέχεσθαι τὴν ἐκκρισιν ἐν τοῖς τόποις τοῖς ὑπὲρ τῆς γῆς, σχεδὸν ἐστὶ τοσαῦτα καὶ τοιαῦτα.

ὅσα δ' ἐν αὐτῇ τῇ γῇ, ἐγκατακλειομένη τοῖς τῆς γῆς μέρεσιν, ἀπεργάζεται, λεκτέον. ποιεῖ γὰρ δύο διαφορὰς σωμάτων διὰ τὸ διπλῇ πεφυκέναι καὶ αὐτή, καθάπερ καὶ ἐν τῷ μετεώρῳ· δύο μὲν γὰρ αἱ ἀναθυμιάσεις, ἡ μὲν ἀτμιδώδης ἡ δὲ καπνώδης, ὥς φαμεν, εἰσίν· δύο δὲ καὶ τὰ εἶδη τῶν ἐν τῇ γῇ γιγνομένων, τὰ μὲν ὀρυκτὰ τὰ δὲ μεταλλευτά. ἡ μὲν οὖν ξηρὰ ἀναθυμιάσις ἐστὶν ἢ τις

ἐκπυροῦσα ποιεῖ τὰ ὀρυκτὰ πάντα, οἷον λίθων τε γένη τὰ [378a.23] ἄτηκτα καὶ σανδαράκην καὶ ὤχραν καὶ μίλτον καὶ θεῖον καὶ τᾶλλα τὰ τοιαῦτα. τὰ δὲ πλεῖστα τῶν ὀρυκτῶν ἐστὶν τὰ μὲν κονία κεχρωματισμένη, τὰ δὲ λίθος ἐκ τοιαύτης γεγωνῶς συστάσεως, οἷον τὸ κιννάβαρι. τῆς δ' ἀναθυμιάσεως τῆς ἀτμιδώδους, ὅσα μεταλλεύεται, καὶ ἔστιν ἢ χυτὰ ἢ ἐλατά, οἷον σίδηρος, χρυσός, χαλκός. ποιεῖ δὲ ταῦτα πάντα ἢ ἀναθυμιάσις ἢ ἀτμιδώδης ἐγκατακλειομένη, καὶ μάλιστα ἐν τοῖς λίθοις, διὰ ξηρότητα εἰς ἓν συνθλιβομένη καὶ πηγνυμένη, οἷον ἢ δρόσος ἢ πάχνη, ὅταν ἀποκριθῇ. ἐνταῦθα δὲ πρὶν ἀποκριθῆναι γεννᾶται ταῦτα. διὸ ἔστι μὲν ὡς ὕδωρ ταῦτα, ἔστιν δ' ὡς οὐ· δυνάμει μὲν γὰρ ἢ ὕλῃ ὕδατος ἦν, ἔστι δ' οὐκέτι, οὐδ' ἐξ ὕδατος γενομένου διὰ τι πάθος, ὥσπερ [378b] οἱ χυμοί· οὐδὲ γὰρ οὕτω γίγνεται τὸ μὲν χαλκὸς τὸ δὲ χρυσός, ἀλλὰ πρὶν γενέσθαι παγείσης τῆς ἀναθυμιάσεως ἕκαστα τούτων ἐστίν. διὸ καὶ πυροῦται πάντα καὶ γῆν ἔχει· ξηρὰν γὰρ ἔχει ἀναθυμιάσιν· ὁ δὲ χρυσὸς μόνος οὐ πυροῦται. κοινῇ μὲν οὖν εἴρηται περὶ αὐτῶν ἀπάντων, ἰδίᾳ δὲ σκεπτέον προχειριζομένοις περὶ ἕκαστον γένος.

Βιβλίον Δ' Ἐπεὶ δὲ τέτταρα αἵτια διώριστα τῶν στοιχείων, τούτων

δὲ κατὰ συζυγίας καὶ τὰ στοιχεῖα τέτταρα συμβέβηκεν εἶναι, ὧν τὰ μὲν δύο ποιητικά, τὸ θερμὸν καὶ τὸ ψυχρόν, τὰ δὲ δύο παθητικά, τὸ ξηρὸν καὶ τὸ ὑγρόν· ἢ δὲ πίστις τούτων ἐκ τῆς ἐπαγωγῆς· φαίνεται γὰρ ἐν πᾶσιν ἢ μὲν θερμότης καὶ ψυχρότης ὀρίζουσαι καὶ συμφύουσαι καὶ μεταβάλλουσαι τὰ θ' ὁμογενῇ καὶ τὰ μὴ ὁμογενῇ, καὶ ὑγραίνουσαι καὶ ξηραίνουσαι καὶ σκληρύνουσαι καὶ μαλάττουσαι, τὰ δὲ ξηρὰ καὶ ὑγρὰ ὀριζόμενα καὶ τᾶλλα τὰ εἰρημένα πάθη πάσχοντα αὐτὰ τε καθ' αὐτὰ καὶ ὅσα κοινὰ ἐξ ἀμφοῖν σώματα συνέστηκεν· ἔτι δ' ἐκ τῶν λόγων δῆλον, οἷς ὀριζόμεθα τὰς φύσεις αὐτῶν· τὸ μὲν γὰρ θερμὸν καὶ ψυχρὸν ὡς ποιητικὰ λέγομεν (τὸ γὰρ συγκριτικὸν ὥσπερ ποιητικόν τί ἐστι), τὸ δὲ ὑγρὸν καὶ ξηρὸν παθητικόν (τὸ γὰρ εὐόριστον καὶ δυσόριστον τῷ πάσχειν τι λέγεται τὴν φύσιν αὐτῶν)· ὅτι μὲν οὖν τὰ μὲν ποιητικὰ τὰ δὲ παθητικά, φανερόν· διωρισμένων δὲ τούτων ληπτέον ἂν εἴη τὰς ἐργασίας αὐτῶν, αἷς ἐργάζονται τὰ ποιητικά, καὶ τῶν παθητικῶν τὰ εἶδη. πρῶτον μὲν οὖν καθόλου ἢ ἀπλῇ γένεσις καὶ ἡ φυσικὴ μεταβολὴ τούτων τῶν δυνάμεων ἐστὶν ἔργον, καὶ ἡ ἀντικειμένη φθορὰ κατὰ φύσιν. αὐταὶ μὲν οὖν τοῖς τε φυτοῖς ὑπάρχουσι καὶ ζώοις καὶ τοῖς μέρεσιν αὐτῶν. ἔστι δ' ἢ ἀπλῇ καὶ ἡ φυσικὴ γένεσις μεταβολὴ ὑπὸ τούτων τῶν δυνάμεων, ὅταν ἔχωσι λόγον, ἐκ τῆς ὑποκειμένης ὕλης ἐκάστη φύσει· αὐταὶ δ' εἰσὶν αἱ εἰρημέναι δυνάμεις παθητικάι. [379a] γεννῶσι δὲ τὸ θερμὸν καὶ ψυχρὸν κρατοῦντα τῆς ὕλης· ὅταν δὲ μὴ κρατῇ, κατὰ μέρος μὲν μόλυνσις καὶ

ἀπεψία γίνεται. τῇ δ' ἀπλῇ γενέσει ἐναντίον μάλιστα κοινὸν σῆψις· πᾶσα γὰρ ἢ κατὰ φύσιν φθορὰ εἰς τοῦθ' ὁδὸς ἐστίν, οἷον γῆρας καὶ αὖανσις. τέλος δὲ πάντων τῶν ἄλλων τούτων σαπρότης, ἐὰν μὴ τι βίᾳ φθαρῇ τῶν φύσει συνεστώτων· ἔστιν γὰρ καὶ σάρκα καὶ ὅστουν καὶ ὀτιοῦν κατακαῦσαι, ὧν τὸ τέλος τῆς κατὰ φύσιν φθορᾶς σῆψις ἐστίν. διὸ ὑγρὰ πρῶτον, εἴτα ξηρὰ τέλος γίνεται τὰ σηπόμενα· ἐκ τούτων γὰρ ἐγένετο, καὶ ὠρίσθη τῷ ὑγρῷ τὸ ξηρὸν ἐργαζομένων τῶν ποιητικῶν. γίνεται δ' ἡ φθορὰ ὅταν κρατῇ τοῦ ὀρίζοντος τὸ ὀριζόμενον διὰ τὸ περιέχον. (οὐ μὴν ἄλλ' ἰδίως γε λέγεται σῆψις ἐπὶ τῶν κατὰ μέρος φθειρομένων, ὅταν χωρισθῇ τῆς φύσεως.) διὸ καὶ σήπεται πάντα τᾶλλα πλὴν πυρός· καὶ γὰρ γῆ καὶ ὕδωρ καὶ ἀήρ σήπεται· πάντα γὰρ ὕλη τῷ πυρὶ ἐστὶ ταῦτα. σῆψις δ' ἐστὶν φθορὰ τῆς ἐν ἐκάστω ὑγρῷ οἰκείας καὶ κατὰ φύσιν θερμότητος ὑπ' ἄλλοτρίας θερμότητος· αὕτη δ' ἐστὶν ἡ τοῦ περιέχοντος. ὥστε ἐπεὶ κατ' ἔνδειαν πάσχει θερμοῦ, ἐνδεὲς δὲ ὄν τοιαύτης δυνάμεως ψυχρὸν πᾶν, ἄμφω ἂν αἴτια εἴη, καὶ κοινὸν τὸ πάθος ἡ σῆψις, ψυχρότητός τε οἰκείας καὶ θερμότητος ἄλλοτρίας. διὰ τοῦτο γὰρ καὶ ξηρότερα γίνεται τὰ σηπόμενα πάντα, καὶ τέλος γῆ καὶ κόπρος· ἐξιόντος γὰρ τοῦ οἰκείου θερμοῦ συνεξατμίζεται τὸ κατὰ φύσιν ὑγρόν, καὶ τὸ σπῶν τὴν ὑγρότητα οὐκ ἔστιν· ἐπάγει γὰρ ἔλκουσα ἡ οἰκεία θερμότης. καὶ ἐν τοῖς ψύχεσι δ' ἦττον σήπεται ἢ ἐν ταῖς ἀλέαις (ἐν μὲν γὰρ τῷ χειμῶνι ὀλίγον ἐν τῷ περιέχοντι ἄερί καὶ ὕδατι τὸ θερμόν, ὥστ' οὐδὲν ἰσχύει, ἐν δὲ τῷ θέρει πλεόν)· καὶ οὔτε τὸ πεπηγός (μᾶλλον γὰρ ψυχρὸν ἢ ὁ ἀήρ θερμόν· οὐκ οὐκ κρατεῖται, τὸ δὲ κινεῖν κρατεῖ) οὔτε τὸ ζέον ἢ θερμόν (ἐλάττων γὰρ ἢ ἐν τῷ ἄερί θερμότης τῆς ἐν τῷ πράγματι, ὥστ' οὐ κρατεῖ οὐδὲ ποιεῖ μεταβολὴν οὐδεμίαν). ὁμοίως δὲ καὶ τὸ κινούμενον καὶ ῥέον ἦττον σήπεται τοῦ ἀκίνητιζοντος· ἀσθενεστέρα γὰρ γίνεται ἢ ὑπὸ τῆς ἐν τῷ ἄερί θερμότητος κίνησις τῆς ἐν τῷ [379b] πράγματι προϋπαρχούσης, ὥστε οὐδὲν ποιεῖ μεταβάλλειν. ἡ δ' αὐτὴ αἰτία καὶ τοῦ τὸ πολὺ ἦττον τοῦ ὀλίγου σήπεσθαι· ἐν γὰρ τῷ πλεόνι πλεόν ἐστὶν πῦρ οἰκεῖον καὶ ψυχρὸν ἢ ὥστε κρατεῖν τὰς ἐν τῷ περιστῶτι δυνάμεις. διὸ ἡ θάλαττα κατὰ μέρος μὲν διαιρουμένη ταχὺ σήπεται, ἅπαντα δ' οὔ, καὶ τᾶλλα ὕδατα ὡσαύτως. καὶ ζῶα ἐγγίγνεται τοῖς σηπομένοις διὰ τὸ τὴν ἀποκεκριμένην θερμότητα φυσικὴν οὔσαν συνιστάναι τὰ ἐκκριθέντα. τί μὲν οὖν ἐστὶ γένεσις καὶ τί φθορά, εἴρηται.

λοιπὸν δ' εἰπεῖν τὰ ἐχόμενα εἶδη, ὅσα αἰ εἰρημέναι δυνάμεις ἐργάζονται ἐξ ὑποκειμένων τῶν φύσει συνεστώτων ἥδη. ἔστι δὲ θερμοῦ μὲν πέψις, πέψεως δὲ πέπανσις, ἔψησις, ἔτι ὀπτησις· ψυχρότητος δὲ ἀπεψία, ταύτης δὲ ὠμότης, μόλυνσις, στάτευσις. δεῖ δὲ ὑπολαμβάνειν μὴ κυρίως ταῦτα λέγεσθαι τὰ ὀνόματα τοῖς πράγμασιν, ἀλλ' οὐ κεῖται καθόλου τοῖς ὁμοίοις, ὥστε οὐ ταῦτα ἀλλὰ τοιαῦτα δεῖ νομίζειν εἶναι τὰ εἰρημένα εἶδη. εἰπώμεν δ' αὐτῶν ἕκαστον

τί ἐστιν. πέψις μὲν οὖν ἐστὶν τελείωσις ὑπὸ τοῦ φυσικοῦ καὶ οἰκείου θερμοῦ ἐκ τῶν ἀντικειμένων παθητικῶν· ταῦτα δ' ἐστὶν ἡ οἰκεία ἐκάστω ὕλη. ὅταν γὰρ πεφθῇ, τετελείωταί τε καὶ γέγονεν. καὶ ἡ ἀρχὴ τῆς τελειώσεως ὑπὸ θερμότητος τῆς οἰκείας συμβαίνει, κἂν διὰ τινος τῶν ἐκτὸς βοηθείας συνεπιτελεσθῇ, οἷον ἡ τροφή συμπέττεται καὶ διὰ λουτρῶν καὶ δι' ἄλλων τοιούτων· ἀλλ' ἢ γε ἀρχὴ ἡ ἐν αὐτῷ θερμότης ἐστίν. τὸ δὲ τέλος τοῖς μὲν ἡ φύσις ἐστίν, φύσις δὲ ἦν λέγομεν ὡς εἶδος καὶ οὐσίαν· τοῖς δὲ εἰς ὑποκειμένην τινὰ μορφήν τὸ τέλος ἐστὶ τῆς πέψεως, ὅταν τοιονδὶ γένηται καὶ τοσονδὶ τὸ ὑγρὸν ἢ ὀπτώμενον ἢ ἐψόμενον ἢ σηπόμενον ἢ ἄλλως πως θερμαινόμενον· τότε γὰρ χρήσιμόν ἐστι καὶ πεπέφθαι φαμέν, ὥσπερ τὸ γλεῦκος καὶ τὰ ἐν τοῖς φύμασιν συνιστάμενα, ὅταν γένηται πύον, καὶ τὸ δάκρυον, ὅταν γένηται λήμη· ὁμοίως δὲ καὶ τᾶλλα. συμβαίνει δὲ τοῦτο πάσχειν ἅπασιν, ὅταν κρατηθῇ ἡ ὕλη καὶ ἡ ὑγρότης· αὕτη γὰρ ἐστὶν ἡ ὀριζομένη ὑπὸ τῆς ἐν τῇ φύσει θερμότητος. ἕως γὰρ ἂν ἐνῇ ἐν αὐτῇ ὁ λόγος, φύσις τοῦτ' ἐστίν. [380a] διὸ καὶ ὑγείας σημεῖα τὰ τοιαῦτα, καὶ οὖρα καὶ ὑποχωρήσεις καὶ ὅλως τὰ περιττώματα. καὶ λέγεται πεπέφθαι, ὅτι δηλοῖ κρατεῖν τὴν θερμότητα τὴν οἰκείαν τοῦ ἀορίστου. ἀνάγκη δὲ τὰ πεττόμενα παχύτερα καὶ θερμότερα εἶναι· τοιοῦτον γὰρ ἀποτελεῖ τὸ θερμόν, εὐογκότερον καὶ παχύτερον καὶ ξηρότερον. πέψις μὲν οὖν τοῦτο ἐστίν· ἀπεψία δὲ ἀτέλεια δι' [380a.7] ἔνδειαν τῆς οἰκείας θερμότητος (ἡ δὲ ἔνδεια τῆς θερμότητος ψυχρότης ἐστίν)· ἡ δ' ἀτέλειά ἐστὶν τῶν ἀντικειμένων παθητικῶν, ἥπερ ἐστὶν ἐκάστω φύσει ὕλη. πέψις μὲν οὖν καὶ ἀπεψία διωρίσθω τοῦτον τὸν τρόπον.

πέπανσις δ' ἐστὶν πέψις τις· ἡ γὰρ τῆς ἐν τοῖς περικαρπίοις τροφῆς πέψις πέπανσις λέγεται. ἐπεὶ δ' ἡ πέψις τελέωσις, τότε ἡ πέπανσις τελέα ἐστὶν ὅταν τὰ ἐν τῷ περικαρπίῳ σπέρματα δύνηται ἀποτελεῖν τοιοῦτον ἕτερον οἷον αὐτό· καὶ γὰρ ἐπὶ τῶν ἄλλων τὸ τέλεον οὕτω λέγομεν. περικαρπίου μὲν οὖν αὕτη πέπανσις, λέγεται δὲ καὶ ἄλλα πολλὰ πέποντα τῶν πεπεμμένων, κατὰ μὲν τὴν αὐτὴν ἰδέαν, μεταφοραῖς δέ, διὰ τὸ μὴ κεῖσθαι, καθάπερ εἴρηται καὶ πρότερον, ὀνόματα καθ' ἐκάστην τελείωσιν περὶ τὰ ὀριζόμενα ὑπὸ τῆς φυσικῆς θερμότητος καὶ ψυχρότητος. ἔστιν δὲ ἡ φυμάτων καὶ φλέγματος καὶ τῶν τοιούτων πέπανσις ἡ ὑπὸ τοῦ φυσικοῦ θερμοῦ τοῦ ἐνόντος ὑγροῦ πέψις· ἀδύνατον γὰρ ὀρίζειν μὴ κρατοῦν. ἐκ μὲν οὖν τῶν πνευματικῶν ὑδατώδη, ἐκ δὲ τῶν τοιούτων τὰ γεηρὰ συνίσταται, καὶ ἐκ λεπτῶν αἰεὶ παχύτερα γίνονται πεπαινόμενα πάντα. καὶ τὰ μὲν εἰς αὐτὴν ἡ φύσις ἄγει κατὰ τοῦτο, τὰ δὲ ἐκβάλλει. πέπανσις μὲν οὖν εἴρηται τί ἐστίν· ὠμότης δ' ἐστὶν τὸ ἐναντίον· ἐναντίον δὲ πεπάνσει ἀπεψία τῆς ἐν τῷ περικαρπίῳ τροφῆς· αὕτη δ' ἐστὶν ἡ ἀόριστος ὑγρότης. διὸ ἡ πνευματικὴ ἢ ὑδατώδης ἢ τῶν ἐξ ἀμφοῖν ἐστὶν ἡ ὠμότης. ἐπεὶ δ' ἡ πέπανσις τελέωσις τις ἐστίν, ἡ ὠμότης ἀτέλεια ἔσται.

γίνεται δ' ἡ ἀτέλεια δι' ἔνδειαν τοῦ φυσικοῦ θερμοῦ καὶ ἀσυμμετρίαν πρὸς τὸ ὑγρὸν τὸ πεπαινόμενον. οὐδὲν δὲ ὑγρὸν αὐτὸ καθ' αὐτὸ πεπαίνεται ἄνευ ξηροῦ· ὕδωρ γὰρ οὐ παχύνεται μόνον τῶν ὑγρῶν. [380b] συμβαίνει δὲ τοῦτο ἢ τῷ τὸ θερμὸν ὀλίγον εἶναι ἢ τῷ τὸ ὀριζόμενον πολὺ· διὸ καὶ λεπτοὶ οἱ χυμοὶ τῶν ὠμῶν, καὶ ψυχροὶ μᾶλλον ἢ θερμοί, καὶ ἄβρωτοι καὶ ἄποτοι. λέγεται δὲ καὶ ἡ ὠμότης ὥσπερ καὶ ἡ πέπανσις, πολλαχῶς. ὅθεν καὶ οὖρα καὶ ὑποχωρήσεις καὶ κατάρροι ὠμοὶ λέγονται διὰ τὸ αὐτὸ αἴτιον· τῷ γὰρ μὴ κεκρατῆσθαι ὑπὸ τῆς θερμότητος μηδὲ συνεστάναι ὠμὰ πάντα προσαγορεύεται. πόρρω δὲ προϊόντων καὶ κέραμος ὠμὸς καὶ γάλα ὠμὸν καὶ ἄλλα πολλὰ λέγεται, ἔαν δυνάμενα μεταβάλλειν καὶ συνίστασθαι ὑπὸ θερμότητος ἀπαθῇ ἢ. διὸ τὸ ὕδωρ ἐφθὸν μὲν λέγεται, ὠμὸν δ' οὐ, ὅτι οὐ παχύνεται. πέπανσις μὲν οὖν καὶ ὠμότης εἴρηται τί ἐστίν, καὶ διὰ τί ἐστίν ἐκάτερον αὐτῶν· ἔψησις δ' ἐστίν τὸ μὲν ὅλον πέψις ὑπὸ θερμότητος ὑγρᾶς τοῦ ἐνυπάρχοντος ἀορίστου ἐν τῷ ὑγρῷ, λέγεται δὲ τοῦνομα κυρίως μόνον ἐπὶ τῶν ἐψομένων. τοῦτο δ' ἂν εἴη, ὥσπερ εἴρηται, πνευματώδες ἢ ὑδατώδες. ἡ δὲ πέψις γίνεται ἀπὸ τοῦ ἐν τῷ ὑγρῷ πυρός· τὸ γὰρ ἐπὶ τῶν τηγάνων ὀπτᾶται (ὑπὸ γὰρ τοῦ ἔξωθεν θερμοῦ πάσχει, ἐν ᾧ δ' ἐστίν ὑγρῷ, ποιεῖ ἐκεῖνο μᾶλλον ξηρόν, εἰς αὐτὸ ἀναλαμβάνον), τὸ δ' ἐψόμενον τοῦναντίον ποιεῖ (ἐκκρίνεται γὰρ ἐξ αὐτοῦ τὸ ὑγρὸν ὑπὸ τῆς ἐν τῷ ἔξω ὑγρῷ θερμασίας)· διὸ ξηρότερα τὰ ἐφθὰ τῶν ὀπτῶν· οὐ γὰρ ἀνασπᾷ εἰς ἑαυτὰ τὸ ὑγρὸν τὰ ἐψόμενα· κρατεῖ γὰρ ἡ ἔξωθεν θερμότης τῆς ἐντός· εἰ δ' ἐκράτει ἡ ἐντός, εἴλκεν ἂν εἰς ἑαυτήν. ἔστιν δ' οὐ πᾶν σῶμα ἐψητόν· οὔτε γὰρ ἐν ᾧ μηδὲν ἐστίν ὑγρόν, οἷον ἐν λίθοις, οὔτ' ἐν οἷς ἔνεστι μὲν, ἀλλ' ἀδύνατον κρατηθῆναι διὰ πυκνότητα, οἷον ἐν τοῖς ξύλοις· ἀλλ' ὅσα τῶν σωμάτων ἔχει ὑγρότητα παθητικὴν ὑπὸ τῆς ἐν τῷ ὑγρῷ πυρώσεως. λέγεται δὲ καὶ χρυσὸς ἔψεσθαι καὶ ξύλον καὶ ἄλλα πολλὰ, κατὰ μὲν τὴν ιδέαν οὐ τὴν αὐτήν, μεταφορᾷ δέ· οὐ γὰρ κεῖται ὀνόματα ταῖς διαφοραῖς. καὶ τὰ ὑγρά δὲ ἔψεσθαι λέγομεν, οἷον γάλα καὶ γλεῦκος, ὅταν ἐν τῷ ὑγρῷ ὁ χυμὸς εἰς εἰδὸς τι μεταβάλλῃ ὑπὸ τοῦ κύκλω καὶ ἔξωθεν πυρὸς θερμαίνοντος, ὥστε τρόπον τινὰ παραπλήσιον τῇ εἰρημένῃ [381a] ἐψήσει ποιεῖ. (τέλος δὲ οὐ ταῦτο πᾶσιν, οὔτε ἐψομένοις οὔτε πεττομένοις, ἀλλὰ τοῖς μὲν πρὸς ἐδωδήν, τοῖς δὲ πρὸς ῥόφησιν, τοῖς δὲ πρὸς ἄλλην χρεῖαν, ἐπεὶ καὶ τὰ φάρμακα ἔψειν λέγομεν.) ὥστε ὅσα παχύτερα δύναται γίνεσθαι ἢ ἐλάττω ἢ βαρύτερα, ἢ τὰ μὲν αὐτῶν τοιαῦτα τὰ δ' ἐναντία, διὰ τὸ διακρινόμενα τὰ μὲν παχύνεσθαι τὰ δὲ λεπτύνεσθαι, ὥσπερ τὸ γάλα εἷς τε ὀρόν καὶ πυετίαν, πάντα ἐψητά ἐστίν. τὸ δὲ ἔλαιον οὐχ ἔψεται αὐτὸ καθ' ἑαυτό, ὅτι τούτων οὐδὲν πάσχει. ἡ μὲν οὖν κατὰ τὴν ἔψησιν λεγομένη πέψις τοῦτ' ἐστίν· καὶ οὐδὲν διαφέρει ἐν ὀργάνοις τεχνικοῖς καὶ φυσικοῖς ἐάν τι γίγηται· διὰ τὴν αὐτὴν γὰρ αἰτίαν πάντα ἔσται. μόλυνσις δὲ ἀπεψία μὲν ἢ ἐναντία ἐψήσει· εἴη δ' ἂν ἐναντία ἢ τε πρώτη



λεχθεῖσα ἀπεψία τοῦ ἐν τῷ σώματι ἀορίστου δι' ἔνδειαν τῆς ἐν τῷ ὑγρῷ τῷ περίξ θερμότητος (ἡ δ' ἔνδεια μετὰ ψυχρότητος ὅτι ἐστίν, εἴρηται)· γίνεται δὲ διὰ κίνησιν ἄλλην· ἐκκρούεται γὰρ ἡ πέττουσα, καὶ ἡ ἔνδεια δὲ ἡ διὰ τὸ πλῆθος τῆς ἐν τῷ ὑγρῷ ψυχρότητος ἢ διὰ τὸ ἐν τῷ ἐψομένῳ πλῆθος· τότε γὰρ συμβαίνει τὴν ἐν τῷ ὑγρῷ θερμότητα πλείω μὲν εἶναι ἢ ὥστε μὴ κινῆσαι, ἐλάττω δὲ ἢ ὥστε ὀμαλῦναι καὶ συμπέσαι. διὸ σκληρότερα μὲν τὰ μεμωλυσμένα γίνεται τῶν ἐφθῶν, τὰ δ' ὑγρὰ διωρισμένα μᾶλλον. ἔψησις μὲν οὖν καὶ μόλυνσις εἴρηται, καὶ τί ἐστίν καὶ διὰ τί ἐστίν· ὀπτησις δ' ἐστὶν πέψις ὑπὸ θερμότητος ξηρᾶς καὶ ἀλλοτρίας. διὰ τοῦτο καὶ ἔψων τις ποιῇ μεταβάλλειν καὶ πέττεσθαι, μὴ ὑπὸ τῆς τοῦ ὑγροῦ θερμότητος ἀλλ' ὑπὸ τῆς τοῦ πυρός, ὅταν τελεσθῇ, ὅππῃ γίνεται καὶ οὐχ ἐφθόν, καὶ τῇ ὑπερβολῇ προσκεκαῦσθαι λέγεται· ὑπὸ ξηρᾶς δὲ θερμότητος γίνεται ὅταν ξηρότερον γίγνηται ἐπιτελεσθέν. διὸ καὶ τὰ ἐκτὸς ξηρότερα τῶν ἐντός· τὰ δ' ἐφθὰ τούναντίον. καὶ ἔργον ἐπὶ τῶν χειροκμήτων τὸ ὀπτῆσαι μεῖζον ἢ ἐψῆσαι· χαλεπὸν γὰρ τὰ ἐκτὸς καὶ τὰ ἐντός ὀμαλῶς θερμαίνειν. ἀεὶ γὰρ τὰ ἐγγύτερον τοῦ πυρὸς ξηραίνεται [381b] θάττον, ὥστε καὶ μᾶλλον. συνιόντων οὖν τῶν ἔξω πόρων οὐ δύναται ἐκκρίνεσθαι τὸ ἐνυπάρχον ὑγρόν, ἀλλ' ἐγκατακλείεται, ὅταν οἱ πόροι μύσωσιν. ὀπτησις μὲν οὖν καὶ ἔψησις γίνονται μὲν τέχνῃ, ἔστιν δ', ὥσπερ λέγομεν, τὰ εἶδη καθόλου ταῦτά καὶ φύσει· ὅμοια γὰρ τὰ γινόμενα πάθῃ, ἀλλ' ἀνώνυμα· μιμεῖται γὰρ ἡ τέχνη τὴν φύσιν, ἐπεὶ καὶ ἡ τῆς τροφῆς ἐν τῷ σώματι πέψις ὁμοία ἐψήσει ἐστίν· καὶ γὰρ ἐν ὑγρῷ καὶ θερμῷ ὑπὸ τῆς τοῦ σώματος θερμότητος γίνεται. καὶ ἀπεψίαί ἐναι ὅμοιαι τῇ μόλυνσει. καὶ ζῶον οὐκ ἐγγίγνεται ἐν τῇ πέψει, ὥσπερ τινὲς φασιν, ἀλλ' ἐν τῇ ἀποκρίσει σηπομένη ἐν τῇ κάτω κοιλίᾳ, εἴτ' ἐπανέρχεται ἄνω· πέττεται μὲν γὰρ ἐν τῇ ἄνω κοιλίᾳ, σήπεται δ' ἐν τῇ κάτω τὸ ἀποκριθέν· δι' ἣν δ' αἰτίαν, εἴρηται ἐν ἑτέροις. ἡ μὲν οὖν μόλυνσις τῇ ἐψήσει ἐναντίον· τῇ δὲ ὡς ὀπτῆσει λεγομένη πέψει ἔστι μὲν τι ἀντικείμενον ὁμοίως, ἀνωνυμώτερον δέ. εἴη δ' ἂν οἷον εἰ γένοιτο στάτευσις ἀλλὰ μὴ ὀπτησις δι' ἔνδειαν θερμότητος, ἢ συμβαίῃ ἂν ἢ δι' ὀλιγότητα τοῦ ἔξω πυρὸς ἢ διὰ πλῆθος τοῦ ἐν τῷ ὀπτωμένῳ ὕδατος· τότε γὰρ πλείων μὲν ἐστίν ἢ ὥστε μὴ κινῆσαι, ἐλάττων δὲ ἢ ὥστε πέσαι. τί μὲν οὖν ἐστὶ πέψις καὶ ἀπεψία, καὶ πέπανσις καὶ ὠμότης, καὶ ἔψησις καὶ ὀπτησις καὶ τάναντία τούτοις, εἴρηται.

τῶν δὲ παθητικῶν, τοῦ ὑγροῦ καὶ τοῦ ξηροῦ, λεκτέον τὰ [381b.24] εἶδη. εἰσὶν δ' αἱ μὲν ἀρχαὶ τῶν σωμάτων αἱ παθητικαὶ ὑγρὸν καὶ ξηρόν, τὰ δ' ἄλλα μεικτὰ μὲν ἐκ τούτων, ὁποτέρου δὲ μᾶλλον, τούτου μᾶλλον τὴν φύσιν ἐστίν, οἷον τὰ μὲν ξηροῦ μᾶλλον τὰ δ' ὑγροῦ. πάντα δὲ τὰ μὲν ἐντελεχεῖα ἔσται, τὰ δ' ἐν τῷ ἀντικειμένῳ· ἔχει δ' οὕτως τῆξις πρὸς τὸ τηκτόν. ἐπεὶ δ' ἐστὶν τὸ μὲν ὑγρὸν εὐόριστον, τὸ δὲ ξηρὸν δυσόριστον, ὁμοίον τι τῷ ὄψῳ

καὶ τοῖς ἡδύσμασι πρὸς ἄλληλα πάσχουσι· τὸ γὰρ ὑγρὸν τῷ ξηρῷ αἴτιον τοῦ ὀρίζεσθαι, καὶ ἑκάτερον ἑκατέρῳ οἶον κόλλα γίνεται, ὥσπερ καὶ [382a] Ἐμπεδοκλῆς ἐποίησεν ἐν τοῖς φυσικοῖς “ἄλφιτον ὕδατι κολλήσας.” καὶ διὰ τοῦτο ἐξ ἀμφοῖν ἐστὶν τὸ ὠρισμένον σῶμα. λέγεται δὲ τῶν στοιχείων ἰδιαίτατα ξηροῦ μὲν γῆ, ὑγροῦ δὲ ὕδωρ. διὰ τοῦτο ἅπαντά τε τὰ ὠρισμένα σώματα ἐνταῦθα οὐκ ἄνευ γῆς καὶ ὕδατος (ὁποτέρου δὲ πλεον, κατὰ τὴν δύναμιν τούτου ἕκαστον φαίνεται)· καὶ ἐν γῇ καὶ ἐν ὕδατι ζῶα μόνον ἐστίν, ἐν ἄερί δὲ καὶ πυρὶ οὐκ ἔστιν, ὅτι τῶν σωμάτων ὕλη ταῦτα. τῶν δὲ σωματικῶν παθημάτων ταῦτα πρῶτα ἀνάγκη ὑπάρχειν τῷ ὠρισμένῳ, σκληρότητα ἢ μαλακότητα· ἀνάγκη γὰρ τὸ ἐξ ὑγροῦ καὶ ξηροῦ ἢ σκληρὸν εἶναι ἢ μαλακόν. ἔστι δὲ σκληρὸν μὲν τὸ μὴ ὑπεῖκον εἰς αὐτὸ κατὰ τὸ ἐπίπεδον, μαλακὸν δὲ τὸ ὑπεῖκον τῷ μὴ ἀντιπερίστασθαι· τὸ γὰρ ὕδωρ οὐ μαλακόν· οὐ γὰρ ὑπέικει τῇ θλίψει τὸ ἐπίπεδον εἰς βάθος, ἀλλ’ ἀντιπερίσταται. ἀπλῶς μὲν οὖν σκληρὸν ἢ μαλακὸν τὸ ἀπλῶς τοιοῦτον, πρὸς ἕτερον δὲ τὸ πρὸς ἐκεῖνο τοιοῦτον. πρὸς μὲν οὖν ἄλληλα ἀόριστά ἐστὶν τῷ μᾶλλον καὶ ἥττον· ἐπεὶ δὲ πρὸς τὴν αἴσθησιν πάντα κρίνομεν τὰ αἰσθητά, δῆλον ὅτι καὶ τὸ σκληρὸν καὶ τὸ μαλακὸν ἀπλῶς πρὸς τὴν ἀφὴν ὠρίκαμεν, ὡς μεσότητι χρώμενοι τῇ ἀφῇ· διὸ τὸ μὲν ὑπερβάλλον αὐτὴν σκληρόν, τὸ δ’ ἐλλεῖπον μαλακὸν εἶναί φασιν.

ἀνάγκη δὲ σκληρὸν ἢ μαλακὸν εἶναι τὸ ὠρισμένον σῶμα οἰκείῳ ὄρω (ἢ γὰρ ὑπέικει ἢ μή)· ἔτι πεπηγὸς εἶναι (τούτῳ γὰρ ὀρίζεται)· ὥστ’ ἐπεὶ πᾶν μὲν τὸ ὠρισμένον καὶ συνεστὸς ἢ μαλακὸν ἢ σκληρόν, ταῦτα δὲ πῆξει ἐστίν, ἅπαντ’ ἂν εἴη τὰ σώματα τὰ σύνθετα καὶ ὠρισμένα οὐκ ἄνευ πῆξεως. πῆξεως οὖν πέρι ῥητέον. ἔστιν δὴ τὰ αἴτια τὰ παρὰ τὴν ὕλην δύο, τό τε ποιοῦν καὶ τὸ πάθος (τὸ μὲν οὖν ποιοῦν ὡς ὅθεν ἡ κίνησις, τὸ δὲ πάθος ὡς εἶδος)· ὥστε καὶ πῆξεως καὶ διαχύσεως, καὶ τοῦ ξηραίνεσθαι καὶ τοῦ ὑγραίνεσθαι. ποιεῖ δὲ τὸ ποιοῦν δυσὶ δυνάμεσι, καὶ πάσχει παθήμασιν δυσίν, ὥσπερ εἴρηται· ποιεῖ μὲν θερμῷ καὶ ψυχρῷ, τὸ δὲ πάθος ἢ ἀπουσίᾳ ἢ παρουσίᾳ θερμοῦ ἢ [382b] ψυχροῦ. ἐπεὶ δὲ τὸ πῆγνυσθαι ξηραίνεσθαι πῶς ἐστὶν, περὶ τούτου εἴπωμεν πρῶτον. τὸ δὴ πάσχον ἢ ὑγρὸν ἢ ξηρὸν ἢ ἐκ τούτων. τιθέμεθα δὲ ὑγροῦ σῶμα ὕδωρ, ξηροῦ δὲ γῆν· ταῦτα γὰρ τῶν ὑγρῶν καὶ τῶν ξηρῶν παθητικά. διὸ καὶ τὸ ψυχρὸν τῶν παθητικῶν μᾶλλον· ἐν τούτοις γὰρ ἐστὶν· καὶ γὰρ ἡ γῆ καὶ τὸ ὕδωρ ψυχρὰ ὑπόκειται. ποιητικὸν δὲ τὸ ψυχρὸν ὡς φθαρτικὸν ἢ ὡς κατὰ συμβεβηκός, καθάπερ εἴρηται πρότερον· ἐνίοτε γὰρ καὶ κάειν λέγεται καὶ θερμαίνειν τὸ ψυχρόν, οὐχ ὡς τὸ θερμόν, ἀλλὰ τῷ συνάγειν ἢ ἀντιπεριστάναι τὸ θερμόν. ξηραίνεται δὲ ὅσα ἐστὶν ὕδωρ καὶ ὕδατος εἶδη, ἢ ἔχει ὕδωρ εἴτ’ ἐπακτὸν εἴτε συμφυές (λέγω δὲ ἐπακτὸν μὲν οἶον ἐν ἐρίῳ, σύμφυτον δ’ οἶον ἐν γάλακτι). ὕδατος δ’ εἶδη τὰ τοιάδε, οἶνος, οὔρον, ὀρός, καὶ ὅλως ὅσα μηδεμίαν ἢ βραχεῖαν ἔχει ὑπόστασιν, μὴ διὰ γλισχρότητα· ἐνίοις γὰρ αἴτιον

τοῦ μὴ ὑφίστασθαι μηδὲν ἢ γλισχρότης, ὥσπερ ἐλαίῳ ἢ πίττῃ. ξηραίνεται δὲ πάντα ἢ θερμαινόμενα ἢ ψυχόμενα, ἀμφοτέρω δὲ θερμῷ, καὶ ὑπὸ τῆς ἐντὸς θερμότητος ἢ τῆς ἔξω· καὶ γὰρ τὰ τῇ ψύξει ξηραίνόμενα, ὥσπερ ἱμάτιον, ἐὰν ἢ κεχωρισμένον αὐτὸ καθ' αὐτὸ τὸ ὑγρὸν, ὑπὸ τοῦ ἐντὸς θερμοῦ συνεξατμίζοντος τὸ ὑγρὸν ξηραίνεται, ἂν ὀλίγον ἢ τὸ ὑγρὸν, ἐξιούσης τῆς θερμότητος ὑπὸ τοῦ περιεστῶτος ψυχροῦ. ξηραίνεται μὲν οὖν, ὥσπερ εἴρηται, ἅπαντα ἢ θερμαινόμενα ἢ ψυχόμενα, καὶ πάντα θερμῷ, ἢ τῷ ἐντὸς ἢ τῷ ἐκτὸς συνεξατμίζοντι τὸ ὑγρὸν (λέγω δ' ἐκτὸς μὲν ὥσπερ τὰ ἐψόμενα, ἐντὸς δὲ ὅταν ἀφαιρεθέντος ὑφ' ἧς ἔχει θερμότητος ἀναλωθῇ ἀποπνεοῦσης). περὶ μὲν οὖν τοῦ ξηραίνεσθαι εἴρηται.

τὸ δ' ὑγραίνεσθαι ἐστὶν ἐν μὲν τὸ ὕδωρ γίνεσθαι συνιστάμενον, ἐν δὲ τὸ τήκεσθαι τὸ πεπηγός. τούτων δὲ συνίσταται μὲν ψυχόμενον τὸ πνεῦμα· περὶ δὲ τήξεως ἅμα καὶ περὶ πήξεως ἔσται δῆλον. πήγνυται δὲ ὅσα πήγνυται ἢ ὕδατος ὄντα ἢ γῆς καὶ ὕδατος, καὶ ταῦτα ἢ θερμῷ ξηρῷ ἢ ψυχρῷ. διὸ καὶ λύεται τοῖς ἐναντίοις, ὅσα [383a] λύεται τῶν ὑπὸ θερμοῦ παγέντων ἢ ὑπὸ ψυχροῦ· τὰ μὲν γὰρ ὑπὸ ξηροῦ θερμοῦ παγέντα ὑπὸ ὕδατος λύεται, ὃ ἐστὶν ὑγρὸν ψυχρόν, τὰ δὲ ὑπὸ ψυχροῦ παγέντα ὑπὸ πυρὸς λύεται, ὃ ἐστὶν θερμόν. πήγνυσθαι δ' ἔνια δόξειεν ἂν ὑπὸ ὕδατος, ὡς τὸ μέλι τὸ ἐφθόν· πήγνυται δὲ οὐχ ὑπὸ τοῦ ὕδατος, ἀλλ' ὑπὸ τοῦ ἐν αὐτῷ ψυχροῦ. ὅσα μὲν οὖν ἐστὶν ὕδατος, οὐ πήγνυται ὑπὸ πυρός· λύεται γὰρ ὑπὸ πυρός, τὸ δὲ αὐτὸ τῷ αὐτῷ κατὰ ταῦτόν οὐκ ἔσται αἴτιον τοῦ ἐναντίου. ἔτι τῷ ἀπιέναι τὸ θερμόν πήγνυται, ὥστε δῆλον ὅτι τῷ εἰσιέναι λυθήσεται· ὥστε ποιοῦντος τοῦ ψυχροῦ πήγνυται. διὸ καὶ οὐ παχύνεται τὰ τοιαῦτα πηγνύμενα· ἢ γὰρ πάχυνσις ὑγροῦ μὲν ἀπιόντος γίγνεται, τοῦ ξηροῦ δὲ συνισταμένου· ὕδωρ δὲ τῶν ὑγρῶν οὐ παχύνεται μόνον. ὅσα δὲ κοινὰ γῆς καὶ ὕδατος, καὶ ὑπὸ πυρός πηγνυται καὶ ὑπὸ ψυχροῦ, παχύνεται δὲ ὑπ' ἀμφοῖν ἔστι μὲν ὡς τὸν αὐτὸν τρόπον, ἔστι δ' ὡς ἄλλως, ὑπὸ μὲν θερμοῦ τὸ ὑγρὸν ἐξάγοντος (ἐξατμίζοντος γὰρ τοῦ ὑγροῦ παχύνεται τὸ ξηρὸν καὶ συνίσταται), ὑπὸ δὲ ψυχροῦ τὸ θερμόν ἐκθλίβοντος, μεθ' οὗ τὸ ὑγρὸν συναπέρχεται συνεξατμίζον. ὅσα μὲν οὖν μαλακὰ ἀλλὰ μὴ ὑγρά, οὐ παχύνεται ἀλλὰ πηγνυται ἐξιόντος τοῦ ὑγροῦ, οἷον ὁ ὀπτώμενος κέραμος· ὅσα δὲ ὑγρά τῶν μεικτῶν, καὶ παχύνεται, οἷον γάλα. πολλὰ δὲ καὶ ὑγραίνεται πρῶτον, ὅσα ἢ παχέα ἢ σκληρὰ ὑπὸ ψυχροῦ προὑπῆρχεν ὄντα, ὥσπερ καὶ ὁ κέραμος τὸ πρῶτον ὀπτώμενος ἀτμίζει καὶ μαλακώτερος γίγνεται· διὸ καὶ διαστρέφεται ἐν ταῖς καμίνοις. ὅσα μὲν οὖν ὑπὸ ψυχροῦ πηγνυται τῶν κοινῶν γῆς καὶ ὕδατος, πλέον δὲ ἐχόντων γῆς, τὰ μὲν τῷ τὸ θερμόν ἐξεληλυθέναι πηγνύμενα, ταῦτα τήκεται θερμῷ εἰσιόντος πάλιν τοῦ θερμοῦ, οἷον ὁ πηλὸς ὅταν παγῇ· ὅσα δὲ διὰ ψύξιν, καὶ τοῦ θερμοῦ συνεξατμίσαντος ἅπαντος, ταῦτα δὲ ἅλута μὴ ὑπερβαλλούσῃ θερμότητι,

ἀλλὰ μαλάττεται, οἶον σίδηρος καὶ κέρας. τήκεται δὲ καὶ ὁ εἰργασμένος σίδηρος, ὥστε ὑγρὸς γίνεσθαι καὶ πάλιν πήγνυσθαι. καὶ τὰ στομώματα ποιοῦσιν οὕτως· ὑφίσταται γὰρ καὶ ἀποκαθαίρεται κάτω [383b] ἡ σκωρία· ὅταν δὲ πολλάκις πάθῃ καὶ καθαρὸς γένηται, τοῦτο στόμωμα γίγνεται. οὐ ποιοῦσι δὲ πολλάκις αὐτὸ διὰ τὸ ἀπουσίαν γίνεσθαι πολλὴν καὶ τὸν σταθμὸν ἐλάττω ἀποκαθαιρομένου. ἔστιν δ' ἀμείνων σίδηρος ὁ ἐλάττω ἔχων ἀποκάθαρσιν. τήκεται δὲ καὶ ὁ λίθος ὁ πυρίμαχος ὥστε στάζειν καὶ ῥεῖν· τὸ δὲ πηγνύμενον ὅταν ῥυῇ, πάλιν γίγνεται σκληρόν. καὶ αἱ μύλαι τήκονται ὥστε ῥεῖν· τὸ δὲ ῥέον πηγνύμενον τὸ μὲν χρῶμα μέλαν, ὅμοιον δὲ γίγνεται τῇ τιτάνῳ. τήκεται δὲ καὶ ὁ πηλὸς καὶ ἡ γῆ. ὅσα δ' ὑπὸ [383b.10] ξηροῦ θερμοῦ πήγνυται, τὰ μὲν ἄλυτα, τὰ δὲ λυτὰ ὑγρῶ. κέραμος μὲν οὖν καὶ λίθων ἐνίων γένη, ὅσοι ὑπὸ πυρὸς τῆς γῆς συγκαυθείσης γίνονται, οἶον οἱ μυλῖαι, ἄλυτα, νίτρον δὲ καὶ ἄλλες λυτὰ ὑγρῶ, οὐ παντὶ δὲ ἀλλὰ ψυχρῶ· διὸ ὕδατι καὶ ὅσα ὕδατος εἶδη τήκεται, ἐλαίῳ δ' οὐ τήκεται· τῷ γὰρ ξηρῷ θερμῷ ἐναντίον ψυχρὸν ὑγρόν. εἰ οὖν ἔπηξεν θάτερον, θάτερον λύσει· οὕτω γὰρ τάναντία ἔσται αἷτια τῶν ἐναντίων.

παχύνεται μὲν οὖν ὑπὸ πυρὸς μόνον, ὅσα ὕδατος πλέον ἔχει ἢ γῆς, πήγνυται δέ, ὅσα γῆς. διὸ καὶ τὸ νίτρον καὶ οἱ ἄλλες γῆς εἰσιν μᾶλλον, καὶ λίθος καὶ κέραμος. ἀπορώτατα δὲ ἔχει ἡ τοῦ ἐλαίου φύσις. εἰ μὲν γὰρ ὕδατος, ἔδει πήγνυσθαι ὑπὸ ψυχροῦ, εἰ δὲ γῆς πλέον, ὑπὸ πυρός· νῦν δὲ πήγνυται μὲν ὑπ' οὐδετέρου, παχύνεται δὲ ὑπ' ἀμφοῖν. αἷτιον δ' ἐστὶν ὅτι ἀέρος ἐστὶν πλήρης. διὸ καὶ ἐν τῷ ὕδατι ἐπιπολάζει· καὶ γὰρ ὁ ἀῆρ φέρεται ἄνω. τὸ μὲν οὖν ψυχρὸν ἐκ τοῦ ἐνόντος πνεύματος ὕδωρ ποιοῦν παχύνει· ἀεὶ γάρ, ὅταν μειχθῇ ὕδωρ καὶ ἔλαιον, ἀμφοῖν γίγνεται παχύτερον. ὑπὸ δὲ πυρός καὶ χρόνου παχύνεται καὶ λευκαίνεται, λευκαίνεται μὲν ἐξατμίζοντος εἴ τι ἐνῆν ὕδατος, παχύνεται δὲ διὰ τὸ μαραινομένου τοῦ θερμοῦ ἐκ τοῦ ἀέρος γίνεσθαι ὕδωρ. ἀμφοτέρως μὲν οὖν τὸ αὐτὸ γίγνεται πάθος, καὶ διὰ τὸ αὐτό, ἀλλ' οὐχ ὡσαύτως. παχύνεται μὲν οὖν ὑπ' ἀμφοτέρων, οὐ ξηραίνεται δ' ὑπ' οὐδετέρου· οὔτε γὰρ ὁ ἥλιος οὔτε τὸ ψῦχος ξηραίνει· οὐ μόνον διότι γλίσχρον, [384a] ἀλλὰ καὶ διότι ἀέρος ἐστίν. οὐ ξηραίνεται δὲ τὸ ὕδωρ οὐδ' ἔψεται ὑπὸ πυρός, ὅτι οὐκ ἀτμίζει διὰ γλίσχρότητα. ὅσα δὲ μεικτὰ ὕδατος καὶ γῆς, κατὰ τὸ πλῆθος ἐκατέρου ἄξιον λέγεσθαι· οἶνος γάρ τις καὶ πήγνυται καὶ ἔψεται, οἶον τὸ γλεῦκος. ἀπέρχεται δὲ ἀπὸ πάντων τῶν τοιούτων ξηραινομένων τὸ ὕδωρ. σημεῖον δ' ὅτι τὸ ὕδωρ· ἡ γὰρ ἀτμὶς συνίσταται εἰς ὕδωρ, ἐάν τις βούληται συλλέγειν· ὥστε ὅσοις λείπεται τι, τοῦτο γῆς. ἔνια δὲ τούτων καὶ ὑπὸ ψυχροῦ, ὥσπερ εἴρηται, παχύνεται καὶ ξηραίνεται· τὸ γὰρ ψυχρὸν οὐ μόνον πήγνυσιν, ἀλλὰ ξηραίνει μὲν ὕδωρ, παχύνει δὲ τὸν ἀέρα ὕδωρ ποιοῦν· ἡ δὲ πῆξις εἴρηται ξηρασία τις οὔσα. ὅσα μὲν οὖν μὴ παχύνεται ὑπὸ τοῦ

ψυχροῦ ἀλλὰ πήγνυται, ὕδατός ἐστι μᾶλλον, οἶον οἶνος καὶ οὔρον καὶ ὄξος καὶ κονία καὶ ὀρός· ὅσα δὲ παχύνεται μὴ ἐξατμίζοντα ὑπὸ πυρός, τὰ μὲν γῆς, τὰ δὲ κοινὰ ὕδατος καὶ ἀέρος, μέλι μὲν γῆς, ἔλαιον δ' ἀέρος. ἔστιν δὲ καὶ τὸ γάλα καὶ τὸ αἷμα ἀμφοῖν μὲν κοινὰ καὶ ὕδατος καὶ γῆς, μᾶλλον δὲ τὰ πολλὰ γῆς, ὥσπερ καὶ ἐξ ὅσων ὑγρῶν νίτρον γίνεταί καὶ ἄλλες (καὶ λίθοι δ' ἔκ τινων συνίστανται τοιούτων). διὸ ἐὰν μὴ χωρισθῇ ὁ ὀρός, ἐκκάζεται ὑπὸ τοῦ πυρός ἐψόμενος. τὸ δὲ γεῶδες συνίσταται καὶ ὑπὸ τοῦ ὀποῦ, ἐὰν πως ἔψη τις, οἶον οἱ ἰατροὶ ὀπίζοντες. οὕτω δὲ χωρίζεται ὁ ὀρός καὶ ὁ τυρός. ὁ δὲ χωρισθεὶς ὀρός οὐκέτι παχύνεται, ἀλλ' ἐκκάζεται ὥσπερ ὕδωρ. εἰ δέ τι μὴ ἔχει τυρὸν γάλα ἢ ὀλίγον, τοῦτο μᾶλλον ὕδατος καὶ ἄτροφον. καὶ τὸ αἷμα δὲ ὁμοίως· πήγνυται γὰρ τῷ ξηραίνεσθαι ψυχόμενον. ὅσα δὲ μὴ πήγνυται, οἶον τὸ τῆς ἐλάφου, τὰ τοιαῦτα ὕδατος μᾶλλον, καὶ ψυχρὰ ταῦτα. διὸ καὶ οὐκ ἔχει ἵνας· αἱ γὰρ ἵνές εἰσιν γῆς καὶ στερεόν· ὥστε καὶ ἐξαιρεθεισῶν οὐ πήγνυται· τοῦτο δ' ἐστὶν ὅτι οὐ ξηραίνεται· ὕδωρ γὰρ τὸ λοιπόν, ὡς τὸ γάλα τοῦ τυροῦ ἐξαιρεθέντος. σημεῖον δέ· τὰ νοσώδη γὰρ αἷματα οὐ θέλει πήγνυσθαι· ἰχωροειδῇ γάρ, τοῦτο δὲ φλέγμα καὶ ὕδωρ διὰ τὸ ἄπεπτον εἶναι καὶ ἀκράτητον ὑπὸ τῆς φύσεως. ἔτι δὲ τὰ μὲν λυτά ἐστίν, οἶον νίτρον, τὰ δὲ ἄλυτα, οἶον [384b] κέραμος, καὶ τούτων τὰ μὲν μαλακτά, οἶον κέρας, τὰ δὲ ἀμάλακτα, οἶον κέραμος καὶ λίθος. αἴτιον δ' ὅτι τάναντία τῶν ἐναντίων αἴτια, ὥστ' εἰ πήγνυται δυοῖν, ψυχρῷ καὶ ξηρῷ, λύεσθαι ἀνάγκη θερμῷ καὶ ὑγρῷ· διὸ πυρὶ καὶ ὕδατι (ταῦτα γὰρ ἐναντία), ὕδατι μὲν ὅσα πυρὶ μόνω, πυρὶ δὲ ὅσα ψυχρῷ μόνω· ὥστ' εἴ τι ὑπ' ἀμφοῖν συμβαίνει πήγνυσθαι, ταῦτα ἄλυτα μάλιστα. γίνεταί δὲ τοιαῦτα ὅσα θερμανθέντα ἔπειτα τῷ ψυχρῷ πήγνυται· συμβαίνει γάρ, ὅταν τὸ θερμὸν ἐξικμάσῃ ἐξιόν, τὸ πλεῖστον ὑγρὸν συνθλίβεσθαι πάλιν ὑπὸ τοῦ ψυχροῦ, ὥστε μὴδὲ ὑγρῷ διδόναι δίοδον. καὶ διὰ ταῦτα οὔτε τὸ θερμὸν λύει· ὅσα γὰρ ὑπὸ ψυχροῦ πήγνυται μόνου, ταῦτα λύει· οὔθ' ὑπὸ ὕδατος· ὅσα γὰρ ὑπὸ ψυχροῦ πήγνυται, οὐ λύει, ἀλλ' ὅσα ὑπὸ θερμοῦ ξηροῦ μόνον. ὁ δὲ σίδηρος τακεῖς ὑπὸ θερμοῦ ψυχθεὶς πήγνυται. τὰ δὲ ξύλα ἐστὶν γῆς καὶ ἀέρος· διὸ καυστὰ καὶ οὐ τηκτὰ οὐδὲ μαλακτά, καὶ ἐπὶ τῷ ὕδατι ἐπιπλεῖ, πλὴν ἐβένου· αὕτη δ' οὐ· τὰ μὲν γὰρ ἄλλα ἀέρος ἔχει πλεόν, ἐκ δὲ τῆς ἐβένου τῆς μελαίνης διαπέπνευκεν ὁ ἀήρ, καὶ ἔστι πλεόν ἐν αὐτῇ γῆς. κέραμος δὲ γῆς μόνον διὰ τὸ ξηραίνόμενος παγῆναι κατὰ μικρόν· οὔτε γὰρ τὸ ὕδωρ εἰσόδους ἔχει, δι' ὧν μόνον πνεῦμα ἐξῆλθεν, οὔτε πῦρ· ἔπηξε γὰρ αὐτό. τί μὲν οὖν ἐστὶ πῆξις καὶ τῆξις, καὶ διὰ πόσα καὶ ἐν πόσοις ἐστίν, εἴρηται.

ἐκ δὲ τούτων φανερόν ὅτι ὑπὸ θερμοῦ καὶ ψυχροῦ συνίσταται τὰ σώματα, ταῦτα δὲ παχύνοντα καὶ πηγνύντα ποιεῖται τὴν ἐργασίαν αὐτῶν. διὰ δὲ τὸ ὑπὸ τούτων δημιουργεῖσθαι ἐν ἅπασιν ἔνεστι θερμότης, τισὶ δὲ καὶ ψυχρότης

ἢ ἐκλείπει. ὥστ' ἐπεὶ ταῦτα μὲν ὑπάρχει διὰ τὸ ποιεῖν, ὑγρὸν δὲ καὶ ξηρὸν διὰ τὸ πάσχειν, μετέχει αὐτῶν τὰ κοινὰ πάντων. ἐκ μὲν οὖν ὕδατος καὶ γῆς τὰ ὁμοιομερῆ σώματα συνίσταται, καὶ ἐν φυτοῖς καὶ ἐν ζώοις, καὶ τὰ μεταλλευόμενα, οἷον χρυσὸς καὶ ἄργυρος καὶ ὅσα ἄλλα τοιαῦτα, ἐξ αὐτῶν τε καὶ ἐκ τῆς ἀναθυμιάσεως τῆς ἐκατέρου ἐγκατακλειομένης, ὥσπερ εἴρηται ἐν ἄλλοις. ταῦτα [385a] δὲ διαφέρει ἀλλήλων τοῖς τε πρὸς τὰς αἰσθήσεις ἰδίοις ἅπαντα, τῷ ποιεῖν τι δύνασθαι (λευκὸν γὰρ καὶ εὐῶδες καὶ ψοφητικὸν καὶ γλυκὺ καὶ θερμὸν καὶ ψυχρὸν τῷ ποιεῖν τι δύνασθαι τὴν αἴσθησίν ἐστι), καὶ ἄλλοις οἰκειοτέροις πάθεσιν, ὅσα τῷ πάσχειν λέγονται, λέγω δ' οἷον τὸ τηκτὸν καὶ πηκτὸν καὶ καμπτὸν καὶ ὅσα ἄλλα τοιαῦτα· πάντα γὰρ τὰ τοιαῦτα παθητικά, ὥσπερ τὸ ὑγρὸν καὶ τὸ ξηρὸν. τούτοις δ' ἤδη διαφέρει ὅστοῦν καὶ σὰρξ καὶ νεῦρον καὶ ξύλον καὶ φλοιὸς καὶ λίθος καὶ τῶν ἄλλων ἕκαστον τῶν ὁμοιομερῶν μὲν φυσικῶν δὲ σωμάτων. εἴπωμεν δὲ πρῶτον τὸν ἀριθμὸν αὐτῶν, ὅσα κατὰ δύναμιν καὶ ἀδυναμίαν λέγεται. ἔστιν δὲ τάδε, πηκτὸν ἄπηκτον, τηκτὸν ἄτηκτον, μαλακτὸν ἀμάλακτον, τεγκτὸν ἄτεγκτον, καμπτὸν ἄκαμπτον, κατακτὸν ἀκάτακτον, θραυστὸν ἄθραυστον, θλαστὸν ἄθλαστον, πλαστὸν ἄπλαστον, πεστὸν ἀπίεστον, ἐλκτὸν ἀνελκτον, ἐλατὸν ἀνήλατον, σχιστὸν ἄσχιστον, τμητὸν ἄτμητον, γλίσχρον ψαθυρόν, πιλητὸν ἀπίλητον, καυστὸν ἄκαυστον, θυμιατὸν ἀθυμίατον. τὰ μὲν οὖν πλεῖστα σχεδὸν τῶν σωμάτων τούτοις διαφέρει τοῖς πάθεσιν· τίνα δ' ἕκαστον τούτων ἔχει δύναμιν, εἴπωμεν. περὶ μὲν οὖν πηκτοῦ καὶ ἀπήκτου καὶ τηκτοῦ καὶ ἀτήκτου εἴρηται μὲν καθόλου πρότερον, ὅμως δ' ἐπανέλθωμεν καὶ νῦν. τῶν γὰρ σωμάτων ὅσα πηγνυται καὶ σκληρύνεται, τὰ μὲν ὑπὸ θερμοῦ πάσχει τοῦτο τὰ δ' ὑπὸ ψυχροῦ, ὑπὸ μὲν τοῦ θερμοῦ ξηραίνοντος τὸ ὑγρὸν, ὑπὸ δὲ τοῦ ψυχροῦ ἐκθλίβοντος τὸ θερμόν. ὥστε τὰ μὲν ὑγροῦ ἀπουσία τὰ δὲ θερμοῦ τοῦτο πάσχει, ὅσα μὲν ὕδατος, θερμοῦ, ὅσα δὲ γῆς, ὑγροῦ. τὰ μὲν [385a.28] οὖν ὑγροῦ ἀπουσία ὑπὸ ὑγροῦ διατήκεται, ἂν μὴ οὕτως συνέλθῃ ὥστε ἐλάττους τοὺς πόρους λειφθῆναι τῶν τοῦ ὕδατος ὄγκων, οἷον ὁ κέραμος· ὅσα δὲ μὴ οὕτω, πάντα ὑγρῷ τήκεται, οἷον νίτρον, ἄλες, γῆ ἢ ἐκ πηλοῦ· τὰ δὲ θερμοῦ στερήσῃ ὑπὸ θερμοῦ τήκεται, οἷον κρύσταλλος, μόλυβδος, χαλκός. ποῖα μὲν οὖν πηκτὰ καὶ τηκτὰ, εἴρηται, καὶ ποῖα [385b] ἄτηκτα. ἄπηκτα δὲ ὅσα μὴ ἔχει ὑγρότητα ὑδατώδη, μηδὲ ὑδατός ἐστιν, ἀλλὰ πλεον θερμοῦ καὶ γῆς, οἷον μέλι καὶ γλεῦκος (ὥσπερ ζέοντα γὰρ ἐστιν), καὶ ὅσα ὕδατος μὲν ἔχει, ἔστιν δὲ πλεον αἲρος, ὥσπερ τὸ ἔλαιον καὶ ὁ ἄργυρος ὁ χυτός, καὶ εἴ τι γλίσχρον, οἷον <πίττα καὶ> ἰξός.

μαλακτὰ δ' ἐστὶ τῶν πεπηγότων ὅσα μὴ ἐξ ὕδατος, οἷον κρύσταλλος ὕδατος, ἀλλ' ὅσα γῆς μᾶλλον, καὶ μήτ' ἐξίκμασται πᾶν τὸ ὑγρὸν ὥσπερ ἐν νίτρῳ ἢ ἀλσί, μήτ' ἔχει ἀνωμάλως ὥσπερ ὁ κέραμος, ἀλλ' ἢ ἐλκτὰ μὴ ὄντα διαντὰ, ἢ

ἐλατὰ μὴ ὄντα ὕδατος, καὶ μαλακτὰ πυρί, οἶον σίδηρος καὶ κέρας καὶ ξύλα. ἔστι δὲ καὶ τῶν τηκτῶν καὶ τῶν ἀτήκτων τὰ μὲν τεγκτὰ τὰ δὲ ἄτεγκτα, οἶον χαλκὸς ἄτεγκτον, τηκτὸν ὄν, ἔριον δὲ καὶ γῆ τεγκτόν· βρέχεται γάρ. καὶ χαλκὸς μὲν δὴ τηκτόν, οὐχ ὑπὸ ὕδατος δὲ τηκτόν. ἀλλὰ καὶ τῶν ὑπὸ ὕδατος τηκτῶν ἔνια ἄτεγκτα, οἶον νίτρον καὶ ἄλες· οὐδὲ γὰρ ἄλλο τεγκτὸν οὐδὲν ὃ μὴ μαλακώτερον γίγνεται βρεχόμενον. ἔνια δὲ τεγκτὰ ὄντα οὐ τηκτά ἐστίν, οἶον ἔριον καὶ οἱ καρποί. ἔστι δὲ τεγκτὰ μὲν ὅσα γῆς ὄντα ἔχει τοὺς πόρους μείζους τῶν τοῦ ὕδατος ὄγκων, ὄντων σκληροτέρων τοῦ ὕδατος. τηκτὰ δὲ ὕδατι ὅσα δι' ὅλου. διὰ τί δ' ἡ μὲν γῆ καὶ τήκεται καὶ τέγγεται ὑπὸ τοῦ ὑγροῦ, τὸ δὲ νίτρον τήκεται μὲν, τέγγεται δ' οὐ; ὅτι ἐν μὲν τῷ νίτρῳ δι' ὅλου οἱ πόροι, ὥστε διαιρεῖται εὐθύς ὑπὸ τοῦ ὕδατος τὰ μόρια, ἐν δὲ τῇ γῇ καὶ παραλλάξ εἰσι πόροι, ὥστε ὁποτέρως ἂν δέξηται, διαφέρει τὸ πάθος. ἔστι δὲ καὶ τὰ μὲν τῶν σωμάτων καμπτὰ καὶ εὐθυντά, οἶον κάλαμος καὶ λύγος, τὰ δ' ἄκαμπτα τῶν σωμάτων, οἶον κέραμος καὶ λίθος. ἔστιν δὲ ἄκαμπτα μὲν καὶ ἀνεύθυντα ὅσων σωμάτων οὐ δύναται τὸ μήκος εἰς εὐθύτητα ἐκ περιφερείας καὶ ἐξ εὐθύτητος εἰς περιφέρειαν μεταβάλλειν, καὶ τὸ κάμπτεσθαι καὶ τὸ εὐθύνεσθαι ἐστίν τὸ εἰς εὐθύτητα ἢ περιφέρειαν μεθίστασθαι ἢ κινεῖσθαι· καὶ γὰρ τὸ ἀνακαμπτόμενον καὶ τὸ [386a] κατακαμπτόμενον κάμπτεται. ἡ μὲν οὖν εἰς κυρτότητα ἢ κοιλότητα κίνησις τοῦ μήκους σωζομένου κάμψις ἐστίν· εἰ γὰρ καὶ εἰς τὸ εὐθύ, εἴη ἂν ἅμα κεκαμμένον καὶ εὐθύ· ὅπερ ἀδύνατον, τὸ εὐθύ κεκάμφθαι. καὶ εἰ κάμπτεται πᾶν ἢ ἀνακάμψει ἢ κατακάμψει, τούτων δὲ τὸ μὲν εἰς τὸ κυρτὸν τὸ δ' εἰς τὸ κοῖλον μετάβασις, οὐκ ἂν εἴη καὶ εἰς τὸ εὐθύ κάμψις, ἀλλ' ἔστι κάμψις καὶ εὐθυνσις ἄλλο καὶ ἄλλο. καὶ ταῦτά ἐστιν καμπτὰ καὶ εὐθυντά, καὶ ἄκαμπτα καὶ ἀνεύθυντα. καὶ τὰ μὲν κατακτὰ καὶ θραυστὰ ἅμα ἢ χωρίς, οἶον ξύλον μὲν κατακτόν, θραυστὸν δ' οὐ, κρύσταλλος δὲ καὶ λίθος θραυστόν, κατακτόν δ' οὐ, κέραμος δὲ καὶ θραυστὸν καὶ κατακτόν. διαφέρει δ', ὅτι κάταξις μὲν ἐστίν εἰς μεγάλα μέρη διαίρεσις καὶ χώρισις, θραῦσις δὲ εἰς τὰ τυχόντα καὶ πλείω δυοῖν. ὅσα μὲν οὖν οὕτω πέπηγεν ὥστε πολλοὺς ἔχειν παραλλάττοντας πόρους, θραυστά (μέχρι γὰρ τούτου διίσταται), ὅσα δ' εἰς πολὺ, κατακτά, ὅσα δ' ἄμφω, ἀμφοτέρα. καὶ τὰ μὲν θλαστὰ, οἶον χαλκὸς καὶ κηρός, τὰ δ' ἄθλαστα, οἶον κέραμος καὶ ὕδωρ. ἔστιν δὲ θλάσις ἐπιπέδου κατὰ μέρος εἰς βάθος μετάστασις ὥσει ἢ πληγῇ, τὸ δ' ὅλον ἀφῇ. ἔστιν δὲ τὰ τοιαῦτα καὶ μαλακτά, οἶον κηρὸς μένοντος τοῦ ἄλλου ἐπιπέδου κατὰ μέρος μεθίσταται, καὶ σκληρά, οἶον χαλκός, καὶ ἄθλαστα καὶ σκληρά, οἶον κέραμος (οὐ γὰρ ὑπεῖκει εἰς βάθος τὸ ἐπίπεδον), καὶ ὑγρά, οἶον ὕδωρ (τὸ γὰρ ὕδωρ ὑπεῖκει μὲν, ἀλλ' οὐ κατὰ μέρος, ἀλλ' ἀντιμεθίσταται). τῶν δὲ θλαστῶν ὅσα μὲν μένει θλασθέντα καὶ εὐθλαστα χειρί, ταῦτα μὲν πλαστὰ, τὰ δὲ ἢ μὴ εὐθλαστα, ὥσπερ λίθος ἢ ξύλον, ἢ

εὐθλαστα μέν, μὴ μένει δὲ ἡ θάλασις, ὥσπερ ἐρίου ἢ σπόγγου, οὐ πλαστά, ἀλλὰ πιεστὰ ταῦτ' ἐστίν. ἔστι δὲ πιεστὰ ὅσα ὠθούμενα εἰς αὐτὰ συνιέναι δύναται, εἰς βάθος τοῦ ἐπιπέδου παραλλάττοντος, οὐ διαιρουμένου, καὶ <μὴ> μεθισταμένου ἄλλου ἄλλω μορίου, οἷον τὸ ὕδωρ ποιεῖ· τοῦτο γὰρ ἀντιμεθίσταται. ἔστι δὲ ὥσις ἢ κίνησις ὑπὸ τοῦ κινουῦντος, ἢ [386b] γίγνεται ἀπὸ τῆς ἄψεως· πληγὴ δέ, ὅταν ἀπὸ τῆς φορᾶς. πιέζεται δὲ ὅσα πόρους ἔχει κενοὺς συγγενοῦς σώματος· καὶ πιεστὰ ταῦτα ὅσα δύναται εἰς τὰ ἑαυτῶν κενὰ συνιέναι ἢ εἰς τοὺς ἑαυτῶν πόρους. [ἐνίστε γὰρ οὐ κενοὶ εἰσιν εἰς οὓς συνέρχεται,] οἷον ὁ βεβρεγμένος σπόγγος (πλήρεις γὰρ αὐτοῦ οἱ πόροι), ἀλλ' ὧν ἂν οἱ πόροι πλήρεις ὥσι μαλακωτέρων ἢ αὐτὸ τὸ πεφυκὸς συνιέναι εἰς αὐτά. πιεστὰ μὲν οὖν ἐστίν οἷον σπόγγος, κηρός, σάρξ· ἀπίεστα δὲ τὰ μὴ πεφυκότα συνιέναι ὥσει εἰς τοὺς ἑαυτῶν πόρους διὰ τὸ ἢ μὴ ἔχειν ἢ σκληροτέρων ἔχειν πλήρεις· ὁ γὰρ σίδηρος ἀπίεστος καὶ λίθος καὶ ὕδωρ καὶ πᾶν ὑγρόν. ἐλκτὰ δ' ἐστὶν ὅσων δυνατὸν εἰς τὸ πλάγιον μεθίστασθαι τὸ ἐπίπεδον· τὸ γὰρ ἔλκεσθαι ἐστὶ τὸ ἐπὶ τὸ κινεῖν μεθίστασθαι τὸ ἐπίπεδον συνεχὲς ὄν. ἔστιν δὲ τὰ μὲν ἐλκτά, οἷον θρίξ, ἰμάς, νεῦρον, σταῖς, ἰξός, τὰ δ' ἄνελκτα, οἷον ὕδωρ καὶ λίθος. τὰ μὲν οὖν ταῦτά ἐστιν ἐλκτὰ καὶ πιεστὰ, οἷον ἔριον, τὰ δ' οὐ ταῦτά, οἷον φλέγμα πιεστὸν μὲν οὐκ ἔστιν, ἐλκτὸν δέ, καὶ ὁ σπόγγος πιεστὸν μὲν, οὐχ ἐλκτὸν δέ. ἔστιν δὲ καὶ τὰ μὲν ἐλατά, οἷον χαλκός, τὰ δ' ἀνήλατα, οἷον λίθος καὶ ξύλον. ἔστιν δ' ἐλατὰ μὲν ὅσα τῇ αὐτῇ πληγῇ δύναται ἅμα καὶ εἰς πλάτος καὶ εἰς βάθος τὸ ἐπίπεδον μεθίστασθαι κατὰ μέρος, ἀνήλατα δὲ ὅσα ἀδύνατα. ἔστιν δὲ τὰ μὲν ἐλατὰ ἅπαντα καὶ θλαστά, τὰ δὲ θλαστὰ οὐ πάντα ἐλατά, οἷον ξύλον· ὥς μέντοι ἐπίπαν εἶπεῖν, ἀντιστρέφει. τῶν δὲ πιεστῶν τὰ μὲν ἐλατὰ τὰ δ' οὐ, κηρὸς μὲν καὶ πηλὸς ἐλατά, ἔριον δ' οὐ [οὐδ' ὕδωρ]. ἔστιν δὲ καὶ τὰ μὲν σχιστά, οἷον ξύλον, τὰ δὲ ἄσχιστα, οἷον κέραμος. ἔστιν δὲ σχιστὸν τὸ δυνάμενον διαιρεῖσθαι ἐπὶ πλεον ἢ τὸ διαιροῦν διαιρεῖ· σχίζεται γάρ, ὅταν ἐπὶ πλεον διαιρῇται ἢ τὸ διαιροῦν διαιρεῖ, καὶ προηγεῖται ἢ διαίρεσις· ἐν δὲ τῇ τμήσει οὐκ ἔστιν τοῦτο. ἄσχιστα δὲ ὅσα μὴ δύναται τοῦτο πάσχειν. ἔστιν δὲ οὔτε μαλακὸν οὐδὲν σχιστόν (λέγω δὲ τῶν ἀπλῶς μαλακῶν καὶ μὴ πρὸς ἄλληλα· οὕτω μὲν γὰρ καὶ σίδηρος ἔσται μαλακός) οὔτε τὰ σκληρὰ πάντα, [387a] ἀλλ' ὅσα μήτε ὑγρά ἐστὶν μήτε θλαστὰ μήτε θραυστά· τοιαῦτα δ' ἐστὶν ὅσα κατὰ μῆκος ἔχει τοὺς πόρους, καθ' οὓς προσφύεται ἀλλήλοις, ἀλλὰ μὴ κατὰ πλάτος. τμητὰ δ' ἐστὶν τῶν συνεστώτων σκληρῶν ἢ μαλακῶν ὅσα δύναται μὴτ' ἐξ ἀνάγκης προηγεῖσθαι τῆς διαιρέσεως μήτε θραύεσθαι διαιρούμενα· ὅσα δὲ μὴ ὑγρά ἢ, τὰ τοιαῦτα ἄτμητα. ἔνια δ' ἐστὶν ταῦτά καὶ τμητὰ καὶ σχιστά, οἷον ξύλον· ἀλλ' ὥς ἐπὶ τὸ πολὺ σχιστόν μὲν κατὰ τὸ μῆκος, τμητὸν δὲ κατὰ τὸ πλάτος· ἐπεὶ γὰρ διαιρεῖται ἕκαστον εἰς πολλὰ, ἢ μὲν μήκη πολλὰ τὸ ἕν, σχιστόν ταύτη, ἢ δὲ πλάτη πολλὰ τὸ ἕν, τμητὸν ταύτη. γλίσχρον δ' ἐστὶν ὅταν ἐλκτὸν



ἢ ὑγρὸν ὃν ἢ μαλακόν. τοιοῦτον δὲ γίνεται τῇ ἐπαλλάξει ὅσα ὥσπερ αἱ ἀλύσεις σύγκεινται τῶν σωμάτων· [387a.14] ταῦτα γὰρ ἐπὶ πολὺ δύναται ἐκτείνεσθαι καὶ συνιέναι. ὅσα δὲ μὴ τοιαῦτα, ψαθυρά. πλῆτὰ δ' ὅσα τῶν πεστών μόνιμον ἔχει τὴν πίεσιν, ἀπίλητα δὲ ὅσα ἢ ὅλως ἀπίεστα ἢ μὴ μόνιμον ἔχει τὴν πίεσιν. καὶ τὰ μὲν καυστὰ ἐστὶν τὰ δὲ ἄκαυστα, οἷον ξύλον μὲν καυστὸν καὶ ἔριον καὶ ὀστοῦν, λίθος δὲ καὶ κρύσταλλος ἄκαυστον. ἐστὶν δὲ καυστὰ ὅσα ἔχει πόρους δεκτικούς πυρὸς καὶ ὑγρότητα ἐν τοῖς κατ' εὐθυωρίαν πόροις ἀσθενεστέραν πυρός. ὅσα δὲ μὴ ἔχει ἢ ἰσχυροτέραν, οἷον κρύσταλλος καὶ τὰ σφόδρα χλωρά, ἄκαυστα. θυμιατὰ δ' ἐστὶ τῶν σωμάτων ὅσα ὑγρότητα ἔχει μὲν, οὕτω δ' ἔχει ὥστε μὴ ἐξατμίζειν πυρουμένων χωρίς· ἐστὶν γὰρ ἀτμὶς ἢ ὑπὸ θερμοῦ καυστικοῦ εἰς ἀέρα καὶ πνεῦμα ἔκκρισις ἐξ ὑγροῦ διαντική. τὰ δὲ θυμιατὰ χρόνῳ εἰς ἀέρα ἐκκρίνεται, καὶ τὰ μὲν ἀφανιζόμενα ξηρά, τὰ δὲ γῇ γίνεται. διαφέρει δ' αὕτη ἢ ἔκκρισις, ὅτι οὐτε διαίνει οὐτε πνεῦμα γίνεται. ἐστὶν δὲ πνεῦμα ῥύσις συνεχῆς ἀέρος ἐπὶ μῆκος· θυμιάσις δ' ἐστὶν ἢ ὑπὸ θερμοῦ καυστικοῦ κοινὴ ἔκκρισις ξηροῦ καὶ ὑγροῦ ἀθρόως· διόπερ οὐ διαίνει, ἀλλὰ χρωματίζει μᾶλλον. ἔστι δ' ἢ μὲν ξυλώδους σώματος [387b] θυμιάσις καπνός. λέγω γὰρ καὶ ὅστ' αἰ καὶ τρίχας καὶ πᾶν τὸ τοιοῦτον ἐν ταύτῳ· οὐ γὰρ κεῖται ὄνομα κοινόν, ἀλλὰ κατ' ἀναλογίαν ὅμως ἐν ταύτῳ πάντ' ἐστίν, ὥσπερ καὶ Ἑμπεδοκλῆς φησιν “ταῦτ' αἰ τρίχες καὶ φύλλα καὶ οἰωνῶν πτερὰ πυκνὰ καὶ λοπίδες γίνονται ἐπὶ στιβαροῖσι μέλεσσι.” ἢ δὲ πίονος θυμιάσις λιγνύς, ἢ δὲ λιπαροῦ κνῖσα. διὰ τοῦτο τὸ ἔλαιον οὐχ ἔψεται οὐδὲ παχύνεται, ὅτι θυμιατόν ἐστιν ἀλλ' οὐκ ἀτμιστόν· ὕδωρ δ' οὐ θυμιατόν ἀλλ' ἀτμιστόν. οἶνος δ' ὁ μὲν γλυκὺς θυμιάται. πίων γάρ, καὶ ταῦτ' αἰ ποιεῖ τῷ ἐλαίῳ· οὐτε γὰρ ὑπὸ ψύχους πῆγνυται, καίεται τε. ἐστὶν δὲ ὀνόματι οἶνος, ἔργῳ δ' οὐκ ἔστιν· οὐ γὰρ οἰνώδης ὁ χυμός· διὸ οὐ μεθύσκει, ὁ τυχὼν δ' οἶνος (μικρὰν δ' ἔχει θυμιάσιν· διὸ ἀνίησιν φλόγα). καυστὰ δὲ δοκεῖ εἶναι ὅσα εἰς τέφραν διαλύεται τῶν σωμάτων. πάσχει δὲ τοῦτο πάντα ὅσα πέπηγεν ἢ ὑπὸ θερμοῦ ἢ ὑπ' ἀμφοῖν, ψυχροῦ καὶ θερμοῦ· ταῦτα γὰρ φαίνεται κρατούμενα ὑπὸ τοῦ πυρός· ἥκιστα δὲ τῶν λίθων ἢ σφραγίς, ὁ καλούμενος ἄνθραξ. τῶν δὲ καυστῶν τὰ μὲν φλογιστὰ ἐστὶν τὰ δ' ἀφλόγιστα· τούτων δ' ἓν ἄνθρακευτά. φλογιστὰ μὲν οὖν ὅσα φλόγα δύναται παρέχεσθαι· ὅσα δὲ ἀδύνατα, ἀφλόγιστα. ἔστι δὲ φλογιστὰ ὅσα μὴ ὑγρὰ ὄντα θυμιατὰ ἐστὶν· πίττα δὲ ἢ ἔλαιον ἢ κηρὸς μᾶλλον μετ' ἄλλων ἢ καθ' αὐτὰ φλογιστὰ· μάλιστα δ' ὅσα καπνὸν ἀνίησιν. ἄνθρακευτὰ δ' ὅσα τῶν τοιούτων γῆς πλεον ἔχει ἢ καπνοῦ. ἔτι δ' ἓν ἄνθρακευτὰ ὄντα οὐ φλογιστὰ ἐστὶν, οἷον χαλκός, καὶ φλογιστὰ οὐ τηκτά, οἷον ξύλον, τὰ δ' ἄμφω, οἷον λιβανωτός. αἴτιον δ' ὅτι τὰ μὲν ξύλα ἀθρόον ἔχει τὸ ὑγρὸν, καὶ δι' ὅλου συνεχές ἐστὶν, ὥστε διακάεσθαι, ὁ δὲ χαλκὸς παρ' ἑκάστον μὲν μέρος, οὐ συνεχές δέ, καὶ ἔλαττον ἢ ὥστε φλόγα

ποιῆσαι· ὁ δὲ λιβανωτὸς τῇ μὲν οὕτως τῇ δ' ἐκείνως ἔχει. φλογιστὰ δ' ἐστὶν τῶν θυμιατῶν ὅσα μὴ τηκτά ἐστὶν διὰ τὸ μᾶλλον εἶναι γῆς. (τὸ ξηρὸν γὰρ ἔχει κοινὸν τῷ [388a] πυρί· τοῦτ' οὖν θερμὸν ἂν γένηται τὸ ξηρὸν, πῦρ γίγνεται. διὰ τοῦτο ἢ φλὸξ πνεῦμα ἢ καπνὸς καόμενός ἐστιν.) ξύλων μὲν οὖν ἢ θυμίας καπνός, κηροῦ δὲ καὶ λιβανωτοῦ καὶ τῶν τοιούτων καὶ πίττης, καὶ ὅσα ἔχει πίτταν ἢ τοιαῦτα, λιγνύς, ἐλαίου δὲ καὶ ὅσα ἐλαιώδη, κνῖσα, καὶ ὅσα ἥκιστα καίεται μόνα, ὅτι ὀλίγον ξηροῦ ἔχει, ἢ δὲ μετάβασις διὰ τούτου, μετὰ δ' ἐτέρου τάχιστα· τοῦτο γὰρ ἐστὶν τὸ πῖον, ξηρὸν λιπαρόν. τὰ μὲν οὖν ἐκθυμιάμενα τῶν ὑγρῶν ὑγροῦ μᾶλλον, ὡς ἔλαιον καὶ πίττα, τὰ δὲ καόμενα ξηροῦ. τούτοις δὲ τοῖς παθήμασιν καὶ ταύταις ταῖς διαφοραῖς τὰ ὁμοιομερῆ τῶν σωμάτων, ὥσπερ εἴρηται, διαφέρει ἀλλήλων κατὰ τὴν ἀφήν, καὶ ἔτι χυμοῖς καὶ ὁσμαῖς καὶ χρώμασιν· λέγω δ' ὁμοιομερῆ οἶον τὰ τε μεταλλεύόμενα-χαλκόν, χρυσόν, ἄργυρον, καττίτερον, σίδηρον, λίθον, καὶ τᾶλλα τὰ τοιαῦτα, καὶ ὅσα ἐκ τούτων γίγνεται ἐκκρινόμενα-καὶ τὰ ἐν τοῖς ζώοις καὶ φυτοῖς, οἶον σάρκες, ὀστᾶ, νεῦρον, δέρμα, σπλάγχνον, τρίχες, ἴνες, φλέβες, ἐξ ὧν ἤδη συνέστηκε τὰ ἀνομοιομερῆ, οἶον πρόσωπον, χεῖρ, πούς, καὶ τᾶλλα τὰ τοιαῦτα, καὶ ἐν φυτοῖς ξύλον, φλοιός, φύλλον, ῥίζα, καὶ ὅσα τοιαῦτα. ἐπεὶ δὲ ταῦτα μὲν ὑπ' ἄλλης αἰτίας συνέστηκεν, ἐξ ὧν δὲ ταῦτα ὕλη μὲν τὸ ξηρὸν καὶ ὑγρόν, ὥστε ὕδωρ καὶ γῆ (ταῦτα γὰρ προφανεστάτην ἔχει τὴν δύναμιν ἐκάτερον ἐκατέρου), τὰ δὲ ποιοῦντα τὸ θερμὸν καὶ ψυχρόν (ταῦτα γὰρ συνίστησιν καὶ πηγνυσὶν ἐξ ἐκείνων), λάβωμεν τῶν ὁμοιομερῶν ποῖα γῆς εἶδη καὶ ποῖα ὕδατος καὶ ποῖα κοινά. ἔστι δὲ τῶν σωμάτων τῶν δεδημιουργημένων τὰ μὲν ὑγρά, τὰ δὲ μαλακά, τὰ δὲ σκληρά· τούτων δὲ ὅποσα σκληρὰ ἢ μαλακὰ πήξει ἐστίν, εἴρηται πρότερον. τῶν μὲν οὖν ὑγρῶν ὅσα μὲν ἐξατμίζεται, ὕδατος, ὅσα δὲ μή, ἢ γῆς ἢ κοινὰ γῆς καὶ ὕδατος, οἶον γάλα, ἢ γῆς καὶ ἀέρος, οἶον ξύλον, ἢ ὕδατος καὶ ἀέρος, οἶον ἔλαιον. καὶ ὅσα μὲν ὑπὸ θερμοῦ παχύνεται, κοινὰ (ἀπορήσειε δ' ἂν τις περὶ οἴνου τῶν ὑγρῶν· τοῦτο [388b] γὰρ καὶ ἐξατμισθεῖν ἂν, καὶ παχύνεται ὥσπερ ὁ νέος· αἴτιον δ' ὅτι οὔτε ἐν ἐνὶ εἶδει λέγεται ὁ οἶνος, καὶ ὅτι ἄλλος ἄλλως· ὁ γὰρ νέος μᾶλλον γῆς ἢ ὁ παλαιός· διὸ καὶ παχύνεται τῷ θερμῷ μάλιστα καὶ πηγνύται ἥττον ὑπὸ τοῦ ψυχροῦ· ἔχει γὰρ καὶ θερμὸν πολὺ καὶ γῆς, ὥσπερ ὁ ἐν Ἀρκαδίᾳ οὕτως ἀποξηραίνεται ὑπὲρ τοῦ καπνοῦ ἐν τοῖς ἀσκοῖς ὥστε ξυόμενος πίνεσθαι· εἰ δὲ ἅπας ἰλὺν ἔχει, οὕτως ἐκατέρου ἐστίν, ἢ γῆς ἢ ὕδατος, ὡς ταύτης ἔχει πλῆθος). ὅσα δὲ ὑπὸ ψυχροῦ παχύνεται, γῆς· ὅσα δ' ὑπ' ἀμφοῖν, κοινὰ πλειόνων, οἶον ἔλαιον καὶ μέλι καὶ ὁ γλυκύς οἶνος. τῶν δὲ συνεστώτων ὅσα μὲν πέπηγεν ὑπὸ ψυχροῦ, ὕδατος, οἶον κρύσταλλος, χιών, χάλαζα, πάχνη· ὅσα δ' ὑπὸ θερμοῦ, γῆς, οἶον κέραμος, τυρός, νίτρον, ἄλες· ὅσα δ' ὑπ' ἀμφοῖν (τοιαῦτα δ' ἐστὶν ὅσα ψύξει· ταῦτα δ' ἐστὶν ὅσα ἀμφοῖν στερήσει, καὶ θερμοῦ καὶ ὑγροῦ συνεξιόντος τῷ θερμῷ· οἱ μὲν γὰρ ἄλες

ὕγροῦ μόνου στερήσει πήγνυνται, καὶ ὅσα εἰλικρινῇ γῆς, ὁ δὲ κρύσταλλος θερμοῦ μόνου), ταῦτα δ' ἀμφοῖν. διὸ καὶ ὑπ' ἀμφοῖν καὶ εἶχεν ἄμφω. ὅσων μὲν οὖν ἅπαν ἐξικμάσθη, οἷον κέραμος ἢ ἥλεκτρον (καὶ γὰρ τὸ ἥλεκτρον, καὶ ὅσα λέγεται ὡς δάκρυα, ψύξει ἐστίν, οἷον σμύρνα, λιβανωτός, κόμμι· καὶ τὸ ἥλεκτρον δὲ τούτου τοῦ γένους ἔοικεν, καὶ πήγνυται· ἐμπεριειλημμένα γοῦν ζῶα ἐν αὐτῷ φαίνεται· ὑπὸ δὲ τοῦ ποταμοῦ τὸ θερμὸν ἐξιδὼν ὥσπερ τοῦ ἐπομένου μέλιτος, ὅταν εἰς ὕδωρ ἀφεθῇ, ἐξατμίζει τὸ ὑγρὸν), ταῦτα πάντα γῆς. καὶ τὰ μὲν ἄτηκτα καὶ ἀμάλακτα, οἷον τὸ ἥλεκτρον καὶ λίθοι ἔνιοι, ὥσπερ οἱ πῶροι οἱ ἐν τοῖς σπηλαίοις· καὶ γὰρ οὗτοι ὁμοίως γίνονται τούτοις, καὶ οὐχ ὡς ὑπὸ πυρὸς ἀλλ' ὡς ὑπὸ τοῦ ψυχροῦ διεξιόντος τοῦ θερμοῦ συνεξέρχεται τὸ ὑγρὸν ὑπὸ τοῦ ἐξ αὐτοῦ ἐξιόντος θερμοῦ· ἐν δὲ τοῖς ἑτέροις ὑπὸ τοῦ ἐξωθεν πυρός. ὅσα δὲ μὴ ὅλα, γῆς μὲν ἐστὶ μᾶλλον, μαλακτὰ δέ, οἷον σίδηρος καὶ κέρα. (λιβανωτοὶ δὲ καὶ τὰ τοιαῦτα παραπλησίως τοῖς ξύλοις ἀτμίζει.) ἐπεὶ οὖν τηκτά γε θετέον καὶ ὅσα τήκεται ὑπὸ πυρός, ταῦτ' ἐστὶν ὕδατωδέστερα, ἔνια [389a] δὲ καὶ κοινά, οἷον κηρός· ὅσα δὲ ὑπὸ ὕδατος, ταῦτα δὲ [389a.2] γῆς· ὅσα δὲ μὴδ' ὑφ' ἑτέρου, ταῦτα ἢ γῆς ἢ ἀμφοῖν. εἰ οὖν ἅπαντα μὲν ἢ ὑγρὰ ἢ πεπηγότα, τούτων δὲ τὰ ἐν τοῖς εἰρημένοις πάθεσιν, καὶ οὐκ ἔστιν μεταξύ, ἅπαντ' ἂν εἴη εἰρημένα οἷς διαγνωσόμεθα πότερον γῆς ἢ ὕδατος ἢ πλειόνων κοινόν, καὶ πότερον ὑπὸ πυρός συνέστηκεν ἢ ψυχροῦ ἢ ἀμφοῖν. χρυσὸς μὲν δὴ καὶ ἄργυρος καὶ χαλκὸς καὶ καττίτερος καὶ μόλυβδος καὶ ὕαλος καὶ λίθοι πολλοὶ ἀνώνυμοι ὕδατος· πάντα γὰρ τήκεται ταῦτα θερμῷ. ἔτι οἶνοι ἔνιοι καὶ οὔρον καὶ ὄξος καὶ κονία καὶ ὀρός καὶ ἰχώρ ὕδατος· πάντα γὰρ πήγνυται ψυχρῷ. σίδηρος δὲ καὶ κέρα καὶ ὄνυξ καὶ ὀστοῦν καὶ νεῦρον καὶ ξύλον καὶ τρίχες καὶ φύλλα καὶ φλοιὸς γῆς μᾶλλον· ἔτι ἥλεκτρον, σμύρνα, λίβανος, καὶ πάντα τὰ δάκρυα λεγόμενα, καὶ πῶρος, καὶ οἱ καρποί, οἷον τὰ χεδροπά, καὶ σῖτος (τὰ τοιαῦτα γὰρ τὰ μὲν σφόδρα, τὰ δὲ ἥττον μὲν τούτων, ὅμως δὲ γῆς· τὰ μὲν γὰρ μαλακτά, τὰ δὲ θυμιατὰ καὶ ψύξει γεγεννημένα)· ἔτι νίτρον, ἄλες, λίθων γένη, ὅσα μήτε ψύξει μήτε τηκτά. αἶμα δὲ καὶ γονὴ κοινὰ γῆς καὶ ὕδατος καὶ ἀέρος, τὸ μὲν ἔχον αἶμα ἵνας μᾶλλον γῆς (διὸ ψύχει πήγνυται καὶ ὑγρῷ τήκεται), τὰ δὲ μὴ ἔχοντα ἵνας ὕδατος (διὸ καὶ οὐ πήγνυται). γονὴ δὲ πήγνυται ψύξει ἐξιόντος τοῦ ὑγροῦ μετὰ τοῦ θερμοῦ.

ποῖα δὲ θερμὰ ἢ ψυχρὰ τῶν πεπηγόνων ἢ τῶν ὑγρῶν, ἐκ τῶν εἰρημένων δεῖ μεταδιώκειν. ὅσα μὲν οὖν ὕδατος, ὡς ἐπὶ τὸ πολὺ ψυχρά, ἐὰν μὴ ἄλλοτρίαν ἔχῃ θερμότητα, οἷον κονία, οὔρον, οἶνος· ὅσα δὲ γῆς, ὡς ἐπὶ τὸ πολὺ θερμὰ διὰ τὴν τοῦ θερμοῦ δημιουργίαν, οἷον τίτανος καὶ τέφρα. δεῖ δὲ λαβεῖν τὴν ὕλην ψυχρότητά τινα εἶναι· ἐπεὶ γὰρ τὸ ξηρὸν καὶ τὸ ὑγρὸν ὕλη (ταῦτα γὰρ παθητικά), τούτων δὲ σώματα μάλιστα γῆ καὶ ὕδωρ ἐστίν (ταῦτα γὰρ

ψυχρότητι ὥριστα), δῆλον ὅτι πάντα τὰ σώματα ὅσα ἐκατέρου ἀπλῶς [389b] τοῦ στοιχείου, ψυχρὰ μᾶλλον ἐστίν, ἐὰν μὴ ἔχη ἀλλοτρίαν θερμότητα, οἷον τὸ ζέον ὕδωρ ἢ τὸ διὰ τέφρας ἡθημένον· καὶ γὰρ τοῦτο ἔχει τὴν ἐκ τῆς τέφρας θερμότητα· ἐν ἅπασιν γὰρ ἐστὶ θερμότης, ἢ πλείων ἢ ἐλάττων, τοῖς πεπυρωμένοις· διὸ καὶ ἐν τοῖς σαπροῖς ζῶα ἐγγίγνεται· ἔνεστι γὰρ θερμότης ἢ φθείρασα τὴν ἐκάστου οἰκείαν θερμότητα. ὅσα δὲ κοινά, ἔχει θερμότητα· συνέστηκε γὰρ τὰ πλεῖστα ὑπὸ θερμότητος πεψάσης. ἔνια δὲ σήψεις εἰσίν, οἷον τὰ συντηκτά· ὥστε ἔχοντα μὲν τὴν φύσιν θερμὰ καὶ αἷμα καὶ γονὴ καὶ μυελὸς καὶ ὀπὸς καὶ πάντα τὰ τοιαῦτα, φθειρόμενα δὲ καὶ ἐξιστάμενα τῆς φύσεως οὐκέτι· λείπεται γὰρ ἢ ὕλη, γῆ οὐσα ἢ ὕδωρ· διὸ ἀμφοτέρω δοκεῖ τισιν, καὶ οἱ μὲν ψυχρὰ οἱ δὲ θερμὰ ταῦτά φασιν εἶναι, ὁρῶντες, ὅταν μὲν ἐν τῇ φύσει ᾖσιν, θερμὰ, ὅταν δὲ χωρισθῶσιν, πηγνύμενα. ἔχει μὲν οὖν οὕτως, ὅμως δέ, ὥσπερ διώριστα, ἐν οἷς μὲν ἢ ὕλη ὕδατος τὸ πλεῖστον, ψυχρὰ (ἀντίκειται γὰρ μάλιστα τοῦτο τῷ πυρί), ἐν οἷς δὲ γῆς ἢ ἀέρος, θερμότερα. συμβαίνει δέ ποτε ταῦτά γίνεσθαι ψυχρότατα καὶ θερμότατα ἀλλοτρίᾳ θερμότητι· ὅσα γὰρ μάλιστα πέπηγε καὶ στερεώτερα ἐστίν, ταῦτα ψυχρὰ τε μάλιστα, ἐὰν στερηθῇ θερμότητος, καὶ καί μάλιστα, ἐὰν πυρωθῇ, οἷον ὕδωρ καπνοῦ καὶ ὁ λίθος ὕδατος καί μᾶλλον.

❖ τὰς αἰτίας.

❖ ην.ετα

## Περὶ κόσμου (ψευδεπίγραφο) (391a) On the Universe



Πολλάκις μὲν ἔμοιγε θεῖόν τι καὶ δαιμόνιον ὄντως χρῆμα, ὧς Ἀλέξανδρε, ἡ φιλοσοφία ἔδοξεν εἶναι, μάλιστα δὲ ἐν οἷς μόνη διαραμένη πρὸς τὴν τῶν ὄντων θέαν ἐσπούδασε γνῶναι τὴν ἐν αὐτοῖς ἀλήθειαν, καὶ τῶν ἄλλων ταύτης ἀποστάντων διὰ τὸ ὕψος καὶ τὸ μέγεθος, αὕτη τὸ πρᾶγμα οὐκ ἔδεισεν οὐδ' αὐτὴν τῶν καλλίστων ἀπηξίωσεν, ἀλλὰ καὶ συγγενεστάτην ἑαυτῇ καὶ μάλιστα πρέπουσαν ἐνόμισεν εἶναι τὴν ἐκείνων μάθησιν. Ἐπειδὴ γὰρ οὐχ οἶόν τε ἦν τῷ σώματι εἰς τὸν οὐράνιον ἀφικέσθαι τόπον καὶ τὴν γῆν ἐκλιπόντα τὸν ἱερὸν ἐκεῖνον χῶρον κατοπτεῦσαι, καθάπερ οἱ ἀνόητοί ποτε ἐπενόουν Ἀλωάδαι, ἡ γοῦν ψυχὴ διὰ φιλοσοφίας, λαβοῦσα ἡγεμόνα τὸν νοῦν, ἐπεραιώθη καὶ ἐξεδήμησεν, ἀκοπιάτον τινα ὁδὸν εὐροῦσα, καὶ τὰ πλεῖστον ἀλλήλων ἀφεστῶτα τοῖς τόποις τῇ διανοίᾳ συνεφόρησε, ῥαδίως, οἶμαι, τὰ συγγενῇ γνωρίσασα, καὶ θείῳ ψυχῆς ὄμματι τὰ θεῖα καταλαβομένη, τοῖς τε ἀνθρώποις προφητεύουσα. Τοῦτο δὲ ἔπαθε, καθ' ὅσον οἶόν τε ἦν, πᾶσιν ἀφθόνως μεταδοῦναι βουληθεῖσα τῶν παρ' αὐτῇ τιμίων. Διὸ καὶ τοὺς μετὰ σπουδῆς διαγράψαντας ἡμῖν ἐνὸς τόπου φύσιν ἢ μιᾶς σχῆμα πόλεως ἢ ποταμοῦ μέγεθος ἢ ὅρους κάλλος, οἷά τινες ἤδη πεποιήκασι, φράζοντες οἱ μὲν τὴν Ὅσσαν, οἱ δὲ τὴν Νύσσαν, οἱ δὲ τὸ Κωρύκιον ἄντρον, οἱ δὲ ὀτιοῦν ἔτυχε τῶν ἐπὶ μέρους, οἰκτίσειεν ἂν τις τῆς μικροψυχίας, τὰ τυχόντα ἐκπεπληγμένους καὶ μέγα φρονοῦντας ἐπὶ θεωρίᾳ μικρᾷ. Τοῦτο δὲ πάσχουσι διὰ τὸ ἀθέατοι τῶν κρειττόνων εἶναι, κόσμου λέγω καὶ τῶν ἐν κόσμῳ μεγίστων· οὐδέποτε γὰρ ἂν τούτοις γνησίως ἐπιστήσαντες ἐθαύμαζόν τι τῶν ἄλλων, ἀλλὰ πάντα αὐτοῖς τὰ ἄλλα μικρὰ κατεφαίνετο ἂν καὶ οὐδενὸς ἄξια πρὸς τὴν τούτων ὑπεροχὴν. Λέγωμεν δὴ ἡμεῖς καί, καθ' ὅσον ἐφικτόν, θεολογῶμεν περὶ τούτων συμπάντων, ὥς ἕκαστον ἔχει φύσεως καὶ θέσεως καὶ κινήσεως. Πρέπειν δέ γε οἶμαι καὶ σοί, ὄντι ἡγεμόνων ἀρίστῳ, τὴν τῶν μεγίστων ἱστορίαν μετιέναι, φιλοσοφία τε μηδὲν μικρὸν ἐπινοεῖν, ἀλλὰ τοῖς τοιούτοις δώροις δεξιοῦσθαι τοὺς ἀρίστους.

Κόσμος μὲν οὖν ἐστὶ σύστημα ἐξ οὐρανοῦ καὶ γῆς καὶ τῶν ἐν τούτοις περιεχομένων φύσεων. Λέγεται δὲ καὶ ἑτέρως κόσμος ἢ τῶν ὅλων τάξις τε καὶ διακόσμησις, ὑπὸ θεοῦ τε καὶ διὰ θεὸν φυλαττομένη. Ταύτης δὲ τὸ μὲν μέσον, ἀκίνητόν τε καὶ ἐδραῖον ὄν, ἡ φερέσβιος εἵληχε γῆ, παντοδαπῶν ζώων ἐστία τε οὖσα καὶ μήτηρ. Τὸ δὲ ὑπερθεν αὐτῆς, πᾶν τε καὶ πάντῃ πεπερατωμένον

εἰς τὸ ἄνωτάτῳ, θεῶν οἰκητήριον, οὐρανὸς ὠνόμασται. Πλήρης δὲ ὧν σωμάτων θείων, ἃ δὴ καλεῖν ἄστρα εἰώθαμεν, κινούμενος κίνησιν αἰδίον, μιᾷ περιαγωγῇ καὶ κύκλῳ συναναγορεύει πᾶσι τούτοις ἀπαύστως δι' αἰῶνος. Τοῦ δὲ σύμπαντος οὐρανοῦ τε καὶ κόσμου σφαιροειδοῦς ὄντος καὶ κινουμένου, καθάπερ εἶπον, ἐνδελεχῶς, δύο ἐξ ἀνάγκης ἀκίνητά ἐστι σημεῖα, καταντικρὺ ἀλλήλων, καθάπερ τῆς ἐν τὸρνῳ κυκλοφορουμένης σφαίρας, στερεὰ μένοντα καὶ συνέχοντα τὴν σφαῖραν, περὶ ἃ ὁ πᾶς ὄγκος κύκλῳ στρέφεται· καλοῦνται δὲ οὗτοι πόλοι· δι' ὧν εἰ νοήσαιμεν ἐπεξευγμένην εὐθεΐαν, ἣν τινες ἄξονα καλοῦσι, διάμετρος ἔσται τοῦ κόσμου, μέσον μὲν ἔχουσα τὴν γῆν, τοὺς δὲ δύο πόλους πέρατα. Τῶν δὲ ἀκινήτων πόλων τούτων ὁ μὲν ἀεὶ φανερός ἐστιν ὑπὲρ κορυφὴν ὧν κατὰ τὸ βόρειον κλίμα, ἀρκτικὸς καλούμενος, ὁ δὲ ὑπὸ γῆν ἀεὶ κατακέκρυπται, κατὰ τὸ νότιον, ἀνταρκτικὸς καλούμενος. Οὐρανοῦ δὲ καὶ ἄστρον οὐσίαν μὲν αἰθέρα καλοῦμεν, οὐχ, ὥς τινες, διὰ τὸ πυρώδη οὔσαν αἰθεσθαι, πλημμελοῦντες περὶ τὴν πλεῖστον πυρὸς ἀπηλλαγμένην δύναμιν, ἀλλὰ διὰ τὸ ἀεὶ θεῖν κυκλοφορουμένην, στοιχεῖον οὔσαν ἕτερον τῶν τεττάρων, ἀκήρατόν τε καὶ θεῖον. Τῶν γε μὴν ἐμπεριεχομένων ἄστρον τὰ μὲν ἀπλανῶς τῷ σύμπαντι οὐρανῷ συμπεριστρέφεται, τὰς αὐτὰς ἔχοντα ἕδρας, ὧν μέσος ὁ ζωοφόρος καλούμενος κύκλος ἐγκάρσιος διὰ τῶν τροπικῶν διέζωσται, κατὰ μέρη διηρημένος εἰς δώδεκα ζωδίων χώρας, τὰ δέ, πλανητὰ ὄντα, οὔτε τοῖς προτέροις ὁμοταχῶς κινεῖσθαι πέφυκεν οὔτε ἀλλήλοις, ἀλλ' ἐν ἑτέροις καὶ ἑτέροις κύκλοις, ὥστε αὐτῶν τὸ μὲν προσγειότερον εἶναι, τὸ δὲ ἀνώτερον. Τὸ μὲν οὖν τῶν ἀπλανῶν πλῆθος ἀνεξεύρετόν ἐστιν ἀνθρώποις, καίπερ ἐπὶ μιᾷς κινουμένων ἐπιφανείας τῆς τοῦ σύμπαντος οὐρανοῦ· τὸ δὲ τῶν πλανήτων, εἰς ἑπτὰ μέρη κεφαλαιούμενον, ἐν τοσοῦτοις ἐστὶ κύκλοις ἐφεξῆς κειμένοις, ὥστε ἀεὶ τὸν ἀνωτέρω μείζω τοῦ ὑποκάτω εἶναι, τοὺς τε ἑπτὰ ἐν ἀλλήλοις ἐμπεριέχεσθαι, πάντας γε μὴν ὑπὸ τῆς τῶν ἀπλανῶν σφαίρας περιελθῆναι. Συνεχῇ δὲ ἔχει ἀεὶ τὴν θέσιν ταύτη ὁ τοῦ Φαίνοντος ἅμα καὶ Κρόνου καλούμενος κύκλος, ἐφεξῆς δὲ ὁ τοῦ Φαέθοντος καὶ Διὸς λεγόμενος, εἰθ' ὁ Πυρόεις, Ἡρακλέους τε καὶ Ἄρεος προσαγορευόμενος, ἐξῆς δὲ ὁ Στίλβων, ὃν ἱερὸν Ἑρμοῦ καλοῦσιν ἔνιοι, τινὲς δὲ Ἀπόλλωνος· μεθ' ὃν ὁ τοῦ Φωσφόρου, ὃν Ἀφροδίτης, οἱ δὲ Ἥρας προσαγορεύουσιν, εἴτα ὁ ἡλίου, καὶ τελευταῖος ὁ τῆς σελήνης, μέχρις ἧς ὀρίζεται ὁ αἰθήρ, τὰ τε θεῖα ἐμπεριέχων σώματα καὶ τὴν τῆς κινήσεως τάξιν. Μετὰ δὲ τὴν αἰθέριον καὶ θεϊαν φύσιν, ἥντινα τεταγμένην ἀποφαίνομεν, ἔτι δὲ ἄτρεπτον καὶ ἀνετεροίωτον καὶ ἀπαθῆ, συνεχὴς ἐστὶν ἡ δι' ὅλων παθητὴ τε καὶ τρεπτὴ, καί, τὸ σύμπαν εἰπεῖν, φθαρτὴ τε καὶ ἐπίκηρος. Ταύτης δὲ αὐτῆς πρώτη μὲν ἐστὶν ἡ λεπτομερὴς καὶ φλογώδης οὐσία, ὑπὸ τῆς αἰθερίου πυρουμένη διὰ τὸ μέγεθος αὐτῆς καὶ τὴν ὀξύτητα τῆς κινήσεως· ἐν δὲ τῇ πυρώδει καὶ ἀτάκτῳ λεγομένη τὰ τε σέλα δίαττει καὶ φλόγες ἀκοντίζονται καὶ

δοκίδες τε καὶ βόθυνοι καὶ κομῆται λεγόμενοι στηρίζονται καὶ σβέννυνται πολλάκις. Ἐξῆς δὲ ταύτης ὁ ἄηρ ὑποκέχυται, ζοφώδης ὢν καὶ παγετώδης τὴν φύσιν· ὑπὸ δὲ ἐκείνης λαμπόμενος ἅμα καὶ διακαιόμενος λαμπρὸς τε γίνεται καὶ ἄλσεινός. Ἐν δὲ τούτῳ, τῆς παθητῆς ὄντι καὶ αὐτῷ δυνάμεως καὶ παντοδαπῶς ἀλλοιουμένῳ, νέφη τε συνίσταται καὶ ὄμβροι καταράσσουσι, χιόνες τε καὶ πάχνη καὶ χάλαζαι πνοαί τε ἀνέμων καὶ τυφώνων, ἔτι τε βρονταὶ καὶ ἀστραπαὶ καὶ πτώσεις κεραυνῶν μυρίων τε γνόφων συμπληγάδες.

Ἐξῆς δὲ τῆς ἀερίου φύσεως γῆ καὶ θάλασσα ἐρήρυσται, φυτοῖς βρύουσα καὶ ζώοις πηγαῖς τε καὶ ποταμοῖς, τοῖς μὲν ἐν γῇ ἀναλισκομένοις, τοῖς δὲ ἀνερευγομένοις εἰς θάλασσαν. Πεποίκιλται δὲ καὶ χλόαις μυρίαίς ὄρεσι τε ὑψηλοῖς καὶ βαθυξύλοις δρυμοῖς καὶ πόλεσιν, ἃς τὸ σοφὸν ζῶον, ὁ ἄνθρωπος, ἰδρύσατο, νήσοις τε ἐναλίοις καὶ ἡπείροις. Τὴν μὲν οὖν οἰκουμένην ὁ πολλὸς λόγος εἷς τε νήσους καὶ ἡπείρους διεῖλεν, ἀγνοῶν ὅτι καὶ ἡ σύμπασα μία νῆσός ἐστιν, ὑπὸ τῆς Ἀτλαντικῆς καλουμένης θαλάσσης περιρρεομένη. Πολλὰς δὲ καὶ ἄλλας εἰκὸς τῆσδε ἀντιπόρθμους ἄπωθεν κεῖσθαι, τὰς μὲν μείζους αὐτῆς, τὰς δὲ ἐλάττους, ἡμῖν δὲ πάσας πλὴν τῆσδε ἀοράτους· ὅπερ γὰρ αἱ παρ' ἡμῖν νῆσοι πρὸς ταυτὶ τὰ πελάγη πεπόνθασιν, τοῦτο ἦδε ἡ οἰκουμένη πρὸς τὴν Ἀτλαντικὴν θάλασσαν πολλάι τε ἕτεραι πρὸς σύμπασαν τὴν θάλασσαν· καὶ γὰρ αὗται μεγάλαι τινές εἰσι νῆσοι μεγάλοις περικλυζόμεναι πελάγεσιν. Ἡ δὲ σύμπασα τοῦ ὑγροῦ φύσις ἐπιπολάζουσα, κατὰ τινὰς τῆς γῆς σπίλους τὰς καλουμένας ἀναπεφαγκυῖα οἰκουμένας, ἐξῆς ἂν εἴη τῆς ἀερίου μάλιστα φύσεως. Μετὰ δὲ ταύτην ἐν τοῖς βυθοῖς κατὰ τὸ μεσαίτατον τοῦ κόσμου συνερηρυσμένη γῆ πᾶσα καὶ πεπιεσμένη συνέστηκεν, ἀκίνητος καὶ ἀσάλευτος· καὶ τοῦτ' ἔστι τοῦ κόσμου τὸ πᾶν ὃ καλοῦμεν κάτω. Πέντε δὲ στοιχεῖα ταῦτα ἐν πέντε χώραις σφαιρικῶς ἐγκείμενα, περιεχομένης αἰὲ τῆς ἐλάττονος τῇ μείζονι - λέγω δὲ γῆς μὲν ἐν ὕδατι, ὕδατος δὲ ἐν ἀέρι, ἀέρος δὲ ἐν πυρί, πυρὸς δὲ ἐν αἰθέρι - τὸν ὅλον κόσμον συνεστήσατο, καὶ τὸ μὲν ἄνω πᾶν θεῶν ἀπέδειξεν οἰκητήριον, τὸ κάτω δὲ ἐφημέρων ζώων. Αὐτοῦ γε μὴν τούτου τὸ μὲν ὑγρὸν ἐστίν, ὃ καλεῖν ποταμοὺς καὶ νάματα καὶ θαλάσσας εἰθίσμεθα, τὸ δὲ ξηρὸν, ὃ γῆν τε καὶ ἡπείρους καὶ νήσους ὀνομάζομεν.

Τῶν δὲ νήσων αἱ μὲν εἰσι μεγάλαι, καθάπερ ἡ σύμπασα ἦδε οἰκουμένη λέλεκται πολλάι τε ἕτεραι μεγάλοις περιρρεόμεναι πελάγεσιν, αἱ δὲ ἐλάττους, φανεραὶ τε ἡμῖν καὶ ἐντὸς οὔσαι. Καὶ τούτων αἱ μὲν ἀξιόλογοι, Σικελία καὶ Σαρδῶ καὶ Κύρνος Κρήτη τε καὶ Εὐβοία καὶ Κύπρος καὶ Λέσβος, αἱ δὲ ὑποδεέστεραι, ὧν αἱ μὲν Σποράδες, αἱ δὲ Κυκλάδες, αἱ δὲ ἄλλως ὀνομάζονται.

Πέλαγος δὲ τὸ μὲν ἔξω τῆς οἰκουμένης Ἀτλαντικόν τε καὶ Ὠκεανὸς καλεῖται, περιρρέων ἡμᾶς. Ἐντὸς δὲ πρὸς δύοσι στενοπόρῳ διανεωγὼς στόματι, κατὰ τὰς Ἡρακλείους λεγομένας στήλας τὸν εἴσρουν εἰς τὴν ἔσω θάλασσαν ὡς ἂν εἰς λιμένα ποιεῖται, κατὰ μικρὸν δὲ ἐπιπλατυνόμενος ἀναχεῖται, μεγάλους περιλαμβάνων κόλπους ἀλλήλοις συναφεῖς, πῇ μὲν κατὰ στενοπόρους αὐχένας ἀνεστομωμένος, πῇ δὲ πάλιν πλατυνόμενος. Πρῶτον μὲν οὖν λέγεται ἐγκεκολπῶσθαι ἐν δεξιᾷ εἰσπλέοντι τὰς Ἡρακλείους στήλας, διχῶς, εἰς τὰς καλουμένας Σύρτεις, ὧν τὴν μὲν Μεγάλην, τὴν δὲ Μικρὰν, καλοῦσιν· ἐπὶ θάτερα δὲ οὐκέτι ὁμοίως ἀποκολλούμενος τρία ποιεῖ πελάγη, τό τε Σαρδόνιον καὶ τὸ Γαλατικὸν λεγόμενον καὶ Ἀδρίαν, ἐξῆς δὲ τούτων ἐγκάρσιον τὸ Σικελικόν, μετὰ δὲ τοῦτο τὸ Κρητικόν, συνεχὲς δὲ αὐτοῦ, τῇ μὲν τὸ Αἰγύπτιον τε καὶ Παμφύλιον καὶ Σύριον, τῇ δὲ τὸ Αἰγαῖόν τε καὶ Μυρτώον. Ἀντιπαρῆκει δὲ τοῖς εἰρημένοις πολυμερέστατος ὧν ὁ Πόντος, οὗ τὸ μὲν μυχαίτατον Μαιῶτις καλεῖται, τὸ δὲ ἔξω πρὸς τὸν Ἑλλήσποντον συνανεστόμωται τῇ καλουμένῃ Προποντίδι. Πρὸς γε μὴν ταῖς ἀνασχέσεσι τοῦ ἡλίου πάλιν εἰσρέων ὁ Ὠκεανός, τὸν Ἰνδικόν τε καὶ Περσικὸν διανοίξας κόλπον, ἀναφαίνει συνεχῇ τὴν Ἐρυθρὰν θάλασσαν διειληφώς. Ἐπὶ θάτερον δὲ κέρας κατὰ στενόν τε καὶ ἐπιμήκη διήκων αὐχένα, πάλιν ἀνευρύνεται, τὴν Ὑρκανίαν τε καὶ Κασπίαν ὀρίζων· τὸ δὲ ὑπὲρ ταύτην βαθὺν ἔχει τὸν ὑπὲρ τὴν Μαιῶτιν λίμνην τόπον. Εἴτα κατ' ὀλίγον ὑπὲρ τοὺς Σκύθας τε καὶ Κελτικὴν σφίγγει τὴν οἰκουμένην πρὸς τε τὸν Γαλατικὸν κόλπον καὶ τὰς προειρημένας Ἡρακλείους στήλας, ὧν ἔξω περιρρέει τὴν γῆν ὁ Ὠκεανός. Ἐν τούτῳ γε μὴν νῆσοι μέγισται τυγχάνουσιν οὔσαι δύο, Βρεττανικαὶ λεγόμεναι, Ἀλβίων καὶ Ἰέρνη, τῶν προϊστορημένων μείζους, ὑπὲρ τοὺς Κελτοὺς κείμεναι. Τούτων δὲ οὐκ ἐλάττους ἢ τε Ταπροβάνη πέραν Ἰνδῶν, λοξῇ πρὸς τὴν οἰκουμένην, καὶ ἡ ἸΦεβὸλ καλουμένη, κατὰ τὸν Ἀραβικὸν κειμένη κόλπον. Οὐκ ὀλίγαι δὲ ἄλλαι μικραὶ περὶ τὰς Βρεττανικὰς καὶ τὴν Ἰβηρίαν κύκλῳ περιεστεφάνωνται τὴν οἰκουμένην ταύτην, ἣν δὴ νῆσον εἰρήκαμεν· ἥς πλάτος μὲν ἐστὶ κατὰ τὸ βαθύτατον τῆς ἡπείρου βραχὺ ἀποδέον τετρακισμυρίων σταδίων, ὡς φασιν οἱ εὖ γεωγραφήσαντες, μῆκος δὲ περὶ ἑπτακισμυρίους μάλιστα. Διαιρεῖται δὲ εἰς τε Εὐρώπην καὶ Ἀσίαν καὶ Λιβύην.

Εὐρώπη μὲν οὖν ἐστὶν ἥς ὄροι κύκλῳ στῆλαί τε Ἡρακλέους καὶ μυχοὶ Πόντου θάλαττά τε Ὑρκανία, καθ' ἣν στενότατος ἰσθμὸς εἰς τὸν Πόντον διήκει· τινὲς δὲ ἀντὶ τοῦ ἰσθμοῦ Τανάϊν ποταμὸν εἰρήκασιν. Ἀσία δὲ ἐστὶ τὸ ἀπὸ τοῦ εἰρημένου ἰσθμοῦ τοῦ τε Πόντου καὶ τῆς Ὑρκανίας θαλάσσης μέχρι θατέρου ἰσθμοῦ, ὃς μεταξὺ κεῖται τοῦ τε Ἀραβικοῦ κόλπου καὶ τῆς ἔσω θαλάσσης, περιεχόμενος ὑπὸ τε ταύτης καὶ τοῦ πέριξ Ὠκεανοῦ· τινὲς δὲ ἀπὸ Τανάϊδος μέχρι Νείλου στομάτων τὸν τῆς Ἀσίας τίθενται ὄρον. Λιβύη δὲ τὸ



ἀπὸ τοῦ Ἀραβικοῦ ἰσθοῦ ἕως Ἡρακλέους στηλῶν. Οἱ δὲ ἀπὸ τοῦ Νείλου φασὶν ἕως ἐκείνων. Τὴν δὲ Αἴγυπτον, ὑπὸ τῶν τοῦ Νείλου στομάτων περιρρεομένην, οἱ μὲν τῇ Ἀσίᾳ, οἱ δὲ τῇ Λιβύῃ προσάπτουσι, καὶ τὰς νήσους οἱ μὲν ἐξαιρέτους ποιοῦσιν, οἱ δὲ προσνέμουσι ταῖς γείτοσιν ἀεὶ μοίραις. Γῆς μὲν δὴ καὶ θαλάττης φύσιν καὶ θέσιν, ἥντινα καλεῖν εἰώθαμεν οἰκουμένην, τοιάνδε τινὰ ἱστορήκαμεν.

Περὶ δὲ τῶν ἀξιολογωτάτων ἐν αὐτῇ καὶ περὶ αὐτὴν παθῶν νῦν λέγωμεν, αὐτὰ τὰ ἀναγκαῖα κεφαλαιούμενοι. Δύο γὰρ δὴ τινες ἀπ' αὐτῆς ἀναθυμιάσεις ἀναφέρονται συνεχῶς εἰς τὸν ὑπὲρ ἡμᾶς ἀέρα, λεπτομερεῖς καὶ ἀόρατοι παντάπασιν, εἰ [τι] μὴ κατὰ τὰς ἐώας ἔστιν ὅτε ἀπὸ ποταμῶν τε καὶ ναμάτων ἀναφερόμεναι θεωροῦνται. Τούτων δὲ ἡ μὲν ἐστὶ ξηρὰ καὶ καπνώδης, ἀπὸ τῆς γῆς ἀπορρέουσα, ἡ δὲ νοτερὰ καὶ ἀτμώδης, ἀπὸ τῆς ὑγρᾶς ἀναθυμιωμένη φύσεως. Γίνονται δὲ ἀπὸ μὲν ταύτης ὁμίχλαι καὶ δρόσοι καὶ πάγων ἰδέαι νέφη τε καὶ ὄμβροι καὶ χιόνες καὶ χάλαζαι, ἀπὸ δὲ τῆς ξηρᾶς ἄνεμοί τε καὶ πνευμάτων διαφοραὶ βρονταὶ τε καὶ ἀστραπαὶ καὶ πρηστῆρες καὶ κεραυνοὶ καὶ τὰ ἄλλα ἃ δὴ τούτοις ἐστὶ σύμφυλα. Ἔστι δὲ ὁμίχλη μὲν ἀτμώδης ἀναθυμιάσις ἄγονος ὕδατος, ἀέρος μὲν παχυτέρα, νέφους δὲ ἀραιότερα· γίνεται δὲ ἥτοι ἐξ ἀρχῆς νέφους ἢ ἐξ ὑπολείμματος. Ἀντίπαλος δὲ αὐτῇ λέγεται τε καὶ ἔστιν αἰθρία, οὐδὲν ἄλλο οὕσα πλὴν ἀῆρ ἀνέφελος καὶ ἀνόμιχλος. Δρόσος δὲ ἐστὶν ὑγρὸν ἐξ αἰθρίας κατὰ σύστασιν λεπτὴν φερόμενον, κρύσταλλος δὲ ἀθρόον ὕδωρ ἐξ αἰθρίας πεπηγός, πάχνη δὲ δρόσος πεπηγυῖα, δροσοπάχνη δὲ ἡμιπαγῆς δρόσος. Νέφος δὲ ἐστὶ πάχος ἀτμῶδες συνεστραμμένον, γόνιμον ὕδατος· ὄμβρος δὲ γίνεται μὲν κατ' ἐκπνευσμὸν νέφους εὐ μάλα πεπαχυσμένου, διαφορὰς δὲ ἴσχει τοσάσδε ὅσας καὶ ἡ τοῦ νέφους θλίψις· ἡπία μὲν γὰρ οὕσα μαλακὰς ψεκάδας διασπείρει, σφοδρὰ δὲ ἀδροτέρας· καὶ τοῦτο καλοῦμεν ὑετὸν, ὄμβρου μείζω καὶ συνεχῇ συστρέμματα ἐπὶ γῆς φερόμενον. Χιὼν δὲ γίνεται κατὰ νεφῶν πεπυκνωμένων ἀπόθραυσιν πρὸ τῆς εἰς ὕδωρ μεταβολῆς ἀνακοπέντων· ἐργάζεται δὲ ἡ μὲν κοπὴ τὸ ἀφρῶδες καὶ ἔκλευκον, ἡ δὲ σύμπηξις τοῦ ἐνόντος ὑγροῦ τὴν ψυχρότητα οὕτω χυθέντος οὐδὲ ἡραιωμένου. Σφοδρὰ δὲ αὕτη καὶ ἀθρόα καταφερομένη νιφετὸς ὠνόμασται. Χάλαζα δὲ γίνεται νιφετοῦ συστραφέντος καὶ βρῖθος ἐκ πλήματος εἰς καταφορὰν ταχυτέραν λαβόντος· παρὰ δὲ τὰ μεγέθη τῶν ἀπορρηγνυμένων θραυσμάτων οἱ τε ὄγκοι μείζους αἱ τε φοραὶ γίνονται βιαιότεραι. Ταῦτα μὲν οὖν ἐκ τῆς ὑγρᾶς ἀναθυμιάσεως πέφυκε συμπίπτειν.

Ἐκ δὲ τῆς ξηρᾶς ὑπὸ ψύχους μὲν ὠσθείσης ὥστε ῥεῖν ἄνεμος ἐγένετο· οὐδὲν γὰρ ἐστὶν οὗτος πλὴν ἀῆρ πολὺς ῥέων καὶ ἀθρόος· ὅστις ἅμα καὶ

πνεῦμα λέγεται. Λέγεται δὲ καὶ ἑτέρως πνεῦμα ἢ τε ἐν φυτοῖς καὶ ζώοις καὶ διὰ πάντων διήκουσα ἔμψυχός τε καὶ γόνιμος οὐσία, περὶ ἧς νῦν λέγειν οὐκ ἀναγκαῖον. Τὰ δὲ ἐν ἁέρι πνέοντα πνεύματα καλοῦμεν ἀνέμους, αὐρας δὲ τὰς ἐξ ὑγροῦ φερομένας ἐκπνοάς. Τῶν δὲ ἀνέμων οἱ μὲν ἐκ νενοτισμένης γῆς πνέοντες ἀπόγειοι λέγονται, οἱ δὲ ἐκ κόλπων διεξάττοντες ἐγκολπίαι· τούτοις δὲ ἀνάλογόν τι ἔχουσιν οἱ ἐκ ποταμῶν καὶ λιμνῶν. Οἱ δὲ κατὰ ῥῆξιν νέφους γινόμενοι καὶ ἀνάλυσιν τοῦ πάχους εἰς ἑαυτοὺς ποιούμενοι ἐκνεφίαί καλοῦνται· μεθ' ὕδατος δὲ ἁθρόον ῥαγέντες ἐξυδρίαί λέγονται. Καὶ οἱ μὲν ἀπὸ ἀνατολῆς συνεχεῖς εὗροι κέκληνται, βορέαι δὲ οἱ ἀπὸ ἄρκτου, ζέφυροι δὲ οἱ ἀπὸ δύσεως, νότοι δὲ οἱ ἀπὸ μεσημβρίας. Τῶν γε μὴν εὗρων καικίας μὲν λέγεται ὁ ἀπὸ τοῦ περὶ τὰς θερινὰς ἀνατολὰς τόπου πνέων ἄνεμος, ἀπηλιώτης δὲ ὁ ἀπὸ τοῦ περὶ τὰς ἰσημερινάς, εὗρος δὲ ὁ ἀπὸ τοῦ περὶ τὰς χειμερινάς. Καὶ τῶν ἐναντίων ζεφύρων ἀργέστης μὲν ὁ ἀπὸ τῆς θερινῆς δύσεως, ὃν τινες καλοῦσιν ὀλυμπίαν, οἱ δὲ ἰάπυγα· ζέφυρος δὲ ὁ ἀπὸ τῆς ἰσημερινῆς, λῖψ δὲ ὁ ἀπὸ τῆς χειμερινῆς. Καὶ τῶν βορεῶν ἰδίως ὁ μὲν ἐξῆς τῷ καικίᾳ καλεῖται βορέας, ἀπαρκτίας δὲ ὁ ἐφεξῆς ἀπὸ τοῦ πόλου κατὰ τὸ μεσημβρινὸν πνέων, θρασκίας δὲ ὁ ἐξῆς πνέων τῷ ἀργέστῃ, ὃν ἔνιοι κερκίαν καλοῦσιν. Καὶ τῶν νότων ὁ μὲν ἀπὸ τοῦ ἀφανοῦς πόλου φερόμενος ἀντίπαλος τῷ ἀπαρκτίᾳ καλεῖται νότος, εὐρόνοτος δὲ ὁ μεταξὺ νότου καὶ εὗρου· τὸν δὲ ἐπὶ θάτερα μεταξὺ λιβὸς καὶ νότου οἱ μὲν λιβόνοτον, οἱ δὲ λιβοφοίνικα, καλοῦσιν. Τῶν δὲ ἀνέμων οἱ μὲν εἰσιν εὐθύπνοοι, ὅποσοι διεκπνέουσι πρόσω κατ' εὐθεΐαν, οἱ δὲ ἀνακαμψίπνοοι, καθάπερ ὁ καικίας λεγόμενος, καὶ οἱ μὲν χειμῶνος, ὥσπερ οἱ νότοι, δυναστεύοντες, οἱ δὲ θέρους, ὡς οἱ ἐτησία λεγόμενοι, μῖξιν ἔχοντες τῶν τε ἀπὸ τῆς ἄρκτου φερομένων καὶ ζεφύρων· οἱ δὲ ὀρνιθίαί καλούμενοι, ἑαρινοὶ τινες ὄντες ἄνεμοι, βορέαι εἰσὶ τῷ γένει. Τῶν γε μὴν βιαίων πνευμάτων καταιγὶς μὲν ἐστὶ πνεῦμα ἄνωθεν τύπτον ἐξαίφνης, θύελλα δὲ πνεῦμα βίαιον καὶ ἄφνω προσαλλόμενον, λαῖλαψ δὲ καὶ στρόβιλος πνεῦμα εἰλούμενον κάτωθεν ἄνω, ἀναφύσημα δὲ γῆς πνεῦμα ἄνω φερόμενον κατὰ τὴν ἐκ βυθοῦ τινος ἢ ῥήγματος ἀνάδοσιν· ὅταν δὲ εἰλούμενον πολὺ φέρηται, πρηστὴρ χθονίός ἐστιν. Εἰληθὲν δὲ πνεῦμα ἐν νέφει παχεῖ τε καὶ νοτερῷ, καὶ ἐξωσθὲν δι' αὐτοῦ, βιαίως ῥηγνύον τὰ συνεχῆ πηλήματα τοῦ νέφους, βρόμον καὶ πάταγον μέγαν ἀπειργάσατο, <ὅς> βροντὴ λέγεται, ὥσπερ ἐν ὕδατι πνεῦμα σφοδρῶς ἐλαυνόμενον. Κατὰ δὲ τὴν τοῦ νέφους ἔκρηξιν πυρωθὲν τὸ πνεῦμα καὶ λάμψαν ἀστραπὴ λέγεται· ὃ δὲ πρότερον τῆς βροντῆς προσέπεσεν, ὕστερον γενόμενον, ἐπεὶ τὸ ἀκουστὸν ὑπὸ τοῦ ὄρατοῦ πέφυκε φθάνεσθαι, τοῦ μὲν καὶ πόρρωθεν ὀρωμένου, τοῦ δὲ ἐπειδὴν ἐμπελάσῃ τῇ ἀκοῇ, καὶ μάλιστα ὅταν τὸ μὲν τάχιστον ἢ τῶν ὄντων, λέγω δὲ τὸ πυρῶδες, τὸ δὲ ἥττον ταχύ, ἀερῶδες ὅν, ἐν τῇ πλήξει πρὸς ἀκοὴν ἀφικνούμενον. Τὸ δὲ ἀστράψαν ἀναπυρωθὲν, βιαίως ἄχρι τῆς γῆς διεκθέον,

κεραυνὸς καλεῖται, ἐὰν δὲ ἡμίπυρον ᾦ, σφοδρὸν δὲ ἄλλως καὶ ἄθρόον, πρηστήρ, ἐὰν δὲ ἄπυρον παντελῶς, τυφών· ἕκαστον δὲ τούτων κατασκήψαν εἰς τὴν γῆν σκηπτὸς ὀνομάζεται. Τῶν δὲ κεραυνῶν οἱ μὲν αἰθαλώδεις ψολόεντες λέγονται, οἱ δὲ ταχέως διάττοντες ἀργῆτες, ἐλικίαί δὲ οἱ γραμμοειδῶς φερόμενοι, σκηπτοὶ δὲ ὅσοι κατασκήπτουσιν εἰς τὴν γῆν. Συλλήβδην δὲ τῶν ἐν ἀέρι φαντασμάτων τὰ μὲν ἐστὶ κατ' ἔμφασιν, τὰ δὲ καθ' ὑπόστασιν - κατ' ἔμφασιν μὲν ἱριδες καὶ ῥάβδοι καὶ τὰ τοιαῦτα, καθ' ὑπόστασιν δὲ σέλα τε καὶ διάττοντες καὶ κομῆται καὶ τὰ τούτοις παραπλήσια. Ἴρις μὲν οὖν ἐστὶν ἔμφασις ἡλίου τμήματος ἢ σελήνης, ἐν νέφει νοτερῶ καὶ κοίλῳ καὶ συνεχεῖ πρὸς φαντασίαν, ὡς ἐν κατόπτρῳ, θεωρουμένη κατὰ κύκλου περιφέρειαν. Ῥάβδος δὲ ἐστὶν ἱριδος ἔμφασις εὐθεΐα. Ἄλως δὲ ἐστὶν ἔμφασις λαμπρότητος ἄστρου περίαιγος· διαφέρει δὲ ἱριδος ὅτι ἡ μὲν ἱρις ἐξ ἐναντίας φαίνεται ἡλίου καὶ σελήνης, ἡ δὲ ἄλως κύκλῳ παντὸς ἄστρου. Σέλας δὲ ἐστὶ πυρὸς ἀθρόου ἕξαψις ἐν ἀέρι. Τῶν δὲ σελάων ἃ μὲν ἀκοντίζεται, ἃ δὲ στηρίζεται. Ὁ μὲν οὖν ἐξακοντισμὸς ἐστὶ πυρὸς γένεσις ἐκ παρατρίψεως ἐν ἀέρι φερομένου ταχέως καὶ φαντασίαν μήκους ἐμφαίνοντος διὰ τὸ τάχος, ὃ δὲ στηριγμὸς ἐστὶ χωρὶς φορᾶς προμήκης ἔκτασις καὶ οἶον ἄστρου ῥύσις· πλατυνομένη δὲ κατὰ θάτερον κομήτης καλεῖται. Πολλάκις δὲ τῶν σελάων τὰ μὲν ἐπιμένει πλείονα χρόνον, τὰ δὲ παραχρῆμα σβέννυται. Πολλὰ δὲ καὶ ἄλλαι φαντασμάτων ἰδέαι θεωροῦνται, λαμπάδες τε καλούμεναι καὶ δοκίδες καὶ πίθοι καὶ βόθυνοι, κατὰ τὴν πρὸς ταῦτα ὁμοιότητα ὥδε προσαγορευθεῖσαι. Καὶ τὰ μὲν τούτων ἐσπέρια, τὰ δὲ ἐῷα, τὰ δὲ ἀμφιφανῆ θεωρεῖται, σπανίως δὲ βόρεια καὶ νότια. Πάντα δὲ ἀβέβαια· οὐδέποτε γάρ τι τούτων ἀεὶ φανερόν ἱστόρηται κατεστηριγμένον. Τὰ μὲν τοίνυν ἀέρια τοιαῦτα

Ἐμπεριέχει δὲ καὶ ἡ γῆ πολλὰς ἐν αὐτῇ, καθάπερ ὕδατος, οὕτως καὶ πνεύματος καὶ πυρὸς πηγὰς. Τούτων δὲ αἱ μὲν ὑπὸ γῆν εἰσιν ἀόρατοι, πολλὰ δὲ ἀναπνοὰς ἔχουσι καὶ ἀναφυσήσεις, ὥσπερ Λιπάρα τε καὶ Αἴτνη καὶ αἱ ἐν Αἰόλου νήσοις· αἱ δὲ καὶ ῥέουσι πολλάκις ποταμοῦ δίκην, καὶ μύδρους ἀναρριπτοῦσι διαπύρους. Ἐνταῦθα δὲ ὑπὸ γῆν οὔσαι πλησίον πηγαίων ὑδάτων θερμαίνουσι ταῦτα, καὶ τὰ μὲν χλιαρὰ τῶν ναμάτων ἀνιᾶσι, τὰ δὲ ὑπέρζεστα, τὰ δὲ εὖ ἔχοντα κράσεως. Ὅμοίως δὲ καὶ τῶν πνευμάτων πολλὰ πολλαχοῦ γῆς στόμια ἀνέωκται· ὧν τὰ μὲν ἐνθουσιᾶν ποιεῖ τοὺς ἐμπελάζοντας, τὰ δὲ ἀτροφεῖν, τὰ δὲ χρησμοδεῖν, ὥσπερ τὰ ἐν Δελφοῖς καὶ Λεβαδείᾳ, τὰ δὲ καὶ παντάπασιν ἀναιρεῖ, καθάπερ τὸ ἐν Φρυγίᾳ. Πολλάκις δὲ καὶ συγγενὲς πνεῦμα εὐκρατον ἐν γῇ παρεξωσθὲν εἰς μυχίους σήραγγας αὐτῆς, ἔξεδρον γενόμενον ἐκ τῶν οἰκείων τόπων, πολλὰ μέρη συνεκράδανεν. Πολλάκις δὲ πολὺ γενόμενον ἔξωθεν ἐγκατελιθήθη τοῖς ταύτης κοιλώμασι καὶ ἀποκλεισθὲν [ἐξόδου] μετὰ βίας αὐτὴν συνετίναξε, ζητοῦν ἔξοδον ἑαυτῷ, καὶ ἀπειργάσατο

πάθος τοῦτο ὃ καλεῖν εἰώθαμεν σεισμόν. Τῶν δὲ σεισμῶν οἱ μὲν εἰς πλάγια σείοντες κατ' ὀξείας γωνίας ἐπικλίνονται καλοῦνται, οἱ δὲ ἄνω ῥιπτοῦντες καὶ κάτω κατ' ὀρθὰς γωνίας βράσται, οἱ δὲ συνιζήσεις ποιοῦντες εἰς τὰ κοῖλα ἰζηματῖαι· οἱ δὲ χάσματα ἀνοίγοντες καὶ τὴν γῆν ἀναρρηγνύντες ῥῆκται καλοῦνται. Τούτων δὲ οἱ μὲν καὶ πνεῦμα προσαναβάλλουσιν, οἱ δὲ πέτρας, οἱ δὲ πηλόν, οἱ δὲ πηγὰς φαίνουσι τὰς πρότερον οὐκ οὔσας. Τινὲς δὲ ἀνατρέπουσι κατὰ μίαν πρόωσιν, οὓς καλοῦσιν ὥστας. Οἱ δὲ ἀνταποπάλλοντες καὶ ταῖς εἰς ἑκάτερον ἐγκλίσεσι καὶ ἀποπάλλεσι διορθοῦντες ἀεὶ τὸ σειόμενον παλματῖαι λέγονται, τρόμῳ πάθος ὅμοιον ἀπεργαζόμενοι. Γίνονται δὲ καὶ μυκηταὶ σειμοί, σείοντες τὴν γῆν μετὰ βρόμου. Πολλάκις δὲ καὶ χωρὶς σειμοῦ γίνεται μύκημα γῆς, ὅταν τὸ πνεῦμα σείειν μὲν μὴ αὐτάρκες ᾖ, ἐνείλουμένον δὲ ἐν αὐτῇ κόπτηται μετὰ ῥοθίου βίας. Συσσωματοποιεῖται δὲ τὰ εἰσιόντα πνεύματα καὶ ὑπὸ τῶν ἐν τῇ γῇ ὑγρῶν κεκρυμμένων.

Τὰ δὲ ἀνάλογον συμπίπτει [τούτοις] καὶ ἐν θαλάσσῃ· χάσματά τε γὰρ γίνεται θαλάσσης καὶ ἀναχωρήματα πολλάκις καὶ κυμάτων ἐπιδρομαί, ποτὲ μὲν ἀντανακοπὴν ἔχουσαι, ποτὲ δὲ πρόωσιν μόνον, ὥσπερ ἱστορεῖται περὶ Ἑλίκην τε καὶ Βοῦραν. Πολλάκις δὲ καὶ ἀναφυσήματα γίνεται πυρὸς ἐν τῇ θαλάσσῃ καὶ πηγῶν ἀναβλύσεις καὶ ποταμῶν ἐκβολαὶ καὶ δένδρων ἐκφύσεις ῥοαί τε καὶ δῖναι ταῖς τῶν πνευμάτων ἀνάλογον, αἱ μὲν ἐν μέσοις πελάγεσιν, αἱ δὲ κατὰ τοὺς εὐρίπους τε καὶ πορθμούς. Πολλά τε ἀμπώτεις λέγονται καὶ κυμάτων ἄρσεις συμπεριοδεύειν ἀεὶ τῇ σελήνῃ κατὰ τινὰς ὠρισμένους καιρούς. Ὡς δὲ τὸ πᾶν εἶπεῖν, τῶν στοιχείων ἐγκεκραμένων ἀλλήλοις ἐν ἑαίρῃ τε καὶ γῇ καὶ θαλάσῃ κατὰ τὸ εἶκος αἱ τῶν παθῶν ὁμοιότητες συνίστανται, τοῖς μὲν ἐπὶ μέρους φθορὰς καὶ γενέσεις φέρουσαι, τὸ δὲ σύμπαν ἀνώλεθρόν τε καὶ ἀ❖. Καίτοι γέ τις ἐθαύμασε πῶς ποτε, ἐκ τῶν ἐναντίων ἀρχῶν συνεστηκὼς ὁ κόσμος, λέγω δὲ ξηρῶν τε καὶ ὑγρῶν, ψυχρῶν τε καὶ θερμῶν, οὐ πάλαι διέφθαρται καὶ ἀπόλωλεν, ὥς κἂν εἰ πόλιν τινὲς θαυμάζοιεν, ὅπως διαμένει συνεστηκυῖα ἐκ τῶν ἐναντιωτάτων ἐθνῶν, πενήτων λέγω καὶ πλουσίων, νέων γερόντων, ἀσθενῶν ἰσχυρῶν, πονηρῶν χρηστῶν. Ἀγνοοῦσι δὲ ὅτι τοῦτ' ἦν πολιτικῆς ὁμονοίας τὸ θαυμασιώτατον, λέγω δὲ τὸ ἐκ πολλῶν μίαν καὶ ὁμοίαν ἐξ ἀνομοίων ἀποτελεῖν διάθεσιν ὑποδεχομένην πᾶσαν καὶ φύσιν καὶ τύχην. Ἴσως δὲ τῶν ἐναντίων ἢ φύσις γλίχεται καὶ ἐκ τούτων ἀποτελεῖ τὸ σύμφωνον, οὐκ ἐκ τῶν ὁμοίων, ὥσπερ ἀμέλει τὸ ἄρρεν συνήγαγε πρὸς τὸ θῆλυ καὶ οὐχ ἑκάτερον πρὸς τὸ ὁμόφυλον, καὶ τὴν πρώτην ὁμόνοιαν διὰ τῶν ἐναντίων σηνῆψεν, οὐ διὰ τῶν ὁμοίων. Ἔοικε δὲ καὶ ἡ τέχνη τὴν φύσιν μιμουμένη τοῦτο ποιεῖν. Ζωγραφία μὲν γὰρ λευκῶν τε καὶ μελάνων, ὠχρῶν τε καὶ ἐρυθρῶν, χρωμάτων ἐγκερασασμένη φύσεις τὰς

εἰκόνας τοῖς προηγουμένοις ἀπετέλεσε συμφώνους, μουσικὴ δὲ ὀξεῖς ἅμα καὶ βαρεῖς, μακροὺς τε καὶ βραχεῖς, φθόγγους μίξασα ἐν διαφόροις φωναῖς μίαν ἀπετέλεσεν ἁρμονίαν, γραμματικὴ δὲ ἐκ φωνηέντων καὶ ἀφώνων γραμμάτων κρᾶσιν ποιησαμένη τὴν ὅλην τέχνην ἀπ’ αὐτῶν συνεστήσατο. Ταῦτ’ οὖν τοῦτο ἦν καὶ τὸ παρὰ τῷ σκοτεινῷ λεγόμενον Ἡρακλείτῳ· “Συλλάψεις ὅλα καὶ οὐχ ὅλα, συμφερόμενον διαφερόμενον, συνᾶδον διᾶδον· ἐκ πάντων ἐν καὶ ἐξ ἑνὸς πάντα.” Οὕτως οὖν καὶ τὴν τῶν ὅλων σύστασιν, οὐρανοῦ λέγω καὶ γῆς τοῦ τε σύμπαντος κόσμου, διὰ τῆς τῶν ἐναντιωτάτων κράσεως ἀρχῶν μία διεκόσμησεν ἁρμονία· ξηρὸν γὰρ ὑγρῷ, θερμὸν δὲ ψυχρῷ, βαρεῖ τε κοῦφον μιγὲν, καὶ ὀρθὸν περιφερεῖ, γῆν τε πᾶσαν καὶ θάλασσαν αἰθέρα τε καὶ ἥλιον καὶ σελήνην καὶ τὸν ὅλον οὐρανὸν διεκόσμησε μία [ἡ] διὰ πάντων διήκουσα δύναμις, ἐκ τῶν ἀμίκτων καὶ ἑτεροίων, ἀέρος τε καὶ γῆς καὶ πυρὸς καὶ ὕδατος, τὸν σύμπαντα κόσμον δημιουργήσασα καὶ μιᾷ διαλαβοῦσα σφαίρας ἐπιφανείᾳ τάς τε ἐναντιωτάτας ἐν αὐτῷ φύσεις ἀλλήλαις ἀναγκάσασα ὁμολογῆσαι καὶ ἐκ τούτων μηχανησαμένη τῷ παντὶ σωτηρίαν. Αἰτία δὲ ταύτης μὲν ἡ τῶν στοιχείων ὁμολογία, τῆς δὲ ὁμολογίας ἡ ἰσομοιρία καὶ τὸ μηδὲν αὐτῶν πλέον ἕτερον ἑτέρου δύνασθαι· τὴν γὰρ ἴσην ἀντίστασιν ἔχει τὰ βαρέα πρὸς τὰ κοῦφα καὶ τὰ θερμὰ πρὸς θάτερα, τῆς φύσεως ἐπὶ τῶν μειζόνων διδασκούσης ὅτι τὸ ἴσον σωστικόν πὼς ἐστὶν ὁμονοίας, ἡ δὲ ὁμόνοια τοῦ πάντων γενετήρως καὶ περικαλλεστάτου κόσμου. Τίς γὰρ ἂν εἴη φύσις τοῦδε κρείττων; ἦν γὰρ ἂν εἴπη τις, μέρος ἐστὶν αὐτοῦ. Τό τε καλὸν πᾶν ἐπώνυμόν ἐστι τούτου καὶ τὸ τεταγμένον, ἀπὸ τοῦ κόσμου λεγόμενον κεκοσμηθῆναι. Τί δὲ τῶν ἐπὶ μέρους δύναται ἂν ἐξισωθῆναι τῇ κατ’ οὐρανὸν τάξει τε καὶ φορᾷ τῶν ἄστρον ἡλίου τε καὶ σελήνης, κινουμένων ἐν ἀκριβεστάτοις μέτροις ἐξ αἰῶνος εἰς ἕτερον αἰῶνα; τίς δὲ γένοιτ’ ἂν ἀψεύδεια τοιάδε, ἥντινα φυλάττουσιν αἱ καλά καὶ γόνιμοι τῶν ὅλων ὥραι, θέρη τε καὶ χειμῶνας ἐπάγουσαι τεταγμένως ἡμέρας τε καὶ νύκτας εἰς μηνὸς ἀποτελεσμα καὶ ἐνιαυτοῦ; καὶ μὴν μεγέθει μὲν οὗτος πανυπέρτατος, κινήσει δὲ ὀξύτατος, λαμπρότητι δὲ εὐαυγέστατος, δυνάμει δὲ ἀγήρως τε καὶ ἄφθαρτος. Οὗτος ἐναλίων ζώων καὶ πεζῶν καὶ ἀερίων φύσεις ἐχώρισε καὶ βίους ἐμέτρησε ταῖς ἑαυτοῦ κινήσεσιν. Ἐκ τούτου πάντα ἐμπνεῖ τε καὶ ψυχὴν ἴσχει τὰ ζῶα. Τούτου καὶ αἱ παράδοξοι νεοχμώσεις τεταγμένως ἀποτελοῦνται, συναραπτόντων μὲν ἀνέμων παντοίων, πιπτόντων δὲ ἐξ οὐρανοῦ κεραυνῶν, ῥηγνυμένων δὲ χειμώνων ἐξαισίων. Διὰ δὲ τούτων τὸ νοτερόν ἐκπιεζόμενον τό τε πυρῶδες διαπνεόμενον εἰς ὁμόνοιαν ἄγει τὸ πᾶν καὶ καθίστησιν. Ἡ τε γῆ φυτοῖς κομῶσα παντοδαποῖς νάμασί τε περιβλύζουσα καὶ περιοχουμένη ζώοις, κατὰ καιρὸν ἐκφύουσα τε πάντα καὶ τρέφουσα καὶ δεχομένη, μυρίας τε φέρουσα ἰδέας καὶ πάθη, τὴν ἀγήρω φύσιν ὁμοίως τηρεῖ, καίτοι καὶ σεισμοῖς τινασσομένη καὶ πλημυρίσιν ἐπικλυζομένη πυρκαϊαῖς τε κατὰ μέρος

φλογιζομένη. Ταῦτα δὲ πάντα ἔοικεν αὐτῇ πρὸς ἀγαθοῦ γινόμενα τὴν δι' αἰῶνος σωτηρίαν παρέχειν· σειομένης τε γὰρ διεξάπτουσιν αἱ τῶν πνευμάτων παρεμπτώσεις κατὰ τὰ ῥήγματα τὰς ἀναπνοὰς ἰσχουσai, καθὼς ἄνω λέλεκται, καθαιρομένη τε ὄμβροις ἀποκλύζεται πάντα τὰ νοσώδη, περιπνεομένη δὲ αὔραις τὰ τε ὑπ' αὐτὴν καὶ τὰ ὑπὲρ αὐτὴν εἰλικρινεῖται. Καὶ μὴν αἱ φλόγες μὲν τὸ παγετῶδες ἠπαινούνουσιν, οἱ πάγοι δὲ τὰς φλόγας ἀνιᾶσιν. Καὶ τῶν ἐπὶ μέρους τὰ μὲν γίνεται, τὰ δὲ ἀκμάζει, τὰ δὲ φθείρεται. Καὶ αἱ μὲν γενέσεις ἐπαναστέλλουσι τὰς φθοράς, αἱ δὲ φθοραὶ κουφίζουσι τὰς γενέσεις. Μία δὲ ἐκ πάντων περαινομένη σωτηρία διὰ τέλους ἀντιπερισταμένων ἀλλήλοις καὶ τοτὲ μὲν κρατούντων, τοτὲ δὲ κρατουμένων, φυλάττει τὸ σύμπαν ἄφθαρτον δι' αἰῶνος.

Λοιπὸν δὴ περὶ τῆς τῶν ὅλων συνεκτικῆς αἰτίας κεφαλαιωδῶς εἰπεῖν, ὃν τρόπον καὶ περὶ τῶν ἄλλων· πλημμελὲς γὰρ περὶ κόσμου λέγοντας, εἰ καὶ μὴ δι' ἀκριβείας, ἀλλ' οὖν γε ὥς εἰς τυπώδη μάθησιν, τὸ τοῦ κόσμου κυριώτατον παραλιπεῖν. Ἀρχαῖος μὲν οὖν τις λόγος καὶ πατριός ἐστι πᾶσιν ἀνθρώποις ὥς ἐκ θεοῦ πάντα καὶ διὰ θεὸν συνέστηκεν, οὐδεμία δὲ φύσις αὐτὴ καθ' ἑαυτὴν ἐστὶν αὐτάρκης, ἐρημωθεῖσα τῆς ἐκ τούτου σωτηρίας. Διὸ καὶ τῶν παλαιῶν εἰπεῖν τινες προήχθησαν ὅτι πάντα ταῦτά ἐστι θεῶν πλέα τὰ καὶ δι' ὀφθαλμῶν ἰνδαλλόμενα ἡμῖν καὶ δι' ἀκοῆς καὶ πάσης αἰσθήσεως, τῇ μὲν θείᾳ δυνάμει πρέποντα καταβαλλόμενοι λόγον, οὐ μὴν τῇ γε οὐσίᾳ. Σωτὴρ μὲν γὰρ ὄντως ἀπάντων ἐστὶ καὶ γενέτωρ τῶν ὅπως οὐδέποτε κατὰ τόνδε τὸν κόσμον συντελουμένων ὁ θεός, οὐ μὴν αὐτουργοῦ καὶ ἐπιπόνου ζώου κάματον ὑπομένων, ἀλλὰ δυνάμει χρώμενος ἀτρύτῳ, δι' ἧς καὶ τῶν πόρρω δοκούντων εἶναι περιγίνεται. Τὴν μὲν οὖν ἀνωτάτω καὶ πρώτην ἔδραν αὐτὸς ἔλαχεν, ὑπατός τε διὰ τοῦτο ὠνόμασται, κατὰ τὸν ποιητὴν “ἀκροτάτη κορυφῇ” τοῦ σύμπαντος ἐγκαθιδρυμένος οὐρανοῦ· μάλιστα δέ πως αὐτοῦ τῆς δυνάμεως ἀπολαύει τὸ πλησίον αὐτοῦ σῶμα, καὶ ἔπειτα τὸ μετ' ἐκεῖνο, καὶ ἐφεξῆς οὕτως ἄχρι τῶν καθ' ἡμᾶς τόπων. Διὸ γῆ τε καὶ τὰ ἐπὶ γῆς ἔοικεν, ἐν ἀποστάσει πλείστη τῆς ἐκ θεοῦ ὄντα ὠφελείας, ἀσθενῆ καὶ ἀκατάλληλα εἶναι καὶ πολλῆς μεστὰ ταραχῆς· οὐ μὴν ἀλλὰ καθ' ὅσον ἐπὶ πᾶν διικνεῖσθαι πέφυκε τὸ θεῖον, καὶ ἐπὶ τὰ καθ' ἡμᾶς ὁμοίως συμβαίνει τὰ τε ὑπὲρ ἡμᾶς, κατὰ τὸ ἔγγιον τε καὶ πορρωτέρω θεοῦ εἶναι μᾶλλον τε καὶ ἥττον ὠφελείας μεταλαμβάνοντα. Κρεῖττον οὖν ὑπολαβεῖν, ὃ καὶ πρέπον ἐστὶ καὶ θεῷ μάλιστα ἀρμόζον, ὥς ἢ ἐν οὐρανῷ δύναμις ἰδρυμένη καὶ τοῖς πλείστον ἀφεστηκόσιν, ὥς ἔνι γε εἰπεῖν, καὶ σύμπασιν αἴτιος γίνεται σωτηρίας, μᾶλλον ἢ ὥς διήκουσα καὶ φοιτῶσα ἔνθα μὴ καλὸν μηδὲ εὐσχημον αὐτουργεῖν τὰ ἐπὶ γῆς. Τοῦτο μὲν γὰρ οὐδὲ ἀνθρώπων ἡγεμόσιν ἀρμόττει, παντὶ καὶ τῷ τυχόντι ἐφίστασθαι ἔργῳ, λέγω δὲ οἶον στρατιᾶς ἄρχοντι ἢ πόλεως ἢ οἴκου,

[καὶ] εἰ χρεὼν στρωματόδεσμον εἶη δῆσαι καὶ εἴ τι φαυλότερον ἀποτελεῖν ἔργον, ὃ κἂν τὸ τυχὸν ἀνδράποδον ποιήσειεν, ἀλλ' οἷον ἐπὶ τοῦ μεγάλου βασιλέως ἱστορεῖται. Τὸ <γὰρ> Καμβύσου Ξέρξου τε καὶ Δαρείου πρόσχημα εἰς σεμνότητος καὶ ὑπεροχῆς ὕψος μεγαλοπρεπῶς διεκεκόσμητο· αὐτὸς μὲν γάρ, ὡς λόγος, ἵδρυτο ἐν Σούσοις ἢ Ἐκβατάνοις, παντὶ ἀόρατος, θαυμαστὸν ἐπέχων βασιλείον οἶκον καὶ περίβολον χρυσῷ καὶ ἡλέκτρῳ καὶ ἐλέφαντι ἀστράπτοντα· πυλῶνες δὲ πολλοὶ καὶ συνεχεῖς πρόθυρά τε σύχνοις εἰργόμενα σταδίοις ἀπ' ἀλλήλων θύραις τε χαλκαῖς καὶ τείχεσι μεγάλοις ὠχύρωτο· ἔξω δὲ τούτων ἄνδρες οἱ πρῶτοι καὶ δοκιμώτατοι διεκεκόσμηντο, οἱ μὲν ἀμφ' αὐτὸν τὸν βασιλέα δορυφόροι τε καὶ θεράποντες, οἱ δὲ ἐκάστου περιβόλου φύλακες, πυλωροὶ τε καὶ ὠτακουσταὶ λεγόμενοι, ὡς ἂν ὁ βασιλεὺς αὐτός, δεσπότης καὶ θεὸς ὀνομαζόμενος, πάντα μὲν βλέποι, πάντα δὲ ἀκούοι. Χωρὶς δὲ τούτων ἄλλοι καθειστήκεσαν προσόδων ταμίαι καὶ στρατηγοὶ πολέμων καὶ κυνηγεσίων δώρων τε ἀποδεκτῆρες τῶν τε λοιπῶν ἔργων ἕκαστοι κατὰ τὰς χρείας ἐπιμεληταί. Τὴν δὲ σύμπασαν ἀρχὴν τῆς Ἀσίας, περατουμένην Ἑλλησπόντῳ μὲν ἐκ τῶν πρὸς ἐσπέραν μερῶν, Ἰνδῷ δὲ ἐκ τῶν πρὸς ἑω, διειλήφεσαν κατὰ ἔθνη στρατηγοὶ καὶ σατράπαι καὶ βασιλεῖς, δοῦλοι τοῦ μεγάλου βασιλέως, ἡμεροδρόμοι τε καὶ σκοποὶ καὶ ἀγγελιαφόροι φρυκτωριῶν τε ἐποπτῆρες. Τοσοῦτος δὲ ἦν ὁ κόσμος, καὶ μάλιστα τῶν φρυκτωρ[ι]ῶν, κατὰ διαδοχὰς πυρσευόντων ἀλλήλοις ἐκ περάτων τῆς ἀρχῆς μέχρι Σούσων καὶ Ἐκβατάνων, ὥστε τὸν βασιλέα γινώσκειν αὐθημερὸν πάντα τὰ ἐν τῇ Ἀσίᾳ καινουργούμενα.

Νομιστέον δὴ τὴν τοῦ μεγάλου βασιλέως ὑπεροχὴν πρὸς τὴν τοῦ τὸν κόσμον ἐπέχοντος θεοῦ τοσοῦτον καταδεεστέραν ὅσον τῆς ἐκείνου τὴν τοῦ φαυλοτάτου τε καὶ ἀσθενεστάτου ζώου, ὥστε, εἴπερ ἄσεμνον ἦν αὐτὸν αὐτῷ δοκεῖν Ξέρξην αὐτουργεῖν ἅπαντα καὶ ἐπιτελεῖν ἃ βούλοιο καὶ ἐφιστάμενον <ἐκασταχοῦ> διοικεῖν, πολὺ μᾶλλον ἀπρεπὲς ἂν εἶη θεῷ. Σεμνότερον δὲ καὶ πρεπωδέστερον αὐτὸν μὲν ἐπὶ τῆς ἀνωτάτω χώρας ἰδρῦσθαι, τὴν δὲ δύναμιν διὰ τοῦ σύμπαντος κόσμου διήκουσαν ἥλιόν τε κινεῖν καὶ σελήνην καὶ τὸν πάντα οὐρανὸν περιάγειν αἵτιόν τε γίνεσθαι τοῖς ἐπὶ τῆς γῆς σωτηρίας. Οὐδὲν γὰρ ἐπιτεχνήσεως δεῖ καὶ ὑπηρεσίας τῆς παρ' ἐτέρων, ὥσπερ τοῖς παρ' ἡμῖν ἄρχουσι τῆς πολυχειρίας διὰ τὴν ἀσθένειαν, ἀλλὰ τοῦτο ἦν τὸ θειότατον, τὸ μετὰ ῥαστώνης καὶ ἀπλῆς κινήσεως παντοδαπὰς ἀποτελεῖν ἰδέας, ὥσπερ ἀμέλει δρῶσιν οἱ μηχανοτέχναι, διὰ μιᾶς ὀργάνου σχαστηρίας πολλὰς καὶ ποικίλας ἐνεργείας ἀποτελοῦντες. Ὅμοίως δὲ καὶ οἱ νευροσπᾶσται μίαν μήρινθον ἐπισπασάμενοι ποιοῦσι καὶ αὐχένα κινεῖσθαι καὶ χεῖρα τοῦ ζώου καὶ ὦμον καὶ ὀφθαλμόν, ἔστι δὲ ὅτε πάντα τὰ μέρη, μετὰ τινος εὐρυθμίας. Οὕτως οὖν καὶ ἡ θεία φύσις ἀπὸ τινος ἀπλῆς κινήσεως τοῦ πρώτου τὴν

δύναμιν εἰς τὰ συνεχῇ δίδωσι καὶ ἀπ' ἐκείνων πάλιν εἰς τὰ πορρωτέρω, μέχρις ἂν διὰ τοῦ παντὸς διεξέλθῃ· κινηθὲν γὰρ ἕτερον ὑφ' ἑτέρου καὶ αὐτὸ πάλιν ἐκίνησεν ἄλλο σὺν κόσμῳ, δρῶντων μὲν πάντων οἰκείως ταῖς σφετέραις κατασκευαῖς, οὐ τῆς αὐτῆς δὲ ὁδοῦ πᾶσιν οὔσης, ἀλλὰ διαφόρου καὶ ἑτεροίας, ἔστι δὲ οἷς καὶ ἐναντίας, καίτοι τῆς πρώτης οἶον ἐνδόσεως εἰς κίνησιν μιᾶς γενομένης· ὥσπερ ἂν εἴ τις ἐξ ἄγγους ὁμοῦ ρίψει σφαῖραν καὶ κύβον καὶ κῶνον καὶ κύλινδρον - ἕκαστον γὰρ αὐτῶν κατὰ τὸ ἴδιον κινηθήσεται σχῆμα - ἢ εἴ τις ὁμοῦ ζῶον ἔνυδρόν τε καὶ χερσαῖον καὶ πτηνὸν ἐν τοῖς κόλποις ἔχων ἐκβάλῃ· δῆλον γὰρ ὅτι τὸ μὲν νηκτὸν ἀλόμενον εἰς τὴν ἑαυτοῦ δίαίταν ἐκνήξεται, τὸ δὲ χερσαῖον εἰς τὰ σφέτερα ἦθη καὶ νομοὺς διεξερπύσει, τὸ δὲ ἀέριον ἐξαρθὲν ἐκ γῆς μετάρσιον οἰχήσεται πετόμενον, μιᾶς τῆς πρώτης αἰτίας πᾶσιν ἀποδούσης τὴν οἰκείαν εὐμάρειαν. Οὕτως καὶ ἐπὶ κόσμου· διὰ γὰρ ἀπλῆς τοῦ σύμπαντος οὐρανοῦ περιαγωγῆς ἡμέρα καὶ νυκτὶ περατουμένης ἄλλοῖαι πάντων διέξοδοι γίνονται, καίτοι ὑπὸ μιᾶς σφαίρας περιεχομένων, τῶν μὲν θᾶπτον, τῶν δὲ σχολαιότερον κινουμένων παρά τε τὰ τῶν διαστημάτων μήκη καὶ τὰς ἰδίας ἐκάστων κατασκευάς. Σελήνη μὲν γὰρ ἐν μηνὶ τὸν ἑαυτῆς διαπεραίνεται κύκλον αὐξομένη τε καὶ μειουμένη καὶ φθίνουσα, ἥλιος δὲ ἐν ἐνιαυτῷ καὶ οἱ τούτου ἰσόδρομοι, ὃ τε Φωσφόρος καὶ ὁ Ἑρμοῦ λεγόμενος, ὁ δὲ Πυρόεις ἐν διπλασίονι τούτων χρόνῳ, ὁ δὲ Διὸς ἐν ἑξαπλασίονι τούτου, καὶ τελευταῖος ὁ Κρόνου λεγόμενος ἐν διπλασίονι καὶ ἡμίσει τοῦ ὑποκάτω. Μία δὲ ἐκ πάντων ἀρμονία συναδόντων καὶ χορευόντων κατὰ τὸν οὐρανὸν ἐξ ἑνός τε γίνεται καὶ εἰς ἕν ἀπολήγει, κόσμον ἐτύμως τὸ σύμπαν ἄλλ' οὐκ ἀκοσμίαν ὀνομάσασα. Καθάπερ δὲ ἐν χορῷ κορυφαίου κατάρξαντος συνεπηχεῖ πᾶς ὁ χορὸς ἀνδρῶν, ἔσθ' ὅτε καὶ γυναικῶν, ἐν διαφόροις φωναῖς ὀξυτέραις καὶ βαρυτέραις μίαν ἀρμονίαν ἐμμελῆ κεραννύντων, οὕτως ἔχει καὶ ἐπὶ τοῦ τὸ σύμπαν διέποντος θεοῦ· κατὰ γὰρ τὸ ἄνωθεν ἐνδόσιμον ὑπὸ τοῦ φερωνύμως ἂν κορυφαίου προσαγορευθέντος κινεῖται μὲν τὰ ἄστρα ἀεὶ καὶ ὁ σύμπας οὐρανός, πορεύεται δὲ διττὰς πορείας ὁ παμφαῆς ἥλιος, τῇ μὲν ἡμέραν καὶ νύκτα διορίζων ἀνατολῇ καὶ δύσει, τῇ δὲ τὰς τέσσαρας ὥρας ἄγων τοῦ ἔτους, πρόσω τε βόρειος καὶ ὀπίσω νότιος διεξέρπων. Γίνονται δὲ ὑετοὶ κατὰ καιρὸν καὶ ἄνεμοι καὶ δρόσοι τὰ τε πάθη τὰ ἐν τῷ περιέχοντι συμβαίνοντα διὰ τὴν πρώτην καὶ ἀρχέγονον αἰτίαν. Ἔπονται δὲ τούτοις ποταμῶν ἐκροαί, θαλάσσης ἀνοιδήσεις, δένδρων ἐκφύσεις, καρπῶν πεπάνσεις, γοναὶ ζώων, ἐκτροφαί τε πάντων καὶ ἄκμαὶ καὶ φθίσεις, συμβαλλομένης πρὸς ταῦτα καὶ τῆς ἐκάστου κατασκευῆς, ὡς ἔφην. Ὅταν οὖν ὁ πάντων ἡγεμὼν τε καὶ γενέτωρ, ἀόρατος ὢν ἄλλῳ πλὴν λογισμῷ, σημήνῃ πάσῃ φύσει μεταξὺ οὐρανοῦ τε καὶ γῆς φερομένη, κινεῖται πᾶσα ἐνδελεχῶς ἐν κύκλοις καὶ πέρασιν ἰδίῳις, ποτὲ μὲν ἀφανιζομένη, ποτὲ δὲ φαινομένη, μυρίας ἰδέας ἀναφαίνουσά τε καὶ πάλιν ἀποκρύπτουσα ἐκ μιᾶς



ἀρχῆς. Ἔοικε δὲ κομιδῇ τὸ δρώμενον τοῖς ἐν πολέμου καιροῖς μάλιστα γινομένοις, ἐπειδὴν ἡ σάλπιγξ σημήνη τῷ στρατοπέδῳ· τότε γὰρ τῆς φωνῆς ἕκαστος ἀκούσας ὁ μὲν ἀσπίδα ἀναιρεῖται, ὁ δὲ θώρακα ἐνδύεται, ὁ δὲ κνημίδας ἢ κράνος ἢ ζωστήρα περιτίθεται· καὶ ὁ μὲν ἵππον χαλινοῖ, ὁ δὲ συνωρίδα ἀναβαίνει, ὁ δὲ σύνθημα παρεγγυᾷ· καθίσταται δὲ εὐθέως ὁ μὲν λοχαγὸς εἰς λόχον, ὁ δὲ ταξίαρχος εἰς τάξιν, ὁ δὲ ἵππεὺς ἐπὶ κέρας, ὁ δὲ ψιλὸς εἰς τὴν ἰδίαν ἐκτρέχει χώραν· πάντα δὲ ὑφ' ἑνα σημάντορα δονεῖται κατὰ προστάξιν τοῦ τὸ κράτος ἔχοντος ἡγεμόνος. Οὕτω χρὴ καὶ περὶ τοῦ σύμπαντος φρονεῖν· ὑπὸ γὰρ μιᾶς ῥοπῆς ὀτρυνομένων ἀπάντων γίνεται τὰ οἰκεῖα, καὶ ταύτης ἀοράτου καὶ ἀφανοῦς. Ὅπερ οὐδαμῶς ἐστὶν ἐμπόδιον οὔτε ἐκείνῃ πρὸς τὸ δρᾶν οὔτε ἡμῖν πρὸς τὸ πιστεῦσαι· καὶ γὰρ ἡ ψυχὴ, δι' ἣν ζῶμέν τε καὶ οἴκους καὶ πόλεις ἔχομεν, ἀόρατος οὕσα τοῖς ἔργοις αὐτῆς ὁρᾶται· πᾶς γὰρ ὁ τοῦ βίου διάκοσμος ὑπὸ ταύτης εὗρηται καὶ διατέτακται καὶ συνέχεται, γῆς ἀρόσεις καὶ φυτεύσεις, τέχνης ἐπίνοιαι, χρήσεις νόμων, κόσμος πολιτείας, ἔνδημοι πράξεις, ὑπερόριος πόλεμος, εἰρήνη. Ταῦτα χρὴ καὶ περὶ θεοῦ διανοεῖσθαι, δυνάμει μὲν ὄντος ἰσχυροτάτου, κάλλει δὲ εὐπρεπεστάτου, ζωῇ δὲ ἀθανάτου, ἀρετῇ δὲ κρατίστου, διότι πάσῃ θνητῇ φύσει γενόμενος ἀθεώρητος ἀπ' αὐτῶν τῶν ἔργων θεωρεῖται. Τὰ γὰρ πάθη, καὶ τὰ δι' ἀέρος ἅπαντα καὶ τὰ ἐπὶ γῆς καὶ τὰ ἐν ὕδατι, θεοῦ λέγοιτ' ἂν ὄντως ἔργα εἶναι τοῦ τὸν κόσμον ἐπέχοντος· ἐξ οὗ, κατὰ τὸν φυσικὸν ἔμπεδοκλέα,

“πάνθ' ὅσα τ' ἦν ὅσα τ' ἔσθ' ὅσα τ' ἔσται ὀπίσσω,

δένδρεά τ' ἐβλάστησε καὶ ἀνέρες ἠδὲ γυναῖκες

θῆρές τ' οἰωνοί τε καὶ ὕδατοθρέμμονες ἰχθῦς.”

Ἔοικε δὲ ὄντως, εἰ καὶ μικρότερον παραβαλεῖν, τοῖς ὀμφαλοῖς λεγομένοις τοῖς ἐν ταῖς ψαλίσιν [λίθοις], οἳ μέσοι κείμενοι κατὰ τὴν εἰς ἑκάτερον μέρος ἔνδεσιν ἐν ἀρμονίᾳ τηροῦσι καὶ ἐν τάξει τὸ πᾶν σχῆμα τῆς ψαλίδος καὶ ἀκίνητον. Φασὶ δὲ καὶ τὸν ἀγαλματοποιὸν Φειδίαν κατασκευάζοντα τὴν ἐν ἀκροπόλει Ἀθηνᾶν ἐν μέσῃ τῇ ταύτης ἀσπίδι τὸ ἑαυτοῦ πρόσωπον ἐντυπώσασθαι, καὶ συνδῆσαι τῷ ἀγάλματι διὰ τινος ἀφανοῦς δημιουργίας, ὥστε ἐξ ἀνάγκης, εἴ τις βούλοιτο αὐτὸ περιαιρεῖν, τὸ σύμπαν ἄγαλμα λύειν τε καὶ συγχεῖν. Τοῦτον οὖν ἔχει τὸν λόγον ὁ θεὸς ἐν κόσμῳ, συνέχων τὴν τῶν ὅλων ἀρμονίαν τε καὶ σωτηρίαν, πλὴν οὔτε μέσος ὢν, ἔνθα ἡ γῆ τε καὶ ὁ θολερὸς τόπος οὗτος, ἀλλ' ἄνω καθαρὸς ἐν καθαρῷ χωρῷ βεβηκώς, ὃν ἐτύμως καλοῦμεν οὐρανὸν μὲν ἀπὸ τοῦ ὅρον εἶναι τὸν ἄνω, Ὀλυμπον δὲ

οἶον ὀλοαμπῇ τε καὶ παντὸς ζόφου καὶ ἀτάκτου κινήματος κεχωρισμένον,  
οἷα γίνεται παρ' ἡμῖν διὰ χειμῶνος καὶ ἀνέμων βίας, ὥσπερ ἔφη καὶ ὁ  
ποιητὴς

“Οὐλύμπόνδ' ὅθι φασὶ θεῶν ἔδος ἀσφαλὲς αἰεὶ

ἔμμεναι· οὔτ' ἀνέμοισι τινάσσεται οὔτε ποτ' ὄμβρῳ

δεύεται, οὔτε χιῶν ἐπιπίλνεται, ἀλλὰ μάλ' αἴθρη

πέπταται ἀνέφελος, λευκὴ δ' ἐπιδέδρομεν αἴγλη.”

συνεπιμαρτυρεῖ δὲ καὶ ὁ βίος ἅπας, τὴν ἄνω χώραν ἀποδοὺς θεῶ· καὶ γὰρ  
πάντες ἄνθρωποι ἀνατείνομεν τὰς χεῖρας εἰς τὸν οὐρανὸν εὐχὰς ποιούμενοι.  
Καθ' ὃν λόγον οὐ κακῶς κάκεῖνο ἀναπεφώνηται

“Ζεὺς δ' ἔλαχ' οὐρανὸν εὐρὺν ἐν αἰθέρι καὶ νεφέλῃσι.”

διὸ καὶ τῶν αἰσθητῶν τὰ τιμιώτατα τὸν αὐτὸν ἐπέχει τόπον, ἄστρα τε καὶ  
ἥλιος καὶ σελήνη, μόνα τε τὰ οὐράνια διὰ τοῦτο ἀεὶ τὴν αὐτὴν σώζοντα τάξιν  
διακεκόσμηται, καὶ οὔποτε ἀλλοιωθέντα μετεκινήθη, καθάπερ τὰ ἐπὶ γῆς  
εὐτρεπτα ὄντα πολλὰς ἑτεροιώσεις καὶ πάθη ἀναδέδεκται· σεισμοὶ τε γὰρ ἤδη  
βίαιοι πολλὰ μέρη τῆς γῆς ἀνέρρηξαν, ὄμβροι τε κατέκλυσαν ἐξαίσιοι  
καταρραγέντες, ἐπιδρομαὶ τε κυμάτων καὶ ἀναχωρήσεις πολλάκις καὶ ἡπείρους  
ἐθαλάττωσαν καὶ θάλαττας ἡπείρωσαν, βιαί τε πνευμάτων καὶ τυφώνων ἔστιν  
ὅτε πόλεις ὅλας ἀνέτρεψαν, πυρκαϊαὶ τε καὶ φλόγες αἱ μὲν ἐξ οὐρανοῦ  
γενόμεναι πρότερον, ὥσπερ φασίν, ἐπὶ Φαέθοντος τὰ πρὸς ἔω μέρη  
κατέφλεξαν, αἱ δὲ πρὸς ἐσπέραν ἐκ γῆς ἀναβλύσασαι καὶ ἐκφυσήσασαι,  
καθάπερ τῶν ἐν Αἴτνῃ κρατήρων ἀναρραγέντων καὶ ἀνὰ τὴν γῆν φερομένων  
χειμάρρου δίκην. Ἐνθα καὶ τὸ τῶν εὐσεβῶν γένος ἐξόχως ἐτίμησε τὸ  
δαιμόνιον· περικαταληφθέντων γὰρ «αὐτῶν» ὑπὸ τοῦ ῥεύματος διὰ τὸ  
βαστάζειν γέροντας ἐπὶ τῶν ὤμων γονεῖς καὶ σώζειν, πλησίον [αὐτῶν]  
γενόμενος ὁ τοῦ πυρὸς ποταμὸς ἐξεσχίσθη παρέτρεψέ τε τοῦ φλογμοῦ τὸ μὲν  
ἔνθα, τὸ δὲ ἔνθα, καὶ ἐτήρησεν ἀβλαβεῖς ἅμα τοῖς γονεῦσι τοὺς νεανίσκους.  
Καθόλου δὲ ὅπερ ἐν νηὶ μὲν κυβερνήτης, ἐν ἄρματι δὲ ἡνίοχος, ἐν χορῷ δὲ  
κορυφαῖος, ἐν πόλει δὲ νομοθέτης, ἐν στρατοπέδῳ δὲ ἡγεμών, τοῦτο θεὸς ἐν  
κόσμῳ, πλὴν καθ' ὅσον τοῖς μὲν καματηρὸν τὸ ἄρχειν πολυκίνητόν τε καὶ  
πολυμέριμον, τῷ δὲ ἄλυπον ἄπονόν τε καὶ πάσης κεχωρισμένον σωματικῆς  
ἀσθενείας· ἐν ἀκινήτῳ γὰρ ἰδρυμένος δυνάμει πάντα κινεῖ καὶ περιάγει, ὅπου

βούλεται καὶ ὅπως, ἐν διαφόροις ἰδέαις τε καὶ φύσεσιν, ὥσπερ ἀμέλει καὶ ὁ τῆς πόλεως νόμος ἀκίνητος ὢν ἐν ταῖς τῶν χρωμένων ψυχαῖς πάντα οἰκονομεῖ τὰ κατὰ τὴν πολιτείαν· ἐφεπόμενοι γὰρ αὐτῷ δηλονότι ἐξίσιν ἄρχοντες μὲν ἐπὶ τὰ ἀρχεῖα, θεσμοθέται δὲ εἰς τὰ οἰκεῖα δικαστήρια, βουλευταὶ δὲ καὶ ἐκκλησιασταὶ εἰς συνέδρια τὰ προσήκοντα, καὶ ὁ μὲν τις εἰς τὸ πρυτανεῖον βαδίζει σιτησόμενος, ὁ δὲ πρὸς τοὺς δικαστὰς ἀπολογησόμενος, ὁ δὲ εἰς τὸ δεσμωτήριον ἀποθανούμενος. Γίνονται δὲ καὶ δημοθoinίαι νόμιμοι καὶ πανηγύρεις ἐνιαύσιοι θεῶν τε θυσίαι καὶ ἡρώων θεραπείαι καὶ χοαὶ κεκμηκότων· ἄλλα δὲ ἄλλως ἐνεργούμενα κατὰ μίαν πρόσταξιν ἢ νόμιμον ἐξουσίαν σώζει τὸ τοῦ ποιήσαντος ὄντως ὅτι

“πόλις δ’ ὁμοῦ μὲν θυμιαμάτων γέμει,

ὁμοῦ δὲ παιάνων τε καὶ στεναγμάτων,”

οὕτως ὑποληπτέον καὶ ἐπὶ τῆς μείζονος πόλεως, λέγω δὲ τοῦ κόσμου· νόμος γὰρ ἡμῖν ἰσοκλινὴς ὁ θεός, οὐδεμίαν ἐπιδεχόμενος διόρθωσιν ἢ μετάθεσιν, κρείττων δέ, οἶμαι, καὶ βεβαιότερος τῶν ἐν ταῖς κύρβεσιν ἀναγεγραμμένων. Ἦγουμένου δὲ ἀκινήτως αὐτοῦ καὶ ἐμμελῶς ὁ σύμπας οἰκονομεῖται διάκοσμος οὐρανοῦ καὶ γῆς, μεμερισμένος κατὰ τὰς φύσεις πάσας διὰ τῶν οἰκείων σπερμάτων εἷς τε φυτὰ καὶ ζῶα κατὰ γένη τε καὶ εἶδη· καὶ γὰρ ἄμπελοι καὶ φοίνικες καὶ περσέαι

“συκέαι τε γλυκεραὶ καὶ ἐλαῖαι”,

ὥς φησιν ὁ ποιητής, τά τε ἄκαρπα μὲν, ἄλλας δὲ παρεχόμενα χρείας, πλάτανοι καὶ πίτυες καὶ πύξοι

“κλήθρη τ’ αἴγειρός τε καὶ εὐώδης κυπάρισσος,”

αἱ τε καρπὸν ὁπώρας ἡδὺν ἄλλως δὲ δυσθησαύριστον φέρουσαι,

“ὄχναι καὶ ῥοιαὶ καὶ μηλέαι ἀγλαόκαρποι,”

τῶν τε ζώων τά τε ἄγρια καὶ ἡμερα, τά τε ἐν ἁέρι καὶ ἐπὶ γῆς καὶ ἐν ὕδατι βοσκόμενα, γίνεται καὶ ἀκμάζει καὶ φθείρεται τοῖς τοῦ θεοῦ πειθόμενα θεσμοῖς· “πᾶν γὰρ ἐρπετὸν πληγῇ νέμεται”, ὥς φησιν Ἡράκλειτος.

Εἷς δὲ ὢν πολυώνυμός ἐστι, κατονομαζόμενος τοῖς πάθεσι πᾶσιν ἅπερ αὐτὸς νεοχμοῖ. Καλοῦμεν γὰρ αὐτὸν καὶ Ζῆνα καὶ Δία, παραλλήλως

χρώμενοι τοῖς ὀνόμασιν, ὥς κ' ἂν εἰ λέγοιμεν δι' ὃν ζῶμεν. Κρόνου δὲ παῖς καὶ χρόνου λέγεται, διήκων ἔξ αἰῶνος ἀτέρμονος εἰς ἕτερον αἰῶνα· ἀστραπαῖός τε καὶ βρονταῖος καὶ αἶθριος καὶ αἰθήριος κεραυνίος τε καὶ ὑέτιος ἀπὸ τῶν ὑετῶν καὶ κεραυνῶν καὶ τῶν ἄλλων καλεῖται. Καὶ μὴν ἐπικάρπιος μὲν ἀπὸ τῶν καρπῶν, πολιεὺς δὲ ἀπὸ τῶν πόλεων ὀνομάζεται, γενέθλιός τε καὶ ἐρκεῖος καὶ ὁμόγνιος καὶ πατρῷος ἀπὸ τῆς πρὸς ταῦτα κοινωνίας, ἑταιρεῖός τε καὶ φίλιος καὶ ξένιος καὶ στρατίος καὶ τροπαιοῦχος καθάρσιός τε καὶ παλαμναῖος καὶ ἰκέσιος καὶ μειλίχιος, ὥσπερ οἱ ποιηταὶ λέγουσι, σωτήρ τε καὶ ἐλευθέριος ἐτύμως, ὥς δὲ τὸ πᾶν εἶπεῖν, οὐράνιός τε καὶ χθόνιος, πάσης ἐπώνυμος φύσεως ὢν καὶ τύχης, ἅτε πάντων αὐτὸς αἴτιος ὢν. Διὸ καὶ ἐν τοῖς Ὀρφικοῖς οὐ κακῶς λέγεται

“Ζεὺς πρῶτος γένητο, Ζεὺς ὕστατος ἀρχικέραυνος·

Ζεὺς κεφαλή, Ζεὺς μέσσα, Διὸς δ' ἐκ πάντα τέτυκται·

Ζεὺς πυθμὴν γαίης τε καὶ οὐρανοῦ ἀστερόεντος·

Ζεὺς ἄρσην γένητο, Ζεὺς ἄμβροτος ἔπλετο νύμφη·

Ζεὺς πνοιή πάντων, Ζεὺς ἀκαμάτου πυρὸς ὀρμή·

Ζεὺς πόντου ῥίζα, Ζεὺς ἥλιος ἡδὲ σελήνη·

Ζεὺς βασιλεύς, Ζεὺς ἀρχὸς ἀπάντων ἀρχικέραυνος·

πάντας γὰρ κρύψας αὖθις φάος ἐς πολυγηθὲς

ἐκ καθαρῆς κραδίης ἀνενέγκατο, μέρμερα ῥέζων.”

οἶμαι δὲ καὶ τὴν Ἀνάγκην οὐκ ἄλλο τι λέγεσθαι πλὴν τοῦτον, οἶονεὶ ἀνίκητον αἰτίαν ὄντα, Εἰμαρμένην δὲ διὰ τὸ εἶρειν τε καὶ χωρεῖν ἀκωλύτως, Πεπρωμένην δὲ διὰ τὸ πεπερατῶσθαι πάντα καὶ μηδὲν ἐν τοῖς οὕσιν ἄπειρον εἶναι, καὶ Μοῖραν μὲν ἀπὸ τοῦ μεμερίσθαι, Νέμεσιν δὲ ἀπὸ τῆς ἐκάστῳ διανεμήσεως, Ἀδράστειαν δὲ ἀναπόδραστον αἰτίαν οὖσαν κατὰ φύσιν, Αἶσαν δὲ ἀεὶ οὖσαν. Τὰ τε περὶ τὰς Μοίρας καὶ τὸν ἄτρακτον εἰς ταῦτό πως νεύει· τρεῖς μὲν γὰρ αἱ Μοῖραι, κατὰ τοὺς χρόνους μεμερισμέναι, νῆμα δὲ ἀτράκτου τὸ μὲν ἐξεργασμένον, τὸ δὲ μέλλον, τὸ δὲ περιστρεφόμενον· τέτακται δὲ κατὰ μὲν τὸ γεγονός μία τῶν Μοιρῶν, Ἄτροπος, ἐπεὶ τὰ παρελθόντα πάντα ἄτρεπτά ἐστι, κατὰ δὲ τὸ μέλλον Λάχεσις - [εἷς] πάντα γὰρ ἢ κατὰ φύσιν

μένει λήξις - κατὰ δὲ τὸ ἐνεστὼς Κλωθῶ, συμπεραίνουσά τε καὶ κλώθουσα ἑκάστω τὰ οἰκεῖα. Περαίνεται δὲ καὶ ὁ μῦθος οὐκ ἀτάκτως. Ταῦτα δὲ πάντα ἐστὶν οὐκ ἄλλο τι πλὴν ὁ θεός, καθάπερ καὶ ὁ γενναῖος Πλάτων φησὶν· “ὁ μὲν δὴ θεός, ὥσπερ ὁ παλαιὸς λόγος, ἀρχὴν τε καὶ τελευτὴν καὶ μέσα τῶν ὄντων ἀπάντων ἔχων, εὐθείᾳ περαίνει κατὰ φύσιν πορευόμενος· τῷ δὲ ἀεὶ ξυνέπεται δίκη, τῶν ἀπολειπομένων τοῦ θεοῦ νόμου τιμωρός”, “ἥς ὁ γενήσεσθαι μέλλων μακάριός τε καὶ εὐδαίμων ἐξ ἀρχῆς εὐθύς μέτοχος εἴη.”

## Περὶ ψυχῆς (402a) On the Soul



### CONTENTS

#### [Βιβλίο Α](#)

##### [Κεφάλαιο 1](#)

##### [Κεφάλαιο 2](#)

##### [Κεφάλαιο 3](#)

##### [Κεφάλαιο 4](#)

##### [Κεφάλαιο 5](#)

#### [Βιβλίο Β](#)

##### [Κεφάλαιο 1](#)

##### [Κεφάλαιο 2](#)

##### [Κεφάλαιο 3](#)

##### [Κεφάλαιο 4](#)

##### [Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Βιβλίο Γ](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

## Βιβλίο Α

### Κεφάλαιο 1

[402a] Τῶν καλῶν καὶ τιμίῳ τὴν εἶδῃσιν ὑπολαμβάνοντες, μᾶλλον δ' ἑτέραν ἑτέρας ἢ κατ' ἀκρίβειαν ἢ τῷ βελτιόνων τε καὶ θαυμασιωτέρων εἶναι, δι' ἀμφοτέρω ταῦτα τὴν περὶ τῆς ψυχῆς ἱστορίαν εὐλόγως ἂν ἐν πρώτοις τιθεῖμεν. δοκεῖ δὲ καὶ πρὸς ἀλήθειαν ἅπασαν ἢ γνῶσις αὐτῆς μεγάλη συμβάλλεσθαι, μάλιστα δὲ πρὸς τὴν φύσιν· ἔστι γὰρ οἷον ἀρχὴ τῶν ζώων. ἐπιζητοῦμεν δὲ θεωρῆσαι καὶ γινῶναι τὴν τε φύσιν αὐτῆς καὶ τὴν οὐσίαν, εἴθ' ὅσα συμβέβηκε περὶ αὐτὴν· ὧν τὰ μὲν ἴδια πάθη τῆς ψυχῆς εἶναι δοκεῖ, τὰ δὲ δι' ἐκείνην καὶ τοῖς ζώοις ὑπάρχειν.

πάντῃ δὲ πάντως ἔστι τῶν χαλεπωτάτων λαβεῖν τινα πίστιν περὶ αὐτῆς. καὶ γάρ, ὄντος κοινοῦ τοῦ ζητήματος καὶ πολλοῖς ἑτέροις, λέγω δὲ τοῦ περὶ τὴν οὐσίαν καὶ τὸ τί ἐστὶ, τάχ' ἂν τῷ δόξειε μία τις εἶναι μέθοδος κατὰ πάντων περὶ ὧν βουλόμεθα γινῶναι τὴν οὐσίαν, ὥσπερ καὶ τῶν κατὰ συμβεβηκὸς ἰδίων ἀπόδειξις, ὥστε ζητητέον ἂν εἴη τὴν μέθοδον ταύτην· εἰ δὲ μὴ ἔστι μία τις καὶ κοινὴ μέθοδος περὶ τὸ τί ἐστίν, ἔτι χαλεπώτερον γίνεται τὸ πραγματευθῆναι· δεήσει γὰρ λαβεῖν περὶ ἕκαστον τίς ὁ τρόπος, ἐὰν δὲ φανερόν ἢ πότερον ἀπόδειξις ἐστὶν ἢ διαίρεσις ἢ καὶ τις ἄλλη μέθοδος, ἔτι πολλὰς ἀπορίας ἔχει καὶ πλάνας, ἐκ τίνων δεῖ ζητεῖν· ἄλλαι γὰρ ἄλλων ἀρχαί, καθάπερ ἀριθμῶν καὶ ἐπιπέδων.

πρῶτον δ' ἴσως ἀναγκαῖον διελεῖν ἐν τίνι τῶν γενῶν καὶ τί ἐστὶ, λέγω δὲ πότερον τόδε τι καὶ οὐσία ἢ ποιὸν ἢ ποσόν, ἢ καὶ τις ἄλλη τῶν διαιρεθεισῶν κατηγοριῶν, ἔτι δὲ πότερον τῶν ἐν δυνάμει ὄντων ἢ μᾶλλον ἐντελέχειά τις· διαφέρει γὰρ οὗ τι [402b] μικρόν.

σκεπτέον δὲ καὶ εἰ μεριστὴ ἢ ἀμερής, καὶ πότερον ὁμοειδὴς ἅπασα ψυχὴ ἢ οὐ· εἰ δὲ μὴ ὁμοειδής, πότερον εἶδει διαφέρουσα ἢ γένει. νῦν μὲν γὰρ οἱ λέγοντες καὶ ζητοῦντες περὶ ψυχῆς περὶ τῆς ἀνθρωπίνης μόνῃς εὐοίκασι ἐπισκοπεῖν·

εὐλαβητέον δ' ὅπως μὴ λανθάνῃ πότερον εἷς ὁ λόγος αὐτῆς ἐστὶ, καθάπερ ζώου, ἢ καθ' ἕκαστον ἕτερος, οἷον ἵππου, κυνός, ἀνθρώπου, θεοῦ, τὸ δὲ ζῶον

τὸ καθόλου ἦτοι οὐθέν ἐστιν ἢ ὕστερον, ὁμοίως δὲ καὶ εἴ τι κοινὸν ἄλλο κατηγοροῖτο·

ἔτι δέ, εἰ μὴ πολλὰ ψυχὰ ἀλλὰ μόρια, πότερον δεῖ ζητεῖν πρότερον τὴν ὅλην ψυχὴν ἢ τὰ μόρια. χαλεπὸν δὲ καὶ τούτων διορίσαι ποῖα πέφυκεν ἕτερα ἀλλήλων, καὶ πότερον τὰ μόρια χρὴ ζητεῖν πρότερον ἢ τὰ ἔργα αὐτῶν, οἷον τὸ νοεῖν ἢ τὸν νοῦν, καὶ τὸ αἰσθάνεσθαι ἢ τὸ αἰσθητικόν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων.

εἰ δὲ τὰ ἔργα πρότερον, πάλιν ἂν τις ἀπορήσειεν εἰ τὰ ἀντικείμενα πρότερον τούτων ζητητέον, οἷον τὸ αἰσθητὸν τοῦ αἰσθητικοῦ, καὶ τὸ νοητὸν τοῦ νοῦ.

[402b16] ἔοικε δ' οὐ μόνον τὸ τί ἐστι γινῶναι χρήσιμον εἶναι πρὸς τὸ θεωρῆσαι τὰς αἰτίας τῶν συμβεβηκότων ταῖς οὐσίαις (ὥσπερ ἐν τοῖς μαθήμασι τί τὸ εὐθύ καὶ τὸ καμπύλον, ἢ τί γραμμὴ καὶ ἐπίπεδον, πρὸς τὸ κατιδεῖν πόσαις ὀρθαῖς αἰ τοῦ τριγώνου γωνίαι ἴσαι), ἀλλὰ καὶ ἀνάπαλιν τὰ συμβεβηκότα συμβάλλεται μέγα μέρος πρὸς τὸ εἶδέναι τὸ τί ἐστιν· ἐπειδὴν γὰρ ἔχωμεν ἀποδιδόναι κατὰ τὴν φαντασίαν περὶ τῶν συμβεβηκότων, ἢ πάντων ἢ τῶν πλείστων, τότε καὶ περὶ τῆς οὐσίας ἔξομεν λέγειν κάλλιστα· πάσης γὰρ ἀποδείξεως ἀρχὴ τὸ τί ἐστιν, ὥστε καθ' ὅσους τῶν ὀρισμῶν μὴ συμβαίνει τὰ [403a] συμβεβηκότα γνωρίζειν, ἀλλὰ μηδ' εἰκάσαι περὶ αὐτῶν εὐμαρές, δῆλον ὅτι διαλεκτικῶς εἴρηνται καὶ κενῶς ἅπαντες.

[403a3] ἀπορίαν δ' ἔχει καὶ τὰ πάθη τῆς ψυχῆς, πότερόν ἐστι πάντα κοινὰ καὶ τοῦ ἔχοντος ἢ ἔστι τι καὶ τῆς ψυχῆς ἴδιον αὐτῆς· τοῦτο γὰρ λαβεῖν μὲν ἀναγκαῖον, οὐ ῥάδιον δέ. φαίνεται δὲ τῶν μὲν πλείστων οὐθέν ἄνευ τοῦ σώματος πάσχειν οὐδὲ ποιεῖν, οἷον ὀργίζεσθαι, θαρρεῖν, ἐπιθυμεῖν, ὅλως αἰσθάνεσθαι, μάλιστα δ' ἔοικεν ἰδίῳ τὸ νοεῖν· εἰ δ' ἐστὶ καὶ τοῦτο φαντασία τις ἢ μὴ ἄνευ φαντασίας, οὐκ ἐνδέχοιτ' ἂν οὐδὲ τοῦτ' ἄνευ σώματος εἶναι.

εἰ μὲν οὖν ἔστι τι τῶν τῆς ψυχῆς ἔργων ἢ παθημάτων ἴδιον, ἐνδέχοιτ' ἂν αὐτὴν χωρίζεσθαι· εἰ δὲ μηθέν ἐστιν ἴδιον αὐτῆς, οὐκ ἂν εἴη χωριστή, ἀλλὰ καθάπερ τῷ εὐθεῖ, ἢ εὐθύ, πολλὰ συμβαίνει, οἷον ἄπτεσθαι τῆς [χαλκῆς] σφαίρας κατὰ στιγμήν, οὐ μέντοι γ' ἄψεται οὕτως χωρισθέν τι εὐθύ· ἀχώριστον γάρ, εἴπερ ἀεὶ μετὰ σώματός τινος ἐστιν. ἔοικε δὲ καὶ τὰ τῆς ψυχῆς πάθη πάντα εἶναι μετὰ σώματος, θυμός, πραότης, φόβος, ἔλεος, θάρσος, ἔτι χαρὰ καὶ τὸ φιλεῖν τε καὶ μισεῖν· ἅμα γὰρ τούτοις πάσχει τι τὸ σῶμα. μηνύει δὲ τὸ ποτὲ μὲν ἰσχυρῶν καὶ ἐναργῶν παθημάτων συμβαινόντων μηδὲν παροξύνεσθαι ἢ φοβεῖσθαι, ἐνίοτε δ' ὑπὸ μικρῶν καὶ ἀμαυρῶν κινεῖσθαι,



ὅταν ὀργᾷ τὸ σῶμα καὶ οὕτως ἔχῃ ὥσπερ ὅταν ὀργίζεται. ἔτι δὲ μᾶλλον τοῦτο φανερόν· μηθενὸς γὰρ φοβεροῦ συμβαίνοντος ἐν τοῖς πάθεσι γίνονται τοῖς τοῦ φοβουμένου. εἰ δ' οὕτως ἔχει, δῆλον ὅτι τὰ πάθη λόγοι ἐνυλοὶ εἰσιν· ὥστε οἱ ὅροι τοιοῦτοι οἷον “τὸ ὀργίζεσθαι κίνησίς τις τοῦ τοιουδὶ σώματος ἢ μέρους ἢ δυνάμεως ὑπὸ τοῦδε ἔνεκα τοῦδε”,

καὶ διὰ ταῦτα ἤδη φυσικοῦ τὸ θεωρῆσαι περὶ ψυχῆς, ἢ πάσης ἢ τῆς τοιαύτης. διαφερόντως δ' ἂν ὀρίσαιντο ὁ φυσικὸς [τε] καὶ ὁ διαλεκτικὸς ἕκαστον αὐτῶν, οἷον ὀργὴ τί ἐστίν· ὁ μὲν γὰρ ὀρεξιν ἀντιλυπήσεως ἢ τι τοιοῦτον, ὁ δὲ ζέσιν τοῦ περὶ καρδίαν αἵματος [403b] καὶ θερμοῦ. τούτων δὲ ὁ μὲν τὴν ὕλην ἀποδίδωσιν, ὁ δὲ τὸ εἶδος καὶ τὸν λόγον. ὁ μὲν γὰρ λόγος ὅδε τοῦ πράγματος, ἀνάγκη δ' εἶναι τοῦτον ἐν ὕλῃ τοιαδί, εἰ ἔσται· ὥσπερ οἰκίας ὁ μὲν λόγος τοιοῦτος, ὅτι σκέπασμα κωλυτικὸν φθορᾶς ὑπ' ἀνέμων καὶ ὄμβρων καὶ καυμάτων, ὁ δὲ φήσκει λίθους καὶ πλίνθους καὶ ξύλα, ἕτερος δ' ἐν τούτοις τὸ εἶδος <οὔ> ἔνεκα τωνδὶ. τίς οὖν ὁ φυσικὸς τούτων; πότερον ὁ περὶ τὴν ὕλην, τὸν δὲ λόγον ἀγνοῶν, ἢ ὁ περὶ τὸν λόγον μόνον; ἢ μᾶλλον ὁ ἐξ ἀμφοῖν; ἐκείνων δὲ δὴ τίς ἐκάτερος; ἢ οὐκ ἔστιν εἷς ὁ περὶ τὰ πάθη τῆς ὕλης τὰ μὴ χωριστὰ μὴδ' ἢ χωριστά, ἀλλ' ὁ φυσικὸς περὶ ἅπανθ' ὅσα τοῦ τοιουδὶ σώματος καὶ τῆς τοιαύτης ὕλης ἔργα καὶ πάθη, ὅσα δὲ μὴ τοιαῦτα, ἄλλος, καὶ περὶ τινῶν μὲν τεχνίτης, ἐὰν τύχη, οἷον τέκτων ἢ ἰατρός, τῶν δὲ μὴ χωριστῶν μὲν, ἢ δὲ μὴ τοιούτου σώματος πάθη καὶ ἐξ ἀφαιρέσεως, ὁ μαθηματικὸς, ἢ δὲ κεχωρισμένα, ὁ πρῶτος φιλόσοφος; ἀλλ' ἐπανιτέον ὅθεν ὁ λόγος. ἐλέγομεν δὴ ὅτι τὰ πάθη τῆς ψυχῆς οὕτως ἀχώριστα τῆς φυσικῆς ὕλης τῶν ζώων, ἢ γε τοιαῦθ' ὑπάρχει <οῖα> θυμὸς καὶ φόβος, καὶ οὐχ ὥσπερ γραμμὴ καὶ ἐπίπεδον.

## Κεφάλαιο 2

[403b20] Ἐπισκοποῦντας δὲ περὶ ψυχῆς ἀναγκαῖον, ἅμα διαποροῦντας περὶ ὧν εὐπορεῖν δεῖ προελθόντας, τὰς τῶν προτέρων δόξας συμπαραλαμβάνειν ὅσοι τι περὶ αὐτῆς ἀπεφάναντο, ὅπως τὰ μὲν καλῶς εἰρημένα λάβωμεν, εἰ δέ τι μὴ καλῶς, τοῦτ' εὐλαβηθῶμεν.

ἀρχὴ δὲ τῆς ζητήσεως προθέσθαι τὰ μάλιστα δοκοῦνθ' ὑπάρχειν αὐτῇ κατὰ φύσιν. τὸ ἔμψυχον δὴ τοῦ ἀψύχου δυσὶ μάλιστα διαφέρειν δοκεῖ, κινήσει τε καὶ τῷ αἰσθάνεσθαι. παρειλήφαμεν δὲ καὶ παρὰ τῶν προγενεστέρων σχεδὸν δύο ταῦτα περὶ ψυχῆς· φασὶ γὰρ ἔνιοι καὶ μάλιστα καὶ πρῶτως ψυχὴν εἶναι τὸ κινοῦν, οἰηθέντες δὲ τὸ μὴ κινούμενον αὐτὸ μὴ ἐνδέχεσθαι κινεῖν ἕτερον, τῶν κινουμένων τι τὴν ψυχὴν ὑπέλαβον εἶναι. ὅθεν Δημόκριτος μὲν [404a]

πῦρ τι καὶ θερμόν φησιν αὐτὴν εἶναι· ἀπείρων γὰρ ὄντων σχημάτων καὶ ἀτόμων τὰ σφαιροειδῆ πῦρ καὶ ψυχὴν λέγει (οἷον ἐν τῷ ἀέρι τὰ καλούμενα ξύσματα, ἃ φαίνεται ἐν ταῖς διὰ τῶν θυρίδων ἀκτῖσιν), ὧν τὴν μὲν πανσπερμίαν στοιχεῖα λέγει τῆς ὅλης φύσεως (ὁμοίως δὲ καὶ Λεύκιππος), τούτων δὲ τὰ σφαιροειδῆ ψυχὴν, διὰ τὸ μάλιστα διὰ παντὸς δύνασθαι διαδύνειν τοὺς τοιούτους ῥυσμοὺς καὶ κινεῖν τὰ λοιπά, κινούμενα καὶ αὐτά, ὑπολαμβάνοντες τὴν ψυχὴν εἶναι τὸ παρέχον τοῖς ζώοις τὴν κίνησιν· διὸ καὶ τοῦ ζῆν ὅρον εἶναι τὴν ἀναπνοήν· συνάγοντος γὰρ τοῦ περιέχοντος τὰ σώματα καὶ ἐκθλίβοντος τῶν σχημάτων τὰ παρέχοντα τοῖς ζώοις τὴν κίνησιν διὰ τὸ μηδ' αὐτὰ ἡρεμεῖν μηδέποτε, βοήθειαν γίνεσθαι θύραθεν ἐπεισιόντων ἄλλων τοιούτων ἐν τῷ ἀναπνεῖν· κωλύειν γὰρ αὐτὰ καὶ τὰ ἐνυπάρχοντα ἐν τοῖς ζώοις ἐκκρίνεσθαι, συνανείργοντα τὸ συνάγον καὶ πηγνύον· καὶ ζῆν δὲ ἕως ἄν δύνωνται τοῦτο ποιεῖν.

[404a16] ἔοικε δὲ καὶ τὸ παρὰ τῶν Πυθαγορείων λεγόμενον τὴν αὐτὴν ἔχειν διάνοιαν· ἔφασαν γάρ τινες αὐτῶν ψυχὴν εἶναι τὰ ἐν τῷ ἀέρι ξύσματα, οἱ δὲ τὸ ταῦτα κινοῦν, περὶ δὲ τούτων εἴρηται ὅτι συνεχῶς φαίνεται κινούμενα, κἂν ἢ νηνεμία παντελής. ἐπὶ ταῦτόν δὲ φέρονται καὶ ὅσοι λέγουσι τὴν ψυχὴν τὸ αὐτὸ κινοῦν· εἰκόασι γὰρ οὗτοι πάντες ὑπειληφέναι τὴν κίνησιν οἰκειότατον εἶναι τῇ ψυχῇ, καὶ τὰ μὲν ἄλλα πάντα κινεῖσθαι διὰ τὴν ψυχὴν, ταύτην δ' ὑφ' ἑαυτῆς, διὰ τὸ μηθὲν ὁρᾶν κινοῦν ὃ μὴ καὶ αὐτὸ κινεῖται.

ὁμοίως δὲ καὶ Ἀναξαγόρας ψυχὴν εἶναι λέγει τὴν κινουῦσαν, καὶ εἴ τις ἄλλος εἴρηκεν ὡς τὸ πᾶν ἐκίνησε νοῦς· οὐ μὴν παντελῶς γ' ὥσπερ Δημόκριτος. ἐκεῖνος μὲν γὰρ ἀπλῶς ταῦτόν ψυχὴν καὶ νοῦν (τὸ γὰρ ἀληθὲς εἶναι τὸ φαινόμενον, διὸ καλῶς ποιῆσαι [τὸν] Ὅμηρον ὡς ὁ Ἑκτωρ “κεῖτ' ἄλλοφρονέων”· οὐ δὲ χρῆται τῷ νῶ ὡς δυνάμει τινὶ περὶ τὴν ἀλήθειαν, ἀλλὰ ταῦτόν λέγει ψυχὴν καὶ νοῦν).

[404b] Ἀναξαγόρας δ' ἥττον διασαφεῖ περὶ αὐτῶν· πολλαχοῦ μὲν γὰρ τὸ αἴτιον τοῦ καλῶς καὶ ὀρθῶς τὸν νοῦν λέγει, ἐτέρωθι δὲ τὸν νοῦν εἶναι ταῦτόν τῇ ψυχῇ· ἐν ἅπασιν γὰρ ὑπάρχειν αὐτόν τοῖς ζώοις, καὶ μεγάλοις καὶ μικροῖς, καὶ τιμίοις καὶ ἀτιμοτέροις· οὐ φαίνεται δ' ὅ γε κατὰ φρόνησιν λεγόμενος νοῦς πᾶσιν ὁμοίως ὑπάρχειν τοῖς ζώοις, ἀλλ' οὐδὲ τοῖς ἀνθρώποις πᾶσιν.

ὅσοι μὲν οὖν ἐπὶ τὸ κινεῖσθαι τὸ ἔμψυχον ἀπέβλεψαν, οὗτοι τὸ κινητικώτατον ὑπέλαβον τὴν ψυχὴν· ὅσοι δ' ἐπὶ τὸ γινώσκειν καὶ τὸ αἰσθάνεσθαι τῶν ὄντων, οὗτοι δὲ λέγουσι τὴν ψυχὴν τὰς ἀρχάς, οἱ μὲν

πλείους ποιοῦντες, ταύτας, οἱ δὲ μίαν, ταύτην, ὥσπερ Ἐμπεδοκλῆς μὲν ἐκ τῶν στοιχείων πάντων, εἶναι δὲ καὶ ἕκαστον ψυχὴν τούτων, λέγων οὕτως,

γαίῃ μὲν γὰρ γαῖαν ὀπώπαμεν, ὕδατι δ' ὕδωρ,

αἰθέρι δ' αἰθέρα διῖαν, ἀτὰρ πυρὶ πῦρ αἶδηλον,

στοργῇ δὲ στοργήν, νεῖκος δέ τε νείκει λυγρῷ·

τὸν αὐτὸν δὲ τρόπον καὶ Πλάτων ἐν τῷ Τιμαίῳ τὴν ψυχὴν ἐκ τῶν στοιχείων ποιεῖ· γινώσκεισθαι γὰρ τῷ ὁμοίῳ τὸ ὅμοιον, τὰ δὲ πράγματα ἐκ τῶν ἀρχῶν εἶναι. ὁμοίως δὲ καὶ ἐν τοῖς περὶ φιλοσοφίας λεγομένοις διωρίσθη, αὐτὸ μὲν τὸ ζῶον ἐξ αὐτῆς τῆς τοῦ ἐνδὸς ιδέας καὶ τοῦ πρώτου μήκους καὶ πλάτους καὶ βάθους, τὰ δ' ἄλλα ὁμοιοτρόπως· ἔτι δὲ καὶ ἄλλως, νοῦν μὲν τὸ ἔν, ἐπιστήμην δὲ τὰ δύο (μοναχῶς γὰρ ἐφ' ἑν), τὸν δὲ τοῦ ἐπιπέδου ἀριθμὸν δόξαν, αἴσθησιν δὲ τὸν τοῦ στερεοῦ. οἱ μὲν γὰρ ἀριθμοὶ τὰ εἶδη αὐτὰ καὶ αἱ [404b25] ἀρχαὶ ἐλέγοντο, εἰσὶ δ' ἐκ τῶν στοιχείων, κρίνεται δὲ τὰ πράγματα τὰ μὲν νῶ, τὰ δ' ἐπιστήμη, τὰ δὲ δόξη, τὰ δ' αἰσθήσει· εἶδη δ' οἱ ἀριθμοὶ οὗτοι τῶν πραγμάτων.

[404b27] ἐπεὶ δὲ καὶ κινητικὸν ἐδόκει ἡ ψυχὴ εἶναι καὶ γνωριστικὸν οὕτως, ἔνιοι συνέπλεξαν ἐξ ἀμφοῖν, ἀποφηνάμενοι τὴν ψυχὴν ἀριθμὸν κινεῖν ἑαυτόν,

διαφέρονται δὲ περὶ τῶν ἀρχῶν, τίνες καὶ πόσαι, μάλιστα μὲν οἱ σωματικὰς ποιοῦντες τοῖς ἀσωμάτους, [405a] τούτοις δ' οἱ μίξαντες καὶ ἀπ' ἀμφοῖν τὰς ἀρχὰς ἀποφηνάμενοι.

διαφέρονται δὲ καὶ περὶ τοῦ πλήθους· οἱ μὲν γὰρ μίαν οἱ δὲ πλείους λέγουσιν. ἐπομένως δὲ τούτοις καὶ τὴν ψυχὴν ἀποδιδόασιν· τὸ γὰρ κινητικὸν τὴν φύσιν τῶν πρώτων ὑπειλήφασιν, οὐκ ἀλόγως.

ὅθεν ἔδοξέ τισι πῦρ εἶναι· καὶ γὰρ τοῦτο λεπτομερέστατόν τε καὶ μάλιστα τῶν στοιχείων ἀσώματον, ἔτι δὲ κινεῖται τε καὶ κινεῖ τὰ ἄλλα πρώτως.

Δημόκριτος δὲ καὶ γλαφυρωτέρως εἶρηκεν ἀποφαινόμενος διὰ τί τούτων ἑκάτερον· ψυχὴν μὲν γὰρ εἶναι ταῦτόν τε καὶ νοῦν, τοῦτο δ' εἶναι τῶν πρώτων καὶ ἀδιαιρέτων σωμάτων, κινητικὸν δὲ διὰ μικρομέρειαν καὶ τὸ σχῆμα· τῶν δὲ σχημάτων εὐκίνητότατον τὸ σφαιροειδὲς λέγει· τοιοῦτον δ' εἶναι τὸν τε νοῦν καὶ τὸ πῦρ.

Ἀναξαγόρας δ' ἔοικε μὲν ἕτερον λέγειν ψυχὴν τε καὶ νοῦν, ὥσπερ εἴπομεν καὶ πρότερον, χρήται δ' ἀμφοῖν ὡς μιᾷ φύσει, πλὴν ἀρχὴν γε τὸν νοῦν τίθεται μάλιστα πάντων· μόνον γοῦν φησὶν αὐτὸν τῶν ὄντων ἀπλοῦν εἶναι καὶ ἀμιγῆ τε καὶ καθαρὸν. ἀποδίδωσι δ' ἄμφω τῇ αὐτῇ ἀρχῇ, τό τε γινώσκειν καὶ τὸ κινεῖν, λέγων νοῦν κινῆσαι τὸ πᾶν.

ἔοικε δὲ καὶ Θαλῆς ἐξ ὧν ἀπομνημονεύουσι κινητικὸν τι τὴν ψυχὴν ὑπολαβεῖν, εἴπερ τὴν λίθον ἔφη ψυχὴν ἔχειν, ὅτι τὸν σίδηρον κινεῖ.

Διογένης δ' ὥσπερ καὶ ἕτεροὶ τινες ἀέρα, τοῦτον οἶηθεις πάντων λεπτομερέστατον εἶναι καὶ ἀρχήν· καὶ διὰ τοῦτο γινώσκειν τε καὶ κινεῖν τὴν ψυχὴν, ἥ μὲν πρῶτόν ἐστι, καὶ ἐκ τούτου τὰ λοιπά, γινώσκειν, ἥ δὲ λεπτότατον, κινητικὸν εἶναι.

καὶ Ἡράκλειτος δὲ τὴν ἀρχὴν εἶναί φησι ψυχὴν, εἴπερ τὴν ἀναθυμίασιν, ἐξ ἧς τᾶλλα συνίστησιν· καὶ ἀσωματώτατόν τε καὶ ῥέον ἀεί· τὸ δὲ κινούμενον κινουμένῳ γινώσκεσθαι· ἐν κινήσει δ' εἶναι τὰ ὄντα κἀκεῖνος ὤετο καὶ οἱ πολλοί.

παραπλησίως δὲ τούτοις καὶ Ἀλκμαίων ἔοικεν ὑπολαβεῖν περὶ ψυχῆς· φησὶ γὰρ αὐτὴν ἀθάνατον εἶναι διὰ τὸ εἰκέναι τοῖς ἀθανάτοις· τοῦτο δ' ὑπάρχειν αὐτῇ ὡς ἀεὶ κινουμένη· κινεῖσθαι γὰρ καὶ τὰ θεῖα πάντα συνεχῶς [405b] ἀεὶ, σελήνην, ἥλιον, τοὺς ἀστέρας καὶ τὸν οὐρανὸν ὅλον.

τῶν δὲ φορτικωτέρων καὶ ὕδωρ τινὲς ἀπεφάναντο, καθάπερ Ἴππων· πεισθῆναι δ' εἰκόασιν ἐκ τῆς γονῆς, ὅτι πάντων ὑγρὰ. καὶ γὰρ ἐλέγχει τοὺς αἵμα φάσκοντας τὴν ψυχὴν, ὅτι ἡ γονὴ οὐχ αἷμα· ταύτην δ' εἶναι τὴν πρώτην ψυχὴν.

ἕτεροι δ' αἷμα, καθάπερ Κριτίας, τὸ αἰσθάνεσθαι ψυχῆς οἰκειότατον ὑπολαμβάνοντες, τοῦτο δ' ὑπάρχειν διὰ τὴν τοῦ αἵματος φύσιν. πάντα γὰρ τὰ στοιχεῖα κριτὴν εἴληφε, πλὴν τῆς γῆς· ταύτην δ' οὐθεὶς ἀποπέφανται, πλὴν εἴ τις αὐτὴν εἴρηκεν ἐκ πάντων εἶναι τῶν στοιχείων ἢ πάντα.

ὀρίζονται δὲ πάντες τὴν ψυχὴν τρισὶν ὡς εἰπεῖν, κινήσει, αἰσθήσει, τῷ ἀσωμάτῳ· τούτων δ' ἕκαστον ἀνάγεται πρὸς τὰς ἀρχάς. διὸ καὶ οἱ τῷ γινώσκειν ὀριζόμενοι αὐτὴν ἢ στοιχεῖον ἢ ἐκ τῶν στοιχείων ποιοῦσι, λέγοντες παραπλησίως ἀλλήλοις, πλὴν ἑνός· φασὶ γὰρ γινώσκεσθαι τὸ ὅμοιον τῷ ὁμοίῳ· ἐπειδὴ γὰρ ἡ ψυχὴ πάντα γινώσκει, συνιστᾷσιν αὐτὴν ἐκ πασῶν τῶν ἀρχῶν.

ὅσοι μὲν οὖν μίαν τινὰ λέγουσιν αἰτίαν καὶ στοιχεῖον ἓν, καὶ τὴν ψυχὴν ἐν τιθέασιν, οἷον πῦρ ἢ ἀέρα· οἱ δὲ πλείους λέγοντες τὰς ἀρχὰς καὶ τὴν ψυχὴν πλείω ποιοῦσιν.

Ἀναξαγόρας δὲ μόνος ἀπαθῆ φησιν εἶναι τὸν νοῦν, καὶ κοινὸν οὐθὲν οὐθενὶ τῶν ἄλλων ἔχειν. τοιοῦτος δ' ὢν πῶς γνωριεῖ καὶ διὰ τίν' αἰτίαν, οὗτ' ἐκεῖνος εἴρηκεν οὗτ' ἐκ τῶν εἰρημένων συμφανές ἐστιν. ὅσοι δ' ἐναντιώσεις ποιοῦσιν ἐν ταῖς ἀρχαῖς, καὶ τὴν ψυχὴν ἐκ τῶν ἐναντίων συνιστᾷσιν· οἱ δὲ θάτερον τῶν ἐναντίων, οἷον θερμὸν ἢ ψυχρὸν ἢ τι τοιοῦτον ἄλλο, καὶ τὴν ψυχὴν ὁμοίως ἓν τι τούτων τιθέασιν. διὸ καὶ τοῖς ὀνόμασιν ἀκολουθοῦσιν, οἱ μὲν τὸ θερμὸν λέγοντες, ὅτι διὰ τοῦτο καὶ τὸ ζῆν ὠνόμασται, οἱ δὲ τὸ ψυχρὸν, <διὰ τὸ> διὰ τὴν ἀναπνοὴν καὶ τὴν κατάψυξιν καλεῖσθαι ψυχὴν.

τὰ μὲν οὖν παραδεδομένα περὶ ψυχῆς, καὶ δι' ἃς αἰτίας λέγουσιν οὕτω, ταῦτ' ἐστίν.

### Κεφάλαιο 3

[405a31] Ἐπισκεπτέον δὲ πρῶτον μὲν περὶ κινήσεως· ἴσως γὰρ οὐ μόνον ψεῦδός ἐστι τὸ τὴν οὐσίαν αὐτῆς τοιαύτην εἶναι οἷαν [406a] φασὶν οἱ λέγοντες ψυχὴν εἶναι τὸ κινεῖν ἑαυτὸ ἢ δυνάμενον κινεῖν, ἀλλ' ἓν τι τῶν ἀδυνάτων τὸ ὑπάρχειν αὐτῇ κίνησιν.

ὅτι μὲν οὖν οὐκ ἀναγκαῖον τὸ κινεῖν καὶ αὐτὸ κινεῖσθαι, πρότερον εἴρηται. διχῶς δὲ κινουμένου παντός-ἢ γὰρ καθ' ἕτερον ἢ καθ' αὐτό· καθ' ἕτερον δὲ λέγομεν ὅσα κινεῖται τῷ ἐν κινουμένῳ εἶναι, οἷον πλωτῆρες· οὐ γὰρ ὁμοίως κινεῖνται τῷ πλοίῳ· τὸ μὲν γὰρ καθ' αὐτὸ κινεῖται, οἱ δὲ τῷ ἐν κινουμένῳ εἶναι (δῆλον δ' ἐπὶ τῶν μορίων· οἰκεία μὲν γάρ ἐστι κίνησις ποδῶν βάδισις, αὕτη δὲ καὶ ἀνθρώπων· οὐχ ὑπάρχει δὲ τοῖς πλωτῆρσι τόδε) -διχῶς δὲ λεγομένου τοῦ κινεῖσθαι νῦν ἐπισκοποῦμεν περὶ τῆς ψυχῆς εἰ καθ' αὐτὴν κινεῖται καὶ μετέχει κινήσεως.

[406a12] τεσσάρων δὲ κινήσεων οὐσῶν, φορᾶς ἀλλοιώσεως φθίσεως ἀυξήσεως, ἢ μίαν τούτων κινεῖτ' ἂν ἢ πλείους ἢ πάσας. εἰ δὲ κινεῖται μὴ κατὰ συμβεβηκός, φύσει ἂν ὑπάρχοι κίνησις αὐτῇ· εἰ δὲ τοῦτο, καὶ τόπος· πᾶσαι γὰρ αἰ λεχθεῖσαι κινήσεις ἐν τόπῳ. εἰ δ' ἐστὶν ἡ οὐσία τῆς ψυχῆς τὸ κινεῖν ἑαυτήν, οὐ κατὰ συμβεβηκός αὐτῇ τὸ κινεῖσθαι ὑπάρξει, ὥσπερ τῷ λευκῷ ἢ τῷ τριπῆχει· κινεῖται γὰρ καὶ ταῦτα, ἀλλὰ κατὰ συμβεβηκός· ὥ γὰρ ὑπάρχουσιν, ἐκεῖνο κινεῖται, τὸ σῶμα. διὸ καὶ οὐκ ἔστι τόπος αὐτῶν· τῆς δὲ

ψυχῆς ἔσται, εἴπερ φύσει κινήσεως μετέχει.

ἔτι δ' εἰ φύσει κινεῖται, κἂν βίᾳ κινηθεῖη· κἂν εἰ βίᾳ, καὶ φύσει. τὸν αὐτὸν δὲ τρόπον ἔχει καὶ περὶ ἡρεμίας· εἰς ὃ γὰρ κινεῖται φύσει, καὶ ἡρεμεῖ ἐν τούτῳ φύσει· ὁμοίως δὲ καὶ εἰς ὃ κινεῖται βίᾳ, καὶ ἡρεμεῖ ἐν τούτῳ βίᾳ. ποῖαι δὲ βίαιοι τῆς ψυχῆς κινήσεις ἔσονται καὶ ἡρεμίαι, οὐδὲ πλάττειν βουλομένοις ῥάδιον ἀποδοῦναι.

ἔτι δ' εἰ μὲν ἄνω κινήσεται, πῦρ ἔσται, εἰ δὲ κάτω, γῆ· τούτων γὰρ τῶν σωμάτων αἱ κινήσεις αὗται·

ὁ δ' αὐτὸς λόγος καὶ περὶ τῶν μεταξύ. ἔτι δ' ἐπεὶ φαίνεται κινεῖσα τὸ σῶμα, ταύτας εὖλογον κινεῖν τὰς κινήσεις ἃς καὶ αὐτὴ κινεῖται. εἰ δὲ τοῦτο, καὶ ἀντιστρέψασιν εἰπεῖν ἀληθὲς ὅτι ἦν τὸ [406b] σῶμα κινεῖται, ταύτην καὶ αὐτή. τὸ δὲ σῶμα κινεῖται φορᾷ· ὥστε καὶ ἡ ψυχὴ μεταβάλλοι ἂν κατὰ τὸ σῶμα ἢ ὅλη ἢ κατὰ μέρη μεθισταμένη. εἰ δὲ τοῦτ' ἐνδέχεται, καὶ ἐξελθοῦσαν εἰσιέναι πάλιν ἐνδέχεται· ἂν· τούτῳ δ' ἔποιτ' ἂν τὸ ἀνίστασθαι τὰ τεθνεῶτα τῶν ζώων.

τὴν δὲ κατὰ συμβεβηκὸς κίνησιν κἂν ὑφ' ἑτέρου κινεῖτο· ὡσθελὶ γὰρ ἂν βίᾳ τὸ ζῶον. οὐ δεῖ δὲ ὥ τὸ ὑφ' ἑαυτοῦ κινεῖσθαι ἐν τῇ οὐσίᾳ, τοῦθ' ὑπ' ἄλλου κινεῖσθαι, πλὴν εἰ μὴ κατὰ συμβεβηκὸς, ὥσπερ οὐδὲ τὸ καθ' αὐτὸ ἀγαθὸν ἢ δι' αὐτό, τὸ μὲν δι' ἄλλο εἶναι, τὸ δ' ἑτέρου ἔνεκεν. τὴν δὲ ψυχὴν μάλιστα φαίη τις ἂν ὑπὸ τῶν αἰσθητῶν κινεῖσθαι, εἴπερ κινεῖται.

ἀλλὰ μὴν καὶ εἰ κινεῖ [406b12] γε αὐτὴ αὐτήν, καὶ αὐτὴ κινεῖτ' ἂν, ὥστ' εἰ πᾶσα κίνησις ἔκστασις ἐστὶ τοῦ κινουμένου ἢ κινεῖται, καὶ ἡ ψυχὴ ἐξίσταται· ἂν ἐκ τῆς οὐσίας, εἰ μὴ κατὰ συμβεβηκὸς ἑαυτὴν κινεῖ, ἀλλ' ἐστὶν ἡ κίνησις τῆς οὐσίας αὐτῆς καθ' αὐτήν.

ἔνιοι δὲ καὶ κινεῖν φασὶ τὴν ψυχὴν τὸ σῶμα ἐν ᾧ ἐστίν, ὥς αὐτὴ κινεῖται, οἷον Δημόκριτος, παραπλησίως λέγων Φιλίππῳ τῷ κωμωδοδιδασκάλῳ· φησὶ γὰρ τὸν Δαίδαλον κινουμένην ποιῆσαι τὴν ξυλίνην Ἀφροδίτην, ἐγγέαντ' ἄργυρον χυτόν· ὁμοίως δὲ καὶ Δημόκριτος λέγει· κινουμένας γὰρ φησὶ τὰς ἀδιαιρέτους σφαίρας, διὰ τὸ πεφυκέναι μηδέποτε μένειν, συνεφέλκειν καὶ κινεῖν τὸ σῶμα πᾶν. ἡμεῖς δ' ἐρωτήσομεν εἰ καὶ ἡρέμησιν ποιεῖ τοῦτο αὐτό· πῶς δὲ ποιήσει, χαλεπὸν ἢ καὶ ἀδύνατον εἰπεῖν. ὅλως δ' οὐχ οὕτω φαίνεται κινεῖν ἡ ψυχὴ τὸ ζῶον, ἀλλὰ διὰ προαιρέσεώς τινος καὶ νοήσεως.

τὸν αὐτὸν δὲ τρόπον καὶ ὁ Τίμαιος φυσιολογεῖ τὴν ψυχὴν κινεῖν τὸ σῶμα· τῷ

γὰρ κινεῖσθαι αὐτὴν καὶ τὸ σῶμα κινεῖν διὰ τὸ συμπεπλέχθαι πρὸς αὐτό. συνεστηκυῖαν γὰρ ἔκ τῶν στοιχείων καὶ μεμερισμένην κατὰ τοὺς ἁρμονικοὺς ἀριθμούς, ὅπως αἰσθησὶν τε σύμφυτον ἁρμονίας ἔχῃ καὶ τὸ πᾶν φέρηται συμφώνους φοράς, τὴν εὐθυωρίαν εἰς κύκλον κατέκαμψεν· καὶ διελὼν ἔκ τοῦ ἑνὸς δύο κύκλους δισσαχῇ συνημμένους [407a] πάλιν τὸν ἕνα διεῖλεν εἰς ἑπτὰ κύκλους, ὥς οὕσας τὰς τοῦ οὐρανοῦ φοράς τὰς τῆς ψυχῆς κινήσεις.

[407a2] πρῶτον μὲν οὖν οὐ καλῶς τὸ λέγειν τὴν ψυχὴν μέγεθος εἶναι· τὴν γὰρ τοῦ παντὸς δῆλον ὅτι τοιαύτην εἶναι βούλεται οἷόν ποτ' ἐστὶν ὁ καλούμενος νοῦς (οὐ γὰρ δὴ οἷόν γ' ἡ αἰσθητική, οὐδ' οἷον ἡ ἐπιθυμητική· τούτων γὰρ ἡ κίνησις οὐ κυκλοφορία).

ὁ δὲ νοῦς εἷς καὶ συνεχὴς ὥσπερ καὶ ἡ νόησις· ἡ δὲ νόησις τὰ νοήματα· ταῦτα δὲ τῷ ἐφεξῆς ἔν, ὡς ὁ ἀριθμός, ἀλλ' οὐχ ὡς τὸ μέγεθος· διόπερ οὐδ' ὁ νοῦς οὕτω συνεχὴς, ἀλλ' ἥτοι ἀμερὴς ἢ οὐχ ὡς μέγεθος τι συνεχὴς. πῶς γὰρ δὴ καὶ νοήσῃ, μέγεθος ὢν, πότερον ὀτωοῦν τῶν μορίων τῶν αὐτοῦ, μορίων δ' ἥτοι κατὰ μέγεθος ἢ κατὰ στιγμήν, εἰ δεῖ καὶ τοῦτο μόριον εἰπεῖν;

εἰ μὲν οὖν κατὰ στιγμήν, αὐταὶ δ' ἄπειροι, δῆλον ὡς οὐδέποτε διέξεισιν· εἰ δὲ κατὰ μέγεθος, πολλάκις ἢ ἀπειράκις νοήσῃ τὸ αὐτό. φαίνεται δὲ καὶ ἄπαξ ἐνδεχόμενον. εἰ δ' ἱκανὸν θιγεῖν ὀτωοῦν τῶν μορίων, τί δεῖ κύκλῳ κινεῖσθαι, ἢ καὶ ὅλως μέγεθος ἔχειν; εἰ δ' ἀναγκαῖον νοῆσαι τῷ ὅλῳ κύκλῳ θιγόντα, τίς ἐστὶν ἡ τοῖς μορίοις θίξις; ἔτι δὲ πῶς νοήσῃ τὸ μεριστὸν ἀμερεῖ ἢ τὸ ἀμερές μεριστῷ; ἀναγκαῖον δὲ τὸν νοῦν εἶναι τὸν κύκλον τοῦτον· νοῦ μὲν γὰρ κινήσεις νόησις κύκλου δὲ περιφορά.

εἰ οὖν ἡ νόησις περιφορά, καὶ νοῦς ἂν εἴῃ ὁ κύκλος οὗ ἡ τοιαύτη περιφορά νόησις. ἀεὶ δὲ δὴ τί νοήσῃ (δεῖ γάρ, εἴπερ αἰδῖος ἡ περιφορά); τῶν μὲν γὰρ πρακτικῶν νοήσεων ἔστι πέρατα (πᾶσαι γὰρ ἑτέρου χάριν), αἱ δὲ θεωρητικαὶ τοῖς λόγοις ὁμοίως ὀρίζονται· λόγος δὲ πᾶς ὀρισμὸς ἢ ἀπόδειξις· αἱ μὲν οὖν ἀποδείξεις καὶ ἀπ' ἀρχῆς καὶ ἔχουσάι πως τέλος, τὸν συλλογισμὸν ἢ τὸ συμπέρασμα (εἰ δὲ μὴ περατοῦνται, ἀλλ' οὐκ ἀνακάμπουσί γε πάλιν ἐπ' ἀρχήν, προσλαμβάνουσιν δ' ἀεὶ μέσον καὶ ἄκρον εὐθυποροῦσιν· ἡ δὲ περιφορά πάλιν ἐπ' ἀρχὴν ἀνακάμπει)· οἱ δ' ὀρισμοὶ πάντες πεπερασμένοι.

ἔτι εἰ ἡ αὐτὴ περιφορά πολλάκις, δεήσει πολλάκις νοεῖν τὸ αὐτό.

ἔτι δ' ἡ νόησις ἔοικεν ἡρεμήσει τινὶ καὶ ἐπιστάσει μᾶλλον ἢ κινήσει· τὸν αὐτὸν δὲ τρόπον καὶ ὁ συλλογισμός.

ἀλλὰ μὴν οὐδὲ μακάριόν γε τὸ μὴ [407b] ῥάδιον ἀλλὰ βίαιον· εἰ δ' ἐστὶν ἡ κίνησις αὐτῆς ἢ οὐσία, παρὰ φύσιν ἂν κινεῖτο. ἐπίπονον δὲ καὶ τὸ μεμῖχθαι τῷ σώματι μὴ δυνάμενον ἀπολυθῆναι, καὶ προσέτι φευκτόν, εἴπερ βέλτιον τῷ νῷ μὴ μετὰ σώματος εἶναι, καθάπερ εἴωθέ τε λέγεσθαι καὶ πολλοῖς συνδοκεῖ.

ἄδηλος δὲ καὶ τοῦ κύκλῳ φέρεσθαι τὸν οὐρανὸν ἡ αἰτία· οὔτε γὰρ τῆς ψυχῆς ἡ οὐσία αἰτία τοῦ κύκλῳ φέρεσθαι, ἀλλὰ κατὰ συμβεβηκὸς οὕτω κινεῖται, οὔτε τὸ σῶμα αἴτιον, ἀλλ' ἡ ψυχὴ μᾶλλον ἐκείνῳ. ἀλλὰ μὴν οὐδ' ὅτι βέλτιον λέγεται· καίτοι γ' ἐχρῆν διὰ τοῦτο τὸν θεὸν κύκλῳ ποιεῖν φέρεσθαι τὴν ψυχὴν, ὅτι βέλτιον αὐτῇ τὸ κινεῖσθαι τοῦ μένειν, κινεῖσθαι δ' οὕτως ἢ ἄλλως.

ἐπεὶ δ' ἐστὶν ἡ τοιαύτη σκέψις ἐτέρων λόγων οἰκειότερα, ταύτην μὲν ἀφῶμεν τὸ νῦν. ἐκεῖνο δὲ ἄτοπον συμβαίνει καὶ τούτῳ τῷ λόγῳ καὶ τοῖς πλείστοις τῶν περὶ ψυχῆς· συνάπτουσι γὰρ καὶ τιθέασιν εἰς σῶμα τὴν ψυχὴν, οὐθὲν προσδιορίζαντες διὰ τίν' αἰτίαν καὶ πῶς ἔχοντος τοῦ σώματος. καίτοι δόξειεν ἂν τοῦτ' ἀναγκαῖον εἶναι· διὰ γὰρ τὴν κοινωνίαν τὸ μὲν ποιεῖ τὸ δὲ πάσχει καὶ τὸ μὲν κινεῖται τὸ δὲ κινεῖ, τούτων δ' οὐθὲν ὑπάρχει πρὸς ἀλλήλα τοῖς τυχοῦσιν.

οἱ δὲ μόνον ἐπιχειροῦσι λέγειν ποῖόν τι ἡ ψυχὴ, περὶ δὲ τοῦ δεξομένου σώματος οὐθὲν ἔτι προσδιορίζουσιν, ὥσπερ ἐνδεχόμενον κατὰ τοὺς Πυθαγορικοὺς μύθους τὴν τυχοῦσαν ψυχὴν εἰς τὸ τυχὸν ἐνδύεσθαι σῶμα. δοκεῖ γὰρ ἕκαστον ἴδιον ἔχειν εἶδος καὶ μορφήν, παραπλήσιον δὲ λέγουσιν ὥσπερ εἴ τις φαίη τὴν τεκτονικὴν εἰς αὐλοὺς ἐνδύεσθαι· δεῖ γὰρ τὴν μὲν τέχνην χρῆσθαι τοῖς ὀργάνοις, τὴν δὲ ψυχὴν τῷ σώματι.

## Κεφάλαιο 4

[407b27] Καὶ ἄλλη δέ τις δόξα παραδέδοται περὶ ψυχῆς, πιθανὴ μὲν πολλοῖς οὐδεμιᾶς ἤττον τῶν λεγομένων, λόγον δ' ὥσπερ εὐθύνοις δεδωκυῖα κἂν τοῖς ἐν κοινῷ γεγεννημένοις λόγοις. ἁρμονίαν γάρ τινα αὐτὴν λέγουσι· καὶ γὰρ τὴν ἁρμονίαν κρᾶσιν καὶ σύνθεσιν ἐναντίων εἶναι, καὶ τὸ σῶμα συγκεῖσθαι ἐξ ἐναντίων.

καίτοι γε ἡ μὲν ἁρμονία λόγος τίς ἐστι τῶν मिχθέντων ἢ σύνθεσις, τὴν δὲ ψυχὴν οὐδέτερον οἶόν τ' εἶναι τούτων. ἔτι δὲ τὸ κινεῖν οὐκ ἔστιν ἁρμονίας, ψυχῇ δὲ [408a] πάντες ἀπονέμουσι τοῦτο μάλισθ' ὥς εἰπεῖν. ἁρμόζει δὲ μᾶλλον καθ' ὑγιείας λέγειν ἁρμονίαν, καὶ ὅλως τῶν σωματικῶν ἀρετῶν, ἢ



κατὰ ψυχῆς. φανερώτατον δ' εἴ τις ἀποδιδόναι πειραθείη τὰ πάθη καὶ τὰ ἔργα τῆς ψυχῆς ἁρμονίᾳ τινί· χαλεπὸν γὰρ ἐφαρμόζειν.

ἔτι δ' εἰ λέγομεν τὴν ἁρμονίαν εἰς δύο ἀποβλέποντες, κυριώτατα μὲν, τῶν μεγεθῶν ἐν τοῖς ἔχουσι κίνησιν καὶ θέσιν, τὴν σύνθεσιν αὐτῶν, ἐπειδὴ οὕτω συναρμόζωσιν ὥστε μηδὲν συγγενὲς παραδέχεσθαι, ἐντεῦθεν δὲ καὶ τὸν τῶν μεμιγμένων λόγον-οὐδετέρως μὲν οὖν εὐλογον, ἢ δὲ σύνθεσις τῶν τοῦ σώματος μερῶν λίαν εὐεξέταστος. πολλάκι γὰρ αἱ συνθέσεις τῶν μερῶν καὶ πολλαχῶς· τίνος οὖν ἢ πῶς ὑπολαβεῖν τὸν νοῦν χρὴ σύνθεσιν εἶναι, ἢ καὶ τὸ αἰσθητικὸν ἢ ὀρεκτικόν; ὁμοίως δὲ ἄτοπον καὶ τὸ τὸν λόγον τῆς μίξεως εἶναι τὴν ψυχὴν· οὐ γὰρ τὸν αὐτὸν ἔχει λόγον ἢ μίξις τῶν στοιχείων καθ' ἣν σὰρξ καὶ καθ' ἣν ὀστοῦν. συμβήσεται οὖν πολλὰς τε ψυχὰς ἔχειν καὶ κατὰ πᾶν τὸ σῶμα, εἴπερ πάντα μὲν ἐκ τῶν στοιχείων μεμιγμένων, ὃ δὲ τῆς μίξεως λόγος ἁρμονία καὶ ψυχή.

ἀπαιτήσῃ δ' ἂν τις τοῦτό γε καὶ παρ' Ἐμπεδοκλέους· ἕκαστον γὰρ αὐτῶν λόγῳ τινί φησιν εἶναι· πότερον οὖν ὁ λόγος ἐστὶν ἡ ψυχὴ, ἢ μᾶλλον ἕτερόν τι οὕσα ἐγγίνεται τοῖς μέρεσιν; ἔτι δὲ πότερον ἡ φιλία τῆς τυχούσης αἰτία μίξεως ἢ τῆς κατὰ τὸν λόγον, καὶ αὕτη πότερον ὁ λόγος ἐστὶν ἢ παρὰ τὸν λόγον ἕτερόν τι;

ταῦτα μὲν οὖν ἔχει τοιαύτας ἀπορίας. εἰ δ' ἐστὶν ἕτερον ἢ ψυχὴ τῆς μίξεως, τί δὴ ποτε ἅμα τῷ σαρκὶ εἶναι ἀναιρεῖται καὶ τὸ τοῖς ἄλλοις μορίοις τοῦ ζώου; πρὸς δὲ τούτοις εἴπερ μὴ ἕκαστον τῶν μορίων ψυχὴν ἔχει, εἰ μὴ ἐστὶν ἡ ψυχὴ ὁ λόγος τῆς μίξεως, τί ἐστὶν ὃ φθείρεται τῆς ψυχῆς ἀπολιπούσης;

ὅτι μὲν οὖν οὕθ' ἁρμονίαν οἶόν τ' εἶναι τὴν ψυχὴν οὐτε κύκλῳ περιφέρεισθαι, δῆλον ἐκ τῶν εἰρημένων. κατὰ συμβεβηκὸς δὲ κινεῖσθαι, καθάπερ εἵπομεν, ἔστι, καὶ κι-νεῖν ἑαυτήν, οἷον κινεῖσθαι μὲν ἐν ᾧ ἐστὶ, τοῦτο δὲ κινεῖσθαι ὑπὸ τῆς ψυχῆς· ἄλλως δ' οὐχ οἶόν τε κινεῖσθαι κατὰ τόπον αὐτήν.

εὐλογώτερον δ' ἀπορήσειεν ἂν τις περὶ αὐτῆς ὥς [408b] κινουμένης, εἰς τὰ τοιαῦτα ἀποβλέψας· φανερὸν γὰρ τὴν ψυχὴν λυπεῖσθαι χαίρειν, θαρρεῖν φοβεῖσθαι, ἔτι δὲ ὀργίζεσθαι τε καὶ αἰσθάνεσθαι καὶ διανοεῖσθαι· ταῦτα δὲ πάντα κινήσεις εἶναι δοκοῦσιν. ὅθεν οἰηθείη τις ἂν αὐτὴν κινεῖσθαι.

τὸ δ' οὐκ ἐστὶν ἀναγκαῖον. εἰ γὰρ καὶ ὅτι μάλιστα τὸ λυπεῖσθαι ἢ χαίρειν ἢ διανοεῖσθαι κινήσεις εἰσὶ, καὶ ἕκαστον κινεῖσθαι τι τούτων, τὸ δὲ κινεῖσθαι ἐστὶν ὑπὸ τῆς ψυχῆς, οἷον τὸ ὀργίζεσθαι ἢ φοβεῖσθαι τὸ τὴν καρδίαν ὡδὶ

κινεῖσθαι, τὸ δὲ διανοεῖσθαι ἢ τι τοιοῦτον ἴσως ἢ ἕτερόν τι, τούτων δὲ συμβαίνει τὰ μὲν κατὰ φοράν τινων κινουμένων, τὰ δὲ κατ' ἀλλοίωσιν (ποῖα δὲ καὶ πῶς, ἕτερός ἐστι λόγος),

τὸ δὲ λέγειν ὀργίζεσθαι τὴν ψυχὴν ὅμοιον κἂν εἴ τις λέγοι τὴν ψυχὴν ὑφαίνειν ἢ οἰκοδομεῖν· βέλτιον γὰρ ἴσως μὴ λέγειν τὴν ψυχὴν ἐλεεῖν ἢ μανθάνειν ἢ διανοεῖσθαι, ἀλλὰ τὸν ἄνθρωπον τῇ ψυχῇ· τοῦτο δὲ μὴ ὡς ἐν ἐκείνῃ τῆς κινήσεως οὔσης, ἀλλ' ὅτε μὲν μέχρι ἐκείνης, ὅτε δ' ἀπ' ἐκείνης, οἷον ἢ μὲν αἴσθησις ἀπὸ τωνδὶ, ἢ δ' ἀνάμνησις ἀπ' ἐκείνης ἐπὶ τὰς ἐν τοῖς αἰσθητηρίοις κινήσεις ἢ μονάς.

[408b18] ὁ δὲ νοῦς ἔοικεν ἐγγίνεσθαι οὐσία τις οὐσα, καὶ οὐ φθείρεσθαι. μάλιστα γὰρ ἐφθείρετ' ἂν ὑπὸ τῆς ἐν τῷ γήρα ἁμαυρώσεως, νῦν δ' ὥσπερ ἐπὶ τῶν αἰσθητηρίων συμβαίνει· εἰ γὰρ λάβοι ὁ πρεσβύτης ὄμμα τοιονδί, βλέποι ἂν ὥσπερ καὶ ὁ νέος. ὥστε τὸ γήρας οὐ τῷ τὴν ψυχὴν τι πεπονθέναι, ἀλλ' ἐν ᾧ, καθάπερ ἐν μέθαις καὶ νόσοις.

καὶ τὸ νοεῖν δὴ καὶ τὸ θεωρεῖν μαραίνεται ἄλλου τινὸς ἔσω φθειρομένου, αὐτὸ δὲ ἀπαθές ἐστιν. τὸ δὲ διανοεῖσθαι καὶ φιλεῖν ἢ μισεῖν οὐκ ἔστιν ἐκείνου πάθη, ἀλλὰ τουδὶ τοῦ ἔχοντος ἐκεῖνο, ἢ ἐκεῖνο ἔχει. διὸ καὶ τούτου φθειρομένου οὔτε μνημονεύει οὔτε φιλεῖ· οὐ γὰρ ἐκείνου ἦν, ἀλλὰ τοῦ κοινοῦ, ὃ ἀπόλωλεν· ὁ δὲ νοῦς ἴσως θειότερόν τι καὶ ἀπαθές ἐστιν.

ὅτι μὲν οὖν οὐχ οἷόν τε κινεῖσθαι τὴν ψυχὴν, φανερόν ἐκ τούτων· εἰ δ' ὅλως μὴ κινεῖται, δῆλον ὡς οὐδ' ὑφ' ἐαυτῆς.

πολὺ δὲ τῶν εἰρημένων ἀλογώτατον τὸ λέγειν ἀριθμὸν εἶναι τὴν ψυχὴν κινουῖνθ' ἐαυτόν· ὑπάρχει γὰρ αὐτοῖς ἀδύνατα πρῶτα μὲν τὰ ἐκ τοῦ κινεῖσθαι συμβαίνοντα, ἴδια δ' ἐκ τοῦ [409a] λέγειν αὐτὴν ἀριθμόν. πῶς γὰρ χρή νοῆσαι μονάδα κινουμένην, καὶ ὑπὸ τίνος, καὶ πῶς, ἀμερῇ καὶ ἀδιάφορον οὐσαν; ἢ γὰρ ἐστὶ κινητικὴ καὶ κινητή, διαφέρειν δεῖ. ἔτι δ' ἐπεὶ φασὶ κινηθεῖσαν γραμμὴν ἐπίπεδον ποιεῖν, στιγμὴν δὲ γραμμὴν, καὶ αἱ τῶν μονάδων κινήσεις γραμμαὶ ἔσσονται· ἢ γὰρ στιγμὴ μονάς ἐστὶ θέσιν ἔχουσα, ὃ δ' ἀριθμὸς τῆς ψυχῆς ἤδη πού ἐστι καὶ θέσιν ἔχει.

ἔτι δ' ἀριθμοῦ μὲν ἐὰν ἀφέλῃ τις ἀριθμὸν ἢ μονάδα, λείπεται ἄλλος ἀριθμός· τὰ δὲ φυτὰ καὶ τῶν ζώων πολλὰ διαιρούμενα ζῆ καὶ δοκεῖ τὴν αὐτὴν ψυχὴν ἔχειν τῷ εἶδει.

δόξειε δ' ἂν οὐθὲν διαφέρειν μονάδας λέγειν ἢ σωμάτια μικρά· καὶ γὰρ ἐκ τῶν

Δημοκρίτου σφαιρίων ἔαν γένωνται στιγμαί, μόνον δὲ μένη τὸ ποσόν, ἔσται [τι] ἐν αὐτῷ τὸ μὲν κινοῦν τὸ δὲ κινούμενον, ὥσπερ ἐν τῷ συνεχεῖ· οὐ γὰρ διὰ τὸ μεγέθει διαφέρειν ἢ μικρότητι συμβαίνει τὸ λεχθέν, ἀλλ' ὅτι ποσόν· διὸ ἀναγκαῖον εἶναι τι τὸ κινῆσον τὰς μονάδας. εἰ δ' ἐν τῷ ζῶν τὸ κινοῦν ἢ ψυχὴ, καὶ ἐν τῷ ἀριθμῷ, ὥστε οὐ τὸ κινοῦν καὶ κινούμενον ἢ ψυχὴ, ἀλλὰ τὸ κινοῦν μόνον.

ἐνδέχεται δὲ δὴ πῶς μονάδα ταύτην εἶναι; δεῖ γὰρ ὑπάρχειν τινὰ αὐτῇ διαφορὰν πρὸς τὰς ἄλλας, στιγμῆς δὲ μοναδικῆς τίς ἂν εἴη διαφορὰ πλὴν θέσις; εἰ μὲν οὖν εἰσὶν ἕτεραι αἱ ἐν τῷ σώματι μονάδες καὶ αἱ στιγμαί, ἐν τῷ αὐτῷ ἔσονται αἱ μονάδες· καθέξει γὰρ <ἐκάστη> χώραν στιγμῆς. καίτοι τί κωλύει ἐν τῷ αὐτῷ εἶναι, εἰ δύο, καὶ ἅπειρα; ὧν γὰρ ὁ τόπος ἀδιαίρετος, καὶ αὐτά.

εἰ δ' αἱ ἐν τῷ σώματι στιγμαὶ ὁ ἀριθμὸς ὁ τῆς ψυχῆς, ἢ εἰ ὁ τῶν ἐν τῷ σώματι στιγμῶν ἀριθμὸς ἢ ψυχὴ, διὰ τί οὐ πάντα ψυχὴν ἔχουσι τὰ σώματα; στιγμαὶ γὰρ ἐν ἅπασιν δοκοῦσιν εἶναι καὶ ἅπειροι.

ἔτι δὲ πῶς οἶόν τε χωρίζεσθαι τὰς στιγμάς καὶ ἀπολύεσθαι τῶν σωμάτων, εἴ γε μὴ διαιροῦνται αἱ γραμμαὶ εἰς στιγμάς;

## Κεφάλαιο 5

[409a31] Συμβαίνει δέ, καθάπερ εἴπομεν, τῇ μὲν ταύτῃ λέγειν τοῖς σώματι λεπτομερεῖς αὐτὴν τιθεῖσι, τῇ δ', ὥσπερ [409b] Δημόκριτος κινεῖσθαι φησιν ὑπὸ τῆς ψυχῆς, ἴδιον τὸ ἄτοπον. εἴπερ γὰρ ἐστὶν ἡ ψυχὴ ἐν παντὶ τῷ αἰσθανομένῳ σώματι, ἀναγκαῖον ἐν τῷ αὐτῷ δύο εἶναι σώματα, εἰ σῶμά τι ἢ ψυχὴ· τοῖς δ' ἀριθμὸν λέγουσιν, ἐν τῇ μιᾷ στιγμῇ πολλὰς στιγμάς, καὶ πᾶν σῶμα ψυχὴν ἔχειν, εἰ μὴ διαφέρων τις ἀριθμὸς ἐγγίνεται καὶ ἄλλος τις τῶν ὑπαρχουσῶν ἐν τῷ σώματι στιγμῶν.

συμβαίνει τε κινεῖσθαι τὸ ζῶον ὑπὸ τοῦ ἀριθμοῦ, καθάπερ καὶ Δημόκριτον αὐτὸ ἔφαμεν κινεῖν· τί γὰρ διαφέρει σφαίρας λέγειν μικρὰς ἢ μονάδας μεγάλας, ἢ ὅλως μονάδας φερομένας; ἀμφοτέρως γὰρ ἀναγκαῖον κινεῖν τὸ ζῶον τῷ κινεῖσθαι ταύτας.

τοῖς δὲ συμπλέξασιν εἰς τὸ αὐτὸ κίνησιν καὶ ἀριθμὸν ταῦτά τε συμβαίνει καὶ πολλὰ ἕτερα τοιαῦτα· οὐ γὰρ μόνον ὁρισμὸν ψυχῆς ἀδύνατον τοιοῦτον εἶναι, ἀλλὰ καὶ συμβεβηκός. δῆλον δ' εἶ τις ἐπιχειρήσειεν ἐκ τοῦ λόγου τούτου τὰ

πάθη καὶ τὰ ἔργα τῆς ψυχῆς ἀποδιδόναι, οἷον λογισμούς, αἰσθήσεις, ἡδονάς, λύπας, ὅσα ἄλλα τοιαῦτα· ὥσπερ γὰρ εἵπομεν πρότερον, οὐδὲ μαντεύσασθαι ῥάδιον ἐξ αὐτῶν.

τριῶν δὲ τρόπων παραδεδομένων καθ' οὓς ὀρίζονται τὴν ψυχὴν, οἱ μὲν τὸ κινητικώτατον ἀπεφάναντο τῷ κινεῖν ἑαυτό, οἱ δὲ σῶμα τὸ λεπτομερέστατον ἢ τὸ ἀσωματώτατον τῶν ἄλλων. ταῦτα δὲ τίνας ἀπορίας τε καὶ ὑπεναντιώσεις ἔχει, διεληλύθαμεν σχεδόν·

λείπεται δ' ἐπισκέψασθαι πῶς λέγεται τὸ ἐκ τῶν στοιχείων αὐτὴν εἶναι. λέγουσι μὲν γάρ, ἴν' αἰσθάνηταί τε τῶν ὄντων καὶ ἕκαστον γνωρίζῃ· ἀναγκαῖον δὲ συμβαίνειν πολλὰ καὶ ἀδύνατα τῷ λόγῳ. τίθενται γὰρ γνωρίζειν τῷ ὁμοίῳ τὸ ὅμοιον, ὥσπερ ἂν εἰ τὴν ψυχὴν τὰ πράγματα τιθέντες. οὐκ ἔστι δὲ μόνον ταῦτα, πολλὰ δὲ καὶ ἕτερα, μᾶλλον δ' ἴσως ἄπειρα τὸν ἀριθμὸν τὰ ἐκ τούτων. ἐξ ὧν μὲν οὖν ἐστὶν ἕκαστον τούτων, ἔστω γινώσκειν τὴν ψυχὴν καὶ αἰσθάνεσθαι· ἀλλὰ τὸ σύνολον τίτι γνωριεῖ ἢ αἰσθήσεται, οἷον τί θεὸς ἢ ἄνθρωπος ἢ σὰρξ ἢ ὅστοῦν; ὁμοίως δὲ καὶ [410a] ἄλλο ὅποῦν τῶν συνθέτων· οὐ γὰρ ὁπωσοῦν ἔχοντα τὰ στοιχεῖα τούτων ἕκαστον, ἀλλὰ λόγῳ τινὶ καὶ συνθέσει, καθάπερ φησὶ καὶ Ἐμπεδοκλῆς τὸ ὅστοῦν·

ἡ δὲ χθὼν ἐπίηρος ἐν εὐστέροισι χοάνοισιν

τὼ δύο τῶν ὀκτὼ μερέων λάχε νήστιδος αἴγλης,

τέσσαρα δ' Ἡφαίστοιο· τὰ δ' ὀστέα λευκὰ γέγοντο.

οὐδὲν οὖν ὄφελος ἐνεῖναι τὰ στοιχεῖα ἐν τῇ ψυχῇ, εἰ μὴ καὶ οἱ λόγοι ἐνέσσονται καὶ ἡ σύνθεσις· γνωριεῖ γὰρ ἕκαστον τὸ ὅμοιον, τὸ δ' ὅστοῦν ἢ τὸν ἄνθρωπον οὐθέν, εἰ μὴ καὶ ταῦτ' ἐνέσται. τοῦτο δ' ὅτι ἀδύνατον, οὐθέν δεῖ λέγειν· τίς γὰρ ἂν ἀπορήσειεν εἰ ἔνεστιν ἐν τῇ ψυχῇ λίθος ἢ ἄνθρωπος; ὁμοίως δὲ καὶ τὸ ἀγαθὸν καὶ τὸ μὴ ἀγαθόν· τὸν αὐτὸν δὲ τρόπον καὶ περὶ τῶν ἄλλων.

[410a13] ἔτι δὲ πολλαχῶς λεγομένου τοῦ ὄντος (σημαίνει γὰρ τὸ μὲν τότε τι, τὸ δὲ ποσὸν ἢ ποιὸν ἢ καὶ τίνα ἄλλην τῶν διαιρεθεισῶν κατηγοριῶν) πότερον ἐξ ἀπάντων ἔσται ἡ ψυχὴ ἢ οὐ; ἀλλ' οὐ δοκεῖ κοινὰ πάντων εἶναι στοιχεῖα. ἄρ' οὖν ὅσα τῶν οὐσιῶν, ἐκ τούτων μόνον; πῶς οὖν γινώσκει καὶ τῶν ἄλλων ἕκαστον; ἢ φήσουσιν ἐκάστου γένους εἶναι στοιχεῖα καὶ ἀρχὰς ἰδίας, ἐξ ὧν τὴν ψυχὴν συνεστάναι; ἔσται ἄρα ποσὸν καὶ ποιὸν καὶ οὐσία. ἀλλ' ἀδύνατον

ἐκ τῶν τοῦ ποσοῦ στοιχείων οὐσίαν εἶναι καὶ μὴ ποσόν. τοῖς δὲ λέγουσιν ἐκ πάντων ταῦτά τε καὶ τοιαῦθ' ἕτερα συμβαίνει.

ἄτοπον δὲ καὶ τὸ φάναι μὲν ἀπαθὲς εἶναι τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου, αἰσθάνεσθαι δὲ τὸ ὅμοιον τοῦ ὁμοίου καὶ γινώσκειν τῷ ὁμοίῳ τὸ ὅμοιον· τὸ δ' αἰσθάνεσθαι πάσχειν τι καὶ κινεῖσθαι τιθέασιν· ὁμοίως δὲ καὶ τὸ νοεῖν τε καὶ γινώσκειν.

πολλὰς δ' ἀπορίας καὶ δυσχερείας ἔχοντος τοῦ λέγειν, καθάπερ Ἐμπεδοκλῆς, ὡς τοῖς σωματικοῖς στοιχείοις ἕκαστα γνωρίζεται, καί, πρὸς, τῷ ὁμοίῳ, μαρτυρεῖ τὸ νῦν λεχθέν· ὅσα γὰρ ἐστὶν ἐν τοῖς τῶν ζώων σώμασιν ἀπλῶς γῆς, οἷον [410b] ὅστ' αὖ νεῦρα τρίχες, οὐθενὸς αἰσθάνεσθαι δοκεῖ, ὥστ' οὐδὲ τῶν ὁμοίων· καίτοι προσῆκεν. ἔτι δ' ἐκάστη τῶν ἀρχῶν ἄγνοια πλείων ἢ σύνεσις ὑπάρξει· γνώσεται μὲν γὰρ ἐν ἐκάστη, πολλὰ δ' ἄγνοήσει· πάντα γὰρ τ' ἄλλα. συμβαίνει δ' Ἐμπεδοκλεῖ γε καὶ ἀφρονέστατον εἶναι τὸν θεόν· μόνος γὰρ τῶν στοιχείων ἐν οὐ γνωριεῖ, τὸ νεῖκος, τὰ δὲ θνητὰ πάντα· ἐκ πάντων γὰρ ἕκαστον.

ὅλως τε διὰ τίν' αἰτίαν οὐχ ἅπαντα ψυχὴν ἔχει τὰ ὄντα, ἐπειδὴ πᾶν ἥτοι στοιχεῖον ἢ ἐκ στοιχείου ἑνὸς ἢ πλειόνων ἢ πάντων; ἀναγκαῖον γὰρ ἐστὶν ἔν τι γινώσκειν ἢ τινὰ ἢ πάντα.

ἀπορήσειε δ' ἂν τις καὶ τί ποτ' ἐστὶ τὸ ἐνοποιοῦν αὐτά· ὕλη γὰρ ἔοικε τά γε στοιχεῖα, κυριώτατον δ' ἐκεῖνο τὸ συνέχον, ὃ τί ποτ' ἐστίν· τῆς δὲ ψυχῆς εἶναί τι κρεῖττον καὶ ἄρχον ἀδύνατον· ἀδυνατώτερον δ' ἔτι τοῦ νοῦ· εὐλογον γὰρ τοῦτον εἶναι προγενέστατον καὶ κύριον κατὰ φύσιν, τὰ δὲ στοιχεῖα φασὶ πρῶτα τῶν ὄντων εἶναι.

πάντες δὲ καὶ οἱ διὰ τὸ γνωρίζειν καὶ αἰσθάνεσθαι τὰ ὄντα τὴν ψυχὴν ἐκ τῶν στοιχείων λέγοντες αὐτήν, καὶ οἱ τὸ κινητικώτατον, οὐ περὶ πάσης λέγουσι ψυχῆς. οὔτε γὰρ τὰ αἰσθανόμενα πάντα κινητικά (φαίνεται γὰρ εἶναί τινα μόνιμα τῶν ζώων κατὰ τόπον· καίτοι δοκεῖ γε ταύτην μόνην τῶν κινήσεων κινεῖν ἢ ψυχὴ τὸ ζῶον)· ὁμοίως δὲ καὶ ὅσοι τὸν νοῦν καὶ τὸ αἰσθητικὸν ἐκ τῶν στοιχείων ποιοῦσιν. φαίνεται γὰρ τά τε φυτὰ ζῆν οὐ μετέχοντα [φορᾶς οὐδ'] αἰσθήσεως, καὶ τῶν ζώων <τὰ> πολλὰ διάνοιαν οὐκ ἔχειν.

εἰ δέ τις καὶ ταῦτα παραχωρήσειε καὶ θείη τὸν νοῦν μέρος τι τῆς ψυχῆς, ὁμοίως δὲ καὶ τὸ αἰσθητικόν, οὐδ' ἂν οὕτω λέγοιεν καθόλου περὶ πάσης ψυχῆς οὐδὲ περὶ ὅλης οὐδεμιᾶς.

τοῦτο δὲ πέπονθε καὶ ὁ ἐν τοῖς Ὀρφικοῖς καλουμένοις ἔπεσι λόγος· φησὶ γὰρ τὴν ψυχὴν ἐκ τοῦ ὅλου εἰσιέναι ἀναπνεόντων, φερομένην ὑπὸ τῶν ἀνέμων, οὐχ οἷόν τε δὲ τοῖς φυτοῖς τοῦτο συμβαίνειν οὐδὲ [411a] τῶν ζώων ἐνίοις, εἶπερ μὴ πάντα ἀναπνεύουσιν· τοῦτο δὲ λέληθε τοὺς οὕτως ὑπειληφότας.

(εἰ δὲ δεῖ τὴν ψυχὴν ἐκ τῶν στοιχείων ποιεῖν, οὐθὲν δεῖ ἐξ ἀπάντων· ἱκανὸν γὰρ θάτερον μέρος τῆς ἐναντιώσεως ἑαυτὸ τε κρίνειν καὶ τὸ ἀντικείμενον. καὶ γὰρ τῷ εὐθεῖ καὶ αὐτὸ καὶ τὸ καμπύλον γινώσκομεν· κριτὴς γὰρ ἀμφοῖν ὁ κανὼν, τὸ δὲ καμπύλον οὐθ' ἑαυτοῦ οὔτε τοῦ εὐθέος.)

καὶ ἐν τῷ ὅλῳ δὴ τινες αὐτὴν μεμῖχθαί φασιν, ὅθεν ἴσως καὶ Θαλῆς ὠήθη πάντα πλήρη θεῶν εἶναι.

τοῦτο δ' ἔχει τινὰς ἀπορίας· διὰ τίνα γὰρ αἰτίαν ἐν μὲν τῷ ἀέρι ἢ τῷ πυρὶ οὕσα ἢ ψυχὴ οὐ ποιεῖ ζῶον, ἐν δὲ τοῖς μικτοῖς, καὶ ταῦτα βελτίων ἐν τούτοις εἶναι δοκοῦσα;

(ἐπιζητήσῃς δ' ἂν τις καὶ διὰ τίνα αἰτίαν ἢ ἐν τῷ ἀέρι ψυχὴ τῆς ἐν τοῖς ζώοις βελτίων ἐστὶ καὶ ἀθανατωτέρα.)

συμβαίνει δ' ἀμφοτέρως ἄτοπον καὶ παράλογον· καὶ γὰρ τὸ λέγειν ζῶον τὸ πῦρ ἢ τὸν ἀέρα τῶν παραλογωτέρων ἐστί, καὶ τὸ μὴ λέγειν ζῶα ψυχῆς ἐνούσης ἄτοπον. ὑπολαβεῖν δ' εἰκόσιν εἶναι τὴν ψυχὴν ἐν τούτοις ὅτι τὸ ὅλον τοῖς μορίοις ὁμοιδές· ὥστ' ἀναγκαῖον αὐτοῖς λέγειν καὶ τὴν ψυχὴν ὁμοιδεῖν τοῖς μορίοις εἶναι, εἰ τῷ ἀπολαμβάνεσθαι τι τοῦ περιέχοντος ἐν τοῖς ζώοις ἔμψυχα τὰ ζῶα γίνεται. εἰ δ' ὁ μὲν ἀῆρ διασπώ-μενος ὁμοειδής, ἢ δὲ ψυχὴ ἀνομοιομερής, τὸ μὲν τι αὐτῆς ὑπάρξει δῆλον ὅτι, τὸ δ' οὐχ ὑπάρξει. ἀναγκαῖον οὖν αὐτὴν ἢ ὁμοιομερεῖ εἶναι ἢ μὴ ἐνυπάρχειν ἐν ὁπωῦν μορίῳ τοῦ παντός.

φανερὸν οὖν ἐκ τῶν εἰρημένων ὡς οὔτε τὸ γινώσκειν ὑπάρχει τῇ ψυχῇ διὰ τὸ ἐκ τῶν στοιχείων εἶναι, οὔτε τὸ κινεῖσθαι αὐτὴν καλῶς οὐδ' ἀληθῶς λέγεται.

ἐπεὶ δὲ τὸ γινώσκειν τῆς ψυχῆς ἐστὶ καὶ τὸ αἰσθάνεσθαι τε καὶ τὸ δοξάζειν, ἔτι δὲ τὸ ἐπιθυμεῖν καὶ βούλεσθαι καὶ ὅλως αἰ ὀρέξεις, γίνεται δὲ καὶ ἡ κατὰ τόπον κίνησις τοῖς ζώοις ὑπὸ τῆς ψυχῆς, ἔτι δ' αὔξη τε καὶ ἀκμὴ καὶ φθίσις, πότερον ὅλη [411b] τῇ ψυχῇ τούτων ἕκαστον ὑπάρχει, καὶ πάσῃ νοοῦμέν τε καὶ αἰσθανόμεθα καὶ κινούμεθα καὶ τῶν ἄλλων ἕκαστον ποιοῦμέν τε καὶ πάσχομεν, ἢ μορίοις ἑτέροις ἕτερα; καὶ τὸ ζῆν δὴ πότερον ἐν τινι τούτων ἐστὶν ἐνὶ ἢ καὶ ἐν πλείοσιν ἢ πᾶσιν, ἢ καὶ ἄλλο τι αἴτιον;

λέγουσι δὴ τινες μεριστὴν αὐτήν, καὶ ἄλλω μὲν νοεῖν ἄλλω δὲ ἐπιθυμεῖν. τί οὖν δὴ ποτε συνέχει τὴν ψυχὴν, εἰ μεριστὴ πέφυκεν; οὐ γὰρ δὴ τό γε σῶμα· δοκεῖ γὰρ τοῦναντίον μᾶλλον ἢ ψυχὴ τὸ σῶμα συνέχειν· ἐξελθούσης γοῦν διαπνεῖται καὶ σήπεται. εἰ οὖν ἕτερόν τι μίαν αὐτὴν ποιεῖ, ἐκεῖνο μάλιστ' ἂν εἴη ψυχὴ. δεήσει δὲ πάλιν κάκεῖνο ζητεῖν πότερον ἐν ἡ πολυμέρες. εἰ μὲν γὰρ ἔν, διὰ τί οὐκ εὐθέως καὶ ἡ ψυχὴ ἔν; εἰ δὲ μεριστόν, πάλιν ὁ λόγος ζητήσει τί τὸ συνέχον ἐκεῖνο, καὶ οὕτω δὴ πρόεισιν ἐπὶ τὸ ἄπειρον.

[411b14] ἀπορήσειε δ' ἂν τις καὶ περὶ τῶν μορίων αὐτῆς, τίς ἔχει δύναμιν ἕκαστον ἐν τῷ σώματι. εἰ γὰρ ἡ ὅλη ψυχὴ πᾶν τὸ σῶμα συνέχει, προσήκει καὶ τῶν μορίων ἕκαστον συνέχειν τι τοῦ σώματος. τοῦτο δ' ἔοικεν ἀδυνάτῳ· ποῖον γὰρ μόριον ἢ πῶς ὁ νοῦς συνέξει, χαλεπὸν καὶ πλάσαι.

φαίνεται δὲ καὶ τὰ φυτὰ διαιρούμενα ζῆν καὶ τῶν ζώων ἔνια τῶν ἐντόμων, ὡς τὴν αὐτὴν ἔχοντα ψυχὴν τῷ εἶδει, εἰ καὶ μὴ ἀριθμῷ· ἐκάτερον γὰρ τῶν μορίων αἴσθησιν ἔχει καὶ κινεῖται κατὰ τόπον ἐπὶ τινὰ χρόνον. εἰ δὲ μὴ διατελοῦσιν, οὐθὲν ἄτοπον· ὄργανα γὰρ οὐκ ἔχουσιν ὥστε σώζειν τὴν φύσιν. ἀλλ' οὐδὲν ἦττον ἐν ἐκατέρῳ τῶν μορίων ἅπαντ' ἐνυπάρχει τὰ μόρια τῆς ψυχῆς, καὶ ὁμοειδῆ ἔστιν ἀλλήλοις καὶ τῇ ὅλῃ, ἀλλήλοις μὲν ὡς οὐ χωριστὰ ὄντα, τῇ δ' ὅλη ψυχῇ ὡς οὐ διαιρετῇ οὕσῃ.

ἔοικε δὲ καὶ ἡ ἐν τοῖς φυτοῖς ἀρχὴ ψυχὴ τις εἶναι· μόνης γὰρ ταύτης κοινωνεῖ καὶ ζῶα καὶ φυτά, καὶ αὕτη μὲν χωρίζεται τῆς αἰσθητικῆς ἀρχῆς, αἴσθησιν δ' οὐθὲν ἄνευ ταύτης ἔχει.

## **Βιβλίο Β**

### **Κεφάλαιο 1**

[412a] 1. Τὰ μὲν δὴ ὑπὸ τῶν πρότερον παραδεδομένα περὶ ψυχῆς εἰρήσθω· πάλιν δ' ὥσπερ ἐξ ὑπαρχῆς ἐπανάγωμεν, πειρώμενοι διορίσαι τί ἐστὶ ψυχὴ καὶ τίς ἂν εἴη κοινότατος λόγος αὐτῆς.

2. λέγομεν δὴ γένος ἔν τι τῶν ὄντων τὴν οὐσίαν, ταύτης δὲ τὸ μὲν, ὡς ὕλην, ὃ καθ' αὐτὸ οὐκ ἔστι τόδε τι, ἕτερον δὲ μορφήν καὶ εἶδος, καθ' ἣν ἤδη λέγεται τόδε τι, καὶ τρίτον τὸ ἐκ τούτων. ἔστι δ' ἡ μὲν ὕλη δύναμις, τὸ δ' εἶδος ἐντελέχεια, καὶ τοῦτο διχῶς, τὸ μὲν ὡς ἐπιστήμη, τὸ δ' ὡς τὸ θεωρεῖν.

3. οὐσίαι δὲ μάλιστ' εἶναι δοκοῦσι τὰ σώματα, καὶ τούτων τὰ φυσικά· ταῦτα

γὰρ τῶν ἄλλων ἀρχαί. τῶν δὲ φυσικῶν τὰ μὲν ἔχει ζωὴν, τὰ δ' οὐκ ἔχει· ζωὴν δὲ λέγομεν τὴν δι' αὐτοῦ τροφήν τε καὶ αὕξησιν καὶ φθίσιν. ὥστε πᾶν σῶμα φυσικὸν μετέχον ζωῆς οὐσία ἂν εἴη, οὐσία δ' οὕτως ὡς συνθέτη.

4. ἐπεὶ δ' ἐστὶ καὶ σῶμα καὶ τοιόνδε, ζωὴν γὰρ ἔχον, οὐκ ἂν εἴη σῶμα ἡ ψυχὴ· οὐ γάρ ἐστι τῶν καθ' ὑποκειμένου τὸ σῶμα, μᾶλλον δ' ὡς ὑποκείμενον καὶ ὕλη. ἀναγκαῖον ἄρα τὴν ψυχὴν οὐσίαν εἶναι ὡς εἶδος σώματος φυσικοῦ δυνάμει ζωὴν ἔχοντος. ἡ δ' οὐσία ἐντελέχεια· τοιούτου ἄρα σώματος ἐντελέχεια.

5. αὕτη δὲ λέγεται διχῶς, ἡ μὲν ὡς ἐπιστήμη, ἡ δ' ὡς τὸ θεωρεῖν. φανερόν οὖν ὅτι ὡς ἐπιστήμη· ἐν γὰρ τῷ ὑπάρχειν τὴν ψυχὴν καὶ ὕπνος καὶ ἐγρήγορσις ἐστίν, ἀνάλογον δ' ἡ μὲν ἐγρήγορσις τῷ θεωρεῖν, ὁ δ' ὕπνος τῷ ἔχειν καὶ μὴ ἐνεργεῖν· προτέρα δὲ τῇ γενέσει ἐπὶ τοῦ αὐτοῦ ἡ ἐπιστήμη. διὸ ἡ ψυχὴ ἐστὶν ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ δυνάμει ζωὴν ἔχοντος.

6. τοιοῦτον δὲ ὃ ἂν ᾖ ὀργανικόν. (ὄργανα δὲ καὶ τὰ τῶν φυτῶν μέρη, ἀλλὰ παντελῶς ἀπλᾶ, οἷον τὸ φύλλον περικαρπίου σκέπασμα, τὸ δὲ περικάρπιον καρποῦ· αἱ δὲ ῥίζαι τῷ στόματι ἀνάλογον· ἄμφω γὰρ ἔλκει τὴν τροφήν.) εἰ δὴ τι κοινὸν ἐπὶ πάσης ψυχῆς δεῖ λέγειν, εἴη ἂν ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ ὀργανικοῦ.

7. διὸ καὶ οὐ δεῖ ζητεῖν εἰ ἐν ἡ ψυχὴ καὶ τὸ σῶμα, ὥσπερ οὐδὲ τὸν κηρὸν καὶ τὸ σχῆμα, οὐδ' ὅλως τὴν ἐκάστου ὕλην καὶ τὸ οὐ ἢ ὕλη· τὸ γὰρ ἐν καὶ τὸ εἶναι ἐπεὶ πλεοναχῶς λέγεται, τὸ κυρίως ἡ ἐντελέχειά ἐστίν.

8. καθόλου μὲν οὖν εἴρηται τί ἐστίν ἡ ψυχὴ· οὐσία γὰρ ἡ κατὰ τὸν λόγον. τοῦτο δὲ τὸ τί ᾗν εἶναι τῷ τοιῶδὶ σώματι, καθάπερ εἴ τι τῶν ὀργάνων φυσικὸν ᾗν σῶμα, οἷον πέλεκυς· ᾗν μὲν γὰρ ἂν τὸ πελέκει εἶναι ἡ οὐσία αὐτοῦ, καὶ ἡ ψυχὴ τοῦτο· χωρισθείσης δὲ ταύτης οὐκ ἂν ἔτι πέλεκυς ᾗν, ἀλλ' ἢ ὁμωνύμως, νῦν δ' ἔστι πέλεκυς. οὐ γὰρ τοιούτου σώματος τὸ τί ᾗν εἶναι καὶ ὁ λόγος ἡ ψυχὴ, ἀλλὰ φυσικοῦ τοιουδί, ἔχοντος ἀρχὴν κινήσεως καὶ στάσεως ἐν ἑαυτῷ.

9. θεωρεῖν δὲ καὶ ἐπὶ τῶν μερῶν δεῖ τὸ λεχθέν. εἰ γὰρ ᾗν ὁ ὀφθαλμὸς ζῶον, ψυχὴ ἂν ᾗν αὐτοῦ ἡ ὄψις· αὕτη γὰρ οὐσία ὀφθαλμοῦ ἡ κατὰ τὸν λόγον (ὁ δ' ὀφθαλμὸς ὕλη ὄψεως), ἥς ἀπολειπούσης οὐκέτ' ὀφθαλμός, πλὴν ὁμωνύμως, καθάπερ ὁ λίθινος καὶ ὁ γεγραμμένος. δεῖ δὲ λαβεῖν τὸ ἐπὶ μέρους ἐφ' ὅλου τοῦ ζῶντος σώματος· ἀνάλογον γὰρ ἔχει ὡς τὸ μέρος πρὸς τὸ μέρος, οὕτως ἡ



ὅλη αἴσθησις πρὸς τὸ ὅλον σῶμα τὸ αἰσθητικόν, ἢ τοιοῦτον.

10. ἔστι δὲ οὐ τὸ ἀποβεβληκὸς τὴν ψυχὴν τὸ δυνάμει ὄν ὥστε ζῆν, ἀλλὰ τὸ ἔχον· τὸ δὲ σπέρμα καὶ ὁ καρπὸς τὸ δυνάμει τοιονδὶ σῶμα. ὥς μὲν οὖν ἡ τμῆσις καὶ ἡ ὄρασις, οὕτω καὶ ἡ ἐγρήγορσις ἐντελέ-[413a]χεια, ὥς δ' ἡ ὄψις καὶ ἡ δύναμις τοῦ ὀργάνου, ἡ ψυχὴ· τὸ δὲ σῶμα τὸ δυνάμει ὄν· ἀλλ' ὥσπερ ὀφθαλμὸς ἡ κόρη καὶ ἡ ὄψις, κάκει ἡ ψυχὴ καὶ τὸ σῶμα ζῶν.

11. ὅτι μὲν οὖν οὐκ ἔστιν ἡ ψυχὴ χωριστὴ τοῦ σώματος, ἢ μέρη τινὰ αὐτῆς, εἰ μεριστὴ πέφυκεν, οὐκ ἄδηλον· ἐνίων γὰρ ἡ ἐντελέχεια τῶν μερῶν ἐστὶν αὐτῶν. οὐ μὲν ἄλλ' ἐνία γε οὐθέν κωλύει, διὰ τὸ μηθενὸς εἶναι σώματος ἐντελεχείας.

12. ἔτι δὲ ἄδηλον εἰ οὕτως ἐντελέχεια τοῦ σώματος ἡ ψυχὴ <ἢ> ὥσπερ πλωτὴρ πλοίου. τύπῳ μὲν οὖν ταύτῃ διωρίσθω καὶ ὑπογεγράφθω περὶ ψυχῆς.

## Κεφάλαιο 2

[413a11] 1. Ἐπεὶ δ' ἐκ τῶν ἀσαφῶν μὲν φανερωτέρων δὲ γίνεται τὸ σαφές καὶ κατὰ τὸν λόγον γνωριμώτερον, πειρατέον πάλιν οὕτω γ' ἐπελθεῖν περὶ αὐτῆς· οὐ γὰρ μόνον τὸ ὅτι δεῖ τὸν ὀριστικὸν λόγον δηλοῦν, ὥσπερ οἱ πλεῖστοι τῶν ὄρων λέγουσιν, ἀλλὰ καὶ τὴν αἰτίαν ἐνυπάρχειν καὶ ἐμφαίνεσθαι. νῦν δ' ὥσπερ συμπεράσμαθ' οἱ λόγοι τῶν ὄρων εἰσίν· οἷον τί ἐστὶν ὁ τετραγωνισμός; τὸ ἴσον ἑτερομήκει ὀρθογώνιον εἶναι ἰσόπλευρον. ὁ δὲ τοιοῦτος ὅρος λόγος τοῦ συμπεράσματος· ὁ δὲ λέγων ὅτι ἐστὶν ὁ τετραγωνισμὸς μέσης εὗρεσις τοῦ πράγματος λέγει τὸ αἷτιον.

2. λέγομεν οὖν, ἀρχὴν λαβόντες τῆς σκέψεως, διωρίσθαι τὸ ἔμψυχον τοῦ ἀψύχου τῷ ζῆν. πλεοναχῶς δὲ τοῦ ζῆν λεγομένου, κἂν ἔν τι τούτων ἐνυπάρχη μόνον, ζῆν αὐτό φαμεν, οἷον νοῦς, αἴσθησις, κίνησις καὶ στάσις ἢ κατὰ τόπον, ἔτι κίνησις ἢ κατὰ τροφὴν καὶ φθίσις τε καὶ αὔξησις.

3. διὸ καὶ τὰ φυόμενα πάντα δοκεῖ ζῆν· φαίνεται γὰρ ἐν αὐτοῖς ἔχοντα δύναμιν καὶ ἀρχὴν τοιαύτην, δι' ἧς αὔξησίν τε καὶ φθίσιν λαμβάνουσι κατὰ τοὺς ἐναντίους τόπους· οὐ γὰρ ἄνω μὲν αὔξεται, κάτω δ' οὐ, ἀλλ' ὁμοίως ἐπ' ἄμφω καὶ πάντῃ, ὅσα αἰεὶ τρέφεταί τε καὶ ζῇ διὰ τέλους, ἕως ἂν δύνηται λαμβάνειν τροφήν.

4. χωρίζεσθαι δὲ τοῦτο μὲν τῶν ἄλλων δυνατόν, τὰ δ' ἄλλα τούτου ἀδύνατον

ἐν τοῖς θνητοῖς. φανερόν δ' ἐπὶ τῶν φυομένων· οὐδεμία γὰρ αὐτοῖς ὑπάρχει δύναμις ἄλλη [413b] ψυχῆς. τὸ μὲν οὖν ζῆν διὰ τὴν ἀρχὴν ταύτην ὑπάρχει τοῖς ζῶσι, τὸ δὲ ζῶον διὰ τὴν αἴσθησιν πρώτως· καὶ γὰρ τὰ μὴ κινούμενα μὴδ' ἀλλάττοντα τόπον, ἔχοντα δ' αἴσθησιν, ζῶα λέγομεν καὶ οὐ ζῆν μόνον. αἰσθήσεως δὲ πρῶτον ὑπάρχει πᾶσιν ἀφή· ὥσπερ δὲ τὸ θρεπτικὸν δύναται χωρίζεσθαι τῆς ἀφῆς καὶ πάσης αἰσθήσεως, οὕτως ἡ ἀφή τῶν ἄλλων αἰσθήσεων (θρεπτικὸν δὲ λέγομεν τὸ τοιοῦτον μόνον τῆς ψυχῆς οὐ καὶ τὰ φυόμενα μετέχει), τὰ δὲ ζῶα πάντα φαίνεται τὴν ἀπτικὴν αἴσθησιν ἔχοντα· δι' ἣν δ' αἰτίαν ἑκάτερον τούτων συμβέβηκεν, ὕστερον ἐροῦμεν.

5. νῦν δ' ἐπὶ τοσοῦτον εἰρήσθω μόνον, ὅτι ἐστὶν ἡ ψυχὴ τῶν εἰρημένων τούτων ἀρχὴ καὶ τούτοις ὠρίσται, θρεπτικῶ, αἰσθητικῶ, διανοητικῶ, κινήσει. πότερον δὲ τούτων ἕκαστόν ἐστι ψυχὴ ἢ μόνον ψυχῆς, καὶ εἰ μόνον, πότερον οὕτως ὥστ' εἶναι χωριστὸν λόγῳ μόνον ἢ καὶ τόπῳ, περὶ μὲν τινῶν τούτων οὐ χαλεπὸν ἰδεῖν, ἕνια δὲ ἀπορίαν ἔχει.

6. ὥσπερ γὰρ ἐπὶ τῶν φυτῶν ἕνια διαιρούμενα φαίνεται ζῶντα καὶ χωριζόμενα ἀπ' ἀλλήλων, ὡς οὕσης τῆς ἐν αὐτοῖς ψυχῆς ἐντελεχείᾳ μὲν μιᾶς ἐν ἑκάστῳ φυτῷ, δυνάμει δὲ πλειόνων, οὕτως ὁρῶμεν καὶ περὶ ἑτέρας διαφορᾶς τῆς ψυχῆς συμβαῖνον ἐπὶ τῶν ἐντόμων ἐν τοῖς διατεμνομένοις· καὶ γὰρ αἴσθησιν ἑκάτερον τῶν μερῶν ἔχει καὶ κίνησιν τὴν κατὰ τόπον, εἰ δ' αἴσθησιν, καὶ φαντασίαν καὶ ὄρεξιν· ὅπου μὲν γὰρ αἴσθησις, καὶ λύπη τε καὶ ἡδονή, ὅπου δὲ ταῦτα, ἐξ ἀνάγκης καὶ ἐπιθυμία.

7. περὶ δὲ τοῦ νοῦ καὶ τῆς θεωρητικῆς δυνάμεως οὐδέν πω φανερόν, ἀλλ' ἔοικε ψυχῆς γένος ἕτερον εἶναι, καὶ τοῦτο μόνον ἐνδέχεσθαι χωρίζεσθαι, καθάπερ τὸ αἰδίδιον τοῦ φθαρτοῦ.

8. τὰ δὲ λοιπὰ μέρη τῆς ψυχῆς φανερόν ἐκ τούτων ὅτι οὐκ ἔστι χωριστά, καθάπερ τινὲς φασιν· τῷ δὲ λόγῳ ὅτι ἕτερα, φανερόν· αἰσθητικῶ γὰρ εἶναι καὶ δοξαστικῶ ἕτερον, εἴπερ καὶ τὸ αἰσθάνεσθαι τοῦ δοξάζειν, ὁμοίως δὲ καὶ τῶν ἄλλων ἕκαστον τῶν εἰρημένων.

9. ἔτι δ' ἐνίοις μὲν τῶν ζώων ἅπανθ' ὑπάρχει ταῦτα, πρὸς δὲ τινὰ τούτων, ἑτέροις δὲ ἐν μόνον (τοῦτο δὲ ποιεῖ δια- [414a] φορὰν τῶν ζώων)· διὰ τίνα δ' αἰτίαν, ὕστερον ἐπισκεπτέον. παραπλήσιον δὲ καὶ περὶ τὰς αἰσθήσεις συμβέβηκεν· τὰ μὲν γὰρ ἔχει πάσας, τὰ δὲ τινάς, τὰ δὲ μίαν τὴν ἀναγκαιοτάτην, ἀφήν.

10. ἐπεὶ δὲ ὧ ζῶμεν καὶ αἰσθανόμεθα διχῶς λέγεται, καθάπερ ὧ ἐπιστάμεθα (λέγομεν δὲ τὸ μὲν ἐπιστήμην τὸ δὲ ψυχὴν, ἑκατέρω γὰρ τούτων φαμὲν ἐπίστασθαι), ὁμοίως δὲ καὶ [ὧ] ὑγιαίνομεν τὸ μὲν ὑγείᾳ τὸ δὲ μορίῳ τινὶ τοῦ σώματος ἢ καὶ ὅλῳ, τούτων δ' ἡ μὲν ἐπιστήμη τε καὶ ὑγεία μορφή καὶ εἶδός τι καὶ λόγος καὶ οἶον ἐνέργεια τοῦ δεκτικοῦ, ἡ μὲν τοῦ ἐπιστημονικοῦ, ἡ δὲ τοῦ ὑγιαστοῦ (δοκεῖ γὰρ ἐν τῷ πάσχοντι καὶ διατιθεμένῳ ἡ τῶν ποιητικῶν ὑπάρχειν ἐνέργεια), ἡ ψυχὴ δὲ τοῦτο ὧ ζῶμεν καὶ αἰσθανόμεθα καὶ διανοοῦμεθα πρῶτως-ὥστε λόγος τις ἂν εἴη καὶ εἶδος, ἀλλ' οὐχ ὕλη καὶ τὸ ὑποκείμενον.

11. τριχῶς γὰρ λεγομένης τῆς οὐσίας, καθάπερ εἵπομεν, ὧν τὸ μὲν εἶδος, τὸ δὲ ὕλη, τὸ δὲ ἐξ ἀμφοῖν, τούτων δ' ἡ μὲν ὕλη δύναμις, τὸ δὲ εἶδος ἐντελέχεια, ἐπεὶ τὸ ἐξ ἀμφοῖν ἔμψυχον, οὐ τὸ σῶμά ἐστιν ἐντελέχεια ψυχῆς, ἀλλ' αὕτη σώματός τινος. καὶ διὰ τοῦτο καλῶς ὑπολαμβάνουσιν οἷς δοκεῖ μήτ' ἄνευ σώματος εἶναι μήτε σῶμά τι ἢ ψυχὴ· σῶμα μὲν γὰρ οὐκ ἔστι, σώματος δέ τι,

12. καὶ διὰ τοῦτο ἐν σώματι ὑπάρχει, καὶ ἐν σώματι τοιούτῳ, καὶ οὐχ ὥσπερ οἱ πρότερον εἰς σῶμα ἐνήρμοζον αὐτήν, οὐθὲν προσδιορίζοντες ἐν τίνι καὶ ποίῳ, καίπερ οὐδὲ φαινομένου τοῦ τυχόντος δέχεσθαι τὸ τυχόν.

13. οὕτω δὲ γίνεται καὶ κατὰ λόγον· ἐκάστου γὰρ ἡ ἐντελέχεια ἐν τῷ δυνάμει ὑπάρχοντι καὶ τῇ οἰκείᾳ ὕλῃ πέφυκεν ἐγγίνεσθαι. ὅτι μὲν οὖν ἐντελέχειά τις ἔστι καὶ λόγος τοῦ δυνάμει ἔχοντος εἶναι τοιούτου, φανερόν ἐκ τούτων.

### Κεφάλαιο 3

[414a27] 1. Τῶν δὲ δυνάμεων τῆς ψυχῆς αἱ λεχθεῖσαι τοῖς μὲν ὑπάρχουσι πᾶσαι, καθάπερ εἵπομεν, τοῖς δὲ τινὲς αὐτῶν, ἐνίοις δὲ μία μόνη. δυνάμεις δ' εἵπομεν θρεπτικόν, αἰσθητικόν, ὀρεκτικόν, κινητικὸν κατὰ τόπον, διανοητικόν.

2. ὑπάρχει δὲ τοῖς μὲν φυτοῖς τὸ θρεπτικὸν μόνον, ἑτέροις δὲ [414b] τοῦτό τε καὶ τὸ αἰσθητικόν. εἰ δὲ τὸ αἰσθητικόν, καὶ τὸ ὀρεκτικόν· ὄρεξις μὲν γὰρ ἐπιθυμία καὶ θυμὸς καὶ βούλησις, τὰ δὲ ζῶα πάντ' ἔχουσι μίαν γε τῶν αἰσθήσεων, τὴν ἀφῆν· ὧ δ' αἰσθησις ὑπάρχει, τούτῳ ἡδονὴ τε καὶ λύπη καὶ τὸ ἡδύ τε καὶ λυπηρόν, οἷς δὲ ταῦτα, καὶ ἐπιθυμία· τοῦ γὰρ ἡδέος ὄρεξις αὕτη.

3. ἔτι δὲ τῆς τροφῆς αἰσθησιν ἔχουσιν· ἡ γὰρ ἀφῆ τῆς τροφῆς αἰσθησις·

ξηροῖς γὰρ καὶ ὑγροῖς καὶ θερμοῖς καὶ ψυχροῖς τρέφεται τὰ ζῶντα πάντα, τούτων δ' αἰσθησις ἀφή, τῶν δ' ἄλλων αἰσθητῶν κατὰ συμβεβηκός. οὐθὲν γὰρ εἰς τροφήν συμβάλλεται ψόφος οὐδὲ χρῶμα οὐδὲ ὀσμή, ὃ δὲ χυμὸς ἔν τι τῶν ἀπτῶν ἐστίν. πείνα δὲ καὶ δίψα ἐπιθυμία, καὶ ἡ μὲν πείνα ξηροῦ καὶ θερμοῦ, ἡ δὲ δίψα ὑγροῦ καὶ ψυχροῦ· ὃ δὲ χυμὸς οἶον ἡδυσμά τι τούτων ἐστίν. διασαφητέον δὲ περὶ αὐτῶν ὕστερον, νῦν δ' ἐπὶ τοσοῦτον εἰρήσθω, ὅτι τῶν ζώντων τοῖς ἔχουσιν ἀφήν καὶ ὄρεξις ὑπάρχει. περὶ δὲ φαντασίας ἄδηλον, ὕστερον δ' ἐπισκεπτέον.

4. ἐνίοις δὲ πρὸς τούτοις ὑπάρχει καὶ τὸ κατὰ τόπον κινητικόν, ἑτέροις δὲ καὶ τὸ διανοητικόν τε καὶ νοῦς, οἶον ἀνθρώποις καὶ εἴ τι τοιοῦτον ἕτερον ἔστιν ἢ τιμιώτερον.

5. δῆλον οὖν ὅτι τὸν αὐτὸν τρόπον εἰς ἃν εἴη λόγος ψυχῆς τε καὶ σχήματος· οὔτε γὰρ ἐκεῖ σχῆμα παρὰ τὸ τρίγωνον ἔστι καὶ τὰ ἐφεξῆς, οὔτ' ἐνταῦθα ψυχὴ παρὰ τὰς εἰρημένους. γένοιτο δ' ἃν καὶ ἐπὶ τῶν σχημάτων λόγος κοινός, ὃς ἐφαρμόσει μὲν πᾶσιν, ἴδιος δ' οὐδενὸς ἔσται σχήματος. ὁμοίως δὲ καὶ ἐπὶ ταῖς εἰρημέναις ψυχαῖς. διὸ γελοῖον ζητεῖν τὸν κοινὸν λόγον καὶ ἐπὶ τούτων καὶ ἐφ' ἑτέρων, ὃς οὐδενὸς ἔσται τῶν ὄντων ἴδιος λόγος, οὐδὲ κατὰ τὸ οἰκεῖον καὶ ἄτομον εἶδος, ἀφέντας τὸν τοιοῦτον.

6. (παραπλησίως δ' ἔχει τῷ περὶ τῶν σχημάτων καὶ τὰ κατὰ ψυχὴν· ἀεὶ γὰρ ἐν τῷ ἐφεξῆς ὑπάρχει δυνάμει τὸ πρότερον ἐπὶ τε τῶν σχημάτων καὶ ἐπὶ τῶν ἐμψύχων, οἶον ἐν τετραγώνῳ μὲν τρίγωνον, ἐν αἰσθητικῷ δὲ τὸ θρεπτικόν.) ὥστε καθ' ἕκαστον ζητητέον, τίς ἐκάστου ψυχῆ, οἶον τίς φυτοῦ καὶ τίς ἀνθρώπου ἢ θηρίου.

7. διὰ τίνα δ' αἰτίαν τῷ [415a] ἐφεξῆς οὕτως ἔχουσι, σκεπτέον. ἄνευ μὲν γὰρ τοῦ θρεπτικοῦ τὸ αἰσθητικὸν οὐκ ἔστιν· τοῦ δ' αἰσθητικοῦ χωρίζεται τὸ θρεπτικὸν ἐν τοῖς φυτοῖς. πάλιν δ' ἄνευ μὲν τοῦ ἀπτικοῦ τῶν ἄλλων αἰσθήσεων οὐδεμία ὑπάρχει, ἀφῆ δ' ἄνευ τῶν ἄλλων ὑπάρχει· πολλὰ γὰρ τῶν ζώων οὔτ' ὄψιν οὔτ' ἀκοὴν ἔχουσιν οὔτ' ὀσμῆς αἰσθησιν. καὶ τῶν αἰσθητικῶν δὲ τὰ μὲν ἔχει τὸ κατὰ τόπον κινητικόν, τὰ δ' οὐκ ἔχει· τελευταῖον δὲ καὶ ἐλάχιστα λογισμὸν καὶ διάνοιαν· οἷς μὲν γὰρ ὑπάρχει λογισμὸς τῶν φθαρτῶν, τούτοις καὶ τὰ λοιπὰ πάντα, οἷς δ' ἐκείνων ἕκαστον, οὐ πᾶσι λογισμός, ἀλλὰ τοῖς μὲν οὐδὲ φαντασία, τὰ δὲ ταύτῃ μόνῃ ζῶσιν. περὶ δὲ τοῦ θεωρητικοῦ νοῦ ἕτερος λόγος. ὅτι μὲν οὖν ὁ περὶ τούτων ἐκάστου λόγος, οὗτος οἰκειότατος καὶ περὶ ψυχῆς, δῆλον.

## Κεφάλαιο 4

[415a13] 1. Αναγκαῖον δὲ τὸν μέλλοντα περὶ τούτων σκέψιν ποιεῖσθαι λαβεῖν ἕκαστον αὐτῶν τί ἐστίν, εἴθ' οὕτως περὶ τῶν ἐχομένων καὶ περὶ τῶν ἄλλων ἐπιζητεῖν. εἰ δὲ χρὴ λέγειν τί ἕκαστον αὐτῶν, οἷον τί τὸ νοητικὸν ἢ τὸ αἰσθητικὸν ἢ τὸ θρεπτικόν, πρότερον ἔτι λεκτέον τί τὸ νοεῖν καὶ τί τὸ αἰσθάνεσθαι· πρότεραι γάρ εἰσι τῶν δυνάμεων αἱ ἐνέργειαι καὶ αἱ πράξεις κατὰ τὸν λόγον. εἰ δ' οὕτως, τούτων δ' ἔτι πρότερα τὰ ἀντικείμενα δεῖ τεθεωρηκέναι, περὶ ἐκείνων πρῶτον ἂν δέοι διορίσαι διὰ τὴν αὐτὴν αἰτίαν, οἷον περὶ τροφῆς καὶ αἰσθητοῦ καὶ νοητοῦ.

2. ὥστε πρῶτον περὶ τροφῆς καὶ γεννήσεως λεκτέον· ἡ γὰρ θρεπτικὴ ψυχὴ καὶ τοῖς ἄλλοις ὑπάρχει, καὶ πρώτη καὶ κοινοτάτη δυνάμις ἐστὶ ψυχῆς, καθ' ἣν ὑπάρχει τὸ ζῆν ἅπασιν. ἥς ἐστὶν ἔργα γεννῆσαι καὶ τροφῇ χρῆσθαι· φυσικώτατον γὰρ τῶν ἔργων τοῖς ζῴσιν, ὅσα τέλεια καὶ μὴ πηρώματα ἢ τὴν γένεσιν αὐτομάτην ἔχει, τὸ ποιῆσαι ἕτερον οἷον αὐτό, ζῶον μὲν ζῶον, φυτὸν δὲ φυτόν, ἵνα τοῦ ἀεὶ καὶ τοῦ θεοῦ μετέχωσιν ἢ [415b] δύνανται· πάντα γὰρ ἐκείνου ὀρέγεται, καὶ ἐκείνου ἔνεκα πράττει ὅσα πράττει κατὰ φύσιν (τὸ δ' οὐ ἔνεκα διττόν, τὸ μὲν οὐ, τὸ δὲ ὦ). ἐπεὶ οὖν κοινωνεῖν ἀδυνατεῖ τοῦ ἀεὶ καὶ τοῦ θεοῦ τῇ συνεχείᾳ, διὰ τὸ μὴδὲν ἐνδέχεσθαι τῶν φθαρτῶν ταῦτό καὶ ἐν ἀριθμῷ διαμένειν, ἢ δύναται μετέχειν ἕκαστον, κοινωνεῖ ταύτῃ, τὸ μὲν μᾶλλον τὸ δ' ἥττον, καὶ διαμένει οὐκ αὐτὸ ἄλλ' οἷον αὐτό, ἀριθμῷ μὲν οὐχ ἓν, εἶδει δ' ἓν.

3. ἔστι δὲ ἡ ψυχὴ τοῦ ζῶντος σώματος αἰτία καὶ ἀρχή. ταῦτα δὲ πολλαχῶς λέγεται, ὁμοίως δ' ἡ ψυχὴ κατὰ τοὺς διωρισμένους τρόπους τρεῖς αἰτία· καὶ γὰρ ὅθεν ἡ κίνησις καὶ οὐ ἔνεκα καὶ ὡς ἡ οὐσία τῶν ἐμψύχων σωμάτων ἡ ψυχὴ αἰτία.

4. ὅτι μὲν οὖν ὡς οὐσία, δῆλον· τὸ γὰρ αἴτιον τοῦ εἶναι πᾶσιν ἡ οὐσία, τὸ δὲ ζῆν τοῖς ζῴσι τὸ εἶναι ἐστίν, αἰτία δὲ καὶ ἀρχὴ τούτου ἡ ψυχὴ. ἔτι τοῦ δυνάμει ὄντος λόγος ἡ ἐντελέχεια.

5. φανερόν δ' ὡς καὶ οὗ ἔνεκεν ἡ ψυχὴ αἰτία· ὥσπερ γὰρ ὁ νοῦς ἔνεκά του ποιεῖ, τὸν αὐτὸν τρόπον καὶ ἡ φύσις, καὶ τοῦτ' ἐστὶν αὐτῆς τέλος. τοιοῦτον δ' ἓν τοῖς ζῴσι ἡ ψυχὴ κατὰ φύσιν· πάντα γὰρ τὰ φυσικὰ σώματα τῆς ψυχῆς ὄργανα, καθάπερ τὰ τῶν ζῴων, οὕτω καὶ τὰ τῶν φυτῶν, ὡς ἔνεκα τῆς ψυχῆς ὄντα· διττῶς δὲ τὸ οὐ ἔνεκα, τό τε οὐ καὶ τὸ ὦ.

6. ἀλλὰ μὴν καὶ ὅθεν πρῶτον ἢ κατὰ τόπον κίνησις, ψυχὴ· οὐ πᾶσι δ' ὑπάρχει τοῖς ζῶσιν ἢ δύναμις αὕτη. ἔστι δὲ καὶ ἀλλοίωσις καὶ αὔξεις κατὰ ψυχὴν· ἢ μὲν γὰρ αἰσθησις ἀλλοίωσίς τις εἶναι δοκεῖ, αἰσθάνεται δ' οὐθὲν ὃ μὴ μετέχει ψυχῆς, ὁμοίως δὲ καὶ περὶ αὐξήσεως τε καὶ φθίσεως ἔχει· οὐδὲν γὰρ φθίνει οὐδ' αὖξεται φυσικῶς μὴ τρεφόμενον, τρέφεται δ' οὐθὲν ὃ μὴ κοινωνεῖ ζωῆς.

7. Ἐμπεδοκλῆς δ' οὐ καλῶς εἴρηκε τοῦτο προστιθείς, τὴν αὔξην συμβαίνειν τοῖς φυτοῖς κάτω μὲν συρριζουμένοις διὰ τὸ τὴν γῆν οὕτω φέρεσθαι κατὰ φύσιν, ἄνω δὲ διὰ τὸ <τὸ> πῦρ ὡσαύτως. οὔτε γὰρ τὸ ἄνω καὶ κάτω καλῶς λαμβάνει (οὐ γὰρ ταῦτ' οὐ πᾶσι τὸ ἄνω καὶ κάτω καὶ τῷ παντί, ἀλλ' ὡς ἡ κεφαλὴ τῶν ζώων, οὕτως αἱ ῥίζαι τῶν φυτῶν, εἰ χρὴ τὰ ὄργανα λέγειν ἕτερα καὶ ταῦτ' αὖτε τοῖς ἔργοις) πρὸς δὲ τούτοις τί τὸ συνέχον εἰς τάναντία φερόμενα τὸ πῦρ καὶ τὴν γῆν; διασπασθήσεται γάρ, εἰ μὴ τι ἔσται τὸ κωλύον· εἰ δ' ἔσται, τοῦτ' ἔστιν ἡ ψυχὴ, καὶ τὸ αἶτιον τοῦ αὐξάνεσθαι καὶ τρέφεσθαι.

8. δοκεῖ δὲ τισιν ἢ τοῦ πυρὸς φύσις ἀπλῶς αἰτία τῆς τροφῆς καὶ τῆς αὐξήσεως εἶναι· καὶ γὰρ αὐτὸ φαίνεται μόνον τῶν σωμάτων [ἢ τῶν στοιχείων] τρεφόμενον καὶ αὐξόμενον, διὸ καὶ ἐν τοῖς φυτοῖς καὶ ἐν τοῖς ζώοις ὑπολάβοι τις ἂν τοῦτο εἶναι τὸ ἐργαζόμενον. τὸ δὲ συναίτιον μὲν πῶς ἔστιν, οὐ μὴν ἀπλῶς γε αἶτιον, ἀλλὰ μᾶλλον ἢ ψυχὴ· ἢ μὲν γὰρ τοῦ πυρὸς αὔξεις εἰς ἄπειρον, ἕως ἂν ἢ τὸ καυστόν, τῶν δὲ φύσει συνισταμένων πάντων ἔστι πέρας καὶ λόγος μεγέθους τε καὶ αὐξήσεως· ταῦτα δὲ ψυχῆς, ἀλλ' οὐ πυρός, καὶ λόγου μᾶλλον ἢ ὕλης.

9. ἐπεὶ δ' ἡ αὕτη δύναμις τῆς ψυχῆς θρεπτικὴ καὶ γεννητικὴ, περὶ τροφῆς ἀναγκαῖον διωρίσθαι πρῶτον· ἀφορίζεται γὰρ πρὸς τὰς ἄλλας δυνάμεις τῷ ἔργῳ τούτῳ. δοκεῖ δ' εἶναι ἡ τροφή τὸ ἐναντίον τῷ ἐναντίῳ, οὐ πᾶν δὲ παντί, ἀλλ' ὅσα τῶν ἐναντίων μὴ μόνον γένεσιν ἐξ ἀλλήλων ἔχουσιν ἀλλὰ καὶ αὔξην· γίνεται γὰρ πολλὰ ἐξ ἀλλήλων, ἀλλ' οὐ πάντα ποσά, οἷον ὑγιὲς ἐκ κάμνοντος. φαίνεται δ' οὐδ' ἐκεῖνα τὸν αὐτὸν τρόπον ἀλλήλοις εἶναι τροφή, ἀλλὰ τὸ μὲν ὕδωρ τῷ πυρὶ τροφή, τὸ δὲ πῦρ οὐ τρέφει τὸ ὕδωρ. ἐν μὲν οὖν τοῖς ἀπλοῖς σώμασι ταῦτ' εἶναι δοκεῖ μάλιστα τὸ μὲν τροφή τὸ δὲ τρεφόμενον.

10. ἀπορίαν δ' ἔχει· φασὶ γὰρ οἱ μὲν τὸ ὅμοιον τῷ ὁμοίῳ τρέφεσθαι, καθάπερ καὶ αὐξάνεσθαι, τοῖς δ' ὥσπερ εἶπομεν τοῦμπαλιν δοκεῖ, τὸ ἐναντίον τῷ ἐναντίῳ, ὡς ἀπαθοῦς ὄντος τοῦ ὁμοίου ὑπὸ τοῦ ὁμοίου, τὴν δὲ τροφήν δεῖν μεταβάλλειν καὶ πέττεσθαι· ἢ δὲ μεταβολὴ πᾶσιν εἰς τὸ ἀντικείμενον ἢ τὸ μεταξύ. ἔτι πάσχει τι ἡ τροφή ὑπὸ τοῦ τρεφόμενου, ἀλλ' οὐ τοῦτο ὑπὸ τῆς

[416b]

11. τροφῆς, ὥσπερ οὐδ' ὁ τέκτων ὑπὸ τῆς ὕλης, ἀλλ' ὑπ' ἐκείνου αὕτη· ὁ δὲ τέκτων μεταβάλλει μόνον εἰς ἐνέργειαν ἐξ ἀργίας. πότερον δ' ἐστὶν ἡ τροφή τὸ τελευταῖον προσγινόμενον ἢ τὸ πρῶτον, ἔχει διαφοράν. εἰ δ' ἄμφω, ἀλλ' ἡ μὲν ἄπεπτος ἡ δὲ πεπεμμένη, ἀμφοτέρως ἂν ἐνδέχοιτο τὴν τροφήν λέγειν· ἡ μὲν γὰρ ἄπεπτος, τὸ ἐναντίον τῷ ἐναντίῳ τρέφεται, ἡ δὲ πεπεμμένη, τὸ ὅμοιον τῷ ὁμοίῳ. ὥστε φανερόν ὅτι λέγουσί τινα τρόπον ἀμφοτέροι καὶ ὀρθῶς καὶ οὐκ ὀρθῶς.

12. ἐπεὶ δ' οὐθὲν τρέφεται μὴ μετέχον ζωῆς, τὸ ἔμψυχον ἂν εἴη σῶμα τὸ τρεφόμενον, ἢ ἔμψυχον, ὥστε καὶ ἡ τροφή πρὸς ἔμψυχόν ἐστι, καὶ οὐ κατὰ συμβεβηκός. ἔστι δ' ἕτερον τροφῆ καὶ αὐξητικῶ εἶναι· ἡ μὲν γὰρ ποσόν τι τὸ ἔμψυχον, αὐξητικόν, ἡ δὲ τόδε τι καὶ οὐσία, τροφή (σώζει γὰρ τὴν οὐσίαν, καὶ μέχρι τούτου ἔστιν ἕως ἂν τρέφηται), καὶ γενέσεως ποιητικόν, οὐ τοῦ τρεφομένου, ἀλλ' οἷον τὸ τρεφόμενον· ἥδη γὰρ ἔστιν αὐτοῦ ἡ οὐσία, γεννᾷ δ' οὐθὲν αὐτὸ ἐαυτό, ἀλλὰ σώζει. ὥσθ' ἡ μὲν τοιαύτη τῆς ψυχῆς ἀρχὴ δύναμις ἐστὶν οἷα σώζειν τὸ ἔχον αὐτὴν ἢ τοιοῦτον, ἡ δὲ τροφή παρασκευάζει ἐνεργεῖν· διὸ στερηθὲν τροφῆς οὐ δύναται εἶναι.

13. [ἐπεὶ δ' ἔστι τρία, τὸ τρεφόμενον καὶ ὃ τρέφεται καὶ τὸ τρέφον, τὸ μὲν τρέφον ἐστὶν ἡ πρώτη ψυχὴ, τὸ δὲ τρεφόμενον τὸ ἔχον ταύτην σῶμα, ὃ δὲ τρέφεται, ἡ τροφή.] ἐπεὶ δὲ ἀπὸ τοῦ τέλους ἅπαντα προσαγορεύειν δίκαιον, τέλος δὲ τὸ γεννῆσαι οἷον αὐτό, εἴη ἂν ἡ πρώτη ψυχὴ γεννητικὴ οἷον αὐτό. ἔστι δὲ ὃ [416b26] τρέφει διττόν, ὥσπερ καὶ ὃ κυβερνᾷ καὶ ἡ χεὶρ καὶ τὸ πηδάλιον, τὸ μὲν κινεῖν καὶ κινούμενον, τὸ δὲ κινούμενον μόνον. πᾶσαν δ' ἀναγκαῖον τροφήν δύνασθαι πέττεσθαι, ἐργάζεται δὲ τὴν πέψιν τὸ θερμόν· διὸ πᾶν ἔμψυχον ἔχει θερμότητα. τύπῳ μὲν οὖν ἡ τροφή τί ἐστὶν εἴρηται· διασαφητέον δ' ἐστὶν ὕστερον περὶ αὐτῆς ἐν τοῖς οἰκείοις λόγοις.

## Κεφάλαιο 5

[416b32] 1. Διωρισμένων δὲ τούτων λέγωμεν κοινῇ περὶ πάσης αἰσθήσεως. ἡ δ' αἴσθησις ἐν τῷ κινεῖσθαι τε καὶ πάσχειν συμβαίνει, καθάπερ εἴρηται· δοκεῖ γὰρ ἀλλοίωσίς τις εἶναι. φασὶ δέ τινες καὶ τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου πάσχειν. [417a] τοῦτο δὲ πῶς δυνατόν ἢ ἀδύνατον, εἰρήκαμεν ἐν τοῖς καθόλου λόγοις περὶ τοῦ ποιεῖν καὶ πάσχειν.

2. ἔχει δ' ἀπορίαν διὰ τί καὶ τῶν αἰσθήσεων αὐτῶν οὐ γίνεται αἴσθησις, καὶ

διὰ τί ἄνευ τῶν ἔξω οὐ ποιοῦσιν αἴσθησιν, ἐνόντος πυρὸς καὶ γῆς καὶ τῶν ἄλλων στοιχείων, ὧν ἐστὶν ἡ αἴσθησις καθ' αὐτὰ ἢ τὰ συμβεβηκότα τούτοις. δῆλον οὖν ὅτι τὸ αἰσθητικὸν οὐκ ἔστιν ἐνεργεία, ἀλλὰ δυνάμει μόνον, διὸ οὐκ αἰσθάνεται, καθάπερ τὸ καυστὸν οὐ καίεται αὐτὸ καθ' αὐτὸ ἄνευ τοῦ καυστικοῦ· ἔκαιε γὰρ ἂν ἐαυτό, καὶ οὐθὲν ἐδεῖτο τοῦ ἐντελεχείᾳ πυρὸς ὄντος. ἐπειδὴ δὲ τὸ αἰσθάνεσθαι λέγομεν διχῶς (τό τε γὰρ δυνάμει ἀκοῦον καὶ ὁρῶν ἀκούειν καὶ ὁρᾶν λέγομεν, κἂν τύχη καθεῦδον, καὶ τὸ ἤδη ἐνεργοῦν), διχῶς ἂν λέγοιτο καὶ ἡ αἴσθησις, ἡ μὲν ὡς δυνάμει, ἡ δὲ ὡς ἐνεργείᾳ. ὁμοίως δὲ καὶ τὸ αἰσθητόν, τό τε δυνάμει ὄν καὶ τὸ ἐνεργείᾳ.

3. πρῶτον μὲν οὖν ὡς τοῦ αὐτοῦ ὄντος τοῦ πάσχειν καὶ τοῦ κινεῖσθαι καὶ τοῦ ἐνεργεῖν λέγωμεν· καὶ γὰρ ἔστιν ἡ κίνησις ἐνεργείᾳ τις, ἀτελὴς μέντοι, καθάπερ ἐν ἑτέροις εἴρηται. πάντα δὲ πάσχει καὶ κινεῖται ὑπὸ τοῦ ποιητικοῦ καὶ ἐνεργείᾳ ὄντος. διὸ ἔστι μὲν ὡς ὑπὸ τοῦ ὁμοίου πάσχει, ἔστι δὲ ὡς ὑπὸ τοῦ ἀνομοίου, καθάπερ εἴπομεν· πάσχει μὲν γὰρ τὸ ἀνόμοιον, πεπονθὸς δ' ὁμοίον ἐστίν.

4. διαιρετέον δὲ καὶ περὶ δυνάμεως καὶ ἐντελεχείας· νῦν γὰρ ἀπλῶς ἐλέγομεν περὶ αὐτῶν. ἔστι μὲν γὰρ οὕτως ἐπιστήμὸν τι ὡς ἂν εἴποιμεν ἄνθρωπον ἐπιστήμονα ὅτι ὁ ἄνθρωπος τῶν ἐπιστημόνων καὶ ἐχόντων ἐπιστήμην· ἔστι δ' ὡς ἤδη λέγομεν ἐπιστήμονα τὸν ἔχοντα τὴν γραμματικὴν· ἐκάτερος δὲ τούτων οὐ τὸν αὐτὸν τρόπον δυνατὸς ἐστίν, ἀλλ' ὁ μὲν ὅτι τὸ γένος τοιοῦτον καὶ ἡ ὕλη, ὁ δ' ὅτι βουλευθεὶς δυνατὸς θεωρεῖν, ἂν μή τι κωλύσῃ τῶν ἔξωθεν· ὁ δ' ἤδη θεωρῶν, ἐντελεχείᾳ ὦν καὶ κυρίως ἐπιστάμενος τότε τὸ Α. ἀμφοτέροι μὲν οὖν οἱ πρῶτοι, κατὰ δύναμιν ἐπιστήμονες <ὄντες, ἐνεργείᾳ γίνονται ἐπιστήμονες,> ἀλλ' ὁ μὲν διὰ μαθήσεως ἀλλοιωθεὶς καὶ πολλάκις ἐξ ἐναντίας μεταβαλὼν ἔξεως, ὁ δ' ἐκ τοῦ ἔχειν τὴν ἀριθμητικὴν ἢ τὴν γραμματικὴν, μὴ ἐνεργεῖν δέ, εἰς τὸ ἐνεργεῖν, ἄλλον τρόπον.

5. οὐκ ἔστι δ' ἀπλοῦν οὐδὲ τὸ πάσχειν, ἀλλὰ τὸ μὲν φθορά τις ὑπὸ τοῦ ἐναντίου, τὸ δὲ σωτηρία μᾶλλον ὑπὸ τοῦ ἐντελεχείᾳ ὄντος τοῦ δυνάμει ὄντος καὶ ὁμοίου οὕτως ὡς δύναμις ἔχει πρὸς ἐντελέχειαν· θεωροῦν γὰρ γίνεται τὸ ἔχον τὴν ἐπιστήμην, ὅπερ ἢ οὐκ ἔστιν ἀλλοιοῦσθαι (εἰς αὐτὸ γὰρ ἡ ἐπίδοσις καὶ εἰς ἐντελέχειαν) ἢ ἕτερον γένος ἀλλοιώσεως. διὸ οὐ καλῶς ἔχει λέγειν τὸ φρονοῦν, ὅταν φρονῇ, ἀλλοιοῦσθαι, ὥσπερ οὐδὲ τὸν οἰκοδόμον ὅταν οἰκοδομῇ. τὸ μὲν οὖν εἰς ἐντελέχειαν ἄγειν ἐκ δυνάμει ὄντος [κατὰ] τὸ νοοῦν καὶ φρονοῦν οὐ διδασκαλίαν ἀλλ' ἑτέραν ἐπωνυμίαν ἔχειν δίκαιον· τὸ δ' ἐκ δυνάμει ὄντος μανθάνον καὶ λαμβάνον ἐπιστήμην ὑπὸ τοῦ ἐντελεχείᾳ ὄντος καὶ διδασκαλικοῦ ἦτοι οὐδὲ πάσχειν φατέον, [ὥσπερ εἴρηται,] ἢ δύο τρόπους



εἶναι ἀλλοιώσεως, τὴν τε ἐπὶ τὰς στερητικὰς διαθέσεις μεταβολὴν καὶ τὴν ἐπὶ τὰς ἔξεις καὶ τὴν φύσιν.

6. τοῦ δ' αἰσθητικοῦ ἢ μὲν πρώτη μεταβολὴ γίνεται ὑπὸ τοῦ γεννῶντος, ὅταν δὲ γεννηθῇ, ἔχει ἤδη, ὥσπερ ἐπιστήμην, καὶ τὸ αἰσθάνεσθαι. τὸ κατ' ἐνέργειαν δὲ ὁμοίως λέγεται τῷ θεωρεῖν· διαφέρει δέ, ὅτι τοῦ μὲν τὰ ποιητικὰ τῆς ἐνεργείας ἔξωθεν, τὸ ὁρατὸν καὶ τὸ ἀκουστόν, ὁμοίως δὲ καὶ τὰ λοιπὰ τῶν αἰσθητῶν. αἴτιον δ' ὅτι τῶν καθ' ἕκαστον ἢ κατ' ἐνέργειαν αἰσθησις, ἢ δ' ἐπιστήμη τῶν καθόλου· ταῦτα δ' ἐν αὐτῇ πῶς ἐστὶ τῇ ψυχῇ.

διὸ νοῆσαι μὲν ἐπ' αὐτῷ, ὁπόταν βούληται, αἰσθάνεσθαι δ' οὐκ ἐπ' αὐτῷ· ἀναγκαῖον γὰρ ὑπάρχειν τὸ αἰσθητόν. ὁμοίως δὲ τοῦτο ἔχει κἂν ταῖς ἐπιστήμαις ταῖς τῶν αἰσθητῶν, καὶ διὰ τὴν αὐτὴν αἰτίαν, ὅτι τὰ αἰσθητὰ τῶν καθ' ἕκαστα καὶ τῶν ἔξωθεν.

7. ἀλλὰ περὶ μὲν τούτων διασαφῆσαι καιρὸς γένοιτ' ἂν καὶ εἰσαῦθις· νῦν δὲ διωρίσθω τοσοῦτον, ὅτι οὐχ ἄπλοῦ ὄντος τοῦ δυνάμει λεγομένου, ἀλλὰ τοῦ μὲν ὥσπερ ἂν εἴποιμεν τὸν παῖδα δύνασθαι στρατηγεῖν, τοῦ δὲ ὡς τὸν ἐν ἡλικίᾳ ὄντα, οὕτως ἔχει [[418a] τὸ αἰσθητικόν. ἐπεὶ δ' ἀνώνυμος αὐτῶν ἢ διαφορὰ, διώρισται δὲ περὶ αὐτῶν ὅτι ἕτερα καὶ πῶς ἕτερα, χρῆσθαι ἀναγκαῖον τῷ πάσχειν καὶ ἀλλοιοῦσθαι ὡς κυρίοις ὀνόμασιν. τὸ δ' αἰσθητικὸν δυνάμει ἐστὶν οἷον τὸ αἰσθητὸν ἤδη ἐντελεχεῖα, καθάπερ εἴρηται. πάσχει μὲν οὖν οὐχ ὅμοιον ὄν, πεπονθὸς δ' ὁμοίωται καὶ ἔστιν οἷον ἐκεῖνο.

## Κεφάλαιο 6

[418a7] 1. Λεκτέον δὲ καθ' ἑκάστην αἰσθησιν περὶ τῶν αἰσθητῶν πρῶτον. λέγεται δὲ τὸ αἰσθητὸν τριχῶς, ὧν δύο μὲν καθ' αὐτὰ φαμεν αἰσθάνεσθαι, τὸ δὲ ἓν κατὰ συμβεβηκός. τῶν δὲ δυοῖν τὸ μὲν ἴδιόν ἐστιν ἐκάστης αἰσθήσεως, τὸ δὲ κοινὸν πασῶν.

2. λέγω δ' ἴδιον μὲν ὃ μὴ ἐνδέχεται ἑτέρᾳ αἰσθήσει αἰσθάνεσθαι, καὶ περὶ ὃ μὴ ἐνδέχεται ἀπατηθῆναι, οἷον ὄψις χρώματος καὶ ἀκοὴ ψόφου καὶ γεῦσις χυμοῦ, ἢ δ' ἀφ' ἑλπίδους [μὲν] ἔχει διαφοράς, ἀλλ' ἑκάστη γε κρίνει περὶ τούτων, καὶ οὐκ ἀπατᾶται ὅτι χρῶμα οὐδ' ὅτι ψόφος, ἀλλὰ τί τὸ κεχρωσμένον ἢ ποῦ, ἢ τί τὸ ψοφοῦν ἢ ποῦ. τὰ μὲν οὖν τοιαῦτα λέγεται ἴδια ἐκάστης,

3. κοινὰ δὲ κίνησις, ἡρεμία, ἀριθμός, σχῆμα, μέγεθος· τὰ γὰρ τοιαῦτα

οὐδεμιᾶς ἐστὶν ἴδια, ἀλλὰ κοινὰ πάσαις· καὶ γὰρ ἀφ'ἣ κίνησίς τις ἐστὶν αἰσθητὴ καὶ ὄψει.

4. κατὰ συμβεβηκὸς δὲ λέγεται αἰσθητόν, οἷον εἰ τὸ λευκὸν εἴη Διάρους υἱός· κατὰ συμβεβηκὸς γὰρ τούτου αἰσθάνεται, ὅτι τῷ λευκῷ συμβέβηκε τοῦτο, οὐ αἰσθάνεται· διὸ καὶ οὐδὲν πάσχει ἢ τοιοῦτον ὑπὸ τοῦ αἰσθητοῦ. τῶν δὲ καθ' αὐτὰ αἰσθητῶν τὰ ἴδια κυρίως ἐστὶν αἰσθητά, καὶ πρὸς ἃ ἡ οὐσία πέφυκεν ἐκάστης αἰσθήσεως.

## Κεφάλαιο 7

[418a26] 1. Οὗ μὲν οὖν ἐστὶν ἡ ὄψις, τοῦτ' ἐστὶν ὁρατόν, ὁρατὸν δ' ἐστὶ χρώμα τε καὶ ὃ λόγῳ μὲν ἔστιν εἰπεῖν, ἀνώνυμον δὲ τυγχάνει ὄν· δῆλον δὲ ἔσται ὃ λέγομεν προελθοῦσι. τὸ γὰρ ὁρατόν ἐστὶ χρώμα, τοῦτο δ' ἐστὶ τὸ ἐπὶ τοῦ καθ' αὐτὸ ὁρατοῦ· καθ' αὐτὸ δὲ οὐ τῷ λόγῳ, ἀλλ' ὅτι ἐν ἑαυτῷ ἔχει τὸ αἶτιον τοῦ εἶναι ὁρατόν. πᾶν δὲ χρώμα [418b] κινητικόν ἐστὶ τοῦ κατ' ἐνέργειαν διαφανοῦς, καὶ τοῦτ' ἐστὶν αὐτοῦ ἡ φύσις· διόπερ οὐχ ὁρατὸν ἄνευ φωτός, ἀλλὰ πᾶν τὸ ἐκάστου χρώμα ἐν φωτὶ ὁράται. διὸ περὶ φωτὸς πρῶτον λεκτέον τί ἐστίν.

2. ἔστι δὴ τι διαφανές. διαφανές δὲ λέγω ὃ ἔστι μὲν ὁρατόν, οὐ καθ' αὐτὸ δὲ ὁρατὸν ὡς ἀπλῶς εἰπεῖν, ἀλλὰ δι' ἀλλότριον χρώμα. τοιοῦτον δὲ ἐστὶν ἀήρ καὶ ὕδωρ καὶ πολλὰ τῶν στερεῶν· οὐ γὰρ ἢ ὕδωρ οὐδ' ἢ ἀήρ διαφανές, ἀλλ' ὅτι ἔστι τις φύσις ἐνυπάρχουσα ἡ αὐτὴ ἐν τούτοις ἀμφοτέροις καὶ ἐν τῷ αἰδίῳ τῷ ἄνω σώματι. φῶς δὲ ἐστὶν ἡ τούτου ἐνέργεια, τοῦ διαφανοῦς ἢ διαφανές. δυνάμει δέ, ἐν ᾧ τοῦτ' ἐστί, καὶ τὸ σκότος. τὸ δὲ φῶς οἷον χρώμα ἐστὶ τοῦ διαφανοῦς, ὅταν ἢ ἐντελεχεῖα διαφανές ὑπὸ πυρὸς ἢ τοιούτου οἷον τὸ ἄνω σῶμα· καὶ γὰρ τούτῳ τι ὑπάρχει ἐν καὶ ταῦτόν. τί μὲν οὖν τὸ διαφανές καὶ τί τὸ φῶς, εἴρηται, ὅτι οὔτε πῦρ οὔθ' ὅλως σῶμα οὐδ' ἀπορροή σώματος οὐδενός (εἴη γὰρ ἂν σῶμά τι καὶ οὕτως), ἀλλὰ πυρὸς ἢ τοιούτου τινὸς παρουσία ἐν τῷ διαφανεῖ· οὔτε γὰρ δύο σώματα ἅμα δυνατὸν ἐν τῷ αὐτῷ εἶναι,

3. δοκεῖ τε τὸ φῶς ἐναντίον εἶναι τῷ σκότει· ἔστι δὲ τὸ σκότος στέρσις τῆς τοιαύτης ἕξεως ἐκ διαφανοῦς, ὥστε δῆλον ὅτι καὶ ἡ τούτου παρουσία τὸ φῶς ἐστίν. καὶ οὐκ ὀρθῶς Ἐμπεδοκλῆς, οὐδ' εἴ τις ἄλλος οὕτως εἴρηκεν, ὡς φερομένου τοῦ φωτὸς καὶ γιγνομένου ποτὲ μεταξὺ τῆς γῆς καὶ τοῦ περιέχοντος, ἡμᾶς δὲ λανθάνοντος· τοῦτο γὰρ ἐστὶ καὶ παρὰ τὴν τοῦ λόγου ἐνέργειαν καὶ παρὰ τὰ φαινόμενα· ἐν μικρῷ μὲν γὰρ διαστήματι λάθοι ἄν,

ἀπ' ἀνατολῆς δ' ἐπὶ δυσμᾶς τὸ λανθάνειν μέγα λίαν τὸ αἴτημα. [418b26]

4. ἔστι δὲ χρώματος μὲν δεκτικὸν τὸ ἄχρουν, ψόφου δὲ τὸ ἄψοφον. ἄχρουν δ' ἔστι τὸ διαφανὲς καὶ τὸ ἀόρατον ἢ τὸ μόλις ὁρώμενον, οἷον δοκεῖ τὸ σκοτεινόν. τοιοῦτον δὲ τὸ διαφανὲς μὲν, ἀλλ' οὐχ ὅταν ἢ ἐντελεχείᾳ διαφανές, ἀλλ' ὅταν δυνάμει· ἡ γὰρ αὐτὴ φύσις ὅτε μὲν σκότος ὅτε δὲ φῶς [419a]

5. νῦν δ' ἐπὶ τοσοῦτον φανερόν ἐστιν, ὅτι τὸ μὲν ἐν φωτὶ ὁρώμενον χρῶμα (διὸ καὶ οὐχ ὁράται ἄνευ φωτός· τοῦτο γὰρ ἦν αὐτῷ τὸ χρώματι εἶναι, τὸ κινητικῷ εἶναι τοῦ κατ' ἐνέργειαν διαφανοῦς), ἡ δ' ἐντελέχεια τοῦ διαφανοῦς φῶς ἐστιν. σημεῖον δὲ τούτου φανερόν· ἐὰν γάρ τις θῇ τὸ ἔχον χρῶμα ἐπ' αὐτὴν τὴν ὄψιν, οὐκ ὄψεται· ἀλλὰ τὸ μὲν χρῶμα κινεῖ τὸ διαφανές, οἷον τὸν ἄερα, ὑπὸ τούτου δὲ συνεχοῦς ὄντος κινεῖται τὸ αἰσθητήριον.

6. οὐ γὰρ καλῶς τοῦτο λέγει Δημόκριτος, οἰόμενος, εἰ γένοιτο κενὸν τὸ μεταξύ, ὁράσθαι ἂν ἀκριβῶς καὶ εἰ μύρμηξ ἐν τῷ οὐρανῷ εἴη· τοῦτο γὰρ ἀδύνατόν ἐστιν. πάσχοντος γάρ τι τοῦ αἰσθητικοῦ γίνεται τὸ ὁρᾶν· ὑπ' αὐτοῦ μὲν οὖν τοῦ ὁρώμενου χρώματος ἀδύνατον· λείπεται δὴ ὑπὸ τοῦ μεταξύ, ὥστ' ἀναγκαῖόν τι εἶναι μεταξύ· κενοῦ δὲ γενομένου οὐχ ὅτι ἀκριβῶς, ἀλλ' ὅλως οὐθὲν ὀφθήσεται.

7. δι' ἣν μὲν οὖν αἰτίαν τὸ χρῶμα ἀναγκαῖον ἐν φωτὶ ὁράσθαι, εἴρηται. πῦρ δὲ ἐν ἀμφοῖν ὁράται, καὶ ἐν σκότει καὶ ἐν φωτί, καὶ τοῦτο ἐξ ἀνάγκης· τὸ γὰρ διαφανὲς ὑπὸ τούτου γίνεται διαφανές.

8. ὁ δ' αὐτὸς λόγος καὶ περὶ ψόφου καὶ ὁσμῆς ἐστιν· οὐθὲν γὰρ αὐτῶν ἀπτόμενον τοῦ αἰσθητηρίου ποιεῖ τὴν αἴσθησιν, ἀλλ' ὑπὸ μὲν ὁσμῆς καὶ ψόφου τὸ μεταξύ κινεῖται, ὑπὸ δὲ τούτου τῶν αἰσθητηρίων ἐκότερον· ὅταν δ' ἐπ' αὐτό τις ἐπιθῇ τὸ αἰσθητήριον τὸ ψοφοῦν ἢ τὸ ὄζον, οὐδεμίαν αἴσθησιν ποιήσει. περὶ δὲ ἀφῆς καὶ γεύσεως ἔχει μὲν ὁμοίως, οὐ φαίνεται δέ· δι' ἣν δ' αἰτίαν, ὕστερον ἔσται δῆλον.

9. τὸ δὲ μεταξύ ψόφων μὲν ἀήρ, ὁσμῆς δ' ἀνώνυμον· κοινὸν γάρ τι πάθος ἐπ' ἀέρος καὶ ὕδατος ἐστιν, ὥσπερ τὸ διαφανὲς χρώματι, οὕτω τῷ ἔχοντι ὁσμὴν ὃ ἐν ἀμφοτέροις ὑπάρχει τούτοις· φαίνεται γὰρ καὶ τὰ ἔνυδρα τῶν ζώων [419b] ἔχειν αἴσθησιν ὁσμῆς. ἀλλ' ὁ μὲν ἄνθρωπος, καὶ τῶν πεζῶν ὅσα ἀναπνεῖ, ἀδυνατεῖ ὁσμεῖσθαι μὴ ἀναπνέοντα. ἡ δ' αἰτία καὶ περὶ τούτων ὕστερον λεχθήσεται.

## Κεφάλαιο 8

[419b4] 1. Νῦν δὲ πρῶτον περὶ ψόφου καὶ ἀκοῆς διορίσωμεν. ἔστι δὲ διττὸς ὁ ψόφος· ὁ μὲν γὰρ ἐνέργειά τις, ὁ δὲ δύναμις· τὰ μὲν γὰρ οὗ φαμεν ἔχειν ψόφον, οἷον σπόγγον, ἔρια, τὰ δ' ἔχειν, οἷον χαλκὸν καὶ ὅσα στερεὰ καὶ λεῖα, ὅτι δύναται ψοφῆσαι (τοῦτο δ' ἐστὶν αὐτοῦ μεταξὺ καὶ τῆς ἀκοῆς ἐμποιῆσαι ψόφον ἐνέργειά).

2. γίνεται δ' ὁ κατ' ἐνέργειαν ψόφος ἀεὶ τινος πρὸς τι καὶ ἔν τινι· πληγὴ γὰρ ἐστὶν ἡ ποιοῦσα. διὸ καὶ ἀδύνατον ἐνὸς ὄντος γενέσθαι ψόφον· ἕτερον γὰρ τὸ τύπτον καὶ τὸ τυπτόμενον· ὥστε τὸ ψοφοῦν πρὸς τι ψοφεῖ· πληγὴ δ' οὐ γίνεται ἄνευ φορᾶς. ὥσπερ δ' εἴπομεν, οὐ τῶν τυχόντων πληγὴ ὁ ψόφος· οὐθένα γὰρ ποιεῖ ψόφον ἔρια ἢ πληγῇ, ἀλλὰ χαλκὸς καὶ ὅσα λεῖα καὶ κοῖλα· ὁ μὲν χαλκὸς ὅτι λεῖος, τὰ δὲ κοῖλα τῇ ἀνακλάσει πολλὰς ποιεῖ πληγὰς μετὰ τὴν πρώτην, ἀδυνατοῦντος ἐξελθεῖν τοῦ κινηθέντος.

3. ἔτι ἀκούεται ἐν ἀέρι, κἂν ὕδατι, ἀλλ' ἦττον, οὐκ ἔστι δὲ ψόφου κύριος ὁ ἀήρ οὐδὲ τὸ ὕδωρ, ἀλλὰ δεῖ στερεῶν πληγὴν γενέσθαι πρὸς ἄλληλα καὶ πρὸς τὸν ἀέρα. τοῦτο δὲ γίνεται ὅταν ὑπομένη πληγεῖς ὁ ἀήρ καὶ μὴ διαχυθῇ. διὸ ἐὰν ταχέως καὶ σφοδρῶς πληγῇ, ψοφεῖ· δεῖ γὰρ φθάσαι τὴν κίνησιν τοῦ ῥαπίζοντος τὴν θρύψιν τοῦ ἀέρος, ὥσπερ ἂν εἰ σωρὸν ἢ ὀρμαθὸν ψάμμου τύπτοι τις φερόμενον ταχύ.

4. ἡχὼ δὲ γίνεται ὅταν, ἀέρος ἐνὸς γενομένου διὰ τὸ ἀγγεῖον τὸ διορίσαν καὶ κωλύσαν θρυφθῆναι, πάλιν ὁ ἀήρ ἀπωσθῇ, ὥσπερ σφαῖρα. ἔοικε δ' αἰεὶ γίνεσθαι ἡχώ, ἀλλ' οὐ σαφές, ἐπεὶ συμβαίνει γε ἐπὶ τοῦ ψόφου καθάπερ καὶ ἐπὶ τοῦ φωτός· καὶ γὰρ τὸ φῶς αἰεὶ ἀνακλᾶται (οὐδὲ γὰρ ἂν ἐγένετο πάντη φῶς, ἀλλὰ σκότος ἔξω τοῦ ἡλιουμένου), ἀλλ' οὐχ οὕτως ἀνακλᾶται ὥσπερ ἀφ' ὕδατος ἢ χαλκοῦ ἢ καὶ τινος ἄλλου τῶν λείων, ὥστε σκιὰν ποιεῖν, ἢ τὸ φῶς ὀρίζομεν.

5. τὸ δὲ κενὸν ὀρθῶς λέγεται κύριον τοῦ ἀκούειν. δοκεῖ γὰρ εἶναι κενὸν ὁ ἀήρ, οὗτος δ' ἐστὶν ὁ ποιῶν ἀκούειν, ὅταν κινηθῇ συνεχῆς καὶ εἷς. ἀλλὰ διὰ τὸ ψαθυρὸς [420a] εἶναι οὐ γεγωνεῖ, ἂν μὴ λεῖον ἢ τὸ πληγέν. τότε δὲ εἷς γίνεται ἅμα διὰ τὸ ἐπίπεδον· ἐν γὰρ τὸ τοῦ λείου ἐπίπεδον.

6. ψοφητικὸν μὲν οὖν τὸ κινητικὸν ἐνὸς ἀέρος συνεχεία μέχρις ἀκοῆς. ἀκοῇ δὲ συμφυῆς <ἐστίν> ἀήρ· διὰ δὲ τὸ ἐν ἀέρι εἶναι, κινουμένου τοῦ ἔξω ὁ εἶσω κινεῖται. διόπερ οὐ πάντη τὸ ζῶον ἀκούει, οὐδὲ πάντη διέρχεται ὁ ἀήρ· οὐ

γὰρ πάντῃ ἔχει ἄερα τὸ κινησόμενον μέρος καὶ ἔμψυχον. αὐτὸς μὲν δὴ ἄψοφον ὁ ἀήρ διὰ τὸ εὐθρυπτον· ὅταν δὲ κωλυθῇ θρύπτεσθαι, ἡ τούτου κίνησις ψόφος. ὁ δ' ἐν τοῖς ὡσὶν ἐγκατωκοδόμηται πρὸς τὸ ἀκίνητος εἶναι, ὅπως ἀκριβῶς αἰσθάνηται πάσας τὰς διαφορὰς τῆς κινήσεως. διὰ ταῦτα δὲ καὶ ἐν ὕδατι ἀκούομεν, ὅτι οὐκ εἰσέρχεται πρὸς αὐτὸν τὸν συμφυῆ ἄερα· ἀλλ' οὐδ' εἰς τὸ οὖς, διὰ τὰς ἔλικας. ὅταν δὲ τοῦτο συμβῇ, οὐκ ἀκούει· οὐδ' ἂν ἡ μῆνιγξ κάμη, ὥσπερ τὸ ἐπὶ τῇ κόρῃ δέρμα [ὅταν κάμη]. ἀλλ' οὐ σημείον τοῦ ἀκούειν ἢ μὴ τὸ ἡγεῖν τὸ οὖς ὥσπερ τὸ κέρας· αἰεὶ γὰρ οἰκείαν τινὰ κίνησιν ὁ ἀήρ κινεῖται ὁ ἐν τοῖς ὡσὶν, ἀλλ' ὁ ψόφος ἀλλότριος καὶ οὐκ ἴδιος. καὶ διὰ τοῦτο φασιν ἀκούειν τῷ κενῷ καὶ ἡχοῦντι, ὅτι ἀκούομεν τῷ ἔχοντι ὠρισμένον τὸν ἄερα. [420a.19]

7. πότερον δὲ ψοφεῖ τὸ τυπτόμενον ἢ τὸ τύπτον; ἢ καὶ ἄμφω, τρόπον δ' ἕτερον; ἔστι γὰρ ὁ ψόφος κίνησις τοῦ δυναμένου κινεῖσθαι τὸν τρόπον τοῦτον ὥνπερ τὰ ἀφαλλόμενα ἀπὸ τῶν λείων, ὅταν τις κρούσῃ. οὐ δὲ πᾶν, ὥσπερ εἴρηται, ψοφεῖ τυπτόμενον καὶ τύπτον, οἷον ἐὰν πατάξῃ βελόνη βελόνην, ἀλλὰ δεῖ τὸ τυπτόμενον ὁμαλὸν εἶναι, ὥστε τὸν ἄερα ἀθροῦν ἀφάλλεσθαι καὶ σείεσθαι.

8. αἱ δὲ διαφοραὶ τῶν ψοφούντων ἐν τῷ κατ' ἐνέργειαν ψόφῳ δηλοῦνται· ὥσπερ γὰρ ἄνευ φωτὸς οὐχ ὁράται τὰ χρώματα, οὕτως οὐδ' ἄνευ ψόφου τὸ ὀξύ καὶ τὸ βαρὺ. ταῦτα δὲ λέγεται κατὰ μεταφορὰν ἀπὸ τῶν ἀπτῶν· τὸ μὲν γὰρ ὀξύ κινεῖ τὴν αἴσθησιν ἐν ὀλίγῳ χρόνῳ ἐπὶ πολὺ, τὸ δὲ βαρὺ ἐν πολλῷ ἐπ' ὀλίγον. οὐ δὲ ταχὺ τὸ ὀξύ, τὸ δὲ βαρὺ βραδύ, ἀλλὰ γίνεται τοῦ μὲν διὰ τὸ τάχος ἢ κίνησις τοιαύτη, τοῦ δὲ διὰ βραδυτῆτα, [420b] καὶ ἔοικεν ἀνάλογον ἔχειν τῷ περὶ τὴν ἀφὴν ὀξεῖ καὶ ἀμβλεῖ· τὸ μὲν γὰρ ὀξύ οἷον κεντεῖ, τὸ δ' ἀμβλὺ οἷον ὠθεῖ, διὰ τὸ κινεῖν τὸ μὲν ἐν ὀλίγῳ τὸ δὲ ἐν πολλῷ, ὥστε συμβαίνει τὸ μὲν ταχὺ τὸ δὲ βραδὺ εἶναι.

9. περὶ μὲν οὖν ψόφου ταύτη διωρίσθω. ἡ δὲ φωνὴ ψόφος τίς ἐστὶν ἐμψύχου· τῶν γὰρ ἀψύχων οὐθέν φωνεῖ, ἀλλὰ καθ' ὁμοιότητα λέγεται φωνεῖν, οἷον αὐλὸς καὶ λύρα καὶ ὅσα ἄλλα τῶν ἀψύχων ἀπότασιν ἔχει καὶ μέλος καὶ διάλεκτον. ἔοικε γάρ, ὅτι καὶ ἡ φωνὴ ταῦτ' ἔχει. πολλὰ δὲ τῶν ζώων οὐκ ἔχουσι φωνήν, οἷον τὰ τε ἄναιμα καὶ τῶν ἐναίμων ἰχθύες (καὶ τοῦτ' εὐλόγως, εἴπερ ἄερος κίνησις τίς ἐστὶν ὁ ψόφος), ἀλλ' οἱ λεγόμενοι φωνεῖν, οἷον <οἱ> ἐν τῷ Ἀχελῷῳ, ψοφοῦσι τοῖς βραγχίοις ἢ τινι ἑτέρῳ τοιούτῳ,

10. φωνὴ δ' ἐστὶ ζώου ψόφος οὐ τῷ τυχόντι μορίῳ. ἀλλ' ἐπεὶ πᾶν ψοφεῖ τύπτοντός τινος καὶ τι καὶ ἐν τινι, τοῦτο δ' ἐστὶν ἀήρ, εὐλόγως ἂν φωνοίῃ

ταῦτα μόνᾳ ὅσα δέχεται τὸν ἄερα. τῷ γὰρ ἤδη ἀναπνεομένῳ καταχρῆται ἡ φύσις ἐπὶ δύο ἔργα-καθάπερ τῇ γλώττῃ ἐπὶ τε τὴν γεῦσιν καὶ τὴν διάλεκτον, ὧν ἡ μὲν γεῦσις ἀναγκαῖον (διὸ καὶ πλείοσιν ὑπάρχει), ἡ δ' ἐρμηνεία ἔνεκα τοῦ εὖ, οὕτω καὶ τῷ πνεύματι πρὸς τε τὴν θερμότητα τὴν ἐντὸς ὡς ἀναγκαῖον <ὄν> (τὸ δ' αἴτιον ἐν ἑτέροις εἰρήσεται) καὶ πρὸς τὴν φωνὴν ὅπως ὑπάρχει τὸ εὖ.

11. ὄργανον δὲ τῇ ἀναπνοῇ ὁ φάρυγξ· οὗ δ' ἔνεκα τὸ μόνιον ἐστὶ τοῦτο, πνεύμων· τούτῳ γὰρ τῷ μορίῳ πλέον ἔχει τὸ θερμὸν τὰ περὶ τῶν ἄλλων. δεῖται δὲ τῆς ἀναπνοῆς καὶ ὁ περὶ τὴν καρδίαν τόπος πρῶτος. διὸ ἀναγκαῖον εἶσω ἀναπνεόμενον εἰσιέναι τὸν ἄερα. ὥστε ἡ πληγὴ τοῦ ἀναπνεομένου ἀέρος ὑπὸ τῆς ἐν τούτοις τοῖς μορίοις ψυχῆς πρὸς τὴν καλουμένην ἀρτηρίαν φωνὴ ἐστίν (οὐ γὰρ πᾶς ζῶου ψόφος φωνή, καθάπερ εἵπομεν-ἐστὶ γὰρ καὶ τῇ γλώττῃ ψοφεῖν καὶ ὡς οἱ βήττοντες-ἀλλὰ δεῖ ἔμψυχόν τε εἶναι τὸ τύπον καὶ μετὰ φαντασίας τινός· σημαντικὸς γὰρ δὴ τις ψόφος ἐστὶν ἡ φωνή)· καὶ οὐ τοῦ ἀναπνεομένου ἀέρος ὥσπερ ἡ βῆξ, [421a] ἀλλὰ τούτῳ τύπτει τὸν ἐν τῇ ἀρτηρίᾳ πρὸς αὐτήν.

12. σημεῖον δὲ τὸ μὴ δύνασθαι φωνεῖν ἀναπνέοντα μὴδ' ἐκπνέοντα, ἀλλὰ κατέχοντα· κινεῖ γὰρ τούτῳ ὁ κατέχων. φανερόν δὲ καὶ διότι οἱ ἰχθύες ἄφωνοι· οὐ γὰρ ἔχουσι φάρυγγα. τοῦτο δὲ τὸ μόνιον οὐκ ἔχουσιν ὅτι οὐ δέχονται τὸν ἄερα οὐδ' ἀναπνέουσιν. δι' ἣν μὲν οὖν αἰτίαν, ἕτερός ἐστι λόγος.

## Κεφάλαιο 9

[421a7] 1. Περὶ δὲ ὁσμῆς καὶ ὁσφραντοῦ ἥττον εὐδιόριστόν ἐστι τῶν εἰρημένων· οὐ γὰρ δῆλον ποῖόν τί ἐστὶν ἡ ὁσμή, οὕτως ὡς ὁ ψόφος ἡ τὸ χρῶμα. αἴτιον δ' ὅτι τὴν αἴσθησιν ταύτην οὐκ ἔχομεν ἀκριβῆ, ἀλλὰ χεῖρω πολλῶν ζώων· φαύλως γὰρ ἄνθρωπος ὁσμάται, καὶ οὐθενὸς αἰσθάνεται τῶν ὁσφραντῶν ἄνευ τοῦ λυπηροῦ ἢ τοῦ ἡδέος, ὡς οὐκ ὄντος ἀκριβοῦς τοῦ αἰσθητηρίου.

2. εὐλογον δ' οὕτω καὶ τὰ σκληρόφθαλμα τῶν χρωμάτων αἰσθάνεσθαι, καὶ μὴ διαδήλους αὐτοῖς εἶναι τὰς διαφορὰς τῶν χρωμάτων πλὴν τῷ φοβερῷ καὶ ἀφόβῳ· οὕτω δὲ καὶ περὶ τὰς ὁσμάς τὸ τῶν ἀνθρώπων γένος. εἰκε μὲν γὰρ ἀνάλογον ἔχειν πρὸς τὴν γεῦσιν, καὶ ὁμοίως τὰ εἶδη τῶν χυμῶν τοῖς τῆς ὁσμῆς, ἀλλ' ἀκριβεστέραν ἔχομεν τὴν γεῦσιν διὰ τὸ εἶναι αὐτὴν ἀφήν τινα, ταύτην δ' ἔχειν τὴν αἴσθησιν τὸν ἄνθρωπον ἀκριβεστάτην· ἐν μὲν γὰρ ταῖς

ἄλλαις λείπεται πολλῶν τῶν ζώων, κατὰ δὲ τὴν ἀφὴν πολλῶν τῶν ἄλλων διαφερόντως ἀκριβοῖ· διὸ καὶ φρονιμώτατόν ἐστι τῶν ζώων. σημεῖον δὲ τὸ καὶ ἐν τῷ γένει τῶν ἀνθρώπων παρὰ τὸ αἰσθητήριον τοῦτο εἶναι εὐφυεῖς καὶ ἀφυεῖς, παρ' ἄλλο δὲ μηδέν· οἱ μὲν γὰρ σκληρόσαρκοι ἀφυεῖς τὴν διάνοιαν, οἱ δὲ μαλακόσαρκοι εὐφυεῖς. [421a26]

3. ἔστι δ', ὥσπερ χυμὸς ὁ μὲν γλυκὺς ὁ δὲ πικρός, οὕτω καὶ ὀσμαί, ἀλλὰ τὰ μὲν ἔχουσι τὴν ἀνάλογον ὀσμήν καὶ χυμόν, λέγω δὲ οἶον γλυκεῖαν ὀσμήν καὶ γλυκὺν χυμόν, τὰ δὲ τοῦναντίον. ὁμοίως δὲ καὶ δριμεῖα καὶ αὐστηρὰ καὶ ὀξεῖα καὶ λιπαρά ἐστὶν ὀσμή. ἀλλ' ὥσπερ εἶπομεν, διὰ τὸ μὴ σφόδρα διαδήλους εἶναι τὰς ὀσμάς ὥσπερ τοὺς χυμούς, [ἀπὸ τούτων] εἴληφε τὰ [421b] ὀνόματα καθ' ὁμοιότητα τῶν πραγμάτων, ἡ μὲν γλυκεῖα κρόκου καὶ μέλιτος, ἡ δὲ δριμεῖα θύμου καὶ τῶν τοιούτων· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων.

4. ἔστι δ' ὥσπερ ἡ ἀκοὴ καὶ ἐκάστη τῶν αἰσθήσεων, ἡ μὲν τοῦ ἀκουστοῦ καὶ ἀνηκούστου, ἡ δὲ τοῦ ὁρατοῦ καὶ ἀοράτου, καὶ ἡ ὄσφρησις τοῦ ὀσφραντοῦ καὶ ἀνοσφράντου. ἀνόσφραντον δὲ τὸ μὲν παρὰ τὸ ὅλως ἀδύνατον <εἶναι> ἔχειν ὀσμήν, τὸ δὲ μικρὰν ἔχον καὶ φαύλην. ὁμοίως δὲ καὶ τὸ ἄγευστον λέγεται.

5. ἔστι δὲ καὶ ἡ ὄσφρησις διὰ τοῦ μεταξύ, οἶον ἀέρος ἢ ὕδατος· καὶ γὰρ τὰ ἔνυδρα δοκοῦσιν ὀσμῆς αἰσθάνεσθαι, ὁμοίως καὶ τὰ ἔναιμα καὶ τὰ ἄναιμα, ὥσπερ καὶ τὰ ἐν τῷ ἀέρι· καὶ γὰρ τούτων ἔνια πόρρωθεν ἀπαντᾷ πρὸς τὴν τροφήν ὑποσμα γινόμενα.

6. διὸ καὶ ἄπορον φαίνεται εἰ πάντα μὲν ὁμοίως ὀσμάται, ὁ δ' ἄνθρωπος ἀναπνέων μὲν, μὴ ἀναπνέων δὲ ἄλλ' ἐκπνέων ἢ κατέχων τὸ πνεῦμα οὐκ ὀσμάται, οὔτε πόρρωθεν οὔτ' ἐγγύθεν, οὐδ' ἂν ἐπὶ τοῦ μυκτῆρος ἐντὸς τεθῇ· καὶ τὸ μὲν ἐπ' αὐτῷ τιθέμενον τῷ αἰσθητηρίῳ ἀναίσθητον εἶναι κοινὸν πάντων, ἀλλὰ τὸ ἄνευ τοῦ ἀναπνεῖν μὴ αἰσθάνεσθαι ἴδιον ἐπὶ τῶν ἀνθρώπων· δῆλον δὲ πειρωμένοις· ὥστε τὰ ἄναιμα, ἐπειδὴ οὐκ ἀναπνέουσιν, ἐτέραν ἂν τιν' αἴσθησιν ἔχοι παρὰ τὰς λεγομένας. ἀλλ' ἀδύνατον, εἴπερ τῆς ὀσμῆς αἰσθάνεται· ἡ γὰρ τοῦ ὀσφραντοῦ αἴσθησις καὶ δυσώδους καὶ εὐώδους ὄσφρησις ἐστίν. ἔτι δὲ καὶ φθειρόμενα φαίνεται ὑπὸ τῶν ἰσχυρῶν ὀσμῶν ὑφ' ὧν περ ἄνθρωπος, οἶον ἀσφάλτου καὶ θείου καὶ τῶν τοιούτων. ὀσφραίνεσθαι μὲν οὖν ἀναγκαῖον, ἀλλ' οὐκ ἀναπνέοντα.

7. ἔοικε δὲ τοῖς ἀνθρώποις διαφέρειν τὸ αἰσθητήριον τοῦτο πρὸς τὸ τῶν

ἄλλων ζώων, ὥσπερ τὰ ὄμματα πρὸς τὰ τῶν σκληροφθάλμων-τὰ μὲν γὰρ ἔχει φράγμα καὶ ὥσπερ ἔλυτρον τὰ βλέφαρα, ἃ μὴ κινήσας μὴδ' ἀνασπάσας οὐχ ὀρᾷ· τὰ δὲ σκληρόφθαλμα οὐδὲν ἔχει τοιοῦτον, ἀλλ' εὐθέως ὀρᾷ τὰ γινόμενα ἐν τῷ διαφανεῖ-οὕτως οὖν καὶ τὸ ὀσφραντικὸν αἰσθητήριον τοῖς μὲν [422a] ἀκαλυφές εἶναι, ὥσπερ τὸ ὄμμα, τοῖς δὲ τὸν ἀέρα δεχομένοις ἔχειν ἐπικάλυμμα, ὃ ἀναπνεόντων ἀποκαλύπτεται, διευρυνομένων τῶν φλεβίων καὶ τῶν πόρων.

8. καὶ διὰ τοῦτο τὰ ἀναπνέοντα οὐκ ὁσμᾶται ἐν τῷ ὑγρῷ· ἀναγκαῖον γὰρ ὀσφρανθῆναι ἀναπνεύσαντα, τοῦτο δὲ ποιεῖν ἐν τῷ ὑγρῷ ἀδύνατον. ἔστι δ' ἡ ὁσμὴ τοῦ ξηροῦ (ὥσπερ ὁ χυμὸς τοῦ ὑγροῦ), τὸ δὲ ὀσφραντικὸν αἰσθητήριον δυνάμει τοιοῦτον.

## Κεφάλαιο 10

[422a8] 1. Τὸ δὲ γευστὸν ἐστὶν ἀπτόν τι· καὶ τοῦτ' αἷτιον τοῦ μὴ εἶναι αἰσθητὸν διὰ τοῦ μεταξὺ ἄλλοτρίου ὄντος σώματος· οὐδὲ γὰρ τῇ ἀφῇ. καὶ τὸ σῶμα δὲ ἐν ᾧ ὁ χυμὸς, τὸ γευστὸν, ἐν ὑγρῷ ὡς ὕλη· τοῦτο δ' ἀπτόν τι. διὸ καὶ εἰ ἐν ὕδατι ἤμεν, ἡσθανόμεθ' ἂν ἐμβληθέντος τοῦ γλυκέος, οὐκ ἦν δ' ἂν ἡ αἰσθησις ἡμῖν διὰ τοῦ μεταξύ, ἀλλὰ τῷ μιχθῆναι τῷ ὑγρῷ, καθάπερ ἐπὶ τοῦ ποτοῦ. τὸ δὲ χρῶμα οὐχ οὕτως ὀρᾶται τῷ μίγνυσθαι, οὐδὲ ταῖς ἀπορροίαις. ὡς μὲν οὖν τὸ μεταξὺ οὐθὲν ἔστιν· ὡς δὲ χρῶμα τὸ ὁρατόν, οὕτω τὸ γευστὸν ὁ χυμὸς. οὐθὲν δὲ ποιεῖ χυμοῦ αἰσθησιν ἄνευ ὑγρότητος, ἀλλ' ἔχει ἐνεργεῖα ἢ δυνάμει ὑγρότητα, οἷον τὸ ἄλμυρόν· εὐτηκτόν τε γὰρ αὐτὸ καὶ συντηκτικὸν γλώττης. ὥσπερ δὲ καὶ ἡ ὄψις ἐστὶ τοῦ τε ὁρατοῦ καὶ τοῦ ἀοράτου (τὸ γὰρ σκότος ἀόρατον, κρίνει δὲ καὶ τοῦτο ἡ ὄψις), ἔτι τε τοῦ λῖαν λαμπροῦ (καὶ γὰρ τοῦτο ἀόρατον, ἄλλον δὲ τρόπον τοῦ σκότους), ὁμοίως δὲ καὶ ἡ ἀκοὴ ψόφου τε καὶ σιγῆς, ὧν τὸ μὲν ἀκουστόν τὸ δ' οὐκ ἀκουστόν, καὶ μεγάλου ψόφου καθάπερ ἡ ὄψις τοῦ λαμπροῦ (ὥσπερ γὰρ ὁ μικρὸς ψόφος ἀνήκουστος, τρόπον τινὰ καὶ ὁ μέγας τε καὶ ὁ βίαιος), ἀόρατον δὲ τὸ μὲν ὅλως λέγεται, ὥσπερ καὶ ἐπ' ἄλλων τὸ ἀδύνατον, τὸ δ' ἐὰν πεφυκὸς μὴ ἔχη ἢ φαύλως, ὥσπερ τὸ ἄπουν καὶ τὸ ἀπύρηνον-οὕτω δὴ καὶ ἡ γεῦσις τοῦ γευστοῦ τε καὶ ἀγεύστου, τοῦτο δὲ τὸ μικρὸν ἢ φαῦλον ἔχον χυμὸν ἢ φθαρτικὸν τῆς γεύσεως. [422b] δοκεῖ δ' εἶναι ἀρχὴ τὸ ποτόν καὶ ἄποτον (γεῦσις γὰρ τις ἀμφοτέρου· ἀλλὰ τοῦ μὲν φαύλη καὶ φθαρτικὴ [τῆς γεύσεως], τοῦ δὲ κατὰ φύσιν). ἔστι δὲ κοινὸν ἀφῆς καὶ γεύσεως τὸ ποτόν. ἔπει δ' ὑγρὸν τὸ γευστόν,

ἀνάγκη καὶ τὸ αἰσθητήριον αὐτοῦ μήτε ὑγρὸν εἶναι ἐντελεχεῖα μήτε



ἀδύνατον ὑγραίνεσθαι· πάσχει γάρ τι ἢ γεῦσις ὑπὸ τοῦ γευστοῦ, ἢ γευστόν. ἀναγκαῖον ἄρα ὑγρανθῆναι τὸ δυνάμενον μὲν ὑγραίνεσθαι σωζόμενον, μὴ ὑγρὸν δέ, τὸ γευστικὸν αἰσθητήριον. σημεῖον δὲ τὸ μήτε κατάξηρον οὔσαν τὴν γλῶτταν αἰσθάνεσθαι μήτε λίαν ὑγρὰν· αὕτη γὰρ ἀφ᾽ ἧ γίνεται τοῦ πρώτου ὑγροῦ, ὥσπερ ὅταν προγευματίσας τις ἰσχυροῦ χυμοῦ γεύηται ἑτέρου, καὶ οἶον τοῖς κάμνουσι πικρὰ πάντα φαίνεται διὰ τὸ τῇ γλώττῃ πλήρει τοιαύτης ὑγρότητος αἰσθάνεσθαι.

◆ ἐνήτον φυλάττουςαι.

◆ τα.

## Κεφάλαιο 11

[422b17] 1. Περὶ δὲ τοῦ ἀπτοῦ καὶ περὶ ἀφῆς ὁ αὐτὸς λόγος· εἰ γὰρ ἡ ἀφή μὴ μία ἐστὶν αἴσθησις ἀλλὰ πλείους, ἀναγκαῖον καὶ τὰ ἀπτὰ αἰσθητὰ πλείω εἶναι. ἔχει δ' ἀπορίαν πότερον πλείους εἰσὶν ἢ μία, καὶ τί τὸ αἰσθητήριον τὸ τοῦ ἀπτικοῦ, πότερον ἢ σὰρξ καὶ ἐν τοῖς ἄλλοις τὸ ἀνάλογον, ἢ οὐ, ἀλλὰ τοῦτο μὲν ἐστὶ τὸ μεταξύ, τὸ δὲ πρῶτον αἰσθητήριον ἄλλο τί ἐστὶν ἐντός.

2. πᾶσα γὰρ αἴσθησις μιᾶς ἐναντιώσεως εἶναι δοκεῖ, οἷον ὄψις λευκοῦ καὶ μέλανος, καὶ ἀκοὴ ὀξέος καὶ βαρέος, καὶ γεῦσις πικροῦ καὶ γλυκέος· ἐν δὲ τῷ ἀπτῷ πολλὰί ἐνεισὶν ἐναντιώσεις, θερμὸν ψυχρόν, ξηρὸν ὑγρόν, σκληρὸν μαλακόν, καὶ τῶν ἄλλων ὅσα τοιαῦτα. ἔχει δὲ τινα λύσιν πρὸς γε ταύτην τὴν ἀπορίαν, ὅτι καὶ ἐπὶ τῶν ἄλλων αἰσθήσεων εἰσὶν ἐναντιώσεις πλείους, οἷον ἐν φωνῇ οὐ μόνον ὀξύτης καὶ βαρύτης, ἀλλὰ καὶ μέγεθος καὶ μικρότης, καὶ λειότης καὶ τραχύτης φωνῆς, καὶ τοιαῦθ' ἕτερα. εἰσὶ δὲ καὶ περὶ χρῶμα διαφοραὶ τοιαῦται ἕτεραι. ἀλλὰ τί τὸ ἐν τὸ ὑποκείμενον, ὥσπερ ἀκοῇ ψόφος, οὕτω τῇ ἀφῇ, οὐκ ἐστὶν ἐνδηλον.

3. πότερον δ' ἐστὶ τὸ αἰσθητήριον ἐντός, ἢ οὐ, ἀλλ' [423a] εὐθέως ἡ σὰρξ, οὐδὲν δοκεῖ σημεῖον εἶναι τὸ γίνεσθαι τὴν αἴσθησιν ἅμα θιγγανομένων. καὶ γὰρ νῦν εἴ τις <τι> περὶ τὴν σάρκα περιτείνειεν οἷον ὑμένα ποιήσας, ὁμοίως τὴν αἴσθησιν εὐθέως ἀψάμενος ἐνσημανεῖ· καίτοι δῆλον ὡς οὐκ ἐστὶν ἐν τούτῳ τὸ αἰσθητήριον (εἰ δὲ καὶ συμφυεὲς γένοιτο, θᾶπτον ἔτι διικνοῖτ' ἂν ἡ αἴσθησις).

4. διὸ τὸ τοιοῦτον μόριον τοῦ σώματος ἔοικεν οὕτως ἔχειν ὥσπερ ἂν εἰ κύκλῳ ἡμῖν περιεπεφύκει ὁ ἀήρ· ἐδοκοῦμεν γὰρ ἂν ἐνί τινι αἰσθάνεσθαι καὶ ψόφου καὶ χρώματος καὶ ὀσμῆς, καὶ μία τις αἴσθησις εἶναι ὄψις ἀκοὴ ὄσφρησις. νῦν δὲ διὰ τὸ διωρίσθαι δι' οὐ γίνονται αἱ κινήσεις, φανερὰ τὰ εἰρημένα αἰσθητήρια ἕτερα ὄντα. ἐπὶ δὲ τῆς ἀφῆς τοῦτο νῦν ἄδηλον· ἐξ ἀέρος μὲν γὰρ ἢ ὕδατος ἀδύνατον συστήναι τὸ ἔμψυχον σῶμα· δεῖ γάρ τι στερεὸν εἶναι· λείπεται δὴ μικτὸν ἐκ τῆς καὶ τούτων εἶναι, οἷον βούλεται εἶναι ἢ σὰρξ καὶ τὸ ἀνάλογον· ὥστε ἀναγκαῖον τὸ σῶμα εἶναι τὸ μεταξύ τοῦ ἀπτικοῦ προσπεφυκός, δι' οὐ γίνονται αἱ αἰσθήσεις πλείους οὕσαι.

5. δηλοῖ δ' ὅτι πλείους ἢ ἐπὶ τῆς γλώττης ἀφή· ἀπάντων γὰρ τῶν ἀπτῶν αἰσθάνεται κατὰ τὸ αὐτὸ μόριον καὶ χυμοῦ. εἰ μὲν οὖν καὶ ἡ ἄλλη σὰρξ ἡσθάνετο τοῦ χυμοῦ, ἐδόκει ἂν ἡ αὐτὴ καὶ μία εἶναι αἴσθησις ἢ γεῦσις καὶ ἡ

ἀφή· νῦν δὲ δύο διὰ τὸ μὴ ἀντιστρέφειν.

6. ἀπορήσειε δ' ἂν τις, εἰ πᾶν σῶμα βάθος ἔχει, τοῦτο δ' ἐστὶ τὸ τρίτον μέγεθος, ὧν δ' ἐστὶ δύο σωμάτων μεταξὺ σῶμά τι, οὐκ ἐνδέχεται ταῦτα ἀλλήλων ἄπτεσθαι, τὸ δ' ὑγρὸν οὐκ ἔστιν ἄνευ σώματος, οὐδὲ τὸ διερὸν, ἀλλ' ἀναγκαῖον ὕδωρ εἶναι ἢ ἔχειν ὕδωρ,

τὰ δὲ ἀπτόμενα ἀλλήλων ἐν τῷ ὕδατι, μὴ ξηρῶν τῶν ἄκρων ὄντων, ἀναγκαῖον ὕδωρ ἔχειν μεταξύ, οὗ ἀνάπλεα τὰ ἔσχατα, εἰ δὲ τοῦτ' ἀληθές, ἀδύνατον ἄψασθαι ἄλλο ἄλλου ἐν ὕδατι, τὸν αὐτὸν δὲ τρόπον καὶ ἐν τῷ ἀέρι (ὁμοίως γὰρ ἔχει ὁ ἀήρ πρὸς τὰ ἐν αὐτῷ καὶ τὸ ὕδωρ πρὸς τὰ ἐν τῷ ὕδατι, λανθάνει δὲ μᾶλλον ἡμᾶς, ὥσπερ καὶ τὰ ἐν τῷ ὕδατι ζῶα [423b] εἰ διερὸν διεροῦ ἄπτεται)

-πότερον οὖν πάντων ὁμοίως ἐστὶν ἡ αἴσθησις, ἢ ἄλλων ἄλλως, καθάπερ νῦν δοκεῖ ἡ μὲν γεῦσις καὶ ἡ ἀφή τῷ ἄπτεσθαι, αἱ δ' ἄλλαι ἄποθεν. τὸ δ' οὐκ ἔστιν, ἀλλὰ καὶ τὸ σκληρὸν καὶ τὸ μαλακὸν δι' ἐτέρων αἰσθανόμεθα, ὥσπερ καὶ τὸ ψοφητικὸν καὶ τὸ ὀρατὸν καὶ τὸ ὀσφραντόν· ἀλλὰ τὰ μὲν πόρρωθεν, τὰ δ' ἐγγύθεν, διὸ λανθάνει· ἐπεὶ αἰσθανόμεθά γε πάντων διὰ τοῦ μέσου, ἀλλ' ἐπὶ τούτων λανθάνει. καίτοι καθάπερ εἵπομεν καὶ πρότερον, κἂν εἰ δι' ὑμένοιο αἰσθανοίμεθα τῶν ἀπτῶν ἀπάντων λανθάνοντος ὅτι διείργει, ὁμοίως ἂν ἔχοιμεν ὥσπερ καὶ νῦν ἐν τῷ ὕδατι καὶ ἐν τῷ ἀέρι· δοκοῦμεν γὰρ νῦν αὐτῶν ἄπτεσθαι καὶ οὐδὲν εἶναι διὰ μέσου.

8. ἀλλὰ διαφέρει τὸ ἀπτὸν τῶν ὀρατῶν καὶ τῶν ψοφητικῶν, ὅτι ἐκείνων μὲν αἰσθανόμεθα τῷ τὸ μεταξὺ ποιεῖν τι ἡμᾶς, τῶν δὲ ἀπτῶν οὐχ ὑπὸ τοῦ μεταξὺ ἀλλ' ἅμα τῷ μεταξύ, ὥσπερ ὁ δι' ἀσπίδος πληγεῖς· οὐ γὰρ ἡ ἀσπίς πληγεῖσα ἐπάταξεν, ἀλλ' ἅμ' ἅμφω συνέβη πληγῇναι.

9. ὅλως δ' ἔοικεν ἡ σὰρξ καὶ ἡ γλῶττα, ὡς ὁ ἀήρ καὶ τὸ ὕδωρ πρὸς τὴν ὄψιν καὶ τὴν ἀκοὴν καὶ τὴν ὀσφρησιν ἔχουσιν, οὕτως ἔχειν πρὸς τὸ αἰσθητήριον ὥσπερ ἐκείνων ἕκαστον. αὐτοῦ δὲ τοῦ αἰσθητηρίου ἀπτομένου οὗτ' ἐκεῖ οὗτ' ἐνταῦθα γένοιτ' ἂν αἴσθησις, οἷον εἴ τις σῶμά τι λευκὸν ἐπὶ τοῦ ὅμματος θείη τὸ ἔσχατον. ἢ καὶ δῆλον ὅτι ἐντὸς τὸ τοῦ ἀπτοῦ αἰσθητικόν. οὕτω γὰρ ἂν συμβαίνοι ὅπερ καὶ ἐπὶ τῶν ἄλλων· ἐπιτιθεμένων γὰρ ἐπὶ τὸ αἰσθητήριον οὐκ αἰσθάνεται, ἐπὶ δὲ τὴν σάρκα ἐπιτιθεμένων αἰσθάνεται· ὥστε τὸ μεταξὺ τοῦ ἀπτικοῦ ἢ σάρξ.

10. ἀπταὶ μὲν οὖν εἰσὶν αἱ διαφοραὶ τοῦ σώματος ἢ σῶμα· λέγω δὲ διαφορὰς

αὐτὰ στοιχεῖα διορίζουσι, θερμὸν ψυχρόν, ξηρὸν ὑγρόν, περὶ ὧν εἰρήκαμεν πρότερον ἐν τοῖς περὶ τῶν στοιχείων.

11. τὸ δὲ αἰσθητήριον αὐτῶν τὸ ἄπτικόν, καὶ ἐν ᾧ ἡ καλουμένη ἀφὴ ὑπάρχει αἴσθησις πρῶτω, τὸ δυνάμει τοιοῦτόν ἐστι μόριον· [424a] τὸ γὰρ αἰσθάνεσθαι πάσχειν τι ἐστίν· ὥστε τὸ ποιοῦν, οἷον αὐτὸ ἐνεργεία, τοιοῦτον ἐκεῖνο ποιεῖ, δυνάμει ὄν. διὸ τοῦ ὁμοίως θερμοῦ καὶ ψυχροῦ, ἢ σκληροῦ καὶ μαλακοῦ, οὐκ αἰσθανόμεθα, ἀλλὰ τῶν ὑπερβολῶν, ὡς τῆς αἰσθήσεως οἷον μεσότητός τινος οὔσης τῆς ἐν τοῖς αἰσθητοῖς ἐναντιώσεως. καὶ διὰ τοῦτο κρίνει τὰ αἰσθητά. τὸ γὰρ μέσον κριτικόν· γίνεται γὰρ πρὸς ἑκάτερον αὐτῶν θάτερον τῶν ἄκρων· καὶ δεῖ ὥσπερ τὸ μέλλον αἰσθήσεσθαι λευκοῦ καὶ μέλανος μηδέτερον αὐτῶν εἶναι ἐνεργεία, δυνάμει δ' ἄμφω (οὕτω δὲ καὶ ἐπὶ τῶν ἄλλων), καὶ ἐπὶ τῆς ἀφῆς μήτε θερμὸν μήτε ψυχρόν.

12. ἔτι δ' ὥσπερ ὁρατοῦ καὶ ἀοράτου ἦν πως ἡ ὄψις, ὁμοίως δὲ καὶ αἱ λοιπαὶ τῶν ἀντικειμένων, οὕτω καὶ ἡ ἀφὴ τοῦ ἀπτοῦ καὶ ἀνάπτου· ἀνάπτου δ' ἐστὶ τό τε μικρὰν ἔχον ἀμπαν διαφορὰν τῶν ἀπτῶν, οἷον πέπονθεν ὁ ἀήρ, καὶ τῶν ἀπτῶν αἱ ὑπερβολαί, ὥσπερ τὰ φθαρτικά. καθ' ἑκάστην μὲν οὖν τῶν αἰσθήσεων εἴρηται τύπω.

## Κεφάλαιο 12

[424a17] 1. Καθόλου δὲ περὶ πάσης αἰσθήσεως δεῖ λαβεῖν ὅτι ἡ μὲν αἴσθησις ἐστὶ τὸ δεκτικὸν τῶν αἰσθητῶν εἰδῶν ἄνευ τῆς ὕλης, οἷον ὁ κηρὸς τοῦ δακτυλίου ἄνευ τοῦ σιδήρου καὶ τοῦ χρυσοῦ δέχεται τὸ σημεῖον, λαμβάνει δὲ τὸ χρυσοῦν ἢ τὸ χαλκοῦν σημεῖον, ἀλλ' οὐχ ἡ χρυσὸς ἢ χαλκός· ὁμοίως δὲ καὶ ἡ αἴσθησις ἐκάστου ὑπὸ τοῦ ἔχοντος χρῶμα ἢ χυμὸν ἢ ψόφον πάσχει, ἀλλ' οὐχ ἡ ἑκάστον ἐκείνων λέγεται, ἀλλ' ἡ τοιονδί, καὶ κατὰ τὸν λόγον.

2. αἰσθητήριον δὲ πρῶτον ἐν ᾧ ἡ τοιαύτη δύναμις. ἔστι μὲν οὖν ταυτόν, τὸ δ' εἶναι ἕτερον· μέγεθος μὲν γὰρ ἂν τι εἴη τὸ αἰσθανόμενον, οὐ μὴν τό γε αἰσθητικῶς εἶναι οὐδ' ἡ αἴσθησις μέγεθός ἐστιν, ἀλλὰ λόγος τις καὶ δύναμις ἐκείνου.

3. φανερόν δ' ἐκ τούτων καὶ διὰ τί ποτε τῶν αἰσθητῶν αἱ ὑπερβολαὶ φθείρουσι τὰ αἰσθητήρια (ἐὰν γὰρ ἡ ἰσχυροτέρα τοῦ αἰσθητηρίου ἡ κίνησις, λύεται ὁ λόγος-τοῦτο δ' ἦν ἡ αἴσθησις-ὥσπερ καὶ ἡ συμφωνία καὶ ὁ τόνος κρουομένων σφόδρα τῶν χορδῶν),

4. καὶ διὰ τί ποτε τὰ φυτὰ οὐκ αἰσθάνεται, ἔχοντά τι μόριον ψυχικὸν καὶ πάσχοντά τι ὑπὸ τῶν ἀπτῶν (καὶ γὰρ ψύχε- [424b] ται καὶ θερμαίνεται). αἴτιον γὰρ τὸ μὴ ἔχειν μεσότητα, μηδὲ τοιαύτην ἀρχὴν οἷαν τὰ εἶδη δέχεσθαι τῶν αἰσθητῶν, ἀλλὰ πάσχειν μετὰ τῆς ὕλης.

5. ἀπορήσειε δ' ἂν τις εἰ πάθοι ἄν τι ὑπ' ὁσμῆς τὸ ἀδύνατον ὀσφρανθῆναι, ἢ ὑπὸ χρώματος τὸ μὴ δυνάμενον ἰδεῖν. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. εἰ δὲ τὸ ὀσφραντὸν ὁσμή, εἴ τι ποιεῖ, τὴν ὀσφρησιν ἢ ὁσμή ποιεῖ. ὥστε τῶν ἀδυνάτων ὀσφρανθῆναι οὐθὲν οἷον τε πάσχειν ὑπ' ὁσμῆς (ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων). οὐδὲ τῶν δυνατῶν, ἀλλ' <ἢ> ἢ αἰσθητικὸν ἕκαστον. ἅμα δὲ δῆλον καὶ οὕτως· οὔτε γὰρ φῶς καὶ σκότος οὔτε ψόφος οὔτε ὁσμή οὐδὲν ποιεῖ τὰ σώματα, ἀλλ' ἐν οἷς ἐστίν, οἷον ἀήρ ὁ μετὰ βροντῆς διίστησι τὸ ξύλον.

6. ἀλλὰ τὰ ἀπτὰ καὶ οἱ χυμοὶ ποιοῦσιν· εἰ γὰρ μή, ὑπὸ τίνος ἂν πάσχοι τὰ ἄψυχα καὶ ἀλλοιοῖτο; ἄρ' οὖν κάκεῖνα ποιήσει; ἢ οὐ πᾶν σῶμα παθητικὸν ὑπ' ὁσμῆς καὶ ψόφου, καὶ τὰ πάσχοντα ἀόριστα, καὶ οὐ μένει, οἷον ἀήρ (ὅζει γὰρ ὥσπερ παθὼν τι); τί οὖν ἐστὶ τὸ ὁσμᾶσθαι παρὰ τὸ πάσχειν τι; ἢ τὸ μὲν ὁσμᾶσθαι αἰσθάνεσθαι, ὁ δ' ἀήρ παθὼν ταχέως αἰσθητὸς γίνεται;

## Βιβλίο Γ

### Κεφάλαιο 1

[424b.22] 1. Ὅτι δ' οὐκ ἔστιν αἰσθησις ἑτέρα παρὰ τὰς πέντε (λέγω δὲ ταύτας ὄψιν, ἀκοήν, ὀσφρησιν, γεῦσιν, ἀφήν), ἐκ τῶνδε πιστεύσειεν ἂν τις. εἰ γὰρ παντὸς οὗ ἐστὶν αἰσθησις ἀφή καὶ νῦν αἰσθησιν ἔχομεν (πάντα γὰρ τὰ τοῦ ἀπτοῦ ἢ ἀπτὸν πάθη τῇ ἀφῇ ἡμῖν αἰσθητὰ ἐστίν), ἀνάγκη τ', εἴπερ ἐκλείπει τις αἰσθησις, καὶ αἰσθητήριόν τι ἡμῖν ἐκλείπειν, καὶ ὅσων μὲν αὐτῶν ἀπτόμενοι αἰσθανόμεθα, τῇ ἀφῇ αἰσθητὰ ἐστίν, ἣν τυγχάνομεν ἔχοντες, ὅσα δὲ διὰ τῶν μεταξὺ καὶ μὴ αὐτῶν ἀπτόμενοι, τοῖς ἀπλοῖς, λέγω δ' οἷον ἀέρι καὶ ὕδατι,

2. ἔχει δ' οὕτως ὥστ' εἰ μὲν δι' ἐνὸς πλείω αἰσθητὰ ἕτερα ὄντα ἀλλήλων τῷ γένει, ἀνάγκη τὸν ἔχοντα τὸ τοιοῦτον αἰσθητήριον ἀμφοῖν αἰσθητικὸν εἶναι (οἷον εἰ ἐξ ἀέρος ἐστὶ τὸ αἰσθητήριον, καὶ ἔστιν ὁ ἀήρ καὶ ψόφος καὶ χρώας), εἰ δὲ πλείω [425a] τοῦ αὐτοῦ, οἷον χρώας καὶ ἀήρ καὶ ὕδωρ (ἄμφω γὰρ διαφανῆ), καὶ ὁ τὸ ἕτερον αὐτῶν ἔχων μόνον αἰσθήσεται τοῦ δι' ἀμφοῖν,

3. τῶν δὲ ἀπλῶν ἐκ δύο τούτων αἰσθητήρια μόνον ἐστίν, ἐξ ἀέρος καὶ ὕδατος (ἢ μὲν γὰρ κόρη ὕδατος, ἢ δ' ἀκοὴ ἀέρος, ἢ δ' ὄσφρησις θατέρου τούτων), τὸ δὲ πῦρ ἢ οὐθενὸς ἢ κοινὸν πάντων (οὐθέν γὰρ ἄνευ θερμότητος αἰσθητικόν), γῆ δὲ ἢ οὐθενός, ἢ ἐν τῇ ἀφῇ μάλιστα μέμικται ἰδίως, διὸ λείποιτ' ἂν μηθὲν εἶναι αἰσθητήριον ἔξω ὕδατος καὶ ἀέρος,

4. ταῦτα δὲ καὶ νῦν ἔχουσιν ἓνια ζῶα-πᾶσαι ἄρα αἱ αἰσθήσεις ἔχονται ὑπὸ τῶν μὴ ἀτελῶν μηδὲ πεπηρωμένων (φαίνεται γὰρ καὶ ἡ ἀσπάλαξ ὑπὸ τὸ δέρμα ἔχουσα ὀφθαλμούς). ὥστ' εἰ μὴ τι ἕτερον ἔστι σῶμα, καὶ πάθος ὃ μηθενός ἐστι τῶν ἐνταῦθα σωμάτων, οὐδεμία ἂν ἐκλείποι αἴσθησις.

5. ἀλλὰ μὴν οὐδὲ τῶν κοινῶν οἷόν τ' εἶναι αἰσθητήριόν τι ἴδιον, ὧν ἐκάστη αἰσθήσει αἰσθανόμεθα κατὰ συμβεβηκός, οἷον κινήσεως, στάσεως, σχήματος, μεγέθους, ἀριθμοῦ. ταῦτα γὰρ πάντα [κινήσει] αἰσθανόμεθα, οἷον μέγεθος κινήσει (ὥστε καὶ σχῆμα· μέγεθος γάρ τι τὸ σχῆμα), τὸ δ' ἡρεμοῦν τῷ μὴ κινεῖσθαι, ὃ δ' ἀριθμὸς τῇ ἀποφάσει τοῦ συνεχοῦς, καὶ τοῖς ἰδίους (ἐκάστη γὰρ ἐν αἰσθάνεται αἴσθησις). ὥστε δῆλον ὅτι ἀδύνατον ὁτουοῦν ἰδίαν αἴσθησιν εἶναι τούτων, οἷον κινήσεως· οὕτω γὰρ ἔσται ὥσπερ νῦν τῇ ὄψει τὸ γλυκὺ αἰσθανόμεθα.

6. τοῦτο δ' ὅτι ἀμφοῖν ἔχοντες τυγχάνομεν αἴσθησιν, ἥ ὅταν συμπέσωσιν ἅμα γνωρίζομεν. εἰ δὲ μή, οὐδαμῶς ἂν ἄλλ' ἢ κατὰ συμβεβηκὸς ἦσθάνομεθα (οἷον τὸν Κλέωνος υἱὸν οὐχ ὅτι Κλέωνος υἱός, ἀλλ' ὅτι λευκός, τούτῳ δὲ συμβέβηκεν υἱῷ Κλέωνος εἶναι).

7. τῶν δὲ κοινῶν ἤδη ἔχομεν αἴσθησιν κοινήν, οὐ κατὰ συμβεβηκός· οὐκ ἄρ' ἐστὶν ἴδια· οὐδαμῶς γὰρ ἂν ἦσθάνομεθα ἄλλ' ἢ οὕτως ὥσπερ εἴρηται [τὸν Κλέωνος υἱὸν ἡμᾶς ὀρᾶν]. τὰ δ' ἀλλήλων ἴδια κατὰ συμβεβηκὸς αἰσθάνονται αἱ αἰσθήσεις, οὐχ ἡ αὐταί, ἀλλ' ἡ μία, ὅταν [425b] ἅμα γένηται ἡ αἴσθησις ἐπὶ τοῦ αὐτοῦ, οἷον χολῆς ὅτι πικρὰ καὶ ξανθή (οὐ γὰρ δὴ ἑτέρας γε τὸ εἶπεῖν ὅτι ἄμφω ἔν). διὸ καὶ ἀπατᾶται, καὶ ἐὰν ἡ ξανθὴν, χολὴν οἶεται εἶναι.

8. ζητήσῃς δ' ἂν τις τίνος ἔνεκα πλείους ἔχομεν αἰσθήσεις, ἀλλ' οὐ μίαν μόνην. ἢ ὅπως ἦττον λανθάνῃ τὰ ἀκολουθοῦντα καὶ κοινά, οἷον κίνησις καὶ μέγεθος καὶ ἀριθμός; εἰ γὰρ ἦν ἡ ὄψις μόνη, καὶ αὕτη λευκοῦ, ἐλάνθανεν ἂν μᾶλλον κἂν ἐδόκει ταῦτόν εἶναι πάντα διὰ τὸ ἀκολουθεῖν ἀλλήλοις ἅμα χρῶμα καὶ μέγεθος. νῦν δ' ἐπεὶ καὶ ἐν ἑτέρῳ αἰσθητῷ τὰ κοινὰ ὑπάρχει, δῆλον ποιεῖ ὅτι ἄλλο τι ἕκαστον αὐτῶν.

## Κεφάλαιο 2

[425b12] 1. Ἐπεὶ δ' αἰσθανόμεθα ὅτι ὁρῶμεν καὶ ἀκούομεν, ἀνάγκη ἢ τῇ ὄψει αἰσθάνεσθαι ὅτι ὁρᾷ, ἢ ἑτέρᾳ. ἀλλ' ἢ αὐτὴ ἔσται τῆς ὄψεως καὶ τοῦ ὑποκειμένου χρώματος, ὥστε ἢ δύο τοῦ αὐτοῦ ἔσονται ἢ αὐτὴ αὐτῆς.

2. ἔτι δ' εἰ καὶ ἑτέρα εἴη ἢ τῆς ὄψεως αἴσθησις, ἢ εἰς ἄπειρον εἴσιν ἢ αὐτὴ τις ἔσται αὐτῆς· ὥστ' ἐπὶ τῆς πρώτης τοῦτο ποιητέον. ἔχει δ' ἀπορίαν· εἰ γὰρ τὸ τῇ ὄψει αἰσθάνεσθαι ἔστιν ὁρᾶν, ὁρᾶται δὲ χρῶμα ἢ τὸ ἔχον, εἰ ὄψεταί τις τὸ ὁρῶν, καὶ χρῶμα ἔξει τὸ ὁρῶν πρῶτον.

3. φανερόν τοίνυν ὅτι οὐχ ἓν τὸ τῇ ὄψει αἰσθάνεσθαι· καὶ γὰρ ὅταν μὴ ὁρῶμεν, τῇ ὄψει κρίνομεν καὶ τὸ σκότος καὶ τὸ φῶς, ἀλλ' οὐχ ὡσαύτως. ἔτι δὲ καὶ τὸ ὁρῶν ἔστιν ὡς κεχρωμάτισται· τὸ γὰρ αἰσθητήριον δεκτικὸν τοῦ αἰσθητοῦ ἄνευ τῆς ὕλης ἕκαστον· διὸ καὶ ἀπελθόντων τῶν αἰσθητῶν ἔννευσιν αἰσθήσεις καὶ φαντασίαι ἐν τοῖς αἰσθητηρίοις.

4. ἡ δὲ τοῦ αἰσθητοῦ ἐνέργεια καὶ τῆς αἰσθήσεως ἡ αὐτὴ μὲν ἔστι καὶ μία, τὸ δ' εἶναι οὐ τὸ αὐτὸ αὐταῖς· λέγω δ' οἷον ὁ ψόφος ὁ κατ' ἐνέργειαν καὶ ἡ ἀκοὴ ἡ κατ' ἐνέργειαν· ἔστι γὰρ ἀκοὴν ἔχοντα μὴ ἀκούειν, καὶ τὸ ἔχον ψόφον οὐκ ἀεὶ ψοφεῖ, ὅταν δ' ἐνεργῇ τὸ δυνάμενον ἀκούειν καὶ ψοφῇ τὸ δυνάμενον ψοφεῖν, τότε ἡ κατ' ἐνέργειαν ἀκοὴ ἅμα γίνεται καὶ ὁ κατ' [426a] ἐνέργειαν ψόφος, ὧν εἴπειεν ἄν τις τὸ μὲν εἶναι ἄκουσιν τὸ δὲ ψόφησιν.

5. εἰ δὴ ἔστιν ἡ κίνησις (καὶ ἡ ποίησις καὶ τὸ πάθος) ἐν τῷ κινουμένῳ, ἀνάγκη καὶ τὸν ψόφον καὶ τὴν ἀκοὴν τὴν κατ' ἐνέργειαν ἐν τῷ κατὰ δύναμιν εἶναι· ἡ γὰρ τοῦ ποιητικοῦ καὶ κινητικοῦ ἐνέργεια ἐν τῷ πάσχοντι ἐγγίνεται· διὸ οὐκ ἀνάγκη τὸ κινεῖν κινεῖσθαι. ἡ μὲν οὖν τοῦ ψοφητικοῦ ἐνέργειά ἔστι ψόφος ἢ ψόφησις, ἡ δὲ τοῦ ἀκουστικοῦ ἀκοὴ ἢ ἄκουσις· διττὸν γὰρ ἡ ἀκοή, καὶ διττὸν ὁ ψόφος.

6. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων αἰσθήσεων καὶ αἰσθητῶν. ὥσπερ γὰρ καὶ ἡ ποίησις καὶ ἡ πάθησις ἐν τῷ πάσχοντι ἄλλ' οὐκ ἐν τῷ ποιοῦντι, οὕτω καὶ ἡ τοῦ αἰσθητοῦ ἐνέργεια καὶ ἡ τοῦ αἰσθητικοῦ ἐν τῷ αἰσθητικῷ. ἀλλ' ἐπ' ἐνίων μὲν ὠνόμασται, οἷον ἡ ψόφησις καὶ ἡ ἄκουσις, ἐπ' ἐνίων δ' ἄνωνυμον θάτερον· ὅρασις γὰρ λέγεται ἡ τῆς ὄψεως ἐνέργεια, ἡ δὲ τοῦ χρώματος ἄνωνυμος, καὶ γεῦσις ἡ τοῦ γευστικοῦ, ἡ δὲ τοῦ χυμοῦ ἄνωνυμος.

7. ἐπεὶ δὲ μία μὲν ἔστιν ἐνέργεια ἡ τοῦ αἰσθητοῦ καὶ τοῦ αἰσθητικοῦ, τὸ δ'

εἶναι ἕτερον, ἀνάγκη ἅμα φθείρεσθαι καὶ σώζεσθαι τὴν οὕτω λεγομένην ἀκοὴν καὶ ψόφον, καὶ χυμὸν δὴ καὶ γεῦσιν, καὶ τὰ ἄλλα ὁμοίως· τὰ δὲ κατὰ δύναμιν λεγόμενα οὐκ ἀνάγκη·

8. ἀλλ' οἱ πρότερον φυσιολόγοι τοῦτο οὐ καλῶς ἔλεγον, οὐθὲν οἰόμενοι οὔτε λευκὸν οὔτε μέλαν εἶναι ἄνευ ὀψεως, οὐδὲ χυμὸν ἄνευ γεύσεως. τῇ μὲν γὰρ ἔλεγον ὀρθῶς, τῇ δ' οὐκ ὀρθῶς· διχῶς γὰρ λεγομένης τῆς αἰσθήσεως καὶ τοῦ αἰσθητοῦ, τῶν μὲν κατὰ δύναμιν τῶν δὲ κατ' ἐνέργειαν, ἐπὶ τούτων μὲν συμβαίνει τὸ λεχθέν, ἐπὶ δὲ τῶν ἑτέρων οὐ συμβαίνει. ἀλλ' ἐκεῖνοι ἀπλῶς ἔλεγον περὶ τῶν λεγομένων οὐχ ἀπλῶς.

9. εἰ δ' ἡ φωνὴ συμφωνία τίς ἐστίν, ἡ δὲ φωνὴ καὶ ἡ ἀκοὴ ἔστιν ὡς ἓν ἐστι [καὶ ἔστιν ὡς οὐχ ἓν τὸ αὐτό], λόγος δ' ἡ συμφωνία, ἀνάγκη καὶ τὴν ἀκοὴν λόγον τινὰ εἶναι. καὶ διὰ τοῦτο καὶ φθείρει ἕκαστον ὑπερβάλλον, καὶ τὸ ὀξύ καὶ τὸ βαρὺ, τὴν ἀκοήν· ὁμοίως δὲ καὶ ἐν χυμοῖς τὴν [426b] γεῦσιν, καὶ ἐν χρώμασι τὴν ὄψιν τὸ σφόδρα λαμπρὸν ἢ ζοφερόν, καὶ ἐν ὀσφρήσει ἡ ἰσχυρὰ ὀσμή, καὶ γλυκεῖα καὶ πικρά, ὡς λόγου τινὸς ὄντος τῆς αἰσθήσεως. διὸ καὶ ἡδέα μὲν, ὅταν εἰλικρινῇ καὶ ἁμικτα ὄντα ἄγεται εἰς τὸν λόγον, οἷον τὸ ὀξύ ἢ γλυκὺ ἢ ἄλμυρόν, ἡδέα γὰρ τότε· ὅλως δὲ μᾶλλον τὸ μικτόν, συμφωνία, ἢ τὸ ὀξύ ἢ βαρὺ, ἀφ᾽ ἧς δὲ τὸ θερμαντὸν ἢ ψυκτόν· ἡ δ' αἰσθησις ὁ λόγος· ὑπερβάλλοντα δὲ λύει ἢ φθείρει.

10. ἐκάστη μὲν οὖν αἰσθησις τοῦ ὑποκειμένου αἰσθητοῦ ἐστίν, ὑπάρχουσα ἐν τῷ αἰσθητηρίῳ ἢ αἰσθητήριον, καὶ κρίνει τὰς τοῦ ὑποκειμένου αἰσθητοῦ διαφοράς, οἷον λευκὸν μὲν καὶ μέλαν ὄψις, γλυκὺ δὲ καὶ πικρὸν γεῦσις· ὁμοίως δ' ἔχει τοῦτο καὶ ἐπὶ τῶν ἄλλων. ἐπεὶ δὲ καὶ τὸ λευκὸν καὶ τὸ γλυκὺ καὶ ἕκαστον τῶν αἰσθητῶν πρὸς ἕκαστον κρίνομεν, τινὲ καὶ αἰσθανόμεθα ὅτι διαφέρει. ἀνάγκη δὴ αἰσθήσει· αἰσθητὰ γὰρ ἐστίν.

11. ἢ καὶ δῆλον ὅτι ἡ σὰρξ οὐκ ἔστι τὸ ἔσχατον αἰσθητήριον· ἀνάγκη γὰρ ἂν ἦν ἀπτόμενον αὐτὸ κρίνειν τὸ κρῖνον. οὔτε δὴ κεχωρισμένοις ἐνδέχεται κρίνειν ὅτι ἕτερον τὸ γλυκὺ τοῦ λευκοῦ, ἀλλὰ δεῖ ἐνί τινι ἅμφω δῆλα εἶναι· οὕτω μὲν γὰρ κἂν εἰ τοῦ μὲν ἐγὼ τοῦ δὲ σὺ αἰσθοιο, δῆλον ἂν εἴη ὅτι ἕτερα ἀλλήλων, δεῖ δὲ τὸ ἐν λέγειν ὅτι ἕτερον· ἕτερον γὰρ τὸ γλυκὺ τοῦ λευκοῦ· λέγει ἄρα τὸ αὐτό· ὥστε ὡς λέγει, οὕτω καὶ νοεῖ καὶ αἰσθάνεται·

12. ὅτι μὲν οὖν οὐχ οἷόν τε κεχωρισμένοις κρίνειν τὰ κεχωρισμένα, δῆλον· ὅτι δ' οὐδ' ἐν κεχωρισμένῳ χρόνῳ, ἐντεῦθεν. ὥσπερ γὰρ τὸ αὐτὸ λέγει ὅτι ἕτερον τὸ ἀγαθὸν καὶ τὸ κακόν, οὕτω καὶ ὅτε θάτερον λέγει ὅτι ἕτερον καὶ



θάτερον (οὐ κατὰ συμβεβηκὸς τὸ ὅτε, λέγω δ', οἷον νῦν λέγω ὅτι ἕτερον, οὐ μέντοι ὅτι νῦν ἕτερον, ἀλλ' οὕτω λέγει, καὶ νῦν καὶ ὅτι νῦν)· ἅμα ἅρα. ὥστε ἀχώριστον καὶ ἐν ἀχώριστῳ χρόνῳ.

13. ἀλλὰ μὴν ἀδύνατον ἅμα τὰς ἐναντίας κινήσεις κινεῖσθαι τὸ αὐτὸ ἢ ἀδιαίρετον, καὶ ἐν ἀδιαίρετῳ χρόνῳ. εἰ γὰρ γλυκύ, ὠδὶ κινεῖ τὴν αἴσθησιν [427a]

14. ἢ τὴν νόησιν, τὸ δὲ πικρὸν ἐναντίως, καὶ τὸ λευκὸν ἐτέρως. ἄρ' οὖν ἅμα μὲν ἀριθμῶ ἀδιαίρετον καὶ ἀχώριστον τὸ κρῖνον, τῷ εἶναι δὲ κεχωρισμένον; ἔστι δὲ [πως] ὥς τὸ διαιρετὸν τῶν διηρημένων αἰσθάνεται, ἔστι δ' ὥς ἢ ἀδιαίρετον· τῷ εἶναι μὲν γὰρ διαιρετόν, τόπῳ δὲ καὶ ἀριθμῶ ἀδιαίρετον. ἢ οὐχ οἷόν τε; δυνάμει μὲν γὰρ τὸ αὐτὸ καὶ ἀδιαίρετον τάναντία, τῷ δ' εἶναι οὐ, ἀλλὰ τῷ ἐνεργεῖσθαι διαιρετόν, καὶ οὐχ οἷόν τε ἅμα λευκὸν καὶ μέλαν εἶναι, ὥστ' οὐδὲ τὰ εἶδη πάσχειν αὐτῶν, εἰ τοιοῦτον ἡ αἴσθησις καὶ ἡ νόησις.

15. ἀλλ' ὥσπερ ἦν καλοῦσί τινες στιγμὴν, ἢ μία καὶ δύο, ταύτῃ <καὶ ἀδιαίρετος> καὶ διαιρετή. ἢ μὲν οὖν ἀδιαίρετον, ἐν τὸ κρῖνόν ἐστι καὶ ἅμα, ἢ δὲ διαιρετὸν ὑπάρχει, δις τῷ αὐτῷ χρῆται σημείῳ ἅμα· ἢ μὲν οὖν δις χρῆται τῷ πέρατι, δύο κρίνει καὶ κεχωρισμένα, ἔστιν ὥς κεχωρισμένως· ἢ δὲ ἐνί, ἐν καὶ ἅμα. περὶ μὲν οὖν τῆς ἀρχῆς ἢ φαμέν τὸ ζῶον αἰσθητικὸν εἶναι, διωρίσθω τὸν τρόπον τοῦτον.

### Κεφάλαιο 3

[427a17] 1. Ἐπεὶ δὲ δύο διαφοραῖς ὀρίζονται μάλιστα τὴν ψυχὴν, κινήσει τε τῇ κατὰ τόπον καὶ τῷ νοεῖν καὶ φρονεῖν καὶ αἰσθάνεσθαι, δοκεῖ δὲ καὶ τὸ νοεῖν καὶ τὸ φρονεῖν ὥσπερ αἰσθάνεσθαι τι εἶναι (ἐν ἀμφοτέροις γὰρ τούτοις κρίνει τι ἢ ψυχὴ καὶ γνωρίζει τῶν ὄντων), καὶ οἱ γε ἀρχαῖοι τὸ φρονεῖν καὶ τὸ αἰσθάνεσθαι ταῦτόν εἶναι φασιν-ὥσπερ καὶ Ἐμπεδοκλῆς εἶρηκε “πρὸς παρεὸν γὰρ μῆτις ἀέξεται ἀνθρώποισιν” καὶ ἐν ἄλλοις “ὅθεν σφίσιν αἰεὶ καὶ τὸ φρονεῖν ἄλλοῖα παρίσταται”, τὸ δ' αὐτὸ τούτοις βούλεται καὶ τὸ Ὀμήρου “τοῖος γὰρ νόος ἐστίν”,

2. πάντες γὰρ οὗτοι τὸ νοεῖν σωματικὸν ὥσπερ τὸ αἰσθάνεσθαι ὑπολαμβάνουσιν, καὶ αἰσθάνεσθαι τε καὶ φρονεῖν τῷ ὁμοίῳ τὸ ὅμοιον, ὥσπερ καὶ ἐν τοῖς κατ' ἀρχὰς λόγοις διωρίσαμεν (καίτοι ἔδει ἅμα καὶ περὶ [427b] τοῦ ἡπατῆσθαι αὐτοὺς λέγειν, οἰκειότερον γὰρ τοῖς ζώοις, καὶ πλείῳ χρόνον ἐν τούτῳ διατελεῖ ἡ ψυχὴ· διὸ ἀνάγκη ἦτοι, ὥσπερ ἔνιοι λέγουσι,

πάντα τὰ φαινόμενα εἶναι ἀληθῆ, ἢ τὴν τοῦ ἀνομοίου θίξιν ἀπάτην εἶναι, τοῦτο γὰρ ἐναντίον τῷ τὸ ὅμοιον τῷ ὁμοίῳ γνωρίζειν· δοκεῖ δὲ καὶ ἡ ἀπάτη καὶ ἡ ἐπιστήμη τῶν ἐναντίων ἡ αὐτὴ εἶναι)

3. ὅτι μὲν οὖν οὐ ταῦτόν ἐστι τὸ αἰσθάνεσθαι καὶ τὸ φρονεῖν, φανερόν· τοῦ μὲν γὰρ πᾶσι μέτεστι, τοῦ δὲ ὀλίγοις τῶν ζώων. ἀλλ' οὐδὲ τὸ νοεῖν, ἐν ᾧ ἐστι τὸ ὀρθῶς καὶ τὸ μὴ ὀρθῶς, τὸ μὲν ὀρθῶς φρόνησις καὶ ἐπιστήμη καὶ δόξα ἀληθής, τὸ δὲ μὴ ὀρθῶς τάναντία τούτων-οὐδὲ τοῦτό ἐστι ταῦτό τῷ αἰσθάνεσθαι· ἡ μὲν γὰρ αἴσθησις τῶν ἰδίων ἀεὶ ἀληθής, καὶ πᾶσιν ὑπάρχει τοῖς ζώοις, διανοεῖσθαι δ' ἐνδέχεται καὶ ψευδῶς, καὶ οὐδενὶ ὑπάρχει ὧ μὴ καὶ λόγος·

4. φαντασία γὰρ ἕτερον καὶ αἰσθήσεως καὶ διανοίας, αὕτη τε οὐ γίγνεται ἄνευ αἰσθήσεως, καὶ ἄνευ ταύτης οὐκ ἔστιν ὑπόληψις. ὅτι δ' οὐκ ἔστιν ἡ αὐτὴ [νόησις] καὶ ὑπόληψις, φανερόν. τοῦτο μὲν γὰρ τὸ πάθος ἐφ' ἡμῖν ἐστιν, ὅταν βουλώμεθα (πρὸ ὁμμάτων γὰρ ἔστι τι ποιήσασθαι, ὥσπερ οἱ ἐν τοῖς μνημονικοῖς τιθέμενοι καὶ εἰδωλοποιοῦντες), δοξάζειν δ' οὐκ ἐφ' ἡμῖν· ἀνάγκη γὰρ ἢ ψεύδεσθαι ἢ ἀληθεύειν. ἔτι δὲ ὅταν μὲν δοξάσωμεν δεινόν τι ἢ φοβερόν, εὐθὺς συμπάσχομεν, ὁμοίως δὲ κἂν θαρραλέον· κατὰ δὲ τὴν φαντασίαν ὡσαύτως ἔχομεν ὥσπερ ἂν εἰ θεώμενοι ἐν γραφῇ τὰ δεινὰ ἢ θαρραλέα.

5. εἰσὶ δὲ καὶ αὐτῆς τῆς ὑπολήψεως διαφοραί, ἐπιστήμη καὶ δόξα καὶ φρόνησις καὶ τάναντία τούτων, περὶ ὧν τῆς διαφορᾶς ἕτερος ἔστω λόγος. περὶ δὲ τοῦ νοεῖν, ἐπεὶ ἕτερον τοῦ αἰσθάνεσθαι, τούτου δὲ τὸ μὲν φαντασία δοκεῖ εἶναι τὸ δὲ ὑπόληψις, περὶ φαντασίας διορίσαντας οὕτω περὶ θατέρου λεκτέον. [428a]

6. εἰ δὴ ἐστιν ἡ φαντασία καθ' ἣν λέγομεν φάντασμά τι ἡμῖν γίνεσθαι καὶ μὴ εἶ τι κατὰ μεταφορὰν λέγομεν, <ἄρα> μία τις ἔστι τούτων δύναμις ἢ ἕξις καθ' ἧς κρίνομεν καὶ ἀληθεύομεν ἢ ψευδόμεθα; τοιαῦται δ' εἰσὶν αἴσθησις, δόξα, ἐπιστήμη, νοῦς. ὅτι μὲν οὖν οὐκ ἔστιν αἴσθησις, δῆλον ἐκ τῶνδε. αἴσθησις μὲν γὰρ ἥτοι δύναμις ἢ ἐνέργεια, οἷον ὄψις καὶ ὄρασις, φαίνεται δέ τι καὶ μηδετέρου ὑπάρχοντος τούτων, οἷον τὰ ἐν τοῖς ὕπνοις. εἴτα αἴσθησις μὲν ἀεὶ πάρεστι, φαντασία δ' οὐ. εἰ δὲ τῇ ἐνεργείᾳ τὸ αὐτό, πᾶσιν ἂν ἐνδέχοιτο τοῖς θηρίοις φαντασίαν ὑπάρχειν· δοκεῖ δ' οὐ, οἷον μύρμηκι ἢ μελίττῃ, σκώληκι δ' οὐ. εἴτα αἱ μὲν ἀληθεῖς αἰεὶ, αἱ δὲ φαντασίαι γίνονται αἱ πλείους ψευδεῖς. ἔπειτα οὐδὲ λέγομεν, ὅταν ἐνεργῶμεν ἀκριβῶς περὶ τὸ αἰσθητόν, ὅτι φαίνεται τοῦτο ἡμῖν ἄνθρωπος, ἀλλὰ μᾶλλον ὅταν μὴ ἐναργῶς αἰσθανώμεθα

πότερον ἀληθῆς ἢ ψευδῆς. καὶ ὅπερ δὴ ἐλέγομεν πρότερον, φαίνεται καὶ μύουσιν ὀράματα.

8. ἀλλὰ μὴν οὐδὲ τῶν ἀεὶ ἀληθευουσῶν οὐδεμία ἔσται, οἷον ἐπιστήμη ἢ νοῦς· ἔστι γὰρ φαντασία καὶ ψευδῆς. λείπεται ἄρα ἰδεῖν εἰ δόξα· γίνεται γὰρ δόξα καὶ ἀληθῆς καὶ ψευδῆς, ἀλλὰ δόξη μὲν ἔπεται πίστις (οὐκ ἐνδέχεται γὰρ δοξάζοντα οἷς δοκεῖ μὴ πιστεύειν), τῶν δὲ θηρίων οὐθενὶ ὑπάρχει πίστις, φαντασία δὲ πολλοῖς. [ἔτι πάσῃ μὲν δόξη ἀκολουθεῖ πίστις, πίστει δὲ τὸ πεπεῖσθαι, πειθοῖ δὲ λόγος· τῶν δὲ θηρίων ἐνίοις φαντασία μὲν ὑπάρχει, λόγος δ' οὐ.] [428a24]

9. φανερόν τοίνυν ὅτι οὐδὲ δόξα μετ' αἰσθήσεως, οὐδὲ δι' αἰσθήσεως, οὐδὲ συμπλοκὴ δόξης καὶ αἰσθήσεως, φαντασία ἂν εἴη, διὰ τε ταῦτα καὶ διότι οὐκ ἄλλου τινὸς ἔσται ἢ δόξα, ἀλλ' ἐκείνου, εἴπερ ἔστιν, οὗ καὶ ἡ αἴσθησις· λέγω δ', ἐκ τῆς τοῦ λευκοῦ δόξης καὶ αἰσθήσεως ἡ συμπλοκὴ φαντασία ἔσται· οὐ γὰρ δὴ ἐκ τῆς δόξης μὲν τῆς τοῦ ἀγαθοῦ, αἰσθήσεως δὲ τῆς τοῦ [428b] λευκοῦ. τὸ οὖν φαίνεσθαι ἔσται τὸ δοξάζειν ὅπερ αἰσθάνεται, μὴ κατὰ συμβεβηκός.

10. φαίνεται δέ γε καὶ ψευδῇ, περὶ ὧν ἅμα ὑπόληψιν ἀληθῆ ἔχει, οἷον φαίνεται μὲν ὁ ἥλιος ποδιαῖος, πιστεύεται δ' εἶναι μείζων τῆς οἰκουμένης· συμβαίνει οὖν ἥτοι ἀποβεβληκέναι τὴν ἑαυτοῦ ἀληθῆ δόξαν, ἣν εἶχε, σωζομένου τοῦ πράγματος, μὴ ἐπιλαθόμενον μηδὲ μεταπεισθέντα, ἢ εἰ ἔτι ἔχει, ἀνάγκη τὴν αὐτὴν ἀληθῆ εἶναι καὶ ψευδῇ. ἀλλὰ ψευδῆς ἐγένετο ὅτε λάθοι μεταπεσὼν τὸ πρᾶγμα. οὐτ' ἄρα ἓν τι τούτων ἐστὶν οὐτ' ἐκ τούτων ἡ φαντασία.

11. ἀλλ' ἐπειδὴ ἔστι κινηθέντος τουδὶ κινεῖσθαι ἕτερον ὑπὸ τούτου, ἢ δὲ φαντασία κίνησίς τις δοκεῖ εἶναι καὶ οὐκ ἄνευ αἰσθήσεως γίνεσθαι ἀλλ' αἰσθανομένοις καὶ ὧν αἴσθησις ἔστιν, ἔστι δὲ γίνεσθαι κίνησιν ὑπὸ τῆς ἐνεργείας τῆς αἰσθήσεως, καὶ ταύτην ὁμοίαν ἀνάγκη εἶναι τῇ αἰσθήσει, εἴη ἂν αὕτη ἡ κίνησις οὔτε ἄνευ αἰσθήσεως ἐνδεχομένη οὔτε μὴ αἰσθανομένοις ὑπάρχειν, καὶ πολλὰ κατ' αὐτὴν καὶ ποιεῖν καὶ πάσχειν τὸ ἔχον, καὶ εἶναι καὶ ἀληθῇ καὶ ψευδῇ.

12. τοῦτο δὲ συμβαίνει διὰ τὰδε· ἡ αἴσθησις τῶν μὲν ἰδίων ἀληθῆς ἐστὶν ἢ ὅτι ὀλίγιστον ἔχουσα τὸ ψεῦδος. δεύτερον δὲ τοῦ συμβεβηκέναι ταῦτα <ἂν συμβέβηκε τοῖς αἰσθητοῖς>· καὶ ἐνταῦθα ἤδη ἐνδέχεται διαψεύδεσθαι· ὅτι μὲν γὰρ λευκόν, οὐ ψεύδεται, εἰ δὲ τοῦτο τὸ λευκὸν ἢ ἄλλο τι, ψεύδεται. τρίτον δὲ

τῶν κοινῶν καὶ ἐπομένων τοῖς συμβεβηκόσιν οἷς ὑπάρχει τὰ ἴδια (λέγω δ' οἷον κίνησις καὶ μέγεθος) [ἃ συμβέβηκε τοῖς αἰσθητοῖς]· περὶ ἃ μάλιστα ἤδη ἔστιν ἀπατηθῆναι κατὰ τὴν αἴσθησιν.

13. ἡ δὲ κίνησις ἡ ὑπὸ τῆς ἐνεργείας τῆς αἰσθήσεως γινομένη διοίσει, ἡ ἀπὸ τούτων τῶν τριῶν αἰσθήσεων, καὶ ἡ μὲν πρώτη παρούσης τῆς αἰσθήσεως ἀληθῆς, αἱ δ' ἕτεραι καὶ παρούσης καὶ ἀπούσης εἶεν ἂν ψευδεῖς, καὶ μάλιστα ὅταν πόρρω τὸ αἰσθητὸν ᾖ. εἰ οὖν μηθὲν ἄλλο ἔχει τὰ εἰρημένα ἢ [429a] φαντασία (τοῦτο δ' ἐστὶ τὸ λεχθέν), ἡ φαντασία ἂν εἴη κίνησις ὑπὸ τῆς αἰσθήσεως τῆς κατ' ἐνέργειαν γινομένης.

14. ἐπεὶ δ' ἡ ὄψις μάλιστα αἴσθησίς ἐστι, καὶ τὸ ὄνομα ἀπὸ τοῦ φάους εἴληφεν, ὅτι ἄνευ φωτὸς οὐκ ἔστιν ἰδεῖν.

15. καὶ διὰ τὸ ἐμμένειν καὶ ὁμοίας εἶναι ταῖς αἰσθήσεσι, πολλὰ κατ' αὐτὰς πράττει τὰ ζῶα, τὰ μὲν διὰ τὸ μὴ ἔχειν νοῦν, οἷον τὰ θηρία, τὰ δὲ διὰ τὸ ἐπικαλύπτεσθαι τὸν νοῦν ἐνίοτε πάθει ἢ νόσῳ ἢ ὕπνῳ, οἷον οἱ ἄνθρωποι. περὶ μὲν οὖν φαντασίας, τί ἐστὶ καὶ διὰ τί ἐστίν, εἰρήσθω ἐπὶ τοσοῦτον.

## Κεφάλαιο 4

[429a10] 1. Περὶ δὲ τοῦ μορίου τοῦ τῆς ψυχῆς ᾧ γινώσκει τε ἡ ψυχὴ καὶ φρονεῖ, εἴτε χωριστοῦ ὄντος εἴτε μὴ χωριστοῦ κατὰ μέγεθος ἀλλὰ κατὰ λόγον, σκεπτέον τίν' ἔχει διαφοράν, καὶ πῶς ποτὲ γίνεται τὸ νοεῖν.

2. εἰ δὴ ἐστὶ τὸ νοεῖν ὥσπερ τὸ αἰσθάνεσθαι, ἢ πάσχειν τι ἂν εἴη ὑπὸ τοῦ νοητοῦ ἢ τι τοιοῦτον ἕτερον.

3. ἀπαθὲς ἄρα δεῖ εἶναι, δεκτικὸν δὲ τοῦ εἶδους καὶ δυνάμει τοιοῦτον ἀλλὰ μὴ τοῦτο, καὶ ὁμοίως ἔχειν, ὥσπερ τὸ αἰσθητικὸν πρὸς τὰ αἰσθητά, οὕτω τὸν νοῦν πρὸς τὰ νοητά. ἀνάγκη ἄρα, ἐπεὶ πάντα νοεῖ, ἀμιγῆ εἶναι, ὥσπερ φησὶν Ἀναξαγόρας, ἵνα κρατῇ, τοῦτο δ' ἐστὶν ἵνα γνωρίζῃ (παρεμφαινόμενον γὰρ κωλύει τὸ ἀλλότριον καὶ ἀντιφράττει)· ὥστε μὴδ' αὐτοῦ εἶναι φύσιν μηδεμίαν ἄλλ' ἢ ταύτην, ὅτι δυνατός. ὁ ἄρα καλούμενος τῆς ψυχῆς νοῦς (λέγω δὲ νοῦν ᾧ διανοεῖται καὶ ὑπολαμβάνει ἡ ψυχὴ) οὐθέν ἐστίν ἐνεργεία τῶν ὄντων πρὶν νοεῖν.

4. διὸ οὐδὲ μεμῖχθαι εὐλογον αὐτὸν τῷ σώματι· ποίος τις γὰρ ἂν γίγνοιτο, ἢ ψυχρὸς ἢ θερμός, κἂν ὄργανόν τι εἴη, ὥσπερ τῷ αἰσθητικῷ· νῦν δ' οὐθέν

ἔστιν. καὶ εὖ δὴ οἱ λέγοντες τὴν ψυχὴν εἶναι τόπον εἰδῶν, πλὴν ὅτι οὔτε ὅλη ἄλλ' ἢ νοητικὴ, οὔτε ἐντελεχεῖα ἀλλὰ δυνάμει τὰ εἶδη.

5. ὅτι δ' οὐχ ὁμοία ἡ ἀπάθεια τοῦ αἰσθητικοῦ καὶ τοῦ νοητικοῦ, φανερόν ἐπὶ τῶν αἰσθητηρίων καὶ τῆς αἰσθήσεως. ἡ μὲν γὰρ αἴσθησις οὐ δύναται [429b] αἰσθάνεσθαι ἐκ τοῦ σφόδρα αἰσθητοῦ, οἷον ψόφου ἐκ τῶν μεγάλων ψόφων, οὐδ' ἐκ τῶν ἰσχυρῶν χρωμάτων καὶ ὁσμῶν οὔτε ὁρᾶν οὔτε ὁσμᾶσθαι· ἀλλ' ὁ νοῦς ὅταν τι νοήσῃ σφόδρα νοητόν, οὐχ ἥττον νοεῖ τὰ ὑποδεέστερα, ἀλλὰ καὶ μᾶλλον· τὸ μὲν γὰρ αἰσθητικὸν οὐκ ἄνευ σώματος, ὁ δὲ χωριστός.

6. ὅταν δ' οὕτως ἕκαστα γένηται ὥς ὁ ἐπιστήμων λέγεται ὁ κατ' ἐνέργειαν (τοῦτο δὲ συμβαίνει ὅταν δύνηται ἐνεργεῖν δι' αὐτοῦ), ἔστι μὲν καὶ τότε δυνάμει πῶς, οὐ μὴν ὁμοίως καὶ πρὶν μαθεῖν ἢ εὐρεῖν· καὶ αὐτὸς δι' αὐτοῦ τότε δύναται νοεῖν.

7. ἐπεὶ δ' ἄλλο ἐστὶ τὸ μέγεθος καὶ τὸ μεγέθει εἶναι, καὶ ὕδωρ καὶ ὕδατι εἶναι (οὕτω δὲ καὶ ἐφ' ἐτέρων πολλῶν, ἀλλ' οὐκ ἐπὶ πάντων· ἐπ' ἐνίων γὰρ ταῦτόν ἐστι), τὸ σαρκὶ εἶναι καὶ σάρκα ἢ ἄλλῳ ἢ ἄλλως ἔχοντι κρίνει· ἡ γὰρ σὰρξ οὐκ ἄνευ τῆς ὕλης, ἀλλ' ὥσπερ τὸ σιμόν, τόδε ἐν τῷδε. τῷ μὲν οὖν αἰσθητικῷ τὸ θερμὸν καὶ τὸ ψυχρὸν κρίνει, καὶ ὧν λόγος τις ἡ σὰρξ· ἄλλῳ δέ, ἥτοι χωριστῷ ἢ ὥς ἡ κεκλασμένη ἔχει πρὸς αὐτὴν ὅταν ἐκταθῇ, τὸ σαρκὶ εἶναι κρίνει.

8. πάλιν δ' ἐπὶ τῶν ἐν ἀφαιρέσει ὄντων τὸ εὐθὺ ὥς τὸ σιμόν· μετὰ συνεχοῦς γάρ· τὸ δὲ τί ἦν εἶναι, εἰ ἔστιν ἕτερον τὸ εὐθεῖ εἶναι καὶ τὸ εὐθύ, ἄλλο· ἔστω γὰρ дуάς. ἐτέρῳ ἄρα ἢ ἐτέρως ἔχοντι κρίνει. ὅλως ἄρα ὥς χωριστὰ τὰ πράγματα τῆς ὕλης, οὕτω καὶ τὰ περὶ τὸν νοῦν. [429b22]

9. ἀπορήσειε δ' ἂν τις, εἰ ὁ νοῦς ἀπλοῦν ἐστὶ καὶ ἀπαθὲς καὶ μηθενὶ μηθὲν ἔχει κοινόν, ὥσπερ φησὶν Ἀναξαγόρας, πῶς νοήσῃ, εἰ τὸ νοεῖν πάσχειν τί ἐστίν (ἡ γὰρ τι κοινὸν ἀμφοῖν ὑπάρχει, τὸ μὲν ποιεῖν δοκεῖ τὸ δὲ πάσχειν),

10. ἔτι δ' εἰ νοητὸς καὶ αὐτός; ἡ γὰρ τοῖς ἄλλοις νοῦς ὑπάρξει, εἰ μὴ κατ' ἄλλο αὐτὸς νοητός, ἐν δέ τι τὸ νοητὸν εἶδει, ἢ μεμιγμένον τι ἔξει, ὃ ποιεῖ νοητὸν αὐτὸν ὥσπερ τᾶλλα.

11. ἡ τὸ μὲν πάσχειν κατὰ κοινόν τι διήρηται πρότερον, ὅτι δυνάμει πῶς ἐστὶ τὰ νοητὰ ὁ νοῦς, ἀλλ' ἐντελεχεῖα οὐδέν, πρὶν ἂν νοῇ· δυνάμει δ' οὕτως [430a] ὥσπερ ἐν γραμματεῖῳ ὧ μηθὲν ἐνυπάρχει ἐντελεχεῖα γεγραμμένον·

ὅπερ συμβαίνει ἐπὶ τοῦ νοῦ.

12. καὶ αὐτὸς δὲ νοητός ἐστιν ὥσπερ τὰ νοητά. ἐπὶ μὲν γὰρ τῶν ἄνευ ὕλης τὸ αὐτό ἐστὶ τὸ νοοῦν καὶ τὸ νοούμενον· ἡ γὰρ ἐπιστήμη ἢ θεωρητικὴ καὶ τὸ οὕτως ἐπιστητὸν τὸ αὐτό ἐστὶν (τοῦ δὲ μὴ ἀεὶ νοεῖν τὸ αἴτιον ἐπισκεπτέον)· ἐν δὲ τοῖς ἔχουσιν ὕλην δυνάμει ἕκαστον ἐστὶ τῶν νοητῶν. ὥστ' ἐκείνοις μὲν οὐχ ὑπάρξει νοῦς (ἄνευ γὰρ ὕλης δύναμις ὁ νοῦς τῶν τοιούτων), ἐκείνῳ δὲ τὸ νοητὸν ὑπάρξει.

## Κεφάλαιο 5

[4310a10] 1. Ἐπεὶ δ' [ὥσπερ] ἐν ἀπάσῃ τῇ φύσει ἐστὶ [τι] τὸ μὲν ὕλη ἐκάστῳ γένει (τοῦτο δὲ ὃ πάντα δυνάμει ἐκείνα), ἕτερον δὲ τὸ αἴτιον καὶ ποιητικόν, τῷ ποιεῖν πάντα, οἷον ἡ τέχνη πρὸς τὴν ὕλην πέπονθεν, ἀνάγκη καὶ ἐν τῇ ψυχῇ ὑπάρχειν ταύτας τὰς διαφοράς· καὶ ἔστιν ὁ μὲν τοιοῦτος νοῦς τῷ πάντα γίνεσθαι, ὁ δὲ τῷ πάντα ποιεῖν, ὡς ἕξις τις, οἷον τὸ φῶς· τρόπον γάρ τινα καὶ τὸ φῶς ποιεῖ τὰ δυνάμει ὄντα χρώματα ἐνεργείᾳ χρώματα. καὶ οὗτος ὁ νοῦς χωριστὸς καὶ ἀπαθὴς καὶ ἀμιγής, τῇ οὐσίᾳ ὦν ἐνέργεια·

2. ἀεὶ γὰρ τιμιώτερον τὸ ποιοῦν τοῦ πάσχοντος καὶ ἡ ἀρχὴ τῆς ὕλης. [τὸ δ' αὐτό ἐστὶν ἢ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι· ἢ δὲ κατὰ δύναμιν χρόνῳ προτέρα ἐν τῷ ἐνί, ὅλως δὲ οὐδὲ χρόνῳ, ἀλλ' οὐχ ὅτε μὲν νοεῖ ὅτε δ' οὐ νοεῖ.] χωρισθεὶς δ' ἐστὶ μόνον τοῦθ' ὅπερ ἐστί, καὶ τοῦτο μόνον ἀθάνατον καὶ αἰδίων (οὐ μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθές, ὁ δὲ παθητικὸς νοῦς φθαρτός)· καὶ ἄνευ τούτου οὐθὲν νοεῖ.

## Κεφάλαιο 6

[430a27] 1. Ἡ μὲν οὖν τῶν ἀδιαιρέτων νόησις ἐν τούτοις περὶ ἃ οὐκ ἔστι τὸ ψεῦδος, ἐν οἷς δὲ καὶ τὸ ψεῦδος καὶ τὸ ἀληθές σύνθεσις τις ἥδη νοημάτων ὥσπερ ἐν ὄντων-καθάπερ Ἐμπεδοκλῆς ἔφη “ἡ πολλῶν μὲν κόρσαι ἀναύχενες ἐβλάστησαν”, ἔπειτα συντίθεσθαι τῇ φιλίᾳ, οὕτω καὶ ταῦτα κεχωρισμένα συντίθεται, οἷον τὸ ἀσύμμετρον καὶ ἡ διάμετρος -

2. ἂν δὲ [430b] γενομένων ἢ ἐσομένων, τὸν χρόνον προσεννοῶν [καὶ] συντίθησι. τὸ γὰρ ψεῦδος ἐν συνθέσει ἀεὶ· καὶ γὰρ ἂν τὸ λευκὸν μὴ λευκὸν <φῇ, τὸ λευκὸν καὶ> τὸ μὴ λευκὸν συνέθηκεν· ἐνδέχεται δὲ καὶ διαίρεσιν φάναι πάντα. ἀλλ' οὖν ἔστι γε οὐ μόνον τὸ ψεῦδος ἢ ἀληθές ὅτι λευκὸς Κλέων ἐστίν, ἀλλὰ καὶ ὅτι ἦν ἢ ἔσται. τὸ δὲ ἐν ποιοῦν ἕκαστον, τοῦτο ὁ

νοῦς. [430b6]

3. τὸ δ' ἀδιαίρετον ἐπεὶ διχῶς, ἢ δυνάμει ἢ ἐνεργείᾳ, οὐθὲν κωλύει νοεῖν τὸ <διαιρετὸν ἢ> ἀδιαίρετον, <οἶον> ὅταν νοῇ τὸ μῆκος (ἀδιαίρετον γὰρ ἐνεργείᾳ), καὶ ἐν χρόνῳ ἀδιαιρέτω· ὁμοίως γὰρ ὁ χρόνος διαιρετὸς καὶ ἀδιαίρετος τῷ μήκει. οὐκ οὖν ἔστιν εἰπεῖν ἐν τῷ ἡμίσει τί ἐνόει ἐκατέρῳ· οὐ γὰρ ἔστιν, ἂν μὴ διαιρεθῇ, ἀλλ' ἢ δυνάμει. χωρὶς δ' ἐκάτερον νοῶν τῶν ἡμίσεων διαιρεῖ καὶ τὸν χρόνον ἅμα, τότε δ' οἶονεὶ μήκη· εἰ δ' ὥς ἐξ ἀμφοῖν, καὶ ἐν τῷ χρόνῳ τῷ ἐπ' ἀμφοῖν.

4. [τὸ δὲ μὴ κατὰ τὸ ποσὸν ἀδιαίρετον ἀλλὰ τῷ εἶδει νοεῖ ἐν ἀδιαιρέτῳ χρόνῳ καὶ ἀδιαιρέτῳ τῆς ψυχῆς.] κατὰ συμβεβηκὸς δέ, καὶ οὐχ ἢ ἐκεῖνα, διαιρετὰ ὃ νοεῖ καὶ ἐν ᾧ χρόνῳ, ἀλλ' ἢ <ἐκεῖνα> ἀδιαίρετα· ἔνεστι γὰρ κἂν τούτοις τι ἀδιαίρετον, ἀλλ' ἴσως οὐ χωριστόν, ὃ ποιεῖ ἓνα τὸν χρόνον καὶ τὸ μῆκος. καὶ τοῦθ' ὁμοίως ἐν ἅπαντί ἐστι τῷ συνεχεῖ, καὶ χρόνῳ καὶ μήκει. [430b20] <τὸ δὲ μὴ κατὰ τὸ ποσὸν ἀδιαίρετον ἀλλὰ τῷ εἶδει νοεῖ ἐν ἀδιαιρέτῳ χρόνῳ καὶ ἀδιαιρέτῳ <τῷ> τῆς ψυχῆς.>

5. ἡ δὲ στιγμή καὶ πᾶσα διαίρεσις, καὶ τὸ οὕτως ἀδιαίρετον, δηλοῦται ὥσπερ ἡ στέρησις. καὶ ὅμοιος ὁ λόγος ἐπὶ τῶν ἄλλων, οἶον πῶς τὸ κακὸν γνωρίζει ἢ τὸ μέλαν· τῷ ἐναντίῳ γὰρ πως γνωρίζει.

6. δεῖ δὲ δυνάμει εἶναι τὸ γνωρίζον καὶ ἐνεῖναι ἐν αὐτῷ. εἰ δέ τι μὴδὲν ἔστιν ἐναντίον [τῶν αἰτίων], αὐτὸ ἑαυτὸ γινώσκει καὶ ἐνεργείᾳ ἐστι καὶ χωριστόν.

7. ἔστι δ' ἡ μὲν φάσις τι κατὰ τινος, ὥσπερ καὶ ἡ ἀπόφασις, καὶ ἀληθὴς ἢ ψευδὴς πᾶσα· ὁ δὲ νοῦς οὐ πᾶς, ἀλλ' ὁ τοῦ τί ἐστι κατὰ τὸ τί ἦν εἶναι ἀληθὴς, καὶ οὐ τί κατὰ τινος· ἀλλ' ὥσπερ τὸ ὁρᾶν τοῦ ἰδίου ἀληθές, εἰ δ' ἄνθρωπος τὸ λευκὸν ἢ μὴ, οὐκ ἀληθές αἰεὶ, οὕτως ἔχει ὅσα ἄνευ ὕλης.

## Κεφάλαιο 7

[431a] 1. Τὸ δ' αὐτό ἐστιν ἡ κατ' ἐνεργείαν ἐπιστήμη τῷ πράγματι. ἡ δὲ κατὰ δύναμιν χρόνῳ προτέρα ἐν τῷ ἐνί, ὅλως δὲ οὐδὲ χρόνῳ· ἔστι γὰρ ἐξ ἐντελεχείᾳ ὄντος πάντα τὰ γιγνόμενα. -φαίνεται δὲ τὸ μὲν αἰσθητὸν ἐκ δυνάμει ὄντος τοῦ αἰσθητικοῦ ἐνεργείᾳ ποιοῦν· οὐ γὰρ πάσχει οὐδ' ἀλλοιοῦται. διὸ ἄλλο εἶδος τοῦτο κινήσεως· ἡ γὰρ κίνησις τοῦ ἀτελοῦς ἐνεργείᾳ, ἡ δ' ἀπλῶς ἐνεργείᾳ ἑτέρα, ἡ τοῦ τετελεσμένου.

2. τὸ μὲν οὖν αἰσθάνεσθαι ὅμοιον τῷ φάναι μόνον καὶ νοεῖν· ὅταν δὲ ἡδὺ ἢ λυπηρόν, οἷον καταφᾶσα ἢ ἀποφᾶσα διώκει ἢ φεύγει· καὶ ἔστι τὸ ἡδεσθαι καὶ λυπεῖσθαι τὸ ἐνεργεῖν τῇ αἰσθητικῇ μεσότητι πρὸς τὸ ἀγαθὸν ἢ κακόν, ἢ τοιαῦτα. καὶ ἡ φυγὴ δὲ καὶ ἡ ὄρεξις ταῦτό, ἡ κατ' ἐνέργειαν, καὶ οὐχ ἕτερον τὸ ὀρεκτικὸν καὶ τὸ φευκτικόν, οὐτ' ἀλλήλων οὔτε τοῦ αἰσθητικοῦ· ἀλλὰ τὸ εἶναι ἄλλο.

3. τῇ δὲ διανοητικῇ ψυχῇ τὰ φαντάσματα οἷον αἰσθήματα ὑπάρχει, ὅταν δὲ ἀγαθὸν ἢ κακὸν φήσῃ ἢ ἀποφήσῃ, φεύγει ἢ διώκει· διὸ οὐδέποτε νοεῖ ἄνευ φαντάσματος ἢ ψυχῇ. -ὥσπερ δὲ ὁ ἀὴρ τὴν κόρην τοιανδὶ ἐποίησεν, αὕτη δ' ἕτερον, καὶ ἡ ἀκοὴ ὡσαύτως, τὸ δὲ ἔσχατον ἓν, καὶ μία <ἡ> μεσότης, τὸ δ' εἶναι αὐτῇ πλείω ... [431a20]

4. -τίνι δ' ἐπικρίνει τί διαφέρει γλυκὺ καὶ θερμόν, εἴρηται μὲν καὶ πρότερον, λεκτέον δὲ καὶ ὧδε. ἔστι γὰρ ἓν τι, οὕτω δὲ ὡς ὁ ὅρος, καὶ ταῦτα, ἓν τῷ ἀνάλογον καὶ τῷ ἀριθμῷ ὄντα, ἔχει <ἐκάτερον> πρὸς ἐκάτερον ὡς ἐκεῖνα πρὸς ἄλληλα· τί γὰρ διαφέρει τὸ ἀπορεῖν πῶς τὰ μὴ ὁμογενῇ κρίνει ἢ τὰ ἐναντία, οἷον λευκὸν καὶ μέλαν; ἔστω δὴ ὡς τὸ Α τὸ λευκὸν πρὸς τὸ Β τὸ μέλαν, τὸ Γ πρὸς τὸ Δ [ὡς ἐκεῖνα πρὸς ἄλληλα]· ὥστε καὶ ἐναλλάξ. εἰ δὴ τὰ ΓΑ ἐνὶ εἴῃ ὑπάρχοντα, οὕτως ἔξει, ὥσπερ καὶ τὰ ΔΒ, τὸ αὐτὸ μὲν καὶ ἓν, τὸ δ' εἶναι οὐ τὸ αὐτό-κάκεῖνα ὁμοίως. ὁ δ' αὐτὸς [431b] λόγος καὶ εἰ τὸ μὲν Α τὸ γλυκὺ εἴῃ, τὸ δὲ Β τὸ λευκόν.

5. τὰ μὲν οὖν εἶδη τὸ νοητικὸν ἓν τοῖς φαντάσμασι νοεῖ, καὶ ὡς ἓν ἐκείνοις ὠρισταὶ αὐτῷ τὸ διωκτὸν καὶ φευκτόν, καὶ ἐκτὸς τῆς αἰσθήσεως, ὅταν ἐπὶ τῶν φαντασμάτων ἢ, κινεῖται· οἷον, αἰσθανόμενος τὸν φρυκτὸν ὅτι πῦρ, τῇ κοινῇ ὁρῶν κινούμενον γνωρίζει ὅτι πολέμιος·

6. ὅτε δὲ τοῖς ἓν τῇ ψυχῇ φαντάσμασιν ἢ νοήμασιν, ὥσπερ ὁρῶν, λογίζεται καὶ βουλευέται τὰ μέλλοντα πρὸς τὰ παρόντα· καὶ ὅταν εἴπῃ ὡς ἐκεῖ τὸ ἡδὺ ἢ λυπηρόν, ἐνταῦθα φεύγει ἢ διώκει-καὶ ὅλως ἐν πράξει. καὶ τὸ ἄνευ δὲ πράξεως, τὸ ἀληθὲς καὶ τὸ ψεῦδος, ἓν τῷ αὐτῷ γένει ἔστί τῷ ἀγαθῷ καὶ τῷ κακῷ· ἀλλὰ τῷ γε ἀπλῶς διαφέρει καὶ τινί.

7. -τὰ δὲ ἓν ἀφαιρέσει λεγόμενα <νοεῖ> ὥσπερ, εἴ <τις> τὸ σιμὸν ἢ μὲν σιμὸν οὐ, κεχωρισμένως δὲ ἢ κοῖλον [εἴ τις] ἐνόει [ἐνεργεῖα], ἄνευ τῆς σαρκὸς ἂν ἐνόει ἓν ἢ τὸ κοῖλον-οὕτω τὰ μαθηματικά, οὐ κεχωρισμένα <ὄντα>, ὡς κεχωρισμένα νοεῖ, ὅταν νοῇ <ἡ> ἐκεῖνα.



8. ὅλως δὲ ὁ νοῦς ἐστίν, ὁ κατ' ἐνέργειαν, τὰ πράγματα. ἄρα δ' ἐνδέχεται τῶν κεχωρισμένων τι νοεῖν ὄντα αὐτὸν μὴ κεχωρισμένον μεγέθους, ἢ οὐ, σκεπτέον ὕστερον.

## Κεφάλαιο 8

[431b20] 1. Νῦν δέ, περὶ ψυχῆς τὰ λεχθέντα συγκεφαλαιώσαντες, εἰπόμεν πάλιν ὅτι ἡ ψυχὴ τὰ ὄντα πῶς ἐστὶ πάντα· ἡ γὰρ αἰσθητὰ τὰ ὄντα ἢ νοητά, ἔστι δ' ἡ ἐπιστήμη μὲν τὰ ἐπιστητά πως, ἡ δ' αἴσθησις τὰ αἰσθητά·

2. πῶς δὲ τοῦτο, δεῖ ζητεῖν. τέμνεται οὖν ἡ ἐπιστήμη καὶ ἡ αἴσθησις εἰς τὰ πράγματα, ἡ μὲν δυνάμει εἰς τὰ δυνάμει, ἡ δ' ἐντελεχείᾳ εἰς τὰ ἐντελεχείᾳ· τῆς δὲ ψυχῆς τὸ αἰσθητικὸν καὶ τὸ ἐπιστημονικὸν δυνάμει ταῦτά ἐστι, τὸ μὲν <τὸ> ἐπιστητὸν τὸ δὲ <τὸ> αἰσθητόν. ἀνάγκη δ' ἡ αὐτὰ ἢ τὰ εἶδη εἶναι. αὐτὰ μὲν δὴ οὐ· οὐ γὰρ ὁ λίθος ἐν τῇ ψυχῇ, ἀλλὰ τὸ [432a] εἶδος· ὥστε ἡ ψυχὴ ὥσπερ ἡ χεὶρ ἐστίν· καὶ γὰρ ἡ χεὶρ ὄργανόν ἐστίν ὀργάνων, καὶ ὁ νοῦς εἶδος εἰδῶν καὶ ἡ αἴσθησις εἶδος αἰσθητῶν.

3. ἐπεὶ δὲ οὐδὲ πρᾶγμα οὐθὲν ἔστι παρὰ τὰ μεγέθη, ὡς δοκεῖ, τὰ αἰσθητὰ κεχωρισμένον, ἐν τοῖς εἶδεσι τοῖς αἰσθητοῖς τὰ νοητά ἐστὶ, τὰ τε ἐν ἀφαιρέσει λεγόμενα καὶ ὅσα τῶν αἰσθητῶν ἔξεις καὶ πάθη. καὶ διὰ τοῦτο οὔτε μὴ αἰσθανόμενος μηθὲν οὐθὲν ἂν μάθοι οὐδὲ ξυνείη, ὅταν τε θεωρῇ, ἀνάγκη ἅμα φάντασμά τι θεωρεῖν· τὰ γὰρ φαντάσματα ὥσπερ αἰσθήματά ἐστι, πλὴν ἄνευ ὕλης. ἔστι δ' ἡ φαντασία ἕτερον φάσεως καὶ ἀποφάσεως· συμπλοκὴ γὰρ νοημάτων ἐστὶ τὸ ἀληθὲς ἢ ψεῦδος. τὰ δὲ πρῶτα νοήματα τί διοίσει τοῦ μὴ φαντάσματα εἶναι; ἢ οὐδὲ ταῦτα φαντάσματα, ἀλλ' οὐκ ἄνευ φαντασμάτων.

## Κεφάλαιο 9

[432a15] 1. Ἐπεὶ δὲ ἡ ψυχὴ κατὰ δύο ὠρίσται δυνάμεις ἡ τῶν ζώων, τῷ τε κριτικῷ, ὃ διανοίας ἔργον ἐστὶ καὶ αἰσθήσεως, καὶ ἔτι τῷ κινεῖν τὴν κατὰ τόπον κίνησιν, περὶ μὲν αἰσθήσεως καὶ νοῦ διωρίσθω τοσαῦτα, περὶ δὲ τοῦ κινουῦντος, τί ποτέ ἐστι τῆς ψυχῆς, σκεπτέον, πότερον ἔν τι μόνιον αὐτῆς χωριστὸν ὃν ἢ μεγέθει ἢ λόγῳ, ἢ πᾶσα ἡ ψυχὴ, καὶ εἰ μόνιον τι, πότερον ἰδίον τι παρὰ τὰ εἰωθότα λέγεσθαι καὶ τὰ εἰρημένα, ἢ τούτων ἔν τι.

2. ἔχει δὲ ἀπορίαν εὐθύς πῶς τε δεῖ μόρια λέγειν τῆς ψυχῆς καὶ πόσα. τρόπον γάρ τινα ἄπειρα φαίνεται, καὶ οὐ μόνον ἅ τινες λέγουσι διορίζοντες, λογιστικὸν καὶ θυμικὸν καὶ ἐπιθυμητικόν, οἱ δὲ τὸ λόγον ἔχον καὶ τὸ ἄλογον· κατὰ γὰρ

τὰς διαφορὰς δι' ἃς ταῦτα χωρίζουσι, καὶ ἄλλα φαίνεται μόρια μείζω διάστασιν ἔχοντα τούτων, περὶ ὧν καὶ νῦν εἴρηται, τό τε θρεπτικόν, ὃ καὶ τοῖς φυτοῖς ὑπάρχει καὶ πᾶσι τοῖς ζώοις, καὶ τὸ αἰσθητικόν, ὃ οὔτε ὡς ἄλογον οὔτε ὡς λόγον ἔχον θεῖη ἂν τις ῥαδίως·

3. ἔτι δὲ τὸ φανταστικόν, [432b] ὃ τῷ μὲν εἶναι πάντων ἕτερον, τίνι δὲ τούτων ταῦτ' ἢ ἕτερον ἔχει πολλὴν ἀπορίαν, εἴ τις θήσῃ κεχωρισμένα μόρια τῆς ψυχῆς· πρὸς δὲ τούτοις τὸ ὀρεκτικόν, ὃ καὶ λόγῳ καὶ δυνάμει ἕτερον ἂν δόξειεν εἶναι πάντων. καὶ ἄτοπον δὴ τὸ τοῦτο διασπᾶν· ἔν τε τῷ λογιστικῷ γὰρ ἡ βούλησις γίνεται, καὶ ἐν τῷ ἀλόγῳ ἡ ἐπιθυμία καὶ ὁ θυμός· εἰ δὲ τρία ἢ ψυχὴ, ἐν ἑκάστῳ ἔσται ὀρεξις.

4. καὶ δὴ καὶ περὶ οὗ νῦν ὁ λόγος ἐνέστηκε, τί τὸ κινεῖν κατὰ τόπον τὸ ζῶον ἐστίν; τὴν μὲν γὰρ κατ' αὔξησιν καὶ φθίσιν κίνησιν, ἅπασιν ὑπάρχουσιν, τὸ πᾶσιν ὑπάρχον δόξειεν ἂν κινεῖν, τὸ γεννητικὸν καὶ θρεπτικόν· περὶ δὲ ἀναπνοῆς καὶ ἐκπνοῆς, καὶ ὕπνου καὶ ἐγρηγόρσεως, ὕστερον ἐπισκεπτέον· ἔχει γὰρ καὶ ταῦτα πολλὴν ἀπορίαν.

5. ἀλλὰ περὶ τῆς κατὰ τόπον κινήσεως, τί τὸ κινεῖν τὸ ζῶον τὴν πορευτικὴν κίνησιν, σκεπτέον. ὅτι μὲν οὖν οὐχ ἡ θρεπτικὴ δύναμις, δῆλον· ἀεὶ τε γὰρ ἕνεκά του ἡ κίνησις αὕτη, καὶ μετὰ φαντασίας καὶ ὀρέξεώς ἐστίν· οὐθὲν γὰρ μὴ ὀρεγόμενον ἢ φεῦγον κινεῖται ἄλλ' ἢ βία· ἔτι καὶ τὰ φυτὰ κινητικὰ ἦν, καὶ εἶχε τι μόριον ὀργανικὸν πρὸς τὴν κίνησιν ταύτην.

6. ὁμοίως δὲ οὐδὲ τὸ αἰσθητικόν· πολλὰ γὰρ ἔστι τῶν ζώων ἃ αἰσθησιν μὲν ἔχει, μόνιμα δ' ἐστὶ καὶ ἀκίνητα διὰ τέλους. εἰ οὖν ἡ φύσις μήτε ποιεῖ μάτην μηθὲν μήτε ἀπολείπει τι τῶν ἀναγκαίων, πλὴν ἐν τοῖς πηρώμασι καὶ ἐν τοῖς ἀτελέσιν, τὰ δὲ τοιαῦτα τῶν ζώων τέλεια καὶ οὐ πηρώματά ἐστιν (σημεῖον δ' ὅτι ἐστὶ γεννητικὰ καὶ ἀκμὴν ἔχει καὶ φθίσιν) -ὥστ' εἶχεν ἂν καὶ τὰ ὀργανικὰ μέρη τῆς πορείας.

7. ἀλλὰ μὴν οὐδὲ τὸ λογιστικόν καὶ ὁ καλούμενος νοῦς ἐστίν ὁ κινῶν· ὁ μὲν γὰρ θεωρητικὸς οὐθὲν θεωρεῖ πρακτόν, οὐδὲ λέγει περὶ φευκτοῦ καὶ διωκτοῦ οὐθέν, ἀεὶ δὲ ἡ κίνησις ἢ φεύγοντός τι ἢ διώκοντός τί ἐστίν. ἀλλ' οὐδ' ὅταν θεωρῇ τι τοιοῦτον, ἤδη κελεύει φεύγειν ἢ διώκειν, οἷον πολλάκις διανοεῖται φοβερόν τι ἢ ἡδύ, οὐ κελεύει δὲ φοβεῖσθαι, ἢ δὲ καρδία [433a] κινεῖται, ἂν δ' ἡδύ, ἕτερόν τι μόριον.

8. ἔτι καὶ ἐπιτάττοντος τοῦ νοῦ καὶ λεγούσης τῆς διανοίας φεύγειν τι ἢ διώκειν

οὐ κινεῖται, ἀλλὰ κατὰ τὴν ἐπιθυμίαν πράττει, οἷον ὁ ἀκρατής. καὶ ὅλως δὲ ὁρῶμεν ὅτι ὁ ἔχων τὴν ἱατρικὴν οὐκ ἰᾶται, ὡς ἐτέρου τινὸς κυρίου ὄντος τοῦ ποιεῖν κατὰ τὴν ἐπιστήμην, ἀλλ' οὐ τῆς ἐπιστήμης. ἀλλὰ μὴν οὐδ' ἡ ὄρεξις ταύτης κυρία τῆς κινήσεως· οἱ γὰρ ἐγκρατεῖς ὁρεγόμενοι καὶ ἐπιθυμοῦντες οὐ πράττουσιν ὧν ἔχουσι τὴν ὄρεξιν, ἀλλ' ἀκολουθοῦσι τῷ νῷ.

## Κεφάλαιο 10

[433a9] 1. Φαίνεται δέ γε δύο ταῦτα κινεῖν, ἡ ὄρεξις ἢ νοῦς, εἴ τις τὴν φαντασίαν τιθεῖ ὡς νόησιν τινα· πολλοὶ γὰρ παρὰ τὴν ἐπιστήμην ἀκολουθοῦσι ταῖς φαντασίαις, καὶ ἐν τοῖς ἄλλοις ζώοις οὐ νόησις οὐδὲ λογισμὸς ἔστιν, ἀλλὰ φαντασία. ἄμφω ἄρα ταῦτα κινητικὰ κατὰ τόπον, νοῦς καὶ ὄρεξις,

2. νοῦς δὲ ὁ ἔνεκά του λογιζόμενος καὶ ὁ πρακτικός· διαφέρει δὲ τοῦ θεωρητικοῦ τῷ τέλει. καὶ ἡ ὄρεξις <δ'> ἔνεκά του πᾶσα· οὐ γὰρ ἡ ὄρεξις, αὕτη ἀρχὴ τοῦ πρακτικοῦ νοῦ, τὸ δ' ἔσχατον ἀρχὴ τῆς πράξεως. ὥστε εὐλόγως δύο ταῦτα φαίνεται τὰ κινεῖν, ὄρεξις καὶ διάνοια πρακτική· τὸ ὀρεκτὸν γὰρ κι-νεῖ, καὶ διὰ τοῦτο ἡ διάνοια κινεῖ, ὅτι ἀρχὴ αὐτῆς ἐστὶ τὸ ὀρεκτόν.

3. καὶ ἡ φαντασία δὲ ὅταν κινῇ, οὐ κινεῖ ἄνευ ὀρέξεως. ἐν δὴ τι τὸ κινεῖν, τὸ ὀρεκτικόν. εἰ γὰρ δύο, νοῦς καὶ ὄρεξις, ἐκίνουν, κατὰ κοινὸν ἂν τι ἐκίνουν εἶδος· νῦν δὲ ὁ μὲν νοῦς οὐ φαίνεται κινῶν ἄνευ ὀρέξεως (ἡ γὰρ βούλησις ὄρεξις, ὅταν δὲ κατὰ τὸν λογισμὸν κινῇται, καὶ κατὰ βούλησιν κινεῖται), ἡ δ' ὄρεξις κινεῖ καὶ παρὰ τὸν λογισμόν· ἡ γὰρ ἐπιθυμία ὄρεξις τίς ἐστίν.

4. νοῦς μὲν οὖν πᾶς ὀρθός ἐστιν· ὄρεξις δὲ καὶ φαντασία καὶ ὀρθὴ καὶ οὐκ ὀρθή. διὸ ἀεὶ κινεῖ μὲν τὸ ὀρεκτόν, ἀλλὰ τοῦτ' ἐστὶν ἢ τὸ ἀγαθόν ἢ τὸ φαινόμενον ἀγαθόν· οὐ πᾶν δέ, ἀλλὰ τὸ πρακτὸν ἀγαθόν. πρακτὸν δ' ἐστὶ τὸ ἐνδεχόμενον καὶ ἄλλως ἔχειν.

5. ὅτι μὲν οὖν ἡ τοιαύτη δύναμις κινεῖ τῆς ψυχῆς, ἡ καλουμένη [433b] ὄρεξις, φανερόν. τοῖς δὲ διαιροῦσι τὰ μέρη τῆς ψυχῆς, ἐὰν κατὰ τὰς δυνάμεις διαιρῶσι καὶ χωρίζωσι, πάμπολλα γίνεται, θρεπτικόν, αἰσθητικόν, νοητικόν, βουλευτικόν, ἔτι ὀρεκτικόν· ταῦτα γὰρ πλέον διαφέρει ἀλλήλων ἢ ἐπιθυμητικὸν καὶ θυμικόν.

6. ἐπεὶ δ' ὀρέξεις γίνονται ἐναντίαι ἀλλήλαις, τοῦτο δὲ συμβαίνει ὅταν ὁ

λόγος καὶ αἱ ἐπιθυμίαι ἐναντία ὧσι, γίνεται δ' ἐν τοῖς χρόνου αἰσθησιν ἔχουσιν (ὁ μὲν γὰρ νοῦς διὰ τὸ μέλλον ἀνθέλκειν κελεύει, ἡ δ' ἐπιθυμία διὰ τὸ ἤδη· φαίνεται γὰρ τὸ ἤδη ἡδὺ καὶ ἀπλῶς ἡδὺ καὶ ἀγαθὸν ἀπλῶς, διὰ τὸ μὴ ὁρᾶν τὸ μέλλον), εἶδει μὲν ἐν ᾧ εἴη τὸ κινεῖν, τὸ ὀρεκτικόν, ἢ ὀρεκτικόν-πρῶτον δὲ πάντων τὸ ὀρεκτόν· τοῦτο γὰρ κινεῖ οὐ κινούμενον, τῷ νοηθῆναι ἢ φαντασθῆναι-ἀριθμῶ δὲ πλείω τὰ κινεῖντα.

7. ἐπεὶ δ' ἔστι τρία, ἐν μὲν τὸ κινεῖν, δεύτερον δ' ὧ κινεῖ, ἔτι τρίτον τὸ κινούμενον, τὸ δὲ κινεῖν διττόν, τὸ μὲν ἀκίνητον, τὸ δὲ κινεῖν καὶ κινούμενον, ἔστι δὴ τὸ μὲν ἀκίνητον τὸ πρακτὸν ἀγαθόν, τὸ δὲ κινεῖν καὶ κινούμενον τὸ ὀρεκτικόν (κινεῖται γὰρ τὸ κινούμενον ἢ ὀρέγεται, καὶ ἡ ὄρεξις κινήσις τίς ἐστίν, ἢ ἐνεργεία), τὸ δὲ κινούμενον τὸ ζῶον· ὧ δὲ κινεῖ ὀργάνῳ ἢ ὄρεξις, ἥδη τοῦτο σωματικόν ἐστίν - διὸ ἐν τοῖς κοινοῖς σώματος καὶ ψυχῆς ἔργοις θεωρητέον περὶ αὐτοῦ.

8. νῦν δὲ ὡς ἐν κεφαλαίῳ εἰπεῖν, τὸ κινεῖν ὀργανικῶς ὅπου ἀρχὴ καὶ τελευτὴ τὸ αὐτό-οἶον ὁ γιγλυμός· ἐνταῦθα γὰρ τὸ κυρτὸν καὶ τὸ κοῖλον τὸ μὲν τελευτὴ τὸ δ' ἀρχή (διὸ τὸ μὲν ἡρεμεῖ τὸ δὲ κινεῖται), λόγῳ μὲν ἕτερα ὄντα, μεγέθει δ' ἀχώριστα. πάντα γὰρ ὧσει καὶ ἔλξει κινεῖται· διὸ δεῖ, ὥσπερ ἐν κύκλῳ, μένειν τι, καὶ ἐντεῦθεν ἄρχεσθαι τὴν κίνησιν.

9. ὅλως μὲν οὔν, ὥσπερ εἴρηται, ἢ ὀρεκτικὸν τὸ ζῶον, ταύτη αὐτοῦ κινητικόν· ὀρεκτικὸν δὲ οὐκ ἄνευ φαντασίας· φαντασία δὲ πᾶσα ἢ λογιστικὴ ἢ αἰσθητικὴ. ταύτης μὲν οὔν καὶ τὰ ἄλλα ζῶα μετέχει.

## Κεφάλαιο 11

[433b31] 1. Σκεπτέον δὲ καὶ περὶ τῶν ἀτελῶν τί τὸ κινεῖν ἐστίν, [434a] οἷς ἀφ'ἣ μόνον ὑπάρχει αἰσθησις, πότερον ἐνδέχεται φαντασίαν ὑπάρχειν τούτοις, ἢ οὔ, καὶ ἐπιθυμίαν. φαίνεται γὰρ λύπη καὶ ἡδονὴ ἐνοῦσα, εἰ δὲ ταῦτα, καὶ ἐπιθυμίαν ἀνάγκη. φαντασία δὲ πῶς ἂν ἐνεῖη; ἢ ὥσπερ καὶ κινεῖται ἀορίστως, καὶ ταῦτ' ἐνεστί μὲν, ἀορίστως δ' ἐνεστί.

2. ἡ μὲν οὔν αἰσθητικὴ φαντασία, ὥσπερ εἴρηται, καὶ ἐν τοῖς ἄλλοις ζώοις ὑπάρχει, ἡ δὲ βουλευτικὴ ἐν τοῖς λογιστικοῖς (πότερον γὰρ πράξει τόδε ἢ τόδε, λογισμοῦ ἤδη ἐστίν ἔργον· καὶ ἀνάγκη ἐνὶ μετρεῖν· τὸ μείζον γὰρ διώκει· ὥστε δύναται ἐν ἐκ πλειόνων φαντασμάτων ποιεῖν). καὶ αἴτιον τοῦτο τοῦ δόξαν μὴ δοκεῖν ἔχειν, ὅτι τὴν ἐκ συλλογισμοῦ οὐκ ἔχει, αὕτη δὲ κινεῖ.

3. διὸ τὸ βουλευτικὸν οὐκ ἔχει ἢ ὄρεξις· νικᾷ δ' ἐνίοτε καὶ κινεῖ ὅτε μὲν αὕτη ἐκείνην, ὅτε δ' ἐκείνη ταύτην, ὥσπερ σφαῖρα <σφαῖραν>, ἢ ὄρεξις τὴν ὄρεξιν, ὅταν ἀκρασία γένηται· φύσει δὲ αἰεὶ ἢ ἄνω ἀρχικωτέρα καὶ κινεῖ· ὥστε τρεῖς φορὰς ἤδη κινεῖσθαι.

4. τὸ δ' ἐπιστημονικὸν οὐ κινεῖται, ἀλλὰ μένει. ἐπεὶ δ' ἢ μὲν καθόλου ὑπόληψις καὶ λόγος, ἢ δὲ τοῦ καθ' ἕκαστον (ἢ μὲν γὰρ λέγει ὅτι δεῖ τὸν τοιοῦτον τὸ τοιόνδε πράττειν, ἢ δὲ ὅτι τόδε τοιόνδε, κἀγὼ δὲ τοιόσδε), ἢ δὴ αὕτη κινεῖ ἢ δόξα, οὐχ ἢ καθόλου, ἢ ἄμφω, ἀλλ' ἢ μὲν ἡρεμοῦσα μᾶλλον, ἢ δ' οὐ.

## Κεφάλαιο 12

[434a21] 1. Τὴν μὲν οὖν θρεπτικὴν ψυχὴν ἀνάγκη πᾶν ἔχειν ὅτι περ ἂν ζῇ καὶ ψυχὴν ἔχῃ, ἀπὸ γενέσεως καὶ μέχρι φθορᾶς· ἀνάγκη γὰρ τὸ γενόμενον αὐξήσιν ἔχειν καὶ ἀκμὴν καὶ φθίσιν, ταῦτα δ' ἄνευ τροφῆς ἀδύνατον· ἀνάγκη ἄρα ἐνεῖναι τὴν θρεπτικὴν δύναμιν ἐν πᾶσι τοῖς φυομένοις καὶ φθίνουσιν·

2. αἴσθησιν δ' οὐκ ἀναγκαῖον ἐν ἅπασι τοῖς ζῶσιν· οὔτε γὰρ ὅσων τὸ σῶμα ἀπλοῦν ἐνδέχεται αὐτὴν ἔχειν, [οὔτε ἄνευ ταύτης οἷόν τε οὐθὲν εἶναι ζῶον] οὔτε ὅσα μὴ δεκτικὰ τῶν εἰδῶν ἄνευ τῆς ὕλης.

3. τὸ δὲ ζῶον ἀναγκαῖον αἴσθησιν ἔχειν, [434a30] <οὐδὲ ἄνευ ταύτης οἷόν τε οὐθὲν εἶναι ζῶον,> εἰ μὴθὲν μάτην ποιεῖ ἢ φύσις. ἔνεκά του γὰρ πάντα ὑπάρχει τὰ φύσει, ἢ συμπτώματα ἔσται τῶν ἔνεκά του. εἰ οὖν πᾶν σῶμα πορευτικόν, μὴ ἔχον αἴσθησιν, φθείροιτο ἂν καὶ [434b] εἰς τέλος οὐκ ἂν ἔλθοι, ὃ ἐστὶ φύσεως ἔργον (πῶς γὰρ θρέψεται; τοῖς μὲν γὰρ μονίμοις ὑπάρχει τοῦτο ὅθεν πεφύκασιν,

4. οὐχ οἷόν τε δὲ σῶμα ἔχειν μὲν ψυχὴν καὶ νοῦν κριτικόν, αἴσθησιν δὲ μὴ ἔχειν, μὴ μόνιμον ὄν, γενητὸν δέ-ἀλλὰ μὴν οὐδὲ ἀγένητον· διὰ τί γὰρ οὐχ ἔξει; ἢ γὰρ τῇ ψυχῇ βέλτιον ἢ τῷ σώματι, νῦν δ' οὐδέτερον· ἢ μὲν γὰρ οὐ μᾶλλον νοήσει, τῷ δ' οὐθὲν ἔσται μᾶλλον δι' ἐκεῖνο) -οὐθὲν ἄρα ἔχει ψυχὴν σῶμα μὴ μόνιμον <ὄν> ἄνευ αἰσθήσεως.

5. ἀλλὰ μὴν εἴγε αἴσθησιν ἔχει, ἀνάγκη τὸ σῶμα εἶναι ἢ ἀπλοῦν ἢ μικτόν. οὐχ οἷόν τε δὲ ἀπλοῦν· ἀφ' ἧν γὰρ οὐχ ἔξει, ἔστι δὲ ἀνάγκη ταύτην ἔχειν. τοῦτο δὲ ἐκ τῶνδε δῆλον.

6. ἐπεὶ γὰρ τὸ ζῶον σῶμα ἔμψυχόν ἐστι, σῶμα δὲ ἅπαν ἀπτόν, [ἀπτόν δὲ τὸ

αἰσθητὸν ἀφ᾽ ἧς,] ἀνάγκη [καὶ] τὸ τοῦ ζώου σῶμα ἀπτικὸν εἶναι, εἰ μέλλει σώζεσθαι τὸ ζῶον. αἱ γὰρ ἄλλαι αἰσθήσεις δι' ἐτέρων αἰσθάνονται, οἷον ὄσφρησις ὄψις ἀκοή· ἀπτόμενον δέ, εἰ μὴ ἔξει αἰσθησιν, οὐ δυνήσεται τὰ μὲν φεύγειν τὰ δὲ λαβεῖν. εἰ δὲ τοῦτο, ἀδύνατον ἔσται σώζεσθαι τὸ ζῶον.

7. διὸ καὶ ἡ γεῦσις ἐστὶν ὥσπερ ἀφ᾽ ἧς τρῶφης γάρ ἐστὶν, ἡ δὲ τροφή τὸ σῶμα ἀπτόν. ψόφος δὲ καὶ χρῶμα καὶ ὁσμή οὐ τρέφει, οὐδὲ ποιεῖ οὗτ' αὖξησιν οὕτε φθίσιν· ὥστε καὶ τὴν γεῦσιν ἀνάγκη ἀφ᾽ ἧς εἶναι τινα, διὰ τὸ τοῦ ἀπτοῦ καὶ θρεπτικοῦ αἰσθησιν εἶναι· αὗται μὲν οὖν ἀναγκαῖαι τῷ ζῳῳ, καὶ φανερόν ὅτι οὐχ οἷόν τε ἄνευ ἀφ᾽ ἧς εἶναι ζῶον,

8. αἱ δὲ ἄλλαι τοῦ τε εὖ ἔνεκα καὶ γένει ζώων ἤδη οὐ τῷ τυχόντι· ἀλλὰ τισίν, οἷον τῷ πορευτικῷ, ἀνάγκη ὑπάρχειν· εἰ γὰρ μέλλει σώζεσθαι, οὐ μόνον δεῖ ἀπτόμενον αἰσθάνεσθαι ἀλλὰ καὶ ἄποθεν. τοῦτο δ' ἂν εἴη, εἰ διὰ τοῦ μεταξὺ αἰσθητικὸν εἴη τῷ ἐκείνῳ μὲν ὑπὸ τοῦ αἰσθητοῦ πάσχειν καὶ κινεῖσθαι, αὐτὸ δ' ὑπ' ἐκείνου.

9. ὥσπερ γὰρ τὸ κινεῖν κατὰ τόπον μέχρι τοῦ μεταβάλλειν ποιεῖ, καὶ τὸ ὥσαν ἕτερον ποιεῖ ὥστε ὠθεῖν, καὶ ἔστι διὰ μέσου ἡ κίνησις, καὶ τὸ μὲν πρῶτον κινεῖν ὠθεῖ οὐκ ὠθούμενον, τὸ δ' ἔσχατον μόνον ὠθεῖται οὐκ ὥσαν, τὸ δὲ μέσον ἄμφω, [435a] πολλὰ δὲ τὰ μέσα, οὕτω καὶ ἐπ' ἀλλοιώσεως, πλὴν ὅτι μένοντος ἐν τῷ αὐτῷ τόπῳ ἀλλοιοῖ, οἷον εἰ εἰς κηρὸν βάψειέ τις, μέχρι τούτου ἐκινήθη, ἕως ἔβαψεν· λίθος δὲ οὐδέν, ἀλλ' ὕδωρ μέχρι πόρρω· ὁ δ' ἀὴρ ἐπὶ πλεῖστον κινεῖται καὶ ποιεῖ καὶ πάσχει, ἐὰν μένη καὶ εἰς ἧ'. διὸ καὶ περὶ ἀνακλάσεως βέλτιον ἢ τὴν ὄψιν ἐξιοῦσαν ἀνακλᾶσθαι τὸν ἀέρα πάσχειν ὑπὸ τοῦ σχήματος καὶ χρώματος, μέχρι περ οὗ ἂν ἡ εἶς. ἐπὶ δὲ τοῦ λείου ἐστὶν εἰς· διὸ πάλιν οὗτος τὴν ὄψιν κινεῖ, ὥσπερ ἂν εἰ τὸ ἐν τῷ κηρῷ σημείον διεδίδοτο μέχρι τοῦ πέρατος.

## Κεφάλαιο 13

[435a11] 1. Ὅτι δ' οὐχ οἷόν τε ἀπλοῦν εἶναι τὸ τοῦ ζώου σῶμα, φανερόν, λέγω δ' οἷον πύρινον ἢ ἀέρινον. ἄνευ μὲν γὰρ ἀφ᾽ ἧς οὐδεμίαν ἐνδέχεται ἄλλην αἰσθησιν ἔχειν (τὸ γὰρ σῶμα ἀπτικὸν τὸ ἔμψυχον πᾶν, ὥσπερ εἴρηται)· τὰ δὲ ἄλλα ἔξω γῆς αἰσθητήρια μὲν ἂν γένοιτο, πάντα δὲ τῷ δι' ἐτέρου αἰσθάνεσθαι ποιεῖ τὴν αἰσθησιν, καὶ διὰ τῶν μετα-ξύ, ἡ δ' ἀφ᾽ ἧς τῷ αὐτῶν ἄπτεσθαί ἐστιν, διὸ καὶ τὸ ὄνομα τοῦτο ἔχει. καίτοι καὶ τὰ ἄλλα αἰσθητήρια ἀφ᾽ ἧς αἰσθάνεται, ἀλλὰ δι' ἐτέρου· αὕτη δὲ δοκεῖ μόνη δι' αὐτῆς. ὥστε τῶν μὲν τοιούτων στοιχείων οὐθὲν ἂν εἴη σῶμα τοῦ ζώου. οὐδὲ δὴ

γῆϊνον. πάντων γὰρ ἡ ἀφὴ τῶν ἀπτῶν ἐστὶν ὥσπερ μεσότης, καὶ δεκτικὸν τὸ αἰσθητήριον οὐ μόνον ὅσαι διαφοραὶ γῆς εἰσὶν, ἀλλὰ καὶ θερμοῦ καὶ ψυχροῦ καὶ τῶν ἄλλων ἀπτῶν ἀπάντων. καὶ διὰ τοῦτο τοῖς ὅστοις καὶ ταῖς θριξὶ καὶ τοῖς τοιούτοις μορίοις οὐκ αἰσθανόμεθα, ὅτι γῆς ἐστίν, [435b] καὶ τὰ φυτὰ διὰ τοῦτο οὐδεμίαν ἔχει αἴσθησιν, ὅτι γῆς ἐστίν· ἄνευ δὲ ἀφῆς οὐδεμίαν οἶόν τε ἄλλην ὑπάρχειν, τοῦτο δὲ τὸ αἰσθητήριον οὐκ ἔστιν οὔτε γῆς οὔτε ἄλλου τῶν στοιχείων οὐδενός.

2. φανερόν τοίνυν ὅτι ἀνάγκη μόνης ταύτης στερισκόμενα τῆς αἰσθήσεως τὰ ζῶα ἀποθνήσκουσιν· οὔτε γὰρ ταύτην ἔχειν οἶόν τε μὴ ζῶον ὄν, οὔτε ζῶον ὄν ἄλλην ἔχειν ἀνάγκη πλὴν ταύτην. καὶ διὰ τοῦτο τὰ μὲν ἄλλα αἰσθητὰ ταῖς ὑπερβολαῖς οὐ διαφθείρει τὸ ζῶον, οἷον χρῶμα καὶ ψόφος καὶ ὁσμή, ἀλλὰ μόνον τὰ αἰσθητήρια (ἂν μὴ κατὰ συμβεβηκός, οἷον ἂν ἅμα τῷ ψόφῳ ὥσις γένηται καὶ πληγὴ), καὶ ὑπὸ ὁραμάτων καὶ ὁσμῆς ἕτερα κινεῖται, ἃ τῇ ἀφῇ φθείρει (καὶ ὁ χυμὸς δὲ ἢ ἅμα συμβαίνει ἀπτικὸν εἶναι, ταύτη φθείρει),

3. ἡ δὲ τῶν ἀπτῶν ὑπερβολή, οἷον θερμῶν καὶ ψυχρῶν καὶ σκληρῶν, ἀναιρεῖ τὸ ζῶον· παντὸς μὲν γὰρ ὑπερβολὴ αἰσθητοῦ ἀναιρεῖ τὸ αἰσθητήριον, ὥστε καὶ τὸ ἀπτὸν τὴν ἀφήν, ταύτη δὲ ὥριστα τὸ ζῶον· ἄνευ γὰρ ἀφῆς δέδεικται ὅτι ἀδύνατον εἶναι ζῶον. διὸ ἡ τῶν ἀπτῶν ὑπερβολὴ οὐ μόνον τὸ αἰσθητήριον φθείρει, ἀλλὰ καὶ τὸ ζῶον, ὅτι ἀνάγκη μόνην ἔχειν ταύτην. τὰς δ' ἄλλας αἰσθήσεις ἔχει τὸ ζῶον, ὥσπερ εἴρηται, οὐ τοῦ εἶναι ἔνεκα ἀλλὰ τοῦ εἶναι, οἷον ὄψιν, ἐπεὶ ἐν ἀέρι καὶ ὕδατι, ὅπως ὁρᾷ, ὅλως δ' ἐπεὶ ἐν διαφανεῖ, γεῦσιν δὲ διὰ τὸ ἡδὺ καὶ λυπηρόν, ἵνα αἰσθάνηται τὸ ἐν τροφῇ καὶ ἐπιθυμῇ καὶ κινῆται, ἀκοὴν δὲ ὅπως σημαίνηται τι αὐτῷ [γλῶτταν δὲ ὅπως σημαίνη τι ἐτέρῳ].

## Περὶ Αἰσθησεως και Αἰσθητων (436a) Sense and Sensibilia



[436a] Ἐπεὶ δὲ περὶ ψυχῆς καθ' αὐτὴν διώριστα πρότερον καὶ περὶ τῶν δυνάμεων ἐκάστης κατὰ μέρος αὐτῆς, ἐχόμενόν ἐστι ποιήσασθαι τὴν ἐπίσκεψιν περὶ τῶν ζώων καὶ τῶν ζῶων ἐχόντων ἀπάντων, τίνες εἰσὶν ἴδιαι καὶ τίνες κοιναὶ πράξεις αὐτῶν. τὰ μὲν οὖν εἰρημένα περὶ ψυχῆς ὑποκείσθω, περὶ δὲ τῶν λοιπῶν λέγωμεν, καὶ πρῶτον περὶ τῶν πρώτων. φαίνεται δὲ τὰ μέγιστα, καὶ τὰ κοινὰ καὶ τὰ ἴδια τῶν ζώων, κοινὰ τῆς τε ψυχῆς ὄντα καὶ τοῦ σώματος, οἷον αἴσθησις καὶ μνήμη καὶ θυμὸς καὶ ἐπιθυμία καὶ ὅλως ὄρεξις, καὶ πρὸς τούτοις ἡδονὴ καὶ λύπη· καὶ γὰρ ταῦτα σχεδὸν ὑπάρχει πᾶσι

τοῖς ζώοις. πρὸς δὲ τούτοις τὰ μὲν πάντων ἐστὶ τῶν μετεχόντων ζωῆς κοινά, τὰ δὲ τῶν ζώων ἐνίοις. τυγχάνουσι δὲ τούτων τὰ μέγιστα τέτταρες οὕσαι συζυγίαι τὸν ἀριθμόν, οἷον ἐγρήγορσις καὶ ὕπνος, καὶ νεότης καὶ γῆρας, καὶ ἀναπνοὴ καὶ ἐκπνοή, καὶ ζωὴ καὶ θάνατος· περὶ ὧν θεωρητέον, τί τε ἕκαστον αὐτῶν, καὶ διὰ τίνας αἰτίας συμβαίνει. φυσικοῦ δὲ καὶ περὶ ὑγιείας καὶ νόσου τὰς πρώτας ἰδεῖν ἀρχάς· οὔτε γὰρ ὑγίειαν οὔτε νόσον οἷον τε γίνεσθαι τοῖς ἐστερημένοις ζωῆς. διὸ σχεδὸν τῶν περὶ φύσεως οἱ πλεῖστοι καὶ τῶν ἱατρῶν οἱ φιλοσοφωτέως τὴν τέχνην μετιόντες, οἱ μὲν τελευτῶσιν εἰς τὰ περὶ ἱατρικῆς, [436b] οἱ δ' ἐκ τῶν περὶ φύσεως ἄρχονται [περὶ τῆς ἱατρικῆς].

ὅτι δὲ πάντα τὰ λεχθέντα κοινὰ τῆς τε ψυχῆς ἐστὶ καὶ τοῦ σώματος, οὐκ ἄδηλον. πάντα γὰρ τὰ μὲν μετ' αἰσθήσεως συμβαίνει, τὰ δὲ δι' αἰσθήσεως, ἕνια δὲ τὰ μὲν πάθη ταύτης ὄντα τυγχάνει, τὰ δ' ἔξεις, τὰ δὲ φυλακαὶ καὶ σωτηρίαι, τὰ δὲ φθοραὶ καὶ στερήσεις· ἡ δ' αἴσθησις ὅτι διὰ σώματος γίνεταί τῇ ψυχῇ, δῆλον καὶ διὰ τοῦ λόγου καὶ τοῦ λόγου χωρίς. ἀλλὰ περὶ μὲν αἰσθήσεως καὶ τοῦ αἰσθάνεσθαι, τί ἐστὶ καὶ διὰ τί συμβαίνει τοῖς ζώοις τοῦτο τὸ πάθος, εἴρηται πρότερον ἐν τοῖς περὶ ψυχῆς. τοῖς δὲ ζώοις, ἡ μὲν ζῶον ἕκαστον, ἀνάγκη ὑπάρχειν αἴσθησιν· τούτῳ γὰρ τὸ ζῶον εἶναι καὶ μὴ ζῶον διορίζομεν. ἰδίᾳ δ' ἥδη καθ' ἕκαστον ἡ μὲν ἀφῆ καὶ γεῦσις ἀκολουθεῖ πᾶσιν ἐξ ἀνάγκης, ἡ μὲν ἀφῆ διὰ τὴν εἰρημένην αἰτίαν ἐν τοῖς περὶ ψυχῆς, ἡ δὲ γεῦσις διὰ τὴν τροφήν· τὸ γὰρ ἥδὺ διακρίνει καὶ τὸ λυπηρὸν αὐτῇ περὶ τὴν τροφήν, ὥστε τὸ μὲν φεύγειν τὸ δὲ διώκειν, καὶ ὅλως ὁ χυμός ἐστὶ τοῦ θρεπτικοῦ πάθος. αἱ δὲ διὰ τῶν ἔξωθεν αἰσθήσεις τοῖς πορευτικοῖς αὐτῶν, οἷον ὄσφρησις καὶ ἀκοὴ καὶ ὄψις, πᾶσι μὲν τοῖς ἔχουσι σωτηρίας ἔνεκεν ὑπάρχουσιν, ὅπως διώκωσί τε προαισθανόμενα τὴν τροφήν καὶ τὰ φαῦλα καὶ τὰ φθαρτικά [437a] φεύγωσι, τοῖς δὲ καὶ φρονήσεως τυγχάνουσι τοῦ εὖ ἕνεκα· πολλὰς γὰρ εἰσαγγέλλουσι διαφοράς, ἐξ ὧν ἡ τε τῶν νοητῶν ἐγγίνεται φρόνησις καὶ ἡ τῶν πρακτῶν.

αὐτῶν δὲ τούτων πρὸς μὲν τὰ ἀναγκαῖα κρείττων ἡ ὄψις καθ' αὐτήν, πρὸς δὲ νοῦν κατὰ συμβεβηκὸς ἡ ἀκοή. διαφοράς μὲν γὰρ πολλὰς καὶ παντοδαπὰς ἡ τῆς ὄψεως εἰσαγγέλλει δύναμις διὰ τὸ πάντα τὰ σώματα μετέχειν χρώματος, ὥστε καὶ τὰ κοινὰ διὰ ταύτης αἰσθάνεσθαι μάλιστα (λέγω δὲ κοινὰ μέγεθος, σχῆμα, κίνησιν, ἀριθμόν), ἡ δ' ἀκοὴ τὰς τοῦ ψόφου διαφοράς μόνον, ὀλίγοις δὲ καὶ τὰς τῆς φωνῆς· κατὰ συμβεβηκὸς δὲ πρὸς φρόνησιν ἡ ἀκοὴ πλεῖστον συμβάλλεται μέρος. ὁ γὰρ λόγος αἷτιός ἐστι τῆς μαθήσεως ἀκουστός ὢν, οὐ καθ' αὐτὸν ἀλλὰ κατὰ συμβεβηκός· ἐξ ὀνομάτων γὰρ σύγκειται, τῶν δ' ὀνομάτων ἕκαστον σύμβολόν ἐστιν. διόπερ φρονιμώτεροι τῶν ἐκ γενετῆς ἐστερημένων εἰσὶν ἑκατέρας τῆς αἰσθήσεως οἱ



τυφλοὶ τῶν ἐνεῶν καὶ κωφῶν.

Περὶ μὲν οὖν τῆς δυνάμεως ἣν ἔχει τῶν αἰσθήσεων ἑκάστη, πρότερον εἴρηται. τοῦ δὲ σώματος ἐν οἷς ἐγγίγνεσθαι πέφυκεν αἰσθητηρίοις, ἔνιοι μὲν ζητοῦσι κατὰ τὰ στοιχεῖα τῶν σωμάτων· οὐκ εὐποροῦντες δὲ πρὸς τέτταρα πέντ' οὔσας συνάγειν, γλίσχονται περὶ τῆς πέμπτης. ποιοῦσι δὲ πάντες τὴν ὄψιν πυρὸς διὰ τὸ πάθους τινὸς ἀγνοεῖν τὴν αἰτίαν· θλιβομένου γὰρ καὶ κινουμένου τοῦ ὀφθαλμοῦ φαίνεται πῦρ ἐκλάμπειν· τοῦτο δ' ἐν τῷ σκότει πέφυκε συμβαίνειν, ἢ τῶν βλεφάρων ἐπικεκαλυμμένων· γίγνεται γὰρ καὶ τότε σκότος.

ἔχει δ' ἀπορίαν τοῦτο καὶ ἑτέραν. εἰ γὰρ μὴ ἔστι λανθάνειν <μὴ> αἰσθανόμενον καὶ ὁρῶντα, ἀνάγκη ἄρ' αὐτὸν ἑαυτὸν ὁρᾶν τὸν ὀφθαλμόν. διὰ τί οὖν ἡρεμοῦντι τοῦτ' οὐ συμβαίνει; τὸ δ' αἴτιον τούτου, καὶ τῆς ἀπορίας καὶ τοῦ δοκεῖν πῦρ εἶναι τὴν ὄψιν, ἐντεῦθεν ληπτέον. τὰ γὰρ λεῖα πέφυκεν ἐν τῷ σκότει λάμπειν, οὐ μέντοι φῶς γε ποιεῖν, τοῦ δ' ὀφθαλμοῦ [437b] τὸ καλούμενον μέλαν καὶ μέσον λεῖον. φαίνεται δὲ τοῦτο κινουμένου τοῦ ὀμματος διὰ τὸ συμβαίνειν ὥσπερ δύο γίγνεσθαι τὸ ἕν. τοῦτο δ' ἢ ταχυτῆς ποιεῖ τῆς κινήσεως, ὥστε δοκεῖν ἕτερον εἶναι τὸ ὁρῶν καὶ τὸ ὁρώμενον. διὸ καὶ οὐ γίγνεται, ἐὰν μὴ ταχέως καὶ ἐν σκότει τοῦτο συμβῇ· τὸ γὰρ λεῖον ἐν τῷ σκότει πέφυκε λάμπειν (οἶον κεφαλαὶ ἰχθύων τινῶν καὶ ὁ τῆς σηπίας θολός), καὶ βραδέως μεταβάλλοντος τοῦ ὀμματος οὐ συμβαίνει ὥστε δοκεῖν ἅμα ἕν καὶ δύο εἶναι τό θ' ὁρῶν καὶ τὸ ὁρώμενον. ἐκείνως δ' αὐτὸς αὐτὸν ὁρᾷ ὁ ὀφθαλμός, ὥσπερ καὶ ἐν τῇ ἀνακλάσει· ἐπεὶ εἴ γε πῦρ ἦν, καθάπερ Ἐμπεδοκλῆς φησὶ καὶ ἐν τῷ Τιμαίῳ γέγραπται, καὶ συνέβαινε τὸ ὁρᾶν ἐξιόντος ὥσπερ ἐκ λαμπτήρος τοῦ φωτός, διὰ τί οὐ καὶ ἐν τῷ σκότει ἐώρα ἂν ἢ ὄψις; τὸ δ' ἀποσβέννυσθαι φάναι ἐν τῷ σκότει ἐξιοῦσαν, ὥσπερ ὁ Τίμαιος λέγει, κενόν ἐστὶ παντελῶς· τίς γὰρ ἀπόσβεσις φωτός ἐστίν; σβέννυται γὰρ ἢ ὑγρῷ ἢ ψυχρῷ τὸ θερμὸν καὶ ξηρόν (οἶον δοκεῖ τό τ' ἐν τοῖς ἀνθρακώδεσιν εἶναι πῦρ καὶ ἢ φλόξ), ὧν τῷ φωτὶ οὐδέτερον φαίνεται ὑπάρχον. εἰ δ' ἄρα ὑπάρχει μὲν ἀλλὰ διὰ τὸ ἡρέμα λανθάνει ἡμᾶς, ἔδει μεθ' ἡμέραν γε καὶ ἐν τῷ ὕδατι ἀποσβέννυσθαι τὸ φῶς καὶ ἐν τοῖς πάγοις μᾶλλον γίγνεσθαι σκότον· ἢ γοῦν φλόξ καὶ τὰ πεπυρωμένα σώματα πάσχει τοῦτο· νῦν δ' οὐδὲν συμβαίνει τοιοῦτον.

Ἐμπεδοκλῆς δ' ἔοικε νομίζοντι ὅτε μὲν ἐξιόντος τοῦ φωτός, ὥσπερ εἴρηται πρότερον, βλέπειν· λέγει γοῦν οὕτως·

ὥς δ' ὅτε τις πρόοδον νοέων ὠπλίσσατο λύχνον

χειμερίην διὰ νύκατα, πυρὸς σέλας αἶθομένοιο,  
ἄψας παντοίων ἀνέμων λαμπτήρας ἀμοργούς,  
οἳ τ' ἀνέμων μὲν πνεῦμα διασκιδνᾷσιν ἀέντων,  
πῦρ δ' ἔξω διαθρῶσκον, ὅσον ταναώτερον ἦεν,  
λάμπεσκεν κατὰ βηλὸν ἀτειρέσιν ἀκτίνεσσιν·  
ὥς δὲ τότε ἔν μηνιγξιν ἐεργμένον ὠγύγιον πῦρ

[438a] λεπτῇσιν τ' ὀθόνησι λοχεύσατο κύκλοπα κούρην·

ἄϊ> χοάνησι δίαντα τετρήατο θεσπεσίησιν·

αἱ δ' ὕδατος μὲν βένθος ἀπέστεγον ἀμφιναέντος,

πῦρ δ' ἔξω διέεσκον, ὅσον ταναώτερον ἦεν.

ὅτε μὲν οὖν οὕτως ὀρᾶν φησίν, ὅτε δὲ ταῖς ἀπορροαῖς ταῖς ἀπὸ τῶν ὀρωμένων.

Δημόκριτος δ' ὅτι μὲν ὕδωρ εἶναί φησι, λέγει καλῶς, ὅτι δ' οἶεται τὸ ὀρᾶν εἶναι τὴν ἔμφασιν, οὐ καλῶς· τοῦτο μὲν γὰρ συμβαίνει ὅτι τὸ ὄμμα λεῖον, καὶ ἔστιν οὐκ ἐν ἐκείνῳ ἄλλ' ἐν τῷ ὀρῶντι· ἀνάκλασις γὰρ τὸ πάθος, ἀλλὰ καθόλου περὶ τῶν ἐμφαινομένων καὶ ἀνακλάσεως οὐδέν πω δῆλον ἦν, ὡς ἔοικεν. ἄτοπον δὲ καὶ τὸ μὴ ἐπελθεῖν αὐτῷ ἀπορῆσαι διὰ τί ὁ ὀφθαλμός ὀρᾷ μόνον, τῶν δ' ἄλλων οὐδέν ἐν οἷς ἐμφαίνεται τὰ εἶδωλα. τὸ μὲν οὖν τὴν ὄψιν εἶναι ὕδατος ἀληθὲς μὲν, οὐ μέντοι συμβαίνει τὸ ὀρᾶν ἢ ὕδωρ ἄλλ' ἢ διαφανές· ὃ καὶ ἐπὶ τοῦ ἀέρος κοινόν ἐστιν. ἀλλ' εὐφυλακτότερον καὶ εὐπιλητότερον τὸ ὕδωρ τοῦ ἀέρος· διόπερ ἡ κόρη καὶ τὸ ὄμμα ὕδατός ἐστιν. τοῦτο δὲ καὶ ἐπ' αὐτῶν τῶν ἔργων δῆλον· φαίνεται γὰρ ὕδωρ τὸ ἐκρέον διαφθειρομένων, καὶ ἔν γε τοῖς πάμπαν ἐμβρύοις τῇ ψυχρότητι ὑπερβάλλον καὶ τῇ λαμπρότητι, καὶ τὸ λευκὸν τοῦ ὄμματος ἐν τοῖς ἔχουσιν αἷμα πῖον καὶ λιπαρόν· ὅπερ διὰ τοῦτ' ἐστί, πρὸς τὸ διαμένειν τὸ ὑγρὸν ἄπηκτον, καὶ διὰ τοῦτο τοῦ σώματος ἀρριγότατον ὁ ὀφθαλμός ἐστιν· οὐδεὶς γὰρ πω τὸ ἐντὸς τῶν βλεφάρων ἐρρίγωσεν. τῶν δ' ἀναίμων σκληρόδερμοι οἱ ὀφθαλμοὶ εἰσι, καὶ τοῦτο ποιεῖ τὴν σκέπην. ἄλογον δὲ ὅλως τὸ ἐξιόντι τινὲ τὴν ὄψιν ὀρᾶν, καὶ ἀποτείνεσθαι μέχρι τῶν ἄστρον, ἢ μέχρι τινὸς ἐξιοῦσαν συμφύεσθαι,

καθάπερ λέγουσί τινες. τούτου μὲν γὰρ βέλτιον τὸ ἐν <τῇ> ἀρχῇ συμφύεσθαι τοῦ ὄμματος. ἀλλὰ καὶ τοῦτο εὐηθες· τό τε γὰρ συμφύεσθαι τί ἐστι φωτὶ πρὸς φῶς, ἢ πῶς οἶόν θ' ὑπάρχειν (οὐ γὰρ τῷ τυχόντι [438b] συμφύεται τὸ τυχόν), τό τ' ἐντὸς τῷ ἐκτὸς πῶς; ἢ γὰρ μῆνιγξ μεταξύ ἐστιν.

περὶ μὲν οὖν τοῦ ἄνευ φωτὸς μὴ ὁρᾶν εἴρηται ἐν ἄλλοις· ἀλλ' εἴτε φῶς εἴτ' ἀήρ ἐστι τὸ μεταξύ τοῦ ὁρωμένου καὶ τοῦ ὄμματος, ἢ διὰ τούτου κίνησις ἐστιν ἢ ποιοῦσα τὸ ὁρᾶν. καὶ εὐλόγως τὸ ἐντὸς ἐστιν ὕδατος· διαφανὲς γὰρ τὸ ὕδωρ, ὁρᾶται δὲ ὥσπερ καὶ ἔξω οὐκ ἄνευ φωτός, οὕτως καὶ ἐντὸς· διαφανὲς ἄρα δεῖ εἶναι· ἀνάγκη ἄρα ὕδωρ εἶναι, ἐπειδὴ οὐκ ἀήρ. οὐ γὰρ ἐπὶ ἐσχάτου τοῦ ὄμματος ἡ ψυχὴ ἢ τῆς ψυχῆς τὸ αἰσθητικὸν ἐστιν, ἀλλὰ δῆλον ὅτι ἐντὸς· διόπερ ἀνάγκη διαφανὲς εἶναι καὶ δεκτικὸν φωτὸς τὸ ἐντὸς τοῦ ὄμματος. καὶ τοῦτο καὶ ἐπὶ τῶν συμβαινόντων δῆλον· ἤδη γάρ τισι πληγεῖσιν ἐν πολέμῳ παρὰ τὸν κρόταφον οὕτως ὥστ' ἀποτμηθῆναι τοὺς πόρους τοῦ ὄμματος ἔδοξε γενέσθαι σκότος ὥσπερ λύχνου ἀποσβεσθέντος, διὰ τὸ οἶον λαμπτήρᾳ τινι ἀποτμηθῆναι τὸ διαφανές, τὴν καλουμένην κόρην. ὥστ' εἴπερ ἐπὶ τούτων συμβαίνει καθάπερ λέγομεν, φανερόν ὡς εἰ δεῖ τοῦτον τὸν τρόπον ἀποδιδόναι καὶ προσάπτειν ἕκαστον τῶν αἰσθητηρίων ἐνὶ τῶν στοιχείων, τοῦ μὲν ὄμματος τὸ ὁρατικὸν ὕδατος ὑποληπτόν, ἀέρος δὲ τὸ τῶν ψόφων αἰσθητικόν, πυρὸς δὲ τὴν ὀσφρησιν (ὃ γὰρ ἐνεργεῖα ἢ ὀσφρησις, τοῦτο δυνάμει τὸ ὀσφραντικόν· τὸ γὰρ αἰσθητὸν ἐνεργεῖν ποιεῖ τὴν αἴσθησιν, ὥσθ' ὑπάρχειν ἀναγκαῖον αὐτὴν δυνάμει πρότερον. ἢ δ' ὁσμὴ καπνώδης τίς ἐστιν ἀναθυμίασις, ἢ δ' ἀναθυμίασις ἢ καπνώδης ἐκ πυρός. διὸ καὶ τῷ περὶ τὸν ἐγκέφαλον τόπῳ τὸ τῆς ὀσφρήσεως αἰσθητήριόν ἐστιν ἴδιον· δυνάμει γὰρ θερμὴ ἢ τοῦ ψυχροῦ ὕλη ἐστίν. καὶ ἡ τοῦ ὄμματος γένεσις τὸν αὐτὸν ἔχει τρόπον· ἀπὸ τοῦ ἐγκεφάλου γὰρ συνέστηκεν· οὗτος γὰρ ὑγρότατος καὶ ψυχρότατος τῶν ἐν τῷ σώματι μορίων ἐστίν). τὸ δ' ἄπτικόν γῆς, τὸ δὲ γευστικόν [439a] εἶδός τι ἀφῆς ἐστίν. καὶ διὰ τοῦτο πρὸς τῇ καρδίᾳ τὸ αἰσθητήριον αὐτῶν, τῆς γεύσεως καὶ τῆς ἀφῆς· ἀντίκειται γὰρ τῷ ἐγκεφάλῳ αὕτη, καὶ ἔστι θερμότατον τῶν μορίων. καὶ περὶ μὲν τῶν αἰσθητικῶν τοῦ σώματος μορίων ἔστω τοῦτον τὸν τρόπον διωρισμένα.

Περὶ δὲ τῶν αἰσθητῶν τῶν καθ' ἕκαστον αἰσθητήριον, οἷον λέγω χρώματος καὶ ψόφου καὶ ὁσμῆς καὶ χυμοῦ καὶ ἀφῆς, καθόλου μὲν εἴρηται ἐν τοῖς περὶ ψυχῆς, τί τὸ ἔργον αὐτῶν καὶ τί τὸ ἐνεργεῖν καθ' ἕκαστον τῶν αἰσθητηρίων. τί δέ ποτε δεῖ λέγειν ὁτιοῦν αὐτῶν, οἷον τί χρῶμα ἢ τί ψόφον ἢ τί ὁσμὴν ἢ χυμόν, ὁμοίως δὲ καὶ περὶ ἀφῆς, ἐπισκεπτέον, καὶ πρῶτον περὶ χρώματος. ἔστι μὲν οὖν ἕκαστον διχῶς λεγόμενον, τὸ μὲν ἐνεργεῖα τὸ δὲ δυνάμει. τὸ μὲν οὖν ἐνεργεῖα χρῶμα καὶ ψόφος πῶς ἐστὶ τὸ αὐτὸ ἢ ἕτερον

ταῖς κατ' ἐνέργειαν αἰσθήσεσιν, οἷον ὁράσει καὶ ἀκούσει, εἴρηται ἐν τοῖς περὶ ψυχῆς· τί δὲ ἕκαστον αὐτῶν ὃν ποιήσει τὴν αἴσθησιν καὶ τὴν ἐνέργειαν, νῦν λέγωμεν. ὥσπερ οὖν εἴρηται περὶ φωτὸς ἐν ἐκείνοις, ὅτι ἐστὶ χρῶμα τοῦ διαφανοῦς κατὰ συμβεβηκός - ὅταν γὰρ ἢ τι πυρῶδες ἐν διαφανεῖ, ἢ μὲν παρουσία φῶς, ἢ δὲ στέρησίς ἐστι σκότος· ὃ δὲ λέγομεν διαφανὲς οὐκ ἔστιν ἴδιον ἀέρος ἢ ὕδατος οὐδ' ἄλλου τῶν οὕτω λεγομένων σωμάτων, ἀλλὰ τίς ἐστι κοινὴ φύσις καὶ δύναμις, ἢ χωριστὴ μὲν οὐκ ἔστιν, ἐν τούτοις δ' ἔστι, καὶ τοῖς ἄλλοις σώμασιν ἐνυπάρχει, τοῖς μὲν μᾶλλον τοῖς δ' ἥττον· ὥσπερ οὖν καὶ τῶν σωμάτων ἀνάγκη τι εἶναι ἔσχατον, καὶ ταύτης - ἢ μὲν οὖν τοῦ φωτὸς φύσις ἐν ἀορίστῳ τῷ διαφανεῖ ἐστίν· τοῦ δ' ἐν τοῖς σώμασι διαφανοῦς τὸ ἔσχατον ὅτι μὲν εἴη ἂν τι, δῆλον, ὅτι δὲ τοῦτ' ἐστὶ τὸ χρῶμα, ἐκ τῶν συμβαινόντων φανερόν. τὸ γὰρ χρῶμα ἢ ἐν τῷ πέρατι ἐστὶν ἢ πέρας (διὸ καὶ οἱ Πυθαγόρειοι τὴν ἐπιφάνειαν χροάν ἐκάλουν)· ἔστι μὲν γὰρ ἐν τῷ τοῦ σώματος πέρατι, ἀλλ' οὐ τὸ τοῦ σώματος πέρας, ἀλλὰ τὴν αὐτὴν φύσιν δεῖ νομίζειν ἥπερ καὶ ἕξω [439b] χρωματίζεται, ταύτην καὶ ἐντός.

φαίνεται δὲ καὶ ἄηρ καὶ ὕδωρ χρωματιζόμενα· καὶ γὰρ ἡ αὐγὴ τοιοῦτόν ἐστιν. ἀλλ' ἐκεῖ μὲν διὰ τὸ ἐν ἀορίστῳ οὐ τὴν αὐτὴν ἐγγύθεν καὶ προσιοῦσι καὶ πόρρωθεν ἔχει χροάν οὕθ' ὁ ἄηρ οὕθ' ἡ θάλαττα· ἐν δὲ τοῖς σώμασιν, ἔαν μὴ τὸ περιέχον ποιῇ μεταβάλλειν, ὠρίσται καὶ ἡ φαντασία τῆς χροάς. δῆλον ἄρα ὅτι τὸ αὐτὸ κάκεῖ κἀνθάδε δεκτικὸν τῆς χροάς ἐστίν. τὸ ἄρα διαφανὲς καθ' ὅσον ὑπάρχει ἐν τοῖς σώμασιν (ὑπάρχει δὲ μᾶλλον καὶ ἥττον ἐν πᾶσι) χρώματος ποιεῖ μετέχειν. ἐπεὶ δ' ἐν πέρατι ἢ χροά, τούτου ἂν ἐν πέρατι εἴη. ὥστε χρῶμα ἂν εἴη τὸ τοῦ διαφανοῦς ἐν σώματι ὠρισμένῳ πέρας. καὶ αὐτῶν δὲ τῶν διαφανῶν, οἷον ὕδατος καὶ εἴ τι ἄλλο τοιοῦτον, καὶ ὅσοις φαίνεται χρῶμα ἴδιον ὑπάρχειν, κατὰ τὸ ἔσχατον ὁμοίως πᾶσιν ὑπάρχει. ἔστι μὲν οὖν ἐνεῖναι ἐν τῷ διαφανεῖ τοῦθ' ὅπερ καὶ ἐν τῷ ἀέρι ποιεῖ φῶς, ἔστι δὲ μὴ, ἀλλ' ἐστερῆσθαι. ὥσπερ οὖν ἐκεῖ τὸ μὲν φῶς τὸ δὲ σκότος, οὕτως ἐν τοῖς σώμασιν ἐγγίγνεται τὸ λευκὸν καὶ τὸ μέλαν. περὶ δὲ τῶν ἄλλων χρωμάτων ἤδη, διελομένοις ποσαχῶς ἐνδέχεται γίνεσθαι, λεκτέον. ἐνδέχεται μὲν γὰρ παρ' ἄλληλα τιθέμενα τὸ λευκὸν καὶ τὸ μέλαν, ὥσθ' ἐκάτερον μὲν εἶναι ἀόρατον διὰ σμικρότητα, τὸ δ' ἐξ ἀμφοῖν ὁρατόν, οὕτω γίνεσθαι. τοῦτο γὰρ οὕτε λευκὸν οἷόν τε φαίνεσθαι οὕτε μέλαν· ἐπεὶ δ' ἀνάγκη μὲν τι ἔχειν χρῶμα, τούτων δ' οὐδέτερον δυνατόν, ἀνάγκη μεικτόν τι εἶναι καὶ εἶδος τι χροάς ἕτερον. ἔστι μὲν οὖν οὕτως ὑπολαβεῖν πλείους εἶναι χροάς παρὰ τὸ λευκὸν καὶ τὸ μέλαν, πολλὰς δὲ τῷ λόγῳ (τρία γὰρ πρὸς δύο, καὶ τρία πρὸς τέτταρα, καὶ κατ' ἄλλους ἀριθμοὺς ἔστι παρ' ἄλληλα κεῖσθαι· τὰ δ' ὅλως κατὰ μὲν λόγον μηδένα, καθ' ὑπεροχὴν δέ τινα καὶ ἔλλειψιν ἀσύμμετρον), καὶ τὸν αὐτὸν δὴ τρόπον ἔχειν ταῦτα ταῖς συμφωνίαις· τὰ μὲν γὰρ ἐν ἀριθμοῖς

εὐλογίστοις χρώματα, καθάπερ ἐκεῖ τὰς συμφωνίας, τὰ ἥδιστα τῶν χρωμάτων εἶναι δοκοῦντα, οἷον [440a] τὸ ἀλουργὸν καὶ τὸ φοινικοῦν καὶ ὀλίγ' ἄττα τοιαῦτα (δι' ἣνπερ αἰτίαν καὶ αἱ συμφωνίαι ὀλίγαι), τὰ δὲ μὴ ἐν ἀριθμοῖς τᾶλλα χρώματα· ἢ καὶ πάσας τὰς χροάς ἐν ἀριθμοῖς εἶναι, τὰς μὲν τεταγμένας τὰς δὲ ἀτάκτους, καὶ αὐτὰς ταύτας, ὅταν μὴ καθαρὰ ὦσι, διὰ τὸ μὴ ἐν ἀριθμοῖς εἶναι τοιαύτας γίνεσθαι.

εἷς μὲν οὖν τρόπος τῆς γενέσεως τῶν χρωμάτων οὗτος, εἷς δὲ τὸ φαίνεσθαι δι' ἀλλήλων, οἷον ἐνίοτε οἱ γραφεῖς ποιοῦσιν, ἑτέραν χροάν ἐφ' ἑτέραν ἐναργεστέραν ἐπαλείφοντες, ὥσπερ ὅταν ἐν ὕδατι τι ἢ ἐν ἀέρι βούλονται ποιῆσαι φαινόμενον, καὶ οἷον ὁ ἥλιος καθ' αὐτὸν μὲν λευκὸς φαίνεται, διὰ δ' ἀχλύος καὶ καπνοῦ φοινικοῦς. πολλὰ δὲ καὶ οὕτως ἔσσονται χροαὶ τὸν αὐτὸν τρόπον τῷ πρότερον εἰρημένῳ· λόγος γὰρ ἂν εἴη τις τῶν ἐπιπολῆς πρὸς τὰ ἐν βάθει, τὰ δὲ καὶ ὅλως οὐκ ἐν λόγῳ. τὸ μὲν οὖν, ὥσπερ οἱ ἀρχαῖοι, λέγειν ἀπόρροϊαν εἶναι τὴν χροάν καὶ ὀρᾶσθαι διὰ τοιαύτην αἰτίαν ἄτοπον· πάντως γὰρ δι' ἀφῆς ἀναγκαῖον αὐτοῖς ποιεῖν τὴν αἴσθησιν, ὥστ' εὐθὺς κρεῖττον φάναι τῷ κινεῖσθαι τὸ μεταξὺ τῆς αἰσθήσεως ὑπὸ τοῦ αἰσθητοῦ γίνεσθαι τὴν αἴσθησιν, ἀφῆ καὶ μὴ ταῖς ἀπορροαῖς. ἐπὶ μὲν οὖν τῶν παρ' ἀλλήλα κειμένων ἀνάγκη ὥσπερ καὶ μέγεθος λαμβάνειν ἀόρατον, οὕτω καὶ χρόνον ἀναίσθητον, ἵνα λανθάνωσιν αἱ κινήσεις ἀφικνούμεναι καὶ ἐν δοκῇ εἶναι διὰ τὸ ἅμα φαίνεσθαι· ἐνταῦθα δὲ οὐδεμία ἀνάγκη, ἀλλὰ τὸ ἐπιπολῆς χρῶμα ἀκίνητον ὄν καὶ κινούμενον ὑπὸ τοῦ ὑποκειμένου οὐχ ὁμοίαν ποιήσει τὴν κίνησιν. διὸ καὶ ἕτερον φαίνεται καὶ οὔτε λευκὸν οὔτε μέλαν. ὥστ' εἰ μὴ ἐνδέχεται μηδὲν εἶναι μέγεθος ἀόρατον, ἀλλὰ πᾶν ἔκ τινος ἀποστήματος ὀρατόν, καίτοι αὕτη τις ἂν εἴη χρωμάτων μίξις. κἀκείνως δ' οὐδὲν κωλύει φαίνεσθαι τινα χροάν κοινὴν τοῖς πόρρωθεν· ὅτι γὰρ οὐκ ἔστιν οὐδὲν μέγεθος ἀόρατον, ἐν τοῖς ὕστερον ἐπισκεπτέον.

εἰ δ' ἔστι μίξις τῶν σωμάτων [440b] μὴ μόνον τὸν τρόπον τοῦτον ὄνπερ οἶονταί τινες, παρ' ἀλλήλα τῶν ἐλαχίστων τιθεμένων, ἀδήλων δ' ἡμῖν διὰ τὴν αἴσθησιν, ἀλλ' ὅλως πάντη πάντως, ὥσπερ ἐν τοῖς περὶ μίξεως εἴρηται καθόλου περὶ πάντων (ἐκείνως μὲν γὰρ μίγνυται ταῦτα μόνον ὅσα ἐνδέχεται διελεῖν εἰς τὰ ἐλάχιστα, καθάπερ ἀνθρώπους <ἢ> ἵππους ἢ τὰ σπέρματα· τῶν μὲν γὰρ ἀνθρώπων ἄνθρωπος ἐλάχιστον, τῶν δ' ἵππων ἵππος· ὥστε τῇ τούτων παρ' ἀλλήλα θέσει τὸ πλῆθος μέμεικται τῶν συναμφοτέρων· ἄνθρωπον δὲ ἔνα ἐνὶ ἵππῳ οὐ λέγομεν μεμεῖχθαι· ὅσα δὲ μὴ διαιρεῖται εἰς τὸ ἐλάχιστον, τούτων οὐκ ἐνδέχεται μίξιν γενέσθαι τὸν τρόπον τοῦτον ἀλλὰ τῷ πάντῃ μεμεῖχθαι, ἅπερ καὶ μάλιστα μίγνυσθαι πέφυκεν· πῶς δὲ τοῦτο γίνεσθαι δυνατόν, ἐν τοῖς περὶ μίξεως εἴρηται πρότερον) - ἀλλ' ὅτι ἀνάγκη μειγνυμένων

καὶ τὰς χροὰς μείγνυσθαι, δῆλον, καὶ ταύτην τὴν αἰτίαν εἶναι κυρίαν τοῦ πολλὰς εἶναι χροὰς, ἀλλὰ μὴ τὴν ἐπιπόλασιν μηδὲ τὴν παρ' ἄλληλα θέσιν· οὐ γὰρ πόρρωθεν μὲν ἐγγύθεν δ' οὐ φαίνεται μία χροὰ τῶν μεμειγμένων, ἀλλὰ πάντοθεν. πολλὰ δ' ἔσονται χροαὶ διὰ τὸ κατὰ πολλοὺς λόγους ἐνδέχεσθαι μείγνυσθαι ἀλλήλοις τὰ μειγνύμενα, καὶ τὰ μὲν ἐν ἀριθμοῖς τὰ δὲ καθ' ὑπεροχὴν μόνον. καὶ τᾶλλα δὴ τὸν αὐτὸν τρόπον ὥνπερ ἐπὶ τῶν παρ' ἄλληλα τιθεμένων χρωμάτων ἢ ἐπιπολῆς, ἐνδέχεται λέγειν καὶ περὶ τῶν μειγνυμένων. διὰ τίνα δ' αἰτίαν εἶδη τῶν χρωμάτων ἐστὶν ὠρισμένα καὶ οὐκ ἄπειρα, καὶ χυμῶν καὶ ψόφων, ὕστερον ἐπισκεπτέον.

Τί μὲν οὖν ἐστὶ χρῶμα καὶ διὰ τίν' αἰτίαν πολλὰ χροαὶ εἰσίν, εἴρηται· [περὶ δὲ ψόφου καὶ φωνῆς εἴρηται πρότερον ἐν τοῖς περὶ ψυχῆς·] περὶ δὲ ὁσμῆς καὶ χυμοῦ λεκτέον. σχεδὸν γὰρ ἐστὶ τὸ αὐτὸ πάθος, οὐκ ἐν τοῖς αὐτοῖς δ' ἐστὶν ἐκάτερον αὐτῶν. ἐναργέστερον δ' ἡμῖν ἐστὶ τὸ τῶν χυμῶν γένος ἢ τὸ τῆς ὁσμῆς. τούτου δ' αἴτιον ὅτι χειρίστην [441a] ἔχομεν τῶν ἄλλων ζώων τὴν ὁσφρησιν καὶ τῶν ἐν ἡμῖν αὐτοῖς αἰσθήσεων, τὴν δ' ἀφὴν ἀκριβεστάτην τῶν ἄλλων ζώων· ἢ δὲ γεῦσις ἀφή τίς ἐστίν.

ἢ μὲν οὖν τοῦ ὕδατος φύσις βούλεται ἄχυμος εἶναι· ἀνάγκη δ' ἢ ἐν αὐτῷ τὸ ὕδωρ ἔχειν τὰ γένη τῶν χυμῶν ἀναίσθητα διὰ μικρότητα, καθάπερ Ἐμπεδοκλῆς φησίν, ἢ ὕλην τοιαύτην εἶναι οἷον πανσπερμίαν χυμῶν, καὶ ἅπαντα μὲν ἐξ ὕδατος γίνεσθαι, ἄλλο δ' ἐξ ἄλλου μέρους, ἢ μηδεμίαν ἔχοντος διαφορὰν τοῦ ὕδατος τὸ ποιοῦν αἴτιον εἶναι, οἷον εἰ τὸ θερμὸν καὶ τὸν ἥλιον φαίη τις. τούτων δ' ὥς μὲν Ἐμπεδοκλῆς λέγει λίαν εὐσύννοπτον τὸ ψεῦδος· ὁρῶμεν γὰρ μεταβάλλοντας ὑπὸ τοῦ θερμοῦ τοὺς χυμοὺς ἀφαιρουμένων τῶν περικαρπίων [εἰς τὸν ἥλιον] καὶ πυρουμένων, ὥς οὐ τῷ ἐκ τοῦ ὕδατος ἔλκειν τοιοῦτους γιγνομένους, ἀλλ' ἐν αὐτῷ τῷ περικαρπίῳ μεταβάλλοντας, καὶ ἐξικμαζομένους δὲ καὶ κειμένους διὰ τὸν χρόνον αὐστηροὺς ἐκ γλυκέων καὶ πικροῦς καὶ παντοδαποὺς γιγνομένους, καὶ ἐψομένους εἰς πάντα τὰ γένη τῶν χυμῶν ὥς εἰπεῖν μεταβάλλοντας. ὁμοίως δὲ καὶ τὸ πανσπερμίας εἶναι τὸ ὕδωρ ὕλην ἀδύνατον· ἐκ τοῦ αὐτοῦ γὰρ ὁρῶμεν ὥς [ἐκ τῆς αὐτῆς] τροφῆς γιγνομένους ἑτέρους χυμούς.

λείπεται δὲ τῷ πάσχειν τι τὸ ὕδωρ μεταβάλλειν. ὅτι μὲν τοίνυν οὐχ ὑπὸ τῆς τοῦ θερμοῦ μόνον δυνάμεως λαμβάνει ταύτην τὴν δύναμιν ἣν καλοῦμεν χυμόν, φανερόν. λεπτότατον γὰρ πάντων τῶν οὕτως ὑγρῶν τὸ ὕδωρ ἐστί, καὶ αὐτοῦ τοῦ ἐλαίου (ἀλλ' ἐπεκτείνεται ἐπὶ πλεον τοῦ ὕδατος τὸ ἔλαιον διὰ τὴν γλίσχρότητα· τὸ δ' ὕδωρ ψαθυρόν ἐστί, διὸ καὶ χαλεπώτερον φυλάξαι ἐν τῇ χειρὶ τὸ ὕδωρ ἢπερ ἔλαιον), ἐπεὶ δὲ θερμαινόμενον οὐδὲν φαίνεται

παχυνόμενον τὸ ὕδωρ αὐτὸ μόνον, δῆλον ὅτι ἑτέρα τις ἂν εἴη αἰτία· οἱ γὰρ χυμοὶ πάντες πάχος ἔχουσι μᾶλλον· τὸ δὲ θερμὸν συναίτιον. φαίνονται δ' οἱ χυμοὶ ὅσοιπερ καὶ ἐν τοῖς περικαρπίοις, [441b] οὗτοι ὑπάρχοντες καὶ ἐν τῇ γῇ. διὸ καὶ πολλοὶ φασὶ τῶν ἀρχαίων φυσιολόγων τοιοῦτον εἶναι τὸ ὕδωρ δι' οἷας ἂν γῆς πορεύηται. καὶ τοῦτο δῆλόν ἐστιν ἐπὶ τῶν ἀλμυρῶν ὑδάτων μάλιστα· οἱ γὰρ ἄλλες γῆς τι εἶδός εἰσιν. καὶ τὰ διὰ τῆς τέφρας διηθούμενα πικρᾶς οὔσης πικρὸν ποιεῖ τὸν χυμόν, εἰσὶ τε κρῆναι πολλὰ αἱ μὲν πικραί, αἱ δ' ὀξεῖαι, αἱ δὲ παντοδαποὺς ἔχουσιν χυμοὺς ἄλλους. εὐλόγως δ' ἐν τοῖς φυομένοις τὸ τῶν χυμῶν γίγνεται γένος μάλιστα. πάσχειν γὰρ πέφυκε τὸ ὑγρὸν, ὥσπερ καὶ τᾶλλα, ὑπὸ τοῦ ἐναντίου· ἐναντίον δὲ τὸ ξηρὸν. διὸ καὶ ὑπὸ τοῦ πυρὸς πάσχει τι· ξηρὰ γὰρ ἡ τοῦ πυρὸς φύσις. ἀλλ' ἴδιον τοῦ πυρὸς τὸ θερμόν ἐστι, γῆς δὲ τὸ ξηρὸν, ὥσπερ εἴρηται ἐν τοῖς περὶ στοιχείων. ἡ μὲν οὖν πῦρ καὶ ἡ γῆ, οὐδὲν πέφυκε ποιεῖν καὶ πάσχειν, οὐδ' ἄλλο οὐδέν· ἡ δ' ὑπάρχει ἐναντιότης ἐν ἐκάστω, ταύτῃ πάντα καὶ ποιοῦσι καὶ πάσχουσιν.

ὥσπερ οὖν οἱ ἐναποπλύνοντες ἐν τῷ ὑγρῷ τὰ χρώματα καὶ τοὺς χυμοὺς τοιοῦτον ἔχειν ποιοῦσι τὸ ὕδωρ, οὕτως καὶ ἡ φύσις τὸ ξηρὸν καὶ γεῶδες, καὶ διὰ τοῦ ξηροῦ καὶ γεώδους διηθοῦσα καὶ κινοῦσα τῷ θερμῷ ποιόν τι τὸ ὑγρὸν παρασκευάζει. καὶ ἔστι τοῦτο χυμός, τὸ γινόμενον ὑπὸ τοῦ εἰρημένου ξηροῦ πάθος ἐν τῷ ὑγρῷ, τῆς γεύσεως τῆς κατὰ δύναμιν ἀλλοιωτικὸν <ὄν> εἰς ἐνέργειαν· ἄγει γὰρ τὸ αἰσθητικὸν εἰς τοῦτο δυνάμει προϋπάρχον· οὐ γὰρ κατὰ τὸ μανθάνειν ἀλλὰ κατὰ τὸ θεωρεῖν ἐστι τὸ αἰσθάνεσθαι. ὅτι δ' οὐ παντὸς ξηροῦ ἀλλὰ τοῦ τροφίμου οἱ χυμοὶ ἢ πάθος εἰσὶν ἢ στέρησις, δεῖ λαβεῖν ἐντεῦθεν, ὅτι οὔτε τὸ ξηρὸν ἄνευ τοῦ ὑγροῦ οὔτε τὸ ὑγρὸν ἄνευ τοῦ ξηροῦ· τροφή γὰρ οὐχ ἐν μόνον τοῖς ζώοις, ἀλλὰ τὸ μεμειγμένον. καὶ ἔστι τῆς προσφερομένης τροφῆς τοῖς ζώοις τὰ μὲν ἅπτα τῶν αἰσθητῶν αὔξησιν ποιοῦντα καὶ φθίσιν· τούτων μὲν γὰρ αἴτιον ἡ θερμὸν καὶ ψυχρὸν τὸ προσφερόμενον (ταῦτα γὰρ ποιεῖ καὶ αὔξησιν [442a] καὶ φθίσιν), τρέφει δὲ ἡ γευστὸν τὸ προσφερόμενον (πάντα γὰρ τρέφεται τῷ γλυκεῖ, ἢ ἀπλῶς ἢ μεμειγμένῳ). δεῖ μὲν οὖν διορίζειν περὶ τούτων ἐν τοῖς περὶ γενέσεως, νῦν δ' ὅσον ἀναγκαῖον ἅψασθαι αὐτῶν. τὸ γὰρ θερμὸν αὐξάνει, καὶ δημιουργεῖ τὴν τροφήν, καὶ τὸ κοῦφον ἔλκει, τὸ δ' ἀλμυρὸν καὶ πικρὸν καταλείπει διὰ τὸ βάρος. ὃ δὴ ἐν τοῖς ἔξω σώμασι ποιεῖ τὸ ἔξω θερμόν, τοῦτο τὸ ἐν τῇ φύσει τῶν ζώων καὶ φυτῶν· διὸ τρέφεται τῷ γλυκεῖ. συμμείγνυνται δ' οἱ ἄλλοι χυμοὶ εἰς τὴν τροφήν τὸν αὐτὸν τρόπον τῷ ἀλμυρῷ καὶ ὀξεῖ, ἀντὶ ἡδύσματος, ταῦτα δὲ διὰ τὸ ἀντισπᾶν τῷ λίαν τρόφιμον εἶναι τὸ γλυκὺ καὶ ἐπιπολαστικόν.

ὥσπερ δὲ τὰ χρώματα ἐκ λευκοῦ καὶ μέλανος μίξεώς ἐστιν, οὕτως οἱ

χυμοὶ ἐκ γλυκέος καὶ πικροῦ, καὶ κατὰ λόγον δ' ἢ τῷ μᾶλλον καὶ ἥττον ἕκαστοί εἰσιν, εἴτε κατ' ἀριθμούς τινας τῆς μίξεως καὶ κινήσεως, εἴτε καὶ ἀορίστως, οἱ δὲ τὴν ἡδονὴν ποιοῦντες μειγνύμενοι, οὗτοι ἐν ἀριθμοῖς μόνον· ὁ μὲν οὖν λιπαρὸς τοῦ γλυκέος ἐστὶ χυμός, τὸ δ' ἄλμυρὸν καὶ πικρὸν σχεδὸν τὸ αὐτό, ὁ δὲ δριμύς καὶ αὐστηρὸς καὶ στρυφνὸς καὶ ὀξύς ἀνὰ μέσον. σχεδὸν γὰρ ἴσα καὶ τὰ τῶν χυμῶν εἶδη καὶ τὰ τῶν χρωμάτων ἐστίν· ἐπτα γὰρ ἀμφοτέρων εἶδη, ἅν τις τιθῇ, ὥσπερ εὖλογον, τὸ φαιὸν μέλαν τι εἶναι· λείπεται γὰρ τὸ ξανθὸν μὲν τοῦ λευκοῦ εἶναι ὥσπερ τὸ λιπαρὸν τοῦ γλυκέος, τὸ φοινικοῦν δὲ καὶ ἀλουργὸν καὶ πράσινον καὶ κυανοῦν μεταξὺ τοῦ λευκοῦ καὶ μέλανος, τὰ δ' ἄλλα μεικτὰ ἐκ τούτων. καὶ ὥσπερ τὸ μέλαν στέρησις ἐν τῷ διαφανεῖ τοῦ λευκοῦ, οὕτω τὸ ἄλμυρὸν καὶ τὸ πικρὸν τοῦ γλυκέος ἐν τῷ τροφίμῳ ὑγρῷ. διὸ καὶ ἡ τέφρα τῶν κατακαιομένων πικρὰ πάντων· ἐξίκμασται γὰρ τὸ πότιμον ἐξ αὐτῶν.

Δημόκριτος δὲ καὶ οἱ πλεῖστοι τῶν φυσιολόγων, ὅσοι λέγουσι περὶ αἰσθήσεως, ἀτοπώτατόν τι [442b] ποιοῦσιν· πάντα γὰρ τὰ αἰσθητὰ ἀπτὰ ποιοῦσιν. καίτοι εἰ τοῦτο οὕτως ἔχει, δῆλον ὡς καὶ τῶν ἄλλων αἰσθήσεων ἕκαστη ἀφή τίς ἐστίν· τοῦτο δ' ὅτι ἀδύνατον, οὐ χαλεπὸν συνιδεῖν. ἔτι δὲ τοῖς κοινοῖς τῶν αἰσθήσεων πασῶν χρῶνται ὡς ἰδίους· μέγεθος γὰρ καὶ σχῆμα καὶ τὸ τραχὺ καὶ τὸ λεῖον, ἔτι δὲ τὸ ὀξύ καὶ τὸ ἀμβλὺ τὸ ἐν τοῖς ὄγκοις, κοινὰ τῶν αἰσθήσεων ἐστίν, εἰ δὲ μὴ πασῶν, ἀλλ' ὅψεως γε καὶ ἀφῆς. διὸ καὶ περὶ μὲν τούτων ἀπατῶνται, περὶ δὲ τῶν ἰδίων οὐκ ἀπατῶνται, οἷον ἡ ὄψις περὶ χρώματος καὶ ἡ ἀκοὴ περὶ φόφων. οἱ δὲ τὰ ἴδια εἰς ταῦτα ἀνάγουσιν, ὥσπερ Δημόκριτος· τὸ γὰρ λευκὸν καὶ τὸ μέλαν τὸ μὲν τραχύ φησιν εἶναι τὸ δὲ λεῖον, εἰς δὲ τὰ σχήματα ἀνάγει τοὺς χυμούς. καίτοι ἢ οὐδεμιᾶς ἢ μᾶλλον τῆς ὀψεως τὰ κοινὰ γνωρίζειν. εἰ δ' ἄρα τῆς γεύσεως μᾶλλον, τὰ γοῦν ἐλάχιστα τῆς ἀκριβεστάτης ἐστὶν αἰσθήσεως διακρίνειν περὶ ἕκαστον γένος, ὥστε ἐχρῆν τὴν γεῦσιν καὶ τῶν ἄλλων κοινῶν αἰσθάνεσθαι μάλιστα καὶ τῶν σχημάτων εἶναι κριτικωτάτην. ἔτι τὰ μὲν αἰσθητὰ πάντα ἔχει ἐναντίωσιν, οἷον ἐν χρώματι τῷ μέλανι τὸ λευκὸν καὶ ἐν χυμοῖς τῷ γλυκεῖ τὸ πικρόν· σχῆμα δὲ σχήματι οὐ δοκεῖ εἶναι ἐναντίον· τίτι γὰρ τῶν πολυγώνων τὸ περιφερὲς ἐναντίον; ἔτι ἀπείρων ὄντων τῶν σχημάτων ἀναγκαῖον καὶ τοὺς χυμοὺς εἶναι ἀπείρους· διὰ τί γὰρ ὁ μὲν τῶν χυμῶν αἰσθησιν ποιήσει, ὁ δ' οὐκ ἂν ποιήσειεν; καὶ περὶ μὲν τοῦ γευστοῦ καὶ χυμοῦ εἴρηται· τὰ γὰρ ἄλλα πάθη τῶν χυμῶν οἰκείαν ἔχει τὴν σκέψιν ἐν τῇ φυσιολογίᾳ τῇ περὶ τῶν φυτῶν.

Τὸν αὐτὸν δὲ τρόπον δεῖ νοῆσαι καὶ περὶ τὰς ὀσμάς· ὅπερ γὰρ ποιεῖ ἐν τῷ ὑγρῷ τὸ ξηρόν, τοῦτο ποιεῖ ἐν ἄλλῳ γένει τὸ ἔγχυμον ὑγρόν, ἐν ἄερί καὶ ὕδατι ὁμοίως. (κοινὸν δὲ κατὰ τούτων νῦν μὲν λέγομεν τὸ διαφανές, ἔστι δ'



ὄσφραντὸν [443a] οὐχ ἡ διαφανές, ἀλλ' ἡ πλυτικὸν καὶ ῥυπτικὸν ἐγγύμου ξηρότητος.) οὐ γὰρ μόνον ἐν ἀέρι ἀλλὰ καὶ ἐν ὕδατι τὸ τῆς ὄσφρησεως ἐστίν. δῆλον δ' ἐπὶ τῶν ἰχθύων καὶ τῶν ὀστρακοδέρμων· φαίνονται γὰρ ὄσφραινόμενα οὔτε ἀέρος ὄντος ἐν τῷ ὕδατι (ἐπιπολάζει γὰρ ὁ ἀήρ, ὅταν ἐγγένηται) οὔτ' αὐτὰ ἀναπνέοντα. εἰ οὖν τις θεῖη καὶ τὸν ἀέρα καὶ τὸ ὕδωρ ἄμφω ὑγρά, εἴη ἂν ἡ ἐν ὑγρῷ τοῦ ἐγγύμου ξηροῦ φύσις ὁσμή, καὶ ὄσφραντὸν τὸ τοιοῦτον. ὅτι δ' ἀπ' ἐγγύμου ἐστὶ τὸ πάθος, δῆλον ἐκ τῶν ἐχόντων καὶ μὴ ἐχόντων ὁσμήν· τὰ τε γὰρ στοιχεῖα ἄοσμα, οἷον πῦρ ἀήρ γῆ ὕδωρ, διὰ τὸ τὰ τε ξηρὰ αὐτῶν καὶ τὰ ὑγρά ἄχυμα εἶναι, ἂν μὴ τι μειγνύμενον ποιῇ. διὸ καὶ ἡ θάλαττα ἔχει ὁσμήν (ἔχει γὰρ χυμὸν καὶ ξηρότητα), καὶ ἄλλες μᾶλλον νίτρου ὁσμώδεις (δηλοῖ δὲ τὸ ἐξικμαζόμενον ἐξ αὐτῶν ἔλαιον), τὸ δὲ νίτρον γῆς ἐστὶ μᾶλλον. ἔτι λίθος μὲν ἄοσμον, ἄχυμον γάρ, τὰ δὲ ξύλα ὁσμώδη, ἔγχυμα γάρ· καὶ τούτων τὰ ὑδατώδη ἦττον. ἔτι ἐπὶ τῶν μεταλλευομένων χρυσὸς ἄοσμον, ἄχυμον γάρ, ὁ δὲ χαλκὸς καὶ ὁ σίδηρος ὁσμώδη· ὅταν δ' ἐκκαυθῇ τὸ ὑγρόν, ἀοσμότεραι αἱ σκωρίαι γίνονται πάντων· ἄργυρος δὲ καὶ καττίτερος τῶν μὲν μᾶλλον ὁσμώδη τῶν δ' ἦττον· ὑδατώδη γάρ.

δοκεῖ δ' ἐνίοις ἡ καπνώδης ἀναθυμίασις εἶναι ὁσμή, οὔσα κοινὴ γῆς τε καὶ ἀέρος [καὶ πάντες ἐπιφέρονται ἐπὶ τοῦτο περὶ ὁσμῆς]· διὸ καὶ Ἡράκλειτος οὕτως εἴρηκεν, ὡς εἰ πάντα τὰ ὄντα καπνὸς γένοιτο, ῥῖνες ἂν διαγνοῖεν, «καὶ πάντες ἐπιφέρονται ἐπὶ τοῦτο περὶ ὁσμῆς», οἱ μὲν ὡς ἀτμίδα, οἱ δ' ὡς ἀναθυμίασιν, οἱ δ' ὡς ἄμφω ταῦτα· ἔστι δ' ἡ μὲν ἀτμὶς ὑγρότης τις, ἡ δὲ καπνώδης ἀναθυμίασις, ὥσπερ εἴρηται, κοινὸν ἀέρος καὶ γῆς· καὶ συνίσταται ἐκ μὲν ἐκείνης ὕδωρ, ἐκ δὲ ταύτης γῆς τι εἶδος. ἀλλ' οὐδέτερον τούτων ἔοικεν· ἡ μὲν γὰρ ἀτμὶς ἐστὶν ὕδατος, ἡ δὲ καπνώδης ἀναθυμίασις ἀδύνατος ἐν ὕδατι γενέσθαι· ὁσμᾶται δὲ καὶ τὰ ἐν τῷ ὕδατι, [443b] ὥσπερ εἴρηται πρότερον. ἔτι ἡ ἀναθυμίασις ὁμοίως λέγεται ταῖς ἀπορροαῖς· εἰ οὖν μὴδ' ἐκεῖναι καλῶς, οὐδ' αὕτη καλῶς. ὅτι μὲν οὖν ἐνδέχεται ἀπολαύειν τὸ ὑγρόν, καὶ τὸ ἐν τῷ πνεύματι καὶ τὸ ἐν τῷ ὕδατι, καὶ πάσχειν τι ὑπὸ τῆς ἐγγύμου ξηρότητος, οὐκ ἄδηλον· καὶ γὰρ ὁ ἀήρ ὑγρὸν τὴν φύσιν ἐστίν. ἔτι δ' εἴπερ ὁμοίως ἐν τοῖς ὑγροῖς ποιεῖ καὶ ἐν τῷ ἀέρι οἷον ἀποπλυνόμενον τὸ ξηρόν, φανερόν ὅτι δεῖ ἀνάλογον εἶναι τὰς ὁσμάς τοῖς χυμοῖς. ἀλλὰ μὴν τοῦτό γε ἐπ' ἐνίων συμβέβηκεν· καὶ γὰρ δριμεῖαι καὶ γλυκεῖαι εἰσιν ὁσμαὶ καὶ αὐστηραὶ καὶ στρυφναὶ καὶ λιπαραὶ, καὶ τοῖς πικροῖς τὰς σαπρὰς ἂν τις ἀνάλογον εἴποι· διὸ ὥσπερ ἐκεῖνα δυσκατάποτα, τὰ σαπρὰ δυσανάπνευστά ἐστίν. δῆλον ἄρα ὅτι ὅπερ ἐν τῷ ὕδατι ὁ χυμός, τοῦτ' ἐν τῷ ἀέρι καὶ ὕδατι ἡ ὁσμή. καὶ διὰ τοῦτο τὸ ψυχρὸν καὶ ἡ πῆξις καὶ τοὺς χυμοὺς ἀμβλύνει καὶ τὰς ὁσμάς ἀφανίζει· τὸ γὰρ θερμὸν τὸ κινεῖν καὶ δημιουργοῦν ἀφανίζουσιν

ἡ ψύξις καὶ ἡ πῆξις.

εἶδη δὲ τοῦ ὀσφραντοῦ δύο ἐστίν· οὐ γάρ, ὥσπερ τινές φασιν, οὐκ ἔστιν εἶδη τοῦ ὀσφραντοῦ, ἀλλ' ἔστιν. διοριστέον δὲ πῶς ἔστι καὶ πῶς οὐκ ἔστιν· τὸ μὲν γάρ ἐστι κατὰ τοὺς χυμοὺς τεταγμένον αὐτῶν, ὥσπερ εἵπομεν, καὶ τὸ ἡδὺ καὶ τὸ λυπηρὸν κατὰ συμβεβηκὸς ἔχουσιν (διὰ γὰρ τὸ τοῦ θρεπτικοῦ πάθη εἶναι, ἐπιθυμούντων μὲν ἡδεῖαι αἱ ὀσμαι τούτων εἰσί, πεπληρωμένοις δὲ καὶ μηδὲν δεομένοις οὐχ ἡδεῖαι, οὐδ' ὅσοις μὴ καὶ ἡ τροφή ἢ ἔχουσα τὰς ὀσμάς ἡδεῖα, οὐδὲ τούτοις) - ὥστε αὗται μὲν, καθάπερ εἵπομεν, κατὰ συμβεβηκὸς ἔχουσι τὸ ἡδὺ καὶ λυπηρόν, διὸ καὶ πάντων εἰσὶ κοιναὶ τῶν ζώων· αἱ δὲ καθ' αὐτάς ἡδεῖαι τῶν ὀσμῶν εἰσιν, οἷον αἱ τῶν ἀνθῶν· οὐδὲν γὰρ μᾶλλον οὐδ' ἥττον πρὸς τὴν τροφήν παρακαλοῦσιν, οὐδὲ συμβάλλονται πρὸς ἐπιθυμίαν οὐδέν, ἀλλὰ τοῦναντίον μᾶλλον· ἀληθὲς γὰρ ὅπερ Εὐριπίδην σκώπτων εἶπε Στράτις, “ὅταν φακῆν ἔψητε, μὴ ‘πιχεῖν μύρον.” οἱ δὲ νῦν μειγνύντες [444a] εἰς τὰ πόματα τὰς τοιαύτας δυνάμεις βιάζονται τῇ συνηθείᾳ τὴν ἡδονήν, ἕως ἂν ἐκ δύο αἰσθήσεων γένηται τὸ ἡδὺ ὡς ἂν καὶ ἀπὸ μιᾶς.

τοῦτο μὲν οὖν τὸ ὀσφραντὸν ἴδιον ἀνθρώπου ἐστίν, ἡ δὲ κατὰ τοὺς χυμοὺς τεταγμένη καὶ τῶν ἄλλων ζώων, ὥσπερ εἴρηται πρότερον· κἀκείνων μὲν, διὰ τὸ κατὰ συμβεβηκὸς ἔχειν τὸ ἡδύ, διήρηται τὰ εἶδη κατὰ τοὺς χυμούς, ταύτης δ' οὐκέτι, διὰ τὸ τὴν φύσιν αὐτῆς εἶναι καθ' αὐτὴν ἡδεῖαν ἢ λυπηράν. αἴτιον δὲ τοῦ ἴδιον εἶναι ἀνθρώπου τὴν τοιαύτην ὀσμὴν διὰ τὴν ἕξιν τὴν περὶ τὸν ἐγκέφαλον. ψυχροῦ γὰρ ὄντος τὴν φύσιν τοῦ ἐγκεφάλου, καὶ τοῦ αἵματος τοῦ περὶ αὐτὸν ἐν τοῖς φλεβίοις ὄντος λεπτοῦ μὲν καὶ καθαροῦ, εὐψύκτου δέ (διὸ καὶ ἡ τῆς τροφῆς ἀναθυμιάσις ψυχομένη διὰ τὸν τόπον τὰ νοσηματικὰ ρεύματα ποιεῖ), τοῖς ἀνθρώποις πρὸς βοήθειαν ὑγιείας γέγονε τὸ τοιοῦτον εἶδος τῆς ὀσμῆς· οὐδὲν γὰρ ἄλλο ἔργον ἐστὶν αὐτῆς ἢ τοῦτο. τοῦτο δὲ ποιεῖ φανερώς· ἡ μὲν γὰρ τροφή ἡδεῖα οὔσα, καὶ ἡ ξηρὰ καὶ ἡ ὑγρὰ, πολλάκις νοσώδης ἐστίν, ἡ δ' ἀπὸ τῆς ὀσμῆς τῆς καθ' αὐτὴν ἡδεῖας εὐωδία ὀπωσοῦν ἔχουσιν ὠφέλιμος ὡς εἰπεῖν αἰεὶ. καὶ διὰ τοῦτο γίνεται διὰ τῆς ἀναπνοῆς, οὐ πᾶσιν ἀλλὰ τοῖς ἀνθρώποις καὶ τῶν ἐναίμων οἷον τοῖς τετράποσι καὶ ὅσα μετέχει μᾶλλον τῆς τοῦ ἀέρος φύσεως· ἀναφερομένων γὰρ τῶν ὀσμῶν πρὸς τὸν ἐγκέφαλον διὰ τὴν ἐν αὐταῖς τῆς θερμότητος κουφότητα ὑγιεινότερως ἔχει τὰ περὶ τὸν τόπον τοῦτον· ἡ γὰρ τῆς ὀσμῆς δύναμις θερμὴ τὴν φύσιν ἐστίν. κατακέχρηται δ' ἡ φύσις τῇ ἀναπνοῇ ἐπὶ δύο, ὡς ἔργῳ μὲν ἐπὶ τὴν εἰς τὸν θώρακα βοήθειαν, ὡς παρέργῳ δ' ἐπὶ τὴν ὀσμὴν· ἀναπνέοντος γὰρ ὥσπερ ἐκ παρόδου ποιεῖται διὰ τῶν μυκτῆρων τὴν κίνησιν.

ἴδιον δὲ τῆς τοῦ ἀνθρώπου φύσεώς ἐστι τὸ τῆς ὀσμῆς τῆς τοιαύτης γένος

διὰ τὸ πλεῖστον ἐγκέφαλον καὶ ὑγρότατον ἔχειν τῶν ἄλλων ζώων ὡς κατὰ μέγεθος· διὰ γὰρ τοῦτο καὶ μόνον ὡς εἶπεῖν αἰσθάνεται τῶν ζώων ἄνθρωπος καὶ χαίρει ταῖς τῶν ἀνθῶν καὶ τῶν τοιούτων ὁσμαῖς· σύμμετρος γὰρ αὐτῶν [444b] ἡ θερμότης καὶ ἡ κίνησις πρὸς τὴν ὑπερβολὴν τῆς ἐν τῷ τόπῳ ὑγρότητος καὶ ψυχρότητός ἐστιν. τοῖς δ' ἄλλοις ὅσα πνεύμονα ἔχει διὰ τοῦ ἀναπνεῖν τοῦ ἐτέρου γένους τῆς ὁσμῆς τὴν αἴσθησιν ἀποδέδωκεν ἡ φύσις, ὅπως μὴ δύο αἰσθητήρια ποιῇ· ἀπόχρη γάρ, ἐπεὶ καὶ ὡς ἀναπνέουσιν, ὥσπερ τοῖς ἀνθρώποις ἀμφοτέρων τῶν ὁσφραντῶν, τούτοις τῶν ἐτέρων μόνων ὑπάρχουσα ἡ αἴσθησις. τὰ δὲ μὴ ἀναπνέοντα ὅτι μὲν ἔχει αἴσθησιν τοῦ ὁσφραντοῦ, φανερόν· καὶ γὰρ ἰχθύες καὶ τὸ τῶν ἐντόμων γένος πᾶν ἀκριβῶς καὶ πόρρωθεν αἰσθάνεται, διὰ τὸ θρεπτικὸν εἶδος τῆς ὁσμῆς, ἀπέχοντα πολὺ τῆς οἰκείας τροφῆς, οἷον αἶ τε μέλιται [ποιοῦσι πρὸς τὸ μέλι] καὶ τὸ τῶν μικρῶν μυρμήκων γένος, οὓς καλοῦσιν τινες κνῖπας, καὶ τῶν θαλαττίων αἱ πορφύραι, καὶ πολλὰ τῶν ἄλλων τῶν τοιούτων ζώων ὁξέως αἰσθάνεται τῆς τροφῆς διὰ τὴν ὁσμήν. ὅτῳ δὲ αἰσθάνεται, οὐχ ὁμοίως φανερόν. διὸ καὶ ἀπορήσειέ τις τίτι αἰσθάνονται τῆς ὁσμῆς, εἴπερ ἀναπνέουσι μὲν γίγνεται τὸ ὁσμᾶσθαι μοναχῶς (τοῦτο γὰρ φαίνεται ἐπὶ τῶν ἀναπνεόντων συμβαῖνον πάντων), ἐκείνων δ' οὐθὲν ἀναπνεῖ, αἰσθάνεται μέντοι, εἰ μὴ τις παρὰ τὰς πέντε αἰσθήσεις ἕτερα. τοῦτο δ' ἀδύνατον· τοῦ γὰρ ὁσφραντοῦ ὁσφρησις, ἐκεῖνα δὲ τούτου αἰσθάνεται, ἀλλ' οὐ τὸν αὐτὸν ἴσως τρόπον, ἀλλὰ τοῖς μὲν ἀναπνέουσι τὸ πνεῦμα ἀφαιρεῖ τὸ ἐπικείμενον ὥσπερ πῶμά τι (διὸ οὐκ αἰσθάνεται μὴ ἀναπνέοντα), τοῖς δὲ μὴ ἀναπνέουσιν ἀφήρηται τοῦτο, καθάπερ ἐπὶ τῶν ὀφθαλμῶν τὰ μὲν ἔχει βλέφαρα τῶν ζώων, ὧν μὴ ἀνακαλυφθέντων οὐ δύναται ὁρᾶν, τὰ δὲ σκληρόφθαλμα οὐκ ἔχει, διόπερ οὐ προσδεῖται οὐδενὸς τοῦ ἀνακαλύψοντος, ἀλλ' ὁρᾷ ἐκ τοῦ δυνατοῦ ὄντος αὐτοῖς εὐθύς.

Ὀμοίως δὲ καὶ τῶν ἄλλων ζώων ὁτιοῦν οὐδὲν δυσχεραίνει τῶν καθ' αὐτὰ δυσωδῶν τὴν ὁσμήν, ἂν μὴ τι τύχη φθαρτικὸν ὄν, ὑπὸ τούτων δ' ὁμοίως φθαρεῖται καθάπερ καὶ οἱ ἄνθρωποι ὑπὸ τῆς τῶν ἀνθράκων ἀτμίδος καρηβαροῦσι καὶ φθείρονται πολλάκις· οὕτως ὑπὸ τῆς τοῦ θείου δυνάμεως καὶ τῶν ἀσφαλτωδῶν φθείρεται [445a] τᾶλλα ζῶα, καὶ φεύγει διὰ τὸ πάθος. αὐτῆς δὲ καθ' αὐτὴν τῆς δυσωδίας οὐδὲν φροντίζουσιν (καίτοι πολλὰ τῶν φυομένων δυσώδεις ἔχει τὰς ὁσμάς), ἐὰν μὴ τι συμβάλληται πρὸς τὴν γεῦσιν ἢ τὴν ἐδωδὴν αὐτοῖς. ἔοικε δ' ἡ αἴσθησις ἡ τοῦ ὁσφραίνεσθαι, περιττῶν οὐσῶν τῶν αἰσθήσεων καὶ τοῦ ἀριθμοῦ ἔχοντος μέσον τοῦ περιττοῦ, καὶ αὐτὴ μέση εἶναι τῶν τε ἀπτικῶν, οἷον ἀφῆς καὶ γεύσεως, καὶ τῶν δι' ἄλλου αἰσθητικῶν, οἷον ὄψεως καὶ ἀκοῆς. διὸ καὶ τὸ ὁσφραντὸν τῶν θρεπτικῶν ἐστὶ πάθος τι (ταῦτα δ' ἐν τῷ ἀπτῷ γένει), καὶ τοῦ ἀκουστοῦ δὲ καὶ τοῦ

ὁρατοῦ, διὸ καὶ ἐν ἀέρι καὶ ἐν ὕδατι ὁσμῶνται. ὥστ' ἐστὶ τὸ ὁσφραντὸν κοινόν τι τούτων ἀμφοτέρων, καὶ τῷ τε ἀπῶ ὑπάρχει καὶ τῷ ἀκουστῷ καὶ τῷ διαφανεῖ· διὸ καὶ εὐλόγως παρείκασται ξηρότητος ἐν ὑγρῷ καὶ χυτῷ οἶον βαφή τις εἶναι καὶ πλύσις. πῶς μὲν οὖν εἶδη δεῖ λέγειν καὶ πῶς οὐ δεῖ τοῦ ὁσφραντοῦ, ἐπὶ τοσοῦτον εἰρήσθω.

Ὁ δὲ λέγουσί τινες τῶν Πυθαγορείων, οὐκ ἔστιν εὐλογον· τρέφεσθαι γάρ φασιν ἕνια ζῶα ταῖς ὁσμαῖς. πρῶτον μὲν γὰρ ὁρῶμεν ὅτι τὴν τροφήν δεῖ εἶναι συνθετὴν (καὶ γὰρ τὰ τρεφόμενα οὐχ ἀπλᾶ ἔστιν, διὸ καὶ περιπτώματα γίγνεται τῆς τροφῆς, ἢ ἐν αὐτοῖς ἢ ἔξω, ὥσπερ τοῖς φυτοῖς, ἐπεὶ δ' οὐδὲ τὸ ὕδωρ ἐθέλει αὐτὸ μόνον ἄμεικτον ὃν τρέφειν - σωματῶδες γάρ τι δεῖ εἶναι τὸ συστησόμενον - ἔτι πολὺ ἦττον εὐλογον τὸν ἀέρα σωματοῦσθαι)· πρὸς δὲ τούτοις, ὅτι πᾶσιν ἔστι τοῖς ζώοις τόπος δεκτικὸς τῆς τροφῆς, ἐξ οὗ ἔλκον λαμβάνει τὸ σῶμα· τοῦ δ' ὁσφραντοῦ ἐν τῇ κεφαλῇ τὸ αἰσθητήριον, καὶ μετὰ πνευματώδους εἰσέρχεται ἀναθυμιάσεως, ὥστ' εἰς τὸν ἀναπνευστικὸν βαδίζοι ἂν τόπον. ὅτι μὲν οὖν οὐ συμβάλλεται εἰς τροφήν τὸ ὁσφραντόν, ἢ ὁσφραντόν, δῆλον· ὅτι μέντοι εἰς ὑγίειαν, καὶ ἐκ τῆς αἰσθήσεως καὶ ἐκ τῶν εἰρημένων φανερόν, ὥστε ὅπερ ὁ χυμὸς ἐν τῷ θρεπτικῷ καὶ πρὸς τὰ τρεφόμενα, τοῦτ' ἐστὶ πρὸς ὑγίειαν τὸ [445b] ὁσφραντόν. καθ' ἕκαστον μὲν οὖν αἰσθητήριον διωρίσθω τὸν τρόπον τοῦτον.

Ἀπορήσειε δ' ἂν τις, εἰ πᾶν σῶμα εἰς ἄπειρον διαιρεῖται, ἄρα καὶ τὰ παθήματα τὰ αἰσθητά, οἶον χρῶμα καὶ χυμὸς καὶ ὁσμὴ καὶ ψόφος, καὶ βαρὺ καὶ κοῦφον, καὶ θερμὸν καὶ ψυχρόν, καὶ σκληρὸν καὶ μαλακόν, ἢ ἀδύνατον. ποιητικὸν γάρ ἐστιν ἕκαστον αὐτῶν τῆς αἰσθήσεως (τῷ δύνασθαι γὰρ κινεῖν αὐτὴν λέγεται πάντα), ὥστ' ἀνάγκη, εἰ ἡ δύναμις, καὶ τὴν αἴσθησιν εἰς ἄπειρα διαιρεῖσθαι καὶ πᾶν εἶναι μέγεθος αἰσθητόν (ἀδύνατον γὰρ λευκὸν μὲν ὁρᾶν, μὴ ποσὸν δέ)· εἰ γὰρ μὴ οὕτως, ἐνδέχοιτ' ἂν εἶναι τι σῶμα μηδὲν ἔχον χρῶμα μηδὲ βάρος μηδ' ἄλλο τι τοιοῦτον πάθος, ὥστ' οὐδ' αἰσθητόν ὅλως· ταῦτα γὰρ τὰ αἰσθητά. τὸ ἄρ' αἰσθητόν ἔσται συγκεείμενον οὐκ ἐξ αἰσθητῶν. ἀλλ' ἀναγκαῖον· οὐ γὰρ δὴ ἐκ γε τῶν μαθηματικῶν. ἔτι τίτι κρινοῦμεν ταῦτα καὶ γνωσόμεθα; ἢ τῷ νῶ; ἀλλ' οὐ νοητά, οὐδὲ νοεῖ ὁ νοῦς τὰ ἐκτὸς μὴ μετ' αἰσθήσεως. ἅμα δ' εἰ ταῦτ' ἔχει οὕτως, ἔοικε μαρτυρεῖν τοῖς τὰ ἄτομα ποιοῦσι μεγέθει· οὕτω γὰρ ἂν λύοιτο ὁ λόγος. ἀλλ' ἀδύνατα· εἴρηται δὲ περὶ αὐτῶν ἐν τοῖς λόγοις τοῖς περὶ κινήσεως.

περὶ δὲ τῆς λύσεως αὐτῶν ἅμα δῆλον ἔσται καὶ διὰ τί πεπέρανται τὰ εἶδη καὶ χρώματος καὶ χυμοῦ καὶ φθόγγων καὶ τῶν ἄλλων αἰσθητῶν. ὧν μὲν γὰρ ἔστιν ἔσχατα, ἀνάγκη πεπεράνθαι τὰ ἐντός· τὰ δ' ἐναντία ἔσχατα, πᾶν δὲ τὸ

αἰσθητὸν ἔχει ἐναντίωσιν, οἷον ἐν χρώματι τὸ λευκὸν καὶ τὸ μέλαν, ἐν χυμῷ γλυκὺ καὶ πικρόν· καὶ ἐν τοῖς ἄλλοις δὴ πᾶσιν ἐστὶν ἔσχατα τὰ ἐναντία. τὸ μὲν οὖν συνεχὲς εἰς ἅπειρα τέμνεται ἄνισα, εἰς δ' ἴσα πεπερασμένα· τὸ δὲ μὴ καθ' αὐτὸ συνεχὲς εἰς πεπερασμένα εἶδη. ἐπεὶ οὖν τὰ μὲν πάθη ὡς εἶδη λεκτέον, ὑπάρχει δὲ συνέχεια αἰεὶ ἐν τούτοις, ληπτέον ὅτι τὸ δυνάμει καὶ τὸ ἐνεργείᾳ ἕτερον· καὶ διὰ τοῦτο τὸ μυριοστημόριον λανθάνει [446a] τῆς κέγχρου ὀρωμένης, καίτοι ἡ ὄψις ἐπελήλυθεν, καὶ ὁ ἐν τῇ διέσει φθόγγος λανθάνει, καίτοι συνεχοῦς ὄντος ἀκούει τοῦ μέλους παντός· τὸ δὲ διάστημα τὸ τοῦ μεταξὺ πρὸς τοὺς ἐσχάτους λανθάνει. ὁμοίως δὲ καὶ ἐν τοῖς ἄλλοις αἰσθητοῖς τὰ μικρὰ πάμπαν· δυνάμει γὰρ ὁρατά, ἐνεργείᾳ δ' οὐ, ὅταν μὴ χωρὶς ᾗ· καὶ γὰρ ἐνυπάρχει δυνάμει ἡ ποδιαία τῇ δίποδι, ἐνεργείᾳ δ' ἤδη ἀφαιρεθεῖσα. χωριζόμενα δ' αἰ τηλικοῦται ὑπεροχαὶ εὐλόγως μὲν ἂν καὶ διαλύοιντο εἰς τὰ περιέχοντα, ὥσπερ καὶ ἀκαριαῖος χυμὸς εἰς τὴν θάλατταν ἐγχυθεὶς. οὐ μὴν ἄλλ' ἐπειδὴ οὐδ' ἡ τῆς αἰσθήσεως ὑπεροχὴ καθ' αὐτὴν αἰσθητὴ οὐδὲ χωριστὴ (δυνάμει γὰρ ἐνυπάρχει ἐν τῇ ἀκριβεστέρᾳ ἢ ὑπεροχῇ), οὐδὲ τὸ τηλικοῦτον αἰσθητὸν χωριστὸν ἔσται ἐνεργείᾳ αἰσθάνεσθαι. ἄλλ' ὅμως ἔσται αἰσθητόν· δυνάμει τε γὰρ ἐστὶν ἤδη, καὶ ἐνεργείᾳ ἔσται προσγενόμενον. ὅτι μὲν οὖν ἕνια μεγέθη καὶ πάθη λανθάνει, καὶ διὰ τίν' αἰτίαν, καὶ πῶς αἰσθητὰ καὶ πῶς οὐ, εἴρηται. ὅταν δὲ δὴ ἐνυπάρχη τούτῳ τοσαῦτα ὥστε καὶ ἐνεργείᾳ αἰσθητὰ εἶναι, καὶ μὴ μόνον ὅτι ἐν τῷ ὅλῳ ἀλλὰ καὶ χωρὶς, πεπερασμένα ἀνάγκη εἶναι τὸν ἀριθμόν, καὶ χρώματα καὶ χυμοὺς καὶ φθόγγους.

ἀπορήσειε δ' ἂν τις, ἅρ' ἀφικνοῦνται ἢ τὰ αἰσθητὰ ἢ αἱ κινήσεις αἰ ἀπὸ τῶν αἰσθητῶν (ὅποτέρως ποτὲ γίνεταί ἢ αἰσθησις), ὅταν ἐνεργῶσιν, εἰς τὸ μέσον πρῶτον, οἷον ἢ τε ὁσμὴ φαίνεται ποιοῦσα καὶ ὁ ψόφος· πρότερον γὰρ ὁ ἐγγὺς αἰσθάνεται τῆς ὁσμῆς, καὶ ὁ ψόφος ὕστερον ἀφικνεῖται τῆς πληγῆς. ἅρ' οὖν οὕτω καὶ τὸ ὀρώμενον καὶ τὸ φῶς, καθάπερ καὶ Ἐμπεδοκλῆς φησιν ἀφικνεῖσθαι πρότερον τὸ ἀπὸ τοῦ ἡλίου φῶς εἰς τὸ μεταξὺ πρὶν πρὸς τὴν ὄψιν ἢ ἐπὶ τὴν γῆν; δόξειε δ' ἂν εὐλόγως τοῦτο συμβαίνειν· τὸ γὰρ κινούμενον κινεῖταιί ποθὲν ποι, ὥστ' ἀνάγκη εἶναί τινα καὶ χρόνον ἐν ᾧ κινεῖται ἐκ θατέρου πρὸς θάτερον· ὁ δὲ [446b] χρόνος πᾶς διαιρετός, ὥστε ἦν ὅτε οὐ πῶ ἐωρᾶτο ἄλλ' ἔτ' ἐφέρετο ἢ ἀκτὶς ἐν τῷ μεταξύ. καὶ εἰ «καὶ» ἅπαν ἅμα ἀκούει καὶ ἀκήκοε, καὶ ὅλως αἰσθάνεται καὶ ἥσθηται, καὶ μὴ ἐστὶ γένεσις αὐτῶν, ἀλλ' εἰσὶν ἄνευ τοῦ γίνεσθαι, ὅμως οὐδὲν ἦττον, ὥσπερ ὁ ψόφος ἤδη γεγεννημένης τῆς πληγῆς οὐ πῶ πρὸς τῇ ἀκοῇ - δηλοῖ δὲ τοῦτο καὶ ἡ τῶν γραμμάτων μετασχημάτισις, ὡς γιγνομένης τῆς φορᾶς ἐν τῷ μεταξύ· οὐ γὰρ τὸ λεχθὲν φαίνονται ἀκηκοότες διὰ τὸ μετασχηματίζεσθαι φερόμενον τὸν ἄερα - ἅρ' οὖν οὕτω καὶ τὸ χρῶμα καὶ τὸ φῶς; οὐ γὰρ δὴ τῷ πῶς ἔχειν τὸ

μὲν ὁρᾷ τὸ δ' ὁρᾶται, ὥσπερ ἴσα ἐστίν· οὐθὲν γὰρ ἂν ἔδει που ἐκάτερον εἶναι· τοῖς γὰρ ἴσοις γιγνομένοις οὐδὲν διαφέρει ἢ ἐγγὺς ἢ πόρρω ἀλλήλων εἶναι.

ἢ περὶ μὲν τὸν ψόφον καὶ τὴν ὁσμὴν τοῦτο συμβαίνειν εὐλογον· ὥσπερ γὰρ ὁ ἀήρ καὶ τὸ ὕδωρ, συνεχῇ μὲν, μεμέρισται δ' ἀμφοτέρων ἢ κίνησις. διὸ καὶ ἔστι μὲν ὡς τὸ αὐτὸ ἀκούει ὁ πρῶτος καὶ ὁ ὕστερος καὶ ὁσφραίνεται, ἔστι δ' ὡς οὐ. δοκεῖ δέ τισιν εἶναι ἀπορία καὶ περὶ τούτων· ἀδύνατον γὰρ φασί τινες ἄλλον ἄλλω τὸ αὐτὸ ἀκούειν καὶ ὁρᾶν καὶ ὁσφραίνεσθαι· οὐ γὰρ οἶόν τ' εἶναι πολλοὺς καὶ χωρὶς ὄντας «ἐν» ἀκούειν καὶ ὁσφραίνεσθαι· τὸ γὰρ ἐν χωρὶς ἂν αὐτὸ αὐτοῦ εἶναι. ἢ τοῦ μὲν κινήσαντος πρώτου, οἶον τῆς κώδωνος ἢ λιβανωτοῦ ἢ πυρός, τοῦ αὐτοῦ καὶ ἐνὸς ἀριθμῷ αἰσθάνονται πάντες, τοῦ δὲ δὴ ἰδίου ἑτέρου ἀριθμῷ, εἶδει δὲ τοῦ αὐτοῦ, διὸ ἅμα πολλοὶ ὁρῶσι καὶ ὁσμῶνται καὶ ἀκούουσιν; ἔστι δ' οὔτε σώματα ταῦτα, ἀλλὰ πάθος καὶ κινήσις τις (οὐ γὰρ ἂν τοῦτο συνέβαινεν), οὔτ' ἄνευ σώματος. περὶ δὲ τοῦ φωτὸς ἄλλος λόγος· τῷ ἐνεῖναι γάρ τι τὸ φῶς ἐστίν, ἀλλ' οὐ κινήσις τις. ὅλως δὲ οὐδὲ ὁμοίως ἐπὶ τε ἀλλοιωσεως ἔχει καὶ φορᾶς· αἱ μὲν γὰρ φοραὶ εὐλόγως εἰς τὸ μεταξὺ πρῶτον ἀφικνοῦνται (δοκεῖ δ' ὁ ψόφος εἶναι φερομένου [447a] τινὸς κίνησις), ὅσα δ' ἀλλοιοῦνται, οὐκέτι ὁμοίως· ἐνδέχεται γὰρ ἀθρόον ἀλλοιοῦσθαι, καὶ μὴ τὸ ἥμισυ πρότερον, οἶον τὸ ὕδωρ ἅμα πᾶν πήγνυσθαι. οὐ μὲν ἄλλ' ἂν ἢ πολὺν τὸ θερμαίνόμενον ἢ πηγνύμενον, τὸ ἐχόμενον ὑπὸ τοῦ ἐχομένου πάσχει, τὸ δὲ πρῶτον ὑπ' αὐτοῦ τοῦ ἀλλοιοῦντος μεταβάλλει καὶ ἀνάγκη ἅμα ἀλλοιοῦσθαι καὶ ἀθρόον. ἦν δ' ἂν καὶ τὸ γεύεσθαι ὥσπερ ἡ ὁσμὴ, εἰ ἐν ὑγρῷ ἦμεν καὶ πορρωτέρωθεν πρὶν θιγεῖν αὐτοῦ ἡσθανόμεθα. εὐλόγως δὴ ὧν ἐστὶ μεταξὺ τοῦ αἰσθητηρίου, οὐχ ἅμα πάντα πάσχει, πλὴν ἐπὶ τοῦ φωτὸς διὰ τὸ εἰρημένον, διὰ τὸ αὐτὸ δὲ καὶ ἐπὶ τοῦ ὁρᾶν· τὸ γὰρ φῶς ποιεῖ τὸ ὁρᾶν.

Ἔστι δ' ἀπορία καὶ ἄλλη τις τοιάδε περὶ τὰς αἰσθήσεις, πότερον ἐνδέχεται δεῖν ἅμα αἰσθάνεσθαι ἐν τῷ αὐτῷ καὶ ἀτόμῳ χρόνῳ, ἢ οὐ. εἰ δὴ ἀεὶ ἡ μείζων κίνησις τὴν ἐλάττω ἐκκρούει - διὸ ὑποφερομένων ὑπὸ τὰ ὅμματα οὐκ αἰσθάνονται, ἐὰν τύχῃσι σφόδρα τι ἐννοῦντες ἢ φοβούμενοι ἢ ἀκούοντες πολλὴν ψόφον - τοῦτο δὴ ὑποκείσθω, καὶ ὅτι ἐκάστου μᾶλλον ἔστιν αἰσθάνεσθαι ἀπλοῦ ὄντος ἢ κεκραμένου, οἶον οἴνου ἀκράτου ἢ κεκραμένου, καὶ μέλιτος, καὶ χρώας, καὶ τῆς νήτης μόνης ἢ ἐν τῇ διὰ πασῶν, διὰ τὸ ἀφανίζειν ἄλληλα. τοῦτο δὲ ποιεῖ ἐξ ὧν ἓν τι γίνεται. εἰ δὴ ἡ μείζων τὴν ἐλάττω κίνησιν ἐκκρούει, ἀνάγκη, ἂν ἅμα ὦσι, καὶ αὐτὴν ἥττον αἰσθητὴν εἶναι ἢ εἰ μόνη ἦν· ἀφαιρεῖται γάρ τι ἡ ἐλάττω μειγνυμένη, εἴπερ ἅπαντα τὰ ἀπλᾶ μᾶλλον αἰσθητά ἐστίν. ἐὰν ἄρα ἴσαι ὧσιν ἕτεραι οὔσαι, οὐδετέρας

ἔσται αἴσθησις· ἀφανιεῖ γὰρ ἡ ἑτέρα ὁμοίως τὴν ἑτέραν, ἀπλῆς δ' οὐκ ἔστιν αἰσθάνεσθαι. ὥστε ἡ οὐδεμία ἔσται αἴσθησις, ἢ ἄλλη ἐξ ἀμφοῖν· ὅπερ καὶ γίγνεσθαι δοκεῖ ἐπὶ τῶν κεραννυμένων ἐν ᾧ ἂν μειχθῶσιν.

ἐπεὶ οὖν ἐκ μὲν ἐνίων γίγνεται τι, ἐκ δ' ἐνίων οὐ γίγνεται, τοιαῦτα δὲ τὰ ὑφ' ἑτέραν αἴσθησιν (μείγνυνται γὰρ [447b] ὧν τὰ ἔσχατα ἐναντία· οὐκ ἔστι δ' ἐκ λευκοῦ καὶ ὀξέος ἐν γίγνεσθαι ἄλλ' ἢ κατὰ συμβεβηκός, ἄλλ' οὐχ ὡς ἐξ ὀξέος καὶ βαρέος συμφωνία), οὐκ ἄρα οὐδ' αἰσθάνεσθαι ἐνδέχεται αὐτῶν ἅμα. ἴσαι μὲν γὰρ οὔσαι αἱ κινήσεις ἀφανιοῦσιν ἀλλήλας, ἐπεὶ μία οὐ γίγνεται ἐξ αὐτῶν· ἂν δ' ἄνισοι, ἡ κρείττων αἴσθησιν ἐμποιήσῃ. ἔτι μᾶλλον ἅμα δυοῖν αἰσθοῖτ' ἂν ἡ ψυχὴ τῇ μιᾷ αἰσθήσῃ ὧν μία αἴσθησις, οἷον ὀξέος καὶ βαρέος (μᾶλλον γὰρ ἅμα ἡ κινήσεις τῇ μιᾷς αὐτῇ ἐαυτῇ ἢ τοῖν δυοῖν, οἷον ὄψεως καὶ ἀκοῆς), τῇ μιᾷ δὲ ἅμα δυοῖν οὐκ ἔστιν αἰσθάνεσθαι ἂν μὴ μειχθῇ (τὸ γὰρ μείγμα ἐν βούλεται εἶναι, τοῦ δ' ἐνὸς μία αἴσθησις, ἡ δὲ μία ἅμα αὐτῇ), ὥστ' ἐξ ἀνάγκης τῶν μεμειγμένων ἅμα αἰσθάνεται, ὅτι μιᾷ αἰσθήσῃ κατ' ἐνέργειαν αἰσθάνεται· ἐνὸς μὲν γὰρ ἀριθμῷ ἢ κατ' ἐνέργειαν μία, εἶδει δὲ ἡ κατὰ δύναμιν μία· καὶ εἰ μία τοίνυν ἡ αἴσθησις ἢ κατ' ἐνέργειαν, ἐν ἐκείνῃ ἐρεῖ. μεμείχθαι ἄρα ἀνάγκη αὐτά. ὅταν ἄρα μὴ ἢ μεμειγμένα, δύο ἔσσονται αἰσθήσεις αἱ κατ' ἐνέργειαν. ἀλλὰ κατὰ μίαν δύναμιν καὶ ἄτομον χρόνον μίαν ἀνάγκη εἶναι τὴν ἐνέργειαν· μιᾷ γὰρ ἢ εἰσάπαξ μία χρῆσις καὶ κίνησις, μία δὲ ἡ δύναμις, οὐκ ἄρα ἐνδέχεται δυοῖν ἅμα αἰσθάνεσθαι τῇ μιᾷ αἰσθήσει.

ἀλλὰ μὴν εἰ τὰ ὑπὸ τὴν αὐτὴν αἴσθησιν ἅμα ἀδύνατον, ἐὰν ἢ δύο, δῆλον ὅτι ἦττον ἔτι τὰ κατὰ δύο αἰσθήσεις ἐνδέχεται ἅμα αἰσθάνεσθαι, οἷον λευκὸν καὶ γλυκύ. φαίνεται γὰρ τὸ μὲν τῷ ἀριθμῷ ἐν ἡ ψυχὴ οὐδενὶ ἑτέρῳ λέγειν ἄλλ' ἢ τῷ ἅμα, τὸ δὲ τῷ εἶδει ἐν τῇ κρινούσῃ αἰσθήσει καὶ τῷ τρόπῳ. λέγω δὲ τοῦτο, ὅτι ἴσως τὸ λευκὸν καὶ τὸ μέλαν, ἕτερον τῷ εἶδει ὄν, ἢ αὐτὴ κρίνει, καὶ τὸ γλυκὺ καὶ τὸ πικρὸν ἢ αὐτὴ μὲν ἐαυτῇ, ἐκείνης δ' ἄλλη, ἀλλ' ἑτέρως ἐκάτερον τῶν ἐναντίων, ὡς δ' αὐτῶς ἐαυταῖς τὰ σύστοιχα, οἷον ὡς ἡ γεῦσις τὸ γλυκύ, οὕτως ἡ ὄψις τὸ λευκόν, [448a] ὡς δ' αὕτη τὸ μέλαν, οὕτως ἐκείνη τὸ πικρὸν. ἔτι εἰ αἱ τῶν ἐναντίων κινήσεις ἐναντίαι, ἅμα δὲ τὰ ἐναντία ἐν τῷ αὐτῷ καὶ ἀτόμῳ οὐκ ἐνδέχεται ὑπάρχειν, ὑπὸ δὲ τὴν αἴσθησιν τὴν μίαν ἐναντία ἐστίν, οἷον γλυκὺ πικρῷ, τούτων οὐκ ἂν ἐνδέχοιτο αἰσθάνεσθαι ἅμα. ὁμοίως δὲ δῆλον ὅτι οὐδὲ τὰ μὴ ἐναντία· τὰ μὲν γὰρ τοῦ λευκοῦ τὰ δὲ τοῦ μέλανός ἐστιν, καὶ ἐν τοῖς ἄλλοις ὁμοίως, οἷον τῶν χυμῶν οἱ μὲν τοῦ γλυκέος οἱ δὲ τοῦ πικροῦ. οὐδὲ τὰ μεμειγμένα ἅμα (λόγοι γὰρ εἰσιν ἀντικειμένων, οἷον τὸ διὰ πασῶν καὶ τὸ διὰ πέντε), ἐὰν μὴ ὡς ἐν αἰσθάνηται. οὕτως δ' εἰς ὁ λόγος ὁ τῶν ἄκρων γίγνεται· ἄλλως δ' οὔ, ἔσται

γὰρ ἅμα ὁ μὲν πολλοῦ πρὸς ὀλίγον ἢ περιττοῦ πρὸς ἄρτιον, ὁ δ' ὀλίγου πρὸς πολὺ ἢ ἀρτίου πρὸς περιττόν. εἰ οὖν πλεῖον ἔτι ἀπέχει ἀλλήλων καὶ διαφέρει τὰ συστοίχως μὲν λεγόμενα ἐν ἄλλῳ δὲ γένει τῶν ἐν τῷ αὐτῷ γένει (λέγω δ' οἷον τὸ γλυκὺ καὶ τὸ λευκὸν καλῶ σύστοιχα, γένει δ' ἕτερα, τὸ γλυκὺ δὲ τοῦ λευκοῦ πλεῖον ἔτι τῷ εἶδει διαφέρει ἢ τὸ μέλαν), ἔτι ἂν ἦττον ἅμα ἐνδέχοιτο αὐτὰ αἰσθάνεσθαι ἢ τὰ τῷ γένει ταῦτά. ὥστ' εἰ μὴ ταῦτα, οὐδ' ἐκεῖνα.

Ὅ δὲ λέγουσί τινες τῶν περὶ τὰς συμφωνίας, ὅτι οὐχ ἅμα μὲν ἀφικνοῦνται οἱ ψόφοι, φαίνονται δέ, καὶ λανθάνει, ὅταν ὁ χρόνος ἢ ἀναίσθητος, πότερον ὀρθῶς λέγεται ἢ οὐ; τάχα γὰρ ἂν φαίη τις καὶ νῦν παρὰ τοῦτο δοκεῖν ἅμα ὀρᾶν καὶ ἀκούειν, ὅτι οἱ μεταξὺ χρόνοι λανθάνουσιν. ἢ τοῦτ' οὐκ ἀληθές, οὐδ' ἐνδέχεται χρόνον εἶναι ἀναίσθητον οὐδένα οὐδὲ λανθάνειν, ἀλλὰ παντὸς ἐνδέχεται αἰσθάνεσθαι; εἰ γάρ, ὅτε αὐτὸς αὐτοῦ τις αἰσθάνεται ἢ ἄλλου ἐν συνεχεῖ χρόνῳ, μὴ ἐνδέχεται τότε λανθάνειν ὅτι ἔστιν, ἔστι δέ τις ἐν τῷ συνεχεῖ καὶ τοσοῦτος ὅσος ὅλως ἀναίσθητός ἐστι, δῆλον ὅτι τότε λανθάνοι ἂν εἰ ἔστιν αὐτὸς αὐτόν, καὶ εἰ ὀρᾷ καὶ αἰσθάνεται [καὶ εἰ αἰσθάνεται]. ἔτι οὐκ ἂν εἴη [448b] οὔτε χρόνος οὔτε πρᾶγμα οὐδὲν ὃ αἰσθάνεται ἢ ἐν ᾧ, εἰ μὴ οὕτως, ὅτι ἐν τούτου τινὲ ἢ ὅτι τούτου τι ὀρᾷ, εἴπερ ἔστι τι μέγεθος καὶ χρόνου καὶ πράγματος ἀναίσθητον ὅλως διὰ μικρότητα· εἰ γὰρ τὴν ὅλην ὀρᾷ, καὶ αἰσθάνεται τὸν αὐτὸν συνεχῶς χρόνον, οὕτω, τῷ ἐν τούτου τινί, ἀφηρήσθω τὸ ΓΒ, ἐν ᾧ οὐκ ἦσθάνετο. οὐκοῦν ἐν ταύτης τινί ἢ ταύτης τι, ὥσπερ τὴν γῆν ὀρᾷ ὅλην, ὅτι τοδὶ αὐτῆς, καὶ ἐν τῷ ἐνιαυτῷ βαδίζει, ὅτι ἐν τωδὶ τῷ μέρει αὐτοῦ. ἀλλὰ μὴν ἐν τῷ ΓΒ οὐδὲν αἰσθάνεται. τῷ ἄρα ἐν τούτου τινὲ τοῦ ΑΒ αἰσθάνεσθαι λέγεται τοῦ ὅλου αἰσθάνεσθαι καὶ τὴν ὅλην. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῆς ΑΓ· ἀεὶ γὰρ ἐν τινὲ καὶ τινός, ὅλου δ' οὐκ ἔστιν αἰσθάνεσθαι. ἅπαντα μὲν οὖν αἰσθητά ἐστίν, ἀλλ' οὐ φαίνεται ὅσα ἐστίν· τοῦ γὰρ ἡλίου τὸ μέγεθος ὀρᾷ καὶ τὸ τετράπηχυ πόρρωθεν, ἀλλ' οὐ φαίνεται ὅσον, ἀλλ' ἐνίοτε ἀδιαίρετον, <ὃ> ὀρᾷ δ' οὐκ ἀδιαίρετον. ἢ δ' αἰτία εἴρηται ἐν τοῖς ἔμπροσθεν περὶ τούτου.

ὅτι μὲν οὖν οὐθεὶς ἐστὶ χρόνος ἀναίσθητος, ἐκ τούτων φανερόν· περὶ δὲ τῆς πρότερον λεχθείσης ἀπορίας σκεπτέον, πότερον ἐνδέχεται ἅμα πλειόνων αἰσθάνεσθαι ἢ οὐκ ἐνδέχεται. τὸ δ' ἅμα λέγω ἐν ἐνὶ καὶ ἀτόμῳ χρόνῳ πρὸς ἄλληλα. πρῶτον μὲν οὖν ἄρ' ὧδ' ἐνδέχεται, ἅμα μὲν, ἐτέρῳ δὲ τῆς ψυχῆς αἰσθάνεσθαι, κἂν [οὐ τῷ ἀτόμῳ] οὕτως ἀτόμῳ ὥς παντὶ ὄντι συνεχεῖ; ἢ [ὅτι] πρῶτον μὲν κατὰ τὴν μίαν αἴσθησιν, οἷον λέγω ὄψιν, εἰ ἔσται ἄλλῳ αἰσθανομένη ἄλλου καὶ ἄλλου χρώματος, πλείω γε μέρη ἔξει εἶδει ταῦτά; καὶ γὰρ ἃ αἰσθάνεται ἐν τῷ αὐτῷ γένει ἐστίν. εἰ δέ, [ὅτι] ὥς ὄμματα δύο, φαίη τις οὐδὲν κωλύειν οὕτω καὶ ἐν τῇ ψυχῇ, [ὅτι] ἴσως ἐκ μὲν τούτων ἐν τι γίγνεται



καὶ μία ἢ ἐνέργεια αὐτῶν· ἐκεῖ δέ, εἰ μὲν ἐν τὸ ἐξ ἀμφοῖν, ἐκεῖνο τὸ αἰσθανόμενον ἔσται, εἰ δὲ χωρὶς, οὐχ ὁμοίως ἔξει. ἔτι αἰσθήσεις αἱ αὐταὶ πλείους ἔσονται, ὥσπερ εἴ τις ἐπιστήμας [449a] διαφόρους φαίη· οὔτε γὰρ ἡ ἐνέργεια ἄνευ τῆς κατ' αὐτὴν ἔσται δυνάμεως, οὔτ' ἄνευ ταύτης αἰσθησις ἔσται.

εἰ δὲ τούτων ἐν ἐνὶ καὶ ἀτόμῳ <μὴ> αἰσθάνεται, δῆλον ὅτι καὶ τῶν ἄλλων· μᾶλλον γὰρ ἐνεδέχεται τούτων ἅμα πλειόνων ἢ τῶν τῷ γένει ἐτέρων. εἰ δὲ δὴ ἄλλῳ μὲν γλυκέος ἄλλῳ δὲ λευκοῦ αἰσθάνεται ἢ ψυχῇ μέρει, ἦτοι τὸ ἐκ τούτων ἐν τί ἐστὶν ἢ οὐχ ἔν. ἀλλ' ἀνάγκη ἐν· ἐν γάρ τι τὸ αἰσθητικὸν ἔστι μέρος. τίνος οὖν ἐκεῖνο ἐνός; οὐδὲν γὰρ ἐκ τούτων ἐν. ἀνάγκη ἄρα ἐν τι εἶναι τῆς ψυχῆς ὧς ἅπαντα αἰσθάνεται, καθάπερ εἴρηται πρότερον, ἄλλο δὲ γένος δι' ἄλλου. ἄρ' οὖν ἢ μὲν ἀδιαίρετόν ἐστι κατ' ἐνέργειαν, ἐν τί ἐστὶ τὸ αἰσθητικὸν γλυκέος καὶ λευκοῦ, ὅταν δὲ διαιρετὸν γένηται κατ' ἐνέργειαν, ἕτερον; ἢ ὥσπερ ἐπὶ τῶν πραγμάτων αὐτῶν ἐνδέχεται, οὕτως καὶ ἐπὶ τῆς ψυχῆς; τὸ γὰρ αὐτὸ καὶ ἐν ἀριθμῷ λευκὸν καὶ γλυκὺ ἐστὶ, καὶ ἄλλα πολλὰ· εἰ γὰρ μὴ χωριστὰ τὰ πάθη ἀλλήλων, ἀλλὰ τὸ εἶναι ἕτερον ἐκάστω. ὁμοίως τοίνυν θετέον καὶ ἐπὶ τῆς ψυχῆς τὸ αὐτὸ καὶ ἐν εἶναι ἀριθμῷ τὸ αἰσθητικὸν πάντων, τὸ μέντοι εἶναι ἕτερον καὶ ἕτερον τῶν μὲν γένει τῶν δὲ εἶδει. ὥστε καὶ αἰσθάνοιτ' ἂν ἅμα τῷ αὐτῷ καὶ ἐνί, λόγῳ δ' οὐ τῷ αὐτῷ.

ὅτι δὲ τὸ αἰσθητὸν πᾶν ἐστὶ μέγεθος καὶ οὐκ ἔστιν ἀδιαίρετον αἰσθητόν, δῆλον. ἔστι γὰρ ὅθεν μὲν οὐκ ἂν ὀφθεῖν ἄπειρον τὸ ἀπόστημα, ὅθεν δὲ ὁρᾶται, πεπερασμένον· ὁμοίως δὲ καὶ τὸ ὁσφραντὸν καὶ ἀκουστὸν καὶ ὅσων μὴ αὐτῶν ἀπτόμενοι αἰσθάνονται. ἔστι δὴ τι ἔσχατον τοῦ ἀποστήματος ὅθεν οὐχ ὁρᾶται, καὶ πρῶτον ὅθεν ὁρᾶται. τοῦτο δὴ ἀνάγκη ἀδιαίρετον εἶναι, οὐ ἐν μὲν τῷ ἐπέκεινα οὐκ ἐνδέχεται αἰσθάνεσθαι ὄντος, ἐν δὲ τῷ ἐπὶ τάδε ἀνάγκη αἰσθάνεσθαι. εἰ δὴ τι ἔστιν ἀδιαίρετον αἰσθητόν, ὅταν τεθῇ ἐπὶ τῷ ἐσχάτῳ ὅθεν ἐστὶν ὑστάτον μὲν οὐκ αἰσθητὸν πρῶτον δ' αἰσθητόν, ἅμα συμβήσεται ὁρατὸν εἶναι καὶ ὁράτον· τοῦτο δ' ἀδύνατον.

[449b] περὶ μὲν οὖν τῶν αἰσθητηρίων καὶ τῶν αἰσθητῶν τίνα τρόπον ἔχει καὶ κοινῇ καὶ καθ' ἕκαστον αἰσθητήριον εἴρηται· τῶν δὲ λοιπῶν πρῶτον σκεπτέον περὶ μνήμης καὶ τοῦ μνημονεύειν.

## Περὶ Μνήμης καὶ Αναμνησεως (449b) On Memory



[449b] Περὶ μνήμης καὶ τοῦ μνημονεύειν λεκτέον τί ἐστὶ καὶ διὰ τίν' αἰτίαν γίνεταί καὶ τίνι τῶν τῆς ψυχῆς μορίων συμβαίνει τοῦτο τὸ πάθος καὶ τὸ ἀναμνησκέσθαι· οὐ γὰρ οἱ αὐτοὶ εἰσι μνημονικοὶ καὶ ἀναμνηστικοί, ἀλλ' ὥς ἐπὶ τὸ πολὺ μνημονικώτεροι μὲν οἱ βραδεῖς, ἀναμνηστικώτεροι δὲ οἱ ταχεῖς καὶ εὐμαθεῖς. πρῶτον μὲν οὖν σκεπτέον ποῖά ἐστι τὰ μνημονευτά· πολλάκις γὰρ ἐξαπατᾷ τοῦτο. οὔτε γὰρ τὸ μέλλον ἐνδέχεται μνημονεύειν, ἀλλ' ἔστι δοξαστὸν καὶ ἐλπιστόν (εἴη δ' ἂν καὶ ἐπιστήμη τις ἐλπιστική, καθάπερ τινὲς φασὶ τὴν μαντικήν), οὔτε τοῦ παρόντος, ἀλλ' αἴσθησις· ταύτη γὰρ οὔτε τὸ μέλλον οὔτε τὸ γενόμενον γνωρίζομεν, ἀλλὰ τὸ παρὸν μόνον. ἡ δὲ μνήμη τοῦ γενομένου· τὸ δὲ παρὸν ὅτε πάρεστιν, οἷον τοδὶ τὸ λευκὸν ὅτε ὀρᾷ, οὐδεὶς ἂν φαίη μνημονεύειν, οὐδὲ τὸ θεωρούμενον, ὅτε θεωρῶν τυγχάνει καὶ νοῶν, ἀλλὰ τὸ μὲν αἰσθάνεσθαι φησι, τὸ δ' ἐπίστασθαι μόνον· ὅταν δ' ἄνευ τῶν ἔργων σχῇ τὴν ἐπιστήμην καὶ τὴν αἴσθησιν, οὕτω μέμνηται [τὰς τοῦ τριγώνου ὅτι δύο ὀρθαῖς ἴσαι], τὸ μὲν ὅτι ἔμαθεν ἢ ἐθεώρησεν, τὸ δὲ ὅτι ἤκουσεν ἢ εἶδεν ἢ τι τοιοῦτον· αἰεὶ γὰρ ὅταν ἐνεργῇ κατὰ τὸ μνημονεύειν, οὕτως ἐν τῇ ψυχῇ λέγει, ὅτι πρότερον τοῦτο ἤκουσεν ἢ ἤσθετο ἢ ἐνόησεν. ἔστι μὲν οὖν ἡ μνήμη οὔτε αἴσθησις οὔτε ὑπόληψις, ἀλλὰ τούτων τινὸς ἕξις ἢ πάθος, ὅταν γένηται χρόνος. τοῦ δὲ νῦν ἐν τῷ νῦν οὐκ ἔστι μνήμη, καθάπερ εἴρηται [καὶ πρότερον], ἀλλὰ τοῦ μὲν παρόντος αἴσθησις, τοῦ δὲ μέλλοντος ἐλπίς, τοῦ δὲ γενομένου μνήμη· διὸ μετὰ χρόνου πᾶσα μνήμη· ὥσθ' ὅσα χρόνου αἰσθάνεται, ταῦτα μόνα τῶν ζώων μνημονεύει, καὶ τούτῳ ὧ αἰσθάνεται.

ἐπεὶ δὲ περὶ φαντασίας εἴρηται πρότερον ἐν τοῖς περὶ ψυχῆς, καὶ νοεῖν οὐκ ἔστιν ἄνευ φαντάσματος [450a] - συμβαίνει γὰρ τὸ αὐτὸ πάθος ἐν τῷ νοεῖν ὅπερ καὶ ἐν τῷ διαγράφειν· ἐκεῖ τε γὰρ οὐθὲν προσχρώμενοι τῷ τὸ ποσὸν ὠρισμένον εἶναι τοῦ τριγώνου, ὅμως γράφομεν ὠρισμένον κατὰ τὸ ποσόν, καὶ ὁ νοῶν ὡσαύτως, κἂν μὴ ποσὸν νοῇ, τίθεται πρὸ ὁμμάτων ποσόν, νοεῖ δ' οὐχ ἢ ποσόν· ἂν δ' ἢ φύσις ἢ τῶν ποσῶν, ἀορίστων δέ, τίθεται μὲν ποσὸν ὠρισμένον, νοεῖ δ' ἢ ποσὸν μόνον - διὰ τίνα μὲν οὖν αἰτίαν οὐκ ἐνδέχεται νοεῖν οὐδὲν ἄνευ συνεχοῦς, οὐδ' ἄνευ χρόνου τὰ μὴ ἐν χρόνῳ ὄντα, ἄλλος λόγος· μέγεθος δ' ἀναγκαῖον γνωρίζειν καὶ κίνησιν ὧ καὶ χρόνον· [καὶ τὸ φάντασμα τῆς κοινῆς αἰσθήσεως πάθος ἐστίν] ὥστε φανερόν ὅτι τῷ πρώτῳ αἰσθητικῷ τούτων ἡ γνῶσις ἐστίν· ἡ δὲ μνήμη, καὶ ἡ τῶν νοητῶν, οὐκ ἄνευ φαντάσματός ἐστιν, «καὶ τὸ φάντασμα τῆς κοινῆς αἰσθήσεως πάθος ἐστίν»· ὥστε τοῦ νοῦ μὲν κατὰ συμβεβηκὸς ἂν εἴη, καθ' αὐτὸ δὲ τοῦ πρώτου αἰσθητικοῦ. διὸ καὶ ἑτέροις τισὶν ὑπάρχει τῶν ζώων, καὶ οὐ μόνον ἀνθρώποις καὶ τοῖς ἔχουσι δόξαν ἢ φρόνησιν. εἰ δὲ τῶν νοητικῶν τι μορίων ἦν, οὐκ ἂν ὑπῆρχε πολλοῖς τῶν ἄλλων ζώων, ἴσως δ' οὐδενὶ τῶν ἀνοήτων, ἐπεὶ οὐδὲ

νῦν πᾶσι διὰ τὸ μὴ πάντα χρόνου αἰσθησιν ἔχειν· ἀεὶ γὰρ ὅταν ἐνεργῇ τῇ μνήμῃ, καθάπερ καὶ πρότερον εἵπομεν, ὅτι εἶδε τοῦτο ἢ ἤκουσεν ἢ ἔμαθε, προσαισθάνεται ὅτι πρότερον· τὸ δὲ πρότερον καὶ ὕστερον ἐν χρόνῳ ἐστίν. τίνας μὲν οὖν τῶν τῆς ψυχῆς ἐστὶ μνήμη, φανερόν, ὅτι οὐπὲρ καὶ ἡ φαντασία· καὶ ἐστὶ μνημονευτὰ καθ' αὐτὰ μὲν ὧν ἐστὶ φαντασία, κατὰ συμβεβηκὸς δὲ ὅσα μὴ ἄνευ φαντασίας.

ἀπορήσειε δ' ἂν τις πῶς ποτε τοῦ μὲν πάθους παρόντος τοῦ δὲ πράγματος ἀπόντος μνημονεύεται τὸ μὴ παρόν. δῆλον γὰρ ὅτι δεῖ νοῆσαι τοιοῦτον τὸ γινόμενον διὰ τῆς αἰσθήσεως ἐν τῇ ψυχῇ καὶ τῷ μορίῳ τοῦ σώματος τῷ ἔχοντι αὐτήν - οἷον ζωγράφημα τι [τὸ πάθος] οὗ φαμεν τὴν ἑξὶν μνήμην εἶναι· ἢ γὰρ γιγνομένη κίνησις ἐνσημαίνεται οἷον τύπον τινὰ τοῦ αἰσθήματος, καθάπερ οἱ σφραγιζόμενοι τοῖς δακτυλίοις. διὸ καὶ τοῖς [450b] μὲν ἐν κινήσει πολλῇ διὰ πάθος ἢ δι' ἡλικίαν οὓσιν οὐ γίνεται μνήμη, καθάπερ ἂν εἰς ὕδωρ ῥέον ἐμπιπτούσης τῆς κινήσεως καὶ τῆς σφραγίδος· τοῖς δὲ διὰ τὸ ψήχεσθαι, καθάπερ τὰ παλαιὰ τῶν οἰκοδομημάτων, καὶ διὰ σκληρότητα τοῦ δεχομένου τὸ πάθος οὐκ ἐγγίγνεται ὁ τύπος. διόπερ οἱ τε σφόδρα νέοι καὶ οἱ γέροντες ἀμνήμονες εἰσιν· ῥέουσι γὰρ οἱ μὲν διὰ τὴν αὔξησιν, οἱ δὲ διὰ τὴν φθίσιν. ὁμοίως δὲ καὶ οἱ λίαν ταχεῖς καὶ οἱ λίαν βραδεῖς οὐδέτεροι φαίνονται μνήμονες· οἱ μὲν γὰρ εἰσιν ὑγρότεροι τοῦ δέοντος, οἱ δὲ σκληρότεροι· τοῖς μὲν οὖν οὐ μένει τὸ φάντασμα ἐν τῇ ψυχῇ, τῶν δ' οὐχ ἄπτεται.

ἄλλ' εἰ δὴ τοιοῦτόν ἐστι τὸ συμβαῖνον περὶ τὴν μνήμην, πότερον τοῦτο μνημονεύει τὸ πάθος, ἢ ἐκεῖνο ἀφ' οὗ ἐγένετο; εἰ μὲν γὰρ τοῦτο, τῶν ἀπόντων οὐδὲν ἂν μνημονεύοιμεν· εἰ δ' ἐκεῖνο, πῶς αἰσθανόμενοι τοῦτο μνημονεύομεν οὐ μὴ αἰσθανόμεθα, τὸ ἀπόν; εἴ τ' ἐστὶν ὅμοιον ὥσπερ τύπος ἢ γραφὴ ἐν ἡμῖν, ἢ τούτου αἰσθησις διὰ τί ἂν εἴη μνήμη ἐτέρου, ἄλλ' οὐκ αὐτοῦ τούτου; ὁ γὰρ ἐνεργῶν τῇ μνήμῃ θεωρεῖ τὸ πάθος τοῦτο καὶ αἰσθάνεται τούτου. πῶς οὖν τὸ μὴ παρὸν μνημονεύσει; εἴη γὰρ ἂν καὶ ὁρᾶν τὸ μὴ παρὸν καὶ ἀκούειν. ἢ ἔστιν ὡς ἐνδέχεται καὶ συμβαίνειν τοῦτο; οἷον γὰρ τὸ ἐν πίνακι γεγραμμένον ζῶον καὶ ζῶόν ἐστι καὶ εἰκὼν, καὶ τὸ αὐτὸ καὶ ἐν τοῦτ' ἐστὶν ἄμφω, τὸ μέντοι εἶναι οὐ ταύτὸν ἀμφοῖν, καὶ ἔστι θεωρεῖν καὶ ὡς ζῶον καὶ ὡς εἰκόνα, οὕτω καὶ τὸ ἐν ἡμῖν φάντασμα δεῖ ὑπολαβεῖν καὶ αὐτό τι καθ' αὐτὸ εἶναι καὶ ἄλλου [φάντασμα]. ἢ μὲν οὖν καθ' αὐτό, θεώρημα ἢ φάντασμά ἐστίν, ἢ δ' ἄλλου, οἷον εἰκὼν καὶ μνημόνευμα. ὥστε καὶ ὅταν ἐνεργῇ ἢ κίνησις αὐτοῦ, ἂν μὲν ἢ καθ' αὐτό ἐστὶ, ταύτῃ αἰσθάνηται ἢ ψυχὴ αὐτοῦ, οἷον νόημά τι ἢ φάντασμα φαίνεται ἐπελθεῖν· ἂν δ' ἢ ἄλλου καὶ ὥσπερ ἐν τῇ γραφῇ ὡς εἰκόνα θεωρεῖ καί, μὴ ἑωρακῶς τὸν Κορίσκον, ὡς Κορίσκου, ἐνταῦθά τε ἄλλο τὸ πάθος τῆς θεωρίας ταύτης καὶ ὅταν ὡς ζῶον

γεγραμμένον [451a] θεωρῇ, ἔν τε τῇ ψυχῇ τὸ μὲν γίνεται ὥσπερ νόημα μόνον, τὸ δ' ὡς ἐκεῖ ὅτι εἰκὼν, μνημόνευμα. καὶ διὰ τοῦτο ἐνίοτ' οὐκ ἴσμεν, ἐγγινομένων ἡμῖν ἐν τῇ ψυχῇ τοιούτων κινήσεων ἀπὸ τοῦ αἰσθῆσθαι πρότερον, εἰ κατὰ τὸ ἡσθῆσθαι συμβαίνει, καὶ εἰ ἔστι μνήμη ἢ οὐ, διστάζομεν· ὅτε δὲ συμβαίνει ἐννοῆσαι καὶ ἀναμνησθῆναι ὅτι ἠκούσαμεν τι πρότερον ἢ εἶδομεν. τοῦτο δὲ συμβαίνει, ὅταν θεωρῶν ὡς αὐτὸ μεταβάλλῃ καὶ θεωρῇ ὡς ἄλλου.

γίνεται δὲ καὶ τὸναντίον, οἷον συνέβη Ἀντιφέροντι τῷ Ὠρεῖτῃ καὶ ἄλλοις ἐξισταμένοις· τὰ γὰρ φαντάσματα ἔλεγον ὡς γενόμενα καὶ ὡς μνημονεύοντες. τοῦτο δὲ γίνεται ὅταν τις τὴν μὴ εἰκόνα ὡς εἰκόνα θεωρῇ. αἱ δὲ μελέται τὴν μνήμην σώζουσι τῷ ἐπαναμιμνήσκῃ· τοῦτο δ' ἐστὶν οὐδὲν ἕτερον ἢ τὸ θεωρεῖν πολλάκις ὡς εἰκόνα καὶ μὴ ὡς καθ' αὐτό. τί μὲν οὖν ἐστὶ μνήμη καὶ τὸ μνημονεύειν, εἴρηται, ὅτι φαντάσματος, ὡς εἰκόνοιο οὐ φάντασμα, ἕξις, καὶ τίνος μορίου τῶν ἐν ἡμῖν, ὅτι τοῦ πρώτου αἰσθητικοῦ καὶ ὡ χρόνου αἰσθανόμεθα.

Περὶ δὲ τοῦ ἀναμιμνήσκεσθαι λοιπὸν εἰπεῖν. πρῶτον μὲν οὖν ὅσα ἐν τοῖς ἐπιχειρηματικοῖς λόγοις ἐστὶν ἀληθῆ, δεῖ τιθέναι ὡς ὑπάρχοντα. οὔτε γὰρ μνήμης ἐστὶν ἀνάληψις ἢ ἀνάμνησις οὔτε λῆψις· ὅταν γὰρ τὸ πρῶτον μάθῃ ἢ πάθῃ, οὔτ' ἀναλαμβάνει μνήμην οὐδεμίαν (οὐδεμία γὰρ προέγονεν) οὔτ' ἐξ ἀρχῆς λαμβάνει· ὅταν γὰρ ἐγγένηται ἢ ἕξις ἢ τὸ πάθος, τότε μνήμη ἐστίν, ὥστε μετὰ τοῦ πάθους ἐγγινομένου οὐκ ἐγγίνεται. ἔτι δ' ὅτε τὸ πρῶτον ἐγγέγονε τῷ ατόμῳ καὶ ἐσχάτῳ, τὸ μὲν πάθος ἐνυπάρχει ἤδη τῷ παθόντι καὶ ἢ ἐπιστήμη, εἰ δεῖ καλεῖν ἐπιστήμην τὴν ἕξιν ἢ τὸ πάθος (οὐθὲν δὲ κωλύει κατὰ συμβεβηκὸς καὶ μνημονεύειν ἕνια ὧν ἐπιστάμεθα)· τὸ δὲ μνημονεύειν καθ' αὐτὸ οὐχ ὑπάρχει πρὶν χρονισθῆναι· μνημονεύει γὰρ νῦν ὃ εἶδεν ἢ ἔπαθε πρότερον, οὐχ ὃ νῦν ἔπαθε, νῦν μνημονεύει. ἔτι δὲ φανερόν [451b] ὅτι μνημονεύειν ἐστὶ μὴ νῦν ἀναμνησθέντα, ἀλλ' ἐξ ἀρχῆς αἰσθόμενον ἢ παθόντα· ἀλλ' ὅταν ἀναλαμβάνῃ ἢν πρότερον εἶχεν ἐπιστήμην ἢ αἰσθησιν ἢ οὐ ποτε τὴν ἕξιν ἐλέγομεν μνήμην, τοῦτ' ἐστὶ καὶ τότε τὸ ἀναμιμνήσκεσθαι τῶν εἰρημένων τι, τῷ δὲ μνημονεύειν συμβαίνει καὶ μνήμην ἀκολουθεῖν. οὐδὲ δὴ ταῦτα ἀπλῶς, ἐὰν ἔμπροσθεν ὑπάρξαντα πάλιν ἐγγένηται, ἀλλ' ἐστὶν ὡς, ἔστι δ' ὡς οὐ. δις γὰρ μαθεῖν καὶ εὔρεῖν ἐνδέχεται τὸν αὐτὸν τὸ αὐτό· δεῖ οὖν διαφέρειν τὸ ἀναμιμνήσκεσθαι τούτων, καὶ ἐνούσης πλείονος ἀρχῆς ἢ ἐξ ἧς μανθάνουσιν ἀναμιμνήσκεσθαι.

συμβαίνουνσι δ' αἱ ἀναμνήσεις ἐπειδὴ πέφυκεν ἡ κίνησις ἥδε γενέσθαι μετὰ τήνδε· εἰ μὲν ἐξ ἀνάγκης, δῆλον ὡς ὅταν ἐκείνην κινηθῇ, τήνδε κινηθήσεται·

εἰ δὲ μὴ ἐξ ἀνάγκης ἀλλ' ἔθει, ὥς ἐπὶ τὸ πολὺ κινηθήσεται. συμβαίνει δ' ἐνίας ἅπαξ ἐθισθῆναι μᾶλλον ἢ ἑτέρας πολλάκις κινουμένους· διὸ ἔνια ἅπαξ ἰδόντες μᾶλλον μνημονεύομεν ἢ ἕτερα πολλάκις. ὅταν οὖν ἀναμιμνησκώμεθα, κινούμεθα τῶν προτέρων τινὰ κινήσεων, ἕως ἄν κινηθῶμεν μεθ' ἣν ἐκείνη εἴωθεν. διὸ καὶ τὸ ἐφεξῆς θηρεύομεν νοήσαντες ἀπὸ τοῦ νῦν ἢ ἄλλου τινός, καὶ ἄφ' ὁμοίου ἢ ἐναντίου ἢ τοῦ συνέγγυς. διὰ τοῦτο γίνεται ἡ ἀνάμνησις· αἱ γὰρ κινήσεις τούτων τῶν μὲν αἱ αὐταί, τῶν δ' ἅμα, τῶν δὲ μέρος ἔχουσιν, ὥστε τὸ λοιπὸν μικρὸν ὃ ἐκινήθη μετ' ἐκεῖνο.

ζητοῦσι μὲν οὖν οὕτω, καὶ μὴ ζητοῦντες δ' οὕτως ἀναμιμνήσκονται, ὅταν μεθ' ἑτέραν κίνησιν ἐκείνη γένηται· ὥς δὲ τὰ πολλὰ ἐτέρων γενομένων κινήσεων οἷων εἴπομεν ἐγένετο ἐκείνη. οὐδὲν δὲ δεῖ σκοπεῖν τὰ πόρρω, πῶς μεμνήμεθα, ἀλλὰ τὰ συνέγγυς· δῆλον γὰρ ὅτι ὁ αὐτός ἐστι τρόπος. [λέγω δὲ τὸ ἐφεξῆς οὐ προζητήσας οὐδ' ἀναμνησθεῖς.] τῷ γὰρ ἔθει ἀκολουθοῦσιν αἱ κινήσεις ἀλλήλαις, ἥδε μετὰ τήνδε, καὶ ὅταν τοίνυν ἀναμιμνήσκεσθαι βούληται, τοῦτο ποιήσει· ζητήσει λαβεῖν ἀρχὴν κινήσεως, μεθ' ἣν ἐκείνη ἔσται. διὸ τάχιστα καὶ κάλλιστα γίνονται [452a] ἀπ' ἀρχῆς αἱ ἀναμνήσεις· ὥς γὰρ ἔχουσι τὰ πράγματα πρὸς ἀλλήλα τῷ ἐφεξῆς, οὕτω καὶ αἱ κινήσεις. καὶ ἔστιν εὐμνημόνευτα ὅσα τάξιν τινὰ ἔχει, ὥσπερ τὰ μαθήματα· τὰ δὲ φαύλως καὶ χαλεπῶς. καὶ τούτῳ διαφέρει τὸ ἀναμιμνήσκεσθαι τοῦ πάλιν μανθάνειν, ὅτι δυνήσεται πῶς δι' αὐτοῦ κινηθῆναι ἐπὶ τὸ μετὰ τὴν ἀρχήν. ὅταν δὲ μή, ἀλλὰ δι' ἄλλου, οὐκέτι μέμνηται. πολλάκις δ' ἤδη μὲν ἀδυνατεῖ ἀναμνησθῆναι, ζητῶν δὲ δύναται καὶ εὕρισκε. τοῦτο δὲ γίνεται κινεῖντι πολλά, ἕως ἄν τοιαύτην κίνησιν κίνησιν ἢ ἀκολουθήσει τὸ πρᾶγμα. τὸ γὰρ μεμνηθῆναι ἐστὶ τὸ ἐνεῖναι δύναμιν τὴν κινεῖσαν· τοῦτο δέ, ὥστ' ἐξ αὐτοῦ καὶ ὧν ἔχει κινήσεων κινηθῆναι, ὥσπερ εἴρηται. δεῖ δὲ λαβέσθαι ἀρχῆς· διὸ ἀπὸ τόπων δοκοῦσιν ἀναμιμνήσκεσθαι ἐνίοτε. τὸ δ' αἴτιον ὅτι ταχὺ ἀπ' ἄλλου ἐπ' ἄλλο ἔρχονται, οἷον ἀπὸ γάλακτος ἐπὶ λευκόν, ἀπὸ λευκοῦ δ' ἐπ' ἰσάρεα, καὶ ἀπὸ τούτου ἐφ' ὑγρόν, ἀφ' οὗ ἐμνήσθη μετοπώρου, ταύτην ἐπιζητῶν τὴν ὥραν.

ἔοικε δὲ καθόλου ἀρχῇ καὶ τὸ μέσον πάντων· εἰ γὰρ μὴ πρότερον, ὅταν ἐπὶ τοῦτο ἔλθῃ μνησθήσεται, ἢ οὐκέτ' οὐδὲ ἄλλοθεν, οἷον εἴ τις νοήσειεν ἐφ' ὧν Α Β Γ Δ Ε Ζ Η Θ <Ι>· εἰ γὰρ μὴ ἐπὶ τοῦ Ι μέμνηται, ἐπὶ τοῦ Ε μνησθήσεται· ἐντεῦθεν γὰρ ἐπ' ἅμφω κινηθῆναι ἐνδέχεται, καὶ ἐπὶ τὸ Δ καὶ ἐπὶ τὸ Ζ. εἰ δὲ μὴ τούτων τι ἐζήτει, ἐπὶ τὸ Γ ἐλθὼν μνησθήσεται, εἰ τὸ Α ἢ τὸ Β ἐπιζητεῖ, εἰ δὲ μή, ἐπὶ τὸ Η· καὶ οὕτως αἰεὶ. τοῦ δ' ἀπὸ τοῦ αὐτοῦ ἐνίοτε μὲν μνησθῆναι, ἐνίοτε δὲ μή, αἴτιον ὅτι ἐπὶ πλείῳ ἐνδέχεται κινηθῆναι ἀπὸ τῆς αὐτῆς ἀρχῆς, οἷον ἀπὸ τοῦ Γ ἐπὶ τὸ Β ἢ τὸ Δ. ἐὰν οὖν διὰ πολλοῦ

κινηθῆ, ἐπὶ τὸ συνηθέστερον κινεῖται· ὥσπερ γὰρ φύσις ἤδη τὸ ἔθος. διὸ ἂν πολλάκις ἐννοοῦμεν, ταχὺ ἀναμιμνησκομέθα· ὥσπερ γὰρ φύσει τόδε μετὰ τόδε ἐστίν, οὕτω καὶ ἐνεργείᾳ· τὸ δὲ πολλάκις φύσιν ποιεῖ. ἐπεὶ δ' ὥσπερ [452b] ἐν τοῖς φύσει γίγνεται καὶ παρὰ φύσιν καὶ ἀπὸ τύχης, ἔτι μᾶλλον ἐν τοῖς δι' ἔθος, οἷς ἡ φύσις γε μὴ ὁμοίως ὑπάρχει, ὥστε κινηθῆναι ἐνίστε κάκεῖ καὶ ἄλλως, ἄλλως τε καὶ ὅταν ἀφέλκη <τι> ἐκεῖθεν αὐτόσε πη, διὰ τοῦτο καὶ ὅταν δέη ὄνομα μνημονεῦσαι, παρόμοιον <εἰ> ἴσμεν, εἰς ἐκεῖνο σολοικίζομεν. τὸ μὲν οὖν ἀναμιμνήσκεσθαι τοῦτον συμβαίνει τὸν τρόπον.

τὸ δὲ μέγιστον, γνωρίζειν δεῖ τὸν χρόνον, ἢ μέτρῳ ἢ ἀορίστως. ἔστω δέ τι ὧ κρίνει τὸν πλείω καὶ ἐλάττω· εὐλογον δ' ὥσπερ τὰ μεγέθη· νοεῖ γὰρ τὰ μεγάλα καὶ πόρρω οὐ τῷ ἀποτείνειν ἐκεῖ τὴν διάνοιαν ὥσπερ τὴν ὄψιν φασί τινες (καὶ γὰρ μὴ ὄντων ὁμοίως νοήσει), ἀλλὰ τῇ ἀνάλογον κινήσει· ἔστι γὰρ ἐν αὐτῇ τὰ ὅμοια σχήματα καὶ κινήσεις. τίτι οὖν διοίσει, ὅταν τὰ μείζω νοῇ, ὅτι ἐκεῖνα νοεῖ ἢ τὰ ἐλάττω; πάντα γὰρ τὰ ἐντὸς ἐλάττω, καὶ ἀνὰ λόγον [καὶ τὰ ἐκτός]. ἔστι δ' ἴσως ὥσπερ καὶ τοῖς εἶδεσιν ἀνάλογον λαβεῖν ἄλλο ἐν αὐτῷ, οὕτως καὶ τοῖς ἀποστήμασιν. ὥσπερ οὖν εἰ τὴν A B B E κινεῖται, ποιεῖ τὴν Γ Δ· ἀνάλογον γὰρ ἢ A Γ καὶ ἢ Γ Δ. τί οὖν μᾶλλον τὴν Γ Δ ἢ τὴν Z H ποιεῖ; ἢ ὡς ἢ A Γ πρὸς τὴν A B ἔχει, οὕτως ἢ Θ πρὸς τὴν I ἔχει; ταύτας οὖν ἅμα κινεῖται. ἂν δὲ τὴν Z H βούληται νοῆσαι, τὴν μὲν B E ὁμοίως νοεῖ, ἀντὶ δὲ τῶν Θ I τὰς K Λ νοεῖ· αὐταὶ γὰρ ἔχουσιν ὡς Z A πρὸς B A.

ὅταν οὖν ἅμα ἢ τε τοῦ πράγματος γίγνηται κίνησις καὶ ἡ τοῦ χρόνου, τότε τῇ μνήμῃ ἐνεργεῖ. ἂν δ' οἴηται μὴ ποιῶν, οἴεται μνημονεύειν· οὐθὲν γὰρ κωλύει διαψευσθῆναι τινα καὶ δοκεῖν μνημονεύειν μὴ μνημονεύοντα. ἐνεργοῦντα δὲ τῇ μνήμῃ μὴ οἶεσθαι ἀλλὰ λανθάνειν μεμνημένον οὐκ ἔστιν· τοῦτο γὰρ ἦν αὐτὸ τὸ μεμνησθαι. ἀλλ' ἐὰν ἡ τοῦ πράγματος γένηται χωρὶς τῆς τοῦ χρόνου ἢ αὕτη ἐκείνης, οὐ μέμνηται. ἡ δὲ τοῦ χρόνου διττὴ ἐστίν· ὅτε μὲν γὰρ μέτρῳ οὐ μέμνηται αὐτόν, [453a] οἷον ὅτι τρίτη ἡμέρα ὁδήποτε ἐποίησεν, ὅτε δὲ καὶ μέτρῳ· ἀλλὰ μέμνηται καὶ ἐὰν μὴ μέτρῳ. εἰώθασι δὲ λέγειν ὅτι μέμνηται μὲν, πότε μέντοι οὐκ ἴσασιν, ὅταν μὴ γνωρίζωσι τοῦ πότε τὸ ποσὸν μέτρῳ.

ὅτι μὲν οὖν οὐχ οἱ αὐτοὶ μνημονικοὶ καὶ ἀναμνηστικοί, ἐν τοῖς πρότερον εἴρηται. διαφέρει δὲ τοῦ μνημονεύειν τὸ ἀναμιμνήσκεσθαι οὐ μόνον κατὰ τὸν χρόνον, ἀλλ' ὅτι τοῦ μὲν μνημονεύειν καὶ τῶν ἄλλων ζώων μετέχει πολλά, τοῦ δ' ἀναμιμνήσκεσθαι οὐδὲν ὡς εἰπεῖν τῶν γνωριζομένων ζώων, πλὴν ἄνθρωπος. αἵτιον δ' ὅτι τὸ ἀναμιμνήσκεσθαί ἐστιν οἷον συλλογισμός τις· ὅτι γὰρ πρότερον εἶδεν ἢ ἤκουσεν ἢ τι τοιοῦτον ἔπαθε, συλλογίζεται ὁ

ἀναμνησκόμενος, καὶ ἔστιν οἷον ζήτησίς τις. τοῦτο δ' οἷς καὶ τὸ βουλευτικὸν ὑπάρχει, φύσει μόνοις συμβέβηκεν· καὶ γὰρ τὸ βουλευέσθαι συλλογισμὸς τίς ἐστιν.

ὅτι δ' ἐστὶ σωματικόν τι τὸ πάθος, καὶ ἡ ἀνάμνησις ζήτησις ἐν τοιούτῳ φαντάσματος, σημεῖον τὸ παρενοχλεῖν ἐνίους ἐπειδὴν μὴ δύνωνται ἀναμνησθῆναι καὶ πάνυ ἐπέχοντες τὴν διάνοιαν, καὶ οὐκέτ' ἐπιχειροῦντας ἀναμνήσκεσθαι οὐδὲν ἤττον, καὶ μάλιστα τοὺς μελαγχολικοὺς· τούτους γὰρ φαντάσματα κινεῖ μάλιστα. αἴτιον δὲ τοῦ μὴ ἐπ' αὐτοῖς εἶναι [τὸ ἀναμνήσκεσθαι], ὅτι καθάπερ τοῖς βάλλουσιν οὐκέτι ἐπ' αὐτοῖς τὸ στῆσαι, οὕτως καὶ ὁ ἀναμνησκόμενος καὶ θηρεύων σωματικόν τι κινεῖ, ἐν ᾧ τὸ πάθος. μάλιστα δ' ἐνοχλοῦνται οἷς ἂν ὑγρότης τύχῃ ὑπάρχουσα περὶ τὸν αἰσθητικὸν τόπον· οὐ γὰρ ῥαδίως παύεται κινήσεισα, ἕως ἂν ἐπανέλθῃ τὸ ζητούμενον καὶ εὐθυπορήσῃ ἡ κίνησις. διὸ καὶ ὄργαι καὶ φόβοι, ὅταν τι κινήσωσιν, ἀντικινούντων πάλιν τούτων οὐ καθίστανται, ἀλλ' ἐπὶ τὸ αὐτὸ ἀντικινοῦσιν. καὶ ἔοικε τὸ πάθος τοῖς ὀνόμασι καὶ μέλεσι καὶ λόγοις, ὅταν διὰ στόματος γένηται τι αὐτῶν σφόδρα· παυσαμένοις γὰρ καὶ οὐ βουλομένοις ἐπέρχεται πάλιν ἄδειν ἢ λέγειν. εἰσὶ δὲ καὶ οἱ τὰ ἄνω μείζω ἔχοντες καὶ οἱ νανώδεις [453b] ἀμνημονέστεροι τῶν ἐναντίων διὰ τὸ πολὺ βάρος ἔχειν ἐπὶ τῷ αἰσθητικῷ, καὶ μήτ' ἐξ ἀρχῆς τὰς κινήσεις δύνασθαι ἐμμένειν ἀλλὰ διαλύεσθαι μήτ' ἐν τῷ ἀναμνήσκεσθαι ῥαδίως εὐθυπορεῖν. οἱ δὲ πάμπαν νέοι καὶ λίαν γέροντες ἀμνήμονες διὰ τὴν κίνησιν· οἱ μὲν γὰρ ἐν φθίσει, οἱ δ' ἐν αὐξήσει πολλῇ εἰσίν· ἔτι δὲ τὰ γε παιδιά καὶ νανώδη ἐστὶ μέχρι πόρρω τῆς ἡλικίας.

περὶ μὲν οὖν μνήμης καὶ τοῦ μνημονεύειν, τίς ἡ φύσις αὐτῶν καὶ τίτι τῶν τῆς ψυχῆς μνημονεύει τὰ ζῶα, καὶ περὶ τοῦ ἀναμνήσκεσθαι, τί ἐστὶ καὶ πῶς γίγνεται καὶ διὰ τίνας αἰτίας, εἴρηται.

## Περὶ Ὑπνον καὶ Ἐγρηγόρσεως (453b) On Sleep



[453b] Περὶ δὲ ὕπνου καὶ ἐγρηγόρσεως ἐπισκεπτέον τίνα τε τυγχάνει ὄντα, καὶ πότερον ἴδια τῆς ψυχῆς ἢ τοῦ σώματος ἢ κοινά, καὶ εἰ κοινά, τίνος μορίου τῆς ψυχῆς ἢ τοῦ σώματος, καὶ διὰ τίν' αἰτίαν ὑπάρχει τοῖς ζώοις· καὶ πότερον ἅπαντα κεκοινωνήκεν ἀμφοτέρων, ἢ τὰ μὲν θατέρου τὰ δὲ θατέρου μόνον, ἢ τὰ μὲν οὐδετέρου τὰ δὲ ἀμφοτέρων· πρὸς δὲ τούτοις τί ἐστὶ τὸ ἐνύπνιον, καὶ διὰ τίνα αἰτίαν οἱ καθεύδοντες ὅτε μὲν ὄνειρώττουσιν ὅτε δὲ οὐ, ἢ συμβαίνει μὲν ἄει τοῖς καθεύδουσιν ἐνυπνιάζειν, ἄλλ' οὐ μνημονεύουσιν, καὶ εἰ τοῦτο γίγνεται, διὰ τίνα αἰτίαν γίγνεται· καὶ πότερον ἐνδέχεται τὰ μέλλοντα προορᾶν ἢ οὐκ ἐνδέχεται, καὶ τίνα τρόπον εἰ ἐνδέχεται· καὶ πότερον τὰ μέλλοντα ὑπ' ἀνθρώπου πράσσεσθαι μόνον, ἢ καὶ ὧν τὸ δαιμόνιον ἔχει τὴν αἰτίαν, καὶ φύσει γίγνεται ἢ ἀπὸ ταῦτομάτου.

πρῶτον μὲν οὖν τοῦτό γε φανερόν, ὅτι τῷ αὐτῷ τοῦ ζώου ἢ τε ἐγρηγόρσις ὑπάρχει καὶ ὁ ὕπνος· ἀντίκεινται γάρ, καὶ φαίνεται στέρησις τις ὁ ὕπνος τῆς ἐγρηγόρσεως· ἀεὶ γὰρ τὰ ἐναντία καὶ ἐπὶ τῶν ἄλλων καὶ ἐν τοῖς φυσικοῖς ἐν τῷ αὐτῷ δεκτικῷ φαίνεται γιγνόμενα, καὶ τοῦ αὐτοῦ ὄντα πάθη, λέγω δ' οἷον ὑγίεια καὶ νόσος, καὶ κάλλος καὶ αἴσχος, καὶ ἰσχύς καὶ ἀσθένεια, καὶ ὄψις καὶ τυφλότης, καὶ ἀκοὴ καὶ κωφότης. ἔτι δὲ [454a] καὶ ἐκ τῶνδε δῆλον· ὥ γὰρ τὸν ἐγρηγορότα γνωρίζομεν, τούτῳ καὶ τὸν καθυπνοῦντα· τὸν δὲ αἰσθανόμενον ἐγρηγορέναι νομίζομεν, καὶ τὸν ἐγρηγορότα πάντα ἢ τῶν ἔξωθεν τίνος αἰσθάνεσθαι ἢ τῶν ἐν αὐτῷ κινήσεων. εἰ τοίνυν τὸ ἐγρηγορέναι ἐν μηδενὶ ἄλλῳ ἐστὶν ἢ τῷ αἰσθάνεσθαι, δῆλον ὅτι ὥ περ αἰσθάνεται, τούτῳ καὶ ἐγρηγόρε τὰ ἐγρηγορότα καὶ καθεύδει τὰ καθεύδοντα. ἐπεὶ δὲ οὔτε τῆς ψυχῆς ἴδιον τὸ αἰσθάνεσθαι οὔτε τοῦ σώματος (οὗ γὰρ ἡ δύναμις, τούτου καὶ ἡ ἐνέργεια· ἡ δὲ λεγομένη αἴσθησις ὡς ἐνέργεια κινήσις τις διὰ τοῦ σώματος τῆς ψυχῆς ἐστὶ), φανερόν ὡς οὔτε τῆς ψυχῆς τὸ πάθος ἴδιον, οὔτ' ἄψυχον σῶμα δυνατόν αἰσθάνεσθαι.

διωρισμένων δὲ πρότερον ἐν ἑτέροις περὶ τῶν λεγομένων ὡς μορίων τῆς ψυχῆς, καὶ τοῦ μὲν θρεπτικοῦ χωριζομένου τῶν ἄλλων ἐν τοῖς ἔχουσι σώμασι ζωὴν, τῶν δ' ἄλλων οὐδενὸς ἄνευ τούτου, δῆλον ὡς ὅσα μὲν αὐξήσεως καὶ φθίσεως μετέχει μόνον τῶν ζώντων, [ὅτι] τούτοις οὐχ ὑπάρχει ὕπνος οὐδὲ ἐγρηγόρσις, οἷον τοῖς φυτοῖς (οὐ γὰρ ἔχουσι τὸ αἰσθητικὸν μόριον, οὔτε εἰ χωριστόν ἐστιν οὔτε εἰ μὴ χωριστόν· τῇ γὰρ δυνάμει καὶ τῷ εἶναι χωριστόν



ἐστιν)· ὁμοίως δὲ καὶ ὅτι οὐδὲν ἐστὶν ὃ ἀεὶ ἐγρήγορεν ἢ ἀεὶ καθεύδει, ἀλλὰ τοῖς αὐτοῖς ὑπάρχει τῶν ζώων ἀμφοτέρω τὰ πάθη ταῦτα. οὐ γάρ, εἴ τι ἔστι ζῶον «μὴ» ἔχον αἴσθησιν, τοῦτ' ἐνδέχεται οὔτε καθεύδειν οὔτε ἐγρηγορέναι (ἄμφω γάρ ἐστὶ τὰ πάθη ταῦτα περὶ αἴσθησιν τοῦ πρώτου αἰσθητικοῦ)· οὐκ ἐνδέχεται δὲ οὐδὲ θάτερον τούτων ἀεὶ ὑπάρχειν τῷ αὐτῷ, οἷον ἀεὶ τι γένος ζώων καθεύδειν ἢ ἀεὶ τι ἐγρηγορέναι. ἔτι ὅσων ἔστι τι ἔργον κατὰ φύσιν, ὅταν ὑπερβάλλῃ τὸν χρόνον ὅσον δύναται τι ποιεῖν, ἀνάγκη ἀδυνατεῖν, οἷον τὰ ὄμματα ὀρῶντα, καὶ παύεσθαι τοῦτο ποιοῦντα, ὁμοίως δὲ καὶ χεῖρα καὶ ἄλλο πᾶν οὗ ἔστι τι ἔργον. εἰ δὴ τινός ἐστιν ἔργον τὸ αἰσθάνεσθαι, καὶ τοῦτο, ἂν ὑπερβάλλῃ ὅσον ἦν χρόνον δυνάμενον αἰσθάνεσθαι συνεχῶς, ἀδυνατήσει καὶ οὐκέτι τοῦτο ποιήσει. εἰ τοίνυν τὸ ἐγρηγορέναι ὥριται τῷ λελύσθαι [454b] τὴν αἴσθησιν, τῶν δ' ἐναντίων τῶν μὲν ἀνάγκη θάτερον ἀεὶ παρεῖναι τῶν δ' οὐ, τῷ δ' ἐγρηγορέναι τὸ καθεύδειν ἐναντίον, καὶ ἀναγκαῖον ἅπαντι θάτερον ὑπάρχειν, ἀναγκαῖον ἂν εἴη καθεύδειν. εἰ οὖν τὸ τοιοῦτον πάθος ὕπνος, τοῦτο δ' ἐστὶν ἀδυναμία δι' ὑπερβολὴν τοῦ ἐγρηγορέναι, ἡ δὲ τοῦ ἐγρηγορέναι ὑπερβολὴ ὅτε μὲν νοσώδης ὅτε δὲ ἄνευ νόσου γίνεταί, ὥστε καὶ ἡ ἀδυναμία καὶ ἡ διάλυσις ὡσαύτως ἔσται, ἀνάγκη πᾶν τὸ ἐγρηγορὸς ἐνδέχεσθαι καθεύδειν· ἀδύνατον γὰρ ἀεὶ ἐνεργεῖν.

ὁμοίως δὲ οὐδὲ καθεύδειν οὐδὲν ἀεὶ ἐνδέχεται. ὁ γὰρ ὕπνος πάθος τι τοῦ αἰσθητικοῦ μορίου ἐστίν, οἷον δεσμός τις καὶ ἀκίνησία, ὥστ' ἀνάγκη πᾶν τὸ καθεύδον ἔχειν τὸ αἰσθητικὸν μόριον. αἰσθητικὸν δὲ τὸ δυνατόν αἰσθάνεσθαι κατ' ἐνέργειαν· ἐνεργεῖν δὲ τῇ αἰσθήσει κυρίως καὶ ἀπλῶς ἀδύνατον καθεύδον ἅμα· διὸ ἀναγκαῖον ὕπνον πάντα ἐγερτὸν εἶναι. τὰ μὲν οὖν ἄλλα σχεδὸν ἅπαντα δῆλα κοινωνοῦνθ' ὕπνου, καὶ πλωτὰ καὶ πτηνὰ καὶ πεζὰ· καὶ γὰρ τὰ τῶν ἰχθύων γένη πάντα καὶ τὰ τῶν μαλακίων ὥπται καθεύδοντα, καὶ τὰ ἄλλα πάντα ὅσα περ ἔχει ὀφθαλμούς· καὶ γὰρ τὰ σκληρόφθαλμα φανερά καὶ τὰ ἔντομα κοιμώμενα· βραχύυπνα δὲ τὰ τοιαῦτα πάντα, διὸ καὶ λάθοι ἂν τινα πολλάκις πότερον μετέχουσι τοῦ καθεύδειν ἢ οὐ. τῶν δ' ὀστρακοδέρμων κατὰ μὲν τὴν αἴσθησιν οὐδέ πω γέγονε φανερόν· εἰ δὲ τῷ πιθανὸς ὁ λεχθεὶς λόγος, τοῦτο πεισθήσεται. ὅτι μὲν οὖν ὕπνου κοινωνεῖ τὰ ζῶα πάντα, φανερόν ἐκ τούτων. τῷ γὰρ αἴσθησιν ἔχειν ὥριται τὸ ζῶον, τῆς δ' αἰσθήσεως τρόπον τινὰ τὴν μὲν ἀκίνησίαν καὶ οἷον δεσμὸν τὸν ὕπνον εἶναι φάμεν, τὴν δὲ λύσιν καὶ τὴν ἄνεσιν ἐγρήγορσιν. τῶν δὲ φυτῶν οὐδὲν οἷον τε κοινωνεῖν οὐδετέρου τούτων τῶν παθημάτων· ἄνευ μὲν γὰρ αἰσθήσεως οὐκ ὑπάρχει οὔτε ὕπνος οὔτε ἐγρήγορσις· οἷς δ' αἴσθησις ὑπάρχει, καὶ τὸ λυπεῖσθαι καὶ τὸ χαίρειν· οἷς δὲ ταῦτα, καὶ ἐπιθυμία· τοῖς δὲ φυτοῖς οὐδὲν ὑπάρχει τούτων. σημεῖον δ' ὅτι καὶ τὸ ἔργον τὸ αὐτοῦ ποιεῖ τὸ θρεπτικόν [455a] μόριον ἐν τῷ καθεύδειν μᾶλλον ἢ ἐν τῷ ἐγρηγορέναι· τρέφεται γὰρ καὶ

αὐξάνεται τότε μᾶλλον, ὥς οὐδὲν προσδεόμενα πρὸς ταῦτα τῆς αἰσθήσεως.

Διὰ τί δὲ καθεύδει καὶ ἐγρήγορε καὶ διὰ ποίαν τινὰ αἴσθησιν ἢ ποίας, εἰ διὰ πλείους, σκεπτέον. Ἐπεὶ δ' ἔνια μὲν τῶν ζώων ἔχει τὰς αἰσθήσεις πάσας, ἔνια δ' οὐκ ἔχει, οἷον ὄψιν, τὴν δ' ἀφὴν καὶ τὴν γεῦσιν ἅπαντα ἔχει, πλὴν εἴ τι τῶν ζώων ἀτελές (εἴρηται δὲ περὶ αὐτῶν ἐν τοῖς Περὶ ψυχῆς), ἀδύνατον δ' ἐστὶν ἀπλῶς ὁποιοῦν αἴσθησιν αἰσθάνεσθαι τὸ καθεῦδον ζῶον, φανερόν ὅτι πάσαις ἀναγκαῖον ὑπάρχειν τὸ αὐτὸ πάθος ἐν τῷ καλουμένῳ ὕπνῳ· εἰ γὰρ τῇ μὲν, τῇ δὲ μή, ταύτῃ καθεῦδον αἰσθήσεται, τοῦτο δ' ἀδύνατον. Ἐπεὶ δ' ὑπάρχει καθ' ἑκάστην αἴσθησιν τὸ μὲν τι ἴδιον, τὸ δὲ τι κοινόν, ἴδιον μὲν οἷον τῇ ὄψει τὸ ὄρᾶν, τῇ δ' ἀκοῇ τὸ ἀκούειν, καὶ ταῖς ἄλλαις ἐκάστη κατὰ τὸν αὐτὸν τρόπον, ἔστι δέ τις καὶ κοινὴ δύναμις ἀκολουθοῦσα πάσαις, ἣ καὶ ὅτι ὄρᾳ καὶ ἀκούει αἰσθάνεται (οὐ γὰρ δὴ τῇ γε ὄψει ὄρᾳ ὅτι ὄρᾳ, καὶ κρίνει δὴ καὶ δύναται κρίνειν ὅτι ἕτερα τὰ γλυκέα τῶν λευκῶν οὔτε γεύσει οὔτε ὄψει οὔτε ἀμφοῖν, ἀλλὰ τινι κοινῷ μορίῳ τῶν αἰσθητηρίων ἀπάντων· ἔστι μὲν γὰρ μία αἴσθησις, καὶ τὸ κύριον αἰσθητήριον ἓν, τὸ δ' εἶναι αἰσθήσει τοῦ γένους ἐκάστου ἕτερον, οἷον ψόφου καὶ χρώματος), τοῦτο δ' ἅμα τῷ ἀπτικῷ μάλιστα ὑπάρχει (τοῦτο μὲν γὰρ χωρίζεται τῶν ἄλλων αἰσθητηρίων, τὰ δ' ἄλλα τούτου ἀχώριστα, εἴρηται δὲ περὶ αὐτῶν ἐν τοῖς Περὶ ψυχῆς θεωρήμασιν), φανερόν τοίνυν ὅτι τούτου ἐστὶ πάθος ἢ ἐγρήγορσις καὶ ὁ ὕπνος. διὸ καὶ πᾶσιν ὑπάρχει τοῖς ζώοις· καὶ γὰρ ἡ ἀφὴ μόνη πᾶσιν· εἰ γὰρ τῷ πάσας τι πεπονθέναι τὰς αἰσθήσεις ἐγίγνετο τὸ καθεύδειν, ἄτοπον εἰ αἷς οὔτε ἀνάγκη οὔτε δυνατόν τρόπον τινὰ ἐνεργεῖν ἅμα, ταύτας ἀναγκαῖον ἀργεῖν ἅμα καὶ ἀκίνητιζεῖν· τούναντίον γὰρ εὐλογώτερον συνέβαινεν ἂν αὐταῖς, τὸ μὴ ἅμα ἡρεμεῖν. ὥς δὲ νῦν λέγομεν, εὐλόγως ἔχει καὶ περὶ τούτων· τοῦ γὰρ κυρίου τῶν ἄλλων πάντων αἰσθητηρίου, καὶ πρὸς ὃ συντείνει τᾶλλα, πεπονθότος τι συμπάσχειν ἀναγκαῖον [455b] καὶ τὰ λοιπὰ πάντα, ἐκείνων δὲ τινος ἀδυνατοῦντος οὐκ ἀνάγκη τοῦτ' ἀδυνατεῖν.

φανερόν δὲ ἐκ πολλῶν ὅτι οὐκ ἐν τῷ τὰς αἰσθήσεις ἀργεῖν καὶ μὴ χρῆσθαι αὐταῖς ὁ ὕπνος, οὐδ' ἐν τῷ μὴ δύνασθαι αἰσθάνεσθαι (καὶ γὰρ ἐν ταῖς λειποψυχίαις τοιοῦτόν τι συμβαίνει· ἀδυναμία γὰρ αἰσθήσεως ἢ λειποψυχία, γίνονται δὲ καὶ ἔκνοιαι τινες τοιαῦται· ἔτι δ' οἱ τὰς ἐν τῷ αὐχένι φλέβας καταλαμβανόμενοι ἀναίσθητοι γίνονται), ἀλλ' ὅταν ἡ ἀδυναμία τῆς χρήσεως μήτ' ἐν τῷ τυχόντι αἰσθητηρίῳ, μήτε δι' ἣν ἔτυχεν αἰτίαν, ἀλλὰ, καθάπερ εἴρηται νῦν, ἐν τῷ πρώτῳ ᾧ αἰσθάνεται πάντων· ὅταν μὲν γὰρ τοῦτ' ἀδυνατήσῃ, ἀνάγκη καὶ τοῖς αἰσθητηρίοις πᾶσιν ἀδυνατεῖν αἰσθέσθαι, ὅταν δ' ἐκείνων τι, οὐκ ἀνάγκη τούτῳ.

δι' ἣν δ' αἰτίαν συμβαίνει τὸ καθεύδειν, καὶ ποῖόν τι τὸ πάθος ἐστί, λεκτέον. Ἐπεὶ δὲ τρόποι πλείους τῆς αἰτίας (καὶ γὰρ τὸ τίνας ἔνεκεν, καὶ ὅθεν ἡ ἀρχὴ τῆς κινήσεως, καὶ τὴν ὕλην καὶ τὸν λόγον αἷτιον εἶναι φαμεν), πρῶτον μὲν οὖν ἐπειδὴ λέγομεν τὴν φύσιν ἔνεκά του ποιεῖν, τοῦτο δὲ ἀγαθόν τι, τὴν δ' ἀνάπausιν παντὶ τῷ πεφυκότι κινεῖσθαι, μὴ δυναμένῳ δ' ἀεὶ καὶ συνεχῶς κινεῖσθαι μεθ' ἡδονῆς, ἀναγκαῖον εἶναι καὶ ὠφέλιμον, τῷ δὲ ὕπνῳ αὐτῇ τῇ ἀληθείᾳ προσάπτουσι τὴν μεταφορὰν ταύτην ὡς ἀναπαύσει ὄντι - ὥστε σωτηρίας ἔνεκα τῶν ζώων ὑπάρχει. ἡ δ' ἐγρήγορσις τέλος· τὸ γὰρ αἰσθάνεσθαι καὶ τὸ φρονεῖν πᾶσι τέλος οἷς ὑπάρχει θάτερον αὐτῶν. βέλτιστα γὰρ ταῦτα, τὸ δὲ τέλος βέλτιστον. ἔτι δὲ ἀναγκαῖον ἐκάστῳ τῶν ζώων ὑπάρχειν τὸν ὕπνον. λέγω δ' ἐξ ὑποθέσεως τὴν ἀνάγκην, ὅτι εἰ ζῶον ἔσται ἔχον τὴν αὐτοῦ φύσιν, ἐξ ἀνάγκης τινὰ ὑπάρχειν αὐτῷ δεῖ, καὶ τούτων ὑπαρχόντων ἕτερα ὑπάρχειν. ἔτι δὲ ποίας κινήσεως καὶ πράξεως ἐν τοῖς σώμασι γιγνομένης συμβαίνει τό τε ἐγρηγορέναι καὶ τὸ καθεύδειν τοῖς ζώοις, μετὰ ταῦτα λεκτέον. τοῖς μὲν οὖν ἄλλοις ζώοις καθάπερ τοῖς ἐναίμοις ὑποληπτέον εἶναι τὰ αἷτια τοῦ πάθους ἢ ταῦτ' ἢ τὰ ἀνάλογον, τοῖς δ' ἐναίμοις ἄπερ τοῖς ἀνθρώποις· ὥστε ἐκ τούτων πάντα θεωρητέον.

ὅτι μὲν οὖν ἡ τῆς αἰσθήσεως ἀρχὴ γίγνεται [456a] ἀπὸ τοῦ αὐτοῦ μέρους τοῖς ζώοις ἄφ' οὗπερ καὶ ἡ τῆς κινήσεως, διώρισται πρότερον ἐν ἑτέροις. αὕτη δὲ ἐστὶ τριῶν διωρισμένων τόπων ὁ μέσος κεφαλῆς καὶ τῆς κάτω κοιλίας. τοῖς μὲν οὖν ἐναίμοις τοῦτ' ἐστὶ τὸ περὶ τὴν καρδίαν μέρος. πάντα γὰρ τὰ ἔναιμα καρδίαν ἔχει, καὶ ἡ ἀρχὴ τῆς κινήσεως καὶ τῆς αἰσθήσεως τῆς κυρίας ἐντεῦθεν ἐστίν. τῆς μὲν οὖν κινήσεως φανερόν ὅτι καὶ ἡ τοῦ πνεύματος ἀρχὴ καὶ ὅλως ἡ τῆς καταψύξεως ἐστὶν ἐνταῦθα, καὶ τὸ ἀναπνεῖν τε καὶ τὸ τῷ ὑγρῷ καταψύχεσθαι πρὸς γε τὴν σωτηρίαν τοῦ ἐν τούτῳ μορίῳ θερμοῦ ἡ φύσις πεπόρικεν· ῥηθήσεται δὲ περὶ αὐτῆς ὕστερον καθ' αὐτήν. τοῖς δὲ ἀναίμοις καὶ τοῖς ἐντόμοις καὶ μὴ δεχομένοις πνεῦμα ἐν τῷ ἀνάλογον τὸ σύμφυτον πνεῦμα ἀναφυσώμενον καὶ συνιζάνον φαίνεται. δῆλον δὲ τοῦτο ἐπὶ τῶν ὀλοπτέρων, οἷον σφηκῶν καὶ μελιττῶν, καὶ ἐν ταῖς μυῖαις καὶ ὅσα τοιαῦτα. Ἐπεὶ δὲ κινεῖν μὲν τι ἢ ποιεῖν ἄνευ ἰσχύος ἀδύνατον, ἰσχὺν δὲ ποιεῖ ἡ τοῦ πνεύματος κάθεξις, τοῖς μὲν εἰσφερομένοις ἢ θύραθεν, τοῖς δὲ μὴ ἀναπνέουσιν ἢ σύμφυτος (διὸ καὶ βομβοῦντα φαίνεται τὰ πτερωτά, ὅταν κινῆται, τῇ τρίψει τοῦ πνεύματος προσπίπτοντος πρὸς τὸ ὑπόζωμα τῶν ὀλοπτέρων), κινεῖται δὲ πᾶν αἰσθήσεως τινος γενομένης, ἢ οἰκείας ἢ ἀλλοτρίας, ἐν τῷ πρώτῳ αἰσθητηρίῳ - εἰ δὲ ἐστὶν ὁ ὕπνος καὶ ἡ ἐγρήγορσις πάθη τοῦ μορίου τούτου, ἐν ᾧ μὲν τόπῳ καὶ ἐν ᾧ μορίῳ πρώτῳ γίγνεται ὁ ὕπνος καὶ ἡ ἐγρήγορσις, φανερόν. κινοῦνται δ' ἔνιοι καθεύδοντες καὶ ποιοῦσι πολλὰ ἐγρηγορικά, οὐ μέντοι ἄνευ φαντάσματος καὶ αἰσθήσεως τινος· τὸ γὰρ

ἐνύπνιον ἔστιν αἴσθημα τρόπον τινά· λεκτέον δὲ περὶ αὐτῶν ὕστερον. διότι δὲ τὰ μὲν ἐνύπνια μνημονεύουσιν ἐγερθέντες, τὰς δ' ἐγρηγορικὰς πράξεις ἀμνημονοῦσιν, ἐν τοῖς Προβληματικοῖς εἴρηται.

Ἐχόμενον δὲ τῶν εἰρημένων ἔστιν ἐπελθεῖν τίνων γιγνομένων καὶ πόθεν ἡ ἀρχὴ τοῦ πάθους γίνεται, τοῦ τ' ἐγρηγορέναι καὶ τοῦ καθεύδειν. φανερόν δὲ ὅτι ἐπεὶ ἀναγκαῖον τῷ ζῶντι, ὅταν αἴσθησιν ἔχη, τότε πρῶτον τροφήν τε λαμβάνειν καὶ αὔξησιν, τροφή δ' ἐστὶ πᾶσιν ἡ ἐσχάτη τοῖς μὲν ἐναίμοις ἡ τοῦ αἵματος φύσις, τοῖς δ' ἀναίμοις τὸ ἀνάλογον, [456b] τόπος δὲ τοῦ αἵματος αἱ φλέβες, τούτων δ' ἀρχὴ ἡ καρδία (φανερόν δὲ τὸ λεχθὲν ἐκ τῶν ἀνατομῶν) - τῆς μὲν οὖν θύραθεν τροφῆς εἰσιούσης εἰς τοὺς δεκτικούς τόπους γίνεται ἡ ἀναθυμίασις εἰς τὰς φλέβας, ἐκεῖ δὲ μεταβάλλουσα ἐξαιματοῦται καὶ πορεύεται ἐπὶ τὴν ἀρχήν. εἴρηται δὲ περὶ τούτων ἐν τοῖς Περὶ τροφῆς· νῦν δὲ ἀναληπτέον ὑπὲρ αὐτῶν τούτου χάριν, ὅπως τὰς ἀρχὰς τῆς κινήσεως θεωρήσωμεν, καὶ τί πάσχοντος τοῦ μορίου τοῦ αἰσθητικοῦ συμβαίνει ἡ ἐγρηγόρσις καὶ ὁ ὕπνος. οὐ γάρ ἐστιν ὁ ὕπνος ἡτισοῦν ἀδυναμία τοῦ αἰσθητικοῦ, καθάπερ εἴρηται· καὶ γὰρ ἔκνοια καὶ πνιγμός τις καὶ λειποψυχία ποιεῖ τὴν τοιαύτην ἀδυναμίαν. ἤδη δὲ γεγένηται τις καὶ φαντασία λειποψυχήσασιν ἰσχυρῶς.

τοῦτο μὲν οὖν ἔχει τινὰ ἀπορίαν· εἰ γὰρ ἐνδέχεται καταδαρθεῖν τὸν λειποψυχήσαντα, ἐνδέχοιτ' ἂν ἐνύπνιον εἶναι καὶ τὸ φάντασμα. πολλὰ δ' ἐστὶν ἃ λέγουσιν οἱ σφόδρα λειποψυχήσαντες καὶ δόξαντες τεθνάναι· περὶ ὧν τὸν αὐτὸν λόγον ὑποληπτέον εἶναι πάντων. ἀλλὰ γάρ, ὥσπερ εἵπομεν, οὐκ ἔστιν ὁ ὕπνος ἀδυναμία πᾶσα τοῦ αἰσθητικοῦ, ἀλλ' ἐκ τῆς περὶ τὴν τροφήν ἀναθυμιάσεως γίνεται τὸ πάθος τοῦτο· ἀνάγκη γὰρ τὸ ἀναθυμιώμενον μέχρι τοῦ ὠθεῖσθαι, εἴτ' ἀντιστρέφειν καὶ μεταβάλλειν καθάπερ εὗριπον. τὸ δὲ θερμὸν ἐκάστου τῶν ζώων πρὸς τὸ ἄνω πέφυκε φέρεσθαι· ὅταν δ' ἐν τοῖς ἄνω τόποις γένηται, ἀθρόον πάλιν ἀντιστρέφει καὶ καταφέρεται. διὸ μάλιστα γίνονται ὕπνοι ἀπὸ τῆς τροφῆς· ἀθρόον γὰρ πολὺ τό τε ὑγρὸν καὶ τὸ σωματῶδες ἀναφέρεται. ἰστάμενον μὲν οὖν βαρύνει καὶ ποιεῖ νυστάζειν· ὅταν δὲ ῥέψῃ κάτω καὶ ἀντιστρέψαν ἀπώσῃ τὸ θερμόν, τότε γίνεται ὁ ὕπνος καὶ τὸ ζῶον καθεύδει. σημεῖον δὲ τούτων καὶ τὰ ὑπνωτικά· πάντα γὰρ καρηβαρίαν ποιεῖ, καὶ τὰ ποτὰ καὶ τὰ βρωτά, μήκων, μανδραγόρας, οἶνος, αἶραι. καὶ καταφερόμενοι καὶ νυστάζοντες τοῦτο δοκοῦσι πάσχειν, καὶ ἀδυνατοῦσιν αἶρειν τὴν κεφαλὴν καὶ τὰ βλέφαρα. καὶ μετὰ τὰ σιτία μάλιστα τοιοῦτος ὁ ὕπνος· πολλὴ γὰρ ἡ ἀπὸ τῶν σιτίων ἀναθυμίασις. ἔτι δ' ἐκ κόπων ἐνίων· ὁ μὲν γὰρ κόπος συντηκτικόν, τὸ δὲ σύντηγμα γίνεται ὥσπερ τροφή ἄπεπτος, [457a] ἂν μὴ ψυχρὸν ᾗ. καὶ νόσοι δέ τινες τὸ αὐτὸ τοῦτο ποιοῦσιν,

ὅσαι ἀπὸ περιπτώματος ὑγροῦ καὶ θερμοῦ, οἷον συμβαίνει τοῖς πυρέττουσι καὶ ἐν τοῖς ληθάργοις. ἔτι δ' ἡ πρώτη ἡλικία· τὰ γὰρ παιδία καθεύδει σφόδρα διὰ τὸ τὴν τροφὴν ἄνω φέρεσθαι πᾶσαν. σημεῖον δὲ τὸ ὑπερβάλλειν τὸ μέγεθος τῶν ἄνω πρὸς τὰ κάτω κατὰ τὴν πρώτην ἡλικίαν, διὰ τὸ ἐπὶ ταῦτα γίνεσθαι τὴν αὔξησιν. διὰ ταύτην δὲ τὴν αἰτίαν καὶ ἐπιληπτικὰ γίνεταί· ὅμοιον γὰρ ὁ ὕπνος ἐπλήψει, καὶ ἔστιν τρόπον τινὰ ὁ ὕπνος ἐπίληψις. διὸ καὶ συμβαίνει τισὶν ἡ ἀρχὴ τοῦτου τοῦ πάθους καθεύδουσιν, καὶ καθεύδοντες μὲν ἀλίσκονται, ἐγρηγορότερες δ' οὗ· ὅταν γὰρ πολὺ φέρηται τὸ πνεῦμα ἄνω, καταβαῖνον πάλιν τὰς φλέβας ὀγκοῖ, καὶ συνθλίβει τὸν πόρον δι' οὗ ἡ ἀναπνοὴ γίνεταί. διὸ τοῖς παιδίοις οὐ συμφέρουσιν οἱ οἶνοι, οὐδὲ ταῖς τίτθαις (διαφέρει γὰρ ἴσως οὐδὲν αὐτὰ πίνειν ἢ τὰς τίτθας), ἀλλὰ δεῖ πίνειν ὕδαρῇ καὶ ὀλίγον· πνευματῶδες γὰρ ὁ οἶνος καὶ τοῦτου μᾶλλον ὁ μέλας. οὕτω δὲ τὰ ἄνω πλήρη τροφῆς τοῖς παιδίοις, ὥστε πέντε μηνῶν οὐδὲ στρέφουσι τὸν αὐχένα· ὥσπερ γὰρ τοῖς σφόδρα μεθύουσιν, ὑγρότης ἀναφέρεται πολλή. εὐλόγον δὲ τοῦτ' εἶναι τὸ πάθος αἴτιον καὶ τοῦ ἡρεμεῖν ἐν ταῖς μήτραις τὰ ἔμβρυα τὸ πρῶτον. καὶ τὸ ὅλον δὲ φίλυπνοι οἱ ἀδηλόφλεβοι καὶ οἱ νανώδεις καὶ οἱ μεγαλοκέφαλοι· τῶν μὲν γὰρ αἱ φλέβες στεναί, ὥστ' οὐ ῥάδιον διαρρεῖν κατιὸν τὸ ὑγρόν, τοῖς δὲ νανώδεσι καὶ μεγαλοκεφάλοις ἡ ἄνω ὁρμὴ πολλὴ καὶ ἀναθυμίασις. οἱ δὲ φλεβώδεις οὐχ ὑπνωτικοὶ δι' εὐροίαν τῶν πόρων, ἂν μὴ τι ἄλλο πάθος ἔχωσιν ὑπεναντίον. οὐδ' οἱ μελαγχολικοί· κατέψυκται γὰρ ὁ εἶσω τόπος, ὥστ' οὐ γίνεταί πλῆθος αὐτοῖς ἀναθυμιάσεως. διὰ τοῦτο γὰρ καὶ βρωτικοί, σκληροὶ ὄντες· ὥσπερ γὰρ οὐδὲν ἀπολελαυκότα διάκειται τὰ σώματα αὐτοῖς. ἡ δὲ μέλαινα χολὴ φύσει ψυχρὰ οὕσα καὶ τὸν θρεπτικὸν τόπον ψυχρὸν ποιεῖ καὶ τὰ ἄλλα μόρια, ὅπου ἂν ὑπάρχη δυνάμει τὸ τοιοῦτον περίπτωμα. ὥστε φανερόν ἐκ [457b] τῶν εἰρημένων ὅτι ὁ ὕπνος ἐστὶ σύνοδός τις τοῦ θερμοῦ εἶσω καὶ ἀντιπερίστασις φυσικὴ διὰ τὴν εἰρημένην αἰτίαν· διὸ πολλὴ ἡ κίνησις τοῦ ὑπνοῦντος. ὅθεν δ' ἐκλείπει, καταψύχεται καὶ διὰ ψῦξιν καταπίπτει τὰ βλέφαρα, καὶ τὰ μὲν ἄνω κατέψυκται καὶ τὰ ἔξω, τὰ δ' ἔντος καὶ τὰ κάτω θερμά, οἷον τὰ περὶ τοὺς πόδας καὶ τὰ εἶσω.

καίτοι τοῦτό τις ἀπορήσειεν ἂν, ὅτι μετὰ τὰ σιτία ἰσχυρότατος ὁ ὕπνος γίνεταί, καὶ ἔστιν ὑπνωτικὰ οἶνος καὶ ἄλλα θερμότητα ἔχοντα τοιαῦτα, ἔστι δ' οὐκ εὐλόγον τὸν μὲν ὕπνον εἶναι κατάψυξιν, τὰ δ' αἴτια τοῦ καθεύδειν θερμά. πότερον οὖν τοῦτο συμβαίνει ὅτι ὥσπερ ἡ κοιλία κενὴ μὲν οὕσα θερμὴ ἐστίν, ἡ δὲ πλήρωσις αὐτὴν καταψύχει διὰ τὴν κίνησιν, οὕτω καὶ οἱ ἐν τῇ κεφαλῇ πόροι καὶ τόποι καταψύχονται ἀναφερομένης τῆς ἀναθυμιάσεως; ἢ ὥσπερ τοῖς προσχεομένοις τὸ θερμὸν ἐξαίφνης φρίκη γίνεταί, κάκεῖ ἀνιόντος τοῦ θερμοῦ ἀθροιζόμενον τὸ ψυχρὸν καταψύχει, καὶ τὸ κατὰ φύσιν θερμὸν

ποιεῖ ἑξαδυνατεῖν καὶ ὑποχωρεῖν; ἔτι δὲ πολλῆς ἐμπιπτούσης τροφῆς, ἣν ἀνάγει τὸ θερμόν, ὥσπερ τὸ πῦρ ἐπιτιθεμένων τῶν ξύλων, καταψύχεται, ἕως ἂν καταπεφθῇ. γίνεται γὰρ ὁ ὕπνος, ὥσπερ εἴρηται, τοῦ σωματώδους ἀναφερομένου ὑπὸ τοῦ θερμοῦ διὰ τῶν φλεβῶν πρὸς τὴν κεφαλὴν· ὅταν δὲ μηκέτι δύνηται, ἀλλὰ τῷ πλήθει ὑπερβάλλῃ τὸ ἀναχθέν, πάλιν ἀνταπωθεῖται καὶ κάτω ῥεῖ (διὸ καὶ πίπτουσί γε ὑποσπωμένου τοῦ θερμοῦ τοῦ ἀνάγοντος οἱ ἄνθρωποι· μόνον γὰρ ὀρθὸν τῶν ζώων), καὶ ἐπιπεσὸν μὲν ἔκνοιαν ποιεῖ, ὕστερον δὲ φαντασίαν.

ἡ αἰ μὲν νῦν λεγόμεναι λύσεις ἐνδεχόμεναι μὲν εἰσι τοῦ γίνεσθαι τὴν κατάψυξιν, οὐ μὴν ἀλλὰ κύριός γ' ἐστὶν ὁ τόπος ὁ περὶ τὸν ἐγκέφαλον, ὥσπερ ἐν ἄλλοις εἴρηται. πάντων δ' ἐστὶ τῶν ἐν τῷ σώματι ψυχρότατον ὁ ἐγκέφαλος, τοῖς δὲ μὴ ἔχουσι τὸ ἀνάλογον τούτῳ μόριον. ὥσπερ οὖν τὸ ἀπατμίζον ὑγρὸν ὑπὸ τῆς τοῦ ἡλίου θερμότητος, ὅταν ἔλθῃ εἰς τὸν ἄνω τόπον, διὰ τὴν ψυχρότητα αὐτοῦ καταψύχεται καὶ συστὰν καταφέρεται [458a] γενόμενον πάλιν ὕδωρ, οὕτως ἐν τῇ ἀναφορᾷ τοῦ θερμοῦ τῇ πρὸς τὸν ἐγκέφαλον ἡ μὲν περιττωματικὴ ἀναθυμίασις εἰς φλέγμα συνίσταται (διὸ καὶ οἱ κατάρροι φαίνονται γινόμενοι ἐκ τῆς κεφαλῆς), ἡ δὲ τρόφιμος καὶ μὴ νοσώδης καταφέρεται συνισταμένη καὶ καταψύχει τὸ θερμόν. πρὸς δὲ τὸ καταψύχεσθαι καὶ μὴ δέχεσθαι ῥαδίως τὴν ἀναθυμίασιν συμβάλλεται καὶ ἡ λεπτότης καὶ [ἡ] στενότης τῶν περὶ τὸν ἐγκέφαλον φλεβῶν. τῆς μὲν οὖν καταψύξεως τοῦτ' ἐστὶν αἴτιον, καίπερ τῆς ἀναθυμιάσεως ὑπερβαλλούσης τῇ θερμότητι.

ἐγείρεται δ' ὅταν πεφθῇ καὶ κρατήσῃ ἡ συνεωσμένη θερμότης ἐν ὀλίγῳ πολλῇ ἐκ τοῦ περιεστῶτος, καὶ διακριθῇ τό τε σωματωδέστερον αἷμα καὶ τὸ καθαρώτερον. ἔστι δὲ λεπτότατον μὲν αἷμα καὶ καθαρώτατον τὸ ἐν τῇ κεφαλῇ, παχύτατον δὲ καὶ θολερώτατον τὸ ἐν τοῖς κάτω μέρεσιν. παντὸς δὲ τοῦ αἵματος ἀρχή, ὥσπερ εἴρηται καὶ ἐνταῦθα καὶ ἐν ἄλλοις, ἡ καρδία. τῶν δ' ἐν τῇ καρδίᾳ ἐκατέρας τῆς θαλάμης κοινὴ ἡ μέση· ἐκείνων δ' ἐκάτερα δέχεται ἕξ ἐκατέρας τῆς φλεβός, τῆς τε μεγάλης καλουμένης καὶ τῆς ὀρτῆς· ἐν δὲ τῇ μέσῃ γίνεται ἡ διάκρισις. ἀλλὰ τὸ μὲν διορίζειν περὶ τούτων ἑτέρων ἐστὶ λόγων οἰκειότερον· διὰ δὲ τὸ γίνεσθαι ἀδιακριτώτερον τὸ αἷμα μετὰ τὴν τῆς τροφῆς προσφορὰν ὕπνος γίνεται, ἕως ἂν διακριθῇ τοῦ αἵματος τὸ μὲν καθαρώτερον εἰς τὰ ἄνω, τὸ δὲ θολερώτερον εἰς τὰ κάτω· ὅταν δὲ τοῦτο συμβῇ, ἐγείρονται ἀπολυθέντα τοῦ ἐκ τῆς τροφῆς βάρους.

τί μὲν οὖν τὸ αἴτιον τοῦ καθεύδειν εἴρηται, ὅτι ἡ [ὑπὸ] τοῦ σωματώδους τοῦ ἀναφερομένου ὑπὸ τοῦ συμφύτου θερμοῦ ἀντιπερίστασις ἀθρόως ἐπὶ τὸ

πρῶτον αἰσθητήριον· καὶ τί ἐστὶν ὁ ὕπνος, ὅτι τοῦ πρώτου αἰσθητηρίου κατάληψις πρὸς τὸ μὴ δύνασθαι ἐνεργεῖν, ἐξ ἀνάγκης μὲν γινόμενος (οὐ γὰρ ἐνδέχεται ζῶον εἶναι μὴ συμβαινόντων τῶν ἀπεργαζομένων αὐτό), ἔνεκα δὲ σωτηρίας· σώζει γὰρ ἢ ἀνάπαυσις.

## Περὶ Ἐνυπνίων (458a) On Dreams



[458a] Μετὰ δὲ ταῦτα περὶ ἐνυπνίου ἐπιζητητέον, καὶ πρῶτον [458b] τίτι τῶν τῆς ψυχῆς φαίνεται, καὶ πότερον τοῦ νοητικοῦ τὸ πάθος ἐστὶ τοῦτο ἢ τοῦ αἰσθητικοῦ· τούτοις γὰρ μόνοις τῶν ἐν ἡμῖν γνωρίζομέν τι. εἰ δ' ἡ χρῆσις ὅψεως ὄρασις, καὶ ἀκοῆς τὸ ἀκούειν, καὶ ὅλως αἰσθήσεως τὸ αἰσθάνεσθαι, κοινὰ δ' ἐστὶ τῶν αἰσθήσεων οἶον σχῆμα καὶ μέγεθος καὶ κίνησις καὶ τᾶλλα τὰ τοιαῦτα, ἴδια δ' οἶον χρῶμα ψόφος χυμός, ἀδυνατεῖ δὲ πάντα μύοντα καὶ καθεύδοντα ὄρᾶν, ὁμοίως δὲ καὶ ἐπὶ τῶν λοιπῶν, δῆλον ὅτι οὐκ αἰσθανόμεθα οὐδὲν ἐν τοῖς ὕπνοις· οὐκ ἄρα γε τῇ αἰσθήσει τὸ ἐνύπνιον αἰσθανόμεθα.

ἀλλὰ μὴν οὐδὲ τῇ δόξει· οὐ γὰρ μόνον τὸ προσίόν φαμεν ἄνθρωπον ἢ ἵππον εἶναι, ἀλλὰ καὶ λευκὸν ἢ καλόν· ὣν ἡ δόξα ἄνευ αἰσθήσεως οὐδὲν ἂν φήσειεν, οὔτ' ἀληθῶς οὔτε ψευδῶς. ἐν δὲ τοῖς ὕπνοις συμβαίνει τὴν ψυχὴν τοῦτο ποιεῖν· ὁμοίως γὰρ ὅτι ἄνθρωπος καὶ ὅτι λευκὸς ὁ προσίων δοκοῦμεν ὄρᾶν. ἔτι παρὰ τὸ ἐνύπνιον ἐννοοῦμεν ἄλλο τι, καθάπερ ἐν τῷ ἐγρηγορέναι αἰσθανόμενοι τι. περὶ οὗ γὰρ αἰσθανόμεθα, πολλάκις καὶ διανοοῦμεθά τι· οὕτω καὶ ἐν τοῖς ὕπνοις παρὰ τὰ φαντάσματα ἐνίστε ἄλλα ἐννοοῦμεν. φανείη δ' ἂν τῷ τοῦτο, εἴ τις προσέχοι τὸν νοῦν καὶ πειρῶτο μνημονεύειν ἀναστάς. ἤδη δὲ τινες καὶ ἐωράκασιν ἐνύπνια τοιαῦτα, οἶον οἱ δοκοῦντες κατὰ τὸ μνημονικὸν παράγγελμα τίθεσθαι τὰ προβαλλόμενα· συμβαίνει γὰρ αὐτοῖς πολλάκις ἄλλο τι παρὰ τὸ ἐνύπνιον τίθεσθαι πρὸ ὁμμάτων εἰς τὸν τόπον φάντασμα· ὥστε δῆλον ὅτι οὐκ ἐνύπνιον πᾶν τὸ ἐν ὕπνῳ φάντασμα, καὶ ὅτι ὁ ἐννοοῦμεν τῇ δόξει δοξάζομεν. δῆλον δὲ περὶ τούτων ἀπάντων τό γε τοσοῦτον, ὅτι τὸ αὐτὸ ὦ καὶ ἐγρηγορότερες ἐν ταῖς νόσοις ἀπατώμεθα, τοῦτ' αὐτὸ καὶ ἐν τῷ ὕπνῳ ποιεῖ τὸ πάθος. καὶ ὑγιαίνουσι δὲ καὶ εἰδόσιν ὅμως ὁ ἥλιος ποδιαῖος εἶναι δοκεῖ. ἀλλ' εἴτε δὴ ταῦτόν εἴθ' ἕτερον τὸ φανταστικὸν τῆς ψυχῆς καὶ τὸ αἰσθητικόν, οὐδὲν ἥττον οὐ γίνεται ἄνευ τοῦ ὄρᾶν καὶ αἰσθάνεσθαί τι· τὸ γὰρ παρορᾶν καὶ παρακούειν ὁρῶντος ἀληθές τι καὶ ἀκούοντος, οὐ μέντοι τοῦτο ὃ οἶεται. ἐν δὲ τῷ ὕπνῳ ὑπόκειται μὴδὲν ὄρᾶν [459a] μὴδ' ἀκούειν

μηδ' ὅλως αἰσθάνεσθαι. ἄρ' οὖν τὸ μὲν μὴ ὁρᾶν μηδὲν ἀληθές, τὸ δὲ μηδὲν πάσχειν τὴν αἴσθησιν οὐκ ἀληθές, ἀλλ' ἐνδέχεται καὶ τὴν ὄψιν πάσχειν τι καὶ τὰς ἄλλας αἰσθήσεις, ἕκαστον δὲ τούτων ὥσπερ ἐγρηγορότος προσβάλλει μὲν πως τῇ αἰσθήσει, οὐχ οὕτω δὲ ὥσπερ ἐγρηγορότος· καὶ ὅτε μὲν ἡ δόξα λέγει ὅτι ψεῦδος, ὥσπερ ἐγρηγορόσιν, ὅτε δὲ κατέχεται καὶ ἀκολουθεῖ τῷ φαντάσματι; ὅτι μὲν οὖν οὐκ ἔστι τοῦ δοξάζοντος οὐδὲ τοῦ διανοομένου τὸ πάθος τοῦτο ὃ καλοῦμεν ἐνυπνιάζειν, φανερόν. ἀλλ' οὐδὲ τοῦ αἰσθανομένου ἀπλῶς· ὁρᾶν γὰρ ἂν ἦν καὶ ἀκούειν ἀπλῶς. ἀλλὰ πῶς δὴ καὶ τίνα τρόπον, ἐπισκεπτέον. ὑποκείσθω μὲν οὖν, ὅπερ ἐστὶ καὶ φανερόν, ὅτι τοῦ αἰσθητικοῦ τὸ πάθος, εἴπερ καὶ ὁ ὕπνος· οὐ γὰρ ἄλλω μὲν τινι τῶν ζώων ὑπάρχει ὁ ὕπνος, ἄλλω δὲ τὸ ἐνυπνιάζειν, ἀλλὰ τῷ αὐτῷ. ἐπεὶ δὲ περὶ φαντασίας ἐν τοῖς Περὶ ψυχῆς εἴρηται, καὶ ἔστι μὲν τὸ αὐτὸ τῷ αἰσθητικῷ τὸ φανταστικόν, τὸ δ' εἶναι φανταστικῷ καὶ αἰσθητικῷ ἕτερον, ἔστι δὲ φαντασία ἡ ὑπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως γινομένη κίνησις, τὸ δ' ἐνύπνιον φάντασμά τι φαίνεται εἶναι (τὸ γὰρ ἐν ὕπνῳ φάντασμα ἐνύπνιον λέγομεν, εἴθ' ἀπλῶς εἴτε τρόπον τινὰ γινόμενον), φανερόν ὅτι τοῦ αἰσθητικοῦ μὲν ἐστὶ τὸ ἐνυπνιάζειν, τούτου δ' ἡ φανταστικόν.

Τί δ' ἐστὶ τὸ ἐνύπνιον, καὶ πῶς γίνεται, ἐκ τῶν περὶ τὸν ὕπνον συμβαινόντων μάλιστ' ἂν θεωρήσαιμεν. τὰ γὰρ αἰσθητὰ καθ' ἕκαστον αἰσθητήριον ἡμῖν ἐμποιοῦσιν αἴσθησιν, καὶ τὸ γινόμενον ὑπ' αὐτῶν πάθος οὐ μόνον ἐνυπάρχει ἐν τοῖς αἰσθητηρίοις ἐνεργουσῶν τῶν αἰσθήσεων, ἀλλὰ καὶ ἀπελθουσῶν. παραπλήσιον γὰρ τὸ πάθος ἐπὶ τε τούτων καὶ ἐπὶ τῶν φερομένων ἔοικεν εἶναι. καὶ γὰρ ἐπὶ τῶν φερομένων τοῦ κινήσαντος οὐκέτι θιγγάνοντος κινεῖται· τὸ γὰρ κινήσαν ἐκίνησεν ἄερα τινά, καὶ πάλιν οὗτος κινούμενος ἕτερον· καὶ τοῦτον δὴ τὸν τρόπον, ἕως ἂν στή, ποιεῖται τὴν κίνησιν καὶ ἐν [459b] ἀέρι καὶ ἐν τοῖς ὑγροῖς.

ὁμοίως δὲ ὑπολαβεῖν τοῦτο δεῖ καὶ ἐπ' ἀλλοιώσεως· τὸ γὰρ θερμανθὲν ὑπὸ τοῦ θερμοῦ τὸ πλησίον θερμαίνει, καὶ τοῦτο διαδίδωσιν ἕως τῆς ἀρχῆς. ὥστε καὶ ἐν τῷ αἰσθάνεσθαι, ἐπειδὴ ἐστὶν ἀλλοιώσις τις ἡ κατ' ἐνέργειαν αἴσθησις, ἀνάγκη τοῦτο συμβαίνειν. διὸ τὸ πάθος ἐστὶν οὐ μόνον ἐν αἰσθανομένοις τοῖς αἰσθητηρίοις, ἀλλὰ καὶ ἐν πεπαυμένοις, καὶ ἐν βάθει καὶ ἐπιπολῆς. φανερόν δὲ ὅταν συνεχῶς αἰσθανώμεθά τι· μεταφερόντων γὰρ τὴν αἴσθησιν ἀκολουθεῖ τὸ πάθος, οἷον ἐκ τοῦ ἡλίου εἰς τὸ σκότος· συμβαίνει γὰρ μηδὲν ὁρᾶν διὰ τὴν ἔτι ὑποῦσαν κίνησιν ἐν τοῖς ὄμμασιν ὑπὸ τοῦ φωτός. κἂν πρὸς ἐν χρῶμα πολλὸν χρόνον βλέψωμεν ἢ λευκὸν ἢ χλωρόν, τοιοῦτον φαίνεται ἐφ' ὅπερ ἂν τὴν ὄψιν μεταβάλωμεν. κἂν πρὸς τὸν ἥλιον βλέψαντες ἢ ἄλλο τι λαμπρὸν μύσωμεν, παρατηρήσασι φαίνεται κατ' εὐθυωρίαν, ἢ



συμβαίνει τὴν ὄψιν ὀρᾶν, πρῶτον μὲν τοιοῦτον τὴν χροάν, εἴτα μεταβάλλει εἰς φοινικοῦν κᾶπειτα πορφυροῦν, ἕως ἂν εἰς τὴν μέλαιναν ἔλθῃ χροάν καὶ ἀφανισθῇ. καὶ ἀπὸ τῶν κινουμένων δὲ μεταβάλλουσιν, οἷον ἀπὸ τῶν ποταμῶν, μάλιστα δὲ ἀπὸ τῶν τάχιστα ῥεόντων, φαίνεται [γὰρ] τὰ ἡρεμοῦντα κινούμενα. γίνονται δὲ καὶ ἀπὸ τῶν μεγάλων ψόφων δύσκωφοι καὶ ἀπὸ τῶν ἰσχυρῶν ὁσμῶν δύσοσμοι, καὶ ἐπὶ τῶν ὁμοίων <ὁμοίως>. ταῦτά γε δὴ φανερώς συμβαίνει τοῦτον τὸν τρόπον.

ὅτι δὲ ταχὺ τὰ αἰσθητήρια καὶ μικρᾶς διαφορᾶς αἰσθάνεται, σημεῖον τὸ ἐπὶ τῶν ἐνόπτρων γινόμενον· περὶ οὗ καὶ αὐτοῦ ἐπιστήσας σκέψαιτό τις ἂν καὶ ἀπορήσειεν. ἅμα δ' ἐξ αὐτοῦ δῆλον ὅτι ὥσπερ καὶ ἡ ὄψις πάσχει, οὕτω καὶ ποιεῖ τι. ἐν γὰρ τοῖς ἐνόπτοις τοῖς σφόδρα καθαροῖς, ὅταν τῶν καταμηνίων ταῖς γυναιξὶ γινομένων ἐμβλέψωσιν εἰς τὸ κάτοπτρον, γίνεται τὸ ἐπιπολῆς τοῦ ἐνόπτρου οἷον νεφέλη αἱματώδης· κἂν μὲν καινὸν ᾗ τὸ κάτοπτρον, οὐ ῥᾶδιον ἐκμάζει τὴν τοιαύτην κηλίδα, ἐὰν δὲ παλαιόν, ῥᾶον. αἴτιον δέ, ὥσπερ εἵπομεν, [460a] ὅτι οὐ μόνον πάσχει ἡ ὄψις ὑπὸ τοῦ ἀέρος, ἀλλὰ καὶ ποιεῖ τι καὶ κινεῖ, ὥσπερ καὶ τὰ λαμπρά· καὶ γὰρ ἡ ὄψις τῶν λαμπρῶν καὶ ἐχόντων χρωμα. τὰ μὲν οὖν ὄμματα εὐλόγως, ὅταν ᾗ τὰ καταμήνια, διακεῖται ὥσπερ καὶ ἕτερον μέρος ὁτιοῦν· καὶ γὰρ φύσει τυγχάνουσι φλεβώδεις ὄντες. διὸ γινομένων τῶν καταμηνίων διὰ ταραχὴν καὶ φλεγμασίαν αἱματικὴν ἡμῖν μὲν ἢ ἐν τοῖς ὄμμασι διαφορὰ ἄδηλος, ἔνεστι δέ (ἢ γὰρ αὐτὴ φύσις σπέρματος καὶ καταμηνίων), ὁ δ' ἀὖρ κινεῖται ὑπ' αὐτῶν, καὶ τὸν ἐπὶ τῶν κατόπτρων ἀέρα συνεχῇ ὄντα ποίον τινα ποιεῖ καὶ τοιοῦτον οἷον αὐτὸς πάσχει· ὁ δὲ τοῦ κατόπτρου τὴν ἐπιφάνειαν. ὥσπερ δὲ τῶν ἱματίων, τὰ μάλιστα καθαρὰ τάχιστα κηλιδοῦνται· τὸ γὰρ καθαρὸν ἀκριβῶς δηλοῖ ὅ τι ἂν δέξηται, καὶ τὸ μάλιστα τὰς ἐλαχίστας κινήσεις. ὁ δὲ χαλκὸς διὰ μὲν τὸ λεῖος εἶναι ὁποιασοῦν ἀφῆς αἰσθάνεται μάλιστα (δεῖ δὲ νοῆσαι οἷον τρίψιν οὕσαν τὴν τοῦ ἀέρος ἀφὴν καὶ ὥσπερ ἔκμαξιν καὶ ἀνάπλυσιν), διὰ δὲ τὸ καθαρὸν ἔνδηλος γίνεται ὀπληκιοῦν οὕσα. τοῦ δὲ μὴ ἀπιέναι ταχέως ἐκ τῶν καινῶν κατόπτρων αἴτιον τὸ καθαρὸν εἶναι καὶ λεῖον· διαδεύεται γὰρ διὰ τῶν τοιούτων καὶ εἰς βάθος καὶ πάντη, διὰ μὲν τὸ καθαρὸν εἰς βάθος, διὰ δὲ τὸ λεῖον πάντη. ἐν δὲ τοῖς παλαιοῖς οὐκ ἐμμένει, ὅτι οὐχ ὁμοίως εἰσδύεται ἡ κηλὶς ἀλλ' ἐπιπολαιότερον.

ὅτι μὲν οὖν καὶ ὑπὸ τῶν μικρῶν διαφορῶν γίνεται κίνησις, καὶ ὅτι ταχεῖα ἢ αἰσθησις, καὶ ὅτι οὐ μόνον πάσχει, ἀλλὰ καὶ ἀντιποιεῖ τὸ τῶν χρωμάτων αἰσθητήριον, φανερὸν ἐκ τούτων. μαρτυρεῖ δὲ τοῖς εἰρημένοις καὶ τὰ περὶ τοὺς οἴνους καὶ τὴν μυρεψίαν συμβαίνοντα. τό τε γὰρ παρασκευασθὲν ἔλαιον ταχέως λαμβάνει τὰς τῶν πλησίον ὁσμὰς, καὶ οἱ οἶνοι τὸ αὐτὸ τοῦτο

πάσχουσιν· οὐ γὰρ μόνον τῶν ἐμβαλλομένων ἢ ὑποκιρναμένων ἀλλὰ καὶ τῶν πλησίον τοῖς ἀγγείοις τιθεμένων ἢ πεφυκότων ἀναλαμβάνουσι τὰς ὀσμάς.

πρὸς δὲ τὴν ἐξ ἀρχῆς [460b] σκέψιν ὑποκείσθω ἐν μὲν, ὅπερ ἐκ τῶν εἰρημένων φανερόν, ὅτι καὶ ἀπελθόντος τοῦ θύραθεν αἰσθητοῦ ἐμμένει τὰ αἰσθήματα αἰσθητὰ ὄντα, πρὸς δὲ τούτοις ὅτι ῥαδίως ἀπατώμεθα περὶ τὰς αἰσθήσεις ἐν τοῖς πάθεσιν ὄντες, ἄλλοι δὲ ἐν ἄλλοις, οἷον ὁ δειλὸς ἐν φόβῳ, ὁ δ' ἐρωτικὸς ἐν ἔρωτι, ὥστε δοκεῖν ἀπὸ μικρᾶς ὁμοιότητος τὸν μὲν τοῦς πολεμίους ὁρᾶν, τὸν δὲ τὸν ἐρώμενον· καὶ ταῦτα ὅσω ἂν ἐμπαθέστερος ᾖ, τοσούτῳ ἀπ' ἐλάσσονος ὁμοιότητος φαίνεται. τὸν αὐτὸν δὲ τρόπον καὶ ἐν ὀργαῖς καὶ ἐν πάσαις ἐπιθυμίαις εὐαπάτητοι γίνονται πάντες, καὶ μᾶλλον ὅσω ἂν μᾶλλον ἐν τοῖς πάθεσιν ὦσιν. διὸ καὶ τοῖς πυρέττουσιν ἐνίοτε φαίνεται ζῶα ἐν τοῖς τοίχοις ἀπὸ μικρᾶς ὁμοιότητος τῶν γραμμῶν συντιθεμένων. καὶ ταῦτ' ἐνίοτε συνεπιτείνει τοῖς πάθεσιν οὕτως, ὥστε, ἂν μὲν μὴ σφόδρα κάμνωσι, μὴ λανθάνειν ὅτι ψεῦδος, ἐὰν δὲ μεῖζον ᾖ τὸ πάθος, καὶ κινεῖσθαι πρὸς αὐτά. αἴτιον δὲ τοῦ συμβαίνειν ταῦτα τὸ μὴ κατὰ τὴν αὐτὴν δύναμιν κρίνειν τό τε κύριον καὶ ὧ τὰ φαντάσματα γίνεται. τούτου δὲ σημεῖον ὅτι φαίνεται μὲν ὁ ἥλιος ποδιαῖος, ἀντίφησι δὲ πολλάκις ἕτερόν τι πρὸς τὴν φαντασίαν. καὶ τῇ ἐπαλλάξει τῶν δακτύλων τὸ ἐν δύο φαίνεται, ἀλλ' ὅμως οὐ φαμεν δύο· κυριωτέρα γὰρ τῆς ἀφῆς ἢ ὄψις. εἰ δ' ἦν ἡ ἀφή μόνη, κἂν ἐκρίνομεν τὸ ἐν δύο. τοῦ δὲ διεψεῦσθαι αἴτιον ὅτι οὐ μόνον τοῦ αἰσθητοῦ κινουῦντος φαίνεται ἀδήποτε, ἀλλὰ καὶ τῆς αἰσθήσεως κινουμένης αὐτῆς, ἐὰν ὡσαύτως κινῆται ὥσπερ καὶ ὑπὸ τοῦ αἰσθητοῦ· λέγω δ' οἷον ἡ γῆ δοκεῖ τοῖς πλέουσι κινεῖσθαι κινουμένης τῆς ὀψεως ὑπ' ἄλλου.

Ἐκ δὲ τούτων φανερόν ὅτι οὐ μόνον ἐγρηγορότων αἱ κινήσεις αἱ ἀπὸ τῶν αἰσθημάτων γινόμεναι τῶν τε θύραθεν καὶ τῶν ἐκ τοῦ σώματος ἐνυπάρχουσιν, ἀλλὰ καὶ ὅταν γένηται τὸ πάθος τοῦτο ὃ καλεῖται ὕπνος, καὶ μᾶλλον τότε φαίνονται. μεθ' ἡμέραν μὲν γὰρ ἐκκρούονται ἐνεργουσῶν τῶν [461a] αἰσθήσεων καὶ τῆς διανοίας, καὶ ἀφανίζονται ὥσπερ παρὰ πολὺ πῦρ ἔλαττον καὶ λῦπαι καὶ ἡδοναὶ μικραὶ παρὰ μεγάλας, παυσαμένων δὲ ἐπιπολάζει καὶ τὰ μικρά· νύκτωρ δὲ δι' ἀργίαν τῶν κατὰ μόριον αἰσθήσεων καὶ ἀδυναμίαν τοῦ ἐνεργεῖν, διὰ τὸ ἐκ τῶν ἔξω εἰς τὸ ἐντὸς γίνεσθαι τὴν τοῦ θερμοῦ παλίρροιαν, ἐπὶ τὴν ἀρχὴν τῆς αἰσθήσεως καταφέρονται καὶ γίνονται φανεραὶ καθισταμένης τῆς ταραχῆς.

δεῖ δὲ ὑπολαβεῖν ὥσπερ τὰς μικρὰς δίνας τὰς ἐν τοῖς ποταμοῖς γινομένας, οὕτω τὴν κίνησιν ἐκάστην γίνεσθαι συνεχῶς, πολλάκις μὲν ὁμοίως, πολλάκις δὲ διαλυομένας εἰς ἄλλα σχήματα διὰ τὴν ἀντίκρουσιν. διὸ καὶ μετὰ τὴν

τροφὴν καὶ πάμπαν νέοις οὖσιν, οἷον τοῖς παιδίοις, οὐ γίνεται ἐνύπνια· πολλὴ γὰρ ἡ κίνησις διὰ τὴν ἀπὸ τῆς τροφῆς θερμότητα. ὥστε καθάπερ ἐν ὑγρῷ, ἐὰν σφόδρα κινῇ τις, ὅτε μὲν οὐθὲν φαίνεται εἶδωλον, ὅτε δὲ φαίνεται μὲν, διεστραμμένον δὲ πάμπαν, ὥστε φαίνεσθαι ἄλλοιον ἢ οἷόν ἐστιν, ἡρεμήσαντος δὲ καθαρὰ καὶ φανερά, οὕτω καὶ ἐν τῷ καθεύδειν τὰ φαντάσματα καὶ αἱ ὑπόλοιποι κινήσεις αἱ συμβαίνουσαι ἀπὸ τῶν αἰσθημάτων ὅτε μὲν ὑπὸ μείζονος οὔσης τῆς εἰρημένης κινήσεως ἀφανίζονται πάμπαν, ὅτε δὲ τεταραγμένοι φαίνονται αἱ ὄψεις καὶ τερατώδεις, καὶ οὐκ εἰρόμενα τὰ ἐνύπνια, οἷον τοῖς μελαγχολικοῖς καὶ πυρέττουσι καὶ οἰνωμένοις· πάντα γὰρ τὰ τοιαῦτα πάθη πνευματώδη ὄντα πολλὴν ποιεῖ κίνησιν καὶ ταραχήν. καθισταμένου δὲ καὶ διακρινομένου τοῦ αἵματος ἐν τοῖς ἐναίμοις, σωζομένη τῶν αἰσθημάτων ἡ κίνησις ἀφ' ἐκάστου τῶν αἰσθητηρίων εἰρόμενά τε ποιεῖ τὰ ἐνύπνια, καὶ φαίνεσθαι τι καὶ δοκεῖν διὰ μὲν τὰ ἀπὸ τῆς ὄψεως καταφερόμενα ὁρᾶν, διὰ δὲ τὰ ἀπὸ τῆς ἀκοῆς ἀκούειν, ὁμοιοτρόπως δὲ καὶ ἀπὸ τῶν ἄλλων αἰσθητηρίων· τῷ μὲν γὰρ ἐκεῖθεν ἀφικνεῖσθαι τὴν κίνησιν πρὸς τὴν ἀρχὴν καὶ ἐγρηγορῶς δοκεῖ [461b] ὁρᾶν καὶ ἀκούειν καὶ αἰσθάνεσθαι, καὶ διὰ τὸ τὴν ὄψιν ἐνίστε κινεῖσθαι δοκεῖν, οὐ κινουμένην, ὁρᾶν φαινομένην, καὶ τῷ τὴν ἀφὴν δύο κινήσεις εἰσαγγέλλειν τὸ ἐν δύο δοκεῖ. ὅλως γὰρ τὸ ἀφ' ἐκάστης αἰσθήσεως φησιν ἡ ἀρχή, ἐὰν μὴ ἑτέρα κυριώτερα ἀντιφῇ. φαίνεται μὲν οὖν πάντως, δοκεῖ δὲ οὐ πάντως τὸ φαινόμενον, ἀλλ' ὅταν τὸ ἐπικρῖνον κατέχηται ἢ μὴ κινῆται τὴν οἰκείαν κίνησιν.

ὥσπερ δ' εἵπομεν ὅτι ἄλλοι δι' ἄλλο πάθος εὐαπάτητοι, οὕτως ὁ καθεύδων διὰ τὸν ὕπνον καὶ τὸ κινεῖσθαι τὰ αἰσθητήρια καὶ τὰλλα τὰ συμβαίνοντα περὶ τὴν αἴσθησιν, ὥστε τὸ μικρὰν ἔχον ὁμοιότητα φαίνεται ἐκεῖνο. ὅταν γὰρ καθεύδῃ, κατιόντος τοῦ πλείστου αἵματος ἐπὶ τὴν ἀρχὴν συγκατέρχονται αἱ ἐνοῦσαι κινήσεις, αἱ μὲν δυνάμει αἱ δὲ ἐνεργείᾳ. οὕτω δ' ἔχουσιν ὥστε ἐν τῇ κινήσει τηδὶ ἥδε ἐπιπολάσει ἐξ αὐτοῦ ἡ κίνησις, ἢ δ' αὕτη φθαρῇ, ἥδε. καὶ πρὸς ἀλλήλας δὴ ἔχουσιν ὥσπερ οἱ πεπλασμένοι βάρβαροι οἱ ἀνιόντες ἐν τῷ ὕδατι τηκομένου τοῦ ἀλός - οὕτως ἐνεῖσι δυνάμει, ἀνιένοντες δὲ τοῦ κωλύοντος ἐνεργοῦσιν, καὶ λυόμεναι ἐν ὀλίγῳ τῷ λοιπῷ αἵματι τῷ ἐν τοῖς αἰσθητηρίοις κινουῖνται, ἔχουσαι ὁμοιότητα ὥσπερ τὰ ἐν τοῖς νέφεσιν, ἃ παρεικάζουσιν ἀνθρώποις καὶ κενταύροις ταχέως μεταβάλλοντα. τούτων δὲ ἕκαστόν ἐστιν, ὥσπερ εἴρηται, ὑπόλειμμα τοῦ ἐν τῇ ἐνεργείᾳ αἰσθήματος· καὶ ἀπελθόντος τοῦ ἀληθοῦς ἔνεστι, καὶ ἀληθὲς εἰπεῖν ὅτι τοιοῦτον οἷον Κορίσκος, ἀλλ' οὐ Κορίσκος. ὅτε δὲ ἡσθάνετο, οὐκ ἔλεγε Κορίσκον τὸ κύριον καὶ τὸ ἐπικρῖνον, ἀλλὰ διὰ τοῦτο ἐκεῖνον Κορίσκον τὸν ἀληθινόν. ὁ δὲ καὶ αἰσθανόμενον λέγει τοῦτο, ἐὰν μὴ παντελῶς κατέχηται ὑπὸ τοῦ αἵματος, ὥσπερ αἰσθανόμενον τοῦτο κινεῖται ὑπὸ τῶν κινήσεων τῶν ἐν τοῖς

αἰσθητηρίοις, καὶ δοκεῖ τὸ ὅμοιον αὐτὸ εἶναι τὸ ἀληθές· καὶ τοσαύτη τοῦ ὕπνου ἢ δύναμις ὥστε ποιεῖν τοῦτο λανθάνειν. ὥσπερ οὖν εἴ τινα λανθάνοι ὑποβαλλόμενος ὁ δάκτυλος τῷ ὀφθαλμῷ, [462a] οὐ μόνον φανεῖται ἀλλὰ καὶ δόξει εἶναι δύο τὸ ἓν, ἂν δὲ μὴ λανθάνῃ, φανεῖται μὲν οὐ δόξει δέ, οὕτω καὶ ἐν τοῖς ὕπνοις, ἐὰν μὲν αἰσθάνηται ὅτι καθεύδει, καὶ τοῦ πάθους ἐν ᾧ ἢ αἰσθησις τοῦ ὑπνωτικοῦ, φαίνεται μὲν, λέγει δέ τι ἐν αὐτῷ ὅτι φαίνεται μὲν Κορίσκος, οὐκ ἔστι δὲ ὁ Κορίσκος (πολλάκις γὰρ καθεύδοντας λέγει τι ἐν τῇ ψυχῇ ὅτι ἐνύπνιον τὸ φαινόμενον)· ἐὰν δὲ λανθάνῃ ὅτι καθεύδει, οὐδὲν ἀντιφύσει τῇ φαντασίᾳ.

ὅτι δὲ ἀληθῆ λέγομεν καὶ εἰσὶ κινήσεις φανταστικαὶ ἐν τοῖς αἰσθητηρίοις, δῆλον, ἐάν τις προσέχων πειρᾶται μνημονεύειν ἃ πάσχομεν καταφερόμενοί τε καὶ ἐγειρόμενοι· ἐνίστε γὰρ τὰ φαινόμενα εἶδωλα καθεύδοντι φωράσει ἐγειρόμενος κινήσεις οὕσας ἐν τοῖς αἰσθητηρίοις· καὶ ἐνίοις γε τῶν νεωτέρων καὶ πάμπαν διαβλέπουσιν, ἐὰν ἢ σκότος, φαίνεται εἶδωλα πολλὰ κινούμενα, ὥστ' ἐγκαλύπτεσθαι πολλάκις φοβουμένους. ἐκ δὲ τούτων ἀπάντων δεῖ συλλογίσασθαι ὅτι ἐστὶ τὸ ἐνύπνιον φάντασμα μὲν τι καὶ ἐν ὕπνῳ· τὰ γὰρ ἄρτι λεχθέντα εἶδωλα οὐκ ἔστιν ἐνύπνια, οὐδ' εἴ τι ἄλλο λελυμένων τῶν αἰσθήσεων φαίνεται· οὐδὲ τὸ ἐν ὕπνῳ φάντασμα πᾶν. πρῶτον μὲν γὰρ ἐνίοις συμβαίνει καὶ αἰσθάνεσθαι πῃ καὶ ψόφων καὶ φωτὸς καὶ χυμοῦ καὶ ἀφῆς, ἀσθενικῶς μέντοι καὶ οἷον πόρρωθεν· ἥδη γὰρ ἐν τῷ καθεύδειν ὑποβλέποντες, ὃ ἡρέμα ἐώρων φῶς τοῦ λύχνου καθεύδοντες, ὡς ὦντο, ἐπεγερθέντες εὐθὺς ἐγνώρισαν τὸ τοῦ λύχνου ὄν, καὶ ἀλεκτρυόνων καὶ κυνῶν φωνὴν ἡρέμα ἀκούοντες ἐγερθέντες σαφῶς ἐγνώρισαν. ἐνιοὶ δὲ καὶ ἀποκρίνονται ἐρωτώμενοι· ἐνδέχεται γὰρ τοῦ ἐγρηγορέναι καὶ καθεύδειν ἀπλῶς θατέρου ὑπάρχοντος θατερόν πῃ ὑπάρχειν. ὣν οὐθὲν ἐνύπνιον φατέον, οὐδ' ὅσαι δὴ ἐν τῷ ὕπνῳ γίνονται ἀληθεῖς ἔννοιαὶ παρὰ τὰ φαντάσματα, ἀλλὰ τὸ φάντασμα τὸ ἀπὸ τῆς κινήσεως τῶν αἰσθημάτων, ὅταν ἐν τῷ καθεύδειν ᾗ, ᾗ καθεύδει, τοῦτ' ἐστὶν ἐνύπνιον.

ἥδη δέ τισι συμβέβηκεν μηδὲν [462b] ἐνύπνιον ἐωρακέναι κατὰ τὸν βίον, τοῖς δὲ πόρρῳ που προελθούσης τῆς ἡλικίας ἰδεῖν πρότερον μὴ ἐωρακόσιν. τὸ δ' αἴτιον τοῦ μὴ γίνεσθαι παραπλήσιον φαίνεται τῷ ἐπὶ τῶν παιδίων καὶ μετὰ τὴν τροφήν. ὅσοις γὰρ συνέστηκεν ἡ φύσις ὥστε πολλὴν ἀναθυμίασιν πρὸς τὸν ἄνω τόπον ἀναφέρεισθαι, ἢ πάλιν καταφερομένη ποιεῖ πλῆθος κινήσεως, εὐλόγως τούτοις οὐδὲν φαίνεται φάντασμα. προϊούσης δὲ τῆς ἡλικίας οὐδὲν ἄτοπον φανῆναι ἐνύπνιον· μεταβολῆς γάρ τινος γενομένης ἢ καθ' ἡλικίαν ἢ κατὰ πάθος ἀναγκαῖον συμβῆναι τὴν ἐναντίωσιν ταύτην.

## Περὶ Τῆς καθ' Ὑπνον Μαντικῆς (462b) On Divination in Sleep



[462b] Περὶ δὲ τῆς μαντικῆς τῆς ἐν τοῖς ὕπνοις γινομένης καὶ λεγομένης συμβαίνειν ἀπὸ τῶν ἐνυπνίων, οὔτε καταφρονῆσαι ῥάδιον οὔτε πεισθῆναι. τὸ μὲν γὰρ πάντας ἢ πολλοὺς ὑπολαμβάνειν ἔχειν τι σημειῶδες τὰ ἐνύπνια παρέχεται πίστιν ὥς ἐξ ἐμπειρίας λεγόμενον, καὶ τὸ περὶ ἐνίων εἶναι τὴν μαντικὴν ἐν τοῖς ἐνυπνίοις οὐκ ἄπιστον· ἔχει γάρ τινα λόγον· διὸ καὶ περὶ τῶν ἄλλων ἐνυπνίων ὁμοίως ἂν τις οἰηθείη. τὸ δὲ μηδεμίαν αἰτίαν εὐλογον ὀρᾶν καθ' ἣν ἂν γίνοιτο, τοῦτο δὲ ἀπιστεῖν ποιεῖ· τό τε γὰρ θεὸν εἶναι τὸν πέμποντα, πρὸς τῇ ἄλλῃ ἀλογία, καὶ τὸ μὴ τοῖς βελτίστοις καὶ φρονιμωτάτοις ἀλλὰ τοῖς τυχοῦσι πέμπειν ἄτοπον. ἀφαιρεθείσης δὲ τῆς ἀπὸ τοῦ θεοῦ αἰτίας οὐδεμία τῶν ἄλλων εὐλογος εἶναι φαίνεται αἰτία· τοῦ γὰρ περὶ τῶν ἐφ' Ἡρακλείαις στήλαις ἢ τῶν ἐν Βορυσθένει προορᾶν τινὰς ὑπὲρ τὴν ἡμετέραν εἶναι δόξειεν ἂν σύνεσιν εὐρεῖν τὴν ἀρχήν. ἀνάγκη δ' οὖν τὰ ἐνύπνια ἢ αἴτια εἶναι ἢ σημεῖα τῶν γινομένων ἢ συμπτώματα, ἢ πάντα ἢ ἕνια τούτων ἢ ἐν μόνον. λέγω δ' αἴτιον μὲν οἷον τὴν σελήνην τοῦ ἐκλείπειν τὸν ἥλιον, καὶ τὸν κόπον τοῦ πυρετοῦ, σημεῖον δὲ τῆς ἐκλείψεως τὸ τὸν ἀστέρα εἰσελθεῖν, τὴν δὲ τραχύτητα τῆς γλώττης τοῦ πυρέττειν, σύμπτωμα δὲ τὸ βαδίζοντος ἐκλείπειν τὸν ἥλιον· [463a] οὔτε γὰρ σημεῖον τοῦ ἐκλείπειν τοῦτ' ἐστὶν οὔτ' αἴτιον, οὔθ' ἢ ἐκλειψις τοῦ βαδίζειν· διὸ τῶν συμπτωμάτων οὐδὲν οὔτε αἰεὶ γίνεται, οὔθ' ὥς ἐπὶ τὸ πολὺ. ἄρ' οὖν ἐστὶ τῶν ἐνυπνίων τὰ μὲν αἴτια, τὰ δὲ σημεῖα, οἷον τῶν περὶ τὸ σῶμα συμβαινόντων; λέγουσι γοῦν καὶ τῶν ἰατρῶν οἱ χαρίεντες ὅτι δεῖ σφόδρα προσέχειν τοῖς ἐνυπνίοις· εὐλογον δὲ οὕτως ὑπολαβεῖν καὶ τοῖς μὴ τεχνίταις μὲν, σκοπομένοις δὲ τι καὶ φιλοσοφοῦσιν. αἱ γὰρ μεθ' ἡμέραν γινόμεναι κινήσεις, ἂν μὴ σφόδρα μεγάλαί ᾧσι καὶ ἰσχυραί, λανθάνουσι παρὰ μείζους τὰς ἐγρηγορικὰς κινήσεις, ἐν δὲ τῷ καθεύδειν τούναντίον· καὶ γὰρ αἱ μικραὶ μεγάλαι δοκοῦσιν εἶναι. δῆλον δ' ἐπὶ τῶν συμβαινόντων κατὰ τοὺς ὕπνους πολλάκις· οἷονται γὰρ κεραυνοῦσθαι καὶ βροντᾶσθαι μικρῶν ἤχων ἐν τοῖς ὥσιν γινομένων, καὶ μέλιτος καὶ γλυκέων χυμῶν ἀπολαύειν ἀκαριαίου φλέγματος καταρρέοντος, καὶ βαδίζειν διὰ πυρὸς καὶ θερμαίνεσθαι σφόδρα μικρᾷς θερμασίας περὶ τινὰ μέρη γινομένης, ἐπεγειρομένοις δὲ ταῦτα φανερά τοῦτον ἔχοντα τὸν τρόπον· ὥστ' ἐπεὶ μικραὶ πάντων αἱ ἀρχαί, δῆλον ὅτι καὶ τῶν νόσων καὶ τῶν ἄλλων παθημάτων τῶν ἐν τοῖς σώμασι μελλόντων γίνεσθαι. φανερόν οὖν ὅτι ταῦτα ἀναγκαῖον ἐν τοῖς ὕπνοις εἶναι καταφανῆ μᾶλλον ἢ ἐν τῷ ἐγρηγορέναι.

ἀλλὰ μὴν καὶ ἕνιά γε τῶν καθ' ὕπνον φαντασμάτων αἷτια εἶναι τῶν οἰκείων ἐκάστω πράξεων οὐκ ἄλογον· ὥσπερ γὰρ μέλλοντες πράττειν ἢ ἐν ταῖς πράξεσιν ὄντες ἢ πεπραχότες πολλάκις εὐθυονειρία ταύταις σύνεσμεν καὶ πράττομεν (αἷτιον δ' ὅτι προωδοποιημένη τυγχάνει ἡ κίνησις ἀπὸ τῶν μεθ' ἡμέραν ἀρχῶν), οὕτω πάλιν ἀναγκαῖον καὶ τὰς καθ' ὕπνον κινήσεις πολλάκις ἀρχὰς εἶναι τῶν μεθ' ἡμέραν πράξεων διὰ τὸ προωδοποιῆσθαι πάλιν καὶ τούτων τὴν διάνοιαν ἐν τοῖς φαντάσμασι τοῖς νυκτερινοῖς. οὕτω μὲν οὖν ἐνδέχεται τῶν ἐνυπνίων ἕνια καὶ σημεῖα καὶ αἷτια εἶναι. τὰ δὲ πολλὰ συμπτώμασιν [463b] ἔοικε, μάλιστα δὲ τὰ τε ὑπερβατὰ πάντα καὶ ὧν μὴ ἐν αὐτοῖς ἡ ἀρχή, ἀλλὰ περὶ ναυμαχίας καὶ τῶν πόρρω συμβαινόντων ἐστίν· περὶ γὰρ τούτων τὸν αὐτὸν τρόπον ἔχειν εἰκὸς ὅν ὅταν μεμνημένῳ τινὲ περί τινος τυχεῖ τοῦτο γιγνόμενον· τί γὰρ κωλύει καὶ ἐν τοῖς ὕπνοις οὕτως; μᾶλλον δ' εἰκὸς πολλὰ τοιαῦτα συμβαίνειν. ὥσπερ οὖν οὐδὲ τὸ μνησθῆναι περὶ τοῦδε σημείου οὐδὲ αἷτιον τοῦ παραγενέσθαι αὐτόν, οὕτως οὐδ' ἐκεῖ τοῦ ἀποβῆναι τὸ ἐνύπνιον τῷ ἰδόντι οὔτε σημεῖον οὔτ' αἷτιον, ἀλλὰ σύμπτωμα. διὸ καὶ πολλὰ τῶν ἐνυπνίων οὐκ ἀποβαίνει· τὰ γὰρ συμπτώματα οὔτε ἀεὶ οὔθ' ὥς ἐπὶ τὸ πολὺ γίγνεται.

Ὅλως δὲ ἐπεὶ καὶ τῶν ἄλλων ζώων ὀνειρώττει τινά, θεόπεμπτα μὲν οὐκ ἂν εἴη τὰ ἐνύπνια, οὐδὲ γέγονε τούτου χάριν (δαιμόνια μέντοι· ἡ γὰρ φύσις δαιμονία, ἀλλ' οὐ θεία). σημεῖον δέ· πάνυ γὰρ εὐτελεῖς ἄνθρωποι προορατικοὶ εἰσι καὶ εὐθυόνειροι, ὥς οὐ θεοῦ πέμποντος, ἀλλ' ὅσων ὥσπερ ἂν εἰ λάλος ἡ φύσις ἐστὶ καὶ μελαγχολική, παντοδαπὰς ὄψεις ὀρῶσιν· διὰ γὰρ τὸ πολλὰ καὶ παντοδαπὰ κινεῖσθαι ἐπιτυγχάνουσιν ὁμοίοις θεωρήμασιν, ἐπιτυχεῖς ὄντες ἐν τούτοις ὥσπερ ἕνιοι ἀρτιάζοντες· ὥσπερ γὰρ καὶ λέγεται “ἂν πολλὰ βάλλης, ἄλλοτ' ἄλλοιόν βαλεῖς”, καὶ ἐπὶ τούτων τοῦτο συμβαίνει. ὅτι δ' οὐκ ἀποβαίνει πολλὰ τῶν ἐνυπνίων, οὐδὲν ἄτοπον· οὐδὲ γὰρ τῶν ἐν τοῖς σώμασι σημείων καὶ τῶν οὐρανίων, οἷον τὰ τῶν ὑδάτων καὶ τὰ τῶν πνευμάτων (ἂν γὰρ ἄλλη κυριώτερα ταύτης συμβῇ κίνησις, ἀφ' ἧς μελλούσης ἐγένετο τὸ σημεῖον, οὐ γίνεται), καὶ πολλὰ βουλευθέντα καλῶς τῶν πραχθῆναι δεόντων διελύθη δι' ἄλλας κυριώτερας ἀρχάς. ὅλως γὰρ οὐ πᾶν γίνεται τὸ μελλῆσαν, οὐδὲ τὸ αὐτὸ τὸ ἐσόμενον καὶ τὸ μέλλον· ἀλλ' ὅμως ἀρχὰς γέ τινας λεκτέον εἶναι ἀφ' ὧν οὐκ ἐπετελέσθη, καὶ σημεῖα πέφυκε ταῦτά τινων οὐ γενομένων.

περὶ δὲ τῶν μὴ τοιαύτας [464a] ἐχόντων ἀρχὰς ἐνυπνίων οἷας εἵπομεν, ἀλλ' ὑπερορίας ἢ τοῖς χρόνοις ἢ τοῖς τόποις ἢ τοῖς μεγέθεσιν, ἢ τούτων μὲν μηδέν, μὴ μέντοι γε ἐν αὐτοῖς ἐχόντων τὰς ἀρχὰς τῶν ἰδόντων τὸ ἐνύπνιον, εἰ μὴ γίνεται τὸ προορᾶν ἀπὸ συμπτώματος, τοιόνδ' ἂν εἴη μᾶλλον ἢ ὥσπερ λέγει Δημόκριτος εἰδῶλα καὶ ἀπορροίας αἰτιώμενος. ὥσπερ γὰρ ὅταν κίνηση

τι τὸ ὕδωρ ἢ τὸν ἀέρα, τοῦθ' ἕτερον ἐκίνησε, καὶ παυσαμένου ἐκείνου συμβαίνει τὴν τοιαύτην κίνησιν προῖεναι μέχρι τινός, τοῦ κινήσαντος οὐ παρόντος, οὕτως οὐδὲν κωλύει κινήσιν τινα καὶ αἴσθησιν ἀφικνεῖσθαι πρὸς τὰς ψυχὰς τὰς ἐνυπνιαζούσας (ἀφ' ὧν ἐκεῖνος τὰ εἰδῶλα ποιεῖ καὶ τὰς ἀπορροίας), καὶ ὅποι δὴ ἔτυχεν ἀφικνουμένας μᾶλλον αἰσθητὰς εἶναι νύκτωρ διὰ τὸ μεθ' ἡμέραν φερομένας διαλύεσθαι μᾶλλον (ἀταραχωδέστερος γὰρ ὁ ἀὴρ τῆς νυκτός διὰ τὸ νηνεμώτερας εἶναι τὰς νύκτας), καὶ ἐν τῷ σώματι ποιεῖν αἴσθησιν διὰ τὸν ὕπνον, διὰ τὸ καὶ τῶν μικρῶν κινήσεων τῶν ἐντὸς αἰσθάνεσθαι καθεύδοντας μᾶλλον ἢ ἐγρηγορότας. αὗται δ' αἱ κινήσεις φαντάσματα ποιοῦσιν, ἐξ ὧν προορῶσι τὰ μέλλοντα καὶ περὶ τῶν τοιούτων, καὶ διὰ ταῦτα συμβαίνει τὸ πάθος τοῦτο τοῖς τυχοῦσι καὶ οὐ τοῖς φρονιμωτάτοις. μεθ' ἡμέραν τε γὰρ ἐγίγνεται ἂν καὶ τοῖς σοφοῖς, εἰ θεὸς ἦν ὁ πέμπων· οὕτω δ' εἰκὸς τοὺς τυχόντας προορᾶν· ἢ γὰρ διάνοια τῶν τοιούτων οὐ φροντιστική, ἀλλ' ὥσπερ ἔρημος καὶ κενὴ πάντων, καὶ κινηθεῖσα κατὰ τὸ κινοῦν ἄγεται.

τοῦ δ' ἐνίους τῶν ἐκστατικῶν προορᾶν αἴτιον ὅτι αἱ οἰκεῖαι κινήσεις οὐκ ἐνοχλοῦσιν ἀλλ' ἀπορραπίζονται· τῶν ξενικῶν οὖν μάλιστα αἰσθάνονται. τὸ δέ τινας εὐθυονεῖρους εἶναι καὶ τὸ τοὺς γνωρίμους περὶ τῶν γνωρίμων μάλιστα προορᾶν συμβαίνει διὰ τὸ μάλιστα τοὺς γνωρίμους ὑπὲρ ἀλλήλων φροντίζειν· ὥσπερ γὰρ πόρρω ὄντων τάχιστα γνωρίζουσι καὶ αἰσθάνονται, οὕτω καὶ τῶν κινήσεων· αἱ γὰρ τῶν γνωρίμων γνωριμώτεραι. οἱ δὲ μελαγχολικοὶ διὰ τὸ σφοδρόν, ὥσπερ βάλλοντες πόρρωθεν, εὖστοχοὶ εἰσιν, καὶ διὰ τὸ μεταβλητικὸν [464b] ταχὺ τὸ ἐχόμενον φαντάζεται αὐτοῖς· ὥσπερ γὰρ τὰ Φιλαινίδος ποιήματα καὶ οἱ ἐμμανεῖς ἐχόμενα τοῦ ὁμοίου λέγουσι καὶ διανοοῦνται, οἷον Ἀφροδίτην φροδίτην, καὶ οὕτω συνείρουσιν εἰς τὸ πρόσω. ἔτι δὲ διὰ τὴν σφοδρότητα οὐκ ἐκκρούεται αὐτῶν ἡ κίνησις ὑφ' ἑτέρας κινήσεως.

τεχνικώτατος δ' ἐστὶ κριτῆς ἐνυπνίων ὅστις δύναται τὰς ὁμοιότητας θεωρεῖν· τὰς γὰρ εὐθυονειρίας κρίνειν παντός ἐστιν. λέγω δὲ τὰς ὁμοιότητας, ὅτι παραπλήσια συμβαίνει τὰ φαντάσματα τοῖς ἐν τοῖς ὕδασι εἰδώλοις, καθάπερ καὶ πρότερον εἵπομεν. ἐκεῖ δέ, ἂν πολλὴ γίγνηται ἡ κίνησις, οὐδὲν ὁμοία γίνεται ἢ ἔμφασις καὶ τὰ εἰδῶλα τοῖς ἀληθινοῖς. δεινὸς δὴ τὰς ἐμφάσεις κρίνειν εἴη ἂν ὁ δυνάμενος ταχὺ διαισθάνεσθαι καὶ συνορᾶν τὰ διαπεφορημένα καὶ διεστραμμένα τῶν εἰδώλων, ὅτι ἐστὶν ἀνθρώπου ἢ ἵππου ἢ ὅτουδήποτε, κάκεῖ δὴ ὁμοίως τί δύναται τὸ ἐνύπνιον τοῦτο. ἢ γὰρ κίνησις ἐκκόπτει τὴν εὐθυονειρίαν. τί μὲν οὖν ἐστὶν ὕπνος καὶ τί ἐνύπνιον, καὶ διὰ τίν' αἰτίαν ἐκάτερον αὐτῶν γίνεται, ἔτι δὲ περὶ τῆς ἐκ τῶν ἐνυπνίων μαντείας

εἴρηται περὶ πάσης· [περὶ δὲ κινήσεως τῆς κοινῆς τῶν ζώων λεκτέον.]

## Περὶ Μακροβιοτητοσ και Βραχυβιοτητοσ (464b) On Length and Shortness of Life



[464b] Περὶ δὲ τοῦ τὰ μὲν εἶναι μακρόβια τῶν ζώων τὰ δὲ βραχύβια, καὶ περὶ ζωῆς ὅλως μήκους καὶ βραχύτητος, ἐπισκεπτέον τὰς αἰτίας, ἀρχὴ δὲ τῆς σκέψεως ἀναγκαία πρῶτον ἐκ τοῦ διαπορῆσαι περὶ αὐτῶν. οὐ γάρ ἐστι δῆλον πότερον ἕτερον ἢ τὸ αὐτὸ αἴτιον πᾶσι τοῖς ζώοις καὶ φυτοῖς τοῦ τὰ μὲν εἶναι μακρόβια τὰ δὲ βραχύβια (καὶ γὰρ τῶν φυτῶν τὰ μὲν ἐπέτειον τὰ δὲ πολυχρόνιον ἔχει τὴν ζωὴν). ἔτι δὲ πότερον ταῦτ' αὖ μακρόβια καὶ τὴν φύσιν ὑγιεινὰ τῶν φύσει συνεστῶτων, ἢ κεχώρισται [καὶ] τὸ βραχύβιον καὶ τὸ νοσῶδες, ἢ κατ' ἐνίας μὲν νόσους ἐπαλλάττει τὰ νοσῶδη τὴν φύσιν σώματα τοῖς βραχυβίοις, κατ' ἐνίας δ' οὐδὲν κωλύει νοσῶδεις εἶναι μακροβίους ὄντας. περὶ μὲν οὖν ὕπνου καὶ ἐγρηγόρσεως εἴρηται πρότερον, περὶ δὲ ζωῆς καὶ θανάτου λεκτέον ὕστερον, ὁμοίως δὲ καὶ περὶ νόσου καὶ ὑγείας, ὅσον ἐπιβάλλει τῇ φυσικῇ φιλοσοφίᾳ· νῦν [465a] δὲ περὶ τὰς αἰτίας τοῦ τὰ μὲν εἶναι μακρόβια τὰ δὲ βραχύβια, καθάπερ εἴρηται πρότερον, θεωρητέον. ἔστι δ' ἔχοντα τὴν διαφορὰν ταύτην ὅλα τε πρὸς ὅλα γένη καὶ τῶν ὑφ' ἐν εἶδος ἕτερα πρὸς ἕτερα. λέγω δὲ κατὰ γένος μὲν διαφέρειν οἶον ἄνθρωπον πρὸς ἵππον (μακροβιώτερον γὰρ τὸ τῶν ἀνθρώπων γένος ἢ τὸ τῶν ἵππων), κατ' εἶδος δ' ἄνθρωπον πρὸς ἄνθρωπον· εἰσὶ γὰρ καὶ ἄνθρωποι οἱ μὲν μακρόβιοι οἱ δὲ βραχύβιοι ἕτεροι καθ' ἑτέρους τόπους διεστῶτες (τὰ μὲν γὰρ ἐν τοῖς θερμοῖς τῶν ἐθνῶν μακροβιώτερα, τὰ δ' ἐν τοῖς ψυχροῖς βραχυβιώτερα), καὶ τῶν τὸν αὐτὸν δὲ τόπον οἰκούντων διαφέρουσιν ὁμοίως τινὲς ταύτην τὴν πρὸς ἀλλήλους διαφορὰν.

Δεῖ δὲ λαβεῖν τί τὸ εὐφθαρτον ἐν τοῖς φύσει συνεστῶσι καὶ τί τὸ οὐκ εὐφθαρτον. πῦρ γὰρ καὶ ὕδωρ καὶ τὰ τούτοις συγγενῆ, οὐκ ἔχοντα τὴν αὐτὴν δύναμιν, τυγχάνει γενέσεως καὶ φθορᾶς αἴτια ἀλλήλοις, ὥστε καὶ τῶν ἄλλων ἕκαστον ἐκ τούτων ὄντα καὶ συνεστῶτα μετέχειν τῆς τούτων φύσεως εὐλογον, ὅσα μὴ συνθέσει ἐκ πολλῶν ἐστίν, οἶον οἰκία. περὶ μὲν οὖν τῶν ἄλλων ἕτερος λόγος· εἰσὶ γὰρ ἴδια φθορὰ πολλοῖς τῶν ὄντων, οἶον ἐπιστήμη «καὶ ἀγνοία», καὶ ὑγεία καὶ νόσος· ταῦτα γὰρ φθείρεται καὶ μὴ φθειρομένων τῶν δεκτικῶν ἀλλὰ σωζομένων, οἶον ἀγνοίας μὲν φθορὰ ἀνάμνησις καὶ μάθησις, ἐπιστήμης δὲ λήθη καὶ ἀπάτη. κατὰ συμβεβηκὸς δ' ἀκολουθοῦσι τοῖς



φυσικοῖς αἱ τῶν ἄλλων φθοραί· φθειρομένων γὰρ τῶν ζώων φθείρεται καὶ ἡ ἐπιστήμη καὶ ἡ ὑγίεια ἢ ἐν τοῖς ζώοις. διὸ καὶ περὶ ψυχῆς λογίσαιτ' ἅν τις ἐκ τούτων· εἰ γὰρ ἐστὶ μὴ φύσει ἄλλ' ὥσπερ ἐπιστήμη ἐν ψυχῇ, οὕτω καὶ ψυχὴ ἐν σώματι, εἴη ἅν τις αὐτῆς καὶ ἄλλη φθορὰ παρὰ τὴν φθορὰν ἣν φθείρεται φθειρομένου τοῦ σώματος. ὥστ' ἐπεὶ οὐ φαίνεται τοιαύτη οὕσα, ἄλλως ἂν ἔχοι πρὸς τὴν τοῦ σώματος κοινωνίαν.

[465b] Ἴσως δ' ἅν τις ἀπορήσειεν εὐλόγως, ἅρ' ἔστιν οὗ ἄφθαρτον ἔσται τὸ φθαρτόν, οἷον τὸ πῦρ ἄνω, οὗ μὴ ἔστι τὸ ἐναντίον. φθείρεται γὰρ τὰ μὲν ὑπάρχοντα τοῖς ἐναντίοις κατὰ συμβεβηκός, τῷ ἐκεῖνα φθείρεσθαι (ἀναιρεῖται γὰρ τὰναντία ὑπ' ἀλλήλων), κατὰ συμβεβηκός δ' οὐθὲν τῶν ἐν ταῖς οὐσίαις ἐναντίων φθείρεται, διὰ τὸ μηθενὸς ὑποκειμένου κατηγορεῖσθαι τὴν οὐσίαν. ὥσθ' ὧ μὴ ἔστιν ἐναντίον καὶ ὅπου μὴ ἔστιν, ἀδύνατον ἂν εἴη φθαρῆναι· τί γὰρ ἔσται τὸ φθεροῦν, εἴπερ ὑπ' ἐναντίων μὲν φθείρεσθαι συμβαίνει μόνων, τοῦτο δὲ μὴ ὑπάρχει, ἢ ὅλως ἢ ἐνταῦθα; ἢ τοῦτο τῇ μὲν ἀληθές ἐστὶ τῇ δ' οὐ; ἀδύνατον γὰρ τῷ ὕλην ἔχοντι μὴ ὑπάρχειν πως τὸ ἐναντίον. παντὶ μὲν γὰρ ἐνεῖναι τὸ θερμὸν ἢ τὸ εὐθὺ ἐνδέχεται, πᾶν δ' εἶναι ἀδύνατον ἢ θερμὸν ἢ εὐθὺ ἢ λευκόν· ἔσται γὰρ τὰ πάθη κεχωρισμένα. εἰ οὖν, ὅταν ἅμα ἢ τὸ ποιητικὸν καὶ τὸ παθητικόν, ἀεὶ τὸ μὲν ποιεῖ τὸ δὲ πάσχει, ἀδύνατον μὴ μεταβάλλειν. ἔτι καὶ εἰ ἀνάγκη περίττωμα ποιεῖν, τὸ δὲ περίττωμα ἐναντίον· ἐξ ἐναντίου γὰρ ἀεὶ ἡ μεταβολή, τὸ δὲ περίττωμα ὑπόλειμμα τοῦ προτέρου. εἰ δὲ πᾶν ἐξελαύνει τὸ ἐνεργεῖα ἐναντίον, κἂν ἐνταῦθ' ἄφθαρτον ἂν εἴη. ἢ οὐ, ἀλλ' ὑπὸ τοῦ περιέχοντος φθείρεται; εἰ μὲν οὖν, ἱκανὸν ἐκ τῶν εἰρημένων· εἰ δὲ μὴ, ὑποθέσθαι δεῖ ὅτι ἔνεστί τι ἐνεργεῖα ἐναντίον, καὶ περίττωμα γίνεται. [διὸ ἡ ἐλάττων φλόξ κατακαίεται ὑπὸ τῆς πολλῆς κατὰ συμβεβηκός, ὅτι ἡ τροφή ἣν ἐκείνη ἐν πολλῷ χρόνῳ ἀναλίσκει, τὸν καπνόν, ταύτην ἡ πολλὴ φλόξ ταχύ.] διὸ πάντα ἀεὶ ἐν κινήσει ἐστί, καὶ γίνεται ἢ φθείρεται. τὸ δὲ περιέχον ἢ συμπράττει ἢ ἀντιπράττει· καὶ διὰ τοῦτο μετατιθέμενα πολυχρονιώτερα μὲν γίνεται καὶ ὀλιγοχρονιώτερα τῆς φύσεως, αἰδία δ' οὐδαμοῦ, ὅσοις ἐναντία ἔστιν· εὐθὺς γὰρ ἡ ὕλη τὸ ἐναντίον ἔχει, ὥστ' εἰ μὲν τοῦ ποῦ, κατὰ τόπον μεταβάλλει, εἰ δὲ τοῦ ποσοῦ, κατ' αὐξησιν καὶ φθίσιν, εἰ δὲ πάθους, ἀλλοιοῦται.

[466a] Ἔστι δ' οὔτε τὰ μέγιστα ἀφθαρτότερα (ἵππος γὰρ ἀνθρώπου βραχυβιώτερον) οὔτε τὰ μικρά (ἐπέτεια γὰρ τὰ πολλὰ τῶν ἐντόμων), οὔτε τὰ φυτὰ ὅλως τῶν ζώων (ἐπέτεια γὰρ ἔνια τῶν φυτῶν), οὔτε τὰ ἔναιμα (μέλιττα γὰρ πολυχρονιώτερον ἐνίων ἐναίμων) οὔτε τὰ ἄναιμα (τὰ γὰρ μαλάκια ἐπέτεια μὲν, ἄναιμα δέ), οὔτε τὰ ἐν τῇ γῇ (καὶ γὰρ φυτὰ ἐπέτεια ἔστι καὶ ζῶα πεζά) οὔτε τὰ ἐν τῇ θαλάττῃ (καὶ γὰρ ἐκεῖ βραχύβια καὶ τὰ ὀστρακηρὰ καὶ

τὰ μαλάκια). Ὅλως δὲ τὰ μακροβιώτατα ἐν τοῖς φυτοῖς ἐστίν, οἷον ὁ φοῖνιξ. εἴτ' ἐν τοῖς ἐναίμοις ζώοις μᾶλλον ἢ ἐν τοῖς ἀναίμοις, καὶ ἐν τοῖς πεζοῖς ἢ ἐν τοῖς ἐνύδροις. ὥστε καὶ συνδυασθέντων ἐν τοῖς ἐναίμοις καὶ πεζοῖς τὰ μακροβιώτατα τῶν ζώων ἐστίν, οἷον ἄνθρωπος καὶ ἐλέφας. καὶ δὴ καὶ τὰ μείζω ὥς ἐπὶ τὸ πολὺ εἰπεῖν τῶν ἐλαττόνων μακροβιώτερα· καὶ γὰρ τοῖς ἄλλοις συμβέβηκε τοῖς μακροβιωτάτοις μέγεθος, ὥσπερ καὶ τοῖς εἰρημένοις.

Τὴν δ' αἰτίαν περὶ τούτων ἀπάντων ἐντεῦθεν ἂν τις θεωρήσειεν. δεῖ γὰρ λαβεῖν ὅτι τὸ ζῶόν ἐστι φύσει ὑγρὸν καὶ θερμόν, καὶ τὸ ζῆν τοιοῦτον, τὸ δὲ γῆρας ξηρὸν καὶ ψυχρόν, καὶ τὸ τεθνηκός· φαίνεται γὰρ οὕτως. ὕλη δὲ τῶν σωμάτων τοῖς ζώοις ταῦτα, τὸ θερμόν καὶ τὸ ψυχρόν, καὶ τὸ ξηρὸν καὶ τὸ ὑγρόν. ἀνάγκη τοίνυν γηράσκοντα ξηραίνεσθαι· διὸ δεῖ μὴ εὐξήραντον εἶναι τὸ ὑγρόν. καὶ διὰ τοῦτο τὰ λιπαρὰ ἄσηπτα· αἴτιον δ' ὅτι ἀέρος, ὁ δ' ἀήρ πρὸς τᾶλλα πῦρ, πῦρ δ' οὐ γίνεται σαπρόν. οὐδ' αὖ ὀλίγον δεῖ εἶναι τὸ ὑγρόν· εὐξήραντον γὰρ καὶ τὸ ὀλίγον. διὸ καὶ τὰ μεγάλα καὶ ζῶα καὶ φυτὰ ὥς ὅλως εἰπεῖν μακροβιώτερα, καθάπερ ἐλέγχθη πρότερον· εὐλογον γὰρ τὰ μείζω πλεονέχειν ὑγρόν. οὐ μόνον δὲ διὰ τοῦτο μακροβιώτερα· δύο γὰρ τὰ αἴτια, τό τε ποσὸν καὶ τὸ ποιόν, ὥστε δεῖ μὴ μόνον πλῆθος εἶναι ὑγροῦ, ἀλλὰ τοῦτο καὶ θερμόν, ἵνα μήτε εὐπηκτον μήτε εὐξήραντον ᾖ. καὶ διὰ τοῦτο ἄνθρωπος μακρόβιον μᾶλλον ἐνίων μειζόνων· μακροβιώτερα γὰρ τὰ λειπόμενα τῷ πλήθει τοῦ [466b] ὑγροῦ, ἐὰν πλείονι λόγῳ ὑπερέχη κατὰ τὸ ποιόν ἢ λείπεται κατὰ τὸ ποσόν. ἔστι δ' ἐνίοις μὲν τὸ θερμόν τὸ λιπαρόν, ὃ ἅμα ποιεῖ τό τε μὴ εὐξήραντον καὶ τὸ μὴ εὐψυκτον· ἐνίοις δ' ἄλλον ἔχει χυμόν.

ἔτι δεῖ τὸ μέλλον εἶναι μὴ εὐφθαρτον μὴ περιττωματικὸν εἶναι. ἀναιρεῖ γὰρ τὸ τοιοῦτον ἢ νόσῳ ἢ φύσει· ἐναντία γὰρ ἢ τοῦ περιττώματος δύναμις καὶ φθαρτικὴ ἢ μὲν τῆς φύσεως ἢ δὲ μορίου. διὸ καὶ τὰ ὀχευτικά καὶ πολὺσπερμα γηράσκει ταχύ· τὸ γὰρ σπέρμα περίττωμα, καὶ ἔτι ξηραίνει ἀπίον. καὶ διὰ τοῦτο ἡμίονος μακροβιώτερος καὶ ἵππου καὶ ὄνου, ἐξ ὧν ἐγένετο, καὶ τὰ θήλεα τῶν ἀρρένων, ἐὰν ὀχευτικά ἢ τὰ ἄρρενα· διὸ οἱ στρουθοὶ οἱ ἄρρενες βραχυβιώτεροι τῶν θηλειῶν. ἔτι δὲ καὶ ὅσα πονητικὰ τῶν ἀρρένων καὶ διὰ τὸν πόνον γηράσκει μᾶλλον· ξηραίνει γὰρ ὁ πόνος, τὸ δὲ γῆρας ξηρὸν ἐστίν. φύσει δὲ καὶ ὥς ἐπὶ τὸ πᾶν εἰπεῖν τὰ ἄρρενα τῶν θηλειῶν μακροβιώτερα· αἴτιον δ' ὅτι θερμότερον ζῶον τὸ ἄρρεν τοῦ θήλεος.

τὰ δ' αὐτὰ ἐν τοῖς ἀλεεινοῖς μακροβιώτερά ἐστίν ἢ ἐν τοῖς ψυχροῖς τόποις, διὰ τὴν αὐτὴν αἰτίαν δι' ἣν περ καὶ μείζω. καὶ μάλιστα ἐπίδηλον τὸ μέγεθος τῶν τὴν φύσιν ψυχρῶν ζώων· διὸ οἱ τ' ὄφεις καὶ αἱ σαῦραι καὶ τὰ φολιδωτὰ μεγάλα ἐν τοῖς θερμοῖς τόποις, καὶ ἐν τῇ θαλάττῃ τῇ ἐρυθρᾷ τὰ

όστρακόδερμα· τῆς τε γὰρ αὐξήσεως ἡ θερμὴ ὑγρότης αἰτία καὶ τῆς ζωῆς. ἐν δὲ τοῖς ψυχροῖς τόποις ὑδατωδέστερον τὸ ὑγρὸν τὸ ἐν τοῖς ζώοις ἐστίν· διὸ εὐπηκτον, ὥστε τὰ μὲν οὐ γίνεται ὅλως τῶν ζώων τῶν ὀλιγαίων ἢ ἀναίμων ἐν τοῖς πρὸς τὴν ἄρκτον τόποις, οὔτε τὰ πεζὰ ἐν τῇ γῇ οὔτε τὰ ἔνυδρα ἐν τῇ θαλάττῃ, τὰ δὲ γίνεται μὲν, ἐλάττω δὲ καὶ βραχυβιώτερα· ἀφαιρεῖται γὰρ ὁ πάγος τὴν αὕξησιν. τροφὴν δὲ μὴ λαμβάνοντα καὶ τὰ φυτὰ καὶ τὰ ζῶα φθείρεται· συντήκει γὰρ αὐτὰ ἑαυτά· ὥσπερ γὰρ ἡ πολλὴ φλόξ κατακαίει καὶ φθείρει τὴν ὀλίγην τῷ τὴν τροφὴν ἀναλίσκειν, οὕτω τὸ φυσικὸν θερμόν, τὸ πρῶτον πεπτικὸν <ὄν>, ἀναλίσκει τὴν ὕλην ἐν ᾗ ἐστίν. τὰ δ' ἔνυδρα τῶν πεζῶν ἦττον μακρόβια οὐχ ὅτι [467a] ὑγρὰ ἀπλῶς, ἀλλ' ὅτι ὑδατώδη· τὸ δὲ τοιοῦτον ὑγρὸν εὐφθαρτον, ὅτι ψυχρὸν καὶ εὐπηκτον. καὶ τὸ ἀναιμον διὰ τὸ αὐτό, ἐὰν μὴ μεγέθει ἀπαμύνηται· οὔτε γὰρ λίπος οὔτε γλυκὺ ἔχει. ἐν γὰρ ζῷ τὸ λιπαρὸν γλυκὺ· διὸ αἱ μέλιτται μακροβιώτεροι ἐτέρων μειζόνων ζώων.

Ἐν δὲ τοῖς φυτοῖς ἐστὶ τὰ μακροβιώτατα, καὶ μᾶλλον ἢ ἐν τοῖς ζώοις, πρῶτον μὲν ὅτι ἦττον ὑδατώδη, ὥστ' οὐκ εὐπηκτα· εἴτ' ἔχει λιπαρότητα καὶ γλισχρότητα, διὸ καὶ ξηρὰ καὶ γεώδη ὄντα ὅμως οὐκ εὐξήραντον ἔχουσι τὸ ὑγρὸν. περὶ δὲ τοῦ πολυχρόνιον εἶναι τὴν τῶν δένδρων φύσιν δεῖ λαβεῖν τὴν αἰτίαν· ἔχει γὰρ ἰδίαν πρὸς τὰ ζῶα, πλὴν πρὸς τὰ ἔντομα. νέα γὰρ αἰεὶ τὰ φυτὰ γίνεται· διὸ πολυχρόνια. αἰεὶ γὰρ ἕτεροι οἱ πτόρθοι, οἱ δὲ γηράσκουσιν, καὶ αἱ ῥίζαι ὁμοίως. ἀλλ' οὐχ ἅμα, ἀλλ' ὅτε μὲν μόνον τὸ στέλεχος καὶ οἱ κλάδοι ἀπώλονται, ἕτεροι δὲ παρεφύησαν· ὅταν δ' οὕτως ποιῶσιν, αἱ ῥίζαι ἄλλαι ἐκ τοῦ ὑπάρχοντος γίνονται, καὶ οὕτως αἰεὶ διατελεῖ τὸ μὲν φθειρόμενον τὸ δὲ γινόμενον· διὸ καὶ μακρόβια. ἔοικε δὲ τὰ φυτὰ τοῖς ἐντόμοις, ὥσπερ εἴρηται πρότερον· διαιρούμενα γὰρ ζῆ, καὶ δύο καὶ πολλὰ γίνεται ἐξ ἑνός. τὰ δ' ἔντομα μέχρι μὲν τοῦ ζῆν ἦλθεν, πολὺν δ' οὐ δύναται χρόνον· οὐ γὰρ ἔχει ὄργανα, οὐδὲ δύναται ποιεῖν αὐτὰ ἢ ἀρχὴ ἢ ἐν ἐκάστω. ἢ δ' ἐν τῷ φυτῷ δύναται· πανταχῇ γὰρ ἔχει καὶ ῥίζαν καὶ καυλὸν δυνάμει. διὸ ἀπὸ ταύτης αἰεὶ προέρχεται τὸ μὲν νέον τὸ δὲ γηράσκον, μικρόν τι διαφέροντα τοῦ εἶναι μακρόβια οὕτως ὥσπερ τὰ ἀποφυτευόμενα. καὶ γὰρ ἐν τῇ ἀποφυτείᾳ τρόπον τινὰ φαίη ἂν τις ταῦτα συμβαίνειν· μόνιον γάρ τι τὸ ἀποφυτευθέν. ἐν μὲν οὖν τῇ ἀποφυτείᾳ χωριζομένων συμβαίνει τοῦτο, ἐκεῖ δὲ διὰ τοῦ συνεχοῦς. αἴτιον δ' ὅτι ἐνυπάρχει πάντῃ ἡ ἀρχὴ δυνάμει ἐνοῦσα.

συμβαίνει δὲ ταὐτὸ ἐπὶ τε τῶν ζώων καὶ φυτῶν. ἔν τε γὰρ τοῖς ζώοις τὰ ἄρρενα μακροβιώτερα ὥς ἐπὶ τὸ πολὺ - τούτων δὲ τὰ ἄνω μείζω ἢ τὰ κάτω (νανωδέστερον γὰρ τοῦ θήλεος τὸ ἄρρεν), ἐν δὲ τῷ ἄνω τὸ θερμόν, καὶ τὸ ψυχρὸν ἐν τῷ κάτω - καὶ τῶν φυτῶν τὰ κεφαλοβαρῆ μακροβιώτερα.

[467b] τοιαῦτα δὲ τὰ μὴ ἐπέτεια ἀλλὰ δενδρώδη· τὸ γὰρ ἄνω τοῦ φυτοῦ καὶ κεφαλὴ ἢ ῥίζα ἐστί, τὰ δ' ἐπέτεια ἐπὶ τὰ κάτω καὶ τὸν καρπὸν λαμβάνει τὴν αὔξησιν. ἀλλὰ περὶ μὲν τούτων καὶ καθ' αὐτὰ ἐν τοῖς Περὶ φυτῶν διορισθήσεται· νῦν δὲ περὶ τῶν ἄλλων [ζώων] εἴρηται τὸ αἴτιον περὶ τε μεγέθους ζωῆς καὶ βραχυβιότητος. λοιπὸν δ' ἡμῖν θεωρῆσαι περὶ τε νεότητος καὶ γήρως καὶ ζωῆς καὶ θανάτου· τούτων γὰρ διορισθέντων τέλος ἂν ἡ περὶ τῶν ζώων ἔχοι μέθοδος.

## **Περὶ Νεότητος καὶ Γήρως, καὶ Ζωῆς καὶ Θανάτου, καὶ Αναπνοῆς (467b) On Youth, Old Age, Life and Death, and Respiration**



[467b] Περὶ δὲ νεότητος καὶ γήρως καὶ περὶ ζωῆς καὶ θανάτου λεκτέον νῦν· ἅμα δὲ καὶ περὶ ἀναπνοῆς ἀναγκαῖον ἴσως τὰς αἰτίας εἰπεῖν· ἐνίοις γὰρ τῶν ζώων διὰ τοῦτο συμβαίνει τὸ ζῆν καὶ τὸ μὴ ζῆν. ἐπεὶ δὲ περὶ ψυχῆς ἐν ἑτέροις διώριστα, καὶ δῆλον ὅτι οὐχ οἷόν τ' εἶναι σῶμα τὴν οὐσίαν αὐτῆς, ἀλλ' ὅμως ὅτι γ' ἐν τινι τοῦ σώματος ὑπάρχει μορίῳ φανερόν, καὶ ἐν τούτῳ τινὶ τῶν ἐχόντων δύναμιν ἐν τοῖς μορίοις, τὰ μὲν οὖν ἄλλα τῆς ψυχῆς ἢ μόρια ἢ δυνάμεις, ὁποτέρως ποτὲ δεῖ καλεῖν, ἀφείσθω τὰ νῦν· ὅσα δὲ ζῶα λέγεται καὶ ζῆν, ἐν μὲν τοῖς ἀμφοτέρων τούτων τετυχηκόσι (λέγω δ' ἀμφοτέρων τοῦ τε ζῶον εἶναι καὶ τοῦ ζῆν) ἀνάγκη ταῦτόν εἶναι καὶ ἐν μόριον καθ' ὃ τε ζῆ καὶ καθ' ὃ προσαγορεύομεν αὐτὸ ζῶον· τὸ μὲν γὰρ ζῶον ἢ ζῶον ἀδύνατον μὴ ζῆν· ἢ δὲ ζῆ, ταύτῃ ζῶον ὑπάρχειν οὐκ ἀναγκαῖον· τὰ γὰρ φυτὰ ζῆ μὲν, οὐκ ἔχει δ' αἰσθῆσιν, τῷ δ' αἰσθάνεσθαι τὸ ζῶον πρὸς τὸ μὴ ζῶον διορίζομεν.

ἀριθμῷ μὲν οὖν ἀναγκαῖον ἐν εἶναι καὶ τὸ αὐτὸ τοῦτο τὸ μόριον, τῷ δ' εἶναι πλείω καὶ ἕτερα· οὐ γὰρ ταῦτόν τὸ ζῶον εἶναι καὶ τὸ ζῆν. ἐπεὶ οὖν τῶν ἰδίων αἰσθητηρίων ἐν τι κοινόν ἐστιν αἰσθητήριον, εἰς ὃ τὰς κατ' ἐνέργειαν αἰσθήσεις ἀναγκαῖον ἀπαντᾶν, τοῦτο δ' ἂν εἴη μέσον τοῦ πρόσθεν καλουμένου καὶ ὀπίσθεν (ἔμπροσθεν μὲν γὰρ λέγεται ἐφ' ὃ ἐστὶν ἡμῖν ἢ αἰσθησις, ὀπίσθεν δὲ τὸ ἀντικείμενον), ἔτι δὲ διηρημένου τοῦ σώματος τῶν ζώντων πάντων τῷ τ' ἄνω καὶ κάτω (πάντα γὰρ ἔχει τὸ ἄνω καὶ τὸ κάτω, ὥστε καὶ τὰ φυτὰ), δῆλον ὅτι τὴν θρεπτικὴν [468a] ἀρχὴν ἔχοι ἂν ἐν μέσῳ τούτων· καθ' ὃ μὲν γὰρ εἰσέρχεται μόριον ἢ τροφή, ἄνω καλοῦμεν, πρὸς αὐτὸ βλέποντες ἀλλ' οὐ πρὸς τὸ περιέχον ὅλον, κάτω δὲ καθ' ὃ τὸ περίττωμα

ἀφίησι τὸ πρῶτον. ἔχει δ' ἐναντίως τοῖς φυτοῖς τοῦτο καὶ τοῖς ζώοις· τῷ μὲν γὰρ ἄνθρωπῳ διὰ τὴν ὀρθότητα μάλιστα ὑπάρχει τοῦτο τῶν ζώων, τὸ ἔχειν τὸ ἄνω μόριον πρὸς τὸ τοῦ παντὸς ἄνω, τοῖς δ' ἄλλοις μεταξύ· τοῖς δὲ φυτοῖς ἀκινήτοις οὖσι καὶ λαμβάνουσιν ἐκ τῆς γῆς τὴν τροφήν ἀναγκαῖον ἀεὶ κάτω τοῦτ' ἔχειν τὸ μόριον. ἀνάλογον γὰρ εἰσιν αἱ ῥίζαι τοῖς φυτοῖς καὶ τὸ καλούμενον στόμα τοῖς ζώοις, δι' οὗ τὴν τροφήν τὰ μὲν ἐκ τῆς γῆς λαμβάνει, τὰ δὲ δι' αὐτῶν.

Τριῶν δὲ μερῶν ὄντων εἰς ἃ διαιρεῖται πάντα τὰ τέλεια τῶν ζώων, ἐνὸς μὲν ἢ δέχεται τὴν τροφήν, ἐνὸς δ' ἢ τὸ περίττωμα προίεται, τρίτου δὲ τοῦ μέσου τούτων, τοῦτο ἐν μὲν τοῖς μεγίστοις τῶν ζώων καλεῖται στῆθος, ἐν δὲ τοῖς ἄλλοις τὸ ἀνάλογον, διήρθρωται δὲ μᾶλλον ἑτέροις ἑτέρων. ὅσα δ' αὐτῶν ἐστὶ πορευτικά, πρόσκειται καὶ μόρια τὰ πρὸς ταύτην τὴν ὑπηρεσίαν, οἷς τὸ πᾶν οἴσουσι κύτος, σκέλη τε καὶ πόδες καὶ τὰ τούτοις ἔχοντα τὴν αὐτὴν δύναμιν. ἄλλ' ἢ γε τῆς θρεπτικῆς ἀρχῇ ψυχῆς ἐν τῷ μέσῳ τῶν τριῶν μορίων καὶ κατὰ τὴν αἴσθησιν οὕσα φαίνεται καὶ κατὰ τὸν λόγον· πολλὰ γὰρ τῶν ζώων ἀφαιρουμένου ἑκατέρου τῶν μορίων, τῆς τε καλουμένης κεφαλῆς καὶ τοῦ δεκτικοῦ τῆς τροφῆς, ζῆ μεθ' οὗπερ ἂν ἢ τὸ μέσον. δῆλον δ' ἐπὶ τῶν ἐντόμων, οἷον σφηκῶν τε καὶ μελιττῶν, τοῦτο συμβαῖνον· καὶ τῶν μὴ ἐντόμων δὲ πολλὰ διαιρούμενα δύναται ζῆν διὰ τὸ θρεπτικόν. τὸ δὲ τοιοῦτον μόριον ἐνεργεία μὲν ἔχει ἔν, δυνάμει δὲ πλείω· τὸν αὐτὸν γὰρ συνέστηκε τοῖς φυτοῖς τρόπον· καὶ γὰρ τὰ φυτὰ διαιρούμενα ζῆ χωρὶς, καὶ γίνεται πολλὰ ἀπὸ μιᾶς ἀρχῆς δένδρα. δι' ἐν δ' αἰτίαν τὰ μὲν οὐ δύναται διαιρούμενα ζῆν, τὰ δ' ἀποφυτεύεται τῶν φυτῶν, ἕτερος [468b] ἔσται λόγος. ἄλλ' ὁμοίως ἔχει κατὰ γε τοῦτο τὰ τε φυτὰ καὶ τὸ τῶν ἐντόμων γένος.

ἀνάγκη δὲ καὶ τὴν θρεπτικὴν ψυχὴν ἐνεργεία μὲν ἐν τοῖς ἔχουσιν εἶναι μίαν, δυνάμει δὲ πλείους, ὁμοίως δὲ καὶ τὴν αἰσθητικήν· φαίνεται γὰρ ἔχοντα αἴσθησιν τὰ διαιρούμενα αὐτῶν. ἄλλὰ πρὸς τὸ σῶζεσθαι τὴν φύσιν, τὰ μὲν φυτὰ δύναται, ταῦτα δ' οὐ δύναται διὰ τὸ μὴ ἔχειν ὄργανα πρὸς σωτηρίαν, ἐνδεᾶ τ' εἶναι τὰ μὲν τοῦ ληψομένου τὰ δὲ τοῦ δεξομένου τὴν τροφήν, τὰ δ' ἄλλων τε καὶ τούτων ἀμφοτέρων. εἰκότα γὰρ τὰ τοιαῦτα τῶν ζώων πολλοῖς ζώοις συμπεφυκόσιν (τὰ δ' ἄριστα συνεστηκότα τοῦτ' οὐ πάσχει τῶν ζώων διὰ τὸ εἶναι τὴν φύσιν αὐτῶν ὡς ἐνδέχεται μάλιστα μίαν). διὸ καὶ μικρὰν αἴσθησιν ἔνια ποιεῖ διαιρούμενα τῶν μορίων ὅτι ἔχει τι ψυχικὸν πάθος· χωριζομένων γὰρ τῶν σπλάγχχνων ποιεῖται κίνησιν, οἷον καὶ αἱ χελῶναι τῆς καρδίας ἀφηρημένης.

Ἔτι δὲ ἐπὶ τε τῶν φυτῶν δῆλον καὶ ἐπὶ τῶν ζώων, τῶν μὲν φυτῶν τὴν τ'

ἐκ τῶν σπερμάτων γενέσιν ἐπισκοποῦσι καὶ τὰς ἐμφυτείας τε καὶ τὰς ἀποφυτείας. ἢ τε γὰρ ἐκ τῶν σπερμάτων γενέσις συμβαίνει πᾶσιν ἐκ τοῦ μέσου (διθύρων γὰρ ὄντων πάντων, ἢ συμπέφυκεν καὶ τὸ μέσον ἔστιν ἑκατέρου τῶν μορίων, ἐντεῦθεν ὃ τε καυλὸς ἐκφύεται καὶ ἡ ῥίζα τῶν φυομένων, ἢ δ' ἀρχὴ τὸ μέσον αὐτῶν ἔστιν), ἐν τε ταῖς ἐμφυτεῖαις καὶ ταῖς ἀποφυτεῖαις μάλιστα συμβαίνει τοῦτο περὶ τοὺς ὄζους· ἔστι γὰρ ἀρχὴ τις ὁ ὄζος τοῦ κλάδου, ἅμα δὲ καὶ μέσον, ὥστε ἢ τοῦτο ἀφαιροῦσιν ἢ εἰς τοῦτο ἐμβάλλουσιν, ἵνα ἢ ὁ κλάδος ἢ αἱ ῥίζαι ἐκ τούτου γίνωνται, ὡς οὔσης τῆς ἀρχῆς ἐκ τοῦ μέσου κλάδου καὶ ῥίζης, καὶ τῶν ζώων τῶν ἐναίμων ἡ καρδία γίνεται πρῶτον· τοῦτο δὲ δῆλον ἐξ ὧν ἐν τοῖς ἐνδεχομένοις ἔτι γινομένοις ἰδεῖν τεθεωρήκαμεν. ὥστε καὶ ἐν τοῖς ἀναίμοις ἀναγκαῖον τὸ ἀνάλογον τῇ καρδίᾳ γίνεσθαι πρῶτον. ἢ δὲ καρδία ὅτι ἐστὶν ἀρχή, τῶν φλεβῶν ἐν τοῖς περὶ τὰ Πέρη τῶν ζώων εἴρηται [469a] πρότερον· καὶ ὅτι τὸ αἷμα τοῖς ἐναίμοις ἐστὶ τελευταία τροφή, ἐξ οὗ γίνεται τὰ μόρια. φανερόν τοίνυν ὅτι μίαν μὲν τινα ἐργασίαν ἢ τοῦ στόματος λειτουργεῖ δύναμις, ἑτέραν δ' ἢ τῆς κοιλίας, περὶ τὴν τροφήν, ἢ δὲ καρδία κυριωτάτη, καὶ τὸ τέλος ἐπιτίθησιν. ὥστ' ἀνάγκη καὶ τῆς αἰσθητικῆς καὶ τῆς θρεπτικῆς ψυχῆς ἐν τῇ καρδίᾳ τὴν ἀρχὴν εἶναι τοῖς ἐναίμοις· τὰ γὰρ τῶν ἄλλων μορίων ἔργα περὶ τὴν τροφήν τοῦ ταύτης ἔργου χάριν ἐστὶ· δεῖ μὲν γὰρ τὸ κύριον πρὸς τὸ οὗ ἕνεκα διατελεῖν, ἀλλ' οὐκ ἐν τοῖς τούτου ἕνεκα, οἷον ἰατρὸς πρὸς τὴν ὑγίειαν.

ἀλλὰ μὴν τό γε κύριον τῶν αἰσθήσεων ἐν ταύτῃ τοῖς ἐναίμοις πᾶσιν· ἐν τούτῳ γὰρ ἀναγκαῖον εἶναι τὸ πάντων τῶν αἰσθητηρίων κοινὸν αἰσθητήριον. δύο δὲ φανερώς ἐνταῦθα συντεινούσας ὁρῶμεν, τὴν τε γεῦσιν καὶ τὴν ἀφήν, ὥστε καὶ τὰς ἄλλας ἀναγκαῖον· ἐν τούτῳ μὲν γὰρ τοῖς ἄλλοις αἰσθητηρίοις ἐνδέχεται ποιεῖσθαι τὴν κίνησιν, ταῦτα δ' οὐδὲν συντείνει πρὸς τὸν ἄνω τόπον. χωρὶς δὲ τούτων, εἰ τὸ ζῆν ἐν τούτῳ τῷ μορίῳ πᾶσιν ἐστὶ, δῆλον ὅτι καὶ τὴν αἰσθητικὴν ἀρχὴν ἀναγκαῖον· ἢ μὲν γὰρ ζῶον, ταύτη καὶ ζῆν φαμεν, ἢ δ' αἰσθητικόν, ταύτη τὸ σῶμα ζῶον εἶναι λέγομεν. διὰ τί δ' αἱ μὲν τῶν αἰσθήσεων φανερώς συντείνουν πρὸς τὴν καρδίαν, αἱ δ' εἰσὶν ἐν τῇ κεφαλῇ (διὸ καὶ δοκεῖ πῖσιν αἰσθάνεσθαι τὰ ζῶα διὰ τὸν ἐγκέφαλον), τὸ αἴτιον τούτων ἐν ἑτέροις εἴρηται χωρίς.

κατὰ μὲν οὖν τὰ φαινόμενα δῆλον ἐκ τῶν εἰρημένων ὅτι ἐν τούτῳ τε καὶ ἐν τῷ μέσῳ τοῦ σώματος τῶν τριῶν μορίων ἢ τε τῆς αἰσθητικῆς ψυχῆς ἀρχὴ ἐστὶ καὶ ἡ τῆς αὐξητικῆς καὶ θρεπτικῆς· κατὰ δὲ τὸν λόγον, ὅτι τὴν φύσιν ὁρῶμεν ἐν πᾶσιν ἐκ τῶν δυνατῶν ποιοῦσαν τὸ κάλλιστον· ἐν τῷ μέσῳ δὲ τῆς οὐσίας τῆς ἀρχῆς οὔσης ἑκατέρας μάλιστα ἂν ἀποτελοῖ τῶν μορίων ἑκάτερον τὸ αὐτοῦ ἔργον, τό τε κατεργαζόμενον τὴν ἐσχάτην τροφήν καὶ τὸ

δεκτικόν· πρὸς ἑκατέρῳ γὰρ αὐτῶν οὕτως ἔσται, καὶ ἔστιν ἡ τοῦ τοιούτου μέσου χώρα ἄρχοντος [469b] χώρα. ἔτι τὸ χρώμενον καὶ ὧ χρηται τὸ χρώμενον δεῖ διαφέρειν (ὥσπερ δὲ τὴν δύναμιν, οὕτως, ἂν ἐνδέχεται, καὶ τὸν τόπον), ὥσπερ οἱ τ' αὐλοὶ καὶ τὸ κινεῖν τοὺς αὐλοὺς, ἡ χεὶρ. εἴπερ οὖν τὸ ζῶον ὥριστα τῷ τὴν αἰσθητικὴν ἔχειν ψυχὴν, τοῖς μὲν ἐναίμοις ἀναγκαῖον ἐν τῇ καρδίᾳ ταύτην ἔχειν τὴν ἀρχήν, τοῖς δ' ἀναίμοις ἐν τῷ ἀνάλογον μορίῳ. πάντα δὲ τὰ μόρια καὶ πᾶν τὸ σῶμα τῶν ζώων ἔχει τινὰ σύμφυτον θερμότητα φυσικὴν· διὸ ζῶντα μὲν φαίνεται θερμά, τελευτῶντα δὲ καὶ στερισκόμενα τοῦ ζῆν τοῦναντίον. ἀναγκαῖον δὲ ταύτης τὴν ἀρχὴν τῆς θερμότητος ἐν τῇ καρδίᾳ τοῖς ἐναίμοις εἶναι, τοῖς δ' ἀναίμοις ἐν τῷ ἀνάλογον· ἐργάζεται γὰρ καὶ πέττει τῷ φυσικῷ θερμῷ τὴν τροφήν πάντα, μάλιστα δὲ τὸ κυριώτατον. διὸ τῶν μὲν ἄλλων μορίων ψυχομένων ὑπομένει τὸ ζῆν, τοῦ δ' ἐν ταύτῃ φθείρεται πάμπαν, διὰ τὸ τὴν ἀρχὴν ἐντεῦθεν τῆς θερμότητος ἡρτῆσθαι πᾶσι, καὶ τῆς ψυχῆς ὥσπερ ἐμπεπυρευμένης ἐν τοῖς μορίοις τούτοις, τῶν μὲν ἀναίμων ἐν τῷ ἀνάλογον, ἐν δὲ τῇ καρδίᾳ τῶν ἐναίμων. ἀνάγκη τοίνυν ἅμα τό τε ζῆν ὑπάρχειν καὶ τὴν τοῦ θερμοῦ τούτου σωτηρίαν, καὶ τὸν καλούμενον θάνατον εἶναι τὴν τούτου φθοράν.

Ἀλλὰ μὴν πυρὸς γε δύο ὁρῶμεν φθοράς, μάρανσιν τε καὶ σβέσιν. καλοῦμεν δὲ τὴν μὲν ὑφ' αὐτοῦ μάρανσιν, τὴν δ' ὑπὸ τῶν ἐναντίων σβέσιν, [τὴν μὲν γήρα, τὴν δὲ βίαιον,] συμβαίνει δ' ἀμφοτέρας διὰ ταῦτ' εἶναι τὰς φθοράς· ὑπολειπούσης γὰρ τῆς τροφῆς, οὐ δυναμένου λαμβάνειν τοῦ θερμοῦ τὴν τροφήν, φθορὰ γίνεται τοῦ πυρός. τὸ μὲν γὰρ ἐναντίον παῦον τὴν πέψιν κωλύει τρέφεσθαι· ὅτε δὲ μαραίνεσθαι συμβαίνει, πλείονος ἀθροιζομένου θερμοῦ διὰ τὸ μὴ ἀναπνεῖν μηδὲ καταψύχεσθαι· ταχὺ γὰρ καὶ οὕτω καταναλίσκει τὴν τροφήν πολὺ συναθροιζόμενον τὸ θερμόν, καὶ φθάνει καταναλίσκον πρὶν ἐπιστῆναι τὴν ἀναθυμίασιν. διόπερ οὐ μόνον μαραίνεται τὸ ἔλαττον παρὰ τὸ πλεῖον πῦρ, ἀλλὰ καὶ αὐτὴ καθ' αὐτὴν ἡ τοῦ λύχνου φλὸξ ἐντιθεμένη πλείονι φλογὶ [470a] κατακαίεται, καθάπερ ὅτιοῦν ἄλλο τῶν καυστῶν. αἴτιον δ' ὅτι τὴν μὲν οὖσαν ἐν τῇ φλογὶ τροφήν φθάνει λαμβάνουσα ἢ μείζων φλὸξ πρὶν ἐπελθεῖν ἑτέραν, τὸ δὲ πῦρ αἰεὶ διατελεῖ γινόμενον καὶ ῥέον ὥσπερ ποταμός, ἀλλὰ λανθάνει διὰ τὸ τάχος. δῆλον τοίνυν ὡς εἴπερ δεῖ σῶζεσθαι τὸ θερμόν (τοῦτο δ' ἀναγκαῖον, εἴπερ μέλλει ζῆν), δεῖ γίνεσθαι τινὰ τοῦ θερμοῦ τοῦ ἐν τῇ ἀρχῇ κατάψυξιν. παράδειγμα δὲ τούτου λαβεῖν ἔστι τὸ συμβαῖνον ἐπὶ τῶν καταπνιγομένων ἀνθρώκων· ἂν μὲν γὰρ ὥσι περιπεπωμασμένοι τῷ καλουμένῳ πνιγεῖ συνεχῶς, ἀποσβέννυνται ταχέως· ἂν δὲ παρ' ἄλληλά τις ποιῇ πυκνὰ τὴν ἀφαίρεσιν καὶ τὴν ἐπίθεσιν, μένουσι πεπυρωμένοι πολὺν χρόνον. ἡ δ' ἔγκρυψις σῶζει τὸ πῦρ· οὔτε γὰρ ἀποπνεῖν κωλύεται, διὰ μανότητα τῆς τέφρας, ἀντιφράττει τε τῷ περίξ ἀέρι πρὸς τὸ μὴ

σβεννύναι, τῷ πλήθει τῆς ἐνυπαρχούσης αὐτῷ θερμότητος. ἀλλὰ περὶ μὲν τῆς αἰτίας ταύτης, ὅτι τὸ ἐναντίον συμβαίνει τῷ ἐγκρυπτομένῳ καὶ καταπνιγομένῳ πυρί (τὸ μὲν γὰρ μαραίνεται, τὸ δὲ διαμένει πλείω χρόνον), εἴρηται ἐν τοῖς προβλήμασιν.

Ἐπεὶ δὲ πᾶν ζῶν ἔχει ψυχὴν, αὕτη δ' οὐκ ἄνευ φυσικῆς ὑπάρχει θερμότητος, ὥσπερ εἵπομεν, τοῖς μὲν φυτοῖς ἢ διὰ τῆς τροφῆς καὶ τοῦ περιέχοντος ἱκανῇ γίνεται βοήθεια πρὸς τὴν τοῦ φυσικοῦ θερμοῦ σωτηρίαν. καὶ γὰρ ἡ τροφή ποιεῖ κατάψυξιν εἰσιούσα, καθάπερ καὶ τοῖς ἀνθρώποις τὸ πρῶτον προσενεγκαμένοις, αἱ δὲ νηστεῖαι θερμαίνουσι καὶ δίψας ποιοῦσιν· ἀκίνητος γὰρ ὢν ὁ ἄῃρ αἰεὶ θερμαίνεται, τῆς δὲ τροφῆς εἰσιούσης καταψύχεται κινούμενος, ἕως ἂν λάβῃ τὴν πέψιν. ἐὰν δὲ τὸ περιέχον ὑπερβάλλῃ ψυχρότητι διὰ τὴν ὥραν, ἰσχυρῶν γινομένων πάγων, ἐξαυαίνεται ἢ τοῦ θερμοῦ ἰσχύς, ἂν δὲ συμβαίῃ καύματα καὶ μὴ δύνηται τὸ σπώμενον ἐκ τῆς γῆς ὑγρὸν καταψύχειν, φθείρεται μαραινόμενον τὸ θερμόν, καὶ λέγεται σφακελίζειν καὶ ἀστροβλήτα γίνεσθαι τὰ δένδρα περὶ τοὺς καιροὺς τούτους. διὸ καὶ γένη τινὰ λίθων ταῖς ῥίζαις ὑποβάλλουσι καὶ ὕδωρ ἐν ἀγγείοις, ὅπως αἱ ῥίζαι ψύχωνται τῶν φυτῶν. τῶν δὲ ζώων ἐπεὶ τὰ μὲν ἐστὶν ἐνυδρὰ τὰ δ' ἐν τῷ ἀέρι ποιεῖται τὴν δίαιταν, ἐκ τούτων καὶ διὰ τούτων πορίζεται τὴν κατάψυξιν, τὰ μὲν τῷ ὕδατι τὰ δὲ τῷ ἀέρι. τίνα δὲ τρόπον καὶ πῶς, λεκτέον ἐπιστήσασι τὸν λόγον μᾶλλον.

### Ανωνυμου περὶ Πνεύματος (481a) On Breath



[481a] Τίς ἡ τοῦ ἐμφύτου πνεύματος διαμονή, καὶ τίς ἡ αὔξησις; ὁρῶμεν γὰρ ὅτι πλέον καὶ ἰσχυρότερον γίνεται καὶ καθ' ἡλικίας μεταβολὴν καὶ κατὰ διάθεσιν σώματος. ἢ ὡς τᾶλλα μέρη, προσγινομένου τινός; προσγίνεται δὲ τροφή τοῖς ἐμψύχοις, ὥστε ταύτην σκεπτέον ποία τε καὶ πόθεν. δύο δὲ τρόποι δι' ὧν γίνεται, ἡ διὰ τῆς ἀναπνοῆς, ἡ διὰ τῆς κατὰ τὴν τῆς τροφῆς προσφορὰν πέψεως, καθάπερ τοῖς ἄλλοις. τούτων ἴσως οὐχ ἥττον ἂν [οὐχ οὕτω] δόξειεν διὰ τῆς τροφῆς· σῶμα γὰρ ὑπὸ σώματος τρέφεται, τὸ δὲ πνεῦμα σῶμα. τίς οὖν ὁ τρόπος; ἡ δῆλον ὡς ἐκ τῆς φλεβὸς ὀλκῇ τινι καὶ πέψει. τὸ γὰρ αἷμα ἢ ἐσχάτη τροφή καὶ ἡ αὐτὴ πᾶσιν. ὥσπερ οὖν καὶ εἰς τὸ ἀγγεῖον αὐτοῦ καὶ εἰς τὸ περιεχόμενον λαμβάνει τροφήν εἰς τὸ θερμόν. ἄγει δ' ὁ ἄῃρ τὴν ἐνέργειαν ποιῶν, τὴν τε πεπτικὴν αὐτὸς αὐτῷ προστιθεὶς αὔξει καὶ τρέφει. οὐδὲν δ' ἴσως ἄτοπον αὐτό γε τοῦτο, ἀλλὰ γενέσθαι τὸ πρῶτον



ἐκ τῆς τροφῆς. καθαρώτερον γὰρ ὃ τῇ ψυχῇ συμφυές, εἰ μὴ καὶ τὴν ψυχὴν ὕστερον λέγοι γίνεσθαι, διακρινομένων τῶν σπερμάτων καὶ εἰς φύσιν ἰόντων. εἴτε περίττωμα πάσης τροφῆς ἐστὶ, ποία διαπέμπεται τοῦτο; κατὰ μὲν γὰρ τὴν ἐκπνοὴν οὐκ εὐλογον· ἀντιλαμβάνει γὰρ εὐθύς. λοιπὸν δὲ δῆλον ὅτι διὰ τῶν τῆς ἀρτηρίας πόρων. τὸ δ' ἐκκρινόμενον ἦτοι λεπτότερον ἢ παχύτερον. ἀμφοτέρως δ' ἄτοπον, εἰ τοῦτο πάντων ἔσται καθαρώτατον. εἰ δὲ παχύτερον, ἔσσονται τινες πόροι μείζους. εἰ δ' ἄρα κατὰ τοὺς αὐτοὺς λαμβάνει καὶ ἐκπέμπει, τοῦτ' αὐτὸ παράλογον καὶ ἄτοπον. ἢ μὲν οὖν ἐκ τῆς τροφῆς αὕξεις καὶ διαμονὴ σχεδὸν ταῦτα.

Ἡ δ' ἐκ τῆς ἀναπνοῆς, ὥσπερ Ἀριστογένης οἶεται (τροφὴν γὰρ οἶεται καὶ τὸ πνεῦμα πεττομένου τοῦ ἀέρος ἐν τῷ πνεύμονι· τοῦτο δ' εἰς τὰ ἀγγεῖα διαδίδοσθαι, τὸ [481b] περίττωμα πάλιν ἐκπέμπεσθαι) πλείους ἔχει τὰς ἀπορίας. ἢ τε γὰρ πέψις ὑπὸ τίνος; εἰκὸς μὲν γὰρ ὑπ' αὐτοῦ, καθάπερ καὶ τῶν ἄλλων. αὐτὸ δὲ τοῦτ' ἄτοπον, εἰ μὴ διαφέρει τοῦ ἔξω ἀέρος· οὕτω δ' ἡ θερμότης ἂν πέττοι. καὶ μὴν καὶ παχύτερον αὐτὸν εὐλογον εἶναι μεθ' ὑγρότητος τῆς ἀπὸ τῶν ἀγγείων ὄντα καὶ τῶν ὅλων ὄγκων, ὥσθ' ἡ πέψις ἂν εἰς τὸ σωματῶδες εἴη. τὸ δὲ περίττωμα, εἴπερ γίνεται λεπτότερον, οὐ πιθανόν. ἄλογος δὲ καὶ ἡ ταχυτὴς τῆς πέψεως. εὐθύς γὰρ μετὰ τὴν εἰσπνοὴν ἡ ἐκπνοή. τί οὖν τὸ οὕτω ταχὺ μεταβάλλον καὶ ἀλλοιοῦν; ὑπολάβοι γὰρ ἂν τις μάλιστα τὸ θερμόν, καὶ μαρτυρεῖ οὕτως ἡ αἴσθησις· ὁ γὰρ ἐκπνεόμενος θερμός. ἔτι δ' εἰ μὲν ἐν τῷ πνεύμονι καὶ τῇ ἀρτηρίᾳ τὸ πεττόμενον, ἡ τοῦ θερμοῦ δύναμις ἐν τούτοις· ὅπερ οὗ φασιν, ἀλλ' ἐν τῇ κινήσει τῇ τοῦ πνεύματος ἐκθερμαίνεσθαι τὴν τροφήν. εἰ δ' ἐξ ἑτέρου τινὸς οἶον ἐπισπᾶται ἢ καὶ κινουῖντος δέχεται, τοῦτ' ἔτι θαυμασιώτερον. ἅμα δὲ καὶ οὐκ αὐτὸ τὸ πρῶτον κινουῖν. ἔτι δ' ἡ μὲν ἀναπνοὴ μέχρι τοῦ πνεύμονος, ὥσπερ λέγουσιν αὐτοί, τὸ δὲ πνεῦμα δι' ὅλου τὸ σύμφυτον. εἰ δ' ἀπὸ τούτου διαδίδεται καὶ πρὸς τὰ κάτω καὶ πρὸς τὰ ἄλλα, πῶς ἡ πέψις οὕτω ταχεῖα; θαυμασιώτερον γὰρ τοῦτο καὶ μεῖζον· οὐ γὰρ διαπέμπει τοῦτό γ' εὐθύς πεττόμενον τὸν ἀέρα τοῖς κάτω. καίτοι τὸ μὲν δόξειεν <ἂν> ἀναγκαῖον εἶναι τοῦτο τῆς πέψεως γινομένης ἐν τῷ πνεύμονι τῆς τ' ἀναπνοῆς κοινωνούντων καὶ τῶν κάτω, μεῖζον δ' οὕτως ἔτι καὶ παραδοξότερον τὸ συμβαῖνον· οἶον γὰρ διόδω καὶ θίξει γίνεται μόνον ἡ πέψις. ἄλογον δὲ καὶ τουτὶ καὶ λογοδεστερον, εἰ ὁ αὐτὸς πόρος τῆς τροφῆς καὶ τοῦ περιττώματος. εἰ δὲ δι' ἄλλου τινὸς τῶν ἐντός, οἱ αὐτοὶ λόγοι οἱ καὶ πρότερον, εἰ μὴ τοῦτο λέγοι τις, ὥς οὐ πάσης τῆς τροφῆς οὐδὲ πᾶσι γίνεται περίττωμα, [482a] καθάπερ οὐδὲ τοῖς φυτοῖς, ἐπεὶ οὐδὲ τῶν τοῦ σώματος μερῶν ἐκάστου λαβεῖν ἐστίν, εἰ μὴ, ὅτι γε παντός. ἀλλ' ἄρα γε ἡ μὲν ἀγγείων αὕξεις ἡ αὐτὴ καὶ τῶν ἄλλων μορίων, εὐρυνομένων δὲ καὶ διισταμένων τούτων πλείων ὁ ἀῆρ ὁ εἰσρέων καὶ ἐκρέων. εἰ δέ τι

ἀναγκαῖον ἐνυπάρχει, τοῦτο αὐτὸ ζητεῖται, τίς ὁ φυσικός; καὶ πῶς οὗτος πλείων ὑγιῶς, ἐκ τούτου φανερόν ἂν εἴη. τοῖς δὲ δὴ μὴ ἀναπνευστικοῖς τίς ἡ τροφή τοῦ συμφύτου καὶ τίς ἡ αὔξησις; οὐ γὰρ ἔτι τούτοις ἀπὸ τοῦ ἔξωθεν. εἰ δ' ἀπὸ τῶν ἐντὸς καὶ τῆς κοινῆς τροφῆς, εὐλογον κάκεινοις· ἀπὸ γὰρ τῶν αὐτῶν τὰ ὅμοια καὶ ὡσαύτως, εἰ μὴ ἄρα καὶ τούτοις ἀπὸ τοῦ ἐκτός, ὥσπερ καὶ τῶν ὁσμῶν αἰσθάνονται. ἀλλ' οὕτοιγ' οἶον ἀναπνοὴ γίνεται. περὶ οὗ κἂν ἀπορήσειέ τις, εἰ κατὰ ἀλήθειάν ἐστιν, αὐτό τε τοῦτο προφέρων καὶ τὴν ἐπίσπασιν τῆς τροφῆς (ὀλκὴ γὰρ ἅμα πνεύματος), ἔτι δ' ὑπὲρ τῆς καταψύξεως ἀντιλέγων, ὡς κάκεινων δεομένων. εἰ δὲ διὰ τοῦ ὑποζώματος αὐτοῖς γίνεται, ταύτῃ δῆλον ὅτι καὶ ἡ τοῦ ἀέρος εἴσοδος· ὥσθ' ὁμοίον τι τῇ ἀναπνοῇ. πλὴν οὐκ ἀφορίζεται τίς <ἡ> ὀλκὴ καὶ ὑπὸ τίνος, ἢ εἰ μὴ ὀλκή, πῶς ἡ εἴσοδος; εἰ μὴ ἄρα αὐτομάτως. τοῦτο μὲν οὖν ἔχει καὶ αὐτὸ καθ' αὐτὸ σκέψιν. τοῖς δὲ δὴ ἐνύγροις τίς ἡ τροφή καὶ αὔξησις τοῦ συμφύτου; χωρὶς γὰρ τοῦ μὴ ἀναπνεῖν οὐδ' ἐνυπάρχειν ὅλως ἐν τῷ ὑγρῷ φαμεν ἀέρα. λοιπὸν ἄρα διὰ τῆς τροφῆς, ὡς οὐχ ὁμοίως πᾶσιν, ἢ κάκεινα διὰ τῆς τροφῆς τὰ <μὴ> ἐνυγρα· τριῶν γὰρ τούτων ἀναγκαῖον ἔν. καὶ ταῦτα μὲν ὡς περὶ τὴν αὔξησιν καὶ τροφήν τοῦ πνεύματος.

Περὶ δὲ ἀναπνοῆς οἱ μὲν οὐ λέγουσι τίνος χάριν, ἀλλὰ μόνον ὃν τρόπον γίνεται, καθάπερ Ἐμπεδοκλῆς καὶ Δημόκριτος· οἱ δ' οὐδὲ τὸν τρόπον ὅλως λέγουσιν, ἀλλ' ὡς φανερῶ χρῶνται. δεῖ δὲ καὶ εἰ καταψύξεως χάριν, αὐτὸ τοῦτο διασαφῆσαι. εἰ γὰρ ἐν τοῖς ἄνω τὸ θερμόν, οὐκ ἂν ἔτι δέοιτο κάτω. τὸ δὲ σύμφυτον πνεῦμα δι' ὅλου, καὶ ἀρχὴ ἀπὸ τοῦ πνεύμονος. δοκεῖ δὲ καὶ τὸ τῆς ἀναπνοῆς εἰς πάντα διαδίδοσθαι κατὰ συνέχειαν, ὥστε τοῦτο δεικτέον ὡς οὐκ ἔστιν. ἄτοπον δὲ εἰ μὴ δεῖται τίνος κινήσεως καὶ [482b] οἶον τροφῆς. εἰ δὲ διαπνεῖ πρὸς πᾶν, οὐκ <ἂν> ἔτι καταψύξεως εἴη χάριν. ἀλλὰ μὴν καὶ ἡ διάδοσις ἄλλως τ' ἀναίσθητος, καὶ τὸ τάχος αὐτῆς. καὶ πάλιν τὸ τῆς παλιρροίας, εἴπερ ἀπὸ πάντων, θαυμαστόν, πλὴν εἰ ἄλλον τρόπον ἀπὸ τῶν ἐσχάτων, τὸ δὲ πρῶτως καὶ κυρίως ἀπὸ τῶν περὶ τὴν καρδίαν. ἐν πολλοῖς δ' οὕτω τὸ τῶν ἐνεργειῶν καὶ τῶν δυνάμεων. ἄτοπον οὖν ὅμως εἰ καὶ εἰς τὸ ὅστοῦν διαδίδεται· καὶ γὰρ δὴ τοῦτό φασι ἐξ ἀρτηριῶν. διό, καθάπερ εἴρηται, σκεπτέον περὶ ἀναπνοῆς, καὶ τίνος ἕνεκα καὶ ποίοις μέρεσι καὶ πῶς. ἔτι δὲ οὐδ' ἐπιφορὰ τῆς τροφῆς φέρεται πᾶσι δι' ἀρτηριῶν, οἶον αὐτοῖς τε τοῖς ἀγγείοις καὶ ἄλλοις τισὶ τῶν μερῶν· ζῆ δὲ <ὥσπερ> τὰ φυτὰ καὶ τρέφεται. ταῦτα μὲν οἰκειότερά πως τοῖς περὶ τὰς τροφάς.

Ἐπεὶ δὲ τρεῖς αἱ κινήσεις τοῦ ἐν τῇ ἀρτηρίᾳ πνεύματος, ἀναπνοή, σφυγμός, τρίτη δ' ἡ τὴν τροφήν ἐπάγουσα καὶ κατεργαζομένη, λεκτέον ὑπὲρ ἑκάστης καὶ ποῦ καὶ πῶς καὶ τίνος χάριν. τούτων δ' ἡ μὲν τοῦ σφυγμοῦ καὶ

τῇ αἰσθήσει φανερά καθ' ὅτι οὖν μέρος ἀπτομένοις, ἡ δὲ τῆς ἀναπνοῆς μέχρι μέν του φανερά, τὸ δὲ πλεον κατὰ λόγον, ἡ δὲ τῆς τροφῆς ἅπαντα κατὰ λόγον ὡς εἰπεῖν, ὡς ἐκ τῶν συμβαινόντων δὲ κατὰ τὴν αἴσθησιν. ἡ μὲν οὖν ἀναπνοὴ δῆλον ὡς ἀπὸ τοῦ ἐντὸς ἔχει τὴν ἀρχήν, εἴτε ψυχῆς δύναμιν εἴτε ψυχὴν δεῖ λέγειν ταύτην, εἴτε καὶ ἄλλην τινὰ σωμάτων μίξιν, ἢ δι' αὐτῶν ποιεῖ τὴν τοιαύτην ὀλκήν. ἡ δὲ θρεπτικὴ δόξειεν ἂν ἀπὸ τῆς ἀναπνοῆς αὕτη γὰρ ἀνταποδίδεται, καὶ ὁμοία τῷ ἀληθεῖ. εἰ δὲ μή, πᾶν ὁμαλίζει τοῖς χρόνοις τὸ σῶμα κατὰ τὴν τοιαύτην κίνησιν. ἢ εἰ μηδὲν διαφέρει τὸ ἅμα, πάντα τὰ μέρη σκεπτέον. ὁ δὲ σφυγμὸς ἰδιός τις παρὰ ταύτας τῇ μὲν ἂν δοκῶν εἶναι κατὰ συμβεβηκός, εἴπερ, ὅταν ἐν ὑγρῷ πλήθος ἢ θερμότητος, ἀνάγκη τὸ ἐκπνευματούμενον διὰ τὴν ἐναπόληψιν ποιεῖν σφυγμόν, ἐν τῇ ἀρχῇ δὲ καὶ πρῶτον, εἴπερ τοῖς πρώτοις σύμφυτον. [ἐν γὰρ τῇ καρδίᾳ μάλιστα καὶ πρῶτον, ἀφ' ἧς καὶ τοῖς ἄλλοις.] τάχα δὲ πρὸς τὴν ὑποκειμένην οὐσίαν τοῦ ζώου τὴν ἐκ τῆς ἐνεργείας ἀνάγκη τοῦτο παρακολουθεῖν. ὅτι δ' οὐδὲν πρὸς τὴν ἀναπνοὴν ὁ σφυγμός, [483a] σημεῖον· ἐάν τε γὰρ πυκνὸν ἐάν τε ὁμαλὸν ἐάν τε σφοδρὸν ἢ ἀραιὸν ἀναπνέη τις, ὅ γε σφυγμὸς ὁμοιος καὶ ὁ αὐτός, ἀλλ' ἡ ἀνωμαλία γίνεται καὶ ἐπίτασις ἐν τε σωματικοῖς τισι πάθεσι καὶ ἐν τοῖς τῆς ψυχῆς φόβοις ἐλπίσιν ἀγωνίαις. εἰ δὲ καὶ ἐν ταῖς ἀρτηρίαις ὁ σφυγμός, καὶ ὁ αὐτὸς ὢν ἐν ῥυθμῷ καὶ ὁμαλὸς ἦ, σκεπτέον· οὐκ ἔοικε δέ γε τοῖς μακρὰν ἀπηρτημένοις. ἥκιστα δ' ἔνεκά του φαίνεται γίνεσθαι, καθάπερ εἴρηται. τὸ γὰρ αὐτὸ τῆς ἀναπνοῆς καὶ τῆς ἐπαγωγῆς, εἴθ' ὡς ἕτερα πάμπαν ἀλλήλων εἴθ' ὡς θάτερον πρὸς θάτερον, ἔνεκά του φαίνεται καὶ ἔχει τινὰ λόγον. τριῶν δ' οὐσῶν πρότερον εὐλόγον εἶναι τὴν τε σφυγμώδη καὶ τὴν ἀναπνευστικήν· ἡ γὰρ τροφή προϋπάρχοντος. ἢ οὐ; τὸ μὲν γὰρ ἀναπνεῖν, ὅταν ἀπολυθῇ τῆς κυούσης, ἡ δ' ἐπιφορὰ καὶ ἡ τροφή καὶ ξυνισταμένου καὶ ξυνεστηκότος· ὁ δὲ σφυγμὸς εὐθὺς ἐν τῇ ἀρχῇ ξυνισταμένης τῆς καρδίας, καθάπερ ἐν τοῖς ὥοις γίνεται φανερόν. ὥστε αὕτη πρώτη, καὶ ἔοικεν ἐνεργεῖα τινὶ καὶ οὐκ ἐναπολήψει πνεύματος, εἰ μὴ ἄρα τοῦτο πρὸς τὴν ἐνέργειαν. τὸ δὲ πνεῦμα τὸ ἐκ τῆς ἀναπνοῆς φέρεσθαι μὲν εἰς τὴν κοιλίαν, οὐ διὰ τοῦ στομάχου (τοῦτο μὲν γὰρ ἀδύνατον), ἀλλὰ πόρον εἶναι παρὰ τὴν ὀσφύν, δι' οὗ τὸ πνεῦμα τῇ ἀναπνοῇ φέρεσθαι ἐκ τοῦ βρογχίου εἰς τὴν κοιλίαν καὶ πάλιν ἔξω· τοῦτο δὲ τῇ αἰσθήσει φανερόν. ἔχει δ' ἀπορίαν καὶ τὰ περὶ τὴν αἴσθησιν. εἰ γὰρ ἡ ἀρτηρία μόνον αἰσθάνεται, πότερα τῷ πνεύματι τῷ δι' αὐτῆς, ἢ τῷ ὄγκῳ, ἢ τῷ σώματι; ἢ εἴπερ ὁ ἀῆρ πρῶτον ὑπὸ τὴν ψυχὴν, τῷ κυριωτέρῳ τε καὶ προτέρῳ; τί οὖν ἡ ψυχὴ; δύναμιν φασὶ τὴν αἰτίαν τῆς κινήσεως τῆς τοιαύτης. ἢ δῆλον ὡς οὐκ ὀρθῶς ἐπιτιμήσεις τοῖς τὸ λογιστικὸν καὶ θυμικόν· καὶ γὰρ οὗτοι ὡς δυνάμεις λέγουσιν. ἀλλ' εἰ δὴ ἡ ψυχὴ ἐν τῷ ἀέρι τούτῳ, οὗτός γε κοινός. ἢ πάσχων γέ τι καὶ ἀλλοιούμενος εὐλόγως, ἂν ἔμψυχον ἢ ψυχὴν, πρὸς τὸ συγγενὲς φέρεται καὶ τῷ ὁμοίῳ τὸ ὅμοιον αὐξεται.

ἢ οὐ; τὸ γὰρ ὅλον οὐκ ἀήρ, ἀλλὰ συμβαλλόμενόν τι πρὸς ταύτην τὴν δύναμιν ὁ ἀήρ. ἢ οὐ, <ἀλλὰ> τὸ ταύτην ποιοῦν, καὶ τὸ ποιῆσαν τοῦτ' ἀρχὴ καὶ ὑπόθεσις; [483b] τοῖς δὲ μὴ ἀναπνέουσιν, ἵνα ἀνεπίμικτος τῷ ἔξω. ἢ οὐ, ἀλλὰ κατ' ἄλλον τρόπον μειγνύμενος; τίς οὖν ἡ διαφορὰ τοῦ ἐν τῇ ἀρτηρίᾳ πρὸς τὸν ἔξω; διαφέρειν γὰρ εὖλογον, τάχα δὲ καὶ ἀναγκαῖον, λεπτότητι. ἀλλ' ἔτι δὲ καθ' αὐτὸν θερμὸς ἢ ὑφ' ἑτέρου; φαίνεται γὰρ ὁ ἔσω καθάπερ ὁ ἔξω· βοηθεῖται δὲ τῇ καταψύξει. πότερα δέ; ἔξω μὲν γὰρ πραῦς, ἐμπεριληφθεὶς δὲ πνεῦμα, καθάπερ πυκνωθεὶς καὶ διαδοθεὶς πῶς. ἢ μίξιν τινὰ ἀνάγκη λαμβάνειν, ἐν ὑγρότητί τε καὶ σωματικοῖς ὄγκοις ἀναστρεφόμενον; οὐκ ἄρα λεπτότατος, εἴπερ μέμικται. καὶ μὴν εὖλογόν γε τὸ πρῶτον δεκτικὸν ψυχῆς, εἰ μὴ ἄρα καὶ ἡ ψυχὴ τοιοῦτον, καὶ οὐ καθαρὸν τι καὶ ἀμιγές. τὴν ἀρτηρίαν μόνον εἶναι δεκτικὴν πνεύματος, τὸ δὲ νεῦρον οὐ. διαφέρειν δὲ καὶ ὅτι τὸ μὲν νεῦρον ἔχει τάσιν, ἡ δ' ἀρτηρία ταχὺ διαρρήγνυται, καθάπερ καὶ ἡ φλέψ. τὸ δὲ δέρμα ἐκ φλεβὸς καὶ νεύρου καὶ ἀρτηρίας, ἐκ φλεβὸς μὲν ὅτι κεντηθὲν αἷμα ἀναδίδωσιν, ἐκ νεύρου δὲ ὅτι τάσιν ἔχει, ἐξ ἀρτηρίας δὲ ὅτι διαπνοὴν ἔχει. μόνον γὰρ δεκτικὸν πνεύματος ἡ ἀρτηρία. τὰς δὲ φλέβας ἔχειν πόρους, ἐν αἷς τὸ θερμὸν ὄν ὥσπερ ἐν χαλκείῳ θερμαίνειν τὸ αἷμα· φύσει γὰρ οὐκ εἶναι θερμόν, ἀλλ' ὥσπερ τὰ τηκτὰ διαχεῖσθαι· διὸ καὶ πήγνυσθαι τὴν ἀρτηρίαν, καὶ ἔχειν ὑγρότητα καὶ ἐν αὐτῇ καὶ ἐν τοῖς χιτῶσι τοῖς περιέχουσι τὸ κοίλωμα. φανερόν δ' ἔκ τε τῶν ἀνατομῶν εἶναι, καὶ ὅτι εἰς τὸ ἔντερον καὶ εἰς τὴν κοιλίαν αἱ τε φλέβες καὶ αἱ ἀρτηρίαι συνάπτουσιν, ἃς εἰκὸς εἶναι τὴν τροφὴν ἔλκειν. ἐκ δὲ τῶν φλεβῶν εἰς τὰς σάρκας διαδίδοσθαι τὴν τροφήν, οὐ κατὰ τὰ πλάγια ἀλλὰ κατὰ τὸ στόμα, καθάπερ σωλῆνας. ἀποτείνειν γὰρ ἐκ τῶν πλαγίων φλεβῶν φλέβια λεπτὰ ἐκ τῆς μεγάλης φλεβὸς καὶ τῆς ἀρτηρίας παρ' ἐκάστην πλευράν, καὶ ἀρτηρίαν καὶ φλέβα παρακεῖσθαι· καὶ τὰ ὀστέα δὲ καθάπτειν τὰ νεῦρα καὶ τὰς φλέβας καὶ εἰς μέσα καὶ εἰς τὰς συμβολὰς τῶν κεφαλῶν, δι' ὧν τὴν τροφὴν δέχεσθαι τοὺς ἰχθύας καὶ ἀναπνεῖν· εἰ δὲ μὴ ἀνέπνεον, ἐξαιρεθέντας ἂν ἐκ τοῦ ὑγροῦ εὐθύς θνήσκειν. τὰς δὲ φλέβας καὶ τὰς [484a] ἀρτηρίας συνάπτειν εἰς ἀλλήλας καὶ τῇ αἰσθήσει φανερόν εἶναι. τοῦτο δ' οὐκ ἂν συμβαίνειν, εἰ μὴ ἐδεῖτο καὶ τὸ ὑγρὸν πνεύματος καὶ τὸ πνεῦμα ὑγροῦ, τῷ θερμὸν εἶναι ἐν νεύρῳ καὶ ἀρτηρίᾳ καὶ φλεβί, θερμότατον δὲ καὶ οἶον φλεβωδέστατον τὸ ἐν τῷ νεύρῳ. ἄτοπον οὖν τῇ τοῦ πνεύματος χώρα τὸ θερμόν, ἄλλως τε καὶ καταψύξεως χάριν. εἰ δὲ ποιεῖ καὶ οἶον ἀναζωπυρεῖ θερμῷ τὸ θερμόν, γίγνοιτ' ἂν. ἔτι πάντων τῶν ἐχόντων θερμότητα σύμφυτον πῶς ἢ διαμονή, μηδενοῦς ἀντικειμένου μηδὲ καταψύχοντος; ὅτι γὰρ πάντα δεῖται καταψύξεως, σχεδὸν φανερόν τῷ <τὸ> αἷμα κατέχειν ἐν τῇ φλεβί τὸ θερμὸν οἶον ἀποστέγον· διὸ καὶ ὅταν ἐκρῴῃ, μεθιέναι τε καὶ θνήσκειν, τῷ τὸ ἥπαρ οὐκ ἔχειν οὐδεμίαν ἀρτηρίαν

Πότερον δὲ τὸ σπέρμα διὰ τῆς ἀρτηρίας ὥς καὶ συνθλιβόμενον, καὶ ἐν τῇ προέσει μόνον; ἐν οἷς δὴ φαίνεται καὶ ἡ ἐξ αἵματος μεταβολὴ τῷ τὰ νεῦρα ἀπὸ τῶν ὀστέων τρέφεσθαι· καθάπτει γὰρ αὐτά. ἢ οὐδὲ τοῦτ' ἀληθές· καὶ γὰρ ἐν τῇ καρδίᾳ νεῦρον, καὶ νεῦρα δὲ ἐκ τῶν ὀστέων ἡρτημένα. οὐ συνάπτει δὲ ἐν ἑτέρῳ, ἀλλ' εἰς σάρκα ἀποτελεuat. ἢ τοῦτό γ' οὐθέν· εἴη γὰρ ἂν οὐθέν ἦττον ἀπὸ τοῦ ὀστοῦ ἢ τροφή. αὐτοῖς δ' ἀπὸ τοῦ νεύρου τοῖς ὀστοῖς μᾶλλον τὴν τροφήν. ἄτοπον γὰρ καὶ τοῦτο. ξηρὸν <γὰρ> φύσει καὶ οὐκ ἔχον πόρους ὑγρούς· ἢ τροφή δ' ὑγρόν. σκεπτέον δὲ πρότερον, εἴπερ ἀπὸ τῶν ὀστέων, τίς ἢ τοῦ ὀστοῦ τροφή, ἢ φέρουσι πόροι καὶ ἐκ τῆς φλεβὸς καὶ ἐκ τῆς ἀρτηρίας εἰς αὐτό. καὶ ἐν πολλοῖς μὲν εὐδηλοί, μάλιστα δ' εἰς τὴν ῥάχιν. τὰς δ' ἀπὸ τῶν ὀστέων γίνεσθαι συνεχεῖς, ὥσπερ ταῖς πλευραῖς· τούτους δ' ἀπὸ τῆς κοιλίας τίνα τρόπον, ἢ πῶς τῆς ὀλκῆς γινομένης; ἢ τὰ πολλὰ ἄχονδρα, καθάπερ ἡ ῥάχις· ἀλλ' οὗτοι πρὸς τὴν κίνησιν. ἢ συνάψεως χάριν; δεῖ δέ, καὶ εἰ ἀπὸ τοῦ νεύρου τὸ ὀστοῦν τρέφεται, τὴν τοῦ νεύρου τροφήν εἰδέναι. ἡμεῖς δὲ φαμεν ἐκ τῆς ὑγρότητος γλίσχρας οὔσης τῆς περὶ [τὸ] αὐτό. πόθεν δ' αὐτὴ καὶ πῶς, λεκτέον. τὸ ἐκ φλεβὸς καὶ ἀρτηρίας τὴν σάρκα, ὅτι πανταχόθεν αἷμα τῇ κεντήσει, ψεῦδος ἐπὶ γε τῶν ἄλλων ζώων, οἷον ὀρνίθων καὶ ὄφρων καὶ ἰχθύων ἢ ὅλως τῶν ὠοτόκων· ἀλλὰ τῶν πολυαίμων τοῦτ' ἴδιον, ἐπεὶ τῶν ὀρνίθων γε καὶ τεμνομένων τὸ στήθος ἰχώρ, οὐχ αἷμα. Ἐμπεδοκλῆς δὲ ἐκ νεύρου τὸν ὄνυχά [484b] τῇ πῆξει. ἄρ' οὖν οὕτω καὶ δέρμα πρὸς σάρκα; ἀλλὰ τοῖς ὀστρακοδέρμοις καὶ μαλακοστράκοις πῶς ἀπὸ τῶν ἐκτὸς ἢ τροφή; τούναντίον γὰρ δοκεῖ μᾶλλον ἀπὸ τῶν ἐντὸς ἢ τῶν ἐκτὸς. ἔτι δὲ ποία καὶ διὰ τίνων ἢ ἐκ τῆς κοιλίας δίοδος; καὶ πάλιν ἢ ἐκείνων ἀναστροφὴ πρὸς τὴν σάρκα, καίπερ ἄλογος οὔσα. πολὺ γάρ τι θαυμαστὸν φαίνεται καὶ ἀδύνατον ὅλως. ἄρα γε ἄλλοις ἄλλη τροφή, καὶ οὐ πᾶσι τροφή τὸ αἷμα· πλὴν ἐκ τούτου τᾶλλα.

Τὴν τῶν ὀστέων φύσιν ἄρα σκεπτέον εἰ πρὸς κίνησιν ἢ πρὸς ἔρεισμα καὶ πρὸς τὸ στέγειν καὶ περιέχειν, ἔτι δ' εἰ ὥσπερ ἀρχαὶ ἔνια, καθάπερ ὁ πόλος. λέγω δὲ πρὸς μὲν κίνησιν, οἷον ποδὸς ἢ χειρὸς ἢ σκέλους ἢ ἀγκῶνος, ὁμοίως τὴν τε καμπτικὴν καὶ τὴν κατὰ τόπον· οὐδὲ γὰρ τὴν τοπικὴν οἷον τε ἄνευ κάμψεως. σχεδὸν δὲ καὶ τὰ ἐρείσματα ἐν τούτοις. τὴν δὲ τοῦ στέγειν καὶ περιέχειν, οἷον τὰ ἐν τῇ κεφαλῇ τὸν ἐγκέφαλον, καὶ ὅσοι δὴ τὸν μυελὸν ἀρχήν. αἱ δὲ πλευραὶ τοῦ συγκλείειν. ἀρχὴ δὲ καὶ μένον ἢ ῥάχις, ἀφ' ἧς καὶ αἱ πλευραὶ πρὸς τὴν σύγκλεισιν. ἀνάγκη γὰρ εἶναι τι τοιοῦτον· ἅπαν γὰρ τὸ κινούμενον ἐξ ἡρεμοῦντος. ἅμα δὲ καὶ δεῖ γε εἶναι τὸ οὗ ἕνεκα. ἐν ᾧ δὴ καὶ τὴν ἀρχὴν ἔνιοι, τὸν τε ῥαχίτην καὶ τὸν ἐγκέφαλον. ἔτι δὲ παρὰ ταῦτ' ἐπισυναφῆς καὶ συγκλείσεως χάριν, οἷον ἡ κλείς· ὅθεν ἴσως καὶ τοῦνομα. πρὸς δὲ τὴν χρεῖαν ἕκαστον καλῶς. οὐδὲ γὰρ ἡ κάμψις, οὔτε τοῦ ὅλου οὔτε

τῶν μερῶν, εἰ μὴ τοιαῦτα, οἷον ῥάχιδες, πόδας, ἄγκῶνες. εἴσω γὰρ δεῖ τὴν κάμψιν πρὸς τὴν χρεῖαν, ὁμοίως δὲ καὶ τὴν τοῦ ποδὸς καὶ τῶν ἄλλων τοιαύτην. ἅπαντα δὲ ἔνεκά του, καὶ τὰ ἐν τούτοις ὅστ᾽, οἷον ἢ ἐν τῷ ἄγκῳνι κερκὶς ἔνεκα τῆς στροφῆς τοῦ ἄγκῳνος καὶ τῆς χειρός. οὐ γὰρ <ἄν> ἐδυνάμεθα πρηνῇ καὶ ὑπτίαν κινεῖν ἄνευ ταύτης, οὐδὲ τοὺς πόδας ἐπαίρειν καὶ κάμπτειν, εἰ μὴ δύο αἱ ἐν τῇ κινήσει κερκίδες. ὡσαύτως δὲ καὶ τὰ ἄλλα σκεπτέον, οἷον ἢ τοῦ τραχήλου κινήσεις, εἰ ἐν τὸ ὅστον. δεῖ δὲ καὶ ὅσα πρὸς κατάληψιν ἢ σύνδεσμον, οἷον ἢ μύλη ἢ ἐπὶ τῷ γόνατι. ἀλλὰ καὶ διὰ τί τοῖς ἄλλοις οὐ. ὅσα μὲν οὖν κινητικά, πάντα μὲν μετὰ νεύρων, ἴσως δ' ὅσα πρακτικῶς, μάλιστα, οἷον τὰ περὶ ἄγκῳνα καὶ σκέλη καὶ χεῖρας καὶ πόδας. τὰ δ' ἄλλα συνδέσμου χάριν, ὅσα δεῖται. ἐνίοις γὰρ ἴσως οὐδὲν ἢ ἐπ' ὀλίγον, οἷον ἢ ῥάχιδες· ἀλλ' ἢ [485a] κάμψις. καὶ γὰρ ἢ πρὸς ἄλληλα κόλλησις ἰχώρ ἐστὶ καὶ ὑγρότης μυξώδης. τὰ δὲ καὶ συνδεῖται νεύροις, οἷον τὰ περὶ τὰ ἄρθρα.

Πάντων δ' ἐστὶ λόγος ὁ βελτίων ὡς καὶ νῦν ζητεῖν· ἀλλὰ τὰς ἀρχὰς ἐφ' ἱκανόν, ὧν χάριν, σκεπτέον. οὐκ ἂν δόξειε κινήσεως ἔνεκα τὰ ὅστ᾽, ἀλλὰ μᾶλλον τὰ νεῦρα ἢ τὰ ἀνάλογον, ἐν ᾧ πρώτῳ τὸ πνεῦμα τὸ κινητικόν, ἐπεὶ καὶ ἡ κοιλία κινεῖται καὶ ἡ καρδία νεῦρα ἔχει· τὰ δ' οὐ πᾶσιν, ἀλλ' ἐνίοις, ἀνάγκη καὶ πρὸς τὴν τοιαύτην κίνησιν νεῦρα ἔχειν, ἢ εἰς τὸ ὁ γὰρ πολύπους ἐπ' ὀλίγον καὶ κακῶς βαδίζει. δεῖ γὰρ τοῦτο λαβεῖν ὥσπερ ἀρχήν, ὅτι πᾶσιν [ἢ] ἄλλου τινὸς χάριν ἄλλα πρὸς τὴν κίνησιν τὴν οἰκείαν, οἷον τοῖς μὲν πεζοῖς πόδας, καὶ τοῦτο τοῖς μὲν ὀρθοῖς δύο, τοῖς δὲ παντελῶς ἐπὶ τῆς γῆς πλείους, ὅσοις ἢ ὕλη γεωδεστέρα καὶ ψυχροτέρα (τὰ δὲ καὶ ἀποδα ὅλως ἐγχωρεῖ· βία γὰρ οὕτω κινεῖσθαι) τοῖς <δὲ> πτηνοῖς πτέρυγας, καὶ τούτων τὴν μορφήν οἰκείαν τῇ φύσει, διάφορα δὲ τοῖς πτητικωτέροις καὶ βραδυτέροις. πόδας δὲ τροφῆς χάριν καὶ ἀναστάσεως, πλὴν τῆς νυκτερίδος· διὸ καὶ τὴν τροφήν ἐκ τοῦ ἀέρος. καὶ μὴ δεῖσθαι διαναπαύσεως· οὐ δέονται γὰρ δι' ἄλλων. τὰ δὲ ὀστρακόδερμα τῶν ἐνύδρων ὑπόποδα διὰ τὸ βάρος. καὶ ταῦτα μὲν πρὸς τὴν κατὰ τόπον ἀλλαγὴν· ὅσα δὲ πρὸς τὴν ἄλλην χρεῖαν, ὥσπερ ὑφηγεῖται καὶ ἐκάστου τὰ ἴδια, καὶ εἴ τι μὴ προφανές, οἷον διὰ τί τὰ πολύποδα βραδύτατα. (καίτοι τὰ τετράποδα θάττω τῶν διπόδων) πότερον ὅτι ἐπὶ γῆς ὅλα τὰ σώματα ἢ ὅτι φύσει ψυχρὰ καὶ δυσκίνητα ἢ δι' ἄλλην αἰτίαν.

Οἱ ἀναιροῦντες ὡς οὐ τὸ θερμὸν τὸ ἐργαζόμενον ἐν τοῖς σώμασιν, ἢ ὅτι μία τις φορὰ καὶ δύναμις ἢ τμητικὴ τοῦ πυρός, οὐ καλῶς λέγουσιν. οὐδὲ γὰρ ὅλα τοῖς ἀψύχοις ταῦτο ποιεῖ πᾶσιν, ἀλλὰ τὰ μὲν πυκνοῖ, τὰ δὲ μανοῖ, καὶ τήκει, τὰ δὲ πήγνυσιν. ἐν δὲ δὴ τοῖς ἐμψύχοις οὕτως ὑποληπτέον, ὥσπερ φύσεως πῦρ ζητοῦντα, καθάπερ τέχνης· καὶ γὰρ ἐν ταῖς τέχναις ἕτερον τὸ χρυσοχοϊκὸν καὶ τὸ χαλκευτικὸν καὶ τὸ τεκτονικὸν πῦρ ἀποτελεῖ, καὶ τὸ

μαγειρικόν. ἴσως δ' ἀληθέστερον ὅτι αἱ τέχναι· χρῶνται γὰρ [485b] ὥσπερ ὀργάνῳ μαλάττουσαι καὶ τήκουσαι καὶ ξηραίνουσαι, ἔνια δὲ καὶ ῥυθμίζουσαι. τὸ αὐτὸ δὴ τοῦτο καὶ αἱ φύσεις· ὅθεν δὴ καὶ <αἱ> πρὸς ἀλλήλα διαφοραί. διὸ γελοῖον πρὸς τὸ ἔξω κρίνειν· εἴτε γὰρ διακρίνον εἴτε λεπτῦνον εἴθ' ὅτιδήποτ' ἐστὶ τὸ θερμαίνεσθαι καὶ πυροῦσθαι, διάφορα ἔξει τὰ ἔργα τοῖς χρωμένοις. ἀλλ' αἱ μὲν τέχναι ὡς ὀργάνῳ χρῶνται, ἡ δὲ φύσις ἅμα καὶ ὡς ὕλῃ. οὐ δὴ τοῦτο χαλεπόν, ἀλλὰ μᾶλλον τὸ τὴν φύσιν αὐτὴν νοῆσαι τὴν χρωμένην, ἥτις ἅμα τοῖς αἰσθητοῖς πάθεσι καὶ τὸν ῥυθμὸν ἀποδώσει. τοῦτο γὰρ οὐκέτι πυρὸς οὐδὲ πνεύματος. τούτοις δὴ καταμεμεῖχθαι τοιαύτην δύναμιν θαυμαστόν. ἔτι δὲ τοῦτο θαυμαστόν ταύτὸν καὶ περὶ ψυχῆς· ἐν τούτοις γὰρ ὑπάρχει. διόπερ οὐ κακῶς εἰς ταύτόν, ἢ ἀπλῶς ἢ μόνον τι τὸ δημιουργοῦν, καὶ τὸ τὴν κίνησιν ἀεὶ τὴν ὁμοίαν ὑπάρχειν ἐνεργοῦν. καὶ γὰρ ἡ φύσις, ἀφ' ἧς καὶ ἡ γένεσις. ἀλλὰ δὴ τίς ἡ διαφορὰ τοῦ καθ' ἕκαστον θερμοῦ, εἴθ' ὡς ὄργανον εἴθ' ὡς ὕλην εἴθ' ὡς ἄμφω; πυρὸς γὰρ διαφοραὶ κατὰ τὸ μᾶλλον καὶ ἥττον. τοῦτο δὲ σχεδὸν ὥσπερ ἐν μίξει καὶ ἀμιξίᾳ· τὸ γὰρ καθαρώτερον μᾶλλον. ὁ αὐτὸς δὲ λόγος καὶ ἐπὶ τῶν ἄλλων ἀπλῶν. ἀνάγκη γάρ, ἐπεὶ ἕτερον ὅστοῦν καὶ σὰρξ ἢ ἵππου καὶ ἢ βοός, ἢ τῷ ἐξ ἐτέρων εἶναι ἢ τῇ χρήσει διαφέρειν. εἰ μὲν οὖν ἕτερα, τίνες αἱ διαφοραὶ ἐκάστου τῶν ἀπλῶν καὶ τίς ταύτας γὰρ ζητοῦμεν. εἰ δὲ ταύτά, τοῖς λόγοις ἂν διαφέροι. ἀνάγκη γὰρ δυοῖν θάτερον, καθάπερ ἐν τοῖς ἄλλοις· οἴνου μὲν γὰρ καὶ μέλιτος κρᾶσις διὰ τὸ ὑποκείμενον, οἴνου δ' αὐτοῦ, εἴπερ ἕτερα, διὰ τὸν λόγον. διὸ καὶ Ἐμπεδοκλῆς μίαν ἀπλῶς τὴν τοῦ ὅστοῦ φύσιν εἴπερ ἅπαντα τὸν αὐτὸν λόγον ἔχει τῆς μίξεως, ἀδιάφορα ἐχρῆν ἵππου καὶ λέοντος καὶ ἀνθρώπου εἶναι. νῦν δὲ διαφέρει σκληρότητι, μαλακότητι, πυκνότητι, τοῖς ἄλλοις ὁμοίως καὶ σὰρξ καὶ τὰ ἄλλα μόρια. ἔτι δὲ τὰ ἐν τῷ αὐτῷ ζῳῳ διαφέρουσι πυκνότητι καὶ μανότητι καὶ τοῖς ἄλλοις, ὥστ' οὐχ ἡ αὐτὴ κρᾶσις. παχὺ μὲν γὰρ καὶ λεπτὸν καὶ μέγα καὶ μικρὸν <ἂν> εἴη ἐν τῷ ποσῷ, σκληρὸν δὲ καὶ πυκνὸν καὶ τὰ ἐναντία τούτοις ἐν τῷ ποιῷ τῷ τῆς μίξεως. ἀναγκαῖον δὲ τοῖς οὕτω λέγουσιν εἰδέναι, πῶς τὸ δημιουργοῦν ἕτερον εἴη ἂν καὶ τῷ [486a] τοῦτο πλέον ἢ ἔλαττον εἶναι, καὶ τῷ καθ' αὐτὸ καὶ <τῷ> μεμειγμένῳ ἢ ἐν ἄλλῳ πυροῦσθαι [καθάπερ τὰ ἐψόμενα καὶ ὀπτώμενα. ὅπερ ἴσως ἀληθές]. ἅμα γὰρ ἐγκαταμείγνυται καὶ ποιεῖ τὸ τῆς φύσεως. ἄρα ὁ αὐτὸς καὶ περὶ σαρκὸς [486b] λόγος· καὶ γὰρ αἱ αὐταὶ διαφοραί, σχεδὸν δὲ καὶ περὶ φλεβὸς καὶ ἀρτηρίας καὶ τῶν λοιπῶν. ὥστε δυεῖν θάτερον, ἢ οὐχ εἰς ὁ λόγος τούτων κατὰ τὴν μίξιν, ἢ οὐ σκληρότητι καὶ πυκνότητι καὶ τοῖς ἐναντίοις τοὺς λόγους ληπτέον.

## Τῶν περὶ τὰ ζῷα ἱστοριῶν (486a) History of Animals



## CONTENTS

[Βιβλίο 1](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)



## Βιβλίο 2

Κεφάλαιο 1

Κεφάλαιο 2

Κεφάλαιο 3

Κεφάλαιο 4

Κεφάλαιο 5

Κεφάλαιο 6

Κεφάλαιο 7

Κεφάλαιο 8

Κεφάλαιο 9

Κεφάλαιο 10

Κεφάλαιο 11

Κεφάλαιο 12

Κεφάλαιο 13

Κεφάλαιο 14

Κεφάλαιο 15

Κεφάλαιο 16

Κεφάλαιο 17

## Βιβλίο 3

Κεφάλαιο 1

Κεφάλαιο 2

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Βιβλίο 4](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Βιβλίο 5](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Κεφάλαιο 24](#)

[Κεφάλαιο 25](#)

[Κεφάλαιο 26](#)

[Κεφάλαιο 27](#)

[Κεφάλαιο 28](#)

[Κεφάλαιο 29](#)

[Κεφάλαιο 30](#)

[Κεφάλαιο 31](#)

[Κεφάλαιο 32](#)

[Κεφάλαιο 33](#)

[Κεφάλαιο 34](#)

[Βιβλίο 6](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Κεφάλαιο 24](#)

[Κεφάλαιο 25](#)

[Κεφάλαιο 26](#)

[Κεφάλαιο 27](#)

[Κεφάλαιο 28](#)

[Κεφάλαιο 29](#)

[Κεφάλαιο 30](#)

[Κεφάλαιο 31](#)

[Κεφάλαιο 32](#)

[Κεφάλαιο 33](#)

[Κεφάλαιο 34](#)

[Κεφάλαιο 35](#)

[Κεφάλαιο 36](#)

[Κεφάλαιο 37](#)

## Βιβλίο 7

### Κεφάλαιο 1

### Κεφάλαιο 2

### Κεφάλαιο 3

### Κεφάλαιο 4

### Κεφάλαιο 5

### Κεφάλαιο 6

### Κεφάλαιο 7

### Κεφάλαιο 8

### Κεφάλαιο 9

### Κεφάλαιο 10

### Κεφάλαιο 11

### Κεφάλαιο 12

## Βιβλίο 8

### Κεφάλαιο 1

### Κεφάλαιο 2

### Κεφάλαιο 3

### Κεφάλαιο 4

### Κεφάλαιο 5

### Κεφάλαιο 6

### Κεφάλαιο 7

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Κεφάλαιο 24](#)

[Κεφάλαιο 25](#)

[Κεφάλαιο 26](#)

[Κεφάλαιο 27](#)

[Κεφάλαιο 28](#)



[Κεφάλαιο 29](#)

[Κεφάλαιο 30](#)

[Βιβλίο 9](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Κεφάλαιο 24](#)

[Κεφάλαιο 25](#)

[Κεφάλαιο 26](#)

[Κεφάλαιο 27](#)

[Κεφάλαιο 28](#)

[Κεφάλαιο 29](#)

[Κεφάλαιο 30](#)

[Κεφάλαιο 31](#)

[Κεφάλαιο 32](#)

[Κεφάλαιο 33](#)

[Κεφάλαιο 34](#)

[Κεφάλαιο 35](#)

[Κεφάλαιο 36](#)

[Κεφάλαιο 37](#)

[Κεφάλαιο 38](#)

[Κεφάλαιο 39](#)

[Κεφάλαιο 40](#)

[Κεφάλαιο 41](#)

[Κεφάλαιο 42](#)

[Κεφάλαιο 43](#)

[Κεφάλαιο 44](#)

[Κεφάλαιο 45](#)

[Κεφάλαιο 46](#)

[Κεφάλαιο 47](#)

[Κεφάλαιο 48](#)

[Κεφάλαιο 49](#)

[Κεφάλαιο 49B](#)

[Βιβλίο 10](#)

## **Βιβλίο 1**

### **Κεφάλαιο 1**

(486a.) Τῶν ἐν τοῖς ζώοις μορίων τὰ μὲν ἐστὶν ἀσύνθετα, ὅσα διαιρεῖται εἰς ὁμοιομερῆ, οἷον σάρκες εἰς σάρκας, τὰ δὲ σύνθετα, ὅσα εἰς ἀνομοιομερῆ, οἷον ἡ χεὶρ οὐκ εἰς χεῖρας διαιρεῖται οὐδὲ τὸ πρόσωπον εἰς πρόσωπα. Τῶν δὲ τοιούτων ἓνια οὐ μόνον μέρη ἀλλὰ καὶ μέλη καλεῖται. Τοιαῦτα δ' ἐστὶν ὅσα τῶν μερῶν ὅλα ὄντα ἕτερα μέρη ἔχει ἐν αὐτοῖς, οἷον κεφαλὴ καὶ σκέλος καὶ χεὶρ καὶ ὅλος ὁ βραχίον καὶ ὁ θώραξ· ταῦτα γὰρ αὐτὰ τ' ἐστὶ μέρη ὅλα, καὶ ἔστιν αὐτῶν ἕτερα μόρια. Πάντα δὲ τὰ ἀνομοιομερῆ σύγκειται ἐκ τῶν ὁμοιομερῶν, οἷον χεὶρ ἐκ σαρκὸς καὶ νεύρων καὶ ὀστέων.

Ἔχει δὲ τῶν ζώων ἓνια μὲν πάντα τὰ μόρια ταῦτ' ἀλλήλοις, ἓνια δ' ἕτερα.

Ταύτὰ δὲ τὰ μὲν εἶδει τῶν μορίων ἐστίν, οἷον ἀνθρώπου ῥίς καὶ ὀφθαλμὸς ἀνθρώπου ῥινὴ καὶ ὀφθαλμῷ, καὶ σαρκὶ σὰρξ καὶ ὅστῳ ὅστουν· τὸν αὐτὸν δὲ τρόπον καὶ ἵππου καὶ τῶν ἄλλων ζώων, ὅσα τῷ εἶδει ταύτὰ λέγομεν ἑαυτοῖς· ὁμοίως γὰρ ὥσπερ τὸ ὅλον ἔχει πρὸς τὸ ὅλον, καὶ τῶν μορίων ἔχει ἕκαστον πρὸς ἕκαστον. Τὰ δὲ ταύτὰ μὲν ἐστίν, διαφέρει δὲ καθ' ὑπεροχὴν καὶ ἔλλειψιν, ὅσων τὸ γένος ἐστὶ ταυτόν. Λέγω δὲ γένος οἷον ὄρνιθα καὶ ἰχθύν· τούτων γὰρ ἑκάτερον ἔχει διαφορὰν κατὰ τὸ γένος, καὶ ἐστὶν εἶδη πλείω ἰχθύων καὶ ὀρνίθων. Διαφέρει δὲ σχεδὸν τὰ πλεῖστα τῶν (486b.) μορίων ἐν αὐτοῖς παρὰ τὰς τῶν παθημάτων ἐναντιώσεις, οἷον Χρώματος καὶ σχήματος, τῷ τὰ μὲν μᾶλλον αὐτὰ πεπονθέναι τὰ δ' ἥττον, ἔτι δὲ πλήθει καὶ ὀλιγότητι καὶ μεγέθει καὶ σμικρότητι καὶ ὅλως ὑπεροχῇ καὶ ἐλλείψει. Τὰ μὲν γάρ ἐστι μαλακόσαρκα αὐτῶν τὰ δὲ σκληρόσαρκα, καὶ τὰ μὲν μακρὸν ἔχει τὸ ῥύγχος τὰ δὲ βραχύ, καὶ τὰ μὲν πολύπτερα τὰ δ' ὀλιγόπτερά ἐστίν. Οὐ μὴν ἄλλ' ἐνία γε καὶ ἐν τούτοις ἕτερα ἑτέροις μόρια ὑπάρχει, οἷον τὰ μὲν ἔχει πλῆκτρα τὰ δ' οὐκ, καὶ τὰ μὲν λόφον ἔχει τὰ δ' οὐκ ἔχει. Ἀλλ' ὥς εἰπεῖν τὰ πλεῖστα καὶ ἐξ ὧν μερῶν ὁ πᾶς ὄγκος συνέστηκεν, ἢ ταύτὰ ἐστὶν ἢ διαφέρει τοῖς τ' ἐναντίοις καὶ καθ' ὑπεροχὴν καὶ ἔλλειψιν· τὸ γὰρ μᾶλλον καὶ ἥττον ὑπεροχὴν ἂν τις καὶ ἔλλειψιν θεῖη. Ἐνια δὲ τῶν ζώων οὐτε εἶδει τὰ μόρια ταύτὰ ἔχει οὔτε καθ' ὑπεροχὴν καὶ ἔλλειψιν, ἀλλὰ κατ' ἀναλογίαν, οἷον πέπονθεν ὅστουν πρὸς ἄκανθαν καὶ ὄνυξ πρὸς ὀπλὴν καὶ χεὶρ πρὸς χηλὴν καὶ πρὸς πτερόν λεπίς· ὁ γὰρ ἐν ὀρνίθι πτερόν, τοῦτο ἐν τῷ ἰχθύϊ ἐστὶ λεπίς. Κατὰ μὲν οὖν τὰ μόρια ἃ ἔχουσιν ἕκαστα τῶν ζώων, τοῦτόν τε τὸν τρόπον ἕτερά ἐστὶ καὶ ταύτά, καὶ ἔτι τῇ θέσει τῶν μερῶν· πολλὰ γὰρ τῶν ζώων ἔχει μὲν ταύτὰ μέρη, ἀλλὰ κείμενα οὐχ ὡσαύτως, οἷον μαστοὺς τὰ μὲν ἐν τῷ στήθει τὰ (487a.) δὲ πρὸς τοῖς μηροῖς.

Ἔστι δὲ τῶν ὁμοιομερῶν τὰ μὲν μαλακὰ καὶ ὑγρά, τὰ δὲ ξηρὰ καὶ στερεά, ὑγρά μὲν, ἢ ὅλως ἢ ἕως ἂν ἢ ἐν τῇ φύσει, οἷον αἷμα, ἰχώρ, πιμελή, στέαρ, μυελός, γονή, χολή, γάλα ἐν τοῖς ἔχουσι, σὰρξ τε καὶ τὰ τούτοις ἀνάλογον, ἔτι ἄλλον τρόπον τὰ περιττώματα, οἷον φλέγμα, καὶ τὰ ὑποστήματα τῆς κοιλίας καὶ κύστεως· ξηρὰ δὲ καὶ στερεὰ οἷον νεῦρον, δέρμα, φλέψ, θρίξ, ὅστουν, χόνδρος, ὄνυξ, κέρας (ὁμώνυμον γὰρ τὸ μέρος, ὅταν τῷ σχήματι καὶ τὸ ὅλον λέγεται κέρας), ἔτι ὅσα ἀνάλογον τούτοις.

Αἱ δὲ διαφοραὶ τῶν ζώων εἰσὶ κατὰ τε τοὺς βίους καὶ τὰς πράξεις καὶ τὰ ἦθη καὶ τὰ μόρια, περὶ ὧν τύπῳ μὲν εἵπωμεν πρῶτον, ὕστερον δὲ περὶ ἕκαστον γένος ἐπιστήσαντες ἐροῦμεν. Εἰσὶ δὲ διαφοραὶ κατὰ μὲν τοὺς βίους καὶ τὰ ἦθη καὶ τὰς πράξεις αἱ τοιαίδε, ἢ τὰ μὲν ἔνυδρα αὐτῶν ἐστὶ τὰ δὲ χερσαῖα, ἔνυδρα δὲ διχῶς, τὰ μὲν ὅτι τὸν βίον καὶ τὴν τροφὴν ποιεῖται ἐν τῷ ὑγρῷ,

καὶ δέχεται τὸ ὑγρὸν καὶ ἀφίησι, τούτου δὲ στερισκόμενα οὐ δύναται ζῆν, οἷον πολλοῖς συμβαίνει τῶν ἰχθύων· τὰ δὲ τὴν μὲν τροφήν ποιεῖται καὶ τὴν διατριβὴν ἐν τῷ ὑγρῷ, οὐ μέντοι δέχεται τὸ ὕδωρ ἀλλὰ τὸν ἀέρα, καὶ γεννᾷ ἔξω. Πολλὰ δ' ἐστὶ τοιαῦτα καὶ πεζά, ὥσπερ ἐνυδρὶς καὶ λάταξ καὶ κροκόδειλος, καὶ πτηνά, οἷον αἰθυῖα καὶ κολυμβίς, καὶ ἄποδα, οἷον ὕδρος. Ἔνια δὲ τὴν μὲν τροφήν ἐν τῷ ὑγρῷ ποιεῖται καὶ οὐ δύναται ζῆν ἐκτός, οὐ μέντοι δέχεται οὔτε τὸν ἀέρα οὔτε τὸ ὑγρὸν, οἷον ἀκαλήφη καὶ τὰ ὄστρεα. Τῶν δ' ἐνύδρων τὰ μὲν ἐστὶ θαλάττια, τὰ δὲ ποτάμια, τὰ δὲ λιμναῖα, τὰ δὲ τελματιαῖα, οἷον βάτραχος καὶ κορδύλος.

Τῶν δὲ χερσαίων τὰ μὲν δέχεται τὸν ἀέρα καὶ ἀφίησιν, ὃ καλεῖται ἀναπνεῖν καὶ ἐκπνεῖν, οἷον ἄνθρωπος καὶ πάντα ὅσα πλεύμονα ἔχει τῶν χερσαίων· τὰ δὲ τὸν ἀέρα μὲν οὐ δέχεται, ζῆ δὲ καὶ τὴν τροφήν ἔχει ἐν τῇ γῇ, οἷον σφῆξ καὶ μέλιττα καὶ τὰ ἄλλα ἔντομα. Καλῶ δ' ἔντομα ὅσα ἔχει κατὰ τὸ σῶμα ἔντομάς, ἢ ἐν τοῖς ὑπτίοις ἢ ἐν τούτοις τε καὶ τοῖς πρανεῖσιν. Καὶ τῶν μὲν χερσαίων (487b.) πολλὰ, ὥσπερ εἴρηται, ἐκ τοῦ ὑγροῦ τὴν τροφήν πορίζεται τῶν δ' ἐνύδρων καὶ δεχομένων τὴν θάλατταν οὐδὲν ἐκ τῆς γῆς. Ἔνια δὲ τῶν ζώων τὸ μὲν πρῶτον ζῆ ἐν τῷ ὑγρῷ, ἔπειτα μεταβάλλει εἰς ἄλλην μορφήν καὶ ζῆ ἔξω, οἷον ἐπὶ τῶν ἐν τοῖς ποταμοῖς ἀσκαρίδων· γίνεται γὰρ ἐξ αὐτῶν ὁ οἶστρος.

Ἔτι τὰ μὲν ἐστὶ μόνιμα τῶν ζώων, τὰ δὲ μεταβλητικά. Ἔστι δὲ τὰ μόνιμα ἐν τῷ ὑγρῷ· τῶν δὲ χερσαίων οὐδὲν μόνιμον. Ἐν δὲ τῷ ὑγρῷ πολλὰ τῷ προσπεφυκέναι ζῆ, οἷον γένη ὀστρέων πολλὰ. Δοκεῖ δὲ καὶ ὁ σπόγγος ἔχειν τινὰ αἴσθησιν· σημεῖον δ' ὅτι χαλεπώτερον ἀποσπᾶται, ἂν μὴ γένηται λαθραίως ἢ κίνησις, ὥς φασιν. Τὰ δὲ καὶ προσφύεται καὶ ἀπολύεται, οἷον ἐστὶ γένος τι τῆς καλουμένης ἀκαλήφης· τούτων γὰρ τινες νύκτωρ ἀπολυόμεναι νέμονται.

Πολλὰ δ' ἀπολελυμένα μὲν ἐστὶν ἀκίνητα δέ, οἷον ὄστρεα καὶ τὰ καλούμενα ὀλοθούρια. Τὰ δὲ νευστικά, οἷον ἰχθύες καὶ τὰ μαλάκια καὶ τὰ μαλακόστρακα, οἷον κάραβοι. Τὰ δὲ πορευτικά, οἷον τὸ τῶν καρκίνων γένος· τοῦτο γὰρ ἐνυδρον ὃν τὴν φύσιν πορευτικὸν ἐστίν.

Τῶν δὲ χερσαίων ἐστὶ τὰ μὲν πτηνά, ὥσπερ ὄρνιθες καὶ μέλιττα, καὶ ταῦτ' ἄλλον τρόπον ἀλλήλων, τὰ δὲ πεζά. Καὶ τῶν πεζῶν τὰ μὲν πορευτικά, τὰ δ' ἐρπυστικά, τὰ δ' ἰλυσπαστικά. Πτηνὸν δὲ μόνον οὐδὲν ἐστίν, ὥσπερ νευστικὸν μόνον ἰχθύς· καὶ γὰρ τὰ δερμόπτερα πεζεύει, καὶ νυκτερίδι πόδες εἰσὶ, καὶ τῇ φώκη κεκολωμένοι πόδες. Καὶ τῶν ὀρνίθων εἰσὶ τινες

κακόποδες, οἷ διὰ τοῦτο καλοῦνται ἄποδες· ἔστι δ' εὐπερον τοῦτο τὸ ὀρνίθιον. Σχεδὸν δὲ καὶ τὰ ὅμοια αὐτῷ εὐπερα μὲν κακόποδα δ' ἐστίν, οἷον χελιδὼν καὶ δρεπανίς· ὁμοιότροπά τε γὰρ καὶ ὁμοιόπτερα πάντα ταῦτα, καὶ τὰς ὄψεις ἐγγὺς ἀλλήλων. Φαίνεται δ' ὁ μὲν ἄπους πᾶσαν ὥραν, ἡ δὲ δρεπανίς ὅταν ὕσῃ τοῦ θέρους· τότε γὰρ ὀρᾷται καὶ ἀλίσκεται, ὅλως δὲ καὶ σπάνιόν ἐστὶ τοῦτο τὸ ὄρνεον. Πορευτικὰ δὲ καὶ νευστικὰ πολλὰ τῶν ζώων ἐστίν.

Εἰσὶ δὲ καὶ αἱ τοιαίδε διαφοραὶ κατὰ τοὺς βίους καὶ τὰς πράξεις. Τὰ μὲν γὰρ αὐτῶν ἐστὶν ἀγελαῖα τὰ δὲ (488a.) μοναδικά, καὶ πεζὰ καὶ πτηνὰ καὶ πλωτά, τὰ δ' ἐπαμφοτερίζει. Καὶ τῶν ἀγελαίων καὶ τῶν μοναδικῶν τὰ μὲν πολιτικὰ τὰ δὲ σποραδικὰ ἐστίν. Ἀγελαῖα μὲν οὖν οἷον ἐν τοῖς πτηνοῖς τὸ τῶν περιστερῶν γένος καὶ γέρανος καὶ κύκνος (γαμψώνυχον δ' οὐδὲν ἀγελαῖον), καὶ τῶν πλωτῶν πολλὰ γένη τῶν ἰχθύων, οἷον οὐς καλοῦσι δρομάδας, θύννοι, πηλαμύδες, ἀμίαι· ὁ δ' ἄνθρωπος ἐπαμφοτερίζει. Πολιτικὰ δ' ἐστὶν ὧν ἓν τι καὶ κοινὸν γίνεται πάντων τὸ ἔργον· ὅπερ οὐ πάντα ποιεῖ τὰ ἀγελαῖα. Ἔστι δὲ τοιοῦτον ἄνθρωπος, μέλιττα, σφήξ, μύρμηξ, γέρανος. Καὶ τούτων τὰ μὲν ὑφ' ἡγεμόνα ἐστὶ τὰ δ' ἄναρχα, οἷον γέρανος μὲν καὶ τὸ τῶν μελιττῶν γένος ὑφ' ἡγεμόνα, μύρμηκες δὲ καὶ μυρία ἄλλα ἄναρχα. Καὶ τὰ μὲν ἐπιδημητικὰ καὶ τῶν ἀγελαίων καὶ τῶν μοναδικῶν, τὰ δ' ἐκτοπιστικά.

Καὶ τὰ μὲν σαρκοφάγα, τὰ δὲ καρποφάγα, τὰ δὲ παμφάγα, τὰ δ' ἰδιότροφα, οἷον τὸ τῶν μελιττῶν γένος καὶ τὸ τῶν ἀραχνῶν· τὸ μὲν γὰρ μέλιτι καὶ τισιν ἄλλοις ὀλίγοις τῶν γλυκέων χρῆται τροφῇ, οἱ δ' ἀράχναι ἀπὸ τῆς τῶν μυιῶν θήρας ζῶσιν, τὰ δ' ἰχθύσι χρῶνται τροφῇ. Καὶ τὰ μὲν θηρευτικά, τὰ δὲ θησαυριστικὰ τῆς τροφῆς ἐστὶ, τὰ δ' οὐ. Καὶ τὰ μὲν οἰκητικὰ τὰ δ' ἄοικα, οἰκητικὰ μὲν οἷον ἀσπάλαξ, μῦς, μύρμηξ, μέλιττα, ἄοικα δὲ πολλὰ τῶν ἐντόμων καὶ τῶν τετραπόδων. Ἔτι τοῖς τόποις τὰ μὲν τρωγλοδυτικά, οἷον σαύρα, ὄφεις, τὰ δ' ὑπέργεια, οἷον ἵππος, κύων. Καὶ τὰ μὲν τρηματώδη τὰ δ' ἄτρητα. Καὶ τὰ μὲν νυκτερόβια, οἷον γλαύξ, νυκτερίς, τὰ δ' ἐν τῷ φωτὶ ζῇ.

Ἔτι δ' ἡμερα καὶ ἄγρια, καὶ τὰ μὲν αἰεὶ, οἷον ὄνος καὶ ὄρεὺς αἰεὶ ἡμερα, τὰ δ' ἄγρια, ὥσπερ πάρδαλις καὶ λύκος· τὰ δὲ καὶ ἡμεροῦσθαι δύναται ταχύ, οἷον ἐλέφας. Ἔτι ἄλλον τρόπον· πάντα γὰρ ὅσα ἡμερὰ ἐστὶ γένη, καὶ ἄγριά ἐστίν, οἷον ἵπποι, βόες, ὕες, ἄνθρωποι, πρόβατα, αἶγες, κύνες.

Καὶ τὰ μὲν ψοφητικά, τὰ δ' ἄφωνα, τὰ δὲ φωνήεντα, καὶ τούτων τὰ μὲν διάλεκτον ἔχει τὰ δ' ἀγράμματα, καὶ τὰ μὲν κωτίλα τὰ δὲ σιγηλά, τὰ δ' ὠδικὰ τὰ δ' ἄνωδα· πάντων (488b.) δὲ κοινὸν τὸ περὶ τὰς ὀχείας μάλιστα

ἄδειν καὶ λαλεῖν.

Καὶ τὰ μὲν ἄγροικα, ὥσπερ φάττα, τὰ δ' ὄρεια, ὥσπερ ἔποψ, τὰ δὲ συνανθρωπίζει, οἷον περιστερὰ.

Καὶ τὰ μὲν ἀφροδισιαστικά, οἷον τὸ τῶν περδίκων καὶ ἀλεκτρυόνων γένος, τὰ δ' ἀγνευτικά, οἷον τὸ τῶν κορακοειδῶν ὀρνίθων γένος· ταῦτα γὰρ σπανίως ποιεῖται τὴν ὀχείαν.

Καὶ τῶν θαλαττίων τὰ μὲν πελάγια, τὰ δ' αἰγιαλώδη, τὰ δὲ πετραῖα.

Ἔτι τὰ μὲν ἀμυντικά τὰ δὲ φυλακτικά· ἔστι δ' ἀμυντικά μὲν ὅσα ἢ ἐπιτίθεται ἢ ἀδικούμενα ἀμύνεται, φυλακτικά δ' ὅσα πρὸς τὸ μὴ παθεῖν τι ἔχει ἐν αὐτοῖς ἀλεωρήν.

Διαφέρουσι δὲ καὶ ταῖς τοιαῖσδε διαφοραῖς κατὰ τὸ ἦθος.

Τὰ μὲν γὰρ ἐστὶ πρᾶα καὶ δύσθυμα καὶ οὐκ ἐνστατικά, οἷον βοῦς, τὰ δὲ θυμώδη καὶ ἐνστατικά καὶ ἀμαθῆ, οἷον ὕς ἄγριος, τὰ δὲ φρόνιμα καὶ δειλά, οἷον ἔλαφος, δασύπους, τὰ δ' ἀνελεύθερα καὶ ἐπίβουλα, οἷον οἱ ὄφεις, τὰ δ' ἐλευθέρια καὶ ἀνδρεῖα καὶ εὐγενῆ, οἷον λέων, τὰ δὲ γενναῖα καὶ ἄγρια καὶ ἐπίβουλα, οἷον λύκος· εὐγενὲς μὲν γὰρ ἐστὶ τὸ ἐξ ἀγαθοῦ γένους, γενναῖον δὲ τὸ μὴ ἐξιστάμενον ἐκ τῆς αὐτοῦ φύσεως. Καὶ τὰ μὲν πανοῦργα καὶ κακοῦργα, οἷον ἀλώπηξ, τὰ δὲ θυμικά καὶ φιλητικά καὶ θωπευτικά, οἷον κύων, τὰ δὲ πρᾶα καὶ τιθασσευτικά, οἷον ἐλέφας, τὰ δ' αἰσχυνητὰ καὶ φυλακτικά, οἷον χήν, τὰ δὲ φθονερά καὶ φιλόκαλα, οἷον ταῶς. Βουλευτικὸν δὲ μόνον ἄνθρωπός ἐστι τῶν ζώων. Καὶ μνήμης μὲν καὶ διδαχῆς πολλὰ κοινωνεῖ, ἀναμνησθεσθαι δ' οὐδὲν ἄλλο δύναται πλὴν ἄνθρωπος.

Περὶ ἕκαστον δὲ τῶν γενῶν τά τε περὶ τὰ ἦθη καὶ τοὺς βίους ὕστερον λεχθήσεται δι' ἀκριβείας μᾶλλον.

## Κεφάλαιο 2

Πάντων δ' ἐστὶ τῶν ζώων κοινὰ μόρια, ὧς δέχεται τὴν τροφήν καὶ εἰς ὃ δέχεται· ταῦτα δ' ἐστὶ ταύτα καὶ ἕτερα κατὰ τοὺς εἰρημένους τρόπους, ἢ κατ' εἶδος ἢ καθ' ὑπεροχὴν ἢ κατ' ἀναλογίαν ἢ τῇ θέσει διαφέροντα. Μετὰ δὲ ταῦτα ἄλλα κοινὰ μόρια ἔχει τὰ πλεῖστα τῶν ζώων πρὸς τούτοις, ἢ ἀφίησι τὸ περίττωμα τῆς τροφῆς [καὶ ἢ λαμβάνει]· οὐ (489a.) γὰρ πᾶσιν ὑπάρχει τοῦτο. Καλεῖται δ' ἢ μὲν λαμβάνει, στόμα, εἰς ὃ δὲ δέχεται, κοιλία· τὸ δὲ λοιπὸν

πολυώνυμόν ἐστιν. Τοῦ δὲ περιττώματος ὄντος διττοῦ, ὅσα μὲν ἔχει δεκτικὰ μόρια τοῦ ὑγροῦ περιττώματος, ἔχει καὶ τῆς ξηρᾶς τροφῆς, ὅσα δὲ ταύτης, ἐκείνης οὐ πάντα. Διὸ ὅσα μὲν κύστιν ἔχει, καὶ κοιλίαν ἔχει, ὅσα δὲ κοιλίαν ἔχει, οὐ πάντα κύστιν ἔχει.

Ὀνομάζεται γὰρ τὸ μὲν τῆς ὑγρᾶς περιττώσεως δεκτικὸν μόριον κύστις, κοιλία δὲ τὸ τῆς ξηρᾶς.

### Κεφάλαιο 3

Τῶν δὲ λοιπῶν πολλοῖς ὑπάρχει ταῦτά τε τὰ μόρια καὶ ἔτι ἢ τὸ σπέρμα ἀφιᾶσιν· καὶ τούτων ἐν οἷς μὲν ὑπάρχει γένεσις ζώων τὸ μὲν εἰς αὐτὸ ἀφιέν, τὸ δ' εἰς ἕτερον. Καλεῖται δὲ τὸ μὲν εἰς αὐτὸ ἀφιέν θῆλυ, τὸ δ' εἰς τοῦτο ἄρρεν. Ἐν ἐνίοις δ' οὐκ ἔστι τὸ ἄρρεν καὶ θῆλυ· ἢ καὶ τῶν μορίων τῶν πρὸς τὴν δημιουργίαν ταύτην διαφέρει τὸ εἶδος· τὰ μὲν γὰρ ἔχει ὑστέραν, τὰ δὲ τὸ ἀνάλογον. Ὅσα μὲν οὖν ἀναγκαιότατα μόρια τοῖς ζώοις τὰ μὲν πᾶσιν ἔχειν συμβέβηκε, τὰ δὲ τοῖς πλείστοις, ταῦτ' ἐστίν.

Πᾶσι δὲ τοῖς ζώοις αἴσθησις μία ὑπάρχει κοινὴ μόνη ἢ ἀφή, ὥστε καὶ ἐν ᾧ αὕτη μορίῳ γίνεσθαι πέφυκεν, ἀνώνυμόν ἐστιν· τοῖς μὲν γὰρ ταῦτὸ τοῖς δὲ τὸ ἀνάλογόν ἐστιν.

### Κεφάλαιο 4

Ἔχει δὲ καὶ ὑγρότητα πᾶν ζῶον, ἥς στερισκόμενον ἢ φύσει ἢ βίᾳ φθείρεται. Ἔτι ἐν ᾧ γίνεται, τοῦτο ἄλλο. Ἔστι δὲ τοῦτο τοῖς μὲν αἷμα καὶ φλέψ, τοῖς δὲ τὸ ἀνάλογον τούτων· ἔστι δ' ἀτελῆ ταῦτα, οἷον τὸ μὲν ἰς τὸ δ' ἰχώρ. Ἡ μὲν οὖν ἀφή ἐν ὁμοιομερεῖ ἐγγίνεται μέρει, οἷον ἐν σαρκὶ ἢ τοιούτῳ τινί, καὶ ὅλως ἐν τοῖς αἱματικοῖς, ὅσα ἔχει αἷμα· τοῖς δ' ἐν τῷ ἀνάλογον, πᾶσι δ' ἐν τοῖς ὁμοιομερέσιν. Αἱ δὲ ποιητικαὶ δυνάμεις ἐν τοῖς ἀνομοιομερέσιν, οἷον ἡ τῆς τροφῆς ἐργασία ἐν στόματι καὶ ἡ τῆς κινήσεως τῆς κατὰ τόπον ἐν ποσὶν ἢ πτέρυξιν ἢ τοῖς ἀνάλογον.

Πρὸς δὲ τούτοις τὰ μὲν ἔναιμα τυγχάνει ὄντα, οἷον ἄνθρωπος καὶ ἵππος καὶ πάνθ' ὅσα ἢ ἀποδὰ ἐστὶ τέλεα ὄντα ἢ δίποδα ἢ τετράποδα, τὰ δ' ἄναιμα, οἷον μέλιττα καὶ σφήξ καὶ τῶν θαλαττίων σηπία καὶ κάραβος καὶ πάνθ' ὅσα πλείους πόδας ἔχει τεττάρων.

### Κεφάλαιο 5



Καὶ τὰ μὲν ζωτόκα τὰ δ' ὠτόκα τὰ δὲ σκωληκοτόκα, ζωτόκα μὲν οἶον ἄνθρωπος καὶ ἵππος (489b.) καὶ φώκη καὶ τὰ ἄλλα ὅσα ἔχει τρίχας, καὶ τῶν ἐνύδρων τὰ κητώδη, οἶον δελφίς, καὶ τὰ καλούμενα σελάχη. Τούτων δὲ τὰ μὲν αὐλὸν ἔχει, βράγχια δ' οὐκ ἔχει, οἶον δελφίς καὶ φάλαινα (ἔχει δ' ὁ μὲν δελφίς τὸν αὐλὸν διὰ τοῦ νώτου, ἡ δὲ φάλαινα ἐν τῷ μετώπῳ), τὰ δ' ἀκάλυπτα βράγχια, οἶον τὰ σελάχη, γαλεοὶ τε καὶ βάτοι.

Καλεῖται δ' ὦν μὲν τῶν κυημάτων τῶν τελείων, ἐξ οὗ γίνεται τὸ γινόμενον ζῶον, ἐκ μορίου τὴν ἀρχήν, τὸ δ' ἄλλο τροφή τῷ γινομένῳ ἐστίν· σκώληξ δ' ἐστὶν ἐξ οὗ ὅλου ὅλον γίνεται τὸ ζῶον, διαρθρουμένου καὶ αὐξανομένου τοῦ κυήματος. Τὰ μὲν οὖν ἐν αὐτοῖς ὠτοκεῖ τῶν ζωτόκων, οἶον τὰ σελάχη, τὰ δὲ ζωτοκεῖ ἐν αὐτοῖς, οἶον ἄνθρωπος καὶ ἵππος· εἰς δὲ τὸ φανερόν τῶν μὲν τελεωθέντος τοῦ κυήματος ζῶον ἐξέρχεται, τῶν δ' ὦόν, τῶν δὲ σκώληξ.

Τῶν δ' ὦων τὰ μὲν ὀστρακόδερμά ἐστι καὶ δίχροα, οἶον τὰ τῶν ὀρνίθων, τὰ δὲ μαλακόδερμα καὶ μονόχροα, οἶον τὰ τῶν σελαχῶν. Καὶ τῶν σκωλήκων οἱ μὲν εὐθὺς κινητικοὶ οἱ δ' ἀκίνητοι. Ἀλλὰ περὶ μὲν τούτων ἐν τοῖς περὶ γενέσεως δι' ἀκριβείας ὕστερον λεκτέον.

Ἔτι δὲ τῶν ζώων τὰ μὲν ἔχει πόδας τὰ δ' ἄποδα, καὶ τῶν ἐχόντων τὰ μὲν δύο πόδας ἔχει, οἶον ἄνθρωπος καὶ ὄρνις μόνα, τὰ δὲ τέτταρας, οἶον σαύρα καὶ κύων, τὰ δὲ πλείους, οἶον σκολόπενδρα καὶ μέλιττα· πάντα δ' ἄρτίους ἔχει πόδας.

Τῶν δὲ νευστικῶν ὅσα ἄποδα, τὰ μὲν πτερύγια ἔχει, ὥσπερ ἰχθύς, καὶ τούτων οἱ μὲν τέτταρα πτερύγια, δύο μὲν ἄνω ἐν τοῖς πρᾶνέσι, δύο δὲ κάτω ἐν τοῖς ὑπτίοις, οἶον χρύσοφρυς καὶ λάβραξ, τὰ δὲ δύο μόνον, ὅσα προμήκη καὶ λεῖα, οἶον ἔγχελυσ καὶ γόγγρος· τὰ δ' ὅλως οὐκ ἔχει, οἶον σμύραινα καὶ ὅσα ἄλλα χρῆται τῇ θαλάττῃ ὥσπερ οἱ ὄφεις τῇ γῇ, καὶ ἐν τῷ ὑγρῷ ὁμοίως νέουσιν. Τῶν δὲ σελαχῶν ἓνια μὲν οὐκ ἔχει πτερύγια, οἶον τὰ πλατέα καὶ κερκοφόρα, ὥσπερ βάτος καὶ τρυγὼν, ἀλλ' αὐτοῖς νεῖ τοῖς πλάτεσιν· βάτραχος δ' ἔχει, καὶ ὅσα τὸ πλάτος μὴ ἔχει ἀπολελεπτυσμένον. Ὅσα δὲ δοκεῖ πόδας ἔχειν, καθάπερ καὶ τὰ μαλάκια, τούτοις νεῖ καὶ τοῖς πτερυγίοις, καὶ θᾶπτον ἐπὶ κύτος, οἶον σηπία καὶ τευθὶς καὶ (490a.) πολύπους· βαδίζει δὲ τούτων οὐδέτερον, ὥσπερ πολύπους.

Τὰ δὲ σκληρόδερμα, οἶον κάραβος, τοῖς οὐραίοις νεῖ, τάχιστα δ' ἐπὶ τὴν κέρκον τοῖς ἐν ἐκείνῃ πτερυγίοις· καὶ ὁ κορδύλος τοῖς ποσὶ καὶ τῷ οὐραίῳ· ἔχει δ' ὁμοιον γλάνει τὸ οὐραῖον, ὥς μικρὸν εἰκάσαι μεγάλῳ. Τῶν δὲ πτηνῶν

τὰ μὲν περωτὰ ἐστίν, οἷον ἀετὸς καὶ ἰέραξ, τὰ δὲ πτιλωτὰ, οἷον μέλιττα καὶ μηλολόνθη, τὰ δὲ δερμόπτερα, οἷον ἀλώπηξ καὶ νυκτερίς. Περωτὰ μὲν οὖν ἐστὶν ὅσα ἔναιμα, καὶ δερμόπτερα ὡσαύτως· πτιλωτὰ δ' ὅσα ἄναιμα, οἷον τὰ ἔντομα.

Ἔστι δὲ τὰ μὲν περωτὰ καὶ δερμόπτερα δίποδα πάντα ἢ ἄποδα· λέγονται γὰρ εἶναι τινες ὄφεις τοιοῦτοι περὶ Αἰθιοπίαν.

Τὸ μὲν οὖν περωτὸν γένος τῶν ζώων ὄρνις καλεῖται, τὰ δὲ λοιπὰ δύο ἀνώνυμα ἐνὶ ὀνόματι.

Τῶν δὲ πτηνῶν μὲν ἀναίμων δὲ τὰ μὲν κολεόπτερά ἐστίν (ἔχει γὰρ ἐν ἐλύτρῳ τὰ πτερά, οἷον αἱ μηλολόνθαι καὶ οἱ κάνθαροι), τὰ δ' ἀνέλυτρα, καὶ τούτων τὰ μὲν δίπτερα τὰ δὲ τετράπτερα, τετράπτερα μὲν ὅσα μέγεθος ἔχει ἢ ὅσα ὀπισθόκεντρά ἐστι, δίπτερα δ' ὅσα ἢ μέγεθος μὴ ἔχει ἢ ἐμπροσθόκεντρά ἐστίν.

Τῶν δὲ κολεοπτέρων οὐδὲν ἔχει κέντρον. Τὰ δὲ δίπτερα ἔμπροσθεν ἔχει τὰ κέντρα, οἷον μυῖα καὶ μύωψ καὶ οἷστρος καὶ ἐμπίς. Πάντα δὲ τὰ ἄναιμα ἐλάττω τὰ μεγέθη ἐστὶ τῶν ἐναίμων ζώων· πλὴν ὀλίγα ἐν τῇ θαλάττῃ μείζονα ἄναιμά ἐστίν, οἷον τῶν μαλακίων ἔνια. Μέγιστα δὲ γίνεται ταῦτα τὰ γένη αὐτῶν ἐν τοῖς ἀλεινοτάτοις, καὶ ἐν τῇ θαλάττῃ μᾶλλον ἢ ἐν τῇ γῇ καὶ ἐν τοῖς γλυκέσιν ὕδασιν.

Κινεῖται δὲ τὰ κινούμενα πάντα τέτταρσι σημείοις ἢ πλείοσι, τὰ μὲν ἔναιμα τέτταρσι μόνον, οἷον ἄνθρωπος μὲν χερσὶ δυσὶ καὶ ποσὶ δυσίν, ὄρνις δὲ πτέρυξι δυσὶ καὶ ποσὶ δυσί, τὰ δὲ τετράποδα καὶ ἰχθύες τὰ μὲν τέτταρσι ποσίν, οἱ δὲ τέτταρσι περυγίοις. Ὅσα δὲ δύο ἔχει περυγία ἢ ὅλως μὴ, οἷον ὄφεις, τέτταρσι σημείοις οὐδὲν ἦττον· αἱ γὰρ καμπαὶ τέτταρες, ἢ δύο σὺν τοῖς περυγίοις. Ὅσα δ' ἄναιμα ὄντα πλείους πόδας ἔχει, εἴτε πτηνὰ εἴτε πεζὰ, σημείοις κινεῖται πλείοσιν, οἷον τὸ καλούμενον ζῶον ἐφήμερον τέτταρσι καὶ (490b.) ποσὶ καὶ περοῖς· τούτῳ γὰρ οὐ μόνον κατὰ τὸν βίον συμβαίνει τὸ ἴδιον, ὅθεν καὶ τὴν ἐπωνυμίαν ἔχει, ἀλλ' ὅτι καὶ πτηνὸν ἐστὶ τετράπουν ὄν.

Πάντα δὲ κινεῖται ὁμοίως, τὰ τετράποδα καὶ πολύποδα· κατὰ διάμετρον γὰρ κινεῖται. Τὰ μὲν οὖν ἄλλα ζῶα δύο τοὺς ἡγεμόνας ἔχει πόδας, ὁ δὲ καρκίνος μόνος τῶν ζώων τέτταρας.

## Κεφάλαιο 6

Γένη δὲ μέγιστα τῶν ζώων, εἰς ἃ διήρηται τᾶλλα ζῶα, τὰδ' ἐστίν, ἓν μὲν ὀρνίθων, ἓν δ' ἰχθύων, ἄλλο δὲ κῆτος. Ταῦτα μὲν οὖν πάντα ἔναιμά ἐστιν. Ἄλλο δὲ γένος ἐστὶ τὸ τῶν ὀστρακοδέρμων, ὃ καλεῖται ὄστρεον· ἄλλο τὸ τῶν μαλακοστράκων, ἀνώνυμον ἐνὶ ὀνόματι, οἷον κάραβοι καὶ γένη τινὰ καρκίνων καὶ ἀστακῶν· ἄλλο τὸ τῶν μαλακίων, οἷον τευθίδες τε καὶ τεῦθοι καὶ σηπία· ἕτερον τὸ τῶν ἐντόμων. Ταῦτα δὲ πάντα μὲν ἐστὶν ἄναιμα, ὅσα δὲ πόδας ἔχει, πολypoδα· τῶν δ' ἐντόμων ἓνια καὶ πτηνά ἐστιν.

Τῶν δὲ λοιπῶν ζώων οὐκέτι τὰ γένη μεγάλα· οὐ γὰρ περιέχει πολλὰ εἶδη ἓν εἶδος, ἀλλὰ τὸ μὲν ἐστὶν ἀπλοῦν αὐτὸ οὐκ ἔχον διαφορὰν τὸ εἶδος, οἷον ἄνθρωπος, τὰ δ' ἔχει μὲν, ἀλλ' ἀνώνυμα τὰ εἶδη. Ἔστι γὰρ τὰ τετράποδα καὶ μὴ πτερωτὰ ἔναιμα μὲν πάντα, ἀλλὰ τὰ μὲν ζωοτόκα τὰ δ' ὠοτόκα αὐτῶν. Ὅσα μὲν οὖν ζωοτόκα, οὐ πάντα τρίχας ἔχει, ὅσα δ' ὠοτόκα, φολίδας· ἔστι δ' ἢ φολίς ὅμοιον χώρα λεπίδος. Ἄπουν δὲ φύσει ἐστὶν ἔναιμον πεζὸν τὸ τῶν ὀφειῶν γένος· ἔστι δὲ τοῦτο φολιδωτόν. Ἄλλ' οἱ μὲν ἄλλοι ὠοτοκοῦσιν ὀφεις, ἢ δ' ἔχιδνα μόνον ζωοτοκεῖ. Τὰ μὲν γὰρ ζωοτοκοῦντα οὐ πάντα τρίχας ἔχει· καὶ γὰρ τῶν ἰχθύων τινὲς ζωοτοκοῦσιν· ὅσα μέντοι ἔχει τρίχας, ἅπαντα ζωοτοκεῖ.

Τριχῶν γὰρ τι εἶδος θετέον καὶ τὰς ἀκανθώδεις τρίχας, οἷας οἱ χερσαῖοι ἔχουσιν ἐχῖνοι καὶ οἱ ὕστριχες· τριχὸς γὰρ χρεῖαν παρέχουσιν, ἀλλ' οὐ ποδῶν, ὥσπερ αἱ τῶν θαλαττίων.

Τοῦ δὲ γένους τοῦ τῶν τετραπόδων ζώων καὶ ζωοτόκων εἶδη μὲν ἐστὶ πολλά, ἀνώνυμα δέ· ἀλλὰ καθ' ἕκαστον αὐτῶν ὡς εἶπειν, ὥσπερ ἄνθρωπος εἴρηται, λέων, ἔλαφος, ἵππος, κύων καὶ τᾶλλα τοῦτον τὸν τρόπον, ἐπεὶ ἐστὶν ἓν τι γένος μόνον (491a.) ἐπὶ τοῖς λοφούροις καλουμένοις, οἷον ἵππῳ καὶ ὄνῳ καὶ ὄρεϊ καὶ γίνῳ [καὶ ἱνῳ] καὶ ταῖς ἐν Συρίᾳ καλουμέναις ἡμίονοις, αἱ καλοῦνται ἡμίονοι δι' ὁμοιότητα, οὐκ οὔσαι ἀπλῶς τὸ αὐτὸ εἶδος· καὶ γὰρ ὀχεύονται καὶ γεννῶνται ἐξ ἀλλήλων. Διὸ καὶ χωρὶς λαμβάνοντας ἀνάγκη θεωρεῖν ἑκάστου τὴν φύσιν αὐτῶν.

Ταῦτα μὲν οὖν τοῦτον τὸν τρόπον εἴρηται νῦν ὡς ἐν τύπῳ, γεύματος χάριν περὶ ὅσων καὶ ὅσα θεωρητέον· δι' ἀκριβείας δ' ὕστερον ἐροῦμεν, ἵνα πρῶτον τὰς ὑπαρχούσας διαφορὰς καὶ τὰ συρβεβηκότα πᾶσι λαμβάνωμεν. Μετὰ δὲ τοῦτο τὰς αἰτίας τούτων πειρατέον εὑρεῖν. Οὕτω γὰρ κατὰ φύσιν ἐστὶ ποιεῖσθαι τὴν μέθοδον, ὑπαρχούσης τῆς ἱστορίας τῆς περὶ ἕκαστον· περὶ ὧν τε γὰρ καὶ ἐξ ὧν εἶναι δεῖ τὴν ἀπόδειξιν, ἐκ τούτων γίνεται φανερόν.

Ληπτέον δὲ πρῶτον τὰ μέρη τῶν ζώων ἐξ ὧν συνέστηκεν. Κατὰ γὰρ ταῦτα μάλιστα καὶ πρῶτα διαφέρει καὶ τὰ ὅλα, ἢ τῷ τὰ μὲν ἔχειν τὰ δὲ μὴ ἔχειν, ἢ τῇ θέσει καὶ τῇ τάξει, ἢ καὶ κατὰ τὰς εἰρημένους πρότερον διαφοράς, εἶδει καὶ ὑπεροχῇ καὶ ἀναλογίᾳ καὶ τῶν παθημάτων ἐναντιότητι. Πρῶτον δὲ τὰ τοῦ ἀνθρώπου μέρη ληπτέον· ὥσπερ γὰρ τὰ νομίσματα πρὸς τὸ αὐτοῖς ἕκαστοι γνωριμώτατον δοκιμάζουσιν, οὕτω δὲ καὶ ἐν τοῖς ἄλλοις· ὁ δ' ἄνθρωπος τῶν ζώων γνωριμώτατον ἡμῖν ἐξ ἀνάγκης ἐστίν. Τῇ μὲν οὖν αἰσθήσει οὐκ ἄδηλα τὰ μόρια· ὅμως δ' ἔνεκεν τοῦ μὴ παραλιπεῖν τε τὸ ἐφεξῆς καὶ τοῦ λόγον ἔχειν μετὰ τῆς αἰσθήσεως, λεκτέον τὰ μέρη πρῶτον μὲν τὰ ὀργανικά, εἶτα τὰ ὁμοιομερῆ.

## Κεφάλαιο 7

Μέγιστα μὲν οὖν ἐστὶ τάδε τῶν μερῶν εἰς ἃ διαιρεῖται τὸ σῶμα τὸ σύνολον, κεφαλὴ, αὐχὴν, θώραξ, βραχίονες δύο, σκέλη δύο (τὸ ἀπ' αὐχένος μέχρι αἰδοίων κύτος, ὃ καλεῖται θώραξ). Κεφαλῆς μὲν οὖν μέρη τὸ μὲν τριχωτὸν κρανίον καλεῖται. Τούτου δὲ μέρη τὸ μὲν πρόσθιον βρέγμα, ὑστερογενές (τελευταῖον γὰρ τῶν ἐν τῷ σώματι πηγνυται ὀστέων), τὸ δ' ὀπίσθιον ἰνίον, μέσον δ' ἰνίου καὶ βρέγματος κορυφή. Ὑπὸ μὲν οὖν τὸ βρέγμα ὁ ἐγκέφαλός ἐστιν, τὸ δ' (491b.) ἰνίον κενόν. Ἔστι δὲ τὸ κρανίον ἅπαν ἄραιον ὅστουν, στρογγύλον, ἀσάρκῳ δέρματι περιεχόμενον. Ἐχει δὲ ῥαφὰς τῶν μὲν γυναικῶν μίαν κύκλῳ, τῶν δ' ἀνδρῶν τρεῖς εἰς ἓν συναπτούσας ὡς ἐπὶ τὸ πολὺ· ἤδη δ' ὠμμένη ἐστὶ κεφαλὴ ἀνδρὸς οὐδεμίαν ἔχουσα ῥαφήν. Τοῦ δὲ κρανίου κορυφὴ καλεῖται τὸ μέσον λίσσωμα τῶν τριχῶν. Τοῦτο δ' ἐνίοις διπλοῦν ἐστίν· γίνονται γὰρ τινες δικόροφοι, οὐ τῷ ὀστέῳ ἀλλὰ τῇ τῶν τριχῶν λισσώσει.

## Κεφάλαιο 8

Τὸ δ' ὑπὸ τὸ κρανίον ὀνομάζεται πρόσωπον ἐπὶ μόνου τῶν ἄλλων ζώων ἀνθρώπου· ἰχθύος γὰρ καὶ βοὸς οὐ λέγεται πρόσωπον. Προσώπου δὲ τὸ μὲν ὑπὸ τὸ βρέγμα μεταξὺ τῶν ὀμμάτων μέτωπον. Τοῦτο δ' οἷς μὲν μέγα, βραδύτεροι, οἷς δὲ μικρόν, εὐκίνητοι· καὶ οἷς μὲν πλατὺ, ἐκστατικοί, οἷς δὲ περιφερές, θυμικοί.

## Κεφάλαιο 9

Ὑπὸ δὲ τῷ μετώπῳ ὀφρύες διφυεῖς· ὧν αἱ μὲν εὐθεῖαι μαλακοῦ ἥθους σημεῖον, αἱ δὲ πρὸς τὴν ῥῖνα τὴν καμπυλότητ' ἔχουσαι στρυφνοῦ, αἱ δὲ πρὸς

τοὺς κροτάφους μωκοῦ καὶ εἴρωνος, αἱ δὲ κατεσπασμέναι φθόνου. Ὑφ' αἷς ὀφθαλμοί. Οὗτοι κατὰ φύσιν δύο. Τούτων μέρη ἑκατέρου βλέφαρον τὸ ἄνω καὶ κάτω. Τούτου τρίχες αἱ ἔσχεται βλεφαρίδες. Τὸ δ' ἐντὸς τοῦ ὀφθαλμοῦ, τὸ μὲν ὑγρόν, ὃ βλέπει, κόρη, τὸ δὲ περὶ τοῦτο μέλαν, τὸ δ' ἐκτὸς τούτου λευκόν. Κοινὸν δὲ τῆς βλεφαρίδος μέρος τῆς ἄνω καὶ κάτω κανθοὶ δύο, ὁ μὲν πρὸς τῇ ῥινί, ὁ δὲ πρὸς τοῖς κροτάφοις· οἱ ἂν μὲν ὥσι μακροί, κακοηθείας σημεῖον, ἂν δ' οἶον οἱ ἰκτῖνες κρεῶδες ἔχωσι τὸ πρὸς τῷ μυκτῆρι, πονηρίας.

Τὰ μὲν οὖν ἄλλα γένη πάντα τῶν ζώων πλὴν τῶν ὀστρακοδέρμων καὶ εἴ τι ἄλλο ἀτελές, ἔχει ὀφθαλμούς· τὰ δὲ ζωοτόκα πάντα πλὴν ἀσπάλακος. Τοῦτον δὲ τρόπον μὲν τιν' ἔχειν ἂν θεῖη τις, ὅλως δ' οὐκ ἔχειν. Ὅλως μὲν γὰρ οὐθ' ὀρᾷ οὐτ' ἔχει εἰς τὸ φανερόν δήλους ὀφθαλμούς· ἀφαιρεθέντος δὲ τοῦ δέρματος ἔχει τὴν τε χώραν τῶν ὀμμάτων καὶ τῶν ὀφθαλμῶν τὰ μέλανα κατὰ τὸν τόπον καὶ τὴν χώραν τὴν φύσει τοῖς ὀφθαλμοῖς ὑπάρχουσιν ἐν τῷ ἐκτός, ὡς ἐν τῇ γενέσει πηρουμένων καὶ ἐπιφυομένου τοῦ δέρματος.

## Κεφάλαιο 10

Ὄφθαλμοῦ (492a.) δὲ τὸ μὲν λευκὸν ὅμοιον ὡς ἐπὶ τὸ πολὺ πᾶσιν, τὸ δὲ καλούμενον μέλαν διαφέρει· τοῖς μὲν γὰρ ἐστὶ μέλαν, τοῖς δὲ σφόδρα γλαυκόν, τοῖς δὲ χαροπόν, ἐνίοις δὲ αἰγυπόν· τοῦτο ἥθους βελτίστου σημεῖον καὶ πρὸς ὀξύτητα ὄψεως κράτιστον.

Μόνον δ' ἡ μάλιστα τῶν ζώων ἄνθρωπος πολύχρους τὰ ὄμματα ἐστίν· τῶν δ' ἄλλων ἐν εἶδος· ἵπποι δὲ γίνονται γλαυκοὶ ἔνιοι.

Τῶν δ' ὀφθαλμῶν οἱ μὲν μεγάλοι, οἱ δὲ μικροί, οἱ δὲ μέσοι· οἱ μέσοι βέλτιστοι. Καὶ ἡ ἐκτὸς σφόδρα ἢ ἐντὸς ἢ μέσως· τούτων οἱ ἐντὸς μάλιστα ὀξυωπέστατοι ἐπὶ παντὸς ζώου, τὸ δὲ μέσον ἥθους βελτίστου σημεῖον. Καὶ ἡ σκαρδαμυκτικοὶ ἢ ἀτενεῖς ἢ μέσοι· βελτίστου δ' ἥθους οἱ μέσοι, ἐκείνων δ' ὁ μὲν ἀναιδὴς ὁ δ' ἀβέβαιος.

## Κεφάλαιο 11

Ἔτι δὲ κεφαλῆς μόριον, δι' οὗ ἀκούει, ἄπνουν, τὸ οὖς. Ἀλκμαίων γὰρ οὐκ ἀληθῆ λέγει, φάμενος ἀναπνεῖν τὰς αἰγας κατὰ τὰ ὦτα. Ὡτὸς δὲ μέρος τὸ μὲν ἀνώνυμον, τὸ δὲ λοβός. Ὅλον δ' ἐκ χόνδρου καὶ σαρκὸς σύγκειται. Εἴσω δὲ τὴν μὲν φύσιν ἔχει οἶον οἱ στρόμβοι, τὸ δ' ἔσχατον ὅστουν ὅμοιον τῷ ὦτι, εἰς ὃ ὥσπερ ἀγγεῖον ἔσχατον ἀφικνεῖται ὁ ψόφος. Τοῦτο δ' εἰς μὲν τὸν

ἐγκέφαλον οὐκ ἔχει πόρον, εἰς δὲ τὸν τοῦ στόματος οὐρανόν· καὶ ἐκ τοῦ ἐγκεφάλου φλέψ τείνει εἰς αὐτό. Περαινοῦσι δὲ καὶ οἱ ὀφθαλμοὶ εἰς τὸν ἐγκέφαλον, καὶ κεῖται ἐπὶ φλεβίου ἐκάτερος. Ἀκίνητον δὲ τὸ οὖς ἄνθρωπος ἔχει μόνος τῶν ἐχόντων τοῦτο τὸ μόριον. Τῶν γὰρ ἐχόντων ἀκοὴν τὰ μὲν ἔχει ὦτα, τὰ δ' οὐκ ἔχει, ἀλλὰ τὸν πόρον φανερόν, οἷον ὅσα πτερωτὰ ἢ φολιδωτά. Ὅσα δὲ ζωοτοκεῖ, ἔξω φώκης καὶ δελφῖνος καὶ τῶν ἄλλων ὅσα οὕτω κητώδη, πάντα ἔχει ὦτα· ζωοτοκεῖ γὰρ καὶ τὰ σελάχη· ἀλλὰ μόνον ἄνθρωπος οὐ κινεῖ. Ἡ μὲν οὖν φώκη πόρους ἔχει φανεροὺς ἢ ἀκούει· ὁ δὲ δελφὶς ἀκούει μὲν, οὐκ ἔχει δ' ὦτα.

Τὰ δ' ἄλλα κινεῖ πάντα. Κεῖται δὲ τὰ ὦτα ἐπὶ τῆς αὐτῆς περιφερείας τοῖς ὀφθαλμοῖς, καὶ οὐχ ὥσπερ ἐνίοις τῶν τετραπόδων ἄνωθεν. Ὡτων δὲ τὰ μὲν ψιλά, τὰ δὲ δασέα, τὰ δὲ μέσα· βέλτιστα δὲ τὰ μέσα πρὸς ἀκοήν, ἥθος δ' οὐδὲν σημαίνει. Καὶ ἡ μεγάλη ἢ μικρὰ ἢ μέσα, ἡ ἐπανεστηκότα (492b.) σφόδρα ἢ οὐδὲν ἢ μέσον· τὰ δὲ μέσα βελτίστου ἥθους σημεῖον, τὰ δὲ μεγάλα καὶ ἐπανεστηκότα μωρολογίας καὶ ἀδολεσχίας. Τὸ δὲ μεταξύ ὀφθαλμοῦ καὶ ὠτὸς καὶ κορυφῆς καλεῖται κρόταφος.

Ἔτι προσώπου μέρος τὸ μὲν ὄν τῷ πνεύματι πόρος ῥίς· καὶ γὰρ ἀναπνεῖ καὶ ἐκπνεῖ ταύτῃ, καὶ ὁ παρμὸς διὰ ταύτης γίνεται, πνεύματος ἀθρόου ἔξοδος, σημεῖον οἰωνιστικὸν καὶ ἱερὸν μόνον τῶν πνευμάτων. Ἄμα δ' ἡ ἀνάπνευσις καὶ ἔκπνευσις γίνεται εἰς τὸ στήθος, καὶ ἀδύνατον χωρὶς τοῖς μυκτῆρσιν ἀναπνεῦσαι ἢ ἐκπνεῦσαι, διὰ τὸ ἐκ τοῦ στήθους εἶναι τὴν ἀναπνοὴν καὶ ἐκπνοὴν κατὰ τὸν γαργαρεῶνα, καὶ μὴ ἐκ τῆς κεφαλῆς τινι μέρει· ἐνδέχεται δὲ καὶ μὴ χρώμενον ταύτῃ ζῆν. Ἡ δ' ὁσφρησις γίνεται διὰ τούτου τοῦ μέρους· αὕτη δ' ἐστὶν ἡ αἴσθησις ὁσμῆς. Εὐκίνητος δ' ὁ μυκτῆρ, καὶ οὐχ ὥσπερ τὸ οὖς ἀκίνητον κατ' ἰδίαν. Μέρος δ' αὐτοῦ τὸ μὲν διάφραγμα χόνδρος, τὸ δ' ὀχέτευμα κενόν· ἔστι γὰρ ὁ μυκτῆρ διχότομος. Τοῖς δ' ἐλέφασιν ὁ μυκτῆρ γίνεται μακρὸς καὶ ἰσχυρός, καὶ χρῆται αὐτῷ ὥσπερ χειρί· προσάγεται τε γὰρ καὶ λαμβάνει τούτῳ καὶ εἰς τὸ στόμα προσφέρεται τὴν τροφήν, καὶ τὴν ὑγρὰν καὶ τὴν ξηράν, μόνον τῶν ζώων.

Ἔτι δὲ σιαγόνες δύο· τούτων τὸ πρόσθιον γένειον, τὸ δ' ὀπίσθιον γένυς. Κινεῖ δὲ πάντα τὰ ζῶα τὴν κάτωθεν γένυν, πλὴν τοῦ ποταμίου κροκοδείλου· οὗτος δὲ τὴν ἄνω μόνον.

Μετὰ δὲ τὴν ῥῖνα χεῖλη δύο, σὰρξ εὐκίνητος. Τὸ δ' ἐντὸς στόμα σιαγόνων καὶ χειλῶν. Τούτου μέρη τὸ μὲν ὑπερῶα τὸ δὲ φάρυγξ. Τὸ δ' αἰσθητικὸν χυμοῦ γλῶττα· ἡ δ' αἴσθησις ἐν τῷ ἄκρῳ· ἐὰν δέ <τι> ἐπὶ τὸ πλατὺ ἐπιτεθῇ,

ἦττον. Αἰσθάνεται δὲ καὶ ὧν ἡ ἄλλη σὰρξ πάντων, οἷον σκληροῦ θερμοῦ καὶ ψυχροῦ καθ' ὅτιοῦν μέρος, ὥσπερ καὶ χυμοῦ. Αὕτη δ' ἡ πλατεῖα ἡ στενὴ ἡ μέση· ἡ μέση δὲ βελτίστη καὶ σαφεστάτη.

Καὶ ἡ λελυμένη ἡ καταδεδεμένη, ὥσπερ τοῖς ψελλοῖς καὶ τοῖς τραυλοῖς. Ἔστι δ' ἡ γλῶττα σὰρξ μανὴ καὶ σομφή.

Ταύτης τι μέρος ἐπιγλωττίς. Καὶ τὸ μὲν διφυὲς τοῦ (493a.) στόματος παρίσθμιον, τὸ δὲ πολυφυὲς οὖλον· σάρκινα δὲ ταῦτα. Ἐντὸς δ' ὀδόντες ὀστέινοι. Εἴσω δ' ἄλλο μόριον σταφυλοφόρον, κίων ἐπίφλεβος· ὃς ἐὰν ἐξυγρανθεὶς φλεγμῆνῃ, σταφυλὴ καλεῖται καὶ πνίγει.

## Κεφάλαιο 12

Αὐχὴν δὲ τὸ μεταξὺ προσώπου καὶ θώρακος. Καὶ τούτου τὸ μὲν πρόσθιον μέρος λάρυγξ, [τὸ δ' ὀπίσθιον στόμαχος].

Τούτου δὲ τὸ μὲν χονδρῶδες καὶ πρόσθιον, δι' οὗ ἡ φωνὴ καὶ ἡ ἀναπνοή, ἀρτηρία· τὸ δὲ σαρκῶδες στόμαχος, ἐντὸς πρὸ τῆς ῥάχεως. Τὸ δ' ὀπίσθιον αὐχένος μέρος ἐπωμὶς. Ταῦτα μὲν οὖν τὰ μόρια μέχρι τοῦ θώρακος.

Θώρακος δὲ μέρη τὰ μὲν πρόσθια τὰ δ' ὀπίσθια.

Πρῶτον μὲν μετὰ τὸν αὐχένα ἐν τοῖς προσθίοις στῆθος διφυὲς μαστοῖς. Τούτων ἡ θηλὴ διφυής, δι' ἧς τοῖς θήλεσι τὸ γάλα διηθεῖται· ὁ δὲ μαστὸς μανός. Ἐγγίνεται δὲ καὶ τοῖς ἄρρεσι γάλα· ἀλλὰ πυκνὴ ἡ σὰρξ τοῖς ἄρρεσι, ταῖς δὲ γυναῖξι σομφὴ καὶ πόρων μεστή.

## Κεφάλαιο 13

Μετὰ δὲ τὸν θώρακα ἐν τοῖς προσθίοις γαστήρ, καὶ ταύτης ῥίζα ὀμφαλός· ὑπόρριζον δὲ τὸ μὲν διφυὲς λαγών, τὸ δὲ μονοφυὲς τὸ μὲν ὑπὸ τὸν ὀμφαλὸν ἦτρον (τούτου δὲ τὸ ἔσχατον ἐπίσιον), τὸ δ' ὑπὲρ τὸν ὀμφαλὸν ὑποχόνδριον, τὸ δὲ κοινὸν ὑποχονδρίου καὶ λαγόνος χολάς.

Τῶν δ' ὀπισθεν διάζωμα μὲν ἡ ὀσφύς (ὅθεν καὶ τοῦνομ' ἔχει· δοκεῖ γὰρ εἶναι ἰσοφυές), τοῦ δὲ διεξοδικοῦ τὸ μὲν οἷον ἐφέδρανον γλουτός, τὸ δ' ἐν ᾧ στρέφεται ὁ μηρός, κοτυληδών.

Τοῦ δὲ θήλεος ἴδιον μέρος ὑστέρα, καὶ τοῦ ἄρρενος αἰδοῖον, ἐξωθεν ἐπὶ τῷ

τέλει τοῦ θώρακος, διμερές, τὸ μὲν ἄκρον σαρκῶδες καὶ ἀεὶ λεῖον <καὶ> ὡς εἰπεῖν ἴσον, ὃ καλεῖται βάλανος, τὸ δὲ περὶ αὐτὴν ἀνώνυμον δέρμα, ὃ ἐὰν διακοπῇ, οὐ συμφύεται, οὐδὲ γνάθος οὐδὲ βλεφαρίς. Κοινὸν δὲ τούτου καὶ τῆς βαλάνου ἀκροποσθία. Τὸ δὲ λοιπὸν μέρος χονδρῶδες, εὐαυξές, καὶ ἐξέρχεται καὶ εἰσέρχεται ἐναντίως ἢ τοῖς λοφούροις. Τοῦ δ' αἰδοίου ὑποκάτω ὄρχεις δύο. Τὸ δὲ περίξ δέρμα, ὃ καλεῖται ὄσχεος. Οἱ δ' ὄρχεις οὔτε ταῦτ' οὐτ' ὅτε πόρρω σαρκός· ὃν (493b.) τρόπον δ' ἔχουσιν, ὕστερον δι' ἀκριβείας λεχθήσεται καθόλου περὶ πάντων τῶν τοιούτων μορίων.

## Κεφάλαιο 14

Τὸ δὲ τῆς γυναικὸς αἰδοῖον ἐξ ἐναντίας τῷ τῶν ἀρρένων· κοῖλον γὰρ τὸ ὑπὸ τὴν ἥβην καὶ οὐχ ὥσπερ τὸ τοῦ ἄρρενος ἐξεστηκός. Καὶ οὐρήθρα ἔξω τῶν ὕστερων, δίοδος τῷ σπέρματι τοῦ ἄρρενος. Τοῦ δ' ὑγροῦ περιπτώματος ἀμφοῖν ἕξις.

Κοινὸν δὲ μέρος ἀυχένος καὶ στήθους σφαγὴ, πλευρᾶς δὲ καὶ βραχίονος καὶ ὤμου μασχάλη, μηροῦ δὲ καὶ ἥτρου βουβών. Μηροῦ δὲ καὶ γλουτοῦ τὸ ἐντὸς περίνεον, μηροῦ δὲ καὶ γλουτοῦ τὸ ἔξω ὑπογλουτῖς.

Θώρακος δὲ περὶ μὲν τῶν ἔμπροσθεν εἴρηται, τοῦ δὲ στήθους τὸ ὀπισθεν νῶτος.

♦αν.



## Κεφάλαιο 15

Νώτου δὲ μέρη ὠμοπλάται δύο καὶ ῥάχις, ὑποκάτωθεν δὲ κατὰ τὴν γαστέρα ὀσφύς. Κοινὸν δὲ τοῦ ἄνω καὶ κάτω τοῦ θώρακος πλευραί, ἐκατέρωθεν ὀκτώ· περὶ γὰρ Λιγύων τῶν καλουμένων ἑπταπλεύρων οὐδενός πω ἀξιοπίστου ἀκηκόαμεν.

Ἔχει δ' ὁ ἄνθρωπος καὶ τὸ ἄνω καὶ τὸ κάτω, καὶ τὰ ἔμπροσθεν καὶ τὰ ὀπίσθια, καὶ δεξιὰ καὶ ἀριστερά. Τὰ μὲν οὖν δεξιὰ καὶ ἀριστερὰ ὅμοια σχεδὸν ἐν τοῖς μέρεσι καὶ ταῦτά πάντα, πλὴν ἀσθενέστερα τὰ ἀριστερά· τὰ δ' ὀπίσθια τοῖς προσθίοις ἀνόμοια, καὶ τὰ κάτω τοῖς ἄνω, πλὴν ὧδε ὅμοια, τὰ κάτω τοῦ ἥτρου οἷον τὸ πρόσωπον εὐσαρκία καὶ ἀσαρκία, καὶ τὰ σκέλη πρὸς τοὺς βραχίονας ἀντίκειται· καὶ οἷς βραχεῖς οἱ ἀγκῶνες, καὶ οἱ μηροὶ ὡς ἐπὶ τὸ πολὺ, καὶ οἷς οἱ πόδες μικροί, καὶ αἱ χεῖρες.

Κώλων δὲ τὸ μὲν διφυῆς βραχίων· βραχίονος δὲ ὦμος, ἀγκῶν, ὠλέκρανον, πῆχυς, χεῖρ· χειρὸς δὲ θέναρ, δάκτυλοι πέντε· δακτύλου δὲ τὸ μὲν καμπτικὸν κόνδυλος, τὸ δ' ἄκαμπτον φάλαγξ. Δάκτυλος δ' ὁ μὲν μέγας μονοκόνδυλος, οἱ δ' ἄλλοι δικόνδυλοι. Ἡ δὲ κάμψις καὶ τῷ βραχίονι καὶ τῷ δακτύλῳ εἴσω πᾶσιν· κάμπτεται δ' ὁ βραχίων κατὰ τὸ ὠλέκρανον. Χειρὸς δὲ τὸ μὲν ἐντὸς θέναρ, σαρκῶδες καὶ διηρημένον ἄρθροις, τοῖς μὲν μακροβίοις ἐνὶ ἡ (494a.) δυσὶ δι' ὅλου, τοῖς δὲ βραχυβίοις δυσὶ καὶ οὐ δι' ὅλου. Ἄρθρον δὲ χειρὸς καὶ βραχίονος καρπός. Τὸ δ' ἔξω τῆς χειρὸς νευρῶδες καὶ ἀνώνυμον.

Κώλων δὲ διμερὲς ἄλλο σκέλος. Σκέλους δὲ τὸ μὲν ἀμφικέφαλον μηρός, τὸ δὲ πλανησίεδρον μύλη, τὸ δὲ διόστεον κνήμη, καὶ ταύτης τὸ μὲν πρόσθιον ἀντικνήμιον, τὸ δ' ὀπίσθιον γαστροκνημία, σὰρξ νευρώδης καὶ φλεβώδης, τοῖς μὲν ἀνεσπασμένη ἄνω πρὸς τὴν ἰγνύν, ὅσοι μεγάλα τὰ ἰσχία ἔχουσι, τοῖς δ' ἐναντίως κατεσπασμένη· τὸ δ' ἔσχατον ἀντικνημίου σφυρόν, διφυῆς ἐν ἐκατέρῳ τῷ σκέλει. Τὸ δὲ πολυόστεον τοῦ σκέλους πούς. Τούτου δὲ τὸ μὲν ὀπίσθιον μέρος πτέρνα, τὸ δ' ἐμπρόσθιον τοῦ ποδὸς τὸ μὲν ἐσχισμένον δάκτυλοι πέντε, τὸ δὲ σαρκῶδες κάτωθεν στῆθος, τὸ δ' ἄνωθεν ἐν τοῖς πρανεσὶ νευρῶδες καὶ ἀνώνυμον. Δακτύλου δὲ τὸ μὲν ὄνυξ, τὸ δὲ καμπή· πάντων δ' ὁ ὄνυξ ἐπ' ἄκρῳ· μονόκαμπτοι δὲ πάντες οἱ κάτω δάκτυλοι. Τοῦ δὲ ποδὸς ὅσοις τὸ ἐντὸς παχὺ καὶ μὴ κοῖλον, ἀλλὰ βαίνουσιν ὅλῳ, πανοῦργοι. Κοινὸν δὲ μηροῦ καὶ κνήμης γόνυ καμπή.

Ταῦτα μὲν οὖν τὰ μέρη κοινὰ καὶ θήλεος καὶ ἄρρενος.

Ἡ δὲ θέσις τῶν μερῶν πρὸς τὸ ἄνω καὶ κάτω καὶ πρόσθιον καὶ ὀπίσθιον καὶ δεξιὸν καὶ ἀριστερὸν ὡς ἔχει, φανερὰ μὲν ἂν εἶναι δόξειε τὰ ἔξωθεν κατὰ τὴν αἴσθησιν, οὐ μὴν ἀλλὰ διὰ τὴν αὐτὴν αἰτίαν λεκτέον δι' ἥνπερ καὶ τὰ πρότερον εἰρήκαμεν, ἵνα περαίνηται τὸ ἐφεξῆς, καὶ καταριθμουμένων ὅπως ἦττον λανθάνη τὰ μὴ τὸν αὐτὸν ἔχοντα τρόπον ἐπὶ τε τῶν ἄλλων ζώων καὶ ἐπὶ τῶν ἀνθρώπων.

Μάλιστα δ' ἔχει διωρισμένα πρὸς τοὺς κατὰ φύσιν τόπους τὰ ἄνω καὶ κάτω ἄνθρωπος τῶν ἄλλων ζώων· τὰ τε γὰρ ἄνω καὶ κάτω πρὸς τὰ τοῦ παντός ἄνω καὶ κάτω τέτακται. Τὸν αὐτὸν τρόπον καὶ τὰ πρόσθια καὶ τὰ ὀπίσθια καὶ τὰ δεξιὰ καὶ τὰ ἀριστερὰ κατὰ φύσιν ἔχει. Τῶν δ' ἄλλων ζώων τὰ μὲν οὐκ ἔχει, τὰ δ' ἔχει μὲν συγκεχυμένα δ' ἔχει μᾶλλον. Ἡ μὲν οὖν κεφαλὴ πᾶσιν ἄνω πρὸς τὸ σῶμα τὸ ἐαυτῶν· ὁ δ' ἄνθρωπος μόνος, ὡς περ εἴρηται, πρὸς τὸ τοῦ ὅλου τελειωθείς (494b.) ἔχει τοῦτο τὸ μόριον.

Μετὰ δὲ τὴν κεφαλὴν ἐστὶν ὁ αὐχὴν, εἴτα στῆθος καὶ νῶτος, τὸ μὲν ἐκ τοῦ πρόσθεν τὸ δ' ἐκ τοῦ ὀπίσθεν. Καὶ ἐχόμενα τούτων γαστήρ καὶ ὀσφύς καὶ αἰδοῖον καὶ ἰσχίον, εἴτα μηρὸς καὶ κνήμη, τελευταῖον δὲ πόδες. Εἰς τὸ πρόσθεν δὲ καὶ τὰ σκέλη τὴν κάμπιν ἔχει, ἐφ' ᾗ καὶ ἡ πορεία, καὶ τῶν ποδῶν τὸ κινητικώτερον μέρος καὶ ἡ κάμπις· ἡ δὲ πτέρνα ἐκ τοῦ ὀπίσθεν· τῶν δὲ σφυρῶν ἐκάτερον κατὰ τὸ οὖς. Ἐκ δὲ τῶν πλαγίων τῶν δεξιῶν καὶ τῶν ἀριστερῶν οἱ βραχίονες, τὴν κάμπιν ἔχοντες εἰς τὸ ἐντός, ὥστε τὰ κυρτὰ τῶν σκελῶν καὶ τῶν βραχιόνων πρὸς ἀλλήλα εἶναι ἐπ' ἀνθρώπου μάλιστα.

Τὰς δ' αἰσθήσεις καὶ τὰ αἰσθητήρια, ὀφθαλμοὺς καὶ μυκτῆρας καὶ γλῶτταν, ἐπὶ ταῦτόν καὶ εἰς τὸ πρόσθιον ἔχει· τὴν δ' ἀκοὴν καὶ τὸ αἰσθητήριον αὐτῆς, τὰ ὦτα, ἐκ τοῦ πλαγίου μὲν, ἐπὶ τῆς αὐτῆς δὲ περιφερείας τοῖς ὅμμασιν. Τὰ δ' ὅμματα ἐλάχιστον κατὰ μέγεθος διέστηκεν ἀνθρώπῳ τῶν ζώων. Ἐχει δ' ἀκριβεστάτην ἄνθρωπος τῶν αἰσθήσεων τὴν ἀφὴν, δευτέραν δὲ τὴν γεῦσιν· ἐν δὲ ταῖς ἄλλαις λείπεται πολλῶν.

## Κεφάλαιο 16

Τὰ μὲν οὖν μόρια τὰ πρὸς τὴν ἔξω ἐπιφάνειαν τοῦτον τέτακται τὸν τρόπον, καὶ καθάπερ ἐλέχθη, διωνόμασταί τε μάλιστα καὶ γνώριμα διὰ τὴν συνήθειάν ἐστιν· τὰ δ' ἐντὸς τοῦναντίον. Ἄγνωστα γάρ ἐστι μάλιστα τὰ τῶν ἀνθρώπων, ὥστε δεῖ πρὸς τὰ τῶν ἄλλων μόρια ζώων ἀνάγοντας σκοπεῖν, οἷς ἔχει παραπλησίαν τὴν φύσιν.

Πρῶτον μὲν οὖν τῆς κεφαλῆς κεῖται τὴν θέσιν ἐν τῷ πρόσθεν ἔχων ὁ ἐγκέφαλος. Ὅμοίως δὲ καὶ τοῖς ἄλλοις ζώοις, ὅσα ἔχει τοῦτο τὸ μόριον· ἔχει δ' ἅπαντα ὅσα ἔχει αἷμα, καὶ ἔτι τὰ μαλάκια· κατὰ μέγεθος δ' ὁμοίως ἔχει ἄνθρωπος πλεῖστον ἐγκέφαλον καὶ ὑγρότατον. Ὑμένες δ' αὐτὸν δύο περιέχουσιν, ὁ μὲν περὶ τὸ ὀστοῦν ἰσχυρότερος, ὁ δὲ περὶ αὐτὸν τὸν ἐγκέφαλον ἥττων ἐκείνου. Διφυῆς δ' ἐν πᾶσιν ἐστὶν ὁ ἐγκέφαλος. Καὶ ἐπὶ τούτου ἡ καλουμένη παρεγκεφαλὶς ἔσχατον, ἑτέραν ἔχουσα τὴν μορφήν καὶ κατὰ τὴν ἀφήν καὶ κατὰ τὴν ὄψιν.

Τὸ δ' ὀπισθεν τῆς κεφαλῆς κενὸν καὶ κοῖλον πᾶσιν, ὡς ἐκάστοις (495a.) ὑπάρχει μεγέθους. Ἐνία μὲν γὰρ μεγάλην ἔχει τὴν κεφαλὴν, τὸ δ' ὑποκείμενον τοῦ προσώπου μόριον ἔλαττον, ὅσα στρογγυλοπρόσωπα· τὰ δὲ τὴν μὲν κεφαλὴν μικράν, τὰς δὲ σιαγόνας μακράς, οἷον τὸ τῶν λοφούρων γένος πᾶν.

Ἄναιμος δ' ὁ ἐγκέφαλος ἅπασι, καὶ οὐδεμίαν ἔχων ἐν αὐτῷ φλέβα, καὶ θιγγανόμενος κατὰ φύσιν ψυχρός. Ἐχει δ' ἐν τῷ μέσῳ ὁ τῶν πλείστων [πᾶς] κοῖλόν τι μικρόν. Ἡ δὲ περὶ αὐτὸν μῆνιγξ φλεβώδης· ἐστὶ δ' ὑμὴν δερματικὸς ἡ μῆνιγξ ὁ περιέχων τὸν ἐγκέφαλον. Ὑπὲρ δὲ τοῦ ἐγκεφάλου λεπτότατον ὀστοῦν καὶ ἀσθενέστατον τῆς κεφαλῆς ἐστὶν, ὃ καλεῖται βρέγμα.

Φέρουσι δ' ἐκ τοῦ ὀφθαλμοῦ τρεῖς πόροι εἰς τὸν ἐγκέφαλον, ὁ μὲν μέγιστος καὶ ὁ μέσος εἰς τὴν παρεγκεφαλίδα, ὁ δ' ἐλάχιστος εἰς αὐτὸν τὸν ἐγκέφαλον· ἐλάχιστος δ' ἐστὶν ὁ πρὸς τῷ μυκτῆρι μάλιστα. Οἱ μὲν οὖν μέγιστοι παράλληλοί εἰσι καὶ οὐ συμπίπτουσιν, οἱ δὲ μέσοι συμπίπτουσι (δῆλον δὲ τοῦτο μάλιστα ἐπὶ τῶν ἰχθύων)· καὶ γὰρ ἐγγύτερον οὗτοι τοῦ ἐγκεφάλου ἢ οἱ μεγάλοι· οἱ δ' ἐλάχιστοι πλεῖστόν τε ἀπῆρτηνται ἀλλήλων καὶ οὐ συμπίπτουσιν.

Ἐντὸς δὲ τοῦ ἀυχένος ὃ τ' οἰσοφάγος καλούμενός ἐστιν, ἔχων τὴν ἐπωνυμίαν ἀπὸ τοῦ μήκους καὶ τῆς στενότητος, καὶ ἡ ἀρτηρία. Πρότερον δὲ τῇ θέσει ἡ ἀρτηρία κεῖται τοῦ οἰσοφάγου ἐν πᾶσι τοῖς ἔχουσιν αὐτήν· ἔχει δὲ ταύτην πάντα ὅσαπερ πλεύμονα ἔχει.

Ἔστι δ' ἡ μὲν ἀρτηρία χονδρώδης τὴν φύσιν καὶ ὀλίγαιμος, πολλοῖς λεπτοῖς φλεβίοις περιεχομένη, κεῖται δ' ἐπὶ μὲν τὰ ἄνω πρὸς τὸ στόμα κατὰ τὴν ἐκ τῶν μυκτῆρων σύντρησιν εἰς τὸ στόμα, ἥ καὶ ὅταν πίνοντες ἀνασπᾶσώσι τι τοῦ ποτοῦ, χωρεῖ ἐκ τοῦ στόματος διὰ τῶν μυκτῆρων ἔξω. Μεταξὺ δ' ἔχει τῶν τρήσεων τὴν ἐπιγλωττίδα καλουμένην, ἐπιπτύσσεσθαι δυναμένην ἐπὶ τὸ

τῆς ἀρτηρίας τρῆμα τὸ εἰς τὸ στόμα τεῖνον. Ταύτη δὲ τὸ πέρας συνήρτηται τῆς γλώττης. Ἐπὶ δὲ θάτερα καθήκει εἰς τὸ μεταξὺ τοῦ πλεύμονος, εἴτ' ἀπὸ τούτου σχίζεται εἰς ἑκάτερον τῶν μερῶν τοῦ πλεύμονος. Θέλει γὰρ εἶναι διμερὴς ὁ πλεύμων ἐν ἅπασι τοῖς ἔχουσιν αὐτόν· ἀλλ' ἐν μὲν τοῖς ζωοτόκοις οὐχ ὁμοίως ἢ διάστασις φανερά, ἥκιστα (495b.) δ' ἐν ἀνθρώπῳ. Ἔστι δ' οὐ πολυσχιδῆς ὁ τοῦ ἀνθρώπου, ὥσπερ ἐνίων ζωοτόκων, οὐδὲ λείος, ἀλλ' ἔχει ἄνωμαλίαν.

Ἐν δὲ τοῖς ὠοτόκοις, οἷον ὄρνισι καὶ τῶν τετραπόδων ὅσα ὠοτόκα, πολὺ τὸ μέρος ἑκάτερον ἀπ' ἀλλήλων ἔσχισται, ὥστε δοκεῖν δύο ἔχειν πλεύμονας· καὶ ἀπὸ μιᾶς δύο ἐστὶ μόρια τῆς ἀρτηρίας, εἰς ἑκάτερον τὸ μέρος τείνοντα τοῦ πλεύμονος. Συνήρτηται δὲ καὶ τῇ μεγάλῃ φλεβὶ καὶ τῇ ἀορτῇ καλουμένη.

Φυσωμένης δὲ τῆς ἀρτηρίας διαδίδωσιν εἰς τὰ κοῖλα μέρη τοῦ πλεύμονος τὸ πνεῦμα. Ταῦτα δὲ διαφύσεις ἔχει χονδρώδεις εἰς ὅξυ συνηκούσας· ἐκ δὲ τῶν διαφύσεων τρήματα διὰ παντός ἐστι τοῦ πλεύμονος, ἀεὶ ἐκ μειζόνων εἰς ἐλάττω διαδιδόμενα.

Συνήρτηται δὲ καὶ ἡ καρδία τῇ ἀρτηρίᾳ πιμελώδεσι καὶ χονδρώδεσι καὶ ἰνώδεσι δεσμοῖς· ἡ δὲ συνήρτηται, κοῖλόν ἐστιν. Φυσωμένης δὲ τῆς ἀρτηρίας ἐν ἐνίοις μὲν οὐ κατάδηλον ποιεῖ, ἐν δὲ τοῖς μείζοσι τῶν ζώων δῆλον ὅτι εἰσέρχεται τὸ πνεῦμα εἰς αὐτήν. Ἡ μὲν οὖν ἀρτηρία τοῦτον ἔχει τὸν τρόπον, καὶ δέχεται μόνον τὸ πνεῦμα καὶ ἀφίησιν, ἄλλο δ' οὐδὲν οὔτε ξηρὸν οὔθ' ὑγρόν, ἢ πόνον παρέχει, ἕως ἂν ἐκβήξῃ τὸ κατελθόν.

Ὁ δὲ στόμαχος ἥρτηται μὲν ἄνωθεν ἀπὸ τοῦ στόματος, ἐχόμενος τῆς ἀρτηρίας, συνεχῆς ὢν πρὸς τε τὴν ῥάχιν καὶ τὴν ἀρτηρίαν ὑμενώδεσι δεσμοῖς, τελευτᾷ δὲ διὰ τοῦ διαζώματος εἰς τὴν κοιλίαν, σαρκοειδῆς ὢν τὴν φύσιν, καὶ τάσιν ἔχων καὶ ἐπὶ μῆκος καὶ ἐπὶ πλάτος.

Ἡ δὲ κοιλία ἢ τοῦ ἀνθρώπου ὁμοία τῇ κυνείᾳ ἐστίν· οὐ πολλῷ γὰρ τοῦ ἐντέρου μείζων, ἀλλ' εἰκυῖα οἶονεὶ ἐντέρῳ τινὶ εὖρος ἔχοντι· εἴτα ἔντερον ἀπλοῦν, εἰλιγμένον, ἐπικεικῶς πλατύ. Ἡ δὲ κάτω κοιλία ὁμοία τῇ ὑείᾳ· πλατεῖα τε γὰρ ἐστὶ, καὶ τὸ ἀπὸ ταύτης πρὸς τὴν ἔδραν παχὺ καὶ βραχύ. Τὸ δ' ἐπίπλοον ἀπὸ μέσης τῆς κοιλίας ἥρτηται, ἔστι δὲ τὴν φύσιν ὑμὴν πιμελώδης, ὥσπερ καὶ τοῖς ἄλλοις τοῖς μονοκοιλίοις καὶ ἀμφώδουσιν.

Ἐπεὶ δὲ τῶν ἐντέρων τὸ μεσεντέριόν ἐστιν· ὑμενώδες δ' ἐστὶ καὶ τοῦτο καὶ πλατύ, καὶ πῖον γίνεται. Ἐξήρτηται δ' ἐκ τῆς μεγάλης φλεβὸς καὶ τῆς ἀορτῆς,

καὶ δι' αὐτοῦ φλέβες πολλαὶ καὶ πυκναί, (496a.) κατατείνουσai πρὸς τὴν τῶν ἐντέρων θέσιν, ἄνωθεν ἀρξάμεναι μέχρι κάτω. Τὰ μὲν οὖν περὶ τὸν στόμαχον καὶ τὴν ἀρτηρίαν οὕτως ἔχει, καὶ τὰ περὶ τὴν κοιλίαν.

## Κεφάλαιο 17

Ἡ δὲ καρδία ἔχει μὲν τρεῖς κοιλίας, κεῖται δ' ἄνωτέρω τοῦ πλεύμονος κατὰ τὴν σχίσιν τῆς ἀρτηρίας, ἔχει δ' ὑμένα πιμελώδη καὶ παχύν, ἣ προσπέφυκε τῇ φλεβί τῇ μεγάλῃ καὶ τῇ ἀορτῇ. Κεῖται δ' ἐπὶ τῇ ἀορτῇ κατὰ τὰ ὀξέα.

Κεῖται δὲ τὰ ὀξέα κατὰ τὸ στῆθος ὁμοίως ἀπάντων τῶν ζώων, ὅσα ἔχει στῆθος. Πᾶσι δ' ὁμοίως καὶ τοῖς ἔχουσι καὶ τοῖς μὴ ἔχουσι τοῦτο τὸ μόριον εἰς τὸ πρόσθεν ἔχει ἢ καρδία τὸ ὀξύ· λάθοι δ' ἂν πολλάκις διὰ τὸ μεταπίπτειν διαιρουμένων. Τὸ δὲ κυρτὸν αὐτῆς ἐστὶν ἄνω. Ἔχει δὲ τὸ ὀξύ σαρκῶδες ἐπὶ πολὺ καὶ πυκνόν, καὶ ἐν τοῖς κοίλοις αὐτῆς νεῦρα ἔνεστιν.

Κεῖται δὲ τὴν θέσιν ἐν μὲν τοῖς ἄλλοις κατὰ μέσον τὸ στῆθος, ὅσα ἔχει στῆθος, τοῖς δ' ἀνθρώποις ἐν τοῖς ἀριστεροῖς μᾶλλον, μικρὸν τῆς διαιρέσεως τῶν μαστῶν ἐγκλίνουσα εἰς τὸν ἀριστερὸν μαστὸν ἐν τῷ ἄνω μέρει τοῦ στῆθους.

Καὶ οὔτε μεγάλη, τό θ' ὅλον αὐτῆς εἶδος οὐ πρόμηκές ἐστὶν ἀλλὰ στρογγυλότερον· πλὴν τὸ ἄκρον εἰς ὀξύ συνῆκται. Ἔχει δὲ κοιλίας τρεῖς, ὥσπερ εἴρηται, μεγίστην μὲν τὴν ἐν τοῖς δεξιοῖς, ἐλαχίστην δὲ τὴν ἐν τοῖς ἀριστεροῖς, μέσην δὲ μεγέθει τὴν ἀνὰ μέσον· καὶ εἰσιν εἰς τὸν πλεύμονα τετρημέναι πᾶσαι. [Ἀμφοτέρας δ' ἔχει τὰς δύο μικράς, καὶ τὸν πλεύμονα τετρημένας πάσας]. Κατάδηλον δὲ κατὰ μίαν τῶν κοιλιῶν.

Κάτωθεν δ' ἐκ τῆς προσφύσεως· κατὰ μὲν τὴν μεγίστην κοιλίαν ἐξήρτηται τῇ μεγάλῃ φλεβί, πρὸς ἣν καὶ τὸ μεσεντέριόν ἐστι, κατὰ δὲ τὴν μέσην τῇ ἀορτῇ.

Φέρουσι δὲ καὶ εἰς τὸν πλεύμονα πόροι ἀπὸ τῆς καρδίας, καὶ σχίζονται τὸν αὐτὸν τρόπον ὥνπερ ἡ ἀρτηρία, κατὰ πάντα τὸν πλεύμονα παρακολουθοῦντες τοῖς ἀπὸ τῆς ἀρτηρίας. Ἐπάνω δ' εἰσὶν οἱ ἀπὸ τῆς καρδίας· πόρος δ' οὐδεὶς ἐστὶ κοινός, ἀλλὰ διὰ τὴν σύναψιν δέχονται τὸ πνεῦμα καὶ τῇ καρδίᾳ διαπέμπουσιν· φέρει γὰρ ὁ μὲν εἰς τὸ δεξιὸν κοῖλον τῶν πόρων, ὁ δ' εἰς τὸ ἀριστερόν. Περὶ δὲ τῆς φλεβὸς τῆς μεγάλης καὶ τῆς ἀορτῆς κατ' αὐτὰς κοινῇ περὶ ἀμφοτέρων ἐροῦμεν ὕστερον.

Αἶμα (496b.) δὲ πλεῖστον μὲν ὁ πλεύμων ἔχει τῶν ἐν τοῖς ζώοις μορίων τοῖς

ἔχουσί τε πλεύμονα καὶ ζωτοκοῦσιν ἐν αὐτοῖς τε καὶ ἐκτός· ἅπας μὲν γὰρ ἔστι σομφός, παρ' ἐκάστην δὲ τὴν σύριγγα πόροι φέρουσι τῆς μεγάλης φλεβός. Ἄλλ' οἱ νομίζοντες εἶναι κενὸν διηπάτηνται, θεωροῦντες τοὺς ἐξηρημένους ἐκ τῶν διαιρουμένων τῶν ζώων, ὧν εὐθὺς ἐξελήλυθε τὸ αἷμα ἄθρόον.

Τῶν δ' ἄλλων σπλάγχνων ἡ καρδία μόνον ἔχει αἷμα. Καὶ ὁ μὲν πλεύμων οὐκ ἐν αὐτῷ ἄλλ' ἐν ταῖς φλεψίν, ἡ δὲ καρδία ἐν αὐτῇ· ἐν ἐκάστη γὰρ ἔχει αἷμα τῶν κοιλιῶν, λεπτότατον δ' ἔστι τὸ ἐν τῇ μέσῃ.

Ὑπὸ δὲ τὸν πλεύμονά ἐστι τὸ διάζωμα τὸ τοῦ θώρακος, αἱ καλούμεναι φρένες, πρὸς μὲν τὰ πλευρὰ καὶ τὰ ὑποχόνδρια καὶ τὴν ῥάχιν συνηρημέναι, ἐν μέσῳ δ' ἔχει τὰ λεπτὰ καὶ ὑμενώδη. Ἔχει δὲ δι' αὐτοῦ καὶ φλέβας τεταμένας· εἰσὶ δ' αἱ τοῦ ἀνθρώπου φρένες παχεῖαι ὡς κατὰ λόγον τοῦ σώματος.

Ὑπὸ δὲ τὸ διάζωμα ἐν μὲν τοῖς δεξιόις κεῖται τὸ ἥπαρ, ἐν δὲ τοῖς ἀριστεροῖς ὁ σπλήν, ὁμοίως ἐν ἅπασιν τοῖς ἔχουσι ταῦτα τὰ μόρια κατὰ φύσιν καὶ μὴ τερατωδῶς· ἥδη γὰρ ὥπται μετηλλαχότα τὴν τάξιν ἐν τισὶ τῶν τετραπόδων. Συνήρτηται δὲ τῇ κοιλίᾳ κατὰ τὸ ἐπίπλοον. Τὴν δ' ὄψιν ἐστὶν ὁ τοῦ ἀνθρώπου σπλήν στενὸς καὶ μακρός, ὅμοιος τῷ ὑεῖω. Τὸ δ' ἥπαρ ὡς μὲν ἐπὶ τὸ πολὺ καὶ ἐν τοῖς πλείστοις ἔχει χολήν, ἐπ' ἐνίοις δ' οὐκ ἔπεστιν. Στρογγύλον δ' ἔστι τὸ τοῦ ἀνθρώπου ἥπαρ καὶ ὅμοιον τῷ βοεῖω. Συμβαίνει δὲ τοῦτο καὶ ἐν τοῖς ἱερείοις, οἷον ἐν μὲν τόπῳ τινὶ τῆς ἐν Εὐβοίᾳ Χαλκιδικῆς οὐκ ἔχει τὰ πρόβατα χολήν, ἐν δὲ Νάξῳ πάντα σχεδὸν τὰ τετράποδα τοσαύτην ὥστ' ἐκπλήττεσθαι τοὺς θύοντας τῶν ξένων, οἰομένους αὐτῶν ἴδιον εἶναι τὸ σημεῖον, ἄλλ' οὐ φύσιν αὐτῶν εἶναι ταύτην. Προσπέφυκε δὲ τῇ μεγάλῃ φλεβὶ τὸ ἥπαρ, τῇ δ' ἄορτῇ οὐ κοινωνεῖ· διὰ γὰρ τοῦ ἥπατος διέχει ἡ ἀπὸ τῆς μεγάλης φλεβὸς φλέψ, ἡ αἱ καλούμεναι πύλαι εἰσὶ τοῦ ἥπατος. Συνήρτηται δὲ καὶ ὁ σπλήν τῇ μεγάλῃ φλεβὶ μόνον· τείνει γὰρ ἀπ' αὐτῆς φλὲψ εἰς τὸν σπλῆνα.

Μετὰ δὲ ταῦτα οἱ νεφροὶ πρὸς αὐτῇ τῇ ῥάχει κεῖνται, ὅμοιοι τὴν φύσιν ὄντες τοῖς βοεῖοις. (497a.) Ἀνώτερος δ' ὁ δεξιός ἐστίν ἐν πᾶσι τοῖς ζώοις τοῖς ἔχουσι νεφρούς· καὶ ἐλάττω δὲ πιμελὴν ἔχει τοῦ ἀριστεροῦ καὶ αὐχμηρότερος ὁ δεξιός. Ἐν πᾶσι δ' ἔχει ὁμοίως τοῖς ἄλλοις καὶ τοῦτο. Φέρουσι δ' εἰς αὐτοὺς πόροι ἔκ τε τῆς μεγάλης φλεβὸς καὶ τῆς ἄορτῆς, πλὴν οὐκ εἰς τὸ κοῖλον. Ἔχουσι γὰρ οἱ νεφροὶ ἐν μέσῳ κοῖλον, οἱ μὲν μεῖζον οἱ δ' ἔλαττον, πλὴν οἱ τῆς φώκης· οὗτοι δ' ὅμοιοι τοῖς βοεῖοις ὄντες στερεώτατοι πάντων εἰσίν. Οἱ δὲ πόροι οἱ τείνοντες εἰς αὐτοὺς εἰς τὸ σῶμα καταναλίσκονται τῶν

νεφρῶν· σημείον δ' ὅτι οὐ περαίνουσι τὸ μὴ ἔχειν αἷμα μηδὲ πηγνυσθαι ἐν αὐτοῖς.

Ἔχουσι δὲ κοιλίαν, ὥσπερ εἴρηται, μικράν. Ἐκ δὲ τοῦ κοίλου τῶν νεφρῶν φέρουσιν εἰς τὴν κύστιν πόροι δύο νεανικοί, καὶ ἄλλοι ἐκ τῆς ἁορτῆς ἰσχυροὶ καὶ συνεχεῖς. Ἐκ μέσου δὲ τῶν νεφρῶν ἑκατέρου φλεψ κοίλη καὶ νευρώδης ἐξήρτηται, τείνουσα παρ' αὐτὴν τὴν ῥάχιν διὰ τῶν στενῶν· εἴτα εἰς ἑκάτερον τὸ ἰσχίον ἀφανίζονται, καὶ πάλιν δῆλαι γίνονται τεταμέναι πρὸς τὸ ἰσχίον. Αὗται δ' αἱ ἀποτομαὶ τῶν φλεβίων εἰς τὴν κύστιν καθήκουσιν. Τελευταία γὰρ ἡ κύστις κεῖται, τὴν μὲν ἐξάρτησιν ἔχουσα τοῖς ἀπὸ τῶν νεφρῶν τεταμένοις πόροις παρὰ τὸν καυλὸν τὸν ἐπὶ τὴν οὐρήθραν τείνοντα, καὶ σχεδὸν πάντῃ κύκλῳ λεπτοῖς καὶ ἰνώδεσιν ὑμένιαις ἐστὶ προσειλημμένη, παραπλησίαις οὖσι τρόπον τινὰ τῷ διαζώματι τοῦ θώρακος. Ἔστι δ' ἡ τοῦ ἀνθρώπου κύστις ἐπεικῶς ἔχουσα μέγεθος.

Πρὸς δὲ τὸν καυλὸν τὸν τῆς κύστεως συνήρτηται τὸ αἰδοῖον, τὸ μὲν ἐξωτάτω τρῆμα συνερρωγὸς εἰς ταῦτό, μικρὸν δ' ὑποκάτω. Τὸ μὲν οὖν εἰς τοὺς ὄρχεις φέρει τῶν τρημάτων, τὸ δ' εἰς τὴν κύστιν, νευρώδες καὶ χονδρῶδες ὄν. Τοῦτον δ' ἐξήρτηνται οἱ ὄρχεις τοῖς ἄρρεσι, περὶ ὧν ἐν τοῖς κοινῇ λεγομένοις διορισθήσεται πῶς ἔχουσιν.

Τὸν αὐτὸν δὲ τρόπον καὶ ἐν τῷ θήλει πάντα πέφυκεν· διαφέρει γὰρ οὐδενὶ τῶν ἔσω πλὴν ταῖς ὑστέραις, ὧν ἡ μὲν ὄψις θεωρεῖσθω ἐκ τῆς διαγραφῆς τῆς ἐν ταῖς ἀνατομαῖς, ἡ δὲ θέσις ἐστὶν ἐπὶ τοῖς ἐντέροις· ἐπὶ δὲ τῆς ὑστέρας ἡ κύστις. Λεκτέον δὲ καὶ περὶ ὑστερῶν κοινῇ πασῶν ἐν τοῖς ἐπομένοις· οὔτε γὰρ ὅμοιαι πᾶσιν οὐθ' ὁμοίως ἔχουσιν.

(497b.) Τὰ μὲν οὖν μόρια καὶ τὰ ἐντὸς καὶ τὰ ἐκτὸς τοῦ ἀνθρώπου ταῦτα καὶ τοιαῦτα, καὶ τοῦτον ἔχει τὸν τρόπον.

## Βιβλίο 2

### Κεφάλαιο 1

Τῶν δ' ἄλλων ζώων τὰ μόρια τὰ μὲν κοινὰ πάντων ἐστίν, ὥσπερ εἴρηται πρότερον, τὰ δὲ γενῶν τινων. Ταῦτα δὲ καὶ ἕτερα ἐστὶν ἀλλήλων τὸν ἤδη πολλάκις εἰρημένον τρόπον. Σχεδὸν γὰρ ὅσα γ' ἐστὶ γένει ἕτερα τῶν ζώων, καὶ τὰ πλεῖστα τῶν μερῶν ἔχει ἕτερα τῷ εἶδει, καὶ τὰ μὲν κατ' ἀναλογίαν ἀδιάφορα μόνον, τῷ γένει δ' ἕτερα, τὰ δὲ τῷ γένει μὲν ταῦτα τῷ εἶδει δ'

ἕτερα· πολλὰ δὲ τοῖς μὲν ὑπάρχει, τοῖς δ' οὐχ ὑπάρχει.

Τὰ μὲν οὖν τετράποδα καὶ ζωοτόκα κεφαλὴν μὲν ἔχει καὶ αὐχένα καὶ τὰ ἐν τῇ κεφαλῇ μόρια ἅπαντα, διαφέρει δὲ τὰς μορφὰς τῶν μορίων ἕκαστον. Καὶ ὁ γε λέων τὸ τοῦ αὐχένος ἔχει ἐν ὅστοῦν, σφονδύλους δ' οὐκ ἔχει· τὰ δ' ἐντὸς ἀνοιχθεῖς ὅμοια πάντ' ἔχει κυνί. Ἔχει δὲ τὰ τετράποδα ζῶα καὶ ζωοτόκα ἀντὶ τῶν βραχιόνων σκέλη πρόσθια, πάντα μὲν τὰ τετράποδα, μάλιστα δ' ἀνάλογα ταῖς χερσὶ τὰ πολυσχιδῇ αὐτῶν· χρήται γὰρ πρὸς πολλὰ ὡς χερσίν. Καὶ τὰ ἀριστερὰ δ' ἦττον ἔχει ἀπολελυμένα τῶν ἀνθρώπων, πλὴν ἐλέφαντος. Οὗτος δὲ τὰ τε περὶ τοὺς δακτύλους ἀδιαρθρωτότερα ἔχει τῶν ποδῶν, καὶ τὰ πρόσθια σκέλη πολλῷ μείζω. Ἔστι δὲ πενταδάκτυλον, καὶ πρὸς τοῖς ὀπισθίοις σκέλεσι σφυρὰ ἔχει βραχέα. Ἔχει δὲ μυκτῆρα τοιοῦτον καὶ τηλικοῦτον ὥστε ἀντὶ χειρῶν ἔχειν αὐτόν· πίνει γὰρ καὶ ἐσθίει ὀρέγων τούτῳ εἰς τὸ στόμα, καὶ τῷ ἐλεφαντιστῇ ἀνορέγει ἄνω. Τούτῳ καὶ δένδρα ἀνασπᾷ, καὶ διὰ τοῦ ὕδατος βαδίζων τούτῳ ἀναφυσᾷ. Τῷ δ' ἄκρῳ ἐγκλίνει, οὐ κάμπτεται δέ· χονδρῶδες γὰρ ἔχει. Μόνον δὲ καὶ ἀμφιδέξιον γίνεται τῶν ἄλλων ζώων ἄνθρωπος.

Τῷ δὲ στήθει τῷ τοῦ ἀνθρώπου πάντα τὰ ζῶα ἀνάλογον ἔχει τοῦτο τὸ μόριον, ἄλλ' οὐχ ὅμοιον· ὁ μὲν γὰρ πλατὺ τὸ στήθος, τὰ δ' ἄλλα στενόν. Μαστοὺς δ' οὐκ ἔχει οὐδὲν ἐν τῷ πρόσθεν ἄλλ' ἢ ἄνθρωπος· ὁ δ' ἐλέφας ἔχει (498a.) μὲν μαστοὺς δύο, ἄλλ' οὐκ ἐν τῷ στήθει ἀλλὰ πρὸς τῷ στήθει.

Τὰς δὲ κάμψεις τῶν κώλων καὶ τῶν ἔμπροσθεν καὶ τῶν ὀπισθεν ὑπεναντίας ἔχουσι καὶ ἑαυταῖς καὶ ταῖς τοῦ ἀνθρώπου καμπαῖς, πλὴν ἐλέφαντος. Τοῖς μὲν γὰρ ζωοτόκοις τῶν τετραπόδων κάμπτεται τὰ μὲν πρόσθια εἰς τὸ πρόσθεν τὰ δ' ὀπίσθια εἰς τοῦτο ὀπισθεν, καὶ ἔχουσι τὰ κοῖλα τῆς περιφερείας πρὸς ἄλληλα ἀντεστραμμένα· ὁ δ' ἐλέφας οὐχ ὥσπερ ἔλεγόν τινες, ἀλλὰ συγκαθίζει καὶ κάμπτει τὰ σκέλη, πλὴν οὐ δύναται διὰ τὸ βάρος ἐπ' ἀμφοτέρα ἅμα, ἀλλ' ἀνακλίνεται ἢ ἐπὶ τὰ εὐώνυμα ἢ ἐπὶ τὰ δεξιὰ, καὶ καθεύδει ἐν τούτῳ τῷ σχήματι, κάμπτει δὲ τὰ ὀπίσθια σκέλη ὥσπερ ἄνθρωπος.

Τοῖς ὠοτόκοις δέ, ὥσπερ κροκοδείλῳ καὶ σαύρᾳ καὶ τοῖς ἄλλοις τοῖς τοιούτοις ἄπασιν, ἀμφοτέρα τὰ σκέλη καὶ τὰ πρόσθια καὶ τὰ ὀπίσθια εἰς τὸ πρόσθεν κάμπτεται, μικρὸν εἰς τὸ πλάγιον παρεγκλίνοντα. Ὅμοίως δὲ καὶ τοῖς ἄλλοις τοῖς πολύποσιν· πλὴν τὰ μετὰ τῶν ἐσχάτων ἀεὶ ἐπαμφοτερίζει καὶ τὴν κάμψιν ἔχει εἰς τὸ πλάγιον μᾶλλον. Ὁ δ' ἄνθρωπος ἄμφω τὰς καμπὰς τῶν κώλων ἐπὶ ταὐτὸ ἔχει καὶ ἐξ ἐναντίας· τοὺς μὲν γὰρ βραχίονας εἰς τοῦτο ὀπισθεν κάμπτει, πλὴν μικρὸν βεβλαίσωται ἐπὶ τὰ πλάγια τὰ ἐντός, τὰ δὲ



σκέλη εἰς τοῦμπροσθεν. Εἰς δὲ τὸ ὀπισθεν τὰ τε πρόσθια καὶ τὰ ὀπίσθια οὐδὲν κάμπτει τῶν ζώων. Ἐναντίως δὲ τοῖς ἀγκῶσι καὶ τοῖς προσθίοις σκέλεσιν ἢ τῶν ὤμων ἔχει καμπὴ πᾶσι, καὶ τῶν ὀπισθεν γονάτων ἢ τῶν ἰσχύων, ὥστ' ἐπεὶ ὁ ἄνθρωπος τοῖς ἄλλοις ἐναντίως κάμπτει, καὶ οἱ ταῦτ' ἔχοντες ἐναντίως.

Παραπλησίους δὲ τὰς καμπὰς ἔχει καὶ ὁ ὄρνις τοῖς τετράποσι ζώοις· δίπους γὰρ ὢν τὰ μὲν σκέλη εἰς τὸ ὀπισθεν κάμπτει, ἀντὶ δὲ βραχιόνων καὶ σκελῶν τῶν ἔμπροσθεν πτέρυγας ἔχει, ὧν ἡ κάμψις ἐστὶν εἰς τὸ πρόσθεν. Ἡ δὲ φώκη ὥσπερ πεπηρωμένον τετράπουν ἐστίν· εὐθὺς γὰρ ἔχει μετὰ τὴν ὠμοπλάτην τοὺς πόδας ὁμοίους χερσίν, ὥσπερ καὶ οἱ τῆς ἄρκτου· πενταδάκτυλοι γὰρ εἰσι, καὶ ἕκαστος τῶν (498b.) δακτύλων καμπὰς ἔχει τρεῖς καὶ ὄνυχας οὐ μέγαν· οἱ δ' ὀπίσθιοι πόδες πενταδάκτυλοι μὲν εἰσι, καὶ τὰς καμπὰς καὶ τοὺς ὄνυχας ὁμοίους ἔχουσι τοῖς προσθίοις, τῷ δὲ σχήματι παραπλήσιοι ταῖς τῶν ἰχθύων οὐραῖς εἰσιν.

Αἱ δὲ κινήσεις τῶν ζώων τῶν μὲν τετραπόδων καὶ πολυπόδων κατὰ διάμετρόν εἰσι, καὶ ἐστᾶσιν οὕτως· ἢ δ' ἀρχὴ ἀπὸ τῶν δεξιῶν πᾶσιν. Κατὰ σκέλος δὲ βαδίζουσιν ὅ τε λέων καὶ αἱ κάμηλοι ἀμφοτέραι, αἳ τε Βακτριαναὶ καὶ αἱ Ἀράβιαι. Τὸ δὲ κατὰ σκέλος ἐστὶν ὅτε οὐ προβαίνει τῷ ἀριστερῷ τὸ δεξιόν, ἀλλ' ἐπακολουθεῖ.

Ἔχουσι δὲ τὰ τετράποδα ζῶα, ὅσα μὲν ὁ ἄνθρωπος μόρια ἔχει ἐν τῷ πρόσθεν, κάτω ἐν τοῖς ὑπτίοις, τὰ δ' ὀπίσθια ἐν τοῖς πρηνέσιν. Ἐτι δὲ τὰ πλεῖστα κέρκον ἔχει· καὶ γὰρ ἡ φώκη μικρὰν ἔχει, ὁμοίαν τῇ τοῦ ἐλάφου. Περὶ δὲ τῶν πιθηκοειδῶν ζώων ὕστερον διορισθήσεται. Πάντα δ' ὅσα τετράποδα καὶ ζωοτόκα, δασέα ὡς εἰπεῖν ἐστι, καὶ οὐχ ὥσπερ ὁ ἄνθρωπος ὀλιγότριχον καὶ μικρότριχον πλὴν τῆς κεφαλῆς, τὴν δὲ κεφαλὴν δασύτατον τῶν ζώων. Ἐτι δὲ τῶν μὲν ἄλλων ζώων τῶν ἐχόντων τρίχας τὰ πρηνῆ δασύτερα, τὰ δ' ὑπτια ἢ λεῖα πάμπαν ἢ ἥττον δασέα· ὁ δ' ἄνθρωπος τούναντίον. Καὶ βλεφαρίδας ὁ μὲν ἄνθρωπος ἐπ' ἄμφω ἔχει, καὶ ἐν μασχάλαις ἔχει τρίχας καὶ ἐπὶ τῆς ἥβης· τῶν δ' ἄλλων οὐδὲν οὔτε τούτων οὐδέτερον οὔτε τὴν κάτω βλεφαρίδα, ἀλλὰ κάτωθεν τοῦ βλεφάρου ἐνίοις μανὰι τρίχες πεφύκασιν.

Αὐτῶν δὲ τῶν τετραπόδων καὶ τρίχας ἐχόντων τῶν μὲν ἅπαν τὸ σῶμα δασύ, καθάπερ ὕδρς καὶ ἄρκτου καὶ κυνός· τὰ δὲ δασύτερα τὸν αὐχένα ὁμοίως πάντη, οἷον ὅσα χαίτην ἔχει, ὥσπερ λέων· τὰ δ' ἐπὶ τῷ πρηνεῖ τοῦ αὐχένος ἀπὸ τῆς κεφαλῆς μέχρι τῆς ἀκρωμίας, οἷον ὅσα λοφιὰν ἔχει, ὥσπερ ἵππος καὶ

ὄρευς καὶ τῶν ἀγρίων καὶ κερατοφόρων βόνασος. Ἔχει δὲ καὶ ὁ ἱππέλαφος καλούμενος ἐπὶ τῇ ἀκρωμίᾳ χαίτην καὶ τὸ θηρίον τὸ πάρδιον ὀνομαζόμενον· ἀπὸ δὲ τῆς κεφαλῆς ἐπὶ τὴν ἀκρωμίαν λεπτὴν ἐκάτερον· ἰδίᾳ δ' ὁ ἱππέλαφος πώγων (499a.) ἔχει κατὰ τὸν λάρυγγα. Ἔστι δ' ἀμφοτέρω κερατοφόρα καὶ διχαλά· ἡ δὲ θήλεια ἱππέλαφος οὐκ ἔχει κέρατα. Τὸ δὲ μέγεθός ἐστι τοῦτου τοῦ ζώου ἐλάφω προσεμφερές. Γίνονται δ' οἱ ἱππέλαφοι ἐν Ἀραχώταις, οὐπὲρ καὶ οἱ βόες οἱ ἄγριοι. Διαφέρουσι δ' οἱ ἄγριοι τῶν ἡμέρων ὅσον περ οἱ ὕες οἱ ἄγριοι πρὸς τοὺς ἡμέρους· μέλανές τε γὰρ εἰσι καὶ ἰσχυροὶ τῷ εἶδει καὶ ἐπίγρυποι, τὰ δὲ κέρατα ἐξυπτιάζοντα ἔχουσι μᾶλλον· τὰ δὲ τῶν ἱππελάφων κέρατα παραπλήσια τοῖς τῆς δορκάδος εἰσίν. Ὁ δ' ἐλέφας ἥκιστα δασύς ἐστι τῶν τετραπόδων. Ἀκολουθοῦσι δὲ κατὰ τὸ σῶμα καὶ αἱ κέρκοι δασύτητι καὶ ψιλότητι, ὅσων αἱ κέρκοι μέγεθος ἔχουσιν· ἓν γὰρ μικρὰν ἔχει πάμπαν.

Αἱ δὲ κάμηλοι ἴδιον ἔχουσι παρὰ τᾶλλα τετράποδα τὸν καλούμενον ὕβον ἐπὶ τῷ νώτῳ. Διαφέρουσι δ' αἱ Βάκτριαι τῶν Ἀραβίων· αἱ μὲν γὰρ δύο ἔχουσιν ὕβους, αἱ δ' ἓνα μόνον, ἄλλον δ' ἔχουσιν ὕβον τοιοῦτον οἷον ἄνω ἐν τοῖς κάτω, ἐφ' οὗ, ὅταν κατακλιθῇ εἰς γόνατα, ἐστήρικται τὸ ἄλλο σῶμα. Θηλὰς μὲν οὖν ἔχει τέτταρας ἡ κάμηλος ὥσπερ βοῦς, καὶ κέρκον ὁμοίαν ὄνῳ, τὸ δ' αἰδοῖον ὀπισθεν. Καὶ γόνυ δ' ἔχει ἐν ἐκάστῳ τῷ σκέλει ἓν, καὶ τὰς καμπὰς οὐ πλείους, ὥσπερ λέγουσί τινες, ἀλλὰ φαίνεται διὰ τὴν ὑπόστασιν τῆς κοιλίας. Καὶ ἀστράγαλον ὅμοιον μὲν βοτῇ, ἰσχνὸν δὲ καὶ μικρὸν ὡς κατὰ τὸ μέγεθος. Ἔστι δὲ διχαλὸν καὶ οὐκ ἄμφωδον, διχαλὸν δ' ὥδε. Ἐκ μὲν τοῦ ὀπισθεν μικρὸν ἔσχισται μέχρι τῆς δευτέρας καμπῆς τῶν δακτύλων· τὰ δ' ἔμπροσθεν ἔσχισται μικρόν, ὅσον ἄχρι τῆς πρώτης καμπῆς τῶν δακτύλων ἐπ' ἄκρῳ, τέτταρα· καὶ ἔστι τι καὶ διὰ μέσου τῶν σχισμάτων, ὥσπερ τοῖς χησίν. Ὁ δὲ πούς ἐστι κάτωθεν σαρκώδης, ὥσπερ καὶ οἱ τῶν ἄρκτων· διὸ καὶ τὰς εἰς πόλεμον ἰούσας ὑποδοῦσι καρβατίνας, ὅταν ἀλγήσωσιν.

Πάντα δὲ τὰ τετράποδα ὁστώδη τὰ σκέλη ἔχει καὶ νευρώδη καὶ ἄσαρκα· ὅλως δὲ καὶ τᾶλλα ζῶα ἅπαντα, (499b.) ὅσα ἔχει πόδας, ἐκτὸς ἀνθρώπου. Ἔτι δ' ἀνίσχια· καὶ γὰρ οἱ ὄρνιθες ἔτι μᾶλλον τοῦτο πεπόνθασιν. Ὁ δ' ἄνθρωπος τοῦναντίον· σαρκώδη γὰρ ἔχει σχεδὸν μάλιστα τοῦ σώματος τὰ ἰσχία καὶ τοὺς μηροὺς καὶ τὰς κνήμας· αἱ γὰρ καλούμεναι γαστροκνημίαι ἐν ταῖς κνήμαις εἰσὶ σαρκώδεις.

Τῶν δὲ τετραπόδων καὶ ἐναίμων καὶ ζωοτόκων τὰ μὲν ἐστὶ πολυσχιδῆ, ὥσπερ αἱ τοῦ ἀνθρώπου χεῖρες καὶ οἱ πόδες (πολυδάκτυλα γὰρ ἓν ἐστὶν, οἷον λέων, κύων, πάρδαλις), τὰ δὲ δισχιδῆ, καὶ ἀντὶ τῶν ὀνύχων χηλὰς ἔχει, ὥσπερ πρόβατον καὶ αἰξ καὶ ἔλαφος καὶ ἵππος ὁ ποτάμιος· τὰ δ' ἀσχιδῆ, οἷον

τὰ μώνυχα, ὥσπερ ἵππος καὶ ὄρεύς. Τὸ δὲ τῶν ὑῶν γένος ἐπαμφοτερίζει· εἰσὶ γὰρ καὶ ἐν Ἰλλυριοῖς καὶ ἐν Παιονίᾳ καὶ ἄλλοθι μώνυχες ὕες. Τὰ μὲν οὖν διχαλὰ δύο ἔχει σχίσεις ὀπισθεν· τοῖς δὲ μώνυξι τοῦτ' ἐστὶ συνεχές.

Ἔστι δὲ καὶ τὰ μὲν κερατοφόρα τῶν ζώων τὰ δ' ἄκερα. Τὰ μὲν οὖν πλεῖστα τῶν ἐχόντων κέρατα διχαλὰ κατὰ φύσιν ἐστίν, οἷον βοῦς καὶ ἔλαφος καὶ αἶξ· μώνυχον δὲ καὶ δίκερων οὐδὲν ὥπται. Μονοκέρατα δὲ καὶ μώνυχα ὀλίγα, οἷον ὁ Ἰνδικὸς ὄνος. Μονόκερων δὲ καὶ διχαλὸν ὄρυξ. Καὶ ἀστράγαλον δ' ὁ Ἰνδικὸς ὄνος ἔχει τῶν μωνύχων μόνον· ἡ γὰρ ὕς, ὥσπερ ἐλέχθη πρότερον, ἐπαμφοτερίζει, διὸ καὶ οὐ καλλιαστράγαλόν ἐστιν. Τῶν δὲ διχαλῶν πολλὰ ἔχει ἀστράγαλον. Πολυσχιδὲς δ' οὐδὲν ὥπται τοιοῦτον ἔχον ἀστράγαλον, ὥσπερ οὐδ' ἄνθρωπος, ἀλλ' ἡ μὲν λὺγξ ὅμοιον ἡμιαστραγαλίῳ, ὁ δὲ λέων, οἷόν περ πλάττουσι, λαβυρινθώδη. Πάντα δὲ τὰ ἔχοντα ἀστραγάλους ἐν τοῖς ὀπισθεν ἔχει σκέλεσιν. Ἔχει δ' ὀρθὸν τὸν ἀστράγαλον ἐν τῇ καμπῇ, τὸ μὲν πρηνὲς ἔξω, τὸ δ' ὑπτίον εἴσω, καὶ τὰ μὲν κῶα ἐντὸς ἐστραμμένα πρὸς ἄλληλα, τὰ δὲ χῖα καλούμενα ἔξω, καὶ τὰς κεραίας ἄνω. Ἡ μὲν οὖν θέσις τῶν ἀστραγάλων τοῖς ἔχουσι πᾶσι τοῦτον ἔχει τὸν τρόπον.

Διχαλὰ δ' ἅμα καὶ χαίτην ἔχοντα καὶ κέρατα δύο κεκαμμένα εἰς αὐτὰ ἐστίν (500a.) ἔνια τῶν ζώων, οἷον ὁ βόνασος, ὃς γίνεται περὶ τὴν Παιονίαν καὶ τὴν Μαιδικήν. Πάντα δ' ὅσα κερατοφόρα, τετράποδά ἐστιν, εἰ μὴ τι κατὰ μεταφορὰν λέγεται ἔχειν κέρας καὶ λόγου χάριν, ὥσπερ τοὺς περὶ Θήβας ὄφεις οἱ Αἰγύπτιοί φασιν, ἔχοντας ἐπανάστασιν ὅσον προφάσεως χάριν.

Τῶν δ' ἐχόντων κέρας δι' ὅλου μὲν ἔχει στερεὸν μόνον ἔλαφος, τὰ δ' ἄλλα κοῖλα μέχρι τινός, τὸ δ' ἔσχατον στερεόν. Τὸ μὲν οὖν κοῖλον ἐκ τοῦ δέρματος πέφυκε μᾶλλον· ὃ δὲ περὶ τοῦτο περιήρμωσται τὸ στερεὸν ἐκ τῶν ὀστέων, οἷον τὰ κέρατα τῶν βοῶν. Αποβάλλει δὲ τὰ κέρατα μόνον ἔλαφος κατ' ἔτος, ἀρξάμενος ἀπὸ διετοῦς, καὶ πάλιν φύει· τὰ δ' ἄλλα συνεχῶς ἔχει, ἐὰν μὴ τι βία πηρωθῇ.

Ἔτι δὲ περὶ τε τοὺς μαστοὺς ὑπεναντίως ἐν τοῖς ἄλλοις ζώοις ὑπάρχει πρὸς αὐτὰ τε καὶ πρὸς τὸν ἄνθρωπον, καὶ περὶ τὰ ὄργανα τὰ χρήσιμα πρὸς τὴν ὀχείαν. Τὰ μὲν γὰρ ἔμπροσθεν ἔχει τοὺς μαστοὺς ἐν τῷ στήθει ἢ πρὸς τῷ στήθει, καὶ δύο μαστοὺς καὶ δύο θηλάς, ὥσπερ ἄνθρωπος καὶ ἐλέφας, καθάπερ εἴρηται πρότερον. Καὶ γὰρ ὁ ἐλέφας ἔχει τοὺς μαστοὺς δύο περὶ τὰς μασχάλας· ἔχει δ' ἡ θήλεια τοὺς μαστοὺς μικροὺς παντελῶς καὶ οὐ κατὰ λόγον τοῦ σώματος, ὥστ' ἐκ τοῦ πλαγίου μὴ πάνυ ὀρᾶν· ἔχουσι δὲ καὶ οἱ ἄρρενες μαστούς, ὥσπερ αἱ θήλειαι, μικροὺς παντελῶς. Ἡ δ' ἄρκτος

τέτταρας. Τὰ δὲ δύο μὲν μαστοὺς ἔχει, ἐν τοῖς μηροῖς δ' ἔχει, καὶ τὰς θηλάς δύο, ὥσπερ πρόβατον· τὰ δὲ τέτταρας θηλάς, ὥσπερ βοῦς. Τὰ δ' οὐτ' ἐν τῷ στήθει ἔχει τοὺς μαστοὺς οὐτ' ἐν τοῖς μηροῖς, ἀλλ' ἐν τῇ γαστρὶ, οἷον κύων καὶ ὄνος, καὶ πολλοὺς, οὐ πάντας δ' ἴσους. Τὰ μὲν οὖν ἄλλα πλείους ἔχει, ἡ δὲ πάρδαλις τέτταρας ἐν τῇ γαστρὶ, ἡ δὲ λέαινα δύο ἐν τῇ γαστρὶ. Ἔχει δὲ καὶ ἡ κάμηλος μαστοὺς δύο καὶ θηλάς τέτταρας, ὥσπερ ὁ βοῦς. Τῶν δὲ μωνύχων τὰ ἄρρενα οὐκ ἔχουσι μαστούς, πλὴν ὅσα ἐοίκασι τῇ μητρὶ, ὅπερ συμβαίνει ἐπὶ τῶν ἵππων.

Τὰ δ' αἰδοῖα τῶν μὲν ἀρρένων τὰ μὲν ἔξω ἔχει, οἷον ἄνθρωπος καὶ ἵππος καὶ ἄλλα πολλά, τὰ δ' ἐντός, (500b.) ὥσπερ δελφίς· καὶ τῶν ἔξω δ' ἐχόντων τὰ μὲν εἰς τὸ πρόσθεν, ὥσπερ καὶ τὰ εἰρημένα, καὶ τούτων τὰ μὲν ἀπολελυμένα καὶ τὸ αἰδοῖον καὶ τοὺς ὄρχεις, ὥσπερ ἄνθρωπος, τὰ δὲ πρὸς τῇ γαστρὶ καὶ τοὺς ὄρχεις καὶ τὸ αἰδοῖον, καὶ τὰ μὲν μᾶλλον τὰ δ' ἥττον ἀπολελυμένα· οὐ γὰρ ὡσαύτως ἀπολέλυται κάπρῳ καὶ ἵππῳ τοῦτο τὸ μόριον. Ἔχει δὲ καὶ ὁ ἐλέφας τὸ αἰδοῖον ὅμοιον μὲν ἵππῳ, μικρὸν δὲ καὶ οὐκ ἀνὰ λόγον τοῦ σώματος, τοὺς δ' ὄρχεις οὐκ ἔξω φανερούς, ἀλλ' ἐντὸς περὶ τοὺς νεφρούς· διὸ καὶ ἐν τῇ ὀχείᾳ ἀπαλλάττεται ταχέως. Ἡ δὲ θήλεια τὸ αἰδοῖον ἔχει ἐν τῷ τόπῳ οὗ τὰ οὐθата τῶν προβάτων ἐστίν· ὅταν δ' ὀργᾷ ὀχεύεσθαι, ἀνασπᾷ ἄνω καὶ ἐκτρέπει πρὸς τὸν ἔξω τόπον, ὥστε ῥαδίαν εἶναι τῷ ἄρρενι τὴν ὀχείαν· ἀνέρρωγε δ' ἐπικεῖν ἐπὶ πολὺ τὸ αἰδοῖον.

Τοῖς μὲν οὖν πλείστοις αὐτῶν τὰ αἰδοῖα τοῦτον ἔχει τὸν τρόπον· ἔνια δ' ὀπισθοιθητικά ἐστίν, οἷον λυγρὸν καὶ λέων καὶ κάμηλος καὶ δασύπους. Τὰ μὲν οὖν ἄρρενα ὑπεναντίως ἔχει ἀλλήλοις, καθάπερ εἴρηται, τὰ δὲ θήλεα πάντα ὀπισθοιθητικά ἐστίν· καὶ γὰρ ὁ θήλυς ἐλέφας ἔχει τὰ αἰδοῖα ὑπὸ τοῖς μηροῖς, καθάπερ καὶ τὰλλα.

Τῶν δ' αἰδοίων διαφορὰ πολλή ἐστίν. Τὰ μὲν γὰρ ἔχει χονδρῶδες τὸ αἰδοῖον καὶ σαρκῶδες, ὥσπερ ἄνθρωπος· τὸ μὲν οὖν σαρκῶδες οὐκ ἐμφυσᾶται, τὸ δὲ χονδρῶδες ἔχει αὐξησιν. Τὰ δὲ νευρώδη, οἷον καμήλου καὶ ἐλάφου, τὰ δ' ὀστώδη, ὥσπερ ἀλώπεκος καὶ λύκου καὶ ἱκτιδος καὶ γαλῆς· καὶ γὰρ ἡ γαλῆ ὀστοῦν ἔχει τὸ αἰδοῖον.

Πρὸς δὲ τούτοις ὁ μὲν ἄνθρωπος τελειωθείς τὰ ἄνω ἔχει ἐλάττω τῶν κάτωθεν, τὰ δ' ἄλλα ζῶα, ὅσα ἔναιμα, τοῦναντίον. Λέγομεν δ' ἄνω τὸ ἀπὸ κεφαλῆς μέχρι τοῦ μορίου ἢ ἡ τοῦ περιττώματός ἐστίν ἔξοδος, κάτω δὲ τὸ ἀπὸ τούτου λοιπόν. Τοῖς μὲν οὖν ἔχουσι πόδας τὸ ὀπίσθιον ἐστὶ σκέλος τὸ κάτωθεν μέρος πρὸς τὸ μέγεθος, τοῖς δὲ μὴ ἔχουσιν οὐραὶ καὶ κέρκοι καὶ τὰ

τοιαῦτα.

Τελειούμενα μὲν οὖν τοιαῦτ' ἐστίν, ἐν δὲ τῇ αὐξήσει διαφέρει· ὁ μὲν γὰρ ἄνθρωπος μείζω τὰ ἄνω ἔχει νέος ὢν ἢ τὰ κάτω, αὐξανόμενος δὲ μεταβάλλει (501a.) τοῦναντίον (διὸ καὶ μόνον οὐ τὴν αὐτὴν κίνησιν ποιεῖται τῆς πορείας νέος ὢν καὶ τελειωθείς, ἀλλὰ τὸ πρῶτον παιδίον ὃν ἔρπει τετραποδίζον), τὰ δ' ἀνὰ λόγον ἀποδίδωσι τὴν αὕξησιν, οἷον κύων. Ἐνια δὲ τὸ πρῶτον ἐλάττω τὰ ἄνω, τὰ δὲ κάτω μείζω ἔχει, αὐξανόμενα δὲ τὰ ἄνω γίνεται μείζω, ὥσπερ τὰ λοφοῦρα· τούτων γὰρ οὐδὲν γίνεται μείζον ὕστερον τὸ ἀπὸ τῆς ὀπλῆς μέχρι τοῦ ἰσχίου.

Ἔστι δὲ καὶ περὶ τοὺς ὀδόντας πολλὴ διαφορὰ τοῖς ἄλλοις ζώοις καὶ πρὸς αὐτὰ καὶ πρὸς ἄνθρωπον. Ἐχει μὲν γὰρ πάντα ὀδόντας ὅσα τετράποδα καὶ ἔναιμα καὶ ζωοτόκα, ἀλλὰ πρῶτον τὰ μὲν ἐστὶν ἀμφώδοντα, τὰ δ' οὐκ ἀμφώδοντα. Ὅσα μὲν γὰρ ἐστὶ κερατοφόρα, οὐκ ἀμφώδοντα· οὐ γὰρ ἔχει τοὺς προσθίους ὀδόντας ἐπὶ τῆς ἄνω σιαγόνος.

Ἔστι δ' ἔνια οὐκ ἀμφώδοντα καὶ ἀκέρατα, οἷον κάμηλος. Καὶ τὰ μὲν χαυλιόδοντας ἔχει, ὥσπερ οἱ ἄρρενες ὕες, τὰ δ' οὐκ ἔχει. Ἔτι δὲ τὰ μὲν ἐστὶ καρχαρόδοντα αὐτῶν, οἷον λέων καὶ πάρδαλις καὶ κύων, τὰ δ' ἀνεπάλλακτα, οἷον ἵππος καὶ βοῦς· καρχαρόδοντα γὰρ ἐστὶν ὅσα ἐπαλλάττει τοὺς ὀδόντας τοὺς ὀξεῖς. Ἄμα δὲ χαυλιόδοντα καὶ κέρας οὐδὲν ἔχει ζῶον, οὐδὲ καρχαρόδουν καὶ τούτων θάτερον. Τὰ δὲ πλεῖστα τοὺς προσθίους ἔχει ὀξεῖς, τοὺς δ' ἐντὸς πλατεῖς. Ἡ δὲ φώκη καρχαρόδουν ἐστὶ πᾶσι τοῖς ὀδοῦσιν, ὡς ἐπαλλάττουσα τῷ γένει τῶν ἰχθύων· οἱ γὰρ ἰχθύες πάντες σχεδὸν καρχαρόδοντές εἰσιν.

Διστοίχους δ' ὀδόντας οὐδὲν ἔχει τούτων τῶν γενῶν. Ἔστι δέ τι, εἰ δεῖ πιστεῦσαι Κτησίᾳ· ἐκεῖνος γὰρ τὸ ἐν Ἰνδοῖς θηρίον, ᾧ ὄνομα εἶναι μαρτιχόραν, τοῦτ' ἔχειν ἐπ' ἀμφοτέρᾳ φησι τριστοίχους τοὺς ὀδόντας· εἶναι δὲ μέγεθος μὲν ἡλίκον λέοντα καὶ δασὺ ὁμοίως, καὶ πόδας ἔχειν ὁμοίους, πρόσωπον δὲ καὶ ὦτα ἀνθρωποειδές, τὸ δ' ὄμμα γλαυκόν, τὸ δὲ χρῶμα κινναβάρινον, τὴν δὲ κέρκον ὁμοίαν τῇ τοῦ σκορπίου τοῦ χερσαίου, ἐν ἣ κέντρον ἔχειν καὶ τὰς ἀποφυάδας ἀπακοντίζειν, φθέγγεσθαι δ' ὅμοιον φωνῇ ἅμα σύριγγος καὶ σάλπιγγος, ταχὺ δὲ θεῖν οὐχ ἥττον τῶν (501b.) ἐλάφων, καὶ εἶναι ἄγριον καὶ ἀνθρωποφάγον.

Ἄνθρωπος μὲν οὖν βάλλει τοὺς ὀδόντας, βάλλει δὲ καὶ ἄλλα τῶν ζώων, οἷον ἵππος καὶ ὄρεϋς καὶ ὄνος. Βάλλει δ' ἄνθρωπος τοὺς προσθίους, τοὺς δὲ

γομφίους οὐδὲν βάλλει τῶν ζώων. Ὑς δ' ὅλως οὐδένα βάλλει τῶν ὀδόντων.

## Κεφάλαιο 2

Περὶ δὲ τῶν κυνῶν ἀμφισβητεῖται, καὶ οἱ μὲν ὅλως οὐκ οἶονται βάλλειν οὐδένα αὐτούς, οἱ δὲ τοὺς κυνόδοντας μόνον· ὥπται δ' ὅτι βάλλει καθάπερ καὶ ἄνθρωπος, ἀλλὰ λανθάνει διὰ τὸ μὴ βάλλειν πρότερον πρὶν ὑποφυῶσιν ἐντὸς ἴσοι. Ὅμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν ἀγρίων εἰκὸς συμβαίνειν, ἐπεὶ λέγονταί γε τοὺς κυνόδοντας μόνον βάλλειν. Τοὺς δὲ κύνας διαγινώσκουσι τοὺς νεωτέρους καὶ πρεσβυτέρους ἐκ τῶν ὀδόντων· οἱ μὲν γὰρ νέοι λευκοὺς ἔχουσι καὶ ὀξεῖς τοὺς ὀδόντας, οἱ δὲ πρεσβύτεροι μέλανας καὶ ἀμβλεῖς.

## Κεφάλαιο 3

Ἐναντίως δὲ πρὸς τᾶλλα ζῶα καὶ ἐπὶ τῶν ἵππων συμβαίνει· τὰ μὲν γὰρ ἄλλα ζῶα πρεσβύτερα γινόμενα μελαντέρους ἔχει τοὺς ὀδόντας, ὁ δ' ἵππος λευκοτέρους.

Ὅριζουσι δὲ τοὺς τε ὀξεῖς καὶ τοὺς πλατεῖς οἱ καλούμενοι κυνόδοντες, ἀμφοτέρων μετέχοντες τῆς μορφῆς· κάτωθεν μὲν γὰρ πλατεῖς, ἄνωθεν δ' εἰσὶν ὀξεῖς.

Ἔχουσι δὲ πλείους οἱ ἄρρενες τῶν θηλειῶν ὀδόντας καὶ ἐν ἀνθρώποις καὶ ἐπὶ προβάτων καὶ αἰγῶν καὶ ὕων· ἐπὶ δὲ τῶν ἄλλων οὐ τεθεώρηται πῶ.

Ὅσοι δὲ πλείους ἔχουσι, μακροβιώτεροι ὥς ἐπὶ τὸ πολὺ εἰσιν, οἱ δ' ἐλάττους καὶ ἀραιόδοντες ὥς ἐπὶ τὸ πολὺ βραχυβιώτεροι.

## Κεφάλαιο 4

Φύονται δ' οἱ τελευταῖοι τοῖς ἀνθρώποις γόμφιοι, οὓς καλοῦσι κραντῆρας, περὶ τὰ εἴκοσιν ἔτη καὶ ἀνδράσι καὶ γυναιξίν. Ἦδη δέ τισι γυναιξὶ καὶ ὀγδοήκοντα ἐτῶν οὔσαις ἔφυσαν γόμφιοι ἐν τοῖς ἐσχάτοις, πόνον παρασχόντες ἐν τῇ ἀνατολῇ, καὶ ἀνδράσιν ὡσαύτως· τοῦτο δὲ συμβαίνει ὅσοις ἂν μὴ ἐν τῇ ἡλικίᾳ ἀνατείλωσιν οἱ κραντῆρες.

## Κεφάλαιο 5

Ὁ δ' ἐλέφας ὀδόντας μὲν ἔχει τέτταρας ἐφ' ἑκάτερα, οἷς κατεργάζεται τὴν

τροφὴν (λεαίνει δ' ὥσπερ κρίμνα), χωρὶς δὲ τούτων ἄλλους δύο τοὺς μεγάλους. Ὁ μὲν οὖν ἄρρην τούτους ἔχει μεγάλους τε καὶ ἀνασίμους, ἡ δὲ θήλεια μικροὺς καὶ ἐξ (502a.) ἐναντίας τοῖς ἄρρεσιν· κάτω γὰρ οἱ ὀδόντες βλέπουσιν.

## Κεφάλαιο 6

Ἐχει δ' ὁ ἐλέφας εὐθύς γενόμενος ὀδόντας, τοὺς μέντοι μεγάλους ἀδήλους τὸ πρῶτον. Γλῶτταν δ' ἔχει μικράν τε σφόδρα καὶ ἐντός, ὥστε ἔργον ἐστὶν ἰδεῖν.

## Κεφάλαιο 7

Ἐχουσι δὲ τὰ ζῶα καὶ τὰ μεγέθη διαφέροντα τοῦ στόματος. Τῶν μὲν γὰρ ἐστὶ τὰ στόματα ἀνερρωγότα, ὥσπερ κυνὸς καὶ λέοντος καὶ πάντων τῶν καρχαροδόντων, τὰ δὲ μικρόστομα, ὥσπερ ἄνθρωπος, τὰ δὲ μεταξύ, οἷον τὸ τῶν ὑῶν γένος.

Ὁ δ' ἵππος ὁ ποτάμιος ὁ ἐν Αἰγύπτῳ χαίτην μὲν ἔχει ὥσπερ ἵππος, διχαλὸν δ' ἐστὶν ὥσπερ βοῦς, τὴν δ' ὄψιν σιμός. Ἐχει δὲ καὶ ἀστράγαλον ὥσπερ τὰ διχαλά, καὶ χαυλιόδοντας ὑποφαινομένους, κέρκον δ' ὑός, φωνὴν δ' ἵππου· μέγεθος δ' ἐστὶν ἡλίκον ὄνος. Τοῦ δὲ δέρματος τὸ πάχος ὥστε δόρατα ποιεῖσθαι ἐξ αὐτοῦ. Τὰ δ' ἐντὸς ἔχει ὅμοια ἵππῳ καὶ ὄνῳ.

## Κεφάλαιο 8

Ἐνια δὲ τῶν ζώων ἐπαμφοτερίζει τὴν φύσιν τῷ τ' ἀνθρώπῳ καὶ τοῖς τετράποσιν, οἷον πίθηκοι καὶ κῆβοι καὶ κυνοκέφαλοι. Ἔστι δ' ὁ μὲν κῆβος πίθηκος ἔχων οὐράν. Καὶ οἱ κυνοκέφαλοι δὲ τὴν αὐτὴν ἔχουσι μορφήν τοῖς πιθήκοις, πλὴν μείζονές τ' εἰσὶ καὶ ἰσχυρότεροι καὶ τὰ πρόσωπα ἔχοντες κυνοειδέστερα, ἔτι δ' ἀγριώτερά τε τὰ ἥθη καὶ τοὺς ὀδόντας ἔχουσι κυνοειδεστέρους καὶ ἰσχυροτέρους. Οἱ δὲ πίθηκοι δασεῖς μὲν εἰσι τὰ πρηνῇ ὥς ὄντες τετράποδες, καὶ τὰ ὑπτία δ' ὡσαύτως ὥς ὄντες ἀνθρωποειδεῖς (τοῦτο γὰρ ἐπὶ τῶν ἀνθρώπων ἐναντίως ἔχει καὶ ἐπὶ τῶν τετραπόδων, καθάπερ ἐλέχθη πρότερον)· πλὴν ἢ τε θριξ παχεῖα, καὶ δασεῖς ἐπ' ἀμφοτέρα σφόδρα εἰσὶν οἱ πίθηκοι. Τὸ δὲ πρόσωπον ἔχει πολλὰς ὁμοιότητας τῷ τοῦ ἀνθρώπου· καὶ γὰρ μυκτῆρας καὶ ὦτα παραπλήσια ἔχει, καὶ ὀδόντας ὥσπερ ὁ ἄνθρωπος, καὶ τοὺς προσθίους καὶ τοὺς γομφίους.

Ἔτι δὲ βλεφαρίδας τῶν ἄλλων τετραπόδων ἐπὶ θάτερα οὐκ ἔχοντων οὗτος ἔχει μὲν λεπτὰς δὲ σφόδρα, καὶ μᾶλλον τὰς κάτω, καὶ μικρὰς πάμπαν· τὰ γὰρ ἄλλα τετράποδα ταύτας οὐκ ἔχει.

Ἔτι δ' ἐν τῷ στήθει δύο θηλὰς μαστῶν μικρῶν. Ἔχει δὲ καὶ βραχίονας ὥσπερ ἄνθρωπος, πλὴν (502b.) δασεῖς· καὶ κάμπτει καὶ τούτους καὶ τὰ σκέλη ὥσπερ ἄνθρωπος, τὰς περιφερείας πρὸς ἀλλήλας ἀμφοτέρων τῶν κώλων. Πρὸς δὲ τούτοις χεῖρας καὶ δακτύλους καὶ ὄνυχας ὁμοίους ἀνθρώπῳ, πλὴν πάντα ταῦτα ἐπὶ τὸ θηριωδέστερον.

Ἰδίους δὲ τοὺς πόδας· εἰσὶ γὰρ οἷον χεῖρες μεγάλαι, καὶ οἱ δάκτυλοι ὥσπερ οἱ τῶν χειρῶν, ὁ μέσος μακρότατος, καὶ τὸ κάτω τοῦ ποδὸς χειρὶ ὅμοιον, πλὴν ἐπιμηκέστερον τοῦ τῆς χειρός, ἐπὶ τὰ ἔσχατα τείνον, καθάπερ θέναρ· τοῦτο δ' ἐπ' ἄκρου σκληρότερον, κακῶς καὶ ἀμυδρῶς μιμούμενον πτέρνην. Κέχρηται δὲ τοῖς ποσὶν ἐπ' ἄμφω, καὶ ὡς χερσὶ καὶ ὡς ποσί, καὶ συγκάμπτει ὥσπερ χεῖρας. Ἔχει δὲ τὸν ἀγκῶνα καὶ τὸν μηρὸν βραχεῖς ὡς πρὸς τὸν βραχίονα καὶ τὴν κνήμην. Ὀμφαλὸν δ' ἐξέχοντα μὲν οὐκ ἔχει, σκληρὸν δέ τι κατὰ τὸν τόπον τοῦ ὀμφαλοῦ. Τὰ δ' ἄνω τοῦ κάτω πολὺ μείζονα ἔχει, ὥσπερ τὰ τετράποδα· σχεδὸν γὰρ ὡς πέντε πρὸς τρία ἐστίν. Καὶ διὰ τε ταῦτα καὶ διὰ τὸ τοὺς πόδας ἔχειν ὁμοίους χερσὶ καὶ ὥσπερ ἀνὲρ συγκειμένους ἐκ χειρὸς καὶ ποδός (ἐκ μὲν ποδὸς κατὰ τὸ τῆς πτέρνης ἔσχατον, ἐκ δὲ χειρὸς τὰλλα μέρη· καὶ γὰρ οἱ δάκτυλοι ἔχουσι τὸ καλούμενον θέναρ), διατελεῖ δὲ τὸν πλείω χρόνον τετράπουν ὢν μᾶλλον ἢ ὀρθόν· καὶ οὕτ' ἰσχία ἔχει ὡς τετράπουν ὢν οὐτε κέρκον ὡς δίπουν, πλὴν μικρὰν τὸ ὅλον, ὅσον σημείου χάριν. Ἔχει δὲ καὶ τὸ αἰδοῖον ἢ θήλεια ὅμοιον γυναικί, ὁ δ' ἄρρην κυνωδέστερον ἢ ὁ ἄνθρωπος.

## Κεφάλαιο 9

Οἱ δὲ κῆβοι, καθάπερ εἴρηται πρότερον, ἔχουσι κέρκον. Τὰ δ' ἐντὸς διαιρεθέντα ὅμοια ἔχουσιν ἀνθρώπῳ πάντα τὰ τοιαῦτα.

Τὰ μὲν οὖν τῶν εἰς τὸ ἐκτὸς ζωτοκούντων μόρια τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 10

Τὰ δὲ τετράποδα μὲν ὠτοκά δὲ καὶ ἔναιμα (οὐδὲν δὲ ὠτοκεῖ χερσαῖον καὶ ἔναιμον μὴ τετράπουν ὢν ἢ ἄπουν) κεφαλὴν μὲν ἔχει καὶ αὐχένα καὶ νῶτον καὶ τὰ πρηνῆ καὶ τὰ ὑπτία τοῦ σώματος, ἔτι δὲ σκέλη πρόσθια καὶ ὀπίσθια



καὶ τὸ ἀνάλογον τῷ στήθει, ὥσπερ τὰ ζωοτόκα τῶν τετραπόδων, καὶ κέρκον τὰ μὲν πλεῖστα μεῖζω, ὀλίγα δ' ἐλάττω. Πάντα δὲ πολυδάκτυλα καὶ πολυσχιδῆ ἔστι τὰ τοιαῦτα. Πρὸς δὲ τούτοις τὰ αἰσθητήρια καὶ γλῶτταν (503a.) πάντα, πλὴν ὁ ἐν Αἰγύπτῳ κροκόδειλος. Οὗτος δὲ παραπλησίως τῶν ἰχθύων τισίν· ὅλως μὲν γὰρ οἱ ἰχθύες ἀκανθώδη καὶ οὐκ ἀπολελυμένην ἔχουσι τὴν γλῶτταν, ἔνιοι δὲ πάμπαν λεῖον καὶ ἀδιάρθρωτον τὸν τόπον μὴ ἐγκλίναντι σφόδρα τὸ χεῖλος.

Ἵστα δ' οὐκ ἔχουσιν ἀλλὰ τὸν πόρον τῆς ἀκοῆς μόνον πάντα τὰ τοιαῦτα· οὐδὲ μαστούς, οὐδ' αἰδοῖον, οὐδ' ὄρχεις ἔξω φανεροὺς ἀλλ' ἐντός, οὐδὲ τρίχας, ἀλλὰ πάντ' ἔστι φολιδωτά. Ἔτι δὲ καρχαρόδοντα πάντα.

Οἱ δὲ κροκόδειλοι οἱ ποτάμιοι ἔχουσιν ὀφθαλμοὺς μὲν ὑός, ὀδόντας δὲ μεγάλους καὶ χαυλιόδοντας καὶ ὄνυχας ἰσχυροὺς καὶ δέρμα ἄρρηκτον φολιδωτόν· βλέπουσι δ' ἐν μὲν τῷ ὕδατι φαύλως, ἔξω δ' ὀξύτατον. Τὴν μὲν οὖν ἡμέραν ἐν τῇ γῇ τὸ πλεῖστον διατρίβει, τὴν δὲ νύκτα ἐν τῷ ὕδατι· ἀλεεινότερον γάρ ἔστι τῆς αἰθρίας.

## Κεφάλαιο 11

Ὁ δὲ χαμαιλέων ὅλον μὲν τοῦ σώματος ἔχει τὸ σχῆμα σαυροειδές, τὰ δὲ πλευρὰ κάτω καθήκει συνάπτοντα πρὸς τὸ ὑπογάστριον, καθάπερ τοῖς ἰχθύσι, καὶ ἡ ῥάχis ἐπανέστηκεν ὁμοίως τῇ τῶν ἰχθύων. Τὸ δὲ πρόσωπον ὁμοιότατον τῷ τοῦ χοιροπιθήκου. Κέρκον δ' ἔχει μακρὰν σφόδρα, εἰς λεπτὸν καθήκουσαν καὶ συνελιττομένην ἐπὶ πολὺ, καθάπερ ἱμάντα. Μετεωρότερος δ' ἔστι τῇ ἀπὸ τῆς γῆς ἀποστάσει τῶν σαύρων, τὰς δὲ καμπὰς τῶν σκελῶν καθάπερ οἱ σαῦροι ἔχει. Τῶν δὲ ποδῶν ἕκαστος αὐτοῦ διχῇ διήρηται εἰς μέρη θέσιν ὁμοίαν πρὸς αὐτὰ ἔχοντα οἷανπερ ὁ μέγας ἡμῶν δάκτυλος πρὸς τὸ λοιπὸν τῆς χειρὸς ἀντίθεσιν ἔχει. Ἐπὶ βραχὺ δὲ καὶ τούτων τῶν μερῶν ἕκαστον διήρηται εἰς τινες δακτύλους, τῶν μὲν ἔμπροσθεν ποδῶν τὰ μὲν πρὸς αὐτὸν τρίχα, τὰ δ' ἐκτὸς δίχα, τῶν δ' ὀπισθίων τὰ μὲν πρὸς αὐτὸν δίχα, τὰ δ' ἐκτὸς τρίχα. Ἔχει δὲ καὶ ὀνύχια ἐπὶ τούτων ὅμοια τοῖς τῶν γαμψωνύχων.

Τραχὺ δ' ἔχει ὅλον τὸ σῶμα, καθάπερ ὁ κροκόδειλος. Ὀφθαλμοὺς δ' ἔχει ἐν κοίλῳ τε κειμένους καὶ μεγάλους σφόδρα καὶ στρογγύλους καὶ δέρματι ὁμοίῳ τῷ τοῦ λοιποῦ σώματος περιεχομένους. Κατὰ μέσους δ' αὐτοὺς διαλέλειπται μικρὰ τῇ ὄψει χώρα, δι' ἧς ὁρᾷ· οὐδέποτε δὲ τῷ δέρματι ἐπικαλύπτει τοῦτο. Στρέφει δὲ (503b.) τὸν ὀφθαλμὸν κύκλῳ τὴν ὄψιν ἐπὶ πάντας τοὺς τόπους μεταβάλλει, καὶ οὕτως ὁρᾷ ὃ βούλεται.

Τῆς δὲ χροιάς ἡ μεταβολὴ ἐμφυσωμένῳ αὐτῷ γίνεται· ἔχει δὲ καὶ μέλαιναν ταύτην, οὐ πόρρω τῆς τῶν κροκοδείλων, καὶ ὠχρὰν καθάπερ οἱ σαῦροι, μέλανι ὥσπερ τὰ παρδάλια διαπεποικιλμένην. Γίνεται δὲ καθ' ἅπαν τὸ σῶμα αὐτοῦ ἡ τοιαύτη μεταβολή· καὶ γὰρ οἱ ὀφθαλμοὶ συµμεταβάλλουσιν ὁμοίως τῷ λοιπῷ σώματι καὶ ἡ κέρκος. Ἡ δὲ κίνησις αὐτοῦ νωθῆς ἰσχυρῶς ἐστὶ, καθάπερ ἡ τῶν χελωνῶν. Καὶ ἀποθνήσκων τε ὠχρὸς γίνεται, καὶ τελευτήσαντος αὐτοῦ ἡ χροιά τοιαύτη ἐστίν.

Τὰ δὲ περὶ τὸν στόμαχον καὶ τὴν ἀρτηρίαν ὁμοίως ἔχει τοῖς σαύροις κείμενα. Σάρκα δ' οὐδαμοῦ ἔχει πλὴν πρὸς τῇ κεφαλῇ καὶ ταῖς σιαγόσιν ὀλίγα σαρκία, καὶ περὶ ἄκραν τὴν τῆς κέρκου πρόσφυσιν. Καὶ αἷμα δ' ἔχει περὶ τε τὴν καρδίαν μόνον καὶ τὰ ὄμματα καὶ τὸν ἄνω τῆς καρδίας τόπον, καὶ ὅσα ἀπὸ τούτων φλέβια ἀποτείνει· ἐστὶ δὲ καὶ ἐν τούτοις βραχὺ παντελῶς. Κεῖται δὲ καὶ ὁ ἐγκέφαλος ἀνώτερον μὲν ὀλίγῳ τῶν ὀφθαλμῶν, συνεχῆς δὲ τούτοις.

Περαιρεθέντος δὲ τοῦ ἔξωθεν δέρματος τῶν ὀφθαλμῶν περιέχει τι διαλάμπον διὰ τούτων, οἷον κρίκος χαλκοῦς λεπτός.

Καθ' ἅπαν δ' αὐτοῦ τὸ σῶμα σχεδὸν διατείνουσιν ὑμένες πολλοὶ καὶ ἰσχυροὶ καὶ πολὺ ὑπερβάλλοντες τῶν περὶ τὰ λοιπὰ ὑπαρχόντων. Ἐνεργεῖ δὲ καὶ τῷ πνεύματι ἀνατετμημένος ὅλος ἐπὶ πολὺν χρόνον, βραχείας ἰσχυρῶς ἔτι κινήσεως ἐν αὐτῷ περὶ τὴν καρδίαν οὔσης, καὶ συνάγει διαφερόντως μὲν τὰ περὶ τὰ πλευρά, οὐ μὴν ἄλλὰ καὶ τὰ λοιπὰ μέρη τοῦ σώματος. Σπλήνα δ' οὐδαμοῦ ἔχει φανερόν. Φωλεύει δὲ καθάπερ οἱ σαῦροι.

## Κεφάλαιο 12

Ὅμοίως δ' ἔνια μόρια καὶ οἱ ὄρνιας τοῖς εἰρημένοις ἔχουσι ζώοις· καὶ γὰρ κεφαλὴν καὶ αὐχένα πάντ' ἔχει καὶ νῶτον καὶ τὰ ὕπτια τοῦ σώματος καὶ τὸ ἀνάλογον τῷ στήθει· σκέλη δὲ δύο καθάπερ ἄνθρωπος μάλιστα τῶν ζώων· πλὴν κάμπτει εἰς τοῦπισθεν ὁμοίως τοῖς τετράποσιν, ὥσπερ εἴρηται πρότερον. Χεῖρας δ' οὐδὲ πόδας προσθίους ἔχει, ἀλλὰ πτέρυγας ἴδιον πρὸς τὰ ἄλλα ζῶα. Ἐτι δὲ τὸ ἰσχίον ὅμοιον (504a.) μηρῷ μακρὸν καὶ προσπεφυκὸς μέχρι ὑπὸ μέσσην τὴν γαστέρα, ὥστε δοκεῖν διαιρούμενον μηρὸν εἶναι, τὸν δὲ μηρὸν μεταξὺ τῆς κνήμης, ἕτερόν τι μέρος. Μεγίστους δὲ τοὺς μηροὺς ἔχει τὰ γαμψώνυχα τῶν ὀρνίθων, καὶ τὸ στήθος ἰσχυρότερον τῶν ἄλλων.

Πολυώνυχοι δ' εἰσὶ πάντες οἱ ὄρνιας, ἔτι δὲ πολυσχιδεῖς τρόπον τινὰ πάντες· τῶν μὲν γὰρ πλείστων διήρηνται οἱ δάκτυλοι, τὰ δὲ πλωτὰ στεγανόποδά ἐστι,

διηρθρωμένους δ' ἔχει καὶ χωριστοὺς <τοὺς> δακτύλους. Εἰσὶ δ' ὅσοι αὐτῶν μετεωρίζονται πάντες τετραδάκτυλοι· τρεῖς μὲν γὰρ εἰς τὸ ἔμπροσθεν ἓνα δ' εἰς τὸ ὀπίσθεν κείμενον ἔχουσιν οἱ πλεῖστοι ἀντὶ πτέρνης· ὀλίγοι δέ τινες δύο μὲν ἔμπροσθεν δύο δ' ὀπίσθεν, οἷον ἡ καλουμένη ἱυγξ. Αὕτη δ' ἐστὶ μικρῶ μὲν μείζων σπίζης, τὸ δ' εἶδος ποικίλον, ἴδια δ' ἔχει τὰ τε περὶ τοὺς δακτύλους καὶ τὴν γλῶτταν ὁμοίαν τοῖς ὄφεσιν· ἔχει γὰρ ἐπὶ μῆκος ἕκτασιν καὶ ἐπὶ τέτταρας δακτύλους, καὶ πάλιν συστέλλεται εἰς ἑαυτήν. Ἔτι δὲ περιστρέφει τὸν τράχηλον εἰς τοὔπίσω τοῦ λοιποῦ σώματος ἡρεμοῦντος, καθάπερ οἱ ὄφεις. Ὄνυχας δ' ἔχει μεγάλους μὲν ὁμοίως μέντοι πεφυκότας τοῖς τῶν κολοιῶν· τῇ δὲ φωνῇ τρίζει.

Στόμα δ' οἱ ὄρνια ἔχουσι μὲν ἴδιον δέ· οὔτε γὰρ χεῖλη οὔτ' ὀδόντας ἔχουσιν, ἀλλὰ ῥύγχος, οὔτ' ὦτα οὔτε μυκτῆρας, ἀλλὰ τοὺς πόρους τούτων τῶν αἰσθήσεων, τῶν μὲν μυκτῆρων ἐν τῷ ῥύγχει, τῆς δ' ἀκοῆς ἐν τῇ κεφαλῇ. Ὀφθαλμοὺς δὲ πάντες καθάπερ καὶ τᾶλλα ζῶα δύο, ἄνευ βλεφαρίδων. Μύουσι δ' οἱ βαρεῖς τῷ κάτω βλεφάρῳ, σκαρδαμύττουσι δ' ἐκ τοῦ κανθοῦ δέρματι ἐπὶ πάντες, οἱ δὲ γλαυκώδεις τῶν ὀρνίθων καὶ τῷ ἄνω βλεφάρῳ. Τὸ δ' αὐτὸ τοῦτο ποιοῦσι καὶ τὰ φολιδωτά, οἷον οἱ σαῦροι καὶ τᾶλλα τὰ ὁμοιογενῇ τούτοις τῶν ζώων· μύουσι γὰρ τῇ κάτω βλεφαρίδι πάντες, οὐ μέντοι σκαρδαμύττουσιν ὥσπερ οἱ ὄρνια.

Ἔτι δ' οὔτε φολίδας οὔτε τρίχας ἔχουσιν, ἀλλὰ περὰ· τὰ δὲ περὰ ἔχει καυλὸν ἅπαντα. Καὶ οὐρὰν μὲν οὐκ ἔχουσιν, ὀρροπύγιον δέ, οἱ μὲν μακροσκελεῖς καὶ στεγανόποδες βραχύ, οἱ δ' ἐναντίοι μέγα. Καὶ οὔτοι μὲν πρὸς τῇ γαστρὶ τοὺς πόδας ἔχοντες πέτονται, οἱ δὲ μικρορροπύγιοι ἐκτεταμένους.

Καὶ γλῶτταν ἅπαντες, ταύτην δ' ἀνομοίαν· οἱ (504b.) μὲν γὰρ μακρὰν οἱ δὲ βραχεῖαν. Μάλιστα δὲ τῶν ζώων μετὰ τὸν ἄνθρωπον γράμματα φθέγγεται ἓνα τῶν ὀρνίθων γένη· τοιαῦτα δ' ἐστὶ τὰ πλατύγλωττα αὐτῶν μάλιστα.

Τὴν ἀλλὰ συνάγει καὶ διοίγει τὸν πόρον ὥστε μηδὲν κατιέναι τῶν ἐχόντων βάρος ἐπὶ τὸν πλεύμονα.

Γένη δ' ἓνα τῶν ὀρνίθων ἔχει καὶ πληκτρα· γαμψώνυχον δ' ἅμα καὶ πληκτρον ἔχον οὐδέν. Ἔστι δὲ τὰ μὲν γαμψώνυχα τῶν πτητικῶν, τὰ δὲ πληκτροφόρα τῶν βαρέων.

Ἔτι δ' ἓνα τῶν ὀρνέων λόφον ἔχουσι, τὰ μὲν αὐτῶν τῶν πτερῶν

ἐπανεστηκότα, ὁ δ' ἄλεκτρυὼν μόνος ἴδιον· οὔτε γὰρ σάρξ ἐστίν οὔτε πόρρω σαρκὸς τὴν φύσιν.

### Κεφάλαιο 13

Τῶν δ' ἐνύδρων ζώων τὸ τῶν ἰχθύων γένος ἐν ἀπὸ τῶν ἄλλων ἀφώριστα, πολλὰς περιέχον ἰδέας. Κεφαλὴν μὲν γὰρ ἔχει καὶ τὰ πρηνῆ καὶ τὰ ὕπτια, ἐν ᾧ τόπω ἢ γαστήρ καὶ τὰ σπλάγχνα· καὶ ὀπίσθιον οὐράϊον συνεχὲς ἔχει καὶ ἄσχιστον· τοῦτο δ' οὐ πᾶσιν ὅμοιον. Αὐχένα δ' οὐδεὶς ἔχει ἰχθύς, οὐδὲ κῶλον οὐδέν, οὐδ' ὄρχεις ὅλως, οὔτ' ἐντὸς οὔτ' ἐκτός, οὐδὲ μαστοὺς. Τοῦτο μὲν οὖν ὅλως οὐδ' ἄλλο οὐδέν τῶν μὴ ζωοτοκούντων, οὐδὲ τὰ ζωοτοκοῦντα πάντα, ἀλλ' ὅσα εὐθύς ἐν αὐτοῖς ζωοτοκεῖ καὶ μὴ ὠοτοκεῖ πρῶτον. Καὶ γὰρ ὁ δελφὶς ζωοτοκεῖ, διὸ ἔχει μαστοὺς δύο, οὐκ ἄνω δ' ἀλλὰ πλησίον τῶν ἄρθρων. Ἔχει δ' οὐχ ὥσπερ τὰ τετράποδα ἐπιφανεῖς θηλάς, ἀλλ' οἶον ῥύακας δύο, ἐκατέρωθεν ἐκ τῶν πλαγίων ἓνα, ἐξ ὧν τὸ γάλα ῥεῖ· καὶ θηλάζεται ὑπὸ τῶν τέκνων παρακολουθούντων· καὶ τοῦτο ὥπται ἤδη ὑπὸ τινων φανερώς.

Οἱ δ' ἰχθύες, ὥσπερ εἴρηται, οὔτε μαστοὺς ἔχουσιν οὔτ' αἰδοίων πόρον ἐκτός οὐδένα φανερόν. Ἴδιον δ' ἔχουσι τό τε τῶν βραγχίων, ἧ τὸ ὕδωρ ἀφιᾶσι δεξάμενοι κατὰ τὸ στόμα, καὶ τὰ πτερύγια, οἱ μὲν πλεῖστοι τέτταρα, οἱ δὲ προμήκεις δύο, οἶον ἔγχελυσ, δύο ὄντα πρὸς τὰ βράγχια. Ὁμοίως δὲ καὶ κεστρεῖς, οἶον ἐν Σιφαῖς οἱ ἐν τῇ λίμνῃ, δύο, καὶ ἡ καλουμένη ταινία ὡσαύτως. Ἐνια δὲ τῶν προμήκων οὐδὲ πτερύγια ἔχει, οἶον σμύραινα, οὐδὲ τὰ βράγχια διηρθρωμένα ὁμοίως τοῖς ἄλλοις ἰχθύσιν.

Αὐτῶν δὲ τῶν ἐχόντων βράγχια τὰ μὲν (505a.) ἔχει ἐπικάλυμμα τοῖς βραγχίοις, τὰ δὲ σελάχη πάντα ἀκάλυπτα. Καὶ τὰ μὲν ἔχοντα καλύμματα πάντα ἐκ πλαγίου ἔχει τὰ βράγχια, τῶν δὲ σελαχῶν τὰ μὲν πλατέα κάτω ἐν τοῖς ὑπτίοις, οἶον νάρκη καὶ βάτος, τὰ δὲ προμήκη ἐν τοῖς πλαγίοις, οἶον πάντα τὰ γαλεῶδη. Ὁ δὲ βάτραχος ἐκ πλαγίου μὲν ἔχει, καλυπτόμενα δ' οὐκ ἀκανθῶδει καλύμματι ὥσπερ οἱ μὴ σελαχῶδεις, ἀλλὰ δερματώδει.

Ἔτι δὲ τῶν ἐχόντων βράγχια τῶν μὲν ἀπλᾶ ἐστὶ τὰ βράγχια, τῶν δὲ διπλᾶ· τὸ δ' ἔσχατον πρὸς τὸ σῶμα πάντων ἀπλοῦν. Καὶ πάλιν τὰ μὲν ὀλίγα βράγχια ἔχει, τὰ δὲ πλῆθος βραγχίων· ἴσα δ' ἐφ' ἐκάτερα πάντες. Ἔχει δ' ὁ ἐλάχιστος ἔχων ἐν ἐφ' ἐκάτερα βράγχιον, διπλοῦν δὲ τοῦτο, οἶον κάπρος· οἱ δὲ δύο ἐφ' ἐκάτερα, τὸ μὲν ἀπλοῦν τὸ δὲ διπλοῦν, οἶον γόγγρος καὶ σκάρος· οἱ δὲ τέτταρα ἐφ' ἐκάτερα ἀπλᾶ, οἶον ἔλλοψ, συναγρίς, σμύραινα, ἔγχελυσ· οἱ δὲ

τέτταρα μὲν δίστοιχα δὲ πλὴν τοῦ ἐσχάτου, οἷον κίχλη καὶ πέρκη καὶ γλάνις καὶ κυπρίνος. Ἔχουσι δὲ καὶ οἱ γαλεώδεις διπλᾶ πάντες, καὶ πέντ' ἑφ' ἑκάτερα· ὁ δὲ ξιφίας ὀκτὼ διπλᾶ. Περὶ μὲν οὖν πλήθους βραγχίων ἐν τοῖς ἰχθύσι τοῦτον ἔχει τὸν τρόπον.

Ἔτι δὲ πρὸς τᾶλλα ζῶα οἱ ἰχθύες διαφέρουσι πρὸς τῇ διαφορᾷ τῇ περὶ τὰ βράγχια· οὔτε γὰρ ὥσπερ τῶν πεζῶν ὅσα ζωοτόκα ἔχει τρίχας, οὔθ' ὥσπερ ἓνια τῶν ὠοτοκούντων τετραπόδων φολίδας, οὔθ' ὡς τὸ τῶν ὀρνέων γένος πτερωτόν, ἀλλ' οἱ μὲν πλεῖστοι αὐτῶν λεπιδωτοὶ εἰσιν, ὀλίγοι δὲ τινες τραχεῖς, ἐλάχιστον δ' ἐστὶ πλῆθος αὐτῶν τὸ λεῖον. Τῶν μὲν οὖν σελαχῶν τὰ μὲν τραχεὰ ἐστὶ τὰ δὲ λεῖα, γόγγρος δὲ καὶ ἔγγελυς καὶ θύννος τῶν λείων.

Καρχαρόδοντες δὲ πάντες οἱ ἰχθύες ἔξω τοῦ σκάρου· καὶ πάντες ἔχουσιν ὀξεῖς τοὺς ὀδόντας καὶ πολυστοίχους, καὶ ἔνιοι ἐν τῇ γλώττῃ. Καὶ γλῶτταν σκληρὰν καὶ ἀκανθώδη ἔχουσι, καὶ προσπεφυκυῖαν οὕτως ὥστ' ἐνίστε μὴ δοκεῖν ἔχειν.

Τὸ δὲ στόμα οἱ μὲν ἀνερρωγός, ὥσπερ ἓνια τῶν ζωοτοκούντων καὶ τετραπόδων. Τῶν δ' αἰσθητηρίων τῶν μὲν ἄλλων οὐδὲν ἔχουσι φανερόν οὔτ' αὐτὸ οὔτε τοὺς πόρους, οὔτ' ἀκοῆς οὔτ' ὀσφρήσεως· ὀφθαλμοὺς δὲ πάντες ἔχουσιν ἄνευ βλεφάρων, οὐ (505b.) σκληρόφθαλμοι ὄντες.

Ἐναιμον μὲν οὖν ἐστὶν ἅπαν τὸ τῶν ἰχθύων γένος, εἰσὶ δ' αὐτῶν οἱ μὲν ὠοτόκοι οἱ δὲ ζωοτόκοι, οἱ μὲν λεπιδωτοὶ πάντες ὠοτόκοι, τὰ δὲ σελάχη πάντα ζωοτόκα πλὴν βατράχου.

## Κεφάλαιο 14

Λοιπὸν δὲ τῶν ἐναίμων ζώων τὸ τῶν ὄφεων γένος. Ἔστι δὲ κοινὸν ἀμφοῖν· τὸ μὲν γὰρ πλεῖστον αὐτῶν χερσαῖόν ἐστιν, ὀλίγον δὲ τὸ τῶν ἐνύδρων ἐν τοῖς ποτίμοις ὕδασι διατελεῖ.

Εἰσὶ δὲ καὶ θαλάττιοι ὄφεις, παραπλήσιοι τὴν μορφήν τοῖς χερσαίοις τᾶλλα· πλὴν τὴν κεφαλὴν ἔχουσι γόγγροειδεστέραν. Γένη δὲ πολλὰ τῶν θαλαττίων ὄφεων ἐστὶ, καὶ χροᾶν ἔχουσι παντοδαπὴν· οὐ γίνονται δ' οὔτοι ἐν τοῖς σφόδρα βαθέσιν. Ἀποδες δ' εἰσὶν οἱ ὄφεις ὥσπερ τὸ τῶν ἰχθύων γένος.

Εἰσὶ δὲ καὶ σκολόπενδραι θαλάττιαι, παραπλήσιαι τὸ εἶδος ταῖς χερσαίαις, τὸ δὲ μέγεθος μικρῷ ἐλάττους· γίνονται δὲ περὶ τοὺς πετρώδεις τόπους. Τὴν δὲ

χροιάν εἰσιν ἐρυθρότεραι καὶ πολύποδες μᾶλλον καὶ λεπτοσκελέστεραι τῶν χερσαίων. Οὐ γίνονται δ' οὐδ' αὐται, ὥσπερ οὐδ' οἱ ὄφεις, ἐν τοῖς βαθέσι σφόδρα.

Ἔστι δ' ἰχθύδιόν τι τῶν πετραίων, ὃ καλοῦσιν τινες ἐχενηίδα, καὶ χρῶνται τινες αὐτῷ πρὸς δίκας καὶ φίλτρα· ἔστι δ' ἄβρωτον· τοῦτο δ' ἔνιοί φασιν ἔχειν πόδας οὐκ ἔχον, ἀλλὰ φαίνεται διὰ τὸ τὰς πτέρυγας ὁμοίας ἔχειν ποσίν.

Τὰ μὲν οὖν ἔξω μόρια, καὶ πόσα καὶ ποῖα τῶν ἐναίμων ζώων, καὶ τίνας ἔχει πρὸς ἄλληλα διαφοράς, εἴρηται.

## Κεφάλαιο 15

Τὰ δ' ἐντὸς πῶς ἔχει, λεκτέον ἐν τοῖς ἐναίμοις ζώοις πρῶτον· τούτῳ γὰρ διαφέρει τὰ μέγιστα γένη πρὸς τὰ λοιπὰ τῶν ἄλλων ζώων, τῷ τὰ μὲν ἔναιμα τὰ δ' ἄναιμα εἶναι.

Ἔστι δὲ ταῦτα ἄνθρωπος τε καὶ τὰ ζωτόκα τῶν τετραπόδων, ἔτι δὲ καὶ τὰ ὠτόκα τῶν τετραπόδων καὶ ὄρνις καὶ ἰχθύς καὶ κῆτος, καὶ εἴ τι ἄλλο ἄνῳμὸν ἔστι διὰ τὸ μὴ εἶναι γένος ἄλλ' ἀπλοῦν τὸ εἶδος ἐπὶ τῶν καθ' ἕκαστον, οἷον ὄφεις καὶ κροκόδειλος.

Ὅσα μὲν οὖν ἔστι τετράποδα καὶ ζωτόκα, στόμαχον μὲν καὶ ἄρτηρίαν πάντ' ἔχει, καὶ κείμενα τὸν αὐτὸν τρόπον ὥσπερ ἐν τοῖς ἀνθρώποις· ὁμοίως δὲ καὶ ὅσα ὠτοκεῖ τῶν τετραπόδων, καὶ ἐν τοῖς ὄρνισιν· ἀλλὰ τοῖς (506a.) εἴδεσι τῶν μορίων τούτων διαφέρουσιν. Ὅλως δὲ πάντα ὅσα τὸν ἀέρα δεχόμενα ἀναπνεῖ καὶ ἐκπνεῖ, πάντ' ἔχει πλεύμονα καὶ ἄρτηρίαν καὶ στόμαχον, καὶ τὴν θέσιν τοῦ στομάχου καὶ τῆς ἀρτηρίας ὁμοίως, ἀλλ' οὐχ ὅμοια, τὸν δὲ πλεύμονα οὕθ' ὅμοιον οὔτε τῇ θέσει ὁμοίως ἔχοντα.

Ἔτι δὲ καρδίαν ἅπαντ' ἔχει ὅσα αἷμα ἔχει, καὶ τὸ διάζωμα, ὃ καλοῦνται φρένες· ἀλλ' ἐν τοῖς μικροῖς διὰ λεπτότητα καὶ σμικρότητα οὐ φαίνεται ὁμοίως, πλην ἐν τῇ καρδίᾳ. Ἴδιον δ' ἐστὶν ἐπὶ τῶν βοῶν· ἔστι γάρ τι γένος βοῶν, ἀλλ' οὐ πάντες, ὃ ἔχει ἐν τῇ καρδίᾳ ὅστοῦν. Ἔχει δὲ καὶ ἡ τῶν ἵππων καρδία ὅστοῦν.

Πλεύμονα δ' οὐ πάντα, οἷον ἰχθύς οὐκ ἔχει, οὐδ' εἴ τι ἄλλο τῶν ζώων ἔχει βράγχια. Καὶ ἡπαρ ἅπαντ' ἔχει ὅσαπερ αἷμα. Σπλῆνα δὲ τὰ πλεῖστα ἔχει ὅσαπερ καὶ αἷμα. Τὰ δὲ πολλὰ τῶν μὴ ζωτόκων ἀλλ' ὠτόκων μικρὸν ἔχει τὸν σπλῆνα οὕτως ὥστε λανθάνειν ὀλίγου τὴν αἴσθησιν, ἐν τε τοῖς ὄρνισι τοῖς

πλείστοις, οἷον ἐν περιστερᾷ καὶ ἰκτίνῳ καὶ ἰέρακι καὶ γλαυκί· ὁ δ' αἰγοκέφαλος ὅλως οὐκ ἔχει. Καὶ ἐπὶ τῶν ὠοτόκων δὲ καὶ τετραπόδων τὸν αὐτὸν τρόπον ἔχει· μικρὸν γὰρ πάμπαν ἔχουσι καὶ ταῦτα, οἷον χελώνη, ἐμύς, φρύνη, σαῦρος, κροκόδειλος, βάτραχος.

Χολὴν δὲ τῶν ζώων τὰ μὲν ἔχει τὰ δ' οὐκ ἔχει ἐπὶ τῷ ἥπατι. Τῶν μὲν ζωοτόκων καὶ τετραπόδων ἔλαφος οὐκ ἔχει οὐδὲ πρόξ, ἔτι δ' ἵππος, ὄρεύς, ὄνος, φώκη καὶ τῶν ὑῶν ἔνιοι. Τῶν δ' ἐλάφων αἱ ἀχαῖναι καλούμεναι δοκοῦσιν ἔχειν ἐν τῇ κέρκῳ χολήν· ἔστι δ' ὃ λέγουσι τὸ μὲν χρῶμα ὅμοιον χολῇ, οὐ μέντοι ὅλον ὑγρὸν οὕτως, ἀλλ' ὅμοιον τῷ τοῦ σπληνὸς τὰ ἐντός.

Σκώληκας μέντοι πάντες ἔχουσιν ἐν τῇ κεφαλῇ ζῶντας· ἐγγίνονται δ' ὑποκάτω τοῦ ὑπογλωττίου ἐν τῷ κοίλῳ καὶ περὶ τὸν σφόνδυλον, ἥ ἢ κεφαλὴ προσπέφυκε, τὸ μέγεθος οὐκ ἐλάττους ὄντες τῶν μεγίστων εὐλῶν· ἐγγίνονται δ' ἄθροοι καὶ συνεχεῖς, τὸν ἀριθμὸν δ' εἰσὶ μάλιστα περὶ εἴκοσι.

Χολὴν μὲν οὖν οὐκ ἔχουσιν οἱ ἔλαφοι, ὥσπερ εἴρηται· τὸ δ' ἔντερον αὐτῶν ἐστὶ πικρὸν οὕτως ὥστε μηδὲ τοὺς κύνας ἐθέλειν ἐσθίειν, ἂν μὴ (506b.) σφόδρα πίων ἢ ὁ ἔλαφος. Ἐχει δὲ καὶ ὁ ἐλέφας τὸ ἥπαρ ἄχολον μὲν, τεμνομένου μέντοι περὶ τὸν τόπον οὗ τοῖς ἔχουσιν ἐπιφύεται ἡ χολή, ῥεῖ ὑγρότης χολώδης ἢ πλείων ἢ ἐλάττων.

Τῶν δὲ δεχομένων τὴν θάλατταν καὶ ἐχόντων πλεύμονα δελφίς οὐκ ἔχει χολήν. Οἱ δ' ὄρνιθες καὶ οἱ ἰχθύες πάντες ἔχουσι, καὶ τὰ ὠοτόκα καὶ τετράποδα, καὶ ὡς ἐπίπαν εἰπεῖν ἢ πλείω ἢ ἐλάττω· ἀλλ' οἱ μὲν πρὸς τῷ ἥπατι τῶν ἰχθύων, οἷον οἱ τε γαλεώδεις καὶ γλάνις καὶ ῥίνη καὶ λειόβατος καὶ νάρκη καὶ τῶν μακρῶν ἔγχελυσ καὶ βελόνη καὶ ζύγαινα. Ἐχει δὲ καὶ ὁ καλλιώνυμος ἐπὶ τῷ ἥπατι, ὅσπερ ἔχει μεγίστην τῶν ἰχθύων ὡς κατὰ μέγεθος. Οἱ δὲ πρὸς τοῖς ἐντέροις ἔχουσιν, ἀποτεταμένην ἀπὸ τοῦ ἥπατος πόροις ἐνίοις πάνυ λεπτοῖς. Ἡ μὲν οὖν ἀμία παρὰ τὸ ἔντερον παρατεταμένην ἰσομήκη ἔχει, πολλάκις δὲ καὶ ἐπαναδίπλωμα· οἱ δ' ἄλλοι πρὸς τοῖς ἐντέροις, οἱ μὲν πορρώτερον οἱ δ' ἐγγύτερον, οἷον βάτραχος, ἔλοψ, συναγρία, σμύραινα, ξιφίας. Πολλάκις δὲ καὶ τὸ αὐτὸ γένος ἐπ' ἀμφοτέρα φαίνεται ἔχον, οἷον γόγγροι οἱ μὲν πρὸς τῷ ἥπατι, οἱ δὲ κάτω ἀπηρτημένην. Ὁμοίως δ' ἔχει τοῦτο καὶ ἐπὶ τῶν ὀρνίθων· ἔνιοι γὰρ πρὸς τῇ κοιλίᾳ ἔχουσιν, οἱ δὲ πρὸς τοῖς ἐντέροις τὴν χολήν, οἷον περιστερὰ, κόραξ, ὄρτυξ, χελιδών, στρουθός. Ἐνιοι δ' ἅμα πρὸς τῷ ἥπατι ἔχουσι καὶ πρὸς τῇ κοιλίᾳ, οἷον αἰγοκέφαλος, οἱ δ' ἅμα πρὸς τῷ ἥπατι καὶ τοῖς ἐντέροις, οἷον ἰέραξ καὶ ἰκτῖνος.

## Κεφάλαιο 16

Νεφροὺς δὲ καὶ κύστιν τὰ μὲν ζωοτόκα τῶν τετραπόδων πάντ' ἔχει· ὅσα δ' ὠτοκεῖ, τῶν μὲν ἄλλων οὐδὲν ἔχει, οἶον οὐτ' ὄρνις οὐτ' ἰχθύς, τῶν δὲ τετραπόδων μόνη χελώνη ἢ θαλαττία μέγεθος κατὰ λόγον τῶν ἄλλων μορίων. Ὅμοιους δ' ἔχει τοὺς νεφροὺς ἢ θαλαττία χελώνη τοῖς βοείοις· ἔστι δ' ὁ τοῦ βοὸς οἶον ἐκ πολλῶν μικρῶν εἰς συγκείμενος. Ἐχει δὲ καὶ ὁ βόνασος τὰ ἐντὸς ἅπαντα ὅμοια βοῖ.

## Κεφάλαιο 17

Τῇ δὲ θέσει, ὅσα ἔχει ταῦτα τὰ μόρια, ὁμοίως κείμενα ἔχει, τὴν τε καρδίαν περὶ τὸ μέσον, πλὴν ἐν (507a.) ἀνθρώπῳ· οὗτος δ' ἐν τῷ ἀριστερῷ μᾶλλον μέρει, καθάπερ ἐλέχθη πρότερον. Ἐχει δὲ καὶ τὸ ὀξύ ἢ καρδία πάντων εἰς τὸ πρόσθεν· πλὴν ἐπὶ τῶν ἰχθύων οὐκ ἂν δόξειεν· οὐ γὰρ πρὸς τὸ στῆθος ἔχει τὸ ὀξύ, ἀλλὰ πρὸς τὴν κεφαλὴν καὶ τὸ στόμα. Ἀνήρτηται δ' αὐτῶν τὸ ἄκρον ἢ συνάπτει τὰ βράγχια ἀλλήλοις τὰ δεξιὰ καὶ τὰ ἀριστερά. Εἰσὶ δὲ καὶ ἄλλοι πόροι τεταμένοι ἐξ αὐτῆς εἰς ἕκαστον τῶν βραγχίων, μείζους μὲν τοῖς μείζουσιν, ἐλάττους δὲ τοῖς ἐλάττοσιν· ὁ δ' ἐπ' ἄκρας τῆς καρδίας τοῖς μεγάλοις αὐτῶν σφόδρα παχὺς αὐλὸς ἐστὶ καὶ λευκός. Στόμαχον δ' ὀλίγοι ἔχουσι τῶν ἰχθύων, οἶον γόγγρος καὶ ἔγχελυσ, καὶ οὗτοι μικρόν.

Καὶ τὸ ἥπαρ τοῖς ἔχουσι τοῖς μὲν ἀσχιδῆς ἔχουσιν ἐστὶν ἐν τοῖς δεξιοῖς ὅλον, τοῖς δ' ἐσχισμένον ἀπ' ἀρχῆς τὸ μείζον ἐν τοῖς δεξιοῖς. Ἐνίοις γὰρ ἐκάτερον τὸ μόριον ἀπὴρτηται καὶ οὐ συμπέφυκεν ἢ ἀρχή, οἶον τῶν τ' ἰχθύων τοῖς γαλεώδεσι, καὶ δασυπόδων τι γένος ἐστὶ καὶ ἄλλοθι καὶ περὶ τὴν λίμνην τὴν Βόλβην ἐν τῇ καλουμένῃ Συκίνῃ, οὓς ἂν τις δόξειε δύο ἥπατα ἔχειν διὰ τὸ πόρρω τοὺς πόρους συνάπτειν, ὥσπερ καὶ ἐπὶ τοῦ τῶν ὀρνίθων πλεύμονος.

Καὶ ὁ σπλὴν δ' ἐστὶ πᾶσιν ἐν τοῖς ἀριστεροῖς κατὰ φύσιν, καὶ οἱ νεφροὶ τοῖς ἔχουσι κείμενοι τὸν αὐτὸν τρόπον· ἤδη δὲ διανοιχθέν τι τῶν τετραπόδων ὥφθη ἔχον τὸν σπλῆνα μὲν ἐν τοῖς δεξιοῖς, τὸ δ' ἥπαρ ἐν τοῖς ἀριστεροῖς· ἀλλὰ τὰ τοιαῦτα ὡς τέρατα κρίνεται.

Τείνει δ' ἢ μὲν ἀρτηρία πᾶσιν εἰς τὸν πλεύμονα (ὃν δὲ τρόπον, ὕστερον ἐροῦμεν), ὁ δὲ στόμαχος εἰς τὴν κοιλίαν διὰ τοῦ διαζώματος, ὅσα ἔχει στόμαχον· οἱ γὰρ ἰχθύες, ὥσπερ εἴρηται πρότερον, οἱ πλεῖστοι οὐκ ἔχουσιν, ἀλλ' εὐθὺς πρὸς τὸ στόμα συνάπτει ἢ κοιλία, διὸ πολλάκις ἐνίοις τῶν μεγάλων διώκουσι τοὺς ἐλάττους προπίπτει ἢ κοιλία εἰς τὸ στόμα.



ἔχει δὲ κοιλίαν πάντα μὲν τὰ εἰρημένα, καὶ κειμένην ὁμοίως (κεῖται γὰρ ὑπὸ τὸ διάζωμα εὐθύς), καὶ τὸ ἔντερον ἐχόμενον καὶ τελευτῶν πρὸς τὴν ἔξοδον τῆς τροφῆς καὶ τὸν καλούμενον ἀρχόν. Ἀνομοίας δ' ἔχουσι τὰς κοιλίας.

Πρῶτον μὲν γὰρ τῶν τετραπόδων καὶ ζωοτόκων ὅσα μὴ ἔστιν ἀμφώδοντα τῶν κερατοφόρων, τέτταρας ἔχει τοὺς τοιούτους πόρους· ἃ δὴ καὶ λέγεται μηρυκάζειν. Διήκει γὰρ ὁ μὲν στόμαχος ἀπὸ τοῦ στόματος ἀρξάμενος ἐπὶ τὰ κάτω παρὰ (507b.) τὸν πλεύμονα, ἀπὸ τοῦ διαζώματος ἐπὶ τὴν κοιλίαν τὴν μεγάλην· αὕτη δ' ἐστὶ τὰ ἔσω τραχεῖα καὶ διειλημμένη.

Συνήρτηται δ' αὐτῇ πλησίον τῆς τοῦ στομάχου προσβολῆς ὁ καλούμενος κεκρύφαλος ἀπὸ τῆς ὀψεως· ἔστι γὰρ τὰ μὲν ἔξωθεν ὅμοιος τῇ κοιλίᾳ, τὰ δ' ἐντὸς ὅμοιος τοῖς πλεκτοῖς κεκρυφάλοις· μεγέθει δὲ πολὺ ἐλάττων ἐστὶν ὁ κεκρύφαλος τῆς κοιλίας. Τούτου δ' ἔχεται ὁ ἐχῖνος, τὰ ἐντὸς ὦν τραχὺς καὶ πλακώδης, τὸ δὲ μέγεθος παραπλήσιος τῷ κεκρυφάλῳ.

Μετὰ δὲ τοῦτον τὸ καλούμενον ἥνυστρον ἐστὶ, τῷ μὲν μεγέθει τοῦ ἐχίνου μεῖζον, τὸ δὲ σχῆμα προμηκέστερον· ἔχει δ' ἐντὸς πλάκας πολλὰς καὶ μεγάλας καὶ λείας. Ἀπὸ δὲ τούτου τὸ ἔντερον ἤδη.

Τὰ μὲν οὖν κερατοφόρα καὶ μὴ ἀμφώδοντα τοιαύτην ἔχει τὴν κοιλίαν, διαφέρει δὲ πρὸς ἄλληλα τοῖς σχήμασι καὶ τοῖς μεγέθεσι τούτων τε καὶ τῷ τὸν στόμαχον εἰς μέσην ἢ πλαγίαν τείνειν τὴν κοιλίαν. Τὰ δ' ἀμφώδοντα μίαν ἔχει κοιλίαν, οἷον ἄνθρωπος, ὕς, κύων, ἄρκτος, λέων, λύκος. ἔχει δὲ καὶ ὁ θῶς πάντα τὰ ἐντὸς ὅμοια λύκῳ.

Πάντα μὲν οὖν ἔχει μίαν κοιλίαν, καὶ μετὰ ταῦτα τὸ ἔντερον· ἀλλὰ τὰ μὲν ἔχει μείζω τὴν κοιλίαν, ὥσπερ ὕς καὶ ἄρκτος (καὶ ἡ γε τῆς ὑδὸς ὀλίγας ἔχει λείας πλάκας), τὰ δὲ πολὺ ἐλάττω καὶ οὐ πολλῶ μείζω τοῦ ἐντέρου, καθάπερ λέων καὶ κύων καὶ ἄνθρωπος. Καὶ τῶν ἄλλων δὲ τὰ εἶδη διέστηκε πρὸς τὰς τούτων κοιλίας· τὰ μὲν γὰρ ὕῃ ὁμοίαν ἔχει τὰ δὲ κυνί, καὶ τὰ μείζω καὶ τὰ ἐλάττω τῶν ζώων ὡσαύτως. Διαφορὰ δὲ καὶ ἐν τούτοις κατὰ τὰ μεγέθη καὶ τὰ σχήματα καὶ πάχη καὶ λεπτότητας ὑπάρχει τὰς τῆς κοιλίας, καὶ κατὰ τὴν τοῦ στομάχου τῇ θέσει σύντηρσιν.

Διαφέρει δὲ καὶ ἡ τῶν ἐντέρων φύσις ἑκατέροις τῶν εἰρημένων ζώων, τοῖς τε μὴ ἀμφώδουσι καὶ τοῖς ἀμφώδουσι, τῷ μεγέθει καὶ πάχει καὶ ταῖς ἐπαναδιπλώσεσιν. Πάντα δὲ μείζω τὰ τῶν μὴ ἀμφωδόντων ἐστίν· καὶ γὰρ αὐτὰ πάντα μείζω· μικρὰ μὲν γὰρ ὀλίγα, ἀμπαν δὲ μικρὸν οὐδέν ἐστι

κερατοφόρον. Ἔχουσι δ' ἓνια καὶ ἀποφυάδας τῶν ἐντέρων, εὐθυέντερον δ' οὐδέν ἐστι μὴ ἀμφώδουν. Ὁ δ' ἐλέφας ἔντερον ἔχει συμφύσεις ἔχον, ὥστε φαίνεσθαι τέτταρας κοιλίας ἔχειν. Ἐν τούτῳ καὶ ἡ τροφή ἐγγίνεται, χωρὶς δ' οὐκ ἔχει ἀγγεῖον. Καὶ τὰ σπλάγχνα ἔχει παραπλήσια τοῖς (508a.) ὑείοις, πλὴν τὸ μὲν ἦπαρ τετραπλάσιον τοῦ βοείου καὶ τάλλα, τὸν δὲ σπλῆνα ἐλάττω ἢ κατὰ λόγον.

Τὸν αὐτὸν δὲ τρόπον ἔχει τὰ περὶ τὴν κοιλίαν καὶ τὴν τῶν ἐντέρων φύσιν καὶ τοῖς τετράποσι μὲν τῶν ζώων ὠτοτόκοις δέ, οἷον χελώνη χερσαία καὶ χελώνη θαλαττία καὶ σαύρα καὶ τοῖς κροκοδείλοις ἀμφοῖν καὶ πᾶσιν ὅλως τοῖς τοιούτοις· ἀπλὴν τε γὰρ ἔχουσι καὶ μίαν τὴν κοιλίαν, καὶ τὰ μὲν ὁμοίαν τῇ ὑείᾳ, τὰ δὲ τῇ τοῦ κυνός.

Τὸ δὲ τῶν ὄφεων γένος ὁμοίον ἐστι καὶ ἔχει παραπλήσια σχεδὸν πάντα τῶν πεζῶν καὶ ὠτοτόκων τοῖς σαύροις, εἴ τις μῆκος ἀποδοὺς αὐτοῖς ἀφέλοι τοὺς πόδας. Φολιδωτόν τε γὰρ ἐστι, καὶ τὰ πρηνῆ καὶ τὰ ὑπτία παραπλήσια τούτοις ἔχει· πλὴν ὄρχεις οὐκ ἔχει, ἀλλ' ὥσπερ ἰχθὺς δύο πόρους εἰς ἓν συνάπτοντας καὶ τὴν ὑστέραν μακρὰν καὶ δικρόαν. Τὰ δ' ἄλλα τὰ ἐντὸς τὰ αὐτὰ τοῖς σαύροις, πλὴν ἅπαντα διὰ τὴν στενότητα καὶ τὸ μῆκος στενὰ καὶ μακρὰ τὰ σπλάγχνα, ὥστε καὶ λανθάνειν διὰ τὴν ὁμοιότητα τῶν σχημάτων· τὴν τε γὰρ ἀρτηρίαν ἔχει σφόδρα μακρὰν, ἔτι δὲ μακρότερον τὸν στόμαχον. Ἀρχὴ δὲ τῆς ἀρτηρίας πρὸς αὐτῷ ἐστι τῷ στόματι, ὥστε δοκεῖν ὑπὸ ταύτην εἶναι τὴν γλῶτταν. Προέχειν δὲ δοκεῖ τῆς γλῶττης ἡ ἀρτηρία διὰ τὸ συσπᾶσθαι τὴν γλῶτταν καὶ μὴ μένειν ὥσπερ τοῖς ἄλλοις. Ἔστι δ' ἡ γλῶττα λεπτὴ καὶ μακρὰ καὶ μέλαινα, καὶ ἐξέρχεται μέχρι πόρρω. Ἴδιον δὲ παρὰ τὰς τῶν ἄλλων γλῶττας ἔχουσι καὶ οἱ ὄφεις καὶ οἱ σαῦροι τὸ δικρόαν αὐτῶν εἶναι τὴν γλῶτταν ἄκραν, πολὺ δὲ μάλιστα οἱ ὄφεις· τὰ γὰρ ἄκρα αὐτῶν ἐστι λεπτὰ ὥσπερ τρίχες.

Ἔχει δὲ καὶ ἡ φώκη ἐσχισμένην τὴν γλῶτταν.

Τὴν δὲ κοιλίαν ὁ ὄφις ἔχει οἷον ἔντερον εὐρυχωρέστερον, ὁμοίαν τῇ τοῦ κυνός· εἴτα τὸ ἔντερον μακρὸν καὶ λεπτὸν καὶ μέχρι τοῦ τέλους ἓν. Ἐπὶ δὲ τοῦ φάρυγγος ἡ καρδία, μικρὰ δὲ καὶ νεφροειδής· διὸ δόξειεν ἂν ἐνίοτε οὐ πρὸς τὸ στῆθος ἔχειν τὸ ὄξύ. Εἴθ' ὁ πλεύμων ἀπλοῦς, ἰνώδει πόρῳ διηρθρωμένος καὶ μακρὸς σφόδρα καὶ πολὺ ἀπηρτημένος τῆς καρδίας. Καὶ τὸ ἦπαρ μακρὸν καὶ ἀπλοῦν, σπλῆνα δὲ μικρὸν καὶ στρογγύλον, ὥσπερ καὶ οἱ σαῦροι. Χολὴν δ' ἔχει ὁμοίως τοῖς (508b.) ἰχθύσιν· οἱ μὲν γὰρ ὕδροι πρὸς τῷ ἥπατι ἔχουσιν, οἱ δ' ἄλλοι πρὸς τοῖς ἐντέροις ὡς ἐπὶ τὸ πολὺ. Καρχαρόδοντες

δὲ πάντες εἰσὶν. Πλευρὰς δ' ἔχουσιν ἴσας ταῖς ἐν τῷ μηνὶ ἡμέραις· τριάκοντα γὰρ ἔχουσιν. Λέγουσι δέ τινες συμβαίνειν περὶ τοὺς ὄφεις τὸ αὐτὸ ὅπερ καὶ περὶ τοὺς νεοττοὺς τῶν χελιδόνων· ἔάν γάρ τις ἐκκεντήσῃ τὰ ὄμματα τῶν ὄφεων, φασὶ φύεσθαι πάλιν. Καὶ αἱ κέρκοι δὲ ἀποτεμνόμεναι τῶν τε σαύρων καὶ τῶν ὄφεων φύονται.

Ὡσαύτως δὲ καὶ τοῖς ἰχθύσιν ἔχει τὰ περὶ τὰ ἔντερα καὶ τὴν κοιλίαν· μίαν γὰρ καὶ ἀπλὴν ἔχουσι, διαφέρουσιν τοῖς σχήμασιν. Ἐνιοὶ γὰρ πάμπαν ἔντεροειδῆ ἔχουσιν, οἷον ὃν καλοῦσι σκάρων, ὃς δὲ καὶ δοκεῖ μόνος ἰχθύς μηρυκάζειν. Καὶ τὸ τοῦ ἐντέρου δὲ μέγεθος ἀπλοῦν, καὶ ἀναδίπλωσιν ἔχει, ὃ ἀναλύεται εἰς ἓν.

Ἴδιον δὲ τῶν ἰχθύων ἐστὶ καὶ τῶν ὀρνίθων τῶν πλείστων τὸ ἔχειν ἀποφυάδας· ἄλλ' οἱ μὲν ὀρνιθες κάτωθεν καὶ ὀλίγας, οἱ δ' ἰχθύες ἄνωθεν περὶ τὴν κοιλίαν, καὶ ἔνιοι πολλάς, οἷον κωβίος, γαλεός, πέρκη, σκορπίος, κίθαρος, τρίγλη, σπάρος· ὁ δὲ κεστρεὺς ἐπὶ μὲν θάτερα τῆς κοιλίας πολλάς, ἐπὶ δὲ θάτερα μίαν. Ἐνιοὶ δ' ἔχουσι μὲν ὀλίγας δέ, οἷον ἥπατος, γλαῦκος· ἔχει δὲ καὶ ὁ χρύσοφρυς ὀλίγας. Διαφέρουσι δὲ καὶ αὐτοὶ αὐτῶν, οἷον χρύσοφρυς ἔχει ὁ μὲν πλείους ὁ δ' ἐλάττους. Εἰσὶ δὲ καὶ οἱ ὅλως οὐκ ἔχουσιν, οἷον οἱ πλεῖστοι τῶν σελαχωδῶν· τῶν δ' ἄλλων οἱ μὲν ὀλίγας, οἱ δὲ καὶ πάνυ πολλάς. Πάντες δὲ παρ' αὐτὴν ἔχουσι τὴν κοιλίαν τὰς ἀποφυάδας οἱ ἰχθύες.

Οἱ δ' ὀρνιθες ἔχουσι καὶ πρὸς ἀλλήλους καὶ πρὸς ἄλλα ζῶα περὶ τὰ ἐντὸς μέρη διαφοράν. Οἱ μὲν γὰρ ἔχουσι πρὸ τῆς κοιλίας πρόλοβον, οἷον ἄλεκτρον, φάττα, περιστερὰ, πέρδιξ· ἔστι δ' ὁ πρόλοβος δέρμα κοῖλον καὶ μέγα, ἐν ᾧ ἡ τροφή πρώτη εἰσιούσα ἄπεπτός ἐστιν.

Ἔστι δ' αὐτόθι μὲν ἀπὸ τοῦ στομάχου στενότερος, ἔπειτα εὐρύτερος, ἣ δὲ καθήκει πάλιν πρὸς τὴν κοιλίαν, λεπτότερος.

Τὴν δὲ κοιλίαν σαρκώδη καὶ στιφρὰν οἱ πλεῖστοι ἔχουσι, καὶ ἔσωθεν δέρμα ἰσχυρὸν καὶ ἀφαιρούμενον ἀπὸ τοῦ σαρκώδους.

Οἱ δὲ πρόλοβον μὲν οὐκ ἔχουσιν, ἀλλ' ἀντὶ τούτου τὸν στόμαχον εὐρὺν καὶ πλατύν, ἢ δι' ὅλου ἢ τὸ πρὸς τὴν κοιλίαν τείνον, οἷον (509a.) κολοῖδος καὶ κόραξ καὶ κορώνη. ἔχει δὲ καὶ ὁ ὄρνυξ τοῦ στομάχου τὸ πλατὺ κάτω, καὶ ὁ αἰγοκέφαλος μικρὸν εὐρύτερον τὸ κάτω καὶ ἡ γλαύξ. Νῆττα δὲ καὶ χῆν καὶ λάρος καὶ καταρράκτης καὶ ὥτις τὸν στόμαχον εὐρὺν καὶ πλατύν ὅλον, καὶ ἄλλοι δὲ πολλοὶ τῶν ὀρνίθων ὁμοίως. Ἐνιοὶ δὲ τῆς κοιλίας αὐτῆς τι ἔχουσιν

ὅμοιον προλόβω, οἷον ἢ κεγχρηΐς.

Ἔστι δ' ἃ οὐκ ἔχει οὔτε τὸν στόμαχον οὔτε τὸν πρόλοβον εὐρύν, ἀλλὰ τὴν κοιλίαν μακράν, ὅσα μικρὰ τῶν ὀρνίθων, οἷον χελιδὼν καὶ στρουθός. Ὀλίγοι δ' οὔτε τὸν πρόλοβον ἔχουσιν οὔτε τὸν στόμαχον εὐρύν, ἀλλὰ σφόδρα μακρόν, ὅσοι τὸν αὐχένα μακρὸν ἔχουσιν, οἷον πορφυρίων· σχεδὸν δ' οὔτοι καὶ τὸ περίττωμα ὑγρότερον τῶν ἄλλων προΐενται πάντες. Ὁ δ' ὄρνυξ ἰδίως ἔχει ταῦτα πρὸς τοὺς ἄλλους· ἔχει γὰρ καὶ πρόλοβον καὶ πρὸ τῆς γαστρὸς τὸν στόμαχον εὐρύν καὶ πλάτος ἔχοντα· διέχει δ' ὁ πρόλοβος τοῦ πρὸ τῆς γαστρὸς στομάχου συχνὸν ὡς κατὰ μέγεθος.

Ἔχουσι δὲ καὶ λεπτὸν τὸ ἔντερον οἱ πλεῖστοι καὶ ἀπλοῦν ἀναλυόμενον. Τὰς δ' ἀποφυάδας ἔχουσιν οἱ ὄρνιθες, καθάπερ εἴρηται, ὀλίγας, καὶ οὐκ ἄνωθεν ὥσπερ οἱ ἰχθύες, ἀλλὰ κάτωθεν κατὰ τὴν τοῦ ἐντέρου τελευτήν. Ἔχουσι δ' οὐ πάντες ἄλλ' οἱ πλεῖστοι, οἷον ἀλεκτρυών, πέρδιξ, νῆττα, νυκτικόραξ, λόκαλος, ἀσκάλαφος, χήν, κύκνος, ὡτίς, γλαύξ. Ἔχουσι δὲ καὶ τῶν μικρῶν τινές, ἀλλὰ μικρὰ πάμπαν, οἷον στρουθός.

## Βιβλίο 3

### Κεφάλαιο 1

Περὶ μὲν οὖν τῶν ἄλλων μορίων τῶν ἐντὸς εἴρηται, καὶ πόσα καὶ ποῖ' ἄττα, καὶ τίνας ἔχει πρὸς ἀλληλα διαφοράς· λοιπὸν δὲ περὶ τῶν εἰς τὴν γένεσιν συντελούντων μορίων εἶπεῖν.

Ταῦτα γὰρ τοῖς μὲν θήλεσι πᾶσιν ἐντὸς ἐστί, τὰ δὲ τῶν ἀρρένων διαφορὰς ἔχει πλείους. Τὰ μὲν γὰρ ὅλως τῶν ἐναίμων ζώων οὐκ ἔχει ὄρχεις, τὰ δ' ἔχει μὲν ἐντὸς δ' ἔχει, καὶ τῶν ἐντὸς ἐχόντων τὰ μὲν πρὸς τῇ ὀσφύϊ ἔχει περὶ τὸν τῶν νεφρῶν τόπον, τὰ δὲ πρὸς τῇ γαστρί, τὰ δ' ἐκτός. Καὶ τὸ αἰδοῖον τούτων τοῖς μὲν συνήρτηται πρὸς τὴν (509b.) γαστέρα, τοῖς δ' ἀφεῖται καθάπερ καὶ οἱ ὄρχεις· πρὸς δὲ τὴν γαστέρα συνήρτηται ἄλλως τοῖς τ' ἐμπροσθουρητικοῖς καὶ τοῖς ὀπισθουρητικοῖς.

Τῶν μὲν οὖν ἰχθύων οὐδεὶς ὄρχεις ἔχει, οὐδ' εἴ τι ἄλλο ἔχει βράγχια, οὐδὲ τὸ τῶν ὄφεων γένος ἅπαν, οὐδ' ὅλως ἄπουν οὐδέν, ὅσα μὴ ζωοτοκεῖ ἐν αὐτοῖς. Οἱ δ' ὄρνιθες ἔχουσι μὲν ὄρχεις, ἔχουσι δ' ἐντὸς πρὸς τῇ ὀσφύϊ.

Καὶ τῶν τετραπόδων ὅσα ὠοτοκεῖ, τὸν αὐτὸν ἔχει τρόπον, οἷον σαύρα καὶ

χελώνη καὶ κροκόδειλος, καὶ τῶν ζωοτόκων ἔχῃνος. Τὰ δὲ τῶν ἐντὸς ἐχόντων πρὸς τῇ γαστρὶ ἔχει, οἷον τῶν ἀπόδων μὲν δελφίς, τῶν δὲ τετραπόδων καὶ ζωοτόκων ἐλέφας· τὰ δ' ἄλλα φανεροὺς ἔχει.

Ἡ δ' ἐξάρτησις ἢ πρὸς τὴν κοιλίαν καὶ τὸν τόπον τὸν συνεχῇ τίνα διαφορὰν ἔχει, πρότερον εἴρηται· τοῖς μὲν γὰρ ἐκ τοῦ ὀπισθεν συνεχεῖς καὶ οὐκ ἀπηρτημένοι εἰσίν, οἷον τῷ γένει τῷ τῶν ὑῶν, τοῖς δ' ἀπηρτημένοι, καθάπερ τοῖς ἀνθρώποις. Οἱ μὲν οὖν ἰχθύες ὄρχεις μὲν οὐκ ἔχουσιν, ὥσπερ εἴρηται πρότερον, οὐδ' οἱ ὄφεις· πόρους δὲ δύο ἔχουσιν ἀπὸ τοῦ ὑποζώματος ἡρτημένους ἐφ' ἐκάτερα τῆς ῥάχεως, συνάπτοντας εἰς ἓνα πόρον ἄνωθεν τῆς τοῦ περιττώματος ἐξόδου· τὸ δ' ἄνωθεν λέγομεν τὸ πρὸς τὴν ἄκανθαν. Οὗτοι δὲ γίνονται περὶ τὴν ὥραν τῆς ὀχείας θοροῦ πλήρεις, καὶ θλιβομένων ἐξέρχεται τὸ σπέρμα λευκόν. Αὐτοὶ δὲ πρὸς αὐτοὺς ἦν ἔχουσι διαφορὰν, ἐκ τε τῶν ἀνατομῶν δεῖ θεωρεῖν καὶ ὕστερον λεχθήσεται ἐν τοῖς περὶ ἕκαστον αὐτῶν ἰδίους ἀκριβέστερον.

Ὅσα δ' ὠοτοκεῖ ἢ δίποδα ὄντα ἢ τετράποδα, πάντ' ἔχει ὄρχεις πρὸς τῇ ὀσφυϊ κάτωθεν τοῦ διαζώματος, τὰ μὲν λευκοτέρους τὰ δ' ὠχροτέρους, λεπτοῖς πάμπαν φλεβίοις περιεχομένους. Καὶ ἀφ' ἐκατέρου τείνει πόρος συνάπτων εἰς ἓν, καθάπερ καὶ τοῖς ἰχθύσιν, ὑπὲρ τῆς τοῦ περιττώματος ἐξόδου. Τοῦτο δ' ἐστὶν αἰδοῖον, ὃ τοῖς μὲν μικροῖς ἄδηλον, ἐν δὲ τοῖς μείζουσιν, οἷον ἐν χηνὶ καὶ τοῖς τηλικούτοις, φανερώτερον γίνεται, ὅταν ἢ ὀχεία πρόσφατος ᾖ.

Οἱ δὲ πόροι καὶ τοῖς ἰχθύσι καὶ τούτοις προσπεφύκασιν πρὸς τῇ ὀσφυϊ ὑποκάτω τῆς κοιλίας καὶ τῶν ἐντέρων, μεταξὺ τῆς μεγάλης φλεβός, ἀφ' ἧς τείνουσι πόροι εἰς ἐκάτερον τῶν ὄρχεων. Ὡσπερ δὲ τοῖς ἰχθύσι περὶ μὲν τὴν ὥραν (510a.) τῆς ὀχείας θορός τε φαίνεται ἐνῶν καὶ οἱ πόροι σφόδρα δῆλοι, ὅταν δὲ παρέλθῃ ἡ ὥρα, ἄδηλοι καὶ οἱ πόροι ἐνίστε, οὕτω καὶ τῶν ὀρνίθων οἱ ὄρχεις· πρὶν μὲν ὀχεύειν, οἱ μὲν μικροὺς οἱ δὲ πάμπαν ἀδήλους ἔχουσιν, ὅταν δ' ὀχεύωσι, σφόδρα μεγάλους ἴσχουσιν. Ἐπιδηλότατα δὲ τοῦτο συμβαίνει ταῖς φάτταις καὶ τοῖς πέρδιξιν, ὥστ' ἐνιοὶ οἴονται οὐδ' ἔχειν τοῦ χειμῶνος ὄρχεις αὐτά.

Τῶν δ' ἐν τῷ ἔμπροσθεν ἐχόντων τοὺς ὄρχεις οἱ μὲν ἐντὸς ἔχουσι πρὸς τῇ γαστρὶ, καθάπερ δελφίς, οἱ δ' ἐκτὸς ἐν τῷ φανερωῷ πρὸς τῷ τέλει τῆς γαστρός. Τούτοις δὲ τὰ μὲν ἄλλα ἔχει τὸν αὐτὸν τρόπον, διαφέρουσι δ' ὅτι οἱ μὲν αὐτῶν ἔχουσι καθ' αὐτοὺς τοὺς ὄρχεις, οἱ δ' ἐν τῇ καλουμένῃ ὀσχέᾳ, ὅσοι ἔξωθεν.

Αὐτοὶ δ' οἱ ὄρχεις ἐν πᾶσι τοῖς πεζοῖς καὶ ζωοτόκοις τόνδ' ἔχουσι τὸν τρόπον. Τείνουσιν ἐκ τῆς ἁορτῆς πόροι φλεβικοὶ μέχρι τῆς κεφαλῆς ἑκατέρου τοῦ ὄρχεως, καὶ ἄλλοι ἀπὸ τῶν νεφρῶν δύο· εἰσὶ δ' οὗτοι μὲν αἱματώδεις, οἱ δ' ἐκ τῆς ἁορτῆς ἄναιμοι. Ἀπὸ δὲ τῆς κεφαλῆς πρὸς αὐτῷ τῷ ὄρχει πόρος ἐστὶ πυκνότερος ἐκείνου καὶ νευρωδέστερος, ὃς ἀνακάμπει πάλιν ἐν ἑκατέρῳ τῷ ὄρχει πρὸς τὴν κεφαλὴν τοῦ ὄρχεως· ἀπὸ δὲ τῆς κεφαλῆς ἑκατέρας πάλιν εἰς ταὐτὸ συνάπτουσιν εἰς τὸ πρόσθεν ἐπὶ τὸ αἰδοῖον. Οἱ δ' ἐπανακάμπτοντες πόροι καὶ προσκαθήμενοι τοῖς ὄρχεσιν ὑμὲν περιειλημμένοι εἰσὶ τῷ αὐτῷ, ὥστε δοκεῖν ἓνα εἶναι πόρον, ἂν μὴ διέλη τὸν ὑμένα τις. Ὁ μὲν οὖν προσκαθήμενος πόρος ἔτι αἱματώδης ἔχει τὸ ὑγρόν, ἦττον μέντοι τῶν ἄνω τῶν ἐκ τῆς ἁορτῆς· ἐν δὲ τοῖς ἐπανακάμπτουσιν εἰς τὸν καυλὸν τὸν ἐν τῷ αἰδοίῳ λευκὴ ἐστὶν ἡ ὑγρότης. Φέρει δὲ καὶ ἀπὸ τῆς κύστεως πόρος, καὶ συνάπτει ἄνωθεν εἰς τὸν καυλόν· περὶ τοῦτον δ' οἶον κελυφὸς ἐστὶ τὸ καλούμενον αἰδοῖον. Θεωρείσθω δὲ τὰ εἰρημένα ταῦτα ἐκ τῆς ὑπογραφῆς τῆσδε. Τῶν πόρων ἀρχὴ τῶν ἀπὸ τῆς ἁορτῆς, ἐφ' οἷς Α· κεφαλαὶ τῶν ὄρχεων καὶ οἱ καθήμενοι πόροι, ἐφ' οἷς ΚΚ· οἱ ἀπὸ τούτων πρὸς τῷ ὄρχει προσκαθήμενοι, ἐφ' οἷς τὰ ΩΩ· οἱ δ' ἀνακάμπτοντες, ἐν οἷς ἡ ὑγρότης ἡ λευκὴ, ἐφ' οἷς τὰ ΒΒ· αἰδοῖον Δ, κύστις Ε, ὄρχεις δ' ἐν οἷς τὰ ΨΨ.

Ἀποτεμνομένων δ' ἡ (510b.) ἀφαιρουμένων τῶν ὄρχεων αὐτῶν ἀνασπῶνται οἱ πόροι ἄνω. Διαφθείρουσι δ' οἱ μὲν ἔτι νέων ὄντων τρίψει, οἱ δὲ καὶ ὕστερον ἐκτέμνοντες· συνέβη δ' ἤδη ταῦρον ἐκτμηθέντα καὶ εὐθύς ἐπιβάντα ὀχεῦσαι καὶ γεννῆσαι. Τὰ μὲν οὖν περὶ τοὺς ὄρχεις τοῖς ζώοις τοῦτον ἔχει τὸν τρόπον.

Αἱ δ' ὑστέραι τῶν ἐχόντων ὑστέρας ζώων οὔτε τὸν αὐτὸν τρόπον ἔχουσιν οὔθ' ὅμοιαι πάντων εἰσὶν, ἀλλὰ διαφέρουσι καὶ τῶν ζωοτοκούντων πρὸς ἄλληλα καὶ τῶν ὠοτοκούντων. Δίκροαι μὲν οὖν εἰσιν ἀπάντων τῶν πρὸς τοῖς ἄρθροις ἐχόντων τὰς ὑστέρας, καὶ τὸ μὲν αὐτῶν ἐν τοῖς δεξιοῖς μέρεσι, τὸ δ' ἕτερον ἐν τοῖς ἀριστεροῖς ἐστὶν· ἡ δ' ἀρχὴ μία καὶ τὸ στόμα ἓν, οἶον καυλὸς σαρκώδης σφόδρα καὶ χονδρώδης τοῖς πλείστοις καὶ μεγίστοις.

Καλεῖται δὲ τούτων τὸ μὲν ὑστέρα καὶ δελφύς (ὄθεν καὶ ἀδελφοὺς προσαγορεύουσι), μήτρα δ' ὁ καυλὸς καὶ τὸ στόμα τῆς ὑστέρας. Ὅσα μὲν οὖν ἐστὶ ζωοτόκα καὶ δίποδα καὶ τετράποδα, τούτων μὲν ἡ ὑστέρα πάντων ἐστὶ κάτω τοῦ ὑποζώματος, οἶον ἀνθρώπῳ καὶ κυνὶ καὶ ἵππῳ καὶ βοτῇ· καὶ τοῖς κερατοφόροις ὁμοίως ταῦτά γ' ἔχει πᾶσιν. Ἐπ' ἄκρων δ' αἱ ὑστέραι τῶν καλουμένων κερατίων εἰλιγμὸν ἔχουσιν αἱ τῶν πλείστων.

Τῶν δ' ὠοτοκούντων εἰς τοῦμφανές οὐχ ὁμοίως ἀπάντων ἔχουσιν, ἀλλ' αἱ μὲν τῶν ὀρνίθων πρὸς τῷ ὑποζώματι, αἱ δὲ τῶν ἰχθύων κάτω καθάπερ αἱ τῶν ζωοτοκούντων διπόδων καὶ τετραπόδων, πλὴν λεπταὶ καὶ ὑμενώδεις καὶ μακραί, ὥστ' ἐν τοῖς σφόδρα μικροῖς τῶν ἰχθύων δοκεῖν ἑκατέραν ὥδον εἶναι ἓν, ὡς δύο ἐχόντων ὥα τῶν ἰχθύων τούτων, ὅσων λέγεται τὸ ὥδον εἶναι ψαθυρόν· ἔστι γὰρ οὐχ ἓν ἀλλὰ πολλά, διόπερ διαχεῖται εἰς πολλά.

Ἡ δὲ τῶν ὀρνίθων ὑστέρα κάτωθεν μὲν ἔχει τὸν καυλὸν σαρκώδη καὶ στιφρόν, τὰ δὲ πρὸς τῷ ὑποζώματι ὑμενώδη καὶ λεπτὰ πάμπαν, ὥστε δόξαι ἂν ἔξω τῆς ὑστέρας εἶναι τὰ ὥα. Ἐν μὲν οὖν τοῖς μείζοσι τῶν ὀρνίθων δῆλός ἐστιν ὁ ὑμὴν μᾶλλον, καὶ φυσώμενος διὰ τοῦ καυλοῦ αἴρεται καὶ κολποῦται· ἐν δὲ τοῖς μικροῖς ἀδηλότερα πάντα ταῦτα.

Τὸν αὐτὸν δὲ τρόπον ἔχει ἡ ὑστέρα καὶ ἐν τοῖς τετράποσι μὲν τῶν ζώων ὠοτόκοις δέ, οἷον χελώνη καὶ σαύρα καὶ βατράχοις καὶ τοῖς ἄλλοις (511a.) τοῖς τοιούτοις· ὁ μὲν γὰρ καυλὸς κάτωθεν εἰς καὶ σαρκωδέστερος, ἡ δὲ σχίσις καὶ τὰ ὥα ἄνω πρὸς τῷ ὑποζώματι.

Ὅσα δὲ τῶν ἀπόδων εἰς τὸ φανερόν μὲν ζωοτοκεῖ ἐν αὐτοῖς δ' ὠοτοκεῖ, οἷον οἷ τε γαλεοὶ καὶ τᾶλλα τὰ καλούμενα σελάχη (καλεῖται δὲ σέλαχος ὁ ἂν ἄπουν ὄν καὶ βράγχια ἔχον ζωοτόκον ἦ), τούτων δὴ δικρόα μὲν ἡ ὑστέρα, ὁμοίως δὲ καὶ πρὸς τὸ ὑπόζωμα τείνει, καθάπερ καὶ τῶν ὀρνίθων. Ἐπι δὲ διὰ μέσου τῶν δικρῶν κάτωθεν ἀρξαμένη μέχρι πρὸς τὸ ὑπόζωμα τείνει, καὶ τὰ ὥα ἐνταῦθα γίνεται καὶ ἄνω ἐπ' ἀρχῇ τοῦ ὑποζώματος· εἴτα προελθόντα εἰς τὴν εὐρυχωρίαν ζῶα γίνεται ἐκ τῶν ὥων. Αὐτῶν δὲ τούτων πρὸς ἄλληλά τε καὶ πρὸς τοὺς ἄλλους ἰχθῦς ἡ διαφορὰ τῶν ὑστερῶν ἀκριβέστερον ἂν θεωρηθεῖ τοῖς σχήμασιν ἐκ τῶν ἀνατομῶν.

Ἔχει δὲ καὶ τὸ τῶν ὄφεων γένος πρὸς τε ταῦτα καὶ πρὸς ἄλληλα διαφοράν. Τὰ μὲν γὰρ ἄλλα γένη τῶν ὄφεων ὠοτοκεῖ πάντα, ὁ δ' ἔχῃς ζωοτοκεῖ μόνον, ὠοτοκήσας ἐν αὐτῷ πρῶτον· διὸ παραπλησίως ἔχει τὰ περὶ τὴν ὑστέραν τοῖς σελάχεσιν. Ἡ δὲ τῶν ὄφεων ὑστέρα μακρά, καθάπερ τὸ σῶμα, τείνει κάτωθεν ἀρξαμένη ἀφ' ἐνὸς πόρου συνεχῆς, ἔνθεν καὶ ἔνθεν τῆς ἀκάνθης, οἷον πόρος ἑκάτερος ὢν, μέχρι πρὸς τὸ ὑπόζωμα, ἐν ᾗ τὰ ὥα κατὰ στοῖχον ἐγγίνεται, καὶ ἐκτίκτει οὐ καθ' ἓν ἀλλὰ συνεχές.

Ἔχει δὲ τὴν ὑστέραν, ὅσα μὲν ζωοτοκεῖ καὶ ἐν αὐτοῖς καὶ εἰς τοῦμφανές, ἄνωθεν τῆς κοιλίας, ὅσα δ' ὠοτοκεῖ, πάντα κάτωθεν πρὸς τῇ ὀσφύϊ. Ὅσα δ' εἰς τὸ φανερόν μὲν ζωοτοκεῖ ἐν αὐτοῖς δ' ὠοτοκεῖ, ἐπαμφοτερίζει· τὸ μὲν

γὰρ κάτωθεν πρὸς τὴν ὀσφὺν αὐτῆς μέρος ἐστίν, ἐν ᾧ τὰ ὠά, τὸ δὲ περὶ τὴν ἔξοδον ἐπάνω τῶν ἐντέρων.

Ἔτι δὲ διαφορὰ καὶ ἦδε πρὸς ἀλλήλας ἐστὶ τῶν ὑστερῶν. Τὰ μὲν γὰρ κερατοφόρα καὶ μὴ ἀμφώδοντα ἔχει κοτυληδόνας ἐν τῇ ὑστέρα, ὅταν ἔχη τὸ ἔμβρυον, καὶ τῶν ἀμφωδόντων οἶον δασύπους καὶ μῦς καὶ νυκτερίς· τὰ δ' ἄλλα τὰ ἀμφώδοντα καὶ ζωοτόκα καὶ ὑπόποδα πάντα λείαν ἔχει τὴν ὑστέραν, καὶ ἡ τῶν ἐμβρύων ἐξάρτησις ἐξ αὐτῆς ἐστὶ τῆς ὑστέρας, ἀλλ' οὐκ ἐκ κοτυληδόνης.

Τὰ μὲν οὖν ἀνομοιομερῆ ἐν τοῖς ζώοις μέρη τοῦτον ἔχει (511b.) τὸν τρόπον, καὶ τὰ ἐκτὸς καὶ τὰ ἐντός.

## Κεφάλαιο 2

Τῶν δ' ὁμοιομερῶν κοινότατον μὲν ἐστὶ τὸ αἷμα πᾶσι τοῖς ἐναίμοις ζώοις καὶ τὸ μόριον ἐν ᾧ πέφυκεν ἐγγίνεσθαι (τοῦτο δὲ καλεῖται φλέψ), ἔπειτα δὲ τὸ ἀνάλογον τούτοις, ἰχώρ καὶ ἴνες, καὶ ὃ μάλιστα δὴ ἐστὶ τὸ σῶμα τῶν ζώων, ἡ σὰρξ καὶ τὸ τούτῳ ἀνάλογον ἐν ἐκάστῳ μόριον, ἔτι ὅστούν καὶ τὸ ἀνάλογον τούτῳ, οἶον ἄκανθα καὶ χόνδρος· ἔτι δὲ δέρμα, ὑμήν, νεῦρα, τρίχες, ὄνυχες, καὶ τὰ ὁμολογούμενα τούτοις· πρὸς δὲ τούτοις πιμελή, στέαρ καὶ τὰ περιττώματα· ταῦτα δ' ἐστὶ κόπρος, φλέγμα, χολὴ ξανθὴ καὶ μέλαινα.

Ἐπεὶ δ' ἀρχῇ ἔοικεν ἡ τοῦ αἵματος φύσις καὶ ἡ τῶν φλεβῶν, πρῶτον περὶ τούτων λεκτέον, ἄλλως τ' ἐπειδὴ καὶ τῶν πρότερον εἰρηκότων τινὲς οὐ καλῶς λέγουσιν. Αἷτιον δὲ τῆς ἀγνοίας τὸ δυσθεώρητον αὐτῶν. Ἐν μὲν γὰρ τοῖς τεθνεῶσι τῶν ζώων ἄδηλος ἡ φύσις τῶν κυριωτάτων φλεβῶν διὰ τὸ συμπίπτειν εὐθύς ἐξιόντος τοῦ αἵματος μάλιστα ταύτας (ἐκ τούτων γὰρ ἐκχεῖται ἀθρόον ὥσπερ ἐξ ἀγγείου· καθ' αὐτὸ γὰρ οὐδὲν ἔχει αἷμα, πλὴν ὀλίγον ἐν τῇ καρδίᾳ, ἀλλὰ πᾶν ἐστὶν ἐν ταῖς φλεψίν). Ἐν δὲ τοῖς ζῶσιν ἀδύνατόν ἐστι θεάσασθαι πῶς ἔχουσιν· ἐντὸς γὰρ ἡ φύσις αὐτῶν. Ὡσθ' οἱ μὲν ἐν τεθνεῶσι καὶ διηρημένοις τοῖς ζώοις θεωροῦντες τὰς μεγίστας ἀρχὰς οὐκ ἐθεώρουν, οἱ δ' ἐν τοῖς λελεπτυσμένοις σφόδρα ἀνθρώποις ἐκ τῶν τότε ἔξωθεν φαινομένων τὰς ἀρχὰς τῶν φλεβῶν διώρισαν.

Συέννεσις μὲν ὁ Κύπριος ἰατρὸς τόνδε τὸν τρόπον λέγει. Αἱ φλέβες αἱ παχεῖαι ὧδε πεφύκασιν, ἐκ τοῦ ὀμφαλοῦ παρὰ τὴν ὀσφὺν διὰ τοῦ νώτου παρὰ τὸν πλεύμονα ὑπὸ τοὺς μαστούς, ἡ μὲν ἐκ τοῦ δεξιοῦ εἰς τὰ ἀριστερά, ἡ δ' ἐκ τοῦ ἀριστεροῦ εἰς τὸ δεξιόν, ἡ μὲν ἐκ τοῦ ἀριστεροῦ διὰ τοῦ ἥπατος εἰς τὸν



νεφρὸν καὶ εἰς τὸν ὄρχιν, ἡ δ' ἐκ τοῦ δεξιοῦ εἰς τὸν σπλῆνα καὶ νεφρὸν καὶ ὄρχιν, ἐντεῦθεν δ' εἰς τὸ αἰδοῖον.

Διογένης δ' ὁ Ἀπολλωνιάτης τάδε λέγει. Αἱ φλέβες ἐν τῷ ἀνθρώπῳ ὧδ' ἔχουσιν. Εἰσὶ δύο μέγισται· αὗται τείνουσι διὰ τῆς κοιλίας παρὰ τὴν νωτιαίαν ἄκανθαν, ἡ μὲν ἐπὶ δεξιᾷ ἡ δ' ἐπ' ἀριστερά, εἰς τὰ σκέλη ἑκάτερα παρ' ἑαυτῇ, καὶ ἄνω εἰς τὴν κεφαλὴν παρὰ τὰς κλεῖδας διὰ τῶν σφαγῶν. Ἀπὸ δὲ τούτων καθ' (512a.) ἅπαν τὸ σῶμα φλέβες διατείνουσιν, ἀπὸ μὲν τῆς δεξιᾶς εἰς τὰ δεξιᾷ, ἀπὸ δὲ τῆς ἀριστερᾶς εἰς τὰ ἀριστερά, μέγισται μὲν δύο εἰς τὴν καρδίαν περὶ αὐτὴν τὴν νωτιαίαν ἄκανθαν, ἕτεραι δ' ὀλίγον ἄνωτέρω διὰ τῶν στηθῶν ὑπὸ τὴν μασχάλην εἰς ἑκατέραν τὴν χεῖρα τὴν παρ' ἑαυτῇ· καὶ καλεῖται ἡ μὲν σπληνίτις, ἡ δ' ἥπατιτις. Σχίζεται δ' αὐτῶν ἄκρα ἑκάτερα, ἡ μὲν ἐπὶ τὸν μέγαν δάκτυλον, ἡ δ' ἐπὶ τὸν ταρσόν· ἀπὸ δὲ τούτων λεπταὶ καὶ πολυόζοι ἐπὶ τὴν ἄλλην χεῖρα καὶ δακτύλους. Ἑτεραι δὲ λεπτότεραι ἀπὸ τῶν πρώτων φλεβῶν τείνουσιν, ἀπὸ μὲν τῆς δεξιᾶς εἰς τὸ ἥπαρ, ἀπὸ δὲ τῆς ἀριστερᾶς εἰς τὸν σπλῆνα καὶ τοὺς νεφρούς. Αἱ δ' εἰς τὰ σκέλη τείνουσαι σχίζονται κατὰ τὴν πρόσφυσιν, καὶ διὰ παντὸς τοῦ μηροῦ τείνουσιν. Ἡ δὲ μεγίστη αὐτῶν ὀπισθεν τείνει τοῦ μηροῦ, καὶ ἐκφαίνεται παχεῖα· ἑτέρα δ' εἴσω τοῦ μηροῦ, μικρὸν ἥττον παχεῖα ἐκείνης. Ἐπειτα παρὰ τὸ γόνυ τείνουσιν εἰς τὴν κνήμην τε καὶ τὸν πόδα. Καὶ καθάπερ αἱ εἰς τὰς χεῖρας, καὶ ἐπὶ τὸν ταρσόν τοῦ ποδὸς καθήκουσι, καὶ ἐντεῦθεν ἐπὶ τοὺς δακτύλους διατείνουσιν. Σχίζονται δὲ καὶ ἐπὶ τὴν κοιλίαν καὶ τὸ πλευρὸν πολλαὶ ἀπ' αὐτῶν καὶ λεπταὶ φλέβες.

Αἱ δ' εἰς τὴν κεφαλὴν τείνουσαι διὰ τῶν σφαγῶν φαίνονται ἐν τῷ αὐχένι μεγάλαι· ἀφ' ἑκατέρας δ' αὐτῶν, ἡ τελευτᾷ, σχίζονται εἰς τὴν κεφαλὴν πολλαί, αἱ μὲν ἐκ τῶν δεξιῶν εἰς τὰ ἀριστερά, αἱ δ' ἐκ τῶν ἀριστερῶν εἰς τὰ δεξιᾷ· τελευτῶσι δὲ παρὰ τὸ οὖς ἑκάτεραι. Ἔστι δ' ἑτέρα φλεψὶς ἐν τῷ τραχήλῳ παρὰ τὴν μεγάλην ἑκατέρωθεν, ἐλάττων ἐκείνης ὀλίγον, εἰς ἣν αἱ πλεῖσται ἐκ τῆς κεφαλῆς συνέχουσιν αὐτῆς· καὶ αὗται τείνουσι διὰ τῶν σφαγῶν εἴσω, καὶ ἀπ' αὐτῶν ἑκατέρας ὑπὸ τὴν ὠμοπλάτην τείνουσι καὶ εἰς τὰς χεῖρας. Καὶ φαίνονται παρά τε τὴν σπληνίτιν καὶ τὴν ἥπατιτιν ἕτεραι ὀλίγον ἐλάττους, ἃς ἀποσχάζουσιν, ὅταν τι ὑπὸ τὸ δέρμα λυπῇ· ἂν δέ τι περὶ τὴν κοιλίαν, τὴν ἥπατιτιν καὶ τὴν σπληνίτιν. Τείνουσι δὲ καὶ ὑπὸ τοὺς μαστοὺς ἀπὸ (512b.) τούτων ἕτεραι. Ἑτεραι δ' εἰσὶν αἱ ἀπὸ ἑκατέρας τείνουσαι διὰ τοῦ νωτιαίου μυελοῦ εἰς τοὺς ὄρχεις, λεπταί. Ἑτεραι δ' ὑπὸ τὸ δέρμα καὶ διὰ τῆς σαρκὸς τείνουσιν εἰς τοὺς νεφρούς, καὶ τελευτῶσιν εἰς τοὺς ὄρχεις τοῖς ἀνδράσι, ταῖς δὲ γυναξίν εἰς τὰς ὑστέρας. Αἱ δὲ φλέβες αἱ μὲν πρῶται ἐκ τῆς κοιλίας εὐρύτεραί εἰσιν, ἔπειτα λεπτότεραι γίνονται, ἕως ἂν

μεταβάλωσιν ἐκ τῶν δεξιῶν εἰς τὰ ἀριστερὰ καὶ ἐκ τούτων εἰς τὰ δεξιά· αὗται δὲ σπερματίδες καλοῦνται.

Τὸ δ' αἶμα τὸ μὲν παχύτατον ὑπὸ τῶν σαρκῶν ἐγγίνεται· ὑπερβάλλον δ' εἰς τοὺς τόπους τούτους λεπτὸν καὶ θερμὸν καὶ ἀφρώδες γίνεται.

### Κεφάλαιο 3

Συέννεσις μὲν οὖν καὶ Διογένης οὕτως εἰρήκασιν, Πόλυβος δ' ὥδε. Τὰ δὲ τῶν φλεβῶν τέτταρα ζεύγη ἐστίν, ἓν μὲν ἀπὸ τοῦ ἐξόπισθεν τῆς κεφαλῆς διὰ τοῦ αὐχένος ἔξωθεν παρὰ τὴν ῥάχιν ἔνθεν καὶ ἔνθεν μέχρι τῶν ἰσχύων εἰς τὰ σκέλη, ἔπειτα διὰ τῶν κνημῶν ἐκ τῶν σφυρῶν εἰς τ' ἔξω καὶ εἰς τοὺς πόδας· διὸ καὶ τὰς φλεβοτομίας ποιοῦνται τῶν περὶ τὸν νῶτον ἀλγημάτων καὶ ἰσχίον ἀπὸ τῶν ἰγνύων καὶ τῶν σφυρῶν ἔξωθεν. Ἔτεροι δὲ φλέβες ἐκ τῆς κεφαλῆς παρὰ τὰ ὦτα διὰ τοῦ αὐχένος, αἱ καλοῦνται σφαγίτιδες, ἔνδοθεν παρὰ τὴν ῥάχιν ἐκάτεραι φέρουσαι παρὰ τὰς ψύας εἰς τοὺς ὄρχεις καὶ εἰς τοὺς μηρούς, καὶ διὰ τῶν ἰγνύων τοῦ ἔνδοθεν μορίου καὶ διὰ τῶν κνημῶν ἐπὶ τὰ σφυρὰ τὰ εἴσω καὶ τοὺς πόδας· διὸ καὶ τὰς φλεβοτομίας ποιοῦνται τῶν περὶ τὰς ψύας καὶ τοὺς ὄρχεις ἀλγημάτων ἀπὸ τῶν ἰγνύων καὶ τῶν σφυρῶν <εἴσωθεν>.

Τὸ δὲ τρίτον ζεῦγος ἐκ τῶν κροτάφων διὰ τοῦ αὐχένος ὑπὸ τὰς ὠμοπλάτας εἰς τὸν πλεύμονα ἀφικνοῦνται, αἱ μὲν ἐκ τῶν δεξιῶν εἰς τὰ ἀριστερὰ ὑπὸ τὸν μαστὸν καὶ εἰς τὸν σπλῆνᾶ τε καὶ εἰς τὸν νεφρόν, αἱ δ' ἀπὸ τῶν ἀριστερῶν εἰς τὸν δεξιὸν ἐκ τοῦ πλεύμονος ὑπὸ τὸν μαστὸν καὶ ἦπαρ καὶ εἰς τὸν νεφρόν· ἄμφω δὲ τελευτῶσιν εἰς τὸν ἄρχόν. Αἱ δὲ τέταρται ἀπὸ τοῦ ἔμπροσθεν τῆς κεφαλῆς καὶ (513a.) τῶν ὀφθαλμῶν ὑπὸ τὸν αὐχένα καὶ τὰς κλεῖδας· ἐντεῦθεν δὲ τείνουσι διὰ τῶν βραχιόνων ἄνωθεν εἰς τὰς καμπάς, εἴτα διὰ τῶν πήχεων ἐπὶ τοὺς καρπούς καὶ τὰς συγκαμπάς, καὶ διὰ τῶν βραχιόνων τοῦ κάτωθεν μορίου εἰς τὰς μασχάλας, καὶ ἐπὶ τὸ τῶν πλευρῶν ἄνωθεν, ἕως ἢ μὲν ἐπὶ τὸν σπλῆνα ἢ δ' ἐπὶ τὸ ἦπαρ ἀφίκηται· εἴθ' ὑπὲρ τῆς γαστρὸς εἰς τὸ αἰδοῖον ἄμφω τελευτῶσιν.

Τὰ μὲν οὖν ὑπὸ τῶν ἄλλων εἰρημένα σχεδὸν ταῦτ' ἐστίν· εἰσὶ δὲ καὶ τῶν περὶ φύσιν οἱ τοιαύτην μὲν οὐκ ἐπραγματεύθησαν ἀκριβολογίαν περὶ τὰς φλέβας, πάντες δ' ὁμοίως τὴν ἀρχὴν αὐτῶν ἐκ τῆς κεφαλῆς καὶ τοῦ ἐγκεφάλου ποιοῦσι, λέγοντες οὐ καλῶς. Χαλεπῆς δ' οὕσης, ὥσπερ εἴρηται πρότερον, τῆς θεωρίας ἐν μόνοις τοῖς ἀποπεπνιγμένοις τῶν ζώων προλεπυνθεῖσιν ἔστιν ἱκανῶς καταμαθεῖν, εἴ τι περὶ τῶν τοιούτων

ἐπιμελές.

Ἐχει δὲ τοῦτον τὸν τρόπον ἡ τῶν φλεβῶν φύσις. Δύο φλέβες εἰσὶν ἐν τῷ θώρακι κατὰ τὴν ῥάχιν ἐντός, ἔστι δὲ κειμένη αὐτῶν ἡ μὲν μείζων ἐν τοῖς ἔμπροσθεν, ἡ δ' ἐλάττων ὀπισθεν ταύτης, καὶ ἡ μὲν μείζων ἐν τοῖς δεξιοῖς μᾶλλον, ἡ δ' ἐλάττων ἐν τοῖς ἀριστεροῖς, ἣν καλοῦσιν τινες ἄορτὴν ἐκ τοῦ τεθεῖσθαι καὶ ἐν τοῖς τεθνεῶσι τὸ νευρώδες αὐτῆς μόριον. Αὗται δ' ἔχουσι τὰς ἀρχὰς ἀπὸ τῆς καρδίας· διὰ μὲν γὰρ τῶν ἄλλων σπλάγχνων, ἡ τυγχάνουσι τείνουσαι, ὅλαι δι' αὐτῶν διέρχονται σωζόμεναι καὶ οὔσαι φλέβες, ἡ δὲ καρδία ὥσπερ μόριον αὐτῶν ἐστὶ, καὶ μᾶλλον τῆς ἐμπροσθίας καὶ μείζονος, διὰ τὸ ἄνω μὲν καὶ κάτω τὰς φλέβας εἶναι ταύτας, ἐν μέσῳ δ' αὐτῶν τὴν καρδίαν.

Ἐχουσι δ' αἱ καρδίαι πᾶσαι μὲν κοιλίας ἐν αὐταῖς, ἀλλ' αἱ μὲν τῶν σφόδρα μικρῶν ζώων μόλις φανερὰν τὴν μεγίστην ἔχουσι, τὰ δὲ μέσα τῷ μεγέθει τῶν ζώων καὶ τὴν ἑτέραν, τὰ δὲ μέγιστα τὰς τρεῖς. Ἔστι δὲ τῆς καρδίας τὸ ὄξυ ἐχούσης εἰς τὸ πρόσθεν, καθάπερ εἴρηται πρότερον, ἡ μεγίστη μὲν κοιλία ἐν τοῖς δεξιοῖς καὶ ἄνωτάτῳ αὐτῆς, ἡ δ' ἐλαχίστη ἐν τοῖς ἀριστεροῖς, ἡ δὲ μέση μεγέθει τούτων ἐν τῷ μέσῳ ἀμφοῖν· ἀμφοτέραι δὲ πολλῶ ἐλάττους εἰσὶ τῆς μεγίστης. Συντέτρηνται μέντοι πᾶσαι αὗται πρὸς τὸν πλεύμονα, ἀλλ' ἄδηλοι διὰ σμικρότητα τῶν (513b.) πόρων πλὴν μιᾶς.

Ἡ μὲν οὖν μεγάλη φλέψ ἐκ τῆς μεγίστης ἥρτηται κοιλίας τῆς ἄνω καὶ ἐν τοῖς δεξιοῖς, εἴτα διὰ τοῦ κοίλου τοῦ μέσου τείνεται πάλιν φλέψ, ὡς οὔσης τῆς κοιλίας μορίου τῆς φλεβὸς ἐν ᾧ λιμνάζει τὸ αἷμα. Ἡ δ' ἄορτὴ ἀπὸ τῆς μέσης· πλὴν οὐχ οὕτως ἀλλὰ κατὰ στενωτέραν σύριγγα πολλῶ κοινωνεῖ. Καὶ ἡ μὲν φλέψ διὰ τῆς καρδίας, εἰς δὲ τὴν ἄορτὴν ἀπὸ τῆς καρδίας τείνει. Καὶ ἔστιν ἡ μὲν μεγάλη φλέψ ὑμενώδης καὶ δερματώδης, ἡ δ' ἄορτὴ στενωτέρα μὲν ταύτης, σφόδρα δὲ νευρώδης· καὶ ἀποτεينوμένη πόρρῳ πρὸς τε τὴν κεφαλὴν καὶ πρὸς τὰ κάτω μόρια στενὴ τε γίνεται καὶ νευρώδης πάμπαν.

Τείνει δὲ πρῶτον μὲν ἄνω ἀπὸ τῆς καρδίας τῆς μεγάλης φλεβὸς μόριον πρὸς τὸν πλεύμονα καὶ τὴν σύναψιν τῆς ἄορτῆς, ἄσχιστος καὶ μεγάλη οὔσα φλέψ. Σχίζεται δ' ἀπ' αὐτῆς μόρια δύο, τὸ μὲν ἐπὶ τὸν πλεύμονα, τὸ δ' ἐπὶ τὴν ῥάχιν καὶ τὸν ὕστατον τοῦ τραχήλου σφόνδυλον. Ἡ μὲν οὖν ἐπὶ τὸν πλεύμονα τείνουσα φλέψ εἰς διμερῆ ὄντ' αὐτὸν διχῇ σχίζεται πρῶτον, εἴτα παρ' ἐκάστην σύριγγα καὶ ἕκαστον τρῆμα τείνει, μείζων μὲν παρὰ τὰ μείζω, ἐλάττων δὲ παρὰ τὰ ἐλάττω, οὕτως ὥστε μηδὲν εἶναι μόριον λαβεῖν ἐν ᾧ οὐ τρῆμά τ' ἔνεστι καὶ φλέβιον· τὰ γὰρ τελευταῖα τῷ μεγέθει ἄδηλα διὰ τὴν μικρότητα

ἔστιν, ἀλλὰ πᾶς ὁ πλεύμων φαίνεται μεστὸς ὦν αἵματος. Ἐπάνω δ' οἱ ἀπὸ τῆς φλεβὸς εἰσι πόροι τῶν ἀπὸ τῆς ἀρτηρίας συρίγγων τεινουσῶν. Ἡ δ' ἐπὶ τὸν σφόνδυλον τοῦ τραχήλου τείνουσα φλέψ καὶ τὴν ῥάχιν πάλιν παρὰ τὴν ῥάχιν τείνει· ἦν καὶ μηρὸς ἐν τοῖς ἔπεσιν εἴρηκε ποιήσας “ἀπὸ δὲ φλέβα πᾶσαν ἔκερσεν, ἥ τ' ἀνὰ νῶτα θέουσα διαμπερὲς αὐχέν' ἰκάνει”. Ἀπὸ δὲ ταύτης τείνουσι παρὰ τε τὴν πλευρὰν ἐκάστην φλέβια καὶ πρὸς ἕκαστον τὸν σφόνδυλον, κατὰ δὲ τὸν ὑπὲρ τῶν νεφρῶν σφόνδυλον σχίζεται διχῇ.

Ταῦτα μὲν οὖν τὰ μόρια ἀπὸ τῆς μεγάλης φλεβὸς τοῦτον ἔσχισται τὸν τρόπον· ὑπεράνω δὲ τούτων ἀπὸ τῆς ἐκ τῆς καρδίας τεταμένης πάλιν ἡ ὅλη σχίζεται εἰς δύο τόπους. Αἱ μὲν γὰρ φέρουσιν εἰς τὰ πλάγια καὶ τὰς κλεῖδας, κᾶπειτα διὰ τῶν μασχαλῶν τοῖς μὲν ἀνθρώποις εἰς τοὺς βραχίονας, τοῖς δὲ τετράποσιν εἰς (514a.) τὰ πρόσθια σκέλη τείνουσι, τοῖς δ' ὄρνισιν εἰς τὰς πτέρυγας, τοῖς δ' ἰχθύσιν εἰς τὰ πτερύγια τὰ πρηνῇ. Αἱ δ' ἀρχαὶ τούτων τῶν φλεβῶν, ἧ σχίζονται τὸ πρῶτον, καλοῦνται σφαγίτιδες· ἧ δὲ σχίζονται εἰς τὸν αὐχένα [ἀπὸ τῆς μεγάλης φλεβὸς], παρὰ τὴν ἀρτηρίαν τείνουσι τὴν τοῦ πλεύμονος· ὦν ἐπιλαμβανομένων ἐνίστε ἔξωθεν ἄνευ πνιγμοῦ καταπίπτουσιν οἱ ἄνθρωποι μετ' ἀναισθησίας, τὰ βλέφαρα συμβεβληκότες. Οὕτω δὲ τείνουσαι, καὶ μεταξὺ λαμβάνουσαι τὴν ἀρτηρίαν, φέρουσι μέχρι τῶν ὠτων, ἧ συμβάλλουσιν αἱ γένυες τῇ κεφαλῇ. Πάλιν δ' ἐντεῦθεν εἰς τέτταρας σχίζονται φλέβας, ὧν μία μὲν ἐπανακάμψασα καταβαίνει διὰ τοῦ τραχήλου καὶ τοῦ ὤμου, καὶ συμβάλλει τῇ πρότερον ἀποσχίσει τῆς φλεβὸς κατὰ τὴν τοῦ βραχίονος καμπήν, τὸ δ' ἕτερον μόριον εἰς τὴν χεῖρα τελευτᾷ καὶ τοὺς δακτύλους· μία δ' ἑτέρα ἀφ' ἐκατέρου τοῦ τόπου τοῦ περὶ τὰ ὦτα ἐπὶ τὸν ἐγκέφαλον τείνει, καὶ σχίζεται εἰς πολλὰ καὶ λεπτὰ φλέβια εἰς τὴν καλουμένην μήνιγγα τὴν περὶ τὸν ἐγκέφαλον. Αὐτὸς δ' ὁ ἐγκέφαλος ἄναιμος πάντων ἐστί, καὶ οὔτε μικρὸν οὔτε μέγα φλέβιον τελευτᾷ εἰς αὐτόν. Τῶν δὲ λοιπῶν τῶν ἀπὸ τῆς φλεβὸς ταύτης σχισθειςῶν φλεβῶν αἱ μὲν τὴν κεφαλὴν κύκλω περιλαμβάνουσιν, αἱ δ' εἰς τὰ αἰσθητήρια ἀποτελεωῶσι καὶ τοὺς ὁδόντας λεπτοῖς πάμπαν φλεβίοις.

## Κεφάλαιο 4

Τὸν δ' αὐτὸν τρόπον καὶ τὰ τῆς ἐλάττονος φλεβὸς, καλουμένης δ' ἀορτῆς, ἔσχισται μέρη, συμπαρακολουθοῦντα τοῖς τῆς μεγάλης· πλὴν ἐλάττους οἱ πόροι καὶ τὰ φλέβια πολλῶ ἐλάττω ταύτης ἐστὶ τῶν τῆς μεγάλης φλεβὸς.

Τὰ μὲν οὖν ἄνωθεν τῆς καρδίας τοῦτον ἔχουσι τὸν τρόπον αἱ φλέβες· τὸ δ' ὑποκάτω τῆς καρδίας μέρος τῆς μεγάλης φλεβὸς τείνει μετέωρον διὰ τοῦ

ὑποζώματος, συνέχεται δὲ καὶ πρὸς τὴν ἄορτὴν καὶ πρὸς τὴν ῥάχιν πόροις ὑμενώδεσι καὶ χαλαροῖς. Τείνει δ' ἅπ' αὐτῆς μία μὲν διὰ τοῦ ἥπατος φλέψ, βραχεῖα μὲν πλατεῖα δέ, ἅφ' ἧς πολλὰ καὶ λεπτὰ εἰς τὸ ἥπαρ ἀποτείνουσιν ἀφανίζονται. Δύο δ' ἀπὸ τῆς διὰ τοῦ ἥπατος φλεβὸς ἀποσχίσεις εἰσὶν, ὧν ἡ μὲν εἰς τὸ ὑπόζωμα τελευτᾷ καὶ τὰς καλουμένας φρένας, ἡ δὲ πάλιν ἐπανελθοῦσα διὰ τῆς μασχάλης εἰς τὸν (514b.) βραχίονα τὸν δεξιὸν συμβάλλει ταῖς ἑτέραις φλεψὶ κατὰ τὴν ἐντὸς καμπήν· διὸ ἀποσχαζόντων τῶν ἱατρῶν ταύτην ἀπολύονται τινων πόνων περὶ τὸ ἥπαρ.

Ἐκ δὲ τῶν ἀριστερῶν αὐτῆς μικρὰ μὲν παχεῖα δὲ φλέψ τείνει εἰς τὸν σπλῆνα, καὶ ἀφανίζεται τὰ ἅπ' αὐτῆς φλέβια εἰς τοῦτον. Ἅτερον δὲ μέρος ἀπὸ τῶν ἀριστερῶν τῆς μεγάλης φλεβὸς ἀποσχισθὲν τὸν αὐτὸν τρόπον ἀναβαίνει ἐπὶ τὸν ἀριστερὸν βραχίονα· πλὴν ἐκείνη μὲν ἡ διὰ τοῦ ἥπατος ἐστίν, αὕτη δ' ἑτέρα τῆς εἰς τὸν σπλῆνα τεινούσης.

Ἔτι δ' ἄλλαι ἀπὸ τῆς μεγάλης φλεβὸς ἀποσχίζονται, ἡ μὲν ἐπὶ τὸ ἐπίπλοον, ἡ δ' ἐπὶ τὸ καλούμενον πάγκρεας. Ἀπὸ δὲ ταύτης πολλὰ φλέβες διὰ τοῦ μεσεντερίου τείνουσιν. Πᾶσαι δ' αὗται εἰς μίαν φλέβα μεγάλην τελευτῶσιν, παρὰ πᾶν τὸ ἔντερον καὶ τὴν κοιλίαν μέχρι τοῦ στομάχου τεταμένην. Καὶ περὶ ταῦτα τὰ μόρια πολλὰ ἅπ' αὐτῶν σχίζονται φλέβες.

Μέχρι μὲν οὖν τῶν νεφρῶν μία οὔσα ἑκάτερα τείνει, καὶ ἡ ἄορτὴ καὶ ἡ μεγάλη φλέψ· ἐνταῦθα δὲ πρὸς τε τὴν ῥάχιν μᾶλλον προσπεφύκασι, καὶ σχίζονται εἰς δύο ὥσπερ εἰς λάμβδα ἑκάτερα, καὶ γίνεται εἰς τοῦ ὑπισθεν μᾶλλον ἡ μεγάλη φλέψ τῆς ἄορτῆς. Προσπέφυκε δ' ἡ ἄορτὴ μάλιστα τῇ ῥάχει περὶ τὴν καρδίαν· ἡ δὲ πρόσφυσις ἐστὶ φλεβίοις νευρώδεσι καὶ μικροῖς.

Ἔστι δ' ἡ ἄορτὴ ἀπὸ μὲν τῆς καρδίας ἀγομένη εὖ μάλα κοίλη, προϊοῦσα δ' ἐστὶ στενωτέρα καὶ νευρωδεστέρα. Τείνουσι δὲ καὶ ἀπὸ τῆς ἄορτῆς εἰς τὸ μεσεντέριον φλέβες ὥσπερ αἱ ἀπὸ τῆς μεγάλης φλεβὸς, πλὴν πολλῶν λειπόμεναι τῷ μεγέθει· στεναὶ γάρ εἰσι καὶ ἰνώδεις· λεπτοῖς γὰρ καὶ ποικίλοις καὶ ἰνώδεσι τελευτῶσι φλεβίοις. Εἰς δὲ τὸ ἥπαρ καὶ τὸν σπλῆνα οὐδεμία τείνει ἀπὸ τῆς ἄορτῆς φλέψ.

Αἱ δὲ σχίσεις ἑκάτερας τῆς φλεβὸς τείνουσιν εἰς τὸ ἰσχίον ἑκάτερον, καὶ καθάπτουσιν εἰς τὸ ὅστον ἀμφοτέραι. Φέρουσι δὲ καὶ εἰς τοὺς νεφροὺς ἀπὸ τε τῆς μεγάλης φλεβὸς καὶ τῆς ἄορτῆς φλέβες· πλὴν οὐκ εἰς τὸ κοῖλον ἀλλ' εἰς τὸ σῶμα καταναλίσκονται τῶν νεφρῶν. Ἀπὸ μὲν οὖν τῆς ἄορτῆς ἄλλοι δύο πόροι φέρουσιν εἰς τὴν κύστιν, ἰσχυροὶ καὶ συνεχεῖς, καὶ ἄλλοι ἕκ τοῦ

κοίλου τῶν νεφρῶν, οὐδὲν κοινωνοῦντες τῇ μεγάλῃ φλεβί. Ἐκ μέσου δὲ τῶν νεφρῶν ἑκατέρου φλέψ κοίλῃ καὶ νευρώδης ἐξήρτηται, τείνουσα παρ' αὐτὴν τὴν ῥάχιν διὰ (515a.) τῶν στενῶν· εἴτα εἰς ἑκάτερον τὸ ἰσχίον ἀφανίζεται ἑκάτερα πρῶτον, ἔπειτα δὴλαι γίνονται πάλιν διατεταμέναι πρὸς τὸ ἰσχίον. Καθάπτουσι δὲ πρὸς τὴν κύστιν καὶ τὸ αἰδοῖον τὰ πέρατα αὐτῶν ἐν τοῖς ἄρρεσιν, ἐν δὲ τοῖς θήλεσι πρὸς τὰς ὑστέρας. Τείνει δ' ἀπὸ μὲν τῆς μεγάλης φλεβὸς οὐδεμία εἰς τὰς ὑστέρας, ἀπὸ δὲ τῆς ἁορτῆς πολλὰ καὶ πυκναί. Τείνουσι δ' ἀπὸ τῆς ἁορτῆς καὶ τῆς μεγάλης φλεβὸς ἀπὸ τῶν σχιζομένων καὶ ἄλλαι, αἱ μὲν ἐπὶ τοὺς βουβῶνας πρῶτον μεγάλαι καὶ κοῖλαι, ἔπειτα διὰ τῶν σκελῶν τελευτῶσιν εἰς τοὺς πόδας καὶ τοὺς δακτύλους· καὶ πάλιν ἕτεραι διὰ τῶν βουβώνων καὶ τῶν μηρῶν φέρουσιν ἐναλλάξ, ἡ μὲν ἐκ τῶν ἀριστερῶν εἰς τὰ δεξιὰ, ἡ δ' εἰς τὰ ἀριστερὰ ἐκ τῶν δεξιῶν· καὶ συνάπτουσι περὶ τὰς ἰγνύας ταῖς ἐτέραις φλεψίν.

Ὅν μὲν οὖν τρόπον ἔχουσιν αἱ φλέβες καὶ πόθεν ἤρτηνται τὰς ἀρχάς, φανερόν ἐκ τούτων. Ἔχει δ' ἐν ἅπασιν μὲν τοῖς ἐναίμοις ζώοις οὕτω τὰ περὶ τὰς ἀρχὰς καὶ τὰς μεγίστας φλέβας (τὸ γὰρ ἄλλο πλῆθος τῶν φλεβῶν οὐχ ὡσαύτως ἔχει πᾶσιν· οὐδὲ γὰρ τὰ μέρη τὸν αὐτὸν τρόπον ἔχουσιν, οὐδὲ ταῦτα πάντα ἔχουσιν), οὐ μὴν οὐδ' ὁμοίως ἐν ἁπασίν ἐστὶ φανερόν, ἀλλὰ μάλιστα ἐν τοῖς μάλιστα πολυαίμοις καὶ μεγίστοις. Ἐν γὰρ τοῖς μικροῖς καὶ μὴ πολυαίμοις ἢ διὰ φύσιν ἢ διὰ πότητα τοῦ σώματος οὐχ ὁμοίως ἐστὶ καταμαθεῖν· τῶν μὲν γὰρ οἱ πόροι συγκεχυμένοι καθάπερ ὅχεοί τινες ὑπὸ πολλῆς ἰλύος εἰσίν, οἱ δ' ὀλίγας καὶ ταύτας ἵνας ἀντὶ φλεβῶν ἔχουσιν. Ἡ δὲ μεγάλη φλέψ ἐν πᾶσι μάλιστα διάδηλος, καὶ τοῖς μικροῖς.

## Κεφάλαιο 5

Τὰ δὲ νεῦρα τοῖς ζώοις ἔχει τόνδε τὸν τρόπον. Ἡ μὲν ἀρχὴ καὶ τούτων ἐστὶν ἀπὸ τῆς καρδίας· καὶ γὰρ ἐν αὐτῇ ἡ καρδία ἔχει νεῦρα ἐν τῇ μεγίστῃ κοιλίᾳ, καὶ ἡ καλουμένη ἁορτὴ νευρώδης ἐστὶ φλέψ, τὰ μὲν τελευταῖα καὶ παντελῶς αὐτῆς· ἄκοιλα γὰρ ἐστὶ, καὶ τάσιν ἔχει τοιαύτην οἴαν περ τὰ νεῦρα, ἢ τελευτᾷ πρὸς τὰς καμπὰς τῶν ὀστέων. Οὐ μὴν ἄλλ' οὐκ ἐστὶ συνεχῆς ἡ τῶν νεύρων φύσις ἀπὸ μιᾶς ἀρχῆς, ὥσπερ αἱ φλέβες. Αἱ μὲν γὰρ φλέβες, ὥσπερ ἐν τοῖς γραφομένοις κανάβοις, τὸ τοῦ σώματος ἔχουσι σχῆμα παντὸς (515b.) οὕτως ὥστ' ἐν τοῖς σφόδρα λελεπτυσμένοις πάντα τὸν ὄγκον φαίνεσθαι πλήρη φλεβίων (γίνεται γὰρ ὁ αὐτὸς τόπος λεπτῶν μὲν ὄντων φλέβια, παχυνθέντων δὲ σάρκες), τὰ δὲ νεῦρα διεσπασμένα περὶ τὰ ἄρθρα καὶ τὰς τῶν ὀστέων ἐστὶ κάμψεις. Εἰ δ' ἦν συνεχῆς ἡ φύσις αὐτῶν, ἐν τοῖς λελεπτυσμένοις ἂν καταφανῆς ἐγίνετο ἡ συνέχεια πάντων.

Μέγιστα δὲ μέρη τῶν νεύρων τό τε περὶ τὸ μόριον τὸ τῆς ἄλσεως κύριον (καλεῖται δὲ τοῦτο ἰγνύα), καὶ ἕτερον νεῦρον διπτυχές, ὁ τένων, καὶ τὰ πρὸς τὴν ἰσχὺν βοηθητικά, ἐπίτονός τε καὶ ὠμιαία. Τὰ δ' ἀνώνυμα περὶ τὴν τῶν ὀστέων ἐστὶ κάμψιν· πάντα γὰρ τὰ ὀστᾶ, ὅσα ἀπτόμενα πρὸς ἄλληλα σύγκεινται, συνδέδενται νεύροις, καὶ περὶ πάντα ἐστὶ τὰ ὀστᾶ πλήθος νεύρων. Πλήν ἐν τῇ κεφαλῇ οὐκ ἔστιν οὐδέν, ἀλλ' αἱ ῥαφαὶ αὐταὶ τῶν ὀστέων συνέχουσιν αὐτήν.

Ἔστι δ' ἡ τοῦ νεύρου φύσις σχιστὴ κατὰ μῆκος, κατὰ δὲ πλάτος ἄσχιτος καὶ τάσιν ἔχουσα πολλήν. Ὑγρότης δὲ περὶ αὐτὰ μυξώδης γίνεται, λευκὴ καὶ κολλώδης, ἣ τρέφεται καὶ ἐξ ἧς γινόμενα φαίνεται. Ἡ μὲν οὖν φλέψ δύναται πυροῦσθαι, νεῦρον δὲ πᾶν φθείρεται πυρωθέν· κἂν διακοπῇ, οὐ συμφύεται πάλιν. Οὐ λαμβάνει δ' οὐδὲ νάρκη, ὅπου μὴ νεῦρόν ἐστὶ τοῦ σώματος.

Πλεῖστα δ' ἐστὶ νεῦρα περὶ τοὺς πόδας καὶ τὰς χεῖρας καὶ πλευρὰς καὶ ὠμοπλάτας καὶ περὶ τὸν αὐχένα καὶ τοὺς βραχίονας. Ἐχει δὲ νεῦρα πάντα ὅσα ἔχει αἷμα· ἀλλ' ἐν οἷς μὴ εἰσι καμπαὶ ἀλλ' ἄποδα καὶ ἄχειρά ἐστι, λεπτὰ καὶ ἄδηλα· διὸ τῶν ἰχθύων μάλιστά ἐστι δῆλα πρὸς τοῖς πτερυγίοις.

## Κεφάλαιο 6

Αἱ δ' ἴνές εἰσι μεταξὺ νεύρου καὶ φλεβός. Ἐναι δ' αὐτῶν ἔχουσιν ὑγρότητα τὴν τοῦ ἰχῶρος, καὶ διέχουσιν ἀπὸ τε τῶν νεύρων πρὸς τὰς φλέβας καὶ ἀπ' ἐκείνων πρὸς τὰ νεῦρα.

Ἔστι δὲ καὶ ἄλλο γένος ἰνῶν, ὃ γίνεται μὲν ἐν αἵματι, οὐκ ἐν ἅπαντος δὲ ζώου αἵματι· ὧν ἐξαιρουμένων ἐκ τοῦ αἵματος οὐ πηγνυται τὸ αἷμα, ἐὰν δὲ μὴ ἐξαιρεθῶσι, πηγνυται.

Ἐν μὲν οὖν τῷ τῶν πλείστων αἵματι ζῶων ἔνεισιν, ἐν δὲ τῷ τῆς ἐλάφου καὶ προκὸς καὶ βουβαλίδος καὶ ἄλλων τινῶν οὐκ ἔνεισιν ἴνες· διὸ καὶ οὐ πηγνυται αὐτῶν τὸ αἷμα ὁμοίως τοῖς (516a.) ἄλλοις, ἀλλὰ τὸ μὲν τῶν ἐλάφων παραπλησίως τῷ τῶν δασυπόδων (ἔστι δ' ἀμφοτέρων αὐτῶν ἡ πῆξις οὐ στιφρά, καθάπερ ἡ τῶν ἄλλων, ἀλλὰ πλαδῶσα, καθάπερ ἡ τοῦ γάλακτος, ἂν τις εἰς αὐτὸ τὸ πῆγμα μὴ ἐμβάλῃ), τὸ δὲ τῆς βουβαλίδος πηγνυται μᾶλλον· παραπλησίως γὰρ συνίσταται ἢ μικρῷ ἥττον τοῦ τῶν προβάτων.

Περὶ μὲν οὖν φλεβὸς καὶ νεύρου καὶ ἰνὸς τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 7

Τὰ δ' ὅστ'α τοῖς ζώοις ἀφ' ἐνὸς πάντα συνηρτημένα ἐστὶ καὶ συνεχῆ ἀλλήλοις ὥσπερ αἱ φλέβες· αὐτὸ δὲ καθ' αὐτὸ οὐδέν ἐστιν ὅστοῦν. Ἀρχὴ δ' ἡ ῥάχις ἐστὶν ἐν πᾶσι τοῖς ἔχουσιν ὅστ'α. Σύγκειται δ' ἡ ῥάχις ἐκ σφονδύλων, τείνει δ' ἀπὸ τῆς κεφαλῆς μέχρι πρὸς τὰ ἰσχία. Οἱ μὲν οὖν σφόνδυλοι πάντες τετρημένοι εἰσὶν, ἄνω δὲ τὸ τῆς κεφαλῆς ὅστοῦν συνεχές ἐστι τοῖς ἐσχάτοις σφονδύλοις, ὃ καλεῖται κρανίον.

Τούτου δὲ τὸ πριονωτὸν μέρος ῥαφή. Ἔστι δ' οὐ πᾶσιν ὁμοίως ἔχον τοῦτο τοῖς ζώοις· τὰ μὲν γὰρ ἔχει μονόστεον τὸ κρανίον, ὥσπερ κύων, τὰ δὲ συγκείμενον, ὥσπερ ἄνθρωπος, καὶ τούτου τὸ μὲν θῆλυ κύκλῳ ἔχει τὴν ῥαφήν, τὸ δ' ἄρρεν τρεῖς ῥαφὰς ἄνωθεν συναπτούσας, τριγωνοειδεῖς· ἥδη δ' ὥφθη καὶ ἀνδρὸς κεφαλὴ οὐκ ἔχουσα ῥαφὰς.

Σύγκειται δ' ἡ κεφαλὴ οὐκ ἐκ τεττάρων ὀστέων, ἀλλ' ἐξ ἑξ. ἔστι δὲ δύο τούτων περὶ τὰ ὦτα, μικρὰ πρὸς τὰ λοιπά. Ἀπὸ δὲ τῆς κεφαλῆς αἱ σιαγόνες τείνουσιν ὅστ'α. Κινεῖται δὲ τοῖς μὲν ἄλλοις ζώοις ἅπασιν ἢ κάτωθεν σιαγών· ὁ δὲ κροκόδειλος ὁ ποτάμιος μόνος τῶν ζώων κινεῖ τὴν σιαγόνα τὴν ἄνωθεν. Ἐν δὲ ταῖς σιαγόσιν ἔνεστι τὸ τῶν ὀδόντων γένος, ὅστοῦν τῇ μὲν ἄτρητον τῇ δὲ τρητόν, καὶ ἀδύνατον γλύφεσθαι τῶν ὀστέων μόνον.

Ἀπὸ δὲ τῆς ῥάχεως, ἥπερ περόνη ἐστί, καὶ αἱ κλεῖδες καὶ αἱ πλευραὶ. Ἔστι δὲ καὶ τὸ στῆθος ἐπὶ πλευραῖς κείμενον· ἀλλ' αὗται μὲν συνάπτουσιν, αἱ δ' ἄλλαι ἀσύναπτοι· οὐδὲν γὰρ ἔχει ζῶον ὅστοῦν περὶ τὴν κοιλίαν. Ἔτι δὲ τὰ τ' ἐν τοῖς ὤμοις ὅστ'α, καὶ αἱ καλούμεναι ὠμοπλάται, καὶ τὰ τῶν βραχιόνων ἐχόμενα, καὶ τούτων τὰ ἐν ταῖς χερσίν. Ὅσα δ' ἔχει σκέλη πρόσθια, καὶ ἐν τούτοις τὸν αὐτὸν ἔχει τρόπον.

Κάτω δ' ἡ περαίνει, μετὰ τὸ ἰσχίον ἡ κοτυληδὼν ἐστὶ καὶ τὰ τῶν σκελῶν ἥδη ὅστ'α, τὰ τ' ἐν τοῖς μηροῖς καὶ κνήμαις, οἷ (516b.) καλοῦνται κωλῆνες, ὧν μέρος τὰ σφυρά, καὶ τούτων τὰ καλούμενα πλῆκτρα ἐν τοῖς ἔχουσι σφυρόν· καὶ τούτοις συνεχῆ τὰ ἐν τοῖς ποσίν.

Ὅσα μὲν οὖν τῶν ἐναίμων καὶ πεζῶν ζωοτόκα ἐστίν, οὐ πολὺ διαφέρει τὰ ὅστ'α, ἀλλὰ κατ' ἀναλογίαν μόνον σκληρότητι καὶ μαλακότητι καὶ μεγέθει. Ἔτι δὲ τὰ μὲν ἔχει μυελὸν τὰ δ' οὐκ ἔχει τῶν ἐν τῷ αὐτῷ ζῳῷ ὀστέων.

Ἐνια δὲ ζῶα οὐδ' ἂν ἔχουν δόξειεν ὅλως μυελὸν ἐν τοῖς ὀστοῖς, οἷον λέων,



διὰ τὸ πάμπαν ἔχειν μικρὸν καὶ λεπτὸν καὶ ἐν ὀλίγοις· ἔχει δὲ καὶ ἐν τοῖς μηροῖς καὶ βραχίοσιν. Στερεὰ δὲ πάντων μάλιστα ὁ λέων ἔχει τὰ ὀστέα· οὕτω γὰρ ἔστι σκληρὰ ὥστε συντριβομένων ὥσπερ ἐκ λίθων ἐκλάμπειν πῦρ.

Ἔχει δὲ καὶ ὁ δελφὶς ὀστέα, ἀλλ' οὐκ ἄκανθαν. Τὰ δὲ τῶν ἄλλων ζώων τῶν ἐναίμων τὰ μὲν μικρὸν παραλλάττει, οἷον τὰ τῶν ὀρνίθων, τὰ δὲ τῷ ἀνάλογόν ἐστι ταῦτά, οἷον ἐν τοῖς ἰχθύσι· τούτων γὰρ τὰ μὲν ζωοτοκοῦντα χονδράκανθά ἐστιν, οἷον τὰ καλούμενα σελάχη, τὰ δ' ὠοτοκοῦντα ἄκανθαν ἔχει, ἢ ἐστὶν ὥσπερ ἐν τοῖς τετράποσιν ἡ ῥάχιν. Ἴδιον δ' ἐν τοῖς ἰχθύσιν, ὅτι ἐν ἐνίοις εἰσὶ κατὰ τὴν σάρκα κεχωρισμένα ἀκάνθια λεπτὰ. Ὁμοίως δὲ καὶ ὁ ὄφις ἔχει τοῖς ἰχθύσιν· ἀκανθώδης γὰρ ἡ ῥάχιν αὐτοῦ ἐστὶν.

Τὰ δὲ τῶν τετραπόδων μὲν ὠοτοκοῦντων δὲ τῶν μὲν μειζόνων ὀστωδέστερά ἐστι, τῶν δ' ἐλαττόνων ἀκανθωδέστερα. Πάντα δὲ τὰ ζῶα ὅσα ἔναιμά ἐστιν, ἔχει ῥάχιν ἢ ὀστώδη ἢ ἀκανθώδη· τὰ δ' ἄλλα μόρια τῶν ὀστέων ἐν ἐνίοις μὲν ἐστὶν, ἐν ἐνίοις δ' οὐκ ἐστὶν, ἀλλ' ὡς ὑπάρχει τοῦ ἔχειν τὰ μόρια, οὕτω καὶ τοῦ ἔχειν τὰ ἐν τούτοις ὀστέα. Ὅσα γὰρ μὴ ἔχει σκέλη καὶ βραχίονας, οὐδὲ κωλῆνας ἔχει, οὐδ' ὅσα ταῦτά μὲν ἔχει μόρια, μὴ ὅμοια δέ· καὶ γὰρ ἐν τούτοις ἢ τῷ μᾶλλον καὶ ἥττον διαφέρει ἢ τῷ ἀνάλογον.

Τὰ μὲν οὖν περὶ τὴν τῶν ὀστέων φύσιν τοῦτον ἔχει τὸν τρόπον τοῖς ζώοις.

## Κεφάλαιο 8

Ἔστι δὲ καὶ ὁ χόνδρος τῆς αὐτῆς φύσεως τοῖς ὀστοῖς, ἀλλὰ τῷ μᾶλλον διαφέρει καὶ ἥττον.

Καὶ ὥσπερ οὐδ' ὀστοῦν οὐδ' ὁ χόνδρος ἀυξάνεται, ἂν ἀποκοπῇ.

Εἰσὶ δ' ἐν μὲν τοῖς χερσαίοις καὶ ζωοτόκοις τῶν ἐναίμων ἄτρητοι οἱ χόνδροι, καὶ οὐ γίνεται ἐν αὐτοῖς ὥσπερ ἐν τοῖς ὀστοῖς μυελός· ἐν δὲ τοῖς σελάχεσιν (ταῦτα γὰρ ἐστὶ (517a.) χονδράκανθα) ἔνεστιν αὐτῶν ἐν τοῖς πλατέσι τὸ κατὰ τὴν ῥάχιν ἀνάλογον τοῖς ὀστοῖς χονδρῶδες, ἐν οἷς ὑπάρχει ὑγρότης μυελώδης. Τῶν δὲ ζωοτοκοῦντων καὶ πεζῶν περὶ τε τὰ ὦτα χόνδροι εἰσὶ καὶ τοὺς μυκτῆρας καὶ ἔνια ἀκρωτήρια τῶν ὀστέων.

## Κεφάλαιο 9

Ἔτι δ' ἐστὶν ἄλλα γένη μορίων, οὔτε τὴν αὐτὴν ἔχοντα φύσιν τούτοις οὔτε

πόρρω τούτων, οἷον ὄνυχές τε καὶ ὅπλα καὶ χηλαὶ καὶ κέρατα, καὶ ἔτι παρὰ ταῦτα ῥύγχος, οἷον ἔχουσιν οἱ ὄρνιθες, ἐν οἷς ὑπάρχει ταῦτα τὰ μόρια τῶν ζώων. Ταῦτα μὲν γὰρ καὶ καμπτὰ καὶ σχιστά, ὅστοῦν δ' οὐδὲν καμπτὸν οὐδὲ σχιστόν, ἀλλὰ θραυστόν. Καὶ τὰ χρώματα τῶν κεράτων καὶ ὀνύχων καὶ χηλῆς καὶ ὀπλῆς κατὰ τὴν τοῦ δέρματος καὶ τὴν τῶν τριχῶν ἀκολουθεῖ χροάν.

Τῶν τε γὰρ μελανοδερμάτων μέλανα τὰ κέρατα καὶ αἱ ὅπλα καὶ αἱ χηλαί, ὅσα χηλὰς ἔχει, καὶ τῶν λευκῶν λευκά, μεταξὺ δὲ τὰ τῶν ἀνὰ μέσον. Ἔχει δὲ καὶ περὶ τοὺς ὄνυχας τὸν αὐτὸν τρόπον. Οἱ δ' ὀδόντες κατὰ τὴν τῶν ὀστέων εἰσι φύσιν. Διόπερ τῶν μελάνων ἀνθρώπων, ὥσπερ Αἰθιοπῶν καὶ τῶν τοιούτων, οἱ μὲν ὀδόντες λευκοὶ καὶ τὰ ὅστᾱ, οἱ δ' ὄνυχες μέλανεσ, ὥσπερ καὶ τὸ πᾶν δέρμα.

Τῶν δὲ κεράτων τὰ μὲν πλεῖστα κοιλὰ ἐστὶν ἀπὸ τῆς προσφύσεως περὶ τὸ ἐντὸς ἐκπεφυκὸς ἐκ τῆς κεφαλῆς ὅστοῦν, ἐπ' ἄκρου δ' ἔχει τὸ στερεόν, καὶ ἔστιν ἀπλᾶ· τὰ δὲ τῶν ἐλάφων μόνα δι' ὅλου στερεὰ καὶ πολυσχιδῆ. Καὶ τῶν μὲν ἄλλων τῶν ἐχόντων κέρας οὐδὲν ἀποβάλλει τὰ κέρατα, ἔλαφος δὲ μόνος καθ' ἑκάστον ἔτος, ἐὰν μὴ ἐκτμηθῇ· περὶ δὲ τῶν ἐκτετμημένων ἐν τοῖς ὕστερον λεχθήσεται. Τὰ δὲ κέρατα προσπέφυκε μᾶλλον τῷ δέρματι ἢ τῷ ὀστέῳ· διὸ καὶ ἐν Φρυγίᾳ εἰσὶ βόες καὶ ἄλλοθι οἱ κινεῶσι τὰ κέρατα ὥσπερ τὰ ὦτα.

Τῶν δ' ἐχόντων ὄνυχας (ἔχει δ' ὄνυχας ἅπαντα ὅσαπερ δακτύλους, δακτύλους δ' ὅσα πόδας, πλὴν ἐλέφας· οὗτος δὲ καὶ δακτύλους ἀσχίστους καὶ ἡρέμα διηρθρωμένους καὶ ὄνυχας ὅλως οὐκ ἔχει) τῶν δ' ἐχόντων τὰ μὲν ἐστὶν εὐθυώνυχα, (517b.) ὥσπερ ἄνθρωπος, τὰ δὲ γαμψώνυχα, ὥσπερ καὶ τῶν πεζῶν λέων καὶ τῶν πτηνῶν ἀετός.

## Κεφάλαιο 10

Περὶ δὲ τριχῶν καὶ τῶν ἀνάλογον καὶ δέρματος τόνδ' ἔχει τὸν τρόπον. Τρίχας μὲν ἔχει τῶν ζώων ὅσα πεζὰ καὶ ζωτόκα, φολίδας δ' ὅσα πεζὰ καὶ ὠτόκα, λεπίδας δ' ἰχθύες μόνοι, ὅσοι ὠτοκοῦσι τὸ ψαθυρὸν ὠόν· τῶν γὰρ μακρῶν γόγγρος μὲν οὐ τοιοῦτον ἔχει ὠόν, οὐδ' ἡ μύραινα, ἔγχελυς δ' ὅλως οὐκ ἔχει.

Τὰ δὲ πάχη τῶν τριχῶν καὶ αἱ λεπτότητες καὶ τὰ μεγέθη διαφέρουσι κατὰ τοὺς τόπους, ἐν οἷς ἂν ὦσι τῶν μερῶν, καὶ ὁποῖον ἂν ᾖ τὸ δέρμα· ὥς γὰρ ἐπὶ τὸ πολὺ ἐν τοῖς παχυτέροις δέρμασι σκληρότεραι αἱ τρίχες καὶ παχύτεραι, πλείους δὲ καὶ μακρότεραι ἐν τοῖς κοιλοτέροις καὶ ὑγροτέροις, ἅνπερ ὁ τόπος

ἢ τοιοῦτος οἶος ἔχειν τρίχας. Ὅμοίως δὲ καὶ περὶ τῶν λεπιδωτῶν ἔχει καὶ τῶν φολιδωτῶν. Ὅσα μὲν οὖν μαλακὰς ἔχει τὰς τρίχας, εὐβοσίᾳ χρώμενα σκληροτέρας ἴσχει, ὅσα δὲ σκληράς, μαλακωτέρας καὶ ἐλάττους. Διαφέρουσι δὲ καὶ κατὰ τοὺς τόπους τοὺς θερμότερους καὶ ψυχροτέρους, οἷον αἱ τῶν ἀνθρώπων τρίχες ἐν μὲν τοῖς θερμοῖς σκληραί, ἐν δὲ τοῖς ψυχροῖς μαλακαί. Εἰσὶ δ' αἱ μὲν εὐθεῖαι μαλακαί, αἱ δὲ κεκαμμέναι σκληραί.

## Κεφάλαιο 11

Ἡ δὲ φύσις τῆς τριχὸς ἐστὶ σχιστή. Τῷ μᾶλλον δὲ καὶ ἥττον διαφέρουσι πρὸς ἀλλήλας. Ἐνὶ τῇ σκληρότητι μεταβαίνουσαι κατὰ μικρὸν οὐκέτι θριξὶν εἰκόσιν ἀλλ' ἀκάνθαις, οἷον αἱ τῶν ἐχίνων τῶν χερσαίων, παραπλησίως τοῖς ὄνυξιν· καὶ γὰρ τὸ τῶν ἀνύχων γένος ἐν ἐνίοις τῶν ζώων οὐδὲν διαφέρει τὴν σκληρότητα τῶν ὀστέων.

Δέρμα δὲ πάντων λεπτότατον ἄνθρωπος ἔχει κατὰ λόγον τοῦ μεγέθους. Ἐνεστὶ δ' ἐν τοῖς δέρμασι πᾶσι γλισχρότης μυξώδης, ἐν μὲν τοῖς ἐλάττων ἐν δὲ τοῖς πλείων, οἷον ἐν τοῖς τῶν βοῶν, ἐξ ἧς ποιοῦσι τὴν κόλλαν· ἐνιαχοῦ δὲ καὶ ἐξ ἰχθύων ποιοῦσι κόλλαν. Ἀναίσθητον δὲ τὸ δέρμα τεμνόμενόν ἐστι καθ' αὐτό· μάλιστα δὲ τοιοῦτον τὸ ἐν τῇ κεφαλῇ, διὰ τὸ τὸ μεταξὺ ἀσαρκότατον εἶναι πρὸς τὸ ὀστοῦν. Ὅπου δ' (518a.) ἂν ἡ καθ' αὐτὸ δέρμα, ἂν διακοπῇ, οὐ συμφύεται, οἷον γνάθου τὸ λεπτὸν καὶ ἀκροποσθία καὶ βλεφαρίς. Τῶν συνεχῶν δ' ἐστὶ τὸ δέρμα ἐν ἅπασιν τοῖς ζώοις, καὶ ταύτῃ διαλείπει ἡ καὶ οἱ κατὰ φύσιν πόροι ἐξικμάζονται, καὶ κατὰ τὸ στόμα καὶ ὄνυχας. Δέρμα μὲν οὖν ἅπαντ' ἔχει τὰ ἔναιμα ζῶα, τρίχας δ' οὐ πάντα, ἀλλ' ὥσπερ εἴρηται πρότερον.

Μεταβάλλουσι δὲ τὰς χροὰς γηρασκόντων καὶ λευκαίνονται ἐν ἀνθρώπῳ· τοῖς δ' ἄλλοις γίνεται μὲν, οὐκ ἐπιδήλως δὲ σφόδρα, πλὴν ἐν ἵππῳ. Λευκαίνεται δὲ καὶ ἀπ' ἄκρας ἢ θρίξ. Αἱ δὲ πλεῖσται εὐθύς φύονται λευκαὶ τῶν πολιῶν. Ἦν καὶ δῆλον ὅτι οὐχ αὐότης ἐστὶν ἡ πολιότης, ὥσπερ τινὲς φασιν· οὐδὲν γὰρ φύεται εὐθύς αὖρον. Ἐν δὲ τῷ ἐξανθήματι ὃ καλεῖται λεύκη, πᾶσαι πολιαὶ γίνονται· ἤδη δὲ τισὶ κάμνουσι μὲν πολιὰ ἐγένοντο, ὑγιασθεῖσι δὲ ἀπορρυσσῶν μέλαιναι ἀνεφύησαν. Γίνονται τε μᾶλλον πολιὰ σκεπαζομένων τῶν τριχῶν ἢ διαπνεομένων. Πρῶτον δὲ πολιοῦνται οἱ κρόταφοι τῶν ἀνθρώπων, καὶ τὰ πρόσθια πρότερα τῶν ὀπισθεν· τελευταῖον δ' ἡ ἦβη.

Εἰσὶ δὲ τῶν τριχῶν αἱ μὲν συγγενεῖς, αἱ δ' ὕστερον κατὰ τὰς ἡλικίας γινόμεναι ἐν ἀνθρώπῳ μόνῳ τῶν ζώων, συγγενεῖς μὲν αἱ ἐν τῇ κεφαλῇ καὶ

ταῖς βλεφαρίσι καὶ ταῖς ὀφρύσιν, ὑστερογενεῖς δ' αἱ ἐπὶ τῆς ἥβης πρῶτον, ἔπειτα δ' αἱ ἐπὶ τῆς μασχάλης, τρίται δ' αἱ ἐπὶ τοῦ γενείου· ἴσοι γὰρ οἱ τόποι εἰσὶν ἐν οἷς αἱ τρίχες ἐγγίνονται αἷ τε συγγενεῖς καὶ αἱ ὑστερογενεῖς.

Λείπουσι δὲ καὶ ῥέουσι κατὰ τὴν ἡλικίαν αἱ ἐκ τῆς κεφαλῆς καὶ μάλιστα καὶ πρῶται. Τούτων δ' αἱ ἔμπροσθεν μόναι· τὰ γὰρ ὀπίσθεν οὐδεὶς γίνεται φαλακρός. Ἡ μὲν οὖν κατὰ κορυφὴν λειότης φαλακρότης καλεῖται, ἡ δὲ κατὰ τὰς ὀφρῦς ἀναφαλανθιάσις· οὐδέτερον δὲ τούτων συμβαίνει οὐδενὶ πρὶν ἢ ἀφροδισιάζειν ἄρξηται. Οὐ γίνεται δ' οὔτε παῖς φαλακρὸς οὔτε γυνὴ οὔθ' οἱ ἐκτετμημένοι· ἀλλ' ἐὰν μὲν ἐκτμηθῇ πρὸ ἥβης, οὐ φύονται αἱ ὑστερογενεῖς, ἐὰν δ' ὕστερον, αὗται μόναι ἐκρέουσι, πλην τῆς ἥβης. Γυνὴ δὲ τὰς ἐπὶ τῷ γενεῖω οὐ φύει τρίχας· πλην ἐνίαις γίνονται ὀλίγαι, ὅταν τὰ καταμήνια στῶσι, καὶ οἷον ἐν Καρίᾳ ταῖς ἱερείαις, ὃ δοκεῖ συμβαίνειν (518b.) σημεῖον τῶν μελλόντων. Αἱ δ' ἄλλαι γίνονται μὲν, ἐλάττους δέ. Γίνονται δὲ καὶ ἄνδρες καὶ γυναῖκες ἐκ γενετῆς ἐνδεεῖς τῶν ὑστερογενῶν τριχῶν ἅμα καὶ ἄγονοι, ὅσοι περ ἂν καὶ ἥβης στερηθῶσιν.

Αἱ μὲν οὖν ἄλλαι τρίχες αὐξάνονται κατὰ λόγον ἢ πλεον ἢ ἔλαττον, μάλιστα μὲν αἱ ἐν τῇ κεφαλῇ, εἶτα πώγωνι, καὶ οἱ λεπτότριχοι μάλιστα. Δασύνονται δέ τισι καὶ αἱ ὀφρύες γινομένοις πρεσβυτέροις, οὕτως ὥστ' ἀποκεῖρεσθαι, διὰ τὸ ἐπὶ συμφύσει ὁστῶν κεῖσθαι, ἃ γηρασκόντων διστάμενα διᾶσι πλείω ὑγρότητα. Αἱ δ' ἐν ταῖς βλεφαρίσιν οὐκ αὐξάνονται, ῥέουσι δέ, ὅταν ἀφροδισιάζειν ἄρξωνται, καὶ μᾶλλον τοῖς μᾶλλον ἀφροδισιαστικοῖς· πολιοῦνται δὲ βραδύτατα αὗται. Ἐκτιλλόμεναι δ' αἱ τρίχες μέχρι τῆς ἀκμῆς ἀναφύονται, εἶτα οὐκέτι. Ἔχει δὲ πᾶσα θρῖξ ὑγρότητα πρὸς τῇ ῥίζῃ γλίσχραν, καὶ ἔλκει εὐθὺς ἐκτιλθεῖσα τὰ κοῦφα θιγγάνουσα.

Ὅσα δὲ ποικίλα τῶν ζώων κατὰ τὰς τρίχας, τούτοις καὶ ἐν τῷ δέρματι προϋπάρχει ἡ ποικιλία καὶ ἐν τῷ τῆς γλώττης δέρματι.

Περὶ δὲ τὸ γένειον τοῖς μὲν συμβαίνει τὴν ὑπὴν καὶ τὸ γένειον δασὺ ἔχειν, τοῖς δὲ ταῦτα μὲν λεῖα τὰς σιαγόνας δὲ δασείας· ἦττον δὲ γίνονται φαλακροὶ οἱ μαδιγένειοι.

Αὖξονται δ' αἱ τρίχες ἐν τε νόσοις πσιν, οἷον ἐν ταῖς φθίσεσι μᾶλλον, καὶ ἐν γήρᾳ καὶ τεθνεώτων, καὶ σκληρότεραι γίνονται ἀντὶ μαλακῶν· τὰ δ' αὐτὰ ταῦτα συμβαίνει καὶ περὶ τοὺς ὄνυχας.

Ῥέουσι δὲ μᾶλλον αἱ τρίχες τοῖς ἀφροδισιαστικοῖς αἱ συγγενεῖς· αἱ δ'

ὕστερογενεῖς γίνονται θᾶπτον. Οἱ δ' ἰξίαν ἔχοντες ἦττον φαλακροῦνται, κἂν ὄντες φαλακροὶ λάβωσιν, ἔνιοι δασύνονται.

Οὐκ αὐξάνεται δὲ θρῖξ ἀποτμηθεῖσα, ἀλλὰ κάτωθεν ἀναφυομένη γίνεται μείζων. Καὶ αἱ λεπίδες δὲ τοῖς ἰχθύσι σκληρότεραι γίνονται καὶ παχύτεραι, τοῖς δὲ λεπτυνομένοις καὶ τοῖς γηράσκουσι σκληρότεραι. Καὶ τῶν τετραπόδων δὲ γινομένων πρεσβυτέρων τῶν μὲν αἱ τρίχες τῶν δὲ τὰ ἔρια βαθύτερα μὲν γίνεται, ἐλάττω δὲ τῷ πλήθει· καὶ τῶν μὲν αἱ ὀπλαὶ τῶν δ' αἱ χηλαὶ γίνονται γηρασκόντων μείζους, καὶ τὰ ῥύγχη τῶν ὀρνίθων. Αὐξάνονται δὲ καὶ αἱ χηλαί, ὥσπερ καὶ οἱ ὄνυχες.

## Κεφάλαιο 12

Περὶ δὲ τὰ πτερωτὰ τῶν (519a.) ζώων, οἷον τοὺς ὀρνίθας, κατὰ μὲν τὰς ἡλικίας οὐδὲν μεταβάλλει, πλὴν γέρανος· αὕτη δ' οὕσα τεφρὰ μελάντερα γηράσκουσα τὰ πτερὰ ἴσχει· διὰ δὲ τὰ πάθη τὰ γινόμενα κατὰ τὰς ὥρας, οἷον ὅταν ψύχη γίνηται μᾶλλον, ἐνίοτε γίνεται τῶν μονοχρόων ἐκ μελάνων τε καὶ μελαντέρων λευκά, οἷον κόραξ τε καὶ στρουθὸς καὶ χελιδόνες· ἐκ δὲ τῶν λευκῶν γενῶν οὐκ ὥπται εἰς μέλαν μεταβάλλον. Καὶ κατὰ τὰς ὥρας δ' οἱ πολλοὶ τῶν ὀρνίθων μεταβάλλουσι τὰς χροάς, ὥστε λαθεῖν ἂν τὸν μὴ συνήθη.

Μεταβάλλουσι δέ τινα τῶν ζώων τὰς χροάς τῶν τριχῶν κατὰ τὰς τῶν ὑδάτων μεταβολάς· ἔνθα μὲν γὰρ λευκὰ γίνονται, ἔνθα δὲ μέλανα ταῦτά. Καὶ περὶ τὰς ὁχείας δ' εἰσὶν ὕδατα πολλαχοῦ τοιαῦτα, ἃ πίνοντα καὶ ὀχεύσαντα μετὰ τὴν πόσιν τὰ πρόβατα μέλανας γεννῶσι τοὺς ἄρνας, οἷον καὶ ἐν τῇ Χαλκιδικῇ τῇ ἐπὶ τῆς Θράκης ἐν τῇ Ἀσσυρίτιδι ἐποίει ὁ καλούμενος ποταμὸς Ψυχρός. Καὶ ἐν τῇ Ἀντανδρίᾳ δὲ δύο ποταμοὶ εἰσιν, ὧν ὁ μὲν λευκὰ ὁ δὲ μέλανα ποιεῖ τὰ πρόβατα.

Δοκεῖ δὲ καὶ ὁ Σκάμανδρος ποταμὸς ξανθὰ τὰ πρόβατα ποιεῖν· διὸ καὶ τὸν Ὅμηρόν φασιν ἀντὶ Σκαμάνδρου Ξάνθον προσαγορεύειν αὐτόν.

Τὰ μὲν οὖν ἄλλα ζῶα οὗτ' ἐντὸς ἔχει τρίχας, τῶν τ' ἀκρωτηρίων ἐν τοῖς πρானέσιν ἀλλ' οὐκ ἐν τοῖς ὑπτίοις· ὁ δὲ δασύπους μόνος καὶ ἐντὸς ἔχει τῶν γνάθων τρίχας καὶ ὑπὸ τοῖς ποσίν. Ἔτι δὲ καὶ ὁ μῦς τὸ κῆτος ὀδόντας μὲν ἐν τῷ στόματι οὐκ ἔχει, τρίχας δ' ὁμοίας ὑείαις.

Αἱ μὲν οὖν τρίχες αὐξάνονται ἀποτμηθεῖσαι κάτωθεν, ἄνωθεν δ' οὐ· τὰ δὲ πτερὰ οὗτ' ἄνωθεν οὔτε κάτωθεν, ἀλλ' ἐκπίπτει.

Οὐκ ἀναφύεται δὲ ἐκτιλθὲν οὔτε τῶν μελιττῶν τὸ πτερὸν οὔθ' ὅσα ἄλλα ἔχει ἄσχιστον τὸ πτερόν· οὐδὲ τὸ κέντρον, ὅταν ἀποβάλλῃ ἢ μέλιττα, ἀλλὰ θνήσκει.

### Κεφάλαιο 13

Εἰσὶ δὲ καὶ ὑμένες ἐν τοῖς ζώοις ἅπασι τοῖς ἐναίμοις.

Ὅμοιος δ' ἐστὶν ὁ ὑμὴν δέρματι πυκνῷ καὶ λεπτῷ, ἔστι δὲ τὸ γένος ἕτερον· οὔτε γάρ ἐστι σχιστὸν οὔτε τατόν. Περὶ ἕκαστον δὲ τῶν ὀστέων καὶ περὶ ἕκαστον τῶν σπλάγχνων ὁ ὑμὴν ἐστὶ καὶ ἐν τοῖς μείζοσι καὶ ἐν τοῖς ἐλάττοσι ζώοις· ἀλλ' (519b.) ἄδηλοι ἐν τοῖς ἐλάττοσι διὰ τὸ πάμπαν εἶναι λεπτοὶ καὶ μικροί.

Μέγιστοι δὲ τῶν ὑμένων εἰσὶν οἱ τε περὶ τὸν ἐγκέφαλον δύο, ὧν ὁ περὶ τὸ ὀστοῦν ἰσχυρότερος καὶ παχύτερος τοῦ περὶ τὸν ἐγκέφαλον, ἔπειθ' ὁ περὶ τὴν καρδίαν ὑμὴν. Διακοπεῖς δ' οὐ συμφύεται ψιλὸς ὑμὴν, ψιλούμενά τε τὰ ὀστᾶ τῶν ὑμένων σφακελίζει.

### Κεφάλαιο 14

Ἔστι δὲ καὶ τὸ ἐπίπλοον ὑμὴν. Ἔχει δ' ἐπίπλοον ἅπαντα τὰ ἔναιμα· ἀλλὰ τοῖς μὲν πῖον τοῖς δ' ἀπίμελόν ἐστιν.

Ἔχει δὲ καὶ τὴν ἀρχὴν καὶ τὴν ἐξάρτησιν ἐν τοῖς ζωοτόκοις καὶ ἀμφώδουσιν ἐκ μέσης τῆς κοιλίας, ἣ ἐστὶν οἷον ῥαφή τις αὐτῆς· καὶ τοῖς μὴ ἀμφώδουσι δ' ἐκ τῆς μεγάλης κοιλίας ὡσαύτως.

### Κεφάλαιο 15

Ἔστι δὲ καὶ ἡ κύστις ὑμενοειδὴς μὲν, ἄλλο δὲ γένος ὑμένος· ἔχει γὰρ τάσιν· ἔχει δὲ κύστιν οὐ πάντα, ἀλλὰ τὰ μὲν ζωοτόκα πάντα, τῶν δ' ὠοτόκων ἢ χελώνη μόνον. Διακοπεῖσα δ' οὐδ' ἡ κύστις συμφύεται ἀλλ' ἢ παρ' αὐτὴν τὴν ἀρχὴν τοῦ οὐρητῆρος, εἰ μὴ τι πάμπαν σπάνιον· γέγονε γάρ τι ἤδη τοιοῦτον. Τεθνεώτων μὲν οὖν οὐδὲν διήησιν ὑγρόν, ἐν δὲ τοῖς ζῶσι καὶ ξηρὰς συστάσεις, ἐξ ὧν οἱ λίθοι γίνονται τοῖς κάμνουσιν. Ἐνίοις δ' ἤδη καὶ τοιαῦτα συνέστη ἐν τῇ κύστει ὥστε μηδὲν δοκεῖν διαφέρειν κογχυλίων.

Περὶ μὲν οὖν φλεβὸς καὶ νεύρου καὶ δέρματος, καὶ περὶ ἰνῶν καὶ ὑμένων, ἔτι

δὲ καὶ περὶ τριχῶν καὶ ὀνύχων καὶ χηλῆς καὶ ὀπλῆς καὶ κεράτων καὶ ὀδόντων καὶ ῥύγχους καὶ χόνδρου καὶ ὀστέων καὶ τῶν ἀνάλογον τούτοις τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 16

Σὰρξ δὲ καὶ τὸ παραπλησίαν ἔχον τὴν φύσιν τῇ σαρκὶ ἐν τοῖς ἐναίμοις ἐν πᾶσιν ἐστὶ μεταξὺ τοῦ δέρματος καὶ τοῦ ὀστοῦ καὶ τῶν ἀνάλογον τοῖς ὀστοῖς· ὥς γὰρ ἡ ἄκανθα ἔχει πρὸς τὸ ὀστοῦν, οὕτω καὶ τὸ σαρκῶδες πρὸς τὰς σάρκας ἔχει τῶν ἐχόντων ὅστ᾽ αὐτὰ καὶ ἄκανθαν.

Ἔστι δὲ διαιρετὴ ἡ σὰρξ πάντῃ, καὶ οὐχ ὥσπερ τὰ νεῦρα καὶ αἱ φλέβες ἐπὶ μῆκος μόνον. Λεπτυνομένων μὲν οὖν τῶν ζώων ἀφανίζονται, καὶ γίνονται φλέβια καὶ ἴνες· εὐβοσίᾳ δὲ πλείονι χρωμένων πιμελὴ ἀντὶ σαρκῶν. Εἰσὶ δὲ τοῖς μὲν ἔχουσι (520a.) τὰς σάρκας πολλὰς αἱ φλέβες ἐλάττους καὶ τὸ αἷμα ἐρυθρότερον καὶ τὰ σπλάγχνα καὶ κοιλία μικρά· τοῖς δὲ τὰς φλέβας ἔχουσι μεγάλας καὶ τὸ αἷμα μελάντερον καὶ σπλάγχνα μεγάλα καὶ κοιλία μεγάλη, αἱ δὲ σάρκες ἐλάττους. Γίνονται δὲ κατὰ σάρκα πίονα τὰ τὰς κοιλίας ἔχοντα μικράς.

## Κεφάλαιο 17

Πιμελὴ δὲ καὶ στέαρ διαφέρουσιν ἀλλήλων.

Τὸ μὲν γὰρ στέαρ ἐστὶ θραυστὸν πάντῃ καὶ πήγνυται ψυχόμενον, ἡ δὲ πιμελὴ χυτὸν καὶ ἄπηκτον· καὶ οἱ μὲν ζωμοὶ οἱ τῶν πόνων οὐ πήγνυνται, οἷον ἵππου καὶ ὑός, οἱ δὲ τῶν στέαρ ἐχόντων πήγνυνται, οἷον προβάτου καὶ αἰγός. Διαφέρουσι δὲ καὶ τοῖς τόποις· ἡ μὲν γὰρ πιμελὴ γίνεται μεταξὺ δέρματος καὶ σαρκός, στέαρ δ' οὐ γίνεται ἀλλ' ἢ ἐπὶ τέλει τῶν σαρκῶν. Γίνεται δὲ καὶ τὸ ἐπίπλοον τοῖς μὲν πιμελώδεσι πιμελώδες, τοῖς δὲ στεατώδεσι στεατώδες. Ἔχει δὲ τὰ μὲν ἀμφώδοντα πιμελήν, τὰ δὲ μὴ ἀμφώδοντα στέαρ.

Τῶν δὲ σπλάγχνων τὸ ἥπαρ ἐν ἐνίοις τῶν ζώων γίνεται πιμελώδες, οἷον τῶν ἰχθύων ἐν τοῖς σελάχεσιν· ποιοῦσι γὰρ ἔλαιον ἀπ' αὐτῶν, ὃ γίνεται τηκομένων· αὐτὰ δὲ τὰ σελάχη ἐστὶν ἀπιμελώτατα καὶ κατὰ σάρκα καὶ κατὰ κοιλίαν κεχωρισμένη πιμελῇ. Ἔστι δὲ καὶ τὸ τῶν ἰχθύων στέαρ πιμελώδες, καὶ οὐ πήγνυται.

Πάντα δὲ τὰ ζῶα τὰ μὲν κατὰ σάρκα ἐστὶ πίονα τὰ δ' ἀφωρισμένως. Ὅσα δὲ

μὴ ἔχει κεχωρισμένην τὴν πύοτητα, ἥτις ἐστὶ πύονα κατὰ κοιλίαν καὶ ἐπίπλοον, οἷον ἔγγελυς· ὀλίγον γὰρ στέαρ ἔχουσι περὶ τὸ ἐπίπλοον. Τὰ δὲ πλεῖστα γίνεται πύονα κατὰ τὴν γαστέρα, καὶ μάλιστα τὰ μὴ ἐν κινήσει ὄντα τῶν ζώων. Οἱ δ' ἐγκέφαλοι τῶν μὲν πιμελωδῶν λιπαροί, οἷον ὕος, τῶν δὲ στεατωδῶν αὐχμηροί. Τῶν δὲ σπλάγχχνων περὶ τοὺς νεφροὺς μάλιστα πύονα γίνεται τὰ ζῶα· ἔστι δ' αἰὲς ὁ δεξιὸς ἀπιμελώτερος, καὶ σφόδρα πύονες ὦσιν, ἐλλείπει τι αἰὲς κατὰ τὸ μέσον. Περίνεφρα δὲ γίνεται τὰ στεατώδη μᾶλλον, καὶ μάλιστα τῶν ζώων πρόβατον· τοῦτο γὰρ ἀποθνήσκει τῶν νεφρῶν πάντη καλυφθέντων. Γίνεται δὲ περίνεφρα δι' (520b.) εὐβοσίαν, οἷον τῆς Σικελίας περὶ Λεοντίνους· διὸ καὶ ἐξελαύνουσιν ὥς τὰ πρόβατα τῆς ἡμέρας, ὅπως ἐλάττω λάβωσι τὴν τροφήν.

## Κεφάλαιο 18

Πάντων δὲ τῶν ζώων κοινόν ἐστὶ τὸ περὶ τὴν κόρην ἐν τοῖς ὀφθαλμοῖς· ἔχουσι γὰρ τοῦτο τὸ μόριον στεατωδὲς πάντα ὅσα ἔχουσι τὸ τοιοῦτον μόριον ἐν τοῖς ὀφθαλμοῖς καὶ μὴ εἰσι σκληρόφθαλμα.

Ἔστι δ' ἀγωνώτερα πάντα τὰ πιμελώδη καὶ ἄρρενα καὶ θήλεα. Πιαινέται δὲ πάντα πρεσβύτερα μᾶλλον ἢ νεώτερα ὄντα, μάλιστα δ' ὅταν καὶ τὸ πλάτος καὶ τὸ μήκος ἔχη τοῦ μεγέθους καὶ εἰς βάθος αὐξάνηται.

## Κεφάλαιο 19

Περὶ δ' αἵματος ὥδε ἔχει· τοῦτο γὰρ πᾶσιν ἀναγκαιότατον καὶ κοινότατον τοῖς ἐναίμοις, καὶ οὐκ ἐπίκτητον, ἀλλ' ὑπάρχει πᾶσι τοῖς μὴ φθειρομένοις. Πᾶν δ' αἷμα ἐστὶν ἐν ἀγγείῳ, ἐν ταῖς καλουμέναις φλεψίν, ἐν ἄλλῳ δ' οὐδενὶ πλὴν ἐν τῇ καρδίᾳ μόνον. Οὐκ ἔχει δ' αἴσθησιν τὸ αἷμα ἀπτομένων ἐν οὐδενὶ τῶν ζώων, ὥσπερ οὐδ' ἡ περίττωσις ἢ τῆς κοιλίας· οὐδὲ δὴ ὁ ἐγκέφαλος οὐδ' ὁ μυελὸς οὐκ ἔχει αἴσθησιν ἀπτομένων. Ὅπου δ' ἂν τις διέλη τὴν σάρκα, γίνεται αἷμα ἐν ζῶντι, ἂν μὴ διεφθαρμένη ἡ σὰρξ ᾖ. Ἔστι δὲ τὴν φύσιν τὸ αἷμα τὸν τε χυμὸν ἔχον γλυκύν, ἐὰν περ ὑγιὲς ᾖ, καὶ τὸ χρῶμα ἐρυθρόν· τὸ δὲ χεῖρον ἢ φύσει ἢ νόσῳ μελάντερον. Καὶ οὔτε λίαν παχὺ οὔτε λίαν λεπτὸν τὸ βέλτιστον, ἐὰν μὴ χεῖρον ἢ διὰ φύσιν ἢ διὰ νόσον. Καὶ ἐν μὲν τῷ ζῶῳ ὑγρὸν καὶ θερμὸν αἰεὶ, ἐξιδὼν δὲ ἔξω πηγνυται πάντων πλὴν ἐλάφου καὶ προκοῦ καὶ εἴ τι ἄλλο τοιαύτην ἔχει τὴν φύσιν· τὸ δ' ἄλλο αἷμα πηγνυται, ἐὰν μὴ ἐξαίρεθῶσιν αἱ ἴνες. Τάχιστα δὲ πηγνυται τὸ τοῦ ταύρου αἷμα πάντων.

Ἔστι δὲ τῶν ἐναίμων ταῦτα πολυαιμότερα ἢ καὶ ἐν αὐτοῖς καὶ ἔξω ζωοτοκεῖ



τῶν ἐναίμων μὲν ὥτοκοούντων δέ. Τὰ δ' εὖ ἔχοντα ἢ φύσει ἢ τῷ ὑγιαίνειν οὔτε πολὺ λίαν ἔχει, ὥσπερ τὰ πεπωκότα πόμα πρόσφατον, οὔτ' ὀλίγον, ὥσπερ τὰ πίονα λίαν· τὰ γὰρ πίονα καθαρὸν μὲν ἔχει ὀλίγον δὲ τὸ αἷμα, καὶ γίνεται πότερα γινόμενα ἀναιμότερα· ἀναιμον γὰρ τὸ πῖον. Καὶ (521a.) τὸ μὲν πῖον ἄσηπτον, τὸ δ' αἷμα καὶ τὰ ἔναιμα τάχιστα σήπεται, καὶ τούτων τὰ περὶ τὰ ὅσῃ.

Ἐχει δὲ λεπτότατον μὲν αἷμα καὶ καθαρώτατον ἄνθρωπος, παχύτατον δὲ καὶ μελάντατον τῶν ζωοτόκων ταῦρος καὶ ὄνος, Καὶ ἐν τοῖς κάτω δὲ μορίοις ἢ ἐν τοῖς ἄνω παχύτερον τὸ αἷμα γίνεται καὶ μελάντερον. Σφύζει δὲ τὸ αἷμα ἐν ταῖς φλεψὶν ἅπασι πάντῃ ἅμα τοῖς ζώοις, καὶ ἔστι τῶν ὑγρῶν μόνον καθ' ἅπαν τε τὸ σῶμα τοῖς ζώοις καὶ αἰεὶ, ἕως ἂν ζῇ, τὸ αἷμα μόνον. Πρῶτον δὲ γίνεται τὸ αἷμα ἐν τῇ καρδίᾳ τοῖς ζώοις, καὶ πρὶν ὅλον διηρθρῶσθαι τὸ σῶμα. Στερισκομένου δ' αὐτοῦ καὶ ἀφιεμένου ἔξω πλείονος μὲν ἐκθνήσκουσι, πολλοῦ δ' ἄγαν ἀποθνήσκουσιν. Ἐξυγραιομένου δὲ λίαν νοσοῦσιν· γίνεται γὰρ ἰχωροειδές, καὶ διορροῦται οὕτως ὥστε ἤδη τινὲς ἴδισαν αἱματώδη ἰδρῶτα. Καὶ ἐξίον ἐνίοις οὐ πήγνυται παντελῶς ἢ διωρισμένως καὶ χωρὶς. Τοῖς δὲ καθεύδουσιν ἐν τοῖς ἐκτὸς μέρεσιν ἔλαττον γίνεται τὸ αἷμα, ὥστε καὶ κεντουμένων μὴ ῥεῖν ὁμοίως.

Γίνεται δὲ πεττόμενον ἐξ ἰχώρος μὲν αἷμα, ἐξ αἵματος δὲ πιμελή· νενοσηκότος δ' αἵματος αἱμορροῖς ἢ τ' ἐν ταῖς ῥῖσι καὶ ἢ περὶ τὴν ἔδραν, καὶ ἰξία. Σηπόμενον δὲ γίνεται τὸ αἷμα ἐν τῷ σώματι πύον, ἐκ δὲ τοῦ πύου πῶρος.

Τὸ δὲ τῶν θηλειῶν πρὸς τὸ τῶν ἀρρένων διαφέρει· παχύτερόν τε γὰρ καὶ μελάντερόν ἐστιν ὁμοίως ἐχόντων πρὸς ὑγίειαν καὶ ἡλικίαν ἐν τοῖς θήλεσιν, καὶ ἐπιπολῆς μὲν ἔλαττον ἐν τοῖς θήλεσιν, ἐντὸς δὲ πολυαιμότερον. Μάλιστα δὲ καὶ τῶν θηλέων ζώων γυνὴ πολυαιμον, καὶ τὰ καλούμενα καταμήνια γίνεται πλεῖστα τῶν ζώων ταῖς γυναιξίν. Νενοσηκὸς δὲ τοῦτο τὸ αἷμα καλεῖται ῥοῦς. Τῶν δ' ἀνδρῶν τῶν νοσηματικῶν ἥττον μετέχουσιν αἱ γυναῖκες· ὀλίγαις δὲ γίνεται ἰξία καὶ αἱμορροῖς καὶ ἐκ ῥινῶν ῥύσις· ἐὰν δέ τι συμβαίνει τούτων, τὰ καταμήνια χεῖρω γίνεται.

Διαφέρει δὲ καὶ κατὰ τὰς ἡλικίας πλήθει καὶ εἴδει τὸ αἷμα· ἐν μὲν γὰρ τοῖς πάμπαν νέοις ἰχωροειδές ἐστι καὶ πλεόν, ἐν δὲ τοῖς γέρουσι παχὺ καὶ μέλαν καὶ ὀλίγον, ἐν ἀκμάζουσι δὲ μέσως· καὶ πήγνυται (521b.) ταχὺ τὸ τῶν γερόντων, κἂν ἐν τῷ σώματι ἢ ἐπιπολῆς· τοῖς δὲ νέοις οὐ γίνεται τοῦτο.

Ἰχώρ δ' ἐστὶν ἄλεπτον αἷμα, ἢ τῷ μήπω πεπέφθαι ἢ τῷ διωρρῶσθαι.

## Κεφάλαιο 20

Περὶ δὲ μυελοῦ· καὶ γὰρ τοῦτο ἐν τῶν ὑγρῶν ἐνίοις τῶν ἐναίμων ὑπάρχει ζώων. Πάντα δ' ὅσα φύσει ὑπάρχει ὑγρὰ ἐν τῷ σώματι, ἐν ἀγγείοις ὑπάρχει, ὥσπερ καὶ αἷμα ἐν φλεψὶ καὶ μυελὸς ἐν ὀστοῖς, τὰ δ' ἐν ὑμενώδεσι, καὶ δέρμασι καὶ κοιλίαις. Γίνεται δ' ἐν μὲν τοῖς νέοις αἱματώδης πάμπαν ὁ μυελός, πρεσβυτέρων δὲ γενομένων ἐν μὲν τοῖς πιμελώδεσι πιμελώδης, ἐν δὲ τοῖς στεατώδεσι στεατώδης. Οὐ πάντα δ' ἔχει τὰ ὀστᾶ μυελόν, ἀλλὰ τὰ κοῖλα, καὶ τούτων ἐνίοις οὐκ ἔνεστιν· τὰ γὰρ τοῦ λέοντος ὀστᾶ τὰ μὲν οὐκ ἔχει πάμπαν, τὰ δ' ἔχει μικρόν, διόπερ ἔνιοι οὗ φασιν ὅλως ἔχειν μυελὸν τοὺς λέοντας, ὥσπερ εἴρηται καὶ πρότερον. Καὶ ἐν τοῖς ὑείοις δ' ὀστοῖς ἐλάττων ἐστίν, ἐνίοις δ' αὐτῶν πάμπαν οὐκ ἔνεστιν.

Ταῦτα μὲν οὖν τὰ ὑγρὰ σχεδὸν ἀεὶ σύμφυτα τοῖς ζώοις ἐστίν, ὑστερογενῆ δὲ γάλα τε καὶ γονή. Τούτων δὲ τὸ μὲν ἀποκεκριμένον ἅπασιν, ὅταν ἐνῇ, ἐστὶ τὸ γάλα· ἡ δὲ γονή οὐ πᾶσιν ἄλλ' ἐνίοις οἱ καλούμενοι θοροὶ οἷον τοῖς ἰχθύσιν.

Ἔχει δέ, ὅσα ἔχει τὸ γάλα, ἐν τοῖς μαστοῖς. Μαστοὺς δ' ἔχει ὅσα ζωοτοκεῖ καὶ ἐν αὐτοῖς καὶ ἔξω, οἷον ὅσα τε τρίχας ἔχει, ὥσπερ ἄνθρωπος καὶ ἵππος, καὶ τὰ κήτη, οἷον δελφὶς καὶ φώκαινα καὶ φάλαινα· καὶ γὰρ ταῦτα μαστοὺς ἔχει καὶ γάλα. Ὅσα δ' ἔξω ζωοτοκεῖ μόνον ἢ ὠοτοκεῖ, οὐκ ἔχει οὔτε μαστοὺς οὔτε γάλα, οἷον ἰχθὺς καὶ ὄρνις.

Πᾶν δὲ γάλα ἔχει ἰχῶρα ὑδατώδη, ὃ καλεῖται ὀρρός, καὶ σωματῶδες, ὃ καλεῖται τυρός· ἔχει δὲ πλείω τυρὸν τὸ παχύτερον τῶν γαλάκτων. Τὸ μὲν οὖν τῶν μὴ ἀμφωδόντων γάλα πήγνυται (διὸ καὶ τυρεύεται τῶν ἡμέρων), τῶν δ' ἀμφωδόντων οὐ πήγνυται, ὥσπερ οὐδ' ἡ πιμελή, καὶ ἔστι λεπτὸν καὶ γλυκύ. Ἔστι δὲ λεπτότατον μὲν γάλα καμήλου, δεύτερον δ' ἵππου, τρίτον δ' ὄνου· παχύτατον δὲ τὸ βόειον. Ὑπὸ μὲν οὖν τοῦ ψυχροῦ οὐ πήγνυται τὸ γάλα, ἀλλὰ διορροῦται (522a.) μᾶλλον· ὑπὸ δὲ τοῦ πυρὸς πήγνυται καὶ παχύνεται.

Οὐ γίνεται δὲ γάλα, πρὶν ἢ ἔγκυον γένηται, οὐδενὶ τῶν ζώων ὥς ἐπὶ τὸ πολὺ. Ὅταν δ' ἔγκυον ᾖ, γίνεται μὲν, ἄχρηστον δὲ τὸ πρῶτον καὶ ὕστερον. Μὴ ἐγκύοις δ' οὔσαις ὀλίγον μὲν ἀπ' ἐδεσμάτων τινῶν, οὐ μὲν ἀλλὰ καὶ βδαλλομέναις ἤδη πρεσβυτέραις προῆλθε, καὶ τοσοῦτον ἤδη τισὶν ὥστ' ἐκτιθεῖσθαι παιδίον.

Καὶ οἱ περὶ τὴν Οἴτην δέ, ὅσαι ἂν μὴ ὑπομένωσι τὴν ὀχείαν τῶν αἰγῶν, λαμβάνοντες κνίδην τρίβουσι τὰ οὔθата βίᾳ διὰ τὸ ἀλγεινὸν εἶναι· τὸ μὲν

οὖν πρῶτον αἱματῶδες ἀμέλγονται, εἴθ' ὑπόπυον, τὸ δὲ τελευταῖον γάλα ἤδη οὐδὲν ἔλαττον τῶν ὀχευομένων.

Τῶν δ' ἄρρένων ἔν τε τοῖς ἄλλοις ζώοις καὶ ἐν ἀνθρώπῳ ἐν οὐδενὶ μὲν ὡς ἐπὶ τὸ πολὺ γίνεται γάλα, ὅμως δὲ γίνεται ἔν τισιν, ἐπεὶ καὶ ἐν Λήμνῳ αἶξ ἐκ τῶν μαστῶν, οὓς ἔχει δύο ὁ ἄρρην παρὰ τὸ αἰδοῖον, γάλα ἠμέλγετο τοσοῦτον ὥστε γίνεσθαι τροφαλίδα, καὶ πάλιν ὀχεύσαντος τῷ ἐκ τούτου γενομένῳ συνέβαινε ταύτόν. Ἀλλὰ τὰ μὲν τοιαῦτα ὡς σημεῖα ὑπολαμβάνουσιν, ἐπεὶ καὶ τῷ ἐν Λήμνῳ ἀνεῖλεν ὁ θεὸς μαντευομένῳ ἐπίκτησιν ἔσεσθαι κτημάτων. Ἐν δὲ τοῖς ἀνδράσι μεθ' ἥβην ἐνίοις ἐκθλίβεται ὀλίγον· βδαλλομένοις δὲ καὶ πολὺ ἤδη τισὶ προῆλθεν.

Ὑπάρχει δ' ἐν τῷ γάλακτι λιπαρότης, ἥ καὶ ἐν τοῖς πεπηγόσι γίνεται ἐλαιώδης. Εἰς δὲ τὸ προβάτειον ἐν Σικελίᾳ, καὶ ὅπου πλεῖον, αἶγειον μινγύουσιν. Πήγνυται δὲ μάλιστα οὐ μόνον τὸ τυρὸν ἔχον πλεῖστον, ἀλλὰ καὶ τὸ ἀχμηρότερον ἔχον.

Τὰ μὲν οὖν πλέον ἔχει γάλα ἢ ὅσον εἰς τὴν ἐκτροφὴν τῶν τέκνων, καὶ χρήσιμον εἰς τύρευσιν καὶ ἀπόθεςιν, μάλιστα μὲν τὸ προβάτειον καὶ τὸ αἶγειον, ἔπειτα τὸ βόειον· τὸ δ' ἵππειον καὶ ὄνειον μίγνυται εἰς τὸν Φρύγιον τυρόν. Ἔστι δὲ τυρὸς πλείων ἐν τῷ βοεῖῳ ἢ ἐν τῷ αἰγείῳ· γίνεσθαι γὰρ φασιν οἱ νομεῖς ἐκ μὲν ἀμφορέως αἰγείου γάλακτος τροφαλίδας ὀβολιαίας μῖας δεούσης εἴκοσιν, ἐκ δὲ βοείου τριάκοντα.

Τὰ δ' ὅσον τοῖς τέκνοις ἱκανόν, πλῆθος δ' οὐδὲν οὔτε χρήσιμον εἰς τύρευσιν, οἶον πάντα τὰ πλείους ἔχοντα (522b.) μαστοὺς δυοῖν· οὐδενὸς γὰρ τούτων οὔτε πλῆθός ἐστι γάλακτος οὔτε τυρεύεται τὸ γάλα.

Πήγνυσι δὲ τὸ γάλα ὁπὸς τε συκῆς καὶ πυετία. Ὁ μὲν οὖν ὁπὸς εἰς ἔριον ἐξοπισθεῖς, ὅταν ἐκπλυθῇ πάλιν τὸ ἔριον εἰς γάλα ὀλίγον· τοῦτο γὰρ κεραννύμενον πήγνυσιν. Ἡ δὲ πυετία γάλα ἐστίν· τῶν γὰρ ἔτι θηλαζόντων γίνεται ἐν τῇ κοιλίᾳ.

## Κεφάλαιο 21

Ἔστιν οὖν ἡ πυετία γάλα ἔχον ἐν ἑαυτῷ πῦρ ὃ ἐκ τῆς τοῦ ζώου θερμότητος πεττομένου τοῦ γάλακτος γίνεται. Ἐχει δὲ πυετίαν τὰ μὲν μηρυκάζοντα πάντα, τῶν δ' ἀμφωδόντων δασύπους. Βελτίων δ' ἐστὶν ἡ πυετία ὅσω ἂν ἡ παλαιότερα· συμφέρει γὰρ πρὸς τὰς διαρροίας ἡ τοιαύτη μάλιστα καὶ ἡ τοῦ

δασύποδος· ἀρίστη δὲ πυετία νεβροῦ.

Διαφέρει δὲ τῷ πλέον ἱμᾶσθαι γάλα ἢ ἔλαττον τῶν ἐχόντων γάλα ζώων κατὰ τε τὰ μεγέθη τῶν σωμάτων καὶ τὰς τῶν ἐδεσμάτων διαφοράς, οἷον ἐν Φάσει μὲν ἐστὶ βοῖδια μικρὰ ὧν ἕκαστον βδάλλεται γάλα πολὺ, αἱ δ' Ἑπειρωτικαὶ βόες αἱ μεγάλα βδάλλονται ἑκάστη ἀμφορέα καὶ τούτου τὸ ἥμισυ κατὰ τοὺς δύο μαστούς· ὁ δὲ βδάλλων ὀρθὸς ἕστηκεν, μικρὸν ἐπικύπτων, διὰ τὸ μὴ δύνασθαι ἂν ἐφικνεῖσθαι καθήμενος. Γίνεται δ' ἔξω ὄνου καὶ τᾶλλα μεγάλα ἐν τῇ Ἑπείρῳ τετράποδα, μέγιστοι δ' οἱ βόες καὶ οἱ κύνες. Νομῆς δὲ δέονται τὰ μεγάλα πλείονος· ἄλλ' ἔχει πολλὴν ἡ χώρα τοιαύτην εὐβοσίαν, καὶ καθ' ἑκάστην ὥραν ἐπιτηδεῖους τόπους. Μέγιστοι δ' οἱ τε βόες εἰσὶ καὶ τὰ πρόβατα τὰ καλούμενα Πυρρικά, τὴν ἐπωνυμίαν ἔχοντα ταύτην ἀπὸ Πύρρου τοῦ βασιλέως.

Τῆς δὲ τροφῆς ἡ μὲν σβέννυσι τὸ γάλα, οἷον ἡ Μηδικὴ πόα, καὶ μάλιστα τοῖς μηρυκάζουσιν· ποιεῖ δὲ πολὺ ἕτερα, οἷον κύτισος καὶ ὄροβοι, πλὴν κύτισος μὲν ὁ ἀνθῶν οὐ συμφέρει (πίμπρησι γάρ), οἱ δ' ὄροβοι ταῖς κυούσαις οὐ συμφέρουσι (τίκτουσι γὰρ χαλεπώτερον). Ὅλως δὲ τὰ φαγεῖν δυνάμενα τῶν τετραπόδων, ὥσπερ καὶ πρὸς τὴν κύησιν συμφέρει, καὶ βδάλλεται πολὺ τροφήν ἔχοντα. Ποιεῖ δὲ γάλα καὶ τῶν φυσιωδῶν ἕνια προσφερόμενα, οἷον καὶ κυάμων πλῆθος ὃ καὶ αἰγὶ καὶ βοῖ (523a.) καὶ χιμαίρα· ποιεῖ γὰρ καθιέναι τὸ οὖθαρ. Σημεῖον δὲ τοῦ γάλα πλεῖον ἱμῆσεσθαι, ὅταν πρὸ τοῦ τόκου τὸ οὖθαρ βλέπῃ κάτω. Γίνεται δὲ πολλὸν χρόνον γάλα πᾶσι τοῖς ἔχουσιν, ἂν ἀνόχευτα διατελῇ καὶ τὰ ἐπιτήδεια ἔχωσι, μάλιστα δὲ τῶν τετραπόδων πρόβατον· ἀμέλγεται γὰρ μῆνας ὀκτώ.

Ὅλως δὲ τὰ μηρυκάζοντα γάλα πολὺ καὶ χρήσιμον εἰς τυρείαν ἀμέλγεται. Περὶ δὲ Τορώνην αἱ βόες ὀλίγας ἡμέρας πρὸ τοῦ τόκου διαλείπουσι, τὸν δ' ἄλλον χρόνον πάντα ἔχουσι γάλα. Τῶν δὲ γυναικῶν τὸ πελιώτερον γάλα βέλτιον τοῦ λευκοῦ τοῖς τιτθευομένοις· καὶ αἱ μέλαιναι τῶν λευκῶν ὑγιεινότερον ἔχουσιν. Τροφιμώτατον μὲν οὖν τὸ πλεῖστον ἔχον τυρόν, ὑγιεινότερον δὲ τοῖς παιδίοις τὸ ἔλαττον.

## Κεφάλαιο 22

Σπέρμα δὲ προΐενται πάντα τὰ ἔχοντα αἷμα. Τί δὲ συμβάλλεται εἰς τὴν γένεσιν καὶ πῶς, ἐν ἄλλοις λεχθήσεται.

Πλεῖστον δὲ κατὰ τὸ σῶμα ἄνθρωπος προΐεται. Ἔστι δὲ τῶν μὲν ἐχόντων

τρίχας γλίσχρον, τῶν δ' ἄλλων ζώων οὐκ ἔχει γλισχρότητα. Λευκὸν δὲ πάντων· ἀλλ' Ἡρόδοτος διέψευσται γράψας τοὺς Αἰθίοπας προῖεσθαι μέλαιναν τὴν γονὴν. Τὸ δὲ σπέρμα ἐξέρχεται μὲν λευκὸν καὶ παχύ, ἂν ἢ ὑγιαῖνον, θύραζε δ' ἐλθὼν λεπτὸν γίνεται καὶ μέλαν. Ἐν δὲ τοῖς πάγοις οὐ πήγνυται, ἀλλὰ γίνεται πάμπαν λεπτὸν καὶ ὑδατῶδες καὶ τὸ χρῶμα καὶ τὸ πάχος· ὑπὸ δὲ τοῦ θερμοῦ πήγνυται καὶ παχύνεται. Καὶ ὅταν ἐξίη χρονίσαν ἐν τῇ ὑστέρα, παχύτερον ἐξέρχεται, ἐνίστε δὲ ξηρὸν καὶ συνεστραμμένον. Καὶ τὸ μὲν γόνιμον ἐν τῷ ὕδατι χωρεῖ κάτω, τὸ δ' ἄγονον διαχεῖται. Ψευδὲς δ' ἐστὶ καὶ ὁ Κτησίας γέγραφε περὶ τῆς γονῆς τῶν ἐλεφάντων.

## **Βιβλίο 4**

## Κεφάλαιο 1

Περὶ μὲν οὖν τῶν ἐναίμων ζώων, ὅσα τε κοινὰ ἔχουσι μέρη καὶ ὅσα ἴδια ἕκαστον γένος, καὶ τῶν ἀνομοιομερῶν καὶ τῶν ὁμοιομερῶν, καὶ ὅσα ἐκτὸς καὶ ὅσα ἐντός, εἴρηται (523b.) πρότερον· περὶ δὲ τῶν ἀναίμων νῦν λεκτέον.

Ἔστι δὲ γένη ταῦτα πλείω, ἓν μὲν τὸ τῶν καλουμένων μαλακίων· ταῦτα δ' ἐστὶν ὅσα ἀναιμα ὄντα ἐκτὸς ἔχει τὸ σαρκῶδες, ἐντὸς δ' εἴ τι ἔχει στερεόν, καθάπερ καὶ τὰ ἔναιμα τῶν ζώων, οἷον τὸ τῶν σηπιῶν γένος. Ἐν δὲ τὸ τῶν μαλακοστράκων· ταῦτα δ' ἐστὶν ὅσων ἐκτὸς τὸ στερεόν, ἐντὸς δὲ τὸ μαλακὸν καὶ σαρκῶδες· τὸ δὲ σκληρὸν αὐτῶν ἐστὶν οὐ θραυστὸν ἀλλὰ θλαστὸν, οἷον ἐστὶ τό τε τῶν καράβων γένος καὶ τὸ τῶν καρκίνων. Ἐπὶ δὲ τὰ ὀστρακόδερμα· τοιαῦτα δ' ἐστὶν ὧν ἐντὸς μὲν τὸ σαρκῶδες, ἐκτὸς δὲ τὸ στερεόν, θραυστὸν ὄν καὶ κατακτόν, ἀλλ' οὐ θλαστὸν· τοιοῦτον δὲ τὸ τῶν κοχλιῶν γένος καὶ τὸ τῶν ὀστρέων ἐστίν. Τέταρτον δὲ τὸ τῶν ἐντόμων, ὃ πολλὰ καὶ ἀνόμοια περιείληφεν εἶδη ζώων. Ἔστι δ' ἔντομα ὅσα κατὰ τοῦνομά ἐστιν ἐντομᾶς ἔχοντα ἢ ἐν τοῖς ὑπτίοις ἢ ἐν τοῖς πρανεσίν ἢ ἐν ἀμφοῖν, καὶ οὔτε ὀστῶδες ἔχει ἐν κεχωρισμένον οὔτε σαρκῶδες, ἀλλὰ μέσον ἀμφοῖν· τὸ σῶμα γὰρ ὁμοίως καὶ ἔσω καὶ ἔξω σκληρὸν ἐστὶν αὐτῶν. Ἔστι δ' ἔντομα καὶ ἄπτερα, οἷον ἱουλος καὶ σκολόπενδρα, καὶ πτερωτά, οἷον μέλιττα καὶ μηλολόνη καὶ σφήξ· καὶ ταῦτ' ὅμως γένος αὐτῶν ἐστὶ καὶ πτερωτὸν καὶ ἄπτερον, οἷον μύρμηκες εἰσι καὶ πτερωτοὶ καὶ ἄπτεροι, καὶ αἱ καλούμεναι πυγολαμπίδες.

Τῶν μὲν οὖν μαλακίων καλουμένων τὰ μὲν ἔξω μόρια τὰδ' ἐστίν, ἓν μὲν οἱ ὀνομαζόμενοι πόδες, δεύτερον δὲ τούτων ἐχομένη ἡ κεφαλή, τρίτον δὲ τὸ κύτος, ὃ περιέχει τὰντός, καὶ καλοῦσιν αὐτὸ κεφαλὴν τινες, οὐκ ὀρθῶς καλοῦντες· ἔτι δὲ πτερύγια κύκλω περὶ τὸ κύτος.

Συμβαίνει δ' ἐν πᾶσι τοῖς μαλακίοις μεταξὺ τῶν ποδῶν καὶ τῆς γαστρὸς εἶναι τὴν κεφαλὴν. Πόδας μὲν οὖν ὀκτώ πάντ' ἔχει, καὶ τούτους δικοτύλους πάντα, πλὴν ἐνὸς γένους πολυπόδων. Ἰδίᾳ δ' ἔχουσιν αἱ τε σηπία καὶ αἱ τευθίδες καὶ οἱ τεῦθοι δύο προβοσκίδας μακράς, ἐπ' ἅκρων τραχύτητα ἐχούσας δικότυλον, αἷς προσάγονταί τε καὶ λαμβάνουσιν εἰς τὸ στόμα τὴν τροφήν, καὶ ὅταν χειμῶν ᾖ, βαλλόμεναι πρὸς τινὰ πέτραν ὥσπερ ἀγκύρας ἀποσαλεύουσιν.

(524a.) Τοῖς δ' ὥσπερ πτερυγίοις, οἷς ἔχουσι περὶ τὸ κύτος, νέουσιν. Ἐπὶ δὲ τῶν ποδῶν αἱ κοτυληδόνες ἅπασιν εἰσίν.

Ὁ μὲν οὖν πολύπους καὶ ὡς ποσὶ καὶ ὡς χερσὶ χρῆται ταῖς πλεκτάναις. Προσάγεται δὲ ταῖς δυσὶ ταῖς ὑπὲρ τοῦ στόματος· τῇ δ' ἐσχάτῃ τῶν πλεκτανῶν, ἣ ἐστὶν ὀξυτάτῃ τε καὶ μόνη παράλευκος αὐτῶν καὶ ἐξ ἄκρου δικρόα (ἔστι δ' αὕτη ἐπὶ τῇ ῥάχει· καλεῖται δὲ ῥάχιν τὸ λεῖον, οὗ πρόσω αἱ κοτυληδόνες εἰσίν), ταύτῃ δὴ τῇ πλεκτάνῃ χρῆται ἐν ταῖς ὀχείαις. Πρὸ τοῦ κύτους δ' ὑπὲρ τῶν πλεκτανῶν ἔχουσι κοῖλον αὐλόν, ὃ τὴν θάλατταν ἀφίᾳσι δεξάμενοι τῷ κύτει, ὅταν τι τῷ στόματι λαμβάνωσιν. Μεταβάλλει δὲ τοῦτον ὅτε μὲν εἰς τὰ δεξιὰ ὅτε δ' εἰς τὰ ἀριστερά· ἀφίᾳσι δὲ καὶ τὸν θολὸν ταύτῃ.

Νεῖ δὲ πλάγιος, ἐπὶ τὴν καλουμένην κεφαλὴν, ἐκτείνων τοὺς πόδας· οὕτω δὲ νέοντι συμβαίνει προορᾶν μὲν εἰς τὸ πρόσθεν (ἐπάνω γὰρ εἰσιν οἱ ὀφθαλμοί), τὸ δὲ στόμα ἔχει ὀπισθεν. Τὴν δὲ κεφαλὴν, ἕως ἂν ζῇ, σκληρὰν ἔχει καθάπερ ἐμπεφυσημένην. Ἀπτεται δὲ καὶ κατέχει ταῖς πλεκτάναις ὑπταίς, καὶ ὁ μεταξὺ τῶν ποδῶν ὑμὴν διατέταται πᾶς· ἐὰν δ' εἰς τὴν ἄμμον ἐμπέσῃ, οὐκέτι δύναται κατέχειν.

Ἔχουσι δὲ διαφορὰν οἱ τε πολypoδες καὶ τὰ εἰρημένα τῶν μαλακίων· τῶν μὲν γὰρ πολυπόδων τὸ μὲν κύτος μικρόν, οἱ δὲ πόδες μακροὶ εἰσι, τῶν δὲ τὸ μὲν κύτος μέγα, οἱ δὲ πόδες βραχεῖς, ὥστε μὴ πορεύεσθαι ἐπ' αὐτοῖς. Αὐτῶν δὲ πρὸς αὐτά, τὸ μὲν μακρότερόν ἐστιν ἡ τευθίς, ἡ δὲ σηπία πλατύτερον. Τῶν δὲ τευθίδων οἱ τεῦθοι καλούμενοι ἐπὶ πολὺ μείζους· γίνονται γὰρ καὶ πέντε πήχεων τὸ μέγεθος. Γίνονται δὲ καὶ σηπία ἔνιαι διπήχεις, καὶ πολυπόδων πλεκτάναι τηλικαῦται καὶ μείζους ἔτι τὸ μέγεθος. Ἔστι δὲ τὸ γένος ὀλίγον τῶν τεύθων. Διαφέρει δὲ τὸ σχῆμα τῶν τευθίδων ὁ τεῦθος· πλατύτερον γὰρ ἐστὶ τὸ ὅξυ τῶν τεύθων, ἔτι δὲ τὸ κύκλω πτερύγιον περὶ ἅπαν ἐστὶ τὸ κύτος· τῇ δὲ τευθίδι ἐλλείπει. Ἔστι δὲ πελάγιον, ὥσπερ καὶ ἡ τευθίς.

Μετὰ δὲ τοὺς πόδας ἡ κεφαλὴ ἐστὶν (524b.) ἀπάντων ἐν μέσῳ τῶν ποδῶν τῶν καλουμένων πλεκτανῶν. Ταύτης δὲ τὸ μὲν ἐστὶ στόμα, ἐν ᾧ ἔννευσι δύο ὀδόντες· ὑπὲρ δὲ τούτων ὀφθαλμοὶ μεγάλοι δύο, ὧν τὸ μεταξὺ μικρὸς χόνδρος ἔχων ἐγκέφαλον μικρόν. Ἐν δὲ τῷ στόματι ἐστὶ μικρὸν σαρκῶδες· γλώτταν δ' οὐκ ἔχει αὐτῶν οὐδέν, ἀλλὰ τούτῳ χρῆται ἀντὶ γλώττης.

Μετὰ δὲ τοῦτο ἔξωθεν μὲν ἔστιν ἰδεῖν τὸ φαινόμενον κύτος. Ἔστι δ' αὐτοῦ ἡ σὰρξ σχιστή, οὐκ εἰς εὐθὺ μέντοι ἀλλὰ κύκλω· δέρμα δ' ἔχουσι πάντα τὰ μαλάκια περὶ ταύτην.

Μετὰ δὲ τὸ στόμα ἔχουσιν οἰσοφάγον μακρὸν καὶ στενόν, ἐχόμενον δὲ τούτου πρόλοβον μέγαν καὶ περιφερῆ ὀρνιθώδη. Τούτου δ' ἔχεται ἡ κοιλία οἷον

ἥνυστρον· τὸ δὲ σχῆμα ὅμοιον τῇ ἐν τοῖς κήρυξιν ἐλίκῃ. Ἀπὸ δὲ ταύτης ἄνω πάλιν φέρει πρὸς τὸ στόμα ἔντερον λεπτὸν· παχύτερον δ' ἐστὶ τοῦ στομάχου τὸ ἔντερον.

Σπλάγχχνον δ' οὐδὲν ἔχει τῶν μαλακίων, ἀλλ' ἦν καλοῦσι μύτιν, καὶ ἐπὶ ταύτῃ θολόν. Τοῦτον δὲ πλεῖστον αὐτῶν καὶ μέγιστον ἡ σηπία ἔχει· ἀφίησι μὲν οὖν ἅπαντα, ὅταν φοβηθῇ, μάλιστα δ' ἡ σηπία. Ἡ μὲν οὖν μύτις κεῖται ὑπὸ τὸ στόμα, καὶ διὰ ταύτης τείνει ὁ στόμαχος· ἡ δὲ τὸ ἔντερον ἀνατείνει, κάτωθεν ὁ θολός, καὶ τῷ αὐτῷ ὑμένι περιεχόμενον ἔχει τὸν πόρον τῷ ἐντέρῳ, καὶ ἀφίησι κατὰ ταῦτόν τόν τε θολόν καὶ τὸ περιττώμα· ἔχουσι δὲ καὶ τριχώδη ἄττα ἐν τῷ σώματι.

Τῇ μὲν οὖν σηπία καὶ τῇ τευθίδι καὶ τῷ τεύθῳ ἐντός ἐστι τὰ στερεὰ ἐν τῷ πρανεῖ τοῦ σώματος, ἃ καλοῦσι τὸ μὲν σήπιον, τὸ δὲ ξίφος. Διαφέρει δέ· τὸ μὲν γὰρ σήπιον ἰσχυρὸν καὶ πλατὺ ἐστὶ, μεταξὺ ἀκάνθης καὶ ὀστοῦ, ἔχον ἐν αὐτῷ ψαθυρότητα σομφήν, τὸ δὲ τῶν τευθίδων λεπτὸν καὶ χονδρῶδέστερον. Τῷ δὲ σχήματι διαφέρουσιν ἀλλήλων ὥσπερ καὶ τὰ κύτη. Οἱ δὲ πολύποδες οὐκ ἔχουσιν εἴσω στερεὸν τοιοῦτον οὐδέν, ἀλλὰ περὶ τὴν κεφαλὴν χονδρῶδες, ὃ γίνεται, ἐάν τις αὐτῶν παλαιωθῇ, σκληρόν.

Τὰ δὲ θήλεα τῶν ἄρρένων διαφέρουσιν· οἱ μὲν γὰρ ἄρρενες ἔχουσι πόρον ὑπὸ τὸν στόμαχον, ἀπὸ τοῦ ἐγκεφάλου τείνοντα πρὸς τὸ κάτω τοῦ κύτους· ἔστι δὲ πρὸς ὃ τείνει, ὅμοιον μαστῷ· (525a.) ἐν δὲ ταῖς θηλείαις δύο τε ταῦτ' ἐστὶ καὶ ἄνω. Ἀμφοτέροις δ' ὑπὸ ταῦτα ἐρυθρὰ ἄττα σωμάτια πρόσσεστιν.

Τὸ δ' ὥον ὃ μὲν πολύπους ἐν καὶ ἀνώμαλον ἔξωθεν καὶ μέγα ἴσχει· ἔσω δὲ τὸ ὑγρόν, ὁμόχρουν ἅπαν καὶ λεῖον, χρῶμα δὲ λευκόν· τὸ δὲ πλῆθος τοῦ ὥου τοσοῦτον ὥστε πληροῦν ἀγγεῖον μεῖζον τῆς τοῦ πολύποδος κεφαλῆς. Ἡ δὲ σηπία δύο τε τὰ κύτη καὶ πολλὰ ὥὰ ἐν τούτοις, χαλάζαις ὅμοια λευκαῖς. Ἐκαστα δὲ τούτων ὡς κεῖται τῶν μορίων, θεωρεῖσθω ἐκ τῆς ἐν ταῖς ἀνατομαῖς διαγραφῆς.

Πάντα δὲ τὰ ἄρρενα ταῦτα τῶν θηλειῶν διαφέρει, καὶ μάλιστα ἡ σηπία· τά τε γὰρ πρηνῇ τοῦ κύτους, ὄντα μελάντερα τῶν ὑπτίων, τραχύτερά τ' ἔχει ὁ ἄρρην τῆς θηλείας, καὶ διαποίκιλα ῥάβδοις, καὶ τὸ ὀρροπύγιον ὀξύτερον.

Ἔστι δὲ γένη πλείω πολυπόδων, ἐν μὲν τὸ μάλιστ' ἐπιπολάζον καὶ μέγιστον αὐτῶν (εἰσὶ δὲ πολλὸν μείζους οἱ πρόσγειοι τῶν πελαγίων), ἔτι δ' ἄλλοι μικροί, ποικίλοι, οἳ οὐκ ἐσθίονται. Ἄλλα τε δύο, ἡ τε καλουμένη ἐλεδώνη, μήκει τε



διαφέρουσα τῷ τῶν ποδῶν καὶ τῷ μονοκότυλον εἶναι μόνην τῶν μαλακίων (τὰ γὰρ ἄλλα πάντα δικότυλά ἐστι), καὶ ἦν καλοῦσιν οἱ μὲν βολίταιναν οἱ δ' ὄζολιν. Ἔτι δ' ἄλλοι δύο ἐν ὀστρείοις, ὃ τε καλούμενος ὑπὸ τινων ναυτίλος καὶ ποντίλος, ὑπ' ἐνίων δ' ὦδὸν πολύποδος· τὸ δ' ὀστρακὸν αὐτοῦ ἐστὶν οἶον κτεῖς κοῖλος καὶ οὐ συμφυής. Οὗτος νέμεται πολλάκις παρὰ τὴν γῆν, εἴθ' ὑπὸ τῶν κυμάτων ἐκκλύζεται εἰς τὸ ξηρόν, καὶ περιπεσόντος τοῦ ὀστρέου ἀλίσκεται καὶ ἐν τῇ γῇ ἀποθνήσκει. Εἰσὶ δ' οὗτοι μικροί, τὸ εἶδος ὅμοιοι ταῖς βολιταίναις. Καὶ ἄλλος ἐν ὀστράκῳ οἶον κοχλίας, ὃς οὐκ ἐξέρχεται ἐκ τοῦ ὀστράκου, ἀλλ' ἔνεστιν ὥσπερ ὁ κοχλίας, καὶ ἔξω ἐνίοτε τὰς πλεκτάνας προτείνει. Περὶ μὲν οὖν τῶν μαλακίων εἴρηται.

## Κεφάλαιο 2

Τῶν δὲ μαλακοστράκων ἐν μὲν ἐστὶ γένος τὸ τῶν καράβων, καὶ τούτῳ παραπλήσιον ἕτερον τὸ τῶν καλουμένων ἀστακῶν· οὗτοι δὲ διαφέρουσι τῶν καράβων τῷ ἔχειν χηλὰς καὶ ἄλλας τινὰς διαφορὰς οὐ πολλὰς. Ἐν δὲ τὸ τῶν καρίδων, καὶ ἄλλο τὸ τῶν καρκίνων. Γένη δὲ πλείω τῶν (525b.) καρίδων ἐστὶ καὶ τῶν καρκίνων, τῶν μὲν καρίδων αἱ τε κυφαὶ καὶ αἱ κράγγονες καὶ τὸ μικρὸν γένος (αὗται γὰρ οὐ γίνονται μείζους), τῶν δὲ καρκίνων παντοδαπώτερον τὸ γένος καὶ οὐκ εὐαρίθμητον. Μέγιστον μὲν οὖν ἐστὶν ἃς καλοῦσι μαΐας, δεύτερον δ' οἱ τε πάγουροι καὶ οἱ Ἡρακλεωτικοὶ καρκίνοι, ἔτι δ' οἱ ποτάμιοι· οἱ δ' ἄλλοι ἐλάττους καὶ ἀνωθυμώτεροι.

Περὶ δὲ τὴν Φοινίκην γίνονται ἐν τῷ αἰγιαλῷ οὓς καλοῦσιν ἵππους διὰ τὸ οὕτω ταχέως θεῖν ὥστε μὴ ῥάδιον εἶναι καταλαβεῖν· ἀνοιχθέντες δὲ κενοὶ διὰ τὸ μὴ ἔχειν νομὴν. Ἔστι δὲ καὶ ἕτερον γένος μικρὸν μὲν ὥσπερ οἱ καρκίνοι, τὸ δ' εἶδος ὅμοιον τοῖς ἀστακοῖς.

Πάντα μὲν οὖν ταῦτα, καθάπερ εἴρηται πρότερον, τὸ μὲν στερεὸν καὶ ὀστρακῶδες ἐκτὸς ἔχει ἐν τῇ χώρᾳ τῇ τοῦ δέρματος, τὸ δὲ σαρκῶδες ἐντός, τὰ δ' ἐν τοῖς ὑπτίοις πλακωδέστερα, εἰς ἃ καὶ ἐκτίκτουσιν αἱ θήλεια.

Πόδας δ' οἱ μὲν κάραβοι ἐφ' ἐκάτερα ἔχουσι πέντε σὺν ταῖς ἐσχάταις χηλαῖς· ὁμοίως δὲ καὶ οἱ καρκίνοι δέκα τοὺς πάντας σὺν ταῖς χηλαῖς. Τῶν δὲ καρίδων αἱ μὲν κυφαὶ πέντε μὲν ἐφ' ἐκάτερα ἔχουσιν, ὅξεῖς τοὺς πρὸς τῇ κεφαλῇ, ἄλλους δὲ πέντε ἐφ' ἐκάτερα κατὰ τὴν γαστέρα, τὰ ἄκρα ἔχοντας πλατέα· πλάκας δ' ἐν ὑπτίοις οὐκ ἔχουσι, τὰ δ' ἐν τοῖς πρανέσιν ὅμοια τοῖς καράβοις. Ἡ δὲ κραγγὼν ἀνάπαλιν· τοὺς πρώτους γὰρ ἔχει τέτταρας ἐφ' ἐκάτερα, εἴτ' ἄλλους ἐχομένους λεπτοὺς τρεῖς ἐφ' ἐκάτερα, τὸ δὲ λοιπὸν πλεῖον μόριον τοῦ

σώματος ἄπουν ἐστίν. Κάμπτονται δ' οἱ μὲν πόδες πάντων εἰς τὸ πλάγιον, ὥσπερ καὶ τῶν ἐντόμων, αἱ δὲ χηλαί, ὅσα ἔχει χηλάς, εἰς τὸ ἐντός. Ἔχει δ' ὁ κάραβος καὶ κέρκον, πτερύγια δὲ πέντε· καὶ ἡ καρὶς ἡ κυφὴ τὴν οὐρᾶν καὶ πτερύγια τέτταρα. Ἔχει δὲ καὶ ἡ κραγγὼν πτερύγια ἐφ' ἐκάτερα ἐν τῇ οὐρᾷ· τὸ δὲ μέσον αὐτῶν ἀμφοτέραι ἀκανθῶδες, πλὴν αὕτη μὲν πλατύ, ἡ δὲ κυφὴ ὀξύ. Ὁ δὲ καρκίνος μόνος τῶν τοιούτων ἀνορροπύγιον· καὶ τὸ σῶμα τὸ μὲν τῶν καρίδων καὶ τῶν καράβων πρόμηκες, τὸ δὲ τῶν καρκίνων στρογγύλον.

Διαφέρει δ' ὁ κάραβος ὁ ἄρρην τῆς θηλείας· τῆς μὲν γὰρ θηλείας ὁ πρῶτος (526a.) ποῦς δίκρους ἐστί, τοῦ δ' ἄρρενος μῶνυξ, καὶ τὰ πτερύγια τὰ ἐν τῷ ὑπίῳ ἡ μὲν θήλεια μεγάλα ἔχει καὶ ἐπαλλάττοντα πρὸς τῷ τραχήλῳ, ὁ δ' ἄρρην ἐλάττω καὶ οὐκ ἐπαλλάττοντα· ἔτι τοῦ μὲν ἄρρενος ἐν τοῖς τελευταίοις ποσὶ μεγάλα καὶ ὀξέα ἐστὶν ὥσπερ πλῆκτρα, τῆς δὲ θηλείας ταῦτα μικρὰ καὶ λεῖα. Ὅμοίως δ' ἔχουσιν ἀμφοτέρα κεραίας δύο πρὸ τῶν ὀφθαλμῶν μεγάλας καὶ τραχείας, καὶ ἄλλα κεράτια μικρὰ ὑποκάτω λεῖα.

Τὰ δ' ὄμματα πάντων τούτων ἐστὶ σκληρόφθαλμα, καὶ κινεῖται καὶ ἐκτὸς καὶ ἐντὸς καὶ εἰς τὸ πλάγιον· ὁμοίως δὲ καὶ τοῖς καρκίνοις τοῖς πλείστοις, καὶ ἔτι μᾶλλον.

Ὁ δ' ἄστακὸς τὸ μὲν ὅλον ὑπόλευκον ἔχει τὸ χρῶμα, μέλανι δὲ διαπεπασμένον. Ἔχει δὲ τοὺς μὲν ὑποκάτω πόδας τοὺς ἄχρι τῶν μεγάλων ὀκτώ, μετὰ δὲ ταῦτα τοὺς μεγάλους πολλῶ μείζους καὶ ἐξ ἄκρου πλατυτέρους ἢ ὁ κάραβος, ἀνωμάλους δ' αὐτούς· ὁ μὲν γὰρ δεξιὸς τὸ πλατὺ τὸ ἔσχατον πρόμηκες ἔχει καὶ λεπτόν, ὁ δ' ἀριστερὸς παχὺ καὶ στρογγύλον. Ἐξ ἄκρου δ' ἐκάτερος ἐσχισμένος ὥσπερ σιαγῶν ὀδόντας ἔχων καὶ κάτωθεν καὶ ἄνωθεν, πλὴν ὁ μὲν δεξιὸς μικροὺς ἅπαντας καὶ καρχαρόδοντας, ὁ δ' ἀριστερὸς ἐξ ἄκρου μὲν καρχαρόδοντας, τοὺς δ' ἐντὸς ὥσπερ γομφίους, ἐκ μὲν τοῦ κάτω μέρους τέτταρας καὶ συνεχεῖς, ἄνωθεν δὲ τρεῖς καὶ οὐ συνεχεῖς. Κινοῦσι δὲ τὸ ἄνω μέρος ἀμφοτέροι, καὶ προσπιέζουσι πρὸς τὸ κάτω· βλαισοὶ δ' ἀμφοτέροι τῇ θέσει, καθάπερ πρὸς τὸ λαβεῖν καὶ πιέσαι πεφυκότες. Ἐπάνω δὲ τῶν μεγάλων ἄλλοι δύο δασεῖς, μικρὸν ὑποκάτω τοῦ στόματος, καὶ ὑποκάτω τούτων τὰ βραγχιώδη τὰ περὶ τὸ στόμα, δασέα καὶ πολλά. Ταῦτα δ' αἰεὶ διατελεῖ κινῶν· κάμπτει δὲ καὶ προσάγεται τοὺς δύο πόδας πρὸς τὸ στόμα τοὺς δασεῖς. Ἔχουσι δὲ καὶ παραφυάδας λεπτὰς οἱ πρὸς τῷ στόματι πόδες.

Ὀδόντας δ' ἔχει δύο καθάπερ ὁ κάραβος, ἐπάνω δὲ τούτων τὰ κέρατα μακρά, βραχύτερα δὲ καὶ λεπτότερα πολὺ ἢ ὁ κάραβος, καὶ ἄλλα τέτταρα τὴν μὲν μορφήν ὅμοια τούτοις, βραχύτερα δὲ καὶ (526b.) λεπτότερα. Τούτων δ' ἐπάνω

τοὺς ὀφθαλμοὺς μικροὺς καὶ βραχεῖς, οὐχ ὥσπερ ὁ κάραβος μεγάλους. Τὸ δ' ἐπάνω τῶν ὀφθαλμῶν ὀξὺ καὶ τραχύ, καθαπερεὶ μέτωπον, μεῖζον ἢ ὁ κάραβος. Ὅλως δὲ τὸ μὲν πρόσωπον ὀξύτερον, τὸν δὲ θώρακα εὐρύτερον ἔχει πολὺ τοῦ καράβου, καὶ τὸ ὅλον σῶμα σαρκωδέστερον καὶ μαλακώτερον. Τῶν δ' ὀκτὼ ποδῶν οἱ μὲν τέτταρες ἐξ ἄκρου δίκροοί εἰσιν, οἱ δὲ τέτταρες οὐ. Τὰ δὲ περὶ τὸν τράχηλον καλούμενον διήρηται μὲν ἕξωθεν πενταχῇ, καὶ ἕκτον ἐστὶ τὸ πλατὺ τὸ ἔσχατον, πέντε πλάκας ἔχον· τὰ δ' ἐντός, εἰς ἃ προεντίκτουσιν αἱ θήλειαι, δασέα τέτταρα.

Καθ' ἕκαστον δὲ τῶν εἰρημένων πρὸς τὰ ἕξω ἄκανθαν ἔχει βραχεῖαν καὶ ὀρθήν. Τὸ δ' ὅλον σῶμα καὶ τὰ περὶ τὸν θώρακα λεῖα, οὐχ ὥσπερ ὁ κάραβος τραχύς· ἀλλ' ἐν τοῖς μεγάλοις ποσὶ τὰ ἕξωθεν ἀκάνθας ἔχει μεῖζους. Τῆς δὲ θηλείας πρὸς τὸν ἄρρενα οὐδεμία διαφορὰ φαίνεται· καὶ γὰρ ὁ ἄρρην καὶ ἡ θήλεια ὁποτέραν ἂν τύχη τῶν χηλῶν ἔχουσι μεῖζω, ἴσας μέντοι ἀμφοτέρας οὐδέτερος οὐδέποτε.

Τὴν δὲ θάλατταν δέχονται μὲν παρὰ τὸ στόμα πάντα τὰ τοιαῦτα, ἀφιᾶσι δ' ἐπιλαμβάνοντα μικρὸν τούτου μόριον οἱ καρκῖνοι, οἱ δὲ κάραβοι παρὰ τὰ βραγχιοειδῆ· ἔχουσι δὲ τὰ βραγχιοειδῆ πολλὰ οἱ κάραβοι.

Κοινὸν δὲ πάντων τούτων ἐστίν· ὀδόντας τε πάντ' ἔχει δύο (καὶ γὰρ οἱ κάραβοι τοὺς πρώτους δύο ἔχουσι) καὶ ἐν τῷ στόματι σαρκωδέστερον ἀντὶ γλώττης, εἴτα κοιλίαν τοῦ στόματος ἐχομένην εὐθύς, πλὴν οἱ κάραβοι μικρὸν στόμαχον πρὸ τῆς κοιλίας, εἴτ' ἐκ ταύτης ἔντερον εὐθύ. Τελευτᾷ δὲ τοῦτο τοῖς μὲν καραβοειδέσι καὶ καρίσι κατ' εὐθυωρίαν πρὸς τὴν οὐράν, ἢ τὸ περιττώμα ἀφιᾶσι καὶ τὰ ὡὰ ἐκτίκτουσιν, τοῖς δὲ καρκίνοις, ἢ τὸ ἐπίπτυγμα ἔχουσι, κατὰ μέσον τὸ ἐπίπτυγμα, ἢ τὰ ὡὰ ἐκτίκτουσιν (ἐκτὸς δὲ καὶ οὗτοι). Ἔτι τὰ θήλεα αὐτῶν παρὰ τὸ ἔντερον τὴν τῶν ὡῶν χώραν ἔχουσιν. Καὶ τὴν καλουμένην δὲ μύτιν ἢ μήκωνα πλείω ἢ ἐλάττω πάντ' ἔχει ταῦτα.

Τὰς δ' ἰδίας ἤδη διαφορὰς καθ' ἕκαστον δεῖ (527a.) θεωρεῖν. Οἱ μὲν οὖν κάραβοι, ὥσπερ εἴρηται, δύο ἔχουσιν ὀδόντας μεγάλους καὶ κοίλους, ἐν οἷς ἔνεστι χυμὸς ὅμοιος τῇ μύτιδι, μεταξὺ δὲ τῶν ὀδόντων σαρκίον γλωττοειδές. Ἀπὸ δὲ τοῦ στόματος ἔχει οἰσοφάγον βραχὺν καὶ κοιλίαν τούτου ἐχομένην ὑμενώδη, ἥς πρὸς τῷ στόματι ὀδόντες εἰσὶ τρεῖς, οἱ μὲν δύο κατ' ἀλλήλους, ὁ δ' εἰς ὑποκάτω. Τῆς δὲ κοιλίας ἐκ τοῦ πλαγίου ἔντερον ἀπλοῦν καὶ ἰσοπαχὲς δι' ὅλου μέχρι πρὸς τὴν ἔξοδον τοῦ περιττώματος. Ταῦτα μὲν οὖν πάντα ἔχουσι καὶ οἱ κάραβοι καὶ αἱ καρίδες καὶ οἱ καρκῖνοι· καὶ γὰρ ὀδόντας δύο ἔχουσιν οἱ καρκῖνοι.

Ἔτι δ' οἷ γε κάραβοι πόρον ἔχουσιν ἀπὸ τοῦ στήθους ἡρτημένον μέχρι πρὸς τὴν ἔξοδον τοῦ περιττώματος· οὗτος δ' ἐστὶ τῇ μὲν θηλείᾳ ὑστερικός, τῷ δ' ἄρρени θορικός. Ἔστι δ' ὁ πόρος οὗτος πρὸς τῷ κοίλῳ τῆς σαρκός, ὥστε μεταξὺ εἶναι τὴν σάρκα· τὸ μὲν γὰρ ἔντερον πρὸς τῷ κυρτῷ ἐστίν, ὁ δὲ πόρος πρὸς τῷ κοίλῳ, ὁμοίως ἔχοντα ταῦτα ὥσπερ τοῖς τετράποσιν.

Διαφέρει δ' οὐδὲν ὁ τοῦ ἄρρενος ἢ τῆς θηλείας· ἀμφότεροι γὰρ εἰσι λεπτοὶ καὶ λευκοὶ καὶ ὑγρότητα ἔχοντες ἐν αὐτοῖς ὡχράν, ἔτι δ' ἡρτημένοι ἀμφότεροι ἐκ τοῦ στήθους.

Ἔχουσι δ' οὕτω τὸ ὦδον καὶ αἱ καρίδες καὶ τὰς ἐλίκας.

Ἰδίᾳ δ' ἔχει ὁ ἄρρην πρὸς τὴν θήλειαν ἐν τῇ σαρκὶ κατὰ τὸ στήθος δύο λευκὰ ἄττα καθ' αὐτά, ὅμοια τὸ χρῶμα καὶ τὴν σύστασιν ταῖς τῆς σηπίας προβοσκίσιν· εἰλιγμένα δ' ἐστὶ ταῦτα ὥσπερ ἡ τοῦ κήρυκος μήκων. Ἡ δ' ἀρχὴ τούτων ἐστὶν ἀπὸ τῶν κοτυληδόνων, αἱ εἰσιν ὑποκάτω τῶν ἐσχάτων ποδῶν. Ἔχει δὲ καὶ ἐν τούτῳ σάρκα ἐρυθρὰν καὶ αἱματώδη τὴν χροάν, τῇ δ' ἀφῇ γλίσχραν καὶ οὐχ ὁμοίαν τῇ σαρκί. Ἀπὸ δὲ τοῦ περὶ τὰ στήθη κηρυκώδους ἄλλος ἐστὶν ἐλιγμός, ὥσπερ ἄρπεδόνη τὸ πάχος· ὧν ὑποκάτω δύο ἄττα ψαθυρά ἐστι προσηρητημένα τῷ ἐντέρῳ θορικά. Ταῦτα μὲν οὖν ὁ ἄρρην ἔχει· ἡ δὲ θήλεια ὧν ἔχει τὸ χρῶμα ἐρυθρά, ὧν ἡ πρόσφυσις ἐστὶ πρὸς τῇ κοιλίᾳ καὶ τοῦ ἐντέρου ἐκατέρωθι μέχρι εἰς τὸ σαρκῶδες, ὑμένι λεπτῷ περιεχόμενα. Τὰ μὲν οὖν μόρια ὅσα ἐντὸς καὶ ἐκτὸς ἔχουσι, ταῦτά ἐστιν.

### Κεφάλαιο 3

(527b.) Συμβέβηκε δὲ τῶν μὲν ἐναίμων τὰ ἐντὸς μόρια ὀνόματα ἔχειν· πάντα γὰρ σπλάγχνα ἔχει τὰ ἔσωθεν· τῶν δ' ἀναίμων οὐδέν, ἀλλὰ κοινὸν τούτοις καὶ ἐκείνοις πᾶσι κοιλία καὶ στόμαχος καὶ ἔντερον.

Οἱ δὲ καρκίνοι, περὶ μὲν τῶν χηλῶν καὶ τῶν ποδῶν, ὅτι ἔχουσι καὶ πῶς ἔχουσιν, εἴρηται πρότερον· ὥς δ' ἐπὶ τὸ πολὺ πάντες τὴν δεξιὰν ἔχουσι μείζω χηλὴν καὶ ἰσχυροτέραν. Εἴρηται δὲ πρότερον καὶ περὶ ὀφθαλμῶν, ὅτι εἰς τὸ πλάγιον βλέπουσιν οἱ πλεῖστοι. Τὸ δὲ κύτος τοῦ σώματος ἐν ἐστὶν ἀδιόριστον, ἔτι δὲ κεφαλὴ, καὶ εἴ τι ἄλλο μόριον. Ἔχουσι δ' ὀφθαλμοὺς οἱ μὲν ἐκ τοῦ πλαγίου ἄνω ὑπὸ τὸ πρηνὲς εὐθύς πολὺ διεστῶτας, ἔνιοι δ' ἐν μέσῳ καὶ ἐγγὺς ἀλλήλων, οἷον οἱ Ἡρακλεωτικοὶ καὶ αἱ μαῖαι. Ὑποκάτω δὲ τὸ στόμα τῶν ὀφθαλμῶν, καὶ ἐν αὐτῷ ὀδόντας δύο ὥσπερ ὁ κάραβος, πλὴν οὐ

στρογγύλοι οὔτοι ἀλλὰ μακροί. Καὶ ἐπὶ τούτων ἐπικαλύμματά ἐστι δύο, ὧν μεταξὺ ἐστὶν οἷά περ ὁ κάραβος ἔχει πρὸς τοῖς ὁδοῦσιν. Δέχεται μὲν οὖν τὸ ὕδωρ παρὰ τὸ στόμα, ἀπωθῶν τοῖς ἐπικαλύμμασιν, ἀφίησι δὲ κατὰ τοὺς ἄνω πόρους τοῦ στόματος, ἐπιλαμβάνων τοῖς ἐπικαλύμμασιν, ἣ εἰσῆλθεν· οὔτοι δ' εἰσὶν εὐθύς ὑπὸ τοὺς ὀφθαλμούς· καὶ ὅταν δέξηται τὸ ὕδωρ, ἐπιλαμβάνει τὸ στόμα τοῖς ἐπικαλύμμασιν ἀμφοτέροις, ἔπειθ' οὕτως ἀποπυτίζει τὴν θάλατταν.

Ἐχόμενος δὲ τῶν ὀδόντων ὁ στόμαχος βραχὺς πάμπαν, ὥστε δοκεῖν εὐθύς εἶναι μετὰ τὸ στόμα τὴν κοιλίαν. Καὶ κοιλία τούτου ἐχομένη δικρόα, ἥς ἐκ μέσης μὲν τὸ ἔντερόν ἐστὶν ἀπλοῦν καὶ λεπτόν· τελευτᾷ δὲ τὸ ἔντερον ὑπὸ τὸ ἐπικάλυμμα τὸ ἔξω, ὥσπερ εἴρηται καὶ πρότερον. Ἔχει δὲ τὰ μεταξὺ τῶν ἐπικαλυμμάτων, οἷά περ ὁ κάραβος, πρὸς τοῖς ὁδοῦσιν.

Ἐν δὲ τῷ κύτει ἔσω χυμός ἐστὶν ὠχρός, καὶ μικρ' ἄττα προμήκη λευκά, καὶ ἄλλα πυρρὰ διαπεπασμένα. Διαφέρει δ' ὁ ἄρρην τῆς θηλείας τῷ τε μεγέθει καὶ τῷ πλάτει καὶ τῷ ἐπικαλύμματι· μεῖζον γὰρ τοῦτο ἔχει ἢ θήλεια, καὶ πλεον ἄφεστηκὸς καὶ συνηρεφέστερον, καθάπερ καὶ ἐπὶ τῶν θηλειῶν καράβων.

Τὰ μὲν οὖν τῶν μαλακοστράκων μόρια τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 4

Τὰ δ' ὀστρακόδερμα τῶν ζώων, οἷον οἷ τε κοχλίας (528a.) καὶ οἱ κόχλοι καὶ πάντα τὰ καλούμενα ὄστρεα, ἔτι δὲ τὸ τῶν ἐχίνων γένος, τὸ μὲν σαρκῶδες, ὅσα σάρκας ἔχει, ὁμοίως ἔχει τοῖς μαλακοστράκοις (ἐντὸς γὰρ ἔχει), τὸ δ' ὄστρακον ἐκτός, ἐντὸς δ' οὐδὲν σκληρόν. Αὐτὰ δὲ πρὸς αὐτὰ διαφορὰς ἔχει πολλὰς καὶ κατὰ τὰ ὄστρακα καὶ κατὰ τὴν σάρκα τὴν ἐντός.

Τὰ μὲν γὰρ αὐτῶν οὐκ ἔχει σάρκα οὐδεμίαν, οἷον ἐχῖνος, τὰ δ' ἔχει μὲν, ἐντὸς δ' ἔχει τὴν σάρκα ἀφανῆ πᾶσαν πλην τῆς κεφαλῆς, οἷον οἷ τε χερσαῖοι κοχλίας καὶ τὰ καλούμενα ὑπὸ τινων κοκάλια καὶ τῶν ἐν τῇ θαλάττῃ αἷ τε πορφύραι καὶ οἱ κήρυκες καὶ ὁ κόχλος καὶ τᾶλλα τὰ στρομβώδη. Τῶν δ' ἄλλων τὰ μὲν ἐστὶ δίθυρα τὰ δὲ μονόθυρα· λέγω δὲ δίθυρα τὰ δυσὶν ὀστράκοις περιεχόμενα, μονόθυρα δὲ τὰ ἐνί· τὸ δὲ σαρκῶδες ἐπιπολῆς, οἷον ἡ λεπὰς. Τῶν δὲ διθύρων τὰ μὲν ἐστὶν ἀναπτυκτά, οἷον οἷ τε κτένες καὶ οἱ μύες· ἅπαντα γὰρ τὰ τοιαῦτα τῇ μὲν συμπέφυκε τῇ δὲ διαλέλυται, ὥστε συγκλείεσθαι καὶ ἀνοίγεσθαι. Τὰ δὲ δίθυρα μὲν ἐστὶν, ὁμοίως δὲ συγκέκλεισται ἐπ' ἀμφοτέρα, οἷον οἱ σωλῆνες. Ἔστι δ' ἃ ὅλα περιέχεται τῷ ὀστράκῳ καὶ οὐδὲν τῆς σαρκὸς ἔχει εἰς τὸ ἔξω γυμνόν, οἷον τὰ καλούμενα

τήθυα.

Ἔτι δ' αὐτῶν τῶν ὀστράκων διαφοραὶ πρὸς ἄλληλά εἰσιν. Τὰ μὲν γάρ ἐστι λειόστρακα, ὥσπερ σωλὴν καὶ μύες καὶ κόγχαι ἔνιαι αἱ καλούμεναι ὑπὸ τινων γάλακες, τὰ δὲ τραχυόστρακα, οἷον τὰ λιμνόστρεα καὶ πίννα καὶ γένη κόγχων ἔνια καὶ κήρυκες· καὶ τούτων τὰ μὲν ῥαβδωτά ἐστίν, οἷον κτεῖς καὶ κόγχων τι γένος, τὰ δ' ἄρραβδωτα, οἷον αἱ τε πίνναι καὶ κόγχων τι γένος.

Καὶ πάχει δὲ καὶ λεπτότητι τῶν ὀστράκων διαφέρουσιν, ὅλων τε τῶν ὀστράκων καὶ κατὰ μέρος, οἷον περὶ τὰ χεῖλη· τὰ μὲν γὰρ λεπτοχειλῆ ἐστίν, οἷον οἱ μύες, τὰ δὲ παχυχειλῆ, οἷον τὰ λιμνόστρεα. Ἔτι τὰ μὲν κινητικὰ αὐτῶν ἐστίν, οἷον ὁ κτεῖς (ἔνιοι γὰρ καὶ πέτεσθαι λέγουσι τοὺς κτένας, ἐπεὶ καὶ ἐκ τοῦ ὀργάνου ὧ θηρεύονται ἐξάλλονται πολλάκις), τὰ δ' ἀκίνητά ἐστίν ἐκ τῆς προσφυῆς, οἷον ἡ πίννα. Τὰ δὲ (528b.) στρομβώδη πάντα κινεῖται καὶ ἔρπει· νέμεται δ' ἀπολυομένη καὶ ἡ λεπὰς. Κοινὸν δὲ καὶ τούτων καὶ τῶν ἄλλων τῶν σκληροστράκων τὸ λεῖον εἶναι ἐντὸς τὸ ὄστρακον.

Τὸ δὲ σαρκῶδες τοῖς μὲν μονοθύροις καὶ διθύροις προσπέφυκε τοῖς ὀστράκοις, ὥστε βίᾳ ἀποσπᾶσθαι, τοῖς δὲ στρομβώδεσιν ἀπολέλυται μᾶλλον.

Ἴδιον δὲ τούτοις κατὰ τὸ ὄστρακον ὑπάρχει πᾶσι τὸ ἐλίκην ἔχειν τὸ ὄστρακον τὸ ἔσχατον ἀπὸ τῆς κεφαλῆς. Ἔτι δ' ἐπίπτυγμα πάντ' ἔχει ἐκ γενετῆς. Ἔστι δὲ πάντα τὰ στρομβώδη τῶν ὀστρακοδέρμων δεξιὰ, καὶ κινεῖται οὐκ ἐπὶ τὴν ἐλίκην ἀλλ' ἐπὶ τὸ καταντικρύ.

Τὰ μὲν οὖν ἔξωθεν μόρια τούτων τῶν ζώων τοιαύτας ἔχει τὰς διαφοράς· τῶν δ' ἐντὸς τρόπον μὲν τινα παραπλήσιος ἢ φύσις ἐστὶ πάντων, καὶ μάλιστα τῶν στρομβωδῶν (μεγέθει γὰρ ἀλλήλων διαφέρει καὶ τοῖς καθ' ὑπεροχὴν πάθεσιν), οὐ πολὺ δὲ διαφέρει οὐδὲ τὰ μονόθυρα καὶ δίθυρα, συγκλειστὰ δέ· διαφορὰν γὰρ ἔχει πρὸς ἄλληλα μὲν μικράν, πρὸς δὲ τὰ ἀκίνητα πλείω. Τοῦτο δ' ἔσται φανερόν ἐκ τῶν ὕστερον μᾶλλον.

Ἡ δὲ φύσις τῶν στρομβοειδῶν ἀπάντων ὁμοίως ἔχει, διαφέρει δ' ὥσπερ εἴρηται, καθ' ὑπεροχὴν (τὰ μὲν γὰρ μείζω μόρια καὶ ἐνδηλότερα ἔχει αὐτῶν, τὰ δ' ἐλάττω τούναντίον), ἔτι δὲ σκληρότητι καὶ μαλακότητι καὶ τοῖς ἄλλοις τοῖς τοιούτοις πάθεσιν. Ἔχει γὰρ πάντα τὴν μὲν ἐξωτάτω ἐν τῷ στόματι τοῦ ὀστράκου σάρκα στιφράν, τὰ μὲν μᾶλλον τὰ δ' ἥττον. Ἐκ μέσου δὲ τούτου ἡ κεφαλὴ καὶ κέρατια δύο· ταῦτα δ' ἐν μὲν τοῖς μείζοσι μεγάλα, ἐν δὲ τοῖς ἐλάττωσι πάνπαν μικρά ἐστίν. Ἡ δὲ κεφαλὴ ἐξέρχεται πᾶσι τὸν αὐτὸν τρόπον·

κᾶν τι φοβηθῇ, συσπᾶται πάλιν εἰς τὸ ἐντός. Ἔχει δὲ στόμα καὶ ὀδόντας ἓνια, οἷον ὁ κοχλίας, ὀξεῖς καὶ μικροὺς καὶ λεπτούς. Ἔχουσι δὲ καὶ προβοσκίδας, ὥσπερ καὶ αἱ μυῖαι· τοῦτο δ' ἐστὶ γλωττοειδές. Ἔχουσι δὲ καὶ οἱ κήρυκες τοῦτο καὶ αἱ πορφύραι στιφρόν, καὶ ὥσπερ οἱ μύωπες καὶ οἱ οἴστροι τὰ δέρματα διατρυπῶσι τῶν τετραπόδων, ἔτι τὴν ἰσχὺν τοῦτ' ἔστι σφοδρότερον· τῶν γὰρ δελεάτων τὰ ὄστρακα διατρυπῶσιν.

(529a.) Τοῦ δὲ στόματος ἔχεται εὐθύς ἡ κοιλία. Ὁμοία δ' ἐστὶν ἡ κοιλία προλόβῳ ὄρνιθος ἡ τῶν κόχλων. Κάτω δ' ἔχει δύο λευκὰ στιφρά, ὅμοια μαστοῖς, οἷα ἐγγίνεται καὶ ἐν ταῖς σηπίαις, πλὴν στιφρὰ ταῦτα μᾶλλον. Ἀπὸ δὲ τῆς κοιλίας στόμαχος ἀπλοῦς μακρὸς μέχρι τῆς μήκωνος, ἥ ἐστὶν ἐν τῷ πυθμένι. Ταῦτα μὲν οὖν δῆλα καὶ ἐπὶ τῶν πορφυρῶν καὶ τῶν κηρύκων ἐστὶν ἐν τῇ ἐλίκῃ τοῦ ὀστράκου.

Τοῦ δὲ στομάχου τὸ ἐχόμενόν ἐστιν ἔντερον· συνεχές δ' ὁ τε στόμαχος καὶ τὸ ἔντερον, καὶ ἅπαν ἀπλοῦν μέχρι τῆς ἐξόδου. Ἡ δ' ἀρχὴ τοῦ ἐντέρου περὶ τὴν ἐλίκην τῆς μήκωνος, καὶ ταύτῃ ἐστὶν εὐρύτερον (ἔστι γὰρ ἡ μήκων οἶονεὶ περίττωμα πᾶσι τοῖς ὀστρακηροῖς τὸ πολὺ αὐτῆς), εἴτ' ἐπικάμψαν ἄνω φέρεται πάλιν πρὸς τὸ σαρκῶδες, καὶ ἡ τελευταῖα τοῦ ἐντέρου παρὰ τὴν κεφαλὴν ἐστὶν, ἣ ἀφιᾶσι τὸ περίττωμα, πᾶσιν ὁμοίως τοῖς στρομβώδεσι καὶ τοῖς χερσαίοις καὶ τοῖς θαλαττίοις. Παρύφανται δ' ἀπὸ τῆς κοιλίας τῷ στομάχῳ ἐν τοῖς μεγάλοις κόχλοις συνεχόμενος ὑμένιῳ μακρὸς πόρος καὶ λευκός, ὅμοιος τὴν χροάν τοῖς ἄνω μαστοειδέσιν· ἔχει δ' ἐντομὰς ὥσπερ τὸ ἐν τῷ καράβῳ ὦον, πλὴν τὴν χροάν τὸ μὲν λευκόν, ἐκεῖνο δ' ἐρυθρόν. Ἔχει δ' οὐδεμίαν ἐξοδὸν τοῦτο οὐδὲ πόρον, ἀλλ' ἐν ὑμένι ἐστὶ λεπτῷ, κοιλότητα ἔχον ἐν ἑαυτῷ στενὴν. Ἀπὸ δὲ τοῦ ἐντέρου κάτω παρατείνει μέλανα καὶ τραχέα συνεχῇ, οἷα καὶ ἐν ταῖς χελώναις, πλὴν ἥττον μέλανα.

Ἔχουσι δὲ καὶ οἱ θαλάττιοι κόχλοι ταῦτα καὶ τὰ λευκά, πλὴν ἐλάττω οἱ ἐλάττους.

Τὰ δὲ μονόθυρα καὶ δίθυρα τῇ μὲν ὁμοίως ἔχει τούτοις τῇ δ' ἐτέρως. Κεφαλὴν μὲν γὰρ καὶ κεράτια καὶ στόμα ἔχουσι καὶ τὸ γλωττοειδές· ἀλλ' ἐν μὲν τοῖς ἐλάττοσι διὰ μικρότητα αὐτῶν ἄδηλα, τὰ δὲ καὶ ἐν τεθνεῶσιν ἢ μὴ κινουμένοις οὐ δῆλα. Τὴν δὲ μήκωνα πάντα ἔχει, ἀλλ' οὐκ ἐν τῷ αὐτῷ οὐδ' ἴσην οὐδ' ὁμοίως φανεράν, ἀλλ' αἱ μὲν λεπάδες κάτω ἐν τῷ βάθει, τὰ δὲ δίθυρα ἐν τῷ γιγγλυμώδει. Καὶ τὰ τριχώδη πᾶσιν ὑπάρχει κύκλῳ (529b.) τούτοις, οἷον καὶ τοῖς κτεσίν. Καὶ τὸ λεγόμενον ὦον τοῖς ἔχουσιν, ὅταν ἔχωσιν, ἐν τῷ ἐπὶ θάτερα κύκλῳ τῆς περιφερείας ἐστίν, ὥσπερ καὶ τὸ λευκόν

τοῖς κόχλοις· καὶ γὰρ ἐκείνοις τοῦτο ὅμοιον ὑπάρχει.

Ἀλλὰ πάντα τὰ τοιαῦτα μόρια, ὥσπερ εἴρηται, ἐν μὲν τοῖς μεγάλοις δῆλὰ ἐστίν, ἐν δὲ τοῖς μικροῖς ἢ οὐδὲν ἢ μόλις. Διὸ μάλιστα ἐν τοῖς μεγάλοις κτεσὶ φανερά ἐστιν· οὗτοι δ' εἰσὶν οἱ τὴν ἑτέραν θυρίδα πλατεῖαν ἔχοντες, οἷον ἐπίθεμα. Ἡ δὲ τοῦ περιπτώματος ἔξοδος τοῖς μὲν ἄλλοις ἐστὶν ἐκ πλαγίου· ἔστι γὰρ πόρος ἢ πορεύεται ἔξω· ἢ γὰρ μήκων, ὥσπερ εἴρηται, περίττωμά ἐστι πᾶσιν ἐν ὑμένι. Τὸ δὲ καλούμενον ὦδον οὐκ ἔχει πόρον ἐν οὐδενί, ἀλλ' αὐτῆς τῆς σαρκὸς ἐπανοιδεῖ· ἔστι δ' οὐκ ἐπὶ ταῦτό τῳ ἐντέρῳ, ἀλλὰ τὸ μὲν ὦδον ἐν τοῖς δεξιοῖς, τὸ δ' ἔντερον ἐν τοῖς ἀριστεροῖς. Τοῖς μὲν οὖν ἄλλοις τοιαύτη ἢ ἔξοδος τῆς περιπτώσεως, τῇ δ' ἀγρία λεπάδι, ἣν τινες καλοῦσι θαλάττιον οὖς, ὑποκάτω τοῦ ὀστράκου ἢ περίττωσις ἐξέρχεται· τετρύπηται γὰρ τὸ ὄστρακον. Φανερά δὲ καὶ ἡ κοιλία μετὰ τὸ στόμα οὕσα ἐν ταύτῃ καὶ τὰ ὠοειδῇ. Πάντα δὲ ταῦτα τίνα τρόπον τῇ θέσει ἔχει, ἐκ τῶν ἀνατομῶν θεωρεῖσθω.

Τὸ δὲ καλούμενον καρκίνιον τρόπον μὲν τίνα κοινόν ἐστι τῶν τε μαλακοστράκων καὶ τῶν ὀστρακοδέρμων. Αὐτὸ μὲν γὰρ τὴν φύσιν ὅμοιον τοῖς караβοειδέσι, καὶ γίνεται αὐτὸ καθ' αὐτό, τῳ δ' εἰσδύεσθαι καὶ ζῆν ἐν ὀστράκῳ ὅμοιον τοῖς ὀστρακοδέρμοις, ὥστε διὰ ταῦτα ἔοικεν ἐπαμφοτερίζειν. Τὴν δὲ μορφήν ὥς μὲν ἀπλῶς εἰπεῖν ὅμοιον ἐστὶ τοῖς ἀράχναις, πλὴν τὸ κάτω τῆς κεφαλῆς καὶ τοῦ θώρακος μεῖζον ἔχει ἐκείνου.

Ἔχει δὲ κεράτια δύο λεπτὰ πυρρά, καὶ ὀφθαλμοὺς ὑποκάτω τούτων δύο μακροὺς, οὐκ εἰσδυομένους οὐδὲ κατακλινομένους ὥσπερ οἱ τῶν καρκίνων ἀλλ' ὀρθοὺς, ὑποκάτω δὲ τούτων τὸ στόμα καὶ περὶ αὐτὸ καθαπερεὶ τριχῶδη ἄττα πλείω, τούτων δ' ἐχομένους δύο πόδας δικρούς, οἷς προσάγεται, καὶ ἄλλους ἑφ' ἑκάτερα δύο, καὶ τρίτον μικρόν. Τὸ δὲ κάτω τοῦ (530a.) θώρακος μαλακὸν ἅπαν ἐστὶ καὶ διοιγόμενον ὠχρὸν ἔνδοθεν. Ἀπὸ δὲ τοῦ στόματος πόρος εἰς ἄχρι τῆς κοιλίας· τῆς δὲ περιπτώσεως οὐ δῆλος ὁ πόρος. Οἱ δὲ πόδες καὶ ὁ θώραξ σκληρὰ μὲν, ἥττον δ' ἢ τῶν καρκίνων. Πρόσφυσιν δ' οὐκ ἔχει πρὸς τὰ ὄστρακα ὥσπερ αἱ πορφύραι καὶ οἱ κήρυκες, ἀλλ' εὐαπόλυτόν ἐστιν. Προμηκέστερα δ' ἐστὶ τὰ ἐν τοῖς στρόμβοις τῶν ἐν τοῖς νηρείταις. Ἅτερον δὲ γένος ἐστὶ τὸ τῶν νηρειτῶν, τὰ μὲν ἄλλα παραπλήσιον, τῶν δὲ δικρῶν ποδῶν τὸν μὲν δεξιὸν ἔχει μικρὸν τὸν δ' ἀριστερὸν μέγαν, καὶ ποιεῖται τὴν βάδισιν μᾶλλον ἐπὶ τούτῳ. Λαμβάνεται δὲ καὶ ἐν ταῖς κόγχαις τοιοῦτον, ὧν ἐστὶν ἢ πρόσφυσις παραπλησία, καὶ ἐν τοῖς ἄλλοις. Τοῦτον δὲ καλοῦσι κύλλαρον.



Ὁ δὲ νηρείτης τὸ μὲν ὄστρακον ἔχει λεῖον καὶ μέγα καὶ στρογγύλον, τὴν δὲ μορφὴν παραπλησίαν τοῖς κήρυξι, πλὴν οὐχ ὥσπερ ἐκεῖνοι τὴν μήκωνα μέλαιναν ἀλλ' ἐρυθράν· προσπέφυκε δὲ νεανικῶς κατὰ τὸ μέσον.

Ἐν μὲν οὖν ταῖς εὐδαίαις ἀπολυόμενα νέμεται ταῦτα, πνευμάτων δ' ὄντων τὰ μὲν καρκίνια ἡσυχάζει πρὸς τοῖς λίθοις, οἱ δὲ νηρεῖται προσέχονται καθάπερ αἱ λεπάδες· ὡσαύτως δὲ καὶ αἱ αἰμορροῖδες καὶ πᾶν τὸ τοιοῦτον γένος. Προσφύονται δὲ ταῖς πέτραις, ὅταν ἀποκλίνωσι τὸ ἐπικάλυμμα· τοῦτο γὰρ ἔοικεν εἶναι ὡσπερὶ πῶμα· ὃ γὰρ τοῖς διθύροις ἄμφω, τοῦτο τοῖς στρομβώδεσι τὸ ἕτερον μέρος. Τὸ δ' ἐντὸς σαρκῶδές ἐστι, καὶ ἐν τούτῳ τὸ στόμα. Τὸν αὐτὸν δὲ τρόπον ἔχει ταῖς αἰμορροῖσι καὶ ταῖς πορφύραις καὶ πᾶσι τοῖς τοιούτοις.

Ὅσα δ' ἔχει μείζω τὸν ἀριστερὸν πόδα, ταῦτα ἐν μὲν τοῖς στρόμβοις οὐκ ἐγγίνεται, ἐν δὲ τοῖς νηρείταις ἐγγίνεται. Εἰσὶ δὲ τινες κόχλοι οἱ ἔχουσιν ἐν ἑαυτοῖς ὅμοια ζῶα τοῖς ἀστακοῖς τοῖς μικροῖς, οἱ γίνονται καὶ ἐν τοῖς ποταμοῖς· διαφέρουσι δ' αὐτῶν τῷ μαλακὸν ἔχειν τὸ ἔσω τοῦ ὀστράκου. Τὴν δ' ἰδέαν οἱοί εἰσιν, ἐκ τῶν ἀνατομῶν θεωρεῖσθωσαν.

## Κεφάλαιο 5

Οἱ δ' ἐχῖνοι τὸ μὲν σαρκῶδες οὐκ ἔχουσιν, ἀλλ' ἴδιον αὐτῶν τοῦτ' ἔστιν· ἐστέρηνται γὰρ πάντες, καὶ οὐκ ἔχουσι σάρκα ἐντὸς οὐδεμίαν· τὰ δὲ μέλανα πάντες. Ἔστι δὲ γένη πλείω (530b.) τῶν ἐχίνων, ἐν μὲν τὸ ἐσθιόμενον· τοῦτο δ' ἐστὶν ἐν ᾧ τὰ καλούμενα ὡὰ μεγάλα ἐγγίνεται καὶ ἐδώδιμα, ὁμοίως ἐν μείζουσι καὶ ἐλάττοσιν· καὶ γὰρ εὐθὺς ἔτι μικροὶ ὄντες ἔχουσι ταῦτα. Ἄλλα δὲ δύο γένη τό τε τῶν σπατάγγων καὶ τὸ τῶν καλουμένων βρύσσων· γίνονται δ' οὗτοι πελάγιοι καὶ σπάνιοι. Ἔτι αἱ ἐχίνομητραι καλούμεναι, μεγέθει πάντων μέγισται. Πρὸς δὲ τούτοις ἄλλο γένος μεγέθει μὲν μικρόν, ἀκάνθας δὲ μεγάλας ἔχει καὶ σκληράς, γίνεται δ' ἐκ τῆς θαλάττης ἐν πολλαῖς ὀργυιαῖς, ᾧ χρῶνται πρὸς τὰς στραγγουρίας τινές. Περὶ δὲ Τορώνην εἰσὶν ἐχῖνοι λευκοὶ θαλάττιοι καὶ τὰ ὄστρακα καὶ τὰς ἀκάνθας καὶ τὰ ὡὰ, μείζους δὲ τῶν ἄλλων εἰς μῆκος· ἢ δ' ἄκανθα οὐ μεγάλη οὐδ' ἰσχυρὰ ἀλλὰ μαλακωτέρα, τὰ δὲ μέλανα τὰ ἀπὸ τοῦ στόματος πλείω, καὶ πρὸς μὲν τὸν ἔξω πόρον συνάπτοντα πρὸς ἑαυτὰ δὲ ἀσύναπτα· τούτοις δ' ὥσπερ διελημμένος ἐστίν. Κινοῦνται δὲ μάλιστα καὶ πλειστάκις οἱ ἐδώδιμοι αὐτῶν· καὶ σημεῖον δ' <ὅτι> αἰεὶ τι ἔχουσιν ἐπὶ ταῖς ἀκάνθαις.

Ἔχουσι μὲν οὖν ἅπαντες ὡὰ, ἀλλ' ἔνιοι πάμπαν μικρὰ καὶ οὐκ ἐδώδιμα.

Συμβαίνει δὲ τὴν μὲν λεγομένην κεφαλὴν καὶ τὸ στόμα τὸν ἔχϊνον κάτω ἔχειν, ἢ δ' ἀφίησι τὸ περίττωμα, ἄνω. Ταῦτο δὲ τοῦτο συμβέβηκε τοῖς τε στρομβώδεσι πᾶσι καὶ ταῖς λεπάσιν· ἡ γὰρ νομὴ ἐκ τῶν κάτωθεν, ὥστε τὸ μὲν στόμα πρὸς τῇ νομῇ, τὸ δὲ περίττωμα ἄνω πρὸς τοῖς πρανέσι τοῦ ὀστράκου. Ἐχει δ' ὁ ἔχϊνος ὀδόντας πέντε κοίλους ἔνδοθεν, ἐν μέσῳ δὲ τούτων σῶμα σαρκῶδες ἀντὶ γλώττης. Τούτου δ' ἔχεται ὁ στόμαχος, εἴτα ἡ κοιλία εἰς πέντε μέρη διηρημένη, πλήρης περιττώματος· συνέχουσι δὲ πάντες οἱ κόλποι αὐτῆς εἰς ἓν πρὸς τὴν ἔξοδον τῆς περιττώσεως, ἢ τετρύπηται τὸ ὄστρακον. Ὑπὸ δὲ τὴν κοιλίαν ἐν ἄλλῳ ὑμένι τὰ καλούμενα ὠά ἐστίν, ἴσα τὸν ἀριθμὸν ὄντα ἐν ἅπασιν (πέντε γὰρ ἐστὶ τὸ πλῆθος) καὶ περιττά. Ἄνω δὲ τὰ μέλανα ἀπὸ τῆς ἀρχῆς τῶν ὀδόντων ἡρτῆται, ἃ ἐστὶ πικρὰ καὶ οὐκ ἐδώδιμα. Ἐν πολλοῖς δὲ τῶν ζώων τὸ τοιοῦτόν ἐστίν ἢ τὸ ἀνάλογον· καὶ γὰρ ἐν ταῖς χελώναις καὶ φρύναις καὶ βατράχοις καὶ ἐν (531a.) τοῖς στρομβώδεσι καὶ τοῖς μαλακίοις· ἀλλὰ τῷ χρώματι διαφέρει, καὶ ἄβρωτά ἐστίν ἐν πᾶσι τὰ τοιαῦτα ἢ πάμπαν ἢ μᾶλλον. Κατὰ μὲν οὖν τὴν ἀρχὴν καὶ τελευτὴν συνεχὲς τοῦ ἐχίνου τὸ στόμα ἐστὶ, κατὰ δὲ τὴν ἐπιφάνειαν οὐ συνεχὲς ἀλλ' ὅμοιον λαμπτήρι μὴ ἔχοντι τὸ κύκλῳ δέρμα. Ταῖς δ' ἀκάνθαις χρῆται ὁ ἔχϊνος ὡς ποσὶν· ταύταις γὰρ ἐπεριδόμενος καὶ κινούμενος μεταβάλλει τὸν τόπον.

## Κεφάλαιο 6

Τὰ δὲ καλούμενα τήθυα τούτων πάντων ἔχει τὴν φύσιν περιττοτάτην. Κέκρυπται γὰρ αὐτῶν μόνων τὸ σῶμα ἐν τῷ ὀστράκῳ πᾶν, τὸ δ' ὄστρακόν ἐστὶ μεταξὺ δέρματος καὶ ὀστράκου, διὸ καὶ τέμνεται ὥσπερ βύρσα σκληρά. Προσπέφυκε μὲν οὖν ταῖς πέτραις τῷ ὀστρακῷδε, δύο δ' ἔχει πόρους ἀπέχοντας ἀπ' ἀλλήλων, πάμπαν μικροὺς καὶ οὐ ῥαδίους ἰδεῖν, ἢ ἀφίησι καὶ δέχεται τὸ ὑγρόν· περίττωμα γὰρ οὐδὲν ἔχει φανερόν, ὥσπερ τῶν ἄλλων ὀστρέων τὰ μὲν ὥσπερ ἔχϊνος, τὰ δὲ τὴν καλουμένην μήκωνα. Ἀνοιχθέντα δ' ἔσωθεν πρῶτον μὲν ὑμένα ἔχει νευρώδη περὶ τὸ ὀστρακῷδες· ἐν δὲ τούτῳ αὐτό ἐστὶ τὸ σαρκῷδες τοῦ τηθίου, οὐδενὶ ὅμοιον τῶν ἄλλων· αὕτη μέντοι ἡ σὰρξ πᾶσα ὁμοία. Προσπέφυκε δὲ τοῦτο κατὰ δύο τόπους τῷ ὑμένι καὶ τῷ δέρματι ἐκ τοῦ πλαγίου· καὶ ἢ προσπέφυκε, ταύτη ἐστὶ στενότερον ἐφ' ἑκάτερα, οἷς τείνει πρὸς τοὺς πόρους τοὺς ἔξω διὰ τοῦ ὀστράκου φέροντας, ἢ ἀφίησι καὶ δέχεται τὴν τροφήν καὶ τὸ ὑγρόν, ὡς ἂν εἰ τὸ μὲν στόμα εἴη, τὸ δὲ τῇ περιττώσει ἔξοδος· καὶ ἔστιν αὐτῶν τὸ μὲν παχύτερον τὸ δὲ λεπτότερον. Ἐσω δὲ κοῖλον ἐφ' ἑκάτερα, καὶ διείργει μικρόν τι συνεχές· ἐν θατέρῳ δὲ τῶν κοίλων ἡ ὑγρότης ἐγγίνεται. Ἄλλο δ' οὐδὲν ἔχει μόριον οὔτε ὀργανικὸν οὔτε αἰσθητήριον οὔτε, ὥσπερ ἐλέχθη πρότερον ἐν τοῖς ἄλλοις, τὸ περιττωματικόν. Χρῶμα δὲ τοῦ τηθίου ἐστὶ τὸ μὲν ὠχρόν τὸ δ' ἐρυθρόν.

Ἔστι δὲ καὶ τὸ τῶν ἀκαληφῶν γένος ἴδιον· προσπέφυκε μὲν γὰρ ταῖς πέτραις ὥσπερ ἔνια τῶν ὀστρακοδέρμων, ἀπολύεται δ' ἐνίοτε. Οὐκ ἔχει δ' ὀστρακον, ἀλλὰ σαρκῶδες (531b.) τὸ σῶμα πᾶν ἐστὶν αὐτῆς. Αἰσθάνεται δὲ καὶ συναρπάζει προσφερομένης τῆς χειρὸς καὶ προσέχεται, καθάπερ ὁ πολύπους ταῖς πλεκτάναις, οὕτως ὥστε τὴν σάρκα ἐπανοιδεῖν. Ἔχει δὲ τὸ στόμα ἐν μέσῳ, καὶ ζῆ ἀπὸ τῆς πέτρας ὥσπερ ἀπ' ὀστρέου. Κἂν τι προσπέσῃ τῶν μικρῶν ἰχθυδίων, ἀντέχεται ὥσπερ τῆς χειρὸς· οὕτω κἂν τι προσπέσῃ αὐτῇ ἐδώδιμον, κατεσθίει. Καὶ ἀπολύεται δὲ γένος τι αὐτῶν, ὃ ἐάν τι προσπέσῃ κατεσθίει καὶ ἐχίνους καὶ κτένας. Περίττωμα δὲ παντελῶς οὐδὲν φαίνεται ἔχουσα, ἀλλ' ὁμοία κατὰ τοῦτο τοῖς φυτοῖς ἐστίν.

Γένη δὲ τῶν ἀκαληφῶν ἐστὶ δύο, αἱ μὲν ἐλάττους καὶ ἐδώδιμοι μᾶλλον, αἱ δὲ μεγάλαι καὶ σκληραί, οἷαι γίνονται καὶ περὶ Χαλκίδα. Τοῦ μὲν οὖν χειμῶνος τὴν σάρκα στιφρὰν ἔχουσι (διὸ καὶ θηρεύονται καὶ ἐδώδιμοί εἰσι), τοῦ δὲ θέρους ἀπόλλυνται· γίνονται γὰρ μαδαραί, καὶ ἐάν τις θίγῃ, διασπῶνται ταχέως καὶ ὅλαι ἀφαιρεῖσθαι οὐ δύνανται, πονοῦσαί τε ταῖς ἀλέαις εἰς τὰς πέτρας εἰσδύονται μᾶλλον.

Περὶ μὲν οὖν τῶν μαλακίων καὶ τῶν μαλακοστράκων καὶ τῶν ὀστρακοδέρμων, ὅσα τ' ἔχουσιν μέρη ἐκτὸς καὶ ὅσα ἐντός, εἴρηται.

## Κεφάλαιο 7

Περὶ δὲ τῶν ἐντόμων λεκτέον τὸν αὐτὸν τρόπον. Ἔστι δὲ τοῦτο τὸ γένος πολλὰ εἶδη ἔχον ἐν ἑαυτῷ, καὶ ἐνίοις πρὸς ἄλληλα συγγενικοῖς οὗσιν οὐκ ἐπέζευκται κοινὸν ὄνομα οὐδέν, οἷον ἐπὶ μελίττη καὶ ἀνθρήνη καὶ σφηκὶ καὶ πᾶσι τοῖς τοιούτοις, καὶ πάλιν ὅσα τὸ πτερὸν ἔχει ἐν κολεῷ, οἷον μηλολόνη καὶ κάραβος καὶ κανθαρίς καὶ ὅσα τοιαῦτα ἄλλα.

Πάντων μὲν οὖν κοινὰ μέρη ἐστὶ τρία, κεφαλὴ τε καὶ τὸ περὶ τὴν κοιλίαν κύτος καὶ τρίτον τὸ μεταξὺ τούτων, οἷον τοῖς ἄλλοις τὸ στῆθος καὶ τὸ νῶτόν ἐστιν. Τοῦτο δὲ τοῖς μὲν πολλοῖς ἐν ἐστίν· ὅσα δὲ μακρὰ καὶ πολύποδα, σχεδὸν ἴσα ταῖς ἐντομαῖς ἔχει τὰ μεταξύ.

Πάντα δ' ἔχει διαιρούμενα ζῶν τὰ ἐντομα, πλὴν ὅσα ἢ λίαν κατέψυκται ἢ διὰ μικρότητα ταχὺ καταψύχεται, ἐπεὶ καὶ οἱ σφῆκες διαιρεθέντες ζῶσιν. Μετὰ μὲν οὖν τοῦ μέσου καὶ ἡ κεφαλὴ καὶ ἡ (532a.) κοιλία ζῆ, ἄνευ δὲ τούτου ἡ κεφαλὴ οὐ ζῆ. Ὅσα δὲ μακρὰ καὶ πολύποδά ἐστι, πολὺν χρόνον ζῆ διαιρούμενα, καὶ κινεῖται τὸ ἀποτμηθὲν ἐπ' ἀμφοτέρα τὰ ἔσχατα· καὶ γὰρ ἐπὶ

τὴν τομὴν πορεύεται καὶ ἐπὶ τὴν οὐράν, οἷον ἡ καλουμένη σκολόπενδρα.

Ἔχει δ' ὀφθαλμοὺς μὲν ἅπαντα, ἄλλο δ' αἰσθητήριον οὐδὲν φανερόν, πλὴν ἓν οἷον γλῶτταν (ἦν καὶ τὰ ὀστρακόδερμα ἔχει πάντα), ἧ καὶ γεύεται καὶ εἰς αὐτὸ τὴν τροφὴν ἀνασπᾷ. Τοῦτο δὲ τοῖς μὲν μαλακόν ἐστι, τοῖς δ' ἔχει ἰσχυρὸν πολλήν, ὥσπερ ταῖς πορφύραις. Καὶ οἱ μύωπες δὲ καὶ οἱ οἰστροὶ ἰσχυρὸν τοῦτ' ἔχουσι, καὶ τᾶλλα σχεδὸν τὰ πλεῖστα· ἐν πᾶσι γὰρ τοῖς μὴ ὀπισθοκέντροις τοῦτο ὥσπερ ὄπλον ἔχει ἕκαστον. Ὅσα δ' ἔχει τοῦτο, ὀδόντας οὐκ ἔχει, ἔξω ὀλίγων τινῶν, ἐπεὶ καὶ αἱ μυῖαι τούτῳ θιγγάνουσαι αἱματίζουσι καὶ οἱ κώνωπες τούτῳ κεντοῦσιν.

Ἔχουσι δ' ἓν τῶν ἐντόμων καὶ κέντρα. Τὸ δὲ κέντρον τὰ μὲν ἔχει ἐν αὐτοῖς, οἷον αἱ μέλιττα καὶ οἱ σφῆκες, τὰ δ' ἐκτός, οἷον σκορπίος· καὶ μόνον δὴ τοῦτο τῶν ἐντόμων μακρόκεντρόν ἐστιν.

Ἔτι δὲ χηλὰς ἔχει τοῦτό τε καὶ τὸ ἐν τοῖς βιβλίοις γινόμενον σκορπιῶδες.

Τὰ δὲ πτηνὰ αὐτῶν πρὸς τοῖς ἄλλοις μορίοις καὶ πτερὰ ἔχει. Ἔστι δὲ τὰ μὲν δίπτερα αὐτῶν, ὥσπερ αἱ μυῖαι, τὰ δὲ τετράπτερα, ὥσπερ αἱ μέλιττα· οὐθὲν δ' ἐστὶν ὀπισθοκέντρον δίπτερον μόνον. Ἔτι δὲ τὰ μὲν ἔχει τῶν πτηνῶν ἔλυτρον τοῖς πτεροῖς, ὥσπερ ἡ μηλολόνη, τὰ δ' ἀνέλυτρά ἐστιν, ὥσπερ ἡ μέλιττα· ἀνορροπύγιος δ' ἡ πτῆσις αὐτῶν ἀπάντων ἐστί, καὶ τὸ πτερὸν οὐκ ἔχει καυλὸν οὐδὲ σχίσιν. Ἔτι κεραίας πρὸ τῶν ὀμμάτων ἔχει ἓν οἷον αἱ τε ψυχαὶ καὶ οἱ κάραβοι.

Ὅσα δὲ πηδητικὰ αὐτῶν ἐστί, τούτων τὰ μὲν ἔχει τὰ ὀπισθεν σκέλη μείζω, τὰ δὲ πηδάγια καμπτόμενα εἰς τοῦπισθεν ὥσπερ τὰ τῶν τετραπόδων σκέλη.

Πάντα δ' ἔχει τὰ πρηνῆ πρὸς τὰ ὑπτία διάφορα, ὥσπερ καὶ τᾶλλα ζῶα. Ἡ δὲ τοῦ σώματος σὰρξ οὗτ' ὀστρακώδης ἐστὶν οὐθ' οἷον τὸ ἐντὸς τῶν ὀστρακωδῶν, οὔτε σαρκώδης, ἀλλὰ μεταξύ. Διὸ καὶ οὗτ' ἄκανθαν ἔχουσιν οὗτ' (532b.) ὀστοῦν οὐθ' οἷον σήπιον οὔτε κύκλῳ ὀστρακον· αὐτὸ γὰρ αὐτὸ τὸ σῶμα διὰ τὴν σκληρότητα σώζει, καὶ οὐ προσδεῖται ἐτέρου ἐρείσματος. Δέρμα δ' ἔχουσι μὲν, πάμπαν δὲ τοῦτο λεπτόν.

Τὰ μὲν οὖν ἔξωθεν αὐτῶν μόρια ταῦτα καὶ τοιαῦτ' ἐστίν, ἐντὸς δ' εὐθύς μετὰ τὸ στόμα ἔντερον τοῖς μὲν πλείστοις εὐθύ καὶ ἀπλοῦν μέχρι τῆς ἐξόδου ἐστίν, ὀλίγοις δ' ἐλιγμὸν ἔχει. Σπλάγχνον δ' οὐδὲν ἔχει τῶν τοιούτων οὐδὲ πιμελήν, ὥσπερ οὐδ' ἄλλο τῶν ἀναίμων οὐδέν. Ἐνία δ' ἔχει καὶ κοιλίαν, καὶ

ἀπὸ ταύτης τὸ λοιπὸν ἔντερον ἢ ἀπλοῦν ἢ εἰλιγμένον, ὥσπερ αἱ ἀκρίδες.

Ὁ δὲ τέττιξ μόνον τῶν τοιούτων καὶ τῶν ἄλλων ζώων στόμα οὐκ ἔχει, ἀλλ' οἶον τοῖς ὀπισθοκέντροις τὸ γλωττοειδές, τοῦτο μακρὸν καὶ συμφυὲς καὶ ἀδιάσχιτον, δι' οὗ τῇ δρόσῳ τρέφεται μόνον· ἐν δὲ τῇ κοιλίᾳ οὐκ ἴσχει περίττωμα. Ἔστι δ' αὐτῶν πλείω εἶδη, καὶ διαφέρουσι μεγέθει τε καὶ μικρότητι καὶ τῷ τοὺς μὲν καλουμένους ἀχέτας ὑπὸ τὸ διάζωμα διηρηῆσθαι καὶ ἔχειν ὑμένα φανερόν, τὰ δὲ τεττιγόνια μὴ ἔχειν.

Ἔστι δ' ἓνια ζῶα περιττὰ καὶ ἐν τῇ θαλάττῃ, ἃ διὰ τὸ σπάνια εἶναι οὐκ ἔστι θεῖναι εἰς γένος. Ἦδη γάρ φασί τινες τῶν ἐμπειρικῶν ἀλιέων [οἱ μὲν] ἑωρακέναι ἐν τῇ θαλάττῃ ὅμοια δοκίοις, μέλανα, στρογγύλα τε καὶ ἰσοπαχῇ· ἕτερα δὲ καὶ ἀσπίσιν ὅμοια, τὸ μὲν χρῶμα ἐρυθρά, πτερύγια δ' ἔχοντα πυκνά· καὶ ἄλλα ὅμοια αἰδοίῳ ἀνδρὸς τό τ' εἶδος καὶ τὸ μέγεθος, πλὴν ἀντὶ τῶν ὄρχεων πτερύγια ἔχειν δύο, καὶ λαβέσθαι ποτὲ τοῦ πολυαγκίστρου τῷ ἄκρῳ.

Τὰ μὲν οὖν μέρη τῶν ζώων ἀπάντων τά τ' ἐκτὸς καὶ τὰ ἐντὸς περὶ ἕκαστον γένος καὶ ἰδίᾳ καὶ κοινῇ τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 8

Περὶ δὲ τῶν αἰσθήσεων νῦν λεκτέον· οὐ γὰρ ὁμοίως ἀπᾶσιν ὑπάρχουσιν, ἀλλὰ τοῖς μὲν πᾶσαι τοῖς δ' ἐλάττους εἰσίν. Εἰσὶ δ' αἱ πλεῖσται, καὶ παρ' ἃς οὐδεμία φαίνεται ἴδιος ἕτερα, πέντε τὸν ἀριθμόν, ὄψις, ἀκοή, ὄσφρησις, γεῦσις, ἀφή. Ἄνθρωπος μὲν οὖν καὶ τὰ ζωοτόκα καὶ πεζά, (533a.) πρὸς δὲ τούτοις καὶ ὅσα ἔναιμα καὶ ὠοτόκα, πάντα φαίνεται ἔχοντα ταύτας πάσας, πλὴν εἴ τι πεπῆρωται γένος ἓν, οἶον τὸ τῶν ἀσπαλάκων. Τοῦτο γὰρ ὄψιν οὐκ ἔχει· ὀφθαλμοὺς γὰρ ἐν μὲν τῷ φανερῷ οὐκ ἔχει, ἀφαιρεθέντος δὲ τοῦ δέρματος ὄντος παχέος ἀπὸ τῆς κεφαλῆς κατὰ τὴν χώραν τὴν ἔξω τῶν ὀμμάτων ἔσωθεν εἰσιν οἱ ὀφθαλμοὶ διεφθαρμένοι, πάντ' ἔχοντες ταῦτ' αὐτὰ μέρη τοῖς ἀληθινοῖς· ἔχουσι γὰρ τό τε μέλαν καὶ τὸ ἐντὸς τοῦ μέλανος, τὴν καλουμένην κόρην, καὶ τὸ κύκλω πῖον, ἐλάττω μέντοι ταῦτα πάντα τῶν φανερῶν ὀφθαλμῶν. Εἰς δὲ τὸ ἔξωθεν οὐδὲν σημαίνει τούτων διὰ τὸ τοῦ δέρματος πάχος, ὥς ἐν τῇ γενέσει πηρουμένης τῆς φύσεως· εἰσὶ γὰρ ἀπὸ τοῦ ἐγκεφάλου, ἣ συνάπτει τῷ μυελῷ, δύο πόροι νευρώδεις καὶ ἰσχυροὶ παρ' αὐτὰς τείνοντες τὰς ἔδρας τῶν ὀφθαλμῶν, τελευτῶντες δ' εἰς τοὺς ἄνω χαυλιόδοντας.

Τὰ δ' ἄλλα καὶ τῶν χρωμάτων αἰσθησιν ἔχει καὶ τῶν ψόφων, ἔτι δ' ὁσμῆς

καὶ χυμῶν. Τὴν δὲ πέμπτην αἴσθησιν τὴν ἀφὴν καλουμένην καὶ τᾶλλα πάντ' ἔχει ζῶα.

Ἐν μὲν οὖν ἐνίοις [καὶ] τὰ αἰσθητήρια φανερώτατά ἐστι, τὰ μὲν τῶν ὀμμάτων καὶ μᾶλλον. Διωρισμένον γὰρ ἔχει τὸν τόπον τῶν ὀφθαλμῶν καὶ τὸν τῆς ἀκοῆς· ἕνια μὲν γὰρ ὧτα ἔχει, ἕνια δὲ τοὺς πόρους φανερούς. Ὅμοίως δὲ καὶ περὶ ὀσφρήσεως· τὰ μὲν γὰρ ἔχει μυκτῆρας, τὰ δὲ τοὺς πόρους τῆς ὀσφρήσεως, οἷον τὸ τῶν ὀρνίθων γένος. Ὅμοίως δὲ καὶ τὸ τῶν χυμῶν αἰσθητήριον, τὴν γλῶτταν. Ἐν δὲ τοῖς ἐνύδροις, καλουμένοις δ' ἰχθύσι, τὸ μὲν τῶν χυμῶν αἰσθητήριον, τὴν γλῶτταν, ἔχουσι μὲν, ἔχουσι δ' ἄμυδρῶς· ὁστώδη γὰρ καὶ οὐκ ἀπολελυμένην ἔχουσιν. Ἀλλ' ἐνίοις τῶν ἰχθύων ὁ οὐρανός ἐστι σαρκώδης, οἷον τῶν ποταμίων ἐν τοῖς κυπρίνοις, ὥστε τοῖς μὴ σκοποῦμένοις ἀκριβῶς δοκεῖν ταύτην εἶναι γλῶτταν.

Ὅτι δ' αἰσθάνονται γεύόμενα, φανερόν· ἰδίους τε γὰρ πολλὰ χαίρει χυμοῖς, καὶ τὸ τῆς ἀμίας λαμβάνουσι μάλιστα δέλεαρ καὶ τὸ τῶν πόνων ἰχθύων, ὡς χαίροντες ἐν τῇ γεύσει καὶ ἐδώδῃ τοῖς τοιούτοις δελέασιν. Τῆς δ' ἀκοῆς καὶ τῆς (533b.) ὀσφρήσεως οὐδὲν ἔχουσι φανερόν αἰσθητήριον· ἃ γὰρ ἂν τισιν εἶναι δόξειε κατὰ τοὺς τόπους τῶν μυκτῆρων, οὐδὲν περαίνει πρὸς τὸν ἐγκέφαλον, ἀλλὰ τὰ μὲν τυφλά, τὰ δὲ φέρει μέχρι τῶν βραγχίων. Ὅτι δὲ καὶ ἀκούουσι καὶ ὀσφραίνονται, φανερόν· τοὺς τε γὰρ ψόφους φεύγοντα φαίνεται τοὺς μεγάλους, οἷον τὰς εἰρεσίας τῶν τριήρων, ὥστε λαμβάνεσθαι ῥαδίως ἐν ταῖς θαλάμαις· καὶ γὰρ ἂν μικρὸς ἦ ὁ ἔξω ψόφος, ὅμως τοῖς ἐν τῷ ὑγρῷ τὴν ἀκοὴν ἔχουσι χαλεπὸς καὶ μέγας καὶ βαρὺς φαίνεται πᾶσιν. Ὁ συμβαίνει καὶ ἐπὶ τῆς τῶν δελφίνων θήρας· ὅταν γὰρ ἀθρόως περικυκλώσωσι τοῖς μονοξύλοις, ψοφοῦντες ἐξ αὐτῶν ἐν τῇ θαλάττῃ ἀθρόους ποιοῦσιν ἐξοκέλλειν φεύγοντας εἰς τὴν γῆν, καὶ λαμβάνουσιν ὑπὸ τοῦ ψόφου καρηβαροῦντας.

Καίτοι οὐδ' οἱ δελφῖνες τῆς ἀκοῆς φανερόν οὐδὲν ἔχουσιν αἰσθητήριον. Ἔτι δ' ἐν ταῖς θήραις τῶν ἰχθύων ὅτι μάλιστα εὐλαβοῦνται ψόφον ποιεῖν ἢ κώπης ἢ δικτύων οἱ περὶ τὴν θήραν ταύτην ὄντες· ἀλλ' ὅταν κατανοήσωσιν ἐν τινι τόπῳ πολλοὺς ἀθρόους ὄντας, ἐκ τοσούτου τόπου τεκμαιρόμενοι τὰ δίκτυα καθιᾶσιν, ὅπως μήτε κώπης μήτε τῆς ῥύμης τῆς ἀλιάδος ἀφίκηται πρὸς τὸν τόπον ἐκεῖνον ὁ ψόφος· παραγγέλλουσί τε πᾶσι τοῖς ναύταις ὅτι μάλιστα σιγῇ πλεῖν, μέχρι περ ἂν κυκλώσωσιν. Ἐνίοτε δ' ὅταν βούλωνται συνδραμεῖν, ταῦτόν ποιοῦσιν ὅπερ ἐπὶ τῆς τῶν δελφίνων θήρας· ψοφοῦσι γὰρ λίθοις, ἵνα φοβηθέντες συνθέωσιν εἰς ταῦτόν καὶ τοῖς δικτύοις οὕτω περιβάλλωνται. Καὶ πρὶν μὲν συγκλεῖσαι, καθάπερ εἴρηται, κωλύουσι ψοφεῖν, ὅταν δὲ κυκλώσωσι, κελεύουσιν ἤδη βοᾶν καὶ ψοφεῖν· τὸν γὰρ ψόφον καὶ τὸν θόρυβον ἀκούοντες

ἐμπίπτουσι διὰ τὸν φόβον.

Ἔτι δ' ὅταν ἴδωσιν οἱ ἄλιεῖς ἐκ πάνυ πολλοῦ νεμομένους ἀθρόους πολλοὺς ἐν ταῖς γαλήναις καὶ εὐδαίαις ἐπιπολάζοντας, καὶ βουλευθῶσιν ἰδεῖν τὰ μεγέθη καὶ τί τὸ γένος αὐτῶν, ἂν μὲν ἀψοφητὶ προσπλεύσωσι, λανθάνουσι καὶ καταλαμβάνουσιν ἐπιπολάζοντας ἔτι, ἐὰν δέ τις τύχῃ ψοφήσας πρότερον, φανεροὶ εἴσι φεύγοντες.

Ἔτι δ' ἐν τοῖς (534a.) ποταμοῖς εἰσιν ἰχθύδια ἅττα ἃ καλοῦσιν τινες κόττους· ταῦτα θηρεύουσιν τινες διὰ τὸ ὑπὸ ταῖς πέτραις ὑποδεδυκέναι κόπτοντες τὰς πέτρας λίθοις· τὰ δ' ἐκπίπτει παραφερόμενα ὡς ἀκούοντα καὶ καρηβαροῦντα ὑπὸ τοῦ ψόφου.

Ὅτι μὲν οὖν ἀκούουσιν, ἐκ τῶν τοιούτων ἐστὶ φανερόν· εἰσὶ δέ τινες οἳ φασὶ καὶ μάλιστα ὀξυηκόους εἶναι τῶν ζώων τοὺς ἰχθύς, ἐκ τοῦ διατρίβοντας περὶ τὴν θάλατταν ἐντυγχάνειν τοιούτοις πολλοῖς. Μάλιστα δὲ τῶν ἰχθύων εἰσὶν ὀξυήκοοι κεστρεύς, λάβραξ, σάλπη, χρομῖς, καὶ ὅσοι ἄλλοι τοιοῦτοι τῶν ἰχθύων· οἱ δ' ἄλλοι τούτων ἦττον, διὸ μᾶλλον πρὸς τῷ ἐδάφει τῆς θαλάττης ποιοῦνται τὰς διαγωγάς.

Ὅμοίως δὲ καὶ περὶ ὀσφρήσεως. Τοῦ τε γὰρ μὴ προσφάτου δελέατος οὐκ ἐθέλουσιν ἄπτεσθαι οἱ πλεῖστοι τῶν ἰχθύων, τοῖς τε δελέασιν οὐ τοῖς αὐτοῖς ἀλίσκονται πάντες ἄλλ' ἰδίους, διαγινώσκοντες τῷ ὀσφραίνεσθαι· ἕνια γὰρ δελεάζεται τοῖς δυσώδεσιν, ὥσπερ ἡ σάλπη τῇ κόπρῳ. Ἔτι δὲ πολλοὶ τῶν ἰχθύων διατρίβουσιν ἐν σπηλαίοις, οὓς ἐπειδὴν βούλωνται προκαλέσασθαι εἰς τὴν θήραν οἱ ἄλιεῖς, τὸ στόμα τοῦ σπηλαίου περιαλείφουσι ταριχηραῖς ὀσμαῖς, πρὸς ἃς ἐξέρχονται ταχέως. Ἀλίσκεται δὲ καὶ ἡ ἔγχελυς τοῦτον τὸν τρόπον· τιθέασιν γὰρ τῶν ταριχηρῶν τι κεραμίων, ἐνθέντες εἰς τὸ στόμα τοῦ κεραμίου τὸν καλούμενον ἡθμόν. Καὶ ὅλως δὲ πρὸς τὰ κνισώδη φέρονται πάντες θᾶπτον. Καὶ τῶν σπηλιῶν δὲ τὰ σαρκία σταθεύσαντες ἔνεκα τῆς ὀσμῆς δελεάζουσι τούτοις· προσέρχονται γὰρ μᾶλλον. Τοὺς δὲ πολύπους φασὶν ὀπτήσαντες εἰς τοὺς κύρτους ἐντιθέσθαι οὐδενὸς ἄλλου χάριν ἢ τῆς κνίσης.

Ἔτι δ' οἱ ῥυάδες ἰχθύες, ὅταν ἐκχυθῇ τὸ πλύμα τῶν ἰχθύων, ἢ τῆς ἀντλίας ἐκχυθείσης, φεύγουσιν ὡς ὀσφραϊνόμενοι τῆς ὀσμῆς αὐτῶν. Καὶ τοῦ αὐτῶν δὴ αἵματος (534b.) τάχιστα ὀσφραίνεσθαι φασὶν αὐτούς· δῆλον δὲ ποιοῦσι φεύγοντες καὶ ἐκτοπίζοντες μακράν, ὅταν αἷμα γένηται ἰχθύων. Καὶ ὅλως δ' ἐὰν μὲν σαπρῷ τις δελέατι δελεάσῃ τὸν κύρτον, οὐκ ἐθέλουσιν εἰσδύνειν οὐδὲ πλησιάζειν, ἐὰν δὲ νεαρῷ δελέατι καὶ κεκνισωμένῳ, εὐθὺς φερόμενοι

πόρρωθεν εἰσδύνουσιν.

Μάλιστα δὲ φανερόν ἐστι περὶ τῶν εἰρημένων ἐπὶ τῶν δελφίνων· οὗτοι γὰρ τῆς ἀκοῆς αἰσθητήριον μὲν οὐδὲν ἔχουσι φανερόν, ἀλίσκονται δὲ διὰ τὸ καρηβαρεῖν ὑπὸ τοῦ ψόφου, καθάπερ εἴρηται πρότερον. Οὐδὲ δὴ τῆς ὀσφρήσεως αἰσθητήριον οὐδὲν ἔχει φανερόν, ὀσφραίνεται δ' ὁξέως.

Ὅτι μὲν οὖν πάσας τὰς αἰσθήσεις ἔχει ταῦτα τὰ ζῶα, φανερόν· τὰ δὲ λοιπὰ γένη τῶν ζώων ἐστὶ μὲν τέτταρα διηρημένα εἰς γένη, ἃ περιέχει τὸ πλῆθος τῶν λοιπῶν ζώων, τὰ τε μαλάκια καὶ τὰ μαλακόστρακα καὶ τὰ ὀστρακόδερμα καὶ ἔτι τὰ ἔντομα.

Τούτων δὲ τὰ μὲν μαλάκια καὶ τὰ μαλακόστρακα καὶ τὰ ἔντομα ἔχει πάσας τὰς αἰσθήσεις· καὶ γὰρ ὄψιν ἔχει καὶ ὀσφρησιν καὶ γεῦσιν.

Τὰ τε γὰρ ἔντομα ὄντα πόρρω συναισθάνεται, καὶ τὰ πτερωτὰ καὶ τὰ ἄπτερα, οἷον αἱ μέλιττα καὶ οἱ κνῖπες τοῦ μέλιτος· ἐκ πολλοῦ γὰρ αἰσθάνονται ὡς τῇ ὀσμῇ γινώσκοντα. Καὶ ὑπὸ τῆς τοῦ θείου ὀσμῆς πολλὰ ἀπόλλυται.

Ἔτι δ' οἱ μύρμηκες ὑπ' ὀριγάνου καὶ θείου περιπαττομένων λείων ἐκλείπουσι τὰς μυρμηκίας, καὶ ἐλαφείου κέρατος θυμιωμένου τὰ πλεῖστα φεύγει τῶν τοιούτων· μάλιστα δὲ φεύγουσι θυμιωμένου τοῦ στύρακος.

Ἔτι δ' αἱ σηπῖαι καὶ οἱ πολύποδες καὶ οἱ κάραβοι τοῖς δελέασιν ἀλίσκονται· καὶ οἱ γε πολύποδες οὕτω μὲν προσέχονται ὥστε μὴ ἀποσπᾶσθαι ἀλλ' ὑπομένειν τεμνόμενοι· ἐὰν δέ τις κόνυζαν προσενέγκῃ, ἀφιᾶσιν εὐθέως ὀσμώμενοι.

Ὅμοίως δὲ καὶ περὶ (535a.) γεύσεως· τὴν τε γὰρ τροφὴν ἑτέραν διώκουσι, καὶ οὐ τοῖς αὐτοῖς πάντα χαίρει χυμοῖς, οἷον ἡ μέλιττα πρὸς οὐδὲν προσιζάνει σαπρὸν ἀλλὰ πρὸς τὰ γλυκέα, ὃ δὲ κώνωψ πρὸς οὐδὲν γλυκὺ ἀλλὰ πρὸς τὰ ὀξέα. Τὸ δὲ τῇ ἀφῇ αἰσθάνεσθαι, ὥσπερ καὶ πρότερον εἴρηται, πᾶσιν ὑπάρχει τοῖς ζώοις.

Τὰ δ' ὀστρακόδερμα ὀσφρησιν μὲν καὶ γεῦσιν ἔχει, φανερόν δ' ἐκ τῶν δელεασμῶν, οἷον ἐπὶ τῆς πορφύρας· αὕτη γὰρ δελεάζεται τοῖς σαπροῖς, καὶ προσέρχεται πρὸς τὸ τοιοῦτον δέλεαρ ὡς αἰσθησιν ἔχουσα πόρρωθεν. Καὶ τῶν χυμῶν δ' ὅτι αἰσθησιν ἔχει, φανερόν ἐκ τῶν αὐτῶν· πρὸς ἃ γὰρ διὰ τὰς ὀσμάς προσέρχεται κρίναντα, τούτων χαίρει καὶ τοῖς χυμοῖς ἕκαστα. Ἔτι δ' ὅσα ἔχει στόμα, χαίρει καὶ λυπεῖται τῇ τῶν χυμῶν ἄψει.



Περὶ δ' ὄψεως καὶ ἀκοῆς βέβαιον μὲν οὐδὲν ἔστιν οὐδὲ λίαν φανερόν, δοκοῦσι δ' οἷ τε σωλῆνες, ἅν τις ψοφήσῃ, καταδύεσθαι, καὶ φεύγειν κατωτέρω, ὅταν αἰσθωνται τὸ σιδήριον προσίόν (ὑπερέχει γὰρ αὐτῶν μικρόν, τὸ δ' ἄλλο ὥσπερ ἐν θαλάμῃ ἐστίν), καὶ οἱ κτένες, ἐάν τις προσφέρῃ τὸν δάκτυλον, χάσκουσι καὶ συμμύουσιν ὡς ὀρώντες. Καὶ τοὺς νηρείτας δ' οἱ θηρεύοντες οὐ κατὰ πνεῦμα προσιόντες θηρεύουσιν, ὅταν θηρεύσωσιν αὐτοὺς εἰς τὸ δέλεαρ, οὐδὲ φθεγγόμενοι ἀλλὰ σιωπῶντες ὡς ὀσφραινομένων καὶ ἀκουόντων· ἐάν δὲ φθέγγωνται, φασὶν ὑποφεύγειν αὐτούς. Ἦκιστα δὲ τὴν ὀσφρησιν τῶν ὀστρακοδέρμων φαίνεται ἔχειν τῶν μὲν πορευτικῶν ἐχῖνος, τῶν δ' ἀκινήτων τήθυα καὶ βάλανοι.

Περὶ μὲν οὖν τῶν αἰσθητηρίων τοῦτον ἔχει τὸν τρόπον τοῖς ζώοις πᾶσιν, περὶ δὲ φωνῆς τῶν ζώων ὧδ' ἔχει.

## Κεφάλαιο 9

Φωνὴ καὶ ψόφος ἕτερόν ἐστι, καὶ τρίτον διάλεκτος. Φωνεῖ μὲν οὖν οὐδενὶ τῶν ἄλλων μορίων οὐδὲν πλην τῷ φάρυγγι· διὸ ὅσα μὴ ἔχει πλεύμονα, οὐδὲ φθέγγεται· διάλεκτος δ' ἢ τῆς φωνῆς ἐστὶ τῇ γλώττῃ διάρθρωσις. Τὰ μὲν οὖν φωνήεντα ἢ φωνὴ καὶ ὁ λάρυγξ ἀφίησιν, τὰ δ' ἄφωνα ἢ (535b.) γλῶττα καὶ τὰ χεῖλη· ἐξ ὧν ἢ διάλεκτός ἐστιν. Διὸ ὅσα γλῶτταν μὴ ἔχει ἢ μὴ ἀπολελυμένην, οὐ διαλέγεται. Ψοφεῖν δ' ἔστι καὶ ἄλλοις μορίοις. Τὰ μὲν οὖν ἔντομα οὔτε φωνεῖ οὔτε διαλέγεται, ψοφεῖ δὲ τῷ ἔσω πνεύματι, οὐ τῷ θύραζε· οὐδὲν γὰρ ἀναπνεῖ αὐτῶν, ἀλλὰ τὰ μὲν βομβεῖ, οἶον μέλιττα καὶ τὰ πτηνὰ αὐτῶν, τὰ δ' ἄδειν λέγεται, οἶον οἱ τέττιγες. Πάντα δὲ ταῦτα ψοφεῖ τῷ ὑμένι τῷ ὑπὸ τὸ ὑπόζωμα, ὅσων διήρηται, οἶον τῶν τεττίγων τι γένος τῇ τρίψει τοῦ πνεύματος. Καὶ αἱ μυῖαι δὲ καὶ αἱ μέλιτται καὶ τᾶλλα πάντα, τῇ πτήσει αἶροντα καὶ συστέλλοντα· ὁ γὰρ ψόφος τρίψις τοῦ ἔσω πνεύματός ἐστιν. Αἱ δ' ἀκρίδες τοῖς πηδαλίοις τρίβουσαι ποιοῦσι τὸν ψόφον.

Οὐδὲ δὴ τῶν μαλακίων οὐδὲν οὔτε φθέγγεται οὔτε ψοφεῖ οὐδένα φυσικὸν ψόφον, οὐδὲ τῶν μαλακοστράκων. Οἱ δ' ἰχθύες ἄφωνοι μὲν εἰσιν (οὔτε γὰρ πλεύμονα οὔτ' ἀρτηρίαν καὶ φάρυγγα ἔχουσι), ψόφους δέ τινας ἀφιάσι καὶ τριγμοὺς οὓς λέγουσι φωνεῖν, οἶον λύρα καὶ χρομῖς (οὔτοι γὰρ ἀφιάσιν ὥσπερ γρυλισμόν) καὶ ὁ κάπρος ὁ ἐν τῷ Ἀχελῷ, ἔτι δὲ χαλκὶς καὶ κόκκυξ· ἢ μὲν γὰρ ψοφεῖ οἶον συριγμόν, ὁ δὲ παραπλήσιον τῷ κόκκυγι ψόφον, ὅθεν καὶ τοῦνομα ἔχει. Πάντα δὲ ταῦτα τὴν δοκοῦσαν φωνὴν ἀφιάσι, τὰ μὲν τῇ τρίψει τῶν βραγχίων (ἀκανθώδεις γὰρ οἱ τόποι), τὰ δὲ τοῖς ἐντὸς τοῖς περὶ τὴν κοιλίαν· πνεῦμα γὰρ ἔχει τούτων ἕκαστον, ὃ προστρίβοντα καὶ κινοῦντα

ποιεῖ τοὺς ψόφους. Καὶ τῶν σελαχῶν δ' ἓνια δοκεῖ τρίζειν. Ἀλλὰ ταῦτα φωνεῖν μὲν οὐκ ὀρθῶς ἔχει φάναι, ψοφεῖν δέ. Καὶ γὰρ οἱ κτένες ὅταν φέρονται ἀπερειδόμενοι τῷ ὑγρῷ, ὃ καλοῦσι πέτεσθαι, ῥοιζοῦσι, καὶ αἱ χελιδόνες αἱ θαλάττιαι ὁμοίως· καὶ γὰρ αὗται πέτονται μετέωροι, οὐχ ἀπτόμεναι τῆς θαλάττης· τὰ γὰρ πτερύγια ἔχουσι πλατέα καὶ μακρά. Ὡσπερ οὖν τῶν ὀρνίθων πετομένων ὁ γινόμενος ταῖς πτέρυξι ψόφος οὐ φωνὴ ἐστίν, οὕτως οὐδὲ τῶν τοιούτων οὐδενός.

Ἀφίησι δὲ καὶ ὁ δελφὶς τριγμὸν καὶ μύζει, (536a.) ὅταν ἐξέλθῃ, ἐν τῷ ἀέρι, οὐχ ὁμοίως δὲ τοῖς εἰρημένοις· ἔστι γὰρ τούτῳ φωνή· ἔχει γὰρ καὶ πλεύμονα καὶ ἀρτηρίαν, ἀλλὰ τὴν γλῶτταν οὐκ ἀπολελυμένην οὐδὲ χεῖλη ὥστε ἄρθρον τι τῆς φωνῆς ποιεῖν.

Τῶν δ' ἐχόντων γλῶτταν καὶ πλεύμονα ὅσα μὲν ὠτόκα ἐστὶ καὶ τετράποδα, ἀφίησι μὲν φωνήν, ἀσθενῇ δέ, καὶ τὰ μὲν συριγμόν, ὥσπερ οἱ ὄφεις, τὰ δὲ λεπτὴν καὶ ἀσθενῇ φωνήν, τὰ δὲ σιγμὸν μικρόν, ὥσπερ αἱ χελῶναι. Ὁ δὲ βάτραχος ἰδίαν ἔχει τὴν γλῶτταν· τὸ μὲν γὰρ ἔμπροσθεν προσπέφυκεν ἰχθυωδῶς, ὃ τοῖς ἄλλοις ἀπολέλυται, τὸ δὲ πρὸς τὸν φάρυγγα ἀπολέλυται καὶ πέπτυκται, ὡς τὴν ἰδίαν ἀφίησι φωνήν. Καὶ τὴν ὀλολυγόναν δὲ τὴν γινομένην ἐν τῷ ὕδατι οἱ βάτραχοι οἱ ἄρρενες ποιοῦσιν, ὅταν ἀνακαλῶνται τὰς θηλείας πρὸς τὴν ὀχεῖαν· εἰσὶ γὰρ ἐκάστοις τῶν ζώων ἴδιαι φωναὶ πρὸς τὴν ὁμιλίαν καὶ τὸν πλησιασμόν, οἷον καὶ τράγοις καὶ ὑσὶ καὶ προβάτοις.

Ποιεῖ δὲ τὴν ὀλολυγόναν, ὅταν ἰσοχειλῇ τὴν κάτω σιαγόναν ποιήσας ἐπὶ τῷ ὕδατι περιτείνῃ τὴν ἄνω. Δοκεῖ δὲ διαλαμπουσῶν τῶν σιαγόνων ἐκ τῆς ἐπιτάσεως ὥσπερ λύχνοι φαίνεσθαι οἱ ὀφθαλμοί· ἢ γὰρ ὀχεῖα τὰ πολλὰ γίνεται νύκτωρ.

Τὸ δὲ τῶν ὀρνίθων γένος ἀφίησι φωνήν· καὶ μάλιστα ἔχει διάλεκτον ὅσοις ὑπάρχει ἡ γλῶττα πλατεῖα, καὶ ὅσα ἔχουσι τὴν γλῶτταν αὐτῶν λεπτὴν. Ἐνια μὲν οὖν τὴν αὐτὴν ἀφιᾶσι φωνήν τὰ τε θήλεα καὶ τὰ ἄρρενα, ἓνια δ' ἑτέραν.

Πολύφωνα δ' ἐστὶ καὶ λαλίστερα τὰ ἐλάττω τῶν μεγάλων· καὶ μάλιστα περὶ τὴν ὀχεῖαν ἕκαστον γίνεται τῶν ὀρνέων τοιοῦτον. Καὶ τὰ μὲν μαχόμενα φθέγγεται, οἷον ὄρτυξ, τὰ δὲ πρὸ τοῦ μάχεσθαι προκαλούμενα <οἷον πέρδικες>, ἢ νικῶντα, οἷον ἀλεκτρυόνες. Ἄδουσι δ' ἓνια μὲν ὁμοίως τὰ ἄρρενα τοῖς θήλεσιν, οἷον καὶ ἀηδὼν ᾄδει καὶ ὁ ἄρρην καὶ ἡ θήλεια, πλὴν ἡ θήλεια παύεται ὅταν ἐπώαζῃ καὶ τὰ νεόττια ἔχῃ· ἐνίων δὲ τὰ ἄρρενα μᾶλλον, οἷον ἀλεκτρυόνες καὶ ὄρτυγες, αἱ δὲ θήλειαι οὐκ ᾄδουσιν.

Τὰ δὲ ζωοτόκα καὶ τετράποδα ζῶα ἄλλο (536b.) ἄλλην φωνὴν ἀφίησι, διάλεκτον δ' οὐδὲν ἔχει, ἀλλ' ἴδιον τοῦτ' ἀνθρώπου ἐστίν· ὅσα μὲν γὰρ διάλεκτον ἔχει, καὶ φωνὴν ἔχει, ὅσα δὲ φωνὴν, οὐ πάντα διάλεκτον. Ὅσοι δὲ γίνονται κωφοὶ ἐκ γενετῆς, πάντες καὶ ἐνεοὶ γίνονται· φωνὴν μὲν οὖν ἀφιᾷσι, διάλεκτον δ' οὐδεμίαν. Τὰ δὲ παιδία ὥσπερ καὶ τῶν ἄλλων μορίων οὐκ ἐγκρατῇ ἐστίν, οὕτως οὐδὲ τῆς γλώττης τὸ πρῶτον, καὶ ἔστιν ἀτελής, καὶ ἀπολύεται ὀψιαιότερον, ὥστε ψελλίζουσι καὶ τραυλίζουσι τὰ πολλά.

Διαφέρουσι δὲ κατὰ τοὺς τόπους καὶ αἱ φωναὶ καὶ αἱ διάλεκτοι. Ἡ μὲν οὖν φωνὴ ὀξύτητι καὶ βαρύτητι μάλιστα ἐπίδηλος, τὸ δ' εἶδος οὐδὲν διαφέρει τῶν αὐτῶν γενῶν· ἢ δ' ἐν τοῖς ἄρθροις, ἣν ἂν τις ὥσπερ διάλεκτον εἴπειεν, καὶ τῶν ἄλλων ζώων διαφέρει καὶ τῶν ἐν ταύτῳ γένει ζώων κατὰ τοὺς τόπους, οἷον τῶν περδίκων οἱ μὲν κακκαβίζουσιν οἱ δὲ τρίζουσιν. Καὶ τῶν μικρῶν ὀρνιθίων ἓνια οὐ τὴν αὐτὴν φωνὴν ἀφίησι ἐν τῷ ἄδειν τοῖς γεννήσασιν, ἂν ἀπότροφα γένωνται καὶ ἄλλων ἀκούσωσιν ὀρνίθων ἀδόντων. Ἦδη δ' ὥπται καὶ ἀηδὼν νεοττὸν προδιδάσκουσα, ὡς οὐχ ὁμοίας φύσει τῆς διαλέκτου οὔσης καὶ τῆς φωνῆς, ἀλλ' ἐνδεχόμενον πλάττεσθαι. Καὶ οἱ ἄνθρωποι φωνὴν μὲν τὴν αὐτὴν ἀφιᾷσι, διάλεκτον δ' οὐ τὴν αὐτήν. Ὁ δ' ἐλέφας φωνεῖ ἄνευ μὲν τοῦ μυκτῆρος αὐτῷ τῷ στόματι πνευματῶδες ὥσπερ ὅταν ἄνθρωπος ἐκπνέῃ καὶ αἰάζῃ, μετὰ δὲ τοῦ μυκτῆρος ὅμοιον σάλπιγγι τετραχυσμένη.

## Κεφάλαιο 10

Περὶ δ' ὕπνου καὶ ἐγρηγόρσεως τῶν ζώων, ὅτι μὲν ὅσα πεζὰ καὶ ἔναιμα πάντα καθεύδει καὶ ἐγρήγορεν, φανερόν ποιοῦσι κατὰ τὴν αἴσθησιν. Πάντα γὰρ ὅσα ἔχει βλεφαρίδας, μύοντα ποιεῖται τὸν ὕπνον. Ἔτι δ' ἐνυπνιάζειν φαίνονται οὐ μόνον ἄνθρωποι, ἀλλὰ καὶ ἵπποι καὶ κύνες καὶ βόες, ἔτι δὲ πρόβατα καὶ αἶγες καὶ πᾶν τὸ τῶν ζωοτόκων καὶ τετραπόδων γένος· δηλοῦσι δ' οἱ κύνες τῷ ὕλαγμῳ. Περὶ δὲ τῶν ὠτοκούντων τοῦτο μὲν ἄδηλον, ὅτι δὲ καθεύδουσι, φανερόν. Ὅμοίως δὲ καὶ τὰ ἔνυδρα, οἷον οἱ τ' ἰχθύες καὶ τὰ (537a.) μαλάκια καὶ τὰ μαλακόστρακα, κάραβοί τε καὶ τὰ τοιαῦτα. Βραχύυπνα μὲν οὖν ἐστὶ πάντα ταῦτα, φαίνεται δὲ καθεύδοντα. Σημεῖον δὲ κατὰ μὲν τὰ ὄμματα οὐκ ἔστι λαβεῖν (οὐδὲν γὰρ ἔχει βλέφαρα αὐτῶν), ἀλλὰ ταῖς ἀτρεμίαις.

Ἀλίσκονται γὰρ οἱ ἰχθύες, εἰ μὴ διὰ τοὺς φθειρας καὶ τοὺς καλουμένους ψύλλους, κἂν ὥστε τῇ χειρὶ λαμβάνειν ῥαδίως· νῦν δ', ἂν χρονίζωσιν, οὕτοι τῆς νυκτὸς κατεσθίουσι προσπίπτοντες, πολλοὶ τὸ πλῆθος ὄντες. Γίνονται δ' ἐν τῷ βυθῷ τῆς θαλάττης, καὶ τοσοῦτοι τὸ πλῆθος ὥστε καὶ τὸ δέλεαρ, ὃ τι ἂν

ἰχθύος ἧ, ἐὰν χρονίση ἐπὶ τῆς γῆς, κατεσθίουσιν· καὶ ἀνέλκουσι πολλάκις οἱ ἄλιεῖς περὶ τὸ δέλεαρ ὥσπερ σφαῖραν συνεχομένων αὐτῶν.

Ἄλλ' ἐκ τῶν τοιῶνδε μᾶλλον ἔστι τεκμήρασθαι ὅτι καθεύδουσιν· πολλάκις γὰρ ἔστιν ἐπιπεσόντα τοῖς ἰχθύσι λαθεῖν οὕτως ὥστε καὶ τῇ χειρὶ λαβεῖν ἢ πατάξαντα λαθεῖν· ὑπὸ δὲ τὸν καιρὸν τοῦτον ἡρεμοῦσι σφόδρα, καὶ κινοῦσιν οὐδὲν πλὴν ἡρέμα τὸ οὐραῖον. Δῆλον δὲ γίνεται ὅτι καθεύδει καὶ ταῖς φοραῖς, ἂν τι κινηθῇ ἡσυχάζοντων αὐτῶν· φέρεται γὰρ ὥσπερ ἐξ ὕπνου ὄντα. Ἔτι δ' ἐν ταῖς πυρίαις ἀλίσκονται διὰ τὸ καθεύδειν. Πολλάκις δὲ καὶ οἱ θυννοσκόποι περιβάλλονται καθεύδοντας· δῆλον δ' ἐκ τοῦ ἡσυχάζοντος καὶ τὰ λευκὰ ὑποφαίνοντας ἀλίσκεσθαι. Καθεύδουσι δὲ τῆς νυκτός μᾶλλον ἢ τῆς ἡμέρας οὕτως ὥστε βαλλόντων μὴ κινεῖσθαι. Τὰ δὲ πλεῖστα καθεύδουσιν τῆς γῆς ἢ τῆς ἁμμου ἢ λίθου τινὸς ἐχόμενοι ἐν τῷ βυθῷ, ἢ ἀποκρύψαντες ὑπὸ πέτραν ἢ θῖνα ἑαυτούς, οἱ δὲ πλατεῖς ἐν τῇ ἁμμῳ· γινώσκονται δὲ τῇ σχηματίσει τῆς ἁμμου, καὶ λαμβάνονται τυπτόμενοι τοῖς τριώδουσιν. Λαμβάνονται δὲ καὶ λάβραξ καὶ χρύσοφρυς καὶ κεστρεὺς καὶ ὅσοι τοιοῦτοι τριώδοντι ἡμέρας πολλάκις διὰ τὸ καθεύδειν· εἰ δὲ μή, οὐδὲν δοκεῖ τῶν τοιούτων ληφθῆναι ἂν τριώδοντι. Τὰ δὲ σελάχη οὕτω καθεύδει ἐνίοτε ὥστε καὶ λαμβάνεσθαι τῇ χειρὶ. Δελφίς δὲ καὶ (537b.) φάλαινα, καὶ ὅσα αὐλὸν ἔχει, ὑπερέχοντα τὸν αὐλὸν καθεύδει τῆς θαλάττης, δι' οὗ ἀναπνέουσιν ἡρέμα κινοῦντες τὰς πτέρυγας· καὶ δελφῖνός γε καὶ ῥέγχοντος ἤδη ἠκρόανταί τινες.

Καθεύδει δὲ καὶ τὰ μαλάκια τὸν αὐτὸν τρόπον ὅνπερ οἱ ἰχθύες· ὁμοίως δὲ καὶ τὰ μαλακόστρακα τούτοις.

Καὶ τὰ ἔντομα δὲ τῶν ζώων ὅτι τυγχάνει ὕπνου, διὰ τοιούτων σημείων ἐστὶ φανερόν· ἡσυχάζουσιν τε γὰρ καὶ ἀκίνητίζουσιν ἐπιδήλως.

Μάλιστα δ' ἐπὶ τῶν μελιττῶν τοῦτο δῆλον· ἡρεμοῦσι γὰρ καὶ παύονται βομβοῦσαι τῆς νυκτός. Δῆλον δὲ καὶ ἐπὶ τῶν ἐν ποσὶ μάλιστα τῶν τοιούτων· οὐ γὰρ μόνον διὰ τὸ μὴ ὁξὺ βλέπειν ἡσυχάζουσι τῆς νυκτός (ἅπαντα γὰρ ἄμυδρῶς βλέπει τὰ σκληρόφθαλμα), ἀλλὰ καὶ πρὸς τὸ φῶς τῶν λύχνων ἡσυχάζοντα φαίνονται οὐδὲν ἥττον.

Ἐνυπνιάζει δὲ τῶν ζώων μάλιστα ἄνθρωπος. Καὶ νέοις μὲν οὖσι καὶ παιδίοις ἔτι ἀμπαν οὐ γίνεται ἐνύπνιον, ἀλλ' ἄρχεται τοῖς πλείστοις περὶ τέτταρα ἔτη ἢ πέντε· ἥδη δὲ γεγόνασιν καὶ ἄνδρες καὶ γυναῖκες οἱ ὅλως οὐδὲν πώποτε ἐνύπνιον εἶδον. Συνέβη δέ τις τῶν τοιούτων προϊούσης τῆς ἡλικίας ἰδεῖν ἐνύπνιον, καὶ μετὰ ταῦτα γενέσθαι περὶ τὸ σῶμα μεταβολὴν τοῖς μὲν εἰς

θάνατον τοῖς δ' εἰς ἄρρωστίαν.

Περὶ μὲν οὖν αἰσθήσεως καὶ ὕπνου καὶ ἐγρηγόρσεως τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 11

Τὸ δ' ἄρρεν καὶ θῆλυ τοῖς μὲν ὑπάρχει τῶν ζώων, τοῖς δ' οὐχ ὑπάρχει, ἀλλὰ καθ' ὁμοιότητά τινα καὶ τίκτειν λέγονται καὶ κύειν. Ἔστι δ' οὐδὲν ἄρρεν καὶ θῆλυ ἐν τοῖς μονίμοις, οὐδ' ὅλως ἐν τοῖς ὀστρακοδέρμοις. Ἐν δὲ τοῖς μαλακίοις καὶ τοῖς μαλακοστράκοις ἔστι τὸ μὲν θῆλυ τὸ δ' ἄρρεν, καὶ ἐν τοῖς πεζοῖς καὶ ἐν τοῖς δίποσι καὶ τετράποσι καὶ πᾶσιν ὅσα ἐκ συνδυασμοῦ τίκτει ζῶον ἢ ὦδον ἢ σκώληκα. Ἐν μὲν οὖν τοῖς ἄλλοις γένεσιν ἀπλῶς ἢ ἔστιν ἢ οὐκ ἔστιν, οἷον ἐν μὲν τοῖς τετράποσι πᾶσιν ἔστι τὸ μὲν θῆλυ τὸ δ' ἄρρεν, ἐν δὲ τοῖς ὀστρακοδέρμοις οὐκ ἔστιν, ἀλλ' ὥσπερ ἐν φυτοῖς τὰ (538a.) μὲν εὐφορά ἐστι τὰ δ' ἄλλ' ἄφορα, οὕτω καὶ ἐν τούτοις.

Ἐν δὲ τοῖς ἐντόμοις καὶ τοῖς ἰχθύσιν ἐστὶ τὰ μὲν ὅλως οὐκ ἔχοντα ταύτην τὴν διαφορὰν ἐπ' οὐδέτερον, οἷον ἔγχελυς οὗτ' ἄρρεν ἐστὶν οὔτε θῆλυ, οὐδὲ γεννᾷ ἐξ αὐτῆς οὐδὲν, ἀλλ' οἱ μὲν φάσκοντες ὅτι τριχῶδη καὶ ἐλμινθῶδη προσπεφυκότ' ἔχουσαι ποτέ τινες φαίνονται, οὐ προσθεωρήσαντες τὸ ποῦ ἔχουσιν ἀσκέπτως λέγουσιν. Οὔτε γὰρ ζωοτοκεῖ ἄνευ ὠοτοκίας οὐδὲν τῶν τοιούτων, ὦδον δ' οὐδεμία πώποτε ὥπται ἔχουσα· ὅσα τε ζωοτοκεῖ, ἐν τῇ ὑστέρα ἔχει καὶ προσπεφυκότα, ἀλλ' οὐκ ἐν τῇ γαστρί· ἐπέττετο γὰρ ἂν ὥσπερ ἡ τροφή. Ἦν δὲ λέγουσι διαφορὰν ἄρρενος ἐγγέλους καὶ θηλείας τῷ τὸν μὲν μείζω κεφαλὴν ἔχειν καὶ μακροτέραν, τὴν δὲ θήλειαν μικρὰν καὶ σιμοτέραν, οὐ τοῦ θήλεος ἢ ἄρρενος λέγουσιν, ἀλλὰ τοῦ γένους.

Εἰσὶ δὲ τινες ἰχθύες οἱ καλοῦνται ἐπιτραγίαί, γίνονται δὲ τοιοῦτοι τῶν ποταμίων κυπρίνος καὶ βάλαγρος· οὐκ ἔχουσι δ' οἱ τοιοῦτοι οὔτε ὦδον οὔτε θορὸν οὐδέποτε, ἀλλ' ὅσοι στερεοὶ εἰσι καὶ πίονες, ἔντερον μικρὸν ἔχουσι, καὶ δοκοῦσιν ἄριστοι οὗτοι εἶναι.

Ἔτι δ' ἔνια, καθάπερ ἐν τοῖς ὀστρακοδέρμοις καὶ φυτοῖς τὸ μὲν τίκτον ἐστὶ καὶ γεννῶν, τὸ δ' ὄχευον οὐκ ἔστιν, οὕτως ἐν τοῖς ἰχθύσι τὸ τῶν ψητῶν γένος καὶ τὸ τῶν ἐρυθρίνων καὶ αἱ χάνναι· πάντα γὰρ τὰ τοιαῦτα ὧς φαίνεται ἔχοντα.

Ἐν μὲν οὖν τοῖς πεζοῖς καὶ ἐναίμοις τῶν ζώων ὅσα μὴ ὠοτοκεῖ, τὰ πλεῖστα μείζω καὶ μακροβιώτερα τὰ ἄρρενα τῶν θηλειῶν ἐστι, πλὴν ἡμίονος, τούτων

δ' αἱ θήλειαι μακροβιώτεραι καὶ μείζους· ἐν δὲ τοῖς ὠοτόκοις καὶ τοῖς σκωληκοτόκοις, οἷον ἔν τε τοῖς ἰχθύσι καὶ ἐπὶ τῶν ἐντόμων, μείζω τὰ θήλεα τῶν ἄρρένων ἐστίν, οἷον ὄφεις καὶ φαλάγγια καὶ ἀσκαλαβῶται καὶ βάτραχοι. Καὶ ἐπὶ τῶν ἰχθύων δ' ὡσαύτως, οἷον τὰ τε σελάχη τὰ μικρὰ καὶ τῶν ἀγελαίων τὰ πλεῖστα, τὰ δὲ πετραῖα πάντα. Ὅτι δὲ μακροβιώτεροι τῶν (538b.) ἰχθύων αἱ θήλειαι τῶν ἄρρένων, δῆλον ἐκ τοῦ παλαιότερα ἀλίσκεσθαι τὰ θήλεα τῶν ἄρρένων.

Ἔστι δὲ τὰ μὲν ἄνω καὶ πρόσθια πάντων τῶν ζώων τὰ ἄρρενα κρείττω καὶ ἰσχυρότερα καὶ εὐοπλότερα, τὰ δ' ὡς ἂν ὀπίσθια καὶ κάτω λεχθέντα τῶν θηλέων. Τοῦτο δὲ καὶ ἐπ' ἀνθρώπων καὶ ἐπὶ τῶν ἄλλων ζώων τῶν πεζῶν καὶ ζωοτόκων πάντων ἔχει τὸν αὐτὸν τρόπον. Καὶ ἀνευρότερον δὲ καὶ ἀναρθρότερον τὸ θῆλυ μᾶλλον, καὶ λεπτοτριχώτερον, ὅσα τρίχας ἔχει· τὰ δὲ μὴ τρίχας ἔχοντα κατὰ τὸ ἀνάλογον. Καὶ ὑγροσαρκότερα δὲ τὰ θήλεα τῶν ἄρρένων καὶ γονυκροτώτερα, καὶ αἱ κνήμαι λεπτότεραι· τοὺς δὲ πόδας γλαφυρωτέρους, ὅσα τὰ μόρια ταῦτ' ἔχει τῶν ζώων.

Καὶ περὶ φωνῆς δέ, πάντα τὰ θήλεα λεπτοφωνότερα καὶ ὀξυφωνότερα, πλὴν βοός, ὅσα ἔχει φωνήν· οἱ δὲ βόες βαρύτερον φθέγγονται αἱ θήλειαι τῶν ἄρρένων. Τὰ δὲ πρὸς ἀλκὴν ἐν τῇ φύσει ὑπάρχοντα μόρια, οἷον ὀδόντες καὶ χαυλιόδοντες καὶ κέρατα καὶ πλῆκτρα καὶ ὅσα ἄλλα τοιαῦτα μόρια, ἐν ἐνίοις μὲν γένεσιν ὅλως τὰ μὲν ἄρρενα ἔχει τὰ δὲ θήλεα οὐκ ἔχει, οἷον κέρατα ἔλαφος θήλεια οὐκ ἔχει καὶ τῶν ὀρνίθων τῶν πλῆκτρα ἐχόντων ἐνίων αἱ θήλειαι ὅλως πλῆκτρα οὐκ ἔχουσιν· ὁμοίως δὲ καὶ χαυλιόδοντας αἱ θήλειαι οὐκ ἔχουσι τῶν ὑῶν. Ἐν ἐνίοις δ' ὑπάρχει μὲν ἀμφοῖν, ἀλλὰ κρείττω καὶ μᾶλλον τοῖς ἄρρεσιν, οἷον τὰ κέρατα τῶν ταύρων ἰσχυρότερα τῶν θηλειῶν βοῶν.

## **Βιβλίο 5**

### **Κεφάλαιο 1**

Ὅσα μὲν οὖν ἔχουσι μόρια τὰ ζῶα πάντα καὶ τῶν ἐντὸς καὶ τῶν ἐκτός, ἔτι δὲ περὶ τε τῶν αἰσθήσεων καὶ φωνῆς καὶ ὕπνου, καὶ ποῖα θήλεα καὶ ποῖα ἄρρενα, πρότερον (539a.) εἴρηται περὶ ἀπάντων· περὶ δὲ τῶν γενέσεων αὐτῶν λοιπὸν διελθεῖν, καὶ πρῶτον περὶ τῶν πρώτων.

Εἰσὶ δὲ πολλαὶ καὶ πολλὴν ἔχουσαι ποικιλίαν, καὶ τῇ μὲν ἀνόμοιοι, τῇ δὲ τρόπον τινὰ προσεοίκασιν ἀλλήλαις. Ἐπεὶ δὲ διήρηται τὰ γένη πρότερον, τὸν

αὐτὸν τρόπον καὶ νῦν πειρατέον ποιεῖσθαι τὴν θεωρίαν· πλὴν τότε μὲν τὴν ἀρχὴν ἐποιοῦμεθα σκοποῦντες περὶ τῶν μερῶν ἀπ' ἀνθρώπου, νῦν δὲ περὶ τούτου τελευταῖον λεκτέον διὰ τὸ πλείστην ἔχειν πραγματείαν.

Πρῶτον δ' ἀρκτέον ἀπὸ τῶν ὀστρακοδέρμων, μετὰ δὲ ταῦτα περὶ τῶν μαλακοστράκων, καὶ τὰ ἄλλα δὴ τοῦτον τὸν τρόπον ἐφεξῆς· ἔστι δὲ τὰ τε μαλάκια καὶ τὰ ἔντομα, καὶ μετὰ ταῦτα τὸ τῶν ἰχθύων γένος, τό τε ζωοτόκον καὶ τὸ ὠοτόκον αὐτῶν, εἴτα τὸ τῶν ὀρνίθων· μετὰ δὲ ταῦτα περὶ τῶν πεζῶν λεκτέον, ὅσα τ' ὠοτόκα καὶ ὅσα ζωοτόκα. Ζωοτόκα δ' ἐστὶ τῶν τετραπόδων ἔνια, καὶ ἄνθρωπος τῶν διπόδων μόνον.

Κοινὸν μὲν οὖν συμβέβηκε καὶ ἐπὶ τῶν ζώων, ὥσπερ καὶ ἐπὶ τῶν φυτῶν· τὰ μὲν γὰρ ἀπὸ σπέρματος ἐτέρων φυτῶν, τὰ δ' αὐτόματα γίνεται, συστάσης τινὸς τοιαύτης ἀρχῆς, καὶ τούτων τὰ μὲν ἐκ τῆς γῆς λαμβάνει τὴν τροφήν, τὰ δ' ἐν ἐτέροις ἐγγίνεται φυτοῖς, ὥσπερ εἴρηται ἐν τῇ θεωρίᾳ τῇ περὶ φυτῶν. Οὕτω καὶ τῶν ζώων τὰ μὲν ἀπὸ ζώων γίνεται κατὰ συγγένειαν τῆς μορφῆς, τὰ δ' αὐτόματα καὶ οὐκ ἀπὸ συγγενῶν, καὶ τούτων τὰ μὲν ἐκ γῆς σηπομένης καὶ φυτῶν, ὥσπερ πολλὰ συμβαίνει τῶν ἐντόμων, τὰ δ' ἐν τοῖς ζώοις αὐτοῖς ἐκ τῶν τοῖς μορίοις περιττωμάτων. Τῶν δὴ τὴν γένεσιν ἐχόντων ἀπὸ συγγενῶν ζώων ἐν οἷς μὲν αὐτῶν ἐστὶ τὸ θῆλυ καὶ τὸ ἄρρεν, ἐκ συνδυασμοῦ γίνονται· ἐν δὲ τῷ τῶν ἰχθύων γένει ἔνια γίνεται οὗτ' ἄρρενα οὔτε θήλεα, τῷ γένει μὲν ὄντα ἐτέροις τῶν ἰχθύων τὰ αὐτά, τῷ εἶδει δ' ἕτερα, ἔνια δὲ καὶ πάμπαν ἴδια. Τὰ δὲ θήλεα μὲν ἐστίν, ἄρρενα δ' οὐ· ἐξ ὧν γίνεται ὥσπερ ἐν τοῖς ὀρνίσι τὰ ὑπηνέμια. Τὰ μὲν οὖν τῶν ὀρνίθων ἄγονα πάντα ἐστὶ ταῦτα (μέχρι γὰρ τοῦ ὦδὸν γεννῆσαι δύναται ἡ φύσις αὐτῶν ἐπιτελεῖν), ἂν μὴ τις (539b.) αὐτοῖς συμβῇ τρόπος ἄλλος τῆς κοινωνίας πρὸς τοὺς ἄρρενας· περὶ ὧν ἀκριβέστερον ἔσται δῆλον ἐν τοῖς ὕστερον. Τῶν δ' ἰχθύων ἐνίοις, ὅταν αὐτόματα γεννήσωσιν ὦα, συμβαίνει ἐκ τούτων καὶ ζῶα γίνεσθαι, πλὴν τῶν μὲν καθ' αὐτά, τῶν δ' οὐκ ἄνευ ἄρρενος· ὃν δὲ τρόπον, καὶ περὶ τούτων ἐν τοῖς ἐχομένοις ἔσται φανερόν· σχεδὸν γὰρ παραπλήσια συμβαίνει καὶ ἐπὶ τῶν ὀρνίθων.

Ὅσα δ' ἀπὸ ταύτομάτου γίνεται ἐν ζώοις ἢ γῇ ἢ φυτοῖς ἢ τοῖς τούτων μορίοις, ἔχουσι δὲ τὸ ἄρρεν καὶ τὸ θῆλυ, ἐκ τούτων συνδυαζομένων γίνεται μὲν τι, οὐ ταῦτὸ δ' ἐξ οὐδενὸς ἄλλ' ἀτελές, οἷον ἔκ τε τῶν φθειρῶν ὀχευομένων αἱ καλούμεναι κονίδες καὶ ἐκ τῶν μυιῶν σκώληκες καὶ ἐκ τῶν ψυλλῶν σκώληκες ὠοειδεῖς, ἐξ ὧν οὔτε τὰ γεννήσαντα γίνεται οὔτε ἄλλο οὐδὲν ζῶον, ἀλλὰ τὰ τοιαῦτα μόνον.

Πρῶτον μὲν οὖν περὶ τῆς ὀχείας λεκτέον, ὅσα ὀχεύεται, εἴτα μετὰ ταῦτα περὶ τῶν ἄλλων ἐφεξῆς, τὰ τε καθ' ἕκαστα καὶ τὰ κοινῇ συμβαίνοντα περὶ αὐτῶν.

## Κεφάλαιο 2

Ὀχεύεται μὲν οὖν ταῦτα τῶν ζώων ἐν οἷς ὑπάρχει τὸ θῆλυ καὶ τὸ ἄρρεν, εἰσὶ δ' αἱ ὀχεῖται οὗθ' ὅμοιαι πᾶσιν οὗθ' ὁμοίως ἔχουσαι. Τὰ μὲν γὰρ ζωοτόκα καὶ πεζᾶ τῶν ἐναίμων ἔχει μὲν ὄργανα πάντα τὰ ἄρρενα πρὸς τὴν πρᾶξιν τὴν γεννητικήν, οὐ μὴν ὁμοίως γε πάντα πλησιάζουσιν, ἀλλὰ τὰ μὲν ὀπισθοιθητικὰ συνιόντα πυγηδόν, οἷον λέοντες τε καὶ δασύποδες καὶ λύγκες· τῶν δὲ δασυπόδων καὶ πολλάκις ἡ θήλεια προτέρα ἀναβαίνει ἐπὶ τὸν ἄρρενα. Τῶν δ' ἄλλων τῶν μὲν πλείστων ὁ αὐτὸς τρόπος· τὸν ἐνδεχόμενον γὰρ ποιοῦνται συνδυασμὸν τὰ τε πλεῖστα τῶν τετραπόδων, ἐπιβαίνοντος ἐπὶ τὸ θῆλυ τοῦ ἄρρενος, καὶ τὸ τῶν ὀρνίθων ἅπαν γένος οὕτω τε καὶ μοναχῶς. Εἰσὶ δὲ διαφοραὶ τινες καὶ περὶ τοὺς ὀρνίθους· τὰ μὲν γὰρ συγκαθείσης τῆς θηλείας ἐπὶ τὴν γῆν ἐπιβαίνει τὸ ἄρρεν, ὥσπερ αἱ ὠτίδες καὶ οἱ ἀλεκτρυόνες, τὰ δ' οὐ συγκαθείσης τῆς θηλείας, οἷον αἱ γέρανοι· ἐν τούτοις γὰρ ὁ ἄρρην ἐπιπηδῶν ὀχεύει τὴν θήλειαν, καὶ συγγίνεται ὥσπερ καὶ τὰ στρουθία ὁξέως.

Τῶν δὲ τετραπόδων αἱ ἄρκτοι (540a.) παρακεκλιμέναι τὸν αὐτὸν τρόπον ὥνπερ τᾶλλα ἐπὶ τῶν ποδῶν ποιούμενα τὴν ὀχείαν, πρὸς τὰ πρηνῇ τῶν θηλειῶν τὰ ὑπτια τῶν ἀρρένων· οἱ δὲ χερσαῖοι ἐχῖνοι ὀρθοὶ τὰ ὑπτια πρὸς ἄλληλα ἔχοντες. Τῶν δὲ ζωοτόκων καὶ μέγεθος ἐχόντων οὕτε τοὺς ἄρρενας ἐλάφους αἱ θήλεια ὑπομένουσιν, εἰ μὴ ὀλιγάκις, οὕτε τοὺς ταύρους αἱ βόες διὰ τὴν τοῦ αἰδοίου συντονίαν, ἀλλ' ὑπάγοντα τὰ θήλεα δέχονται τὴν γονήν· καὶ γὰρ ἐπὶ τῶν ἐλάφων ὥπται τοῦτο συμβαῖνον, τῶν γε τιθασσῶν. Λύκος δ' ὀχεύει καὶ ὀχεύεται τὸν αὐτὸν τρόπον ὥνπερ καὶ κύων. Οἱ δ' αἰλουροὶ οὐκ ὀπισθεν συνιόντες, ἀλλ' ὁ μὲν ὀρθός, ἡ δὲ θήλεια ὑποτίθησιν αὐτήν· εἰσὶ δὲ τὴν φύσιν αἱ θήλεια ἀφροδισιαστικάι, καὶ προσάγονται τοὺς ἄρρενας εἰς τὰς ὀχείας, καὶ συνοῦσαι κράζουσιν. Αἱ δὲ κάμηλοι ὀχεύονται τῆς θηλείας καθημένης· περιβεβηκῶς δ' ὁ ἄρρην ὀχεύει, οὐκ ἀντίπυγος, ἀλλὰ καθάπερ καὶ τὰ ἄλλα τετράποδα· καὶ διημερεύει τὸ μὲν ὀχεῦον τὸ δ' ὀχευόμενον. Ἀποχωροῦσι δ' εἰς ἐρημίαν, ὅταν ποιῶνται τὴν ὀχείαν, καὶ οὐκ ἔστι πλησιάσαι ἀλλ' ἢ τῷ βόσκοντι. Τὸ δ' αἰδοῖον ἔχει ὁ κάμηλος νεῦρον οὕτως ὥστε καὶ νευρὰν ποιοῦνται ἐκ τούτου τοῖς τόξοις. Οἱ δ' ἐλέφαντες ὀχεύονται μὲν ἐν ταῖς ἐρημίαις, μάλιστα δὲ περὶ τοὺς ποταμοὺς καὶ οὐ διατρίβειν εἰώθασιν· ὀχεύεται δ' ἡ μὲν θήλεια συγκαθειῖσα καὶ διαβαίνουσα, ὁ δ' ἄρρην ἐπαναβαίνων ὀχεύει. Ὀχεύεται δὲ καὶ ἡ φώκη καθάπερ τὰ ὀπισθοιθητικὰ τῶν ζώων, καὶ συνέχονται ἐν τῇ ὀχείᾳ πολὺν χρόνον, ὥσπερ αἱ κύνες· ἔχουσι δὲ



καὶ τὸ αἰδοῖον οἱ ἄρρενες μέγα.

### Κεφάλαιο 3

Τὸν αὐτὸν δὲ τρόπον καὶ τῶν πεζῶν τὰ τετράποδα καὶ ὠοτόκα ποιεῖται τὴν ὀχείαν. Τὰ μὲν γὰρ ἐπιβαίνοντα καθάπερ τὰ ζωοτόκα, οἷον χελώνη καὶ ἡ θαλαττία καὶ ἡ χερσαία. Ἔχουσι δέ τι εἰς ὃ οἱ πόροι συνάπτουσιν καὶ ὧ ἐν τῇ ὀχείᾳ πλησιάζουσιν, οἷον φρυῖναι καὶ βάτραχοι καὶ πᾶν τὸ τοιοῦτον γένος.

### Κεφάλαιο 4

Τὰ δ' ἄποδα καὶ μακρὰ τῶν ζώων, οἷον ὄφεις τε καὶ (540b.) σμύραιναι, περιπλεκόμεναι τοῖς ὑπτίοις πρὸς τὰ ὑπτια.

Οὕτω δὲ σφόδρα οἱ γ' ὄφεις περιελίττονται ἀλλήλοις, ὥστε δοκεῖν ἐνὸς ὄφεως δικεφάλου τὸ σῶμα εἶναι ἅπαν. Τὸν αὐτὸν δὲ τρόπον καὶ τὸ τῶν σαύρων γένος· ὁμοίᾳ γὰρ περιπλοκῇ ποιοῦνται τὴν ὀχείαν.

### Κεφάλαιο 5

Οἱ δ' ἰχθύες ἅπαντες, ἔξω τῶν πλατέων σελαχῶν, παραπίπτοντες τὰ ὑπτια πρὸς τὰ ὑπτια ποιοῦνται τὸν συνδυασμόν. Τὰ δὲ πλατέα καὶ κερκοφόρα, οἷον βάτος καὶ τρυγὼν καὶ τὰ τοιαῦτα, οὐ μόνον παραπίπτοντα ἀλλὰ καὶ ἐπιβαίνοντα τοῖς ὑπτίοις ἐπὶ τὰ πρηνῇ τῶν θηλειῶν, ὅσοις μὴ ἐμποδίζει τὸ οὐραῖον δεινὸν ἔχον πάχος. Αἱ δὲ ῥῖναι, καὶ ὅσοις τῶν τοιούτων πολὺ τὸ οὐραῖον, παρατριβόμενα μόνον ὀχεύεται τὰ ὑπτια πρὸς τὰ ὑπτια. Εἰσὶ δέ τινες οἱ ἑωρακέναι φασὶ καὶ συνεχόμενα τῶν σελαχῶν ἔνια ὀπισθεν, ὥσπερ τοὺς κύνας.

Ἔστι δ' ἐν πᾶσι τοῖς σελαχώδεσι μεῖζον τὸ θῆλυ τοῦ ἄρρενος· σχεδὸν δὲ καὶ ἐν τοῖς ἄλλοις ἰχθύσι τὰ θήλεα μεῖζω τῶν ἀρρένων. Σελάχη δ' ἐστὶ τὰ τ' εἰρημένα καὶ βοῦς καὶ λάμια καὶ ἀετὸς καὶ νάρκη καὶ βάτραχος καὶ πάντα τὰ γαλεώδη. Τὰ μὲν οὖν σελάχη πάντα τεθεώρηται ὑπὸ πολλῶν τούτους ποιούμενα τοὺς τρόπους τὴν ὀχείαν· χρονιωτέρα γὰρ ἡ συμπλοκὴ πάντων τῶν ζωοτόκων ἐστὶν ἢ τῶν ὠοτόκων. Καὶ δελφῖνες δὲ καὶ πάντα τὰ κητώδη τὸν αὐτὸν τρόπον· παραπίπτοντα γὰρ ὀχεύει παρὰ τὸ θῆλυ τὸ ἄρρεν, καὶ χρόνον οὗτ' ὀλίγον οὔτε λίαν πολύν. Διαφέρουσι δ' ἔνιοι τῶν σελαχωδῶν ἰχθύων οἱ ἄρρενες τῶν θηλειῶν τῷ τοὺς μὲν ἔχειν ἀποκρεμώμενα ἅττα δύο περὶ τὴν ἔξοδον τῆς περιττώσεως, τὰς δὲ θηλείας ταῦτα μὴ ἔχειν, οἷον ἐν τοῖς

γαλεώδεσιν· ἐπὶ γὰρ τούτων ὑπάρχει πάντων τὸ εἰρημένον. Ὅρχεις μὲν οὖν οὕτ' ἰχθύες οὕτ' ἄλλο τῶν ἀπόδων ἔχει οὐδέν, πόρους δὲ δύο καὶ οἱ ὄφεις καὶ οἱ ἰχθύες οἱ ἄρρενες ἔχουσιν, οἳ γίνονται θοροῦ πλήρεις περὶ τὴν τῆς ὀχείας ὥραν, καὶ προΐενται ὑγρότητα γαλακτώδη πάντες. Οὗτοι δ' οἱ πόροι εἰς ἓν υνάπτουσιν, ὥσπερ καὶ τοῖς ὄρνισιν· οἱ γὰρ ὄρνιθες ἐντὸς ἔχουσι τοὺς (541a.) ὄρχεις, καὶ τὰ ἄλλα πάντα ὅσα ὠτοκεῖ πόδας ἔχοντα.

Τοῦτο δὴ συμπεραίνει καὶ ἐπεκτείνεται εἰς τὴν τοῦ θήλεος χώραν καὶ ὑποδοχήν. Ἔστι δὲ τοῖς μὲν ζωοτόκοις καὶ πεζοῖς ὁ αὐτὸς πόρος τοῦ τε σπέρματος καὶ τῆς τοῦ ὑγροῦ περιττώσεως ἔξωθεν, ἔσωθεν δ' ἕτερος πόρος, ὥσπερ ἐλέχθη καὶ πρότερον ἐν τῇ διαφορᾷ τῇ τῶν μορίων. Τοῖς δὲ μὴ ἔχουσι κύστιν ὁ αὐτὸς καὶ τῆς ξηρᾶς περιττώσεως πόρος ἔξωθεν· ἔσωθεν δὲ σύνεγγυς ἀλλήλων. Ὅμοίως δὲ ταῦτα ἔχει τοῖς θήλεσιν αὐτῶν καὶ τοῖς ἄρρεσιν· οὐ γὰρ ἔχουσι κύστιν πλὴν ἐπὶ χελώνης, τούτων δ' ἡ θήλεια ἓνα πόρον ἔχει, καίτοι κύστιν ἔχουσα· αἱ χελῶναι δὲ τῶν ὠτοκόκων εἰσίν.

Ἡ δὲ τῶν ὠτοκόκων ἰχθύων ὀχεία ἦττον γίνεται κατάδηλος· διόπερ οἱ πλεῖστοι νομίζουσι πληροῦσθαι τὰ θήλεα τὸν τῶν ἄρρένων ἀνακάπτοντα θορόν.

Τοῦτο γὰρ πολλάκις ὁρᾶται γινόμενον· περὶ μὲν γὰρ τὴν τῆς ὀχείας ὥραν αἱ θήλειαι τοῖς ἄρρεσιν ἐπόμεναι τοῦτο δρῶσι, καὶ κόπτουσιν ὑπὸ τὴν γαστέρα τοῖς στόμασιν, οἱ δὲ θᾶττον προΐενται καὶ μᾶλλον· κατὰ δὲ τὸν τόκον οἱ ἄρρενες τοῖς θήλεσι, καὶ ἀποτικτουσῶν δ' ἀνακάπτουσι τὰ ὠά· ἐκ δὲ τῶν παραλειπομένων γίνονται οἱ ἰχθύες. Περὶ δὲ τὴν Φοινίκην καὶ θήραν ποιοῦνται δι' ἀλλήλων· ἄρρενας μὲν γὰρ ὑπάγοντες κεστρέας τὰς θηλείας περιβάλλονται συνάγοντες, θηλείας δὲ τοὺς ἄρρενας. Τοῦτο μὲν οὖν διὰ τὸ πολλάκις ὁρᾶσθαι τὴν δόξαν ἐποίησε τῆς ὀχείας ταύτην, ποιεῖ δέ τι τοιοῦτον καὶ τὰ τετράποδα τῶν ζώων· περὶ γὰρ τὴν ὥραν τῆς ὀχείας ἀπορραίνουσι καὶ τὰ ἄρρενα καὶ τὰ θήλεα, καὶ τῶν αἰδοίων ὁσμῶνται ἀλλήλων. Αἱ δὲ πέρδικες ἂν κατ' ἄνεμον στῶσιν αἱ θήλειαι τῶν ἄρρένων, ἔγκυοι γίνονται· πολλάκις δὲ καὶ τῆς φωνῆς <ἀκούουσαι>, ἐὰν ὀργῶσαι τύχωσι, καὶ ὑπερπετομένων ἐκ τοῦ καταπνεῦσαι τὸν ἄρρενα· χάσκει δὲ καὶ ἡ θήλεια καὶ ὁ ἄρρην, καὶ τὴν γλῶτταν ἔξω ἔχουσι περὶ τὴν τῆς ὀχείας ποίησιν.

Ἡ δ' ἀληθινὴ σύνοδος τῶν ὠτοκόκων ἰχθύων ὀλιγάκις ὁρᾶται διὰ τὸ ταχέως ἀπολύεσθαι παραπесόντας, ἐπεὶ ὥπται ἡ ὀχεία καὶ ἐπὶ τούτων γινομένη τὸν εἰρημένον τρόπον.

## Κεφάλαιο 6

(541b.) Τὰ δὲ μαλάκια, οἷον πολύποδες καὶ σπηΐαι καὶ τευθίδες, τὸν αὐτὸν τρόπον πάντα πλησιάζουσιν ἀλλήλοις· κατὰ τὸ στόμα γὰρ συμπλέκονται, τὰς πλεκτάνας πρὸς τὰς πλεκτάνας συναρμόττοντες. Ὁ μὲν οὖν πολύπους ὅταν τὴν λεγομένην κεφαλὴν ἐρείσῃ πρὸς τὴν γῆν καὶ διαπετάσῃ τὰς πλεκτάνας, ἄτερος ἐφαρμόττει ἐπὶ τὸ πέτασμα τῶν πλεκτανῶν, καὶ συνεχεῖς ποιοῦνται τὰς κοτυληδόνας πρὸς ἀλλήλας. Φασὶ δέ τινες καὶ τὸν ἄρρενα ἔχειν αἰδοιῶδές τι ἐν μιᾷ τῶν πλεκτανῶν, ἐν ἣ δύο αἱ μέγιστα κοτυληδόνες εἰσὶν· εἶναι δὲ τὸ τοιοῦτον ὥσπερ νευρῶδες, μέχρι εἰς μέσσην τὴν πλεκτάνην προσπεφυκὸς ἅπαν, ἣ ἐσπιφράναι εἰς τὸν μυκτῆρα τῆς θηλείας. Αἱ δὲ σπηΐαι καὶ αἱ τευθίδες νέουσιν ἅμα συμπεπλεγμένα, τὰ στόματα καὶ τὰς πλεκτάνας ἐφαρμόττουσαι καταντικρὺ ἀλλήλαις, νέουσai ἐναντίως· ἐναρμόττουσι δὲ καὶ τὸν καλούμενον μυκτῆρα εἰς τὸν μυκτῆρα. Τὴν δὲ νεῦσιν ἢ μὲν ἐπὶ τὸ ὀπισθεν, ἢ δ' ἐπὶ τὸ στόμα ποιεῖται.

Ἐκτίκει δὲ κατὰ τὸν φουσητῆρα καλούμενον, καθ' ὃν ἔνιοι καὶ ὀχεύεσθαι φασιν αὐτάς.

## Κεφάλαιο 7

Τὰ δὲ μαλακόστρακα ὀχεύεται, οἷον κάραβοι καὶ ἄστακοὶ καὶ καρίδες καὶ τὰ τοιαῦτα, ὥσπερ καὶ τὰ ὀπισθουρητικὰ τῶν τετραπόδων, ὅταν ὁ μὲν ὑπτιάν ὁ δ' ἐπὶ ταύτης ποιήσῃ τὴν κέρκον. Ὀχεύεται δὲ τοῦ ἔαρος ἀρχομένου πρὸς τῇ γῇ (ἤδη γὰρ ὥπται ἢ ὀχεῖα πάντων τῶν τοιούτων), ἐνιαχοῦ δὲ καὶ ὅταν τὰ σῦκα ἄρχηται πεπαίνεσθαι. Τὸν αὐτὸν δὲ τρόπον καὶ οἱ ἄστακοὶ καὶ αἱ καρίδες ὀχεύονται.

Οἱ δὲ καρκίνοι κατὰ τὰ πρόσθια ἀλλήλων συνδυάζονται, τὰ ἐπικαλύμματα τὰ πτυχώδη πρὸς ἀλλήλα συμβάλλοντες. Πρῶτον δ' ὁ καρκίνος ἀναβαίνει ὁ ἐλάττων ἐκ τοῦ ὀπισθεν· ὅταν δ' ἀναβῇ οὗτος, ὁ μείζων πλάγιος ἐπιστρέφει. Ἄλλο μὲν οὖν οὐδὲν ἢ θήλεια τοῦ ἄρρενος διαφέρει· τὸ δ' ἐπικάλυμμα μείζον ἐστὶ τὸ τῆς θηλείας καὶ μᾶλλον ἀφεστηκὸς καὶ συνηρεφέστερον, εἰς ὃ ἐκτίκτουσι καὶ ἢ τὸ περίττωμα ἐξέρχεται. Μόριον δ' οὐδὲν προῖεται θάτερον εἰς θάτερον.

## Κεφάλαιο 8

Τὰ δ' ἔντομα συνέρχεται μὲν ὀπισθεν, εἴτ' ἐπιβαίνει (542a.) τὸ ἔλαττον ἐπὶ τὸ μείζον· τοῦτο δ' ἐστὶ τὸ ἄρρεν. Ἐναφίησι δὲ τὸν πόρον κάτωθεν τὸ θῆλυ εἰς τὸ ἄρρεν τὸ ἐπάνω, ἀλλ' οὐ τὸ ἄρρεν εἰς τὸ θῆλυ, ὥσπερ ἐπὶ τῶν ἄλλων.

Καὶ τοῦτο τὸ μόριον ἐπὶ μὲν ἐνίων καὶ φαίνεται μεῖζον ὃν ἢ κατὰ λόγον τοῦ ὅλου σώματος, καὶ πάνυ μικρῶν ὄντων, ἐπ' ἐνίων δ' ἥττον. Τοῦτο δ' ἐστὶ φανερόν, ἅν τις διαιρῇ τὰς ὀχευομένας μυίας. Απολύονται δ' ἀπ' ἀλλήλων μόλις· πολὺν γὰρ χρόνον ὁ συνδυασμός ἐστὶ τῶν τοιούτων. Δῆλον δ' ἐπὶ τῶν ἐν ποσίν, οἷον μυιῶν τε καὶ κανθαρίδων. Πάντα δὲ τὸν τρόπον τοῦτον ὀχεύεται, αἷ τε μυῖαι καὶ αἷ κανθαρίδες καὶ αἷ σπονδύλαι καὶ τὰ φαλάγγια, καὶ εἴ τι ἄλλο τοιοῦτόν ἐστὶ τῶν ὀχευομένων. Ποιοῦνται δὲ τὰ φαλάγγια τὴν ὀχείαν τόνδε τὸν τρόπον, ὅσα γε ὑφαίνει ἀράχνια· ὅταν ἡ θήλεια σπάσῃ τῶν ἀποτεταμένων ἀραχνίων ἀπὸ τοῦ μέσου, πάλιν ὁ ἄρρην ἀντισπᾷ· τοῦτο δὲ ποιήσαντα πολλάκις οὕτω συνέρχεται καὶ συμπλέκεται ἀντίπυγα· διὰ γὰρ τὴν περιφέρειαν τῆς κοιλίας οὗτος ἀρμόττει ὁ συνδυασμός αὐτοῖς.

Ἡ μὲν οὖν ὀχεία τῶν ζώων τοῦτον γίνεται τὸν τρόπον πάντων, ὥραι δὲ καὶ ἡλικίαι τῆς ὀχείας ἐκάστοις εἰσὶ διωρισμένας τῶν ζώων. Βούλεται μὲν οὖν ἡ φύσις τῶν πλείστων περὶ τὸν αὐτὸν χρόνον ποιεῖσθαι τὴν ὀμίλιαν ταύτην, ὅταν ἐκ τοῦ χειμῶνος μεταβάλλῃ πρὸς τὸ θέρος· αὕτη δ' ἐστὶν ἡ τοῦ ἔαρος ὥρα, ἐν ἣ τὰ πλεῖστα καὶ πτηνὰ καὶ πεζὰ καὶ πλωτὰ ὀρμᾷ πρὸς τὸν συνδυασμόν. Ποιεῖται δ' ἕνια τὴν ὀχείαν καὶ τὸν τόκον καὶ μετοπώρου καὶ χειμῶνος, οἷον τῶν τ' ἐνύδρων γένη ἅττα καὶ τῶν πτηνῶν· ἄνθρωπος δὲ μάλιστα πᾶσαν ὥραν, καὶ τῶν συνανθρωπευομένων ζώων πολλὰ διὰ τὴν ἀλέαν καὶ εὐτροφίαν, ὅσων καὶ αἱ κυήσεις ὀλιγοχρόνιοί εἰσιν, οἷον ὑὸς καὶ κυνός, καὶ τῶν πτηνῶν ὅσα πλεονάκις ποιοῦνται τοὺς τόκους. Πολλὰ δὲ καὶ πρὸς τὰς ἐκτροφὰς τῶν τέκνων στοχαζόμενα ποιεῖται τὸν συνδυασμόν ἐν τῇ ἀπαρτιζούσῃ ὥρᾳ. Ὅργᾳ δὲ πρὸς τὴν ὀμίλιαν τῶν ἀνθρώπων τὸ μὲν (542b.) ἄρρεν ἐν τῷ χειμῶνι μᾶλλον, τὸ δὲ θῆλυ ἐν τῷ θέρει.

Τὸ δὲ τῶν ὀρνίθων γένος, ὥσπερ εἴρηται, τὸ πλεῖστον περὶ τὸ ἔαρ ποιεῖται καὶ ἀρχομένου τοῦ θέρους τὴν ὀχείαν καὶ τοὺς τόκους, πλην ἀλκυόνος. Ἡ δ' ἀλκυὼν τίκτει περὶ τροπὰς τὰς χειμερινάς. Διὸ καὶ καλοῦνται, ὅταν εὐδειναὶ γένωνται αἱ τροπαί, ἀλκυονίδες ἡμέραι ἐπτὰ μὲν πρὸ τροπῶν, ἐπτὰ δὲ μετὰ τροπὰς, καθάπερ καὶ Σιμωνίδης ἐποίησεν ὡς ὁπόταν χειμέριον κατὰ μῆνα πινύσκη Ζεὺς ἡματα τεσσαρακαίδεκα, λαθάνεμόν τέ μιν ὥραν καλέουσιν ἐπιχθόνιοι, ἱερὰν παιδοτρόφον ποικίλας ἀλκυόνος. Γίνονται δ' εὐδειναί, ὅταν συμβῇ νοτίους γίνεσθαι τὰς τροπὰς, τῆς Πλειάδος βορείου γενομένης. Λέγεται δ' ἐν ἐπτὰ μὲν ἡμέραις ποιεῖσθαι τὴν νεοττιάν, ἐν δὲ ταῖς λοιπαῖς ἐπτὰ ἡμέραις τίκτειν καὶ ἐκτρέφειν τὰ νεόττια. Περὶ μὲν οὖν τοὺς ἐνταῦθα τόπους οὐκ ἀεὶ συμβαίνει γίνεσθαι ἀλκυονίδας ἡμέρας περὶ τὰς τροπὰς, ἐν δὲ τῷ Σικελικῷ πελάγει σχεδὸν ἀεὶ. Τίκτει δ' ἡ ἀλκυὼν περὶ πέντε ὥα.

## Κεφάλαιο 9

Ἡ δ' αἶθυια καὶ οἱ λάρροι τίκτουσι μὲν ἐν ταῖς περὶ θάλατταν πέτραις, τὸ δὲ πλῆθος δύο ἢ τρία· ἀλλ' ὁ μὲν λάρρος τοῦ θέρους, ἡ δ' αἶθυια ἀρχομένου τοῦ ἔαρος εὐθὺς ἐκ τροπῶν, καὶ ἐπικαθεύδει ὥσπερ αἱ ἄλλαι ὄρνιθες.

Οὐδέτερον δὲ φωλεῖ τούτων τῶν ὀρνέων. Πάντων δὲ σπανιώτατον ἰδεῖν ἀλκυόνα ἐστίν· σχεδὸν γὰρ περὶ Πλειάδος δύσιν καὶ τροπᾶς ὀρᾷται μόνον, καὶ ἐν τοῖς ὑφόρμοις ὅσον περιπταμένη περὶ τὸ πλοῖον ἀφανίζεται εὐθύς, διὸ καὶ Στησίχορος τοῦτον τὸν τρόπον ἐμνήσθη περὶ αὐτῆς. Τίκει δὲ καὶ ἡ ἀηδὼν τοῦ θέρους ἀρχομένου, τίκει δὲ πέντε καὶ ἕξ ὥα· φωλεῖ δ' ἀπὸ τοῦ μετοπώρου μέχρι τοῦ ἔαρος.

Τὰ δ' ἔντομα καὶ τοῦ χειμῶνος ὀχεύεται καὶ γίνεται, ὅταν εὐημερίαί γένωνται καὶ νότια, ὅσα μὴ φωλεῖ αὐτῶν, οἷον μυῖαι καὶ μύρμηκες.

Τίκει δ' ἅπαξ τοῦ ἐνιαυτοῦ τὰ πολλὰ τῶν ἀγρίων, ὅσα μὴ ἐπικυῖσκεται ὥσπερ δασύπους.

Ὅμοίως δὲ καὶ τῶν ἰχθύων οἱ πλεῖστοι ἅπαξ, οἷον οἱ (543a.) χυτοί (καλοῦνται δὲ χυτοὶ οἱ τῷ δικτύῳ περιεχόμενοι), θύννος, πηλαμύς, κεστρεύς, χαλκίδες, κολίαι, χρομῖς, ψῆττα καὶ τὰ τοιαῦτα, πλὴν ὁ λάβραξ· οὗτος δὲ δις τούτων μόνος, γίνεται δ' ὁ τόκος αὐτῷ ὁ ὕστερος ἀσθενέστερος. Καὶ ὁ τριχίας δὲ καὶ τὰ πετραῖα δις, ἡ δὲ τρίγλη μόνη τρίς.

Τεκμαίρονται δ' ἐκ τοῦ γόνου· τρίς γὰρ φαίνεται ὁ γόνος περί τινος τόπους. Ὁ δὲ σκορπίος τίκει δις. Τίκει δὲ καὶ ὁ σαργὸς δις, ἔαρος καὶ μετοπώρου· ἡ δὲ σάλπη τοῦ μετοπώρου ἅπαξ. Ἡ δὲ θυννὶς ἅπαξ τίκει, ἀλλὰ διὰ τὸ τὰ μὲν πρώϊα τὰ δ' ὄψια προΐεσθαι δις δοκεῖ τίκτειν· ἔστι δ' ὁ μὲν πρώτος τόκος περὶ τὸν Ποσειδεῶνα πρὸ τροπῶν, ὁ δ' ὕστερος τοῦ ἔαρος.

Διαφέρει δ' ὁ θύννος ὁ ἄρρην τοῦ θήλεος, ὅτι ἡ μὲν ἔχει ὁ δ' οὐκ ἔχει ὑπὸ τῇ γαστρὶ πτερύγιον, ὃ καλοῦσιν ἀφαρέα.

## Κεφάλαιο 10

Τῶν δὲ σελαχῶν ἡ ῥίνη μόνη τίκει δις· τίκει γὰρ καὶ ἀρχομένου τοῦ φθινοπώρου καὶ περὶ Πλειάδος δύσιν, εὐημερεῖ δ' ἐν τῷ φθινοπώρῳ μᾶλλον· ὁ δ' εἷς τόκος γίνεται περὶ ἑπτὰ ἢ ὀκτώ. Δοκοῦσι δ' ἐνιοὶ τῶν γαλεῶν, οἷον ὁ

ἀστερίας, δις τοῦ μηνὸς τίκτειν· τοῦτο δὲ συμβαίνει, ὅτι οὐχ ἅμα πάντα λαμβάνει τελέωσιν τὰ ὥα. Ἐνια δὲ τίκτει πᾶσαν ὥραν, οἷον ἡ σμύραινα. Τίκτει δ' αὖτις ὥα πολλά, καὶ ἐκ μικροῦ ταχεῖαν τὴν αὕξησιν λαμβάνουσι τὰ γενόμενα, ὥσπερ καὶ τὰ τοῦ ἱππούρου· καὶ γὰρ ταῦτα ἐξ ἐλαχίστου μέγιστα γίνεται τάχιστα, πλὴν ἡ μὲν σμύραινα πᾶσαν ὥραν τίκτει, ὁ δ' ἱππουρος ἕαρος. Διαφέρει δ' ὁ σμῦρος καὶ ἡ σμύραινα· ἡ μὲν γὰρ σμύραινα ποικίλον καὶ ἀσθενέστερον, ὁ δὲ σμῦρος ὁμόχρους καὶ ἰσχυρός, καὶ τὸ χρῶμα ἔχει ὅμοιον τῇ πίτυϊ, καὶ ὀδόντας ἔχει καὶ ἔσωθεν καὶ ἔξωθεν. Φασὶ δ' ὥσπερ καὶ τὰλλα, τὸν μὲν ἄρρενα τὴν δὲ θήλειαν εἶναι. Ἐξέρχονται δὲ ταῦτα εἰς τὸ ξηρόν, καὶ λαμβάνονται πολλάκις.

Συμβαίνει μὲν οὖν σχεδὸν πᾶσι ταχεῖαν γίνεσθαι τὴν αὕξησιν τοῖς ἰχθύσιν, οὐχ ἥκιστα δὲ κορακίνῳ τῶν μικρῶν· τίκτει δὲ (543b.) πρὸς τῇ γῇ καὶ τοῖς βρυώδεσι καὶ δασέσιν. Ταχὺ δὲ καὶ ὁ ὀρφὺς ἐκ μικροῦ γίνεται μέγας. Αἱ δὲ πηλαμύδες καὶ οἱ θύννοι τίκτουσιν ἐν τῷ Πόντῳ, ἄλλοθι δ' οὐ· κεστρεῖς δὲ καὶ χρυσόφρυες καὶ λάβρακες μάλιστα οὗ ἂν ποταμοὶ ῥέωσιν· οἱ δ' ὄρκυνες καὶ σκορπίδες καὶ ἄλλα πολλὰ γένη ἐν τῷ πελάγει.

## Κεφάλαιο 11

Τίκτουσι δ' οἱ πλεῖστοι τῶν ἰχθύων ἐν μηνὶ τρισί, Μουνυχιῶνι, Θαργηλιῶνι, Σκιρροφοριῶνι· μετοπώρου δ' ὀλίγοι, οἷον σάλπη καὶ σαργὸς καὶ ὅσα ἄλλα τοιαῦτα μικρὸν πρὸ ἰσημερίας τῆς φθινοπωρινῆς, καὶ νάρκη καὶ ῥίνη. Τίκτει δ' ἔνια καὶ χειμῶνος καὶ θέρους, ὥσπερ ἐλέχθη πρότερον, οἷον χειμῶνος μὲν λάβραξ, κεστρεὺς, βελόνη, θέρους δὲ περὶ τὸν Ἑκατομβαιῶνα θυννίς, περὶ τροπὰς θερινὰς· τίκτει δὲ θυλακοειδές, ἐν ᾧ πολλὰ ἐγγίνεται καὶ μικρὰ ὥα. Καὶ οἱ ῥυάδες τοῦ θέρους τίκτουσιν.

Ἀρχονται δὲ κύειν τῶν κεστρέων οἱ μὲν χελῶνες τοῦ Ποσειδεῶνος καὶ ὁ σαργὸς καὶ ὁ σμύξων καλούμενος καὶ ὁ κέφαλος· κύουσι δὲ τριάκοντα ἡμέρας.

Ἐνιοι δὲ τῶν κεστρέων οὐ γίνονται ἐκ συνδυασμοῦ, ἀλλὰ φύονται ἐκ τῆς ἰλύος καὶ τῆς ἄμμου.

Ὡς μὲν οὖν ἐπὶ τὸ πολὺ τοῦ ἕαρος τὰ πλεῖστα κυῖσκειται, οὐ μὲν ἀλλά, καθάπερ εἴρηται, καὶ θέρους ἔνια καὶ φθινοπώρου καὶ χειμῶνος· ἀλλ' οὐθ' ἅπασιν ὁμοίως τοῦτο συμβαίνει οὐθ' ἀπλῶς οὔτε καθ' ἕκαστον γένος, ὥσπερ τοῖς πλείστοις τοῦ ἕαρος· οὐδὲ δὴ κύουσι πολλὰ κυήματα ὁμοίως ἐν τοῖς ἄλλοις χρόνοις. Ὅλως δὲ δεῖ μὴ λεληθῆναι ὅτι, ὥσπερ καὶ τῶν φυομένων καὶ

τῶν ζώων τῶν τετραπόδων πολλὴν αἱ χῶραι ποιοῦσι διαφορὰν οὐ μόνον πρὸς τὴν ἄλλην τοῦ σώματος εὐημερίαν ἀλλὰ καὶ πρὸς τὸ πλεονάκις ὀχεύεσθαι καὶ γεννᾶν, οὕτω καὶ περὶ τοὺς ἰχθῦς πολλὴν ποιοῦσι τὴν διαφορὰν αὐτοὶ οἱ τόποι οὐ μόνον κατὰ μέγεθος καὶ εὐτροφίαν ἀλλὰ καὶ κατὰ τοὺς τόκους καὶ τὰς ὀχείας, τοῦ ἔνθα μὲν πλεονάκις ἔνθα δ' ἐλαττονάκις γεννᾶν τὰ αὐτά.

## Κεφάλαιο 12

(544a.) Τίκει δὲ καὶ τὰ μαλάκια τοῦ ἔαρος, καὶ ἐν τοῖς πρώτοις τίκει τῶν θαλαττίων ἢ σηπία. Τίκει δὲ πᾶσαν ὥραν, ἀποτίκει δ' ἐν ἡμέραις πέντε καὶ δέκα. Ὅταν δὲ τέκη τὰ ὡά, ὁ ἄρρην παρακολουθῶν καταφυσᾷ τὸν θορόν, καὶ γίνεται στιφρά. Βαδίζουσι δὲ κατὰ ζυγά· ἔστι δ' ὁ ἄρρην τῆς θηλείας ποικιλωτέρος καὶ μελάντερος τὸν νῶτον.

Ὁ δὲ πολύπους ὀχεύεται τοῦ χειμῶνος, τίκει δὲ τοῦ ἔαρος, ὅτε καὶ φωλεῖ περὶ δύο μῆνας. Τίκει δὲ τὸ ὥον καθάπερ βοστρύχιον, ὅμοιον τῷ τῆς λεύκης καρπῷ. Ἔστι δὲ πολύγονον τὸ ζῶον· ἐκ γὰρ τοῦ ἀποτικτομένου ἄπειρον γίνεται τὸ πλῆθος. Διαφέρει δ' ὁ ἄρρην τῆς θηλείας τῷ τε τὴν κεφαλὴν ἔχειν προμηκεστέραν καὶ τὸ καλούμενον ὑπὸ τῶν ἀλιέων αἰδοῖον ἐν τῇ πλεκτάνῃ λευκόν. Ἐπωάζει δέ, ὅταν τέκη· διὸ καὶ χεῖριστοι γίνονται· οὐ γὰρ νέμονται κατὰ τὸν καιρὸν τοῦτον.

Γίνονται δὲ καὶ αἱ πορφύραι περὶ τὸ ἔαρ, καὶ οἱ κήρυκες λήγοντος τοῦ χειμῶνος. Καὶ ὅλως τὰ ὀστρακόδερμα ἔν τε τῷ ἔαρι φαίνεται τὰ καλούμενα ὡά ἔχοντα καὶ ἐν τῷ μετοπώρῳ, πλὴν τῶν ἐχίνων τῶν ἐδωδίμων· οὗτοι δὲ μάλιστα μὲν ἐν ταύταις ταῖς ὥραις, οὐ μὴν ἀλλὰ καὶ ἀεὶ ἔχουσι, καὶ μάλιστα ταῖς πανσελήνοις καὶ ταῖς ἀλεσιναῖς ἡμέραις, πλὴν τῶν ἐν τῷ εὐρίπῳ τῶν Πυρραίων· ἐκεῖνοι δ' ἀμείνους τοῦ χειμῶνος. Εἰσὶ δὲ μικροὶ μὲν, πλήρεις δὲ τῶν ὡῶν. Κύοντες δὲ φαίνονται καὶ οἱ κοχλῖαι πάντες ὁμοίως τὴν αὐτὴν ὥραν.

## Κεφάλαιο 13

Τῶν δ' ὀρνέων τὰ μὲν ἄγρια, ὥσπερ εἴρηται, ἅπαξ ὀχεύεται καὶ τίκει τὰ πλεῖστα, χελιδὼν δὲ δις τίκει καὶ κόττυφος. Τὰ μὲν οὖν πρῶτα τοῦ κοττύφου ὑπὸ χειμῶνος ἀπόλλυται (πρωϊαίτατα γὰρ τίκει τῶν ὀρνέων ἀπάντων), τὸν δ' ὕστερον τόκον εἰς τέλος ἐκτρέφει. Ὅσα δ' ἢ ἡμερα ἢ ἡμεροῦσθαι δύναται, ταῦτα δὲ πλεονάκις, οἷον αἱ περιστερὰ καθ' ἅπαν τὸ θέρος, καὶ τὸ τῶν ἀλεκτορίδων γένος· ὀχεύουσι γὰρ οἱ ἄρρενες καὶ ὀχεύονται αἱ θήλειαι τῶν

ἀλεκτορίδων καὶ τίκτουσιν αἰεῖ, πλὴν τῶν ἐν χειμῶνι τροπικῶν ἡμερῶν. Τῶν (544b.) δὲ περιστεροειδῶν πλείω τυγχάνει ὄντα γένη· ἔστι γὰρ ἕτερον περιστερὰ καὶ πελειάς. Ἐλάττων μὲν οὖν ἡ πελειάς, τιθασσὸν δὲ γίνεται μᾶλλον ἢ περιστερὰ· ἡ δὲ πελειάς καὶ μέλαν καὶ μικρὸν καὶ ἐρυθρόπουν καὶ τραχύπουν, διὸ καὶ οὐδεὶς τρέφει. Μέγιστον μὲν οὖν τῶν τοιούτων ἡ φάττα ἐστὶ, δεύτερον δ' ἡ οἰνάς· αὕτη δὲ μικρῶ μείζων ἐστὶ τῆς περιστερᾶς· ἐλάχιστον δὲ τῶν τοιούτων ἡ τρυγών. Τίκτουσι δ' αἱ περιστερὰὶ πᾶσαν ὥραν καὶ ἐκτρέφουσιν, ἂν τόπον ἔχωσιν ἀλεεινὸν καὶ τὰ ἐπιτήδεια· εἰ δὲ μή, τοῦ θέρους μόνον. Τὰ δ' ἔκγονα τοῦ ἔαρος βέλτιστα καὶ τοῦ φθινοπώρου· τὰ δὲ τοῦ θέρους καὶ ἐν ταῖς θερμομερίαις χεῖριστα.

## Κεφάλαιο 14

Διαφέρουσι δὲ καὶ κατὰ τὴν ἡλικίαν τὰ ζῶα πρὸς τὴν ὀχείαν. Πρῶτον μὲν οὖν οὐχ ἅμα τοῖς πολλοῖς ἄρχεται τε τὸ σπέρμα ἐκκρίνεσθαι καὶ γεννᾶν δύναται, ἀλλ' ὕστερον· τὸ γὰρ τῶν νέων ἐν πᾶσι τοῖς ζώοις τὸ μὲν πρῶτον ἄγονον, γονίμων δ' ὄντων ἀσθενέστερα καὶ ἐλάττω τὰ ἔκγονα. Τοῦτο δὲ μάλιστα δῆλον ἐπὶ τε τῶν ἀνθρώπων καὶ τῶν ζωοτόκων τετραπόδων καὶ ἐπὶ τῶν ὀρνίθων· τῶν μὲν γὰρ τὰ ἔκγονα ἐλάττω, τῶν δὲ τὰ ὠά. Αἱ δ' ἡλικίαι τοῖς ὀχεύουσιν αὐτοῖς μὲν πρὸς αὐτὰ τοῖς γένεσι τοῖς πλείστοις σχεδὸν κατὰ τὸν αὐτὸν γίνονται χρόνον, ἐὰν μή τι προτερῇ διὰ τι τερατῶδες πάθος ἢ διὰ βλάβην τῆς φύσεως.

Τοῖς μὲν οὖν ἀνθρώποις ἐπισημαίνει κατὰ τε τὴν τῆς φωνῆς μεταβολὴν καὶ τῶν αἰδοίων οὐ μόνον μεγέθει ἀλλὰ καὶ εἴδει, καὶ ἐπὶ τῶν μαστῶν ὡσαύτως, μάλιστα δὲ τῇ τριχώσει τῆς ἥβης. Ἀρχεται δὲ φέρειν τὸ σπέρμα περὶ τὰ δις ἑπτὰ ἔτη, γεννητικὸς δὲ περὶ τὰ τρις ἑπτὰ. Τοῖς δ' ἄλλοις ζώοις ἥβη μὲν οὐ γίνεται (τὰ μὲν γὰρ ὅλως οὐκ ἔχει τρίχας, τὰ δ' οὐκ ἔχει ἐν τοῖς ὑπτίοις, ἢ ἐλάττους τῶν ἐν τοῖς πρανεσίν), ἡ δὲ φωνὴ μεταβάλλουσα ἐν ἐνίοις ἐπίδηλός ἐστιν· τοῖς δ' ἕτερα τοῦ σώματος μόρια ἐπισημαίνει τὴν τ' ἀρχὴν τοῦ σπέρμα ἔχειν καὶ τοῦ τὸ γόνιμον ἤδη.

Τὴν δὲ φωνὴν ὅλως ἔχει τὸ θῆλυ ἐν τοῖς πλείστοις ὀξυτέραν, καὶ τὰ νεώτερα τῶν (545a.) πρεσβυτέρων, ἐπεὶ καὶ οἱ ἔλαφοι οἱ ἄρρενες τῶν θηλειῶν φθέγγονται βαρύτερον. Φθέγγονται δ' οἱ μὲν ἄρρενες, ὅταν ἡ ὥρα τῆς ὀχείας ἦ, αἱ δὲ θήλειαι, ὅταν φοβηθῶσιν. Ἔστι δ' ἡ μὲν τῆς θηλείας φωνὴ βραχεῖα, ἡ δὲ τοῦ ἄρρενος ἔχει μῆκος. Καὶ ἡ τῶν κυνῶν δὲ γηρασκόντων γίνεται βαρυτέρα φωνή. Καὶ τῶν ἵππων δὲ διαφέρουσιν αἱ φωναί· εὐθὺς μὲν γὰρ γενόμεναι ἀφιᾶσι φωνὴν λεπτὴν καὶ μικρὰν αἱ θήλειαι, οἱ δ' ἄρρενες μικρὰν



μέν, μείζω μέντοι γε καὶ βαρυτέραν τῆς θηλείας· τοῦ δὲ χρόνου προϊόντος μείζονα· διετὴς δ' ἐπειδὴν γένηται καὶ τῆς ὀχείας ἄρξεται, φωνὴν ἀφήσιν ὁ μὲν ἄρρην μεγάλην καὶ βαρεῖαν, ἡ δὲ θήλεια μείζω καὶ λαμπροτέραν ἢ τέως, ἄχρι ἐτῶν εἴκοσιν ὡς ἐπὶ τὸ πολὺ· μετὰ μέντοι τὸν χρόνον τοῦτον ἀσθενεστέραν ἀφίᾳσι καὶ οἱ ἄρρενες καὶ αἱ θήλειαι.

Ὡς μὲν οὖν ἐπὶ τὸ πολὺ, καθάπερ εἵπομεν, διαφέρει ἡ φωνὴ τῶν ἀρρένων καὶ τῶν θηλειῶν ἐν τῷ βαρύτερον φθέγγεσθαι τὰ ἄρρενα τῶν θηλειῶν, ὅσων ἐστὶν ἀπότασις τῆς φωνῆς· οὐ μὴν ἐν πᾶσί γε τοῖς ζώοις, ἀλλ' ἐνίοις τοῦναντίον, οἷον ἐπὶ τῶν βοῶν· ἐπὶ γὰρ τούτων τὸ θῆλυ τοῦ ἄρρενος βαρύτερον φθέγγεται, καὶ οἱ μόσχοι τῶν τελείων. Διὸ καὶ τὰς φωνὰς τὰ ἐκτεμνόμενα μεταβάλλουσιν ἐναντίως· εἰς τὸ θῆλυ γὰρ μεταβάλλουσι τὰ ἐκτεμνόμενα.

Οἱ δὲ χρόνοι τῆς ὀχείας κατὰ τὴν ἡλικίαν ἔχουσιν ὥδε τοῖς ζώοις. Πρόβατον μὲν καὶ αἶξ αὐτοετὲς ὀχεύεται καὶ κύει, μᾶλλον δ' ἡ αἶξ· καὶ οἱ ἄρρενες δ' ὀχεύουσιν ὡσαύτως. Τὰ δ' ἔκγονα τῶν ἀρρένων διαφέρει ἐπὶ τούτων καὶ τῶν ἄλλων· οἱ γὰρ ἄρρενες βελτίους γίνονται τῷ ὕστερον ἔτει, ὅταν γηράσκωσιν. Ὑς δ' ὀχεύεται μὲν καὶ ὀχεύει πρῶτον ὀκτάμηνος, τίκει δ' ἡ θήλεια μὲν ἐνιαυσία (οὕτω γὰρ συμβαίνει ὁ χρόνος τῆς κυήσεως). Ὁ δ' ἄρρην γεννᾷ μὲν ὀκτάμηνος, φαῦλα μέντοι πρὶν γενέσθαι ἐνιαύσιος. Οὐ πανταχοῦ δέ, ὥσπερ εἴρηται, ὁμοίως συμβαίνουσιν αἱ ἡλικίαι· ἐνιαχοῦ μὲν (545b.) γὰρ αἱ ὕες ὀχεύονται μὲν καὶ ὀχεύουσι τετράμηνοι, ὥστε δὲ γεννᾶν καὶ ἐκτρέφειν ἑξάμηνοι, ἐνιαχοῦ δ' οἱ κάπροι δεκάμηνοι ἄρχονται ὀχεύειν, ἀγαθοὶ δὲ μέχρι ἐπὶ τριετὲς. Κύων δ' ὡς ἐπὶ τὸ πολὺ μὲν ὀχεύεται ἐνιαυσία καὶ ὀχεύει ἐνιαύσιος, ἐνίοτε δὲ συμβαίνει ταῦτα καὶ ὀκταμήνοις· μᾶλλον δὲ τοῦτο γίνεται ἐπὶ τῶν ἀρρένων ἢ τῶν θηλειῶν. Κύει δ' ἐξήκοντα καὶ μίαν ἢ καὶ δύο ἢ τρεῖς ἡμέρας τὸ μακρότατον· ἔλαττον δ' οὐ φέρει τῶν ἐξήκονθ' ἡμερῶν, ἀλλ' ἂν τι καὶ γένηται, οὐκ ἐκτρέφεται εἰς τέλος. Τεκοῦσα δὲ πάλιν ὀχεύεται ἕκτω μηνί, καὶ οὐ πρότερον.

Ἴππος δ' ὀχεύειν ἄρχεται διετὴς καὶ ὀχεύεσθαι, ὥστε καὶ γεννᾶν· τὰ μέντοι ἔκγονα τὰ κατὰ τούτους τοὺς χρόνους ἐλάττω καὶ ἀσθενικώτερα.

Ὡς δ' ἐπὶ τὸ πλεῖστον τριετὴς ὀχεύει καὶ ὀχεύεται. Καὶ ἐπιδίδωσι δ' αἰεὶ ἐπὶ τὸ βελτίω τὰ ἔκγονα γεννᾶν μέχρι ἐτῶν εἴκοσιν. Ὀχεύει δ' ὁ ἵππος ὁ ἄρρην μέχρι ἐτῶν τριάκοντα καὶ τριῶν, ἡ δὲ θήλεια ὀχεύεται μέχρι τετταράκοντα ἐτῶν, ὥστε συμβαίνει σχεδὸν διὰ βίου γίνεσθαι τὴν ὀχείαν· ζῆ γὰρ ὡς ἐπὶ τὸ πολὺ ὁ μὲν ἄρρην περὶ πέντε καὶ τριάκοντα ἔτη, ἡ δὲ θήλεια πλείω τῶν

τετταράκοντα· ἤδη δέ τις ἐβίωσεν ἵππος ἔτη ἐβδομήκοντα καὶ πέντε.

Ὅνος δὲ τριακοντάμηνος ὀχεύει καὶ ὀχεύεται. Οὐ μέντοι γεννῶσί γ' ὥς ἐπὶ τὸ πολὺ ἄλλ' ἢ τριετῆς ἢ τριετῆς καὶ ἐξάμηνος. Ἦδη δὲ καὶ ἐνιαυσία ἐκύησεν ὥστε καὶ ἐκτραφῆναι. Καὶ βοῦς ἐνιαυσία ἔτεκεν ὥστε καὶ ἐκτραφῆναι· καὶ τὸ μέγεθος ηὔξηθη ὅσον ἔμελλε, καὶ οὐκέτι. Αἱ μὲν οὖν ἀρχαὶ τοῖς ζώοις τούτοις τῆς γεννήσεως τοῦτον ἔχουσι τὸν τρόπον.

Γεννᾷ δ' ἄνθρωπος μὲν τὸ ἔσχατον μέχρι ἐβδομήκοντα ἐτῶν ὁ ἄρρην, γυνὴ δὲ μέχρι πενήκοντα. Ἀλλὰ τοῦτο μὲν σπάνιον· ὀλίγοις γὰρ γεννᾶται ἐν ταύταις ταῖς ἡλικίαις τέκνα· ὥς δ' ἐπὶ τὸ πολὺ τοῖς μὲν πέντε καὶ ἐξήκοντα ὅρος, ταῖς δὲ πέντε καὶ τετταράκοντα.

Πρόβατον δὲ τίκει μέχρι ἐτῶν ὀκτώ, ἐὰν δὲ θεραπεύηται καλῶς, καὶ μέχρι ἑνδεκα· σχεδὸν δὲ διὰ βίου (546a.) συμβαίνει ὀχεύειν καὶ ὀχεύεσθαι ἀμφοτέροις. Οἱ δὲ τράγοι πίονες ὄντες ἦττον γόνιμοί εἰσιν (ἀφ' ὧν καὶ τὰς ἀμπέλους, ὅταν μὴ φέρωσι, τραγᾶν καλοῦσιν), ἀλλὰ παρισχαινόμενοι δύνανται ὀχεύοντες γεννᾶν. Ὀχεύουσι δ' οἱ κριοὶ τὰς πρεσβυτάτας πρῶτον, τὰς δὲ νέας οὐ διώκουσιν. Τίκτουσι δ', ὥσπερ εἴρηται ἐν τοῖς πρότερον, αἱ νέαι ἐλάττω τὰ ἔκγονα τῶν πρεσβυτέρων.

Κάπρος δ' ἀγαθὸς μὲν ὀχεύειν μέχρι ἐπὶ τριετές, τῶν δὲ πρεσβυτέρων χεῖρω τὰ ἔκγονα· οὐ γὰρ ἔτι γίνεται αὐτῷ ἐπίδοσις οὐδὲ ῥώμη. Ὀχεύειν δ' εἴωθε χορτασθεῖς καὶ μὴ προβιβάσας ἄλλην· εἰ δὲ μή, ὀλιγοχροنيωτέρα ἢ ὀχεία γίνεται καὶ μικρότερα τὰ ἔκγονα.

Τίκει δ' ἐλάχιστα μὲν ὕς, ὅταν ἦ πρωτοτόκος· δευτεροτόκος δ' οὕσα ἀκμάζει· γηράσκουσα δὲ τίκει μὲν ὁμοίως, ὀχεύεται δὲ βραδύτερον· ὅταν δὲ πεντεκαιδεκαετεῖς ὣσιν, οὐκέτι γεννῶσιν ἀλλὰ γραῖαι γίνονται. Ἐὰν δ' εὐτραφῆς ἦ, θᾷπτον ὀρμᾷ πρὸς τὰς ὀχείας καὶ νέας καὶ γηράσκουσα· ἔγκυος δ' οὕσα ἐὰν παίνεται σφόδρα, ἔλαττον ἴσχει τὸ γάλα μετὰ τὸν τόκον. Τὰ δ' ἔκγονα κατὰ μὲν τὴν ἡλικίαν βέλτιστα <ᾶ> ἐν ἀκμῇ, κατὰ δὲ τὰς ὥρας, ὅσα τοῦ χειμῶνος ἀρχομένου γίνεται· χεῖριστα δὲ τὰ θερινά· καὶ γὰρ μικρὰ καὶ λεπτὰ καὶ ὑγρά. Ὁ δ' ἄρρην, ἐὰν μὲν εὐτραφῆς ἦ, πᾶσαν ὥραν ὀχεύειν δύνανται, καὶ μεθ' ἡμέραν καὶ νύκτωρ· εἰ δὲ μή, μάλιστα τό γ' ἔωθεν· καὶ γηράσκων ἦττον αἰεὶ, ὥσπερ εἴρηται καὶ πρότερον. Πολλάκις δ' οἱ ἀδύνατοι ἢ διὰ τὴν ἡλικίαν ἢ δι' ἀσθένειαν, οὐ δυνάμενοι ταχέως ὀχεύειν, κατακλινομένης τῆς θηλείας διὰ τὸ κάμνειν τῇ στάσει συγκατακλιθέντες πλησιάζουσιν. Κυῖσκεται δὲ μάλιστα ἢ ὕς, ἐπειδὴν θυῶσα καταβάλλῃ τὰ ὦτα·

εἰ δὲ μή, ἀναθυᾷ πάλιν.

Αἱ δὲ κύνες ὀχεύονται οὐ διὰ βίου ἀλλὰ μέχρι τινὸς ἀκμῆς ὥς μὲν οὖν ἐπὶ τὸ πολὺ μέχρι ἐτῶν δώδεκα αἶ τ' ὀχεῖται συμβαίνουσι καὶ αἱ κυήσεις αὐτῶν· οὐ μὴν ἀλλ' ἤδη τισὶ καὶ ὀκτωκαίδεκα ἔτη γεγονόσι καὶ εἴκοσι συνέβη καὶ θηλείαις ὀχευθῆναι καὶ ἄρρεσι γεννῆσαι. Ἀφαιρεῖται δὲ καὶ τὸ γῆρας ὥστε μὴ γεννᾶν μηδὲ τίκτειν, καθάπερ καὶ (546b.) ἐπὶ τῶν ἄλλων.

Ἡ δὲ κάμηλός ἐστι μὲν ὀπισθοθηρτικόν, καὶ ὀχεύεται ὥσπερ εἴρηται πρότερον· τῆς δ' ὀχείας ὁ χρόνος ἐν τῇ Ἀραβίᾳ κατὰ τὸν Μαιμακτηριῶνα μῆνα. Κύει δὲ δώδεκα μῆνας, τίκτει δ' ἕν· ἔστι γὰρ μονοτόκον. Ἀρχεται δὲ τῆς ὀχείας ἡ θήλεια τριετῆς οὔσα καὶ ὁ ἄρρην τριετῆς ὢν· μετὰ δὲ τὸν τόκον ἐν ἔτος διαλιποῦσα ὀχεύεται ἡ θήλεια.

Ὁ δ' ἐλέφας ἀρχεται μὲν βαίνεισθαι ὁ μὲν νεώτατος δέκ' ἐτῶν, ὁ δὲ πρεσβύτατος πεντεκαίδεκα· ὁ δ' ἄρρην βαίνει πεντέτης ὢν ἢ ἑξέτης. Χρόνος δὲ τῆς ὀχείας τὸ ἔαρ. Πάλιν δὲ βαίνει μετὰ τὴν ὀχείαν διὰ τρίτου ἔτους· ὃν δ' ἂν ἐγκύμονα ποιήσῃ, τούτου πάλιν οὐχ ἄπτεται. Κύει δ' ἔτη δύο, τίκτει δ' ἕν· ἔστι γὰρ μονοτόκον· τὸ δ' ἔμβρυον γίνεται ὅσον μόσχος δίμηνος ἢ τρίμηνος.

## Κεφάλαιο 15

Περὶ μὲν οὖν τῆς ὀχείας τῶν ζώων τῶν ὀχευομένων τοῦτον ἔχει τὸν τρόπον. Περὶ δὲ τῆς γενέσεως καὶ τῶν ὀχευομένων καὶ τῶν ἀνοχεύτων λεκτέον, καὶ πρῶτον περὶ τῶν ὀστρακοδέρμων· τοῦτο γάρ ἐστιν ἀνόχευτον μόνον ὥς εἰπεῖν ὅλον τὸ γένος. Αἱ μὲν οὖν πορφύραι τοῦ ἔαρος συναθροιζόμεναι εἰς ταῦτό ποιοῦσι τὴν καλουμένην μελίκηραν. Τοῦτο δ' ἐστὶν οἶον κηρίον, πλὴν οὐχ οὕτω γλαφυρόν, ἀλλ' ὥσπερ ἂν εἰ ἐκ λεπυρίων ἐρεβίνθων λευκῶν πολλὰ συμπαγείῃ. Οὐκ ἔχει δ' ἀνεωγμένον πόρον οὐδὲν τούτων, οὐδὲ γίνονται ἐκ τούτων αἱ πορφύραι, ἀλλὰ φύονται καὶ αὗται καὶ τᾶλλα τὰ ὀστρακόδερμα ἐξ ἰλύος καὶ συσσήψεως. Τοῦτο δὲ συμβαίνει ὥσπερ ἀποκάθαρμα καὶ ταύταις καὶ τοῖς κήρυξιν· κηριάζουσι γὰρ καὶ οἱ κήρυκες. Γίνονται μὲν οὖν καὶ τὰ κηριάζοντα τῶν ὀστρακοδέρμων τὸν αὐτὸν τρόπον τοῖς ἄλλοις ὀστρακοδέρμοις, οὐ μὴν ἀλλὰ μᾶλλον ὅταν προϋπάρχῃ τὰ ὁμοιογενῆ· ἀφιδῶσι γὰρ ἀρχόμενα κηριάζειν γλισχρότητα μυξώδη, ἐξ ἧς τὰ λεπυριώδη συνίσταται. Ταῦτα μὲν οὖν ἅπαντα διαχεῖται, ἀφίησι δ' ὃ εἶχεν εἰς τὴν γῆν· καὶ ἐν τούτῳ τῷ τόπῳ γίνεται ἐν τῇ γῇ συστάντα πορφύρια μικρά, ἃ ἔχουσαι ἀλίσκονται αἱ πορφύραι ἐφ' αὐτῶν, ἕνια δ' οὐπω διηκριβωμένα (547a.) τὴν μορφήν. Ἐὰν δὲ πρὶν ἐκτεκεῖν ἀλῶσιν, ἐνίοτε ἐν ταῖς φορμίσιν οὐχ ὅπου ἔτυχεν ἐκτίκτουσιν,

ἄλλ' εἰς ταὐτὸ ἰοῦσαι, ὥσπερ καὶ ἐν τῇ θαλάττῃ, καὶ διὰ τὴν στενοχωρίαν γίνονται οἷονεὶ βότρυς.

Εἰσὶ δὲ τῶν πορφυρῶν γένη πλείω, καὶ ἔναι μὲν μεγάλα, οἷον αἱ περὶ τὸ Σίγειον καὶ Λεκτόν, αἱ δὲ μικραί, οἷον ἐν τῷ Εὐρίπῳ καὶ περὶ τὴν Καρίαν, καὶ αἱ μὲν ἐν τοῖς κόλποις μεγάλα καὶ τραχεῖαι, καὶ τὸ ἄνθος αὐτῶν αἱ μὲν πλεῖσται μέλαν ἔχουσιν, ἔναι δ' ἐρυθρὸν καὶ μικρόν. Γίνονται δ' ἔναι τῶν μεγάλων καὶ μναῖαι· αἱ δ' ἐν τοῖς αἰγιαλοῖς καὶ περὶ τὰς ἀκτὰς τὸ μὲν μέγεθος γίνονται μικραί, τὸ δ' ἄνθος ἐρυθρὸν ἔχουσιν. Ἔτι δ' ἐν μὲν τοῖς προσβορείοις μέλαιναι, ἐν δὲ τοῖς νοτίοις ἐρυθραὶ ὥς ἐπὶ τὸ πλεῖστον εἶπεῖν. Ἀλίσκονται δὲ τοῦ ἔαρος, ὅταν κηριάζωσιν· ὑπὸ κύνα δ' οὐχ ἀλίσκονται· οὐ γὰρ νέμονται, ἀλλὰ κρύπτουσιν ἑαυτὰς καὶ φωλοῦσιν. Τὸ δ' ἄνθος ἔχουσιν ἀνὰ μέσον τῆς μήκωνος καὶ τοῦ τραχήλου· τούτων δ' ἐστὶν ἡ σύμφυσις πυκνή, τὸ δὲ χρῶμα ἰδεῖν ὥσπερ ὑμὴν λευκός, ὃν ἀφαιροῦσιν· θλιβόμενος δὲ βάπτει καὶ ἀνθίζει τὴν χεῖρα. Διατείνει δ' αὐτὴν οἷον φλέψ· τοῦτο δὲ δοκεῖ εἶναι τὸ ἄνθος.

Ἡ δ' ἄλλη φύσις οἷον στυπτηρία. Ὅταν δὲ κηριάζωσιν αἱ πορφύραι, τότε χεῖριστον ἔχουσι τὸ ἄνθος. Τὰς μὲν οὖν μικρὰς μετὰ τῶν ὀστράκων κόπτουσιν· οὐ γὰρ ῥᾶδιον ἀφελεῖν· τῶν δὲ μειζόνων περιελόντες τὸ ὄστρακον ἀφαιροῦσι τὸ ἄνθος.

Διὸ καὶ χωρίζεται ὁ τράχηλος καὶ ἡ μήκων· μεταξὺ γὰρ τούτων τὸ ἄνθος, ἐπάνω τῆς καλουμένης κοιλίας· ἀφαιρεθέντος οὖν ἀνάγκη διηρῆσθαι. Σπουδάζουσι δὲ ζώσας κόπτειν· ἐὰν γὰρ πρότερον ἀποθάνῃ, συνεξεμεῖ τὸ ἄνθος· διὸ καὶ φυλάττουσιν ἐν τοῖς κύρτοις, ἕως ἂν ἀθροίσωσι καὶ σχολάσωσιν. Οἱ μὲν οὖν ἀρχαῖοι πρὸς τοῖς δελέασιν οὐ καθίεσαν οὐδὲ προσῆπτον τοὺς κύρτους, ὥστε συνέβαινεν ἀνεσπασμένην ἤδη πολλάκις ἀποπίπτειν· οἱ δὲ νῦν προσάπτουσιν, ὅπως ἐὰν ἀποπέσῃ, μὴ ἀπολλύηται. Μάλιστα δ' ἀποπίπτει, ἐὰν πλήρης ᾖ· κενῆς δ' οὔσης καὶ ἀποσπᾶσαι χαλεπόν. Ταῦτα μὲν οὖν τὰ (547b.) συμβαίνοντα ἴδια περὶ τὰς πορφύρας ἐστίν.

Τὸν αὐτὸν δὲ τρόπον γίνονται ταῖς πορφύραις καὶ οἱ κήρυκες, καὶ τὴν αὐτὴν ὥραν. Ἔχουσι δὲ καὶ τὰ ἐπικαλύμματα κατὰ ταῦτὰ ἀμφοτέρω, καὶ τᾶλλα τὰ στρομβώδη, ἐκ γενετῆς ἅπαντα· νέμονται δ' ἐξείροντα τὴν καλουμένην γλώτταν ὑπὸ τὸ κάλυμμα. Τὸ δὲ μέγεθος τῆς γλώττης ἔχει ἡ πορφύρα μείζον δακτύλου, ὧν νέμεται καὶ διατρυπᾷ τὰ κογχύλια καὶ τὸ αὐτῆς ὄστρακον.

Ἔστι δὲ καὶ ἡ πορφύρα καὶ ὁ κήρυξ ἀμφοτέρω μακρόβια· ζῆ γὰρ ἡ πορφύρα

περὶ ἔτη ἕξ, καὶ καθ' ἕκαστον ἐνιαυτὸν φανερά ἐστιν ἡ αὕξησις τοῖς διαστήμασι τοῖς ἐν τῷ ὀστράκῳ τῆς ἑλίκος.

Κηριάζουσι δὲ καὶ οἱ μύες. Τὰ δὲ λιμνόστρεα καλούμενα, ὅπου ἂν βόρβορος ᾖ, ἐνταῦθα συνίσταται πρῶτον αὐτῶν ἡ ἀρχή. Αἱ δὲ κόγχαι καὶ αἱ χῆμαι καὶ οἱ σωλῆνες καὶ οἱ κτένες ἐν τοῖς ἀμμώδεσι λαμβάνουσι τὴν σύστασιν. Αἱ δὲ πίνναι ὀρθαὶ φύονται ἐκ τοῦ βυσσοῦ ἐν τοῖς ἀμμώδεσι καὶ βορβορώδεσιν. Ἐχουσι δ' ἐν αὐταῖς πιννοφύλακα, αἱ μὲν καρίδιον αἱ δὲ καρκίνιον· οὐ στερισκόμενα διαφθείρονται θᾶπτον. Ὅλως δὲ πάντα τὰ ὀστρακώδη γίνεται ἐν τῇ ἰλύϊ καὶ αὐτόματα, κατὰ τὴν διαφορὰν τῆς ἰλύος ἕτερα, ἐν μὲν τῇ βορβορώδει τὰ ὄστρεα, ἐν δὲ τῇ ἀμμώδει κόγχαι καὶ τὰ εἰρημένα, περὶ δὲ τὰς σήραγγας τῶν πετριδίων τήθουα καὶ βάλανοι καὶ τὰ ἐπιπολάζοντα, οἷον αἱ λεπάδες καὶ οἱ νηρεῖται. Ἄπαντα μὲν οὖν τὰ τοιαῦτα τὴν αὕξησιν ἔχει ταχεῖαν, μάλιστα δ' αἱ τε πορφύραι καὶ οἱ κτένες· ταῦτα γὰρ ἐν ἐνιαυτῷ γίνεται τέλεια.

Ἐμφύονται δ' ἐν ἐνίοις τῶν ὀστρακοδέρμων καρκίνοι λευκοί, τὸ μέγεθος μικροὶ πάνπαν, πλεῖστοι μὲν ἐν τοῖς μυσὶ τοῖς πυελώδεσιν, ἔπειτα καὶ ἐν ταῖς πίνναις οἱ καλούμενοι πιννοτῆραι. Γίνονται δὲ καὶ ἐν τοῖς κτεσὶ καὶ ἐν τοῖς λιμνοστρέοις· αὕξησιν δ' ἐπίδηλον οὐδεμίαν οὗτοι λαμβάνουσιν. Φασὶ δ' αὐτοὺς οἱ ἄλιεῖς ἅμα συγγίνεσθαι γινομένοις. Ἀφανίζονται δὲ τινα χρόνον ἐν τῇ ἄμμῳ καὶ οἱ κτένες, ὥσπερ καὶ αἱ πορφύραι.

Φύεται μὲν οὖν τὰ ὄστρεα καθάπερ εἴρηται, φύεται δὲ τὰ μὲν αὐτῶν (548a.) ἐν τοῖς τενάγεσι, τὰ δ' ἐν τοῖς αἰγιαλοῖς, τὰ δ' ἐν τοῖς πηλώδεσι τόποις, ἕνια δ' ἐν τοῖς σκληροῖς καὶ τραχέσι, τὰ δ' ἐν τοῖς ἀμμώδεσιν. Καὶ τὰ μὲν μεταβάλλει τοὺς τόπους, τὰ δ' οὐ. Τῶν δὲ μὴ μεταβαλλόντων αἱ μὲν πίνναι ἐρρίζωνται, οἱ δὲ σωλῆνες καὶ αἱ κόγχαι ἀρρίζωτοι διαμένουσιν· ὅταν δ' ἀνασπασθῶσιν, οὐκέτι δύνανται ζῆν.

Ὁ δὲ καλούμενος ἀστὴρ οὕτω θερμός ἐστι τὴν φύσιν, ὥσθ' ὅ τι ἂν λάβῃ, παραχρῆμα ἐξαιρούμενον δίεφθον εἶναι. Φασὶ δὲ καὶ σίνος μέγιστον εἶναι τοῦτο ἐν τῷ εὐρίπῳ τῷ τῶν Πυρραίων. Τὴν δὲ μορφὴν ὅμοιον ἐστι τοῖς γραφομένοις.

Γίνονται δὲ καὶ οἱ κανούμενοι πνεύμονες αὐτόματοι. Ὡς δ' οἱ γραφεῖς ὀστρέω χρῶνται, πάχει τε πολὺ ὑπερβάλλει, καὶ ἔξωθεν τοῦ ὀστράκου τὸ ἄνθος ἐπιγίνεται· εἰσὶ δὲ τὰ τοιαῦτα μάλιστα περὶ τοὺς τόπους τοὺς περὶ Καρίαν.

Τὸ δὲ καρκίνιον γίνεται μὲν τὴν ἀρχὴν ἐκ τῆς γῆς καὶ ἰλύος, εἴτ' εἰς τὰ κενὰ τῶν ὀστράκων εἰσδύεται, καὶ αὐξανόμενον μετεισδύνει πάλιν εἰς ἄλλο μεῖζον ὄστρακον, οἷον εἷς τε τὸ τοῦ νηρείτου καὶ τὸ τοῦ στρόμβου καὶ τὸ τῶν ἄλλων τῶν τοιούτων, πολλάκις δ' εἰς τοὺς κήρυκας τοὺς μικροὺς. Ὅταν δ' εἰσδύσῃ, συμπεριφέρει τοῦτο καὶ ἐν τούτῳ τρέφεται πάλιν· καὶ αὐξανόμενον πάλιν εἰς ἄλλο μετεισδύνει μεῖζον.

## Κεφάλαιο 16

Τὸν αὐτὸν δὲ τρόπον γίνονται τοῖς ὀστρακοδέρμοις καὶ τὰ μὴ ἔχοντα ὄστρακον, οἷον αἱ τε κνῖδαι καὶ οἱ σπόγγοι, ἐν ταῖς σήραγξι τῶν πετρῶν. Ἔστι δὲ τῶν κνιδῶν δύο γένη· αἱ μὲν οὖν ἐν τοῖς κοίλοις οὐκ ἀπολύονται τῶν πετρῶν, αἱ δ' ἐπὶ τοῖς λείοις καὶ πλαταμώδεσιν ἀπολυόμεναι μεταχωροῦσιν. Καὶ αἱ λεπάδες δ' ἀπολύονται καὶ μεταχωροῦσιν.

Τῶν δὲ σπόγγων ἐν ταῖς θαλάμαις γίνονται πιννοφύλακες.

Ἔπεστι δ' οἷον ἀράχνιον ἐπὶ τῶν θαλαμῶν, ὃ διοίγοντες καὶ συνάγοντες θηρεύουσι τὰ ἰχθύδια τὰ μικρά, πρὸς μὲν τὸ εἰσελθεῖν διοίγοντες αὐτά, ὅταν δ' εἰσέλθῃ, συνάγοντες. Ἔστι δὲ τῶν σπόγγων τρία γένη, ὃ μὲν μανός, ὃ δὲ πυκνός, (548b.) τρίτος δ' ὃν καλοῦσιν Ἀχίλλειον λεπτότατος καὶ πυκνότατος καὶ ἰσχυρότατος· ὃν ὑπὸ τὰ κράνη καὶ τὰς κνημίδας ὑποτιθέασι, καὶ ἦττον ἢ πληγὴ ψοφεῖ. Σπανιώτατος δὲ γίνεται οὗτος. Τῶν δὲ πυκνῶν οἱ σκληροὶ σφόδρα καὶ τραχεῖς τράγοι καλοῦνται. Φύονται δ' ἢ πρὸς πέτρα πάντες ἢ ἐν ταῖς θισί, τρέφονται δ' ἐν τῇ ἰλύϊ. Σημεῖον δέ· ὅταν γὰρ ληφθῶσι, φαίνονται μεστοὶ ἰλύος· ὅπερ συμβαίνει καὶ τοῖς ἄλλοις τοῖς φυομένοις ἀπὸ τῆς προσφύσεως οὔσα ἢ τροφή. Ασθενέστεροι δ' εἰσὶν οἱ πυκνοὶ τῶν μανῶν διὰ τὸ τὴν πρόσφυσιν εἶναι κατ' ἔλαττον.

Ἔχει δὲ καὶ αἴσθησιν, ὡς φασίν. Σημεῖον δέ· ἐὰν γὰρ μέλλοντος ἀποσπᾶν αἴσθηται, συνάγει ἑαυτὸν καὶ χαλεπὸν ἀφελεῖν ἐστίν. Ταῦτόν δὲ τοῦτο ποιεῖ καὶ ὅταν ἡ πνεῦμα πολὺ καὶ κλύδων, πρὸς τὸ μὴ ἀποπίπτειν. Εἰσὶ δὲ τινες οἱ περὶ τούτου ἀμφισβητοῦσιν, ὥσπερ οἱ ἐν Τορώνῃ.

Τρέφει δ' ἐν ἑαυτῷ ζῶα, ἔλμινθάς τε καὶ ἕτερ' ἄττα, ἃ κατεσθίει, ὅταν ἀποσπασθῇ, τὰ ἰχθύδια τὰ πετραῖα, καὶ τὰς ῥίζας τὰς ὑπολοιπούς· ἐὰν δ' ἀπορραγῇ, φύεται πάλιν ἐκ τοῦ καταλοίπου καὶ ἀναπληροῦται. Μέγιστοι μὲν οὖν γίνονται οἱ μανοί, καὶ πλεῖστοι περὶ τὴν Λυκίαν, μαλακώτατοι δ' οἱ πυκνοί· οἱ γὰρ Ἀχίλλειοι στιφρότεροι τούτων εἰσίν. Ὅλως δ' οἱ ἐν τοῖς βαθέσι

καὶ εὐδαινοῖς μαλακώτατοί εἰσιν· τὸ γὰρ πνεῦμα καὶ ὁ χειμὼν σκληρύνει, καθάπερ καὶ τὰλλα τὰ φυόμενα, καὶ ἀφαιρεῖται τὴν αὔξησιν· διὸ καὶ οἱ ἐν Ἑλλησπόντῳ τραχεῖς εἰσι καὶ πυκνοί, καὶ ὅλως οἱ τ' ἐπέκεινα Μαλέας καὶ οἱ ἐντὸς διαφέρουσι μαλακότητι καὶ σκληρότητι. Δεῖ δὲ μὴδ' ἀλέαν εἶναι σφόδρα· σήπεται γάρ, ὥσπερ τὰ φυόμενα. Διὸ οἱ πρὸς ταῖς ἀκταῖς εἰσι κάλλιστοι, ἂν ὧσιν ἀγχιβαθεῖς· εὖ γὰρ κέκранται πρὸς ἄμφω διὰ τὸ βάθος. Ἄπλυτοι δ' ὄντες καὶ ζῶντες ἰδεῖν μὲν εἰσι μέλανες. Ἡ δὲ πρόσφυσις ἐστὶν οὔτε καθ' ἐν οὔτε κατὰ πᾶν· μεταξὺ γὰρ εἰσι πόροι κενοί. Περιτέταται δ' ὥσπερ ὑμὴν περὶ τὰ κάτω· κατὰ (549a.) πλείω δ' ἐστὶν ἡ πρόσφυσις. Ἄνωθεν δ' οἱ μὲν ἄλλοι πόροι συγκεκλεισμένοι, φανεροὶ δ' εἰσὶ τέτταρες ἢ πέντε· διό φασιν ἔνιοι τούτους εἶναι καθ' οὓς δέχεται τὴν τροφήν.

Ἔστι δ' ἄλλο γένος ὃ καλοῦσιν ἀπλυσίας διὰ τὸ μὴ δύνασθαι πλύνεσθαι· τοῦτο δὲ τοὺς μὲν μεγάλους πόρους ἔχει, τὸ δ' ἄλλο πυκνὸν ἐστὶ πᾶν· διατμηθὲν δὲ πυκνότερόν ἐστι καὶ γλισχρότερον τοῦ σπόγγου, καὶ τὸ σύνολον πνευμονῶδες. Ὁμολογεῖται δὲ μάλιστα παρὰ πάντων τοῦτο τὸ γένος αἰσθῆσιν ἔχειν καὶ πολυχρόνιον εἶναι. Διάδηλοι δ' εἰσὶν ἐν τῇ θαλάττῃ πρὸς τοὺς σπόγγους τῷ τοὺς σπόγγους μὲν εἶναι λευκοὺς ἐφίζούσης τῆς ἰλύος, τούτους δ' ἀεὶ μέλανας. Τὰ μὲν οὖν περὶ τοὺς σπόγγους καὶ τὴν τῶν ὀστρακοδέρμων γένεσιν τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 17

Τῶν δὲ μαλακοστράκων οἱ κάραβοι μετὰ τὴν ὀχείαν κύουσι καὶ ἴσχουσι τὰ ὠὰ περὶ τρεῖς μῆνας, Σκιρροφοριῶνα καὶ Ἑκατομβαιῶνα καὶ Μεταγειτνιῶνα· μετὰ δὲ ταῦτα προεκτίκτουσιν ὑπὸ τὴν κοιλίαν εἰς τὰς πτύχας, καὶ αὐξάνεται αὐτῶν τὰ ὠὰ ὥσπερ οἱ σκώληκες. Τὸ δ' αὐτὸ τοῦτο καὶ ἐπὶ τῶν μαλακίων ἐστὶ καὶ τῶν ἰχθύων, ὅσοι ὠοτοκοῦσιν· αὐξάνεται γὰρ πάντων τὸ ὠόν. Τὸ μὲν οὖν ὠὸν γίνεται ψαθυρὸν τῶν καράβων, διηρημένον εἰς ὀκτὼ μοίρας. Καθ' ἕκαστον γὰρ τῶν ἐπικαλυμμάτων τῶν ἐκ τοῦ πλαγίου πεφυκότων ἐστὶ χονδρῶδές τι πρὸς ὃ περιφύεται, καὶ τὸ ὅλον γίνεται ὥσπερ βότρυς· σχίζεται γὰρ ἕκαστον εἰς πλείω τῶν χονδρωδῶν. Ταῦτα δὲ διαστέλλοντι μὲν γίνεται φανερά, προσβλέποντι δὲ συνεστηκός τι φαίνεται· καὶ γίνεται δὲ μέγιστα οὐ τὰ πρὸς τῷ πόρῳ ἀλλὰ τὰ κατὰ μέσον, ἐλάχιστα δὲ τὰ ἔσχατα. Τὸ δὲ μέγεθος τῶν ὠῶν τῶν μικρῶν ἐστὶν ἡλίκον κεγχραμῖς. Οὐκ ἔστι δ' εὐθύς ἐχόμενα τοῦ πόρου, ἀλλὰ κατὰ μέσον· ἐκατέρωθεν γὰρ ἀπὸ τῆς κέρκου καὶ ἀπὸ τοῦ θώρακος δύο διαστήματα ἐπέχει μάλιστα· οὕτω γὰρ καὶ τὰ ἐπικαλύμματα πέφυκεν. Αὐτὰ μὲν οὖν τὰ ἐκ τοῦ πλαγίου οὐ δύναται συμπεριλαμβάνειν, τοῦ δ' ἄκρου προσεπιτεθέντος καλύπτει πάντα, καὶ γίνεται τοῦτ' αὐτοῖς οἶον

πῶμα. Ἔοικε (549b.) δὲ τὰ ὡὰ τίκτουσα προσάγειν πρὸς τὰ χονδρώδη τῷ πλάτει τῆς κέρκου προσαναπτυττομένης, καὶ προσπιέσασα εὐθὺς καὶ κεκαμμένη ἀποτίκτειν. Τὰ δὲ χονδρώδη κατὰ τοὺς καιροὺς τούτους αὐξάνεται καὶ δεκτικὰ γίνεται τῶν ὡῶν· πρὸς τὰ χονδρώδη γὰρ ἀποτίκτουσι, καθάπερ αἱ σηπίαι πρὸς τὰ κλήματα καὶ τὸν φορυτόν. Ἀποτίκτει μὲν οὖν τοῦτον τὸν τρόπον, συμπέψασα δ' ἐνταῦθα μάλιστα ἐν εἴκοσιν ἡμέραις ἀποβάλλει συνεστηκὸς καὶ ἀθρόον, ὥσπερ φαίνεται καὶ ἐκτός· εἴτ' ἐκ τούτων γίνονται οἱ κάραβοι ἐν ἡμέραις μάλιστα πεντεκαίδεκα, καὶ λαμβάνονται πολλάκις ἐλάττους ἢ δακτυλιαῖοι. Προεκτίκτει μὲν οὖν πρὸ ἄρκτούρου, μετὰ δ' ἄρκτοῦρον ἀποβάλλει τὰ ὡά. Τῶν δὲ κυφῶν καρίδων ἡ κύησις ἐστὶ περὶ τέτταρας μῆνας.

Γίνονται δ' οἱ μὲν κάραβοι ἐν τοῖς τραχέσι καὶ πετρώδεσιν, οἱ δ' ἀστακοὶ ἐν τοῖς λείοις· ἐν δὲ τοῖς πηλώδεσιν οὐδέτεροι· διὸ καὶ ἐν Ἑλλησπόντῳ μὲν καὶ περὶ Θάσον ἀστακοὶ γίνονται, περὶ δὲ τὸ Σίγειον καὶ τὸν Ἀθων κάραβοι. Διασημαίνονται δὲ τοὺς τόπους οἱ ἀλιεῖς τοὺς τε τραχεῖς καὶ τοὺς πηλώδεις ταῖς τ' ἀκταῖς καὶ τοῖς ἄλλοις τοῖς τοιούτοις σημείοις, ὅταν βούλωνται ἐν τῷ πελάγει ποιεῖσθαι τὴν θήραν. Γίνονται δ' ἐν μὲν τῷ χειμῶνι καὶ τῷ ἔαρι πρὸς τῇ γῇ μᾶλλον, τοῦ δὲ θέρους ἐν τῷ πελάγει, διώκοντα ὅτε μὲν τὴν ἀλέαν ὅτε δὲ τὸ ψῦχος.

Τοῖς δὲ χρόνοις παραπλησίως καὶ αἱ καλούμεναι ἄρκτοι τίκτουσι τοῖς καράβοις· διὸ καὶ τοῦ χειμῶνος καὶ πρὶν ἐκτεκεῖν τοῦ ἔαρος ἄρισταί εἰσιν, ὅταν δ' ἐκτέκωσι, χεῖρισται.

Ἐκδύνουσι δὲ τὸ κέλυφος τοῦ ἔαρος, ὥσπερ οἱ ὄφεις τὸ καλούμενον γῆρας, καὶ εὐθὺς γενόμενοι καὶ ὕστερον καὶ οἱ καρκίνοι καὶ οἱ κάραβοι. Εἰσὶ δ' οἱ κάραβοι μακρόβιοι πάντες.

## Κεφάλαιο 18

Τὰ δὲ μαλάκια ἐκ τοῦ συνδυασμοῦ καὶ τῆς ὀχείας ὡὸν ἴσχει λευκόν· τοῦτο δὲ γίνεται τῷ χρόνῳ, ὥσπερ τὰ τῶν σκληροδέρμων, ψαθυρόν. Καὶ ἀποτίκτει ὁ μὲν πολύπους εἰς τὰς θαλάμας ἢ εἰς κεράμιον ἢ τι ἄλλο κοῖλον ὅμοιον βοστρυχίοις οἰνάνθης καὶ λεύκης καρπῷ, καθάπερ εἴρηται πρότερον. Ἐκκρεμάννυνται δὲ περὶ τὴν θαλάμην τὰ ὡά, ὅταν (550a.) ἐκτέκη. Τὸ δὲ πλῆθος ἔχει τοσαῦτα ὡὰ ὥστ' ἐξαيرهθέντων ἐμπίπλται ἀγγεῖον πολλῷ μεῖζον τῆς κεφαλῆς, ἐν ᾗ ἔχει τὰ ὡά.

Τὰ μὲν οὖν τῶν πολυπόδων μεθ' ἡμέρας μάλιστα πεντήκοντα γίνεται ἐκ τῶν



ἀπορραγέντων πολυπόδια, καὶ ἐξέρπει, ὥσπερ τὰ φαλάγγια, πολλὰ τὸ πλῆθος· ὧν ἡ μὲν καθ' ἕκαστα φύσις τῶν μελῶν οὐπω διάδηλος, ἡ δ' ὅλη μορφή φανερά. Διὰ δὲ τὴν μικρότητα καὶ τὴν ἀσθένειαν φθείρεται τὸ πλῆθος αὐτῶν. Ἦδη δ' ὥπται καὶ οὕτω πάμπαν μικρὰ ὥστ' ἀδιάρθρωτα μὲν εἶναι, ἀπτομένων δὲ κινεῖσθαι.

Αἱ δὲ σηπία ἀποτίκτουσι, καὶ γίνεται ὅμοια μύρτοις μεγάλοις καὶ μέλασιν· καὶ ἀλλήλων ἐχόμενά ἐστιν, οἷον βότρυς τὸ πᾶν, περιπελεγμένα τινὲ ἐνί, καὶ οὐκ εὐαπόσπαστα ἀλλήλων. Ἐπαφίησι γὰρ ὁ ἄρρην ὑγρότητά τινα μυζώδη· ὃ τὴν γλισχρότητα παρέχει. Καὶ αὐξάνεται δὲ ταῦτα τὰ ῥά, καὶ εὐθύς μὲν ἐστὶ λευκά, ὅταν δ' ἀφῇ τὸν θορόν, καὶ μείζω καὶ μέλανα. Ὅταν δὲ σηπίδιον γένηται, ὅλον ἐκ τοῦ λευκοῦ γενόμενον ἔσω, τούτου περιρραγέντος ἐξέρχεται. Γίνεται δ' ὅταν πρῶτον ἀπορράνη ἡ θήλεια, οἶονεὶ χάλαζα· ἐκ γὰρ τούτου τὸ σηπίδιον φύεται ἐπὶ κεφαλὴν, ὥσπερ οἱ ὄρνιθες κατὰ τὴν κοιλίαν προσηρτημένοι. Ποία δὲ τίς ἐστὶν ἡ πρόσφυσις ἡ ὀμφαλώδης, οὐπω ὥπται, πλὴν ὅτι αὐξανομένου τοῦ σηπιδίου αἰεὶ ἔλαττον γίνεται τὸ λευκόν, καὶ τέλος, ὥσπερ τὸ ὠχρὸν τοῖς ὄρνισι, τούτοις τὸ λευκὸν ἀφανίζεται. Μέγιστοι δὲ φαίνονται πρῶτον, ὥσπερ καὶ ἐν τοῖς ἄλλοις, καὶ ἐν τούτοις οἱ ὀφθαλμοί. Ὡς ἐφ' οὗ τὸ Α, ὀφθαλμοὶ ἐφ' ὧν τὸ ΒΓ, τὸ σηπίδιον αὐτὸ ἐφ' οὗ Δ.

Κύει δὲ τοῦ ἔαρος, ἀποτίκτει δ' ἐν ἡμέραις πεντεκαίδεκα· ὅταν δ' ἀποτέκη τὰ ῥά, γίνεται ἐν ἄλλαις πεντεκαίδεκα ἡμέραις οἷον ῥάγες βότρυς, ὧν περιρραγέντων ἐκδύεται ἔσωθεν τὰ σηπίδια. Ἐὰν δὲ τις περισχίσῃ πρότερον ἤδη τετελειωμένων, προῖενται κόπρον τὰ σηπίδια, καὶ τὸ χρῶμα μεταβάλλει ἐρυθρότερον γινόμενον ἐκ λευκοῦ διὰ τὸν φόβον.

Τὰ μὲν οὖν μαλακόστρακα αὐτὰ (550b.) ὑφ' αὐτὰ θέμενα τὰ ῥά ἐπωάζει, ὃ δὲ πολύπους καὶ ἡ σηπία καὶ τᾶλλα τὰ τοιαῦτα ἐκτεκόντα, οὗ ἂν τὰ κυήματα αὐτῶν ᾗ, μάλιστα μὲν ἡ σηπία· πολλάκις γὰρ ὑπερφαίνεται πρὸς τῇ γῇ τὸ κύτος αὐτῆς. Ὁ δὲ πολύπους ὁ θῆλυς ὅτε μὲν ἐπὶ τοῖς ῥαῖς ὅτε δ' ἐπὶ τῷ στόματι προκάθηται τῆς θαλάμης, τὴν πλεκτάνην ἐπέχων. Ἡ δὲ σηπία πρὸς τὴν γῆν ἐκτίκτει περὶ τὰ φυκία καὶ τὰ καλαμώδη, καὶ τι ἢ τοιοῦτον ἐκβεβλημένον, οἷον ὕλη <ἢ> κλήματα ἢ λίθοι· καὶ οἱ ἀλιεῖς δὲ κλήματα τιθέασιν ἐπίτηδες· καὶ πρὸς ταῦτα ἐκτίκτει μακρὸν καὶ συνεχὲς ἐκ τῶν ῥαῖν, οἷον τὸ τῶν βοστρύχων.

Ἀποτίκτει δὲ καὶ ἀπορραίνει ἐξ ἀναγωγῆς, ὡς μετὰ πόνου γινομένης τῆς προέσεως. Αἱ δὲ τευθίδες πελάγιοι ἀποτίκτουσιν· τὸ δ' ῥόν, ὥσπερ ἡ σηπία, ἀποτίκτει συνεχές. Ἔστι δὲ καὶ ὁ τεῦθος καὶ ἡ σηπία βραχύβιον· οὐ γὰρ

διετίζουσιν, εἰ μή τινες ὀλίγοι αὐτῶν· ὁμοίως δὲ καὶ οἱ πολύποδες. Γίνεται δ' ἐξ ἑνὸς ὠοῦ ἕν σηπίδιον· ὁμοίως δὲ καὶ ἐπὶ τῶν τευθίδων ἔχει. Διαφέρει δ' ἡ ἄρρην τευθὶς τῆς θηλείας· ἔχει γὰρ ἡ θήλεια, ἐάν τις διαστείλας θεωρήσῃ τὴν κόμην εἴσω, ἐρυθρὰ δύο οἶον μαστούς, ὃ δ' ἄρρην οὐκ ἔχει. Ἡ δὲ σηπία τοῦτο τ' ἔχει διάφορον, καὶ ὅτι ποικιλώτερός ἐστὶν ὁ ἄρρην τῆς θηλείας, καθάπερ εἴρηται πρότερον.

## Κεφάλαιο 19

Τὰ δ' ἔντομα τῶν ζώων ὅτι μὲν ἐλάττω ἐστὶ τὰ ἄρρενα τῶν θηλειῶν καὶ ἐπιβαίνει ἄνωθεν, καὶ πῶς ποιεῖται τὴν ὀχείαν, καὶ ὅτι διαλύεται μόλις, εἴρηται πρότερον· ὅταν δ' ὀχευθῇ, ταχέως ποιεῖται τὰ πλεῖστα τὸν τόκον. Τίκει δὲ πάντα ὅσα ὀχεύεται σκώληκας πλὴν γένος τι ψυχῶν· αὗται δὲ σκληρόν, ὅμοιον κνήκου σπέρματι, ἔσω δὲ χύμα.

Ἐκ δὲ τῶν σκωλήκων οὐκ ἐκ μέρους τινὸς γίνεται τὸ ζῶον, ὥσπερ ἐκ τῶν ὤων, ἀλλ' ὅλον αὐξάνεται καὶ διαρθρούμενον γίνεται τὸ ζῶον.

Γίνεται δ' αὐτῶν τὰ μὲν ἐκ ζώων τῶν συγγενῶν, οἶον φαλάγγια τε καὶ ἀράχνια ἐκ φαλαγγίων καὶ ἀραχνίων, καὶ ἀττέλαβοι καὶ ἀκρίδες καὶ τέττιγες· τὰ δ' (551a.) οὐκ ἐκ ζώων ἀλλ' αὐτόματα, τὰ μὲν ἐκ τῆς δρόσου τῆς ἐπὶ τοῖς φύλλοις πιπτούσης, κατὰ φύσιν μὲν ἐν τῷ ἔαρι, πολλάκις δὲ καὶ τοῦ χειμῶνος, ὅταν εὐδία καὶ νοτία γένηται πλείω χρόνον· τὰ δ' ἐν βορβόρῳ καὶ κόπρῳ σηπομένοις, τὰ δ' ἐν ξύλοις, τὰ μὲν φυτῶν, τὰ δ' ἐν αὖοις ἤδη, τὰ δ' ἐν θριξὶ ζώων, τὰ δ' ἐν σαρκὶ τῶν ζώων, τὰ δ' ἐν τοῖς περιττώμασι, καὶ τούτων τὰ μὲν ἐκκεχωρισμένων, τὰ δ' ἔτι ὄντων ἐν τοῖς ζώοις, οἶον αἱ καλούμεναι ἔλμινθες. Ἔστι δ' αὐτῶν γένη τρία, ἢ τε ὀνομαζομένη πλατεῖα, καὶ αἱ στρογγύλαι, καὶ τρίται αἱ ἀσκαρίδες. Ἐκ μὲν οὖν τούτων ἕτερον οὐδὲν γίνεται· ἡ δὲ πλατεῖα προσπέφυκε τε μόνη τῷ ἐντέρῳ καὶ ἀποτίκει οἶον σικύου σπέρμα, ὧ γινώσκουσι σημείῳ οἱ ἱατροὶ τοὺς ἔχοντας αὐτήν.

Γίνονται δ' αἱ μὲν καλούμεναι ψυχαὶ ἐκ τῶν καμπῶν, αἱ γίνονται ἐπὶ τῶν φύλλων τῶν χλωρῶν, καὶ μάλιστα ἐπὶ τῆς ῥαφάνου, ἣν καλοῦσιν τινες κράμβην, πρῶτον μὲν ἔλαττον κέγχρου, εἶτα μικροὶ σκώληκες αὐξανόμενοι, ἔπειτα ἐν τρισὶν ἡμέραις κάμπαι μικραὶ· μετὰ δὲ ταῦτα αὐξηθεῖσαι ἀκινητίζουσι, καὶ μεταβάλλουσι τὴν μορφήν, καὶ καλοῦνται χρυσαλλίδες, καὶ σκληρόν ἔχουσι τὸ κέλυφος, ἀπτομένου δὲ κινεῖνται. Προσέχονται δὲ πόροις ἀραχνιώδεσιν οὔτε στόμα ἔχουσιν οὔτ' ἄλλο τῶν μορίων διάδηλον οὐδέν. Χρόνου δ' οὐ πολλοῦ διελθόντος περιρρήγνυται τὸ κέλυφος, καὶ ἐκπέτεται ἐξ

αὐτῶν περωτὰ ζῶα, ἃς καλοῦμεν ψυχάς. Τὸ μὲν οὖν πρῶτον, ὅταν ὦσι κάμπαι, τρέφονται καὶ περίττωμα ἀφίᾳσιν· ὅταν δὲ γένωνται χρυσαλλίδες, οὐδενὸς οὔτε γεύονται οὔτε προΐενται περίττωμα. Τὸν αὐτὸν δὲ τρόπον καὶ τᾶλλα ὅσα γίνεται ἐκ σκωλήκων, καὶ ὅσοι ἐκ συνδυασμοῦ γίνονται ζώων σκώληκες, καὶ ὅσοι ἄνευ ὀχείας. Καὶ γὰρ οἱ τῶν μελιττῶν καὶ ἀνθρηνῶν καὶ σφηκῶν ὅταν μὲν νέοι σκώληκες ὦσι, (551b.) τρέφονται τε καὶ κόπρον ἔχοντες φαίνονται· ὅταν δ' ἐκ τῶν σκωλήκων εἰς τὴν διατύπωσιν ἔλθωσι, καλοῦνται μὲν νύμφαι τότε, οὐ λαμβάνουσι δὲ τρυφὴν οὐδὲ κόπρον ἔτ' ἔχουσιν, ἀλλὰ περιειργμένοι ἀκινήτιζουσιν ἕως ἂν αὐξηθῶσιν· τότε δ' ἐξέρχονται διακόψαντες ὥ καταλήλειπται ὁ κύτταρος. Γίνονται δὲ καὶ τὰ ὑπερα καὶ τὰ πηνία ἐκ τινων τοιούτων ἄλλων, αἱ κυμαίνουσι τῇ πορείᾳ καὶ προβάσαι τῷ ἑτέρῳ κάμψασαι ἐπιβαίνουσιν· ἕκαστον δὲ τῶν γινομένων τὸ οἰκεῖον χρῶμα λαμβάνει ἀπὸ τῆς κάμπης.

Ἐκ δὲ τινος σκώληκος μεγάλου, ὃς ἔχει οἶον κέρατα καὶ διαφέρει τῶν ἄλλων, γίνεται πρῶτον μὲν μεταβάλλοντος τοῦ σκώληκος κάμπη, ἔπειτα βομβυλῖς, ἐκ δὲ τούτου νεκύδαλος· ἐν ἑξ δὲ μηνὶ μεταβάλλει ταύτας τὰς μορφὰς πάσας. Ἐκ δὲ τούτου τοῦ ζώου καὶ τὰ βομβύκια ἀναλύουσι τῶν γυναικῶν τινὲς ἀναπηνιζόμεναι, κᾷπειτα ὑφαίνουσιν· πρώτη δὲ λέγεται ὑφῆναι ἐν Κῶ Παμφίλῃ Πλάτew θυγάτηρ.

Ἐκ δὲ τῶν σκωλήκων τῶν ἐν τοῖς ξύλοις τοῖς αὔοις οἱ καράμβιοι γίνονται τὸν αὐτὸν τρόπον· πρῶτον μὲν ἀκινήτισάντων τῶν σκωλήκων, εἴτα περιρραγέντος τοῦ κελύφους ἐξέρχονται οἱ καράμβιοι. Ἐκ δὲ τῶν κραμβῶν ... γίνονται αἱ πρασοκουρίδες· ἴσχουσι δὲ περὰ καὶ αὐταί. Ἐκ δὲ τῶν ἐν τοῖς ποταμοῖς πλατέων ζωδαρίων τῶν ἐπιθεόντων οἱ οἷστροι· διὸ καὶ οἱ πλεῖστοι περὶ τὰ ὕδατα γίνονται οὐ τὰ τοιαῦτα ζῶα ἐστίν. Ἐκ δὲ μελαινῶν τινων καὶ δασειῶν οὐ μεγάλων καμπῶν πρῶτον γίνονται πυγολαμπίδες, οὐχ αἱ πετόμεναι· αὗται δὲ πάλιν μεταβάλλουσι, καὶ γίνονται περωτὰ ζῶα ἐξ αὐτῶν, οἱ καλούμενοι βόστρυχοι.

Αἱ δ' ἐμπίδες γίνονται ἐκ τῶν ἀσκαρίδων. Αἱ δ' ἀσκαρίδες γίνονται ἐν τε τῇ ἰλύϊ τῶν φρεάτων καὶ ὅπου ἂν σύρρευσις γένηται ὕδατος γεώδη ἔχουσα ὑπόστασιν. Τὸ μὲν οὖν πρῶτον αὐτὴ ἡ ἰλὺς σηπομένη χρῶμα λαμβάνει λευκόν, εἴτα (552a.) μέλαν, τελευτῶσα δ' αἱματῶδες· ὅταν δὲ τοιαύτη γένηται, φύεται ἐξ αὐτῆς ὥσπερ τὰ φυκία μικρὰ σφόδρα καὶ ἐρυθρά· ταῦτα δὲ χρόνον μὲν τινα κινεῖται προσπεφυκότα, ἔπειτ' ἀπορραγέντα φέρεται κατὰ τὸ ὕδωρ, αἱ καλούμεναι ἀσκαρίδες. Μεθ' ἡμέρας δ' ὀλίγας ἴστανται ὀρθαὶ ἐπὶ τοῦ ὕδατος ἀκινήτιζουσαι καὶ σκληραί, κᾷπειτα περιρραγέντος τοῦ κελύφους ἡ

ἐμπὶς ἄνω ἐπικάθηται, ἕως ἂν ἥλιος ἢ πνεῦμα κινήσῃ· τότε δ' ἤδη πέτεται. Πᾶσι δὲ καὶ τοῖς ἄλλοις σκώληξι καὶ τοῖς ζώοις τοῖς ἐκ τῶν σκωλήκων περιρρηγνυμένοις ἡ ἀρχὴ γίνεται τῆς γενέσεως ὑφ' ἡλίου ἢ ὑπὸ πνεύματος. Μᾶλλον δὲ καὶ θᾶττον γίνονται αἱ ἀσκαρίδες ἐν τοῖς ἔχουσι παντοδαπὴν ὑπόστασιν, οἷον ἐν μαγειρείοις τε γίνεται καὶ ἐν τοῖς ἔργοις· σήπεται γὰρ τὰ τοιαῦτα θᾶττον. Καὶ μετοπώρου δὲ γίνονται μᾶλλον· τότε γὰρ τὸ ὑγρὸν συμβαίνει εἶναι ἔλαττον.

Οἱ δὲ κρότῳνες γίνονται ἐκ τῆς ἀγρώστεως, αἱ δὲ μηλολόνθαι ἐκ τῶν σκωλήκων τῶν ἐν τοῖς βολίτοις καὶ τῶν ὀνίδων. Οἱ δὲ κάνθαροι ἦν κυλίουσι κόπρον, ἐν ταύτῃ φωλοῦσί τε τὸν χειμῶνα καὶ ἐντίκτουσι σκωλήκια, ἐξ ὧν γίνονται κάνθαροι. Γίνονται δὲ καὶ ἐκ τῶν σκωλήκων τῶν ἐν τοῖς ὀσπρίοις πτερωτὰ ζῶα ὁμοίως τοῖς εἰρημένοις.

Αἱ δὲ μυῖαι ἐκ τῶν σκωλήκων τῶν ἐν τῇ κόπρῳ τῇ χωριζομένη κατὰ μέρος· διὸ καὶ οἱ περὶ ταύτην τὴν ἐργασίαν ὄντες μηχανῶνται χωρίζειν τὴν ἄλλην τὴν μεμιγμένην, καὶ λέγουσι τότε κατειργάσθαι τὴν κόπρον. Ἡ δ' ἀρχὴ τῶν σκωληκίων μικρά· πρῶτον μὲν γὰρ καὶ ἐνταῦθα ἐρυθραίνεται καὶ ἐξ ἀκινήσιας λαμβάνει κίνησιν οἷον πεφυκότα· εἴτα σκωλήκιον ἀποβαίνει ἀκίνητον· εἴτα κινηθὲν ὕστερον γίνεται ἀκίνητον πάλιν· ἐκ δὲ τούτου μυῖα ἀποτελεῖται, καὶ κινεῖται πνεύματος ἢ ἡλίου γενομένου. Οἱ δὲ μύωπες γίνονται ἐκ τῶν ξύλων. Αἱ δ' ὀρσοδάκναι ἐκ τῶν σκωληκίων μεταβαλλόντων· τὰ δὲ σκωλήκια ταῦτα γίνεται ἐν τοῖς καυλοῖς τῆς κράμβης. Αἱ (552b.) δὲ κανθαρίδες ἐκ τῶν πρὸς ταῖς συκαῖς καμπῶν καὶ ταῖς ἀπίοις καὶ ταῖς πεύκαις (πρὸς πᾶσι γὰρ τούτοις γίνονται σκώληκες) καὶ ἐκ τῶν ἐν τῇ κυνακάνθῃ· ὀρμῶσι δὲ καὶ πρὸς τὰ δυσώδη διὰ τὸ ἐκ τοιαύτης γεγονέναι ὕλης. Οἱ δὲ κώνωπες ἐκ σκωλήκων οἳ γίνονται ἐκ τῆς περὶ τὸ ὄξος ἰλύος· καὶ γὰρ ἐν τοῖς δοκοῦσιν ἀσηπτοτάτοις εἶναι ἐγγίνονται ζῶα, οἷον ἐν χιόνι τῇ παλαιᾷ. Γίνεται δ' ἡ παλαιὰ ἐρυθροτέρα, διὸ καὶ οἱ σκώληκες τοιοῦτοι καὶ δασεῖς· οἱ δ' ἐκ τῆς ἐν Μηδίᾳ χιόνος μεγάλοι καὶ λευκοί· δυσκίνητοι δὲ πάντες. Ἐν δὲ Κύπρῳ, οὗ ἡ χαλκῖτις λίθος καίεται, ἐπὶ πολλὰς ἡμέρας ἐμβαλλόντων, ἐνταῦθα γίνεται θηρία ἐν τῷ πυρί, τῶν μεγάλων μυῶν μικρόν τι μείζονα, ὑπόπτερα, ἃ διὰ τοῦ πυρὸς πηδᾷ καὶ βαδίζει. Ἀποθνήσκουσι δὲ καὶ οἱ σκώληκες καὶ ταῦτα χωριζόμενα τὰ μὲν τοῦ πυρός, οἱ δὲ τῆς χιόνος. Ὅτι δ' ἐνδέχεται καὶ μὴ καίεσθαι συστάσεις τινὰς ζώων, ἢ σαλαμάνδρα ποιεῖ φανερόν· αὕτη γάρ, ὡς φασί, διὰ τοῦ πυρὸς βαδίζουσα κατασβέννυσι τὸ πῦρ.

Περὶ δὲ τὸν Ὑπανιν ποταμὸν τὸν περὶ Βόσπορον τὸν Κιμμέριον ὑπὸ τροπᾶς θερινᾶς καταφέρονται ὑπὸ τοῦ ποταμοῦ οἷον θύλακοι μείζους ῥαγῶν, ἐξ ὧν

ρήγνουμένων ἐξέρχεται ζῶον περωτὸν τετράπουν· ζῆ δὲ καὶ πέτεται μέχρι δειλῆς, καταφερομένου δὲ τοῦ ἡλίου ἀπομαραίνεται, καὶ ἅμα δυομένου ἀποθνήσκει βιώσαν ἡμέραν μίαν, διὸ καὶ καλεῖται ἐφήμερον.

Τὰ πλεῖστα δὲ τῶν γινομένων ἔκ τε καμπῶν καὶ σκωλήκων ὑπὸ ἀραχνίων κατέχεται τὸ πρῶτον. Ταῦτα μὲν οὖν γίνεται τοῦτον τὸν τρόπον.

## Κεφάλαιο 20

Οἱ δὲ σφῆκες οἱ ἰχνεύμονες καλούμενοι (εἰσὶ δ' ἐλάττους τῶν ἐτέρων) τὰ φαλάγγια ἀποκτείναντες φέρουσι πρὸς τειχίον ἢ τι τοιοῦτον τρώγλην ἔχον, καὶ πηλῶ προσκαταλείψαντες ἐντίκτουσιν ἐνταῦθα, καὶ γίνονται ἐξ αὐτῶν οἱ σφῆκες οἱ ἰχνεύμονες. Ἐνια δὲ τῶν κολεοπτέρων καὶ μικρῶν καὶ ἀνωνύμων ζώων τοῦ πηλοῦ τρώγλας ποιοῦνται (553a.) μικρὰς ἢ πρὸς τάφοις ἢ τειχίοις, καὶ ἐνταῦθα τὰ σκωλήκια ἐντίκτουσιν.

Ὁ δὲ χρόνος τῆς γενέσεως ἀπὸ μὲν τῆς ἀρχῆς μέχρι τοῦ τέλους σχεδὸν τοῖς πλείστοις ἐπτάσι μετρεῖται τρισὶν ἢ τέτταρσιν. Τοῖς μὲν οὖν σκώληξι καὶ τοῖς σκωληκοειδέσι τοῖς πλείστοις τρεῖς γίνονται ἐπτάδες, τοῖς δ' ὠτοκοῦσι τέτταρες ὡς ἐπὶ τὸ πολὺ. Τούτων δ' ἀπὸ μὲν τῆς ὀχείας ἐν ταῖς ἐπτά ἢ σύστασις γίνεται, ἐν δὲ ταῖς λοιπαῖς τρισὶν ἐπωάζουσι καὶ ἐκλέπουσιν ὅσα γόνω τίκεται, οἷον ὑπ' ἀράχνου ἢ ἄλλου τινὸς τοιούτου. Αἱ δὲ μεταβολαὶ γίνονται τοῖς πλείστοις κατὰ τριήμερον ἢ τετραήμερον, ὥσπερ καὶ αἱ τῶν νόσων συμβαίνουσι κρίσεις.

Τῶν μὲν οὖν ἐντόμων οὗτος ὁ τρόπος ἐστὶ τῆς γενέσεως· φθείρονται δ' ἐρρικνωμένων τῶν μορίων, ὥσπερ γήρᾳ τὰ μείζω τῶν ζώων· ὅσα δὲ περωτά, καὶ τῶν περῶν συσπωμένων περὶ τὸ μετόπωρον· οἱ δὲ μύωπες καὶ τῶν ὀμμάτων ἐξυδρωπιόντων.

## Κεφάλαιο 21

Περὶ δὲ τὴν γένεσιν τὴν τῶν μελιττῶν οὐ τὸν αὐτὸν τρόπον πάντες ὑπολαμβάνουσιν. Οἱ μὲν γὰρ φασιν οὐ τίκειν οὐδ' ὀχεύεσθαι τὰς μελίττας, ἀλλὰ φέρειν τὸν γόνον, καὶ φέρειν οἱ μὲν ἀπὸ τοῦ ἄνθους τοῦ καλλύντρου, οἱ δ' ἀπὸ τοῦ ἄνθους τοῦ καλάμου, ἄλλοι δ' ἀπὸ τοῦ ἄνθους τῆς ἐλαίας· καὶ σημεῖον λέγουσιν ὅτι, ἂν ἐλαιῶν φορὰ γένηται, τότε καὶ ἐσμοὶ ἀφίενται πλεῖστοι. Οἱ δὲ φασι τὸν μὲν τῶν κηφήνων γόνον αὐτὰς φέρειν ἀπὸ τινος ὕλης τῶν προειρημένων, τὸν δὲ τῶν μελιττῶν τίκειν τοὺς ἡγεμόνας. Τῶν δ'

ἡγεμόνων ἐστὶ γένη δύο, ὁ μὲν βελτίων πυρρός, ὁ δ' ἕτερος μέλας καὶ ποικιλώτερος, τὸ δὲ μέγεθος διπλάσιος τῆς χρηστῆς μελίττης· τὸ δὲ κάτω τοῦ διαζώματος ἔχουσιν ἡμιόλιον μάλιστα τῷ μήκει, καὶ καλοῦνται ὑπὸ τινων μητέρες ὡς γεννῶντες. Σημεῖον δὲ λέγουσιν ὅτι ὁ μὲν τῶν κηφῆνων ἐγγίνεται γόνος κἂν μὴ ἐνῇ ἡγεμών, ὁ δὲ τῶν μελιττῶν οὐκ ἐγγίνεται. Οἱ δὲ φασιν ὀχεύεσθαι, καὶ εἶναι ἄρρενας μὲν (553b.) τοὺς κηφῆνας, θηλείας δὲ τὰς μελίττας.

Ἔστι δὲ τῶν μὲν ἄλλων ἡ γένεσις ἐν τοῖς κοίλοις τοῦ κηρίου, οἱ δὲ γ' ἡγεμόνες γίνονται κάτω πρὸς τῷ κηρίῳ, ἀποκρεμάμενοι χωρίς, ἐξ ἧ ἑπτά, ἐναντίως τῷ ἄλλῳ γόνῳ πεφυκότες. Κέντρον δ' αἱ μὲν μέλιτται ἔχουσιν, οἱ δὲ κηφῆνες οὐκ ἔχουσιν· οἱ δὲ βασιλεῖς καὶ ἡγεμόνες ἔχουσι μὲν κέντρον, ἀλλ' οὐ τύπτουσι, διὸ ἔνιοι οὐκ οἶονται ἔχειν αὐτούς.

## Κεφάλαιο 22

Εἰσὶ δὲ γένη τῶν μελιττῶν, ἡ μὲν ἀρίστη μικρὰ καὶ στρογγύλη καὶ ποικίλη, ἄλλη δὲ μακρά, ὁμοία τῇ ἀνθρώπῳ, τρίτος δ' ὁ φῶρ καλούμενος (οὗτος δ' ἐστὶ μέλας καὶ πλατυγαστῶρ), τέταρτος δ' ὁ κηφῆν, μεγέθει μὲν μέγιστος ἀπάντων, ἄκεντρος δὲ καὶ νωθρός· διὸ καὶ πλέκουσί τινες περὶ τὰ σμήνη ὥστε τὰς μὲν μελίττας εἰσδύεσθαι, τοὺς δὲ κηφῆνας μὴ διὰ τὸ εἶναι αὐτοὺς μείζους.

Ἡγεμόνων δὲ γένη δύο ἐστίν, ὥσπερ εἴρηται καὶ πρότερον. Εἰσὶ δὲ πλείους ἐν ἐκάστῳ σμήνῃ ἡγεμόνες, καὶ οὐχ εἷς μόνος· ἀπόλλυται δὲ τὸ σμήνος, ἂν τε ἡγεμόνες μὴ ἱκανοὶ ἐνῶσιν (οὐχ οὕτω διὰ τὸ ἄναρχοι εἶναι, ἀλλ' ὥς φασίν, ὅτι συμβάλλονται εἰς τὴν γένεσιν τὴν τῶν μελιττῶν) ἂν τε πολλοὶ ὦσιν οἱ ἡγεμόνες· διασπῶσι γάρ.

Ὅταν μὲν οὖν ἕαρ ὄψιον γένηται, καὶ ὅταν αὐχμοὶ καὶ ἐρυσίβη, ἐλάττων γίνεται ὁ γόνος· ἀλλ' αὐχμοῦ μὲν ὄντος μέλι ἐργάζονται μᾶλλον, ἐπομβρίας δὲ γόνον, διὸ καὶ ἅμα συμβαίνει ἐλαιῶν φορὰ καὶ ἐσμῶν.

Ἐργάζονται δὲ πρῶτον μὲν τὸ κηρίον, εἴτα τὸν γόνον ἐναφιᾷσιν, ὡς μὲν ἔνιοι λέγουσιν, ἐκ τοῦ στόματος, ὅσοι φέρειν φασὶν ἄλλοθεν, εἴθ' οὕτω τὸ μέλι τροφήν τὴν μὲν τοῦ θέρους τὴν δὲ τοῦ μετοπώρου· ἄμεινον δ' ἐστὶ τὸ μετοπωρινὸν μέλι. Γίνεται δὲ κηρίον μὲν ἐξ ἀνθέων, κήρωσιν δὲ φέρουσιν ἀπὸ τοῦ δακρύου τῶν δένδρων, μέλι δὲ τὸ πῖπτον ἐκ τοῦ ἀέρος, καὶ μάλιστα ἐν ταῖς τῶν ἄστρον ἐπιτολαῖς, καὶ ὅταν κατασκήψῃ ἡ ἥλιος· ὅλως δ' οὐ γίνεται

μέλι πρὸ Πλειάδος ἐπιτολῆς.

Τὸ μὲν οὖν κηρίον ποιεῖ, ὥσπερ εἴρηται, ἐκ τῶν ἀνθέων· τὸ δὲ μέλι ὅτι οὐ (554a.) ποιεῖ, ἀλλὰ φέρει τὸ πῖπτον, σημεῖον· ἐν μιᾷ γὰρ ἡ δυσὶν ἡμέραις πλήρη εὐρίσκουσι τὰ σμήνη οἱ μελιττουργοὶ μέλιτος. Ἔτι δὲ τοῦ μετοπώρου ἄνθη μὲν γίνεται, μέλι δ' οὐ, ὅταν ἀφαιρεθῇ. Ἀφηρημένου οὖν ἤδη τοῦ γενομένου μέλιτος, καὶ τροφῆς ἡ οὐκ ἐνούσης ἔτι ἡ σπανίας, ἐνεγίνετο ἄν, εἴπερ ἐποίουν ἐκ τῶν ἀνθέων.

Συνίσταται δὲ τὸ μέλι πεττόμενον· ἐξ ἀρχῆς γὰρ οἶον ὕδωρ γίνεται, καὶ ἐφ' ἡμέρας μὲν τινὰς ὑγρὸν ἐστὶ (διὸ κἂν ἀφαιρεθῇ ἐν ταύταις ταῖς ἡμέραις, οὐκ ἔχει πάχος), ἐν εἴκοσι δὲ μάλιστα συνίσταται.

Δῆλον δ' ἐστὶν εὐθέως τὸ ἀπὸ τοῦ χυμοῦ· διαφέρει γὰρ τῇ γλυκύτητι καὶ τῷ πάχει. Φέρει δ' ἀπὸ πάντων ἢ μέλιττα ὅσα ἐν κάλυκι ἀνθεῖ, καὶ ἀπὸ τῶν ἄλλων δ' ὅσα ἂν γλυκύτητα ἔχῃ, οὐδένα βλάπτουσα καρπὸν· τοὺς δὲ χυμοὺς τούτων τῷ ὁμοίῳ τῇ γλώττῃ ἀναλαμβάνουσα κομίζει.

Βλίσσεται δὲ τὰ σμήνη, ὅταν ἐρινεὸν σῦκον φανῇ· σχάδονας δ' ἀρίστας ποιοῦσιν, ὅταν μέλι ἐργάζωνται. Φέρει δὲ κηρὸν μὲν καὶ ἐριθάκην περὶ τοῖς σκέλεσι, τὸ δὲ μέλι ἐμεῖ εἰς τὸν κύτταρον. Τὸν δὲ γόνον ὅταν ἀφῇ, ἐπωάζει ὥσπερ ὄρνις. Ἐν δὲ τῷ κηρίῳ τὸ σκωλήκιον μικρὸν μὲν ὃν κεῖται πλάγιον, ὕστερον δ' ἀνίσταται αὐτὸ ὑφ' ἑαυτοῦ καὶ τρέφεται, πρὸς δὲ τῷ κηρίῳ ἔχεται ὥστε καὶ ἀντειλῆφθαι. Ὁ δὲ γόνος ἐστὶ τῶν μελιττῶν καὶ τῶν κηφήνων λευκός, ἐξ οὗ τὰ σκωλήκια γίνεται· αὐξανόμενα δὲ γίνονται μέλιττα καὶ κηφῆνες. Ὁ δὲ τῶν βασιλέων γόνος τὴν χροάν γίνεται ὑπόπυρρος, τὴν δὲ λεπτότητά ἐστιν οἶον μέλι παχύ· τὸν δ' ὄγκον εὐθέως ἔχει παραπλήσιον τῷ γινομένῳ ἐξ αὐτοῦ.

Σκώληξ δ' οὐ γίνεται πρότερον ἐκ τούτου, ἀλλ' εὐθέως ἢ μέλιττα, ὡς φασίν. Ὅταν δὲ τέκη ἐν τῷ κηρίῳ, μέλι ἐκ τοῦ ἀπαντικρὺ γίνεται. Φύει δ' ἡ σχάδων πόδας καὶ πτερά, ὅταν καταλειφθῇ· ὅταν δὲ λάβῃ τέλος, τὸν ὑμένα (554b.) περιρρήξας ἐκπέταται. Κόπρον δὲ προΐεται, ἕως ἂν ἡ σκωλήκιον, ὕστερον δ' οὐκέτι, πλὴν ἔαν μὴ ἐξέλθῃ, ὥσπερ ἐλέχθη πρότερον.

Ἐὰν δέ τις ἀφέλῃ τὰς κεφαλὰς τῆς σχάδονος πρὶν πτερὰ ἔχειν, ἐξεσθίουσιν αὐταὶ αἱ μέλιττα· καὶ κηφήνος πτερόν ἂν ἀποκνίσας ἀφῇ τις, τῶν λοιπῶν αὐταὶ τὰ πτερὰ ἀπεσθίουσιν. Βίος δὲ τῶν μελιττῶν ἔτη ἕξ· ἔνια δ' ἐπὶ τὰ ζῶσιν. Σμῆνος δ' ἂν διαμείνῃ ἔτη ἐννέα ἢ δέκα, εὖ δοκεῖ διαγεγενῆσθαι.

Ἐν δὲ τῷ Πόντῳ εἰσὶ τινες μέλιτται λευκαὶ σφόδρα, αἱ τὸ μέλι ποιοῦσι δις τοῦ μηνός. Αἱ δ' ἐν Θεμισκύρᾳ περὶ τὸν Θερμώδοντα ποταμὸν ἐν τῇ γῇ καὶ ἐν τοῖς σμήνεσι ποιοῦσι κηρία οὐκ ἔχοντα κηρὸν πολὺν ἀλλὰ πάνυ σμικρόν, μέλι δὲ παχύ· τὸ δὲ κηρίον λεῖον καὶ ὁμαλὸν ἐστίν. Οὐκ ἀεὶ δὲ τοῦτο ποιοῦσιν, ἀλλὰ τοῦ χειμῶνος· ὁ γὰρ κιττὸς πολὺς ἐν τῷ Πόντῳ ἐστίν, ἀνθεῖ δὲ ταύτην τὴν ὥραν, ἀφ' οὗ φέρουσι τὸ μέλι. Κατάγεται δὲ καὶ εἰς Ἀμισὸν μέλι ἄνωθεν λευκὸν καὶ παχὺ σφόδρα, ὃ ποιοῦσιν αἱ μέλιτται ἄνευ κηρίων πρὸς τοῖς δένδρεσιν· γίνεται δὲ καὶ ἄλλοθι τοιοῦτον ἐν τῷ Πόντῳ. Εἰσὶ δὲ καὶ μέλιτται αἱ ποιοῦσι κηρία τριπλᾶ ἐν τῇ γῇ· ταῦτα δὲ μέλι μὲν ἴσχει, σκώληκας δ' οὐκ ἴσχει. Ἔστι δ' οὔτε τὰ κηρία πάντα τοιαῦτα, οὔτε πᾶσαι αἱ μέλιτται τοιαῦτα ποιοῦσιν.

## Κεφάλαιο 23

Αἱ δ' ἀνθρῆναι καὶ οἱ σφῆκες ποιοῦσι κηρία τῷ γόνῳ, ὅταν μὲν μὴ ἔχωσιν ἡγεμόνα ἄλλ' ἀποπλανηθῶσι καὶ μὴ εὐρίσκωσιν, αἱ μὲν ἀνθρῆναι ἐπὶ μετεώρου τινός, οἱ δὲ σφῆκες ἐν τρώγλαις, ὅταν δ' ἔχωσιν ἡγεμόνα, ὑπὸ γῆν. Ἐξάγωνα μὲν οὖν πάντα ἐστὶ τὰ κηρία αὐτῶν, ὥσπερ καὶ τὰ τῶν μελιττῶν, σύγκειται δ' οὐκ ἐκ κηροῦ ἀλλ' ἐκ φλοιώδους καὶ ἀραχνιώδους ὕλης τὸ κηρίον· γλαφυρώτερον δὲ πολλῷ τὸ τῶν ἀνθρηνῶν ἐστὶν ἢ τὸ τῶν σφηκῶν κηρίον. Ἐναφιᾶσι δὲ γόνον, ὥσπερ αἱ μέλιτται, ὅσον σταλαγμὸν εἰς τὸ πλάγιον (555a.) τοῦ κυττάρου, καὶ ἔχεται πρὸς τῷ τοίχῳ. Οὐχ ἅμα δὲ πᾶσι τοῖς κυττάροις ἔνεστι γόνος, ἀλλ' ἐνίοις μὲν ἤδη μεγάλα ἔνεστιν ὥστε καὶ πέτεσθαι, ἐνίοις δὲ νύμφαι, ἐν τοῖς δὲ σκώληκες ἔτι. Κόπρος δὲ μόνον περὶ τοῖς σκώληξιν, ὥσπερ καὶ ταῖς μελίτταις. Καὶ ἔστ' ἂν νύμφαι ὦσιν, ἀκίνητιζουσι καὶ ἐπαλήλιπται ὁ κύτταρος. Καταντικρὺ δ' ἐν τῷ κυττάρῳ τοῦ γόνου ὅσον σταλαγμὸς μέλιτος ἐγγίνεται ἐν τοῖς τῆς ἀνθρήνης κηρίοις. Γίνονται δ' αἱ σχάδονες οὐκ ἐν τῷ ἔαρι τούτων, ἀλλ' ἐν τῷ μετοπώρῳ· τὴν δ' αὔξησιν ἐπίδηλον λαμβάνουσι μάλιστ' ἐν ταῖς πανσελήνοις. Ἔχεται δὲ καὶ ὁ γόνος καὶ οἱ σκώληκες οὐ κάτωθεν τοῦ κυττάρου, ἀλλ' ἐκ τοῦ πλαγίου.

## Κεφάλαιο 24

Ἐνια δὲ τῶν βομβυλιοειδῶν πρὸς λίθῳ ἢ τοιούτῳ τινὶ ποιοῦσι πῆλινον ὀξύ, ὥσπερ σιάλῳ καταλείφοντα· τοῦτο δὲ σφόδρα καὶ παχὺ καὶ σκληρόν· λόγχῃ γὰρ μόλις διαιροῦσιν. Ἐνταῦθα δὲ τίκτουσι, καὶ γίνεται σκωλήκια λευκὰ ἐν ὑμένι μέλανι. Χωρὶς δὲ τοῦ ὑμένος ἐν τῷ πηλῷ ἐγγίνεται κηρός· οὗτος δ' ὁ κηρὸς πολὺ ἐστὶν ὠχρότερος τοῦ τῶν μελιττῶν.



## Κεφάλαιο 25

Όχεύονται δὲ καὶ οἱ μύρμηκες καὶ τίκτουσι σκωλήκια, ἃ οὐ προσπέφυκεν οὐδενί· αὐξανόμενα δὲ ταῦτα ἐκ μικρῶν καὶ στρογγύλων τὸ πρῶτον μακρὰ γίνεται καὶ διαρθροῦται· ἡ δὲ γένεσίς ἐστι τούτοις τοῦ ἕαρος.

## Κεφάλαιο 26

Τίκτουσι δὲ καὶ οἱ σκορπίοι οἱ χερσαῖοι σκωλήκια ὠοειδῆ πολλά, καὶ ἐπωάζουσιν. Ὅταν δὲ τελειωθῇ, ἐκβάλλονται, ὥσπερ οἱ ἀράχνη, καὶ ἀπόλλυνται ὑπὸ τῶν τέκνων· πολλάκις γὰρ γίνονται περὶ ἕνδεκα τὸν ἀριθμόν.

## Κεφάλαιο 27

Τὰ δ' ἀράχνη ὀχεύεται μὲν πάντα τὸν εἰρημένον τρόπον, γεννᾷ δὲ σκωλήκια μικρὰ πρῶτον· ὅλα γὰρ μεταβάλλοντα γίνεται ἀράχνη, καὶ οὐκ ἐκ μέρους, ἐπεὶ στρογγύλα ἐστὶ κατ' ἀρχάς· ὅταν δὲ τέκη, ἐπωάζει τε καὶ ἐν (555b.) τρισὶν ἡμέραις διαρθροῦται. Τίκει δὲ πάντα μὲν ἐν ἀραχνίῳ, ἀλλὰ τὰ μὲν ἐν λεπτῷ καὶ μικρῷ, τὰ δ' ἐν παχεῖ, καὶ τὰ μὲν ὅλως ἐν κύτει στρογγύλῳ, τὰ δὲ μέχρι τινὸς περιέχεται ὑπὸ τοῦ ἀραχνίου.

Οὐχ ἅμα δὲ πάντα <τὰ> ἀράχνη, γίνεται· πηδᾷ δ' εὐθὺς καὶ ἀφίησιν ἀράχνην. Ὁ δὲ χυμὸς ὅμοιος ἐν τοῖς σκώληξι θλιβομένοις καὶ ἐν αὐτοῖς νέοις οὔσι, παχὺς καὶ λευκός.

Αἱ δὲ λειμώναι ἀράχνη προαποτίκτουσιν εἰς ἀράχνην, οὗ τὸ μὲν ἥμισυ πρὸς αὐταῖς ἐστὶ, τὸ δ' ἥμισυ ἕξω· καὶ ἐν τούτῳ ἐπωάζουσαι ζωοποιοῦσιν. Τὰ δὲ φαλάγγια τίκει εἰς γύργαθον πλεξάμενα παχύν, ἐφ' ᾧ ἐπωάζουσιν. Τίκτουσι δ' αἱ μὲν γλαφυραὶ ἐλάττω τὸ πλῆθος, τὰ δὲ φαλάγγια πολὺ τὸ πλῆθος· καὶ αὐξηθέντα περιέχει κύκλῳ τὸ φαλάγγιον, καὶ ἀποκτείνει τὴν τεκοῦσαν ἐκβάλλοντα, πολλάκις δὲ καὶ τὸν ἄρρενα, ἐὰν λάβωσιν· συνεπωάζει γὰρ τῇ θηλείᾳ. Ἐνίστε δὲ τὸ πλῆθος γίνονται καὶ τριακόσια περὶ ἕν φαλάγγιον. Ἐκ δὲ μικρῶν τέλειοι οἱ ἀράχνη γίνονται περὶ τὰς ἐπτάδας τὰς τέτταρας.

## Κεφάλαιο 28

Αἱ δ' ἀκρίδες ὀχεύονται μὲν τὸν αὐτὸν τρόπον τοῖς ἄλλοις ἐντόμοις, ἐπιβαίνοντος τοῦ ἐλάττονος ἐπὶ τὸ μεῖζον (τὸ γὰρ ἄρρεν ἑλαττόν ἐστι), τίκτουσι δ' εἰς τὴν γῆν καταπήξασαι τὸν πρὸς τῇ κέρκῳ καυλόν, ὃν οἱ

ἄρρενες οὐκ ἔχουσιν.

Ἀθρόα δὲ τίκτουσι καὶ κατὰ τὸν αὐτὸν τόπον, ὥστε εἶναι καθαπερεὶ κηρίον. Εἴθ' ὅταν τέκωσιν, ἐνταῦθα γίνονται σκώληκες ὠοειδεῖς, οἱ περιλαμβάνονται ὑπὸ τινος γῆς λεπτῆς ὥσπερ ὑμένος· ἐκ ταύτης δ' ἐκπέττονται. Γίνεται δὲ μαλακὰ τὰ κυήματα οὕτως ὥστ' ἂν τις ἄψηται συνθλίβεσθαι. Ταῦτα δ' οὐκ ἐπιπολῆς ἀλλὰ μικρὸν ὑπὸ γῆς ἐστίν. Ὅταν δ' ἐκπεφθῶσιν, ἐκδύνουσιν ἐκ τοῦ γεοειδοῦς τοῦ περιέχοντος ἀκρίδες μικραὶ καὶ μέλαιναι· εἴτα περιρρήγνυται αὐταῖς τὸ δέρμα καὶ γίνονται εὐθὺς μείζους. Τίκτουσι δὲ λήγοντος τοῦ θέρους, (556a.) καὶ τεκοῦσαι ἀποθνήσκουσιν· ἅμα γὰρ τικτούσαις σκώληκες ἐγγίνονται περὶ τὸν τράχηλον. Καὶ οἱ ἄρρενες δ' ἀποθνήσκουσι περὶ τὸν αὐτὸν χρόνον. Ἐκδύνουσι δ' ἐκ τῆς γῆς τοῦ ἔαρος. Οὐ γίνονται δ' ἀκρίδες οὔτ' ἐν τῇ ὀρεινῇ οὔτ' ἐν τῇ λυπρᾷ, ἀλλ' ἐν τῇ πεδιάδι καὶ κατερρωγυίᾳ· ἐν ταῖς ῥωγμαῖς γὰρ ἐκτίκτουσιν. Διαμένει δὲ τὰ ὦα τὸν χειμῶνα ἐν τῇ γῇ· ἅμα δὲ τῷ θέρει γίνονται ἐκ τῶν περυσινῶν κυημάτων ἀκρίδες.

## Κεφάλαιο 29

Ὅμοίως δὲ τίκτουσι καὶ οἱ ἀπτέλαβοι, καὶ τεκόντες ἀποθνήσκουσιν. Φθείρεται δ' αὐτῶν τὰ ὦα ὑπὸ τῶν μετοπωρινῶν ὑδάτων, ὅταν πολλὰ γένηται· ἂν δ' αὐχμὸς συμβῇ, τότε γίνονται μᾶλλον πολλοὶ οἱ ἀπτέλαβοι διὰ τὸ μὴ φθίρεσθαι ὁμοίως, ἐπεὶ ἄτακτός γε δοκεῖ ἡ φθορὰ αὐτῶν, καὶ γίνεσθαι ὅπως ἂν τύχη.

## Κεφάλαιο 30

Τῶν δὲ τεττίγων γένη μέν ἐστι δύο, οἱ μὲν μικροί, οἱ πρῶτοι φαίνονται καὶ τελευταῖοι ἀπόλλυνται, οἱ δὲ μεγάλοι, [οἱ ἄδοντες] οἱ καὶ ὕστερον γίνονται καὶ πρότερον ἀπόλλυνται. Ὅμοίως δ' ἔν τε τοῖς μικροῖς καὶ τοῖς μεγάλοις οἱ μὲν διηρημένοι εἰσὶ τὸ ὑπόζωμα, οἱ ἄδοντες, οἱ δ' ἀδιαίρετοι, οἱ οὐκ ἄδοντες. Καλοῦσι δὲ τοὺς μὲν μεγάλους καὶ ἄδοντας ἀχέτας, τοὺς δὲ μικροὺς τεττιγόνια· ἄδουσι δὲ μικρὸν καὶ τούτων οἱ διηρημένοι.

Οὐ γίνονται δὲ τέττιγες ὅπου μὴ δένδρα ἐστίν· διὸ καὶ ἐν Κυρήνῃ οὐ γίνονται ἐν τῷ πεδίῳ, περὶ δὲ τὴν πόλιν πολλοί, μάλιστα δ' οὗ ἑλαῖαι· οὐ γὰρ γίνονται παλίνσκιοι. Ἐν γὰρ τοῖς ψυχροῖς οὐ γίνονται τέττιγες, διὸ οὐδ' ἐν τοῖς συσκίοις ἄλσεσιν.

Ὅχεύονται δ' ὁμοίως οἱ μεγάλοι ἀλλήλοις καὶ οἱ μικροί, ὕπτιοι συνδουζόμενοι πρὸς ἀλλήλους· ἐναφίησι δ' ὁ ἄρρην εἰς τὴν θήλειαν, ὥσπερ καὶ τᾶλλα ἔντομα. Ἔχει δὲ καὶ ἡ θήλεια αἰδοῖον ἐσχισμένον· θήλεια δ' ἐστὶν εἰς ἣν ἀφίησιν ὁ ἄρρην. Τίκτουσι δ' ἐν τοῖς ἀργοῖς, τρυπῶντες ὥ ἔχουσιν ὀπισθεν ὀξεῖ, καθάπερ καὶ οἱ (556b.) ἀττέλαβοι· καὶ γὰρ οἱ ἀττέλαβοι τίκτουσιν ἐν τοῖς ἀργοῖς, διὸ πολλοὶ ἐν τῇ Κυρηναίᾳ γίνονται. Ἐντίκτουσι δὲ καὶ ἐν τοῖς καλάμοις ἐν οἷς ἰστᾷσι τὰς ἀμπέλους, διατρυπῶντες τοὺς καλάμους, καὶ ἐν τοῖς τῆς σκίλλης καυλοῖς. Ταῦτα δὲ τὰ κυήματα καταρρεῖ εἰς τὴν γῆν.

Γίνονται δὲ πολλοὶ ὅταν ἐπομβρία γένηται. Ὁ δὲ σκώληξ αὐξηθεὶς ἐν τῇ γῇ γίνεται τεττιγομήτρα· καὶ εἰσὶ τότε ἥδιστοι, πρὶν περιρραγῆναι τὸ κέλυφος. Ὅταν δ' ἡ ὥρα ἔλθῃ περὶ τροπᾶς, ἐξέρχονται νύκτωρ, καὶ εὐθὺς ῥήγνυταί τε τὸ κέλυφος καὶ γίνονται τέττιγες ἐκ τῆς τεττιγομήτρας, καὶ γίνονται μέλανες καὶ σκληρότεροι εὐθὺς καὶ μείζους, καὶ ἄδουσιν. Εἰσὶ δ' ἄρρενες μὲν οἱ ἄδοντες ἐν ἀμφοτέροις τοῖς γένεσι, θήλεις δ' οἱ ἕτεροι. Καὶ τὸ μὲν πρῶτον ἡδίους οἱ ἄρρενες, μετὰ δὲ τὴν ὀχείαν αἱ θήλεια· ἔχουσι γὰρ ὥα λευκά. Ἀναπετόμενοι δ' ὅταν σοβήσῃ τις, ἀφιαῖσιν ὑγρὸν οἶον ὕδωρ, ὃ λέγουσιν οἱ γεωργοὶ ὡς κατουρούντων καὶ ἐχόντων περίττωμα καὶ τρεφομένων τῇ δρόσῳ.

Ἐὰν δέ τις κινῶν τὸν δάκτυλον προσίῃ ἀπ' ἄκρου ἐπικάμπτων τε καὶ ἐπεκτείνων πάλιν, μᾶλλον ὑπομένουσιν ἢ ἐὰν εὐθὺς ἐκτείνας, καὶ ἀναβαίνουσιν ἐπὶ τὸν δάκτυλον· διὰ τὸ ἀμυδρῶς γὰρ ὁρᾶν ὡς ἐπὶ φύλλον ἀναβαίνουσι κινούμενον.

## Κεφάλαιο 31

Τῶν δ' ἐντόμων ὅσα σαρκοφάγα μὲν μή ἐστι, ζῆ δὲ χυμοῖς σαρκὸς ζώσης, οἶον οἷ τε φθεῖρες καὶ αἱ ψύλλαι καὶ κόρεις, ἐκ μὲν τῆς ὀχείας πάντα γεννᾷ τὰς καλουμένας κόνιδας, ἐκ δὲ τούτων ἕτερον οὐδὲν γίνεται πάλιν.

Αὐτῶν δὲ γίνονται τούτων αἱ μὲν ψύλλαι ἐξ ἐλαχίστης σηπεδόνης (ὅπου γὰρ ἂν κόπρος ξηρὰ γένηται, ἐνταῦθα συνίστανται), αἱ δὲ κόρεις ἐκ τῆς ἱκμάδος τῆς ἀπὸ τῶν ζώων συνισταμένης ἐκτός, οἱ δὲ φθεῖρες ἐκ τῶν σαρκῶν. Γίνονται δ' ὅταν μέλλωσιν, οἶον ἱονθοὶ μικροί, οὐκ ἔχοντες πύον· τούτους ἂν τις κεντήσῃ, ἐξέρχονται φθεῖρες. Ἐνίοις δὲ τοῦτο συμβαίνει τῶν ἀνθρώπων (557a.) νόσημα, ὅταν ὑγρασία πολλὴ ἐν τῷ σώματι ᾗ· καὶ διεφθάρησάν τινες ἤδη τοῦτον τὸν τρόπον, ὥσπερ Ἀλκμᾶνά τέ φασι τὸν ποιητὴν καὶ Φερεκύδην τὸν Σύριον. Καὶ ἐν νόσοις δὲ τισι γίνεται πλῆθος φθειρῶν. Ἔστι δὲ γένος φθειρῶν οἱ καλοῦνται ἄγριοι, καὶ σκληρότεροι τῶν ἐν τοῖς πολλοῖς γινομένων· εἰσὶ δ' οὗτοι καὶ δυσαφαίρετοι ἀπὸ τοῦ χρωτός.

Παισὶ μὲν οὖν οὗσιν αἱ κεφαλαὶ γίνονται φθειρώδεις, τοῖς δ' ἀνδράσιν ἥττον. Γίνονται δὲ καὶ αἱ γυναῖκες τῶν ἀνδρῶν μᾶλλον φθειρώδεις. Ὅσοις δ' ἂν ἐγγίνωνται ἐν τῇ κεφαλῇ, ἥττον πονοῦσι τὰς κεφαλὰς.

Ἐγγίνονται δὲ καὶ τῶν ἄλλων ζώων ἐν πολλοῖς φθεῖρες. Καὶ γὰρ οἱ ὄρνια ἔχουσι, καὶ οἱ καλούμενοι φασιανοὶ ἐὰν μὴ κονιῶνται, διαφθείρονται ὑπὸ τῶν φθειρῶν. Καὶ τῶν ἄλλων δ' ὅσα πτερὰ ἔχει ἔχοντα καυλόν, καὶ τῶν ἐχόντων τρίχας. Πλὴν ὄνος οὐκ ἔχει οὔτε φθειράς οὔτε κρότωνα. Οἱ δὲ βόες ἔχουσιν ἄμφω· τὰ δὲ πρόβατα καὶ <αἱ> αἶγες κρότωνα, φθειράς δ' οὐκ ἔχουσιν· καὶ αἱ ὕες φθειράς μεγάλους καὶ σκληρούς. Ἐν δὲ τοῖς κυσὶν οἱ καλούμενοι γίνονται κυνοραῖσταί. Πάντες δ' οἱ φθεῖρες ἐν τοῖς ἔχουσιν ἐξ αὐτῶν γίνονται τῶν ζώων. Γίνονται δ' οἱ φθεῖρες μᾶλλον ὅταν μεταβάλλωσι τὰ ὕδατα οἷς λούονται, ὅσα ἔχει τῶν λουομένων φθειράς.

Ἐν δὲ τῇ θαλάττῃ γίνονται μὲν ἐν τοῖς ἰχθύσι φθεῖρες, οὗτοι δ' οὐκ ἐξ αὐτῶν τῶν ἰχθύων ἀλλ' ἐκ τῆς ἰλύος· εἰσὶ δὲ τὰς ὄψεις ὅμοιοι τοῖς ὄνοις τοῖς πολύποσι, πλὴν τὴν οὐρὰν ἔχουσι πλατεῖαν. Ἐν δ' εἰδός ἐστι τῶν φθειρῶν τῶν θαλαττίων, καὶ γίνονται πανταχοῦ, μάλιστα δὲ περὶ τὰς τρίγλας. Πάντα δὲ πολύποδα ταῦτ' ἐστὶ καὶ ἄναιμα καὶ ἔντομα. Ὁ δὲ τῶν θύννων οἶστρος γίνεται μὲν περὶ τὰ πτερύγια, ἔστι δ' ὅμοιος τοῖς σκορπίοις, καὶ τὸ μέγεθος ἡλικὸς ἀράχνης. Ἐν δὲ τῇ θαλάττῃ τῇ ἀπὸ Κυρήνης πρὸς Αἴγυπτον ἔστι περὶ τὸν δελφῖνα ἰχθύς ὃν καλοῦσι φθειρά· ὃς γίνεται πάντων πίοτατος διὰ τὸ

ἀπολαύειν τροφῆς ἀφθόνου θηρεύοντος τοῦ δελφίνος.

## Κεφάλαιο 32

(557b.) Γίνεται δὲ καὶ ἄλλα ζωδάρια, ὥσπερ ἐλέχθη καὶ πρότερον, τὰ μὲν ἐν ἐρίοις καὶ ὅσα ἐξ ἐρίων ἐστίν, οἷον οἱ σῆτες, οἱ ἐμφύονται μᾶλλον ὅταν κονιορτώδη τὰ ἔρια ᾗ, μάλιστα δὲ γίνονται ἂν ἀράχνης συγκατακλεισθῇ· ἐκπίνων γάρ, ἂν τι ἐνῇ ὑγρόν, ξηραίνει. Γίνεται δὲ καὶ ἐν χιτῶνι ὁ σκώληξ οὗτος. Καὶ ἐπὶ κηρίῳ δὲ γίνεται παλαιουμένῳ, ὥσπερ ἐν ξύλῳ ζῶον, ὃ δὴ δοκεῖ ἐλάχιστον εἶναι τῶν ζώων πάντων καὶ καλεῖται ἀκαρί, λευκὸν καὶ μικρόν. Καὶ ἐν τοῖς βιβλίοις ἄλλα γίνεται, τὰ μὲν ὅμοια τοῖς ἐν τοῖς ἱματίοις, τὰ δὲ τοῖς σκορπίοις ἄνευ τῆς οὐράς, μικρὰ πάμπαν· καὶ ὅλως ἐν πᾶσιν ὡς εἶπειν, ἐν τε τοῖς ξηροῖς ὑγραινομένοις καὶ ἐν τοῖς ὑγροῖς ξηραινομένοις, ὅσα ἔχει αὐτῶν ζωήν.

Ἔστι δὲ τι σκωλήκιον ὃ καλεῖται ξυλοφθόρον, οὐδενὸς ἦττον ἄτοπον τῶν ζώων. Ἡ μὲν γὰρ κεφαλὴ ἔξω τοῦ κελύφους προέρχεται ποικίλη, καὶ οἱ πόδες ἐπ' ἄκρου, ὥσπερ τοῖς ἄλλοις σκώληξιν, ἐν χιτῶνι δὲ τὸ ἄλλο σῶμα ἀραχνιώδει, καὶ περὶ αὐτὸ κάρφη, ὥστε δοκεῖν προσέχεσθαι βαδίζοντι· ταῦτα δὲ σύμφυτα τῷ χιτῶνί ἐστιν· ὥσπερ κοχλία τὸ ὄστρακον, οὕτω τὸ ἅπαν τῷ σκώληκι, καὶ οὐκ ἀποπίπτει ἀλλ' ἀποσπᾶται ὥσπερ προσπεφυκότα· καὶ ἐάν τις τὸν χιτῶνα περιέλῃ, ἀποθνήσκει καὶ γίνεται ὁμοίως ἀχρεῖος ὥσπερ ὁ κοχλίας περιαιρεθέντος τοῦ ὀστράκου. Χρόνου δὲ προϊόντος γίνεται καὶ οὗτος ὁ σκώληξ χρυσαλλὶς ὥσπερ αἱ κάμπαι, καὶ ζῆ ἀκίνητίζων· ὃ τι δ' ἐξ αὐτοῦ γίνεται τῶν πτερωτῶν ζώων, οὕτω συνῶπται.

Τὰ δ' ἐρίνεα τὰ ἐν τοῖς ἐρίνεοις ἔχουσι τοὺς καλουμένους ψῆνας. Γίνεται δὲ τοῦτο πρῶτον σκωλήκιον, εἴτα περιρραγέντος τοῦ δέρματος ἐκπέτεται τοῦτο ἐγκαταλιπὼν ὁ ψήν, καὶ εἰσδύεται εἰς τὰ τῶν συκῶν ἐρίνεά, καὶ διὰ στιγμάτων ποιεῖ μὴ ἀποπίπτειν τὰ ἐρίνεα· διὸ περιάπτουσί τε τὰ ἐρίνεα πρὸς τὰς συκάς οἱ γεωργοί, καὶ φυτεύουσι πλησίον ταῖς συκαῖς ἐρίνεούς.

## Κεφάλαιο 33

Τῶν δὲ τετραπόδων καὶ ἐναίμων καὶ ὠοτόκων αἱ μὲν (558a.) γενέσεις εἰσὶ τοῦ ἔαρος, ὁχεύεται δ' οὐ πάντα τὴν αὐτὴν ὥραν, ἀλλὰ τὰ μὲν ἔαρος τὰ δὲ θέρους τὰ δὲ περὶ τὸ μετόπωρον, ὡς ἐκάστοις πρὸς τὴν γένεσιν τῶν ἐκγόνων ἡ ἐπιούσα ὥρα συμφέρει.

Ἡ μὲν οὖν χελώνη τίκτει ὥα σκληρόδερμα καὶ δίχροα ὥσπερ τὰ τῶν ὀρνίθων, τεκοῦσα δὲ κατορύττει καὶ τὸ ἄνω ποιεῖ ἐπίκροτον· ὅταν δὲ τοῦτο ποιήσῃ, φοιτῶσα ἐπωάζει ἄνωθεν· ἐκλέπεται δὲ τὰ ὥα τῷ ὑστέρω ἔτει. Ἡ δ' ἐμὺς ἐξιοῦσα ἐκ τοῦ ὕδατος τίκτει, ὀρύξασα βόθυνον πηλώδη, καὶ ἐντεκοῦσα καταλείπει· ἐάσασα δ' ἡμέρας ἐλάττους ἢ τριάκοντα ἀνορύττει καὶ ἐκλέπει ταχύ, καὶ ἀπάγει τοὺς νεοττοὺς εὐθύς εἰς τὸ ὕδωρ. Τίκτουσι δὲ καὶ αἱ θαλάττιαι χελῶναι ἐν τῇ γῇ ὥα ὅμοια τοῖς ὄρνισι τοῖς ἡμέροις, καὶ κατορύξασαι ἐπωάζουσι τὰς νύκτας. Τίκτουσι δὲ πολὺ πλῆθος ὥων· καὶ γὰρ εἰς ἑκατὸν τίκτουσιν ὥα.

Τίκτουσι δὲ καὶ σαῦροι καὶ κροκόδειλοι οἱ χερσαῖοι καὶ οἱ ποτάμιοι εἰς τὴν γῆν. Ἐκλέπεται δὲ τὰ τῶν σαύρων αὐτόματα ἐν τῇ γῇ· οὐ γὰρ διετίζει ὁ σαῦρος· λέγεται γὰρ ἔκμηνος εἶναι βίος σαύρας. Ὁ δὲ ποτάμιος κροκόδειλος τίκτει μὲν ὥα πολλά, τὰ πλεῖστα περὶ ἐξήκοντα, λευκὰ τὴν χροάν, καὶ ἐπικάθηται δ' ἡμέρας ἐξήκοντα (καὶ γὰρ καὶ βιοῖ χρόνον πολύν), ἐξ ἐλαχίστων δ' ὥων ζῶον μέγιστον γίνεται ἐκ τούτων· τὸ μὲν γὰρ ὥον οὐ μεῖζόν ἐστι χηνείου, καὶ ὁ νεοττὸς τούτου κατὰ λόγον, αὐξανόμενος δὲ γίνεται καὶ ἑπτακαίδεκα πῆχεων. Λέγουσι δὲ τινες ὅτι καὶ αὐξάνεται ἕως ἂν ζῇ.

## Κεφάλαιο 34

Τῶν δ' ὄφεων ὁ μὲν ἔχισ ζωτοκεῖ ἕξω, ἐν αὐτῷ πρῶτον ὠτοκήσας· τὸ δ' ὠόν, ὥσπερ τῶν ἰχθύων, μονόχρουν ἐστὶ καὶ μαλακόδερμον. Ὁ δὲ νεοττὸς ἄνω ἐπιγίνεται, καὶ οὐ περιέχει φλοιὸς ὀστρακώδης, ὥσπερ οὐδὲ τὰ τῶν ἰχθύων. Τίκτει δὲ μικρὰ ἐχίδια ἐν ὑμέσιν, οἷ περιρρήγνυνται τριταῖοι· ἐνίοτε δὲ καὶ τὰ ἔσω διαφαγόντα αὐτὰ ἐξέρχεται. Τίκτει δ' ἐν μιᾷ ἡμέρᾳ καθ' ἓν, τίκτει δὲ πλείω ἢ εἴκοσιν.

(558b.) Οἱ δ' ἄλλοι ὄφεις ὠτοκοῦσιν ἕξω, τὰ δ' ὥα ἀλλήλοις συνεχῇ ἐστὶν ὥσπερ αἱ τῶν γυναικῶν ὑποδερίδες· ὅταν δὲ τέκη εἰς τὴν γῆν, ἐπωάζει. Ἐκλέπεται δὲ καὶ ταῦτα τῷ ὑστέρω ἔτει.

## Βιβλίο 6

### Κεφάλαιο 1

Αἱ μὲν οὖν τῶν ὄφεων καὶ τῶν ἐντόμων γενέσεις, ἔτι δὲ τῶν τετραπόδων καὶ ὠοτόκων, τοῦτον ἔχουσι τὸν τρόπον.

Οἱ δ' ὄρνιθες ὠτοκοῦσι μὲν ἅπαντες, ἡ δ' ὥρα τῆς ὀχείας καὶ οἱ τόκοι οὐ πᾶσιν ὁμοίως ἔχουσιν. Τὰ μὲν γὰρ καὶ ὀχεύεται καὶ τίκτει κατὰ πάντα τὸν χρόνον ὡς εἰπεῖν, οἷον ἀλεκτορὶς καὶ περιστέρα, ἡ μὲν ἀλεκτορὶς ὅλον τὸν ἐνιαυτὸν ἔξω δύο μηνῶν τῶν ἐν τῷ χειμῶνι τροπικῶν. Πλήθος δὲ τίκτουσιν ἔνιαι καὶ τῶν γενναίων πρὸ ἐπώασμοῦ καὶ ἐξήκοντα· καίτοι ἦττον πολυτόκοι αἱ γενναῖαι τῶν ἀγεννῶν εἰσιν. Αἱ δ' Ἀδριαναὶ ἀλεκτορίδες εἰσὶ μὲν μικραὶ τὸ μέγεθος, τίκτουν δ' ἂν' ἐκάστην ἡμέραν· εἰσὶ δὲ χαλεπαί, καὶ κτείνουσι τοὺς νεοττοὺς πολλάκις· χρώματα δὲ παντοδαπὰ ἔχουσιν.

Τίκτουν δὲ καὶ οἰκογενεῖς ἔνιαι δις τῆς ἡμέρας· ἤδη δέ τινες λίαν πολυτοκήσασαι ἀπέθανον διὰ ταχέων.

Αἱ μὲν οὖν ἀλεκτορίδες τίκτουν, ὥσπερ εἴρηται, συνεχῶς· περιστέρα δὲ καὶ φάττα καὶ τρυγῶν καὶ οἶνᾶς διτοκοῦσι μὲν, ἄλλ' αἱ περιστέραὶ καὶ δεκάκις τοῦ ἐνιαυτοῦ τίκτουν.

Οἱ δὲ πλεῖστοι τῶν ὀρνίθων τίκτουν τὴν ἐαρινὴν ὥραν, καὶ εἰσιν οἱ μὲν πολύγονοι αὐτῶν, πολύγονοι δὲ διχῶς, οἱ μὲν τῷ πολλάκις, ὥσπερ αἱ περιστέραί, οἱ δὲ τῷ πολλά, ὥσπερ αἱ ἀλεκτορίδες. Τὰ δὲ γαμψώνυχα πάντα ὀλιγόγονά ἐστιν, ἔξω κεγχρίδος· αὕτη δὲ πλεῖστα τίκτει τῶν γαμψωνύχων. Ὡπται μὲν οὖν καὶ τέτταρα ἤδη, τίκτει δὲ καὶ πλείω.

Τίκτουν δὲ τὰ μὲν ἄλλα ἐν νεοττιαῖς, τὰ δὲ μὴ πτητικὰ ἐν νεοττιαῖς οὐδαμῶς, οἷον οἳ τε (559a.) πέρδικες καὶ οἱ ὄρτυγες, ἄλλ' ἐν τῇ γῇ, ἐπηλυγαζόμενα ὕλην. Ὡσαύτως δὲ καὶ κόρυδος καὶ τέτριξ. Ταῦτα μὲν οὖν ὑπηνέμους ποιεῖται τὰς νεοττεύσεις· ὃν δ' οἱ Βοιωτοὶ καλοῦσιν εἴροπα, εἰς τὰς ὁπᾶς ἐν τῇ γῇ καταδυόμενος νεοττεύει μόνος. Αἱ δὲ κίχλαι νεοττιὰν μὲν ποιοῦνται ὥσπερ αἱ χελιδόνες ἐκ πηλοῦ ἐπὶ τοῖς ὑψηλοῖς τῶν δένδρων, ἐφεξῆς δὲ ποιοῦσιν ἀλλήλαις καὶ ἐχομένας, ὥστ' εἶναι διὰ τὴν συνέχειαν ὥσπερ ὀρμαθὸν νεοττιῶν. Ὁ δ' ἔποψ μόνος οὐ ποιεῖται νεοττιὰν τῶν καθ' ἑαυτὰ νεοττευόντων, ἄλλ' εἰσδυόμενος εἰς τὰ στελέχη ἐν τοῖς κοίλοις αὐτῶν τίκτει, οὐδὲν συμφορούμενος. Ὁ δὲ κόραξ καὶ ἐν οἰκίᾳ νεοττεύει καὶ ἐν πέτραις. Ἡ δὲ τέτριξ, ἣν καλοῦσιν Ἀθηναῖοι οὔραγα, οὔτ' ἐπὶ τῆς γῆς νεοττεύει οὔτ' ἐπὶ τοῖς δένδρεσιν, ἄλλ' ἐπὶ τοῖς χαμαιζήλοις φυτοῖς.

## Κεφάλαιο 2

Τὸ δ' ὥδον ἁπάντων ὁμοίως τῶν ὀρνίθων σκληρόδερμόν ἐστιν, ἔαν γόνω γένηται καὶ μὴ διαφθαρεῖ (ἔνια γὰρ μαλακὰ τίκτουν αἱ ἀλεκτορίδες), καὶ

δίχροα τὰ ὠὰ τῶν ὀρνίθων, ἐκτὸς μὲν τὸ λευκόν, ἐντὸς δὲ τὸ ὠχρόν. Διαφέρουσι δὲ καὶ τὰ τῶν περὶ ποταμοὺς καὶ λίμνας γινομένων ὀρνέων πρὸς τὰ τῶν ξηροβατικῶν· πολλαπλάσιον γὰρ ἔχει τὰ τῶν ἐνύδρων κατὰ λόγον τὸ ὠχρόν πρὸς τὸ λευκόν. Καὶ τὰ χρώματα δὲ τῶν ὠῶν διαφέρει κατὰ τὰ γένη τῶν ὀρνίθων· τῶν μὲν γὰρ λευκά ἐστι τὰ ὠὰ, οἷον περιστερᾶς καὶ πέρδικος, τῶν δ' ὠχρά, οἷον τῶν περὶ τὰς λίμνας, τῶν δὲ κατεστιγμένα, οἷον τὰ τῶν μελεαγρίδων καὶ φασιανῶν· τὰ δὲ τῆς κεγχρίδος ἐρυθρά ἐστὶν ὥσπερ μίλτος.

Ἔχει δὲ τὸ ὠὸν διαφοράν· τῇ μὲν γὰρ ὀξὺ τῇ δὲ πλατύτερόν ἐστιν· ἐξιόντος δ' ἡγεῖται τὸ πλατύ. Ἔστι δὲ τὰ μὲν μακρὰ καὶ ὀξέα τῶν ὠῶν θήλεα, τὰ δὲ στρογγύλα καὶ περιφέρειαν ἔχοντα κατὰ τὸ ὀξὺ ἄρρενα.

Ἐκλέπεται μὲν οὖν ἐπωαζόντων τῶν ὀρνίθων, (559b.) οὐ μὴν ἀλλὰ καὶ αὐτόματα ἐν τῇ γῇ ὥσπερ ἐν Αἰγύπτῳ, κατορυπτόντων εἰς τὴν κόπρον· καὶ ἐν Συρακούσαις δὲ φιλοπότης τις ὑποτιθέμενος ὑπὸ τὴν ψίαθον εἰς τὴν γῆν τοσοῦτον ἔπινεν, ὥς φασί, χρόνον συνεχῶς, ἕως ἐκλέποι τὰ ὠὰ. Ἦδη δὲ καὶ κείμενα ἐν ἀγγείοις ἀλεεινοῖς ἐξεπέφθη καὶ ἐξῆλθεν αὐτόματα.

Ἡ μὲν οὖν γονὴ πάντων τῶν ὀρνίθων λευκή, ὥσπερ καὶ τῶν ἄλλων ζώων· ὅταν δ' ὀχευθῇ, ἄνω πρὸς τὸ ὑπόζωμα λαμβάνει ἡ θήλεια. Καὶ τὸ μὲν πρῶτον λευκὸν καὶ μικρὸν φαίνεται, ἔπειτα ἐρυθρὸν καὶ αἱματῶδες, αὐξανόμενον δ' ὠχρόν καὶ ξανθὸν ἅπαν· ὅταν δ' ἤδη γίνηται ἀδρότερον, διακρίνεται, καὶ ἔσω μὲν τὸ ὠχρόν ἔξω δὲ τὸ λευκὸν περίσταται. Ὅταν δὲ τελειωθῇ, ἀπολύεται τε καὶ ἐξέρχεται οὕτω τῷ καιρῷ ἐκ τοῦ μαλακὸν εἶναι μεταβάλλον ἐπὶ τὸ σκληρόν, ὥστ' ἐξέρχεται μὲν οὕτω πεπηγός, ἐξελθὼν δ' εὐθὺς πήγνυται καὶ γίνεται σκληρόν, ἂν μὴ ἐξίη νενοσηκός. Ἐφάνη δ' ἤδη, οἷον ἐν τινι καιρῷ γίνεται τὸ ὠόν (ἅπαν γὰρ ὠχρόν ὁμοίως ἐστίν, ὥσπερ ὕστερον ὁ νεοττός), τοιαῦτα καὶ ἐν ἀλεκτρύονι διαιρουμένῳ ὑπὸ τὸ ὑπόζωμα, οὐπερ αἱ θήλειαι ἔχουσι τὰ ὠὰ, τὸ μὲν εἶδος ὠχρὰ ὅλα, τὸ δὲ μέγεθος ἡλίκα ὠὰ· ἃ ἐν τέρατος λόγῳ τιθέασιν.

Οἱ δὲ λέγοντες ὅτι ὑπολείμματά ἐστι τὰ ὑπηνέμια τῶν ἔμπροσθεν ἐξ ὀχείας γενομένων, οὐκ ἀληθῆ λέγουσιν· ὥπται γὰρ ἱκανῶς ἤδη ἀνόχευτοι νεοττίδες ἀλεκτορίδων καὶ χηνῶν τίκτουσαι ὑπηνέμια. Τὰ δ' ὠὰ τὰ ὑπηνέμια ἐλάττω μὲν τῷ μεγέθει γίνεται καὶ ἥττον ἡδέα καὶ ὑγρότερα τῶν γονίμων, πλήθει δὲ πλείω· ὑποτιθεμένων δὲ τῇ ὀρνιθὶ οὐδὲν παχύνεται τὸ ὑγρόν, ἀλλὰ τό τ' ὠχρόν διαμένει καὶ τὸ λευκὸν ὅμοια ὄντα. Γίνεται δ' ὑπηνέμια πολλῶν, οἷον ἀλεκτορίδος, πέρδικος, περιστερᾶς, ταῶνος, χηνός, χηναλώπεκος. Ἐκλέπεται δ' ἐπωαζουσῶν ἐν τῷ θέρει θᾶπτον ἢ ἐν τῷ χειμῶνι· ἐν (560a.) ὀκτωκαίδεκα



γὰρ ἡμέραις αἱ ἄλεκτορίδες ἐν τῷ θέρει ἐκλέπουσιν, ἐν δὲ τῷ χειμῶνι ἐνίοτ' ἐν πέντε καὶ εἴκοσιν. Διαφέρουσι μέντοι καὶ ὄρνιθες ὀρνίθων τῷ ἐπωαστικώτεροι εἶναι ἕτεροι ἑτέρων. Ἐὰν δὲ βροντήσῃ ἐπωαζούσης, διαφθείρεται τὰ ὦα.

Τὰ δὲ καλούμενα ὑπὸ τινων κυνόσουρα καὶ οὔρια γίνεται τοῦ θέρους μᾶλλον. Ζεφύρια δὲ καλεῖται τὰ ὑπηνέμια ὑπὸ τινων, ὅτι ὑπὸ τὴν ἑαρινὴν ὥραν φαίνονται δεχόμενα τὰ πνεύματα αἱ ὄρνιθες· τοιοῦτον δὲ ποιοῦσι καὶ τῇ χειρὶ πως ψηλαφώμεναι.

Γίνεται δὲ τὰ ὑπηνέμια γόνιμα καὶ τὰ ἐξ ὀχείας ἤδη ἐνυπάρχοντα μεταβάλλει τὸ γένος εἰς ἄλλο γένος, ἔαν πρὶν μεταβαλεῖν ἐκ τοῦ ὠχροῦ εἰς τὸ λευκὸν ὀχεύηται ἢ τὰ ὑπηνέμια ἔχουσα ἢ τὰ γόνω εἰλημμένα ἐξ ἑτέρου ὀρνιθος· καὶ γίνεται τὰ μὲν ὑπηνέμια γόνιμα, τὰ δὲ προϋπάρχοντα κατὰ τὸν ὕστερον ὀχεύοντα ὀρνιθα.

Ἐὰν δ' ἤδη μεταβαλλόντων εἰς τὸ λευκόν, οὐδὲν μεταβάλλει οὔτε τὰ ὑπηνέμια ὥστε γίνεσθαι γόνιμα, οὔτε τὰ γόνω κυούμενα ὥστε μεταβαλεῖν εἰς τὸ τοῦ ὀχεύοντος γένος. Καὶ ἔαν ὑπαρχόντων δὲ μικρῶν διαλείπῃ ἢ ὀχεία, οὐδὲν ἐπαυξάνεται τὰ προϋπάρχοντα· ἔαν δὲ πάλιν ὀχεύηται, ταχεῖα γίνεται ἢ ἐπίδοσις εἰς τὸ μέγεθος.

Ἔχει δὲ φύσιν τοῦ ὠοῦ τὸ ὠχρὸν καὶ τὸ λευκὸν ἐναντίαν οὐ μόνον τῷ χρώματι ἀλλὰ καὶ τῇ δυνάμει· τὸ μὲν γὰρ ὠχρὸν ὑπὸ τοῦ ψύχους πήγνυται, τὸ δὲ λευκὸν οὐ πήγνυται ἀλλ' ὑγραίνεται μᾶλλον· ὑπὸ δὲ τοῦ πυρὸς τὸ μὲν λευκὸν πήγνυται, τὸ δ' ὠχρὸν οὐ πήγνυται ἀλλὰ μαλακὸν διατελεῖ, ἂν μὴ κατακαυθῇ, καὶ μᾶλλον ἐψόμενον ἢ πυρούμενον συνίσταται καὶ ξηραίνεται.

Ἐκάτερον δὲ χωρὶς ὑμένι διείληπται ἀπ' ἀλλήλων. Αἱ δὲ πρὸς τῇ ἀρχῇ τοῦ ὠχροῦ χάλαζαι οὐδὲν συμβάλλονται πρὸς τὴν γένεσιν, ὥσπερ τινὲς ὑπολαμβάνουσιν· εἰσὶ δὲ δύο, ἡ μὲν κάτωθεν ἢ δ' ἄνωθεν. Συμβαίνει δὲ περὶ τὸ ὠχρὸν καὶ τὸ λευκὸν καὶ <τόδε> ὅταν ἐξαιρεθέντα συνεράσῃ (560b.) τις πλείω τοιαῦτα εἰς κύστιν καὶ ἔψῃ μαλακῶς καὶ μὴ συντόνῳ τῷ πυρί, τὸ ὠχρὸν εἰς τὸ μέσον συνέρχεται πᾶν, κύκλῳ δὲ τὸ λευκὸν περιίσταται.

Τῶν δ' ἄλεκτορίδων αἱ νεοττίδες πρῶτον τίκτουσιν εὐθὺς ἀρχομένου τοῦ ἔαρος, καὶ πλείω τίκτουσιν ἢ αἱ πρεσβύτεραι· ἐλάττω δὲ τῷ μεγέθει τὰ ἐκ τῶν νεωτέρων.

Ὅλως δ' ἔαν μὴ ἐπωάζωσιν αἱ ὄρνιθες, διαφθείρονται καὶ κάμνουσιν.

Ὁχευθεῖσαι δ' αἱ μὲν ὄρνιθες φρίττουσί τε καὶ ἀποσεύονται καὶ πολλάκις κάρφος περιβάλλονται (ποιοῦσι δὲ τὸ αὐτὸ τοῦτο καὶ τεκοῦσαι ἐνίοτε) αἱ δὲ περιστερὰ ἐφέλκουσι τὸ ὀρροπύγιον, οἱ δὲ χῆνες κατακολυμβῶσιν.

Αἱ δὲ κυήσεις καὶ αἱ τῶν ὑπνηνέμων ὥων συλλήψεις ταχεῖαι γίνονται ταῖς πλείσταις τῶν ὀρνίθων, οἷον καὶ τῇ πέρδικι, ὅταν ὀργᾷ πρὸς τὴν ὀχείαν· ἐὰν γὰρ κατὰ πνεῦμα στῇ τοῦ ἄρρενος, κυῖσκεται καὶ εὐθὺς ἄχρηστος γίνεται πρὸς τὰς θήρας· ὁσφρησιν γὰρ δοκεῖ ἔχειν ἐπίδηλον ὁ πέρδιξ.

Ἡ δὲ τοῦ ὥου γένεσις μετὰ τὴν ὀχείαν καὶ ἐκ τοῦ ὥου πάλιν συμπεττομένου ἢ τοῦ νεοττοῦ γένεσις οὐκ ἐν ἴσοις χρόνοις συμβαίνει πᾶσιν, ἀλλὰ διαφέρει κατὰ τὰ μεγέθη τῶν γεννώντων. Συνίσταται δὲ τὸ τῆς ἀλεκτορίδος ὥον μετὰ τὴν ὀχείαν καὶ τελειοῦται ἐν δέχ' ἡμέραις ὡς ἐπὶ τὸ πολὺ· καὶ τῆς περιστερᾶς δ' ἐν μικρῷ ἐλάττονι. Δύνανται δ' αἱ περιστερὰ καὶ ἤδη τοῦ ὥου ἐν ὠδῖνι ὄντος κατέχειν· ἐὰν γὰρ τι ἐνοχληθῇ ὑπὸ τινος ἢ περὶ τὴν νεοττείαν ἢ πτερὸν ἐκτιλθῇ ἢ ἄλλο τι πονήσῃ καὶ δυσαρεστήσῃ, κατέχει καὶ οὐ τίκτει μελλήσασα.

Ἰδια δὲ περὶ τὰς περιστερὰς συμβαίνει καὶ τάδε περὶ τὴν ὀχείαν. Κυνοῦσί τε γὰρ ἀλλήλας, ὅταν μέλλῃ ἀναβαίνειν ὁ ἄρρην, ἢ οὐκ ἂν ὀχεύσειεν· ὁ μὲν πρεσβύτερος τὸ πρῶτον, ὕστερον μέντοι ἀναβαίνει καὶ μὴ κύσας· οἱ δὲ νεώτεροι ἀεὶ τοῦτο ποιήσαντες ὀχεύουσιν. Τοῦτό [τε] δὴ ἴδιον ποιοῦσι. Καὶ ἔτι αἱ θήλειαι ἀλλήλαις ἀναβαίνουσιν, ὅταν ἄρρην μὴ παρῇ, κύσασαι ὥσπερ οἱ ἄρρενες· καὶ οὐδὲν προῖέμεναι (561a.) εἰς ἀλλήλας τίκτουσιν ὥα πλείω ἢ τὰ γόνῳ γινόμενα, ἐξ ὧν οὐ γίνεται νεοττὸς οὐδεὶς, ἀλλ' ὑπνηνέμια πάντα τὰ τοιαῦτά ἐστιν.

### Κεφάλαιο 3

Ἡ δὲ γένεσις ἐκ τοῦ ὥου τοῖς ὄρνισι συμβαίνει μὲν τὸν αὐτὸν τρόπον πᾶσιν, οἱ δὲ χρόνοι διαφέρουσι τῆς τελειώσεως, καθάπερ εἴρηται. Ταῖς μὲν οὖν ἀλεκτορίσι τριῶν ἡμερῶν καὶ νυκτῶν παρελθουσῶν ἐπισημαίνει τὸ πρῶτον, ταῖς δὲ μείζουσιν αὐτῶν ὄρνισιν ἐν πλείονι χρόνῳ, ταῖς δ' ἐλάττοσιν ἐν ἐλάττονι. Γίνεται δ' ἐν τούτῳ τῷ χρόνῳ ἤδη τό τ' ὥχρον ἄνω προσεληλυθὸς πρὸς τὸ ὀξύ, ἧπέρ ἐστιν ἡ ἀρχὴ τε τοῦ ὥου καὶ ἐκλέπεται τὸ ὥον, καὶ ὅσον στιγμὴ αἱματίνη ἐν τῷ λευκῷ ἢ καρδίᾳ. Τοῦτο δὲ τὸ σημεῖον πηδᾷ καὶ κινεῖται ὥσπερ ἔμψυχον, καὶ ἀπ' αὐτοῦ δύο πόροι φλεβικοὶ ἔναιμοι ἐλίσσόμενοι φέρουσιν αὐξανομένου εἰς ἑκάτερον τῶν χιτώνων τῶν περιεχόντων. Καὶ ὑμὴν δ' αἱματικὰς ἵνας ἔχων ἤδη περιέχει τὸ λέκιθον κατὰ τὸν χρόνον τοῦτον ἀπὸ τῶν πόρων τῶν φλεβικῶν. Ὀλίγον δ' ὕστερον καὶ τὸ

σῶμα ἤδη ἀποκρίνεται, μικρὸν τὸ πρῶτον πάμπαν καὶ λευκόν. Δήλη δ' ἡ κεφαλὴ, καὶ ταύτης οἱ ὀφθαλμοὶ μάλιστ' ἐμπεφυσημένοι· καὶ τοῦτο μέχρι πόρρω διατελεῖ· ὁψὲ γάρ ποτε μικροὶ γίνονται καὶ συμπίπτουσιν. Τοῦ δὲ σώματος τὸ κάτω μέρος οὐδὲν φαίνεται μόνον πρὸς τὸ ἄνω τὸ πρῶτον. Τῶν δὲ πόρων τῶν ἐκ τῆς καρδίας τεινόντων ὁ μὲν φέρει εἰς τὸ κύκλῳ περιέχον χόριον, ὁ δ' εἰς τὸ ὠχρὸν ὥσπερ ὀμφαλὸς ὦν. Ἡ μὲν οὖν ἀρχὴ τοῦ νεοττοῦ ἐστὶν ἐκ τοῦ λευκοῦ, ἡ δὲ τροφὴ διὰ τοῦ ὀμφαλοῦ ἐκ τοῦ ὠχροῦ.

Δεκαταίου δ' ἤδη ὄντος ὁ νεοττὸς ὅλος διάδηλος καὶ τὰ μέρη πάντα. Ἔχει δ' ἔτι τὴν κεφαλὴν μείζω τοῦ ἄλλου σώματος, καὶ τοὺς ὀφθαλμοὺς τῆς κεφαλῆς, οὐκ ἔχοντάς πω ὄψιν. Γίνονται δ' οἱ ὀφθαλμοὶ περὶ τὸν χρόνον τοῦτον ἐξαιρόμενοι μείζους κυάμων καὶ μέλανες· ἀφαιρουμένου δὲ τοῦ δέρματος ὑγρὸν ἔνεστι λευκὸν καὶ ψυχρόν, σφόδρα στίλβον πρὸς τὴν αὐγὴν, στερεὸν δ' οὐδέν. Τὰ μὲν οὖν περὶ τὰ (561b.) ὄμματα καὶ τὴν κεφαλὴν τοῦτον διάκειται τὸν τρόπον.

Ἔχει δ' ἐν τῷ χρόνῳ τούτῳ καὶ τὰ σπλάγχνα ἤδη φανερά καὶ τὰ περὶ τὴν κοιλίαν καὶ τὴν τῶν ἐντέρων φύσιν, καὶ αἱ φλέβες αἱ ἀπὸ τῆς καρδίας φαινόμεναι τείνειν πρὸς τῷ ὀμφαλῷ ἤδη γίνονται. Ἀπὸ δὲ τοῦ ὀμφαλοῦ τέταται φλὲψ ἡ μὲν πρὸς τὸν ὑμένα τὸν περιέχοντα τὸ ὠχρόν (τὸ δ' ὠχρὸν ἐν τούτῳ τῷ χρόνῳ ὑγρὸν ἤδη ἐστὶ καὶ πλεῖον ἢ τὸ κατὰ φύσιν), ἡ δ' ἑτέρα εἰς τὸν ὑμένα τὸν περιέχοντα ὅλον τὸν θ' ὑμένα ἐν ᾧ ὁ νεοττός, καὶ τὸν τοῦ ὠχροῦ ὑμένα καὶ τὸ μεταξὺ τούτων ὑγρόν. Αὐξανομένου γὰρ τοῦ νεοττοῦ κατὰ μικρὸν τοῦ ὠχροῦ τὸ μὲν ἄνω γίνεται τὸ δὲ κάτω, ἐν μέσῳ δὲ τὸ λευκὸν ὑγρόν· τοῦ δὲ κάτω ὠχροῦ τὸ λευκὸν κάτωθεν, ὥσπερ τὸ πρῶτον ὑπῆρχεν. Δεκαταίου δ' ὄντος τὸ λευκὸν ἔσχατον γίνεται, ὀλίγον ἤδη ὄν καὶ γλίσχρον καὶ παχὺ καὶ ὑπωχρον. Τέτακται γὰρ τῇ θέσει ἕκαστα τόνδε τὸν τρόπον. Πρῶτος μὲν καὶ ἔσχατος πρὸς τὸ ὄστρακον ὁ τοῦ ὠοῦ ὑμὴν, οὐχ ὁ τοῦ ὀστράκου, ἀλλ' <ὁ> ὑπ' ἐκεῖνον. Ἐν δὲ τούτῳ λευκὸν ἔνεστιν ὑγρόν, εἴτα ὁ νεοττός, καὶ περὶ αὐτὸν ὑμὴν χωρίζων, ὅπως μὴ ἐν ὑγρῷ ὁ νεοττός ᾗ· ὑπὸ δὲ τὸν νεοττὸν τὸ ὠχρόν, εἰς ὃ τῶν φλεβῶν ἔφερεν ἡ ἑτέρα, ἡ δ' ἑτέρα εἰς τὸ περιέχον λευκόν. Τὸ δὲ πᾶν περιέχει ὑμὴν μεθ' ὑγρότητος ἰχωροειδοῦς. Εἴτ' ἄλλος ὑμὴν περὶ αὐτὸ ἤδη τὸ ἔμβρυον, ὥσπερ εἴρηται, χωρίζων πρὸς τὸ ὑγρόν. Ὑποκάτω δὲ τούτου τὸ ὠχρόν ἐν ἑτέρῳ ὑμένι περιειλημμένον, εἰς ὃ τείνει ὀμφαλὸς ὁ ἀπὸ τῆς καρδίας καὶ τῆς μεγάλης φλεβὸς φέρων, ὥστε μὴ εἶναι τὸ ἔμβρυον ἐν μηδετέρᾳ τῶν ὑγροτήτων.

Περὶ δὲ τὴν εἰκοστὴν ἤδη φθέγγεται τε κινούμενος ἔσωθεν, ἐάν τις κινῇ διελών, καὶ ἤδη δασὺς γίνεται, ὅταν ὑπὲρ τὰς εἴκοσιν ἢ ἐκκόλαψις γίνηται

τῶν ὤων. ἔχει δὲ τὴν κεφαλὴν ὑπὲρ τοῦ δεξιοῦ σκέλους ἐπὶ τῇ λαγόνι, τὴν δὲ πτέρυγα ὑπὲρ τῆς κεφαλῆς· καὶ φανερὸς κατὰ τοῦτον τὸν χρόνον ὃ τε χοριοειδὴς ὑμὴν ὁ μετὰ τὸν τοῦ ὀστράκου ὑμένα (562a.) τὸν ἔσχατον, εἰς ὃν ἔτεινεν ὁ ἕτερος τῶν ὀμφαλῶν (καὶ ὁ νεοττός ἐν τούτῳ δὴ γίνεται τότε ὅλος), καὶ ὁ ἕτερος ὑμὴν χοριοειδὴς ὢν, ὁ περὶ τὸ ὠχρὸν εἰς ὃ ἔτεινεν ὁ ἕτερος ὀμφαλός· ἄμφω δ' ἦσθιν ἀπὸ τε τῆς καρδίας καὶ τῆς φλεβὸς τῆς μεγάλης. Ἐν δὲ τούτῳ τῷ χρόνῳ ὁ μὲν πρὸς τὸ ἔξω χόριον ὀμφαλὸς τείνων ἀπολύεται τοῦ ζώου συμπεπτωκώς, ὁ δ' εἰς τὸ ὠχρὸν φέρων συνήρτηται τοῦ νεοττοῦ πρὸς τὸ ἔντερον τὸ λεπτόν, καὶ ἔσω τοῦ ὠχροῦ πολὺ ἤδη γίνεται ἐν τῷ νεοττῷ, καὶ ὑπόστημα ἐν τῇ κοιλίᾳ ὠχρόν. Καὶ περίττωμα δ' ἀφίησι περὶ τὸν χρόνον τοῦτον πρὸς τὸ ἔξω χόριον, καὶ ἐν τῇ κοιλίᾳ ἔχει· λευκὸν δὲ καὶ τὸ ἔξω περίττωμα, καὶ ἔσω τι ἐγγίνεται λευκόν. Τέλος δὲ τὸ ὠχρὸν αἰεὶ ἔλαττον γινόμενον καὶ προϊὼν ἀναλίσκεται πάμπαν καὶ ἐμπεριλαμβάνεται ἐν τῷ νεοττῷ, ὥστ' ἤδη ἐκκεκολλαμένου δεκαταίου, ἂν τις ἀνασχίσῃ, ἔτι πρὸς τῷ ἐντέρῳ μικρόν τι τοῦ ὠχροῦ λείπεται, ἀπὸ δὲ τοῦ ὀμφαλοῦ ἀπολέλυται, καὶ οὐδὲν γίνεται μετὰ ἄλλ' ἀνήλωται πᾶν.

Περὶ δὲ τὸν χρόνον τὸν πρότερον ῥηθέντα καθεύδει μὲν ὁ νεοττός, ἐγείρεται δὲ καὶ ἀναβλέπει κινούμενος καὶ φθέγγεται· καὶ ἡ καρδία ἅμα τῷ ὀμφαλῷ ἀναφυσᾷ ὡς ἀναπνέοντος. Ἡ μὲν οὖν γένεσις ἐκ τοῦ ὠοῦ τοῖς ὄρνισι τοῦτον ἔχει τὸν τρόπον.

Τίκτουσι δ' αἱ ὄρνιθες ἔνια ἄγονα τῶν ὤων καὶ [τὰ] ἐξ ὀχείας γινόμενα, καὶ ἐπωαζουσῶν οὐδὲν γίνεται ἔκγονον· τεθεώρηται δὲ τοῦτο μάλιστα ἐπὶ τῶν περιστερῶν.

Τὰ δὲ δίδυμα τῶν ὤων δύο· ἔχει λεκίθους, ὧν τὰ μὲν διείργει τοῦ μὴ εἰς ἄλληλα συγκεχύσθαι τὰ ὠχρὰ τοῦ λευκοῦ λεπτὴ διάφυσις, τὰ δ' οὐκ ἔχει ταύτην τὴν διάφυσιν, ἀλλὰ συμψάουσιν. Εἰσὶ δ' ἔνια ἀλεκτορίδες αἱ πάντα δίδυμα τίκτουσιν, καὶ ἤδη ἐπὶ τούτων ὥπται τὸ περὶ τὴν λέκιθον συμβαῖνον· ὀκτωκαίδεκα γάρ τις τεκοῦσα ἐξέλεψε δίδυμα, πλὴν ὅσα οὖρια ἐγένετο. Τὰ μὲν οὖν ἄλλα γόνιμα (πλὴν ὅτι τὸ μὲν μεῖζον (562b.) τὸ δ' ἔλαττον γίνεται τῶν διδύμων), τὸ δὲ τελευταῖον τερατῶδες.

## Κεφάλαιο 4

Τίκτουσι δὲ πάντα μὲν τὰ περιστεροειδῆ δύο, οἷον φάττα καὶ τρυγῶν, ὡς ἐπὶ τὸ πολὺ, τὰ δὲ πλεῖστα τρία [τρυγῶν καὶ φάττα]. Τίκτει δ' ἡ μὲν περιστέρα, ὥσπερ εἴρηται, πᾶσαν ὥραν, τρυγῶν δὲ καὶ φάττα ἐν τῷ ἔαρι, οὐ πλεονάκις

ἢ δίς· τίκει δὲ τὰ δεύτερα, ὅταν τὰ πρότερον γεννηθέντα διαφθαρή· πολλὰ γὰρ διαφθείρουσιν αὐτὰ τῶν ὀρνίθων. Τίκει μὲν οὖν, ὥσπερ εἴρηται, καὶ τρία ποτέ· ἀλλ' ἐξάγει οὐδέποτε δυοῖν πλέον νεοττοῖν, ἐνίστε δὲ καὶ ἓνα μόνον· τὸ δ' ὑπολειπόμενον τῶν ὥων ἀεὶ οὐρίον ἐστίν.

Τῶν δὲ πλείστων ὀρνέων οὐδὲν αὐτοετὲς γεννᾷ. Ἄπαντες δ' οἱ ὀρνιθες, ἐπειδὴν ἅπαξ ἄρξονται τίκειν, διὰ τέλους ὥς εἰπεῖν ἔχουσιν ὥα, ἀλλ' ἐν ἐνίοις διὰ μικρότητα οὐ ῥάδιον ἰδεῖν.

Ἡ δὲ περιστερὰ ὥς ἐπὶ τὸ πολὺ ἄρρεν καὶ θήλυ, καὶ τούτων ὥς τὸ πολὺ πρότερον τὸ ἄρρεν τίκει· καὶ τεκοῦσα μίαν ἡμέραν διαλείπει εἴτα πάλιν τίκει θάτερον. Ἐπωάζει δὲ καὶ ὁ ἄρρην ἐν τῷ μέρει τῆς ἡμέρας, τὴν δὲ νύκτα ἢ θήλεια. Ἐκπέττεται τε καὶ ἐκλέπεται ἐντὸς εἴκοσιν ἡμερῶν τὸ γενόμενον πρότερον τῶν ὥων· τιτρώσκει δὲ τὸ ὥον τῇ προτεραίᾳ ἢ ἐκλέπει.

Καὶ συνθερμαίνουσι τοὺς νεοττοὺς ἀμφότεροι ἐπὶ τινα χρόνον τὸν αὐτόν γε τρόπον ὅνπερ καὶ τὰ ὥα. Χαλεπωτέρα δ' ἢ θήλειά ἐστι περὶ τὴν τεκνοτροφίαν τοῦ ἄρρενος, ὥσπερ καὶ τὰ ἄλλα ζῶα μετὰ τὸν τόκον. Τίκτουσι δὲ τοῦ ἐνιαυτοῦ καὶ δεκάκις, ἥδη δέ τινες καὶ ἐνδεκάκις, αἱ δ' ἐν Αἰγύπτῳ καὶ δωδεκάκις. Ὄχεύει δὲ καὶ ὀχεύεται ἢ περιστερὰ ἐντὸς ἐνιαυτοῦ· καὶ γὰρ ἔκμηνος ὀχεύει καὶ ὀχεύεται.

Τὰς δὲ φάττας καὶ τὰς τρυγόνας ἐνιοὶ φασιν ὀχεύεσθαι καὶ γεννᾶν καὶ τρίμηνα ὄντα, σημεῖον ποιούμενοι τὴν πολυπλήθειαν αὐτῶν. Ἐγκυα δὲ γίνεται δέκα καὶ τέτταρας ἡμέρας, καὶ ἐπωάζει ἄλλας τοσαύτας· ἐν ἐτέραις δὲ δέκα καὶ τέτταρσι πτεροῦνται οὕτως ὥστε (563a.) μὴ ῥαδίως καταλαμβάνεσθαι. Βιοῖ δὲ φάττα, ὥς φασί, καὶ τετταράκοντα ἔτη· καὶ αἱ πέρδικες δὲ πλείω ἢ ἔτη ἐκκαίδεκα. Τίκει δὲ ἢ περιστερὰ ἀπονεοττεύουσα πάλιν ἐν τριάκονθ' ἡμέραις.

## Κεφάλαιο 5

Ὁ δὲ γυψ νεοττεύει μὲν ἐπὶ πέτραις ἀπροσβάτοις· διὸ σπάνιον ἰδεῖν νεοττιὰν γυπὸς καὶ νεοττούς. Καὶ διὰ τοῦτο καὶ Ἡρόδωρος ὁ Βρύσωνος τοῦ σοφιστοῦ πατήρ φησιν εἶναι τοὺς γυψας ἀφ' ἐτέρας γῆς, ἀδήλου ἡμῖν, τοῦτό τε λέγων τὸ σημεῖον, ὅτι οὐδεὶς ἐώρακε γυπὸς νεοττιάν, καὶ ὅτι πολλοὶ ἐξαίφνης φαίνονται ἀκολουθοῦντες τοῖς στρατεύμασιν. Τὸ δ' ἐστὶ χαλεπὸν μὲν ἰδεῖν, ὥπται δ' ὅμως. Τίκτουσι δὲ δύο ὥα οἱ γυψες.

Τὰ μὲν οὖν ἄλλα ὅσα σαρκοφάγα οὐκ ὥπται πλεονάκεις ἢ ἅπαξ τίκτοντα, ἡ δὲ χελιδὼν δις νεοττεύει μόνον τῶν σαρκοφάγων· τῶν δὲ νεοττῶν ἄν τις ἔτι νέων ὄντων τῆς χελιδόνος τὰ ὄμματα ἐκκεντήσῃ, γίνονται ὑγιεῖς καὶ βλέπουσιν ὕστερον.

## Κεφάλαιο 6

Ὁ δ' ἀετὸς ὡὰ μὲν τίκτει τρία, ἐκλέπει δὲ τούτων τὰ δύο, ὥσπερ ἐστὶ καὶ ἐν τοῖς Μουσαίου λεγομένοις ἔπεσιν, “Ὃς τρία μὲν τίκτει, δύο δ' ἐκλέπει, ἐν δ' ἀλεγίζει”.

Ὡς μὲν οὖν τὰ πολλὰ οὕτω συμβαίνει, ἤδη δὲ καὶ τρεῖς νεοττοὶ ὠμμένοι εἰσίν. Ἐκβάλλει δ' αὐξανομένων τὸν ἕτερον τῶν νεοττῶν ἀχθόμενος τῇ ἐδωδῇ. Ἄμα δὲ καὶ λέγεται ἐν τῷ χρόνῳ τούτῳ ἅπαστος γίνεσθαι, ὅπως μὴ ἀρπάξῃ τοὺς τῶν θηρίων σκύμνους· οἱ τε οὖν ὄνυχες αὐτοῦ διαστρέφονται ὀλίγας ἡμέρας, καὶ τὰ πτερὰ λευκαίνεται, ὥστε καὶ τοῖς τέκνοις τότε γίνονται χαλεποί. Τὸν δ' ἐκβληθέντα δέχεται καὶ ἐκτρέφει ἡ φήνη. Ἐπωάζει δὲ περὶ τριάκονθ' ἡμέρας. Καὶ τῶν ἄλλων δὲ τοῖς μεγάλοις ὁ χρόνος τοσοῦτός ἐστι τῆς ἐπωάσεως, οἷον χηνὶ καὶ ὠτίδι· τοῖς δὲ μέσοις περὶ εἴκοσιν, οἷον ἰκτίνῳ καὶ ἰέρακι. Τίκτει δ' ὁ ἰκτῖνος τὰ μὲν πλεῖστα δύο, ἐνίοτε δὲ καὶ τρεῖς ἐξάγει νεοττούς· ὁ δ' αἰγῳλιος καλούμενος ἔστιν ὅτε καὶ τέτταρας. Τίκτει δὲ καὶ ὁ (563b.) κόραξ οὐ μόνον δύο, ὥσπερ φασὶ τινες, ἀλλὰ καὶ πλείω· ἐπωάζει δὲ περὶ εἴκοσιν ἡμέρας καὶ ἐκβάλλει τοὺς νεοττούς ὁ κόραξ. Ποιεῖ δὲ καὶ ἄλλα τῶν ὀρνέων τὸ αὐτὸ τοῦτο· πολλάκις γάρ, ὅσα πλείω τίκτει, ἓνα ἐκβάλλουσιν.

Οὐ πάντα δὲ τὰ τῶν ἀετῶν γένη ὅμοια περὶ τὰ τέκνα, ἀλλ' ὁ πύγαργος χαλεπός, οἱ δὲ μέλανες εὐτεκνοὶ περὶ τὴν τροφήν εἰσιν, ἐπεὶ πάντες γ' ὡς εἰπεῖν οἱ γαμψώνυχες, ὅταν θᾶπτον οἱ νεοττοὶ δύνωνται πέτεσθαι, ἐκβάλλουσι τύπτοντες ἐκ τῆς νεοττιᾶς. Καὶ τῶν ἄλλων δέ, ὥσπερ εἴρηται, σχεδὸν οἱ πλεῖστοι τοῦτο δρῶσι καὶ θρέψαντες οὐδεμίαν ἐπιμέλειαν ποιοῦνται τὸ λοιπόν, πλην κορώνης· αὕτη δ' ἐπὶ τινὰ χρόνον ἐπιμελεῖται· καὶ γὰρ ἤδη πετομένων σιτίζει παραπετομένη.

## Κεφάλαιο 7

Ὁ δὲ κόκκυξ λέγεται μὲν ὑπὸ τινων ὡς μεταβάλλει ἐξ ἰέρακος, διὰ τὸ ἀφανίζεσθαι τὸν ἰέρακα, περὶ τοῦτον τὸν χρόνον, ὃ ὅμοιός ἐστιν· σχεδὸν δὲ καὶ τοὺς ἄλλους ἰέρακας οὐκ ἔστιν ἰδεῖν, ὅταν θᾶπτον φθέγγηται ὁ κόκκυξ, πλην ὀλίγας ἡμέρας. Ὁ δὲ κόκκυξ φαίνεται ἐπ' ὀλίγον χρόνον τοῦ θέρους, τὸν

δὲ χειμῶνα ἀφανίζεται. Ἔστι δ' ὁ μὲν ἱέραξ γαμψώνυχος, ὁ δὲ κόκκυξ οὐ γαμψώνυχος. Ἐπὶ δ' οὐδὲ τὰ περὶ τὴν κεφαλὴν ἔοικεν ἱέρακι, ἀλλ' ἄμφω ταῦτα περιστερᾶ μάλλον· ἀλλ' ἢ κατὰ τὸ χρῶμα μόνον προσέοικεν ἱέρακι, πλὴν τοῦ μὲν ἱέρακος τὰ ποικίλα οἶον γραμμαὶ εἶσι, τοῦ δὲ κόκκυγος οἶον στιγμαί. Τὸ μέντοι μέγεθος καὶ ἡ πτῆσις παραπλησίᾳ τῷ ἐλαχίστῳ τῶν ἱεράκων, ὅς κατὰ τὸν χρόνον τοῦτον ἀφανὴς ἐστὶν ὥς ἐπὶ τὸ πολὺ ὄν φαίνεται ὁ κόκκυξ, ἐπεὶ ἤδη γ' ὠμμένοι εἰσὶν ἄμφω. Καὶ κατεσθιόμενος δ' ὥπται κόκκυξ ὑπὸ ἱέρακος· καίτοι οὐδὲν ποιεῖ τοῦτο τῶν ὁμογενῶν ὀρνέων. Νεοττοὺς δὲ κόκκυγος λέγουσιν ὥς οὐδεὶς ἐώρακεν· ὁ δὲ τίκτει μὲν, ἀλλ' οὐ ποιησάμενος νεοττιάν, ἀλλ' ἐνίοτε μὲν ἐν τῇ τῶν ἐλαττόνων ὀρνίθων ἐντίκτει καταφαγῶν τὰ ὡὰ τὰ ἐκείνων, μάλιστα δ' ἐν ταῖς τῶν φαβῶν νεοττιαῖς, (564a.) καταφαγῶν καὶ τὰ τούτων ὡὰ. Τίκτει δ' ὀλιγάκις μὲν δύο, τὰ δὲ πλεῖστα ἕν. Ἐντίκτει δὲ καὶ τῇ τῆς ὑπολαΐδος νεοττιᾶ· ἡ δ' ἐκπέττει καὶ ἐκτρέφει. Γίνεται δὲ πίων καὶ ἡδύκρεως κατὰ τοῦτον τὸν καιρὸν μάλιστα. Γίνονται δὲ καὶ τῶν ἱεράκων οἱ νεοττοὶ ἡδύκρεω σφόδρα καὶ πiones. Νεοττεύει δὲ γένος τι αὐτῶν πόρρω καὶ ἐν ἀποτόμοις πέτραις.

## Κεφάλαιο 8

Ἐπωάζει δὲ τὰ πολλὰ τῶν ὀρνέων, ὥσπερ εἴρηται περὶ τῶν περιστερῶν, διαδεχόμενα τὰ ἄρρενα τοῖς θήλεσι, τὰ δὲ τοσοῦτον χρόνον ὅσον ἀπολείπει τὸ θῆλυ τροφήν αὐτῷ ποριζόμενον. Τῶν δὲ χηνῶν αἱ θήλειαι ἐπωάζουσι μόναι, καὶ διαμένουσι διὰ παντός ἐφεδρεύουσai, ὅτανπερ ἄρξωνται τοῦτο ποιεῖν. Πρὸς δὲ τόποις ἐλώδεσί τε καὶ πόαν ἔχουσι πάντων τῶν λιμναίων ὀρνίθων αἱ νεοττιαὶ γίνονται· διόπερ καὶ ἡσυχίαν ἔχοντες ἐπὶ τῶν ὡῶν δύνανται τροφήν τινα αὐτοῖς πορίζεσθαι καὶ μὴ παντάπασιν ἄσιτοι εἶναι.

Ἐπωάζουσι δὲ καὶ τῶν κορωνῶν αἱ θήλειαι μόναι, καὶ διατελοῦσιν ἐπ' αὐτῶν οὔσαι διὰ παντός· τρέφουσι δ' αὐτάς οἱ ἄρρενες κομίζοντες τὴν τροφήν αὐταῖς καὶ σιτίζοντες. Τῶν δὲ φαβῶν ἡ μὲν θήλεια ἀπὸ δείλης ἀρξαμένη τὴν τε νύχθ' ὅλην ἐπωάζει καὶ ἕως ἀκρατίσματος ὥρας, ὁ δ' ἄρρην τὸ λοιπὸν τοῦ χρόνου. Οἱ δὲ πέρδικες δύο ποιοῦνται τῶν ὡῶν σηκούς, καὶ ἐφ' ᾧ μὲν ἡ θήλεια ἐπὶ δὲ θατέρῳ ὁ ἄρρην ἐπωάζει, καὶ ἐκλέψας ἐκτρέφει ἕκαστος ἕκαστα· καὶ τοὺς νεοττοὺς ὅταν πρῶτον ἐξάγῃ, ὀχεύει αὐτούς.

## Κεφάλαιο 9

Ὁ δὲ ταῶς ζῆ μὲν περὶ πέντε καὶ εἴκοσιν ἔτη, γεννᾷ δὲ τριετὴς μάλιστα, ἐν οἷς καὶ τὴν ποικιλίαν τῶν πτερῶν ἀπολαμβάνει· ἐκλέπει δ' ἐν τριάκονθ'

ἡμέραις ἢ μικρῶ πλείοσιν. Ἄπαξ δὲ τοῦ ἔτους μόνον τίκει· τίκει δ' ὥα δώδεκα ἢ μικρῶ ἐλάττω· τίκει δὲ διαλείπων δύο ἢ τρεῖς ἡμέρας καὶ οὐκ ἐφεξῆς· αἱ δὲ πρωτοτόκοι μάλιστα περὶ ὀκτὼ ὥα. Τίκτουσι δ' οἱ ταῶ καὶ ὑπηνέμια. Ὀχεύονται δὲ περὶ τὸ ἔαρ· γίνεται δὲ καὶ ὁ τόκος εὐθέως μετὰ τὴν ὀχείαν. Πτερορρυεῖ (564b.) δ' ἅμα τοῖς πρώτοις τῶν δένδρων καὶ ἄρχεται αὐθις ἀπολαμβάνειν τὴν πτέρωσιν ἅμα τῇ τούτων βλαστήσει. Ἀλεκτορίδι δ' ὑποτιθέασιν αὐτῶν τὰ ὥα ἐπωάζειν οἱ τρέφοντες διὰ τὸ τὸν ἄρρενα τῆς θηλείας τοῦτο δρώσης ἐπιπετόμενον συντρίβειν· διὰ ταύτην δὲ τὴν αἰτίαν καὶ τῶν ἀγρίων ἔνιοι ὀρνίθων ἀποδιδράσκοντες τοὺς ἄρρενας τίκτουσι καὶ ἐπωάζουσιν.

Ὑποτίθεται δὲ τῇ ὀρνιθι μάλιστα δύο ὥα· τοσαῦτα γὰρ μόνα δύναται ἐπωάζουσα ἐξάγειν. Ἐπιμελοῦνται δ' ὅπως μὴ καταβαίνουσα διαλίπη τὸν ἐπώασμόν, παρατιθέντες τροφήν.

Οἱ δ' ὀρνιθες περὶ τὴν ὀχείαν τοὺς ὄρχεις μείζους ἴσχουσιν [ἐπιδήλως], οἱ μὲν μᾶλλον ὀχευτικοὶ καὶ μᾶλλον ἐπιδήλως, οἷον ἀλεκτρυόνες καὶ πέρδικες, οἱ δὲ μὴ συνεχῶς, ἦττον.

## Κεφάλαιο 10

Περὶ μὲν οὖν τῆς τῶν ὀρνίθων κυήσεως καὶ γενέσεως τοῦτον ἔχει τὸν τρόπον, οἱ δ' ἰχθύες ὅτι μὲν οὐ πάντες ὠοτοκοῦσιν, εἴρηται πρότερον. Τὰ μὲν γὰρ σελάχη ζωοτοκεῖ, τὸ δὲ τῶν ἄλλων γένος ἰχθύων ὠοτοκεῖ. Ζωοτοκεῖ δὲ τὰ σελάχη πρότερον ὠοτοκήσαντα ἐν αὐτοῖς, καὶ ἐκτρέφουσιν ἐν αὐτοῖς, πλὴν βατράχου.

Ἔχουσι δὲ καὶ τὰς ὑστέρας, ὥσπερ ἐν τοῖς ἄνω ἐλέχθη, διαφοροὺς οἱ ἰχθύες· τὰ μὲν γὰρ ὠοτοκοῦντα δικρόας ἔχει καὶ κάτω, τὰ δὲ σελάχη ὀρνιθωδεστέρας. Διαφέρει δὲ τῆς τῶν ὀρνίθων ὑστέρας, ὅτι οὐ πρὸς τῷ ὑποζώματι ἐνίοις συνίσταται τὰ ὥα, ἀλλὰ μεταξὺ κατὰ τὴν ῥάχιν, ἐκεῖθεν δ' αὐξανόμενα μεταβαίνει.

Τὸ δ' ὥδον γίνεται πάντων τῶν ἰχθύων οὐ δίχρων ἀλλὰ μονόχρων, λευκότερον δ' ἢ ὠχρότερον, καὶ πρότερον καὶ ὅταν ἐνῇ ὁ νεοττός. Διαφέρει δ' ἡ γένεσις ἡ ἐκ τοῦ ὠοῦ τοῦ τῶν ἰχθύων καὶ τῶν ὀρνίθων, ἢ οὐκ ἔχει τὸν ἕτερον ὀμφαλὸν τείνοντα πρὸς τὸν ὑμένα τὸν ὑπὸ τὸ ὄστρακον· τὸν δ' εἰς τὸ ὠχρόν τοῖς ὀρνισι τείνοντα πόρον, τοῦτον ἔχει τοῖν δυοῖν μόνον. Ἡ δ' ἄλλη γένεσις ἤδη πᾶσα ἢ αὐτὴ ἢ ἐκ τοῦ ὠοῦ τῶν τ' ὀρνίθων καὶ τῶν ἰχθύων· ἐπ' ἄκρῳ τε



γὰρ τούτου γίνεται, καὶ αἱ φλέβες ὁμοίως τείνουσιν ἐκ τῆς καρδίας πρῶτον, καὶ ἡ κεφαλὴ καὶ τὰ ὄμματα καὶ (565a.) τὰ ἄνω μέγιστα γίνεται τὸ πρῶτον· ὁμοίως δ' αὐξανομένου αἰεὶ ἔλαττον γίνεται τὸ ὥον, καὶ τέλος ἀφανίζεται καὶ εἰσδύεται ἔσω, καθάπερ ἐν τοῖς ὄρνισιν ὁ νεοττός καλούμενος. Προσπέφυκε δὲ καὶ ὁ ὀμφαλὸς μικρὸν κατώτερον τοῦ στόματος τῆς γαστροῦ. Ἔστι δὲ νέοις μὲν οὖσιν ὁ ὀμφαλὸς μακρὸς, αὐξανομένοις δ' ἐλάττων, καὶ τέλος μικρὸς, ἕως ἂν εἰσέλθῃ, καθάπερ ἐλέχθη ἐπὶ τῶν ὀρνίθων. Περιέχεται δὲ τὸ ἔμβρυον καὶ τὸ ὥον ὑμένι κοινῶ· ὑπὸ δὲ τοῦτον ἄλλος ἐστὶν ὑμὴν, ὃς περιέχει ἰδίᾳ τὸ ἔμβρυον· μεταξὺ δὲ τῶν ὑμένων ἔνεστιν ὑγρότης. Καὶ ἡ τροφή δ' ὁμοία γίνεται τοῖς ἰχθυοῖς ἐν τῇ κοιλίᾳ ὥσπερ τοῖς τῶν ὀρνίθων νεοττοῖς, ἢ μὲν λευκὴ ἢ δ' ὠχρὰ.

Τὸ μὲν οὖν σχῆμα τῆς ὑστέρας ὡς ἔχει, ἐκ τῶν ἀνατομῶν θεωρεῖσθω· διαφορὰ δ' ἐστὶν αὐτοῖς πρὸς αὐτούς, οἷον τοῖς γαλεώδεσι καὶ πρὸς αὐτούς καὶ πρὸς τὰ πλατέα. Ἐνίοις μὲν γὰρ ἐν τῷ μέσῳ τῆς ὑστέρας περὶ τὴν ῥάχιν προσπέφυκε τὰ ὠὰ, ὥσπερ εἴρηται, οἷον τοῖς σκυλίοις· αὐξανόμενα δὲ περιέρχεται. Οὐσῆς δὲ δικρόας τῆς ὑστέρας καὶ προσπεφυκυίας πρὸς τῷ ὑποζώματι, ὥσπερ καὶ τῶν ἄλλων τῶν τοιούτων, περιέρχεται εἰς ἑκάτερον τὸ μέρος. Ἐχει δ' ἡ ὑστέρα καὶ αὕτη καὶ ἡ τῶν ἄλλων τῶν γαλεοειδῶν μικρὸν προελθόντι ἀπὸ τοῦ ὑποζώματος οἷον μαστοὺς λευκοὺς, οἱ κυημάτων μὴ ἐνόντων οὐκ ἐγγίνονται. Τὰ μὲν σκύλια καὶ αἱ βατίδες ἴσχουσι τὰ ὀστρακώδη, ἐν οἷς ἐγγίνεται ὠώδης ὑγρότης· τὸ δὲ σχῆμα τοῦ ὀστράκου ὅμοιον ταῖς τῶν αὐλῶν γλώτταις, καὶ πόροι τριχώδεις ἐγγίνονται τοῖς ὀστράκοις. Τοῖς μὲν οὖν σκυλίοις, οὓς καλοῦσιν τινες νεβρίας γαλεούς, ὅταν περιρραγῇ καὶ ἐκπέσῃ τὸ ὀστρακον, γίνονται οἱ νεοττοί· ταῖς δὲ βατίσιν, ὅταν ἐκτέκωσι, τοῦ ὀστράκου περιρραγέντος ἐξέρχεται ὁ νεοττός. Ὁ δ' ἀκανθίας γαλεὸς πρὸς τῷ ὑποζώματι ἔχει τὰ ὠὰ ἄνωθεν τῶν μαστῶν· ὅταν δὲ καταβῇ τὸ ὥον, ἐπὶ τούτῳ ἀπολελυμένῳ γίνεται ὁ νεοττός. Τὸν αὐτὸν δὲ τρόπον (565b.) συμβαίνει ἢ γενεαίς καὶ ἐπὶ τῶν ἁλωπέκων.

Οἱ δὲ καλούμενοι λεῖτοι τῶν γαλεῶν τὰ μὲν ὠὰ ἴσχουσι μεταξὺ τῶν ὑστερῶν ὁμοίως τοῖς σκυλίοις, περιόντα δὲ ταῦτα εἰς ἑκατέραν τὴν δικρόαν τῆς ὑστέρας καταβαίνει, καὶ τὰ ζῶα γίνεται τὸν ὀμφαλὸν ἔχοντα πρὸς τῇ ὑστέρᾳ, ὥστε ἀναλίσκομένων τῶν ὠῶν ὁμοίως δοκεῖν ἔχειν τὸ ἔμβρυον τοῖς τετράποσιν. Προσπέφυκε δὲ μακρὸς ὢν ὁ ὀμφαλὸς τῆς μὲν ὑστέρας πρὸς τῷ κάτω μέρει, ὥσπερ ἐκ κοτυληδόνης ἕκαστος ἡρτημένος, τοῦ δ' ἐμβρύου κατὰ τὸ μέσον, ἢ τὸ ἦπαρ. Ἡ δὲ τροφή ἀνατεμνομένου, κἂν μηκέτ' ἔχῃ τὸ ὥον, ὠώδης. Χόριον δὲ καὶ ὑμένες ἴδιοι περὶ ἕκαστον γίνονται τῶν ἐμβρύων, καθάπερ ἐπὶ τῶν τετραπόδων. Ἐχει δὲ τὰ ἔμβρυα τὴν κεφαλὴν νέα μὲν ὄντα

ἄνω, ἀδρυνόμενα δὲ καὶ τέλεα ὄντα κάτω. Ἐγγίνεται δὲ καὶ ἐν τῇ ἀριστερᾷ ἄρρενα καὶ ἐν τῇ δεξιᾷ θήλεα, καὶ ἐν τῇ αὐτῇ ἅμα θήλεα καὶ ἄρρενα. Καὶ τὰ ἔμβρυα διαιρούμενα, ὁμοίως ὥσπερ ἐπὶ τῶν τετραπόδων, ἔχει τῶν σπλάγχχνων ὅσα ἔχει μεγάλα, οἷον τὸ ἥπαρ, καὶ αἱματώδη. Πάντα δὲ τὰ σελαχώδη ἅμα ἔχουσιν ἄνω μὲν πρὸς τῷ ὑποζώματι ὡς, τὰ μὲν μείζω τὰ δ' ἐλάττω, πολλά, κάτω δ' ἔμβρυα ἤδη· διὸ πολλοὶ κατὰ μῆνα τίκτειν καὶ ὀχεύεσθαι οἴονται τοὺς τοιούτους τῶν ἰχθύων, ὅτι οὐχ ἅμα πάντα προΐενται, ἀλλὰ πολλάκις καὶ πολὺν χρόνον. Τὰ δὲ κάτω ἐν τῇ ὑστέρᾳ ἅμα πέττεται καὶ τελεσιουργεῖται.

Οἱ μὲν οὖν ἄλλοι γαλεοὶ καὶ ἐξαφιᾷσι καὶ δέχονται εἰς ἑαυτοὺς τοὺς νεοττοὺς, καὶ αἱ ῥῖναι καὶ αἱ νάρκαι (ἤδη δ' ὥφθη νάρκη μεγάλη περὶ ὀγδοήκοντα ἔχουσα ἐν ἑαυτῇ ἔμβρυα), ὁ δ' ἀκανθίας οὐκ εἰσδέχεται μόνος τῶν γαλεῶν διὰ τὴν ἀκανθαν.

Τῶν δὲ πλατέων τρυγῶν καὶ βάτος οὐ δέχονται διὰ τὴν τραχύτητα τῆς κέρκου. Οὐκ εἰσδέχεται δ' οὐδὲ βάτραχος τοὺς νεοττοὺς διὰ τὸ μέγεθος τῆς κεφαλῆς καὶ τὰς ἀκάνθας· οὐδὲ γὰρ ζωστοκεῖ μόνος τούτων, ὥσπερ εἴρηται πρότερον. Αἱ μὲν (566a.) οὖν πρὸς ἄλληλα διαφοραὶ τοῦτον ἔχουσι τὸν τρόπον αὐτῶν, καὶ ἡ γένεσις ἡ ἐκ τῶν ὣων.

## Κεφάλαιο 11

Οἱ δ' ἄρρενες περὶ τὸν χρόνον τῆς ὀχείας τοὺς πόρους ἔχουσι θοροῦ πλήρεις οὕτως ὥστε θλιβομένων ἔξω ῥεῖν τὸ σπέρμα λευκόν. Εἰσὶ δ' οἱ πόροι δίκροοι, ἀπὸ τοῦ ὑποζώματος καὶ τῆς μεγάλης φλεβὸς ἔχοντες τὴν ἀρχήν. Περὶ μὲν οὖν τὸν χρόνον τοῦτον ἤδη διάδηλοι πρὸς τὴν τῶν θηλειῶν ὑστέραν εἰσὶν οἱ πόροι τῶν ἄρρένων, ὅταν δὲ μὴ αὐτὴ ἡ ὥρα, ἤττον διάδηλοι τῷ μὴ συνήθει· πάνπαν γὰρ ἐν ἐνίοις καὶ ἐνίοτε ἄδηλοι γίνονται, ὥσπερ ἐλέγχθη περὶ τῶν ὄρχεων ἐν τοῖς ὄρνισιν. Ἐχουσι δὲ διαφορὰς καὶ ἄλλας μὲν πρὸς ἄλληλα οἱ τε θορικοὶ πόροι καὶ οἱ ὑστερικοί, καὶ ὅτι οἱ μὲν προσπεφύκασι τῇ ὀσφύϊ, οἱ δὲ τῶν θηλειῶν πόροι εὐκίνητοί εἰσι καὶ λεπτῷ ὑμένι προσειλημμένοι. Θεωρεῖσθωσαν δὲ καὶ οἱ τῶν ἄρρένων πόροι, ὡς ἔχουσιν, ἐκ τῶν ἐν ταῖς ἀνατομαῖς διαγεγραμμένων.

Ἐπικυῖσκειται δὲ τὰ σελάχη, καὶ κύει τοὺς πλείστους μῆνας ἕξ. Πλειστάκις δ' ἀποτίκτει ὁ καλούμενος τῶν γαλεῶν ἀστερίας· ἀποτίκτει γὰρ δις τοῦ μηνός. Ἀρχονται δ' ὀχεύεσθαι μηνὸς Μαιμακτηριῶνος. Οἱ δ' ἄλλοι γαλεοὶ δις τίκτουσι, πλὴν τοῦ σκυλίου· οὗτος δ' ἅπαξ τοῦ ἐνιαυτοῦ. Τίκτουσι δὲ τὰ μὲν τοῦ ἔαρος αὐτῶν, ῥίνη δὲ καὶ τοῦ μετοπώρου πρὸς δύσιν Πλειάδος χειμερινῇν

τὸ ὕστερον, τὸ δὲ πρῶτον τοῦ ἔαρος· εὐθηνεῖ δ' αὐτῆς μάλιστα μὲν ὁ γόνος ὁ ὕστερος· αἱ δὲ νάρκαι περὶ τὸ φθινόπωρον. Ἐκτίκει δὲ τὰ σελάχη πρὸς τὴν γῆν ἐκ τοῦ πελάγους καὶ τῶν βαθέων ἐπανιόντα διὰ τε τὴν ἀλέαν καὶ διὰ τὸ φοβεῖσθαι περὶ τῶν τέκνων.

Τῶν μὲν οὖν ἄλλων ἰχθύων παρὰ τὰς συγγενείας οὐδὲν ὥπται συνδυαζόμενον, ῥίνη δὲ δοκεῖ μόνη τοῦτο ποιεῖν καὶ βάτος· ἔστι γάρ τις ἰχθύς ὃς καλεῖται ῥινόβατος· ἔχει γὰρ τὴν μὲν κεφαλὴν καὶ τὰ ἔμπροσθεν βάτου, τὰ δ' ὀπισθεν ῥίνης, ὡς γινόμενος ἐξ ἀμφοτέρων τούτων. Οἱ μὲν οὖν γαλεοὶ καὶ οἱ γαλεοειδεῖς, οἷον ἀλώπηξ καὶ κύων, καὶ οἱ πλατεῖς ἰχθύες, νάρκη καὶ βάτος καὶ λειόβατος (566b.) καὶ τρυγῶν, τὸν εἰρημένον τρόπον ζωοτοκοῦσιν ὠοτοκήσαντες.

## Κεφάλαιο 12

Δελφῖς δὲ καὶ φάλαινα καὶ τὰ ἄλλα κήτη, ὅσα μὴ ἔχει βράγχια ἀλλὰ φυσητῆρα, ζωοτοκοῦσιν, ἔτι δὲ πρίστις καὶ βοῦς· οὐδὲν γὰρ τούτων φαίνεται ἔχον ὠά, ἀλλ' εὐθέως κύημα, ἐξ οὗ διαρθρουμένου γίνεται τὸ ζῶον, καθάπερ ἄνθρωπος καὶ τῶν τετραπόδων τὰ ζωοτόκα. Τίκει δ' ὁ μὲν δελφῖς τὰ μὲν πολλὰ ἔν, ἐνίετε δὲ καὶ δύο· ἡ δὲ φάλαινα ἢ δύο τὰ πλεῖστα καὶ πλεονάκεις, ἢ ἔν. Ὅμοίως δὲ τῷ δελφῖνι καὶ ἡ φώκαινα· καὶ γὰρ ἔστιν ὅμοιον δελφῖνι μικρῷ, γίνεται δ' ἐν τῷ Πόντῳ. Διαφέρει δὲ φώκαινα δελφίνος· ἔστι γὰρ τὸ μέγεθος ἔλαττον, εὐρύτερον δ' ἐκ τοῦ νώτου· τὸ χρῶμα ἔχει κυανοῦν. Πολλοὶ δὲ δελφίνων τι γένος εἶναί φασι τὴν φώκαιναν. Ἀναπνεῖ δὲ πάντα ὅσα ἔχει φυσητῆρα, καὶ δέχεται τὸν ἀέρα· πλεύμονα γὰρ ἔχουσιν. Καὶ ὁ γε δελφῖς ὥπται, ὅταν καθεύδῃ, ὑπερέχων τὸ ῥύγχος, καὶ ῥέγχει καθεύδων. Ἔχει δ' ὁ δελφῖς καὶ ἡ φώκαινα γάλα, καὶ θηλάζονται· καὶ εἰσδέχονται δὲ τὰ τέκνα μικρὰ ὄντα. Τὴν δ' αὖξησιν τὰ τέκνα τῶν δελφίνων ποιοῦνται ταχεῖαν· ἐν ἔτεσι γὰρ δέκα μέγεθος λαμβάνουσι τέλεον. Κύει δὲ δέκα μῆνας. Τίκει δ' ὁ δελφῖς ἐν τῷ θέρει, ἐν ἄλλῃ δ' ὥρα οὐδεμιᾷ· συμβαίνει δὲ καὶ ἀφανίζεσθαι αὐτὸν ὑπὸ κύνα περὶ τριάκονθ' ἡμέρας. Παρακολουθεῖ δὲ τὰ τέκνα πολὺν χρόνον, καὶ ἔστι τὸ ζῶον φιλότεκνον. Ζῇ δ' ἔτη πολλά· δῆλοι γὰρ ἔνιοι γεγόνασι βιοῦντες οἱ μὲν πλείω ἔτη ἢ πέντε καὶ εἴκοσιν, οἱ δὲ τριάκοντα· ἀποκόπτοντες γὰρ ἐνίων τὸ οὐραῖον οἱ ἀλιεῖς ἀφιᾶσιν, ὥστε τούτῳ γνωρίζουσι τοὺς χρόνους αὐτῶν.

Ἡ δὲ φώκη ἐστὶ τῶν ἐπαμφοτεριζόντων ζώων· οὐ δέχεται μὲν γὰρ τὸ ὕδωρ, ἀλλ' ἀναπνεῖ καὶ καθεύδει καὶ τίκει ἐν τῇ γῇ μὲν, πρὸς αἰγιαλοῖς δέ, ὡς οὖσα τῶν πεζῶν, διατρίβει δὲ τοῦ χρόνου τὸν πολὺν καὶ τρέφεται ἐκ τῆς

θαλάττης, διὸ μετὰ τῶν ἐνύδρων περὶ αὐτῆς λεκτέον. Ζωοτοκεῖ μὲν οὖν εὐθύς ἐν αὐτῇ, καὶ τίκει ζῶα, καὶ χόριον καὶ (567a.) τᾶλλα προῖεται ὥσπερ πρόβατον. Τίκει δ' ἐν ἡ δύο, τὰ δὲ πλεῖστα τρία. Καὶ μαστοὺς δ' ἔχει δύο καὶ θηλάζεται ὑπὸ τῶν τέκνων καθάπερ τὰ τετράποδα. Τίκει δ' ὥσπερ ἄνθρωπος πᾶσαν ὥραν τοῦ ἔτους, μάλιστα δ' ἅμα ταῖς πρώταις αἱξίν. Ἄγει δὲ περὶ δωδεκαταῖα ὄντα τὰ τέκνα εἰς τὴν θάλατταν πολλάκις τῆς ἡμέρας, συνεθίζουσα κατὰ μικρόν· τὰ δὲ κατάντη φέρεται, ἄλλ' οὐ βαδίζει, διὰ τὸ μὴ δύνασθαι ἀπερείδεσθαι τοῖς ποσίν. Συνάγει δὲ καὶ συστέλλει ἑαυτήν· σαρκῶδες γάρ ἐστι καὶ μαλακόν, καὶ ὅστ' αὖ χονδρώδη ἔχει. Ἀποκτεῖναι δὲ φώκην χαλεπὸν βιαίως, ἐὰν μή τις πατάξῃ παρὰ τὸν κρόταφον· τὸ γὰρ σῶμα σαρκῶδες αὐτῆς ἐστίν. Ἀφίησι δὲ φωνὴν ὁμοίαν βοῖ. Ἔχει δὲ καὶ τὸ αἰδοῖον ἢ θήλεια ὅμοιον προβάτῳ, πάντα δὲ τᾶλλα γυναικί.

Περὶ μὲν οὖν τῶν ἐνύδρων καὶ ζωοτοκούντων ἢ ἐν αὐτοῖς ἢ ἔξω ἢ γένεσις καὶ τὰ περὶ τὸν τόκον τοῦτον ἔχει τὸν τρόπον.

### Κεφάλαιο 13

Οἱ δ' ὠοτοκοῦντες τῶν ἰχθύων τὴν μὲν ὑστέραν δικρόαν ἔχουσι καὶ κάτω, καθάπερ ἐλέχθη πρότερον (ὠοτοκοῦσι δὲ πάντες οἱ τε λεπιδωτοί, οἷον λάβραξ, κεστρεύς, κέφαλος, ἔτελīs, καὶ οἱ λευκοὶ καλούμενοι πάντες, καὶ οἱ λεῖοι πλὴν ἐγγέλυος), ὡδὸν δ' ἴσχουσι ψαθυρόν. Τοῦτο δὲ φαίνεται διὰ τὸ τὴν ὑστέραν εἶναι πλήρη πᾶσαν ὥσιν, ὥστ' ἐν γε τοῖς μικροῖς τῶν ἰχθύων δοκεῖν ὡς μόνον εἶναι δύο· διὰ τὴν μικρότητα γὰρ καὶ τὴν λεπτότητα ἄδηλος ἐν αὐτοῖς ἡ ὑστέρα.

Περὶ μὲν οὖν τῆς ὀχείας πάντων τῶν ἰχθύων εἴρηται πρότερον. Εἰσὶ δὲ τῶν ἰχθύων οἱ μὲν πλεῖστοι ἄρρενες καὶ θήλεις, περὶ δ' ἐρυθρίνου καὶ χάννης ἀπορεῖται· πάντες γὰρ ἀλίσκονται κυήματα ἔχοντες. Συνίσταται μὲν οὖν καὶ ὀχευομένων ὡς τοῖς συνδυαζομένοις τῶν ἰχθύων, ἴσχουσι δὲ καὶ ἄνευ ὀχείας.

Δηλοῦσι δ' ἔνιοι τῶν ποταμίων· εὐθύς γὰρ γεννώμενοι ὡς εἶπεῖν καὶ μικροὶ ὄντες οἱ φοξῖνοι κυήματ' ἔχουσιν.

Ἀπορραίνουσι δὲ τὰ ὡς καί, καθάπερ λέγεται, τὰ μὲν πολλὰ οἱ ἄρρενες ἀνακάπτουσι, τὰ δ' ἀπόλλυται ἐν τῷ ὑγρῷ· ὅσα (567b.) δ' ἂν ἐκτέκωσιν εἰς τοὺς τόπους εἰς οὓς ἐκτίκτουσι, ταῦτα σώζεται· εἰ γὰρ πάντα ἐσώζετο, παμπληθὲς ἂν τὸ γένος ἦν ἐκάστων. Καὶ τούτων δ' οὐ γίνεται τὰ πολλὰ γόνιμα, ἄλλ' ὅσα ἂν ἐπιρράνῃ ὁ ἄρρην τῷ θορῷ· ὅταν γὰρ ἐκτέκῃ,

παρεπόμενος ὁ ἄρρην ἐπιρραίνει ἐπὶ τὰ ὡὰ τὸν θορόν, καὶ ὅσα μὲν ἂν ἐπιρρανθῇ, ἐκ πάντων γίνεται ἰχθύδια, ἐκ δὲ τῶν ἄλλων ὅπως ἂν τύχη. Ταῦτὸ δὲ συμβαίνει τοῦτο καὶ ἐπὶ τῶν μαλακίων· ὁ γὰρ ἄρρην τῶν σηπιῶν, ὅταν ἐκτέκη ἡ θήλεια, ἐπιρραίνει τὰ ὡὰ. Ὅπερ εὖλογον καὶ ἐπὶ τῶν ἄλλων συμβαίνειν μαλακίων, ἀλλ' ἐπὶ τῶν σηπιῶν ὥπται ἐν τῷ παρόντι μόνον.

Ἐκτίκτουσι δὲ πρὸς τῇ γῇ, οἱ μὲν κωβιοὶ πρὸς τοῖς λίθοις, πλὴν πλατὺ καὶ ψαθυρὸν τὸ ἀποτικτόμενόν ἐστιν. Ὅμοίως δὲ καὶ οἱ ἄλλοι· ἀλεεινά τε γὰρ ἐστι τὰ περὶ τὴν γῆν, καὶ τροφὴν ἔχει μᾶλλον, καὶ πρὸς τὸ μὴ κατεσθίεσθαι ὑπὸ τῶν μειζόνων τὰ κυήματα. Διὸ καὶ ἐν τῷ Πόντῳ περὶ τὸν Θερμώδοντα ποταμὸν οἱ πλεῖστοι τίκτουσιν· νήνεμος γὰρ ὁ τόπος καὶ ἀλεεινὸς καὶ ἔχων ὕδατα γλυκέα. Τίκτουσι δ' οἱ μὲν ἄλλοι τῶν ὠοτόκων ἰχθύων ἅπαξ τοῦ ἐνιαυτοῦ, πλὴν τῶν μικρῶν φυκίδων· αὗται δὲ δίς. Διαφέρει δ' ὁ ἄρρην φύκης τῆς θηλείας τῷ μελάντερος εἶναι καὶ μείζους ἔχειν τὰς λεπίδας.

Οἱ μὲν οὖν ἄλλοι ἰχθύες γόνῳ τίκτουσι καὶ τὰ ὡὰ ἀφιᾶσιν· ἦν δὲ καλοῦσί τινες βελόνην, ὅταν ἤδη ὥρα ᾗ τοῦ τίκτειν, διαρρήγνυται, καὶ οὕτω τὰ ὡὰ ἐξέρχεται. Ἔχει γάρ τινα ὁ ἰχθύς οὗτος διάφυσιν ὑπὸ τὴν γαστέρα καὶ τὸ ἥτρον, ὥσπερ οἱ τυφλῖναι ὄφεις· ὅταν δ' ἐκτέκη, συμφύεται ταῦτα πάλιν.

Ἡ δὲ γένεσις ἐκ τοῦ ὠοῦ ὁμοίως συμβαίνει ἐπὶ τε τῶν ἔσω ὠοτοκούντων καὶ ἐπὶ τῶν ἔξω· ἐπ' ἄκρου τε γὰρ γίνεται καὶ ὑμένι περιέχεται, καὶ πρῶτον διάδηλοι οἱ ὀφθαλμοὶ μεγάλοι καὶ σφαιροειδεῖς ὄντες. Ἦι καὶ δῆλον ὅτι οὐχ ὥσπερ τινές φασιν, ὁμοίως γίνονται τοῖς ἐκ τῶν σκωλήκων γινομένοις· τοῦναντίον γὰρ συμβαίνει ἐπ' ἐκείνων, τὰ κάτω μείζω πρῶτον, οἱ δ' ὀφθαλμοὶ καὶ ἡ κεφαλὴ ὕστερον. Ὅταν δ' (568a.) ἀναλωθῇ τὸ ὠόν, γίνονται γυρινώδεις, καὶ τὸ μὲν πρῶτον οὐδεμίαν τροφὴν λαμβάνοντα αὐξάνονται ἐκ τῆς ἀπὸ τοῦ ὠοῦ ἐγγινομένης ὑγρότητος, ὕστερον δὲ τρέφονται ἕως ἂν αὐξηθῶσι τοῖς ποταμίῳις ὕδασι.

Τοῦ δὲ Πόντου καθαιρομένου ἐπιφέρεται τι κατὰ τὸν Ἑλλήσποντον ὃ καλοῦσι φῦκος· ἔστι δ' ὠχρὸν τοῦτο. Οἱ δὲ τινές φασι τοῦτο ἄνθος εἶναι τοῦ φύκου, ἀφ' οὗ τὸ φυκίον εἶναι. Ἀρχομένου δὲ γίνεται τοῦ θέρους. Τούτῳ τρέφεται καὶ τὰ ὄστρεα καὶ τὰ ἰχθύδια τὰ ἐν τοῖς τόποις τούτοις. Φασὶ δὲ τινες τῶν θαλαττίων καὶ τὴν πορφύραν ἴσχειν ἀπὸ τούτου τὸ ἄνθος.

## Κεφάλαιο 14

Οἱ δὲ λιμναῖοι καὶ οἱ ποτάμιοι τῶν ἰχθύων κυήματα μὲν ἴσχουσι πεντάμηνοι

τὴν ἡλικίαν ὄντες ὥς ἐπὶ τὸ πολὺ, τίκτουσι δὲ τοῦ ἐνιαυτοῦ περιόντος ἅπαντες· ὥσπερ δὲ καὶ οἱ θαλάττιοι, καὶ οὗτοι οὐκ ἐξαφιάσιν οὐδέποτε ἅμα πᾶν, οὐθ' αἱ θήλειαι τὸ ὦν οὐθ' οἱ ἄρρενες τὸν θορόν, ἀλλ' ἔχουσιν αἰεὶ πλείω ἢ ἐλάττονα αἱ μὲν ὦα οἱ δὲ θορόν. Τίκτουσι δ' ἐν τῇ καθηκούσῃ ὥρᾳ κυπρίνος μὲν πεντάκις ἢ ἑξάκις (ποιεῖται δὲ τὸν τόκον μάλιστα ἐπὶ τοῖς ἄστροις), χαλκὶς δὲ τίκτει τρίς, οἱ δ' ἄλλοι ἅπαξ ἐν τῷ ἐνιαυτῷ πάντες. Τίκτουσι δ' ἐν ταῖς προλιμνάσι τῶν ποταμῶν καὶ τῶν λιμνῶν πρὸς τὰ καλαμώδη, οἷον οἱ τε φοξῖνοι καὶ αἱ πέρκαι. Οἱ δὲ γλάνεις καὶ αἱ πέρκαι συνεχῆς ἀφιάσι τὸ κύημα, ὥσπερ οἱ βάτραχοι· οὕτω δὲ συνεχὲς ἐστὶ τὸ κύημα περιελιγμένον, ὥστε τό γε τῆς πέρκης διὰ πλατύτητα ἀναπνιζονται ἐν ταῖς λίμναις οἱ ἀλιεῖς ἐκ τῶν καλάμων. Οἱ μὲν οὖν μείζους τῶν γλάνιων ἐν τοῖς βαθέσι ἐκτίκτουσιν, ἔνιοι καὶ κατ' ὀργυιᾶς τὸ βάθος, οἱ δ' ἐλάττους αὐτῶν ἐν τοῖς βραχυτέροις, μάλιστα πρὸς ρίζαις ἰτέας ἢ ἄλλου τινὸς δένδρου, καὶ πρὸς τῷ καλάμῳ δὲ καὶ πρὸς τῷ βρύῳ. Συμπλέκονται δὲ πρὸς ἀλλήλους ἐνίοτε καὶ πάνυ μέγας πρὸς μικρόν· καὶ προσαγαγόντες τοὺς πόρους πρὸς ἀλλήλους, οὓς καλοῦσιν τινες (568b.) ὀμφαλούς, ἢ τὸν γόνον ἀφιάσιν, ὁ μὲν τὸ ὦν ὁ δὲ τὸν θορόν ἐξίησιν. Ὅσα δ' ἂν τῷ θορῷ μιχθῇ τῶν ὦων, εὐθύς τε λευκότερα φαίνεται καὶ μείζω ἐν ἡμέρᾳ ὥς εἰπεῖν. Ὑστερον δ' ἐν ὀλίγῳ χρόνῳ δῆλὰ ἐστὶ τὰ ὄμματα τοῦ ἰχθύος· τοῦτο γὰρ ἐν πᾶσι τοῖς ἰχθύσιν, ὥσπερ καὶ ἐν τοῖς ἄλλοις ζώοις, ἐπιδηλότατόν ἐστιν εὐθύς καὶ φαίνεται μέγιστον. Ὅσων δ' ἂν ὦων ὁ θορὸς μὴ θίγῃ, καθάπερ καὶ ἐπὶ τῶν θαλαττίων, ἀχρεῖον τὸ ὦν τοῦτο καὶ ἄγονόν ἐστιν. Ἀπὸ δὲ τῶν γονίμων ὦων αὐξανομένων τῶν ἰχθυδίων ἀποκαθαίρεται οἷον κέλυφος· τοῦτο δ' ἐστὶν ὑμὴν περιέχων τὸ ὦν καὶ τὸ ἰχθυδίων.

Ὅταν δὲ μιγῇ τῷ ὦῳ ὁ θορός, σφόδρα γίνεται κολλῶδες τὸ συνεστηκὸς ἐξ αὐτῶν πρὸς ταῖς ρίζαις ἢ ὅπου ἂν ἐκτέκωσιν.

Οὗ δ' ἂν πλεῖστον τέκωσιν, ὠοφυλακεῖ ὁ ἄρρην, ἡ δὲ θήλεια ἀπέρχεται τεκοῦσα. Ἔστι δὲ βραδυτάτη μὲν ἐκ τῶν ὦων ἢ τῶν γλάνιων αὕξησις, διὸ προσεδρεύει ὁ ἄρρην καὶ τετταράκοντα καὶ πεντήκοντα ἡμέρας, ὅπως μὴ κατεσθίηται ὁ γόνος ὑπὸ τῶν παρατυχόντων ἰχθυδίων· δευτέρα δὲ βραδυτῇτι ἡ τοῦ κυπρίνου γένεσις, ὅμως δὲ ταχέως καὶ τούτων ὁ σωζόμενος διαφεύγει γόνος. Τῶν δ' ἐλαττόνων ἐνίων καὶ τριταίων ὄντων ἤδη ἰχθυδιά ἐστιν. Λαμβάνει δ' αὕξησιν τὰ ὦα, ὧν ἂν ἐπιψαύσῃ ὁ θορός, καὶ αὐθημερόν καὶ ὕστερον ἔτι. Τὸ μὲν οὖν τοῦ γλάνιος γίνεται ὅσον ὄροβος, τὰ δὲ τῶν κυπρίνων καὶ τῶν τοιούτων ὅσον κέγχρος.

Ταῦτα μὲν οὖν τοῦτον τὸν τρόπον τίκτει καὶ γεννᾷ, χαλκὶς δὲ τίκτει ἐν τοῖς

βαθέσιν ἀθρόα καὶ ἀγελαῖα, ὃν δὲ καλοῦσι τίλωνα, πρὸς τοῖς αἰγιαλοῖς ἐν ὑπηνέμοις· ἀγελαῖος δὲ καὶ οὗτος. Κυπρῖνος δὲ καὶ βάλερος καὶ οἱ ἄλλοι πάντες ὡς εἶπεῖν ὠθοῦνται μὲν εἰς τὰ βραχέα πρὸς τὸν τόκον, μιᾷ δὲ θηλείᾳ πολλάκις ἀκολουθοῦσιν ἄρρενες καὶ τρισκαίδεκα καὶ τεσσαρεσκαίδεκα· τῆς θηλείας δ' ἀφείσης τὸ ὦδον καὶ ὑποχωρούσης ἐπακολουθοῦντες ἐπιρραίνουσι τὸν θορόν. Απόλλυται δὲ τὰ πλεῖστ' αὐτῶν· (569a.) διὰ τε γὰρ τὸ ὑποχωροῦσαν τίκτειν τὴν θήλειαν σκεδάννυται τὸ ὦδον, ὃ τι ἂν ὑπὸ ῥεύματος ληφθῇ καὶ μὴ προσπέσῃ πρὸς ὕλην· καὶ γὰρ οὐδ' ὠοφυλακεῖ τῶν ἄλλων ἔξω γλάνιος οὐδεὶς, πλὴν ἂν ἀθρόῳ γόνῳ ἑαυτοῦ περιτύχῃ ὁ κυπρῖνος· τοῦτον δὲ φασιν ὠοφυλακεῖν. Θορόν δὲ πάντες ἔχουσιν οἱ ἄρρενες πλὴν ἐγγέλυος· αὕτη δ' οὐδέτερον οὗτ' ὦδον οὕτε θορόν. Οἱ μὲν οὖν κεστρεῖς ἐκ τῆς θαλάττης ἀναβαίνουσιν εἰς τὰς λίμνας καὶ τοὺς ποταμούς, αἱ δ' ἐγγέλους τοῦναντίον ἐκ τούτων εἰς τὴν θάλατταν.

## Κεφάλαιο 15

Οἱ μὲν οὖν πλεῖστοι, ὥσπερ εἴρηται, τῶν ἰχθύων γίνονται ἐξ ὠῶν. Οὐ μὲν ἄλλ' ἔνιοι καὶ ἐκ τῆς ἰλύος καὶ ἐκ τῆς ἄμμου γίνονται, καὶ τῶν τοιούτων γενῶν ἃ γίνεται ἐκ συνδυασμοῦ καὶ ὠῶν, ἐν τέλμασιν ἄλλοις τε, καὶ οἶον περὶ Κνίδον φασὶν εἶναί ποτε, ὃ ἐξηραίνετο μὲν ὑπὸ κύνα καὶ ἡ ἰλὺς ἅπασα ἐξηρεῖτο, ὕδωρ δ' ἦρχετο ἐγγίνεσθαι ἅμα τοῖς ὄμβροις γινομένοις. Ἐν τούτῳ ἰχθύδια ἐνεγίνετο ἀρχομένου τοῦ ὕδατος. Ἦν δὲ κεστρέων τι γένος τοῦτο, ὃ οὐδὲ γίνεται ἐξ ὀχείας, μέγεθος ἡλίκαι μαινίδια μικρά· ὦδον δὲ τούτων εἶχεν οὐδὲν οὐδὲ θορόν. Γίνεται δὲ καὶ ἐν ποταμοῖς ἐν τῇ Ἀσίᾳ, οὐ διαρρέουσιν εἰς τὴν θάλατταν, ἰχθύδια μικρά, ἡλίκαι ἐψητοί, ἕτερα τὸν αὐτὸν τρόπον τούτοις. Ἔνιοι δὲ καὶ ὅλως φασὶ τοὺς κεστρεῖς φύεσθαι πάντας, οὐκ ὀρθῶς λέγοντες· ἔχουσαι γὰρ φαίνονται καὶ ὡὰ αἱ θήλειαι αὐτῶν καὶ θορόν οἱ ἄρρενες.

Ἀλλὰ γένος τί ἐστὶν αὐτῶν τοιοῦτον, ὃ φύεται ἐκ τῆς ἰλύος καὶ τῆς ἄμμου. Ὅτι μὲν οὖν γίνεται αὐτόματα ἔνια οὗτ' ἐξ ὠῶν οὗτ' ἐξ ὀχείας, φανερόν ἐκ τούτων. Ὅσα δὲ μήτ' ὠοτοκεῖ μήτε ζωοτοκεῖ, πάντα γίνεται τὰ μὲν ἐκ τῆς ἰλύος τὰ δ' ἐκ τῆς ἄμμου καὶ τῆς ἐπιπολαζούσης σήψεως, οἶον καὶ τῆς ἀφύης ὁ καλούμενος ἀφρὸς γίνεται ἐκ τῆς ἀμμώδους γῆς· καὶ ἔστιν αὕτη ἡ ἀφύη ἀναυξῆς καὶ ἄγονος, καὶ ὅταν (569b.) πλείων γένηται χρόνος, ἀπόλλυται, ἄλλη δὲ πάλιν ἐπιγίνεται, διὸ ἔξω χρόνου τινὸς ὀλίγου πᾶσαν ὡς εἶπεῖν τὴν ἄλλην γίνεται ὥραν· διαμένει γὰρ ἀρξάμενος ἀπὸ ἀρκτούρου μετοπωρινοῦ μέχρι τοῦ ἔαρος. Σημεῖον δ' ὅτι ἐνίот' ἐκ τῆς γῆς ἀνέρχεται· ἀλιευομένων γάρ, ἔαν μὲν ἡ ψῦχος, οὐχ ἀλίσκεται, ἔαν δ' ἡ εὐδία, ἀλίσκεται, ὡς ἐκ τῆς γῆς ἀνιοῦσα πρὸς τὴν ἀλέαν. Καὶ ἐλκόντων καὶ ἀναξυομένης τῆς γῆς

πλεονάκεις πλείων γίνεται καὶ βελτίων. Αἱ δ' ἄλλαι ἀφύαι χείρους διὰ τὸ ταχὺ λαμβάνειν αὐξήσιν.

Γίνονται δ' ἐν τοῖς ἐπισκίοις καὶ ἐλώδεσι τόποις, ὅταν εὐημερίας γενομένης ἀναθερμαίνηται ἡ γῆ, οἷον περὶ Ἀθήνας ἐν Σαλαμῖνι καὶ πρὸς τῷ Θεμιστοκλείῳ καὶ ἐν Μαραθῶνι· ἐν γὰρ τούτοις τοῖς τόποις γίνεται ὁ ἀφρός. Φαίνεται δ' ἐν μὲν τόποις τοιούτοις καὶ εὐημερίαις τοιαύταις, γίνεται δ' ἐνιαχοῦ καὶ ὁπόταν ὕδωρ πολὺ ἐξ οὐρανοῦ γένηται, ἐν τῷ ἀφρῷ τῷ γινομένῳ ὑπὸ τοῦ ὀμβρίου ὕδατος, διὸ καὶ καλεῖται ἀφρός· καὶ ἐπιφέρεται ἐνίοτε ἐπιπολῆς τῆς θαλάττης, ὅταν εὐημερία ᾗ, ἐν ᾧ συστρέφεται, οἷον ἐν τῇ κόπρῳ τὰ σκωλήκια, οὕτως ἐν τούτῳ ὁ ἀφρός, ὅπου ἂν συστῇ ἐπιπολῆς· διὸ πολλαχοῦ προσφέρεται ἐκ τοῦ πελάγους ἡ ἀφύη αὕτη. Καὶ εὐθηνεῖ δὲ καὶ ἀλίσκεται πλείστη, ὁπόταν ἔνυγρον καὶ εὐδιεινὸν γένηται τὸ ἔτος.

Ἡ δ' ἄλλη ἀφύη γόνος ἰχθύων ἐστίν, ἡ μὲν καλουμένη κωβίτις κωβιῶν τῶν μικρῶν καὶ φαύλων, οἱ καταδύνουσιν εἰς τὴν γῆν· ἐκ δὲ τῆς φαληρικῆς γίνονται μεμβράδες, ἐκ δὲ τούτων τριχίδες, ἐκ δὲ τῶν τριχίδων τριχίαί, ἐκ δὲ μιᾶς ἀφύης, οἷον τῆς ἐν τῷ Ἀθηναίων λιμένι, οἱ ἐγκρασίχολοι καλούμενοι. Ἔστι δὲ καὶ ἄλλη ἀφύη, ἡ γόνος ἐστὶ μαινίδων καὶ κεστρέων.

Ὁ δ' ἀφρός ὁ ἄγονος ὑγρός ἐστὶ καὶ διαμένει ὀλίγον χρόνον, καθάπερ εἴρηται πρότερον· τέλος γὰρ λείπεται κεφαλὴ καὶ ὀφθαλμοί. Πλὴν (570a.) νῦν εὗρηται τοῖς ἀλιεῦσι πρὸς τὸ διακομίζειν· ἀλιζομένη γὰρ πλείω μένει χρόνον.

## Κεφάλαιο 16

Αἱ δ' ἐγγέλους οὗτ' ὀχείας γίνονται οὗτ' ὥτοκοῦσιν, οὐδ' ἐλήφθη πώποτε οὔτε θορὸν ἔχουσα οὐδεμία οὗτ' ὠά, οὗτ' ἀνασχισθεῖσαι ἐντὸς θορικοῦς πόρους οὗθ' ὑστερικοῦς ἔχουσιν· ἀλλὰ τοῦτο ὅλον τὸ γένος τῶν ἐναίμων οὐ γίνεται οὗτ' ἐξ ὀχείας οὗτ' ἐξ ὠῶν. Φανερόν δ' ἐστὶν ὅτι οὕτως ἔχει· ἐν ἐνίαις γὰρ τελματώδεσι λίμναις τοῦ θ' ὕδατος παντὸς ἐξαντληθέντος καὶ τοῦ πηλοῦ ξυσθέντος γίνονται πάλιν, ὅταν ὕδωρ γένηται ὄμβριον· ἐν δὲ τοῖς αὐχμοῖς οὐ γίνονται, οὐδ' ἐν ταῖς διαμενούσαις λίμναις· καὶ γὰρ ζῶσι καὶ τρέφονται ὀμβρίῳ ὕδατι. Ὅτι μὲν οὖν οὗτ' ἐξ ὀχείας οὗτ' ἐξ ὠῶν γίνονται, φανερόν ἐστιν.

Δοκοῦσι δὲ πῖσι γεννᾶν, ὅτι ἐν ἐνίαις τῶν ἐγγελύων ἐλμίνθια ἐγγίνεται· ἐκ τούτων γὰρ οἶονται γίνεσθαι ἐγγέλους. Τοῦτο δ' ἐστὶν οὐκ ἀληθές, ἀλλὰ γίνονται ἐκ τῶν καλουμένων γῆς ἐντέρων, ἃ αὐτόματα συνίσταται ἐν τῷ



πηλῶ καὶ ἐν τῇ γῇ τῇ ἐνίκμῳ. Καὶ ἤδη εἰσὶν ὠμμένοι αἱ μὲν ἐκλυόμεναι ἐκ τούτων, αἱ δ' ἐν διακνιζομένοις καὶ διαιρουμένοις γίνονται φαγεραί. Καὶ ἐν τῇ θαλάττῃ δὲ καὶ ἐν τοῖς ποταμοῖς γίνεται τὰ τοιαῦτα, ὅταν ἡ μάλιστα σῆψις, τῆς μὲν θαλάττης πρὸς τοῖς τοιούτοις τόποις οὗ ἂν ἡ φύκος, τῶν δὲ ποταμῶν καὶ λιμνῶν περὶ τὰ χεῖλη· ἐνταῦθα γὰρ ἡ ἀλέα ἰσχύουσα σήπει. Περὶ μὲν οὖν τῆς τῶν ἐγγελύων γενέσεως τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 17

Τοὺς δὲ τόκους οὔτε πάντες οἱ ἰχθύες ποιοῦνται τὴν αὐτὴν ὥραν οὔθ' ὁμοίως, οὔτε κύουσι τὸν ἴσον χρόνον. Πρὸ μὲν οὖν τῆς ὀχείας ἀγέλαι γίνονται ἄρρένων καὶ θηλειῶν· ὅταν δὲ περὶ τὴν ὀχείαν καὶ τοὺς τόκους ὥσι, συνδυάζονται. Κύουσι δὲ τούτων ἔνιοι μὲν οὐ πλείους τριάκονθ' ἡμερῶν, οἱ δ' ἐλάττω χρόνον, πάντες δ' ἐν χρόνοις διαιρουμένοις εἰς τὸν τῶν ἐβδομάδων ἀριθμόν. Κύουσι δὲ πλεῖστον χρόνον οὓς καλοῦσιν τινες μαρίνους. Σαργὸς δὲ κυῖσκειται μὲν περὶ τὸν (570b.) Ποσειδεῶνα μῆνα, κύει δ' ἡμέρας τριάκοντα· καὶ ὃν καλοῦσιν τινες χελῶνα τῶν κεστρέων, καὶ ὁ μύξων τὴν αὐτὴν ὥραν καὶ ἴσον χρόνον κύουσι τῷ σαργῷ.

Πονοῦσι δὲ τῇ κυήσει πάντες, διὸ μάλιστα τὴν ὥραν ταύτην ἐκπίπτουσιν· φέρονται γὰρ οἰστρῶντες πρὸς τὴν γῆν. Καὶ ὅλως ἐν κινήσει περὶ τὸν χρόνον τοῦτον διατελοῦσιν ὄντες, ἕως ἂν ἐκτέκωσιν· καὶ μάλιστα ὁ κεστρεὺς τοῦτο ποιεῖ τῶν ἰχθύων· ὅταν δ' ἐκτέκωσιν, ἡσυχάζουσιν. Πολλοῖς δὲ τῶν ἰχθύων πέρας ἐστὶ τοῦ τίκτειν, ὅταν ἐγγένηται σκωλήκια ἐν τῇ γαστρί· ἐγγίνεται γὰρ μικρὰ καὶ ἔμψυχα, ἃ ἐξελαύνει τὰ κυήματα.

Οἱ δὲ τόκοι γίνονται τοῖς μὲν ῥυάσι τοῦ ἔαρος, καὶ τοῖς πλείστοις δὲ περὶ τὴν ἔαριν ἰσημερίαν· τοῖς δ' ἄλλοις οὐχ ἡ αὐτὴ ὥρα τοῦ ἔτους, ἀλλὰ τοῖς μὲν τοῦ θέρους, τοῖς δὲ περὶ τὴν φθινοπωρινὴν ἰσημερίαν. Τίκτει δὲ πρῶτον τῶν τοιούτων ἀθερίνη (τίκτει δὲ πρὸς τῇ γῇ), κέφαλος δ' ὕστατος· δῆλον δ' ἐκ τοῦ πρῶτον ταύτης φαίνεσθαι τὸν γόνον, τοῦ δ' ὕστατον. Τίκτει δὲ καὶ κεστρεὺς ἐν τοῖς πρώτοις, καὶ σάλπη τοῦ θέρους ἀρχομένου ἐν τοῖς πλείστοις, ἐνιαχοῦ δὲ μετοπώρου.

Τίκτει δὲ καὶ ὁ αὐλωπίας, ὃν καλοῦσιν τινες ἀνθίαν, τοῦ θέρους. Μετὰ δὲ τούτους χρύσοφρυς καὶ λάβραξ καὶ μόρμυρος καὶ ὅλως οἱ καλούμενοι δρομάδες. Ὑστατοὶ δὲ τῶν ἀγελαίων τρίγλη καὶ κορακῖνος· τίκτουσι δ' οὗτοι περὶ τὸ μετόπωρον.

Τίκτει δ' ἡ τρίγλη ἐπὶ τῷ πηλῷ, διὸ ὁψὲ τίκτει· πολὺν γὰρ χρόνον ὁ πηλὸς ψυχρὸς ἐστίν. Ὁ δὲ κορακῖνος ὕστερον τῆς τρίγλης ἐπὶ τῶν φυκίων ἐκπορευόμενος, διὰ τὸ βιοτεύειν ἐν τοῖς πετραίοις χωρίοις· κύει δὲ πολὺν χρόνον. Αἱ δὲ μαινίδες τίκτουσι μετὰ τροπᾶς χειμερινᾶς. Τῶν δ' ἄλλων ὅσοι πελάγιοι, οἱ πολλοὶ θέρους τίκτουσιν· σημεῖον δ' ὅτι οὐχ ἀλίσκονται τὸν χρόνον τοῦτον.

Πολυγονώτατον δ' ἐστὶ τῶν ἰχθύων μαινίς, τῶν δὲ σελαχῶν βάτραχος· ἀλλὰ σπάνιοι εἰσι διὰ τὸ ἀπόλλυσθαι ῥαδίως· τίκτει γὰρ ἀθρόα καὶ πρὸς τῇ γῇ. Ὅλως δ' ὀλιγογονώτερα μὲν ἐστὶ τὰ σελάχη (571a.) διὰ τὸ ζωοτοκεῖν, σώζεται δὲ μάλιστα ταῦτα διὰ τὸ μέγεθος. Ὀψίγονον δ' ἐστὶ καὶ ἡ καλουμένη βελόνη, καὶ αἱ πολλὰ αὐτῶν πρὸ τοῦ τίκτειν διαρρήγνυνται ὑπὸ τῶν ὤων· ἴσχει δ' οὐχ οὕτω πολλὰ ὡς μεγάλα. Καὶ ὥσπερ τὰ φαλάγγια δέ, περικέχυνται καὶ περὶ τὴν βελόνην· ἐκτίκτει γὰρ πρὸς αὐτῇ, κἄν τις θίγῃ, φεύγουσιν. Ἡ δ' ἀθερίνη τίκτει τρίβουσα τὴν κοιλίαν πρὸς τὴν ἄμμον.

Διαρρήγνυνται δὲ καὶ οἱ θύννοι ὑπὸ τῆς πιμελῆς, ζῶσι δ' ἔτη δύο. Σημεῖον δὲ τούτου ποιοῦνται οἱ ἀλιεῖς· ἐκλιπουσῶν γάρ ποτε τῶν θυννίδων ἐνιαυτόν, τῷ ἐχομένῳ ἔτει καὶ θύννοι ἐξέλιπον. Δοκοῦσι δ' ἐνιαυτῷ εἶναι πρεσβύτεροι τῶν πηλαμύδων.

Ὁχεύφθινοντα, τίκτουσι δὲ περὶ τὸν Ἑκατομβαιῶνα ἀρχόμενον· τίκτουσι δ' οἷον ἐν θυλάκῳ τὰ ὠά. Ἡ δ' αὕξησις ἐστὶ τῶν θυννίδων ταχεῖα· ὅταν γὰρ τέκωσιν οἱ ἰχθύες ἐν τῷ Πόντῳ, γίνονται ἐκ τοῦ ὥοῦ ἅς καλοῦσιν οἱ μὲν σκορδύλας, οἱ δὲ Βυζάντιοι αὐξίδας διὰ τὸ ἐν ὀλίγαις αὐξάνεσθαι ἡμέραις, καὶ ἐξέρχονται μὲν τοῦ φθινοπώρου ἅμα ταῖς θυννίσιν, εἰσπλέουσι δὲ τοῦ ἔαρος ἤδη οὔσαι πηλαμύδες. Σχεδὸν δὲ καὶ οἱ ἄλλοι πάντες ἰχθύες ταχεῖαν λαμβάνουσι τὴν αὕξησιν, πάντες δ' ἐν τῷ Πόντῳ θᾶπτον· παρ' ἡμέραν γὰρ καὶ αἱ ἀμῖαι πολὺ ἐπιδήλως αὐξάνονται. Ὅλως δὲ δεῖ νομίζειν τοῖς αὐτοῖς ἰχθύσι μὴ ἐν τοῖς αὐτοῖς τόποις μήτε τῆς ὀχείας καὶ τῆς κυήσεως εἶναι τὴν αὐτὴν ὥραν μήτε τοῦ τόκου καὶ τῆς εὐημερίας, ἐπεὶ καὶ οἱ καλούμενοι κορακῖνοι ἐνιαχοῦ τίκτουσι περὶ τὸν πυραμητόν· ἀλλὰ τοῦ ὥς ἐπὶ τὸ πολὺ γινομένου ἐστόχασται τὰ εἰρημένα.

Ἴσχουσι δὲ καὶ οἱ γόγγροι κυήματα· ἀλλ' οὐκ ἐν πᾶσι τοῖς τόποις ὁμοίως τοῦτο ἐπίδηλον, οὐδὲ τὸ κύημα σφόδρα φανερόν διὰ τὴν πιμελήν· ἴσχει γὰρ μακρόν, ὥσπερ καὶ οἱ ὄφεις. Ἀλλ' ἐπὶ τὸ πῦρ τιθέμενον διάδηλον ποιεῖ· ἢ μὲν γὰρ πιμελὴ θυμιᾶται καὶ τήκεται, τὰ δὲ πηδᾶ καὶ ψοφεῖ ἐκθλιβόμενα.

Ἔτι δ' ἂν τις ψηλαφῇ καὶ τρίβῃ τοῖς δακτύλοις, τὸ μὲν στέαρ λεῖον φαίνεται, τὸ δ' ὦδον τραχύ. Ἐνιοὶ μὲν οὖν (571b.) γόγγροι στέαρ μὲν ἔχουσιν ὦδον δ' οὐδέν, οἱ δὲ τοῦναντίον στέαρ μὲν οὐδέν, ὦδον δὲ τοιοῦτον οἶον εἴρηται νῦν.

## Κεφάλαιο 18

Περὶ μὲν οὖν τῶν ἄλλων ζώων καὶ πτηνῶν καὶ πλωτῶν, καὶ περὶ τῶν πεζῶν ὅσα ὠοτοκεῖ, σχεδὸν εἴρηται περὶ πάντων, περί τ' ὀχείας καὶ κυήσεως καὶ τῶν ἄλλων τῶν ὁμοιοτρόπων τούτοις· περὶ δὲ τῶν πεζῶν ὅσα ζωοτοκεῖ καὶ περὶ ἀνθρώπου λεκτέον τὰ συμβαίνοντα τὸν αὐτὸν τρόπον.

Περὶ μὲν οὖν ὀχείας εἴρηται καὶ ἰδίᾳ καὶ κοινῇ κατὰ πάντων. Πάντων δὲ κοινὸν τῶν ζώων τὸ περὶ τὴν ἐπιθυμίαν καὶ τὴν ἡδονὴν ἐπτοῆσθαι τὴν ἀπὸ τῆς ὀχείας μάλιστα. Τὰ μὲν οὖν θήλεα χαλεπώτατα, ὅταν ἐκτέκωσι πρῶτον, οἱ δ' ἄρρενες περὶ τὴν ὀχείαν. Οἱ τε γὰρ ἵπποι δάκνουσι τοὺς ἵππους καὶ καταβάλλουσι καὶ διώκουσι τοὺς ἱππείας, καὶ οἱ ὕες οἱ ἄγριοι χαλεπώτατοι, καίπερ ἀσθενέστατοι περὶ τὸν καιρὸν τοῦτον ὄντες, διὰ τὴν ὀχείαν, καὶ πρὸς ἀλλήλους δὲ ποιοῦνται μάχας θαυμαστάς, θωρακίζοντες ἑαυτοὺς καὶ ποιοῦντες τὸ δέρμα ὡς παχύτατον ἐκ παρασκευῆς, πρὸς τὰ δένδρα τρίβοντες καὶ τῷ πηλῷ μολύνοντες πολλάκις καὶ ξηραίνοντες ἑαυτούς· μάχονται δὲ πρὸς ἀλλήλους, ἐξελαύνοντες ἐκ τῶν συοφορβίων, οὕτω σφοδρῶς ὥστε πολλάκις ἀμφοτέρω ἀποθνήσκουσιν. Ὡσαύτως δὲ καὶ οἱ ταῦροι καὶ οἱ κριοὶ καὶ οἱ τράγοι· πρότερον γὰρ ὄντες σύννομοι ἕκαστοι περὶ τοὺς καιροὺς τῆς ὀχείας μάχονται διστάμενοι πρὸς ἀλλήλους. Χαλεπὸς δὲ καὶ ὁ κάμηλος περὶ τὴν ὀχείαν ὁ ἄρρην, ἐάν τ' ἄνθρωπος ἐάν τε κάμηλος πλησιάζῃ· ἵππῳ μὲν γὰρ ὅλως ἀεὶ πολεμεῖ.

Τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἀγρίων· καὶ γὰρ ἄρκτοι καὶ λύκοι καὶ λέοντες χαλεποὶ τοῖς πλησιάζουσι γίνονται περὶ τὸν καιρὸν τοῦτον, πρὸς ἀλλήλους δ' ἥττον μάχονται διὰ τὸ μὴ ἀγελαῖον εἶναι μηδὲν τῶν τοιούτων ζώων. Χαλεπαὶ δὲ καὶ αἱ θήλειαι ἄρκτοι ἀπὸ τῶν σκύμνων, ὥσπερ καὶ αἱ κύνες ἀπὸ τῶν σκυλακίων.

Ἐξαγριαίνονται δὲ καὶ οἱ ἐλέφαντες περὶ τὴν ὀχείαν, διόπερ φασὶν οὐκ ἔἴναι αὐτοὺς ὀχεύειν τὰς θηλείας τοὺς τρέφοντας ἐν τοῖς Ἰνδοῖς· ἐμμανεῖς γὰρ γινομένους ἐν τοῖς χρόνοις τούτοις (572a.) ἀνατρέπιν τὰς οἰκήσεις αὐτῶν ἅτε φαύλως ὠκοδομημένας, καὶ ἄλλα πολλὰ ἐργάζεσθαι. Φασὶ δὲ καὶ τὴν τῆς τροφῆς δαψίλειαν πραότερους αὐτοὺς παρέχειν· καὶ προσάγοντες δ' αὐτοῖς ἑτέρους κολάζουσι καὶ δουλοῦνται προστάττοντες τύπτειν τοῖς προσαγομένοις.

Τὰ δὲ πολλάκις ποιούμενα τὰς ὀχείας καὶ μὴ κατὰ μίαν ὥραν, οἷον τὰ συνανθρωπεύόμενα, ὕες τε καὶ κύνες, ἦττον τοιαῦτα φαίνεται διὰ τὴν ἀφθονίαν τῆς ὀμιλίας.

Τῶν δὲ θηλειῶν ὀρμητικῶς ἔχουσι πρὸς τὸν συνδυασμὸν μάλιστα μὲν ἵππος, ἔπειτα βοῦς. Αἱ μὲν οὖν ἵπποι αἱ θήλειαι ἵπομανοῦσιν· ὅθεν καὶ ἐπὶ τὴν βλασφημίαν τὸ ὄνομα αὐτῶν ἐπιφέρουσιν ἀπὸ μόνου τῶν ζώων τούτου τὴν ἐπὶ τῶν ἀκολάστων περὶ τὸ ἀφροδισιάζεσθαι. Λέγονται δὲ καὶ ἐξανεμοῦσθαι περὶ τὸν καιρὸν τοῦτον· διὸ ἐν Κρήτῃ οὐκ ἐξαιροῦσι τὰ ὀχεῖα ἐκ τῶν θηλειῶν. Ὅταν δὲ τοῦτο πάθωσι, θέουσιν ἐκ τῶν ἄλλων ἵππων. Ἔστι δὲ τὸ πάθος ὅπερ ἐπὶ τῶν ὑῶν λέγεται τὸ καπρίζειν. Θεοῦσι δὲ οὔτε πρὸς ἑὸν οὔτε πρὸς δυσμάς, ἀλλὰ πρὸς ἄρκτον ἢ νότον. Ὅταν δ' ἐμπέσῃ τὸ πάθος, οὐδένα ἑῷσι πλησιάζειν, ἕως ἂν ἡ ἀπείπωσι διὰ τὸν πόνον ἢ πρὸς θάλατταν ἔλθωσιν· τότε δ' ἐκβάλλουσί τι. Καλοῦσι δὲ καὶ τοῦτο, ὥσπερ ἐπὶ τοῦ τικτομένου, ἵπομανές· ἔστι δ' οἷον ἡ καπρία, καὶ ζητοῦσι τοῦτο μάλιστα πάντων αἱ περὶ τὰς φαρμακείας.

Περὶ δὲ τὴν ὥραν τῆς ὀχείας συγκύπτουσί τε πρὸς ἀλλήλας μᾶλλον ἢ πρότερον, καὶ τὴν κέρκον κινοῦσι πυκνά, καὶ τὴν φωνὴν ἀφιδᾷσιν ἀλλοιοτέραν ἢ κατὰ τὸν ἄλλον χρόνον· ῥεῖ δ' αὐταῖς ἐκ τοῦ αἰδοίου ὅμοιον γονῆ, λεπτότερον δὲ πολὺ ἢ τὸ τοῦ ἄρρενος· καὶ καλοῦσιν τινες τοῦτο ἵπομανές, ἀλλ' οὐ τὸ ἐπὶ τοῖς πώλοις ἐπιφυόμενον· ἐργῶδες δ' εἶναί φασι λαβεῖν· κατὰ μικρὸν γὰρ ῥεῖν. Καὶ οὐροῦσι δὲ πολλάκις, ὅταν σκυζῶσι, καὶ πρὸς αὐτὰς παίζουσιν.

Τὰ μὲν οὖν περὶ τοὺς ἵππους τοῦτον ἔχει τὸν τρόπον, αἱ δὲ βόες ταυρῶσιν· οὕτω δὲ σφόδρα κατακώχονται τῷ πάθει γίνονται, ὥστε μὴ δύνασθαι αὐτῶν κρατεῖν μηδὲ λαμβάνεσθαι τοὺς βουκόλους. (572b.) Δῆλαι δ' εἰσὶ καὶ αἱ ἵπποι καὶ αἱ βόες, ὅταν ὀργῶσι πρὸς τὴν ὀχείαν, καὶ τῇ ἐπάρσει τῶν αἰδοίων, καὶ τῷ πυκνὰ οὐρεῖν αἱ βόες ὥσπερ αἱ ἵπποι. Ἔτι δ' αἱ γε βόες ἐπὶ τοὺς ταύρους ἀναβαίνουσι, καὶ παρακολουθοῦσιν αἰεὶ, καὶ παρεστᾶσιν. Πρότερα δὲ τὰ νεώτερα ὀργᾷ πρὸς τὴν ὀχείαν καὶ ἐν τοῖς ἵπποις καὶ ἐν τοῖς βουσίν· καὶ ὅταν εὐημερίαι γίνονται καὶ τὰ σώματα εὖ ἔχωσι, μᾶλλον ὀργῶσιν.

Αἱ μὲν οὖν ἵπποι ὅταν ἀποκείρωνται, ἀποπαύονται τῆς ὀρμῆς μᾶλλον καὶ γίνονται κατηφέστεραι. Οἱ δ' ἄρρενες ἵπποι διαγινώσκουσι τὰς θηλείας τὰς συννόμους ταῖς ὁσμαῖς, κἂν ὀλίγας ἡμέρας ἅμα γένωνται πρὸ τῆς ὀχείας· κἂν ἀναμιχθῶσιν ἀλλήλοις, ἐξελαύνουσι δάκνοντες, καὶ νέμονται χωρίς, ἕκαστοι τὰς ἑαυτῶν ἔχοντες. Διδόασιν δ' ἐκάστῳ περὶ τριάκοντα ἢ μικρῷ πλείους.

Ὅταν δὲ προσίῃ τις ἄρρην, συστρέψας εἰς ταὐτὸ καὶ περιδραμῶν κύκλῳ, προσελθὼν μάχεται· κᾶν τις κινῆται, δάκνει καὶ κωλύει.

Ὁ δὲ ταῦρος, ὅταν ὥρα τῆς ὀχείας ᾗ, τότε γίνεται σύννομος καὶ μάχεται τοῖς ἄλλοις, τὸν δὲ πρότερον χρόνον μετ' ἀλλήλων εἰσίν, ὃ καλεῖται ἀτιμαγελεῖν· πολλάκις γὰρ οἱ γ' ἐν τῇ Ἡλείῳ οὐ φαίνονται τριῶν μηνῶν. Ὅλως δὲ τὰ ἄρρενα πάντα ἢ τὰ πλεῖστα οὐ συννέμονται τοῖς θήλεσι πρὸ τῆς ὥρας τοῦ ὀχεύειν, ἀλλ' ἐκκρίνονται, ὅταν εἰς ἡλικίαν ἔλθωσι, καὶ χωρὶς βόσκονται τὰ ἄρρενα τῶν θηλειῶν.

Καὶ αἱ ὕες δ' ὅταν ἔχωσι πρὸς τὴν ὀχείαν ὀρμητικῶς, ὃ καλεῖται καπρᾶν, ὠθοῦνται καὶ πρὸς τοὺς ἀνθρώπους. Περὶ δὲ τὰς κύνας τὸ τοιοῦτον πάθος καλεῖται σκυζᾶν.

Ἐπάρσις μὲν οὖν τοῖς θήλεσιν γίνεται τῶν αἰδοίων, ὅταν πρὸς τὴν ὀχείαν ὀργῶσι, καὶ ὑγρασία περὶ τὸν τόπον· αἱ δ' ἵπποι καὶ ἀπορραίνουσι λευκὴν ὑγρότητα περὶ τὸν καιρὸν τοῦτον. Καθάρσεις δὲ γίνονται μὲν καταμηνίων, οὐ μὴν ὅσαι γε ταῖς γυναιξὶν οὐθενὶ τῶν ἄλλων ζώων. Τοῖς μὲν οὖν προβάτοις καὶ αἰξίν, ἐπειδὴν ὥρα ᾗ ὀχεύεσθαι, ἐπισημαίνει πρὸ τοῦ ὀχεύεσθαι· καὶ ἐπειδὴν ὀχευθῶσι, γίνεται τὰ σημεῖα, εἴτα διαλείπει, μέχρι οὗ ἂν (573a.) μέλλωσι τίκτειν. Τότε δ' ἐπισημαίνει, καὶ οὕτω γινώσκουσιν ὅτι ἐπίτοκοι οἱ ποιμένες. Ἐπειδὴν δὲ τέκη, καθάρσις γίνεται πολλή, τὸ μὲν πρῶτον οὐ σφόδρα αἱματώδης, ὕστερον μέντοι σφόδρα. Βοῖ δὲ καὶ ὄνῳ καὶ ἵππῳ πλείῳ μὲν τούτων διὰ τὸ μέγεθος, ἐλάττω δὲ κατὰ λόγον πολλῶ. Ἡ μὲν οὖν βοῦς ὅταν ὀργᾷ πρὸς τὴν ὀχείαν ἢ θήλεια, καθαίρεται καθάρσιν βραχεῖαν ὅσον ἡμικοτύλιον ἢ μικρῶ πλέον· καιρὸς δὲ γίνεται τῆς ὀχείας μάλιστα περὶ τὴν καθάρσιν. Ἴππος δὲ τῶν τετραπόδων ἀπάντων εὐτοκώτατον καὶ λοχίων καθαρώτατον, καὶ ἐλαχίστην προῖεται αἵματος ῥύσιν, ὥς κατὰ τὸ τοῦ σώματος μέγεθος.

Μάλιστα δὲ καὶ ταῖς βουσὶ καὶ ταῖς ἵπποις τὰ καταμήνια ἐπισημαίνει διαλείποντα δίμηνον καὶ τετράμηνον καὶ ἑξάμηνον· ἀλλ' οὐ ῥάδιον γνῶναι μὴ παρεπομένῳ μηδὲ συνήθει σφόδρα, διὸ ἔνιοι οὐκ οἴονται γίνεσθαι αὐτοῖς.

Τοῖς δ' ὀρεῦσι τοῖς θήλεσιν οὐδὲν γίνεται καταμήνιον, ἀλλὰ τὸ οὖρον παχύτερον τὸ τῆς θηλείας.

Ὅλως μὲν οὖν τὸ τῆς κύστεως περίττωμα τοῖς τετράποσι παχύτερον ἢ τὸ τῶν ἀνθρώπων, τὸ δὲ τῶν προβάτων καὶ τῶν αἰγῶν τῶν θηλειῶν παχύτερον ἔστι ἢ

τὸ τῶν ἄρρένων· ὄνου δὲ λεπτότερον τὸ τῶν θηλειῶν, βοὸς δὲ δριμύτερον τὸ τῆς θηλείας. Μετὰ δὲ τοὺς τόκους ἅπαντων τῶν τετραπόδων παχύτερον τὸ οὖρον γίνεται, καὶ μᾶλλον τῶν ἐλάττω προϊεμένων κάθαρσιν.

Τὸ δὲ γάλα γίνεται, ὅταν ὀχεύεσθαι ἄρχωνται, πυοειδές· χρήσιμον δὲ γίνεται, ἐπειδὴν τέκωσιν ὕστερον. Κύοντα δὲ καὶ πρόβατα καὶ αἶγες πότερα γίνονται καὶ ἐσθίουσι μᾶλλον· καὶ βόες δὲ ὡσαύτως καὶ τᾶλλα τὰ τετράποδα πάντα.

Ὀρμητικώτερα μὲν οὖν ὥς ἐπὶ τὸ πᾶν εἰπεῖν τὴν ὀχείαν τὴν ἐαρινὴν ὥραν ἐστίν· οὐ μὴν ἅπαντά γε ποιεῖται τὸν αὐτὸν καιρὸν τῆς ὀχείας, ἀλλὰ πρὸς τὴν ἐκτροφὴν τῶν τέκνων ἐν τοῖς καθήκουσι καιροῖς.

Αἱ μὲν οὖν ἡμεροὶ ὕες κύουσι τέτταρας μῆνας, τίκτουσι δὲ τὰ πλεῖστα εἴκοσιν· πλὴν ἂν πολλὰ τέκωσιν, οὐ δύνανται ἐκτρέφειν πάντα. Γηράσκουσαι δὲ τίκτουσι μὲν ὁμοίως, ὀχεύονται δὲ βραδύτερον· κυῖσκονται δ' ἐκ μιᾶς ὀχείας, ἀλλὰ (573b.) πολλάκις ἐπιβιάσκουσι διὰ τὸ ἐκβάλλειν μετὰ τὴν ὀχείαν τὴν καλουμένην ὑπὸ τινων καπρίαν. Τοῦτο μὲν οὖν συμβαίνει πάσαις, ἔνιαι δ' ἅμα τούτῳ καὶ τὸ σπέρμα προΐενται. Ἐν δὲ τῇ κυήσει ὃ ἂν βλαφθῇ τῶν τέκνων καὶ τῷ μεγέθει πηρωθῇ, καλεῖται μετάχοιρον· τοῦτο δὲ γίνεται ὅπου ἂν τύχῃ τῆς ὑστέρας. Ὅταν δὲ γεννήσῃ, τῷ πρώτῳ τὸν πρῶτον παρέχει μαστόν. Θυῶσαν δ' οὐ δεῖ εὐθὺς βιβάζειν, πρὶν ἂν μὴ τὰ ὠτα καταβάλλῃ· εἰ δὲ μὴ, ἀναθυᾷ πάλιν· ἐὰν δ' ὀργῶσαν βιβάσῃ, μία ὀχεία, ὡς περ εἴρηται, ἄρκεϊ. Συμφέρι δ' ὀχεύοντι μὲν τῷ κάπρῳ παρέχειν κριθάς, τετοκυῖα δὲ τῇ ὑῖ κριθάς ἐφθάς. Εἰσὶ δὲ τῶν ὑῶν αἱ μὲν εὐθὺς καλλίχοιροι μόνον, αἱ δ' ἐπαυξανόμεναι τὰ τέκνα καὶ τὰς δέλφακας χρηστὰς γεννῶσιν. Φασὶ δὲ τινες, ἐὰν τὸν ἕτερον ὀφθαλμὸν ἐκκοπῇ ἢ ὕς, ἀποθνήσκειν διὰ ταχέων ὥς ἐπὶ τὸ πολὺ. Ζῶσι δ' αἱ πλεῖστα μὲν περὶ ἔτη πεντεκαίδεκα, ἔνιαι δὲ καὶ τῶν εἴκοσιν ὀλίγον ἀπολείπουσιν.

## Κεφάλαιο 19

Τὰ δὲ πρόβατα κυῖσκειται μὲν ἐν τρισὶν ἢ τέτταρσιν ὀχείαις, ἐὰν δ' ὕδωρ ἐπιγένηται μετὰ τὴν ὀχείαν, ἀνακυῖσκει· ὁμοίως δὲ καὶ αἱ αἶγες. Τίκτουσι δὲ τὰ μὲν πλεῖστα δύο, ἐνίοτε δὲ καὶ τρία ἢ τέτταρα. Κύει δὲ πέντε μῆνας καὶ πρόβατον καὶ αἶξ· διὸ ἐν ἐνίοις τόποις, ὅσοι ἄλσεινοί εἰσι καὶ ἐν οἷς εὐημεροῦσι καὶ τροφὴν ἄφθονον ἔχουσι, δις τίκτουσιν.

Ζῇ δ' αἶξ μὲν περὶ ἔτη ὀκτώ, πρόβατον δὲ δέκα, τὰ δὲ πλεῖστα ἐλάττω, πλὴν οἱ ἡγεμόνες τῶν προβάτων· οὗτοι δὲ καὶ πεντεκαίδεκα. Ἐν ἐκάστῃ δὲ ποίμνῃ

κατασκευάζουσιν ἡγεμόνα τῶν ἄρρένων, ὃς ὅταν ὀνόματι κληθῇ ὑπὸ τοῦ ποιμένος προηγεῖται· συνεθίζουσι δὲ τοῦτο δρᾶν ἐκ νέων. Τὰ δὲ περὶ τὴν Αἰθιοπίαν πρόβατα ζῇ καὶ δώδεκα καὶ τριακαίδεκα ἔτη, καὶ αἴγες δὲ καὶ δέκα καὶ ἑνδεκα. Ὀχεύει δὲ καὶ ὀχεύεται, ἕως ἂν ζῇ, καὶ πρόβατον καὶ αἶξ. Διδυμοτοκοῦσι δὲ καὶ πρόβατα καὶ αἴγες διὰ τε εὐβοσίαν, καὶ ἔαν ὁ κριὸς ἢ ὁ τράγος ἢ διδυμοτόκος ἢ ἡ μήτηρ. Θηλυγὸνα δέ, τὰ δ' ἄρρενογὸνα γίνεται διὰ τε τὰ ὕδατα (ἔστι γὰρ τὰ μὲν θηλυγὸνα τὰ δ' ἄρρενογὸνα) καὶ διὰ τὰς ὀχείας ὡσαύτως, καὶ (574a.) βορείοις μὲν ὀχεύόμενα ἄρρενοτοκεῖ μᾶλλον, νοτίοις δὲ θηλυτοκεῖ. Μεταβάλλει δὲ καὶ τὰ θηλυτοκοῦντα καὶ ἄρρενοτοκεῖ· δεῖ δ' ὁρᾶν ὀχεύόμενα πρὸς βορέαν. Τὰ δ' εἰωθότα πρῶτ' ὀχεύεσθαι, ἔαν ὁψὲ ὀχεύῃ τις, οὐχ ὑπομένουσι τοὺς κριούς.

Λευκὰ δὲ τὰ ἔκγονα γίνεται καὶ μέλανα, ἔαν ὑπὸ τῇ τοῦ κριοῦ γλώττῃ λευκαὶ φλέβες ὦσιν ἢ μέλαιναι, λευκὰ μὲν ἔαν λευκαί, ἔαν δὲ μέλαιναι μέλανα· ἔαν δ' ἀμφότεραι, ἅμφω· πυρρὰ δ' ἔαν πυρραί. Τὰ δὲ τὸ ἀλυκὸν ὕδωρ πίνοντα πρότερον ὀχεύεται· δεῖ δ' ἀλίζειν πρὶν τεκεῖν καὶ ἐπειδὴν τέκῃ, καὶ ἕαρος αὖθις.

Αἰγῶν δ' ἡγεμόνα οὐ καθιστᾷσιν οἱ νομεῖς διὰ τὸ μὴ μόνιμον εἶναι τὴν φύσιν αὐτῶν, ἀλλ' ὀξεῖαν καὶ εὐκίνητον. Τῶν δὲ προβάτων ἔαν μὲν τὰ πρεσβύτερα ὀρμᾷ πρὸς τὴν ὀχείαν κατὰ τὴν τεταγμένην ὥραν, φασὶν οἱ ποιμένες σημεῖον εὐετηρίας εἶναι τοῖς προβάτοις, ἔαν δὲ τὰ νεώτερα, κακοθηνεῖν τὰ πρόβατα.

## Κεφάλαιο 20

Τῶν δὲ κυνῶν ἔστι μὲν γένη πλείω, ὀχεύει δὲ κύων ἢ Λακωνικὴ μὲν ὀκτάμηνος καὶ ὀχεύεται· καὶ τὸ σκέλος δ' αἶροντες οὐροῦσιν ἤδη ἔνιοι περὶ τὸν χρόνον τοῦτον. Κυΐσκεται δὲ κύων ἐκ μιᾶς ὀχείας· δῆλον δὲ τοῦτο γίνεται μάλιστα ἐν τοῖς κλέπτουσι τὰς ὀχείας· ἅπαξ γὰρ ἐπιβάντες πληροῦσιν.

Κύει δ' ἡ μὲν Λακωνικὴ ἕκτον μέρος τοῦ ἐνιαυτοῦ (τοῦτο δ' ἐστὶν ἡμέραι ἐξήκοντα), κἂν ἅρα μιᾷ ἢ δυσὶν ἢ τρισὶ πλείονας ἡμέρας καὶ ἐλάττους μιᾷ. Τυφλὰ δὲ γίνεται αὐτῇ τὰ σκυλάκια, ὅταν τέκῃ, δώδεκα ἡμέρας. Τεκοῦσα δὲ πάλιν ὀχεύεται ἕκτω μηνί, καὶ οὐ πρότερον. Ἔνιοι δὲ κύουσι τῶν κυνῶν τὸ πέμπτον μέρος τοῦ ἐνιαυτοῦ (τοῦτο δ' ἐστὶν ἡμέραι ἐβδομήκοντα καὶ δύο), τυφλὰ δὲ γίνεται τὰ σκυλάκια τούτων τῶν κυνῶν ἡμέρας δεκατέτταρας. Ἔνιοι δὲ κύουσι μὲν τέταρτον μέρος τοῦ ἐνιαυτοῦ (τοῦτο δ' ἐστὶ τρεῖς μῆνες ὅλοι), τυφλὰ δὲ τὰ σκυλάκια τούτων γίνεται ἑπτακαίδεχ' ἡμέρας. Δοκεῖ δὲ σκυζᾶν τὸν ἴσον χρόνον κύων.

Τὰ δὲ καταμήνια ταῖς κυσὶν ἑπτὰ ἡμέραις γίνεται· συμβαίνει δ' ἅμα καὶ ἔπαρσις αἰδοίου. Ἐν δὲ τῷ χρόνῳ τούτῳ οὐ προσίενται ὀχείαν, ἀλλ' ἐν ταῖς μετὰ (574b.) ταῦτα ἑπτὰ ἡμέραις· τὰς γὰρ πάσας δοκεῖ σκυζᾶν ἡμέρας τέτταρας καὶ δέκα ὡς ἐπὶ τὸ πολὺ, οὐ μὴν ἀλλὰ τισι καὶ περὶ ἐκκαίδεχ' ἡμέρας γεγένηται τοῦτο τὸ πάθος. Ἡ δ' ἐν τοῖς τόκοις κάθαρσις γίνεται ἅμα τοῖς σκυλακίοις τικτομένοις, ἔστι δ' αὕτη παχεῖα καὶ φλεγματώδης· καὶ τὸ πλῆθος δ', ὅταν ἐκτέκωσιν, ἀπισχναίνεται ἔλαττον ἢ κατὰ τὸ σῶμα.

Τὸ δὲ γάλα αἱ κύνες ἴσχουσι πρὸ τοῦ τεκεῖν ὡς ἐπὶ τὸ πολὺ ἡμέρας πέντε· οὐ μὴν ἀλλ' ἐνίαις καὶ ἑπτὰ γίνεται πρότερον καὶ τέτταρσιν. Χρήσιμον δ' εὐθύς ἔστι τὸ γάλα, ὅταν τέκωσιν. Ἡ δὲ Λακωνικὴ μετὰ τὴν ὀχείαν τριάκονθ' ἡμέραις ὕστερον. Τὸ μὲν οὖν πρῶτον παχύ ἐστι, χρονιζόμενον δὲ γίνεται λεπτότερον. Διαφέρει δὲ παχύτητι τὸ κύνειον τῶν ἄλλων ζώων μετὰ τὸ ὕειν καὶ δασυπόδειον.

Γίνεται δὲ σημεῖον καὶ ὅταν ἡλικίαν ἔχωσι τοῦ ὀχεύεσθαι· ὥσπερ γὰρ τοῖς ἀνθρώποις, ἐπὶ ταῖς θηλαῖς τῶν μαστῶν ἐπιγίνεται ἀνοίδησις τις καὶ χόνδρον ἴσχουσιν· οὐ μὴν ἀλλ' ἔργον μὴ συνήθει ὄντι ταῦτα καταμαθεῖν· οὐ γὰρ ἔχει μέγεθος οὐδὲν τὸ σημεῖον.

Τῇ μὲν οὖν θηλείᾳ τοῦτο συμβαίνει, τῷ δ' ἄρρενι οὐδὲν τούτων. Τὸ δὲ σκέλος αἶροντες οὐροῦσιν οἱ ἄρρενες ὡς μὲν ἐπὶ τὸ πολὺ ὅταν ἐξάμηνοι ὦσιν· ποιοῦσι δὲ τινες τοῦτο καὶ ὕστερον, ἤδη ὀκτάμηνοι ὄντες, καὶ πρότερον ἢ ἐξάμηνοι· ὡς γὰρ ἀπλῶς εἰπεῖν, ὅταν ἰσχύειν ἄρξωνται, αὐτὸ ποιοῦσιν. Αἱ δὲ θήλειαι πᾶσαι καθεζόμεναι οὐροῦσιν· ἤδη δὲ τινες καὶ τούτων ἄρασαι τὸ σκέλος οὖρησαν.

Τίκτει δὲ κύων σκυλάκια τὰ πλεῖστα δώδεκα, ὡς δ' ἐπὶ τὸ πολὺ πέντε ἢ ἕξ· ἤδη δὲ καὶ ἐν ἕτεκέ τις· αἱ δὲ Λακωνικαὶ ὡς ἐπὶ τὸ πολὺ ὀκτώ. Καὶ ὀχεύονται δ' αἱ θήλειαι καὶ ὀχεύουσιν οἱ ἄρρενες ἕως ἂν ζῶσιν. Ἴδιον δ' ἐπὶ τῶν Λακωνικῶν συμβαίνει πάθος· πονήσαντες γὰρ μᾶλλον δύνανται ὀχεύειν ἢ ἀργοῦντες.

Ζῇ δ' ἡ μὲν Λακωνικὴ κύων ὁ μὲν ἄρρην περὶ ἔτη δέκα, ἡ δὲ θήλεια περὶ ἔτη δώδεκα, τῶν δ' ἄλλων κυνῶν αἱ μὲν πλεῖστα περὶ ἔτη τετταρακαίδεκα ἢ πεντεκαίδεκα, ἔνιαι δὲ καὶ εἴκοσιν· διὸ καὶ Ὀμηρον οἶονταί τινες ὀρθῶς ποιῆσαι τῷ (575a.) εἴκοστῷ ἔτει ἀποθανόντα τὸν κύνα τοῦ Ὀδυσσέως. Ἐπὶ μὲν οὖν τῶν Λακωνικῶν διὰ τὸ πονεῖν τοὺς ἄρρενας μᾶλλον μακροβιώτεραι αἱ θήλειαι τῶν ἀρρένων· ἐπὶ δὲ τῶν ἄλλων λίαν μὲν οὐκ ἐπίδηλον,



μακροβιώτεροι δ' ὅμως οἱ ἄρρενες τῶν θηλειῶν εἰσιν.

Ὀδόντας δὲ κύων οὐ βάλλει πλὴν τοὺς καλουμένους κυνόδοντας· τούτους δ' ὅταν ὥσι τετράμηνοι, ὁμοίως αἴ τε θήλειαι καὶ οἱ ἄρρενες. Διὰ δὲ τὸ τούτους μόνους βάλλειν ἀμφισβητοῦσιν τινες· οἱ μὲν γὰρ διὰ τὸ δύο μόνους βάλλειν ὅλως οὐ φασιν (χαλεπὸν γὰρ ἐπιτυχεῖν τούτοις), οἱ δ' ὅταν ἴδωσι τούτους, ὅλως οἴονται βάλλειν καὶ τοὺς ἄλλους. Τὰς δ' ἡλικίας ἐκ τῶν ὀδόντων σκοποῦσιν· οἱ μὲν γὰρ νέοι λευκοὺς καὶ ὀξεῖς ἔχουσιν, οἱ δὲ πρεσβύτεροι μέλανας καὶ ἀμβλεῖς.

## Κεφάλαιο 21

Βοῦς δὲ πληροῖ μὲν ὁ ἄρρην ἐκ μιᾶς ὀχείας, βαίνει δὲ σφοδρῶς ὥστε συγκάμπτεσθαι τὴν βοῦν· ἐὰν δ' ἀμάρτη τῆς ὀρμῆς, εἴκοσιν ἡμέρας διαλείπουσα προσίεται πάλιν ἡ θήλεια τὴν ὀχείαν. Οἱ μὲν οὖν πρεσβύτεροι τῶν ταύρων οὐδ' ἀναβαίνουνσι πλεονάκεις ἐπὶ τὴν αὐτὴν τῆς αὐτῆς ἡμέρας, ἐὰν μὴ ἄρα διαλιπόντες· οἱ δὲ νεώτεροι καὶ τὴν αὐτὴν βιάζονται πλεονάκεις καὶ ἐπὶ πολλὰς ἀναβαίνουνσι διὰ τὴν ἀκμήν. Ἦκιστα δὲ τῶν ἀρρένων λάγνον ἐστὶ βοῦς. Ὀχεύει δ' ὁ νικῶν τῶν ταύρων· ὅταν δ' ἐξαδυνατήσῃ διὰ τὴν λαγνείαν, ἐπιτίθεται ὁ ἡττώμενος, καὶ κρατεῖ πολλάκις. Ὀχεύει δὲ τὰ ἄρρενα καὶ ὀχεύεται τὰ θήλεα ἐνιαύσια ὄντα πρῶτον, ὥστε καὶ γεννᾶν· οὐ μὴν ἀλλὰ τό γ' ὥς ἐπὶ τὸ πολὺ ἐνιαύσιοι καὶ ὀκτάμηνοι, τὸ δὲ μάλισθ' ὁμολογούμενον διετεῖς.

Κύει δ' ἐννέα μῆνας, δεκάτῳ δὲ τίκει· ἔνιοι δὲ δισχυρίζονται δέκα μῆνας κύειν ἡμερολογδόν. Ὅτι δ' ἂν ἔμπροσθεν ἐξενεχθῇ τῶν εἰρημένων χρόνων, ἐκβόλιμόν ἐστι καὶ οὐ θέλει ζῆν· μαλακαὶ γὰρ καὶ ἀτελεῖς γίνονται αἱ ὀπλαί. Τίκει δ' ἐν τὰ πλεῖστα, ὀλιγάκις δὲ δύο· καὶ τίκει καὶ ὀχεύει ἕως ἂν ζῇ.

Ζῶσι δ' ὥς ἐπὶ τὸ πολὺ περὶ πεντεκαίδεκα ἔτη αἱ θήλειαι· καὶ οἱ ἄρρενες δ', ἂν ἐκτμηθῶσιν. Ἐνιοι δὲ ζῶσι καὶ εἴκοσιν ἔτη καὶ ἔτι πλείω, ἐὰν εὖφορον ἔχωσι τὸ σῶμα· καὶ γὰρ (575b.) τῶν βοῶν τοὺς τομίας ἐθίζουσι, καὶ καθιστᾷσι τῶν βοῶν ἡγεμόνας ὥσπερ τῶν προβάτων, καὶ ζῶσιν οὗτοι πλείω χρόνον τῶν ἄλλων διὰ τε τὸ <μὴ> πονεῖν καὶ διὰ τὸ νέμεσθαι ἀκέραιον νομήν. Ἀκμάζει δὲ μάλιστα πεντετῆς ὢν, διὸ καὶ Ὅμηρόν φασιν πεποιηκέναι τινὲς ὀρθῶς ποιήσαντα “ἄρσενα πενταέτηρον” καὶ τὸ “βοὸς ἐννεώροιο”· δύνασθαι γὰρ ταῦτόν.

Τοὺς δ' ὀδόντας βάλλει βοῦς διετής, καὶ οὐκ ἀθρόους ἀλλ' ὥσπερ ἵππος· τὰς

δ' ὀπλάς, ὅποταν ποδαγρᾷ, οὐκ ἀποβάλλει, ἀλλ' οἶδεῖ μόνον σφόδρα τοὺς πόδας.

Τὸ δὲ γάλα, ὅταν τέκη, χρήσιμον γίνεται· ἔμπροσθεν δ' οὐκ ἔχει γάλα. Τὸ δὲ πρῶτον γινόμενον γάλα ὅταν παγῇ, οὕτω γίνεται σκληρὸν ὥσπερ λίθος· τοῦτο δὲ συμβαίνει, ἐὰν μὴ τις μίξη ὕδατι.

Νεώτεραι δ' ἐνιαυσίων οὐκ ὀχεύονται, πλὴν ἐάν τι τερατῶδες ᾗ· ἤδη δέ τινες καὶ δεκάμηνοι ὠχεύθησαν καὶ ὠχευσαν. Ἀρχονται δὲ τῆς ὀχείας περὶ τὸν Θαργηλιῶνα μῆνα καὶ τὸν Σκιρροφοριῶνα αἱ πλεῖσται· οὐ μὴν ἀλλ' ἐνίαι καὶ μέχρι τοῦ μετοπώρου κυῖσκονται. Ὅταν δὲ πολλὰ κύωσι καὶ προσδέχονται τὴν ὀχείαν, σφόδρα δοκεῖ σημεῖον εἶναι καὶ χειμῶνος καὶ ἐπομβρίας. Αἱ δὲ συνήθειαι γίνονται μὲν ταῖς βουσὶν ὥσπερ ταῖς ἵπποις, ἥττον δέ.

## Κεφάλαιο 22

Ἴππος δ' ἄρχεται ὀχεύειν ὁ μὲν ἄρρην διετῆς, καὶ ἡ θήλεια διετῆς ὀχεύεσθαι· ταῦτα μέντοι ὀλίγα ἐστί, καὶ τὰ ἔκγονα τούτων ἐλάττω καὶ ἀσθενικώτερα· ὡς δ' ἐπὶ τὸ πολὺ ἀρχονται ὀχεύειν τριετεῖς ὄντες, καὶ αἱ ἵπποι ὀχεύεσθαι, καὶ ἐπιδιδόασιν δ' αἰεὶ πρὸς τὸ βελτίω τὰ ἔκγονα γίνεσθαι μέχρι ἐτῶν εἴκοσιν. Κύει δ' ἑνδεκα μῆνας, δωδεκάτῳ δὲ τίκτει. Πληροῖ δ' ὁ ἵππος οὐκ ἐν τεταγμέναις ἡμέραις, ἀλλ' ἐνίοτε μὲν ἐν μιᾷ ἢ δυσὶν ἢ τρισίν, ἐνίοτε δ' ἐν πλείοσιν· θᾶπτον δὲ πληροῖ ἐπιβαίνων ὄνος ἢ ἵππος. Ἡ δ' ὀχεία οὐκ ἐπίπονος τῶν ἵππων, ὥσπερ ἡ τῶν βοῶν. Λαγνίστατον δὲ καὶ τῶν θηλειῶν καὶ τῶν ἄρρένων μετ' ἄνθρωπον ἵππος ἐστίν. Ἡ δὲ τῶν νεωτέρων ὀχεία γίνεται παρὰ τὴν ἡλικίαν, ὅταν εὐβοσία καὶ ἀφθονία γένηται τροφῆς. Ἔστι μὲν οὖν ὡς ἐπὶ τὸ (576a.) πολὺ μονοτόκος, τίκτει μέντοι ποτὲ καὶ δύο τὰ πλεῖστα. Καὶ ἡμιόνους δ' ἤδη ἔτεκε τις δύο· ἃ κρίνουσιν ἐν τέρασιν.

Ὀχεύει μὲν οὖν ἵππος καὶ τριακοντάμηνος· ὥστε δὲ καὶ γεννᾶν ἀξίως, ὅταν παύσῃται βάλλων (ἤδη δέ τινες καὶ βάλλοντες ἐπλήρωσαν, ὡς φασίν), ἐὰν μὴ φύσει ἄγονοι τυγχάνωσιν ὄντες. Ἔχει μὲν οὖν ὀδόντας τετταράκοντα, βάλλει δὲ τοὺς μὲν πρώτους τέτταρας τριακοντάμηνος, τοὺς μὲν δύο ἄνωθεν τοὺς δὲ δύο κάτωθεν· ἐπειδὴν δὲ γένηται ἐνιαυτός, βάλλει τὸν αὐτὸν τρόπον τέτταρας, δύο μὲν ἄνωθεν δύο δὲ κάτωθεν, καὶ πάλιν ὅταν ἄλλος ἐνιαυτός γένηται, ἐτέρους τέτταρας τὸν αὐτὸν τρόπον· τεττάρων δ' ἐτῶν παρελθόντων καὶ ἕξ μηνῶν οὐκέτι βάλλει οὐδένα. Ἦδη δέ τις τὸ πρῶτον εὐθύς ἅμα πάντας ἐξέβαλε, καὶ ἄλλος ἅμα τοῖς τελευταίοις ἅπαντας· ἀλλὰ τὰ τοιαῦτα γίνεται ὀλιγάκις. Ὡστε σχεδὸν συμβαίνει, ὅταν τεττάρων ἐτῶν ἢ καὶ ἕξ μηνῶν,

χρήσιμον εἶναι πρὸς τὴν γέννησιν μάλιστα. Εἰσὶ δ' οἱ πρεσβύτεροι τῶν ἵππων γονιμώτεροι, καὶ οἱ ἄρρενες τῶν ἀρρένων καὶ αἱ θήλειαι τῶν θηλειῶν. Ἀναβαίνουνσι δὲ καὶ ἐπὶ τὰς μητέρας οἱ ἵπποι καὶ ἐπὶ τὰς θυγατέρας· καὶ τότε δοκεῖ τέλεον εἶναι τὸ ἵπποφόρβιον, ὅταν ὀχεύωσι τὰ ἑαυτῶν ἔκγονα.

Οἱ δὲ Σκύθαι ἵππεύουσι ταῖς κυούσαις ἵπποις, ὅταν θᾶπτον στραφῇ τὸ ἔμβρυον, καὶ φασὶ γίνεσθαι αὐτὰς εὐτοκωτέρας. Τὰ μὲν οὖν ἄλλα τετράποδα κατακείμενα τίκτει, διὸ καὶ πλάγια προέρχεται τὰ ἔμβρυα πάντων· ἡ δ' ἵππος ἡ θήλεια ὅταν ἤδη πλησίον ἢ τῆς ἀφέσεως, ὀρθὴ στᾶσα προῖεται τὸ ἔκγονον.

Ζῶσι δὲ τῶν ἵππων οἱ μὲν πλεῖστοι περὶ ὀκτωκαίδεκα ἔτη καὶ εἴκοσιν, ἔνιοι δὲ πεντεκαεῖκοσι καὶ τριάκοντα· ἐὰν δέ τις ἐπιμελῶς θεραπεύῃ, ἐκτείνει καὶ πρὸς τὰ πεντήκοντα. Ὁ δὲ μακρότατος βίος τῶν πλείστων ἐστὶν ὡς ἐπὶ τὸ πολὺ τριακοντετὴς· ἡ δὲ θήλεια ὡς ἐπὶ τὸ πολὺ μὲν πέντε (576b.) καὶ εἴκοσιν ἔτη, ἤδη δέ τινες καὶ τετταράκοντα ἔτη βεβιώκασιν. Ἐλάττω δὲ χρόνον βιοῦσιν οἱ ἄρρενες τῶν θηλειῶν διὰ τὰς ὀχείας, καὶ οἱ ἰδίᾳ τρεφόμενοι τῶν ἐν τοῖς ἵπποφορβίοις. Ἡ μὲν οὖν θήλεια πέντ' ἐτῶν τέλος λαμβάνει μήκους καὶ ὕψους, ὃ δ' ἄρρην ἕξ ἐτῶν· μετὰ δὲ ταῦτα ἐν ἄλλοις ἕξ ἔτεσι τὸ πλῆθος λαμβάνει τοῦ σώματος, καὶ ἐπιδίδωσι μέχρι ἐτῶν εἴκοσιν. Ἀποτελειοῦνται δὲ τὰ θήλεα τῶν ἀρρένων ἔμπροσθεν, ἐν δὲ τῇ γαστρὶ τὰ ἄρρενα τῶν θηλειῶν, καθάπερ καὶ ἐπὶ τῶν ἀνθρώπων· ταῦτό δὲ τοῦτο συμβαίνει καὶ ἐπὶ τῶν ἄλλων ζώων ὅσα <μῆ> πλείω τίκτει.

Θηλάζειν δὲ φασὶ τὸν μὲν ἡμίονον ἑξάμηνον, εἴτ' οὐκέτι προσίεσθαι διὰ τὸ σπᾶσθαι καὶ πονεῖν· τὸν δ' ἵππον πλείω χρόνον.

Ἀκμάζει δὲ καὶ ἵππος καὶ ἡμίονος μετὰ τοὺς βόλους· ὅταν δὲ πάντας ὦσι βεβληκότες, οὐ ῥάδιον γινῶναι τὴν ἡλικίαν. Διὸ καὶ λέγουσι γνώμην ἔχειν, ὅταν ἄβολος ἦ· ὅταν δὲ βεβληκῶς, οὐκ ἔχειν.

Ὅμως δὲ μάλιστα γνωρίζεται ἡ ἡλικία μετὰ τοὺς βόλους τῷ κυνόδοντι· τῶν μὲν γὰρ ἵππαστῶν γίνεται μικρὸς διὰ τὴν τρίψιν (κατὰ τοῦτον γὰρ ἐμβάλλεται ὁ χαλινός), τῶν δὲ μὴ ἵππαστῶν μέγας μὲν ἄλλ' ἀπηρτημένος, τῶν δὲ νέων ὀξὺς καὶ μακρός.

Ὅχευει δ' ὁ μὲν ἄρρην πᾶσάν τε ὥραν καὶ ἕως ζῆ· καὶ ἡ θήλεια δ' ὀχεύεται ἕως ἂν ζῇ, οὐπω δὲ πᾶσαν ὥραν, ἐὰν μὴ τις δεσμὸν ἢ ἄλλην τινα προσενέγκῃ ἀνάγκην· ὥρα δ' οὐκ ἀφαιρεῖται οὐδεμία τεταγμένη τοῦ ὀχεύεσθαι καὶ ὀχεύειν. Οὐ μέντοι γε, ὅτ' ἔτυχε γενομένης τῆς ὀχείας, δύνανται

ἃ ἂν γεννήσωσιν ἐκτρέφειν. Ἐν Ὀποῦντι δ' ἐν ἵπποφορβίῳ ἵππος ἐγένετο ὃς ὤχευεν ἐτῶν ὦν τετταράκοντα· ἔδει δὲ τὰ πρόσθια σκέλη συνεπαίρειν.

Ἄρχονται δ' ὀχεύεσθαι αἱ ἵπποι τοῦ ἔαρος. Ὄταν δὲ τέκη ἡ ἵππος, οὐκ εὐθὺς μετὰ τοῦτο πίμπλαται ἀλλὰ διαλείπει χρόνον, καὶ τίκτει ἄμεινον τετάρτῳ ἢ πέμπτῳ ἔτει μετὰ τὸν τόκον. Ἐνα δ' (577a.) ἐνιαυτὸν καὶ πάμπαν ἀνάγκη διαλείπειν καὶ ποιεῖν ὥσπερ νειόν.

Ἴππος μὲν οὖν διαλείπουσα τίκτει, ὥσπερ εἴρηται, ὄνος δὲ συνεχῶς. Γίνονται δὲ τῶν ἵππων αἱ μὲν καὶ ἄτεκνοι ὅλως, αἱ δὲ συλλαμβάνουσι μὲν, οὐ δύνανται δ' ἐκφέρειν· σημεῖον δὲ τῶν τοιούτων λέγουσιν εἶναι, τὸ ἔμβρυον ἀνασχιζόμενον ἔχειν ἄλλα νεφροειδῆ περὶ τοὺς νεφρούς, ὥστε δοκεῖν τέτταρας ἔχειν νεφρούς. Ὄταν δὲ τέκη ἡ ἵππος, τό τε χόριον εὐθὺς κατεσθίει, καὶ ἀπεσθίει τοῦ πώλου ὃ ἐπιφύεται ἐπὶ τοῦ μετώπου τῶν πάλων, καλεῖται δ' ἵππομανές· ἔστι δὲ τὸ μέγεθος ἔλαττον μικρῷ ἰσχάδος, τὴν δ' ἰδέαν πλατύ, περιφερές, μέλαν. Τοῦτο δ' ἐάν τις φθῇ λαβὼν καὶ ὄσφρηται ἡ ἵππος, ἐξίσταται καὶ μαίνεται πρὸς τὴν ὀσμήν· διὸ καὶ τοῦτο αἱ φαρμακίδες ζητοῦσι καὶ συλλέγουσιν.

Ἐὰν δ' ὠχευμένην ἵππον ὑπὸ ἵππου ὄνος ὀχεύσῃ, διαφθείρει τὸ ἔμβρυον τὸ ἐνυπάρχον. Ἴππων δ' ἡγεμόνα οὐ καθιστᾷσιν οἱ ἵπποφορβοὶ ὥσπερ τῶν βοῶν, [διὰ τὸ μὴ μόνιμον εἶναι τὴν φύσιν αὐτῶν ἀλλ' ὀξεῖαν καὶ εὐκίνητον].

## Κεφάλαιο 23

Ὄνος δ' ὀχεύει μὲν καὶ ὀχεύεται τριακοντάμηνος, καὶ βάλλει τοὺς πρώτους ὀδόντας· τοὺς δὲ δευτέρους ἔκτῳ μηνί, καὶ τοὺς τρίτους καὶ τοὺς τετάρτους ὡσαύτως· τούτους δὲ γνώμονας καλοῦσι, τοὺς τετάρτους. Ἦδη δὲ καὶ ἐνιαυσία ὄνος ἐκύησεν ὥστε καὶ ἐκτραφῆναι. Ἐξουρεῖ δ', ὅταν ὀχευθῇ, τὴν γονήν, ἐὰν μὴ κωλύηται· διὸ τύπτουσι μετὰ τὴν ὀχείαν εὐθὺς καὶ διώκουσιν. Τίκτει δὲ δωδεκάτῳ μηνί. Τίκτει δὲ τὰ μὲν πολλὰ ἔν· μονοτόκον γάρ ἐστι φύσει· τίκτει δ' ἐνίστε καὶ δύο.

Ὁ μὲν οὖν ὄνος ἐπαναβάς διαφθείρει τὸ τοῦ ἵππου ὄχευμα, ὥσπερ εἴρηται· ὁ δ' ἵππος τὸ τοῦ ὄνου οὐ διαφθείρει, ὅταν ἡ ὠχευμένη ἡ ἵππος ὑπὸ τοῦ ὄνου. Ἴσχει δὲ γάλα κύουσα δεκάμηνος οὔσα. Τεκοῦσα δὲ βιβάζεται ἐβδόμη ἡμέρα, καὶ μάλιστα δέχεται τὸ πλῆσμα ταύτῃ βιβασθεῖσα τῇ ἡμέρᾳ, λαμβάνει δὲ καὶ ὕστερον. Ἐὰν δὲ μὴ τέκη πρὶν τὸ γνῶμα λιπεῖν, οὐκέτι λαμβάνει πλῆσμα οὐδὲ κυῖσκεται τοῦ λοιποῦ (577b.) βίου παντός. Τίκτειν δ' οὐ θέλει οὔτε

ὀρωμένη ὑπὸ ἀνθρώπου οὕτ' ἐν τῷ φωτί, ἀλλ' εἰς τὸ σκότος ἀπάγουσιν, ὅταν μέλλῃ τίκτειν. Τίκτει δὲ διὰ βίου, ἐὰν τέκῃ πρὶν τὸ γνῶμα λιπεῖν. Βιοῖ δ' ὄνος πλείω τριάκοντ' ἔτων, καὶ ἡ θήλεια τοῦ ἄρρενος πλείω ἔτη.

Ὅταν δ' ἵππος ὀχεύσῃ ὄνον ἢ ὄνος ἵππον, πολὺ μᾶλλον ἐξαμβλοῖ ἢ ὅταν τὰ ὁμογενῇ ἀλλήλοις μιχθῇ, οἷον ἵππος ἵππῳ ἢ ὄνος ὄνῳ. Ἀποβαίνει δὲ καὶ ὁ τῆς κυήσεως χρόνος, ὅταν μιχθῇ ἵππος καὶ ὄνος, κατὰ τὸ ἄρρεν, λέγω δ' ἐν ὅσῳ χρόνῳ τοῦτο γίνεται ἐξ ὁμογωνῶν γινόμενον.

Τὸ δὲ μέγεθος τοῦ σώματος καὶ τὸ εἶδος καὶ ἡ ἰσχὺς μᾶλλον τῷ θήλει ἀφομοιοῦνται τοῦ γενομένου. Ἐὰν δὲ συνεχῶς μίσγηται καὶ μὴ διαλείπῃ χρόνον τινὰ οὕτως ὀχευόμενα, ταχέως ἄγονον τὸ θῆλυ γίνεται· διὸ συνεχῶς οὐ μίσγουσιν οὕτως οἱ περὶ ταῦτα πραγματευόμενοι, ἀλλὰ διαλείπουσί τινα χρόνον. Οὐ προσδέχεται δ' οὔτε ἡ ἵππος τὸν ὄνον οὔτε ἡ ὄνος τὸν ἵππον, ἐὰν μὴ τύχῃ τεθηλακῶς ὁ ὄνος ἵππον· ὑποβάλλουσι γὰρ ἐπίτηδες οὐς καλοῦσιν ἵπποθήλας. Οὗτοι δ' ὀχεύουσιν ἐν τῇ νομῇ βίᾳ κρατοῦντες, ὥσπερ οἱ ἵπποι.

## Κεφάλαιο 24

Ὁ δ' ὀρεὺς ἀναβαίνει μὲν καὶ ὀχεύει μετὰ τὸν πρῶτον βόλον, ἑπταετῆς δ' ὦν καὶ πληροῖ, καὶ ἤδη ἐγένετο γίννος ὅταν ἀναβῇ ἐφ' ἵππον θήλειαν· ὕστερον δ' οὐκέτι ἀναβαίνει. Καὶ ὁ θῆλυς δ' ὀρεὺς ἤδη ἐπληρώθη, οὐ μέντοι γε ὥστ' ἐξενεγκεῖν διὰ τέλους. Αἱ δ' ἐν τῇ Συρίᾳ τῇ ὑπὲρ Φοινίκης ἡμίονοι καὶ ὀχεύονται καὶ τίκτουσιν· ἀλλ' ἔστι τὸ γένος ὅμοιον μὲν ἕτερον δέ.

Οἱ δὲ καλούμενοι γίννοι γίνονται ἐξ ἵππου, ὅταν νοσήσῃ ἐν τῇ κυήσῃ, ὥσπερ ἐν μὲν τοῖς ἀνθρώποις οἱ νάνοι, ἐν δὲ τοῖς ὑστὶ τὰ μετάχοιρα· καὶ ἴσχει δέ, ὥσπερ οἱ νάνοι, ὁ γίννος τὸ αἰδοῖον μέγα.

Ζῆ δ' ἡμίονος ἔτη πολλά· ἤδη γάρ τις βεβίωκεν ἔτη καὶ ὀγδοήκοντα, οἷον Ἀθήνησιν ὅτε τὸν νεῶν ὠκοδόμουν· ὃς καὶ ἀφειμένος ἤδη διὰ τὸ γῆρας συναμπρεῦων καὶ παραπορευόμενος παρώξυνε τὰ ζεύγη πρὸς τὸ ἔργον, ὥστ' ἐψηφίσαντο μὴ (578a.) ἀπελαύνειν αὐτὸν τοὺς σιτοπώλας ἀπὸ τῶν τηλιῶν. Γηράσκει δὲ βραδύτερον ὁ θῆλυς ὀρεὺς τοῦ ἄρρενος. Λέγουσι δ' ἔνιοι ὅτι ἡ μὲν καθαίρεται οὐροῦσα, ὁ δ' ἄρρην διὰ τὸ ὀσφραίνεισθαι τοῦ οὔρου γηράσκει θάπτον. Τούτων μὲν οὖν τῶν ζώων αἱ γενέσεις τοῦτον ἔχουσι τὸν τρόπον.

## Κεφάλαιο 25

Τὰ δὲ νέα καὶ τὰ παλαιὰ τετράποδα διαγινώσκουσιν οἱ περὶ τὰς θεραπείας ὄντες αὐτῶν· ἔαν μὲν ἀπὸ τῆς γνάθου τὸ δέρμα ἐφελκόμενον ταχὺ ἐπίη, νέον τὸ τετράπουν, ἔαν δὲ πολὺν χρόνον μένη ἐρρυτιδωμένον, παλαιόν.

## Κεφάλαιο 26

Ἡ δὲ κάμηλος κύει μὲν δέκα μῆνας, τίκτει δ' αἰεὶ ἐν μόνον· μονοτόκον γάρ ἐστιν. Ἐκκρίνουσι δ' ἐκ τῶν καμῆλων ἐνιαύσιον τὸ ἔκγονον. Ζῇ δὲ χρόνον πολὺν, πλείω ἢ πενήκοντα ἔτη. Τίκτει δὲ τοῦ ἔαρος, καὶ γάλα ἔχει μέχρι οὗ ἂν ἐν γαστρὶ λάβῃ. Ἔχει δὲ καὶ τὰ κρέα καὶ τὸ γάλα ἥδιστα πάντων· πίνουσι δὲ τὸ γάλα δύο καὶ ἓνα ἢ τρία καὶ ἓνα πρὸς ὕδωρ κεράσαντες. Ὁ δ' ἐλέφας ὀχεύει καὶ ὀχεύεται πρῶτον εἴκοσιν ἔτων.

## Κεφάλαιο 27

Ὅταν δ' ὀχευθῇ ἡ θήλεια, φέρει ἐν γαστρὶ, ὡς μὲν τινές φασιν, ἐνιαυτὸν καὶ ἕξ μῆνας, ὡς δ' ἕτεροι, τρί' ἔτη· τοῦ δὲ μὴ ὁμολογεῖσθαι τὸν χρόνον αἴτιον τὸ μὴ εὐθεώρητον εἶναι τὴν ὀχείαν. Τίκτει δ' ἡ θήλεια συγκαθίσασα ἐπὶ τὰ ὀπισθεν, καὶ ἀλγοῦσα δήλη ἐστίν. Ὁ δὲ σκύμνος ὅταν γένηται, θηλάζει τῷ στόματι καὶ οὐ τῷ μυκτῆρι, καὶ βαδίζει καὶ βλέπει εὐθὺς γεννηθείς.

## Κεφάλαιο 28

Αἱ δ' ὕες αἱ ἄγριαι τοῦ χειμῶνος ἀρχομένου ὀχεύονται, τίκτους δὲ τοῦ ἔαρος ἀποχωροῦσαι εἰς τοὺς δυσβατωτάτους τόπους καὶ ἀποκρήμους μάλιστα καὶ φαραγγώδεις καὶ συσκίους. Διατρίβει δ' ὁ ἄρρην ἐν ταῖς ὑσὶν ὡς ἐπὶ τὸ πολὺ ἡμέρας τριάκοντα. Τὸ δὲ πλῆθος τῶν τικτομένων καὶ ὁ χρόνος τῆς κυήσεως ὁ αὐτὸς καὶ ἐπὶ τῶν ἡμέρων ὧν ἐστίν. Τὰς δὲ φωνὰς παραπλησίας ἔχουσι τοῖς ἡμέροις, πλὴν μᾶλλον ἡ θήλεια φωνεῖ, ὁ δ' ἄρρην σπανίως. Τῶν δ' ἄρρένων καὶ ἀγρίων οἱ τομῖαι μείζους γίνονται καὶ χαλεπώτεροι, ὥσπερ καὶ (578b.) Ὅμηρος ἐποίησεν “θρέψεν ἔπι χλοῦνην σὺν ἄγριον· οὐδὲ ἐώκει θηρί γε σιτοφάγῳ, ἀλλὰ ῥίῳ ὑλήεντι.” Γίνονται δὲ τομῖαι διὰ τὸ νέοις οὖσιν ἐμπίπτειν νόσημα κνησμὸν εἰς τοὺς ὄρχεις· εἴτα ξυόμενοι πρὸς τὰ δένδρα ἐκθλίβουσι τοὺς ὄρχεις.

## Κεφάλαιο 29

Ἡ δ' ἔλαφος τὴν μὲν ὀχείαν ποιεῖται, καθάπερ ἐλέχθη πρότερον, τὰ πλεῖστα μὲν ὑπαγωγῆς (οὐ γὰρ ὑπομένει ἡ θήλεια τὸν ἄρρενα πολλάκις διὰ τὴν

συντονίαν), οὐ μὴν ἀλλὰ καὶ ὑπομένουσαι ἐνίστε ὀχεύονται, καθάπερ τὰ πρόβατα· καὶ ὅταν ὀργῶσι, παρεκκλίνουσιν ἀλλήλας. Μεταλλάττει δ' ὁ ἄρρην καὶ οὐ πρὸς μιᾷ διατρίβει, ἀλλὰ διαλιπὼν βραχὺν χρόνον πλησιάζει ἄλλαις. Ἡ δ' ὀχεία γίνεται μετ' ἀρκτοῦρον περὶ τὸν Βοηδρομιῶνα καὶ Μαιμακτηριῶνα. Κύει δ' ὀκτὼ μῆνας· κυῖσκειται δ' ἐν ὀλίγαις ἡμέραις, καὶ ὑφ' ἐνὸς πολλάι. Τίκτηι δ' ὡς μὲν ἐπὶ τὸ πολὺ ἔν, ἤδη δέ τινες ὠμμένοι εἰσὶν ὀλίγαι καὶ δύο. Καὶ ποιεῖται τοὺς τόκους παρὰ τὰς ὁδοὺς διὰ τὸν πρὸς τὰ θηρία φόβον. Ἡ δ' αὖξησης ταχεῖα τῶν νεβρῶν. Κάθαρσις δὲ κατ' ἄλλους μὲν χρόνους οὐ συμβαίνει ταῖς ἐλάφοις· ὅταν δὲ τίκτωσι, γίνεται φλεγματώδης αὐταῖς κάθαρσις.

Εἴθισται δ' ἄγειν τοὺς νεβροὺς ἐπὶ τοὺς σταθμούς· ἔστι δὲ τοῦτο τὸ χωρίον αὐταῖς καταφυγή, πέτρα περιρραγεῖσα μίαν ἔχουσα εἴσοδον, οὗ καὶ ἀμύνεσθαι εἴωθε τοὺς ἐπιτιθεμένους.

Περὶ δὲ τῆς ζωῆς μυθολογεῖται μὲν ὡς ὄν μακρόβιον, οὐ φαίνεται δ' οὔτε τῶν μυθολογουμένων οὐδὲν σαφές, ἢ τε κύησις καὶ ἡ αὖξησης τῶν νεβρῶν συμβαίνει οὐχ ὡς μακροβίου τοῦ ζώου ὄντος.

Ἐν δὲ τῷ ὄρει τῷ Ἐλαφῶντι καλουμένῳ, ὃ ἐστὶ τῆς Ἀσίας ἐν τῇ Ἀργινούσῃ, οὗ ἐτελεύτησεν Ἀλκιβιάδης, αἱ ἔλαφοι πᾶσαι τὸ οὖς ἐσχισμέναι εἰσὶν, ὥστε κἂν ἐκτοπίσωσι γινώσκεσθαι τούτῳ· καὶ τὰ ἔμβρυα δ' ἐν τῇ γαστρὶ ὄντα εὐθὺς ἔχει τοῦτο τὸ σημεῖον.

Θηλὰς δ' ἔχουσιν αἱ θήλειαι τέτταρας ὥσπερ αἱ βόες. Ἐπειδὴν δὲ πλησθῶσιν αἱ θήλειαι, ἐκκρίνονται οἱ ἄρρενες καθ' ἑαυτοὺς, καὶ διὰ τὴν ὀρμὴν τὴν τῶν ἀφροδισίων ἕκαστος (579a.) μονούμενος βόθρους ὀρύττει, καὶ βρωμάται ὥσπερ οἱ τράγοι· καὶ τὰ πρόσωπα διὰ τὸ ῥαίνεσθαι μέλανα γίνεται αὐτῶν, ὥσπερ τῶν τράγων. Οὕτω δὲ διάγουσιν, ἕως ἂν ὕδωρ γένηται· μετὰ δὲ ταῦτα τρέπονται πρὸς τὴν νομήν. Ταῦτα δὲ ποιεῖ τὸ ζῶον διὰ τὸ φύσει λάγνον εἶναι καὶ διὰ τὴν παχύτητα· ὑπερβάλλουσα γὰρ γίνεται τοῦ θέρους αὐτῶν, διὸ καὶ οὐ δύνανται θεῖν, ἀλλ' ἀλίσκονται ὑπὸ τῶν πεζῶν διωκόντων ἐν τῷ δευτέρῳ δρόμῳ καὶ τρίτῳ, καὶ φεύγουσι διὰ τὸ καῦμα καὶ τὸ ἄσθμα εἰς τὸ ὕδωρ. Καθ' ὃν δὲ χρόνον ὀχεύουσι, τὰ κρέα γίνεται φαῦλα καὶ δυσώδη, καθάπερ καὶ τῶν τράγων. Ἐν μὲν οὖν τῷ χειμῶνι γίνονται λεπτοὶ καὶ ἀσθενεῖς, πρὸς δ' ἔαρ μάλιστ' ἀκμάζουσι πρὸς τὸ δραμεῖν. Ἐν δὲ τῷ φεύγειν ἀνάπασιν ποιοῦνται τῶν δρόμων, καὶ ὑφιστάμενοι μένουσιν ἕως ἂν πλησίον ἔλθῃ ὁ διώκων· τότε δὲ πάλιν φεύγουσιν.

Τοῦτο δὲ δοκοῦσι ποιεῖν διὰ τὸ πονεῖν τὰ ἐντός· τὸ γὰρ ἔντερον ἔχει λεπτὸν καὶ ἀσθενὲς οὕτως ὥστ' ἐὰν ἡρέμα τις πατάξῃ, διακόπτεται τοῦ δέρματος ὑγιοῦς ὄντος.

### Κεφάλαιο 30

Αἱ δ' ἄρκτοι τὴν μὲν ὀχείαν ποιοῦνται, ὥσπερ εἴρηται πρότερον, οὐκ ἀναβαδὸν ἀλλὰ κατακεκλιμέναι ἐπὶ τῆς γῆς.

Κύει δ' ἄρκτος τριάκονθ' ἡμέρας. Τίκει δὲ καὶ ἐν καὶ δύο, τὰ δὲ πλεῖστα πέντε. Ἐλάχιστον δὲ τίκει τὸ ἔμβρυον τῷ μεγέθει ὡς κατὰ τὸ σῶμα τὸ ἐαυτῆς· ἔλαττον μὲν γὰρ γαλῆς τίκει, μεῖζον δὲ μυός, καὶ ψιλὸν καὶ τυφλόν, καὶ σχεδὸν ἀδιάρθρωτα τὰ σκέλη καὶ τὰ πλεῖστα τῶν μορίων.

Τὴν δ' ὀχείαν ποιεῖται τοῦ μηνὸς τοῦ Ἐλαφηβολιῶνος, τίκει δὲ περὶ τὴν ὥραν τὴν τοῦ φωλεύειν. Γίνονται μὲν οὖν περὶ τὸν χρόνον τοῦτον καὶ ἡ θήλεια καὶ ἡ ἄρρην πότατοι· ὅταν δ' ἐκθρέψῃ, τρίτῳ μηνὶ ἐκφαίνουσιν ἤδη τοῦ ἔαρος.

Καὶ ἡ ὕστριξ δὲ φωλεῖ καὶ κύει ἴσας ἡμέρας, καὶ τᾶλλα ὡσαύτως τῇ ἄρκτῳ. Κύουσιν δ' ἄρκτον ἔργον ἐστὶ λαβεῖν.

### Κεφάλαιο 31

Λέων δ' ὅτι μὲν ὀχεύει ὀπισθεν καὶ ἔστιν ὀπισθουρητικόν, εἴρηται πρότερον· ὀχεύει δὲ καὶ τίκει οὐ πᾶσαν ὥραν, καθ' ἕκαστον μέντοι τὸν ἐνιαυτόν. Τίκει μὲν οὖν τοῦ ἔαρος, τίκει (579b.) δ' ὡς ἐπὶ τὸ πολὺ δύο, τὰ μέντοι πλεῖστα ἕξ· τίκει δ' ἐνίοτε καὶ ἐν. Ὁ δὲ λεχθεὶς μῦθος περὶ τοῦ ἐκβάλλειν τὰς ὑστέρας τίκοντα ληρώδης ἐστὶ, συνετέθη δ' ἐκ τοῦ σπανίους εἶναι τοὺς λέοντας, ἀποροῦντος τὴν αἰτίαν τοῦ τὸν μῦθον συνθέντος· σπάνιον γὰρ τὸ γένος τὸ τῶν λεόντων ἐστὶ καὶ οὐκ ἐν πολλῷ γίνεται τόπῳ, ἀλλὰ τῆς Εὐρώπης ἀπάσης ἐν τῷ μεταξὺ τοῦ Ἀχελώου καὶ τοῦ Νέσσου ποταμοῦ. Τίκει δὲ καὶ ὁ λέων πάνυ μικρὰ οὕτως ὥστε δίμηνα ὄντα μόλις βαδίζειν. Οἱ δ' ἐν Συρίᾳ λέοντες τίκτουσι πεντάκις, τὸ πρῶτον πέντε, εἴτ' ἀεὶ ἐνὶ ἐλάττονα· μετὰ δὲ ταῦτα οὐκέτι οὐδὲν τίκτουσιν, ἀλλ' ἄγονοι διατελοῦσιν.

Οὐκ ἔχει δ' ἡ λέαινα χαίτην, ἀλλ' ὁ ἄρρην λέων. Βάλλει δ' ὁ λέων τῶν ὀδόντων τοὺς κυνόδοντας καλουμένους τέτταρας μόνους, δύο μὲν ἄνωθεν δύο δὲ κάτωθεν· βάλλει δ' ἐξάμηνος ὢν τὴν ἡλικίαν.



## Κεφάλαιο 32

Ἡ δ' ὕαινα τῷ μὲν χρώματι λυκώδης ἐστί, δασυτέρα δέ, καὶ λοφιᾶν ἔχει δι' ὅλης τῆς ῥάχεως· περὶ δὲ τῶν αἰδοίων ὃ λέγεται, ὥς ἔχει ἄρρενος καὶ θηλείας, ψευδός ἐστιν.

Ἄλλ' ἔχει τὸ μὲν τοῦ ἄρρενος ὅμοιον τῷ τῶν λύκων καὶ τῶν κυνῶν, τὸ δὲ δοκοῦν θηλείας εἶναι ὑποκάτω μὲν ἔχει τῆς κέρκου, παραπλήσιον δ' ἐστὶ τῷ σχήματι τῷ τοῦ θήλεος, οὐκ ἔχει μέντοι οὐδένα πόρον· ὑποκάτω δ' αὐτοῦ ἐστὶν ὁ τῆς περιττώσεως πόρος. Ἡ δὲ θήλεια ὕαινα ἔχει μὲν καὶ τὸ ὅμοιον τῷ τῆς θηλείας λεγομένῳ αἰδοίῳ, ἔχει δ' ὥσπερ ὁ ἄρρην αὐτὸ ὑποκάτω τῆς κέρκου, πόρον δ' οὐδένα ἔχει· μετὰ δὲ τοῦτο ὁ τῆς περιττώσεως ἐστὶ πόρος, ὑποκάτω δὲ τούτου τὸ ἀληθινὸν αἰδοῖον.

Ἐχει δ' ἡ ὕαινα ἡ θήλεια καὶ ὑστέραν, ὥσπερ καὶ τὰ ἄλλα ζῶα τὰ θήλεα, ὅσα ἐστὶ τοιαῦτα. Σπάνιον δ' ἐστὶ λαβεῖν θήλειαν ὕαιναν· ἐν ἔνδεκα γοῦν κυνηγός τις μίαν ἔφη λαβεῖν.

## Κεφάλαιο 33

Οἱ δὲ δασύποδες ὀχεύονται μὲν συνιόντες ὀπισθεν, ὥσπερ εἴρηται πρότερον (ἐστὶ γὰρ ὀπισθουρητικόν), ὀχεύονται δὲ καὶ τίκτουσι πᾶσαν ὥραν, καὶ ἐπικυῖσκονται ὅταν κύωσι, καὶ τίκτουσι κατὰ μῆνα. Τίκτουσι δ' οὐκ ἀθρόα, ἀλλὰ (580a.) διαλείπουσιν ἡμέρας ὅσας ἂν τύχωσιν. Ἴσχει δ' ἡ θήλεια γάλα πρότερον ἢ τεκεῖν, καὶ τεκοῦσα εὐθὺς ὀχεύεται, καὶ συλλαμβάνει ἔτι θηλαζομένη· τὸ δὲ γάλα παχύτητι ὅμοιον ἐστὶ τῷ ὑεῖω. Τίκει δὲ τυφλά, ὥσπερ τὰ πολλὰ τῶν πολυσχιδῶν.

## Κεφάλαιο 34

Ἡ δ' ἀλώπηξ ὀχεύει μὲν ἀναβαίνουσα, τίκει δ' ὥσπερ ἡ ἄρκτος, καὶ ἔτι μᾶλλον ἀδιάρθρωτον. Ὅταν δὲ μέλλῃ τίκειν, ἐκτοπίζει οὕτως ὥστε σπάνιον εἶναι τὸ ληφθῆναι κύουσιν. Ὅταν δ' ἐκτέκῃ, τῇ γλώττῃ λείχουσα ἐκθερμαίνει καὶ συμπέττει. Τίκει δὲ τέτταρα τὰ πλεῖστα.

## Κεφάλαιο 35

Λύκος δὲ κύει μὲν καὶ τίκει καθάπερ κύων τῷ χρόνῳ καὶ τῷ πλήθει τῶν γινομένων, καὶ τυφλὰ τίκει ὥσπερ κύων· ὀχεύει δὲ καὶ ὀχεύεται κατὰ μίαν

ῥαν, καὶ τίκτει ἀρχομένου τοῦ θέρους. Λέγεται δέ τις περὶ τοῦ τόκου λόγος πρὸς μῦθον συνάπτων· φασὶ γὰρ πάντας τοὺς λύκους ἐν δώδεχ' ἡμέραις τοῦ ἐνιαυτοῦ τίκτειν. Τούτου δὲ τὴν αἰτίαν ἐν μύθῳ λέγουσιν, ὅτι ἐν τοσαύταις ἡμέραις τὴν Λητῶ παρεκόμισαν ἐξ Ὑπερβορέων εἰς Δῆλον, λύκαιναν φαινομένην διὰ τὸν τῆς Ἥρας φόβον. Εἰ δ' ἐστὶν ὁ χρόνος οὗτος τῆς κυήσεως ἢ μὴ ἐστίν, οὐδέν πω συνῶπται μέχρι γε τοῦ νῦν, ἀλλ' ἢ ὅτι λέγεται μόνον. Οὐκ ἀληθὲς δὲ φαίνεται ὃν οὐδὲ τὸ λεγόμενον ὡς ἅπαξ ἐν τῷ βίῳ τίκτουσιν οἱ λύκοι.

Οἱ δ' αἰλουροὶ καὶ οἱ ἰχνεύμονες τίκτουσιν ὅσαπερ καὶ οἱ κύνες, καὶ τρέφονται τοῖς αὐτοῖς· ζῶσι δὲ περὶ ἔτη ἕξ· καὶ ὁ πανθὴρ δὲ τίκτει τυφλὰ ὥσπερ λύκος, τίκτει δὲ τὰ πλεῖστα τέτταρα. Καὶ οἱ θῶες δ' ὁμοίως κυῖσκονται τοῖς κυσὶ, καὶ τίκτουσι τυφλὰ· τίκτουσι δὲ καὶ δύο καὶ τρία καὶ τέτταρα τὸν ἀριθμόν. Ἔστι δὲ τὴν ἰδέαν ἐπ' οὐρανὸν μὲν μακρός, τὸ δ' ὕψος βραχύτερος. Ὅμοίως δὲ ταχυτῆτι διαφέρει, καίπερ τῶν σκελῶν ὄντων βραχέων, διὰ τὸ ὑγρὸς εἶναι, καὶ πηδᾷ πόρρω.

## Κεφάλαιο 36

(580b.) Εἰσὶ δ' ἐν Συρίᾳ οἱ καλούμενοι ἡμίονοι, ἕτερον γένος τῶν ἐκ συνδυασμοῦ γινομένων ἵππου καὶ ὄνου, ὅμοιοι δὲ τὴν ὄψιν, ὥσπερ καὶ οἱ ἄγριοι ὄνοι πρὸς τοὺς ἡμέρους, ἀπὸ τινος ὁμοιότητος λεχθέντες. Εἰσὶ δ' ὥσπερ οἱ ὄνοι οἱ ἄγριοι καὶ αἱ ἡμίονοι, τὴν ταχυτῆτα διαφέροντες. Αὗται αἱ ἡμίονοι γεννῶσιν ἐξ ἀλλήλων. Σημεῖον δέ· ἦλθον γάρ τινες εἰς Φρυγίαν ἐπὶ Φαρνάκου τοῦ Φαρναβάζου πατρός, καὶ διαμένουσιν ἔτι. Εἰσὶ δὲ νῦν μὲν τρεῖς, τὸ παλαιὸν δ' ἐννέα ἦσαν, ὡς φασίν.

## Κεφάλαιο 37

Ἡ δὲ τῶν μυῶν γένεσις θαυμασιωτάτη παρὰ τᾶλλα ζῷα ἐστὶ τῷ πλήθει καὶ τῷ τάχει. Ἦδη γάρ ποτε ἐναποληφθείσης τῆς θηλείας κυούσης ἐν ἀγγείῳ κέγχρου, μετ' ὀλίγον ἀνοιχθέντος τοῦ ἀγγείου ἐφάνησαν ἑκατὸν καὶ εἴκοσι μύες τὸν ἀριθμόν. Ἀπορεῖται δὲ καὶ ἡ τῶν ἐπιπολαζόντων γένεσις μυῶν ἐν ταῖς χώραις καὶ ἡ φθορά· πολλαχοῦ γὰρ εἶωθε γίνεσθαι πλῆθος ἀμύθητον τῶν ἀρουραίων, ὥστ' ὀλίγον λείπεσθαι τοῦ σίτου παντός. Γίνεται δ' οὕτω ταχεῖα ἡ φορά, ὥστ' ἔνιοι τῶν μὴ μεγάλας γεωργίας ἐργαζομένων, τῇ προτεραίᾳ ἰδόντες ὅτι θερίζειν ὥρα, τῇ ὑστεραίᾳ ἔωθεν ἄγοντες τοὺς θεριστὰς καταβεβρωμένα ἅπαντα καταλαμβάνουσιν. Ὁ δ' ἀφανισμὸς οὐ κατὰ λόγον ἀποβαίνει· ἐν ὀλίγαις γὰρ ἡμέραις ἀφανεῖς ἀμπαν γίνονται· καίτοι ἐν τοῖς

ἔμπροσθεν χρόνοις οὐ κρατοῦσιν οἱ ἄνθρωποι ἀποθυμιῶντες καὶ ἀνορύττοντες, ἔτι δὲ θηρεύοντες καὶ τὰς ὕς ἐμβάλλοντες· αὗται γὰρ ἀνορύττουσι τὰς μυωπίας. Θηρεύουσι δὲ καὶ αἱ ἀλώπεκες αὐτούς, καὶ αἱ γαλαῖ αἱ ἄγριαι μάλιστα ἀναιροῦσιν, ὅταν ἐπιγένωνται· ἀλλ' οὐ κρατοῦσι τῆς πολυγονίας καὶ τῆς ταχυγονίας, οὐδ' ἄλλ' οὐδὲν πλὴν οἱ ὄμβροι, ὅταν ἐπιγένωνται· τότε δ' ἀφανίζονται ταχέως. Τῆς δὲ Περσικῆς ἐν τινι τόπῳ ἀνασχιζομένης τῆς θηλείας τῶν ἐμβρύων τὰ θήλεα κύοντα φαίνεται. Φασὶ δέ τινες καὶ ἰσχυρίζονται ὅτι ἂν ἄλλα (581a.) λείχωσιν, ἄνευ ὀχείας γίνεσθαι ἐγκύους.

Οἱ δ' ἐν Αἰγύπτῳ μύες σκληρὰν ἔχουσι τὴν τρίχα ὥσπερ οἱ χερσαῖοι ἐχῖνοι.

Εἰσὶ δὲ καὶ ἕτεροι οἱ βαδίζουσιν ἐπὶ τοῖς δυσὶ ποσίν· τὰ γὰρ πρόσθια μικρὰ ἔχουσι, τὰ δ' ὀπίσθια μεγάλα· γίνονται δὲ πλήθει πολλοί. Ἔστι δὲ καὶ ἄλλα γένη μυῶν πολλά.

## **Βιβλίον 7**

### **Κεφάλαιον 1**

Περὶ δ' ἀνθρώπου γενέσεως τῆς τε πρώτης τῆς ἐν τῷ θήλει καὶ τῆς ὕστερον μέχρι γήρωος, ὅσα συμβαίνει διὰ τὴν φύσιν τὴν οἰκείαν, τόνδ' ἔχει τὸν τρόπον.

Ἡ μὲν διαφορὰ τοῦ ἄρρενος πρὸς τὸ θῆλυ καὶ τὰ μόρια πρότερον εἴρηται. Φέρειν δὲ σπέρμα πρῶτον ἄρχεται τὸ ἄρρεν ὥς ἐπὶ τὸ πολὺ ἐν τοῖς ἔτεσι τοῖς δις ἐπτὰ τετελεσμένοις· ἅμα δὲ καὶ ἡ τρίχωσις τῆς ἥβης ἄρχεται, καθάπερ καὶ τὰ φυτὰ μέλλοντα σπέρμα φέρειν ἀνθεῖν πρῶτον Ἀλκμαίων φησὶν ὁ Κροτωνιάτης. Περὶ δὲ τὸν αὐτὸν χρόνον τοῦτον ἢ τε φωνὴ μεταβάλλειν ἄρχεται ἐπὶ τὸ τραχύτερον καὶ ἀνωμαλέστερον, οὗτ' ἔτι ὀξεῖα οὖσα οὔτε πω βαρεῖα, οὔτε πᾶσα ὁμαλή, ἀλλ' ὁμοία φαινομένη ταῖς παρανενευρισμέναις καὶ τραχείαις χορδαῖς· ὃ καλοῦσι τραγίζειν. Γίνεται δὲ τοῦτο μᾶλλον τοῖς πειρωμένοις ἀφροδισιάζειν· τοῖς γὰρ περὶ ταῦτα προθυμουμένοις καὶ μεταβάλλουσιν αἱ φωναὶ εἰς τὴν τῶν ἀνδρῶν φωνήν, ἀπεχομένοις δὲ τοῦναντίον· ἂν δὲ καὶ συναποβιάζωνται ταῖς ἐπιμελείαις, ὅπερ ποιοῦσιν ἔνιοι τῶν περὶ τὰς χορείας σπουδαζόντων, καὶ μέχρι πόρρῳ διαμένει καὶ τὸ πάμπαν μικρὰν λαμβάνει μεταβολήν.

Καὶ μαστῶν ἔπαρσις γίνεται καὶ αἰδοίων, οὐ μεγέθει μόνον ἀλλὰ καὶ εἶδει. Συμβαίνει δὲ περὶ τοῦτον τὸν χρόνον τοῖς τε πειρωμένοις τρίβεσθαι περὶ τὴν

τοῦ σπέρματος πρόεσιν οὐ μόνον ἡδονὴν γίνεσθαι τοῦ σπέρματος ἐξιόντος, ἀλλὰ καὶ λύπην.

Περὶ τὸν αὐτὸν δὲ χρόνον καὶ τοῖς θήλεσιν ἢ τ' ἔπαρσις γίνεται τῶν μαστῶν καὶ τὰ (581b.) καταμήνια καλούμενα καταρρήγνυται· τοῦτο δ' ἐστὶν αἷμα οἶον νεόσφακτον. Τὰ δὲ λευκὰ καὶ παιδίοις οὖσι γίνεται νέοις πάμπαν, μᾶλλον δ' ἂν ὑγρᾷ χρῶνται τροφῇ· καὶ κωλύει τὴν αὔξησιν, καὶ τὰ σώματα ἰσχναίνει τῶν παιδίων. Τὰ δὲ καταμήνια γίνεται ταῖς πλείσταις ἤδη τῶν μαστῶν ἐπὶ δύο δακτύλους ἡρμένων. Καὶ ἡ φωνὴ δὲ καὶ ταῖς παισὶ μεταβάλλει περὶ τὸν χρόνον τοῦτον ἐπὶ τὸ βαρύτερον. Ὅλως μὲν γὰρ γυνὴ ἀνδρὸς ὀξυφωνότερον, αἱ δὲ νέαι τῶν πρεσβυτέρων, ὥσπερ καὶ οἱ παῖδες τῶν ἀνδρῶν· ἀλλ' ἐστὶν ἡ φωνὴ ὀξυτέρα ἢ τῶν θηλειῶν παίδων ἢ τῶν ἄρρένων, καὶ ὁ παρθένιος αὐλὸς τοῦ παιδικοῦ ὀξύτερος.

Μάλιστα δὲ καὶ φυλακῆς δέονται περὶ τὸν χρόνον τοῦτον· μάλιστα γὰρ ὁρμῶσι πρὸς τὴν τῶν ἀφροδισίων χρῆσιν ἄρχομένων αὐτῶν, ὥστ' ἂν μὴ διευλαβηθῶσι μηδὲν ἐπὶ πλεῖον κινῆσαι οὐδ' αὐτὰ τὰ σώματα μεταβάλλει μηδὲν χρωμένων ἀφροδισίοις, ἀκολουθεῖν εἴωθεν εἰς τὰς ὕστερον ἡλικίας. Αἱ τε γὰρ νέαι πάμπαν ἀφροδισιαζόμεναι ἀκολαστότεραι γίνονται καὶ οἱ ἄρρενες, ἐάν τ' ἐπὶ θάτερα ἐάν τ' ἐπ' ἀμφοτέρα ἀφυλακτῆσωσιν· οἳ τε γὰρ πόροι ἀναστομοῦνται, καὶ ποιοῦσιν εὖρουσιν τὸ σῶμα ταύτη· καὶ ἅμα ἡ τότε μνήμη τῆς συμβαινούσης ἡδονῆς ἐπιθυμίαν ποιεῖ τῆς τότε γινομένης ὁμιλίας.

Γίνονται δὲ τινες ἄνηβοι ἐκ γενετῆς καὶ ἄγονοι, διὰ τὸ πηρωθῆναι περὶ τὸν τόπον τὸν γόνιμον· ὁμοίως δὲ καὶ γυναῖκες γίνονται ἄνηβοι ἐκ γενετῆς.

Μεταβάλλουσι δὲ καὶ τὰς ἑξεις καὶ τὰ ἄρρενα καὶ τὰ θήλεα περὶ τε τὸ ὑγιεινότερα εἶναι καὶ νοσερώτερα, καὶ περὶ τὴν τοῦ σώματος ἰσχύτητα καὶ παχύτητα καὶ εὐτροφίαν· μετὰ γὰρ τὴν ἥβην οἱ μὲν ἐξ ἰσχνῶν παχύνονται καὶ ὑγιεινότεροι γίνονται, οἱ δὲ τοῦναντίον· ὁμοίως δὲ τοῦτο συμβαίνει καὶ ἐπὶ τῶν παρθένων. Ὅσοι μὲν γὰρ παῖδες ἢ ὅσοι παρθένοι περιττωματικὰ τὰ σώματα εἶχον, συναποκρινομένων τῶν τοιούτων τοῖς μὲν ἐν τῷ σπέρματι ταῖς δ' ἐν τοῖς καταμηνίοις ὑγιεινότερα τὰ σώματα γίνεται καὶ (582a.) εὐτραφέστερα, ἐξιόντων τῶν ἐμποδιζόντων τὴν ὑγίειαν καὶ τὴν τροφὴν· ὅσοι δὲ τοῦναντίον, ἰσχνότερα καὶ νοσακερώτερα τὰ σώματα γίνεται· ἀπὸ γὰρ τῆς φύσεως καὶ τῶν καλῶς ἐχόντων ἢ ἀπόκρισις γίνεται τοῖς μὲν ἐν τῷ σπέρματι ταῖς δ' ἐν τοῖς καταμηνίοις.

Ἐπὶ δὲ ταῖς γε παρθένοις καὶ τὰ περὶ τοὺς μαστοὺς γίνεται διαφερόντως

ἐτέραις πρὸς ἐτέρας· αἱ μὲν γὰρ πάμπαν μεγάλους ἔχουσιν, αἱ δὲ μικροῦς. Ὡς ἐπὶ τὸ πολὺ δὲ συμβαίνει τοῦτο, ὅσαι ἂν παῖδες οὕσαι περιττωματικαὶ ὦσιν· μελλόντων γὰρ καὶ οὕπω γινομένων τῶν γυναικείων, ὅσω ἂν πλείων ἢ ὑγρότης ᾖ, τοσούτω μᾶλλον ἀναγκάζει αἵρεσθαι ἄνω, ἕως ἂν καταρραγῇ· ὥστε τότε λαβόντες ὄγκον οἱ μαστοὶ διαμένουσι καὶ εἰς τὸ ὕστερον. Καὶ τῶν ἀρρένων δ' ἐπιδηλότεροι γίνονται καὶ γυναικικώτεροι οἱ μαστοί, καὶ νεωτέροις καὶ πρεσβυτέροις οὖσι, τοῖς ὑγροῖς καὶ λείοις καὶ μὴ φλεβώδεσι, καὶ τούτων μᾶλλον τοῖς μέλασιν ἢ λευκοῖς.

Μέχρι μὲν οὖν τῶν τρὶς ἐπτὰ ἐτῶν τὸ μὲν πρῶτον ἄγονα τὰ σπέρματά ἐστιν· ἔπειτα γόνιμα μὲν μικρὰ δὲ καὶ ἀτελῆ γεννῶσι καὶ οἱ νέοι καὶ αἱ νέαι, ὥσπερ καὶ ἐπὶ τῶν ἄλλων ζώων τῶν πλείστων. Συλλαμβάνουσι μὲν οὖν αἱ νέαι θᾶπτον· ἐὰν δὲ συλλάβωσιν, ἐν τοῖς τόκοις πονοῦσι μᾶλλον. Καὶ τὰ σώματα δ' αὐτῶν ἀτελέστερα γίνεται ὥς ἐπὶ τὸ πολὺ καὶ γηράσκει θᾶπτον, τῶν τ' ἀφροδισιαστικῶν ἀρρένων καὶ τῶν γυναικῶν τῶν τοῖς τόκοις χρωμένων πλείοσιν· δοκεῖ γὰρ οὐδ' ἡ αὔξησις ἔτι γίνεσθαι μετὰ τοὺς τρεῖς τόκους. Καθίστανται δὲ καὶ σωφρονίζονται μᾶλλον ὅσαι τῶν γυναικῶν ἀκόλαστοι πρὸς τὴν ὁμιλίαν εἰσὶ τὴν τῶν ἀφροδισίων, ὅταν τοῖς τόκοις χρήσωνται πολλοῖς. Μετὰ δὲ τὰ τρὶς ἐπτὰ ἔτη αἱ μὲν γυναῖκες πρὸς τὰς τεκνοποιίας ἤδη εὐκαίρως ἔχουσιν, οἱ δ' ἄνδρες ἔτι ἔχουσιν ἐπίδοσιν.

Ἔστι δὲ τὰ μὲν λεπτὰ τῶν σπερμάτων ἄγονα, τὰ δὲ χαλαζώδη γόνιμα καὶ ἀρρενογόνα μᾶλλον· τὰ δὲ λεπτὰ καὶ μὴ θρομβώδη θηλυγόνα.

Καὶ γενείου δὲ τρίχωσις συμβαίνει τοῖς ἄρρεσι περὶ τὴν ἡλικίαν ταύτην.

## Κεφάλαιο 2

Ἡ δὲ τῶν γυναικείων ὁρμὴ γίνεται περὶ φθίνοντας τοὺς μῆνας· διό φασί τινες τῶν σοφιζομένων καὶ τὴν σελήνην (582b.) εἶναι θῆλυ, ὅτι ἅμα συμβαίνει ταῖς μὲν ἢ κάθαρσις τῇ δ' ἢ φθίσις, καὶ μετὰ τὴν κάθαρσιν καὶ τὴν φθίσιν ἢ πλήρωσις ἀμφοῖν. Καὶ ταῖς μὲν συνεχῶς καθ' ἕκαστον ὀλιγάκις τὰ καταμήνια φοιτᾷ, παρὰ δὲ μῆνα τρίτον ταῖς πλείσταις.

Ὅσαις μὲν οὖν ὀλίγον χρόνον γίνεται, δύο ἢ τρεῖς ἡμέρας, ἀπαλλάττουσι ῥᾶον, ὅσαις δὲ πολλάς, χαλεπώτερον. Πονοῦσι γὰρ τὰς ἡμέρας ταύτας· ταῖς μὲν γὰρ ἀθρόα ἢ κάθαρσις γίνεται ταῖς δὲ κατ' ὀλίγον, τὸ δὲ σῶμα βαρύνεται πάσαις, ἕως ἂν ἐξέλθῃ. Πολλαῖς δὲ καὶ ὅταν ὁρμᾷ τὰ καταμήνια καὶ μέλλῃ ῥήγνυσθαι, πνιγμοὶ γίνονται καὶ ψόφος ἐν ταῖς ὑστέραις, ἕως ἂν ῥαγῇ.

Φύσει μὲν οὖν ἡ σύλληψις γίνεται μετὰ τὴν τούτων ἀπαλλαγὴν ταῖς γυναῖξιν· καὶ ὅσαις μὴ γίνεται ταῦτα, ὡς ἐπὶ τὸ πολὺ ἄτεκνοι διατελοῦσιν. Οὐ μὴν ἀλλὰ καὶ μὴ γινομένων τούτων ἔναι συλλαμβάνουσιν, ὅσαις συναθροίζεται ἱκμᾶς τοσαύτη ὅση ταῖς γειναμέναις ὑπολείπεται μετὰ τὴν κάθαρσιν, ἀλλὰ μὴ ὥστε καὶ θύραζε ἐξιέναι. Καὶ γινομένων ἔτι ἔναι συλλαμβάνουσιν· ὕστερον δ' οὐ συλλαμβάνουσιν, ὅσαις εὐθὺς μετὰ τὴν κάθαρσιν αἱ ὑστέραι συμμύουσιν. Γίνεται δ' ἑνίαις καὶ κυούσαις διὰ τέλους τὰ γυναικεῖα· συμβαίνει μέντοι ταύταις φαῦλα τίκτειν, καὶ ἡ μὴ σώζεσθαι εἰς αὕξην ἢ ἀσθενῆ τὰ ἔκγονα γίνεσθαι. Πολλαῖς δὲ καὶ διὰ τὸ δεῖσθαι τῆς συνουσίας ἢ διὰ τὴν νεότητα καὶ τὴν ἡλικίαν, ἢ διὰ τὸ χρόνον ἀπέχεσθαι πολὺν, καταβαίνουσιν αἱ ὑστέραι κάτω, καὶ τὰ γυναικεῖα γίνεται πολλάκις τρὶς τοῦ μηνός, ἕως ἂν συλλάβωσιν· τότε δ' ἀπέρχονται πάλιν εἰς τὸν ἄνω τόπον τὸν οἰκεῖον.

Ἐνίστε δὲ κἂν συμβῇ <εὔ> ἔχουσα, τύχη δ' ὑγρὰ οὔσα, ἀποφυσᾷ τοῦ σπέρματος τὸ ὑγρότερον.

Πάντων δὲ τῶν ζώων, ὥσπερ εἴρηται καὶ πρότερον, ταῖς γυναῖξιν μᾶλλον τῶν ἄλλων θηλειῶν ἡ κάθαρσις γίνεται πλείστη. Τοῖς μὲν γὰρ μὴ ζωοτοκοῦσιν οὐδὲν τοιοῦτον ἐπισημαίνει διὰ τὸ τὴν περίπτωσιν ταύτην τρέπεσθαι εἰς τὸ σῶμα (μείζω τε γὰρ ἔνια τῶν ἀρρένων ἐστί, καὶ ἔτι τοῖς μὲν εἰς φολίδας τοῖς δ' εἰς λεπίδας τοῖς δ' εἰς τὸ τῶν πτερῶν ἀναλίσκεται πλῆθος), τοῖς δὲ πεζοῖς καὶ ζωοτόκοις εἷς τε τὰς τρίχας καὶ τὸ σῶμα (λεῖον γὰρ (583a.) ἄνθρωπος ἐστί μόνον) καὶ εἰς τὰ οὔρα (παχεῖαν γὰρ τὰ πλείστα καὶ πολλὴν τὰ τοιαῦτα ποιεῖται τὴν ἔκκρισιν)· ταῖς δὲ γυναῖξιν ἀντὶ τούτων τρέπεται τὸ περίπτωμα εἰς τὴν κάθαρσιν. Ὅμοίως δ' ἔχει τοῦτο καὶ ἐπὶ τῶν ἀρρένων· πλείστον γὰρ ὡς κατὰ τὸ μέγεθος ἀφίησι σπέρμα τῶν ἄλλων ζώων ἄνθρωπος (διὸ καὶ λειότατον τῶν ζώων ἐστὶν ἄνθρωπος), καὶ αὐτῶν δ' οἱ ὑγρότεροι τὰς φύσεις καὶ μὴ πολύσαρκοι λίαν, καὶ οἱ λευκότεροι δὲ τῶν μελάνων. Καὶ ἐπὶ γυναικῶν δὲ τὸν αὐτὸν τρόπον· ταῖς γὰρ εὐσάρκοις πορεύεται εἰς τὴν τροφὴν τοῦ σώματος τὸ πολὺ τῆς ἐκκρίσεως. Καὶ ἐν ταῖς ὁμιλίαις δὲ τῶν ἀφροδισίων αἱ λευκότεραι τὴν φύσιν ἐξικμάζουσι μᾶλλον τῶν μελαινῶν. Ποιεῖ δὲ τῆς τροφῆς τὰ ὑγρὰ καὶ δριμέα τοιαύτην τὴν ὁμιλίαν μᾶλλον.

### Κεφάλαιο 3

Γίνεται δὲ σημεῖον τοῦ συνειληφέναι ταῖς γυναῖξιν, ὅταν εὐθὺς γένηται μετὰ τὴν ὁμιλίαν ὁ τόπος ξηρός. Ἄν μὲν οὖν λεῖα τὰ χεῖλη ἢ τοῦ στόματος, οὐ θέλει συλλαμβάνειν (ἀπολισθαίνει γάρ), οὐδ' ἂν παχέα· ἂν δ' ἀπτομένῳ τῷ δακτύλῳ τραχύτερα ἢ καὶ ἀντέχεται, καὶ ἐὰν λεπτὰ τὰ χεῖλη, τότε εὐκαίρως

ἔχει πρὸς τὴν σύλληψιν. Πρὸς μὲν οὖν τὸ συλλαμβάνειν τοιαύτας δεῖ κατασκευάζειν τὰς ὑστέρας, πρὸς δὲ τὸ μὴ συλλαμβάνειν τοῦναντίον· ἐὰν γὰρ ἡ λεῖα τὰ χεῖλη, οὐ συλλαμβάνει· διὸ ἔνιοι τῆς μήτρας πρὸς ὃ πίπτει τὸ σπέρμα, ἀλείφουσιν ἐλαίῳ κεδρίνῳ ἢ ψιμυθίῳ ἢ λιβανωτῷ, διέντες ἐλαίῳ. Ἐὰν δὲ ἐπτὰ ἐμμείνη ἡμέρας, φανερόν ὅτι εἴληπται· αἱ γὰρ καλούμεναι ἐκρύσεις ἐν ταύταις γίνονται ταῖς ἡμέραις.

Αἱ δὲ καθάρσεις φοιτῶσι ταῖς πλείσταις ἐπὶ τινα χρόνον συνειληφυῖαις, ἐπὶ μὲν τῶν θηλειῶν τριάκονθ' ἡμέρας μάλιστα, περὶ δὲ τετταράκοντα ἐπὶ τῶν ἄρρένων. Καὶ μετὰ τοὺς τόκους δ' αἱ καθάρσεις βούλονται τὸν αὐτὸν ἀριθμὸν ἀποδιδόναι τούτων, οὐ μὴν ἐξακριβοῦσί γε πάσαις ὁμοίως. Μετὰ δὲ τὴν σύλληψιν καὶ τὰς ἡμέρας τὰς εἰρημένας οὐκέτι κατὰ φύσιν, ἀλλ' εἰς τοὺς μαστοὺς τρέπεται καὶ γίνεται γάλα. Ἐπισημαίνει δὲ τὸ πρῶτον μικρόν τε καὶ ἀραχνιώδες τὸ γάλα ἐν τοῖς μαστοῖς.

Ὅταν δὲ συλ(583b.) (ἐνίαις γὰρ γίνονται πληρέστεραι εὐθύς· μᾶλλον δ' ἐπιδήλως τοῦτο συμβαίνει ταῖς ἰσχυαῖς) καὶ ἐν τοῖς βουβῶσιν.

Ἐπὶ μὲν οὖν τῶν ἄρρένων ὡς ἐπὶ τὸ πολὺ ἐν τῷ δεξιῷ μᾶλλον περὶ τὰς τετταράκοντα γίνεται ἡ κίνησις, τῶν δὲ θηλειῶν ἐν τῷ ἀριστερῷ περὶ ἐνενήκονθ' ἡμέρας. Οὐ μὴν ἀλλ' ἀκρίβειάν γε τούτων οὐδεμίαν ὑποληπτέον· πολλαῖς γὰρ θηλυτοκούσαις ἡ κίνησις ἐν τῷ δεξιῷ γίνεται, καὶ ταῖς ἐν τῷ ἀριστερῷ ἄρρεν· ἀλλὰ καὶ ταῦτα καὶ τὰ τοιαῦτα πάντα διαφέρει ὡς ἐπὶ τὸ πολὺ τῷ μᾶλλον καὶ ἥττον.

Περὶ δὲ τοῦτον τὸν χρόνον καὶ σχίζεται τὸ κύημα· τὸν δ' ἔμπροσθεν ἄναρθρον συνέστηκεν κρεῶδες. Καλοῦνται δ' ἐκρύσεις μὲν αἱ μέχρι τῶν ἐπτὰ ἡμερῶν διαφθοραί, ἐκτρωσμοὶ δ' αἱ μέχρι τῶν τετταράκοντα· καὶ πλεῖστα διαφθείρεται τῶν κυημάτων ἐν ταύταις ταῖς ἡμέραις.

Τὸ μὲν οὖν ἄρρεν ὅταν ἐξέλθῃ τετταρακοσταῖον, ἐὰν μὲν εἰς ἄλλο τι ἀφῇ τις, διαχεῖται τε καὶ ἀφανίζεται, ἐὰν δ' εἰς ψυχρὸν ὕδωρ, συνίσταται οἶον ἐν ὑμένι· τούτου δὲ διακνισθέντος φαίνεται τὸ ἔμβρυον τὸ μέγεθος ἡλικὸν μύρμηξ τῶν μεγάλων, τὰ τε μέλη δῆλα, τὰ τε ἄλλα πάντα καὶ τὸ αἰδοῖον, καὶ οἱ ὀφθαλμοὶ καθάπερ ἐπὶ τῶν ἄλλων ζώων μέγιστοι.

Τὸ δὲ θῆλυ, ὃ τι μὲν ἂν διαφθαρῇ ἐντὸς τῶν τριῶν μηνῶν, ἀδιάρθρωτον ὡς ἐπὶ τὸ πολὺ φαίνεται· ὃ τι δ' ἂν ἐπιλάβῃ τοῦ τετάρτου μηνός, γίνεται ἐσχισμένον καὶ διὰ ταχέων λαμβάνει τὴν ἄλλην διάρθρωσιν. Τέως μὲν οὖν

πᾶσαν τὴν τελείωσιν τῶν μορίων βραδύτερον ἀπολαμβάνει τὸ θῆλυ τοῦ ἄρρενος, καὶ δεκάμηνα γίνεται μᾶλλον τῶν ἀρρένων· ὅταν δὲ γένηται, θᾶττον τὰ θήλεα τῶν ἀρρένων καὶ νεότητα καὶ ἀκμὴν λαμβάνει καὶ γῆρας, καὶ μᾶλλον αἱ πλείοσι χρώμεναι τόκοις, ὥσπερ εἴρηται πρότερον.

## Κεφάλαιο 4

Ὅταν δὲ συλλάβῃ ἡ ὑστέρα τὸ σπέρμα, εὐθὺς συμμύει ταῖς πολλαῖς, μέχρι γένωνται ἑπτὰ μῆνες· τῷ δ' ὀγδόῳ χάσκουσιν· καὶ τὸ ἔμβρυον, ἐὰν ᾖ γόνιμον, προκαταβαίνει τῷ ὀγδόῳ μηνί. Τὰ δὲ μὴ γόνιμα ἀλλ' ἀποπεπνιγμένα ὀκτάμηνα ἐν τοῖς τόκοις οὐκ ἐκφέρουσιν ὀκτάμηνα αἱ γυναῖκες, οὔτε προκαταβαίνει κάτω τὰ ἔμβρυα τῷ ὀγδόῳ μηνί, οὔθ' αἱ ὑστέραι ἐν τῷ χρόνῳ τούτῳ χάσκουσιν· ἀλλὰ (584a.) σημεῖον ὅτι οὐ γόνιμον, ἐὰν γένηται μὴ συμπεσόντων τῶν εἰρημένων.

Μετὰ δὲ τὰς συλλήψεις αἱ γυναῖκες βαρύνονται τὸ σῶμα πᾶν, καὶ σκότοι πρὸ τῶν ὀμμάτων καὶ ἐν τῇ κεφαλῇ γίνονται πόνοι. Ταῦτα δὲ ταῖς μὲν θᾶττον καὶ σχεδὸν δεκαταίαις γίνεται, ταῖς δὲ βραδύτερον, ὅπως ἂν τύχωσιν οὔσαι τῷ περιττωματικῇ εἶναι μᾶλλον καὶ ἥττον. Ἐτι δὲ ναυτία καὶ ἔμετοι λαμβάνουσι τὰς πλείστας, καὶ μάλιστα τὰς τοιαύτας, ὅταν αἱ τε καθάρσεις στῶσι καὶ μήπω εἰς τοὺς μαστοὺς τετραμμένοι ὦσιν.

Ἔναι μὲν οὖν ἀρχόμεναι μᾶλλον πονοῦσι τῶν γυναικῶν, ἔναι δ' ὕστερον, ἤδη τοῦ κυήματος ἔχοντος αὐξησιν μᾶλλον· πολλαῖς δὲ καὶ πολλάκις καὶ στραγγουρίαι γίνονται τὸ τελευταῖον. Ὡς μὲν οὖν ἐπὶ τὸ πολὺ ῥᾶον ἀπαλλάττουσιν αἱ τὰ ἄρρενα κύουσai καὶ μᾶλλον μετ' εὐχροίας διατελοῦσιν, ἐπὶ δὲ τῶν θηλειῶν τὸναντίον· ἀχρόστεραί τε γὰρ ὥς ἐπὶ τὸ πολὺ, καὶ βαρύτερον διάγουσι, καὶ πολλαῖς περὶ τὰ σκέλη οἰδήματα καὶ ἐπάρσεις γίνονται τῆς σαρκός· οὐ μὴν ἀλλ' ἐνίαις γίνεται καὶ τάναντία τούτων.

Εἰώθασιν δὲ ταῖς κυούσαις ἐπιθυμίαι γίνεσθαι παντοδαπαὶ καὶ μεταβάλλειν ὀξέως, ὃ καλοῦσιν τινες κισσᾶν· καὶ ἐπὶ τῶν θηλειῶν ὀξύτεραι μὲν αἱ ἐπιθυμίαι, παραγινομένων δὲ ἥττον δύνανται ἀπολαύειν. Ὀλίγαις δέ τισι συμβαίνει βέλτιον ἔχειν τὸ σῶμα κυούσαις. Μάλιστα δ' ἀσῶνται, ὅταν ἀρχῶνται τὰ παιδιά τρίχας ποιεῖν. Αἱ δὲ τρίχες ταῖς μὲν κυούσαις αἱ μὲν συγγενεῖς γίνονται ἐλάττους καὶ ῥέουσιν, ἐν οἷς δὲ μὴ εἰώθασιν ἔχειν τρίχας, ταῦτα δασύνεται μᾶλλον.

Καὶ κίνησιν δὲ παρέχεται ἐν τῷ σώματι μᾶλλον ὥς ἐπὶ τὸ πολὺ τὸ ἄρρεν τοῦ



θήλεος, καὶ τίκεται θᾶπτον, τὰ δὲ θήλεα βραδύτερον. Καὶ ὁ πόνος ἐπὶ μὲν τοῖς θήλεσι συνεχῆς καὶ νωθρότερος, ἐπὶ δὲ τοῖς ἄρρεσιν ὀξὺς μὲν, πολλῶ δὲ χαλεπώτερος. Αἱ δὲ πλησιάζουσιν πρὸ τῶν τόκων τοῖς ἀνδράσι θᾶπτον τίκτουσιν. Δοκοῦσι δ' ὠδίνειν αἱ γυναῖκες ἐνίοτε οὐ γινομένης ὠδίνος, ἀλλὰ διὰ τὸ τὴν κεφαλὴν στρέφειν τὸ ἔμβρυον φαίνεται ὠδῖνος ἀρχὴ τοῦτο γίνεσθαι.

Τὰ μὲν οὖν ἄλλα ζῶα μοναχῶς ποιεῖται τὴν τοῦ τόκου τελείωσιν· εἷς γὰρ ὥρισται τοῦ τόκου χρόνος πᾶσιν· ἀνθρώπῳ δὲ πολλοὶ μόνῳ τῶν ζώων· καὶ γὰρ ἐπτάμηνα καὶ ὀκτάμηνα καὶ ἐννεάμηνα γίνεται, καὶ δεκάμηνα τὸ πλεῖστον· ἔναι δ' (584b.) ἐπιλαμβάνουσι καὶ τοῦ ἐνδεκάτου μηνός.

Ὅσα μὲν οὖν γίνεται πρότερα τῶν ἐπτὰ μηνῶν, οὐδὲν οὐδαμῇ δύναται ζῆν· τὰ δ' ἐπτάμηνα γόνιμα γίνεται πρῶτον, ἀσθενῇ δὲ τὰ πολλὰ (διὸ καὶ σπαργανοῦσιν ἐρίοις αὐτά), πολλὰ δὲ καὶ τῶν πόρων ἐνίους ἔχοντα ἀσχίστους, οἷον ὠτων καὶ μυκτῆρων· ἄλλ' ἐπαυξανομένοις διαρθροῦνται, καὶ βιοῦσι πολλὰ καὶ τῶν τοιούτων. Τὰ δ' ὀκτάμηνα περὶ μὲν Αἴγυπτον καὶ ἐν ἐνίοις τόποις, ὅπου εὐέκφοροι αἱ γυναῖκες καὶ φέρουσί τε πολλὰ ῥαδίως καὶ τίκτουσι, καὶ γενόμενα δύναται ζῆν, κἂν τερατώδη γένηται, ἐνταῦθα μὲν ζῇ τὰ ὀκτάμηνα καὶ ἐκτρέφεται, ἐν δὲ τοῖς περὶ τὴν Ἑλλάδα τόποις ὀλίγα πάμπαν σώζεται, τὰ δὲ πολλὰ ἀπόλλυται· καὶ διὰ τὴν ὑπόληψιν, κἂν σωθῇ τι, νομίζουσιν οὐκ ὀκτάμηνον εἶναι τὸ γεγεννημένον, ἀλλὰ λαθεῖν ἑαυτὰς αἱ γυναῖκες συλλαβοῦσαι πρότερον.

Πονοῦσι δ' αἱ γυναῖκες μάλιστα τὸν μῆνα τὸν τέταρτον καὶ τὸν ὄγδοον, καὶ ἔαν διαφθείρωσι τετάρτῳ ἢ ὀγδόῳ μηνί, διαφθείρονται καὶ αὐταὶ ὥς ἐπὶ τὸ πολὺ, ὥστ' οὐ μόνον τὰ ὀκτάμηνα οὐ ζῇ, ἀλλὰ καὶ διαφθειρομένων αἱ τίκτουσαι κινδυνεύουσιν.

Τὸν αὐτὸν δὲ τρόπον δοκεῖ λανθάνειν καὶ ὅσα φαίνεται τίκεσθαι πολυχρονιώτερα τῶν ἐνδεκα μηνῶν· καὶ γὰρ τούτων ἢ τῆς συλλήψεως ἀρχὴ λανθάνει τὰς γυναῖκας· πολλάκις γὰρ πνευματικῶν γενομένων ἔμπροσθεν τῶν ὑστερῶν, μετὰ ταῦτα πλησιάσασαι καὶ συλλαβοῦσαι ἐκείνην οἶονται τὴν ἀρχὴν εἶναι τῆς συλλήψεως, δι' ἣν ἐχρήσαντο τοῖς σημείοις ὁμοίοις.

Τὸ δὲ δὴ πλῆθος τῶν τόκων τῆς τελειώσεως παρὰ τᾶλλα ζῶα τοῖς ἀνθρώποις ταύτην ἔχει τὴν διαφορὰν· καὶ τῶν μὲν μονοτόκων ὄντων τῶν δὲ πολυτόκων, ἐπαμφοτερίζει τὸ γένος τὸ τῶν ἀνθρώπων. Τὸ μὲν γὰρ πλεῖστον καὶ παρὰ τοῖς πλείστοις ἐν τίκτουσιν αἱ γυναῖκες, πολλάκις δὲ καὶ πολλαχοῦ δίδυμα,

οἷον καὶ περὶ Αἴγυπτον. Τίκτουσι δὲ καὶ τρία καὶ τέτταρα, περὶ ἐνίους μὲν καὶ σφόδρα τόπους, ὥσπερ εἴρηται πρότερον. Πλεῖστα δὲ τίκτεται πέντε τὸν ἀριθμόν· ἥδη γὰρ ὥπται τοῦτο καὶ ἐπὶ πλειόνων συμβεβηκός. Μία δέ τις ἐν τέτταρσι τόκοις ἔτεκεν εἴκοσιν· ἀνὰ πέντε γὰρ ἔτεκε, καὶ τὰ πολλὰ αὐτῶν ἐξετράφη.

Ἐν μὲν οὖν τοῖς ἄλλοις ζώοις, κἂν ἢ τὰ δίδυμα ἄρρεν καὶ θῆλυ, οὐδὲν ἦττον (585a.) ἐκτρέφεται γενόμενα καὶ σώζεται τῶν ἀρρένων ἢ θηλειῶν· ἐν δὲ τοῖς ἀνθρώποις ὀλίγα σώζεται τῶν διδύμων, ἐὰν ἢ τὸ μὲν θῆλυ τὸ δ' ἄρρεν.

Δέχεται δ' ὀχείαν κύοντα μάλιστα τῶν ζώων γυνὴ καὶ ἵππος· τὰ δ' ἄλλα ὅταν πληρωθῇ, φεύγει τοὺς ἄρρενας, ὅσα μὴ πέφυκεν ἐπικυῖσκεσθαι, καθάπερ δασύπους. Ἄλλ' ἵππος μὲν ἂν συλλάβῃ τὸ πρῶτον, οὐκ ἐπικυῖσκειται πάλιν, ἀλλ' ἐν τίκτει μόνον ὥς ἐπὶ τὸ πολὺ· ἐπ' ἀνθρώπῳ δ' ὀλίγα μὲν, γέγονε δέ ποτε.

Τὰ μὲν οὖν ὕστερον πολλῷ χρόνῳ συλληφθέντα οὐδὲν λαμβάνει τέλος, ἀλλὰ πόνον παρασχόντα συνδιαφθείρει τὸ προϋπάρχον (ἥδη γὰρ συνέβη γενομένης διαφθορᾶς καὶ δώδεκα ἐκπρεσεῖν τὰ ἐπικυηθέντα)· ἐὰν δ' ἐγγὺς ἢ σύλληψις ἐγένετο, τὸ ἐπικυηθὲν ἐξήνεγκαν, καὶ τίκτουσιν ὥσπερ δίδυμα γόνῳ, καθάπερ καὶ τὸν Ἴφικλέα καὶ τὸν Ἡρακλέα μυθολογοῦσιν. Γέγονε γὰρ καὶ τοῦτο φανερόν· μοιχευομένη γάρ τις τὸ μὲν τῶν τέκνων τῷ ἀνδρὶ εἰκότος ἔτεκε, τὸ δὲ τῷ μοιχῷ. Ἦδη δὲ καὶ δίδυμα κύουσά τις ἐπεκύησε τρίτον, γενομένου δὲ τοῦ χρόνου τοῦ καθήκοντος τὰ μὲν τελεόγονα τῷ χρόνῳ ἔτεκε, τὸ δὲ πεντάμηνον· καὶ τοῦτ' ἀπέθανεν εὐθύς. Καὶ ἑτέρα δέ τι συνέβη τεκούσῃ πρῶτον μὲν ἐπτάμηνον, ὕστερον δὲ δύο τελεόμηνα τεκεῖν· καὶ τούτων τὸ μὲν ἐτελεύτησε, τὰ δ' ἐβίωσεν.

Καὶ ἐκτιτρώσκουσαι δέ τινες συνέλαβον ἅμα, καὶ τὸ μὲν ἐξέβαλον τὸ δ' ἔτεκεν.

Ταῖς δὲ πλείσταις, ἐὰν συγγένωνται κύουσαι μετὰ τὸν ὄγδοον μῆνα, περίπλεων μυζώδους τὸ παιδίον ἐξέρχεται γλισχρότητος. Καὶ τῶν ἐδεσμάτων δὲ τῶν προσφερομένων περίπλεων φαίνεται πολλάκις.

## Κεφάλαιο 5

Καὶ τῶν ἀλλὶ δαψιλεστέρω χρησαμένων οὐκ ἔχοντα γίνεται τὰ παιδιά ὄνυχας.

Τὸ δὲ γάλα τὸ γινόμενον πρότερον τῶν ἑπτὰ μηνῶν ἄχρηστόν ἐστιν· ἀλλ' ἅμα τὰ τε παιδία γόνιμα καὶ τὸ γάλα χρήσιμον. Τὸ δὲ πρῶτον καὶ ἄλμυρόν, ὥσπερ τοῖς προβάτοις.

Μάλιστα δ' ἐν ταῖς κυήσεσι τοῦ οἴνου αἰσθάνονται αἱ πλεῖσται· διαλύονται τε γάρ, ἐὰν πίωσι, καὶ ἀδυνατοῦσιν.

Ἀρχὴ δὲ ταῖς γυναῖξιν τοῦ τεκνοῦσθαι καὶ τοῖς ἄρρεσι τοῦ τεκνοῦν, καὶ παῦλα ἀμφοτέροις, τοῖς μὲν ἢ τοῦ σπέρματος πρόεσις ταῖς δ' ἢ τῶν καταμηνίων, πλὴν οὐτ' ἀρχομένων γόνιμα (585b.) εὐθὺς οὐτ' ἔτι ὀλίγων γινομένων καὶ ἀσθενῶν. Ἡλικία δὲ τῆς μὲν ἀρχῆς εἴρηται· παύεται δὲ ταῖς γυναῖξιν ταῖς μὲν πλείσταις τὰ καταμήνια περὶ τετταράκοντα ἔτη, αἷς δ' ἂν ὑπερβάλλῃ τὸν χρόνον τοῦτον, διαμένει μέχρι τῶν πεντήκοντα ἐτῶν, καὶ ἤδη τινὲς ἔτεκον· πλείω δὲ χρόνον οὐδεμία.

## Κεφάλαιο 6

Οἱ δ' ἄνδρες οἱ μὲν πλεῖστοι γεννῶσι μέχρι ἐξήκοντα ἐτῶν, ὅταν δ' ὑπερβάλλῃ ταῦτα, μέχρι ἐβδομήκοντα· καὶ ἤδη τινὲς γεγεννήκασιν ἐβδομήκοντα ἐτῶν ὄντες. Συμβαίνει δὲ πολλοῖς καὶ πολλαῖς γυναῖξιν καὶ ἀνδράσι μετ' ἀλλήλων μὲν συνεζευγμένοις μὴ δύνασθαι τεκνοποιεῖσθαι, διαζευχθεῖσι δέ. Τὸ δ' αὐτὸ συμβαίνει καὶ περὶ ἀρρενογονίας καὶ θηλυγονίας· ἐνίοτε γὰρ καὶ γυναῖκες καὶ ἄνδρες μετ' ἀλλήλων μὲν ὄντες θηλυγόνοι εἰσὶν ἢ ἀρρενογόνοι, διεζευγμένοι δὲ γίνονται τούναντίον. Καὶ κατὰ τὴν ἡλικίαν δὲ μεταβάλλουσιν· νέοι μὲν ὄντες μετ' ἀλλήλων θήλεα γεννῶσι, πρεσβύτεροι δ' ἄρρενα· τοῖς δὲ καὶ ἐπὶ τούτων συμβαίνει τούναντίον. Καὶ ἐπὶ τοῦ γεννᾶν δ' ὅλως τὸ αὐτό· νέοις μὲν οὖσιν οὐδὲν γίνεται, πρεσβυτέροις δέ· οἱ δὲ τὸ πρῶτον, ὕστερον δὲ γεννῶσιν οὐδέν.

Εἰσὶ δὲ καὶ τῶν γυναικῶν τινὲς αἱ μόλις μὲν συλλαμβάνουσιν, ἐὰν δὲ συλλάβωσιν, ἐκφέρουσιν· αἱ δὲ τούναντίον συλλαμβάνουσι μὲν ῥαδίως, οὐ δύνανται δ' ἐκφέρειν. Εἰσὶ δὲ καὶ ἄνδρες θηλυγόνοι καὶ γυναῖκες ἀρρενογόνοι, οἷον καὶ κατὰ τοῦ Ἡρακλέους μυθολογεῖται, ὃς ἐν δύο καὶ ἐβδομήκοντα τέκνοις θυγατέρα μίαν ἐγέννησεν. Αἱ δὲ μὴ δυνάμεναι συλλαμβάνειν ἐὰν ἢ διὰ θεραπείαν συλλάβωσιν ἢ δι' ἄλλην τινὰ σύμπτωσιν, ὥς ἐπὶ τὸ πολὺ θηλυτοκοῦσι μᾶλλον ἢ ἀρρενοτοκοῦσιν.

Πολλοῖς δὲ συμβαίνει καὶ τῶν ἀνδρῶν δυναμένοις γεννᾶν ὕστερον μὴ δύνασθαι, καὶ πάλιν καθίστασθαι εἰς αὐτό.

Γίνονται δὲ καὶ ἐξ ἀναπήρων ἀνάπηροι, οἷον ἐκ χωλῶν χωλοὶ καὶ τυφλῶν τυφλοί, καὶ ὅλως τὰ παρὰ φύσιν ἐοικότες πολλάκις, καὶ σημεῖα ἔχοντες συγγενῇ, οἷον φύματα καὶ οὐλὰς. Ἦδη δ' ἀπέδωκε τῶν τοιούτων τι καὶ διὰ τριῶν, οἷον ἔχοντός τινος στίγμα ἐν τῷ βραχίονι ὁ μὲν υἱὸς οὐκ ἐγένετο ὁ δ' υἱοῦς ἔχων ἐν τῷ αὐτῷ τόπῳ συγκεχυμένον μέλαν.

Ὀλίγα μὲν οὖν γίνεται τὰ τοιαῦτα, τὰ δὲ πλεῖστα γίνεται ὁλόκληρα ἐκ κολοβῶν, καὶ οὐδὲν ἀποτέτακται τούτων. Καὶ (586a.) ἐοικότες δὲ τοῖς γεννήσασιν ἢ τοῖς ἄνωθεν γονεῦσιν, ὅτε δ' οὐδὲν οὐδενί. Ἀποδίδωσι δὲ καὶ διὰ πλειόνων γενῶν, οἷον ἐν Σικελίᾳ ἢ τῷ Αἰθίοπι μοιχευθεῖσα· ἢ μὲν γὰρ θυγάτηρ ἐγένετο οὐκ Αἰθίοψ, τὸ δ' ἐκ ταύτης.

Καὶ ὡς μὲν ἐπὶ τὸ πολὺ τὰ θήλεα ἔοικε τῇ μητρὶ μᾶλλον, τὰ δ' ἄρρενα τῷ πατρί· γίνεται δὲ καὶ τοῦναντίον, τὰ μὲν θήλεα τῷ πατρί, τὰ δ' ἄρρενα τῇ μητρὶ. Καὶ κατὰ μέρη δὲ γίνονται ἐοικότα ἅττα [μέρη] ἑκατέρῳ. Τὰ δὲ δίδυμα ἤδη μὲν ἐγένετο καὶ οὐκ ἐοικότα ἀλλήλοις, τὰ δὲ πλεῖστα καὶ ὡς ἐπὶ τὸ πολὺ ἐοικότα, ἐπεὶ καὶ μετὰ τὸν τόκον τις ἐβδομαία συγγενομένη καὶ συλλαβοῦσα ἔτεκε τὸ ὕστερον τῷ προτέρῳ ἐοικός, ὥσπερ δίδυμον. Εἰσὶ δὲ καὶ γυναικες ἐοικότα αὐταῖς γεννώσαι, αἱ δὲ τῷ ἀνδρί, ὥσπερ ἢ ἐν Φαρσάλῳ ἵππος ἢ Δικαία καλουμένη.

## Κεφάλαιο 7

Ἐν δὲ τῇ τοῦ σπέρματος ἐξόδῳ πρῶτον μὲν ἡγεῖται πνεῦμα (δηλοῖ δὲ καὶ ἡ ἐξοδος ὅτι γίνεται ὑπὸ πνεύματος· οὐδὲν γὰρ ῥιπτεῖται πόρρῳ ἄνευ βίας πνευματικῆς)· ὅταν δὲ λάβηται τὸ σπέρμα τῆς ὑστέρας καὶ ἐγχρονισθῇ, ὑμὴν περιίσταται. Φαίνεται γάρ, ὅταν πρὶν διαρθρωθῆναι ἐξέλθῃ, οἷον ὥδον ἐν ὑμένι περιεχόμενον ἀφαιρεθέντος τοῦ ὀστράκου· ὁ δ' ὑμὴν φλεβῶν μεστός.

Πάντα δὲ τὰ πλωτὰ καὶ πτηνὰ καὶ πεζά, εἴτε ζωτοκεῖται ἢ ὠτοκεῖται, ὁμοίως γίνεται· πλὴν τὸν ὀμφαλὸν τὰ μὲν πρὸς τὴν ὑστέραν ἔχει τὰ ζωτοκούμενα, τὰ δὲ πρὸς τῷ ὥδι, τὰ δ' ἀμφοτέρως, οἷον ἐπὶ γένους τινὸς ἰχθύων. Καὶ τὰ μὲν περιέχουσιν οἷον ὑμένες, τὰ δὲ χόρια· καὶ πρῶτον μὲν τοῦ ἐσχάτου ἐντὸς γίνεται τὸ ζῶον, εἴθ' ὑμὴν περὶ τοῦτον ἄλλος, τὸ μὲν πλεῖστον προσπεφυκὼς τῇ μήτρᾳ, τῇ δ' ἀφεστῶς καὶ ὕδωρ ἔχων. Μεταξὺ δ' ὑγρότης ὑδατώδης ἢ αἱματώδης, ὁ καλούμενος ὑπὸ τῶν γυναικῶν πρόφορος.

## Κεφάλαιο 8

Αύξεται δὲ τὰ ζῶα πάντα, ὅσα ἔχει ὀμφαλόν, διὰ τοῦ ὀμφαλοῦ. Ὁ δ' ὀμφαλός, ὅσα μὲν κοτυληδόνας ἔχει, πρὸς τῇ κοτυληδόνι προσπέφυκεν, ὅσα δὲ λείαν ἔχει τὴν ὑστέραν, πρὸς τῇ ὑστέρᾳ ἐπὶ φλεβός. Σχῆμα δ' ἔχει ἐν τῇ ὑστέρᾳ τὰ μὲν τετράποδα πάντα ἐκτεταμένα, καὶ τὰ ἄποδα (586b.) πλάγια, οἷον ἰχθύς, τὰ δὲ δίποδα συγκεκαμμένα, οἷον ὄρνις· καὶ ἄνθρωπος συγκεκαμμένος ῥῖνα μὲν μεταξὺ τῶν γονάτων ἔχει, ὀφθαλμοὺς δ' ἐπὶ τοῖς γόνασιν, ὥτα δ' ἐκτός. Ἔχει δ' ὁμοίως πάντα τὰ ζῶα τὴν κεφαλὴν ἄνω τὸ πρῶτον· αὐξανόμενα δὲ καὶ πρὸς τὴν ἔξοδον ὀρμῶντα κάτω περιάγεται, καὶ ἡ γένεσις ἐστὶν ἡ κατὰ φύσιν ἐπὶ κεφαλὴν· συγκεκαμμένα δὲ καὶ ἐπὶ πόδας γίνεται παρὰ φύσιν. Τὰ δὲ τῶν τετραπόδων ἔχει καὶ περιπτώματα, ὅταν ἤδη τέλεια ᾖ, καὶ ὑγρὸν καὶ σφυράδας, τὰς μὲν ἐν τῷ ἐσχάτῳ τοῦ ἐντέρου, ἐν δὲ τῇ κύστει οὖρον. Τοῖς δ' ἔχουσι κοτυληδόνας ἐν τῇ μήτρᾳ τῶν ζώων αἰεὶ ἐλάττους γίνονται αἱ κοτυληδόνες αὐξανομένου τοῦ ἐμβρύου, καὶ τέλος ἀφανίζονται.

Ὁ δ' ὀμφαλός ἐστι κέλυφος περὶ φλέβας, ὧν ἡ ἀρχὴ ἐκ τῆς ὑστέρας ἐστί, τοῖς μὲν ἔχουσι τὰς κοτυληδόνας ἐκ τῶν κοτυληδόνων, τοῖς δὲ μὴ ἔχουσιν ἀπὸ φλεβός. Εἰσὶ δὲ τοῖς μὲν μείζουσιν, οἷον τοῖς τῶν βοῶν ἐμβρύοις, τέτταρες αἱ φλέβες, τοῖς δ' ἐλάττωσι δύο, τοῖς δὲ πάμπαν μικροῖς, οἷον ὄρνισι, μία φλέψ. Τείνουσι δ' εἰς τὰ ἔμβρυα αἱ μὲν δύο διὰ τοῦ ἥπατος, ἡ αἱ καλούμεναι πύλαι εἰσὶ, πρὸς τὴν φλέβα τὴν μεγάλην, αἱ δὲ δύο πρὸς τὴν ἁορτήν, ἡ σχίζεται καὶ γίνεται ἡ ἁορτὴ δύο ἐκ μιᾶς. Εἰσὶ δὲ περὶ τὴν συζυγίαν ἑκατέραν τῶν φλεβῶν ὑμένες, περὶ δὲ τοὺς ὑμένας ὁ ὀμφαλὸς οἷον ἔλυτρον. Αὐξανομένων δ' αἰεὶ μᾶλλον συμπύπτουσιν αὗται αἱ φλέβες. Τὸ δ' ἔμβρυον ἀδρυνόμενον εἰς τε τὰ κοῖλα ἔρχεται, καὶ ἐνταῦθα δῆλόν ἐστι κινούμενον, καὶ ἐνίοτε κυλινδεῖται περὶ τὸ αἰδοῖον.

## Κεφάλαιο 9

Ὅταν δ' ὠδίνωσιν αἱ γυναῖκες, εἰς πολλὰ μὲν καὶ ἄλλα ἀποστηρίζονται αὐταῖς οἱ πόνοι, ταῖς δὲ πλείσταις εἰς ὁπότερον ἂν τύχῃ τῶν μηνῶν. Ὅσαις δ' ἂν περὶ τὴν κοιλίαν σφοδρότατοι γένωνται πόνοι, αὗται τάχιστα τίκτουςιν· καὶ ὅσαι μὲν τὴν ὀσφὺν προαγοῦσι, μόλις τίκτουςιν, ὅσαι δὲ τὸ ἦτρον, ταχύ.

Ἄν μὲν οὖν ἀρρενοτοκῇ, προέρχονται οἱ ἰχῶρες ὑδαρεῖς ὑπώχροι, ἐὰν δὲ θηλυτοκῇ, αἱματώδεις, ὑγροὶ δὲ καὶ οὗτοι· ἐνίαις μέντοι συμβαίνει περὶ τὰς ὠδῖνας καὶ οὐδέτερα τούτων.

Τοῖς μὲν οὖν ἄλλοις ζώοις οὐκ ἐπίπονοι (587a.) γίνονται οἱ τόκοι, ἀλλὰ

μετριωτέρως ἐπίδηλά ἐστιν ἐνοχλούμενα ὑπὸ τῆς ὠδῖνος· ταῖς δὲ γυναῖξί συμβαίνουσιν οἱ πόνοι ἰσχυρότεροι, καὶ μάλιστα ταῖς ἐδραΐαις καὶ ὅσαι μὴ εὐπλευροὶ μηδὲ δύνανται τὸ πνεῦμα κατέχειν. Δυστοκοῦσι δὲ μᾶλλον καὶ ἂν μεταξὺ ἀποπνεύσωσιν ἀποβιαζόμεναι τῷ πνεύματι.

Πρῶτον μὲν οὖν ὕδρωψ ἐξέρχεται κινουμένου τοῦ ἐμβρύου καὶ ῥηγνυμένων τῶν ὑμένων, ἔπειτα τὸ ἔμβρυον, στρεφομένων μὲν τῶν ὑστερῶν, καὶ τοῦ ὑστέρου τὰ ἔσω ἐκτὸς ἴσχοντος.

## Κεφάλαιο 10

Καὶ τῆς μαίας ἡ ὀμφαλοτομία μέρος ἐστὶν οὐκ ἀστόχου διανοίας· οὐ γὰρ μόνον περὶ τὰς δυστοκίας τῶν γυναικῶν τῇ εὐχερείᾳ δύνασθαι δεῖ βοηθεῖν, ἀλλὰ καὶ πρὸς τὰ συμβαίνοντα ἀγχίνουν εἶναι καὶ περὶ τὴν τοῦ ὀμφαλοῦ ἀπόδεσιν τοῖς παιδίοις. Ἐὰν μὲν γὰρ καὶ τὸ ὕστερον συνεκπέσῃ, ἐρίῳ ἀποδεῖται ἀπὸ τοῦ ὑστέρου ὁ ὀμφαλός, καὶ ἀποτέμενεται ἄνωθεν· ἢ δ' ἂν ἀποδεθῇ, συμφύεται, τὸ δὲ συνεχὲς ἀποπίπτει. Ἐὰν δὲ λυθῇ τὸ ἄμμα, ἀποθνήσκει τοῦ αἵματος ἐκρυσθέντος τὸ ἔμβρυον. Ἐὰν δὲ μὴ συνεξέλθῃ εὐθύς τὸ ὕστερον, ἔξω ὄντος αὐτοῦ τοῦ παιδίου, ἔσω ἀποτέμενεται ἀποδεθέντος τοῦ ὀμφαλοῦ. Πολλάκις δ' ἔδοξε τεθνεὺς τίκτεσθαι τὸ παιδίον, ὅταν ἀσθενικοῦ ὄντος, πρὶν ἀποδεθῆναι τὸν ὀμφαλόν, τὸ αἶμα ἔξω εἰς τὸν ὀμφαλὸν καὶ τὸ πέριξ τύχῃ ἐξερρηκός· ἀλλὰ τεχνικαί τινες ἤδη τῶν μαίων γενόμεναι ἀπέθλιψαν εἴσω ἐκ τοῦ ὀμφαλοῦ, καὶ εὐθύς τὸ παιδίον, ὥσπερ ἔξαιμον γενόμενον πρότερον, πάλιν ἀνεβίωσεν.

Γίνεται δέ, καθάπερ ἐλέχθη πρότερον, κατὰ φύσιν ἐπὶ κεφαλὴν καὶ τᾶλλα ζῶα, τὰ δὲ παιδία καὶ τὰς χεῖρας παρατεταμένα παρὰ τὰς πλευράς. Ἐξελθόντα δ' εὐθύς φθέγγεται, καὶ προσάγει πρὸς τὸ στόμα τὰς χεῖρας. Ἀφήσιν δὲ καὶ περιττώματα τὰ μὲν εὐθύς τὰ δὲ διὰ ταχέων, πάντα δ' ἐν ἡμέρᾳ· καὶ τοῦτο πλεον ἢ τοῦ παιδὸς κατὰ μέγεθος· ὃ καλοῦσιν αἱ γυναῖκες μηκόνιον. Χρῶμα δὲ τούτου αἱματῶδες καὶ σφόδρα μέλαν, καὶ πιττῶδες, μετὰ δὲ τοῦτο ἤδη γαλακτῶδες· σπᾶ γὰρ εὐθύς καὶ τὸν μαστόν.

Πρὶν δ' ἐξελθεῖν οὐ φθέγγεται τὸ παιδίον, κἂν δυστοκούσης τὴν κεφαλὴν μὲν ὑπερέχῃ, τὸ δ' ὅλον σῶμα ἔχῃ ἐντός.

Ὅσαις δ' ἂν ἐν ταῖς (587b.) ἀποκαθάρσεσι προεξορμήσωσιν οἱ καθαρμοί, δυσπαλλακτότεραι γίνονται τῶν ἐμβρύων. Ἐὰν δ' αἱ καθάρσεις μετὰ τὸν τόκον ἐλάττους γένωνται, καὶ ὅσων μόνον αἱ πρῶται, καὶ μὴ διατελέσωσιν εἰς

τὰς τετταράκοντα, ἰσχύουσί τε μᾶλλον αἱ γυναῖκες καὶ συλλαμβάνουσι θᾶπτον.

Τὰ δὲ παιδιά ὅταν γένωνται, τῶν τετταράκοντα ἡμερῶν ἐγρηγορότα μὲν οὔτε γελᾷ οὔτε δακρύει, νύκτωρ δ' ἐνίοτε ἄμφω· οὐδὲ κνιζόμενα τὰ πολλὰ αἰσθάνεται, τὸ δὲ πλεῖστον καθεύδει τοῦ χρόνου.

Αὐξανόμενον δ' αἰεὶ εἰς τὸ ἐγρηγορέναι μεταβάλλει μᾶλλον· καὶ ἐνυπνιαζόμενον δῆλον μὲν γίνεται, μνημονεύει δ' ὅψὲ τὰς φαντασίας.

Τοῖς μὲν οὖν ἄλλοις ζώοις οὐδεμία διαφορὰ τῶν ὀστέων, ἀλλὰ πάντα τετελεσμένα γίνεται· τοῖς δὲ παιδίοις τὸ βρέγμα λεπτόν, καὶ ὅψὲ πηγνυται. Καὶ τὰ μὲν ἔχοντα γίνεται ὀδόντας, τὰ δὲ παιδιά ἐβδόμῳ μηνὶ ἄρχονται ὀδοντοφυεῖν· φύει δὲ πρῶτον τοὺς προσθίους, καὶ τὰ μὲν τοὺς ἄνωθεν πρότερον, τὰ δὲ τοὺς κάτωθεν. Πάντα δὲ θᾶπτον φύουσιν, ὅσων αἱ τίθαι θερμότερον ἔχουσι τὸ γάλα.

## Κεφάλαιο 11

Μετὰ δὲ τοὺς τόκους καὶ τὰς καθάρσεις ταῖς γυναῖξιν τὸ γάλα πληθύνεται, καὶ ἐνίαις ῥεῖ οὐ μόνον κατὰ τὰς θηλάς ἀλλὰ πολλαχῇ τοῦ μαστοῦ, ἐνίαις δὲ καὶ κατὰ τὰς μασχάλας· καὶ διαμένουσιν εἰς τὸν ὕστερον χρόνον στραγγαλίδες, ὅταν μὴ ἐκπεφθῇ μηδὲ ἐξέλθῃ ὑγρότης, ἀλλὰ πληρωθῇ· ἅπας γὰρ ὁ μαστὸς σομφός ἐστιν οὕτως, ὥστε κἂν ἐν τῷ πόματι λάβωσι τρίχα, πόνος ἐγγίνεται ἐν τοῖς μαστοῖς (ὃ καλοῦσι τριχιᾶν), ἕως ἂν ἡ αὐτομάτη ἐξέλθῃ θλιβομένη ἢ μετὰ τοῦ γάλακτος ἐκθηλασθῇ.

Τὸ δὲ γάλα ἔχουσιν ἕως ἂν πάλιν συλλάβωσιν· τότε δὲ παύεται καὶ σβέννυται ὁμοίως ἐπ' ἀνθρώπων καὶ τῶν ἄλλων ζωοτόκων καὶ τετραπόδων. Τοῦ γάλακτος δ' ἐξιόντος οὐ γίνονται αἱ καθάρσεις ὥς ἐπὶ τὸ πολὺ, ἐπεὶ ἤδη τισὶ θηλαζομέναις ἐγένετο κάθαρσις.

Ὅλως δ' ἅμα πολλαχῇ οὐ συμβαίνει ἡ ὁρμὴ τῆς ὑγρότητος, οἷον ταῖς ἐχούσαις αἰμορροΐδας χεῖρους αἱ καθάρσεις ἐπιγίνονται. Ἐνίαις δὲ καὶ διὰ τῶν ἰξιῶν, ὅταν ἀπὸ τῆς ὀσφύος ἐκκριθῇ, πρὶν ἐλθεῖν εἰς τὰς ὑστέρας. Καὶ ὅσαις δ' ἂν μὴ (588a.) γινομένων τῶν καθάρσεων αἷμα συμπέσῃ ἐμέσαι, οὐδὲν βλάπτονται.

## Κεφάλαιο 12

Εἶωθε δὲ τὰ παῖδια τὰ πλεῖστα σπασμὸς ἐπιλαμβάνειν, καὶ μᾶλλον τὰ εὐτραφέστερα καὶ γάλακτι χρώμενα πλείονι ἢ παχυτέρῳ καὶ τίθαις εὐσάρκοις. Βλαβερὸν δὲ πρὸς τὸ πάθος καὶ ὁ οἶνος ὁ μέλας μᾶλλον τοῦ λευκοῦ, καὶ ὁ μὴ ὑδαρής, καὶ τὰ πλεῖστα τῶν φυσιωδῶν, καὶ ἐὰν ἡ κοιλία σιῇ. Τὰ πλεῖστα δ' ἀναιρεῖται πρὸ τῆς ἐβδόμης· διὸ καὶ τὰ ὀνόματα τότε τίθενται, ὥς πιστεύοντες ἤδη μᾶλλον τῇ σωτηρίᾳ. Καὶ ἐν ταῖς πανσελήνοις δὲ μᾶλλον πονοῦσιν. Ἐπικίνδυνον δὲ καὶ ὅσοις τῶν παιδίων οἱ σπασμοὶ ἐκ τοῦ νώτου ἄρχονται.

## **Βιβλίο 8**



## Κεφάλαιο 1

Τὰ μὲν οὖν περὶ τὴν ἄλλην φύσιν τῶν ζώων καὶ τὴν γένεσιν τοῦτον ἔχει τὸν τρόπον· αἱ δὲ πράξεις καὶ οἱ βίοι κατὰ τὰ ἦθη καὶ τὰς τροφὰς διαφέρουσιν. Ἔνεστι γὰρ ἐν τοῖς πλείστοις καὶ τῶν ἄλλων ζώων ἵχνη τῶν περὶ τὴν ψυχὴν τρόπων, ἅπερ ἐπὶ τῶν ἀνθρώπων ἔχει φανερωτέρας τὰς διαφοράς· καὶ γὰρ ἡμερότης καὶ ἀγριότης, καὶ πραότης καὶ χαλεπότης, καὶ ἀνδρία καὶ δειλία, καὶ φόβοι καὶ θάρρη, καὶ θυμοὶ καὶ πανουργίαι καὶ τῆς περὶ τὴν διάνοιαν συνέσεως ἔνεισιν ἐν πολλοῖς αὐτῶν ὁμοιότητες, καθάπερ ἐπὶ τῶν μερῶν ἐλέγομεν. Τὰ μὲν γὰρ τῷ μᾶλλον καὶ ἥττον διαφέρει πρὸς τὸν ἄνθρωπον, καὶ ὁ ἄνθρωπος πρὸς πολλὰ τῶν ζώων (ἔνια γὰρ τῶν τοιούτων ὑπάρχει μᾶλλον ἐν ἀνθρώπῳ, ἔνια δ' ἐν τοῖς ἄλλοις ζώοις μᾶλλον), τὰ δὲ τῷ ἀνάλογον διαφέρει· ὥς γὰρ ἐν ἀνθρώπῳ τέχνη καὶ σοφία καὶ σύνεσις, οὕτως ἐνίοις τῶν ζώων ἐστὶ τις ἑτέρα τοιαύτη φυσικὴ δύναμις. Φανερώτατον δ' ἐστὶ τὸ τοιοῦτον ἐπὶ τὴν τῶν παίδων ἡλικίαν βλέψασιν· ἐν τούτοις γὰρ τῶν μὲν ὕστερον ἕξεων ἐσομένων ἔστιν ἰδεῖν οἷον ἵχνη καὶ σπέρματα, διαφέρει δ' (588b.) οὐδὲν ὥς εἶπεῖν ἡ ψυχὴ τῆς τῶν θηρίων ψυχῆς κατὰ τὸν χρόνον τοῦτον, ὥστ' οὐδὲν ἄλογον εἰ τὰ μὲν ταῦτα τὰ δὲ παραπλήσια τὰ δ' ἀνάλογον ὑπάρχει τοῖς ἄλλοις ζώοις.

Οὕτω δ' ἐκ τῶν ἀψύχων εἰς τὰ ζῶα μεταβαίνει κατὰ μικρὸν ἢ φύσις, ὥστε τῇ συνεχείᾳ λανθάνει τὸ μεθόριον αὐτῶν καὶ τὸ μέσον ποτέρων ἐστίν. Μετὰ γὰρ τὸ τῶν ἀψύχων γένος τὸ τῶν φυτῶν πρῶτόν ἐστιν· καὶ τούτων ἕτερον πρὸς ἕτερον διαφέρει τῷ μᾶλλον δοκεῖν μετέχειν ζωῆς, ὅλον δὲ τὸ γένος πρὸς μὲν τᾶλλα σώματα φαίνεται σχεδὸν ὥσπερ ἔμψυχον, πρὸς δὲ τὸ τῶν ζώων ἄψυχον.

Ἡ δὲ μετάβασις ἐξ αὐτῶν εἰς τὰ ζῶα συνεχὴς ἐστίν, ὥσπερ ἐλέχθη πρότερον. Ἔνια γὰρ τῶν ἐν τῇ θαλάττῃ διαπορήσειεν ἂν τις πότερον ζῶόν ἐστιν ἢ φυτόν· προσπέφυκε γὰρ, καὶ χωριζόμενα πολλὰ διαφθείρεται τῶν τοιούτων, οἷον αἱ μὲν πίνναι προσπεφύκασιν, οἱ δὲ σωλῆνες ἀνασπασθέντες οὐ δύνανται ζῆν. Ὅλως δὲ πᾶν τὸ γένος τὸ τῶν ὀστρακοδέρμων φυτοῖς ἔοικε πρὸς τὰ πορευτικὰ τῶν ζώων.

Καὶ περὶ αἰσθήσεως, τὰ μὲν αὐτῶν οὐδ' ἐν σημαίνεται, τὰ δ' ἀμυδρῶς.

Ἡ δὲ τοῦ σώματος ἐνίων σαρκώδης ἐστὶ φύσις, οἷον τὰ τε καλούμενα τήθηα καὶ τὸ τῶν ἀκαληφῶν γένος· ὁ δὲ σπόγγος παντελῶς ἔοικε τοῖς φυτοῖς.

Ἀεὶ δὲ κατὰ μικρὰν διαφορὰν ἕτερα πρὸ ἐτέρων ἤδη φαίνεται μᾶλλον ζῶν ἔχοντα καὶ κίνησιν. Καὶ κατὰ τὰς τοῦ βίου δὲ πράξεις τὸν αὐτὸν ἔχει τρόπον. Τῶν τε γὰρ φυτῶν ἔργον οὐδὲν ἄλλο φαίνεται πλὴν οἷον αὐτὸ ποιῆσαι πάλιν ἕτερον, ὅσα γίνεται διὰ σπέρματος· ὁμοίως δὲ καὶ τῶν ζώων ἐνίων παρὰ τὴν γένεσιν οὐδὲν ἔστιν ἄλλο λαβεῖν ἔργον. Διόπερ αἱ μὲν τοιαῦται πράξεις κοιναὶ πάντων εἰσὶ· προσοῦσης δ' αἰσθήσεως ἤδη, περί τε τὴν ὀχείαν διὰ τὴν ἡδονὴν διαφέρουσιν αὐτῶν οἱ βίοι, καὶ περὶ τοὺς τόκους καὶ τὰς ἐκτροφὰς τῶν τέκνων. Τὰ μὲν οὖν ἀπλῶς, ὥσπερ φυτά, κατὰ τὰς ὥρας ἀποτελεῖ τὴν οἰκείαν γένεσιν· τὰ δὲ καὶ περὶ τὰς τροφὰς ἐκπονεῖται τῶν τέκνων, ὅταν δ' ἀποτελέσῃ, χωρίζονται καὶ κοινωνίαν (589a.) οὐδεμίαν ἔτι ποιοῦνται· τὰ δὲ συνετώτερα καὶ κοινωνοῦντα μνήμης ἐπὶ πλέον καὶ πολιτικώτερον χρῶνται τοῖς ἀπογόνους.

Ἐν μὲν οὖν μέρος τῆς ζωῆς αἱ περὶ τὴν τεκνοποιίαν εἰσὶ πράξεις αὐτοῖς, ἔτι δ' ἕτερον αἱ περὶ τὴν τροφήν· περὶ γὰρ δύο τούτων αἱ τε σπουδαὶ τυγχάνουσιν οὔσαι πᾶσαι καὶ ὁ βίος. Αἱ δὲ τροφαὶ διαφέρουσι μάλιστα κατὰ τὴν ὕλην ἐξ οἷας συνεστήκασιν. Ἡ γὰρ αὕξησις ἐκάστοις γίνεται κατὰ φύσιν ἐκ ταύτης. Τὸ δὲ κατὰ φύσιν ἡδύ· διώκει δὲ πάντα τὴν κατὰ φύσιν ἡδονήν.

## Κεφάλαιο 2

Διήρηνται δὲ κατὰ τοὺς τόπους· τὰ μὲν γὰρ πεζὰ τὰ δ' ἔνυδρα τῶν ζώων ἐστίν. Διχῶς δὲ λεγομένης ταύτης τῆς διαφορᾶς, τὰ μὲν τῷ δέχεσθαι τὸν ἀέρα, τὰ δὲ τῷ τὸ ὕδωρ, λέγεται τὰ μὲν πεζὰ τὰ δ' ἔνυδρα· τὰ δ' οὐ δεχόμενα μὲν, πεφυκότα μέντοι πρὸς τὴν κρᾶσιν τῆς ψύξεως τὴν ἀφ' ἐκατέρου τούτων ἱκανῶς, τὰ μὲν πεζὰ τὰ δ' ἔνυδρα καλεῖται, οὔτ' ἀναπνέοντα οὔτε δεχόμενα τὸ ὕδωρ. Τὰ δὲ τῷ τὴν τροφήν ποιεῖσθαι καὶ διαγωγῇ ἐν ἐκατέρῳ τούτων.

Πολλὰ γὰρ δεχόμενα τὸν ἀέρα, καὶ τοὺς τόκους ἐν τῇ γῇ ποιούμενα, τὴν τροφήν ἐκ τῶν ἐνύδρων ποιεῖται τόπων καὶ διατρίβει τὸν πλεῖστον ἐν ὕδατι χρόνον· ἅπερ ἔοικεν ἐπαμφοτερίζειν μόνα τῶν ζώων· καὶ γὰρ ὥς πεζὰ καὶ ὥς ἔνυδρά τις ἂν θείῃ.

Τῶν δὲ δεχομένων τὸ ὑγρὸν οὐδὲν οὔτε πεζὸν οὔτε πτηνόν, οὐδὲ τὴν τροφήν ἐκ τῆς γῆς ποιεῖται, τῶν δὲ πεζῶν καὶ δεχομένων τὸν ἀέρα πολλά. Καὶ τὰ μὲν οὕτως ὥστε μὴδὲ ζῆν δύνασθαι χωριζόμενα τῆς τοῦ ὕδατος φύσεως, οἷον αἱ τε καλούμεναι θαλάττιαι χελῶναι καὶ κροκόδειλοι καὶ ἵπποι ποτάμιοι καὶ φῶκαι καὶ τῶν ἐλαττόνων ζώων οἷον αἱ τ' ἐμύδες καὶ τὸ τῶν βατράχων

γένος· ταῦτα γὰρ ἅπαντα μὴ διὰ τινος ἀναπνεύσαντα χρόνου ἀποπνίγεται. Καὶ τίκτει δὲ καὶ ἐκτρέφει ἐν τῷ ξηρῷ, τὰ δὲ πρὸς τῷ ξηρῷ, διάγει δ' ἐν τῷ ὑγρῷ.

Περιττότατα δὲ πάντων ὁ δελφὶς ἔχει τῶν ζώων, καὶ εἴ τι ἄλλο τοιοῦτόν ἐστι καὶ τῶν ἐνύδρων καὶ τῶν ἄλλων κητωδῶν, ὅσα (589b.) τοῦτον ἔχει τὸν τρόπον, οἷον φάλαινα καὶ ὅσ' ἄλλ' αὐτῶν ἔχει αὐλόν. Οὐ γὰρ ῥάδιον οὔτ' ἐνυδρον θεῖναι μόνον τούτων ἕκαστον οὔτε πεζόν, εἰ πεζὰ μὲν τὰ δεχόμενα τὸν ἀέρα θετέον, τὰ δὲ τὸ ὕδωρ ἐνυδρα τὴν φύσιν. Ἀμφοτέρων γὰρ μετείληφεν· καὶ γὰρ τὴν θάλατταν δέχεται καὶ ἀφίησι κατὰ τὸν αὐλόν, καὶ τὸν ἀέρα τῷ πλεύμονι. Τοῦτο γὰρ ἔχουσι τὸ μόριον, καὶ ἀναπνέουσιν· διὸ καὶ λαμβανόμενος ὁ δελφὶς ἐν τοῖς δικτύοις ἀποπνίγεται ταχέως διὰ τὸ μὴ ἀναπνεῖν. Καὶ ἔξω δὲ ζῇ πολὺν χρόνον μύζων καὶ στένων, ὥσπερ καὶ τᾶλλα τῶν ἀναπνεόντων ζώων· ἔτι δὲ καθεύδων ὑπερέχει τὸ ῥύγχος, ὅπως ἀναπνέῃ.

Τὰ δ' αὐτὰ τάττειν εἰς ἀμφοτέρας τὰς διαιρέσεις ἄτοπον, ὑπεναντίους οὐσας· ἄλλ' ἔοικεν εἶναι τὸ ἐνυδρον ἔτι προσδιοριστέον. Τὰ μὲν γὰρ δέχεται τὸ ὕδωρ καὶ ἀφίησι διὰ τὴν αὐτὴν αἰτίαν δι' ἣν περ τὰ ἀναπνέοντα τὸν ἀέρα, καταψύξεως χάριν, τὰ δὲ διὰ τὴν τροφήν· ἀνάγκη γὰρ ἐν ὑγρῷ λαμβάνοντα ταύτην καὶ τὸ ὑγρὸν ἅμα δέχεσθαι, καὶ δεχόμενα ὄργανον ἔχειν ὃ ἐκπέμψει. Τὰ μὲν οὖν ἀνάλογον τῇ ἀναπνοῇ χρώμενα τῷ ὑγρῷ βράγχια ἔχει, τὰ δὲ διὰ τὴν τροφήν αὐλὸν τῶν ἐναίμων ζώων. Ὅμοίως δὲ τὰ τε μαλάκια καὶ τὰ μαλακόστρακα· καὶ γὰρ ταῦτα δέχεται τὸ ὑγρὸν διὰ τὴν τροφήν.

Ἐνυδρα δ' ἐστὶ τὸν ἕτερον τρόπον, διὰ τὴν τοῦ σώματος κρᾶσιν καὶ τὸν βίον, ὅσα δέχεται μὲν τὸν ἀέρα ζῇ δ' ἐν τῷ ὑγρῷ, ἢ ὅσα δέχεται μὲν τὸ ὑγρὸν καὶ ἔχει βράγχια, πορεύεται δ' εἰς τὸ ξηρὸν καὶ λαμβάνει τροφήν. Ἐν δὲ μόνον νῦν ὥπται τοιοῦτον, ὁ καλούμενος κορδύλος· οὗτος γὰρ πλεύμονα μὲν οὐκ ἔχει ἀλλὰ βράγχια, τετράπουν δ' ἐστὶν ὥς καὶ πεζεύειν πεφυκός.

Τούτων δὲ πάντων ἔοικεν ἡ φύσις ὥσπερ ἀνελὶ διεστράφθαι, καθάπερ τῶν τ' ἄρρενων ἔνια γίνεται θηλυκὰ καὶ τῶν θηλέων ἄρρενωπά. Ἐν μικροῖς γὰρ μορίοις λαμβάνοντα τὰ ζῶα διαφορὰν μέγα διαφέρειν φαίνεται κατὰ τὴν τοῦ ὅλου σώματος φύσιν. Δηλοῖ δ' ἐπὶ τῶν (590a.) ἐκτεμνομένων· μικροῦ γὰρ μορίου πηρωθέντος εἰς τὸ θῆλυ μεταβάλλει τὸ ζῶον. Ὡστε δῆλον ὅτι καὶ ἐν τῇ ἐξ ἀρχῆς συστάσει ἀκαριαίου τινὸς μεταβάλλοντος τῷ μεγέθει, ἂν ἢ ἀρχοειδές, γίνεται τὸ μὲν θῆλυ τὸ δ' ἄρρεν, ὅλως δ' ἀναιρεθέντος οὐδέτερον. Ὡστε καὶ τὸ πεζὸν καὶ τὸ ἐνυδρον εἶναι κατ' ἀμφοτέρους τοὺς τρόπους, ἐν μικροῖς μορίοις γινομένης τῆς μεταβολῆς. Διὸ συμβαίνει γίνεσθαι τὰ μὲν πεζὰ

τὰ δ' ἔνυδρα τῶν ζώων. Καὶ τὰ μὲν οὐκ ἐπαμφοτερίζει, τὰ δ' ἐπαμφοτερίζει, διὰ τὸ μετέχειν τι τῆς ὕλης ἐν τῇ συστάσει τῆς γενέσεως, ἐξ οἷας ποιεῖται τὴν τροφήν· προσφιλὲς γὰρ ἐκάστω τῶν ζώων τὸ κατὰ φύσιν, ὥσπερ εἴρηται καὶ πρότερον.

Διηρημένων δὲ τῶν ζώων εἰς τὸ ἔνυδρον καὶ πεζὸν τριχῶς, τῷ τε δέχεσθαι τὸν ἀέρα ἢ τὸ ὕδωρ, καὶ τῇ κράσει τῶν σωμάτων, τὸ δὲ τρίτον ταῖς τροφαῖς, ἀκολουθοῦσιν οἱ βίοι κατὰ ταύτας τὰς διαιρέσεις· τὰ μὲν γὰρ κατὰ τὴν κρᾶσιν καὶ τὴν τροφήν ἀκολουθοῦσι, καὶ κατὰ τὸ δέχεσθαι τὸ ὕδωρ ἢ τὸν ἀέρα, τὰ δὲ τῇ κράσει καὶ τοῖς βίοις μόνον.

Τῶν μὲν οὖν ὀστρακοδέρμων ζώων ἕνια μὲν ἀκίνητιζοντα τρέφεται τῷ ποτίμῳ (διηθεῖται γὰρ διὰ τῶν πυκνῶν διὰ τὸ λεπτότερον εἶναι τῆς θαλάττης συμπεττομένης), ὥσπερ καὶ τὴν ἐξ ὑπαρχῆς λαμβάνει γενέσιν. Ὅτι δ' ἐν τῇ θαλάττῃ πότιμον ἔνεστι καὶ τοῦτο διηθεῖσθαι δύναται, φανερόν ἐστιν. Ἦδη γὰρ εἰληφέναι τούτου συμβέβηκε πεῖραν· ἐὰν γὰρ τις κήρινον πλάσας λεπτὸν ἀγγεῖον καὶ περιδήσας καθῆ ἑῖς τὴν θάλατταν κενόν, ἐν νυκτὶ καὶ ἡμέρᾳ λαμβάνει ὕδατος πλῆθος, καὶ τοῦτο φαίνεται πότιμον.

Αἱ δ' ἀκαλῆφαι τρέφονται ὅ τι ἂν προσπέσῃ ἰχθυδίων. Ἐχει δὲ τὸ στόμα ἐν μέσῳ· δῆλον δὲ τοῦτο μάλιστ' ἐστὶν ἐπὶ τῶν μεγάλων. Ἐχει δὲ καὶ ὥσπερ τὰ ὄστρεα, ἢ ὑποχωρεῖ ἔξω ἢ τροφή, πόρον. Ἔστι δ' οὗτος ἄνω· ἔοικε γὰρ ἢ ἀκαλήφη ὥσπερ τὸ ἔσω εἶναι τῶν ὀστρέων τὸ σαρκῶδες, τῇ δὲ πέτρᾳ χρῆσθαι ὡς ὀστρέῳ.

Καὶ αἱ λεπάδες δ' ἀπολυόμεναι μεταχωροῦσι καὶ τρέφονται. Ὅσα δὲ κινητικά, τὰ (590b.) μὲν ζωοφαγοῦντα τρέφεται τοῖς μικροῖς ἰχθυδίοις, οἷον ἡ πορφύρα (σαρκοφάγον γὰρ ἐστὶ, διὸ καὶ δελεάζεται τοῖς τοιούτοις), τὰ δὲ καὶ τοῖς ἐν τῇ θαλάττῃ φυομένοις.

Αἱ δὲ χελῶναι αἱ θαλάττιαι τὰ τε κογχύλια νέμονται (ἔχουσι γὰρ τὸ στόμα ἰσχυρότατον πάντων· ὅτου γὰρ ἂν ἐπιλάβηται, ἢ λίθου ἢ ἄλλου ὁτουοῦν, ἀπεσθίει καὶ κατάγνυσιν), καὶ ἐξιοῦσα τὴν πόαν νέμεται. Πονοῦσι δὲ καὶ ἀπόλλυνται πολλάκις, ὅταν ἐπιπολάζουσαι ξηρανθῶσιν ὑπὸ τοῦ ἡλίου· καταφέρεσθαι γὰρ πάλιν οὐ δύνανται ῥαδίως.

Τὸν αὐτὸν δὲ τρόπον καὶ τὰ μαλακόστρακα· καὶ γὰρ ταῦτα παμφάγα· καὶ γὰρ λίθους καὶ ἰλὺν καὶ φυκία νέμονται καὶ κόπρον, οἷον οἱ πετραῖοι τῶν καρκίνων, καὶ σαρκοφαγοῦσιν. Οἱ δὲ κάραβοι κρατοῦσι μὲν καὶ τῶν μεγάλων

ἰχθύων, καὶ τις συμβαίνει περιπέτεια τούτων ἐνίοις· τοὺς μὲν γὰρ καράβους οἱ πολύποδες κρατοῦσιν, ὥστε καὶ ὄντας πλησίον ἐν ταύτῳ δικτύῳ αἴσθωνται, ἀποθνήσκουσιν οἱ κάραβοι διὰ τὸν φόβον. Οἱ δὲ κάραβοι τοὺς γόγγρους· διὰ γὰρ τὴν τραχύτητα οὐκ ἐξολισθαίνουσιν αὐτῶν. Οἱ δὲ γόγγροι τοὺς πολύποδας κατεσθίουσιν· οὐδὲν γὰρ αὐτοῖς διὰ τὴν λειότητα δύνανται χρῆσθαι. Τὰ δὲ μαλάκια πάντα σαρκοφάγα ἐστίν. Νέμονται δ' οἱ κάραβοι τὰ ἰχθύδια θηρεύοντες παρὰ τὰς θαλάμας· καὶ γὰρ ἐν τοῖς πελάγεσιν ἐν τοῖς τοιούτοις γίνονται τόποις οἱ ἂν ὥσι τραχεῖς καὶ λιθώδεις· ἐν τούτοις γὰρ ποιοῦνται καὶ τὰς θαλάμας· ὅτι δ' ἂν λάβῃ, προσάγεται πρὸς τὸ στόμα τῇ δικρόᾳ χηλῇ καθάπερ οἱ καρκῖνοι. Βαδίζει δὲ κατὰ φύσιν μὲν εἰς τοῦμπροσθεν, ὅταν ἄφοβος ᾖ, καταβαλὼν τὰ κέρατα πλάγια· ὅταν δὲ φοβηθῇ, φεύγει ἀνάπαλιν καὶ μακρὰν ἐξακοντίζει. Μάχονται δὲ πρὸς ἀλλήλους ὥσπερ οἱ κριοὶ τοῖς κέρασιν, ἐξαίροντες καὶ τύπτοντες· ὀρῶνται δὲ μετ' ἀλλήλων καὶ ἄθροοι πολλάκις ὥσπερ ἀγέλη.

Τὰ μὲν οὖν μαλακόστρακα τοῦτον ζῆ τὸν τρόπον, τῶν δὲ μαλακίων αἱ τευθίδες καὶ αἱ σηπῖαι κρατοῦσι καὶ τῶν (591a.) μεγάλων ἰχθύων. Οἱ δὲ πολύποδες μάλιστα κογχύλια συλλέγοντες, ἐξαιροῦντες τὰ σαρκία τρέφονται τούτοις· διὸ καὶ τοῖς ὀστράκοις οἱ θηρεύοντες γνωρίζουσι τὰς θαλάμας αὐτῶν.

Ὁ δὲ λέγουσί τινες, ὡς αὐτὸς αὐτὸν ἐσθίει, ψευδὲς ἐστίν· ἀλλ' ἀπεδηδεσμένας ἔχουσιν ἔνιοι τὰς πλεκτάνας ὑπὸ τῶν γόγγρων.

Οἱ δ' ἰχθύες τοῖς μὲν κυήμασι τρέφονται πάντες, ὅταν οἱ χρόνοι καθήκωσιν οὗτοι, τὴν δ' ἄλλην τροφήν οὐ τὴν αὐτὴν ποιοῦνται πάντες. Οἱ μὲν γὰρ αὐτῶν εἰσι σαρκοφάγοι μόνον, οἷον τὰ τε σελάχη καὶ οἱ γόγγροι καὶ αἱ χάνναι καὶ οἱ θύννοι καὶ λάβρακες καὶ σινόδοντες καὶ ἁμῖαι καὶ ὀρφοὶ καὶ μύραιναι· αἱ δὲ τρίγλαι καὶ φυκίοις τρέφονται καὶ ὀστρέοις καὶ βορβόρῳ καὶ σαρκοφαγοῦσιν· κέφαλοι δὲ τῷ βορβόρῳ, ὁ δὲ δάσκιλλος τῷ βορβόρῳ καὶ κόπρῳ, σκάρος δὲ καὶ μελάνουρος φυκίοις, ἡ δὲ σάλπη τῇ κόπρῳ καὶ φυκίοις· βόσκεται δὲ καὶ τὸ πράσον, θηρεύεται δὲ καὶ κολοκύνθη μόνη τῶν ἰχθύων.

Ἀλληλοφαγοῦσι δὲ πάντες μὲν πλὴν κεστρέως, μάλιστα δ' οἱ γόγγροι. Ὁ δὲ κέφαλος καὶ ὁ κεστρεὺς ὅλως μόνοι οὐ σαρκοφαγοῦσιν· σημεῖον δέ, οὔτε γὰρ ἐν τῇ κοιλίᾳ πώποτ' ἔχοντες εἰλημμένοι εἰσὶ τοιοῦτον οὐδέν, οὔτε δελέατι χρῶνται πρὸς αὐτοὺς ζώων σαρκὶν ἀλλὰ μάζη. Τρέφεται δὲ πᾶς κεστρεὺς φυκίοις καὶ ἄμμῳ. Ἔστι δ' ὁ μὲν κέφαλος, ὃν καλοῦσιν τινες χελῶνα, πρόσγειος, ὁ δὲ περαίας οὗ· βόσκεται δ' ὁ περαίας τὴν ἀφ' αὐτοῦ μύξαν, διὸ καὶ νῆστis ἐστίν ἀεὶ. Οἱ δὲ κέφαλοι νέμονται τὴν ἰλύν, διὸ καὶ βαρεῖς καὶ

βλεννώδεις εἰσίν, ἰχθὺν δ' ὅλως οὐκ ἐσθίουσιν· διὰ δὲ τὸ ἐν τῇ ἰλύϊ διατρίβειν ἐξανακολουμβῶσι πολλάκις, ἵνα περιπλύνωνται τὸ βλέννος. Τὸν δὲ γόνον αὐτῶν οὐδὲν ἐσθίει τῶν θηρίων, διὸ γίνονται πολλοί· ἄλλ' ὅταν αὐξηθῶσι, τότε κατεσθίονται ὑπὸ τε τῶν ἄλλων ἰχθύων καὶ μάλιστα (591b.) ὑπὸ τοῦ ἀχάρνου. Λαίμαργος δὲ μάλιστα τῶν ἰχθύων ὁ κεστρεὺς ἐστὶ καὶ ἄπληστος, διὸ ἡ κοιλία περιτείνεται, καὶ ὅταν ἦ μὴ νῆστις, φαῦλος· ὅταν δὲ φοβηθῇ, κρύπτει τὴν κεφαλὴν ὡς ὅλον τὸ σῶμα κρύπτων. Σαρκοφαγεῖ δὲ καὶ ὁ σινόδων, καὶ τὰ μαλάκια κατεσθίει. Πολτάκις δὲ καὶ οὗτος καὶ ἡ χάννα ἐκβάλλουσι τὰς κοιλίας διώκοντες τοὺς ἐλάττους ἰχθῦς, διὰ τὸ πρὸς τῷ στόματι τὰς κοιλίας τῶν ἰχθύων εἶναι καὶ στόμαχον μὴ ἔχειν.

Τὰ μὲν οὖν, ὥσπερ εἴρηται, σαρκοφάγα μόνον ἐστίν, οἷον δελφίς καὶ σινόδων καὶ χρύσοφρυς καὶ οἱ σελαχώδεις τῶν ἰχθύων καὶ τὰ μαλάκια· τὰ δ' ὡς ἐπὶ τὸ πολὺ νέμονται μὲν τὸν πηλὸν καὶ τὸ φῦκος καὶ τὸ βρύον καὶ τὸ καλούμενον καυλίον καὶ τὴν φυομένην ὕλην, οἷον φυκὶς καὶ κωβιδὸς καὶ οἱ πετραῖοι· ἡ δὲ φυκὶς ἄλλης μὲν σαρκὸς οὐχ ἄπτεται, τῶν δὲ καρίδων. Πολτάκις δὲ καὶ ἀλλήλων ἄπτονται, καθάπερ εἴρηται, καὶ τῶν ἐλαττόνων οἱ μείζους. Σημεῖον δ' ὅτι σαρκοφαγοῦσιν· ἀλίσκονται γὰρ τοιοῦτοις δελέασιν. Καὶ ἀμία δὲ καὶ θύννος καὶ λάβραξ τὰ μὲν πολλὰ σαρκοφαγοῦσιν, ἄπτονται δὲ καὶ φυκίων. Ὁ δὲ σάργος ἐπινέμεται τῇ τρίγλῃ, καὶ ὅταν ἡ τρίγλη κινήσασα τὸν πηλὸν ἀπέλθῃ (δύναται γὰρ ὀρύττειν), ἐπικαταβὰς νέμεται καὶ τοὺς ἀσθενεστεροὺς ἐαυτοῦ κωλύει συνεπινεῖν. Δοκεῖ δὲ τῶν ἰχθύων ὁ καλούμενος σκάρος μηρυκάζειν ὥσπερ τὰ τετράποδα μόνος.

Τοῖς μὲν οὖν ἄλλοις ἰχθύσιν ἡ θήρα τῶν ἡττόνων καταντικρὺ γίνεται τοῖς στόμασιν, ὥνπερ πεφύκασιν τρόπον νεῖν· οἱ δὲ σελαχώδεις καὶ οἱ δελφῖνες καὶ πάντες οἱ κητώδεις ὕπτιοι ἀναπίπτοντες λαμβάνουσιν· κάτω γὰρ τὸ στόμα ἔχουσιν. Διὸ σώζονται μᾶλλον οἱ ἐλάττους· εἰ δὲ μή, πάμπαν ἂν ὀλίγοι δοκοῦσιν εἶναι· καὶ γὰρ ἡ τοῦ δελφίνου ὀξύτης καὶ δύναμις τοῦ φαγεῖν δοκεῖ εἶναι θαυμαστή.

Τῶν δ' ἐγγελύων τρέφονται ὀλίγοι μὲν τινες καὶ (592a.) ἐνιαχοῦ καὶ τῇ ἰλύϊ καὶ σιτίοις, ἐάν τις παραβάλῃ, αἱ μέντοι πλεῖσται τῷ ποτίμῳ ὕδατι· καὶ τοῦτο τηροῦσιν οἱ ἐγγελοτρόφοι ὅπως ὅτι μάλιστα καθαρὸν ἦ, ἀπορρέον ἀεὶ καὶ ἐπρρέον ἐπὶ πλαταμώνων· ἢ κονιῶνται τοὺς ἐγγελεῶνας. Ἀποπνίγονται γὰρ ταχύ, ἐὰν μὴ καθαρὸν ἦ τὸ ὕδωρ· ἔχουσι γὰρ τὰ βράγχια μικρά. Διόπερ ὅταν θηρεύωσι, ταραττοῦσι τὸ ὕδωρ· καὶ ἐν τῷ Στρυμόνι δὲ περὶ Πλειάδας ἀλίσκονται· τότε γὰρ ἀναθολοῦται τὸ ὕδωρ καὶ ὁ πηλὸς ὑπὸ πνευμάτων γινομένων ἐναντίων· εἰ δὲ μή, συμφέρει ἡσυχίαν ἔχειν.

Ἀποθανοῦσαι δ' αἱ ἐγγέλους οὐκ ἐπιπολάζουσιν οὐδὲ φέρονται ἄνω, ὥσπερ οἱ πλεῖστοι τῶν ἰχθύων· ἔχουσι γὰρ τὴν κοιλίαν μικράν. Δημὸν δ' ὀλίγαι μὲν ἔχουσιν, αἱ δὲ πλεῖσται οὐκ ἔχουσιν. Ζῶσι δ' ἐκ τοῦ ὑγροῦ ἀφαιρούμεναι ἡμέρας καὶ πέντε καὶ ἕξ, καὶ βορείων μὲν ὄντων πλείους, νοτίων δ' ἐλάττους. Καὶ μεταβαλλόμεναι τοῦ θέρους εἰς τοὺς ἐγγελεῶνας ἐκ τῶν λιμνῶν ἀποθνήσκουσι, χειμῶνος δ' οὔ.

Καὶ τὰς μεταβολὰς δ' οὐχ ὑπομένουσι τὰς ἰσχυράς, οἷον καὶ τοῖς φέρουσιν ἐὰν βάπτωσιν εἰς ψυχρόν· ἀπόλλυνται γὰρ ἀθρόαι πολλάκις. Αποπνίγονται δὲ καὶ ἐὰν ἐν ὀλίγῳ ὕδατι τρέφονται. Τὸ δ' αὐτὸ τοῦτο καὶ ἐπὶ τῶν ἄλλων συμβαίνει ἰχθύων· ἀποπνίγονται γὰρ ἐν τῷ αὐτῷ ὕδατι καὶ ὀλίγῳ ἀεὶ ὄντες, ὥσπερ καὶ τὰ ἀναπνέοντα, ἐὰν περιπωμασθῇ ὀλίγος ἀήρ. Ζῶσι δ' ἔνιοι ἐγγέλους καὶ ἐπτὰ καὶ ὀκτὼ ἔτη.

Τροφῇ δὲ καὶ οἱ ποτάμιοι χρῶνται ἀλλήλους τ' ἐσθίοντες καὶ βοτάνας καὶ ῥίζας, κἄν τι ἐν τῷ βορβόρῳ λάβωσιν. Νέμονται δὲ μᾶλλον τῆς νυκτός, τὴν δ' ἡμέραν εἰς τὰ βαθέα ὑποχωροῦσιν. Τὰ μὲν οὖν περὶ τὴν τῶν ἰχθύων τροφήν τοῦτον ἔχει τὸν τρόπον.

### Κεφάλαιο 3

Τῶν δ' ὀρνίθων ὅσοι μὲν γαμψώνυχες, σαρκοφάγοι πάντες εἰσὶ, σῆτον δ' οὐδ' ἐὰν τις ψωμίζῃ δύνανται (592b.) καταπίνειν, οἷον τὰ τε τῶν ἀετῶν γένη πάντα καὶ ἰκτῖνοι καὶ ἱέρακες ἅμφω, ὃ τε φαβοτύπος καὶ ὁ σπιζίας (διαφέρουσι δ' οὔτοι τὸ μέγεθος πολὺ ἀλλήλων), καὶ ὁ τριόρχης· ἔστι δ' ὁ τριόρχης τὸ μέγεθος ὅσον ἰκτῖνος, καὶ φαίνεται οὗτος διὰ παντός. Ἔτι φήνη καὶ γύψ· ἔστι δ' ἡ μὲν φήνη τὸ μέγεθος ἀετοῦ μείζων, τὸ δὲ χρῶμα σποδοειδές, τῶν δὲ γυπῶν δύο ἐστὶν εἶδη, ὁ μὲν μικρὸς καὶ ἐκλευκότερος, ὁ δὲ μείζων καὶ σποδοειδέστερος.

Ἔτι τῶν νυκτερινῶν ἔνιοι γαμψώνυχές εἰσιν, οἷον νυκτικόραξ, γλαύξ, βύας. Ἔστι δ' ὁ βύας τὴν μὲν ιδέαν ὅμοιος γλαυκί, τὸ δὲ μέγεθος ἀετοῦ οὐδὲν ἐλάττων. Ἔτι δ' ἐλεὸς καὶ αἰγώλιος καὶ σκῶψ. Τούτων δ' ὁ μὲν ἐλεὸς μείζων ἀλεκτρυόνος, ὁ δ' αἰγώλιος παραπλήσιος, ἀμφότεροι δὲ θηρεύουσι τὰς κίττας· ὁ δὲ σκῶψ ἐλάττων γλαυκός· πάντα δὲ ταῦτα τρία ὄντα ὅμοια τὰς ὄψεις καὶ σαρκοφάγα πάντα.

Εἰσὶ δὲ καὶ τῶν μὴ γαμψωνύχων ἔνιοι σαρκοφάγοι, οἷον ἡ χελιδών. Τὰ δὲ σκωληκοφάγα, οἷον σπίζα, στρουθός, βατίς, χλωρίς, αἰγιθαλός. Ἔστι δὲ τῶν

αἰγιθαλῶν εἶδη τρία, ὁ μὲν σπιζίτης μέγιστος (ἔστι γὰρ ὅσον σπίζα), ἕτερος δ' ὀρεινὸς διὰ τὸ διατρίβειν ἐν τοῖς ὄρεσιν, οὐραῖον μακρὸν ἔχων· ὁ δὲ τρίτος ὅμοιος μὲν τούτοις, διαφέρει δὲ κατὰ τὸ μέγεθος· ἔστι γὰρ ἐλάχιστος. Ἔτι δὲ συκαλὶς, μελαγκόρυφος, πυρρούλας, ἐρίθακος, ἐπιλαῖς, οἷστρος, τύραννος· οὗτος τὸ μέγεθος μικρῷ μείζων ἀκρίδος, ἔστι δὲ φοινικοῦν λόφον ἔχων, καὶ ἄλλως εὐχάρι τὸ ὀρνίθιον καὶ εὐρυθμον. Ἄνθος· οὗτος τὸ μέγεθος ὅσον σπίζα. Ὀρόσπιζος· οὗτος σπίζῃ ὅμοιος καὶ τὸ μέγεθος παραπλήσιος, πλὴν ἔχει <τὸ> περὶ τὸν αὐχένα κυανοῦν, καὶ διατρίβει ἐν τοῖς ὄρεσιν. Ἔτι βασιλεύς, σπερμολόγος. Ταῦτα μὲν οὖν καὶ τὰ τοιαῦτα τὰ μὲν ὅλως, τὰ δ' ὡς ἐπὶ τὸ πολὺ σκωληκοφάγα, τὰ δὲ τοιάδε ἀκανθοφάγα, ἀκανθίς, θραυπὶς, ἔτι ἡ καλουμένη (593a.) χρυσομῆτρης. Ταῦτα γὰρ πάντα ἐπὶ τῶν ἀκανθῶν νέμεται, σκωλήκα δ' οὐδὲν οὐδ' ἔμψυχον οὐδέν· ἐν ταύτῳ δὲ καθεύδει καὶ νέμεται ταῦτα.

Ἄλλα δ' ἐστὶ σκνιποφάγα, ἃ τοὺς σκνῖπας θηρεύοντα ζῆ μάλιστα, οἶον πιπῶ ἢ τε μείζων καὶ ἢ ἐλάττων· καλοῦσι δὲ τινες ἀμφότερα ταῦτα δρυοκολάπτας· ὅμοια δ' ἀλλήλοις, καὶ φωνὴν ἔχουσιν ὁμοίαν, πλὴν μείζω τὸ μείζων· νέμεται δ' ἀμφότερα ταῦτα πρὸς τὰ ξύλα προσπετόμενα. Ἔτι κελεός· ἔστι δ' ὁ κελεὸς τὸ μέγεθος ὅσον τρυγῶν, τὸ δὲ χρῶμα χλωρὸς ὅλος· ἔστι δὲ ξυλοκόπος σφόδρα, καὶ νέμεται ἐπὶ τῶν ξύλων τὰ πολλά, φωνὴν τε μεγάλην ἔχει· γίνεται δὲ μάλιστα τὸ ὄρνεον τοῦτο περὶ Πελοπόννησον. Ἄλλος ὃς καλεῖται κνιπολόγος, τὸ δὲ μέγεθος μικρὸς ὅσον ἀκανθυλλίς, τὴν δὲ χροάν σποδοειδὴς καὶ κατάστικτος· φωνεῖ δὲ μικρόν· ἔστι δὲ καὶ τοῦτο ξυλοκόπον.

Ἄλλα δ' ἔστιν ἃ ζῆ καρποφαγοῦντα καὶ ποοφαγοῦντα, οἶον φάψ, φάττα, περιστερὰ, οἰνάς, τρυγῶν. Φάττα μὲν οὖν καὶ περιστερὰ αἰεὶ φαίνονται, τρυγῶν δὲ τοῦ θέρους· τοῦ γὰρ χειμῶνος ἀφανίζεται· φωλεῖ γάρ. Οἰνάς δὲ τοῦ φθινοπώρου καὶ φαίνεται μάλιστα καὶ ἀλίσκεται· ἔστι δὲ τὸ μέγεθος ἡ οἰνάς μείζων μὲν περιστερᾶς, ἐλάττων δὲ φαβός· ἢ δ' ἄλωσης αὐτῆς γίνεται μάλιστα καπτούσης τὸ ὕδωρ. Ἀφικνοῦνται δ' εἰς τοὺς τόπους τούτους ἔχουσιν νεοττούς· τὰ δ' ἄλλα πάντα τοῦ θέρους ἀφικνούμενα νεοττεύει ἐνταῦθα, καὶ ἐκτρέφει τὰ πλεῖστα ζώοις, πλὴν τῶν περιστεροειδῶν. Πάντων δ' ὡς εἰπεῖν τῶν ὀρνίθων οἱ μὲν πεζεύουσι περὶ τὴν τροφήν, οἱ δὲ περὶ ποταμοὺς καὶ λίμνας βιοτεύουσιν, οἱ δὲ περὶ τὴν θάλατταν, ὅσοι μὲν στεγανόποδες, ἐν αὐτῷ τῷ ὕδατι ποιούμενοι τὴν πλείστην διατριβήν, ὅσοι δὲ σχιζόποδες, περὶ αὐτὸ τὸ ὕδωρ· καὶ τούτων ἔνιοι διὰ τῶν φυομένων τρέφονται, ὅσοι μὴ σαρκοφάγοι. (593b.) Οἶον περὶ μὲν τὰς λίμνας καὶ τοὺς ποταμοὺς ἐρωδιὸς καὶ ὁ λευκερωδιός· ἔστι δ' οὗτος τὸ μέγεθος ἐκείνου ἐλάττων, καὶ ἔχει τὸ ῥύγχος πλατὺ καὶ μακρόν. Ἔτι πελαργὸς καὶ λάρος· ὁ δὲ λάρος τὸ χρῶμα σποδοειδής.



Καὶ σχοινίλος καὶ κίγκλος καὶ πύγαργος· οὗτος μέγιστος τῶν ἐλαττόνων τούτων· ἔστι γὰρ ὅσον κίχλη. Πάντες δ' οὗτοι τὸ οὐραῖον κινουῦσιν.

Ἔτι σκαλίδρις· ἔστι δὲ τοῦτο τὸ ὄρνεον ποικιλίαν ἔχον, τὸ δ' ὅλον σποδοειδές. Καὶ τὸ τῶν ἀλκυόνων δὲ γένος πάρυδρόν ἐστιν. Τυγχάνει δ' αὐτῶν ὄντα δύο εἶδη, καὶ ἡ μὲν φθέγγεται, καθιζάνουσα ἐπὶ τῶν δονάκων, ἡ δ' ἄφωνος· ἔστι δ' αὕτη μείζων· τὸν δὲ νῶτον ἀμφοτέραι κυανοῦν ἔχουσιν. Καὶ τροχίλος.

Περὶ δὲ τὴν θάλατταν καὶ ἀλκυῶν καὶ κήρυλος. Καὶ αἱ κορῶναι δὲ νέμονται ἀπτόμεναι τῶν ἐκπιπτόντων ζώων· παμφάγον γὰρ ἐστιν. Ἔτι δὲ λάρος ὁ λευκὸς καὶ κέπφος, αἶθυια, χαραδριός.

Τῶν δὲ στεγανοπόδων τὰ μὲν βαρύτερα περὶ ποταμοὺς καὶ λίμνας ἐστίν, οἷον κύκνος, νῆττα, φαλαρίς, κολυμβίς, ἔτι βόσκας, ὅμοιος μὲν νήττη, τὸ δὲ μέγεθος ἐλάττων, καὶ ὁ καλούμενος κόραξ· οὗτος δ' ἐστὶ τὸ μὲν μέγεθος οἷον πελαργός, πλὴν τὰ σκέλη ἔχει ἐλάττω, στεγανόπους δὲ καὶ νευστικός, τὸ δὲ χρῶμα μέλας· καθίζει δὲ οὗτος ἐπὶ τῶν δένδρων καὶ νεοττεύει ἐνταῦθα μόνος τῶν τοιούτων. Ἔτι χήν, καὶ ὁ μικρὸς χήν ὁ ἀγελαῖος, καὶ χηναλώπηξ καὶ αἶξ καὶ πηνέλοψ. Ὁ δ' ἀλκίαιετος καὶ περὶ τὴν θάλατταν διατρίβει καὶ τὰ λιμναῖα κόπτει.

Πολλοὶ δὲ καὶ παμφάγοι τῶν ὀρνίθων εἰσίν. Οἱ δὲ γαμψώνυχοι καὶ τῶν ἄλλων ἄπτονται ζώων, ὅσων ἂν κρατῶσι, καὶ τῶν ὀρνέων· πλὴν οὐκ ἀλληλοφάγοι τοῦ γένους τοῦ οἰκείου εἰσίν, ὥσπερ οἱ ἰχθύες ἄπτονται πολλάκις καὶ αὐτῶν. Ἔστι δὲ τὸ τῶν ὀρνέων γένος πᾶν μὲν ὀλιγόποτον, οἱ δὲ γαμψώνυχοι καὶ (594a.) ἄποτοι πάμπαν, εἰ μὴ τι ὀλίγον γένος καὶ ὀλιγάκις. Μάλιστα δὲ τοιοῦτον ἡ κεγχρίς. Καὶ ἰκτῖνος ὀλιγάκις μὲν, ὥπται δὲ πίνων.

## Κεφάλαιο 4

Τὰ δὲ φολιδωτὰ τῶν ζώων, οἷον σαῦρός τε καὶ τὰ τετράποδα τᾶλλα καὶ οἱ ὄφεις, παμφάγα ἐστίν· καὶ γὰρ σαρκοφάγα, καὶ πόαν ἐσθίουσιν. Οἱ δ' ὄφεις καὶ λιχνότατοι τῶν ζώων εἰσίν. Ἔστι μὲν οὖν ὀλιγόποτα καὶ ταῦτα καὶ τᾶλλα ὅσα ἔχει τὸν πλεύμονα σομφόν· ἔχουσι δὲ σομφὸν τὰ ὀλίγαιμα πάντα καὶ τὰ ὠτόκα. Οἱ δ' ὄφεις καὶ πρὸς τὸν οἶνόν εἰσιν ἀκρατεῖς, διὸ θηρεύουσιν τινες καὶ τοὺς ἔχεις εἰς ὀστράκια διατιθέντες οἶνον εἰς τὰς αἱμασίας· λαμβάνονται γὰρ μεθύοντες.

Σαρκοφάγοι δ' ὄντες οἱ ὄφεις, ὅ τι ἂν λάβωσι ζῶον, ἐξικμάζοντες ὅλα κατὰ τὴν ὑποχώρησιν προΐενται. Σχεδὸν δὲ καὶ τᾶλλα τὰ τοιαῦτα, οἷον οἱ ἀράχνη· ἄλλ' ἔξω οἱ ἀράχνη ἐκχυμίζουσιν, οἱ δ' ὄφεις ἐν τῇ κοιτίᾳ.

Λαμβάνει μὲν οὖν ὁ ὄφις ὅθεν ἂν τύχῃ τὸ διδόμενον (ἐσθίει γὰρ καὶ ὀρνίθια καὶ θηρία, καὶ ὧν καταπίνει), λαβὼν δ' ἐπανάγει, ἕως ἂν ἐπὶ τὸ ἄκρον ἐλθὼν εἰς εὐθὺ καταστήσῃ, κᾶπειθ' οὕτω συνάγει αὐτὸν καὶ συστέλλει εἰς μικρὸν ὥστ' ἐκταθέντος κάτω γίνεσθαι τὸ καταποθέν. Ταῦτα δὲ ποιεῖ διὰ τὸ τὸν στόμαχον εἶναι λεπτὸν καὶ μακρόν. Δύναται δ' ἄσιτα καὶ τὰ φαλάγγια καὶ οἱ ὄφεις πολὺν χρόνον ζῆν· ἔστι δὲ τοῦτο θεωρῆσαι ἐκ τῶν παρὰ τοῖς φαρμακοπώλαις τρεφομένων.

## Κεφάλαιο 5

Τῶν δὲ τετραπόδων καὶ ζωοτόκων τὰ μὲν ἄγρια καὶ καρχαρόδοντα πάντα σαρκοφάγα· πλὴν τοὺς λύκους φασίν, ὅταν πεινῶσιν, ἐσθίειν τινὰ γῆν, μόνον δὴ τοῦτο τῶν ζώων· πόας δ' ἄλλοτε μὲν οὐχ ἄπτονται, ὅταν δὲ κάμνωσι, καθάπερ καὶ αἱ κύνες ἐσθίουσαι ἀνεμοῦσι καὶ καθαίρονται.

Ἀνθρωποφαγοῦσι δ' οἱ μονοπεῖραι τῶν λύκων μᾶλλον [αὐτῶν] ἢ τὰ κυνηγεία. Ὅν δὲ καλοῦσιν οἱ μὲν γλάνον οἱ δ' ὕαιναν, ἔστι μὲν τὸ μέγεθος οὐκ ἐλάττων λύκου, χαίτην δ' ἔχει ὥσπερ (594b.) ἵππος, καὶ ἔτι σκληροτέρας καὶ βαθυτέρας τὰς τρίχας, καὶ καθ' ὅλης τῆς ῥάχεως· ἐπιβουλεύει δὲ καὶ θηρεύει τοὺς ἀνθρώπους, τοὺς δὲ κύνας καὶ ἐμοῦσα θηρεύει ὥσπερ οἱ ἄνθρωποι· καὶ τυμβωρυχεῖ δὲ ἐφίεμενον τῆς σαρκοφαγίας τῆς τοιαύτης.

Ἡ δ' ἄρκτος παμφάγον ἐστί. Καὶ γὰρ καρπὸν ἐσθίει, καὶ ἀναβαίνει ἐπὶ τὰ δένδρα διὰ τὴν ὑγρότητα τοῦ σώματος, καὶ τοὺς καρποὺς τοὺς χέδροπας· ἐσθίει δὲ καὶ μέλι τὰ σμήνη καταγνύουσα, καὶ καρκίνους καὶ μύρμηκας, καὶ σαρκοφαγεῖ. Διὰ γὰρ τὴν ἰσχὺν ἐπιτίθεται οὐ μόνον τοῖς ἐλάφοις ἀλλὰ καὶ τοῖς ἀγρίοις ὑσίν, ἂν δύνηται λαθεῖν ἐπιπεσοῦσα, καὶ τοῖς ταύροις· ὁμόσε χωρήσασα γὰρ τῷ ταύρῳ κατὰ πρόσωπον ὑπτία καταπίπτει, καὶ τοῦ ταύρου τύπτειν ἐπιχειροῦντος τοῖς μὲν βραχίοσι τὰ κέρατα περιλαμβάνει, τῷ δὲ στόματι τὴν ἀκρωμίαν δακοῦσα καταβάλλει τὸν ταῦρον. Βαδίζει δ' ἐπὶ τινα χρόνον ὀλίγον καὶ τοῖν δυοῖν ποδοῖν ὀρθή. Τὰ δὲ κρέα πάντα κατεσθίει προσήπουσα πρῶτον.

Ὁ δὲ λέων σαρκοφάγον μὲν ἐστίν, ὥσπερ καὶ τᾶλλα ὅσα ἄγρια καὶ καρχαρόδοντα, τῇ δὲ βρώσει χρῆται λάβρως, καὶ καταπίνει πολλὰ ὅλα οὐ

διαιρῶν, εἴθ' ἡμέρας δύο ἢ τρεῖς ἀσιτεῖ· δύναται γὰρ διὰ τὸ ὑπερπληροῦσθαι.

Ὀλιγόποτον δ' ἐστίν. Τὸ δὲ περίττωμα προίεται σπανίως· διὰ τρίτης γὰρ ἢ ὅπως ἂν τύχη προχωρεῖ, καὶ τοῦτο σκληρὸν καὶ ἐξικμασμένον, ὅμοιον κυνί. Προίεται δὲ καὶ τὴν φῦσαν σφόδρα δριμεῖαν καὶ τὸ οὔρον ἔχον ὁσμήν, διὸ <ὥς>περ οἱ κύνες ὁσφραίνεται τῶν δένδρων· οὐρεῖ γὰρ αἵρων τὸ σκέλος ὥσπερ οἱ κύνες. Ἐμποιεῖ δὲ καὶ ὁσμήν βαρεῖαν ἐν τοῖς ἐσθιομένοις καταπνέων· καὶ γὰρ ἀνοιχθέντος αὐτοῦ τὰ ἔσω ἀτμίδα ἀφήσι βαρεῖαν.

Ἐνια δὲ τῶν τετραπόδων καὶ ἀγρίων ζώων ποιεῖται τὴν τροφήν περὶ λίμνας καὶ ποταμούς· περὶ δὲ τὴν θάλατταν οὐδὲν ἔξω φώκης. Τοιαῦτα δ' ἐστὶν ὃ τε καλούμενος κάστωρ καὶ τὸ σαθέριον καὶ τὸ σατύριον καὶ ἐνυδρίς καὶ ἡ καλουμένη λάταξ· ἔστι δὲ τοῦτο πλατύτερον τῆς ἐνυδρίδος, καὶ (595a.) ὀδόντας ἔχει ἰσχυρούς· ἐξιοῦσα γὰρ νύκτωρ πολλάκις τὰς περὶ τὸν ποταμὸν κερκίδας ἐκτέμνει τοῖς ὁδοῦσιν. Δάκνει δὲ τοὺς ἀνθρώπους καὶ ἡ ἐνυδρίς, καὶ οὐκ ἀφήσιν, ὡς λέγουσι, μέχρι ἂν ὁστοῦ ψόφον ἀκούσῃ. Τὸ δὲ τρίχωμα ἔχει ἢ λάταξ σκληρόν, καὶ τὸ εἶδος μεταξὺ τοῦ τῆς φώκης τριχώματος καὶ τοῦ τῆς ἐλάφου.

## Κεφάλαιο 6

Πίνει δὲ τῶν ζώων τὰ μὲν καρχαρόδοντα λάπτοντα· ἔνια δὲ καὶ τῶν μὴ καρχαροδόκτων, οἷον οἱ μύες. Τὰ δὲ συνόδοντα σπάσει, οἷον ἵπποι καὶ βόες. Ἡ δ' ἄρκτος οὔτε σπάσει οὔτε λάψει, ἀλλὰ κάψει. Καὶ τῶν ὀρνέων δὲ τὰ μὲν ἄλλα σπάσει, πλὴν τὰ μὲν μακράχενα διαλείποντα καὶ αἵροντα τὴν κεφαλὴν, ὃ δὲ πορφυρίων μόνος κάψει.

Τὰ δὲ κερατώδη τῶν ζώων, καὶ ἡμερα καὶ ἄγρια, καὶ ὅσα μὴ καρχαρόδοντα, πάντα καρποφάγα καὶ ποηφάγα ἐστί, μὴ λίαν κατεχόμενα τῷ πεινῇ, ἔξω τῆς ὑός· αὕτη δ' ἥκιστα ποηφάγον καὶ καρποφάγον· ῥιζοφάγον δὲ μάλιστα ἢ ὅς ἐστι τῶν ζώων διὰ τὸ εὖ πεφυκέναι τὸ ῥύγχος πρὸς τὴν ἐργασίαν ταύτην, καὶ εὐχερέστατον πρὸς πᾶσαν τροφήν τῶν ζώων ἐστίν. Τάχιστα δὲ καὶ ἐπιδίδωσιν εἰς παχύτητα ὡς κατὰ μέγεθος· παίνεται γὰρ ἐν ἐξήκοντα ἡμέραις· ὅσον δ' ἐπιδίδωσιν, γινώσκουσιν οἱ περὶ ταῦτα πραγματευόμενοι νῆστιν ἰστάντες. Παίνεται δὲ προλιμοκτονηθεῖσα ἡμέρας τρεῖς· σχεδὸν δὲ καὶ τᾶλλα πάντα προλιμοκτονοῦμενα παίνεται. Μετὰ δὲ τὰς τρεῖς ἡμέρας εὐωχοῦσιν ἤδη οἱ παίνοντες τὰς ὕς. Οἱ δὲ Θρᾷκες παίνουσι τῇ μὲν πρώτῃ πιεῖν διδόντες, εἴτα διαλείπουσιν ἡμέραν μίαν τὸ πρῶτον, μετὰ δὲ ταῦτα δύο, εἴτα τρεῖς καὶ τέτταρας μέχρι τῶν ἑπτά. Παίνεται δὲ τὸ ζῶον τοῦτο κριθαῖς, κέγχροις,

σύκοις, ἀκύλοις, ἀχράσι, σικύοις. Μάλιστα δὲ καὶ ταῦτα καὶ τᾶλλα τὰ ἔχοντα κοιλίαν θερμὴν ἢ ἀτρεμία παίνει· τὰς δ' ὕς καὶ τὸ λούεσθαι ἐν πηλῷ. Νέμεσθαι δὲ βούλονται (595b.) κατὰ τὰς ἡλικίας. Μάχεται δ' ὕς καὶ λύκῳ. Ἀπογίνεται δ' ἀπὸ τοῦ σταθμοῦ, ὅσον ἔλκει ζῶσα, τὸ ἕκτον μέρος εἰς τρίχας καὶ αἷμα καὶ τὰ τοιαῦτα. Θηλαζόμεναι δὲ καὶ αἱ ὕες καὶ τᾶλλα πάντα λεπτότερα γίνεται. Ταῦτα μὲν οὖν τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 7

Οἱ δὲ βόες εἰσὶ μὲν καὶ καρποφάγοι καὶ ποηφάγοι, παίνονται δὲ τοῖς τε φυσητικοῖς, οἷον ὀρόβοις καὶ κυάμοις ἐρηριγμένοις καὶ χλόῃ κυάμων, καὶ ἄν τις τὸ δέρμα ἐντεμὼν φυσῇσιν καὶ μετὰ ταῦτα παράσχη τὴν τροφήν τοῖς πρεσβυτέροις, ἔτι δὲ κριθαῖς καὶ ἀπλῶς καὶ ἐπιτισμέναις, καὶ τοῖς γλυκέσιν, οἷον σύκοις καὶ ἀσταφίσι, καὶ οἴνω καὶ τοῖς φύλλοις τῆς πελέας· μάλιστα δ' οἱ ἥλιοι καὶ τὰ λουτρὰ τὰ θερμά.

Τὰ δὲ κέρατα τῶν νέων χλαινόμενα τῷ κηρῷ ἄγεται ῥαδίως ὅπου ἂν τις ἐθέλῃ· καὶ τοὺς πόδας δ' ἤττον ἀλγοῦσιν, ἂν τις τὰ κέρατα ἀλείφῃ κηρῷ ἢ ἐλαίῳ ἢ πίττῃ. Πονοῦσι δ' αἱ ἀγελαῖαι μᾶλλον ὑπὸ τῆς πάχνης μετανιστάμεναι ἢ ὑπὸ χιόνος.

Αὐξάνονται δ' ὅταν πλείω ἔτη ἀνόχευτοι ᾦσιν· διὸ οἱ ἐν τῇ Ἡπείρῳ τὰς καλουμένας Πυρρικὰς βοῦς ἐννέα ἔτη διατηροῦσιν ἀνοχεύτους καὶ καλοῦσιν ἀποταύρους, ὅπως αὐξάνωνται. Τούτων δὲ τὸ μὲν πλῆθος εἶναι φασὶ περὶ τετρακοσίας, ἰδίους τῶν βασιλέων, ζῆν δ' ἐν ἄλλῃ χώρᾳ οὐ δύνασθαι· καίτοι πεπειρᾶσθαι τινάς.

## Κεφάλαιο 8

Ἴπποι δὲ καὶ ὄρεῖς καὶ ὄνοι καρποφάγοι μὲν εἰσὶ καὶ ποηφάγοι, μάλιστα δὲ παίνεται τῷ ποτῷ· ὥς γὰρ ἂν πίνη τὰ ὑποζύγια τὸ ὕδωρ, οὕτω καὶ πρὸς τὴν ἀπόλαυσιν ἔχει τῆς τροφῆς, καὶ ὅπου δ' ἂν ἤττον δυσχεραίνει τὸ ποτόν, τοῦτο μᾶλλον εὐχορτόν ἐστιν. Ἡ δὲ κράστις λειοτριχεῖν ποιεῖ, ὅταν ἔγκυος ᾗ· ὅταν δ' ἀθέρας ἔχῃ σκληρούς, οὐκ ἀγαθή. Τῆς δὲ πόας τῆς Μηδικῆς ἢ τε πρωτόκουρος φαύλη, καὶ ὅπου ἂν δυσῶδες ὕδωρ ἐπάγηται· ὅζει γὰρ τῆς πόας.

Πίνειν δ' οἱ μὲν βόες ζητοῦσι καθαρὸν, οἱ δ' ἵπποι ὥσπερ αἱ κάμηλοι· ἡ δὲ κάμηλος πίνει ἥδιον θολερὸν καὶ παχύ· οὐδὲ γὰρ ἀπὸ τῶν (596a.) ποταμῶν πρότερον πίνει ἢ συνταράξαι. Δύναται δ' ἄποτος ἀνέχεσθαι καὶ τέτταρας

ἡμέρας· εἴτα μετὰ ταῦτα πίνει πολὺ πλῆθος.

## Κεφάλαιο 9

Ὁ δ' ἐλέφας ἐσθίει πλεῖστον μὲν <κριθῶν> μεδίμνους Μακεδονικοὺς ἐννέα ἐπὶ μιᾷς ἐδωδῆς· ἐπικίνδυνον δὲ τὸ τοσοῦτον πλῆθος· τὸ δ' ἐπίπαν ἔξ μεδίμνους ἢ ἐπτὰ, ἀλφίτων δὲ πέντε μεδίμνους καὶ οἴνου πέντε μάρεις (ἔστι δ' ὁ μάρις ἔξ κοτύλαι). Ἦδη δέ τις ἔπιεν ἐλέφας μετρητὰς ὕδατος Μακεδονικοὺς εἰσάπαξ δέκα καὶ τέτταρας, καὶ πάλιν τῆς δείλης ἄλλους ὀκτώ. Ζῶσι δ' αἱ μὲν πολλὰ τῶν καμήλων περὶ ἔτη τριάκοντα, ἔνιαι δὲ πολλῶ πλείω· καὶ γὰρ εἰς ἔτη ἑκατὸν ζῶσιν. Τὸν δ' ἐλέφαντα ζῆν οἱ μὲν περὶ ἔτη διακόσια φασιν, οἱ δὲ τριακόσια.

## Κεφάλαιο 10

Πρόβατα δὲ καὶ αἴγες εἰσὶ μὲν ποηφάγα, τὴν δὲ νομὴν ποιοῦνται τὰ μὲν πρόβατα προσεδρεύοντα καὶ μονίμως, αἱ δ' αἴγες ταχὺ μεταβάλλουσαι καὶ τῶν ἄκρων ἀπτόμεναι μόνον. Πιαίνει δὲ μάλιστα τὸ πρόβατον τὸ ποτόν, διὸ καὶ τοῦ θέρους διδόασιν ἄλας διὰ πέντε ἡμερῶν μέδιμνον τοῖς ἑκατόν· γίνεται γὰρ οὕτως ὑγιεινότερον καὶ πότερον τὸ ποιμνίον. Καὶ τὰ πολλὰ δ' ἀλίζοντες διὰ τοῦτο προσφέρουσιν, οἷον ἔν τε τοῖς ἀχύροις ἄλας πολλοὺς (διψῶντα γὰρ πίνει μᾶλλον) καὶ τοῦ μετοπώρου τὴν κολοκύνθην ἀλλὶ πάττοντες· τοῦτο γὰρ καὶ γάλα ποιεῖ πλεῖον. Καὶ κινούμεναι δὲ μεσημβρίας πίνουσι μᾶλλον πρὸς τὴν δείλην. Πρὸς τε τοὺς τόκους ἀλίζόμεναι μείζω τὰ οὕθατα καθιᾶσιν.

Πιαίνει δὲ τὰ πρόβατα θαλλός, κότινος, ἀφάκη, ἄχυρα ὅποια ἂν ᾗ· ἅπαντα δὲ μᾶλλον πιαίνει ἄλμη προσρανθέντα. Παχύνεται δὲ καὶ ταῦτα μᾶλλον προλιμοκτονηθέντα τρεῖς ἡμέρας. Ὑδωρ δὲ τοῖς προβάτοις τοῦ μετοπώρου τὸ βόρειον τοῦ νοτίου ἄμεινον, καὶ αἱ νομαὶ αἱ πρὸς ἐσπέραν συμφέρουσιν, λεπτύνουσι δ' αἱ ὁδοὶ καὶ αἱ ταλαιπωρίαι.

Οἱ δὲ ποιμένες γινώσκουσι τὰς ἰσχυούσας τῶν οἰῶν, ὅταν χειμῶν ᾗ, τῷ (596b.) ἔχειν πάχνην, τὰς δὲ μὴ ἔχειν· διὰ γὰρ τὴν ἀσθένειαν κινούμεναι ἀποβάλλουσιν αἱ μὴ ἰσχύουσαι.

Παντὸς δὲ τετράποδος τὰ κρέα χερίω, ὅπου ἐλώδη χωρία νέμονται ἢ ὅπου μετεωρότερα.

Εἰσὶ δὲ δυσχειμερώτεραι αἱ πλατύκερκοι οἷες τῶν μακροκέρκων καὶ αἱ

κολέραι τῶν λασίων· δυσχείμεροι δὲ καὶ αἱ οὖλαι. Ὑγιεινότεραι μὲν οὖν αἱ οἶες τῶν αἰγῶν, ἰσχύουσι δὲ μᾶλλον αἱ αἶγες τῶν οἰῶν.

Τῶν δὲ λυκοβρώτων προβάτων τὰ κώδια καὶ τὰ ἔρια καὶ τὰ ἐξ αὐτῶν ἱμάτια φθειρωδέστερα γίνεται πολὺ μᾶλλον τῶν ἄλλων.

## Κεφάλαιο 11

Τῶν δ' ἐντόμων τὰ μὲν ἔχοντα ὀδόντας παμφάγα ἐστί, τὰ δὲ γλῶτταν μόνον τοῖς ὑγροῖς τρέφεται, πάντοθεν ἐκχυλίζοντα ταύτη. Καὶ τούτων τὰ μὲν παμφάγα (πάντων γὰρ γεύεται τῶν χυμῶν), οἷον αἱ μυῖαι, τὰ δ' αἰμοβόρα, καθάπερ μύωψ καὶ οἷστρος· τὰ δὲ φυτῶν καὶ καρπῶν ζῆ χυλοῖς. Ἡ δὲ μέλιττα μόνον πρὸς οὐδὲν σαπρὸν προσίζει, οὐδὲ χρῆται τροφῇ οὐδεμιᾷ ἄλλ' ἢ τῇ γλυκὺν ἐχούσῃ χυμὸν· καὶ ὕδωρ δ' ἥδιστα εἰς ἑαυτὰς λαμβάνουσιν, ὅπου ἂν καθαρὸν ἀναπηδᾷ. Τροφαῖς μὲν οὖν χρῶνται τὰ γένη τῶν ζώων ταῖς εἰρημέναις.

## Κεφάλαιο 12

Αἱ δὲ πράξεις αὐτῶν ἅπασαι περὶ τε τὰς ὀχείας καὶ τὰς τεκνώσεις εἰσὶ, καὶ περὶ τὰς εὐπορίας τῆς τροφῆς, καὶ πρὸς τὰ ψύχη καὶ τὰς ἀλέας πεπορισμένοι, καὶ πρὸς τὰς μεταβολὰς τὰς τῶν ὥρῶν. Πάντα γὰρ τῆς κατὰ τὸ θερμὸν καὶ ψυχρὸν μεταβολῆς αἴσθησιν ἔχει σύμφυτον, καὶ καθάπερ τῶν ἀνθρώπων οἱ μὲν εἰς τὰς οἰκίας τοῦ χειμῶνος μεταβάλλουσιν, οἱ δὲ πολλῆς χώρας κρατοῦντες θερίζουσι μὲν ἐν τοῖς ψυχροῖς χειμάζουσι δ' ἐν τοῖς ἀλεεινοῖς, οὕτω καὶ τῶν ζώων τὰ δυνάμενα μεταβάλλειν τοὺς τόπους.

Καὶ τὰ μὲν ἐν αὐτοῖς τοῖς συνήθεσι τόποις εὐρίσκεται τὰς βοηθείας, τὰ δ' ἐκτοπίζει, μετὰ μὲν τὴν φθινοπωρινὴν ἰσημερίαν ἐκ τοῦ Πόντου καὶ τῶν ψυχρῶν τόπων φεύγοντα τὸν (597a.) ἐπιόντα χειμῶνα, μετὰ δὲ τὴν ἐαρινὴν ἐκ τῶν θερμῶν εἰς τοὺς τόπους τοὺς ψυχροὺς φοβούμενα τὰ καύματα, τὰ μὲν ἐκ τῶν ἐγγὺς τόπων ποιούμενα τὰς μεταβολάς, τὰ δὲ καὶ ἐκ τῶν ἐσχάτων ὡς εἰπεῖν, οἷον αἱ γέρανοι ποιοῦσιν. Μεταβάλλουσι γὰρ ἐκ τῶν Σκυθικῶν πεδίων εἰς τὰ ἔλη τὰ ἄνω τῆς Αἰγύπτου, ὅθεν ὁ Νεῖλος ρεῖ· οὗ καὶ λέγονται τοῖς Πυγμαίοις ἐπιχειρεῖν· οὐ γάρ ἐστι τοῦτο μῦθος, ἀλλ' ἔστι κατὰ τὴν ἀλήθειαν γένος μικρὸν μὲν, ὥσπερ λέγεται, καὶ αὐτοὶ καὶ οἱ ἵπποι, τρωγλοδύται δ' εἰσὶ τὸν βίον. Καὶ οἱ πελεκᾶνες δ' ἐκτοπίζουσι, καὶ πέτονται ἀπὸ τοῦ Στρυμόνος ἐπὶ τὸν Ἰστρον, κάκεῖ τεκνοποιοῦνται· ἀθρόοι δ' ἀπέρχονται, ἀναμένοντες οἱ πρότεροι τοὺς ὕστερον, διὰ τὸ ὅταν ὑπερπτῶνται τὸ ὄρος ἀδήλους γίνεσθαι

τοὺς προτέρους τοῖς ὑστέροις.

Καὶ οἱ ἰχθύες δὲ τὸν αὐτὸν τρόπον οἱ μὲν ἐκ τοῦ Πόντου καὶ εἰς τὸν Πόντον μεταβάλλουσιν, οἱ δ' ἐν μὲν τῷ χειμῶνι ἐκ τοῦ πελάγους πρὸς τὴν γῆν, τὴν ἁλέαν διώκοντες, ἐν δὲ τῷ θέρει ἐκ τῶν προσγείων εἰς τὸ πέλαγος, φεύγοντες τὴν ἁλέαν.

Καὶ τὰ ἀσθενῆ δὲ τῶν ὀρνέων ἐν μὲν τῷ χειμῶνι καὶ τοῖς πάγοις εἰς τὰ πεδία καταβαίνουσι διὰ τὴν ἁλέαν, ἐν δὲ τῷ θέρει ἀποχωροῦσιν εἰς τὰ ὄρη ἄνω διὰ τὰ καύματα. Ποιεῖται δ' ἅει τὰ ἀσθενέστερα πρῶτα τὴν μετάστασιν καθ' ἑκατέραν τὴν ὑπερβολήν, οἷον οἱ μὲν σκόμβροι τῶν θύννων, οἱ δ' ὄρτυγες τῶν γεράνων· τὰ μὲν γὰρ μεταβάλλει τοῦ Βοηδρομιῶνος, τὰ δὲ τοῦ Μαιμακτηριῶνος.

Ἔστι δὲ πρότερα πάντα ὅταν ἐκ τῶν ψυχρῶν τόπων μεταβάλλῃ ἢ ὅταν ἐκ τῶν θερμῶν, οἷον καὶ οἱ ὄρτυγες τοῦ φθινοπώρου μᾶλλον ἢ τοῦ ἔαρος. Συμβαίνει δ' ἐκ τῶν ψυχρῶν τόπων ἅμα μεταβάλλειν καὶ ἐκ τῆς ὥρας τῆς θερμῆς. Ἔχουσι δὲ καὶ πρὸς τὰς ὁχείας ὀρμητικώτερον κατὰ τὴν ἑαρινὴν ὥραν καὶ ὅταν μεταβάλλωσιν ἐκ τῶν θερμῶν.

Τῶν μὲν οὖν ὀρνέων αἱ γέρανοι, καθάπερ εἴρηται πρότερον, ἐκτοπίζουσιν εἰς τὰ ἔσχατα ἐκ τῶν ἐσχάτων. Πέτονται δὲ πρὸς τὸ πνεῦμα. Τὸ δὲ περὶ (597b.) τοῦ λίθου ψευδὸς ἐστὶ· λέγεται γὰρ ὡς ἔχουσιν ἔρμα λίθον, ὃς γίνεται χρήσιμος πρὸς τὰς τοῦ χρυσοῦ βασάνους, ὅταν ἀνεμέσωσιν.

Ἀπαίρουσι δὲ καὶ αἱ φάτται καὶ αἱ πελειάδες, καὶ οὐ χειμάζουσι, καὶ αἱ χελιδόνες καὶ αἱ τρυγόνες· αἱ δὲ περιστέραὶ καταμένουσιν. Ὀμοίως δὲ καὶ οἱ ὄρτυγες, ἐὰν μὴ τινες ὑπολειφθῶσι καὶ τῶν τρυγόνων καὶ τῶν ὀρτύγων ἐν εὐεῖλοις χωρίοις. Ἀγελάζονται δ' αἱ τε φάτται καὶ αἱ τρυγόνες, ὅταν τε παραγίνωνται καὶ πάλιν ὅταν ὥρα ἦ πρὸς τὴν ἀνακομιδὴν. Οἱ δ' ὄρτυγες ὅταν ἐμπέσωσιν, ἐὰν μὲν εὐδία ἢ βόρειον ἦ, συνδυάζονται τε καὶ εὐημεροῦσιν, ἐὰν δὲ νότος, χαλεπῶς ἔχουσι διὰ τὸ μὴ εἶναι πτητικοί· ὑγρὸς γὰρ καὶ βαρὺς ὁ ἄνεμος· διὸ καὶ οἱ θηρεύοντες ἐπιχειροῦσι τοῖς νοτίοις. Εὐδίας δ' οὐκ εὐ πέτονται διὰ τὸ βάρος· πολὺ γὰρ τὸ σῶμα. Διὸ καὶ βοῶντες πέτονται· πονοῦσι γάρ. Ὅταν μὲν οὖν ἐκεῖθεν παραβάλλωσιν, οὐκ ἔχουσιν ἡγεμόνας· ὅταν δ' ἐντεῦθεν ἀπαίρωσιν, ἡ τε γλωττὶς συναπαίρει καὶ ἡ ὀρτυγομήτρα καὶ ὁ ὦτος καὶ ὁ κύχραμος, ὅσπερ αὐτοὺς καὶ ἀνακαλεῖται νύκτωρ· καὶ ὅταν τούτου τὴν φωνὴν ἀκούσωσιν οἱ θηρεύοντες, ἴσασιν ὅτι οὐ καταμένουσιν. Ἡ δ' ὀρτυγομήτρα παραπλήσιος τὴν μορφήν τοῖς λιμναίοις ἐστί, καὶ ἡ γλωττὶς

γλωτταν ἑξαγομένην ἔχουσα μέχρι πόρρω. Ὁ δ' ὦτος ὅμοιος ταῖς γλαυξὶ καὶ περὶ τὰ ὦτα πτερύγια ἔχων· ἔνιοι δ' αὐτὸν νυκτικόρακα καλοῦσιν. Ἔστι δὲ κόβαλος καὶ μιμητής, καὶ ἀντορχούμενος ἀλίσκεται, περιελθόντος θατέρου τῶν θηρευτῶν, καθάπερ ἡ γλαύξ. Ὅλως δὲ τὰ γαμψώνυχα πάντα βραχυτράχηλα καὶ πλατύγλωττα καὶ μιμητικά· καὶ γὰρ τὸ Ἰνδικὸν ὄρνεον ἢ ψιττάκη, τὸ λεγόμενον ἀνθρωπόγλωττον, τοιοῦτόν ἐστι· καὶ ἀκολαστότερον δὲ γίνεται, ὅταν πῖη οἶνον.

Ἀγελαῖοι δὲ τῶν ὀρνίθων εἰσὶ γέρανος, κύκνος, πελεκάν, χὴν ὁ μικρός.

### Κεφάλαιο 13

Τῶν δ' ἰχθύων οἱ μὲν, ὥσπερ εἴρηται, μεταβάλλουσι πρὸς τὴν γῆν ἐκ τοῦ πελάγους καὶ εἰς τὸ πέλαγος ἀπὸ τῆς (598a.) γῆς, φεύγοντες τὰς ὑπερβολὰς τοῦ ψύχους καὶ τῆς ἀλέας. Ἀμείνους δ' εἰσὶν οἱ πρόσγειοι τῶν πελαγίων· πλείω γὰρ καὶ βελτίω νομῆν ἔχουσιν· ὅπου γὰρ ἂν ὁ ἥλιος ἐπιβάλλῃ, πλείω φύεται καὶ βελτίω καὶ ἀπαλώτερα, οἶον ἐν κήποις. Καὶ ὁ θὺς †..... ὁ μέλας φύεται πρὸς τῇ γῇ, ὁ δ' ἄλλος ὅμοιός ἐστι τοῖς ἀγρίοις. Ἔτι δὲ καὶ κεκραμένοι τυγχάνουσι καλῶς τῷ θερμῷ καὶ τῷ ψυχρῷ οἱ τόποι οἱ πρόσγειοι τῆς θαλάττης· διὸ καὶ αἱ σάρκες συνεστᾶσι μᾶλλον τῶν τοιούτων ἰχθύων, τῶν δὲ πελαγίων ὕγραί εἰσι καὶ κεχυμένοι.

Εἰσὶ δὲ πρόσγειοι σινόδων, κάνθαρος, ὀρφῶς, χρύσοφρυς, κεστρεύς, τρίγλη, κίχλη, δράκων, καλλιώνυμος, κωβιὸς καὶ τὰ πετραῖα πάντα· πελάγιοι δὲ τρυγῶν καὶ τὰ σελάχη καὶ γόγγροι οἱ λευκοί, χάννη, ἐρυθρῖνος, γλαῦκος· φάγροι δὲ καὶ σκορπίοι καὶ γόγγροι οἱ μέλανες καὶ μύραιναι καὶ κόκκυγες ἐπαμφοτερίζουσιν. Εἰσὶ δὲ διαφοραὶ τούτων καὶ κατὰ τοὺς τόπους, οἶον περὶ Κρήτην οἱ κωβιοὶ καὶ τὰ πετραῖα πάντα πίονα γίνεται. Γίνεται δὲ καὶ ὁ θύννος ἀγαθὸς πάλιν μετ' Ἀρκτοῦρον· ἥδη γὰρ οἰστρῶν παύεται ταύτην τὴν ὥραν· διὰ γὰρ τοῦτο ἐν τῷ θέρει χείρων ἐστίν.

Γίνονται δὲ καὶ ἐν ταῖς λιμνοθαλάτταις πολλοὶ τῶν ἰχθύων, οἶον σάλπαι, χρύσοφρυς, τρίγλη καὶ τῶν ἄλλων σχεδὸν οἱ πλεῖστοι. Γίνονται δὲ καὶ ἀμῖαι, οἶον περὶ Ἀλωπεκόννησον· καὶ ἐν τῇ Βιστωνίδι λίμνῃ ἔνεστι τὰ πλεῖστα γένη τῶν ἰχθύων.

Τῶν δὲ κολιῶν οἱ πολλοὶ εἰς μὲν τὸν Πόντον οὐκ ἐμβάλλουσιν, ἐν δὲ τῇ Προποντίδι θερίζουσι καὶ ἐκτίκτουσι, χειμάζουσι δ' ἐν τῷ Αἰγαίῳ. Θυννίδες δὲ καὶ πηλαμύδες καὶ ἀμῖαι εἰς τὸν Πόντον ἐμβάλλουσιν τοῦ ἔαρος καὶ



θερίζουσιν, σχεδὸν δὲ καὶ οἱ πλεῖστοι τῶν ῥυάδων καὶ ἀγελαίων ἰχθύων.

Εἰσὶ δ' οἱ πλεῖστοι ἀγελαῖοι. Ἔχουσι δ' οἱ ἀγελαῖοι ἡγεμόνας πάντες. Εἰσπλέουσι δ' εἰς τὸν Πόντον διὰ τε τὴν τροφήν· ἡ γὰρ νομὴ καὶ πλείων καὶ βελτίων διὰ τὸ πότιμον, καὶ τὰ (598b.) θηρία δὲ τὰ μεγάλα ἐλάττω· ἔξω γὰρ δελφῖνος καὶ φωκαίνης οὐδέν ἐστιν ἐν τῷ Πόντῳ, καὶ ὁ δελφὶς μικρός. Ἔξω δ' εὐθύς προελθόντι μεγάλοι. Διὰ τε δὴ τὴν τροφήν εἰσπλέουσι καὶ διὰ τὸν τόκον· τόποι γὰρ εἰσιν ἐπιτήδαιοι ἐντίκτειν, καὶ τὸ πότιμον καὶ τὸ γλυκύτερον ὕδωρ ἐκτρέφει τὰ κυήματα. Ὅταν δὲ τέκωσι καὶ τὰ γενόμενα αὐξηθῇ, ἐκπλέουσιν εὐθύς μετὰ Πλειάδα. Ἄν μὲν οὖν νότιος ὁ χειμὼν ἦ, βραδύτερον ἐκπλέουσιν, ἂν δὲ βόρειος, θᾶπτον διὰ τὸ τὸ πνεῦμα συνεπουρίζειν· καὶ ὁ γόνος δὲ τότε μικρὸς ἀλίσκεται περὶ Βυζάντιον ἅτ' οὐ γενομένης πολλῆς ἐν τῷ Πόντῳ διατριβῆς.

Οἱ μὲν οὖν ἄλλοι καὶ ἐκπλέοντες καὶ εἰσπλέοντες δῆλοί εἰσιν, οἱ δὲ τριχίαι μόνοι εἰσπλέοντες μὲν ἀλίσκονται, ἐκπλέοντες δ' οὐχ ὀρώνται, ἀλλὰ καὶ ὅταν ληφθῇ τις περὶ Βυζάντιον, οἱ ἀλιεῖς τὰ δίκτυα περικαθαίρουσι διὰ τὸ μὴ εἰσθῆναι ἐκπλεῖν. Αἴτιον δ' ὅτι οὗτοι μόνοι ἀναπλέουσιν εἰς τὸν Ἰστρον, εἴθ' ἢ σχίζεται, καταπλέουσιν εἰς τὸν Ἀδρίαν.

Σημεῖον δέ, ἐκεῖ γὰρ συμβαίνει τοῦναντίον· εἰσπλέοντες μὲν γὰρ οὐχ ἀλίσκονται εἰς τὸν Ἀδρίαν, ἐκπλέοντες δ' ἀλίσκονται.

Εἰσπλέουσι δ' οἱ θύννοι ἐπὶ δεξιὰ ἐχόμενοι τῆς γῆς, ἐκπλέουσι δ' ἐπ' ἀριστερά· τοῦτο δὲ φασὶ τινες ποιεῖν ὅτι τῷ δεξιῷ ὀξύτερον ὀρώσι, φύσει οὐκ ὀξὺ βλέποντες. Τὴν μὲν οὖν ἡμέραν οἱ ῥυάδες κομίζονται, τὴν δὲ νύκτα ἡσυχάζουσι καὶ νέμονται, ἂν μὴ σελήνη ᾖ· τότε δὲ κομίζονται καὶ οὐχ ἡσυχάζουσιν. Λέγουσι δὲ τινες τῶν περὶ τὴν θάλατταν ὡς ὅταν τροπαὶ χειμεριναὶ γένωνται, οὐκέτι κινεῶνται ἀλλ' ἡσυχάζουσιν, ὅπου ἂν τύχωσι καταληφθέντες, μέχρι ἰσημερίας.

Οἱ μὲν οὖν κολίαι εἰσπλέοντες ἀλίσκονται, ἐξιόντες δ' ἥττον· ἄριστοι δ' εἰσὶν ἐν τῇ Προποντίδι πρὸ τοῦ τίκτειν. Οἱ δ' ἄλλοι ῥυάδες ἐξιόντες ἐκ τοῦ Πόντου ἀλίσκονται μᾶλλον καὶ ἄριστοι τότε εἰσὶν· ὅταν δ' εἰσπλέωσιν, ἐγγύτατα τοῦ Αἰγαίου πότατοι ἀλίσκονται, ὅσω δ' ἀνωτέρω, ἀεὶ λεπτότεροι.

(599a.) Πολλάκις δὲ καὶ ὅταν πνεῦμα ἀντικόψη νότιον ἐκπλέουσι καὶ τοῖς κολίαις καὶ τοῖς σκόμβροις, κάτω ἀλίσκονται μᾶλλον ἢ περὶ Βυζάντιον.

Τοὺς μὲν οὖν ἐκτοπισμοὺς τοῦτον ποιοῦνται τὸν τρόπον. Τὸ δ' αὐτὸ τοῦτο

συμβαίνει πάθος καὶ ἐπὶ τῶν χερσαίων κατὰ τὴν φωλείαν· τοῦ μὲν γὰρ χειμῶνος ὀρμῶσι πρὸς τὴν φωλείαν, ἀπαλλάττονται δὲ κατὰ τὴν θερμότεραν ὥραν. Ποιοῦνται δὲ τὰ ζῶα καὶ τὰς φωλείας πρὸς τὴν βοήθειαν καὶ τὰς ὑπερβολὰς τῆς ὥρας ἐκατέρας. Φωλεῖ δὲ τῶν μὲν ὅλον τὸ γένος, ἐνίων δὲ τὰ μὲν τὰ δ' οὐ. Τὰ μὲν γὰρ ὀστρακόδερμα πάντα φωλεῖ, οἷον τὰ τε ἐν τῇ θαλάττῃ, πορφύραι καὶ κήρυκες καὶ πᾶν τὸ τοιοῦτον γένος· ἀλλὰ τῶν μὲν ἀπολελυμένων ἐπιδηλότερός ἐστιν ἡ φωλεία (κρύπτουσι γὰρ αὐτά, οἷον οἱ κτένες, τὰ δ' ἴσχει ἐπιπολῆς ἐπικάλυμμα, οἷον οἱ χερσαῖοι κοχλῖαι), τῶν δ' ἀναπολύτων ἄδηλος ἡ μεταβολή. Φωλοῦσι δ' οὐ τὴν αὐτὴν ὥραν, ἀλλ' οἱ μὲν κοχλῖαι τοῦ χειμῶνος, αἱ δὲ πορφύραι καὶ οἱ κήρυκες ὑπὸ κύνα περὶ ἡμέρας τριάκοντα, καὶ οἱ κτένες περὶ τὸν αὐτὸν χρόνον. Τὰ δὲ πλεῖστα αὐτῶν φωλεῖ καὶ ἐν τοῖς σφόδρα ψύχεσι καὶ ἐν ταῖς σφόδρα ἀλέαις.

## Κεφάλαιο 14

Τὰ δ' ἔντομα σχεδὸν ἅπαντα φωλεῖ, πλὴν εἴ τι ἐν ταῖς οἰκίσεσι συνανθρωπεύεται αὐτῶν, καὶ ὅσα φθείρεται καὶ μὴ διετίζει. Τάλλα δὲ φωλεῖ τοῦ χειμῶνος. Φωλεῖ δὲ τὰ μὲν πλείους ἡμέρας, τὰ δὲ τὰς χειμεριωτάτας, οἷον αἱ μέλιτται· καὶ γὰρ αὗται φωλοῦσιν. Σημεῖον δ' ὅτι οὐδὲν φαίνονται γεύομεναι τῆς παρακειμένης τροφῆς· κἄν τις αὐτῶν ἐξερπύσῃ, φαίνεται διαφανής, καὶ οὐδὲν ἐν τῇ κοιλίᾳ ἐνὸν δῆλον. Ἡσυχάζει δ' ἀπὸ Πλειάδος δύσεως μέχρι τοῦ ἕαρος.

## Κεφάλαιο 15

Ποιεῖται δὲ τὰ ζῶα τὰς φωλείας ἀποκρυπτόμενα ἐν ἀλεεινοῖς καὶ ἐν οἷς εἴωθε τόποις ἐπικοιτάζεσθαι. Φωλεῖ δὲ καὶ τῶν ἐναίμων πολλά, οἷον τὰ τε φολιδωτά, ὄφεις τε καὶ σαῦροι καὶ ἀσκαλαβῶται καὶ κροκόδειλοι οἱ ποτάμιοι, τέτταρας μῆνας τοὺς χειμεριωτάτους, καὶ οὐκ ἐσθίουσιν οὐδέν. Οἱ μὲν οὖν ἄλλοι (599b.) ὄφεις ἐν τῇ γῇ φωλοῦσιν, αἱ δ' ἔχιδναι ὑπὸ τὰς πέτρας ἀποκρύπτουσιν αὐτάς.

Φωλοῦσι δὲ πολλοὶ καὶ τῶν ἰχθύων, ἐπιφανέστατα δ' ἵππουρος καὶ κορακῖνος τοῦ χειμῶνος· οὗτοι γὰρ μόνοι οὐχ ἀλίσκονται οὐδαμοῦ πλὴν κατὰ τινὰς χρόνους τακτοὺς καὶ τοὺς αὐτοὺς αἰεῖ, τὰ δὲ λοιπὰ πάντα σχεδόν. Φωλεῖ δὲ καὶ μύραινα καὶ ὀρφὼς καὶ γόγγρος. Κατὰ συζυγίας δ' οἱ πετραῖοι φωλοῦσιν οἱ ἄρρενες τοῖς θήλεσιν, ὥσπερ καὶ νεοττεύουσιν, οἷον κίχλαι, κόττυφοι, πέρκαι. Φωλοῦσι δὲ καὶ οἱ θύννοι τοῦ χειμῶνος ἐν τοῖς βάθεσι, καὶ γίνονται πότατοι μετὰ τὴν φωλείαν, καὶ ἄρχονται θηρεύεσθαι ἀπὸ Πλειάδος ἀνατολῆς

μέχρι Ἀρκτούρου δύσεως τὸ ἔσχατον· τὸν δ' ἄλλον χρόνον ἡσυχίαν ἔχουσι φωλοῦντες. Ἀλίσκονται δ' ἔνιοι περὶ τὸν χρόνον τῆς φωλείας καὶ τούτων καὶ τῶν ἄλλων τινὲς τῶν φωλούντων κινούμενοι, ἂν ἄλγεινός ᾗ ὁ τόπος καὶ ἐπιγίνονται εὐδαίαι παράλογοι· ἀπὸ γὰρ τῆς θαλάμης προέρχονται μικρὸν ἐπὶ νομήν· καὶ ταῖς πανσελήνοις. Εἰσὶ δ' οἱ πολλοὶ φωλοῦντες ἡδιστοί. Αἱ δὲ πριμάδες κρύπτουσιν ἑαυτὰς ἐν τῷ βορβόρῳ· σημεῖον δὲ τό τε μὴ ἀλίσκεσθαι καὶ ἰλὺν ἐχούσας ἐπὶ τοῦ νώτου φαίνεσθαι πολλήν καὶ τὰ περύγια ἐντεθλιμμένα. Κατὰ δὲ τὴν ἑαρινὴν ὥραν κινοῦνται καὶ προέρχονται πρὸς τὴν γῆν ὀχευόμεναι καὶ τίκτουσαι, καὶ ἀλίσκονται κύουσai· καὶ τότε δοκοῦσιν ὠραῖοι εἶναι, οἱ δὲ μετοπωρινοὶ καὶ χειμερινοὶ χεῖρους· ἅμα δὲ καὶ οἱ ἄρρενες φαίνονται πλήρεις ὄντες θοροῦ. Ὅταν μὲν οὖν μικρὰ τὰ κυήματ' ἔχωσι, δυσάλωτοί εἰσιν, ὅταν δὲ μείζω, πολλοὶ ἀλίσκονται διὰ τὸ οἰστρᾶν.

Φωλεῖ δὲ τὰ μὲν ἐν τῇ ἄμμῳ τὰ δ' ἐν τῷ πηλῷ, ὑπερέχοντα τὸ στόμα μόνον. Τὰ μὲν οὖν πλεῖστα φωλεῖ μόνον τοῦ χειμῶνος, τὰ δὲ μαλακόστρακα καὶ τῶν ἰχθύων οἱ πετραῖοι καὶ βάτοι καὶ τὰ σελαχώδη τὰς χειμεριωτάτας μόνον ἡμέρας· δηλοῖ δὲ τὸ μὴ ἀλίσκεσθαι ὅταν ᾗ ψύχη.

Ἐνιοι δὲ τῶν ἰχθύων φωλοῦσι καὶ τοῦ θέρους, οἷον ὁ γλαῦκος· οὗτος γὰρ τοῦ θέρους φωλεῖ περὶ ἐξήκονθ' ἡμέρας.

Φωλεῖ δὲ καὶ ὁ ὄνος καὶ ὁ χρύσοφρυς· σημεῖον δὲ δοκεῖ (600a.) εἶναι τοῦ τὸν ὄνον πλεῖστον φωλεῖν χρόνον τὸ διὰ πλείστου χρόνου ἀλίσκεσθαι. Τοῦ δὲ καὶ θέρους τοὺς ἰχθύς φωλεῖν δοκεῖ σημεῖον εἶναι τὸ ἐπὶ τοῖς ἄστροις γίνεσθαι τὰς ἀλώσεις, καὶ μάλιστα ἐπὶ κυνί· τηνικαῦτα γὰρ ἀνατρέπεσθαι τὴν θάλατταν. Ὅπερ ἐν τῷ Βοσπόρῳ γνωριμώτατόν ἐστιν· ἡ γὰρ ἰλὺς ἐπάνω γίνεται καὶ ἐπιφέρονται οἱ ἰχθύες. Φασὶ δὲ καὶ πολλάκις τριβομένου τοῦ βυθοῦ ἀλίσκεσθαι πλείους ἐν τῷ αὐτῷ βόλῳ τὸ δεύτερον ἢ τὸ πρῶτον. Καὶ ἐπειδὴν ὄμβροι γένωνται μεγάλοι, πολλὰ φαίνεται ζῶα τῶν πρότερον ἢ ὅλως οὐχ ἐωραμένων ἢ οὐ πολλάκις.

## Κεφάλαιο 16

Φωλοῦσι δὲ πολλοὶ καὶ τῶν ὀρνίθων, καὶ οὐχ ὥς τινες οἴονται, εἰς ἀλγεινοὺς τόπους ἀπέρχονται πάντες· ἀλλ' οἱ μὲν πλησίον ὄντες τοιούτων τόπων, ἐν οἷς ἀεὶ διαμένουσι, καὶ ἰκτῖνοι καὶ χελιδόνες, ἀποχωροῦσιν ἐνταῦθα, οἱ δὲ πορρωτέρω ὄντες τῶν τοιούτων οὐκ ἐκτοπίζουσιν ἀλλὰ κρύπτουσιν ἑαυτούς. Ἦδη γὰρ ὠμμένοι πολλὰ χελιδόνες εἰσὶν ἐν ἀγγείοις ἐψλωμένοι ἀμπαν, καὶ ἰκτῖνοι ἐκ τοιούτων ἐκπετόμενοι χωρίων, ὅταν φαίνωνται τὸ πρῶτον.

Φωλοῦσι δ' οὐδὲν διακεκριμένως καὶ τῶν γαμψωνύχων καὶ τῶν εὐθυωνύχων· φωλεῖ γὰρ καὶ πελαργὸς καὶ κόττυφος καὶ τρυγῶν καὶ κόρυδος, καὶ ἡ γε τρυγῶν ὁμολογουμένως μάλιστα πάντων· οὐδεὶς γὰρ ὡς εἰπεῖν λέγεται τρυγὸνα ἰδεῖν οὐδαμοῦ χειμῶνος. Ἀρχεται δὲ τῆς φωλείας σφόδρα πείρα οὔσα, καὶ περορρυεῖ μὲν ἐν τῇ φωλείᾳ, παχεῖα μέντοι διατελεῖ οὔσα. Τῶν δὲ φασσῶν ἔνιαι μὲν φωλοῦσιν, ἔνιαι δ' οὐ φωλοῦσιν, ἀπέρχονται δ' ἅμα ταῖς χελιδόσιν. Φωλεῖ δὲ καὶ ἡ κίχλη καὶ ὁ ψάρος, καὶ τῶν γαμψωνύχων ἰκτῖνος ὀλίγας ἡμέρας καὶ ἡ γλαύξ.

## Κεφάλαιο 17

Τῶν δὲ ζωοτόκων καὶ τετραπόδων φωλοῦσιν οἳ τε ὕστριχες καὶ αἱ ἄρκτοι. Ὅτι μὲν οὖν φωλοῦσιν αἱ ἄγριαι ἄρκτοι, φανερόν ἐστι, πότερον δὲ διὰ ψυχῆς ἢ δι' ἄλλην αἰτίαν, ἀμφισβητεῖται. Γίνονται γὰρ περὶ τὸν χρόνον τοῦτον οἱ ἄρρενες καὶ αἱ θήλειαι πότατοι, ὥστε μὴ εὐκίνητοι εἶναι. Ἡ δὲ θήλεια καὶ τίκτει περὶ (600b.) τοῦτον τὸν καιρόν, καὶ φωλεῖ ἕως ἂν ἐξάγειν ὥρα ἢ τοὺς σκύμνους· τοῦτο δὲ ποιεῖ τοῦ ἥαρος περὶ τρίτον μῆνα ἀπὸ τροπῶν. Τὸ δ' ἐλάχιστον φωλεῖ περὶ τετταράκονθ' ἡμέρας· τούτων δὲ δις ἐπτὰ λέγουσιν ἐν αἷς οὐδὲν κινεῖται, ἐν δὲ ταῖς πλείοσι ταῖς μετὰ ταῦτα φωλεῖ μὲν κινεῖται δὲ καὶ ἐγείρεται. Κύουσα δ' ἄρκτος ἢ ὑπ' οὐδενὸς ἢ πάνυ ὀλίγων εἴληπται. Ἐν δὲ τῷ χρόνῳ τούτῳ φανερόν ἐστιν ὅτι οὐδὲν ἐσθίουσιν· οὔτε γὰρ ἐξέρχονται, ὅταν τε ληφθῶσι, κενὰ φαίνεται ἢ τε κοιλία καὶ τὰ ἔντερα. Λέγεται δὲ καὶ διὰ τὸ μηδὲν προσφέρεσθαι τὸ ἔντερον ὀλίγου συμφύεσθαι αὐτῇ, καὶ διὰ τοῦτο πρῶτον ἐξιοῦσαν γεύεσθαι τοῦ ἥρου πρὸς τὸ ἀφιστάναι τὸ ἔντερον καὶ διευρύνειν. Φωλεῖ δὲ καὶ ὁ ἐλειὸς ἐν αὐτοῖς τοῖς δένδρεσι, καὶ γίνεται τότε παχύτατος, καὶ ὁ μῦς ὁ Ποντικὸς ὁ λευκός.

Τῶν δὲ φωλούντων ἔνιοι τὸ καλούμενον ἐκδύνουσι γῆρας· ἔστι δὲ τοῦτο τὸ ἔσχατον δέρμα καὶ τὸ περὶ τὰς γενέσεις κέλυφος. Τῶν μὲν οὖν πεζῶν καὶ ζωοτόκων περὶ τῆς ἄρκτου ἀμφισβητεῖται ἡ αἰτία τῆς φωλείας, καθάπερ ἐλέχθη πρότερον· τὰ δὲ φολιδωτὰ φωλεῖ μὲν σχεδὸν τὰ πλεῖστα, ἐκδύνει δὲ τὸ γῆρας ὅσων τὸ δέρμα μαλακὸν μὴ ὀστρακῶδες ὥσπερ τῆς χελώνης (καὶ γὰρ ἡ χελώνη τῶν φολιδωτῶν ἐστὶ καὶ ὁ ἐμύς), ἀλλ' οἷον ἀσκαλαβώτης τε καὶ σαῦρος καὶ μάλιστα πάντων οἱ ὄφεις· ἐκδύνουσι γὰρ καὶ τοῦ ἥαρος, ὅταν ἐξίωσι, καὶ τοῦ μετοπώρου πάλιν. Ἐκδύνουσι δὲ καὶ οἱ ἔχεις τὸ γῆρας καὶ τοῦ ἥαρος καὶ τοῦ μετοπώρου, καὶ οὐχ ὥσπερ φασὶ τινες τοῦτο τὸ γένος τῶν ὄφεων μὴ ἐκδύεσθαι μόνον.

Ὅταν δ' ἄρχωνται ἐκδύνειν οἱ ὄφεις, ἀπὸ τῶν ὀφθαλμῶν ἀφίσταται πᾶσι

πρῶτον, ὥστε δοκεῖν γίνεσθαι τυφλοὺς τοῖς μὴ συννοοῦσι τὸ πάθος· μετὰ δὲ τοῦτο ἀπὸ τῆς κεφαλῆς, καὶ λευκὴ φαίνεται πάντων. Ἐν νυκτὶ δὲ σχεδὸν καὶ ἡμέρᾳ πᾶν ἀποδύεται τὸ γῆρας, ἀπὸ τῆς κεφαλῆς ἀρξάμενον μέχρι τῆς κέρκου. Γίνεται δ' ἐκδυομένου τὰ ἐντὸς ἐκτός· (601a.) ἐκδύεται γὰρ ὥσπερ τὰ ἔμβρυα ἐκ τῶν χορίων.

Τὸν αὐτὸν δὲ τρόπον καὶ τῶν ἐντόμων ἐκδύνει τὸ γῆρας ὅσα ἐκδύνει, οἷον σίλφη καὶ ἐμπὶς καὶ τὰ κολεόπτερα, οἷον κάνθαρος. Πάντα δὲ μετὰ τὴν γένεσιν ἐκδύεται· ὥσπερ γὰρ τοῖς ζωοτοκουμένοις τὸ χόριον καὶ τοῖς σκωληκοτοκουμένοις περιρρήγνυται τὸ κέλυφος, ὁμοίως καὶ μελίτταις καὶ ἀκρίσιν. Οἱ δὲ τέττιγες ὅταν ἐξέλθωσι, καθιζάνουσιν ἐπὶ τε τὰς ἐλαίας καὶ καλάμους. Περιρραγέντος δὲ τοῦ κελύφους ἐξέρχονται ἐγκαταλιπόντες ὑγρότητα μικράν, καὶ μετ' οὐ πολὺν χρόνον ἀναπέτονται καὶ ἄδουσιν.

Τῶν δὲ θαλαττίων οἱ κάραβοι καὶ ἀστακοὶ ἐκδύνουσιν ὅτε μὲν τοῦ ἔαρος ὅτε δὲ τοῦ μετοπώρου μετὰ τοὺς τόκους. Ἦδη δ' εἰλημμένοι εἰσὶν ἔνιοι τῶν καράβων τὰ μὲν περὶ τὸν θώρακα μαλακὰ ἔχοντες διὰ τὸ περιερρωγένοι τὸ ὄστρακον, τὰ δὲ κάτω σκληρὰ διὰ τὸ μήπω περιερρωγένοι· τὴν γὰρ ἔκδυσιν ποιοῦνται οὐχ ὁμοίαν τοῖς ὄφειν. Φωλοῦσι δ' οἱ κάραβοι περὶ πέντε μῆνας. Ἐκδύνουσι δὲ καὶ οἱ καρκίνοι τὸ γῆρας, οἱ μὲν μαλακόστρακοι ὁμολογουμένως, φασὶ δὲ καὶ τοὺς ὄστρακοδέρμους, οἷον τὰς μαίας. Ὅταν δ' ἐκδύνωσι, μαλακὰ γίνεται πάμπαν τὰ ὄστρακα, καὶ οἱ γε καρκίνοι βαδίζειν οὐ σφόδρα δύνανται. Ἐκδύνει δὲ τὰ τοιαῦτα οὐχ ἅπαξ ἀλλὰ πολλάκις.

Ὅσα μὲν οὖν φωλεῖ καὶ πότε καὶ πῶς, ἔτι δὲ ποῖα καὶ πότε ἐκδύνει τὸ γῆρας, εἴρηται.

## Κεφάλαιο 18

Εὐημεροῦσι δὲ τὰ ζῶα κατὰ τὰς ὥρας οὐ τὰς αὐτάς, οὐδ' ἐν ταῖς ὑπερβολαῖς ὁμοίως ἀπάσαις· ἔτι δ' ὑγίειαι καὶ νόσοι κατὰ τε τὰς ὥρας τοῖς ἑτερογενέσιν ἕτεραι καὶ τὸ σύνολον οὐχ αἱ αὐταὶ πᾶσιν.

Τοῖς μὲν οὖν ὄρνισιν οἱ αὐχμοὶ συμφέρουσι καὶ πρὸς τὴν ἄλλην ὑγίειαν καὶ πρὸς τοὺς τόκους, καὶ οὐχ ἥκιστα ταῖς φάτταις, τοῖς δ' ἰχθύσιν ἔξω τινῶν ὀλίγων αἱ ἐπομβρίαί. Ἀσύμφορα δὲ τοῦναντίον ἑκατέροις, τοῖς μὲν ὄρνισι τὰ ἔπομβρα ἔτη (οὐδὲ γὰρ ὅλως συμφέρει τὸ πολὺ πίνειν), τοῖς δ' ἰχθύσιν οἱ αὐχμοί. Τὰ μὲν οὖν γαμψώνυχα, καθάπερ εἴρηται πρότερον, ὥς ἀπλῶς (601b.) εἰπεῖν ἅποτα πάμπαν ἐστίν (ἀλλ' Ἡσίοδος ἠγνόει τοῦτο· πεποίηκε γὰρ τὸν

τῆς μαντείας πρόεδρον ἀετὸν ἐν τῇ διηγῆσει τῇ περὶ τὴν πολιορκίαν τὴν Νίνου πίνοντα). Τὰ δ' ἄλλα πίνει μέν, οὐ πολύποτα δ' ἐστίν· ὁμοίως δ' οὐδ' ἄλλ' οὐδὲν τῶν πλεύμονα ἔχόντων σομφὸν καὶ ὠσόκων. Τῶν δ' ὀρνίθων ἐν ταῖς ἀρρωστίαις ἐπίδηλος ἡ πτέρωσις γίνεται· ταραττεται γάρ, καὶ οὐ τὴν αὐτὴν ἔχει κατάστασιν ἥνπερ ὑγιαίνοντων.

## Κεφάλαιο 19

Τῶν δ' ἰχθύων τὸ πλεῖστον γένος εὐθηνεῖ μᾶλλον, ὥσπερ εἴρηται πρότερον, ἐν τοῖς ἐπομβρίοις ἔτεσιν· οὐ γὰρ μόνον τότε πλείω τροφὴν ἔχουσιν, ἀλλὰ καὶ ὅλως τὸ ὄμβριον συμφέρει, καθάπερ καὶ τοῖς ἐκ τῆς γῆς φυομένοις· καὶ γὰρ τὰ λάχανα καίπερ ἀρδευόμενα ὅμως ἐπιδίδωσιν ὑόμενα πλέον. Τὸ δ' αὐτὸ καὶ οἱ κάλαμοι πάσχουσιν οἱ πεφυκότες ἐν ταῖς λίμναις· οὐδὲν γὰρ ὡς εἰπεῖν αὐξάνονται μὴ γινομένων ὑδάτων. Σημεῖον δὲ καὶ τὸ τοὺς πλείστους τῶν ἰχθύων εἰς τὸν Πόντον ἐκτοπίζειν θεριοῦντας· διὰ γὰρ τὸ πλῆθος τῶν ποταμῶν γλυκύτερον τὸ ὕδωρ, καὶ τροφὴν οἱ ποταμοὶ καταφέρουσι πολλήν. Ἔτι δὲ καὶ εἰς τοὺς ποταμοὺς ἀναπλέουσι πολλοὶ τῶν ἰχθύων, καὶ εὐθηνοῦσιν ἐν τοῖς ποταμοῖς καὶ ἐν ταῖς λίμναις, οἷον ἀμῖα καὶ κεστρεὺς. Γίνονται δὲ καὶ οἱ κωβιοὶ πόνες ἐν τοῖς ποταμοῖς· καὶ ὅλως τὰ εὐλίμνα τῶν χωρίων ἀρίστους ἔχει ἰχθῦς. Αὐτῶν δὲ τῶν ὑδάτων οἱ θερινοὶ ὄμβροι μᾶλλον συμφέρουσι τοῖς πλείστοις ἰχθύσι, καὶ ὅταν τὸ ἔαρ καὶ τὸ θέρος καὶ τὸ φθινόπωρον γένηται ἐπὶ ὄμβριον, ὃ δὲ χειμῶν εὐδιεινός. Ὡς δ' εἰπεῖν ὅλως ὅταν καὶ κατὰ τοὺς ἀνθρώπους εὐετηρία ᾗ, καὶ τοῖς πλείστοις ἰχθύσι συμβαίνει εὐημερεῖν. Ἐν δὲ τοῖς ψυχροῖς τόποις οὐκ εὐθηνοῦσιν. Μάλιστα δὲ πονοῦσιν ἐν τοῖς χειμῶσιν οἱ ἔχοντες λίθον ἐν τῇ κεφαλῇ, οἷον χρομῖς, λάβραξ, σκίαίνα, φάγρος· διὰ γὰρ τὸν λίθον ὑπὸ τοῦ ψύχους καταπήγνυνται καὶ ἐκπίπτουσιν.

Τοῖς μὲν οὖν πλείστοις ἰχθύσι συμφέρει (602a.) μᾶλλον, κεστρεῖ δὲ καὶ κεφάλῳ καὶ ὃν καλοῦσιν τινες μαρῖνον τοῦναντίον· ὑπὸ γὰρ τῶν ὀμβρίων ὑδάτων ἀποτυφλοῦνται οἱ πολλοὶ αὐτῶν θᾶπτον, ἂν λίαν ὑπερβάλλωσιν. Εἰώθασι γὰρ πάσχειν αὐτὸ οἱ κέφαλοι ἐν τοῖς χειμῶσι μᾶλλον· γίνεται γὰρ αὐτῶν τὰ ὄμματα λευκά, καὶ ἀλίσκονται τότε λεπτοί, καὶ τέλος ἀπόλλυνται πάμπαν. Ἔοικε δ' οὐ διὰ τὴν ὑπερομβρίαν τοῦτο πάσχειν μᾶλλον, ἀλλὰ διὰ τὸ ψῦχος· ἤδη γοῦν καὶ ἄλλοθι καὶ περὶ Ναυπλίαν τῆς Ἀργείας περὶ τὸ τέναγος πολλοὶ τυφλοὶ ἐλήφθησαν ἰσχυροῦ γενομένου ψύχους· ἐλήφθησαν δὲ πολλοὶ καὶ λευκὴν ἔχοντες τὴν ὄψιν. Πονεῖ δὲ τοῦ χειμῶνος καὶ ὁ χρύσοφρος, τοῦ δὲ θέρους ὁ ἀχάρνας, καὶ γίνεται λεπτός. Συμφέρει δὲ τοῖς κορακίνοις ὡς εἰπεῖν παρὰ τοὺς ἄλλους ἰχθῦς τὰ αὐχμώδη μᾶλλον τῶν

ἐτῶν· καὶ τούτοις δὲ διὰ τὸ συμβαίνειν ἀλέαν μᾶλλον ἐν τοῖς αὐχμοῖς.

Τόποι δ' ἐκάστοις συμφέρουσι πρὸς εὐθηνίαν, ὅσα μὲν ἐστὶ φύσει παράγεια ἢ πελάγια, ἐν ἑκατέρῳ τούτων, ὅσα δ' ἐπαμφοτερίζει, ἐν ἀμφοτέροις· εἰσὶ δέ τινες καὶ ἴδιοι τόποι ἐκάστοις ἐν οἷς εὐθηνοῦσιν. Ὡς δ' ἀπλῶς εἰπεῖν οἱ φυκῶδεις συμφέρουσιν· πότεροι γοῦν ἐν τοῖς τοιούτοις ἀλίσκονται, ὅσοι παντοδαποὺς νέμονται τόπους· οἱ μὲν γὰρ φυκιοφάγοι τροφῆς εὐποροῦσιν, οἱ δὲ σαρκοφάγοι πλείουσιν ἐντυγχάνουσιν ἰχθύσιν. Διαφέρουσι δὲ καὶ τὰ βόρεια καὶ τὰ νότια. Τὰ γὰρ μακρὰ μᾶλλον εὐθηνεῖ ἐν τοῖς βορείοις, καὶ τοῦ θέρους ἀλίσκονται ἐπὶ τοῦ αὐτοῦ χωρίου πλείους ἐν τοῖς βορείοις τῶν μακρῶν καὶ τῶν πλατέων.

Οἱ δὲ θύννοι καὶ οἱ ξιφίαι οἰστρῶσι περὶ κυνὸς ἐπιτολήν· ἔχουσι γὰρ ἀμφοτέροι τῆνικαῦτα παρὰ τὰ πτερύγια οἷον σκωλήκιον τὸ καλούμενον οἶστρον, ὅμοιον μὲν σκορπίῳ, μέγεθος δ' ἡλίκον ἀράχνης· ποιοῦσι δὲ ταῦτα πόνον τοιοῦτον ὥστ' ἐξάλλεσθαι οὐκ ἔλαττον ἐνίστε τὸν ξιφίαν τοῦ δελφίνος, διὸ καὶ τοῖς πλοίοις πολλάκις ἐμπίπτουσιν. Χαίρουσι δ' οἱ θύννοι μάλιστα τῶν ἰχθύων τῇ ἀλέα, καὶ πρὸς τὴν ἄμμον τὴν πρὸς τῇ γῇ (602b.) προσχωροῦσι τῆς ἀλέας ἔνεκεν, καὶ ἄνω ἐπιπολάζουσιν ὅτι θερμαίνονται.

Τὰ δὲ μικρὰ τῶν ἰχθυδίων σώζεται διὰ τὸ παρορᾶσθαι· διώκουσι γὰρ τὰ μείζω οἱ μεγάλοι. Τῶν δ' ὥων καὶ τοῦ γόνου διαφθείρεται τὸ πολὺ διὰ τὰς ἀλέας· οὗ γὰρ ἂν ἐφάψωνται, πᾶν τοῦτο λυμαίνονται.

Ἀλίσκονται δὲ μάλιστα οἱ ἰχθύες πρὸ ἡλίου ἀνατολῆς καὶ μετὰ τὴν δύσιν, ὅλως δὲ περὶ δυσμὰς ἡλίου καὶ ἀνατολὰς· οὗτοι γὰρ λέγονται εἶναι ὥραῖοι βόλοι, διὸ καὶ τὰ δίκτυα ταύτην τὴν ὥραν ἀναιροῦνται οἱ ἀλιεῖς. Μάλιστα γὰρ ἀπατῶνται οἱ ἰχθύες τῇ ὄψει κατὰ τούτους τοὺς καιροὺς· τῆς μὲν γὰρ νυκτὸς ἡσυχάζουσι, πλείονος δὲ γενομένου τοῦ φωτὸς μᾶλλον ὀρώσιν.

Νόσημα δὲ λοιμῶδες μὲν οὐδὲν εἰς τοὺς ἰχθῦς φαίνεται ἐμπίπτον, οἷον ἐπὶ τῶν ἀνθρώπων συμβαίνει πολλάκις καὶ τῶν ζωοτόκων καὶ τετραπόδων εἰς ἵππους καὶ βοῦς, καὶ τῶν ἄλλων εἰς ἔνια καὶ ἡμερα καὶ ἄγρια· νοσεῖν μέντοι γε δοκοῦσιν· τεκμαίρονται δ' οἱ ἀλιεῖς τῷ ἐνίους ἀλίσκεσθαι λεπτοὺς καὶ ἡσθενηκόσιν ὁμοίους καὶ τὸ χρῶμα μεταβεβληκότας ἐν πολλοῖς καὶ πίοσιν ἐαλωκότας καὶ τῷ γένει τῷ αὐτῷ. Περὶ μὲν οὖν τῶν θαλαττίων τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 20

Τοῖς δὲ ποταμίοις καὶ λιμναίοις λοιμῶδες μὲν οὐδὲ τούτοις οὐδὲν γίνεται, ἐνίοις δ' αὐτῶν ἴδια νοσήματα ἐμπίπτει, οἷον ὁ γλάνις ὑπὸ κύνα μάλιστα διὰ τὸ μετέωρος νεῖν ἀστροβλής τε γίνεται καὶ ὑπὸ βροντῆς νεανικῆς καροῦται. Πάσχει δέ ποτε τοῦτο καὶ ὁ κυπρίνος, ἦττον δέ. Οἱ δὲ γλάνεις ἐν τοῖς βραχέσι καὶ ὑπὸ δράκοντος τοῦ ὄφεως τυπτόμενοι ἀπόλλυνται πολλοί. Ἐν δὲ τῷ βαλέρῳ καὶ τίλῳ ἐλμὶς ἐγγινομένη ὑπὸ κύνα μετεωρίζει τε καὶ ἀσθενῆ ποιεῖ· μετέωρος δὲ γινόμενος ὑπὸ τοῦ καύματος ἀπόλλυται. Τῇ δὲ χαλκίδι νόσημα ἐμπίπτει νεανικόν· φθεῖρες ὑπὸ τὰ βράγχια γινόμενοι πολλοὶ ἀναιροῦσιν. Τῶν δ' ἄλλων ἰχθύων οὐδενὶ οὐδὲν τοιοῦτόν ἐστι νόσημα.

Ἀποθνήσκουσι δ' οἱ ἰχθύες τῷ πλόμῳ· διὸ καὶ θηρεύουσιν οἱ μὲν ἄλλοι τοὺς ἐν τοῖς ποταμοῖς καὶ (603a.) λίμναις πλομίζοντες, οἱ δὲ Φοίνικες καὶ τοὺς ἐν τῇ θαλάττῃ. Ποιοῦνται δέ τινες καὶ δύο ἄλλας θήρας τῶν ἰχθύων. Διὰ γὰρ τὸ φεύγειν ἐν τῷ χειμῶνι τὰ βαθέα ἐν τοῖς ποταμοῖς (καὶ γὰρ ἄλλως τὸ πότιμον ὕδωρ ψυχρόν) ὀρύττουσι τάφρον εἰς τὸν ποταμὸν διὰ ξηροῦ· εἴτα ταύτην καταστεγάσαντες χόρτῳ καὶ λίθοις οἷον γωλεὸν ποιοῦσιν, ἔκδυσιν ἔχοντα ἐκ τοῦ ποταμοῦ· καὶ ὅταν πάγος ᾗ, ἐκ τούτου κύρτῳ θηρεύουσιν τοὺς ἰχθύς. Καὶ ἄλλην δὲ θήραν ποιοῦνται ὁμοίως θέρους καὶ χειμῶνος· ἐν μέσῳ τῷ ποταμῷ φρυγάνοις καὶ λίθοις περιφράξαντες ὅσον στόμα καταλείπουσιν· καὶ ἐν τούτῳ κύρτον ἐνθέντες θηρεύουσιν, περιελόντες τοὺς λίθους.

Τῶν δ' ὀστρακοδέρμων συμφέρει τοῖς ἄλλοις τὰ ἔπομβρα ἔτη, πλὴν ταῖς πορφύραις. Σημεῖον δέ· ὅταν γὰρ τεθῇ οὗ ποταμοῦ ἐξερεύγεται, καὶ γεύσωνται τοῦ ὕδατος, ἀποθνήσκουσιν αὐθημερόν. Καὶ ζῆ δ' ἡ πορφύρα, ὅταν θηρευθῇ, περὶ ἡμέρας πεντήκοντα. Τρέφονται δ' ὑπ' ἀλλήλων· ἐπιγίνεται γὰρ ἐπὶ τοῖς ὀστράκοις ὥσπερ φύκός τι καὶ βρῦον.

Ἄ δ' ἐμβάλλουσιν εἰς τροφήν αὐταῖς, τοῦ σταθμοῦ φασὶ χάριν εἶναι πρὸς τὸ πλεόν ἔλκειν. Τοῖς δ' ἄλλοις οἱ αὐχμοὶ ἀσύμφοροι· ἐλάττω γὰρ καὶ χεῖρῳ γίνεται, καὶ οἱ πυρροὶ τότε γίνονται μᾶλλον κτένες. Ἐν δὲ τῷ Πυρραίῳ ποτ' εὐρίπῳ ἐξέλιπον οἱ κτένες οὐ μόνον διὰ τὸ ὄργανον ὧ θηρεύοντες ἀνέξουν, ἀλλὰ καὶ διὰ τοὺς αὐχμούς. Καὶ τοῖς ἄλλοις δ' ὀστρακοδέρμοις τὰ ἔπομβρα ἔτη συμφέρει διὰ τὸ γλυκυτέραν γίνεσθαι τὴν θάλατταν. Ἐν δὲ τῷ Πόντῳ διὰ τὸ ψῦχος οὐ γίνονται, οὐδ' ἐν τοῖς ποταμοῖς ἀλλ' ἢ ὀλίγα τῶν διθύρων· τὰ δὲ μονόθυρα μάλιστα ἐν τοῖς πάγοις ἐκπύγνυται.

## Κεφάλαιο 21

Περὶ μὲν οὖν τὰ ἔνυδρα τῶν ζώων τοῦτον ἔχει τὸν τρόπον· τῶν δὲ



τετραπόδων αἱ μὲν ὕες νοσήμασι μὲν κάμνουσι τρισὶν, ὧν ἓν μὲν καλεῖται βράγχος, ἓν ὧ μάλιστα τὰ περὶ τὰ βράγχια καὶ τὰς σιαγόνας φλεγμαίνει. Γίνεται δὲ καὶ (603b.) ὅπου ἂν τύχη τοῦ σώματος· πολλάκις γὰρ τοῦ ποδὸς λαμβάνεται, ὅτε δ' ἓν τῷ ὠτί. Γίνεται δὲ σαπρὸν εὐθὺς καὶ τὸ ἐχόμενον, ἕως ἂν ἔλθῃ πρὸς τὸν πλεύμονα· τότε δ' ἀποθνήσκει. Ταχὺ δ' αὐξάνεται· καὶ οὐδὲν ἐσθίει, ὅταν ἄρξηται τὸ πάθος κἂν ὀσονοῦν. Ἰῶνται δ' οἱ ὑβοσκοί, ὅταν αἰσθωνται μικρὸν ὄν, ἄλλον μὲν οὐδένα τρόπον, ἀποτέμνουσι δ' ὅλον.

Δύο δ' ἄλλ' ἐστί, λέγεται δὲ κραυρᾶν ἄμφω· ὧν τὸ μὲν ἕτερόν ἐστι κεφαλῆς πόνος καὶ βάρος, ὧ αἱ πλεῖσται ἀλίσκονται, τὸ δ' ἕτερον, ἡ κοιλία ῥεῖ. Καὶ τοῦτο μὲν δοκεῖ εἶναι ἀνίατον, θατέρω δὲ βοηθοῦσιν οἶνον προσφέροντες πρὸς τοὺς μυκτῆρας καὶ κλύζοντες τοὺς μυκτῆρας οἴνω. Διαφεύγειν δὲ καὶ τοῦτο χαλεπόν· ἀναιρεῖ μὲν γὰρ ἐν ἡμέραις τρισὶν ἢ τέτταρσιν. Βραγχῶσι δὲ μάλιστα, ὅταν τὸ θέρος ἐνέγκῃ σῦκα καὶ πίοταται ὧσιν· βοηθεῖ δὲ τὰ τε συκάμινα διδόμενα καὶ τὸ λουτρὸν ἐὰν πολὺ ἦ καὶ θερμόν, καὶ ἐὰν τις σχάσῃ ὑπὸ τὴν γλῶτταν.

Χαλαζώδεις δ' εἰσὶ τῶν ὑῶν αἱ ὑγρόσαρκοι τὰ τε περὶ τὰ σκέλη καὶ τὰ περὶ τὸν τράχηλον καὶ τοὺς ὠμούς, ἐν οἷς μέρεσι καὶ πλεῖσται γίνονται χάλαζαι· κἂν μὲν ὀλίγας ἔχῃ, γλυκυτέρα ἢ σὰρξ, ἂν δὲ πολλὰς, ὑγρὰ λίαν καὶ διάχυλος γίνεται. Δῆλαι δ' εἰσὶν αἱ χαλαζῶσαι· ἓν τε γὰρ τῇ γλώττῃ τῇ κάτω ἔχουσι μάλιστα τὰς χαλάζας, καὶ ἐὰν τις τρίχας ἐκτίλλῃ ἐκ τῆς λοφιᾶς, ὑφαιμοὶ φαίνονται· ἔτι δὲ τὰ χαλαζῶντα τοὺς ὀπισθίους πόδας οὐ δύνανται ἡσυχάζειν. Οὐκ ἔχουσι δὲ χαλάζας, ἕως ἂν ὧσι γαλαθιναὶ μόνον. Ἐκβάλλουσι δὲ τὰς χαλάζας ταῖς τίφαις· ὃ καὶ πρὸς τὴν τροφήν ἐστι χρήσιμον.

Ἄριστον δὲ πρὸς τὸ παίνειν καὶ τρέφειν οἱ ἐρέβινθοι καὶ τὰ σῦκα, τὸ δ' ὅλον μὴ ποιεῖν ἀπλῆν τὴν τροφήν ἀλλὰ ποικίλην· χαίρει γὰρ μεταβάλλουσα καθάπερ καὶ τᾶλλα ζῶα, καὶ ἅμα φασὶ τὸ μὲν ἐμφυσᾶν τὸ δὲ σαρκοῦν τὸ δὲ παίνειν τῶν προσφερομένων, τὰς δὲ βαλάνους ἡδέως μὲν ἐσθίειν, ποιεῖν δ' ὑγρὰν τὴν σάρκα· καὶ ἐὰν κύουσαι πλείους (604a.) ἐσθίωσιν, ἐκβάλλουσιν ὥσπερ καὶ τὰ πρόβατα· ταῦτα γὰρ ἐπιδηλοτέρως τοῦτο πάσχει διὰ τὰς βαλάνους. Χαλαζᾷ δὲ μόνον τῶν ζώων ὧν ἴσμεν ὕς.

## Κεφάλαιο 22

Οἱ δὲ κύνες κάμνουσι νοσήμασι τρισὶν· ὀνομάζεται δὲ ταῦτα λύττα, κυνάγχη, ποδάγρα. Τούτων ἡ λύττα ἐμποιεῖ μανίαν, καὶ ὅταν δάκῃ, λυττώσιν ἅπαντα τὰ δηχθέντα πλὴν ἀνθρώπου· καὶ ἀναιρεῖ δὲ τὸ νόσημα τοῦτο τὰς τε κύνας καὶ

ἂν τι δηχθῇ ὑπὸ λυττώσης πλὴν ἀνθρώπου. Ἀναιρεῖ δὲ καὶ ἡ κυνάγχη τὰς κύνας· ὀλίγαι δὲ καὶ ἐκ τῆς ποδάγρας περιφεύγουσιν. Λαμβάνει δ' ἡ λύττα καὶ τὰς καμήλους. Τοὺς δ' ἐλέφαντας πρὸς μὲν τὰ ἄλλα ἀρρωστήματα ἀνόσους εἶναί φασιν, ἐνοχλεῖσθαι δ' ὑπὸ φυσῶν.

## Κεφάλαιο 23

Οἱ δὲ βόες οἱ ἀγελαῖοι νοσοῦσι δύο νόσους, ὧν τὸ μὲν ποδάγρα τὸ δὲ κραῦρος καλεῖται. Ἐν μὲν οὖν τῇ ποδάγρα τοὺς πόδας οἶδοῦσιν, οὐκ ἀποθνήσκουσι δ' οὐδὲ τὰς ὀπλὰς ἀποβάλλουσι· βέλτιον δ' ἴσχουσι τῶν κεράτων ἀλειφομένων πίσση θερμῇ. Ὅταν δὲ κραυρᾷ, τὸ πνεῦμα γίνεται θερμὸν καὶ πυκνόν· καὶ ὃ ἐστὶν ἐν τοῖς ἀνθρώποις πυρετός, τοῦτό ἐστιν ἐν τοῖς βουσὶ τὸ κραυρᾶν. Σημεῖον δὲ τῆς ἀρρωστίας τὰ ὠτα καταβάλλουσι καὶ οὐ δύνανται ἐσθίειν. Ἀποθνήσκουσι δὲ ταχέως, καὶ ἀνοιχθέντων ὁ πλεύμων φαίνεται σαπρός.

## Κεφάλαιο 24

Τῶν δ' ἵππων αἱ μὲν φορβάδες ἄνοσοι τῶν ἄλλων ἀρρωστημάτων εἰσὶ πλὴν ποδάγρας, ταύτῃ δὲ κάμνουσι, καὶ ἐνίοτε ἀποβάλλουσι τὰς ὀπλὰς· ὅταν δ' ἀποβάλωσι, πάλιν φύουσιν εὐθύς· γίνεται γὰρ ἅμα τῆς ἐτέρας ὑποφυομένης ἡ τῆς ἐτέρας ὀπλῆς ἀποβολή. Σημεῖον δὲ τῆς ἀρρωστίας· ὁ γὰρ ὄρχις ἄλλεται ὁ δεξιός, ἢ κατὰ μέσον ὀλίγον κάτωθεν τῶν μυκτῆρων ἔγκοιλόν τι γίνεται καὶ ῥυτιδῶδες.

Οἱ δὲ τροφίαὶ ἵπποι πλείστοις ἀρρωστήμασι κάμνουσιν. Λαμβάνει γὰρ καὶ εἰλεός· σημεῖον δὲ τῆς ἀρρωστίας τὰ (604b.) ὀπίσθια σκέλη ἐφέλκουσιν ἐπὶ τὰ ἐμπρόσθια καὶ ὑποφέρουσιν, ὥστε ὀλίγου συγκρούειν. Ἐὰν δ' ἀσιτήσας τὰς ἔμπροσθεν ἡμέρας εἴτα μανῇ, αἷμα ἀφαιροῦντες βοηθοῦσι καὶ ἐκτέμνοντες. Λαμβάνει δὲ καὶ τέτανος· σημεῖον δ' αἱ φλέβες τέτανται πᾶσαι καὶ κεφαλὴ καὶ αὐχὴν, καὶ προβαίνει εὐθέσι τοῖς σκέλεσιν. Γίνονται δὲ καὶ ἔμπυοι οἱ ἵπποι. Λαμβάνει δὲ καὶ ἄλλος αὐτοὺς πόνος, καλεῖται δὲ τοῦτο κριθιᾶν· σημεῖον δὲ τοῦ ἀρρωστήματος μαλακὸς γίνεται ὁ οὐρανὸς καὶ θερμὸν πνεῖ. Ἀνίατα δέ, ἂν μὴ αὐτόματα καταστῇ.

Τὸ δὲ νυμφιᾶν καλούμενον, ἐν ᾧ συμβαίνει κατέχεσθαι ὅταν αὐλῇ τις, καὶ κατωπιᾶν· καὶ ὅταν ἀναβῇ τις, τροχάζει, ἕως ἂν μέλλῃ τις κατασχεῖν· κατηφεῖ δ' αἰεὶ, καὶ ὅταν λυττήσῃ. Σημεῖον δὲ καὶ τούτου τὰ ὠτα καταβάλλει πρὸς τὴν χαίτην καὶ πάλιν προτείνει, καὶ ἐκλείπει, καὶ πνεῖ.

Ἀνίατα δὲ καὶ τάδε, ἔαν καρδίαν ἀλγήσῃ (σημεῖον δὲ λαπαρὸς ὦν ἀλγεῖ), καὶ ἔαν ἡ κύστις μεταστῇ (σημεῖον δὲ καὶ τούτου τὸ μὴ δύνασθαι οὐρεῖν, καὶ τὰς ὀπλὰς καὶ τὰ ἰσχία ἐφέλκει), καὶ ἔαν σταφύλινον περιχάνῃ· τοῦτο δ' ἐστὶν ἡλίκον σφονδύλη.

Τὰ δὲ δῆγματα τῆς μυγαλῆς καὶ τοῖς ἄλλοις ὑποζυγίοις χαλεπά· γίνονται δὲ φλύκταιναι. Χαλεπώτερον δὲ τὸ δῆγμα, ἔαν κύουσα δάκῃ· ἐκρήγνυνται γὰρ αἱ φλύκταιναι, εἰ δὲ μή, οὕ. Ἀποκτείνει δὲ δάκνουσα ἢ σφόδρα ποιεῖ ἀλγεῖν καὶ ἡ καλουμένη χαλκὶς ὑπὸ τινῶν, ὑπὸ δ' ἐνίων ζιγνίς· ἐστὶ δ' ὅμοιον ταῖς μικραῖς σαύραις, τὸ δὲ χρῶμα τοῖς τυφλίνοις ὄφειν. Ὅλως δέ φασιν οἱ ἔμπειροι, σχεδὸν ὅσαπερ ἄρρωστήματα ἄρρωστεῖ ἄνθρωπος, καὶ ἵππον ἄρρωστεῖν καὶ πρόβατον. Ὑπὸ φαρμάκου δὲ διαφορεῖται καὶ ἵππος καὶ πᾶν ὑποζύγιον σανδαράκης· δίδοται δ' ἐν ὕδατι καὶ διηθεῖται. Καὶ ἐκβάλλει δὲ κύουσα ἵππος ὁσμὴ λύχνου ἀποσβεννυμένου· συμβαίνει (605a.) δὲ τοῦτο καὶ γυναιξὶν ἐνίαις κυούσαις. Περὶ μὲν οὖν τὰς νόσους τῶν ἵππων τοῦτον ἔχει τὸν τρόπον.

Τὸ δ' ἵππομανὲς καλούμενον ἐπιφύεται μὲν, ὥσπερ λέγεται, τοῖς πώλοις, αἱ δ' ἵπποι περιλείχουσαι καὶ καθαίρουσαι ἀποτρώγουσιν αὐτό· τὰ δ' ἐπιμυθεύόμενα πέπλασται μᾶλλον ὑπὸ γυναικῶν καὶ τῶν περὶ τὰς ἐπωδὰς. Ὁμολογουμένως δὲ καὶ τὸ καλούμενον πώλιον αἱ ἵπποι προεκβάλλουσι πρὸ τοῦ πώλου.

Γινώσκουσι δ' οἱ ἵπποι καὶ τὴν φωνὴν ἀκούοντες τῶν ἵππων, οἷς ἂν μαχεσάμενοι τύχωσιν. Χαίρουσι δ' οἱ ἵπποι τοῖς λειμῶσι καὶ τοῖς ἔλεσιν· καὶ γὰρ τῶν ὑδάτων τὰ θολερὰ πίνουνσι, κἂν ἢ καθαρὰ, ἀνατρέπουσιν αὐτὰ οἱ ἵπποι ταῖς ὀπλαῖς, εἴτα πιοῦσαι λούονται. Καὶ γὰρ ὅλως ἐστὶ φιλόλουτρον τὸ ζῶον καὶ φίλυδρον· διὸ καὶ ἡ τοῦ ποταμίου ἵππου φύσις οὕτω συνέστηκεν. Ὁ δὲ βοῦς τοῦναντίον τοῦ ἵππου· ἂν γὰρ μὴ καθαρὸν ἢ τὸ ὕδωρ καὶ ψυχρὸν καὶ ἀκέραιον, οὐκ ἐθέλει πιεῖν.

## Κεφάλαιο 25

Οἱ δ' ὄνοι νοσοῦσι μάλιστα νόσον μίαν, ἣν καλοῦσι μηλίδα. Γίνεται δὲ περὶ τὴν κεφαλὴν πρῶτον, καὶ ῥεῖ φλέγμα κατὰ τοὺς μυκτῆρας παχὺ καὶ πυρρόν· ἔαν δὲ πρὸς τὸν πλεύμονα καταβῇ, ἀποκτείνει· τὰ δὲ περὶ τὴν κεφαλὴν οὐ θανάσιμα. Δυσριγότατον δ' ἐστὶ τῶν τοιούτων ζώων· διὸ καὶ περὶ τὸν Πόντον καὶ τὴν Σκυθικὴν οὐ γίνονται ὄνοι.

## Κεφάλαιο 26

Οἱ δ' ἐλέφαντες κάμνουσι τοῖς φυσώδεσι νοσήμασιν· διὸ οὔτε τὸ ὑγρὸν περίττωμα προῖεσθαι δύνανται οὔτε τὰ τῆς κοιλίας. Καὶ ἐὰν γῆν ἐσθίῃ, μαλακίζεται, ἐὰν μὴ συνεχῶς· εἰ δὲ συνεχῶς, οὐδὲν βλάπτεται. Καταπίνει δὲ καὶ λίθους ἐνίοτε. Ἀλίσκεται δὲ καὶ διαρροία· ὅταν δ' ἄλῳ, ἰατρεύουσιν ὕδωρ θερμὸν διδόντες πίνειν, καὶ τὸν χόρτον εἰς μέλι βάπτοντες διδόασιν ἐσθίειν, καὶ ἴστησιν ἐκάτερον τούτων.

Ὅταν δὲ κοπιάσωσι διὰ τὸ μὴ κοιμηθῆναι, ἀλλ' τριβόμενοι καὶ ἐλαίῳ καὶ ὕδατι θερμῷ τοὺς ὤμους ὑγιάζονται. Καὶ (605b.) ὅταν τοὺς ὤμους ἀλγῇ, ὕεια κρέα ὀπτήσαντες προστιθέασιν, καὶ βοηθεῖ αὐτοῖς. Ἐλαιον δ' οἱ μὲν πίνουνσιν οἱ δ' οὐ τῶν ἐλεφάντων· κἂν τύχῃ σιδήριόν τι ἐν τῷ σώματι ἐνόν, τὸ ἔλαιον ἐκβάλλει, ὅταν πώσιν, ὡς φασί· τοῖς δὲ μὴ πίνουνσι ῥίζαν ἐψήσαντες ἐν ἐλαίῳ διδόασιν.

## Κεφάλαιο 27

Περὶ μὲν οὖν τῶν τετραπόδων ζώων τοῦτον ἔχει τὸν τρόπον. Τῶν δ' ἐντόμων τὰ πλεῖστα εὐθηνεῖ ἐν ἡπέρ ὥρᾳ καὶ γίνεται, ὅταν τοιοῦτον ἢ τὸ ἔτος οἶον τὸ ἔαρ, ὑγρὸν καὶ ἀλεεινόν. Ταῖς δὲ μελίτταις ἐγγίνεται ἐν τοῖς σμήνεσι θηρία ἃ λυμαίνεται τὰ κηρία, τό τε σκωλήκιον τὸ ἀραχνιοῦν καὶ λυμαινόμενον τὰ κηρία (καλεῖται δὲ κληῖρος, οἱ δὲ πυραύστην καλοῦσιν· ὅς ἐντίκτει ἐν τῷ κηρίῳ ὅμοιον ἑαυτῷ οἶον ἀράχνιον, καὶ νοσεῖν ποιεῖ τὸ σμῆνος), καὶ ἄλλο θηρίον, οἶον ὁ ἡπίολος ὁ περὶ τὸν λύχνον πετόμενος· οὗτος ἐντίκτει τι χνοῦ ἀνάπλεων, καὶ οὐ κεντεῖται ὑπὸ τῶν μελιττῶν, ἀλλὰ μόνον φεύγει καπνιζόμενος. Ἐγγίνονται δὲ καὶ κάμπαι ἐν τοῖς σμήνεσιν [ἃς καλοῦσι τερηδόνας], ἃς οὐκ ἀμύνονται αἱ μέλιτται. Νοσοῦσι δὲ μάλιστα ὅταν ἐρυσσιβώδη τὰ ἄνθη ἢ ὕλη ἐνέγκῃ, καὶ ἐν τοῖς αὐχμηροῖς ἔτεσιν. Πάντα δὲ τὰ ἔντομα ἀποθνήσκει ἐλαιούμενα· τάχιστα δ', ἂν τις τὴν κεφαλὴν ἀλείψας ἐν τῷ ἡλίῳ θῇ.

## Κεφάλαιο 28

Διαφέρει δὲ τὰ ζῶα καὶ κατὰ τοὺς τόπους· ὥσπερ γὰρ ἐν τισιν ἔνια οὐ γίνεται παντάπασιν, οὕτως ἐν ἐνίοις τόποις γίνεται μὲν ἐλάττω δὲ καὶ ὀλιγοβιώτερα, καὶ οὐκ εὐημερεῖ.

Καὶ ἐνίοτε ἐν τοῖς πάρεγγυς τόποις ἢ διαφορὰ γίνεται τῶν τοιούτων, οἶον τῆς

Μιλησίας ἐν τόποις γειτνιώσιν ἀλλήλοις ἔνθα μὲν γίνονται τέττιγες ἔνθα δ' οὐ γίνονται, καὶ ἐν Κεφαληνίᾳ ποταμὸς διείργει, οὐ ἐπὶ τάδε μὲν γίνονται τέττιγες, ἐπ' ἐκεῖνα δ' οὐ γίνονται. Ἐν δὲ Πορδοσελήνῃ ὁδὸς διείργει, ἥς ἐπ' ἐκεῖνα μὲν γαλῇ γίνεται, ἐπὶ θάτερα δ' οὐ γίνεται.

Καὶ ἐν τῇ Βοιωτίᾳ ἀσπάλακες περὶ μὲν τὸν Ὀρχομενὸν (606a.) πολλοὶ γίνονται, ἐν δὲ τῇ Λεβαδιακῇ γειτνιώσῃ οὐκ εἰσίν, οὐδ' ἂν τις κομίσῃ, ἐθέλουσιν ὀρύττειν. Ἐν Ἰθάκῃ δ' οἱ δασύποδες, ἐάν τις ἀφῇ κομίσας, οὐ δύνανται ζῆν, ἀλλὰ φαίνονται τεθνεῶτες πρὸς τῇ θαλάττῃ ἐστραμμένοι, ἥπερ ἂν εἰσαχθῶσιν. Καὶ ἐν μὲν Σικελίᾳ ἵππομύρμηκες οὐκ εἰσίν, ἐν δὲ Κυρήνῃ οἱ φωνοῦντες βάτραχοι πρότερον οὐκ ἦσαν. Ἐν δὲ Λιβύῃ πάσῃ οὔτε σὺς ἄγριος ἐστίν οὔτ' ἔλαφος οὔτ' αἰξ ἄγριος· ἐν δὲ τῇ Ἰνδικῇ, ὡς φησὶ Κτησίας οὐκ ὦν ἀξιόπιστος, οὔτ' ἄγριος οὔτε ἡμερος ὕς, τὰ δ' ἄναιμα καὶ τὰ φολιδωτὰ πάντα μεγάλα. Καὶ ἐν μὲν τῷ Πόντῳ οὔτε τὰ μαλάκια γίνεται οὔτε τὰ ὀστρακόδερμα, εἰ μὴ ἐν τισὶ τόποις ὀλίγα· ἐν δὲ τῇ ἐρυθρᾷ θαλάττῃ ὑπερμεγέθη τὰ ὀστρακόδερμα πάντα.

Ἐν δὲ Συρίᾳ τὰ πρόβατα τὰς οὐράς ἔχει τὸ πλάτος πήχεως, τὰ δ' ὦτα αἱ αἰγες σπιθαμῆς καὶ παλαιστῆς, καὶ ἔναι συμβάλλουσι κάτω τὰ ὦτα πρὸς τὴν γῆν· καὶ οἱ βόες, ὥσπερ αἱ κάμηλοι, κάλας ἔχουσιν ἐπὶ τῶν ἀκρωμίων. Καὶ ἐν Λυκίᾳ αἱ αἰγες κείρονται, ὥσπερ τὰ πρόβατα παρὰ τοῖς ἄλλοις. Καὶ ἐν μὲν Λιβύῃ εὐθὺς γίνεται κέρατα ἔχοντα τὰ κερατώδη τῶν ζώων, οὐ μόνον οἱ ἄρνες, ὥσπερ φησὶν Ὅμηρος, ἀλλὰ καὶ τὰλλα· ἐν δὲ τῷ Πόντῳ περὶ τὴν Σκυθικὴν τοῦναντίον· ἀκέρата γὰρ γίνονται.

Καὶ ἐν Αἰγύπτῳ τὰ μὲν ἄλλα μείζω ἢ ἐν τῇ Ἑλλάδι, καθάπερ οἱ βόες καὶ τὰ πρόβατα, τὰ δ' ἐλάττω, οἶον οἱ κύνες καὶ λύκοι καὶ λαγωοὶ καὶ ἀλώπεκες καὶ κόρακες καὶ ἰέρακες, τὰ δὲ παραπλήσια, οἶον κορῶναι καὶ αἰγες. Αἰτιῶνται δὲ τὰς τροφάς, ὅτι τοῖς μὲν ἄφθονος τοῖς δὲ σπανία, οἶον τοῖς λύκοις καὶ τοῖς ἰέραξι, τοῖς μὲν γὰρ σαρκοφάγοις ὀλίγη· σπάνια (606b.) γὰρ τὰ μικρὰ ὄρνεα· τοῖς δὲ δασύποσι, καὶ ὅσα μὴ σαρκοφάγα, ὅτι οὔτ' ἀκρόδρυα οὔτ' ὀπώρα χρόνιος.

Πολλαχοῦ δὲ καὶ ἡ κρᾶσις αἰτία, οἶον ἐν τῇ Ἰλλυρίδι καὶ τῇ Θράκῃ καὶ τῇ Ἠπείρῳ οἱ ὄνοι μικροί, ἐν δὲ τῇ Σκυθικῇ καὶ Κελτικῇ ὅλως οὐ γίνονται· δυσχείμερα γὰρ ταῦτα.

Ἐν δ' Ἀραβίᾳ σαῦραι μείζους πηχυαίων γίνονται καὶ μύες πολλὸν μείζους τῶν ἀρουραίων, τὰ μὲν ὀπίσθια σκέλη ἔχοντες καὶ σπιθαμῆς, τὰ δὲ πρόσθια ὅσον

ἄχρι τῆς πρώτης καμπῆς τῶν δακτύλων.

Ἐν δὲ τῇ Λιβύῃ τὸ τῶν ὄφεων μέγεθος γίνεται ἄπλετον, ὥσπερ καὶ λέγεται· ἤδη γάρ φασί τινες προσπλεύσαντες ἰδεῖν ὅστ᾽ ἑκατὸν πολλῶν, ἃ δῆλον γενέσθαι αὐτοῖς ὅτι ὑπ' ὄφεων ἦν κατεδηδεσμένα· ἀναγομένων γὰρ διώκειν ταχὺ τὰς τριήρεις αὐτούς, καὶ ἐνίους αὐτῶν ἐμβαλεῖν ἀνατρέψαντας τὴν τριήρη.

Ἔτι δὲ λέοντες μὲν ἐν τῇ Λιβύῃ μᾶλλον, καὶ τῆς Ἑυρώπης ἐν τῷ μεταξὺ τόπῳ τοῦ Ἀχελώου καὶ Νέσσου ποταμοῦ· παρδάλεις δ' ἐν τῇ Ἀσίᾳ, ἐν δὲ τῇ Εὐρώπῃ οὐ γίνονται.

Ὅλως δὲ τὰ μὲν ἄγρια ἀγριώτερα ἐν τῇ Ἀσίᾳ, ἀνδρειότερα δ' ἐν τῇ Εὐρώπῃ πάντα, πολυμορφότατα δ' ἐν τῇ Λιβύῃ· καὶ λέγεται δέ τις παροιμία, ὅτι αἰὲν Λιβύῃ φέρει τι καινόν. Διὰ γὰρ τὴν ἀνομβρίαν μίσγεσθαι δοκεῖ ἀπαντῶντα πρὸς τὰ ὑδάτια καὶ τὰ μὴ ὁμόφυλα, καὶ ἐκφέρειν ὧν οἱ χρόνοι οἱ τῆς κυήσεως οἱ αὐτοὶ καὶ τὰ μεγέθη μὴ πολὺ ἀπ' ἀλλήλων· πρὸς ἄλληλα δὲ πραῦνεται διὰ τὴν τοῦ ποτοῦ χρείαν. Καὶ γὰρ καὶ δέονται τοῦ πίνειν τοῦναντίον τῶν ἄλλων τοῦ χειμῶνος μᾶλλον ἢ τοῦ θέρους· διὰ γὰρ τὸ μὴ εἰωθέναι ὕδατα γίνεσθαι τοῦ θέρους ἀσύνηθες αὐτοῖς τὸ πίνειν ἐστίν. Καὶ οἷ γε μύες ὅταν πίωσιν, (607a.) ἀποθνήσκουσιν. Γίνεται δὲ καὶ ἄλλα ἐκ μίξεως μὴ ὁμοφύλων, ὥσπερ καὶ ἐν Κυρήνῃ οἱ λύκοι μίσγονται ταῖς κυσὶ καὶ γεννῶσι, καὶ ἐξ ἀλώπεκος καὶ κυνὸς οἱ Λακωνικοί. Φασὶ δὲ καὶ ἐκ τοῦ τίγριος καὶ κυνὸς γίνεσθαι τοὺς Ἰνδικούς, οὐκ εὐθὺς δ' ἄλλ' ἐπὶ τῆς τρίτης μίξεως· τὸ γὰρ πρῶτον γεννηθὲν θηριῶδες γίνεσθαί φασιν. Ἄγοντες δὲ δεσμεύουσιν εἰς τὰς ἐρημίας τὰς κύνας· καὶ πολλὰ κατεσθίονται, ἐὰν μὴ τύχη ὀργῶν πρὸς τὴν ὀχείαν τὸ θηρίον.

## Κεφάλαιο 29

Ποιοῦσι δ' οἱ τόποι διαφέροντα καὶ τὰ ἦθη, οἷον οἱ ὄρεινοὶ καὶ τραχεῖς τῶν ἐν τοῖς πεδινοῖς καὶ μαλακοῖς· καὶ γὰρ τὰς ὄψεις ἀγριώτερα καὶ ἀλκιμώτερα, καθάπερ καὶ οἱ ἐν τῷ Ἄθῳ ὕες· τούτων γὰρ οὐδὲ τὰς θηλείας ὑπομένουσι τῶν κάτω οἱ ἄρρενες.

Καὶ πρὸς τὰ δῆγματα δὲ τῶν θηρίων μεγάλην ἔχουσιν αἱ χῶραι διαφοράν, οἷον περὶ μὲν Φάρον καὶ ἄλλους τόπους οἱ σκορπίοι οὐ χαλεποί, ἐν ἄλλοις δὲ τόποις καὶ ἐν τῇ Σκυθίᾳ πολλοὶ καὶ μεγάλοι καὶ χαλεποὶ γίνονται, κἄν τινα πατάξωσιν ἄνθρωπον ἢ τι ἄλλο θηρίον, ἀποκτείνουσι, καὶ τὰς ὕς, αἱ ἥκιστα

αἰσθάνονται τῶν ἄλλων δηγμάτων, καὶ τούτων τὰς μελαίνας μᾶλλον ἀποκτείνουσιν· τάχιστα δ' ἀπόλλυνται αἱ ὕες πληγεῖσαι, ἐὰν εἰς ὕδωρ ἔλθωσιν.

Τὰ τε τῶν ὄφεων δῆγματα πολὺ διαφέρουσιν. Ἡ τε γὰρ ἀσπίς ἐν Λιβύῃ γίνεται, ἐξ οὗ ὄφεως ποιοῦσι τὸ σηπτικόν, καὶ ἄλλως ἀνίατος. Γίνεται δὲ καὶ ἐν τῷ σιλφίῳ τι ὀφείδιον, οὗ καὶ λέγεται ἄκος εἶναι λίθος τις, ὃν λαμβάνουσιν ἀπὸ τάφου βασιλέως τῶν ἀρχαίων καὶ ἐν οἴνῳ ἀποβάψαντες πίνουσιν. Τῆς δ' Ἰταλίας ἐν τισι τόποις καὶ τὰ τῶν ἀσκαλαβωτῶν δῆγματα θανάσιμά ἐστιν. Πάντων δὲ χαλεπώτερα ἐστὶ τὰ δῆγματα τῶν ἰοβόλων, ἐὰν τύχη ἀλλήλων ἐδηδοκότα, οἷον σκορπίον ἔχῃς, Ἔστι δὲ τοῖς πλείστοις αὐτῶν πολέμιον τὸ τοῦ ἀνθρώπου πτύελον. Ἔστι δὲ τι ὀφείδιον μικρόν, ὃ καλοῦσιν τινες ἱερόν, ὃ οἱ πάνυ μεγάλοι ὄφεις φεύγουσιν· γίνεται δὲ τὸ μέγιστον πηχυαῖον, καὶ δασὺ ἰδεῖν· ὃ τι δ' ἂν δάκη, εὐθὺς σήπεται τὸ κύκλω. Ἔστι δὲ καὶ ἐν τῇ Ἰνδικῇ ὀφείδιόν τι, οὗ μόνου φάρμακον οὐκ ἔχουσιν.

### Κεφάλαιο 30

(607b.) Διαφέρει δὲ τὰ ζῶα τῷ εὐημερεῖν ἢ τούναντίον καὶ περὶ τὰς κυήσεις. Τὰ μὲν γὰρ ὀστρακόδερμα, οἷον κτένες καὶ ἅπαντα τὰ ὀστρεώδη καὶ τὰ μαλακόστρακα, ἄριστα ἐστὶν ὅταν κύῃ, οἷον τὰ караβώδη. Λέγεται δὲ κύσεις καὶ τῶν ὀστρακοδέρμων· τὰ μὲν γὰρ μαλακόστρακα καὶ ὀχευόμενα ὀρᾶται καὶ ἀποτίκτοντα, ἐκείνων δ' οὐδέν. Καὶ τὰ μαλάκια δὲ κύοντα ἄριστα, οἷον τευθίδες τε καὶ σηπίαι καὶ πολύποδες.

Οἱ δ' ἰχθύες ἀρχόμενοι μὲν κυῖσκεσθαι σχεδὸν ἀγαθοὶ πάντες, προϊούσης δὲ τῆς κυήσεως οἱ μὲν οἱ δ' οὐ. Κύουσα μὲν οὖν ἀγαθὴ μαινίς· μορφὴ δὲ τῆς θηλείας στρογγυλωτέρα, ὃ δ' ἄρρην μακρότερος καὶ πλατύτερος· συμβαίνει δ' ἀρχομένης κυῖσκεσθαι τῆς θηλείας τοὺς ἄρρενας μέλαν τὸ χρῶμα ἴσχειν καὶ ποικιλώτερον, καὶ φαγεῖν χειρίστους εἶναι· καλοῦνται δ' ὑπ' ἐνίων τράγοι περὶ τοῦτον τὸν χρόνον.

Μεταβάλλουσι δὲ καὶ οὗς καλοῦσι κοττύφους καὶ κίχλας καὶ ἡ σμαρίς τὸ χρῶμα κατὰ τὰς ὥρας, ὥσπερ ἔνια τῶν ὀρνέων· τοῦ μὲν γὰρ ἔαρος μέλανες γίνονται, εἴτα ἐκ τοῦ ἔαρος λευκοὶ πάλιν. Μεταβάλλει δὲ καὶ ἡ φυκὶς τὴν χροάν· τὸν μὲν γὰρ ἄλλον χρόνον λευκὴ ἐστὶ, τοῦ δ' ἔαρος ποικίλη· μόνη δ' αὕτη τῶν θαλαττίων ἰχθύων στιβαδοποιεῖται, ὡς φασί, καὶ τίκτει ἐν τῇ στιβάδι. Μεταβάλλει δὲ καὶ ἡ μαινίς, ὥσπερ εἴρηται, καὶ ἡ σμαρίς, καὶ ἐκ λευκοτέρων πάλιν ἐν τῷ θέρει καθίστανται καὶ γίνονται μέλανες· μάλιστα δ'

ἐπίδηλός ἐστι περὶ τὰ πτερύγια καὶ τὰ βράγχια.

Καὶ κορακῖνος δ' ἄριστός ἐστι κύων, ὥσπερ καὶ ἡ μαινίς. Κεστρεὺς δὲ καὶ λάβραξ καὶ οἱ λοιποὶ πλωτοὶ φαῦλοι κύοντες σχεδὸν πάντες.

Ὅμοιοι δὲ κύοντες καὶ μὴ ὀλίγοι, οἷον γλαῦκος. Φαῦλοι δὲ καὶ οἱ γέροντες τῶν ἰχθύων, καὶ οἳ γε θύννοι καὶ εἰς τὰς ταριχείας φαῦλοι οἱ γέροντες· πολὺ γὰρ συντήκεται τῆς σαρκός. Τὸ δ' αὐτὸ καὶ ἐπὶ τῶν ἄλλων συμβαίνει ἰχθύων. Δῆλοι δ' οἱ γέροντες αὐτῶν τῷ μεγέθει τῶν λεπίδων καὶ τῇ σκληρότητι. Ἦδη δ' ἐλήφθη γέρων θύννος οὗ σταθμὸς μὲν ἦν τάλαντα πεντεκαίδεκα, τοῦ δ' οὐραίου τὸ διάστημα δύο πήχεων ἦν καὶ σπιθαμῆς.

Οἱ δὲ ποτάμιοι καὶ οἱ λιμναῖοι (608a.) ἄριστοι γίνονται μετὰ τὴν ἄφεσιν τοῦ κυήματος καὶ τοῦ θοροῦ, ὅταν ἀνατραφῶσιν· κύοντες δ' ἔνιοι μὲν ἀγαθοί, οἷον σαπερδῖς, ἔνιοι δὲ φαῦλοι, οἷον γλάνις. Οἱ μὲν οὖν ἄλλοι πάντες ἀμείνους οἱ ἄρρενες τῶν θηλειῶν, γλάνις δ' ὁ θῆλυς τοῦ ἄρρενος ἀμείνων. Καὶ ἐν ταῖς ἐγγέλουσι δέ, ἃς καλοῦσι θηλείας, ἀμείνους εἰσὶν· οὐκ οὔσας δὲ θηλείας καλοῦσιν, ἀλλὰ τῇ ὄψει διαφόρους.

## Βιβλίο 9

### Κεφάλαιο 1

Τὰ δ' ἦθη τῶν ζώων ἐστὶ τῶν μὲν ἀμαυροτέρων καὶ βραχυβιωτέρων ἥττον ἡμῖν ἔνδηλα κατὰ τὴν αἴσθησιν, τῶν δὲ μακροβιωτέρων ἔνδηλότερα. Φαίνονται γὰρ ἔχοντά τινα δύναμιν περὶ ἕκαστον τῶν τῆς ψυχῆς παθημάτων φυσικὴν, περί τε φρόνησιν καὶ εὐήθειαν καὶ ἀνδρείαν καὶ δειλίαν, περί τε πραότητα καὶ χαλεπότητα καὶ τὰς ἄλλας τὰς τοιαύτας ἕξεις. Ἐνια δὲ κοινωνεῖ τινὸς ἅμα καὶ μαθήσεως καὶ διδασκαλίας, τὰ μὲν παρ' ἀλλήλων, τὰ δὲ καὶ παρὰ τῶν ἀνθρώπων, ὅσαπερ ἀκοῆς μετέχει, μὴ μόνον ὅσα τῶν ψόφων, ἀλλ' ὅσα καὶ τῶν σημείων διαισθάνεται τὰς διαφοράς.

Ἐν πᾶσι δ' ὅσοις ἐστὶ γένεσι τὸ θῆλυ καὶ τὸ ἄρρεν, σχεδὸν ἡ φύσις ὁμοίως διέστησε τὸ ἦθος τῶν θηλειῶν πρὸς τὸ τῶν ἀρρένων. Μάλιστα δὲ φανερόν ἐπὶ τε τῶν ἀνθρώπων καὶ τῶν μέγεθος ἔχόντων καὶ τῶν ζωοτόκων τετραπόδων· μαλακώτερον γὰρ τὸ ἦθός ἐστι τῶν θηλειῶν, καὶ τιθασσεύεται θάπτον, καὶ προσίεται τὰς χεῖρας μᾶλλον, καὶ μαθητικώτερον, οἷον καὶ αἱ Λάκαιναι κύνες αἱ θήλειαι εὐφυέστεραι τῶν ἀρρένων εἰσὶν. Τὸ δ' ἐν τῇ Μολοττίᾳ γένος τῶν κυνῶν τὸ μὲν θηρευτικὸν οὐδὲν διαφέρει πρὸς τὸ παρὰ



τοῖς ἄλλοις, τὸ δ' ἀκόλουθον τοῖς προβάτοις τῷ μεγέθει καὶ τῇ ἀνδρείᾳ τῇ πρὸς τὰ θηρία. Διαφέρουσι δ' οἱ ἐξ ἀμφοῖν ἀνδρείᾳ καὶ φιλοπονίᾳ, οἳ τε ἐκ τῶν ἐν τῇ Μολοττίᾳ γινομένων κυνῶν καὶ ἐκ τῶν Λακωνικῶν.

Ἀθυμότερα δὲ τὰ θήλεα πάντα τῶν ἄρρένων πλὴν ἄρκτου καὶ παρδάλεως· τούτων δ' ἡ θήλεια δοκεῖ εἶναι ἀνδρειότερα. Ἐν δὲ τοῖς ἄλλοις γένεσι τὰ θήλεα (608b.) μαλακώτερα καὶ κακουργότερα καὶ ἥττον ἀπλᾶ καὶ προπετέστερα καὶ περὶ τῶν τέκνων τροφὴν φροντιστικώτερα, τὰ δ' ἄρρενα ἐναντίως θυμωδέστερα καὶ ἀγριώτερα καὶ ἀπλούστερα καὶ ἥττον ἐπίβουλα.

Τούτων δ' ἵχνη μὲν τῶν ἡθῶν ἐστὶν ἐν πᾶσιν ὡς εἰπεῖν, μᾶλλον δὲ φανερώτερα ἐν τοῖς ἔχουσι μᾶλλον ἥθος καὶ μάλιστα ἐν ἀνθρώπῳ· τοῦτο γὰρ ἔχει τὴν φύσιν ἀποτετελεσμένην, ὥστε καὶ ταύτας τὰς ἕξεις εἶναι φανερώτερας ἐν αὐτοῖς. Διόπερ γυνὴ ἀνδρὸς ἐλεημονέστερον καὶ ἀρίδακρυ μᾶλλον, ἔτι δὲ φθονερώτερον καὶ μεμψιμοιρότερον, καὶ φιλολοίδορον μᾶλλον καὶ πληκτικώτερον. Ἔστι δὲ καὶ δύσθυμον μᾶλλον τὸ θῆλυ τοῦ ἄρρενος καὶ δύσελπι, καὶ ἀναιδέστερον καὶ ψευδέστερον, εὐαπατητότερον δὲ καὶ μνημονικώτερον, ἔτι δ' ἀγρυπνότερον καὶ ὀκνηρότερον, καὶ ὅλως ἀκινήτοτερον τὸ θῆλυ τοῦ ἄρρενος, καὶ τροφῆς ἐλάττονός ἐστιν.

Βοηθητικώτερον δὲ καί, ὥσπερ ἐλέχθη, ἀνδρειότερον τὸ ἄρρεν τοῦ θήλεός ἐστιν, ἐπεὶ ἐν τοῖς μαλακίοις, ὅταν τῷ τριώδοντι πληγῇ ἡ σηπία, ὁ μὲν ἄρρην βοηθεῖ τῇ θηλείᾳ, ἡ δὲ θήλεια φεύγει τοῦ ἄρρενος πληγέντος. Πόλεμος μὲν οὖν πρὸς ἄλληλα τοῖς ζώοις ἐστίν, ὅσα τοὺς αὐτούς τε κατέχει τόπους καὶ ἀπὸ τῶν αὐτῶν ποιεῖται τὴν ζωὴν· ἐὰν γὰρ ἡ σπάνιος ἡ τροφή, καὶ πρὸς ἄλληλα τὰ ὁμόφυλα μάχεται, ἐπεὶ καὶ τὰς φώκας φασὶ πολεμεῖν τὰς περὶ τὸν αὐτὸν τόπον, καὶ ἄρρενι ἄρρενα καὶ θηλείᾳ θήλειαν, ἕως ἂν ἀποκτείνῃ ἢ ἐκβληθῇ θάτερον ὑπὸ θατέρου· καὶ τὰ σκυμνία ὡσαύτως πάντα. Ἔτι δὲ τοῖς ὠμοφάγοις ἅπαντα πολεμεῖ, καὶ ταῦτα τοῖς ἄλλοις· ἀπὸ γὰρ τῶν ζώων ἡ τροφή αὐτοῖς· ὅθεν καὶ τὰς διεδρείας καὶ τὰς συνεδρείας οἱ μάντις λαμβάνουσι, δίδρα μὲν τὰ πολέμια τιθέντες, σύνεδρα δὲ τὰ εἰρηνοῦντα πρὸς ἄλληλα. Κινδυνεύει δέ, εἰ ἀφθονία τροφῆς εἴη, πρὸς τε τοὺς ἀνθρώπους ἂν ἔχειν τιθασσῶς τὰ νῦν φοβούμενα αὐτῶν καὶ ἀγριαίνοντα, καὶ πρὸς ἄλληλα τὸν αὐτὸν τρόπον. Δῆλον δὲ ποιεῖ τοῦτο ἡ περὶ Αἴγυπτον ἐπιμέλεια τῶν ζώων· διὰ γὰρ τὸ τροφὴν ὑπάρχειν καὶ μὴ ἀπορεῖν μετ' ἀλλήλων ζῶσι καὶ αὐτὰ τὰ ἀγριώτατα· διὰ τὰς ὠφελείας γὰρ ἡμεροῦται, (609a.) οἷον ἐνιαχοῦ τὸ τῶν κροκοδείλων γένος πρὸς τὸν ἱερέα διὰ τὴν ἐπιμέλειαν τὴν τῆς τροφῆς. Τὸ δ' αὐτὸ τοῦτ' ἐστὶν ἰδεῖν καὶ περὶ τὰς ἄλλας χώρας γινόμενον, καὶ κατὰ μόρια τούτων.

Ἔστι δ' ἄετος καὶ δράκων πολέμια· τροφήν γὰρ ποιεῖται τοὺς ὄφεις ὁ ἄετος. Καὶ ἰχνεύμων καὶ φάλαγξ· θηρεύει γὰρ τοὺς φάλαγγας ὁ ἰχνεύμων. Τῶν δ' ὀρνίθων ποικιλίδες καὶ κορυδῶνες καὶ πίπρα καὶ χλωρεύς· τὰ γὰρ ὦα κατεσθίουσιν ἀλλήλων. Καὶ κορώνη καὶ γλαύξ· ἡ μὲν γὰρ τῆς μεσημβρίας, διὰ τὸ μὴ ὄξυ βλέπειν τὴν γλαῦκα τῆς ἡμέρας, κατεσθίει ὑφαρπάζουσα αὐτῆς τὰ ὦα, ἡ δὲ γλαύξ τῆς νυκτός τὰ τῆς κορώνης, καὶ κρείττων ἡ μὲν τῆς ἡμέρας ἡ δὲ τῆς νυκτός ἐστίν. Καὶ γλαύξ δὲ καὶ ὄρχιλος πολέμια· τὰ γὰρ ὦα κατεσθίει καὶ οὗτος τῆς γλαυκός. Τῆς δ' ἡμέρας καὶ τὰ ἄλλα ὀρνίθια τὴν γλαῦκα περιπέταται, ὃ καλεῖται θαυμάζειν, καὶ προσπετόμενα τίλλουσιν· διὸ οἱ ὀρνιθοθῆραι θηρεύουσιν αὐτῇ παντοδαπὰ ὀρνίθια. Πολέμιος δὲ καὶ ὁ πρέσβυς καλούμενος καὶ γαλῆ [καὶ κορώνη]· τὰ γὰρ ὦα καὶ τοὺς νεοττοὺς κατεσθίουσιν αὐτῆς.

Καὶ τρυγῶν καὶ πυραλλίς· τόπος γὰρ τῆς νομῆς καὶ βίος ὁ αὐτός. Καὶ κελεὸς καὶ λιβυός. Ἰκτῖνος δὲ καὶ κόραξ· ὑφαίρεται γὰρ τοῦ κόρακος ὁ ἰκτῖνος ὅ τι ἂν ἔχη διὰ τὸ κρείττων εἶναι τοῖς ὄνυξι καὶ τῇ πτήσει, ὥστε ἡ τροφή ποιεῖ πολεμίους καὶ τούτους.

Ἔτι οἱ ἀπὸ τῆς θαλάττης ζῶντες ἀλλήλοις, οἷον βρένθος καὶ λάρος καὶ ἄρπη. Τριόρχης δὲ καὶ φρῦνος καὶ ὄφιν· κατεσθίει γὰρ ὁ τριόρχης αὐτούς. Τρυγῶν δὲ καὶ χλωρεύς· ἀποκτείνει γὰρ τὴν τρυγῶνα ὁ χλωρεύς, καὶ ἡ κορώνη τὸν καλούμενον τύπανον. Τὸν δὲ κάλαριν ὁ αἰγώλιος καὶ οἱ ἄλλοι γαμψώνυχες κατεσθίουσιν· ὅθεν ὁ πόλεμος αὐτοῖς. Πόλεμος δὲ καὶ ἀσκαλαβώτη καὶ ἀράχνη· κατεσθίει γὰρ τοὺς ἀράχνας ὁ ἀσκαλαβώτης. Πίπῳ δὲ καὶ ἐρωδιῷ· τὰ γὰρ ὦα κατεσθίει καὶ τοὺς νεοττοὺς τοῦ ἐρωδιοῦ. Αἰγίθῳ δὲ καὶ ὄνῳ πόλεμος διὰ τὸ παριόντα τὸν ὄνον κνήθεσθαι εἰς τὰς ἀκάνθας τὰ ἔλκη· διὰ τε οὖν τοῦτο, κἂν ὀγκήσῃται, ἐκβάλλει τὰ ὦα καὶ τοὺς νεοττούς· φοβούμενοι γὰρ ἐκπίπτουσιν· ὁ δὲ διὰ τὴν βλάβην ταύτην κολάπτει ἐπιπετόμενος τὰ ἔλκη (609b.) αὐτοῦ.

Λύκος δ' ὄνῳ καὶ ταύρῳ καὶ ἀλώπεκι πολέμιος· ὠμοφάγος γὰρ ὢν ἐπιτίθεται τοῖς βουσί καὶ τοῖς ὄνοις καὶ τῇ ἀλώπεκι. Καὶ ἀλώπηξ δὲ καὶ κίρκος διὰ τὴν αὐτὴν αἰτίαν· γαμψώνυχος γὰρ ὢν καὶ ὠμοφάγος ἐπιτίθεται καὶ ἔλκη ποιεῖ κόπτων. Καὶ κόραξ ταύρῳ καὶ ὄνῳ πολέμιος διὰ τὸ τύπτειν ἐπιπετόμενος αὐτοὺς καὶ τὰ ὄμματα κολάπτειν αὐτῶν. Πολεμεῖ δὲ καὶ ἄετος καὶ ἐρωδιός· γαμψώνυχος γὰρ ὢν ὁ ἄετος ἐπιτίθεται, ὁ δ' ἀποθνήσκει ἀμυνόμενος. Καὶ αἰσάλων δ' αἰγυπιῷ πολέμιος, καὶ κρῆξ ἐλεῷ καὶ κοττύφῳ καὶ χλωρίωνι, ὃν ἔνιοι μυθολογοῦσι γενέσθαι ἐκ πυρκαϊᾶς· καὶ γὰρ αὐτοὺς βλάπτει καὶ τὰ τέκνα αὐτῶν. Καὶ σίττη καὶ τροχίλος ἄετῳ πολέμια· ἡ γὰρ σίττη καταγνύει τὰ

ὥα τοῦ ἀετοῦ, ὁ δ' ἀετὸς καὶ διὰ τοῦτο καὶ διὰ τὸ ὠμοφάγος εἶναι πολέμιός ἐστι πᾶσιν. Ἄνθος δ' ἵππῳ πολέμιος· ἐξελαύνει γὰρ ὁ ἵππος ἐκ τῆς νομῆς· πόαν γὰρ νέμεται ὁ ἄνθος, ἐπάργεμος δ' ἐστὶ καὶ οὐκ ὀξυωπός· μιμεῖται γὰρ τοῦ ἵππου τὴν φωνήν, καὶ φοβεῖ ἐπιπετόμενος καὶ ἐξελαύνει, ὅταν δὲ λάβῃ, κτείνει αὐτόν. Οἴκεϊ δ' ὁ ἄνθος παρὰ ποταμὸν καὶ ἔλη, χροάν δ' ἔχει καλὴν καὶ εὐβίος. Κωλωτῇ δ' ὄνος πολέμιος· κοιμᾶται γὰρ ἐν τῇ φάτνῃ αὐτοῦ, καὶ κωλύει ἐσθίειν εἰς τοὺς μυκτῆρας ἐνδύομενος.

Τῶν δ' ἐρωδιῶν ἐστὶ τρία γένη, ὃ τε πέλλος καὶ ὁ λευκὸς καὶ ὁ ἀστερίας καλούμενος. Τούτων ὁ πέλλος χαλεπῶς εὐνάζεται καὶ ὀχεύει. κράζει τε γὰρ καὶ αἶμα, ὡς φασίν, ἀφίησιν ἐκ τῶν ὀφθαλμῶν ὀχεύων, καὶ τίκτει φαύλως καὶ ὀδυνηρῶς. Πολεμεῖ δὲ τοῖς βλάπτουσιν, ἀετῷ (ἄρπάζει γὰρ αὐτόν) καὶ ἁλώπεκι (φθείρει γὰρ αὐτόν τῆς νυκτός) καὶ κορύδῳ (τὰ γὰρ ὥα αὐτοῦ κλέπτει).

Ὅφεις δὲ γαλῆ καὶ ὑἱ πολέμιον, τῇ μὲν γαλῇ, κατ' οἰκίαν ὅταν ὦσιν ἀμφοτέρα· ἀπὸ γὰρ τῶν αὐτῶν ζῶσιν· ἡ δ' ὑς ἐσθίει τοὺς ὄφεις. Καὶ αἰσάλων ἁλώπεκι πολέμιος· τύπτει γὰρ καὶ τίλλει αὐτήν, καὶ τὰ τέκνα ἀποκτείνει· γαμψώνυχος γὰρ ἐστίν. Κόραξ δὲ καὶ ἁλώπηξ ἀλλήλοις φίλοι· πολεμεῖ γὰρ τῷ αἰσάλωνι ὁ κόραξ· διὸ βοηθεῖ τυπτομένη αὐτῇ. Καὶ αἰγυπιδὸς δὲ καὶ αἰσάλων πολέμιοι σφίσιν αὐτοῖς· ἀμφοτέροι γὰρ γαμψώνυχοι. (610a.) Μάχεται δὲ καὶ ἀετῷ αἰγυπιδὸς καὶ κύκνος· κρατεῖ δ' ὁ κύκνος πολλάκις· εἰσὶ δ' οἱ κύκνοι καὶ ἀλληλοφάγοι μάλιστα τῶν ὀρνέων.

Ἔστι δὲ τῶν θηρίων τὰ μὲν αἰὲν πολέμια ἀλλήλοις, τὰ δ' ὥσπερ ἄνθρωποι, ὅταν τύχωσιν. Ὄνος δὲ καὶ ἀκανθίδες πολέμιοι· αἱ μὲν γὰρ ἀπὸ τῶν ἀκανθῶν βιοτεύουσιν, ὁ δ' ἀπαλὰς οὖσας κατεσθίει τὰς ἀκάνθας. Καὶ ἄνθος καὶ ἀκανθὶς καὶ αἰγίθος· λέγεται δ' ὅτι αἰγίθου καὶ ἄνθου αἶμα οὐ συμμίγνυται ἀλλήλοις.

Κορώνη δὲ καὶ ἐρωδιὸς φίλοι, καὶ σχοινίων καὶ κόρυδος, καὶ λαεδὸς καὶ κελεός· ὁ μὲν γὰρ κελεὸς παρὰ ποταμὸν οἴκεϊ καὶ λόχμας, ὁ δὲ λαεδὸς πέτρας καὶ ὄρη, καὶ φιλοχωρεῖ οὐκ ἂν οἰκῇ. Καὶ πίφιγξ καὶ ἄρπη καὶ ἰκτῖνος φίλοι, καὶ ἁλώπηξ καὶ ὄφεις (ἅμφω γὰρ τρωγλοδύται), καὶ κόττυφος καὶ τρυγών.

Πολέμιοι δὲ καὶ ὁ λέων καὶ ὁ θῶς ἀλλήλοις· ὠμοφάγοι γὰρ ὄντες ἀπὸ τῶν αὐτῶν ζῶσιν.

Μάχονται δὲ καὶ ἐλέφαντες σφοδρῶς πρὸς ἀλλήλους, καὶ τύπτουσι τοῖς ὁδοῦσι σφᾶς αὐτούς· ὁ δ' ἡττηθεὶς δουλοῦται ἰσχυρῶς, καὶ οὐχ ὑπομένει τὴν τοῦ νικήσαντος φωνήν. Διαφέρουσι δὲ καὶ τῇ ἀνδρείᾳ ἀλλήλων οἱ ἐλέφαντες θαυμαστὸν ὅσον. Χρῶνται δ' οἱ Ἴνδοι πολεμιστηρίοις, καθάπερ τοῖς ἄρρεσι, καὶ ταῖς θηλείαις· εἰσὶ μέντοι καὶ ἐλάττονες αἱ θήλειαι καὶ ἀψυχότεραι πολὺ. Τοὺς δὲ τοίχους καταβάλλει ὁ ἐλέφας τοὺς ὀδόντας τοὺς μεγάλους προσβάλλων· τοὺς δὲ φοίνικας τῷ μετώπῳ, ἕως ἂν κατακλίνῃ, ἔπειτα τοῖς ποσὶν ἐπιβαίνων κατατείνει ἐπὶ τῆς γῆς. Ἔστι δὲ καὶ ἡ θήρα τῶν ἐλεφάντων τοιάδε· ἀναβάντες ἐπὶ τινὰς τῶν τιθασσῶν καὶ ἀνδρείων διώκουσι, καὶ ὅταν καταλάβωσι, τύπτειν προστάττουσι τούτοις, ἕως ἂν ἐκλύσωσιν· τότε δ' ὁ ἐλεφαντιστὴς ἐπιπηδήσας κατευθύνει τῷ δρεπάνῳ. Ταχέως δὲ μετὰ ταῦτα τιθασσεύεται τε καὶ πειθαρχεῖ. Ἐπιβεβηκότος μὲν οὖν τοῦ ἐλεφαντιστοῦ ἅπαντες πρᾶεῖς εἰσιν, ὅταν δ' ἀποβῇ, οἱ μὲν οἱ δ' οὐ· ἀλλὰ τῶν ἐξαгриουμένων τὰ ἐμπρόσθια σκέλη δεσμεύουσι σειραῖς, ἵν' ἡσυχάζωσιν. Ἔστι δ' ἡ θήρα καὶ μεγάλων ἤδη ὄντων καὶ πώλων.

Αἱ μὲν οὖν φιλῖαι καὶ οἱ πόλεμοι τοῖς θηρίοις τούτοις διὰ τὰς τροφὰς καὶ τὸν βίον συμβαίνουσιν.

## Κεφάλαιο 2

(610b.) Τῶν δ' ἰχθύων οἱ μὲν συναγελάζονται μετ' ἀλλήλων καὶ φίλοι εἰσίν, οἱ δὲ μὴ συναγελαζόμενοι πολέμιοι. Ἀγελάζονται δ' οἱ μὲν κυοῦντες, ἔνιοι δ' ὅταν ἐκτέκωσιν. Ὅλως δ' ἀγελαῖά ἐστι τὰ τοιάδε, θυννίδες, μαινίδες, κωβιοί, βῶκες, σαῦροι, κορακῖνοι, σινόδοντες, τρίγλαι, σφύραιναι, ἀνθῖαι, ἐλεγῖνοι, ἀθερῖνοι, σαργῖνοι, βελόναι, τευθοί, ἰουλίδες, πηλαμύδες, σκόμβροι, κολία. Τούτων δ' ἓν ἐστὶν οὐ μόνον ἀγελαῖα ἀλλὰ καὶ σύζυγα· τὰ γὰρ λοιπὰ συνδυάζεται μὲν ἅπαντα, τὰς δ' ἀγέλας ποιοῦνται κατ' ἐνίους καιροὺς, ὥσπερ εἴρηται, ὅταν κύωσιν, ἔνια δὲ καὶ ὅταν τέκωσιν.

Λάβραξ δὲ καὶ κεστρεὺς πολεμιώτατοι ὄντες κατ' ἐνίους καιροὺς συναγελάζονται ἀλλήλοις· συναγελάζονται γὰρ πολλάκις οὐ μόνον τὰ ὁμόγονα, ἀλλὰ καὶ οἷς ἡ αὐτὴ καὶ ἡ παραπλήσιός ἐστι νομὴ, ἂν ᾗ ἄφθονος.

Ζῶσι δὲ πολλάκις ἀφηρημένοι οἱ κεστρεῖς τὴν κέρκον καὶ οἱ γόγγροι μέχρι τῆς ἐξόδου τῆς περιττώσεως· ἀπεσθίεται δ' ὁ μὲν κεστρεὺς ὑπὸ λάβρακος, ὁ δὲ γόγγρος ὑπὸ μυραίνης. Ὁ δὲ πόλεμός ἐστι τοῖς κρείττοσι πρὸς τοὺς ἥττους· κατεσθίει γὰρ ὁ κρείττων. Καὶ περὶ μὲν τῶν θαλαττίων ταῦτα.

### Κεφάλαιο 3

Τὰ δ' ἦθη τῶν ζώων, ὥσπερ εἴρηται πρότερον, διαφέρει κατά τε δειλίαν καὶ πραότητα καὶ ἀνδρείαν καὶ ἡμερότητα καὶ νοῦν τε καὶ ἄνοιαν. Τό τε γὰρ τῶν προβάτων ἦθος, ὥσπερ λέγεται, εὖηθες καὶ ἀνόητον· πάντων γὰρ τῶν τετραπόδων κάκιστόν ἐστι, καὶ ἔρπει εἰς τὰς ἐρημίας πρὸς οὐδέν, καὶ πολλάκις χειμῶνος ὄντος ἐξέρχεται ἔνδοθεν, καὶ ὅταν ὑπὸ νιφετοῦ ληφθῶσιν, ἂν μὴ κινήσῃ ὁ ποιμήν, οὐκ ἐθέλουσιν ἀπιέναι, ἀλλ' ἀπόλλυνται καταλειπόμενα, ἐὰν μὴ ἄρρενας κομίσωσιν οἱ ποιμένες· τότε δ' ἀκολουθοῦσιν.

Τῶν δ' αἰγῶν ὅταν τις μιᾶς λάβῃ τὸ ἄκρον τοῦ ἡρύγγου (ἔστι δ' οἶον θρίξ), αἱ ἄλλαι ἐστᾶσιν ὥσπερ μεμωρωμένοι βλέπουσαι εἰς ἐκείνην. Ἐγκαθεύδειν δὲ ψυχρότεραι ὄϊες αἰγῶν· αἱ γὰρ αἶγες μᾶλλον ἡσυχάζουσι καὶ προσέρχονται πρὸς τοὺς ἀνθρώπους· εἰσὶ δ' αἱ αἶγες δυσριγότεραι τῶν ὄϊων.

Διδάσκουσι δ' οἱ ποιμένες τὰ πρόβατα συνθεῖν ὅταν ψοφήσῃ· ἐὰν γὰρ βροντήσαντος ὑπολειφθῇ τις καὶ μὴ συνδράμῃ, ἐκτιτρώσκει, (611a.) ἐὰν τύχῃ κύουσα· διὸ ἐὰν ψοφῇ, ἐν τῇ οἰκίᾳ συνθέουσι διὰ τὸ ἔθος. Κατάκεινται δ' αἱ ὄϊες καὶ αἱ αἶγες ἀθρόαι κατὰ συγγένειαν· ὅταν δ' ὁ ἥλιος τραπῇ θᾶπτον, φασὶν οἱ ποιμένες οὐκέτι ἀντιβλεπούσας κατακεῖσθαι τὰς αἶγας, ἀλλ' ἀπεστραμμένας ἀπ' ἀλλήλων.

### Κεφάλαιο 4

Αἱ δὲ βόες καὶ νέμονται καθ' ἑταιρείας καὶ συνηθείας, κἂν μία ἀποπλανηθῇ, ἀκολουθοῦσιν αἱ ἄλλαι· διὸ καὶ οἱ βουκόλοι, ἐὰν μίαν μὴ εὕρωσιν, εὐθὺς πάντες ἐπιζητοῦσιν. Απόλλυνται δὲ καὶ οἱ ταῦροι, ὅταν ἀτιμαγελήσαντες ἀποπλανηθῶσιν, ὑπὸ θηρίων.

Τῶν δ' ἵππων αἱ σύννομοι, ὅταν ἡ ἑτέρα ἀπόληται, ἐκτρέφουσι τὰ πωλία ἀλλήλων. Καὶ ὅλως γε δοκεῖ τὸ τῶν ἵππων γένος εἶναι φύσει φιλόστοργον. Σημεῖον δέ· πολλάκις γὰρ αἱ στέριφαι ἀφαιρούμεναι τὰς μητέρας τὰ πωλία αὐταὶ στέργουσι, διὰ δὲ τὸ μὴ ἔχειν γάλα διαφθείρουσιν.

### Κεφάλαιο 5

Τῶν δ' ἀγρίων καὶ τετραπόδων ἡ ἔλαφος οὐχ ἥκιστα δοκεῖ εἶναι φρόνιμον, τῷ τε τίκτειν παρὰ τὰς ὁδοὺς (τὰ γὰρ θηρία διὰ τοὺς ἀνθρώπους οὐ

προσέρχεται), καὶ ὅταν τέκη, ἐσθίει τὸ χόριον πρῶτον. Καὶ ἐπὶ τὴν σέσελιν δὲ τρέχουσι, καὶ φαγοῦσαι οὕτως ἔρχονται πρὸς τὰ τέκνα πάλιν. Ἔτι δὲ τὰ τέκνα ἄγει ἐπὶ τοὺς σταθμούς, ἐθίζουσα οὐ δεῖ ποιεῖσθαι τὰς ἀποφυγὰς· ἔστι δὲ τοῦτο πέτρα ἀπορρώξ, μίαν ἔχουσα εἴσοδον, οὗ δὴ καὶ ἀμύνεσθαι ἤδη φασὶν ὑπομένουσαν.

Ἔτι δὲ ὁ ἄρρην ὅταν γένηται παχύς (γίνεται δὲ σφόδρα πίων ὁπώρας οὔσης), οὐδαμοῦ ποιεῖ αὐτὸν φανερόν· ἀλλ' ἐκτοπίζει ὡς διὰ τὴν παχύτητα εὐάλωτος ὢν. Αποβάλλουσι δὲ καὶ τὰ κέρατα ἐν τόποις χαλεποῖς καὶ δυσεξευρέτοις· ὅθεν καὶ ἡ παροιμία γέγονεν “οὐ αἱ ἔλαφοι τὰ κέρατα ἀποβάλλουσιν·” ὥσπερ γὰρ τὰ ὅπλα ἀποβεβληκυῖαι φυλάττονται ὀρᾶσθαι. Λέγεται δ' ὡς τὸ ἀριστερόν κέρας οὐδεὶς πω ἐώρακεν· ἀποκρύπτειν γὰρ αὐτὸ ὡς ἔχον τινὰ φαρμακείαν.

Οἱ μὲν οὖν ἐνιαύσιοι οὐ φύουσι κέρατα, πλὴν ὥσπερ σημείου χάριν ἀρχὴν τινα· τοῦτο δ' ἐστὶ βραχὺ καὶ δασύ. Φύουσι δὲ διετεῖς πρῶτον τὰ κέρατα εὐθέα, καθάπερ παττάλους· διὸ καὶ καλοῦσι τότε πατταλίας αὐτούς. Τῷ δὲ τρίτῳ ἔτει δίκρουν φύουσι, τῷ δὲ τετάρτῳ τραχύτερον· καὶ τοῦτον τὸν τρόπον ἀεὶ (611b.) ἐπιδιδόασι μέχρι ἕξ ἐτῶν. Ἀπὸ τούτου δὲ ὅμοια ἀεὶ ἀναφύουσιν, ὥστε μηκέτι ἂν γινῶναι τὴν ἡλικίαν τοῖς κέρασιν, ἀλλὰ τοὺς γέροντας γνωρίζουσι μάλιστα δυοῖν σημείοις· ὀδόντας τε γὰρ οἱ μὲν οὐκ ἔχουσιν οἱ δ' ὀλίγους, καὶ τοὺς ἀμυντῆρας οὐκέτι φύουσιν. Καλοῦνται δ' ἀμυντῆρες τὰ προνενευκότα τῶν φυομένων κεράτων εἰς τὸ πρόσθεν, οἷς ἀμύνεται· ταῦτα δ' οἱ γέροντες οὐκ ἔχουσιν, ἀλλ' εἰς τὸ ὀρθὸν γίνεται ἡ αὐξησις αὐτοῖς τῶν κεράτων. Αποβάλλουσι δ' ἅνα ἕκαστον ἐνιαυτὸν τὰ κέρατα, ἀποβάλλουσι δὲ περὶ τὸν Θαραγηλιῶνα μῆνα.

Ὅταν δ' ἀποβάλωσι, κρύπτουσιν αὐτοὺς τὴν ἡμέραν, ὥσπερ εἴρηται· κρύπτουσι δ' ἐν τοῖς δασέσιν, εὐλαβούμενοι τὰς μυίας. Νέμονται δὲ τὸν χρόνον τοῦτον νύκτωρ, μέχριτερ ἂν ἐκφύσωσι τὰ κέρατα. Φύεται δ' ὥσπερ ἐν δέρματι τὸ πρῶτον, καὶ γίνονται δασέα· ὅταν δ' αὐξηθῶσιν, ἡλιάζονται, ἵν' ἐκπέψωσι καὶ ξηράνωσι τὸ κέρας. Ὅταν δὲ μηκέτι πονῶσι πρὸς τὰ δένδρα κνώμενοι αὐτά, τότε ἐκλείπουσι τοὺς τόπους τούτους διὰ τὸ θαρρεῖν ὡς ἔχοντες ὧ ἀμυνοῦνται. Ἦδη δ' εἴληπται ἀχαΐνης ἔλαφος ἐπὶ τῶν κεράτων ἔχων κιττὸν πολὺν πεφυκότα χλωρόν, ὡς ἀπαλῶν ὄντων τῶν κεράτων ἐμφύντα ὥσπερ ἐν ξύλῳ χλωρῷ.

Ὅταν δὲ δηχθῶσιν αἱ ἔλαφοι ὑπὸ φαλαγγίου ἢ τινος τοιούτου, τοὺς ὀριγάνους συλλέγουσαι ἐσθίουσιν· δοκεῖ δὲ καὶ ἀνθρώπῳ ἀγαθὸν εἶναι τοῦτο πίνειν,

ἄλλ' ἔστιν ἀηδὲς. Αἱ δὲ θήλειαι τῶν ἐλάφων ὅταν τέκωσιν, εὐθὺς κατεσθίουσι τὸ χόριον, καὶ οὐκ ἔστι λαβεῖν· πρὸ γὰρ τοῦ χαμαὶ βαλεῖν αὐταὶ ἄπτονται· δοκεῖ δὲ τοῦτ' εἶναι φάρμακον.

Ἀλίσκονται δὲ θηρεύμεναι αἱ ἔλαφοι συριττόντων καὶ ἁδόντων, καὶ κατακλίνονται ὑπὸ τῆς ἡδονῆς.

Δύο δ' ὄντων ὁ μὲν φανερώς ἄδει ἢ συρίττει, ὁ δ' ἐκ τοῦ ὀπισθεν βάλλει, ὅταν οὗτος σημήνη τὸν καιρόν. Ἐὰν μὲν οὖν τύχη ὀρθὰ τὰ ὦτα ἔχουσα, ὅξυ ἀκούει καὶ οὐκ ἔστι λαθεῖν· ἔαν δὲ καταβεβληκυῖα τύχη, λανθάνει.

## Κεφάλαιο 6

Αἱ δ' ἄρκτοι ὅταν φεύγωσι, τὰ σκυμνία προωθοῦσι καὶ ἀναλαβοῦσαι φέρουσιν· ὅταν δ' ἐπικαταλαμβάνωνται, ἐπὶ τὰ δένδρα ἀναπηδῶσιν. Καὶ ὅταν ἐκ τοῦ φωλεοῦ ἐξέλθωσι, πρῶτον τὸ ἄρον ἐσθίουσιν, ὥσπερ εἴρηται πρότερον, (612a.) καὶ τὰ ξύλα διαμασῶνται ὥσπερ ὀδοντοφυοῦσαι.

Πολλὰ δὲ καὶ τῶν ἄλλων ζώων τῶν τετραπόδων ποιεῖ πρὸς βοήθειαν αὐτοῖς φρονίμως, ἐπεὶ καὶ ἐν Κρήτῃ φασὶ τὰς αἴγας τὰς ἀγρίας, ὅταν τοξευθῶσι, ζητεῖν τὸ δίκταμνον· δοκεῖ δὲ τοῦτο ἐκβλητικὸν εἶναι τῶν τοξευμάτων ἐν τῷ σώματι. Καὶ αἱ κύνες δ' ὅταν τι πονῶσιν, ἔμετον ποιοῦνται φαγοῦσαί τινα πόαν. Ἡ δὲ πάρδαλις ὅταν φάγη τὸ φάρμακον τὸ παρδαλιαγχές, ζητεῖ τὴν τοῦ ἀνθρώπου κόπρον· βοηθεῖ γὰρ αὐτῇ.

Διαφθείρει δὲ τοῦτο τὸ φάρμακον καὶ λέοντας. Διὸ καὶ οἱ κυνηγοὶ κρεμαννύουσιν ἐν ἀγγεῖῳ ἕκ τινος δένδρου τὴν κόπρον, ὅπως μὴ ἀποχωρῇ μακρὰν τὸ θηρίον· αὐτοῦ γὰρ προσαλλομένη ἡ πάρδαλις καὶ ἐλπίζουσα λήψεσθαι τελευτᾷ. Λέγουσι δὲ καὶ κατανενοηκυῖαν τὴν πάρδαλιν ὅτι τῇ ὁσμῇ αὐτῆς χαίρουσι τὰ θηρία, ἀποκρύπτουσιν ἑαυτὴν θηρεύειν· προσιέναι γὰρ ἐγγύς, καὶ λαμβάνειν οὕτω καὶ τὰς ἐλάφους.

Ὁ δ' ἰχνεύμων ὁ ἐν Αἰγύπτῳ ὅταν ἴδῃ τὸν ὄφιν τὴν ἀσπίδα καλουμένην, οὐ πρότερον ἐπιτίθεται πρὶν συγκαλέσῃ βοηθοὺς ἄλλους· πρὸς δὲ τὰς πληγὰς καὶ τὰ δῆγματα πηλῶ καταπλάττουσιν ἑαυτούς· βρέξαντες γὰρ ἐν τῷ ὕδατι πρῶτον, οὕτω καλινδοῦνται ἐν τῇ γῇ.

Τῶν δὲ κροκοδείλων χασκόντων οἱ τροχίλοι καθαίρουσιν εἰσπετόμενοι τοὺς ὀδόντας, καὶ αὐτοὶ μὲν τροφὴν λαμβάνουσιν, ὁ δ' ὠφελούμενος αἰσθάνεται καὶ οὐ βλάπτει, ἀλλ' ὅταν ἐξελθεῖν βούληται, κινεῖ τὸν αὐχένα, ἵνα μὴ

συνδάκη.

Ἡ δὲ χελώνη ὅταν ἔχεως φάγη, ἐπεσθίει τὴν ὀρίγανον· καὶ τοῦτο ὥπται. Καὶ ἤδη κατιδὼν τις τοῦτο πολλάκις ποιοῦσαν αὐτὴν καὶ ὅτε σπάσαι τῆς ὀριγάνου πάλιν ἐπὶ τὸν ἔχιν πορευομένην, ἐξέτιλε τὴν ὀρίγανον· τούτου δὲ συμβάντος ἀπέθανεν ἡ χελώνη. Ἡ δὲ γαλῆ ὅταν ὄφει μάχηται, προεσθίει τὸ πήγανον· πολεμία γὰρ ἡ ὁσμὴ τοῖς ὄφεσιν.

Ὁ δὲ δράκων ὅταν ὀπωρίζῃ, τὸν ὀπὸν τῆς πικρίδος ἐκροφεῖ, καὶ τοῦθ' ἐώραται ποιῶν. Αἱ δὲ κύνες ὅταν ἐλμινθιῶσιν, ἐσθίουσι τοῦ σίτου τὸ λήϊον. Οἱ δὲ πελαργοὶ καὶ οἱ ἄλλοι τῶν ὀρνίθων, ὅταν ἐλκωθῇ τι μαχομένοις, ἐπιτιθέασιν τὴν ὀρίγανον. Πολλοὶ δὲ καὶ τὴν ἀκρίδα ἐωράκασιν ὅτι, ὅταν μάχηται τοῖς ὄφεσι, λαμβάνεται τοῦ τραχήλου τῶν ὄφρων.

(612b.) Φρονίμως δὲ δοκεῖ καὶ ἡ γαλῆ χειροῦσθαι τοὺς ὀρνιθας· σφάζει γὰρ ὥσπερ οἱ λύκοι τὰ πρόβατα. Μάχεται δὲ καὶ τοῖς ὄφεσι μάλιστα τοῖς μυοθήραις διὰ τὸ καὶ αὐτὴν τοῦτο τὸ ζῶον θηρεύειν.

Περὶ δὲ τῆς τῶν ἐχίνων αἰσθήσεως συμβέβηκε πολλαχοῦ τεθεωρηῆσθαι ὅτι μεταβαλλόντων βορέων καὶ νότων οἱ μὲν ἐν τῇ γῇ τὰς ὁπὰς αὐτῶν μεταμείβουσιν, οἱ δ' ἐν ταῖς οἰκίαις τρεφόμενοι μεταβάλλουσι πρὸς τοὺς τοίχους, ὥστ' ἐν Βυζαντίῳ γέ τινά φασι προλέγοντα λαβεῖν δόξαν ἐκ τοῦ κατανενοηκέναι ποιοῦντα ταῦτα τὸν ἐχῆνον.

Ἡ δ' ἵκτις ἐστὶ μὲν τὸ μέγεθος ἡλίκον Μελιταῖον κυνίδιον τῶν μικρῶν, τὴν δὲ δασύτητα καὶ τὴν ὄψιν καὶ τὸ λευκὸν τὸ ὑποκάτω καὶ τοῦ ἥθους τὴν κακουργίαν ὅμοιον γαλῆ, καὶ τιθασσὸν δὲ γίνεται σφόδρα, τὰ δὲ σμήνη κακουργεῖ· τῷ γὰρ μέλιτι χαίρει. Ἔστι δὲ καὶ ὀρνιθοφάγον ὥσπερ αἱ αἴλουροι. Τὸ δ' αἰδοῖον αὐτῆς ἐστὶ μὲν, ὥσπερ εἴρηται, ὅστοῦν, δοκεῖ δ' εἶναι φάρμακον στραγγουρίας τὸ τοῦ ἄρρενος· διδόασιν δ' ἐπιζύοντες.

## Κεφάλαιο 7

Ὅλως δὲ περὶ τοὺς βίους πολλὰ ἂν θεωρηθεῖ μιμήματα τῶν ἄλλων ζώων τῆς ἀνθρωπίνης ζωῆς, καὶ μᾶλλον ἐπὶ τῶν ἐλαττόνων ἢ μειζόνων ἴδοι τις ἂν τὴν τῆς διανοίας ἀκρίβειαν, οἷον πρῶτον ἐπὶ τῶν ὀρνίθων ἢ τῆς χελιδόνος σκηνοπηγία· τῇ γὰρ περὶ τὸν πηλὸν ἀχυρώσει τὴν αὐτὴν ἔχει τάξιν. Συγκαταπλέκει γὰρ τοῖς κάρφεσι πηλόν· κἂν ἀπορῆται πηλοῦ, βρέχουσα αὐτὴν κυλινδεῖται τοῖς πτεροῖς πρὸς τὴν κόνιν. Ἐπὶ δὲ στιβαδοποιεῖται



καθάπερ οἱ ἄνθρωποι, τὰ σκληρὰ πρῶτα ὑποτιθεῖσα καὶ τῷ μεγέθει σύμμετρον ποιοῦσα πρὸς ἑαυτήν. Περί τε τὴν τροφήν τῶν τέκνων ἐκπονεῖται ἀμφοτέρω· δίδωσι δ' ἑκατέρω διατηροῦσά τινι συνηθείᾳ τὸ προειληφός, ὅπως μὴ δις λάβῃ. Καὶ τὴν κόπρον τὸ μὲν πρῶτον αὐταὶ ἐκβάλλουσιν, ὅταν δ' αὐξηθῶσι, μεταστρέφοντας ἔξω διδάσκουσι τοὺς νεοττοὺς προῖεσθαι.

Περί τε τὰς περιστερὰς ἔστιν ἕτερα τοιαύτην ἔχοντα τὴν θεωρίαν· οὔτε γὰρ συνδυάζεσθαι θέλουσι πλείοσιν, οὔτε προαπολείπουσιν τὴν κοινωνίαν, πλὴν ἔαν χῆρος ἢ χήρα γένηται. Ἔτι δὲ περὶ τὴν ὠδίνα δεινὴ ἢ τοῦ ἄρρενος θεραπεία καὶ συναγανάκτησις· (613a.) ἔαν τ' ἀπομαλακίζεται πρὸς τὴν εἴσοδον τῆς νεοττιᾶς διὰ τὴν λοχείαν, τύπτει καὶ ἀναγκάζει εἰσιέναι. Γενομένων δὲ τῶν νεοττῶν τῆς ἀλμυριζούσης μάλιστα γῆς διαμασησάμενος εἰσπύει τοῖς νεοττοῖς διοιγνὺς τὸ στόμα, προπαρασκευάζων πρὸς τὴν τροφήν. Ὅταν δ' ἐκ τῆς νεοττιᾶς ἐξάγειν μέλλη πάντας, ὁ ἄρρην ὀχεύει.

Ὡς μὲν οὖν ἐπὶ τὸ πολὺ τοῦτον τὸν τρόπον στέργουσιν ἀλλήλας, παροχεύονται δέ ποτε καὶ τῶν τοὺς ἄρρενας ἐχουσῶν τινες. Ἔστι δὲ μάχιμον τὸ ζῶον, καὶ ἐνοχλοῦσιν ἀλλήλαις, καὶ εἰς τὰς νεοττιᾶς παραδύονται τὰς ἀλλήλων, ὀλιγάκις μέντοι· καὶ γὰρ ἂν ἄποθεν ἦττον ἢ, ἀλλὰ παρά γε τὴν νεοττιὰν διαμάχονται ἐσχάτως. Ἴδιον δὲ ταῖς περιστεραῖς δοκεῖ συμβεβηκέναι καὶ ταῖς φαψί τε καὶ τρυγόσι τὸ μὴ ἀνακύπτειν πινούσας, ἔαν μὴ ἱκανὸν πίωσιν.

Ἐχει δὲ τὸν ἄρρενα ἢ τρυγῶν τὸν αὐτὸν καὶ φάττα, καὶ ἄλλον οὐ προσίενται· καὶ ἐπ' αὐτῶν ἀμφοτέροι καὶ ὁ ἄρρην καὶ ἡ θήλεια. Διαγνῶναι δ' οὐ ῥάδιον τὴν θήλειαν καὶ τὸν ἄρρενα, ἀλλ' ἢ τοῖς ἐντός. Ζῶσι δ' αἱ φάτται πολὺν χρόνον· καὶ γὰρ εἴκοσιν ἔτη καὶ πέντε καὶ τριάκοντα ἔτη ὠμμένοι εἰσίν, ἔνιαι δὲ καὶ τετταράκοντα ἔτη. Πρεσβυτέρων δὲ γινομένων αὐτῶν οἱ ὄνυχες αὐξάνονται· ἀλλ' ἀποτέμνουσιν οἱ τρέφοντες. Ἄλλο δ' οὐδὲν βλάπτονται ἐπιδήλως γηράσκουσαι.

Καὶ αἱ τρυγόνες δὲ καὶ αἱ περιστεραὶ ζῶσι καὶ ὀκτὼ ἔτη αἱ τετυφλωμέναι ὑπὸ τῶν παλευτρίας τρεφόντων αὐτάς. Ζῶσι δὲ καὶ οἱ πέρδικες περὶ πεντεκαίδεκα ἔτη. Νεοττεύουσι δὲ καὶ αἱ φάβες καὶ αἱ τρυγόνες ἐν τοῖς αὐτοῖς τόποις αἰεὶ. Πολυχρονιώτερα δ' ὅλως μὲν ἐστὶ τὰ ἄρρενα τῶν θηλέων, ἐπὶ δὲ τούτων τελευτᾶν φασί τινες πρότερον τὰ ἄρρενα τῶν θηλέων, τεκμαιρόμενοι ἐκ τῶν κατ' οἰκίαν τρεφομένων παλευτριῶν.

Λέγουσι δέ τινες καὶ τῶν στρουθίων ἐνιαυτὸν μόνον ζῆν τοὺς ἄρρενας,

ποιούμενοι σημείον ὅτι τοῦ ἔαρος οὐ φαίνονται ἔχοντες εὐθὺς τὰ περὶ τὸν πώγωνα μέλανα, ὕστερον δ' ἴσχουσιν, ὥς οὐδενὸς σωζομένου τῶν προτέρων. Τὰς δὲ θηλείας μακροβιωτέρας εἶναι τῶν στρουθίων· ταύτας γὰρ ἀλίσκεσθαι ἐν τοῖς (613b.) νέοις, καὶ διαδήλας εἶναι τῷ ἔχειν τὰ περὶ τὰ χεῖλη σκληρά.

Διάγουσι δ' αἱ μὲν τρυγόνες τοῦ θέρους ἐν τοῖς χειμερίοις, αἱ δὲ σπίζαι τοῦ μὲν θέρους ἐν τοῖς ἀλεεινοῖς, τοῦ δὲ χειμῶνος ἐν τοῖς ψυχροῖς.

## Κεφάλαιο 8

Οἱ δὲ βαρεῖς τῶν ὀρνίθων οὐ ποιοῦνται νεοττίας (οὐ συμφέρει γὰρ μὴ πτητικοῖς οὕσιν), οἷον ὄρτυγες καὶ πέρδικες καὶ τὰλλα τὰ τοιαῦτα τῶν ὀρνέων· ἀλλ' ὅταν ποιήσωνται ἐν τῷ λείῳ κονίστραν (ἐν ἄλλῳ γὰρ τόπῳ οὐδενὶ τίκτει), ἐπηλυγασάμενοι ἄκανθάν τινα καὶ ὕλην τῆς περὶ τοὺς ἱέρακας ἔνεκα καὶ τοὺς ἀετοὺς ἀλεώρας, ἐνταῦθα τίκτουσι καὶ ἐπωάζουσιν. Ἐπειτα ἐκλέψαντες εὐθὺς ἐξάγουσι τοὺς νεοττοὺς διὰ τὸ μὴ δύνασθαι τῇ πτήσει πορίζειν αὐτοῖς τροφήν. Αναπαύονται δ' ὑφ' ἑαυτοὺς ἀγόμενοι τοὺς νεοττοὺς καὶ οἱ ὄρτυγες καὶ οἱ πέρδικες, ὥσπερ αἱ ἀλεκτορίδες. Καὶ οὐκ ἐν τῷ αὐτῷ τίκτουσι καὶ ἐπωάζουσιν, ἵνα μὴ τις κατανοήσῃ τὸν τόπον πλείῳ χρόνον προσεδρευόντων. Ὅταν δέ τις θηρεύῃ περιπεσὼν τῇ νεοττιᾷ, προκυλινδεῖται ἢ πέρδιξ τοῦ θηρεύοντος ὥς ἐπίληπτος οὔσα, καὶ ἐπισπᾶται ὥς ληψόμενον ἐφ' ἑαυτήν, ἕως ἂν διαδράσῃ τῶν νεοττῶν ἕκαστος· μετὰ δὲ ταῦτα ἀναπτᾶσα αὐτὴ ἀνακαλεῖται πάλιν.

Τίκτει μὲν οὖν ὡς ἡ πέρδιξ οὐκ ἐλάττω ἢ δέκα, πολλάκις δ' ἐκκαίδεκα· ὥσπερ δ' εἴρηται, κακότηες τὸ ὄρνεόν ἐστι καὶ πανοῦργον. Τοῦ δ' ἔαρος ἐκ τῆς ἀγέλης ἐκκρίνονται δι' ὥδῃς καὶ μάχης κατὰ ζεύγη μετὰ θηλείας, ἣν ἂν λάβῃ ἕκαστος. Διὰ δὲ τὸ εἶναι ἀφροδισιαστικοί, ὅπως μὴ ἐπωάζῃ ἡ θήλεια, οἱ ἄρρενες τὰ ὡς διακυλινδοῦσι καὶ συντρίβουσιν, ἐὰν εὕρωσιν· ἡ δὲ θήλεια ἀντιμηχανωμένη ἀποδιδράσκουσα τίκτει, καὶ πολλάκις διὰ τὸ ὀργᾶν τεκεῖν, ὅπου ἂν τύχῃ ἐκβάλλει· ἂν παρῇ ὁ ἄρρην καὶ ὅπως σώζεται ἀθρόα, οὐκ ἔρχεται πρὸς αὐτά. Καὶ ἐὰν ὑπ' ἀνθρώπου ὀφθῇ, ὥσπερ περὶ τοὺς νεοττοὺς, οὕτω καὶ ἀπὸ τῶν ὤων ὑπάγει, πρὸ ποδῶν φαινομένη τοῦ ἀνθρώπου, ἕως ἂν ἀπαγάγῃ.

Ὅταν δ' ἀποδρᾶσα ἐπωάζῃ, οἱ ἄρρενες (614a.) κεκράγασι καὶ μάχονται συνιόντες· καλοῦσι δὲ τούτους χήρους. Ὁ δ' ἡττηθεὶς μαχόμενος ἀκολουθεῖ τῷ νικήσαντι, ὑπὸ τούτου ὀχευόμενος μόνου. Ἐὰν δὲ κρατηθῇ τις ὑπὸ τοῦ δευτέρου ἢ ὁποιοῦν, οὗτος λάθρα ὀχεύεται ὑπὸ τοῦ κρατιστεύοντος.

Γίνεται δὲ τοῦτο οὐκ αἰεὶ, ἀλλὰ καθ' ὥραν τινὰ τοῦ ἔτους· καὶ ἐπὶ τῶν ὀρτύγων ὡσαύτως. Ἐνίοτε δὲ συμβαίνει τοῦτο καὶ ἐπὶ τῶν ἀλεκτρυόνων· ἐν μὲν γὰρ τοῖς ἱεροῖς, ὅπου ἄνευ θηλειῶν ἀνάκεινται, τὸν ἀνατιθέμενον πάντες εὐλόγως ὀχεύουσιν.

Καὶ τῶν περδίκων δ' οἱ τιθασσοὶ τοὺς ἀγρίους πέρδικας ὀχεύουσι καὶ ἐπικορρίζουσι καὶ ὑβρίζουσιν.

Ἐπὶ δὲ τὸν θηρευτὴν πέρδικα ὠθεῖται τῶν ἀγρίων ὁ ἡγεμὼν ἀντάσας ὡς μαχόμενος. Τούτου δ' ἀλόντος ἐν ταῖς πηκταῖς πάλιν προσέρχεται ἄλλος, ἀντάσας τὸν αὐτὸν τρόπον. Ἐὰν μὲν οὖν ἄρρην ἢ ὁ θηρεύων, τοῦτο ποιοῦσιν· ἐὰν δὲ θήλεια ἢ θηρεύουσα ἢ καὶ ἄδουσα, ἀντάση δ' ὁ ἡγεμὼν αὐτῇ, οἱ ἄλλοι ἀθροισθέντες τύπτουσι τοῦτον καὶ ἀποδιώκουσιν ἀπὸ τῆς θηλείας, ὅτι ἐκείνη ἄλλ' οὐκ αὐτοῖς προσέρχεται. Ὁ δὲ πολλάκις διὰ ταῦτα σιωπῇ προσέρχεται, ὅπως μὴ ἄλλος τῆς φωνῆς ἀκούσας ἔλθῃ μαχόμενος αὐτῷ. Ἐνίοτε δὲ φασιν οἱ ἔμπειροι τὸν ἄρρενα προσιόντα τὴν θήλειαν κατασιγάζειν, ὅπως μὴ ἀκουσάντων τῶν ἀρρένων ἀναγκασθῇ διαμάχεσθαι πρὸς αὐτούς.

Οὐ μόνον δ' ἄδει ὁ πέρδιξ, ἀλλὰ καὶ τριγμὸν ἀφίησι καὶ ἄλλας φωνάς. Πολλάκις δὲ καὶ ἡ θήλεια ἐπωάζουσα ἀνίσταται, ὅταν τῇ θηρευούσῃ θηλείᾳ αἰσθηταὶ προσέχοντα τὸν ἄρρενα, καὶ ἀντάσασα ὑπομένει, ἵν' ὀχευθῇ καὶ ἀποσπάσῃ ἀπὸ τῆς θηρευούσης. Οὕτω δὲ σφόδρα καὶ οἱ πέρδικες καὶ οἱ ὄρτυγες ἐπτόνηται περὶ τὴν ὀχείαν, ὥστ' εἰς τοὺς θηρεύοντας ἐμπίπτουσι καὶ πολλάκις καθιζάνουσιν ἐπὶ τὰς κεφαλὰς.

Περὶ μὲν οὖν τὴν ὀχείαν καὶ θήραν τῶν περδίκων τοιαῦτα συμβαίνει, καὶ περὶ τὴν ἄλλην τοῦ ἥθους πανουργίαν.

Νεοττεύουσι δ' ἐπὶ τῆς γῆς, ὥσπερ εἴρηται, οἱ τε ὄρτυγες καὶ οἱ πέρδικες καὶ τῶν ἄλλων ἔνιοι τῶν πτητικῶν. Ἔτι δὲ τῶν τοιούτων ὁ μὲν κόρυδος καὶ ὁ σκολόπαξ καὶ ὄρτυξ ἐπὶ δένδρου οὐ καθίζουσιν, ἀλλ' ἐπὶ τῆς γῆς.

## Κεφάλαιο 9

Ὁ δὲ δρυοκολάπτης οὐ καθίζει ἐπὶ τῆς γῆς· κόπτει δὲ τὰς δρυὺς τῶν σκωλήκων (614b.) καὶ σκνιπῶν ἔνεκεν, ἵν' ἐξίωσιν. Ἀναλέγεται γὰρ ἐξελθόντας αὐτοὺς τῇ γλώττῃ· πλατεῖαν δ' ἔχει καὶ μεγάλην. Καὶ πορεύεται ἐπὶ τοῖς δένδρεσι ταχέως πάντα τρόπον, καὶ ὑπτίος, καθάπερ οἱ ἀσκαλαβῶται. Ἐχει δὲ καὶ τοὺς

ὄνυχας βελτίους τῶν κολοιῶν πεφυκότας πρὸς τὴν ἀσφάλειαν τῆς ἐπὶ τοῖς δένδρεσιν ἐφεδρείας· τούτους γὰρ ἐμπηγνὺς πορεύεται.

Ἔστι δὲ τῶν δρυοκολαπτῶν ἓν μὲν γένος ἔλαττον τοῦ κοττύφου, ἔχει δ' ὑπέρυθρα μικρά, ἕτερον δὲ γένος μεῖζον ἢ κόττυφος. Τὸ δὲ τρίτον γένος αὐτῶν οὐ πολλῶ ἔλαττόν ἐστιν ἀλεκτορίδος θηλείας. Νεοττεύει δ' ἐπὶ τῶν δένδρων, ὥσπερ εἴρηται, ἐν ἄλλοις τε τῶν δένδρων καὶ ἐν ἐλαίαις. Βόσκεται δὲ τοὺς τε μύρμηκας καὶ τοὺς σκώληκας τοὺς ἐκ τῶν δένδρων. Θηρεύοντα δὲ τοὺς σκώληκας οὕτω σφόδρα φασὶ κοιλαίνειν, ὥστε καταβάλλειν τὰ δένδρα. Καὶ τιθασσευόμενος δέ τις ἤδη ἀμύγδαλον εἰς ῥωγμὴν ξύλου ἐνθείς, ὅπως ἐναρμοσθὲν ὑπομείνειεν αὐτοῦ τὴν πληγὴν, ἐν τῇ τρίτῃ πληγῇ διέκοψε καὶ κατήσθιε τὸ μαλακόν.

## Κεφάλαιο 10

Φρόνιμα δὲ πολλὰ καὶ περὶ τὰς γεράνους δοκεῖ συμβαίνειν· ἐκτοπίζουσί τε γὰρ μακράν, καὶ εἰς ὕψος πέτονται πρὸς τὸ καθορᾶν τὰ πόρρω, καὶ ἐὰν ἴδωσι νέφη καὶ χειμέρια, καταπτᾶσαι ἡσυχάζουσιν. Ἔτι δὲ τὸ ἔχειν ἡγεμόνα τε καὶ τοὺς ἐπισυρίπτοντας ἐν τοῖς ἐσχάτοις, ὥστε κατακούεσθαι τὴν φωνήν. Ὅταν δὲ καθίζωνται, αἱ μὲν ἄλλαι ὑπὸ τῇ πτέρυγι τὴν κεφαλὴν ἔχουσαι καθεύδουσιν ἐπὶ ἐνὸς ποδὸς ἐναλλάξ, ὁ δ' ἡγεμὼν γυμνὴν ἔχων τὴν κεφαλὴν προορᾷ, καὶ ὅταν αἴσθηταί τι, σημαίνει βοῶν. Οἱ δὲ πελεκᾶνες οἱ ἐν τοῖς ποταμοῖς γινόμενοι καταπίνουσι τὰς μεγάλας κόγχας καὶ λείας· ὅταν δ' ἐν τῷ πρὸ τῆς κοιλίας τόπῳ πέσωσιν, ἐξεμοῦσιν, ἵνα χασκουσῶν τὰ κρέα ἐξαιροῦντες ἐσθίωσιν.

## Κεφάλαιο 11

Τῶν δ' ἀγρίων ὀρνέων αἱ τ' οἰκῆσεις μεμηχάνηται πρὸς τοὺς βίους καὶ τὰς σωτηρίας τῶν τέκνων. Εἰσὶ δ' οἱ μὲν εὐτεκνοὶ αὐτῶν καὶ ἐπιμελεῖς τῶν τέκνων, οἱ δὲ τοῦναντίον, καὶ οἱ μὲν εὐμήχανοι πρὸς τὸν βίον, οἱ δ' ἀμηχανώτεροι.

Τὰς δ' οἰκῆσεις οἱ μὲν περὶ τὰς χαράδρας καὶ χηραμοὺς (615a.) ποιοῦνται καὶ πέτρας, οἷον ὁ καλούμενος χαραδριός· ἔστι δ' ὁ χαραδριὸς καὶ τὴν χροάν καὶ τὴν φωνὴν φαῦλος, φαίνεται δὲ νύκτωρ, ἡμέρας δ' ἀποδιδράσκει.

Ἐν ἀποτόμοις δὲ καὶ ὁ ἱέραξ νεοττεύει· ὠμοφάγος δ' ὢν, ὢν ἂν κρατήσῃ ὀρνέων, τὴν καρδίαν οὐ κατεσθίει· καὶ τοῦτό τινες ἐωράκασιν καὶ ἐπ' ὄρτυγος

καὶ ἐπὶ κίχλης καὶ ἕτεροι ἐφ' ἐτέρων. Ἐπὶ δὲ καὶ περὶ τὸ θηρεύειν μεταβάλλουσιν· οὐ γὰρ ἀρπάζουσιν ὁμοίως τοῦ θέρους.

Γυπὸς δὲ λέγεται ὑπὸ τινων ὡς οὐδεὶς ἐώρακεν οὔτε νεοττὸν οὔτε νεοττιάν· ἀλλὰ διὰ τοῦτο ἔφη Ἡρόδωρος ὁ Βρύσσωνος τοῦ σοφιστοῦ πατὴρ ἀπὸ τινος αὐτὸν ἐτέρας εἶναι μετεώρου γῆς, τεκμήριον τοῦτο λέγων καὶ τὸ φαίνεσθαι ταχὺ πολλούς, ὅθεν δέ, μηδενὶ εἶναι δῆλον. Τούτου δ' αἴτιον ὅτι τίκτει ἐν πέτραις ἀπροσβάτοις· ἔστι δ' οὐδὲ πολλαχοῦ ἐπιχώριος ὁ ὄρνις. Τίκτει δ' ἐν ὠδὸν ἢ δύο τὰ πλεῖστα.

Ἐνιοὶ δὲ τῶν ὀρνίθων ἐν τοῖς ὄρεσι καὶ τῇ ὕλῃ κατοικοῦσιν, οἷον ἔποψ καὶ βρίνθος· οὗτος δ' ὁ ὄρνις εὐβίωτος καὶ ὠδικός. Ὁ δὲ τροχίλος καὶ λόχμας καὶ τρώγλας οἰκεῖ· δυσάλωτος δὲ καὶ δραπέτης καὶ τὸ ἦθος ἀσθενές, εὐβίωτος δὲ καὶ τεχνικός. Καλεῖται δὲ πρέσβυς καὶ βασιλεύς· διὸ καὶ τὸν ἀετὸν αὐτῷ φασὶ πολεμεῖν.

## Κεφάλαιο 12

Εἰσὶ δέ τινες οἱ περὶ τὴν θάλατταν βιοῦσιν, οἷον κίγκλος. Ἔστι δὲ τὸ ἦθος ὁ κίγκλος πανοῦργος καὶ δυσθήρατος, ὅταν δὲ ληφθῇ, τιθασσότατος.

Τυχχάνει δ' ὦν καὶ ἀνάπηρος· ἀκρατὴς γὰρ τῶν ὀπισθέν ἐστιν. Ζῶσι δὲ περὶ θάλατταν καὶ ποταμοὺς καὶ λίμνας οἱ μὲν στεγανόποδες ἅπαντες· ἡ γὰρ φύσις αὐτὴ ζητεῖ τὸ πρόσφορον· πολλοὶ δὲ καὶ τῶν σχιζοπόδων περὶ τὰ ὕδατα καὶ τὰ ἔλη βιοτεύουσιν, οἷον ἄνθος παρὰ τοὺς ποταμούς· ἔχει δὲ τὴν χροάν καλὴν καὶ ἔστιν εὐβίωτον. Ὁ δὲ καταρράκτης ζῇ μὲν περὶ θάλατταν, ὅταν δὲ καθῇ αὐτὸν εἰς τὸ βαθύ, μένει χρόνον οὐκ ἐλάττονα ἢ ὅσον πλέθρον διέλθοι τις· ἔστι δ' ἑλαττον ἱέρακος τὸ ὄρνεον.

Καὶ οἱ κύκνοι δ' εἰσὶ μὲν τῶν στεγανοπόδων, καὶ βιοτεύουσι περὶ λίμνας καὶ ἔλη, εὐβίωτοι δὲ καὶ εὐήθεις καὶ εὐτεκνοὶ καὶ εὐγῆροι, καὶ τὸν ἀετὸν, ἐὰν (615b.) ἄρξηται, ἀμυνόμενοι νικῶσιν, αὐτοὶ δ' οὐκ ἄρχουσι μάχης. Ωιδικοὶ δέ, καὶ περὶ τὰς τελευτὰς μάλιστα ἄδουσιν· ἀναπέτονται γὰρ καὶ εἰς τὸ πέλαγος, καὶ τινες ἤδη πλέοντες παρὰ τὴν Λιβύην περιέτυχον ἐν τῇ θαλάττῃ πολλοῖς ἄδουσι φωνῇ γοῶδει, καὶ τούτων ἐώρων ἀποθνήσκοντας ἐνίους.

Ἡ δὲ κύμινδις ὀλιγάκις μὲν φαίνεται (οἰκεῖ γὰρ ὄρη), ἔστι δὲ μέλας καὶ μέγεθος ὅσον ἱέραξ ὁ φασσοφόνος καλούμενος, καὶ τὴν ιδέαν μακρὸς καὶ λεπτός. Κύμινδιν δὲ καλοῦσιν Ἴωνες αὐτήν· ἥς καὶ Ὅμηρος μέμνηται ἐν τῇ

Ἰλιάδι εἰπὼν “χαλκίδα κικλήσκουσι θεοί, ἄνδρες δὲ κύμινδιν.”

Ἡ δ' ὕβρις, φασὶ δέ τινες εἶναι τὸν αὐτὸν τοῦτον ὄρνιθα τῷ πώϋγγι, οὗτος ἡμέρας μὲν οὐ φαίνεται διὰ τὸ μὴ βλέπειν ὄξύ, τὰς δὲ νύκτας θηρεύει ὥσπερ οἱ ὦτοι· καὶ μάχονται δὲ πρὸς τὸν ἄετὸν οὕτω σφόδρα ὥστ' ἄμφω λαμβάνεσθαι πολλάκις ζῶντας ὑπὸ τῶν νομέων. Τίκει μὲν οὖν δύο ὦά, νεοττεύει δὲ καὶ οὗτος ἐν πέτραις καὶ σπηλαίοις. Μάχιμοι δὲ καὶ αἱ γέρανοί εἰσι πρὸς ἀλλήλας οὕτω σφόδρα ὥστε καὶ λαμβάνεσθαι μαχομένας· ὑπομένουσι γάρ. Τίκει δὲ γέρανος δύο ὦά.

### Κεφάλαιο 13

Ἡ δὲ κίττα φωνὰς μὲν μεταβάλλει πλείστας (καθ' ἑκάστην γὰρ ὡς εἰπεῖν ἡμέραν ἄλλην ἀφίησι), τίκει δὲ περὶ ἐννέα ὦά, ποιεῖται δὲ τὴν νεοττιὰν ἐπὶ τῶν δένδρων ἐκ τριχῶν καὶ ἐρίων· ὅταν δ' ὑπολίπωσιν αἱ βάλανοι, ἀποκρύπτουσα ταμιεύεται.

Περὶ μὲν οὖν τῶν πελαργῶν, ὅτι ἀντεκτρέφονται, θρυλεῖται παρὰ πολλοῖς· φασὶ δέ τινες καὶ τοὺς μέροπας ταῦτ' οὗτο ποιεῖν, καὶ ἀντεκτρέφεσθαι ὑπὸ τῶν ἐκγόνων οὐ μόνον γηράσκοντας ἀλλὰ καὶ εὐθύς, ὅταν οἱοί τ' ὦσιν· τὸν δὲ πατέρα καὶ τὴν μητέρα μένειν ἔνδον. Ἡ δ' ἰδέα τοῦ ὄρνιθος τῶν περῶν ἐστὶ τὰ μὲν ὑποκάτω ὠχρόν, τὰ δὲ ἐπάνω ὥσπερ τῆς ἀλκυόνος κυάνεον, τὰ δ' ἐπ' ἄκρων τῶν περυγίων ἐρυθρά. Τίκει δὲ περὶ ἕξ ἢ ἐπτὰ ὑπὸ τὴν ὀπώραν, ἐν τοῖς κρημνοῖς τοῖς μαλακοῖς· εἰσδύεται δ' εἴσω καὶ τέτταρας πῆχεις.

Ἡ δὲ καλουμένη χλωρίς διὰ τὸ τὰ κάτω ἔχειν ὠχρά, ἔστι μὲν ἡλικὸν κόρυδος, τίκει δ' ὦά (616a.) τέτταρα ἢ πέντε, τὴν δὲ νεοττιὰν ποιεῖται μὲν ἐκ τοῦ συμφύτου ἔλκουσα πρόρριζον, στρώματα δ' ὑποβάλλει τρίχας καὶ ἔρια. Ταῦτ' οὗτο ποιεῖ καὶ ὁ κόττυφος καὶ ἡ κίττα, καὶ τὰ ἐντὸς τῆς νεοττιᾶς ἐκ τούτων ποιοῦνται.

Τεχνικῶς δὲ καὶ ἡ τῆς ἀκανθυλλίδος ἔχει νεοττιὰ· πέπλεκται γὰρ ὥσπερ σφαῖρα λινῇ, ἔχουσα τὴν εἰσδυσιν μικράν· φασὶ δὲ καὶ τὸ κιννάμωμον ὄρνεον εἶναι οἱ ἐκ τῶν τόπων ἐκείνων, καὶ τὸ καλούμενον κιννάμωμον φέρειν ποθὲν τοῦτο τὸ ὄρνεον, καὶ τὴν νεοττιὰν ἐξ αὐτοῦ ποιεῖσθαι. Νεοττεύει δ' ἐφ' ὑψηλῶν δένδρων καὶ ἐν τοῖς θαλλοῖς τῶν δένδρων· ἀλλὰ τοὺς ἐγχωρίους μόλιβδον πρὸς τοῖς οἴστοις προσαρτῶντας τοξεύοντας καταβάλλειν, καὶ οὕτω συνάγειν ἐκ τοῦ φορυτοῦ τὸ κιννάμωμον.

## Κεφάλαιο 14

Ἡ δ' ἄλκυών ἐστι μὲν οὐ πολλῶ μείζων στρουθοῦ, τὸ δὲ χρῶμα καὶ κυανοῦν ἔχει καὶ χλωρὸν καὶ ὑποπόρφυρον· μεμιγμένως δὲ τοιοῦτον τὸ σῶμα πᾶν καὶ αἱ πτέρυγες καὶ τὰ περὶ τὸν τράχηλον, οὐ χωρὶς ἕκαστον τῶν χρωμάτων· τὸ δὲ ῥύγχος ὑπόχλωρον μὲν, μακρὸν δὲ καὶ λεπτόν. Τὸ μὲν οὖν εἶδος ἔχει τοιοῦτον, ἡ δὲ νεοττιὰ παρομοία ταῖς σφαίραις ταῖς θαλαττίαις ἐστὶ καὶ ταῖς καλουμέναις ἄλοσάχναις, πλὴν τοῦ χρώματος· τὴν δὲ χροάν ὑπόπυρρον ἔχουσιν, τὸ δὲ σχῆμα παραπλήσιον ταῖς σικύαις ταῖς ἐχούσαις τοὺς τραχήλους μακρούς. Τὸ δὲ μέγεθος αὐτῶν ἐστὶ τῆς μεγίστης σπογγιᾶς μείζον· εἰσὶ γὰρ καὶ μείζους καὶ ἐλάττους· κατάστεγοι δέ, καὶ τὸ στερεὸν ἔχουσι συχνὸν καὶ τὸ κοῖλον.

Καὶ κόπτοντι μὲν σιδηρίῳ ὅξεϊ οὐ ταχὺ διακόπτεται, ἅμα δὲ κόπτοντι καὶ ταῖς χερσὶ θραύοντι ταχὺ διαθραύεται, ὥσπερ ἡ ἄλοσάχνη. Τὸ δὲ στόμα στενὸν ὅσον *It;είς>* εἴσδυσιν μικράν, ὥστ' οὐδ' ἂν ἀνατραπῇ, ἡ θάλαττα οὐκ εἰσέρχεται. Τὰ δὲ κοῖλα παραπλήσια ἔχει τοῖς τῶν σπόγγων. Ἀπορεῖται δ' ἐκ τίνος συντίθησι τὴν νεοττιάν, δοκεῖ δὲ μάλιστα ἐκ τῶν ἀκανθῶν τῆς βελόνης· ζῇ γὰρ ἰχθυοφαγοῦσα. Ἀναβαίνει δὲ καὶ ἀνὰ τοὺς ποταμούς. Τίττει δὲ περὶ πέντε μάλιστα ὥα. Λοχεύεται δὲ διὰ βίου, ἄρχεται δὲ τετράμηνος.

## Κεφάλαιο 15

Ὁ δ' ἔποψ τὴν νεοττιάν μάλιστα ποιεῖται ἐκ τῆς (616b.) ἀνθρωπίνης κόπρου· τὴν δ' ἰδέαν μεταβάλλει τοῦ θέρους καὶ τοῦ χειμῶνος, ὥσπερ καὶ τῶν ἄλλων ἀγρίων τὰ πλεῖστα.

Ὁ δ' αἰγίθαλος τίττει μὲν ὥα πλεῖστα, ὥς φασίν. Ἕνιοι δὲ καὶ τὸν μελαγκόρυφον καλούμενόν φασι πλεῖστα τίττειν μετὰ γε τὸν ἐν Λιβύῃ στρουθόν· ἐώραται μὲν γὰρ καὶ ἑπτακαίδεκα, τίττει μέντοι καὶ πλείω ἢ εἴκοσιν. Τίττει δ' ἀεὶ περιττά, ὥς φασίν. Νεοττεύει δὲ καὶ οὗτος ἐν τοῖς δένδρεσι, καὶ βόσκεται τοὺς σκώληκας. Ἴδιον δὲ τούτῳ καὶ ἀηδόني παρὰ τοὺς ἄλλους ὄρνιθας τὸ μὴ ἔχειν τῆς γλώττης τὸ ὀξύ.

Ὁ δ' αἰγιθος εὐβίωτος καὶ πολύτεκνος, τὸν δὲ πόδα χωλός ἐστίν.

Χλωρίων δὲ μαθεῖν μὲν ἀγαθὸς καὶ βιομήχανος, κακοπέτης δέ, καὶ χροάν ἔχει μοχθηράν.

## Κεφάλαιο 16

Ἡ δ' ἐλέα, ὥσπερ ἄλλος τις τῶν ὀρνίθων, εὐβίος, καὶ καθίζει θέρους μὲν ἐν προσηνέμῳ καὶ σκιᾷ, χειμῶνος δ' ἐν εὐηλίῳ καὶ ἐπισκεπεῖ ἐπὶ τῶν δονάκων περὶ τὰ ἔλη. Ἔστι δὲ τὸ μὲν μέγεθος βραχύς, φωνὴν δ' ἔχει ἀγαθὴν.

Καὶ ὁ γνάφαλος καλούμενος τὴν τε φωνὴν ἔχει ἀγαθὴν καὶ τὸ χρῶμα καλός, καὶ βιομήχανος, καὶ τὸ εἶδος εὐπρεπές. Δοκεῖ δ' εἶναι ξενικὸς ὄρνις· ὀλιγάκις γὰρ φαίνεται ἐν τοῖς μὴ οἰκείοις τόποις.

## Κεφάλαιο 17

Ἡ δὲ κρῆξ τὸ μὲν ἦθος μάχιμος, τὴν δὲ διάνοιαν εὐμήχανος πρὸς τὸν βίον, ἄλλως δὲ κακόποτος ὄρνις.

Ἡ δὲ καλουμένη σίττη τὸ μὲν ἦθος μάχιμος, τὴν δὲ διάνοιαν εὐθικτος καὶ εὐθήμων καὶ εὐβίος, καὶ λέγεται φαρμάκεια εἶναι διὰ τὸ πολυίδρις εἶναι· πολύγονος δὲ καὶ εὐτεκνος, καὶ ζῆ ὑλογοποῦσα.

Αἰγώλιος δ' ἐστὶ νυκτινόμος καὶ ἡμέρας ὀλιγάκις φαίνεται, καὶ οἰκεῖ καὶ οὗτος πέτρας καὶ σπήλυγγας· ἔστι γὰρ ἀθαρσής, τὴν δὲ διάνοιαν βιωτικὸς καὶ εὐμήχανος.

Ἔστι δὲ τι ὀρνίθιον μικρὸν ὃ καλεῖται κέρθιος· οὗτος τὸ μὲν ἦθος θρασύς, καὶ οἰκεῖ περὶ δένδρα, καὶ ἔστι θριποφάγος, τὴν δὲ διάνοιαν εὐβίος, καὶ τὴν φωνὴν ἔχει λαμπράν.

Αἱ δ' ἀκανθίδες κακόβιοι καὶ κακόχροι, φωνὴν μέντοι λιγυρὰν ἔχουσιν.

## Κεφάλαιο 18

Τῶν δ' ἐρωδιῶν ὁ μὲν πέλλος, ὥσπερ εἴρηται, ὀχεύει μὲν χαλεπῶς, εὐμήχανος δὲ καὶ δειπνοφόρος καὶ ἔπαγρος, ἐργάζεται δὲ τὴν ἡμέραν· τὴν μέντοι χροᾶν ἔχει φαύλην (617a.) καὶ τὴν κοιλίαν ἀεὶ ὑγράν. Τῶν δὲ λοιπῶν δύο (τρία γὰρ γένη ἐστὶν αὐτῶν) ὁ μὲν λευκὸς τὴν τε χροᾶν ἔχει καλήν, καὶ ὀχεύει ἀσινῶς, καὶ νεοττεύει καὶ τίκτει καλῶς ἐπὶ τῶν δένδρων, νέμεται δ' ἔλη καὶ λίμνας καὶ πεδία καὶ λειμῶνας. Ὁ δ' ἄστερίας ὁ ἐπικαλούμενος ὄκνος μυθολογεῖται μὲν γενέσθαι ἐκ δούλων τὸ ἀρχαῖον, ἔστι δὲ κατὰ τὴν ἐπωνυμίαν τούτων ἀργότατος.



Οἱ μὲν οὖν ἔρωδιοι τοῦτον βιοῦσι τὸν τρόπον. Ἡ δὲ καλουμένη πῶϋγξ ἴδιον ἔχει πρὸς τᾶλλα· μάλιστα γάρ ἐστι ὀφθαλμοβόρος τῶν ὀρνίθων. Πολέμιος δὲ τῇ ἄρπῃ· καὶ γὰρ ἐκείνη ὁμοιοβίотος.

## Κεφάλαιο 19

Τῶν δὲ κοτύφων δύο γένη ἐστίν, ὁ μὲν ἕτερος μέλας καὶ πανταχοῦ ὢν, ὁ δ' ἕτερος ἔκλευκος, τὸ δὲ μέγεθος ἴσος ἐκείνῳ, καὶ ἡ φωνὴ παραπλησία ἐκείνῳ· ἔστι δ' οὗτος ἐν Κυλλήνῃ τῆς Ἀρκαδίας, ἄλλοθι δ' οὐδαμοῦ. Τούτων ὅμοιος τῷ μέλανι κοτύφῳ ἐστὶ λαιός, τὸ μέγεθος μικρῷ ἐλάττων· οὗτος ἐπὶ τῶν πετρῶν καὶ ἐπὶ τῶν κεράμων τὰς διατριβάς ποιεῖται, τὸ δὲ ῥύγχος οὐ φοινικοῦν ἔχει καθάπερ ὁ κόττυφος.

## Κεφάλαιο 20

Κιχλῶν δ' εἶδη τρία, ἡ μὲν ἰσοβόρος· αὕτη δ' οὐκ ἐσθίει ἄλλ' ἢ ἰξὸν καὶ ῥητίνην, τὸ δὲ μέγεθος ὅσον κίττα ἐστίν. Ἑτέρα τριχάς· αὕτη δ' ὅξυ φθέγγεται, τὸ δὲ μέγεθος ὅσον κόττυφος. Ἄλλη δ' ἦν καλοῦσί τινες ἱλιάδα, ἐλαχίστη τε τούτων καὶ ἥττον ποικίλη.

## Κεφάλαιο 21

Ἔστι δέ τις πετραῖος ὧ ὄνομα κύανος· οὗτος ὁ ὄρνις ἐν Νισύρῳ μάλιστα ἐστι, ποιεῖται δ' ἐπὶ τῶν πετρῶν τὰς διατριβάς. Τὸ δὲ μέγεθος κοτύφου μὲν ἐλάττων, σπίζης δὲ μείζων μικρῷ. Μεγαλόπους δέ, καὶ πρὸς τὰς πέτρας προσαναβαίνει. Κυανοῦς ὅλος· τὸ δὲ ῥύγχος ἔχει λεπτὸν καὶ μακρόν, σκέλη δὲ βραχέα τῇ πίπῳ παρόμοια.

## Κεφάλαιο 22

Ὁ δὲ χλωρίων χλωρὸς ὅλος· οὗτος τὸν χειμῶνα οὐχ ὀρᾷται, περὶ δὲ τὰς τροπὰς τὰς θερινὰς φανερὸς μάλιστα γίνεται, ἀπαλλάττεται δ' ὅταν Ἀρκτοῦρος ἐπιτέλλῃ. Τὸ δὲ μέγεθός ἐστίν ὅσον τρυγῶν.

Ὁ δὲ μαλακοκρανεὺς ἀεὶ ἐπὶ τὸ αὐτὸ (617b.) καθιζάνει, καὶ ἀλίσκεται ἐνταῦθα. Τὸ δ' εἶδος, κεφαλὴ μὲν μεγάλη χονδρότυπος, τὸ δὲ μέγεθος ἐλάττων κίχλης μικρῷ· στόμα δ' εὖρωστον, μικρόν, στρογγύλον· τὸ δὲ χρῶμα σποδοειδὲς ὅλος· εὖπους δὲ καὶ κακόπτερος. Ἀλίσκεται δὲ μάλιστα γλαυκί.

## Κεφάλαιο 23

Ἔστι δὲ καὶ ὁ πάρδαλος. Τοῦτο δὲ τὸ ὄρνεόν ἐστιν ἀγελαῖον ὡς ἐπὶ τὸ πολὺ, καὶ οὐκ ἔστι κατὰ ἓνα ἰδεῖν· τὸ δὲ χρῶμα σποδοειδὲς ὅλος, μέγεθος δὲ παραπλήσιος ἐκείνοις, εὖπους δὲ καὶ οὐ κακόπτερος, φωνὴ δὲ πολλή καὶ οὐ βαρεῖα.

Κολλυρίων δὲ τὰ αὐτὰ ἐσθίει τῷ κοτύφῳ· τὸ δὲ μέγεθος καὶ τούτου ταῦτόν τοις πρότερον· ἀλίσκεται δὲ κατὰ χειμῶνα μάλιστα. Ταῦτα δὲ πάντα διὰ παντὸς φανερά ἐστιν.

Ἔτι δὲ τὰ κατὰ πόλεις εἰωθότα μάλιστα ζῆν, κόραξ καὶ κορώνη· καὶ γὰρ ταῦτ' αἰὲ φανερά, καὶ οὐ μεταβάλλει τοὺς τόπους οὐδὲ φωλεῖ.

## Κεφάλαιο 24

Κολοιῶν δ' ἐστὶν εἶδη τρία, ἓν μὲν ὁ κορακίας· οὗτος ὅσον κορώνη, φοινικόρυγχος· ἄλλος δ' ὁ λύκος καλούμενος· ἔτι δ' ὁ μικρός, ὁ βωμολόχος. Ἔστι δὲ καὶ ἄλλο γένος κολοιῶν περὶ τὴν Λυδίαν καὶ Φρυγίαν, ὃ στεγανόπουον ἐστίν.

## Κεφάλαιο 25

Κορυδάλων δ' ἐστὶ δύο γένη, ἡ μὲν ἑτέρα ἐπίγειος καὶ λόφον ἔχουσα, ἡ δ' ἑτέρα ἀγελαία καὶ οὐ σποράς ὥσπερ ἐκείνη, τὸ μέντοι χρῶμα ὅμοιον τῇ ἑτέρᾳ ἔχουσα, τὸ δὲ μέγεθος ἐλάττων· καὶ λόφον οὐκ ἔχει· ἐσθίεται δέ.

## Κεφάλαιο 26

Ἀσκαλώπας δ' ἐν τοῖς κήποις ἀλίσκεται ἔρκεσιν· τὸ μέγεθος ὅσον ἀλεκτορίς, τὸ ῥύγχος μακρόν, τὸ χρῶμα ὅμοιον ἀτταγῆνι· τρέχει δὲ ταχύ, καὶ φιλάνθρωπόν ἐστιν ἐπεικῶς.

## Κεφάλαιο 27

Ὁ δὲ ψάρος ἐστὶ ποικίλος· μέγεθος δ' ἐστὶν ἡλίκον κόττυφος.

Αἱ δ' ἴβιες αἱ ἐν Αἰγύπτῳ εἰσὶ μὲν διτταί, αἱ μὲν λευκαὶ αὐτῶν, αἱ δὲ μέλαιναι. Ἐν μὲν οὖν τῇ ἄλλῃ Αἰγύπτῳ αἱ λευκαὶ εἰσι, πλὴν ἐν Πηλουσίῳ οὐ

γίνονται· αἱ δὲ μέλαιναι ἐν τῇ ἄλλῃ Αἰγύπτῳ οὐκ εἰσίν, ἐν Πηλουσίῳ δ' εἰσίν.

## Κεφάλαιο 28

Σκῶπες δ' οἱ μὲν ἀεὶ πᾶσαν ὥραν εἰσί, καὶ καλοῦνται ἀεισκῶπες, καὶ οὐκ (618a.) ἐσθίονται διὰ τὸ ἄβρωτοι εἶναι· ἕτεροι δὲ γίνονται ἐνίοτε τοῦ φθινοπώρου, φαίνονται δ' ἐφ' ἡμέραν μίαν ἢ δύο τὸ πλεῖστον, καὶ εἰσὶν ἐδώδιμοι καὶ σφόδρα εὐδοκιμοῦσιν. Καὶ διαφέρουσι τῶν ἀεισκωπῶν καλουμένων οὗτοι ἄλλῳ μὲν ὥς εἰπεῖν οὐδενί, τῷ δὲ πάχει· καὶ οὗτοι μὲν εἰσὶν ἄφωνοι, ἐκεῖνοι δὲ φθέγγονται. Περὶ δὲ γενέσεως αὐτῶν ἥτις ἐστίν, οὐδὲν ὥπται, πλὴν ὅτι τοῖς ζευρυίοις φαίνονται· τοῦτο δὲ φανερόν.

## Κεφάλαιο 29

Ὁ δὲ κόκκυξ, ὥσπερ εἴρηται ἐν ἑτέροις, οὐ ποιεῖ νεοττιάν, ἀλλ' ἐν ἀλλοτρίαις τίκτει νεοττιαῖς, μάλιστα μὲν ἐν ταῖς τῶν φαβῶν καὶ ἐν ὑπολαΐδος καὶ κορύδου χαμαί, ἐπὶ δένδρου δ' ἐν τῇ τῆς χλωρίδος καλουμένης νεοττιᾷ. Τίκτει μὲν οὖν ἐν ὥόν, ἐπωάζει δ' οὐκ αὐτός, ἀλλ' ἐν οὗ ἂν τέκη νεοττιᾷ, οὗτος ὁ ὄρνις ἐκκολάπτει καὶ τρέφει, καὶ ὥς φασίν, ὅταν αὐξάνηται ὁ τοῦ κόκκυγος νεοττός, ἐκβάλλει τὰ αὐτῆς, καὶ ἀπόλλυνται οὕτως. Οἱ δὲ λέγουσιν ὥς καὶ ἀποκτείνασα ἢ τρέφουσα δίδωσι καταφαγεῖν· διὰ γὰρ τὸ καλὸν εἶναι τὸν τοῦ κόκκυγος νεοττὸν ἀποδοκιμάζει τὰ αὐτῆς.

Τὰ μὲν οὖν πλεῖστα τούτων ὁμολογοῦσιν αὐτόπται γεγενημένοι τινές· περὶ δὲ τῆς φθορᾶς τῆς τῶν νεοττῶν τῆς ὄρνιθος οὐχ ὡσαύτως πάντες λέγουσιν, ἀλλ' οἱ μὲν φασιν αὐτὸν ἐπιφοιτῶντα τὸν κόκκυγα κατεσθίειν τὰ τῆς ὑποδεξαμένης ὄρνιθος νεόττια, οἱ δὲ διὰ τὸ τῷ μεγέθει ὑπερέχειν τὸν νεοττὸν τοῦ κόκκυγος ὑποκάπτοντα τὰ προσφερόμενα φθάνειν, ὥστε λιμῶ τοὺς ἑτέρους ἀπόλλυσθαι νεοττούς, οἱ δὲ κρείττον' ὄντα ἀποκτινύναι συντρεφόμενον αὐτοῖς.

Δοκεῖ δ' ὁ κόκκυξ φρόνιμον ποιεῖσθαι τὴν τέκνωσιν· διὰ γὰρ τὸ συνειδέναι αὐτῷ τὴν δειλίαν καὶ ὅτι οὐκ ἂν δύναιτο βοηθῆσαι, διὰ τοῦτο ὥσπερ ὑποβολιμαίους ποιεῖ τοὺς ἑαυτοῦ νεοττούς, ἵνα σωθῶσιν. Τὴν γὰρ δειλίαν ὑπερβάλλει τοῦτο τὸ ὄρνεον· τίλλεται γὰρ ὑπὸ τῶν μικρῶν ὀρνέων, καὶ φεύγει αὐτά.

## Κεφάλαιο 30

Οἱ δ' ἄποδες, οὓς καλοῦσιν τινες κυψέλους, ὅτι μὲν ὅμοιοι ταῖς χελιδόσιν εἰσίν, εἴρηται πρότερον· οὐ γὰρ ῥάδιον γινῶναι πρὸς τὴν χελιδόνα, πλὴν τῷ τὴν κνήμην ἔχειν δασεῖαν. Οὗτοι νεοττεύουσιν ἐν κυψελίσιν ἐκ πηλοῦ πεπλασμέναις μακραῖς, ὅσον εἴσδυσιν ἐχούσαις. Ἐν στεγνῷ δὲ ποιεῖται (618b.) τὰς νεοττίας ὑπὸ πέτραις καὶ σπηλαίοις, ὥστε καὶ τὰ θηρία καὶ τοὺς ἀνθρώπους διαφεύγειν.

Ὁ δὲ καλούμενος αἰγοθήλας ἐστὶ μὲν ὀρεινός, τὸ δὲ μέγεθος κοτύφου μὲν μικρῷ μείζων, κόκκυγος δ' ἐλάττων. Τίττει μὲν οὖν ὡς δύο ἢ τρία τὸ πλεῖστον, τὸ δ' ἥθος ἐστὶ βλακικός. Θηλάζει δὲ τὰς αἶγας προσπετόμενος, ὅθεν καὶ τοῦνομ' εἴληφεν· φασὶ δ', ὅταν θηλάσῃ τὸν μαστόν, ἀποσβέννυσθαι τε καὶ τὴν αἶγα ἀποτυφλοῦσθαι. Ἔστι δ' οὐκ ὀξυωπὸς τῆς ἡμέρας, ἀλλὰ τῆς νυκτὸς βλέπει.

### Κεφάλαιο 31

Οἱ δὲ κόρακες ἐν τοῖς μικροῖς χωρίοις, καὶ ὅπου μὴ ἱκανὴ τροφή πλείοσι, δύο μόνοι γίνονται· καὶ τοὺς ἑαυτῶν νεοττούς, ὅταν οἱοί τ' ὦσιν ἤδη πέτεσθαι, τὸ μὲν πρῶτον ἐκβάλλουσιν, ὕστερον δὲ καὶ ἐκ τοῦ τόπου ἐκδιώκουσιν.

Τίττει δ' ὁ κόραξ καὶ τέτταρα καὶ πέντε. Περὶ δὲ τοὺς χρόνους ἐν οἷς ἀπώλοντο οἱ Μηδίου ξένοι ἐν Φαρσάλῳ, ἐρημία ἐν τοῖς τόποις τοῖς περὶ Ἀθήνας καὶ Πελοπόννησον ἐγένετο κοράκων, ὡς ἐχόντων αἰσθησὶν τινα τῆς παρ' ἀλλήλων δηλώσεως.

### Κεφάλαιο 32

Τῶν δ' ἀετῶν ἐστὶ πλείονα γένη, ἐν μὲν ὁ καλούμενος πύγαργος· οὗτος κατὰ τὰ πεδία καὶ τὰ ἄλση καὶ περὶ τὰς πόλεις γίνεται· ἔνιοι δὲ καλοῦσιν νεβροφόνον αὐτόν. Πέτεται δὲ καὶ εἰς τὰ ὄρη καὶ εἰς τὴν ὕλην διὰ τὸ θάρσος· τὰ δὲ λοιπὰ γένη ὀλιγάκις εἰς πεδία καὶ εἰς ἄλση φοιτᾷ.

Ἄτερον δὲ γένος ἀετοῦ ἐστὶν ὃ πλάγγος καλεῖται, δεύτερος μεγέθει καὶ ῥώμῃ· οἰκεῖ δὲ βήσσας καὶ ἄγκη καὶ λίμνας, ἐπικαλεῖται δὲ νηττοφόνος καὶ μορφνός· οὐ καὶ Ὀμηρος μέμνηται ἐν τῇ τοῦ Πριάμου ἐξόδῳ.

Ἄτερος δὲ μέλας τὴν χροάν καὶ μέγεθος ἐλάχιστος, κράτιστος τούτων· οὗτος οἰκεῖ ὄρη καὶ ὕλας, καλεῖται δὲ μελανάετος καὶ λαγωφόνος. Ἐκτρέφει δὲ μόνος τὰ τέκνα οὗτος καὶ ἐξάγει. Ἔστι δ' ὠκυβόλος καὶ εὐθήμων καὶ

ἄφθονος καὶ ἄφοβος καὶ μάχιμος καὶ εὖφημος· οὐ γὰρ μινυρίζει οὐδὲ λέληκεν.

Ἔτι δ' ἕτερον γένος περκνόπτερος, λευκὴ κεφαλὴ, μεγέθει δὲ μέγιστος, πτερὰ δὲ βραχύτατα καὶ οὐροπύγιον πρόμηκες, γυπὶ ὅμοιος· ὀρειπέλαργος καλεῖται καὶ ὑπάετος. Οἰκεῖ δ' ἄλσῃ, τὰ μὲν κακὰ ταῦτ' ἔχων τοῖς ἄλλοις, τῶν δ' ἀγαθῶν (619a.) οὐδέν· ἀλίσκεται γὰρ καὶ διώκεται ὑπὸ κοράκων καὶ τῶν ἄλλων· βαρὺς γὰρ καὶ κακόβιος καὶ τὰ τεθνεῶτα φέρων, πεινῇ δ' ἀεὶ καὶ βοᾷ καὶ μινυρίζει.

Ἔτερον δὲ γένος ἐστὶν ἀετῶν οἱ καλούμενοι ἀλιάετοι. Οὗτοι δ' ἔχουσιν αὐχένα τε μέγαν καὶ παχὺν καὶ πτερὰ καμπύλα, οὐροπύγιον δὲ πλατὺ· οἰκοῦσι δὲ περὶ θάλατταν καὶ ἀκτάς, ἀρπάζοντες δὲ καὶ οὐ δυνάμενοι φέρειν πολλάκις καταφέρονται εἰς βυθόν.

Ἔτι δ' ἄλλο γένος ἐστὶν ἀετῶν οἱ καλούμενοι γνήσιοι. Φασὶ δὲ τούτους μόνους καὶ τῶν ἄλλων ὀρνίθων γνησίους εἶναι· τὰ γὰρ ἄλλα γένη μέμικται καὶ μεμοίχευται ὑπ' ἀλλήλων, καὶ τῶν ἀετῶν καὶ τῶν ἱεράκων καὶ τῶν ἐλαχίστων.

Ἔστι δ' οὗτος μέγιστος τῶν ἀετῶν ἀπάντων, μείζων τε τῆς φήνης, τῶν δ' ἀετῶν καὶ ἡμιόλιος, χρῶμα ξανθός. Φαίνεται δ' ὀλιγάκις, ὥσπερ ἡ καλουμένη κύμινδις.

Ὡρα δὲ τοῦ ἐργάζεσθαι ἀετῷ καὶ πέτεσθαι ἀπ' ἀρίστου μέχρι δείλης· τὸ γὰρ ἔωθεν κάθηται μέχρι ἀγορᾶς πληθυσούσης. Γηράσκουσι δὲ τοῖς ἀετοῖς τὸ ρύγχος αὐξάνεται τὸ ἄνω γαμψούμενον ἀεὶ μᾶλλον, καὶ τέλος λιμῷ ἀποθνήσκουσιν. Ἐπιλέγεται δὲ τις καὶ μῦθος, ὥς τοῦτο πάσχει διότι ἄνθρωπος ποτ' ὦν ἠδίκησε ξένον. Αποτίθεται δὲ τὴν περιττεύουσαν τροφὴν τοῖς νεοττοῖς· διὰ γὰρ τὸ μὴ εὖπορον εἶναι καθ' ἑκάστην ἡμέραν αὐτὴν πορίζεσθαι, ἐνίοτε οὐκ ἔχουσιν ἔξωθεν κομίζειν. Τύπτουσι δὲ ταῖς πτέρυξι καὶ τοῖς ὄνυξιν ἀμύπτουσιν, ἂν τινα λάβωσι σκευωρούμενον περὶ τὰς νεοττίας.

Ποιοῦνται δ' αὐτὰς οὐκ ἐν πεδινοῖς τόποις ἀλλ' ἐν ὑψηλοῖς, μάλιστα μὲν ἐν πέτραις ἀποκρήμνοις, οὐ μὲν ἀλλὰ καὶ ἐπὶ δένδρων. Τρέφουσι δὲ τοὺς νεοττοὺς ἕως ἂν δυνατοὶ γένωνται πέτεσθαι· τότε δ' ἐκ τῆς νεοττίας αὐτοὺς ἐκβάλλουσι καὶ ἐκ τοῦ τόπου τοῦ περὶ αὐτὴν παντὸς ἀπελαύνουσιν. Ἐπέχει γὰρ ἐν ζεῦγος ἀετῶν πολὺν τόπον· διόπερ οὐκ ἔῃ πλησίον αὐτῶν ἄλλους ἀύλισθηῖναι.

Τὴν δὲ θήραν ποιεῖται οὐκ ἐκ τῶν συνέγγυς τόπων τῆς νεοτιᾶς, ἀλλὰ συχνὸν ἀποπτάς. Ὅταν δὲ κυνηγήσῃ καὶ ἄρῃ, τίθησι καὶ οὐκ εὐθὺς φέρει, ἀλλ' ἀποπειραθεὶς τοῦ βάρους ἀφίησιν. Καὶ τοὺς δασύποδας δ' οὐκ (619b.) εὐθὺς λαμβάνει, ἀλλ' εἰς τὸ πεδῖον ἐάσας προελθεῖν· καὶ καταβαίνει δ' οὐκ εὐθὺς εἰς τὸ ἔδαφος, ἀλλ' ἀεὶ ἀπὸ τοῦ μείζονος ἐπὶ τὸ ἔλαττον κατὰ μικρόν. Ἄμφω δὲ ταῦτα ποιεῖ πρὸς ἀσφάλειαν τοῦ μὴ ἐνεδρεύεσθαι. Καὶ ἐφ' ὑψηλῶν καθίζει διὰ τὸ βραδέως αἵρεσθαι ἀπὸ τῆς γῆς. Ὑψοῦ δὲ πέτεται, ὅπως ἐπὶ πλεῖστον τόπον καθορᾷ· διόπερ θεῖον οἱ ἄνθρωποι φασιν εἶναι μόνον τῶν ὀρνέων.

Πάντες δ' οἱ γαμψώνυχοι ἥκιστα καθιζάνουσιν ἐπὶ πέτραις διὰ τὸ τῇ γαμψότητι ἐμπόδιον εἶναι τὴν σκληρότητα. Θηρεύει δὲ λαγῶς καὶ νεβροὺς καὶ ἀλώπεκας καὶ τὰ λοιπά, ὅσων κρατεῖν οἷός τ' ἐστίν. Μακρόβιος δ' ἐστίν· δῆλον δὲ τοῦτο ἐκ τοῦ τὴν νεοτιᾶν τὴν αὐτῶν ἐπὶ πολὺ διαμένειν.

### Κεφάλαιο 33

Ἐν δὲ Σκύθαις ὀρνίθων γένος ἐστὶν οὐκ ἔλαττον ὠτίδος· τοῦτο τίκτει δύο νεοττοὺς, οὐκ ἐπικάθηται δέ, ἀλλ' ἐν δέρματι λαγωοῦ ἢ ἀλώπεκος ἐγκρύψαν ἐᾷ. ἐπ' ἄκρῳ δὲ τῷ δένδρῳ φυλάττει, ὅταν μὴ τύχῃ θηρεύων· κἂν τις ἀναβαίνει, μάχεται καὶ τύπτει ταῖς πτέρυξιν, ὥσπερ οἱ ἀετοί.

Γλαῦκες δὲ καὶ νυκτικόρακες, καὶ τὰ λοιπὰ ὅσα τῆς ἡμέρας ἀδυνατεῖ βλέπειν, τῆς νυκτὸς μὲν θηρεύοντα τὴν τροφήν αὐτοῖς πορίζεται, οὐ κατὰ πᾶσαν δὲ τὴν νύκτα τοῦτο ποιεῖ, ἀλλ' ἄκρας ἐσπέρας καὶ περὶ ὄρθρον· θηρεύει δὲ μῦς καὶ σαύρας καὶ σφονδύλας καὶ τοιαῦτ' ἄλλα ζωδάρια.

Ἡ δὲ καλουμένη φήνη ἐστὶν εὐτεκνος καὶ εὐβίος καὶ δειπνοφόρος καὶ ἥπιος, καὶ τὰ τέκνα ἐκτρέφει καὶ τὰ αὐτῆς καὶ τὰ τοῦ ἀετοῦ. Καὶ γὰρ ταῦθ' ὅταν ἐκβάλλῃ ἐκεῖνος, ἀναλαβοῦσα τρέφει· ἐκβάλλει γὰρ ὁ ἀετὸς πρὸ ὥρας, ἔτι βίου δεόμενα καὶ οὕπω δυνάμενα πέτεσθαι. Ἐκβάλλειν δὲ δοκεῖ ὁ ἀετὸς τοὺς νεοττοὺς διὰ φθόνον· φύσει γὰρ ἐστὶ φθονερὸς καὶ ὀξύπεινος, ἔτι δὲ ὀξυλαβής. Λαμβάνει δὲ μέγα, ὅταν λάβῃ. Φθονεῖ οὖν τοῖς νεοττοῖς ἀδρυνομένοις, ὅτι φαγεῖν ἀγαθοὶ γίνονται, καὶ σπᾷ τοῖς ὄνουξιν. Μάχονται δὲ καὶ οἱ νεοττοὶ καὶ αὐτοὶ περὶ τῆς ἔδρας καὶ τῆς τροφῆς· ὁ δ' ἐκβάλλει καὶ κόπτει αὐτούς· οἱ δ' ἐκβαλλόμενοι βοῶσι, καὶ οὕτως ὑπολαμβάνει αὐτοὺς ἡ φήνη.

Ἡ δὲ φήνη (620a.) ἐπάργεμός τ' ἐστὶ καὶ πεπήρωται τοὺς ὀφθαλμούς· ὁ δ'

ἀλιάετος ὀξυωπέστατος μὲν ἔστι, καὶ τὰ τέκνα ἀναγκάζει ἔτι ψιλὰ ὄντα πρὸς τὸν ἥλιον βλέπειν, καὶ τὸν μὴ βουλόμενον κόπτει καὶ στρέφει, καὶ ὁποτέρου ἂν ἔμπροσθεν οἱ ὀφθαλμοὶ δακρῦσωσιν, τοῦτον ἀποκτείνει, τὸν δ' ἕτερον ἐκτρέφει. Διατρίβει δὲ περὶ θάλατταν, καὶ ζῇ θηρεύων τοὺς περὶ τὴν θάλατταν ὄρνιθας, ὥσπερ εἴρηται. Θηρεύει δ' ἀπολαμβάνων καθ' ἓνα, παρατηρῶν ἀναδυόμενον ἐκ τῆς θαλάττης. Ὅταν δ' ἴδῃ ὁ ὄρνις ἀνακύπτων τὸν ἀλιάετον, πάλιν φοβηθεὶς καταδύεται ὡς ἑτέρα ἀνακύψων· ὁ δὲ διὰ τὸ ὀξὺ ὄρᾶν ἀεὶ πέτεται, ἕως ἂν ἀποπνίξῃ ἢ λάβῃ μετέωρον. Ἀθρόαις γὰρ οὐκ ἐπιχειρεῖ· ῥαίνουσai γὰρ ἀπερύκουσι ταῖς πτέρυξιν.

## Κεφάλαιο 34

Οἱ δὲ κέφοι ἀλίσκονται τῷ ἀφρῶ· κάπτουσι γὰρ αὐτόν, διὸ προσραίνοντες θηρεύουσιν. Ἔχει δὲ τὴν μὲν ἄλλην σάρκα εὐώδη, τὸ δὲ πυγαῖον μόνον θινὸς ὄζει. Γίνονται δὲ πίονες.

## Κεφάλαιο 35

Τῶν δ' ἱεράκων κράτιστος μὲν ὁ τριόρχης, δεύτερος δ' ὁ αἰσάλων, τρίτος ὁ κίρκος. Ὁ δ' ἄστερίας καὶ ὁ φασσοφόνος καὶ ὁ πτέρνις ἄλλοῖοι. Οἱ δὲ πλατύτεροι ἱέρακες ὑποτριόρχαι καλοῦνται, ἄλλοι δὲ πέρκοι καὶ σπιζίαί, οἱ δ' ἔλαιοι καὶ οἱ φρυνολόγοι· οὗτοι εὐβιώτατοι καὶ χθαμαλοπτῆται.

Γένη δὲ τῶν ἱεράκων φασὶ τινες εἶναι οὐκ ἐλάττω τῶν δέκα, διαφέρουσι δ' ἀλλήλων· οἱ μὲν γὰρ αὐτῶν ἐπὶ τῆς γῆς καθημένην τύπτουσι τὴν περιστερὰν καὶ συναρπάζουσι, πετομένης δ' οὐ θιγγάνουσιν· οἱ δ' ἐπὶ δένδρου μὲν ἢ τινος ἄλλου καθημένην θηρεύουσιν, ἐπὶ τῆς γῆς δ' οὔσης ἢ μετεώρου οὐχ ἄπτονται· οἱ δ' οὔτ' ἐπὶ τῆς γῆς οὔτ' ἐπ' ἄλλου καθημένης θιγγάνουσιν, ἀλλὰ πετομένην πειρῶνται λαμβάνειν. Φασὶ δὲ καὶ τὰς περιστερὰς γινώσκειν ἕκαστον τούτων τῶν γενῶν, ὥστε προσπετομένων, ἐὰν μὲν ἢ τῶν μετεωροθήρων, μένειν ὅπου ἂν καθήμεναι τύχωσιν, ἐὰν δ' ἢ τῶν χαμαιτύπων ὁ προσπετόμενος, οὐχ ὑπομένειν ἀλλ' ἀναπέτεσθαι.

## Κεφάλαιο 36

Τὰ μὲν οὖν περὶ τοὺς ὄρνιθας τοῦτον ἔχει τὸν τρόπον· ἔστι δὲ καὶ ἐν τοῖς θαλαττίοις ζώοις πολλὰ τεχνικὰ θεωρῆσαι πρὸς τοὺς ἐκάστων βίους. Τὰ τε γὰρ θρυλούμενα περὶ τὸν βάτραχον τὸν ἀλιέα καλούμενόν ἐστιν ἀληθῆ, καὶ τὰ περὶ τὴν νάρκην. Ὁ μὲν γὰρ βάτραχος χρῆται τοῖς πρὸ τῶν ὀφθαλμῶν ἀποκρεμαμένοις, ὧν τὸ μὲν μῆκος ἐστὶ τριχοειδές, ἐπ' ἄκρου δὲ στρογγύλον, ὥσπερ προσκείμενον ἐκατέρω δελέατος χάριν· ὅταν οὖν ἐν τοῖς ἀμμώδεσιν ἢ θολώδεσιν ἀναταράξας κρύψη ἑαυτόν, ἐπαίρει τὰ τριχώδη, κοπτόντων δὲ τῶν ἰχθυδίων συγκατάγει μέχριπερ ἂν πρὸς τὸ στόμα προσαγάγῃ.

Ἡ τε νάρκη ναρκᾶν ποιοῦσα ὧν ἂν κρατήσῃν μέλλῃ ἰχθύων, τῷ ῥόπτρῳ ὃν ἔχει ἐν τῷ σώματι λαμβάνουσα, τρέφεται τούτοις, κατακρύπτεται δ' εἰς τὴν ἄμμον καὶ πηλόν, λαμβάνει δὲ τὰ ἐπινέοντα, ὅσα ἂν ναρκήσῃ ἐπιφερόμενα τῶν ἰχθύων· καὶ τούτου αὐτόπται γεγέννηται τινες. Κατακρύπτει δὲ καὶ ἡ τρυγῶν αὐτήν, πλὴν οὐχ ὁμοίως.

Σημεῖον δ' ὅτι τοῦτον τὸν τρόπον ζῶσιν· ἀλίσκονται γὰρ ἔχοντες κεστρέας πολλάκις ὄντες αὐτοὶ βραδύτατοι, τὸν τάχιστον τῶν ἰχθύων. Ἐπειτα ὁ μὲν βάτραχος, ὅταν μηκέτ' ἔχῃ τὰ ἐπὶ ταῖς θριξίν, ἀλίσκεται λεπτότερος· ἡ δὲ νάρκη φανερά ἐστὶ καὶ τοὺς ἀνθρώπους ποιοῦσα ναρκᾶν.

Καθαμμίζουσι δ' ἑαυτὰ καὶ ὄνος καὶ βάτος καὶ ψῆττα καὶ ῥίνη, καὶ ὅταν ποιήσῃ ἑαυτὰ ἄδηλα, εἴτα ῥαβδεύεται τοῖς ἐν τῷ στόματι, ἃ καλοῦσιν οἱ ἀλιεῖς ῥαβδία· προσέρχονται δ' ὡς πρὸς φυκία ἅφ' ὧν τρέφονται.

Ὅπου δ' ἂν ἀνθίας ὀραθῇ, οὐκ ἔστι θηρίον· ὧ καὶ σημείῳ χρώμενοι κατακολυμβῶσιν οἱ σπογγεῖς, καὶ καλοῦσιν ἱεροὺς ἰχθῦς τούτους· ἔοικε δὲ συμπτώματι, (621a.) καθάπερ ὅπου ἂν ἦ κοχλίας, σῦς οὐκ ἔστιν οὐδὲ πέρδιξ· κατεσθίουσι γὰρ ἄμφω τοὺς κοχλίας.

Ὁ δ' ὄφις ὁ θαλάττιος τὸ μὲν χρῶμα παραπλήσιον ἔχει τῷ γόγγρῳ καὶ τὸ σῶμα, πλὴν ἐστὶν ἀμαυρότερος καὶ σφοδρότερος· ἐὰν δὲ ληφθῇ καὶ ἀφεθῇ, εἰς τὴν ἄμμον καταδύεται ταχὺ τῷ ῥύγχει διατρυπήσας· ἔχει δ' ὀξύτερον τὸ στόμα τῶν ὄφεων.

Ἦν δὲ καλοῦσι σκολόπενδραν, ὅταν καταπίῃ τὸ ἄγκιστρον, ἐκτρέπεται τὰ ἐντὸς ἐκτός, ἕως ἂν ἐκβάλῃ τὸ ἄγκιστρον· εἴθ' οὕτως εἰστρέπεται πάλιν ἐντός. Βαδίζουσι δ' αἱ σκολόπενδραι πρὸς τὰ κνισώδη, ὥσπερ καὶ αἱ



χερσαῖαι. Τῷ μὲν οὖν στόματι οὐ δάκνουσι, τῇ δ' ἄψει καθ' ὅλον τὸ σῶμα, ὥσπερ αἱ καλούμεναι κνῖδαι.

Τῶν δ' ἰχθύων αἱ ὀνομαζόμεναι ἀλώπεκες ὅταν αἰσθωνται ὅτι τὸ ἄγκιστρον καταπεπώκασι, βοηθοῦσι πρὸς τοῦτο ὥσπερ καὶ ἡ σκολόπενδρα· ἀναδραμοῦσαι γὰρ ἐπὶ πολὺ πρὸς τὴν ὀρμιᾶν ἀποτρώγουσιν αὐτῆς· ἀλίσκονται γὰρ περὶ ἐνίους τόπους πολυαγκίστροις ἐν ῥοώδεσι καὶ βαθέσι τόποις.

Συστρέφονται δὲ καὶ αἱ ἀμίαι, ὅταν τι θηρίον ἴδωσι, καὶ κύκλῳ αὐτῶν περιnéουσιν αἱ μέγισται, κἂν ἄπτηταί τις, ἀμύνουσιν· ἔχουσι δ' ὀδόντας ἰσχυροὺς, καὶ ἤδη ὥπται καὶ ἄλλα καὶ λάμια ἐμπεσοῦσα καὶ καθελκωθεῖσα.

Τῶν δὲ ποταμίων ὁ γλάνις ὁ ἄρρην περὶ τὰ τέκνα ποιεῖται ἐπιμέλειαν πολλήν· ἡ μὲν γὰρ θήλεια τεκοῦσα ἀπαλλάττεται, ὁ δ' ἄρρην, οὗ ἂν πλεῖστον συστῇ τοῦ κυήματος, ὠοφυλακεῖ παραμένων, οὐδεμίαν ὠφέλειαν ἄλλην παρεχόμενος πλὴν ἐρύκων τᾶλλα ἰχθύδια μὴ διαρπάσῃ τὸν γόνον· καὶ τοῦτο ποιεῖ ἡμέρας καὶ τετταράκοντα καὶ πεντήκοντα, ἕως ἂν αὐξηθεὶς ὁ γόνος δύνῃται διαφεύγειν ἀπὸ τῶν ἄλλων ἰχθύων. Γινώσκεται δ' ὑπὸ τῶν ἀλιέων οὗ ἂν τύχῃ ὠοφυλακῶν· ἐρύκων γὰρ τὰ ἰχθύδια ἄττει καὶ ἤχον ποιεῖ καὶ μυγμόν. Οὕτω δὲ φιλοστόργως μένει πρὸς τοῖς ὠοῖς, ὥστε οἱ ἀλιεῖς ἐκάστοτε, ἂν ἐν βαθείαις ῥίζαις τὰ ὠὰ προσῇ, ἀνάγουσιν ὥς ἂν δύνωνται εἰς βραχύτατον· ὁ δ' ὅμως οὐκ ἀπολείπει τὸν γόνον, ἀλλ' ἐὰν μὲν <νέος> τύχῃ, ταχέως ὑπὸ τοῦ ἀγκίστρου ἐάλω διὰ τὸ ἀρπάζειν τὰ προσιόντα τῶν ἰχθυδίων, ἐὰν δ' ἡ συνήθης καὶ (621b.) ἀγκιστροφάγος, λείπει μὲν οὐδ' ὥς τὸν γόνον, τῷ δ' ὀδόντι τῷ σκληροτάτῳ συνδάκνων διαφθείρει τὰ ἄγκιστρα.

Ἄπαντα δὲ καὶ τὰ πλωτὰ καὶ τὰ μόνιμα τούτους νέμεται τοὺς τόπους ἐν οἷς ἂν φυῶσι, καὶ τοὺς ὁμοίους τούτοις· ἡ γὰρ οἰκεία τροφή ἐκάστων ἐν τούτοις ἐστίν. Πλανᾶται δὲ μάλιστα τὰ σαρκοφάγα· πάντα δὲ σχεδόν ἐστι σαρκοφάγα πλὴν ὀλίγων, οἷον κεστρέως καὶ σάλπης καὶ τρίγλης καὶ χαλκίδος. Τῇ δὲ καλουμένη φωλίδι ἡ μύξα, ἣν ἀφίησι, περιπλάττεται περὶ αὐτὴν καὶ γίνεται καθάπερ θαλάμη.

Τῶν δ' ὀστρακοδέρμων καὶ ἀπόδων ὁ κτεῖς μάλιστα καὶ πλεῖστον κινεῖται δι' αὐτοῦ πετόμενος· ἡ γὰρ πορφύρα ἐπὶ μικρότατον προέρχεται, καὶ τὰ ὅμοια ταύτῃ.

Ἐκ δὲ τοῦ εὐρίπου τοῦ ἐν Πύρρῃ οἱ ἰχθύες χειμῶνος μὲν ἐκπλέουσιν ἔξω,

πλὴν κωβιοῦ, διὰ τὸ ψῦχος (ψυχρότερος γάρ ἐστιν ὁ εὐριπος), ἅμα δὲ τῷ ἔαρι πάλιν εἰσπλέουσιν. Οὐ γίνεται δ' ἐν τῷ εὐρίπῳ οὔτε σκάρος οὔτε θρίπτα οὔτ' ἄλλο τῶν ἀκανθηροτέρων οὐδέν, οὐδὲ γαλεοὶ οὐδ' ἀκανθίαι οὐδὲ κάραβοι οὐδὲ πολύποδες οὐδὲ βολίταιναι οὐδ' ἄλλ' ἄττα· τῶν δ' ἐν τῷ εὐρίπῳ φυομένων οὐκ ἔστι πελάγιος ὁ λευκὸς κωβιός.

Ἀκμάζουσι δὲ τῶν ἰχθύων οἱ μὲν ὠοφόροι τοῦ ἔαρος, μέχρι οὗ ἂν ἐκτέκωσιν, οἱ δὲ ζωοτόκοι τοῦ μετοπώρου, καὶ πρὸς τούτοις κεστρεῖς καὶ τρίγλαι καὶ τᾶλλα τὰ τοιαῦτα πάντα. Περὶ δὲ τὴν Λέσβον καὶ τὰ πελάγια πάντα καὶ τὰ εὐριπώδη τίκτει ἐν τῷ εὐρίπῳ· ὀχεύονται μὲν γὰρ τοῦ μετοπώρου, τίκτουσι δὲ τοῦ ἔαρος. Ἔστι δὲ καὶ τὰ σελάχη κατὰ μὲν τὸ μετόπωρον ἀναμῖξ τὰ ἄρρενα τοῖς θήλεσι κατὰ τὴν ὀχείαν, τοῦ δ' ἔαρος εἰσπλέουσιν διακεκριμένα μέχρι οὗ ἂν ἐκτέκωσιν· κατὰ δὲ τὴν ὀχείαν ἀλίσκεται πολλὰ συνεζευγμένα.

Τῶν δὲ μαλακίων πανουργότατον μὲν ἡ σηπία, καὶ μόνη χρῆται τῷ θολῷ κρύψεως χάριν, καὶ οὐ μόνον φοβούμενη· ὁ δὲ πολύπους καὶ ἡ τευθὶς διὰ φόβον ἀφίησι τὸν θολόν. Ἀφίησι δὲ ταῦτα πάντα οὐδέποτε ἀθρόον τὸν θολόν· καὶ ὅταν ἀφῇ, αὐξάνεται πάλιν.

Ἡ δὲ σηπία, ὥσπερ εἴρηται, τῷ τε θολῷ πολλάκις χρῆται κρύψεως χάριν, καὶ προδείξασα εἰς τὸ πρόσθεν (622a.) ἀναστρέφεται εἰς τὸν θολόν· ἔτι δὲ θηρεύει τοῖς μακροῖς τοῖς ἀποτείνουσιν οὐ μόνον τὰ μικρὰ τῶν ἰχθυδίων, ἀλλὰ καὶ κεστρέας πολλάκις.

Ὁ δὲ πολύπους ἀνόητον μὲν ἐστὶ (καὶ γὰρ πρὸς τὴν χεῖρα βαδίζει τοῦ ἀνθρώπου καθιεμένην), οἰκονομικὸς δ' ἐστίν· πάντα γὰρ συλλέγει μὲν εἰς τὴν θαλάμην, οὗ τυγχάνει κατοικῶν, ὅταν δὲ καταναλώσῃ τὰ χρησιμώτατα, ἐκβάλλει τὰ ὄστρακα καὶ τὰ κελύφια τῶν καρκίνων καὶ κογχυλίων καὶ τὰς ἀκάνθας τῶν ἰχθυδίων· καὶ θηρεύει τοὺς ἰχθῦς τὸ χρῶμα μεταβάλλων καὶ ποιῶν ὅμοιον οἷς ἂν πλησιάζῃ λίθοις. Τὸ δ' αὐτὸ ποιεῖ καὶ φοβηθεῖς. Λέγεται δ' ὑπὸ τινων ὡς καὶ ἡ σηπία τοῦτο ποιεῖ· παρόμοιον γὰρ φασὶ τὸ χρῶμα ποιεῖν τὸ αὐτῆς τῷ τόπῳ περὶ ὃν διατρίβει. Τῶν δ' ἰχθύων τοῦτο ποιεῖ μόνον ἡ ῥίνη· μεταβάλλει γὰρ τὴν χροάν ὥσπερ ὁ πολύπους.

Τὸ μὲν οὖν πλεῖστον γένος τῶν πολυπόδων οὐ διετίζει· καὶ γὰρ φύσει συντηκτικόν ἐστίν· σημεῖον δ' ἐστίν, πλούμενος γὰρ ἀφίησιν αἰεὶ τι καὶ τέλος ἀφανίζεται. Αἱ δὲ θήλειαι μετὰ τὸν τόκον τοῦτο πάσχουσι μᾶλλον, καὶ γίνονται μωραί, καὶ οὔτε κυματιζόμεναι αἰσθάνονται, λαβεῖν τε τῇ χειρὶ κατακολυμβήσαντα ῥάδιον· βλεννώδεις τε γίνονται, καὶ οὐδὲ θηρεύουσιν ἔτι

προσκαθήμεναι. Οἱ δ' ἄρρενες σκυτώδεις τε γίνονται καὶ γλίσχροι.

Σημεῖον δὲ δοκεῖ εἶναι τοῦ μὴ διετίζειν, ὅτι μετὰ τὴν γένεσιν τῶν πολυποδίων ἔν γε τῷ θέρει καὶ πρὸς τὸ φθινόπωρον μέγαν πολύπου οὐκέτι ῥαδίον ἐστὶν ἰδεῖν, μικρὸν δὲ πρὸ τούτου τοῦ καιροῦ μέγιστοί εἰσιν οἱ πολύποδες. Ὄταν δὲ τὰ ὡὰ ἐκτέκωσιν, οὕτω καταγηράσκειν καὶ ἀσθενεῖς γίνεσθαι ἀμφοτέρους φασὶν ὥστε ὑπὸ τῶν ἰχθυδίων κατεσθίεσθαι καὶ ῥαδίως ἀποσπᾶσθαι ἀπὸ τῶν φωλεῶν· πρότερον δὲ τοιοῦτον οὐδὲν πάσχειν. Ἔτι δὲ τοὺς μικροὺς καὶ νέους τῶν πολυπόδων μετὰ τὴν γένεσιν οὐδὲν φασὶ τοιοῦτον πάσχειν, ἀλλ' ἰσχυροτέρους εἶναι τῶν μεζόνων. Οὐ διετίζουσι δ' οὐδ' αἱ σηπία. Εἰς δὲ τὸ ξηρὸν ἐξέρχεται μόνον τῶν μαλακίων ὁ πολύπους· πορεύεται δ' ἐπὶ τοῦ τραχείος, τὸ δὲ λεῖον φεύγει. Ἔστι δὲ τὰ μὲν ἄλλα ἰσχυρὸν τὸ ζῶον, τὸν δὲ τράχηλον ἀσθενές, ὅταν πιεσθῇ.

(622b.) Περὶ μὲν οὖν τῶν μαλακίων τοῦτον ἔχει τὸν τρόπον. Τὰς δὲ κόγχας φασὶ τὰς λεπτὰς καὶ τραχείας ποιεῖσθαι περὶ αὐτὰς οἶον θώρακα σκληρόν, καὶ τοῦτον μεῖζονα, ὅταν γίνωνται μεζίους, καὶ ἐκ τούτου ἐξιέναι ὥσπερ ἐκ φωλεοῦ τινὸς ἢ οἰκίας.

Ἔστι δὲ καὶ ὁ ναυτίλος πολύπους τῇ τε φύσει καὶ οἷς ποιεῖ περιπτός· ἐπιπλεῖ γὰρ ἐπὶ τῆς θαλάττης, τὴν ἀναφορὰν ποιησάμενος κάτωθεν ἐκ τοῦ βυθοῦ, καὶ ἀναφέρεται μὲν κατεστραμμένῳ τῷ ὀστράκῳ, ἵνα ῥᾶόν γ' ἀνέλθῃ καὶ κενῶ ναυτίλληται, ἐπιπολάσας δὲ μεταστρέφει. Ἔχει δὲ <τὸ> μεταξὺ τῶν πλεκτανῶν ἐπὶ τι συνυφές· ὅμοιον τοῖς στεγανόποσι τὸ μεταξὺ δακτύλων, πλὴν ἐκείνοις μὲν παχύ, τούτοις δὲ λεπτὸν τοῦτο καὶ ἀραχνιῶδές ἐστιν. Χρῆται δ' αὐτῷ, ὅταν πνεῦμά τι ἦ, ἰστίῳ· ἀντὶ πηδαλίων δὲ <δύο> τῶν πλεκτανῶν παρακαθήσιν· ἐὰν δὲ φοβηθῇ, καταδύνει τῆς θαλάττης μεστώσας τὸ ὀστρακον. Περὶ δὲ γενέσεως καὶ συναυξήσεως τοῦ ὀστράκου ἀκριβῶς μὲν οὐπω ὥπται, δοκεῖ δ' οὐκ ἐξ ὀχείας γίνεσθαι, ἀλλὰ φύεσθαι ὥσπερ ἄλλα κογχύλια. Οὐ δῆλον δὲ πῶ οὐδ' εἰ ἀποδυόμενος δύναται ζῆν.

## Κεφάλαιο 37

Τῶν δ' ἐντόμων ἐργατικώτατον ζῶον ἐστί, σχεδὸν δὲ καὶ πρὸς τὰλλα συγκρίνεσθαι πάντα, τό τε τῶν μυρμήκων γένος καὶ τὸ τῶν μελιττῶν, ἔτι δ' ἀνθρῆναι καὶ σφῆκες καὶ πάνθ' ὡς εἰπεῖν τὰ συγγενῇ τούτοις. Εἰσὶ δὲ καὶ τῶν ἀραχνίων οἱ γλαφυρώτατοι καὶ λαγαρώτατοι καὶ τεχνικώτατοι περὶ τὸν βίον. Ἡ μὲν οὖν τῶν μυρμήκων ἐργασία πᾶσιν ἐστὶν ἐπιπολῆς ἰδεῖν, καὶ ὡς αἰεὶ μίαν ἀτραπὸν πάντες βαδίζουσι, καὶ τὴν ἀπόθεσιν τῆς τροφῆς καὶ

ταμειάν· ἐργάζονται γὰρ καὶ τὰς νύκτας τὰς πανσελήνους.

## Κεφάλαιο 38

Τῶν δ' ἀραχνίων καὶ τῶν φαλαγγίων ἔστι πολλὰ γένη, τῶν μὲν δηκτικῶν φαλαγγίων δύο, τὸ μὲν ἕτερον ὅμοιον τοῖς καλουμένοις λύκοις μικρὸν καὶ ποικίλον καὶ ὀξύ καὶ πηδητικόν· καλεῖται δὲ ψύλλα· τὸ δ' ἕτερον μεῖζον, τὸ μὲν χρῶμα μέλαν, τὰ δὲ σκέλη τὰ πρόσθια μακρὰ ἔχον, καὶ τῇ κινήσει νωθρὸν καὶ βαδίζον ἡρέμα καὶ οὐ κρατερὸν καὶ οὐ πηδῶν. Τὰ δ' ἄλλα πάντα, ὅσα παρατίθενται οἱ φαρμακοπῶλαι, τὰ μὲν (623a.) οὐδεμίαν τὰ δ' ἀσθενῇ ποιεῖ τὴν δῆξιν. Ἄλλο δ' ἐστὶ τῶν καλουμένων λύκων γένος.

Τοῦτο μὲν οὖν τὸ μικρὸν οὐχ ὑφαίνει ἀράχνιον, τὸ δὲ μεῖζον τραχὺ καὶ φαῦλον πρὸς τῇ γῇ καὶ ταῖς αἱμασιαῖς· ἐπὶ τοῖς στομίοις δ' ἀεὶ ποιεῖ τὸ ἀράχνιον, καὶ ἔνδον ἔχον τὰς ἀρχὰς τηρεῖ, ἕως ἂν ἐμπεσόν τι κινήσῃ· ἔπειτα προσέρχεται. Τὸ δὲ ποικίλον ὑπὸ τοῖς δένδρεσι ποιεῖται μικρὸν καὶ φαῦλον ἀράχνιον.

Ἄλλο δ' ἐστὶ τρίτον τούτων σοφώτατον καὶ γλαφυρώτατον· ὑφαίνει γὰρ πρῶτον μὲν διατεῖναν πρὸς τὰ πέρατα πανταχόθεν, εἴτα στημονίζεται ἀπὸ τοῦ μέσου (λαμβάνει δὲ τὸ μέσον ἱκανῶς), ἐπὶ δὲ τούτοις ὥσπερ κρόκας ἐμβάλλει, εἴτα συνυφαίνει. Τὴν μὲν οὖν κοίτην καὶ τὴν ἀπόθεσιν τῆς θήρας ἄλλοθι ποιεῖται, τὴν δὲ θήραν ἐπὶ τοῦ μέσου τηροῦσα· κᾶπειθ' ὅταν ἐμπέσῃ τι, κινηθέντος τοῦ μέσου πρῶτον μὲν περιδεῖ καὶ περιελίττει τοῖς ἀραχνίοις, ἕως ἂν ἀχρεῖον ποιήσῃ, μετὰ δὲ ταῦτ' ἀπήνεγκεν ἀραμένη, καὶ ἐὰν μὲν τύχῃ πεινῶσα, ἐξεχύλισεν (αὕτη γὰρ ἡ ἀπόλαυσις), εἰ δὲ μή, πάλιν ὀρμᾷ πρὸς τὴν θήραν, ἀκεσαμένη πρῶτον τὸ διερρωγός· ἐὰν δέ τι μεταξὺ ἐμπέσῃ, πρῶτον ἐπὶ τὸ μέσον βαδίζει, κᾶκεῖθεν ἐπανέρχεται πρὸς τὸ ἐμπεσόν ὥσπερ ἀπ' ἀρχῆς. Ἐὰν δέ τι λυμήνηται τοῦ ἀραχνίου, πάλιν ἄρχεται τῆς ὑφῆς καταφερομένου τοῦ ἡλίου ἢ ἀνατέλλοντος διὰ τὸ μάλιστα ἐν ταύταις ταῖς ὥραις ἐμπίπτειν τὰ θηρία. Ἐργάζεται δὲ καὶ θηρεύει ἡ θήλεια· ὁ δ' ἄρρην συναπολαύει.

Τῶν δ' ἀραχνίων τῶν γλαφυρῶν καὶ ὑφαινόντων ἀράχνιον πυκνὸν δύο ἐστὶ γένη, τὸ μὲν μεῖζον τὸ δ' ἔλαττον. Τὸ μὲν οὖν μακροσκελέστερον κάτωθεν κρεμάμενον τηρεῖ, ὅπως ἂν μὴ φοβούμενα τὰ θηρία εὐλαβῇται ἄλλ' ἐμπίπτῃ ἄνω (διὰ γὰρ τὸ μέγεθος οὐκ εὐκρυφές ἐστι), τὸ δὲ συμμετρότερον ἄνωθεν ἐπηλυγισάμενον τοῦ ἀραχνίου ὀπὴν μικράν.

Δύνανται δ' ἀφιέναι οἱ ἀράχνη τὸ ἀράχνηον εὐθὺς γενόμενοι, οὐκ ἔσωθεν ὡς ὃν περίττωμα, καθάπερ φησὶ Δημόκριτος, ἀλλ' ἀπὸ τοῦ σώματος οἷον φλοιόν, ἢ τὰ βάλλοντα ταῖς θριξίν, οἷον αἱ ὕστριχες. Ἐπιτίθεται δὲ καὶ περιελίττεται καὶ τοῖς μείζοσι ζώοις, ἐπεὶ καὶ ταῖς (623b.) σαύραις ταῖς μικραῖς ἐπιβάλλον περὶ τὸ σῶμα περιθέον ἀφίησιν, ἕως ἄν συλλάβῃ τὸ στόμα· τότε δ' ἤδη δάκνει προσελθόν.

## Κεφάλαιο 39

Καὶ περὶ μὲν τούτων τῶν ζώων τοῦτον ἔχει τὸν τρόπον.

Ἔστι δέ τι γένος τῶν ἐντόμων, ὃ ἐνὶ μὲν ὀνόματι ἀνώνυμόν ἐστιν, ἔχει δὲ πάντα τὴν μορφήν συγγενικήν· ἔστι δὲ ταῦτα ὅσα κηριοποιά, οἷον μέλιττα καὶ τὰ παραπλήσια τὴν μορφήν. Τούτων δ' ἐστὶ γένη ἑννέα, ὧν τὰ μὲν ἐξ ἀγελαῖα, μέλιττα, βασιλεῖς τῶν μελιττῶν, κηφὴν ὁ ἐν ταῖς μελίτταις, σφήξ ὁ ἐπέτειος, ἔτι δ' ἀνθρήνη καὶ τενθηρῶν· μοναδικὰ δὲ τρία, σειρήν ὁ μικρός, φαίος, ἄλλος σειρήν ὁ μείζων, ὁ μέλας καὶ ποικίλος, τρίτος δ' ὁ καλούμενος βομβύλιος, μέγιστος τούτων.

Οἱ μὲν οὖν μύρμηκες θηρεύουσι μὲν οὐδέν, τὰ δὲ πεποιημένα συλλέγουσιν· οἱ δ' ἀράχνη ποιοῦσι μὲν οὐδέν οὐδ' ἀποτίθενται, θηρεύουσι δὲ μόνον τὴν τροφήν· τῶν δ' ἑννέα γενῶν τῶν εἰρημένων περὶ μὲν τῶν λοιπῶν ὕστερον λεχθήσεται, αἱ δὲ μέλιττα θηρεύουσι μὲν οὐδέν, αὐτὰὶ δὲ ποιοῦνται καὶ ἀποτίθενται· ἔστι γὰρ αὐταῖς τὸ μέλι τροφή. Δῆλον δὲ ποιοῦσιν, ὅταν τὰ κηρία ἐπιχειρῶσιν οἱ μελιττουργοὶ ἐξαιρεῖν· θυμιώμεναι γὰρ καὶ σφόδρα πονοῦσαι ὑπὸ τοῦ καπνοῦ τότε μάλιστα τὸ μέλι ἐσθίουσιν, ἐν δὲ τῷ ἄλλῳ χρόνῳ οὐ σφόδρα ὀρῶνται, ὡς φειδόμεναι καὶ ἀποτιθέμεναι τροφῆς χάριν.

Ἔστι δ' αὐταῖς καὶ ἄλλη τροφή, ἣν καλοῦσιν τινες κήρινθον· ἔστι δὲ τοῦτο ὑποδεέστερον καὶ γλυκύτητα συκώδη ἔχον, κομίζουσι δὲ τοῦτο τοῖς σκέλεσι καθάπερ καὶ τὸν κηρόν.

Ἔστι δὲ περὶ τὴν ἐργασίαν αὐτῶν καὶ τὸν βίον πολλὴ ποικιλία. Ἐπειδὴν γὰρ παραδοθῇ αὐταῖς καθαρὸν τὸ σμῆνος, οἰκοδομοῦσι τὰ κηρία, φέρουσαι τῶν τ' ἄλλων ἀνθέων καὶ ἀπὸ τῶν δένδρων τὰ δάκρυα, ἰτέας τε καὶ πτελέας καὶ ἄλλων τῶν κολλωδεστάτων. Τούτῳ δὲ καὶ τὸ ἔδαφος διαχρίουσι τῶν ἄλλων θηρίων ἕνεκεν· καλοῦσι δ' οἱ μελιττουργοὶ τοῦτο κόλλησιν καὶ τὰς εἰσόδους δὲ παροικοδομοῦσιν, ἐὰν εὐρεῖται ὧσιν.

Πλάττουσι δὲ κηρία πρῶτον ἐν οἷς αὐταὶ γίνονται, εἴτ' ἐν οἷς οἱ καλούμενοι βασιλεῖς καὶ τὰ κηφήνια. Τὰ μὲν οὖν αὐτῶν ἀεὶ (624a.) πλάττουσι, τὰ δὲ τῶν βασιλέων ὅταν ἢ πολυγονία, τὰ δὲ κηφήνια ἐὰν μέλιτος ἀφθονία ἐπισημαίνῃ. Πλάττουσι δὲ τὰ μὲν τῶν βασιλέων πρὸς τοῖς αὐτῶν (μικρὰ δ' ἐστὶ ταῦτα), τὰ δὲ κηφήνια πρὸς αὐτά· ἐλάττω δ' ἐστὶ ταῦτα τῷ μεγέθει τῶν μελιττίων. Ἀρχονται δὲ τῶν ἰστῶν ἄνωθεν ἀπὸ τῆς ὀροφῆς τοῦ σμήνους, καὶ κάτω συνυφεῖς ποιοῦσιν ἕως τοῦ ἐδάφους ἰστοὺς πολλούς. Αἱ δὲ θυρίδες καὶ αἱ τοῦ μέλιτος καὶ τῶν σχαδόνων ἀμφίστομοι· περὶ γὰρ μίαν βάσιν δύο θυρίδες εἰσίν, ὥσπερ ἡ τῶν ἀμφικυπέλλων, ἡ μὲν ἐντὸς ἡ δ' ἐκτός. Αἱ δὲ περὶ τὰς ἀρχὰς τῶν κηρίων πρὸς τὰ σμήνη συνύφειαι, ὅσον ἐπὶ δύο ἢ τρεῖς στίχους κύκλῳ, βραχεῖαι καὶ κεναὶ μέλιτος· πληρέστερα δὲ τῶν κηρίων τὰ μάλιστα τῷ κηρῷ καταπεπλασμένα.

Περὶ δὲ τὸ στόμα τοῦ σμήνους τὸ μὲν πρῶτον τῆς εἰσόδου περιαλήλιπται μίτυ· τοῦτο δ' ἐστὶ μέλαν ἱκανῶς, ὥσπερ ἀποκάθαρμ' αὐταῖς τοῦ κηροῦ, καὶ τὴν ὁσμὴν δριμύ, φάρμακον δ' ἐστὶ τυμμάτων καὶ τῶν τοιούτων ἐμπυημάτων· ἡ δὲ συνεχὴς ἀλοιφή τούτῳ πισσόκηρος, ἀμβλύτερον καὶ ἥττον φαρμακῶδες τῆς μίτους.

Λέγουσι δὲ τινες τοὺς κηφήνας κηρία μὲν πλάττειν καθ' αὐτοὺς καὶ ἐν τῷ αὐτῷ σμήνῃ καὶ ἐν τῷ ἐνὶ κηρίῳ μεριζομένους πρὸς τὰς μελίττας, μελιτουργεῖν μέντοι οὐδέν, ἀλλὰ τρέφεσθαι τῷ τῶν μελιττῶν καὶ αὐτοὺς καὶ τοὺς νεοττοὺς. Διατρίβουσι δ' οἱ κηφήνες τὰ μὲν πολλὰ ἔνδον, ἐὰν δ' ἐκπετασθῶσι, προσφέρονται ῥύβδην ἄνω πρὸς τὸν οὐρανόν, ἐπιδινοῦντες αὐτοὺς καὶ ὥσπερ ἀπογυμνάζοντες· ὅταν δὲ τοῦτο δράσωσι, πάλιν εἰσελθόντες εὐωχοῦνται.

Οἱ δὲ βασιλεῖς οὐ πέτονται ἔξω, ἐὰν μὴ μετὰ ὅλου τοῦ ἐσμοῦ, οὔτ' ἐπὶ βοσκὴν οὔτ' ἄλλως. Φασὶ δὲ καὶ ἐὰν ἀποπλανηθῇ ὁ ἀφесμός, ἀνιχνευούσας μεταθεῖν ἕως ἂν εὕρωσι τὸν ἡγεμόνα τῇ ὁσμῇ. Λέγεται δὲ καὶ φέρεσθαι αὐτὸν ὑπὸ τοῦ ἐσμοῦ, ὅταν πέτεσθαι μὴ δύνηται· καὶ ἐὰν ἀπόληται, ἀπόλλυσθαι τὸν ἀφесμόν· ἐὰν δ' ἄρα χρόνον τινὰ διαμείνωσι καὶ κηρία ποιήσωσι, μέλι οὐκ ἐγγίνεσθαι καὶ αὐτὰς ταχὺ ἀπόλλυσθαι.

Τὸν δὲ κηρὸν ἀναλαμβάνουσιν αἱ μέλισσαι ἀριχόμεναι πρὸς τὰ βρύα ὀξέως τοῖς (624b.) ἔμπροσθεν ποσί· τούτους δ' ἐκμάττουσιν εἰς τοὺς μέσους, τοὺς δὲ μέσους εἰς τὰ βλαισὰ τῶν ὀπισθίων· καὶ οὕτω γεμισθεῖσαι ἀποπέτονται, καὶ δῆλαί εἰσι βαρυνόμεναι. Καθ' ἐκάστην δὲ πτῆσιν οὐ βαδίζει ἡ μέλιττα ἐφ' ἕτερα τῷ εἶδει ἄνθη, οἷον ἀπὸ ἴου ἐπὶ ἴον, καὶ οὐ θιγγάνει ἄλλου γε, ἕως ἂν

εἰς τὸ σμῆνος εἰσπετασθῇ. Ὅταν δ' εἰς τὸ σμῆνος ἀφίκωνται, ἀποσεύονται, καὶ παρακολουθοῦσιν ἑκάστη τρεῖς ἢ τέτταρες. Τὸ δὲ λαμβανόμενον οὐ ῥάδιόν ἐστιν ἰδεῖν· οὐδὲ τὴν ἐργασίαν ὄντινα τρόπον ποιοῦνται, οὐκ ὥπται· τοῦ δὲ κηροῦ ἡ ἀνάληψις τεθεώρηται ἐπὶ τῶν ἐλαιῶν, διὰ πυκνότητα τῶν φύλλων ἐν ταύτῳ διαμενουσῶν πλείω χρόνον.

Μετὰ δὲ τοῦτο νεοττεύουσιν. Οὐδὲν δὲ κωλύει ἐν τῷ αὐτῷ κηρίῳ εἶναι νεοττοὺς καὶ μέλι καὶ κηφῆνας.

Ἐὰν μὲν οὖν ὁ ἡγεμὼν ζῇ, χωρὶς φασὶ τοὺς κηφῆνας γίνεσθαι, εἰ δὲ μή, ἐν τοῖς τῶν μελιττῶν κυττάροις γεννᾶσθαι ὑπὸ τῶν μελιττῶν, καὶ γίνεσθαι τούτους θυμικωτέρους· διὸ καὶ καλεῖσθαι κεντρωτούς, οὐκ ἔχοντας κέντρον, ἀλλ' ὅτι βούλονται μὲν οὐ δύνανται δὲ βάλλειν. Εἰσὶ δὲ μείζους οἱ τῶν κηφῆνων κύτταροι. Ἀναπλάττουσι δ' ὅτε μὲν καὶ αὐτὰ καθ' αὐτὰ τὰ κηρία τὰ τῶν κηφῆνων, ὥς ἐπὶ τὸ πολὺ δ' ἐν τοῖς τῶν μελιττῶν· διὸ καὶ ἀποτέμνουσιν.

Εἰσὶ δὲ γένη τῶν μελιττῶν πλείω, καθάπερ εἴρηται πρότερον, δύο μὲν ἡγεμόνων, ὁ μὲν βελτίων πυρρός, ὁ δ' ἕτερος μέλας καὶ ποικιλώτερος, τὸ δὲ μέγεθος διπλάσιος τῆς χρηστῆς μελίττης. Ἡ δ' ἀρίστη μικρά, στρογγύλη καὶ ποικίλη, ἄλλη μακρά, ὁμοία τῇ ἀνθρώπῃ. Ἑτέρος ὁ φῶρ καλούμενος, μέλας, πλατυγαστῶρ. Ἔτι δ' ὁ κηφῆν· οὗτος μέγιστος πάντων, ἄκεντρος δὲ καὶ νωθρός.

Διαφέρουσι δ' αἱ γινόμεναι τῶν μελιττῶν αἱ τ' ἀπὸ τῶν τὰ ἡμέρα νεμομένων καὶ ἀπὸ τῶν τὰ ὄρεινά· εἰσὶ γὰρ αἱ ἀπὸ τῶν ὑλονόμων δασύτεραι καὶ ἐλάττους καὶ ἐργατικώτεραι καὶ χαλεπώτεραι.

Αἱ μὲν οὖν χρησταὶ μέλιτται ἐργάζονται τὰ τε κηρία ὁμαλὰ καὶ τὸ ἐπιπολῆς κάλυμμα πᾶν λεῖον, ἔτι δ' ἐν εἶδος τοῦ κηρίου, οἷον ἅπαν μέλι ἢ νεοττοὺς ἢ κηφῆνας· ἐὰν δὲ συμβῇ ὥστ' ἐν τῷ αὐτῷ κηρίῳ ἅπαντα ποιεῖν αὐτά, ἔσται ἐφεξῆς ἐν εἶδος εἰργασμένον διὰ (625a.) τέλους. Αἱ δὲ μακρὰι τὰ τε κηρία ποιοῦσιν ἀνώμαλα καὶ τὸ κάλυμμα ἀνωδηκός, ὅμοιον τῷ τῆς ἀνθρώπῃς, ἔτι δὲ τὸν γόνον καὶ τᾶλλα οὐ τεταγμένα ἀλλ' ὥς ἂν τύχη· γίνονται δ' ἐξ αὐτῶν οἱ τε πονηροὶ ἡγεμόνες καὶ κηφῆνες πολλοὶ καὶ οἱ φῶρες καλούμενοι, μέλι δ' ἢ πάνυ βραχὺ ἢ οὐδέν.

Ἐπικάθηνται δ' ἐπὶ τοῖς κηρίοις αἱ μέλιτται καὶ συμπέττουσιν· ἐὰν δὲ τοῦτο μὴ ποιῶσι, θείρεσθαί φασὶ τὰ κηρία καὶ ἀραχνιοῦσθαι. Καὶ ἐὰν μὲν τὸ

λοιπὸν δύνωνται κατέχειν ἐπικαθήμενοι, τοῦθ' ὥσπερ ἔκβρωμα γίνεται, εἰ δὲ μή, ἀπόλλυται ὅλα. Γίνεται δὲ σκολήκια ἐν τοῖς φθειρομένοις, ἃ πτερούμενα ἐκπέταται.

Καὶ τὰ πίπτοντα δὲ τῶν κηρίων ὀρθοῦσιν αἱ μέλιτται, καὶ ὑφιστᾷσιν ἐρείσματα, ὅπως ἂν δύνωνται ὑπέναι· ὅταν γὰρ μὴ ἔχωσιν ὁδὸν ἢ προσπορεύσονται, οὐ προσκαθίζουσιν, εἴτ' ἀραχνιοῦται.

Τοῦ δὲ φωρὸς καὶ κηφῆνος γενομένων οὐδέν ἐστιν ἔργον, τὰ δὲ τῶν ἄλλων βλάπτουσιν. Ἀλισκόμενοι δὲ θνήσκουσιν ὑπὸ τῶν χρηστῶν μελιττῶν. Κτείνουσι δ' αὗται σφόδρα καὶ τῶν ἡγεμόνων τοὺς πολλούς, καὶ μᾶλλον τοὺς πονηρούς, ἵνα μὴ πολλοὶ ὄντες διασπῶσι τὸν ἑσμόν. Κτείνουσι δὲ μάλιστα, ὅταν μὴ πολύγονον ἢ τὸ σμήνος μηδὲ ἀφέσεις μέλλωσι γίνεσθαι· ἐν γὰρ τούτοις τοῖς καιροῖς καὶ τὰ κηρία διαφθείρουσι τὰ τῶν βασιλέων, ἐὰν ἢ παρεσκευασμένα, ὡς ἐξαγωγέων ὄντων.

Διαφθείρουσι δὲ καὶ τὰ τῶν κηφῆνων, ἐὰν ὑποφαίνῃ ἀπορία μέλιτος καὶ μὴ εὐμελιτῇ τὰ σμήνη· καὶ τοῖς ἐξαίρουσι περὶ τοῦ μέλιτος τότε μάχονται μάλιστα, καὶ τοὺς ὑπάρχοντας τῶν κηφῆνων ἐκβάλλουσι, καὶ πολλάκις ὀρῶνται ἐν τῷ τεύχει ἀποκαθήμεναι.

Πολεμοῦσι δὲ σφόδρα αἱ μικραὶ τῷ γένει τῷ μακρῷ, καὶ πειρῶνται ἐκβάλλειν ἐκ τῶν σμηνῶν· κἂν ἐπικρατήσωσι, τοῦτο δοκεῖ ὑπερβολῇ γίνεσθαι ἀγαθὸν σμήνος. Αἱ δ' ἕτεραι ἂν γένωνται αὐταὶ ἐφ' ἑαυτῶν, ἀργοῦσί τε καὶ τελέως οὐδὲν ποιοῦσιν ἀγαθόν, ἀπόλλυνται δὲ καὶ αὐταὶ πρὸ τοῦ φθινοπώρου. Ὅσας δὲ κτείνουσιν αἱ χρησταὶ μέλιτται, πειρῶνται μὲν ἔξω τοῦ σμήνους τοῦτο πράττειν· ἐὰν δ' ἔσω τις ἀποθάνῃ, ἐξάγουσιν ὁμοίως.

Οἱ δὲ φῶρες καλούμενοι κακουργοῦσι μὲν καὶ (625b.) τὰ παρ' αὐτοῖς κηρία, εἰσέρχονται δέ, ἐὰν λάθωσι, καὶ εἰς τὰ ἀλλότρια· ἐὰν δὲ ληφθῶσι, θνήσκουσιν. Ἔργον δ' ἐστὶ λαθεῖν· ἐπὶ τε γὰρ εἰσόδῳ ἐκάστη φύλακές εἰσιν, αὐτός τε ἐὰν εἰσελθὼν λάθῃ, διὰ τὸ ὑπερπεπληῆσθαι οὐ δύναται πέτεσθαι, ἀλλὰ πρὸ τοῦ σμήνους κυλίνεται, ὥστ' ἔργον ἐστὶν αὐτῷ ἐκφυγεῖν.

Οἱ δὲ βασιλεῖς αὐτοὶ μὲν οὐχ ὀρῶνται ἔξω ἄλλως ἢ μετ' ἀφέσεως· ἐν δὲ ταῖς ἀφέσεσιν αἱ λοιπαὶ περὶ τοῦτον συνεσπειραμένοι φαίνονται. Ὅταν δ' ἄφεσις μέλλῃ γίνεσθαι, φωνὴ μονῶτις καὶ ἴδιος γίνεται ἐπὶ τινος ἡμέρας, καὶ πρὸ δύο ἢ τριῶν ἡμερῶν ὀλίγαι πέτονται περὶ τὸ σμήνος· εἰ δὲ γίνεται καὶ ὁ βασιλεὺς ἐν ταύταις, οὐκ ὥπταί πω διὰ τὸ μὴ ῥάδιον εἶναι. Ὅταν δ' ἀθροισθῶσιν,



ἀποπέτονται καὶ χωρίζονται καθ' ἕκαστον τῶν βασιλέων αἱ ἄλλαι· ἐὰν δὲ τύχωσιν ὀλίγαι πολλαῖς ἐγγὺς καθεζόμεναι, μετανίστανται αἱ ὀλίγαι πρὸς τὰς πολλὰς, καὶ τὸν βασιλέα ὃν ἀπέλιπον, ἐὰν συνακολουθήσῃ, διαφθείρουσιν. Τὰ μὲν οὖν περὶ τὴν ἀπόλειψιν καὶ ἄφεσιν τοῦτον συμβαίνει γίνεσθαι τὸν τρόπον.

Εἰσὶ δ' αὐταῖς τεταγμένοι ἐφ' ἕκαστον τῶν ἔργων, οἷον αἱ μὲν ἀνθοφοροῦσιν, αἱ δ' ὑδροφοροῦσιν, αἱ δὲ λεαίνουσι καὶ κατορθοῦσι τὰ κηρία. Φέρει δ' ὕδωρ, ὅταν τεκνοτροφῇ. Πρὸς σάρκα δ' οὐδενὸς καθίζει, οὐδ' ὀψοφαγεῖ. Χρόνος δ' αὐταῖς οὐκ ἔστιν εἰθισμένος ἀφ' ὅτου ἄρχονται ἐργάζεσθαι· ἀλλ' ἐὰν τὰπιτήδεια ἔχωσι καὶ εὖ διάγωσι, μᾶλλον ἐν ὥρᾳ τοῦ ἔτους ἐγχειροῦσι τῇ ἐργασίᾳ, καὶ ὅταν εὐδία ᾖ, συνεχῶς ἐργάζονται. Καὶ εὐθύς δὲ νέα οὔσα, ὅταν ἐκδύῃ, ἐργάζεται τριταία, ἐὰν ἔχῃ τροφήν. Καὶ ὅταν ἐσμὸς προκάθηται, ἀποτρέπονται ἔναι ἐπὶ τροφήν, εἴτ' ἐπανέρχονται πάλιν.

Ἐν δὲ τοῖς εὐθηνοῦσι τῶν σμηνῶν ἐκλείπει ὁ γόνος τῶν μελιττῶν περὶ τεττάρακονθ' ἡμέρας μόνον τὰς μετὰ χειμερινὰς τροπὰς. Ἐπειδὴ δ' ἠϋξημένοι ὦσιν οἱ νεοττοί, τροφήν αὐτοῖς παραθεῖσαι καταχρίουσιν· ὅταν δ' ᾖ δυνατός, αὐτὸς διελὼν τὸ κάλυμμα ἐξέρχεται. Τὰ δὲ γινόμενα θηρία ἐν τοῖς σμήνεσι καὶ λυμαινόμενα τὰ κηρία αἱ μὲν χρησταὶ μέλιτται ἐκκαθαίρουσιν, αἱ δ' ἕτεραι διὰ κακίαν περιορῶσιν (626a.) ἀπολλύμενα τὰ ἔργα αὐτῶν.

Ὅταν δὲ τὰ κηρία ἐξαιρῶσιν οἱ μελιττουργοί, ἀπολείπουσιν αὐταῖς τροφήν διὰ χειμῶνος, ἥ ἐὰν μὲν διαρκὴς ᾖ, σώζεται τὸ σμῆνος, εἰ δὲ μὴ, ἐὰν μὲν χειμῶν ᾖ, αὐτοῦ θνήσκουσιν, εὐδιῶν δ' οὐσῶν ἐκλείπουσι τὸ σμῆνος. Τροφῇ δὲ χρῶνται μέλιτι καὶ θέρους καὶ χειμῶνος· τίθενται δὲ καὶ ἄλλην τροφήν ἐμφερῇ τῷ κηρῷ τὴν σκληρότητα, ἣν ὀνομάζουσι τινες σανδαράκην.

Ἄδικοῦσι δ' αὐτὰς μάλιστα οἱ τε σφῆκες καὶ οἱ αἰγίθαλοι καλούμενοι τὰ ὄρνεα, ἔτι δὲ χελιδῶν καὶ μέροψ. Θηρεύουσι δὲ καὶ οἱ τελματιαῖοι βάτραχοι πρὸς τὸ ὕδωρ αὐτὰς ἀπαντῶσας· διόπερ καὶ τούτους οἱ μελισσεῖς ἐκ τῶν τελμάτων, ἀφ' ὧν ὑδρεύονται αἱ μέλιτται, θηρεύουσι, καὶ τὰς σφηκίας καὶ τὰς χελιδόνας τὰς πλησίον τῶν σμηνῶν ἐξαιροῦσι, καὶ τὰς τῶν μερόπων νεοττίας. Οὐδὲν δὲ φεύγουσι τῶν ζώων ἄλλ' ἢ ἑαυτάς. Ἡ δὲ μάχη αὐτῶν ἐστὶ καὶ πρὸς αὐτὰς καὶ πρὸς τοὺς σφῆκας· καὶ ἔξω μὲν οὗτ' ἀλλήλας ἀδικοῦσιν οὔτε τῶν ἄλλων οὐδέεν, τὰ δὲ πρὸς τῷ σμήνει ἀποκτείνουσιν, ὧν ἂν κρατήσωσιν.

Αἱ δὲ τύπτουσαι ἀπόλλυνται διὰ τὸ μὴ δύνασθαι τὸ κέντρον ἄνευ τοῦ ἐντέρου ἐξαιρεῖσθαι· πολλάκις γὰρ σώζεται, ἐὰν ὁ πληγεὶς ἐπιμελῇται καὶ τὸ κέντρον

ἐκθλίψη· τὸ δὲ κέντρον ἀποβαλοῦσα ἢ μέλιττα ἀποθνήσκει. Κτείνουσι δὲ βάλλουσαι τὰ μεγάλα τῶν ζώων, οἷον ἵππος ἤδη ἀπέθανεν ὑπὸ μελιττῶν. Ἦκιστα δὲ χαλεπαίνουν οἱ ἡγεμόνες καὶ τύπτουσιν.

Τὰς δ' ἀποθνησκούσας τῶν μελιττῶν ἐκκομίζουν ἔξω. Καὶ τᾶλλα δὲ καθαριώτατόν ἐστι τὸ ζῶον· διὸ καὶ τὸ περίττωμα πολλάκις ἀφιᾶσιν ἀποπετόμεναι, διὰ τὸ δυσῶδες εἶναι. Δυσχεραίνουν δ', ὥσπερ εἴρηται, ταῖς δυσῶδεσιν ὀσμαῖς καὶ ταῖς τῶν μύρων· διὸ καὶ τοὺς χρωμένους αὐτοῖς τύπτουσιν.

Ἀπόλλυνται δὲ διὰ τ' ἄλλα συμπτώματα, καὶ ὅταν οἱ ἡγεμόνες πολλοὶ γενόμενοι ἕκαστος αὐτῶν μέρος ἀπαγάγη. Απόλλυσι δὲ καὶ ὁ φρῦνος τὰς μελίττας· ἐπὶ τὰς εἰσόδους γὰρ ἐλθὼν φυσᾷ τε καὶ ἐπιτηρῶν ἐκπετομένας κατεσθίει· ὑπὸ μὲν οὖν τῶν μελιττῶν οὐδὲν δύναται κακὸν πάσχειν, ὃ δ' ἐπιμελόμενος (626b.) τῶν σμηνῶν κτείνει αὐτόν.

Τὸ δὲ γένος τὸ τῶν μελιττῶν ὃ εἴρηται ὅτι πονηρόν τε καὶ τραχέα τὰ κηρία ἐργάζεται, εἰσὶ τινες τῶν μελιττουργῶν οἳ φασὶ τὰς νέας μάλιστα τοῦτο ποιεῖν δι' ἀνεπιστημοσύνην· νέαι δ' εἰσὶν αἱ ἐπέτειοι. Οὐχ ὁμοίως δ' οὐδὲ κεντοῦσιν αἱ νέαι· διὸ οἱ ἔσμοι φέρονται· εἰσὶ γὰρ νέων μελιττῶν. Ὅταν δ' ὑπολίπη τὸ μέλι, τοὺς κηφῆνας ἐκβάλλουσι, καὶ παραβάλλουσι σῦκα καὶ τὰ γλυκέα αὐταῖς.

Τῶν δὲ μελιττῶν αἱ μὲν πρεσβύτεραι εἴσω ἐργάζονται, καὶ δασεῖαί εἰσι διὰ τὸ εἴσω μένειν, αἱ δὲ νέαι ἔξωθεν φέρουσι καὶ εἰσὶ λειότεραι. Καὶ τοὺς κηφῆνας δ' ἀποκτείνουσιν, ὅταν μηκέτι χωρῇ αὐταῖς ἐργαζομέναις· εἰσὶ δ' ἐν μυχῶ τοῦ σμήνους.

Ἦδη δὲ νοσήσαντός τινος σμήνους ἦλθόν τινες ἐπ' ἀλλότριον, καὶ μαχόμεναι νικῶσαι ἐξέφερον τὸ μέλι· ἐπεὶ δ' ἀπέκτεινεν ὁ μελιττουργός, οὕτως ἐπεξήεσαν αἱ ἕτεραι καὶ ἡμύνοντο, καὶ τὸν ἄνθρωπον οὐκ ἔτυπον. Τὰ δὲ νοσήματα ἐμπίπτει μάλιστα εἰς τὰ εὐθηνοῦντα τῶν σμηνῶν, ὃ τε καλούμενος κλῆρος· τοῦτο γίνεται ἐν τῷ ἐδάφει σκωλήκια μικρά, ἀφ' ὧν αὐξανομένων ὥσπερ ἀράχνια κατίσχει ὅλον τὸ σμήνος, καὶ σήπεται τὰ κηρία· ἄλλο δὲ νόσημα οἷον ἀργία τις γίνεται τῶν μελιττῶν καὶ δυσωδία τῶν σμηνῶν. Νομῇ δὲ ταῖς μελίτταις τὸ θύμον· ἄμεινον δὲ τὸ λευκὸν τοῦ ἐρυθροῦ. Τόπος δ' ἐν τῷ πνίγει μὴ ἄλσεινός, ἐν δὲ τῷ χειμῶνι ἄλσεινός. Νοσοῦσι δὲ μάλιστα, ὅταν ἐρυσιβώδη ἐργάζονται ὕλην. Ὅταν δ' ἄνεμος ἢ μέγας, φέρουσι λίθον ἐφ' ἑαυταῖς ἔρμα πρὸς τὸ πνεῦμα. Πίνουσι δ', ἂν μὲν ἢ ποταμὸς πλησίον,

οὐδαμόθεν ἄλλοθεν ἢ ἐντεῦθεν, θέμεναι τὸ ἄχθος πρῶτον· ἐὰν δὲ μὴ ᾗ, ἐτέρωθεν πίνουσαι ἀνεμοῦσι τὸ μέλι, καὶ εὐθύς ἐπ' ἔργον πορεύονται.

Τῇ δὲ τοῦ μέλιτος ἐργασία διττοὶ καιροὶ εἰσίν, ἕαρ καὶ μετόπωρον· ἥδιον δὲ καὶ λευκότερον καὶ τὸ σύνολον κάλλιον ἐστὶ τὸ ἐαρινὸν τοῦ μετοπωρινοῦ. Μέλι δὲ κάλλιον γίνεται ἐκ νέου κηροῦ καὶ ἐκ μόσχου· τὸ δὲ πυρρὸν αἷσχιον διὰ τὸ κηρίον· διαφθείρεται γὰρ ὥσπερ οἶνος ὑπ' ἀγγείου· διὸ δεῖ ξηραίνειν (627a.) αὐτό. Ὅταν δὲ τὸ θύμον ἀνθῇ καὶ πλήρες γίνηται τὸ κηρίον, οὐ πῆγνυται τοῦτο. Ἔστι δὲ καλὸν τὸ χρυσοειδές· τὸ δὲ λευκὸν οὐκ ἐκ θύμου εἰλικρινοῦς, ἀγαθὸν δὲ πρὸς ὀφθαλμοὺς καὶ ἔλκη. Τοῦ δὲ μέλιτος τὸ μὲν ἀσθενές ἀεὶ ἄνω ἐπιπολάζει, ὃ δεῖ ἀφαιρεῖν, τὸ δὲ καθαρὸν κάτω.

Ὅταν δ' ἡ ὕλη ἀνθῇ, κηρὸν ἐργάζονται· διὸ ἐκ τοῦ σίμβλου τότε' ἐξαιρετέον τὸν κηρὸν· ἐργάζονται γὰρ εὐθύς. Ἀφ' ὧν δὲ φέρουσιν, ἔστι τάδε, ἀτρακτυλλίς, μελίλωτον, ἀσφόδελος, μυρρίνη, φλεώς, ἄγνος, σπάρτον. Ὅταν δὲ τὸ θύμον ἐργάζωνται, ὕδωρ μιγνύουσι πρὶν τὸ κηρίον καταλείφειν. Ἀφοδεύουσι δ' αἱ μέλιτται πᾶσαι ἢ ἀποπετόμεναι, ὥσπερ εἴρηται, ἢ εἰς ἓν κηρίον.

Εἰσὶ δ' αἱ μικραὶ ἐργάτιδες μᾶλλον τῶν μεγάλων, ὥσπερ εἴρηται, ἔχουσι δὲ τὰ πτερὰ περιτετριμμένα καὶ χροιάν μέλαιναν, καὶ ἐπικεκαυμένα· αἱ δὲ φαναὶ καὶ λαμπραὶ, ὥσπερ γυναῖκες ἀργαί.

Δοκοῦσι δὲ χαίρειν αἱ μέλιτται καὶ τῷ κρότῳ, διὸ καὶ κροτοῦντές φασιν ἀθροίζειν αὐτάς εἰς τὸ σμῆνος ὀστράκοις τε καὶ ψήφοις· ἔστι μέντοι ἄδηλον ὅλως εἴ τι ἀκούουσιν, καὶ πότερον δι' ἡδονὴν τοῦτο ποιοῦσιν ἢ διὰ φόβον.

Ἐξελαύνουσι δὲ καὶ τὰς ἀργὰς αἱ μέλιτται καὶ τὰς μὴ φειδομένας. Διήρηνται δὲ τὰ ἔργα, ὥσπερ εἴρηται πρότερον, καὶ αἱ μὲν κηρὸν ἐργάζονται, αἱ δὲ τὸ μέλι, αἱ δ' ἐριθάκην· καὶ αἱ μὲν πλάττουσι κηρία, αἱ δὲ ὕδωρ φέρουσιν εἰς τοὺς κυττάρους καὶ μιγνύουσι τῷ μέλιτι, αἱ δ' ἐπ' ἔργον ἔρχονται. Ὅρθρια δὲ σιωπῶσιν, ἕως ἂν μία ἐγείρη βομβήσασα δις ἢ τρίς· τότε δ' ἐπ' ἔργον ἀθρόαι πέτονται, καὶ ἐλθοῦσαι πάλιν θορυβοῦσι τὸ πρῶτον, κατὰ μικρὸν δ' ἤττον, ἕως ἂν μία περιπετομένη βομβήσῃ, ὥσπερ σημαίνουσα καθεύδειν· εἴτ' ἐξαπίνης σιωπῶσιν.

Διαγινώσκεται δ' ἰσχύειν τὸ σμῆνος τῷ τὸν ψόφον εἶναι πολὺν καὶ κινεῖσθαι ἐξιούσας καὶ εἰσιούσας· τότε γὰρ σχαδόνας ἐργάζονται.

Πεινῶσι δὲ μάλισθ' ἥνικ' ἂν ἄρχωνται ἐκ τοῦ χειμῶνος. Ἀργότεραι δὲ γίνονται, ἐὰν πλεῖόν τις καταλίπη μέλι βλίττων· ἀλλὰ δεῖ πρὸς τὸ πλῆθος καταλείπειν τὰ κηρία· ἀθυμότερον δ' (627b.) ἐργάζονται κἂν ἐλάττω καταλειφθῇ. Ἀργότεραι δὲ γίνονται κἂν μέγα τὸ κυψέλιον ᾗ· ἀθυμότερον γὰρ πονοῦσιν. Βλίσσεται δὲ σμήνος χοᾶ ἢ τρία ἡμίχοα, τὰ δ' εὐθηνοῦντα δύο χοᾶς ἢ πέντε ἡμίχοα· τρεῖς δὲ χοᾶς ὀλίγα.

Πολέμιον δὲ πρόβατον ταῖς μελίτταις, καὶ οἱ σφῆκες, ὥσπερ εἴρηται καὶ πρότερον· θηρεύουσι δὲ τούτους οἱ μελιττουργοί, λοπάδα τιθέντες καὶ κρέας εἰς αὐτὴν ἐμβάλλοντες· ὅταν δὲ πολλοὶ ἐμπίπτωσιν, ἐπὶ τὸ πῦρ πωμάσαντες ἐπιτιθέασιν. Κηφῆνες δ' ὀλίγοι ἐνόντες ὠφελοῦσι τὸ σμήνος· ἐργατικωτέρας γὰρ ποιοῦσι τὰς μελίττας.

Προγινώσκουσι δὲ καὶ χειμῶνα καὶ ὕδωρ αἱ μέλιτται· σημεῖον δέ, οὐκ ἀποπέτονται γὰρ ἀλλ' ἐν τῇ εὐδίᾳ αὐτοῦ ἀνείλουσιν, ὥ γινώσκουσιν οἱ μελιττουργοί ὅτι χειμῶνα προσδέχονται. Ὅταν δὲ κρέμονται ἐξ ἀλλήλων ἐν τῷ σμήνει, σημεῖον γίνεται τοῦτο ὅτι ἀπολείψει τὸ σμήνος. Ἀλλὰ καταφυσῶσι τὸ σμήνος οἶνω γλυκεῖ οἱ μελιττουργοί, ὅταν τοῦτ' αἴσθωνται.

Φυτεύειν δὲ συμφέρει περὶ τὰ σμήνη ἀχράδας, κυάμους, πόαν Μηδικήν, Συρίαν, ὠχρους, μυρρίνην, μήκωνα, ἔρφυλλον, ἀμυγδαλῆν.

Γινώσκουσι δὲ τινες τῶν μελιττουργῶν τὰς ἑαυτῶν ἐν τῷ νομῷ ἄλευρα καταπάσαντες.

Ἐὰν δ' ἔαρ ὄψιον γένηται ἢ αὐχμός, καὶ ὅταν ἐρυσίβη, ἐλάττον' ἐργάζονται αἱ μέλιτται τὸν γόνον.

## Κεφάλαιο 40

Τὰ μὲν οὖν περὶ τὰς μελίττας τοῦτον ἔχει τὸν τρόπον, τῶν δὲ σφηκῶν ἐστὶ δύο γένη. Τούτων δ' οἱ μὲν ἄγριοι σπάνιοι, γίνονται δ' ἐν τοῖς ὄρεσι, καὶ τίκτουσιν οὐ κατὰ γῆς ἀλλ' ἐν ταῖς δρυσί, τὴν μὲν μορφήν μείζους καὶ προμηκέστεροι καὶ μελαγχρῶτες τῶν ἐτέρων μᾶλλον, ποικίλοι δὲ καὶ ἔγκεντροι πάντες καὶ ἀλκιμώτεροι, καὶ τὸ πλῆγμα ὀδυνηρότερον αὐτῶν ἢ ἐκείνων· καὶ γὰρ τὸ κέντρον ἀνάλογον μείζον τὸ τούτων. Οὗτοι μὲν οὖν διετίζουσι, καὶ ὀρῶνται καὶ τοῦ χειμῶνος ἐκ δρυῶν κοπτομένων ἐκπετόμενοι, ζῶσι δὲ φωλοῦντες τὸν χειμῶνα· ἡ δὲ διατριβὴ ἐν τοῖς ξύλοις. Εἰσὶ δ' αὐτῶν οἱ μὲν μῆτραι οἱ δ' ἐργάται, ὥσπερ καὶ τῶν ἡμερωτέρων.

Τίς δ' ἡ φύσις τοῦ ἐργάτου καὶ τῆς μήτρας, ἐπὶ τῶν (628a.) ἡμερωτέρων ἔσται δῆλον. Ἔστι γὰρ καὶ τῶν ἡμέρων σφηκῶν δύο γένη, οἱ μὲν ἡγεμόνες, οὓς καλοῦσι μήτρας, οἱ δ' ἐργάται. Εἰσὶ δὲ μείζους οἱ ἡγεμόνες πολὺ καὶ πραότεροι. Καὶ οἱ μὲν ἐργάται οὐ διετίζουσιν, ἀλλὰ πάντες ἀποθνήσκουσιν, ὅταν χειμῶν ἐπιπέσῃ (φανερὸν δ' ἐστὶ τοῦτο· τοῦ γὰρ χειμῶνος ἀρχομένου μὲν μωροὶ γίνονται οἱ ἐργάται αὐτῶν, περὶ δὲ τροπᾶς οὐ φαίνονται ὅλως), οἱ δ' ἡγεμόνες οἱ καλούμενοι μῆτραι ὀρῶνται δι' ὅλου τοῦ χειμῶνος καὶ κατὰ γῆς φωλεύουσιν· ἀροῦντες γὰρ καὶ σκάπτοντες ἐν τῷ χειμῶνι μήτρας μὲν πολλοὶ ἐωράκασιν, ἐργάτας δ' οὐδεῖς.

Ἡ δὲ γένεσις τῶν σφηκῶν ἐστὶ τοιάδε· οἱ ἡγεμόνες ὅταν λάβωσι τόπον εὐσκεπῇ ἐπιόντος τοῦ θέρους, πλάττονται τὰ κηρία καὶ συνίστανται οὓς καλοῦσι σφηκωνεῖς, ἱστοὺς μικροὺς, οἷον τετραθύρους ἢ ἐγγὺς τούτων, ἐν οἷς σφῆκες γίνονται καὶ οὐ μῆτραι. Τούτων δ' αὐξηθέντων πάλιν μετὰ τούτους ἄλλους μείζους συνίστανται, καὶ πάλιν τούτων αὐξηθέντων ἑτέρους, ὥστε τοῦ μετοπώρου τελευτῶντος πλεῖστα καὶ μέγιστα γίνεσθαι σφηκία, ἐν οἷς ὁ ἡγεμὼν, ἡ καλουμένη μήτρα, οὐκέτι σφῆκας γεννᾷ ἀλλὰ μήτρας. Γίνονται δ' οὗτοι ἄνω ἐπὶ τοῦ σφηκίου ἐπιπολῆς μείζους σκώληκες ἐν θυρίσι συνεχέσι τέτταρσιν ἢ μικρῷ πλείοσιν, παραπλησίως δ' ὥσπερ ἐν τοῖς κηρίοις τὰ τῶν ἡγεμόνων.

Ἐπειδὴν δὲ γένωνται οἱ ἐργάται σφῆκες ἐν τοῖς κηρίοις, οὐκέτι οἱ ἡγεμόνες ἐργάζονται, ἀλλ' οἱ ἐργάται αὐτοῖς τὴν τροφήν εἰσφέρουσιν· φανερὸν δ' ἐστὶ τοῦτο τῷ μηκέτι τοὺς ἡγεμόνας ἐκπέτεσθαι τῶν ἐργατῶν, ἀλλ' ἔνδον μένοντας ἡσυχάζειν. Πότερον δ' οἱ περυσिनὸι ἡγεμόνες, ὅταν νέους ποιήσωσιν ἡγεμόνας, ἀποθνήσκουσιν ὑπὸ τῶν νέων σφηκῶν, καὶ τοῦθ' ὁμοίως συμβαίνει, ἢ καὶ πλείω χρόνον δύνανται ζῆν, οὐδὲν ὥπται πω· οὐδὲ γῆρας οὔτε μήτρας οὔτε τῶν ἀγρίων σφηκῶν οὐδεῖς πω ὥπται ἐωρακῶς, οὐδ' ἄλλο τοιοῦτον οὐδὲν πάθος.

Ἔστι δ' ἡ μήτρα πλατὺ καὶ βαρὺ, καὶ παχύτερον καὶ μεῖζον τοῦ σφηκός, καὶ πρὸς τὴν πτῆσιν διὰ τὸ βάρος οὐκ ἄγαν ἰσχυρόν, οὐδὲ δύνανται ἐπὶ [τὸ] πολὺ πέτεσθαι· διὸ καὶ κάθηνται ἐν τοῖς σφηκίοις αἰεὶ, συμπλάττουσαι καὶ διοικοῦσαι τὰ ἔνδον. Ἐν δὲ τοῖς πλείστοις σφηκίοις ἔνεισιν αἱ μῆτραι καλούμεναι. Ἀμφισβητεῖται δὲ (628b.) πότερον ἔγκεντροί εἰσιν ἢ ἄκεντροι· εἰκόασι δ', ὥσπερ οἱ τῶν μελιττῶν ἡγεμόνες, ἔχειν μὲν, οὐκ ἐξιέναι δ' οὐδὲ βάλλειν.

Τῶν δὲ σφηκῶν οἱ μὲν ἄκεντροί εἰσιν ὥσπερ κηφῆνες, οἱ δ' ἔχουσι κέντρον.

Εἰσὶ δ' οἱ ἄκεντροι ἐλάττους καὶ ἀμενηνότεροι, καὶ οὐκ ἀμύνονται, οἱ δ' ἔχοντες τὰ κέντρα μείζους καὶ ἄλκιμοι· καὶ καλοῦσι τούτους ἔνιοι μὲν ἄρρενας, τοὺς δ' ἀκέντρους θηλείας. Πρὸς δὲ τὸν χειμῶνα ἀποβάλλειν δοκοῦσι πολλοὶ τῶν ἐχόντων τὰ κέντρα· αὐτόπτη δ' οὐπω ἐντετυχήκαμεν.

Γίνονται δ' οἱ σφῆκες μᾶλλον ἐν τοῖς αὐχμοῖς καὶ ἐν ταῖς χώραις ταῖς τραχείαις, γίνονται δ' ὑπὸ γῆν, καὶ τὰ κηρία πλάττουσιν ἐκ φορυτοῦ καὶ γῆς, ἀπὸ μιᾶς ἀρχῆς ἕκαστον ὥσπερ ἀπὸ ρίζης. Τροφῇ δὲ χρῶνται μὲν καὶ ἀπ' ἀνθῶν τινῶν καὶ καρπῶν, τὴν δὲ πλείστην ἀπὸ ζωοφαγίας.

Ὡμμένοι δ' εἰσὶν ὀχευόμενοι ἤδη καὶ τῶν ἄλλων τινές· εἰ δ' ἄκεντροι ἄμφω ἢ κέντρα ἔχοντες, ἢ ὁ μὲν ὁ δ' οὐ, οὐπω ὥπται. Καὶ τῶν ἀγρίων ὀχευόμενοι ὠμμένοι, καὶ ὁ ἕτερος ἔχων κέντρον· περὶ θατέρου δ' οὐκ ὥφθη.

Ὁ δὲ γόνος οὐ δοκεῖ ἐκ τοῦ τόκου γίνεσθαι, ἀλλ' εὐθὺς μείζων εἶναι ἢ ὡς σφηκὸς τόκος. Ἐὰν δὲ λάβῃ τις τῶν ποδῶν σφῆκα καὶ τοῖς πτεροῖς ἐᾷ βομβεῖν, προσπέτονται οἱ ἄκεντροι, οἱ δὲ τὰ κέντρα ἔχοντες οὐ προσπέτονται· ὧ τινὲς τεκμηρίῳ χρῶνται ὡς τῶν μὲν ἀρρένων ὄντων τῶν δὲ θηλειῶν. Ἀλίσκονται δ' ἐν τοῖς σπηλαίοις τοῦ χειμῶνος καὶ ἔχοντες ἔνιοι κέντρα καὶ οὐκ ἔχοντες.

Ἐργάζονται δ' οἱ μὲν μικρὰ καὶ ὀλίγα σφηκία, <οἱ δὲ πολλὰ καὶ μεγάλα>. Αἱ δὲ μῆτραι καλούμεναι ἀλίσκονται τραπέισης τῆς ὥρας, αἱ πολλὰ περὶ τὰς πτελέας· συλλέγουσι γὰρ τὰ γλίσχρα καὶ κομμιώδη. Γεγένηται δέ που μητρῶν πλῆθος γενομένων τῷ ἔμπροσθεν ἔτει πολλῶν σφηκῶν καὶ ἐπομβρίας. Θηρεύονται δὲ περὶ τοὺς κρημνοὺς καὶ τὰ ρήγματα τῆς γῆς τὰ εἰς ὀρθόν, καὶ πάντες φαίνονται ἔχοντες κέντρα.

## Κεφάλαιο 41

Τὰ μὲν οὖν περὶ τοὺς σφῆκας τοῦτον ἔχει τὸν τρόπον.

Αἱ δ' ἀνθρῆναι ζῶσι μὲν οὐκ ἀνθολογούμεναι ὥσπερ αἱ μέλιτται, ἀλλὰ τὰ πολλὰ σαρκοφαγοῦσαι (διὸ καὶ περὶ τὴν κόπρον διατρίβουσιν· θηρεύουσι γὰρ τὰς μεγάλας μυίας, καὶ ὅταν καταλάβωσιν, ἀφελοῦσαι τὴν κεφαλὴν ἀποπέτονται (629a.) φέρουσαι τὸ σῶμα τὸ λοιπόν), ἄπτονται δὲ καὶ τῆς γλυκείας ὁπώρας. Τροφῇ μὲν οὖν χρῶνται τῇ εἰρημένῃ, ἔχουσι δ' ἡγεμόνας ὥσπερ αἱ μέλιτται καὶ οἱ σφῆκες· καὶ οἱ ἡγεμόνες οὗτοι μείζονές εἰσι τῷ μεγέθει κατὰ λόγον πρὸς τὰς ἀνθρήνας ἢ ὁ τῶν σφηκῶν πρὸς τοὺς σφῆκας

καὶ ὁ τῶν μελιττῶν πρὸς τὰς μελίττας. Διατρίβει δ' ἔσω καὶ οὗτος, ὥσπερ ὁ τῶν σφηκῶν ἡγεμών. Ποιοῦσι δὲ τὸ σμήνος ὑπὸ γῆν αἱ ἀνθρήναι, ἐκφέρουσαι τὴν γῆν ὥσπερ οἱ μύρμηκες· ἀφ'esμὸς γάρ, ὥσπερ τῶν μελιττῶν, οὐ γίνεται οὔτε τούτων οὔτε τῶν σφηκῶν, ἀλλ' ἀεὶ ἐπιγινόμεναι νεώτεραι αὐτοῦ μένουσι καὶ τὸ σμήνος μεῖζον ποιοῦσιν ἐκφέρουσαι τὸν χοῦν. Γίνεται δὲ μεγάλα τὰ σμήνη· ἥδη γὰρ εὐθηνοῦντος σμήνους κόφινοι τρεῖς καὶ τέτταρες ἐξήρηνται κηρίων. Οὐδὲ τροφήν, ὥσπερ αἱ μέλιτται, ἀποτίθενται, ἀλλὰ φωλοῦσι τὸν χειμῶνα, αἱ δὲ πλεῖσται ἀποθνήσκουσιν· εἰ δὲ καὶ πᾶσαι, οὐπω δῆλον.

Οἱ δ' ἡγεμόνες πλείους ἑνὸς οὐ γίνονται ἐν τοῖς σμήνεσιν, ὥσπερ ἐν τοῖς τῶν μελιττῶν, οἱ διασπῶσι τὰ σμήνη τῶν μελιττῶν. Ὅταν δὲ πλανηθῶσί τινες τῶν ἀνθρήνων ἀπὸ τοῦ σμήνους, συστραφεῖσαι πρὸς τινα ὕλην ποιοῦσι κηρία, οἷάπερ καὶ ὁράται ἐπιπολῆς ὄντα πολλάκις, καὶ ἐν τούτῳ ἐργάζονται ἡγεμόνα ἕνα· οὗτος δ' ἐπ' αὐτὸν ἐξέλθῃ καὶ αὐξήσει, ἀπάγει λαβῶν καὶ κατοικίζει μεθ' αὐτοῦ εἰς σμήνος.

Περὶ δ' ὀχείας τῶν ἀνθρήνων οὐδὲν ὥπται πω, οὐδὲ πόθεν γίνεται ὁ γόνος. Ἐν μὲν οὖν ταῖς μελίτταις ἄκεντροί εἰσι καὶ οἱ κηφῆνες καὶ οἱ βασιλεῖς, καὶ τῶν σφηκῶν ἔνιοι ἄκεντροί εἰσι, καθάπερ εἴρηται πρότερον· αἱ δ' ἀνθρήναι πᾶσαι φαίνονται κέντρον ἔχουσαι. Ἐπισκεπτέον δὲ μᾶλλον καὶ περὶ τοῦ ἡγεμόνος, εἰ κέντρον ἔχει ἢ μή.

## Κεφάλαιο 42

Οἱ δὲ βομβύλιοι τίκτουσιν ὑπὸ πέτρας ἐπ' αὐτῆς τῆς γῆς, θυρίσι δυσὶν ἢ μικρῷ πλείοσιν· εὐρίσκεται δὲ καὶ μέλιτος ἀρχὴ φαύλου τινὸς ἐν τούτοις.

Ἡ δὲ τενθρηδὼν προσεμφερῆς μὲν ἐστὶ τῇ ἀνθρήνῃ, ποικίλον δέ, καὶ τὸ πλάτος ὅμοιον τῇ μελίττῃ· λίχνον δ' ὄν καὶ πρὸς τὰ μαγειρεῖα καὶ τοὺς ἰχθύας καὶ τὴν τοιαύτην ἀπόλαυσιν κατὰ μόνας προσπέταται· ἐκτίκει δὲ κατὰ γῆς ὥσπερ οἱ σφήκες, (629b.) πολύχουν δ' ἐστὶ, καὶ τὸ τενθρήνιον αὐτῶν πολὺ μεῖζον ἢ τῶν σφηκῶν καὶ προμηκέστερον. Τὰ μὲν οὖν περὶ τὴν τῶν μελιττῶν καὶ τῶν σφηκῶν καὶ τῶν ἄλλων τῶν τοιούτων ἐργασίαν καὶ τὸν βίον τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 43

Περὶ δὲ τὰ ἦθη τῶν ζώων, ὥσπερ εἴρηται καὶ πρότερον, ἔστι θεωρῆσαι

διαφορὰς πρὸς ἀνδρίαν μὲν μάλιστα καὶ δειλίαν, ἔπειτα καὶ πρὸς πραότητα καὶ ἀγριότητα καὶ αὐτῶν τῶν ἀγρίων. Καὶ γὰρ ὁ λέων ἐν τῇ βρώσει μὲν χαλεπώτατός ἐστι, μὴ πεινῶν δὲ καὶ βεβρωκῶς πραότατος.

Ἔστι δὲ τὸ ἦθος οὐχ ὑπόπτῃς οὐδενὸς οὐδ' ὑφορώμενος οὐδέν, πρὸς τε τὰ σύντροφα καὶ συνήθη σφόδρα φιλοπαίγμων καὶ στερκτικός. Ἐν δὲ ταῖς θήραις ὀρώμενος μὲν οὐδέποτε φεύγει οὐδὲ πτήσσει, ἀλλ' ἐὰν καὶ διὰ πλῆθος ἀναγκασθῇ τῶν θηρευόντων ὑπαγαγεῖν βάδην ὑποχωρεῖ καὶ κατὰ σκέλος, κατὰ βραχὺ ἐπιστρεφόμενος· ἐὰν μέντοι ἐπιλάβηται δασέος, φεύγει ταχέως, ἕως ἂν καταστῇ εἰς φανερόν· τότε δὲ πάλιν ὑπάγει βάδην. Ἐν δὲ τοῖς ψιλοῖς ἐὰν ποτ' ἀναγκασθῇ εἰς φανερόν διὰ τὸ πλῆθος φεύγειν, τρέχει κατατείνας καὶ οὐ πηδᾷ. Τὸ δὲ δρόμημα συνεχῶς ὥσπερ κυνός ἐστι κατατεταμένον· διώκων μέντοι ἐπιρίπτει ἑαυτόν, ὅταν ἦ πλησίον.

Ἀληθῆ δὲ καὶ τὰ λεγόμενα, τό τε φοβεῖσθαι μάλιστα τὸ πῦρ, ὥσπερ καὶ Ὅμηρος ἐποίησεν “καιόμεναί τε δεταί, τάς τε τρεῖ ἐσσύμενός περ,” καὶ τὸ τὸν βάλλοντα τηρήσαντα ἴεσθαι ἐπὶ τοῦτον· ἐὰν δέ τις βάλλῃ μὲν μή, ἐνοχλῇ δ' αὐτόν, ἐὰν ἐπαΐξας συλλάβῃ, ἀδικεῖ μὲν οὐδὲν οὐδὲ βλάπτει τοῖς ὄνυξι, σείσας δὲ καὶ φοβήσας ἀφίησι πάλιν.

Πρὸς δὲ τὰς πόλεις ἔρχονται μάλιστα καὶ τοὺς ἀνθρώπους ἀδικοῦσιν, ὅταν γένωνται πρεσβῦται, διὰ τε τὸ γῆρας ἀδύνατοι θηρεύειν ὄντες καὶ διὰ τὸ πεπονηκέναι τοὺς ὀδόντας.

Ἔτη δὲ ζῶσι πολλά, καὶ ὁ ληφθεὶς λέων χωλὸς πολλοὺς τῶν ὀδόντων εἶχε κατεαγότας, ὧς τεκμηρίῳ ἔχρωντό τινες ὅτι πόλλ' ἔτη ζῶσιν· τοῦτο γὰρ οὐκ ἂν συμπεσεῖν μὴ πολυχρονίῳ ὄντι.

Γένη δ' ἐστὶ λεόντων δύο· τούτων δ' ἐστὶ τὸ μὲν στρογγυλότερον καὶ οὐλοτριχώτερον δειλότερον, τὸ δὲ μακρότερον καὶ εὐθύτριχον ἀνδρειότερον. Φεύγουσι δ' ἐνίοτε (630a.) κατατείναντες τὴν κέρκον ὥσπερ κύνες. Ἦδη δ' ὥπται λέων καὶ οὐκ ἐπιτίθεσθαι μέλλον, καὶ ὥς εἶδεν ἀντιφρίζαντα, φεύγων. Ἔστι δὲ πρὸς τὰς πληγὰς εἰς μὲν τὰ κοῖλα ἀσθενής, κατὰ δὲ τὸ ἄλλο σῶμα δέχεται πολλὰς καὶ κεφαλὴν ἔχει ἰσχυράν. Ὅσα δ' ἂν δάκη ἢ τοῖς ὄνυξιν ἐλκῶσῃ, ἐκ τῶν ἐλκῶν ἰχῶρες ρέουσιν ὡχροὶ σφόδρα καὶ ἐκ τῶν ἐπιδέσμων καὶ σπόγγων ὑπ' οὐδενὸς δυνάμενοι ἐκκλύζεσθαι· ἡ δὲ θεραπεία ἢ αὐτὴ καὶ τῶν κυνοδήκτων ἐλκῶν.

Φιλάνθρωποι δ' εἰσὶ καὶ οἱ θῶες, καὶ οὗτ' ἀδικοῦσι τοὺς ἀνθρώπους οὔτε



φοβοῦνται σφόδρα, πολεμοῦσι δὲ τοῖς κυσὶ καὶ τοῖς λέουσιν· διὸ ἐν τῷ αὐτῷ τόπῳ οὐ γίνονται. Ἄριστοι δ' οἱ μικροὶ τῶν θῶων. Γένη δ' αὐτῶν οἱ μὲν φασιν εἶναι δύο, οἱ δὲ τρία· οὐ δοκεῖ δὲ πλείω εἶναι, ἀλλ' ὥσπερ τῶν ἰχθύων καὶ τῶν ὀρνέων καὶ τῶν τετραπόδων ἓνια, καὶ οἱ θῶες μεταβάλλουσι κατὰ τὰς ὥρας, καὶ τό τε χρῶμα ἕτερον τοῦ χειμῶνος καὶ τοῦ θέρους ἴσχουσι, καὶ τοῦ μὲν θέρους λεῖτοι γίνονται τοῦ δὲ χειμῶνος δασεῖς.

## Κεφάλαιο 44

Ὁ δὲ βόνασος γίνεται μὲν ἐν τῇ Παιονίᾳ ἐν τῷ ὄρει τῷ Μεσσαπίῳ, ὃ ὀρίζει τὴν Παιονικὴν καὶ τὴν Μαιδικὴν χώραν, καλοῦσι δ' αὐτὸν οἱ Παῖονες μόναπον. Τὸ δὲ μέγεθός ἐστιν ἡλίκον ταῦρος, καὶ ἔστιν ὀγκωδέστερον ἢ βοῦς· οὐ γὰρ πρόμηκές ἐστιν. Τὸ δὲ δέρμα αὐτοῦ κατέχει εἰς ἐπτάκλινον ἀποταθέν. Καὶ τὸ ἄλλο δ' εἶδος ὅμοιον βοῖ, πλην χαίτην ἔχει μέχρι τῆς ἀκρωμίας ὥσπερ ἵππος· μαλακωτέρα δ' ἢ θρῖξ τῆς τοῦ ἵππου, καὶ προσεσταλμένη μᾶλλον.

Χρῶμα δ' ἔχει τοῦ τριχώματος ξανθόν· βαθεῖα δὲ καὶ μέχρι τῶν ὀφθαλμῶν καθήκουσα ἡ χαίτη ἐστὶ καὶ πυκνή. Τὸ δὲ χρῶμα ἔχει τι μέσον τεφροῦ καὶ πυρροῦ, οὐχ οἶον αἱ παρῶναι ἵπποι καλούμεναι, ἀλλ' αὐχμηροτέραν τὴν τρίχα <ἄνωθεν>, κάτωθεν ἐριώδη· μέλανες δ' ἢ πυρροὶ σφόδρα οὐ γίνονται. Φωνὴν δ' ὁμοίαν ἔχουσι βοῖ, κέρατα δὲ γαμψά, κεκαμμένα πρὸς ἄλληλα καὶ ἄχρηστα πρὸς τὸ ἀμύνεσθαι, τῷ μεγέθει σπιθαμιαῖα ἢ μικρῷ μείζω, πάχος δ' ὥστε χωρῆσαι μὴ πολλῷ ἔλαττον ἡμίχουν ἑκάτερον· ἢ δὲ μελανία καλὴ καὶ λιπαρὰ τοῦ κέρατος.

Τὸ δὲ προκόμιον καθήκει (630b.) ἐπὶ τοὺς ὀφθαλμούς, ὥστ' εἰς τὸ πλάγιον παρορᾶν μᾶλλον ἢ εἰς τὸ πρόσθεν. Ὀδόντας δὲ τοὺς ἄνωθεν οὐκ ἔχει, ὥσπερ οὐδὲ βοῦς οὐδ' ἄλλο τῶν κερατοφόρων οὐδέν, σκέλη δὲ δασέα· καὶ ἔστι διχαλόν· κέρκον δ' ἐλάττω ἢ κατὰ τὸ μέγεθος, ὁμοίαν τῇ τοῦ βοός. Καὶ ἀναρρίπτει τὴν κόνιν καὶ ὀρύττει ὥσπερ ταῦρος. Δέρμα δ' ἔχει πρὸς τὰς πληγὰς ἰσχυρόν. Ἔστι δ' ἡδύκρεων, διὸ καὶ θηρεύουσιν αὐτό. Ὅταν δὲ πληγῇ, φεύγει, καὶ ὑπομένει ὅταν ἐξατονῇ. Ἀμύνεται δὲ λακτίζων καὶ προσαφοδεύων καὶ εἰς τέτταρας ὀργυιάς ἀφ' ἑαυτοῦ ρίπτων· ῥαδίως δὲ χρῆται τούτῳ καὶ πολλάκις, καὶ ἐπικαίει ὥστε ἀποψήχεσθαι τὰς τρίχας τῶν κυνῶν. Τεταραγμένου μὲν οὖν καὶ φοβουμένου τοῦτο ποιεῖ ἢ κόπρος, ἀταράκτου δ' ὄντος οὐκ ἐπικαίει.

Ἡ μὲν οὖν ἰδέα τοῦ θηρίου καὶ ἡ φύσις τοιαύτη τίς ἐστιν· ὅταν δ' ὥρα ἦ τοῦ τίκτειν, ἄθροοι τίκτουσιν ἐν τοῖς ὄρεσιν. Περὶ δὲ τὸν τόπον ἀφοδεύουσι

πρότερον πρὶν τεκεῖν, καὶ ποιοῦσιν οἶον περίβολον· προΐεται γὰρ τὸ θηρίον πολὺ τι πλῆθος τούτου τοῦ περιπτώματος.

## Κεφάλαιο 45

Πάντων δὲ τιθασσότατον καὶ ἡμερώτατον τῶν ἀγρίων ἐστὶν ὁ ἐλέφας· πολλὰ γὰρ καὶ παιδεύεται καὶ ξυνήσιν, ἐπεὶ καὶ προσκυνεῖν διδάσκονται τὸν βασιλέα. Ἔστι δὲ καὶ εὐαίσθητον καὶ τῇ συνέσει τῇ ἄλλῃ ὑπερβάλλον. Ὁ δ' ἂν ὀχεύσῃ καὶ ἔγκυον ποιήσῃ, τούτου πάλιν οὐχ ἄπτεται.

Ζῆν δέ φασι τὸν ἐλέφαντα οἱ μὲν ἔτη διακόσια, οἱ δ' ἑκατὸν εἴκοσι, καὶ τὴν θήλειαν ἴσα σχεδὸν τῷ ἄρρενι, ἀκμάζειν δὲ περὶ ἔτη ἐξήκοντα, πρὸς δὲ τοὺς χειμῶνας καὶ τὰ ψύχῃ δύσριγον εἶναι. Ἔστι δὲ τὸ ζῶον παραποτάμιον, οὐ ποτάμιον.

Ποιεῖται δὲ καὶ διὰ τοῦ ὕδατος τὴν πορείαν, ἕως τούτου δὲ προέρχεται ἕως ἂν ὁ μυκτὴρ ὑπερέχῃ αὐτοῦ· ἀναφυσᾷ γὰρ διὰ τούτου καὶ τὴν ἀναπνοὴν ποιεῖται. Νεῖν δ' οὐ πάνυ δύναται διὰ τὸ τοῦ σώματος βάρος.

## Κεφάλαιο 46

Οἱ δὲ κάμηλοι οὐκ ἀναβαίνουσιν ἐπὶ τὰς μητέρας, ἀλλὰ κἂν βιάζηταί τις, οὐ θέλουσιν. Ἦδη γάρ ποτε ἐπεὶ οὐκ ἦν ὀχεῖον, ὁ ἐπιμελητὴς περικαλύψας τὴν μητέρα ἐφῆκε τὸν πῶλον· ὥς δ' ὀχεύοντος ἀπέπεσε, τότε μὲν ἀπετέλεσε τὴν συνουσίαν, μικρὸν δ' ὕστερον δακῶν τὸν καμηλίτην (631a.) ἀπέκτεινεν. Λέγεται δὲ καὶ τῷ Σκυθῶν βασιλεῖ γενέσθαι ἵππον γενναίαν, ἐξ ἧς ἅπαντας ἀγαθοὺς γίνεσθαι τοὺς ἵππους· τούτων ἐκ τοῦ ἀρίστου βουλόμενον γεννῆσαι καὶ τῆς μητρὸς προσαγαγεῖν, ἵν' ὀχεύσῃ· τὸν δ' οὐ θέλειν· περικαλυφθείσης δὲ λαθόντα ἀναβῆναι· ὥς δ' ὀχεύσαντος ἀπεκαλύφθη τὸ πρόσωπον τῆς ἵππου, ἰδόντα τὸν ἵππον φεύγειν καὶ ῥῖψαι ἑαυτὸν κατὰ τῶν κρημνῶν.

## Κεφάλαιο 47

Τῶν δὲ θαλαττίων πλεῖστα λέγεται σημεῖα περὶ τοὺς δελφῖνας πραότητος καὶ ἡμερότητος, καὶ δὴ καὶ πρὸς παῖδας ἔρωτες καὶ ἐπιθυμίας, καὶ περὶ Τάραντα καὶ Καρίαν καὶ ἄλλους τόπους. Καὶ περὶ Καρίαν δὲ ληφθέντος δελφίνου καὶ τραύματα λαβόντος ἀθρόον ἐλθεῖν λέγεται πλῆθος δελφίνων εἰς τὸν λιμένα, μέχριπερ ὁ ἄλιεὺς ἀφῆκεν· τότε δὲ πάλιν ἅμα πάντες ἀπῆλθον. Καὶ τοῖς μικροῖς δελφῖσιν ἀκολουθεῖ τις ἀεὶ τῶν μεγάλων φυλακῆς χάριν. Ἦδη δ'

ὥπται δελφίνων μεγάλων ἀγέλη ἅμα καὶ μικρῶν· τούτων δ' ἀπολειπόμενοι τινες δύο οὐ πολὺ ἐφάνησαν δελφινίσκον μικρὸν τεθνηκότα, ὅτ' εἰς βυθὸν φέροιτο, ὑπονέοντες καὶ μετεωρίζοντες τῷ νώτῳ οἷον κατελεοῦντες, ὥστε μὴ καταβρωθῆναι ὑπὸ τινος τῶν ἄλλων θηρίων.

Λέγεται δὲ καὶ περὶ ταχυτήτος ἄπιστα τοῦ ζώου· ἀπάντων γὰρ δοκεῖ εἶναι ζῶων τάχιστον, καὶ τῶν ἐνύδρων καὶ τῶν χερσαίων, καὶ ὑπεράλλονται δὲ πλοίων μεγάλων ἰστούς. Μάλιστα δὲ τοῦτ' αὐτοῖς συμβαίνει, ὅταν διώκωσί τινα ἰχθὺν τροφῆς χάριν· τότε γάρ, ἐὰν ἀποφεύγῃ, συνακολουθοῦσιν εἰς βυθὸν διὰ τὸ πεινῆν, ὅταν δ' αὐτοῖς μακρὰ γίνηται ἡ ἀναστροφή, κατέχουσι τὸ πνεῦμα ὥσπερ ἀναλογισάμενοι, καὶ συστρέψαντες ἑαυτοὺς φέρονται ὥσπερ τόξευμα, τῇ ταχυτῇτι τὸ μῆκος διελθεῖν βουλόμενοι πρὸς τὴν ἀναπνοήν, καὶ ὑπεράλλονται τοὺς ἰστούς, ἐὰν παρατυγχάνῃ που πλοῖον. Ταῦτόν δὲ ποιοῦσι καὶ οἱ κατακολυμβηταί, ὅταν εἰς βυθὸν ἑαυτοὺς ἀφῶσιν· κατὰ τὴν ἑαυτῶν γὰρ δύναμιν καὶ οὗτοι ἀναφέρονται (631b.) συστρέψαντες.

Διατρίβουσι δὲ μετ' ἀλλήλων κατὰ συζυγίας οἱ ἄρρενες ταῖς θηλείαις. Διαπορεῖται δὲ περὶ αὐτῶν διὰ τί ἐξοκέλλουσιν εἰς τὴν γῆν· ποιεῖν γάρ φασι τοῦτ' αὐτοὺς ἐνίοτε, ὅταν τύχῃ, δι' οὐδεμίαν αἰτίαν.

## Κεφάλαιο 48

Ὡσπερ δὲ τὰς πράξεις κατὰ τὰ πάθη συμβαίνει ποιεῖσθαι πᾶσι τοῖς ζώοις, οὕτω πάλιν καὶ τὰ ἦθη μεταβάλλουσι κατὰ τὰς πράξεις, πολλάκις δὲ καὶ τῶν μορίων ἕνια, οἷον ἐπὶ τῶν ὀρνίθων συμβαίνει. Αἷ τε γὰρ ἀλεκτορίδες ὅταν νικήσωσι τοὺς ἄρρενας, κοκκύζουσί τε μιμούμεναι τοὺς ἄρρενας καὶ ὀχεύειν ἐπιχειροῦσι, καὶ τό τε κάλλαιον ἐξαίρεται αὐταῖς καὶ τὸ οὐροπύγιον, ὥστε μὴ ῥαδίως ἂν ἐπιγνῶναι ὅτι θήλειά εἰσιν· ἐνίαις δὲ καὶ πληκτρά τινα μικρὰ ἐπανέστη.

Ἦδη δὲ καὶ τῶν ἀρρένων τινὲς ὥφθησαν ἀπολομένης τῆς θηλείας αὐτοῖ περὶ τοὺς νεοττοὺς τὴν τῆς θηλείας ποιούμενοι σκευωρίαν, περιάγοντές τε καὶ ἐκτρέφοντες οὕτως ὥστε μήτε κοκκύζειν ἔτι μήτ' ὀχεύειν ἐπιχειρεῖν. Γίνονται δὲ καὶ θηλυδρία ἐκ γενετῆς τῶν ὀρνίθων τινὲς οὕτως ὥστε καὶ ὑπομένειν τοὺς ἐπιχειροῦντας ὀχεύειν.

## Κεφάλαιο 49

Μεταβάλλει δὲ τὰ ζῶα οὐ μόνον τὰς μορφὰς ἕνια καὶ τὸ ἦθος κατὰ τὰς

ἡλικίας καὶ τὰς ὥρας, ἀλλὰ καὶ ἐκτεμνόμενα. Ἐκτέμνεται δὲ τῶν ζώων ὅσα ἔχει ὄρχεις.

Ἔχουσι δ' οἱ μὲν ὄρνιθες τοὺς ὄρχεις ἐντὸς καὶ τὰ ὠοτόκα τῶν τετραπόδων πρὸς τῇ ὀσφύϊ, τὰ δὲ ζωοτόκα καὶ πεζὰ τὰ μὲν πλεῖστα ἐκτός, τὰ δ' ἐντός, πάντα δὲ πρὸς τῷ τέλει τῆς γαστρού.

Ἐκτέμνονται δ' οἱ μὲν ὄρνιθες κατὰ τὸ οὐροπύγιον, καθ' ὃ συμπίπτουσιν ὀχεύοντες· ἐνταῦθα γὰρ ἂν ἐπικαύσῃ τις δυσὶν ἢ τρισὶ σιδηρίοις, ἐὰν μὲν ἤδη τέλειον ὄντα, τό τε κάλλαιον ἔξωχρον γίνεται καὶ οὐκέτι κοκκύζει οὐδ' ἐπιχειρεῖ ὀχεύειν, ἐὰν δ' ἔτι νεοττὸν ὄντα, οὐδὲ γίνεται τούτων οὐδὲν αὐξανομένου. Τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ ἀνθρώπων· ἐὰν μὲν γὰρ παῖδας ὄντας πηρώσῃ τις, οὔτε αἱ ὑστερογενεῖς ἐπιγίνονται τρίχες οὔθ' ἡ φωνὴ μεταβάλλει, (632a.) ἀλλ' ὀξεῖα διατελεῖ· ἂν δ' ἤδη ἡβῶντας, αἱ μὲν ὑστερογενεῖς τρίχες ἀπολείπουσι πλὴν τῶν ἐπὶ τῆς ἡβῆς (αὗται δ' ἐλάττους μὲν, μένουσι δέ), αἱ δ' ἐκ γενετῆς τρίχες οὐκ ἀπολείπουσιν· οὐδεὶς γὰρ γίνεται εὐνοῦχος φαλακρός.

Μεταβάλλει δὲ καὶ ἡ φωνὴ ἐπὶ τῶν τετραπόδων τῶν ἐκτεμνομένων ἀπάντων εἰς τὸ θῆλυ. Τὰ μὲν οὖν ἄλλα τετράποδα ἐὰν μὴ νέα ἐκτέμνηται, διαφθείρεται· ἐπὶ δὲ τῶν κάπρων μόνων οὐδὲν διαφέρει. Πάντα δ' ἐὰν μὲν νέα ἐκτμηθῇ, μείζω γίνεται τῶν ἀτμήτων καὶ γλαφυρώτερα, ἐὰν δὲ καθεστηκότα ἤδη, οὐκέτι αὐξάνεται ἐπὶ πλεῖον.

Οἱ δ' ἔλαφοι ἐὰν μὲν μὴ πω τὰ κέρατα ἔχοντες διὰ τὴν ἡλικίαν ἐκτμηθῶσιν, οὐκέτι φύουσι κέρατα· ἐὰν δ' ἔχοντας ἐκτέμῃ τις, τό τε μέγεθος ταύτῳ μένει τῶν κεράτων, καὶ οὐκ ἀποβάλλουσιν.

Οἱ μὲν οὖν μόσχοι ἐκτέμνονται ἐνιαύσιοι, εἰ δὲ μὴ, αἰσχίους γίνονται καὶ ἐλάττους· οἱ δὲ δαμάλαι ἐκτέμνονται τὸν τρόπον τοῦτον· κατακλίνοντες καὶ ἀποτέμνοντες τῆς ὀσχέας κάτωθεν τοὺς ὄρχεις ἀποθλίβουσιν, εἴτα ἀναστέλλουσι τὰς ῥίζας ἄνω ὡς μάλιστα, καὶ τὴν τομὴν φριξὶ βύουσιν, ὅπως ὁ ἰχώρ ῥέῃ ἔξω· καὶ ἐὰν φλεγμαίνῃ, κατακαύσαντες τὴν ὀσχέαν ἐπιπάττουσιν.

Οἱ δ' ἐνόρχαι τῶν βοῶν ἐὰν ἐκτμηθῶσι, τὸ φανερόν συγγεννῶσιν. Ἐκτέμνεται δὲ καὶ ἡ καπρία τῶν θηλειῶν ὑῶν, ὥστε μηκέτι δεῖσθαι ὀχείας ἀλλὰ παίνεισθαι ταχέως. Ἐκτέμνεται δὲ νηστεύσασα δύο ἡμέρας, ὅταν κρεμάσῃ τῶν ὀπισθίων σκελῶν. Τέμνουσι δὲ τὸ ἦτρον, ἢ τοῖς ἄρρεσιν οἱ

ὄρχεις μάλιστα φύονται· ἐνταῦθα γὰρ ἐπὶ ταῖς μήτραις ἐπιπέφυκεν ἡ καπρία, ἥς μικρὸν ἀποτέμνοντες συρράπτουσιν.

Ἐκτέμνονται δὲ καὶ αἱ κάμηλοι αἱ θήλειαι, ὅταν εἰς πόλεμον χρῆσθαι αὐταῖς βούλωνται, ἵνα μὴ ἐν γαστρὶ λάβωσιν. Κέκτηνται δ' ἔνιοι τῶν ἄνω καμήλους καὶ τρισχιλίας. Θέουσι δὲ θᾶσσον τῶν Νησαίων ἵππων πολὺ, ἐὰν θέωσι, διὰ τὸ μέγεθος τοῦ ὀρέγματος. Ὅλως δὲ μακρότερα γίνεται τὰ ἐκτεμνόμενα ζῶα τῶν ἀτμήτων.

Ὡφελοῦνται δὲ τὰ ζῶα καὶ χαίρουσι καὶ (632b.) μηρυκάζοντα ὥσπερ ἐσθίοντα ὅσα μηρυκάζει. Μηρυκάζει δὲ τὰ μὴ ἀμφώδοντα, οἷον βόες καὶ πρόβατα καὶ αἶγες. Ἐπὶ δὲ τῶν ἀγρίων οὐδὲν πω συνῶπται, ὅσα μὴ συντρέφεται ἐνίοτε, οἷον ἔλαφος· αὕτη δὲ μηρυκάζει. Πάντα δὲ κατακείμενα μηρυκάζουσι μᾶλλον. Μάλιστα δὲ τοῦ χειμῶνος μηρυκάζουσιν, τὰ τε κατ' οἰκίαν τρεφόμενα σχεδὸν ἐπτὰ μῆνας τοῦτο ποιεῖ· τὰ δ' ἀγελαῖα καὶ ἥττον καὶ ἐλάττονα χρόνον μηρυκάζει διὰ τὸ νέμεσθαι ἕξω.

Μηρυκάζει δὲ καὶ τῶν ἀμφωδόντων ἔνια, οἷον οἱ τε μύες οἱ Ποντικοί, καὶ ἄλλοι ἰχθύες καὶ ὃν καλοῦσιν ἔνιοι ἀπὸ τοῦ ἔργου μήρυκα.

Ἔστι δὲ τὰ μὲν μακροσκελῆ τῶν ζώων ὑγροκοίλια, τὰ δ' εὐρυστήθη ἐμετικὰ μᾶλλον, καὶ ἐπὶ τῶν τετραπόδων καὶ ἐπ' ὀρνίθων καὶ ἐπ' ἀνθρώπων ὡς ἐπὶ τὸ πολὺ.

## Κεφάλαιο 49B

Τῶν δ' ὀρνέων πολλὰ μεταβάλλουσι κατὰ τὰς ὥρας καὶ τὸ χρῶμα καὶ τὴν φωνήν, οἷον ὁ κόττυφος ἀντὶ μέλανος ξανθός, καὶ τὴν φωνήν ἴσχει ἀλλοίαν· ἐν μὲν γὰρ τῷ θέρει ἄδει, τοῦ δὲ χειμῶνος παταγεῖ καὶ φθέγγεται θορυβῶδες. Μεταβάλλει δὲ καὶ ἡ κίχλη τὸ χρῶμα· τοῦ μὲν γὰρ χειμῶνος ψαρὰ τοῦ δὲ θέρους ποικίλα τὰ περὶ τὸν αὐχένα ἴσχει· τὴν μέντοι φωνήν οὐδὲν μεταβάλλει.

Ἡ δ' ἀηδὼν ἄδει μὲν συνεχῶς ἡμέρας καὶ νύκτας δεκαπέντε, ὅταν τὸ ὄρος ἤδη δασύνηται· μετὰ δὲ ταῦτα ἄδει μὲν, συνεχῶς δ' οὐκέτι. Τοῦ δὲ θέρους προϊόντος ἄλλην ἀφίησι φωνήν καὶ οὐκέτι παντοδαπὴν οὐδὲ ταχεῖαν καὶ ἐπιστρεφῆ ἄλλ' ἀπλῆν, καὶ τὸ χρῶμα μεταβάλλει, καὶ ἔν γ' Ἰταλία τὸ ὄνομα ἕτερον καλεῖται περὶ τὴν ὥραν ταύτην. Φαίνεται δ' οὐ πολὺν χρόνον· φωλεῖ γάρ.

Μεταβάλλουσι δὲ καὶ οἱ ἐρίθακοι καὶ οἱ καλούμενοι φοινίκουροι ἐξ ἀλλήλων·

ἔστι δ' ὁ μὲν ἐρίθακος χειμερινόν, οἱ δὲ φοινίκουροι θερινοί, διαφέρουσι δ' ἀλλήλων οὐδὲν ὡς εἰπεῖν ἄλλ' ἢ τῇ χροῶν μόνον.

Ὡσαύτως δὲ καὶ αἱ συκαλίδες καὶ οἱ μελαγκόρυφοι· καὶ γὰρ οὗτοι μεταβάλλουσιν εἰς ἀλλήλους. Γίνεται δ' ἡ μὲν συκαλὶς περὶ τὴν ὀπώραν, ὁ δὲ μελαγκόρυφος εὐθέως μετὰ (633a.) τὸ φθινόπωρον. Διαφέρουσι δὲ καὶ οὗτοι οὐδὲν ἀλλήλων πλὴν τῇ χροῶν καὶ τῇ φωνῇ. Ὅτι δ' ὁ αὐτός ἐστιν ὄρνις, ἤδη ὥπται περὶ τὴν μεταβολὴν ἑκάτερον τὸ γένος τούτων, οὗπω δὲ τελέως μεταβεβληκότα οὐδ' ἐν θατέρῳ εἶδει ὄντα. Οὐδὲν δ' ἄτοπον εἰ ἐπὶ τούτων αἱ φωναὶ μεταβάλλουσιν ἢ τὰ χρώματα, ἐπεὶ καὶ ἡ φάττα τοῦ μὲν χειμῶνος οὐ φθέγγεται (πλὴν ἤδη ποτὲ εὐδίας ἐκ χειμῶνος σφοδροῦ γενομένης ἐφθέγγατο καὶ ἐθαυμαστώθη ὑπὸ τῶν ἐμπείρων), ἀλλ' ὅταν ἔαρ γένηται, τότε ἄρχεται φωνεῖν. Τὸ δ' ὅλον τὰ ὄρνεα καὶ μάλιστα καὶ πλείστας ἀφήσι φωνάς, ὅταν ὦσι περὶ τὴν ὀχρίαν.

Μεταβάλλει δὲ καὶ ὁ κόκκυξ τὸ χρῶμα καὶ τῇ φωνῇ οὐ σαφηνίζει, ὅταν μέλλῃ ἀφανίζεσθαι· ἀφανίζεται δ' ὑπὸ κύνα, φανερός δὲ γίνεται ἀπὸ τοῦ ἔαρος ἀρξάμενος μέχρι κυνὸς ἐπιτολῆς. Ἀφανίζεται δὲ καὶ ἦν καλοῦσιν τινες οἰνάνθην ἀνίσχοντος τοῦ σειρίου, δυομένου δὲ φαίνεται· φεύγει δ' ὅτε μὲν τὰ ψύχη ὅτε δὲ τὴν ἀλέαν.

Μεταβάλλει δὲ καὶ ὁ ἔποψ τὸ χρῶμα καὶ τὴν ιδέαν, ὥσπερ πεποίηκεν Αἰσχύλος ἐν τοῖσδε·

Τοῦτον δ' ἐπόπτην ἔποπα τῶν αὐτοῦ κακῶν πεποικίλωκε,

κάποδηλώσας ἔχει θρασὺν πετραῖον ὄρνιν ἐν παντευχίᾳ,

ὃς ἦρι μὲν φαίνοντι διαπάλλει πτερόν κίρκου λεπάργου.

Δύο γὰρ οὖν μορφὰς φανεῖ, παιδός τε χαῦτοῦ νηδύος μιᾶς ἅπο.

Νέας δ' ὀπώρας ἡνίκ' ἂν ξανθῇ στάχυς,

στικτὴ νιν αὖθις ἀμφινωμήσει πτέρυξ.

Ἀεὶ δὲ μίσει τῶνδ' ἅπ' ἄλλον εἰς τόπον δρυμοὺς ἐρήμους καὶ πάγους ἀποικίσει.

Εἰσὶ δὲ τῶν ὀρνίθων οἱ μὲν κονιστικοί, οἱ δὲ λοῦσται, οἱ δ' οὔτε κονιστικοὶ

οὔτε λοῦσται. Ὅσοι μὲν μὴ πτητικοὶ (633b.) ἀλλ' ἐπίγειοι, κονιστικοί, οἷον ἀλεκτορίς, πέρδιξ, ἀτταγὴν, κορύδαλος, φασιανός· τῶν δ' εὐθυωνύχων ἔνιοι, καὶ ὅσοι περὶ ποταμὸν ἢ ἔλη ἢ θάλατταν διατρίβουσι, λοῦνται· οἱ δ' ἄμφω, καὶ κονίονται καὶ λοῦνται, οἷον περιστερὰ καὶ στρουθός· τῶν δὲ γαμψωνύχων οἱ πολλοὶ οὐδέτερον.

Ταῦτα μὲν οὖν τοῦτον ἔχει τὸν τρόπον, ἴδιον δ' ἐνίοις συμβαίνει τῶν ὀρνιθίων τὸ ἀποσοφεῖν, οἷον καὶ ταῖς τρυγόσιν· ποιοῦνται δὲ καὶ περὶ τὴν ἔδραν κίνησιν οἱ τοιοῦτοι ἰσχυρὰν ἅμα τῇ φωνῇ.

## Βιβλίο 10

### ΥΠΕΡ ΤΟΥ ΜΗ ΓΕΝΝΑΝ

Προϊούσης δὲ τῆς ἡλικίας ἀνδρὶ καὶ γυναικί, τοῦ μὴ γεννᾶν ἀλλήλοις συνόντας τὸ αἴτιον ὅτε μὲν ἐν ἀμφοῖν ἐστίν, ὅτε δ' ἐν θατέρῳ μόνον. Πρῶτον μὲν οὖν ἐπὶ τοῦ θήλεος δεῖ θεωρεῖν τὰ περὶ τὰς ὑστέρας ὅπως ἔχει, ἵν' εἰ μὲν ἐν ταύταις τὸ αἴτιον, αὗται τυγχάνωσι θεραπείας, εἰ δὲ μὴ ἐν ταύταις, περὶ ἕτερόν τι τῶν αἰτίων ποιῶνται τὴν ἐπιμέλειαν.

Ἔστι δ', ὥσπερ καὶ περὶ ἄλλο μέρος, φανερόν εἰ ὑγιαίνει, ὅταν τὸ ἔργον τὸ αὐτοῦ ἱκανῶς ἀποτελῇ καὶ ἄλυπόν τ' ἢ καὶ μετὰ τὰς ἐργασίας ἄκοπον, οἷον ὀφθαλμὸς ὅταν λήμην τε μηδεμίαν ποιῇ καὶ ὀρᾷ καὶ μετὰ τὴν ὄρασιν μὴ ταραττήται μηδ' ἀδυνατῇ ὀρᾶν πάλιν. Οὕτω καὶ ὑστέρα ἢ πόνον τε μὴ παρέχουσα, καὶ ὃ ἐκείνης ἐστί, τοῦθ' ἱκανῶς ἀπεργαζομένη, καὶ μετὰ τὰ ἔργα μὴ ἀδύνατος ἀλλ' ἄκοπος.

Λέγεται δὲ καὶ μὴ καλῶς ἔχουσιν τὴν ὑστέρα ὅμως πρὸς τὸ ἔργον τὸ αὐτῆς ἔχειν καλῶς καὶ ἀλύπως, ἂν μὴ ταύτης χειρόν ὃ ἔργον ἐστὶν αὐτῆς ἔχη, ὥσπερ ὄμμα οὐδὲν κωλύει αὐτὸ ὀρᾶν ἀκριβῶς, μὴ ἔχοντος τοῦ ὀφθαλμοῦ καλῶς πάντα τὰ μόρια, ἢ εἰ φῦμά τι ἔνεστιν. Ὅμοίως δὲ καὶ ὑστέρα, εἰ εὖ ἔχει τοῦ ἐπικαίρου τόπου, οὐδὲν ἂν πρὸς τοῦτο (634a.) βλάπτοιο.

Δεῖ δὲ τὴν ἔχουσαν καλῶς ὑστέρα πρῶτον μὲν τῷ τόπῳ μὴ ἐν ἄλλῳ καὶ ἄλλῳ εἶναι, ἀλλ' ὁμοίως τῇ θέσει, πληγὴ γίνεσθαι τὸ πορρώτερον ἄνευ πάθους καὶ λύπης, καὶ μηδὲν ἀναισθητοτέρας εἶναι θιγγανομένας. Τοῦτο δὲ κρίνειν οὐ χαλεπόν. Ὅτι δὲ δεῖ τοιαύτας εἶναι, ἐκ τῶνδε φανερόν.

Εἴτε γὰρ μὴ πλησίον προσίασιν, οὐκ ἔσσονται ἀνασπαστικά· πόρρω γὰρ

αὐταῖς ἔσται ὁ τόπος ὅθεν δεῖ ἀναλαβεῖν.

Εἰ δὲ μή, εἰ πλησίον μένουσι καὶ μὴ οἷαι ἐπανιέναι πορρωτέρω, κωφότεραι ἔσσονται, It;τῷ> διαθιγγάνεσθαι ἀεὶ, ὥστε μὴ ταχὺ ἀνοίγεσθαι· δεῖ It;δὲ> τοῦτο σφόδρα ποιεῖν καὶ εὐηκόους εἶναι.

Ταῦτά τε οὖν χρὴ ὑπάρχειν, ὅσαις τε μὴ ὑπάρχει, αὗται θεραπείας δέονται τινός, καὶ τὰ καταμήνια γίνεσθαι καλῶς, τοῦτο δ' ἐστὶ δι' ἴσων χρόνων καὶ μὴ πεπλανημένως, ὑγιαίνοντος τοῦ σώματος. Σημαίνει γὰρ οὕτω γινόμενα καλῶς ἔχειν ἀνοίγεσθαι καὶ δέχεσθαι τὴν ἐκ τοῦ σώματος ὑγρότητα, ὅταν τὸ σῶμα διδῷ. Ὅταν δὲ πλεονάκῃς ἢ ἐλαττονάκῃς ἢ πεπλανημένως ἀφίῳσι, τοῦ ἄλλου σώματος μὴ συναιτίου ὄντος ἄλλ' ὑγιαίνοντος, ἀνάγκη τοῦτο συμβαίνειν δι' αὐτάς.

Ἡ διὰ κωφότητα οὐκ ἀνοίγονται ἐν τοῖς καιροῖς, ὥστ' ὀλίγα δέχονται, ἢ μᾶλλον ἐπισπῶνται τὸ ὑγρὸν διὰ τινὰ φλεγμασίαν αὐτῶν, ὥστε θεραπείας σημαίνουνσι δεόμεναι, ὥσπερ καὶ ὀφθαλμοὶ καὶ κύστις καὶ κοιλία καὶ τᾶλλα· πάντες γὰρ οἱ τόποι φλεγμαίνοντες ἔλκουσιν ὑγρότητα τοιαύτην, ἢ πέφυκεν ἐκκρίνεσθαι εἰς ἕκαστον τόπον, ἄλλ' οὐ τοιαύτη ἢ τοσαύτη. Ὅμοίως δὲ καὶ ἡ ὑστέρα πλείω ἀποδιδούσα σημαίνει φλεγματικόν τι πάθος, ἐὰν ὅμοια μὲν πλείω δ' ἀποδιδῷ.

Ἐὰν δ' ἀνόμοια καὶ σεσημμένα μᾶλλον, οἷα ταῖς ὑγιαινούσαις προέρχεται, τοῦτο μὲν ἤδη πάθος καὶ ἐπίδηλον γίνεται. Ἀνάγκη γὰρ καὶ πόνους τινὰς ἐπισημαίνειν ἐχούσης ὡς οὐ δεῖ.

Ταῖς δ' ὑγιαινούσαις τὰ λευκὰ καὶ σεσημμένα προέρχεται, ταῖς μὲν καὶ ἀρχομένων, ταῖς δὲ πλείσταις ληγόντων τῶν καταμηνίων. Ὅσαις μὲν οὖν σεσημμένα μᾶλλον γίνεται ἢ ταῖς ὑγιαινούσαις, ἢ ἄτακτα, πλείω ἢ ἐλάττω, μᾶλλον δέονται θεραπείας ὡς ἐμποδιζόντων πρὸς τὴν τέκνωσιν. Ὅσαις δὲ τοῖς χρόνοις μόνον ἀνωμάλοις καὶ μὴ δι' ἴσου, ἦττον μὲν διακωλυτικὸν τὸ πάθος, διασημαίνει μέντοι τῆς ὑστέρας τὴν ἕξιν κινουμένην καὶ οὐκ ἀεὶ ὁμοίως μένουσαν. Ἔστι δὲ τοῦτο τὸ πάθος οἷον μὲν βλάψαι τὰς εὐφυεῖς πρὸς τὴν σύλληψιν, οὐ μέντοι νόσος, ἀλλὰ τοιοῦτόν τι πάθος οἷον καθίστασθαι καὶ ἄνευ θεραπείας, ἂν (634b.) μὴ τι προσεξαμαρτάνῃ αὐτή.

Ἐὰν δὲ μεταβάλλωσι τῇ τάξει ἢ τῷ πλήθει, τοῦ ἄλλου σώματος μὴ ὁμοίως ἔχοντος ἄλλ' ὅτε μὲν ὑγροτέρου ὅτε δὲ ξηροτέρου, οὐδὲν αἵτιαι αἱ ὑστέραι, ἀλλὰ δεῖ καὶ ἀκολουθεῖν αὐτάς τῇ τοῦ σώματος ἕξει, δεχομένας καὶ ἀφιείσας



κατὰ λόγον. Ἐὰν μὲν οὖν ὑγιαίνοντος τοῦ σώματος μεταβάλλοντος δὲ τοῦτο ποιῶσιν, οὐδὲν αὐταὶ δέονται θεραπείας.

Ἐὰν δὲ νοσοῦντος ἢ ἐλάττω ἀποδιδῶσι διὰ τὸ ἄλλοθί που ἀναλίσκεσθαι τὸ περίττωμα, ἢ κάμνει τὸ σῶμα, ἢ πλείω ἀφιῶσι διὰ τὸ δεῦρο ἐξερεύγεσθαι τὸ σῶμα, οὐδὲ τοῦτο σημαίνει αὐτάς γε τὰς ὑστέρας δεῖσθαι θεραπείας, ἀλλὰ τὸ σῶμα. Ὡς ὅσαις συµμεταβάλλει ταῖς ἔξεσι τοῦ σώματος τὰ γυναικεῖα, δηλοῖ ὅτι οὐδὲν αἷτιον ἐν ταῖς ὑστέραις ἐστίν, ὅτι ὑγιαίνουσιν διατελοῦσιν.

Αὐταὶ δ' αὐτῶν ὅτε μὲν ἄρρωστώτεραι, ὅτε δ' ἰσχύουσι μᾶλλον, καὶ ὅτε μὲν ὑγρότεραι ὅτε δὲ ξηρότεραι. Καὶ φοιτᾷ αὐταῖς, ὅταν μὲν πλεῖον τὸ σῶμα αὐτῶν, πλείω, ὅταν δ' ἔλαττον, ἐλάττω, καὶ ἐὰν μὲν ὑγρόν, ὑδαρέστερα, ἐὰν δὲ ξηρόν, ἐναιμότερα. Καὶ ἄρχονται μὲν ἐκ λευκῶν γαλακτοειδῶν, ἀνόσμων μενόντων· τὰ δὲ φοινικᾷ μὲν, ἀπολήγοντα δὲ λευκότερα, ἐσχάτης καταλήξεως. Ὅσμην δ' ἔχει τὰ λευκὰ ταῦτα οὐ σηπεδόνος, ἀλλὰ δριμυτέραν καὶ βαρυτέραν, οὔτε πύου. Καὶ ἄνευ μὲν τήξεως, μετὰ μέντοι θερμασίας, ὅταν οὗτος ἢ ὁ τρόπος τῶν σημείων. Ὅσαις μὲν οὖν οὕτω συμβαίνει, ταύταις ἔχουσιν ὡς δεῖ τὰ περὶ τὰς ὑστέρας πρὸς τὴν τέκνωσιν.

Καὶ πρῶτον ταῦτα σκεπτέον, εἰ καλῶς ἔχει, μετὰ δὲ ταῦτα πῶς ἔχει τὸ στόμα τῶν ὑστερῶν. Δεῖ γὰρ εἰς ὀρθὸν ἔχειν· εἰ δὲ μή, οὐχ ἔλξουσιν εἰς αὐτάς τὸ σπέρμα.

Εἰς τὸ πρόσθεν γὰρ αὐτῶν καὶ ἡ γυνὴ προίεται, ὡς δῆλον, ὅταν ἐξονειρώττωσιν αὐταὶ τελέως· τότε γὰρ οὗτος ὁ τόπος θεραπείας δεῖται αὐταῖς ὑγρανθεῖς, ὥσπερ εἰ ἀνδρὶ συνεγένοντο, ὡς προϊέμενον ἐνταῦθα καὶ τὸ παρὰ τοῦ ἀνδρός, εἰς τὸν αὐτὸν τόπον καὶ οὐχὶ εἰς τὰς ὑστέρας εἴσω. Ἀλλ' ὅταν ἐνταῦθα προῖῶνται, ἐντεῦθεν σπῶσι τῷ πνεύματι, οἷον αἱ ῥῖνες, καὶ αἱ ὑστέραι τὸ σπέρμα. Διὸ καὶ παντὶ σχήματι συνοῦσαι κυῖσκονται, ὅτι εἰς τὸ πρόσθεν παντελῶς ἐχούσης γίνεται καὶ αὐταῖς καὶ τοῖς ἀνδράσιν ἢ πρόεσις τοῦ σπέρματος· εἰ δ' εἰς αὐτήν, οὐκ ἂν πάντως συγγινόμεναι συνελάμβανον.

Ἐὰν δὲ μὴ εἰς ὀρθὸν βλέπωσιν αἱ ὑστέραι ἀλλ' ἢ πρὸς τὰ ἰσχία ἢ πρὸς τὴν ὀσφὺν ἢ πρὸς τὸ ὑπογάστριον, (635a.) ἀδύνατον συλλαβεῖν διὰ τὴν προειρημένην αἰτίαν, ὅτι ἀνελέσθαι οὐκ ἂν δύναιντο τὸ σπέρμα. Ἐὰν μὲν οὖν ἰσχυρῶς τῇ φύσει οὕτως ἔχωσιν ἢ ὑπὸ νόσου, ἀνίατον τὸ πάθος· ἐὰν δ' ἢ ῥῆγμα ἢ φύσει ἢ ὑπὸ τῆς νόσου διὰ φλεγμασίαν συσπασάσης, ἐπὶ θάτερα αὐτῇ τὸ πάθος.

Ταῖς δὲ μελλούσαις ἐγκύοις ἔσεσθαι δεῖ, καθάπερ εἴρηται, τὸ στόμα εἰς ὀρθὸν εἶναι, καὶ πρὸς τούτοις ἀνοίγεσθαι καλῶς. Λέγω δὲ τὸ καλῶς τοιοῦτον ὅπως, ὅταν ἄρχηται τὰ γυναικεῖα, θιγγανόμενον ἔσται τὸ στόμα μαλακώτερον ἢ πρότερον, καὶ μὴ διεστομωμένον φανερώς. Ἄλλ' εἰ .... οὕτως ἔχοντος, τὰ πρῶτα σημεῖα τὰ λευκὰ φοιτάτω. Ὅταν δὲ σαρκικώτερα ἢ τὴν χροάν τὰ σημεῖα, φανερώς ἔσται ἀνεστομωμένη ἄνευ ἀλγήματος, κἂν θιγγάνῃ κἂν μὴ θιγγάνῃ, καὶ μήτε κωφότητα μήτε στόμα ἀλλοιότερον αὐτὸ αὐτοῦ. Ληξάντων δὲ τῶν γυναικείων διεστομωμένον ἔστω σφόδρα καὶ ξηρόν, ἀλλὰ μὴ σκληρόν, ἡμέραν ὅλην καὶ ἡμίσειαν ἢ καὶ δύο ἡμέρας. Ταῦτα γὰρ σημαίνει οὕτω γινόμενα ὅτι καλῶς ἔχουσιν αἱ ὑστέραι καὶ ποιοῦσι τὸ αὐτῶν ἔργον, τῷ μὲν μὴ εὐθὺς ἀνεστομῶσθαι ἀλλὰ μαλακὸν τὸ στόμα γίνεσθαι, ὅτι ἅμα τῷ ἄλλῳ σώματι λυομένῳ λύονται, καὶ οὐκ ἐμποδίζουσι, καὶ ἀφιᾶσι πρῶτον τὰ ἀπ' αὐτοῦ τοῦ στόματος, ὅταν δὲ πλείω τὸ σῶμα προῖηται, ἀναστομοῦνται· ὅπερ ἐστὶ στόματος ὑγιεινῶς ἔχοντος. Πausaμένων δὲ τῶν σημείων, τῷ μὴ εὐθὺς συμπίπτειν σημαίνουσιν ὅτι, ἂν ἀπορήσῃ, κενὰ καὶ ξηρὰ γίνονται καὶ διψηρὰ καὶ οὐκ ἔχουσι λείψανα περὶ τὴν δίοδον.

Προσπαστικὰ οὖν οὕσαι σημαίνουσι καλῶς ἔχειν πρὸς τὸ συλλαβεῖν πλησιάσαντος, ὅταν οὕτως ἔχωσιν ἄνευ ἄλγους καὶ μετὰ ἀναισθησίας. Τό τε μὴ ἀλλοιότερον ἔχειν τὸ στόμα ἀγαθόν· καὶ γὰρ τοῦτο σημαίνει ὅτι οὐδὲν ἐστὶν ὃ κωλύει μὴ συμμύειν αὐτὰς ὅταν δέῃ.

Περὶ μὲν οὖν τὸ στόμα τῶν ὑστερῶν ἐκ τούτων ἡ σκέψις ἐστίν, εἰ ἔχει ὡς δεῖ ἢ μή. Περὶ αὐτὴν δὲ τὴν ὑστέραν δεῖ συμβαίνειν τοιαῦτα μετὰ τὴν κάθαρσιν, πρῶτον μὲν ἐν τοῖς ὑπνοῖς ὡς συγγινομένην τῷ ἀνδρὶ καὶ προῖεμένην, ὡς ἂν εἰ παρεπλησίαζε, ῥαδίως· ἂν τοῦτο φαίνεται πλεονάκῃς πάσχουσα, ἄμεινον. Καὶ ἀνισταμένην ὅτε μὲν δεῖσθαι θεραπείας οἷας ὅταν πλησιάσῃ ἀνδρί, ὅτε δὲ ξηρασίας.

Τὴν δὲ ξηρότητα ταύτην μὴ συνεχῇ, ἀλλ' ὕστερον μετὰ τὴν ἔγερσιν ἐξυγραίνεσθαι ὅτε μὲν θᾶπτον ὅτε δ' ὀψιαίτερον καὶ ὅσον εἰς ἡμισυ τῆς ἡμέρας βραχείας προελθούσης. Ἡ δ' ὑγρότης (635b.) ἔστω τοιαύτη οἷα ὅταν πλεσιάσῃ τῷ ἀνδρί. Πάντα γὰρ ταῦτα σημαίνει δεκτικὴν τὴν ὑστέραν εἶναι τοῦ διδομένου, καὶ προσπαστικὰς τὰς κοτυληδόνας, καὶ καθεκτικὰς ὧν λαμβάνουσι, καὶ ἀκούσας ἀφειίσας.

Ἔτι φύσας ἐγγίνεσθαι ἄνευ πάθους, ὥσπερ ἡ κοιλία, καὶ ἀφιέναι, καὶ μεγάλας γινομένας καὶ ἐλάττους αὐτῶν, ἄνευ νόσου· καὶ γὰρ ταῦτ' ἀποδηλοῖ αὐτάς, ὅτι οὐδὲν στερεώτεραι τοῦ δέοντός εἰσιν, οὐδὲ κωφαὶ οὔτε φύσει οὔτε νόσῳ,

ἀλλὰ δύνανται, ὡς ἂν δέξωνται, αὐξανομένῳ παρέχειν χώραν. Ἔχουσι δὲ καὶ διάτασιν.

Ὅταν δὲ τοῦτο μὴ γίνηται, ἢ πυκνότεραί εἰσιν ἢ ἀναισθητότεραι ἢ φύσει ἢ νόσῳ. Διὸ καὶ οὐ δύνανται τρέφειν, ἀλλὰ καὶ διαφθείρουσι τὰ ἔμβρυα, ἐὰν μὲν σφόδρα τοιαῦται ὦσιν, ἔτι μικρὰ ὄντα, ἐὰν δ' ἦττον, μείζω· ἐὰν δὲ πάνυ ἡρέμα, φαυλότερα ἐκτρέφουσι τὰ ἔκγονα καὶ οἶον ἐν ἀγγείῳ φαύλῳ τραφέντα.

Ἔτι δὲ θιγγανομένης τὰ ἐπὶ δεξιὰ καὶ τὰ ἐπ' ἀριστερὰ ὁμαλὰ αὐτῆς εἶναι, καὶ τᾶλλα τούτοις ὁμοίως.

Καὶ ἐν τῇ πρὸς τὸν ἄνδρα συνουσίᾳ μεταξὺ ὑγραίνεσθαι, μὴ πολλάκις δὲ μηδὲ σφόδρα. Ἔστι δὲ τοῦτο τὸ πάθος οἶον ἰδρωμα τοῦ τόπου, ὥσπερ καὶ τῷ στόματι σιάλου πολλαχοῦ μὲν καὶ πρὸς τὴν φορὰν τῶν σιτίων, καὶ ὅταν λαλῶμεν καὶ ἐργαζώμεθα αὐτοὶ πλέον· καὶ τοῖς ὄμμασι δακρύομεν πρὸς τὰ λαμπρότερα ὀρῶντες, καὶ ὑπὸ ψύχους καὶ θερμότητος ἰσχυροτέρας, ἥς κρατεῖ τὰ μόρια ταῦτα, ὅταν τύχῃ ὑγροτέρως ἔχοντα. Οὕτω καὶ αἱ ὑστέραι ὑγραίνονται ἐργαζόμεναι, ὅταν τύχῃσιν ὑγροτέρας διαθέσεως. Πάσχουσι δὲ τοῦτο τὸ πάθος καὶ αἱ μάλιστα καλῶς πεφυκυῖαι. Διὸ θεραπείας αἰεὶ δέονται αἱ γυναῖκες ἢ πλείονος ἢ ἐλάττονος, ὥσπερ καὶ τὸ στόμα πτύσεως. Ἄλλ' ἐνίαις τοσαύτη ὑγρασία γίνεται, ὥστε μὴ δύνασθαι καθαρὸν τὸ τοῦ ἀνδρὸς ἀνασπάσαι διὰ τὴν σύμμιξιν τῆς γινομένης ἀπὸ τῆς γυναικὸς ὑγρότητος.

Πρὸς δὲ τούτοις τοῖς πάθεσι καὶ τοσόνδε δεῖ κατανοεῖν τί συμβαίνει, ὅταν δόξῃ ἐν τῷ ὕπνῳ πλησιάσαι τῷ ἀνδρί, πῶς ἔχουσα ἐξανίσταται, οἶον εἰ ἀσθενεστέρα, καὶ εἰ αἰεὶ, ἢ ὅτε μὲν ὅτε δ' οὐ, ἢ ἐνίστε καὶ ἰσχυροτέρα· εἰ δὲ μὴ ξηροτέρα τὸ πρῶτον, εἴτα ἐφυγραίνεται. Δεῖ γὰρ ταῦτα συμβαίνειν τῇ γονίμῳ γυναικί. Τὸ μὲν γὰρ ἐκλύεσθαι σημαίνει προετικὸν εἶναι τὸ σῶμα σπέρματος αἰεὶ, τὴν τ' ἐκποιοῦσαν ποιεῖ καὶ σωματωδῶν δ' οὐσῶν ἀσθενεστέραν. Τὸ δ' ἀνόσως τοῦτο πάσχειν σημεῖον ὅτι κατὰ φύσιν καὶ ὃν δεῖ τρόπον ἢ ἄφοδος τούτου γίνεται· εἰ γὰρ μή, νοσώδης (636a.) ἦν ἢ ἄρρωστίᾳ. Τὸ δέ ποτε καὶ ἰσχύειν μᾶλλον, καὶ ξηρὰν εἶναι τὴν ὑστέραν, εἴτ' ἐφυγραίνεσθαι, σημεῖον ὅτι πᾶν τὸ σῶμα λαμβάνει καὶ ἀφανίζει, καὶ οὐ μόνον ἢ ὑστέρα καὶ τὸ σῶμα ἰσχύει. Πνεύματί τε γὰρ ἔλκει ἢ ὑστέρα τὸ προσελθὸν ἔξωθεν αὐτῇ, ὥσπερ πρότερον εἴρηται. Οὐ γὰρ εἰς αὐτὴν προῖεται, ἀλλ' οὐ καὶ ὁ ἀνὴρ. Ὅσα δὲ πνεύματι, πάντα ἰσχυρῶς ἐργάζεται. Ὡστε δῆλον ὅτι καὶ τὸ σῶμα προσσπαστικὸν τῆς τοιαύτης.

Εἰσὶ δέ τινες αἱ πάσχουσί τι τοιοῦτον ὃ καλοῦσιν ἐξανεμοῦσθαι· δεῖ δὴ καὶ τοῦτο μὴ πάσχειν. Ἔστι δὲ τὸ τοιοῦτον πάθος· ὅταν συγγένωνται τῷ ἀνδρί, οὔτε προῖεμεναι δῆλαι τὸ σπέρμα οὔτε κυῖσκονται, διὸ καὶ καλεῖται ἐξανεμοῦσθαι.

Αἴτιον δὲ τοῦ πάθους ἡ ὑστέρα, ὅταν ἡ λίαν ξηρά· ἐλκύσασα γὰρ πρὸς αὐτὴν τὸ ὑγρὸν ἀφήσιν ἔξω· τὸ δὲ κατασκελετεύεται, καὶ μικρόν τι γινόμενον ἐξ αὐτῆς ἀπέπεσέ τε καὶ ἔλαθε διὰ μικρότητα ἐξιόν. Καὶ ὅταν μὲν τοῦτο σφόδρα πάθῃ ἡ ὑστέρα καὶ γένηται ὑπέρξηρος, ταχύ τ' ἀπέβαλε καὶ ταχὺ δῆλον γίνεται ὅτι οὐ κύει· ἐὰν δὲ μὴ σφόδρα ταχέως ταῦτα ποιῇ, ἐν τῷ μεταξὺ χρόνῳ δοκεῖ κύειν, ὃ ἂν ἔχῃ αὐτὴ πρὸς αὐτήν, ἕως ἂν ἀποβάλλῃ. Καὶ ὅμοια συμβαίνει ταχὺ ταύταις πάθῃ οἷα ταῖς ὀρθῶς κυούσαις, καὶ ἐὰν γίνηται πολὺς χρόνος, αἴρεται ἡ ὑστέρα, ὥστε φανερώς δοκεῖ κύειν, ἕως ἂν ἀποπέσῃ· τότε δ' ὁμοία ἐγένετο οἷα πρὸ τοῦ ἦν. Αναφέρουσι δὲ τοῦτο τὸ πάθος εἰς τὸ δαιμόνιον. Ὅ ἐστι θεραπευτόν, ἐὰν μὴ φύσει τοιαύτη ἡ σφόδρα πάσχουσα τὸ πάσχον. Σημεῖον δὲ τοῦ μὴ τοιαύτας εἶναι, ἐὰν φαίνωνται μὴ προῖεμεναι, ὅταν λάβωσι παρὰ τοῦ ἀνδρός, καὶ μὴ συλλάβωσιν.

Κωλύονται δὲ καὶ ἐὰν σπᾶσμα ἔχωσιν αἱ ὑστέραι. Γίνονται δὲ σπᾶσματα ἐν ταῖς ὑστέραις ἢ φλεγμασίᾳ διατεινομένης τῆς ὑστέρας, ἢ ἐν τῷ τόκῳ πληρώματος πολλοῦ ἐξαπίνης ἐπιπεσόντος καὶ μὴ ἀνοιγομένου τοῦ στόματος· τότε ὑπὸ τῆς διατάσεως γίνεται σπᾶσμα. Σημεῖον δὲ τοῦ μὴ ἔχειν σπᾶσμα, ἐὰν μὴ φαίνεται εἰς φλεγμασίαν ἀφικνουμένη ἐν τοῖς αὐτῆς ἔργοις ἡ ὑστέρα· ἔχουσα γὰρ σπᾶσμα φλεγμαῖνοι ἂν ποτε.

Ἔτι δ' ἐὰν φῦμα ἐπὶ τοῦ στόματος ἦ, πολλὰ ἐλκωθέντος, ἐμποδίζει πρὸς τὰς συλλήψεις. Σημεῖον δὲ καὶ τοῦ ταῦτα μὴ ἔχειν, ἐὰν φαίνεται ἀνοιγομένη καλῶς ἡ ὑστέρα καὶ συμμύουσα, ὅταν γένηται αὐταῖς τὰ γυναικεῖα καὶ αἱ πρὸς τὸν ἄνδρα (636b.) χρήσεις.

Ἔτι ἔστιν αἷς πως τὸ στόμα συμφύεται, ταῖς μὲν ἐκ γενετῆς ταῖς δὲ διὰ νόσον. Γίνεται δὲ τοῦτο καὶ ἰατὸν καὶ ἀνίατον. Οὐ χαλεπὸν δὲ τοῦτο γνῶναι, ἐὰν ἡ οὐ γὰρ οἷόν τ' οὔτε λαμβάνειν οὐδὲν ὧν δεῖ οὔτε προῖεσθαι. Ἐὰν οὖν φαίνεται καὶ δεχομένη παρὰ τοῦ ἀνδρός καὶ ἀφιεῖσα, δῆλον ὅτι οὐκ ἂν ἐνσχεθεῖ τῷ πάθει.

Ὅσαις δὲ τούτων μηδὲν ἐμπόδιον ἦ, ἀλλ' ἔχουσιν ὃν τρόπον δεῖν εἴρηται ἔχειν, ἂν μὴ ὁ ἀνὴρ αἴτιος ἢ τῆς ἀτεκνίας, ἀμφοτέρωθεν μὲν δύνανται τεκνοῦσθαι, πρὸς ἀλλήλους δ' ἐὰν μὴ ὡς σύμμετροι τῷ ἅμα προῖεσθαι ἀλλὰ

πολὺ διαφωνῶσιν, οὐκ ἔσονται τέκνα τούτοις.

Τοῦ μὲν οὖν εἰδέναι τὰ τοῦ ἀνδρὸς αἷτια ἔστι μὲν καὶ ἄλλα σημεῖα λαβεῖν· ἃ δὲ ῥᾶω μάλιστ' ἂν φαίνοιτο, πρὸς ἄλλας πλησιάζων καὶ γεννῶν.

Τῷ δὲ πρὸς ἀλλήλους μὴ συνδρόμῳς ἔχειν, πάντων τῶν εἰρημένων ὑπαρξάντων, οὐ γεννῶσιν. Δηλοῖ γὰρ ὅτι τοῦτο αἷτιον μόνον. Εἴπερ γὰρ καὶ ἡ γυνὴ συμβάλλεται εἰς τὸ σπέρμα καὶ τὴν γένεσιν, δῆλον ὅτι δεῖ ἰσοδρομῆσαι παρ' ἀμφοῖν. Ἐὰν οὖν ὁ μὲν ταχὺ ἐκποιήσῃ ἡ δὲ μόλις (τὰ γὰρ πολλὰ αἱ γυναῖκες βραδύτεραι), τοῦτο κωλύει· διὸ καὶ συζευγνύμενοι οὐ γεννῶντες μετ' ἀλλήλων, γεννῶσιν ὅταν ἐντύχωσιν ἰσοδρομοῦσι πρὸς τὴν συνουσίαν. Εἰ γὰρ ἡ μὲν ὀργῶσα καὶ παρεσκευασμένη εἴη καὶ ἐννοίας ἔχουσα ἐπιτηδείας, ὁ δὲ προλελυπημένος καὶ κατεψυγμένος, ἀνάγκη τότε ἰσοδρομῆσαι αὐτοὺς ἀλλήλοις.

Ἔτι δ' ἐνίστε γυναιξὶ καὶ ἐξονειρωξάσαις καὶ ἀνδράσιν ἀφροδισιάσαι συμβαίνει εὐρωστωτέροις εἶναι, μὴ ἰσχυρὶ ἄλλ' ὑγιείᾳ. Γίνεται δὲ τοῦτο, ὅταν πολὺ τὸ σπέρμα ἢ ἡθροισμένον ἐπὶ τὸν τόπον ὅθεν προῖενται. Ἐὰν οὖν τότε ἀπέλθῃ, οὐδὲν ἀσθενέστεραι γίνονται· οὐ γὰρ ἀεὶ ἐκλύονται ἀπελθόντων, ὅταν ἱκανὰ ἢ τὰ λειπόμενα· οὐδ' ἂν εἰ ἐκεῖνα ἄχρηστα ἢ ἅμα καὶ ῥᾶω, οἷον πλησμονῆς ἀπαλλαγέντα· διὸ οὐκ ἰσχυρὶ εὐρωστώτεραι ἀλλὰ κουφότητι γίνονται. Ἀλλ' ὅταν ἀπὸ τοσούτων ἐπίῃ ὧν τὸ σῶμα δεῖται, τότε ἀσθενεστέρας ποιεῖ.

Παύεται δὲ ταχύ, ἂν ἄλλως τις ὑγιάνῃ τὸ σῶμα καὶ ἐν ἡλικίᾳ ἢ, ἢ ταχὺ σπερμοποιεῖ· τῶν γὰρ αὐξανομένων τοῦτ' ἔστι ταχύ καὶ τῶν αὐξητῶν. Καὶ λανθάνουσι τότε μάλιστα

κυῖσκόμεναι. Οὐ γὰρ οἷονται συνειληφέναι, ἐὰν μὴ αἰσθωνται προιέμεναι ..... δὲ τυγχάνουσιν ὑπολαμβάνουσαι ὡς δεῖ ἀπ' ἀμφοῖν συμπεσεῖν ἅμα, καὶ ἀπὸ τῆς γυναικὸς καὶ ἀπὸ τοῦ ἀνδρός. Μάλιστα δὲ λανθάνει, ὅσαι οἷονται ἀδύνατον εἶναι (637a.) συλλαβεῖν, ἐὰν μὴ ξηρανθῶσι καὶ ἐπιδήλως ἀφανισθῇ τὸ δοθέν. Συμβαίνει δ' ἐνίστε πλέον προῖεσθαι καὶ αὐτὴν καὶ τὸν ἄνδρα οὗ ἂν δύνηται ἀφανίσαι καὶ τοῦ ἱκανοῦ. Ὅταν οὖν σπάσῃ μὲν ἱκανόν, λειφθῇ δὲ πολὺ, τότε λανθάνουσι κυῖσκόμεναι. Ὅτι δὲ τοιοῦτον ἐνδέχεται γίνεσθαι καὶ οὐκ ἐξ ἅπαντος γίνεται τὸ πάθος, δηλοῖ ὅσα τῶν ζώων ἀπὸ μιᾶς ὀχείας πολλὰ τίκτει, καὶ ἡ τῶν διδύμων γένεσις, ὅταν ἀπὸ μιᾶς γένηται· δῆλον γὰρ ὅτι ἐξ οὐχ ἅπαντος ἐγένετο, ἀλλὰ μέρος τι αὐτοῦ ἔλαβεν ὁ τόπος, τὸ δὲ περιελείπετο πολλαπλάσιον. Ἔτι εἰ πολλὰ ἀπὸ μιᾶς ὀχείας γίνεται, ὅπερ

φαίνεται ἐπὶ τῶν ὑῶν καὶ τῶν διδύμων ἐνίστε γινόμενον, δῆλον ὅτι οὐκ ἀπὸ παντὸς ἔρχεται τὸ σπέρμα τοῦ σώματος, ἀλλ' ἐφ' ἑκάστου εἶδους ἐμερίζετο. Ἀπὸ παντὸς μὲν γὰρ ἐνδέχεται ἀποχωρισθῆναι, καὶ τὸ πᾶν εἰς πολλά. Ὡστε ἅμα ..... καὶ κατὰ μέρος ἀδύνατον.

Ἔτι ἡ γυνὴ προίεται εἰς τὸ πρόσθεν τοῦ στόματος τῶν ὑστερῶν, οὗ καὶ ὁ ἀνὴρ, ὅταν πλησιάσῃ. Ἐντεῦθεν γὰρ σπᾶ τῷ πνεύματι, ὥσπερ τοῖς στόμασιν ἢ τοῖς μυκτῆρσιν. Πάντα γὰρ ὅσα μὴ ὀργάνοις προσάγεται, ἢ φύσιν ἔχει ἀνωθεῖν κοῦφα ὄντα, ἢ πνεύματι ἔλκονται ἐκ τούτου τοῦ τόπου. Διὸ ἐπιμελοῦνται ὅπως γένηται ξηρὸς οὕτως, ὥσπερ πρὶν τοῦτο συμβαίνειν.

Πέφυκε δ' οὕτως ἡ ὁδός, δι' ἧς ἔρχεται, ταῖς γυναῖξιν. Ἔχουσι καυλόν, ὥσπερ καὶ οἱ ἄνδρες τὸ αἰδοῖον, ἀλλ' ἐν τῷ σώματι. Ἀποπνέουσι διὰ τοῦτο μικρῷ τε πόρῳ ἀνωτέρῳ <ἢ> ἢ οὐροῦσιν αἱ γυναῖκες. Διὸ καὶ ὅταν ὀργῶσιν ἀφροδισιασθῆναι, οὗτος ὁ τόπος οὐκ ἔχει ὁμοίως καὶ πρὶν ὀργᾶν. Ἀπὸ δὲ τούτου τοῦ καυλοῦ γίνεται ἔκπτωσις, καὶ τὸ ἔμπροσθεν τῆς ὑστέρας πολλῷ μείζον ἢ καθ' ἣν εἰς ἐκεῖνον τὸν τόπον ἐκπίπτει. Ὅμοιον δ' ἐστὶ τοῦτο κατὰ τοῦτο ταῖς ῥισίν· καὶ γὰρ αἱ ῥῖνες ἔχουσιν εἴσω εἰς τὸν φάρυγγα πόρον τινὰ καὶ εἰς τὸν ἔξω ἀέρα· οὕτω κἀκεῖνος καὶ ἔξω ἔχει πόρον μικρόν τε πάνυ καὶ στενόν, ὅσον πνεύματι ἔξοδον, τὸν δ' εἰς τὸ πρόσθεν τῆς ὑστέρας εὐρύχωρον [εὐρουν] ὥσπερ αἱ ῥῖνες τὸν εἰς τὸν ἀέρα μείζω τοῦ εἰς τὸ στόμα καὶ φάρυγγα.

Ὅμοίως δὲ καὶ αἱ γυναῖκες μείζω τὸν εἰς τὸ ἔμπροσθεν τῶν ὑστερῶν πόρον ἔχουσι καὶ εὐρυχωρότερον τοῦ ἔξω.

Ὅ τι συμβάλλεται εἰς τοῦτο, ποιεῖ ..... τῶν αὐτῶν παθημάτων, ὅτι καὶ ἡ γυνὴ γόνιμον προίεται. Τὰ δ' αὐτὰ αἷτια, ταῦτα συμβαίνει. Καὶ γὰρ οἷς ἡ νόσου ἢ θανάτου δοκεῖ ἑτέρου τὸ αἷτιον, θεωροῦσι τὸ (637b.) τελευταῖον ἐπὶ τὰς ἀρχάς, ὃ δεῖ ὀρᾶν. Τοῖς μὲν γὰρ ταῦτα αἷτια τὰ πρῶτα, τοῖς δ' οὐδέν, τῶν δὲ τὰ μὲν τὰ δ' οὐ.

Ἀποδίδωσιν οὖν κατὰ λόγον καὶ τὰ ἀποβαίνοντα· καὶ τοῖς μὲν διὰ πάντων συμβαίνει διελθεῖν τῶν αὐτῶν παθημάτων, τοῖς δὲ διὰ πολλῶν, οἷς πολλά, τοῖς δὲ δι' ὀλίγων, τοῖς δὲ δι' οὐδενός, ὅσοις μηδέν.

Φανερά δὲ τὰ ζῶα ἐστίν, ὅταν ὀχευθῆναι δέηται. Διώκει γὰρ τὰ ἄρρενα, οἷον αἱ ἀλεκτορίδες διώκουσι καὶ ὑφιζάνουσιν αὐταί, ἐὰν μὴ ὀργᾷ ὁ ἄρρην. Τοῦτο δὲ ποιεῖ καὶ ἄλλα ζῶα. Εἰ δὲ ταῦτα πάθη πᾶσι τοῖς ζώοις φαίνεται

ὄντα περὶ τὴν συνουσίαν, δῆλον ὅτι καὶ τὰ αἷτια συμβαίνοντα.

Ἀλλὰ μὴν ἢ γ' ὄρνις οὐ μόνον τοῦ λαβεῖν ἐπιθυμίαν ἔχει, ἀλλὰ καὶ τοῦ προέσθαι. Σημεῖον δὲ τούτου· ἐὰν γὰρ μὴ παρῇ ὁ ἄρρην, πίπτει ὑπ' ἄλλην καὶ ἔγκυος γίνεται καὶ τίκτει ὑπηνέμια, ὡς ἐπιθυμοῦσα καὶ τοῦ ἀφεῖναι τότε, καὶ ἀφεῖσα, ἵως ὅταν καὶ τῷ ἄρρηνι ἀνὴρ συνῇ.

Ποιεῖ δὲ τοῦτο καὶ τᾶλλα, ἐπειδὴ καὶ τῶν ἀδουσῶν ἀκρίδων ἤδη τις ἐπειράθη τρέφουσα, ἔτι ἀπαλὰς λαβοῦσα· καὶ ἐγένοντο αὐτόματοι ἔγκυοι. Ἐκ δὴ τούτων δῆλον ὅτι συμβάλλεται εἰς τὸ σπέρμα πᾶν τὸ θῆλυ, εἴ γε καὶ ἐφ' ἐνὸς γένους φαίνεται τοῦτο γινόμενον. Οὐδὲν γὰρ διαφέρει τὸ ὦδὸν τὸ ὑπηνέμιον τούτου, ἀλλὰ τῷ μὴ γεννᾶν ζῶον. Τοῦτο δ' ὅτι καὶ παρ' ἀμφοῖν ἦλθεν. Διὸ οὐδὲ τὰ ἀπὸ τοῦ ἄρρενος ἅπαντα γόνιμα φαίνεται, ἀλλ' ἓνια ἄγονα, ὅταν μὴ ἐξ ἀμφοῖν ὡς δεῖ συναρμοσθῇ.

Ἔτι γυναῖκες ἐξονειρώττουσι, καὶ ταύταις γίνεται, ὡς ὅταν συγγένωνται ἀνδρί, ταῦτ' αὖ παθήματα μετὰ τὸν ὄνειρωγμόν, διάλυσις καὶ ἀδυναμία. Δῆλον τοίνυν, εἰ ἐν τῷ ἐξονειρωγμῷ φαίνονται προϊέμεναι, καὶ τότε συμβάλλονται, ὅτι μετὰ τοὺς ἐξονειρωγμοὺς ὁ αὐτὸς τόπος ἀφυγραίνεται, καὶ θεραπείας δέονται τῆς αὐτῆς αὐταὶ ὑφ' αὐτῶν, ὥσπερ ὅταν συγγένωνται ἀνδρί. Ὅστε φανερόν ὅτι παρ' ἀμφοῖν γίνεται πρόεσις τοῦ σπέρματος, εἰ μέλλει γόνιμον ἔσεσθαι.

Προῖενται δ' οὐκ εἰς αὐτὰς αἱ ὑστέραι, ἀλλ' ἔξω, οὗ καὶ ὁ ἀνὴρ· εἴτ' ἐκεῖθεν ἔλκει εἰς αὐτάς. Ὡν τὰ μὲν γεννᾷ ἀφ' αὐτῶν τὰ θήλεα, οἷον ὄρνις τὰ ὑπηνέμια, τὰ δ' οὐδέν, οἷον ἵπποι καὶ πρόβατα. Ἡ ὅτι ἡ μὲν ὄρνις εἰς τὴν ὑστέραν προϊεται, καὶ οὐκ ἔστιν ἔξω τόπος εἰς ὃν ἀφίησιν, οὐδ' ὁ ἄρρην; Διὸ ἐὰν μὴ τύχη ὀχεύων, εἰς τὴν γῆν ἐκχεῖ. Τοῖς δὲ τετράποσιν ἔστιν ἔξω τόπος ἄλλος, εἰς ὃν καὶ τὸ θῆλυ (638a.) προϊεται καὶ τὸ ἄρρην.

Ὅπερ τοῖς μὲν ἄλλοις μετὰ τῶν ἄλλων ὑγρῶν συγχεῖται, καὶ οὐ συνίσταται ἐν τῇ ὑστέρᾳ διὰ τὸ μὴ εἰσιέναι, τοῖς δ' ὄρνισι λαβοῦσα ἡ ὑστέρα συμπέττει καὶ σῶμά τι ὅμοιον τᾶλλα, πλὴν οὐ ζῶον, διότι δεῖ ἐξ ἀμφοῖν τὸ ζῶον εἶναι.

Ἔστι δ' ἐνστήναι εἰ ἀληθῆ λέγουσι φάσκουσαι, ὅταν ἐξονειρώττωσι, ξηραὶ ἀνίστασθαι. Δῆλον γὰρ ὅτι ἔλκει ἡ ὑστέρα ἄνωθεν, ὥστε διὰ τί οὐ γεννᾷ αὐτὰ καθ' αὐτὰ τὰ θήλεα, ἐπεὶ καὶ μιχθὲν ἔλκει τὸ τοῦ ἄρρενος; Διὰ τί οὐχὶ καὶ ἀμιγῆς τὸ αὐτῆς ἔλκει, ὅπερ εἰς τὸ ἔξω διατείνει;

Αἷς γίνεται τοῦτο τὸ πάθος κυούσαις ἔτη πολλά. Τίκτουσι γὰρ ὃ καλοῦσι

μύλην, οἷον συνέβη τινὶ γυναικί. Συγγενομένης τῷ ἀνδρὶ καὶ δοξάσης συλλαβεῖν ὃ τ' ὄγκος ηὔξανετο τῆς ὑστέρας καὶ τᾶλλα ἐγίνετο τὸ πρῶτον κατὰ λόγον.

Ἐπεὶ δ' ὁ χρόνος ἦν τοῦ τόκου, οὗτ' ἔτικτεν οὕθ' ὁ ὄγκος ἐλάττων ἐγίνετο, ἀλλ' ἔτη τρία ἢ τέτταρα οὕτω διετέλεσεν, ἕως δυσεντερίας γενομένης καὶ κινδυνευσάσης αὐτῆς ἔτεκε σάρκα εὐμεγέθη, ἣν καλοῦσι μύλην. Ἐνίαις δὲ καὶ συγκαταγηράσκει τὸ πάθος καὶ συναποθνήσκει. Πότερον δὲ διὰ θερμότητα γίνεται τὸ πάθος τοῦτο, ὅταν τύχη ἡ ὑστέρα θερμὴ καὶ ξηρὰ οὕσα καὶ διὰ ταῦτα σπαστικὴ πρὸς αὐτήν, καὶ οὕτως ὥστ' ἔστιν ἀνελέσθαι καὶ φυλάξαι πρὸς αὐτήν; Οὕτω γὰρ ἐχούσαις, ἐὰν μὴ μεμιγμένον ἐστὶ τὸ ἀπ' ἀμφοῖν, ἀλλ' ὥσπερ τὸ ὑπηνέμιον ἐνδέξαιτο ἀπὸ θατέρου, τότε γίνεται ἡ καλουμένη μύλη, οὕτε ζῶον, διὰ τὸ μὴ παρ' ἀμφοῖν, οὗτ' ἄψυχον, διὰ τὸ ἔμψυχον <τὸ> ληφθὲν εἶναι, ὥσπερ τὰ ὑπηνέμια.

Πολὺν δὲ χρόνον ἐμμένει διὰ τε τὴν τῆς ὑστέρας διάθεσιν, καὶ διότι ἡ μὲν ὄρνις πολλὰ εἰς αὐτὴν τίκτουσα, ὑπὸ τούτων τεινομένης τῆς ὑστέρας, προάγει καὶ τίκτει· καὶ ὅταν ἅπαξ οἰχθῇ, καὶ τὸ τελευταῖον ἐξέρχεται. Οὐ γὰρ ἐστὶ τὸ εἶργον, ἀλλὰ καὶ τὸ σῶμα προετικὸν γενόμενον, ὅτε ἐπληροῦτο, οὐκέτι τὴν ὑστέραν ποιεῖ ἀντισπαστικήν. Ὅσα δὲ ζωοφορεῖ, διὰ τὸ μεταβάλλειν τὴν δύναμιν αὐξανομένου καὶ ἄλλοτε ἄλλοίαις δεῖσθαι τροφῆς, ἐπιφλεγμαίνουσά τι ἡ ὑστέρα ποιεῖ τακτὸν τὸν τόκον. Ἡ δὲ σάρξ, διὰ τὸ μὴ ζῶον εἶναι, ἀεὶ τῶν ὁμαλῶν.

Δεῖ γὰρ ὃ βαρύνει τὴν ὑστέραν οὐδὲν ποιεῖν φλεγμαίνειν. Ὡς ἐνίαις γε καὶ συναποθνήσκει τὸ πάθος, ἐὰν μὴ τι εὐτύχημα ἀσθενήματος συμβῇ, οἷον τῇ ληφθείσῃ ὑπὸ τῆς (638b.) δυσεντερίας.

Πότερον δ' ὥσπερ εἴρηται, διὰ θερμότητα γίνεται τὸ πάθος ἢ μᾶλλον δι' ὑγρότητα, ὅτι καὶ ἔστι τὸ πλήρωμα οἷον μύει, ἢ ὅταν μὴ οὕτως ἢ ψυχρὰ ἢ ὑστέρα ὥστε ἀφεῖναι, μηδ' οὕτω θερμὴ ὥστε πέψαι; Διὸ καὶ χρόνιον τὸ πάθος, ὥσπερ καὶ τὰ ἐν ἐψήσει πολὺν χρόνον διαμένει. Τὰ δ' ἐψόμενα πέρας ἔχει καὶ ταχυτῆτα. Αἱ δὲ τοιαῦται ὑστέραι ἀκρόταται οὕσαι τὸν χρόνον ποιοῦσι πολύν. Ἔτι δὲ τὸ μὴ ζῶον εἶναι μὴ κινούμενον οὐ ποιεῖ τὴν ὠδῖνα· ἡ γὰρ κίνησις τῶν συνδέσμων ὠδὶς ἐστίν, ἣν διὰ τὸ ζῆν <ποιεῖ> προῖεσθαι τὸ ἔμβρυον.

Καὶ ἡ σκληρότης δ' ἡ γινομένη τοῦ πράγματος μωλύσεως ἔργον ἐστίν. Οὕτω γὰρ γίνεται σκληρὸν ὥστε πελέκει οὐ δύνανται διακόπτειν. Τὰ μὲν οὖν ἐφθὰ



καὶ πάντα τὰ πεπεμμένα μαλακὰ γίνεται, τὰ δὲ μεμολυμμένα ἄπεπτα καὶ σκληρά.

Ὅτι πολλοὶ ἰατροὶ ἀγνοοῦντες δι' ὁμοιότητα μύλας εἶναι τὸ πάθος λέγουσιν, ἂν μόνον ἴδωσι τὰς τε κοιλίας ἐπαιρομένας ἄνευ ὕδρωπος καὶ τῶν ἐπιμηνίων σχέσιν, ὅταν χρονίζῃ τοῦτο τὸ πάθος. Τὸ δ' οὐκ ἔστιν, ἀλλ' ὀλιγάκις γίνονται αἱ γινόμεναι μύλαι. Ἄλλοτε μὲν σύρρους γίνεται ψυχρῶν καὶ ὑγρῶν περιττωμάτων καὶ ὑδαρῶν, ἄλλοτε δὲ παχυτέρων, εἰς τὸν περὶ τὴν κοιλίαν τόπον, ἐὰν τὴν φύσιν τοιαῦτα ἦ ἢ τὴν ἔξιν. Ταῦτα γὰρ οὔτ' ὀδυνηρὰν παρέχει οὔτε θερμότητα διὰ ψυχρότητα. Αὕξησιν δὲ λαβόντα τὰ μὲν μείζω τὰ δ' ἐλάττω, οὐδεμίαν ἄλλην ἐπισπῶνται νόσον παρ' ἑαυτά, ἀλλ' ὥσπερ πῆρωμά τι ἡσυχάζει. Ἡ δ' ἀπόλειψις τῶν καταμηνίων γίνεται διὰ τὸ δεῦρο καταναλίσκεσθαι τὰ περιττώματα, ὥσπερ καὶ ὅταν θηλάζωνται· καὶ γὰρ ταύταις ἢ οὐ γίνεται ἢ ὀλίγα.

Ἔστι δ' ὅτε καὶ εἰς τὸν μεταξὺ τόπον τῆς ὑστέρας καὶ τῆς κοιλίας συρρέον ἐκ τῆς σαρκὸς δοκεῖ μύλη εἶναι, οὐκ οὔσα. Ἔστι δ' οὐ χαλεπὸν γνῶναι, ἂν μύλη ἦ, θιγγάνοντα τῆς ὑστέρας. Ἐὰν γὰρ ἦ εὐσταλὴς καὶ μὴ ἔχουσα αὕξησιν, δῆλον ὅτι οὐκ ἐν ἐκείνῃ τὸ πάθος. Ἐὰν δὲ τοιαύτη ἦ οἷον ὅτε παιδίον ἔχει [μύλην], θερμὴ τε [καὶ ψυχρὰ] καὶ ξηρὰ ἔσται διὰ τὸ εἶσω τετράφθαι τὰ ὑγρά, καὶ τὸ στόμα τοιαύτη οἷον ὅταν κύωσιν. Ἐὰν δέ τι ἄλλο ἢ ὁ ὄγκος, ἔσται ψυχρὰ θιγγανομένη καὶ οὐ ξηρά, καὶ αἰεὶ τὸ στόμα ὅμοιον.

## Περὶ ζώων μορίων (639a) Parts of Animals



### CONTENTS

[Βιβλίο 1](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Βιβλίο 2](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Βιβλίο 3](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Βιβλίο 4](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

## **Βιβλίο 1**

### **Κεφάλαιο 1**

(639a.) Περὶ πᾶσαν θεωρίαν τε καὶ μέθοδον, ὁμοίως ταπεινοτέραν τε καὶ τιμιωτέραν, δύο φαίνονται τρόποι τῆς ἔξεως εἶναι, ὧν τὴν μὲν ἐπιστήμην τοῦ πράγματος καλῶς ἔχει προσαγορεύειν, τὴν δ' οἷον παιδείαν τινά. Πεπαιδευμένου γάρ ἐστι κατὰ τρόπον τὸ δύνασθαι κρῖναι εὐστόχως τί καλῶς ἢ μὴ καλῶς ἀποδίδωσιν ὁ λέγων. Τοιοῦτον γὰρ δὴ τινὰ καὶ τὸν ὅλως πεπαιδευμένον οἰόμεθ' εἶναι, καὶ τὸ πεπαιδεῦσθαι τὸ δύνασθαι ποιεῖν τὸ εἰρημένον. Πλὴν τοῦτον μὲν περὶ πάντων ὡς εἶπεῖν κριτικόν τινὰ νομίζομεν εἶναι ἓνα τὸν ἀριθμὸν ὄντα, τὸν δὲ περὶ τινος φύσεως ἀφωρισμένης· εἴη γὰρ ἂν τις ἕτερος τὸν αὐτὸν τρόπον τῷ εἰρημένῳ διακείμενος περὶ μόνιον. Ὡστε δῆλον ὅτι καὶ τῆς περὶ φύσιν ἱστορίας δεῖ τινὰς ὑπάρχειν ὄρους τοιούτους πρὸς οὓς ἀναφέρων ἀποδέχεται τὸν τρόπον τῶν δεικνυμένων, χωρὶς τοῦ πῶς ἔχει τἀληθές, εἴτε οὕτως εἴτε ἄλλως. Λέγω δ' οἷον πότερον δεῖ λαμβάνοντας μίαν ἐκάστην οὐσίαν περὶ ταύτης διορίζειν καθ' αὐτήν, οἷον περὶ ἀνθρώπου φύσεως ἢ λέοντος ἢ βοῦς ἢ καὶ τινος ἄλλου καθ' ἕκαστον προχειριζομένους, ἢ τὰ κοινῇ συμβεβηκότα πᾶσι κατὰ τι κοινὸν ὑποθεμένους. Πολλὰ γὰρ ὑπάρχει ταῦτά πολλοῖς γένεσιν ἑτέροις οὓσιν ἀλλήλων, οἷον ὕπνος, ἀναπνοή, αὔξησις, φθίσις, θάνατος, καὶ πρὸς τούτοις ὅσα τοιαῦτα τῶν λειπομένων παθῶν τε καὶ διαθέσεων· ἄδηλον γὰρ καὶ ἀδιόριστόν ἐστι λέγειν νῦν περὶ τούτων. Φανερόν

δ' ὅτι καὶ κατὰ μέρος μὲν λέγοντες περὶ πολλῶν ἐροῦμεν πολλάκις ταῦτά· καὶ γὰρ ἵπποις καὶ κυσὶ καὶ ἀνθρώποις ὑπάρχει τῶν εἰρημένων ἕκαστον, ὥστε ἔαν καθ' ἕκαστον τῶν συμβεβηκότων λέγη τις, πολλάκις ἀναγκασθήσεται περὶ τῶν αὐτῶν λέγειν, ὅσα ταῦτά μὲν ὑπάρχει τοῖς εἶδει διαφέρουσι τῶν ζώων, αὐτὰ δὲ μηδεμίαν ἔχει διαφορὰν. Ἔτερα δὲ ἴσως ἐστὶν οἷς συμβαίνει τὴν μὲν κατηγορίαν ἔχειν τὴν αὐτήν, διαφέρειν (639b.) δὲ τῇ κατ' εἶδος διαφορᾷ, οἷον ἢ τῶν ζώων πορεία· οὐ γὰρ φαίνεται μία τῷ εἶδει· διαφέρει γὰρ πτήσις καὶ νεῦσις καὶ βάδισις καὶ ἔρψις. Διὸ δεῖ μὴ διαλεληθέναι πῶς ἐπισκεπτέον, λέγω δὲ πότερον κοινῇ κατὰ γένος πρῶτον, εἴτα ὕστερον περὶ τῶν ἰδίων θεωρητέον, ἢ καθ' ἕκαστον εὐθύς. Νῦν γὰρ οὐ διώριστα περὶ αὐτοῦ οὐδέ γε τὸ νῦν ῥηθησόμενον, οἷον πότερον καθάπερ οἱ μαθηματικοὶ τὰ περὶ τὴν ἀστρολογίαν δεικνύουσιν, οὕτω δεῖ καὶ τὸν φυσικὸν τὰ φαινόμενα πρῶτον τὰ περὶ τὰ ζῶα θεωρήσαντα καὶ τὰ μέρη τὰ περὶ ἕκαστον, ἔπειθ' οὕτω λέγειν τὸ διὰ τί καὶ τὰς αἰτίας, ἢ ἄλλως πως.

Πρὸς δὲ τούτοις, ἐπεὶ πλείους ὀρώμεν αἰτίας περὶ τὴν γένεσιν τὴν φυσικὴν, οἷον τὴν τε οὐ ἔνεκα καὶ τὴν ὅθεν ἢ ἀρχὴ τῆς κινήσεως, διοριστέον καὶ περὶ τούτων, ποία πρώτη καὶ δευτέρα πέφυκεν. Φαίνεται δὲ πρώτη, ἣν λέγομεν ἔνεκά τινος· λόγος γὰρ οὗτος, ἀρχὴ δ' ὁ λόγος ὁμοίως ἔν τε τοῖς κατὰ τέχνην καὶ ἐν τοῖς φύσει συνεστηκόσιν. Ἡ γὰρ τῇ διανοίᾳ ἢ τῇ αἰσθήσει ὀρισάμενος ὁ μὲν ἰατρὸς τὴν ὑγίειαν, ὁ δ' οἰκοδόμος τὴν οἰκίαν, ἀποδιδόασιν τοὺς λόγους καὶ τὰς αἰτίας οὐ ποιοῦσιν ἕκαστου, καὶ διότι ποιητέον οὕτως. Μᾶλλον δ' ἐστὶ τὸ οὐ ἔνεκα καὶ τὸ καλὸν ἐν τοῖς τῆς φύσεως ἔργοις ἢ ἐν τοῖς τῆς τέχνης. Τὸ δ' ἐξ ἀνάγκης οὐ πᾶσιν ὑπάρχει τοῖς κατὰ φύσιν ὁμοίως, εἰς ὃ πειρῶνται πάντες σχεδὸν τοὺς λόγους ἀνάγειν, οὐ διελόμενοι ποσαχῶς λέγεται τὸ ἀναγκαῖον. Ὑπάρχει δὲ τὸ μὲν ἀπλῶς τοῖς αἰδίοις, τὸ δ' ἐξ ὑποθέσεως καὶ τοῖς ἐν γενέσει πᾶσιν, ὥσπερ ἐν τοῖς τεχναστοῖς, οἷον οἰκία καὶ τῶν ἄλλων ὁτῶοῦν τῶν τοιούτων. Ἀνάγκη δὲ τοιάνδε τὴν ὕλην ὑπάρξαι, εἰ ἔσται οἰκία ἢ ἄλλο τι τέλος· καὶ γενέσθαι τε καὶ κινηθῆναι δεῖ τόδε πρῶτον, εἴτα τόδε, καὶ τοῦτον δὴ τὸν τρόπον ἐφεξῆς μέχρι τοῦ τέλους καὶ οὐ ἔνεκα γίνεται ἕκαστον καὶ ἔστιν. Ὡσαύτως δὲ καὶ ἐν τοῖς φύσει γιγνομένοις. Ἄλλ' ὁ (640a.) τρόπος τῆς ἀποδείξεως καὶ τῆς ἀνάγκης ἕτερος ἐπὶ τε τῆς φυσικῆς καὶ τῶν θεωρητικῶν ἐπιστημῶν. Εἴρηται δ' ἐν ἑτέροις περὶ τούτων. Ἡ γὰρ ἀρχὴ τοῖς μὲν τὸ ὄν, τοῖς δὲ τὸ ἐσόμενον· ἐπεὶ γὰρ τοιόνδε ἐστὶν ἢ ὑγία ἢ ὁ ἄνθρωπος, ἀνάγκη τόδ' εἶναι ἢ γενέσθαι, ἀλλ' οὐκ ἐπεὶ τόδ' ἐστὶν ἢ γέγονεν, ἐκεῖνο ἐξ ἀνάγκης ἐστὶν ἢ ἔσται. Οὐδ' ἔστιν εἰς αἰδίων συναρτῆσαι τῆς τοιαύτης ἀποδείξεως τὴν ἀνάγκην, ὥστε εἰπεῖν, ἐπεὶ τόδε ἐστίν, ὅτι τόδε ἐστίν. Διώριστα δὲ καὶ περὶ τούτων ἐν ἑτέροις, καὶ ποίοις ὑπάρχει καὶ ποῖα ἀντιστρέφει καὶ διὰ τίν' αἰτίαν.

Δεῖ δὲ μὴ λεληθέναι καὶ πότερον προσήκει λέγειν, ὥσπερ οἱ πρότερον ἐποιοῦντο τὴν θεωρίαν, πῶς ἕκαστον γίνεσθαι πέφυκε μᾶλλον ἢ πῶς ἔστιν. Οὐ γάρ τι μικρὸν διαφέρει τοῦτο ἐκείνου.

Ἔοικε δ' ἐντεῦθεν ἀρκτέον εἶναι, καθάπερ καὶ πρότερον εἵπομεν, ὅτι πρῶτον τὰ φαινόμενα ληπτέον περὶ ἕκαστον γένος, εἴθ' οὕτω τὰς αἰτίας τούτων λεκτέον, καὶ περὶ γενέσεως· μᾶλλον γὰρ τάδε συμβαίνει καὶ περὶ τὴν οἰκοδόμησιν, ἐπεὶ τοιόνδ' ἐστὶ τὸ εἶδος τῆς οἰκίας, ἢ τοιόνδ' ἐστὶν ἡ οἰκία, ὅτι γίνεται οὕτως. Ἡ γὰρ γένεσις ἔνεκα τῆς οὐσίας ἐστίν, ἀλλ' οὐχ ἡ οὐσία ἔνεκα τῆς γενέσεως. Διόπερ Ἐμπεδοκλῆς οὐκ ὀρθῶς εἶρηκε λέγων ὑπάρχειν πολλὰ τοῖς ζώοις διὰ τὸ συμβῆναι οὕτως ἐν τῇ γενέσει, οἷον καὶ τὴν ῥάχιν τοιαύτην ἔχειν, ὅτι στραφέντος καταχθῆναι συνέβη, ἀγνοῶν πρῶτον μὲν ὅτι δεῖ τὸ σπέρμα τὸ συνιστᾶν ὑπάρχειν τοιαύτην ἔχον δύναμιν, εἶτα ὅτι τὸ ποιῆσαν πρότερον ὑπῆρχεν οὐ μόνον τῷ λόγῳ ἀλλὰ καὶ τῷ χρόνῳ· γεννᾷ γὰρ ὁ ἄνθρωπος ἄνθρωπον, ὥστε διὰ τὸ ἐκεῖνον τοιόνδ' εἶναι ἡ γένεσις τοιάδε συμβαίνει τωδί.

Ὅμοίως δὲ καὶ ἐπὶ τῶν αὐτομάτως δοκούντων γίνεσθαι, καθάπερ καὶ ἐπὶ τῶν τεχναστῶν· ἓνα γὰρ καὶ ἀπὸ ταῦτομάτου γίνεται ταῦτα τοῖς ἀπὸ τέχνης, οἷον ὑγίεια. Τῶν μὲν οὖν προϋπάρχει τὸ ποιητικὸν ὅμοιον, οἷον ἀνδριαντοποιητική· οὐ γὰρ γίνεται αὐτόματον. Ἡ δὲ τέχνη λόγος τοῦ ἔργου ὁ ἄνευ τῆς ὕλης ἐστίν. Καὶ τοῖς ἀπὸ <τέχνης τὰ ἀπὸ> τύχης ὁμοίως· ὥς γὰρ ἡ τέχνη ἔχει, οὕτω γίνεται. Διὸ μάλιστα μὲν λεκτέον ὥς ἐπειδὴ τοῦτ' ἦν τὸ ἀνθρώπῳ εἶναι, διὰ τοῦτο ταῦτ' ἔχει· οὐ γὰρ ἐνδέχεται εἶναι ἄνευ τῶν μορίων τούτων. Εἰ δὲ μή, ὅτι ἐγγύτατα τούτου, καὶ ἡ ὅλως (ὅτι ἀδύνατον ἄλλως) ἢ καλῶς γε (640b.) οὕτως. Ταῦτα δ' ἔπεται. Ἐπεὶ δ' ἐστὶ τοιοῦτον, τὴν γένεσιν ὥδ' καὶ τοιαύτην συμβαίνειν ἀναγκαῖον. Διὸ γίνεται πρῶτον τῶν μορίων τόδε, εἶτα τόδε. Καὶ τοῦτον δὴ τὸν τρόπον ὁμοίως ἐπὶ πάντων τῶν φύσει συνισταμένων. Οἱ μὲν οὖν ἀρχαῖοι καὶ πρῶτοι φιλοσοφήσαντες περὶ φύσεως περὶ τῆς ὑλικῆς ἀρχῆς καὶ τῆς τοιαύτης αἰτίας ἐσκόπουν, τίς καὶ ποία τις, καὶ πῶς ἐκ ταύτης γίνεται τὸ ὅλον, καὶ τίνας κινεῖντος, οἷον νείκους ἢ φιλίας ἢ νοῦ ἢ τοῦ αὐτομάτου, τῆς δ' ὑποκειμένης ὕλης τοιάνδε τινὰ φύσιν ἐχούσης ἐξ ἀνάγκης, οἷον τοῦ μὲν πυρὸς θερμὴν, τῆς δὲ γῆς ψυχράν, καὶ τοῦ μὲν κούφην, τῆς δὲ βαρεῖαν. Οὕτως γὰρ καὶ τὸν κόσμον γεννῶσιν. Ὅμοίως δὲ καὶ περὶ τὴν τῶν ζώων καὶ τῶν φυτῶν γένεσιν λέγουσιν, οἷον ὅτι ἐν τῷ σώματι ῥέοντος μὲν τοῦ ὕδατος κοιλίαν γενέσθαι καὶ πᾶσαν ὑποδοχὴν τῆς τροφῆς καὶ τοῦ περιττώματος, τοῦ δὲ πνεύματος διαπορευθέντος τοὺς μυκτῆρας ἀναρραγῆναι. Ὁ δ' ἄῃρ καὶ τὸ ὕδωρ ὕλη τῶν σωμάτων ἐστίν· ἐκ τῶν τοιούτων γὰρ σωμάτων συνιστᾷσι τὴν φύσιν πάντες. Εἰ δ' ἔστιν ὁ

ἄνθρωπος καὶ τὰ ζῶα φύσει καὶ τὰ μόρια αὐτῶν, λεκτέον ἂν περὶ σαρκὸς εἶη καὶ ὁστοῦ καὶ αἵματος καὶ τῶν ὁμοιομερῶν ἀπάντων. Ὅμοίως δὲ καὶ τῶν ἀνομοιομερῶν, οἷον προσώπου, χειρὸς, ποδός, ἥ τε τοιοῦτον ἕκαστόν ἐστιν αὐτῶν καὶ κατὰ ποίαν δύναμιν. Οὐ γὰρ ἱκανὸν τὸ ἐκ τίνων ἐστίν, οἷον πυρὸς ἢ γῆς, ὥσπερ κἂν εἰ περὶ κλίνης ἐλέγομεν ἢ τινος ἄλλου τῶν τοιούτων, ἐπειρώμεθα μᾶλλον ἂν διορίζειν τὸ εἶδος αὐτῆς ἢ τὴν ὕλην, οἷον τὸν χαλκὸν ἢ τὸ ξύλον· εἰ δὲ μή, τὴν γε τοῦ συνόλου· κλίνη γὰρ τόδε ἐν τῷδε ἢ τόδε τοιόνδε, ὥστε κἂν περὶ τοῦ σχήματος εἶη λεκτέον, καὶ ποῖον τὴν ιδέαν. Ἡ γὰρ κατὰ τὴν μορφήν φύσις κυριωτέρα τῆς ὑλικῆς φύσεως. Εἰ μὲν οὖν τῷ σχήματι καὶ τῷ χρώματι ἕκαστόν ἐστι τῶν τε ζώων καὶ τῶν μορίων, ὀρθῶς ἂν Δημόκριτος λέγοι· φαίνεται γὰρ οὕτως ὑπολαβεῖν. Φησὶ γοῦν παντὶ δῆλον εἶναι οἷόν τι τὴν μορφήν ἐστίν ὁ ἄνθρωπος, ὡς ὄντος αὐτοῦ τῷ τε σχήματι καὶ τῷ χρώματι γνωρίμου. Καίτοι καὶ ὁ τεθνεὺς ἔχει τὴν αὐτὴν τοῦ σχήματος μορφήν, ἀλλ' ὅμως οὐκ ἔστιν ἄνθρωπος. Ἔτι δ' ἀδύνατον εἶναι χεῖρα ὁπωσοῦν διακειμένην, οἷον χαλκῆν ἢ ξυλίνην, πλήν (641a.) ὁμωνύμως, ὥσπερ τὸν γεγραμμένον ἱατρόν. Οὐ γὰρ δυνήσεται ποιεῖν τὸ ἐαυτῆς ἔργον, ὥσπερ οὐδ' αὐλοὶ λίθινοι τὸ ἐαυτῶν ἔργον, οὐδ' ὁ γεγραμμένος ἱατρός. Ὅμοίως δὲ τούτοις οὐδὲ τῶν τοῦ τεθνηκότος μορίων οὐδὲν ἔτι τῶν τοιούτων ἐστί, λέγω δ' οἷον ὀφθαλμός, χεῖρ. Λίαν οὖν ἀπλῶς εἴρηται, καὶ τὸν αὐτὸν τρόπον ὥσπερ ἂν εἰ τέκτων λέγοι περὶ χειρὸς ξυλίνης.

Οὕτως γὰρ καὶ οἱ φυσιολόγοι τὰς γενέσεις καὶ τὰς αἰτίαις τοῦ σχήματος λέγουσιν· ὑπὸ τινων γὰρ ἐδημιουργήθησαν δυνάμει. Ἄλλ' ἴσως ὁ μὲν τέκτων ἐρεῖ πέλεκυν ἢ τρύπανον, ὁ δ' ἄερα καὶ γῆν, πλήν βέλτιον ὁ τέκτων· οὐ γὰρ ἱκανὸν ἔσται αὐτῷ τὸ τοσοῦτον εἰπεῖν, ὅτι ἐμπεσόντος τοῦ ὀργάνου τὸ μὲν κοῖλον ἐγένετο τὸ δὲ ἐπίπεδον, ἀλλὰ διότι τὴν πληγὴν ἐποίησατο τοιαύτην, καὶ τίνος ἕνεκα, ἐρεῖ τὴν αἰτίαν, ὅπως τοιόνδε ἢ τοιόνδε ποτὲ τὴν μορφήν γένηται.

Δῆλον τοίνυν ὅτι οὐκ ὀρθῶς λέγουσι, καὶ ὅτι λεκτέον ὡς τοιοῦτον τὸ ζῶον, καὶ περὶ ἐκείνου, καὶ τί καὶ ποῖόν τι, καὶ τῶν μορίων ἕκαστον, ὥσπερ καὶ περὶ τοῦ εἶδους τῆς κλίνης. Εἰ δὲ τοῦτο ἐστὶ ψυχὴ ἢ ψυχῆς μέρος ἢ μὴ ἄνευ ψυχῆς (ἀπελθούσης γοῦν οὐκέτι ζῶόν ἐστιν, οὐδὲ τῶν μορίων οὐδὲν τὸ αὐτὸ λείπεται, πλήν τῷ σχήματι μόνον, καθάπερ τὰ μυθεύμενα λιθοῦσθαι), εἰ δὲ ταῦτα οὕτως, τοῦ φυσικοῦ περὶ ψυχῆς ἂν εἶη λέγειν καὶ εἰδέναι, καὶ εἰ μὴ πάσης, κατ' αὐτὸ τοῦτο καθ' ὃ τοιοῦτο τὸ ζῶον, καὶ τί ἐστὶν ἡ ψυχὴ, ἢ αὐτὸ τοῦτο τὸ μόριον, καὶ περὶ τῶν συμβεβηκότων κατὰ τὴν τοιαύτην αὐτῆς οὐσίαν, ἄλλως τε καὶ τῆς φύσεως διχῶς λεγομένης καὶ οὔσης τῆς μὲν ὡς ὕλης τῆς δ' ὡς οὐσίας. Καὶ ἔστιν αὕτη καὶ ὡς ἡ κινούσα καὶ ὡς τὸ τέλος.

Τοιοῦτον δὲ τοῦ ζώου ἦτοι πᾶσα ἡ ψυχὴ ἢ μέρος τι αὐτῆς. Ὡστε καὶ οὕτως ἂν λεκτέον εἶη τῷ περὶ φύσεως θεωρητικῷ περὶ ψυχῆς μᾶλλον ἢ περὶ τῆς ὕλης, ὅσω μᾶλλον ἢ ὕλη δι' ἐκείνην φύσιν ἐστὶν ἢ περ ἀνάπαλιν. Καὶ γὰρ κλίνη καὶ τρίπους τὸ ξύλον ἐστίν, ὅτι δυνάμει ταῦτά ἐστιν. Ἀπορήσειε δ' ἂν τις εἰς τὸ νῦν λεχθὲν ἐπιβλέψας, πότερον περὶ πάσης ψυχῆς τῆς φυσικῆς ἐστὶ τὸ εἰπεῖν ἢ περὶ τίνος. Εἰ γὰρ περὶ πάσης, οὐδεμία λείπεται παρὰ τὴν φυσικὴν ἐπιστήμην φιλοσοφία. Ὁ γὰρ νοῦς τῶν νοητῶν. Ὡστε περὶ (641b.) πάντων ἡ φυσικὴ γνῶσις ἂν εἶη· τῆς γὰρ αὐτῆς περὶ νοῦ καὶ τοῦ νοητοῦ θεωρῆσαι, εἵπερ πρὸς ἄλληλα, καὶ ἡ αὐτὴ θεωρία τῶν πρὸς ἄλληλα πάντων, καθάπερ καὶ περὶ αἰσθήσεως καὶ τῶν αἰσθητῶν. Ἡ οὐκ ἔστι πᾶσα ἡ ψυχὴ κινήσεως ἀρχή, οὐδὲ τὰ μόρια ἅπαντα, ἀλλ' αὐξήσεως μὲν ὅπερ καὶ ἐν τοῖς φυτοῖς, ἀλλοιώσεως δὲ τὸ αἰσθητικόν, φορᾶς δ' ἕτερόν τι καὶ οὐ τὸ νοητικόν· ὑπάρχει γὰρ ἡ φορὰ καὶ ἐν ἑτέροις τῶν ζώων, διάνοια δ' οὐδενί. Δῆλον οὖν ὡς οὐ περὶ πάσης ψυχῆς λεκτέον· οὐδὲ γὰρ πᾶσα ψυχὴ φύσις, ἀλλὰ τι μόριον αὐτῆς ἐν ἡ καὶ πλείω.

Ἔτι δὲ τῶν ἐξ ἀφαιρέσεως οὐδενὸς οἶόν τ' εἶναι τὴν φυσικὴν θεωρητικὴν, ἐπειδὴ ἡ φύσις ἔνεκά του ποιεῖ πάντα. Φαίνεται γάρ, ὥσπερ ἐν τοῖς τεχναστοῖς ἐστὶν ἡ τέχνη, οὕτως ἐν αὐτοῖς τοῖς πράγμασιν ἄλλη τις ἀρχὴ καὶ αἰτία τοιαύτη, ἣν ἔχομεν καθάπερ τὸ θερμὸν καὶ τὸ ψυχρὸν ἐκ τοῦ παντός. Διὸ μᾶλλον εἰκὸς τὸν οὐρανὸν γεγενῆσθαι ὑπὸ τοιαύτης αἰτίας, εἰ γέγονε, καὶ εἶναι διὰ τοιαύτην αἰτίαν μᾶλλον ἢ τὰ ζῶα τὰ θνητά· τὸ γοῦν τεταγμένον καὶ τὸ ὠρισμένον πολὺ μᾶλλον φαίνεται ἐν τοῖς οὐρανίοις ἢ περὶ ἡμᾶς, τὸ δ' ἄλλοτ' ἄλλως καὶ ὡς ἔτυχε περὶ τὰ θνητά μᾶλλον. Οἱ δὲ τῶν μὲν ζώων ἕκαστον φύσει φασὶν εἶναι καὶ γενέσθαι, τὸν δ' οὐρανὸν ἀπὸ τύχης καὶ τοῦ αὐτομάτου τοιοῦτον συστήναι, ἐν ᾧ ἀπὸ τύχης καὶ ἀταξίας οὐδ' ὅτιοῦν φαίνεται. Πανταχοῦ δὲ λέγομεν τόδε τοῦδε ἔνεκα, ὅπου ἂν φαίνεται τέλος τι πρὸς ὃ ἡ κίνησις περαίνει μηδενὸς ἐμποδίζοντος. Ὡστε εἶναι φανερόν ὅτι ἔστι τι τοιοῦτον, ὃ δὴ καὶ καλοῦμεν φύσιν. Οὐ γὰρ δὴ ὅ τι ἔτυχεν ἐξ ἑκάστου γίνεται σπέρματος, ἀλλὰ τόδε ἐκ τοῦδε, οὐδὲ σπέρμα τὸ τυχόν ἐκ τοῦ τυχόντος σώματος.

Ἀρχὴ ἄρα καὶ ποιητικὸν τοῦ ἐξ αὐτοῦ τὸ σπέρμα. Φύσει γὰρ ταῦτα· φύεται γοῦν ἐκ τούτου. Ἀλλὰ μὴν ἔτι τούτου πρότερον τὸ οὐ τὸ σπέρμα· γένεσις μὲν γὰρ τὸ σπέρμα, οὐσία δὲ τὸ τέλος. Ἀμφοῖν δ' ἔτι πρότερον, ἀφ' οὗ ἐστὶ τὸ σπέρμα. Ἔστι γὰρ τὸ σπέρμα διχῶς, ἐξ οὗ τε καὶ οὗ· καὶ γὰρ ἀφ' οὗ ἀπῆλθε, τούτου σπέρμα, οἶον ἵππου, καὶ τούτου ὃ ἔσται ἐξ αὐτοῦ, οἶον ὀρέως, τρόπον δ' οὐ τὸν αὐτόν, ἀλλ' ἑκατέρου τὸν εἰρημένον. Ἔτι δὲ δυνάμει τὸ σπέρμα· (642a.) δύναμις δ' ὡς ἔχει πρὸς ἐντελέχειαν, ἴσμεν.



Εἰσὶν ἄρα δύο γὰρ γίνεται, ὅτι ἀνάγκη. Ἴσως δ' ἂν τις ἀπορήσειε ποῖαν λέγουσιν ἀνάγκην οἱ λέγοντες ἐξ ἀνάγκης· τῶν μὲν γὰρ δύο τρόπων οὐδέτερον οἷόν τε ὑπάρχειν, τῶν διωρισμένων ἐν τοῖς κατὰ φιλοσοφίαν. Ἔστι δ' ἐν γε τοῖς ἔχουσι γένεσιν ἡ τρίτη· λέγομεν γὰρ τὴν τροφὴν ἀναγκαῖόν τι κατ' οὐδέτερον τούτων τῶν τρόπων, ἀλλ' ὅτι οὐχ οἷόν τ' ἄνευ ταύτης εἶναι.

Τοῦτο δ' ἐστὶν ὥσπερ ἐξ ὑποθέσεως· ὥσπερ γὰρ ἐπεὶ δεῖ σχίζειν τῷ πελέκει, ἀνάγκη σκληρὸν εἶναι, εἰ δὲ σκληρόν, χαλκοῦν ἢ σιδηροῦν, οὕτως καὶ ἐπεὶ τὸ σῶμα ὄργανον (ἐνεκά τιος γὰρ ἕκαστον τῶν μορίων, ὁμοίως δὲ καὶ τὸ ὅλον), ἀνάγκη ἄρα τοιονδὶ εἶναι καὶ ἐκ τοιωνδί, εἰ ἐκεῖνο ἔσται.

Ὅτι μὲν οὖν δύο τρόποι τῆς αἰτίας, καὶ δεῖ λέγοντας τυγχάνειν μάλιστα μὲν ἀμφοῖν, εἰ δὲ μή, δῆλόν γε πειρᾶσθαι ποιεῖν, καὶ ὅτι πάντες οἱ τοῦτο μὴ λέγοντες οὐδὲν ὥς εἰπεῖν περὶ φύσεως λέγουσιν· ἀρχὴ γὰρ ἡ φύσις μᾶλλον τῆς ὕλης.

Ἐνιαχοῦ δέ που αὐτῇ καὶ Ἐμπεδοκλῆς περιπίπτει, ἀγόμενος ὑπ' αὐτῆς τῆς ἀληθείας, καὶ τὴν οὐσίαν καὶ τὴν φύσιν ἀναγκάζεται φάναι τὸν λόγον εἶναι, οἷον ὅστοῦν ἀποδιδούς τί ἐστίν· οὔτε γὰρ ἐν τι τῶν στοιχείων λέγει αὐτὸ οὔτε δύο ἢ τρία οὔτε πάντα, ἀλλὰ λόγον τῆς μίξεως αὐτῶν. Δῆλον τοίνυν ὅτι καὶ ἡ σὰρξ τὸν αὐτὸν τρόπον ἐστί, καὶ τῶν ἄλλων τῶν τοιούτων μορίων ἕκαστον. Αἵτιον δὲ τοῦ μὴ ἐλθεῖν τοὺς προγενεστέρους ἐπὶ τὸν τρόπον τοῦτον, ὅτι τὸ τί ἦν εἶναι καὶ τὸ ὀρίσασθαι τὴν οὐσίαν οὐκ ἦν, ἀλλ' ἥψατο μὲν Δημόκριτος πρῶτος, ὥς οὐκ ἀναγκαίου δὲ τῇ φυσικῇ θεωρίᾳ, ἀλλ' ἐκφερόμενος ὑπ' αὐτοῦ τοῦ πράγματος, ἐπὶ Σωκράτους δὲ τοῦτο μὲν ηὔξηθη, τὸ δὲ ζητεῖν τὰ περὶ φύσεως ἔληξε, πρὸς δὲ τὴν χρήσιμον ἀρετὴν καὶ τὴν πολιτικὴν ἀπέκλιναν οἱ φιλοσοφοῦντες. Δεικτέον δ' οὕτως, οἷον ὅτι ἔστι μὲν ἡ ἀναπνοὴ τουδὶ χάριν, τοῦτο δὲ γίγνεται διὰ τὰδε ἐξ ἀνάγκης. Ἡ δ' ἀνάγκη ὅτε μὲν σημαίνει ὅτι εἰ ἐκεῖνο ἔσται τὸ οὗ ἕνεκα, ταῦτα ἀνάγκη ἐστὶν ἔχειν, ὅτε δ' ὅτι ἔστιν οὕτως ἔχοντα καὶ πεφυκότα. Τὸ θερμὸν γὰρ ἀναγκαῖον ἐξιέναι καὶ πάλιν εἰσιέναι ἀντικροῦον, τὸν δ' ἀέρα εἰσερεῖν. Τοῦτο δ' ἤδη ἀναγκαῖόν ἐστιν. (642b.) Τοῦ ἐντὸς δὲ θερμοῦ ἀντικόπτοντος, ἐν τῇ ψύξει τοῦ θύραθεν ἀέρος ἡ εἴσοδος.

Ὁ μὲν οὖν τρόπος οὗτος ὁ τῆς μεθόδου, καὶ περὶ ὧν δεῖ λαβεῖν τὰς αἰτίας, ταῦτα καὶ τοιαῦτά ἐστιν.

## Κεφάλαιο 2

Λαμβάνουσι δ' ἔνιοι τὸ καθ' ἕκαστον, διαιρούμενοι τὸ γένος εἰς δύο διαφοράς. Τοῦτο δ' ἐστὶ τῇ μὲν οὐ ῥάδιον, τῇ δὲ ἀδύνατον. Ἐνίων γὰρ ἔσται διαφορὰ μία μόνη, τὰ δ' ἄλλα περίεργα, οἷον ὑπόπουν, δίπουν, σχιζόπουν· αὕτη γὰρ μόνη κυρία. Εἰ δὲ μή, ταῦτόν πολλάκις ἀναγκαῖον λέγειν.

Ἔτι δὲ προσήκει μὴ διασπᾶν ἕκαστον γένος, οἷον τοὺς ὄρνιθας τοὺς μὲν ἐν τῇδε, τοὺς δ' ἐν ἄλλῃ διαιρέσει, καθάπερ ἔχουσιν αἱ γεγραμμένοι διαιρέσεις· ἐκεῖ γὰρ τοὺς μὲν μετὰ τῶν ἐνύδρων συμβαίνει διηρηθῆσθαι, τοὺς δ' ἐν ἄλλῳ γένει. Ταύτη μὲν οὖν τῇ ὁμοιότητι ὄρνις ὄνομα κεῖται, ἑτέρα δ' ἰχθύς.

Ἄλλαι δ' εἰσὶν ἀνώνυμοι, οἷον τὸ ἔναιμον καὶ τὸ ἄναιμον· ἐφ' ἑκατέρῳ γὰρ τούτων οὐ κεῖται ἐν ὀνόματι. Εἴπερ οὖν μηδὲν τῶν ὁμογενῶν διασπαστέον, ἢ εἰς δύο διαίρεσις μάταιος ἂν εἴη· οὕτως γὰρ διαιροῦντας ἀναγκαῖον χωρίζειν καὶ διασπᾶν· τῶν πολυπόδων γὰρ ἐστὶ τὰ μὲν ἐν τοῖς πεζοῖς τὰ δ' ἐν τοῖς ἐνύδροις.

### Κεφάλαιο 3

Ἔτι στερήσει μὲν ἀναγκαῖον διαιρεῖν, καὶ διαιροῦσιν οἱ διχοτομοῦντες. Οὐκ ἔστι δὲ διαφορὰ στερήσεως ἢ στέρησις· ἀδύνατον γὰρ εἶδη εἶναι τοῦ μὴ ὄντος, οἷον τῆς ἀποδίας ἢ τοῦ ἀπτέρου ὥσπερ πτερώσεως καὶ ποδῶν. Δεῖ δὲ τῆς καθόλου διαφορᾶς εἶδη εἶναι· εἰ γὰρ μὴ ἔσται, διὰ τί ἂν εἴη τῶν καθόλου καὶ οὐ τῶν καθ' ἕκαστον; Τῶν δὲ διαφορῶν αἱ μὲν καθόλου εἰσὶ καὶ ἔχουσιν εἶδη, οἷον πτερότης· τὸ μὲν γὰρ ἄσχιτον τὸ δ' ἐσχισμένον ἐστὶ πτερόν. Καὶ ποδότης ὡσαύτως ἢ μὲν πολυσχιδής, ἢ δὲ δισχιδής, οἷον τὰ διχαλά, ἢ δ' ἄσχιδής καὶ ἀδιαίρετος, οἷον τὰ μώνυχα. Χαλεπὸν μὲν οὖν διαλαβεῖν καὶ εἰς τοιαύτας διαφοράς ὧν ἔστιν εἶδη, ὥσθ' ὁτιοῦν ζῶον ἐν ταύταις ὑπάρχειν καὶ μὴ ἐν πλείοσι ταῦτόν, οἷον πτερωτὸν καὶ ἄπτερον (ἔστι γὰρ ἄμφω ταῦτόν, οἷον μύρμηξ καὶ λαμπυρίς καὶ ἕτεραί τινα), πάντων δὲ χαλεπώτατον ἢ ἀδύνατον εἰς τὰ ἀντικείμενα. Ἀναγκαῖον γὰρ τῶν καθ' ἕκαστον ὑπάρχειν τινὲς τῶν διαφορῶν ἐκάστην, ὥστε καὶ τὴν (643a.) ἀντικειμένην. Εἰ δὲ μὴ ἐνδέχεται τοῖς εἶδει διαφέρουσιν ὑπάρχειν εἰδός τι τῆς οὐσίας ἄτομον καὶ ἐν, ἄλλ' ἀεὶ διαφορὰν ἔξει (οἷον ὄρνις ἀνθρώπου· ἢ διποδία γὰρ ἄλλη καὶ διάφορος· κἂν εἰ ἔναιμα, τὸ αἷμα διάφορον, ἢ οὐδὲν τῆς οὐσίας τὸ αἷμα θετέον· εἰ δ' οὕτως ἐστίν, ἢ μία διαφορὰ δυσὶν ὑπάρξει)· εἰ δὲ τοῦτο, δῆλον ὅτι ἀδύνατον στέρησιν εἶναι διαφορὰν. Ἔσονται δ' αἱ διαφοραὶ ἴσαι τοῖς ἀτόμοις ζώοις, εἴπερ ἄτομά τε ταῦτα καὶ αἱ διαφοραὶ ἄτομοι, κοινὴ δὲ μὴ ἔστιν.

Εἰ δ' ἐνδέχεται μὴ ὑπάρχειν † .... καὶ κοινήν, ἄτομον δέ, δῆλον ὅτι κατὰ γε τὴν κοινήν ἐν τῷ αὐτῷ ἐστίν, ἕτερα ὄντα τῷ εἶδει ζῶα. Ὡστ' ἀναγκαῖον, εἰ ἴδιοι αἱ διαφοραὶ εἰς ἃς ἅπαντα ἐμπίπτει τὰ ἅτομα, μηδεμίαν αὐτῶν εἶναι κοινήν.

Εἰ δὲ μή, ἕτερα ὄντα εἰς τὴν αὐτὴν βαδιεῖται. Δεῖ δ' οὔτε τὸ αὐτὸ καὶ ἄτομον εἰς ἑτέραν καὶ ἑτέραν ἰέναι διαφορὰν τῶν διηρημένων, οὔτ' εἰς τὴν αὐτὴν ἕτερα, καὶ ἅπαντα εἰς ταύτας.

Φανερόν τοίνυν ὅτι οὐκ ἔστι λαβεῖν τὰ ἅτομα εἶδη ὡς διαιροῦνται οἱ εἰς δύο διαιροῦντες τὰ ζῶα ἢ καὶ ἄλλο ὅτιοῦν γένος. Καὶ γὰρ κατ' ἐκείνους ἀναγκαῖον ἴσας τὰς ἐσχάτας εἶναι διαφορὰς τοῖς ζώοις πᾶσι τοῖς ἀτόμοις τῷ εἶδει. Ὄντος γὰρ τοῦδέ τινος γένους, οὐ διαφορὰ πρῶται τὰ λευκά, τούτων δ' ἐκατέρου ἄλλαι, καὶ οὕτως εἰς τὸ πρόσω ἕως τῶν ἀτόμων, αἱ τελευταῖαι τέτταρες ἔσονται ἢ ἄλλο τι πλῆθος τῶν ἀφ' ἐνὸς διπλασιαζομένων· τοσαῦτα δὲ καὶ τὰ εἶδη. Ἔστι δ' ἡ διαφορὰ τὸ εἶδος ἐν τῇ ὕλῃ. Οὔτε γὰρ ἄνευ ὕλης οὐδὲν ζώου μόριον, οὔτε μόνη ἡ ὕλη· οὐ γὰρ πάντως ἔχον σῶμα ἔσται ζῶον, οὐδὲ τῶν μορίων οὐδέν, ὥσπερ πολλάκις εἴρηται. Ἔτι διαιρεῖν χρή τοῖς ἐν τῇ οὐσίᾳ καὶ μὴ τοῖς συμβεβηκόσι καθ' αὐτό, οἷον εἴ τις τὰ σχήματα διαιροίη, ὅτι τὰ μὲν δυσὶν ὀρθαῖς ἴσας ἔχει τὰς γωνίας, τὰ δὲ πλείοσιν· συμβεβηκὸς γὰρ τι τῷ τριγώνῳ τὸ δυσὶν ὀρθαῖς ἴσας ἔχειν τὰς γωνίας. Ἔτι τοῖς ἀντικειμένοις διαιρεῖν. Διάφορα γὰρ ἀλλήλοις ἀντικείμενα, οἷον λευκότης καὶ μελανία καὶ εὐθύτης καὶ καμπυλότης. Ἐὰν οὖν θάτερα διάφορα ἦ, τῷ ἀντικειμένῳ διαιρετέον καὶ μὴ τὸ μὲν νεύσει τὸ δὲ χρώματι, πρὸς δὲ τούτοις τὰ γ' ἔμψυχα τοῖς κοινοῖς ἔργοις τοῦ σώματος καὶ τῆς ψυχῆς, οἷον καὶ ἐν ταῖς ῥηθείσαις νῦν (643b.) πορευτικὰ καὶ πτηνὰ· ἔστι γὰρ τινα γένη οἷς ἄμφω ὑπάρχει καὶ ἔστι πτηνὰ καὶ ἅπτερα, καθάπερ τὸ τῶν μυρμηκῶν γένος. Καὶ τῷ ἀγρίῳ καὶ τῷ ἡμέρῳ διαιρεῖσθαι· ὡσαύτως γὰρ ἂν δόξειε ταῦτά εἶδη διαιρεῖν. Πάντα γὰρ ὡς εἰπεῖν, ὅσα ἡμέρα καὶ ἄγρια τυγχάνει ὄντα, οἷον ἄνθρωποι, ἵπποι, βόες, κύνες ἐν τῇ Ἰνδικῇ, ὕες, αἶγες, πρόβατα· ὧν ἕκαστον, εἰ μὲν ὁμώνυμον, οὐ διήρηται χωρίς, εἰ δὲ ταῦτα ἐν εἶδει, οὐχ οἷόν τ' εἶναι διαφορὰς τὸ ἄγριον καὶ τὸ ἡμέρον.

Ὅλως δ' ὁποιοῦν διαφορὰ μιᾷ διαιροῦντι τοῦτο συμβαίνειν ἀναγκαῖον. Ἀλλὰ δεῖ πειρᾶσθαι λαμβάνειν κατὰ γένη τὰ ζῶα, ὡς ὑφήγηθ' οἱ πολλοὶ διορίσαντες ὄρνιθος γένος καὶ ἰχθύος. Τούτων δ' ἕκαστον πολλαῖς ὠρίσται διαφοραῖς, οὐ κατὰ τὴν διχοτομίαν. Οὕτω μὲν γὰρ ἦτοι τὸ παράπαν οὐκ ἔστι λαβεῖν (τὸ αὐτὸ γὰρ εἰς πλείους ἐμπίπτει διαιρέσεις καὶ τὰ ἐναντία εἰς τὴν αὐτήν), ἢ μία μόνον διαφορὰ ἔσται, καὶ αὕτη ἦτοι ἀπλῆ, ἢ ἐκ συμπλοκῆς τὸ τελευταῖον ἔσται εἶδος. Ἐὰν δὲ μὴ διαφορὰς λαμβάνῃ τὴν διαφοράν,

ἀναγκαῖον ὥσπερ συνδέσμῳ τὸν λόγον ἓνα ποιοῦντας, οὕτω καὶ τὴν διαίρεσιν συνεχῇ ποιεῖν. Λέγω δ' οἷον συμβαίνει τοῖς διαιρουμένοις τὸ μὲν ἄπτερον τὸ δὲ πτερωτόν, πτερωτοῦ δὲ τὸ μὲν ἡμερον τὸ δ' ἄγριον, ἢ τὸ μὲν λευκὸν τὸ δὲ μέλαν· οὐ γὰρ διαφορὰ τοῦ πτερωτοῦ τὸ ἡμερον οὐδὲ τὸ λευκόν, ἀλλ' ἑτέρας ἀρχὴ διαφορᾶς, ἐκεῖ δὲ κατὰ συμβεβηκός. Διὸ πολλὰς τὸ ἐν εὐθέως διαιρετέον, ὥσπερ λέγομεν. Καὶ γὰρ οὕτως μὲν αἱ στερήσεις ποιήσουσι διαφορὰν, ἐν δὲ τῇ διχοτομίᾳ οὐ ποιήσουσιν. Ὅτι δ' οὐκ ἐνδέχεται τῶν καθ' ἕκαστον εἰδῶν λαμβάνειν οὐδὲν διαιροῦσι δίχα τὸ γένος, ὥσπερ τινὲς ὠήθησαν, καὶ ἐκ τῶνδε φανερόν. Ἀδύνατον γὰρ μίαν ὑπάρχειν διαφορὰν τῶν καθ' ἕκαστον διαιρετῶν, ἐάν τε ἀπλᾶ λαμβάνῃ ἐάν τε συμπεπλεγμένα (λέγω δὲ ἀπλᾶ μὲν, ἐάν μὴ ἔχῃ διαφορὰν, οἷον τὴν σχιζοποδίαν, συμπεπλεγμένα δέ, ἐάν ἔχῃ, οἷον τὸ πολυσχιδὲς πρὸς τὸ σχιζόπουν. Τοῦτο γὰρ ἢ συνέχεια βούλεται τῶν ἀπὸ τοῦ γένους κατὰ τὴν διαίρεσιν διαφορῶν ὡς ἓν τι τὸ πᾶν ὄν, ἀλλὰ παρὰ τὴν λέξιν συμβαίνει δοκεῖν τὴν τελευταίαν μόνην εἶναι διαφορὰν, οἷον τὸ πολυσχιδὲς ἢ τὸ δίπουν· τὸ δ' ὑπόπουν (644a.) καὶ πολύπουν περίεργα). Ὅτι δ' ἀδύνατον πλείους εἶναι τοιαύτας, δῆλον· ἀεὶ γὰρ βαδίζων ἐπὶ τὴν ἐσχάτην διαφορὰν ἀφικνεῖται, ἀλλ' οὐκ ἐπὶ τὴν τελευταίαν καὶ τὸ εἶδος. Αὕτη δ' ἐστὶν ἢ τὸ σχιζόπουν μόνον, ἢ πᾶσα ἢ σύμπλεξις, ἐὰν διαιρῇται ἄνθρωπον, οἷον εἴ τις συνθεῖη ὑπόπουν, δίπουν, σχιζόπουν. Εἰ δ' ἦν ὁ ἄνθρωπος σχιζόπουν μόνον, οὕτως ἐγίγνετ' ἂν αὕτη μία διαφορὰ. Νῦν δ' ἐπειδὴ οὐκ ἔστιν, ἀνάγκη πολλὰς εἶναι μὴ ὑπὸ μίαν διαίρεσιν. Ἀλλὰ μὴν πλείους γε τοῦ αὐτοῦ οὐκ ἔστιν ὑπὸ μίαν διχοτομίαν εἶναι, ἀλλὰ μίαν κατὰ μίαν τελευτᾶν. Ὡστε ἀδύνατον ὁτιοῦν λαβεῖν τῶν καθ' ἕκαστον ζώων δίχα διαιρουμένους.

## Κεφάλαιο 4

Ἀπορήσειε δ' ἂν τις διὰ τί οὐκ ἄνωθεν ἐνὶ ὀνόματι ἐμπεριλαβόντες ἅμα ἐν γένος ἅμφω προσηγόρευσαν οἱ ἄνθρωποι, ὃ περιέχει τὰ τε ἔνυδρα καὶ τὰ πτηνὰ τῶν ζώων. Ἔστι γὰρ ἓνα πάθη κοινὰ καὶ τούτοις καὶ τοῖς ἄλλοις ζώοις ἅπασιν. Ἀλλ' ὅμως ὀρθῶς διώρισται τοῦτον τὸν τρόπον. Ὅσα μὲν γὰρ διαφέρει τῶν γενῶν καθ' ὑπεροχὴν καὶ τὸ μᾶλλον καὶ τὸ ἥττον, ταῦτα ὑπέζευκται ἐνὶ γένει, ὅσα δ' ἔχει τὸ ἀνάλογον, χωρὶς· λέγω δ' οἷον ὄρνις ὄρνιθος διαφέρει τῷ μᾶλλον ἢ καθ' ὑπεροχὴν (τὸ μὲν γὰρ μακρόπτερον τὸ δὲ βραχύπτερον), ἰχθύες δ' ὄρνιθος τῷ ἀνάλογον (ὃ γὰρ ἐκείνῳ πτερόν, θατέρῳ λεπίς). Τοῦτο δὲ ποιεῖν ἐπὶ πᾶσιν οὐ ῥάδιον· τὰ γὰρ πολλὰ ζῶα ἀνάλογον ταῦτό πέπονθεν. Ἐπεὶ δ' οὐσίαι μὲν εἰσὶ τὰ ἔσχατα εἶδη, ταῦτα δὲ κατὰ τὸ εἶδος ἀδιάφορα, οἷον Σωκράτης, Κορίσκος, ἀναγκαῖον ἢ τὰ καθόλου ὑπάρχοντα πρότερον εἰπεῖν ἢ πολλάκις ταῦτόν λέγειν, καθάπερ εἴρηται. Τὰ δὲ

καθόλου κοινά· τὰ γὰρ πλείοσιν ὑπάρχοντα καθόλου λέγομεν. Ἀπορίαν δ' ἔχει περὶ πότερα δεῖ πραγματεύεσθαι. Ἡ μὲν γὰρ οὐσία τὸ τῷ εἶδει ἄτομον, κράτιστον, εἴ τις δύναιτο περὶ τῶν καθ' ἕκαστον καὶ ἀτόμων τῷ εἶδει θεωρεῖν χωρὶς, ὥσπερ περὶ ἀνθρώπου, οὕτω μὴ περὶ ὄρνιθος· ἔχει γὰρ εἶδη τὸ γένος τοῦτο· ἀλλὰ περὶ ὅτουοῦν ὄρνιθος τῶν ἀτόμων, οἶον ἢ στρουθὸς ἢ γέρανος ἢ τι τοιοῦτον.

Ἡ δὲ συμβήσεται λέγειν πολλάκις περὶ τοῦ αὐτοῦ πάθους διὰ τὸ κοινῇ πλείοσιν ὑπάρχειν, ταύτη δ' ἐστὶν ὑπάτοπον καὶ (644b.) μακρὸν τὸ περὶ ἑκάστου λέγειν χωρὶς.

Ἴσως μὲν οὖν ὀρθῶς ἔχει τὰ μὲν κατὰ γένη κοινῇ λέγειν, ὅσα λέγεται καλῶς ὠρισμένων τῶν ἀνθρώπων, καὶ ἔχει τε μίαν φύσιν κοινὴν καὶ εἶδη ἐν αὐτῷ μὴ πολὺ διεστῶτα, ὄρνις καὶ ἰχθυῖς, καὶ εἴ τι ἄλλο ἐστὶν ἀνώνυμον μὲν, τῷ γένει δ' ὁμοίως περιέχει τὰ ἐν αὐτῷ εἶδη· ὅσα δὲ μὴ τοιαῦτα, καθ' ἕκαστον, οἶον περὶ ἀνθρώπου καὶ εἴ τι τοιοῦτον ἕτερόν ἐστιν. Σχεδὸν δὲ τοῖς σχήμασι τῶν μορίων καὶ τοῦ σώματος ὅλου, ἐὰν ὁμοιότητα ἔχωσιν, ὠρίζεται τὰ γένη, οἶον τὸ τῶν ὀρνίθων γένος πρὸς αὐτὰ πέπονθε καὶ τὸ τῶν ἰχθύων καὶ τὰ μαλάκιά τε καὶ τὰ ὄστρεα. Τὰ γὰρ μόρια διαφέρουσι τούτων οὐ τῇ ἀνάλογον ὁμοιότητι, οἶον ἐν ἀνθρώπῳ καὶ ἰχθυὶ πέπονθεν ὅστοῦν πρὸς ἄκανθαν, ἀλλὰ μᾶλλον τοῖς σωματικοῖς πάθεσιν, οἶον μεγέθει μικρότητι, μαλακότητι σκληρότητι, λειότητι τραχύτητι καὶ τοῖς τοιούτοις, ὅλως δὲ τῷ μᾶλλον καὶ ἥττον. Πῶς μὲν οὖν ἀποδέχεσθαι δεῖ τὴν περὶ φύσεως μέθοδον, καὶ τίνα τρόπον γίνοιτ' ἂν ἡ θεωρία περὶ αὐτῶν ὁδῶ καὶ ῥᾶστα, ἔτι δὲ περὶ διαιρέσεως, τίνα τρόπον ἐνδέχεται μετιοῦσι λαμβάνειν χρησίμως, καὶ διότι τὸ διχοτομεῖν τῇ μὲν ἀδύνατον τῇ δὲ κενόν, εἴρηται. Διωρισμένων δὲ τούτων περὶ τῶν ἐφεξῆς λέγωμεν, ἀρχὴν τήνδε ποιησάμενοι.

## Κεφάλαιο 5

Τῶν οὐσιῶν ὅσαι φύσει συνεστᾶσι, τὰς μὲν ἀγενήτους καὶ ἀφθάρτους εἶναι τὸν ἅπαντα αἰῶνα, τὰς δὲ μετέχειν γενέσεως καὶ φθορᾶς. Συμβέβηκε δὲ περὶ μὲν ἐκείνας τιμίας οὔσας καὶ θείας ἐλάττους ἡμῖν ὑπάρχειν θεωρίας (καὶ γὰρ ἐξ ὧν ἂν τις σκέψαιτο περὶ αὐτῶν, καὶ περὶ ὧν εἰδέναι ποθοῦμεν, παντελῶς ἐστὶν ὀλίγα τὰ φανερά κατὰ τὴν αἴσθησιν), περὶ δὲ τῶν φθαρτῶν φυτῶν τε καὶ ζώων εὐποροῦμεν μᾶλλον πρὸς τὴν γνῶσιν διὰ τὸ σύντροφον· πολλὰ γὰρ περὶ ἕκαστον γένος λάβοι τις ἂν τῶν ὑπαρχόντων βουλόμενος διαπνεεῖν ἱκανῶς. Ἐχει δ' ἐκάτερα χάριν. Τῶν μὲν γὰρ εἰ καὶ κατὰ μικρὸν ἐφαπτόμεθα, ὅμως διὰ τὴν τιμιότητα τοῦ γνωρίζειν ἥδιον ἢ τὰ παρ' ἡμῖν

ἅπαντα, ὥσπερ καὶ τῶν ἐρωμένων τὸ τυχὸν καὶ μικρὸν μόριον κατιδεῖν ἥδιόν ἐστιν ἢ πολλὰ ἕτερα καὶ μεγάλα δι' ἀκριβείας ἰδεῖν· (645a.) τὰ δὲ διὰ τὸ μᾶλλον καὶ πλείω γνωρίζειν αὐτῶν λαμβάνει τὴν τῆς ἐπιστήμης ὑπεροχὴν, ἔτι δὲ διὰ τὸ πλησιαίτερα ἡμῶν εἶναι καὶ τῆς φύσεως οἰκειότερα ἀντικαταλλάττεται τι πρὸς τὴν περὶ τὰ θεῖα φιλοσοφίαν. Ἐπεὶ δὲ περὶ ἐκείνων διήλθομεν λέγοντες τὸ φαινόμενον ἡμῖν, λοιπὸν περὶ τῆς ζωϊκῆς φύσεως εἰπεῖν, μηδὲν παραλιπόντας εἰς δύναμιν μήτε ἀτιμότερον μήτε τιμιώτερον. Καὶ γὰρ ἐν τοῖς μὴ κεχαρισμένοις αὐτῶν πρὸς τὴν αἴσθησιν κατὰ τὴν θεωρίαν ὅμως ἡ δημιουργήσασα φύσις ἀμηχάνους ἡδονὰς παρέχει τοῖς δυναμένοις τὰς αἰτίας γνωρίζειν καὶ φύσει φιλοσόφοις. Καὶ γὰρ ἂν εἴη παράλογον καὶ ἄτοπον, εἰ τὰς μὲν εἰκόνας αὐτῶν θεωροῦντες χαίρομεν ὅτι τὴν δημιουργήσασαν τέχνην συνθεωροῦμεν, οἷον τὴν γραφικὴν ἢ τὴν πλαστικὴν, αὐτῶν δὲ τῶν φύσει συνεστώτων μὴ μᾶλλον ἀγαπῶμεν τὴν θεωρίαν, δυνάμενοί γε τὰς αἰτίας καθορᾶν. Διὸ δεῖ μὴ δυσχεραίνειν παιδικῶς τὴν περὶ τῶν ἀτιμότερων ζώων ἐπίσκεψιν. Ἐν πᾶσι γὰρ τοῖς φυσικοῖς ἔνεστί τι θαυμαστόν· καὶ καθάπερ Ἡράκλειτος λέγεται πρὸς τοὺς ξένους εἰπεῖν τοὺς βουλομένους ἐντυχεῖν αὐτῷ, οἱ ἐπειδὴ προσιόντες εἶδον αὐτὸν θερόμενον πρὸς τῷ ἵπνῳ ἔστησαν (ἐκέλευε γὰρ αὐτοὺς εἰσιέναι θαρροῦντας· εἶναι γὰρ καὶ ἐνταῦθα θεός), οὕτω καὶ πρὸς τὴν ζήτησιν περὶ ἐκάστου τῶν ζώων προσιέναι δεῖ μὴ δυσωπούμενον ὡς ἐν ἅπασιν ὄντος τινὸς φυσικοῦ καὶ καλοῦ.

Τὸ γὰρ μὴ τυχόντως ἄλλ' ἔνεκά τινος ἐν τοῖς τῆς φύσεως ἔργοις ἐστὶ καὶ μάλιστα· οὐ δ' ἔνεκα συνέστηκεν ἢ γέγονε τέλους, τὴν τοῦ καλοῦ χώραν εἴληφεν. Εἰ δέ τις τὴν περὶ τῶν ἄλλων ζώων θεωρίαν ἄτιμον εἶναι νενόμικε, τὸν αὐτὸν τρόπον οἴεσθαι χρὴ καὶ περὶ αὐτοῦ· οὐκ ἔστι γὰρ ἄνευ πολλῆς δυσχερείας ἰδεῖν ἐξ ὧν συνέστηκε τὸ τῶν ἀνθρώπων γένος, οἷον αἶμα, σάρκες, ὅστ' αἰ, φλέβες καὶ τὰ τοιαῦτα μόρια. Ὁμοίως τε δεῖ νομίζειν τὸν περὶ οὐτινοσοῦν τῶν μορίων ἢ τῶν σκευῶν διαλεγόμενον μὴ περὶ τῆς ὕλης ποιεῖσθαι τὴν μνήμην, μηδὲ ταύτης χάριν, ἀλλὰ τῆς ὅλης μορφῆς, οἷον καὶ περὶ οἰκίας, ἀλλὰ μὴ πλίνθων καὶ πηλοῦ καὶ ξύλων· καὶ τὸν περὶ φύσεως περὶ τῆς συνθέσεως καὶ τῆς ὅλης οὐσίας, ἀλλὰ μὴ περὶ τούτων ἃ μὴ συμβαίνει χωριζόμενά ποτε τῆς οὐσίας αὐτῶν. (645b.) Ἀναγκαῖον δὲ πρῶτον τὰ συμβεβηκότα διελεῖν περὶ ἕκαστον γένος, ὅσα καθ' αὐτὰ πᾶσιν ὑπάρχει τοῖς ζώοις, μετὰ δὲ ταῦτα τὰς αἰτίας αὐτῶν πειρᾶσθαι διελεῖν. Εἴρηται μὲν οὖν καὶ πρότερον ὅτι πολλὰ κοινὰ πολλοῖς ὑπάρχει τῶν ζώων, τὰ μὲν ἀπλῶς, οἷον πόδες πτερὰ λεπίδες, καὶ πάθη δὲ τὸν αὐτὸν τρόπον τούτοις, τὰ δ' ἀνάλογον. Λέγω δ' ἀνάλογον, ὅτι τοῖς μὲν ὑπάρχει πλεύμων, τοῖς δὲ πλεύμων μὲν οὐ, ὃ δὲ τοῖς ἔχουσι πλεύμονα, ἐκείνοις ἕτερον ἀντὶ τούτου· καὶ τοῖς μὲν

αἷμα, τοῖς δὲ τὸ ἀνάλογον τὴν αὐτὴν ἔχον δύναμιν ἦνπερ τοῖς ἐναίμοις τὸ αἷμα. Τὸ δὲ λέγειν χωρὶς περὶ ἐκάστων τῶν καθ' ἕκαστα, καὶ ἔμπροσθεν εἶπομεν ὅτι πολλάκις συμβήσεται ταῦτά λέγειν, ἐπειδὴν λέγωμεν περὶ πάντων τῶν ὑπαρχόντων· ὑπάρχει δὲ πολλοῖς ταῦτά. Ταῦτα μὲν οὖν ταύτῃ διωρίσθω. Ἐπεὶ δὲ τὸ μὲν ὄργανον πᾶν ἔνεκά του, τῶν δὲ τοῦ σώματος μορίων ἕκαστον ἔνεκά του, τὸ δ' οὐ ἔνεκα πρᾶξις τις, φανερόν ὅτι καὶ τὸ σύνολον σῶμα συνέστηκε πράξεώς τινος ἔνεκα πολυμεροῦς. Οὐ γὰρ ἡ πρίσις τοῦ πρίονος χάριν γέγονεν, ἀλλ' ὁ πρίων τῆς πρίσεως· χρῆσις γάρ τις ἡ πρίσις ἐστίν. Ὡστε καὶ τὸ σῶμά πως τῆς ψυχῆς ἔνεκεν, καὶ τὰ μόρια τῶν ἔργων πρὸς ἃ πέφυκεν ἕκαστον. Λεκτέον ἄρα πρῶτον τὰς πράξεις τὰς τε κοινὰς πάντων καὶ τὰς κατὰ γένος καὶ τὰς κατ' εἶδος.

Λέγω δὲ κοινὰς μὲν αἰ πᾶσιν ὑπάρχουσι τοῖς ζώοις, κατὰ γένος δέ, ὅσων παρ' ἄλληλα τὰς διαφορὰς ὁρῶμεν καθ' ὑπεροχὴν οὐσας, οἷον ὄρνιθα λέγω κατὰ γένος, ἄνθρωπον δὲ κατ' εἶδος, καὶ πᾶν ὃ κατὰ τὸν καθόλου λόγον μηδεμίαν ἔχει διαφορὰν. Τὰ μὲν γὰρ ἔχουσι τὸ κοινὸν κατ' ἀναλογίαν, τὰ δὲ κατὰ γένος, τὰ δὲ κατ' εἶδος. Ὅσαι μὲν οὖν πράξεις ἄλλων ἔνεκα, δῆλον ὅτι καὶ ὧν αἰ πράξεις τὸν αὐτὸν τρόπον διεστᾶσιν ὥνπερ αἰ πράξεις. Ὁμοίως δὲ καὶ εἴ τινες πρότεροι καὶ τέλος ἐτέρων πράξεων τυγχάνουσιν οὐσαι, τὸν αὐτὸν ἔξει τρόπον καὶ τῶν μορίων ἕκαστον, ὧν αἰ πράξεις αἰ τοιαῦται· καὶ τρίτον, ὧν ὄντων ἀναγκαῖον ὑπάρχειν. Λέγω δὲ πάθη καὶ πράξεις γένεσιν αὐξησιν ὀχείαν ἐγρήγορσιν ὕπνον πορείαν, καὶ ὁπόσ' ἄλλα τοιαῦτα τοῖς ζώοις ὑπάρχει· μόρια δὲ λέγω ῥῖνα ὀφθαλμὸν καὶ τὸ σύνολον πρόσωπον, ὧν ἕκαστον καλεῖται (646a.) μέλος. Ὁμοίως δὲ καὶ περὶ τῶν ἄλλων. Καὶ περὶ μὲν τοῦ τρόπου τῆς μεθόδου τοσαῦθ' ἡμῖν εἰρήσθω· τὰς δ' αἰτίας πειραθῶμεν εἰπεῖν περὶ τε τῶν κοινῶν καὶ τῶν ιδίων, ἀρξάμενοι καθάπερ διωρίσαμεν, πρῶτον ἀπὸ τῶν πρώτων.

## Βιβλίο 2

### Κεφάλαιο 1

Ἐκ τίνων μὲν οὖν μορίων καὶ πόσων συνέστηκεν ἕκαστον τῶν ζώων, ἐν ταῖς ἱστορίαις ταῖς περὶ αὐτῶν δεδῆλωται σαφέστερον· δι' ἃς δ' αἰτίας ἕκαστον τοῦτον ἔχει τὸν τρόπον, ἐπισκεπτέον νῦν, χωρίσαντας καθ' αὐτὰ τῶν ἐν ταῖς ἱστορίαις εἰρημένων.

Τριῶν δ' οὐσῶν τῶν συνθέσεων πρώτην μὲν ἂν τις θεῖη τὴν ἐκ τῶν καλουμένων ὑπὸ τινων στοιχείων, οἷον γῆς ἀέρος ὕδατος πυρός. Ἔτι δὲ

βέλτιον ἴσως ἐκ τῶν δυνάμεων λέγειν, καὶ τούτων οὐκ ἐξ ἀπασῶν, ἀλλ' ὥσπερ ἐν ἑτέροις εἴρηται καὶ πρότερον. Ὑγρὸν γὰρ καὶ ξηρὸν καὶ θερμὸν καὶ ψυχρὸν ὕλη τῶν συνθέτων σωμάτων ἐστίν· αἱ δ' ἄλλαι διαφοραὶ ταύταις ἀκολουθοῦσιν, οἷον βάρος καὶ κουφότης καὶ πυκνότης καὶ μανότης καὶ τραχύτης καὶ λειότης καὶ τᾶλλα τὰ τοιαῦτα πάθη τῶν σωμάτων. Δευτέρα δὲ σύστασις ἐκ τῶν πρώτων ἢ τῶν ὁμοιομερῶν φύσις ἐν τοῖς ζώοις ἐστίν, οἷον ὁστοῦ καὶ σαρκὸς καὶ τῶν ἄλλων τῶν τοιούτων. Τρίτη δὲ καὶ τελευταία κατ' ἀριθμὸν ἢ τῶν ἀνομοιομερῶν, οἷον προσώπου καὶ χειρὸς καὶ τῶν τοιούτων μορίων. Ἐπεὶ δ' ἐναντίως ἐπὶ τῆς γενέσεως ἔχει καὶ τῆς οὐσίας· τὰ γὰρ ὕστερα τῇ γενέσει πρότερα τὴν φύσιν ἐστί, καὶ πρῶτον τὸ τῇ γενέσει τελευταῖον· οὐ γὰρ οἰκία πλίνθων ἔνεκέν ἐστι καὶ λίθων, ἀλλὰ ταῦτα τῆς οἰκίας· ὁμοίως δὲ τοῦτ' ἔχει καὶ περὶ τὴν ἄλλην ὕλην. Οὐ μόνον δὲ φανερὸν ὅτι τοῦτον ἔχει τὸν τρόπον ἐκ τῆς ἐπαγωγῆς, ἀλλὰ καὶ κατὰ τὸν λόγον· πᾶν γὰρ τὸ γινόμενον ἔκ τινος καὶ εἷς τι ποιεῖται τὴν γένεσιν, καὶ ἀπ' ἀρχῆς ἐπ' ἀρχήν, ἀπὸ τῆς πρώτης κινούσης καὶ ἐχούσης ἤδη τινὰ φύσιν ἐπὶ τινὰ μορφήν ἢ τοιοῦτον ἄλλο τέλος· ἄνθρωπος γὰρ ἄνθρωπον καὶ φυτὸν γεννᾷ φυτὸν ἐκ τῆς περὶ ἑκάστον ὑποκειμένης ὕλης. Τῷ μὲν οὖν χρόνῳ προτέραν τὴν ὕλην (646b.) ἀναγκαῖον εἶναι καὶ τὴν γένεσιν, τῷ λόγῳ δὲ τὴν οὐσίαν καὶ τὴν ἐκάστου μορφήν. Δῆλον δ' ἂν λέγη τις τὸν λόγον τῆς γενέσεως· ὁ μὲν γὰρ τῆς οἰκοδομήσεως λόγος ἔχει τὸν τῆς οἰκίας, ὁ δὲ τῆς οἰκίας οὐκ ἔχει τὸν τῆς οἰκοδομήσεως. Ὅμοίως δὲ τοῦτο συμβέβηκε καὶ ἐπὶ τῶν ἄλλων. Ὡστε τὴν μὲν τῶν στοιχείων ὕλην ἀναγκαῖον εἶναι τῶν ὁμοιομερῶν ἔνεκεν.

Ὑστερα γὰρ ἐκείνων ταῦτα τῇ γενέσει, τούτων δὲ τὰ ἀνομοιομερῆ· ταῦτα γὰρ ἤδη τὸ τέλος ἔχει καὶ τὸ πέρας, ἐπὶ τοῦ τρίτου λαβόντα τὴν σύστασιν ἀριθμοῦ, καθάπερ ἐπὶ πολλῶν συμβαίνει τελειοῦσθαι τὰς γενέσεις.

Ἐξ ἀμφοτέρων μὲν οὖν τὰ ζῶα συνέστηκε τῶν μορίων τούτων, ἀλλὰ τὰ ὁμοιομερῆ τῶν ἀνομοιομερῶν ἔνεκέν ἐστιν· ἐκείνων γὰρ ἔργα καὶ πράξεις εἰσὶν, οἷον ὀφθαλμοῦ καὶ μυκτῆρος καὶ τοῦ προσώπου παντὸς καὶ δακτύλου καὶ χειρὸς καὶ παντὸς τοῦ βραχίονος. Πολυμόρφων δὲ τῶν πράξεων καὶ τῶν κινήσεων ὑπαρχουσῶν τοῖς ζώοις ὅλοις τε καὶ τοῖς μορίοις τοῖς τοιούτοις, ἀναγκαῖον ἐξ, ὧν σύγκεινται, τὰς δυνάμεις ἀνομοίας ἔχειν· πρὸς μὲν γὰρ τινὰ μαλακότης χρήσιμος πρὸς δέ τινα σκληρότης, καὶ τὰ μὲν τάσιν ἔχειν τὰ δὲ κάμψιν. Τὰ μὲν οὖν ὁμοιομερῆ κατὰ μέρος διείληφε τὰς δυνάμεις τὰς τοιαύτας (τὸ μὲν γὰρ αὐτῶν ἐστὶ μαλακὸν τὸ δὲ σκληρόν, καὶ τὸ μὲν ὑγρὸν τὸ δὲ ξηρὸν, καὶ τὸ μὲν γλίσχρον τὸ δὲ κραῦρον), τὰ δ' ἀνομοιομερῆ κατὰ πολλὰς καὶ συγκειμένας ἀλλήλαις· ἑτέρα γὰρ πρὸς τὸ πιέσαι τῇ χειρὶ χρήσιμος δύναμις καὶ πρὸς τὸ λαβεῖν. Διόπερ ἐξ ὁστῶν καὶ νεύρων καὶ



σαρκὸς καὶ τῶν ἄλλων τῶν τοιούτων συνεστήκασι τὰ ὀργανικὰ τῶν μορίων, ἄλλ' οὐκ ἐκεῖνα ἐκ τούτων. Ὡς μὲν οὖν ἔνεκά τινος διὰ ταύτην τὴν αἰτίαν ἔχει περὶ τούτων τὸν εἰρημένον τρόπον· ἐπεὶ δὲ ζητεῖται καὶ πῶς ἀναγκαῖον ἔχειν οὕτως, φανερόν ὅτι προυπῆρχεν οὕτω πρὸς ἄλληλα ἔχοντα ἐξ ἀνάγκης. Τὰ μὲν γὰρ ἀνομοιομερῆ ἐκ τῶν ὁμοιομερῶν ἐνδέχεται συνεστάναι, καὶ ἐκ πλειόνων καὶ ἐνός, οἷον ἕνια τῶν σπλάγχχνων· πολύμορφα γὰρ τοῖς σχήμασιν, ἐξ ὁμοιομεροῦς ὄντα σώματος ὡς εἶπειν ἀπλῶς. Τὰ δ' ὁμοιομερῆ ἐκ τούτων ἀδύνατον· τὸ γὰρ ὁμοιομερές πόλλ' ἂν εἴη ἀνομοιομερῆ. Διὰ μὲν οὖν (647a.) ταύτας τὰς αἰτίας τὰ μὲν ἀπλᾶ καὶ ὁμοιομερῆ, τὰ δὲ σύνθετα καὶ ἀνομοιομερῆ τῶν μορίων ἐν τοῖς ζώοις ἐστίν.

Ὅντων δὲ τῶν μὲν ὀργανικῶν μερῶν τῶν δ' αἰσθητηρίων ἐν τοῖς ζώοις, τῶν μὲν ὀργανικῶν ἕκαστον ἀνομοιομερές ἐστίν, ὥσπερ εἶπον πρότερον, ἢ δ' αἰσθήσεις ἐγγίγνεται πᾶσιν ἐν τοῖς ὁμοιομερέσι, διὰ τὸ τῶν αἰσθήσεων ὁποιοῦν ἐνός τινος εἶναι γένους, καὶ τὸ αἰσθητήριον ἐκάστου δεκτικὸν εἶναι τῶν αἰσθητῶν. Πάσχει δὲ τὸ δυνάμει ὄν ὑπὸ τοῦ ἐνεργείᾳ ὄντος, ὥστε ἐστὶ τὸ αὐτὸ τῷ γένει καὶ ἐκεῖνο ἐν καὶ τοῦτο ἐν. Καὶ διὰ τοῦτο χεῖρα μὲν ἢ πρόσωπον ἢ τῶν τοιούτων τι μορίων οὐδεὶς ἐγχειρεῖ λέγειν τῶν φυσιολόγων τὸ μὲν εἶναι γῆν, τὸ δ' ὕδωρ, τὸ δὲ πῦρ· τῶν δ' αἰσθητηρίων ἕκαστον πρὸς ἕκαστον ἐπιζευγνύουσι τῶν στοιχείων, τὸ μὲν ἀέρα φάσκοντες εἶναι τὸ δὲ πῦρ. Οὕσης δὲ τῆς αἰσθήσεως ἐν τοῖς ἀπλοῖς μέρεσιν εὐλόγως μάλιστα συμβαίνει τὴν ἀφὴν ἐν ὁμοιομερεῖ μὲν ἥκιστα δ' ἀπλῶ τῶν αἰσθητηρίων ἐγγίνεσθαι· μάλιστα γὰρ αὕτη δοκεῖ πλειόνων εἶναι γενῶν, καὶ πολλὰς ἔχει ἐναντιώσεις τὸ ὑπὸ ταύτην αἰσθητόν, θερμὸν ψυχρόν, ξηρὸν ὑγρὸν καὶ ἔτι ἄλλα τοιαῦτα· καὶ τὸ τούτων αἰσθητήριον, ἢ σὰρξ, καὶ τὸ ταύτῃ ἀνάλογον σωματωδέστατόν ἐστι τῶν αἰσθητηρίων. Ἐπεὶ δ' ἀδύνατον εἶναι ζῶον ἄνευ αἰσθήσεως, καὶ διὰ τοῦτο ἂν εἴη ἀναγκαῖον ἔχειν τοῖς ζώοις ἕνια μόρια ὁμοιομερῆ· ἢ μὲν γὰρ αἰσθήσεις ἐν τούτοις, αἱ δὲ πράξεις διὰ τῶν ἀνομοιομερῶν ὑπάρχουσιν αὐτοῖς.

Τῆς δ' αἰσθητικῆς δυνάμεως καὶ τῆς κινούσης τὸ ζῶον καὶ τῆς θρεπτικῆς ἐν ταύτῳ μορίῳ τοῦ σώματος οὕσης, καθάπερ ἐν ἑτέροις εἴρηται πρότερον, ἀναγκαῖον τὸ ἔχον πρῶτον μόριον τὰς τοιαύτας ἀρχάς, ἢ μὲν ἐστὶ δεκτικὸν πάντων τῶν αἰσθητῶν, τῶν ἀπλῶν εἶναι μορίων, ἢ δὲ κινητικὸν καὶ πρακτικόν, τῶν ἀνομοιομερῶν. Διόπερ ἐν μὲν τοῖς ἀναίμοις ζώοις τὸ ἀνάλογον, ἐν δὲ τοῖς ἐναίμοις ἡ καρδία τοιοῦτόν ἐστιν· διαιρεῖται μὲν γὰρ εἰς ὁμοιομερῆ καθάπερ τῶν ἄλλων σπλάγχχνων ἕκαστον, διὰ δὲ τὴν τοῦ σχήματος μορφήν ἀνομοιομερές ἐστίν.

Ταύτη δ' ἠκολούθηκε καὶ τῶν ἄλλων τῶν καλουμένων σπλάγχνων ἕκαστον. Ἐκ τῆς αὐτῆς γὰρ ὕλης συνεστᾶσιν· αἱματικὴ (647b.) γὰρ ἡ φύσις πάντων αὐτῶν διὰ τὸ τὴν θέσιν ἔχειν ἐπὶ πόροις φλεβικοῖς καὶ διαλήψεσιν. Καθάπερ οὖν ῥέοντος ὕδατος ἰλὺς, τᾶλλα σπλάγχνα τῆς διὰ τῶν φλεβῶν ῥύσεως τοῦ αἵματος οἷον προχεύματά ἐστιν· ἡ δὲ καρδία, διὰ τὸ τῶν φλεβῶν ἀρχὴ εἶναι καὶ ἔχειν ἐν αὐτῇ τὴν δύναμιν τὴν δημιουργοῦσαν τὸ αἷμα πρώτην, εὖλογον, ἐξ οἷας δέχεται τροφῆς, ἐκ τοιαύτης συνεστάναι καὶ αὐτήν. Διότι μὲν οὖν αἱματικὰ τὴν μορφήν τὰ σπλάγχνα ἐστίν, εἴρηται, καὶ διότι τῇ μὲν ὁμοιομερῇ τῇ δ' ἀνομοιομερῇ.

## Κεφάλαιο 2

Τῶν δ' ὁμοιομερῶν μορίων ἐν τοῖς ζώοις ἐστὶ τὰ μὲν μαλακὰ καὶ ὑγρά, τὰ δὲ σκληρὰ καὶ στερεὰ, ὑγρά μὲν ἢ ὅλως ἢ ἕως ἂν ἢ ἐν τῇ φύσει, οἷον αἷμα, ἰχώρ, πιμελή, στέαρ, μυελός, γονή, χολή, γάλα ἐν τοῖς ἔχουσι, σάρξ, καὶ τὰ τούτοις ἀνάλογον· οὐ γὰρ ἅπαντα τὰ ζῶα τούτων τῶν μορίων τέτευχεν, ἀλλ' ἕνια τῶν ἀνάλογον τούτων τισίν. Τὰ δὲ ξηρὰ καὶ στερεὰ τῶν ὁμοιομερῶν ἐστίν, οἷον ὅστουν ἄκανθα νεῦρον φλέψ. Καὶ γὰρ τῶν ὁμοιομερῶν ἡ διαίρεσις ἔχει διαφορὰν· ἔστι γὰρ ὡς ἐνίων τὸ μέρος ὁμώνυμον τῷ ὅλῳ, ἔστι δ' ὡς οὐχ ὁμώνυμον, οἷον φλεβὸς φλέψ, ἀλλὰ προσώπου πρόσωπον οὐδαμῶς. Πρῶτον μὲν οὖν καὶ τοῖς ὑγροῖς μορίοις καὶ τοῖς ξηροῖς πολλοὶ τρόποι τῆς αἰτίας εἰσίν. Τὰ μὲν γὰρ ὡς ὕλη τῶν μερῶν τῶν ἀνομοιομερῶν ἐστίν (ἐκ τούτων γὰρ συνέστηκεν ἕκαστον τῶν ὀργανικῶν μερῶν, ἐξ ὧστων καὶ νεύρων καὶ σαρκῶν καὶ ἄλλων τοιούτων συμβαλλομένων τὰ μὲν εἰς τὴν οὐσίαν τὰ δ' εἰς τὴν ἐργασίαν), τὰ δὲ τροφὴ τούτοις τῶν ὑγρῶν ἐστὶ (πάντα γὰρ ἐξ ὑγροῦ λαμβάνει τὴν αὔξησιν), τὰ δὲ περιττώματα συμβέβηκεν εἶναι τούτων, οἷον τὴν τε τῆς ξηρᾶς τροφῆς ὑπόστασιν καὶ τὴν τῆς ὑγρᾶς τοῖς ἔχουσι κύστιν.

Αὐτῶν δὲ τούτων αἱ διαφοραὶ πρὸς ἄλληλα τοῦ βελτίονος ἕνεκέν εἰσιν, οἷον τῶν τε ἄλλων καὶ αἵματος πρὸς αἷμα· τὸ μὲν γὰρ λεπτότερον τὸ δὲ παχύτερον καὶ τὸ μὲν καθαρώτερον ἐστὶ τὸ δὲ θολερώτερον, ἔτι δὲ τὸ μὲν ψυχρότερον τὸ δὲ θερμότερον ἔν τε τοῖς μορίοις τοῦ ἐνὸς ζώου (τὸ γὰρ ἐν τοῖς ἄνω μέρεσι πρὸς τὰ κάτω μόρια διαφέρει ταύταις ταῖς διαφοραῖς) καὶ ἐτέρῳ πρὸς ἕτερον. Καὶ ὅλως (648a.) τὰ μὲν ἔναιμα τῶν ζώων ἐστί, τὰ δ' ἀντὶ τοῦ αἵματος ἔχει ἕτερόν τι μόριον τοιοῦτον. Ἔστι δ' ἰσχύος μὲν ποιητικώτερον τὸ παχύτερον αἷμα καὶ θερμότερον, αἰσθητικώτερον δὲ καὶ νοερώτερον τὸ λεπτότερον καὶ ψυχρότερον. Τὴν αὐτὴν δ' ἔχει διαφορὰν καὶ τῶν ἀνάλογον ὑπαρχόντων πρὸς τὸ αἷμα· διὸ καὶ μέλιτται καὶ ἄλλα τοιαῦτα ζῶα

φρονιμώτερα τὴν φύσιν ἐστὶν ἐναίμων πολλῶν, καὶ τῶν ἐναίμων τὰ ψυχρὸν ἔχοντα καὶ λεπτὸν αἷμα φρονιμώτερα τῶν ἐναντίων ἐστίν.

Ἄριστα δὲ τὰ θερμὸν ἔχοντα καὶ λεπτὸν καὶ καθαρὸν· ἅμα γὰρ πρὸς τε ἀνδρείαν τὰ τοιαῦτα καὶ πρὸς φρόνησιν ἔχει καλῶς. Διὸ καὶ τὰ ἄνω μόρια πρὸς τὰ κάτω ταύτην ἔχει τὴν διαφοράν, καὶ πρὸς τὸ θῆλυ αὐτὸ τὸ ἄρρεν, καὶ τὰ δεξιὰ πρὸς τὰ ἀριστερὰ τοῦ σώματος. Ὀμοίως δὲ καὶ περὶ τῶν ἄλλων καὶ τῶν τοιούτων μορίων καὶ τῶν ἀνομοιομερῶν ὑποληπτέον ἔχειν τὴν διαφοράν, τὰ μὲν πρὸς τὸ βέλτιον ἢ χειρόν, τὰ δὲ πρὸς τὰ ἔργα καὶ τὴν οὐσίαν ἐκάστω τῶν ζώων, οἷον ἐχόντων ὀφθαλμοὺς ἀμφοτέρων τὰ μὲν ἐστὶ σκληρόφθαλμα τὰ δ' ὑγρόφθαλμα, καὶ τὰ μὲν οὐκ ἔχει βλέφαρα τὰ δ' ἔχει πρὸς τὸ τὴν ὄψιν ἀκριβεστέραν εἶναι.

Ὅτι δ' ἀναγκαῖον ἔχειν ἢ αἷμα ἢ τὸ τούτῳ τὴν αὐτὴν ἔχον φύσιν, καὶ τίς ἐστὶν ἡ τοῦ αἵματος φύσις, πρῶτον διελομένοις περὶ θερμοῦ καὶ ψυχροῦ, οὕτω καὶ περὶ τούτου θεωρητέον τὰς αἰτίας. Πολλῶν γὰρ ἡ φύσις ἀνάγεται πρὸς ταύτας τὰς ἀρχάς, καὶ πολλοὶ διαμφισβητοῦσι ποῖα θερμὰ καὶ ποῖα ψυχρὰ τῶν ζώων ἢ τῶν μορίων. Ἐνιοὶ γὰρ τὰ ἔνυδρα τῶν πεζῶν θερμότερά φασιν εἶναι, λέγοντες ὡς ἐπανισοῖ τὴν ψυχρότητα τοῦ τόπου ἢ τῆς φύσεως αὐτῶν θερμότης, καὶ τὰ ἄναιμα τῶν ἐναίμων καὶ τὰ θήλεα τῶν ἀρρένων, οἷον Παρμενίδης τὰς γυναῖκας τῶν ἀνδρῶν θερμότερας εἶναι φησι καὶ ἕτεροί τινες, ὡς διὰ τὴν θερμότητα καὶ πολυαιμούσας γινομένων τῶν γυναικείων, Ἐμπεδοκλῆς δὲ τοῦναντίον· ἔτι δ' αἷμα καὶ χολὴν οἱ μὲν θερμὸν ὁποτερονοῦν εἶναι φασιν αὐτῶν, οἱ δὲ ψυχρόν. Εἰ δ' ἔχει τοσαύτην τὸ θερμὸν καὶ τὸ ψυχρὸν ἀμφισβήτησιν, τί χρὴ περὶ τῶν ἄλλων ὑπολαβεῖν; Ταῦτα γὰρ ἡμῖν ἐναργέστατα τῶν περὶ τὴν αἴσθησιν.

Ἔοικε δὲ διὰ τὸ πολλαχῶς λέγεσθαι τὸ θερμότερον ταῦτα (648b.) συμβαίνειν· ἕκαστος γὰρ δοκεῖ τι λέγειν τὰναντία λέγων.

Διὸ δεῖ μὴ λανθάνειν πῶς δεῖ τῶν φύσει συνεστώτων τὰ μὲν θερμὰ λέγειν τὰ δὲ ψυχρὰ καὶ τὰ μὲν ξηρὰ τὰ δ' ὑγρά, ἐπεὶ ὅτι γ' αἷτια ταῦτα σχεδὸν καὶ θανάτου καὶ ζωῆς ἔοικεν εἶναι φανερόν, ἔτι δ' ὕπνου καὶ ἐγρηγόρσεως καὶ ἀκμῆς καὶ γήρωος καὶ νόσου καὶ ὑγείας, ἀλλ' οὐ τραχύτητες καὶ λειότητες οὐδὲ βαρύτητες καὶ κουφότητες οὐδ' ἄλλο τῶν τοιούτων οὐδὲν ὡς εἶπεῖν. Καὶ τοῦτ' εὐλόγως συμβέβηκεν· καθάπερ γὰρ ἐν ἑτέροις εἴρηται πρότερον, ἀρχαὶ τῶν φυσικῶν στοιχείων αὐταί εἰσι, θερμὸν καὶ ψυχρὸν καὶ ξηρὸν καὶ ὑγρόν.

Πότερον οὖν ἀπλῶς λέγεται τὸ θερμὸν ἢ πλεοναχῶς; Δεῖ δὴ λαβεῖν τί ἔργον τοῦ θερμότερου, ἢ πόσα, εἰ πλείω. Ἐνα μὲν δὴ τρόπον λέγεται μᾶλλον θερμὸν ὑφ' οὗ μᾶλλον θερμαίνεται τὸ ἀπτόμενον, ἄλλως δὲ τὸ μᾶλλον αἴσθησιν ἐμποιοῦν ἐν τῷ θιγγάνειν, καὶ τοῦτ', ἐὰν μετὰ λύπης. Ἔστι δ' ὅτε δοκεῖ τοῦτ' εἶναι ψεῦδος· ἐνίστε γὰρ ἡ ἕξις αἰτία τοῦ ἀλγεῖν αἰσθανομένοις. Ἔτι τὸ τηκτικώτερον τοῦ τηκτοῦ καὶ τοῦ καυστοῦ καυστικώτερον. Ἔτι ἐὰν ἢ τὸ μὲν πλεόν τὸ δ' ἔλαττον τὸ αὐτό, τὸ πλεόν τοῦ ἐλάττονος θερμότερον. Πρὸς δὲ τούτοις δυοῖν τὸ μὴ ταχέως ψυχόμενον ἀλλὰ βραδέως θερμότερον, καὶ τὸ θάπτον θερμαινόμενον τοῦ θερμαινομένου βραδέως θερμότερον εἶναι τὴν φύσιν φαμέν, ὡς τὸ μὲν ἐναντίον, ὅτι πόρρω, τὸ δ' ὅμοιον, ὅτι ἐγγύς. Λέγεται μὲν οὖν εἰ μὴ πλεοναχῶς, ἀλλὰ τοσαυταχῶς ἕτερον ἑτέρου θερμότερον· τούτους δὲ τοὺς τρόπους ἀδύνατον ὑπάρχειν τῷ αὐτῷ πάντας.

Θερμαίνει μὲν γὰρ μᾶλλον τὸ ζέον ὕδωρ τῆς φλογός, καίει δὲ καὶ τήκει τὸ καυστὸν καὶ τηκτὸν ἢ φλόξ, τὸ δ' ὕδωρ οὐδέν. Ἔτι θερμότερον μὲν τὸ ζέον ὕδωρ ἢ πῦρ ὀλίγον, ψύχεται δὲ καὶ θάπτον καὶ μᾶλλον τὸ θερμὸν ὕδωρ μικροῦ πυρός· οὐ γὰρ γίνεται ψυχρὸν πῦρ, ὕδωρ δὲ γίνεται πᾶν. Ἔτι θερμότερον μὲν κατὰ τὴν ἀφὴν τὸ ζέον ὕδωρ, ψύχεται δὲ θάπτον καὶ πήγνυται τοῦ ἐλαίου. Ἔτι τὸ αἷμα κατὰ μὲν τὴν ἀφὴν θερμότερον ὕδατος καὶ ἐλαίου, πήγνυται δὲ θάπτον.

Ἔτι λίθοι καὶ σίδηρος καὶ τὰ τοιαῦτα θερμαίνεται μὲν βραδύτερον ὕδατος, καίει δὲ θερμανθέντα μᾶλλον. Πρὸς δὲ τούτοις τῶν λεγομένων θερμῶν τὰ μὲν ἄλλοτρίαν ἔχει τὴν (649a.) θερμότητα τὰ δ' οἰκείαν, διαφέρει δὲ τὸ θερμὸν εἶναι οὕτως ἢ ἐκείνως πλεῖστον· ἐγγύς γὰρ τοῦ κατὰ συμβεβηκὸς εἶναι θερμὸν ἀλλὰ μὴ καθ' αὐτὸ θάτερον αὐτῶν, ὥσπερ ἂν εἴ τις λέγοι, εἰ συμβεβηκὸς εἴη τῷ πυρέττοντι εἶναι μουσικῷ, τὸν μουσικὸν εἶναι θερμότερον ἢ τὸν μεθ' ὑγιείας θερμόν. Ἐπεὶ δ' ἐστὶ τὸ μὲν καθ' αὐτὸ θερμὸν τὸ δὲ κατὰ συμβεβηκός, ψύχεται μὲν βραδύτερον τὸ καθ' αὐτό, θερμαίνει δὲ μᾶλλον πολλάκις τὴν αἴσθησιν τὸ κατὰ συμβεβηκός· καὶ πάλιν καίει μὲν μᾶλλον τὸ καθ' αὐτὸ θερμόν, οἶον ἢ φλόξ τοῦ ὕδατος τοῦ ζέοντος, θερμαίνει δὲ κατὰ τὴν ἀφὴν τὸ ζέον μᾶλλον, τὸ κατὰ συμβεβηκὸς θερμόν. Ὡστε φανερόν ὅτι τὸ κρῖναι δυοῖν πότερον θερμότερον οὐχ ἀπλοῦν· ὡδὲ μὲν γὰρ τότε ἔσται θερμότερον, ὡδὲ δὲ θάτερον. Ἐνια δὲ τῶν τοιούτων οὐδ' ἔστιν ἀπλῶς εἰπεῖν ὅτι θερμὸν ἢ μὴ θερμόν. Ὁ μὲν γὰρ ποτε τυγχάνει ὄν τὸ ὑποκείμενον, οὐ θερμόν, συνδυαζόμενον δὲ θερμόν, οἶον εἴ τις θεῖτο ὄνομα ὕδατι ἢ σιδήρῳ θερμῷ.

Τοῦτον γὰρ τὸν τρόπον τὸ αἷμα θερμόν ἐστιν. Καὶ ποιεῖ δὲ φανερόν ἐν τοῖς

τοιούτοις ὅτι τὸ ψυχρὸν φύσις τις ἄλλ' οὐ στερησίς ἐστιν, ἐν ὅσοις τὸ ὑποκείμενον κατὰ πάθος θερμὸν ἐστιν. Τάχα δὲ καὶ ἡ τοῦ πυρὸς φύσις, εἰ ἔτι, τοιαύτη τις ἐστίν· ἴσως γὰρ τὸ ὑποκείμενόν ἐστιν ἢ καπνὸς ἢ ἄνθραξ, ὧν τὸ μὲν αἰεὶ θερμὸν (ἀναθυμίασις γὰρ ὁ καπνός), ὁ δ' ἄνθραξ ἀποσβεσθεὶς ψυχρός. Ἐλαιον δὲ καὶ πεύκη γένοιτ' ἂν ψυχρά. ἔχει δὲ θερμότητα καὶ τὰ πυρωθέντα πάντα σχεδόν, οἷον κονία καὶ τέφρα, καὶ τὰ ὑποστήματα τῶν ζώων, καὶ τῶν περιττωμάτων ἡ χολή, τῷ ἐμπεφυρεῦσθαι καὶ ἐγκαταλελεῖφθαί τι ἐν αὐτοῖς θερμὸν. Ἄλλον δὲ τρόπον θερμὸν πεύκη καὶ τὰ πίονα, τῷ ταχὺ μεταβάλλειν εἰς ἐνέργειαν πυρός. Δοκεῖ δὲ τὸ θερμὸν καὶ πηγνύναι καὶ τήκειν.

Ὅσα μὲν οὖν ὕδατος μόνον, ταῦτα πήγνυσι τὸ ψυχρὸν, ὅσα δὲ γῆς, τὸ πῦρ· καὶ τῶν θερμῶν πήγνυται ὑπὸ ψυχροῦ ταχὺ μὲν ὅσα γῆς μᾶλλον, καὶ ἀλύτως, λυτῶς δ', ὅσα ὕδατος.

Ἀλλὰ περὶ μὲν τούτων ἐν ἑτέροις διώρισται σαφέστερον, ποῖα τὰ πηκτά, καὶ πήγνυται διὰ τίνος αἰτίας. Τὸ δὲ τί θερμὸν καὶ ποῖον θερμότερον, ἐπειδὴ λέγεται πλεοναχῶς, (649b.) οὐ τὸν αὐτὸν τρόπον ὑπάρξει πᾶσιν, ἀλλὰ προσδιοριστέον ὅτι καθ' αὐτὸ μὲν τόδε, κατὰ συμβεβηκὸς δὲ πολλάκις θάτερον, ἔτι δὲ δυνάμει μὲν τοδί, τοδί δὲ κατ' ἐνέργειαν, καὶ τόνδε μὲν τὸν τρόπον τοδί, τῷ μᾶλλον τὴν ἀφὴν θερμαίνειν, τοδί δὲ τῷ φλόγα ποιεῖν καὶ πυροῦν. Λεγομένου δὲ τοῦ θερμοῦ πολλαχῶς, ἀκολουθήσει δῆλον ὅτι καὶ τὸ ψυχρὸν κατὰ τὸν αὐτὸν λόγον. Καὶ περὶ μὲν θερμοῦ καὶ ψυχροῦ καὶ τῆς ὑπεροχῆς αὐτῶν διωρίσθω τὸν τρόπον τοῦτον.

### Κεφάλαιο 3

Ἐχόμενον δὲ καὶ περὶ ξηροῦ καὶ ὑγροῦ διελθεῖν ἀκολουθῶς τοῖς εἰρημένοις. Λέγεται δὲ ταῦτα πλεοναχῶς, οἷον τὰ μὲν δυνάμει τὰ δ' ἐνεργείᾳ. Κρύσταλλος γὰρ καὶ πᾶν τὸ πεπηγὸς ὑγρὸν λέγεται ξηρὸν μὲν ἐνεργείᾳ καὶ κατὰ συμβεβηκός, ὄντα δυνάμει καὶ καθ' αὐτὰ ὑγρά, γῆ δὲ καὶ τέφρα καὶ τὰ τοιαῦτα μιχθέντα ὑγρῷ ἐνεργείᾳ μὲν ὑγρά καὶ κατὰ συμβεβηκός, καθ' αὐτὰ δὲ καὶ δυνάμει ξηρά· διακριθέντα δὲ ταῦτα τὰ μὲν ὕδατος ἀναπληστικὰ καὶ ἐνεργείᾳ καὶ δυνάμει ὑγρά, τὰ δὲ γῆς ἅπαντα ξηρά. Καὶ τὸ κυρίως καὶ ἀπλῶς ξηρὸν τοῦτον μάλιστα λέγεται τὸν τρόπον.

Ὅμοίως δὲ καὶ θάτερα τὰ ὑγρά κατὰ τὸν αὐτὸν λόγον ἔχει τὸ κυρίως καὶ ἀπλῶς, καὶ ἐπὶ θερμῶν καὶ ψυχρῶν.

Τούτων δὲ διωρισμένων φανερόν ὅτι τὸ αἷμα ὡδὶ μὲν ἔστι θερμόν, οἷόν τι ἦν αὐτῷ τὸ αἷματι εἶναι (καθαπερεὶ ὀνόματί τινη σημαίνομεν τὸ ζέον ὕδωρ, οὕτω λέγεται), τὸ δ' ὑποκείμενον καὶ ὃ ποτε ὄν αἷμά ἐστιν, οὐ θερμόν· καὶ καθ' αὐτό ἐστι μὲν ὡς θερμόν ἐστιν, ἔστι δ' ὡς οὐ. Ἐν μὲν γὰρ τῷ λόγῳ ὑπάρξει αὐτοῦ ἡ θερμότης, ὥσπερ ἐν τῷ τοῦ λευκοῦ ἀνθρώπου τὸ λευκόν· ἡ δὲ κατὰ πάθος τὸ αἷμα, οὐ καθ' αὐτὸ θερμόν. Ὅμοίως δὲ καὶ περὶ ξηροῦ καὶ ὑγροῦ. Διὸ καὶ ἐν τῇ φύσει τῶν τοιούτων τὰ μὲν θερμὰ καὶ ὑγρά χωριζόμενα δὲ πηγνυται καὶ ψυχρὰ φαίνεται, οἷον τὸ αἷμα, τὰ δὲ θερμὰ καὶ πάχος ἔχοντα καθάπερ ἡ χολή, χωριζόμενα δ' ἐκ τῆς φύσεως τῶν ἐχόντων τούναντίον πάσχει· ψύχεται γὰρ καὶ ὑγραίνεται· τὸ μὲν γὰρ αἷμα ξηραίνεται μᾶλλον, ὑγραίνεται δ' ἡ ξανθὴ χολή. Τὸ δὲ μᾶλλον καὶ ἥττον μετέχειν τῶν ἀντικειμένων ὡς ὑπάρχοντα δεῖ τιθέναι τούτοις. Πῶς μὲν οὖν (650a.) θερμόν καὶ πῶς ὑγρόν, καὶ πῶς τῶν ἐναντίων ἡ φύσις τοῦ αἵματος κεκοινώνηκεν, εἴρηται σχεδόν.

Ἐπεὶ δ' ἀνάγκη πᾶν τὸ αὐξανόμενον λαμβάνειν τροφήν, ἡ δὲ τροφή πᾶσιν ἐξ ὑγροῦ καὶ ξηροῦ, καὶ τούτων ἡ πέψις γίνεται καὶ ἡ μεταβολὴ διὰ τῆς τοῦ θερμοῦ δυνάμεως, καὶ τὰ ζῶα πάντα καὶ τὰ φυτά, κἂν εἰ μὴ δι' ἄλλην αἰτίαν, ἀλλὰ διὰ ταύτην ἀναγκαῖον ἔχειν ἀρχὴν θερμοῦ φυσικὴν, καὶ ταύτην ὥσπερ † ... αἱ ἐργασίαι τῆς τροφῆς πλειόνων εἰσὶ μορίων. Ἡ μὲν γὰρ πρώτη φανερά τοῖς ζώοις λειτουργία διὰ τοῦ στόματος οὔσα καὶ τῶν ἐν τούτῳ μορίων, ὅσων ἡ τροφή δεῖται διαιρέσεως. Ἄλλ' αὕτη μὲν οὐδεμιᾶς αἰτία πέψεως, ἀλλ' εὐπεψίας μᾶλλον· ἡ γὰρ εἰς μικρὰ διαίρεσις τῆς τροφῆς ῥάω ποιεῖ τῷ θερμῷ τὴν ἐργασίαν· ἡ δὲ τῆς ἄνω καὶ τῆς κάτω κοιλίας ἥδη μετὰ θερμότητος

φυσικῆς ποιεῖται τὴν πέψιν. Ὡσπερ δὲ καὶ τὸ στόμα τῆς ἀκατεργάστου τροφῆς πόρος ἐστί, καὶ τὸ συνεχὲς αὐτῷ μόριον ὃ καλοῦσιν οἰσοφάγον, ὅσα τῶν ζώων ἔχει τοῦτο τὸ μόριον, ἕως εἰς τὴν κοιλίαν, οὕτως καὶ ἄλλας ἀρχὰς δεῖ πλείους εἶναι, δι' ὧν ἅπαν λήψεται τὸ σῶμα τὴν τροφήν, ὥσπερ ἐκ φάτνης, ἐκ τῆς κοιλίας καὶ τῆς τῶν ἐντέρων φύσεως. Τὰ μὲν γὰρ φυτὰ λαμβάνει τὴν τροφήν κατειργασμένην ἐκ τῆς γῆς ταῖς ῥίζαις (διὸ καὶ περίττωμα οὐ γίνεται τοῖς φυτοῖς· τῇ γὰρ γῇ καὶ τῇ ἐν αὐτῇ θερμότητι χρῆται ὥσπερ κοιλία), τὰ δὲ ζῶα πάντα μὲν σχεδόν, τὰ δὲ πορευτικὰ φανερώς, οἷον γῆν ἐν αὐτοῖς ἔχει τὸ τῆς κοιλίας κύτος, ἐξ ἧς, ὥσπερ ἐκεῖνα ταῖς ῥίζαις, ταῦτα δεῖ τινι τὴν τροφήν λαμβάνειν, ἕως τὸ τῆς ἐχομένης πέψεως λάβῃ τέλος. Ἡ μὲν γὰρ τοῦ στόματος ἐργασία παραδίδωσι τῇ κοιλίᾳ, παρὰ δὲ ταύτης ἕτερον ἀναγκαῖον λαμβάνειν, ὅπερ συμβέβηκεν· αἱ γὰρ φλέβες κατατείνονται διὰ τοῦ μεσεντερίου παράπαν, κάτωθεν ἀρξάμεναι μέχρι τῆς κοιλίας. Δεῖ δὲ ταῦτα θεωρεῖν ἕκ τε τῶν ἀνατομῶν καὶ τῆς φυσικῆς ἱστορίας.

Ἐπεὶ δὲ πάσης τροφῆς ἐστί τι δεκτικὸν καὶ τῶν γινομένων περιττωμάτων, αἱ δὲ φλέβες οἷον ἀγγεῖον αἵματός εἰσι, φανερόν ὅτι τὸ αἷμα ἢ τελευταία τροφή τοῖς ζώοις τοῖς ἐναίμοις ἐστί, τοῖς δ' ἀναίμοις τὸ ἀνάλογον. Καὶ διὰ τοῦτο μὴ λαμβάνουσί τε τροφήν ὑπολείπει τοῦτο καὶ (650b.) λαμβάνουσιν αὐξάνεται, καὶ χρηστῆς μὲν οὔσης ὑγιεινόν, φαύλης δὲ φαῦλον. Ὅτι μὲν οὖν τὸ αἷμα τροφῆς ἔνεκεν ὑπάρχει τοῖς ἐναίμοις, φανερόν ἐκ τούτων καὶ τῶν τοιούτων. Καὶ γὰρ διὰ τοῦτο θιγγανόμενον αἴσθησιν οὐ ποιεῖ, ὥσπερ οὐδ' ἄλλο τῶν περιττωμάτων οὐδέν. Οὐδ' ἢ τροφή καθάπερ σὰρξ· αὕτη γὰρ θιγγανομένη ποιεῖ αἴσθησιν. Οὐ γὰρ συνεχὲς ἐστί τὸ αἷμα ταύτη οὐδὲ συμπεφυκός, ἀλλ' οἷον ἐν ἀγγεῖῳ τυγχάνει κείμενον ἔν τε τῇ καρδίᾳ καὶ ταῖς φλεψίν. Ὅν δὲ τρόπον λαμβάνει ἐξ αὐτοῦ τὰ μόρια τὴν αὕξησιν, ἔτι δὲ περὶ τροφῆς ὅλως, ἐν τοῖς περὶ γενέσεως καὶ ἐν ἑτέροις οἰκειότερόν ἐστι διελθεῖν. Νῦν δ' ἐπὶ τοσοῦτον εἰρήσθω (τοσοῦτον γὰρ χρήσιμον), ὅτι τὸ αἷμα τροφῆς ἔνεκα καὶ τροφῆς τῶν μορίων ἐστίν.

## Κεφάλαιο 4

Τὰς δὲ καλουμένας ἴνας τὸ μὲν ἔχει αἷμα τὸ δ' οὐκ ἔχει, οἷον τὸ τῶν ἐλάφων καὶ προκῶν. Διόπερ οὐ πῆγνυται τὸ τοιοῦτον αἷμα· τοῦ γὰρ αἵματος τὸ μὲν ὑδατώδες μᾶλλον ψυχρόν ἐστί, διὸ καὶ οὐ πῆγνυται, τὸ δὲ γεῶδες πῆγνυται συνεξατμίζοντος τοῦ ὑγροῦ· αἱ δ' ἴνες γῆς εἰσιν. Συμβαίνει δ' ἑνία γε καὶ γλαφυρωτέραν ἔχειν τὴν διάνοιαν τῶν τοιούτων, οὐ διὰ τὴν ψυχρότητα τοῦ αἵματος, ἀλλὰ διὰ τὴν λεπτότητα μᾶλλον καὶ διὰ τὸ καθαρὸν εἶναι· τὸ γὰρ γεῶδες οὐδέτερον ἔχει τούτων. Εὐκίνητοτέραν γὰρ ἔχουσι τὴν αἴσθησιν τὰ

λεπτοτέραν ἔχοντα τὴν ὑγρότητα καὶ καθαρωτέραν. Διὰ γὰρ τοῦτο καὶ τῶν ἀναίμων ἔνια συνετωτέραν ἔχει τὴν ψυχὴν ἐνίων ἀναίμων, καθάπερ εἴρηται πρότερον, οἷον ἢ μέλιττα καὶ τὸ γένος τὸ τῶν μυρμήκων κἂν εἴ τι ἕτερον τοιοῦτόν ἐστιν. Δειλότερα δὲ τὰ λίαν ὑδατώδη. Ὁ γὰρ φόβος καταψύχει· προωδοποιῆται οὖν τῷ πάθει τὰ τοιαύτην ἔχοντα τὴν ἐν τῇ καρδίᾳ κρᾶσιν· τὸ γὰρ ὕδωρ τῷ ψυχρῷ πηκτόν ἐστιν. Διὸ καὶ τᾶλλα τὰ ἄναιμα δειλότερα τῶν ἀναίμων ἐστὶν ὥς ἀπλῶς εἰπεῖν, καὶ ἀκίνητίζει τε φοβούμενα καὶ προῖεται περιττώματα καὶ μεταβάλλει ἔνια τὰς χροὰς αὐτῶν. Τὰ δὲ πολλὰς ἔχοντα λίαν ἵνας καὶ παχείας γεωδέστερα τὴν φύσιν ἐστὶ καὶ θυμώδη τὸ ἦθος καὶ ἐκστατικὰ διὰ τὸν θυμόν. Θερμότητος γὰρ ποιητικὸν ὁ θυμός, τὰ δὲ στερεὰ θερμανθέντα μᾶλλον θερμαίνει τῶν ὑγρῶν· αἱ δ' ἵνες στερεὸν (651a.) καὶ γεῶδες, ὥστε γίνονται οἷον πυρίαι ἐν τῷ αἵματι καὶ ζέσιν ποιοῦσιν ἐν τοῖς θυμοῖς. Διὸ οἱ ταῦροι καὶ οἱ κάπροι θυμώδεις καὶ ἐκστατικοί· τὸ γὰρ αἷμα τούτων ἰνωδέστατον, καὶ τό γε τοῦ ταύρου τάχιστα πήγνυται πάντων. Ἐξαιρουμένων δὲ τούτων τῶν ἰνῶν οὐ πήγνυται τὸ αἷμα· καθάπερ γὰρ ἐκ πηλοῦ εἴ τις ἐξέλοι τὸ γεῶδες, οὐ πήγνυται τὸ ὕδωρ. οὕτω καὶ τὸ αἷμα· αἱ γὰρ ἵνες γῆς. Μὴ ἐξαιρουμένων δὲ πήγνυται, οἷον ὑγρὰ γῆ ὑπὸ ψύχους· τοῦ γὰρ θερμοῦ ὑπὸ τοῦ ψυχροῦ ἐκθλιβομένου συνεξατμίζει τὸ ὑγρόν, καθάπερ εἴρηται πρότερον, καὶ πήγνυται οὐχ ὑπὸ θερμοῦ ἀλλ' ὑπὸ ψυχροῦ ξηραίνόμενον. Ἐν δὲ τοῖς σώμασιν ὑγρόν ἐστὶ διὰ τὴν θερμότητα τὴν ἐν τοῖς ζώοις. Πολλῶν δ' ἐστὶν αἰτία ἢ τοῦ αἵματος φύσις καὶ κατὰ τὸ ἦθος τοῖς ζώοις καὶ κατὰ τὴν αἴσθησιν, εὐλόγως· ὕλη γάρ ἐστι παντὸς τοῦ σώματος· ἢ γὰρ τροφή ὕλη, τὸ δ' αἷμα ἢ ἐσχάτη τροφή. Πολλὴν οὖν ποιεῖ διαφορὰν θερμὸν ὃν καὶ ψυχρὸν καὶ λεπτὸν καὶ παχὺ καὶ θολερὸν καὶ καθαρὸν. Ἰχώρ δ' ἐστὶ τὸ ὑδατῶδες τοῦ αἵματος διὰ τὸ μήπω πεπέφθαι ἢ διεφθάρθαι, ὥστε ὁ μὲν ἐξ ἀνάγκης ἰχώρ, ὁ δ' αἷματος χάριν ἐστίν.

## Κεφάλαιο 5

Πιμελὴ δὲ καὶ στέαρ διαφέρουσι μὲν ἀλλήλων κατὰ τὴν τοῦ αἵματος διαφοράν. Ἔστι γὰρ ἐκάτερον αὐτῶν αἷμα πεπεμμένον δι' εὐτροφίαν, καὶ τὸ μὴ καταναλισκόμενον εἰς τὸ σαρκῶδες μόριον τῶν ζώων, εὐπεπτον δὲ καὶ εὐτραφές.

Δηλοῖ δὲ τὸ λιπαρὸν αὐτῶν· τῶν γὰρ ὑγρῶν τὸ λιπαρὸν κοινὸν ἄερος καὶ πυρός ἐστιν. Διὰ τοῦτο οὐδὲν ἔχει τῶν ἀναίμων οὔτε πιμελὴν οὔτε στέαρ, ὅτι οὐδ' αἷμα. Τῶν δ' ἀναίμων τὰ μὲν σωματῶδες ἔχοντα τὸ αἷμα στέαρ ἔχει μᾶλλον. Τὸ γὰρ στέαρ γεῶδες ἐστὶ, διὸ πήγνυται καθάπερ καὶ τὸ ἰνώδες, καὶ αὐτὸ καὶ οἱ ζωμοὶ οἱ τοιοῦτοι· ὀλίγον γὰρ ἔχει ὕδατος, τὸ δὲ πολὺ γῆς. Διὸ



τὰ μὴ ἀμφώδοντα ἀλλὰ κερατώδη στέαρ ἔχει. Φανερά δ' ἡ φύσις αὐτῶν τοῦ τοιούτου στοιχείου πλήρης οὕσα τῷ κερατώδης εἶναι καὶ ἀστραγάλους ἔχειν· ἅπαντα γὰρ ξηρὰ καὶ γεηρὰ τὴν φύσιν ἐστίν. Τὰ δ' ἀμφώδοντα καὶ ἀκέρата καὶ πολυσχιδῇ πιμελὴν ἔχει ἀντὶ στέατος, ἢ οὐ πηγνυται οὐδὲ θρύπτεται ξηρανομένη διὰ τὸ μὴ εἶναι γεώδη τὴν φύσιν αὐτῆς. Μέτρια μὲν οὖν ταῦτα ὄντα ἐν τοῖς μορίοις τῶν ζώων ὠφελεῖ (πρὸς μὲν γὰρ αἴσθησιν οὐκ (651b.) ἐμποδίζει, πρὸς δ' ὑγίειαν καὶ δύναμιν ἔχει βοήθειαν), ὑπερβάλλοντα δὲ τῷ πλήθει φθείρει καὶ βλάπτει. Εἰ γὰρ πᾶν γένοιτο τὸ σῶμα πιμελὴ καὶ στέαρ, ἀπόλοιτ' ἄν. Ζῶον μὲν γὰρ ἐστὶ κατὰ τὸ αἰσθητικὸν μόριον, ἢ δὲ σὰρξ καὶ τὸ ἀνάλογον αἰσθητικόν· τὸ δ' αἷμα, ὥσπερ εἴρηται καὶ πρότερον, οὐκ ἔχει αἴσθησιν, διὸ οὐδὲ πιμελὴ οὐδὲ στέαρ· αἷμα γὰρ πεπεμμένον ἐστίν. Ὡστ' εἰ πᾶν γένοιτο τὸ σῶμα τοιοῦτον, οὐκ ἂν ἔχοι οὐδεμίαν αἴσθησιν. Διὸ καὶ γηράσκει ταχέως τὰ λίαν πίονα· ὀλίγαιμα γὰρ ἅτε εἰς τὴν πόσητα ἀναλίσκομένου τοῦ αἵματος, τὰ δ' ὀλίγαιμα ἤδη προωδοποιῆται πρὸς τὴν φθοράν· ἢ γὰρ φθορὰ ὀλιγαμία τίς ἐστὶ, καὶ τὸ ὀλίγον παθητικὸν καὶ ὑπὸ ψυχροῦ τοῦ τυχόντος καὶ ὑπὸ θερμοῦ.

Καὶ ἀγονώτερα δὴ τὰ πίονα ἐστὶ διὰ τὴν αὐτὴν αἰτίαν· ὃ γὰρ ἔδει ἐκ τοῦ αἵματος εἰς τὴν γονὴν ἰέναι καὶ τὸ σπέρμα, τοῦτ' εἰς τὴν πιμελὴν ἀναλίσκεται καὶ τὸ στέαρ· πεττόμενον γὰρ τὸ αἷμα γίνεται ταῦτα, ὥστε ἢ ὅλως οὐ γίνεται περίττωμα αὐτοῖς οὐδὲν ἢ ὀλίγον.

## Κεφάλαιο 6

Καὶ περὶ μὲν αἵματος καὶ ἰχώρος καὶ πιμελῆς καὶ στέατος, τί τέ ἐστὶν ἕκαστον αὐτῶν καὶ διὰ τίνας αἰτίας, εἴρηται. Ἔστι δὲ καὶ ὁ μυελὸς αἱματός τις φύσις, καὶ οὐχ ὥσπερ οἶονταί τινες, τῆς γονῆς σπερματικὴ δύναμις. Δηλοῖ δ' ἐν τοῖς νέοις πάμπαν· ἅτε γὰρ ἐξ αἵματος συνεστώτων τῶν μορίων καὶ τῆς τροφῆς οὔσης τοῖς ἐμβρύοις αἵματος, καὶ ἐν τοῖς ὁστοῖς ὁ μυελὸς αἱματώδης ἐστίν· αὐξανομένων δὲ καὶ πεττομένων, καθάπερ καὶ τὰ μόρια μεταβάλλει καὶ τὰ σπλάγχνα τὰς χροάς (ὑπερβολῇ γὰρ αἱματώδες καὶ τῶν σπλάγχνων ἕκαστόν ἐστιν ἔτι νέων ὄντων), οὕτω καὶ ὁ μυελός· καὶ τῶν μὲν πιμελωδῶν λιπαρὸς καὶ πιμελῇ ὅμοιος, ὅσοις δὲ μὴ πιμελῇ ὅμοιος ἀλλὰ στέαρ γίνεται τὸ αἷμα πεττόμενον, τούτοις δὲ στεατώδης. Διὸ τοῖς μὲν κερατοφόροις καὶ μὴ ἀμφώδουσι στεατώδης, τοῖς δ' ἀμφώδουσι καὶ πολυσχιδέσι πιμελώδης. Ἦκιστα δὲ τοιοῦτος ὁ ραχίτης ἐστὶ μυελὸς διὰ τὸ δεῖν αὐτὸν εἶναι συνεχῇ καὶ διέχειν διὰ πάσης τῆς ράχεως διηρημένης κατὰ τοὺς σφονδύλους· λιπαρὸς δ' ὢν ἢ στεατώδης οὐκ ἂν ὁμοίως ἦν συνεχής, ἀλλ' ἢ θραυστὸς ἢ ὑγρός. Ἔνια δ' οὐκ ἔχει τῶν ζώων ὡς ἀξίως εἰπεῖν μυελόν, ὅσων τὰ ὀστᾶ ἰσχυρὰ

καὶ πυκνά, οἷον τὰ τοῦ (652a.) λέοντος· τούτου γὰρ τὰ ὀστέα, διὰ τὸ πάμπαν ἄσημον ἔχειν, δοκεῖ οὐκ ἔχειν ὅλως μυελόν. Ἐπεὶ δὲ τὴν μὲν τῶν ὀστέων ἀνάγκη φύσιν ὑπάρχειν τοῖς ζώοις, ἢ τὸ ἀνάλογον τοῖς ὀστοῖς, οἷον τοῖς ἐνύδροις τὴν ἄκανθαν, ἀναγκαῖον ἐνίοις ὑπάρχειν καὶ μυελόν, ἐμπεριλαμβανομένης τῆς τροφῆς ἐξ ἧς γίνεται τὰ ὀστέα. Ὅτι δ' ἡ τροφή πᾶσιν αἷμα, εἴρηται πρότερον. Εὐλόγως δὲ καὶ στεατώδεις οἱ μυελοὶ καὶ πιμελώδεις εἰσὶν· διὰ γὰρ τὴν ἀλέαν τὴν γινομένην ὑπὸ τοῦ περιέχεσθαι τοῖς ὀστοῖς πέττεται τὸ αἷμα, ἢ δὲ καθ' αὐτὸ πέψις αἵματος στέαρ καὶ πιμελή ἐστίν. Καὶ ἐν τοῖς δὴ τὰ ὀστέα πυκνὰ ἔχουσι καὶ ἰσχυρὰ εὐλόγως ἐν τοῖς μὲν οὐκ ἔνεστι, τοῖς δ' ὀλίγος ἔνεστιν· εἰς γὰρ τὰ ὀστέα ἀναλίσκεται ἡ τροφή. Ἐν δὲ τοῖς μὴ ἔχουσιν ὀστέα ἀλλ' ἄκανθαν ὁ ῥαχίτης ὁ μόνος ἐστὶ μυελός· ὀλίγαιμά τε γὰρ φύσει ὑπάρχει ὄντα, καὶ κοίλη ἄκανθα μόνον ἢ τῆς ῥάχεως ἐστίν. Διὸ ἐν ταύτῃ ἐγγίνεται· μόνη τε γὰρ ἔχει χώραν, καὶ μόνη δεῖται συνδέσμου διὰ τὰς διαλήψεις. Διὸ καὶ ὁ ἐνταῦθα μυελός, ὥσπερ εἴρηται, ἀλλοιότερός ἐστιν· διὰ τὸ ἀντὶ περόνης γὰρ γίνεσθαι γλίσχρος καὶ νευρώδης ἐστίν, ἵν' ἔχη τάσιν. Διὰ τί μὲν οὖν μυελὸν ἔχει τὰ ζῶα τὰ ἔχοντα μυελόν, εἴρηται· καὶ τί ἐστίν ὁ μυελός, ἐκ τούτων φανερόν, ὅτι τῆς αἱματικῆς τροφῆς τῆς εἰς ὀστέα καὶ ἄκανθαν μεριζομένης ἐστὶ τὸ ἐμπεριλαμβανόμενον περίττωμα πεφθέν.

## Κεφάλαιο 7

Περὶ δ' ἐγκεφάλου σχεδόν ἐστίν ἐχόμενον εἰπεῖν· πολλοῖς γὰρ καὶ ὁ ἐγκέφαλος δοκεῖ μυελὸς εἶναι καὶ ἀρχὴ τοῦ μυελοῦ διὰ τὸ συνεχῆ τὸν ῥαχίτην αὐτῷ ὁρᾶν μυελόν.

Ἔτι δὲ πᾶν τούναντίον αὐτῷ τὴν φύσιν ὡς εἰπεῖν· ὁ μὲν γὰρ ἐγκέφαλος ψυχρότατον τῶν ἐν τῷ σώματι μορίων, ὁ δὲ μυελὸς θερμὸς τὴν φύσιν· δηλοῖ δ' ἡ λιπαρότης αὐτοῦ καὶ τὸ πῖον. Διὸ καὶ συνεχῆς ὁ ῥαχίτης τῷ ἐγκεφάλῳ ἐστίν· ἀεὶ γὰρ ἡ φύσις μηχανᾶται πρὸς τὴν ἐκάστου ὑπερβολὴν βοήθειαν τὴν τοῦ ἐναντίου παρεδρίαν, ἵνα ἀνισάζῃ τὴν θατέρου ὑπερβολὴν θάτερον. Ὅτι μὲν οὖν ὁ μυελὸς θερμόν ἐστι, δῆλον ἐκ πολλῶν· ἢ δὲ τοῦ ἐγκεφάλου ψυχρότης φανερὰ μὲν καὶ κατὰ τὴν θίξιν, ἔτι δ' ἀναιμότατον τῶν ὑγρῶν τῶν ἐν τῷ σώματι πάντων (οὐδ' ὅτι οὖν γὰρ αἵματος ἔχει ἐν αὐτῷ) καὶ (652b.) αὐχμηρότατον. Ἔστι δ' οὔτε περίττωμα οὔτε τῶν συνεχῶν μορίων, ἀλλὰ ἴδιος ἡ φύσις, καὶ εὐλόγως τοιαύτη. Ὅτι μὲν οὖν οὐκ ἔχει συνέχειαν οὐδεμίαν πρὸς τὰ αἰσθητικὰ μόρια, δῆλον μὲν καὶ διὰ τῆς ὥσεως, ἔτι δὲ μᾶλλον τῷ μηδεμίαν ποιεῖν αἰσθησιν θιγγανόμενος, ὥσπερ οὐδὲ τὸ αἷμα οὐδὲ τὸ περίττωμα τῶν ζώων. Ὑπάρχει δ' ἐν τοῖς ζώοις πρὸς τὴν τῆς φύσεως ὅλης σωτηρίαν. Οἱ μὲν γὰρ τοῦ ζώου τὴν ψυχὴν τιθέασιν πῦρ ἢ τοιαύτην τινα

δύναμιν φορτικῶς τιθέντες· βέλτιον δ' ἴσως φάναι ἐν τοιούτῳ τινὶ σώματι συνεστάναι. Τούτου δ' αἴτιον ὅτι τοῖς τῆς ψυχῆς ἔργοις ὑπηρετικώτατον τῶν σωμάτων τὸ θερμόν ἐστιν· τὸ τρέφειν γὰρ καὶ κινεῖν ψυχῆς ἔργον ἐστί, ταῦτα δὲ διὰ ταύτης μάλιστα γίνεται τῆς δυνάμεως. Ὅμοιον οὖν τὸ τὴν ψυχὴν εἶναι φάναι πῦρ, καὶ τὸ πρίονα ἢ τρύπανον τὸν τέκτονα ἢ τὴν τεκτονικὴν, ὅτι τὸ ἔργον περαίνεται ἐγγὺς ἀλλήλων οὕσιν. Ὅτι μὲν οὖν θερμότητος τὰ ζῶα μετέχουσιν ἀναγκαῖον, δῆλον ἐκ τούτων.

Ἐπεὶ δ' ἅκαὶ τοῦ μέσου (τὴν γὰρ οὐσίαν ἔχει τοῦτο καὶ τὸν λόγον, τῶν δ' ἄκρων ἐκάτερον οὐκ ἔχει χωρὶς), διὰ ταύτην τὴν αἰτίαν πρὸς τὸν τῆς καρδίας τόπον καὶ τὴν ἐν αὐτῇ θερμότητα μεμηχάνηται τὸν ἐγκέφαλον ἢ φύσιν, καὶ τούτου χάριν ὑπάρχει τοῦτο τὸ μόριον τοῖς ζώοις, τὴν φύσιν ἔχον κοινὴν ὕδατος καὶ γῆς. Καὶ διὰ τοῦτο τὰ ἔναιμα ἔχει πάντα ἐγκέφαλον, τῶν δ' ἄλλων οὐδὲν ὡς εἰπεῖν, πλην ὅτι κατὰ τὸ ἀνάλογον, οἷον ὁ πολύπους· ὀλιγόθερμα γὰρ πάντα διὰ τὴν ἀναιμίαν. Ὁ μὲν οὖν ἐγκέφαλος εὐκρατον ποιεῖ τὴν ἐν τῇ καρδίᾳ θερμότητα καὶ ζέσιν· ἵνα δὲ καὶ τοῦτο τὸ μόριον τυγχάνῃ μετρίας θερμότητος, ἀφ' ἐκατέρας τῆς φλεβός, τῆς τε μεγάλης καὶ τῆς καλουμένης ὁρτῆς, τελευτῶσιν αἱ φλέβες εἰς τὴν μήνιγγα τὴν περὶ τὸν ἐγκέφαλον. Πρὸς δὲ τὸ τῇ θερμότητι μὴ βλάπτειν, ἀντὶ μὲν μεγάλων ὀλίγων πυκναὶ καὶ λεπταὶ φλέβες περιέχουσιν αὐτόν, ἀντὶ δὲ πολλοῦ καὶ παχέος αἵματος λεπτὸν καὶ καθαρὸν. Διὸ καὶ τὰ ρεύματα τοῖς σώμασιν ἐκ τῆς κεφαλῆς ἐστὶ τὴν ἀρχήν, ὅσοις ἂν ἦ τὰ περὶ τὸν ἐγκέφαλον ψυχρότερα τῆς συμμέτρου κράσεως· ἀναθυμιωμένης γὰρ διὰ τῶν φλεβῶν ἄνω τῆς (653a.) τροφῆς τὸ περίττωμα ψυχόμενον διὰ τὴν τοῦ τόπου τούτου δύναμιν ρεύματα ποιεῖ φλέγματος καὶ ἰχῶρος. Δεῖ δὲ λαβεῖν, ὡς μεγάλῳ παρεικάζοντα μικρόν, ὁμοίως συμβαίνειν ὥσπερ τὴν τῶν ὑετῶν γένεσιν· ἀναθυμιωμένης γὰρ ἐκ τῆς γῆς τῆς ἀτμίδος καὶ φερομένης ὑπὸ τοῦ θερμοῦ πρὸς τὸν ἄνω τόπον, ὅταν ἐν τῷ ὑπὲρ τῆς γῆς γένηται ἄερί ὄντι ψυχρῷ, συνίσταται πάλιν εἰς ὕδωρ διὰ τὴν ψύξιν καὶ ῥεῖ κάτω πρὸς τὴν γῆν. Ἀλλὰ περὶ μὲν τούτων ἐν ταῖς τῶν νόσων ἀρχαῖς ἀρμόττει λέγειν, ἐφ' ὅσον τῆς φυσικῆς φιλοσοφίας ἐστὶν εἰπεῖν περὶ αὐτῶν· ποιεῖ δὲ καὶ τὸν ὕπνον τοῖς ζώοις τοῦτοτὸ μόριον τοῖς ἔχουσιν ἐγκέφαλον, τοῖς δὲ μὴ ἔχουσι τὸ ἀνάλογον. Καταψύχον γὰρ τὴν ἀπὸ τῆς τροφῆς τοῦ αἵματος ἐπίρρυσιν, ἢ καὶ διὰ τινος ὁμοίας αἰτίας ἄλλας, βαρύνει τε τὸν τόπον (διὸ τὴν κεφαλὴν καρηβαροῦσιν οἱ ὑπνώσσοντες) καὶ κάτω ποιεῖ τὸ θερμόν ὑποφεύγειν μετὰ τοῦ αἵματος. Διὸ πλεῖον ἀθροιζόμενον ἐπὶ τὸν κάτω τόπον ἀπεργάζεται τὸν ὕπνον, καὶ τὸ δύνασθαι ἐστάναι ὀρθὰ ἀφαιρεῖται, ὅσα τῶν ζώων ὀρθὰ τὴν φύσιν ἐστί, τῶν δ' ἄλλων τὴν ὀρθότητα τῆς κεφαλῆς· περὶ ὧν εἴρηται καθ' αὐτὰ ἐν τε τοῖς περὶ αἰσθήσεως καὶ περὶ ὕπνου διωρισμένοις.

Ὅτι δ' ἐστὶν ὁ ἐγκέφαλος κοινὸς ὕδατος καὶ γῆς, δηλοῖ τὸ συμβαῖνον περὶ αὐτόν· ἐψόμενος γὰρ γίνεται ξηρὸς καὶ σκληρός, καὶ λείπεται τὸ γεῶδες ἐξατμισθέντος τοῦ ὕδατος ὑπὸ τῆς θερμότητος, ὥσπερ τὰ τῶν χεδρόπων ἐψήματα καὶ τῶν ἄλλων καρπῶν, διὰ τὸ γῆς εἶναι τὸ πλεῖστον μέρος, ἐξιόντος τοῦ μιχθέντος ὑγροῦ· καὶ γὰρ ταῦτα γίνεται σκληρὰ καὶ γεηρὰ πάνπαν. Ἔχει δὲ τῶν ζώων ἐγκέφαλον πλεῖστον ἄνθρωπος ὡς κατὰ μέγεθος, καὶ τῶν ἀνθρώπων οἱ ἄρρενες τῶν θηλειῶν· καὶ γὰρ τὸν περὶ τὴν καρδίαν καὶ τὸν πλεύμονα τόπον θερμότατον καὶ ἐναιμότατον. Διὸ καὶ μόνον ἐστὶ τῶν ζώων ὀρθόν· ἡ γὰρ τοῦ θερμοῦ φύσις ἐνισχύουσα ποιεῖ τὴν αὔξησιν ἀπὸ τοῦ μέσου κατὰ τὴν αὐτῆς φοράν. Πρὸς οὖν πολλὴν θερμότητα ἀντίκειται πλείων ὑγρότης καὶ ψυχρότης, καὶ διὰ τὸ πλῆθος ὀψιαίτατα πηγνυται τὸ περὶ τὴν κεφαλὴν ὀστοῦν, ὃ καλοῦσι βρέγμα τινές, διὰ τὸ πολὺν χρόνον τὸ θερμὸν ἀπατμίζειν· τῶν δ' ἄλλων οὐδενὶ τοῦτο συμβαίνει τῶν ἐναιμῶν ζώων. Καὶ ῥαφὰς δὲ πλείστας ἔχει περὶ τὴν (653b.) κεφαλὴν, καὶ τὸ ἄρρεν πλείους τῶν θηλειῶν, διὰ τὴν αὐτὴν αἰτίαν, ὅπως ὁ τόπος εὐπνους ἦ, καὶ μᾶλλον ὁ πλείων ἐγκέφαλος· ὑγραινόμενος γὰρ ἢ ξηραινόμενος μᾶλλον οὐ ποιήσει τὸ αὐτοῦ ἔργον, ἀλλ' ἢ οὐ ψύξει ἢ πῆξει, ὥστε νόσους καὶ παρανοίας ποιεῖν καὶ θανάτους· τὸ γὰρ ἐν τῇ καρδίᾳ θερμὸν καὶ ἡ ἀρχὴ συμπαθέστατόν ἐστι καὶ ταχεῖαν ποιεῖται τὴν αἴσθησιν μεταβάλλοντός τι καὶ πάσχοντος τοῦ περὶ τὸν ἐγκέφαλον αἵματος.

Περὶ μὲν οὖν τῶν συμφύτων τοῖς ζώοις ὑγρῶν σχεδὸν εἴρηται περὶ πάντων· τῶν δ' ὑστερογενῶν τὰ τε περιττώματα τῆς τροφῆς ἐστὶ, τό τε τῆς κύστεως ὑπόστημα καὶ τὸ τῆς κοιλίας, καὶ παρὰ ταῦτα γονὴ καὶ γάλα τοῖς πεφυκόσιν ἔχειν ἕκαστα τούτων. Τὰ μὲν οὖν τῆς τροφῆς περιττώματα περὶ τὴν τῆς τροφῆς σκέψιν καὶ θεωρίαν οἰκείους ἔχει τοὺς λόγους, τίσι τε τῶν ζώων ὑπάρχει καὶ διὰ τίνας αἰτίας, τὰ δὲ περὶ σπέρματος καὶ γάλακτος ἐν τοῖς περὶ γενέσεως· τὸ μὲν γὰρ ἀρχὴ γενέσεως αὐτῶν ἐστὶ, τὸ δὲ χάριν γενέσεως.

## Κεφάλαιο 8

Περὶ δὲ τῶν ἄλλων μορίων τῶν ὁμοιομερῶν σκεπτέον, καὶ πρῶτον περὶ σαρκὸς ἐν τοῖς ἔχουσι σάρκας, ἐν δὲ τοῖς ἄλλοις τὸ ἀνάλογον· τοῦτο γὰρ ἀρχὴ καὶ σῶμα καθ' αὐτὸ τῶν ζώων ἐστίν. Δῆλον δὲ καὶ κατὰ τὸν λόγον· τὸ γὰρ ζῶον ὀριζόμεθα τῷ ἔχειν αἴσθησιν, πρῶτον δὲ τὴν πρώτην· αὕτη δ' ἐστὶν ἀφή, ταύτης δ' αἰσθητήριον τὸ τοιοῦτον μόριόν ἐστίν, ἥτοι τὸ πρῶτον, ὥσπερ ἡ κόρη τῆς ὄψεως, ἢ τὸ δι' οὗ συνειλημμένον, ὥσπερ ἂν εἴ τις προσλάβοι τῇ κόρῃ τὸ διαφανὲς πᾶν. Ἐπὶ μὲν οὖν τῶν ἄλλων αἰσθήσεων ἀδύνατόν τε καὶ οὐδὲν προὔργου τοῦτ' ἦν ποιῆσαι τῇ φύσει, τὸ δ' ἀπτικὸν ἐξ ἀνάγκης· μόνον

γὰρ ἢ μάλιστα τοῦτ' ἔστι σωματῶδες τῶν αἰσθητηρίων. Κατὰ δὲ τὴν αἰσθησιν φανερόν πάντα τᾶλλα τούτου χάριν ὄντα, λέγω δ' οἶον ὅστᾳ καὶ δέρμα καὶ νεῦρα καὶ φλέβες, ἔτι δὲ τρίχες καὶ τὸ τῶν ὀνύχων γένος, καὶ εἴ τι τοιοῦτον ἕτερόν ἐστιν. Ἡ μὲν γὰρ τῶν ὀστέων φύσις σωτηρίας ἔνεκεν μεμηχάνηται μαλακοῦ, σκληρὰ τὴν φύσιν οὔσα, ἐν τοῖς ἔχουσιν ὅστᾳ· ἐν δὲ τοῖς μὴ ἔχουσι τὸ ἀνάλογον, οἶον ἐν τοῖς ἰχθύσι τοῖς μὲν ἄκανθα τοῖς δὲ χόνδρος. Τὰ μὲν οὖν ἔχει τῶν ζώων ἐντὸς τὴν τοιαύτην βοήθειαν, ἕνια δὲ τῶν (654a.) ἀναίμων ἐκτὸς, ὥσπερ τῶν τε μαλακοστράκων ἕκαστον, οἶον καρκῖνοι καὶ τὸ τῶν καράβων γένος, καὶ τὸ τῶν ὀστρακοδέρμων ὡσαύτως, οἶον τὰ καλούμενα ὄστρεα· πᾶσι γὰρ τούτοις τὸ μὲν σαρκῶδες ἐντὸς, τὸ δὲ συνέχον καὶ φυλάττον ἐκτὸς τὸ γεῶδές ἐστιν· πρὸς γὰρ τῇ φυλακῇ τῆς συνεχείας, τῷ ἔχειν ὀλίγον αὐτῶν τὴν φύσιν θερμὸν ἀναίμων ὄντων, οἶον πνιγεύς τις περικείμενον τὸ ὄστρακον φυλάττει τὸ ἐμπεπυρευμένον θερμόν. Ἡ δὲ χελώνη καὶ τὸ τῶν ἐμύδων γένος ὁμοίως ἔχειν δοκεῖ τούτοις, ἕτερον ὄν γένος τούτων. Τὰ δ' ἔντομα τῶν ζώων καὶ τὰ μαλάκια τούτοις τ' ἐναντίως καὶ αὐτοῖς ἀντικειμένως συνέστηκεν· οὐδὲν γὰρ ὀστῶδες ἔχειν ἔοικεν οὐδὲ γεηρὸν ἀποκεκριμένον, ὅ τι καὶ ἄξιον εἰπεῖν, ἀλλὰ τὰ μὲν μαλάκια σχεδὸν ὅλα σαρκώδη καὶ μαλακά, πρὸς δὲ τὸ μὴ εὐφθαρτον εἶναι τὸ σῶμα αὐτῶν, καθάπερ τὰ σαρκώδη, μεταξὺ σαρκὸς καὶ νεύρου τὴν φύσιν ἔχει. Μαλακὸν μὲν γὰρ ὥσπερ σάρξ ἐστιν, ἔχει δὲ τάσιν ὥσπερ νεῦρον· τὴν δὲ σχίσιν ἔχει τῆς σαρκὸς οὐ κατ' εὐθυωρίαν ἀλλὰ κατὰ κύκλους διαιρετήν· οὕτως γὰρ ἂν ἔχον χρησιμώτατον ἂν εἴη πρὸς τὴν ἰσχύν. Ὑπάρχει δ' ἐν αὐτοῖς καὶ τὸ ἀνάλογον ταῖς τῶν ἰχθύων ἀκάνθαις, οἶον ἐν μὲν ταῖς σηπίαις τὸ καλούμενον σηπίον, ἐν δὲ ταῖς τευθίσιν τὸ καλούμενον ξίφος. Τὰ δ' αὖ τῶν πολυπόδων τοιοῦτον οὐδὲν ἔχει διὰ τὸ μικρὸν ἔχειν τὸ κύτος τὴν καλουμένην κεφαλὴν, θάτερα δ' εὐμήκη. Διὸ πρὸς τὴν ὀρθότητα αὐτῶν καὶ τὴν ἀκαμψίαν ὑπέγραψε ταῦτα ἢ φύσις, ὥσπερ τῶν ἐναίμων τοῖς μὲν ὀστοῦν τοῖς δ' ἄκανθαν. Τὰ δ' ἔντομα τούτοις τ' ἐναντίως ἔχει καὶ τοῖς ἐναίμοις, καθάπερ εἵπομεν. Οὐδὲν γὰρ ἀφωρισμένον ἔχει σκληρόν, τὸ δὲ μαλακόν, ἀλλ' ὅλον τὸ σῶμα σκληρόν, σκληρότητα δὲ τοιαύτην, ὅστοῦ μὲν σαρκωδεστέραν, σαρκὸς δ' ὀστωδεστέραν καὶ γεωδεστέραν, πρὸς τὸ μὴ εὐδιαίρετον εἶναι τὸ σῶμα αὐτῶν.

## Κεφάλαιο 9

Ἔχει δ' ὁμοίως ἢ τε τῶν ὀστέων καὶ ἢ τῶν φλεβῶν φύσις. Ἐκατέρα γὰρ αὐτῶν ἀφ' ἐνὸς ἡργμένη συνεχῆς ἐστι, καὶ οὔτε ὀστοῦν ἐστιν καθ' αὐτὸ οὐδέν, ἀλλ' ἢ μόριον ὡς συνεχοῦς ἢ ἀπτόμενον καὶ προσδεδεμένον, ἵνα χρῆται ἢ φύσις (654b.) καὶ ὡς ἐνὶ καὶ συνεχεῖ καὶ ὡς δυσὶ καὶ διηρημένοις πρὸς τὴν κάμψιν. Ὅμοίως δὲ καὶ φλέψ οὐδεμία αὐτὴ καθ' αὐτὴν ἐστιν, ἀλλὰ

πᾶσαι μόριον μιᾶς εἰσιν. Ὅστουν τε γὰρ εἴ τι κεχωρισμένον ἦν, τό τ' ἔργον οὐκ ἂν ἐποίει οὐδ' χάριν ἢ τῶν ὁσίων ἐστὶ φύσις (οὐτε γὰρ ἂν κάμψεως ἦν αἴτιον οὐτ' ὀρθότητος οὐδεμιᾶς μὴ συνεχὲς ὄν ἀλλὰ διαλείπον), ἔτι τ' ἔβλαπτεν ἂν ὥσπερ ἄκανθὰ τις ἢ βέλος ἐνὸν ταῖς σαρκίν. Εἴτε φλέψ ἦν τις κεχωρισμένη καὶ μὴ συνεχὴς πρὸς τὴν ἀρχήν, οὐκ ἂν ἔσωζε τὸ ἐν αὐτῇ αἷμα· ἢ γὰρ ἀπ' ἐκείνης θερμότης κωλύει πηγνυσθαι, φαίνεται δὲ καὶ σηπόμενον τὸ χωριζόμενον. Ἀρχὴ δὲ τῶν μὲν φλεβῶν ἢ καρδία, τῶν δ' ὁσίων ἢ καλουμένη ράχιν τοῖς ἔχουσιν ὅστ' ἂν πᾶσιν, ἀπ' ἧς συνεχὴς ἢ τῶν ἄλλων ὁσίων ἐστὶ φύσις.

Ἡ γὰρ τὸ μῆκος καὶ τὴν ὀρθότητα συνέχουσα τῶν ζώων ἢ ράχιν ἐστίν. Ἐπεὶ δ' ἀνάγκη κινουμένου τοῦ ζώου κάμπτεσθαι τὸ σῶμα, μία μὲν διὰ τὴν συνέχειάν ἐστι, πολυμερὴς δὲ τῇ διαιρέσει τῶν σπονδύλων. Ἐκ δὲ ταύτης τοῖς ἔχουσι κῶλα συνεχῇ πρὸς αὐτήν, τὰ τούτων ὅστ' ἂν τῶν ἀρμονιῶν ἐστίν, ἢ μὲν ἔχει τὰ κῶλα κάμπιν, συνδεδεμένα τε νεύροις, καὶ τῶν ἐσχάτων συναρμοσθέντων τοῦ μὲν ὄντος κοίλου τοῦ δὲ περιφεροῦς, ἢ καὶ ἀμφοτέρων κοίλων, ἐν μέσῳ δὲ περιειληφότων, οἷον γόμφον, ἀστράγαλον, ἵνα γίγνηται κάμπιν καὶ ἔκτασις· ἄλλως γὰρ ἢ ὅλως ἀδύνατον, ἢ οὐ καλῶς ἂν ἐποίουν τὴν τοιαύτην κίνησιν. Ἔνια δ' αὐτῶν ὁμοίαν ἔχοντα τὴν ἀρχὴν τὴν θατέρου τῇ τελευτῇ θατέρου, συνδέεται νεύροις. Καὶ χονδρώδη δὲ μόρια μεταξὺ τῶν κάμψεων εἰσιν, οἷον στοιβή, πρὸς τὸ ἄλληλα μὴ τρίβειν.

Περὶ δὲ τὰ ὅστ' αἱ σάρκες περιπεφύκασιν, προσειλημμένοι λεπτοῖς καὶ ἰνώδεσι δεσμοῖς, ὧν ἔνεκεν τὸ τῶν ὁσίων ἐστὶ γένος. Ὡσπερ γὰρ οἱ πλάττοντες ἐκ πηλοῦ ζῶον ἢ τινος ἄλλης ὑγρᾶς συστάσεως ὑφιστάσιν τῶν στερεῶν τι σωμάτων, εἴθ' οὕτω περιπλάττουσι, τὸν αὐτὸν τρόπον ἢ φύσις δεδημιούργηκεν ἐκ τῶν σαρκῶν τὸ ζῶον. Τοῖς μὲν οὖν ἄλλοις ὑπεστὶν ὅστ' ἂν τοῖς σαρκώδεσι μορίοις, τοῖς μὲν κινουμένοις διὰ κάμπιν τούτου χάριν, τοῖς δ' ἀκινήτοις φυλακῆς ἔνεκεν, οἷον αἱ συγκλείουσαι πλευραὶ τὸ στῆθος σωτηρίας (655a.) χάριν τῶν περὶ τὴν καρδίαν σπλάγχχνων· τὰ δὲ περὶ τὴν κοιλίαν ἀνόστεα πᾶσιν, ὅπως μὴ κωλύῃ τὴν ἀνοίδησιν τὴν ἀπὸ τῆς τροφῆς γινομένην τοῖς ζώοις ἐξ ἀνάγκης καὶ τοῖς θήλεσι τὴν ἐν αὐτοῖς τῶν ἐμβρύων αὔξησιν. Τὰ μὲν οὖν ζωοτόκα τῶν ζώων καὶ ἐν αὐτοῖς καὶ ἐκτὸς παραπλησίαν ἔχει τὴν τῶν ὁσίων δύναμιν καὶ ἰσχυράν. Πολὺ γὰρ μείζω πάντα τὰ τοιαῦτα τῶν μὴ ζωοτόκων ὡς κατὰ λόγον εἶπεν τῶν σωμάτων· ἐνιαχοῦ γὰρ πολλὰ γίνεται μεγάλα τῶν ζωοτόκων, οἷον ἐν Λιβύῃ καὶ τοῖς τόποις τοῖς θερμοῖς καὶ τοῖς ξηροῖς. Τοῖς δὲ μεγάλοις ἰσχυροτέρων δεῖ τῶν ὑπερεισμάτων καὶ μειζόνων καὶ σκληροτέρων, καὶ τούτων αὐτῶν τοῖς βιαστικωτέροις. Διὸ τὰ τῶν ἄρρένων σκληρότερα ἢ τὰ τῶν θηλειῶν, καὶ τὰ τῶν σαρκοφάγων (ἢ τροφῇ

γὰρ διὰ μάχης τούτοις), ὥσπερ τὰ τοῦ λέοντος· οὕτω γὰρ ἔχει ταῦτα σκληρὰν τὴν φύσιν ὥστ' ἐξάπτεσθαι τυπτομένων καθάπερ ἐκ λίθων πῦρ. Ἔχει δὲ καὶ ὁ δελφὶς οὐκ ἀκάνθας ἀλλ' ὅστ' αὖ· ζωοτόκος γάρ ἐστιν. Τοῖς δ' ἐναίμοις μὲν μὴ ζωοτόκοις δὲ παραλλάττει κατὰ μικρὸν ἢ φύσις, οἷον τοῖς ὄρνισιν ὅστ' αὖ μὲν, ἀσθενέστερα δέ. Τῶν δ' ἰχθύων τοῖς μὲν ὠοτόκοις ἄκανθα, καὶ τοῖς ὄφεσιν ἀκανθώδης ἐστὶν ἢ τῶν ὀστέων φύσις, πλὴν τοῖς λίαν μεγάλοις· τούτοις δέ, δι' ἅπερ καὶ τοῖς ζωοτόκοις, πρὸς τὴν ἰσχὺν ἰσχυροτέρων δεῖ τῶν στερεωμάτων.

Τὰ δὲ καλούμενα σελάχη χονδράκανθα τὴν φύσιν ἐστίν· ὑγροτέραν τε γὰρ ἀναγκαῖον αὐτῶν εἶναι τὴν κίνησιν, ὥστε δεῖ καὶ τὴν τῶν ἐρεισμάτων μὴ κραῦρον εἶναι ἀλλὰ μαλακωτέραν, καὶ τὸ γεῶδες εἰς τὸ δέρμα πᾶν ἀνήλωκεν ἢ φύσις· ἅμα δὲ τὴν αὐτὴν ὑπεροχὴν εἰς πολλοὺς τόπους ἀδυνατεῖ διανέμειν ἢ φύσις. Ἐνεστί δὲ καὶ ἐν τοῖς ζωοτόκοις πολλὰ τῶν ὀστέων χονδρώδη, ἐν ὅσοις συμφέρει μαλακὸν εἶναι καὶ μυζῶδες τὸ στερεὸν διὰ τὴν σάρκα τὴν περικειμένην, οἷον συμβέβηκε περί τε τὰ ὠτα καὶ τοὺς μυκτῆρας· θραύεται γὰρ τὰ κραῦρα ταχέως ἐν τοῖς ἀπέχουσιν. Ἡ δὲ φύσις ἢ αὐτὴ χόνδρου καὶ ὅστοῦ ἐστὶ, διαφέρει δὲ τῷ μᾶλλον καὶ ἥττον· διὸ καὶ οὐδέτερον ἀυξάνεται ἀποκοπέν. Οἱ μὲν οὖν ἐν τοῖς πεζοῖς ἀμύελοι χόνδροι κεχωρισμένῳ μυελῷ· τὸ γὰρ χωριζόμενον εἰς ἅπαν μεμιγμένον μαλακὴν ποιεῖ καὶ ζυμώδη τὴν τοῦ χόνδρου σύστασιν. Ἐν δὲ τοῖς σελάχεσιν ἢ ῥάχιδι (655b.) χονδρώδης μὲν ἐστίν, ἔχει δὲ μυελόν· ἀντ' ὅστοῦ γὰρ αὐτοῖς ὑπάρχει τοῦτο τὸ μόριον.

Σύνεγγυς δὲ κατὰ τὴν ἀφήν ἐστι τοῖς ὅστοις καὶ τὰ τοιάδε τῶν μορίων οἷον ὄνυχές τε καὶ ὀπλαὶ καὶ χηλαὶ καὶ κέρατα καὶ ῥύγχη τὰ τῶν ὀρνίθων. Πάντα δὲ ταῦτα βοηθείας ἔχουσι χάριν τὰ ζῶα· τὰ γὰρ ἐξ αὐτῶν συνεστηκότα ὅλα καὶ συνώνυμα τοῖς μορίοις, οἷον ὀπλή τε ὄλη καὶ κέρας ὅλον, μεμηχάνηται πρὸς τὴν σωτηρίαν ἐκάστοις. Ἐν τούτῳ δὲ τῷ γένει καὶ ἡ τῶν ὀδόντων ἐστὶ φύσις, τοῖς μὲν ὑπάρχουσα πρὸς ἐν ἔργον τὴν τῆς τροφῆς ἐργασίαν, τοῖς δὲ πρὸς τε τοῦτο καὶ πρὸς ἀλκὴν, οἷον τοῖς καρχαρόδουσι καὶ χαυλιόδουσι πᾶσιν. Ἐξ ἀνάγκης δὲ πάντα ταῦτα γεώδη καὶ στερεὰν ἔχει τὴν φύσιν· ὅπλου γὰρ αὕτη δύναμις. Διὸ καὶ πάντα τὰ τοιαῦτα μᾶλλον ἐν τοῖς τετράποσιν ὑπάρχει ζῳοῖς τῶν ζωοτόκων, διὰ τὸ γεωδεστέραν ἔχειν πάντα τὴν σύστασιν ἢ τὸ τῶν ἀνθρώπων γένος.

Ἀλλὰ καὶ περὶ τούτων καὶ τῶν ἐχομένων, οἷον δέρματος καὶ κύστεως καὶ ὑμένος καὶ τριχῶν καὶ πτερῶν καὶ τῶν ἀνάλογον τούτοις καὶ εἴ τι τοιοῦτόν ἐστι μέρος, ὕστερον ἅμα τοῖς ἀνομοιομερέσι θεωρητέον τὴν αἰτίαν αὐτῶν, καὶ τίνας ἔνεκεν ὑπάρχει τοῖς ζῳοῖς ἕκαστον· ἐκ τῶν ἔργων γὰρ γνωρίζειν, ὥσπερ κάκεῖνα, καὶ ταῦτα ἀναγκαῖον ἂν εἴη. Ἀλλ' ὅτι συνώνυμα τοῖς ὅλοις

τὰ μέρη, τὴν τάξιν ἀπέλαβεν ἐν τοῖς ὁμοιομερέσι νῦν, Εἰσὶ δ' ἀρχαὶ πάντων τούτων τό τε ὀστοῦν καὶ ἡ σὰρξ. Ἔτι δὲ περὶ γονῆς καὶ γάλακτος ἀπελίπομεν ἐν τῇ περὶ τῶν ὑγρῶν καὶ ὁμοιομερῶν θεωρίᾳ· τοῖς γὰρ περὶ γενέσεως λόγοις ἀρμόττουσαν ἔχει τὴν σκέψιν· τὸ μὲν γὰρ αὐτῶν ἀρχή, τὸ δὲ τροφή τῶν γινομένων ἐστίν.

## Κεφάλαιο 10

Νῦν δὲ λέγωμεν οἶον ἀπ' ἀρχῆς πάλιν, ἀρξάμενοι πρῶτον ἀπὸ τῶν πρώτων. Πᾶσι γὰρ τοῖς ζώοις τοῖς τελείοις δύο τὰ ἀναγκαιότατα μόρια ἐστίν, ἢ τε δέχονται τὴν τροφήν καὶ ἢ τὸ περίττωμα ἀφήσουσιν· οὔτε γὰρ εἶναι οὔτε αὐξάνεσθαι ἐνδέχεται ἄνευ τροφῆς. Τὰ μὲν οὖν φυτὰ (καὶ γὰρ ταῦτα ζῆν φάμεν) τοῦ μὲν ἀχρήστου περιττώματος οὐκ ἔχει τόπον· ἐκ τῆς γῆς γὰρ λαμβάνει πεπεμμένην τὴν τροφήν, ἀντὶ δὲ τούτου προῖεται τὰ σπέρματα καὶ τοὺς καρπούς. Τρίτον δὲ μέρος ἐν πᾶσιν ἐστὶ τὸ τούτων μέσον, ἐν ᾧ ἡ ἀρχή ἐστίν ἢ τῆς ζωῆς. Ἡ μὲν οὖν τῶν φυτῶν (656a.) φύσις οὕσα μόνιμος οὐ πολυειδής ἐστὶ τῶν ἀνομοιομερῶν· πρὸς γὰρ ὀλίγας πράξεις ὀλίγων ὀργάνων ἢ χρῆσις· διὸ θεωρητέον καθ' αὐτὰ περὶ τῆς ιδέας αὐτῶν. Τὰ δὲ πρὸς τῷ ζῆν αἰσθησιν ἔχοντα πολυμορφότεραν ἔχει τὴν ιδέαν, καὶ τούτων ἕτερα πρὸ ἑτέρων μᾶλλον, καὶ πολυχουστέραν, ὅσων μὴ μόνον τοῦ ζῆν ἀλλὰ καὶ τοῦ εὖ ζῆν ἢ φύσις μετείληφεν.

Τοιοῦτο δ' ἐστὶ τὸ τῶν ἀνθρώπων γένος· ἡ γὰρ μόνον μετέχει τοῦ θείου τῶν ἡμῖν γνωρίμων ζώων, ἡ μάλιστα πάντων. Ὡστε διὰ τε τοῦτο, καὶ διὰ τὸ γνωρίμον εἶναι μάλιστ' αὐτοῦ τὴν τῶν ἑξωθεν μορίων μορφήν, περὶ τούτου λεκτέον πρῶτον. Εὐθὺς γὰρ καὶ τὰ φύσει μόρια κατὰ φύσιν ἔχει τούτῳ μόνῳ, καὶ τὸ τούτου ἄνω πρὸς τὸ τοῦ ὅλου ἔχει ἄνω· μόνον γὰρ ὀρθόν ἐστὶ τῶν ζώων ἄνθρωπος. Τὸ μὲν οὖν ἔχειν τὴν κεφαλὴν ἄσαρκον ἐκ τῶν περὶ τὸν ἐγκέφαλον εἰρημένων ἀναγκαῖον συμβέβηκεν. Οὐ γὰρ ὥσπερ τινὲς λέγουσιν, ὅτι εἰ σαρκώδης ἦν, μακροβιώτερον ἂν ἦν τὸ γένος· ἀλλ' εὐαισθησίας ἔνεκεν ἄσαρκον εἶναί φασιν· αἰσθάνεσθαι μὲν γὰρ τῷ ἐγκεφάλῳ, τὴν δ' αἰσθησιν οὐ προσίεσθαι τὰ μόρια τὰ σαρκώδη λίαν. Τούτων δ' οὐδέτερόν ἐστιν ἀληθές, ἀλλὰ πολύσαρκος μὲν ὁ τόπος ὧν ὁ περὶ τὸν ἐγκέφαλον τούναντίον ἂν ἀπειργάζετο οὐ ἔνεκα ὑπάρχει τοῖς ζώοις ὁ ἐγκέφαλος (οὐ γὰρ ἂν ἐδύνατο καταψύχειν ἀλεαίνων αὐτὸς λίαν), τῶν τ' αἰσθήσεων οὐκ αἴτιος οὐδεμιᾶς, ὅς γε ἀναίσθητος καὶ αὐτός ἐστιν ὥσπερ ὀτιοῦν τῶν περιττωμάτων. Ἀλλ' οὐχ εὐρίσκοντες διὰ τίνα αἰτίαν ἔναι τῶν αἰσθήσεων ἐν τῇ κεφαλῇ τοῖς ζώοις εἰσί, τοῦτο δ' ὀρῶντες ἰδιαίτερον ὄν τῶν ἄλλων μορίων, ἐκ συλλογισμοῦ πρὸς ἄλληλα συνδυάζουσιν.



Ὅτι μὲν οὖν ἀρχὴ τῶν αἰσθήσεων ἐστὶν ὁ περὶ τὴν καρδίαν τόπος, διώρισται πρότερον ἐν τοῖς περὶ αἰσθήσεως· καὶ διότι αἱ μὲν δύο φανερώς ἡρτημέναι πρὸς τὴν καρδίαν εἰσὶν, ἢ τε τῶν ἀπτῶν καὶ ἡ τῶν χυμῶν, τῶν δὲ τριῶν ἡ μὲν τῆς ὀσφρήσεως μέση, ἀκοὴ δὲ καὶ ὄψις μάλιστ' ἐν τῇ κεφαλῇ διὰ τὴν τῶν αἰσθητηρίων φύσιν εἰσὶ, καὶ τούτων ἡ ὄψις πᾶσιν, ἐπεὶ ἢ γ' ἀκοὴ καὶ ἡ ὀσφρησις ἐπὶ τῶν ἰχθύων καὶ τῶν τοιούτων ποιεῖ τὸ λεγόμενον φανερόν· ἀκούουσι μὲν γὰρ καὶ ὀσφραίνονται, αἰσθητήριον δ' οὐδὲν ἔχουσι φανερόν ἐν τῇ κεφαλῇ τούτων τῶν αἰσθητῶν. Ἡ δ' ὄψις πᾶσι τοῖς ἔχουσιν εὐλόγως ἐστὶ περὶ τὸν (656b.) ἐγκέφαλον· ὁ μὲν γὰρ ὑγρὸς καὶ ψυχρὸς, ἡ δ' ὕδωρ τὴν φύσιν ἐστίν· τοῦτο γὰρ τῶν διαφανῶν εὐφυλακτότατόν ἐστιν.

Ἔτι δὲ τὰς ἀκριβεστέρας τῶν αἰσθήσεων διὰ τῶν καθαρώτερον ἐχόντων τὸ αἷμα μορίων ἀναγκαῖον ἀκριβεστέρας γίνεσθαι· ἐκκόπτει γὰρ ἡ τῆς ἐν τῷ αἵματι θερμότητος κίνησις τὴν αἰσθητικὴν ἐνέργειαν· διὰ ταύτας τὰς αἰτίας ἐν τῇ κεφαλῇ τούτων τὰ αἰσθητήριά ἐστιν. Οὐ μόνον δ' ἐστὶ τὸ ἔμπροσθεν ἄσκαρον, ἀλλὰ καὶ τὸ ὀπισθεν τῆς κεφαλῆς, διὰ τὸ πᾶσι τοῖς ἔχουσιν αὐτὴν ὀρθότατον δεῖν εἶναι τοῦτο τὸ μόριον· οὐδὲν γὰρ ὀρθοῦσθαι δύναται φορτίον ἔχον, ἦν δ' ἂν τοιοῦτον, εἰ σεσαρκωμένην εἶχε τὴν κεφαλὴν. Ἡ καὶ δῆλον ὅτι οὐ τῆς τοῦ ἐγκεφάλου αἰσθήσεως χάριν ἄσκαρος ἡ κεφαλὴ ἐστίν· τὸ γὰρ ὀπισθεν οὐκ ἔχει ἐγκέφαλον, ἄσκαρον δ' ὁμοίως. Ἔχει δὲ καὶ τὴν ἀκοὴν εὐλόγως ἔνια τῶν ζώων ἐν τῷ τόπῳ τῷ περὶ τὴν κεφαλὴν· τὸ γὰρ κενὸν καλούμενον ἀέρος πληρὲς ἐστὶ, τὸ δὲ τῆς ἀκοῆς αἰσθητήριον ἀέρος εἶναι φαινομεν. Ἐκ μὲν οὖν τῶν ὀφθαλμῶν οἱ πόροι φέρουσιν εἰς τὰς περὶ τὸν ἐγκέφαλον φλέβας· πάλιν δ' ἐκ τῶν ὥτων ὡσαύτως πόρος εἰς τοῦ ὀπισθεν συνάπτει. Ἔστι δ' οὗτ' ἄναιμον οὐδὲν αἰσθητικὸν οὔτε τὸ αἷμα, ἀλλὰ τῶν ἐκ τούτου τι. Διόπερ οὐδὲν ἐν τοῖς ἐναίμοις ἄναιμον αἰσθητικόν, οὐδ' αὐτὸ τὸ αἷμα· οὐδὲν γὰρ τῶν ζώων μόριον. Ἔχει δ' ἐν τῷ ἔμπροσθεν τὸν ἐγκέφαλον πάντα τὰ ἔχοντα τοῦτο τὸ μόριον, διὰ τὸ ἔμπροσθεν εἶναι ἐφ' ὃ αἰσθάνεται, τὴν δ' αἰσθησὶν ἀπὸ τῆς καρδίας, ταύτην δ' εἶναι ἐν τοῖς ἔμπροσθεν, καὶ τὸ αἰσθάνεσθαι διὰ τῶν ἐναίμων γίνεσθαι μορίων, φλεβῶν δ' εἶναι κενὸν τὸ ὀπισθεν κύτος. Τέτακται δὲ τὸν τρόπον τοῦτον τὰ αἰσθητήρια τῇ φύσει καλῶς, τὰ μὲν τῆς ἀκοῆς ἐπὶ μέσης τῆς περιφερείας (ἀκούει γὰρ οὐ μόνον κατ' εὐθυωρίαν ἀλλὰ πάντοθεν), ἡ δ' ὄψις εἰς τὸ ἔμπροσθεν (ὁρᾷ γὰρ κατ' εὐθυωρίαν, ἡ δὲ κίνησις εἰς τὸ ἔμπροσθεν, προορᾷ δὲ δεῖ ἐφ' ὃ ἡ κίνησις). Ἡ δὲ τῆς ὀσφρήσεως μεταξὺ τῶν ὁμμάτων εὐλόγως. Διπλοῦν μὲν γὰρ ἐστὶν ἕκαστον τῶν αἰσθητηρίων διὰ τὸ διπλοῦν εἶναι τὸ σῶμα, τὸ μὲν δεξιὸν τὸ δ' ἀριστερόν. Ἐπὶ μὲν οὖν τῆς ἀφῆς τοῦτ' ἄδηλον· τούτου δ' αἴτιον ὅτι οὐκ ἔστι τὸ πρῶτον αἰσθητήριον ἡ σὰρξ καὶ τὸ τοιοῦτον μόριον, ἀλλ' ἐντός. Ἐπὶ δὲ τῆς γλώττης ἦττον μὲν, μᾶλλον δ' ἢ ἐπὶ τῆς ἀφῆς· ἔστι γὰρ

οἷον ἀφή τις καὶ (657a.) αὕτη ἢ αἴσθησις. Ὅμως δὲ δῆλον καὶ ἐπὶ ταύτης φαίνεται γὰρ ἐσχισμένη. Ἐπὶ δὲ τῶν ἄλλων αἰσθητηρίων φανερωτέως ἐστὶν ἢ αἴσθησις διμερής· ὥτα τε γὰρ δύο καὶ ὄμματα καὶ ἡ τῶν μυκτῆρων δύναμις διφυής ἐστίν. Ἄλλον οὖν ἂν τρόπον κειμένη καὶ διεσπασμένη, καθάπερ ἡ τῆς ἀκοῆς, οὐκ ἂν ἐποίει τὸ αὐτῆς ἔργον, οὐδὲ τὸ μόριον ἐν ᾧ ἐστίν· διὰ γὰρ τῆς ἀναπνοῆς ἡ αἴσθησις τοῖς ἔχουσι μυκτῆρας, τοῦτο δὲ τὸ μόριον κατὰ μέσον καὶ ἐν τοῖς ἔμπροσθέν ἐστίν. Διόπερ εἰς μέσον τῶν τριῶν αἰσθητηρίων συνήγαγεν ἡ φύσις τοὺς μυκτῆρας, οἷον ἐπὶ στάθμην θεῖσα μίαν ἐπὶ τὴν τῆς ἀναπνοῆς κίνησιν. Καλῶς δὲ καὶ τοῖς ἄλλοις ἔχει ταῦτα τὰ αἰσθητήρια ζώοις πρὸς τὴν ἰδίαν φύσιν ἐκάστω.

## Κεφάλαιο 11

Τὰ μὲν γὰρ τετράποδα ἀπηρτημένα ἔχει τὰ ὦτα καὶ ἄνωθεν τῶν ὀμμάτων, ὡς δόξειεν ἄν. Οὐκ ἔχει δέ, ἀλλὰ φαίνεται διὰ τὸ μὴ ὀρθὰ εἶναι τὰ ζῶα ἀλλὰ κύπτειν. Οὕτω δὲ τὸ πλεῖστον κινουμένων χρήσιμα μετεωρότερα τε ὄντα καὶ κινούμενα· δέχεται γὰρ στρεφόμενα πάντοθεν τοὺς ψόφους μάλλον.

## Κεφάλαιο 12

Οἱ δ' ὄρνιθες τοὺς πόρους μόνον ἔχουσι διὰ τὴν τοῦ δέρματος σκληρότητα, καὶ τὸ ἔχειν μὴ τρίχας ἀλλὰ πτερωτὰ εἶναι· οὐκ οὖν ἔχει τοιαύτην ὕλην ἐξ ἧς ἂν ἔπλασε τὰ ὦτα. Ὅμοίως δὲ καὶ τῶν τετραπόδων τὰ ὠτοκά καὶ φολιδωτά· ὁ γὰρ αὐτὸς ἀρμόσει καὶ ἐπ' ἐκείνων λόγος. Ἔχει δὲ καὶ ἡ φώκη τῶν ζωοτόκων οὐκ ὦτα ἀλλὰ πόρους ἀκοῆς, διὰ τὸ πεπηρωμένον εἶναι τετράπουν.

## Κεφάλαιο 13

Καὶ οἱ μὲν ἄνθρωποι καὶ οἱ ὄρνιθες καὶ τὰ ζωοτόκα καὶ τὰ ὠτοκά τῶν τετραπόδων φυλακὴν ἔχουσι τῆς ὀψεως, τὰ μὲν ζωοτόκα βλέφαρα δύο, οἷς καὶ σκαρδαμύττουσι, τῶν δ' ὀρνίθων ἄλλοι τε καὶ οἱ βαρεῖς καὶ τὰ ὠτοκά τῶν τετραπόδων τῇ κάτω βλεφαρίδι μύουσιν· σκαρδαμύττουσι δ' οἱ ὄρνιθες ἐκ τῶν κανθῶν ὑμένι. Τοῦ μὲν οὖν φυλακὴν ἔχειν αἴτιον τὸ ὑγρὰ τὰ ὄμματα εἶναι, ἵνα ὁξὺ βλέπωσι τοῦτον τὸν τρόπον ὑπὸ τῆς φύσεως. Σκληρόδερμα γὰρ ὄντα ἀβλαβέστερα μὲν ἂν ἦν ὑπὸ τῶν ἐξωθεν προσπιπτόντων, οὐκ ὁξυωπὰ δέ. Τοῦ μὲν οὖν εὖ ἔνεκα λεπτὸν τὸ δέρμα τὸ περὶ τὴν κόρην ἐστί, τῆς δὲ σωτηρίας χάριν τὰ βλέφαρα· καὶ διὰ τοῦτο σκαρδαμύσσει τε πάντα καὶ μάλιστ' ἄνθρωπος, πάντα μὲν ὅπως τὰ προσπίπτοντα τοῖς βλεφάροις κωλύωσι (καὶ

τοῦτο (657b.) οὐκ ἐκ προαιρέσεως, ἀλλ' ἡ φύσις ἐποίησε), πλειστάκις δ' ὁ ἄνθρωπος διὰ τὸ λεπτοδερμότατος εἶναι. Ἡ δὲ βλεφαρίς ἐστὶ δέρματι περιειλημμένη· διὸ καὶ οὐ συμφύεται οὔτε βλεφαρίς οὔτε ἀκροποσθία, ὅτι ἄνευ σαρκὸς δέρματά ἐστίν. Τῶν δ' ὀρνίθων ὅσοι τῇ κάτω βλεφαρίδι μύουσι, καὶ τὰ ὠοτόκα τῶν τετραπόδων, διὰ τὴν σκληρότητα τοῦ δέρματος τοῦ περὶ τὴν κεφαλὴν οὕτω μύουσιν. Οἱ μὲν γὰρ βαρεῖς τῶν περωτῶν διὰ τὸ μὴ πτητικοὶ εἶναι τὴν τῶν περῶν αὔξησιν εἰς τὴν τοῦ δέρματος παχύτητα τετραμμένην ἔχουσιν. Διὸ καὶ οὗτοι μὲν τῷ κάτω βλεφάρῳ μύουσι, περιστερὰ δὲ καὶ τὰ τοιαῦτα ἀμφοῖν. Τὰ δὲ τετράποδα τῶν ὠοτόκων φολιδωτά ἐστίν· ταῦτα δὲ σκληρότερα πάντα τριχός, ὥστε καὶ τὰ δέρματα τοῦ δέρματος. Τὸ μὲν οὖν περὶ τὴν κεφαλὴν σκληρόν ἐστὶν αὐτοῖς, διόπερ οὐκ ἔχει βλέφαρον ἐκεῖθεν, τὸ δὲ κάτωθεν σαρκῶδες, ὥστ' ἔχειν τὸ βλέφαρον λεπτότητα καὶ τάσιν. Σκαρδαμύττουσι δ' οἱ βαρεῖς ὀρνιθες τούτῳ μὲν οὐ, τῷ δ' ὑμένι, διὰ τὸ βραδεῖαν εἶναι τὴν τούτου κίνησιν, δεῖν δὲ ταχεῖαν γίνεσθαι· ὁ δ' ὑμὴν τοιοῦτον. Ἐκ δὲ τοῦ κανθοῦ τοῦ παρὰ τοὺς μυκτῆρας σκαρδαμύττουσιν, ὅτι βέλτιον ἀπ' ἀρχῆς μίᾳς τὴν φύσιν εἶναι αὐτῶν, οὗτοι δ' ἔχουσιν ἀρχὴν τὴν πρὸς τὸν μυκτῆρα πρόσφυσιν· καὶ τὸ πρόσθιον ἀρχὴ τοῦ πλαγίου μᾶλλον. Τὰ δὲ τετράποδα καὶ ὠοτόκα οὐ σκαρδαμύττει ὁμοίως, ὅτι οὐδ' ὑγρὰν αὐτοῖς ἀναγκαῖον ἔχειν καὶ ἀκριβῆ τὴν ὄψιν ἐπιγείοις οὖσιν. Τοῖς δ' ὀρνισιν ἀναγκαῖον· πόρρωθεν γὰρ ἡ χρῆσις τῆς ὄψεως. Διὸ καὶ τὰ γαμψώνυχα μὲν ὀξύωπά (ἄνωθεν γὰρ αὐτοῖς ἡ θεωρία τῆς τροφῆς, διὸ καὶ ἀναπέτονται ταῦτα μάλιστα τῶν ὀρνέων εἰς ὕψος), τὰ δ' ἐπίγεια καὶ μὴ πτητικά, οἷον ἀλεκτρυόνες καὶ τὰ τοιαῦτα, οὐκ ὀξύωπά· οὐδὲν γὰρ αὐτὰ κατεπείγει πρὸς τὸν βίον.

Οἱ δ' ἰχθύες καὶ τὰ ἔντομα καὶ τὰ σκληρόδερμα διαφέροντα μὲν ἔχουσι τὰ ὄμματα, βλέφαρον δ' οὐδὲν αὐτῶν ἔχει. Τὰ μὲν γὰρ σκληρόδερμα ὅλως οὐκ ἔχει· ἡ δὲ τοῦ βλεφάρου χρῆσις ταχεῖαν καὶ δερματικὴν ἔχει τὴν ἐργασίαν· ἀλλ' ἀντὶ ταύτης τῆς φυλακῆς πάντα σκληρόφθαλμά ἐστίν, οἷον βλέποντα διὰ τοῦ βλεφάρου προσπεφυκότες. Ἐπεὶ δ' ἀναγκαῖον διὰ τὴν σκληρότητα ἀμβλύτερον βλέπειν, κινουμένους ἐποίησεν ἡ φύσις τοὺς ὀφθαλμοὺς τοῖς ἐντόμοις, καὶ μᾶλλον (658a.) ἔτι τοῖς σκληροδέρμοις, ὥσπερ ἔνια τῶν τετραπόδων τὰ ὦτα, ὅπως ὀξύτερον βλέπη στρέφοντα πρὸς τὸ φῶς καὶ δεχόμενα τὴν αὐγὴν. Οἱ δ' ἰχθύες ὑγρόφθαλμοι μὲν εἰσιν.

Ἀναγκαία γὰρ τοῖς πολλὴν ποιουμένοις κίνησιν ἡ τῆς ὄψεως ἐκ πολλοῦ χρῆσις. Τοῖς μὲν οὖν πεζοῖς ὁ ἀὴρ εὐδίοπτος· ἐκείνοις δ' ἐπεὶ τὸ ὕδωρ πρὸς μὲν τὸ ὀξὺ βλέπειν ἐναντίον, οὐκ ἔχει δὲ πολλὰ τὰ προσκρούσματα πρὸς τὴν ὄψιν ὥσπερ ὁ ἀήρ, διὰ μὲν τοῦτ' οὐκ ἔχει βλέφαρον (οὐδὲν γὰρ ἡ φύσις

ποιεῖ μάτην), πρὸς δὲ τὴν παχύτητα τοῦ ὕδατος ὑγρόφθαλμοὶ εἰσιν.

## Κεφάλαιο 14

Βλεφαρίδας δ' ἐπὶ τῶν βλεφάρων ἔχουσιν ὅσα τρίχας ἔχουσιν, ὄρνιθες δὲ καὶ τῶν φολιδωτῶν οὐδέν· οὐ γὰρ ἔχουσι τρίχας. Περὶ γὰρ τοῦ στρουθοῦ τοῦ Λιβυκοῦ τὴν αἰτίαν ὕστερον ἐροῦμεν· τοῦτο γὰρ ἔχει βλεφαρίδας τὸ ζῶον. Καὶ τῶν ἐχόντων τρίχας ἐπ' ἀμφοτέρα οἱ ἄνθρωποι μόνον ἔχουσιν. Τὰ γὰρ τετράποδα τῶν ζώων ἐν τοῖς ὑπτίοις οὐκ ἔχει τρίχας, ἀλλ' ἐν τοῖς πρανεσι μᾶλλον· οἱ δ' ἄνθρωποι τοῦναντίον ἐν τοῖς ὑπτίοις μᾶλλον ἢ ἐν τοῖς πρανεσιν. Σκέπης γὰρ χάριν αἱ τρίχες ὑπάρχουσι τοῖς ἔχουσιν· τοῖς μὲν οὖν τετράποσι τὰ πρανῇ δεῖται μᾶλλον τῆς σκέπης, τὰ δὲ πρόσθια τιμώτερα μὲν, ἀλλ' ἀλεάζει διὰ τὴν κάμψιν· τοῖς δ' ἀνθρώποις ἐπεὶ ἐξ ἴσου διὰ τὴν ὀρθότητα τὰ πρόσθια τοῖς ὀπισθίοις, τοῖς τιμιωτέροις ὑπέγραψεν ἡ φύσις τὴν βοήθειαν· αἰεὶ γὰρ ἐκ τῶν ἐνδεχομένων αἰτία τοῦ βελτιονός ἐστιν. Καὶ διὰ τοῦτο τῶν τετραπόδων οὐθὲν οὔτε βλεφαρίδα ἔχει τὴν κάτωθεν, ἀλλ' ὑπὸ τοῦτο τὸ βλέφαρον ἐνίοις παραφύονται μαναὶ τρίχες, οὔτ' ἐν ταῖς μασχάλαις οὔτ' ἐπὶ τῆς ἥβης, ὥσπερ τοῖς ἀνθρώποις. Ἀλλ' ἀντὶ τούτων τὰ μὲν καθ' ὅλον τὸ σῶμα πρანὲς δεδάσυνται ταῖς θριξίν, οἷον τὸ τῶν κυνῶν γένος, τὰ δὲ λοφιὰν ἔχει, καθάπερ ἵπποι καὶ τὰ τοιαῦτα τῶν ζώων, τὰ δὲ χαίτην, ὥσπερ ὁ ἄρρην λέων.

Ἔτι δ' ὅσα κέρκους ἔχει μῆκος ἐχούσας, καὶ ταύτας ἐπικεκόσμηκεν ἡ φύσις θριξί, τοῖς μὲν μικρὸν ἔχουσι τὸν στόλον μακραις, ὥσπερ τοῖς ἵπποις, τοῖς δὲ μακρὸν βραχεῖαις, καὶ κατὰ τὴν τοῦ ἄλλου σώματος φύσιν· πανταχοῦ γὰρ ἀποδίδωσι λαβοῦσα ἐτέρωθεν πρὸς ἄλλο μόριον. Ὅσοις δὲ τὸ σῶμα δασυλίαν (658b.) πεποίηκε, τούτοις ἐνδεῶς ἔχει τὰ περὶ τὴν κέρκον, οἷον ἐπὶ τῶν ἄρκτων συμβέβηκεν.

Τὴν δὲ κεφαλὴν ἄνθρωπος ἐστὶ τῶν ζώων δασύτατον, ἐξ ἀνάγκης μὲν διὰ τὴν ὑγρότητα τοῦ ἐγκεφάλου καὶ διὰ τὰς ῥαφάς (ὅπου γὰρ ὑγρὸν καὶ θερμὸν πλεῖστον, ἐνταῦθ' ἀναγκαῖον πλείστην εἶναι τὴν ἔκφυσιν), ἔνεκεν δὲ βοηθείας, ὅπως σκεπάζωσι φυλάττουσαι τὰς ὑπερβολὰς τοῦ τε ψύχους καὶ τῆς ἀλέας. Πλεῖστος δ' ὢν καὶ ὑγρότατος ὁ τῶν ἀνθρώπων ἐγκέφαλος πλείστης καὶ τῆς φυλακῆς δεῖται· τὸ γὰρ ὑγρότατον καὶ ζεῖ καὶ ψύχεται μάλιστα, τὸ δ' ἐναντίως ἔχον ἀπαθέστερόν ἐστιν. Ἀλλὰ περὶ μὲν τούτων παρεκβῆναι συμβέβηκεν ἐχομένοις τῆς περὶ τὰς βλεφαρίδας αἰτίας, διὰ τὴν συγγένειαν αὐτῶν, ὥστε περὶ τῶν λοιπῶν ἐν τοῖς οἰκείοις καιροῖς ἀποδοτέον τὴν μνείαν.

## Κεφάλαιο 15

Αἱ δ' ὀφρύες καὶ αἱ βλεφαρίδες ἀμφοτέραι βοηθείας χάριν εἰσίν, αἱ μὲν ὀφρύες τῶν καταβαινόντων ὑγρῶν, ὅπως ἀποστέγωσιν οἶον ἀπογείσωμα τῶν ἀπὸ τῆς κεφαλῆς ὑγρῶν, αἱ δὲ βλεφαρίδες τῶν πρὸς τὰ ὄμματα προσπιπτόντων ἔνεκεν, οἶον τὰ χαρακώματα ποιοῦσί τινες πρὸ τῶν ἐρυμάτων.

Εἰσὶ δ' αἱ μὲν ὀφρύες ἐπὶ συνθέσει ὀστέων, διὸ καὶ δασύνονται πολλοῖς ἀπογηράσκουσιν οὕτως ὥστε δεῖσθαι κουρᾶς, αἱ δὲ βλεφαρίδες ἐπὶ πέρατι φλεβίων· ἥ γὰρ τὸ δέρμα περαίνει, καὶ τὰ φλέβια πέρας ἔχει τοῦ μήκους. Ὡστ' ἀναγκαῖον διὰ τὴν ἀπιοῦσαν ἱκμάδα σωματικὴν οὖσαν, ἂν μή τι τῆς φύσεως ἔργον ἐμποδίσῃ πρὸς ἄλλην χρῆσιν, καὶ διὰ τὴν τοιαύτην αἰτίαν ἐξ ἀνάγκης ἐν τοῖς τόποις τούτοις γίνεσθαι τρίχας.

## Κεφάλαιο 16

Τοῖς μὲν οὖν ἄλλοις ζώοις τοῖς τετράποσι καὶ ζωοτόκοις οὐ πόρρω τρόπον τινὰ διέστηκεν ἀλλήλων τὸ τῆς ὀσφρήσεως αἰσθητήριον, ἀλλ' ὅσα μὲν ἔχει προμήκεις εἰς στενὸν ἀπηγμένας τὰς σιαγόνας, ἐν τῷ καλουμένῳ ῥύγχει καὶ τὸ τῶν μυκτῆρων ἐνυπάρχει μόριον κατὰ τὸν ἐνδεχόμενον τρόπον, τοῖς δ' ἄλλοις μᾶλλον διηρθρωμένον ἐστὶ πρὸς τὰς σιαγόνας.

Ὁ δ' ἐλέφας ἰδιαίτατον ἔχει τοῦτο τὸ μόριον τῶν ἄλλων ζώων· τό τε γὰρ μέγεθος καὶ τὴν δύναμιν ἔχει περιττή. Μυκτῆρ γάρ ἐστιν ὡς τὴν τροφήν προσάγεται, καθάπερ χειρὶ χρώμενος, πρὸς τὸ στόμα, τὴν τε ξηρὰν καὶ (659a.) τὴν ὑγρὰν, καὶ τὰ δένδρα περιελίττων ἀνασπᾷ, καὶ χρῆται καθάπερ ἂν εἰ χειρὶ. Τὴν γὰρ φύσιν ἐλῶδες ἅμα τὸ ζῶόν ἐστι καὶ πεζόν, ὥστ' ἐπεὶ τὴν τροφήν ἐξ ὑγροῦ συνέβαινε ἔχειν, ἀναπνεῖν δ' ἀναγκαῖον πεζὸν ὄν καὶ ἔναιμον, καὶ μὴ ταχεῖαν ποιεῖσθαι τὴν μεταβολὴν ἐκ τοῦ ὑγροῦ πρὸς τὸ ξηρόν, καθάπερ ἔνια τῶν ζωοτόκων καὶ ἐναίμων καὶ ἀναπνεόντων, τὸ γὰρ μέγεθος ὄν ὑπερβάλλον, ἀναγκαῖον ὁμοίως ἦν χρῆσθαι τῷ ὑγρῷ ὥσπερ καὶ τῇ γῇ.

Οἶον οὖν τοῖς κολυμβηταῖς ἔνιοι πρὸς τὴν ἀναπνοὴν ὄργανα πορίζονται, ἵνα πολὺν χρόνον ἐν τῇ θαλάττῃ μένοντες ἔλκωσιν ἕξωθεν τοῦ ὑγροῦ διὰ τοῦ ὀργάνου τὸν ἀέρα, τοιοῦτον ἢ φύσις τὸ τοῦ μυκτῆρος μέγεθος ἐποίησε τοῖς ἐλέφασιν. Διόπερ ἀναπνέουσιν ἄραντες ἄνω διὰ τοῦ ὕδατος τὸν μυκτῆρα, ἂν ποτε ποιῶνται δι' ὑγροῦ τὴν πορείαν· καθάπερ γὰρ εἵπομεν, μυκτῆρ ἐστὶν ἢ προβοσκὶς τοῖς ἐλέφασιν. Ἐπεὶ δ' ἀδύνατον ἦν εἶναι τὸν μυκτῆρα τοιοῦτον

μὴ μαλακὸν ὄντα μὴδὲ κάμπτεσθαι δυνάμενον (ἐνεπόδιζε γὰρ ἂν τῷ μήκει πρὸς τὸ λαβεῖν τὴν θύραθεν τροφήν, καθάπερ φασὶ τὰ κέρατα τοῖς ὀπισθονόμοις βουσίν· καὶ γὰρ ἐκείνους νέμεσθαί φασιν ὑποχωροῦντας πάλιν πυγηδόν) ὑπάρξαντος οὖν τοιούτου τοῦ μυκτῆρος, ἡ φύσις παρακαταχρῆται, καθάπερ εἴωθεν, ἐπὶ πλείονα τοῖς αὐτοῖς μορίοις, ἀντὶ τῆς τῶν προσθίων ποδῶν χρείας. Τούτους γὰρ τὰ πολυδάκτυλα τῶν τετραπόδων ἀντὶ χειρῶν ἔχουσιν, ἀλλ' οὐ μόνον ἐνεχ' ὑποστάσεως τοῦ βάρους· οἱ δ' ἐλέφαντες τῶν πολυδακτύλων εἰσὶ, καὶ οὔτε διχαλοὺς ἔχουσιν οὔτε μώνυχας τοὺς πόδας· ἐπεὶ δὲ τὸ μέγεθος πολὺ καὶ τὸ βάρος τὸ τοῦ σώματος, διὰ τοῦτο μόνον ἐρείσματός εἰσι χάριν, καὶ διὰ τὴν βραδυτῆτα καὶ τὴν ἀφυΐαν τῆς κάμψεως οὐ χρήσιμον πρὸς ἄλλο οὐδέν. Διὰ μὲν οὖν τὴν ἀναπνοὴν ἔχει μυκτῆρα, καθάπερ καὶ τῶν ἄλλων ἕκαστον τῶν ἐχόντων πλεύμονα ζῶων, διὰ δὲ τὴν ἐν τῷ ὑγρῷ διατριβὴν καὶ τὴν βραδυτῆτα τῆς ἐκεῖθεν μεταβολῆς δυνάμενον ἐλίττεσθαι καὶ μακρόν· ἀφηρημένης δὲ τῆς τῶν ποδῶν χρήσεως, καὶ ἡ φύσις, ὥσπερ εἴπομεν, καταχρῆται καὶ πρὸς τὴν ἀπὸ τῶν ποδῶν γινομένην ἂν βοήθειαν τούτῳ τῷ μορίῳ.

Οἱ δ' ὄρνιθες καὶ οἱ ὄφεις καὶ ὅσα (659b.) ἄλλ' ἔναιμα καὶ ὠτοκά τῶν τετραπόδων, τοὺς μὲν πόρους ἔχουσι τῶν μυκτῆρων πρὸ τοῦ στόματος, ὥστε δ' εἰπεῖν μυκτῆρας, εἰ μὴ διὰ τὸ ἔργον, οὐκ ἔχουσι φανερώς διηρθρωμένους· ἀλλ' ἢ γε ὄρνις ὥστε μὴθέν' ἂν εἰπεῖν ἔχειν ῥῖνας. τοῦτο δὲ συμβέβηκεν, ὅτι ἀντὶ σιαγόνων ἔχει τὸ καλούμενον ῥύγχος. Αἰτία δὲ τούτων ἡ φύσις ἡ τῶν ὀρνίθων συνεστηκυῖα τοῦτον τὸν τρόπον. Δίπουν γὰρ ἐστὶ καὶ πτερυγῶτον, ὥστ' ἀνάγκη μικρὸν τὸ βάρος ἔχειν τὸ τοῦ αὐχένος καὶ τὸ τῆς κεφαλῆς, ὥσπερ καὶ τὸ στῆθος στενόν· ὅπως μὲν οὖν ἢ χρήσιμον πρὸς τε τὴν ἀλκὴν καὶ διὰ τὴν τροφήν, ὁστῶδες ἔχουσι τὸ ῥύγχος, στενὸν δὲ διὰ τὴν μικρότητα τῆς κεφαλῆς. Ἐν δὲ τῷ ῥύγχει τοὺς πόρους ἔχουσι τῆς ὁσφρήσεως, μυκτῆρας δ' ἔχειν ἀδύνατον. Περὶ δὲ τῶν ἄλλων ζῶων τῶν μὴ ἀναπνεόντων εἴρηται πρότερον δι' ἣν αἰτίαν οὐκ ἔχουσι μυκτῆρας, ἀλλὰ τὰ μὲν διὰ τῶν βραγχίων, τὰ δὲ διὰ τοῦ αὐλοῦ, τὰ δ' ἔντομα διὰ τοῦ ὑποζώματος αἰσθάνονται τῶν ὀσμῶν, καὶ πάντα τῷ συμφύτῳ πνεύματι τοῦ σώματος ὥσπερ κινεῖται· τοῦτο δ' ὑπάρχει φύσει πᾶσι καὶ οὐ θύραθεν ἐπείσακτόν ἐστιν.

Ὑπὸ δὲ τοὺς μυκτῆρας ἡ τῶν χειλῶν ἐστὶ φύσις τοῖς ἔχουσι τῶν ἐναίμων ὀδόντας. Τοῖς γὰρ ὄρνισι, καθάπερ εἴπομεν, διὰ τὴν τροφήν καὶ τὴν ἀλκὴν τὸ ῥύγχος ὁστῶδες ἐστίν· συνῆκται γὰρ εἰς ἓν ἀντ' ὀδόντων καὶ χειλῶν, ὥσπερ ἂν εἴ τις ἀφελὼν ἀνθρώπου τὰ χεῖλη καὶ συμφύσας τοὺς ἄνωθεν ὀδόντας χωρὶς καὶ τοὺς κάτωθεν προαγάγοι μῆκος ποιήσας ἀμφοτέρωθεν εἰς στενόν· εἴη γὰρ ἂν τοῦτο ἤδη ῥύγχος ὀρνιθῶδες. Τοῖς μὲν οὖν ἄλλοις ζώοις πρὸς

σωτηρίαν τῶν ὀδόντων ἢ τῶν χειλῶν φύσις ἐστὶ καὶ πρὸς φυλακὴν, διόπερ ὥς ἐκείνων μετέχουσι τοῦ ἀκριβῶς καὶ καλῶς ἢ τοῦναντίον, οὕτω καὶ τοῦ διηρθρῶσθαι τοῦτο τὸ μόριον ἔχουσιν· οἱ δ' ἄνθρωποι μαλακὰ καὶ σαρκώδη καὶ δυνάμενα χωρίζεσθαι, φυλακῆς τε ἔνεκα τῶν ὀδόντων ὥσπερ καὶ τὰ ἄλλα, καὶ μᾶλλον ἔτι διὰ τὸ εὖ· πρὸς γὰρ τὸ χρῆσθαι τῷ λόγῳ καὶ ταῦτα. Ὡσπερ γὰρ τὴν γλῶτταν οὐχ ὁμοίαν τοῖς ἄλλοις ἐποίησεν ἡ φύσις, πρὸς ἐργασίας δύο καταχρησαμένη, καθάπερ εἵπομεν ποιεῖν αὐτὴν ἐπὶ πολλῶν, τὴν μὲν (660a.) γλῶτταν τῶν τε χυμῶν ἔνεκεν καὶ τοῦ λόγου, τὰ δὲ χεῖλη τούτου τε ἔνεκεν καὶ τῆς τῶν ὀδόντων φυλακῆς. Ὁ μὲν γὰρ λόγος ὁ διὰ τῆς φωνῆς ἐκ τῶν γραμμάτων σύγκειται, τῆς δὲ γλώττης μὴ τοιαύτης οὔσης μηδὲ τῶν χειλῶν ὑγρῶν οὐκ ἂν φθέγγεσθαι τὰ πλεῖστα τῶν γραμμάτων· τὰ μὲν γὰρ τῆς γλώττης εἰσὶ προσβολαί, τὰ δὲ συμβολαὶ τῶν χειλῶν. Ποίας δὲ ταῦτα καὶ πόσας καὶ τίνας ἔχει διαφοράς, δεῖ πυνθάνεσθαι παρὰ τῶν μετρικῶν. Ἀνάγκη δ' ἦν εὐθὺς ἀκολουθεῖν τούτων τῶν μορίων ἑκάτερον πρὸς τὴν εἰρημένην χρῆσιν εὐεργὰ καὶ τοιαύτην ἔχοντα τὴν φύσιν· διὸ σάρκινα. Μαλακωτάτη δ' ἡ σὰρξ ἢ τῶν ἀνθρώπων ὑπῆρχεν. Τοῦτο δὲ διὰ τὸ αἰσθητικώτατον εἶναι τῶν ζώων τὴν διὰ τῆς ἀφῆς αἴσθησιν.

## Κεφάλαιο 17

Ὑπὸ δὲ τὸν οὐρανὸν ἐν τῷ στόματι ἡ γλῶττα τοῖς ζώοις ἐστί, τοῖς μὲν πεζοῖς σχεδὸν ὁμοίως πᾶσι, τοῖς δ' ἄλλοις ἀνομοίως καὶ αὐτοῖς πρὸς αὐτὰ καὶ πρὸς τὰ πεζὰ τῶν ζώων.

Ὁ μὲν οὖν ἄνθρωπος ἀπολελυμένην τε καὶ μαλακωτάτην ἔχει μάλιστα τὴν γλῶτταν καὶ πλατεῖαν, ὅπως πρὸς ἀμφοτέρας ἢ τὰς ἐργασίας χρήσιμος, πρὸς τε τὴν τῶν χυμῶν αἴσθησιν (ὁ γὰρ ἄνθρωπος εὐαισθητότατος τῶν ἄλλων ζώων, καὶ ἡ μαλακὴ γλῶττα· ἀπτικωτάτη γάρ, ἡ δὲ γεῦσις ἀφή τίς ἐστίν), καὶ πρὸς τὴν τῶν γραμμάτων διάρθρωσιν καὶ πρὸς τὸν λόγον ἡ μαλακὴ καὶ πλατεῖα χρήσιμος· συστέλλειν γὰρ καὶ προβάλλειν παντοδαπῇ τοιαύτῃ οὔσῃ καὶ ἀπολελυμένη μάλιστ' ἂν δύναιτο. Δηλοῖ δ' ὅσοις μὴ λίαν ἀπολέλυται· ψελλίζονται γὰρ καὶ τραυλίζουσι, τοῦτο δ' ἐστὶν ἔνδεια τῶν γραμμάτων. Ἐν τε τῷ πλατεῖαν εἶναι καὶ τὸ στενὴν ἐστίν· ἐν γὰρ τῷ μεγάλῳ καὶ τὸ μικρόν, ἐν δὲ τῷ μικρῷ τὸ μέγα οὐκ ἔστιν. Διὸ καὶ τῶν ὀρνίθων οἱ μάλιστα φθεγγόμενοι γράμματα πλατυγλωπτότεροι τῶν ἄλλων εἰσίν. Τὰ δ' ἔναιμα καὶ ζωοτόκα τῶν τετραπόδων βραχεῖαν τῆς φωνῆς ἔχει διάρθρωσιν· σκληράν τε γὰρ καὶ οὐκ ἀπολελυμένην ἔχουσι καὶ παχεῖαν τὴν γλῶτταν. Τῶν δ' ὀρνίθων ἔνιοι πολύφωνοι, καὶ πλατυτέραν οἱ γαμψώνυχοι ἔχουσιν. Πολύφωνοι δ' οἱ μικρότεροι. Καὶ χρῶνται τῇ γλώττῃ καὶ πρὸς ἐρμηνείαν ἀλλήλοις πάντες μὲν,

ἕτεροι δὲ τῶν ἐτέρων μᾶλλον, (660b.) ὥστ' ἐπ' ἐνίων καὶ μάθησιν εἶναι δοκεῖν παρ' ἀλλήλων· εἴρηται δὲ περὶ αὐτῶν ἐν ταῖς ἱστορίαις ταῖς περὶ τῶν ζώων.

Τῶν δὲ πεζῶν καὶ ὠοτόκων καὶ ἐναίμων πρὸς μὲν τὴν τῆς φωνῆς ἐργασίαν ἄχρηστον τὰ πολλὰ τὴν γλῶτταν ἔχει καὶ προσδεδεμένην καὶ σκληράν, πρὸς δὲ τὴν τῶν χυμῶν γεῦσιν οἳ τ' ὄφεις καὶ οἱ σαῦροι μακρὰν καὶ δικρόαν ἔχουσιν, οἳ μὲν ὄφεις οὕτω μακρὰν ὥστ' ἐκτείνεσθαι ἐκ μικροῦ ἐπὶ πολὺ, δικρόαν δὲ καὶ τὸ ἄκρον λεπτὸν καὶ τριχῶδες διὰ τὴν λιχνείαν τῆς φύσεως· διπλὴν γὰρ τὴν ἡδονὴν κτᾶται τῶν χυμῶν, ὥσπερ διπλὴν ἔχοντα τὴν τῆς γεύσεως αἴσθησιν. Ἔχει δὲ καὶ τὰ μὴ ἔναιμα τῶν ζώων τὸ αἰσθητικὸν τῶν χυμῶν μόριον καὶ τὰ ἔναιμα πάντα· καὶ γὰρ ὅσα μὴ δοκεῖ τοῖς πολλοῖς ἔχειν, οἷον ἔνιοι τῶν ἰχθύων, καὶ οὗτοι τρόπον τινὰ γλίσχρον ἔχουσι, καὶ σχεδὸν παραπλησίως τοῖς ποταμίοις κροκοδείλοις. Οὐ φαίνονται δ' οἱ πλεῖστοι αὐτῶν ἔχειν διὰ τιν' αἰτίαν εὐλογον· ἀκανθώδης τε γάρ ἐστιν ὁ τόπος τοῦ στόματος πᾶσι τοῖς τοιούτοις, καὶ διὰ τὸ μικρὸν χρόνον εἶναι τὴν αἴσθησιν τοῖς ἐνύδροις τῶν χυμῶν, ὥσπερ καὶ ἡ χρῆσις αὐτῆς βραχεῖα, οὕτω βραχεῖαν ἔχουσιν αὐτῆς καὶ τὴν διάρθρωσιν. Ταχεῖα δ' ἡ δίοδος εἰς τὴν κοιλίαν διὰ τὸ μὴ οἷόν τ' εἶναι διατρίβειν ἐκχυμίζοντας· παρεμπίπτει γὰρ ἂν τὸ ὕδωρ. Ὡστ' ἐὰν μή τις τὸ στόμα ἐπικλίνη, μὴ φαίνεσθαι ἀφεστηκὸς τοῦτο τὸ μόριον. Ἀκανθώδης δ' ἐστὶν οὗτος ὁ τόπος· σύγκειται γὰρ ἐκ τῆς συμψαύσεως τῶν βραγχίων, ὧν ἡ φύσις ἀκανθώδης ἐστίν. Τοῖς δὲ κροκοδείλοις συμβάλλεται τι πρὸς τὴν τοῦ μορίου τούτου ἀναπηρίαν καὶ τὸ τὴν σιαγόνα τὴν κάτω ἀκίνητον ἔχειν. Ἔστι μὲν γὰρ ἡ γλῶττα τῇ κάτω συμφυῆς, οἳ δ' ἔχουσιν ὥσπερ ἀνάπαλιν τὴν ἄνω κάτω· τοῖς γὰρ ἄλλοις ἡ ἄνω ἀκίνητος. Πρὸς μὲν οὖν τῇ ἄνω οὐκ ἔχουσι τὴν γλῶτταν, ὅτι ἐναντίως ἂν ἔχοι πρὸς τὴν τῆς τροφῆς εἴσοδον, πρὸς δὲ τῇ κάτω, ὅτι ὥσπερ μετακειμένη ἡ ἄνω ἐστίν. Ἔτι δὲ καὶ συμβέβηκεν αὐτῷ πεζῷ ὄντι ζῆν ἰχθύων βίον, ὥστε καὶ διὰ τοῦτο ἀναγκαῖον ἀδιάρθρωτον αὐτὸν ἔχειν τοῦτο τὸ μόριον. Τὸν δ' οὐρανὸν σαρκώδη πολλοὶ καὶ τῶν ἰχθύων ἔχουσι, καὶ τῶν ποταμίων ἔνιοι σφόδρα σαρκώδη καὶ μαλακόν, οἷον οἱ καλούμενοι κυπρίνοι, ὥστε δοκεῖν (661a.) τοῖς μὴ σκοποῦσιν ἀκριβῶς γλῶτταν ἔχειν ταύτη. Οἳ δ' ἰχθύες διὰ τὴν εἰρημένην αἰτίαν ἔχουσι μὲν, οὐ σαφῆ δ' ἔχουσι τὴν διάρθρωσιν τῆς γλώττης. Ἐπεὶ δὲ τῆς τροφῆς χάριν τῆς ἐν τοῖς χυμοῖς ἐστὶν εἰς αἴσθησιν μὲν τὸ γλωττοειδὲς μόριον, οὐ πάντῃ δ' ὁμοίως ἀλλὰ τῷ ἄκρῳ μάλιστα, διὰ τοῦτο τοῖς ἰχθύσι τοῦτ' ἀφώρισται μόνον. Ἐπιθυμίαν δ' ἔχει τροφῆς τὰ ζῶα πάντα ὡς ἔχοντα αἴσθησιν τῆς ἡδονῆς τῆς γινομένης ἐκ τῆς τροφῆς· ἡ γὰρ ἐπιθυμία τοῦ ἡδέος ἐστίν.



Ἀλλὰ τὸ μόριον οὐχ ὅμοιον τοῦτο πᾶσιν, ὥ τὴν αἴσθησιν ποιοῦνται τῆς τροφῆς, ἀλλὰ τοῖς μὲν ἀπολελυμένον τοῖς δὲ προσπεφυκός, ὅσοις μηδὲν ἔργον ὑπάρχει φωνῆς, καὶ τοῖς μὲν σκληρὸν τοῖς δὲ μαλακὸν ἢ σαρκῶδες. Διὸ καὶ τοῖς μαλακοστράκοις, οἷον καράβοις καὶ τοῖς τοιούτοις, ἐντὸς ὑπάρχει τι τοῦ στόματος τοιοῦτον, καὶ τοῖς μαλακίοις, οἷον σηπίασι καὶ πολύποσιν. Τῶν δ' ἐντόμων ζώων ἓν μὲν ἐντὸς ἔχει τὸ τοιοῦτον μόριον, οἷον τὸ τῶν μυρμηκῶν γένος, ὡσαύτως δὲ καὶ τῶν ὀστρακοδέρμων πολλά· τὰ δ' ἐκτός, οἷον κέντρον, σομφὸν δὲ τὴν φύσιν καὶ κοῖλον, ὥσθ' ἅμα τούτῳ καὶ γεύεσθαι καὶ τὴν τροφήν ἀνασπᾶν. Δῆλον δὲ τοῦτο ἐπὶ τε μυιῶν καὶ μελιττῶν καὶ πάντων τῶν τοιούτων, ἔτι δ' ἐπ' ἐνίων τῶν ὀστρακοδέρμων· ταῖς γὰρ πορφύραις τοσαύτην ἔχει δύναμιν τοῦτο τὸ μόριον ὥστε καὶ τῶν κογχυλίων διατρυπῶσι τὸ ὄστρακον, οἷον τῶν στρόμβων οἷς δελεάζουσιν αὐτάς. Ἐπὶ δ' οἱ τε οἰστροὶ καὶ οἱ μύωπες οἱ μὲν τὰ τῶν ἀνθρώπων οἱ δὲ καὶ τὰ τῶν ἄλλων ζώων δέρματα διαιροῦσιν. Ἐν μὲν οὖν τούτοις τοῖς ζώοις ἡ γλῶττα τοιαύτη τὴν φύσιν ἐστίν, ὥσπερ ἀντιστρόφως ἔχουσα τῷ μυκτῆρι τῷ τῶν ἐλεφάντων· καὶ γὰρ ἐκείνοις πρὸς βοήθειαν ὁ μυκτῆρ, καὶ τούτοις ἡ γλῶττα ἀντὶ κέντρου ἐστίν. Ἐπὶ δὲ τῶν ἄλλων ζώων ἡ γλῶττα πάντων ἐστὶν οἷανπερ εἵπομεν.

## Βιβλίο 3

### Κεφάλαιο 1

Ἐχόμενον δὲ τῶν εἰρημένων ἢ τῶν ὀδόντων ἐστὶ φύσις τοῖς ζώοις, καὶ τὸ στόμα τὸ περιεχόμενον ὑπὸ τούτων καὶ συνεστηκὸς ἐκ τούτων. Τοῖς μὲν οὖν ἄλλοις ἢ τῶν ὀδόντων (661b.) φύσις κοινὴ μὲν ἐπὶ τὴν τῆς τροφῆς ἐργασίαν ὑπάρχει, χωρὶς δὲ κατὰ γένη τοῖς μὲν ἀλκῆς χάριν, καὶ ταύτης διηρημένης, ἐπὶ τε τὸ ποιεῖν καὶ τὸ μὴ πάσχειν· τὰ μὲν γὰρ ἀμφοῖν ἔνεκεν ἔχει, καὶ τοῦ μὴ παθεῖν καὶ τοῦ ποιεῖν, οἷον ὅσα σαρκοφάγα τῶν ἀγρίων τὴν φύσιν ἐστίν, τὰ δὲ βοηθείας χάριν, ὥσπερ πολλὰ τῶν ἀγρίων καὶ τῶν ἡμέρων. Ὁ δ' ἄνθρωπος πρὸς τε τὴν κοινήν χρῆσιν καλῶς ἔχει πεφυκότας, τοὺς μὲν προσθίους ὀξεῖς, ἵνα διαιρῶσι, τοὺς δὲ γομφίους πλατεῖς, ἵνα λεαίνωσιν. Ὅρίζουσι δ' ἑκατέρους οἱ κυνόδοντες, μέσοι τὴν φύσιν ἀμφοτέρων ὄντες· τό τε γὰρ μέσον ἀμφοτέρων μετέχει τῶν ἄκρων, οἱ τε κυνόδοντες τῇ μὲν ὀξεῖς τῇ δὲ πλατεῖς εἰσιν. Ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων ζώων, ὅσα μὴ πάντα ἔχουσιν ὀξεῖς. Μάλιστα δὲ καὶ τούτους τοιούτους καὶ τοσούτους πρὸς τὴν διάλεκτον· πολλὰ γὰρ πρὸς τὴν γένεσιν τῶν γραμμάτων οἱ πρόσθιοι τῶν ὀδόντων συμβάλλονται.

Ἐνία δὲ τῶν ζώων, ὥσπερ εἵπομεν, τροφῆς χάριν ἔχει μόνον. Ὅσα δὲ καὶ

πρὸς βοήθειάν τε καὶ πρὸς ἀλκὴν, τὰ μὲν χαυλιόδοντας ἔχει, καθάπερ ὕς, τὰ δ' ὀξεῖς καὶ ἐπαλλάττοντας, ὅθεν καρχαρόδοντα καλεῖται. Ἐπεὶ γὰρ ἐν τοῖς ὁδοῦσιν ἡ ἰσχυρὸς αὐτῶν, τοῦτο δὲ γίνοιτ' ἂν διὰ τὴν ὀξύτητα, οἱ χρήσιμοι δὲ πρὸς τὴν ἀλκὴν ἐναλλάξ ἐμπίπτουσιν, ὅπως μὴ ἀμβλύνωνται τριβόμενοι πρὸς ἀλλήλους. Οὐδὲν δὲ τῶν ζώων ἐστὶν ἅμα καρχαρόδουν καὶ χαυλιόδουν, διὰ τὸ μηδὲν μάτην ποιεῖν τὴν φύσιν μηδὲ περίεργον· ἔστι δὲ τῶν μὲν διὰ πληγῆς ἢ βοήθεια, τῶν δὲ διὰ δῆγματος. Διόπερ αἱ θήλειαι τῶν ὑῶν δάκνουσιν· οὐ γὰρ ἔχουσι χαυλιόδοντας. Καθόλου δὲ χρεῶν τι λαβεῖν, ὃ καὶ ἐπὶ τούτων καὶ ἐπὶ πολλῶν τῶν ὕστερον λεχθησομένων ἔσται χρησίμον. Τῶν τε γὰρ πρὸς ἀλκὴν τε καὶ βοήθειαν ὀργανικῶν μορίων ἕκαστα ἀποδίδωσιν ἢ φύσις τοῖς δυναμένοις χρῆσθαι μόνοις ἢ μᾶλλον, μάλιστα δὲ τῷ μάλιστα, οἷον κέντρον, πλῆκτρον, κέρατα, χαυλιόδοντας καὶ εἴ τι τοιοῦτον ἕτερον. Ἐπεὶ δὲ τὸ ἄρρεν ἰσχυρότερον καὶ θυμικώτερον, τὰ μὲν μόνα τὰ δὲ μᾶλλον ἔχει τὰ τοιαῦτα τῶν μορίων. Ὅσα μὲν γὰρ ἀναγκαῖον καὶ τοῖς θήλεσιν ἔχειν, οἷον τὰ πρὸς τὴν τροφήν, ἔχουσι μὲν ἥττον δ' ἔχουσιν, ὅσα δὲ πρὸς μηδὲν τῶν ἀναγκαίων, οὐκ ἔχουσιν. Καὶ (662a.) διὰ τοῦτο τῶν ἐλάφων οἱ μὲν ἄρρενες ἔχουσι κέρατα, αἱ δὲ θήλειαι οὐκ ἔχουσιν. Διαφέρει δὲ καὶ τὰ κέρατα τῶν θηλειῶν βοῶν καὶ τῶν ταύρων· ὁμοίως δὲ καὶ ἐν τοῖς προβάτοις. Καὶ πλῆκτρα τῶν ἀρρένων ἐχόντων αἱ πολλὰ τῶν θηλειῶν οὐκ ἔχουσιν. Ὡσαύτως δ' ἔχει τοῦτο καὶ ἐπὶ τῶν ἄλλων τῶν τοιούτων.

Οἱ δ' ἰχθύες πάντες εἰσὶ καρχαρόδοντες, πλὴν τοῦ ἐνὸς τοῦ καλουμένου σκάρου· πολλοὶ δ' ἔχουσι καὶ ἐν ταῖς γλώτταις ὀδόντας καὶ ἐν τοῖς οὐρανοῖς. Τούτου δ' αἴτιον ὅτι ἀναγκαῖον ἐν ὑγροῖς οὕσι παρειαδέχεσθαι τὸ ὑγρὸν ἅμα τῇ τροφῇ, καὶ τοῦτο ταχέως ἐκπέμπειν. Οὐ γὰρ ἐνδέχεται λεαίνοντας διατρίβειν· εἰσρέοι γὰρ ἂν τὸ ὑγρὸν εἰς τὰς κοιλίας.

Διὰ τοῦτο πάντες εἰσὶν ὀξεῖς πρὸς τὴν διαίρεσιν. Πάλιν καὶ πολλοὶ καὶ πολλαχῇ, ἵνα ἀντὶ τοῦ λεαίνειν εἰς πολλὰ κερματίζωσι τῷ πλήθει. Γαμψοὶ δὲ διὰ τὸ τὴν ἀλκὴν σχεδὸν ἅπασαν αὐτοῖς διὰ τούτων εἶναι.

Ἐχει δὲ καὶ τὴν τοῦ στόματος φύσιν τὰ ζῶα τούτων τε τῶν ἔργων ἔνεκα καὶ ἔτι τῆς ἀναπνοῆς, ὅσα ἀναπνεῖ τῶν ζώων καὶ καταψύχεται θύραθεν. Ἡ γὰρ φύσις αὐτὴ καθ' αὐτήν, ὥσπερ εἵπομεν, τοῖς κοινοῖς πάντων μορίοις εἰς πολλὰ τῶν ἰδίων καταχρῆται, οἷον καὶ ἐπὶ τοῦ στόματος ἢ μὲν τροφή πάντων κοινόν, ἢ δ' ἀλκή τινων ἴδιον καὶ ὁ λόγος ἑτέρων, ἔτι δὲ τὸ ἀναπνεῖν οὐ πάντων κοινόν. Ἡ δὲ φύσις ἅπαντα συνήγαγεν εἰς ἓν, ποιοῦσα διαφορὰν αὐτοῦ τοῦ μορίου πρὸς τὰς τῆς ἐργασίας διαφοράς. Διὸ τὰ μὲν ἐστὶ συστομώτερα, τὰ δὲ μεγαλόστομα. Ὅσα μὲν γὰρ τροφῆς καὶ ἀναπνοῆς καὶ

λόγου χάριν, συστομώτερα, τῶν δὲ βοηθείας χάριν τὰ μὲν καρχαρόδοντα πάντα ἀνερρωγότα. Οὕσης γὰρ αὐτοῖς τῆς ἀλκῆς ἐν τοῖς δῆγμασι χρήσιμον τὸ μεγάλην εἶναι τὴν ἀνάπτυξιν τοῦ στόματος· πλείοσι γὰρ καὶ κατὰ μείζον δήξεται, ὅσονπερ ἂν ἐπὶ τὸ πλεόν ἀνερρώγη τὸ στόμα. Ἔχουσι δὲ καὶ τῶν ἰχθύων οἱ δηκτικοὶ καὶ σαρκοφάγοι τοιοῦτον στόμα, οἱ δὲ μὴ σαρκοφάγοι μύουρον· τοιοῦτον γὰρ αὐτοῖς χρήσιμον, ἐκεῖνο δὲ ἄχρηστον.

Τοῖς δ' ὄρνισιν ἐστὶ τὸ καλούμενον ῥύγχος στόμα· τοῦτο γὰρ ἀντὶ χειλῶν καὶ ὀδόντων ἔχουσιν. Διαφέρει δὲ τοῦτο κατὰ τὰς χρήσεις καὶ τὰς (662b.) βοηθείας. Τὰ μὲν γὰρ γαμψώνυχα καλούμενα διὰ τὸ σαρκοφαγεῖν καὶ μηδενὶ τρέφεσθαι καρπῷ γαμψὸν ἔχει τὸ ῥύγχος ἅπαντα· χρήσιμον γὰρ πρὸς τὸ κρατεῖν καὶ βιαστικώτερον τοιοῦτο πεφυκός. Ἡ δ' ἀλκὴ ἐν τούτῳ τε καὶ τοῖς ὄνυξι, διὸ καὶ τοὺς ὄνυχας γαμψοτέρους ἔχουσιν. Τῶν δ' ἄλλων ἐκάστῳ πρὸς τὸν βίον χρήσιμόν ἐστὶ τὸ ῥύγχος, οἷον τοῖς μὲν δρυοκόποις ἰσχυρὸν καὶ σκληρόν, καὶ κόραξι καὶ κορακώδεσι, τοῖς δὲ μικροῖς γλαφυρὸν πρὸς τὰς συλλογὰς τῶν καρπῶν καὶ τὰς λήψεις τῶν ζωδαρίων. Ὅσα δὲ ποηφάγα καὶ ὅσα παρ' ἔλη ζῆ, καθάπερ τὰ πλωτὰ καὶ στεγανόποδα, τὰ μὲν ἄλλον τρόπον χρήσιμον ἔχει τὸ ῥύγχος, τὰ δὲ πλατύρυγχα αὐτῶν ἐστὶν· τοιούτῳ γὰρ ὄντι ῥαδίως δύνατ' ὀρύσσειν, ὥσπερ καὶ τῶν τετραπόδων τὸ τῆς ὑός· καὶ γὰρ αὕτη ῥιζοφάγος. Ἔτι δ' ἔχουσι καὶ τὰ ῥιζοφάγα τῶν ὀρνέων καὶ τῶν ὁμοιοβίων ἓνια τὰ ἄκρα τοῦ ῥύγχους κεχαραγμένα· ποηφάγοις γὰρ τούτοις οὐσι ποιεῖ ῥαδίως.

Περὶ μὲν οὖν τῶν ἄλλων μορίων τῶν ἐν τῇ κεφαλῇ σχεδὸν εἴρηται, τῶν ἀνθρώπων δὲ καλεῖται τὸ μεταξὺ τῆς κεφαλῆς καὶ τοῦ ἀυχένος πρόσωπον, ἀπὸ τῆς πράξεως αὐτῆς ὀνομασθέν, ὡς ἔοικεν· διὰ γὰρ τὸ μόνον ὀρθὸν εἶναι τῶν ζώων μόνον πρόσωθεν ὅπως καὶ τὴν φωνὴν εἰς τὸ πρόσω διαπέμπει.

## Κεφάλαιο 2

Περὶ δὲ κέρατων λεκτέον· καὶ γὰρ ταῦτα πέφυκε τοῖς ἔχουσιν ἐν τῇ κεφαλῇ. Ἔχει δ' οὐδὲν μὴ ζωτόκον. Καθ' ὁμοιότητα δὲ καὶ μεταφορὰν λέγεται καὶ ἐτέρων τινῶν κέρατα· ἄλλ' οὐδενὶ αὐτῶν τὸ ἔργον τοῦ κέρατος ὑπάρχει.

Βοηθείας γὰρ καὶ ἀλκῆς χάριν ἔχουσι τὰ ζωτόκα, ὃ τῶν ἄλλων τῶν λεγομένων ἔχειν κέρας οὐδενὶ συμβέβηκεν· οὐδὲν γὰρ χρῆται τοῖς κέρασιν οὔτ' ἀμυνόμενον οὔτε πρὸς τὸ κρατεῖν, ἅπερ ἰσχύος ἐστὶν ἔργα. Ὅσα μὲν οὖν πολυσχιδῇ τῶν ζώων, οὐδὲν ἔχει κέρας. Τούτου δ' αἴτιον ὅτι τὸ μὲν κέρας βοηθείας αἴτιόν ἐστι, τοῖς δὲ πολυσχιδέσιν ὑπάρχουσιν ἕτεραι βοήθειαι·

δέδωκε γὰρ ἡ φύσις τοῖς μὲν ὄνυχας, τοῖς δ' ὀδόντας μαχητικούς, τοῖς δ' ἄλλο τι μόριον ἱκανὸν ἀμύνειν.

Τῶν δὲ διχαλῶν τὰ μὲν πολλὰ κέρατα ἔχει πρὸς ἀλκὴν, (663a.) καὶ τῶν μωνύχων ἓνια, τὰ δὲ καὶ πρὸς βοήθειαν. Ὅσοις δὲ μὴ δέδωκεν ἡ φύσις ἄλλην ἀλκὴν πρὸς σωτηρίαν, οἷον ταχυτῆτα σώματος, καθάπερ τοῖς ἵπποις βεβοήθηκεν, ἢ μέγεθος, ὥσπερ ταῖς καμήλοις· καὶ γὰρ μεγέθους ὑπερβολὴ τὴν ἀπὸ τῶν ἄλλων ζώων φθορὰν ἱκανὴ κωλύειν, ὅπερ συμβέβηκε ταῖς καμήλοις, ἔτι δὲ μᾶλλον τοῖς ἐλέφασιν.

Τὰ δὲ χαυλιόδοντα, ὥσπερ καὶ τὸ τῶν ὑῶν γένος, διχαλόν. Ὅσοις δ' ἄχρηστος πέφυκεν ἡ τῶν κεράτων ἐξοχή, τούτοις προστέθεικεν ἑτέραν βοήθειαν ἡ φύσις, οἷον ταῖς μὲν ἐλάφοις τάχος (τὸ γὰρ μέγεθος αὐτῶν καὶ τὸ πολυσχιδὲς μᾶλλον βλάπτει ἢ ὠφελεῖ), καὶ βουβάλοις δὲ καὶ δορκάσι (πρὸς ἓνια μὲν γὰρ ἀνθιστάμενα τοῖς κέρασιν ἀμύνονται, τὰ δὲ θηριώδη καὶ μάχιμα ἀποφεύγουσι), τοῖς δὲ βονάσοις (καὶ γὰρ τούτοις γαμπὰ τὰ κέρατα πέφυκε πρὸς ἄλληλα) τὴν τοῦ περιττώματος ἄφεςιν· τούτῳ γὰρ ἀμύνεται φοβηθέντα· καὶ ταύτῃ δὲ τῇ προέσει διασώζεται ἕτερα. Ἄμα δ' ἱκανὰς καὶ πλείους βοηθείας οὐ δέδωκεν ἡ φύσις τοῖς αὐτοῖς. Ἔστι δὲ τὰ πλεῖστα τῶν κερατοφόρων διχαλά, λέγεται δὲ καὶ μώνυχον, ὃν καλοῦσιν Ἰνδικὸν ὄνον. Τὰ μὲν οὖν πλεῖστα, καθάπερ καὶ τὸ σῶμα διήρηται τῶν ζώων οἷς ποιεῖται τὴν κίνησιν, δεξιὸν καὶ ἀριστερόν, καὶ κέρατα δύο πέφυκεν ἔχειν διὰ τὴν αἰτίαν ταύτην· ἔστι δὲ καὶ μονοκέρατα, οἷον ὁ τε ὄρυξ καὶ ὁ Ἰνδικὸς καλούμενος ὄνος. Ἔστι δ' ὁ μὲν ὄρυξ διχαλόν, ὁ δ' ὄνος μώνυχον. Ἐχει δὲ τὰ μονοκέρατα τὸ κέρας ἐν τῷ μέσῳ τῆς κεφαλῆς· οὕτω γὰρ ἐκάτερον τῶν μερῶν μάλιστ' ἂν ἔχοι κέρας ἓν· τὸ γὰρ μέσον ὁμοίως κοινὸν ἀμφοτέρων τῶν ἐσχάτων. Εὐλόγως δ' ἂν δόξειε μονόκερων εἶναι τὸ μώνυχον τοῦ διχαλοῦ μᾶλλον· ὅπλῃ γὰρ καὶ χηλὴ τὴν αὐτὴν ἔχει κέρατι φύσιν, ὥσθ' ἅμα καὶ τοῖς αὐτοῖς ἡ σχίσις γίνεται τῶν ὀπλῶν καὶ τῶν κεράτων.

Ἔτι δ' ἡ σχίσις καὶ τὸ διχαλὸν κατ' ἔλλειψιν τῆς φύσεώς ἐστιν, ὥστ' εὐλόγως τοῖς μωνύχοις ἐν ταῖς ὀπλαῖς δοῦσα τὴν ὑπεροχὴν ἡ φύσις ἄνωθεν ἀφεῖλε καὶ μονόκερων ἐποίησεν.

Ὅρθως δὲ καὶ τὸ ἐπὶ τῆς κεφαλῆς ποιῆσαι τὴν τῶν κεράτων φύσιν, ἀλλὰ μὴ καθάπερ ὁ Αἰσώπου Μῶμος διαμέμφεται τὸν ταῦρον, ὅτι οὐκ ἐπὶ τοῖς ὤμοις ἔχει τὰ κέρατα, ὅθεν (663b.) τὰς πληγὰς ἐποιεῖτ' ἂν ἰσχυροτάτας, ἀλλ' ἐπὶ τοῦ ἀσθενεστάτου μέρους τῆς κεφαλῆς. Οὐ γὰρ ὁξὺ βλέπων ὁ Μῶμος ταῦτ' ἐπετίμησεν. Ὡσπερ γὰρ καὶ εἰ ἐτέρωθί που τοῦ σώματος κέρατα ἐπεφύκει,

βάρος ἂν παρείχεν ἄλλως οὐδὲν ὄντα χρήσιμα καὶ ἐμπόδια τῶν ἔργων πολλοῖς ἦν, οὕτως καὶ ἐπὶ τῶν ὤμων πεφυκότα. Οὐ γὰρ μόνον χρή σκοπεῖν πόθεν ἰσχυρότεροι αἱ πληγαί, ἀλλὰ καὶ πόθεν πορρώτεροι· ὥστ' ἐπεὶ καὶ χεῖρας μὲν οὐκ ἔχουσιν, ἐπὶ δὲ τῶν ποδῶν ἀδύνατον, ἐν δὲ τοῖς γόνασιν ὄντα τὴν κάμπην ἐκώλυεν ἂν, ἀναγκαῖον ὥσπερ νῦν ἔχουσιν, ἐπὶ τῆς κεφαλῆς ἔχειν. Ἄμα δὲ καὶ πρὸς τὰς ἄλλας κινήσεις τοῦ σώματος ἀνεμπόδιστα πέφυκεν οὕτω μάλιστα. Ἔστι δὲ τὰ κέρατα δι' ὅλου στερεὰ τοῖς ἐλάφοις μόνοις, καὶ ἀποβάλλει μόνον, ἔνεκεν μὲν ὠφελείας κουφιζόμενον, ἐξ ἀνάγκης δὲ διὰ τὸ βάρος. Τῶν δ' ἄλλων τὰ κέρατα μέχρι τινὸς κοῖλα, τὰ δ' ἄκρα στερεὰ διὰ τὸ πρὸς τὰς πληγὰς τοῦτ' εἶναι χρήσιμον. Ὅπως δὲ μηδὲ τὸ κοῖλον ἀσθενὲς ἦ, πέφυκεν ἐκ τοῦ δέρματος, ἐν τούτῳ δ' ἐνήρμοσται στερεὸν ἐκ τῶν ὀστέων· οὕτω γὰρ καὶ τὰ κέρατα ἔχοντα πρὸς ἀλκὴν τε χρησιμώτατ' εἶναι, καὶ πρὸς τὸν ἄλλον βίον ἀνοχλότατα.

Τίνος μὲν οὖν ἔνεκεν ἡ τῶν κεράτων φύσις, εἴρηται, καὶ διὰ τίν' αἰτίαν τὰ μὲν ἔχουσι τοιαῦτα, τὰ δ' οὐκ ἔχουσιν· πῶς δὲ τῆς ἀναγκαίας φύσεως ἐχούσης τοῖς ὑπάρχουσιν ἐξ ἀνάγκης ἢ κατὰ τὸν λόγον φύσις ἔνεκά του κατακέχρηται, λέγωμεν. Πρῶτον μὲν οὖν τὸ σωματῶδες καὶ γεῶδες πλεῖον ὑπάρχει τοῖς μείζοσι τῶν ζώων, κερατοφόρον δὲ μικρὸν πάνπαν οὐδὲν ἴσμεν· ἐλάχιστον γὰρ ἐστὶ τῶν γνωριζομένων δορκάς. Δεῖ δὲ τὴν φύσιν θεωρεῖν εἰς τὰ πολλὰ βλέποντα· ἡ γὰρ ἐν τῷ παντὶ ἢ τῷ ὥς ἐπὶ τὸ πολὺ τὸ κατὰ φύσιν ἐστίν. Τὸ δ' ὀστέωδες ἐν τοῖς σώμασι τῶν ζώων γεῶδες ὑπάρχει· διὸ καὶ πλεῖστον ἐν τοῖς μεγίστοις ὥς ἐπὶ τὸ πολὺ βλέψαντας εἰπεῖν. Τὴν γοῦν τοιοῦτου σώματος περισσωματικὴν ὑπερβολὴν ἐν τοῖς μείζοσι τῶν ζώων ὑπάρχουσιν ἐπὶ βοήθειαν καὶ τὸ συμφέρον καταχρῆται ἡ φύσις, καὶ τὴν ῥέουσιν ἐξ ἀνάγκης εἰς τὸν ἄνω τόπον τοῖς μὲν εἰς ὀδόντας καὶ χαυλιόδοντας ἀπένειμε, τοῖς δ' εἰς κέρατα. Διὸ τῶν κερατοφόρων οὐδὲν ἐστὶν ἄμφωδον· ἄνω γὰρ οὐκ ἔχει τοὺς προσθίους (664a.) ὀδόντας· ἀφελούσα γὰρ ἐντεῦθεν ἡ φύσις τοῖς κέρασι προσέθηκε, καὶ ἡ διδομένη τροφή εἰς τοὺς ὀδόντας τούτους εἰς τὴν τῶν κεράτων αὕξησιν ἀναλίσκεται. Τοῦ δὲ τὰς θηλείας ἐλάφους κέρατα μὲν μὴ ἔχειν, περὶ δὲ τοὺς ὀδόντας ὁμοίως τοῖς ἄρρεσιν, αἴτιον τὸ τὴν αὐτὴν εἶναι φύσιν ἀμφοῖν καὶ κερατοφόρον. Ἀφήρηται δὲ τὰ κέρατα ταῖς θηλείαις διὰ τὸ χρήσιμα μὲν μὴ εἶναι μηδὲ τοῖς ἄρρεσιν, βλάπτεσθαι δ' ἥσσαν διὰ τὴν ἰσχύν. Τῶν δ' ἄλλων ζώων ὅσοις μὴ εἰς κέρατα ἀποκρίνεται τὸ τοιοῦτον μόριον τοῦ σώματος, ἐνίοις μὲν τῶν ὀδόντων αὐτῶν ἐπηύξησε τὸ μέγεθος κοινῇ πάντων, ἐνίοις δὲ χαυλιόδοντας ὥσπερ κέρατα ἐκ τῶν γνάθων ἐποίησεν.

### Κεφάλαιο 3

Περὶ μὲν οὖν τῶν ἐν τῇ κεφαλῇ μορίων ταύτῃ διωρίσθω, ὑπὸ δὲ τὴν κεφαλὴν ὁ αὐχὴν πεφυκώς ἐστὶ τοῖς ἔχουσιν αὐχένα τῶν ζώων. Οὐ γὰρ πάντα τοῦτο τὸ μόριον ἔχει. ἀλλὰ μόνα τὰ ἔχοντα ὦν χάριν ὁ αὐχὴν πέφυκεν· ταῦτα δ' ἐστὶν ὃ τε φάρυγξ καὶ ὁ καλούμενος οἰσοφάγος. Ὁ μὲν οὖν φάρυγξ τοῦ πνεύματος ἔνεκεν πέφυκεν· διὰ τούτου γὰρ εἰσάγεται τὸ πνεῦμα τὰ ζῶα καὶ ἐκπέμπει ἀναπνέοντα καὶ ἐκπνέοντα. Διὸ τὰ μὴ ἔχοντα πλεύμονα οὐκ ἔχουσιν οὐδ' αὐχένα, οἷον τὸ τῶν ἰχθύων γένος. Ὁ δ' οἰσοφάγος ἐστὶ δι' οὗ ἡ τροφή πορεύεται εἰς τὴν κοιλίαν· ὥσθ' ὅσα μὴ ἔχει αὐχένα, οὐδ' οἰσοφάγον ἐπιδήλως ἔχουσιν. Οὐκ ἀναγκαῖον δ' ἔχειν τὸν οἰσοφάγον τῆς τροφῆς ἔνεκεν· οὐθὲν γὰρ παρασκευάζει πρὸς αὐτήν. Ἔτι δὲ μετὰ τὴν τοῦ στόματος θέσιν ἐνδέχεται κεῖσθαι τὴν κοιλίαν εὐθέως, τὸν δὲ πλεύμονα οὐκ ἐνδέχεται. Δεῖ γὰρ εἶναι τινα κοινὸν οἶον αὐλῶνα, δι' οὗ μεριεῖται τὸ πνεῦμα κατὰ τὰς ἀρτηρίας εἰς τὰς σύριγγας, διμερῇ ὄντα· καὶ κάλλιστ' ἂν οὕτως ἀποτελοῖ τὴν ἀναπνοὴν καὶ ἐκπνοήν. Τοῦ δ' ὀργάνου τοῦ περὶ τὴν ἀναπνοὴν ἐξ ἀνάγκης ἔχοντος μῆκος, ἀναγκαῖον τὸν οἰσοφάγον εἶναι μεταξὺ τοῦ στόματος καὶ τῆς κοιλίας. Ἔστι δ' ὁ μὲν οἰσοφάγος σαρκώδης, ἔχων νευρώδη τάσιν, νευρώδης μὲν, ὅπως ἔχη διάτασιν εἰσιούσης τῆς τροφῆς, σαρκώδης δέ, ὅπως μαλακὸς ἦ καὶ ἐνδιδῶ καὶ μὴ βλάπτηται τραχυνόμενος ὑπὸ τῶν κατιόντων.

Ἡ δὲ καλουμένη φάρυγξ καὶ ἀρτηρία συνέστηκεν ἐκ χονδρώδους σώματος· οὐ (664b.) γὰρ μόνον ἀναπνοῆς ἔνεκεν ἐστὶν ἀλλὰ καὶ φωνῆς, δεῖ δὲ τὸ ψοφήσειν μέλλον λεῖον εἶναι καὶ στερεότητα ἔχειν. Κεῖται δ' ἔμπροσθεν ἡ ἀρτηρία τοῦ οἰσοφάγου, καίπερ ἐμποδίζουσα αὐτὸν περὶ τὴν ὑποδοχὴν τῆς τροφῆς· ἐὰν γὰρ τι παρειαυτῇ ξηρὸν ἢ ὑγρὸν εἰς τὴν ἀρτηρίαν, πνιγμοὺς καὶ πόνους καὶ βῆχας χαλεπὰς ἐμποιεῖ. Ὁ δὲ καὶ θαυμάσειεν ἂν τις τῶν λεγόντων ὡς ταύτῃ τὸ ποτὸν δέχεται τὸ ζῶον· συμβαίνει γὰρ φανερώς τὰ λεχθέντα πᾶσιν, οἷς ἂν παραρρυῇ τι τῆς τροφῆς. Πολλαχῇ δὲ γελοῖον φαίνεται τὸ λέγειν ὡς ταύτῃ τὸ ποτὸν εἰσδέχεται τὰ ζῶα. Πόρος γὰρ οὐδεὶς ἐστὶν εἰς τὴν κοιλίαν ἀπὸ τοῦ πλεύμονος, ὥσπερ ἐκ τοῦ στόματος ὀρώμεν τὸν οἰσοφάγον. Ἔτι δ' ἐν τοῖς ἐμέτοις καὶ ναυτίαις οὐκ ἄδηλον πόθεν τὸ ὑγρὸν φαίνεται πορευόμενον. Δῆλον δὲ καὶ ὅτι οὐκ εὐθέως εἰς τὴν κύστιν συλλέγεται τὸ ὑγρὸν, ἀλλ' εἰς τὴν κοιλίαν πρότερον· τὰ γὰρ τῆς κοιλίας περιττώματα φαίνεται χρωματίζειν ἢ ἰλὺς τοῦ μέλανος οἴνου· συμβέβηκε δὲ τοῦτο πολλάκις φανερόν καὶ ἐπὶ τῶν εἰς τὴν κοιλίαν τραυμάτων. Ἀλλὰ γὰρ ἴσως εὐηθες τὸ τοὺς εὐήθεις τῶν λόγων λίαν ἐξετάζειν.

Ἡ δ' ἀρτηρία τῷ διακεῖσθαι, καθάπερ εἴπομεν, ἐν τῷ πρόσθεν ὑπὸ τῆς τροφῆς ἐνοχλεῖται· ἀλλ' ἡ φύσις πρὸς τοῦτο μεμηχάνηται τὴν ἐπιγλωσσίδα. Ταύτην δ' οὐκ ἔχουσιν ἅπαντα τὰ ζωοτοκοῦντα, ἀλλ' ὅσα πλεύμονα ἔχει καὶ

τὸ δέρμα τριχωτόν, καὶ μὴ φολιδωτὰ μηδὲ περωτὰ πέφυκεν. Τούτοις δ' ἀντὶ τῆς ἐπιγλωττίδος συνάγεται καὶ διοίγεται ὁ φάρυγξ, ὥνπερ τρόπον ἐκείνοις ἐπιβάλλει τε καὶ ἀναπτύσσεται τοῦ πνεύματος τῇ εἰσόδῳ τε καὶ ἐξόδῳ ἀναπτυσσομένη, τῆς δὲ τροφῆς εἰσιούσης ἐπιπτυσσομένη, ἵνα μὴθὲν παραρρυῇ παρὰ τὴν ἀρτηρίαν. Ἐὰν δέ τι πλημμεληθῇ παρὰ τὴν τοιαύτην κίνησιν καὶ προσφερομένης τῆς τροφῆς ἀναπνεύσει τις, βῆχας καὶ πνιγμοὺς ποιεῖ, καθάπερ εἴρηται. Οὕτω δὲ καλῶς μεμηχάνηται καὶ ἡ ταύτης καὶ ἡ τῆς γλώττης κίνησις, ὥστε τῆς τροφῆς ἐν μὲν τῷ στόματι λεαινομένης, παρ' αὐτὴν δὲ διουούσης, τὴν μὲν ὀλιγάκις ὑπὸ τοὺς ὀδόντας πίπτειν, εἰς δὲ τὴν ἀρτηρίαν σπάνιον τι παραρρεῖν. Οὐκ ἔχει δὲ τὰ λεχθέντα ζῶα τὴν (665a.) ἐπιγλωττίδα διὰ τὸ ξηρὰς εἶναι τὰς σάρκας αὐτῶν καὶ τὸ δέρμα σκληρόν, ὥστ' οὐκ ἂν εὐκίνητον ἦν τὸ τοιοῦτον μόριον αὐτοῖς ἐκ τοιαύτης σαρκὸς καὶ ἐκ τοιούτου δέρματος συνεστηκός, ἀλλ' αὐτῆς τῆς ἀρτηρίας τῶν ἐσχάτων θᾶσσον ἐγίνετο ἂν ἡ συναγωγή τῆς ἐκ τῆς οἰκείας σαρκὸς ἐπιγλωττίδος, ἣν ἔχουσι τὰ τριχωτά. Δι' ἣν μὲν οὖν αἰτίαν τὰ μὲν ἔχει τῶν ζώων τὰ δ' οὐκ ἔχει, ταῦτ' εἰρήσθω, καὶ διότι τῆς ἀρτηρίας τὴν φαυλότητα τῆς θέσεως ἰάτρευκεν ἡ φύσις, μηχανησαμένη τὴν καλουμένην ἐπιγλωττίδα.

Κεῖται δ' ἔμπροσθεν ἡ φάρυγξ τοῦ οἰσοφάγου ἐξ ἀνάγκης. Ἡ μὲν γὰρ καρδία ἐν τοῖς ἔμπροσθεν καὶ ἐν μέσῳ κεῖται, ἐν ἣ τὴν ἀρχὴν φαμεν τῆς ζωῆς καὶ πάσης κινήσεώς τε καὶ αἰσθήσεως (ἐπὶ τὸ καλούμενον γὰρ ἔμπροσθεν ἡ αἴσθησις καὶ ἡ κίνησις· αὐτῷ γὰρ τῷ λόγῳ τούτῳ διώρισται τὸ ἔμπροσθεν καὶ ὅπισθεν), ὁ δὲ πλεύμων κεῖται οὐ ἡ καρδία καὶ περὶ ταύτην, ἡ δ' ἀναπνοὴ διὰ τε τοῦτο καὶ διὰ τὴν ἀρχὴν τὴν ἐν τῇ καρδίᾳ ἐνυπάρχουσαν. Ἡ δ' ἀναπνοὴ γίνεται τοῖς ζώοις διὰ τῆς ἀρτηρίας· ὥστ' ἐπεὶ τὴν καρδίαν ἐν τοῖς ἔμπροσθεν πρῶτην ἀναγκαῖον κεῖσθαι, καὶ τὸν φάρυγγα καὶ τὴν ἀρτηρίαν πρότερον ἀναγκαῖον κεῖσθαι τοῦ οἰσοφάγου· τὰ μὲν γὰρ πρὸς τὸν πλεύμονα τείνει καὶ τὴν καρδίαν, ὁ δ' εἰς τὴν κοιλίαν. Ὅλως δ' αἰεὶ τὸ βέλτιον καὶ τιμιώτερον, ὅπου μὴ τι μεῖζον ἕτερον ἐμποδίζει, τοῦ μὲν ἄνω καὶ κάτω ἐν τοῖς μᾶλλον ἐστὶν ἄνω, τοῦ δ' ἔμπροσθεν καὶ ὅπισθεν ἐν τοῖς ἔμπροσθεν, τοῦ δεξιοῦ δὲ καὶ ἀριστεροῦ ἐν τοῖς δεξιοῖς.

## Κεφάλαιο 4

Καὶ περὶ μὲν αὐχένος τε καὶ οἰσοφάγου καὶ ἀρτηρίας εἴρηται, ἐπόμενον δ' ἐστὶ περὶ σπλάγχνων εἰπεῖν.

Ταῦτα δ' ἐστὶν ἴδια τῶν ἐναίμων, καὶ τοῖς μὲν ἅπανθ' ὑπάρχει, τοῖς δ' οὐχ ὑπάρχει. Τῶν δ' ἀναίμων οὐδὲν ἔχει σπλάγχνον.

Δημόκριτος δ' ἔοικεν οὐ καλῶς διαλαβεῖν περὶ αὐτῶν, εἴπερ ὥηθη διὰ μικρότητα τῶν ἀναίμων ζώων ἄδηλα εἶναι ταῦτα. Συνισταμένων γὰρ εὐθέως τῶν ἐναίμων καὶ πάμπαν ὄντων μικρῶν ἔνδηλα γίνεται καρδία τε καὶ ἥπαρ· φαίνεται γὰρ ἐν μὲν τοῖς ὥοις ἐνίοτε τριταίοις οὖσι στιγμῆς (665b.) ἔχοντα μέγεθος, πάμμικρα δὲ καὶ ἐν τοῖς ἐκβολίμοις τῶν ἐμβρύων. Ἔτι δ' ὥσπερ τῶν ἐκτὸς μορίων οὐ πᾶσι τῶν αὐτῶν χρῆσις, ἀλλ' ἐκάστοις ἰδίᾳ πεπόρισται πρὸς τε τοὺς βίους καὶ τὰς κινήσεις, οὕτω καὶ τὰ ἐντὸς ἄλλα πέφυκεν ἄλλοις. Τὰ δὲ σπλάγχνα τῶν αἱματικῶν ἐστὶν ἴδια, διὸ καὶ συνέστηκεν αὐτῶν ἕκαστον ἐξ αἱματικῆς ὕλης. Δῆλον δ' ἐν τοῖς νεογνοῖς τούτων· αἱματωδέστερα γὰρ καὶ μέγιστα κατὰ λόγον διὰ τὸ εἶναι τὸ εἶδος τῆς ὕλης καὶ τὸ πλῆθος ἐμφανέστατον κατὰ τὴν πρώτην σύστασιν.

Καρδία μὲν οὖν ἅπασιν ὑπάρχει τοῖς ἐναίμοις· δι' ἣν δ' αἰτίαν, εἴρηται καὶ πρότερον· Αἷμα μὲν γὰρ ἔχειν τοῖς ἐναίμοις δῆλον ὡς ἀναγκαῖον· ὑγροῦ δ' ὄντος τοῦ αἵματος ἀναγκαῖον ἀγγεῖον ὑπάρχειν, ἐφ' ὃ δὴ καὶ φαίνεται μεμηχανῆσθαι τὰς φλέβας ἢ φύσις. Ἀρχὴν δὲ τούτων ἀναγκαῖον εἶναι μίαν· ὅπου γὰρ ἐνδέχεται, μίαν βέλτιον ἢ πολλὰς. Ἡ δὲ καρδία τῶν φλεβῶν ἀρχὴ· φαίνονται γὰρ ἐκ ταύτης οὔσαι καὶ οὐ διὰ ταύτης, καὶ ἡ φύσις αὐτῆς φλεβώδης ὡς ὁμογενοῦς οὔσης.

Ἔχει δὲ καὶ ἡ θέσις αὐτῆς ἀρχικὴν χώραν· περὶ μέσον γάρ, μᾶλλον δ' ἐν τῷ ἄνω ἢ κάτω καὶ ἔμπροσθεν ἢ ὀπίσθεν· ἐν τοῖς γὰρ τιμιωτέροις τὸ τιμιώτερον καθίδρυκεν ἡ φύσις, οὗ μὴ τι κωλύει μεῖζον. Ἐμφανέστατον δὲ τὸ λεχθέν ἐστὶν ἐπὶ τῶν ἀνθρώπων, βούλεται δὲ καὶ ἐν τοῖς ἄλλοις ὁμολόγως ἐν μέσῳ κεῖσθαι τοῦ ἀναγκαίου σώματος. Τούτου δὲ πέρας ἢ τὰ περιττώματα ἀποκρίνεται· τὰ δὲ κῶλα πέφυκεν ἄλλοις ἄλλως, καὶ οὐκ ἔστι τῶν πρὸς τὸ ζῆν ἀναγκαίων, διὸ καὶ ἀφαιρουμένων ζῶσιν· δῆλον δ' ὡς οὐδὲ προστιθέμενα φθείρει. Οἱ δ' ἐν τῇ κεφαλῇ λέγοντες τὴν ἀρχὴν τῶν φλεβῶν οὐκ ὀρθῶς ὑπέλαβον. Πρῶτον μὲν γὰρ πολλὰς ἀρχὰς καὶ διεσπαρμένας ποιοῦσιν, εἴτ' ἐν τόπῳ ψυχρῷ. Δηλοῖ δὲ δύσριγος ὢν, ὃ δὲ περὶ τὴν καρδίαν τούναντίον. Ὡσπερ δ' ἐλέχθη, διὰ μὲν τῶν ἄλλων σπλάγχνων διέχουσιν αἱ φλέβες, διὰ δὲ τῆς καρδίας οὐ διατείνει φλέψ· ὅθεν καὶ δῆλον ὅτι μόριον καὶ ἀρχὴ τῶν φλεβῶν ἐστὶν ἡ καρδία. Καὶ τοῦτ' εὐλόγως· μέσον γὰρ τὸ τῆς καρδίας ἐστὶ σῶμα πυκνὸν καὶ κοῖλον πεφυκός, ἔτι δὲ πλήρες αἵματος (666a.) ὡς τῶν φλεβῶν ἐντεῦθεν ἠργγμένων, κοῖλον μὲν πρὸς τὴν ὑποδοχὴν τοῦ αἵματος, πυκνὸν δὲ πρὸς τὸ φυλάσσειν τὴν ἀρχὴν τῆς θερμότητος. Ἐν ταύτῃ γὰρ μόνη τῶν σπλάγχνων καὶ τοῦ σώματος αἷμα ἄνευ φλεβῶν ἐστι, τῶν δ' ἄλλων μορίων ἕκαστον ἐν ταῖς φλεβὶν ἔχει τὸ αἷμα. Καὶ τοῦτ' εὐλόγως· ἐκ τῆς καρδίας γὰρ ἐποχετεύεται καὶ εἰς τὰς φλέβας, εἰς δὲ τὴν καρδίαν οὐκ



ἄλλοθεν· αὕτη γάρ ἐστιν ἀρχὴ ἢ πηγὴ τοῦ αἵματος καὶ ὑποδοχὴ πρώτη. Ἐκ τῶν ἀνατομῶν δὲ κατάδηλα μᾶλλον ταῦτα, καὶ ἐκ τῶν γενέσεων· εὐθέως γάρ ἐστιν ἔναιμος πρώτη γινομένη τῶν μορίων ἀπάντων. Ἔτι δ' αἱ κινήσεις τῶν ἡδέων καὶ τῶν λυπηρῶν καὶ ὅλως πάσης αἰσθήσεως ἐντεῦθεν ἀρχόμεναι φαίνονται καὶ πρὸς ταύτην περαίνουσai. Οὕτω δ' ἔχει καὶ κατὰ τὸν λόγον· ἀρχὴν γὰρ εἶναι δεῖ μίαν ὅπου ἐνδέχεται. Εὐφυέστατος δὲ τῶν τόπων ὁ μέσος· ἐν γὰρ τὸ μέσον καὶ ἐπὶ πᾶν ἐφικτὸν ὁμοίως ἢ παραπλησίως. Ἔτι δ' ἐπεὶ οὔτε τῶν ἀναίμων οὐθὲν αἰσθητικὸν οὔτε τὸ αἷμα, δῆλον ὡς τὸ πρῶτον ἔχον ὡς ἐν ἀγγείῳ δ' ἔχον ἀναγκαῖον εἶναι τὴν ἀρχήν. Οὐ μόνον δὲ κατὰ τὸν λόγον οὕτως ἔχειν φαίνεται, ἀλλὰ καὶ κατὰ τὴν αἴσθησιν· ἐν γὰρ τοῖς ἐμβρύοις εὐθέως ἡ καρδία φαίνεται κινουμένη τῶν μορίων καθάπερ εἰ ζῶν, ὡς ἀρχὴ τῆς φύσεως τοῖς ἐναίμοις οὔσα. Μαρτύριον δὲ τῶν εἰρημένων καὶ τὸ πᾶσι τοῖς ἐναίμοις ὑπάρχειν αὐτήν· ἀναγκαῖον γὰρ αὐτοῖς ἔχειν τὴν ἀρχὴν τοῦ αἵματος. Ὑπάρχει δὲ καὶ τὸ ἦπαρ πᾶσι τοῖς ἐναίμοις· ἀλλ' οὐθεὶς ἂν ἀξιώσειεν αὐτὸ ἀρχὴν εἶναι οὔτε τοῦ ὅλου σώματος οὔτε τοῦ αἵματος· κεῖται γὰρ οὐδαμῶς πρὸς ἀρχοειδῇ θέσιν, ἔχει δ' ὥσπερ ἀντίζυγον ἐν τοῖς μάλιστ' ἀπηκριβωμένοις τὸν σπλῆνα. Ἔτι δ' ὑποδοχὴν αἵματος οὐκ ἔχει ἐν ἑαυτῷ καθάπερ ἡ καρδία, ἀλλ' ὥσπερ τὰ λοιπά, ἐν φλεβί. Ἔτι δὲ τείνει δι' αὐτοῦ φλέψ, δι' ἐκείνης δ' οὐδεμία· πασῶν γὰρ τῶν φλεβῶν ἐκ τῆς καρδίας αἱ ἀρχαί. Ἐπεὶ οὖν ἀνάγκη μὲν θάτερον τούτων ἀρχὴν εἶναι, μὴ ἔστι δὲ τὸ ἦπαρ, ἀνάγκη τὴν καρδίαν εἶναι καὶ τοῦ αἵματος ἀρχήν. Τὸ μὲν γὰρ ζῶον αἰσθήσει ὠρίσται, αἰσθητικὸν δὲ πρῶτον τὸ πρῶτον ἔναιμον, τοιοῦτον δ' ἡ καρδία· καὶ γὰρ (666b.) ἀρχὴ τοῦ αἵματος καὶ ἔναιμον πρῶτον.

Ἔστι δ' αὐτῆς τὸ ἄκρον ὀξύ καὶ στερεώτερον, κεῖται δὲ πρὸς τῷ στήθει καὶ ὅλως ἐν τοῖς πρόσθεν τοῦ σώματος πρὸς τὸ μὴ καταψύχεσθαι αὐτό· πᾶσι γὰρ ἀσαρκότερον τὸ στήθος, τὰ δὲ πρᾶνῃ σαρκωδέστερα, διὸ πολλὴν ἔχει σκέπην τὸ θερμὸν κατὰ τὸν νῶτον. Ἔστι δ' ἡ καρδία τοῖς μὲν ἄλλοις ζώοις κατὰ μέσον τοῦ στηθικοῦ τόπου, τοῖς δ' ἀνθρώποις μικρὸν εἰς τὰ εὐώνυμα παρεγκλίνουσα πρὸς τὸ ἀνισοῦν τὴν κατάψυχιν τῶν ἀριστερῶν· μάλιστα γὰρ τῶν ἄλλων ζώων ἄνθρωπος ἔχει κατεψυγμένα τὰ ἀριστερά. Ὅτι δὲ καὶ ἐν τοῖς ἰχθύσιν ὁμοίως ἡ καρδία κεῖται, πρότερον εἴρηται, καὶ διότι φαίνεται ἀνομοίως. Ἔχει δὲ πρὸς τὴν κεφαλὴν τὸ ὀξύ, ἔστι δ' αὕτη τὸ πρόσθεν· ἐπὶ ταύτην γὰρ ἡ κίνησις. Ἔχει δὲ καὶ νεύρων πλῆθος ἡ καρδία, καὶ τοῦτ' εὐλόγως· ἀπὸ ταύτης γὰρ αἱ κινήσεις, περαίνονται δὲ διὰ τοῦ ἔλκειν καὶ ἀνιέναι· δεῖ οὖν τοιαύτης ὑπηρεσίας καὶ ἰσχύος. Ἡ δὲ καρδία, καθάπερ εἵπομεν καὶ πρότερον, οἶον ζῶόν τι πέφυκεν ἐν τοῖς ἔχουσιν. Ἔστι δ' ἀνόστεος πάντων ὅσα καὶ ἡμεῖς τεθεάμεθα, πλὴν τῶν ἵππων καὶ γένους τινὸς βοῶν· τούτοις δὲ διὰ τὸ μέγεθος οἶον ἐρείσματος χάριν ὅστοῦν ὑπεστι,

καθάπερ καὶ τοῖς ὅλοις σώμασιν. Κοιλίας δ' ἔχουσιν αἱ μὲν τῶν μεγάλων ζώων τρεῖς, αἱ δὲ τῶν ἐλασσόνων δύο, μίαν δὲ πᾶσαι· δι' ἣν δ' αἰτίαν, εἴρηται. Δεῖ γὰρ εἶναι τόπον τινὰ τῆς καρδίας καὶ ὑποδοχὴν τοῦ πρώτου αἵματος. Ὅτι δὲ πρῶτον ἐν τῇ καρδίᾳ γίνεται τὸ αἷμα, πολλάκις εἰρήκαμεν, διὰ τὸ τὰς ἀρχηγοὺς φλέβας δύο εἶναι, τὴν τε μεγάλην καλουμένην καὶ τὴν ἄορτήν.

Ἐκατέρας γὰρ οὔσης ἀρχῆς τῶν φλεβῶν, καὶ διαφορὰς ἔχουσιν, περὶ ὧν ὕστερον ἐροῦμεν, βέλτιον καὶ τὰς ἀρχὰς αὐτῶν κεχωρίσθαι· τοῦτο δ' ἂν εἴη διαφόρου ὄντος τοῦ αἵματος καὶ κεχωρισμένου. Διόπερ ἐν οἷς ἐνδέχεται, δύο εἰσὶν ὑποδοχαί. Ἐνδέχεται δ' ἐν τοῖς μεγάλοις· τούτων γὰρ ἔχουσι καὶ αἱ καρδίαι μέγεθος. Ἔτι δὲ βέλτιον τρεῖς εἶναι τὰς κοιλίας, ὅπως ἢ μία ἀρχὴ κοινὴ· τὸ δὲ μέσον καὶ περιττὸν ἀρχή· ὥστε μεγέθους δεῖ μείζονος αὐταῖς αἰεὶ, διόπερ αἱ μέγισται τρεῖς ἔχουσι μόναι. Τούτων δὲ πλεῖστον μὲν αἷμα (667a.) καὶ θερμότατον ἔχουσιν αἱ δεξιαί (διὸ καὶ τῶν μερῶν θερμότερα τὰ δεξιά), ἐλάχιστον δὲ καὶ ψυχρότερον αἱ ἀριστεραί, μέσον δ' αἱ μέσαι τῷ πλήθει καὶ θερμότητι, καθαρώτατον δέ· δεῖ γὰρ τὴν ἀρχὴν ὅτι μάλιστ' ἡρεμεῖν, τοιαύτη δ' ἂν εἴη καθαροῦ τοῦ αἵματος ὄντος, τῷ πλήθει δὲ καὶ θερμότητι μέσου. Ἔχουσι δὲ καὶ διαίρεσιν τινα αἱ καρδίαι παραπλησίαν ταῖς ῥαφαῖς. Οὐκ εἰσὶ δὲ συναφεῖς ὥς τινος ἐκ πλειόνων συνθέτου ἀλλά, καθάπερ εἵπομεν, διαρθρώσει μᾶλλον.

Εἰσὶ δὲ τῶν μὲν αἰσθητικῶν ἀρθρωδέστεραι, τῶν δὲ νωθροτέρων ἀναρθρότεραι, καθάπερ αἱ τῶν ὕων.

Αἱ δὲ διαφοραὶ τῆς καρδίας κατὰ μέγεθός τε καὶ μικρότητα καὶ σκληρότητα καὶ μαλακότητα τείνουσί πῃ καὶ πρὸς τὰ ἥθη. Τὰ μὲν γὰρ ἀναίσθητα σκληρὰν ἔχει τὴν καρδίαν καὶ πυκνήν, τὰ δ' αἰσθητικὰ μαλακώτεραν· καὶ τὰ μὲν μεγάλας ἔχοντα τὰς καρδίας δειλά, τὰ δὲ ἐλάσσους καὶ μέσας θαρραλεώτερα.

Τὸ γὰρ συμβαῖνον πάθος ὑπὸ τοῦ φοβεῖσθαι προϋπάρχει τούτοις, διὰ τὸ μὴ ἀνάλογον ἔχειν τὸ θερμὸν τῇ καρδίᾳ, μικρὸν δ' ὄν ἐν μεγάλοις ἀμαυροῦσθαι, καὶ τὸ αἷμα ψυχρότερον εἶναι. Μεγάλας δὲ τὰς καρδίας ἔχουσι, λαγῶς, ἔλαφος, μῦς, ὕαινα, ὄνος, πάρδαλις, γαλῆ, καὶ τᾶλλα σχεδὸν πάνθ' ὅσα φανερώς δειλὰ ἢ διὰ φόβον κακοῦργα. Παραπλησίως δὲ καὶ ἐπὶ τῶν φλεβῶν καὶ ἐπὶ τῶν κοιλιῶν ἔχει· ψυχραὶ γὰρ αἱ μεγάλαι φλέβες καὶ κοιλίαι. Ὡς περ γὰρ ἐν μικρῷ καὶ ἐν μεγάλῳ οἰκῆματι τὸ ἴσον πῦρ ἤσσον ἐν τοῖς μείζοσι θερμαίνει, οὕτω κἂν τούτοις τὸ θερμόν· ἀγγεῖα γὰρ καὶ ἡ φλεψὶ καὶ ἡ κοιλία.

Ἔτι δ' αἱ ἀλλότριαι κινήσεις ἕκαστον τῶν θερμῶν καταψύχουσιν, ἐν δὲ ταῖς εὐρυχωρεστέραις τὸ πνεῦμα πλεῖον καὶ ἐνισχύει μᾶλλον· διὸ τῶν μεγαλοκοιλιῶν οὐδὲν οὐδὲ τῶν μεγαλοφλέβων πῖόν ἐστι κατὰ σάρκα, ἀλλὰ πάντα ἢ τὰ πλεῖστα τῶν τοιούτων ἀδηλόφλεβα καὶ μικροκοίλια φαίνεται.

Μόνον δὲ τῶν σπλάγχνων καὶ ὅλως τῶν ἐν τῷ σώματι μορίων ἡ καρδία χαλεπὸν πάθος οὐδὲν ὑποφέρει, καὶ τοῦτ' εὐλόγως· φθειρομένης γὰρ τῆς ἀρχῆς οὐκ ἔστιν ἐξ οὗ γένοιτ' ἂν βοήθεια τοῖς ἄλλοις ἐκ ταύτης ἡρτημένοις. Σημεῖον δὲ τοῦ μηθὲν ἐπιδέχεσθαι πάθος τὴν καρδίαν τὸ ἐν μηδενὶ τῶν θυομένων (667b.) ἱερείων ὥφθαι τοιοῦτον πάθος περὶ αὐτὴν ὥσπερ ἐπὶ τῶν ἄλλων σπλάγχνων. Οἱ τε γὰρ νεφροὶ πολλάκις φαίνονται λίθων μεστοὶ καὶ φυμάτων καὶ δοθιήνων καὶ τὸ ἥπαρ, ὡσαύτως δὲ καὶ ὁ πλεύμων, μάλιστα δὲ ὁ σπλήν. Πολλὰ δὲ καὶ ἕτερα παθήματα συμβαίνοντα περὶ αὐτὰ φαίνεται, ἥκιστα δὲ τοῦ μὲν πλεύμονος περὶ τὴν ἀρτηρίαν, τοῦ δ' ἥπατος περὶ τὴν σύναψιν τῇ μεγάλῃ φλεβί, καὶ ταῦτ' εὐλόγως· ταύτη γὰρ μάλιστα κοινωνοῦσι τῇ καρδίᾳ. Ὅσα δὲ διὰ νόσον καὶ τοιαῦτα πάθη φαίνεται τελευτῶντα τῶν ζώων, τούτοις ἀνατεμνομένοις φαίνεται περὶ τὴν καρδίαν νοσώδη πάθη.

Καὶ περὶ μὲν τῆς καρδίας, ποία τις, καὶ τίνος ἔνεκεν καὶ διὰ τίν' αἰτίαν ὑπάρχει τοῖς ἔχουσιν τοσαῦτ' εἰρήσθω.

## Κεφάλαιο 5

Ἐπόμενον δ' ἂν εἴη καὶ περὶ φλεβῶν εἰπεῖν, τῆς τε μεγάλης καὶ τῆς ἀορτῆς· αὗται γὰρ ἐκ τῆς καρδίας πρῶται δέχονται τὸ αἷμα, αἱ δὲ λοιπαὶ τούτων ἀποφυάδες εἰσίν. Ὅτι μὲν οὖν τοῦ αἵματος χάριν εἰσὶ, πρότερον εἴρηται· τό τε γὰρ ὑγρὸν ἅπαν ἀγγείου δεῖται, καὶ τὸ φλεβῶν γένος ἀγγεῖον, τὸ δ' αἷμα ἐν ταύταις· διότι δὲ δύο καὶ ἀπὸ μιᾶς ἀρχῆς καθ' ἅπαν τὸ σῶμα διατείνουσι, λέγωμεν. Τοῦ μὲν οὖν εἰς μίαν ἀρχὴν συντελεῖν καὶ ἀπὸ μιᾶς αἰτίας τὸ μίαν ἔχειν πάντα τὴν αἰσθητικὴν ψυχὴν ἐνεργείᾳ, ὥστε καὶ τὸ μόριον ἐν τῷ ταύτην ἔχον πρώτως, ἐν μὲν τοῖς ἐναίμοις κατὰ δύναμιν καὶ κατ' ἐνέργειαν, τῶν δ' ἀναίμων ἐνίοις κατ' ἐνέργειαν μόνον. Διὸ καὶ τὴν τοῦ θερμοῦ ἀρχὴν ἀναγκαῖον ἐν τῷ αὐτῷ τόπῳ εἶναι· αὕτη δ' ἐστὶν αἰτία καὶ τῷ αἵματι τῆς ὑγρότητος καὶ τῆς θερμότητος. Διὰ μὲν οὖν τὸ ἐν ἐνὶ εἶναι μορίῳ τὴν αἰσθητικὴν ἀρχὴν καὶ τὴν τῆς θερμότητος καὶ ἡ τοῦ αἵματος ἀπὸ μιᾶς ἐστὶν ἀρχῆς, διὰ δὲ τὴν τοῦ αἵματος ἐνότητα καὶ ἡ τῶν φλεβῶν ἀπὸ μιᾶς. Δύο δ' εἰσὶ διὰ τὸ τὰ σώματα εἶναι διμερῆ τῶν ἐναίμων καὶ πορευτικῶν· ἐν πᾶσι γὰρ τούτοις διώριστα τὸ ἔμπροσθεν καὶ τὸ ὀπίσθεν καὶ τὸ δεξιὸν καὶ τὸ ἀριστερὸν καὶ τὰ ἄνω καὶ τὸ κάτω. Ὅσω δὲ τιμιώτερον καὶ ἡγεμονικώτερον

τὸ ἔμπροσθεν τοῦ ὀπισθεν, τοσοῦτω καὶ ἡ μεγάλη φλέψ τῆς ἀορτῆς.

Ἡ μὲν γὰρ ἐν τοῖς ἔμπροσθεν, ἡ δ' ἐν τοῖς ὀπισθεν κεῖται, καὶ τὴν μὲν ἅπαντ' ἔχει τὰ ἔναιμα φανερώς, (668a.) τὴν δ' ἔνια μὲν ἀμυδρώς ἔνια δ' ἀφανώς. Τοῦ δ' εἰς τὸ πᾶν διαδεδόσθαι τὸ σῶμα τὰς φλέβας αἴτιον τὸ παντὸς εἶναι τοῦ σώματος ὕλην τὸ αἶμα, τοῖς δ' ἀναίμοις τὸ ἀνάλογον, ταῦτα δ' ἐν φλεβὶ καὶ τῷ ἀνάλογον κεῖσθαι. Πῶς μὲν οὖν τρέφεται τὰ ζῶα καὶ ἐκ τίνος καὶ τίνα τρόπον ἀναλαμβάνουσιν ἐκ τῆς κοιλίας, ἐν τοῖς περὶ γενέσεως λόγοις μᾶλλον ἀρμόζει σκοπεῖν καὶ λέγειν. Συνισταμένων δὲ τῶν μορίων ἐκ τοῦ αἵματος, καθάπερ εἵπομεν, εὐλόγως ἡ τῶν φλεβῶν ῥύσις διὰ παντὸς τοῦ σώματος πέφυκεν· δεῖ γὰρ καὶ τὸ αἶμα διὰ παντὸς καὶ παρὰ πᾶν εἶναι, εἴπερ τῶν μορίων ἕκαστον ἐκ τούτου συνέστηκεν. Ἔοικε δ' ὥσπερ ἐν τε τοῖς κήποις αἱ ὕδραγωγίαι κατασκευάζονται ἀπὸ μιᾶς ἀρχῆς καὶ πηγῆς εἰς πολλοὺς ὀχετοὺς καὶ ἄλλους ἀεὶ πρὸς τὸ πάντῃ μεταδιδόναι, καὶ ἐν ταῖς οἰκοδομίαις παρὰ πᾶσαν τὴν τῶν θεμελίων ὑπογραφὴν λίθοι παραβέβληνται διὰ τὸ τὰ μὲν κηπευόμενα φύεσθαι ἐκ τοῦ ὕδατος, τοὺς δὲ θεμελίους ἐκ τῶν λίθων οἰκοδομεῖσθαι, τὸν αὐτὸν τρόπον καὶ ἡ φύσις τὸ αἶμα διὰ παντὸς ὠχέτευκε τοῦ σώματος, ἐπειδὴ παντὸς ὕλη πέφυκε τοῦτο. Γίνεται δὲ κατάδηλον ἐν τοῖς μάλιστα καταλελεπτυσμένοις οὐθὲν γὰρ ἄλλο φαίνεται παρὰ τὰς φλέβας, καθάπερ ἐπὶ τῶν ἀμπελίνων τε καὶ συκίνων φύλλων καὶ ὅσ' ἄλλα τοιαῦτα· καὶ γὰρ τούτων αὐαινομένων φλέβες λείπονται μόνον.

Τούτων δ' αἴτιον ὅτι τὸ αἶμα καὶ τὸ ἀνάλογον τούτῳ δυνάμει σῶμα καὶ σὰρξ ἢ τὸ ἀνάλογόν ἐστιν· καθάπερ οὖν ἐν ταῖς ὀχετείαις αἱ μέγισται τῶν τάφρων διαμένουσιν, αἱ δ' ἐλάχισται πρῶται καὶ ταχέως ὑπὸ τῆς ἰλῦος ἀφανίζονται, πάλιν δ' ἐκλειπούσης φανεραὶ γίνονται, τὸν αὐτὸν τρόπον καὶ τῶν φλεβῶν αἱ μὲν μέγισται διαμένουσιν, αἱ δ' ἐλάχισται γίνονται σάρκες ἐνεργεῖα, δυνάμει δ' εἰσὶν οὐδὲν ἥσσον φλέβες.

Διὸ καὶ σωζομένων τῶν σαρκῶν καθ' ὅτι οὖν αἶμα ῥεῖ διαιρουμένων· καίτοι ἄνευ μὲν φλεβὸς οὐκ ἔστιν αἶμα, φλέβιον δ' οὐδὲν δῆλον, ὥσπερ οὐδ' ἐν τοῖς ὀχετοῖς αἱ τάφροι πρὶν ἢ τὴν ἰλὺν ἐξαιρεθῆναι.

Ἐκ μειζόνων δ' εἰς ἐλάσσους αἱ φλέβες ἀεὶ προέρχονται, ἕως τοῦ γενέσθαι τοὺς πόρους ἐλάσσους (668b.) τῆς τοῦ αἵματος παχύτητος· δι' ὧν τῷ μὲν αἵματι δίοδος οὐκ ἔστι, τῷ δὲ περιττώματι τῆς ὑγρᾶς ἱκμάδος, ὃν καλοῦμεν ἰδρῶτα, καὶ τοῦτο διαθερμανθέντος τοῦ σώματος καὶ τῶν φλεβίων ἀναστομωθέντων. Ἦδη δὲ τισιν ἰδρῶσαι συνέβη αἱματώδει περιττώματι διὰ καχεξίαν, τοῦ μὲν σώματος ῥυάδος καὶ μανοῦ γενομένου, τοῦ δ' αἵματος

ἐξυγρυνθέντος δι' ἀπεψίαν, ἀδυνατούσης τῆς ἐν τοῖς φλεβίοις θερμότητος πέσσειν δι' ὀλιγότητα. Εἴρηται γὰρ ὅτι πᾶν τὸ κοινὸν γῆς καὶ ὕδατος παχύνεται πεσσόμενον, ἡ δὲ τροφή καὶ τὸ αἷμα μικτὸν ἐξ ἀμφοῖν. Ἀδυνατεῖ δὲ πέσσειν ἡ θερμότης οὐ μόνον διὰ τὴν αὐτῆς ὀλιγότητα ἀλλὰ καὶ διὰ πλῆθος καὶ ὑπερβολὴν τῆς εἰσφερομένης τροφῆς· γίνεται δὲ πρὸς ταύτην ὀλίγη. Ἡ δ' ὑπερβολὴ δισσή· καὶ γὰρ τῷ ποσῷ καὶ τῷ ποιῷ. Οὐ γὰρ πᾶν ὁμοίως εὐπεπτον.

Ῥεῖ δὲ μάλιστα τὸ αἷμα κατὰ τοὺς εὐρυχωρεστάτους τῶν πόρων· διόπερ ἐκ τῶν μυκτῆρων καὶ τῶν οὐλῶν καὶ τῆς ἔδρας, ἐνίοτε δὲ καὶ ἐκ τοῦ στόματος αἱμορροῖδες ἄπονοι γίνονται, καὶ οὐχ ὥσπερ ἐκ τῆς ἀρτηρίας μετὰ βίας.

Διεστῶσαι δ' ἄνωθεν ἢ τε μεγάλη φλὲψ καὶ ἡ ἀορτή, κάτω δ' ἐναλλάσσουσai συνέχουσι τὸ σῶμα.

Προϊοῦσαι γὰρ σχίζονται κατὰ τὴν διφυΐαν τῶν κώλων, καὶ ἡ μὲν ἐκ τοῦ ἔμπροσθεν εἰς τοῦπισθεν προέρχεται, ἡ δ' ἐκ τοῦ ὀπισθεν εἰς τοῦμπροσθεν, καὶ συμβάλλουσιν εἰς ἕν· ὥσπερ γὰρ ἐν τοῖς πλεκομένοις ἐγγίνεται τὸ συνεχὲς μᾶλλον, οὕτω καὶ διὰ τῆς τῶν φλεβῶν ἐναλλάξεως συνδεῖται τῶν σωμάτων τὰ πρόσθια τοῖς ὀπισθεν. Ὅμοίως δὲ καὶ ἀπὸ τῆς καρδίας ἐν τοῖς ἄνω τόποις συμβαίνει. Τὸ δὲ μετ' ἀκριβείας ὡς ἔχουσιν αἱ φλέβες πρὸς ἀλλήλας, ἔκ τε τῶν ἀνατομῶν δεῖ θεωρεῖν καὶ ἐκ τῆς ζωϊκῆς ἱστορίας. Καὶ περὶ μὲν φλεβῶν καὶ καρδίας εἰρήσθω, περὶ δὲ τῶν ἄλλων σπλάγχχνων σκεπτέον κατὰ τὴν αὐτὴν μέθοδον.

## Κεφάλαιο 6

Πλεύμονα μὲν οὖν ἔχει διὰ τὸ πεζὸν εἶναι τι γένος τῶν ζώων. Ἀναγκαῖον μὲν γὰρ γίνεσθαι τῷ θερμῷ κατάψυξιν, ταύτης δὲ δεῖται θύραθεν τὰ ἔναιμα τῶν ζώων· θερμότερα (669a.) γάρ. Τὰ δὲ μὴ ἔναιμα καὶ τῷ συμφύτῳ πνεύματι δύναται καταψύχειν. Ἀνάγκη δὲ καταψύχειν ἔξωθεν ἢ ὕδατι ἢ ἀέρι. Διόπερ τῶν μὲν ἰχθύων οὐδεὶς ἔχει πλεύμονα, ἀλλ' ἀντὶ τούτου βράγχια, καθάπερ εἴρηται ἐν τοῖς περὶ ἀναπνοῆς· ὕδατι γὰρ ποιεῖται τὴν κατάψυξιν, τὰ δ' ἀναπνέοντα τῷ ἀέρι, διόπερ πάντα τὰ ἀναπνέοντα ἔχει πλεύμονα. Ἀναπνεῖ δὲ τὰ μὲν πεζὰ πάντα, ἔνια δὲ καὶ τῶν ἐνύδρων, οἷον φάλαινα καὶ δελφὶς καὶ τὰ ἀναφυσῶντα κήτη πάντα. Πολλὰ γὰρ τῶν ζώων ἐπαμφοτερίζει τὴν φύσιν, καὶ τῶν τε πεζῶν καὶ τὸν ἀέρα δεχομένων διὰ τὴν τοῦ σώματος κράσιν ἐν ὑγρῷ διατελεῖ τὸν πλεῖστον χρόνον, καὶ τῶν ἐν τῷ ὑγρῷ μετέχει τοσοῦτον ἔνια τῆς πεζῆς φύσεως ὥστ' ἐν τῷ πνεύματι αὐτῶν εἶναι τὸ τέλος τοῦ ζῆν. Τοῦ δ'

ἀναπνεῖν ὁ πλεύμων ὄργανόν ἐστι, τὴν μὲν ἀρχὴν τῆς κινήσεως ἔχων ἀπὸ τῆς καρδίας, ποιῶν δ' εὐρυχωρίαν τῇ εἰσόδῳ τοῦ πνεύματος διὰ τὴν αὐτοῦ σομφότητα καὶ τὸ μέγεθος· αἰρομένου γὰρ εἰσρεῖ τὸ πνεῦμα, συνιόντος δ' ἐξέρχεται πάλιν. Τὸ δὲ πρὸς τὴν ἅλσιν εἶναι τὸν πλεύμονα τῆς καρδίας οὐκ εἴρηται καλῶς· ἐν ἀνθρώπῳ τε γὰρ συμβαίνει μόνον ὡς εἶπεῖν τὸ τῆς πηδήσεως διὰ τὸ μόνον ἐν ἐλπίδι γίνεσθαι καὶ προσδοκίᾳ τοῦ μέλλοντος, ἀπέχει τ' ἐν τοῖς πλείστοις πολὺν τόπον καὶ κεῖται τὴν θέσιν ἀνωτέρω τοῦ πλεύμονος, ὥστε μηδὲν συμβάλλεσθαι τὸν πλεύμονα πρὸς τὴν ἅλσιν τῆς καρδίας.

Διαφέρει δὲ ὁ πλεύμων πολὺ τοῖς ζώοις. Τὰ μὲν γὰρ ἔναιμον ἔχει καὶ μέγαν, τὰ δ' ἐλάττω καὶ σομφόν, τὰ μὲν ζωτόκα διὰ τὴν θερμότητα τῆς φύσεως μείζω καὶ πολύαιμον, τὰ δ' ὠτόκα ξηρόν καὶ μικρόν, δυνάμενον δὲ μέγα διίστασθαι ἐν τῷ ἐμφυσᾶσθαι, ὥσπερ τὰ τετράποδα μὲν ὠτόκα δὲ τῶν πεζῶν, οἷον οἱ τε σαῦροι καὶ αἱ χελῶναι καὶ πᾶν τὸ τοιοῦτον γένος, ἔτι δὲ πρὸς τούτοις ἡ τῶν πτηνῶν φύσις καὶ καλουμένων ὀρνίθων. Πάντων γὰρ τούτων σομφὸς ὁ πλεύμων καὶ ὁμοιος ἀφρῶ· καὶ γὰρ ὁ ἀφρὸς ἐκ πολλοῦ μικρὸς γίνεται συγχεόμενος, καὶ ὁ τούτων πλεύμων μικρὸς καὶ ὑμενώδης. Διὸ καὶ ἄδιψα καὶ ὀλιγόποτα ταῦτα πάντα, καὶ δύναται πολὺν ἐν τῷ ὑγρῷ ἀνέχεσθαι χρόνον· ἅτε γὰρ ὀλίγον ἔχοντα θερμὸν ἱκανῶς ἐπὶ πολὺν χρόνον καταψύχεται ὑπ' αὐτῆς τῆς τοῦ πλεύμονος (669b.) κινήσεως, οὔσης ἀερώδους καὶ κενῆς. Συμβέβηκε δὲ καὶ τὰ μεγέθη τούτων ἐλάττω τῶν ζώων ὡς ἐπίπαν εἶπεῖν· τὸ γὰρ θερμὸν ἀύξητικόν· ἡ δὲ πολυαιμία θερμότητος σημεῖον.

Ἔτι δ' ὀρθοῖ τὰ σώματα μᾶλλον, διόπερ ἄνθρωπος μὲν τῶν ἄλλων ὀρθότατον, τὰ δὲ ζωτόκα τῶν ἄλλων τετραπόδων· οὐδὲν γὰρ ὁμοίως τρωγλοδυτεῖ τῶν ζωτόκων, οὔτ' ἄπουν οὔτε πεζεῦον. Ὅλως μὲν οὖν ὁ πλεύμων ἐστὶν ἀναπνοῆς χάριν, ἄναιμος δὲ καὶ τοιοῦτος γένους τινὸς ἔνεκεν ζώων· ἀλλ' ἀνώνυμον τὸ κοινὸν ἐπ' αὐτῶν, καὶ οὐχ ὥσπερ ὁ ὄρνις ὠνόμασται ἐπὶ τινος γένους. Διὸ ὥσπερ τὸ ὀρνίθι εἶναι ἔκ τινός ἐστι, καὶ ἐκείνων ἐν τῇ οὐσίᾳ ὑπάρχει τὸ πλεύμονα ἔχειν.

## Κεφάλαιο 7

Δοκεῖ δὲ τῶν σπλάγχνων τὰ μὲν εἶναι μονοφυῆ, καθάπερ καρδία καὶ πλεύμων, τὰ δὲ διφυῆ, καθάπερ νεφροί, τὰ δ' ἀπορεῖται ποτέρως ἔχει. Φανεῖν γὰρ ἂν ἐπαμφοτερίζειν τούτοις τὸ ἥπαρ καὶ ὁ σπλήν· καὶ γὰρ ὡς μονοφυεῖς ἐκάτερον, καὶ ὡς ἀνθ' ἑνὸς δύο παραπλησίαν ἔχοντα τὴν φύσιν. Ἔστι δὲ πάντα διφυῆ. Τὸ δ' αἴτιον ἢ τοῦ σώματος διάστασις διφυῆς μὲν οὔσα, πρὸς μίαν δὲ

συντελοῦσα ἀρχήν· τὸ μὲν γὰρ ἄνω καὶ κάτω, τὸ δ' ἔμπροσθεν καὶ ὀπίσθεν τὸ δὲ δεξιὸν καὶ ἀριστερόν ἐστιν. Διόπερ καὶ ὁ ἐγκέφαλος βούλεται διμερῆς εἶναι πᾶσι καὶ τῶν αἰσθητηρίων ἕκαστον. Κατὰ τὸν αὐτὸν δὲ λόγον ἡ καρδία ταῖς κοιλίαις. Ὁ δὲ πλεύμων ἔν τε τοῖς ὠτοκόις τοσοῦτον διέστηκεν ὥστε δοκεῖν δύ' ἔχειν αὐτὰ πλεύμονας. Οἱ δὲ νεφροὶ καὶ παντὶ δῆλοι. Κατὰ δὲ τὸ ἦπαρ καὶ τὸν σπλῆνα δικαίως ἂν τις ἀπορήσειεν. Τούτου δ' αἴτιον ὅτι ἓν μὲν τοῖς ἐξ ἀνάγκης ἔχουσι σπλῆνα δόξειεν ἂν οἷον νόθον εἶναι ἦπαρ ὁ σπλήν, ἓν δὲ τοῖς μὴ ἐξ ἀνάγκης ἔχουσιν, ἀλλὰ πάμμικρον ὥσπερ σημείου χάριν, ἐναργῶς διμερὲς τὸ ἦπαρ ἐστιν, καὶ τὸ μὲν εἰς τὰ δεξιά, τὸ δ' ἔλαττον εἰς τὰ ἀριστερὰ βούλεται τὴν θέσιν ἔχειν. Οὐ μὴν ἀλλὰ καὶ ἓν τοῖς ὠτοκόις ἦττον μὲν ἢ ἐπὶ τούτων φανερόν, ἐνίοις δὲ κάκεῖ ὥσπερ ἓν τισι ζωοτόκοις ἐπιδήλως διέστηκεν, οἷον κατὰ τινὰς τόπους οἱ δασύποδες δύο δοκοῦσιν ἦπαρ ἔχειν, καθάπερ τῶν ἰχθύων ἕτεροὶ τέτινες καὶ οἱ σελαχῶδεις.

Διὰ δὲ τὸ τὴν θέσιν ἔχειν τὸ ἦπαρ ἓν τοῖς δεξιοῖς μᾶλλον (670a.) ἢ τοῦ σπληνὸς γέγονε φύσις, ὥστ' ἀναγκαῖον μὲν πως, μὴ λίκν δ' εἶναι πᾶσι τοῖς ζώοις. Τοῦ μὲν οὖν διφυῆ τὴν φύσιν εἶναι τῶν σπλάγχχνων αἴτιον, ὥσπερ εἵπομεν, τὸ δύ' εἶναι τὸ δεξιὸν καὶ τὸ ἀριστερόν· ἐκάτερον γὰρ ζητεῖ τὸ ὅμοιον. Ὡς περ καὶ αὐτὰ βούλεται παραπλησίαν καὶ διδύμην ἔχειν τὴν φύσιν, καθάπερ ἐκεῖνα δίδυμα μὲν, συνήρηται δ' εἰς ἓν, καὶ τῶν σπλάγχχνων ὁμοίως ἕκαστον. Ἔστι δὲ σπλάγχχνα τὰ κάτω τοῦ ὑποζώματος κοινῇ μὲν πάντα τῶν φλεβῶν χάριν, ὅπως οὔσαι μετέωροι μένωσι τῷ τούτων συνδέσμῳ πρὸς τὸ σῶμα. Καθάπερ ἄγκυραι γὰρ βέβληνται πρὸς τὸ σῶμα διὰ τῶν ἀποτεταμένων μορίων· ἀπὸ μὲν τῆς μεγάλης φλεβός, πρὸς τὸ ἦπαρ καὶ τὸν σπλῆνα (τούτων γὰρ τῶν σπλάγχχνων ἡ φύσις οἷον ἦλοι πρὸς τὸ σῶμα προσλαμβάνουσιν αὐτήν, εἰς μὲν τὰ πλάγια τοῦ σώματος τό θ' ἦπαρ καὶ ὁ σπλήν τὴν φλέβα τὴν μεγάλην· ἀπὸ ταύτης γὰρ εἰς αὐτὰ μόνα διατείνουσι φλέβες· εἰς δὲ τὰ ὀπίσθεν οἱ νεφροί)· πρὸς δ' ἐκείνους οὐ μόνον ἀπὸ τῆς μεγάλης φλεβὸς ἀλλὰ καὶ ἀπὸ τῆς ἁορτῆς τείνει φλέψις εἰς ἐκάτερον. Ταῦτα δὲ συμβαίνει διὰ τούτων τῇ συστάσει τῶν ζώων· καὶ τὸ μὲν ἦπαρ καὶ ὁ σπλήν βοηθεῖ πρὸς τὴν πέψιν τῆς τροφῆς (ἔναιμα γὰρ ὄντα θερμὴν ἔχει τὴν φύσιν), οἱ δὲ νεφροὶ πρὸς τὸ περίττωμα τὸ εἰς τὴν κύστιν ἀποκρινόμενον. Καρδία μὲν οὖν καὶ ἦπαρ πᾶσιν ἀναγκαῖα τοῖς ζώοις, ἡ μὲν διὰ τὴν τῆς θερμότητος ἀρχήν (δεῖ γὰρ εἶναί τινα οἷον ἐστίαν, ἓν ἢ κείσεται τῆς φύσεως τὸ ζῶπυρον, καὶ τοῦτο εὐφύλακτον, ὥσπερ ἀκρόπολις οὔσα τοῦ σώματος), τὸ δ' ἦπαρ τῆς πέψεως χάριν. Πάντα δὲ δεῖται τὰ ἔναιμα δυοῖν τούτοις, διόπερ ἔχει πάντα τὰ ἔναιμα δύο τὰ σπλάγχχνα ταῦτα μόνον· ὅσα δ' ἀναπνεῖ, καὶ πλεύμονα τρίτον. Ὁ δὲ σπλήν κατὰ συμβεβηκὸς ἐξ ἀνάγκης ὑπάρχει τοῖς ἔχουσιν, ὥσπερ καὶ τὰ περιττώματα, τό τ' ἓν τῇ κοιλίᾳ καὶ τὸ περὶ τὴν κύστιν. Διόπερ ἓν τισιν ἐκλείπει κατὰ τὸ

μέγεθος, ὥσπερ τῶν τε περωτῶν ἐνίοις, ὅσα θερμὴν ἔχει τὴν κοιλίαν, οἷον περιστερὰ ἰέραξ ἰκτίνος, καὶ ἐπὶ τῶν ὠοτόκων (670b.) δὲ καὶ τετραπόδων ὁμοίως (μικρὸν γὰρ πάνπαν ἔχουσιν), καὶ πολλοῖς τῶν λεπιδωτῶν· ἅπερ καὶ κύστιν οὐκ ἔχει διὰ τὸ τρέπεσθαι τὸ περίττωμα διὰ μανῶν τῶν σαρκῶν εἰς πτερὰ καὶ λεπίδας. Ὁ γὰρ σπλὴν ἀντισπᾶ ἐκ τῆς κοιλίας τὰς ἰκμάδας τὰς περιττευούσας, καὶ δύναται συμπέττειν αἱματώδης ὢν. Ἄν δὲ τὸ περίττωμα πλεῖον ἢ ἢ ὀλιγόθερμος ὁ σπλὴν, νοσακερὰ γίνεται πλήρη τροφῆς· καὶ διὰ τὴν ἐνταῦθα παλirroια τῆς ὑγρότητος πολλοῖς αἱ κοιλία σκληραὶ γίνονται σπληνιῶσιν, ὥσπερ τοῖς λίαν οὖρητικοῖς, διὰ τὸ ἀντιπερισπᾶσθαι τὰς ὑγρότητας. Οἷς δὲ ὀλίγη περίττωσις γίνεται, καθάπερ τοῖς ὀρνέοις καὶ τοῖς ἰχθύσι, τὰ μὲν οὐ μέγαν ἔχει, τὰ δὲ σημείου χάριν. Καὶ ἐν τοῖς τετράποσι δὲ τοῖς ὠοτόκοις μικρὸς καὶ στιφρὸς καὶ νεφρώδης ὁ σπλὴν ἐστὶ, διὰ τὸ τὸν πλεύμονα σομφὸν εἶναι καὶ ὀλιγοποτεῖν καὶ τὸ περιγινόμενον περίττωμα τρέπεσθαι εἰς τὸ σῶμα καὶ τὰς φολίδας, ὥσπερ εἰς τὰ πτερὰ τοῖς ὄρνισιν. Ἐν δὲ τοῖς κύστιν ἔχουσι καὶ τὸν πλεύμονα ἔναιμον ὑγρὸς ἐστὶ διὰ τε τὴν εἰρημένην αἰτίαν καὶ διὰ τὸ τὴν φύσιν τὴν τῶν ἀριστερῶν ὅλως ὑγροτέραν εἶναι καὶ ψυχροτέραν. Διήρηται γὰρ τῶν ἐναντίων ἕκαστον πρὸς τὴν συγγενῇ συστοιχίαν, οἷον δεξιὸν ἐναντίον ἀριστερῶ καὶ θερμὸν ἐναντίον ψυχρῶ· καὶ σύστοιχα γὰρ ἀλλήλοις εἰσὶ τὸν εἰρημένον τρόπον.

Οἱ δὲ νεφροὶ τοῖς ἔχουσιν οὐκ ἐξ ἀνάγκης, ἀλλὰ τοῦ εὖ καὶ καλῶς ἔνεκεν ὑπάρχουσιν· τῆς γὰρ περιττώσεως χάριν τῆς εἰς τὴν κύστιν ἀθροιζομένης εἰσὶ κατὰ τὴν ἰδίαν φύσιν, ἐν ὅσοις πλεῖον ὑπόστημα γίνεται τὸ τοιοῦτον, ὅπως βέλτιον ἀποδιδῶ ἢ κύστις τὸ αὐτῆς ἔργον. Ἐπεὶ δὲ τῆς αὐτῆς ἔνεκα χρείας τούς τε νεφροὺς συμβέβηκεν ἔχειν τὰ ζῶα καὶ τὴν κύστιν, λεκτέον περὶ κύστεως νῦν, ὑπερβάντας τὸν ἐφεξῆς τῶν μορίων ἀριθμόν· περὶ γὰρ φρενῶν οὐδέν πω διώριται, τοῦτο δέ τι τῶν περὶ τὰ σπλάγχνα μορίων ἐστίν.

## Κεφάλαιο 8

Κύστιν δ' οὐ πάντ' ἔχει τὰ ζῶα, ἀλλ' ἔοικεν ἡ φύσις βουλομένη ἀποδιδόναι τοῖς ἔχουσι τὸν πλεύμονα ἔναιμον (671a.) μόνον, τούτοις δ' εὐλόγως. Διὰ γὰρ τὴν ὑπεροχὴν τῆς φύσεως, ἣν ἔχουσιν ἐν τῷ μορίῳ τούτῳ, διψητικά τε ταῦτ' ἐστὶ μάλιστα τῶν ζώων, καὶ δεῖται τροφῆς οὐ μόνον ξηρᾶς ἀλλὰ καὶ τῆς ὑγρᾶς πλείονος, ὥστ' ἐξ ἀνάγκης καὶ περίττωμα γίνεσθαι πλεῖον καὶ μὴ τοσοῦτον μόνον ὅσον ὑπὸ τῆς κοιλίας πέττεσθαι καὶ ἐκκρίνεσθαι μετὰ τοῦ ταύτης περιττώματος. Ἀνάγκη τοίνυν εἶναι τι δεκτικὸν καὶ τούτου τοῦ περιττώματος. Διόπερ ὅσα πλεύμονα ἔχει τοιοῦτον ἅπαντ' ἔχει κύστιν· ὅσα δὲ μὴ τοιοῦτον, ἀλλ' ἢ ὀλιγόποτά ἐστὶ διὰ τὸ τὸν πλεύμονα ἔχειν σομφόν, ἢ



ὅλως τὸ ὑγρὸν προσφέρεται οὐ ποτοῦ χάριν ἀλλὰ τροφῆς, οἷον τὰ ἔντομα καὶ οἱ ἰχθύες, ἔτι δὲ περωτὰ ἐστὶν ἢ λεπιδωτὰ ἢ φολιδωτὰ, ταῦτα δι' ὀλιγότητά τε τῆς τοῦ ὑγροῦ προσφορᾶς καὶ διὰ τὸ τρέπεσθαι εἰς ταῦτα τὸ περιγιγνόμενον τοῦ περιττώματος οὐδὲν ἔχει τούτων κύστιν, πλὴν αἱ χελῶναι τῶν φολιδωτῶν.

Καὶ ἐνταῦθ' ἡ φύσις κεκολόβωται μόνον. Αἴτιον δ' ὅτι αἱ μὲν θαλάττιαι σαρκώδη καὶ ἔναιμον ἔχουσι τὸν πλεύμονα, καὶ ὅμοιον τῷ βοεῖω, αἱ δὲ χερσαῖαι μείζω ἢ κατὰ λόγον. Ἔτι δὲ διὰ τὸ ὀστρακῶδες καὶ πυκνὸν εἶναι τὸ περιέχον οὐ διαπνέοντος τοῦ ὑγροῦ διὰ μανῶν τῶν σαρκῶν, οἷον τοῖς ὄρνισι καὶ τοῖς ὄφεσι καὶ τοῖς ἄλλοις τοῖς φολιδωτοῖς, ὑπόστασις γίνεται τοσαύτη ὥστε δεῖσθαι τὴν φύσιν αὐτῶν ἔχειν τι μόριον δεκτικὸν καὶ ἀγγειῶδες. Κύστιν μὲν οὖν ταῦτα μόνον τῶν τοιούτων ἔχει διὰ ταύτην τὴν αἰτίαν, ἡ μὲν θαλαττία μεγάλην, αἱ δὲ χερσαῖαι μικρὰν πάνπαν.

## Κεφάλαιο 9

Ὅμοίως δ' ἔχει καὶ περὶ νεφρῶν. Οὐδὲ γὰρ νεφροὺς οὔτε τῶν περωτῶν καὶ λεπιδωτῶν οὐδὲν ἔχει οὔτε τῶν φολιδωτῶν, πλὴν αἱ θαλάττιαι χελῶναι καὶ αἱ χερσαῖαι· ἀλλ' ὡς τῆς εἰς τοὺς νεφροὺς τεταγμένης σαρκὸς οὐκ ἐχούσης χώραν ἀλλὰ διεσπαρμένης εἰς πολλά, πλατέα νεφροειδῆ ἐν ἐνίοις τῶν ὀρνίθων ἐστίν. Ἡ δ' ἐμὺς οὔτε κύστιν οὔτε νεφροὺς ἔχει· διὰ τὴν μαλακότητα γὰρ τοῦ χελωνίου εὐδιάπνουν γίνεται τὸ ὑγρὸν. Ἡ μὲν οὖν ἐμὺς διὰ ταύτην τὴν αἰτίαν οὐκ ἔχει τῶν μορίων οὐδέτερον· τοῖς δ' ἄλλοις ζώοις τοῖς ἔχουσιν ἔναιμον, ὥσπερ εἴρηται, τὸν πλεύμονα πᾶσι συμβέβηκεν ἔχειν (671b.) νεφρούς. Καταχρῆται γὰρ ἡ φύσις ἅμα τῶν τε φλεβῶν χάριν καὶ πρὸς τὴν τοῦ ὑγροῦ περιττώματος ἔκκρισιν· φέρει γὰρ εἰς αὐτοὺς πόρος ἐκ τῆς μεγάλης φλεβός. Ἔχουσι δ' οἱ νεφροὶ πάντες κοῖλον, ἢ πλεῖον ἢ ἔλαττον, πλὴν οἱ τῆς φώκης· οὔτοι δ' ὅμοιοι τοῖς βοείοις ὄντες στερεώτατοι πάντων εἰσίν. Ὅμοιοι δὲ καὶ οἱ τοῦ ἀνθρώπου τοῖς βοείοις· εἰσὶ γὰρ ὥσπερ συγκείμενοι ἐκ πολλῶν νεφρῶν μικρῶν καὶ οὐχ ὁμαλεῖς, ὥσπερ οἱ τῶν προβάτων καὶ τῶν ἄλλων τῶν τετραπόδων. Διὸ καὶ τὸ ἄρρώστημα τοῖς ἀνθρώποις δυσάπαλλακτον αὐτῶν ἐστίν, ἂν ἄπαξ νοσήσωσιν· συμβαίνει γὰρ ὥσπερ πολλοὺς νεφροὺς νοσοῦντων χαλεπωτέραν εἶναι τὴν ἴασιν ἢ τῶν ἑνα νοσοῦντων. Ὁ δ' ἀπὸ τῆς φλεβὸς τείνων πόρος οὐκ εἰς τὸ κοῖλον τῶν νεφρῶν κατατελευτᾷ ἀλλ' εἰς τὸ σῶμα καταναλίσκεται τῶν νεφρῶν· διόπερ ἐν τοῖς κοίλοις αὐτῶν οὐκ ἐγγίνεται αἷμα, οὐδὲ πηγνυται τελευτώντων. Ἐκ δὲ τοῦ κοίλου τῶν νεφρῶν φέρουσι πόροι ἄναιμοι εἰς τὴν κύστιν δύο νεανικοί, ἐξ ἑκατέρου εἷς, καὶ ἄλλοι ἐκ τῆς ἀορτῆς ἰσχυροὶ καὶ συνεχεῖς. Ταῦτα δ' ἔχει τὸν τρόπον τοῦτον, ὅπως ἐκ μὲν

τῆς φλεβὸς τὸ περίττωμα τῆς ὑγρότητος βαδίζει εἰς τοὺς νεφρούς, ἐκ δὲ τῶν νεφρῶν ἡ γιγνομένη ὑπόστασις διηθουμένων τῶν ὑγρῶν διὰ τοῦ σώματος τῶν νεφρῶν εἰς τὸ μέσον συρρέη, οὐ τὸ κοῖλον οἱ πλεῖστοι ἔχουσι αὐτῶν· διὸ καὶ δυσωδέστατον τοῦτο τῶν σπλάγχχνων ἐστίν. Ἐκ δὲ τοῦ μέσου διὰ τούτων τῶν πόρων εἰς τὴν κύστιν ἤδη μᾶλλον ὥς περίττωμα ἀποκρίνεται. Καθώρμισται δ' ἡ κύστις ἐκ τῶν νεφρῶν· τείνουσι γάρ, ὥσπερ εἴρηται, πόροι ἰσχυροὶ πρὸς αὐτήν· οἱ μὲν οὖν νεφροὶ διὰ ταύτας τὰς αἰτίας εἰσὶ, καὶ τὰς δυνάμεις ἔχουσι τὰς εἰρημένας.

Ἐν πᾶσι δὲ τοῖς ἔχουσι νεφροὺς ὁ δεξιὸς ἀνωτέρω τοῦ ἀριστεροῦ ἐστίν· διὰ γὰρ τὸ τὴν κίνησιν εἶναι ἐκ τῶν δεξιῶν καὶ ἰσχυροτέραν διὰ ταῦτ' εἶναι τὴν φύσιν τὴν τῶν δεξιῶν, δεῖ προοδοποιήσασθαι διὰ τὴν κίνησιν πρὸς τὸ ἄνω πάντα τὰ μόρια μᾶλλον, ἐπεὶ καὶ τὴν ὀφρὺν τὴν δεξιὰν αἴρουσι μᾶλλον καὶ ἐπικεκαμμένην ἔχουσι τῆς ἀριστερᾶς μᾶλλον. Καὶ διὰ τὸ ἀνεσπᾶσθαι ἀνώτερον τὸν δεξιὸν νεφρὸν τὸ ἦπαρ ἄπτεται τοῦ δεξιοῦ νεφροῦ ἐν πᾶσιν· ἐν τοῖς δεξιοῖς γὰρ τὸ ἦπαρ.

(672a.) Ἐχουσι δ' οἱ νεφροὶ μάλιστα τῶν σπλάγχχνων πιμελήν, ἐξ ἀνάγκης μὲν διὰ τὸ διηθεῖσθαι τὸ περίττωμα διὰ τῶν νεφρῶν· τὸ γὰρ λειπόμενον αἷμα καθαρὸν ὃν εὐπεπτὸν ἐστὶ, τέλος δ' εὐπεψίας αἱματικῆς πιμελὴ καὶ στέαρ ἐστίν.

Ὡσπερ γὰρ ἐν τοῖς πεπυρωμένοις ξηροῖς, οἷον τῇ τέφρᾳ, ἐγκαταλείπεται τι πῦρ, οὕτω καὶ ἐν τοῖς πεπεμμένοις ὑγροῖς· ἐγκαταλείπεται γάρ τι τῆς εἰργασμένης θερμότητος μόριον. Διόπερ τὸ λιπαρὸν κοῦφόν ἐστὶ καὶ ἐπιπολάζει ἐν τοῖς ὑγροῖς. Ἐν αὐτοῖς μὲν οὖν οὐ γίνεται τοῖς νεφροῖς διὰ τὸ πυκνὸν εἶναι τὸ σπλάγχχνον, ἔξω δὲ περιίσταται πιμελὴ μὲν ἐν τοῖς πιμελώδεσι, στέαρ δ' ἐν τοῖς στεατώδεσιν· ἡ δὲ διαφορὰ τούτων εἴρηται πρότερον ἐν ἐτέροις. Ἐξ ἀνάγκης μὲν οὖν πιμελώδεις γίνονται διὰ ταύτην τὴν αἰτίαν ἐκ τῶν συμβαινόντων ἐξ ἀνάγκης τοῖς ἔχουσι νεφρούς, ἔνεκα δὲ σωτηρίας καὶ τοῦ θερμὴν εἶναι τὴν φύσιν τὴν τῶν νεφρῶν.

Ἔσχατοί τε γὰρ ὄντες ἀλέας δέονται πλείονος· τὸ μὲν γὰρ νῶτον σαρκῶδές ἐστιν, ὅπως ἡ προβολὴ τοῖς περὶ τὴν καρδίαν σπλάγχχνοις, ἡ δ' ὀσφὺς ἄσαρκος (ἄσαρκοι γὰρ αἱ καμπαὶ πάντων)· ἀντὶ σαρκὸς οὖν ἡ πιμελὴ πρόβλημα γίνεται τοῖς νεφροῖς. Ἔτι δὲ διακρίνουσι καὶ πέττουσι τὴν ὑγρότητα μᾶλλον πίονες ὄντες· τὸ γὰρ λιπαρὸν θερμόν, πέττει δ' ἡ θερμότης. Διὰ ταύτας μὲν οὖν τὰς αἰτίας οἱ νεφροὶ πιμελώδεις εἰσὶν, ἐν πᾶσι δὲ τοῖς ζώοις ὁ δεξιὸς ἀπιμελώτερός ἐστιν. Αἴτιον δὲ τὸ τὴν φύσιν ξηρὰν εἶναι τὴν τῶν δεξιῶν καὶ

κινητικωτέραν· ἡ δὲ κίνησις ἐναντία· τήκει γὰρ τὸ πῖον μᾶλλον. Τοῖς μὲν οὖν ἄλλοις ζώοις συμφέρει τε τοὺς νεφροὺς ἔχειν πίονας, καὶ πολλάκις ἔχουσιν ὅλους περίπλεως· τὸ δὲ πρόβατον ὅταν τοῦτο πάθῃ, ἀποθνήσκει. Ἀλλ' ἂν καὶ πάνυ πίονες ὦσιν, ὅμως ἐλλείπει τι, ἂν μὴ κατ' ἀμφοτέρους, ἀλλὰ κατὰ τὸν δεξιόν. Αἴτιον δὲ τοῦ μόνον ἢ μάλιστα τοῦτο συμβαίνειν ἐπὶ τῶν προβάτων, ὅτι τοῖς μὲν πιμελώδεσιν ὑγρὸν τὸ πῖον, ὥστ' οὐχ ὁμοίως ἐγκατακλειόμενα τὰ πνεύματα ποιεῖ τὸν πόνον. Τοῦ δὲ σφακελισμοῦ τοῦτ' αἴτιόν ἐστιν· διὸ καὶ τῶν ἀνθρώπων τοῖς πονοῦσι τοὺς νεφροὺς, καίπερ τοῦ παίνεσθαι συμφέροντος, ὅμως ἂν λίαν γίνονται πίονες, ὁδύναι θανατηφόροι συμβαίνουσιν. Τῶν δ' ἄλλων τοῖς (672b.) στεατώδεσιν ἦττον πυκνὸν τὸ στέαρ ἢ τοῖς προβάτοις.

Καὶ τῷ πλήθει πολὺ τὰ πρόβατα ὑπερβάλλει· γίνεται γὰρ περίνεφρα τάχιστα τῶν ζώων τὰ πρόβατα πάντων. Ἐγκατακλειομένης οὖν τῆς ὑγρότητος καὶ τῶν πνευμάτων διὰ τὸν σφακελισμὸν ἀναιροῦνται ταχέως· διὰ γὰρ τῆς ἀορτῆς καὶ τῆς φλεβὸς εὐθὺς ἀπαντᾷ τὸ πάθος πρὸς τὴν καρδίαν· οἱ δὲ πόροι συνεχεῖς ἀπὸ τούτων τῶν φλεβῶν εἰσι πρὸς τοὺς νεφροὺς.

## Κεφάλαιο 10

Περὶ μὲν οὖν τῆς καρδίας καὶ πλεύμονος εἴρηται, καὶ περὶ ἥπατος καὶ σπληνὸς καὶ νεφρῶν.

Τυχάνει δὲ ταῦτα κεχωρισμένα ἀλλήλων τῷ διαζώματι. Τοῦτο δὲ τὸ διάζωμα καλοῦσιν τινες φρένας· ὃ διορίζει τὸν τε πλεύμονα καὶ τὴν καρδίαν. Καλεῖται δὲ τοῦτο τὸ διάζωμα ἐν τοῖς ἐναίμοις, ὥσπερ καὶ εἴρηται, φρένες. Ἐχει δὲ πάντα τὰ ἔναιμα αὐτό, καθάπερ καρδίαν καὶ ἥπαρ. Τούτου δ' αἴτιον ὅτι τοῦ διορισμοῦ χάριν ἐστὶ τοῦ τε περὶ τὴν κοιλίαν τόπου καὶ τοῦ περὶ τὴν καρδίαν, ὅπως ἡ τῆς αἰσθητικῆς ψυχῆς ἀρχὴ ἀπαθῆς ἢ καὶ μὴ ταχὺ καταλαμβάνηται διὰ τὴν ἀπὸ τῆς τροφῆς γινομένην ἀναθυμίασιν καὶ τὸ πλῆθος τῆς ἐπεισάκτου θερμότητος. Ἐπὶ γὰρ τοῦτο διέλαβεν ἡ φύσις, οἷον παροικοδόμημα ποιήσασα καὶ φραγμὸν τὰς φρένας, καὶ διεῖλε τό τε τιμιώτερον καὶ τὸ ἀτιμώτερον, ἐν ὅσοις ἐνδέχεται διελεῖν τὸ ἄνω καὶ κάτω· τὸ μὲν γὰρ ἄνω ἐστὶν οὗ ἕνεκεν καὶ βέλτιον, τὸ δὲ κάτω τὸ τούτου ἕνεκεν καὶ ἀναγκαῖον, τὸ τῆς τροφῆς δεκτικόν. Ἔστι δὲ τὸ διάζωμα πρὸς μὲν τὰς πλευρὰς σαρκωδέστερον καὶ ἰσχυρότερον, κατὰ μέσον δ' ὑμενωδέστερον· οὕτω γὰρ πρὸς τὴν ἰσχὺν καὶ τὴν τάσιν χρησιμώτερον. Διότι δὲ πρὸς τὴν θερμότητα τὴν κάτωθεν οἷον παραφυάδες εἰσὶ, σημεῖον ἐκ τῶν συμβαινόντων· ὅταν γὰρ διὰ τὴν γειτνίασιν ἐλκύσωσιν ὑγρότητα θερμὴν καὶ περιττωματικὴν, εὐθὺς ἐπιδήλως ταραττεῖ

τὴν διάνοιαν καὶ τὴν αἴσθησιν, διὸ καὶ καλοῦνται φρένες ὡς μετέχουσαί τι τοῦ φρονεῖν. Αἱ δὲ μετέχουσι μὲν οὐδέν, ἐγγὺς δ' οὖσαι τῶν μετεχόντων ἐπίδηλον ποιοῦσι τὴν μεταβολὴν τῆς διανοίας. Διὸ καὶ λεπταὶ κατὰ μέσον εἰσίν, οὐ μόνον ἐξ ἀνάγκης, ὅτι σαρκώδεις οὖσας τὰ πρὸς τὰς πλευράς ἀναγκαῖον εἶναι σαρκωδεστέρας, ἀλλ' ἵν' ὅτι ὀλιγίστης μετέχωσιν ἱκμάδος· σαρκώδεις γὰρ ἂν οὖσαι (673a.) καὶ εἶχον καὶ εἶλκον μᾶλλον ἱκμάδα πολλήν.

Ὅτι δὲ θερμαινόμεναι ταχέως ἐπίδηλον ποιοῦσι τὴν αἴσθησιν, σημαίνει καὶ τὸ περὶ τοὺς γέλωτας συμβαῖνον. Γαργαλιζόμενοί τε γὰρ ταχὺ γελῶσι, διὰ τὸ τὴν κίνησιν ἀφικνεῖσθαι ταχὺ πρὸς τὸν τόπον τοῦτον, θερμαίνουσιν δ' ἡρέμα, ποιεῖν ὅμως ἐπίδηλον καὶ κινεῖν τὴν διάνοιαν παρὰ τὴν προαίρεσιν.

Τοῦ δὲ γαργαλίζεσθαι μόνον ἄνθρωπον αἴτιον ἢ τε λεπτότης τοῦ δέρματος καὶ τὸ μόνον γελᾶν τῶν ζώων ἄνθρωπον. Ὁ δὲ γαργαλισμὸς γέλως ἐστὶ διὰ κινήσεως τοιαύτης τοῦ μορίου τοῦ περὶ τὴν μασχάλην. Συμβαίνειν δέ φασι καὶ περὶ τὰς ἐν τοῖς πολέμοις πληγὰς εἰς τὸν τόπον τὸν περὶ τὰς φρένας γέλωτα διὰ τὴν ἐκ τῆς πληγῆς γινομένην θερμότητα. Τοῦτο γὰρ μᾶλλον ἐστὶν ἀξιοπίστων ἀκοῦσαι λεγόντων ἢ τὸ περὶ τὴν κεφαλὴν, ὡς ἀποκοπεῖσα φθέγγεται τῶν ἀνθρώπων. Λέγουσι γάρ τινες ἐπαγόμενοι καὶ τὸν Ὅμηρον, ὡς διὰ τοῦτο ποιήσαντος· φθεγγομένη δ' ἄρα τοῦγε κάρη κονίησιν ἐμίχθη· ἀλλ' οὐ, φθεγγομένου. Περὶ δὲ Καρίαν οὕτω τὸ τοιοῦτον διεπίστευσαν ὥστε καὶ κρίσιν ἐποίησαντο περὶ τινος τῶν ἐγχωρίων.

Τοῦ γὰρ ἱερέως τοῦ Ὀπλοσμίου Διὸς ἀποθανόντος, ὑφ' ὅτου δὲ δὴ ἀδήλως, ἔφασάν τινες ἀκοῦσαι τῆς κεφαλῆς ἀποκεκομμένης λεγούσης πολλάκις· ἐπ' ἀνδρὸς ἄνδρα Κερκιδᾶς ἀπέκτεινεν. Διὸ καὶ ζητήσαντες ὦ ὄνομα ἦν ἐν τῷ τόπῳ Κερκιδᾶς, ἔκριναν. Ἀδύνατον δὲ φθέγγεσθαι κεχωρισμένης τῆς ἀρτηρίας, καὶ ἄνευ τῆς ἐκ τοῦ πλεύμονος κινήσεως. Παρὰ τε τοῖς βαρβάροις, παρ' οἷς ἀποτέμνουσι ταχέως τὰς κεφαλὰς, οὐδέν πω τοιοῦτον συμβέβηκεν. Ἔτι δ' ἐπὶ τῶν ἄλλων ζώων διὰ τίν' αἰτίαν οὐ γίνεται; Τὸ μὲν γὰρ τοῦ γέλωτος πληγιστῶν τῶν φρενῶν εἰκότως· οὐδὲν γὰρ γελᾷ τῶν ἄλλων. Προϊέναι δέ ποι τὸ σῶμα τῆς κεφαλῆς ἀφηρεμένης οὐδὲν ἄλογον, ἐπεὶ τὰ γ' ἄναιμα καὶ ζῆ πολλὸν χρόνον· δεδήλωται δὲ περὶ τῆς αἰτίας αὐτῶν ἐν ἑτέροις.

Τίνος μὲν οὖν ἔνεκέν ἐστὶν ἕκαστον τῶν σπλάγχνων, εἴρηται. Γέγονε δ' ἐξ ἀνάγκης ἐπὶ τοῖς ἐντὸς πέρασι τῶν φλεβῶν· ἐξιέναι τε γὰρ ἱκμάδα ἀναγκαῖον, καὶ ταύτην αἱματικήν, (673b.) ἐξ ἧς συνισταμένης καὶ πηγνυμένης γίνεσθαι τὸ σῶμα τῶν σπλάγχνων. Διόπερ αἱματικά, καὶ αὐτοῖς μὲν ὁμοίαν ἔχουσι τὴν τοῦ σώματος φύσιν, τοῖς δ' ἄλλοις ἀνομοίαν.

## Κεφάλαιο 11

Πάντα δὲ τὰ σπλάγχνα ἐν ὑμένι ἐστίν· προβολῆς τε γὰρ δεῖ πρὸς τὸ ἀπαθῆ εἶναι, καὶ ταύτης ἐλαφρᾶς, ὃ δ' ὑμὴν τὴν φύσιν τοιοῦτος· πυκνὸς μὲν γὰρ ὥστ' ἀποστέγειν, ἄσαρκος δὲ ὥστε μὴ ἔλκειν μηδ' ἔχειν ἱκμάδα, λεπτὸς δ', ὅπως κοῦφος ἦ καὶ μηδὲν ποιῇ βάρος. Μέγιστοι δὲ καὶ ἰσχυρότατοι τῶν ὑμένων εἰσὶν οἱ τε περὶ τὴν καρδίαν καὶ περὶ τὸν ἐγκέφαλον, εὐλόγως· ταῦτα γὰρ δεῖται πλείστης φυλακῆς. Ἡ μὲν γὰρ φυλακὴ περὶ τὰ κύρια, ταῦτα δὲ κύρια μάλιστα τῆς ζωῆς.

## Κεφάλαιο 12

Ἔχουσι δ' ἓν μὲν τῶν ζώων πάντα τὸν ἀριθμὸν αὐτῶν, ἓν δ' οὐ πάντα· ποῖα δὲ ταῦτα καὶ διὰ τίν' αἰτίαν, εἴρηται πρότερον. Καὶ τῶν ἐχόντων δὲ ταῦτα διαφέρουσιν· οὐ γὰρ ὁμοίας οὔτε τὰς καρδίας ἔχουσι πάντα τὰ ἔχοντα καρδίαν, οὔτε τῶν ἄλλων ὡς εἰπεῖν οὐδέν.

Τό τε γὰρ ἦπαρ τοῖς μὲν πολυσχιδές ἐστι, τοῖς δὲ μονοφυέστερον, πρῶτον αὐτῶν τῶν ἐναίμων καὶ ζωοτόκων· ἔτι δὲ μᾶλλον καὶ πρὸς ταῦτα καὶ πρὸς ἄλληλα διαφέρει τὰ τε τῶν ἰχθύων καὶ τῶν τετραπόδων καὶ ὠοτόκων. Τὸ δὲ τῶν ὀρνίθων μάλιστα προσεμφερές τῳ τῶν ζωοτόκων ἐστὶν ἦπατι· καθαρὸν γὰρ καὶ ἐναιμον τὸ χρῶμα αὐτῶν ἐστὶ καθάπερ κᾶκείνων.

Αἵτιον δὲ τὸ τὰ σώματα τούτων εὐπνούστατα εἶναι καὶ μὴ πολλὴν ἔχειν φαύλην περίττωσιν. Διόπερ ἓν καὶ οὐκ ἔχει χολὴν τῶν ζωοτόκων· τὸ γὰρ ἦπαρ συμβάλλεται πολὺ μέρος πρὸς εὐκρασίαν τοῦ σώματος καὶ ὑγίειαν· ἐν μὲν γὰρ τῳ αἵματι μάλιστα τὸ τούτων τέλος, τὸ δ' ἦπαρ αἱματικώτατον μετὰ τὴν καρδίαν τῶν σπλάγχνων. Τὰ δὲ τῶν τετραπόδων καὶ ὠοτόκων καὶ τῶν ἰχθύων ἔνωχρα τῶν πλείστων, ἐνίων δὲ καὶ φαῦλα παντελῶς, ὥσπερ καὶ τὰ σώματα φαύλης τετύχηκε κράσεως, οἷον φρύνης καὶ χελώνης καὶ τῶν ἄλλων τῶν τοιούτων.

Σπλῆνα δ' ἔχει τὰ μὲν κερατοφόρα καὶ διχαλὰ στρογγύλον, καθάπερ αἶξ καὶ πρόβατον καὶ τῶν ἄλλων ἕκαστον, εἰ μὴ τι διὰ μέγεθος εὐαυξέστερον ἔχει κατὰ μήκος, οἷον ὁ τοῦ βοῦς (674a.) πέπονθεν· τὰ δὲ πολυσχιδῆ πάντα μακρόν, οἷον ὅς καὶ ἄνθρωπος καὶ κύων, τὰ δὲ μώνυχα μετὰ τούτων καὶ μικτόν· τῇ μὲν γὰρ πλατὺν ἔχει τῇ δὲ στενόν, οἷον ἵππος καὶ ὄρεὺς καὶ ὄνος.

## Κεφάλαιο 13

Οὐ μόνον δὲ διαφέρει τὰ σπλάγχνα τῆς σαρκὸς τῷ ὄγκῳ τοῦ σώματος, ἀλλὰ καὶ τῷ τὴν μὲν ἔξω τὰ δ' ἔσω τὴν θέσιν ἔχειν. Αἴτιον δ' ὅτι τὴν φύσιν ἔχει κοινωνοῦσαν ταῖς φλεψί, καὶ τὰ μὲν τῶν φλεβῶν χάριν, τὰ δ' οὐκ ἄνευ φλεβῶν ἐστίν.

## Κεφάλαιο 14

Ὑπὸ δὲ τὸ ὑπόζωμα κεῖται ἡ κοιλία τοῖς ζώοις, τοῖς μὲν ἔχουσιν οἰσοφάγον ἢ τελευτᾷ τοῦτο τὸ μόριον, τοῖς δὲ μὴ ἔχουσιν εὐθὺς πρὸς τῷ στόματι· τῆς δὲ κοιλίας ἐχόμενον τὸ καλούμενον ἔντερον. Δι' ἣν δ' αἰτίαν ἔχει ταῦτα τὰ μόρια τῶν ζώων ἕκαστον, φανερόν πᾶσιν. Καὶ γὰρ δέξασθαι τὴν εἰσελθοῦσαν τροφήν καὶ τὴν ἐξικμασμένην ἀναγκαῖον ἐκπέμψαι, καὶ μὴ τὸν αὐτὸν τόπον εἶναι τῆς τε ἀπέπτου καὶ τοῦ περιττώματος, εἶναί τε τινα δεῖ τόπον ἐν ᾧ μεταβάλλει. Τὸ μὲν γὰρ τὴν εἰσελθοῦσαν ἔξει μόριον, τὸ δὲ τὸ περίττωμα τὸ ἄχρηστον· ὥσπερ δὲ χρόνος ἕτερος ἐκατέρου τούτων, ἀναγκαῖον διειληφθαι καὶ τοῖς τόποις. Ἀλλὰ περὶ μὲν τούτων ἐν τοῖς περὶ τὴν γένεσιν καὶ τὴν τροφήν οἰκειότερός ἐστιν ὁ διορισμός· περὶ δὲ τῆς διαφορᾶς τῆς κοιλίας καὶ τῶν συντελῶν μορίων νῦν ἐπισκεπτέον. Οὔτε γὰρ τοῖς μεγέθεσιν οὔτε τοῖς εἶδεσιν ὁμοίας ἔχουσιν ἀλλήλοις τὰ ζῶα. Ἀλλ' ὅσα μὲν ἐστὶν αὐτῶν ἀμφώδοντα τῶν ἐναίμων καὶ τῶν ζωοτόκων, μίαν ἔχει κοιλίαν, οἷον ἄνθρωπος καὶ κύων καὶ λέων καὶ τᾶλλα ὅσα πολυδάκτυλα, καὶ ὅσα μώνυχα, οἷον ἵππος ὀρεὺς ὄνος, καὶ ὅσα διχαλὰ μὲν ἀμφώδοντα δέ, οἷον ὕξ, πλὴν εἰ μή τι διὰ μέγεθος τοῦ σώματος καὶ τὴν τῆς τροφῆς δύναμιν, οὔσαν οὐκ εὐπεπτον ἄλλ' ἀκανθώδη καὶ ξυλικήν, ἔχει πλείους, οἷον κάμηλος, ὥσπερ καὶ τὰ κερατοφόρα.

Τὰ γὰρ κερατοφόρα οὐκ ἔστιν ἀμφώδοντα· διὰ τοῦτο δὲ καὶ ἡ κάμηλος οὐ τῶν ἀμφωδόντων ἐστίν, ἀκέρατος οὔσα, διὰ τὸ ἀναγκαιότερον εἶναι αὐτῇ τὴν κοιλίαν ἔχειν τοιαύτην ἢ τοὺς προσθίους ὀδόντας. Ὡστ' ἐπεὶ ταύτην ὁμοίαν ἔχει (674b.) τοῖς μὴ ἀμφώδουσι, καὶ τὰ περὶ τοὺς ὀδόντας ὁμοίως ἔχει αὐτῇ, ὥς οὐδὲν ὄντας προέργου. Ἄμα δὲ καὶ ἐπεὶ ἡ τροφή ἀκανθώδης, τὴν δὲ γλῶτταν ἀνάγκη σαρκώδη εἶναι, πρὸς σκληρότητα τοῦ οὐρανοῦ κατακέχρηται τῷ ἐκ τῶν ὀδόντων γεῶδει ἢ φύσις. Καὶ μηρυκάζει δ' ἡ κάμηλος ὥσπερ τὰ κερατοφόρα, διὰ τὸ τὰς κοιλίας ὁμοίας ἔχειν τοῖς κερατοφόροις. Τούτων δ' ἕκαστον πλείους ἔχει κοιλίας, οἷον πρόβατον βοῦς αἶξ ἔλαφος καὶ τᾶλλα τὰ τοιαῦτα τῶν ζώων, ὅπως ἐπειδὴ τῆς ἐργασίας ἐλλείπει περὶ τὴν τροφήν ἢ λειτουργίαν ἢ τοῦ στόματος διὰ τὴν ἔνδειαν τῶν ὀδόντων, ἢ τῶν κοιλιῶν ἑτέρα πρὸς ἑτέρας δεχομένη τὴν τροφήν, ἢ μὲν ἀκατέργαστον, ἢ δὲ κατειργασμένην μᾶλλον, ἢ δὲ πάμπαν, ἢ δὲ λείαν. Διὸ τὰ τοιαῦτα τῶν ζώων

πλείους ἔχει τόπους καὶ μόρια. Καλοῦνται δὲ ταῦτα κοιλία καὶ κεκρύφαλος καὶ ἐχῖνος καὶ ἥνυστρον. Ὃν δ' ἔχει τρόπον ταῦτα πρὸς ἄλληλα τῇ θέσει καὶ τοῖς εἶδεσιν, ἕκ τε τῆς ἱστορίας τῆς περὶ τὰ ζῶα δεῖ θεωρεῖν, καὶ ἕκ τῶν ἀνατομῶν.

Διὰ τὴν αὐτὴν δ' αἰτίαν καὶ τὸ τῶν ὀρνίθων γένος ἔχει διαφορὰν περὶ τὸ τῆς τροφῆς δεκτικὸν μόριον. Ἐπεὶ γὰρ οὐδὲ ταῦτα ὅλως τὴν τοῦ στόματος ἀποδίδωσι λειτουργίαν (ἀνόδοντα γάρ) καὶ οὔτε ὥ διαιρήσει, οὔτε ὥ λεανεῖ τὴν τροφήν ἔχουσι, διὰ τοῦτο τὰ μὲν πρὸ τῆς κοιλίας ἔχουσι τὸν καλούμενον πρόλοβον ἀντὶ τῆς τοῦ στόματος ἐργασίας, οἱ δὲ τὸν οἰσοφάγον πλατύν, ἢ πρὸ τῆς κοιλίας αὐτοῦ μέρος τι ὀγκῶδες ἐν ᾧ προθησαυρίζουσι τὴν ἀκατέργαστον τροφήν, ἢ τῆς κοιλίας αὐτῆς τι ἐπανεστηκός, οἱ δ' αὐτὴν τὴν κοιλίαν ἰσχυρὰν καὶ σαρκώδη πρὸς τὸ δύνασθαι πολὺν χρόνον θησαυρίζειν καὶ πέττειν ἀλείαντον οὔσαν τὴν τροφήν· τῇ δυνάμει γὰρ καὶ τῇ θερμότητι τῆς κοιλίας ἡ φύσις ἀναλαμβάνει τὴν τοῦ στόματος ἔνδειαν. Εἰσὶ δέ τινες οἱ τούτων οὐδὲν ἔχουσιν, ἀλλὰ τὸν πρόλοβον μακρόν, ὅσα μακροσκελῆ καὶ ἔλεια, διὰ τὴν τῆς τροφῆς ὑγρότητα. Αἴτιον δ' ὅτι ἡ τροφή πᾶσι τούτοις εὐλέαντος, ὥστε συμβαίνειν διὰ ταῦτα τῶν τοιούτων τὰς κοιλίας εἶναι ὑγράς διὰ τὴν ἀπεψίαν καὶ τὴν τροφήν.

(675a.) Τὸ δὲ τῶν ἰχθύων γένος ἔχει μὲν ὀδόντας, τούτους δὲ καρχαρόδοντας σχεδὸν ὡς εἰπεῖν πάντας· ὀλίγον γὰρ τί ἐστὶ γένος τὸ μὴ τοιοῦτον, οἷον ὁ καλούμενος σκάρος, ὃς δὴ καὶ δοκεῖ μηρυκάζειν εὐλόγως διὰ ταῦτα μόνος· καὶ γὰρ τὰ μὴ ἀμφώδοντα κερατοφόρα δὲ μηρυκάζει. Ὁξεῖς δὲ πάντες ἔχουσιν, ὥστε διελεῖν μὲν δύνανται, φαύλως δὲ διελεῖν· ἐνδιατρίβειν γὰρ οὐχ οἷόν τε χρονίζοντας. Διόπερ οὐδὲ πλατεῖς ἔχουσιν ὀδόντας, οὐδ' ἐνδέχεται λεαίνειν· μάτην ἂν οὖν εἶχον. Ἔτι δὲ στόμαχον οἱ μὲν ὅλως οὐκ ἔχουσιν, οἱ δὲ βραχύν. Ἀλλὰ πρὸς τὴν βοήθειαν τῆς πέψεως οἱ μὲν ὀρνιθώδεις ἔχουσι τὰς κοιλίας καὶ σαρκώδεις, οἷον κεστρεύς, οἱ δὲ πολλοὶ παρὰ τὴν κοιλίαν ἀποφυάδας πυκνάς, ἵν' ἐν ταύταις ὥσπερ ἐν προλακκίοις θησαυρίζοντες συσσήπωσι καὶ πέττωσι τὴν τροφήν. Ἐχουσι δ' ἐναντίως οἱ ἰχθύες τοῖς ὄρνισι τὰς ἀποφυάδας· οἱ μὲν γὰρ ἰχθύες ἄνω πρὸς τῇ κοιλίᾳ, τῶν δ' ὀρνίθων οἱ ἔχοντες ἀποφυάδας κάτω πρὸς τῷ τέλει τοῦ ἐντέρου. Ἐχουσι δ' ἀποφυάδας ἔνια καὶ τῶν ζωοτόκων ἐντερικὰς κάτω διὰ τὴν αὐτὴν αἰτίαν. Τὸ δὲ τῶν ἰχθύων γένος ἅπαν, διὰ τὸ ἐνδεεστερώς ἔχειν τὰ περὶ τὴν τῆς τροφῆς ἐργασίαν, ἀλλ' ἄπεπτα διαχωρεῖν, λαίμαργον πρὸς τὴν τροφήν ἐστὶ, καὶ τῶν ἄλλων δὲ πάντων ὅσα εὐθυέντερα· ταχείας γὰρ γινομένης τῆς διαχωρήσεως, καὶ διὰ ταῦτα βραχείας οὔσης τῆς ἀπολαύσεως, ταχεῖαν ἀναγκαῖον γίνεσθαι πάλιν καὶ τὴν ἐπιθυμίαν. Τὰ δ' ἀμφώδοντα ὅτι μὲν μικρὰν ἔχει κοιλίαν,

εἴρηται πρότερον, εἰς διαφορὰς δὲ πίπτουσι δύο πᾶσαι σχεδόν· τὰ μὲν γὰρ τῇ τῆς κυνὸς ὁμοίαν ἔχουσι κοιλίαν, τὰ δὲ τῇ τῆς ὑός· ἔστι δὲ ἡ μὲν τῆς ὑὸς μείζων καὶ τινὰς ἔχουσα μετρίας πλάκας πρὸς τὸ χρονιωτέραν γίνεσθαι τὴν πέψιν, ἡ δὲ τῆς κυνὸς μικρὰ τὸ μέγεθος καὶ οὐ πολὺ τοῦ ἐντέρου ὑπερβάλλουσα καὶ λεία τὰ ἐντός.

Μετὰ δὲ τὴν κοιλίαν ἡ τῶν ἐντέρων ἔγκειται φύσις πᾶσι τοῖς ζώοις. Ἔχει δὲ διαφορὰς πολλὰς, καθάπερ ἡ κοιλία, καὶ τοῦτο τὸ μόριον. Τοῖς μὲν γὰρ ἀπλοῦν ἔστι καὶ ὁμοιον ἀναλυόμενον, τοῖς δ' ἀνόμοιον· ἐνίοις μὲν γὰρ εὐρύτερον τὸ πρὸς τῇ κοιλίᾳ, τὸ δὲ πρὸς τῷ τέλει στενώτερον (διόπερ αἱ κύνες μετὰ πόνου προΐενται τὴν τοιαύτην περίπτωσιν), τοῖς (675b.) δὲ πλείοσιν ἄνωθεν στενώτερον, πρὸς τῷ τέλει δ' εὐρύτερον. Μείζω δὲ καὶ ἀναδιπλώσεις ἔχοντα πολλὰς τὰ τῶν κερατοφόρων ἐστί, καὶ οἱ ὄγκοι τῆς κοιλίας τούτοις μείζους καὶ τῶν ἐντέρων διὰ τὸ μέγεθος· πάντα γὰρ ὡς εἶπεν μεγάλα τὰ κερατοφόρα διὰ τὴν κατεργασίαν τὴν τῆς τροφῆς. Πᾶσι δὲ τοῖς μὴ εὐθυεντέροις προϊοῦσιν εὐρύτερον γίνεται τὸ μόριον τοῦτο, καὶ τὸ καλούμενον κόλον ἔχουσι, καὶ τοῦ ἐντέρου τυφλὸν τι καὶ ὀγκῶδες, εἴτ' ἐκ τούτου πάλιν στενώτερον καὶ εἰλιγμένον. Τὸ δὲ μετὰ τοῦτο εὐθὺ πρὸς τὴν ἔξοδον διατείνει τοῦ περιττώματος, καὶ τοῖς μὲν τοῦτο τὸ μόριον, ὁ καλούμενος ἀρχός, κνισσώδης ἐστί, τοῖς δ' ἀπίμελος.

Πάντα δὲ ταῦτα μεμηχάνηται τῇ φύσει πρὸς τὰς ἀρμοττούσας ἐργασίας περὶ τὴν τροφήν καὶ τοῦ γινομένου περιττώματος. Προϊόντι γὰρ καὶ καταβαίνοντι τῷ περιττώματι εὐρυχωρία γίνεται, καὶ πρὸς τὸ μεταβάλλειν ἱσταμένῳ τοῖς εὐχίλοτέροις τῶν ζώων καὶ πλείονος δεομένοις τροφῆς, διὰ τὸ μέγεθος ἢ τὴν θερμότητα τῶν τόπων. Εἴτ' ἐντεῦθεν πάλιν, ὥσπερ ἀπὸ τῆς ἄνω κοιλίας δέχεται στενώτερον ἔντερον, οὕτως ἐκ τοῦ κώλου καὶ τῆς εὐρυχωρίας ἐν τῇ κάτω κοιλίᾳ πάλιν εἰς στενώτερον ἔρχεται καὶ εἰς τὴν ἔλिका τὸ περίττωμα ἐξικμασμένον πάμπαν, ὅπως ταμιεύηται ἡ φύσις καὶ μὴ ἀθρόος ἢ ἡ ἔξοδος τοῦ περιττώματος. Ὅσα μὲν οὖν εἶναι δεῖ τῶν ζώων σωφρονέστερα πρὸς τὴν τῆς τροφῆς ποίησιν εὐρυχωρίας μὲν οὐκ ἔχει μεγάλας κατὰ τὴν κάτω κοιλίαν, ἔλिकास δ' ἔχει πλείους καὶ οὐκ εὐθυέντερά ἐστιν. Ἡ μὲν γὰρ εὐρυχωρία ποιεῖ πλήθους ἐπιθυμίαν, ἡ δ' εὐθύτης ταχυτῆτα ἐπιθυμίας· διόπερ ὅσα τῶν ζώων ἢ ἀπλᾶς ἔχει ἢ εὐρυχώρους τὰς ὑποδοχάς, τὰ μὲν εἰς πλῆθος γαστρίμαργα τὰ δ' εἰς τάχος ἐστίν. Ἐπεὶ δ' ἐν τῇ ἄνω μὲν κοιλίᾳ κατὰ τὴν πρώτην εἴσοδον τῆς τροφῆς νεαρὰν ἀναγκαῖον εἶναι τὴν τροφήν, κάτω δὲ προϊοῦσαν κοπρώδη καὶ ἐξικμασμένην, ἀναγκαῖον εἶναι τι καὶ τὸ μεταξύ, ἐν ᾧ μεταβάλλει καὶ οὐτ' ἔτι πρόσφατος οὐτ' ἤδη κόπρος.



Διὰ τοῦτο πάντα τὰ τοιαῦτα ζῶα τὴν καλουμένην ἔχει νῆστιν καὶ ἐν τῷ μετὰ τὴν κοιλίαν ἐντέρῳ τῷ λεπτῷ· τοῦτο γὰρ μεταξὺ τῆς τ' ἄνω, ἐν ἣ τὸ ἄπεπτον, καὶ τῆς κάτω, ἐν ἣ τὸ ἄχρηστον ἤδη περίττωμα. Γίνεται δ' ἐν πᾶσι μὲν, δηλὴ δ' (676a.) ἐν τοῖς μείζοσι καὶ νηστεύσασιν ἄλλ' οὐκ ἐδηδοκόσιν.

Τότε γὰρ ἤδη μεταίχμιον γίνεται τῶν τόπων ἀμφοτέρων, ἐδηδοκότων δὲ μικρὸς ὁ καιρὸς τῆς μεταβολῆς. Τοῖς μὲν οὖν θήλεσι γίνεται ὅπου ἂν τύχη τοῦ ἄνω ἐντέρου ἢ νῆστις· οἱ δ' ἄρρενες ἔχουσι πρὸ τοῦ τυφλοῦ καὶ τῆς κάτω κοιλίας.

## Κεφάλαιο 15

Ἔχουσι δὲ τὴν καλουμένην πυετίαν τὰ μὲν πολυκοίλια πάντα, τῶν δὲ μονοκοιλίων δασύπους. Ἔχει δὲ τὰ ἔχοντα τῶν πολυκοιλίων τὴν πυετίαν οὗτ' ἐν τῇ μεγάλῃ κοιλίᾳ οὗτ' ἐν τῷ κεκρυφάλῳ οὗτ' ἐν τῷ τελευταίῳ τῷ ἡνύστρῳ, ἄλλ' ἐν τῷ μεταξὺ τοῦ τελευταίου καὶ δύο τῶν πρώτων, ἐν τῷ καλουμένῳ ἐχίνῳ. Ἔχει δὲ ταῦτα πάντα πυετίαν διὰ τὴν παχύτητα τοῦ γάλακτος· τὰ δὲ μονοκοίλια οὐκ ἔχει, λεπτὸν γὰρ τὸ γάλα τῶν μονοκοιλίων. Διὸ τῶν μὲν κερατοφόρων πῆγνυται, τῶν δ' ἀκεράτων οὐ πῆγνυται τὸ γάλα. Τῷ δὲ δασύποδι γίγνεται πυετία διὰ τὸ νέμεσθαι ὁπώδη πόαν· ὁ γὰρ τοιοῦτος χυμὸς συνίστησιν ἐν τῇ κοιλίᾳ τὸ γάλα τοῖς ἐμβρύοις. Διότι δὲ τῶν πολυκοιλίων ἐν τῷ ἐχίνῳ γίνεται ἡ πυετία, εἴρηται [ἐν τοῖς προβλήμασιν].

## Βιβλίον 4

### Κεφάλαιο 1

Τὸν αὐτὸν δὲ τρόπον ἔχει τὰ περὶ τὰ σπλάγχνα καὶ τὴν κοιλίαν καὶ τῶν εἰρημένων μορίων ἕκαστον τοῖς τετράποσι μὲν ὠοτόκοις δὲ τῶν ζώων καὶ τοῖς ἄποσιν, οἷον τοῖς ὄφεσιν.

Καὶ γὰρ ἡ τῶν ὄφεων φύσις ἐστὶ συγγενῆς τούτοις· ὁμοία γάρ ἐστι σαύρῳ μακρῷ εἰ καὶ ἄποδι. Τούτοις δὲ καὶ τοῖς ἰχθύσι πάντα παραπλήσια, πλὴν τὰ μὲν ἔχει πλεύμονα διὰ τὸ πεζεύειν, οἱ δ' οὐκ ἔχουσιν, ἀλλὰ βράγχια ἀντὶ τοῦ πλεύμονος. Κύστιν δὲ οὔτε οἱ ἰχθύες ἔχουσιν οὔτε τούτων οὐδὲν πλὴν χελώνης· τρέπεται γὰρ εἰς τὰς φολίδας τὸ ὑγρὸν ὀλιγοπότων ὄντων διὰ τὴν ἀναιμότητα τοῦ πλεύμονος, καθάπερ τοῖς ὄρνισιν εἰς τὰ πτερά. Καὶ ἐπιλευκαίνει δὲ τὸ περίττωμα πᾶσι καὶ τούτοις, ὥσπερ καὶ τοῖς ὄρνισιν· διόπερ ἐν τοῖς ἔχουσι κύστιν ἐξελθόντος τοῦ περιττώματος ὑφίσταται ἀλμυρὶς

γεώδης ἐν τοῖς ἀγγείοις· τὸ γὰρ γλυκὺ καὶ πότιμον ἀναλίσκεται διὰ κουφότητα εἰς τὰς σάρκας. Τῶν δ' (676b.) ὄφρων οἱ ἔχεις πρὸς τοὺς ἄλλους ἔχουσι τὴν αὐτὴν διαφορὰν ἣν καὶ ἐν τοῖς ἰχθύσι τὰ σελάχη πρὸς τοὺς ἄλλους· ζωοτοκοῦσι γὰρ ἔξω καὶ τὰ σελάχη καὶ οἱ ἔχεις, ἐν αὐτοῖς ὠοτοκῆσαντα πρῶτον. Μονοκοίλια δὲ πάντα τὰ τοιαῦτά ἐστι, καθάπερ τᾶλλα τὰ ἀμφώδοντα· καὶ σπλάγχνα δὲ πάμπαν μικρὰ ἔχει, ὥσπερ τᾶλλα τὰ μὴ ἔχοντα κύστιν. Οἱ δ' ὄφεις διὰ τὴν τοῦ σώματος μορφήν, οὕσαν μακρὰν καὶ στενὴν, καὶ τὰ σχήματα τῶν σπλάγχνων ἔχουσι διὰ ταῦτα μακρὰ καὶ τοῖς τῶν ἄλλων ζώων ἀνόμοια, διὰ τὸ καθάπερ ἐν τύπῳ τὰ σχήματα αὐτῶν πλασθῆναι διὰ τὸν τόπον. Ἐπίπλοον δὲ καὶ μεσεντέριον καὶ τὰ περὶ τὴν τῶν ἐντέρων φύσιν, ἔτι δὲ τὸ διάζωμα καὶ τὴν καρδίαν πάντ' ἔχει τὰ ἔναιμα τῶν ζώων, πλεύμονα δὲ καὶ ἀρτηρίαν πάντα πλὴν τῶν ἰχθύων. Καὶ τὴν θέσιν δὲ τῆς ἀρτηρίας καὶ τοῦ οἴσοφάγου πάντα τὰ ἔχοντα ὁμοίως ἔχει διὰ τὰς εἰρημένας αἰτίας πρότερον.

## Κεφάλαιο 2

Ἔχει δὲ καὶ χολὴν τὰ πολλὰ τῶν ἐναίμων ζώων, τὰ μὲν ἐπὶ τῷ ἥπατι, τὰ δ' ἀπηρτημένην ἐπὶ τοῖς ἐντέροις, ὡς οὕσαν οὐχ ἥττον ἐκ τῆς κάτω κοιλίας τὴν φύσιν αὐτῆς. Δῆλον δὲ μάλιστα ἐπὶ τῶν ἰχθύων· οὗτοι γὰρ ἔχουσι τε πάντες, καὶ οἱ πολλοὶ πρὸς τοῖς ἐντέροις, ἔνιοι δὲ παρ' ὅλον τὸ ἔντερον παρυφασμένην, οἷον ἡ ἀμία· καὶ τῶν ὄφρων οἱ πλεῖστοι τὸν αὐτὸν τρόπον. Διόπερ οἱ λέγοντες τὴν φύσιν τῆς χολῆς αἰσθήσεώς τινος εἶναι χάριν, οὐ καλῶς λέγουσι. Φασὶ γὰρ εἶναι διὰ τοῦτο, ὅπως τῆς ψυχῆς τὸ περὶ τὸ ἥπαρ μόριον δάκνουσα μὲν συνιστῇ, λυομένη δ' ἴλεων ποιῇ. Τὰ μὲν γὰρ ὅλως οὐκ ἔχει χολήν, οἷον ἵππος καὶ ὄρευς καὶ ὄνος καὶ ἔλαφος καὶ πρόξ. Οὐκ ἔχει δὲ οὐδὲ ἡ κάμηλος ἀποκεκριμένην, ἀλλὰ φλεβία χολώδη μᾶλλον. Οὐκ ἔχει δ' οὐδ' ἡ φώκη χολήν, οὐδὲ τῶν θαλαττίων δελφίς. Ἐν δὲ τοῖς γένεσι τοῖς αὐτοῖς τὰ μὲν ἔχειν φαίνεται, τὰ δ' οὐκ ἔχειν, οἷον ἐν τῷ τῶν μυῶν. Τούτων δ' ἐστὶ καὶ ὁ ἄνθρωπος· ἔνιοι μὲν γὰρ φαίνονται ἔχοντες χολήν ἐπὶ τοῦ ἥπατος, ἔνιοι δ' οὐκ ἔχοντες. Διὸ καὶ γίνεται ἀμφισβήτησις περὶ ὅλου τοῦ γένους· οἱ γὰρ ἐντυχόντες ὁποτέρωσοῦν ἔχουσι περὶ πάντων ὑπολαμβάνουσιν ὡς ἀπάντων ἐχόντων. Συμβαίνει δὲ τὸ τοιοῦτον καὶ περὶ τὰ πρόβατα καὶ τὰς αἴγας· τὰ μὲν γὰρ πλεῖστα (677a.) τούτων ἔχει χολήν· ἀλλ' ἐνιαχοῦ μὲν τοσαύτην ὥστε δοκεῖν τέρας εἶναι τὴν ὑπερβολήν, οἷον ἐν Νάξῳ, ἐνιαχοῦ δὲ οὐκ ἔχουσιν, οἷον ἐν Χαλκίδι τῆς Εὐβοίας κατὰ τινα τόπον τῆς χώρας αὐτῶν. Ἔτι δ', ὥσπερ εἴρηται, ἡ τῶν ἰχθύων ἀπήρτηται πολὺ τοῦ ἥπατος. Οὐκ ὀρθῶς δ' εἰκόασιν οἱ περὶ Ἀναξαγόραν ὑπολαμβάνειν ὡς αἰτίαν οὕσαν τῶν ὀξέων νοσημάτων· ὑπερβάλλουσιν γὰρ ἀπορραίνειν πρὸς τε τὸν πλεύμονα καὶ

τάς φλέβας καὶ τὰ πλευρά. Σχεδὸν γὰρ οἷς ταῦτα συμβαίνει τὰ πάθη τῶν νόσων, οὐκ ἔχουσι χολήν, ἔν τε ταῖς ἀνατομαῖς ἂν ἐγίνετο τοῦτο φανερόν· ἔτι δὲ τὸ πλῆθος τό τ' ἐν τοῖς ἀρρωστήμασιν ὑπάρχον καὶ τὸ ἀπορραϊνόμενον ἀσύμβλητον. Ἄλλ' ἔοικεν ἡ χολή, καθάπερ καὶ ἡ κατὰ τὸ ἄλλο σῶμα γινομένη περίττωμά τι εἶναι ἢ σύντηξις, οὕτω καὶ ἡ ἐπὶ τῷ ἥπατι χολή περίττωμα εἶναι καὶ οὐχ ἔνεκά τινος, ὥσπερ καὶ ἡ ἐν τῇ κοιλίᾳ καὶ ἐν τοῖς ἐντέροις ὑπόστασις. Κατάχρηται μὲν οὖν ἐνίοτε ἡ φύσις εἰς τὸ ὠφέλιμον καὶ τοῖς περιττώμασιν, οὐ μὴν διὰ τοῦτο δεῖ ζητεῖν πάντα ἔνεκα τίνος, ἀλλὰ τινων ὄντων τοιούτων ἕτερα ἔξ ἀνάγκης συμβαίνει διὰ ταῦτα πολλά.

Ὅσοις μὲν οὖν ἡ τοῦ ἥπατος σύστασις ὑγιεινὴ ἐστὶ καὶ ἡ τοῦ αἵματος φύσις γλυκεῖα ἢ εἰς τοῦτ' ἀποκρινομένη, ταῦτα μὲν ἢ πάμπαν οὐκ ἴσχει χολήν ἐπὶ τοῦ ἥπατος, ἢ ἐν τισι φλεβίοις, ἢ τὰ μὲν τὰ δ' οὐ. Διὸ καὶ τὰ ἥπατα τὰ τῶν ἀχόλων εὐχρω καὶ γλυκερά ἐστὶν ὡς ἐπίπαν εἰπεῖν, καὶ τῶν ἐχόντων χολήν τὸ ὑπὸ τῇ χολῇ τοῦ ἥπατος γλυκύτατόν ἐστιν.

Τῶν δὲ συνισταμένων ἐξ ἥττον καθαροῦ αἵματος τοῦτ' ἐστὶν ἡ χολή, τὸ γινόμενον περίττωμα. Ἐναντίον τε γὰρ τῇ τροφῇ τὸ περίττωμα βούλεται εἶναι καὶ τῷ γλυκεῖ τὸ πικρόν, καὶ τὸ αἷμα γλυκὺ τὸ ὑγιαῖνον. Φανερόν οὖν ὅτι οὐ τινος ἔνεκα, ἀλλ' ἀποκάθαρμά ἐστὶν ἡ χολή. Διὸ καὶ χαριέστατα λέγουσι τῶν ἀρχαίων οἱ φάσκοντες αἴτιον εἶναι τοῦ πλείω ζῆν χρόνον τὸ μὴ ἔχειν χολήν, βλέψαντες ἐπὶ τὰ μώνυχα καὶ τὰς ἐλάφους· ταῦτα γὰρ ἄχολά τε καὶ ζῆ πολὺν χρόνον.

Ἔτι δὲ καὶ τὰ μὴ ἐωραμένα ὑπ' ἐκείνων ὅτι οὐκ ἔχει χολήν, οἶον δελφὶς καὶ κάμηλος, καὶ ταῦτα τυγχάνει μακρόβια ὄντα.

Εὐλογον γὰρ τὴν τοῦ ἥπατος φύσιν ἐπικαίρον οὕσαν, καὶ ἀναγκαίαν πᾶσι τοῖς ἐναίμοις ζώοις αἰτίαν εἶναι, ποῖαν τιν' (677b.) οὕσαν, τοῦ ζῆν ἐλάττω ἢ πλείω χρόνον. Καὶ τὸ τούτου μὲν τοῦ σπλάγχνου εἶναι περίττωμα τοιοῦτον, τῶν δ' ἄλλων μηδεὶς, κατὰ λόγον ἐστίν. Τῇ μὲν γὰρ καρδίᾳ τοιοῦτον οὐδένα πλησιάζειν οἶόν τε χυμόν (οὐδὲν γὰρ δέχεται βίαιον πάθος), τῶν δ' ἄλλων οὐδὲν σπλάγχνων ἀναγκαῖόν ἐστὶ τοῖς ζώοις, τὸ δ' ἥπαρ μόνον· διόπερ καὶ τοῦτο συμβαίνει περὶ αὐτὸ μόνον. Ἀτοπὸν τε τὸ μὴ πανταχοῦ νομίζειν, ὅπου ἂν τις ἴδῃ φλέγμα ἢ τὸ ὑπόστημα τῆς κοιλίας, περίττωμα εἶναι, ὁμοίως δὲ δῆλον ὅτι καὶ χολήν καὶ μὴ διαφέρεσθαι τοῖς τόποις.

### Κεφάλαιο 3

Καὶ περὶ μὲν χολῆς, διὰ τίν' αἰτίαν τὰ μὲν ἔχει τὰ δ' οὐκ ἔχει τῶν ζώων, εἴρηται. Περὶ δὲ μεσεντερίου καὶ ἐπιπλόου λοιπὸν εἰπεῖν. Ταῦτα γὰρ ἐν τῷ τόπῳ τούτῳ καὶ μετὰ τῶν μορίων ἐστὶ τούτων. Ἔστι δὲ τὸ μὲν ἐπίπλοον ὑμὴν τοῖς μὲν στέαρ ἔχουσι στεατώδης, τοῖς δὲ πιμελὴν πιμελώδης. Ποῖα δ' ἐστὶν ἑκάτερα τούτων εἴρηται πρότερον. Ἦρκεται δὲ τὸ ἐπίπλοον ὁμοίως τοῖς τε μονοκοιλίοις καὶ τοῖς πολυκοιλίοις ἀπὸ μέσης τῆς κοιλίας κατὰ τὴν ὑπογεγραμμένην οἷον ῥαφήν. Ἐπέχει δὲ τό τε λοιπὸν τῆς κοιλίας καὶ τὸ τῶν ἐντέρων πλῆθος ὁμοίως τοῖς ἐναίμοις, ἐν τε τοῖς πεζοῖς καὶ τοῖς ἐνύδροις ζώοις.

Ἡ μὲν οὖν γένεσις ἐξ ἀνάγκης συμβαίνει τοιαύτη τοῦ μορίου τούτου· ξηροῦ γὰρ καὶ ὑγροῦ μίγματος θερμαινομένου τὸ ἔσχατον ἀεὶ δερματῶδες γίνεται καὶ ὑμενώδες, ὃ δὲ τόπος οὗτος τοιαύτης πλήρης ἐστὶ τροφῆς. Ἔτι δὲ διὰ πυκνότητα τοῦ ὑμέου τὸ διηθούμενον τῆς αἱματώδους τροφῆς ἀναγκαῖον λιπαρὸν εἶναι (τοῦτο γὰρ λεπτότατον) καὶ διὰ τὴν θερμότητα τὴν περὶ τὸν τόπον συμπεττόμενον ἀντὶ σαρκώδους καὶ αἱματώδους συστάσεως στέαρ γίνεσθαι καὶ πιμελήν.

Ἡ μὲν οὖν γένεσις τοῦ ἐπιπλόου συμβαίνει κατὰ τὸν λόγον τοῦτον, καταχρῆται δ' ἡ φύσις αὐτῷ πρὸς τὴν εὐπεσίαν τῆς τροφῆς, ὅπως ῥᾶον πέττη καὶ θᾶττον τὰ ζῶα τὴν τροφήν· τὸ μὲν γὰρ θερμὸν πεπτικόν, τὸ δὲ πῖον θερμόν, τὸ δ' ἐπίπλοον πῖον. Καὶ διὰ τοῦτο ἀπὸ μέσης ἦρκεται τῆς κοιλίας, ὅτι τὸ ἐπ' ἐκεῖνο μέρος συμπέττει τὸ παρακείμενον ἥπαρ. Καὶ περὶ μὲν τοῦ ἐπιπλόου εἴρηται.

## Κεφάλαιο 4

Τὸ δὲ καλούμενον μεσεντέριον ἐστὶ μὲν ὑμὴν, διατείνει δὲ συνεχὲς ἀπὸ τῆς τῶν ἐντέρων παρατάσεως εἰς τὴν φλέβα (678a.) τὴν μεγάλην καὶ τὴν ᾠορτήν, πλῆρες ὃν φλεβῶν πολλῶν καὶ πυκνῶν, αἱ τείνουσιν ἀπὸ τῶν ἐντέρων εἰς τε τὴν μεγάλην φλέβα καὶ τὴν ᾠορτήν. Τὴν μὲν οὖν γένεσιν ἐξ ἀνάγκης οὕσαν εὐρήσομεν ὁμοίως τοῖς ἄλλοις μορίοις· διὰ τίνα δ' αἰτίαν ὑπάρχει τοῖς ἐναίμοις, φανερόν ἐστιν ἐπισκοποῦσιν. Ἐπεὶ γὰρ ἀναγκαῖον τὰ ζῶα τροφήν λαμβάνειν θύραθεν, καὶ πάλιν ἐκ ταύτης γίνεσθαι τὴν ἐσχάτην τροφήν, ἐξ ἧς ἤδη διαδίδοται εἰς τὰ μόρια (τοῦτο δὲ τοῖς μὲν ἀναίμοις ἀνώνυμον, τοῖς δ' ἐναίμοις αἷμα καλεῖται), δεῖ τι εἶναι δι' οὗ εἰς τὰς φλέβας ἐκ τῆς κοιλίας οἶον διὰ ῥιζῶν πορεύσεται ἡ τροφή. Τὰ μὲν οὖν φυτὰ τὰς ῥίζας ἔχει εἰς τὴν γῆν (ἐκεῖθεν γὰρ λαμβάνει τὴν τροφήν), τοῖς δὲ ζώοις ἡ κοιλία καὶ ἡ τῶν ἐντέρων δύναμις γῆ ἐστίν, ἐξ ἧς δεῖ λαμβάνειν τὴν τροφήν· διόπερ ἡ τοῦ μεσεντερίου

φύσις ἐστίν, οἷον ῥίζας ἔχουσα τὰς δι' αὐτῆς φλέβας. Οὗ μὲν οὖν ἕνεκα τὸ μεσεντέριον ἐστίν, εἴρηται· τίνα δὲ τρόπον λαμβάνει τὴν τροφήν, καὶ πῶς εἰσέρχεται διὰ τῶν φλεβῶν ἀπὸ τῆς εἰσιούσης τροφῆς εἰς τὰ μόρια ταῦτα τὸ διαδιδόμενον εἰς τὰς φλέβας, ἐν τοῖς περὶ τὴν γένεσιν τῶν ζώων λεχθήσεται καὶ τὴν τροφήν.

Τὰ μὲν οὖν ἕναιμα τῶν ζώων πῶς ἔχει μέχρι τῶν διωρισμένων μορίων, καὶ διὰ τίνας αἰτίας, εἴρηται. Περὶ δὲ τῶν εἰς τὴν γένεσιν συντελούντων, οἷς δοκεῖ διαφέρειν τὸ θῆλυ τοῦ ἄρρενος, ἐχόμενον μὲν ἐστὶ καὶ λοιπὸν τῶν εἰρημένων· ἄλλ' ἐπειδὴ περὶ γενέσεως λεκτέον, ἀρμόττον ἐστὶ καὶ περὶ τούτων ἐν τῇ περὶ ἐκείνων θεωρίᾳ διελθεῖν.

## Κεφάλαιο 5

Τὰ δὲ καλούμενα μαλάκια καὶ μαλακόστρακα πολλὴν ἔχει πρὸς ταῦτα διαφοράν· εὐθὺς γὰρ τὴν τῶν σπλάγχνων ἅπασαν οὐκ ἔχει φύσιν. Ὅμοίως δ' οὐδὲ τῶν ἄλλων ἀναίμων οὐδέν.

Ἔστι δὲ δύο γένη λοιπὰ τῶν ἀναίμων, τὰ τε ὀστρακόδερμα καὶ τὸ τῶν ἐντόμων γένος. Ἐξ οὗ γὰρ συνέστηκεν ἡ τῶν σπλάγχνων φύσις, οὐδὲν τούτων ἔχει αἷμα διὰ τὸ τῆς οὐσίας αὐτῶν εἶναι τι τοιοῦτον πάθος αὐτῆς· ὅτι γὰρ ἔστι τὰ μὲν ἔναιμα τὰ δ' ἄναιμα, ἐν τῷ λόγῳ ἐνυπάρξει τῷ ὀρίζοντι τὴν οὐσίαν αὐτῶν. Ἔτι δ' ὧν ἔνεκεν ἔχουσι τὰ σπλάγχνα τὰ ἔναιμα τῶν ζώων, οὐδὲν ὑπάρξει τοῖς τοιούτοις· οὔτε γὰρ (678b.) φλέβας ἔχουσιν οὔτε κύστιν οὔτ' ἀναπνέουσιν, ἀλλὰ μόνον ἀναγκαῖον ἔχειν αὐτοῖς τὸ ἀνάλογον τῇ καρδίᾳ. Τὸ γὰρ αἰσθητικὸν ψυχῆς καὶ τὸ τῆς ζωῆς αἴτιον ἀρχῇ τι τῶν μορίων καὶ τοῦ σώματος ὑπάρχει πᾶσι τοῖς ζώοις. Τὰ δὲ πρὸς τὴν τροφήν μόρια ἔχει καὶ ταῦτα ἐξ ἀνάγκης πάντα· οἱ δὲ τρόποι διαφέρουσι διὰ τοὺς τόπους ἐν οἷς λαμβάνουσι τὴν τροφήν.

Ἔχουσι δὲ τὰ μὲν μαλάκια περὶ τὸ καλούμενον στόμα δύο ὀδόντας, καὶ ἐν τῷ στόματι ἀντὶ γλώττης σαρκῶδές τι, ᾧ κρίνουν τὴν ἐν τοῖς ἐδεστοῖς ἡδονήν. Ὅμοίως δὲ καὶ τὰ μαλακόστρακα τούτοις τοὺς πρώτους ὀδόντας ἔχει καὶ τὸ ἀνάλογον τῇ γλώττῃ σαρκῶδες. Ἔτι δὲ καὶ τὰ ὀστρακόδερμα πάντα τὸ τοιοῦτον ἔχει μόριον διὰ τὴν αὐτὴν αἰτίαν τοῖς ἐναίμοις, πρὸς τὴν τῆς τροφῆς αἴσθησιν. Ὅμοίως δὲ καὶ τὰ ἔντομα τὰ μὲν τὴν ἐξιοῦσαν ἐπιβοσκίδα τοῦ στόματος, οἷον τό τε τῶν μελιττῶν γένος καὶ τὸ τῶν μυιῶν, ὥσπερ εἴρηται καὶ πρότερον· ὅσα δὲ μὴ ἔστιν ἐμπροσθόκεντρα, ἐν τῷ στόματι ἔχει τὸ τοιοῦτον μόριον, οἷον τὸ τῶν μυρμήκων γένος, καὶ εἴ τι τοιοῦτον ἕτερον. Ὀδόντας δὲ τὰ μὲν ἔχει τούτων, ἄλλοιότερους δέ, καθάπερ τό τε τῶν μυρμήκων καὶ τὸ τῶν μελιττῶν γένος, τὰ δ' οὐκ ἔχει, ὅσα ὑγρᾷ χρῆται τῇ τροφῇ· πολλὰ γὰρ τῶν ἐντόμων οὐ τροφῆς ἔχει χάριν τοὺς ὀδόντας ἀλλ' ἀλκῆς. Τῶν δὲ ὀστρακοδέρμων τὰ μὲν, ὥσπερ ἐλέχθη καὶ ἐν τοῖς κατ' ἀρχὰς λόγοις, τὴν καλουμένην ἔχει γλῶτταν ἰσχυράν, οἱ δὲ κόχλοι καὶ ὀδόντας δύο, καθάπερ τὰ μαλακόστρακα.

Μετὰ δὲ τὸ στόμα τοῖς μαλακίοις ἐστὶ στόμαχος μακρός, τούτου δ' ἐχόμενος πρόλοβος οἷός περ τοῖς ὄρνισιν, εἴτα συνεχῆς κοιλία καὶ ταύτης ἐχόμενον ἔντερον ἀπλοῦν μέχρι τῆς ἐξόδου. Ταῖς μὲν οὖν σηπείαις καὶ τοῖς πολυπόσιν ὅμοια καὶ τοῖς σχήμασι καὶ τῇ ἀφῇ τὰ περὶ τὴν κοιλίαν· ταῖς δὲ καλουμέναις

τευθίσι δύο μὲν ὁμοίως αἱ κοιλιώδεις εἰσὶν ὑποδοχαί, ἥττον δὲ προλοβώδης ἡ ἑτέρα, καὶ τοῖς σχήμασιν ἐκείνων διαφέρουσι διὰ τὸ καὶ τὸ σῶμα πᾶν ἐκ μαλακωτέρας συνεστάναι σαρκός. Ταῦτα δ' ἔχει τὰ μόρια τοῦτον τὸν τρόπον διὰ τὴν αὐτὴν αἰτίαν ὥσπερ καὶ οἱ ὄρνιθες· οὐδὲ γὰρ τούτων οὐδὲν ἐνδέχεται λεαίνειν τὴν τροφήν, διόπερ ὁ πρόλοβός ἐστι πρὸ τῆς κοιλίας. Πρὸς βοήθειαν δὲ καὶ σωτηρίαν ἔχει ταῦτα τὸν καλούμενον θολόν, ἐν χιτῶνι ὑμενώδει (679a.) προσπεφυκότα, τὴν ἔξοδον ἔχοντι καὶ τὸ πέρας ἥπερ ἀφιάσι τὸ περίττωμα τῆς κοιλίας κατὰ τὸν καλούμενον αὐλόν· οὗτος δ' ἐστὶν ἐν τοῖς ὑπτίοις.

Ἔχει μὲν οὖν πάντα τὰ μαλάκια τοῦτο τὸ μόριον ἴδιον, μάλιστα δ' ἡ σηπία καὶ πλεῖστον. Ὄταν γὰρ φοβηθῶσι καὶ δείσωσιν, οἷον φράγμα πρὸ τοῦ σώματος ποιοῦνται τὴν τοῦ ὑγροῦ μελανίαν καὶ θόλωσιν. Αἱ μὲν οὖν τευθίδες καὶ πολύποδες ἔχουσιν ἄνωθεν τὸν θολόν ἐπὶ τῇ μύτιδι μᾶλλον, ἡ δὲ σηπία πρὸς τῇ κοιλίᾳ κάτω· πλείω γὰρ ἔχει διὰ τὸ χρῆσθαι μᾶλλον. Τοῦτο δ' αὐτῇ συμβαίνει διὰ τὸ πρόσγειον μὲν εἶναι τὸν βίον αὐτῆς, μὴ ἔχειν δὲ ἄλλην βοήθειαν, ὥσπερ ὁ πολύπους τὰς πλεκτάνας ἔχει χρησίμους καὶ τὴν τοῦ χρώματος μεταβολήν, ἢ συμβαίνει αὐτῷ, ὥσπερ καὶ ἡ τοῦ θολοῦ πρόεσις, διὰ δειλίαν. Ἡ δὲ τευθὶς πελάγιόν ἐστι τούτων μόνον. Πλείω μὲν οὖν ἔχει ἡ σηπία παρὰ τοῦτο τὸν θολόν, κάτωθεν δὲ διὰ τὸ πλείω· ῥάδιον γὰρ προῖεσθαι καὶ πόρρωθεν ἀπὸ τοῦ πλείονος. Γίνεται δ' ὁ θολός, καθάπερ τοῖς ὄρνισιν ὑπόστημα τὸ λευκὸν ἐπὶ τοῦ περιττώματος γεῶδες, οὕτω καὶ τούτοις ὁ θολός διὰ τὸ μηδὲ ταῦτ' ἔχειν κύστιν· ἀποκρίνεται γὰρ τὸ γεωδέστατον εἰς αὐτόν, καὶ τῇ σηπίᾳ πλεῖστον διὰ τὸ πλεῖστον ἔχειν γεῶδες. Σημεῖον δὲ τὸ σηπίον τοιοῦτον ὄν· τοῦτο γὰρ ὁ μὲν πολύπους οὐκ ἔχει, αἱ δὲ τευθίδες χονδρῶδες καὶ λεπτόν· δι' ἣν δ' αἰτίαν τὰ μὲν οὐκ ἔχει τὰ δ' ἔχει, καὶ ποῖόν τι τούτων ἔχει ἐκάτερον, εἴρηται. Ἀναίμων δ' ὄντων καὶ διὰ τοῦτο κατεψυγμένων καὶ φοβητικῶν, ὥσπερ ἐνίοις ὅταν δείσωσιν ἡ κοιλία ταραττεται, τοῖς δ' ἐκ τῆς κύστεως ῥεῖ περίττωσις, καὶ τούτοις τοῦτο συμβαίνει μὲν ἐξ ἀνάγκης ἀφιέναι διὰ δειλίαν, ὥσπερ ἐκ κύστεως τοῖς ἐπουροῦσιν, ἡ δὲ φύσις ἅμα τῷ τοιούτῳ περιττώματι καταχρῆται πρὸς βοήθειαν καὶ σωτηρίαν αὐτῶν.

ἔχουσι δὲ καὶ τὰ μαλακόστρακα, τὰ τε καραβοειδῆ καὶ οἱ καρκίνοι, δύο μὲν ὁδόντας τοὺς πρώτους, καὶ μεταξὺ τὴν σάρκα τὴν γλωσσοειδῆ, ὥσπερ εἴρηται καὶ πρότερον, εὐθύς δ' ἐχόμενον τοῦ στόματος στόμαχον μικρὸν κατὰ μέγεθος τῶν σωμάτων, τὰ μείζω πρὸς τὰ ἐλάττω· τούτου δὲ κοιλίαν ἐχομένην, ἐφ' ἧς οἱ τε κάραβοι καὶ ἐνιοὶ τῶν καρκίνων ὁδόντας ἔχουσιν ἑτέρους διὰ τὸ τοὺς ἄνω μὴ διαιρεῖν ἱκανῶς, ἀπὸ δὲ τῆς κοιλίας ἔντερον ἀπλοῦν κατ' εὐθὺ μέχρι πρὸς τὴν (679b.) ἔξοδον τοῦ περιττώματος.

ἔχει δὲ καὶ τῶν ὀστρακοδέρμων ἕκαστον ταῦτα τὰ μόρια, τὰ μὲν διηρθρωμένα μᾶλλον τὰ δ' ἥττον. Ἐν δὲ τοῖς μείζοσι διαδηλότερά ἐστιν ἕκαστα τούτων. Οἱ μὲν οὖν κόχλοι καὶ ὀδόντας ἔχουσι σκληροὺς καὶ ὀξεῖς, ὥσπερ εἴρηται πρότερον, καὶ τὸ μεταξὺ σαρκῶδες ὁμοίως τοῖς μαλακίοις καὶ μαλακοστράκοις, καὶ τὴν προβοσκίδα, καθάπερ εἴρηται, μεταξὺ κέντρου καὶ γλώττης, τοῦ δὲ στόματος ἐχόμενον οἶον ὀρνιθώδη τινὰ πρόλοβον, τούτου δ' ἐχόμενον στόμαχον· τούτου δ' ἔχεται ἡ κοιλία, ἐν ἣ ἡ καλουμένη μήκων, ἀφ' ἧς συνεχές ἐστιν ἔντερον ἀπλῆν τὴν ἀρχὴν ἔχον ἀπὸ τῆς μήκωνος· ἔστι γὰρ ἐν πᾶσι τοῖς ὀστρακηροῖς περίττωμα τοῦτο τὸ μάλιστα δοκοῦν εἶναι ἐδώδιμον. ἔχει δ' ὁμοίως τῷ κόχλῳ καὶ τᾶλλα τὰ στρομβώδη, οἶον πορφύραι καὶ κήρυκες.

Ἔστι δὲ γένη καὶ εἶδη πολλὰ τῶν ὀστρακοδέρμων· τὰ μὲν γὰρ στρομβώδη ἐστίν, ὥσπερ τὰ νῦν εἰρημένα, τὰ δὲ δίθυρα, τὰ δὲ μονόθυρα. Τρόπον δέ τινα καὶ τὰ στρομβώδη διθύροις ἔοικεν· ἔχει γὰρ ἐπιπτύγματ' ἐπὶ τῷ φανερωῷ τῆς σαρκὸς πάντα τὰ τοιαῦτα ἐκ γενετῆς, οἶον αἶ τε πορφύραι καὶ κήρυκες καὶ οἱ νηρεῖται καὶ πᾶν τὸ τοιοῦτον γένος, πρὸς βοήθειαν. Ἦι γὰρ μὴ προβέβληται τὸ ὀστρακον, ῥάδιον ταύτῃ βλάπτεσθαι ὑπὸ τῶν θύραθεν προσπιπτόντων. Τὰ μὲν οὖν μονόθυρα διὰ τὸ προσπεφυκέναι σώζεται τῷ πρηνὲς ἔχειν τὸ ὀστρακον, καὶ γίνεται ἄλλοτρίῳ φράγματι τρόπον τινὰ δίθυρον, οἶον αἰ καλούμεναι λεπάδες· τὰ δὲ δίθυρα, οἶον κτένες καὶ μύες, τῷ συνάγειν, τὰ δὲ στρομβώδη τούτῳ τῷ ἐπικαλύμματι, ὥσπερ δίθυρα γινόμενα ἐκ μονοθύρων.

Ὁ δ' ἐχῖνος μάλιστα πάντων ἁλεωρὰν ἔχει· κύκλῳ γὰρ τὸ ὀστρακον συνηρεφές καὶ κεχαρακωμένον ταῖς ἀκάνθαις. Ἰδίον δ' ἔχει τῶν ὀστρακοδέρμων τοῦτο, καθάπερ εἴρηται πρότερον.

Τῶν δὲ μαλακοστράκων καὶ τῶν ὀστρακοδέρμων συνέστηκεν ἡ φύσις τοῖς μαλακίοις ἀντικειμένως· τοῖς μὲν γὰρ ἔξω τὸ σαρκῶδες, τοῖς δ' ἐντός, ἐκτὸς δὲ τὸ γεῶδες. Ὁ δ' ἐχῖνος οὐδὲν ἔχει σαρκῶδες. Πάντα μὲν οὖν ἔχει, καθάπερ εἴρηται, καὶ τᾶλλα τὰ ὀστρακόδερμα στόμα τε καὶ τὸ γλωττοειδές καὶ τὴν κοιλίαν καὶ τοῦ περιττώματος τὴν ἔξοδον, διαφέρει δὲ τῇ θέσει καὶ τοῖς μεγέθεσιν. Ὅν δὲ (680a.) τρόπον ἔχει τούτων ἕκαστον, ἔκ τε τῶν ἱστοριῶν τῶν περὶ τὰ ζῶα θεωρεῖσθω καὶ ἐκ τῶν ἀνατομῶν· τὰ μὲν γὰρ τῷ λόγῳ τὰ δὲ πρὸς τὴν ὄψιν αὐτῶν σαφηνίζειν δεῖ μᾶλλον.

Ἰδίως δ' ἔχουσι τῶν ὀστρακοδέρμων οἱ τ' ἐχῖνοι καὶ τὸ τῶν καλουμένων τηθύων γένος. ἔχουσι δ' οἱ ἐχῖνοι ὀδόντας μὲν πέντε καὶ μεταξὺ τὸ σαρκῶδες ὥσπερ ἐπὶ πάντων ἐστὶ τῶν εἰρημένων, ἐχόμενον δὲ τούτου



στόμαχον, ἀπὸ δὲ τούτου τὴν κοιλίαν εἰς πολλὰ διηρημένην, ὥσπερανεῖ πολλὰς τοῦ ζώου κοιλίας ἔχοντος. Κεχωρισμένοι μὲν γὰρ εἰσι καὶ πλήρεις περιττώματος, ἐξ ἑνὸς δ' ἥρτηνται τοῦ στομάχου καὶ τελευτῶσι πρὸς μίαν ἔξοδον τὴν τοῦ περιττώματος. Παρὰ δὲ τὴν κοιλίαν σαρκῶδες μὲν οὐδὲν ἔχουσιν, ὥσπερ εἴρηται, τὰ δὲ καλούμενα ὠὰ πλείω τὸν ἀριθμὸν ἐν ὑμένι χωρὶς ἕκαστον, καὶ κύκλῳ ἀπὸ τοῦ στόματος μέλαν' ἄττα διεσπαρμένα χύδην, ἀνώνυμα. ὄντων δὲ πλειόνων γενῶν (οὐ γὰρ ἓν εἶδος τῶν ἐχίνων πάντων ἐστὶ) πάντες μὲν ἔχουσι ταῦτα τὰ μόρια, ἀλλ' οὐκ ἐδώδιμα πάντες τὰ καλούμενα ὠὰ, καὶ μικρὰ πάνπαν ἔξω τῶν ἐπιπολαζόντων. Ὅλως δὲ τοῦτο καὶ περὶ τὰλλα συμβέβηκε τὰ ὀστρακόδερμα· καὶ γὰρ αἱ σάρκες οὐχ ὁμοίως ἐδώδιμοι πάντων, καὶ τὸ περίττωμα, ἢ καλουμένη μήκων, ἐνίων μὲν ἐδώδιμος, ἐνίων δ' οὐκ ἐδώδιμος. Ἔστι δὲ τοῖς στρομβώδεσιν ἐν τῇ ἐλίκῃ τοῦτο, τοῖς δὲ μονοθύροις ἐν τῷ πυθμένι, οἷον ταῖς λεπάσι, τοῖς δὲ διθύροις πρὸς τῇ συναφῇ.

Τὸ δ' ὦν καλούμενον ἐν τοῖς δεξιοῖς, ἐν δὲ τοῖς ἐπὶ θάτερα ἢ ἔξοδος τοῦ περιττώματος τοῖς διθύροις. Καλεῖται δ' ὦν οὐκ ὀρθῶς ὑπὸ τῶν καλούντων· τοῦτο γὰρ ἐστὶν οἷον τοῖς ἐναίμοις, ὅταν εὐθηνῶσιν, ἢ πότης. Διὸ καὶ γίνεται κατὰ τούτους τοὺς καιροὺς τοῦ ἐνιαυτοῦ, ἐν οἷς εὐθηνοῦσιν, ἐν τε τῷ ἔαρι καὶ τῷ μετοπώρῳ. Ἐν γὰρ τῷ ψύχει καὶ ταῖς ἀλέαις πονοῦσι πάντα τὰ ὀστρακόδερμα, καὶ φέρειν οὐ δύνανται τὰς ὑπερβολάς. Σημεῖον δὲ τὸ συμβαῖνον ἐπὶ τῶν ἐχίνων· εὐθύς τε γὰρ γινόμενοι ἔχουσι καὶ ἐν ταῖς πανσελήνοις μᾶλλον, οὐ διὰ τὸ νέμεσθαι καθάπερ τινὲς οἴονται μᾶλλον, ἀλλὰ διὰ τὸ ἀλεεινοτέρας εἶναι τὰς νύκτας διὰ τὸ φῶς τῆς σελήνης. Δύσριγα γὰρ ὄντα διὰ τὸ ἄναιμα εἶναι δέονται ἀλέας. Διὸ καὶ ἐν τῷ θέρει μᾶλλον πανταχοῦ εὐθηνοῦσιν, πλὴν οἱ ἐν τῷ Πυρραίῳ εὐρίπω· ἐκεῖνοι δ' οὐχ ἥττον (680b.) τοῦ χειμῶνος. Αἴτιον δὲ τὸ νομῆς εὐπορεῖν τότε μᾶλλον, ἀπολειπόντων τῶν ἰχθύων τοὺς τόπους κατὰ ταύτην τὴν ὥραν. Ἐχουσι δ' οἱ ἐχῖνοι πάντες ἴσα τε τῷ ἀριθμῷ τὰ ὠὰ καὶ περιττά· πέντε γὰρ ἔχουσιν, τοσοῦτους δὲ καὶ τοὺς ὀδόντας καὶ τὰς κοιλίας. Αἴτιον δ' ὅτι τὸ ὦν ἐστὶ, καθάπερ εἴρηται πρότερον, οὐκ ὦν ἀλλὰ τοῦ ζώου εὐτροφία.

Γίνεται δὲ τοῦτο ἐπὶ θάτερα μόνον ἐν τοῖς ὀστρέοις, τὸ καλούμενον ὦν. Ταῦτ' οὖν ἐστὶ καὶ τὸ ἐν τοῖς ἐχίνοις.

Ἐπεὶ τοίνυν ἐστὶ σφαιροειδὴς ὁ ἐχῖνος, καὶ οὐχ ὥσπερ ἐπὶ τῶν ἄλλων ὀστρέων τοῦ σώματος κύκλος εἷς, ὁ δ' ἐχῖνος οὐ τῇ μὲν τοιοῦτος τῇ δ' οὐ, ἀλλὰ πάντῃ ὁμοῖος (σφαιροειδὴς γάρ), ἀνάγκη καὶ τὸ ὦν ὁμοίως ἔχειν. Οὐ γὰρ ἐστὶν, ὥσπερ τοῖς ἄλλοις, τὸ κύκλῳ ἀνόμοιον. Ἐν μέσῳ γὰρ ἢ κεφαλῇ

παῖσιν αὐτοῖς· τὸ δ' ἄνω τὸ τοιοῦτον μόριον. Ἀλλὰ μὴν οὐδὲ συνεχὲς οἶόν τ' εἶναι τὸ ὥόν· οὐδὲ γὰρ τοῖς ἄλλοις, ἀλλ' ἐπὶ θάτερα τοῦ κύκλου μόνον. Ἀνάγκη τοίνυν, ἐπεὶ τοῦτο μὲν ἀπάντων κοινόν, ἴδιον δ' ἐκείνου εἶναι τὸ σῶμα σφαιροειδές, μὴ εἶναι ἄρτια τὰ ὠά. Κατὰ διάμετρον γὰρ ἂν ἦν, διὰ τὸ ὁμοίως δεῖν ἔχειν τὸ ἔνθεν καὶ ἔνθεν, εἰ ἦν ἄρτια καὶ κατὰ διάμετρον. Οὕτως δ' ἐχόντων ἐπ' ἀμφοτέρα ἂν τοῦ κύκλου εἶχον τὸ ὥόν. Τοῦτο δ' οὐκ ἦν οὐδ' ἐπὶ τῶν ἄλλων ὀστρέων. Ἐπὶ θάτερα γὰρ τῆς περιφερείας ἔχουσι τὰ ὀστρεα καὶ οἱ κτένες τὸ τοιοῦτον μόριον. Ἀνάγκη τοίνυν τρία ἢ πέντε εἶναι ἢ ἄλλον τιν' ἀριθμὸν περιττόν. Εἰ μὲν οὖν τρία εἶχε, πόρρω λίαν <ἂν> ἦν, εἰ δὲ πλείω τῶν πέντε, συνεχὲς ἂν. Τούτων δὲ τὸ μὲν οὐ βέλτιον, τὸ δ' οὐκ ἐνδεχόμενον. Ἀνάγκη ἄρα πέντ' αὐτοὺς ἔχειν τὰ ὠά. Διὰ τὴν αὐτὴν δ' αἰτίαν καὶ ἡ κοιλία τοιαύτη ἔσχισται καὶ τὸ τῶν ὀδόντων τοσοῦτόν ἐστι πλήθος. Ἐκαστον γὰρ τῶν ὠῶν, οἶον σῶμά τι τοῦ ζώου ὄν, πρὸς τὸν τρόπον τὸν τῆς ζωῆς ὅμοιον ἔχειν ἀναγκαῖον· ἐντεῦθεν γὰρ ἡ αὔξησις. Μιᾶς μὲν γὰρ οὔσης ἢ πόρρω ἂν ἦσαν, ἢ πᾶν ἂν κατεῖχε τὸ κύτος, ὥστε καὶ δυσκίνητον εἶναι τὸν ἐχῖνον καὶ μὴ πληροῦσθαι τῆς τροφῆς τὸ ἀγγεῖον· πέντε δ' ὄντων τῶν διαλειμμάτων ἀνάγκη πρὸς ἑκάστῳ οὔσαν πενταχῇ διηρῆσθαι. Διὰ τὴν αὐτὴν δ' αἰτίαν καὶ τὸ τῶν ὀδόντων ἐστὶ τοσοῦτον πλήθος. Τὸ γὰρ ὅμοιον οὕτως ἂν ἡ φύσις εἴη ἀποδεδωκυῖα τοῖς εἰρημένοις (681a.) μορίοις. Διότι μὲν οὖν περιττὰ καὶ τοσαῦτα τὸν ἀριθμὸν ἔχει ὁ ἐχῖνος τὰ ὠά, εἴρηται· διότι δὲ οἱ μὲν πάμπαν μικρὰ οἱ δὲ μεγάλα, αἴτιον τὸ θερμότερους εἶναι τὴν φύσιν τούτους· πέττειν γὰρ τὸ θερμὸν δύναται τὴν τροφὴν μᾶλλον, διόπερ περιττώματος πλήρεις οἱ ἄβρωτοι μᾶλλον.

Καὶ παρασκευάζει κινητικώτερους ἢ τῆς φύσεως θερμότης, ὥστε νέμεσθαι καὶ μὴ μένειν ἐδραίους. Σημεῖον δὲ τούτου τὸ ἔχειν τοὺς τοιούτους αἰεὶ τι ἐπὶ τῶν ἀκανθῶν ὡς κινουμένους πυκνά· χρῶνται γὰρ ποσὶ ταῖς ἀκάνθαις.

Τὰ δὲ τήθυα μικρὸν τῶν φυτῶν διαφέρει τὴν φύσιν, ὅμως δὲ ζωτικώτερα τῶν σπόγγων· οὗτοι γὰρ πάμπαν ἔχουσι φυτοῦ δύναμιν. Ἡ γὰρ φύσις μεταβαίνει συνεχῶς ἀπὸ τῶν ἀψύχων εἰς τὰ ζῶα διὰ τῶν ζώντων μὲν οὐκ ὄντων δὲ ζώων, οὕτως ὥστε δοκεῖν πάμπαν μικρὸν διαφέρειν θατέρου θάτερον τῷ σύνεγγυς ἀλλήλοις. Ὁ μὲν οὖν σπόγγος, ὥσπερ εἴρηται, καὶ τῷ ζῆν προσπεφυκῶς μόνον, ἀπολυθεὶς δὲ μὴ ζῆν, ὁμοίως ἔχει τοῖς φυτοῖς παντελῶς. Τὰ δὲ καλούμενα ὀλοθούρια καὶ οἱ πλεύμονες, ἔτι δὲ καὶ ἕτερα τοιαῦτ' ἐν τῇ θαλάττῃ μικρὸν διαφέρει τούτων τῷ ἀπολελύσθαι· αἴσθησιν μὲν γὰρ οὐδεμίαν ἔχει, ζῆ δὲ ὥσπερ ὄντα φυτὰ ἀπολελυμένα. Ἔστι δὲ καὶ ἐν τοῖς ἐπιγείοις φυτοῖς ἔνια τοιαῦτα, ἃ καὶ ζῆ καὶ γίνεται τὰ μὲν ἐν ἑτέροις φυτοῖς, τὰ δὲ καὶ ἀπολελυμένα, οἶον καὶ τὸ ἐκ τοῦ Παρνασσοῦ καλούμενον ὑπὸ τινων

ἐπίπετρον· τοῦτο γὰρ ζῆ πολὺν χρόνον κρεμάμενον ἄνω ἐπὶ τῶν παττάλων. Ἔστι δ' ὅτε καὶ τὰ τήθυα, καὶ εἴ τι τοιοῦτον ἕτερον γένος, τῷ μὲν προσπεφυκὸς ζῆν μόνον φυτῷ παραπλήσιον, τῷ δ' ἔχειν τι σαρκῶδες δόξειεν ἂν ἔχειν τιν' αἰσθησιν· ἄδηλον δὲ τοῦτο ποτέρως θετέον. Ἔχει δὲ τοῦτο τὸ ζῶον δύο πόρους καὶ μίαν διαίρεσιν, ἣ τε δέχεται τὴν ὑγρότητα τὴν εἰς τροφήν, καὶ ἡ πάλιν διαπέμπει τὴν ὑπολειπομένην ἰκμάδα· περίττωμα γὰρ οὐδὲν ἐστὶ δῆλον ἔχον, ὥσπερ τᾶλλα τὰ ὀστρακόδερμα. Διὸ μάλιστα καὶ τοῦτο, κἂν εἴ τι ἄλλο τοιοῦτον τῶν ζώων, φυτικὸν δίκαιον καλεῖν· οὐδὲ γὰρ τῶν φυτῶν οὐδὲν ἔχει περίττωμα. Διὰ μέσου δὲ λεπτὸν διάζωμα, ἐν ᾧ τὸ κύριον ὑπάρχειν εὖλογον τῆς ζωῆς.

Ἄς δὲ καλοῦσιν οἱ μὲν κνίδας οἱ δὲ ἀκαλήφας, ἔστι μὲν (681b.) οὐκ ὀστρακόδερμα, ἀλλ' ἔξω πίπτει τῶν διηρημένων γενῶν, ἐπαμφοτερίζει δὲ τοῦτο καὶ φυτῷ καὶ ζώῳ τὴν φύσιν.

Τῷ μὲν γὰρ ἀπολύεσθαι καὶ προσπίπτειν πρὸς τὴν τροφήν ἐνίας αὐτῶν ζωϊκὸν ἐστὶ, καὶ τῷ αἰσθάνεσθαι τῶν προσπιπτόντων. Ἔτι δὲ καὶ τῇ τοῦ σώματος τραχύτητι χρῆται πρὸς τὴν σωτηρίαν· τῷ δ' ἀτελὲς εἶναι καὶ προσφύεσθαι ταχέως ταῖς πέτραις τῷ γένει τῶν φυτῶν παραπλήσιον, καὶ τῷ περίττωμα μηδὲν ἔχειν φανερόν, στόμα δ' ἔχειν. Ὅμοιον δὲ τούτῳ καὶ τὸ τῶν ἀστέρων ἐστὶ γένος· καὶ γὰρ τοῦτο προσπίπτον ἐκχυμίζει πολλὰ τῶν ὀστρέων, τοῖς τ' ἀπολελυμένοις τῶν εἰρημένων ζώων, οἷον τοῖς τε μαλακίοις καὶ τοῖς μαλακοστράκοις. Ὁ δ' αὐτὸς λόγος καὶ περὶ τῶν ὀστρακοδέρμων.

Τὰ μὲν οὖν μόρια τὰ περὶ τὴν τροφήν, ἅπερ ἀναγκαῖον πᾶσιν ὑπάρχειν, ἔχει τὸν προειρημένον τρόπον, δεῖ δὲ δηλονότι καὶ τῶν τοῖς ἐναίμοις ὑπαρχόντων κατὰ τὸ κύριον τῶν αἰσθήσεων ἔχειν ἀνάλογόν τι μόριον· τοῦτο γὰρ δεῖ πᾶσιν ὑπάρχειν τοῖς ζώοις. Ἔστι δὲ τοῦτο τοῖς μὲν μαλακίοις ἐν ὑμένι κείμενον ὑγρόν, δι' οὐπὲρ ὁ στόμαχος τέταται κατὰ τὴν κοιλίαν, προσπέφυκε δὲ πρὸς τὰ πρηνῆ μᾶλλον, καὶ καλεῖται μύτις ὑπὸ τινων. Τοιοῦτον δ' ἕτερον καὶ τοῖς μαλακοστράκοις ἐστὶ, καὶ καλεῖται κάκεῖνο μύτις. Ἔστι δ' ὑγρὸν καὶ σωματῶδες ἅμα τοῦτο τὸ μόριον, τείνει δὲ δι' αὐτοῦ, καθάπερ εἴρηται, διὰ μέσου μὲν ὁ στόμαχος. Εἰ γὰρ ἦν μεταξὺ τούτου καὶ τοῦ πρηνοῦς, οὐκ ἂν ἠδύνατο λαμβάνειν ὁμοίως διάστασιν εἰσιούσης τροφῆς διὰ τὴν τοῦ νώτου σκληρότητα. Ἐπὶ δὲ τῆς μύτιδος τὸ ἔντερον ἔξωθεν, καὶ ὁ θολὸς πρὸς τῷ ἐντέρῳ, ὅπως ὅτι πλεῖστον ἀπέχη τῆς εἰσόδου καὶ τὸ δυσχερὲς ἀποθεν ἢ τοῦ βελτίονος καὶ τῆς ἀρχῆς. Ὅτι δ' ἐστὶ τὸ ἀνάλογον τῇ καρδίᾳ τοῦτο τὸ μόριον, δηλοῖ ὁ τόπος (οὗτος γάρ ἐστὶν ὁ αὐτός) καὶ ἡ γλυκύτης τῆς ὑγρότητος, ὡς οὕσα πεπεμμένη καὶ αἱματώδης. Ἐν δὲ τοῖς ὀστρακοδέρμοις

ἔχει μὲν τὸν αὐτὸν τρόπον τὸ κύριον τῆς αἰσθήσεως, ἥττον δ' ἐπίδηλον. Πλὴν δεῖ ζητεῖν αἰεὶ περὶ μεσότητα ταύτην τὴν ἀρχήν, ὅσα μὲν μόνιμα, τοῦ δεχομένου μορίου τὴν τροφήν, καὶ δι' οὗ ποιεῖται τὴν ἀπόκρισιν ἢ τὴν σπερματικὴν ἢ τὴν περιττωματικὴν, ὅσα δὲ καὶ πορευτικὰ (682a.) τῶν ζώων, αἰεὶ τῷ μέσῳ τῶν δεξιῶν καὶ τῶν ἀριστερῶν.

Τοῖς δ' ἐντόμοις τὸ μὲν τῆς τοιαύτης ἀρχῆς μόριον, ὥσπερ ἐν τοῖς πρώτοις ἐλέχθη λόγοις, μεταξὺ κεφαλῆς καὶ τοῦ περὶ τὴν κοιλίαν ἐστὶ κύτους. Τοῦτο δὲ τοῖς μὲν πολλοῖς ἐστὶν ἓν, τοῖς δὲ πλείω, καθάπερ τοῖς ἰουλώδεσι καὶ μακροῖς· διόπερ διατεμνόμενα ζῇ. Βούλεται μὲν γὰρ ἡ φύσις ἐν πᾶσι μόνον ἓν ποιεῖν τὸ τοιοῦτον, οὐ δυναμένη δ' ἐνεργεῖα ποιεῖ μόνον ἓν, δυνάμει δὲ πλείω· δῆλον δ' ἐν ἑτέροις ἑτέρων μᾶλλον.

Τὰ δὲ πρὸς τὴν τροφήν μόρια οὐ πᾶσιν ὁμοίως, ἀλλὰ διαφορὰν ἔχει πολλήν. Ἐντὸς γὰρ τοῦ στόματος ἐνίοις μὲν ἐστὶ τὸ καλούμενον κέντρον, ὥσπερ ἀνεὶ σύνθετον καὶ ἔχον γλώττης καὶ χειλῶν ἅμα δύναμιν. Τοῖς δὲ μὴ ἔχουσιν ἔμπροσθεν τὸ κέντρον ἐστὶν ἐντὸς τῶν ὀδόντων τοιοῦτον αἰσθητήριον. Τούτου δ' ἐχόμενον πᾶσιν ἔντερον εὐθὺ καὶ ἀπλοῦν μέχρι τῆς ἐξόδου τοῦ περιττώματος· ἐνίοις δὲ τοῦτο ἐλίκην ἔχει. Τὰ δὲ κοιλίαν μετὰ τὸ στόμα, ἀπὸ δὲ τῆς κοιλίας τὸ ἔντερον εἰλιγμένον, ὅπως ὅσα βρωτικώτερα καὶ μείζω τὴν φύσιν, ὑποδοχὴν ἔχει πλείονος τροφῆς. Τὸ δὲ τῶν τεττίγων γένος ἰδίαν ἔχει μάλιστα τούτων φύσιν· τὸ γὰρ αὐτὸ μόριον ἔχει στόμα καὶ γλῶτταν συμπεφυκός, δι' οὗ καθαπερεὶ διὰ ῥίζης δέχεται τὴν τροφήν ἀπὸ τῶν ὑγρῶν. Πάντα μὲν οὖν ἐστὶν ὀλιγότροφα τὰ ἔντομα τῶν ζώων, οὐχ οὕτω διὰ μικρότητα ὡς διὰ ψυχρότητα (τὸ γὰρ θερμὸν καὶ δεῖται τροφῆς καὶ πέττει τὴν τροφήν ταχέως, τὸ δὲ ψυχρὸν ἄτροφον), μάλιστα δὲ τὸ τῶν τεττίγων γένος. Ἰκανὴ γὰρ τροφή τῷ σώματι ἢ ἐκ τοῦ σώματος ὑπομένουσα ὑγρότης, καθάπερ τοῖς ἐφημέροις ζώοις (γίνεται δὲ ταῦτα περὶ τὸν Πόντον), πλὴν ἐκεῖνα μὲν ζῇ μιᾷς ἡμέρας χρόνον, ταῦτα δὲ πλειόνων μὲν ἡμερῶν, ὀλίγων δὲ τούτων.

Ἐπεὶ δὲ περὶ τῶν ἐντὸς ὑπαρχόντων μορίων τοῖς ζώοις εἴρηται, πάλιν περὶ τῶν λοιπῶν τῶν ἐκτὸς ἐπανιτέον.

Ἀρκτέον δ' ἀπὸ τῶν νῦν εἰρημένων, ἀλλ' οὐκ ἀφ' ὧν ἀπελίπομεν, ὅπως ἀπὸ τούτων διατριβὴν ἐλάττω ἔχόντων ἐπὶ τῶν τελείων καὶ ἐναίμων ζώων ὁ λόγος σχολάζει μᾶλλον.

## Κεφάλαιο 6

Τὰ μὲν οὖν ἔντομα τῶν ζώων οὐ πολυμερῇ μὲν τὸν ἀριθμὸν ἔστιν, ὅμως δ' ἔχει καὶ πρὸς ἄλληλα διαφοράς.

Πολύποδα μὲν γάρ ἐστι πάντα διὰ τὸ πρὸς τὴν βραδυτῆτα (682b.) καὶ κατάψυξιν τῆς φύσεως τὴν πολυποδίαν ἀνυτικωτέραν αὐτοῖς ποιεῖν τὴν κίνησιν· καὶ μάλιστα πολύποδα τὰ μάλιστα κατεψυγμένα διὰ τὸ μῆκος, οἷον τὸ τῶν ἰούλων γένος. Ἔτι δὲ διὰ τὸ ἀρχὰς ἔχειν πλείονας αἵ τ' ἔντομαί εἰσι καὶ πολύποδα κατὰ ταῦτ' ἐστίν. Ὅσα δ' ἐλάττονας ἔχει πόδας, πτηνὰ ταῦτ' ἐστὶ πρὸς τὴν ἔλλειψιν τὴν τῶν ποδῶν.

Αὐτῶν δὲ τῶν πτηνῶν ὧν μὲν ἐστὶν ὁ βίος νομαδικὸς καὶ διὰ τὴν τροφὴν ἀναγκαῖον ἐκτοπίζειν, τετράπτερά τέ ἐστι καὶ τὸν τοῦ σώματος ἔχει κοῦφον ὄγκον, οἷον αἱ τε μέλιτται καὶ τὰ σύμφυλα ζῶα ταύταις· δύο γὰρ ἐφ' ἑκάτερα πτερὰ τοῦ σώματος ἔχουσιν. Ὅσα δὲ μικρὰ τῶν τοιούτων, δίπτερα, καθάπερ τὸ τῶν μυιῶν γένος. Τὰ δὲ βραχέα καὶ τοῖς βίοις ἐδραῖα πολύπτερα μὲν ὁμοίως ταῖς μελίτταις ἐστίν, ἔχει δ' ἔλυτρα τοῖς πτεροῖς, οἷον αἱ τε μηλολόνθαι καὶ τὰ τοιαῦτα τῶν ἐντόμων, ὅπως σώζη τὴν τῶν πτερῶν δύναμιν. Ἐδραίων γὰρ ὄντων εὐδιάφθορα μᾶλλον ἐστὶ τῶν εὐκινήτων, διόπερ ἔχει φραγμὸν πρὸ αὐτῶν. Καὶ ἄσχιστον δὲ τούτων ἐστὶ τὸ πτερὸν καὶ ἄκαυλον· οὐ γάρ ἐστὶ πτερὸν ἄλλ' ὑμὴν δερματικός, ὃς διὰ ξηρότητα ἐξ ἀνάγκης ἀφίσταται τοῦ σώματος αὐτῶν ψυχομένου τοῦ σαρκώδους.

Ἔντομα δ' ἐστὶ διὰ τε τὰς εἰρημένας αἰτίας, καὶ ὅπως σώζεται δι' ἀπάθειαν συγκαμπτόμενα· συνελίττεται γὰρ τὰ μῆκος ἔχοντ' αὐτῶν, τοῦτο δ' οὐκ ἂν ἐγίνετο αὐτοῖς μὴ οὖσιν ἐντόμοις. Τὰ δὲ μὴ ἐλκτὰ αὐτῶν σκληρύνεται μᾶλλον συνιόντα ἐς τὰς τομάς. Δῆλον δὲ τοῦτο γίνεται θιγγανόντων, οἷον ἐπὶ τῶν καλουμένων κανθάρων· φοβηθέντα γὰρ ἀκινήτίζει, καὶ τὸ σῶμα γίνεται σκληρὸν αὐτοῖς. Ἀναγκαῖον δ' ἐντόμοις αὐτοῖς εἶναι· τοῦτο γὰρ ἐν τῇ οὐσίᾳ αὐτῶν ὑπάρχει τὸ πολλὰς ἔχειν ἀρχάς, καὶ ταύτη προσέοικε τοῖς φυτοῖς. Ὡς περ γὰρ τὰ φυτά, καὶ ταῦτα διαιρούμενα δύναται ζῆν, πλὴν ταῦτα μὲν μέχρι τινός, ἐκεῖνα δὲ καὶ τέλεια γίνεται τὴν φύσιν καὶ δύο ἐξ ἑνὸς καὶ πλείω τὸν ἀριθμὸν.

ἔχει δ' ἓν τῶν ἐντόμων καὶ κέντρα πρὸς βοήθειαν τῶν βλαπτόντων. Τὸ μὲν οὖν κέντρον τοῖς μὲν ἔμπροσθεν ἐστὶ τοῖς δ' ὀπισθεν, τοῖς μὲν ἔμπροσθεν κατὰ τὴν γλῶτταν, τοῖς δ' ὀπισθεν κατὰ τὸ οὐραῖον. Ὡς περ γὰρ τοῖς ἐλέφασιν τὸ τῶν ὀσμῶν αἰσθητήριον γεγένηται χρήσιμον πρὸς τε τὴν (683a.) ἀλκὴν καὶ τὴν τῆς τροφῆς χρῆσιν, οὕτως τῶν ἐντόμων ἐνίοις τὸ κατὰ τὴν γλῶτταν τεταγμένον· αἰσθάνονται τε γὰρ τούτῳ τῆς τροφῆς καὶ ἀναλαμβάνουσι καὶ

προσάγονται αὐτήν. Ὅσα δὲ μὴ ἔστιν αὐτῶν ἐμπροσθόκεντρα, ὀδόντας ἔχει τὰ μὲν ἐδωδῆς χάριν, τὰ δὲ τοῦ λαμβάνειν καὶ προσάγεσθαι τὴν τροφήν, οἷον οἷ τε μύρμηκες καὶ τὸ τῶν μελιττῶν πασῶν γένος. Ὅσα δὲ ὀπισθόκεντρά ἐστι, διὰ τὸ θυμὸν ἔχειν ὄπλον ἔχει τὸ κέντρον. Ἐχουσι δὲ τὰ μὲν ἐν ἑαυτοῖς τὰ κέντρα, καθάπερ αἱ μέλιτται καὶ οἱ σφῆκες, διὰ τὸ πτηνὰ εἶναι. Λεπτὰ μὲν γὰρ ὄντα καὶ ἔξω εὐφθαρτα <ἄν> ἦν. Εἰ δ' ἀπεῖχεν ὥσπερ τοῖς σκορπίοις, βάρος ἄν παρεῖχεν. Τοῖς δὲ σκορπίοις πεζοῖς οὖσι καὶ κέρκον ἔχουσιν ἀναγκαῖον ἐπὶ ταύτῃ ἔχειν τὸ κέντρον, ἢ μηθὲν χρήσιμον εἶναι πρὸς τὴν ἀλκὴν.

Δίπτερον δ' οὐθέν ἐστιν ὀπισθόκεντρον. Διὰ τὸ ἀσθενῆ γὰρ καὶ μικρὰ εἶναι δίπτερά ἐστιν· ἱκανὰ γὰρ τὰ μικρὰ αἵρεσθαι ὑπὸ τῶν ἐλαττόνων τὸν ἀριθμόν. Διὰ ταῦτό δὲ τοῦτο καὶ ἐμπροσθεν ἔχει τὸ κέντρον· ἀσθενῆ γὰρ ὄντα μόλις δύναται τοῖς ἐμπροσθεν τύπτειν. Τὰ δὲ πολύπτερα, διὰ τὸ μείζω τὴν φύσιν εἶναι, πλειόνων τετύχηκε πτερῶν καὶ ἰσχύει τοῖς ὀπισθεν μορίοις. Βέλτιον δ' ἐνδεχομένου μὴ ταῦτό ὄργανον ἐπὶ ἀνομοίας ἔχειν χρήσεις, ἀλλὰ τὸ μὲν ἀμυντικὸν ὀξύτατον, τὸ δὲ γλωττικὸν σομφὸν καὶ σπαστικὸν τῆς τροφῆς. Ὅπου γὰρ ἐνδέχεται χρῆσθαι δυσὶν ἐπὶ δύο ἔργα καὶ μὴ ἐμποδίζειν πρὸς ἕτερον, οὐδὲν ἢ φύσις εἴωθε ποιεῖν ὥσπερ ἡ χαλκευτικὴ πρὸς εὐτέλειαν ὀβελισκολύχνιον. Ἄλλ' ὅπου μὴ ἐνδέχεται, καταχρῆται τῷ αὐτῷ ἐπὶ πλείω ἔργα.

Τοὺς δὲ πόδας τοὺς προσθίους μείζους ἔνια τούτων ἔχει, ὅπως ἐπειδὴ διὰ τὸ σκληρόφθαλμα εἶναι οὐκ ἀκριβῆ τὴν ὄψιν ἔχουσι, τὰ προσπίπτοντα τοῖς προσθίοις ἀποκαθαίρωσι σκέλεσιν· ὅπερ καὶ φαίνονται ποιοῦσαι αἱ τε μυῖαι καὶ τὰ μελιττώδη τῶν ζώων· αἰεὶ γὰρ χαρακίζουν τοῖς προσθίοις σκέλεσιν. Τὰ δ' ὀπίσθια μείζω τῶν μέσων διὰ τε τὴν βάδισιν καὶ πρὸς τὸ αἵρεσθαι ῥᾶον ἀπὸ τῆς γῆς ἀναπετόμενα. Ὅσα δὲ πηδητικὰ αὐτῶν, ἔτι μᾶλλον τοῦτο φανερόν, οἷον αἱ τ' ἀκρίδες καὶ τὸ τῶν ψυλλῶν γένος· ὅταν γὰρ κάμψαντ' ἐκτείνειν πάλιν, ἀναγκαῖον ἀπὸ τῆς γῆς ἦρθαι. Οὐκ ἐμπροσθεν δ' ἄλλ' ὀπισθεν μόνον ἔχουσι τὰ πηδαλιώδη αἱ ἀκρίδες.

(683b.) Τὴν γὰρ καμπὴν ἀναγκαῖον εἴσω κεκλάσθαι, τῶν δὲ προσθίων κώλων οὐδὲν ἐστὶ τοιοῦτον. Ἐξάποδα δὲ τὰ τοιαῦτα πάντ' ἐστὶ σὺν τοῖς ἀλτικοῖς μορίοις.

## Κεφάλαιο 7

Τῶν δὲ ὀστρακοδέρμων οὐκ ἔστι τὸ σῶμα πολυμερές. Τούτου δ' αἴτιον τὸ

μόνιμον αὐτῶν εἶναι τὴν φύσιν· πολυμερέστερα γὰρ ἀναγκαῖον εἶναι τῶν ζώων τὰ κινητικὰ διὰ τὸ εἶναι αὐτῶν πράξεις· ὀργάνων γὰρ δεῖται πλειόνων τὰ πλειόνων μετέχοντα κινήσεων. Τούτων δὲ τὰ μὲν ἀκίνητα πάμπαν ἐστί, τὰ δὲ μικρὰς μετέχει κινήσεως· ἄλλ' ἢ φύσις πρὸς σωτηρίαν αὐτοῖς τὴν τῶν ὀστράκων σκληρότητα περιέθηκεν. Εἰσὶ δὲ τὰ μὲν μονόθυρα τὰ δὲ δίθυρα αὐτῶν τὰ δὲ στρομβώδη, καθάπερ εἴρηται πρότερον. Καὶ τούτων τὰ μὲν ἐλικὴν ἔχοντα, οἷον κήρυκες, τὰ δὲ σφαιροειδῆ μόνον, καθάπερ τὸ τῶν ἐχίνων γένος. Καὶ τῶν διθύρων τὰ μὲν ἐστὶν ἀναπτυσκτά, οἷον κτένες καὶ μῦες (ἐπὶ θάτερα γὰρ συγκέκλεισται, ὥστε ἀνοίγεσθαι ἐπὶ θάτερα καὶ συγκλείεσθαι), τὰ δ' ἐπ' ἄμφω συμπέφυκεν, οἷον τὸ τῶν σωλήνων γένος. Ἄπαντα δὲ τὰ ὀστρακόδερμα, καθάπερ τὰ φυτὰ, κάτω τὴν κεφαλὴν ἔχει. Τούτου δ' αἴτιον ὅτι κάτωθεν λαμβάνει τὴν τροφήν, ὥσπερ τὰ φυτὰ ταῖς ῥίζαις. Συμβαίνει οὖν αὐτοῖς τὰ μὲν κάτω ἄνω ἔχειν, τὰ δ' ἄνω κάτω. Ἐν ὑμένι δ' ἐστί, δι' οὗ διηθεῖ τὸ πότιμον καὶ λαμβάνει τὴν τροφήν. Ἐχει δὲ κεφαλὴν μὲν πάντα, τὰ δὲ τοῦ σώματος μόρια παρὰ τὸ τῆς τροφῆς δεκτικὸν ἀνώνυμα τάλλα.

## Κεφάλαιο 8

Τὰ δὲ μαλακόστρακα πάντα καὶ πορευτικά, διὸ ποδῶν ἔχει πλῆθος. Ἔστι δὲ γένη μὲν τέτταρα τὰ μέγιστ' αὐτῶν, οἳ τε καλούμενοι κάραβοι καὶ ἄστακοὶ καὶ καρίδες καὶ καρκίνοι. Τούτων δ' ἐκάστου πλείω εἶδη ἐστὶ διαφέροντα οὐ μόνον κατὰ τὴν μορφήν ἀλλὰ καὶ κατὰ τὸ μέγεθος πολὺ· τὰ μὲν γὰρ μεγάλα τὰ δὲ μικρὰ πάμπαν αὐτῶν ἐστίν.

Τὰ μὲν οὖν καρκινώδη καὶ караβώδη παρόμοι' ἐστὶ τῷ χηλὰς ἔχειν ἀμφοτέρα. Ταύτας δ' οὐ πορείας ἔχουσι χάριν, ἀλλὰ πρὸς τὸ λαβεῖν καὶ κατασχεῖν ἀντὶ χειρῶν. Διὸ καὶ κάμπτουσιν ἐναντίως ταύτας τοῖς ποσίν· τοὺς μὲν γὰρ ἐπὶ τὸ κοῖλον τὰς δ' ἐπὶ τὸ περιφερὲς κάμπτουσι καὶ ἐλίσσουσιν.

Οὕτως γὰρ χρήσιμα πρὸς τὸ λαβοῦσαι προσφέρεσθαι τὴν (684a.) τροφήν. Διαφέρουσι δ' ἢ οἳ μὲν κάραβοι ἔχουσιν οὐράν, οἳ δὲ καρκίνοι οὐκ ἔχουσιν οὐράν. Τοῖς μὲν γὰρ διὰ τὸ νευστικοῖς εἶναι χρήσιμος ἡ οὐρά (νέουσι γὰρ ἀπερειδόμενοι οἷον πλάταις αὐταῖς), τοῖς δὲ καρκίνοις οὐδὲν χρήσιμον διὰ τὸ πρόσγειον εἶναι τὸν βίον αὐτῶν καὶ εἶναι τρωγλοδύτας.

Ὅσοι δ' αὐτῶν πελάγιοι εἰσι, διὰ τοῦτο πολὺ ἀργότερους ἔχουσι τοὺς πόδας αὐτῶν πρὸς τὴν πορείαν, οἷον αἱ τε μαῖαι καὶ οἱ Ἡρακλεωτικοὶ καλούμενοι καρκίνοι, ὅτι ὀλίγη κινήσει χρῶνται, ἄλλ' ἢ σωτηρία αὐτοῖς τῷ ὀστρειώδει εἶναι γίνεται· διὸ αἱ μὲν μαῖαι λεπτοσκελεῖς, οἳ δὲ Ἡρακλεωτικοὶ

μικροσκελεῖς εἰσιν. Οἱ δὲ πάνπαν μικροὶ καρκῖνοι οἱ ἀλίσκονται ἐν τοῖς μικροῖς ἰχθυοῖς, ἔχουσι τοὺς τελευταίους πλατεῖς πόδας, ἵνα πρὸς τὸ νεῖν αὐτοῖς χρήσιμοι ὦσιν, ὥσπερ πτερύγια ἢ πλάτας ἔχοντες τοὺς πόδας. Αἱ δὲ καρίδες τῶν μὲν καρκινοειδῶν διαφέρουσι τῷ ἔχειν κέρκον, τῶν δὲ караβοειδῶν διὰ τὸ μὴ ἔχειν χηλὰς· ἃς οὐκ ἔχουσι διὰ τὸ πλείους ἔχειν πόδας· ἐνταῦθα γὰρ ἡ ἐκεῖθεν ἀνήλωται αὕξησις. Πλείους δ' ἔχουσι πόδας ὅτι μὴ νευστικώτερα ἐστὶν ἢ πορευτικώτερα. Τὰ δ' ἐν τοῖς ὑπτίοις μόρια καὶ περὶ τὴν κεφαλὴν τὰ μὲν εἰς τὸ δέξασθαι τὸ ὕδωρ καὶ ἀφεῖναι ἔχουσι βραγχοειδῆ· πλακωδέστερα δὲ τὰ κάτω αἱ θήλειαι τῶν ἄρρένων καράβων ἔχουσι, καὶ τὰ ἐν τῷ ἐπιπύγματι δασύτερα αἱ θήλειαι καρκῖνοι τῶν ἄρρένων, διὰ τὸ ἐκτείνειν τὰ ὠτὰ πρὸς αὐτά, ἀλλὰ μὴ ἀποθεν, ὥσπερ οἱ ἰχθύες καὶ τᾶλλα τὰ τίκτοντα· εὐρυχωρέστερα γὰρ ὄντα καὶ μείζω χώραν ἔχει τοῖς ὠοῖς μᾶλλον. Οἱ μὲν οὖν κάραβοι καὶ οἱ καρκῖνοι πάντες τὴν δεξιὰν ἔχουσι χηλὴν μείζω καὶ ἰσχυροτέραν· τοῖς γὰρ δεξιοῖς πάντα πέφυκε τὰ ζῶα δρᾶν μᾶλλον, ἢ δὲ φύσις ἀποδίδωσιν αἰετὶ τοῖς χρῆσθαι δυναμένοις ἕκαστον ἢ μόνως ἢ μᾶλλον, οἷον χαυλιόδοντας καὶ ὀδόντας καὶ κέρατα καὶ πλῆκτρα καὶ πάντα τὰ τοιαῦτα μόρια, ὅσα πρὸς βοήθειαν καὶ ἀλκὴν εἰσιν. Οἱ δ' ἄστακοὶ μόνοι, ὁποτέραν ἂν τύχωσιν, ἔχουσι μείζω τῶν χηλῶν, καὶ αἱ θήλειαι καὶ οἱ ἄρρενες.

Αἴτιον δὲ τοῦ μὲν ἔχειν χηλὰς ὅτι ἐν τῷ γένει εἰσὶ τῷ ἔχοντι χηλὰς. Τοῦτο δ' ἀτάκτως ἔχουσιν, ὅτι πεπῆρωνται, καὶ οὐ (684b.) χρῶνται ἐφ' ὃ πεφύκασιν, ἀλλὰ πορείας χάριν. Καθ' ἕκαστον δὲ τῶν μορίων, τίς ἡ θέσις αὐτῶν καὶ τίνες διαφοραὶ πρὸς ἄλληλα, τῶν τ' ἄλλων καὶ τίνι διαφέρει τὰ ἄρρενα τῶν θηλειῶν, ἕκ τε τῶν ἀνατομῶν θεωρεῖσθω καὶ ἐκ τῶν ἱστοριῶν τῶν περὶ τὰ ζῶα.

## Κεφάλαιο 9

Τῶν δὲ μαλακίων περὶ μὲν τῶν ἐντὸς εἴρηται πρότερον, ὥσπερ καὶ περὶ τῶν ἄλλων ζώων. Ἐκτὸς δ' ἔχει τό τε τοῦ σώματος κύτος, ἀδιόριστον ὄν, καὶ τούτου πόδας ἔμπροσθεν περὶ τὴν κεφαλὴν, ἐντὸς μὲν τῶν ὀφθαλμῶν, περὶ δὲ τὸ στόμα καὶ τοὺς ὀδόντας. Τὰ μὲν οὖν ἄλλα ζῶα τὰ ἔχοντα πόδας τὰ μὲν ἔμπροσθεν ἔχει καὶ ὀπισθεν, τὰ δ' ἐκ τοῦ πλαγίου, ὥσπερ τὰ πολύποδα καὶ ἄναιμα τῶν ζώων. Τοῦτο δὲ τὸ γένος ἰδίως τούτων· πάντας γὰρ ἔχουσι τοὺς πόδας ἐπὶ τὸ καλούμενον ἔμπροσθεν. Τούτου δ' αἴτιον ὅτι συνῆκται αὐτῶν τὸ ὀπισθεν πρὸς τὸ ἔμπροσθεν, ὥσπερ τῶν ὀστρακοδέρμων τοῖς στρομβώδεσιν.

Ὅλως γὰρ τὰ ὀστρακόδερμα ἔχει τῇ μὲν ὁμοίως τοῖς μαλακοστράκοις, τῇ δὲ τοῖς μαλακίοις. Ἦι μὲν γὰρ ἔξωθεν τὸ γεῶδες ἐντὸς δὲ τὸ σαρκῶδες, τοῖς



μαλακοστράκοις, τὸ δὲ σχῆμα τοῦ σώματος ὃν τρόπον συνέστηκε, τοῖς μαλακίοις, τρόπον μὲν τινα πάντα, μάλιστα δὲ τῶν στρομβωδῶν τὰ ἔχοντα τὴν ἐλίκην. Ἀμφοτέρων γὰρ τοῦτον ἔχει τὸν τρόπον ἢ φύσις, ὥσπερ εἴ τις νοήσειεν ἐπ' εὐθείας, καθάπερ συμβέβηκεν ἐπὶ τῶν τετραπόδων ζώων καὶ τῶν ἀνθρώπων, πρῶτον μὲν ἐπὶ τῷ ἄκρῳ τῷ ἄνω στόμα τι τῆς εὐθείας κατὰ τὸ Α, ἔπειτα τὸ Β τὸν στόμαχον, τὸ δὲ Γ τὴν κοιλίαν· ἀπὸ δὲ τοῦ ἐντέρου μέχρι τῆς διεξόδου τοῦ περιττώματος, ἢ τὸ Δ.

Τοῦτον μὲν οὖν τὸν τρόπον ἔχει τοῖς ἐναίμοις ζώοις· καὶ περὶ τοῦτο ἐστὶν ἡ κεφαλὴ καὶ ὁ θώραξ καλούμενος. Τὰ δὲ λοιπὰ μέρη τούτων τε χάριν καὶ ἔνεκα τῆς κινήσεως προσέθηκεν ἡ φύσις, οἷον τὰ τε πρόσθια κῶλα καὶ τὰ ὀπισθεν. Βούλεται δὲ καὶ τοῖς μαλακοστράκοις καὶ τοῖς ἐντόμοις ἢ γ' εὐθυωρία τῶν ἐντοσθιδίων τὸν αὐτὸν ἔχειν τρόπον, κατὰ δὲ τὰς ὑπηρεσίας τὰς ἔξωθεν κινητικὰς διαφέρει τῶν ἐναίμων. Τὰ δὲ μαλάκιά τε καὶ στρομβώδη τῶν ὀστρακοδέρμων ἔχει αὐτοῖς μὲν παραπλησίως, τούτοις δ' (685a.) ἀντεστραμμένως. Κέκαμπται γὰρ ἡ τελευτὴ πρὸς τὴν ἀρχήν, ὥσπερ ἂν εἴ τις τὴν εὐθεΐαν ἐφ' ἧς τὸ Ε κάμψας προσαγάγοι τὸ Δ πρὸς τὸ Α. Οὕτως γὰρ κειμένων νῦν τῶν ἐντοσθίων, περίκειται τοῖς μὲν μαλακίοις τὸ κύτος, ὃ καλεῖται μόνον ἐπὶ τῶν πολυπόδων κεφαλὴ· τοῖς δ' ὀστρακοδέρμοις τὸ τοιοῦτόν ἐστὶν ὁ στρόμβος. Διαφέρει δὲ οὐδὲν ἄλλο πλὴν ὅτι τοῖς μὲν μαλακὸν τὸ πέριξ, τοῖς δὲ σκληρὸν περὶ τὸ σαρκῶδες περιέθηκεν ἡ φύσις, ὅπως σῶζεται διὰ τὴν δυσκινησίαν· καὶ διὰ τοῦτο τὸ περίττωμα τοῖς τε μαλακίοις ἐξέρχεται περὶ τὸ στόμα καὶ τοῖς στρομβώδεσι, πλὴν τοῖς μὲν μαλακίοις κάτωθεν, τοῖς δὲ στρομβώδεσιν ἐκ τοῦ πλαγίου.

Διὰ ταύτην μὲν οὖν τὴν αἰτίαν τοῖς μαλακίοις οἱ πόδες τοῦτον ἔχουσι τὸν τρόπον, καὶ ὑπεναντίως ἢ τοῖς ἄλλοις.

Ἔχουσι δ' ἀνομοίως αἱ σηπία καὶ αἱ τευθίδες τοῖς πολύποσι διὰ τὸ νευστικά μόνον εἶναι, τοὺς δὲ καὶ πορευτικούς. Αἱ μὲν γὰρ τοὺς ἄνωθεν τῶν ποδῶν μικροὺς ἔχουσι, καὶ τούτων τοὺς ἐσχάτους δύο μείζους, τοὺς δὲ λοιποὺς τῶν ὀκτὼ δύο κάτωθεν μεγίστους τούτων. Ὡσπερ γὰρ τοῖς τετράποσι τὰ ὀπίσθια ἰσχυρότερα κῶλα, καὶ ταύταις μέγιστοι οἱ κάτωθεν· τὸ γὰρ φορτίον οὗτοι ἔχουσι καὶ κινεῶσι μάλιστα, καὶ οἱ ἔσχατοι δύο μείζους τῶν μέσων, ὅτι τούτοις συνυπηρετοῦσιν.

Ὁ δὲ πολύπους τοὺς ἐν μέσῳ τέτταρας μεγίστους. Πόδας μὲν οὖν πάντα ἔχουσι ταῦτα ὀκτὼ, ἀλλ' αἱ μὲν σηπία καὶ αἱ τευθίδες βραχεῖς, τὰ δὲ πολυποδώδη μεγάλους. Τὸ γὰρ κύτος τοῦ σώματος αἱ μὲν μέγα ἔχουσιν οἱ δὲ

μικρόν, ὥστε τοῖς μὲν ἀφεῖλεν ἀπὸ τοῦ σώματος, πρὸς δὲ τὸ μῆκος τῶν ποδῶν προσέθηκεν ἢ φύσις, ταῖς δ' ἀπὸ τῶν ποδῶν λαβοῦσα τὸ σῶμα ἠὔξησεν. Διόπερ τοῖς μὲν οὐ μόνον πρὸς τὸ νεῖν χρήσιμοι οἱ πόδες ἀλλὰ καὶ πρὸς τὸ βαδίζειν, ταῖς δ' ἀχρηστοί· μικροὶ γάρ, τὸ δὲ κύτος μέγα ἔχουσιν. Ἐπεὶ δὲ βραχεῖς ἔχουσι τοὺς πόδας καὶ ἀχρήστους πρὸς τὸ ἀντιλαμβάνεσθαι καὶ μὴ ἀντισπᾶσθαι ἀπὸ τῶν πετρῶν, ὅταν κλύδων ἦ καὶ χειμῶν, καὶ πρὸς τὸ τὰ ἀποθεν προσάγεσθαι, διὰ ταῦτα προβοσκίδας ἔχουσι δύο μακράς, αἷς ὀρμοῦσί τε καὶ ἀποσαλεύουσιν ὥσπερ πλοῖον ὅταν χειμῶν ἦ, καὶ τὰ ἀποθεν (685b.) θηρεύουσι καὶ προσάγονται ταύταις αἷ τε σηπία καὶ αἷ τευθίδες. Οἱ δὲ πολύποδες οὐκ ἔχουσι τὰς προβοσκίδας διὰ τὸ τοὺς πόδας αὐτοῖς εἶναι πρὸς ταῦτα χρησίμους.

Ὅσοις δὲ κοτυληδόνες πρὸς τοῖς ποσὶ καὶ πλεκτάναι πρόσεισι, δύναμιν ἔχουσι καὶ σύνθεσιν τοιαύτην οἷανπερ τὰ πλεγμάτια οἷς οἱ ἄτροι οἱ ἀρχαῖοι τοὺς δακτύλους ἐνέβαλλον· οὕτως καὶ ἐκ τῶν ἰνῶν πεπλεγμέναι εἰσίν, αἷς ἔλκουσι τὰ σαρκία καὶ τὰ ἐνδιδόντα. Περιλαμβάνει μὲν γὰρ χαλαρὰ ὄντα· ὅταν δὲ συντείνῃ, πιέζει καὶ ἔχεται τοῦ ἐντὸς θιγγάνοντος παντός. Ὡστ' ἐπεὶ ἄλλο οὐκ ἔστιν ὧ προσάγονται, ἀλλ' ἢ τὰ μὲν τοῖς ποσὶ τὰ δὲ ταῖς προβοσκίσιν, ταύτας ἔχουσι πρὸς ἀλκὴν καὶ τὴν ἄλλην βοήθειαν ἀντὶ χειρῶν. Τὰ μὲν οὖν ἄλλα δικότυλά ἐστι, γένος δέ τι πολυπόδων μονοκότυλον. Αἷτιον δὲ τὸ μῆκος καὶ ἡ λεπτότης τῆς φύσεως αὐτῶν· μονοκότυλον γὰρ ἀναγκαῖον εἶναι τὸ στενόν. Οὐκ οὖν ὡς βέλτιστον ἔχουσιν, ἀλλ' ὡς ἀναγκαῖον διὰ τὸν ἴδιον λόγον τῆς οὐσίας.

Πτερύγιον δ' ἔχουσι ταῦτα πάντα κύκλῳ περὶ τὸ κύτος. Τοῦτο δ' ἐπὶ μὲν τῶν ἄλλων συναπτόμενον καὶ συνεχές ἐστι, καὶ ἐπὶ τῶν μεγάλων τευθῶν· αἷ δ' ἐλάττους καὶ καλούμεναι τευθίδες πλατύτερόν τε τοῦτο ἔχουσι καὶ οὐ στενόν, ὥσπερ αἷ σηπία καὶ οἱ πολύποδες, καὶ τοῦτ' ἀπὸ μέσου ἠργγμένον, καὶ οὐ κύκλῳ διὰ παντός. Τοῦτο δ' ἔχουσιν ὅπως νέωσι καὶ πρὸς τὸ διορθοῦν, ὥσπερ τοῖς μὲν πτηνοῖς τὸ ὀρροπύγιον, τοῖς δ' ἰχθύσι τὸ οὐράϊον. Ἐλάχιστον δὲ τοῦτο καὶ ἥκιστα ἐπίδηλον τοῖς πολυπόσιν ἐστι διὰ τὸ μικρὸν ἔχειν τὸ κύτος καὶ διορθοῦσθαι τοῖς ποσὶν ἱκανῶς.

Περὶ μὲν οὖν τῶν ἐντόμων καὶ μαλακοστράκων καὶ ὀστρακοδέρμων καὶ μαλακίων εἴρηται, καὶ περὶ τῶν ἐντὸς μορίων καὶ τῶν ἐκτός.

## Κεφάλαιο 10

Πάλιν δ' ἐξ ὑπαρχῆς περὶ τῶν ἐναίμων καὶ ζωοτόκων ἐπισκεπτέον,

ἀρξαμένοις ἀπὸ τῶν ὑπολοίπων καὶ πρότερον εἰρημένων μορίων· τούτων δὲ διορισθέντων περὶ τῶν ἐναίμων καὶ ὠοτόκων τὸν αὐτὸν τρόπον ἐροῦμεν.

Τὰ μὲν οὖν μόρια τὰ περὶ τὴν κεφαλὴν τῶν ζώων εἴρηται πρότερον, καὶ τὰ περὶ τὸν καλούμενον αὐχένα καὶ τράχηλον.

Ἔχει δὲ κεφαλὴν πάντα τὰ ἔναιμα ζῶα· τῶν δ' ἀναίμων (686a.) ἐνίοις ἀδιόριστον τοῦτο τὸ μόριον, οἷον τοῖς καρκίνοις.

Αὐχένα οὖν τὰ μὲν ζωοτόκα πάντ' ἔχει, τῶν δ' ὠοτόκων τὰ μὲν ἔχει, τὰ δ' οὐκ ἔχει· ὅσα μὲν γὰρ πλεύμονα ἔχει, καὶ αὐχένα ἔχει, τὰ δὲ μὴ ἀναπνέοντα θύραθεν οὐκ ἔχει τοῦτο τὸ μόριον. Ἔστι δ' ἡ μὲν κεφαλὴ μάλιστα τοῦ ἐγκεφάλου χάριν· ἀνάγκη γὰρ τοῦτο τὸ μόριον ἔχειν τοῖς ἐναίμοις, καὶ ἐν ἀντικειμένῳ τόπῳ τῆς καρδίας, διὰ τὰς εἰρημένας πρότερον αἰτίας. Ἐξέθετο δ' ἡ φύσις ἐν αὐτῇ καὶ τῶν αἰσθήσεων ἐνίας διὰ τὸ σύμμετρον εἶναι τὴν τοῦ αἵματος κρᾶσιν καὶ ἐπιτηδεῖαν πρὸς τε τὴν τοῦ ἐγκεφάλου ἀλέαν καὶ πρὸς τὴν τῶν αἰσθήσεων ἡσυχίαν καὶ ἀκρίβειαν. Ἔτι δὲ τρίτον μόριον ὑπέθηκε τὸ τὴν τῆς τροφῆς εἴσοδον δημιουργοῦν· ἐνταῦθα γὰρ ὑπέκειτο συμμέτρως μάλιστα. Οὐτε γὰρ ἄνωθεν κεῖσθαι τῆς καρδίας καὶ τῆς ἀρχῆς ἐνεδέχeto τὴν κοιλίαν, οὔτε κάτωθεν οὔσης ὃν τρόπον ἔχει νῦν, ἐνεδέχeto τὴν εἴσοδον ἔτι κάτω εἶναι τῆς καρδίας· πολὺ γὰρ τὸ μήκος ἦν τοῦ σώματος, καὶ πόρρω λίαν τῆς κινούσης ἀρχῆς καὶ πεττούσης.

Ἡ μὲν οὖν κεφαλὴ τούτων χάριν ἐστίν, ὁ δ' αὐχὴν τῆς ἀρτηρίας χάριν· πρόβλημα γὰρ ἐστὶ, καὶ σώζει ταύτην καὶ τὸν οἰσοφάγον κύκλῳ περιέχων. Τοῖς μὲν οὖν ἄλλοις ἐστὶ καμπτὸς καὶ σφονδύλους ἔχων, οἱ δὲ λύκοι καὶ λέοντες μονοστοῦν τὸν αὐχένα ἔχουσιν· ἔβλεψε γὰρ ἡ φύσις ὅπως πρὸς τὴν ἰσχὺν χρήσιμον αὐτὸν ἔχωσι μᾶλλον ἢ πρὸς τὰς ἄλλας βοηθείας.

Ἐχόμενα δὲ τοῦ αὐχένος καὶ τῆς κεφαλῆς τά τε πρόσθια κῶλα τοῖς ζώοις ἐστὶ καὶ θώραξ. Ὁ μὲν οὖν ἄνθρωπος ἀντὶ σκελῶν καὶ ποδῶν τῶν προσθίων βραχίονας καὶ τὰς καλουμένας ἔχει χεῖρας. Ὁρθὸν μὲν γάρ ἐστι μόνον τῶν ζώων διὰ τὸ τὴν φύσιν αὐτοῦ καὶ τὴν οὐσίαν εἶναι θείαν· ἔργον δὲ τοῦ θειοτάτου τὸ νοεῖν καὶ φρονεῖν· τοῦτο δ' οὐ ῥᾶδιον πολλοῦ τοῦ ἄνωθεν ἐπικειμένου σώματος· τὸ γὰρ βάρος δυσκίνητον ποιεῖ τὴν διάνοιαν καὶ τὴν κοινὴν αἴσθησιν. Διὸ πλείονος γινομένου τοῦ βάρους καὶ τοῦ σωματώδους ἀνάγκη ῥέπειν τὰ σώματα πρὸς τὴν γῆν, ὥστε πρὸς τὴν ἀσφάλειαν ἀντὶ βραχιόνων καὶ χειρῶν τοὺς προσθίους πόδας ὑπέθηκεν ἡ φύσις τοῖς τετράποσιν. Τοὺς μὲν γὰρ ὀπισθίους δύο πᾶσιν ἀναγκαῖον τοῖς πορευτικοῖς

ἔχειν, τὰ δὲ (686b.) τοιαῦτα τετράποδα ἐγένετο οὐ δυναμένης φέρειν τὸ βάρος τῆς ψυχῆς.

Πάντα γάρ ἐστι τὰ ζῶα νανώδη τᾶλλα παρὰ τὸν ἄνθρωπον· νανῶδες γάρ ἐστιν οὐ τὸ μὲν ἄνω μέγα, τὸ δὲ φέρον τὸ βάρος καὶ πεζεῦον μικρόν. Ἄνω δ' ἐστὶν ὁ καλούμενος θώραξ, ἀπὸ τῆς κεφαλῆς μέχρι τῆς ἐξόδου τοῦ περιττώματος. Τοῖς μὲν οὖν ἀνθρώποις τοῦτο πρὸς τὸ κάτω σύμμετρον, καὶ πολλῷ ἔλαττον ἐστὶ τελειούμενους· νέοις δ' οὐσι τούναντίον τὰ μὲν ἄνω μέγαλα, τὸ δὲ κάτω μικρόν. Διὸ καὶ ἔρπουσι, βαδίζειν δ' οὐ δύνανται. Τὸ δὲ πρῶτον οὐδ' ἔρπουσιν, ἀλλ' ἀκίνητίζουσιν· νάνοι γάρ εἰσι τὰ παιδιά πάντα. Προιοῦσι δὲ τοῖς μὲν ἀνθρώποις αὖξεται τὰ κάτωθεν· τοῖς δὲ τετράποσι τούναντίον τὰ κάτω μέγιστα τὸ πρῶτον, προϊόντα δ' αὖξεται ἐπὶ τὸ ἄνω, τοῦτο δ' ἐστὶ τὸ ἀπὸ τῆς ἔδρας ἐπὶ τὴν κεφαλὴν κύτος. Διὸ καὶ τῷ ὕψει οἱ πῶλοι τῶν ἵππων οὐδὲν ἢ μικρὸν ἐλάττους εἰσὶ, καὶ νέοι μὲν ὄντες θιγγάνουσι τῷ ὀπισθεν σκέλει τῆς κεφαλῆς, πρεσβύτεροι δ' ὄντες οὐ δύνανται. Τὰ μὲν οὖν μώνυχα καὶ διχηλὰ τοῦτον ἔχει τὸν τρόπον, τὰ δὲ πολυδάκτυλα καὶ ἀκέρατα νανώδη μὲν ἐστὶν, ἥττον δὲ τούτων· διὸ καὶ τὴν αὖξησιν πρὸς τὰ ἄνω τὰ κάτω κατὰ λόγον ποιεῖται τῆς ἐλλείψεως. Ἔστι δὲ καὶ τὸ τῶν ὀρνίθων καὶ τὸ τῶν ἰχθύων γένος καὶ πᾶν τὸ ἔναιμον, ὥσπερ εἴρηται, νανῶδες. Διὸ καὶ ἀφρονέστερα πάντα τὰ ζῶα τῶν ἀνθρώπων ἐστίν. Καὶ γὰρ τῶν ἀνθρώπων, οἷον τὰ τε παιδιά πρὸς τοὺς ἄνδρας καὶ αὐτῶν τῶν ἐν ἡλικίᾳ οἱ νανῶδεις τὴν φύσιν, ἐὰν καὶ τιν' ἄλλην δύναμιν ἔχωσι περιττήν, ἀλλὰ τῷ τὸν νοῦν ἔχειν ἐλλείπουσιν. Αἴτιον δ' ὥσπερ εἴρηται πρότερον, ὅτι ἢ τῆς ψυχῆς ἀρχὴ πολλῷ δὴ δυσκίνητος ἐστὶ καὶ σωματώδης.

Ἔτι δ' ἐλάττονος γινομένης τῆς αἰρούσης θερμότητος καὶ τοῦ γεώδους πλείονος, τὰ τε σώματα ἐλάττονα τῶν ζώων ἐστὶ καὶ πολύποδα, τέλος δ' ἄποδα γίγνεται καὶ τεταμένα πρὸς τὴν γῆν. Μικρὸν δ' οὕτω προβαίνοντα καὶ τὴν ἀρχὴν ἔχουσι κάτω, καὶ τὸ κατὰ τὴν κεφαλὴν μόριον τέλος ἀκίνητόν ἐστι καὶ ἀναίσθητον, καὶ γίνεται φυτόν, ἔχον τὰ μὲν ἄνω κάτω, τὰ δὲ κάτω ἄνω· αἱ γὰρ ῥίζαι τοῖς φυτοῖς στόματος καὶ (687a.) κεφαλῆς ἔχουσι δύναμιν, τὸ δὲ σπέρμα τούναντίον· ἄνω γὰρ καὶ ἐπ' ἄκροις γίνεται τοῖς πτόρθοις. Δι' ἣν μὲν οὖν αἰτίαν τὰ μὲν δίποδα τὰ δὲ πολύποδα τὰ δ' ἄποδα τῶν ζώων ἐστὶ, καὶ διὰ τίν' αἰτίαν τὰ μὲν φυτὰ τὰ δὲ ζῶα γέγονεν, εἴρηται, καὶ διότι μόνον ὀρθόν ἐστὶ τῶν ζώων ὁ ἄνθρωπος.

Ὅρθῳ δ' ὄντι τὴν φύσιν οὐδεμία χρεια σκελῶν τῶν ἐμπροσθίων, ἀλλ' ἀντὶ τούτων βραχίονας καὶ χεῖρας ἀποδέδωκεν ἡ φύσις. Αναξαγόρας μὲν οὖν φησι διὰ τὸ χεῖρας ἔχειν φρονιμώτατον εἶναι τῶν ζώων ἄνθρωπον· εὐλογον δὲ διὰ

τὸ φρονιμώτατον εἶναι χεῖρας λαμβάνειν. Αἱ μὲν γὰρ χεῖρες ὄργανόν εἰσιν, ἡ δὲ φύσις ἀεὶ διανέμει, καθάπερ ἄνθρωπος φρόνιμος, ἕκαστον τῷ δυναμένῳ χρῆσθαι. Προσῆκει γὰρ τῷ ὄντι αὐλητῇ δοῦναι μᾶλλον αὐλοῦς ἢ τῷ αὐλοῦς ἔχοντι προσθεῖναι αὐλητικὴν· τῷ γὰρ μείζονι καὶ κυριωτέρῳ προσέθηκε τοῦλαττον, ἀλλ' οὐ τῷ ἐλάττονι τὸ τιμιώτερον καὶ μείζον. Εἰ οὖν οὕτως βέλτιον, ἡ δὲ φύσις ἐκ τῶν ἐνδεχομένων ποιεῖ τὸ βέλτιστον, οὐ διὰ τὰς χεῖρας ἐστὶν ὁ ἄνθρωπος φρονιμώτατος, ἀλλὰ διὰ τὸ φρονιμώτατον εἶναι τῶν ζώων ἔχει χεῖρας. Ὁ γὰρ φρονιμώτατος πλείστοις ἂν ὀργάνοις ἐχρήσατο καλῶς, ἡ δὲ χεὶρ ἔοικεν εἶναι οὐχ ἓν ὄργανον ἀλλὰ πολλά· ἔστι γὰρ ὥσπερ εἰ ὄργανον πρὸ ὀργάνων. Τῷ οὖν πλείστας δυναμένῳ δέξασθαι τέχνας τὸ ἐπὶ πλεῖστον τῶν ὀργάνων χρήσιμον τὴν χεῖρα ἀποδέδωκεν ἡ φύσις. Ἄλλ' οἱ λέγοντες ὡς συνέστηκεν οὐ καλῶς ὁ ἄνθρωπος ἀλλὰ χεῖριστα τῶν ζώων (ἀνυπόδητόν τε γὰρ αὐτὸν εἶναι φασι καὶ γυμνὸν καὶ οὐκ ἔχοντα ὄπλον πρὸς τὴν ἀλκὴν) οὐκ ὀρθῶς λέγουσιν.

Τὰ μὲν γὰρ ἄλλα μίαν ἔχει βοήθειαν, καὶ μεταβάλλεσθαι ἀντὶ ταύτης ἑτέραν οὐκ ἔστιν, ἀλλ' ἀναγκαῖον ὥσπερ ὑποδεδεμένον ἀεὶ καθεύδειν καὶ πάντα πράττειν, καὶ τὴν περὶ τὸ σῶμα ἀλεωρὰν μηδέποτε καταθέσθαι, μηδὲ μεταβάλλεσθαι ὃ δὴ ἐτύγχανεν ὄπλον ἔχων. Τῷ δὲ ἀνθρώπῳ τὰς τε βοηθείας (687b.) πολλὰς ἔχειν, καὶ ταύτας ἀεὶ ἔξεστι μεταβάλλειν, ἔτι δ' ὄπλον οἷον ἂν βούληται καὶ ὅπου ἂν βούληται ἔχειν. Ἡ γὰρ χεὶρ καὶ ὄνυξ καὶ χηλὴ καὶ κέρας γίνεται καὶ δόρυ καὶ ξίφος καὶ ἄλλο ὅποιον οὖν ὄπλον καὶ ὄργανον· πάντα γὰρ ἔσται ταῦτα διὰ τὸ πάντα δύνασθαι λαμβάνειν καὶ ἔχειν.

Ταύτη δὲ συμμεμηχανῆσθαι καὶ τὸ εἶδος τῇ φύσει τῆς χειρός. Διαιρετὴ γὰρ καὶ πολυσχιδής· ἓν γὰρ ἐν τῷ διαιρετῇ εἶναι καὶ συνθετῇ εἶναι, ἐν τούτῳ δ' ἐκεῖνο οὐκ ἔστιν. Καὶ χρῆσθαι ἐνὶ καὶ δυοῖν καὶ πολλαχῶς ἔστιν. Καὶ αἱ καμπαὶ τῶν δακτύλων καλῶς ἔχουσι πρὸς τὰς λήψεις καὶ πιέσεις.

Καὶ ἐκ πλαγίου εἷς, καὶ οὗτος βραχὺς καὶ παχὺς ἀλλ' οὐ μακρός· ὥσπερ γὰρ εἰ μὴ ἦν χεὶρ ὅλως, οὐκ ἂν ἦν λῆψις, οὕτως κἂν εἰ μὴ ἐκ πλαγίου οὗτος ἦν. Οὗτος γὰρ κάτωθεν ἄνω πιάζει, ὅπερ οἱ ἕτεροι ἄνωθεν κάτω· δεῖ δὲ τοῦτο συμβαίνειν, εἰ μέλλει ἰσχυρῶς ὥσπερ σῖνυμα ἰσχυρὸν συνδεῖν, ἵνα ἰσάζῃ εἰς ὧν πολλοῖς. Καὶ βραχὺς διὰ τε τὴν ἰσχύϊν καὶ διότι οὐδὲν ὄφελος εἰ μακρός. Καὶ ὁ ἔσχατος δὲ μικρὸς ὀρθῶς, καὶ ὁ μέσος μακρός, ὥσπερ κώπη μεσόνεως· μάλιστα γὰρ τὸ λαμβανόμενον ἀνάγκη περιλαμβάνεσθαι κύκλῳ κατὰ τὸ μέσον πρὸς τὰς ἐργασίας. Καὶ διὰ τοῦτο καλεῖται μέγας μικρὸς ὧν, ὅτι ἄχρηστοι ὡς εἰπεῖν οἱ ἄλλοι ἄνευ τούτου. Εὖ δὲ καὶ τὸ τῶν ὀνύχων μεμηχάνηται· τὰ μὲν γὰρ ἄλλα ζῶα ἔχει καὶ πρὸς χρῆσιν αὐτούς, τοῖς δ'

ἀνθρώποις ἐπικαλυπτήρια· σκέπασμα γὰρ τῶν ἀκρωτηρίων εἰσίν.

Αἱ δὲ καμπαὶ τῶν βραχιόνων ἔχουσι πρὸς τε τὴν τῆς τροφῆς προσαγωγὴν καὶ πρὸς τὰς ἄλλας χρήσεις ἐναντίως τοῖς τετράποσιν. Ἐκείνοις μὲν γὰρ ἀναγκαῖον εἶσω κάμπτειν τὰ ἐμπρόσθια κῶλα· χρῶνται γὰρ ποσίν, ἢ ἢ χρήσιμα πρὸς τὴν πορείαν, ἐπεὶ θέλει γε κἀκείνων τοῖς πολυδακτύλοις οὐ μόνον πρὸς τὴν πορείαν χρήσιμ' εἶναι τὰ ἔμπροσθεν σκέλη, ἀλλὰ καὶ ἀντὶ χειρῶν, ὥσπερ καὶ φαίνεται χρώμενα· καὶ γὰρ (688a.) λαμβάνουσι καὶ ἀμύνονται τοῖς προσθίοις. Τὰ δὲ μώνυχα τοῖς ὀπισθίοις· οὐ γὰρ ἔχει αὐτοῖς τὰ πρόσθια σκέλη ἀνάλογον τοῖς ἀγκῶσι καὶ ταῖς χερσίν. Τῶν δὲ πολυδακτύλων ἓν καὶ διὰ τοῦτο καὶ πενταδακτύλους ἔχει τοὺς προσθίους πόδας, τοὺς δ' ὀπισθεν τετραδακτύλους, οἷον λέοντες καὶ λύκοι, ἔτι δὲ κύνες καὶ παρδάλεις· ὁ γὰρ πέμπτος ὥσπερ ὁ τῆς χειρὸς γίνεται μέγας πέμπτος. Τὰ δὲ μικρὰ τῶν πολυδακτύλων καὶ τοὺς ὀπισθίους ἔχει πενταδακτύλους διὰ τὸ ἐρπυστικὰ εἶναι, ὅπως τοῖς ὄνυξι πλείοσιν οὖσιν ἀντιλαμβανόμενα ῥᾶον ἀνέρπηι πρὸς τὸ μετεωρότερον καὶ ὑπὲρ κεφαλῆς.

Μεταξὺ δὲ τῶν ἀγκώνων τοῖς ἀνθρώποις, τοῖς δ' ἄλλοις τῶν ἐμπροσθίων σκελῶν, τὸ καλούμενον στήθος ἐστὶ, τοῖς μὲν ἀνθρώποις ἔχον πλάτος εὐλόγως (οὐ γὰρ κωλύουσιν οἱ ἀγκῶνες ἐκ πλαγίου προσκείμενοι τοῦτον εἶναι τὸν τόπον πλατύν), τοῖς δὲ τετράποσι διὰ τὴν ἐπὶ τὸ πρόσθιον τῶν κῶλων ἔκτασιν ἐν τῷ πορεύεσθαι καὶ μεταβάλλειν τὸν τόπον στενὸν τοῦτ' ἔστι τὸ μόριον. Καὶ διὰ τοῦτο τὰ μὲν τετράποδα τῶν ζώων οὐκ ἔχει μαστοὺς ἐν τῷ τόπῳ τούτῳ· τοῖς δ' ἀνθρώποις διὰ τὴν εὐρυχωρίαν καὶ τὸ σκεπάζεσθαι δεῖν τὰ περὶ τὴν καρδίαν, διὰ τοῦτο ὑπάρχοντος τοῦ τόπου σαρκώδους οἱ μαστοὶ διήρθρωνται, σαρκώδεις ὄντες τοῖς μὲν ἄρρεσι διὰ τὴν εἰρημένην αἰτίαν, ἐπὶ δὲ τῶν θηλειῶν παρακέχρηται καὶ πρὸς ἕτερον ἔργον ἢ φύσιν, ὅπερ φαμέν αὐτὴν πολλάκις ποιεῖν· ἀποτίθεται γὰρ ἐνταῦθα τοῖς γεννωμένοις τροφήν.

Δύο δ' εἰσὶν οἱ μαστοὶ διὰ τὸ δύο τὰ μόρια εἶναι, τό τ' ἀριστερὸν καὶ τὸ δεξιόν. Καὶ σκληρότεροι μὲν, διωρισμένοι δὲ διὰ τὸ καὶ τὰς πλευρὰς συνάπτεσθαι μὲν ἀλλήλας κατὰ τὸν τόπον τοῦτον, μὴ ἐπίπονον δ' εἶναι τὴν φύσιν αὐτῶν.

Τοῖς δ' ἄλλοις ζώοις ἐν μὲν τῷ στήθει μεταξὺ τῶν σκελῶν ἀδύνατόν ἐστιν ἔχειν τοὺς μαστούς (ἐμποδίζοιεν μὲν γὰρ ἂν πρὸς τὴν πορείαν), ἔχουσι δ' ἤδη πολλοὺς τρόπους. Τὰ μὲν γὰρ ὀλιγοτόκα καὶ μώνυχα καὶ κερατοφόρα ἐν τοῖς μηροῖς ἔχουσι τοὺς μαστούς, καὶ τούτους δύο, τὰ δὲ πολυτόκα ἢ πολυσχιδῆ τὰ

μὲν περὶ τὴν γαστέρα πλαγίους καὶ πολλούς, οἷον ὕς καὶ κύων, τὰ δὲ δύο μόνους, περὶ μέσσην μέντοι (688b.) γαστέρα, οἷον λέγων. Τούτου δ' αἴτιον οὐχ ὅτι ὀλιγοτόκον, ἐπεὶ τίκτει ποτὲ πλείω δυοῖν, ἀλλ' ὅτι οὐ πολυγάλακτον· ἀναλίσκει γὰρ εἰς τὸ σῶμα τὴν λαμβανομένην τροφήν, λαμβάνει δὲ σπάνιον διὰ τὸ σαρκοφάγον εἶναι. Ὁ δ' ἐλέφας δύο μόνον ἔχει, τούτους δ' ὑπὸ ταῖς μασχάλαις τῶν ἐμπροσθίων σκελῶν. Αἴτιον δὲ τοῦ μὲν δύο ἔχειν ὅτι μονοτόκον ἐστὶ, τοῦ δὲ μὴ ἐν τοῖς μηροῖς ὅτι πολυσχιδὲς (οὐδὲν γὰρ ἔχει πολυσχιδὲς ἐν τοῖς μηροῖς), ἄνω δὲ πρὸς ταῖς μασχάλαις, ὅτι πρῶτοι οὗτοι τῶν μαστῶν τοῖς πολλοὺς ἔχουσι μαστούς, καὶ ἰμῶνται γάλα πλεῖστον. Σημεῖον δὲ τὸ ἐπὶ τῶν ὤων συμβαῖνον· τοῖς γὰρ πρώτοις γενομένοις τῶν χοίρων τοὺς πρώτους παρέχουσι μαστούς· ὧ οὖν τὸ πρῶτον γινόμενον ἐν μόνον ἐστὶ, τούτῳ τοὺς μαστοὺς ἀναγκάζον ἔχειν τοὺς πρώτους· πρῶτοι δ' εἰσὶν οἱ ὑπὸ ταῖς μασχάλαις. Ὁ μὲν οὖν ἐλέφας διὰ ταύτην τὴν αἰτίαν δύο ἔχει καὶ ἐν τούτῳ τῷ τόπῳ, τὰ δὲ πολυτόκα περὶ τὴν γαστέρα. Τούτου δ' αἴτιον ὅτι πλειόνων δεῖ μαστῶν τοῖς πλείω μέλλουσιν ἐκτρέφειν· ἐπεὶ οὖν ἐπὶ πλάτος οὐχ οἷον τε ἀλλ' ἢ δύο μόνους ἔχειν διὰ τὸ δύο εἶναι τό τ' ἀριστερὸν καὶ τὸ δεξιόν, ἐπὶ μῆκος ἀναγκάζον ἔχειν· ὁ δὲ μεταξὺ τόπος τῶν ἐμπροσθεν σκελῶν καὶ τῶν ὀπισθεν ἔχει μῆκος μόνον. Τὰ δὲ μὴ πολυσχιδῇ ἀλλ' ὀλιγοτόκα ἢ κερατοφόρα καὶ ἐν τοῖς μηροῖς ἔχει τοὺς μαστούς, οἷον ἵππος ὄνος κάμηλος (ταῦτα γὰρ μονοτόκα, καὶ τὰ μὲν μώνυχα, τὸ δὲ διχηλόν), ἔτι δ' ἔλαφος καὶ βοῦς καὶ αἶξ καὶ ἄλλα πάντα τὰ τοιαῦτα. Αἴτιον δ' ὅτι τούτοις ἡ αὐξησης ἐπὶ τὸ ἄνω τοῦ σώματός ἐστιν. Ὡσθ' ὅπου συλλογὴ καὶ περιουσία γίνεται τοῦ περιττώματος καὶ αἵματος (οὗτος δ' ὁ τόπος ἐστὶν ὁ κάτω καὶ περὶ τὰς ἐκροάς), ἐνταῦθα ἐποίησεν ἡ φύσις τοὺς μαστούς. Ὅπου γὰρ κίνησις γίνεται τῆς τροφῆς, ἐντεῦθεν καὶ λαβεῖν ἐστὶν αὐτοῖς δυνατόν. Ἄνθρωπος μὲν οὖν καὶ ὁ θῆλυς καὶ ὁ ἄρρην ἔχει μαστούς, ἐν δὲ τοῖς ἄλλοις ἕνια τῶν ἄρρένων οὐκ ἔχει, οἷον ἵπποι οἱ μὲν οὐκ ἔχουσιν οἱ δ' ἔχουσιν, ὅσοι ἐοίκασιν τῇ μητρὶ.

Καὶ περὶ μὲν μαστῶν εἴρηται, μετὰ δὲ τὸ στήθος ὁ περὶ τὴν κοιλίαν ἐστὶ τόπος, ἀσύγκλειστος ταῖς πλευραῖς διὰ τὴν εἰρημένην ἐμπροσθεν αἰτίαν, ὅπως μὴ ἐμποδίζωσι μήτε (689a.) τὴν ἀνοίδησιν τῆς τροφῆς, ἣν ἀναγκάζον συμβαίνειν θερμαινομένης αὐτῆς, μήτε τὰς ὑστέρας τὰς περὶ τὴν κύησιν. Τέλος δὲ τοῦ καλουμένου θώρακός ἐστι τὰ μόρια τὰ περὶ τὴν τῆς περιττώσεως ἔξοδον, τῆς τε ξηρᾶς καὶ τῆς ὑγρᾶς.

Καταχρῆται δ' ἡ φύσις τῷ αὐτῷ μορίῳ ἐπὶ τε τὴν τῆς ὑγρᾶς ἔξοδον περιττώσεως καὶ περὶ τὴν ὀχείαν, ὁμοίως ἔν τε τοῖς θήλεσι καὶ τῶν ἄρρένων, ἔξω τινῶν ὀλίγων πᾶσι τοῖς ἐναίμοις, ἐν δὲ τοῖς ζωοτόκοις πᾶσιν. Αἴτιον δ'

ὅτι ἡ γονὴ ὑγρόν ἐστὶ τι καὶ περίττωμα· τοῦτο δὲ νῦν μὲν ὑποκείσθω, ὕστερον δὲ δειχθήσεται περὶ αὐτοῦ. Τὸν αὐτὸν δὲ τρόπον καὶ ἐν τοῖς θήλεσι τὰ τε καταμήνια, καὶ ἣ προΐενται τὴν γονὴν· διορισθήσεται δὲ καὶ περὶ τούτων ὕστερον, νῦν δὲ ὑποκείσθω μόνον ὅτι περίττωμα καὶ τὰ καταμήνια τοῖς θήλεσιν· ὑγρὰ δὲ τὴν φύσιν τὰ καταμήνια καὶ ἡ γονή, ὥστε τῶν αὐτῶν καὶ τῶν ὁμοίων εἰς ταῦτα τὰ μόρια τὴν ἔκκρισιν εἶναι κατὰ λόγον ἐστίν. Ἐντὸς δὲ πῶς ἔχει, καὶ πῇ διαφέρουσι τὰ τε περὶ τὸ σπέρμα καὶ τὰ περὶ τὴν κύησιν, ἔκ τε τῆς ἱστορίας τῆς περὶ τὰ ζῶα φανερόν καὶ τῶν ἀνατομῶν, καὶ ὕστερον λεχθήσεται ἐν τοῖς περὶ γενέσεως. Ὅτι δ' ἔχει καὶ τὰ σχήματα τῶν μορίων τούτων πρὸς τὴν ἐργασίαν ἀναγκαίως, οὐκ ἄδηλον. Ἔχει δὲ διαφορὰς τὸ τῶν ἀρρένων ὄργανον κατὰ τὰς τοῦ σώματος διαφοράς. Οὐ γὰρ ὁμοίως ἅπαντα νευρώδη τὴν φύσιν ἐστίν. Ἐτι δὲ μόνον τοῦτο τῶν μορίων ἄνευ νοσερᾶς μεταβολῆς αὔξησιν ἔχει καὶ ταπείνωσιν· τούτων γὰρ τὸ μὲν χρήσιμον πρὸς τὸν συνδυασμόν, τὸ δὲ πρὸς τὴν τοῦ ἄλλου σώματος χρείαν· αἰεὶ γὰρ ὁμοίως ἔχοντα ἐνεπόδιζεν ἄν. Συνέστηκε δὲ τὴν φύσιν ἐκ τοιούτων τὸ μόριον τοῦτο ὥστε δύνασθαι ταῦτ' ἀμφοτέρω συμβαίνειν· τὸ μὲν γὰρ ἔχει νευρώδες τὸ δὲ χονδρῶδες, διόπερ συνιέναι τε δύναται καὶ ἔκτασιν ἔχειν καὶ πνεύματός ἐστι δεκτικόν. Τὰ μὲν οὖν θήλεα τῶν τετραπόδων πάντ' ἐστὶν ὀπισθοθηρικά διὰ τὸ πρὸς τὴν ὀχείαν οὕτως εἶναι αὐτοῖς χρησίμην τὴν θέσιν, τῶν δ' ἀρρένων ὀλίγα ἐστὶν ὀπισθοθηρικά, οἷον λυγξ λέων κάμηλος δασύπους· μώνυχον δ' οὐδέν ἐστιν ὀπισθοθηρικόν.

(689b.) Τὰ δ' ὀπισθεν καὶ τὰ περὶ τὰ σκέλη τοῖς ἀνθρώποις ἰδίως ἔχει πρὸς τὰ τετράποδα. Κέρκον δ' ἔχει πάντα σχεδόν, οὐ μόνον τὰ ζωοτόκα ἀλλὰ καὶ τὰ ὠοτόκα· καὶ γὰρ ἂν μὴ μέγεθος αὐτοῖς ἔχον ἢ τοῦτο τὸ μόριον, ἀλλὰ σημείου γ' ἔνεκεν ἔχουσι τινα στόλον. Ὁ δ' ἄνθρωπος ἄκερκον μὲν ἐστίν, ἰσχία δ' ἔχει, τῶν δὲ τετραπόδων οὐδέν. Ἐτι δὲ καὶ τὰ σκέλη ὁ μὲν ἄνθρωπος σαρκώδη καὶ μηροὺς καὶ κνήμας, τὰ δ' ἄλλα πάντ' ἄσαρκα ἔχει, οὐ μόνον τὰ ζωοτόκα ἀλλ' ὅλως ὅσα σκέλη ἔχει τῶν ζώων· νευρώδη γὰρ ἔχει καὶ ὀστώδη καὶ ἀκανθώδη. Τούτων δ' αἰτία μία τις ἐστίν ὥς εἰπεῖν ἀπάντων, διότι μόνον ἐστὶν ὀρθὸν τῶν ζώων ἄνθρωπος. Ἴν' οὖν φέρῃ ῥαδίως τᾶν κοῦφα ὄντα, ἀφελοῦσα τὸ σωματῶδες ἀπὸ τῶν ἄνω πρὸς τὰ κάτω τὸ βάρος ἡ φύσις προσέθηκεν· διόπερ τὰ ἰσχία σαρκώδη ἐποίησε καὶ μηροὺς καὶ γαστροκνημίας. Ἄμα δὲ τὴν τε τῶν ἰσχύων φύσιν καὶ πρὸς τὰς ἀναπαύσεις ἀπέδωκε χρήσιμον· τοῖς μὲν γὰρ τετράποσιν ἄκοπον τὸ ἐστάναι, καὶ οὐ κάμνουσι τοῦτο ποιοῦντα συνεχῶς (ὥσπερ γὰρ κατακείμενα διατελεῖ ὑποκειμένων τεττάρων ἐρεισμάτων), τοῖς δ' ἀνθρώποις οὐ ῥάδιον ὀρθῶς ἐστῶσι διαμένειν, ἀλλὰ δεῖται τὸ σῶμα ἀναπαύσεως καὶ καθέδρας.



Ὁ μὲν οὖν ἄνθρωπος ἰσχία τ' ἔχει τὰ σκέλη σαρκώδη διὰ τὴν εἰρημένην αἰτίαν, καὶ διὰ ταῦτα ἄκερκον (ἢ τε γὰρ ἐκεῖ τροφή πορευομένη εἰς ταῦτα ἀναλίσκεται, καὶ διὰ τὸ ἔχειν ἰσχία ἀφήρηται ἢ τῆς οὐρᾶς ἀναγκαία χρῆσις), τὰ δὲ τετράποδα καὶ τᾶλλα ζῶα ἐξ ἐναντίας· νανώδεσι γὰρ οὕσι πρὸς τὸ ἄνω τὸ βάρος καὶ τὸ σωματῶδες ἐπίκειται πᾶν, ἀφηρημένον ἀπὸ τῶν κάτωθεν· διόπερ ἀνίσχια καὶ σκληρὰ τὰ σκέλη ἔχουσιν.

Ὅπως δ' ἐν φυλακῇ καὶ σκέπη ἥ τὸ λειτουργοῦν μόριον τὴν ἔξοδον τοῦ περιττώματος, τὴν καλουμένην οὐρὰν καὶ κέρκον αὐτοῖς ἀπέδωκεν ἡ φύσις, ἀφελομένη τῆς εἰς τὰ σκέλη γιγνομένης τροφῆς. Ὁ δὲ πίθηκος διὰ τὸ τὴν μορφὴν ἐπαμφοτερίζειν καὶ μηδετέρων τ' εἶναι καὶ ἀμφοτέρων, διὰ τοῦτ' οὔτε οὐρὰν ἔχει οὔτ' ἰσχία, ὥς μὲν δίπους ὦν οὐράν, ὥς δὲ τετράπους ἰσχία. Τῶν δὲ καλουμένων κέρκων διαφοραὶ (690a.) τ' εἰσὶ πλείους καὶ ἡ φύσις παρακαταχρῆται καὶ ἐπὶ τούτων, οὐ μόνον πρὸς φυλακὴν καὶ σκέπην τῆς ἔδρας, ἀλλὰ καὶ πρὸς ὠφέλειαν καὶ χρῆσιν τοῖς ἔχουσιν.

Οἱ δὲ πόδες τοῖς μὲν τετράποσι διαφέρουσιν· τὰ μὲν γὰρ μώνυχα αὐτῶν ἐστὶ τὰ δὲ διχηλὰ τὰ δὲ πολυσχιδῇ, μώνυχα μὲν ὅσοις διὰ μέγεθος καὶ τὸ πολὺ γεῶδες ἔχειν ἀντὶ κεράτων καὶ ὀδόντων εἰς τὴν τοῦ ὄνυχος φύσιν τὸ τοιοῦτον μόριον ἔλαβεν ἀπόκρισιν, καὶ διὰ πλῆθος ἀντὶ πλειόνων ὀνύχων εἷς ὄνυξ ἢ ὀπλή ἐστίν.

Καὶ ἀστράγαλον δὲ διὰ τοῦτο οὐκ ἔχουσιν ὥς ἐπὶ τὸ πολὺ εἰπεῖν, διὰ τὸ δυσκινητοτέραν εἶναι τὴν καμπὴν τοῦ ὀπισθεν σκέλους ἀστραγάλου ἐνόητος· θᾶπτον γὰρ ἀνοίγεται καὶ κλείεται τὰ μίαν ἔχοντα γωνίαν ἢ πλείους, ὃ δ' ἀστράγαλος γόμφος ὦν ὥσπερ ἀλλότριον κῶλον ἐμβέβληται τοῖς δυσί, βάρος μὲν παρέχον, ποιοῦν δ' ἀσφαλεστέραν τὴν βάσιν. Διὰ γὰρ τοῦτο καὶ ἐν τοῖς ἐμπροσθίοις οὐκ ἔχουσιν ἀστράγαλον τὰ ἔχοντα ἀστράγαλον, ἀλλ' ἐν τοῖς ὀπισθεν, ὅτι δεῖ ἐλαφρὰ εἶναι τὰ ἡγούμενα καὶ εὐκαμπτα, τὸ δ' ἀσφαλές καὶ τὴν τάσιν ἐν τοῖς ὀπισθεν. Ἔτι δὲ πρὸς τὸ ἀμύνεσθαι ἐμβριθεστέραν ποιεῖ τὴν πληγὴν· τὰ δὲ τοιαῦτα τοῖς ὀπισθεν χρῆται κώλοις, λακτίζοντα τὸ λυποῦν. Τὰ δὲ διχηλὰ ἔχει ἀστράγαλον (κουφότερα γὰρ τὰ ὀπισθεν), καὶ διὰ τὸ ἔχειν ἀστράγαλον καὶ οὐ μώνυχά ἐστίν, ὥς τὸ ἐκλείπον ὀστῶδες ἐκ τοῦ ποδὸς ἐν τῇ κάμψει μένον. Τὰ δὲ πολυδάκτυλα οὐκ ἔχει ἀστράγαλον· οὐ γὰρ ἂν ἦν πολυδάκτυλα, ἀλλὰ τοσοῦτον ἐσχίζετο τὸ πλάτος ὅσον ἐπέχει ὁ ἀστράγαλος. Διὸ καὶ τῶν ἐχόντων αὐτὸν τὰ πλείω διχηλὰ.

Ὁ δ' ἄνθρωπος πόδας μεγίστους ἔχει τῶν ζώων ὥς κατὰ μέγεθος, εὐλόγως· μόνον γὰρ ἔστηκεν ὀρθόν, ὥστε τοὺς μέλλοντας δύ' ὄντας ἔξιν πᾶν τὸ τοῦ

σώματος βάρος δεῖ μήκος ἔχειν καὶ πλάτος. Καὶ τὸ τῶν δακτύλων δὴ μέγεθος ἐναντίως ἔχει ἐπὶ τε τῶν ποδῶν καὶ τῶν χειρῶν κατὰ λόγον· τῶν μὲν γὰρ τὸ λαμβάνειν ἔργον καὶ πιέζειν, ὥστε δεῖ μακροὺς (690b.) ἔχειν (τῷ γὰρ καμπτομένῳ μέρει περιλαμβάνει ἢ χεῖρ), τῶν δὲ τὸ βεβηκέναι ἀσφαλῶς, ὥστε τοῦτο δεῖ τὸ μόριον εἶναι νομίζειν τὸ ἄσχιστον τοῦ ποδὸς τῶν δακτύλων. Ἐσχίσθαι δὲ βέλτιον ἢ ἄσχιστον εἶναι τὸ ἔσχατον· ἅπαν γὰρ ἂν συμπαθεῖς ἦν ἐνὸς μορίου πονήσαντος, ἐσχισμένων δ' εἰς δακτύλους τοῦτ' οὐ συμβαίνει ὁμοίως. Ἔτι δὲ καὶ βραχεῖς ὄντες ἦττον συμβλάπτοιτο· διὸ πολυσχιδεῖς οἱ πόδες τῶν ἀνθρώπων, οὐ μακροδάκτυλοι δ' εἰσίν. Τὸ δὲ τῶν ὀνύχων γένος διὰ τὴν αὐτὴν αἰτίαν καὶ ἐπὶ τῶν χειρῶν ἔχουσιν· δεῖ γὰν σκέπεσθαι τὰ ἀκρωτήρια μάλιστα διὰ τὴν ἀσθένειαν.

## Κεφάλαιο 11

Περὶ μὲν οὖν τῶν ἐναίμων ζώων καὶ ζωοτόκων καὶ πεζῶν εἴρηται σχεδὸν περὶ πάντων.

Τῶν δ' ἐναίμων ζώων ὠοτόκων δὲ τὰ μὲν ἐστὶ τετράποδα τὰ δ' ἄποδα. Τοιοῦτον δ' ἐν μόνον γένος ἐστὶν ἄπουν, τὸ τῶν ὄφεων· ἢ δ' αἰτία τῆς ἀποδίας αὐτῶν εἴρηται ἐν τοῖς περὶ τῆς πορείας τῶν ζώων διωρισμένοις. Τὰ δ' ἄλλα παραπλησίαν ἔχει τὴν μορφὴν τοῖς τετράποσι καὶ ὠοτόκοις.

Ἔχει δὲ τὰ ζῶα ταῦτα κεφαλὴν μὲν καὶ τὰ ἐν αὐτῇ μόρια διὰ τὰς αὐτὰς αἰτίας τοῖς ἄλλοις τοῖς ἐναίμοις ζώοις, καὶ γλῶτταν ἐν τῷ στόματι πλὴν τοῦ ποταμίου κροκοδείλου· οὗτος δ' οὐκ ἂν δόξειεν ἔχειν, ἀλλὰ τὴν χώραν μόνον. Αἴτιον δ' ὅτι τρόπον μὲν τινὰ ἅμα χερσαῖος καὶ ἔνυδρος ἐστίν· διὰ μὲν οὖν τὸ χερσαῖος εἶναι ἔχει χώραν γλώττης, διὰ δὲ τὸ ἔνυδρος ἄγλωττος. Οἱ γὰρ ἰχθύες, καθάπερ εἴρηται πρότερον, οἱ μὲν οὐ δοκοῦσιν ἔχειν, ἂν μὴ σφόδρα ἀνακλίνη τις, οἱ δ' ἀδιάρθρωτον ἔχουσιν. Αἴτιον δ' ὅτι ὀλίγη ἦν χρεία τούτοις τῆς γλώττης διὰ τὸ μὴ ἐνδέχεσθαι μασᾶσθαι μηδὲ προγεύεσθαι, ἀλλ' ἐν τῇ καταπόσει γίνεσθαι τὴν αἴσθησιν καὶ τὴν ἡδονὴν πᾶσι τούτοις τῆς τροφῆς. Ἡ μὲν γὰρ γλῶττα τῶν χυμῶν ποιεῖ τὴν αἴσθησιν, τῶν δὲ ἐδεστῶν ἐν τῇ καθόδῳ ἢ ἡδονῇ· καταπινομένων γὰρ αἰσθάνονται τῶν λιπαρῶν καὶ θερμῶν καὶ τῶν ἄλλων τῶν τοιούτων. Ἔχει μὲν οὖν καὶ τὰ ζωοτόκα ταύτην τὴν αἴσθησιν, καὶ σχεδὸν τῶν (691a.) πλείστων ὄψων καὶ ἐδεστῶν ἐν τῇ καταπόσει τῇ τάσει τοῦ οἰσοφάγου γίνεται ἡ χάρις. Διὸ οὐχ οἱ αὐτοὶ περὶ τὰ πόματα καὶ τοὺς χυμοὺς ἀκρατεῖς εἰσι καὶ τὰ ὄψα καὶ τὴν ἐδωδὴν, ἀλλὰ τοῖς μὲν ἄλλοις ζώοις καὶ ἢ κατὰ τὴν γεῦσιν ὑπάρχει αἴσθησις, ἐκείνοις δ' ὥσπερανεὶ ἢ ἑτέρα. Τῶν δὲ τετραπόδων καὶ ὠοτόκων οἱ σαῦροι, ὥσπερ οἱ

ὄφεις, δικρόαν ἔχουσι τὴν γλῶτταν καὶ ἐπ' ἄκρου τριχώδη πάμπαν, καθάπερ εἴρηται πρότερον. Ἔχουσι δὲ καὶ αἱ φῶκαι δικρόαν τὴν γλῶτταν· διὸ καὶ λίχνα πάντα τὰ ζῶα ἐστὶ ταῦτα. Ἔστι δὲ καὶ καρχαρόδοντα τὰ τετράποδα τῶν ὠοτόκων, ὥσπερ οἱ ἰχθύες.

Τὰ δ' αἰσθητήρια πάντα ὁμοίως ἔχουσι τοῖς ἄλλοις ζώοις, οἷον τῆς ὀσφρήσεως μυκτῆρας καὶ ὄψεως ὀφθαλμοὺς καὶ ἀκοῆς ὦτα, πλὴν οὐκ ἐπανεστηκότα, καθάπερ οὐδ' οἱ ὄρνιθες, ἀλλὰ τὸν πόρον μόνον. Αἷτιον δ' ἀμφοτέροις ἡ τοῦ δέρματος σκληρότης· τὰ μὲν γὰρ πτερωτὰ αὐτῶν ἐστὶ, ταῦτα δὲ πάντα φολιδωτά, ἔστι δ' ἡ φολὶς ὅμοιον χώρᾳ λεπίδος, φύσει δὲ σκληρότερον. Δηλοῖ δ' ἐπὶ τῶν χελωνῶν τοῦτο καὶ ἐπὶ τῶν μεγάλων ὄφεων καὶ τῶν ποταμίων κροκοδείλων· ἰσχυρότεραι γὰρ γίνονται τῶν ὀστέων ὥς οὔσαι τοιαῦται τὴν φύσιν.

Οὐκ ἔχουσι δὲ τὰ ζῶα ταῦτα τὴν ἄνω βλεφαρίδα, ὥσπερ οὐδ' οἱ ὄρνιθες, ἀλλὰ τῇ κάτω μύουσι διὰ τὴν αἰτίαν τὴν εἰρημένην ἐπ' ἐκείνων. Τῶν μὲν οὖν ὀρνίθων ἔνιοι καὶ σκαρδαμύττουσιν ὑμένι ἐκ τῶν κανθῶν, ταῦτα δὲ τὰ ζῶα οὐ σκαρδαμύττει· σκληροφθαλμότερα γὰρ ἐστὶ τῶν ὀρνίθων. Αἷτιον δ' ὅτι ἐκείνοις χρησιμώτερα ἡ ὀξύωπία πτηνοῖς οὔσι πρὸς τὸν βίον, τούτοις δ' ἦττον· τρωγλόδута γὰρ πάντα τὰ τοιαῦτά ἐστιν.

Εἰς δύο δὲ διηρημένης τῆς κεφαλῆς, τοῦ τε ἄνω μορίου καὶ τῆς σιαγόνος τῆς κάτω, ἄνθρωπος μὲν οὖν καὶ τὰ ζωοτόκα τῶν τετραπόδων καὶ ἄνω καὶ κάτω κινεῖ τὰς σιαγόνας καὶ εἰς τὸ πλάγιον, οἱ δ' ἰχθύες καὶ ὄρνιθες καὶ τὰ ὠοτόκα τῶν τετραπόδων εἰς τὸ ἄνω καὶ κάτω μόνον. Αἷτιον δ' ὅτι ἡ μὲν τοιαύτη κίνησις χρήσιμος εἰς τὸ δακεῖν καὶ (691b.) διελεῖν, ἡ δ' εἰς τὸ πλάγιον ἐπὶ τὸ λεαίνειν. Τοῖς μὲν οὖν ἔχουσι γομφίους χρήσιμος ἡ εἰς τὸ πλάγιον κίνησις, τοῖς δὲ μὴ ἔχουσιν οὐδὲν χρήσιμος, διόπερ ἀφήρηται πάντων τῶν τοιούτων· οὐδὲν γὰρ ποιεῖ περίεργον ἡ φύσις. Τὰ μὲν οὖν ἄλλα πάντα κινεῖ τὴν σιαγόνα τὴν κάτω, ὁ δὲ ποτάμιος κροκόδειλος μόνος τὴν ἄνω. Τούτου δ' αἷτιον ὅτι πρὸς τὸ λαβεῖν καὶ κατασχεῖν ἀχρήστους ἔχει τοὺς πόδας· μικροὶ γὰρ εἰσι πάμπαν. Πρὸς οὖν ταύτας τὰς χρείας ἀντὶ ποδῶν τὸ στόμα ἡ φύσις χρήσιμον αὐτῷ ἐποίησεν. Πρὸς δὲ τὸ κατασχεῖν ἢ λαβεῖν, ὁποτέρωθεν ἂν ἡ ἢ πληγὴ ἰσχυροτέρα, ταύτη χρησιμώτερα κινουμένη ἐστίν· ἡ δὲ πληγὴ ἰσχυροτέρα ἀεὶ ἄνωθεν ἢ κάτωθεν. Ἐπεὶ οὖν ἀμφοτέρων μὲν διὰ τοῦ στόματος ἡ χρῆσις, καὶ τοῦ λαβεῖν καὶ τοῦ δακεῖν, ἀναγκαιοτέρα δ' ἡ τοῦ κατασχεῖν μήτε χεῖρας ἔχοντι μήτε πόδας εὐφυεῖς, χρησιμώτερον τὴν ἄνωθεν κινεῖν σιαγόνα ἢ τὴν κάτωθεν αὐτοῖς. Διὰ τὸ αὐτὸ δὲ καὶ οἱ καρκῖνοι τὸ ἄνωθεν τῆς χηλῆς κινεῖσι μόριον, ἀλλ' οὐ τὸ κάτωθεν· ἀντὶ χειρὸς γὰρ

ἔχουσι τὰς χηλάς, ὥστε πρὸς τὸ λαβεῖν ἄλλ' οὐ πρὸς τὸ διελεῖν χρήσιμον δεῖ εἶναι τὴν χηλήν. Τὸ δὲ διελεῖν καὶ δακεῖν ὀδόντων ἔργον ἐστίν. Τοῖς μὲν οὖν καρκίνοις καὶ τοῖς ἄλλοις ὅσοις ἐνδέχεται σχολαίως ποιεῖσθαι τὴν λήψιν διὰ τὸ μὴ ἐν ὑγρῷ εἶναι τὴν χρῆσιν τοῦ στόματος, διήρηται, καὶ λαμβάνουσι μὲν χερσὶν ἢ ποσί, διαιροῦσι δὲ τῷ στόματι καὶ δάκνουσιν· τοῖς δὲ κροκοδείλοις ἐπ' ἀμφοτέρα χρήσιμον τὸ στόμα πεποίηκεν ἡ φύσις, κινουμένων οὕτω τῶν σιαγόνων.

Ἔχουσι δὲ καὶ αὐχένα πάντα τὰ τοιαῦτα διὰ τὸ πλεύμονα ἔχειν· δέχονται γὰρ τὸ πνεῦμα διὰ τῆς ἀρτήριας μῆκος ἐχούσης. Ἐπεὶ δὲ τὸ μεταξὺ κεφαλῆς καὶ ὠμων κέκληται αὐχέν, ἥκιστα τῶν τοιούτων ὁ ὄφιν δόξειεν ἂν ἔχειν αὐχένα, ἀλλὰ τὸ ἀνάλογον τῷ αὐχένι, εἴ γε δεῖ τοῖς εἰρημένοις ἐσχάτοις διορίζειν τὸ μόριον τοῦτο. Ἴδιον δὲ πρὸς τὰ συγγενῇ τῶν ζώων ὑπάρχει τοῖς ὄφεσι τὸ στρέφειν τὴν κεφαλὴν (692a.) εἰς τοῦπισθεν ἡρεμοῦντος τοῦ σώματος τοῦ λοιποῦ.

Τούτου δ' αἴτιον ὅτι καθάπερ τὰ ἔντομα ἐλικτόν ἐστιν, ὥστε εὐκάμπτους καὶ χονδρώδεις τοὺς σπονδύλους ἔχειν. Ἐξ ἀνάγκης μὲν οὖν διὰ ταύτην τὴν αἰτίαν τοῦτο συμβέβηκεν αὐτοῖς, πρὸς δὲ τὸ βέλτιον φυλακῆς τε ἔνεκα τῶν ὀπισθεν βλαπτόντων· μακρὸν γὰρ ὄν καὶ ἄπουν ἀφυές ἐστὶ πρὸς τε τὴν στροφὴν καὶ πρὸς τὴν τῶν ὀπισθεν τήρησιν. Οὐδὲν γὰρ ὄφελος αἶρειν, στρέφειν δὲ μὴ δύνασθαι τὴν κεφαλὴν.

Ἔχουσι δὲ τὰ τοιαῦτα καὶ τῷ στήθει ἀνάλογον μόριον. Μαστοὺς δ' οὗτ' ἐνταῦθα οὗτ' ἐν τῷ ἄλλῳ σώματι ἔχουσιν· ἔχει δ' οὐδεὶς οὐδ' ὄρνις οὐδ' ἰχθύς. Τούτου δ' αἴτιον τὸ μηδὲ γάλα ἔχειν τούτων μηδέν· ὁ δὲ μαστὸς ὑποδοχὴ καὶ ὥσπερ ἀγγεῖόν ἐστὶ γάλακτος. Ἐχει δ' οὐδὲ ταῦτα οὗτ' ἄλλο τῶν μὴ ζωοτοκούντων ἐν αὐτοῖς οὐδὲν γάλα, διότι ὠοτοκοῦσιν, ἐν δὲ τῷ ὥῳ ἐγγίνεται ἡ γαλακτώδης ὑπάρχουσα ἐν τοῖς ζωοτόκοις τροφή. Σαφέστερον δὲ περὶ αὐτῶν λεχθήσεται ἐν τοῖς περὶ γενέσεως. Περὶ δὲ τῆς τῶν καμπύλων κάμψεως ἐπέσκεπται πρόσθεν ἐν τοῖς περὶ πορείας κοινῇ πᾶσιν.

Ἔχουσι δὲ καὶ κέρκον τὰ τοιαῦτα, τὰ μὲν μείζω, τὰ δὲ ἐλάττω, ὑπὲρ ἧς τὴν αἰτίαν καθόλου πρότερον εἰρήκαμεν.

Ἰσχνότατος δ' ὁ χαμαιλέων τῶν ὠοτόκων καὶ πεζῶν ἐστὶ πάντων· ὀλιγαίμοτατος γὰρ ἐστίν. Αἴτιον δὲ τὸ τῆς ψυχῆς ἡθὸς ἐστὶν αὐτοῦ· διὰ γὰρ τὸν φόβον γίνεται πολύμορφος.

Κατάψυξις γὰρ ὁ φόβος δι' ὀλιγαίμειαν καὶ δι' ἔνδειάν ἐστι θερμότητος. Καὶ περὶ μὲν τῶν ἐναίμων ζώων τῶν τ' ἀπόδων (692b.) καὶ τετραπόδων, ὅσα τε μόρια αὐτῶν ἐστὶν ἐκτὸς καὶ διὰ τίν' αἰτίαν, εἴρηται σχεδόν.

## Κεφάλαιο 12

Ἐν δὲ τοῖς ὄρνισιν ἡ πρὸς ἄλληλα διαφορὰ ἐν τῇ τῶν μορίων ἐστὶν ὑπεροχῇ καὶ ἐλλείψει καὶ κατὰ τὸ μᾶλλον καὶ ἥττον. Εἰσὶ γὰρ αὐτῶν οἱ μὲν μακροσκελεῖς οἱ δὲ βραχυσκελεῖς, καὶ τὴν γλῶτταν οἱ μὲν πλατεῖαν ἔχουσιν οἱ δὲ στενὴν· ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων μορίων. Ἰδίᾳ δ' ἐπ' ὀλίγον διαφέρουσιν ἀλλήλων τοῖς μορίοις· πρὸς δὲ τὰ ἄλλα ζῶα καὶ τῇ μορφῇ τῶν μορίων διαφέρουσιν.

Πτερωτοὶ μὲν οὖν ἅπαντές εἰσιν, καὶ τοῦτ' ἴδιον ἔχουσι τῶν ἄλλων. Τὰ γὰρ μόρια τῶν ζώων τὰ μὲν ἐστὶ φολιδωτὰ τὰ δὲ λεπιδωτὰ τυγχάνουσιν ὄντα, οἱ δ' ὄρνιθες πτερωτοί.

Καὶ τὸ πτερὸν σχιστὸν καὶ οὐχ ὅμοιον τῷ εἶδει τοῖς ὀλοπτέροις· τῶν μὲν γὰρ ἄσχιστον τῶν δὲ σχιστόν ἐστι, καὶ τὸ μὲν ἄκαυλον, τὸ δ' ἔχει καυλόν. Ἔχουσι δὲ καὶ ἐν τῇ κεφαλῇ περιττὴν καὶ ἴδιον τὴν τοῦ ῥύγχους φύσιν πρὸς τὰ ἄλλα. Τοῖς μὲν γὰρ ἐλέφασιν ὁ μυκτὴρ ἀντὶ χειρῶν, τῶν δ' ἐντόμων ἐνίοις ἀντὶ στόματος ἢ γλῶττα, τούτοις δ' ἀντὶ ὀδόντων καὶ χειρῶν τὸ ῥύγχος ὅστινον. Περὶ δὲ τῶν αἰσθητηρίων εἴρηται πρόσθεν.

Αὐχένα δὲ τεταμένον ἔχει τῇ φύσει καὶ διὰ τὴν αὐτὴν αἰτίαν ἦνπερ καὶ τὰ ἄλλα· καὶ τοῦτον τὰ μὲν βραχὺν τὰ δὲ μακρόν, καὶ σχεδὸν ἀκόλουθον τοῖς σκέλεσι τὰ πλεῖστα. Τὰ μὲν γὰρ μακροσκελῆ μακρόν, τὰ δὲ βραχυσκελῆ βραχὺν ἔχει τὸν αὐχένα χωρὶς τῶν στεγανόποδων. Τὰ μὲν γὰρ εἰ εἶχε (693a.) βραχὺν ἐπὶ σκέλεσι μακροῖς, οὐκ ἂν ὑπηρετεῖ αὐτοῖς ὁ αὐχὴν πρὸς τὴν ἀπὸ τῆς γῆς νομήν, τοῖς δ' εἰ μακρὸς ἦν ἐπὶ βραχέσιν. Ἔτι τοῖς κρεωφάγοις αὐτῶν ὑπεναντίον τὸ μῆκος πρὸς τὸν βίον· ὁ γὰρ μακρὸς αὐχὴν ἀσθενής· τοῖς δ' ὁ βίος ἐκ τοῦ κρατεῖν ἐστίν. Διόπερ οὐδὲν τῶν γαμψωνύχων μακρόν ἔχει τὸν αὐχένα. Τὰ δὲ στεγανόποδα καὶ διηρημένους μὲν ἔχοντα τοὺς πόδας σεσιμωμένους δέ, ὡς ἐν τῷ αὐτῷ γένει ὄντα τοῖς στεγανόποσι, τὸν μὲν αὐχένα μακρόν ἔχουσιν (χρήσιμος γὰρ τοιοῦτος ὢν πρὸς τὴν τροφήν τὴν ἐκ τοῦ ὑγροῦ), τὰ δὲ σκέλη πρὸς τὴν νεῦσιν βραχεά.

Διαφορὰν δ' ἔχει καὶ τὰ ῥύγχη κατὰ τοὺς βίους. Τὰ μὲν γὰρ εὐθὺ ἔχει τὰ δὲ γαμψόν, εὐθὺ μὲν ὅσα τροφῆς ἔνεκεν, γαμψὸν δὲ τὸ ὠμοφάγον. Χρήσιμον

γὰρ πρὸς τὸ κρατεῖν τὸ τοιοῦτον, τὴν δὲ τροφὴν ἀναγκαῖον ἀπὸ ζώων πορίζεσθαι.

Ὅσων δὲ ὁ βίος ἔλειος καὶ ποηφάγος, πλατὺ τὸ ῥύγχος ἔχουσιν· πρὸς τε γὰρ τὴν ὄρυξιν χρήσιμον τὸ τοιοῦτον καὶ πρὸς τὴν τῆς τροφῆς σπάσιν καὶ κουράν. Ἐνια δὲ μακρὸν ἔχει τὸ ῥύγχος τῶν τοιούτων ὥσπερ καὶ τὸν αὐχένα διὰ τὸ λαμβάνειν τὴν τροφὴν ἐκ τοῦ βάθους. Καὶ τὰ πολλὰ τῶν τοιούτων καὶ τῶν στεγανοπόδων ἢ ἀπλῶς ἢ κατὰ τὸ μόριον ταῦτὸ θηρεύοντα ζῇ τῶν ἐν τῷ ὑγρῷ ἔνια ζωδαρίων· καὶ γίνεται τοῖς τοιούτοις ὁ μὲν αὐχὴν καθάπερ ἀλιευταῖς ὁ κάλαμος, τὸ δὲ ῥύγχος οἶον ὀρμιὰ καὶ τὸ ἄγκιστρον.

Τὰ δὲ πρηνῆ τοῦ σώματος καὶ τὰ ὑπτία καὶ τὰ τοῦ καλουμένου θώρακος ἐπὶ τῶν τετραπόδων, ὀλοφυῆς ὁ τόπος ἐπὶ τῶν ὀρνίθων ἐστίν. Ἀπηρτημένας γὰρ ἀπὸ τῶν βραχιόνων καὶ τῶν σκελῶν τῶν προσθίων ἔχουσι τὰς πτέρυγας, ἴδιόν (693b.) τι μόριον· διόπερ ἀντὶ ὠμοπλάτης τὰ τελευταῖα ἐπὶ τοῦ νώτου τῶν πτερύγων ἔχουσιν. Σκέλη δὲ καθάπερ ἄνθρωπος δύο, κεκαμμένα καθάπερ τὰ τετράποδα εἴσω, καὶ οὐχ ὥσπερ ἄνθρωπος ἔξω· τὰς δὲ πτέρυγας, ὡς τὰ πρόσθια σκέλη τῶν τετραπόδων, ἐπὶ τὸ περιφερές. Δίπουν δ' ἐξ ἀνάγκης ἐστίν· τῶν γὰρ ἐναίμων ἢ τοῦ ὄρνιθος οὐσία, ἅμα δὲ καὶ πτερυγώτης. Τὰ δ' ἔναιμα οὐ κινεῖται πλείοσιν ἢ τέτταρσι σημείοις. Τὰ μὲν οὖν ἀπηρτημένα μόρια, τέτταρα, ὥσπερ τοῖς ἄλλοις τοῖς πεζοῖς καὶ τοῖς πορευτικοῖς, ἔστι καὶ τοῖς ὄρνισιν, ἀλλὰ τοῖς μὲν βραχίονες καὶ σκέλη τέτταρα ὑπάρχει, τοῖς δ' ὄρνισιν ἀντὶ τῶν προσθίων σκελῶν ἢ βραχιόνων πτερύγιον κοινόν ἐστιν (κατὰ ταύτας γὰρ τονικοὶ εἰσι, τῷ δ' ὄρνιθι ἐν τῇ οὐσίᾳ τὸ πτητικόν ἐστιν), ὥστε λείπεται αὐτοῖς ἐξ ἀνάγκης δίποσιν εἶναι. Οὕτω γὰρ τέτταρσι σημείοις κινήσονται μετὰ τῶν πτερύγων.

Στήθος δ' ἔχουσιν ἅπαντες ὅξυ καὶ σαρκῶδες, ὅξυ μὲν πρὸς τὴν πτῆσιν (τὰ γὰρ πλατέα, πολλὴν ἀέρα ὠθοῦντα δυσκίνητά ἐστι), σαρκῶδες δέ, διότι τὸ ὅξυ ἀσθενὲς μὴ πολλὴν ἔχον σκέπην. Ὑπὸ δὲ τὸ στήθος κοιλία μέχρι πρὸς τὴν ἔξοδον τοῦ περιττώματος καὶ τὴν τῶν σκελῶν καμπήν, καθάπερ τοῖς τετράποσι καὶ τοῖς ἀνθρώποις. Μεταξὺ μὲν οὖν τῶν πτερύγων καὶ τῶν σκελῶν ταῦτα τὰ μόριά ἐστιν.

Ὀμφαλὸν δ' ἐν μὲν τῇ γενέσει ἅπαντα ἔχει ὅσαπερ ζωτοκεῖται ἢ ὠτοκεῖται, τῶν δ' ὀρνίθων αὐξηθέντων ἄδηλος. Δῆλον δ' ἐν τοῖς περὶ γένεσιν. Εἰς γὰρ τὸ ἔντερον ἢ σύμφυσις γίνεται, καὶ οὐχ ὥσπερ τοῖς ζωτόκοις τῶν φλεβῶν τι μόριόν ἐστιν.

Ἐπὶ τῶν ὀρνίθων οἱ μὲν πτητικοὶ καὶ τὰς πτέρυγας ἔχουσι (694a.) μεγάλας καὶ ἰσχυράς, οἷον οἱ γαμψώνυχες καὶ οἱ ὠμοφάγοι· ἀνάγκη γὰρ πτητικοῖς εἶναι διὰ τὸν βίον, ὥσθ' ἔνεκα τούτου καὶ πλῆθος ἔχουσι πτερῶν καὶ τὰς πτέρυγας μεγάλας. Ἔστι δ' οὐ μόνον τὰ γαμψώνυχα ἀλλὰ καὶ ἄλλα γένη ὀρνίθων πτητικά, ὅσοις ἡ σωτηρία ἐν τῇ ταχυτῇ τῆς πτήσεως ἢ ἐκτοπιστικά. Ἔνια δ' οὐ πτητικὰ τῶν ὀρνίθων ἐστὶν ἀλλὰ βαρέα, οἷς ὁ βίος ἐπίγειος καὶ ἔστι καρποφάγα ἢ πλωτὰ καὶ περὶ ὕδωρ βιοτεύουσιν. Ἔστι δὲ τὰ μὲν τῶν γαμψώνυχων σώματα μικρὰ ἄνευ τῶν πτερύγων διὰ τὸ εἰς ταύτας ἀναλίσκεσθαι τὴν τροφήν εἰς τὰ ὄπλα καὶ τὴν βοήθειαν· τοῖς δὲ μὴ πτητικοῖς τὸναντίον τὰ σώματα ὀγκώδη, διὸ βαρέα ἐστίν.

Ἐχουσι δ' ἔνιοι τῶν βαρέων βοήθειαν ἀντὶ τῶν πτερύγων τὰ καλούμενα πλῆκτρα ἐπὶ τοῖς σκέλεσιν. Ἄμα δὲ οἱ αὐτοὶ οὐ γίνονται πλῆκτρα ἔχοντες καὶ γαμψώνυχες· αἴτιον δ' ὅτι οὐδὲν ἡ φύσις ποιεῖ περίεργον. Ἔστι δὲ τοῖς μὲν γαμψώνυχους καὶ πτητικοῖς ἄχρηστα τὰ πλῆκτρα· χρήσιμα γὰρ ἐστὶν ἐν ταῖς πεζαῖς μάχαις· διὸ ὑπάρχει ἐνίοις τῶν βαρέων.

Τούτοις δ' οὐ μόνον ἄχρηστοι ἀλλὰ καὶ βλαβεροὶ οἱ γαμψοὶ ὄνυχες τῷ ἐμπήγνυσθαι ὑπεναντίοι πρὸς τὴν πορείαν ὄντες. Διὸ καὶ γαμψώνυχα πάντα χαλεπῶς πορεύεται καὶ ἐπὶ πέτραις οὐ καθιζάνουσιν· ὑπεναντία γὰρ αὐτοῖς πρὸς ἀμφοτέρα ἡ τῶν ὀνύχων φύσις. Ἐξ ἀνάγκης δὲ τοῦτο περὶ τὴν γένεσιν συμβέβηκεν· τὸ γὰρ γεῶδες ἐν τῷ σώματι καὶ θερμὸν χρήσιμα μόρια γίνεται πρὸς τὴν ἀλκὴν. Ἄνω μὲν ῥυέν ῥύγχους ἐποίησε σκληρότητα ἢ μέγεθος, ἂν δὲ κάτω ῥυῇ, πλῆκτρα ἰσχυρὰ ἐν τοῖς σκέλεσιν ἢ ἐπὶ τῶν ποδῶν ὀνύχων μέγεθος καὶ ἰσχύν.

Ἄμα δ' ἄλλοθι καὶ ἄλλοθι ἕκαστα τούτων οὐ ποιεῖ. Διασπωμένη γὰρ ἀσθενὴς γίνεται ἡ φύσις τούτου τοῦ (694b.) περιπτώματος· τοῖς δὲ σκελῶν κατασκευάζει μῆκος, ἐνίοις δ' ἀντὶ τούτων συμπληροῖ τὸ μεταξὺ τῶν ποδῶν. Καὶ διὰ τοῦτο ὡς ἀναγκαῖον οἱ πλωτοὶ τῶν ὀρνίθων οἱ μὲν ἀπλῶς εἰσι στεγανόποδες, οἱ δὲ διηρημένην μὲν ἔχουσι τὴν καθ' ἕκαστα τῶν δακτύλων φύσιν, πρὸς ἑκάστω δ' αὐτῶν προσπέφυκεν οἷον πλάτη καθ' ὅλον συνεχῆς. Ἐξ ἀνάγκης μὲν οὖν ταῦτα συμβαίνει διὰ ταύτας τὰς αἰτίας· ὡς δὲ διὰ τὸ βέλτιον ἔχουσι τοιούτους τοὺς πόδας τοῦ βίου χάριν, ἵνα ζῶντες ἐν ὑγρῷ καὶ τῶν πτερῶν ἀχρείων ὄντων τοὺς πόδας χρησίμους ἔχωσι πρὸς τὴν νεῦσιν. Γίνονται γὰρ ὥσπερ κῶπαι εἰσπλέουσιν τὰ πτερύγια τοῖς ἰχθύσιν· διὸ καὶ ἐὰν τῶν μὲν τὰ πτερύγια σφαλῇ, τῶν δὲ τὰ μεταξὺ τῶν ποδῶν, οὐκέτι νέουσιν. Ἔνιοι δὲ μακροσκελεῖς τῶν ὀρνίθων εἰσίν. Αἴτιον δ' ὅτι ὁ βίος τῶν τοιούτων ἔλειος· τὰ γὰρ ὄργανα πρὸς τὸ ἔργον ἡ φύσις ποιεῖ, ἀλλ' οὐ τὸ ἔργον πρὸς

τὰ ὄργανα. Διὰ μὲν οὖν τὸ μὴ πλωτὰ εἶναι οὐ στεγανόποδά ἐστι, διὰ δὲ τὸ ἐν ὑπέικοντι εἶναι τὸν βίον μακροσκελῆ καὶ μακροδάκτυλα, καὶ τὰς καμπὰς ἔχουσι πλείους ἐν τοῖς δακτύλοις οἱ πολλοὶ αὐτῶν. Ἐπεὶ δὲ οὐ πτητικὰ μὲν, ἐκ τῆς δ' αὐτῆς ὕλης ἐστὶ πάντα, ἢ εἰς τὸ οὐροπύγιον αὐτοῖς τροφὴ εἰς τὰ σκέλη καταναλισκομένη ταῦτα ἠΰξησεν. Διὸ καὶ ἐν τῇ πτήσει ἀντ' οὐροπυγίου χρῶνται αὐτοῖς· πέτονται γὰρ ἀποτείνοντες εἰς τὸ ὀπισθεν· οὕτω γὰρ αὐτοῖς χρήσιμα τὰ σκέλη, ἄλλως δὲ ἐμποδίζοιεν ἄν.

Ἔνια δὲ βραχέα σκέλη πρὸς τῇ γαστρὶ ἔχοντα πέτανται. Τοῖς μὲν γὰρ αὐτῶν οὐκ ἐμποδίζουσιν οἱ πόδες οὕτω, τοῖς δὲ γαμψώνυξι καὶ πρὸ ἔργου εἰσὶ πρὸς τὴν ἀρπαγὴν. Τῶν δ' ἐχόντων ὀρνίθων τὸν αὐχένα μακρὸν οἱ μὲν παχύτερον ἔχοντες πέτανται ἐκτεταμένῳ τῷ αὐχένι, οἱ δὲ λεπτὸν καὶ μακρὸν συγκεκαμμένῳ· ἐπιπεταμένοις γὰρ διὰ τὴν σκέπην ἦττον εὐθρυπτόν ἐστιν.

(695a.) Ἰσχίον δ' ἔχουσι μὲν οἱ ὄρνιθες πάντες ἢ οὐκ ἂν δόξαιεν ἔχειν, ἀλλὰ δύο μηροὺς ἴσχειν διὰ τὸ τοῦ ἰσχίου μήκος· ὑποτέταται γὰρ μέχρι μέσης τῆς γαστροῦ. Αἵτιον δ' ὅτι δίπουν ἐστὶ τοῦτο τὸ ζῶον, οὐκ ὀρθόν, ὥς εἴ γε εἶχε καθάπερ ἐν τοῖς ἀνθρώποις ἢ τοῖς τετράποσιν, ἀπὸ τῆς ἔδρας βραχὺ τὸ ἰσχίον καὶ τὸ σκέλος εὐθύς ἐχόμενον, ἡδυνάτει ἂν ὀρθὸν ἐστάναι. Ὁ μὲν γὰρ ἄνθρωπος ὀρθόν, τοῖς δὲ τετράποσι πρὸς τὸ βάρος σκέλη ἐμπρόσθια ὑπερήρυσται.

Οἱ δ' ὄρνιθες οὐκ ὀρθοὶ μὲν διὰ τὸ νανώδεις εἶναι τὴν φύσιν, σκέλη δ' ἐμπρόσθια οὐκ ἔχουσιν (διὰ τοῦτο πτέρυγας ἔχουσιν ἀντ' αὐτῶν)· ἀντὶ δὲ τούτου μακρὸν ἢ φύσις τὸ ἰσχίον ποιήσασα εἰς μέσον προσήρυσεν· ἐντεῦθεν δὲ ὑπέθηκε τὰ σκέλη, ὅπως ἰσορρόπου ὄντος τοῦ βάρους ἔνθεν καὶ ἔνθεν πορεύεσθαι δύνηται καὶ μένη. Δι' ἣν μὲν οὖν αἰτίαν δίπουν ἐστὶν οὐκ ὀρθὸν ὄν εἴρηται. Τοῦ δ' ἄσαρκα τὰ σκέλη εἶναι ἢ αὐτὴ αἰτία καὶ ἐπὶ τῶν τετραπόδων, ὑπὲρ ἧς καὶ πρόσθεν εἴρηται.

Τετραδάκτυλος δ' ἐστὶ πᾶς ὄρνις σχιζόπους ὁμοίως καὶ στεγανόπους. Περὶ γὰρ τοῦ στρουθοῦ τοῦ Λιβυκοῦ ὕστερον ἐροῦμεν ὅτι διχηλός, ἅμα τοῖς λοιποῖς ἐναντιώμασιν οἷς ἔχει πρὸς τὸ τῶν ὀρνίθων γένος. Τούτων δὲ τοὺς μὲν τρεῖς ἔχει πρόσθεν, ἓνα δ' ὀπισθεν πρὸς ἀσφάλειαν ἀντὶ πτέρνης.

Καὶ τῶν μακροσκελῶν λείπει τοῦτο κατὰ μέγεθος, οἷον συμβέβηκεν ἐπὶ τῆς κρεκός, πλείους δ' οὐκ ἔχουσι δακτύλους.

Ἐπὶ μὲν οὖν τῶν ἄλλων οὕτως ἢ τῶν δακτύλων ἔχει θέσις, ἢ δ' ἱυγξ δύο



μόνον ἔχει τοὺς ὀπισθεν καὶ δύο τοὺς ἔμπροσθεν. Αἴτιον δ' ὅτι ἥττον ἐστὶν αὐτῆς τὸ σῶμα προπετέες ἐπὶ τὸ πρόσθεν ἢ τὸ τῶν ἄλλων. Ὅρχεις δ' ἔχουσι μὲν πάντες οἱ ὀρνιθες, ἐντὸς δ' ἔχουσιν· ἡ δ' αἰτία ἐν τοῖς περὶ τὰς γενέσεις λεχθήσεται τῶν ζώων. Τὰ μὲν οὖν τῶν ὀρνίθων μόρια (695b.) τὸν τρόπον ἔχει τοῦτον.

### Κεφάλαιο 13

Τὸ δὲ τῶν ἰχθύων γένος ἔτι μᾶλλον κεκολόβωται τῶν ἐκτὸς μορίων. Οὔτε γὰρ σκέλη οὔτε χεῖρας οὔτε πτέρυγας ἔχουσιν (εἴρηται δὲ περὶ τούτων ἡ αἰτία πρότερον), ἀλλ' ὅλον ἀπὸ τῆς κεφαλῆς τὸ κύτος συνεχές ἐστὶ μέχρι τῆς οὐρᾶς. Ταύτην δ' οὐχ ὁμοίαν ἔχουσι πάντες, ἀλλὰ τὰ μὲν παραπλησίαν, τῶν δὲ πλατέων ἔνια ἀκανθώδη καὶ μακράν. Ἡ ἐκεῖθεν γὰρ αὔξησις γίνεται εἰς τὸ πλάτος, οἷόν ἐστι νάρκαις καὶ τρυγόσι καὶ εἴ τι τοιοῦτον ἄλλο σέλαχός ἐστιν. Τῶν μὲν οὖν τοιούτων ἀκανθῶδες καὶ μακρὸν τὸ οὐραῖον ἐστὶν, ἐνίων δὲ σαρκῶδες μὲν βραχὺ δὲ διὰ τὴν αὐτὴν αἰτίαν δι' ἣν περ ταῖς νάρκαις διαφέρει γὰρ οὐδέν, ἢ βραχὺ μὲν σαρκωδέστερον δὲ, ἢ μακρὸν μὲν ἀσαρκότερον δ' εἶναι. Ἐπὶ δὲ τῶν βατράχων τὸ ἐναντίον συμβέβηκεν· διὰ γὰρ τὸ μὴ σαρκῶδες εἶναι τὸ πλάτος αὐτῶν τὸ ἐμπρόσθιον, ὅσον ἀφήρηται σαρκῶδες, πρὸς τὸ ὀπισθεν αὐτὸ ἔθηκεν ἡ φύσις καὶ τὴν οὐράν.

Οὐκ ἔχουσι δὲ ἀπηρτημένα κῶλα οἱ ἰχθύες, διὰ τὸ νευστικὴν εἶναι τὴν φύσιν αὐτῶν κατὰ τὸν τῆς οὐσίας λόγον, ἐπεὶ οὔτε περίεργον οὐδὲν οὔτε μάτην ἡ φύσις ποιεῖ. Ἐπεὶ δ' ἔναιμά ἐστὶ κατὰ τὴν οὐσίαν, διὰ μὲν τὸ νευστικὰ εἶναι πτερύγια ἔχει, διὰ δὲ τὸ μὴ πεζεύειν οὐκ ἔχει πόδας· ἡ γὰρ τῶν ποδῶν πρόσθεσις πρὸς τὴν ἐπὶ τῷ πεδίῳ κίνησιν χρήσιμός ἐστιν. Ἄμα δὲ πτερύγια τέτταρα καὶ πόδας οὐχ οἷόν τε ἔχειν, οὐδ' ἄλλο κῶλον τοιοῦτον οὐδέν· ἔναιμα γάρ. Οἱ δὲ κορδύλοι βράγχια ἔχοντες πόδας ἔχουσιν· πτερύγια γὰρ οὐκ ἔχουσιν, ἀλλὰ τὴν οὐράν μανώδη καὶ πλατεῖαν. Ἐχουσι δὲ τῶν ἰχθύων ὅσοι μὴ πλατεῖς, καθάπερ βάτος καὶ τρυγών, τέτταρα πτερύγια, δύο μὲν ἐν τοῖς πρηνέσι, δύο δ' ἐν τοῖς (696a.) ὑπτίοις. Πλειὸν δὲ τούτων οὐδεὶς· ἄναιμοι γὰρ ἂν ἦσαν. Τούτων δὲ τὰ μὲν ἐν τῷ πρηνεῖ σχεδὸν πάντες ἔχουσι, τὰ δ' ἐν τοῖς ὑπτίοις ἔνιοι τῶν μακρῶν καὶ πάχος ἐχόντων οὐκ ἔχουσιν, οἷον ἔγγελυς καὶ γόγγρος καὶ κεστρέων τι γένος τὸ ἐν τῇ λίμνῃ τῇ ἐν Σιφαῖς. Ὅσα δ' ἐστὶ μακροφυέστερα καὶ ὀφιώδη μᾶλλον, οἷον σμύραινα, οὐδὲν ἔχουσι πτερύγιον ἀπλῶς, ἀλλὰ ταῖς καμπαῖς κινοῦνται, χρώμεναι τῷ ὑγρῷ ὥσπερ οἱ ὄφεις τῇ γῇ· τοῦτον γὰρ τὸν τρόπον οἱ ὄφεις νέουσιν ὥν περ ἐπὶ τῆς γῆς ἔρπουσιν. Αἰτία δὲ τοῦ μὴ ἔχειν τοὺς ὀφιώδεις τῶν ἰχθύων πτερύγια ἥ περ καὶ τῶν ὄφεων τοῦ ἀποδας εἶναι. Τὸ δ' αἴτιον ἐν τοῖς περὶ πορείας καὶ κινήσεως τῶν

ζώων εἴρηται. Ἡ γὰρ κακῶς ἂν ἐκινούντο, τέτταρσι σημείοις κινούμενα. Εἴτε γὰρ σύνεγγυς εἶχον τὰ πτερύγια, μόγις ἂν ἐκινούντο, εἴτε πόρρω, διὰ τὸ πολὺ μεταξύ. Εἰ δὲ πλείω τὰ κινητικὰ σημεῖα εἶχον, ἄναιμα ἂν ἦν. Ἡ δ' αὐτὴ αἰτία καὶ ἐπὶ τῶν δύο μόνον ἐχόντων πτερύγια ἰχθύων· ὀφιώδη γὰρ ἐστὶ καὶ εὐμηκέστερα, καὶ χρῆται τῇ κάμψει ἀντὶ τῶν δύο πτερυγίων. Διὸ καὶ ἐν τῷ ξηρῷ ἔρπουσι καὶ ζῶσι πολὺν χρόνον, καὶ τὰ μὲν οὐκ εὐθύ, τὰ δ' οἰκεῖα τῆς πεζῆς ὄντα φύσεως ἦττον ἀσπαρίζει. Αὐτῶν δὲ τῶν πτερυγίων τὰ ἐν τοῖς πρηνέσιν ἔχει τὰ δύο ἔχοντα πτερύγια μόνον, ὅσα μὴ κωλύεται διὰ τὸ πλάτος. Τὰ δ' ἔχοντα, πρὸς τῇ κεφαλῇ ἔχει, διὰ τὸ μὴ ἔχειν μῆκος ἐν τῷ τόπῳ, ὃ ἀντὶ τούτων κινήσεται· ἐπὶ γὰρ τὴν οὐρὰν πρόμηκες τὸ τῶν τοιούτων ἐστὶν ἰχθύων σῶμα. Οἱ δὲ βάτοι καὶ τὰ τοιαῦτα ἀντὶ τῶν πτερυγίων τῷ ἐσχάτῳ πλάτει νέουσιν. Ἡ δὲ νάρκη καὶ ὁ βάτραχος τὰ ἐν τῷ πρηνεῖ κάτω διὰ τὸ πλάτος τῶν ἄνω, τὰ δ' ἐν τοῖς ὑπτίοις πρὸς τῇ κεφαλῇ. Οὐ γὰρ κωλύει κινεῖσθαι τὸ πλάτος, ἀλλ' ἀντὶ τοῦ ἄνω ἐλάττω ταῦτα τῶν ἐν τῷ πρηνεῖ ἔχει. Ἡ δὲ νάρκη πρὸς τῇ οὐρᾷ ἔχει τὰ δύο πτερύγια· ἀντὶ δὲ τῶν δύο τῷ πλάτει χρῆται ὥς δυσὶ πτερυγίοις ἐκατέρῳ τῷ ἡμικυκλίῳ.

Περὶ δὲ τῶν ἐν τῇ κεφαλῇ μορίων καὶ αἰσθητηρίων εἴρηται πρότερον. Ἴδιον δ' ἔχει τὸ τῶν ἰχθύων γένος πρὸς τὰλλα (696b.) τὰ ἔναιμα ζῶα τὴν τῶν βραγχίων φύσιν· δι' ἣν δ' αἰτίαν, εἴρηται ἐν τοῖς περὶ ἀναπνοῆς. Καὶ ἔχει δὲ τὰ ἔχοντα βράγχια τὰ μὲν ἐπικαλύμματα τοῖς βραγχίοις, τὰ δὲ σελάχη πάντα (χονδράκανθα γάρ) ἀκάλυπτα. Αἴτιον δ' ὅτι οἱ μὲν ἀκανθῶδεις εἰσὶ, τὸ δ' ἐπικάλυμμα ἀκανθῶδες, τὰ δὲ σελάχη πάντα χονδράκανθα. Ἔτι δ' αἱ κινήσεις τῶν μὲν νωθραὶ διὰ τὸ μὴ ἀκανθώδη εἶναι μηδὲ νευρώδη, τῶν δὲ ἀκανθωδῶν ταχεῖα· τοῦ δ' ἐπικαλύμματος ταχεῖαν δεῖ γίνεσθαι τὴν κίνησιν· ὥσπερ γὰρ πρὸς ἐκπνοὴν ἢ τῶν βραγχίων ἐστὶ φύσις. Διὰ τοῦτο τοῖς σελαχῶδεσι καὶ αὐτῶν τῶν πόρων ἡ συναγωγὴ γίνεται τῶν βραγχίων, καὶ οὐ δεῖ ἐπικαλύμματος, ὅπως γίγνηται ταχεῖα. Οἱ μὲν οὖν αὐτῶν ἔχουσι πολλὰ βράγχια οἱ δ' ὀλίγα, καὶ οἱ μὲν διπλᾶ οἱ δ' ἀπλᾶ· τὸ δ' ἔσχατον ἀπλοῦν οἱ πλεῖστοι. Τὴν δ' ἀκρίβειαν ἐκ τῶν ἀνατομῶν περὶ τούτων καὶ ἐν ταῖς ἱστορίαις ταῖς περὶ τὰ ζῶα δεῖ θεωρεῖν. Αἴτιον δὲ τοῦ πλήθους καὶ τῆς ὀλιγότητος τὸ τοῦ ἐν τῇ καρδίᾳ θερμοῦ πλήθους καὶ ὀλιγότης· θάπτω γὰρ καὶ ἰσχυροτέραν τὴν κίνησιν δεῖ εἶναι τοῖς πλείω ἔχουσι θερμότητα. Τὰ δὲ πλείω καὶ διπλᾶ βράγχια τοιαύτην ἔχει τὴν φύσιν μᾶλλον τῶν ἀπλῶν καὶ ἐλαττόνων. Διὸ καὶ ἔνια αὐτῶν ἔξω ζῆν δύναται πολὺν χρόνον, τῶν ἐχόντων ἐλάττω καὶ ἦττον ἐγκρατῇ τὰ βράγχια, οἷον ἔγχελυς καὶ ὅσα ὀφιώδη· οὐ γὰρ πολλῆς δέονται καταψύξεως.

Ἔχει δὲ καὶ περὶ τὸ στόμα διαφοράς. Τὰ μὲν γὰρ κατ' ἀντικρὺ ἔχει τὸ στόμα

καὶ εἰς τὸ πρόσθεν, τὰ δ' ἐν τοῖς ὑπτίοις, οἷον οἷ τε δελφῖνες καὶ τὰ σελαχώδη· καὶ ὑπτία στρεφόμενα λαμβάνει τὴν τροφήν. Φαίνεται δ' ἡ φύσις οὐ μόνον σωτηρίας ἕνεκεν ποιῆσαι τοῦτο τῶν ἄλλων ζώων (ἐν γὰρ τῇ στρέψει σώζεται τὰλλα βραδυνόντων· πάντα γὰρ τὰ τοιαῦτα ζωοφάγα ἐστίν), ἀλλὰ καὶ πρὸς τὸ μὴ ἀκολουθεῖν τῇ λαιμαργίᾳ τῇ περὶ τὴν τροφήν· ῥᾶον γὰρ λαμβάνοντα διεφθείρετ' ἂν διὰ τὴν πλήρωσιν ταχέως. Πρὸς δὲ τούτοις περιφερῇ καὶ λεπτὴν ἔχοντα τὴν τοῦ ῥύγχους φύσιν οὐχ οἷον τ' εὐδιαίρετον ἔχειν. Ἔτι δὲ καὶ τῶν ἄνω τὸ στόμα ἐχόντων (697a.) τὰ μὲν ἀνερρωγὸς ἔχει τὸ στόμα τὰ δὲ μύουρον, ὅσα μὲν σαρκοφάγα, ἀνερρωγός, ὥσπερ τὰ καρχαρόδοντα, διὰ τὸ ἐν τῷ στόματι εἶναι τοῖς τοιούτοις τὴν ἰσχύν, ὅσα δὲ μὴ σαρκοφάγα, μύουρον.

Τὸ δὲ δέρμα οἱ μὲν λεπιδωτὸν ἔχουσιν αὐτῶν (ἡ δὲ λεπίς διὰ λαμπρότητα καὶ λεπτότητα τοῦ σώματος ἀφίσταται), οἱ δὲ τραχύ, οἷον ῥίνη καὶ βάτος καὶ τὰ τοιαῦτα· ἐλάχιστα δὲ τὰ λεῖα. Τὰ δὲ σελάχη ἀλεπίδωτα μὲν τραχέα δ' ἐστὶ διὰ τὸ χονδράκανθα εἶναι· τὸ γὰρ γεῶδες ἐκείθεν ἡ φύσις εἰς τὸ δέρμα κατανήλωκεν.

Ὅρχεις δ' οὐδεὶς ἔχει ἰχθὺς οὔτ' ἐκτὸς οὔτ' ἐντός, οὐδ' ἄλλο τι τῶν ἀπόδων οὐδέν, διὸ οὐδ' οἱ ὄφεις. Πόρον δὲ τοῦ περιπτώματος καὶ τῶν περὶ τὴν γένεσιν τὸν αὐτόν, καθάπερ καὶ τὰλλα ὠοτόκα πάντα καὶ τετράποδα, διὰ τὸ μὴ ἔχειν κύστιν μηδὲ γίνεσθαι περίττωμ' αὐτοῖς ὑγρόν. Τὸ μὲν οὖν τῶν ἰχθύων γένος πρὸς τὰλλα ζῶα ταύτας ἔχει τὰς διαφοράς.

Οἱ δὲ δελφῖνες καὶ αἱ φάλαιναι καὶ πάντα τὰ τοιαῦτα τῶν κητῶν βράγχια μὲν οὐκ ἔχουσιν, αὐλὸν δὲ διὰ τὸ πλεύμονα ἔχειν· δεχόμενα γὰρ κατὰ τὸ στόμα τὴν θάλατταν ἀφιᾶσι κατὰ τὸν αὐλόν. Ἀνάγκη μὲν γὰρ δέξασθαι τὸ ὑγρὸν διὰ τὸ λαμβάνειν τὴν τροφήν ἐν τῷ ὑγρῷ· δεξάμενα δ' ἀφιέναι ἀναγκαῖον. Τὰ μὲν οὖν βράγχια ἐστὶ χρήσιμα τοῖς μὴ ἀναπνεύουσιν· δι' ἣν δ' αἰτίαν, εἴρηται ἐν τοῖς περὶ ἀναπνοῆς· ἀδύνατον γὰρ ἅμα τὸ αὐτὸ ἀναπνεῖν καὶ βράγχια ἔχειν· ἀλλὰ πρὸς τὴν ἄφεσιν τοῦ ὕδατος ἔχουσι τὸν αὐλόν. Κεῖται δ' αὐτοῖς οὗτος πρὸ τοῦ ἐγκεφάλου· διελάμβανε γὰρ ἂν ἀπὸ τῆς ῥάχεως αὐτόν. Αἵτιον δὲ τοῦ πλεύμονα ταῦτα ἔχειν καὶ ἀναπνεῖν, ὅτι τὰ μεγάλα τῶν ζώων πλείονος δεῖται θερμότητος, ἵνα κινῆται. Διὸ ὁ πλεύμων ἔγκειται αὐτοῖς θερμότητος ὦν πλήρης αἱματικῆς. Ἔστι δὲ ταῦτα τρόπον τινὰ πεζὰ καὶ ἔνυδρα· τὸν μὲν γὰρ ἀέρα δέχεται ὡς πεζά, ἄποδα δ' ἐστὶ καὶ λαμβάνει ἐκ τοῦ ὑγροῦ τὴν τροφήν ὥσπερ τὰ ἔνυδρα.

(697b.) Καὶ αἱ φῶκαι δὲ καὶ αἱ νυκτερίδες διὰ τὸ ἐπαμφοτερίζειν αἱ μὲν τοῖς

ένυδροις καὶ πεζοῖς, αἱ δὲ τοῖς πτηνοῖς καὶ πεζοῖς, διὰ τοῦτο ἀμφοτέρων τε μετέχουσι, καὶ οὐδετέρων. Αἱ τε γὰρ φῶκαι ὥς μὲν ἔνυδροι πόδας ἔχουσιν, ὥς δὲ πεζαὶ πτέρυγας (τοὺς γὰρ ὀπισθεν πόδας ἰχθυώδεις ἔχουσι πάμπαν, ἔτι δὲ τοὺς ὀδόντας πάντας καρχαρόδοντας καὶ ὀξεῖς)· καὶ αἱ νυκτερίδες ὥς μὲν πτηνὰ ἔχουσιν πόδας, ὥς δὲ τετράποδα οὐκ ἔχουσιν, καὶ οὔτε κέρκον ἔχουσιν οὔτ' οὐροπύγιον, διὰ μὲν τὸ πτηνὰ εἶναι κέρκον· διὰ δὲ τὸ πεζὰ οὐροπύγιον. Συμβέβηκε δ' αὐταῖς τοῦτ' ἐξ ἀνάγκης· εἰσὶ γὰρ δερμόπτεροι, οὐδὲν δ' ἔχει οὐροπύγιον μὴ σχιζόπτερον· ἐκ τοιούτου γὰρ πτεροῦ γίνεται τὸ οὐροπύγιον. Ἡ δὲ κέρκος καὶ ἐμπόδιος ἂν ἦν ὑπάρχουσα ἐν τοῖς πτεροῖς.

## Κεφάλαιο 14

Τὸν αὐτὸν δὲ τρόπον καὶ ὁ στρουθὸς ὁ Λιβυκός· τὰ μὲν γὰρ ὄρνιθος ἔχει, τὰ δὲ ζώου τετράποδος. Ὡς μὲν γὰρ οὐκ ὦν τετράπους πτερὰ ἔχει, ὥς δ' οὐκ ὦν ὄρνις οὔτε πέταται μετεωριζόμενος, καὶ τὰ πτερὰ οὐ χρήσιμα πρὸς πτήσιν ἀλλὰ τριχώδη. Ἔτι δὲ ὥς μὲν τετράπους ὦν βλεφαρίδας ἔχει τὰς ἄνωθεν καὶ ψιλὸς ἐστὶ τὰ περὶ τὴν κεφαλὴν καὶ τὰ ἄνω τοῦ αὐχένος, ὥστε τριχωδεστέρας ἔχειν τὰς βλεφαρίδας, ὥς δ' ὄρνις ὦν τὰ κάτωθεν ἐπτέρωται, καὶ δίπους μὲν ἐστὶν ὥς ὄρνις, διχαλὸς δ' ὥς τετράπους· οὐ γὰρ δακτύλους ἔχει ἀλλὰ χηλὰς. Τούτου δ' αἴτιον ὅτι τὸ μέγεθος οὐκ ὄρνιθος ἔχει ἀλλὰ τετράποδος. Ἐλάχιστον γὰρ ἀναγκαῖον εἶναι τὸ μέγεθος ὥς καθόλου εἰπεῖν τὸ τῶν ὀρνίθων· οὐ γὰρ ῥάδιον πολὺν ὄγκον κινεῖσθαι σώματος μετέωρον.

Περὶ μὲν οὖν μορίων, διὰ τίν' αἰτίαν ἕκαστόν ἐστιν ἐν τοῖς ζώοις, εἴρηται περὶ πάντων τῶν ζώων καθ' ἕκαστον. Τούτων δὲ διωρισμένων ἐφεξῆς ἐστὶ τὰ περὶ τὰς γενέσεις αὐτῶν διελθεῖν.

## Περὶ ζώων κινήσεως (698a) Movement of Animals



## CONTENTS

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

## **Κεφάλαιο 1**

(698a.) Περὶ δὲ κινήσεως τῆς τῶν ζώων, ὅσα μὲν αὐτῶν περὶ ἕκαστον ὑπάρχει γένος, καὶ τίνες διαφοραί, καὶ τίνες αἰτίαι τῶν καθ' ἕκαστον συμβεβηκότων αὐτοῖς, ἐπέσκεπται περὶ ἀπάντων ἐν ἑτέροις· ὅλως δὲ περὶ τῆς κοινῆς αἰτίας τοῦ κινεῖσθαι κίνησιν ὅποιανοῦν (τὰ μὲν γὰρ πτήσει ινεῖται τὰ δὲ νεύσει τὰ δὲ πορεία τῶν ζώων, τὰ δὲ κατ' ἄλλους τρόπους τοιούτους) ἐπισκεπτέον νῦν. ὅτι μὲν οὖν ἀρχὴ τῶν ἄλλων κινήσεων τὸ αὐτὸ ἑαυτὸ κινοῦν, τούτου δὲ τὸ ἀκίνητον, καὶ ὅτι τὸ πρῶτον κινοῦν ἀναγκαῖον ἀκίνητον εἶναι, διώριστα πρότερον, ὅτεπερ καὶ περὶ κινήσεως αἰδίου, πότερον ἔστιν ἢ οὐκ ἔστι, καὶ εἰ ἔστι, τίς ἐστιν. δεῖ δὲ τοῦτο μὴ μόνον τῷ λόγῳ λαβεῖν, ἀλλὰ καὶ ἐπὶ τῶν καθ' ἕκαστα καὶ τῶν αἰσθητῶν, δι' ἅπερ καὶ τοὺς καθόλου ζητοῦμεν λόγους, καὶ ἐφ' ὧν ἐφαρμόττειν οἰόμεθα δεῖν αὐτούς. φανερόν γάρ καὶ ἐπὶ τούτων ὅτι ἀδύνατον κινεῖσθαι μηδενὸς ἡρεμοῦντος, πρῶτον μὲν οὖν ἐν αὐτοῖς τοῖς ζώοις· δεῖ γάρ, ἂν κινῆται τι τῶν μορίων, ἡρεμεῖν τι· καὶ διὰ τοῦτο αἱ καμπαὶ τοῖς ζώοις εἰσὶν. ὥσπερ γὰρ κέντρῳ χρῶνται ταῖς καμπαῖς, καὶ γίνεται τὸ ὅλον μέρος, ἐν ᾧ ἡ καμπή, καὶ ἐν καὶ δύο, καὶ εὐθὺ καὶ κεκαμμένον, μεταβάλλον δυνάμει καὶ ἐνεργείᾳ διὰ τὴν καμπήν. καμπτομένου δὲ καὶ κινουμένου τὸ μὲν κινεῖται σημεῖον τὸ δὲ μένει τῶν ἐν ταῖς καμπαῖς, ὥσπερ ἂν εἰ τῆς διαμέτρου ἢ μὲν Α καὶ ἢ Δ μένοι, ἢ δὲ Β κινεῖτο, καὶ γίνοιτο ἢ ΑΓ. ἀλλ' ἐνταῦθα μὲν δοκεῖ πάντα τρόπον ἀδιαίρετον εἶναι τὸ κέντρον (καὶ

γὰρ τὸ κινεῖσθαι, ὡς φασί, πλάττουσιν ἐπ' αὐτῶν· οὐ γὰρ κινεῖσθαι τῶν μαθηματικῶν οὐδέν), τὰ δ' ἐν ταῖς καμπαῖς δυνάμει καὶ ἐνεργείᾳ γίνεται ὅτε (698b.) μὲν ἐν ὅτε δὲ διαιρετά. ἄλλ' οὖν αἰεὶ ἡ ἀρχή, ἡρεμεῖ κινουμένου τοῦ μορίου τοῦ κάτωθεν, οἷον τοῦ μὲν βραχίονος κινουμένου τὸ ὠλέκρανον, ὅλου δὲ τοῦ κώλου ὁ ὦμος, καὶ τῆς μὲν κνήμης τὸ γόνυ, ὅλου δὲ τοῦ σκέλους τὸ ἰσχίον. ὅτι μὲν οὖν καὶ ἐν αὐτῷ ἕκαστόν τι δεῖ ἔχειν ἡρεμοῦν, ὅθεν ἡ ἀρχὴ τοῦ κινουμένου ἔσται, καὶ πρὸς ὃ ἀπεριδόμενον καὶ ὅλον ἀθρόον κινηθήσεται καὶ κατὰ μέρος, φανερόν.

## Κεφάλαιο 2

Ἀλλὰ πᾶσα ἡ ἐν αὐτῷ ἡρεμία ὅμως ἄκυρος, ἂν μὴ τι ἔξωθεν ἢ ἀπλῶς ἡρεμοῦν καὶ ἀκίνητον. ἄξιον δ' ἐπιστήσαντας ἐπισκέψασθαι περὶ τοῦ λεχθέντος· ἔχει γὰρ τὴν θεωρίαν οὐ μόνον ὅσον ἐπὶ τὰ ζῶα συντείνουσιν, ἀλλὰ καὶ πρὸς τὴν τοῦ παντός κίνησιν καὶ φοράν. ὥσπερ γὰρ καὶ ἐν αὐτῷ δεῖ τι ἀκίνητον εἶναι, εἰ μέλλει κινεῖσθαι, οὕτως ἔτι μᾶλλον ἔξω δεῖ τι εἶναι τοῦ ζώου ἀκίνητον, πρὸς ὃ ἀπεριδόμενον κινεῖται τὸ κινούμενον. εἰ γὰρ ὑποδώσει αἰεὶ, οἷον τοῖς ἐμύσι τοῖς ἐν τῇ γῇ, ἢ τοῖς ἐν τῇ ἁμμῷ πορευομένοις, οὐ πρόεισιν, οὐδ' ἔσται οὔτε πορεία, εἰ μὴ ἡ γῆ μένοι, οὔτε πτῆσις ἢ νεῦσις, εἰ μὴ ὁ ἀήρ ἢ ἡ θάλαττα ἀντερείδοι. ἀνάγκη δὲ τοῦτο ἕτερον εἶναι τοῦ κινουμένου, καὶ ὅλον ὅλου, καὶ μόριον μηδὲν εἶναι τοῦ κινουμένου τὸ οὕτως ἀκίνητον· εἰ δὲ μὴ, οὐ κινηθήσεται. μαρτύριον δὲ τούτου τὸ ἀπορούμενον, διὰ τί ποτε τὸ πλοῖον ἔξωθεν μὲν, ἂν τις ὠθῇ τῷ κοντῷ τὸν ἰστόν ἢ τι ἄλλο προσβάλλον μόριον, κινεῖ ῥαδίως, ἐὰν δ' ἐν αὐτῷ τις ὢν τῷ πλοίῳ τοῦτο πειρᾶται πράττειν, οὐκ ἂν κινήσειεν οὐδ' ἂν ὁ Τιτυὸς οὔθ' ὁ Βορέας πνέων ἔσωθεν ἐκ τοῦ πλοίου, εἰ τύχοι πνέων τὸν τρόπον τοῦτον ὄνπερ οἱ γραφεῖς ποιοῦσιν· ἐξ αὐτοῦ γὰρ τὸ πνεῦμα ἀφιέντα γράφουσιν. ἐάν τε γὰρ ἡρέμα (699a.) ῥιπτῇ τὸ πνεῦμά τις ἐάν τ' ἰσχυρῶς οὕτως ὥστ' ἄνεμον ποιεῖν τὸν μέγιστον, ἐάν τε ἄλλο τι ἢ τὸ ῥιπτούμενον ἢ ὠθούμενον, ἀνάγκη πρῶτον μὲν πρὸς ἡρεμοῦν τι τῶν αὐτοῦ μορίων ἀπεριδόμενον ὠθεῖν, εἴτα πάλιν τοῦτο τὸ μόριον, ἢ αὐτὸ ἢ οὗ τυγχάνει μόριον ὄν, πρὸς τῶν ἔξωθεν τι ἀποστηριζόμενον μένειν. ὁ δὲ τὸ πλοῖον ὠθῶν ἐν τῷ πλοίῳ αὐτὸς ὢν καὶ ἀποστηριζόμενος πρὸς τὸ πλοῖον εὐλόγως οὐ κινεῖ τὸ πλοῖον διὰ τὸ ἀναγκαῖον εἶναι πρὸς ὃ ἀποστηρίζεται μένειν· συμβαίνει δ' αὐτῷ τὸ αὐτὸ ὅ τε κινεῖ καὶ πρὸς ὃ ἀποστηρίζεται. ἔξωθεν δ' ὠθῶν ἢ ἔλκων κινεῖ· οὐθὲν γὰρ μέρος ἢ γῆ τοῦ πλοίου.

## Κεφάλαιο 3

Ἀπορήσειε δ' ἂν τις, ἄρ' εἴ τι κινεῖ τὸν ὅλον οὐρανόν, εἶναι θέλει ἀκίνητον, καὶ τοῦτο μηθὲν εἶναι τοῦ οὐρανοῦ μόριον μηδ' ἐν τῷ οὐρανῷ. εἴτε γὰρ αὐτὸ κινούμενον κινεῖ αὐτόν, ἀνάγκη τινὸς ἀκινήτου θιγγάνον κινεῖν, καὶ τοῦτο μηθὲν εἶναι μόριον τοῦ κινουῦντος· εἴτ' εὐθὺς ἀκίνητόν ἐστι τὸ κινοῦν, ὁμοίως οὐδὲν ἔσται τοῦ κινουμένου μόριον. καὶ τοῦτό γ' ὀρθῶς λέγουσιν οἱ λέγοντες, ὅτι κύκλῳ φερομένης τῆς σφαίρας οὐδ' ὀτιοῦν μένει μόριον· ἢ γὰρ ἂν ὅλην ἀναγκαῖον ἦν μένειν, ἢ διασπᾶσθαι τὸ συνεχὲς αὐτῆς. ἀλλ' ὅτι τοὺς πόλους οἶονταί τινα δύναμιν ἔχειν, οὐθὲν ἔχοντας μέγεθος ἀλλ' ὄντας ἔσχατα καὶ στιγμάς, οὐ καλῶς. πρὸς γὰρ τῷ μηδεμίαν οὐσίαν εἶναι τῶν τοιούτων μηδενός, καὶ κινεῖσθαι τὴν μίαν κίνησιν ὑπὸ δυοῖν ἀδύνατον· τοὺς δὲ πόλους δύο ποιοῦσιν. ὅτι μὲν οὖν ἔχει τι καὶ πρὸς τὴν ὅλην φύσιν οὕτως ὥσπερ ἡ γῆ πρὸς τὰ ζῶα καὶ τὰ κινούμενα δι' αὐτῶν, ἐκ τῶν τοιούτων ἂν τις διαπορήσειεν. οἱ δὲ μυθικῶς τὸν Ἄτλαντα ποιοῦντες ἐπὶ τῆς γῆς ἔχοντα τοὺς πόδας δόξαιεν ἂν ἀπὸ διανοίας εἰρηκέναι τὸν μῦθον, ὡς τοῦτον ὥσπερ διάμετρον ὄντα καὶ στρέφοντα τὸν οὐρανὸν περὶ τοὺς πόλους· τοῦτο δ' ἂν συμβαίνει καὶ κατὰ λόγον διὰ τὸ τὴν γῆν μένειν, ἀλλὰ τοῖς ταῦτα λέγουσιν ἀναγκαῖον φάναι μηδὲν εἶναι μόριον αὐτὴν τοῦ παντός, πρὸς δὲ τούτοις δεῖ τὴν ἰσχὺν ἰσάζειν τοῦ κινουῦντος καὶ τὴν τοῦ μένοντος.

ἔστι γάρ τι πλῆθος ἰσχύος καὶ δυνάμεως καθ' ἣν μένει τὸ μένον, ὥσπερ καὶ καθ' ἣν κινεῖ τὸ κινοῦν· καὶ ἔστι τις ἀναλογία ἐξ ἀνάγκης, ὥσπερ τῶν ἐναντίων κινήσεων, οὕτω καὶ τῶν ἡρεμιῶν. καὶ αἱ μὲν ἴσαι ἀπαθεῖς ὑπ' ἀλλήλων, (699b.) κρατοῦνται δὲ κατὰ τὴν ὑπεροχὴν. διόπερ εἴτ' Ἄτλας εἴτε τι τοιοῦτόν ἐστιν ἕτερον τὸ κινοῦν τῶν ἐντός, οὐδὲν μᾶλλον ἀντερείδειν δεῖ τῆς μονῆς ἣν ἡ γῆ τυγχάνει μένουσα· ἢ κινήσεται ἡ γῆ ἀπὸ τοῦ μέσου καὶ ἐκ τοῦ αὐτῆς τόπου. ὡς γὰρ τὸ ὠθοῦν ὠθεῖ, οὕτω τὸ ὠθούμενον ὠθεῖται, καὶ ὁμοίως κατ' ἰσχύν.

κινεῖ δὲ τὸ ἡρεμοῦν πρῶτον, ὥστε μᾶλλον καὶ πλείων ἡ ἰσχὺς ἢ ὁμοία καὶ ἴση τῆς ἡρεμίας. ὡσαύτως δὲ καὶ ἡ τοῦ κινουμένου μέν, μὴ κινουῦντος δέ. τοσαύτην οὖν δεήσει τὴν δύναμιν εἶναι τῆς γῆς ἐν τῷ ἡρεμεῖν ὅσην ὅ τε πᾶς οὐρανὸς ἔχει καὶ τὸ κινοῦν αὐτόν. εἰ δὲ τοῦτο ἀδύνατον, ἀδύνατον καὶ τὸ κινεῖσθαι τὸν οὐρανὸν ὑπὸ τινος τοιούτου τῶν ἐντός.

## Κεφάλαιο 4

Ἔστι δὲ τις ἀπορία περὶ τὰς κινήσεις τῶν τοῦ οὐρανοῦ μορίων, ἣν ὡς οὖσαν οἰκείαν τοῖς εἰρημένοις ἐπισκέψαιτ' ἂν τις.

ἐὰν γάρ τις ὑπερβάλλῃ τῇ δυνάμει τῆς κινήσεως τὴν τῆς γῆς ἡρεμίαν, δῆλον ὅτι κινήσει αὐτὴν ἀπὸ τοῦ μέσου. καὶ ἡ ἰσχύς δ' ἀφ' ἧς αὕτη ἡ δύναμις, ὅτι οὐκ ἄπειρος, φανερόν· οὐδὲ γὰρ ἡ γῆ ἄπειρος, ὥστ' οὐδὲ τὸ βάρος αὐτῆς. ἐπεὶ δὲ τὸ ἀδύνατον λέγεται πλεοναχῶς (οὐ γὰρ ὡσαύτως τὴν τε φωνὴν ἀδύνατόν φαμεν εἶναι ὁραθῆναι καὶ τοὺς ἐπὶ τῆς σελήνης ὑφ' ἡμῶν· τὸ μὲν γὰρ ἐξ ἀνάγκης, τὸ δὲ πεφυκὸς ὁρᾶσθαι οὐκ ὀφθῆσεται), τὸν δ' οὐρανὸν ἀφθαρτον εἶναι καὶ ἀδιάλυτον οἴομεθα μὲν ἐξ ἀνάγκης [εἶναι], συμβαίνει δὲ κατὰ τοῦτον τὸν λόγον οὐκ ἐξ ἀνάγκης· (πέφυκε γὰρ καὶ ἐνδέχεται εἶναι κίνησιν μείζω καὶ ἀφ' ἧς ἡρεμεῖ ἡ γῆ καὶ ἀφ' ἧς κινεῖνται τὸ πῦρ καὶ τὸ ἄνω σῶμα)· εἰ μὲν οὖν εἰσὶν ὑπερέχουσαι κινήσεις, διαλυθήσεται ταῦτα ὑπ' ἀλλήλων· εἰ δὲ μὴ εἰσὶ μὲν, ἐνδέχεται δ' εἶναι (ἄπειρον γὰρ οὐκ ἐνδέχεται διὰ τὸ μηδὲ σῶμα ἐνδέχεσθαι ἄπειρον εἶναι), ἐνδέχοιτ' ἂν διαλυθῆναι τὸν οὐρανόν. τί γὰρ κωλύει τοῦτο συμβῆναι, εἴπερ μὴ ἀδύνατον; οὐκ ἀδύνατον δέ, εἰ μὴ τάντικείμενον ἀναγκαῖον. ἀλλὰ περὶ μὲν τῆς ἀπορίας ταύτης ἕτερος ἔστω λόγος· ἄρα δὲ δεῖ τι ἀκίνητον εἶναι καὶ ἡρεμοῦν ἔξω τοῦ κινουμένου, μηδὲν ὃν ἐκείνου μόνιον, ἢ οὐ; καὶ τοῦτο πότερον καὶ ἐπὶ τοῦ παντὸς οὕτως ὑπάρχειν ἀναγκαῖον; ἴσως γὰρ ἂν δόξειεν ἄτοπον εἶναι, εἰ ἡ ἀρχὴ τῆς κινήσεως ἐντός. διὸ δόξειεν ἂν τοῖς οὕτως ὑπολαμβάνουσιν εὖ εἰρησθαι Ὀμήρω

ἀλλ' οὐκ ἂν ἐρύσαιτ' ἐξ οὐρανόθεν πεδίονδε (700a.)

Ζῆν' ὕπατον πάντων, οὐδ' εἰ μάλα πολλὰ κάμοιτε·

πάντες δ' ἐξάπτεσθε θεοὶ πᾶσαί τε θέαιναί.

τὸ γὰρ ὅλως ἀκίνητον ὑπ' οὐδενὸς ἐνδέχεται κινήθῃναι. ὅθεν λύεται καὶ ἡ πάλαι λεχθεῖσα ἀπορία, πότερον ἐνδέχεται ἢ οὐκ ἐνδέχεται διαλυθῆναι τὴν τοῦ οὐρανοῦ σύστασιν, εἰ ἐξ ἀκινήτου ἤρτηται ἀρχῆς. ἐπὶ δὲ τῶν ζώων οὐ μόνον τὸ οὕτως ἀκίνητον δεῖ ὑπάρχειν, ἀλλὰ καὶ ἐν αὐτοῖς τοῖς κινουμένοις κατὰ τόπον ὅσα κινεῖ αὐτὰ αὐτά. δεῖ γὰρ αὐτοῦ τὸ μὲν ἡρεμεῖν τὸ δὲ κινεῖσθαι, πρὸς ὃ ἀπεριδόμενον τὸ κινούμενον κινήσεται, οἷον ἂν τι κινῇ τῶν μορίων· ἀπερείδεται γὰρ θάτερον ὡς πρὸς μένον θάτερον. περὶ δὲ τῶν ἀψύχων ὅσα κινεῖται ἀπορήσειεν ἂν τις, πότερον ἅπαντ' ἔχει ἐν ἑαυτοῖς καὶ τὸ ἡρεμοῦν καὶ τὸ κινεῖν, καὶ πρὸς τῶν ἔξω τι ἡρεμοῦντων ἀπερίδεσθαι ἀνάγκη καὶ ταῦτα, ἢ ἀδύνατον, οἷον πῦρ ἢ γῆν ἢ τῶν ἀψύχων τι, ἀλλ' ὑφ' ὧν ταῦτα κινεῖται πρώτων. πάντα γὰρ ὑπ' ἄλλου κινεῖται τὰ ἄψυχα, ἀρχὴ δὲ πάντων τῶν οὕτως κινουμένων τὰ αὐτὰ αὐτὰ κινεῖντα. τῶν δὲ τοιούτων περὶ μὲν τῶν ζώων εἴρηται· τὰ γὰρ τοιαῦτα πάντα ἀνάγκη καὶ ἐν αὐτοῖς ἔχειν τὸ



ἡρεμοῦν, καὶ ἔξω πρὸς ὃ ἀπερείσεται. εἰ δέ τι ἐστὶν ἀνωτέρω καὶ πρώτως κινοῦν, ἄδηλον, καὶ ἄλλος λόγος περὶ τῆς τοιαύτης ἀρχῆς. τὰ δὲ ζῶα ὅσα κινεῖται, πάντα πρὸς τὰ ἔξω ἀπεριδόμενα κινεῖται, καὶ ἀναπνέοντα καὶ ἐκπνέοντα. οὐδὲν γὰρ διαφέρει μέγα ῥῖψαι βάρος ἢ μικρόν, ὅπερ ποιοῦσιν οἱ πτύοντες καὶ βήττοντες καὶ οἱ εἰσπνέοντες καὶ ἐκπνέοντες.

## Κεφάλαιο 5

Πότερον δ' ἐν τῷ αὐτῷ αὐτὸ κινοῦντι κατὰ τόπον μόνω δεῖ τι μένειν, ἢ καὶ ἐν τῷ ἀλλοιουμένῳ αὐτῷ ὑφ' αὐτοῦ καὶ ἀύξανομένῳ; περὶ δὲ γενέσεως τῆς ἐξ ἀρχῆς καὶ φθορᾶς ἄλλος λόγος· εἰ γὰρ ἐστὶν ἥνπερ φαμὲν πρώτην κίνησιν γενέσεως καὶ φθορᾶς, αὕτη αἰτία ἂν εἴη, καὶ τῶν ἄλλων δὲ κινήσεων ἴσως πασῶν. ὥσπερ δ' ἐν τῷ ὄλῳ, καὶ ἐν τῷ ζῳῳ κινήσεις πρώτη αὕτη, ὅταν τελεωθῇ· ὥστε καὶ ἀυξήσεως, εἴ ποτε γίνεται, αὐτὸ αὐτῷ αἴτιον καὶ ἀλλοιώσεως, εἰ δὲ μή, οὐκ ἀνάγκη. αἱ δὲ πρῶται ἀυξήσεις καὶ ἀλλοιώσεις ὑπ' ἄλλου γίνονται καὶ δι' ἐτέρων· γενέσεως δὲ καὶ φθορᾶς (700b.) οὐδαμῶς οἷόν τε αὐτὸ αἴτιον εἶναι αὐτῷ οὐδέν. προϋπάρχειν γὰρ δεῖ τὸ κινοῦν τοῦ κινουμένου καὶ τὸ γεννῶν τοῦ γεννωμένου· αὐτὸ δ' αὐτοῦ πρότερον οὐδέν ἐστίν.

## Κεφάλαιο 6

Περὶ μὲν οὖν ψυχῆς, εἴτε κινεῖται εἴτε μή, καὶ εἰ κινεῖται, πῶς κινεῖται, πρότερον εἴρηται ἐν τοῖς διωρισμένοις περὶ αὐτῆς. ἐπεὶ δὲ τὰ ἄψυχα πάντα κινεῖται ὑφ' ἐτέρου, περὶ δὲ τοῦ πρώτου κινουμένου καὶ ἀεὶ κινουμένου, τίνα τρόπον κινεῖται, καὶ πῶς κινεῖ τὸ πρῶτον κινοῦν, διώριστα πρότερον ἐν τοῖς περὶ τῆς πρώτης φιλοσοφίας, λοιπὸν ἐστὶ θεωρῆσαι πῶς ἡ ψυχὴ κινεῖ τὸ σῶμα, καὶ τίς ἡ ἀρχὴ τῆς τοῦ ζῳου κινήσεως. τῶν γὰρ ἄλλων παρὰ τὴν τοῦ ὅλου κίνησιν τὰ ἔμψυχα αἴτια τῆς κινήσεως, ὅσα μὴ κινεῖται ὑπ' ἀλλήλων διὰ τὸ προσκόπτειν ἀλλήλοις. διὸ καὶ πέρας ἔχουσιν αὐτῶν πᾶσαι αἱ κινήσεις· καὶ γὰρ καὶ αἱ τῶν ἐμψύχων. πάντα γὰρ τὰ ζῶα καὶ κινεῖ καὶ κινεῖται ἕνεκά τινος, ὥστε τοῦτ' ἐστὶν αὐτοῖς πάσης τῆς κινήσεως πέρας, τὸ οὗ ἕνεκα. ὁρῶμεν δὲ τὰ κινοῦντα τὸ ζῶον διάνοιαν καὶ φαντασίαν καὶ προαίρεσιν καὶ βούλησιν καὶ ἐπιθυμίαν. ταῦτα δὲ πάντα ἀνάγεται εἰς νοῦν καὶ ὄρεξιν. καὶ γὰρ ἡ φαντασία καὶ ἡ αἴσθησις τὴν αὐτὴν τῷ νῷ χώραν ἔχουσιν· κριτικὰ γὰρ πάντα, διαφέρουσι δὲ κατὰ τὰς εἰρημένους ἐν ἄλλοις διαφοράς. βούλησις δὲ καὶ θυμὸς καὶ ἐπιθυμία πάντα ὄρεξις, ἡ δὲ προαίρεσις κοινὸν διανοίας καὶ ὀρέξεως· ὥστε κινεῖ πρῶτον τὸ ὀρεκτὸν καὶ τὸ διανοητόν. οὐ πᾶν δὲ τὸ διανοητόν, ἀλλὰ τὸ τῶν πρακτῶν τέλος. διὸ τὸ τοιοῦτόν ἐστὶ τῶν ἀγαθῶν τὸ

κινοῦν, ἀλλ' οὐ πᾶν τὸ καλόν· ἥ γὰρ ἔνεκα τούτου ἄλλο, καὶ ἥ τέλος ἐστὶ τῶν ἄλλου τινὸς ἔνεκα ὄντων, ταύτῃ κινεῖ. δεῖ δὲ τιθέναι καὶ τὸ φαινόμενον ἀγαθὸν ἀγαθοῦ χώραν ἔχειν, καὶ τὸ ἡδύ· φαινόμενον γάρ ἐστιν ἀγαθόν. ὥστε δῆλον ὅτι ἔστι μὲν ἥ ὁμοίως κινεῖται τὸ ἀεὶ κινούμενον ὑπὸ τοῦ ἀεὶ κινούντος καὶ τῶν ζώων ἕκαστον, ἔστι δ' ἥ ἄλλως, διὸ καὶ τὰ μὲν ἀεὶ κινεῖται, ἡ δὲ τῶν ζώων κίνησις ἔχει πέρας. τὸ δὲ αἰδίων καλόν, καὶ τὸ ἀληθῶς καὶ τὸ πρώτως ἀγαθὸν καὶ μὴ ποτὲ μὲν ποτὲ δὲ μὴ, θειότερον καὶ τιμιώτερον ἢ ὥστ' εἶναι πρότερόν <τι>. τὸ μὲν οὖν πρῶτον οὐ κινούμενον κινεῖ, ἡ δ' (701a.) ὄρεξις καὶ τὸ ὀρεκτικὸν κινούμενον κινεῖ. τὸ δὲ τελευταῖον τῶν κινουμένων οὐκ ἀνάγκη κινεῖν οὐδέν. φανερόν δ' ἐκ τούτων καὶ ὅτι εὐλόγως ἡ φορὰ τελευταία τῶν γινομένων ἐν τοῖς κινουμένοις· κινεῖται γὰρ καὶ πορεύεται τὸ ζῶον ὀρέξει ἢ προαιρέσει, ἀλλοιωθέντος τινὸς κατὰ τὴν αἴσθησιν ἢ τὴν φαντασίαν.

## Κεφάλαιο 7

Πῶς δὲ νοῶν ὅτε μὲν πράττει ὅτε δ' οὐ πράττει, καὶ κινεῖται, ὅτε δ' οὐ κινεῖται; ἔοικε παραπλησίως συμβαίνειν καὶ περὶ τῶν ἀκινήτων διανοουμένοις καὶ συλλογιζομένοις. ἀλλ' ἐκεῖ μὲν θεώρημα τὸ τέλος (ὅταν γὰρ τὰς δύο προτάσεις νοήσῃ, τὸ συμπέρασμα ἐνόησε καὶ συνέθηκεν), ἐνταῦθα δ' ἐκ τῶν δύο προτάσεων τὸ συμπέρασμα γίνεται ἢ πρᾶξις, οἷον ὅταν νοήσῃ ὅτι παντὶ βαδιστέον ἀνθρώπῳ, αὐτὸς δ' ἄνθρωπος, βαδίζει εὐθέως, ἂν δ' ὅτι οὐδενὶ βαδιστέον νῦν ἀνθρώπῳ, αὐτὸς δ' ἄνθρωπος, εὐθὺς ἡρεμεῖ· καὶ ταῦτα ἄμφω πράττει, ἂν μὴ τι κωλύῃ ἢ ἀναγκάζῃ. ποιητέον μοι ἀγαθόν, οἰκία δ' ἀγαθόν· ποιεῖ οἰκίαν εὐθύς. σκεπάσματος δέομαι, ἱμάτιον δὲ σκέπασμα· ἱματίου δέομαι. οὐ δέομαι, ποιητέον· ἱματίου δέομαι· ἱμάτιον ποιητέον. καὶ τὸ συμπέρασμα, τὸ ἱμάτιον ποιητέον, πρᾶξις ἐστίν. πράττει δ' ἀπ' ἀρχῆς. εἰ ἱμάτιον ἔσται, ἀνάγκη εἶναι τόδε πρῶτον, εἰ δὲ τόδε, τόδε· καὶ τοῦτο πράττει εὐθύς. ὅτι μὲν οὖν ἡ πρᾶξις τὸ συμπέρασμα, φανερόν· αἱ δὲ προτάσεις αἱ ποιητικαὶ διὰ δύο εἰδῶν γίνονται, διὰ τε τοῦ ἀγαθοῦ καὶ διὰ τοῦ δυνατοῦ. ὥσπερ δὲ τῶν ἐρωτώντων ἔνιοι, οὕτω τὴν ἑτέραν πρότασιν τὴν δῆλην οὐδ' ἡ διάνοια ἐφιστᾷσα σκοπεῖ οὐδέν· οἷον εἰ τὸ βαδίζειν ἀγαθὸν ἀνθρώπῳ, ὅτι αὐτὸς ἄνθρωπος, οὐκ ἐνδιατρίβει. διὸ καὶ ὅσα μὴ λογισάμενοι πράττομεν, ταχὺ πράττομεν. ὅταν ἐνεργήσῃ γὰρ ἡ τῇ αἰσθήσει πρὸς τὸ οὐ ἔνεκα ἢ τῇ φαντασίᾳ ἢ τῷ νῷ, οὐ ὀρέγεται, εὐθὺς ποιεῖ· ἀντ' ἐρωτήσεως γὰρ ἢ νοήσεως ἢ τῆς ὀρέξεως γίνεται ἐνέργεια. ποτέον μοι, ἡ ἐπιθυμία λέγει· τοδὶ δὲ ποτόν, ἡ αἴσθησις εἶπεν ἢ ἡ φαντασία ἢ ὁ νοῦς· εὐθύς πίνει. οὕτως μὲν οὖν ἐπὶ τὸ κινεῖσθαι καὶ πράττειν τὰ ζῶα ὁρμῶσι, τῆς μὲν ἐσχάτης αἰτίας τοῦ κινεῖσθαι ὀρέξεως οὔσης, ταύτης δὲ γινομένης ἢ δι' αἰσθήσεως ἢ διὰ φαντασίας καὶ

νοήσεως. τῶν δ' ὀρεγομένων πράττειν τὰ μὲν δι' ἐπιθυμίαν ἢ θυμὸν τὰ δὲ (701b.) δι' ὄρεξιν ἢ βούλησιν τὰ μὲν ποιοῦσι, τὰ δὲ πράττουσιν. ὥσπερ δὲ τὰ αὐτόματα κινεῖται μικρᾶς κινήσεως γινομένης, λυομένων τῶν στρεβλῶν καὶ κρουόντων ἀλλήλας τὰς στρέβλας, καὶ τὸ ἀμάξιον, ὅπερ ὀχούμενον αὐτὸ κινεῖ εἰς εὐθύ, καὶ πάλιν κύκλῳ κινεῖται τῷ ἀνίσους ἔχειν τοὺς τροχοὺς (ὁ γὰρ ἐλάττων ὥσπερ κέντρον γίνεται, καθάπερ ἐν τοῖς κυλίνδροις), οὕτω καὶ τὰ ζῶα κινεῖται. ἔχει γὰρ ὄργανα τοιαῦτα τὴν τε τῶν νεύρων φύσιν καὶ τὴν τῶν ὀστέων, τὰ μὲν ὡς ἐκεῖ τὰ ξύλα καὶ ὁ σίδηρος, τὰ δὲ νεῦρα ὡς αἱ στρέβλαι· ὧν λυομένων καὶ ἀνιεμένων κινεῖνται. ἐν μὲν οὖν τοῖς αὐτομάτοις καὶ τοῖς ἀμαξίοις οὐκ ἔστιν ἀλλοίωσις, ἐπεὶ εἰ ἐγίνοντο ἐλάττους οἱ ἐντὸς τροχοὶ καὶ πάλιν μείζους, κἂν κύκλῳ τὸ αὐτὸ ἐκινεῖτο· ἐν δὲ τῷ ζῳῳ δύναται τὸ αὐτὸ καὶ μείζον καὶ ἔλαττον γίνεσθαι καὶ τὰ σχήματα μεταβάλλειν, αὐξανομένων τῶν μορίων διὰ θερμότητα καὶ πάλιν συστελλομένων διὰ ψύξιν καὶ ἀλλοιουμένων. ἀλλοιοῦσι δ' αἱ φαντασίαι καὶ αἱ αἰσθήσεις καὶ αἱ ἔννοιαι. αἱ μὲν γὰρ αἰσθήσεις εὐθύς ὑπάρχουσιν ἀλλοιώσεις τινὲς οὔσαι, ἡ δὲ φαντασία καὶ ἡ νόησις τὴν τῶν πραγμάτων ἔχουσι δύναμιν· τρόπον γὰρ τινὰ τὸ εἶδος τὸ νοούμενον τὸ τοῦ θερμοῦ ἢ ψυχροῦ ἢ ἡδέος ἢ φοβεροῦ τοιοῦτον τυγχάνει ὃν οἶόν περ καὶ τῶν πραγμάτων ἕκαστον, διὸ καὶ φρίττουσι καὶ φοβοῦνται νοήσαντες μόνον. ταῦτα δὲ πάντα πάθη καὶ ἀλλοιώσεις εἰσίν. ἀλλοιουμένων δ' ἐν τῷ σώματι τὰ μὲν μείζω τὰ δ' ἐλάττω γίνεται. ὅτι δὲ μικρὰ μεταβολὴ γινομένη ἐν ἀρχῇ μεγάλας καὶ πολλὰς ποιεῖ διαφορὰς ἄποθεν, οὐκ ἄδηλον· οἶον τοῦ οἴακος ἀκαριαῖόν τι μεθισταμένου πολλὴ ἢ τῆς πρῶρας γίνεται μετάστασις. ἔτι δὲ κατὰ θερμότητα ἢ ψύξιν ἢ κατ' ἄλλο τι τοιοῦτον πάθος ὅταν γένηται ἀλλοίωσις περὶ τὴν καρδίαν, καὶ ἐν ταύτῃ κατὰ μέγεθος ἐν ἀναισθήτῳ μορίῳ, πολλὴν ποιεῖ τοῦ σώματος διαφορὰν ἐρυθρήμασι καὶ ὠχρότησι καὶ φρίκαις καὶ τρόμοις καὶ τοῖς τούτων ἐναντίοις.

## Κεφάλαιο 8

Ἀρχὴ μὲν οὖν, ὥσπερ εἴρηται, τῆς κινήσεως τὸ ἐν τῷ πρακτῷ διωκτὸν καὶ φευκτόν· ἐξ ἀνάγκης δ' ἀκολουθεῖ τῇ νοήσει καὶ τῇ φαντασίᾳ αὐτῶν θερμότης καὶ ψύξις. τὸ μὲν γὰρ λυπηρὸν φευκτόν, τὸ δ' ἡδὺ διωκτόν (ἀλλὰ λανθάνει περὶ τὰ μικρὰ τοῦτο συμβαῖνον), ἔστι δὲ τὰ λυπηρὰ (702a.) καὶ ἡδέα πάντα σχεδὸν μετὰ ψύξεώς τινος καὶ θερμότητος. τοῦτο δὲ δῆλον ἐκ τῶν παθημάτων. θάρρη γὰρ καὶ φόβοι καὶ ἀφροδισιασμοὶ καὶ ἄλλα σωματικὰ λυπηρὰ καὶ ἡδέα τὰ μὲν κατὰ μόριον μετὰ θερμότητος ἢ ψύξεώς ἐστι, τὰ δὲ καθ' ὅλον τὸ σῶμα· μνηῆμαι δὲ καὶ ἐλπίδες, οἶον εἰδώλοις χρώμεναι τοῖς τοιούτοις, ὅτε μὲν ἤττον ὅτε δὲ μᾶλλον αἰτίαι τῶν αὐτῶν εἰσιν. ὥστ'

εὐλόγως ἤδη δημιουργεῖται τὰ ἐντὸς καὶ τὰ περὶ τὰς ἀρχὰς τῶν ὀργανικῶν μορίων μεταβάλλοντα ἐκ πεπηγότων ὑγρὰ καὶ ἐξ ὑγρῶν πεπηγότα καὶ μαλακὰ καὶ σκληρὰ ἐξ ἀλλήλων. τούτων δὲ συμβαινόντων τὸν τρόπον τοῦτον, καὶ ἔτι τοῦ παθητικοῦ καὶ ποιητικοῦ τοιαύτην ἔχόντων τὴν φύσιν οἷαν πολλαχοῦ εἰρήκαμεν, ὁπόταν συμβῇ ὥστ' εἶναι τὸ μὲν ποιητικὸν τὸ δὲ παθητικόν, καὶ μηδὲν ἀπολίπη αὐτῶν ἐκάτερον τῶν ἐν τῷ λόγῳ, εὐθὺς τὸ μὲν ποιεῖ τὸ δὲ πάσχει. διὰ τοῦτο δ' ἅμα ὡς εἰπεῖν νοεῖ ὅτι πορευτέον καὶ πορεύεται, ἂν μὴ τι ἐμποδίζῃ ἕτερον. τὰ μὲν γὰρ ὀργανικὰ μέρη παρασκευάζει ἐπιτηδείως τὰ πάθη, ἢ δ' ὄρεξις τὰ πάθη, τὴν δ' ὄρεξιν ἢ φαντασία· αὕτη δὲ γίνεται ἢ διὰ νοήσεως ἢ δι' αἰσθήσεως.

ἅμα δὲ καὶ ταχὺ διὰ τὸ <τὸ> ποιητικὸν καὶ παθητικὸν τῶν πρὸς ἀλλήλα εἶναι τὴν φύσιν. τὸ δὲ κινοῦν πρῶτον τὸ ζῶον ἀνάγκη εἶναι ἐν τινὶ ἀρχῇ. ἢ δὲ καμπὴ ὅτι μὲν ἐστὶ ἀρχὴ τοῦ δὲ τελευτῆ, εἴρηται. διὸ καὶ ἔστι μὲν ὡς ἐνί, ἔστι δ' ὡς δυσὶ χρήται ἡ φύσις αὐτῇ. ὅταν γὰρ κινῆται ἐντεῦθεν, ἀνάγκη τὸ μὲν ἡρεμεῖν τῶν σημείων τῶν ἐσχάτων, τὸ δὲ κινεῖσθαι· ὅτι γὰρ πρὸς ἡρεμοῦν δεῖ ἀπερίδεσθαι τὸ κινοῦν, εἴρηται πρότερον. κινεῖται μὲν οὖν καὶ οὐ κινεῖ τὸ ἐσχάτον τοῦ βραχίονος, τῆς δ' ἐν τῷ ὠλεκράνῳ κάμψεως τὸ μὲν κινεῖται τὸ ἐν αὐτῷ τῷ ὅλῳ κινουμένῳ, ἀνάγκη δ' εἶναι τι καὶ ἀκίνητον, ὃ δὴ φαμεν δυνάμει μὲν ἐν εἶναι σημεῖον, ἐνεργείᾳ δὲ γίνεσθαι δύο· ὥστ' εἰ τὸ ζῶον ἦν ὁ βραχίων, ἐνταῦθα ἂν που ἦν ἡ ἀρχὴ τῆς ψυχῆς ἢ κινουῖσα. ἐπεὶ δ' ἐνδέχεται καὶ πρὸς τὴν χεῖρα ἔχειν τι οὕτως τῶν ἀψύχων, οἷον εἰ κινοίῃ τὴν βακτηρίαν ἐν τῇ χειρὶ, φανερόν ὅτι οὐκ ἂν εἴη ἐν οὐδετέρῳ ἢ ψυχῇ τῶν ἐσχάτων, οὗτ' ἐν τῷ ἐσχάτῳ τοῦ κινουμένου οὗτ' ἐν τῇ ἐτέρᾳ ἀρχῇ. καὶ γὰρ τὸ ξύλον ἔχει καὶ (702b.) ἀρχὴν καὶ τέλος πρὸς τὴν χεῖρα. ὥστε διὰ γε τοῦτο, εἰ μὴ καὶ ἐν τῇ βακτηρίᾳ ἢ κινουῖσα ἀπὸ τῆς ψυχῆς ἀρχὴ ἐνεστίν, οὐδ' ἐν τῇ χειρὶ· ὁμοίως γὰρ ἔχει καὶ τὸ ἄκρον τῆς χειρὸς πρὸς τὸν καρπόν, καὶ τοῦτο τὸ μέρος πρὸς τὸ ὠλέκρανον. οὐδὲν γὰρ διαφέρει τὰ προσπεφυκότα τῶν μή· γίνεται γὰρ ὡσπερ ἀφαιρετὸν μέρος ἢ βακτηρία. ἀνάγκη ἄρα ἐν μηδεμιᾷ εἶναι ἀρχῇ, ἢ ἐστὶν ἄλλου τελευτῆ, μηδὲ εἴ τι ἐστὶν ἕτερον ἐκείνου ἐξωτέρῳ, οἷον τοῦ μὲν τῆς βακτηρίας ἐσχάτου ἐν τῇ χειρὶ ἢ ἀρχή, τούτου δ' ἐν τῷ καρπῷ. εἰ δὲ μηδ' ἐν τῇ χειρὶ, ὅτι ἀνωτέρῳ ἔτι, ἢ ἀρχὴ οὐδ' ἐνταῦθα· ἔτι γὰρ τοῦ ὠλεκράνου μένοντος κινεῖται ἅπαν τὸ κάτω συνεχές.

## Κεφάλαιο 9

Ἐπεὶ δ' ὁμοίως ἔχει ἀπὸ τῶν ἀριστερῶν καὶ ἀπὸ τῶν δεξιῶν, καὶ ἅμα τὰναντία κινεῖται, ὥστε μὴ εἶναι τῷ ἡρεμεῖν τὸ δεξιὸν κινεῖσθαι τὸ ἀριστερὸν μηδ' αὐτῷ τοῦτο ἐκεῖνο, ἀεὶ δ' ἐν τῷ ἀνωτέρῳ ἀμφοτέρων ἢ

ἀρχή, ἀνάγκη ἐν τῷ μέσῳ εἶναι τὴν ἀρχὴν τῆς ψυχῆς τῆς κινούσης· ἀμφοτέρων γὰρ τῶν ἄκρων τὸ μέσον ἔσχατον. ὁμοίως δ' ἔχει πρὸς τὰς κινήσεις τοῦτο καὶ τὰς ἀπὸ τοῦ ἄνω καὶ κάτω, οἷον τὰς ἀπὸ τῆς κεφαλῆς πρὸς τὰ ἀπὸ τῆς ῥάχεως τοῖς ἔχουσι ῥάχιν. καὶ εὐλόγως δὲ τοῦτο συμβέβηκεν· καὶ γὰρ τὸ αἰσθητικὸν ἐνταῦθα εἶναι φαμεν, ὥστ' ἄλλοιουμένου διὰ τὴν αἴσθησιν τοῦ τόπου τοῦ περὶ τὴν ἀρχὴν καὶ μεταβάλλοντος τὰ ἐχόμενα συμμεταβάλλει ἐκτεινόμενά τε καὶ συναγόμενα τὰ μόρια, ὥστ' ἐξ ἀνάγκης διὰ ταῦτα γίνεσθαι τὴν κίνησιν τοῖς ζώοις. τὸ δὲ μέσον τοῦ σώματος μέρος δυνάμει μὲν ἓν, ἐνεργείᾳ δ' ἀνάγκη γίνεσθαι πλείω· καὶ γὰρ ἅμα κινεῖται τὰ κῶλα ἀπὸ τῆς ἀρχῆς, καὶ θατέρου ἡρεμοῦντος θάτερον κινεῖται. λέγω δ' οἷον ἐπὶ τῆς ΑΒΓ τὸ Β κινεῖται, κινεῖ δὲ τὸ Α. ἀλλὰ μὴν δεῖ γέ τι ἡρεμεῖν, εἰ μέλλει τὸ μὲν κινεῖσθαι τὸ δὲ κινεῖν. ἔν ἄρα δυνάμει ὅν τὸ Α ἐνεργείᾳ δύο ἔσται, ὥστ' ἀνάγκη μὴ στιγμὴν ἀλλὰ μέγεθός τι εἶναι. ἀλλὰ μὴν ἐνδέχεται τὸ Γ ἅμα τῷ Β κινεῖσθαι, ὥστ' ἀνάγκη ἀμφοτέρας τὰς ἀρχὰς τὰς ἐν τῷ Α κινουμένας κινεῖν. δεῖ τι ἄρα εἶναι παρὰ ταύτας ἕτερον τὸ κινοῦν, καὶ μὴ κινούμενον. ἀπερείδονται μὲν γὰρ ἂν τὰ ἄκρα καὶ αἱ ἀρχαὶ αἱ ἐν τῷ Α πρὸς ἀλλήλας κινουμένων, ὥσπερ ἂν εἴ τινες τὰ (703a.) νῶτα ἀντερείδοντες κινοῖεν τὰ σκέλη. ἀλλὰ τὸ κινοῦν ἅμφω <ἀκίνητον> ἀναγκαῖον εἶναι, τοῦτο δ' ἐστὶν ἡ ψυχὴ, ἕτερον μὲν οὐσα | τοῦ μεγέθους τοῦ τοιούτου, ἐν τούτῳ δ' οὐσα.

## Κεφάλαιο 10

Κατὰ μὲν οὖν τὸν λόγον τὸν λέγοντα τὴν αἰτίαν τῆς κινήσεως ἐστὶν ἡ ὄρεξις τὸ μέσον, ὃ κινεῖ κινούμενον· ἐν δὲ τοῖς ἐμψύχοις σώμασι δεῖ τι εἶναι σῶμα τοιοῦτον. τὸ μὲν οὖν κινούμενον μὲν μὴ πεφυκὸς δὲ κινεῖν δύναται πάσχειν κατ' ἄλλοτριαν δύναμιν· τὸ δὲ κινοῦν ἀναγκαῖον ἔχειν τινὰ δύναμιν καὶ ἰσχύν. πάντα δὲ φαίνεται τὰ ζῶα καὶ ἔχοντα πνεῦμα σύμφυτον καὶ ἰσχύοντα τούτῳ. τίς μὲν οὖν ἡ σωτηρία τοῦ συμφύτου πνεύματος, εἴρηται ἐν ἄλλοις· τοῦτο δὲ πρὸς τὴν ἀρχὴν τὴν ψυχικὴν ὅμοιος ἔχειν ὥσπερ τὸ ἐν ταῖς καμπαῖς σημεῖον, τὸ κινοῦν καὶ κινούμενον, πρὸς τὸ ἀκίνητον. ἐπεὶ δ' ἡ ἀρχὴ τοῖς μὲν ἐν τῇ καρδίᾳ τοῖς δ' ἐν τῷ ἀνάλογον, διὰ τοῦτο καὶ τὸ πνεῦμα τὸ σύμφυτον ἐνταῦθα φαίνεται ὄν. πότερον μὲν οὖν ταῦτόν ἐστι τὸ πνεῦμα αἰὲρ ἢ γίνεται αἰὲρ ἕτερον, ἔστω ἄλλος λόγος (ὁ αὐτὸς γὰρ ἐστὶ καὶ περὶ τῶν ἄλλων μορίων)· φαίνεται δ' εὐφυῶς ἔχον πρὸς τὸ κινητικὸν εἶναι καὶ παρέχειν ἰσχύν. τὰ δ' ἔργα τῆς κινήσεως ὥσις καὶ ἔλξις, ὥστε δεῖ τὸ ὄργανον αὐξάνεσθαι τε δύνασθαι καὶ συστέλλεσθαι. τοιαύτη δ' ἐστὶν ἡ τοῦ πνεύματος φύσις· καὶ γὰρ ἀβίαστος συστελλομένη, καὶ βιαστικὴ καὶ ὠστικὴ διὰ τὴν αὐτὴν αἰτίαν, καὶ ἔχει καὶ βάρος πρὸς τὰ πυρώδη καὶ κουφότητα πρὸς τὰ

έναντία. δεῖ δὲ τὸ μέλλον κινεῖν μὴ ἀλλοιώσει τοιοῦτον εἶναι· κρατεῖ γὰρ κατὰ τὴν ὑπεροχὴν τὰ φυσικὰ σώματα ἀλλήλων, τὸ μὲν κοῦφον κάτω ὑπὸ τοῦ βαρυτέρου ἀπονικώμενον, τὸ δὲ βαρὺ ἄνω ὑπὸ τοῦ κουφοτέρου. ὥ μὲν οὖν κινεῖ κινουμένω μορίω ἢ ψυχῇ, εἴρηται, καὶ δι' ἣν αἰτίαν· ὑποληπτέον δὲ συνεστάναι τὸ ζῶον ὥσπερ πόλιν εὐνομουμένην. ἔν τε γὰρ τῇ πόλει ὅταν ἅπαξ συστήῃ ἢ τάξῃς, οὐδὲν δεῖ κεχωρισμένου μονάρχου, ὃν δεῖ παρεῖναι παρ' ἑκαστον τῶν γινομένων, ἀλλ' αὐτὸς ἑκαστος ποιεῖ τὰ αὐτοῦ ὡς τέτακται, καὶ γίνεται τότε μετὰ τότε διὰ τὸ ἔθος· ἔν τε τοῖς ζώοις τὸ αὐτὸ τοῦτο διὰ τὴν φύσιν γίνεται καὶ τῷ πεφυκέναι ἑκαστον οὕτω συστάντων ποιεῖν τὸ αὐτοῦ ἔργον, ὥστε μηδὲν δεῖν ἐν ἐκάστω εἶναι ψυχὴν, ἀλλ' ἔν τινι ἀρχῇ τοῦ σώματος οὔσης τᾶλλα (703b.) ζῆν μὲν τῷ προσπεφυκέναι, ποιεῖν δὲ τὸ ἔργον τὸ αὐτῶν διὰ τὴν φύσιν.

## Κεφάλαιο 11

Πῶς μὲν οὖν κινεῖται τὰς ἐκουσίους κινήσεις τὰ ζῶα, καὶ διὰ τίνας αἰτίας, εἴρηται· κινεῖται δὲ τίνας καὶ ἀκουσίους ἔνια τῶν μερῶν, τὰς δὲ πλείστας οὐχ ἐκουσίους. λέγω δ' ἀκουσίους μὲν οἷον τὴν τῆς καρδίας τε καὶ τὴν τοῦ αἰδοίου (πολλάκις γὰρ φανέντος τινός, οὐ μέντοι κελεύσαντος τοῦ νοῦ κινουῖνται), οὐχ ἐκουσίους δ' οἷον ὕπνον καὶ ἐγρήγορσιν καὶ ἀναπνοήν, καὶ ὅσαι ἄλλαι τοιαῦταί εἰσιν. οὐθενὸς γὰρ τούτων κυρία ἀπλῶς ἐστὶν οὐθ' ἢ φαντασία οὐθ' ἢ ὄρεξις, ἀλλ' ἐπειδὴ ἀνάγκη ἀλλοιοῦσθαι τὰ ζῶα φυσικὴν ἀλλοίωσιν, ἀλλοιουμένων δὲ τῶν μορίων τὰ μὲν αὔξεσθαι τὰ δὲ φθίνειν, ὥστ' ἤδη κινεῖσθαι καὶ μεταβάλλειν τὰς πεφυκυίας ἔχουσιν μεταβολὰς ἀλλήλων. αἰτίαι δὲ τῶν κινήσεων θερμότητές τε καὶ ψύξεις, αἵ τε θύραθεν καὶ αἱ ἐντὸς ὑπάρχουσιν φυσικαί. καὶ αἱ παρὰ τὸν λόγον δὴ γινόμεναι κινήσεις τῶν ῥηθέντων μορίων ἀλλοιώσεως συμπεσοῦσης γίνονται. (ἡ γὰρ νόησις καὶ ἡ φαντασία, ὥσπερ εἴρηται πρότερον, τὰ ποιητικὰ τῶν παθημάτων προσφέρουσι· τὰ γὰρ εἶδη τῶν ποιητικῶν προσφέρουσι.) μάλιστα δὲ τῶν μορίων ταῦτα ποιεῖ ἐπιδήλως διὰ τὸ ὥσπερ ζῶον κεχωρισμένον ἑκάτερον εἶναι τῶν μορίων. [τούτου δ' αἴτιον ὅτι ἔχουσιν ὑγρότητα ζωτικὴν.] ἡ μὲν οὖν καρδία φανερόν δι' ἣν αἰτίαν· τὰς γὰρ ἀρχὰς ἔχει τῶν αἰσθήσεων· τὸ δὲ μόριον τὸ γεννητικὸν ὅτι τοιοῦτόν ἐστι, σημεῖον· καὶ γὰρ ἐξέρχεται ἐξ αὐτοῦ ὥσπερ ζῶόν τι ἢ τοῦ σπέρματος δύναμις. αἱ δὲ κινήσεις τῇ τε ἀρχῇ ἀπὸ τῶν μορίων καὶ τοῖς μορίοις ἀπὸ τῆς ἀρχῆς εὐλόγως συμβαίνουσι, καὶ πρὸς ἀλλήλας οὕτως ἀφικνοῦνται. δεῖ γὰρ νοῆσαι τὸ Α ἀρχήν. αἱ οὖν κινήσεις καθ' ἑκαστον στοιχεῖον τῶν ἐπιγεγραμμένων ἐπὶ τὴν ἀρχὴν ἀφικνοῦνται, καὶ ἀπὸ τῆς ἀρχῆς κινουμένης καὶ μεταβαλλούσης, ἐπειδὴ πολλὰ δυνάμει ἐστίν, ἡ μὲν τοῦ Β ἀρχὴ ἐπὶ τὸ Β, ἡ δὲ τοῦ Γ ἐπὶ τὸ Γ, ἡ δ' ἀμφοῖν ἐπ' ἄμφω. ἀπὸ δὲ τοῦ Β

ἐπὶ τὸ Γ τῷ ἀπὸ μὲν τοῦ Β ἐπὶ τὸ Α ἐλθεῖν ὡς ἐπ' ἀρχήν, ἀπὸ δὲ τοῦ Α ἐπὶ τὸ Γ ὡς ἀπ' ἀρχῆς. ὅτι δὲ ὅτε μὲν ταῦτὰ νοησάντων γίνεται ἡ κίνησις ἢ παρὰ τὸν λόγον ἐν τοῖς μορίοις, ὅτε δ' οὐ, αἴτιον τὸ ὅτε (704a.) μὲν ἐνυπάρχειν τὴν παθητικὴν ὕλην ὅτε δὲ μὴ τοσαύτην ἢ τοιαύτην ἀφικνοῦνται. δεῖ γὰρ νοῆσαι τὸ Α ἀρχήν. αἱ οὖν κινήσεις καθ' ἕκαστον στοιχεῖον τῶν ἐπιγεγραμμένων ἐπὶ τὴν ἀρχὴν ἀφικνοῦνται, καὶ ἀπὸ τῆς ἀρχῆς κινουμένης καὶ μεταβαλλούσης, ἐπειδὴ πολλὰ δυνάμει ἐστίν, ἡ μὲν τοῦ Β ἀρχὴ ἐπὶ τὸ Β, ἡ δὲ τοῦ Γ ἐπὶ τὸ Γ, ἡ δ' ἀμφοῖν ἐπ' ἄμφω. ἀπὸ δὲ τοῦ Β ἐπὶ τὸ Γ τῷ ἀπὸ μὲν τοῦ Β ἐπὶ τὸ Α ἐλθεῖν ὡς ἐπ' ἀρχήν, ἀπὸ δὲ τοῦ Α ἐπὶ τὸ Γ ὡς ἀπ' ἀρχῆς. ὅτι δὲ ὅτε μὲν ταῦτὰ νοησάντων γίνεται ἡ κίνησις ἢ παρὰ τὸν λόγον ἐν τοῖς μορίοις, ὅτε δ' οὐ, αἴτιον τὸ ὅτε (704a.) μὲν ἐνυπάρχειν τὴν παθητικὴν ὕλην ὅτε δὲ μὴ τοσαύτην ἢ τοιαύτην.

Περὶ μὲν οὖν τῶν μορίων ἐκάστου τῶν ζώων, καὶ περὶ (704b.) ψυχῆς, ἔτι δὲ περὶ αἰσθήσεως καὶ ὕπνου καὶ μνήμης καὶ τῆς κοινῆς κινήσεως, εἰρήκαμεν τὰς αἰτίας· λοιπὸν δὲ περὶ γενέσεως εἶπεῖν.

## Περὶ πορείας ζώων (704a) Progression of Animals



### CONTENTS

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

## **Κεφάλαιο 1**

(704a.) Περὶ δὲ τῶν χρησίμων μορίων τοῖς ζώοις πρὸς τὴν κίνησιν τὴν κατὰ τόπον ἐπισκεπτέον διὰ τίνα αἰτίαν τοιοῦτόν ἐστιν ἕκαστον αὐτῶν καὶ τίνος ἔνεκεν ὑπάρχει αὐτοῖς, ἔτι δὲ περὶ τῶν διαφορῶν τῶν τε πρὸς ἄλληλα τοῖς τοῦ αὐτοῦ καὶ ἐνὸς ζώου μορίοις καὶ πρὸς τὰ τῶν ἄλλων τῶν τῷ γένει διαφόρων. πρῶτον δὲ λάβωμεν περὶ ὧν ἐπισκεπτέον. ἔστι δὲ αὐτῶν ἐν μὲν πόσοις ἐλαχίστοις τὰ ζῶα κινεῖται σημείοις, ἔπειτα διὰ τί τὰ μὲν ἔναιμα τέτταρσι τὰ δ' ἄναιμα πλείοσι, καὶ καθόλου δὲ διὰ τίν' αἰτίαν τὰ μὲν ἄποδα τὰ δὲ δίποδα τὰ δὲ τετράποδα τὰ δὲ πολύποδα τῶν ζώων ἐστί, καὶ διὰ τί πάντα ἄρτίους ἔχει τοὺς πόδας, ὅσαπερ ἔχει πόδας αὐτῶν, ὅλως δ' οἷς κινεῖται σημείοις, ἄρτια ταῦτ' ἐστίν· ἔτι δὲ διὰ τίν' αἰτίαν ἄνθρωπος μὲν καὶ ὄρνις δίπους, οἱ δ' ἰχθύες ἄποδες εἰσιν· καὶ τὰς κάμπεις ὃ τε ἄνθρωπος καὶ ὁ ὄρνις δίποδες ὄντες ἐναντίας ἔχουσι τῶν σκελῶν (ὁ μὲν γὰρ ἄνθρωπος ἐπὶ τὴν περιφέρειαν κάμπει τὸ σκέλος, ὁ δ' ὄρνις ἐπὶ τὸ κοῖλον. καὶ ὁ ἄνθρωπος αὐτὸς ἑαυτῷ ἐναντίως τὰ σκέλη καὶ τοὺς βραχίονας· τοὺς μὲν γὰρ ἐπὶ τὸ



κοῖλον, τὰ δὲ γόνατα ἐπὶ τὴν περιφέρειαν κάμπτει. καὶ τὰ τετράποδα τὰ ζωοτόκα τοῖς τ' ἀνθρώποις ἐναντίως κάμπτει καὶ αὐτὰ αὐτοῖς· τὰ μὲν γὰρ πρόσθια σκέλη ἐπὶ τὸ (704b.) κυρτὸν τῆς περιφερείας κάμπτει, τὰ δ' ὀπίσθια ἐπὶ τὸ κοῖλον. ἔτι δὲ τῶν τετραπόδων ὅσα μὴ ζωοτοκεῖ ἀλλ' ὠοτοκεῖ, ἰδίως καὶ εἰς τὸ πλάγιον κάμπτει) πρὸς δὲ τούτοις διὰ τίν' αἰτίαν τὰ τετράποδα κινεῖται κατὰ διάμετρον· περὶ δὲ πάντων τούτων, καὶ ὅσα ἄλλα συγγενῇ τούτοις, τὰς αἰτίας θεωρητέον. ὅτι μὲν οὖν οὕτω ταῦτα συμβαίνει, δῆλον ἐκ τῆς ἱστορίας τῆς φυσικῆς, διότι δέ, νῦν σκεπτέον.

## Κεφάλαιο 2

Ἀρχὴ δὲ τῆς σκέψεως ὑποθεμένοις οἷς εἰώθαμεν χρῆσθαι πολλάκις πρὸς τὴν μέθοδον τὴν φυσικὴν, λαβόντες τὰ τοῦτον ἔχοντα τὸν τρόπον ἐν πᾶσι τοῖς τῆς φύσεως ἔργοις, τούτων δ' ἐν μὲν ἐστὶν ὅτι ἡ φύσις οὐθὲν ποιεῖ μάτην, ἀλλ' ἀεὶ ἐκ τῶν ἐνδεχομένων τῇ οὐσίᾳ περὶ ἕκαστον γένος ζώου τὸ ἄριστον· διόπερ εἰ βέλτιον ὦδί, οὕτως καὶ ἔχει κατὰ φύσιν. ἔτι τὰς διαστάσεις τοῦ μεγέθους, πόσαι καὶ ποῖαι ποίοις ὑπάρχουσι, δεῖ λαβεῖν. εἰσὶ γὰρ διαστάσεις μὲν ἕξ, συζυγίαι δὲ τρεῖς, μία μὲν τὸ ἄνω καὶ τὸ κάτω, δευτέρα δὲ τὸ ἔμπροσθεν καὶ τὸ ὀπίσθεν, τρίτη δὲ τὸ δεξιὸν καὶ τὸ ἀριστερόν. πρὸς δὲ τούτοις ὅτι τῶν κινήσεων τῶν κατὰ τόπον ἀρχαὶ ὥσις καὶ ἔλξις. καθ' αὐτάς μὲν οὖν αὗται, κατὰ συμβεβηκὸς δὲ κινεῖται τὸ φερόμενον ὑπ' ἄλλου· οὐ (705a.) γὰρ αὐτὸ δοκεῖ κινεῖν αὐτό, ἀλλ' ὑπ' ἄλλου κινεῖσθαι τὸ ὑπό τινος φερόμενον.

## Κεφάλαιο 3

Τούτων δὲ διωρισμένων λέγωμεν τὰ τούτων ἐφεξῆς. τῶν δὲ ζώων ὅσα μεταβάλλει κατὰ τόπον, τὰ μὲν ἀθρώω παντὶ τῷ σώματι μεταβάλλει, καθάπερ τὰ ἀλλόμενα, τὰ δὲ μορίοις, καθάπερ τῶν πορευομένων ἕκαστον. ἐν ἀμφοτέραις δὲ ταῖς μεταβολαῖς ταύταις ἀεὶ μεταβάλλει τὸ κινούμενον ἀποστηριζόμενον πρὸς τὸ ὑποκείμενον αὐτῷ. διόπερ ἐάν τε ὑποφέρηται τοῦτο θᾶπτον ἢ ὥστ' ἔχειν ἀπερείσασθαι τὸ ποιούμενον ἐπ' αὐτοῦ τὴν κίνησιν, ἐάν θ' ὅλως μηδεμίαν ἔχη τοῖς κινουμένοις ἀντέρευσιν, οὐθὲν ἐπ' αὐτοῦ δύναται κινεῖν ἑαυτό. καὶ γὰρ τὸ ἀλλόμενον καὶ πρὸς αὐτὸ ἀπερειδόμενον τὸ ἄνω καὶ πρὸς τὸ ὑπὸ τοὺς πόδας ποιεῖται τὴν ἄλσιν· ἔχει γὰρ τινα ἀντέρευσιν πρὸς ἄλληλα τὰ μόρια ἐν ταῖς καμπαῖς, καὶ ὅλως τὸ πιέζον πρὸς τὸ πιεζόμενον. διὸ καὶ οἱ πένταθλοι ἄλλονται πλέον ἔχοντες τοὺς ἀλτῆρας ἢ μὴ ἔχοντες, καὶ οἱ θέοντες θᾶπτον θεοῦσι παρασεύοντες τὰς χεῖρας· γίνεται γὰρ τις ἀπέρευσιν ἐν τῇ διατάσει πρὸς τὰς χεῖρας καὶ τοὺς καρπούς. ἀεὶ δὲ τὸ κινούμενον δυσὶν

ἐλαχίστοις χρώμενον ὀργανικοῖς μέρεσι ποιεῖται τὴν μεταβολήν, τῷ μὲν ὥσπερανεὶ θλίβοντι, τῷ δὲ θλιβομένῳ. τὸ μὲν γὰρ μένον θλίβεται διὰ τὸ φέρειν, τὸ δ' αἰρόμενον τείνεται τῷ φέροντι τὸ φορτίον. διόπερ ἄμερὲς οὐδὲν οὕτω κινηθῆναι δυνατόν· οὐ γὰρ ἔχει τὴν τε τοῦ πεισομένου καὶ τὴν τοῦ ποιήσοντος ἐν αὐτῷ διάληψιν.

## Κεφάλαιο 4

Ἐπεὶ δ' εἰσὶν αἱ διαστάσεις τὸν ἀριθμὸν ἕξ, αἷς ὀρίζεσθαι πέφυκε τὰ ζῶα, τό τε ἄνω καὶ κάτω καὶ τὸ ἔμπροσθεν καὶ τὸ ὀπίσθεν, ἔτι δὲ τὸ δεξιὸν καὶ τὸ ἀριστερόν, τὸ μὲν ἄνω καὶ κάτω μόριον πάντ' ἔχει τὰ ζῶντα. οὐ μόνον γὰρ ἐν τοῖς ζώοις ἐστὶ τὸ ἄνω καὶ κάτω, ἀλλὰ καὶ ἐν τοῖς φυτοῖς. διείληπται δ' ἔργῳ, καὶ οὐ θέσει μόνον τῇ πρὸς τε τὴν γῆν καὶ τὸν οὐρανόν. ὅθεν μὲν γὰρ ἡ τῆς τροφῆς διάδοσις καὶ ἡ αὕξησις ἐκάστοις, ἄνω τοῦτ' ἐστὶ· πρὸς δ' (705b.) ἔσχατον αὕτη περαίνει, τοῦτο κάτω. τὸ μὲν γὰρ ἀρχὴ τις, τὸ δὲ πέρας· ἀρχὴ δὲ τὸ ἄνω. καίτοι δόξειέ γ' ἂν τοῖς φυτοῖς οἰκεῖον εἶναι τὸ κάτω μᾶλλον· οὐχ ὁμοίως γὰρ ἔχει τῇ θέσει τὸ ἄνω καὶ κάτω τούτοις καὶ τοῖς ζώοις. ἔχει δὲ πρὸς μὲν τὸ ὅλον οὐχ ὁμοίως, κατὰ δὲ τὸ ἔργον ὁμοίως. αἱ γὰρ ῥίζαι εἰσὶ τὸ ἄνω τοῖς φυτοῖς· ἐκεῖθεν γὰρ ἡ τροφή διαδίδεται τοῖς φυομένοις, καὶ λαμβάνει ταύταις αὐτήν, καθάπερ τὰ ζῶα τοῖς στόμασιν. ὅσα δὲ μὴ μόνον ζῆ ἀλλὰ καὶ ζῶά ἐστι, τοῖς τοιούτοις ὑπάρχει τό τε ἔμπροσθεν καὶ τὸ ὀπίσθεν. αἰσθησιν γὰρ ἔχει ταῦτα πάντα, ὀρίζεται δὲ κατὰ ταύτην τό τε ὀπίσθεν καὶ τὸ ἔμπροσθεν· ἐφ' ὃ μὲν γὰρ ἡ αἰσθησις πέφυκε καὶ ὅθεν ἐστὶν ἐκάστοις, ἔμπροσθεν ταῦτ' ἐστὶ, τὰ δ' ἀντικείμενα τούτοις ὀπίσθεν. ὅσα δὲ τῶν ζώων μὴ μόνον αἰσθήσεως κοινωνεῖ, ἀλλὰ δύναται ποιεῖσθαι τὴν κατὰ τόπον μεταβολὴν αὐτὰ δι' αὐτῶν, ἐν τούτοις δὴ διώρισται πρὸς τοῖς λεχθεῖσι τό τ' ἀριστερόν καὶ τὸ δεξιὸν ὁμοίως τοῖς πρότερον εἰρημένοις, ἔργῳ τινὶ καὶ οὐ θέσει διωρισμένον ἐκάτερον αὐτῶν· ὅθεν μὲν γὰρ ἐστὶ τοῦ σώματος ἡ τῆς κατὰ τόπον μεταβολῆς ἀρχὴ φύσει, τοῦτο μὲν δεξιὸν ἐκάστων, τὸ δ' ἀντικείμενον καὶ τούτῳ πεφυκὸς ἀκολουθεῖν ἀριστερόν. τοῦτο δὲ διήρθρωται μᾶλλον ἑτέροις ἑτέρων. ὅσα μὲν γὰρ ὀργανικοῖς μέρεσι χρώμενα (λέγω δ' οἶον ποσὶν ἢ πτέρυξιν ἢ τινι ἄλλῳ τοιούτῳ) τὴν εἰρημένην μεταβολὴν ποιεῖται, περὶ μὲν τὰ τοιαῦτα μᾶλλον διήρθρωται τὸ λεχθέν· ὅσα δὲ μὴ τοιούτοις μορίοις, αὐτῷ δὲ τῷ σώματι διαλήψεις ποιούμενα προέρχεται, καθάπερ ἔνια τῶν ἀπόδων, οἶον οἱ τε ὄφεις καὶ τὸ τῶν καμπῶν γένος, καὶ πρὸς τούτοις ἃ καλοῦσι ἔντερα γῆς, ὑπάρχει μὲν καὶ ἐν τούτοις τὸ λεχθέν, οὐ μὴν διασεσάφηταί γ' ὁμοίως. ὅτι δ' ἐκ τῶν δεξιῶν ἡ ἀρχὴ τῆς κινήσεως ἐστὶ, σημεῖον καὶ τὸ φέρειν τὰ φορτία πάντας ἐπὶ τοῖς ἀριστεροῖς· οὕτως γὰρ ἐνδέχεται κινεῖσθαι τὸ φέρον, λελυμένου τοῦ κινήσοντος.

διὸ καὶ ἀσκωλιάζουσι ῥᾶον ἐπὶ τοῖς ἀριστεροῖς· κινεῖν γὰρ (706a.) πέφυκε τὸ δεξιόν, κινεῖσθαι δὲ τὸ ἀριστερόν· ὥστε καὶ τὸ φορτίον οὐκ ἐπὶ τῷ κινήσονται ἄλλ' ἐπὶ τῷ κινησομένῳ δεῖ ἐπικεῖσθαι· ἔαν δ' ἐπὶ τῷ κινοῦντι καὶ τῇ ἀρχῇ τῆς κινήσεως ἐπιτεθῇ, ἦτοι ὅλως οὐ κινήσεται ἢ χαλεπώτερον. σημεῖον δ' ὅτι ἀπὸ τῶν δεξιῶν ἡ ἀρχὴ τῆς κινήσεως καὶ αἱ προβολαί· πάντες γὰρ τὰ ἀριστερὰ προβάλλονται, καὶ ἐστῶτες προβεβλήκασι τὰ ἀριστερὰ μᾶλλον, ἂν μὴ ἀπὸ τύχης συμβῇ. οὐ γὰρ τῷ προβεβηκότι κινοῦνται, ἀλλὰ τῷ ἀποβεβηκότι· καὶ ἀμύνονται τοῖς δεξιοῖς. διὰ ταύτην δὲ τὴν αἰτίαν καὶ τὰ δεξιὰ ταῦτά ἐστι πάντων. ὅθεν μὲν γὰρ ἡ ἀρχὴ τῆς κινήσεως, τὸ αὐτὸ πᾶσι καὶ ἐν τῷ αὐτῷ τὴν θέσιν ἔχει κατὰ φύσιν· δεξιὸν δ' ἐστὶν ὅθεν ἡ ἀρχὴ τῆς κινήσεως ἐστι. καὶ διὰ τοῦτο τὰ στρομβώδη τῶν ὀστρακοδέρμων δεξιὰ πάντ' ἐστίν. οὐ γὰρ ἐπὶ τὴν ἐλίκην κινεῖται, ἀλλ' ἐπὶ τὸ καταντικρὺ πάντα προέρχονται, οἷον πορφύραι καὶ κήρυκες. κινουμένων οὖν πάντων ἀπὸ τῶν δεξιῶν, κάκείνων ἐπὶ ταῦτά κινουμένων ἑαυτοῖς, ἀνάγκη πάντα δεξιὰ εἶναι ὁμοίως. ἀπολελυμένα δ' ἔχουσι τὰ ἀριστερὰ τῶν ζώων μάλιστα ἄνθρωποι διὰ τὸ κατὰ φύσιν ἔχειν μάλιστα τῶν ζώων· φύσει δὲ βέλτιον τὸ δεξιὸν τοῦ ἀριστεροῦ κεχωρισμένον. διὸ καὶ τὰ δεξιὰ ἐν τοῖς ἀνθρώποις μάλιστα δεξιὰ ἐστὶ. διωρισμένων δὲ τῶν δεξιῶν εὐλόγως τὰ ἀριστερὰ ἀκινήτοτέρα ἐστὶ, καὶ ἀπολελυμένα μάλιστα ἐν τούτοις. καὶ αἱ ἄλλαι δ' ἀρχαὶ μάλιστα κατὰ φύσιν καὶ διωρισμέναι ἐν τῷ ἀνθρώπῳ ὑπάρχουσι, τό τ' ἄνω καὶ τὸ ἔμπροσθεν.

## Κεφάλαιο 5

ὅσοις μὲν οὖν τὸ ἄνω καὶ τὸ ἔμπροσθεν διώριται, καθάπερ τοῖς ἀνθρώποις καὶ τοῖς ὄρνισι, ταῦτα μὲν δίποδα. (τῶν δὲ τεττάρων τὰ δύο σημεῖα τοῖς μὲν πτέρυγες τοῖς δὲ χεῖρες καὶ βραχίονές εἰσιν), ὅσα δ' ἐπὶ τὸ αὐτὸ τὸ πρόσθεν ἔχει καὶ τὸ ἄνω, τετράποδα καὶ πολύποδα καὶ ἄποδα. καλῶ γὰρ πόδα μέρος ἐπὶ σημείῳ πεζῶ κινητικῶ κατὰ τόπον· καὶ γὰρ τὸ ὄνομα εἰκόασιν εἰληφέναι ἀπὸ τοῦ πέδου οἱ πόδες. ἔνια δ' ἐπὶ τὸ αὐτὸ ἔχει τὸ πρόσθιον καὶ (706b.) τὸ ὀπίσθιον, οἷον τὰ τε μαλάκια καὶ τὰ στρομβώδη τῶν ὀστρακοδέρμων· εἴρηται δὲ περὶ αὐτῶν πρότερον ἐν ἑτέροις.

τριῶν δ' ὄντων τόπων, τοῦ ἄνω καὶ μέσου καὶ κάτω, τὰ μὲν δίποδα τὸ ἄνω πρὸς τὸ τοῦ ὅλου ἄνω ἔχει, τὰ δὲ πολύποδα ἢ ἄποδα πρὸς τὸ μέσον, τὰ δὲ φυτὰ πρὸς τὸ κάτω. αἴτιον δ' ὅτι τὰ μὲν ἀκίνητα, πρὸς τὴν τροφήν δὲ τὸ ἄνω, ἡ δὲ τροφή ἐκ τῆς γῆς. τὰ δὲ τετράποδα ἐπὶ τὸ μέσον καὶ τὰ πολύποδα καὶ ἄποδα διὰ τὸ μὴ ὀρθὰ εἶναι· τὰ δὲ δίποδα πρὸς τὸ ἄνω διὰ τὸ ὀρθὰ εἶναι, μάλιστα δ' ὁ ἄνθρωπος· μάλιστα γὰρ κατὰ φύσιν ἐστὶ δίπους. εὐλόγως δὲ καὶ αἱ ἀρχαὶ εἰσιν ἀπὸ τούτων τῶν μορίων· ἡ μὲν γὰρ ἀρχὴ τίμιον, τὸ δ'

ἄνω τοῦ κάτω καὶ τὸ πρόσθεν τοῦ ὀπίσθεν καὶ τὸ δεξιὸν τοῦ ἀριστεροῦ τιμιώτερον. καλῶς δ' ἔχει καὶ τὸ ἀνάπαλιν λέγειν περὶ αὐτῶν, ὡς διὰ τὸ τὰς ἀρχὰς ἐν τούτοις εἶναι ταῦτα τιμιώτερα τῶν ἀντικειμένων μορίων ἐστίν.

## Κεφάλαιο 6

Ὅτι μὲν οὖν ἐκ τῶν δεξιῶν ἢ τῆς κινήσεως ἐστὶν ἀρχή, φανερόν ἐκ τῶν εἰρημένων. ἐπεὶ δ' ἀνάγκη παντὸς συνεχοῦς, οὗ τὸ μὲν κινεῖται τὸ δ' ἡρεμεῖ, ὅλου δυναμένου κινεῖσθαι ἐστῶτος θατέρου, ἢ ἄμφω κινεῖται τὰς ἐναντίας κινήσεις, εἶναι τὸ κοινόν, καθ' ὃ συνεχῇ ταῦτ' ἐστὶν ἀλλήλοις, κἀνταῦθ' ὑπάρχειν τὴν ἀρχὴν τῆς ἐκατέρου τῶν μερῶν κινήσεως, ὁμοίως δὲ καὶ τῆς στάσεως δηλονότι, καθ' ὅσας τῶν λεχθεισῶν ἀντιθέσεων ἰδία κίνησις ὑπάρχει τῶν ἀντικειμένων μερῶν ἐκατέρω, πάντα ταῦτα κοινὴν ἀρχὴν ἔχει κατὰ τὴν τῶν εἰρημένων μερῶν σύμφυσιν, λέγω δὲ τῶν τε δεξιῶν καὶ τῶν ἀριστερῶν καὶ τῶν ἄνω καὶ κάτω καὶ τῶν ἔμπροσθεν καὶ τῶν ὀπίσθεν. κατὰ μὲν οὖν τὸ ἔμπροσθεν καὶ τὸ ὀπίσθεν διάληψις οὐκ ἔστι τοιαύτη περὶ τὸ κινεῖν ἑαυτό, διὰ τὸ μηθενὶ φυσικὴν ὑπάρχειν κίνησιν εἰς τὸ ὀπίσθεν, μηδὲ διορισμὸν ἔχειν τὸ κινούμενον, καθ' ὃν τὴν ἐφ' ἐκάτερα τούτων μεταβολὴν ποιεῖται· κατὰ δὲ τὸ δεξιὸν γε καὶ ἀριστερόν καὶ τὸ ἄνω καὶ τὸ κάτω ἔστι. διὸ τῶν ζώων ὅσα μέρεσιν (707a.) ὀργανικοῖς χρώμενα προέρχεται, τῇ μὲν τοῦ ἔμπροσθεν καὶ ὀπίσθεν διαφορᾷ οὐκ ἔχει διωρισμένα ταῦτα, ταῖς δὲ λοιπαῖς, ἀμφοτέραις μὲν, προτέρᾳ δὲ τῇ κατὰ τὸ δεξιὸν καὶ ἀριστερόν διοριζούσῃ, διὰ τὸ τὴν μὲν ἐν τοῖς δυσὶν εὐθέως ἀναγκαῖον εἶναι ὑπάρχειν, τὴν δ' ἐν τοῖς τέτταρσι πρώτοις.

ἐπεὶ οὖν τό τε ἄνω καὶ τὸ κάτω καὶ τὸ δεξιὸν καὶ ἀριστερόν τῇ αὐτῇ ἀρχῇ καὶ κοινῇ συνήρτηται πρὸς αὐτά (λέγω δὲ ταύτην τὴν τῆς κινήσεως κυρίαν), δεῖ δ' ἐν ἅπαντι τῷ μέλλοντι κατὰ τρόπον ποιεῖσθαι τὴν ἐφ' ἐκάστου κίνησιν ὠρίσθαι πῶς καὶ τετάχθαι ταῖς ἀποστάσεσι ταῖς πρὸς τὰς ῥηθείσας ἀρχὰς (τάς τε ἀντιστοιχοὺς καὶ τὰς συστοίχους τῶν ἐν τοῖς μέρεσι τούτοις) τὸ τῶν λεχθεισῶν κινήσεων ἀπασῶν αἴτιον, (αὕτη δ' ἐστὶν ἐφ' ἧς ἀρχῆς κοινῆς τῶν ἐν τῷ ζῷ ἢ τε τοῦ δεξιοῦ καὶ ἀριστεροῦ κινήσις ἐστὶν, ὁμοίως δὲ καὶ ἢ τοῦ ἄνω καὶ κάτω) ταύτην δ' ἔχειν ἐκάστῳ ἢ παραπλησίως πρὸς ἐκάστην τῶν ἐν τοῖς ῥηθεῖσι μέρεσιν ἀρχῶν, δῆλον οὖν ὡς ἢ μόνοις ἢ μάλιστα τούτοις ὑπάρχει τῶν ζώων ἢ κατὰ τόπον κίνησις, ἃ δυσὶν ἢ τέτταρσι ποιεῖται σημείους τὴν κατὰ τόπον μεταβολήν.

## Κεφάλαιο 7

ὥστ' ἐπεὶ σχεδὸν τοῖς ἐναίμοις τοῦτο μάλιστα συμβέβηκε, φανερόν ὅτι

πλείοσί τε σημείοις τεττάρων οὐθὲν οἶόν τε κινεῖσθαι τῶν ἐναίμων ζώων, καὶ εἴ τι τέτταρσι σημείοις κινεῖσθαι πέφυκε μόνον, ἀναγκαῖον τοῦτ' εἶναι ἔναιμον. ὁμολογεῖ δὲ τοῖς λεχθεῖσι καὶ τὰ συμβαίνοντα περὶ τὰ ζῶα. τῶν μὲν γὰρ ἐναίμων οὐδὲν εἰς πλείω διαιρούμενον δύναται ζῆν οὐθένα χρόνον ὥς εἰπεῖν, τῆς τε κατὰ τόπον κινήσεως, καθ' ἣν ἐκινεῖτο συνεχὲς ὄν καὶ μὴ διηρημένον, οὐ δύναται κοινωνεῖν· τῶν δ' ἀναίμων τε καὶ πολυπόδων ἔνια διαιρούμενα δύναται ζῆν πολλὸν χρόνον ἑκάστω τῶν μερῶν, καὶ κινεῖσθαι τὴν αὐτὴν ἥνπερ καὶ πρὶν διαιρεθῆναι κίνησιν, οἶον αἶ τε καλούμεναι σκολόπενδραι καὶ ἄλλα τῶν ἐντόμων καὶ προμήκων· πάντων γὰρ τούτων καὶ (707b.) τὸ ὅπισθεν μέρος ἐπὶ τὸ αὐτὸ ποιεῖται τὴν πορείαν τῷ ἔμπροσθεν. αἴτιον δὲ τοῦ διαιρούμενα ζῆν ὅτι, καθάπερ ἂν εἴ τι συνεχὲς ἐκ πολλῶν εἴη ζώων συγκείμενον, οὕτως ἕκαστον αὐτῶν συνέστηκε. φανερόν δὲ τοῦτο ἐκ τῶν πρότερον εἰρημένων, διότι τοῦτον ἔχει τὸν τρόπον. δυσὶ γὰρ ἡ τέτταρσι κινεῖσθαι πέφυκε σημείοις τὰ μάλιστα συνεστηκότα κατὰ φύσιν, ὁμοίως δὲ καὶ τῶν ἐναίμων ὅσα ἄποδά ἐστι. καὶ γὰρ ταῦτα κινεῖται τέτταρσι σημείοις, δι' ὧν τὴν κίνησιν ποιεῖται. δυσὶ γὰρ χρώμενα προέρχεται καμπαῖς· τὸ γὰρ δεξιὸν καὶ ἀριστερόν τὸ πρόσθιον καὶ ὀπίσθιον ἐν τῷ πλάτει ἐστὶν ἐν ἑκατέρᾳ τῇ καμπῇ αὐτοῖς, ἐν μὲν τῷ πρὸς τὴν κεφαλὴν μέρει τὸ πρόσθιον σημεῖον δεξιὸν τε καὶ ἀριστερόν, ἐν δὲ τῷ πρὸς τὴν οὐρὰν τὰ ὀπίσθια σημεία. δοκεῖ δὲ δυοῖν σημείοις κινεῖσθαι, τῇ τ' ἔμπροσθεν ἀφῆ καὶ τῇ ὕστερον.

αἴτιον δ' ὅτι στενὸν κατὰ πλάτος ἐστίν, ἐπεὶ καὶ ἐν τούτοις τὸ δεξιὸν ἡγεῖται, καὶ ἀνταποδίδωσι κατὰ τὸ ὅπισθεν, ὥσπερ ἐν τοῖς τετράποσι. τῶν δὲ κάμπσεων αἴτιον τὸ μήκος· ὥσπερ γὰρ οἱ μακροὶ τῶν ἀνθρώπων λορδοὶ βαδίζουσι, καὶ τοῦ δεξιοῦ ὤμου εἰς τὸ πρόσθεν ἡγουμένου (τὸ γὰρ ἀριστερόν ἰσχίον εἰς | τοῦπισθεν μᾶλλον ἀποκλίνει, καὶ τὸ μέσον κοῖλον γίνεται καὶ λορδόν) οὕτω δεῖ νοεῖν καὶ τοὺς ὄφεις κινουμένους ἐπὶ τῇ γῇ λορδούς. σημεῖον δ' ὅτι ὁμοίως κινοῦνται τοῖς τετράποσιν· ἐν μέρει γὰρ μεταβάλλουσι τὸ κοῖλον καὶ τὸ κυρτόν. ὅταν γὰρ τὸ ἀριστερόν πάλιν τῶν προσθίων ἡγήσῃται, ἐξ ἐναντίας πάλιν τὸ κοῖλον γίνεται· τὸ γὰρ δεξιὸν ἐντὸς πάλιν γίνεται.

σημεῖον δεξιὸν πρόσθιον ἐφ' οὗ A, ἀριστερόν ἐφ' οὗ B, ὀπίσθιον ἀριστερόν ἐφ' οὗ Γ, δεξιὸν ἐφ' οὗ Δ. οὕτω δὲ κινοῦνται τῶν μὲν χερσαίων οἱ ὄφεις, τῶν δ' ἐνύδρων αἱ ἐγγέλεις καὶ οἱ γόγγροι καὶ αἱ μύραιναι, καὶ τῶν ἄλλων ὅσα ἔχει τὴν μορφήν ὀφιοδεστέραν. πλὴν ἔνια μὲν τῶν ἐνύδρων τῶν τοιούτων οὐδὲν ἔχει περύγιον, οἶον αἱ μύραιναι, ἀλλὰ χρήται τῇ (708a.) θαλάττῃ ὥσπερ οἱ ὄφεις τῇ γῇ καὶ τῇ θαλάττῃ (νέουσι γὰρ οἱ ὄφεις ὁμοίως καὶ ὅταν κινῶνται ἐπὶ τῆς γῆς)· τὰ δὲ δύο ἔχει περύγια μόνον, οἶον οἱ τε γόγγροι καὶ

αἱ ἐγγέλους καὶ γένος τι κεστρέων, οἳ γίνονται ἐν τῇ λίμνῃ τῇ ἐν Σιφαῖς. καὶ διὰ τοῦτο ταῖς καμπαῖς ἐλάττοσι κινουῦνται ἐν τῷ ὑγρῷ ἢ ἐν τῇ γῇ τὰ ζῆν εἰωθότα ἐν τῇ γῇ, καθάπερ τὸ τῶν ἐγγελύων γένος. οἱ δὲ δύο πτερύγια ἔχοντες τῶν κεστρέων τῇ καμπῇ ἀνισάζουσιν ἐν τῷ ὑγρῷ τὰ τέτταρα σημεία.

## Κεφάλαιο 8

τοῖς δ' ὄφεσιν αἴτιον τῆς ἀποδίας τό τε τὴν φύσιν μηθὲν ποιεῖν μάτην, ἀλλὰ πάντα πρὸς τὸ ἄριστον ἀποβλέπουσαν ἐκάστω <ἐκ> τῶν ἐνδεχομένων, διασώζουσιν ἐκάστου τὴν ἰδίαν | οὐσίαν καὶ τὸ τί ἦν αὐτῷ εἶναι· ἔτι δὲ καὶ τὸ πρότερον ἡμῖν εἰρημένον, τὸ τῶν ἐναίμων μηθὲν οἶόν τ' εἶναι πλείοσι κινεῖσθαι σημείοις ἢ τέτταρσιν. ἐκ τούτων γὰρ φανερόν ὅτι τῶν ἐναίμων ὅσα κατὰ τὸ μῆκος ἀσύμμετρά ἐστι πρὸς τὴν ἄλλην τοῦ σώματος φύσιν, καθάπερ οἱ ὄφεις, οὐθὲν αὐτῶν οἶόν θ' ὑπόπουν εἶναι. πλείους μὲν γὰρ τεττάρων οὐχ οἶόν τε αὐτὰ πόδας ἔχειν (ἄναιμα γὰρ ἂν ἦν), ἔχοντα δὲ δύο πόδας ἢ τέτταρας σχεδὸν ἦν ἂν ἀκίνητα πάμπαν· οὕτω βραδεῖαν ἀναγκαῖον εἶναι καὶ ἀνωφελεῖ τὴν κίνησιν.

Ἄπαν δὲ τὸ ὑπόπουν ἐξ ἀνάγκης ἀρτίους ἔχει τοὺς πόδας· ὅσα μὲν γὰρ ἄλσει χρώμενα μόνον ποιεῖται τὴν κατὰ τόπον μεταβολήν, οὐθὲν ποδῶν πρὸς γε τὴν τοιαύτην δεῖται κίνησιν· ὅσα δὲ χρῆται μὲν ἄλσει, μή ἐστι δ' αὐτοῖς αὐτάρκης αὕτη ἢ κινήσις ἀλλὰ καὶ πορείας προσδέονται, δῆλον ὡς τοῖς μὲν βέλτιον τοῖς δ' ὅλως ἀδύνατον πορεύεσθαι. [διότι πᾶν ζῶον ἀναγκαῖον ἀρτίους ἔχει τοὺς πόδας.] οὗσης γὰρ τῆς τοιαύτης μεταβολῆς κατὰ μέρος, ἀλλ' οὐκ ἀθρόω παντὶ τῷ σώματι καθάπερ τῆς ἄλσεως, ἀναγκαῖόν ἐστι τοῖς μὲν μένειν μεταβαλλόντων τῶν ποδῶν τοῖς δὲ κινεῖσθαι, καὶ τοῖς ἀντικειμένοις τούτων ποιεῖν ἐκάτερον, μεταβάλλον ἀπὸ τῶν κινουμένων ἐπὶ τὰ μένοντα τὸ βάρος. διόπερ οὕτε τρισὶ (708b.) μὲν οὐθὲν οὐθ' ἐνὶ χρώμενον βαδίζειν οἶόν τε· τὸ μὲν γὰρ οὐθὲν ὅλως ὑπόστημα ἔχει ἐφ' ᾧ τὸ τοῦ σώματος ἔξει βάρος, τὸ δὲ κατὰ τὴν ἐτέραν ἀντίθεσιν μόνην, ὥστ' ἀναγκαῖον αὐτὸ οὕτως ἐπιχειροῦν κινεῖσθαι πίπτειν. ὅσα δὲ πολὺποδά ἐστιν, οἶον αἱ σκολόπενδραι, τούτοις δυνατὸν μὲν καὶ ἀπὸ περιττῶν ποδῶν πορείαν γίνεσθαι, καθάπερ φαίνεται ποιούμενα καὶ νῦν, ἂν τις αὐτῶν ἓνα πηρώσῃ τῶν ποδῶν, διὰ τὸ τὴν τῶν ἀντιστοιχῶν ποδῶν κολόβωσιν ἰᾶσθαι τῷ λοιπῷ πλήθει τῶν ἐφ' ἐκάτερα ποδῶν· γίνεται γὰρ τούτοις οἶον ἔφελξις τοῦ πεπηρωμένου μορίου τοῖς ἄλλοις [ἀλλ' οὐ βάδισις].

οὐ μὲν ἀλλὰ φανερόν γε ὅτι βέλτιον ἂν καὶ ταῦτα ποιοῖτο τὴν μεταβολὴν ἀρτίους ἔχοντα τοὺς πόδας, καὶ μηθενὸς ἐλλείποντος, ἀλλ' ἀντιστοιχοῦς

ἔχοντα τοὺς πόδας· οὕτω γὰρ <ἄν> αὐτῶν ἀνισάζειν τε δύναιτο τὸ βάρος καὶ μὴ ταλαντεύειν ἐπὶ θάτερα μᾶλλον, εἰ ἀντίστοιχα ἐρείσματ' ἔχοι καὶ μὴ κενὴν τὴν ἑτέραν χώραν τῶν ἀντικειμένων. προβαίνει δ' ἄφ' ἑκατέρου τῶν μερῶν ἐναλλάξ πορευόμενον· οὕτω γὰρ εἰς ταὐτὸ τῷ ἐξ ἀρχῆς σχήματι γίνεται ἡ κατάστασις.

## Κεφάλαιο 9

Ὅτι μὲν οὖν ἀρτίους ἔχει τοὺς πόδας πάντα, καὶ διὰ τίν' αἰτίαν εἴρηται· ὅτι δ' εἰ μὴθὲν ἦν ἡρεμοῦν, οὐκ ἂν ἦν κάμψις οὐδ' εὐθυνσις, ἐκ τῶνδε δῆλον. ἔστι γὰρ κάμψις μὲν ἢ ἐξ εὐθέος ἢ εἰς περιφερὲς ἢ εἰς γωνίαν μεταβολή, εὐθυνσις δ' ἢ ἐκ θατέρου τούτων εἰς εὐθύ. ἐν ἀπάσαις δὲ ταῖς εἰρημέναις μεταβολαῖς ἀνάγκη πρὸς ἓν σημεῖον τὴν κάμψιν ἢ τὴν εὐθυνσιν γίνεσθαι. ἀλλὰ μὴν κάμψεώς γε μὴ οὔσης οὐτ' ἂν πορεία οὔτε νεῦσις οὔτε πτῆσις ἦν. τὰ μὲν γὰρ ὑπόποδα ἐπειδὴ ἐν ἑκατέρῳ τῶν ἀντικειμένων σκελῶν ἐν μέρει ἴσταται καὶ τὸ βάρος ἴσχει, ἀναγκαῖον θατέρου προβαίνοντος θατέρου ποιεῖσθαι κάμψιν. ἴσα τε γὰρ πέφυκεν ἔχειν τῷ μήκει τὰ ἀντίστοιχα κῶλα, καὶ ὀρθὸν δεῖ εἶναι τὸ ὑφεισθὲς τῷ βάρει, οἷον κάθετον πρὸς τὴν γῆν. ὅταν δὲ προβαίνει, (709a.) γίνεται ἡ ὑποτείνουσα καὶ δυναμένη τὸ μένον μέγεθος καὶ τὴν μεταξύ. ἐπεὶ δ' ἴσα τὰ κῶλα, ἀνάγκη κάμψαι τὸ μένον, ἢ ἐν τῷ γόνατι ἢ ἐν τῇ κάμψει, οἷον εἴ τι ἀγόνατον εἴη τῶν βαδιζόντων. σημεῖον δ' ὅτι οὕτως ἔχει· εἰ γάρ τις ἐν γῇ \*\*\*\* βαδίζει παρὰ τοῖχον, ἡ γραφομένη ἔσται οὐκ εὐθεῖα ἀλλὰ σκολιά, διὰ τὸ ἐλάττω μὲν κάμπτοντος γίνεσθαι τὴν γραφομένην, μείζω δ' ἴσταμένου καὶ ἐξαίροντος.

ἐνδέχεται μέντοι κινεῖσθαι καὶ μὴ ἔχοντος καμπὴν τοῦ σκέλους, ὥσπερ τὰ παιδία ἔρπουσι. καὶ περὶ τῶν ἐλεφάντων ὁ παλαιὸς ἦν λόγος τοιοῦτος, οὐκ ἀληθὴς ὢν. κινεῖται δὲ καὶ τὰ τοιαῦτα κάμψεως γινομένης ἐν ταῖς ὠμοπλάταις ἢ τοῖς ἰσχύοις. ἀλλ' ὀρθὸν οὐδὲν δύναιτ' ἂν πορευθῆναι συνεχῶς καὶ ἀσφαλῶς, κινηθεῖν δ' ἂν οἷον ἐν ταῖς παλαιίστραις οἱ διὰ τῆς κόνεως προϊόντες ἐπὶ τῶν γονάτων· πολὺ γὰρ τὸ ἄνω μέρος, ὥστε δεῖ μακρὸν εἶναι τὸ κῶλον· εἰ δὲ τοῦτο, κάμψιν ἀναγκαῖον εἶναι. ἐπεὶ γὰρ ἔστηκε πρὸς ὀρθήν, εἰ ἄκαμπτον ἔσται τὸ κινούμενον εἰς τὸ πρόσθεν, ἢ καταπεσεῖται ἐλάττωνος τῆς ὀρθῆς γινομένης, ἢ οὐ προβήσεται.

εἰ γὰρ ὀρθοῦ ὄντος θατέρου σκέλους θάτερον ἔσται προβεβηκός, μείζον ἔσται, ἴσον ὢν· δυνήσεται γὰρ τοῦτο τό τ' ἡρεμοῦν καὶ τὴν ὑποτείνουσαν. ἀνάγκη ἄρα κάμπτεσθαι τό τε προϊόν, καὶ κάμψαν ἅμα ἐκτείνειν θάτερον, ἐκκλίνειν τε καὶ διαβεβηκέναι καὶ ἐπὶ τῆς καθέτου μένειν· ἰσοσκελὲς γὰρ

γίνεται τρίγωνον τὰ κῶλα, καὶ ἡ κεφαλὴ γίνεται κατώτερον, ὅταν κάθετος ᾗ ἐφ' ἧς βέβηκε. τὰ δ' ἄποδα τὰ μὲν κυμαίνοντα προέρχεται (τοῦτο δὲ διττῶς συμβαίνει· τὰ μὲν γὰρ ἐπὶ τῆς γῆς, καθάπερ οἱ ὄφεις, τὰς καμπὰς ποιεῖται, τὰ δ' εἰς τὸ ἄνω, ὥσπερ αἱ κάμπαι), ἡ δὲ κύμανσις καμπή ἐστι· τὰ δ' ἰλυσπᾶσει χρώμενα, καθάπερ τὰ καλούμενα γῆς ἔντερα καὶ βδέλλαι. ταῦτα γὰρ τῷ μὲν ἡγουμένῳ προέρχεται, τὸ δὲ λοιπὸν σῶμα πᾶν πρὸς τοῦτο συνάγουσι, καὶ τοῦτον τὸν τρόπον εἰς τόπον ἐκ τόπου μεταβάλλουσι. φανερόν δ' ὅτι εἰ μὴ αἱ δύο τῆς μιᾶς μείζους ἦσαν, οὐκ ἂν ἐδύναντο (709b.) κινεῖσθαι τὰ κυμαίνοντα τῶν ζώων. ἐκταθείσης γὰρ τῆς καμπῆς, εἰ ἴσην κατεῖχεν, οὐθὲν ἂν προήεσαν· νῦν δ' ὑπερβάλλει ἐκταθεῖσα, καὶ ἡρεμήσαντος τούτου ἐπάγει τὸ λοιπόν. ἐν ἀπάσαις δὲ ταῖς λεχθείσαις μεταβολαῖς τὸ κινούμενον ὅτε μὲν ἐκτεινόμενον εἰς εὐθὺ προέρχεται, ὅτε δὲ συγκαμπτόμενον, τοῖς μὲν ἡγουμένοις μέρεσιν εὐθὺ γινόμενον, τοῖς δ' ἐπομένοις συγκαμπτόν. ποιεῖται δὲ καὶ τὰ ἀλλόμενα πάντα τὴν κάμπην ἐν τῷ ὑποκειμένῳ μέρει τοῦ σώματος, καὶ τοῦτον τὸν τρόπον ἔχοντα ἄλλεται. καὶ τὰ πετόμενα δὲ καὶ τὰ νέοντα, τὰ μὲν τὰς πτέρυγας εὐθύνοντα καὶ κάμπτοντα πέταται, τὰ δὲ τοῖς πτερυγίοις, καὶ τούτων τὰ μὲν τέτταρσι τὰ δὲ δυσίν, ὅσα προμηκέστερα τὴν μορφήν, ὥσπερ τὸ τῶν ἐγγελύων γένος· τὴν δὲ λοιπὴν κίνησιν ἀντὶ τῶν δύο πτερυγίων τῷ λοιπῷ τοῦ σώματος καμπτόμενα νεῖ, καθάπερ εἴρηται πρότερον. οἱ δὲ πλατεῖς τῶν ἰχθύων τῇ μὲν τῷ πλατεῖ χρῶνται τοῦ σώματος ἀντὶ πτερυγίων, τῇ δὲ πτερυγίοις δυσί. τὰ δὲ πᾶμπαν πλατέα, καθάπερ ὁ βάτος, αὐτοῖς τοῖς πτερυγίοις καὶ ταῖς ἐσχάταις τοῦ σώματος περιφερείαις εὐθύνοντα καὶ κάμπτοντα ποιεῖται τὴν νεῦσιν.

## Κεφάλαιο 10

Ἀπορήσειε δ' ἂν τις ἴσως πῶς κινοῦνται τέτταρσι σημείοις οἱ ὄρνια, ἢ πετόμενοι ἢ πορευόμενοι, ὡς εἰρημένου ὅτι πάντα τὰ ἔναιμα κινεῖται τέτταρσιν. οὐκ εἴρηται δέ, ἀλλ' ὅτι οὐ πλείοσιν. οὐ μὴν ἀλλ' οὐτ' ἂν πέτεσθαι δύναιτο ἀφαιρεθέντων τῶν κώλων οὔτε πορεύεσθαι τῶν πτερύγων ἀφαιρεθεισῶν, ἐπεὶ οὐδ' ἄνθρωπος βαδίζειν μὴ κινῶν τι τοὺς ὤμους. ἀλλὰ πάντα γε, καθάπερ εἴρηται, κάμψει καὶ ἐκτάσει ποιεῖται τὴν μεταβολήν· ἅπαντα γὰρ εἰς τὸ ὑποκείμενον μέχρι τινὸς οἴον εἰς ὑπεῖκον προέρχεται, ὥστ' ἀναγκαῖον, εἰ μὴ καὶ κατ' ἄλλο μόριον γίνεται ἢ κάμψις, ἀλλ' ὅθεν γε ἡ ἀρχὴ τοῖς μὲν ὀλοπτέροις τοῦ πτεροῦ, τοῖς δ' ὄρنيσι τῆς πτέρυγος, τοῖς δ' ἄλλοις τοῦ ἀνάλογον μορίου, καθάπερ τοῖς ἰχθύσι. τοῖς δ', ὥσπερ οἱ ὄφεις, ἐν ταῖς (710a.) καμπαῖς τοῦ σώματος ἐστὶν ἡ ἀρχὴ τῆς κάμψεως. τὸ δ' ὀρροπύγιον ἐστὶ τοῖς πτηνοῖς πρὸς τὸ κατευθύνειν τὴν πτῆσιν, καθάπερ τὰ πηδάλια τοῖς πλοίοις. ἀναγκαῖον δὲ καὶ ταῦτα ἐν τῇ προσφύσει κάμπειν. διόπερ τὰ τε



όλοπτερα καὶ τῶν σχιζοπτέρων οἷς τὸ ὀρροπύγιον ἀφυῶς ἔχει πρὸς τὴν εἰρημένην χρῆσιν, οἷον τοῖς τε ταῶς καὶ τοῖς ἀλεκτρυόσι καὶ ὅλως τοῖς μὴ πτητικοῖς, οὐκ εὐθυποροῦσι· τῶν μὲν γὰρ ὀλοπτέρων ἀπλῶς οὐθὲν ἔχει ὀρροπύγιον, ὥστε καθάπερ ἀπήδαλον πλοῖον φέρεται, καὶ ὅπου ἂν τύχη ἕκαστον αὐτῶν προσπίπτει, ὁμοίως <δὲ> τὰ τε κολεόπτερα, οἷον κάνθαροι καὶ μηλολόνθαι, καὶ τὰ ἀνέλυτρα, οἷον μέλιτται καὶ σφῆκες. καὶ τοῖς μὴ πτητικοῖς ἀχρεῖον τὸ ὀρροπύγιόν ἐστιν, οἷον τοῖς τε πορφυρίωσι καὶ ἐρωδιοῖς καὶ πᾶσι τοῖς πλωτοῖς· ἀλλ’ ἀντὶ τοῦ ὀρροπυγίου πέτανται τοὺς πόδας ἀποτείνοντα, καὶ χρῶνται ἀντ’ ὀρροπυγίου τοῖς σκέλεσι πρὸς τὸ κατευθύνειν τὴν πτήσιν. βραδεῖα δ’ ἡ πτήσις τῶν ὀλοπτέρων ἐστὶ καὶ ἀσθενὴς διὰ τὸ μὴ κατὰ λόγον ἔχειν τὴν τῶν πτερῶν φύσιν πρὸς τὸ τοῦ σώματος βάρος, ἀλλὰ τὸ μὲν πολύ, τὰ δὲ μικρὰ καὶ ἀσθενῆ. ὥσπερ ἂν οὖν εἰ ὀλκαδικὸν πλοῖον ἐπιχειροίη κώπαις ποιεῖσθαι τὸν πλοῦν, οὕτω ταῦτα τῇ πτήσει χρῆται. καὶ ἡ ἀσθένεια δὲ αὐτῶν τε τῶν πτερῶν καὶ ἡ τῆς ἐκφύσεως συμβάλλεται τι πρὸς τὸ λεχθέν. τῶν δ’ ὀρνίθων τῷ μὲν ταῷ τὸ ὀρροπύγιον ὅτε μὲν διὰ τὸ μέγεθος ἄχρηστον, ὅτε δὲ διὰ τὸ ἀποβάλλειν οὐθὲν ὠφελεῖ. ὑπεναντίως δ’ ἔχουσιν οἱ ὀρνιθες τοῖς ὀλοπτέροις τὴν τῶν πτερῶν φύσιν, μάλιστα δ’ οἱ τάχιστα αὐτῶν πετόμενοι. τοιοῦτοι δ’ οἱ γαμψώνυχες· τούτοις γὰρ ἡ ταχυτῆς τῆς πτήσεως χρήσιμος πρὸς τὸν βίον.

ἀκόλουθα δ’ αὐτῶν ἔοικεν εἶναι καὶ τὰ λοιπὰ μόρια τοῦ σώματος πρὸς τὴν ὠκεῖαν κίνησιν, κεφαλὴ μὲν ἀπάντων μικρὰ καὶ αὐχὴν οὐ παχύς, στῆθος δ’ ἰσχυρὸν καὶ ὀξύ, ὅξυ μὲν πρὸς τὸ εὐτονον εἶναι, καθάπερ ἂν εἰ πλοίου πρῶρα λεμβώδους, ἰσχυρὸν δὲ τῇ φύσει τῆς σαρκός, ἵν’ ἀπωθεῖν τε (710b.) δύνηται τὸν προσπίπτοντα ἀέρα· καὶ τοῦτο δρᾷ ῥαδίως καὶ μὴ μετὰ πόνου· τὰ δ’ ὀπισθεν κοῦφα καὶ συνήκοντα πάλιν εἰς στενόν, ἵν’ ἐπακολουθῇ τοῖς ἔμπροσθεν, μὴ σύροντα τὸν ἀέρα διὰ τὸ πλάτος.

## Κεφάλαιο 11

Καὶ περὶ μὲν τούτων διωρίσθω τὸν τρόπον τοῦτον, τὸ δὲ μέλλον ζῶον ὀρθὸν βαδιεῖσθαι διότι δίπουν τε ἀναγκαῖόν ἐστιν εἶναι, καὶ τὰ μὲν ἄνω μέρη τοῦ σώματος κουφότερα ἔχειν τὰ δ' ὑφεστῶτα τούτοις βαρύτερα, δῆλον· μόνως γὰρ ἂν οὕτως ἔχον οἶόν τ' εἴη φέρειν ἑαυτὸ ῥαδίως. διόπερ ἄνθρωπος μόνον ὀρθὸν τῶν ζώων ὦν τὰ σκέλη κατὰ λόγον ἔχει πρὸς τὰ ἄνω τοῦ σώματος μέγιστα τῶν ὑποπόδων καὶ ἰσχυρότατα. δῆλον δὲ ποιεῖ τοῦτο καὶ τὸ συμβαῖνον τοῖς παιδίοις· οὐ γὰρ δύναται βαδίζειν ὀρθὰ διὰ τὸ πάντα νανώδη εἶναι καὶ | μείζω καὶ ἰσχυρότερα ἔχειν ἢ κατὰ λόγον τὰ ἄνω μέρη τοῦ σώματος τῶν κάτωθεν. προϊούσης δὲ τῆς ἡλικίας αὕξησιν λαμβάνει τὰ κάτω μᾶλλον, μέχρι οὐπὲρ ἂν λάβωσι τὸ προσῆκον μέγεθος, καὶ ποιοῦνται τότε τοῖς σώμασι τὴν βάδισιν τὴν ὀρθήν. οἱ δ' ὄρνιθες κοῦφοι ὄντες δίποδες εἰσι διὰ τὸ ὀπισθεν αὐτοῖς τὸ βάρος εἶναι, καθάπερ ἐργάζονται τοὺς ἵππους τοὺς χαλκοῦς τοὺς τὰ πρόσθια ἡρκότας τῶν σκελῶν. αἴτιον δὲ μάλιστα τοῦ δίποδας ὄντας δύνασθαι ἐστάναι τὸ ἔχειν τὸ ἰσχίον ὅμοιον μηρῶ καὶ τηλικοῦτον ὥστε δοκεῖν δύο μηροὺς ἔχειν, τὸν τ' ἐν τῷ σκέλει πρὸ τῆς καμπῆς καὶ τὸν πρὸς τοῦτο τὸ μέρος ἀπὸ τῆς ἔδρας· ἔστι δ' οὐκ ἀλλ' ἰσχίον. εἰ γὰρ μὴ τηλικοῦτον ἦν, οὐκ ἂν ἦν ὄρνις δίπους. ὥσπερ γὰρ τοῖς ἀνθρώποις καὶ τοῖς τετράποσι ζώοις, εὐθὺς ἂν ἦν ἀπὸ βραχέος ὄντος τοῦ ἰσχίου ὁ μηρὸς καὶ τὸ ἄλλο σκέλος· λίαν οὖν ἂν ἦν τὸ σῶμα πᾶν προπετὲς αὐτῶν. νῦν δὲ μακρὸν ὄν μέχρι ὑπὸ μέσῃν παρατείνει τὴν γαστέρα, ὥστ' ἐντεῦθεν τὰ σκέλη ὑπερηρυσμένα φέρει τὸ σῶμα πᾶν. φανερόν δ' ἐκ τούτων καὶ ὅτι ὀρθὸν οὐκ ἐνδέχεται τὸν ὄρνιθα εἶναι ὥσπερ τὸν ἄνθρωπον. ἢ γὰρ τῶν πτερῶν φύσις ὥς ἔχουσι τὸ σῶμα νῦν (711a.) οὕτως αὐτοῖς χρήσιμός ἐστιν, ὀρθοῖς δ' οὐσιν ἄχρηστος ἂν ἦν, ὥσπερ γράφουσι τοὺς ἔρωτας ἔχοντας πτέρυγας. ἅμα γὰρ τοῖς εἰρημένοις δῆλον ὅτι οὐδ' ἄνθρωπον, οὐδ' εἰ ἄλλο τι τοιοῦτόν ἐστι τὴν μορφήν, δυνατόν εἶναι πτερωτόν, οὐ μόνον ὅτι πλείοσι σημείοις κινήσεται ἢ τέτταρσιν ἔναιμον ὄν, ἀλλ' ὅτι ἄχρηστος αὐτοῖς ἢ τῶν πτερύγων ἕξις κατὰ φύσιν κινουμένοις· ἢ δὲ φύσις οὐδὲν ποιεῖ παρὰ φύσιν.

## Κεφάλαιο 12

Ὅτι μὲν οὖν εἰ μὴ κάμψις ἦν ἐν τοῖς σκέλεσιν ἢ ἐν ταῖς ὠμοπλάταις καὶ ἰσχύοις, οὐθὲν οἶόν τ' ἦν ἂν τῶν ἐναίμων καὶ ὑποπόδων προβαίνειν, εἴρηται πρότερον, καὶ ὅτι κάμψις οὐκ ἂν ἦν μηδενὸς ἡρεμοῦντος, ὅτι τε ἐναντίως οἱ τε ἄνθρωποι δίποδες ὄντες καὶ οἱ ὄρνιθες τὴν τῶν σκελῶν ποιοῦνται κάμψιν, ἔτι δὲ τὰ τετράποδα ὑπεναντίως καὶ αὐτοῖς καὶ τοῖς ἀνθρώποις. οἱ μὲν γὰρ

ἄνθρωποι τοὺς μὲν βραχίονας κάμπουσιν ἐπὶ τὰ κοῖλα, τὰ δὲ σκέλη ἐπὶ τὸ κυρτόν, τὰ δὲ τετράποδα τὰ μὲν πρόσθια σκέλη ἐπὶ τὸ κυρτόν, τὰ δ' ὀπίσθια ἐπὶ τὸ κοῖλον· ὁμοίως δὲ καὶ οἱ ὄρνιθες. αἴτιον δ' ὅτι ἡ φύσις οὐδὲν δημιουργεῖ μάτην, ὥσπερ εἴρηται πρότερον, ἀλλὰ πάντα πρὸς τὸ βέλτιστον ἐκ τῶν ἐνδεχομένων.

ὥστ' ἐπεὶ πᾶσιν ὅσοις ὑπάρχει κατὰ φύσιν ἢ κατὰ τόπον μεταβολὴ τοῖν σκελοῖν, ἐστῶτος μὲν ἐκάστου τὸ βάρος ἐν τούτῳ ἐστί, κινουμένοις δ' εἰς τὸ πρόσθεν δεῖ τὸν πόδα τὸν ἡγούμενον τῇ θέσει κοῦφον εἶναι, συνεχοῦς δὲ τῆς πορείας γινομένης αὐθις ἐν τούτῳ τὸ βάρος ἀπολαμβάνειν, δῆλον ὡς ἀναγκαῖον ἐκ τοῦ κεκάμφθαι τὸ σκέλος αὐθις εὐθὺ γίνεσθαι μένοντος τοῦ τε κατὰ τὸν προωσθέντα πόδα σημείου καὶ τῆς κνήμης. τοῦτο δὲ συμβαίνειν ἅμα καὶ προῖεναι τὸ ζῶον εἰς τὸ ἔμπροσθεν μὲν ἔχοντος τὴν καμπὴν τοῦ ἡγουμένου σκέλους δυνατόν, εἰς τοῦπισθεν δ' ἀδύνατον. οὕτω μὲν γὰρ προενεχθέντος τοῦ σώματος ἡ ἔκτασις τοῦ σκέλους ἔσται, ἐκείνως δ' ἀνενεχθέντος. ἔτι δ' εἰς τὸ ὀπισθεν μὲν τῆς καμπῆς οὔσης διὰ δύο κινήσεων ἐγίγνεται ἂν ἡ τοῦ ποδὸς θέσις ὑπεναντίων τε (711b.) αὐταῖς, καὶ τῆς μὲν εἰς τὸ ὀπισθεν τῆς δὲ εἰς τὸ ἔμπροσθεν· ἀναγκαῖον γὰρ ἐν τῇ συγκάμψει τοῦ σκέλους τοῦ μὲν μηροῦ τὸ ἔσχατον εἰς τοῦπισθεν προάγειν, τὴν δὲ κνήμην ἀπὸ τῆς καμπῆς εἰς τὸ ἔμπροσθεν τὸν πόδα κινεῖν· εἰς τὸ ἔμπροσθεν δὲ τῆς καμπῆς οὔσης, οὐθ' ὑπεναντίαις κινήσεσι μιᾷ τε τῇ εἰς τὸ ἔμπροσθεν ἢ λεχθεῖσα πορεία συμβήσεται. ὁ μὲν οὖν ἄνθρωπος δίπους ὢν καὶ τὴν κατὰ τόπον μεταβολὴν κατὰ φύσιν τοῖς σκέλεσι ποιούμενος διὰ τὴν εἰρημένην αἰτίαν κάμπτει εἰς τὸ ἔμπροσθεν τὰ σκέλη, τοὺς δὲ βραχίονας ἐπὶ τὸ κοῖλον εὐλόγως· ἄχρηστοι γὰρ ἂν ἦσαν καμπτόμενοι εἰς τὸ ὑπεναντίον πρὸς τε τὴν τῶν χειρῶν χρήσιν καὶ πρὸς τὴν τῆς τροφῆς λήψιν. τὰ δὲ τετράποδα καὶ τὰ ζωοτόκα τὰ μὲν ἔμπροσθεν σκέλη, ἐπειδὴ ἡγεῖται τε τῆς πορείας αὐτῶν καὶ ἔστι ταῦτ' ἐν τῷ μέρει τῷ ἔμπροσθεν τοῦ σώματος, ἀνάγκη κάμπτειν ἐπὶ τὴν περιφέρειαν διὰ τὴν αὐτὴν αἰτίαν ἥνπερ καὶ οἱ ἄνθρωποι· κατὰ γὰρ τοῦτο ὁμοίως ἔχουσι. διόπερ καὶ τὰ τετράποδα κάμπτουςιν εἰς τὸ πρόσθεν τὸν εἰρημένον τρόπον.

καὶ γὰρ οὕτως μὲν αὐτῶν τῆς κάμψεως γινομένης ἐπὶ πολὺ δυνήσονται τοὺς πόδας μετεωρίζειν· ἐναντίως δὲ κάμπτοντες μικρὸν ἀπὸ τῆς γῆς ἂν αὐτοὺς ἐμετεωρίζον διὰ τὸ τὸν τε μηρὸν ὅλον καὶ τὴν καμπήν, ἀφ' ἧς ἡ κνήμη πέφυκεν, ὑπὸ τῇ γαστρὶ γίνεσθαι προϊόντος αὐτοῦ. τῶν δ' ὀπισθεν σκελῶν εἰ μὲν ἦν εἰς τὸ ἔμπροσθεν ἡ κάμψις, τῶν ποδῶν ὁ μετεωρισμὸς ὁμοίως ἂν αὐτοῖς εἶχε τοῖς προσθίοις (ἐπὶ βραχὺ γὰρ ἂν ἐγίγνετο καὶ τούτοις κατὰ τὴν ἄρσιν τῶν σκελῶν, τοῦ τε μηροῦ καὶ τῆς καμπῆς ἀμφοτέρων ὑπὸ τὸν τῆς

γαστρος τόπον ὑποπιπτόντων), εἰ δ' εἰς τὸ ὀπισθεν, καθάπερ καὶ νῦν κάμπουσιν, οὐθὲν ἐμπόδιον αὐτοῖς γίνεται πρὸς τὴν πορείαν ἐν τῇ τοιαύτῃ κινήσει τῶν ποδῶν. ἔτι τοῖς γε θηλαζομένοις αὐτῶν καὶ πρὸς τὴν τοιαύτην λειτουργίαν ἀναγκαῖον ἢ βέλτιόν γ' οὕτω κεκάμφθαι τὰ σκέλη· οὐ γὰρ ῥάδιον τὴν κάμψιν ποιουμένων ἐντὸς ὑφ' αὐτὰ ἔχειν τὰ τέκνα καὶ σκεπάζειν.

## Κεφάλαιο 13

(712a.) Ὅντων δὲ τεττάρων τρόπων τῆς κάμψεως κατὰ τοὺς συνδέσμους (ἀνάγκη γὰρ κάμπτειν ἢ ἐπὶ τὸ κοῖλον καὶ τὰ πρόσθια καὶ τὰ ὀπίσθια, καθάπερ ἐφ' οἷς A, ἢ ἐπὶ τοῦναντίον ἐπὶ τὸ κυρτόν, καθάπερ ἐφ' οἷς B, ἢ ἀντεστραμμένως μὴ ἐπὶ τὰ αὐτά, ἀλλὰ τὰ μὲν πρόσθια ἐπὶ τὸ κυρτόν, τὰ δ' ὀπίσθια ἐπὶ τὸ κοῖλον, καθάπερ ἐφ' οἷς τὸ Γ, ἢ τοῦναντίον τούτοις τὰ μὲν κυρτὰ πρὸς ἄλληλα, τὰ δὲ κοῖλα ἐκτός, καθάπερ ἔχει ἐφ' οἷς τὸ Δ), ὥς μὲν ἔχει ἐφ' οἷς τὸ A ἢ τὸ B, οὐθὲν κάμπτεται οὔτε τῶν διπόδων οὔτε τῶν τετραπόδων, ὥς δὲ τὸ Γ, τὰ τετράποδα, ὥς δὲ τὸ Δ, τῶν μὲν τετραπόδων οὐθὲν πλὴν ἐλέφας, ὁ δ' ἄνθρωπος τοὺς βραχίονας καὶ τὰ σκέλη· τοὺς μὲν γὰρ ἐπὶ τὸ κοῖλον κάμπτει, τὰ δὲ σκέλη ἐπὶ τὸ κυρτόν. ἀεὶ δ' ἐναλλάξ ἐναντίως ἔχει τὰ κῶλα τὰς κάμψεις τοῖς ἀνθρώποις, οἷον τὸ ὠλέκρανον ἐπὶ τὸ κοῖλον, ὁ δὲ καρπὸς ἐπὶ τὸ κυρτόν, καὶ πάλιν ὁ ὦμος ἐπὶ τὸ κυρτόν· ὡσαύτως δὲ καὶ ἐπὶ τῶν σκελῶν ὁ μηρὸς ἐπὶ τὸ κοῖλον, τὸ δὲ γόνυ ἐπὶ τὸ κυρτόν, ὁ δὲ ποὺς τοῦναντίον ἐπὶ τὸ κοῖλον. καὶ τὰ κάτω δὴ πρὸς τὰ ἄνω φανερόν ὅτι ἐναντίως· ἢ γὰρ ἀρχὴ ὑπεναντίως, ὁ μὲν ὦμος ἐπὶ τὸ κυρτόν, ὁ δὲ μηρὸς ἐπὶ τὸ κοῖλον· διὸ καὶ ὁ μὲν ποὺς ἐπὶ τὸ κοῖλον, ὁ δὲ καρπὸς τῆς χειρὸς ἐπὶ τὸ κυρτόν.

## Κεφάλαιο 14

Αἱ μὲν οὖν κάμψεις τῶν σκελῶν τοῦτόν τε τὸν τρόπον ἔχουσι καὶ διὰ τὰς αἰτίας τὰς εἰρημένας, κινεῖται δὲ τὰ ὀπίσθια πρὸς τὰ ἔμπροσθεν κατὰ διάμετρον· μετὰ γὰρ τὸ δεξιὸν τῶν ἔμπροσθεν τὸ ἀριστερόν τῶν ὀπισθεν κινεῖται, εἴτα τὸ ἀριστερόν τῶν ἔμπροσθεν, μετὰ δὲ τοῦτο τὸ δεξιὸν τῶν ὀπισθεν. αἴτιον δ' ὅτι εἰ μὲν τὰ ἔμπροσθεν ἅμα καὶ πρῶτον, διέσπαστο ἂν ἢ καὶ προπετὴς ἂν ἐγίνετο ἢ βάδισις καὶ οἷον ἐφελκόμενοις τοῖς ὀπισθεν. ἔτι δ' οὐ πορεία ἀλλὰ ἄλσις τὸ τοιοῦτον· χαλεπὸν δὲ συνεχῇ ποιεῖσθαι τὴν μεταβολὴν ἀλλόμενα. σημεῖον δέ· ταχὺ γὰρ ἀπαγορεύουσι καὶ νῦν τῶν ἵππων ὅσοι τὸν τρόπον τοῦτον ποιοῦνται τὴν κίνησιν, οἷον οἱ πομπεύοντες. χωρὶς μὲν οὖν τοῖς ἔμπροσθεν καὶ (712b.) ὀπισθεν διὰ ταῦτα οὐ ποιοῦνται τὴν κίνησιν. εἰ δὲ τοῖς δεξιοῖς ἀμφοτέροις πρώτοις, ἔξω ἂν ἐγίγνοντο τῶν

ἐρεισμάτων καὶ ἔπιπτον ἄν. εἰ δὲ ἀνάγκη μὲν ἢ τούτων τῶν τρόπων ὀποτερονοῦν ποιεῖσθαι τὴν κίνησιν ἢ κατὰ διάμετρον, μὴ ἐνδέχεται δ' ἐκείνων μηδέτερον, ἀνάγκη κινεῖσθαι κατὰ διάμετρον· οὕτω γὰρ κινούμενα ὥσπερ εἴρηται οὐδέτερα τούτων οἷόν τε πάσχειν. καὶ διὰ τοῦτο οἱ ἵπποι καὶ ὅσα τοιαῦτα, ἴσταται προβεβηκότα κατὰ διάμετρον, καὶ οὐ τοῖς δεξιοῖς ἢ τοῖς ἀριστεροῖς ἀμφοτέροις ἅμα. τὸν αὐτὸν δὲ τρόπον καὶ ὅσα πλείους πόδας ἔχει τεττάρων ποιεῖται τὴν κίνησιν· ἀεὶ γὰρ ἐν τοῖς τέτταρσι τοῖς ἐφεξῆς τὰ ὀπίσθια πρὸς τὰ ἔμπροσθεν κινεῖται κατὰ διάμετρον· δῆλον δ' ἐπὶ τοῖς βραδέως κινουμένοις. καὶ οἱ καρκίνοι δὲ τὸν αὐτὸν τρόπον κινοῦνται· τῶν πολυπόδων γὰρ εἰσιν. ἀεὶ γὰρ καὶ οὗτοι κατὰ διάμετρον κινοῦνται, ἐφ' ὅπερ ἂν ποιῶνται τὴν πορείαν. ἰδίως γὰρ τοῦτο τὸ ζῶον ποιεῖται τὴν κίνησιν· μόνον γὰρ οὐ κινεῖται ἐπὶ τὸ πρόσθεν τῶν ζώων, ἀλλ' ἐπὶ τὸ πλάγιον. ἀλλ' ἐπεὶ τοῖς ὄμμασι διώρισται τὸ πρόσθιον, ἢ φύσις πεποίηκεν ἀκολουθεῖν δυναμένους τοὺς ὀφθαλμοὺς τοῖς κώλοις· κινοῦνται γὰρ εἰς τὸ πλάγιον αὐτοῖς, ὥστε τρόπον τινὰ καὶ τοὺς καρκίνους κινεῖσθαι διὰ τοῦτ' ἐπὶ τὸ ἔμπροσθεν.

## Κεφάλαιο 15

Οἱ δ' ὄρνιθες τὰ σκέλη καθάπερ τὰ τετράποδα κάμπτουσι. τρόπον γὰρ τινα παραπλησίως ἢ φύσις αὐτῶν ἔχει· τοῖς γὰρ ὄρνισιν αἱ πτέρυγες ἀντὶ τῶν προσθίων σκελῶν εἰσι. διὸ καὶ κεκαμμένα τὸν αὐτόν εἰσι τρόπον ὥσπερ ἐκείνοις τὰ πρόσθια σκέλη, ἐπεὶ τῆς ἐν τῇ πορείᾳ κινήσεως τούτοις ἀπὸ τῶν πτερύγων ἢ κατὰ φύσιν ἀρχὴ τῆς μεταβολῆς ἐστὶ· πτῆσις γὰρ ἐστὶν ἢ τούτων οἰκεία κίνησις. διόπερ ἀφαιρεθεῖσιν τούτων οὕθ' ἐστάναι οὔτε προῖέναι δύναται ἂν οὐθεὶς | ὄρνις. ἔτι δίποδος ὄντος καὶ οὐκ ὀρθοῦ, καὶ τὰ ἔμπροσθεν μέρη τοῦ σώματος κουφότερα ἔχοντος, ἢ ἀναγκαῖον ἢ βέλτιον πρὸς τὸ ἐστάναι δύνασθαι τὸν μηρὸν οὕτως ὑποκείμενον ἔχειν ὥς νῦν ἔχει, λέγω δ' ὅτι εἰς τὸ ὀπίσθεν πεφυκότα.

ἀλλὰ μὴν εἰ δεῖ τοῦτον ἔχειν τὸν τρόπον, ἀνάγκη τὴν (713a.) κάμψιν ἐπὶ τὸ κοῖλον γίνεσθαι τοῦ σκέλους, καθάπερ τοῖς τετράποσιν ἐπὶ τῶν ὀπισθίων, διὰ τὴν αὐτὴν αἰτίαν ἥνπερ εἵπομεν ἐπὶ τῶν τετραπόδων καὶ ζωοτόκων. ὅλως δὲ οἱ τε ὄρνιθες καὶ τὰ ὀλόπτερα τῶν πετομένων καὶ τὰ ἐν τῷ ὑγρῷ νευστικά, ὅσα αὐτῶν δι' ὀργάνων τὴν ἐπὶ τοῦ ὑγροῦ ποιεῖται πορείαν, οὐ χαλεπὸν ἰδεῖν ὅτι βέλτιον ἐκ πλαγίου τὴν τῶν εἰρημένων μερῶν πρόσφυσιν ἔχειν, καθάπερ καὶ φαίνεται νῦν ὑπάρχειν αὐτοῖς ἐπὶ τε τῶν ὀρνίθων καὶ τῶν ὀλοπτέρων. ταῦτό δὲ τοῦτο καὶ ἐπὶ τῶν ἰχθύων· τοῖς μὲν γὰρ ὄρνισιν αἱ πτέρυγες, τοῖς δ' ἐνύδροις τὰ πτερύγια. [τὰ δὲ πτίλα τοῖς ὀλοπτέροις ἐκ τοῦ

πλαγίου προσπέφυκεν.] οὕτω γὰρ ἂν τάχιστα καὶ ἰσχυρότατα <συστέλλοντα καὶ> διαστέλλοντα τὰ μὲν τὸν ἀέρα τὰ δὲ | τὸ ὑγρὸν ποιοῖτο τὴν κίνησιν· εἰς γὰρ τὸ ἔμπροσθεν καὶ τὰ | ὀπίσθεν μόρια τοῦ σώματος ἐπακολουθοῖη <ἂν> ὑπείκοντι φερόμενα τὰ μὲν ἐν τῷ ὑγρῷ τὰ δ' ἐν τῷ ἀέρι. τὰ δὲ τρωγλόδута τῶν τετραπόδων καὶ ὠτοκόων, οἷον οἱ τε κροκόδειλοι καὶ σαῦροι καὶ ἀσκαλαβῶται καὶ ἐμύδες τε καὶ χελῶναι, πάντα ἐκ τοῦ πλαγίου προσπεφυκότα τὰ σκέλη ἔχει καὶ ἐπὶ τῇ γῇ κατατεταμένα, καὶ κάμπτει εἰς τὸ πλάγιον, διὰ τὸ οὕτω χρήσιμα εἶναι πρὸς τὴν τῆς ὑποδύσεως ῥαστώνην καὶ πρὸς τὴν ἐπὶ τοῖς ὠοῖς ἐφεδρείαν καὶ φυλακὴν. ἔξω δ' ὄντων αὐτῶν, ἀναγκαῖον τοὺς μηροὺς προσστέλλοντα καὶ ὑποτιθέμενα ὑφ' αὐτὰ τὸν μετεωρισμὸν τοῦ ὅλου σώματος ποιεῖσθαι. τούτου δὲ γινομένου κάμπτειν αὐτὰ οὐχ οἷόν τε ἄλλως ἢ ἔξω.

## Κεφάλαιο 16

Τὰ δ' ἄναιμα τῶν ὑποπόδων ὅτι μὲν πολύποδά ἐστι καὶ οὐθὲν αὐτῶν τετράπουν, πρότερον ἡμῖν εἴρηται· διότι δ' αὐτῶν ἀναγκαῖον ἦν τὰ σκέλη πλὴν τῶν ἐσχάτων ἔκ τε τοῦ πλαγίου προσπεφυκέναι καὶ εἰς τὸ ἄνω τὰς καμπὰς ἔχειν, καὶ αὐτὰ ὑπόβλαισα εἶναι εἰς τὸ ὀπίσθεν, φανερόν.

ἅπαντων γὰρ τῶν τοιούτων ἀναγκαῖόν ἐστι τὰ μέσα τῶν σκελῶν καὶ ἡγούμενα εἶναι καὶ ἐπόμενα. εἰ οὖν ὑπ' αὐτοῖς ἦν, (713b.) ἔδει αὐτὰ καὶ εἰς τὸ ἔμπροσθεν καὶ εἰς τὸ ὀπίσθεν τὴν καμπὴν ἔχειν, διὰ μὲν τὸ ἡγεῖσθαι εἰς τὸ ἔμπροσθεν, διὰ δὲ τὸ ἀκολουθεῖν εἰς τὸ ὀπίσθεν. ἐπεὶ δ' ἀμφοτέρα συμβαίνειν ἀναγκαῖον αὐτοῖς, διὰ τοῦτο βεβλαίσωται τε καὶ εἰς τὸ πλάγιον ἔχει τὰς καμπὰς, πλὴν τῶν ἐσχάτων· ταῦτα δ' ὥσπερ πέφυκε μᾶλλον, τὰ μὲν ὡς ἐπόμενα τὰ δ' ὡς ἡγούμενα. ἔτι δὲ κέκαμπται τὸν τρόπον τοῦτον καὶ διὰ τὸ πλῆθος τῶν σκελῶν· ἦττον γὰρ ἂν οὕτως ἐν τῇ πορείᾳ ἐμπόδιά τε αὐτὰ αὐτοῖς εἶη καὶ προσκόπτοι. ἢ δὲ βλαισότης αὐτοῖς ἐστι διὰ τὸ τρωγλοδυτικὰ εἶναι πάντα ἢ τὰ πλεῖστα· οὐ γὰρ οἷόν τε ὑψηλὰ εἶναι τὰ ζῶντα τὸν τρόπον τοῦτον. οἱ δὲ καρκῖνοι τῶν πολυπόδων περιττότατα πεφύκασιν· οὔτε γὰρ εἰς τὸ | πρόσθεν ποιοῦνται τὴν πορείαν πλὴν ὥσπερ εἴρηται πρότερον, | πολλοὺς τε τοὺς ἡγουμένους <πόδας> ἔχουσι μόνοι τῶν ζώων. τούτου δ' αἴτιον ἢ σκληρότης τῶν ποδῶν, καὶ ὅτι οὐ χρῶνται νεύσεως χάριν αὐτοῖς ἀλλὰ πορείας· πεζεύοντα γὰρ διατελοῦσι. πάντων μὲν οὖν τῶν πολυπόδων εἰς τὸ πλάγιον αἱ καμπαί, ὥσπερ καὶ τῶν τετραπόδων ὅσα τρωγλόδута· τοιαῦτα δ' ἐστὶν οἷον σαῦραι καὶ κροκόδειλοι καὶ τὰ πολλὰ τῶν ὠτοκοούντων. αἴτιον δ' ὅτι τρωγλοδυτεῖ τὰ μὲν τοῖς τόκοις, τὰ δὲ καὶ τῷ βίῳ παντί.

## Κεφάλαιο 17

ἀλλὰ τῶν μὲν ἄλλων βλαιοσύνται τὰ κῶλα διὰ τὸ μαλακὰ εἶναι, τῶν δὲ καράβων ὄντων σκληροδέρμων οἱ πόδες εἰσὶν ἐπὶ τῷ νεῖν καὶ οὐ τοῦ βαδίζειν χάριν· τῶν δὲ καρκίνων ἢ κάμπις εἰς τὸ πλάγιον, καὶ οὐ βεβλαίσωται ὥσπερ τοῖς τε ὠοτόκοις τῶν τετραπόδων καὶ τοῖς ἀναίμοις καὶ πολύποσι διὰ τὸ σκληρόδερμα εἶναι τὰ κῶλα καὶ ὀστρακῶδη, ὄντι οὐ νευστικῶ καὶ τρωγλοδύτη· πρὸς τῇ γῇ γὰρ ὁ βίος. καὶ στρογγύλος δὲ τὴν μορφήν, καὶ οὐκ ἔχων ὀρροπύγιον ὥσπερ ὁ κάραβος· πρὸς τὴν νεῦσιν γὰρ τοῖς καράβοις χρήσιμον, ὁ δ' οὐ νευστικός. καὶ ὅμοιον δὲ τῷ ὀπισθεν τὸ πλάγιον ἔχει μόνος, διὰ τὸ πολλοὺς ἔχειν τοὺς ἡγεμόνας πόδας. τούτου δ' αἴτιον (714a.) ὅτι οὐ κάμπει εἰς τὸ πρόσθεν οὐδὲ βεβλαίσωται. τοῦ δὲ μὴ βεβλαισῶσθαι τὸ αἴτιον πρότερον εἴρηται, ἡ σκληρότης καὶ τὸ ὀστρακῶδες τοῦ δέρματος. ἀνάγκη δὲ διὰ ταῦτα πᾶσί τε προηγεῖσθαι καὶ εἰς τὸ πλάγιον, εἰς μὲν τὸ πλάγιον ὅτι εἰς τὸ πλάγιον ἢ κάμπις, πᾶσι δ' ὅτι ἐνεπόδιζον ἂν οἱ ἡρεμοῦντες πόδες τοῖς κινουμένοις. οἱ δὲ ψηττοειδεῖς τῶν ἰχθύων, ὥσπερ οἱ ἑτερόφθαλμοι βαδίζουν, οὕτω νέουσι· διέστραπται γὰρ αὐτῶν ἡ φύσις. οἱ δὲ στεγανόποδες τῶν ὀρνίθων νέουσι τοῖς ποσί, καὶ διὰ μὲν τὸ τὸν ἀέρα δέχεσθαι καὶ ἀναπνεῖν δίποδες εἰσι, διὰ δὲ τὸ ἐν ὑγρῷ τὸν βίον ἔχειν στεγανόποδες· ἀντὶ πτερυγίων γὰρ χρήσιμοι οἱ πόδες αὐτοῖς τοιοῦτοι ὄντες. ἔχουσι δὲ τὰ σκέλη οὐχ ὥσπερ οἱ ἄλλοι κατὰ μέσον, ἀλλ' ὀπισθεν μᾶλλον· βραχυσκελῶν γὰρ αὐτῶν ὄντων ὀπισθεν ὄντα πρὸς τὴν νεῦσιν χρήσιμα. βραχυσκελεῖς δ' εἰσὶν οἱ τοιοῦτοι διὰ τὸ ἀπὸ τοῦ μήκους τῶν σκελῶν ἀφελοῦσαν τὴν φύσιν προσθεῖναι τοῖς ποσί, καὶ ἀντὶ τοῦ μήκους πάχος ἀποδοῦναι τοῖς σκέλεσι καὶ πλάτος τοῖς ποσί· χρήσιμοι γὰρ πλατεῖς ὄντες μᾶλλον ἢ μακροὶ πρὸς τὸ ἀποβιάζεσθαι τὸ ὑγρόν, ὅταν νέωσιν.

## Κεφάλαιο 18

Εὐλόγως δὲ καὶ τὰ μὲν πτηνὰ πόδας ἔχει, οἱ δ' ἰχθύες ἄποδες· τοῖς μὲν γὰρ ὁ βίος ἐν τῷ ξηρῷ, μετέωρον δ' αἰεὶ μένειν ἀδύνατον, ὥστ' ἀνάγκη πόδας ἔχειν· τοῖς δ' ἰχθύσιν ἐν τῷ ὑγρῷ ὁ βίος, καὶ τὸ ὕδωρ δέχονται, οὐ (714b.) τὸν ἀέρα. τὰ μὲν οὖν πτερύγια χρήσιμα πρὸς τὸ νεῖν, οἱ δὲ πόδες ἄχρηστοι. εἰ δ' ἄμφω εἶχον, ἀναιμοὶ ἂν ἦσαν.

ὁμοίως δ' ἔχουσιν οἱ ὀρνίθες τρόπον τινὰ τοῖς ἰχθύσι. τοῖς μὲν γὰρ ὀρνίσις ἄνω αἱ πτέρυγες εἰσι, τοῖς δὲ πτερύγια δύο ἐν τῷ πρᾶνεϊ· καὶ τοῖς μὲν ἐν τοῖς ὑπτίοις οἱ πόδες, τοῖς δὲ ἐν τε τοῖς ὑπτίοις καὶ ἐγγὺς τῶν πρᾶνῶν πτερύγια τοῖς πλείστοις· καὶ οἱ μὲν ὀρροπύγιον ἔχουσιν, οἱ δ' οὐραῖον.

## Κεφάλαιο 19

Περὶ δὲ τῶν ὀστρακοδέρμων ἀπορήσειεν ἄν τις τίς ἢ κίνησις, καὶ εἰ μὴ ἔχουσι δεξιὸν καὶ ἀριστερόν, πόθεν κινεῖνται· φαίνονται δὲ κινούμενα. ἢ ὥσπερ ἀνάπηρον δεῖ τιθέναι πᾶν τὸ τοιοῦτον γένος, καὶ κινεῖσθαι ὁμοίως οἷον εἴ τις ἀποκόψειε τῶν ὑποπόδων τὰ σκέλη, ὥσπερ ἡ φώκη καὶ ἡ κίνησις, καὶ εἰ μὴ ἔχουσι δεξιὸν καὶ ἀριστερόν, πόθεν κινεῖνται· φαίνονται δὲ κινούμενα. ἢ ὥσπερ ἀνάπηρον δεῖ τιθέναι πᾶν τὸ τοιοῦτον γένος, καὶ κινεῖσθαι ὁμοίως οἷον εἴ τις ἀποκόψειε τῶν ὑποπόδων τὰ σκέλη, ὥσπερ ἡ φώκη καὶ ἡ νυκτερίς· καὶ γὰρ ταῦτα τετράποδα, κακῶς δ' ἐστί. τὰ δ' ὀστρακόδερμα κινεῖται μέν, κινεῖται δὲ παρὰ φύσιν· οὐ γάρ ἐστι κινητικά, ἀλλ' ὥς μὲν μόνιμα καὶ προσπεφυκότα κινητικά, ὥς δὲ πορευτικὰ μόνιμα. ἔχουσι δὲ φαύλως καὶ οἱ καρκίνοι τὰ δεξιά, ἐπεὶ ἔχουσιν γε. δηλοῖ δ' ἡ χηλή· μείζων γὰρ καὶ ἰσχυροτέρα ἢ δεξιά, ὥς βουλομένων διωρίσθαι τῶν ἀριστερῶν καὶ τῶν δεξιῶν.

Τὰ μὲν οὖν περὶ τῶν μορίων, τῶν τ' ἄλλων αὐτῶν καὶ τῶν περὶ τὴν πορείαν τῶν ζώων καὶ περὶ πᾶσαν τὴν κατὰ τόπον μεταβολήν, τοῦτον ἔχει τὸν τρόπον· τούτων δὲ διωρισμένων ἐχόμενόν ἐστι θεωρῆσαι περὶ ψυχῆς.

## Περὶ ζώων γενέσως (715a) Generation of Animals



### CONTENTS

[Βιβλίο 1](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)



[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Κεφάλαιο 12](#)

[Κεφάλαιο 13](#)

[Κεφάλαιο 14](#)

[Κεφάλαιο 15](#)

[Κεφάλαιο 16](#)

[Κεφάλαιο 17](#)

[Κεφάλαιο 18](#)

[Κεφάλαιο 19](#)

[Κεφάλαιο 20](#)

[Κεφάλαιο 21](#)

[Κεφάλαιο 22](#)

[Κεφάλαιο 23](#)

[Βιβλίο 2](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Βιβλίο 3](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Κεφάλαιο 11](#)

[Βιβλίο 4](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

[Κεφάλαιο 9](#)

[Κεφάλαιο 10](#)

[Βιβλίο 5](#)

[Κεφάλαιο 1](#)

[Κεφάλαιο 2](#)

[Κεφάλαιο 3](#)

[Κεφάλαιο 4](#)

[Κεφάλαιο 5](#)

[Κεφάλαιο 6](#)

[Κεφάλαιο 7](#)

[Κεφάλαιο 8](#)

## **Βιβλίο 1**

### **Κεφάλαιο 1**

(715a.) Ἐπεὶ δὲ περὶ τῶν ἄλλων μορίων εἴρηται τῶν ἐν τοῖς ζώοις καὶ κοινῇ καὶ καθ' ἕκαστον γένος περὶ τῶν ἰδίων χωρὶς, τίνα τρόπον διὰ τὴν τοιαύτην

αίτιαν ἔστιν ἕκαστον, λέγω δὲ ταύτην τὴν ἕνεκά του· ὑπόκεινται γὰρ αἰτίαι τέτταρες, τό τε οὐ ἕνεκα ὡς τέλος καὶ ὁ λόγος τῆς οὐσίας (ταῦτα μὲν οὖν ὡς ἔν τι σχεδὸν ὑπολαβεῖν δεῖ), τρίτον δὲ καὶ τέταρτον ἡ ὕλη καὶ ὅθεν ἡ ἀρχὴ τῆς κινήσεως-περὶ μὲν οὖν τῶν ἄλλων εἴρηται (ὁ τε γὰρ λόγος καὶ τὸ οὐ ἕνεκα ὡς τέλος ταῦτόν καὶ ἡ ὕλη τοῖς ζώοις τὰ μέρη· παντὶ μὲν τῷ ὅλῳ τὰ ἀνομοιομερῆ, τοῖς δ' ἀνομοιομερέσι τὰ ὁμοιομερῆ, τούτοις δὲ τὰ καλούμενα στοιχεῖα τῶν σωμάτων), λοιπὸν δὲ τῶν μὲν μορίων τὰ πρὸς τὴν γένεσιν συντελοῦντα τοῖς ζώοις περὶ ὧν οὐθὲν διώρισται πρότερον, περὶ αἰτίας δὲ τῆς κινούσης τίς ἀρχή· τὸ δὲ περὶ ταύτης σκοπεῖν καὶ τὸ περὶ τῆς γενέσεως τῆς ἑκάστου τρόπον τινὰ ταῦτόν ἐστιν· διόπερ ὁ λόγος εἰς ἓν συνήγαγε, τῶν μὲν περὶ τὰ μόρια τελευταῖα ταῦτα, τῶν δὲ περὶ γενέσεως τὴν ἀρχὴν ἐχομένην τούτων τάξας.

Τῶν δὴ ζώων τὰ μὲν ἐκ συνδυασμοῦ γίγνεται θήλεος καὶ ἄρρενος, ἐν ὅσοις γένεσι τῶν ζώων ἐστὶ τὸ θῆλυ καὶ τὸ ἄρρεν· οὐ γὰρ ἐν πᾶσιν ἐστίν, ἀλλ' ἐν μὲν τοῖς ἐναίμοις ἔξω ὀλίγων ἅπασι τὸ μὲν ἄρρεν τὸ δὲ θῆλυ τελειωθέν ἐστίν, τῶν δ' ἀναίμων τὰ μὲν ἔχει τὸ θῆλυ καὶ τὸ ἄρρεν ὥστε τὰ ὁμογενῆ γεννᾶν, τὰ δὲ γεννᾶ μὲν, οὐ μέντοι τά γε ὁμογενῆ· τοιαῦτα δ' ἐστὶν ὅσα γίγνεται μὴ ἐκ ζώων συνδυαζομένων ἀλλ' ἐκ γῆς σηπομένης καὶ περιττωμάτων. ὡς δὲ κατὰ παντὸς εἰπεῖν, ὅσα μὲν κατὰ τόπον μεταβλητικὰ τῶν ζώων ὄντα τὰ μὲν νευστικὰ τὰ δὲ πτηνὰ τὰ δὲ πεζευτικὰ τοῖς σώμασιν, ἐν πᾶσι τούτοις ἐστὶ τὸ θῆλυ καὶ τὸ ἄρρεν, οὐ μόνον τοῖς ἐναίμοις ἀλλ' ἐνίοις καὶ ἀναίμοις. καὶ τούτων τοῖς μὲν καθ' ὅλον (715b.) τὸ γένος οἶον τοῖς μαλακίοις καὶ τοῖς μαλακοστράκοις, ἐν δὲ τῷ τῶν ἐντόμων γένει τὰ πλεῖστα. τούτων δ' αὐτῶν ὅσα μὲν ἐκ συνδυασμοῦ γίγνεται τῶν συγγενῶν ζώων καὶ αὐτὰ γεννᾶ κατὰ τὴν συγγένειαν· ὅσα δὲ μὴ ἐκ ζώων ἀλλ' ἐκ σηπομένης τῆς ὕλης, ταῦτα δὲ γεννᾶ μὲν ἕτερον δὲ γένος, καὶ τὸ γιγνόμενον οὔτε θῆλυ ἐστίν οὔτε ἄρρεν· τοιαῦτα δ' ἐστὶν ἔνια τῶν ἐντόμων. καὶ τοῦτο συμβέβηκεν εὐλόγως· εἰ γὰρ ὅσα μὴ γίγνεται ἐκ ζώων, ἐκ τούτων ἐγίγνετο ζῶα συνδυαζομένων, εἰ μὲν ὁμογενῆ, καὶ τὴν ἐξ ἀρχῆς τοιαύτην ἔδει τῶν τεκνωσάντων εἶναι γένεσιν (τοῦτο δ' εὐλόγως ἀξιοῦμεν· φαίνεται γὰρ συμβαῖνον οὕτως ἐπὶ τῶν ἄλλων ζώων), εἰ δ' ἀνόμοια μὲν δυνάμενα δὲ συνδυάζεσθαι, πάλιν ἐκ τούτων ἕτερα τις ἂν ἐγίγνετο φύσις καὶ πάλιν ἄλλη τις ἐκ τούτων, καὶ τοῦτ' ἐπορεύετ' ἂν εἰς ἄπειρον. ἡ δὲ φύσις φεύγει τὸ ἄπειρον· τὸ μὲν γὰρ ἄπειρον ἀτελές, ἡ δὲ φύσις ἀεὶ ζητεῖ τέλος. ὅσα δὲ μὴ πορευτικὰ καθάπερ τὰ ὀστρακόδεσμα τῶν ζώων καὶ τὰ ζῶντα τῷ προσπεφυκέναι, διὰ τὸ παραπλησίαν αὐτῶν εἶναι τὴν οὐσίαν τοῖς φυτοῖς, ὥσπερ οὐδ' ἐν ἐκείνοις οὐδ' ἐν τούτοις ἐστὶ τὸ θῆλυ καὶ τὸ ἄρρεν ἀλλ' ἤδη καθ' ὁμοιότητα καὶ κατ' ἀναλογίαν λέγεται· μικρὰν γὰρ τινα τοιαύτην ἔχει διαφοράν. καὶ γὰρ ἐν τοῖς φυτοῖς ὑπάρχει τὰ μὲν

καρποφόρα δένδρα τοῦ αὐτοῦ γένους, τὰ δ' αὐτὰ μὲν οὐ φέρει καρπὸν, συμβάλλεται δὲ τοῖς φέρουσι πρὸς τὸ πέττειν, οἷον συμβαίνει περὶ τὴν συκῆν καὶ τὸν ἔρινεόν.

Ἔστι δὲ καὶ ἐπὶ τῶν φυτῶν τὸν αὐτὸν τρόπον· τὰ μὲν γὰρ ἐκ σπέρματος γίγνεται τὰ δ' ὥσπερ αὐτοματιζούσης τῆς φύσεως. γίγνεται γὰρ ἢ τῆς γῆς σηπομένης ἢ μορίων τινῶν ἐν τοῖς φυτοῖς· ἓνια γὰρ αὐτὰ μὲν οὐ συνίσταται καθ' αὐτὰ χωρὶς, ἐν ἑτέροις δ' ἐγγίγνεται δένδρεσιν οἷον ὁ ἰξός.

(716a.) Περὶ μὲν οὖν φυτῶν αὐτὰ καθ' αὐτὰ χωρὶς ἐπισκεπτέον.

## Κεφάλαιο 2

Περὶ δὲ τῶν ἄλλων ζώων τῆς γενέσεως λεκτέον κατὰ τὸν ἐπιβάλλοντα λόγον καθ' ἕκαστον αὐτῶν, ἀπὸ τῶν εἰρημένων συνείροντας. καθάπερ γὰρ εἵπομεν τῆς γενέσεως ἀρχὰς ἂν τις οὐχ ἥκιστα θείῃ τὸ θῆλυ καὶ τὸ ἄρρεν, τὸ μὲν ἄρρεν ὡς τῆς κινήσεως καὶ τῆς γενέσεως ἔχον τὴν ἀρχήν, τὸ δὲ θῆλυ ὡς ὕλης. τοῦτο δὲ μάλιστ' ἂν τις πιστεύσειε θεωρῶν πῶς γίγνεται τὸ σπέρμα καὶ πόθεν· ἐκ τούτου μὲν γὰρ τὰ φύσει γιγνόμενα συνίσταται, τοῦτο δὲ πῶς ἀπὸ τοῦ θήλεος καὶ τοῦ ἄρρενος συμβαίνει γίνεσθαι δεῖ μὴ λανθάνειν. τῷ γὰρ ἀποκρίνεσθαι τὸ τοιοῦτον μόριον ἀπὸ τοῦ θήλεος καὶ τοῦ ἄρρενος καὶ ἐν τούτοις τὴν ἀπόκρισιν εἶναι καὶ ἐκ τούτων, διὰ τοῦτο τὸ θῆλυ καὶ τὸ ἄρρεν ἀρχαὶ τῆς γενέσεως εἰσιν. ἄρρεν μὲν γὰρ λέγομεν ζῶον τὸ εἰς ἄλλο γεννῶν, θῆλυ δὲ τὸ εἰς αὐτό· διὸ καὶ ἐν τῷ ὅλῳ τὴν τῆς γῆς φύσιν ὡς θῆλυ καὶ μητέρα νομίζουσιν, οὐρανὸν δὲ καὶ ἥλιον ἢ τι τῶν ἄλλων τῶν τοιούτων ὡς γεννῶντας καὶ πατέρας προσαγορεύουσιν.

Τὸ δ' ἄρρεν καὶ τὸ θῆλυ διαφέρει κατὰ μὲν τὸν λόγον τῷ δύνασθαι ἕτερον ἑκάτερον, κατὰ δὲ τὴν αἴσθησιν μορίοις τισίν· κατὰ μὲν τὸν λόγον τῷ τὸ ἄρρεν μὲν εἶναι τὸ δυνάμενον γεννᾶν εἰς ἕτερον, καθάπερ ἐλέχθη πρότερον, τὸ δὲ θῆλυ τὸ εἰς αὐτό, καὶ ἐξ οὗ γίγνεται ἐνυπάρχον ἐν τῷ γεννῶντι τὸ γεννώμενον. ἐπεὶ δὲ δυνάμει διώρισται καὶ ἔργῳ τινί, δεῖται δὲ πρὸς πᾶσαν ἐργασίαν ὀργάνων, ὅργανα δὲ ταῖς δυνάμεσι τὰ μέρη τοῦ σώματος, ἀναγκαῖον εἶναι καὶ πρὸς τὴν τέκνωσιν καὶ πρὸς τὸν συνδυασμὸν μόρια, καὶ ταῦτα διαφέροντ' ἀλλήλων καθὸ τὸ ἄρρεν διοίσει τοῦ θήλεος. εἰ γὰρ καὶ καθ' ὅλου λέγεται τοῦ ζώου τοῦ μὲν τὸ θῆλυ τοῦ δὲ τὸ ἄρρεν, ἄλλ' οὐ κατὰ πᾶν γε αὐτὸ θῆλυ καὶ ἄρρεν ἐστὶν ἀλλὰ κατὰ τινα δύναμιν καὶ κατὰ τι μόριον, ὥσπερ καὶ ὁρατικὸν καὶ πορευτικόν, -ὅπερ καὶ φαίνεται κατὰ τὴν αἴσθησιν. τοιαῦτα δὲ τυγχάνει μόρια ὄντα τοῦ μὲν θήλεος αἱ καλούμεναι ὑστέραι τοῦ δ'

ἄρρενος τὰ περὶ τοὺς ὄρχεις καὶ τοὺς περινέους ἐν πᾶσι τοῖς ἐναίμοις· τὰ μὲν γὰρ ὄρχεις ἔχει αὐτῶν τὰ δὲ τοὺς τοιούτους πόρους. εἰσὶ δὲ διαφοραὶ τοῦ θήλεος καὶ (716b.) τοῦ ἄρρενος καὶ ἐν τοῖς ἀναίμοις ὅσα αὐτῶν ἔχει ταύτην τὴν ἐναντίωσιν, διαφέρει δ' ἐν τοῖς ἐναίμοις τὰ μέρη τὰ πρὸς τὴν μίξιν τοῖς σχήμασιν. δεῖ δὲ νοεῖν ὅτι μικρᾶς ἀρχῆς μετακινουμένης πολλὰ συµμεταβάλλειν εἴωθε τῶν μετὰ τὴν ἀρχήν. δῆλον δὲ τοῦτο ἐπὶ τῶν ἐκτεμνομένων· τοῦ γεννητικοῦ γὰρ μορίου διαφθειρομένου μόνον ὅλη σχεδὸν ἢ μορφή συµμεταβάλλει τοσοῦτον ὥστε ἢ θῆλυ δοκεῖν εἶναι ἢ μικρὸν ἀπολείπειν, ὡς οὐ κατὰ τὸ τυχὸν μόριον οὐδὲ κατὰ τὴν τυχοῦσαν δύναμιν θῆλυ ὂν καὶ ἄρρεν τὸ ζῶον. φανερόν οὖν ὅτι ἀρχή τις οὕσα φαίνεται τὸ θῆλυ καὶ τὸ ἄρρεν· πολλὰ γοῦν συµμεταβάλλει μεταβαλλόντων ἢ θῆλυ καὶ ἄρρεν, ὡς ἀρχῆς μεταπιπτούσης.

### Κεφάλαιο 3

ἔχει δὲ τὰ περὶ τοὺς ὄρχεις καὶ τὰς ὑστέρας οὐχ ὁμοίως πᾶσι τοῖς ἐναίμοις ζώοις, καὶ πρῶτόν γε τὰ περὶ τοὺς ὄρχεις τοῖς ἄρρεσιν· τὰ μὲν γὰρ ὅλως ὄρχεις οὐκ ἔχει τῶν τοιούτων ζώων, οἷον τό τε τῶν ἰχθύων γένος καὶ τὸ τῶν ὄφεων, ἀλλὰ πόρους μόνον δύο σπερματικούς· τὰ δ' ἔχει μὲν ὄρχεις, ἐντὸς δ' ἔχει τούτους πρὸς τῇ ὀσφύϊ κατὰ τὴν τῶν νεφρῶν χώραν, ἀπὸ δὲ τούτων ἐκατέρου πόρον ὥσπερ ἐν τοῖς μὴ ἔχουσιν ὄρχεις, συνάπτοντας εἰς ἓν καθάπερ καὶ ἐπ' ἐκείνων, οἷον οἱ τε ὄρνιθες πάντες καὶ τὰ ὠοτοκοῦντα τετράποδα τῶν δεχομένων τὸν ἀέρα καὶ πνεύμονα ἐχόντων. καὶ γὰρ ταῦτα πάντα ἐντὸς ἔχει πρὸς τῇ ὀσφύϊ τοὺς ὄρχεις καὶ δύο πόρους ἀπὸ τούτων ὁμοίως τοῖς ὄφεσιν, οἷον σαῦροι καὶ χελῶναι καὶ τὰ φολιδωτὰ πάντα. τὰ δὲ ζωοτόκα πάντα μὲν ἐν τῷ ἔμπροσθεν ἔχει τοὺς ὄρχεις, ἀλλ' ἓνια αὐτῶν ἔσω πρὸς τῷ τέλει τῆς γαστρὸς οἷον ὁ δελφίς, καὶ οὐ πόρους ἀλλ' αἰδοῖον ἀπὸ τούτων περαῖνον εἰς τὸ ἔξω καθάπερ οἱ βόες, -τὰ δ' ἔξω, καὶ τούτων τὰ μὲν ἀπηρτημένους ὥσπερ ἄνθρωπος, τὰ δὲ πρὸς τῇ ἔδρᾳ καθάπερ οἱ ὕες. διώριστα δὲ περὶ αὐτῶν ἀκριβέστερον ἐν ταῖς ἱστορίαις ταῖς περὶ τῶν ζώων.

Αἱ δ' ὑστέραι πᾶσι μὲν εἰσι διμερεῖς καθάπερ καὶ οἱ ὄρχεις τοῖς ἄρρεσι δύο πᾶσιν· ταύτας δ' ἔχουσι τὰ μὲν πρὸς τοῖς ἄρθροις, καθάπερ αἱ τε γυναῖκες καὶ πάντα τὰ ζωοτοκοῦντα μὴ μόνον θύραζε ἀλλὰ καὶ ἐν αὐτοῖς καὶ (717a.) οἱ ἰχθύες ὅσοι ὠοτοκοῦσιν εἰς τοῦμφανές, -τὰ δὲ πρὸς τῷ ὑποζώματι, καθάπερ οἱ τ' ὄρνιθες πάντες καὶ τῶν ἰχθύων οἱ ζωοτοκοῦντες. ἔχουσι δὲ δικρόας καὶ τὰ μαλακόστρακα τὰς ὑστέρας καὶ τὰ μαλάκια, καὶ τὰ καλούμενα τούτων ὧν τοὺς περιέχοντας ὑμένας ὑστερικούς ἔχει. μάλιστα δὲ ἀδιόριστον ἐπὶ τῶν πολυπόδων ἐστίν, ὥστε δοκεῖν μίαν εἶναι· τούτου δ' αἴτιον ὁ τοῦ σώματος

ὄγκος πάντῃ ὅμοιος ὢν. δικρόαι δὲ καὶ αἱ τῶν ἐντόμων εἰσὶν ἐν τοῖς μέγεθος ἔχουσιν· ἐν δὲ τοῖς ἐλάττωσιν ἄδηλοι διὰ μικρότητα τοῦ σώματος.

Τὰ μὲν οὖν εἰρημένα μόρια τοῖς ζώοις τοῦτον ἔχει τὸν τρόπον.

## Κεφάλαιο 4

Περὶ δὲ τῆς ἐν τοῖς ἄρρεσι διαφορᾶς τῶν σπερματικῶν ὀργάνων εἴ τις μέλλει θεωρήσειν τὰς αἰτίας δι' ἃς εἰσιν, ἀνάγκη λαβεῖν πρῶτον τίνος ἕνεκεν ἢ τῶν ὄρχεων ἐστὶ σύστασις. εἰ δὲ πᾶν ἢ φύσις ἢ διὰ τὸ ἀναγκαῖον ποιεῖ ἢ διὰ τὸ βέλτιον, καὶ τοῦτο τὸ μόριον εἴη διὰ τούτων θάτερον. ὅτι μὲν τοίνυν οὐκ ἀναγκαῖον πρὸς τὴν γένεσιν φανερόν· πᾶσι γὰρ ἂν ὑπῆρχε τοῖς γεννώσι, νῦν δ' οὐθ' οἱ ὄφεις ἔχουσιν ὄρχεις οὐθ' οἱ ἰχθύες· ὠμμένοι γὰρ εἰσι συνδουζόμενοι καὶ πλήρεις ἔχοντες θοροῦ τοὺς πόρους. λείπεται τοίνυν βελτίονός τινος χάριν. ἔστι δὲ τῶν μὲν πλείστων ζώων ἔργον σχεδὸν οὐθὲν ἄλλο πλὴν ὥσπερ τῶν φυτῶν σπέρμα καὶ καρπός. ὥσπερ δ' ἐν τοῖς περὶ τὴν τροφήν τὰ εὐθυέντερα λαβρότερα πρὸς τὴν ἐπιθυμίαν τὴν τῆς τροφῆς, οὕτω καὶ τὰ μὴ ἔχοντα ὄρχεις πόρους δὲ μόνον ἢ ἔχοντα μὲν ἐντὸς δ' ἔχοντα, πάντα ταχύτερα πρὸς τὴν ἐνέργειαν τῶν συνδουασμῶν. ἃ δὲ δεῖ σωφρονέστερα εἶναι, ὥσπερ ἐκεῖ οὐκ εὐθυέντερα, καὶ ἐνταῦθ' ἔλικας ἔχουσιν οἱ πόροι πρὸς τὸ μὴ λάβρον μηδὲ ταχεῖαν εἶναι τὴν ἐπιθυμίαν. οἱ δ' ὄρχεις εἰσὶ πρὸς τοῦτο μεμηχανημένοι· τοῦ γὰρ σπερματικοῦ περιττώματος στασιμωτέραν ποιοῦσι τὴν κίνησιν, ἐν μὲν τοῖς ζωοτόκοις οἷον ἵπποις τε καὶ τοῖς ἄλλοις τοῖς τοιούτοις καὶ ἐν ἀνθρώποις σώζοντες τὴν ἐπαναδίπλωσιν (ὃν δὲ τρόπον ἔχει αὕτη ἐκ τῶν ἱστοριῶν τῶν περὶ τὰ ζῶα δεῖ θεωρεῖν)· οὐθὲν γὰρ εἰσι μόριον τῶν πόρων οἱ ὄρχεις ἀλλὰ πρόσκεινται-καθάπερ τὰς λαιὰς προσάπτουσιν αἱ ὑφαίνουσαι τοῖς ἱστοῖς-ἀφαιρουμένων (717b.) γὰρ αὐτῶν ἀνασπῶνται οἱ πόροι ἐντός, ὥστ' οὐ δύνανται γεννᾶν τὰ ἐκτεμνόμενα, ἐπεὶ εἰ μὴ ἀνεσπῶντο ἐδύναντο ἄν, - καὶ ἤδη ταῦτός τις μετὰ τὴν ἐκτομὴν εὐθέως ὀχεύσας ἐπλήρωσε διὰ τὸ μήπω τοὺς πόρους ἀνεσπάσθαι. τοῖς δ' ὄρνισι καὶ τοῖς ὠοτόκοις τῶν τετραπόδων δέχονται τὴν σπερματικὴν περίπτωσιν, ὥστε βραδυτέραν εἶναι τὴν ἔξοδον ἢ τοῖς ἰχθύσιν. φανερόν δ' ἐπὶ τῶν ὀρνίθων· περὶ γὰρ τὰς ὀχείας πολὺ μείζους ἴσχουσι τοὺς ὄρχεις, καὶ ὅσα γε τῶν ὀρνέων καθ' ὥραν μίαν ὀχεύει, ὅταν ὁ χρόνος οὗτος παρέλθῃ οὕτω μικροὺς ἔχουσιν ὥστε σχεδὸν ἀδήλους εἶναι, περὶ δὲ τὴν ὀχείαν σφόδρα μεγάλους. θᾶπτον μὲν οὖν ὀχεύουσι τὰ ἐντὸς ἔχοντα· καὶ γὰρ τὰ ἐκτὸς ἔχοντα οὐ πρότερον τὸ σπέρμα ἀφίησι πρὶν ἀνασπάσαι τοὺς ὄρχεις.

## Κεφάλαιο 5

Ἔτι δὲ τὸ ὄργανον τὸ πρὸς τὸν συνδυασμὸν τὰ μὲν τετράποδα ἔχει· ἐνδέχεται γὰρ αὐτοῖς ἔχειν-τοῖς δ' ὄρνεσι καὶ τοῖς ἄποσιν οὐκ ἐνδέχεται διὰ τὸ τῶν μὲν τὰ σκέλη ὑπὸ μέσῃ εἶναι τὴν γαστέρα, τὰ δ' ὅλως ἀσκελῆ εἶναι, τὴν δὲ τοῦ αἰδοίου φύσιν ἡρτῆσθαι ἐντεῦθεν καὶ τῇ θέσει κεῖσθαι ἐνταῦθα (διὸ καὶ ἐν τῇ ὁμιλίᾳ ἡ σύντασις γίνεταί τῶν σκελῶν· τό τε γὰρ ὄργανον νευρώδες καὶ ἡ φύσις τῶν σκελῶν νευρώδης). ὥστ' ἐπεὶ τοῦτ' οὐκ ἐνδέχεται ἔχειν ἀνάγκη καὶ ὄρχεις ἢ μὴ ἔχειν ἢ μὴ ἐνταῦθ' ἔχειν· τοῖς γὰρ ἔχουσιν ἢ αὐτὴ θέσις ἀμφοτέρων αὐτῶν.

Ἔτι δὲ τοῖς γε τοὺς ὄρχεις ἔχουσιν ἔξω διὰ τῆς κινήσεως θερμαινομένου τοῦ αἰδοίου προέρχεται τὸ σπέρμα συναθροισθέν, ἀλλ' οὐχ ὡς ἔτοιμον ὃν εὐθὺς θιγοῦσιν ὥσπερ τοῖς ἰχθύσιν.

Πάντα δ' ἔχει τὰ ζωοτόκα τοὺς ὄρχεις ἐν τῷ πρόσθεν, <ἢ ἔσω> ἢ ἔξω πλὴν ἐχίνου· οὗτος δὲ πρὸς τῇ ὀσφύϊ μόνος διὰ τὴν αὐτὴν αἰτίαν δι' ἣνπερ καὶ οἱ ὄρνια· ταχὺν γὰρ ἀναγκαῖον γίνεσθαι τὸν συνδυασμὸν αὐτῶν· οὐ γὰρ ὥσπερ τὰ ἄλλα τετράποδα ἐπὶ τὰ πρηνῆ ἐπιβαίνει ἀλλ' ὀρθοὶ μίγνυνται διὰ τὰς ἀκάνθας.

Δι' ἣν μὲν οὖν αἰτίαν ἔχουσι τὰ ἔχοντα ὄρχεις εἴρηται, καὶ δι' ἣν αἰτίαν τὰ μὲν ἔξω τὰ δ' ἐντός.

## Κεφάλαιο 6

Ὅσα δὲ μὴ ἔχει, καθάπερ εἴρηται, διὰ τε τὸ μὴ εὖ ἀλλὰ τὸ ἀναγκαῖον μόνον οὐκ ἔχει τοῦτο τὸ μόριον, καὶ διὰ τὸ ἀναγκαῖον εἶναι ταχεῖαν γίνεσθαι τὴν ὀχείαν· τοιαύτη δ' ἐστὶν ἡ τῶν ἰχθύων φύσις καὶ ἡ τῶν ὄφεων. οἱ (718a.) μὲν γὰρ ἰχθύες ὀχεύονται παραπίπτοντες καὶ ἀπολύονται ταχέως. ὥσπερ γὰρ ἐπὶ τῶν ἀνθρώπων καὶ πάντων τῶν τοιούτων ἀνάγκη κατασχόντας τὸ πνεῦμα προῖεσθαι τὴν γονὴν, τοῦτο δ' ἐκείνοις συμβαίνει μὴ δεχομένοις τὴν θάλατταν, εἰσὶ δὲ εὐφθαρτοὶ τοῦτο μὴ ποιοῦντες· οὐκ οὖν δεῖ ἐν τῷ συνδυασμῷ τὸ σπέρμα πέττειν αὐτοὺς ὥσπερ τὰ πεζὰ καὶ ζωοτόκα, ἀλλ' ὑπὸ τῆς ὥρας τὸ σπέρμα πεττόμενον ἀθρόον ἔχουσιν ὥστε μὴ ἐν τῷ θιγγάνειν ἀλλήλων πέττειν ἀλλὰ προῖεσθαι πεπεμμένον. διὸ ὄρχεις οὐκ ἔχουσιν ἀλλ' εὐθεῖς καὶ ἀπλοῦς τοὺς πόρους, οἷον μικρὸν μόριον τοῖς τετράποσιν ὑπάρχει περὶ τοὺς ὄρχεις· τῆς γὰρ ἐπαναδιπλώσεως τοῦ πόρου τὸ μὲν ἔναιμον μέρος ἐστὶ τὸ δ' ἄναιμον, ὃ δέχεται <τὸ ὑγρὸν> καὶ δι' οὗ ἤδη σπέρμα ὃν πορεύεται, ὥσθ' ὅταν ἐνταῦθα ἔλθῃ ἡ γονὴ ταχεῖα καὶ τούτοις γίνεταί ἡ ἀπόλυσις. τοῖς δ' ἰχθύσι τοιοῦτος ὁ πόρος πᾶς ἐστὶν οἷος ἐπὶ τῶν ἀνθρώπων καὶ τῶν τοιούτων ζώων



κατὰ τὸ ἕτερον μέρος τῆς ἐπαναδιπλώσεως.

## Κεφάλαιο 7

Οἱ δὲ ὄφεις ὀχεύονται περιελιττόμενοι ἀλλήλοις, οὐκ ἔχουσι δ' ὄρχεις οὐδ' αἰδοῖον ὥσπερ εἴρηται πρότερον, -αἰδοῖον μὲν ὅτι οὐδὲ σκέλη, ὄρχεις δὲ διὰ τὸ μῆκος-ἀλλὰ πόρους ὥσπερ οἱ ἰχθύες· διὰ γὰρ τὸ εἶναι αὐτῶν προμήκη τὴν φύσιν, εἰ ἔτι ἐπίστασις ἐγίνετο περὶ τοὺς ὄρχεις ἐψύchet' ἂν ἡ γονὴ διὰ τὴν βραδυτήτα. ὅπερ συμβαίνει καὶ ἐπὶ τῶν μέγα τὸ αἰδοῖον ἐχόντων· ἀγονώτεροι γάρ εἰσι τῶν μετριαζόντων διὰ τὸ μὴ γόνιμον εἶναι τὸ σπέρμα τὸ ψυχρόν, ψύχεσθαι δὲ τὸ φερόμενον λίαν μακράν. δι' ἣν μὲν οὖν αἰτίαν τὰ μὲν ὄρχεις ἔχει τὰ δ' οὐκ ἔχει τῶν ζώων εἴρηται.

Περιπλέκονται δ' ἀλλήλοις οἱ ὄφεις διὰ τὴν ἀφυΐαν τῆς παραπτώσεως. μικρῷ γὰρ προσαρμόττοντες μορίῳ λίαν μακροὶ ὄντες οὐκ εὐσυνάρμοστοί εἰσιν· ἐπεὶ οὖν οὐκ ἔχουσι μόρια οἷς περιλήψονται, ἀντὶ τούτου τῇ ὑγρότητι χρῶνται τοῦ σώματος περιελιττόμενοι ἀλλήλοις. διὸ καὶ δοκοῦσι βραδύτερον ἀπολύεσθαι τῶν ἰχθύων, οὐ μόνον διὰ τὸ μῆκος τῶν πόρων ἀλλὰ καὶ διὰ τὴν περὶ ταῦτα σκευωρίαν.

## Κεφάλαιο 8

Τοῖς δὲ θήλεσι τὰ περὶ τὰς ὑστέρας ἀπορήσειεν ἂν τις ὄν τρόπον ἔχει· πολλὰ γὰρ ὑπεναντιώσεις ὑπάρχουσιν αὐτοῖς. οὔτε γὰρ τὰ ζωτοκοῦντα ὁμοίως ἔχει πάντα, ἀλλ' ἄνθρωποι μὲν καὶ τὰ πεζὰ πάντα κάτω πρὸς τοῖς ἄρθροις, (718b.) τὰ δὲ σελάχη <τὰ> ζωτοκοῦντα ἄνω πρὸς τῷ ὑποζώματι, -οὔτε τὰ ὠτοκοῦντα, ἀλλ' οἱ μὲν ἰχθύες κάτω καθάπερ ἄνθρωπος καὶ τὰ ζωτοκοῦντα τῶν τετραπόδων, οἱ δ' ὄρνιθες ἄνω καὶ ὅσα ὠτοκεῖ τῶν τετραπόδων. οὐ μὴν ἀλλ' ἔχουσι καὶ αὐταὶ αἱ ὑπεναντιώσεις κατὰ λόγον. πρῶτον μὲν γὰρ τὰ ὠτοκοῦντα ὠτοκεῖ διαφερόντως· τὰ μὲν γὰρ ἀτελῆ προῖεται τὰ ὠὰ οἷον οἱ ἰχθύες· ἔξω γὰρ ἐπιτελεῖται καὶ λαμβάνει αὔξησιν τὰ τῶν ἰχθύων. αἴτιον δ' ὅτι πολύγονα ταῦτα καὶ τοῦτ' ἔργον αὐτῶν ὥσπερ τῶν φυτῶν· εἰ οὖν ἐν αὐτοῖς ἐτελεσιούργουν ἀναγκαῖον ὀλίγα τῷ πλήθει εἶναι· νῦν δὲ τοσαῦτα ἴσχουσιν ὥστε δοκεῖν ὦδὸν εἶναι τὴν ὑστέραν ἐκατέραν ἐν γε τοῖς μικροῖς ἰχθυδίοις· ταῦτα γὰρ πολυγονώτατά ἐστιν ὥσπερ καὶ ἐπὶ τῶν ἄλλων τῶν ἀνάλογον τούτοις ἐχόντων τὴν φύσιν, καὶ ἐν φυτοῖς καὶ ἐν ζώοις· ἡ γὰρ τοῦ μεγέθους αὔξησις τρέπεται εἰς τὸ σπέρμα τούτοις. οἱ δ' ὄρνιθες καὶ τὰ τετράποδα τῶν ὠτοκόων τέλεια ὠὰ τίκτουσιν, ἃ δεῖ πρὸς τὸ σῶζεσθαι σκληρόδερμα εἶναι (μαλακόδερμα γὰρ ἕως ἂν αὔξησιν ἔχη ἐστίν), τὸ δ'

ὄστρακον γίγνεται ὑπὸ θερμότητος ἐξικμαζούσης τὸ ὑγρὸν ἐκ τοῦ γεώδους. ἀναγκαῖον οὖν θερμὸν εἶναι τὸν τόπον ἐν ᾧ τοῦτο συμβήσεται. τοιοῦτος δ' ὁ περὶ τὸ ὑπόζωμα· καὶ γὰρ τὴν τροφὴν πέττει οὗτος. εἰ οὖν τὰ ὡὰ ἀνάγκη ἐν τῇ ὑστέρα εἶναι καὶ τὴν ὑστέραν ἀνάγκη πρὸς τῷ ὑποζώματι εἶναι τοῖς τέλεια τὰ ὡὰ τίκτουσι, τοῖς δ' ἀτελῇ κάτω· πρὸ ὁδοῦ γὰρ οὕτως ἔσται. καὶ πέφυκε δὲ μᾶλλον ἢ ὑστέρα κάτω εἶναι ἢ ἄνω, ὅπου μή τι ἐμποδίζει ἕτερον ἔργον τῆς φύσεως· κάτω γὰρ αὐτῆς καὶ τὸ πέρας ἐστίν· ὅπου δὲ τὸ πέρας καὶ τὸ ἔργον-αὕτη δ' οὐ τὸ ἔργον.

## Κεφάλαιο 9

Ἔχει δὲ καὶ τὰ ζωοτοκοῦντα πρὸς ἄλληλα διαφοράν. τὰ μὲν γὰρ οὐ μόνον θύραζε ζωοτοκεῖ ἀλλὰ καὶ ἐν αὐτοῖς, οἷον ἄνθρωποι τε καὶ ἵπποι καὶ κύνες καὶ πάντα τὰ τρίχας ἔχοντα, καὶ τῶν ἐνύδρων δὲ δελφῖνές τε καὶ φάλαιναι καὶ τὰ τοιαῦτα κήτη.

## Κεφάλαιο 10

Τὰ δὲ σελάχη καὶ οἱ ἔχεις θύραζε μὲν ζωοτοκοῦσιν, ἐν αὐτοῖς δ' ὠοτοκοῦσι πρῶτον. ὠοτοκοῦσι δὲ τέλειον ὦον· οὕτω γὰρ γεννᾶται ἐκ τοῦ ὠοῦ τὸ ζῶον, ἐξ ἀτελοῦς δὲ οὐθέν. θύραζε δὲ οὐκ ὠοτοκοῦσι διὰ τὸ ψυχρὰ τὴν φύσιν εἶναι καὶ οὐχ ὥς τινές φασι θερμά.

## Κεφάλαιο 11

μαλακόδερμα γοῦν τὰ ὡὰ γεννῶσιν· διὰ γὰρ τὸ εἶναι ὀλιγόθερμα οὐ ξηραίνει αὐτῶν ἢ φύσις τὸ ἔσχατον. διὰ μὲν οὖν τὸ ψυχρὰ εἶναι μαλακόδερμα (719a.) γεννῶσι, διὰ δὲ τὸ μαλακόδερμα οὐ θύραζε· διεφθείρετο γὰρ ἄν. ὅταν δὲ ζῶον ἐκ τοῦ ὠοῦ γίγνηται, τὸν αὐτὸν τρόπον τὰ πλεῖστα γίγνεται ὥνπερ ἐν τοῖς ὀρνιθίοις, καὶ καταβαίνει κάτω καὶ γίγνεται ζῶα πρὸς τοῖς ἄρθροις καθάπερ καὶ ἐν τοῖς ἐξ ἀρχῆς εὐθύς ζωοτοκοῦσιν. διὸ καὶ τὴν ὑστέραν τὰ τοιαῦτα ἔχει ἀνομοίαν καὶ τοῖς ζωοτόκοις καὶ τοῖς ὠοτόκοις διὰ τὸ ἀμφοτέρων μετέχειν τῶν εἰδῶν· καὶ γὰρ πρὸς τῷ ὑποζώματι ἔχουσι καὶ κάτω παρήκουσαν πάντα τὰ σελαχώδη. δεῖ δὲ καὶ περὶ ταύτης καὶ περὶ τῶν ἄλλων ὑστερῶν, ὃν τρόπον ἔχουσιν, ἔκ τε τῶν ἀνατομῶν τεθεωρηκέναι καὶ τῶν ἱστοριῶν. ὥστε διὰ μὲν τὸ ὠοτόκα εἶναι τελείων ὦων ἄνω ἔχει, διὰ δὲ τὸ ζωοτοκεῖν κάτω, καὶ ἀμφοτέρων μετειλήφασιν.

Τὰ δ' εὐθύς ζωοτοκοῦντα πάντα κάτω· οὐ γὰρ ἐμποδίζει τῆς φύσεως οὐδὲν

ἔργον οὐδὲ διττογονεῖ. πρὸς δὲ τούτοις ἀδύνατον ζῶα γίνεσθαι πρὸς τῷ ὑποζώματι· τὰ μὲν γὰρ ἔμβρυα βάρος ἔχειν ἀναγκαῖον καὶ κίνησιν, ὃ δὲ τόπος ἐπικαίρος ὢν τοῦ ζῆν οὐκ ἂν δύναίτο ταῦθ' ὑπενεγκεῖν. ἔτι δ' ἀνάγκη δυστοκίαν εἶναι διὰ τὸ μῆκος τῆς φορᾶς, ἐπεὶ καὶ νῦν ἐπὶ τῶν γυναικῶν ἐὰν περὶ τὸν τόκον ἀνασπάσῃσι χασμησάμεναι ἢ τι τοιοῦτον ποιήσασαι δυστοκοῦσιν. καὶ κενὰ δ' οὔσαι αἱ ὑστέραι ἄνω προσιστάμεναι πνίγουσιν· καὶ γὰρ ἀνάγκη τὰς μελλούσας ζῶον ἔξιν ἰσχυροτέρας εἶναι, διὸ σαρκώδεις εἰσὶν αἱ τοιαῦται πᾶσαι, αἱ δὲ πρὸς τῷ ὑποζώματι ὑμενώδεις. καὶ ἐπ' αὐτῶν δὲ τῶν διγονίαν ποιουμένων ζώων φανερόν τοῦτο συμβαῖνον· τὰ μὲν γὰρ ὡὰ ἄνω καὶ ἐν τῷ πλαγίῳ ἴσχουσι, τὰ δὲ ζῶα ἐν τῷ κάτω μέρει τῆς ὑστέρας.

Δι' ἣν μὲν οὖν αἰτίαν ὑπεναντίως ἔχουσι τὰ περὶ τὰς ὑστέρας ἐνίοις τῶν ζώων, καὶ ὅλως διὰ τί τοῖς μὲν κάτω τοῖς δὲ ἄνω πρὸς τῷ ὑποζώματι εἰσιν εἴρηται.

## Κεφάλαιο 12

Διότι δὲ τὰς μὲν ὑστέρας ἔχουσι πάντα ἐντός, τοὺς δ' ὄρχεις τὰ μὲν ἐντὸς τὰ δ' ἐκτός, αἴτιον τοῦ μὲν τὰς ὑστέρας ἐντὸς εἶναι πᾶσιν ὅτι ἐν ταύταις ἐστὶ τὸ γιγνόμενον ὃ δεῖται φυλακῆς καὶ σκέπης καὶ πέψεως, ὃ δ' ἐκτὸς τοῦ σώματος τόπος εὐβλαπτος καὶ ψυχρός. οἱ δ' ὄρχεις τοῖς μὲν ἐκτὸς τοῖς δ' ἐντός \*\* διὰ τὸ (719b.) δεῖσθαι καὶ τούτους σκέπης καὶ καλύμματος πρὸς τε σωτηρίαν καὶ πρὸς τὴν τοῦ σπέρματος πέψιν· ἀδύνατον γὰρ ἐψυγμένους καὶ πεπηγότας ἀνασπᾶσθαι καὶ προῖεσθαι τὴν γονήν. διόπερ ὅσοις ἐν φανερῷ εἰσιν οἱ ὄρχεις ἔχουσι σκέπην δερματικὴν τὴν καλουμένην ὀσχέαν· ὅσοις δ' ἡ τοῦ δέρματος φύσις ὑπεναντιοῦται διὰ σκληρότητα πρὸς τὸ μὴ περιληπτικὴν εἶναι μηδὲ μαλθακὴν [καὶ δερματικὴν], οἷον τοῖς τ' ἰχθυῶδες ἔχουσι τὸ δέρμα καὶ τοῖς φολιδωτόν, τούτοις δ' ἀναγκαῖον ἐντὸς ἔχειν. διόπερ οἱ τε δελφῖνες καὶ ὅσα τῶν κητωδῶν ὄρχεις ἔχουσιν ἐντὸς ἔχουσι, καὶ τὰ ὠοτόκα καὶ τετράποδα τῶν φολιδωτῶν. καὶ τὸ τῶν ὀρνίθων δὲ δέρμα σκληρὸν ὥστε κατὰ μέγεθος ἀσύμμετρον εἶναι περιλαβεῖν, καὶ ταύτην αἰτίαν εἶναι πᾶσι τούτοις πρὸς ταῖς εἰρημέναις πρότερον ἐκ τῶν περὶ τὰς ὀχείας συμβαινόντων ἀναγκαίων. διὰ τὴν αὐτὴν δ' αἰτίαν καὶ ὁ ἐλέφας καὶ ὁ ἐχῖνος ἔχουσιν ἐντὸς τοὺς ὄρχεις· οὐδὲ γὰρ τούτοις εὐφυὲς τὸ δέρμα πρὸς τὸ χωριστὸν ἔχειν τὸ σκεπαστικὸν μόριον.

Κεῖνται δὲ καὶ τῇ θέσει ὑπεναντίως αἱ ὑστέραι τοῖς τε ζωοτοκοῦσιν ἐν αὐτοῖς καὶ τοῖς ὠοτοκοῦσι θύραζε, καὶ τούτων τοῖς τε τὰς ὑστέρας ἔχουσι κάτω καὶ τοῖς πρὸς τῷ ὑποζώματι, οἷον τοῖς ἰχθύσι πρὸς τε τοὺς ὀρνίθους καὶ τὰ

ῥωτόκα τῶν τετραπόδων, καὶ τοῖς κατ' ἀμφοτέρους τοὺς τρόπους γεννῶσιν, ἐν αὐτοῖς μὲν ῥωτοκοῦσιν εἰς δὲ τὸ φανερόν ζωτοκοῦσιν.

τὰ μὲν γὰρ ζωτοκοῦντα καὶ ἐν αὐτοῖς καὶ ἐκτὸς ἐπὶ τῆς γαστρὸς ἔχει τὰς ὑστέρας, οἷον ἄνθρωπος καὶ βοῦς καὶ κύων καὶ τᾶλλα τὰ τοιαῦτα· πρὸς γὰρ τὴν τῶν ἐμβρύων σωτηρίαν καὶ αὕξησιν συμφέρει μὴθὲν ἐπεῖναι βάρος ἐπὶ ταῖς ὑστέραις.

### Κεφάλαιο 13

Ἔστι δὲ καὶ ἕτερος ὁ πόρος δι' οὗ ἢ τε ξηρὰ περίττωσις ἐξέρχεται καὶ δι' οὗ ἢ ὑγρὰ τούτοις πᾶσιν. διὸ ἔχουσιν αἰδοῖα τὰ τοιαῦτα πάντα καὶ τὰ ἄρρενα καὶ τὰ θήλεα καθ' ἃ ἐκκρίνεται τὸ περίττωμα τὸ ὑγρὸν καὶ τοῖς μὲν ἄρρεσι τὸ σπέρμα τοῖς δὲ θήλεσι τὸ κύημα. οὗτος δ' ἐπάνω καὶ ἐν τοῖς προσθίοις ὑπάρχει ὁ πόρος τοῦ τῆς ξηρᾶς τροφῆς. [Ὅσα δ' ῥωτοκεῖ μὲν ἀτελὲς δ' ῥόν, οἷον ὅσοι τῶν ἰχθύων ῥωτοκοῦσιν, (720a.) οὗτοι δ' οὐχ ὑπὸ τῇ γαστρὶ ἀλλὰ πρὸς τῇ ὀσφύϊ ἔχουσι τὰς ὑστέρας· οὐτε γὰρ ἐμποδίζει ἢ τοῦ ῥοῦ αὕησις διὰ τὸ ἔξω τελειοῦσθαι καὶ προϊέναι τὸ αὐξανόμενον.] ὁ τε πόρος ὁ αὐτός ἐστι καὶ ἐν τοῖς μὴ ἔχουσι γεννητικὸν αἰδοῖον τῷ τῆς ξηρᾶς τροφῆς, πᾶσι τοῖς ῥωτόκοις καὶ τοῖς ἔχουσιν αὐτῶν κύστιν, οἷον ταῖς χελώναις· τῆς γενέσεως γὰρ ἔνεκεν, οὐ τῆς τοῦ ὑγροῦ περιττώματος ἐκκρίσεως εἰς διττοὶ οἱ πόροι· διὰ δὲ τὸ ὑγρὰν εἶναι τὴν φύσιν τοῦ σπέρματος καὶ ἢ τῆς ὑγρᾶς τροφῆς περίττωσις κεκοινώνηκε τοῦ αὐτοῦ πόρου. δῆλον δὲ τοῦτο ἐκ τοῦ σπέρμα μὲν πάντα φέρειν τὰ ζῶα, περίττωμα δὲ μὴ πᾶσι γίνεσθαι ὑγρόν.

Ἐπεὶ οὖν δεῖ καὶ τοὺς τῶν ἄρρένων πόρους τοὺς σπερματικοὺς ἐρρηεῖσθαι καὶ μὴ πλανᾶσθαι καὶ τοῖς θήλεσι τὰς ὑστέρας, τοῦτο δ' ἀναγκαῖον ἢ πρὸς τὰ πρόσθια τοῦ σώματος ἢ πρὸς τὰ πρηνῆ συμβαίνειν, τοῖς μὲν ζωτόκοις διὰ τὰ ἔμβρυα ἐν τοῖς προσθίοις αἱ ὑστέραι τοῖς δ' ῥωτόκοις πρὸς τῇ ὀσφύϊ καὶ τοῖς πρηνέσιν· ὅσα δ' ῥωτοκήσαντα ἐν αὐτοῖς ζωτοκεῖ ἐκτός, ταῦτα δ' ἀμφοτέρως ἔχει διὰ τὸ μετεληφέναι ἀμφοτέρων καὶ εἶναι καὶ ζωτόκα καὶ ῥωτόκα· τὰ μὲν γὰρ ἄνω τῆς ὑστέρας καὶ ἢ γίνεταί τὰ ῥὰ ὑπὸ τὸ ὑπόζωμα πρὸς τῇ ὀσφύϊ ἐστὶ καὶ τοῖς πρηνέσι, †προϊούσης δὲ κάτω ἐπὶ τῇ γαστρὶ· ταύτη γὰρ ζωτοκεῖ ἤδη. ὁ δὲ πόρος εἰς καὶ τούτοις τῆς τε ξηρᾶς περιττώσεως καὶ τῆς ὀχέας· οὐθὲν γὰρ ἔχει τούτων αἰδοῖον, καθάπερ εἴρηται πρότερον, ἀπηρτημένον. ὁμοίως δ' ἔχουσι καὶ οἱ τῶν ἄρρένων πόροι, καὶ τῶν ἐχόντων καὶ τῶν μὴ ἐχόντων ὄρχεις, ταῖς τῶν ῥωτόκων ὑστέραις· πᾶσι γὰρ πρὸς τοῖς πρηνέσι προσπεφύκασι καὶ κατὰ τὸν τόπον τῆς ῥάχεως· δεῖ μὲν γὰρ μὴ πλανᾶσθαι ἀλλ' ἐδραίους εἶναι, τοιοῦτος δ' ὁ ὀπισθεν τόπος· οὗτος γὰρ τὸ

συνεχῆς παρέχει καὶ τὴν στάσιν. τοῖς μὲν οὖν ἐντὸς ἔχουσι τοὺς ὄρχεις εὐθύς ἐρηρησμένοι εἰσὶν [ἅμα τοῖς πόροις] καὶ τοῖς ἐκτὸς δ' ὁμοίως· εἴτ' ἀπαντῶσιν εἰς ἓν πρὸς τὸν τοῦ αἰδοίου τόπον. ὁμοίως δὲ καὶ τοῖς δελφῖσιν οἱ πόροι ἔχουσιν· ἀλλὰ τοὺς ὄρχεις ἔχουσι κεκρυμμένους ὑπὸ τὸ περὶ τὴν γαστέρα κύτος.

Πῶς μὲν οὖν ἔχουσι τῇ θέσει περὶ τὰ μόρια τὰ (720b.) συντελοῦντα πρὸς τὴν γένεσιν καὶ διὰ τίνος αἰτίας εἴρηται.

## Κεφάλαιο 14

Τῶν δ' ἄλλων ζώων τῶν ἀναίμων οὐχ ὁ αὐτὸς τρόπος τῶν μορίων τῶν πρὸς τὴν γένεσιν συντελούντων οὔτε τοῖς ἐναίμοις οὔθ' ἑαυτοῖς. ἔστι δὲ γένη τέτταρα τὰ λοιπά, ἓν μὲν τὸ τῶν μαλακοστράκων, δεύτερον δὲ τὸ τῶν μαλακίων, τρίτον δὲ τὸ τῶν ἐντόμων, καὶ τέταρτον τὸ τῶν ὀστρακοδέρμων (τούτων δὲ περὶ μὲν πάντων ἄδηλον, τὰ δὲ πλεῖστα ὅτι οὐ συνδυάζεται φανερόν· τίνα δὲ συνίσταται τρόπον ὕστερον λεκτέον).

Τὰ δὲ μαλακόστρακα συνδυάζεται μὲν ὥσπερ τὰ ὀπισθουρητικά, ὅταν τὸ μὲν ὑπτιον τὸ δὲ πρανὲς ἐπαλλάξῃ τὰ οὐραῖα· τοῖς γὰρ ὑπτίοις πρὸς τὰ πρανή ἐπιβαίνειν ἐμποδίζει τὰ οὐραῖα μακρὰν ἔχοντα τὴν ἀπάρτησιν τῶν πτερυγίων. ἔχουσι δ' οἱ μὲν ἄρρενες λεπτοὺς πόρους θορικούς, αἱ δὲ θήλειαι ὑστέρας ὑμενώδεις παρὰ τὸ ἔντερον ἔνθεν καὶ ἔνθεν ἐσχισμένας ἐν αἷς ἐγγίγνεται τὸ ὤον.

## Κεφάλαιο 15

Τὰ δὲ μαλάκια συμπλέκεται μὲν κατὰ τὸ στόμα ἀντερείδοντα καὶ διαπτύττοντα τὰς πλεκτάνας, συμπλέκεται δὲ τὸν τρόπον τοῦτον ἐξ ἀνάγκης· ἡ γὰρ φύσις παρὰ τὸ στόμα τὴν τελευταίην τοῦ περιττώματος συνήγαγε κάμψασα, καθάπερ εἴρηται πρότερον [ἐν τοῖς περὶ τῶν μορίων λόγοις]. ἔχει δ' ἡ θήλεια μὲν ὑστερικὸν μόριον φανερώς ἐν ἐκάστω τούτων τῶν ζώων· ὥν γὰρ ἴσχει τὸ μὲν πρῶτον ἀδιόριστον, ἔπειτα διακρινόμενον γίγνεται πολλὰ καὶ ἀποτίκτει ἕκαστον τούτων ἀτελές, καθάπερ καὶ οἱ ὠοτοκοῦντες τῶν ἰχθύων. ὁ δὲ πόρος ὁ αὐτὸς τοῦ περιττώματος καὶ τοῦ ὑστερικοῦ μορίου καὶ τοῖς μαλακοστράκοις καὶ τούτοις, ἥστι γὰρ ἡ τὸν θολὸν ἀφήσῃ διὰ τοῦ πόρου. ταῦτα δ' ἐστὶν ἓν τοῖς ὑπτίοις τοῦ σώματος ἢ τὸ κέλυσος ἀφέστηκε καὶ ἡ θάλαττα εἰσέρχεται· διὸ ὁ συνδυασμὸς κατὰ τοῦτο γίγνεται τῷ ἄρρενι πρὸς τὴν θήλειαν· ἀναγκαῖον γάρ, εἴπερ ἀφήσῃ τι ὁ ἄρρεν εἴτε σπέρμα εἴτε μόριον

εἴτε ἄλλην τινὰ δύναμιν, κατὰ τὸν ὑστερικὸν πόρον πλησιάζειν. ἡ δὲ τῆς πλεκτάνης τοῦ ἄρρενος διὰ τοῦ ἀύλοῦ δῖσεις ἐπὶ τῶν πολυπόδων, ἢ φασιν ὀχεύειν πλεκτάνη οἱ ἄλιεῖς, συμπλοκῆς χάριν ἐστὶν ἄλλ' οὐχ ὡς ὄργανου χρησίμου πρὸς τὴν γένεσιν· ἔξω γάρ ἐστι τοῦ πόρου καὶ τοῦ σώματος. ἐνίοτε δὲ συνδυάζονται καὶ ἐπὶ τὰ πρανῇ τὰ (721a.) μαλάκια· πότερον δὲ γενέσεως χάριν ἢ δι' ἄλλην αἰτίαν οὐθὲν ὥπται πω.

## Κεφάλαιο 16

Τῶν δ' ἐντόμων τὰ μὲν συνδυάζεται καὶ ἡ γένεσις αὐτῶν ἐστὶν ἐκ ζώων συνωνύμων καθάπερ ἐπὶ τῶν ἐναίμων, οἷον αἶ τε ἀκρίδες καὶ οἱ τέττιγες καὶ τὰ φαλάγγια καὶ οἱ σφῆκες καὶ οἱ μύρμηκες, -τὰ δὲ συνδυάζεται μὲν καὶ γεννῶσιν, οὐχ ὁμογενῇ δ' αὐτοῖς ἀλλὰ σκώληκας μόνον, οὐδὲ γίνονται ἐκ ζώων ἄλλ' ἐκ σηπομένων ὑγρῶν, τὰ δὲ ξηρῶν, οἷον αἶ τε ψύλλαι καὶ αἱ μυῖαι καὶ αἱ κανθαρίδες, -τὰ δ' οὗτ' ἐκ ζώων γίνονται οὔτε συνδυάζονται καθάπερ ἐμπίδες τε καὶ κώνωπες καὶ πολλὰ τοιαῦτα γένη. τῶν δὲ συνδυαζομένων ἐν τοῖς πλείστοις τὰ θήλεα μείζω τῶν ἀρρένων ἐστίν. πόρους δὲ τὰ ἄρρενα θορικοὺς οὐ φαίνονται ἔχοντα. ἀφίησι δὲ ὡς ἐπὶ τὸ πλεῖστον εἰπεῖν τὸ ἄρρεν εἰς τὸ θῆλυ οὐδὲν μόριον ἀλλὰ τὸ θῆλυ εἰς τὸ ἄρρεν κάτωθεν ἄνω. τεθεώρηται δὲ τοῦτο ἐπὶ πολλῶν, [καὶ περὶ τοῦ ἀναβαίνειν ὡσαύτως] τοῦναντίον δ' ἐπ' ὀλίγων· ὥστε δὲ γένει διελεῖν οὐπω συνεώραται. σχεδὸν δὲ τοῦτο καὶ ἐπὶ τῶν ὠοτόκων ἰχθύων τῶν πλείστων ἐστὶ καὶ ἐπὶ τῶν τετραπόδων καὶ ὠοτόκων· τὰ γὰρ θήλεα μείζω τῶν ἀρρένων ἐστὶ διὰ τὸ συμφέρειν πρὸς τὸν γιγνόμενον αὐτοῖς ὑπὸ τῶν ὠῶν ὄγκον ἐν τῇ κυήσει. τοῖς δὲ θήλεσιν αὐτῶν τὸ ταῖς ὑστέραις ἀνάλογον μόριον ἐσχισμένον ἐστὶ παρὰ τὸ ἔντερον, ὥσπερ καὶ τοῖς ἄλλοις, ἐν ᾧ ἐγγίγνεται τὰ κυήματα. δῆλον δὲ τοῦτο ἐπὶ τε τῶν ἀκρίδων καὶ ὅσα μέγεθος αὐτῶν ἔχει, συνδυάζεσθαι πεφυκότων· τὰ γὰρ πλεῖστα μικρὰ λίαν τῶν ἐντόμων ἐστίν.

Τὰ μὲν οὖν περὶ τὴν γένεσιν ὄργανα τοῖς ζώοις περὶ ὧν οὐκ ἐλέχθη πρότερον, τοῦτον ἔχει τὸν τρόπον· τῶν δ' ὁμοιομερῶν ἀπελείφθη περὶ γονῆς καὶ γάλακτος, περὶ ὧν καιρὸς ἐστὶν εἰπεῖν, περὶ μὲν γονῆς ἤδη περὶ δὲ γάλακτος ἐν τοῖς ἐχομένοις.

## Κεφάλαιο 17

Τὰ μὲν γὰρ προῖται φανερώς σπέρμα τῶν ζώων οἷον ὅσα αὐτῶν ἔναιμα τὴν φύσιν ἐστί, τὰ δ' ἔντομα καὶ τὰ μαλάκια ποτέρως ἄδηλον. ὥστε τοῦτο θεωρητέον πότερον πάντα προῖται σπέρμα τὰ ἄρρενα ἢ οὐ πάντα, καὶ εἰ μὴ

πάντα, διὰ τίν' αἰτίαν τὰ μὲν τὰ δ' οὐ· καὶ τὰ θήλεα δὲ πότερον συμβάλλεται σπέρμα τι ἢ οὐ, (721b.) καὶ εἰ μὴ σπέρμα, πότερον οὐδ' ἄλλο οὐθέν, ἢ συμβάλλεται μὲν τι, οὐ σπέρμα δέ. ἔτι δὲ καὶ τὰ προϊέμενα σπέρμα τί συμβάλλεται διὰ τοῦ σπέρματος πρὸς τὴν γένεσιν σκεπτέον καὶ ὅλως τίς ἐστὶν ἢ τοῦ σπέρματος φύσις καὶ ἢ τῶν καλουμένων καταμηνίων, ὅσα ταύτην τὴν ὑγρότητα προῖεται τῶν ζώων.

Δοκεῖ δὲ πάντα γίνεσθαι ἐκ σπέρματος, τὸ δὲ σπέρμα ἐκ τῶν γεννώντων. διὸ τοῦ αὐτοῦ λόγου ἐστὶ πότερον καὶ τὸ θῆλυ καὶ τὸ ἄρρεν προῖενται ἄμφω ἢ θάτερον μόνον, καὶ πότερον ἀπὸ παντὸς ἀπέρχεται τοῦ σώματος ἢ οὐκ ἀπὸ παντός· εὐλόγον γὰρ εἰ μὴ ἀπὸ παντός, μηδ' ἀπ' ἀμφοτέρων τῶν γεννώντων. διόπερ ἐπισκεπτέον, ἐπειδὴ φασὶ τινες ἀπὸ παντὸς ἀπιέναι τοῦ σώματος, περὶ τούτου πῶς ἔχει πρῶτον. ἔστι δὲ σχεδὸν οἷς ἂν τις χρήσαιτο τεκμηρίοις, [ὥς ἀφ' ἐκάστου τῶν μορίων ἀπionτος τοῦ σπέρματος] τέτταρα, πρῶτον μὲν ἡ σφοδρότης τῆς ἡδονῆς· μᾶλλον γὰρ ἡδὺ πλεον ταὐτὸ γινόμενον πάθος, πλεον δὲ τὸ πᾶσι τοῖς μορίοις ἢ τὸ ἐνὶ ἢ ὀλίγοις συμβαῖνον αὐτῶν. ἔτι τὸ ἐκ κολοβῶν κολοβὰ γίνεσθαι· διὰ μὲν γὰρ τὸ τοῦ μορίου ἐνδεὲς εἶναι οὐ βαδίζειν σπέρμα ἐντεῦθεν φασιν, ὅθεν δ' ἂν μὴ ἔλθῃ τοῦτο συμβαίνειν μὴ γίνεσθαι. πρὸς δὲ τούτοις αἱ μοιότητες πρὸς τοὺς γεννήσαντας· γίνονται γὰρ ὅμοιες ὥσπερ καὶ ὅλον τὸ σῶμα καὶ μόρια μορίοις· εἴπερ οὖν καὶ τῷ ὅλῳ αἴτιον τῆς ὁμοιότητος τὸ ἀφ' ὅλου ἐλθεῖν τὸ σπέρμα, καὶ τοῖς μορίοις αἴτιον ἂν εἴη τὸ ἀφ' ἐκάστου τι τῶν μορίων ἐλθεῖν. ἔτι δὲ καὶ εὐλόγον ἂν εἶναι δόξειεν, ὥσπερ καὶ τοῦ ὅλου ἐστὶ τι ἐξ οὗ γίγνεται πρῶτον οὕτω καὶ τῶν μορίων ἐκάστου, ὥστ' εἰ ἐκείνου σπέρμα καὶ τῶν μορίων ἐκάστου εἴη ἂν τι σπέρμα ἴδιον.

πιθανὰ δὲ καὶ τὰ τοιαῦτα μαρτύρια ταύταις ταῖς δόξαις· οὐ γὰρ μόνον τὰ σύμφυτα προσεοικότες γίνονται τοῖς γονεῦσιν οἱ παῖδες ἀλλὰ καὶ τὰ ἐπίκτητα· οὐλὰς τε γὰρ ἐχόντων τῶν γεννησάντων ἤδη τινὲς ἔσχον ἐν τοῖς αὐτοῖς τόποις τῶν ἐκγόνων τὸν τύπον τῆς οὐλῆς, καὶ στίγμα ἔχοντος ἐν τῷ βραχίονι τοῦ πατρὸς ἐπεσήμηνεν ἐν Χαλκηδόνι τῷ τέκνῳ συγκεχυμένον μέντοι καὶ οὐ διηρθρωμένον τὸ γράμμα. ὅτι μὲν οὖν ἀπὸ παντὸς ἔρχεται τὸ σπέρμα σχεδὸν ἐκ τούτων (722a.) μάλιστα πιστεύουσί τινες.

## Κεφάλαιο 18

Φαίνεται δ' ἐξετάζουσι τὸν λόγον τὸναντίον μᾶλλον· τά τε γὰρ εἰρημένα λύειν οὐ χαλεπὸν, καὶ πρὸς τούτοις ἄλλα συμβαίνει λέγειν ἀδύνατα. πρῶτον μὲν οὖν ὅτι οὐθέν σημεῖον ἢ ὁμοιότης τοῦ ἀπιέναι ἀπὸ παντός, ὅτι καὶ

φωνήν καὶ ὄνυχας καὶ τρίχας ὅμοιοι γίνονται καὶ τὴν κίνησιν, ἀφ' ὧν οὐθὲν ἀπέρχεται. ἔνια δ' οὐκ ἔχουσί πω ὅταν γεννῶσιν, οἷον τρίχωσιν πολιῶν ἢ γενείου. ἔτι τοῖς ἄνωθεν γονεῦσιν εὐόικασιν ἀφ' ὧν οὐθὲν ἀπῆλθεν· ἀποδιδόασιν γὰρ διὰ πολλῶν γενεῶν αἱ ὁμοιότητες, οἷον καὶ ἐν Ἡλιδι ἢ τῷ Αἰθίοπι συγγενομένη· οὐ γὰρ ἡ θυγάτηρ ἐγένετο ἄλλ' ὁ ἐκ ταύτης Αἰθίοψ. καὶ ἐπὶ τῶν φυτῶν δὲ ὁ αὐτὸς λόγος· δῆλον γὰρ ὅτι καὶ τούτοις ἀπὸ πάντων ἂν τῶν μερῶν τὸ σπέρμα γίγνοιτο. πολλὰ δὲ τὰ μὲν οὐκ ἔχει, τὰ δὲ καὶ ἀφέλοι τις ἂν, τὰ δὲ προσφύεται. ἔτι οὐδ' ἀπὸ τῶν περικαρπίων ἀπέρχεται· καίτοι καὶ ταῦτα γίνεταί τὴν αὐτὴν ἔχοντα μορφήν.

Ἔτι πότερον ἀπὸ τῶν ὁμοιομερῶν μόνον ἀπέρχεται ἀφ' ἐκάστου οἷον ἀπὸ σαρκὸς καὶ ὀστοῦ καὶ νεύρου, ἢ καὶ ἀπὸ τῶν ἀνομοιομερῶν οἷον προσώπου καὶ χειρός; εἰ μὲν γὰρ ἀπ' ἐκείνων μόνον-εὐόικασι δὲ μᾶλλον ταῦτα τοῖς γονεῦσι [τὰ ἀνομοιομερῇ οἷον πρόσωπον καὶ χεῖρας καὶ πόδας]· εἴπερ οὖν μηδὲ ταῦτα τῷ ἀπὸ παντός ἀπελθεῖν, τί κωλύει μηδ' ἐκεῖνα τῷ ἀπὸ παντός ἀπελθεῖν ὅμοια εἶναι ἀλλὰ δι' ἄλλην αἰτίαν; εἰ δ' ἀπὸ τῶν ἀνομοιομερῶν μόνον -οὕκουν ἀπὸ πάντων. προσήκει δὲ μᾶλλον ἀπ' ἐκείνων· πρότερα γὰρ ἐκεῖνα καὶ σύγκειται τὰ ἀνομοιομερῇ ἐξ ἐκείνων, καὶ ὥσπερ πρόσωπον καὶ χεῖρας γίνονται εὐοικότες οὕτω καὶ σάρκας καὶ ὄνυχας. εἰ δ' ἀπ' ἀμφοτέρων, τίς ὁ τρόπος ἂν εἴη τῆς γενέσεως; σύγκειται γὰρ ἐκ τῶν ὁμοιομερῶν τὰ ἀνομοιομερῇ ὥστε τὸ ἀπὸ τούτων ἀπιέναι τὸ ἀπ' ἐκείνων ἂν εἴη ἀπιέναι καὶ τῆς συνθέσεως· ὥσπερ κἂν εἰ ἀπὸ τοῦ γεγραμμένου· ὀνόματος ἀπῆει τι, εἰ μὲν ἀπὸ παντός, κἂν ἀπὸ τῶν συλλαβῶν ἐκάστης, εἰ δ' ἀπὸ τούτων, ἀπὸ τῶν στοιχείων καὶ τῆς συνθέσεως. ὥστ' εἴπερ ἐκ πυρὸς καὶ τῶν τοιούτων σάρκες καὶ ὀστᾶ συνεστᾶσιν, ἀπὸ τῶν στοιχείων ἂν εἴη μᾶλλον· ἀπὸ γὰρ τῆς συνθέσεως πῶς ἐνδέχεται; ἀλλὰ (722b.) μὴν ἄνευ γε ταύτης οὐκ ἂν εἴη ὅμοια. ταύτην δ' εἴ τι δημιουργεῖ ὕστερον, τοῦτ' ἂν εἴη τὸ τῆς ὁμοιότητος αἴτιον ἄλλ' οὐ τὸ ἀπελθεῖν ἀπὸ παντός.

Ἔτι εἰ μὲν διεσπασμένα τὰ μέρη ἐν τῷ σπέρματι πῶς ζῆ; εἰ δὲ συνεχῆ ζῶον ἂν εἴη μικρόν. καὶ τὰ τῶν αἰδοίων πῶς; οὐ γὰρ ὅμοιον τὸ ἀπὸν ἀπὸ τοῦ ἄρρενος καὶ τοῦ θήλεος.

Ἔτι εἰ ἀπ' ἀμφοτέρων ὁμοίως ἀπὸ πάντων ἀπέρχεται, δύο γίνεταί ζῶα· ἐκατέρου γὰρ ἅπαντα ἔξει. διὸ καὶ Ἐμπεδοκλῆς εἰστικόν, εἴπερ οὕτω λεκτέον, μάλιστα λέγειν ὁμολογούμενα τούτῳ τῷ λόγῳ [τό γε τοσοῦτον, ἀλλ' εἴπερ ἐτέρᾳ πη, οὐ καλῶς]· φησὶ γὰρ ἐν τῷ ἄρρενι καὶ τῷ θήλει οἷον σύμβολον ἐνεῖναι, ὅλον δ' ἀπ' οὐδετέρου ἀπιέναι, ἀλλὰ διέσπασται μελέων φύσις, ἢ μὲν ἐν ἀνδρὸς ... διὰ τί γὰρ τὰ θήλεα οὐ γεννᾷ ἐξ αὐτῶν εἴπερ ἀπὸ παντός τε



ἀπέρχεται καὶ ἔχει ὑποδοχήν; ἀλλ' ὥς ἔοικεν ἢ οὐκ ἀπέρχεται ἀπὸ παντὸς ἢ οὕτως ὥσπερ ἐκεῖνος λέγει, οὐ ταῦτ' ἀφ' ἑκατέρου, διὸ καὶ δέονται τῆς ἀλλήλων συνουσίας. ἀλλὰ καὶ τοῦτ' ἀδύνατον. ὥσπερ γὰρ καὶ μεγάλα ὄντ' ἀδύνατον διεσπασμένα σώζεσθαι καὶ ἔμψυχα εἶναι, καθάπερ Ἐμπεδοκλῆς γεννᾷ ἐπὶ τῆς Φιλότητος λέγων·

ἢ πολλαὶ μὲν κόρσαι ἀναύχενες ἐβλάστησαν,

εἴθ' οὕτω συμφύεσθαι φησιν, τοῦτο δὲ φανερόν ὅτι ἀδύνατον· οὔτε γὰρ μὴ ψυχὴν ἔχοντα οὔτε μὴ ζωὴν τινα δύναται ἂν σώζεσθαι, οὔτε ὥσπερ ζῶα ὄντα πλείω συμφύεσθαι ὥστ' εἶναι πάλιν ἔν. ἀλλὰ μὴν τοῦτον τὸν τρόπον συμβαίνει λέγειν τοῖς ἀπὸ παντὸς ἀπιέναι φάσκουσιν, ὥσπερ τότε ἐν τῇ γῇ ἐπὶ τῆς Φιλότητος, οὕτω τούτοις ἐν τῷ σώματι. ἀδύνατον γὰρ συνεχῇ τὰ μόρια γίνεσθαι καὶ ἀπιέναι εἰς ἓνα τόπον συνιόντα. εἴτα πῶς καὶ διέσπασται τὰ ἄνω καὶ κάτω καὶ δεξιὰ καὶ ἀριστερὰ καὶ πρόσθια καὶ ὀπίσθια; πάντα γὰρ ταῦτα ἄλογά ἐστιν.

Ἔτι δὲ τὰ μέρη τὰ μὲν δυνάμει τὰ δὲ πάθεσι διώρισται, τὰ μὲν ἀνομοιομερῇ τῷ δύνασθαι τι ποιεῖν οἷον γλῶττα καὶ χεῖρ, τὰ δ' ὁμοιομερῇ σκληρότητι καὶ μαλακότητι καὶ τοῖς ἄλλοις τοῖς τοιούτοις πάθεσιν. οὐ πάντως οὖν ἔχον αἷμα οὐδὲ σὰρξ. δῆλον τοίνυν ὅτι ἀδύνατον τὸ ἀπελθὼν εἶναι συνώνυμον τοῖς μέρεσιν, οἷον αἷμα ἀπὸ (723a.) αἵματος ἢ σάρκα ἀπὸ σαρκός. ἀλλὰ μὴν εἴ γ' ἐξ ἑτέρου τινὸς ὄντος αἷμα γίνεταί οὐδ' ἂν τῆς ὁμοιότητος αἷτιον εἴη, ὥς λέγουσιν οἱ φάσκοντες οὕτω, τὸ ἀπελθεῖν ἀπὸ πάντων τῶν μορίων· ἱκανὸν γὰρ ἀφ' ἑνὸς ἀπιέναι μόνον εἴπερ μὴ ἐξ αἵματος αἷμα γίνεταί. διὰ τί γὰρ οὐκ ἂν καὶ ἅπαντα ἐξ ἑνὸς γίγνοιτο; ὁ αὐτὸς γὰρ λόγος ἔοικεν εἶναι οὗτος τῷ Ἀναξαγόρου, τῷ μηθὲν γίνεσθαι τῶν ὁμοιομερῶν· πλὴν ἐκεῖνος μὲν ἐπὶ πάντων, οὗτοι δ' ἐπὶ τῆς γενέσεως τῶν ζώων τοῦτο ποιοῦσιν. ἔπειτα τίνα τρόπον αὐξηθήσεται ταῦτα τὰ ἀπελθόντα ἀπὸ παντός; Ἀναξαγόρας μὲν γὰρ εὐλόγως φησὶ σάρκας ἐκ τῆς τροφῆς προσιέναι ταῖς σαρκίν· τοῖς δὲ ταῦτα μὲν μὴ λέγουσιν ἀπὸ παντὸς δ' ἀπιέναι φάσκουσι, πῶς ἑτέρου προσγενομένου ἔσται μεῖζον εἰ μὴ μεταβάλλει τὸ προσελθόν; ἀλλὰ μὴν εἴ γε δύναται μεταβάλλειν τὸ προσελθόν, διὰ τί οὐκ εὐθύς ἐξ ἀρχῆς τὸ σπέρμα τοιοῦτόν ἐστιν ὥστ' ἐξ αὐτοῦ δυνατόν εἶναι γίνεσθαι αἷμα καὶ σάρκας, ἀλλὰ μὴ αὐτὸ εἶναι ἐκεῖνο καὶ αἷμα καὶ σάρκας; οὐ γὰρ δὴ οὐδὲ τοῦτο ἐνδέχεται λέγειν ὥς τῇ κατακεράσει αὐξάνεται ὕστερον οἷον οἶνος ὕδατος προσεγχυθέντος· αὐτὸ γὰρ ἂν πρῶτον μάλιστα ἦν ἕκαστον ἄκρατον ὄν· νῦν δὲ ὕστερον μᾶλλον καὶ σὰρξ καὶ ὅστοῦν καὶ τῶν ἄλλων ἕκαστόν ἐστι μορίων. τοῦ δὲ σπέρματος φάναι τι νεῦρον εἶναι καὶ ὅστοῦν λίαν ἐστὶν ὑπὲρ ἡμᾶς τὸ λεγόμενον.

Πρὸς δὲ τούτοις εἰ τὸ θῆλυ καὶ τὸ ἄρρεν ἐν τῇ κυήσει διαφέρει καθάπερ Ἐμπεδοκλῆς λέγει· ἐν δ' ἐχύθη καθαροῖσι· τὰ μὲν τελέθουσι γυναῖκες, ψύχρος ἀντιάσαντα .., φαίνονται δ' οὖν μεταβάλλουσαι καὶ γυναῖκες καὶ ἄνδρες, ὥσπερ ἐξ ἀγόνων γόνιμοι οὕτω καὶ ἐκ θηλυτόκων ἄρρενοτόκοι, ὡς οὐκ ἐν τῷ ἀπελθεῖν ἀπὸ παντὸς ἢ μὴ τῆς αἰτίας οὔσης ἀλλ' ἐν τῷ σύμμετρον ἢ ἀσύμμετρον εἶναι τὸ ἀπὸ τῆς γυναικὸς καὶ τοῦ ἀνδρὸς ἀπὸν, ἢ καὶ δι' ἄλλην τινὰ τοιαύτην αἰτίαν. δῆλον τοίνυν, εἰ τοῦτο θήσομεν οὕτως ὅτι οὐ τῷ ἀπελθεῖν ἀπὸ τινος τὸ θῆλυ, ὥστ' οὐδὲ τὸ μέρος ὃ ἔχει ἴδιον τό τε ἄρρεν καὶ τὸ θῆλυ, εἴπερ τὸ αὐτὸ σπέρμα καὶ θῆλυ καὶ ἄρρεν δύναται γίνεσθαι ὡς οὐκ ὄντος τοῦ μορίου ἐν τῷ σπέρματι. τί οὖν διαφέρει ἐπὶ τούτου λέγειν ἢ (723b.) ἐπὶ τῶν ἄλλων μορίων; εἰ γὰρ μηδ' ἀπὸ τῆς ὑστέρας σπέρμα γίγνεται ὁ αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων ἂν εἴη μορίων.

Ἔτι ἓνια γίγνεται τῶν ζώων οὗτ' ἐξ ὁμογένων οὔτε τῷ γένει διαφόρων, οἷον αἱ μυῖαι καὶ τὰ γένη τῶν καλουμένων ψυλλῶν· ἐκ δὲ τούτων γίγνεται μὲν ζῶα οὐκέτι δ' ὅμοια τὴν φύσιν, ἀλλὰ γένος τι σκωλήκων. δῆλον οὖν ὅτι οὐκ ἀπὸ παντὸς μέρους ἀπὸντος γίνονται ὅσα ἑτερογενῆ· ὅμοια γὰρ ἂν ἦν εἴπερ τοῦ ἀπὸ παντὸς ἀπέναι σημεῖόν ἐστιν ἢ ὁμοιότης.

Ἔτι ἀπὸ μιᾶς συνουσίας καὶ τῶν ζώων ἓνια γεννᾷ πολλά (τὰ δὲ φυτὰ καὶ παντάπασιν· δῆλον γὰρ ὅτι ἀπὸ μιᾶς κινήσεως τὸν ἐπέτειον πάντα φέρει καρπὸν)· καίτοι πῶς δυνατόν ἐἶ ἀπὸ παντὸς ἀπεκρίνετο τὸ σπέρμα; μίαν γὰρ ἀπόκρισιν ἀπὸ μιᾶς ἀναγκαῖον γίνεσθαι συνουσίας καὶ μιᾶς διακρίσεως. ἐν δὲ ταῖς ὑστέραις χωρίζεσθαι ἀδύνατον· ἤδη γὰρ ὥσπερ ἀπὸ ζώου, οὐ σπέρματος εἶη ἢ διαχώρισις.

Ἔτι τὰ ἀποφυτευόμενα ἀφ' αὐτοῦ φέρει σπέρμα· δῆλον οὖν ὅτι καὶ πρὶν ἀποφυτευθῆναι ἀπὸ τοῦ αὐτοῦ μεγέθους ἔφερε τὸν καρπὸν, καὶ οὐκ ἀπὸ παντὸς τοῦ φυτοῦ ἀπῆλθε τὸ σπέρμα.

Μέγιστον δὲ τούτων τεκμήριον τεθεωρήκαμεν ἱκανῶς ἐπὶ τῶν ἐντόμων. καὶ γὰρ εἰ μὴ ἐν πᾶσιν, ἀλλ' ἐπὶ τῶν πλείστων ἐν τῇ ὀχείᾳ τὸ θῆλυ εἰς τὸ ἄρρεν μέρος τι αὐτοῦ ἀποτείνει· διὸ καὶ τὴν ὀχείαν, καθάπερ εἴπομεν πρότερον, οὕτω ποιοῦνται· τὰ γὰρ κάτωθεν εἰς τὰ ἄνω φαίνεται ἐναφιέντα, οὐκ ἐν πᾶσιν ἀλλ' ἐν τοῖς πλείστοις τῶν τεθεωρημένων. ὥστε φανερόν ἂν εἴη ὅτι οὐδ' ὅσα προῖεται γονὴν τῶν ἄρρένων, οὐ τὸ ἀπὸ παντὸς ἀπέναι τῆς γενέσεως αἰτίον ἐστιν, ἀλλ' ἄλλον τινὰ τρόπον περὶ οὗ σκεπτέον ὕστερον. καὶ γὰρ εἴπερ τὸ ἀπὸ παντὸς ἀπέναι συνέβαινεν, ὥσπερ φασίν, οὐθὲν ἔδει ἀπὸ πάντων ἀξιοῦν ἀπέναι ἀλλὰ μόνον ἀπὸ τοῦ δημιουργοῦντος, οἷον ἀπὸ τοῦ

τέκτονος ἀλλὰ μὴ ἀπὸ τῆς ὕλης. νῦν δ' ὅμοιον λέγουσιν ὥσπερ κἂν εἰ ἀπὸ τῶν ὑποδημάτων· σχεδὸν γὰρ ὅμοιος υἱὸς τῷ πατρὶ ὅμοια φορεῖ.

Ὅτι δ' ἡδονὴ σφοδρότερα γίνεται ἐν τῇ ὁμιλίᾳ τῇ τῶν ἀφροδισίων, οὐ τὸ ἀπὸ παντὸς ἀπιέναι αἴτιον ἀλλ' ὅτι κνησμός ἐστιν ἰσχυρός· διὸ καὶ εἰ πολλάκις συμβαίνει ἡ ὁμιλία αὕτη ἥττον γίνεται (724a.) τὸ χαίρειν τοῖς πλησιάζουσιν. ἔτι πρὸς τῷ τέλει ἡ χαρά, ἔδει δὲ ἐν ἐκάστω τῶν μορίων, καὶ μὴ ἅμα ἀλλ' ἐν μὲν τοῖς πρότερον ἐν δὲ τοῖς ὕστερον.

Τοῦ δ' ἐκ κολοβῶν γίνεσθαι κολοβὰ ἡ αὐτὴ αἰτία καὶ διὰ τί ὅμοια τοῖς γονεῦσιν. γίνεται δὲ καὶ οὐ κολοβὰ ἐκ κολοβῶν, ὥσπερ καὶ ἀνόμοια τοῖς τεκνώσασιν· περὶ ὧν ὕστερον τὴν αἰτίαν θεωρητέον· τὸ γὰρ πρόβλημα τοῦτ' ἐκείνοις ταῦτόν ἐστιν.

Ἔτι εἰ τὸ θῆλυ μὴ προῖεται σπέρμα τοῦ αὐτοῦ λόγου μηδ' ἀπὸ παντὸς ἀπιέναι. κἂν εἰ μὴ ἀπὸ παντὸς ἀπέρχεται, οὐθὲν ἄλογον τὸ μηδ' ἀπὸ τοῦ θήλεος ἀλλ' ἄλλον τινὰ τρόπον αἴτιον εἶναι τὸ θῆλυ τῆς γενέσεως. περὶ οὗ ἐχόμενόν ἐστιν ἐπισκέψασθαι ἐπειδὴ φανερόν ὅτι οὐκ ἀπὸ πάντων ἀποκρίνεται τὸ σπέρμα τῶν μορίων.

Ἀρχὴ δὲ καὶ ταύτης τῆς σκέψεως καὶ τῶν ἐπομένων πρῶτον λαβεῖν περὶ σπέρματος τί ἐστιν· οὕτω γὰρ καὶ περὶ τῶν ἔργων αὐτοῦ καὶ τῶν περὶ αὐτὸ συμβαινόντων ἔσται μᾶλλον εὐθεώρητον. βούλεται δὲ τοιοῦτον τὴν φύσιν εἶναι τὸ σπέρμα ἐξ οὗ τὰ κατὰ φύσιν συνιστάμενα γίνεται πρώτου, τοῦ τῷ ἐξ ἐκείνου τι εἶναι τὸ ποιοῦν οἶον τοῦ ἀνθρώπου· γίνεται γὰρ ἐκ τούτου ὅτι τοῦτό ἐστι τὸ σπέρμα.† ἐπεὶ δὲ πολλαχῶς γίνεται ἄλλο ἐξ ἄλλου-ἕτερον γὰρ τρόπον ὥς ἐξ ἡμέρας φαμέν νύξ γίνεται καὶ ἐκ παιδὸς ἀνὴρ, ὅτι τόδε μετὰ τόδε· ἄλλον δὲ τρόπον ὥς ἐκ χαλκοῦ ἀνδριᾶς καὶ ἐκ ξύλου κλίνη καὶ τᾶλλα ὅσα ὥς ἐξ ὕλης γίνεσθαι τὰ γιγνόμενα λέγομεν, ἔκ τινος ἐνυπάρχοντος καὶ σχηματισθέντος τὸ ὅλον ἐστίν. ἕτερον δὲ τρόπον ὥς ἐκ μουσικοῦ ἄμουσος καὶ ὥς ἐξ ὑγιοῦς κάμνων καὶ ὅλως ὥς τὸ ἐναντίον ἐκ τοῦ ἐναντίου. ἔτι δὲ παρὰ ταῦτα ὥς Ἐπίχαρμος ποιεῖ τὴν ἐποικοδόμησιν, ἐκ τῆς διαβολῆς ἡ λαιδορία, ἐκ δὲ ταύτης ἡ μάχη· ταῦτα δὲ πάντα ἔκ τινος ἡ ἀρχὴ τῆς κινήσεως. τῶν δὲ τοιούτων ἐνίων μὲν ἐν αὐτοῖς ἡ ἀρχὴ τῆς κινήσεως ἐστίν οἶον καὶ ἐν τοῖς νῦν εἰρημένοις (μέρος γάρ τι ἡ διαβολὴ τῆς πάσης ταραχῆς ἐστίν), ἐνίων δ' ἔξω οἶον αἱ τέχναι τῶν δημιουργουμένων καὶ ὁ λύχνος τῆς καιομένης οἰκίας.

Τὸ δὲ σπέρμα φανερόν ὅτι δυοῖν τούτοις ἐν θατέρῳ ἐστίν· ἢ γὰρ ὥς ἐξ ὕλης

αὐτοῦ ἢ ὡς ἐκ πρώτου κινήσαντός (724b.) ἐστὶ τὸ γινόμενον. οὐ γὰρ δὴ ὡς τότε μετὰ τότε οἶον ἐκ τῶν Παναθηναίων ὁ πλοῦς, οὐδ' ὡς ἐξ ἐναντίου· φθειρομένου τε γὰρ γίνεται τὸ ἐναντίον ἐκ τοῦ ἐναντίου, καὶ ἕτερόν τι δεῖ ὑποκεῖσθαι ἐξ οὗ ἔσται πρώτου ἐνυπάρχοντος. τοῖν δυοῖν δὴ ληπτέον ἐν ποτέρῳ θετέον τὸ σπέρμα, πότερον ὡς ὕλην καὶ πάσχον ἢ ὡς εἶδός τι καὶ ποιοῦν, ἢ καὶ ἄμφω. ἅμα γὰρ ἴσως δῆλον ἔσται καὶ πῶς ἢ ἐξ ἐναντίων γένεσις ὑπάρχει πᾶσι τοῖς ἐκ τοῦ σπέρματος· φυσικὴ γὰρ καὶ ἡ ἐκ τῶν ἐναντίων γένεσις· τὰ μὲν γὰρ ἐξ ἐναντίων γίνεται, ἄρρενος καὶ θήλεος, τὰ δ' ἐξ ἐνὸς μόνου, οἶον τὰ τε φυτὰ καὶ τῶν ζώων ἔνια ἐν ὅσοις μὴ ἐστὶ διωρισμένον τὸ ἄρρεν καὶ τὸ θῆλυ χωρὶς.

[[Γονὴ μὲν οὖν τὸ ἀπὸ τοῦ γεννῶντος καλεῖται ἀπὶόν, ὅσα συνδυάζεσθαι πέφυκε, τὸ πρῶτον ἔχον ἀρχὴν γενέσεως, σπέρμα δὲ τὸ ἐξ ἀμφοτέρων τὰς ἀρχὰς ἔχον τῶν συνδυασθέντων (οἶον τὰ τε τῶν φυτῶν καὶ ἐνίων ζώων ἐν οἷς μὴ κεχώρισται τὸ θῆλυ καὶ τὸ ἄρρεν), ὥσπερ τὸ γινόμενον ἐκ θήλεος καὶ ἄρρενος πρῶτον μίγμα οἶον κύημά τι ὃν ἢ ὠόν· καὶ γὰρ ταῦτα ἤδη ἔχει τὸ ἐξ ἀμφοῖν.

Σπέρμα δὲ καὶ καρπὸς διαφέρει τῷ ὕστερον καὶ πρότερον· καρπὸς μὲν γὰρ τῷ ἐξ ἄλλου εἶναι, σπέρμα δὲ τῷ ἐκ τούτου ἄλλο, ἐπεὶ ἄμφω γε ταύτόν ἐστιν.

[Ἡ δὲ τοῦ λεγομένου σπέρματος φύσις ἡ πρώτη, πάλιν λεκτέα τίς ἐστίν.]]

Ἀνάγκη δὴ πᾶν ὃ ἂν λαμβάνωμεν ἐν τῷ σώματι ἢ μέρος εἶναι τῶν κατὰ φύσιν, καὶ τοῦτο ἢ τῶν ἀνομοιομερῶν ἢ τῶν ὁμοιομερῶν, -ἢ τῶν παρὰ φύσιν οἶον φῦμα, ἢ περίττωμα ἢ σύντηγμα ἢ τροφήν. (λέγω δὲ περίττωμα μὲν τὸ τῆς τροφῆς ὑπόλειμμα, σύντηγμα δὲ τὸ ἀποκριθὲν ἐκ τοῦ αὐξήματος ὑπὸ τῆς παρὰ φύσιν ἀναλύσεως). ὅτι μὲν οὖν οὐκ ἂν εἴη μέρος φανερόν· ὁμοιομερὲς μὲν γὰρ ἐστίν, ἐκ δὲ τούτου οὐθὲν σύγκειται ὥσπερ ἐκ νεύρου καὶ σαρκός. ἔτι δὲ οὐδὲ κεχωρισμένον, τὰ δ' ἄλλα πάντα μέρη. ἀλλὰ μὴν οὐδὲ τῶν παρὰ φύσιν οὐδὲ πῆρωμα· ἐν ἅπασί τε γὰρ ὑπάρχει, καὶ ἡ φύσις ἐκ τούτου γίνεται. ἡ δὲ τροφή φανερώς ἐπείσακτον. ὥστ' ἀνάγκη ἢ σύντηγμα ἢ περίττωμα εἶναι. οἱ μὲν οὖν ἀρχαῖοι εἰκόασιν οἰόμενοις εἶναι σύντηγμα· τὸ γὰρ ἀπὸ παντός ἀπιέναι φάναι διὰ τὴν θερμότητα τὴν ἀπὸ τῆς (725a.) κινήσεως συντήγματος ἔχει δύναμιν. τὰ δὲ συντήγματα τῶν παρὰ φύσιν τι, ἐκ δὲ τῶν παρὰ φύσιν οὐθὲν γίνεται τῶν κατὰ φύσιν. ἀνάγκη ἄρα περίττωμα εἶναι. ἀλλὰ μὴν περίττωμά γε πᾶν ἢ ἀχρήστου τροφῆς ἐστίν ἢ χρησίμης. ἀχρηστον μὲν οὖν λέγω ἄφ' ἧς μηθὲν ἐτι συντελεῖται εἰς τὴν φύσιν ἀλλ' ἀναλίσκομένου πλέονος μάλιστα κακοῦται, τὴν δὲ χρησίμην τὴν ἐναντίαν. ὅτι

μὲν δὴ τοιοῦτον περίττωμα οὐκ ἂν εἴη φανερόν· τοῖς γὰρ κάκιστα διακειμένοις δι' ἡλικίαν ἢ νόσον πλεῖστον ἐνυπάρχει τοιοῦτον, σπέρμα δὲ ἥκιστα· ἢ γὰρ ὅλως οὐκ ἔχουσιν ἢ οὐ γόνιμον διὰ τὸ μίγνυσθαι ἄχρηστον περίττωμα καὶ νοσηματικόν.

Χρησίμου ἄρα περιττώματος μέρος τί ἐστὶ τὸ σπέρμα. χρησιμώτατον δὲ τὸ ἔσχατον καὶ ἐξ οὗ ἤδη γίνεται ἕκαστον τῶν μορίων. ἔστι γὰρ τὸ μὲν πρότερον τὸ δ' ὕστερον. τῆς μὲν οὖν πρώτης ροφῆς περίττωμα φλέγμα καὶ εἴ τι ἄλλο τοιοῦτον· καὶ γὰρ τὸ φλέγμα τῆς χρησίμου τροφῆς περίττωμά ἐστιν· σημεῖον δ' ὅτι μιννύμενον τροφῇ καθαρᾷ τρέφει καὶ πονοῦσι καταναλίσκεται. τὸ δὲ τελευταῖον ἐκ πλείστης τροφῆς ὀλίγιστον γίνεται. ἐννοεῖν δὲ δεῖ ὅτι μικρῷ αὐξάνεται τὰ ζῶα καὶ τὰ φυτὰ τῷ καθ' ἡμέραν· παμμίκρου γὰρ ἂν προστιθεμένου τοῦ αὐτοῦ ὑπερέβαλλε τὸ μέγεθος.

Τοῦναντίον ἄρα ἢ οἱ ἀρχαῖοι ἔλεγον λεκτέον. οἱ μὲν γὰρ τὸ ἀπὸ παντὸς ἀπίον, ἡμεῖς δὲ τὸ πρὸς ἅπαντ' ἰέναι πεφυκὸς σπέρμα ἐροῦμεν, καὶ οἱ μὲν σύντηγμα, φαίνεται δὲ περίττωμα μᾶλλον. εὐλογώτερον γὰρ ὅμοιον εἶναι τὸ προσιὸν ἔσχατον καὶ τὸ περιγιγνόμενον τοῦ τοιούτου, οἷον τοῖς γραφεῦσι τοῦ ἀνδρειακέλου πολλάκις περιγίγνεται ὅμοιον τῷ ἀναλωθέντι. συντηκόμενον δὲ φθείρεται πᾶν καὶ ἐξίσταται τῆς φύσεως. τεκμήριον δὲ τοῦ μὴ σύντηγμα εἶναι ἄλλὰ περίττωμα μᾶλλον τὸ τὰ μεγάλα τῶν ζώων ὀλιγοτόκα εἶναι, τὰ δὲ μικρὰ πολύγονα. σύντηγμα μὲν γὰρ πλέον ἀναγκαῖον εἶναι τοῖς μεγάλοις, περίττωμα δ' ἔλαττον· εἰς γὰρ τὸ σῶμα μέγα ὄν ἀναλίσκεται τὸ πλεῖστον τῆς τροφῆς ὥστ' ὀλίγον γίνεται τὸ περίττωμα. ἔτι τόπος συντήγματι μὲν οὐθεὶς ἀποδέδοται κατὰ φύσιν ἀλλὰ ρεῖ ὅπου ἂν εὐοδήσῃ τοῦ σώματος, τοῖς δὲ κατὰ φύσιν (725b.) περιττώμασι πᾶσιν, οἷον τῆς τροφῆς τῆς ξηρᾶς ἢ κάτω κοιλία καὶ τῆς ὑγρᾶς ἢ κύστις καὶ τῆς χρησίμης ἢ ἄνω κοιλία, καὶ τοῖς σπερματικοῖς ὑστέραι καὶ αἰδοῖα καὶ μαστοί· εἰς τούτους γὰρ ἀθροίζεται καὶ συρρεῖ. καὶ μαρτύρια τὰ συμβαίνοντα ὅτι τὸ εἰρημένον σπέρμα ἐστίν· ταῦτα δὲ συμβαίνει διὰ τὸ τὴν φύσιν εἶναι τοῦ περιττώματος τοιαύτην· ἢ τε γὰρ ἔκλυσις ἐλαχίστου ἀπελθόντος τούτου γίνεται ἐπίδηλος, ὥς στερισκόμενα τὰ σώματα τοῦ ἐκ τῆς τροφῆς γιγνομένου τέλους. (ὀλίγοις δέ τισιν ἐν μικρῷ χρόνῳ κατὰ τὰς ἡλικίας κουφίζει τοῦτ' ἀπίον ὅταν πλεονάσῃ, καθάπερ ἡ πρώτη τροφή ἂν ὑπερβάλλῃ τῷ πλήθει· καὶ γὰρ ταύτης ἀπιούσης τὰ σώματ' εὐημερεῖ μᾶλλον. ἔτι ὅταν συναπῇ ἄλλα περιττώματα· οὐ γὰρ μόνον σπέρμα τὸ ἀπίον ἀλλὰ καὶ ἕτεραι μεμιγμέναι δυνάμεις τούτοις συναπέρχονται, αὗται δὲ νοσώδεις, -διὸ ἐνίων γε καὶ ἄγονόν ποτε γίνεται τὸ ἀποχωροῦν διὰ τὸ ὀλίγον ἔχειν τὸ σπερματικόν. ἀλλὰ τοῖς πλείστοις καὶ ὥς ἐπὶ τὸ πολὺ εἰπεῖν συμβαίνει ἐκ τῶν ἀφροδισιασμῶν ἔκλυσις καὶ ἀδυναμία μᾶλλον διὰ τὴν

εἰρημένην αἰτίαν.) ἔτι οὐκ ἐνυπάρχει σπέρμα οὗτ' ἐν τῇ πρώτῃ ἡλικίᾳ οὗτ' ἐν τῷ γήρᾳ οὗτ' ἐν ταῖς ἀρρώστιαις, ἐν μὲν τῷ κάμνειν διὰ τὴν ἀδυναμίαν, ἐν δὲ τῷ γήρᾳ διὰ τὸ μὴ πέττειν τὸ ἰκάνον τὴν φύσιν, νέοις δ' οὕσι διὰ τὴν αὔξησιν· φθάνει γὰρ ἀναλίσκόμενον πᾶν· ἐν ἔτεσι γὰρ πέντε σχεδὸν ἐπὶ γε τῶν ἀνθρώπων ἡμισυ λαμβάνειν δοκεῖ τὸ σῶμα τοῦ μεγέθους τοῦ ἐν τῷ ἄλλῳ χρόνῳ γιγνομένου ἅπαντος.

Πολλοῖς δὲ συμβαίνει καὶ ζώοις καὶ φυτοῖς καὶ γένεσι πρὸς γένη διαφορὰ περὶ ταῦτα· κἂν τῷ γένει τῷ αὐτῷ τοῖς ὁμοειδέσι πρὸς ἄλληλα, οἷον ἀνθρώπῳ πρὸς ἄνθρωπον καὶ ἀμπέλῳ πρὸς ἄμπελον. τὰ μὲν γὰρ πολύσπερμα τὰ δ' ὀλιγόσπερμά ἐστι, τὰ δ' ἄσπερμα πάμπαν, οὐ δι' ἀσθένειαν ἀλλ' ἐνίοις γε διὰ τοῦναντίον· καταναλίσκεται γὰρ εἰς τὸ σῶμα οἷον τῶν ἀνθρώπων ἐνίοις· εὐεκτικοὶ γὰρ ὄντες καὶ γιγνόμενοι πολύσαρκοι ἢ πότεροι μᾶλλον ἥττον προΐενται σπέρμα καὶ ἥττον ἐπιθυμοῦσι τοῦ ἀφροδισιάζειν. ὅμοιον δὲ καὶ τὸ περὶ τὰς τραγώσας ἀμπέλους πάθος αἰ διὰ τὴν τροφήν ἐξυβρίζουσιν (ἐπεὶ καὶ οἱ (726a.) τράγοι πίονες ὄντες ἥττον ὀχεύουσιν, διὸ καὶ προλεπτόνουςιν αὐτούς· καὶ τὰς ἀμπέλους τραγᾶν ἀπὸ τοῦ πάθους τῶν τράγων καλοῦσιν). καὶ οἱ πίονες δὲ ἀγονώτεροι φαίνονται εἶναι τῶν μὴ πίωνων, καὶ γυναῖκες καὶ ἄνδρες διὰ τὸ τοῖς εὐτραφέσι πεττόμενον τὸ περίττωμα γίνεσθαι πιμελήν· ἔστι γὰρ καὶ ἡ πιμελὴ περίττωμα δι' εὐβοσίαν ὑγιεινόν.

Ἔνια δ' ὅλως οὐδὲ φέρει σπέρμα οἷον ἰτέα καὶ αἴγειρος. εἰσὶ μὲν οὖν καὶ ἄλλαι αἰτίαι τούτου τοῦ πάθους. καὶ γὰρ δι' ἀδυναμίαν οὐ πέττουσι καὶ διὰ δύναμιν ἀναλίσκουσιν ὥσπερ εἴρηται. ὁμοίως δὲ καὶ πολύχοά ἐστι καὶ πολύσπερμα τὰ μὲν διὰ δύναμιν τὰ δὲ δι' ἀδυναμίαν· [[πολὺ γὰρ καὶ ἄχρηστον περίττωμα συμμίγνυται, ὥστ' ἐνίοις γίνεσθαι καὶ ἀρρώστημα ὅταν αὐτῶν μὴ εὐοδήσῃ ἢ ἀποκάθαρσις. καὶ ἐνιοὶ μὲν ὑγιάζονται, οἱ δὲ καὶ ἀναιροῦνται. συντήκονται γὰρ ταύτῃ ὥσπερ καὶ εἰς τὸ οὖρον· ἥδη γὰρ καὶ τοῦτ' ἀσθένημα συνέβη τισίν.

Ἔτι ὁ πόρος ὁ αὐτὸς τῷ περιττώματι καὶ τῷ σπέρματι· καὶ ὅσοις μὲν ἀμφοῖν γίγνεται περίττωμα, καὶ τῆς ὑγρᾶς καὶ τῆς ξηρᾶς τροφῆς, ἥπερ ἢ τοῦ ὑγροῦ ταύτῃ καὶ ἢ τῆς γονῆς γίγνεται ἀπόκρισις (ὑγροῦ γὰρ περίττωμά ἐστιν· ἢ γὰρ τροφή πάντων ὑγρὰ μᾶλλον), οἷς δὲ μὴ ἐστὶν αὕτη, κατὰ τὴν τῆς ξηρᾶς ὑποστάσεως ἀποχώρησιν. ἔτι ἢ μὲν σύντηξις ἀεὶ νοσώδης, ἢ δὲ τοῦ περιττώματος ἀφαίρεσις ὠφέλιμος· ἢ δὲ τοῦ σπέρματος ἀποχώρησις ἐπαμφοτερίζει διὰ τὸ προσλαμβάνειν <τι> τῆς μὴ χρησίμου τροφῆς. εἰ δέ γ' ἦν σύντηξις, ἀεὶ ἔβλαπτεν ἄν· νῦν δ' οὐ ποιεῖ τοῦτο.]]

Ὅτι μὲν οὖν περίττωμά ἐστι τὸ σπέρμα χρησίμου τροφῆς καὶ τῆς ἐσχάτης, εἴτε πάντα προῖεται σπέρμα εἴτε μή, ἐν τοῖς προειρημένοις φανερόν.

## Κεφάλαιο 19

Μετὰ δὲ ταῦτα διοριστέον περίττωμά τε ποίας τροφῆς καὶ περὶ καταμηνίων· γίνεταί γάρ τισι καταμήνια τῶν ζωοτόκων. διὰ τούτων γὰρ φανερόν ἔσται καὶ περὶ τοῦ θήλεος πότερον προῖεται σπέρμα ὥσπερ τὸ ἄρρεν καὶ ἔστιν μίγμα τὸ γινόμενον ἐκ δυοῖν σπερμάτων, ἢ οὐθὲν σπέρμα ἀποκρίνεται ἀπὸ τοῦ θήλεος· καὶ εἰ μηθέν, πότερον οὐδὲ ἄλλο οὐθὲν συμβάλλεται εἰς τὴν γένεσιν ἀλλὰ μόνον παρέχει τόπον, ἢ συμβάλλεται τι, καὶ (726b.) τοῦτο πῶς καὶ τίνα τρόπον.

Ὅτι μὲν οὖν ἔστιν ἐσχάτη τροφή τὸ αἷμα τοῖς ἐναίμοις, τοῖς δ' ἀναίμοις τὸ ἀνάλογον, εἴρηται πρότερον· ἐπεὶ δὲ καὶ ἡ γονὴ περίττωμά ἐστι τροφῆς καὶ τῆς ἐσχάτης, ἥτοι αἷμα ἂν εἴη ἢ τὸ ἀνάλογον ἢ ἐκ τούτων τι. ἐπεὶ δ' ἐκ τοῦ αἵματος πεττομένου καὶ μεριζομένου πῶς γίνεταί τῶν μορίων ἕκαστον, τὸ δὲ σπέρμα πεφθὲν μὲν ἀλλοιότερον ἀποκρίνεται τοῦ αἵματος, ἄπεπτον δ' ὄν, καὶ ὅταν τις προσβιάζεται πλεονάκις χρώμενος τῷ ἀφροδισιάζειν ἐνίοις αἱματώδεις ἤδη προελήλυθεν, φανερόν ὅτι τῆς αἱματικῆς ἂν εἴη περίττωμα τροφῆς τὸ σπέρμα τῆς εἰς τὰ μέρη διαδιδομένης τελευταίας. καὶ διὰ τοῦτο μεγάλην ἔχει δύναμιν·καὶ γὰρ ἡ τοῦ καθαροῦ καὶ ὑγιεινοῦ αἵματος ἀποχώρησις ἐκλυτικόν· καὶ τὸ ὅμοια γίνεσθαι τὰ ἔκγονα τοῖς γεννήσασιν εὖλογον· ὅμοιον γὰρ τὸ προσελθὸν πρὸς τὰ μέρη τῷ ὑπολειφθέντι. ὥστε τὸ σπέρμα ἐστὶ τὸ τῆς χειρὸς ἢ τὸ τοῦ προσώπου ἢ ὅλου τοῦ ζώου ἀδιορίστως χεῖρ ἢ πρόσωπον ἢ ὅλον ζῶον· καὶ οἷον ἐκείνων ἕκαστον ἐνεργεῖα τοιοῦτον τὸ σπέρμα δυνάμει, ἢ κατὰ τὸν ὄγκον τὸν ἑαυτοῦ, ἢ ἔχει τινὰ δύναμιν ἐν ἑαυτῷ (τοῦτο γὰρ οὐπω δῆλον ἡμῖν ἐκ τῶν διωρισμένων πότερον τὸ σῶμα τοῦ σπέρματός ἐστι τὸ αἴτιον τῆς γενέσεως ἢ ἔχει τινὰ ἕξιν καὶ ἀρχὴν κινήσεως γεννητικῆν)· οὐδὲ γὰρ ἡ χεῖρ οὐδ' ἄλλο τῶν μορίων οὐθὲν ἄνευ ψυχικῆς ἢ ἄλλης τινὸς δυνάμεως ἐστι χεῖρ οὐδὲ μόριον οὐθὲν ἀλλὰ μόνον ὁμώνυμον.

[[Φανερόν δὲ καὶ ὅτι ὅσοις σύντηξις γίνεταί σπερματικὴ καὶ τοῦτο περίττωμά ἐστιν. συμβαίνει δὲ τοῦτο ὅταν ἀναλύηται εἰς τὸ προελθόν, ὥσπερ ὅταν ἀποπέσῃ τὸ ἐναλειφθὲν τοῦ κονιάματος εὐθύς· ταῦτόν γάρ ἐστι τὸ ἀπελθόν τῷ πρώτῳ προστεθέντι. τὸν αὐτὸν τρόπον καὶ τὸ τελευταῖον περίττωμα τῷ πρώτῳ συντήγματι ταύτόν ἐστιν.]] καὶ περὶ μὲν τούτων διωρίσθω τὸν τρόπον τοῦτον.

Ἐπεὶ δ' ἀναγκαῖον καὶ τῷ ἀσθενεστέρῳ γίνεσθαι περίττωμα πλεῖον καὶ ἥττον πεπεμμένον, τοιοῦτον δ' ὃν ἀναγκαῖον εἶναι αἱματώδους ὑγρότητος πλῆθος, ἀσθενέστερον δὲ τὸ ἐλάττονος θερμότητος κοινωνοῦν κατὰ φύσιν, τὸ δὲ θῆλυ ὅτι τοιοῦτον εἴρηται πρότερον, ἀναγκαῖον καὶ τὴν ἐν τῷ θήλει γιγνομένην αἱματώδη (727a.) ἀπόκρισιν περίττωμα εἶναι. γίνεται δὲ τοιαύτη ἡ τῶν καλουμένων καταμηνίων ἔκκρισις.

Ὅτι μὲν τοίνυν ἐστὶ τὰ καταμήνια περίττωμα καὶ ὅτι ἀνάλογον ὡς τοῖς ἄρρεσιν ἡ γονὴ οὕτω τοῖς θήλεσι τὰ καταμήνια φανερόν, ὅτι δ' ὀρθῶς εἴρηται σημεῖα τὰ συμβαίνοντα περὶ αὐτά. κατὰ γὰρ τὴν αὐτὴν ἡλικίαν τοῖς μὲν ἄρρεσιν ἄρχεται ἐγγίγνεσθαι γονὴ καὶ ἀποκρίνεται, τοῖς δὲ θήλεσι ῥήγνυται τὰ καταμήνια καὶ φωνὴν τε μεταβάλλουσι καὶ ἐπισημαίνει τὰ περὶ τοὺς μαστούς, -καὶ παύεται τῆς ἡλικίας ληγούσης τοῖς μὲν τὸ δύνασθαι γεννᾶν τοῖς δὲ τὰ καταμήνια. ἔτι δὲ καὶ τὰ τοιάδε σημεῖα ὅτι περίττωμά ἐστιν αὕτη ἡ ἔκκρισις τοῖς θήλεσιν. ὡς γὰρ ἐπὶ τὸ πολὺ οὕθ' αἱμορροῖδες γίνονται ταῖς γυναιξὶν οὗτ' ἐκ τῶν ῥινῶν ῥύσις αἵματος οὔτε τι ἄλλο μὴ τῶν καταμηνίων ἴσταμένων· ἐάν τε συμβῇ τι τούτων χεῖρους γίνονται αἱ καθάρσεις ὡς μεθισταμένης εἰς ταῦτα τῆς ἀποκρίσεως. ἔτι δὲ οὕτε φλεβώδεις ὁμοίως γλαφυρώτερά τε καὶ λειότερα τὰ θήλεα τῶν ἄρρένων ἐστὶ διὰ τὸ συνεκκρίνεσθαι τὴν εἰς ταῦτα περίττωσιν ἐν τοῖς καταμηνίοις. τὸ δ' αὐτὸ τοῦτο δεῖ νομίζειν αἵτιον εἶναι καὶ τοῦ τοὺς ὄγκους ἐλάττους εἶναι τῶν σωμάτων τοῖς θήλεσιν ἢ τοῖς ἄρρεσιν ἐν τοῖς ζωοτοκοῦσιν· ἐν τούτοις γὰρ ἡ τῶν καταμηνίων γίνεται ῥύσις θύραζε μόνοις, καὶ τούτων ἐπιδηλότατα ἐν ταῖς γυναιξίν· πλείστην γὰρ ἀφίησιν ἀπόκρισιν γυνὴ τῶν ζώων. διόπερ ἐπιδηλοτάτως ἀεὶ ὥχρον τέ ἐστὶ καὶ ἀδηλόφλεβον, καὶ τὴν ἔλλειψιν πρὸς τοὺς ἄρρενας ἔχει τοῦ σώματος φανεράν.

Ἐπεὶ δὲ τοῦτ' ἐστὶν ὃ γίνεται τοῖς θήλεσιν ὡς ἡ γονὴ τοῖς ἄρρεσιν, δύο δ' οὐκ ἐνδέχεται σπερματικᾶς ἅμα γίνεσθαι ἀποκρίσεις, φανερόν ὅτι τὸ θῆλυ οὐ συμβάλλεται σπέρμα εἰς τὴν γένεσιν. εἰ μὲν γὰρ σπέρμα ἦν τὰ καταμήνια οὐκ ἂν ἦν· νῦν δὲ διὰ τὸ ταῦτα γίνεσθαι ἐκεῖνο οὐκ ἔστιν.

Διότι μὲν οὖν ὥσπερ τὸ σπέρμα καὶ τὰ καταμήνια περίττωμά ἐστιν εἴρηται· λάβοι δ' ἂν τις εἰς τοῦτο μαρτύρια ἔνια τῶν συμβαινόντων τοῖς ζώοις. τά τε γὰρ πίονα ἥττον ἐστὶ σπερματικὰ τῶν ἀπιμέλων, ὥσπερ εἴρηται πρότερον (αἵτιον δ' ὅτι καὶ ἡ πιμελὴ περίττωμά ἐστὶ καθάπερ τὸ σπέρμα, καὶ πεπεμμένον αἶμα, ἀλλ' οὐ τὸν αὐτὸν τρόπον τῷ σπέρματι. ὥστ' εὐλόγως εἰς τὴν πιμελὴν (727b.) ἀνηλωμένης τῆς περιττώσεως ἐλλείπει τὰ περὶ τὴν γονήν), τῶν τε ἀναίμων τὰ μαλάκια καὶ τὰ μαλακόστρακα περὶ τὴν κύησιν ἐστὶν



ἄριστα· διὰ τὸ ἄναιμα γὰρ εἶναι καὶ μὴ γίνεσθαι πιμελὴν ἐν αὐτοῖς τὸ ἀνάλογον αὐτοῖς τῇ πιμελῇ ἀποκρίνεται εἰς τὸ περίττωμα τὸ σπερματικόν. σημεῖον δ' ὅτι οὐ τοιοῦτον σπέρμα προῖεται τὸ θῆλυ οἶον τὸ ἄρρεν, οὐδὲ μίγνυμένων ἀμφοῖν γίγνεται, ὥσπερ τινὲς φασιν, ὅτι πολλάκις τὸ θῆλυ συλλαμβάνει οὐ γενομένης αὐτῇ τῆς ἐν τῇ ὁμιλίᾳ ἡδονῆς· καὶ γιγνομένης πάλιν οὐδὲν ἦττον, καὶ ἰσοδρομησάντων [παρὰ] τοῦ ἄρρενος καὶ τοῦ θήλεος οὐθὲν γεννᾶται ἐὰν μὴ ἡ τῶν καλουμένων καταμηνίων ἱκμὰς ὑπάρχῃ σύμμετρος. διὸ οὔτε ὅλως μὴ γιγνομένων αὐτῶν γεννᾶ τὸ θῆλυ οὔτε γιγνομένων ὅταν ἐξικμάζῃ ὡς ἐπὶ τὸ πολὺ, ἀλλὰ μετὰ τὴν κάθαρσιν. ὅτε μὲν γὰρ οὐκ ἔχει τροφήν οὐδ' ὕλην ἐξ ἧς δυνήσεται συστήσῃ τὸ ζῶον ἢ ἀπὸ τοῦ ἄρρενος ἐνυπάρχουσα ἐν τῇ γονῇ δύναμις, ὅτε δὲ συνεκκλύζεται διὰ τὸ πλῆθος. ὅταν δὲ γενομένων ἀπέλθῃ τὸ ὑπολειφθὲν συνίσταται. ὅσαι δὲ μὴ γιγνομένων τῶν καταμηνίων συλλαμβάνουσιν, ἢ μεταξὺ γιγνομένων ὕστερον δὲ μή, αἴτιον ὅτι ταῖς μὲν τοσαύτῃ γίγνεται ἱκμὰς ὅση μετὰ τὴν κάθαρσιν ὑπολείπεται ταῖς γονίμοις, πλείων δ' οὐ γίγνεται περίττωσις ὥστε καὶ θύραζε ἀπελθεῖν, -ταῖς δὲ μετὰ τὴν κάθαρσιν συμμύει τὸ στόμα τῶν ὑστερῶν. ὅταν οὖν πολὺ μὲν τὸ ἀπεληλυθὸς ᾖ, ἔτι δὲ γίγνηται μὲν κάθαρσις, μὴ τοσαύτῃ δὲ ὥστε συνεξικμάζειν τὸ σπέρμα, τότε πλησιάζουσιν συλλαμβάνουσιν.

οὐδὲν δὲ ἄτοπον τὸ συνειληφυῖαις ἔτι γίνεσθαι· καὶ γὰρ ὕστερον μέχρι τινὸς φοιτᾷ τὰ καταμήνια, ὀλίγα δὲ καὶ οὐ διὰ παντός. ἀλλὰ τοῦτο μὲν νοσηματώδες, διόπερ ὀλίγαις καὶ ὀλιγάκις συμβαίνει· τὰ δ' ὡς ἐπὶ τὸ πολὺ γιγνόμενα μάλιστα κατὰ φύσιν ἐστίν.

Ὅτι μὲν οὖν συμβάλλεται τὸ θῆλυ εἰς τὴν γένεσιν τὴν ὕλην, τοῦτο δ' ἐστὶν ἐν τῇ καταμηνίων συστάσει, τὰ δὲ καταμήνια περίττωμα, δῆλον.

## Κεφάλαιο 20

Ὁ δ' οἶονταί τινες σπέρμα συμβάλλεσθαι ἐν τῇ συνουσίᾳ τὸ θῆλυ διὰ τὸ γίνεσθαι παραπλησίαν τε χαρὰν ἐνίοτε αὐταῖς τῇ τῶν ἀρρένων καὶ ἅμα ὑγρὰν ἀπόκρισιν, οὐκ ἔστιν ἡ ὑγρασία αὕτη σπερματικὴ (728a.) ἀλλὰ τοῦ τόπου ἴδιος ἐκάσταις. ἔστι γὰρ τῶν ὑστερῶν ἔκκρισις καὶ ταῖς μὲν γίγνεται ταῖς δ' οὐ· γίγνεται μὲν γὰρ ταῖς λευκοχρόοις καὶ θηλυκαῖς ὡς ἐπὶ τὸ πολὺ εἰπεῖν, οὐ γίγνεται δὲ ταῖς μελαίναις καὶ ἀρρενωποῖς. τὸ δὲ πλῆθος αἷς γίγνεται ἐνίοτε οὐ κατὰ σπέρματος πρόεσιν ἐστίν, ἀλλὰ πολὺ ὑπερβάλλει. ἔτι δὲ καὶ ἐδέσματα ἕτερα ἐτέρων ποιεῖ πολλὴν διαφορὰν τοῦ γίνεσθαι τὴν ἔκκρισιν ἢ ἐλάττω ἢ πλείω τὴν τοιαύτην, οἶον ἔνια τῶν δριμέων ἐπίδηλον ποιεῖ εἰς πλῆθος τὴν ἀπόκρισιν.

Τὸ δὲ συμβαίνειν ἡδονὴν ἐν τῇ συνουσίᾳ οὐ μόνον τοῦ σπέρματος προῖεμένου ἐστὶν ἀλλὰ καὶ πνεύματος ἐξ οὗ συνισταμένου ἀποσπερματίζει. δῆλον δ' ἐπὶ τῶν παίδων τῶν μήπω δυναμένων προῖεσθαι, ἐγγὺς δὲ τῆς ἡλικίας ὄντων, καὶ τῶν ἀγόνων ἀνδρῶν· γίγνεται γὰρ πᾶσι τούτοις ἡδονὴ ξυομένοις. καὶ τοῖς γε διεφθαρμένοις τὴν γένεσιν ἔστιν ὅτε ἀναλύονται αἱ κοιλίαι διὰ τὸ ἀποκρίνεσθαι περίττωμα εἰς τὴν κοιλίαν οὐ δυνάμενον πεφθῆναι καὶ γενέσθαι σπέρμα.

Ἔοικε δὲ καὶ τὴν μορφὴν γυναικὶ παῖς, καὶ ἔστιν ἡ γυνὴ ὥσπερ ἄρρεν ἄγονον· ἀδυναμία γάρ τινι τὸ θῆλυ ἐστὶ τῷ μὴ δύνασθαι πέττειν ἐκ τῆς τροφῆς σπέρμα τῆς ὑστάτης (τοῦτο δ' ἐστὶν ἡ αἷμα ἢ τὸ ἀνάλογον ἐν τοῖς ἀναίμοις) διὰ ψυχρότητα τῆς φύσεως. ὥσπερ οὖν ἐν ταῖς κοιλίαις διὰ τὴν ἀπεψίαν γίγνεται διάρροια οὕτως ἐν ταῖς φλεψὶν αἷ τ' ἄλλαι αἱμορροΐδες καὶ αἱ τῶν καταμηνίων· καὶ γὰρ αὕτη αἱμορροΐς ἐστίν, ἀλλ' ἐκεῖναι μὲν διὰ νόσον αὕτη δὲ φυσική.

Ὡστε φανερόν ὅτι εὐλόγως γίγνεται ἐκ τούτου ἡ γένεσις. ἔστι γὰρ τὰ καταμήνια σπέρμα οὐ καθαρὸν ἀλλὰ δεόμενον ἐργασίας, ὥσπερ ἐν τῇ περὶ τοὺς καρποὺς γενέσει, ὅταν ἡ μήπω διητημένη, ἔνεστι μὲν ἡ τροφή, δεῖται δ' ἐργασίας πρὸς τὴν κάθαρσιν. διὸ καὶ μίγνυμένη ἐκείνη μὲν τῇ γονῇ, αὕτη δὲ καθαρᾷ τροφῇ, ἡ μὲν γεννᾷ ἡ δὲ τρέφει.

Σημεῖον δὲ τοῦ τὸ θῆλυ μὴ προῖεσθαι σπέρμα καὶ τὸ γίγνεσθαι ἐν τῇ ὁμιλίᾳ τὴν ἡδονὴν τῇ ἀφῇ κατὰ τὸν αὐτὸν τρόπον τοῖς ἄρρεσιν· καίτοι οὐ προῖενται τὴν ἰκμάδα ταύτην ἐντεῦθεν. ἔτι δ' οὐ πᾶσι γίγνεται τοῖς θήλεσιν αὕτη ἢ ἔκκρισις ἀλλὰ τοῖς αἱματικοῖς, καὶ οὐδὲ τούτοις πᾶσιν ἄλλ' ὅσων αἱ ὑστέραι μὴ πρὸς τῷ ὑποζώματι εἰσι μὴδ' ὠτοκοῦσιν, ἔτι δ' (728b.) οὐδὲ τοῖς αἷμα μὴ ἔχουσιν ἀλλὰ τὸ ἀνάλογον· ὅπερ γὰρ ἐν ἐκείνοις τὸ αἷμα, ἐν τούτοις ἑτέρα ὑπάρχει σύγκρισις. τοῦ δὲ μήτε τούτοις γίγνεσθαι κάθαρσιν μήτε τῶν αἷμα ἐχόντων τοῖς εἰρημένοις, [τοῖς κάτω ἔχουσι καὶ μὴ ὠτοκοῦσιν] αἰτία ἡ ξηρότης τῶν σωμάτων, ὀλίγον λείπουσα τὸ περίττωμα καὶ τοσοῦτον ὅσον εἰς τὴν γένεσιν ἱκανὸν μόνον, ἔξω δὲ μὴ προῖεσθαι. ὅσα δὲ ζωοτόκα ἄνευ ὠτοκίας (ταῦτα δ' ἐστὶν ἄνθρωπος καὶ τῶν τετραπόδων ὅσα κάμπει τὰ ὀπίσθια σκέλη ἐντός· ταῦτα μὲν γὰρ πάντα ζωοτοκεῖ ἄνευ ὠτοκίας) τούτοις δὲ γίγνεται μὲν πᾶσιν, πλὴν εἴ τι πεπήρωται ἐν τῇ γενέσει οἷον ὀρεὺς, οὐ μὴν ἐπιπολάζουσί γε αἱ καθάρσεις ὥσπερ ἀνθρώποις. δι' ἀκριβείας δέ, πῶς συμβαίνει ταῦτα περὶ ἕκαστον τῶν ζώων, γέγραπται ἐν ταῖς περὶ τὰ ζῶα ἱστορίαις. πλείστη δὲ γίγνεται κάθαρσις τῶν ζώων ταῖς γυναιξί, καὶ τοῖς ἄρρεσι πλείστη τοῦ σπέρματος πρόεσις κατὰ λόγον τοῦ μεγέθους. αἵτιον δ' ἡ

τοῦ σώματος σύστασις ὑγρὰ καὶ θερμὴ οὖσα· ἀναγκαῖον γὰρ ἐν τῷ τοιούτῳ γίνεσθαι πλείστην περίττωσιν. ἔτι δὲ οὐδὲ τὰ τοιαῦτ' ἔχει ἐν τῷ σώματι μέρος εἰς ᾧ τρέπεται ἢ περίττωσις ὥσπερ ἐν τοῖς ἄλλοις· οὐ γὰρ ἔχει οὔτε τριχῶν πλῆθος κατὰ τὸ σῶμα οὔτε ὀστέων καὶ κεράτων καὶ ὀδόντων ἐκκρίσεις.

Σημεῖον δ' ὅτι ἐν τοῖς καταμηνίοις τὸ σπέρμα ἐστίν· ἅμα γάρ, ὥσπερ εἴρηται πρότερον, τοῖς ἄρρεσι γίνεται τὸ περίττωμα τοῦτο καὶ τοῖς θήλεσι τὰ καταμήνια ἐπισημαίνει ἐν τῇ αὐτῇ ἡλικίᾳ, ὡς καὶ ἅμα διισταμένων τῶν τόπων τῶν δεκτικῶν ἑκατέρου τοῦ περιττώματος· καὶ ἀραιουμένων ἑκατέρων τῶν πλησίον τόπων ἐξανθεῖ ἢ τῆς ἥβης τρίχωσις. μελλόντων δὲ διίστασθαι οἱ τόποι ἀνοικοῦσιν ὑπὸ τοῦ πνεύματος, τοῖς μὲν ἄρρεσιν ἐπιδηλότερον περὶ τοὺς ὄρχεις, ἐπισημαίνει δὲ καὶ περὶ τοὺς μαστούς, τοῖς δὲ θήλεσι περὶ τοὺς μαστοὺς μᾶλλον· ὅταν γὰρ δύο δακτύλους ἀρθῶσι τότε γίνεται τὰ καταμήνια ταῖς πλείσταις.

Ἐν ὅσοις μὲν οὖν τῶν ζῶν ἐχόντων μὴ κεχώρισται τὸ θῆλυ καὶ τὸ ἄρρεν, τούτοις μὲν τὸ σπέρμα οἷον κύημα ἐστίν. λέγω δὲ κύημα τὸ πρῶτον μίγμα ἐκ θήλεος καὶ ἄρρενος. διὸ καὶ ἐξ ἐνὸς σπέρματος ἐν σῶμα γίνεται οἷον ἐξ ἐνὸς πυροῦ εἰς πυθμὴν, ὥσπερ ἐξ ἐνὸς ὡοῦ ἐν ζῳον (τὰ γὰρ δίδυμα τῶν (729a.) ὡῶν δύο ὡὰ ἐστίν). ἐν ὅσοις δὲ τῶν γενῶν διώρισται τὸ θῆλυ καὶ τὸ ἄρρεν, ἐν τούτοις ἀφ' ἐνὸς σπέρματος ἐνδέχεται πολλὰ γίνεσθαι ζῶα, ὡς διαφέροντος τῇ φύσει τοῦ σπέρματος ἐν τοῖς φυτοῖς τε καὶ ζώοις. σημεῖον δέ, ἀπὸ μιᾶς γὰρ ὀχείας πλείω γίνεται ἐν τοῖς πλείω δυναμένοις γεννᾶν ἐνός. ἢ καὶ δῆλον ὅτι οὐκ ἀπὸ παντὸς ἔρχεται ἡ γονή· οὔτε γὰρ ἂν κεχωρισμένα ἀπὸ τοῦ αὐτοῦ μέρους εὐθὺς ἀπεκρίνετο οὔτε ἅμα ἐλθόντα εἰς τὰς ὑστέρας ἐκεῖ διεχωρίζετο· ἀλλὰ συμβαίνει ὥσπερ εὐλογον, ἐπειδὴ τὸ μὲν ἄρρεν παρέχεται τό τε εἶδος καὶ τὴν ἀρχὴν τῆς κινήσεως τὸ δὲ θῆλυ τὸ σῶμα καὶ τὴν ὕλην, οἷον ἐν τῇ τοῦ γάλακτος πῆξει τὸ μὲν σῶμα τὸ γάλα ἐστίν, ὁ δὲ ὀπὸς ἢ ἡ πυετία τὸ τὴν ἀρχὴν ἔχον τὴν συνιστάσαν, οὕτω τὸ ἀπὸ τοῦ ἄρρενος ἐν τῷ θήλει μεριζόμενον. δι' ἣν δ' αἰτίαν μερίζεται ἔνθα μὲν εἰς πλείω ἔνθα δ' εἰς ἐλάττω ἔνθα δὲ μοναχῶς ἕτερος ἔσται λόγος. ἀλλὰ διὰ τὸ μηθέν γε διαφέρειν τῷ εἶδει, ἀλλ' ἐὰν μόνον σύμμετρον ἢ τὸ διαιρούμενον πρὸς τὴν ὕλην, καὶ μήτε ἔλαττον ὥστε μὴ πέττειν μηδὲ συνιστάναι, μήτε πλεῖον ὥστε ξηρᾶναι, πλείω οὕτω γεννᾶται. ἐκ δὲ τοῦ συνιστάντος πρώτου, ἐξ ἐνὸς ἤδη ἐν γίνεται μόνον.

ὅτι μὲν οὖν τὸ θῆλυ εἰς τὴν γένεσιν γονὴν μὲν οὐ συμβάλλεται, συμβάλλεται δέ τι καὶ τοῦτ' ἐστίν ἢ τῶν καταμηνίων σύστασις καὶ τὸ ἀνάλογον ἐν τοῖς ἀναίμοις, ἐκ τε τῶν εἰρημένων δῆλον καὶ κατὰ τὸν λόγον καθόλου

σκοπουμένοις. ἀνάγκη γὰρ εἶναι τὸ γεννῶν καὶ ἐξ οὗ, καὶ τοῦτ' ἂν καὶ ἐν ἧ, τῷ γε εἶδει διαφέρειν καὶ τῷ τὸν λόγον αὐτῶν εἶναι ἕτερον, ἐν δὲ τοῖς κεχωρισμέναις ἔχουσι τὰς δυνάμεις καὶ τὰ σώματα καὶ τὴν φύσιν ἑτέραν εἶναι τοῦ τε ποιοῦντος καὶ τοῦ πάσχοντος. εἰ οὖν τὸ ἄρρεν ἐστὶν ὡς κινεῖν καὶ ποιεῖν, τὸ δὲ θῆλυ [ἢ θῆλυ] ὡς παθητικόν, εἰς τὴν τοῦ ἄρρενος γονὴν τὸ θῆλυ ἂν συμβάλλοιτο οὐ γονὴν ἄλλ' ὕλην. ὅπερ καὶ φαίνεται συμβαῖνον· κατὰ γὰρ τὴν πρώτην ὕλην ἐστὶν ἡ τῶν καταμηνίων φύσις.

## Κεφάλαιο 21

Καὶ περὶ μὲν τούτων διωρίσθω τὸν τρόπον τοῦτον. ἅμα δ' ἐκ τούτων φανερόν, περὶ ὧν ἐχόμενόν ἐστιν ἐπισκέψασθαι, (729b.) πῶς ποτε συμβάλλεται εἰς τὴν γένεσιν τὸ ἄρρεν καὶ πῶς αἰτίον ἐστὶ τοῦ γιγνομένου τὸ σπέρμα τὸ ἀπὸ τοῦ ἄρρενος, πότερον ὡς ἐνυπάρχον καὶ μόριον ὃν εὐθὺς τοῦ γιγνομένου σώματος, μινύμενον τῇ ὕλῃ τῇ παρὰ τοῦ θήλεος, ἢ τὸ μὲν σῶμα οὐθὲν κοινωνεῖ τοῦ σπέρματος, ἢ δ' ἐν αὐτῷ δυνάμεις καὶ κινήσεις· αὕτη μὲν γὰρ ἐστὶν ἡ ποιοῦσα, τὸ δὲ συνιστάμενον καὶ λαμβάνον τὴν μορφήν τὸ τοῦ ἐν τῇ θήλει περιττώματος λοιπόν. κατὰ τε δὴ τὸν λόγον οὕτω φαίνεται καὶ ἐπὶ τῶν ἔργων. καθόλου τε γὰρ ἐπισκοποῦσιν οὐ φαίνεται γιγνόμενον ἐν ἐκ τοῦ παθητικοῦ καὶ τοῦ ποιοῦντος ὡς ἐνυπάρχοντος ἐν τῷ γιγνομένῳ τοῦ ποιοῦντος, οὐδ' ὅλως δὴ ἐκ τοῦ κινουμένου καὶ κινεῖντος. ἀλλὰ μὴν τό γε θῆλυ ἢ θῆλυ παθητικόν, τὸ δ' ἄρρεν ἢ ἄρρεν ποιητικόν καὶ ὅθεν ἡ ἀρχὴ τῆς κινήσεως. ὥστε ἂν ληφθῇ τὰ ἄκρα ἐκατέρων, ἢ τὸ μὲν ποιητικόν καὶ κινεῖν τὸ δὲ παθητικόν καὶ κινούμενον, οὐκ ἔστιν ἐκ τούτων τὸ γιγνόμενον ἐν, ἀλλ' ἢ οὕτως ὡς ἐκ τοῦ τέκτονος καὶ ξύλου ἢ κλίνῃ ἢ ὡς ἐκ τοῦ κηροῦ καὶ τοῦ εἰδους ἢ σφαῖρα. δῆλον ἄρα ὅτι οὕτ' ἀνάγκη ἀπιέναι τι ἀπὸ τοῦ ἄρρενος, οὕτ' εἴ τι ἀπέρχεται διὰ τοῦτο ἐκ τούτου ὡς ἐνυπάρχοντος τὸ γεννώμενόν ἐστιν ἄλλ' ὡς ἐκ κινήσαντος καὶ τοῦ εἰδους, ὡς καὶ ἀπὸ τῆς ἰατρικῆς ὁ ὑγιασθεὶς. συμβαίνει δ' ὁμολογούμενα τῷ λόγῳ καὶ ἐπὶ τῶν ἔργων. διὰ τοῦτο γὰρ ἓν τῶν ἀρρένων καὶ συνδυαζομένων τοῖς θήλεσιν οὐδὲ μόριον οὐθὲν φαίνεται προϊέμενα εἰς τὸ θῆλυ ἀλλὰ τούναντίον τὸ θῆλυ εἰς τὸ ἄρρεν, οἷον συμβαίνει ἐν ἐνίοις τῶν ἐντόμων. ὃ γὰρ τοῖς προϊεμένοις ἀπεργάζεται τὸ σπέρμα ἐν τῷ θήλει, τούτοις ἢ ἐν τῷ ζώῳ αὐτῷ θερμότης καὶ δυνάμεις ἀπεργάζεται, εἰσφέροντος τοῦ θήλεος τὸ δεκτικόν τοῦ περιττώματος μόριον.

καὶ διὰ τοῦτο τὰ τοιαῦτα τῶν ζώων συμπλέκεται μὲν πολὺν χρόνον, διαλυθέντα δὲ γεννᾷ ταχέως. συνδεδύασται γὰρ μέχρις οὗ ἂν συστήσῃ, ὥσπερ ἡ γονή· διαλυθέντα δὲ προϊεται τὸ κύημα ταχέως· γεννᾷ γὰρ ἀτελές· σκωληκοτοκεῖ γὰρ πάντα τὰ τοιαῦτα.

Μέγιστον δὲ σημείον τὸ συμβαῖνον περὶ τοὺς ὄρνιθας καὶ τὸ τῶν ἰχθύων γένος τῶν ὠοτόκων τοῦ μήτε ἀπὸ πάντων ἵεναι τὸ σπέρμα τῶν μορίων, μήτε (730a.) προῖεσθαι τὸ ἄρρεν τοιοῦτόν τι ὅριον ὃ ἔσται ἐνυπάρχον τῷ γεννηθέντι ἀλλὰ μόνον τῇ δυνάμει τῇ ἐν τῇ γονῇ ζωοποιεῖν, ὥσπερ εἴπομεν ἐπὶ τῶν ἐντόμων ἐν οἷς τὸ θῆλυ προῖεται εἰς τὸ ἄρρεν. ἐάν τε γὰρ ὑπηνέμια τύχη κύουσα ἢ ὄρνις, ἐὰν μετὰ ταῦτα ὀχεύηται μήπω μεταβεβληκότος τοῦ ὠοῦ ἐκ τοῦ ὠχρόν ὅλον εἶναι εἰς τὸ λευκαίνεσθαι, γόνιμα γίγνεται ἀντὶ ὑπηνεμίων· ἐάν τε ὑφ' ἐτέρου ὠχευμένη <ῆ> καὶ ἔτι ὠχροῦ ὄντος, κατὰ τὸν ὕστερον ὀχεύσαντα τὸ γένος ἀποβαίνει πᾶν τὸ τῶν νεοττῶν. διὸ ἔνιοι τοῦτον τὸν τρόπον τῶν περὶ τὰς ὄρνιθας τὰς γενναίας σπουδαζόντων ποιοῦσι μεταβάλλοντες τὰ πρῶτα ὀχεῖα καὶ τὰ ὕστερα, ὡς οὐ συμμιγνύμενον καὶ ἐνυπάρχον, οὐδ' ἀπὸ παντὸς ἐλθὼν τὸ σπέρμα· ἀπ' ἀμφοῖν γὰρ ἂν ἦλθεν, ὥστ' εἶχεν ἂν δις ταῦτά μέρη. ἀλλὰ τῇ δυνάμει τὸ τοῦ ἄρρενος σπέρμα τὴν ἐν τῷ θήλει ὕλην καὶ τροφήν ποιάν τινα κατασκευάζει. τοῦτο γὰρ ἐνδέχεται ποιεῖν τὸ ὕστερον ἐπεισελθὼν ἐκ τοῦ θερμᾶναι καὶ πέψαι· λαμβάνει γὰρ τροφήν τὸ ὠδὸν ἕως ἂν αὐξάνηται.

τὸ δ' αὐτὸ συμβαίνει καὶ περὶ τὴν τῶν ἰχθύων γένεσιν τῶν ὠοτοκουμένων. ὅταν γὰρ ἀποτέκη τὰ ὠὰ ἢ θήλεια, ὁ ἄρρεν ἐπιρραίνει τὸν θορόν· καὶ ὧν μὲν ἂν ἐφάψηται, γόνιμα ταῦτα γίγνεται τὰ ὠὰ, ὧν δ' ἂν μή, ἄγονα, ὡς οὐκ εἰς τὸ ποσὸν συμβαλλομένου τοῖς ζώοις τοῦ ἄρρενος ἀλλ' εἰς τὸ ποιόν.

Ὅτι μὲν οὖν οὕτ' ἀπὸ παντὸς ἀπέρχεται τὸ σπέρμα τοῖς προῖεμένοις σπέρμα τῶν ζώων, οὕτε τὸ θῆλυ πρὸς τὴν γένεσιν οὕτω συμβάλλεται τοῖς συνισταμένοις ὡς τὸ ἄρρεν, ἀλλὰ τὸ μὲν ἄρρεν ἀρχὴν κινήσεως τὸ δὲ θῆλυ τὴν ὕλην, δῆλον ἐκ τῶν εἰρημένων. διὰ γὰρ τοῦτο οὕτ' αὐτὸ καθ' αὐτὸ γεννᾷ τὸ θῆλυ· δεῖται γὰρ ἀρχῆς καὶ τοῦ κινήσοντος καὶ διορισίντος (ἀλλ' ἐνίοις γε τῶν ζώων οἷον ταῖς ὄρνισι μέχρι τινὸς ἢ φύσις δύναται γεννᾶν· αὗται γὰρ συνιστᾷσι μὲν, ἀτελῆ δὲ συνιστᾷσι τὰ καλούμενα ὑπηνέμια ὠὰ),

## Κεφάλαιο 22

ἢ τε γένεσις ἐν τῷ θήλει συμβαίνει τῶν γιγνομένων, ἀλλ' οὐκ εἰς τὸ ἄρρεν οὕτ' αὐτὸ τὸ ἄρρεν προῖεται τὴν γονὴν οὕτε τὸ θῆλυ, ἀλλ' ἄμφω εἰς τὸ θῆλυ συμβάλλονται τὸ παρ' αὐτῶν (730b.) γιγνόμενον, διὰ τὸ ἐν τῷ θήλει εἶναι τὴν ὕλην ἐξ ἧς ἐστὶ τὸ δημιουργούμενον. καὶ εὐθὺς τὴν μὲν ἀθρόον ὑπάρχειν ἀναγκαῖον ἐξ ἧς συνίσταται τὸ κύημα τὸ πρῶτον, τὴν δ' ἐπιγίγνεσθαι ἀεὶ τῆς ὕλης ἵν' αὐξάνηται τὸ κουούμενον. ὥστ' ἀνάγκη ἐν τῷ θήλει ὑπάρχειν τὸν τόκον· καὶ γὰρ πρὸς τῷ ξύλῳ ὁ τέκτων καὶ πρὸς τῷ πηλῷ ὁ κεραμεύς, καὶ

ὅλως πᾶσα ἡ ἐργασία καὶ ἡ κίνησις ἡ ἐσχάτη πρὸς τῇ ὕλῃ οἶον ἡ οἰκοδόμησις ἐν τοῖς οἰκοδομουμένοις. λάβοι δ' ἂν τις ἐκ τούτων καὶ τὸ ἄρρεν πῶς συμβάλλεται πρὸς τὴν γένεσιν· οὐδὲ γὰρ τὸ ἄρρεν ἅπαν προῖεται σπέρμα, ὅσα τε προῖεται τῶν ἀρρένων, οὐθὲν μόριον τοῦτ' ἔστι τοῦ γιγνομένου κυήματος, ὥσπερ οὐδ' ἀπὸ τοῦ τέκτονος πρὸς τὴν τῶν ξύλων ὕλην οὐτ' ἀπέρχεται οὐθέν, οὔτε μόριον οὐθέν ἐστίν ἐν τῷ γιγνομένῳ τῆς τεκτονικῆς, ἀλλ' ἡ μορφή καὶ τὸ εἶδος ἀπ' ἐκείνου ἐγγίγνεται διὰ τῆς κινήσεως ἐν τῇ ὕλῃ, καὶ ἡ μὲν ψυχὴ ἐν ἣ τὸ εἶδος καὶ ἡ ἐπιστήμη κινοῦσι τὰς χεῖρας ἡ τι μόριον ἕτερον ποίαν τινα κίνησιν, ἑτέραν μὲν ἀφ' ὧν τὸ γιγνόμενον ἕτερον, τὴν αὐτὴν δὲ ἀφ' ὧν τὸ αὐτό, αἱ δὲ χεῖρες τὰ ὄργανα, τὰ δ' ὄργανα τὴν ὕλην. ὁμοίως δὲ καὶ ἡ φύσις ἡ ἐν τῷ ἄρρενι τῶν σπέρμα προῖεμένων χρῆται τῷ σπέρματι ὡς ὀργάνῳ καὶ ἔχοντι κίνησιν ἐνεργείᾳ, ὥσπερ ἐν τοῖς κατὰ τέχνην γιγνομένοις τὰ ὄργανα κινεῖται· ἐν ἐκείνοις γάρ πως ἡ κίνησις τῆς τέχνης. ὅσα μὲν οὖν προῖεται σπέρμα συμβάλλεται τοῦτον τὸν τρόπον εἰς τὴν γένεσιν· ὅσα δὲ μὴ προῖεται ἀλλ' ἐναφήσι τὸ θῆλυ εἰς τὸ ἄρρεν τῶν αὐτοῦ τι μορίων, ὅμοιον ἔοικε ποιοῦντι ὥσπερ ἂν εἰ τὴν ὕλην κομίσειέ τις πρὸς τὸν δημιουργόν. δι' ἀσθένειαν γὰρ τῶν τοιούτων ἀρρένων οὐθὲν δι' ἐτέρων οἷα τε ποιεῖν ἡ φύσις, ἀλλὰ μόλις αὐτῆς προσεδρευούσης ἰσχύουσιν αἱ κινήσεις, καὶ ἔοικε τοῖς πλάττουσιν, οὐ τοῖς τεκταινομένοις· οὐ γὰρ δι' ἐτέρου θιγγάνουσα δημιουργεῖ τὸ συνιστάμενον ἀλλ' αὐτὴ τοῖς αὐτῆς μορίοις.

## Κεφάλαιο 23

Ἐν μὲν οὖν τοῖς ζώοις πᾶσι τοῖς πορευτικοῖς κεχώρισται τὸ θῆλυ τοῦ ἄρρενος, καὶ ἔστιν ἕτερον ζῶον θῆλυ καὶ ἕτερον ἄρρεν, τῷ δὲ εἶδει ταυτόν, οἶον ἄνθρωπος ἢ ἵππος (731a.) ἀμφοτέρᾳ· ἐν δὲ τοῖς φυτοῖς μεμιγμένοι αὗται αἱ δυνάμεις εἰσὶ, καὶ οὐ κεχώρισται τὸ θῆλυ τοῦ ἄρρενος. διὸ καὶ γεννᾷ αὐτὰ ἐξ αὐτῶν καὶ προῖεται οὐ γονὴν ἀλλὰ κύημα τὰ καλούμενα σπέρματα. καὶ τοῦτο καλῶς λέγει Ἐμπεδοκλῆς ποιήσας· οὕτω δ' ὠοτοκεῖ μακρὰ δένδρεα· πρῶτον ἐλαίας ... τό τε γὰρ ὠὸν κύημά ἐστι, καὶ ἐκ τινος αὐτοῦ γίγνεται τὸ ζῶον, τὸ δὲ λοιπὸν τροφή, καὶ ἐκ τοῦ σπέρματος ἐκ μέρους γίγνεται τὸ φυόμενον, τὸ δὲ λοιπὸν τροφή γίγνεται τῷ βλαστῷ καὶ τῇ ῥίζῃ τῇ πρώτῃ. τρόπον δέ τινα ταῦτα συμβαίνει καὶ ἐν τοῖς κεχωρισμένοις ἔχουσι ζώοις τὸ θῆλυ καὶ τὸ ἄρρεν. ὅταν γὰρ δεήσῃ γεννᾶν γίγνεται ἀχώριστον ὥσπερ ἐν τοῖς φυτοῖς, καὶ βούλεται ἡ φύσις αὐτῶν ἐν γίγνεσθαι· ὅπερ ἐμφαίνεται κατὰ τὴν ὄψιν μιγνυμένων καὶ συνδυαζομένων [ἐν τι ζῶον γίγνεσθαι ἐξ ἀμφοῖν].

Καὶ τὰ μὲν μὴ προῖεμένα σπέρμα πολὺν χρόνον συμπεπλέχθαι πέφυκεν ἕως ἂν συστήσῃ τὸ κύημα, οἶον τὰ συνδυαζόμενα τῶν ἐντόμων· τὰ δ' ἕως ἂν

ἀποπέμψη τι τῶν ἐπεισάκτων αὐτοῦ μορίων, ὃ συστήσει τὸ κύημα ἐν πλείονι χρόνῳ, οἷον ἐπὶ τῶν ἐναίμων. τὰ μὲν γὰρ ἡμέρας τι μόριον συνέχεται, ἡ δὲ γονὴ ἐν ἡμέραις συνίστησι πλείοσιν· προέμενα δὲ τὸ τοιοῦτον ἀπολύεται. καὶ ἀτεχνῶς ἔοικε τὰ ζῶα ὥσπερ φυτὰ εἶναι διηρημένα, οἷον εἴ τις κἀκεῖνα, ὅτε σπέρμα ἐξενέγκειεν, διαλύσειε καὶ χωρίσειεν εἰς τὸ ἐνυπάρχον θῆλυ καὶ ἄρρεν.

Καὶ ταῦτα πάντα εὐλόγως ἡ φύσις δημιουργεῖ. τῆς μὲν γὰρ τῶν φυτῶν οὐσίας οὐθέν ἐστιν ἄλλο ἔργον οὐδὲ πρᾶξις οὐδεμία πλὴν ἡ τοῦ σπέρματος γένεσις, ὥστ' ἐπεὶ τοῦτο διὰ τοῦ θήλεος γίγνεται καὶ τοῦ ἄρρενος συνδεδυασμένων, μίξασα ταῦτα διέθηκε μετ' ἀλλήλων· διὸ ἐν τοῖς φυτοῖς ἀχώριστον τὸ θῆλυ καὶ τὸ ἄρρεν. ἀλλὰ περὶ μὲν τούτων ἐν ἑτέροις ἐπέσκεπται, τοῦ δὲ ζώου οὐ μόνον τὸ γεννῆσαι ἔργον (τοῦτο μὲν γὰρ κοῖνον τῶν ζώντων πάντων), ἀλλὰ καὶ γνώσεώς τινος πάντα μετέχουσι, τὰ μὲν πλείονος τὰ δ' ἐλάττονος τὰ δὲ πάμπαν μικρᾶς. αἴσθησιν γὰρ ἔχουσιν, ἡ δ' αἴσθησις γνῶσις τις. ταύτης δὲ τὸ τίμιον καὶ ἄτιμον πολὺ διαφέρει σκοποῦσι πρὸς φρόνησιν καὶ πρὸς τὸ τῶν ἀψύχων γένος. πρὸς (731b.) μὲν γὰρ τὸ φρονεῖν ὥσπερ οὐδὲν εἶναι δοκεῖ τὸ κοινωνεῖν ἀφῆς καὶ γεύσεως μόνον, πρὸς δὲ φυτὸν ἢ λίθον θαυμάσιον· ἀγαπητὸν γὰρ ἂν δόξειε καὶ ταύτης τυχεῖν τῆς γνώσεως ἀλλὰ μὴ κεῖσθαι τεθνεὸς καὶ μὴ ὄν. διαφέρει δ' αἰσθήσει τὰ ζῶα τῶν ζώντων μόνον. ἐπεὶ δ' ἀνάγκη καὶ ζῆν, ἐὰν ἢ ζῶον, ὅταν δεῖσῃ ἀποτελεῖν τὸ τοῦ ζῶντος ἔργον, τότε συνδυάζεται καὶ μίγνυται καὶ γίγνεται ὥσπερ ἂν εἰ φυτόν, καθάπερ εἶπομεν.

Τὰ δ' ὀστρακόδερμα τῶν ζώων μεταξὺ ὄντα τῶν ζώων καὶ τῶν φυτῶν, ὡς ἐν ἀμφοτέροις ὄντα τοῖς γένεσιν οὐδετέρων ποιεῖ τὸ ἔργον· ὡς μὲν γὰρ φυτὸν οὐκ ἔχει τὸ θῆλυ καὶ τὸ ἄρρεν καὶ οὐ γεννᾷ εἰς ἕτερον, ὡς δὲ ζῶον οὐ φέρει ἐξ αὐτοῦ καρπὸν ὥσπερ τὰ φυτὰ, ἀλλὰ συνίσταται καὶ γεννᾶται ἐκ τινος συστάσεως γεοειδοῦς καὶ ὑγρᾶς. ἀλλὰ περὶ μὲν τῆς τούτων γενέσεως ὕστερον λεκτέον.

## Βιβλίο 2

### Κεφάλαιο 1

Τὸ δὲ θῆλυ καὶ τὸ ἄρρεν ὅτι μὲν εἰσιν ἀρχαὶ γενέσεως εἴρηται πρότερον, καὶ τίς ἡ δύναμις καὶ ὁ λόγος τῆς οὐσίας αὐτῶν· διὰ τί δὲ γίγνεται καὶ ἔστι τὸ μὲν θῆλυ τὸ δ' ἄρρεν, ὡς μὲν ἐξ ἀνάγκης καὶ τοῦ πρώτου κινουῦντος καὶ ὁποίας ὕλης, προϊόντα πειρᾶσθαι δεῖ φράζειν τὸν λόγον, ὡς δὲ διὰ τὸ βέλτιον καὶ τὴν

αίτιαν τὴν ἔνεκά τινος ἄνωθεν ἔχει τὴν ἀρχήν. ἐπεὶ γὰρ ἐστὶ τὰ μὲν αἰδία καὶ θεῖα τῶν ὄντων, τὰ δ' ἐνδεχόμενα καὶ εἶναι καὶ μὴ εἶναι, τὸ δὲ καλὸν καὶ τὸ θεῖον αἴτιον αἰεὶ κατὰ τὴν αὐτοῦ φύσιν τοῦ βελτίονος ἐν τοῖς ἐνδεχομένοις, τὸ δὲ μὴ αἰδίων ἐνδεχόμενόν ἐστι καὶ εἶναι <καὶ μὴ εἶναι> καὶ μεταλαμβάνειν καὶ τοῦ χείρονος καὶ τοῦ βελτίονος· βέλτιον δὲ ψυχὴ μὲν σώματος, τὸ δ' ἔμψυχον τοῦ ἀψύχου διὰ τὴν ψυχὴν καὶ τὸ εἶναι τοῦ μὴ εἶναι καὶ τὸ ζῆν τοῦ μὴ ζῆν, -διὰ ταύτας τὰς αἰτίας γένεσις ζώων ἐστίν· ἐπεὶ γὰρ ἀδύνατος ἡ φύσις τοῦ τοιούτου γένους αἰδῖος εἶναι, καθ' ὃν ἐνδέχεται τρόπον, κατὰ τοῦτόν ἐστιν αἰδίων τὸ γιγνόμενον. ἀριθμῶ μὲν οὖν ἀδύνατον-ἡ γὰρ οὐσία τῶν ὄντων ἐν τῷ καθ' ἑκάστον· τοιοῦτον δ' εἴπερ ἦν αἰδίων ἂν ἦν-εἶδει δ' ἐνδέχεται. διὸ γένος αἰεὶ (732a.) ἀνθρώπων καὶ ζώων ἐστὶ καὶ φυτῶν. ἐπεὶ δὲ τούτων ἀρχὴ τὸ θῆλυ καὶ τὸ ἄρρεν ἔνεκα τῆς γενέσεως ἂν εἴη τὸ θῆλυ καὶ τὸ ἄρρεν ἐν τοῖς <ἔχ>ουσιν. βελτίονος δὲ καὶ θειότερας τὴν φύσιν οὕσης τῆς αἰτίας τῆς κινούσης πρώτης-ἡ ὁ λόγος ὑπάρχει καὶ τὸ εἶδος-τῆς ὕλης, βέλτιον καὶ τὸ κεχωρίσθαι τὸ κρεῖττον τοῦ χείρονος. διὰ τοῦτ' ἐν ὅσοις ἐνδέχεται καὶ καθ' ὅσον ἐνδέχεται κεχώρισται τοῦ θήλεος τὸ ἄρρεν· βέλτιον γὰρ καὶ θειότερον ἡ ἀρχὴ τῆς κινήσεως ἢ τὸ ἄρρεν ὑπάρχει τοῖς γιγνομένοις-ὕλη δὲ τὸ θῆλυ. συνέρχεται δὲ καὶ μίγνυται πρὸς τὴν ἐργασίαν τῆς γενέσεως τῷ θήλει τὸ ἄρρεν· αὕτη γὰρ κοινὴ ἀμφοτέροις.

Κατὰ μὲν οὖν τὸ μετέχειν τοῦ θήλεος καὶ τοῦ ἄρρενος ζῆ (διὸ καὶ τὰ φυτὰ μετέχει ζωῆς), κατὰ δὲ τὴν αἴσθησιν τὸ τῶν ζώων ἐστὶ γένος. τούτων δὲ σχεδὸν ἐν πᾶσι τοῖς πορευτικοῖς κεχώρισται τὸ θῆλυ καὶ τὸ ἄρρεν διὰ τὰς εἰρημένας αἰτίας· καὶ τούτων τὰ μὲν, ὥσπερ ἐλέχθη, προῖεται σπέρμα, τὰ δ' οὐ προῖεται ἐν τῷ συνδυασμῷ. τούτου δ' αἴτιον ὅτι τὰ τιμιώτερα καὶ αὐταρκέστερα τὴν φύσιν ἐστίν, ὥστε μεγέθους μετεिल्φέναι. τοῦτο δ' οὐκ ἄνευ θερμότητος ψυχικῆς· ἀνάγκη γὰρ τὸ μεῖζον ὑπὸ πλείονος κινεῖσθαι δυνάμεως, τὸ δὲ θερμὸν κινητικόν. διόπερ ὡς ἐπὶ τὸ πᾶν βλέψαντας εἰπεῖν τὰ ἔναιμα μεῖζω τῶν ἀναίμων καὶ τὰ πορευτικὰ τῶν μονίμων ζώων· ἅπερ προῖεται σπέρμα διὰ τὴν θερμότητα καὶ τὸ μέγεθος.

Καὶ περὶ μὲν ἄρρενος καὶ θήλεος δι' ἣν αἰτίαν ἐστὶν ἐκάτερον εἴρηται.

Τῶν δὲ ζώων τὰ μὲν τελεσιουργεῖ καὶ ἐκπέμπει θύραζε ὅμοιον ἑαυτῷ, οἷον ὅσα ζωοτοκεῖ εἰς τοῦμφανές, τὰ δὲ ἀδιάρθρωτον ἐκτίκτει καὶ οὐκ ἀπειληφὸς τὴν αὐτοῦ μορφήν. τῶν δὲ τοιούτων τὰ μὲν ἔναιμα ζωοτοκεῖ, τὰ δ' ἄναιμα σκωληκοτοκεῖ. διαφέρει δ' ὥδον καὶ σκώληξ· ὥδον μὲν γὰρ ἐστὶν ἐξ οὗ γίγνεται τὸ γιγνόμενον ἐκ μέρους (τὸ δὲ λοιπόν ἐστὶ τροφὴ τῷ γιγνομένῳ), σκώληξ δ' ἐξ οὗ τὸ γιγνόμενον ὅλου ὅλον γίγνεται. τῶν δὲ εἰς τὸ φανερόν ὅμοιον



ἀποτελούντων ζῶον καὶ ζωοτοκούντων τὰ μὲν εὐθὺς ἐν αὐτοῖς ζωοτοκεῖ, οἷον ἄνθρωπος καὶ ἵππος καὶ βοῦς καὶ τῶν θαλαττίων δὲ δελφίς καὶ τᾶλλα τὰ τοιαῦτα, τὰ δ' ἐν αὐτοῖς ὠοτοκῆσαντα (732b.) πρῶτον οὕτω ζωοτοκεῖ θύραζε, οἷον τὰ σελάχη καλούμενα. τῶν δ' ὠοτοκούντων τὰ μὲν τέλειον προΐεται τὸ ὠόν, οἷον ὄρνιθες καὶ ὅσα τετράποδα ὠοτοκεῖ καὶ ὅσα ἄποδα οἷον σαῦροι καὶ χελῶναι καὶ τῶν ὄφρων τὸ πλεῖστον γένος (τὰ γὰρ τούτων ὡς ὅταν ἐξέλθῃ οὐκέτι λαμβάνει αὐξησιν), -τὰ δ' ἀτελῆ, οἷον οἱ τ' ἰχθύες καὶ τὰ μαλακόστρακα καὶ τὰ μαλάκια καλούμενα· τούτων γὰρ τὰ ὡς αὐξάνεται ἐξελθόντα.

Πάντα δὲ τὰ ζωοτοκοῦντα ἢ ὠοτοκοῦντα ἔναιμά ἐστιν, καὶ τὰ ἔναιμα ἢ ζωοτοκεῖ ἢ ὠοτοκεῖ, ὅσα μὴ ὅλως ἄγονά ἐστιν. τῶν δ' ἀναιμῶν τὰ ἔντομα σκωληκοτοκεῖ, ὅσα ἢ ἐκ συνδυασμοῦ γίνεται ἢ αὐτὰ συνδυάζεται. ἔστι γὰρ ἔνια τοιαῦτα τῶν ἐντόμων ἃ γίνεται μὲν αὐτόματα, ἔστι δὲ θήλεα καὶ ἄρρενα, καὶ ἐκ συνδυαζομένων γίνεται τι αὐτῶν, ἀτελὲς μέντοι τὸ γιγνόμενον· ἢ δ' αἰτία εἴρηται πρότερον ἐν ἑτέροις.

Συμβαίνει δὲ πολλὴ ἐπάλλαξις τοῖς γένεσιν· οὔτε γὰρ τὰ δίποδα πάντα ζωοτοκεῖ (οἱ γὰρ ὄρνιθες ὠοτοκοῦσιν) οὔτ' ὠοτοκεῖ πάντα (ὁ γὰρ ἄνθρωπος ζωοτοκεῖ) οὔτε τὰ τετράποδα πάντα ὠοτοκεῖ (ἵππος γὰρ καὶ βοῦς καὶ ἄλλα μυρία ζωοτοκεῖ) οὔτε ζωοτοκεῖ πάντα (σαῦροι γὰρ καὶ κροκόδειλοι καὶ ἄλλα πολλὰ ὠοτοκοῦσιν). οὐδ' ἐν τῷ πόδας ἔχειν ἢ μὴ ἔχειν διαφέρει· καὶ γὰρ ἄποδα ζωοτοκεῖ οἷον οἱ ἔχεις καὶ τὰ σελάχη, τὰ δ' ὠοτοκεῖ οἷον τὸ τῶν ἰχθύων γένος καὶ τὰ τῶν ἄλλων ὄφρων· καὶ τῶν πόδας ἔχοντων καὶ ὠοτοκεῖ πολλὰ καὶ ζωοτοκεῖ οἷον τὰ εἰρημένα τετράποδα. καὶ ἐν αὐτοῖς δὲ ζωοτοκεῖ καὶ δίποδα οἷον ἄνθρωπος, καὶ ἄποδα οἷον φάλλαινα καὶ δελφίς. ταύτῃ μὲν οὖν οὐκ ἔστι διελεῖν, οὐδ' αἴτιον τῆς διαφορᾶς ταύτης οὐθὲν τῶν πορευτικῶν ὀργάνων, ἀλλὰ ζωοτοκεῖ μὲν τὰ τελεώτερα τὴν φύσιν τῶν ζῶων καὶ μετέχοντα καθαρωτέρας ἀρχῆς· οὐθὲν γὰρ ζωοτοκεῖ ἐν αὐτῷ μὴ δεχόμενον τὸ πνεῦμα καὶ ἀναπνέον.

τελεώτερα δὲ τὰ θερμότερα τὴν φύσιν καὶ ὑγρότερα καὶ μὴ γεώδη. τῆς δὲ θερμότητος τῆς φυσικῆς ὅρος ὁ πνεύμων ὅσων ἔναιμός ἐστιν· ὅλως μὲν γὰρ τὰ ἔχοντα πνεύμονα τῶν μὴ ἔχοντων θερμότερα, τούτων δ' αὐτῶν τὰ μὴ σομφὸν ἔχοντα μὴδὲ στιφρὸν μὴδ' ὀλίγαιμον ἀλλ' ἔναιμον (733a.) καὶ μαλακόν. ὥσπερ δὲ τὸ μὲν ζῶον τέλειον τὸ δ' ὠόν καὶ ὁ σκώληξ ἀτελές, οὕτω τὸ τέλειον ἐκ τοῦ τελείου γίνεσθαι πέφυκεν. τὰ δὲ θερμότερα μὲν διὰ τὸ ἔχειν πνεύμονα ξηρότερα δὲ τὴν φύσιν, ἢ τὰ ψυχρότερα μὲν ὑγρότερα δὲ-τὰ μὲν ὠοτοκεῖ τέλειον ὠόν, τὰ δ' ὠοτοκῆσαντα ζωοτοκεῖ ἐν αὐτοῖς. οἱ μὲν

γὰρ ὄρνιθες καὶ τὰ φολιδωτὰ διὰ μὲν θερμότητα τελεσιουργοῦσι, διὰ δὲ ξηρότητα ὠτοκοῦσι, -τὰ δὲ σελάχη θερμὰ μὲν ἦττον τούτων ὑγρὰ δὲ μᾶλλον ὥστε μετέχει ἀμφοτέρων· καὶ γὰρ ὠτοκεῖ καὶ ζωτοκεῖ ἐν αὐτοῖς· ὠτοκεῖ μὲν ὅτι ψυχρά, ζωτοκεῖ δ' ὅτι ὑγρά· ζωτικὸν γὰρ τὸ ὑγρόν, πορρωτάτω δὲ τοῦ ἐμψύχου τὸ ξηρόν. ἐπεὶ δ' οὔτε πτερωτὰ οὔτε φολιδωτὰ οὔτε λεπιδωτὰ ἐστίν-ἂ σημεία ξηρᾶς μᾶλλον καὶ γεώδους φύσεως-μαλακὸν τὸ ὦν γεννῶσιν· ὥσπερ γὰρ οὐδ' ἐν αὐτῷ οὐδ' ἐν τῷ ὦν ἐπιπολάζει τὸ γεηρόν. καὶ διὰ τοῦτο εἰς αὐτὰ ὠτοκεῖ· θύραζε γὰρ ἂν ἰὸν διεφθείρετο τὸ ὦν οὐκ ἔχον προβολήν.

Τὰ δὲ καὶ ψυχρὰ καὶ ξηρὰ μᾶλλον ὠτοκεῖ μὲν, ἀτελὲς δὲ τὸ ὦν, καὶ σκληρόδερμον δὲ διὰ τὸ γεηρὰ εἶναι καὶ ἀτελὲς προῖεσθαι ἵνα σώζεται φυλακὴν ἔχον τὸ ὀστρακῶδες. οἱ μὲν οὖν ἰχθύες λεπιδωτοὶ ὄντες καὶ τὰ μαλακόστρακα γεηρὰ ὄντα σκληρόδερμα τὰ ὦν γεννᾷ. τὰ δὲ μαλάκια ὥσπερ αὐτὰ γλίσχρα τὴν τοῦ σώματός ἐστι φύσιν οὕτω σώζει ἀτελεῖ προιέμενα τὰ ὦν· προῖεται γὰρ γλίσχρότητα περὶ τὸ κύημα πολλήν.

Τὰ δ' ἔντομα πάντα σκωληκοτοκεῖ. ἔστι δ' ἅπαντα ἄναιμα τὰ ἔντομα, διὸ καὶ τὰ σκωληκοτοκοῦντα θύραζε. τὰ δ' ἄναιμα οὐ πάντα σκωληκοτοκεῖ ἅπλως· ἐπαλλάττουσι γὰρ ἀλλήλοις τὰ τ' ἔντομα [καὶ] τὰ σκωληκοτοκοῦντα καὶ τὰ ἀτελεῖ τίκτοντα τὰ ὦν, οἷον οἱ τ' ἰχθύες οἱ λεπιδωτοὶ καὶ τὰ μαλακόστρακα καὶ τὰ μαλάκια. τούτων μὲν γὰρ τὰ ὦν σκωληκώδη ἐστίν (αὕξησιν γὰρ λαμβάνει θύραζε), ἐκείνων δ' οἱ σκώληκες γίνονται προϊόντες ὠοειδεῖς· ὃν δὲ τρόπον ἐν τοῖς ὑστερον διορισμοῖς.

Δεῖ δὲ νοῆσαι ὡς εὖ καὶ ἐφεξῆς τὴν γένεσιν ἀποδίδωσιν ἡ φύσις. τὰ μὲν γὰρ (733b.) τελεώτερα καὶ θερμότερα τῶν ζώων τέλειον ἀποδίδωσι τὸ τέκνον κατὰ τὸ ποῖον (κατὰ δὲ τὸ ποσὸν ὅλως οὐθὲν τῶν ζώων· πάντα γὰρ γενόμενα λαμβάνει αὕξησιν), καὶ γεννᾷ δὴ ταῦτα ζῶα ἐν αὐτοῖς εὐθύς. τὰ δὲ δεύτερα ἐν αὐτοῖς μὲν οὐ γεννᾷ τέλεια εὐθύς (ζωτοκεῖ γὰρ ὠτοκῆσαντα πρῶτον), θύραζε δὲ ζωτοκεῖ. τὰ δὲ ζῶον μὲν οὐ τέλειον γεννᾷ, ὦν δὲ γεννᾷ καὶ τοῦτο τέλειον τὸ ὦν. τὰ δ' ἐπὶ τούτων ψυχροτέραν ἔχοντα τὴν φύσιν ὦν μὲν γεννᾷ, οὐ τέλειον δὲ ὦν ἄλλ' ἔξω τελειοῦται καθάπερ τὸ τῶν λεπιδωτῶν ἰχθύων γένος καὶ τὰ μαλακόστρακα καὶ τὰ μαλάκια. τὸ δὲ πέμπτον γένος καὶ ψυχρότατον οὐδ' ὠτοκεῖ ἐξ αὐτοῦ ἀλλὰ καὶ τὸ τοιοῦτον ἔξω συμβαίνει πάθος αὐτῷ ὥσπερ εἴρηται· τὰ γὰρ ἔντομα σκωληκοτοκεῖ τὸ πρῶτον, προελθὼν δ' ὠώδης γίνεσθαι ὁ σκώληξ (ἢ γὰρ χρυσαλλὶς καλουμένη δύναμιν ὠοῦ ἔχει), εἴτ' ἐκ τούτου γίνεσθαι ζῶον ἐν τῇ τρίτῃ μεταβολῇ λαβὼν τὸ τῆς γενέσεως τέλος.

Τὰ μὲν οὖν οὐ γίγνεται τῶν ζώων ἀπὸ σπέρματος, ὥσπερ ἐλέχθη καὶ πρότερον, -τὰ δ' ἔναιμα πάντα γίγνεται ἀπὸ σπέρματος ὅσα ἐκ συνδυασμοῦ γίγνεται, προῖεμένου τοῦ ἄρρενος εἰς τὸ θῆλυ γονὴν ἧς εἰσελθούσης τὰ ζῶα συνίσταται καὶ λαμβάνει τὴν οἰκείαν μορφήν, τὰ μὲν ἐν αὐτοῖς τοῖς ζώοις ὅσα ζωοτοκεῖ τὰ δ' ἐν ὣοις \* καὶ σπέρμασι καὶ τοιαύταις ἄλλαις ἀποκρίσεσιν.

Περὶ ὧν ἐστὶν ἀπορία πλείων, πῶς ποτε γίγνεται ἐκ τοῦ σπέρματος τὸ φυτὸν ἢ τῶν ζώων ὁτιοῦν. ἀνάγκη γὰρ τὸ γιγνόμενον καὶ ἔκ τινος γίγνεσθαι καὶ ὑπὸ τινος καὶ τι. ἐξ οὗ μὲν οὖν ἐστὶν ἡ ὕλη ἣν ἔνια μὲν ζῶα ἔχει πρώτην ἐν αὐτοῖς λαβόντα ἐκ τοῦ θήλεος, οἷον ὅσα μὴ ζωοτοκεῖται ἀλλὰ σκωληκοτοκεῖται ἢ ὠοτοκεῖται, τὰ δὲ μέχρι πόρρω ἐκ τοῦ θήλεος λαμβάνει διὰ τὸ θηλάζειν, ὥσπερ ὅσα ζωοτοκεῖται μὴ μόνον ἐκτὸς ἀλλὰ καὶ ἐντός. ἐξ οὗ μὲν οὖν γίγνεται ἡ τοιαύτη ὕλη ἐστίν. ζητεῖται δὲ νῦν οὐκ ἐξ οὗ ἀλλ' ὑφ' οὗ γίγνεται τὰ μόρια· ἥτοι γὰρ τῶν ἔξωθεν τι ποιεῖ ἢ ἐνυπάρχον τι ἐν τῇ γονῇ καὶ σπέρματι, καὶ τοῦτ' (734a.) ἐστὶν ἢ μέρος τι ψυχῆς ἢ ψυχῇ, ἢ ἔχον ἂν εἴη ψυχὴν.

τὸ μὲν οὖν τῶν ἔξωθεν τι ποιεῖν ἕκαστον ἢ τῶν σπλάγχνων ἢ τῶν ἄλλων μερῶν ἄλογον ἂν δόξειεν· κινεῖν τε γὰρ μὴ ἀπτόμενον ἀδύνατον καὶ μὴ κινουῦντος πάσχειν τι ὑπὸ τούτου. ἐν αὐτῷ ἄρα τῷ κυήματι ἐνυπάρχει τι ἤδη, ἢ αὐτοῦ μόριον ἢ κεχωρισμένον. τὸ μὲν οὖν ἄλλο τι εἶναι κεχωρισμένον ἄλογον· γεννηθέντος γὰρ τοῦ ζώου πότερον φθείρεται ἢ ἐμμένει; ἀλλ' οὐδὲν τοιοῦτον φαίνεται ἐνὸν ὃ οὐ μόριον τοῦ ὅλου ἢ φυτοῦ ἢ ζώου ἐστίν. ἀλλὰ μὴν καὶ τὸ φθεῖρεσθαί γε ποιῆσαν εἴτε πάντα τὰ μέρη εἴτε τι ἄτοπον· τὰ λοιπὰ γὰρ τί ποιήσει; εἰ γὰρ ἐκεῖνο μὲν τὴν καρδίαν, εἴτ' ἐφθάρη, αὕτη δ' ἕτερον, τοῦ αὐτοῦ λόγου ἢ πάντα φθεῖρεσθαι ἢ πάντα μένειν. σώζεται ἄρα· αὐτοῦ ἄρα μόριόν ἐστὶν ὃ εὐθύς ἐνυπάρχει ἐν τῷ σπέρματι. εἰ δὲ δὴ μὴ ἔστι τῆς ψυχῆς μηθὲν ὃ μὴ τοῦ σώματος ἐστὶν ἐν τινι μορίῳ, καὶ ἔμψυχον ἂν τι εἴη μόριον εὐθύς.

Τὰ οὖν ἄλλα πῶς; ἢ γὰρ τοι ἅμα πάντα γίγνεται τὰ μόρια οἷον καρδία πνεύμων ἥπαρ ὀφθαλμοὶ καὶ τῶν ἄλλων ἕκαστον, ἢ ἐφεξῆς ὥσπερ ἐν τοῖς καλουμένοις Ὀρφείως ἔπεσιν· ἐκεῖ γὰρ ὁμοίως φησὶ γίγνεσθαι τὸ ζῶον τῇ τοῦ δικτύου πλοκῇ. ὅτι μὲν οὖν οὐχ ἅμα καὶ τῇ αἰσθήσει ἐστὶ φανερόν· τὰ μὲν γὰρ φαίνεται ἐνόντα ἤδη τῶν μορίων τὰ δ' οὐ. ὅτι δ' οὐ διὰ μικρότητα οὐ φαίνεται δῆλον· μείζων γὰρ τὸ μέγεθος ὧν ὁ πνεύμων τῆς καρδίας ὕστερον φαίνεται τῆς καρδίας ἐν τῇ ἐξ ἀρχῆς γενέσει. ἐπεὶ δὲ τὸ μὲν πρότερον τὸ δ' ὕστερον, πότερον θάτερον ποιεῖ θάτερον καὶ ἔστι διὰ τὸ ἐχόμενον, ἢ μᾶλλον

μετὰ τόδε γίγνεται τόδε; λέγω δ' οἶον οὐχ ἡ καρδία γενομένη ποιεῖ τὸ ἥπαρ, τοῦτο δ' ἕτερόν τι, ἀλλὰ τόδε μετὰ τόδε, ὥσπερ μετὰ τὸ παῖς ἀνὴρ γίγνεται ἀλλ' οὐχ ὑπ' ἐκείνου. λόγος δὲ τούτου ὅτι ὑπὸ τοῦ ἐντελεχείᾳ ὄντος τὸ δυνάμει ὄν γίγνεται ἐν τοῖς φύσει ἢ τέχνῃ γιγνομένοις, ὥστε δέοι ἂν τὸ εἶδος καὶ τὴν μορφήν ἐν ἐκείνῳ εἶναι οἶον ἐν τῇ καρδίᾳ τὸ τοῦ ἥπατος. καὶ ἄλλως δ' ἄτοπος καὶ πλασματίας ὁ λόγος.

Ἀλλὰ μὴν καὶ τὸ ἐν τῷ σπέρματι εὐθὺς ἐνυπάρχειν τι μόριον τοῦ ζώου ἢ φυτοῦ γεγεννημένον-εἴτε δυνάμενον ποιεῖν τᾶλλα εἴτε μὴ-ἀδύνατον εἰ πᾶν ἐκ σπέρματος καὶ γονῆς γίγνεται. δῆλον γὰρ ὅτι ὑπὸ τοῦ τὸ σπέρμα ποιήσαντος ἐγένετο, εἴπερ εὐθὺς (734b.) ἐνυπάρχει. ἀλλὰ σπέρμα δεῖ γενέσθαι πρότερον, καὶ τοῦτ' ἔργον τοῦ γεννῶντος· οὐθὲν ἄρα οἶον τε μόριον ὑπάρχειν. οὐκ ἄρα ἔχει τὸ ποιοῦν τὰ μόρια ἐν αὐτῷ. ἀλλὰ μὴν οὐδ' ἔξω· ἀνάγκη δὲ τούτων εἶναι θάτερον.

Πειρατέον δὴ ταῦτα λύειν· ἴσως γάρ τι τῶν εἰρημένων ἐστὶν οὐχ ἀπλοῦν, οἶον πῶς ποτε ὑπὸ τοῦ ἔξω οὐκ ἐνδέχεται γίνεσθαι. ἔστι μὲν γὰρ ὡς ἐνδέχεται, ἔστι δ' ὡς οὐ. τὸ μὲν οὖν τὸ σπέρμα λέγειν ἢ ἀφ' οὗ τὸ σπέρμα οὐθὲν διαφέρει ἢ ἔχει τὴν κίνησιν ἐν ἑαυτῷ ἢ ἐκείνο ἐκίνει. ἐνδέχεται δὲ τόδε μὲν τόδε κινῆσαι, τόδε δὲ τόδε, καὶ εἶναι οἶον τὰ αὐτόματα τῶν θαυμάτων. ἔχοντα γὰρ πῶς ὑπάρχει δύναμιν τὰ μόρια ἡρεμοῦντα· ὣν τὸ πρῶτον ὅταν τι κίνησις τῶν ἔξωθεν εὐθὺς τὸ ἐχόμενον γίγνεται ἐνεργείᾳ. ὥσπερ οὖν ἐν τοῖς αὐτομάτοις τρόπον μὲν τινα ἐκείνο κινεῖ οὐχ ἀπτόμενον νῦν οὐθενός, ἀψάμενον μέντοι· ὁμοίως δὲ καὶ ἀφ' οὗ τὸ σπέρμα ἢ τὸ ποιῆσαν τὸ σπέρμα, ἀψάμενον μὲν τινος, οὐχ ἀπτόμενον δ' ἔτι· τρόπον δέ τινα ἢ ἐνοῦσα κινήσις ὥσπερ ἡ οἰκοδόμησις τὴν οἰκίαν.

Ὅτι μὲν οὖν ἔστι τι ὃ ποιεῖ, οὐχ οὕτως δὲ ὡς τόδε τι οὐδ' ἐνυπάρχον ὡς τετελεσμένον τὸ πρῶτον, δῆλον.

Πῶς δὲ ποτε ἕκαστον γίγνεται ἐντεῦθεν δεῖ λαβεῖν, ἀρχὴν ποιησαμένους πρῶτον μὲν ὅτι ὅσα φύσει γίγνεται ἢ τέχνῃ ὑπ' ἐνεργείᾳ ὄντος γίγνεται ἐκ τοῦ δυνάμει τοιούτου. τὸ μὲν οὖν σπέρμα τοιοῦτον, καὶ ἔχει κίνησιν καὶ ἀρχὴν τοιαύτην ὥστε παυομένης τῆς κινήσεως γίνεσθαι ἕκαστον τῶν μορίων καὶ ἔμψυχον. οὐ γὰρ ἐστὶ πρόσωπον μὴ ἔχον ψυχὴν οὐδὲ σάρξ, ἀλλὰ φθαρέντα ὁμωνύμως λεχθήσεται τὸ μὲν εἶναι πρόσωπον τὸ δὲ σάρξ, ὥσπερ κἂν εἰ ἐγένετο λίθινα ἢ ξύλινα. ἅμα δὲ τὰ ὁμοιομερῆ γίγνεται καὶ τὰ ὀργανικά· καὶ ὥσπερ οὐδ' ἂν πέλεκυν οὐδ' ἄλλο ὄργανον φῆσαιμεν ἂν ποιῆσαι τὸ πῦρ μόνον οὕτως οὐδὲ πόδα οὐδὲ χεῖρα. τὸν αὐτὸν δὲ τρόπον

οὐδὲ σάρκα· καὶ γὰρ ταύτης ἔργον τί ἐστίν. σκληρὰ μὲν οὖν καὶ μαλακὰ καὶ γλίσχρα καὶ κραῦρα καὶ ὅσα ἄλλα τοιαῦτα πάθη ὑπάρχει τοῖς ἐμψύχοις μορίοις θερμότης καὶ ψυχρότης ποιήσειεν ἄν, τὸν δὲ λόγον ὡς ἤδη τὸ μὲν σὰρξ τὸ δ' ὅστοῦν οὐκέτι, ἀλλ' ἢ κίνησις ἢ ἀπὸ τοῦ γεννήσαντος τοῦ ἐντελεχείᾳ ὄντος ὃ ἐστὶ δυνάμει ἐξ οὗ γίνεταί, ὥσπερ καὶ ἐπὶ τῶν γιγνομένων κατὰ τέχνην· σκληρὸν μὲν γὰρ καὶ μαλακὸν τὸν σίδηρον ποιεῖ τὸ θερμὸν (735a.) καὶ τὸ ψυχρόν, ἀλλὰ ξίφος ἢ κίνησις ἢ τῶν ὀργάνων ἔχουσα λόγον [τὸν] τῆς τέχνης. ἢ γὰρ τέχνη ἀρχὴ καὶ εἶδος τοῦ γιγνομένου, ἀλλ' ἐν ἐτέρῳ· ἢ δὲ τῆς φύσεως κίνησις ἐν αὐτῷ ἀφ' ἐτέρας οὐσα φύσεως τῆς ἐχούσης τὸ εἶδος ἐνεργεία.

Πότερον δ' ἔχει ψυχὴν τὸ σπέρμα ἢ οὐ; ὁ αὐτὸς λόγος καὶ περὶ τῶν μορίων· οὔτε γὰρ ψυχὴ ἐν ἄλλῳ οὐδεμία ἔσται πλην ἐν ἐκείνῳ οὗ γ' ἐστίν, οὔτε μόριον ἔσται μὴ μετέχον ἀλλ' ἢ ὁμωνύμως ὥσπερ τεθνεώτος ὀφθαλμός. δῆλον οὖν ὅτι καὶ ἔχει καὶ ἔστι δυνάμει. ἐγγυτέρῳ δὲ καὶ πορρωτέρῳ αὐτὸ αὐτοῦ ἐνδέχεται εἶναι δυνάμει, ὥσπερ ὁ καθεύδων γεωμέτρης τοῦ ἐγρηγορότος πορρωτέρῳ καὶ οὗτος τοῦ θεωροῦντος. ταύτης μὲν οὖν οὐθὲν μόριον αἴτιον τῆς γενέσεως ἀλλὰ τὸ πρῶτον κινήσαν ἐξώθεν. οὐθὲν γὰρ αὐτὸ ἑαυτὸ γεννᾷ· ὅταν δὲ γένηται αὖξει ἤδη αὐτὸ ἑαυτό. διόπερ πρῶτόν τι γίνεταί καὶ οὐχ ἅμα πάντα. τοῦτο δὲ γίνεσθαι ἀνάγκη πρῶτον ὃ αὐξήσεως ἀρχὴν ἔχει· εἴτε γὰρ φυτὸν εἴτε ζῶον ὁμοίως τοῦτο πᾶσιν ὑπάρχει τὸ θρεπτικόν. τοῦτο δ' ἔστι τὸ γεννητικὸν ἐτέρου οἷον αὐτό· τοῦτο γὰρ παντὸς φύσει τελείου ἔργον καὶ ζώου καὶ φυτοῦ· ἀνάγκη δὲ διὰ τόδε ὅτι ὅταν τι γένηται αὐξάνεσθαι ἀνάγκη. ἐγέννησε μὲν τοίνυν τὸ συνώνυμον οἷον ἄνθρωπος ἄνθρωπον, αὖζεται δὲ δι' ἑαυτοῦ. αὐτὸ ἄρα τι ὃν αὖξει· εἰ δὲ ἔν τι καὶ τοῦτο πρῶτον, τοῦτο ἀνάγκη γίνεσθαι πρῶτον. ὥστ' εἰ ἡ καρδία πρῶτον ἔν τισι ζώοις γίνεταί, ἐν δὲ τοῖς μὴ ἔχουσι καρδίαν τὸ ταύτῃ ἀνάλογον, ἐκ ταύτης ἂν εἴη ἢ ἀρχὴ τοῖς ἔχουσι, τοῖς δ' ἄλλοις ἐκ τοῦ ἀνάλογον.

Τί μὲν οὖν ἐστίν αἴτιον ὡς ἀρχὴ τῆς περὶ ἑκαστον γενέσεως, κινεῖν πρῶτον καὶ δημιουργοῦν, εἴρηται πρὸς τὰ διαπορηθέντα πρότερον.

## Κεφάλαιο 2

Περὶ δὲ τῆς τοῦ σπέρματος φύσεως ἀπορήσειεν ἄν τις. τὸ γὰρ σπέρμα ἐξέρχεται μὲν ἐκ τοῦ ζώου παχὺ καὶ λευκόν, ψυχόμενον δὲ γίνεταί ὑγρὸν ὥσπερ ὕδωρ καὶ τὸ χρῶμα ὕδατος. ἄτοπον δὲ ἂν δόξειεν· οὐ γὰρ παχύνεται ὕδωρ θερμῷ, τὸ δ' ἔσωθεν ἐκ θερμοῦ ἐξέρχεται παχύ, ψυχόμενον δὲ γίνεταί ὑγρόν. καίτοι πήγνυταί γε τὰ ὑδατώδη· τὸ δὲ σπέρμα οὐ πήγνυται τιθέμενον ἐν

τοῖς πάγοις ὑπαίθριον ἀλλ' ὑγραίνεται ὡς ὑπὸ τοῦ ἐναντίου παχυνθέν. ἀλλὰ μὴν οὐδ' ὑπὸ θερμοῦ παχύνεσθαι εὐλογον. ὅσα γὰρ (735b.) γῆς πλεῖον ἔχει, ταῦτα συνίσταται καὶ παχύνεται ἐψόμενα οἶον καὶ τὸ γάλα. ἔδει οὖν ψυχόμενον στερεοῦσθαι. νῦν δ' οὐθὲν γίνεται στερεὸν ἀλλὰ πᾶν ὥσπερ ὕδωρ. ἡ μὲν οὖν ἀπορία αὕτη ἐστίν· εἰ μὲν γὰρ ὕδατος-τὸ ὕδωρ οὐ φαίνεται παχυνόμενον ὑπὸ τοῦ θερμοῦ, τὸ δ' ἐξέρχεται παχὺ καὶ θερμὸν καὶ ἐκ θερμοῦ τοῦ σώματος· εἰ δὲ γῆς ἢ μικτὸν γῆς καὶ ὕδατος οὐκ ἔδει ὑγρὸν πᾶν γίνεσθαι [καὶ ὕδωρ]. ἢ οὐ πάντα τὰ συμβαίνοντα διηγήκαμεν; οὐ γὰρ μόνον παχύνεται τὸ ἐξ ὕδατος καὶ γεώδους συνιστάμενον ὑγρὸν ἀλλὰ καὶ τὸ ἐξ ὕδατος καὶ πνεύματος, οἶον καὶ ὁ ἀφρὸς γίνεται παχύτερος καὶ λευκός, καὶ ὅσω ἂν ἐλάττους καὶ ἀδηλότεραι αἱ πομφόλυγες ὥσι τοσοῦτω καὶ λευκότερος καὶ στιφρότερος ὁ ὄγκος φαίνεται. τὸ δ' αὐτὸ καὶ τὸ ἔλαιον πάσχει· παχύνεται γὰρ τῷ πνεύματι μιγνύμενον· διὸ καὶ τὸ λευκαινόμενον παχύτερον γίνεται, τοῦ ἐνότος ὕδατώδους ὑπὸ τοῦ θερμοῦ διακρινομένου καὶ γιγνομένου πνεύματος. καὶ ἡ μολύβδαινα μιγνυμένη ὕδατι καὶ ἐλαίῳ καὶ τριβομένη ἐξ ὀλίγου τε πολλὸν ὄγκον ποιεῖ καὶ ἐξ ὑγροῦ στιφρὸν καὶ ἐκ μέλανος λευκόν. αἴτιον δ' ὅτι ἐγκαταμίγνυται πνεῦμα ὃ τὸν τε ὄγκον ποιεῖ καὶ τὴν λευκότητα διαφαίνει, ὥσπερ ἐν τῷ ἀφρῷ καὶ τῇ χιόνι· καὶ γὰρ ἡ χιών ἐστίν ἀφρός. καὶ αὐτὸ τὸ ὕδωρ ἐλαίῳ μιγνύμενον γίνεται παχὺ καὶ λευκόν· καὶ γὰρ ὑπὸ τῆς τρίψεως ἐγκατακλείεται πνεῦμα, καὶ αὐτὸ τὸ ἔλαιον ἔχει πνεῦμα πολὺ· ἔστι γὰρ οὔτε γῆς οὔτε ὕδατος ἀλλὰ πνεύματος τὸ λιπαρόν. διὸ καὶ ἐπὶ τῷ ὕδατι ἐπιπολάζει· ὁ γὰρ ἐν αὐτῷ ὢν ἀῆρ ὥσπερ ἐν ἀγγεῖῳ φέρει ἄνω καὶ ἐπιπολάζει καὶ αἴτιος τῆς κουφότητός ἐστιν. καὶ ἐν τοῖς ψύχεσι δὲ καὶ πάγοις παχύνεται τὸ ἔλαιον, πήγνυται δ' οὐ· διὰ μὲν γὰρ θερμότητα οὐ πήγνυται (ὁ γὰρ ἀῆρ θερμὸν καὶ ἄπηκτον), διὰ δὲ τὸ συνίστασθαι αὐτὸν καὶ πυκνοῦσθαι [ὥσπερ] ὑπὸ τοῦ ψύχους παχύτερον γίνεται τὸ ἔλαιον.

διὰ ταύτας τὰς αἰτίας καὶ τὸ σπέρμα ἔσωθεν μὲν ἐξέρχεται στιφρὸν καὶ λευκόν, ὑπὸ τῆς ἐντὸς θερμότητος πνεῦμα πολὺ ἔχον θερμόν, ἐξελθόντος δὲ ὅταν ἀποπνεύσῃ τὸ θερμὸν καὶ ὁ ἀῆρ ψυχθῇ ὑγρὸν γίνεται καὶ μέλαν· λείπεται γὰρ τὸ ὕδωρ καὶ εἴ τι μικρὸν γεῶδες, ὥσπερ ἐν φλέγματι, καὶ ἐν τῷ σπέρματι ξηραίνονμένῳ.

Ἔστι μὲν οὖν τὸ σπέρμα (736a.) κοινὸν πνεύματος καὶ ὕδατος, τὸ δὲ πνεῦμά ἐστι θερμὸς ἀῆρ· διὸ ὑγρὸν τὴν φύσιν ὅτι ἐξ ὕδατος. Κτησίας γὰρ ὁ Κνίδιος ἃ περὶ τοῦ σπέρματος τῶν ἐλεφάντων εἶρηκε φανερός ἐστιν ἐψευσμένος. φησὶ γὰρ οὕτω σκληρύνεσθαι ξηραίνόμενον ὥστε γίνεσθαι ἡλέκτρῳ ὅμοιον. τοῦτο δ' οὐ γίνεται· μᾶλλον μὲν γὰρ ἕτερον ἐτέρου σπέρμα γεωδέστερον ἀναγκαῖον εἶναι, καὶ μάλιστα τοιοῦτον ὅσοις πολὺ γεῶδες ὑπάρχει κατὰ τὸν

ὄγκον τοῦ σώματος, παχὺ δὲ καὶ λευκὸν διὰ τὸ μεμῖχθαι πνεῦμα. καὶ γὰρ λευκὸν ἐστὶ τὸ σπέρμα πάντων· Ἡρόδοτος γὰρ οὐκ ἀληθῆ λέγει φάσκων μέλαιναν εἶναι τὴν τῶν Αἰθιοπῶν γονήν, ὥσπερ ἀναγκαῖον ὄν τῶν τὴν χροάν μελάνων εἶναι πάντα μέλανα, καὶ ταῦθ' ὁρῶν καὶ τοὺς ὀδόντας αὐτῶν ὄντας λευκοῦς. αἴτιον δὲ τῆς λευκότητος τοῦ σπέρματος ὅτι ἐστὶν ἡ γονὴ ἀφρός, ὃ δ' ἀφρὸς λευκόν, καὶ μάλιστα τὸ ἐξ ὀλιγίστων συγκείμενον μορίων καὶ οὕτω μικρῶν ὥσπερ ἐκάστης ἀοράτου τῆς πομφόλυγος οὔσης, ὅπερ συμβαίνει καὶ ἐπὶ τοῦ ὕδατος καὶ τοῦ ἐλαίου μινυμένων καὶ τριβομένων, καθάπερ ἐλέχθη πρότερον.

Ἔοικε δὲ οὐδὲ τοὺς ἀρχαίους λανθάνειν ἀφρώδης ἡ τοῦ σπέρματος οὔσα φύσις· τὴν γοῦν κυρίαν θεὸν τῆς μίξεως ἀπὸ τῆς δυνάμεως ταύτης προσηγόρευσαν.

Ἡ μὲν οὖν αἰτία τῆς λεχθείσης ἀπορίας εἴρηται, φανερόν δὲ ὅτι διὰ τοῦτ' οὐδὲ πηγνυται· ὁ γὰρ ἀὴρ ἄπηκτος.

### Κεφάλαιο 3

Τούτου δ' ἐχόμενόν ἐστιν ἀπορῆσαι καὶ εἰπεῖν, εἰ τῶν προἰεμένων εἰς τὸ θῆλυ γονὴν μηθὲν μόριόν ἐστὶ τὸ εἰσελθὼν τοῦ γιγνομένου κυήματος, ποῦ τρέπεται τὸ σωματῶδες αὐτοῦ, εἴπερ ἐργάζεται τῇ δυνάμει τῇ ἐνούσῃ ἐν αὐτῷ. διορίσαι δὲ δεῖ πότερον μεταλαμβάνει τὸ συνιστάμενον ἐν τῷ θήλει ἀπὸ τοῦ εἰσελθόντος τι ἢ οὐθέν, καὶ περὶ ψυχῆς καθ' ἣν λέγεται ζῶον (ζῶον δ' ἐστὶ κατὰ τὸ μόριον τῆς ψυχῆς τὸ αἰσθητικόν) πότερον ἐνυπάρχει τῷ σπέρματι καὶ τῷ κυήματι ἢ οὐ, καὶ πόθεν. οὔτε γὰρ ὥς ἄψυχον ἂν θεῖ τις τὸ κύημα κατὰ πάντα τρόπον ἐστερημένον ζωῆς· οὐδὲν γὰρ ἦττον τὰ τε σπέρματα καὶ τὰ κυήματα τῶν ζώων ζῆ τῶν φυτῶν, καὶ γόνιμα μέχρι τινός ἐστιν. ὅτι μὲν οὖν τὴν θρεπτικὴν ἔχουσι ψυχὴν φανερόν (δι' ὅτι δὲ ταύτην πρῶτον ἀναγκαῖον ἐστὶ λαβεῖν ἐκ τῶν περὶ ψυχῆς διωρισμένων ἐν ἄλλοις (736b.) φανερόν), προϊόντα δὲ καὶ τὴν αἰσθητικὴν καθ' ἣν ζῶον \*. οὐ γὰρ ἅμα γίγνεται ζῶον καὶ ἄνθρωπος οὐδὲ ζῶον καὶ ἵππος, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων ζώων· ὕστατον γὰρ γίγνεται τὸ τέλος, τὸ δ' ἴδιόν ἐστὶ τὸ ἐκάστου τῆς γενέσεως τέλος. διὸ καὶ περὶ νοῦ, πότε καὶ πῶς μεταλαμβάνει καὶ πόθεν τὰ μετέχοντα ταύτης τῆς ἀρχῆς, ἔχει τ' ἀπορίαν πλείστην καὶ δεῖ προθυμεῖσθαι κατὰ δύναμιν λαβεῖν καὶ καθ' ὅσον ἐνδέχεται.

Τὴν μὲν οὖν θρεπτικὴν ψυχὴν τὰ σπέρματα καὶ τὰ κυήματα τὰ μήπω χωριστὰ δῆλον ὅτι δυνάμει μὲν ἔχοντα θετέον, ἐνεργείᾳ δ' οὐκ ἔχοντα πρὶν ἢ καθάπερ

τὰ χωριζόμενα τῶν κυημάτων ἔλκει τὴν τροφὴν καὶ ποιεῖ τὸ τῆς τοιαύτης ψυχῆς ἔργον· πρῶτον μὲν γὰρ ἅπαντ' ἔοικε ζῆν τὰ τοιαῦτα φυτοῦ βίον. ἐπομένως δὲ δῆλον ὅτι καὶ περὶ τῆς αἰσθητικῆς λεκτέον ψυχῆς καὶ περὶ τῆς νοητικῆς· πάσας γὰρ ἀναγκαῖον δυνάμει πρότερον ἔχειν ἢ ἐνεργείᾳ. ἀναγκαῖον δὲ ἦτοι μὴ οὐσας πρότερον ἐγγίγνεσθαι πάσας ἢ πάσας προϋπαρχούσας ἢ τὰς μὲν τὰς δὲ μή, καὶ ἐγγίγνεσθαι ἢ ἐν τῇ ὕλῃ μὴ εἰσελθούσας ἐν τῷ τοῦ ἄρρενος σπέρματι ἢ ἐνταῦθα μὲν ἐκεῖθεν ἐλθούσας, ἐν δὲ τῷ ἄρρενι ἢ θύραθεν ἐγγιγνομένας ἀπάσας ἢ μηδεμίαν ἢ τὰς μὲν τὰς δὲ μή.

ὅτι μὲν τοίνυν οὐχ οἷόν τε πάσας προϋπάρχειν φανερόν ἐστιν ἐκ τῶν τοιούτων· ὅσων γὰρ ἐστὶν ἀρχῶν ἢ ἐνέργεια σωματική, δῆλον ὅτι ταύτας ἄνευ σώματος ἀδύνατον ὑπάρχειν, οἷον βαδίζειν ἄνευ ποδῶν· ὥστε καὶ θύραθεν εἰσιέναι ἀδύνατον· οὔτε γὰρ αὐτὰς καθ' αὐτὰς εἰσιέναι οἷόν τε ἀχωρίστους οὐσας οὔτ' ἐν σώματι εἰσιέναι· τὸ γὰρ σπέρμα περίττωμα μεταβαλλούσης τῆς τροφῆς ἐστίν. λείπεται δὴ τὸν νοῦν μόνον θύραθεν ἐπεισιέναι καὶ θεῖον εἶναι μόνον· οὐθὲν γὰρ αὐτοῦ τῇ ἐνεργείᾳ κοινωνεῖ <ή> σωματικὴ ἐνέργεια.

Πάσης μὲν οὖν ψυχῆς δύναμις ἑτέρου σώματος ἔοικε κεκοινωνηκέναι καὶ θειοτέρου τῶν καλουμένων στοιχείων· ὥς δὲ διαφέρουσι τιμιότητι αἱ ψυχαὶ καὶ ἀτιμία ἀλλήλων οὕτω καὶ ἡ τοιαύτη διαφέρει φύσις. πάντων μὲν γὰρ ἐν τῷ σπέρματι ἐνυπάρχει ὅπερ ποιεῖ γόνιμα εἶναι τὰ σπέρματα, τὸ καλούμενον θερμόν. τοῦτο δ' οὐ πῦρ οὐδὲ τοιαύτη δύναμις ἐστὶν ἀλλὰ τὸ ἐμπεριλαμβανόμενον ἐν τῷ σπέρματι καὶ ἐν τῷ ἀφρώδει πνεῦμα καὶ ἡ ἐν τῷ πνεύματι φύσις, ἀνάλογον οὐσα τῷ (737a.) τῶν ἄστρον στοιχείῳ. διὸ πῦρ μὲν οὐθὲν γεννᾷ ζῶον, οὐδὲ φαίνεται συνιστάμενον ἐν πυρουμένοις οὔτ' ἐν ὑγροῖς οὔτ' ἐν ξηροῖς οὐθέν· ἡ δὲ τοῦ ἡλίου θερμότης καὶ ἡ τῶν ζώων οὐ μόνον ἡ διὰ τοῦ σπέρματος, ἀλλὰ καὶ τι περίττωμα τύχη τῆς φύσεως ὃν ἕτερον, ὅμως ἔχει καὶ τοῦτο ζωτικὴν ἀρχήν. ὅτι μὲν οὖν ἡ ἐν τοῖς ζώοις θερμότης οὔτε πῦρ οὔτε ἀπὸ πυρὸς ἔχει τὴν ἀρχήν ἐκ τῶν τοιούτων ἐστὶ φανερόν.

Τὸ δὲ τῆς γονῆς σῶμα ἐν ᾧ συναπέρχεται τὸ σπέρμα τὸ τῆς ψυχικῆς ἀρχῆς, τὸ μὲν χωριστὸν ὃν σώματος ὅσοις ἐμπεριλαμβάνεται τι θεῖον (τοιοῦτος δ' ἐστὶν ὁ καλούμενος νοῦς) τὸ δ' ἀχώριστον, -τοῦτο τὸ σῶμα τῆς γονῆς διαλύεται καὶ πνευματοῦται φύσιν ἔχον ὑγρὰν καὶ ὑδατώδη. διόπερ οὐ δεῖ ζητεῖν ἀεὶ θύραζε αὐτὸ ἐξιέναι, οὐδὲ μόριον οὐθὲν εἶναι τῆς συστάσης μορφῆς ὥσπερ οὐδὲ τὸν ὁπὸν τὸν τὸ γάλα συνιστάντα· καὶ γὰρ οὗτος μεταβάλλει καὶ μόριον οὐθέν ἐστὶ τῶν συνισταμένων ὄγκων.



Περὶ μὲν οὖν ψυχῆς πῶς ἔχει τὰ κύματα καὶ ἡ γονὴ καὶ πῶς οὐκ ἔχει διώρισται· δυνάμει μὲν γὰρ ἔχει, ἐνεργείᾳ δ' οὐκ ἔχει.

Τοῦ δὲ σπέρματος ὄντος περιττώματος καὶ κινουμένου κίνησιν τὴν αὐτὴν καθ' ἣνπερ τὸ σῶμα αὐξάνεται μεριζομένης τῆς ἐσχάτης τροφῆς, ὅταν ἔλθῃ εἰς τὴν ὑστέραν συνίστησι καὶ κινεῖ τὸ περίττωμα τὸ τοῦ θήλεος τὴν αὐτὴν κίνησιν ἣνπερ αὐτὸ τυγχάνει κινούμενον κάκεῖνο. καὶ γὰρ ἐκεῖνο περίττωμα, καὶ πάντα τὰ μόρια ἔχει δυνάμει, ἐνεργείᾳ δ' οὐθέν. καὶ γὰρ τὰ τοιαῦτ' ἔχει μόρια δυνάμει ἢ διαφέρει τὸ θῆλυ τοῦ ἄρρενος. ὥσπερ γὰρ καὶ ἐκ πεπηρωμένων ὅτε μὲν γίνεταί πεπηρωμένα ὅτε δ' οὐ, οὕτω καὶ ἐκ θήλεος ὅτε μὲν θῆλυ ὅτε δ' οὐ ἄλλ' ἄρρεν. τὸ γὰρ θῆλυ ὥσπερ ἄρρεν ἐστὶ πεπηρωμένον καὶ τὰ καταμήνια σπέρμα, οὐ καθαρὸν δέ· ἐν γὰρ οὐκ ἔχει μόνον· τὴν τῆς ψυχῆς ἀρχήν. καὶ διὰ τοῦτο ὅσοις ὑπηνέμια γίνεταί τῶν ζώων ἀμφοτέρων ἔχει τὰ μέρη τὸ συνιστάμενον ὡόν, ἀλλὰ τὴν ἀρχὴν οὐκ ἔχει, διὸ οὐ γίνεταί ἔμψυχον· ταύτην γὰρ τὸ τοῦ ἄρρενος ἐπιφέρει σπέρμα. ὅταν δὲ μετάσχη τοιαύτης ἀρχῆς τὸ περίττωμα τὸ τοῦ θήλεος κύημα γίνεταί.

[[Τοῖς δ' ὑγροῖς μὲν σωματώδεσι δὲ θερμαινόμενοις περιίσταται-καθάπερ καὶ ἐν τοῖς ἐψήμασι ψυχομένοις-τὸ περίξηρον. πάντα (737b.) δὲ τὰ σώματα συνέχει τὸ γλίσχρον· ὅπερ καὶ προῖοῦσι καὶ μείζοσι γιγνομένοις ἢ τοῦ νεύρου λαμβάνει φύσις ἥπερ συνέχει τὰ μόρια τῶν ζώων, ἐν μὲν τοῖς οὖσα νεῦρον ἐν δὲ τοῖς τὸ ἀνάλογον. τῆς δ' αὐτῆς μορφῆς ἐστὶ καὶ δέρμα καὶ φλέψ καὶ ὑμὴν καὶ πᾶν τὸ τοιοῦτον γένος· διαφέρει γὰρ ταῦτα τῷ μᾶλλον καὶ ἥττον καὶ ὅλως ὑπεροχῇ καὶ ἐλλείψει.]]

## Κεφάλαιο 4

Τῶν δὲ ζώων τὰ μὲν ἀτελεστέραν ἔχοντα τὴν φύσιν, ὅταν γένηται κύημα τέλειον ζῶον δὲ μήπω τέλειον, θύραζε προῖεται· δι' ἧς δ' αἰτίας εἴρηται πρότερον. τέλειον δ' ἤδη τότε ἔστιν ὅταν τὸ μὲν ἄρρεν ἢ τὸ δὲ θῆλυ τῶν κυημάτων-ἐν ὅσοις ἔστιν αὕτη ἡ διαφορὰ τῶν γιγνομένων· ἕνια γὰρ οὔτε θῆλυ γεννᾷ οὔτ' ἄρρεν, ὅσα μὴδ' αὐτὰ γίνεταί ἐκ θήλεος καὶ ἄρρενος μὴδ' ἐκ ζώων μιγνυμένων. καὶ περὶ μὲν τῆς τούτων γενέσεως ὕστερον ἐροῦμεν.

Τὰ δὲ ζωοτοκοῦντα ἐν αὐτοῖς τὰ τέλεια τῶν ζώων, μέχρι περ ἂν οὗ γεννήσῃ ζῶον καὶ θύραζε ἐκπέμψῃ, ἔχει συμφυῆς ἐν αὐτῷ τὸ γιγνόμενον ζῶον.

Ὅσα δὲ θύραζε μὲν ζωοτοκεῖ ἐν αὐτοῖς δ' ὠτοκεῖ τὸ πρῶτον, ὅταν γεννήσῃ τὸ ὦδον τέλειον, τούτων ἐνίων μὲν ἀπολύεται τὸ ὦδον ὥσπερ τῶν θύραζε ὠτοκοκύντων καὶ τὸ ζῶον ἐκ τοῦ ὦδ' οὗ γίνεταί ἐν τῷ θήλει, ἐνίων δ' ὅταν καταναλωθῇ ἢ ἐν τῷ ὦδ' τροφὴ τελειοῦται ἀπὸ τῆς ὑστέρας, καὶ διὰ τοῦτο οὐκ ἀπολύεται τὸ ὦδον ἀπὸ τῆς ὑστέρας. ταύτην δ' ἔχουσι τὴν διαφορὰν οἱ σελαχῶδεις ἰχθύες περὶ ὧν ὕστερον καθ' αὐτὰ λεκτέον.

Νῦν δ' ἀπὸ τῶν πρώτων ἀρκτέον πρῶτον· ἔστι δὲ τὰ τέλεια ζῶα πρῶτα, τοιαῦτα δὲ τὰ ζωοτοκοῦντα καὶ τούτων ἄνθρωπος πρῶτον.

Ἡ μὲν οὖν ἀπόκρισις γίνεταί πᾶσι τοῦ σπέρματος ὥσπερ ἄλλου τινὸς περιττώματος. φέρεται γὰρ ἕκαστον εἰς τὸν οἰκεῖον τόπον οὐθὲν ἀποβιαζομένου τοῦ πνεύματος οὐδ' ἄλλης αἰτίας τοιαύτης ἀναγκαζούσης, ὥσπερ τινὲς φασιν ἔλκειν τὰ αἰδοῖα φάσκοντες ὥσπερ τὰς σικύας τῷ τε πνεύματι βιαζομένων-ὥσπερ ἐνδεχόμενον ἄλλοθι πορευθῆναι μὴ βιασμένων ἢ ταύτην τὴν περίπτωσιν ἢ τὴν τῆς ὑγρᾶς ἢ ξηρᾶς τροφῆς, ὅτι τὰς ἐξόδους αὐτῶν ἡθροισμένῳ τῷ πνεύματι συνεκκρίνουσιν. τοῦτο δὲ κοινὸν κατὰ πάντων ὅσα δεῖ κινῆσαι· διὰ γὰρ τοῦ τὸ πνεῦμα κατασχεῖν (738a.) ἡ ἰσχὺς ἐγγίγνεται, ἐπεὶ καὶ ἄνευ ταύτης τῆς βίας ἐκκρίνεται τὰ περιττώματα καὶ καθεύδουσιν ἂν ἄνευ τοῦ τε καὶ πλήρεις περιττώματος οἱ τόποι τύχουσιν ὄντες. ὅμοιον δὲ καὶ εἴ τις φαίῃ τοῖς φυτοῖς ὑπὸ τοῦ πνεύματος ἐκάστοτε τὰ σπέρματα ἀποκρίνεσθαι πρὸς τοὺς τόπους πρὸς οὓς εἴωθε φέρειν τὸν καρπὸν. ἀλλὰ τούτου μὲν αἴτιον, ὥσπερ εἴρηται, τὸ πᾶσιν εἶναι μόρια δεκτικὰ τοῖς περιττώμασι τοῖς τ' ἀχρήστοις, τοῖον τῇ τε ξηρᾷ καὶ τῇ ὑγρᾷ,† καὶ τῷ αἵματι τὰς καλουμένας φλέβας.

Τοῖς μὲν οὖν θήλεσι περὶ τὸν τῶν ὑστερῶν τόπον, σχιζομένων ἄνωθεν τῶν δύο φλεβῶν τῆς τε μεγάλης καὶ τῆς ἁορτῆς, πολλαὶ καὶ λεπταὶ φλέβες τελευτῶσιν εἰς τὰς ὑστέρας, ὧν ὑπερπληρουμένων ἐκ τῆς τροφῆς καὶ τῆς φύσεως διὰ ψυχρότητα πέττειν οὐ δυναμένης, ἐκκρίνεται διὰ λεπτοτάτων φλεβῶν εἰς τὰς ὑστέρας, οὐ δυναμένων διὰ τὴν στενοχωρίαν δέχεσθαι τὴν ὑπερβολὴν τοῦ πλήθους, καὶ γίνεταί τὸ πάθος οἷον αἱμορροΐς. ἀκριβῶς μὲν οὖν ἡ περίοδος οὐ τέτακται ταῖς γυναιξί, βούλεται δὲ φθινόντων γίνεσθαι τῶν μηνῶν εὐλόγως· ψυχρότερα γὰρ τὰ σώματα τῶν ζώων ὅταν καὶ τὸ περιέχον συμβαίνει γίνεσθαι τοσοῦτον, αἱ δὲ τῶν μηνῶν σύνοδοι ψυχραὶ διὰ τὴν τῆς σελήνης ἀπόλειψιν, διόπερ καὶ χειμερίους συμβαίνει τὰς συνόδους εἶναι τῶν μηνῶν μᾶλλον ἢ τὰς μεσότητας. μεταβεβληκότος μὲν οὖν εἰς αἷμα τοῦ περιττώματος βούλεται γίνεσθαι τὰ καταμήνια κατὰ τὴν εἰρημένην περίοδον, μὴ πεπεμμένου δὲ κατὰ μικρὸν αἰεὶ τι ἀποκρίνεται· διὸ τὰ λευκὰ μικροῖς ἔτι καὶ παιδίοις οὕσι γίνεταί τοῖς θήλεσι. μετριάζουσιν μὲν οὖν ἀμφοτέραι αὗται αἱ ἀποκρίσεις τῶν περιττωμάτων τὰ σώματα σώζουσιν, ἅτε γιγνομένης καθάρσεως τῶν περιττωμάτων ἃ τοῦ νοσεῖν αἷτια τοῖς σώμασιν· μὴ γιγνομένων δὲ ἡ πλειόνων γιγνομένων βλάπτει· ποιεῖ γὰρ ἡ νόσους ἢ τῶν σωμάτων καθαίρεσιν, διὸ καὶ τὰ λευκὰ συνεχῶς γινόμενα καὶ πλεονάζοντα τὴν αὕξησιν ἀφαιρεῖται τῶν παιδίων.

Ἐξ ἀνάγκης μὲν οὖν ἡ περίπτωσις αὕτη γίνεταί τοῖς θήλεσι διὰ τὰς εἰρημένας αἰτίας· μὴ δυναμένης τε γὰρ πέττειν τῆς φύσεως ἀνάγκη περίττωμα γίνεσθαι μὴ μόνον τῆς ἀχρήστου τροφῆς ἀλλὰ καὶ τοῦ αἵματος· ἐν ταῖς φλεβῖν, ὑπερβάλλειν τε πληθύνοντα κατὰ τὰς λεπτοτάτας φλέβας. ἔνεκα (738b.) δὲ τοῦ βελτίονος καὶ τοῦ τέλους ἡ φύσις καταχρῆται πρὸς τὸν τόπον τοῦτον τῆς γενέσεως χάριν ὅπως οἷον ἔμελλε τοιοῦτον γένηται ἕτερον· ἤδη γὰρ ὑπάρχει δυνάμει γε ὃν τοιοῦτον οἷον ἔστι σώματος ἀπόκρισις.

Τοῖς μὲν οὖν θήλεσιν ἅπασιν ἀναγκαῖον γίνεσθαι περίττωμα, τοῖς μὲν αἱματικοῖς πλεῖον καὶ τούτων ἀνθρώπῳ πλεῖστον· ἀνάγκη δὲ καὶ τοῖς ἄλλοις ἀθροίζεσθαί τινα σύστασιν εἰς τὸν ὑστερικὸν τόπον. τὸ δ' αἷτιον ὅτι τοῖς θ' αἱματικοῖς πλεῖον καὶ τούτων ὅτι πλεῖστον τοῖς ἀνθρώποις εἴρηται πρότερον. τοῦ δ' ἐν μὲν τοῖς θήλεσι πᾶσιν ὑπάρχειν περίττωμα τοιοῦτον, ἐν δὲ τοῖς ἄρρεσι μὴ πᾶσιν· ἔνια γὰρ οὐ προῖεται γονήν, ἀλλ' ὥσπερ τὰ προῖεμένα τῇ ἐν τῇ γονῇ κινήσει δημιουργεῖ τὸ συνιστάμενον ἐκ τῆς ἐν τοῖς θήλεσιν ὕλης, οὕτω τὰ τοιαῦτα [ἐν] τῇ ἐν αὐτοῖς κινήσει ἐν τῷ μορίῳ τούτῳ ὅθεν ἀποκρίνεται τὸ σπέρμα ταῦτό ποιεῖ καὶ συνίστησιν. τοῦτο δ' ἐστὶν ὁ τόπος ὁ περὶ τὸ ὑπόζωμα πᾶσι τοῖς ἔχουσιν· ἀρχὴ γὰρ τῆς φύσεως ἡ καρδία καὶ τὸ ἀνάλογον, τὸ δὲ κάτω προσθήκη καὶ τούτου χάριν. -αἷτιον δὲ τοῦ τοῖς μὲν

ἄρρεσι μὴ πᾶσιν εἶναι περίττωμα γεννητικὸν τοῖς δὲ θήλεσι πᾶσιν, ὅτι τὸ ζῶον σῶμα ἔμψυχόν ἐστιν. ἀεὶ δὲ παρέχει τὸ μὲν θῆλυ τὴν ὕλην τὸ δ' ἄρρεν τὸ δημιουργοῦν· ταύτην γὰρ αὐτῶν φαμεν ἔχειν τὴν δύναμιν ἐκάτερον, καὶ τὸ εἶναι τὸ μὲν θῆλυ τὸ δ' ἄρρεν τοῦτο. ὥστε τὸ μὲν θῆλυ ἀναγκαῖον παρέχειν σῶμα καὶ ὄγκον, τὸ δ' ἄρρεν οὐκ ἀναγκαῖον· οὔτε γὰρ τὰ ὄργανα ἀνάγκη ἐνυπάρχειν ἐν τοῖς γιγνομένοις οὔτε τὸ ποιοῦν. ἔστι δὲ τὸ μὲν σῶμα ἐκ τοῦ θήλεος ἢ δὲ ψυχῇ ἐκ τοῦ ἄρρενος· ἢ γὰρ ψυχὴ οὐσία σώματος τινός ἐστιν. καὶ διὰ τοῦτο ὅσα τῶν μὴ ὁμογενῶν μίγνυται θῆλυ καὶ ἄρρεν (μίγνυται δὲ ὧν ἴσοι οἱ χρόνοι καὶ ἐγγὺς αἱ κυήσεις, καὶ τὰ μεγέθη τῶν σωμάτων μὴ πολὺ διέστηκεν), τὸ μὲν πρῶτον κατὰ τὴν ὁμοιότητα γίγνεται κοινὸν ἀμφοτέρων, οἷον τὰ γινόμενα ἐξ ἀλώπεκος καὶ κυνὸς καὶ πέρδικος καὶ ἀλεκτρυόνος, προϊόντος δὲ τοῦ χρόνου καὶ ἐξ ἐτέρων ἕτερα γινόμενα τέλος ἀποβαίνει κατὰ τὸ θῆλυ τὴν μορφήν, ὥσπερ τὰ σπέρματα τὰ ξενικὰ κατὰ τὴν χώραν· αὕτη γὰρ ἢ τὴν ὕλην παρέχουσα καὶ τὸ σῶμα τοῖς σπέρμασιν ἐστιν. καὶ διὰ τοῦτο τοῖς μὲν θήλεσι τὸ μόριον τὸ δεκτικὸν οὐ πόρος ἐστίν, ἀλλ' ἔχουσι διάστασιν αἰ (739a.) ὑστέραι· τοῖς δ' ἄρρεσι πόροι τοῖς σπέρμα προϊεμένοις, ἄναιμοι δ' οὔτοι.

Τῶν δὲ περιττωμάτων ἕκαστον ἅμα ἔν τε τοῖς οἰκείοις τόποις ἐστὶ καὶ γίγνεται περίττωμα· πρότερον δ' οὐθέν, ἂν μὴ τι βίᾳ πολλῇ καὶ παρὰ φύσιν.

Δι' ἣν μὲν οὖν αἰτίαν ἀποκρίνεται τὰ περιττώματα τὰ γεννητικὰ τοῖς ζώοις εἴρηται.

Ὅταν δ' ἔλθῃ τὸ σπέρμα ἀπὸ τοῦ ἄρρενος τῶν σπέρμα προϊεμένων συνίστησι τὸ καθαρώτατον τοῦ περιττώματος· τὸ γὰρ πλεῖστον ἄχρηστον καὶ ἐν τοῖς καταμηνίοις ἐστὶν ὑγρὸν <ὄν>, ὥσπερ καὶ τῆς τοῦ ἄρρενος γονῆς τὸ ὑγρότατον καὶ τῆς εἰσάπαξ προέσεως· καὶ ἡ προτέρα τῆς ὑστέρας ἄγονος μᾶλλον τοῖς πλείστοις· ἐλάττω γὰρ ἔχει θερμότητα ψυχικὴν διὰ τὴν ἀπεψίαν, τὸ δὲ πεπεμμένον πάχος ἔχει καὶ σεσωμάτῳται μᾶλλον.

Ὅσαις δὲ μὴ γίγνεται θύραζε τις πρόεσις ἢ τῶν γυναικῶν ἢ τῶν ἄλλων ζώων διὰ τὸ μὴ ἐνυπάρχειν ἄχρηστον περίττωμα πολὺ ἐν τῇ ἀποκρίσει τῇ τοιαύτῃ, τοσοῦτόν ἐστι τὸ ἐγγιγνόμενον ὅσον τὸ ὑπολειπόμενον τοῖς θύραζε προϊεμένοις ζώοις, ὃ συνίστησιν ἢ τοῦ ἄρρενος δύναμις ἢ ἐν τῷ σπέρματι τῷ ἀποκρινόμενῳ, ἢ εἰς τὸ ἄρρεν ἐλθόντος τοῦ ἀνάλογον μορίου ταῖς ὑστέραις, ὅπερ ἔν τισι τῶν ἐντόμων φαίνεται συμβαῖνον.

Ὅτι δ' ἡ γιγνομένη ὑγρότης μετὰ τῆς ἡδονῆς τοῖς θήλεσιν οὐδὲν συμβάλλεται

εἰς τὸ κύημα εἴρηται πρότερον. μάλιστα δ' ἂν δόξειεν ὅτι καθάπερ τοῖς ἄρρεσι γίγνεται καὶ ταῖς γυναιξὶ νύκτωρ ὃ καλοῦσιν ἐξονειρώττειν. ἀλλὰ τοῦτο σημεῖον οὐθέν· γίγνεται γὰρ καὶ τοῖς νέοις τῶν ἄρρένων τοῖς μέλλουσι μὲν μηθὲν δὲ προῖεμένοις ἢ τοῖς ἔτι προῖεμένοις ἄγονον.

Ἄνευ μὲν οὖν τῆς τοῦ ἄρρενος προέσεως ἐν τῇ συνουσίᾳ ἀδύνατον συλλαβεῖν καὶ ἄνευ τῆς τῶν γυναικείων περιπτώσεως ἢ θύραζε προελθούσης ἢ ἐντὸς ἱκανῆς οὔσης. οὐ συμβαινούσης μέντοι τῆς εἰωθυίας γίνεσθαι τοῖς θήλεσιν ἡδονῆς περὶ τὴν ὁμιλίαν τὴν τοιαύτην συλλαμβάνουσιν, ἂν τύχη ὁ τόπος γ' ὀργῶν καὶ καταβεβηκυῖαι αἱ ὑστέραι κάτω. ἀλλ' ὥς ἐπὶ τὸ πολὺ συμβαίνει ἐκείνως διὰ τὸ μὴ συμμεμυκέναι τὸ στόμα γιγνομένης τῆς ἐκκρίσεως, μεθ' ἧς εἴωθε γίνεσθαι καὶ τοῖς ἄρρεσιν ἢ ἡδονὴ καὶ ταῖς γυναιξίν· οὕτω δ' ἔχοντος εὐδοεῖται μᾶλλον καὶ τῷ τοῦ ἄρρενος σπέρματι.

Ἡ δ' ἄφεςις οὐκ ἐντὸς γίγνεται καθάπερ οἶονταί τινες (στενὸν γὰρ τὸ στόμα τῶν ὑστερῶν), ἀλλ' εἰς τὸ πρόσθεν οὐπὲρ τὸ θῆλυ (739b.) προῖεται τὴν ἐν ἐνίαις αὐτῶν ἱκμάδα γιγνομένην, ἐνταῦθα καὶ τὸ ἄρρεν προῖεται [ἐάν τις ἐξικμάσῃ]. ὅτε μὲν οὖν μένει τοῦτον ἔχουσα τὸν τόπον, ὅτε δέ, ἂν τύχη συμμέτρως ἔχουσα καὶ θερμὴ διὰ τὴν κάθαρσιν ἢ ὑστέρα, εἴσω σπᾶ. σημεῖον δέ· καὶ γὰρ τὰ πρόσθετα ὑγρὰ προστεθέντα ἀφαιρεῖται ξηρά· ἔτι δὲ ὅσα τῶν ζώων πρὸς τῷ ὑποζώματι ἔχει τὰς ὑστέρας καθάπερ ὄρνις καὶ τῶν ἰχθύων οἱ ζωτοκοῦντες, ἀδύνατον ἐκεῖ μὴ σπᾶσθαι τὸ σπέρμα ἀλλ' ἀφεθὲν ἐλθεῖν.

ἔλκει δὲ τὴν γονὴν ὁ τόπος διὰ τὴν θερμότητα τὴν ὑπάρχουσαν. καὶ ἡ τῶν καταμηνίων δὲ ἔκκρισις καὶ συνάθροισις ἐμπυρεύει θερμότητα ἐν τῷ μορίῳ τούτῳ, ὥστε καθάπερ τὰ κωνικὰ τῶν ἀγγείων ὅταν θερμῷ διακλυσθῇ σπᾶ τὸ ὕδωρ εἰς αὐτὰ καταστρεφομένου τοῦ στόματος. καὶ τοῦτον μὲν τὸν τρόπον γίγνεται σπάσις, ὥς δέ τινες λέγουσι τοῖς ὀργανικοῖς πρὸς τὴν συνουσίαν μορίοις οὐ γίγνεται κατ' οὐθένα τρόπον.

ἀνάπαλιν δὲ συμβαίνει καὶ τοῖς λέγουσι προῖεσθαι καὶ τὴν γυναῖκα σπέρμα· προῖεμέναις γὰρ ἔξω συμβαίνει ταῖς ὑστέραις πάλιν εἴσω σπᾶν, εἴπερ μιχθήσεται τῇ γονῇ τῇ τοῦ ἄρρενος. τὸ δ' οὕτω γίνεσθαι περίεργον, ἢ δὲ φύσις οὐδὲν ποιεῖ περίεργον.

Ὅταν δὲ συστῇ ἢ ἐν ταῖς ὑστέραις ἀπόκρισις τοῦ θήλεος ὑπὸ τῆς τοῦ ἄρρενος γονῆς, παραπλήσιον ποιούσης ὥσπερ ἐπὶ τοῦ γάλακτος τῆς πυετίας· καὶ γὰρ ἡ πυετία γάλα ἐστὶ θερμότητα ζωτικὴν ἔχον ἢ τὸ ὅμοιον εἰς ἐν ἄγει καὶ συνίστησι, καὶ ἡ γονὴ πρὸς τὴν τῶν καταμηνίων φύσιν ταύτῃ πέπονθεν· ἢ

γὰρ αὐτὴ φύσις ἐστὶ γάλακτος καὶ καταμηνίων-συνιόντος δὴ τοῦ σωματώδους ἐκκρίνεται τὸ ὑγρὸν καὶ περιστάνται κύκλῳ ξηραινομένων τῶν γεηρῶν ὑμένες, καὶ ἐξ ἀνάγκης καὶ ἔνεκά τινος· καὶ γὰρ θερμαινομένων ξηραίνεσθαι ἀναγκαῖον τὰ ἔσχατα καὶ ψυχομένων, καὶ δεῖ μὴ ἐν ὑγρῷ τὸ ζῶον εἶναι ἀλλὰ κεχωρισμένον. καλοῦνται δὲ τούτων οἱ μὲν ὑμένες τὰ δὲ χόρια, διαφέροντα τῷ μᾶλλον καὶ ἥττον· ὁμοίως δ' ἐνυπάρχουσιν ἐν τε τοῖς ὠοτόκοις ταῦτα καὶ τοῖς ζωοτόκοις.

Ὅταν δὲ συστή τὸ κύημα ἤδη παραπλήσιον ποιεῖ τοῖς σπειρομένοις. ἡ μὲν γὰρ ἀρχὴ καὶ ἐν τοῖς σπέρμασιν ἐν αὐτοῖς ἐστὶν ἡ πρώτη· ὅταν δ' αὕτη ἀποκριθῇ ἐνοῦσα δυνάμει πρότερον, ἀπὸ ταύτης ἀφίεται ὅ τε βλαστὸς καὶ ἡ ῥίζα. αὕτη δ' ἐστὶν ἡ τὴν τροφήν (740a.) λαμβάνει· δεῖται γὰρ αὐξήσεως τὸ φυτόν. οὕτω καὶ ἐν τῷ κυήματι τρόπον τινὰ πάντων ἐνόντων τῶν μορίων δυνάμει ἡ ἀρχὴ πρὸ ὁδοῦ μάλιστα ἐνυπάρχει. διὸ ἀποκρίνεται πρῶτον ἡ καρδία ἐνεργεία. καὶ τοῦτο οὐ μόνον ἐπὶ τῆς αἰσθήσεως δῆλον (συμβαίνει γὰρ οὕτως) ἀλλὰ καὶ ἐπὶ τοῦ λόγου· ὅταν γὰρ ἀπ' ἀμφοῖν ἀποκριθῇ δεῖ αὐτὸ αὐτὸ διοικεῖν τὸ γενόμενον καθάπερ ἀποικισθὲν τέκνον ἀπὸ πατρός. ὥστε δεῖ ἀρχὴν ἔχειν ἀφ' ἧς καὶ ὕστερον ἡ διακόσμησις τοῦ σώματος γίνεται τοῖς ζώοις. εἰ γὰρ ἔξωθὲν ποτ' ἔσται καὶ ὕστερον ἐνεσομένη οὐ μόνον διαπορήσειεν ἄν τις τὸ πότε, ἀλλ' ὅτι ἀνάγκη, ὅταν ἕκαστον χωρίζεται τῶν μορίων, ταύτην ὑπάρχειν πρῶτον ἐξ ἧς καὶ ἡ αὕξις ὑπάρχει καὶ ἡ κίνησις τοῖς ἄλλοις μορίοις. διόπερ ὅσοι λέγουσιν, ὥσπερ Δημόκριτος, τὰ ἔξω πρῶτον διακρίνεσθαι τῶν ζώων, ὕστερον δὲ τὰ ἐντός, οὐκ ὀρθῶς λέγουσιν, ὥσπερ ξυλίνων ἢ λιθίνων ζώων· τὰ μὲν γὰρ τοιαῦτ' οὐκ ἔχει ἀρχὴν ὅλως, τὰ δὲ ζῶα πάντ' ἔχει καὶ ἐντός ἔχει. διὸ πρῶτον ἡ καρδία φαίνεται διωρισμένη πᾶσι τοῖς ἐναίμοις· ἀρχὴ γὰρ αὕτη καὶ τῶν ὁμοιομερῶν καὶ τῶν ἀνομοιομερῶν. ἤδη γὰρ ἀρχὴν ταύτην ἄξιον ἀκοῦσαι τοῦ ζώου καὶ τοῦ συστήματος ὅταν δέηται τροφῆς· τὸ γὰρ δὴ ὄν αὐξάνεται. τροφή δὲ ζώου ἡ ἐσχάτη αἷμα καὶ τὸ ἀνάλογον, τούτων δ' ἀγγεῖον αἱ φλέβες· διὸ ἡ καρδία καὶ τούτων ἀρχή. δῆλον δὲ τοῦτο ἐκ τῶν ἱστοριῶν καὶ τῶν ἀνατομῶν.

Ἐπεὶ δὲ δυνάμει μὲν ἤδη ζῶον ἀτελὲς δέ, ἄλλοθεν ἀναγκαῖον λαμβάνειν τὴν τροφήν· διὸ χρῆται τῇ ὑστέρα καὶ τῇ ἐχούσῃ ὥσπερ γῆ φυτόν, τοῦ λαμβάνειν τροφήν ἕως ἄν τελεωθῇ πρὸς τὸ εἶναι ἤδη ζῶον δυνάμει πορευτικόν. διὸ ἐκ τῆς καρδίας τὰς δύο φλέβας πρώτας ἡ φύσις ὑπέγραψεν· ἀπὸ δὲ τούτων φλέβια ἀπλήρτηται πρὸς τὴν ὑστέραν ὁ καλούμενος ὀμφαλός. ἔστι γὰρ ὁ ὀμφαλὸς φλέψ, τοῖς μὲν μία τοῖς δὲ πλείους τῶν ζώων. περὶ δὲ ταύτας κέλυφος δερματικὸν [ὁ καλούμενος ὀμφαλός] διὰ τὸ δεῖσθαι σωτηρίας καὶ σκέπης τὴν τῶν φλεβῶν ἀσθένειαν. αἱ δὲ φλέβες οἷον ῥίζαι πρὸς τὴν ὑστέραν

συνάπτουσι, δι' ὧν λαμβάνει τὸ κύημα τὴν τροφήν. τούτου γὰρ χάριν ἐν ταῖς ὑστέραις μένει τὸ ζῶον, ἀλλ' οὐχ ὡς Δημόκριτός φησιν ἵνα διαπλάττηται τὰ μόρια κατὰ τὰ μόρια τῆς ἐχούσης. τοῦτο γὰρ ἐπὶ τῶν (740b.) ὠοτοκούντων φανερόν· ἐκεῖνα γὰρ ἐν τοῖς ὠοῖς λαμβάνει τὴν διάκρισιν κεχωρισμένα τῆς μήτρας.

Ἀπορήσειε δ' ἂν τις εἰ τὸ αἶμα μὲν τροφή ἐστίν, ἡ δὲ καρδία πρώτη γίγνεται ἔναιμος οὕσα, [τὸ δ' αἶμα τροφή,] ἡ δὲ τροφή θύραθεν, πόθεν εἰσῆλθεν ἡ πρώτη τροφή; ἢ τοῦτ' οὐκ ἀληθές ὡς πᾶσα θύραθεν, ἀλλ' εὐθύς ὥσπερ ἐν τοῖς τῶν φυτῶν σπέρμασιν ἔνεστί τι τοιοῦτον τὸ φαινόμενον πρῶτον γαλακτώδες, οὕτω καὶ ἐν τῇ ὕλῃ τῶν ζώων τὸ περίττωμα τῆς συστάσεως τροφή ἐστίν.

Ἡ μὲν οὖν αὔξησις τῷ κυήματι γίγνεται διὰ τοῦ ὀμφαλοῦ τὸν αὐτὸν τρόπον ὅνπερ διὰ τῶν ῥιζῶν τοῖς φυτοῖς, καὶ τοῖς ζώοις αὐτοῖς ὅταν ἀπολυθῶσιν ἐκ τῆς ἐν αὐτοῖς τροφῆς· περὶ ὧν ὕστερον λεκτέον κατὰ τοὺς οἰκείους τῶν λόγων καιρούς. ἡ δὲ διάκρισις γίγνεται τῶν μορίων οὐχ ὡς τινες ὑπολαμβάνουσι διὰ τὸ πεφυκέναι φέρεσθαι τὸ ὅμοιον πρὸς τὸ ὅμοιον (πρὸς γὰρ πολλαῖς ἄλλαις αἷς ὁ λόγος οὗτος ἔχει δυσχερεῖαις συμβαίνει χωρὶς ἕκαστον γίνεσθαι τῶν μορίων τῶν ὁμοιομερῶν, οἷον ὅστ' ἀ κατ' αὐτὰ καὶ νεῦρα καὶ τὰς σάρκας κατ' αὐτάς, εἴ τις ἀποδέξαιτο ταύτην τὴν αἰτίαν)· ἀλλ' ὅτι τὸ περίττωμα τὸ τοῦ θήλεος δυνάμει τοιοῦτόν ἐστίν οἷον φύσει τὸ ζῶον καὶ ἔνεστι δυνάμει τὰ μόρια ἐνεργείᾳ δ' οὐθέν, διὰ ταύτην τὴν αἰτίαν γίγνεται ἕκαστον αὐτῶν, καὶ ὅτι τὸ ποιητικὸν καὶ τὸ παθητικὸν ὅταν θίγωσιν, ὃν τρόπον ἐστὶ τὸ μὲν ποιητικὸν τὸ δὲ παθητικόν (τὸν δὲ τρόπον λέγω τὸ ὡς καὶ οὐ καὶ ὅτε), εὐθύς τὸ μὲν ποιεῖ τὸ δὲ πάσχει. ὕλην μὲν οὖν παρέχει τὸ θῆλυ, τὴν δ' ἀρχὴν τῆς κινήσεως τὸ ἄρρεν. ὥσπερ δὲ τὰ ὑπὸ τῆς τέχνης γιγνόμενα γίγνεται διὰ τῶν ὀργάνων-ἐστὶ δ' ἀληθέστερον εἰπεῖν διὰ τῆς κινήσεως αὐτῶν· αὕτη δ' ἐστὶν ἡ ἐνέργεια τῆς τέχνης, ἡ δὲ τέχνη μορφή τῶν γιγνομένων ἐν ἄλλω-οὕτως ἡ τῆς θρεπτικῆς ψυχῆς δύναμις, ὥσπερ καὶ ἐν αὐτοῖς τοῖς ζώοις καὶ τοῖς φυτοῖς ὕστερον ἐκ τῆς τροφῆς ποιεῖ τὴν αὔξησιν, χρωμένῃ οἷον ὀργάνοις θερμότητι καὶ ψυχρότητι (ἐν γὰρ τούτοις ἡ κίνησις ἐκείνης, καὶ λόγῳ τινὶ ἕκαστον γίγνεται), οὕτω καὶ ἐξ ἀρχῆς συνίστησι τὸ φύσει γιγνόμενον. ἡ γὰρ αὕτη ἐστὶν ὕλη ἢ αὐξάνεται καὶ ἐξ ἧς συνίσταται τὸ πρῶτον, ὥστε καὶ ἡ ποιοῦσα δύναμις ταῦτό τῷ ἐξ ἀρχῆς· μείζων δὲ αὕτη ἐστίν. εἰ οὖν αὕτη ἐστὶν ἡ θρεπτικὴ ψυχὴ, αὕτη ἐστὶ καὶ ἡ γεννώσα· καὶ τοῦτ' ἐστὶν ἡ (741a.) φύσις ἡ ἐκάστου ἐνυπάρχουσα καὶ ἐν φυτοῖς καὶ ἐν ζώοις πᾶσιν, τὰ δ' ἄλλα μόρια τῆς ψυχῆς τοῖς μὲν ὑπάρχει τοῖς δ' οὐχ ὑπάρχει τῶν ζώντων.

Ἐν μὲν οὖν τοῖς φυτοῖς οὐ κεχώρισται τὸ θῆλυ τοῦ ἄρρενος· ἐν δὲ τοῖς ζώοις ἐν οἷς κεχώρισται προσδεῖται τὸ θῆλυ τοῦ ἄρρενος.

## Κεφάλαιο 5

Καίτοι τις ἀπορήσειεν ἂν διὰ τίν' αἰτίαν· εἴπερ ἔχει τὸ θῆλυ τὴν αὐτὴν ψυχὴν καὶ ἡ ὕλη τὸ περίττωμα τὸ τοῦ θήλεός ἐστι, τί προσδεῖται τοῦ ἄρρενος ἄλλ' οὐκ αὐτὸ ἐξ αὐτοῦ γεννᾷ τὸ θῆλυ; αἴτιον δ' ὅτι διαφέρει τὸ ζῶον τοῦ φυτοῦ αἰσθήσει· ἀδύνατον δὲ πρόσωπον ἢ χεῖρα ἢ σάρκα εἶναι ἢ ἄλλο τι μόριον μὴ ἐνούσης αἰσθητικῆς ψυχῆς ἢ ἐνεργείας ἢ δυνάμει καὶ ἡ πη ἢ ἀπλῶς· ἔσται γὰρ οἶον νεκρὸς ἢ νεκροῦ μόριον. εἰ οὖν τὸ ἄρρεν ἐστὶ τὸ τῆς τοιαύτης ποιητικὸν ψυχῆς, ὅπου κεχώρισται τὸ θῆλυ καὶ τὸ ἄρρεν ἀδύνατον τὸ θῆλυ αὐτὸ ἐξ αὐτοῦ γεννᾷ ζῶον· τὸ γὰρ εἰρημένον ἦν τὸ ἄρρεν εἶναι· ἐπεὶ ὅτι γ' ἔχει λόγον ἢ λεχθεῖσα ἀπορία φανερόν ἐπὶ τῶν ὀρνίθων τῶν τὰ ὑπηνέμια τικτόντων ὅτι δύναται μέχρι γέ τινος τὸ θῆλυ γεννᾷν. ἔτι δ' ἔχει καὶ τοῦτο ἀπορίαν πῶς τις αὐτῶν τὰ ὠὰ φήσει ζῆν· οὔτε γὰρ οὕτως ὡς τὰ γόνιμα ὠὰ ἐνδέχεται (ἐγίγνετο γὰρ ἂν ἐξ αὐτῶν ἐνεργεία ἔμψυχον) οὔθ' οὕτως ὥσπερ ξύλον ἢ λίθος. ἔστι γὰρ καὶ τούτων τῶν ὠῶν φθορά τις ὡς μετεχόντων τρόπον τινὰ ζωῆς πρότερον. δῆλον οὖν ὅτι ἔχει τινὰ δυνάμει ψυχὴν.

ποῖαν οὖν ταύτην; ἀνάγκη δὴ τὴν ἐσχάτην. αὕτη δ' ἐστὶν ἡ θρεπτική· αὕτη γὰρ ὑπάρχει πᾶσιν ὁμοίως ζώοις τε καὶ φυτοῖς. διὰ τί οὖν οὐκ ἀποτελεῖ τὰ μόρια καὶ τὸ ζῶον; ὅτι δεῖ αἰσθητικὴν αὐτὰ ἔχειν ψυχὴν· οὐ γὰρ ἐστὶν ὥσπερ φυτοῦ τὰ μόρια τῶν ζώων. διὸ δεῖται τῆς τοῦ ἄρρενος κοινωνίας· κεχώρισται γὰρ ἐν τούτοις τὸ ἄρρεν. ὅπερ καὶ συμβαίνει· τὰ γὰρ ὑπηνέμια γίγνεται γόνιμα ἂν ἔν τινι καιρῷ τὸ ἄρρεν ἐποχεύσῃ. ἀλλὰ περὶ μὲν τῆς τούτων αἰτίας ὕστερον διορισθήσεται.

Εἰ δ' ἐστὶ τι γένος ὃ θῆλυ μὲν ἐστίν, ἄρρεν δὲ μὴ ἔχει κεχωρισμένον, ἐνδέχεται τοῦτο ζῶον ἐξ αὐτοῦ γεννᾷν. ὅπερ ἀξιοπίστως μὲν οὐ συνῶπται μέχρι γε τοῦ νῦν, ποιεῖ δὲ διστάζειν ἐν τῷ γένει τῷ τῶν ἰχθύων· τῶν γὰρ καλουμένων ἐρυθρίνων ἄρρην μὲν οὐθεὶς ὥπται πω, θήλειαι δὲ καὶ κυημάτων πλήρεις. ἀλλὰ τούτων μὲν οὕτω πεῖραν ἔχομεν ἀξιοπίστον· οὔτε δὲ θήλεα οὔτε ἄρρενα καὶ ἐν τῷ τῶν ἰχθύων (741b.) γένει ἐστίν, οἶον αἱ τ' ἐγγέλεις καὶ γένος τι κεστρέων περὶ τοὺς τελματιαίους ποταμούς. ἐν ὅσοις δὲ κεχώρισται τὸ θῆλυ καὶ τὸ ἄρρεν ἀδύνατον αὐτὸ καθ' αὐτὸ τὸ θῆλυ γεννᾷν εἰς τέλος· τὸ γὰρ ἄρρεν μάτην ἂν ἦν, ἡ δὲ φύσις οὐδὲν ποιεῖ μάτην. διόπερ ἐν τοῖς τοιούτοις ἀεὶ τὸ ἄρρεν ἐπιτελεῖ τὴν γένεσιν. ἐμποιεῖ γὰρ τοῦτο τὴν αἰσθητικὴν ψυχὴν ἢ δι' αὐτοῦ ἢ διὰ τῆς γονῆς.



Ἐνυπαρχόντων δ' ἐν τῇ ὕλῃ δυνάμει τῶν μορίων, ὅταν ἀρχὴ γένηται κινήσεως ὥσπερ ἐν τοῖς αὐτομάτοις θαύμασι συνείρεται τὸ ἐφεξῆς· καὶ ὁ βούλονται λέγειν τινὲς τῶν φυσικῶν, τὸ “φέρεσθαι εἰς τὸ ὅμοιον”- λεκτέον οὐχ ὡς τόπον μεταβάλλοντα τὰ μόρια κινεῖσθαι ἀλλὰ μένοντα καὶ ἀλλοιούμενα μαλακότητι καὶ σκληρότητι καὶ χρώμασι καὶ ταῖς ἄλλαις ταῖς τῶν ὁμοιομερῶν διαφοραῖς, γιγνόμενα ἐνεργείᾳ ἣ ὑπῆρχεν ὄντα δυνάμει πρότερον.

Γίνεται δὲ πρῶτον ἡ ἀρχή. αὕτη δ' ἐστὶν ἡ καρδία τοῖς ἐναίμοις, τοῖς δ' ἄλλοις τὸ ἀνάλογον, ὥσπερ εἴρηται πολλάκις. καὶ τοῦτο φανερόν οὐ μόνον κατὰ τὴν αἴσθησιν ὅτι γίνεται πρῶτον ἀλλὰ καὶ περὶ τὴν τελευτήν· ἀπολείπει γὰρ τὸ ζῆν ἐντεῦθεν τελευταῖον, -συμβαίνει δ' ἐπὶ πάντων τὸ τελευταῖον γενόμενον πρῶτον ἀπολείπειν τὸ δὲ πρῶτον τελευταῖον, ὥσπερ τῆς φύσεως διακυλοδρομούσης καὶ ἀνελιττομένης ἐπὶ τὴν ἀρχὴν ὅθεν ἦλθεν. ἔστι γὰρ ἡ μὲν γένεσις ἐκ τοῦ μὴ ὄντος εἰς τὸ ὄν, ἡ δὲ φθορὰ ἐκ τοῦ ὄντος πάλιν εἰς τὸ μὴ ὄν.

## Κεφάλαιο 6

Γίνεται δὲ μετὰ τὴν ἀρχήν, ὥσπερ ἐλέχθη, τὰ ἐντὸς πρότερον τῶν ἐκτός. φαίνεται δὲ πρότερα τὰ μέγεθος ἔχοντα τῶν ἐλαττόνων, οὐδ' ἓνια γιγνόμενα πρότερον. πρῶτον δὲ τὰ ἄνω διαρθροῦνται τοῦ διαζώματος καὶ διαφέρει μεγέθει· τὸ δὲ κάτω καὶ ἔλαττον καὶ ἀδιοριστότερον. καὶ τοῦτο γίνεται ἐν πᾶσιν ὅσοις τὸ ἄνω καὶ τὸ κάτω διώριστα, πλὴν ἐν τοῖς ἐντόμοις· τούτων δ' ἐν τοῖς σκωληκοτοκουμένοις ἐπὶ τὸ ἄνω ἡ αὕξησης γίνεται· τὸ γὰρ ἄνω ἐξ ὑπαρχῆς ἔλαττον. ἀδιόριστον δὲ καὶ τὸ ἄνω καὶ τὸ κάτω τοῖς μαλακίοις τῶν πορευτικῶν μόνοις. τὸ δὲ λεχθὲν συμβαίνει καὶ ἐπὶ τῶν φυτῶν, τὸ προτερεῖν τῇ γενέσει τὸ ἄνω κύτος τοῦ κάτωθεν· τὰς γὰρ ρίζας πρότερον ἀφιᾷσι τὰ σπέρματα τῶν πτόρθων.

Διορίζεται δὲ τὰ μέρη τῶν ζώων πνεύματι, οὐ μέντοι οὔτε τῷ τῆς γεννώσης οὔτε τῷ αὐτοῦ καθάπερ τινὲς τῶν (742a.) φυσικῶν φασιν. φανερόν δὲ τοῦτο ἐπὶ τῶν ὀρνίθων καὶ τῶν ἰχθύων καὶ τῶν ἐντόμων· τὰ μὲν γὰρ χωρισθέντα τῆς γεννώσης γίνεται ἐξ ὧσιν ἐν ᾧ λαμβάνει τὴν διάρθρωσιν, τὰ δ' ὅλως οὐκ ἀναπνεῖ τῶν ζώων, σκωληκοτοκεῖται δὲ καὶ ὠτοτοκεῖται· τὰ δ' ἀναπνέοντα καὶ ἐν τῇ μήτρᾳ λαμβάνοντα τὴν διάρθρωσιν οὐκ ἀναπνεῖ πρὶν ἢ ὁ πνεύμων λάβῃ τέλος· διαρθροῦνται δὲ καὶ οὗτος καὶ τὰ ἔμπροσθεν μόρια πρὶν ἀναπνεῖν. ἔτι δ' ὅσα πολυσχιδῇ τῶν τετραπόδων, οἷον κύων λέων λύκος ἀλώπηξ θώς, πάντα τυφλὰ γεννᾶ, καὶ δίσταται τὸ βλέφαρον γενομένων ὕστερον. ὥστε δῆλον ὅτι τὸν αὐτὸν τρόπον καὶ ἐν τοῖς ἄλλοις πᾶσι καθάπερ καὶ τὸ ποιὸν

καὶ τὸ ποσὸν γίγνεται δυνάμει προϋπάρχον, ἐνεργεία δ' ὕστερον, ὑπὸ τῶν αὐτῶν αἰτίων ὑφ' ὧν περ καὶ τὸ ποιὸν διορίζεται-καὶ γίγνεται δύο ἐξ ἑνός. πνεῦμα δ' ὑπάρχειν ἀναγκαῖον ὅτι ὑγρὸν καὶ θερμόν, τοῦ μὲν ποιοῦντος τοῦ δὲ πάσχοντος.

Τῶν δ' ἀρχαίων τινὲς φυσιολόγων τί μετὰ τί γίγνεται τῶν μορίων ἐπειράθησαν λέγειν, οὐ λίκιν ἐμπειρικῶς ἔχοντες τῶν συμβαινόντων. τῶν γὰρ μορίων ὥσπερ καὶ ἐπὶ τῶν ἄλλων πέφυκεν ἕτερον ἑτέρου πρότερον. τὸ δὲ πρότερον ἤδη πολλαχῶς ἐστίν· τό τε γὰρ οὐ ἔνεκα καὶ τὸ τούτου ἔνεκα διαφέρει, καὶ τὸ μὲν τῇ γενέσει πρότερον αὐτῶν ἐστὶ τὸ δὲ τῇ οὐσίᾳ. δύο δὲ διαφορὰς ἔχει καὶ τὸ τούτου ἔνεκα· τὸ μὲν γὰρ ἐστὶν ὅθεν ἡ κίνησις, τὸ δὲ ὧς χρήται τὸ οὐ ἔνεκα.

λέγω δ' οἷον τό τε γεννητικὸν καὶ τὸ ὀργανικὸν τῷ γεννωμένῳ· τούτων γὰρ τὸ μὲν ὑπάρχειν δεῖ πρότερον, τὸ ποιητικόν, οἷον τὸ διδάξαν τοῦ μανθάνοντος, τοὺς δ' αὐλοὺς ὕστερον τοῦ μανθάνοντος αὐλεῖν· περίεργον γὰρ μὴ ἐπισταμένοις αὐλεῖν ὑπάρχειν αὐλοῦς· τριῶν δ' ὄντων-ἐνὸς μὲν τοῦ τέλους ὃ λέγομεν εἶναι οὐ ἔνεκα, δευτέρου δὲ τῶν τούτου ἔνεκα τῆς ἀρχῆς τῆς κινητικῆς καὶ γεννητικῆς (τὸ γὰρ ποιητικὸν καὶ γεννητικόν, ἢ τοιαῦτα, πρὸς τὸ ποιούμενόν ἐστὶ καὶ γεννώμενον), τρίτου δὲ τοῦ χρησίμου καὶ ὧς χρήται τὸ τέλος-πρῶτον μὲν ὑπάρχειν ἀναγκαῖόν τι μόνιον ἐν ὧς ἡ ἀρχὴ τῆς κινήσεως (καὶ γὰρ εὐθύς τοῦτο τὸ μόνιον ἐστὶ τοῦ τέλους ἐν καὶ κυριώτατον), ἔπειτα μετὰ τοῦτο τὸ ὅλον καὶ τὸ τέλος, τρίτον δὲ καὶ τελευταῖον τὰ ὀργανικὰ τούτοις μέρη πρὸς ἐνίας χρήσεις.

ὥστ' εἴ τι τοιοῦτόν ἐστιν ὅπερ ἀναγκαῖον ὑπάρχειν ἐν τοῖς (742b.) ζώοις, τὸ πάσης ἔχον τῆς φύσεως ἀρχὴν καὶ τέλος, τοῦτο γίγνεσθαι πρῶτον ἀναγκαῖον, ἢ μὲν κινητικὸν πρῶτον, ἢ δὲ μόνιον τοῦ τέλους μετὰ τοῦ ὅλου. ὥστε τῶν μορίων τῶν ὀργανικῶν ὅσα μὲν ἐστὶ γεννητικὰ τὴν φύσιν, αἰεὶ πρότερον δεῖ ὑπάρχειν αὐτά (ἄλλου γὰρ ἔνεκά ἐστὶν ὡς ἀρχή), ὅσα δὲ μὴ τοιαῦτα τῶν ἄλλου ἔνεκα ὕστερον. διὸ οὐ ῥάδιον διελεῖν πότερα πρότερα τῶν μορίων, ὅσα ἄλλου ἔνεκα ἢ οὐ ἔνεκα ταῦτα. παρεμπίπτει γὰρ τὰ κινητικὰ τῶν μορίων πρότερον ὄντα τῇ γενέσει τοῦ τέλους, τὰ δὲ κινητικὰ πρὸς τὰ ὀργανικὰ διελεῖν οὐ ῥάδιον. καίτοι κατὰ ταύτην τὴν μέθοδον δεῖ ζητεῖν τί γίγνεται μετὰ τί· τὸ γὰρ τέλος ἐνίων μὲν ὕστερον ἐνίων δὲ πρότερον. καὶ διὰ τοῦτο πρῶτον μὲν τὸ ἔχον τὴν ἀρχὴν γίγνεται μόνιον, εἴτ' ἐχόμενον τὸ ἄνω κύτος. διὸ τὰ περὶ τὴν κεφαλὴν καὶ τὰ ὄμματα μέγιστα κατ' ἀρχὰς φαίνεται τοῖς ἐμβρύοις, τὰ δὲ κάτω τοῦ ὀμφαλοῦ, οἷον τὰ κῶλα, μικρά. τοῦ γὰρ ἄνω τὰ κάτω ἔνεκεν καὶ οὔτε μόνια τοῦ τέλους οὔτε γεννητικὰ αὐτοῦ.

Οὐ καλῶς δὲ λέγουσιν οὐδὲ τοῦ διὰ τί τὴν ἀνάγκην ὅσοι λέγουσι ὅτι οὕτως αἰεὶ γίνεταί, καὶ ταύτην εἶναι νομίζουσιν ἀρχὴν ἐν αὐτοῖς, ὥσπερ Δημόκριτος ὁ Ἀβδηρίτης, ὅτι τοῦ μὲν αἰεὶ καὶ ἀπείρου οὐκ ἔστιν ἀρχή, τὸ δὲ διὰ τί ἀρχή, τὸ δ' αἰεὶ ἄπειρον, ὥστε τὸ ἐρωτᾶν τὸ διὰ τί περὶ τῶν τοιούτων τινὸς τὸ ζητεῖν εἶναι φησι τοῦ ἀπείρου ἀρχήν. καίτοι κατὰ τοῦτον τὸν λόγον καθ' ὃν ἀξιοῦσι τὸ διὰ τί μὴ ζητεῖν, οὐθενὸς ἀπόδειξις ἔσται τῶν αἰδίων· φαίνεται δ' οὕσα πολλῶν, τῶν μὲν γιγνομένων αἰεὶ τῶν δ' ὄντων, ἐπεὶ καὶ τὸ τρίγωνον ἔχειν δυσὶν ὀρθαῖς ἴσας αἰεὶ καὶ τὸ τὴν διάμετρον ἀσύμμετρον εἶναι πρὸς τὴν πλευρὰν αἰδίων, ἀλλ' ὅμως ἔστιν αὐτῶν αἴτιόν τι καὶ ἀπόδειξις. τὸ μὲν οὖν μὴ πάντων ἀξιοῦν ζητεῖν ἀρχὴν λέγεται καλῶς, τὸ δὲ τῶν ὄντων αἰεὶ καὶ γιγνομένων πάντων οὐ καλῶς, ἀλλ' ὅσαι τῶν αἰδίων ἀρχαὶ τυγχάνουσιν οὕσαι· τῆς γὰρ ἀρχῆς ἄλλη γνώσις καὶ οὐκ ἀπόδειξις. ἀρχὴ δ' ἐν μὲν τοῖς ἀκινήτοις τὸ τί ἐστίν, ἐν δὲ τοῖς γιγνομένοις ἤδη πλείους-τρόπον δ' ἄλλον καὶ οὐ πᾶσαι τὸν αὐτόν-ὦν μία τὸν ἀριθμὸν ὅθεν ἡ κίνησις ἐστίν. διὸ πάντα τὰ ἔναιμα καρδίαν ἔχει πρῶτον ὥσπερ ἐλέχθη κατ' ἀρχάς· ἐν δὲ τοῖς ἄλλοις τὸ ἀνάλογον γίνεταί τῇ (743a.) καρδίᾳ πρῶτον.

Ἐκ δὲ τῆς καρδίας αἱ φλέβες διατεταμέναι, καθάπερ οἱ τοὺς κανάβους γράφοντες ἐν τοῖς τοίχοις· τὰ γὰρ μέρη περὶ ταύτας ἐστίν, ἅτε γινόμενα ἐκ τούτων. ἡ δὲ γένεσις ἐστίν τῶν ὁμοιομερῶν ὑπὸ ψύξεως καὶ θερμότητος· συνίσταται γὰρ καὶ πήγνυται τὰ μὲν ψυχρῶ τὰ δὲ θερμῶ. περὶ δὲ τῆς τούτων διαφορᾶς εἴρηται πρότερον ἐν ἑτέροις, ποῖα λυτὰ ὑγρῶ καὶ πυρὶ καὶ ποῖα ἄλυτα ὑγρῶ καὶ ἄτηκτα πυρί. διὰ μὲν οὖν τῶν φλεβῶν καὶ τῶν ἐν ἐκάστοις πόρων διαπιδύουσα ἡ τροφή, καθάπερ ἐν τοῖς ὠμοῖς κεραμίσις τὸ ὕδωρ, γίνονται σάρκες ἢ τὸ ταύταις ἀνάλογον ὑπὸ τοῦ ψυχροῦ συνιστάμεναι, διὸ καὶ λύονται ὑπὸ πυρός. ὅσα δὲ γεηρὰ λίαν τῶν ἀνατελλόντων, ὀλίγην ἔχοντα ὑγρότητα καὶ θερμότητα, ταῦτα δὲ ψυχόμενα ἐξατμίζοντος τοῦ ὑγροῦ μετὰ τοῦ θερμοῦ γίνεταί σκληρὰ καὶ γεώδη τὴν μορφήν, οἷον ὄνυχες καὶ κέρατα καὶ ὅπλα καὶ ῥύγχη· διὸ μαλάττεται μὲν πυρί, τήκεται δ' οὐθέν, ἀλλ' ἔνια τοῖς ὑγροῖς, οἷον τὰ κελύφη τῶν ὠν.

Ὑπὸ δὲ τῆς ἐντὸς θερμότητος τά τε νεῦρα καὶ τὰ ὀστέα γίνεταί ξηραινομένης τῆς ὑγρότητος. διὸ καὶ ἄλυτά ἐστὶ τὰ ὀστέα ὑπὸ τοῦ πυρός καθάπερ κέραμος· οἷον γὰρ ἐν καμίνῳ ὠπτημένα ἐστὶν ὑπὸ τῆς ἐν τῇ γενέσει θερμότητος. αὕτη δὲ οὔτε ὅ τι ἔτυχε ποιεῖ σάρκα ἢ ὀστοῦν οὔθ' ὅπου ἔτυχεν οὔθ' ὁπότ' ἔτυχεν, ἀλλὰ τὸ πεφυκὸς καὶ οὗ πέφυκε καὶ ὅτε πέφυκεν. οὔτε γὰρ τὸ δυνάμει ὄν ὑπὸ τοῦ μὴ τὴν ἐνέργειαν ἔχοντος κινητικοῦ ἔσται, οὔτε τὸ τὴν ἐνέργειαν ἔχον ποιήσει ἐκ τοῦ τυχόντος, ὥσπερ οὔτε κιβωτὸν μὴ ἐκ ξύλου ὁ τέκτων ποιήσειεν ἄν, οὔτ' ἄνευ τούτου κιβωτὸς ἔσται ἐκ τῶν ξύλων.

Ἡ δὲ θερμότης ἐνυπάρχει ἐν τῷ σπερματικῷ περιττώματι τοσαύτην καὶ τοιαύτην ἔχουσα τὴν κίνησιν καὶ τὴν ἐνέργειαν ὅση σύμμετρος εἰς ἕκαστον τῶν μορίων. καθ' ὅσον δ' ἂν ἐλλείπη ἢ ὑπερβάλλῃ ἢ χειρόν ἀποτελεῖ ἢ ἀνάπηρον τὸ γινόμενον, παραπλησίως τοῖς ἔξω συνισταμένοις διὰ τῆς ἐψήσεως πρὸς τροφῆς ἀπόλαυσιν ἢ τινα ἄλλην ἐργασίαν. ἀλλ' ἐνταῦθα μὲν ἡμεῖς τὴν τῆς θερμότητος συμμετρίαν εἰς τὴν κίνησιν παρασκευάζομεν, ἐκεῖ δὲ δίδωσιν ἡ φύσις ἡ τοῦ γεννῶντος. τοῖς δὲ αὐτομάτως γιγνομένοις ἡ τῆς ὥρας αἰτία κινήσεις καὶ θερμότης.

Ἡ δὲ ψύξις στέρησις θερμότητός ἐστιν. χρῆται δ' ἀμφοτέροις ἡ φύσις ἔχουσι μὲν δύναμιν ἐξ ἀνάγκης ὥστε (743b.) τὸ μὲν τοδὶ τὸ δὲ τοδὶ ποιεῖν, ἐν μέντοι τοῖς γιγνομένοις ἔνεκά τινος συμβαίνει τὸ μὲν ψύχειν αὐτῶν τὸ δὲ θερμαίνειν καὶ γίνεσθαι τῶν μορίων ἕκαστον, τὴν μὲν σάρκα μαλακὴν τῇ μὲν ἐξ ἀνάγκης ποιοῦντων τοιαύτην τῇ δ' ἔνεκά τινος, τὸ δὲ νεῦρον ξηρὸν καὶ ἑλκτὸν τὸ δ' ὅστουν ξηρὸν καὶ θραυστόν.

Τὸ δὲ δέρμα ξηραίνομένης τῆς σαρκὸς γίγνεται καθάπερ ἐπὶ τοῖς ἐψήμασιν ἡ καλουμένη γραῦς. οὐ μόνον δὲ διὰ τὸ ἔσχατον συμβαίνει αὐτοῦ ἡ γένεσις ἀλλὰ καὶ διότι ἐπιπολάζει τὸ γλίσχρον διὰ τὸ μὴ δύνασθαι ἐξατμίζειν. ἐν μὲν οὖν τοῖς ἄλλοις αὐχμηρὸν τὸ γλίσχρον (διὸ ὀστρακόδερμα καὶ μαλακόστρακα τὰ ἔσχατά ἐστι τῶν ἀναίμων ζώων), ἐν δὲ τοῖς ἐναίμοις τὸ γλίσχρον λιπαρώτερόν ἐστιν. καὶ τούτων ὅσα μὴ γεώδη τὴν φύσιν ἔχει λίαν, ἀθροίζεται τὸ πιμελῶδες ὑπὸ τὴν τοῦ δέρματος σκέπην, ὥς τοῦ δέρματος γιγνομένου ἐκ τῆς τοιαύτης γλίσχρότητος· ἔχει γάρ τινα γλίσχρότητα τὸ λιπαρόν. πάντα δὲ ταῦτα, καθάπερ εἴπομεν, λεκτέον γίνεσθαι τῇ μὲν ἐξ ἀνάγκης τῇ δ' οὐκ ἐξ ἀνάγκης ἀλλ' ἔνεκά τινος.

Πρῶτον μὲν οὖν τὸ ἄνω κύτος ἀφορίζεται κατὰ τὴν γένεσιν, τὸ δὲ κάτω προϊόντος τοῦ χρόνου λαμβάνει τὴν αὔξησιν ἐν τοῖς ἐναίμοις. ἅπαντα δὲ ταῖς περιγραφαῖς διορίζεται πρότερον, ὕστερον δὲ λαμβάνει τὰ χρώματα καὶ τὰς μαλακότητας καὶ τὰς σκληρότητας, ἀτεχνῶς ὥσπερ ἂν ὑπὸ ζωγράφου τῆς φύσεως δημιουργούμενα· καὶ γὰρ οἱ γραφεῖς ὑπογράψαντες ταῖς γραμμαῖς οὕτως ἐναλείφουσι τοῖς χρώμασι τὸ ζῶον.

Διὰ μὲν οὖν τὸ τὴν ἀρχὴν ἐν τῇ καρδίᾳ τῶν αἰσθήσεων εἶναι καὶ τοῦ ζώου παντὸς αὕτη γίγνεται πρῶτον, -διὰ δὲ τὴν θερμότητα τὴν ταύτης, ἣ τελευτῶσιν αἱ φλέβες ἄνω, τὸ ψυχρὸν συνίστησιν ἀντίστροφον τῇ θερμότητι τῇ περὶ τὴν καρδίαν τὸν ἐγκέφαλον. διόπερ τὰ περὶ τὴν κεφαλὴν λαμβάνει συνεχῆ τὴν γένεσιν μετὰ τὴν καρδίαν, καὶ μεγέθει τῶν ἄλλων διαφέρει· πολὺς

γὰρ καὶ ὑγρὸς ἐξ ἀρχῆς ὁ ἐγκέφαλος.

Ἔχει δ' ἀπορίαν τὸ περὶ τοὺς ὀφθαλμοὺς συμβαῖνον τῶν ζώων. μέγιστοι μὲν γὰρ ἐξ ἀρχῆς φαίνονται καὶ πεζοῖς καὶ πλωτοῖς καὶ πτηνοῖς, τελευταῖοι δὲ συνίστανται τῶν μορίων· ἐν τῷ μεταξὺ γὰρ χρόνῳ συμπίπτουσιν. αἴτιον δ' ὅτι τὸ τῶν ὀφθαλμῶν αἰσθητήριόν ἐστι μὲν, ὥσπερ καὶ τὰ ἄλλα αἰσθητήρια, ἐπὶ πόρων· ἀλλὰ τὸ μὲν τῆς ἀφῆς καὶ (744a.) γεύσεως εὐθύς ἐστὶν ἢ σῶμα ἢ τοῦ σώματός τι τῶν ζώων, ἡ δ' ὁσφρησις καὶ ἡ ἀκοὴ πόροι συνάπτοντες πρὸς τὸν ἀέρα τὸν θύραθεν, πλήρεις συμφύτου πνεύματος, περαίνοντες δὲ πρὸς τὰ φλέβια τὰ περὶ τὸν ἐγκέφαλον τείνοντα ἀπὸ τῆς καρδίας· ὁ δ' ὀφθαλμὸς σῶμα μόνον ἴδιον ἔχει τῶν αἰσθητηρίων. ἔστι δ' ὑγρὸν καὶ ψυχρὸν καὶ οὐ προϋπάρχον ἐν τῷ τόπῳ-καθάπερ καὶ τὰ ἄλλα μόρια δυνάμει, ἔπειτ' ἐνεργείᾳ γιγνόμενα ὕστερον-ἀλλ' ἀπὸ τῆς περὶ τὸν ἐγκέφαλον ὑγρότητος ἀποκρίνεται τὸ καθαρώτατον διὰ τῶν πόρων οἱ φαίνονται φέροντες ἀπ' αὐτῶν πρὸς τὴν μήνιγγα τὴν περὶ τὸν ἐγκέφαλον. τούτου δὲ τεκμήριον· οὔτε γὰρ ἄλλο μόριον ὑγρὸν καὶ ψυχρὸν ἐστὶν ἐν τῇ κεφαλῇ παρὰ τὸν ἐγκέφαλον, τό τ' ὅμμα ψυχρὸν καὶ ὑγρόν. ἐξ ἀνάγκης οὖν ὁ τόπος λαμβάνει μέγεθος τὸ πρῶτον, συμπίπτει δ' ὕστερον.

καὶ γὰρ περὶ τὸν ἐγκέφαλον συμβαίνει τὸν αὐτὸν τρόπον· τὸ γὰρ πρῶτον ὑγρὸς καὶ πολὺς, ἀποπνέοντος δὲ καὶ πεττομένου σωματοῦνται τε μᾶλλον καὶ συμπίπτει καὶ ὁ ἐγκέφαλος [καὶ τὰ σώματα] καὶ τὸ μέγεθος τὸ τῶν ὀμμάτων. ἐξ ἀρχῆς δὲ διὰ μὲν τὸν ἐγκέφαλον ἡ κεφαλὴ μεγίστη, διὰ δὲ τὸ ὑγρὸν τὸ ἐν τοῖς ὅμμασιν οἱ ὀφθαλμοὶ μεγάλοι φαίνονται. τελευταῖοι δὲ λαμβάνουσι τέλος διὰ τὸ καὶ τὸν ἐγκέφαλον συνίστασθαι μόλις· ὁψὲ γὰρ παύεται τῆς ψυχρότητος καὶ τῆς ὑγρότητος, ἐπὶ πάντων μὲν τῶν ἐχόντων, μάλιστα δ' ἐπὶ τῶν ἀνθρώπων. διὰ γὰρ τοῦτο καὶ τὸ βρέγμα τῶν ὀστέων γίγνεται τελευταῖον· ἤδη γὰρ γεγεννημένων θύραζε τῶν ἐμβρύων μαλακόν ἐστὶ τοῦτο τὸ ὀστοῦν τοῖς παιδίοις. αἴτιον δὲ τοῦ μάλιστ' ἐπὶ τῶν ἀνθρώπων τοῦτο συμβαίνειν ὅτι τὸν ἐγκέφαλον ὑγρότατον ἔχουσι καὶ πλεῖστον τῶν ζώων, τούτου δ' αἴτιον ὅτι καὶ τὴν ἐν τῇ καρδίᾳ θερμότητα καθαρωτάτην.

δηλοῖ δὲ τὴν εὐκрасίαν ἡ διάνοια· φρονιμώτατον γὰρ ἐστὶ τῶν ζώων ἄνθρωπος. ἀκρατῇ δὲ καὶ τὰ παιδιά μέχρι πόρρω τῆς κεφαλῆς ἐστὶ διὰ τὸ βάρος τὸ περὶ τὸν ἐγκέφαλον.

ὁμοίως δὲ καὶ τῶν μορίων ὅσα δεῖ κινεῖν· ἡ γὰρ ἀρχὴ τῆς κινήσεως ὁψὲ κρατεῖ τῶν ἄνωθεν καὶ τελευταίων ὅσων ἡ κίνησις μὴ συνήρηται πρὸς αὐτήν, ὥσπερ τῶν κώλων. τοιοῦτον δ' ἐστὶ μόριον τὸ βλέφαρον. ἐπεὶ δ'

οὐθὲν ποιεῖ περίεργον οὐδὲ μάτην ἢ φύσις δῆλον ὥς οὐδ' ὕστερον οὐδὲ πρότερον· ἔσται γὰρ τὸ γεγονὸς ἢ μάτην ἢ περίεργον. ὥσθ' ἅμ' ἀνάγκη τὰ (744b.) βλέφαρα διαχωρίζεσθαι τε καὶ δύνασθαι κινεῖν. ὁψὲ μὲν οὖν διὰ τὸ πλῆθος τῆς περὶ τὸν ἐγκέφαλον πέψεως τελειοῦται τὰ ὄμματα τοῖς ζώοις, τελευταῖα δὲ διὰ τὸ σφόδρα κρατούσης τῆς κινήσεως εἶναι τὸ κινεῖν καὶ τὰ οὕτω πόρρω τῆς ἀρχῆς καὶ ἀπεψυγμένα τῶν μορίων. δηλοῖ δὲ τὰ βλέφαρα τοιαύτην ἔχοντα τὴν φύσιν· ἂν γὰρ καὶ ὁποσονοῦν βάρος γένηται περὶ τὴν κεφαλὴν δι' ὕπνον ἢ μέθην ἢ ἄλλο τι τῶν τοιούτων οὐ δυνάμεθα τὰ βλέφαρα αἵρειν, οὕτω βάρος αὐτῶν ἐχόντων μικρόν. περὶ μὲν οὖν ὀφθαλμῶν εἴρηται πῶς γίνονται καὶ δι' ὃ τι καὶ διὰ τίν' αἰτίαν τελευταίαν λαμβάνουσι τὴν διάρθρωσιν.

Τῶν δ' ἄλλων γίνεταί μορίων ἕκαστον ἐκ τῆς τροφῆς, τὰ μὲν τιμιώτατα καὶ μετεληφότα τῆς κυριωτάτης ἀρχῆς ἐκ τῆς πεπεμμένης καὶ καθαρωτάτης καὶ πρώτης τροφῆς, τὰ δ' ἀναγκαῖα μόρια καὶ τούτων ἔνεκεν ἐκ τῆς χείρονος καὶ τῶν ὑπολειμμάτων καὶ περιττωμάτων. ὥσπερ γὰρ οἰκονόμος ἀγαθὸς καὶ ἡ φύσις οὐθὲν ἀποβάλλειν εἴωθεν ἐξ ὧν ἔστι ποιῆσαι τι χρηστόν. ἐν δὲ ταῖς οἰκονομίαις τῆς γιγνομένης τροφῆς ἡ μὲν βελτίστη τέτακται τοῖς ἐλευθέροις, ἡ δὲ χείρων καὶ τὸ περιττωμα ταύτης <τοῖς> οἰκέταις, τὰ δὲ χείριστα καὶ τοῖς συντρεφομένοις διδόασιν ζώοις. καθάπερ οὖν εἰς τὴν αὔξησιν ὁ θύραθεν ταῦτα ποιεῖ νοῦς οὕτως ἐν τοῖς γιγνομένοις αὐτοῖς ἡ φύσις ἐκ μὲν τῆς καθαρωτάτης ὕλης σάρκας καὶ τῶν ἄλλων αἰσθητηρίων τὰ σώματα συνίστησιν, ἐκ δὲ τῶν περιττωμάτων ὅστ' αὖ καὶ νεῦρα καὶ τρίχας, ἔτι δ' ὄνυχας καὶ ὀπλὰς καὶ πάντα τὰ τοιαῦτα· διὸ τελευταῖα ταῦτα λαμβάνει τὴν σύστασιν ὅταν ἤδη γίγνηται περιττωμα τῆς φύσεως.

Ἡ μὲν οὖν τῶν ὀστέων φύσις ἐν τῇ πρώτῃ συστάσει γίνεταί τῶν μορίων ἐκ τῆς σπερματικῆς περιττώσεως, καὶ τῶν ζώων αὐξανομένων ἐκ τῆς φυσικῆς τροφῆς λαμβάνει τὴν αὔξησιν ἐξ ἧς περ τὰ μόρια τὰ κύρια, ταύτης μέντοι αὐτῆς τὰ ὑπολείμματα καὶ τὰ περιττωματικά. γίνεταί γὰρ ἐν παντὶ τὸ πρῶτον καὶ τὸ δεύτερον τῆς τροφῆς, τὸ μὲν θρεπτικὸν τὸ δ' αὐξητικόν· θρεπτικὸν μὲν ὃ τὸ εἶναι παρέχεται τῷ τε ὄλῳ καὶ τοῖς μορίοις, αὐξητικὸν δὲ τὸ εἰς μέγεθος ποιοῦν τὴν ἐπίδοσιν· περὶ ὧν ὕστερον διοριστέον μᾶλλον. τὸν αὐτὸν δὲ τρόπον τοῖς ὀστοῖς καὶ τὰ νεῦρα συνίσταται καὶ ἐκ τῶν αὐτῶν, ἐκ τῆς σπερματικῆς περιττώσεως καὶ τῆς θρεπτικῆς.

(745a.) ὄνυχες δὲ καὶ τρίχες καὶ ὀπλὰ καὶ κέρατα καὶ ῥύγχη καὶ τὰ πλῆκτρα τῶν ὀρνίθων καὶ εἴ τι τοιοῦτον ἕτερόν ἐστι μόριον ἐκ τῆς ἐπικτήτου τροφῆς καὶ τῆς αὐξητικῆς, ἣν τε παρὰ τοῦ θήλεος ἐπικτᾶται καὶ [τῆς] θύραθεν. καὶ

διὰ τοῦτο τὰ μὲν ὅστ᾽ μέχρι τινὸς λαμβάνει τὴν αὕξησιν· ἔστι γὰρ τι πᾶσι τοῖς ζώοις πέρας τοῦ μεγέθους, διὸ καὶ τῆς τῶν ὀστέων αὐξήσεως. εἰ γὰρ ταῦτ' εἶχεν αὕξησιν ἀεὶ καὶ τῶν ζώων ὅσα ἔχει ὀστοῦν ἢ τὸ ἀνάλογον ἠϋξάνετ' ἂν ἕως ἔζη· τοῦ γὰρ μεγέθους ὅρος ἐστὶ ταῦτα τοῖς ζώοις. δι' ἣν μὲν οὖν αἰτίαν οὐκ ἀεὶ λαμβάνουσιν αὕξησιν λεκτέον ὕστερον· τρίχες δὲ καὶ τὰ συγγενῇ τούτοις ἕως ἂν ὑπάρχωσιν αὐξάνονται, καὶ μᾶλλον ἐν νόσοις καὶ τῶν σωμάτων γηρασκόντων καὶ φθινόντων διὰ τὸ λείπεσθαι περίττωμα πλεῖον, ἐλάττονος εἰς τὰ κύρια δαπανωμένου διὰ τὸ γῆρας καὶ τὰς νόσους, ἐπεὶ γ' ὅταν ὑπολείπη καὶ τοῦτο διὰ τὴν ἡλικίαν καὶ αἱ τρίχες ὑπολείπουσιν. τὰ δ' ὅστ᾽ αὐτὸν ἀντίον· συμφθίνει γὰρ τῷ σώματι καὶ τοῖς μέρεσιν. αὐξάνονται δ' αἱ τρίχες καὶ τεθνεώτων, οὐ μέντοι γίνονται γ' ἐξ ὑπαρχῆς.

Περὶ δ' ὀδόντων ἀπορήσειεν ἂν τις. εἰσὶ γὰρ τὴν μὲν φύσιν τὴν αὐτὴν ἔχοντες τοῖς ὀστοῖς καὶ γίνονται ἐκ τῶν ὀστέων, ὄνυχες δὲ καὶ τρίχες καὶ κέρατα καὶ τὰ τοιαῦτα ἐκ τοῦ δέρματος, διὸ καὶ συμμεταβάλλουσι τῷ δέρματι τὰς χροάς· λευκά τε γὰρ καὶ μέλανα γίνονται καὶ παντοδαπὰ κατὰ τὴν τοῦ δέρματος χροάν, οἱ δ' ὀδόντες οὐθέν· ἐκ γὰρ τῶν ὀστέων εἰσιν, ὅσα γε τῶν ζώων ἔχει ὀδόντας καὶ ὀστᾶ. αὐξάνονται δὲ διὰ βίου μόνοι τῶν ἄλλων ὀστέων· τοῦτο δὲ δῆλον ἐπὶ τῶν παρακλινόντων ὀδόντων τὴν ἀφὴν τὴν ἀλλήλων.

αἴτιον δὲ τῆς αὐξήσεως ὥς μὲν ἔνεκά του διὰ τὸ ἔργον· ταχὺ γὰρ ἂν κατετρίβοντο μὴ γιγνομένης τινὸς ἐπιρρύσεως, ἐπεὶ καὶ νῦν ἐνίοις γηράσκουσι τοῖς βρωτικοῖς μὲν μὴ μεγάλους δ' ἔχουσι κατατρίβονται ἀμπαν· πλείονι γὰρ λόγῳ καθαιροῦνται τῆς αὐξήσεως. διὸ καὶ τοῦτο εὖ μεμηχάνηται πρὸς τὸ συμβαῖνον ἢ φύσιν· συνάγει γὰρ εἰς τὸ γῆρας καὶ τὴν τελευτὴν τὴν ὑπόλειψιν τῶν ὀδόντων. εἰ δ' ἦν μυριετής ὁ βίος ἢ χιλιετής, παμμεγέθεις τ' ἂν ἔδει γίνεσθαι τοὺς ἐξ ἀρχῆς καὶ φύεσθαι πολλάκις· καὶ γὰρ εἰ συνεχῇ τὴν (745b.) αὕξησιν εἶχον, ὅμως ἂν ἄχρηστοι λεαινόμενοι πρὸς τὴν ἐργασίαν ἦσαν. οὐ μὲν οὖν ἔνεκα λαμβάνουσι τὴν αὕξησιν εἴρηται· συμβαίνει δὲ μηδὲ τὴν αὐτὴν ἔχειν φύσιν τοῖς ἄλλοις ὀστοῖς τοὺς ὀδόντας· τὰ μὲν γὰρ ἐν τῇ πρώτῃ συστάσει γίνονται πάντα καὶ οὐθέν ὕστερον, οἱ δ' ὀδόντες ὕστερον. διὸ καὶ πάλιν δύνανται φύεσθαι ἐκπεσόντες· ἄπτονται γὰρ ἄλλ' οὐ συμπεφύκασι τοῖς ὀστοῖς. ἐκ μέντοι τῆς τροφῆς τῆς εἰς τὰ ὀστᾶ διαδιδομένης γίνονται, διὸ τὴν αὐτὴν ἔχουσι φύσιν, καὶ τότε ὅταν ἐκεῖνα ἔξη ἤδη τὸν ἀριθμὸν τὸν αὐτῶν. τὰ μὲν οὖν ἄλλα ζῶα ἔχοντα γίνονται ὀδόντας καὶ τὸ ἀνάλογον τοῖς ὀδοῦσιν, ἐὰν μή τι γίγνηται παρὰ φύσιν, διὰ τὸ ἀπολύεσθαι τῆς γενέσεως τετελεσμένα τοῦ ἀνθρώπου μᾶλλον· ὁ δ' ἄνθρωπος, ἂν μή τι συμβῇ παρὰ φύσιν, οὐκ ἔχων. δι' ἣν δ' αἰτίαν οἱ μὲν γίνονται τῶν ὀδόντων καὶ ἐκπίπτουσιν οἱ δ' οὐκ

ἐκκίπτουσιν ὕστερον λεχθήσεται.

Διότι δ' ἐκ περιπτώματός ἐστι τὰ τοιαῦτα τῶν μορίων, διὰ τοῦτ' ἄνθρωπος ψιλότατόν τε κατὰ τὸ σῶμα τῶν ζώων πάντων ἐστὶ καὶ ὄνυχας ἐλαχίστους ἔχει ὥς κατὰ μέγεθος· ἐλάχιστον γὰρ ἔχει περίττωμα γεῶδες· ἔστι δὲ περίττωμα μὲν τὸ ἄπεπτον, τὸ δὲ γεηρὸν ἐν τοῖς σώμασι πάντων ἀπεπτότατον.

Πῶς μὲν οὖν ἕκαστον συνίσταται τῶν μορίων εἴρηται, καὶ τί τῆς γενέσεως αἴτιον.

## Κεφάλαιο 7

Ἔχει δὲ τὴν αὕξησιν τὰ ζωοτοκούμενα τῶν ἐμβρύων ὥσπερ ἐλέχθη πρότερον διὰ τῆς τοῦ ὀμφαλοῦ προσφύσεως. ἐπεὶ γὰρ ἔνεστιν ἐν τοῖς ζώοις καὶ ἡ θρεπτικὴ δύναμις τῆς ψυχῆς, ἀφίησιν εὐθὺς οἶον ῥίζαν τὸν ὀμφαλὸν εἰς τὴν ὑστέραν. ἔστι δὲ ὁ ὀμφαλὸς ἐν κελύφει φλέβες, τοῖς μὲν μείζοσι πλείους οἶον βοῖ καὶ τοῖς τοιούτοις, τοῖς δὲ μέσοις δύο, μία δὲ τοῖς ἐλαχίστοις. διὰ δὲ τούτου λαμβάνει τὴν τροφὴν αἱματικήν· αἱ γὰρ ὑστέραι πέρατα φλεβῶν πολλῶν εἰσιν. τὰ μὲν οὖν μὴ ἀμφωδόντα πάντα καὶ τῶν ἀμφωδόντων ὅσων ἡ ὑστέρα μὴ μίαν φλέβα μεγάλην ἔχει διατείνουσιν ἀλλ' ἀντὶ μιᾶς πυκνὰς πολλὰς, ταῦτα ἐν ταῖς ὑστέραις ἔχει τὰς καλουμένας κοτυληδόνας <πρὸς ἃς ὁ ὀμφαλὸς συνάπτει καὶ προσπέφυκεν· ἀποτέτανται γὰρ αἱ φλέβες αἱ διὰ τοῦ ὀμφαλοῦ ἔνθεν καὶ ἔνθεν καὶ σχίζονται πάντῃ κατὰ τὴν ὑστέραν· ἡ δὲ περαίνουσι ταύτῃ γίνονται αἱ κοτυληδόνες> τὸ μὲν περιφερὲς ἔχουσαι πρὸς τὴν ὑστέραν τὸ δὲ κοῖλον πρὸς τὸ ἔμβρυον. μεταξὺ δὲ τῆς ὑστέρας καὶ τοῦ ἐμβρύου τὸ χόριον καὶ οἱ ὑμένες εἰσίν.

(746a.) αἱ δὲ κοτυληδόνες αὐξανομένου καὶ τελεουμένου τοῦ ἐμβρύου γίνονται ἐλάττους καὶ τέλος ἀφανίζονται τελεωθέντος. εἰς τοῦτο γὰρ προεκτίθεται τοῖς ἐμβρύοις ἡ φύσις τὴν αἱματικήν τροφὴν τῆς ὑστέρας ὥσπερ εἰς μαστούς, καὶ διὰ τὸ ἀθροίζεσθαι κατὰ μικρὸν ἐκ πολλῶν οἶον ἐξάνθημα καὶ φλεγμασία γίνεταί τὸ σῶμα τὸ τῆς κοτυληδόνης. ἕως μὲν ἂν οὖν ἔλαττον ἢ τὸ ἔμβρυον, οὐ δυνάμενον πολλὴν λαμβάνειν τροφὴν, δῆλαί εἰσι καὶ μείζονες, αὐξηθέντος δὲ συμπίπτουσιν.

Τὰ δὲ πολλὰ τῶν κολοβῶν ζώων καὶ ἀμφωδόντων οὐκ ἔχει κοτυληδόνας ἐν ταῖς ὑστέραις, ἀλλ' ὁ ὀμφαλὸς εἰς φλέβα τείνει μίαν, αὕτη δὲ τέταται διὰ τῆς ὑστέρας ἔχουσα μέγεθος. ἐπεὶ δὲ τὰ μὲν μονοτόκα τὰ δὲ πολυτόκα τῶν τοιούτων ἐστὶ ζώων, καὶ τὰ πλείω τῶν ἐμβρύων τὸν αὐτὸν ἔχει τρόπον τῷ



ένί. δεῖ δὲ ταῦτα θεωρεῖν ἕκ τε τῶν παραδειγμάτων τῶν ἐν ταῖς ἀνατομαῖς καὶ τῶν ἐν ταῖς ἱστορίαις γεγραμμένων. πεφύκασι γὰρ τὰ ζῶα ἐκ τοῦ ὀμφαλοῦ, ὃ δ' ὀμφαλὸς ἐκ τῆς φλεβὸς ἐφεξῆς ἀλλήλοις, ὥσπερανεὶ παρ' ὀχετὸν τὴν φλέβα ῥέουσιν· περὶ δὲ ἕκαστον τῶν ἐμβρύων οἷ θ' ὑμένες καὶ τὸ χόριόν ἐστιν.

Οἱ δὲ λέγοντες τρέφεσθαι τὰ παιδιά ἐν ταῖς ὑστέραις διὰ τοῦ σαρκίδιόν τι βδάλλειν οὐκ ὀρθῶς λέγουσιν· ἐπὶ τε γὰρ τῶν ἄλλων ζώων ταῦτόν συνέβαινε ἄν, νῦν δ' οὐ φαίνεται (θεωρῆσαι γὰρ τοῦτο ῥάδιον διὰ τῶν ἀνατομῶν), καὶ περὶ ἅπαντα τὰ ἔμβρυα καὶ τὰ πτηνὰ καὶ τὰ πλωτὰ καὶ τὰ τῶν πεζῶν ὁμοίως λεπτοὶ περιέχουσιν ὑμένες χωρίζοντες ἀπὸ τε τῆς ὑστέρας καὶ τῶν ἐγγιγνομένων ὑγρῶν ἐν οἷς οὗτ' αὐτοῖς ἔνεστι τοιοῦτον οὐθέν, οὔτε διὰ τούτων οὐθενὸς ἐνδέχεται ποιεῖσθαι τὴν ἀπόλαυσιν· τὰ δ' ὠτοκούμενα πάντα ὅτι λαμβάνει τὴν αὔξησιν χωρισθέντα τῆς μήτρας ἔξω φανερόν, <ὥστε λέγουσιν οὐκ ὀρθῶς οἱ λέγοντες οὕτως ὥσπερ Δημόκριτος>.

Γίνεται δὲ ὁ συνδυασμὸς τοῖς ζώοις κατὰ φύσιν μὲν τοῖς ὁμογενέσιν, οὐ μὲν ἀλλὰ καὶ τοῖς μὲν σύνεγγυς τὴν φύσιν ἔχουσιν οὐκ ἀδιαφόροις δὲ τῷ εἶδει, ἔάν τὰ τε μεγέθη παραπλήσια ἢ καὶ οἱ χρόνοι ἴσοι ὥσι τῆς κυήσεως. σπάνια μὲν οὖν γίνεται τὰ τοιαῦτα ἐπὶ τῶν ἄλλων, γίνεται δὲ καὶ ἐπὶ κυνῶν καὶ ἁλωπέκων καὶ λύκων <καὶ θῶων>· καὶ οἱ Ἰνδικοὶ δὲ κύνες ἐκ θηρίου τινὸς κυνώδους γεννῶνται καὶ κυνός. καὶ ἐπὶ τῶν (746b.) ὀρνίθων δὲ τῶν ὀχευτικῶν ὥπται τοῦτο συμβαῖνον, οἷον ἐπὶ περδίκων καὶ ἀλεκτορίδων· καὶ τῶν γαμψωνύχων οἱ ἱέρακες δοκοῦσιν οἱ διαφέροντες τῷ εἶδει μίγνυσθαι πρὸς ἀλλήλους· καὶ ἐπ' ἄλλων δὲ τινων ὀρνέων ἔχει τὸν αὐτὸν τρόπον. ἐπὶ δὲ τῶν θαλαττίων οὐθέν ἀξιόλογον ἐώραται, δοκοῦσι δὲ μάλιστα οἱ ῥινοβάται καλούμενοι γίνεσθαι ἐκ ῥίνης καὶ βάρου συνδυαζομένων. λέγεται δὲ καὶ τὸ περὶ τῆς Λιβύης παροιμιαζόμενον ὡς αἰεὶ τι τῆς Λιβύης τρεφούσης καινόν, διὰ τὸ μίγνυσθαι καὶ τὰ μὴ ὁμόφυλα ἀλλήλοις λεχθῆναι τοῦτο· διὰ γὰρ τὴν σπάνιν τοῦ ὕδατος ἀπαντῶντα πάντα πρὸς ὀλίγους τόπους τοὺς ἔχοντας νάματα μίγνυσθαι καὶ τὰ μὴ ὁμογενῆ.

Τὰ μὲν οὖν ἄλλα τῶν ἐκ τοιαύτης μίξεως γιγνομένων συνδυαζόμενα φαίνεται πάλιν ἀλλήλοις καὶ μιγνύμενα καὶ δυνάμενα τό τε θῆλυ καὶ τὸ ἄρρεν γεννᾶν, οἱ δ' ὀρεῖς ἄγονοι μόνοι τῶν τοιούτων· οὔτε γὰρ ἐξ ἀλλήλων οὗτ' ἄλλοις μιγνύμενοι γεννῶσιν. ἔστι δὲ τὸ πρόβλημα καθόλου μὲν διὰ τίν' αἰτίαν ἄγονον ἢ ἄρρεν ἢ θῆλυ ἐστίν· εἰσὶ γὰρ καὶ γυναικες καὶ ἄνδρες ἄγονοι καὶ τῶν ἄλλων ζώων ἐν τοῖς γένεσιν ἐκάστοις, οἷον ἵπποις καὶ προβάτοις. ἀλλὰ τοῦτο τὸ γένος ὅλον ἄγονόν ἐστι, τὸ τῶν ἡμιόνων. τὰ δ' αἴτια τῆς ἀγονίας ἐπὶ μὲν

τῶν ἄλλων πλείω συμβαίνει· καὶ γὰρ ἐκ γενετῆς ὅταν πηρωθῶσι τοὺς τόπους τοὺς πρὸς τὴν μίξιν χρησίμους ἄγονοι γίνονται καὶ γυναῖκες καὶ ἄνδρες ὥστε τὰς μὲν μὴ ἡβᾶν τοὺς δὲ μὴ γενεῖαν ἄλλ’ εὐνουχίας διατελεῖν ὄντας· τοῖς δὲ προϊούσης τῆς ἡλικίας ταῦτόν συμβαίνει πάσχειν, ὅτε μὲν δι’ εὐτροφίαν τῶν σωμάτων (ταῖς μὲν γὰρ πιόταις γιγνομέναις τοῖς δ’ εὐεκτικωτέροις εἰς τὸ σῶμα καταναλίσκεται τὸ περίττωμα τὸ σπερματικόν, καὶ ταῖς μὲν οὐ γίνεται καταμήνια τοῖς δὲ γονή), ὅτε δὲ διὰ νόσον οἱ μὲν ὑγρὸν καὶ ψυχρὸν προΐενται, ταῖς δὲ γυναιξὶν αἱ καθάρσεις φαῦλαι καὶ πλήρεις νοσηματικῶν περιττωμάτων. πολλοῖς δὲ καὶ πολλαῖς καὶ διὰ πηρώματα τοῦτο συμβαίνει τὸ πάθος περὶ τὰ μόρια καὶ τοὺς τόπους τοὺς πρὸς τὴν ὁμιλίαν χρησίμους. γίνεται δὲ τὰ μὲν ἰατὰ τὰ δ’ ἀνίατα τῶν τοιούτων, μάλιστα δὲ διατελοῦσιν ἄγονα <τὰ> κατὰ τὴν πρώτην σύστασιν τοιαῦτα γενόμενα· (747a.) γίνονται γὰρ γυναικῆς τε ἄρρενωποι καὶ ἄνδρες θηλυκοί, καὶ ταῖς μὲν οὐ γίνεται τὰ καταμήνια τοῖς δὲ τὸ σπέρμα λεπτὸν καὶ ψυχρόν. διόπερ εὐλόγως βασανίζεται ταῖς πείραις τό γε τῶν ἀνδρῶν, εἰ ἄγονον, ἐν τῷ ὕδατι· ταχὺ γὰρ διαχεῖται τὸ λεπτὸν καὶ ψυχρὸν ἐπιπολῆς, τὸ δὲ γόνιμον εἰς βυθὸν χωρεῖ· θερμὸν μὲν γὰρ τὸ πεπεμμένον ἐστί, πέπεπται δὲ τὸ συνεστηκὸς καὶ πάχος ἔχον. τὰς δὲ γυναικῆς βασανίζουσι τοῖς τε προσθέτοις, ἔὰν δικνῶνται αἱ ὀσμαι πρὸς τὸ πνεῦμα τὸ θύραζε κάτωθεν ἄνω, καὶ τοῖς ἐγχρίστοις εἰς τοὺς ὀφθαλμοὺς χρώμασιν ἂν χρωματίζωσι τὸ ἐν τῷ στόματι πτύελον.

ταῦτα γὰρ οὐ συμβαίνοντα δηλοῖ τὸ σῶμα τοὺς πόρους δι’ ὧν ἀποκρίνεται τὸ περίττωμα συγκεχυμένους ἔχειν καὶ συμπεφυκότας. ὅ τε γὰρ περὶ τοὺς ὀφθαλμοὺς τόπος τῶν περὶ τὴν κεφαλὴν σπερματικώτατός ἐστιν. δηλοῖ δ’ ἐν ταῖς ὁμιλίαις μετασχηματιζόμενος ἐπιδήλως μόνος, καὶ τοῖς χρωμένοις πλείοσιν ἀφροδισίοις ἐνδιδόασιν τὰ ὄμματα φανερώς. αἴτιον δ’ ὅτι ἡ τῆς γονῆς φύσις ὁμοίως ἔχει τῇ τοῦ ἐγκεφάλου· ὕδατώδης γὰρ ἐστὶν ἡ ὕλη αὐτῆς, ἡ δὲ θερμότης ἐπικτήτος. καὶ αἱ σπερματικαὶ καθάρσεις ἀπὸ τοῦ ὑποζώματός εἰσιν· ἡ γὰρ ἀρχὴ τῆς φύσεως ἐντεῦθεν, ὥστε δικνεῖσθαι πρὸς τὸν θώρακα τὰς κινήσεις ἀπὸ τῶν ἄρθρων· αἱ δ’ ἐκ τοῦ θώρακος ὀσμαι πᾶσαι ποιοῦσιν αἴσθησιν διὰ τῆς ἀναπνοῆς.

## Κεφάλαιο 8

Ἐν μὲν οὖν τοῖς ἀνθρώποις καὶ τοῖς ἄλλοις γένεσιν, ὥσπερ εἴρηται πρότερον, κατὰ μέρος ἡ τοιαύτη συμβαίνει πῆρωσις, τὸ δὲ τῶν ἡμιόνων γένος ὅλον ἄγονόν ἐστιν. περὶ δὲ τῆς αἰτίας, ὥς μὲν λέγουσιν Ἐμπεδοκλῆς καὶ Δημόκριτος-λέγων ὁ μὲν οὐ σαφῶς Δημόκριτος δὲ γνωρίμως μᾶλλον-οὐ καλῶς εἰρήκασιν. λέγουσι γὰρ ἐπὶ πάντων ὁμοίως τὴν ἀπόδειξιν τῶν παρὰ

τὴν συγγένειαν συνδυαζομένων. Δημόκριτος μὲν γάρ φησι διεφθάρθαι τοὺς πόρους τῶν ἡμιόνων ἐν ταῖς ὑστέραις διὰ τὸ μὴ ἐκ συγγενῶν γενέσθαι τὴν ἀρχὴν τῶν ζώων. συμβαίνει δ' ἐφ' ἐτέρων ζώων τοῦτο μὲν ὑπάρχειν, γεννᾶν δὲ μηδὲν ἥττον-καίτοι χρῆν, εἴπερ αἴτιον τοῦτ' ἦν τῆς ἀγονίας, ἄγονα καὶ τᾶλλ' εἶναι τὰ μινύμενα τὸν τρόπον τοῦτον. Ἐμπεδοκλῆς δ' αἰτιᾶται τὸ μίγμα τὸ τῶν σπερμάτων γίνεσθαι πυκνὸν ἐκ (747b.) μαλακῆς τῆς γονῆς οὕσης ἑκατέρας· συναρμόττειν γὰρ τὰ κοῖλα τοῖς πυκνοῖς ἀλλήλων, ἐκ δὲ τῶν τοιούτων γίνεσθαι ἐκ μαλακῶν σκληρὸν ὥσπερ τῷ καττιτέρῳ μυχθέντα τὸν χαλκόν-λέγων οὗτ' ἐπὶ τοῦ χαλκοῦ καὶ τοῦ καττιτέρου τὴν αἰτίαν ὀρθῶς (εἴρηται δ' ἐν τοῖς Προβλήμασι περὶ αὐτῶν) οὕθ' ὅλως ἐκ γνωρίμων ποιούμενος τὰς ἀρχάς. τὰ γὰρ κοῖλα καὶ τὰ στερεὰ ἀρμόττοντα ἀλλήλοις πῶς ποιεῖ τὴν μίξιν οἶον οἴνου καὶ ὕδατος; τοῦτο γὰρ ὑπὲρ ἡμᾶς ἐστὶ τὸ λεγόμενον· πῶς γὰρ δεῖ λαβεῖν τὰ κοῖλα τοῦ οἴνου καὶ τοῦ ὕδατος λίαν ἐστὶ παρὰ τὴν αἴσθησιν. ἔτι δ' ἐπειδὴ συμβαίνει καὶ ἐξ ἵππων γίνεσθαι ἵππον καὶ ἐξ ὄνων ὄνον καὶ ἐξ ἵππου καὶ ὄνου ἡμίονον, ἀμφοτέρως ἄρρενος καὶ θήλεος ὁποτέρου οὖν ὄντος, διὰ τί ἐκ μὲν τούτων γίνεται πυκνὸν οὕτως ὥστ' ἄγονον εἶναι τὸ γενόμενον, ἐκ δὲ ἵππου θήλεος καὶ ἄρρενος ἢ ὄνου θήλεος καὶ ἄρρενος οὐ γίνεται ἄγονον; καίτοι μαλακὸν καὶ τὸ τοῦ ἄρρενος ἵππου ἐστὶ καὶ τὸ τοῦ θήλεος, μίγνυται δὲ καὶ ὁ θῆλυς ἵππος καὶ ὁ ἄρρην τῷ ὄνῳ, καὶ τῷ ἄρρηνι καὶ τῷ θήλει. καὶ διὰ τοῦτο γίνονται ἄγονα ἐξ ἀμφοτέρων, ὡς φησιν, ὅτι ἐξ ἀμφοῖν ἓν τι γίνεται <πυκνόν>, μαλακῶν ὄντων τῶν σπερμάτων. ἔδει οὖν καὶ τὸ ἐξ ἵππου ἄρρενος καὶ θήλεος γινόμενον. εἰ μὲν γὰρ θάτερον ἐμίγνυτο μόνον ἐνῆν ἂν λέγειν ὅτι θάτερον αἴτιον τοῦ μὴ γεννᾶν οὐχ ὅμοιον ὃν τῇ τοῦ ὄνου γονῇ· νῦν δ' οἷα περ οὕση ἐκείνη μίγνυται τοιαύτη καὶ τῇ τοῦ συγγενοῦς. ἔτι δ' ἡ μὲν ἀπόδειξις κατ' ἀμφοτέρων εἴρηται ὁμοίως καὶ τοῦ θήλεος καὶ τοῦ ἄρρενος, -γεννᾷ δ' ὁ ἄρρην ἐπταέτης ὢν μόνος ὡς φασιν, ἀλλ' ἡ θήλεια ἄγονος ὅλως, καὶ αὕτη τῷ μὴ ἐκτρέφειν εἰς τέλος, ἐπεὶ ἤδη κύημα ἔσχεν ἡμίονος.

Ἴσως δὲ μᾶλλον ἂν δόξειεν ἀπόδειξις εἶναι πιθανὴ τῶν εἰρημένων λογικῇ-λέγω δὲ λογικὴν διὰ τοῦτο ὅτι ὅσω καθόλου μᾶλλον πορρωτέρω τῶν οἰκείων ἐστὶν ἀρχῶν. ἔστι δὲ τοιαύτη τις· εἰ γὰρ ἐξ ὁμοειδῶν ἄρρενος καὶ θήλεος ὁμοειδὲς γίνεσθαι πέφυκε τοῖς γεννήσασιν ἄρρην ἢ θῆλυ, οἶον ἐκ κυνὸς ἄρρενος καὶ θήλεος κύων ἄρρην ἢ θήλεια, καὶ ἐξ ἐτέρων τῷ εἶδει ἕτερον τῷ εἶδει, οἶον εἰ κύων ἕτερον λέοντος, καὶ ἐκ κυνὸς ἄρρενος καὶ λέοντος θήλεος ἕτερον καὶ ἐκ λέοντος ἄρρενος καὶ κυνὸς θήλεος ἕτερον· ὥστ' ἐπειδὴ (748a.) γίνεται ἡμίονος ἄρρην καὶ θῆλυς ἀδιαφόρων ὄντων τῷ εἶδει ἀλλήλοις, γίνεται δ' ἐξ ἵππου καὶ ὄνον ἡμίονος, ἕτερα δ' ἐστὶ τῷ εἶδει ταῦτα καὶ οἱ ἡμίονοι, ἀδύνατον γενέσθαι ἐξ ἡμιόνων· ἕτερον γὰρ γένος οὐχ οἷόν τε διὰ τὸ

ἐξ ἄρρενος καὶ θήλεος τῶν ὁμοειδῶν ταὐτὸ γίνεσθαι τῷ εἶδει, ἡμίονος δ' ὅτι ἐξ ἵππου καὶ ὄνου γίνεσθαι ἐτέρων ὄντων τῷ εἶδει, ἐκ δὲ τῶν ἐτέρων τῷ εἶδει ἕτερον ἐτέθη γίνεσθαι ζῶον. οὗτος μὲν οὖν ὁ λόγος καθόλου λίαν καὶ κενός· οἱ γὰρ μὴ ἐκ τῶν οἰκείων ἀρχῶν λόγοι κενοί, ἀλλὰ δοκοῦσιν εἶναι τῶν πραγμάτων οὐκ ὄντες. οἱ γὰρ ἐκ τῶν ἀρχῶν τῶν γεωμετρικῶν γεωμετρικοί, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· τὸ δὲ κενὸν δοκεῖ μὲν εἶναι τι, ἔστι δ' οὐθέν.

οὐκ ἀληθὲς δέ, ὅτι πολλὰ τῶν μὴ <ἐξ> ὁμοειδῶν γενομένων γίνεσθαι γόνιμα καθάπερ ἐλέχθη πρότερον. τοῦτον μὲν οὖν τὸν τρόπον οὔτε περὶ τῶν ἄλλων δεῖ ζητεῖν οὔτε περὶ τῶν φυσικῶν· ἐκ δὲ τῶν ὑπαρχόντων τῷ γένει τῷ τῶν ἵππων καὶ τῷ τῶν ὄνων θεωρῶν ἄν τις μᾶλλον λάβοι τὴν αἰτίαν, ὅτι πρῶτον μὲν ἐκάτερον αὐτῶν ἐστὶ μονοτόκον ἐκ τῶν συγγενῶν ζώων, ἔπειτ' οὐ συλληπτικὰ τὰ θήλεα ἐκ τῶν ἀρρένων ἀεὶ, διόπερ τοὺς ἵππους διαλείποντες ὀχεύουσι [διὰ τὸ μὴ δύνασθαι συνεχῶς φέρειν]. ἀλλ' ἡ μὲν ἵππος οὐ καταμηνιώδης ἀλλ' ἐλάχιστον προῖεται τῶν τετραπόδων· ἡ δ' ὄνος οὐ δέχεται τὴν ὀχείαν ἀλλ' ἐξουρεῖ τὸν γόνον, διὸ μαστιγοῦσιν ἀκολουθοῦντες. ἔτι δὲ ψυχρὸν [τὸ] ζῶον ὁ ὄνος ἐστὶ, διόπερ ἐν τοῖς χειμερινοῖς οὐ θέλει γίνεσθαι τόποις διὰ τὸ δύσριγον εἶναι τὴν φύσιν, οἷον περὶ Σκύθας καὶ τὴν ὁμορον χώραν, οὐδὲ περὶ Κελτοὺς τοὺς ὑπὲρ τῆς Ἰβηρίας· ψυχρὰ γὰρ καὶ αὕτη ἡ χώρα. διὰ ταύτην δὲ τὴν αἰτίαν καὶ τὰ ὀχεῖα ἐπιβάλλουσι τοῖς ὄνοις οὐχ ὥσπερ τοῖς ἵπποις κατ' ἰσημερίαν ἀλλὰ περὶ τροπὰς θερινάς, ὅπως ἐν Ἀλεξινῇ γίγνηται ὥρα τὰ πωλία· ἐν τῇ αὐτῇ γὰρ γίνεσθαι ἐν ἧ ἂν ὀχευθῇ· ἐνιαυτὸν γὰρ κύει καὶ ἵππος καὶ ὄνος. ὄντος δ' ὥσπερ εἴρηται ψυχροῦ τὴν φύσιν καὶ τὴν γονὴν ἀναγκαῖον εἶναι τοῦ τοιούτου ψυχράν. σημεῖον δὲ τούτου· διὰ τοῦτο γάρ, ἐὰν μὲν ἵππος ἀναβῇ ἐπὶ ὠχευμένην ὑπὸ ὄνου οὐ διαφθείρει τὴν τοῦ ὄνου ὀχείαν, ὁ δ' ὄνος ἐὰν ἐπαναβῇ διαφθείρει τὴν τοῦ ἵππου διὰ ψυχρότητα τὴν τοῦ σπέρματος.

(748b.) ὅταν μὲν οὖν ἀλλήλοις μιχθῶσι σώζεται διὰ τὴν θατέρου θερμότητα· θερμότερον γὰρ τὸ ἀπὸ τοῦ ἵππου ἀποκρινόμενον· ἡ μὲν γὰρ τοῦ ὄνου ψυχρὰ καὶ ἡ ὕλη καὶ ἡ γονή, ἡ δὲ τοῦ ἵππου θερμότερα. ὅταν δὲ μιχθῇ ἡ θερμὸν ἐπὶ ψυχρὸν ἢ ψυχρὸν ἐπὶ θερμὸν συμβαίνει αὐτὸ μὲν τὸ ἐκ τούτων κύημα γενόμενον σώζεσθαι καὶ ταῦτ' ἐξ ἀλλήλων εἶναι γόνιμα, τὸ δ' ἐκ τούτων μηκέτι γόνιμον ἀλλ' ἄγονον εἰς τελειογονίαν.

Ὅλως δ' ὑπάρχοντος ἐκατέρου εὐφυοῦς πρὸς ἀγονίαν, τῷ τε γὰρ ὄνω ὑπάρχει τὰ ἄλλα τὰ εἰρημένα, καὶ ἐὰν μὴ μετὰ τὸν βόλον τὸν πρῶτον ἄρξῃται γεννᾶν οὐκέτι γεννᾷ τὸ παράπαν· οὕτως ἐπὶ μικροῦ ἔχεται τὸ ἄγονον

εἶναι τὸ σῶμα τῶν ὄνων. ὁμοίως δὲ καὶ ὁ ἵππος· εὐφυῆς γὰρ πρὸς ἀγωνίαν καὶ τοσοῦτον λείπει τοῦ ἄγονος εἶναι ὅσον τὸ γενέσθαι τὸ ἐκ τούτου ψυχρότερον· τοῦτο δὲ γίνεται ὅταν μιχθῇ τῇ τοῦ ὄνου ἀποκρίσει. καὶ ὁ ὄνος δὲ ὡσαύτως μικροῦ δεῖν κατὰ τὸν οἰκεῖον συνδυασμὸν ἄγονον γεννᾷ, ὥστε ὅταν προσγένηται τὸ παρὰ φύσιν, εἰ τότε ἐνὸς μόλις γεννητικὸν ἐξ ἀλλήλων ἦν, τὸ ἐκ τούτων ἔτι μᾶλλον ἄγονον καὶ παρὰ φύσιν οὐθενὸς δεήσει τοῦ ἄγονον εἶναι ἀλλ' ἐξ ἀνάγκης ἔσται ἄγονον.

Συμβαίνει δὲ καὶ τὰ σώματα τῶν ἡμιόνων μεγάλα γίνεσθαι διὰ τὸ τὴν ἀπόκρισιν τὴν εἰς τὰ καταμήνια τρέπεσθαι εἰς τὴν αὕξησιν. ἐπεὶ δ' ἐνιαύσιος ὁ τοκετὸς τῶν τοιούτων οὐ μόνον συλλαβεῖν δεῖ τὴν ἡμίονον ἀλλὰ καὶ ἐκθρέψαι· τοῦτο δ' ἀδύνατον μὴ γιγνομένων καταμηνίων. ταῖς δ' ἡμιόνοις οὐ γίνεται, ἀλλὰ τὸ μὲν ἄχρηστον μετὰ τοῦ περιπτώματος τοῦ ἐκ τῆς κύστεως ἐκκρίνεται (διόπερ οὐδὲ τῶν ἄρθρων οἱ ἡμίονοι οἱ ἄρρενες ὀσφραίνονται τῶν θηλειῶν ὥσπερ τᾶλλα τὰ μώνυχα, ἀλλ' αὐτοῦ τοῦ περιπτώματος), τὰ δ' ἄλλα τρέπεται εἰς τὴν τοῦ σώματος αὕξησιν καὶ τὸ μέγεθος. ὥστε συλλαβεῖν μὲν ἐνδέχεται ποτε τὴν θήλειαν, ὅπερ ἤδη φαίνεται γεγονός, ἐκθρέψαι δὲ καὶ ἐξενεγκεῖν εἰς τέλος ἀδύνατον. ὁ δ' ἄρρην ποτὲ γεννήσειεν ἂν διὰ τε τὸ θερμότερον εἶναι τοῦ θήλεος φύσει τὸ ἄρρεν καὶ διὰ τὸ μὴ συμβάλλεσθαι πρὸς τὴν μίξιν σῶμα μηδὲν τὸ ἄρρεν. τὸ δ' ἀποτελεσθὲν γίνεται γίννος. τοῦτο δ' ἐστὶν ἡμίονος ἀνάπηρος· καὶ γὰρ ἐκ τοῦ ἵπου καὶ τοῦ ὄνου γίνονται γίννοι ὅταν νοσήσῃ τὸ κύημα (749a.) ἐν τῇ ὑστέρᾳ. ἔστι γὰρ ὁ γίννος ὥσπερ τὰ μετάχοιρα ἐν τοῖς χοίροις· καὶ γὰρ ἐκεῖ τὸ πηρωθὲν ἐν τῇ ὑστέρᾳ καλεῖται μετάχοιρον, γίνεται δὲ τοιοῦτος ὃς ἂν τύχῃ τῶν χοίρων. ὁμοίως δὲ γίνονται καὶ οἱ πυγμαῖοι· καὶ γὰρ οὗτοι πηροῦνται τὰ μέρη καὶ τὸ μέγεθος ἐν τῇ κυήσει καὶ εἰσιν ὥσπερ μετάχοιρα καὶ γίννοι.

## Βιβλίον 3

### Κεφάλαιον 1

Περὶ μὲν οὖν τῆς τῶν ἡμιόνων ἀτεκνίας εἴρηται καὶ περὶ τῶν ζωοτοκούντων καὶ θύραζε καὶ ἐν αὐτοῖς· ἐν δὲ τοῖς ζωοτοκοῦσι τῶν ἐναίμων τῇ μὲν παραπλησίως ἔχει τὰ περὶ τὰς γενέσεις αὐτοῖς τε καὶ τοῖς πεζοῖς καὶ ταύτόν τι λαβεῖν ἔστι περὶ πάντων, τῇ δ' ἔχει διαφορὰς καὶ πρὸς ἀλλήλα καὶ πρὸς τὰ πεζὰ τῶν ζώων. γίνεται μὲν οὖν ἀπὸ συνδυασμοῦ πάντα ὅλως καὶ προῖεμένου γονῆν εἰς τὸ θῆλυ τοῦ ἄρρενος· τῶν δ' ὠτόκων αἱ μὲν ὄρνιθες προῖενται τέλειον ὦδον καὶ σκληρόδερμον, ἐὰν μὴ τι πηρωθῇ διὰ νόσον, καὶ πάντα δίχροα τὰ τῶν ὀρνίθων ἐστίν, τῶν δ' ἰχθύων οἱ μὲν σελαχῶδεις, ὥσπερ

εἴρηται πολλάκις, ἐν αὐτοῖς ὠοτοκήσαντες ζωοτοκοῦσι μεταστάντος τοῦ ὠοῦ ἐξ ἄλλου τόπου τῆς ὑτέρας εἰς ἄλλον, μαλακόδερμον δὲ τὸ ὠὸν καὶ ὁμόχρων ἐστὶν αὐτῶν. εἰς δὲ μόνος οὐ ζωοτοκεῖ τῶν τοιούτων ἐν αὐτῷ, ὁ καλούμενος βάτραχος· περὶ οὗ τὴν αἰτίαν ὕστερον λεκτέον. οἱ δὲ ἄλλοι ὅσοιπερ ὠοτοκοῦσι τῶν ἰχθύων μονόχρων μὲν προΐενται τὸ ὠόν, ἀτελὲς δὲ τοῦτο· λαμβάνει γὰρ ἔξω τὴν αὐξησιν διὰ τὴν αὐτὴν αἰτίαν δι' ἣνπερ καὶ τὰ ἔσω τελειούμενα τῶν ὠῶν.

Περὶ μὲν οὖν τῶν ὑστερῶν τίνας ἔχουσι διαφορὰς καὶ διὰ τίνας αἰτίας εἴρηται πρότερον. καὶ γὰρ τῶν ζωοτοκούντων τὰ μὲν ἄνω πρὸς τῷ ὑποζώματι ἔχει τὰς ὑτέρας τὰ δὲ κάτω πρὸς τοῖς ἄρθροις· ἄνω μὲν τὰ σελαχώδη, κάτω δὲ τὰ καὶ ἐν αὐτοῖς ζωοτοκοῦντα καὶ θύραζε οἶον ἄνθρωπος καὶ ἵππος καὶ τῶν ἄλλων ἕκαστον τῶν τοιούτων. καὶ τῶν ὠοτοκούντων τὰ μὲν κάτω καθάπερ τῶν ἰχθύων οἱ ὠοτοκοῦντες, τὰ δ' ἄνω καθάπερ οἱ ὄρνιθες.

Συνίσταται μὲν οὖν κυήματα τοῖς ὄρνισι καὶ αὐτόματα, ἃ καλοῦσιν (749b.) ὑπηνέμια καὶ ζεφύριά τινες, γίνεταί δὲ ταῦτα τοῖς μὴ πτητικοῖς μηδὲ γαμψώνυξι τῶν ὀρνίθων ἀλλὰ τοῖς πολυγόνοις διὰ τὸ πολὺ περίττωμα ταῦτ' ἔχειν (τοῖς δὲ γαμψώνυξιν εἰς τὰς πτέρυγας καὶ τὰ πτερὰ τρέπεσθαι τὴν τοιαύτην ἀπόκρισιν, τὸ δὲ σῶμα μικρὸν ἔχειν καὶ ξηρόν τε καὶ θερμόν), τὴν δ' ἀπόκρισιν τὴν καταμηνιώδη καὶ τὴν γονὴν περίττωμα εἶναι· ἐπεὶ οὖν καὶ ἡ τῶν πτερῶν φύσις καὶ ἡ τοῦ σπέρματος γίγνεται ἐκ περιττώσεως οὐ δύναται ἡ φύσις ἐπ' ἀμφοτέρα πολυχοεῖν. διὰ τὴν αὐτὴν δὲ ταύτην αἰτίαν καὶ τὰ μὲν γαμψώνυχα οὗτ' ὀχευτικά ἐστίν οὔτε πολύγονα, τὰ δὲ βαρέα καὶ τῶν πτητικῶν ὅσων τὰ σώματα ὀγκώδη ἢ πολύγονα, καθάπερ περιστερᾶς καὶ τῶν τοιούτων. τοῖς μὲν γὰρ βαρέσι καὶ μὴ πτητικοῖς οἶον ἀλεκτορίσι καὶ πέρδιξι καὶ τοῖς ἄλλοις τοῖς τοιούτοις πολὺ γίνεταί περίττωμα τοιοῦτον· διὸ τὰ τε ἄρρενα αὐτῶν ὀχευτικά καὶ τὰ θήλεα προΐεται πολλὴν ὕλην καὶ τίκτει τῶν τοιούτων τὰ μὲν πολλὰ τὰ δὲ πολλάκις, πολλὰ μὲν οἶον ἀλεκτορίς καὶ πέρδιξ καὶ στρουθὸς ὁ Λιβυκός, τὰ δὲ περιστερῶδη πολλὰ μὲν οὐ, πολλάκις δέ· μεταξὺ γάρ ἐστι ταῦτα τῶν γαμψωνύχων καὶ τῶν βαρέων· πτητικὰ μὲν γὰρ ἐστίν ὥσπερ τὰ γαμψώνυχα, πλήθη δ' ἔχει τοῦ σώματος ὥσπερ τὰ βαρέα, ὥστε διὰ μὲν τὸ πτητικὰ εἶναι καὶ ἐνταῦθα τρέπεσθαι τὸ περίττωμα ὀλίγα τίκτουσι, διὰ δὲ τὸ πλῆθος τοῦ σώματος καὶ διὰ τὸ θερμὴν ἔχειν τὴν κοιλίαν καὶ πεπτικωτάτην, πρὸς δὲ τούτοις καὶ διὰ τὸ ῥαδίως πορίζεσθαι τὴν τροφήν, τὰ δὲ γαμψώνυχα χαλεπῶς, πολλάκις.

Ὀχευτικά δὲ καὶ πολύγονα καὶ τὰ μικρὰ τῶν ὀρνέων ἐστὶ καθάπερ ἐνίοτε καὶ

τῶν φυτῶν· ἡ γὰρ εἰς τὸ σῶμα αὔξησις γίνεται περίττωμα σπερματικόν. διὸ καὶ τῶν ἀλεκτορίδων αἱ Ἀδριανικαὶ πολυτοκώταταί εἰσιν· διὰ γὰρ μικρότητα τοῦ σώματος εἰς τὴν τέκνωσιν καταναλίσκεται ἡ τροφή. καὶ αἱ ἀγεννεῖς τῶν γενναίων πολυτοκώτεραι· ὑγρότερα γὰρ τὰ σώματα αὐτῶν καὶ ὀγκωδέστερα, τῶν δὲ ἰσχνότερα καὶ ξηρότερα· ὁ γὰρ θυμὸς ὁ γενναῖος ἐν τοῖς τοιούτοις γίνεται σώμασι μᾶλλον. ἔτι δὲ καὶ ἡ τῶν σκελῶν λεπτότης καὶ ἀσθένεια συμβάλλεται πρὸς τὸ τὴν φύσιν τῶν τοιούτων (750a.) ὀχευτικὴν εἶναι καὶ πολύγονον, καθάπερ καὶ ἐπὶ τῶν ἀνθρώπων· ἡ γὰρ εἰς τὰ κῶλα τροφή τρέπεται τοῖς τοιούτοις εἰς περίττωμα σπερματικόν· ὃ γὰρ ἐκεῖθεν ἀφαιρεῖ ἡ φύσις προστίθῃσιν ἐνταῦθα. τὰ δὲ γαμψώνυχα τὴν βάσιν ἰσχυρὰν ἔχει καὶ τὰ σκέλη πάχος ἔχοντα διὰ τὸν βίον· ὥστε διὰ πάσας ταύτας τὰς αἰτίας οὔτ' ὀχευτικά ἐστὶν οὔτε πολύγωνα.

μάλιστα δὲ ἡ κεγχρηὶς πολύγονον· μόνον γὰρ σχεδὸν τοῦτο καὶ πίνει τῶν γαμψωνύχων, ἡ δ' ὑγρότης καὶ ἡ σύμφυτος καὶ ἡ ἐπακτὸς σπερματικὸν μετὰ τῆς ὑπαρχούσης αὐτῇ θερμότητος. τίκτει δ' οὐδ' αὕτη πολλὰ λίαν, ἀλλὰ τέτταρα τὸ πλεῖστον.

Ὁ δὲ κόκκυξ ὀλιγοτόκον ἐστὶν οὐκ ὦν γαμψώνυχος ὅτι ψυχρὸς τὴν φύσιν ἐστίν (δηλοῖ δ' ἡ δειλία τοῦ ὀρνέου), τὸ δὲ σπερματικὸν ζῶον δεῖ θερμὸν καὶ ὑγρὸν εἶναι. ὅτι δὲ δειλὸν φανερόν· ὑπὸ τε γὰρ τῶν ὀρνέων διώκεται πάντων καὶ ἐν ἀλλοτρίαις τίκτει νεοττιαῖς.

Τὰ δὲ περιστερῶδη δύο ὥς τὰ πολλὰ τίκτειν εἴωθεν· οὔτε γὰρ μονοτόκοι εἰσὶν (οὔθεις γὰρ μονοτόκος ὄρνις πλην ὁ κόκκυξ, καὶ οὗτος ἐνίοτε διτοκεῖ) οὔτε πολλὰ τίκτουσιν ἀλλὰ πολλάκις δύο ἢ τρία τὰ πλεῖστα γεννῶσι, τὰ δὲ πολλὰ δύο· οὔτοι γὰρ οἱ ἀριθμοὶ μεταξὺ τοῦ ἐνὸς καὶ πολλῶν.

Ὅτι δὲ τοῖς πολυγόνοις τρέπεται εἰς τὸ σπέρμα ἡ τροφή φανερόν ἐκ τῶν συμβαινόντων. τῶν τε γὰρ δένδρων τὰ πολλὰ πολυκαρπήσαντα λίαν ἐξασταίνεται μετὰ τὴν φορὰν, ὅταν μὴ ὑπολειφθῇ τῷ σώματι τροφή, καὶ τὰ ἐπέτεια ταῦτ' ὅλον πάσχειν ἔοικεν, οἷον τὰ τε χεδροπὰ καὶ ὁ σῖτος καὶ τὰλλα τὰ τοιαῦτα· τὴν γὰρ τροφὴν ἀναλίσκουσιν εἰς τὸ σπέρμα πᾶσαν· ἔστι γὰρ πολύσπερμον τὸ γένος αὐτῶν. καὶ τῶν ἀλεκτορίδων ἐνὶ πολυτοκήσασαί λίαν οὕτως ὥστε καὶ δύο τεκεῖν ἐν ἡμέρᾳ μετὰ τὴν πολυτοκίαν ἀπέθανον. ὥσπερ ὑπέρينوι γὰρ γίνονται ταῦτα, καὶ οἱ ὄρνιθες καὶ τὰ φυτά· τοῦτο δ' ἐστὶ τὸ πάθος ὑπερβολὴ περιττώματος ἐκκρίσεως. αἴτιον δὲ τὸ τοιοῦτον πάθος καὶ τῷ λέοντι τῆς ἀγονίας τῆς ὕστερον· τὸ μὲν γὰρ πρῶτον τίκτει πέντε ἢ ἕξ, εἴτα τῷ ὑστέρω ἔτει τέτταρας, πάλιν δὲ τρεῖς σκύμνους, εἴτα τὸν ἐχόμενον ἀριθμὸν

ἕως ενός, εἴτ' οὐθέν, ὡς ἐξαναλισκομένου τοῦ περιττώματος καὶ ἅμα τῆς ἡλικίας ληγούσης φθίνοντος τοῦ (750b.) σπέρματος.

Τίσι μὲν οὖν γίγνεται τὰ ὑπηνέμια τῶν ὀρνίθων, ἔτι δὲ ποῖοι πολύγονοι καὶ ὀλιγόγονοι αὐτῶν καὶ διὰ τίνας αἰτίας εἴρηται.

Γίγνεται δὲ τὰ ὑπηνέμια, καθάπερ εἴρηται καὶ πρότερον, διὰ τὸ ὑπάρχειν ἐν τῷ θήλει τὴν ὕλην τὴν σπερματικὴν, τοῖς δ' ὀρνέοις μὴ γίνεσθαι τὴν τῶν καταμηνίων ἀπόκρισιν ὥσπερ τοῖς ζωοτόκοις τοῖς ἐναίμοις· πᾶσι γὰρ τούτοις γίγνεται, τοῖς μὲν πλείων τοῖς δ' ἐλάττω τοῖς δὲ τοσαύτη τὸ πλῆθος ὥστε ὅσον γε ἐπισημαίνειν. ὁμοίως δ' οὐδὲ τοῖς ἰχθύσι καθάπερ <οὐδὲ> τοῖς ὄρνισιν· διὸ καὶ τούτοις γίγνεται μὲν ἄνευ ὀχείας σύστασις κυημάτων ὁμοίως καὶ τοῖς ὄρνισιν, ἥττον δ' ἐπιδήλως· ψυχροτέρα γὰρ ἡ φύσις αὐτῶν. ἡ δὲ γιγνομένη τοῖς ζωοτόκοις ἀπόκρισις τῶν καταμηνίων συνίσταται τοῖς ὄρνισι κατὰ τοὺς ἰκνουμένους χρόνους τοῦ περιττώματος, καὶ διὰ τὸ τὸν τόπον εἶναι θερμὸν τὸν πρὸς τῷ διαζώματι τελειοῦται τοῖς μεγέθεσιν, πρὸς δὲ τὴν γένεσιν ἀτελῇ καὶ ταῦτα καὶ τὰ τῶν ἰχθύων ὁμοίως ἄνευ τῆς τοῦ ἄρρενος γονῆς· ἡ δ' αἰτία τούτων εἴρηται πρότερον. οὐ γίγνεται δὲ τὰ ὑπηνέμια τοῖς πτητικοῖς τῶν ὀρνίθων διὰ τὴν αὐτὴν αἰτίαν δι' ἣνπερ οὐδὲ πολυτοκεῖ τὰ τοιαῦτα· τοῖς γὰρ γαμψώνυξιν ὀλίγον τὸ περίττωμα καὶ προσδέονται τοῦ ἄρρενος πρὸς τὴν ὀρμὴν τῆς τοῦ περιττώματος ἐκκρίσεως. πλείω δὲ τὰ ὑπηνέμια γίγνεται τῶν γονίμων ὥων, ἐλάττω δὲ τὸ μέγεθος διὰ μίαν αἰτίαν καὶ τὴν αὐτὴν· διὰ μὲν γὰρ τὸ ἀτελῇ εἶναι ἐλάττω τὸ μέγεθος, διὰ δὲ τὸ τὸ μέγεθος ἔλαττον πλείω τὸν ἀριθμόν. καὶ ἥττον δὲ ἡδέα διὰ τὸ ἀπεπτότερα εἶναι· ἐν πᾶσι γὰρ τὸ πεπεμμένον γλυκύτερον.

Ὅτι μὲν οὖν οὔτε τὰ τῶν ὀρνίθων οὔτε τὰ τῶν ἰχθύων τελειοῦται πρὸς τὴν γένεσιν ἄνευ τῶν ἀρρένων ἱκανῶς ὥπται, περὶ δὲ τοῦ γίνεσθαι καὶ ἐν τοῖς ἰχθύσι κυήματα ἄνευ τῶν ἀρρένων οὐχ ὁμοίως, μάλιστα δ' ἐπὶ τῶν ποταμίων ἐώραται συμβαῖνον· ἔνιοι γὰρ εὐθύς ἔχοντες ὡὰ φαίνονται, καθάπερ ἐν ταῖς ἱστορίαις γέγραπται περὶ αὐτῶν. ὅλως δ' ἐν γε τοῖς ὄρνισιν οὐδὲ τὰ γιγνόμενα διὰ τῆς ὀχείας ὡὰ θέλει ὡς ἐπὶ τὸ πολὺ λαμβάνειν αὕξησιν ἐὰν μὴ ὀχεύηται ἡ ὄρνις συνεχῶς. τούτου δ' αἴτιον ὅτι καθάπερ ἐπὶ τῶν γυναικῶν τὸ πλησιάζειν τοῖς ἄρρεσι κατασπᾷ τὴν (751a.) τῶν γυναικείων ἀπόκρισιν (ἔλκει γὰρ τὸ ὑγρὸν ἢ ὑστέρα θερμανθεῖσα καὶ οἱ πόροι ἀναστομοῦνται), τοῦτο συμβαίνει καὶ ἐπὶ τῶν ὀρνίθων ἐπιόντος κατὰ μικρὸν τοῦ καταμηνιώδους περιττώματος, ὃ θύραζε μὲν οὐκ ἀποκρίνεται διὰ τὸ ὀλίγον εἶναι καὶ πρὸς τῷ διαζώματι ἄνω τὰς ὑστέρας, συλλεμβεται δ' εἰς αὐτὴν τὴν ὑστέρα. τοῦτο γὰρ αὕξει τὸ ὡόν-ὥσπερ τὰ ἔμβρυα τὰ τῶν ζωοτόκων διὰ τοῦ ὀμφαλοῦ-τὸ



ἐπιρρέον διὰ τῆς ὑστέρας, ἐπεὶ ὅταν ἅπαξ ὀχευθῇ τὰ ὄρνεα, πάντα σχεδὸν αἰὲ διατελεῖ ὡς ἔχοντα, μικρὰ δὲ πάμπαν. διὸ καὶ περὶ τῶν ὑπηνεμίων τινὲς εἰώθασιν λέγειν ὡς οὐ γιγνομένων ἀλλ' ὡς ὑπολειμμάτων ἐκ προτέρας ὀχείας ὄντων. τοῦτο δ' ἐστὶ ψεῦδος· ὥπται γὰρ ἱκανῶς καὶ ἐπὶ νεοττίδων ἀλεκτορίδος καὶ χηνὸς γιγνόμενα ὑπηνέμια ἄνευ ὀχείας. ἔτι δὲ αἱ πέρδικες αἱ θήλειαι, αἱ τ' ἀνόχευτοι καὶ αἱ ὠχευμένοι τῶν εἰς τὰς θήρας ἀγομένων, ὁσμώμεναι τοῦ ἄρρενος καὶ ἀκούουσαι τῆς φωνῆς αἱ μὲν πληροῦνται αἱ δὲ τίκτουσι παραχρῆμα. τοῦ δὲ πάθους αἴτιον ταῦτόν ὅπερ ἐπὶ τῶν ἀνθρώπων καὶ τῶν τετραπόδων· ἐὰν γὰρ ὀργῶντα τύχη τὰ σώματα πρὸς τὴν ὁμιλίαν, τὰ μὲν ἰδόντα τὰ δὲ μικρᾷς γενομένης θίξεως προῖεται σπέρμα.

τὰ δὲ τοιαῦτα τῶν ὀρνέων ὀχευτικὰ καὶ πολὺσπερμα τὴν φύσιν ἐστίν, ὥστε μικρᾷς δεῖσθαι κινήσεως ὅταν ὀργῶντα τύχη καὶ γίνεσθαι ταχὺ τὴν ἔκκρισιν αὐτοῖς, ὥστε τοῖς μὲν ἀνοχεύτοις ὑπηνέμια συνίστασθαι τοῖς δ' ὠχευμένοις αὐξάνεσθαι καὶ τελειοῦσθαι ταχέως.

Τῶν δὲ θύραζε ὠτοκοούντων οἱ μὲν ὀρνίθες προῖενται τὸ ὦδον τέλειον, οἱ δ' ἰχθύες ἀτελές, ἀλλ' ἔξω λαμβάνει τὴν αὔξησιν, καθάπερ εἴρηται καὶ πρότερον. αἴτιον δ' ὅτι πολύγονόν ἐστι τὸ τῶν ἰχθύων γένος· ἀδύνατον οὖν ἔσω πολλὰ λαμβάνειν τέλος, διόπερ ἀποτίκτουσιν ἔξω. ταχεῖα δ' ἡ πρόεσις· αἱ γὰρ ὑστέραι πρὸς τοῖς ἄρθροις τῶν θύραζε ὠτοκοούντων ἰχθύων.

Ἔστι δὲ τὰ μὲν τῶν ὀρνίθων δίχροα, τὰ δὲ τῶν ἰχθύων μονόχροα πάντων. τῆς δὲ διχροίας τὴν αἰτίαν ἴδοι τις ἂν ἐκ τῆς δυνάμεως ἑκατέρου τῶν μορίων, τοῦ τε λευκοῦ καὶ τοῦ ὠχροῦ. γίγνεται μὲν γὰρ ἡ ἀπόκρισις ἐκ τοῦ αἵματος (οὐθὲν γὰρ ἄναιμον ὠτοκεῖ ζῶον), τὸ (751b.) δ' αἶμα ὅτι ἐστὶν ὕλη τοῖς σώμασιν εἴρηται πολλάκις. τὸ μὲν οὖν ἐστὶν ἐγγύτερον αὐτοῦ τῆς μορφῆς τῶν γιγνομένων, τὸ θερμόν· τὸ δὲ γεωδέστερον τὴν τοῦ σώματος παρέχεται σύστασιν καὶ πορρώτερόν ἐστιν. διόπερ ὅσα δίχροα ἐστὶ τῶν ὦων, τὴν μὲν ἀρχὴν τὸ ζῶον λαμβάνει ἐκ τοῦ λευκοῦ τῆς γενέσεως (ἐν γὰρ τῷ θερμῷ ἡ ψυχικὴ ἀρχή) τὴν δὲ τροφὴν ἐκ τοῦ ὠχροῦ. τοῖς μὲν οὖν τὴν φύσιν θερμότεροις τῶν ζώων διακέκριται χωρὶς ἐξ οὗ τε ἡ ἀρχὴ γίγνεται καὶ ἐξ οὗ τρέφεται, καὶ τὸ μὲν λευκόν ἐστὶ τὸ δ' ὠχρόν, καὶ πλέον αἰὲ τὸ λευκόν καὶ καθαρὸν τοῦ ὠχροῦ καὶ γεώδους· τοῖς δ' ἥττον θερμοῖς καὶ ὑγροτέροις τὸ ὠχρόν πλέον καὶ ὑγρότερον. ὅπερ συμβαίνει ἐπὶ τῶν λιμναίων ὀρνέων· ὑγροτέροι γὰρ τὴν φύσιν καὶ ψυχρότεροι τῶν πεζευόντων εἰσὶν ὀρνέων, ὥστε καὶ τὰ ὦα τῶν τοιούτων πολλὴν ἔχει τὴν καλουμένην λέκιθον καὶ ἥττον ὠχρὰν διὰ τὸ ἥττον ἀποκεκρίσθαι τὸ λευκόν. τὰ δ' ἤδη καὶ ψυχρὰ τὴν φύσιν τῶν ὠτοκοούντων καὶ ἔτι ὑγρὰ μᾶλλον (τοιοῦτον δ' ἐστὶ τὸ τῶν ἰχθύων

γένος) οὐδ' ἀποκεκριμένον ἔχει τὸ λευκὸν διὰ τε μικρότητα καὶ διὰ τὸ πλῆθος τοῦ ψυχροῦ καὶ γεώδους· διόπερ γίγνεται μονόχροα πάντα τὰ τῶν ἰχθύων καὶ ὡς μὲν ὠχρὰ λευκά, ὡς δὲ λευκὰ ὠχρά.

τὰ δὲ τῶν ὀρνέων καὶ τὰ ὑπηνέμια ἔχει ταύτην τὴν δίχροϊαν· ἔχει γὰρ ἐξ οὗ ἐκάτερον ἔσται τῶν μορίων-καὶ ὅθεν ἡ ἀρχὴ καὶ ὅθεν ἡ τροφή-ἀλλὰ ταῦτ' ἀτελῆ καὶ προσδεόμενα τοῦ ἄρρενος· γίγνεται γὰρ τὰ ὑπηνέμια γόνιμα ἐὰν ἔν τινι καιρῷ ὀχευθῇ ὑπὸ τοῦ ἄρρενος. οὐκ ἔστι δὲ τῆς διχροίας αἴτιον τὸ ἄρρεν καὶ τὸ θῆλυ-ὡς τοῦ μὲν λευκοῦ ὄντος ἀπὸ τοῦ ἄρρενος τοῦ δ' ὠχροῦ ἀπὸ τοῦ θήλεος-ἀλλ' ἄμφω γίγνεται ἀπὸ τοῦ θήλεος, ἀλλὰ τὸ μὲν ψυχρὸν τὸ δὲ θερμόν. ἐν ὅσοις μὲν οὖν ἐστὶ πολὺ τὸ θερμὸν ἀποκρίνεται, ἐν ὅσοις δ' ὀλίγον οὐ δύναται· διὸ μονόχροα τὰ κυήματα, καθάπερ εἴρηται, τὰ τῶν τοιούτων. ἡ δὲ γονὴ συνέστησε μόνον· καὶ διὰ τοῦτο τὸ μὲν πρῶτον φαίνεται λευκὸν καὶ μικρὸν τὸ κύημα ἐν τοῖς ὀρνισι, προῖδὸν δὲ ὠχρὸν ἅπαν, συμμιγνυμένου αἰὲ πλείονος αἱματώδους· τέλος δ' ἀποκρinoμένου τοῦ θερμοῦ κύκλῳ περιίσταται τὸ (752a.) λευκὸν ὥσπερ ὑγροῦ ζέοντος ὁμοίως πάντη· τὸ γὰρ λευκὸν φύσει μὲν ὑγρόν, ἔχει δ' ἐν αὐτῷ τὴν θερμότητα τὴν ψυχικὴν· διὸ κύκλῳ ἀποκρίνεται, τὸ δ' ὠχρὸν καὶ γεῶδες ἐντός. κἂν πολλὰ συνεράσας τις ὥα εἰς κύστιν ἢ τι τοιοῦτον ἔψη πυρὶ μὴ θάττονα ποιοῦντι τὴν τοῦ θερμοῦ κίνησιν ἢ τὴν ἐν τοῖς ὥοις διάκρισιν, ὥσπερ ἐν ἐνὶ ὥῳ καὶ τὸ ἐκ πάντων τῶν ὥων σύστημα τὸ μὲν ὠχρὸν ἐν μέσῳ γίγνεται, κύκλῳ δὲ λευκόν.

Διότι μὲν οὖν τὰ μὲν μονόχροα τὰ δὲ δίχροα τῶν ὥων εἴρηται.

## Κεφάλαιο 2

Ἀποκρίνεται δ' ἐν τοῖς ὥοις ἡ τοῦ ἄρρενος ἀρχὴ καθ' ὃ προσπέφυκε τῇ ὑστέρα τὸ ὥον, καὶ γίγνεται δὴ ἀνόμοιον τὸ δίχροον ὥον καὶ οὐ πάμπαν στρογγύλον ἀλλ' ἐπὶ θάτερα ὀξύτερον διὰ τὸ διαφέρειν δεῖν τοῦ λευκοῦ ἐν ᾧ ἔχει τὴν ἀρχήν. διόπερ σκληρότερον ταύτῃ τὸ ὥον ἢ κάτωθεν· σκεπάζειν γὰρ δεῖ καὶ φυλάττειν τὴν ἀρχήν. καὶ διὰ τοῦτο ἐξέρχεται ὕστερον τοῦ ὥοῦ τὸ ὀξύ· τὸ γὰρ προσπεφυκὸς ὕστερον ἐξέρχεται, κατὰ τὴν ἀρχὴν δὲ προσπέφυκεν, ἐν τῷ ὀξεῖ δ' ἡ ἀρχή. τὸν αὐτὸν δ' ἔχει τρόπον καὶ ἐν τοῖς τῶν φυτῶν σπέρμασιν· προσπέφυκε γὰρ ἡ ἀρχὴ τοῦ σπέρματος τὰ μὲν ἐν τοῖς κλάδοις τὰ δ' ἐν τοῖς κελύφεσι τὰ δ' ἐν τοῖς περικαρπίοις. δῆλον δ' ἐπὶ τῶν χεδροπῶν· ἡ γὰρ συνῆπται τὸ δίθυρον τῶν κυάμων καὶ τῶν τοιούτων σπερμάτων ταύτῃ προσπέφυκεν· ἡ δ' ἀρχὴ ἐνταῦθα τοῦ σπέρματος.

Ἀπορήσειε δ' ἂν τις περὶ τῆς αὐξήσεως τῶν ὥων τίνα τρόπον ἐκ τῆς ὑστέρας

συμβαίνει. τὰ μὲν γὰρ ζῶα διὰ τοῦ ὀμφαλοῦ λαμβάνει τὴν τροφήν, τὰ δ' ὠὰ διὰ τίνος; ἐπειδήπερ οὐχ ὥσπερ οἱ σκώληκες αὐτὰ δι' αὐτῶν λαμβάνει τὴν αὔξησιν. εἰ δ' ἔστι τι δι' οὗ προσπέφυκε, τοῦτο ποῦ τρέπεται τελεωθέντος; οὐ γὰρ συνεξέρχεται καθάπερ ὁ ὀμφαλὸς τοῖς ζώοις· γίνεται γὰρ τὸ περίξ ὄστρακον τελεωθέντος. τὸ μὲν οὖν εἰρημένον ὀρθῶς ζητεῖται· λανθάνει δ' ὅτι τὸ γιγνόμενον ὄστρακον τὸ πρῶτον μαλακὸς ὑμὴν ἐστίν, τελεωθέντος δὲ γίνεται σκληρὸν καὶ κραῦρον, οὕτω συμμέτρως ὥστ' ἐξέρχεται μὲν ἔτι μαλακόν (πόνον γὰρ ἂν παρεῖχε τικτόμενον), ἐξελθὼν δ' εὐθύς πηγνυται ψυχθέν, συνεξατμίζοντος τοῦ ὑγροῦ (752b.) ταχὺ δι' ὀλιγότητα, λειπομένου δὲ τοῦ γεώδους. τούτου δὴ τι τοῦ ὑμένοος κατ' ἀρχὰς ὀμφαλῶδές ἐστι κατὰ τὸ ὅξυ καὶ ἀπέχει ἔτι μικρῶν ὄντων οἷον αὐλός. φανερόν δ' ἐστὶν ἐν τοῖς ἐκβολίμοις τῶν μικρῶν ὥων· ἐὰν γὰρ βρεχθῇ ἢ ἄλλως πως ῥιγώσασα ἐκβάλη ἢ ὄρνις ἔτι αἱματῶδές τε φαίνεται τὸ κύημα καὶ ἔχον δι' ἑαυτοῦ στόλον μικρὸν ὀμφαλῶδη. μείζονος δὲ γιγνομένου περιτείνεται μᾶλλον οὗτος καὶ ἐλάττων γίνεται. τελεωθέντος δὲ τὸ ὅξυ τοῦ ὡοῦ τοῦτο συμβαίνει τὸ πέρασ. ὑπὸ δὲ τούτῳ ὁ ἐντὸς ὑμὴν ὃς ὀρίζει τὸ λευκὸν καὶ τὸ ὠχρόν ἀπὸ τούτου. τελειωθέντος δ' ἀπολύεται ὅλον τὸ ὦον καὶ οὐ φαίνεται εὐλόγως ὁ ὀμφαλός· αὐτοῦ γὰρ ἐστὶ τοῦ ἐσχάτου τὸ ἄκρον.

Ἡ δ' ἔξοδος τοῦναντίον γίνεται τοῖς ὡοῖς ἢ τοῖς ζωοτοκουμένοις· τοῖς μὲν γὰρ ἐπὶ κεφαλὴν καὶ τὴν ἀρχήν, τῷ δ' ὡῷ γίνεται ἢ ἔξοδος οἷον ἐπὶ πόδας. τούτου δ' αἴτιον τὸ εἰρημένον ὅτι προσπέφυκε κατὰ τὴν ἀρχήν.

Ἡ δὲ γένεσις ἐκ τοῦ ὡοῦ συμβαίνει τοῖς ὄρνισιν ἐπωαζούσης καὶ συμπεττούσης τῆς ὄρνιθος, ἀποκρινομένου μὲν τοῦ ζώου ἐκ μέρους τοῦ ὡοῦ, τὴν δ' αὔξησιν λαμβάνοντος καὶ τελειουμένου ἐκ τοῦ λοιποῦ μέρους· ἡ γὰρ φύσις ἅμα τὴν τε τοῦ ζώου ὕλην ἐν τῷ ὡῷ τίθησι καὶ τὴν ἱκανὴν τροφήν πρὸς τὴν αὔξησιν· ἐπεὶ γὰρ οὐ δύναται τελειοῦν ἐν αὐτῇ ἢ ὄρνις συνεκτίκτει τὴν τροφήν ἐν τῷ ὡῷ. τοῖς μὲν γὰρ ζωοτοκουμένοις ἐν ἄλλῳ μορίῳ γίνεται ἢ τροφή, τὸ καλούμενον γάλα ἐν τοῖς μαστοῖς· τοῖς δ' ὄρνισι τοῦτο ποιεῖ ἢ φύσις ἐν τοῖς ὡοῖς, τοῦναντίον μέντοι ἢ οἱ τε ἄνθρωποι οἷονται καὶ Ἀλκμαίων φησὶν ὁ Κροτωνιάτης. οὐ γὰρ τὸ λευκὸν ἐστὶ γάλα ἀλλὰ τὸ ὠχρόν· τοῦτο γὰρ ἐστὶν ἢ τροφή τοῖς νεοττοῖς-οἱ δ' οἷονται τὸ λευκὸν διὰ τὴν ὁμοιότητα τοῦ χρώματος.

Γίνεται μὲν οὖν ἐπωαζούσης, ὥσπερ εἴρηται, τῆς ὄρνιθος ὁ νεοττός· οὐ μὲν ἀλλὰ καὶ ἡ ὥρα ἢ εὐκρατος ἢ ὁ τόπος ἀλεεινὸς ἐν ᾧ ἂν κείμενα τυγχάνωσιν ἐκπέττεται καὶ τὰ τῶν ὀρνίθων καὶ τὰ τῶν τετραπόδων καὶ ὠοτόκων-πάντα γὰρ εἰς τὴν γῆν ἐκτίκτει, καὶ συμπέττονται ὑπὸ τῆς ἐν τῇ γῇ θερμότητος· ὅσα

δ' ἐπωάζει φοιτῶντα τῶν ὠοτόκων καὶ τετραπόδων ταῦτα ποιεῖ μᾶλλον φυλακῆς χάριν.

Τὸν αὐτὸν δὲ τρόπον γίνεται (753a.) τὰ τε τῶν ὀρνίθων ὥα καὶ τὰ τῶν ζώων τῶν τετραπόδων· καὶ γὰρ σκληρόδερμα καὶ δίχροα, καὶ πρὸς τῷ διαζώματι συνίσταται καθάπερ καὶ τὰ τῶν ὀρνίθων, καὶ τᾶλλα ταῦτά πάντα συμβαίνει καὶ ἐντὸς καὶ ἐκτὸς ὥστε ἡ αὐτὴ θεωρία περὶ τῆς αἰτίας ἐστὶ πάντων. ἄλλὰ τὰ μὲν τῶν τετραπόδων δι' ἰσχὺν ἐκπέττεται ὑπὸ τῆς ὥρας, τὰ δὲ τῶν ὀρνέων ἐπικηρότερα, καὶ δεῖται τῆς τεκούσης. ἔοικε δὲ καὶ ἡ φύσις βούλεσθαι τὴν τῶν τέκνων αἴσθησιν ἐπιμελητικὴν παρασκευάζειν· ἄλλὰ τοῖς μὲν χείροσι τοῦτ' ἐμποιεῖ μέχρι τοῦ τεκεῖν μόνον, τοῖς δὲ καὶ περὶ τὴν τελείωσιν, ὅσα δὲ φρονιμώτερα καὶ περὶ τὴν ἐκτροφὴν. τοῖς δὲ δὴ μάλιστα κοινωνοῦσι φρονήσεως καὶ πρὸς τελειωθέντα γίνεται συνήθεια καὶ φιλία, καθάπερ τοῖς τε ἀνθρώποις καὶ τῶν τετραπόδων ἐνίοις, τοῖς δ' ὄρνισι μέχρι τοῦ γεννῆσαι καὶ ἐκθρέψαι· διόπερ καὶ μὴ ἐπωάζουσαι αἱ θήλειαι ὅταν τέκωσι διατίθενται χεῖρον, ὥσπερ ἐνός τινος στερισκόμεναι τῶν συμφύτων.

Τελειοῦται δ' ἐν τοῖς ὥοις τὰ ζῶα θᾶπτον ἐν ταῖς ἀλεειναῖς ἡμέραις· συνεργάζεται γὰρ ἡ ὥρα· καὶ γὰρ ἡ πέψις θερμότητός ἐστιν. ἡ τε γὰρ γῆ συμπέττει τῇ θερμότητι καὶ ἡ ἐπωάζουσα ταῦτ' οὗτο δρᾷ· προσεγγεῖ γὰρ τὸ ἐν αὐτῇ θερμόν. καὶ διαφθείρεται δὲ τὰ ὥα καὶ γίνεται τὰ καλούμενα οὔρια μᾶλλον κατὰ τὴν θερμὴν ὥραν εὐλόγως· ὥσπερ γὰρ καὶ οἱ οἶνοι ἐν ταῖς ἀλέαις ὀξύνονται ἀνατρεπομένης τῆς ἰλύος (τοῦτο γὰρ αἴτιον τῆς διαφθορᾶς) καὶ ἐν τοῖς ὥοις ἡ λέκιθος· τοῦτο γὰρ ἐν ἀμφοτέροις τὸ γεῶδες, διὸ καὶ ἀναθολοῦται καὶ ὁ οἶνος μίγνυμένης τῆς ἰλύος καὶ τὰ διαφθειρόμενα ὥα τῆς λεκίθου.

Τοῖς μὲν οὖν πολυτόκοις συμβαίνει τὸ τοιοῦτον εὐλόγως (οὐ γὰρ ῥάδιον τὴν ἀρμόττουσαν πᾶσιν ἀποδιδόγει θερμασίαν, ἀλλὰ τοῖς μὲν ἐλλείπειν τοῖς δὲ πλεονάζειν καὶ ἀναθολοῦν οἶον σήπουσαν), -τοῖς δὲ γαμψώνυξιν ὀλιγοτόκοις οὔσιν οὐδὲν ἥττον συμβαίνει τοῦτο· πολλάκις μὲν γὰρ καὶ τοῖν δυοῖν θάτερον οὔριον γίνεται, τὸ δὲ τρίτον ὡς εἶπεῖν ἀεί· θερμὰ γὰρ ὄντα τὴν φύσιν οἶον ὑπερζειν ποιεῖ τὴν ὑγρότητα τὴν ἐν τοῖς ὥοις. ἔχει γὰρ δὴ καὶ τὴν φύσιν ἐναντίαν τό τε ὠχρὸν καὶ τὸ λευκόν. τὸ μὲν γὰρ (753b.) ὠχρὸν ἐν τοῖς πάγοις πήγνυται, θερμαίνόμενον δὲ ὑγραίνεται· διὸ καὶ συμπεττόμενον ἐν τῇ γῇ ἢ ὑπὸ τοῦ ἐπωάζειν ὑγραίνεται, καὶ τοιοῦτον ὃν γίνεται τροφή τοῖς συνισταμένοις ζώοις. πυρούμενον δὲ καὶ ὀπτώμενον οὐ γίνεται σκληρὸν διὰ τὸ εἶναι τὴν φύσιν γεῶδες οὕτως ὥσπερ κηρός· καὶ διὰ τοῦτο θερμαίνόμενα μᾶλλον ἢ ἢ μὴ ἢ ἐξ ὑγροῦ περιττώματος διοροῦται καὶ γίνεται οὔρια. τὸ

δὲ λευκὸν ὑπὸ μὲν τῶν πάγων οὐ πήγνυται ἀλλ' ὑγραίνεται μᾶλλον (τὸ δ' αἴτιον εἴρηται πρότερον), πυρούμενον δὲ γίνεταί στερεόν· διὸ καὶ πεττόμενον περὶ τὴν γένεσιν τῶν ζώων παχύνεται. ἐκ τούτου γὰρ συνίσταται τὸ ζῶον, τὸ δ' ὠχρὸν τροφή γίνεταί, καὶ τοῖς ἀεὶ συνισταμένοις τῶν μορίων ἐντεῦθεν ἡ αὔξησις. διὸ καὶ διώριστα τό τε ὠχρὸν καὶ τὸ λευκὸν χωρὶς ὑμέσιν ὡς ἔχοντα τὴν φύσιν ἑτέραν. δι' ἀκριβείας μὲν οὖν, ὃν τρόπον ἔχουσι ταῦτα πρὸς ἄλληλα κατ' ἀρχάς τε τῆς γενέσεως καὶ συνισταμένων τῶν ζώων, ἔτι δὲ περὶ τε ὑμένων καὶ περὶ ὀμφαλῶν ἐκ τῶν ἐκ ταῖς ἱστορίαις γεγραμμένων δεῖ θεωρεῖν· πρὸς δὲ τὴν παροῦσαν σκέψιν ἱκανὸν φανερὸν εἶναι τοσοῦτον, ὅτι συστάσης πρώτης τῆς καρδίας καὶ τῆς μεγάλης φλεβὸς ἀπὸ ταύτης ἀφορισθείσης δύο ὀμφαλοὶ ἀπὸ τῆς φλεβὸς τείνουσιν, ὁ μὲν εἰς τὸν ὑμένα τὸν περιέχοντα τὸ ὠχρὸν, ὁ δ' ἕτερος εἰς τὸν ὑμένα τὸν χοριοειδῆ ὃς κύκλω περιέχει τὸ ζῶον· ἔστι δ' οὗτος περὶ τὸν ὑμένα τὸν τοῦ ὀστράκου. διὰ μὲν οὖν θατέρου λαμβάνει τὴν ἐκ τοῦ ὠχροῦ τροφήν, τὸ δ' ὠχρὸν γίνεταί πλεῖον· ὑγρότερον γὰρ γίνεταί θερμαινόμενον. δεῖ γὰρ τὴν τροφήν σωματώδη οὔσαν ὑγρὰν εἶναι καθάπερ τοῖς φυτοῖς, ζῆ δὲ τὸ πρῶτον καὶ τὰ ἐν τοῖς ὦοις γινόμενα καὶ τὰ ἐν τοῖς ζώοις φυτοῦ βίον· τῷ πεφυκέναι γὰρ ἕκ τινος λαμβάνει τὴν πρώτην αὔξησιν καὶ τροφήν. ὁ δ' ἕτερος ὀμφαλὸς τείνει εἰς τὸ περιέχον χόριον. δεῖ γὰρ ὑπολαβεῖν τὰ ὠοτοκούμενα τῶν ζώων πρὸς μὲν τὸ ὠχρὸν οὕτως ἔχειν [τὸν νεοττὸν] ὥσπερ πρὸς τὴν μητέρα τὰ ζωοτοκούμενα ἔμβρυα ὅταν ἐν τῇ μητρὶ ᾗ (ἐπεὶ γὰρ οὐκ ἐκτρέφονται γε ἐν τῇ μητρὶ τὰ ὠοτοκούμενα ἐκλαμβάνει τι μέρος αὐτῆς), πρὸς δὲ τὸν ἐξωτάτω ὑμένα τὸν αἱματώδη ὡς πρὸς τὴν ὑστέρα. ἅμα (754a.) δὲ περὶ τε τὸ ὠχρὸν καὶ τὸ χόριον τὸ ἀνάλογον τῇ ὑστέρα τὸ ὀστράκον τοῦ ὦο περιπέφυκεν, ὥσπερ ἂν εἴ τις περιθεῖη περὶ τε τὸ ἔμβρυον αὐτὸ καὶ περὶ τὴν μητέρα ὅλην. ἔχει δ' οὕτως διότι δεῖ τὸ ἔμβρυον ἐν τε τῇ ὑστέρα εἶναι καὶ πρὸς τῇ μητρὶ. ἐν μὲν οὖν τοῖς ζωοτοκουμένοις ἡ ὑστέρα ἐν τῇ μητρὶ ἐστίν, ἐν δὲ τοῖς ὠοτοκουμένοις ἀνάπαλιν, ὥσπερ ἂν εἴ τις εἴποι τὴν μητέρα ἐν τῇ ὑστέρα εἶναι· τὸ γὰρ ἀπὸ τῆς μητρὸς γινόμενον, ἡ τροφή, τὸ ὠχρὸν ἐστίν. αἴτιον δ' ὅτι ἡ ἐκτροφή οὐκ ἐν τῇ μητρὶ ἐστίν.

Αὐξανόμενων δὲ πρότερον ὁ ὀμφαλὸς συμπίπτει ὁ πρὸς τὸ χόριον διότι ταύτη δεῖ τὸ ζῶον ἐξελθεῖν, τὸ δὲ λοιπὸν τοῦ ὠχροῦ καὶ ὁ ὀμφαλὸς ὁ εἰς τὸ ὠχρὸν ὑστέρον· δεῖ γὰρ ἔχειν τροφήν εὐθὺς τὸ γενόμενον· οὔτε γὰρ ἀπὸ τῆς μητρὸς τιθεύεται, δι' αὐτοῦ τε οὐκ εὐθὺς δύναται πορίζεσθαι τὴν τροφήν· διόπερ ἐντὸς εἰσέρχεται τὸ ὠχρὸν μετὰ τοῦ ὀμφαλοῦ καὶ περιφύεται ἡ σάρξ.

Τὰ μὲν οὖν ἐκ τῶν τελείων ὦων γινόμενα θύραζε τοῦτον γίνεταί τὸν τρόπον ἐπὶ τε τῶν ὀρνίθων καὶ τῶν τετραπόδων ὅσα ὠοτοκεῖ τὸ ὦον [τὸ]

σκληρόδερμον. διάδηλα δὲ ταῦτα μᾶλλον ἐπὶ τῶν μειζόνων· ἐν γὰρ τοῖς ἐλάττοσιν ἀφανῆ διὰ μικρότητα τῶν ὄγκων ἐστίν.

### Κεφάλαιο 3

Ἔτι δ' ἐστὶν ὡτόκον τὸ τῶν ἰχθύων γένος. τούτων δὲ τὰ μὲν ἔχοντα κάτω τὴν ὑστέραν ἀτελὲς ὦν τίκτει διὰ τὴν προειρημένην αἰτίαν, τὰ δὲ καλούμενα σελάχη τῶν ἰχθύων ἐν αὐτοῖς μὲν ὡτοκεῖ τέλειον ὦν ἔξω δὲ ζωτοκεῖ, πλὴν ἐνὸς ὃν καλοῦσι βάτραχον· οὗτος δ' ὡτοκεῖ θύραζε τέλειον ὦν μόνος. αἰτία δ' ἡ τοῦ σώματος φύσις· τὴν τε γὰρ κεφαλὴν πολλαπλασίαν ἔχει τοῦ λοιποῦ σώματος καὶ ταύτην ἀκανθώδη καὶ σφόδρα τραχεῖαν. διόπερ οὐδ' ὕστερον εἰσδέχεται τοὺς νεοττοὺς οὐδ' ἐξ ἀρχῆς ζωτοκεῖ· τὸ γὰρ μέγεθος καὶ ἡ τραχύτης τῆς κεφαλῆς ὥσπερ καὶ εἰσελθεῖν κωλύει οὕτω καὶ ἐξελθεῖν. ἐπεὶ δὲ μαλακόδερμόν ἐστι τὸ ὦν τῶν σελαχῶν (οὐ γὰρ δύνανται σκληρύνειν καὶ ξηραίνειν τὸ πέριξ· ψυχρότεροι γὰρ τῶν ὀρνίθων εἰσίν), τὸ τῶν βατράχων ὦν μόνον στερεόν ἐστι καὶ στιφρὸν πρὸς τὴν ἔξω σωτηρίαν, τὰ δὲ τῶν ἄλλων ὑγρὰ καὶ μαλακὰ τὴν φύσιν· (754b.) σκεπάζεται γὰρ ἐντὸς τῷ σώματι τῷ τῆς ἐχούσης.

Ἡ δὲ γένεσις ἐκ τοῦ ὡοῦ τοῖς τε βατράχοις ἔξω τελειουμένοις καὶ τοῖς ἐντὸς ἢ αὐτῇ, τούτοις δὲ καὶ τοῖς τῶν ὀρνίθων τῇ μὲν ὁμοία τῇ δὲ διάφορός ἐστιν. πρῶτον μὲν γὰρ οὐκ ἔχουσι τὸν ἕτερον ὀμφαλὸν τὸν εἰς τὸ χόριον τείνοντα ὃ ἐστὶν ὑπὸ τὸ περιέχον ὄστρακον, τούτου δ' αἴτιον ὅτι τὸ πέριξ ὄστρακον οὐκ ἔχουσιν· οὐδὲν γὰρ αὐτοῖς χρήσιμον· σκεπάζει γὰρ ἡ μήτηρ, τὸ δ' ὄστρακόν ἐστι τοῖς ἐκτικτομένοις ὡοῖς ἀλεωρὰ πρὸς τὰς θύραθεν βλάβας. ἔπειθ' ἡ γένεσις ἐξ ἄκρου μὲν ἐστὶ τοῦ ὡοῦ καὶ τούτοις ἄλλ' οὐχ ἡ προσπέφυκε πρὸς τὴν ὑστέραν· οἱ γὰρ ὀρνιθες ἐκ τοῦ ὀξέος γίνονται, ταύτη δ' ἦν ἡ τοῦ ὡοῦ πρόσφυσις. αἴτιον δ' ὅτι τὸ μὲν τῶν ὀρνίθων χωρίζεται τῆς ὑστέρας, τῶν δὲ τοιούτων οὐ πάντων ἀλλὰ τῶν πλείστων πρὸς τῇ ὑστέρα προσπέφυκε τὸ ὦν τέλειον. ἐπ' ἄκρῳ δὲ γιγνομένου τοῦ ζώου καταναλίσκεται τὸ ὦν ὥσπερ καὶ ἐπὶ τῶν ὀρνίθων καὶ τῶν ἄλλων τῶν ἀπολελυμένων, καὶ τέλος πρὸς τῇ ὑστέρα ὁ ὀμφαλὸς προσπέφυκε τῶν ἤδη τελείων.

ὁμοίως δ' ἔχει καὶ ὅσων ἀπολέλυται τὰ ὡὰ τῆς ὑστέρας· ἐνίοις γὰρ αὐτῶν ὅταν τέλειον γένηται τὸ ὦν ἀπολύεται. Ἀπορήσειαν ἂν οὖν τις διὰ τί διαφέρουσιν αἱ γενέσεις τοῖς ὀρνισι κατὰ τοῦτο καὶ τοῖς ἰχθύσιν. αἴτιον δ' ὅτι τὰ μὲν τῶν ὀρνίθων κεχωρισμένον ἔχει τὸ λευκὸν καὶ τὸ ὠχρόν, τὰ δὲ τῶν ἰχθύων μονόχροα, καὶ πάντῃ μεμιγμένον τὸ τοιοῦτον ὥστ' οὐθεν κωλύει ἐξ ἐναντίας ἔχειν τὴν ἀρχήν· οὐ γὰρ μόνον κατὰ τὴν πρόσφυσιν ἐστὶ τοιοῦτον

ἀλλὰ καὶ καταντικρύ, τὴν δὲ τροφὴν ῥᾶον ἔλκειν ἐκ τῆς ὑστέρας πόροις πρὸς τὴν αὐτῆς τῆς ἀρχῆς. δῆλον δ' ἐπὶ τῶν μὴ ἀπολυομένων ὥων· ἐν ἐνίοις γὰρ τῶν σελαχῶν οὐκ ἀπολύεται τῆς ὑστέρας τὸ ὥον ἀλλ' ἐχόμενον μεταχωρεῖ κάτω πρὸς τὴν ζωοτοκίαν, ἐν οἷς τελεωθὲν τὸ ζῶον ἔχει τὸν ὀμφαλὸν ἐκ τῆς ὑστέρας ἀνηλωμένου τοῦ ὥου. φανερόν οὖν ὅτι καὶ πρότερον ἔτεινον οἱ πόροι τοῦ ὥου ἔτι ὄντος περὶ ἐκεῖνο πρὸς τὴν ὑστέρα. τοῦτο δὲ συμβαίνει, καθάπερ εἵπομεν, ἐν τοῖς γαλεοῖς τοῖς λείοις.

Διαφέρει μὲν οὖν ἡ γένεσις κατὰ ταῦτα τῶν ἰχθύων τοῖς ὄρνισι καὶ διὰ τὰς εἰρημένας αἰτίας· τὰ δ' ἄλλα συμβαίνει τὸν (755a.) αὐτὸν τρόπον. τὸν τε γὰρ ὀμφαλὸν ἔχουσι τὸν ἕτερον ὡσαύτως, ὥσπερ οἱ ὄρνιθες πρὸς τὸ ὠχρὸν οὕτως οἱ ἰχθύες πρὸς τὸ ὄλον ὠόν (οὐ γὰρ ἐστὶν αὐτοῦ τὸ μὲν λευκὸν τὸ δ' ὠχρὸν ἀλλὰ μονόχρων πᾶν), καὶ τρέφονται ἐκ τούτου, καταναλισκομένου τε ἐπέρχεται καὶ περιφύεται ἡ σὰρξ ὁμοίως.

Περὶ μὲν οὖν τῶν ἐν αὐτοῖς μὲν ὠοτοκούντων τέλειον ὦον θύραζε δὲ ζωοτοκούντων τούτου ἔχει τὸν τρόπον ἡ γένεσις,

## Κεφάλαιο 4

οἱ δὲ πλεῖστοι τῶν ἄλλων ἰχθύων ἐκτὸς ὠοτοκοῦσιν, ἀτελὲς δ' ὦον πάντες πλὴν βατράχου· περὶ δὲ τούτου τὸ αἴτιον εἴρηται πρότερον. εἴρηται δὲ καὶ περὶ τῶν ἀτελῆ τικτόντων τὸ αἴτιον. Ἡ δὲ γένεσις καὶ τούτων ἡ μὲν ἐκ τοῦ ὥου τὸν αὐτὸν ἔχει τρόπον ὅνπερ καὶ τῶν σελαχῶν τῶν ἐντὸς ὠοτοκούντων, πλὴν ἢ γ' αὐξήσις ταχεῖα καὶ ἐκ μικρῶν καὶ τὸ ἔσχατον τοῦ ὥου σκληρότερον. ἡ δὲ τοῦ ὥου αὐξήσις ὁμοία τοῖς σκώληξιν ἐστίν· καὶ γὰρ τὰ σκωληκοτοκοῦντα τῶν ζώων μικρὸν ἀποτίκει τὸ πρῶτον, τοῦτο δ' αὐξάνεται δι' αὐτοῦ καὶ οὐ διὰ πρόσφυσιν οὐδεμίαν. τὸ δ' αἴτιον παραπλήσιον ὅπερ ἐπὶ τῆς ζύμης· καὶ γὰρ ἡ ζύμη ἐκ μικρᾶς μεγάλη γίγνεται τοῦ μὲν στερεωτέρου ὑγραιομένου τοῦ δ' ὑγροῦ πνευματουμένου. δημιουργεῖ δὲ τοῦτο ἡ τοῦ ψυχικοῦ θερμοῦ φύσις ἐν τοῖς ζώοις, ἐν δὲ ταῖς ζύμαις ἡ τοῦ χυμοῦ τοῦ συγκραθέντος θερμότης. αὐξάνεται μὲν οὖν τὰ ὦα ἐξ ἀνάγκης μὲν διὰ ταύτην τὴν αἰτίαν (ἔχει γὰρ περίπτωμα ζυμῶδες), χάριν δὲ τοῦ βελτίονος· ἐν ταῖς ὑστέραις γὰρ ἀδύνατον αὐτοῖς λαμβάνειν ὅλην τὴν αὐξήσιν διὰ τὴν τῶν ζώων πολυτοκίαν τούτων. διὰ τοῦτο γὰρ καὶ μικρὰ πάνπαν ἀποκρίνεται καὶ ταχεῖαν λαμβάνει τὴν αὐξήσιν, μικρὰ μὲν διὰ τὸ στενοχωρῆ τὴν ὑστέρα εἶναι πρὸς τὸ πλῆθος τῶν ὥων, ταχὺ δ' ὅπως μὴ χρονιζόντων ἐν τῇ γενέσει περὶ τὴν αὐξήσιν φθείρηται τὸ γένος, ἐπεὶ καὶ νῦν τὰ πολλὰ φθείρεται τῶν ἐκτικτομένων κυημάτων. διόπερ πολύγονόν ἐστι τὸ γένος τὸ τῶν ἰχθύων·

ἀναμάχεται γὰρ ἡ φύσις τῷ πλήθει τὴν φθοράν. εἰσὶ δέ τινες οἱ διαρρήγνυνται τῶν ἰχθύων, οἷον ἡ καλουμένη βελόνη, διὰ τὸ μέγεθος τῶν ὤων· αὕτη γὰρ ἀντὶ τοῦ πολλὰ μεγάλα τὰ κυήματα ἴσχει· τοῦ γὰρ πλήθους ἡ φύσις ἀφελούσα προσέθηκε πρὸς τὸ μέγεθος.

Ὅτι μὲν οὖν αὐξάνεται τε καὶ δι' ἣν αἰτίαν τὰ (755b.) τοιαῦτα τῶν ὤων εἴρηται.

## Κεφάλαιο 5

Ὅτι δ' ὠτοκοῦσι καὶ οὗτοι οἱ ἰχθύες σημεῖον τὸ καὶ τοὺς ζωτοκοῦντας τῶν ἰχθύων οἷον τὰ σελάχη ὠτοκεῖν ἐν αὐτοῖς πρῶτον· δῆλον γὰρ ὅτι τὸ γένος ὅλον ἐστὶν ὠτόκον τὸ τῶν ἰχθύων. τέλος μέντοι οὐθὲν λαμβάνει τῶν τοιούτων ὤων ὅσων ἐστὶ τὸ μὲν θῆλυ τὸ δ' ἄρρεν καὶ γίνονται ἐξ ὀχείας, ἐὰν μὴ ἐπιρράνη ὁ ἄρρην τὸν θορόν.

Εἰσὶ δέ τινες οἱ φασὶ πάντας εἶναι τοὺς ἰχθῦς θήλεις ἕξω τῶν σελαχῶν, οὐκ ὀρθῶς λέγοντες· οἷονται γὰρ διαφέρειν τῶν νομιζομένων ἄρρένων τοὺς θήλεις αὐτῶν ὥσπερ τῶν φυτῶν ἐν ὅσοις τὸ μὲν καρποφορεῖ τὸ δ' ἄκαρπὸν ἐστίν, οἷον ἐλάα καὶ κότινος καὶ συκῆ καὶ ἐρινεός· ὁμοίως δὲ καὶ τοὺς ἰχθῦς πλὴν τῶν σελαχῶν-τούτοις γὰρ οὐκ ἀμφισβητοῦσιν. καίτοι ὡσαύτως τε διάκεινται οἱ ἄρρενες περὶ τὰ θορικὰ οἱ τε σελαχώδεις καὶ οἱ ἐν τῷ γένει τῷ τῶν ὠτόκων, καὶ σπέρμα κατὰ τὴν ὥραν φαίνεται ἀμφοῖν ἐκθλιβόμενον.

ἔχουσι δὲ καὶ ὑστέρας αἱ θήλεια· ἔδει δ' οὐ μόνον τοὺς ὠτοκοῦντας ἀλλὰ καὶ τοὺς ἄλλους ἔχειν μὲν, ἀλλὰ διαφερούσας τῶν ὠτοκούντων [ὥσπερ αἱ ἡμίονοι ἐν τῷ γένει τῷ τῶν λοφούρων] εἴπερ ἦν θῆλυ τὸ γένος πᾶν ἀλλ' ἄτεκνοί τινες αὐτῶν. νῦν δ' οἱ μὲν ἔχουσι θορικὰ οἱ δ' ὑστέρας, καὶ ἐν ἅπασιν ἕξω δυοῖν, ἐρυθρίνου καὶ χάννης, αὕτη ἐστὶν ἡ διαφορά· οἱ μὲν γὰρ θορικὰ ἔχουσιν οἱ δ' ὑστέρας. ἡ δ' ἀπορία δι' ἣν οὕτως ὑπολαμβάνουσιν εὐλύτος τὸ συμβαῖνον ἀκούσασιν. οὐθὲν γὰρ τῶν ὀχευομένων πολλὰ φασὶ τίκτειν, λέγοντες ὀρθῶς· ὅσα γὰρ ἐξ αὐτῶν γεννᾶ τέλεια ἢ ζῶα ἢ ὠὰ οὐ πολυτοκεῖ οὕτως ὥσπερ οἱ ὠτοκοῦντες τῶν ἰχθύων· ἄπλετον γάρ τι τὸ τούτων πλῆθος τῶν ὤων ἐστίν. ἀλλὰ τοῦτο οὐχὶ συνεωράκεσαν ὅτι οὐχ ὁμοιοτρόπως τοῖς τῶν ὀρνίθων ἔχει τὰ περὶ τὰ ὠὰ τῶν ἰχθύων. οἱ μὲν γὰρ ὀρνίθες καὶ τῶν τετραπόδων ὅσα ὠτοκεῖ, καὶ εἴ τι τῶν σελαχωδῶν, τέλειον ὦδον γεννῶσι, καὶ οὐ λαμβάνει ἐξελθὼν αὕξησιν, -οἱ δ' ἰχθύες ἀτελῆ, καὶ λαμβάνει θύραζε τὰ ὠὰ τὴν αὕξησιν. ἔτι καὶ ἐπὶ τῶν μαλακίων τὸν αὐτὸν ἔχει τρόπον καὶ ἐπὶ τῶν μαλακοστράκων ἃ καὶ συνδυαζόμενα ὀράται διὰ τὸ



χρόνιον εἶναι τὸν συνδυασμὸν αὐτῶν· καὶ τούτων φανερόν ἐστι τὸ μὲν ἄρρεν ὄν, τὸ δ' ἔχον ὑστέραν. ἄτοπον δὲ καὶ τὸ μὴ ἐν παντὶ <τῷ> γένει ταύτην (756a.) εἶναι τὴν δύναμιν, ὥσπερ ἐν τοῖς ζωοτόκοις τὸ μὲν ἄρρεν τὸ δὲ θῆλυ. αἵτιον δὲ τοῖς ἐκείνως λέγουσι τῆς ἀγνοίας τὸ τὰς διαφορὰς μὴ δήλας εἶναι παντοδαπὰς οὕσας περὶ τε τὰς ὀχείας τῶν ζώων καὶ τὰς γενέσεις, ἀλλ' ἐξ ὀλίγων θεωροῦντας οἶεσθαι δεῖν ἔχειν ὁμοίως ἐπὶ πάντων.

Διὸ καὶ οἱ λέγοντες τὰς κυήσεις εἶναι ἐκ τοῦ ἀνακάπτειν τὸ σπέρμα τοὺς θήλεις τῶν ἰχθύων οὐ κατανενοηκότες ἔνια λέγουσιν οὕτως. ὑπὸ τὸν αὐτὸν γὰρ καιρὸν οἱ τ' ἄρρενες τὸν θορὸν καὶ αἱ θήλειαι τὰ ὡὰ ἔχουσι, καὶ ὅσω ἂν ἡ ἐγγυτέρω ἡ θήλεια τοῦ τίκτειν τότε πλείων καὶ ὑγρότερος ὁ θορὸς ἐν τῷ ἄρρενι ἐγγίνεται. καὶ ὥσπερ ἡ αὔξησις κατὰ τὸν αὐτὸν χρόνον τοῦ θοροῦ ἐν τῷ ἄρρενι καὶ τοῦ ὡοῦ ἐν τῇ θηλείᾳ οὕτω καὶ ἡ ἄφεςις συμβαίνει· οὔτε γὰρ αἱ θήλειαι ἀθρόα ἐκτίκτουσιν ἀλλὰ κατὰ μικρόν, οὔθ' οἱ ἄρρενες ἀθρόον ἀφιᾶσι τὸν θορόν. καὶ ταῦτα πάντα συμβαίνει κατὰ λόγον· ὥσπερ γὰρ καὶ τὸ τῶν ὀρνέων γένος ἐν ἐνίοις ἴσχει μὲν ὡὰ ἄνευ κυήσεως-ὀλίγα δὲ καὶ ὀλιγάκις, ἀλλ' ἐξ ὀχείας τὰ πολλά-τοῦτ' αὐτὸ συμβαίνει καὶ ἐπὶ τῶν ἰχθύων, ἦττον δέ. ἄγονα δὲ καὶ ἀμφοτέροις γίνεται τὰ αὐτόματα ἐὰν μὴ ἐπιρράνη τὸ ἄρρεν, ἐν ὅσοις γένεσιν αὐτῶν καὶ τὸ ἄρρεν ἐστίν. τοῖς μὲν οὖν ὀρνισι διὰ τὸ τέλεια ἐξιέναι τὰ ὡὰ ἔτι ἐντὸς ὄντων ἀνάγκη τοῦτο συμβῆναι· τοῖς δ' ἰχθύσι διὰ τὸ ἀτελῆ καὶ ἔξω λαμβάνειν τὴν αὔξησιν πᾶσιν, εἰ καὶ μη<τ;δὲν> ἐντὸς ἐξ ὀχείας γένηται γόνιμον, ὅμως τὰ ἔξω ἐπιρραϊνόμενα σώζεται, καὶ ἐνταῦθα ἀναλίσκεται ὁ θορὸς τοῖς ἄρρεσιν. διὸ καὶ συγκαταβαίνει ἐλαττούμενος ἅμα τοῖς ὡοῖς τοῖς ἐν τοῖς θήλεσιν· ἀεὶ γὰρ τοῖς ἐκτικτομένοις ἐπιρραίνουσι παρακολουθοῦντες. ὥστε ἄρρενες μὲν καὶ θήλεις εἰσὶ καὶ ὀχεύονται πάντες, εἰ μὴ ἐν τινι γένει ἀδιόριστόν ἐστι τὸ θῆλυ καὶ τὸ ἄρρεν, καὶ ἄνευ τῆς τοῦ ἄρρενος γονῆς οὐ γίγνεται τῶν τοιούτων οὐθέν.

Συμβάλλεται δὲ πρὸς τὴν ἀπάτην αὐτοῖς καὶ τὸ ταχὺν εἶναι τὸν συνδυασμὸν τῶν τοιούτων ἰχθύων ὥστε πολλοὺς λανθάνειν καὶ τῶν ἀλιέων· οὐθεὶς γὰρ αὐτῶν οὐθέν τηρεῖ τοιοῦτον τοῦ γνῶναι χάριν, ἀλλ' ὅμως ὠμμένος ὁ συνδυασμός ἐστιν. τὸν αὐτὸν γὰρ τρόπον οἱ (756b.) τε δελφῖνες ὀχεύονται παραπίπτοντες καὶ οἱ ἰχθύες ὅσοις ἐμποδίζει τὸ οὐραῖον, ἀλλὰ τῶν μὲν δελφίνων χρονιωτέρα ἡ ἀπόλυσίς ἐστι, τῶν δὲ τοιούτων ἰχθύων ταχεῖα. διόπερ ταύτην οὐχ ὀρῶντες, τὰς δ' ἀνακάψεις τοῦ θοροῦ καὶ τῶν ὡῶν, καὶ οἱ ἀλιεῖς περὶ τῆς κυήσεως τῶν ἰχθύων τὸν εὐήθη λέγουσι λόγον καὶ τεθρυλημένον ὅπερ καὶ Ἡρόδοτος ὁ μυθολόγος, ὡς κυῖσκομένων τῶν ἰχθύων ἐκ τοῦ ἀνακάπτειν τὸν θορόν, οὐ συνορῶντες ὅτι τοῦτ' ἔστιν ἀδύνατον. ὁ γὰρ πόρος ὁ διὰ τοῦ στόματος εἰσιῶν εἰς τὴν κοιλίαν φέρει ἀλλ' οὐκ εἰς τὰς

ὕστερας· καὶ τὸ μὲν εἰς τὴν κοιλίαν ἔλθον ἀνάγκη τροφὴν γίνεσθαι (καταπέττεται γάρ), αἱ δ' ὕστεραι φαίνονται πλήρεις ὥων, -ἃ πόθεν εἰσῆλθεν;

## Κεφάλαιο 6

Ὅμοίως δὲ καὶ περὶ τὴν τῶν ὀρνίθων γένεσιν ἔχει. εἰσὶ γάρ τινες οἱ λέγουσι κατὰ τὸ στόμα μίγνυσθαι τοὺς τε κόρακας καὶ τὴν ἴβιν καὶ τῶν τετραπόδων τίκτειν κατὰ τὸ στόμα τὴν γαλῆν. ταῦτα γὰρ καὶ Ἀναξαγόρας καὶ τῶν ἄλλων τινὲς φυσικῶν λέγουσι λίαν ἀπλῶς καὶ ἀσκέπτως λέγοντες, περὶ μὲν οὖν τῶν ὀρνίθων ἐκ συλλογισμοῦ διαψευδόμενοι τῷ τὴν μὲν ὀχείαν ὀλιγάκις ὀρᾶσθαι τὴν τῶν κοράκων, τὴν δὲ τοῖς ῥύγχεσι πρὸς ἄλληλα κοινωνίαν πολλάκις ἦν πάντα ποιεῖται τὰ κορακῶδη τῶν ὀρνέων· δῆλον δὲ τοῦτο ἐπὶ τῶν τιθασεινομένων κολοιῶν. τὸ δ' αὐτὸ τοῦτο ποιεῖ καὶ τὸ τῶν περιστερῶν γένος· ἀλλὰ διὰ τὸ καὶ ὀχευόμενα φαίνεσθαι, διὰ τοῦτο ταύτης οὐ τετυχήκασιν τῆς φήμης.

τὸ δὲ κορακῶδες γένος οὐκ ἔστιν ἀφροδισιαστικόν (ἔστι γὰρ τῶν ὀλιγογόνων), ἐπεὶ ὥπται γ' ἤδη καὶ τοῦτο ὀχευόμενον. τὸ δὲ δὴ μὴ συλλογίζεσθαι πῶς εἰς τὰς ὕστερας ἀφικνεῖται τὸ σπέρμα διὰ τῆς κοιλίας πεττούσης ἀεὶ τὸ ἐγγιγνόμενον καθάπερ τὴν τροφήν, ἄτοπον. ὕστερας δ' ἔχουσι καὶ ταῦτα τὰ ὄρνεα, καὶ ὥα φαίνεται πρὸς τοῖς ὑποζώμασιν. καὶ ἡ γαλῆ καθάπερ τᾶλλα τετράποδα τὸν αὐτὸν τρόπον ἔχει ἐκείνοις τὰς ὕστερας· ἐξ ὧν εἰς τὸ στόμα πῇ βαδιεῖται τὸ ἔμβρυον; ἀλλὰ διὰ τὸ τίκτειν πάμπαν μικρὰ τὴν γαλῆν καθάπερ καὶ τᾶλλα σχιζόποδα, περὶ ὧν (757a.) ὕστερον ἐροῦμεν, τῷ δὲ στόματι πολλάκις μεταφέρειν τοὺς νεοττοὺς, ταύτην πεποίηκε τὴν δόξαν.

Εὐηθικῶς δὲ καὶ λίαν διεψευσμένοι καὶ οἱ περὶ τρόχου καὶ ὑαίνης λέγοντες. φασὶ γὰρ τὴν μὲν ὕαιναν πολλοί, τὸν δὲ τρόχον Ἡρόδωρος ὁ Ἡρακλεώτης δύο αἰδοῖα ἔχειν, ἄρρενος καὶ θήλεος, καὶ τὸν μὲν τρόχον αὐτὸν αὐτὸν ὀχεύειν, τὴν δ' ὕαιναν ὀχεύειν καὶ ὀχεύεσθαι παρ' ἑτος. ὥπται γὰρ ἡ ὕαινα ἐν ἔχουσα αἰδοῖον· ἐν ἐνίοις γὰρ τόποις οὐ σπάνις τῆς θεωρίας· ἀλλ' ἔχουσιν αἱ ὕαιναι ὑπὸ τὴν κέρκον ὁμοίαν γραμμὴν τῷ τοῦ θήλεος αἰδοίῳ. ἔχουσι μὲν οὖν καὶ οἱ ἄρρενες καὶ αἱ θήλειαι τὸ τοιοῦτον σημεῖον, ἀλλ' ἀλίσκονται οἱ ἄρρενες μᾶλλον· διὸ τοῖς ἐκ παρόδου θεωροῦσι ταύτην ἐποίησε τὴν δόξαν. ἀλλὰ περὶ μὲν τούτων ἄλις τὰ εἰρημένα.

## Κεφάλαιο 7

Περὶ δὲ τῆς τῶν ἰχθύων γενέσεως ἀπορήσειεν ἄν τις διὰ τίνα ποτὲ αἰτίαν τῶν μὲν σελαχωδῶν οὐθ' αἰ θήλειαι τὰ κύηματα οὐθ' οἱ ἄρρενες ἀπορραίνοντες ὀρῶνται τὸν θορόν, τῶν δὲ μὴ ζωοτόκων καὶ αἰ θήλειαι τὰ ῥα καὶ οἱ ἄρρενες τὸν θορόν. αἴτιον δ' ὅτι τὸ γένος οὐ πολύσπερμον ὅλως τὸ τῶν σελαχωδῶν· καὶ ἔτι αἶ γε θήλειαι πρὸς τῷ διαζώματι τὰς ὑστέρας ἔχουσιν. τὰ γὰρ ἄρρενα τῶν ἀρρένων καὶ τὰ θήλεα τῶν θηλειῶν ὁμοίως διαφέρουσιν· ὀλιγοχούστεροι γὰρ πρὸς τὴν γονὴν οἱ σελαχώδεις εἰσίν. τὸ δ' ἄρρεν γένος ἐν τοῖς ῥοτόκοις, καθάπερ αἰ θήλειαι τὰ ῥα διὰ πλῆθος ἀποτίκτουςιν, οὕτως ἐκεῖνοι ἀπορραίνουσιν· πλείω γὰρ ἔχουσι θορόν ἢ ὅσον πρὸς τὴν ὀχείαν ἱκανόν· μᾶλλον γὰρ βούλεται ἡ φύσις δαπανᾶν τὸν θορόν πρὸς τὸ συναύξειν τὰ ῥα, ὅταν ἀποτεκῇ ἡ θήλεια, ἢ πρὸς τὴν ἐξ ἀρχῆς σύστασιν. καθάπερ γὰρ ἐν τε τοῖς ἄνω καὶ τοῖς ὑπογύοις εἴρηται λόγοις, τὰ μὲν τῶν ὀρνέων ῥα τελειοῦται ἐντός, τὰ δὲ τῶν ἰχθύων ἐκτός. τρόπον γάρ τινα ἔοικε τοῖς σκωληκοτοκοῦσιν· ἔτι γὰρ ἀτελέστερον προῖεται τὸ κύημα τὰ σκωληκοτόκα τῶν ζώων. ἀμφοτέροις δὲ τὴν τελείωσιν καὶ τοῖς τῶν ὀρνίθων ῥοῖς καὶ τοῖς τῶν ἰχθύων ποιεῖ τὸ ἄρρεν, ἀλλὰ τοῖς μὲν τῶν ὀρνίθων ἐντός (τελειοῦται γὰρ ἐντός), τοῖς δὲ τῶν ἰχθύων ἐκτός διὰ τὸ ἔξω προῖεσθαι ἀτελές, ἐπεὶ συμβαίνει γε ἐπ' ἀμφοτέρων (757b.) ταῦτόν.

Τῶν μὲν οὖν ὀρνίθων τὰ τε ὑπηνέμια γίνεταί γόνιμα, καὶ τὰ προωχευμένα ὑφ' ἑτέρου γένους τῶν ἀρρένων μεταβάλλει τὴν φύσιν εἰς τὸν ὕστερον ὀχεύοντα. καὶ τὰ οἰκεῖα δέ, ἄναύξητα ὄντα ἂν διαλείπη τὴν ὀχείαν, ὅταν ὀχευθῇ† πάλιν ποιεῖ ταχείαν λαμβάνειν τὴν αὕξησιν-οὐ μέντοι κατὰ πάντα τὸν χρόνον, ἀλλ' ἐάνπερ πρότερον γένηται ἡ ὀχεία πρὶν μεταβαλεῖν εἰς τὴν τοῦ λευκοῦ ἀπόκρισιν. τοῖς δὲ τῶν ἰχθύων οὐθέν ὠρίσται τοιοῦτον ἀλλὰ πρὸς τὸ σώζεσθαι ταχέως ἐπιρραίνουσιν οἱ ἄρρενες. αἴτιον δ' ὅτι οὐ δίχροα ταῦτα· διόπερ οὐχ ὠρίσται τοιοῦτος καιρὸς τούτοις οἷος ἐπὶ τῶν ὀρνίθων. τοῦτο δὲ συμβέβηκεν εὐλόγως· ὅταν γὰρ τὸ λευκὸν ἀφωρισμένον ἢ καὶ τὸ ὠχρὸν ἀπ' ἀλλήλων, ἔχει ἤδη τὴν ἀπὸ τοῦ ἄρρενος ἀρχὴν (ταύτην γὰρ συμβάλλεται τὸ ἄρρεν). τὰ μὲν οὖν ὑπηνέμια λαμβάνει τὴν γένωσιν μέχρι τοῦ ἐνδεχομένου αὐτοῖς· τελεωθῆναι μὲν γὰρ εἰς ζῶον ἀδύνατον (δεῖ γὰρ αἰσθήσεως), τὴν δὲ θρεπτικὴν δύναμιν τῆς ψυχῆς ἔχει καὶ τὰ θήλεα καὶ τὰ ἄρρενα καὶ πάντα τὰ ζῶντα, καθάπερ εἴρηται πολλάκις· διόπερ αὐτὸ τὸ ῥὸν ὡς μὲν φυτοῦ κύημα τέλειόν ἐστιν, ὡς δὲ ζώου ἀτελές. εἰ μὲν οὖν μὴ ἐνῆν ἄρρεν ἐν τῷ γένει αὐτῶν, ἐγίγνετ' ἂν ὡςπερ καὶ ἐπὶ τῶν ἰχθύων-εἴπερ ἔστι τι τοιοῦτον γένος οἷον ἄνευ ἄρρενος γεννᾶν· εἴρηται δὲ περὶ αὐτῶν καὶ πρότερον ὅτι οὐ πω ὥπται ἱκανῶς-νῦν δ' ἐστὶν ἐν πᾶσι τοῖς ὀρνισι τὸ μὲν θῆλυ τὸ δ' ἄρρεν, ὥσθ' ἢ μὲν φυτὸν τετελέωκεν (διόπερ οὐ μεταβάλλει πάλιν μετὰ τὴν ὀχείαν) ἢ δ' οὐ φυτὸν οὐ τετελέωκεν, οὐδ' ἀποβαίνει ἐξ αὐτοῦ ἕτερον οὐθέν· οὔτε γὰρ

ὥς φυτὸν ἀπλῶς οὕθ' ὥς ζῶον ἐκ συνδυασμοῦ γέγονεν. τὰ δ' ἐξ ὀχείας μὲν γενόμενα ὡὰ διακεκριμένα δ' εἰς τὸ λευκὸν γίγνεται κατὰ τὸ πρῶτον ὀχεῦσαν· ἔχει γὰρ ἀμφοτέρας ἤδη τὰς ἀρχάς.

## Κεφάλαιο 8

Τὸν αὐτὸν δὲ τρόπον καὶ τὰ μαλάκια ποιεῖται τὸν τόκον οἶον σηπία καὶ τὰ τοιαῦτα, καὶ τὰ μαλακόστρακα οἶον κάραβοι καὶ τὰ συγγενῇ τούτοις· τίκει γὰρ ἐξ ὀχείας καὶ ταῦτα καὶ συνδυαζόμενον τὸ ἄρρεν τῷ θήλει πολλάκις ὥπται. διόπερ οὐδ' ἱστορικῶς οὐδὲ ταύτη φαίνονται λέγοντες οἱ (758a.) φάσκοντες τοὺς ἰχθῦς πάντας εἶναι θήλεις καὶ τίκειν οὐκ ἐξ ὀχείας· τὸ γὰρ ταῦτα μὲν ἐξ ὀχείας οἶεσθαι ἐκεῖνα δὲ μὴ θαυμαστόν, εἴ τε τοῦτ' ἐλελήθει σημεῖον ἀπειρίας. γίγνεται δὲ ὁ συνδυασμὸς τούτων χρονιώτερος πάντων, ὥσπερ τῶν ἐντόμων, εὐλόγως· ἄναιμα γὰρ ἐστὶ, διόπερ ψυχρὰ τὴν φύσιν.

Ταῖς μὲν οὖν σηπίασι καὶ ταῖς τευθίσι δύο τὰ ὡὰ φαίνεται διὰ τὸ διηρθρῶσθαι τὴν ὑστέρα καὶ φαίνεσθαι δικρόαν· τὸ δὲ τῶν πολυπόδων ἐν ὠόν. αἴτιον δ' ἡ μορφή στρογγύλη τὴν ἰδέαν οὕσα καὶ σφαιροειδής· ἡ γὰρ σχίσις ἄδηλος πληρωθείσης ἐστίν. δικρόα δὲ καὶ ἡ τῶν καράβων ἐστὶν ὑστέρα. ἀποτίκτουσι δὲ τὸ κύημα ἀτελὲς καὶ ταῦτα πάντα διὰ τὴν αὐτὴν αἰτίαν. τὰ μὲν οὖν καραβώδη τὰ θήλεα πρὸς αὐτὰ ποιεῖται τὸν τόκον (διόπερ μείζους ἔχει τὰς πλάκας τὰ θήλεα αὐτῶν ἢ τὰ ἄρρενα, φυλακῆς χάριν τῶν ὠῶν), τὰ δὲ μαλάκια ἔξω. καὶ τοῖς μὲν θήλεσι τῶν μαλακίων ἐπιρραίνει ὁ ἄρρην καθάπερ οἱ ἄρρενες ἰχθύες τοῖς ὠοῖς, καὶ γίγνεται συνεχὲς καὶ κολλῶδες· τοῖς δὲ καραβώδεσιν οὕτ' ὥπται τοιοῦτον οὕτ' εὐλογον· ὑπὸ τε γὰρ τῇ θηλείᾳ τὸ κύημα καὶ σκληρόδερμόν ἐστι, καὶ λαμβάνει αὔξησιν καὶ ταῦτα καὶ τὰ τῶν μαλακίων ἔξω, καθάπερ καὶ τὰ τῶν ἰχθύων.

Προσπέφυκε δ' ἡ γιγνομένη σηπία τοῖς ὠοῖς κατὰ τὸ πρόσθιον· ταύτη γὰρ ἐνδέχεται μόνον· ἔχει γὰρ μόνον ἐπὶ ταῦτὸ τὸ ὀπίσθιον μέρος καὶ τὸ πρόσθιον. τὸ δὲ σχῆμα τῆς θέσεως ὃν ἔχει γιγνόμενα τρόπον δεῖ θεωρεῖν ἐκ τῶν ἱστοριῶν.

## Κεφάλαιο 9

Περὶ μὲν οὖν τῶν ἄλλων ζώων τῆς γενέσεως εἴρηται, καὶ πεζῶν καὶ πλωτῶν καὶ πτηνῶν· περὶ δὲ τῶν ἐντόμων καὶ τῶν ὀστρακοδέρμων λεκτέον κατὰ τὴν ὑφηγημένην μέθοδον. εἴπωμεν δὴ πρῶτον περὶ τῶν ἐντόμων. ὅτι μὲν οὖν τὰ μὲν ἐξ ὀχείας γίγνεται τῶν τοιούτων τὰ δ' αὐτόματα πρότερον ἐλέχθη, πρὸς

δὲ τούτοις ὅτι σκωληκοτοκεῖ καὶ διὰ τίν' αἰτίαν σκωληκοτοκεῖ. σχεδὸν γὰρ ἔοικε πάντα τρόπον τινὰ σκωληκοτοκεῖν τὸ πρῶτον· τὸ γὰρ ἀτελέστατον κύημα τοιοῦτόν ἐστιν, ἐν πᾶσι δὲ καὶ τοῖς ζωοτοκοῦσι καὶ τοῖς ὠοτοκοῦσι τέλειον ὦδον τὸ κύημα τὸ πρῶτον ἀδιόριστον ὃν λαμβάνει τὴν αὕξησιν· τοιαύτη δ' ἐστὶν ἢ τοῦ σκώληκος φύσις. μετὰ δὲ τοῦτο τὰ μὲν ὠοτοκεῖ τὸ κύημα τέλειον τὰ δ' ἀτελές, ἔξω (758b.) δὲ γίνεται τέλειον, καθάπερ ἐπὶ τῶν ἰχθύων εἴρηται πολλάκις. τὰ δ' ἐν αὐτοῖς ζωοτοκοῦντα τρόπον τινὰ μετὰ τὸ σύστημα τὸ ἐξ ἀρχῆς ὠοειδὲς γίνεται· περιέχεται γὰρ τὸ ὑγρὸν ὑμένι λεπτῷ, καθάπερ ἂν εἴ τις ἀφέλοι τὸ τῶν ὠῶν ὄστρακον· διὸ καὶ καλοῦσι τὰς τότε γιγνομένας τῶν κυημάτων φθορὰς ἐκρύσεις.

Τὰ δ' ἔντομα καὶ γεννᾷ τὰ γεννῶντα σκώληκας, καὶ τὰ γιγνόμενα μὴ δι' ὀχείας ἀλλ' αὐτόματα ἐκ τοιαύτης γίνεται πρῶτον συστάσεως. δεῖ γὰρ καὶ τὰς κάμπας εἶδος τι τιθῆναι σκώληκος, καὶ τὰ τῶν ἀραχνίων. καίτοι δόξειεν ἂν ὦοις εἰσκέναι διὰ τὴν τοῦ σχήματος περιφέρειαν καὶ τούτων [δὲ] ἔνια καὶ πολλὰ τῶν ἄλλων· ἀλλ' οὐ τῷ σχήματι λεκτέον οὐδὲ τῇ μαλακότητι καὶ σκληρότητι (καὶ γὰρ σκληρὰ τὰ κυήματα γίνεται ἐνίων) ἀλλὰ τῷ ὅλον μεταβάλλειν καὶ μὴ ἐκ μορίου τινὸς γίνεσθαι τὸ ζῶον. προελθόντα δὲ πάντα τὰ σκωληκώδη καὶ τοῦ μεγέθους λαβόντα τέλος οἶον ὦδον γίνεται· σκληρύνεται τε γὰρ περὶ αὐτὰ τὸ κέλυφος καὶ ἀκίνητίζουσι κατὰ τοῦτον τὸν καιρόν.

δῆλον δὲ τοῦτο ἐν τοῖς σκώληξι τοῖς τῶν μελιττῶν καὶ σφηκῶν καὶ ταῖς κάμπαις. τούτου δ' αἴτιον ὅτι ἢ φύσις ὥσπερανεὶ πρὸ ὥρας ὠοτοκεῖ διὰ τὴν ἀτέλειαν τὴν αὐτῆς, ὡς ὄντος τοῦ σκώληκος ἔτι ἐν αὐξήσει ὦοῦ μαλακοῦ. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων συμβαίνει πάντων τῶν μὴ ἐξ ὀχείας γιγνομένων ἐν ἐρίοις ἢ πρὸς ἄλλοις τοιοῦτοις καὶ τῶν ἐν τοῖς ὕδασι. πάντα γὰρ μετὰ τὴν τοῦ σκώληκος φύσιν ἀκίνητίσαντα καὶ τοῦ κελύφους περιξηρανθέντος, μετὰ ταῦτα τούτου ῥαγέντος ἐξέρχεται καθάπερ ἐξ ὦοῦ ζῶον ἐπιτελεσθὲν ἐπὶ τῆς τρίτης γενέσεως, ὧν τὰ [πλεῖστα] πτερωτὰ <πλείω> τῶν πεζῶν ἐστίν.

Κατὰ λόγον δὲ συμβαίνει καὶ τὸ θαυμαστὸν ἂν δικαίως ὑπὸ πολλῶν· αἶ τε γὰρ κάμπαι λαμβάνουσαι τὸ πρῶτον τροφήν μετὰ ταῦτα οὐκέτι λαμβάνουσιν, ἀλλ' ἀκίνητίζουσιν αἱ καλούμεναι ὑπὸ τινων χρυσαλλίδες, καὶ τῶν σφηκῶν οἱ σκώληκες καὶ τῶν μελιττῶν \*\*\* μετὰ ταῦτα αἱ καλούμεναι νύμφαι γίνονται, καὶ τοιοῦτον οὐδὲν ἔχουσιν. καὶ γὰρ ἢ τῶν ὠῶν φύσις ὅταν λάβῃ τέλος ἀναυξής ἐστι, τὸ δὲ πρῶτον αὐξάνεται καὶ λαμβάνει τροφήν ἕως ἂν διορισθῇ καὶ γένηται τέλειον ὦδον. τῶν δὲ σκωληκῶν οἱ μὲν ἔχουσιν ἐν ἑαυτοῖς τὸ

τοιοῦτον ὅθεν τρεφομένοις ἐπιγίγνεται (759a.) τὸ τοιοῦτον περίττωμα, <οῖον> οἱ τῶν μελιττῶν καὶ σφηκῶν, οἱ δὲ λαμβάνουσι θύραθεν, ὥσπερ αἱ τε κάμπαι καὶ τῶν ἄλλων τινὲς σκωλήκων.

Διότι μὲν οὖν τριγενῇ τε γίγνεται τὰ τοιαῦτα καὶ δι' ἣν αἰτίαν ἐκ κινουμένων ἀκίνητίζει πάλιν εἴρηται· γίγνεται δὲ τὰ μὲν ἐξ ὀχείας αὐτῶν καθάπερ οἱ τε ὄρνιθες καὶ τὰ ζωοτόκα καὶ τῶν ἰχθύων οἱ πλεῖστοι, τὰ δ' αὐτόματα καθάπερ ἔνια τῶν φυομένων.

## Κεφάλαιο 10

Ἡ δὲ τῶν μελιττῶν γένεσις ἔχει πολλὴν ἀπορίαν. εἴπερ γὰρ ἐστὶ καὶ περὶ τοὺς ἰχθύς τοιαύτη τις γένεσις ἐνίων ὥστ' ἄνευ ὀχείας γεννᾶν, τοῦτο συμβαίνειν ἔοικε καὶ περὶ τὰς μελίττας ἐκ τῶν φαινομένων. ἀνάγκη γὰρ ἦτοι φέρειν αὐτὰς ἄλλοθεν τὸν γόνον ὥσπερ τινὲς φασὶ καὶ τοῦτον ἢ φυόμενον αὐτόματον ἢ ἄλλου τινὸς ζώου τίκτοντος· ἢ γεννᾶν αὐτάς· ἢ τὸν μὲν φέρειν τὸν δὲ γεννᾶν (καὶ γὰρ τοῦτο λέγουσιν οἱ τινες ὡς τὸν τῶν κηφήνων μόνων φέρουσι γόνον)· καὶ γεννᾶν ἢ ὀχευομένας ἢ ἀνοχεύτους· καὶ ὀχευομένας γεννᾶν ἦτοι ἕκαστον γένος καθ' αὐτό, ἢ ἐν τι αὐτῶν τᾶλλα, ἢ συνδυαζόμενον ἄλλο γένος ἄλλω, -λέγω δ' οἶον μελίττας μὲν γίγνεσθαι ἐκ μελιττῶν συνδυαζομένων, κηφήνας δ' ἐκ κηφήνων καὶ τοὺς βασιλεῖς ἐκ τῶν βασιλέων, ἢ πάντα τᾶλλα ἐξ ἐνὸς οἶον ἐκ τῶν καλουμένων βασιλέων καὶ ἡγεμόνων, ἢ ἐκ τῶν κηφήνων καὶ τῶν μελιττῶν· φασὶ γὰρ τινες τοὺς μὲν ἄρρενας εἶναι τὰς δὲ θηλείας, οἱ δὲ τὰς μὲν μελίττας ἄρρενας τοὺς δὲ κηφήνας θήλειαις.

Ταῦτα δ' ἐστὶ πάντα ἀδύνατα συλλογιζομένοις τὰ μὲν ἐκ τῶν συμβαινόντων ἰδίᾳ περὶ τὰς μελίττας, τὰ δ' ἐκ τῶν κοινοτέρων τοῖς ἄλλοις ζώοις. εἴτε γὰρ μὴ τίκτουσαι φέρουσιν ἄλλοθεν ἔδει γίγνεσθαι μελίττας, καὶ μὴ φερουσῶν τῶν μελιττῶν, ἐν τοῖς τόποις ἐξ ὧν τὸ σπέρμα φέρουσιν. διὰ τί γὰρ μετενεχθέντος μὲν ἔσται, ἐκεῖ δ' οὐκ ἔσται; προσήκει γὰρ οὐδὲν ἥττον, εἴτε φυόμενον ἐν τοῖς ἄνθεσιν αὐτόματον εἴτε ζώου τινὸς τίκτοντος. καὶ εἴ γε ζώου τινὸς ἐτέρου τὸ σπέρμα ἦν, ἐκεῖνο ἔδει γίγνεσθαι ἐξ αὐτοῦ ἀλλὰ μὴ μελίττας. ἔτι δὲ τὸ μὲν μέλι κομίζειν εὖλογον (τροφή γάρ), τὸ δὲ τὸν γόνον ἀλλότριον ὄντα καὶ μὴ τροφήν ἄτοπον. τίνας γὰρ χάριν; πάντα γὰρ ὅσα πραγματεύεται περὶ τὰ τέκνα περὶ τὸν φαινόμενον οἰκεῖον (759b.) διαπονέεται γόνον.

Ἀλλὰ μὴν οὐδὲ τὰς μὲν μελίττας θηλείας εἶναι τοὺς δὲ κηφήνας ἄρρενας εὖλογον· οὐδενὶ γὰρ τὸ πρὸς ἀλκὴν ὄπλον τῶν θηλειῶν ἀποδίδωσιν ἢ φύσις,

εἰσὶ δ' οἱ μὲν κηφήνες ἄκεντροι, αἱ δὲ μέλιτται πᾶσαι κέντρον ἔχουσιν. οὐδὲ τούναντίον εὐλογον, τὰς μὲν μελίττας ἄρρενας τοὺς δὲ κηφήνας θήλειες· οὐδὲν γὰρ τῶν ἀρρένων εἶωθε διαπονεῖσθαι περὶ τὰ τέκνα, νῦν δ' αἱ μέλιτται τοῦτο ποιοῦσιν. ὅλως δ' ἐπειδὴ φαίνεται ὁ μὲν τῶν κηφήνων γόνος ἐγγιγνόμενος καὶ μηθενὸς ὄντος κηφήνος, ὁ δὲ τῶν μελιττῶν οὐκ ἐγγιγνόμενος ἄνευ τῶν βασιλέων (διὸ καὶ φασὶ τινες τὸν τῶν κηφήνων φέρεσθαι μόνον), δῆλον ὡς οὐκ ἐξ ὀχείας γίνονται, οὔτ' ἐξ ἑκατέρου τοῦ γένους αὐτοῦ αὐτῷ συνδυαζομένου οὔτ' ἐκ μελιττῶν καὶ κηφήνων. τό τε τοῦτον φέρειν μόνον διὰ τε τὰ εἰρημένα ἀδύνατον, καὶ οὐκ εὐλογον μὴ περὶ πᾶν τὸ γένος αὐτῶν ὅμοιον τι συμβαίνειν πάθος. ἀλλὰ μὴν οὐδ' αὐτὰς τὰς μελίττας ἐνδέχεται τὰς μὲν ἄρρενας εἶναι τὰς δὲ θηλείας· ἐν πᾶσι γὰρ διαφέρει τοῖς γένεσι τὸ θῆλυ καὶ τὸ ἄρρεν. κἂν ἐγέννων αὐταὶ αὐτάς· νῦν δ' οὐ φαίνεται γιγνόμενος ὁ γόνος αὐτῶν ἐὰν μὴ ἐνῶσιν οἱ ἡγεμόνες, ὡς φασιν. κοινὸν δὲ καὶ πρὸς τὴν ἐξ ἀλλήλων γένεσιν καὶ πρὸς τὴν ἐκ τῶν κηφήνων, καὶ χωρὶς καὶ μετ' ἀλλήλων, τὸ μηδέποτε ὥφθαι ὀχευόμενον μηθὲν αὐτῶν· εἰ δ' ἦν ἐν αὐτοῖς τὸ μὲν θῆλυ τὸ δ' ἄρρεν πολλάκις ἂν τοῦτο συνέβαινεν. λείπεται δ', εἴπερ ἐξ ὀχείας γίνεταί, τοὺς βασιλεῖς γεννᾶν συνδυαζομένους.

Ἄλλ' οἱ κηφήνες φαίνονται γιγνόμενοι καὶ μὴ ἐνόντων ἡγεμόνων, ὧν οὔτε φέρειν οἶόν τε τὸν γόνον τὰς μελίττας οὔτε γεννᾶν αὐτάς ὀχευόμενας. λείπεται δὴ, καθάπερ φαίνεται συμβαῖνον ἐπὶ τινων ἰχθύων, τὰς μελίττας ἄνευ ὀχείας γεννᾶν τοὺς κηφήνας, τῷ μὲν γεννᾶν οὔσας θηλείας, ἐχούσας δ' ἐν αὐταῖς ὥσπερ τὰ φυτὰ καὶ τὸ θῆλυ καὶ τὸ ἄρρεν. διὸ καὶ τὸ πρὸς τὴν ἀλκὴν ἔχουσιν ὄργανον· οὐ γὰρ δεῖ θῆλυ καλεῖν ἐν ᾧ ἄρρεν μὴ ἐστὶ κεχωρισμένον. εἰ δ' ἐπὶ τῶν κηφήνων τοῦτο φαίνεται συμβαῖνον καὶ γιγνόμενοι μὴ ἐξ ὀχείας, ἤδη καὶ κατὰ τῶν μελιττῶν καὶ τῶν βασιλέων τὸν αὐτὸν ἀναγκαῖον εἶναι λόγον καὶ μὴ γεννᾶσθαι ἐξ ὀχείας. εἰ μὲν οὖν ἄνευ τῶν βασιλέων ἐφαίνεται ἐγγιγνόμενος ὁ γόνος (760a.) τῶν μελιττῶν, κἂν τὰς μελίττας ἀναγκαῖον ἦν ἐξ αὐτῶν ἄνευ ὀχείας γίνεσθαι. νῦν δ' ἐπειδὴ τοῦτ' οὐ φασιν οἱ περὶ τὴν θεραπείαν τούτων τῶν ζώων ὄντες, λείπεται τοὺς βασιλεῖς καὶ αὐτοὺς γεννᾶν καὶ τὰς μελίττας.

Ὅντος δὲ περιττοῦ τοῦ γένους καὶ ἰδίου τοῦ τῶν μελιττῶν καὶ ἡ γένεσις αὐτῶν ἴδιος εἶναι φαίνεται. τὸ μὲν γὰρ γεννᾶν τὰς μελίττας ἄνευ ὀχείας εἶη ἂν καὶ ἐπ' ἄλλων ζώων συμβαῖνον, ἀλλὰ τὸ μὴ τὸ αὐτὸ γένος γεννᾶν ἴδιον· οἱ γὰρ ἐρυθρίνοι γεννῶσιν ἐρυθρίνους καὶ αἱ χάνναι χάννας. αἴτιον δ' ὅτι καὶ αὐταὶ γεννῶνται αἱ μέλιτται οὐχ ὥσπερ αἱ μυῖαι καὶ τὰ τοιαῦτα τῶν ζώων ἄλλ' ἐξ ἐτέρου μὲν συγγενοῦς δὲ γένους· γίνονται γὰρ ἐκ τῶν ἡγεμόνων. διὸ καὶ ἔχει ἀνάλογόν πως ἡ γένεσις αὐτῶν· οἱ μὲν γὰρ ἡγεμόνες μεγέθει μὲν

ὅμοιοι εἰσι τοῖς κηφῆσι, τῷ δὲ κέντρον ἔχειν ταῖς μελίτταις· αἱ μὲν οὖν μέλιτται κατὰ τοῦτ' εὐοικασιν αὐτοῖς, οἱ δὲ κηφῆνες κατὰ τὸ μέγεθος· ἀνάγκη γάρ τι παραλλάττειν, εἰ μὴ δεῖ ἀεὶ τὸ αὐτὸ γένος ἐξ ἐκάστου γίνεσθαι (τοῦτο δ' ἀδύνατον· πᾶν γὰρ ἂν τὸ γένος ἡγεμόνες ἦσαν). αἱ μὲν οὖν μέλιτται κατὰ τὴν δύναμιν αὐτοῖς ὁμοίονται καὶ τῷ τίκτειν, οἱ δὲ κηφῆνες κατὰ τὸ μέγεθος. [εἰ δ' εἶχον καὶ κέντρον ἡγεμόνες ἂν ἦσαν. νῦν δὲ τοῦτο λείπεται τῆς ἀπορίας· οἱ γὰρ ἡγεμόνες ἀμφοτέροις εὐοικασιν ἐν τῷ αὐτῷ τοῖς γένεσι, τῷ μὲν κέντρον ἔχειν ταῖς μελίτταις τῷ δὲ μεγέθει τοῖς κηφῆσιν.] ἀναγκαῖον δὲ καὶ τοὺς ἡγεμόνας γίνεσθαι ἕκ τινος. ἐπεὶ οὖν οὗτ' ἐκ τῶν μελιττῶν οὗτ' ἐκ τῶν κηφήνων αὐτοῖς ἀναγκαῖον καὶ αὐτοὺς γεννᾶν.

γίνονται δ' ἐπὶ τέλει οἱ κύτταροι αὐτῶν καὶ οὐ πολλοὶ τὸν ἀριθμόν. ὥστε συμβαίνει τοὺς μὲν ἡγεμόνας γεννᾶν μὲν καὶ αὐτούς, γεννᾶν δὲ καὶ ἄλλο τι γένος (τοῦτο δ' ἐστὶ τὸ τῶν μελιττῶν), τὰς δὲ μελίττας ἄλλο μὲν τι γεννᾶν, τοὺς κηφῆνας, αὐτὰς δὲ μηκέτι γεννᾶν, ἀλλὰ τοῦτ' ἀφηρηῆσθαι αὐτῶν. ἐπεὶ δ' ἀεὶ τὸ κατὰ φύσιν ἔχει τάξιν, διὰ τοῦτο τῶν κηφήνων ἀναγκαῖον καὶ τὸ ἄλλο τι γένος γεννᾶν ἀφηρηῆσθαι. ὅπερ καὶ φαίνεται συμβαῖνον· αὐτοὶ μὲν γὰρ γίνονται, ἄλλο δ' οὐθὲν γεννῶσιν ἄλλ' ἐν τῷ τρίτῳ ἀριθμῷ πέρας ἔσχεν ἡ γένεσις. καὶ οὕτω δὴ συνέστηκε τῇ φύσει (760b.) καλῶς ὥστ' αἰεὶ διαμένειν ὄντα τὰ γένη καὶ μηδὲν ἐλλείπειν, μὴ πάντων γεννώντων. εὐλογον δὲ καὶ τοῦτο συμβαίνειν, ἐν μὲν ταῖς εὐετηρίαις μέλι καὶ κηφῆνας γίνεσθαι πολλούς, ἐν δὲ ταῖς ἐπομβρίαις ὅλως γόνον πολύν. αἱ μὲν γὰρ ὑγρότητες περίττωμα ποιοῦσι πλεῖον ἐν τοῖς σώμασι τῶν ἡγεμόνων, αἱ δ' εὐετηρίαί ἐν τοῖς τῶν μελιττῶν· ἐλάττω γὰρ ὄντα τῷ μεγέθει δεῖται τῆς εὐετηρίας μᾶλλον. εὖ δὲ καὶ τὸ τοὺς βασιλεῖς ὥσπερ πεποιημένους ἐπὶ τέκνωσιν ἔσω μένειν ἀφειμένους τῶν ἀναγκαίων ἔργων, καὶ μέγεθος δὲ ἔχειν ὥσπερ ἐπὶ τεκνοποιίαν συστάντος τοῦ σώματος αὐτῶν· τοὺς τε κηφῆνας ἀργοὺς ἅτ' οὐδὲν ἔχοντας ὄπλον πρὸς τὸ διαμάχεσθαι περὶ τῆς τροφῆς καὶ διὰ τὴν βραδυτῆτα τὴν τοῦ σώματος.

αἱ δὲ μέλιτται μέσαι [τὸ μέγεθός] εἰσιν ἀμφοῖν (χρήσιμοι γὰρ οὕτω πρὸς τὴν ἐργασίαν), καὶ ἐργάτιδες ὡς καὶ τέκνα τρέφουσαι καὶ πατέρας. ὁμολογούμενον δ' ἐστὶ καὶ τὸ ἐπακολουθεῖν τοῖς βασιλεῦσι τῷ τὴν γένεσιν ἐκ τούτων εἶναι τὴν τῶν μελιττῶν (εἰ γὰρ μηθὲν τοιοῦτον ὑπῆρχεν, οὐκ εἶχε λόγον τὰ συμβαίνοντα περὶ τὴν ἡγεμονίαν αὐτῶν), καὶ τὸ τοὺς μὲν ἔαν μηθὲν ἐργαζομένους ὡς γονεῖς, τοὺς δὲ κηφῆνας κολάζειν ὡς τέκνα· κάλλιον γὰρ τὰ τέκνα κολάζειν καὶ ὧν μηθὲν ἐστὶν ἔργον. τὸ δὲ τὰς μελίττας γεννᾶν πολλὰς αὐτοὺς ὄντας ὀλίγους τοὺς ἡγεμόνας παραπλήσιον ἔοικε συμβαίνειν τῇ γενέσει τῇ τῶν λεόντων, οἳ τὸ πρῶτον πέντε γεννήσαντες ὕστερον ἐλάττω



γεννῶσι καὶ τέλος ἔν, εἴτ' οὐδέν. οἱ δ' ἡγεμόνες τὸ μὲν πρῶτον πλῆθος, ὕστερον δ' ὀλίγους αὐτούς, κἀκείνων μὲν ἐλάττω τὸν γόνον, αὐτῶν δ' ἐπεὶ τοῦ πλῆθους ἀφεῖλε, τὸ μέγεθος αὐτοῖς ἀπέδωκεν ἡ φύσις.

Ἐκ μὲν οὖν τοῦ λόγου τὰ περὶ τὴν γένεσιν τῶν μελιττῶν τοῦτον ἔχει φαίνεται τὸν τρόπον καὶ ἐκ τῶν συμβαίνειν δοκούντων περὶ αὐτάς· οὐ μὴν εἴληπται γε τὰ συμβαίνοντα ἱκανῶς, ἀλλ' ἐάν ποτε ληφθῇ τότε τῇ αἰσθήσει μᾶλλον τῶν λόγων πιστευτέον, καὶ τοῖς λόγοις ἐὰν ὁμολογούμενα δεικνύωσι τοῖς φαινομένοις.

[[Πρὸς δὲ τὸ μὴ ἐξ ὀχείας γίνεσθαι σημεῖον καὶ τὸ τὸν γόνον φαίνεσθαι μικρὸν ἐν τοῖς τοῦ κηρίου κυτταρίοις· ὅσα δ' ἐξ ὀχείας τῶν ἐντόμων γεννᾶται συνδυάζεται (761a.) μὲν πολὺν χρόνον, τίκει δὲ ταχέως καὶ μέγεθος ἔχον σκωληκοειδές.]]

Περὶ δὲ τὴν γένεσιν τὴν τῶν συγγενῶν ζώων αὐταῖς, οἷον ἀνθρηνῶν τε καὶ σφηκῶν, τρόπον τιν' ἔχει παραπλησίως πᾶσιν, ἀφήρηται δὲ τὸ περιττὸν εὐλόγως· οὐ γὰρ ἔχουσιν οὐθὲν θεῖον ὥσπερ τὸ γένος τὸ τῶν μελιττῶν. γεννῶσι μὲν γὰρ αἱ μῆτραι καλούμεναι καὶ τὰ πρῶτα συμπλάττουσι τῶν κηρίων, ὀχευόμεναι δὲ γεννῶσιν ὑπ' ἀλλήλων· ὥπται γὰρ πολλάκις ὁ συνδυασμὸς αὐτῶν. πόσας δ' ἔχουσι διαφορὰς ἢ πρὸς ἄλληλα τῶν τοιούτων γενῶν ἕκαστον ἢ πρὸς τὰς μελίττας ἐκ τῶν περὶ τὰς ἱστορίας ἀναγεγραμμένων δεῖ θεωρεῖν.

## Κεφάλαιο 11

Καὶ περὶ μὲν τῶν ἐντόμων τῆς γενέσεως εἴρηται πάντων, περὶ δὲ τῶν ὀστρακοδέρμων λεκτέον.

Ἐχει δὲ καὶ τούτων τὰ περὶ τὴν γένεσιν τῇ μὲν ὁμοίως τῇ δ' οὐχ ὁμοίως τοῖς ἄλλοις. καὶ τοῦτ' εὐλόγως συμβαίνει· πρὸς μὲν γὰρ τὰ ζῶα φυτοῖς ἐοίκασι πρὸς δὲ τὰ φυτὰ ζώοις, ὥστε τρόπον μὲν τινα ἀπὸ σπέρματος φαίνεσθαι γινόμενα, τρόπον δ' ἄλλον οὐκ ἀπὸ σπέρματος, καὶ τῇ μὲν αὐτόματα τῇ δ' ἀφ' αὐτῶν, ἢ τὰ μὲν οὕτως τὰ δ' ἐκείνως. διὰ δὲ τὸ τοῖς φυτοῖς ἀντίστροφον ἔχειν τὴν φύσιν, διὰ τοῦτο ἐν μὲν τῇ γῇ τῶν ὀστρακοδέρμων οὐθὲν ἢ μικρὸν τι γίγνεται γένος, οἷον τὸ τῶν κοχλιῶν κἂν εἴ τι τοιοῦτον ἕτερον μὲν σπάνιον δέ, ἐν δὲ τῇ θαλάττῃ καὶ τοῖς ὁμοίοις ὑγροῖς πολλὰ καὶ παντοδαπὴν ἔχοντα μορφήν. τὸ δὲ τῶν φυτῶν γένος ἐν μὲν τῇ θαλάττῃ καὶ τοῖς τοιούτοις μικρὸν καὶ ἀμπαν ὥς εἰπεῖν οὐθέν, ἐν δὲ τῇ γῇ τὰ τοιαῦτα γίγνεται πάντα· τὴν γὰρ

φύσιν ἀνάλογον ἔχει, καὶ διέστηκεν ὅσω ζωτικώτερον τὸ ὑγρὸν τοῦ ξηροῦ καὶ γῆς ὕδωρ τοσοῦτον ἢ τῶν ὀστρακοδέρμων φύσις τῆς τῶν φυτῶν, ἐπεὶ βούλεται γε ὥς τὰ φυτὰ πρὸς τὴν γῆν οὕτως ἔχειν τὰ ὀστρακόδερμα πρὸς τὸ ὑγρὸν, ὥς ὄντα τὰ μὲν φυτὰ ὥσπερανεὶ ὄστρεα χερσαῖα τὰ δὲ ὄστρεα ὥσπερανεὶ φυτὰ ἔνυδρα.

Διὰ τοιαύτην δ' αἰτίαν καὶ πολύμορφα τὰ ἐν τῷ ὑγρῷ μᾶλλον ἐστὶ τῶν ἐν τῇ γῇ· τό τε γὰρ ὑγρὸν εὐπλαστοτέραν ἔχει τὴν φύσιν τῆς γῆς καὶ σωματικὴν οὐ πολλῷ ἥττον, καὶ μάλιστα τὰ ἐν τῇ θαλάττῃ τοιαῦτα· (761b.) τὸ μὲν γὰρ πότιμον γλυκὺ μὲν καὶ τρόφιμον, ἥττον δὲ σωματῶδες καὶ ψυχρόν ἐστίν. διόπερ ὅσα ἄναιμα καὶ μὴ θερμὰ τὴν φύσιν οὐ γίγνεται ἐν ταῖς λίμναις οὐδὲ τῶν ἁλμυρῶν ἐν τοῖς ποτιμωτέροις ἄλλ' ἥττον, οἷον τὰ ὀστρακόδερμα καὶ τὰ μαλάκια καὶ τὰ μαλακόστρακα (πάντα γὰρ ἄναιμα καὶ ψυχρὰ ταῦτα τὴν φύσιν ἐστίν), ἐν δὲ ταῖς λιμνοθαλάτταις καὶ πρὸς ταῖς ἐκβολαῖς τῶν ποταμῶν γίνονται· ζητοῦσι γὰρ ἅμα τὴν τ' ἀλέαν καὶ τὴν τροφήν, ἢ δὲ θάλαττα ὑγρά τε καὶ σωματώδης πολλῷ μᾶλλον τοῦ ποτίμου καὶ θερμὴ τὴν φύσιν ἐστί, καὶ κεκοινώνηκε πάντων τῶν μορίων, ὑγροῦ καὶ πνεύματος καὶ γῆς, ὥστε καὶ πάντων μετέχειν τῶν καθ' ἕκαστον γιγνομένων ἐν τοῖς τόποις ζώων. τὰ μὲν γὰρ φυτὰ θείη τις ἂν γῆς, ὕδατος δὲ τὰ ἔνυδρα, τὰ δὲ πεζὰ ἀέρος· τὸ δὲ μᾶλλον καὶ ἥττον καὶ ἐγγύτερον καὶ πορρώτερον πολλὴν ποιεῖ καὶ θαυμαστὴν διαφοράν. τὸ δὲ τέταρτον γένος οὐκ ἐπὶ τούτων τῶν τόπων δεῖ ζητεῖν· καίτοι βούλεται γέ τι κατὰ τὴν τοῦ πυρὸς εἶναι τάξιν· τοῦτο γὰρ τέταρτον ἀριθμεῖται τῶν σωμάτων. ἀλλὰ τὸ μὲν πῦρ αἰεὶ φαίνεται τὴν μορφήν οὐκ ἰδίαν ἔχον, ἄλλ' ἐν ἐτέρῳ τῶν σωμάτων· ἢ γὰρ ἀήρ ἢ καπνὸς ἢ γῆ φαίνεται τὸ πεπυρωμένον. ἀλλὰ δεῖ τὸ τοιοῦτον γένος ζητεῖν ἐπὶ τῆς σελήνης· αὕτη γὰρ φαίνεται κοινωνοῦσα τῆς τετάρτης ἀποστάσεως. ἀλλὰ περὶ μὲν τούτων ἄλλος ἂν εἴη λόγος.

Ἡ δὲ τῶν ὀστρακοδέρμων συνίσταται φύσις τῶν μὲν αὐτόματος, ἐνίων δὲ προῖεμένων τινὰ δύναμιν ἀφ' αὐτῶν, πολλάκις δὲ γιγνομένων καὶ τούτων ἀπὸ συστάσεως αὐτομάτου. δεῖ δὴ λαβεῖν τὰς γενέσεις τὰς τῶν φυτῶν. τούτων γὰρ γίγνεται τὰ μὲν ἀπὸ σπέρματος τὰ δ' ἀπὸ σπαραγμάτων ἀποφυτευομένων, ἔνια δὲ τῷ παραβλαστάνειν, οἷον τὸ τῶν κρομμύων γένος. τοῦτον μὲν οὖν οἱ μύες γίνονται τὸν τρόπον· παραφύονται γὰρ ἐλάττους αἰεὶ παρὰ τὴν ἀρχήν. κήρυκες δὲ καὶ πορφύραι καὶ τὰ λεγόμενα κηριάζειν οἷον ἀπὸ σπερματικῆς φύσεως προῖενται μυξώδεις ὑγρότητας. σπέρμα δ' οὐθὲν τούτων δεῖ νομίζειν ἀλλὰ κατὰ τὸν εἰρημένον τρόπον μετέχειν τῆς ὁμοιότητος τοῖς φυτοῖς· διὸ καὶ γίγνεται πλῆθος τῶν τοιούτων ὅταν ἅπαξ (762a.) γένηται τι. πάντα μὲν γὰρ ταῦτα καὶ αὐτόματα συμβαίνει γίνεσθαι, κατὰ λόγον δὲ καὶ

ὑπαρξάντων συνίστασθαι μᾶλλον. περιγίγνεσθαι γάρ τι περίττωμα πρὸς ἑκάστῳ τῆς ἀρχῆς εὐλογον ἄφ' ἧς παραβλαστάνει τῶν παραφυομένων ἕκαστον. ἐπεὶ δὲ παραπλησίαν ἔχει τὴν δύναμιν ἢ τροφήν καὶ τὸ ταύτης περίττωμα, τῶν κηριαζόντων ὁμοίαν εἰκὸς ἐστὶν εἶναι τῇ ἐξ ἀρχῆς συστάσει οὐσίαν· διόπερ εὐλογον γίγνεσθαι καὶ ἐκ ταύτης.

Ὅσα δὲ μήτε παραβλαστάνει μήτε κηριαζει, τούτων δὲ πάντων ἡ γένεσις αὐτόματός ἐστιν. πάντα δὲ τὰ συνιστάμενα τὸν τρόπον τοῦτον καὶ ἐν γῇ καὶ ἐν ὕδατι φαίνεται γιγνόμενα μετὰ σήψεως καὶ μιγνυμένου τοῦ ὀμβρίου ὕδατος· ἀποκρινομένου γὰρ τοῦ γλυκέος εἰς τὴν συνισταμένην ἀρχὴν τὸ περιττεῦον τοιαύτην λαμβάνει μορφήν. γίγνεται δ' οὐθὲν σηπόμενον ἀλλὰ πεττόμενον· ἡ δὲ σῆψις καὶ τὸ σαπρὸν περίττωμα τοῦ πεφθέντος ἐστίν· οὐθὲν γὰρ ἐκ παντὸς γίγνεται καθάπερ οὐδ' ἐν τοῖς ὑπὸ τῆς τέχνης δημιουργουμένοις· οὐθὲν γὰρ ἂν ἔδει ποιεῖν· νῦν δὲ τὸ μὲν ἡ τέχνη τῶν ἀχρήστων ἀφαιρεῖ, τὸ δ' ἡ φύσις.

Γίγνονται δ' ἐν γῇ καὶ ἐν ὑγρῷ τὰ ζῶα καὶ τὰ φυτὰ διὰ τὸ ἐν γῇ μὲν ὕδωρ ὑπάρχειν ἐν δ' ὕδατι πνεῦμα, ἐν δὲ τούτῳ παντὶ θερμότητα ψυχικὴν, ὥστε τρόπον τινὰ πάντα ψυχῆς εἶναι πλήρη· διὸ συνίσταται ταχέως ὁπόταν ἐμπεριληφθῇ. ἐμπεριλαμβάνεται δὲ καὶ γίγνεται θερμαινομένων τῶν σωματικῶν ὑγρῶν οἷον ἀφρώδης πομφόλυξ. αἱ μὲν οὖν διαφοραὶ τοῦ τιμιώτερον εἶναι τὸ γένος καὶ ἀτιμότερον τὸ συνιστάμενον ἐν τῇ περιλήψει τῆς ἀρχῆς τῆς ψυχικῆς ἐστίν. τούτου δὲ καὶ οἱ τόποι αἴτιοι καὶ τὸ σῶμα τὸ περιλαμβανόμενον. ἐν δὲ τῇ θαλάττῃ πολὺ τὸ γεῶδες ἔνεστιν· διόπερ ἐκ τῆς τοιαύτης συστάσεως ἡ τῶν ὀστρακοδέρμων γίγνεται φύσις, κύκλῳ μὲν τοῦ γεώδους σκληρυνομένου καὶ πηγνυμένου τὴν αὐτὴν πῆξιν τοῖς ὀστοῖς καὶ τοῖς κέρασι (πυρὶ γὰρ ἄτηκτα ταῦτ' ἐστίν), ἐντὸς δὲ περιλαμβανομένου τοῦ τὴν ζωὴν ἔχοντος σώματος.

Μόνον δὲ τῶν τοιούτων συνδυαζομένων ἐώραται τὸ τῶν κοχλιῶν γένος. εἰ δ' ἐκ τοῦ συνδυασμοῦ ἡ γένεσις αὐτῶν ἐστίν ἢ μὴ οὕτω συνῶπται ἱκανῶς.

Ζητήσῃ δ' ἂν τις βουλόμενος ὀρθῶς ζητεῖν τί (762b.) τὸ κατὰ τὴν ὑλικὴν ἀρχὴν συνιστάμενόν ἐστιν ἐν τοῖς τοιούτοις. ἐν μὲν γὰρ τοῖς θήλεσι περίττωμά τι τοῦ ζώου τοῦτ' ἐστίν, ὃ ἡ παρὰ τοῦ ἄρρενος ἀρχὴ κινουσα, δυνάμει τοιοῦτον ὃν οἷον ἄφ' οὗπερ ἦλθεν, ἀποτελεῖ τὸ ζῶον. ἐνταῦθα δὲ τί δεῖ λέγειν τὸ τοιοῦτον, καὶ πόθεν καὶ τίς ἡ κινουσα ἀρχὴ ἢ κατὰ τὸ ἄρρεν; δεῖ δὲ λαβεῖν ὅτι καὶ ἐν τοῖς ζώοις τοῖς γεννώσιν ἐκ τῆς εἰσιούσης τροφῆς ἡ ἐν τῷ ζῷω θερμότης ἀποκρίνουσα καὶ συμπέττουσα ποιεῖ τὸ περίττωμα, τὴν ἀρχὴν τοῦ κυήματος. ὁμοίως δὲ καὶ ἐν τοῖς φυτοῖς, πλὴν ἐν μὲν τούτοις καὶ

ἐν τισι τῶν ζώων οὐθὲν προσδεῖται τῆς τοῦ ἄρρενος ἀρχῆς (ἔχει γὰρ ἐν αὐτοῖς μεμιγμένην), τὸ δὲ τῶν πλείστων ζώων περίττωμα προσδεῖται. τροφή δ' ἐστὶ τοῖς μὲν ὕδωρ καὶ γῆ, τοῖς δὲ τὰ ἐκ τούτων, ὥσθ' ὅπερ ἢ ἐν τοῖς ζώοις θερμότης ἐκ τῆς τροφῆς ἀπεργάζεται, τοῦθ' ἢ τῆς ὥρας ἐν τῷ περιέχοντι θερμότης ἐκ θαλάττης καὶ γῆς συγκρίνει πέττουσα καὶ συνίστησιν. τὸ δ' ἐναπολαμβανόμενον ἢ ἀποκρινόμενον ἐν τῷ πνεύματι τῆς ψυχικῆς ἀρχῆς κύημα ποιεῖ καὶ κίνησιν ἐντίθησιν. ἢ μὲν οὖν τῶν φυτῶν τῶν ἀπὸ ταῦτομάτου γιγνομένων σύστασις ὁμοειδής ἐστίν· ἔκ τινος γὰρ μορίου γίνεταί, καὶ τὸ μὲν ἀρχὴ τὸ δὲ τροφή γίνεταί ἢ πρώτη τοῖς ἐκφυομένοις. -τὰ δὲ τῶν ζώων σκώληκοτοκεῖται, καὶ τῶν ἀναίμων ὅσα μὴ ἀπὸ ζώων γίνεταί καὶ τῶν ἐναίμων, οἷον γένος τι κεστρέων καὶ ἄλλων ποταμίων ἰχθύων, ἔτι δὲ τὸ τῶν ἐγγέλεων γένος· ἅπαντα γὰρ ταῦτα καίπερ ὀλίγαιμον ἔχοντα τὴν φύσιν ὅμως ἐναιμά ἐστι, καὶ καρδίαν ἔχουσι τὴν ἀρχὴν τὴν τῶν μορίων αἱματικήν. τὰ δὲ καλούμενα γῆς ἔντερα σκώληκος ἔχει φύσιν, ἐν οἷς ἐγγίγνεταί τὸ σῶμα τὸ τῶν ἐγγέλεων. διὸ καὶ περὶ τῆς τῶν ἀνθρώπων καὶ τετραπόδων γενέσεως ὑπολάβοι τις ἄν, εἴπερ ἐγίγοντό ποτε γηγενεῖς ὥσπερ φασί τινες, δύο τρόπων τούτων γίνεσθαι τὸν ἕτερον· ἢ γὰρ ὡς σκώληκος συνισταμένου τὸ πρῶτον ἢ ἐξ ὧν. -ἀναγκαῖον γὰρ ἢ ἐν αὐτοῖς ἔχειν τὴν τροφήν εἰς τὴν αὔξησιν (τὸ δὲ τοιοῦτον κύημα σκώληξ ἐστίν) ἢ λαμβάνειν ἄλλοθεν, τοῦτο δ' ἢ ἐκ τῆς γεννώσης ἢ ἐκ μορίου τοῦ κυήματος· ὥστ' εἰ θάτερον ἀδύνατον, ἐπιρρεῖν ἐκ τῆς γῆς ὥσπερ ἐν τοῖς ἄλλοις (763a.) ζώοις ἐκ τῆς μητρός, ἀναγκαῖον ἐκ μορίου λαμβάνειν τοῦ κυήματος· τὴν δὲ τοιαύτην ἐξ ὧν λέγομεν εἶναι γένεσιν.

-ὅτι μὲν οὖν, εἴπερ ἦν τις ἀρχὴ τῆς γενέσεως πᾶσι τοῖς ζώοις, εὐλογον τοῖν δυοῖν τούτοις εἶναι τὴν ἑτέραν φανερόν· ἦττον δ' ἔχει λόγον ἐκ τῶν ὧν· οὐθενὸς γὰρ τοιαύτην ὀρώμεν ζώου γένεσιν ἀλλὰ τὴν ἑτέραν, καὶ τῶν ἐναίμων τῶν ῥηθέντων καὶ τῶν ἀναίμων. τοιαῦτα δ' ἐστὶ τῶν τ' ἐντόμων ἔνια καὶ τὰ ὀστρακόδερμα περὶ ὧν ὁ λόγος· οὐ γὰρ ἐκ μορίου γίνονται τινος ὥσπερ τὰ ὠοτοκούμενα, ποιοῦνται δὲ καὶ τὴν αὔξησιν ὁμοίως τοῖς σκώληξιν. ἐπὶ τὰ ἄνω γὰρ καὶ τὴν ἀρχὴν αὐξάνονται οἱ σκώληκες· ἐν τῷ κάτω γὰρ ἢ τροφή τοῖς ἄνω. καὶ τοῦτό γε ὁμοίως ἔχει τοῖς ἐκ τῶν ὧν, πλὴν ἐκεῖνα μὲν καταναλίσκει πᾶν, ἐν δὲ τοῖς σκώληκοτοκουμένοις ὅταν αὐξηθῇ ἐκ τῆς ἐν τῷ κάτω μορίῳ συστάσεως τὸ ἄνω μόριον, οὕτως ἐκ τῆς ὑπολοίπου διαρθροῦται τὸ κάτωθεν. αἴτιον δ' ὅτι καὶ ὕστερον ἢ τροφή ἐν τῷ μορίῳ τῷ ὑπὸ τὸ ὑπόζωμα γίνεταί πᾶσιν. ὅτι δὲ τοῦτον τὸν τρόπον ποιεῖται τὰ σκώληκώδη τὴν αὔξησιν δῆλον ἐπὶ τῶν μελιττῶν καὶ τῶν τοιούτων· κατ' ἀρχὰς γὰρ τὸ μὲν κάτω μόριον μέγα ἔχουσι τὸ δ' ἄνω μικρόν. καὶ ἐπὶ τῶν ὀστρακοδέρμων δὲ τὸν αὐτὸν τρόπον ἔχει τὰ περὶ τὴν αὔξησιν. φανερόν δὲ καὶ τοῦτ' ἐπὶ τῶν

στρομβωδῶν <έν> ταῖς ἐλίκαις· ἀεὶ γὰρ αὐξανομένων γίνονται μείζους ἐπὶ τὸ πρόσθιον καὶ τὴν καλουμένην κεφαλὴν.

Ὅν μὲν οὖν τρόπον ἔχει ἡ γένεσις καὶ τούτων καὶ τῶν ἄλλων τῶν αὐτομάτων εἴρηται σχεδόν.

Ὅτι δὲ συνίσταται αὐτόματα πάντα τὰ ὀστρακόδερμα φανερόν ἐκ τῶν τοιούτων ὅτι πρὸς τε τοῖς πλοίοις γίνεταί σπηπομένης τῆς ἀφρώδους ἰλύος, καὶ πολλαχοῦ οὐ πρότερον οὐθὲν ὑπῆρχε τοιοῦτον, ὕστερον δι' ἔνδειαν ὑγροῦ τοῦ τόπου βορβορωθέντος ἐγένετο τὰ καλούμενα λιμνόστρεα τῶν ὀστρακηρῶν, οἷον περὶ Ῥόδον παραβαλόντος ναυτικοῦ στόλου καὶ ἐκβληθέντων κεραμίων εἰς τὴν θάλατταν, χρόνου γενομένου καὶ βορβόρου περὶ αὐτὰ συναλισθέντος ὅστρεα εὐρίσκοντ' ἐν αὐτοῖς. ὅτι δ' οὐδ' ἀφίησι τὰ τοιαῦτα οὐθὲν ἀφ' αὐτῶν γεννητικὸν τεκμήριον· (763b.) ἐπεὶ γὰρ Χίοι τινες ἐκ Πύρρας τῆς ἐν Λέσβῳ τῶν ὀστρέων διεκόμισαν ζῶντα καὶ εἰς τόπους τινὰς τῆς θαλάττης εὐριπώδεις καὶ ὁμόρρους ἀφεῖσαν, πλείω μὲν τῷ χρόνῳ οὐδὲν ἐγένετο, τὸ δὲ μέγεθος εἰς αὕξησιν ἐπέδωκε πολύ. τὰ δὲ λεγόμενα ὥα οὐθὲν συμβάλλεται πρὸς τὴν γένεσιν ἄλλ' ἐστὶν εὐτροφίας σημεῖον, οἷον ἐν τοῖς ἐναίμοις ἢ πότῃ· διὸ καὶ πρὸς τὴν ἐδωδὴν γίνεταί εὐχυμα κατὰ τοὺς καιροὺς τούτους.

σημεῖον δ' ὅτι τὰ τοιαῦτα ἀεὶ ἔχουσιν, οἷον αἱ πίνναι καὶ οἱ κήρυκες καὶ αἱ πορφύραι, πλὴν ὅτε μὲν μείζω ὅτε δ' ἐλάττω. ἔνια δ' οὐκ ἀεὶ, ἀλλὰ τοῦ μὲν ἔαρος ἔχουσι, προβαινούσης δὲ φθίνει τῆς ὥρας καὶ τέλος ἀφανίζεται πάνπαν, οἷον οἱ τε κτένες καὶ οἱ μύες καὶ τὰ καλούμενα λιμνόστρεα· ἡ γὰρ ὥρα αὕτη συμφέρει τοῖς σώμασιν αὐτῶν. τοῖς δὲ συμβαίνει τοιοῦτον οὐδὲν ἐπίδηλον, οἷον τοῖς τηθύοις. τὰ δὲ καθ' ἕκαστα περὶ τούτων καὶ ἐν οἷς γίνονται τόποις ἐκ τῆς ἱστορίας θεωρεῖσθω.

## Βιβλίο 4

### Κεφάλαιο 1

Περὶ μὲν οὖν τῆς γενέσεως τῆς τῶν ζώων εἴρηται καὶ κοινῇ καὶ χωρὶς περὶ πάντων. ἐπεὶ δ' ἐν τοῖς τελειοτάτοις αὐτῶν ἐστὶ τὸ θῆλυ καὶ τὸ ἄρρεν κεχωρισμένον, καὶ ταύτας τὰς δυνάμεις ἀρχὰς φάμεν εἶναι πάντων καὶ ζώων καὶ φυτῶν, ἀλλὰ τὰ μὲν αὐτὰς ἀχωρίστους ἔχει τὰ δὲ κεχωρισμένας, λεκτέον περὶ τῆς γενέσεως τῆς τούτων πρῶτον· ἔτι γὰρ ἀτελῶν ὄντων ἐν τῷ γένει διορίζεται τὸ θῆλυ καὶ τὸ ἄρρεν. πότερον δὲ καὶ πρὶν δῆλην τὴν διαφορὰν

εἶναι πρὸς τὴν αἴσθησιν ἡμῶν τὸ μὲν θῆλυ τὸ δ' ἄρρεν ἐστίν, ἐν τῇ μητρὶ λαβόντα τὴν διαφορὰν ἢ πρότερον, ἀμφισβητεῖται.

φασὶ γὰρ οἱ μὲν ἐν τοῖς σπέρμασιν εἶναι ταύτην τὴν ἐναντίωσιν εὐθύς, οἷον Ἀναξαγόρας καὶ ἕτεροι τῶν φυσιολόγων· γίνεσθαι τε γὰρ ἐκ τοῦ ἄρρενος τὸ σπέρμα, τὸ δὲ θῆλυ παρέχειν τὸν τόπον, καὶ εἶναι τὸ μὲν ἄρρεν ἐκ τῶν δεξιῶν τὸ δὲ θῆλυ ἐκ τῶν ἀριστερῶν, καὶ τῆς ὑστέρας τὰ μὲν ἄρρενα ἐν τοῖς (764a.) δεξιοῖς εἶναι τὰ δὲ θήλεα ἐν τοῖς ἀριστεροῖς. οἱ δ' ἐν τῇ μήτρᾳ, καθάπερ Ἐμπεδοκλῆς· τὰ μὲν γὰρ εἰς θερμὴν ἐλθόντα τὴν ὑστέραν ἄρρενα γίνεσθαι φησι τὰ δ' εἰς ψυχρὰν θήλεα, τῆς δὲ θερμότητος καὶ τῆς ψυχρότητος τὴν τῶν καταμηνίων αἰτίαν εἶναι ῥύσιν, ἢ ψυχροτέραν οὖσαν ἢ θερμοτέραν καὶ παλαιότεραν ἢ προσφατώτεραν. Δημόκριτος δὲ ὁ Ἀβδηρίτης ἐν μὲν τῇ μητρὶ γίνεσθαι φησι τὴν διαφορὰν τοῦ θήλεος καὶ τοῦ ἄρρενος, οὐ μέντοι διὰ θερμότητά γε ἢ ψυχρότητα τὸ μὲν γίνεσθαι θῆλυ τὸ δ' ἄρρεν ἀλλ' ὁποτέρου ἂν κρατήσῃ τὸ σπέρμα τὸ ἀπὸ τοῦ μορίου ἐλθὼν ὥ διαφέρουσιν ἀλλήλων τὸ θῆλυ καὶ τὸ ἄρρεν.

τοῦτο γὰρ ὡς ἀληθῶς Ἐμπεδοκλῆς ῥαθυμότερον ὑπέιληφεν οἰόμενος ψυχρότητι καὶ θερμότητι διαφέρειν μόνον ἀλλήλων, ὁρῶν ὅλα τὰ μόρια μεγάλην ἔχοντα διαφορὰν τήν τε τῶν αἰδοίων καὶ τὴν τῆς ὑστέρας. εἰ γὰρ πεπλασμένων τῶν ζώων, τοῦ μὲν τὰ μόρια ἔχοντος τὰ τοῦ θήλεος τοῦ δὲ τὰ τοῦ ἄρρενος, καθάπερ εἰς κάμινον εἰς τὴν ὑστέραν τεθείη, τὸ μὲν ἔχον ὑστέραν εἰς θερμὴν τὸ δὲ μὴ ἔχον εἰς ψυχράν, ἔσται θῆλυ τὸ οὐκ ἔχον ὑστέραν καὶ ἄρρεν τὸ ἔχον. τοῦτο δ' ἀδύνατον. ὥστε ταύτῃ γε βέλτιον ἂν λέγοι Δημόκριτος· ζητεῖ γὰρ ταύτης τῆς γενέσεως τὴν διαφορὰν καὶ πειρᾶται λέγειν-εἰ δὲ καλῶς ἢ μὴ καλῶς ἕτερος λόγος. ἀλλὰ μὴν κἂν εἰ τῶν μορίων τῆς διαφορᾶς αἴτιον ἢ θερμότης καὶ ἢ ψυχρότης τοῦτο λεκτέον ἦν τοῖς ἐκείνως λέγουσιν· τοῦτο γὰρ ἐστίν ὡς εἰπεῖν τὸ λέγειν περὶ γενέσεως ἄρρενος καὶ θήλεος· τοῦτο γὰρ διαφέρει φανερώς. οὐ μικρὸν δὲ ἔργον τὸ ἀπ' ἐκείνης τῆς ἀρχῆς περὶ τῆς γενέσεως τούτων τῶν μορίων τὴν αἰτίαν συναγαγεῖν, ὡς ἀναγκαῖον ἀκολουθεῖν ψυχομένῳ μὲν τῷ ζώῳ γίνεσθαι τοῦτο τὸ μόριον ἦν καλοῦσιν ὑστέραν, θερμαινομένῳ δὲ μὴ γίνεσθαι. τὸν αὐτὸν δὲ τρόπον καὶ περὶ τῶν εἰς τὴν ὁμιλίαν συντελούντων μορίων· καὶ γὰρ ταῦτα διαφέρει καθάπερ εἴρηται πρότερον.

Ἔτι δὲ γίνεται δίδυμα θῆλυ καὶ ἄρρεν ἅμα ἐν τῷ αὐτῷ μορίῳ πολλάκις τῆς ὑστέρας-καὶ τοῦθ' ἱκανῶς τεθεωρήκαμεν ἐκ τῶν ἀνατομῶν ἐν πᾶσι τοῖς ζωοτοκοῦσι, καὶ ἐν τοῖς πεζοῖς καὶ ἐν τοῖς ἰχθύσιν· περὶ ὧν εἰ μὲν μὴ συνεωράκει εὐλόγως ἡμάρτανε ταύτην τὴν αἰτίαν εἰπὼν, εἰ δ' (764b.)

ἔωρακώς, ἄτοπον τὸ ἔτι νομίζειν αἰτίαν εἶναι τὴν τῆς ὑστέρας θερμότητα ἢ ψυχρότητα· ἄμφω γὰρ ἂν ἐγίνετο ἢ θήλεα ἢ ἄρρενα, νῦν δὲ τοῦτ' οὐχ ὁρῶμεν συμβαῖνον.

Λέγοντί τε τὰ μόρια διεσπᾶσθαι τοῦ γιγνομένου (τὰ μὲν γὰρ ἐν τῷ ἄρρενί φησιν εἶναι τὰ δ' ἐν τῷ θήλει, διὸ καὶ τῆς ἀλλήλων ὁμιλίας ἐπιθυμεῖν) ἀναγκαῖον καὶ τῶν τοιούτων διηρῆσθαι τὸ μέγεθος καὶ γίνεσθαι σύνοδον, ἀλλ' οὐ διὰ ψύξιν ἢ θερμασίαν. ἀλλὰ περὶ μὲν τῆς τοιαύτης αἰτίας τοῦ σπέρματος τάχ' ἂν εἴη πολλὰ λέγειν· ὅλως γὰρ ἔοικεν ὁ τρόπος τῆς αἰτίας πλασματώδης εἶναι. εἰ δ' ἐστὶ περὶ σπέρματος οὕτως ἔχον ὥσπερ τυγχάνομεν εἰρηκότες, καὶ μήτ' ἀπὸ παντὸς ἀπέρχεται μήθ' ὅλως τὸ ἀπὸ τοῦ ἄρρενος παρέχει τοῖς γιγνομένοις ὕλην μηδεμίαν, καὶ πρὸς τοῦτον καὶ πρὸς Δημόκριτον καὶ εἴ τις ἄλλος οὕτω τυγχάνει λέγων ὁμοίως ἀπαντητέον. οὔτε γὰρ διεσπασμένον ἐνδέχεται τὸ σῶμα τοῦ σπέρματος εἶναι, τὸ μὲν ἐν τῷ θήλει τὸ δ' ἐν τῷ ἄρρενι, καθάπερ Ἐμπεδοκλῆς φησιν εἰπών· ἀλλὰ διέσπασται μελέων φύσις, ἥ μὲν ἐν ἀνδρός ... οὗτ' ἐξ ἑκατέρου πᾶν ἀποκρινόμενον τῷ κρατῆσαί τι μέρος ἄλλου μέρους γίνεσθαι τὸ μὲν θῆλυ τὸ δ' ἄρρεν.

ὅλως δὲ τό γε τὴν τοῦ μέρους ὑπεροχὴν κρατήσασαν ποιεῖν θῆλυ βέλτιον μὲν ἢ μηθὲν φροντίσαντα τὸ θερμὸν αἰτιᾶσθαι μόνον, τὸ μέντοι συμβαίνειν ἅμα καὶ τὴν τοῦ αἰδοίου μορφὴν ἑτέραν δεῖται λόγου πρὸς τὸ συνακολουθεῖν ἀεὶ ταῦτ' ἀλλήλοις. εἰ γὰρ ὅτι σύνεγγυς, καὶ τῶν λοιπῶν ἕκαστον ἔδει μορίων ἀκολουθεῖν-ἑτέρω γὰρ ἕτερον ἐγγὺς τῶν νικόντων-ὥστε ἅμα θῆλύ τ' ἂν ἦν καὶ τῇ μητρὶ ἐοικὸς ἢ ἄρρεν καὶ τῷ πατρί.

ἔτι ἄτοπον καὶ τὸ μόνον ταῦτ' οἶεσθαι δεῖν γίνεσθαι τὰ μόρια καὶ μὴ τὸ σύνολον μεταβεβληκέναι σῶμα, καὶ μάλιστα καὶ πρῶτον τὰς φλέβας περὶ ἃς ὥς περὶ ὑπογραφὴν τὸ σῶμα περικείται τὸ τῶν σαρκῶν. ἃς οὐ διὰ τὴν ὑστέραν εὐλόγον γενέσθαι ποιᾶς τινος, ἀλλὰ μᾶλλον δι' ἐκείνας τὴν ὑστέραν· ὑποδοχὴ γὰρ αἵματός τινος ἑκάτερον, προτέρα δ' ἢ τῶν φλεβῶν. τὴν δὲ κινοῦσαν ἀρχὴν ἀναγκαῖον ἀεὶ προτέρα εἶναι καὶ τῆς γενέσεως αἰτίαν τῷ ποιᾶν εἶναί τινα. συμβαίνει μὲν οὖν ἡ διαφορὰ τῶν μερῶν τούτων πρὸς ἀλλήλα τοῖς θήλεσι καὶ τοῖς ἄρρεσιν, ἀλλ' οὐκ ἀρχὴν οἰητέον οὐδ' αἰτίαν (765a.) εἶναι ταύτην ἀλλ' ἑτέραν, κἂν εἰ μηθὲν ἀποκρίνεται σπέρμα μήτε ἀπὸ τοῦ θήλεος μήτ' ἀπὸ τοῦ ἄρρενος, ἀλλ' ὅπως δὴ ποτε συνίσταται [τὸ σπέρμα] τὸ γιγνόμενον.

Ὁ δ' αὐτὸς λόγος καὶ πρὸς τοὺς λέγοντας τὸ μὲν ἄρρεν ἀπὸ τῶν δεξιῶν εἶναι

τὸ δὲ θῆλυ ἀπὸ τῶν ἀριστερῶν, ὅσπερ καὶ πρὸς Ἐμπεδοκλέα καὶ πρὸς Δημόκριτον. εἴτε γὰρ μηδεμίαν ὕλην συμβάλλεται τὸ ἄρρεν οὐθὲν ἂν λέγοιεν οἱ λέγοντες οὕτως· εἴτε καὶ συμβάλλεται καθάπερ φασίν, ὁμοίως ἀναγκαῖον ἀπαντᾶν καὶ πρὸς τὸν Ἐμπεδοκλέους λόγον ὃς διορίζει τὸ θῆλυ πρὸς τὸ ἄρρεν θερμότητι καὶ ψυχρότητι τῆς ὑστέρας.

οἱ δὲ τὸ αὐτὸ τοῦτο ποιοῦσι τοῖς δεξιοῖς καὶ τοῖς ἀριστεροῖς ὀρίζοντες, ὀρῶντες διαφέροντα τὸ θῆλυ καὶ τὸ ἄρρεν καὶ μορίοις ὅλοις-ὦν διὰ τίν' αἰτίαν ὑπάρξει τοῖς ἐκ τῶν ἀριστερῶν, τοῖς δ' ἐκ τῶν δεξιῶν οὐχ ὑπάρξει τὸ σῶμα τὸ τῆς ὑστέρας; ἂν γὰρ ἔλθῃ μὲν μὴ σχῇ δὲ τοῦτο τὸ μόριον, ἔσται θῆλυ οὐκ ἔχον ὑστέρα καὶ ἄρρεν ἔχον, ἂν τύχῃ. ἔτι δ' ὅπερ εἴρηται καὶ πρότερον, ὥπται καὶ θῆλυ ἐν τῷ δεξιῷ μέρει τῆς ὑστέρας καὶ ἄρρεν ἐν τῷ ἀριστερῷ καὶ ἄμφω ἐν τῷ αὐτῷ μέρει, καὶ τοῦτ' οὐχ ὅτι ἅπαξ ἀλλὰ πλεονάκεις [ἢ τὸ ἄρρεν μὲν ἐν τοῖς δεξιοῖς τὸ θῆλυ δ' ἐν τοῖς ἀριστεροῖς· οὐχ ἥττον δὲ ἀμφοτέρωθεν γίγνεται ἐν τοῖς δεξιοῖς]. παραπλησίως δέ τινες πεπεισμένοι τούτοις εἰσὶ καὶ λέγουσιν ὡς τὸν δεξιὸν ὄρχιν ἀποδουμένοις ἢ τὸν ἀριστερὸν συμβαίνει τοῖς ὀχεύουσιν ἀρρενοτοκεῖν ἢ θηλυτοκεῖν· οὕτω γὰρ καὶ Λεωφάνης ἔλεγεν. ἐπὶ τε τῶν ἐκτεμνομένων τὸν ἕτερον ὄρχιν τὸ αὐτὸ τοῦτο συμβαίνειν τινές φασιν, οὐκ ἀληθῆ λέγοντες ἀλλὰ μαντευόμενοι τὸ συμβησόμενον ἐκ τῶν εἰκότων καὶ προλαμβάνοντες ὡς οὕτως ἔχον πρὶν γιγνόμενον οὕτως ἰδεῖν, ἔτι δ' ἀγνοοῦντες ὡς οὐθὲν συμβάλλεται πρὸς τὴν γένεσιν τῆς ἀρρενογονίας καὶ θηλυγονίας τὰ μόρια ταῦτα τοῖς ζώοις. τούτου δὲ σημεῖον ὅτι πολλὰ τῶν ζώων αὐτὰ τε θήλεα καὶ ἄρρενά ἐστι, καὶ γεννᾷ τὰ μὲν θήλεα τὰ δ' ἄρρενα ὄρχεις οὐκ ἔχοντα, καθάπερ τὰ μὴ ἔχοντα πόδας, οἷον τό τε τῶν ἰχθύων γένος καὶ τὸ τῶν ὄφεων.

Τὸ μὲν οὖν θερμότητα καὶ ψυχρότητα αἰτίαν οἶεσθαι τοῦ ἄρρενος καὶ τοῦ θήλεος καὶ τὸ τὴν ἀπόκρισιν ἀπὸ τῶν δεξιῶν (765b.) γίγνεσθαι ἢ τῶν ἀριστερῶν ἔχει τινὰ λόγον· θερμότερα γὰρ τὰ δεξιὰ τοῦ σώματος τῶν ἀριστερῶν καὶ τὸ σπέρμα τὸ πεπεμμένον θερμότερον, τοιοῦτον δὲ τὸ συνεστός, γονιμώτερον δὲ τὸ συνεστός μᾶλλον. ἀλλὰ λίαν τὸ λέγειν οὕτω πόρρωθὲν ἐστὶν ἄπτεσθαι τῆς αἰτίας, δεῖ δ' ὅτι μάλιστα προσάγειν ἐκ τῶν ἐνδεχομένων ἐγγὺς τῶν πρώτων αἰτίων.

Περὶ μὲν οὖν ὅλου τε τοῦ σώματος καὶ τῶν μορίων, τί τε ἕκαστόν ἐστι καὶ διὰ τίν' αἰτίαν εἴρηται πρότερον ἐν ἑτέροις. ἀλλ' ἐπεὶ τὸ ἄρρεν καὶ τὸ θῆλυ διώριστα δυνάμει τινὶ καὶ ἀδυναμίᾳ· τὸ μὲν γὰρ δυνάμενον πέττειν καὶ συνιστάναι τε καὶ ἐκκρίνειν σπέρμα ἔχον τὴν ἀρχὴν τοῦ εἶδους ἄρρεν (λέγω δ' ἀρχὴν οὐ τὴν τοιαύτην ἐξ ἧς ὥσπερ ὕλης γίγνεται τοιοῦτον οἷον τὸ



γεννῶν, ἀλλὰ τὴν κινεῶσαν πρώτην, ἐάν τ' ἐν αὐτῷ ἐάν τ' ἐν ἄλλῳ τοῦτο δύνηται ποιεῖν), τὸ δὲ δεχόμενον μὲν ἀδυνατοῦν δὲ συνιστάναι καὶ ἐκκρίνειν θῆλυ-ἔτι εἰ πᾶσα πέψις ἐργάζεται θερμῷ, ἀνάγκη καὶ τῶν ζώων τὰ ἄρρενα τῶν θήλεων θερμότερα εἶναι. διὰ γὰρ ψυχρότητα καὶ ἀδυναμίαν πολυαιμεῖ κατὰ τόπους τινὰς τὸ θῆλυ μᾶλλον, καὶ ἔστιν αὐτὸ τοῦναντίον σημεῖον ἢ δι' ἥνπερ αἰτίαν οἴονται τινες τὸ θῆλυ θερμότερον εἶναι τοῦ ἄρρενος, διὰ τὴν τῶν καταμηνίων πρόεσιν· τὸ μὲν γὰρ αἷμα θερμόν, τὸ δὲ πλεῖον ἔχον μᾶλλον. ὑπολαμβάνουσι δὲ τοῦτο γίνεσθαι τὸ πάθος δι' ὑπερβολὴν αἵματος καὶ θερμότητος, ὥσπερ ἐνδεχόμενον αἷμα εἶναι πᾶν ὁμοίως, ἄνπερ μόνον ὑγρὸν ἢ καὶ τὴν χροᾶν αἱματῶδες, καὶ οὐκ ἔλαττον γιγνόμενον καὶ καθαρώτερον τοῖς εὐτροφοῦσιν. οἱ δ' ὥσπερ τὸ κατὰ τὴν κοιλίαν περίττωμα, τὸ πλεῖον τοῦ ἐλάττονος οἴονται σημεῖον εἶναι θερμῆς φύσεως μᾶλλον. καίτοι τοῦναντίον ἐστίν· ὥσπερ γὰρ καὶ ἐκ τῆς πρώτης τροφῆς ἐκ πολλῆς ὀλίγον ἀποκρίνεται τὸ χρήσιμον ἐν ταῖς περὶ τοὺς καρποὺς ἐργασίαις, καὶ τέλος οὐθὲν μέρος τὸ ἔσχατον πρὸς τὸ πρῶτον πλῆθος ἐστίν, οὕτω πάλιν καὶ ἐν τῷ σώματι διαδεχόμενα τὰ μέρη ταῖς ἐργασίαις τὸ τελευταῖον ἅμπαν μικρὸν ἐξ ἀπάσης γίγνεται τῆς τροφῆς. τοῦτο δὲ ἐν μὲν τισιν αἷμά ἐστίν ἐν δέ τισι τὸ ἀνάλογον.

Ἐπεὶ δὲ τὸ μὲν δύναται τὸ δ' ἀδυνατεῖ ἐκκρίναι τὸ περίττωμα καθαρὸν, ἀπάσῃ δὲ δυνάμει ὄργανόν τί ἐστι, καὶ (766a.) τῇ χειρὸν ἀποτελούσῃ ταῦτο καὶ τῇ βέλτιον, τὸ δὲ θῆλυ καὶ τὸ ἄρρεν πλεοναχῶς λεγομένου τοῦ δυνατοῦ καὶ τοῦ ἀδυνάτου τοῦτον ἀντίκειται τὸν τρόπον, ἀνάγκη ἄρα καὶ τῷ θήλει καὶ τῷ ἄρρενι εἶναι ὄργανον· τῷ μὲν οὖν ἢ ὑστέρα τῷ δ' ὁ περίνεός ἐστιν. ἅμα δ' ἢ φύσις τὴν τε δυνάμιν ἀποδίδωσιν ἐκάστω καὶ τὸ ὄργανον· βέλτιον γὰρ οὕτως. διὸ ἕκαστοι οἱ τόποι ἅμα ταῖς ἐκκρίσεσι γίνονται καὶ ταῖς δυνάμεσιν, ὥσπερ οὕτ' ὅψις ἄνευ ὀφθαλμῶν οὕτ' ὀφθαλμὸς τελειοῦται ἄνευ ὀψεως, καὶ κοιλία καὶ κύστις ἅμα τῷ δύνασθαι τὰ περιττώματα γίνεσθαι. ὄντος δὲ τοῦ αὐτοῦ ἐξ οὗ τε γίγνεται καὶ αὔξεται-τοῦτο δ' ἐστίν ἢ τροφή-ἕκαστον ἂν γίγνοιτο τῶν μορίων ἐκ τοιαύτης ὕλης ἣς δεκτικόν ἐστι καὶ τοιούτου περιττώματος. ἔτι δὲ γίγνεται πάλιν ὥς φαμεν ἐκ τοῦ ἐναντίου πως.

τρίτον δὲ πρὸς τούτοις ληπτέον ὅτι εἴπερ ἢ φθορὰ εἰς τοῦναντίον, καὶ τὸ μὴ κρατούμενον ὑπὸ τοῦ δημιουργοῦντος ἀνάγκη μεταβάλλειν εἰς τοῦναντίον. τούτων δ' ὑποκειμένων ἴσως ἂν ἤδη μᾶλλον εἴη φανερόν δι' ἣν αἰτίαν γίγνεται τὸ μὲν θῆλυ τὸ δ' ἄρρεν. ὅταν γὰρ μὴ κρατῇ ἢ ἀρχὴ μηδὲ δύνηται πέψαι δι' ἔνδειαν θερμότητος μηδ' ἀγάγῃ εἰς τὸ ἴδιον εἶδος τὸ αὐτοῦ ἀλλὰ ταύτῃ ἡττηθῇ, ἀνάγκη εἰς τοῦναντίον μεταβάλλειν. ἐναντίον δὲ τῷ ἄρρενι τὸ θῆλυ καὶ ταύτῃ ἢ τὸ μὲν ἄρρεν τὸ δὲ θῆλυ. ἐπεὶ δ' ἔχει διαφορὰν ἐν τῇ δυνάμει, ἔχει καὶ τὸ ὄργανον διαφέρον ὥστ' εἰς τοιοῦτον μεταβάλλει. ἐνὸς δὲ

μορίου ἐπικαίρου μεταβάλλοντος ὅλη ἡ σύστασις τοῦ ζώου πολὺ τῷ εἶδει διαφέρει. ὁρᾷν δ' ἔξεστιν ἐπὶ τῶν εὐνούχων οἱ ἐνὸς μορίου πηρωθέντος τοσοῦτον ἐξαλλάττουσι τῆς ἀρχαίας μορφῆς καὶ μικρὸν ἐλλείπουσι τοῦ θήλεος τὴν ἰδέαν. τούτου δ' αἴτιον ὅτι ἔνια τῶν μορίων ἀρχαί εἰσιν-ἀρχῆς δὲ κινηθείσης πολλὰ ἀνάγκη μεθίστασθαι τῶν ἀκολουθούντων.

Εἰ οὖν τὸ μὲν ἄρρεν ἀρχὴ τις καὶ αἴτιον-ἔστι δ' ἄρρεν ἢ δύναται τι, θῆλυ δὲ ἢ ἀδυνατεῖ-τῆς δὲ δυνάμεως ὅρος καὶ τῆς ἀδυναμίας τὸ πεπτικὸν εἶναι ἢ μὴ πεπτικὸν τῆς ὑστάτης τροφῆς, ὃ ἐν μὲν τοῖς ἐναίμοις αἷμα καλεῖται ἐν δὲ τοῖς ἄλλοις τὸ ἀνάλογον, τούτου δὲ τὸ αἴτιον ἐν τῇ ἀρχῇ καὶ τῷ μορίῳ τῷ ἔχοντι τὴν τῆς φυσικῆς θερμότητος ἀρχήν, ἀναγκαῖον ἄρα ἐν τοῖς ἐναίμοις συνίστασθαι (766b.) καρδίαν καὶ ἢ ἄρρεν ἔσεσθαι ἢ θῆλυ τὸ γινόμενον, ἐν δὲ τοῖς ἄλλοις γένεσιν οἷς ὑπάρχει τὸ θῆλυ καὶ τὸ ἄρρεν τὸ τῇ καρδίᾳ ἀνάλογον. ἢ μὲν οὖν ἀρχὴ τοῦ θήλεος καὶ τοῦ ἄρρενος καὶ ἡ αἰτία αὕτη καὶ ἐν τούτῳ ἐστίν. θῆλυ δ' ἤδη καὶ ἄρρεν ἐστὶν ὅταν ἔχη καὶ τὰ μόρια οἷς διαφέρει τὸ θῆλυ τοῦ ἄρρενος· οὐ γὰρ καθ' ὅτι οὖν μέρος ἄρρεν οὐδὲ θῆλυ ὥσπερ οὐδ' ὁρῶν καὶ ἀκοῦον.

Ἀναλαμβάντες δὲ πάλιν λέγομεν ὅτι τὸ μὲν σπέρμα ὑπόκειται περίττωμα τροφῆς ὃν τὸ ἔσχατον (ἔσχατον δὲ λέγω τὸ πρὸς ἕκαστον φερόμενον, διὸ καὶ ἔοικε τὸ γεννώμενον τῷ γεννήσαντι· οὐθὲν γὰρ διαφέρει ἀφ' ἑκάστου τῶν μορίων ἀπελθεῖν ἢ πρὸς ἕκαστον προσελθεῖν-ὀρθότερον δ' οὕτως). διαφέρει δὲ τὸ τοῦ ἄρρενος σπέρμα ὅτι ἔχει ἀρχὴν ἐν ἑαυτῷ τοιαύτην οἷαν κινεῖν καὶ ἐν τῷ ζώῳ καὶ διαπέττειν τὴν ἐσχάτην τροφήν, τὸ δὲ τοῦ θήλεος ὕλην μόνον.

κρατῆσαν μὲν οὖν εἰς αὐτὸ ἄγει, κρατηθὲν δ' εἰς τοῦναντίον μεταβάλλει ἢ εἰς φθοράν. ἐναντίον δὲ τῷ ἄρρενι τὸ θῆλυ, θῆλυ δὲ τῇ ἀπεψίᾳ καὶ τῇ ψυχρότητι τῆς αἱματικῆς τροφῆς. ἢ δὲ φύσις ἑκάστῳ τῶν περιττωμάτων ἀποδίδωσι τὸ δεκτικὸν μόριον. τὸ δὲ σπέρμα περίττωμα, τοῦτο δὲ τοῖς μὲν θερμότεροις καὶ ἄρρεσι τῶν ἐναίμων εὐογκον τῷ πλήθει, διὸ τὰ δεκτικὰ μόρια πόροι ταύτης τῆς περιπτώσεως εἰσι τοῖς ἄρρεσιν· τοῖς δὲ θήλεσι δι' ἀπεψίαν πλῆθος αἱματικόν (ἀκατέργαστον γάρ), ὥστε καὶ μόριον δεκτικὸν ἀναγκαῖον εἶναι τι, καὶ εἶναι τοῦτο ἀνόμοιον καὶ μέγεθος ἔχειν. διὸ τῆς ὑστέρας τοιαύτη ἢ φύσις ἐστίν. τούτῳ δὲ τὸ θῆλυ διαφέρει τῷ μορίῳ τοῦ ἄρρενος.

## Κεφάλαιο 2

Διὰ τίνα μὲν οὖν αἰτίαν γίγνεται τὸ μὲν θῆλυ τὸ δ' ἄρρεν εἴρηται.

Τεκμήρια δὲ τὰ συμβαίνοντα τοῖς εἰρημένοις. τά τε γὰρ νέα θηλυτόκα μᾶλλον τῶν ἀκμαζόντων, καὶ τὰ πρεσβύτερα μᾶλλον· τοῖς μὲν γὰρ οὕτω τέλειον τὸ θερμὸν τοῖς δ' ἀπολείπει. καὶ τὰ μὲν ὑγρότερα τῶν σωμάτων καὶ γυναικικώτερα θηλυγόνα μᾶλλον, καὶ τὰ σπέρματα τὰ ὑγρά τῶν συνεστηκότων. πάντα γὰρ ταῦτα γίνεται δι' ἔνδειαν θερμότητος φυσικῆς, καὶ τὸ βορείοις ἀρρενοτοκεῖν μᾶλλον ἢ νοτίοις· <ὑγρότερα γὰρ τὰ σώματα νοτίοις> (34b) ὥστε καὶ περιττωματικώτερα. τὸ δὲ πλεῖον περίττωμα δυσπεπτότερον· διὸ τοῖς μὲν ἄρρεσιν ὑγρότερον τὸ (767a.) σπέρμα, ταῖς δὲ γυναιξὶν ἢ τῶν καταμηνίων ἔκκρισις.

Καὶ τὸ γίνεσθαι δὲ τὰ καταμήνια κατὰ φύσιν φθινόντων τῶν μηνῶν μᾶλλον διὰ τὴν αὐτὴν αἰτίαν συμβαίνει. ψυχρότερος γὰρ ὁ χρόνος οὗτος τοῦ μηνὸς καὶ ὑγρότερος διὰ τὴν φθίσιν καὶ τὴν ἀπόλειπιν τῆς σελήνης· ὁ μὲν γὰρ ἥλιος ἐν ὅλῳ τῷ ἐνιαυτῷ ποιεῖ χειμῶνα καὶ θέρος, ἡ δὲ σελήνη ἐν τῷ μηνί (τοῦτο δ' οὐ διὰ τὰς τροπὰς, ἀλλὰ τὸ μὲν αὐξανομένου συμβαίνει τοῦ φωτὸς τὸ δὲ φθίνοντος). φασι δὲ καὶ οἱ νομεῖς διαφέρειν πρὸς θηλυγονίαν καὶ ἀρρενογονίαν οὐ μόνον ἔαν συμβαίνει τὴν ὀχείαν γίνεσθαι βορείοις ἢ νοτίοις ἀλλὰ καὶ ὅχευόμενα βλέπη πρὸς νότον ἢ βορέαν· οὕτω μικρὰν ἐνίστε ῥοπὴν αἰτίαν γίνεσθαι τῆς ψυχρότητος καὶ θερμότητος, ταῦτα δὲ τῆς γενέσεως.

Διέστηκε μὲν οὖν ὅλως πρὸς ἄλληλα τό τε θῆλυ καὶ τὸ ἄρρεν πρὸς τὴν ἀρρενογονίαν καὶ θηλυγονίαν διὰ τὰς εἰρημένας αἰτίας, οὐ μὴν ἀλλὰ καὶ δεῖ συμμετρίας πρὸς ἄλληλα· πάντα γὰρ τὰ γινόμενα κατὰ τέχνην ἢ φύσιν λόγῳ τινὶ ἔστιν. τὸ δὲ θερμὸν λίαν μὲν κρατοῦν ξηραίνει τὰ ὑγρά, πολὺ δὲ ἐλλεῖπον οὐ συνίστησιν, ἀλλὰ δεῖ πρὸς τὸ δημιουργούμενον ἔχειν τοῦτον τὸν τοῦ μέσου λόγον· εἰ δὲ μή, καθάπερ ἐν τοῖς ἐπομένοις προσκάει μὲν τὸ πλεῖον πῦρ, οὐχ ἔψει δὲ τὸ ἔλαττον, ἀμφοτέρως δὲ συμβαίνει μὴ τελειοῦσθαι τὸ γινόμενον, οὕτω καὶ ἐν τῇ τοῦ ἄρρενος μίξει καὶ τοῦ θήλεος δεῖ τῆς συμμετρίας. καὶ διὰ τοῦτο πολλοῖς καὶ πολλαῖς συμβαίνει μετ' ἀλλήλων μὲν μὴ γεννᾶν, διαζευχθεῖσι δὲ γεννᾶν, καὶ ὅτε μὲν νέοις ὅτε δὲ πρεσβυτέροις οὗσι ταύτας γίνεσθαι τὰς ὑπεναντιώσεις, ὁμοίως περί τε γένεσιν καὶ ἀγονίαν καὶ ἀρρενογονίαν καὶ θηλυγονίαν. διαφέρει δὲ καὶ χώρα χώρας εἰς ταῦτα καὶ ὕδωρ ὕδατος διὰ τὰς αὐτὰς αἰτίας· ποῖα γάρ τις ἢ τροφή γίνεταί μάλιστα καὶ τοῦ σώματος ἢ διάθεσις διὰ τε τὴν κρᾶσιν τοῦ περιεστῶτος ἀέρος καὶ τῶν εἰσιόντων, μάλιστα δὲ διὰ τὴν τοῦ ὕδατος τροφήν· τοῦτο γὰρ πλεῖστον εἰσφέρονται, καὶ ἐν πᾶσιν ἔστι τροφή τοῦτο, καὶ ἐν τοῖς ξηροῖς. διὸ καὶ τὰ ἀτέραμνα ὕδατα καὶ ψυχρὰ τὰ μὲν ἀτεκνίαν ποιεῖ τὰ δὲ θηλυτοκίαν.

### Κεφάλαιο 3

Αί δ' αὐταὶ αἰτίαι καὶ τοῦ τὰ μὲν ἐοικότα γίνεσθαι τοῖς τεκνώσασιν τὰ δὲ μὴ ἐοικότα, καὶ τὰ μὲν πατρὶ τὰ (767b.) δὲ μητρὶ κατὰ τε ὅλον τὸ σῶμα καὶ κατὰ μόριον ἕκαστον, καὶ μᾶλλον αὐτοῖς ἢ τοῖς προγόνοις, καὶ τούτοις ἢ τοῖς τυχοῦσι, καὶ τὰ μὲν ἄρρενα μᾶλλον τῷ πατρὶ τὰ δὲ θήλεα τῇ μητρὶ, τὰ δ' οὐθενὶ τῶν συγγενῶν ὅμως δ' ἀνθρώπῳ γέ τι, τὰ δ' οὐδ' ἀνθρώπῳ τὴν ἰδέαν ἄλλ' ἤδη τέρατι. καὶ γὰρ ὁ μὴ ἐοικῶς τοῖς γονεῦσιν ἤδη τρόπον τινὰ τέρας ἐστίν· παρεκβέβηκε γὰρ ἡ φύσις ἐν τούτοις ἐκ τοῦ γένους τρόπον τινά. ἀρχὴ δὲ πρώτη τὸ θῆλυ γίνεσθαι καὶ μὴ ἄρρεν-ἄλλ' αὕτη μὲν ἀναγκαῖα τῇ φύσει· δεῖ γὰρ σώζεσθαι τὸ γένος τῶν κεχωρισμένων κατὰ τὸ θῆλυ καὶ τὸ ἄρρεν, ἐνδεχομένου δὲ μὴ κρατεῖν ποτε τοῦ ἄρρενος, ἢ διὰ νεότητα ἢ γῆρας ἢ δι' ἄλλην τινὰ αἰτίαν τοιαύτην, ἀνάγκη γίνεσθαι θηλυτοκίαν ἐν τοῖς ζώοις. τὸ δὲ τέρας οὐκ ἀναγκαῖον πρὸς τὴν ἕνεκά του καὶ τὴν τοῦ τέλους αἰτίαν, ἀλλὰ κατὰ συμβεβηκὸς ἀναγκαῖον, ἐπεὶ τὴν γ' ἀρχὴν ἐντεῦθεν δεῖ λαμβάνειν. εὐπέπτου μὲν γὰρ οὔσης τῆς περιπτώσεως ἐν τοῖς καταμηνίοις τῆς σπερματικῆς καθ' αὐτὴν ποιήσει τὴν μορφήν ἢ τοῦ ἄρρενος κίνησις· τὸ γὰρ γονὴν λέγειν ἢ κίνησιν τὴν αὔξουσιν ἕκαστον τῶν μορίων οὐθὲν διαφέρει, οὐδὲ τὴν αὔξουσιν ἢ τὴν συνιστᾶσαν ἐξ ἀρχῆς· ὁ γὰρ αὐτὸς λόγος τῆς κινήσεως. ὥστε κρατούσης μὲν ἄρρεν τε ποιήσει καὶ οὐ θῆλυ, καὶ ἐοικὸς τῷ γεννῶντι ἄλλ' οὐ τῇ μητρὶ· μὴ κρατῆσαν δέ, καθ' ὁποίαν ἂν μὴ κρατήσῃ δύναμιν, τὴν ἔλλειψιν ποιεῖ κατ' αὐτήν. λέγω δ' ἐκάστην δύναμιν τόνδε τὸν τρόπον· τὸ γεννῶν ἐστὶν οὐ μόνον ἄρρεν ἀλλὰ καὶ τοῖον ἄρρεν οἷον Κορίσκος ἢ Σωκράτης, καὶ οὐ μόνον Κορίσκος ἐστὶν ἀλλὰ καὶ ἄνθρωπος. καὶ τοῦτον δὴ τὸν τρόπον τὰ μὲν ἐγγύτερον τὰ δὲ πορρώτερον ὑπάρχει τῷ γεννῶντι καθὸ γεννητικόν, ἀλλ' οὐ κατὰ συμβεβηκὸς οἷον εἰ γραμματικὸς ὁ γεννῶν ἢ γεῖτων τινός. ἀεὶ δ' ἰσχύει πρὸς τὴν γένεσιν μᾶλλον τὸ ἴδιον καὶ τὸ καθ' ἕκαστον. ὁ γὰρ Κορίσκος καὶ ἄνθρωπος ἐστὶ καὶ ζῶον, ἀλλ' ἐγγύτερον τοῦ ἰδίου τὸ ἄνθρωπος ἢ τὸ ζῶον. γεννᾷ δὲ καὶ τὸ καθ' ἕκαστον καὶ τὸ γένος, ἀλλὰ μᾶλλον τὸ καθ' ἕκαστον· τοῦτο γὰρ ἡ οὐσία. καὶ γὰρ τὸ γιγνόμενον γίγνεται μὲν καὶ ποιόν τι, ἀλλὰ καὶ τόδε τι-καὶ τοῦθ' ἡ οὐσία. διόπερ ἀπὸ τῶν δυνάμεων ὑπάρχουσιν αἱ κινήσεις ἐν τοῖς σπέρμασι πάντων τῶν τοιούτων, δυνάμει δὲ καὶ τῶν προγόνων, μᾶλλον δὲ τοῦ ἐγγύτερον ἀεὶ (768a.) τῶν καθ' ἕκαστόν τινος· λέγω δὲ καθ' ἕκαστον τὸν Κορίσκον καὶ τὸν Σωκράτην. ἐπεὶ δ' ἐξίσταται πᾶν οὐκ εἰς τὸ τυχὸν ἀλλ' εἰς τὸ ἀντικείμενον, καὶ τὸ ἐν τῇ γενέσει μὴ κρατούμενον ἀναγκαῖον ἐξίστασθαι καὶ γίνεσθαι τὸ ἀντικείμενον καθ' ἣν δύναμιν οὐκ ἐκράτησε τὸ γεννῶν καὶ κινεῖν. ἐὰν μὲν οὖν ἢ ἄρρεν θῆλυ γίγνεται, ἐὰν δὲ ἢ Κορίσκος ἢ Σωκράτης οὐ τῷ πατρὶ

ἐοικὸς ἀλλὰ τῇ μητρὶ γίγνεται· ἀντίκειται γὰρ ὥσπερ τῷ ὅλως πατρὶ μήτηρ καὶ τῷ καθ' ἕκαστον γεννῶντι ἢ καθ' ἕκαστον γεννῶσα. ὁμοίως δὲ καὶ κατὰ τὰς ἐχομένας δυνάμεις· αἰεὶ γὰρ εἰς τὸν ἐχόμενον μεταβαίνει μᾶλλον τῶν προγόνων, καὶ ἐπὶ πατέρων καὶ ἐπὶ μητέρων. ἔνεισι δ' αἱ μὲν ἐνεργεῖα τῶν κινήσεων αἱ δὲ δυνάμει, ἐνεργεῖα μὲν αἱ τοῦ γεννῶντος καὶ τοῦ καθόλου οἶον ἀνθρώπου καὶ ζώου, δυνάμει δὲ αἱ τοῦ θήλεος καὶ τῶν προγόνων. μεταβάλλει μὲν οὖν ἐξιστάμενον πρὸς τὰ ἀντικείμενα, λύονται δὲ αἱ κινήσεις αἱ δημιουργοῦσαι εἰς τὰς ἐγγύς, οἶον ἢ τοῦ γεννῶντος ἢ λυθῇ κινήσεις ἐλαχίστη διαφορᾷ μεταβαίνει εἰς τὴν τοῦ πατρός, δεύτερον δ' εἰς τὴν τοῦ πάππου· καὶ τοῦτον δὴ τὸν τρόπον [καὶ ἐπὶ τῶν ἄρρένων] καὶ ἐπὶ τῶν θηλειῶν ἢ τῆς γεννώσης εἰς τὴν τῆς μητρός, ἔαν δὲ μὴ εἰς ταύτην εἰς τὴν τῆς τήθης· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄνωθεν.

Μάλιστα μὲν οὖν πέφυκεν ἡ ἄρρεν καὶ ἡ πατὴρ ἅμα κρατεῖν καὶ κρατεῖσθαι· μικρὰ γὰρ ἡ διαφορὰ ὥστ' οὐκ ἔργον ἅμα συμβῆναι ἀμφοτέρω. ὁ γὰρ Σωκράτης ἀνὴρ τοιόσδε τις. διὸ ὡς ἐπὶ τὸ πολὺ τὰ μὲν ἄρρενα τῷ πατρὶ ἔοικεν τὰ δὲ θήλεα τῇ μητρὶ, ἅμα γὰρ εἰς ἄμφω ἔκστασις ἐγένετο· ἀντίκειται δὲ τῷ μὲν ἄρρενι τὸ θῆλυ τῷ δὲ πατρὶ ἡ μήτηρ, ἡ δ' ἔκστασις εἰς τὰ ἀντικείμενα. ἔαν δ' ἡ μὲν ἀπὸ τοῦ ἄρρενος κρατήσῃ κινήσεις ἡ δ' ἀπὸ τοῦ Σωκράτους μὴ κρατήσῃ, ἡ αὕτη μὲν ἐκείνη δὲ μή, τότε συμβαίνει γίνεσθαι ἄρρενά τε μητρὶ ἐοικότα καὶ θήλεα πατρὶ. ἔαν δὲ λυθῶσιν αἱ κινήσεις, καὶ ἡ μὲν ἄρρεν μείνῃ, ἡ δὲ τοῦ Σωκράτους λυθῇ εἰς τὴν τοῦ πατρός, ἔσται ἄρρεν τῷ πάππῳ ἐοικὸς ἢ τῶν ἄλλων τινὲς τῶν ἄνωθεν προγόνων κατὰ τοῦτον τὸν λόγον· κρατηθέντος δὲ ἡ ἄρρεν θῆλυ ἔσται καὶ ἐοικὸς μάλιστα μὲν τῇ μητρὶ, ἔαν δὲ καὶ αὕτη λυθῇ ἡ κινήσεις μητρὶ μητρὸς ἢ ἄλλῃ τινὲς τῶν ἄνωθεν ἔσται (768b.) ἢ ὁμοίότης κατὰ τὸν αὐτὸν λόγον. ὁ δ' αὐτὸς τρόπος καὶ ἐπὶ τῶν μορίων· καὶ γὰρ τῶν μορίων τὰ μὲν τῷ πατρὶ ἔοικε πολλάκις τὰ δὲ τῇ μητρὶ τὰ δὲ τῶν προγόνων τισίν· ἔνεισι γὰρ καὶ τῶν μορίων αἱ μὲν ἐνεργεῖα κινήσεις αἱ δὲ δυνάμει, καθάπερ εἴρηται πολλάκις. καθόλου δὲ δεῖ λαβεῖν ὑποθέσεις, μίαν μὲν τὴν εἰρημένην ὅτι ἔνεισι τῶν κινήσεων αἱ μὲν δυνάμει αἱ δ' ἐνεργεῖα, ἄλλας δὲ δύο ὅτι κρατούμενον μὲν ἐξίσταται εἰς τὸ ἀντικείμενον, λυόμενον δὲ εἰς τὴν ἐχομένην κίνησιν, καὶ ἦττον μὲν λυόμενον εἰς τὴν ἐγγύς μᾶλλον δὲ εἰς τὴν πορρώτερον. τέλος δ' οὕτω συγχέονται ὥστε μηθενὶ ἐοικέναι τῶν οἰκείων καὶ συγγενῶν ἀλλὰ λείπεσθαι τὸ κοινὸν μόνον καὶ εἶναι ἄνθρωπον. τούτου δ' αἴτιον ὅτι πᾶσιν ἀκολουθεῖ τοῦτο τοῖς καθ' ἕκαστον· καθόλου γὰρ ὁ ἄνθρωπος, ὁ δὲ Σωκράτης πατὴρ καὶ ἡ μήτηρ ἥτις ποτ' ἦν τῶν καθ' ἕκαστον.

Αἴτιον δὲ τοῦ μὲν λύεσθαι τὰς κινήσεις ὅτι τὸ ποιοῦν καὶ πάσχει ὑπὸ τοῦ

πάσχοντος, οἷον τὸ τέμνον ἀμβλύνεται ὑπὸ τοῦ τεμνομένου καὶ τὸ θερμαῖνον ψύχεται ὑπὸ τοῦ θερμαινομένου, καὶ ὅλως τὸ κινοῦν ἔξω τοῦ πρώτου ἀντικινεῖται τινα κίνησιν οἷον τὸ ὠθοῦν ἀντωθεῖται πως καὶ ἀντιθλίβεται τὸ θλίβον, ἐνίοτε δὲ καὶ ὅλως ἔπαθε μᾶλλον ἢ ἐποίησεν, καὶ ἐψύχθη μὲν τὸ θερμαῖνον ἐθερμάνθη δὲ τὸ ψῦχον, ὅτε μὲν οὐθὲν ποιῆσαν ὅτε δὲ ἥττον ἢ παθόν· εἴρηται δὲ περὶ αὐτῶν ἐν τοῖς περὶ τοῦ ποιεῖν καὶ πάσχειν διωρισμένοις, ἐν ποίοις ὑπάρχει τῶν ὄντων τὸ ποιεῖν καὶ πάσχειν.

Ἐξίσταται δὲ τὸ πάσχον καὶ οὐ κρατεῖται ἢ δι' ἑλλειψιν δυνάμεως τοῦ πέττοντος καὶ κινοῦντος ἢ διὰ πλῆθος καὶ ψυχρότητα τοῦ πεττομένου καὶ διοριζομένου· τῇ μὲν γὰρ κρατοῦν τῇ δὲ οὐ κρατοῦν ποιεῖ πολύμορφον τὸ συνιστάμενον, οἷον ἐπὶ τῶν ἀθλητῶν συμβαίνει διὰ τὴν πολυφαγίαν· διὰ πλῆθος γὰρ τροφῆς οὐ δυναμένης τῆς φύσεως κρατεῖν ὥστ' ἀνάλογον αὔξειν καὶ διαμένειν ὁμοίαν τὴν μορφήν, ἄλλοιᾳ γίνεταί τὰ μέρη καὶ σχεδὸν ἐνίοθ' οὕτως ὥστε μὴθὲν εἰκέναι τῷ πρότερον. παραπλήσιον δὲ τούτῳ καὶ τὸ νόσημα τὸ καλούμενον σατυριᾶν· καὶ γὰρ ἐν τούτῳ διὰ ῥεύματος [ἢ πνεύματος] ἀπέπτου πλῆθος εἰς μόρια τοῦ προσώπου παρεμπεσόντος ἄλλου ζώου καὶ σατύρου φαίνεται τὸ πρόσωπον.

(769a.) Διὰ τίνα μὲν οὖν αἰτίαν θήλεα καὶ ἄρρενα γίνεταί, καὶ τὰ μὲν εἰκότα τοῖς γονεῦσι, θήλεά τε θήλεσι καὶ ἄρρενα ἄρρεσι, τὰ δ' ἀνάπαλιν θήλεά τε τῷ πατρὶ καὶ ἄρρενα τῇ μητρὶ, καὶ ὅλως τὰ μὲν τοῖς προγόνους εἰκοι τὰ δ' οὐθενί, καὶ ταῦτα καὶ καθ' ὅλον τὸ σῶμα καὶ τῶν μορίων ἕκαστον, διώριστα περὶ πάντων.

Εἰρήκασι δέ τινες τῶν φυσιολόγων καὶ ἕτεροι περὶ τούτων διὰ τίν' αἰτίαν ὅμοια καὶ ἀνόμοια γίνεταί τοῖς γονεῦσιν· δύο δὴ τρόπους λέγουσι τῆς αἰτίας. ἔνιοι μὲν γὰρ φασιν ἅφ' ὁποτέρου ἂν ἔλθῃ σπέρμα πλέον τούτῳ γίνεσθαι μᾶλλον εἰκότος, ὁμοίως παντί τε πᾶν καὶ μέρει μέρος, ὡς ἀπρόντος ἅφ' ἑκάστου τῶν μορίων σπέρματος· ἂν δ' ἴσον ἔλθῃ ἅφ' ἑκατέρου τούτων οὐδετέρῳ γίνεσθαι ὅμοιον. εἰ δὲ τοῦτ' ἔστι ψεῦδος καὶ μὴ ἀπὸ παντὸς ἀπέρχεται δῆλον ὡς οὐδὲ τῆς ὁμοιότητος καὶ ἀνομοιότητος αἴτιον ἂν εἴη τὸ λεχθέν. ἔτι δὲ πῶς ἅμα θῆλυ μὲν πατρὶ εἰκότος ἄρρεν δὲ μητρὶ εἰκότος οὐκ εὐπόρως δύνανται διορίζειν· οἱ μὲν γὰρ ὥσπερ Ἐμπεδοκλῆς λέγοντες ἢ Δημόκριτος περὶ τοῦ θήλεος καὶ ἄρρενος τὴν αἰτίαν ἄλλον τρόπον ἀδύνατα λέγουσιν· οἱ δὲ τῷ πλεῖον ἢ ἔλαττον ἀπέναι ἀπὸ τοῦ ἄρρενος ἢ θήλεος, διὰ τοῦτο γίνεσθαι τὸ μὲν θῆλυ τὸ δ' ἄρρεν, οὐκ ἂν ἔχοιεν ἀποδεῖξαι τίνα τρόπον τό τε θῆλυ τῷ πατρὶ εἰκότος ἔσται καὶ τὸ ἄρρεν τῇ μητρὶ· ἅμα γὰρ ἐλθεῖν πλεῖον ἅπ' ἀμφοτέρων ἀδύνατον. ἔτι δὲ διὰ τίν' αἰτίαν εἰκότος γίνεταί

τοῖς προγόνοις ὥς ἐπὶ τὸ πολὺ καὶ τοῖς ἄποθεν; οὐ γὰρ ἀπ' ἐκείνων γ' ἀπελήλυθεν οὐθὲν τοῦ σπέρματος.

Ἀλλὰ μᾶλλον οἱ τὸν λειπόμενον τρόπον λέγοντες περὶ τῆς ὁμοιότητος καὶ τᾶλλα βέλτιον καὶ τοῦτο λέγουσιν. εἰσὶ γάρ τινες οἱ φασὶ τὴν γονὴν μίαν οὔσαν οἷον πανσπερμίαν εἶναι τινα πολλῶν· ὥσπερ οὖν εἴ τις κεράσειε πολλοὺς χυμοὺς εἰς ἓν ὑγρὸν κᾶπειτ' ἐντεῦθεν λαμβάνοι, καὶ δύναιτ' ἂν λαμβάνειν μὴ ἴσον ἀεὶ ἀφ' ἐκάστου, ἀλλ' ὅτε μὲν τοῦ τοιοῦδε πλεῖον ὅτε δὲ τοῦ τοιοῦδε, ὅτε δὲ τοῦ μὲν λαβεῖν τοῦ δὲ μηθὲν λαβεῖν-τοῦτο συμβαίνειν καὶ ἐπὶ τῆς γονῆς πολυμιγοῦς οὔσης· ἀφ' οὗ γὰρ ἂν τῶν γεννώντων πλεῖστον ἐγγένηται, τούτῳ γίνεσθαι τὴν μορφήν ἐοικός. οὗτος δὲ ὁ λόγος οὐ σαφὴς μὲν καὶ πλασματίας ἐστὶ πολλαχῇ, (769b.) βούλεται δὲ καὶ βέλτιον λέγειν μὴ ἐνεργεῖα ὑπάρχειν ἀλλὰ κατὰ δύναμιν ἣν λέγει πανσπερμίαν· ἐκείνως μὲν γὰρ ἀδύνατον, οὕτως δὲ δυνατόν.

Οὐ ῥάδιον δὲ οὐδὲ τρόπον ἓνα τῆς αἰτίας ἀποδιδόντας τὰς αἰτίας εἰπεῖν περὶ πάντων· τοῦ τε γίνεσθαι θῆλυ καὶ ἄρρεν, καὶ διὰ τί τὸ μὲν θῆλυ τῷ πατρὶ πολλάκις <ὅμοιον> τὸ δ' ἄρρεν τῇ μητρί, καὶ πάλιν τῆς πρὸς τοὺς προγόνους ὁμοιότητος, ἔτι δὲ διὰ τίν' αἰτίαν ὅτε μὲν ἄνθρωπος μὲν τούτων δ' οὐθενὶ προσόμοιος, ὅτε δὲ προῖδὼν οὕτω τέλος οὐδὲ ἄνθρωπος ἀλλὰ ζῶόν τι μόνον φαίνεται τὸ γινόμενον, ἃ δὴ καὶ λέγεται τέρατα.

Καὶ γὰρ ἐχόμενον τῶν εἰρημένων ἐστὶν εἰπεῖν περὶ τῶν τοιούτων τὰς αἰτίας. τέλος γὰρ τῶν μὲν κινήσεων λυομένων τῆς δ' ὕλης οὐ κρατουμένης μένει τὸ καθόλου μάλιστα-τοῦτο δ' ἐστὶ τὸ ζῶον. τὸ δὲ γινόμενον κριοῦ κεφαλὴν φασὶν ἢ βοὸς ἔχειν καὶ ἐν τοῖς ἄλλοις ὁμοίως ἑτέρου ζώου, μόσχον παιδὸς κεφαλὴν ἢ πρόβατον βοός. ταῦτα δὲ πάντα συμβαίνει μὲν διὰ τὰς προειρημένας αἰτίας, ἔστι δ' οὐθὲν ὧν λέγουσιν ἀλλ' ἐοικότα μόνον-ὅπερ γίνεται καὶ μὴ πεπηρωμένων. διὸ πολλάκις οἱ σκώπτοντες εἰκάζουσι τῶν μὴ καλῶν ἐνίους τοὺς μὲν αἰγὶ φυσῶντι πῦρ τοὺς δ' οἷι κυρίττοντι. φυσιογνώμων δέ τις ἀνῆγε πάσας εἰς δύο ζώων ἢ τριῶν ὄψεις, καὶ συνέπειθε πολλάκις λέγων. ὅτι δ' ἐστὶν ἀδύνατον γίνεσθαι τέρας τοιοῦτον, ἕτερον ἐν ἑτέρῳ ζῶον, δηλοῦσιν οἱ χρόνοι τῆς κυήσεως πολὺ διαφέροντες ἀνθρώπου καὶ προβάτου καὶ κυνὸς καὶ βοός· ἀδύνατον δ' ἕκαστον γενέσθαι μὴ κατὰ τοὺς οἰκείους χρόνους.

Τὰ μὲν οὖν τοῦτον τὸν τρόπον λέγεται τῶν τεράτων, τὰ δὲ τῷ πολυμερῇ τὴν μορφήν ἔχειν, πολύποδα καὶ πολυκέφαλα γινόμενα.

Πάρεγγυς δ' οἱ λόγοι τῆς αἰτίας καὶ παραπλήσιοι τρόπον τινά εἰσιν οἳ τε περὶ τῶν τεράτων καὶ οἱ περὶ τῶν ἀναπήρων ζώων· καὶ γὰρ τὸ τέρας ἀναπηρία τίς ἐστίν.

## Κεφάλαιο 4

Δημόκριτος μὲν οὖν ἔφησε γίνεσθαι τὰ τέρατα διὰ τὸ δύο γονᾶς πίπτειν, τὴν μὲν πρότερον ὀρμήσασαν <καὶ μὴ ἐξελθοῦσαν> τὴν δ' ὕστερον καὶ ταύτην [ἐξελθοῦσαν] ἐλθεῖν εἰς τὴν ὑστέρα, ὥστε συμφύεσθαι καὶ ἐπαλλάττειν τὰ μόρια. ταῖς δ' ὀρνισιν ἐπεὶ συμβαίνει ταχεῖαν γίνεσθαι τὴν ὀχείαν αἰεὶ, τὰ τ' ὡς καὶ τὴν χροᾶν αὐτῶν ἐπαλλάττειν φησίν. εἰ δὲ συμβαίνει ἐξ ἑνὸς (770a.) σπέρματος πλείω γίνεσθαι καὶ μιᾶς συνουσίας, ὅπερ φαίνεται, βέλτιον μὴ κύκλῳ περιέναι παρέντας τὴν σύντομον· τοῖς γὰρ τοιούτοις μάλιστ' ἀναγκαῖον τοῦτο συμβαίνειν ὅταν μὴ διακριθῶσιν ἀλλ' ἅμα τὰ σπέρματα ἔλθωσιν. εἰ μὲν οὖν αἰτιάσασθαι δεῖ τὴν ἀπὸ τοῦ ἄρρενος γονήν, τοῦτον ἂν τὸν τρόπον εἴη λεκτέον· ὅλως δὲ μᾶλλον τὴν αἰτίαν οἰητέον ἐν τῇ ὕλῃ καὶ τοῖς συνισταμένοις κυήμασιν εἶναι. διὸ καὶ γίνονται τὰ τοιαῦτα τῶν τεράτων ἐν μὲν τοῖς μονοτόκοις σπάνια πάμπαν, ἐν δὲ τοῖς πολυτόκοις μᾶλλον, καὶ μάλιστ' ἐν ὀρνισι, τῶν δ' ὀρνίθων ἐν ταῖς ἀλεκτορίσιν· αὗται γὰρ πολυτοκοῦσιν οὐ μόνον τῷ πολλάκις τίκτειν ὥσπερ τὸ τῶν περιστερῶν γένος ἀλλὰ καὶ τῷ πολλὰ ἅμα ἔχειν κυήματα καὶ πᾶσαν ὥραν ὀχεύεσθαι. διόπερ καὶ πολλὰ δίδυμα τίκτουσιν· συμφύεται γὰρ διὰ τὸ πλησίον ἀλλήλων εἶναι τὰ κυήματα καθάπερ ἐνίοτε πολλὰ τῶν περικαρπίων. τούτων δὲ ὅσων μὲν ἂν αἱ λέκιθοι διορίζονται κατὰ τὸν ὕμένα, δύο γίνονται νεοττοὶ κεχωρισμένοι περιττὸν οὐδὲν ἔχοντες, -ὅσων δὲ συνεχεῖς καὶ μὴ διείργει μηθέν, ἐκ τούτων οἱ νεοττοὶ γίνονται τερατώδεις, σῶμα μὲν καὶ κεφαλὴν μίαν ἔχοντες σκέλη δὲ τέτταρα καὶ πτέρυγας διὰ τὸ τὰ μὲν ἄνωθεν ἐκ τοῦ λευκοῦ γίνεσθαι καὶ πρότερον, ταμιευομένης ἐκ τῆς λεκίδου τῆς τροφῆς αὐτοῖς, τὸ δὲ κάτω μόριον ὑστερίζει μὲν, τὴν δὲ τροφήν εἶναι μίαν καὶ ἀδιόριστον.

Ἦδη δὲ καὶ ὄφιν ὥπται δικέφαλος διὰ τὴν αὐτὴν αἰτίαν· ὠοτοκεῖ γὰρ καὶ πολυτοκεῖ καὶ τοῦτο τὸ γένος. σπανιώτερον δὲ τὸ τερατώδες ἐπ' αὐτῶν διὰ τὸ σχῆμα τῆς ὑστέρας· στοιχηδὸν γὰρ κεῖται τὸ πλῆθος τῶν ὠῶν διὰ τὸ μῆκος αὐτῆς. καὶ περὶ τὰς μελίττας καὶ τοὺς σφῆκας οὐδὲν γίγνεται τοιοῦτον· ἐν κεχωρισμένοις γὰρ κυτταρίοις ὁ τόκος ἐστὶν αὐτῶν. περὶ δὲ τὰς ἀλεκτορίδας τοῦναντίον συμβέβηκεν, ἥ καὶ δῆλον ὡς ἐν τῇ ὕλῃ τὴν αἰτίαν δεῖ νομίζειν τῶν τοιούτων· καὶ γὰρ τῶν ἄλλων ἐν τοῖς πολυτόκοις μᾶλλον. διὸ ἐν ἀνθρώπῳ ἦττον· ὡς γὰρ ἐπὶ τὸ πολὺ μονοτόκον ἐστὶ καὶ τελειογόνον, ἐπεὶ καὶ τούτων ἐν οἷς τόποις πολύγονοι αἱ γυναῖκες εἰσι τοῦτο συμβαίνει



μᾶλλον, οἷον περὶ Αἴγυπτον. ἐν δὲ ταῖς αἰξὶ καὶ τοῖς προβάτοις γίνεταί μᾶλλον· πολυτοκώτερα γάρ ἐστιν. ἔτι δὲ μᾶλλον ἐν τοῖς πολυσχιδέσιν· πολυτόκα γάρ ἐστι τὰ (770b.) τοιαῦτα τῶν ζώων καὶ οὐ τελειογόνα, καθάπερ ἡ κύων· τὰ γὰρ πολλὰ τίκει τυφλὰ τούτων. δι' ἣν δ' αἰτίαν τοῦτο συμβαίνει καὶ δι' ἣν αἰτίαν πολυτοκοῦσιν ὕστερον λεκτέον. ἀλλὰ προωδοποιῆται τῇ φύσει πρὸς τὸ τερατοτοκεῖν τῷ μὴ γεννᾶν ὅμοια διὰ τὴν ἀτέλειαν· ἔστι δὲ καὶ τὸ τέρας τῶν ἀνομοίων. διόπερ ἐπαλλάττει τοῦτο τὸ σύμπτωμα τοῖς τοιούτοις τὴν φύσιν. ἐν γὰρ τούτοις μάλιστα γίνεταί καὶ τὰ μετὰχοιρα καλούμενα. ταῦτα δ' ἐστὶ κατὰ τι πεπονθότα τερατῶδες· τὸ γὰρ ἐκλείπειν ἢ προσεῖναι τι τερατῶδες. ἔστι γὰρ τὸ τέρας τῶν παρὰ φύσιν τι, παρὰ φύσιν δ' οὐ πᾶσαν ἀλλὰ τὴν ὥς ἐπὶ τὸ πολὺ· περὶ γὰρ τὴν ἀεὶ καὶ τὴν ἐξ ἀνάγκης οὐθὲν γίνεταί παρὰ φύσιν, ἀλλ' ἐν τοῖς ὥς ἐπὶ τὸ πολὺ μὲν οὕτω γιγνομένοις ἐνδεχομένοις δὲ καὶ ἄλλως, ἐπεὶ καὶ τούτων ἐν ὅσοις συμβαίνει παρὰ τὴν τάξιν μὲν ταύτην, ἀεὶ μέντοι μὴ τυχόντως, ἦττον εἶναι δοκεῖ τέρας διὰ τὸ καὶ τὸ παρὰ φύσιν εἶναι τρόπον τινὰ κατὰ φύσιν, ὅταν μὴ κρατήσῃ τὴν κατὰ τὴν ὕλην ἢ κατὰ τὸ εἶδος φύσιν. διόπερ οὔτε τὰ τοιαῦτα τέρατα λέγουσιν οὕτ' ἐν τοῖς ἄλλοις ἐν ὅσοις εἴωθέ τι γίγνεσθαι, καθάπερ ἐν τοῖς περικαρπίοις. ἔστι γὰρ τις ἄμπελος ἣν καλοῦσιν τινες κάπνεον, ἣν ἂν ἐνέγκῃ μέλανας βότρυας οὐ κρίνουσι τέρας διὰ τὸ πλειστάκις εἴωθέναι ταύτην τοῦτο ποιεῖν. αἴτιον δ' ὅτι μεταξὺ λευκῆς ἐστὶ τὴν φύσιν καὶ μελαίνης ὥστ' οὐ πόρρωθεν ἢ μετάβασιν οὐδ' ὥσπερανεὶ παρὰ φύσιν· οὐ γὰρ εἰς ἄλλην φύσιν. ἐν δὲ τοῖς πολυτόκοις ταῦτα συμβαίνει διὰ τὸ τὴν πολυτοκίαν ἐμποδίζειν τὰς τελειώσεις ἀλλήλων καὶ τὰς κινήσεις τὰς γεννητικάς.

Περὶ δὲ τῆς πολυτοκίας καὶ τοῦ πλεονασμοῦ τοῦ τῶν μερῶν, καὶ τῆς ὀλιγοτοκίας καὶ μονοτοκίας καὶ τῆς ἐνδεείας τῶν μερῶν ἀπορήσειεν ἂν τις. γίνεταί γὰρ ἐνίοτε τὰ μὲν πλείους ἔχοντα δακτύλους τὰ δ' ἓνα μόνον, καὶ περὶ τὰ ἄλλα μέρη τὸν αὐτὸν τρόπον· καὶ γὰρ πλεονάζει καὶ κολοβά γίνεταί. τὰ δὲ καὶ δύο ἔχοντα αἰδοῖα, τὸ μὲν ἄρρενος τὸ δὲ θήλεος, καὶ ἐν ἀνθρώποις καὶ μάλιστα περὶ τὰς αἰγας· γίνονται γὰρ ἅς καλοῦσι τραγαίνας διὰ τὸ θήλεος καὶ ἄρρενος ἔχειν αἰδοῖον· ἥδη δὲ καὶ κέρας αἰξ ἔχουσα ἐγένετο πρὸς τῷ σκέλει. γίνονται δὲ μεταβολαὶ καὶ (771a.) πηρώσεις <καὶ πλεονασμοὶ> καὶ περὶ τὰ ἐντὸς μόρια τῷ ἢ μὴ ἔχειν ἓνα ἢ κεκολωμένα ἔχειν καὶ πλείω καὶ μεθεστῶτα τοὺς τόπους.

καρδίαν μὲν οὖν οὐθὲν πώποτε ἐγένετο ζῶον οὐκ ἔχον, σπλῆνα δ' οὐκ ἔχον καὶ δύο ἔχον, καὶ νεφρὸν ἓνα· ἦπαρ δ' οὐκ ἔχον μὲν οὐθέν, οὐχ ὅλον δὲ ἔχον. ταῦτα δὲ πάντα ἐν τοῖς τελειωθεῖσι καὶ ζῶσιν. εὐρίσκεται καὶ χολὴν οὐκ ἔχοντα, πεφυκότα ἔχειν· τὰ δὲ πλείους ἔχοντα μιᾶς. ἥδη δ' ἐγένετο καὶ

μεθεσθηκότα κατὰ τόπον-τὸ μὲν ἦπαρ ἐν τοῖς ἀριστεροῖς, ὁ δὲ σπλὴν ἐν τοῖς δεξιοῖς. καὶ ταῦτα μὲν ἔν γε τετελεσμένοις ὥπται τοῖς ζώοις ὥσπερ εἴρηται· ἐν δὲ τοῖς τικτομένοις ἔχοντα πολλὴν καὶ παντοδαπὴν ταραχήν. τὰ μὲν οὖν μικρὸν παρεκβαίνοντα τὴν φύσιν ζῆν εἴωθεν, τὰ δὲ πλεῖον οὐ ζῆν ὅταν ἐν τοῖς κυρίοις τοῦ ζῆν γένηται τὸ παρὰ φύσιν.

Ἡ δὲ σκέψις ἐστὶν ἡ περὶ τούτων πότερον τὴν αὐτὴν αἰτίαν δεῖ νομίζειν τῆς μονοτοκίας καὶ τῆς ἐνδείας τῶν μερῶν καὶ τοῦ πλεονασμοῦ καὶ τῆς πολυτοκίας ἢ μὴ τὴν αὐτήν.

Πρῶτον μὲν οὖν διὰ τί τὰ μὲν ἐστὶ πολυτόκα τὰ δὲ μονοτόκα, τοῦτ' ἂν τις δόξειεν εὐλόγως θαυμάζειν. τὰ γὰρ μέγιστα μονοτόκα τῶν ζώων ἐστίν, οἷον ἐλέφας κάμηλος ἵππος καὶ τὰ μώνυχα· τούτων δὲ τὰ μὲν μείζω τῶν ἄλλων, τὰ δὲ πολὺ διαφέρει κατὰ τὸ μέγεθος. κύων δὲ καὶ λύκος καὶ τὰ πολυσχιδῆ πάντα πολυτόκα σχεδόν, καὶ τὰ μικρὰ τῶν τοιούτων οἷον τὸ τῶν μυῶν γένος. τὰ δὲ δίχηλα ὀλιγοτόκα πλὴν ὑός· αὕτη δὲ τῶν πολυτόκων ἐστίν. εὐλογον γὰρ τὰ μὲν μεγάλα πλείω δύνασθαι γεννᾶν καὶ σπέρμα φέρειν πλεῖον. αἴτιον δ' αὐτὸ τὸ θαυμαζόμενον τοῦ μὴ θαυμάζειν· διὰ γὰρ τὸ μέγεθος οὐ πολυτοκοῦσιν· ἡ γὰρ τροφή καταναλίσκεται τοῖς τοιούτοις εἰς τὴν αὔξησιν τοῦ σώματος-τοῖς δ' ἐλάττωσιν ἀπὸ τοῦ μεγέθους ἡ φύσις ἀφελοῦσα πρὸς τὸ περίττωμα προστίθῃσι τὸ σπερματικὸν τὴν ὑπεροχήν. ἔτι δὲ τὸ γεννῆσαν σπέρμα πλεῖον μὲν τὸ τοῦ μείζονος ἀναγκαῖον εἶναι, μικρὸν δὲ τὸ τῶν ἐλαττόνων.

πολλὰ μὲν οὖν μικρὰ γένοιτ' ἂν ἐν ταύτῳ, μεγάλα δὲ πολλὰ χαλεπόν. τοῖς δὲ μέσοις μεγέθεσι τὸ μέσον ἀπέδωκεν ἡ φύσις. τοῦ μὲν οὖν τὰ μὲν εἶναι μεγάλα τῶν ζώων τὰ δ' ἐλάττω τὰ δὲ μέσα πρότερον εἰρήκαμεν τὴν αἰτίαν· (771b.) μονοτόκα δέ, τὰ δ' ὀλιγοτόκα, τὰ δὲ πολυτόκα τῶν ζώων ἐστίν. ὥς μὲν ἐπὶ τὸ πολὺ τὰ μὲν μώνυχα μονοτόκα, τὰ δὲ δίχηλα ὀλιγοτόκα, τὰ δὲ πολυσχιδῆ πολυτόκα. τούτου δ' αἴτιον ὅτι ὥς ἐπὶ τὸ πολὺ τὰ μεγέθη διώριστα κατὰ τὰς διαφορὰς ταύτας. οὐ μὲν ἔχει γ' οὕτως ἐπὶ πάντων· αἴτιον γὰρ μέγεθος καὶ μικρότης τῶν σωμάτων τῆς ὀλιγοτοκίας καὶ πολυτοκίας ἄλλ' οὐ τὸ μώνυχον ἢ πολυσχιδὲς ἢ δίχηλον εἶναι τὸ γένος. τούτου δὲ μαρτύριον· ὁ γὰρ ἐλέφας μέγιστον τῶν ζώων, ἔστι δὲ πολυσχιδὲς, ἢ τε κάμηλος δίχηλον τῶν λοιπῶν μέγιστον ὄν. οὐ μόνον δ' ἐν τοῖς πεζοῖς ἀλλὰ καὶ ἐν τοῖς πτηνοῖς καὶ ἐν τοῖς πλωτοῖς τὰ μὲν μεγάλα ὀλιγοτόκα ἐστὶ τὰ δὲ μικρὰ πολυτόκα διὰ τὴν αὐτὴν αἰτίαν. ὁμοίως δὲ καὶ τῶν φυτῶν οὐ τὰ μέγιστα φέρει πλεῖστον καρπόν.

Διὰ τί μὲν οὖν τῶν ζώων τὰ μὲν πολυτόκα τὰ δ' ὀλιγοτόκα τὰ δὲ μονοτόκα τὴν φύσιν ἐστὶν εἴρηται-τῆς δὲ νῦν ῥηθείσης ἀπορίας μᾶλλον ἂν τις εὐλόγως

θαυμάσειεν ἐπὶ τῶν πολυτοκούντων, ἐπειδὴ φαίνεται πολλάκις ἀπὸ μιᾶς ὀχείας κυϊσκόμενα τὰ τοιαῦτα τῶν ζώων. τὸ δὲ σπέρμα τὸ τοῦ ἄρρενος, -εἴτε συμβάλλεται πρὸς τὴν ὕλην μόνιον γιγνόμενον τοῦ κυήματος καὶ τῷ τοῦ θήλεος σπέρματι μιγνύμενον, εἴτε καὶ μὴ τοῦτον τὸν τρόπον ἀλλ' ὥσπερ φαμὲν συνάγον καὶ δημιουργοῦν τὴν ὕλην τὴν ἐν τῷ θήλει καὶ τὸ περίττωμα τὸ σπερματικόν, καθάπερ ὁ ὁπὸς τὴν ὑγρότητα τοῦ γάλακτος, -διὰ τίνα ποτ' αἰτίαν οὐχ ἔν ἀποτελεῖ ζῶον μέγεθος ἔχον, ὥσπερ ἐνταῦθα ὁ ὁπὸς οὐ κεχώρισται τῷ συνιστάναι ποσόν τι, ἀλλ' ὅσῳπερ ἂν εἰς πλεῖον ἔλθῃ καὶ πλείων τοσοῦτω τὸ πηγνύμενόν ἐστι μείζον; τὸ μὲν οὖν ἔλκειν φάναι τοὺς τόπους τῆς ὑστέρας τὸ σπέρμα καὶ διὰ τοῦτο πλείω γίνεσθαι, διὰ τὸ τῶν τόπων πλῆθος καὶ τὰς κοτυληδόνας οὐχ ἔν οὔσας, οὐθέν ἐστιν· ἐν ταύτῳ γὰρ γίνονται τόπῳ ὑστέρας δύο πολλάκις, ἐν δὲ τοῖς πολυτόκοις ὅταν πληρωθῇ τῶν ἐμβρύων ἐφεξῆς κείμενα φαίνεται. τοῦτο δὲ δῆλον ἐκ τῶν ἀνατομῶν ἐστιν. ἀλλ' ὥσπερ καὶ τελειουμένων τῶν ζώων ἔστιν ἐκάστου τι μέγεθος καὶ ἐπὶ τὸ μείζον καὶ ἐπὶ τὸ ἔλαττον, ὧν οὐτ' ἂν μείζον γένοιτο οὐτ' ἔλαττον, ἀλλ' ἐν τῷ μεταξὺ διαστήματι τοῦ μεγέθους λαμβάνουσι πρὸς ἄλληλα τὴν ὑπεροχὴν καὶ τὴν (772a.) ἔλλειψιν, καὶ γίνεταί <ὁ μὲν> μείζων ὁ δ' ἐλάττων ἄνθρωπος καὶ τῶν ἄλλων ζώων ὁτιοῦν, -οὕτω καὶ ἐξ ἧς γίνεταί ὕλης σπερματικῆς οὐκ ἔστιν ἀόριστος οὐτ' ἐπὶ τὸ πλεῖον οὐτ' ἐπὶ τὸ ἔλαττον ὥστ' ἐξ ὀποσησοῦν γίνεσθαι τῷ πλήθει. ὅσα γοῦν τῶν ζώων διὰ τὴν εἰρημένην αἰτίαν πλεῖον προῖεται περίττωμα ἢ εἰς ἐνὸς ζώου ἀρχήν, οὐκ ἐνδέχεται ἐκ ταύτης ἔν γίνεσθαι πάσης ἀλλὰ τοσαῦτα ὅσα τοῖς μεγέθεσιν ὥρισται τοῖς ἱκνουμένοις, οὐδὲ τὸ τοῦ ἄρρενος σπέρμα ἢ ἡ δύναμις ἢ ἐν τῷ σπέρματι οὐθέν συστήσει πλεῖον ἢ ἔλαττον τοῦ πεφυκότος.

ὁμοίως τ' εἰ πλεῖον σπέρμα ἀφίησι τὸ ἄρρεν ἢ δυνάμεις πλείους ἐν διαιρουμένῳ τῷ σπέρματι, οὐθέν ποιήσει μείζον τὸ πλεῖστον ἀλλὰ καὶ τοῦναντίον διαφθερεῖ καταξηραῖνον. οὐδὲ γὰρ τὸ πῦρ θερμαίνει τὸ ὕδωρ μᾶλλον, ὅσῳπερ ἂν ἢ πλεῖον, ἀλλ' ἔστιν ὅρος τις τῆς θερμότητος, ἧς ὑπαρχούσης ἐὰν αὕξη τις τὸ πῦρ, θερμὸν μὲν οὐκέτι γίνεταί μᾶλλον, ἐξατμίζει δὲ μᾶλλον καὶ τέλος ἀφανίζεται καὶ γίνεταί ξηρόν. ἐπεὶ δὲ φαίνεται συμμετρίας δεῖσθαί τινος πρὸς ἄλληλα τό τε περίττωμα τὸ τοῦ θήλεος καὶ τὸ παρὰ τοῦ ἄρρενος (ὅσα προῖεται σπέρμα τῶν ἀρρένων), τὰ πολυτόκα τῶν ζώων εὐθὺς ἀφίησι τὸ μὲν ἄρρεν δυνάμενον πλείω συνιστάναι μεριζόμενον, τὸ δὲ θῆλυ τοσοῦτον ὥστε πλείους γίνεσθαι συστάσεις. τὸ δ' ἐπὶ τοῦ γάλακτος παράδειγμα λεχθὲν οὐχ ὁμοίον ἐστιν· ἢ μὲν γὰρ τοῦ σπέρματος θερμότης οὐ μόνον συνίστησι ποσὸν ἀλλὰ καὶ ποιόν τι, ἢ δ' ἐν τῷ ὁπῷ καὶ τῇ πυετίᾳ τὸ ποσὸν μόνον. τοῦ μὲν οὖν πολλὰ γίνεσθαι τὰ κυήματα καὶ μὴ συνεχῆς ἐν ἐκ πάντων ἐν τοῖς πολυτόκοις τοῦτ' αὐτὸ αἴτιον ὅτι οὐκ ἐξ

ὅπουσούνη γίνεται κύημα, ἀλλ' ἐάν τε ὀλίγον ἢ οὐκ ἔσται, ἐάν τε πολὺ λίαν· ὠρίσται γὰρ ἡ δύναμις καὶ τοῦ πάσχοντος καὶ τῆς θερμότητος τῆς ποιούσης. ὁμοίως δὲ καὶ ἐν τοῖς μονοτόκοις καὶ μεγάλοις τῶν ζώων οὐ πολλὰ γίνεται ἐκ πολλοῦ περιττώματος· καὶ γὰρ ἐν ἐκείνοις ἐκ ποσοῦ τινος ποσόν τι τὸ ἐργαζόμενόν ἐστιν. οὐ προῖεται μὲν οὖν πλείω τοιαύτην ὕλην διὰ τὴν προειρημένην αἰτίαν· ἣν δὲ προῖεται τοσαύτη κατὰ φύσιν ἐστὶν ἐξ ἧς ἐν γίνεται κύημα μόνον. ἐὰν δὲ ποτε πλεῖον ἔλθῃ διτοκεῖ τότε. διὸ καὶ δοκεῖ τερατώδη τὰ τοιαῦτ' εἶναι μᾶλλον, ὅτι γίνεται παρὰ τὸ ὥς ἐπὶ τὸ πολὺ καὶ τὸ εἰωθός.

Ὁ δὲ (772b.) ἄνθρωπος ἐπαμφοτερίζει πᾶσι τοῖς γένεσιν· καὶ γὰρ μονοτοκεῖ καὶ ὀλιγοτοκεῖ καὶ πολυτοκεῖ ποτε, μάλιστα δὲ μονοτόκον τὴν φύσιν ἐστί-διὰ μὲν τὴν ὑγρότητα τοῦ σώματος καὶ θερμότητα πολυτόκον (τοῦ γὰρ σπέρματος ἡ φύσις ὑγρὰ καὶ θερμή), διὰ δὲ τὸ μέγεθος ὀλιγοτόκον καὶ μονοτόκον. διὰ δὲ τοῦτο καὶ τοὺς τῆς κυήσεως χρόνους μόνω τῶν ζώων ἀνωμάλους εἶναι συμβέβηκεν. τοῖς μὲν γὰρ ἄλλοις εἰς ἐστὶν ὁ χρόνος, τοῖς δ' ἀνθρώποις πλείους· καὶ γὰρ ἐπτάμηνα καὶ δεκάμηνα γεννῶνται καὶ κατὰ τοὺς μεταξὺ χρόνους· καὶ γὰρ τὰ ὀκτάμηνα ζῆ μὲν, ἦττον δέ. τὸ δ' αἴτιον ἐκ τῶν νῦν λεχθέντων συνίδοι τις ἄν, εἴρηται δὲ περὶ αὐτῶν ἐν τοῖς Προβλήμασιν. καὶ περὶ μὲν τούτων διωρίσθω τὸν τρόπον τοῦτον.

Τῶν δὲ πλεοναζόντων μορίων παρὰ φύσιν τὸ αὐτὸ αἴτιον καὶ τῆς διδυμοτοκίας. ἤδη γὰρ ἐν τοῖς κυήμασι συμβαίνει τὸ αἴτιον ἐὰν πλείων ὕλη συστήῃ ἢ κατὰ τὴν τοῦ μορίου φύσιν· τότε γὰρ συμβαίνει μὲν μόριον μεῖζον τῶν ἄλλων ἔχειν, οἷον δάκτυλον ἢ χεῖρα ἢ πόδα ἢ τι τῶν ἄλλων ἀκρωτηρίων ἢ μελῶν, ἢ σχισθέντος τοῦ κυήματος πλείω γίνεσθαι καθάπερ ἐν τοῖς ποταμοῖς αἰετῖναι· καὶ γὰρ ἐν τούτοις τὸ φερόμενον ὑγρὸν καὶ κίνησιν ἔχον ἂν ἀντικρούσῃ, δύο ἐξ ἐνὸς γίνονται συστάσεις ἔχουσιν τὴν αὐτὴν κίνησιν· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν κυημάτων συμβαίνει. προσφύεται δὲ μάλιστα μὲν πλησίον ἀλλήλων, ἐνίοτε δὲ καὶ πόρρω διὰ τὴν γιγνομένην ἐν τῷ κυήματι κίνησιν, μάλιστα δὲ διὰ τὸ τὴν τῆς ὕλης ὑπεροχὴν ὅθεν ἀφηρέθη ἐκεῖ ἀποδιδόναι, τὸ δ' εἶδος ἔχειν ὅθεν ἐπλεόνασεν.

Ὅσα δὲ συμβαίνει τοιαῦτα ὥστε δύο ἔχειν αἰδοῖα, τὸ μὲν ἄρρενος τὸ δὲ θήλεος, αἰετῖ μὲν τῶν πλεοναζόντων γίνεται τὸ μὲν κύριον τὸ δ' ἄκυρον τῷ κατὰ τὴν τροφήν αἰετῖ ἀμαυροῦσθαι ἅτε παρὰ φύσιν ὄν, προσπέφυκε δ' ὥσπερ τὰ φύματα· καὶ γὰρ ταῦτα λαμβάνει τροφήν καίπερ ὄντα ὑστερογενῆ καὶ παρὰ φύσιν. γίνεται δὲ κρατήσαντος μὲν τοῦ δημιουργοῦντος ὅμοια δύο καὶ κρατηθέντος ὅλως· ἂν δὲ τῇ μὲν κρατήσῃ τῇ δὲ κρατηθῇ, τὸ μὲν θῆλυ τὸ δὲ

ἄρρεν· οὐθὲν γὰρ διαφέρει τοῦτο λέγειν ἐπὶ τῶν μορίων ἢ ἐπὶ τοῦ ὅλου δι' ἣν αἰτίαν γίγνεται τὸ μὲν θῆλυ τὸ δ' ἄρρεν. ὅσα δ' ἐλλείποντα γίγνεται τῶν τοιούτων μορίων οἷον ἀκρωτηρίου τινὸς ἢ τῶν ἄλλων μελῶν, τὴν αὐτὴν δεῖ νομίζειν αἰτίαν ἥνπερ καὶ ἐὰν ὅλον τὸ (773a.) γιγνόμενον ἀμβλωθῇ-ἀμβλώσεις δὲ γίνονται πολλὰ τῶν κυημάτων.

Διαφέρουσι δ' αἱ μὲν παραφύσεις τῆς πολυτοκίας τὸν εἰρημένον τρόπον, τὰ δὲ τέρατα τούτων τῷ τὰ πολλὰ αὐτῶν εἶναι σύμφυτον. ἔνια δὲ καὶ τοῦτον τὸν τρόπον, ἐὰν ἐπὶ μειζόνων γένωνται καὶ κυριωτέρων μορίων, οἷον ἔνια ἔχει δύο σπλῆνας καὶ πλείους νεφρούς. ἔτι δὲ μεταστάσεις τῶν μορίων παρατρεπομένων τῶν κινήσεων εἰσι καὶ τῆς ὕλης μεθισταμένης. ἔν δ' εἶναι τὸ ζῶον τὸ τερατώδες ἢ πλείω συμπεφυκότα δεῖ νομίζειν κατὰ τὴν ἀρχήν, οἷον εἰ τοιοῦτόν ἐστιν ἡ καρδία μόριον, τὸ μὲν μίαν ἔχον καρδίαν ἐν ζῶον, τὰ δὲ πλεονάζοντα μόρια παραφύσεις, τὰ δὲ πλείω ἔχοντα δύο μὲν εἶναι, συμπεφυκέναι δὲ διὰ τὴν τῶν κυημάτων σύναψιν.

Συμβαίνει δὲ πολλάκις καὶ τῶν οὐ δοκούντων ἀναπήρων εἶναι ζώων πολλοῖς ἤδη τετελειωμένοις τοὺς μὲν συμπεφυκέναι τῶν πόρων τοὺς δὲ παρεκτετράφθαι. καὶ γὰρ θήλεσί τισιν ἤδη τὸ στόμα τῶν ὑστερῶν συμπεφυκὸς διετέλεσεν, ἤδη δ' ὥρας οὔσης τῶν καταμηνίων καὶ πόνων ἐπιγιγνομένων ταῖς μὲν αὐτόματον ἐρράγη ταῖς δ' ὑπὸ ἀτρῶν διηρέθη· τὰς δὲ διαφθαρῆναι συνέπεσεν ἢ βία γενομένης τῆς ῥήξεως ἢ γενέσθαι μὴ δυναμένης. καὶ τῶν παίδων ἐνίοις οὐ κατὰ τὸ αὐτὸ συνέπεσε τὸ πέρας τοῦ αἰδοίου καὶ ὁ πόρος ἢ διέρχεται τὸ περίττωμα τὸ ἐκ τῆς κύστεως ἀλλ' ὑποκάτωθεν· διὸ καὶ καθήμενοι οὐροῦσι, τῶν δὲ ὄρχεων ἀνεσπασμένων ἄνω δοκοῦσι τοῖς ἀποθεν ἅμα θήλεος ἔχειν αἰδοῖον καὶ ἄρρενος. ἤδη δὲ καὶ ὁ τῆς ξηρᾶς τροφῆς πόρος συμπεφυκὼς ἐπὶ τινων ζώων γέγονε, καὶ προβάτων καὶ ἄλλων, ἐπεὶ καὶ βοῦς ἐν Περίνθῳ ἐγένετο ἢ διὰ τῆς κύστεως λεπτὴ διηθουμένη τροφή διεχώρει, καὶ ἀνατμηθέντος τοῦ ἀρχοῦ ταχὺ πάλιν συνεφύετο, καὶ οὐκ ἐπεκράτουν διαιροῦντες.

Περὶ μὲν οὖν ὀλιγοτοκίας καὶ πολυτοκίας καὶ περὶ παραφύσεως τῶν πλεοναζόντων [ἢ ἐλλειπόντων] μορίων, ἔτι δὲ περὶ τῶν τερατωδῶν εἴρηται.

## Κεφάλαιο 5

Τῶν δὲ ζώων τὰ μὲν ὅλως οὐκ ἐπικυῖσκειται τὰ δ' ἐπικυῖσκειται, καὶ τῶν ἐπικυῖσκομένων τὰ μὲν δύναται τὰ κυήματα ἐκτρέφειν, τὰ δὲ ποτὲ μὲν ποτὲ δ' οὔ. τοῦ δὲ μὴ ἐπικυῖσκεσθαι αἴτιον ὅτι (773b.) μονοτόκα ἐστίν. τὰ τε γὰρ

μώνυχα οὐκ ἐπικυῖσκειται καὶ τὰ τούτων μείζονα· διὰ γὰρ τὸ μέγεθος τὸ περίττωμα ἀναλίσκεται εἰς τὸ κύημα. πᾶσι γὰρ ὑπάρχει μέγεθος τούτοις σώματος, τῶν δὲ μεγάλων καὶ τὰ ἔμβρυα μεγάλα κατὰ λόγον ἐστίν· διὸ καὶ τὸ τῶν ἐλεφάντων ἔμβρυον ἡλίκον μόσχος ἐστίν. τὰ δὲ πολυτόκα ἐπικυῖσκειται διὰ τὸ καὶ τῶν πλειόνων τοῦ ἐνὸς εἶναι θατέρω θάτερον ἐπικύημα. τούτων δ' ὅσα μὲν μέγεθος ἔχει, καθάπερ ἄνθρωπος, ἐὰν μὲν ἡ ἑτέρα ὀχρεία τῆς ἑτέρας γένηται πάρεγγυς, ἐκτρέφει τὸ ἐπικυηθέν· ἥδη γὰρ ὥπται τὸ τοιοῦτον συμβεβηκός. αἴτιον δὲ τὸ εἰρημένον· καὶ γὰρ ἐν τῇ μιᾷ συνουσίᾳ πλεῖον τὸ ἀπίον ἐστὶ σπέρμα, ὃ μερισθὲν ποιεῖ πολυτοκεῖν, ὧν ὑστερίζει θάτερον.

ὅταν δ' ἥδη τοῦ κυήματος ηὔξημένου συμβῇ γίνεσθαι τὴν ὀχρείαν ἐπικυῖσκειται μὲν ποτε, ὀλιγάκις μέντοι διὰ τὸ τὴν ὑστέραν συμμύειν ὡς τὰ πολλὰ μέχρι τῶν κυουμένων ταῖς γυναιξίν. ἂν δὲ συμβῇ ποτε (καὶ γὰρ τοῦτ' ἥδη γέγονεν), οὐ δύναται τελειοῦν, ἀλλὰ κυήματ' ἐκπίπτει παραπλήσια τοῖς καλουμένοις ἐκτρώμασιν. ὥσπερ γὰρ ἐπὶ τῶν μονοτόκων διὰ τὸ μέγεθος εἰς τὸ προϋπάρχον τὸ περίττωμα τρέπεται πᾶν, οὕτω καὶ τούτοις, πλὴν ἐκείνοις μὲν εὐθύς, τούτοις δ' ὅταν αὐξηθῇ τὸ ἔμβρυον· τότε γὰρ ἔχουσι παραπλησίως τοῖς μονοτόκοις. ὁμοίως δὲ διὰ τὸν ἄνθρωπον φύσει πολυτόκον εἶναι, καὶ περιεῖναι τι τῷ μεγέθει τῆς ὑστέρας καὶ τοῦ περιττώματος, μὴ μέντοι τοσοῦτον ὥστε ἕτερον ἐκτρέφειν, μόνον τῶν ζώων ὀχρείαν ἐπιδέχεται κυοῦντα γυνὴ καὶ ἵππος, ἡ μὲν διὰ τὴν εἰρημένην αἰτίαν ἡ δ' ἵππος διὰ τε τὴν τῆς φύσεως στερρότητα καὶ τὸ περιεῖναι τι τῆς ὑστέρας μέγεθος, πλεον μὲν ἢ τῷ ἐνί, ἔλαττον δὲ ἢ ὥστε ἄλλο ἐπικυῖσκεισθαι τέλειον. ἔστι δὲ φύσει ἀφροδισιαστικὸν διὰ τὸ ταῦτὸ πεπονθέναι τοῖς στερροῖς· ἐκεῖνά τε γὰρ τοιαῦτ' ἐστὶ διὰ τὸ μὴ γίνεσθαι κάθαρσιν (τοῦτο δ' ἐστὶν ὥσπερ τοῖς ἄρρεσι τὸ ἀφροδισιάσαι) καὶ αἱ ἵπποι αἱ θήλειαι ἥκιστα προῖενται κάθαρσιν.

ἐν πᾶσι δὲ τοῖς ζωοτοκοῦσι τὰ στερρὰ τῶν θηλέων ἀφροδισιαστικὰ διὰ τὸ παραπλησίως ἔχειν τοῖς ἄρρεσιν ὅταν συνειλεγμένον μὲν ἦ τὸ σπέρμα, μὴ ἀποκρινόμενον δέ. τοῖς (774a.) γὰρ θήλεσιν ἡ τῶν καταμηνίων κάθαρσις σπέρματος ἔξοδος ἐστίν· ἔστι γὰρ τὰ καταμήνια σπέρμα ἄπεπτον ὥσπερ εἴρηται πρότερον. διὸ καὶ τῶν γυναικῶν ὅσαι πρὸς τὴν ὁμιλίαν ἀκρατεῖς τὴν τοιαύτην, ὅταν πολυτοκήσωσι παύονται τῆς πτοήσεως· ἐκκεκριμένη γὰρ ἡ σπερματικὴ περίττωσις οὐκέτι ποιεῖ τῆς ὁμιλίας ταύτης ἐπιθυμίαν. ἐν δὲ τοῖς ὄρνισιν αἱ θήλειαι τῶν ἄρρένων ἡττόν εἰσιν ἀφροδισιαστικαὶ διὰ τὸ πρὸς τῷ ὑποζώματι τὰς ὑστέρας ἔχειν, τὰ δ' ἄρρενα τοῦναντίον· ἀνεσπασμένους γὰρ ἔχει τοὺς ὄρχεις ἐντός, ὥστ' ἂν ἦ τι γένος τῶν τοιούτων ὀρνίθων φύσει σπερματικὸν ἀεὶ δεῖσθαι τῆς ὁμιλίας ταύτης. τοῖς μὲν οὖν θήλεσι τὸ κάτω καταβαίνειν τὰς ὑστέρας, τοῖς δ' ἄρρεσι τὸ ἀνασπᾶσθαι τοὺς ὄρχεις

συμβαίνει πρὸ ὁδοῦ πρὸς τὴν ὀχείαν.

Δι' ἣν μὲν οὖν αἰτίαν τὰ μὲν οὐκ ἐπικυῖσκειται παντελῶς τὰ δ' ἐπικυῖσκειται μὲν, τὰ δὲ κυήματα ἐκτρέφει ὅτε μὲν ὅτε δ' οὐ, καὶ διὰ τίν' αἰτίαν τὰ μὲν ἀφροδισιαστικὰ τὰ δ' οὐκ ἀφροδισιαστικὰ τῶν τοιούτων ἐστίν, εἴρηται.

Ἐνια δὲ τῶν ἐπικυῖσκομένων καὶ πολὺν χρόνον διαλειπούσης τῆς ὀχείας δύναται τὰ κυήματα ἐκτρέφειν, ὅσων σπερματικόν τε τὸ γένος ἐστὶ καὶ μὴ τὸ σῶμα μέγεθος ἔχει καὶ τῶν πολυτόκων ἐστίν· διὰ μὲν γὰρ τὸ πολυτοκεῖν εὐρυχωρίαν ἔχει τῆς ὑστέρας, διὰ δὲ τὸ σπερματικὸν εἶναι πολὺ προῖεται περίττωμα τῆς καθάρσεως· διὰ δὲ τὸ μὴ τὸ σῶμα μέγεθος ἔχειν ἀλλὰ πλείονι λόγῳ τὴν κάθαρσιν ὑπερβάλλειν τῆς εἰς τὸ κύημα τροφῆς δύναται τε συνίστασθαι ζῶα καὶ ὕστερον καὶ ταῦτ' ἐκτρέφειν. ἔτι δ' αἱ ὑστέραι τῶν τοιούτων οὐ συμμεμύκασιν διὰ τὸ περιεῖναι περίττωμα τῆς καθάρσεως. τοῦτο δὲ καὶ ἐπὶ γυναικῶν ἤδη συμβέβηκεν· γίνεται γάρ τις κυούσαις κάθαρσις καὶ διὰ τέλους. ἀλλὰ ταύταις μὲν παρὰ φύσιν (διὸ βλάπτει τὸ κύημα), τοῖς δὲ τοιούτοις τῶν ζώων κατὰ φύσιν· οὕτω γὰρ τὸ σῶμα συνέστηκεν ἐξ ἀρχῆς, οἷον τὸ τῶν δασυπόδων· τοῦτο γὰρ ἐπικυῖσκειται τὸ ζῶον· οὔτε γὰρ τῶν μεγάλων ἐστὶ πολυτόκον τε (πολυσχιδὲς γάρ, τὰ δὲ πολυσχιδῇ πολυτόκα) καὶ σπερματικόν. δηλοῖ δ' ἡ δασύτης· ὑπερβάλλει γὰρ τοῦ τριχώματος τὸ πλήθος· καὶ γὰρ ὑπὸ τοὺς πόδας καὶ ἐντὸς τῶν γνάθων τοῦτ' ἔχει τρίχας μόνον τῶν ζώων. ἡ δὲ δασύτης σημεῖον (774b.) πλήθους περιττώματός ἐστι, διὸ καὶ τῶν ἀνθρώπων οἱ δασεῖς ἀφροδισιαστικοὶ καὶ πολύσπερμοι μᾶλλον εἰσι τῶν λείων. ὁ μὲν οὖν δασύπους τὰ μὲν τῶν κυημάτων ἀτελῇ πολλάκις ἔχει, τὰ δὲ προῖεται τετελειωμένα τῶν τέκνων.

## Κεφάλαιο 6

Τῶν δὲ ζωοτόκων τὰ μὲν ἀτελῇ προῖεται ζῶα τὰ δὲ τετελειωμένα, τὰ μὲν μώνυχα τετελειωμένα καὶ τὰ δίχηλα, τῶν δὲ πολυσχιδῶν ἀτελῇ τὰ πολλά. τούτου δ' αἴτιον ὅτι τὰ μὲν μώνυχα μονοτόκα ἐστί, τὰ δὲ δίχηλα ἢ μονοτόκα ἢ διτόκα ὡς ἐπὶ τὸ πολὺ, ῥάδιον δὲ τὰ ὀλίγα ἐκτρέφειν. τῶν δὲ πολυσχιδῶν ὅσα ἀτελῇ τίκτει πάντα πολυτόκα· διὸ νέα μὲν ὄντα δύναται τὰ κυήματα τρέφειν, ὅταν δ' αὐξηθῇ καὶ λάβῃ μέγεθος οὐ δυναμένου τοῦ σώματος ἐκτρέφειν προῖεται καθάπερ τὰ σκωληκοτόκα τῶν ζώων. καὶ γὰρ τούτων τὰ μὲν ἀδιάρθρωτα σχεδὸν γεννᾷ καθάπερ ἀλώπηξ ἄρκτος λέων, παραπλησίως δ' ἔνια καὶ τῶν ἄλλων· τυφλὰ δὲ πάντα σχεδόν, οἷον ταῦτά τε καὶ ἔτι κύων λύκος θῶς. μόνον δὲ πολυτόκον ὃν ἡ ὕς τελειοτοκεῖ, καὶ ἐπαλλάττει τοῦτο μόνον· πολυτοκεῖ μὲν γὰρ ὡς τὰ πολυσχιδῇ, δίχηλον δ' ἐστὶ καὶ μώνυχον·

εἰσὶ γάρ που μώνυχες ὕες. πολυτοκεῖ μὲν οὖν διὰ τὸ τὴν εἰς τὸ μέγεθος τροφήν εἰς τὴν σπερματικὴν ἀποκρίνεσθαι περίττωσιν· τοῦτο γὰρ ὡς μώνυχον ὄν οὐκ ἔχει μέγεθος, ἅμα δὲ καὶ μᾶλλον-ὥσπερ ἀμφισβητοῦν τῇ φύσει τῇ τῶν μωνύχων-δίχηλόν ἐστιν. διὰ μὲν οὖν τοῦτο καὶ μονοτοκεῖ ποτε καὶ διτοκεῖ καὶ πολυτοκεῖ τὰ πλεῖστα, ἐκτρέφει δ' εἰς τέλος διὰ τὴν τοῦ σώματος εὐβοσίαν· ἔχει γὰρ ὡς πείρα γῆ φυτοῖς ἱκανὴν καὶ δαψιλῇ τροφήν.

Τίκτουσι δ' ἀτελῇ καὶ τυφλὰ καὶ τῶν ὀρνίθων τινὲς ὅσοι πολυτοκοῦσιν αὐτῶν μὴ σωμάτων ἔχοντες μέγεθος οἷον κορώνη κίττα στρουθοὶ χελιδόνες, καὶ τῶν ὀλιγοτοκούντων ὅσα μὴ δαψιλῇ τροφήν συνεκτίκει τοῖς τέκνοις οἷον φάττα καὶ τρυγὼν καὶ περιστερὰ. καὶ διὰ τοῦτο τῶν χελιδόνων ἐάν τις ἔτι νέων ὄντων ἐκκεντήσῃ τὰ ὄμματα πάλιν ὑγιάζονται· γιγνομένων γὰρ ἄλλ' οὐ γεγεννημένων φθείρονται, διόπερ φύονται καὶ βλαστάνουσιν ἐξ ἀρχῆς. ὅλως δὲ προτερεῖ μὲν τῆς τελειογονίας διὰ τὴν ἀδυναμίαν τοῦ ἐκτρέφειν, ἀτελῇ δὲ γίγνεται διὰ τὸ προτερεῖν. δῆλον δὲ τοῦτο καὶ ἐπὶ τῶν ἐπταμήνων· διὰ (775a.) γὰρ τὸ ἀτελῇ εἶναι πολλάκις ἔνια αὐτῶν γίγνεται οὐδὲ τοὺς πόρους ἔχοντά πω διηρθρωμένους, οἷον ὠτων καὶ μυκτήρων, ἄλλ' ἐπαυξανομένοις διαρροῦται, καὶ βιοῦσι πολλὰ τῶν τοιούτων.

Γίγνεται δὲ ἀνάπηρα μᾶλλον ἐν τοῖς ἀνθρώποις τὰ ἄρρενα τῶν θηλέων, ἐν δὲ τοῖς ἄλλοις οὐθὲν μᾶλλον. αἴτιον δ' ὅτι ἐν τοῖς ἀνθρώποις πολὺ διαφέρει τὸ ἄρρεν τοῦ θήλεος τῇ θερμότητι τῆς φύσεως, διὸ κινητικώτερα ἐστὶ κυούμενα τὰ ἄρρενα τῶν θηλέων· διὰ δὲ τὸ κινεῖσθαι θραύεται μᾶλλον· εὐφθαρτον γὰρ τὸ νέον διὰ τὴν ἀσθένειαν. διὰ τὴν αὐτὴν δὲ ταύτην αἰτίαν καὶ τελειοῦται τὰ θήλεα τοῖς ἄρρεσιν οὐχ ὁμοίως ἐν ταῖς γυναξίν, <ἐν δὲ τοῖς ἄλλοις ζώοις ὁμοίως· οὐθὲν γὰρ ὑστερεῖ τὸ θῆλυ πλεον τοῦ ἄρρενος ὥσπερ ἐν ταῖς γυναξίν>· ἐν μὲν γὰρ τῇ μητρὶ ἐν πλείονι χρόνῳ διακρίνεται τὸ θῆλυ τοῦ ἄρρενος, ἐξελθόντων δὲ πάντα πρότερον ἐπιτελεῖται οἷον ἥβη καὶ ἀκμὴ καὶ γῆρας τοῖς θήλεσιν ἢ τοῖς ἄρρεσιν· ἀσθενέστερα γὰρ ἐστὶ καὶ ψυχρότερα τὰ θήλεα τὴν φύσιν, καὶ δεῖ ὑπολαμβάνειν ὥσπερ ἀναπηρίαν εἶναι τὴν θηλύτητα φυσικὴν. ἔσω μὲν οὖν διακρίνεται διὰ τὴν ψυχρότητα βραδέως (ἡ γὰρ διάκρισις πέψις ἐστί, πέττει δ' ἡ θερμότης, εὐπεπτον δὲ τὸ θερμότερον), ἐκτὸς δὲ διὰ τὴν ἀσθένειαν ταχὺ συνάπτει πρὸς τὴν ἀκμὴν καὶ τὸ γῆρας· πάντα γὰρ τὰ ἐλάττω πρὸς τὸ τέλος ἔρχεται θᾶπτον ὥσπερ καὶ ἐν τοῖς κατὰ τέχνην ἔργοις καὶ ἐν τοῖς ὑπὸ φύσεως συνισταμένοις. διὰ τὸ εἰρημένον δ' αἴτιον καὶ ἐν τοῖς ἀνθρώποις τὰ διδυμοτοκούμενα θῆλυ καὶ ἄρρεν ἥττον σώζεται, ἐν δὲ τοῖς ἄλλοις οὐθὲν ἥττον· τοῖς μὲν γὰρ παρὰ φύσιν τὸ ἰσοδρομεῖν, οὐκ ἐν ἴσοις χρόνοις γιγνομένης τῆς διακρίσεως ἄλλ' ἀνάγκη τὸ ἄρρεν ὑστερεῖν ἢ τὸ θῆλυ προτερεῖν, ἐν δὲ τοῖς ἄλλοις οὐ παρὰ φύσιν. συμβαίνει δὲ καὶ διαφορὰ



περὶ τὰς κυήσεις ἐπὶ τε τῶν ἀνθρώπων καὶ ἐπὶ τῶν ἄλλων ζώων· τὰ μὲν γὰρ εὐθηνεῖ μᾶλλον τοῖς σώμασι τὸν πλείστον χρόνον, τῶν δὲ γυναικῶν αἱ πολλὰ δυσφοροῦσι περὶ τὴν κύησιν. ἔστι μὲν οὖν αἴτιόν τι τούτων καὶ διὰ τὸν βίον· ἐδραῖαι γὰρ οὔσαι πλείονος γέμουσι περιττώματος, ἐπεὶ ἐν οἷς ἔθνεσι πονητικὸς ὁ τῶν γυναικῶν βίος οὐθ' ἡ κύησις ὁμοίως ἐπίδηλός ἐστι, τίκτουσί τε ῥαδίως κάκεῖ καὶ πανταχοῦ αἱ εἰωθυῖαι πονεῖν· ἀναλίσκει γὰρ ὁ πόνος τὰ περιττώματα, ταῖς δ' ἐδραῖαις ἐνυπάρχει πολλὰ τοιαῦτα διὰ τὴν ἀπονίαν καὶ τὸ μὴ γίνεσθαι καθάρσεις κυούσαις, ἢ τε ὥδης (775b.) ἐπίπονός ἐστιν· ὁ δὲ πόνος γυμνάζει τὸ πνεῦμα ὥστε δύνασθαι κατέχειν ἐν ᾧ τὸ τίκτειν ἐστὶ ῥαδίως ἢ χαλεπῶς. ἔστι μὲν οὖν ὥσπερ εἴρηται καὶ ταῦτα συμβαλλόμενα πρὸς τὴν διαφορὰν τοῦ πάθους τοῖς ἄλλοις ζώοις καὶ ταῖς γυναιξί, μάλιστα δ' ὅτι τοῖς μὲν αὐτῶν ὀλίγη γίνεται καθάρσις τοῖς δ' οὐκ ἐπίδηλος ὅλως, ταῖς δὲ γυναιξὶ πλείστη τῶν ζώων, ὥστε μὴ γιγνομένης τῆς ἐκκρίσεως διὰ τὴν κύησιν ταῖς μὲν ταραχὴν παρέχει· καὶ γὰρ μὴ κυούσαις ὅταν αἱ καθάρσεις μὴ γίνωνται νόσοι συμβαίνουσιν, καὶ τὸ πρῶτον δὲ ταραττόνται συλλαβοῦσαι μᾶλλον αἱ πλείσται τῶν γυναικῶν· τὸ γὰρ κύημα κωλύειν μὲν δύναται τὰς καθάρσεις, διὰ μικρότητα δὲ οὐδὲν ἀναλίσκει πλῆθος τοῦ περιττώματος τὸ πρῶτον, ὕστερον δὲ κουφίζει μεταλαμβάνον· ἐν δὲ τοῖς ἄλλοις ζώοις διὰ τὸ ὀλίγον εἶναι σύμμετρον γίνεται πρὸς τὴν αὔξησιν τῶν ἐμβρύων, καὶ ἀναλίσκομένων τῶν περιττωμάτων τῶν ἐμποδιζόντων τὴν τροφήν εὐημερεῖ τοῖς σώμασι μᾶλλον. καὶ ἐν τοῖς ἐνύδροις τὸν αὐτὸν τρόπον καὶ ἐν τοῖς ὄρνισιν. ἤδη δὲ μεγάλων γιγνομένων τῶν κυημάτων, ὅσοις μηκέτι συμβαίνει ἡ εὐτροφία τῶν σωμάτων, αἴτιον τὸ τὴν αὔξησιν τοῦ κυήματος δεῖσθαι πλείονος ἢ τῆς περιττωματικῆς τροφῆς. ὀλίγαις δὲ τισι τῶν γυναικῶν βέλτιον ἔχειν τὰ σώματα συμβαίνει κυούσαις-αὐταὶ δ' εἰσὶν ὅσαις μικρὰ τὰ περιττώματα ἐν τῷ σώματι ὥστε καταναλίσκεσθαι μετὰ τῆς εἰς τὸ ἔμβρυον τροφῆς.

## Κεφάλαιο 7

Περὶ δὲ τῆς καλουμένης μύλης ῥητέον ἢ γίνεται μὲν ὀλιγάκις ταῖς γυναιξί, γίνεται δὲ τισι τοῦτο τὸ πάθος κυούσαις. τίκτουσι γὰρ ὁ καλοῦσι μύλην. ἤδη γὰρ συνέβη τινὶ γυναικὶ συγγενομένη τῷ ἀνδρὶ καὶ δοξάσῃ συλλαβεῖν, τὸ μὲν πρῶτον ὃ τε ὄγκος ηὐξάνετο τῆς γαστρὸς καὶ τᾶλλα ἐγίγνετο κατὰ λόγον, ἐπεὶ δὲ ὁ χρόνος ἦν τοῦ τόκου οὕτ' ἔτικτεν οὐτε ὁ ὄγκος ἐλάττων ἐγίγνετο, ἀλλ' ἔτη τρία ἢ τέτταρα οὕτω διετέλει ἕως δυσεντερίας γενομένης καὶ κινδυνεύσασα ὑπ' αὐτῆς ἔτεκε σάρκα ἣν καλοῦσι μύλην. ἐνίαις δὲ καὶ συγκαταγηράσκει τοῦτο τὸ πάθος καὶ συναποθνήσκει. τὰ δὲ θύραζε ἐξιόντα τῶν τοιούτων γίνεται σκληρὰ οὕτως ὥστε μόλις διακόπτεσθαι καὶ σιδήρῳ.

περὶ μὲν οὖν τῆς τοῦ πάθους αἰτίας εἴρηται ἐν τοῖς Προβλήμασιν· πάσχει γὰρ ταῦτόν τὸ κύημα (776a.) ἐν τῇ μήτρᾳ ὅπερ ἐν τοῖς ἐψομένοις τὰ μωλυνόμενα, καὶ οὐ διὰ θερμότητα, ὥσπερ τινές φασιν, ἀλλὰ μᾶλλον δι' ἀσθένειαν θερμότητος (ἔοικε γὰρ ἡ φύσις ἀσθενεῖν καὶ οὐ δύνασθαι τελειῶσαι οὐδ' ἐπιθεῖναι τῇ γενέσει πέρας· διὸ καὶ συγκαταγερᾷσκει ἢ πολὺν ἐμμένει χρόνον· οὔτε γὰρ ὥς τετελεσμένον οὔθ' ὥς πάμπαν ἀλλότριον ἔχει τὴν φύσιν)· τῆς γὰρ σκληρότητος ἡ ἀπεψία αἰτία· ἀπεψία γάρ τις καὶ ἡ μώλυνσίς ἐστιν.

Ἀπορίαν δ' ἔχει διὰ τί ποτ' ἐν τοῖς ἄλλοις οὐχὶ γίνεταί ζωοις, εἰ μὴ τι πάμπαν λέληθεν. αἴτιον δὲ δεῖ νομίζειν ὅτι μόνον ὑστερικόν ἐστιν ἡ γυνὴ τῶν ἄλλων ζώων καὶ περὶ τὰς καθάρσεις πλεονάζει καὶ οὐ δύναται πέττειν αὐτάς· ὅταν οὖν ἐκ δυσπέπτου ἰκμάδος συστή τὸ κύημα τότε γίνεταί ἡ καλουμένη μύλη ἐν ταῖς γυναιξὶν εὐλόγως ἢ μάλιστα ἢ μόναις.

## Κεφάλαιο 8

Τὸ δὲ γάλα γίνεταί τοῖς θήλεσιν ὅσα ζωοτοκεῖ ἐν αὐτοῖς χρήσιμον μὲν εἰς τὸν χρόνον τὸν τοῦ τόκου· τῆς γὰρ τροφῆς χάριν αὐτὸ τῆς θύραζε ἐποίησεν ἡ φύσις τοῖς ζώοις ὥστ' οὔτ' ἐλλείπειν αὐτὸ ἐν τῷ χρόνῳ τούτῳ οὐθὲν οὔθ' ὑπερβάλλειν οὐθέν· ὅπερ καὶ φαίνεται συμπύπτον ἂν μὴ τι γένηται παρὰ φύσιν. τοῖς μὲν οὖν ἄλλοις ζώοις διὰ τὸ τὸν χρόνον ἕνα τῆς κυήσεως εἶναι πρὸς τοῦτον ἅπαντ' αὐτὸν καὶ τὸν καιρὸν ἡ πέψις αὐτοῦ· τοῖς δ' ἀνθρώποις ἐπεὶ πλείους οἱ χρόνοι κατὰ τὸν πρῶτον ἀναγκαῖον ὑπάρχειν· διὸ πρὸ τῶν ἑπτὰ μηνῶν ἄχρηστον τὸ γάλα ταῖς γυναιξί, τότε δ' ἤδη γίνεταί χρήσιμον. εὐλόγως δὲ συμβαίνει καὶ διὰ τὴν ἐξ ἀνάγκης αἰτίαν πεπεμμένον εἰς τοὺς τελευταίους χρόνους· τὸ μὲν γὰρ πρῶτον ἢ τοῦ τοιούτου περιττώματος ἀπόκρισις εἰς τὴν τῶν ἐμβρύων ἀναλίσκεται γένεσιν· πάντων δ' ἡ τροφή τὸ γλυκύτατον καὶ πεπεμμένον, ὥστ' ἀφαιρουμένης τῆς τοιαύτης δυνάμεως ἀνάγκη τὸ λοιπὸν ἄλμυρὸν γίνεσθαι καὶ δύσχυμον.

τελευτουμένων δὲ τῶν κυημάτων πλέον τε τὸ περίττωμα τὸ περιγινόμενον (ἔλαττον γὰρ τὸ ἀναλίσκόμενον) καὶ γλυκύτερον, οὐκ ἀφαιρουμένου ὁμοίως τοῦ εὐπέπτου. οὐ γὰρ ἔτι εἰς πλάσιν τοῦ ἐμβρύου γίνεταί ἡ δαπάνη ἀλλ' εἰς μικρὰν αὔξησιν, ὥσπερ ἐστηκὸς ἤδη διὰ τὸ τέλος ἔχειν τὸ ἔμβρυον· ἔστι γάρ (776b.) τις καὶ κυήματος τελείωσις. διόπερ ἐξέρχεται καὶ μεταβάλλει τὴν γένεσιν ὥς ἔχον τὰ αὐτοῦ καὶ οὐκέτι λαμβάνει τὸ μὴ αὐτοῦ, ἐν ᾧ καιρῷ γίνεταί τὸ γάλα χρήσιμον.

Εἰς δὲ τὸν ἄνω τόπον καὶ τοὺς μαστοὺς συλλέγεται διὰ τὴν ἐξ ἀρχῆς τάξιν

τῆς συστάσεως. τὸ μὲν γὰρ ἄνω τοῦ ὑποζώματος τὸ κύριον τῆς ζωῆς ἐστὶ, τὸ δὲ κάτω τῆς τροφῆς καὶ τοῦ περιττώματος, ὅπως ὅσα πορευτικὰ τῶν ζώων ἐν αὐτοῖς ἔχοντα τὴν τῆς τροφῆς αὐτάρκειαν μεταβάλλῃ τοὺς τόπους. ἐντεῦθεν δὲ καὶ ἡ σπερματικὴ περίττωσις ἀποκρίνεται διὰ τὴν εἰρημένην αἰτίαν ἐν τοῖς κατ' ἀρχὰς λόγοις. ἔστι δὲ τό τε τῶν ἁρρένων περίττωμα καὶ τὰ καταμήνια τοῖς θήλεσιν αἱματικῆς φύσεως. τούτου δ' ἀρχὴ καὶ τῶν φλεβῶν ἡ καρδία· αὕτη δ' ἐν τοῖς μορίοις τούτοις. διὸ πρῶτον ἐνταῦθα ἀναγκαῖον γίνεσθαι τὴν μεταβολὴν ἐπίδηλον τῆς τοιαύτης περιττώσεως. διόπερ αἱ τε φωναὶ μεταβάλλουσι καὶ τῶν ἁρρένων καὶ τῶν θηλειῶν ὅταν ἄρχωνται σπέρμα φέρειν (ἡ γὰρ ἀρχὴ τῆς φωνῆς ἐντεῦθεν· ἄλλοια δὲ γίνεταί ἄλλοιου γιγνομένου τοῦ κινουντος), καὶ τὰ περὶ τοὺς μαστοὺς αἶρεται καὶ τοῖς ἁρρεσιν ἐπιδήλως, μᾶλλον δὲ τοῖς θήλεσιν· διὰ γὰρ τὸ κάτω τὴν ἔκκρισιν γίνεσθαι πολλὴν κενὸς ὁ τόπος γίνεταί ὁ τῶν μαστῶν αὐταῖς καὶ σομφός· ὁμοίως δὲ καὶ τοῖς κάτω τοὺς μαστοὺς ἔχουσιν. γίνεταί μὲν οὖν ἐπίδηλος καὶ ἡ φωνὴ καὶ τὰ περὶ τοὺς μαστοὺς καὶ ἐν τοῖς ἄλλοις ζώοις τοῖς ἐμπείροις περὶ ἕκαστον γένος, ἐπὶ δὲ τῶν ἀνθρώπων διαφέρει πλεῖστον. αἴτιον δὲ τὸ πλείστην εἶναι τὴν περίττωσιν τοῖς θήλεσι τούτοις τῶν θηλέων καὶ τοῖς ἁρρεσι τῶν ἁρρένων ὡς κατὰ μέγεθος [ταῖς μὲν τὴν τῶν καταμηνίων, τοῖς δὲ τὴν τοῦ σπέρματος πρόεσιν]. ὅταν οὖν μὴ λαμβάνῃ μὲν τὸ ἔμβρυον τὴν τοιαύτην ἀπόκρισιν, κωλύῃ δὲ θύραζε βαδίζειν, ἀναγκαῖον εἰς τοὺς κενοὺς τόπους ἀθροίζεσθαι τὸ περίττωμα πᾶν, ὅσοιπερ ἂν ὦσιν ἐπὶ τῶν αὐτῶν πόρων. ἔστι δ' ἐκάστοις τοιοῦτος ὁ τῶν μαστῶν τόπος δι' ἀμφοτέρας τὰς αἰτίας ἕνεκά τε τοῦ βελτίστου γεγονῶς τοιοῦτος καὶ ἐξ ἀνάγκης· ἐνταῦθα δὲ ἤδη συνίσταται καὶ γίνεταί πεπεμμένη τροφὴ τοῖς ζώοις. τῆς δὲ πέψεως ἔστι μὲν λαβεῖν τὴν εἰρημένην αἰτίαν, ἔστι δὲ καὶ (777a.) τὴν ἐναντίαν· εὖλογον γὰρ καὶ μεῖζον ὂν τὸ ἔμβρυον πλείω λαμβάνειν τροφὴν ὥστε ἔλαττον περιγίνεσθαι περὶ τὸν χρόνον τοῦτον· πέττεται δὲ θᾶττον τὸ ἔλαττον.

Ὅτι μὲν οὖν ἐστὶ τὸ γάλα τὴν αὐτὴν ἔχον φύσιν τῇ ἀποκρίσει ἐξ ἧς γίνεταί ἕκαστον, δῆλον, εἴρηται δὲ καὶ πρότερον. ἡ γὰρ αὕτη ὕλη ἡ τε τρέφουσα καὶ ἐξ ἧς συνιστᾶ τὴν γένεσιν ἡ φύσις. ἔστι δὲ τοῦτο ἡ αἱματικὴ ὑγρότης τοῖς ἐναίμοις· τὸ γὰρ γάλα πεπεμμένον αἷμά ἐστιν ἄλλ' οὐ διεφθαρμένον. Ἐμπεδοκλῆς δ' ἡ οὐκ ὀρθῶς ὑπελάμβανεν ἡ οὐκ εὖ μετήνεγκε ποιήσας ὡς τὸ γάλα μηνὸς ἐν ὀγδοάτῳ δεκάτῃ πύον ἔπλετο λευκόν. σαπρότης γὰρ καὶ πέψις ἐναντίον, τὸ δὲ πύον σαπρότης τίς ἐστίν, τὸ δὲ γάλα τῶν πεπεμμένων. οὐ γίνονται δὲ οὔτε θηλαζόμεναι αἱ καθάρσεις κατὰ φύσιν οὔτε συλλαμβάνουσι θηλαζόμεναι· κἂν συλλάβωσιν, ἀποσβέννυται τὸ γάλα διὰ τὸ τὴν αὐτὴν εἶναι φύσιν τοῦ γάλακτος καὶ τῶν καταμηνίων· ἡ δὲ φύσις οὐ δύναται πολυχοεῖν οὕτως ὥστ' ἐπαμφοτερίζειν, ἀλλ' ἂν ἐπὶ θάτερα γένηται ἡ ἀπόκρισις

ἀναγκαῖον ἐπὶ θάτερα ἐκλείπειν, ἐὰν μὴ γίγηται τι βίαιον καὶ παρὰ τὸ ὥς ἐπὶ τὸ πολὺ. τοῦτο δ' ἤδη παρὰ φύσιν· ἐν γὰρ τοῖς μὴ ἀδυνάτοις ἄλλως ἔχειν ἄλλ' ἐνδεχομένοις τὸ κατὰ φύσιν ἐστὶ τὸ ὥς ἐπὶ τὸ πολὺ.

Καλῶς δὲ διώρισται τοῖς χρόνοις καὶ ἡ γένεσις ἡ τῶν ζώων· ὅταν γὰρ διὰ τὸ μέγεθος μηκέτι ἱκανὴ ᾖ τῷ κυουμένῳ ἡ διὰ τοῦ ὀμφαλοῦ τροφή, ἅμα τὸ γάλα γίγνεται χρήσιμον πρὸς τὴν γιγνομένην τροφήν, καὶ οὐκ εἰσιούσης διὰ τοῦ ὀμφαλοῦ τροφῆς συμπίπτουσιν αὐταὶ αἱ φλέβες περὶ ὧς ὁ καλούμενος ὀμφαλὸς ἐστὶ χιτῶν, καὶ διὰ ταῦτα καὶ τότε συμβαίνει θύραζε ἢ ἔξοδος.

## Κεφάλαιο 9

Ἐπὶ κεφαλὴν δ' ἡ γένεσις ἐστὶ τοῖς ζώοις πᾶσιν ἢ κατὰ φύσιν διὰ τὸ τὰ ἄνω τοῦ ὀμφαλοῦ μείζω ἔχειν ἢ τὰ κάτω. καθάπερ οὖν ἐν ζυγοῖς ἡρτημένα ἐξ αὐτοῦ ῥέπει ἐπὶ τὸ βάρος· ἔχει δὲ τὰ μείζω πλεῖον βάρος.

## Κεφάλαιο 10

Οἱ δὲ χρόνοι τῆς κυήσεως ἐκάστω τῶν ζώων ὠρισμένοι τυγχάνουσιν ὥς μὲν ἐπὶ τὸ πολὺ κατὰ τοὺς βίους· τῶν γὰρ χρονιωτέρων καὶ τὰς γενέσεις εὐλογον εἶναι χρονιωτέρας. οὐ μὴν τοῦτό γ' ἐστὶν αἴτιον ἄλλ' ὥς ἐπὶ τὸ πολὺ τοῦτο (777b.) συμβέβηκεν· τὰ γὰρ μείζω καὶ τελειότερα τῶν ἐναίμων ζώων καὶ ζῶσι πολλὸν χρόνον· οὐ μέντοι τὰ μείζω πάντα μακροβιώτερα. πάντων γὰρ ἄνθρωπος πλεῖστον ζῆ χρόνον πλὴν ἐλέφαντος, ὧν ἀξιόπιστον ἔχομεν τὴν πεῖραν· ἔλαττον δ' ἐστὶ τὸ γένος τὸ τῶν ἀνθρώπων ἢ τὸ τῶν λοφούρων καὶ πολλῶν ἄλλων. αἴτιον δὲ τοῦ μὲν εἶναι μακρόβιον ὅτι οὖν ζῶον τὸ κεκρᾶσθαι παραπλησίως πρὸς τὸν περιέχοντα ἄερα, καὶ δι' ἄλλα συμπτώματ' ἄττα φυσικὰ περὶ ὧν ὕστερον ἐροῦμεν, -τῶν δὲ χρόνων τῶν περὶ τὴν κύησιν τὸ μέγεθος τῶν γεννωμένων· οὐ γὰρ ῥᾶδιον ἐν ὀλίγῳ χρόνῳ λαμβάνειν τὴν τελείωσιν τὰς μεγάλας συστάσεις οὔτε ζῶων οὔτε τῶν ἄλλων ὥς εἰπεῖν οὐθενός. διόπερ ἵπποι καὶ τὰ συγγενῆ ζῶα τούτοις ἐλάττω ζῶντα χρόνον κυεῖ γε πλείω χρόνον· τῶν μὲν γὰρ ἐνιαύσιος ὁ τόκος τῶν δὲ δεκάμηνος ὁ πλεῖστος. διὰ τὴν αὐτὴν δ' αἰτίαν πολυχρόνιος καὶ ὁ τῶν ἐλεφάντων ἐστὶ τόκος· διετὴς γὰρ ἡ κύησις διὰ τὴν ὑπερβολὴν τοῦ μεγέθους.

Εὐλόγως δὲ πάντων οἱ χρόνοι καὶ τῶν κυήσεων καὶ γενέσεων καὶ τῶν βίων μετρεῖσθαι βούλονται κατὰ φύσιν περιόδοις. λέγω δὲ περίοδον ἡμέραν καὶ νύκτα καὶ μῆνα καὶ ἐνιαυτὸν καὶ τοὺς χρόνους τοὺς μετρούμενους τούτοις, ἔτι δὲ τὰς τῆς σελήνης περιόδους. εἰσὶ δὲ περίοδοι σελήνης πανσέληνός τε καὶ

φθίσις καὶ τῶν μεταξὺ χρόνων αἱ διχοτομίαι· κατὰ γὰρ ταύτας συμβάλλει πρὸς τὸν ἥλιον· ὁ γὰρ μὲς κοινὴ περίοδός ἐστιν ἀμφοτέρων. ἔστι δὲ ἡ σελήνη ἀρχὴ διὰ τὴν πρὸς τὸν ἥλιον κοινωνίαν καὶ τὴν μετάληψιν τὴν τοῦ φωτός· γίνεταί γὰρ ὥσπερ ἄλλος ἥλιος ἐλάττων· διὸ συμβάλλεται εἰς πάσας τὰς γενέσεις καὶ τελειώσεις. αἱ γὰρ θερμότητες καὶ ψύξεις μέχρι συμμετρίας τινὸς ποιοῦσι τὰς γενέσεις, μετὰ δὲ ταῦτα τὰς φθοράς· τούτων δ' ἔχουσι τὸ πέρας καὶ τῆς ἀρχῆς καὶ τῆς τελευτῆς αἱ τούτων κινήσεις τῶν ἄστρων. ὥσπερ γὰρ καὶ θάλατταν καὶ πᾶσαν ὁρῶμεν τὴν τῶν ὑγρῶν φύσιν ἵσταμένην καὶ μεταβάλλουσαν κατὰ τὴν τῶν πνευμάτων κίνησιν καὶ στάσιν, τὸν δ' ἀέρα καὶ τὰ πνεύματα κατὰ τὴν τοῦ ἡλίου καὶ τῆς σελήνης περίοδον, οὕτω καὶ τὰ ἐκ τούτων φυόμενα καὶ τὰ ἐν τούτοις ἀκολουθεῖν ἀναγκαῖον· (778a.) κατὰ λόγον γὰρ ἀκολουθεῖν καὶ τὰς τῶν ἀκυροτέρων περιόδους ταῖς τῶν κυριωτέρων. βίος γάρ τις καὶ πνεύματός ἐστι καὶ γενέσις καὶ φθίσις. τῆς δὲ τῶν ἄστρων τούτων περιφορᾶς τάχ' ἂν ἕτεραί τινες εἶεν ἀρχαί. βούλεται μὲν οὖν ἡ φύσις τοῖς τούτων ἀριθμοῖς ἀριθμεῖν τὰς γενέσεις καὶ τὰς τελευτάς, οὐκ ἀκριβοῖ δὲ διὰ τε τὴν τῆς ὕλης ἀοριστίαν καὶ διὰ τὸ γίνεσθαι πολλὰς ἀρχὰς αἱ τὰς γενέσεις τὰς κατὰ φύσιν καὶ τὰς φθοράς ἐμποδίζουσαι πολλάκις αἵτιαι τῶν παρὰ φύσιν συμπιπτόντων εἰσίν.

Περὶ μὲν οὖν τῆς ἔσωθεν τροφῆς τῶν ζώων καὶ τῆς θύραζε γενέσεως εἴρηται, καὶ χωρὶς περὶ ἐκάστου καὶ κοινῇ περὶ πάντων.

## **Βιβλίο 5**

### **Κεφάλαιο 1**

Περὶ δὲ τῶν παθημάτων οἷς διαφέρουσι τὰ μόρια τῶν ζώων θεωρητέον νῦν. λέγω δὲ τὰ τοιαῦτα παθήματα τῶν μορίων οἷον γλαυκότητα ὁμμάτων καὶ μελανίαν, καὶ φωνῆς ὀξύτητα καὶ βαρύτητα, καὶ χρώματος [ἢ σώματος] καὶ τριχῶν ἢ πτερῶν διαφοράς. τυγχάνει δὲ τῶν τοιούτων ἔνια μὲν ὅλοις ὑπάρχοντα τοῖς γενέσιν, ἐνίοις δ' ὅπως ἔτυχεν, οἷον μάλιστα ἐπὶ τῶν ἀνθρώπων τοῦτο συμβέβηκεν. ἔτι δὲ κατὰ τὰς τῶν ἡλικιῶν μεταβολὰς τὰ μὲν ὁμοίως πᾶσιν ὑπάρχει τοῖς ζώοις τὰ δ' ὑπεναντίως, ὥσπερ περὶ τε φωνὰς καὶ περὶ τριχῶν χροᾶς· τὰ μὲν γὰρ οὐ πολιοῦνται πρὸς τὸ γῆρας ἐπιδήλως, ὁ δ' ἄνθρωπος μάλιστα τοῦτο πάσχει τῶν ἄλλων ζώων. καὶ τὰ μὲν εὐθύς ἀκολουθεῖ γενομένοις, τὰ δὲ προϊούσης τῆς ἡλικίας γίνεταί δῆλα καὶ γηρασκόντων.

Περὶ δὲ τούτων καὶ τῶν τοιούτων πάντων οὐκέτι τὸν αὐτὸν τρόπον δεῖ

νομίζειν εἶναι τῆς αἰτίας. ὅσα γὰρ μὴ τῆς φύσεως ἔργα κοινῇ μηδ' ἴδια τοῦ γένους ἐκάστου, τούτων οὐθὲν ἔνεκά του τοιοῦτον οὔτ' ἐστὶν οὔτε γίγνεται. ὀφθαλμὸς μὲν γὰρ ἔνεκά του, γλαυκὸς δ' οὐχ ἔνεκά του πλὴν ἂν ἴδιον ἢ τοῦ γένους τοῦτο τὸ πάθος. οὔτε δ' ἐπ' ἐνίων πρὸς τὸν λόγον συντείνει τὸν τῆς οὐσίας, ἀλλ' ὥς ἐξ ἀνάγκης γιγνομένων εἰς τὴν ὕλην καὶ τὴν (778b.) κινήσασαν ἀρχὴν ἀνακτέον τὰς αἰτίας. ὥσπερ γὰρ ἐλέχθη κατ' ἀρχὰς ἐν τοῖς πρώτοις λόγοις, οὐ διὰ τὸ γίγνεσθαι ἕκαστον ποιόν τι, διὰ τοῦτο ποιόν τί ἐστὶν ὅσα τεταγμένα καὶ ὠρισμένα ἔργα τῆς φύσεώς ἐστὶν, ἀλλὰ μᾶλλον διὰ τὸ εἶναι τοιαδὶ γίγνεται τοιαῦτα· τῇ γὰρ οὐσίᾳ ἢ γένεσις ἀκολουθεῖ καὶ τῆς οὐσίας ἔνεκά ἐστὶν, ἀλλ' οὐχ αὕτη τῇ γενέσει. οἱ δ' ἀρχαῖοι φυσιολόγοι τοῦναντίον ὡήθησαν· τούτου δ' αἴτιον ὅτι οὐχ ἐώρων πλείους οὔσας τὰς αἰτίας, ἀλλὰ μόνον τὴν τῆς ὕλης καὶ τὴν τῆς κινήσεως-καὶ ταύτας ἀδιορίστως· τῆς δὲ τοῦ λόγου καὶ τῆς τοῦ τέλους ἀνεπισκέπτως εἶχον.

Ἔστι μὲν οὖν ἕκαστον ἔνεκά του, γίγνεται δ' ἤδη διὰ τε ταύτην τὴν αἰτίαν καὶ διὰ τὰς λοιπὰς ὅσαπερ ἐν τῷ λόγῳ ἐνυπάρχει τῷ ἐκάστῳ ἢ ἐστὶν ἔνεκά του ἢ οὐ ἔνεκα. τῶν δὲ μὴ τοιούτων ὅσων ἐστὶ γένεσις, ἤδη τούτων τὸ αἴτιον ἐν τῇ κινήσει δεῖ καὶ τῇ γενέσει ζητεῖν ὥς ἐν αὐτῇ τῇ συστάσει τὴν διαφορὰν λαμβανόντων. ὀφθαλμὸν μὲν γὰρ ἐξ ἀνάγκης ἔξει (τοιόνδε γὰρ ζῶον ὑπόκειται ὄν), τοιόνδε δὲ ὀφθαλμὸν ἐξ ἀνάγκης μέν, οὐ τοιαύτης δ' ἀνάγκης ἀλλ' ἄλλον τρόπον, ὅτι τοιονδὶ ἢ τοιονδὶ ποιεῖν πέφυκε καὶ πάσχειν.

Διωρισμένων δὲ τούτων λέγωμεν περὶ τῶν ἐφεξῆς συμβαινόντων. πρῶτον μὲν οὖν ὅταν γένωνται τὰ παιδιά πάντων, μάλιστα τῶν ἀτελεῶν ἢ τικτόντων, καθεύδειν εἴωθε διὰ τὸ καὶ ἐν τῇ μήτρᾳ, ὅταν λάβῃ πρῶτον αἴσθησιν, καθεύδοντα διατελεῖν. ἔχει δ' ἀπορίαν περὶ τῆς ἐξ ἀρχῆς γενέσεως πότερον ἐγρήγορσις ὑπάρχει τοῖς ζώοις πρότερον ἢ ὕπνος. διὰ γὰρ τὸ φαίνεσθαι προϊούσης τῆς ἡλικίας ἐγειρόμενα μᾶλλον εὐλογον τοῦναντίον ἐν τῇ ἀρχῇ τῆς γενέσεως ὑπάρχειν, τὸν ὕπνον. ἔτι δὲ διὰ τὸ τὴν μετάβασιν ἐκ τοῦ μὴ εἶναι εἰς τὸ εἶναι διὰ τοῦ μεταξὺ γίγνεσθαι· ὁ δ' ὕπνος εἶναι δοκεῖ τὴν φύσιν τῶν τοιούτων οἷον τοῦ ζῆν καὶ τοῦ μὴ ζῆν μεθόριον, καὶ οὔτε μὴ εἶναι παντελῶς ὁ καθεύδων οὔτ' εἶναι. τῷ γὰρ ἐγρηγορέναι τὸ ζῆν μάλισθ' ὑπάρχει διὰ τὴν αἴσθησιν. εἰ δ' ἐστὶν ἀναγκαῖον ἔχειν αἴσθησιν τὸ ζῶον, καὶ τότε πρῶτόν ἐστι ζῶον ὅταν αἴσθησις γένηται πρῶτον, τὴν μὲν ἐξ ἀρχῆς διάθεσιν οὐχ ὕπνον ἀλλ' ὅμοιον ὕπνῳ δεῖ νομίζειν, οἷανπερ ἔχει καὶ τὸ τῶν φυτῶν γένος· (779a.) καὶ γὰρ συμβέβηκε κατὰ τοῦτον τὸν χρόνον τὰ ζῶα φυτοῦ βίον ζῆν-τοῖς δὲ φυτοῖς ὑπάρχειν ὕπνον ἀδύνατον· οὐθεὶς γὰρ ὕπνος ἀνέγερτος, τὸ δὲ τῶν φυτῶν πάθος τὸ ἀνάλογον τῷ ὕπνῳ ἀνέγερτον-καθεύδειν μὲν οὖν τὰ ζῶα τὸν πλείω χρόνον ἀναγκαῖον διὰ τὸ τὴν αὕξησιν καὶ τὸ βάρος ἐπικεῖσθαι

τοῖς ἄνω τόποις (εἰρήκαμεν δὲ τὴν αἰτίαν τοῦ καθεύδειν τοιαύτην οὕσαν ἐν ἑτέροις)· ἀλλ' ὅμως ἐγειρόμενα φαίνεται καὶ ἐν τῇ μήτρᾳ (δῆλον δὲ γίγνεται τοῦτο ἐν ταῖς ἀνατομαῖς καὶ ἐν τοῖς ὠτοκουμένοις), εἴτ' εὐθὺς καθεύδουσι καὶ καταφέρονται πάλιν. διόπερ καὶ ἐξελθόντα τὸν πολὺν διάγει χρόνον καθεύδοντα.

Καὶ ἐγρηγορότα μὲν οὐ γελᾷ τὰ παιδιά, καθεύδοντα δὲ καὶ δακρύει καὶ γελᾷ. συμβαίνουσι γὰρ καὶ καθεύδουσιν αἰσθήσεις τοῖς ζώοις, οὐ μόνον τὰ καλούμενα ἐνύπνια ἀλλὰ καὶ παρὰ τὸ ἐνύπνιον, καθάπερ τοῖς ἀνισταμένοις καθεύδουσι καὶ πολλὰ πράττουσιν ἄνευ τοῦ ἐνυπνιάζειν. εἰσὶ γὰρ τινες οἱ καθεύδοντες ἀνίστανται καὶ πορεύονται βλέποντες ὥσπερ ἐγρηγορότες. τούτοις γὰρ γίγνεται τῶν συμβαινόντων αἰσθησις, οὐκ ἐγρηγορόσι μὲν, οὐ μέντοι ὡς ἐνύπνιον. τὰ δὲ παιδιά ἐοίκασιν, ὥσπερ ἀνεπιστήμονα τοῦ ἐγρηγορέναι, διὰ συνήθειαν ἐν τῷ καθεύδειν αἰσθάνεσθαι καὶ ζῆν. προϊόντος δὲ τοῦ χρόνου καὶ τῆς αὐξήσεως εἰς τὸ κάτω μεταβαίνουσης ἐγείρονται τε μᾶλλον ἤδη καὶ τὸν πλείω χρόνον οὕτω διάγουσιν. μᾶλλον δὲ τῶν ἄλλων ζώων ἐν ὕπνῳ τὸ πρῶτον διατελοῦσιν· ἀτελέστατα γὰρ γεννᾶται τῶν τετελεσμένων καὶ τὴν αὕξησιν ἔχοντα μάλιστα ἐπὶ τὸ ἄνω μέρος τοῦ σώματος.

Γλαυκότερα δὲ τὰ ὄμματα τῶν παιδίων εὐθὺς γενομένων ἐστὶ πάντων, ὕστερον δὲ μεταβάλλει πρὸς τὴν ὑπάρχειν μέλλουσαν φύσιν αὐτοῖς· ἐπὶ δὲ τῶν ἄλλων ζώων οὐ συμβαίνει τοῦτ' ἐπιδήλως. τούτου μὲν οὖν αἴτιον τὸ μονόχροα τὰ ὄμματα τῶν ἄλλων εἶναι μᾶλλον, οἷον οἱ βόες μελανόφθαλμοι, τὸ δὲ τῶν προβάτων ὑδαρὲς πάντων, τῶν δὲ χαροπὸν ὅλον τὸ γένος ἢ γλαυκόν, ἔνια δ' αἰγῳπὰ καθάπερ καὶ τὸ τῶν αἰγῶν αὐτὸ πλῆθος. τὰ δὲ τῶν ἀνθρώπων ὄμματα πολύχροα συμβέβηκεν εἶναι· καὶ γὰρ γλαυκοὶ καὶ χαροποὶ καὶ μελανόφθαλμοί (779b.) τινὲς εἰσιν, οἱ δ' αἰγῳποί. ὥστε τὰ μὲν ἄλλα ὥσπερ οὐδ' ἀλλήλων διαφέρουσιν οὕτως οὐδ' αὐτὰ αὐτῶν· οὐ γὰρ πέφυκε πλείους μιᾷς ἴσχειν χροᾶς. μάλιστα δὲ τῶν ἄλλων ζώων ἵππος πολύχρων ἐστίν· καὶ γὰρ ἑτερόγλαυκοὶ τινες αὐτῶν γίνονται. τοῦτο δὲ τῶν μὲν ἄλλων οὐθὲν πάσχει ζώων ἐπιδήλως, ἄνθρωποι δὲ γίνονται τινες ἑτερόγλαυκοι.

Τοῦ μὲν οὖν τᾶλλα ζῶα νέα ὄντα καὶ πρεσβύτερα μὴθὲν ἐπίδηλον μεταβάλλειν, ἐπὶ δὲ τῶν παιδίων τοῦτο συμβαίνειν, ἱκανὴν οἰητέον αἰτίαν εἶναι καὶ ταύτην ὅτι τῶν μὲν μονόχρων τῶν δὲ πολύχρων τὸ μόριόν ἐστιν· τοῦ δὲ γλαυκότερα καὶ μὴ χροᾶν ἄλλην ἴσχειν αἴτιον ὅτι ἀσθενέστερα τὰ μόρια τῶν νέων, ἀσθένεια δὲ τις ἢ γλαυκότης.

Δεῖ δὲ λαβεῖν καθόλου περὶ τῆς διαφορᾶς τῶν ὀμμάτων διὰ τίν' αἰτίαν τὰ μὲν γλαυκὰ τὰ δὲ χαροπὰ τὰ δ' αἰγωπὰ τὰ δὲ μελανόμματα ἔστιν. τὸ μὲν οὖν ὑπολαμβάνειν τὰ μὲν γλαυκὰ πυρώδη, καθάπερ Ἐμπεδοκλῆς φησι, τὰ δὲ μέλανα πλεῖον ὕδατος ἔχειν ἢ πυρός, καὶ διὰ τοῦτο τὰ μὲν ἡμέρας οὐκ ὁξὺ βλέπειν, τὰ γλαυκὰ, δι' ἔνδειαν ὕδατος, θάτερα δὲ νύκτωρ δι' ἔνδειαν πυρός, οὐ λέγεται καλῶς, εἴπερ μὴ πυρὸς τὴν ὄψιν θετέον ἀλλ' ὕδατος πᾶσιν. ἔτι δ' ἐνδέχεται τῶν χρωμάτων τὴν αἰτίαν ἀποδοῦναι καὶ κατ' ἄλλον τρόπον, ἀλλ' εἴπερ ἔστιν ὥσπερ ἐλέχθη πρότερον ἐν τοῖς περὶ τὰς αἰσθήσεις καὶ τούτων ἔτι πρότερον ἐν τοῖς περὶ ψυχῆς διωρισμένοις, καὶ ὅτι ὕδατος καὶ δι' ἣν αἰτίαν ὕδατος ἀλλ' οὐκ ἄερος ἢ πυρὸς τὸ αἰσθητήριον τοῦτ' ἔστι, ταύτην αἰτίαν ὑποληπτέον εἶναι τῶν εἰρημένων. οἱ μὲν γὰρ ἔχουσι τῶν ὀφθαλμῶν πλεον ὑγρόν, οἱ δ' ἔλαττον τῆς συμμέτρου κινήσεως, οἱ δὲ σύμμετρον. τὰ μὲν οὖν ἔχοντα τῶν ὀμμάτων πολὺ τὸ ὑγρὸν μελανόμματα ἔστι διὰ τὸ μὴ εὐδίοπτ' εἶναι τὰ πολλὰ, γλαυκὰ δὲ τὰ ὀλίγον, καθάπερ φαίνεται καὶ ἐπὶ τῆς θαλάττης· τὸ μὲν γὰρ εὐδίοπτον αὐτῆς γλαυκὸν φαίνεται, τὸ δ' ἥττον ὕδατῶδες, τὸ δὲ μὴ διωρισμένον διὰ βάθος μέλαν καὶ κυανοειδές. τὰ δὲ μεταξὺ τῶν ὀμμάτων τούτων τῷ μᾶλλον ἤδη διαφέρει καὶ ἥττον.

Τὴν δ' αὐτὴν αἰτίαν οἰητέον καὶ τοῦ τὰ μὲν γλαυκὰ μὴ εἶναι ὀξυωπὰ τῆς ἡμέρας, τὰ δὲ (780a.) μελανόμματα τῆς νυκτός. τὰ μὲν γὰρ γλαυκὰ δι' ὀλιγότητα τοῦ ὑγροῦ κινεῖται μᾶλλον ὑπὸ τοῦ φωτός καὶ τῶν ὀρατῶν ἢ ὑγρὸν καὶ ἡ διαφανές. ἔστι δ' ἡ τούτου τοῦ μορίου κινήσεις ὀρασις ἢ διαφανές ἀλλ' οὐχ ἡ ὑγρόν. τὰ δὲ μελανόμματα διὰ πλῆθος τοῦ ὑγροῦ ἥττον κινεῖται. ἀσθενές γὰρ τὸ νυκτερινὸν φῶς· ἅμα γὰρ καὶ δυσκίνητον ἐν τῇ νυκτὶ ὅλως γίγνεται τὸ ὑγρόν. δεῖ δὲ οὔτε μὴ κινεῖσθαι αὐτὸ οὔτε μᾶλλον ἢ ἡ διαφανές· ἐκκρούει γὰρ ἡ ἰσχυροτέρα κινήσις τὴν ἀσθενεστέραν. διὸ καὶ ἀπὸ τῶν ἰσχυρῶν χρωμάτων μεταβάλλοντες οὐχ ὀρώσι, καὶ ἐκ τοῦ ἡλίου εἰς τὸ σκότος ἰόντες· ἰσχυρὰ γὰρ οὔσα ἢ ἐνυπάρχουσα κινήσις κωλύει τὴν θύραθεν-καὶ ὅλως οὔτε σθένους οὔτε ἀσθενῆς ὄψις τὰ λαμπρὰ δύναται ὀρᾶν διὰ τὸ πάσχειν τι μᾶλλον καὶ κινεῖσθαι τὸ ὑγρόν. δηλοῖ δὲ καὶ τὰ ἀρρωστήματα τῆς ὄψεως ἑκατέρας. τὸ μὲν γὰρ γλαύκωμα γίγνεται μᾶλλον τοῖς γλαυκοῖς, οἱ δὲ νυκτάλωπες καλούμενοι τοῖς μελανοφθάλμοις. ἔστι δὲ τὸ μὲν γλαύκωμα ξηρότης τις [μᾶλλον] τῶν ὀμμάτων, διὸ καὶ συμβαίνει μᾶλλον γηράσκουσιν· ξηραίνεται γὰρ ὥσπερ καὶ τὸ ἄλλο σῶμα καὶ ταῦτα τὰ μόρια πρὸς τὸ γῆρας· ὁ δὲ νυκτάλωψ ὑγρότητος πλεονασμός, διὸ τοῖς νεωτέροις γίγνεται μᾶλλον· ὑγρότερος γὰρ ὁ ἐγκέφαλος τούτων. ἡ δὲ μέση τοῦ πολλοῦ καὶ τοῦ ὀλίγου ὑγροῦ βελτίστη ὄψις· οὔτε γὰρ ὡς ὀλίγη οὔσα διὰ τὸ ταράττεσθαι ἐμποδίζει τὴν τῶν χρωμάτων κίνησιν, οὔτε διὰ τὸ πλῆθος παρέχει δυσκινησίαν.



Οὐ μόνον δὲ τὰ εἰρημένα αἵτια τοῦ ἀμβλῦναι ἢ ὀξὺ ὄραν ἀλλὰ καὶ ἡ τοῦ δέρματος φύσις τοῦ ἐπὶ τῇ κόρῃ καλουμένη· δεῖ γὰρ αὐτὸ διαφανὲς εἶναι, τοιοῦτον δ' ἀναγκαῖον εἶναι τὸ λεπτὸν καὶ λευκὸν καὶ ὁμαλόν-λεπτὸν μὲν ὅπως ἡ θύραθεν εὐθυπορῇ κίνησις, ὁμαλὸν δ' ὅπως μὴ ἐπισκιάζη ῥυτιδούμενον (καὶ γὰρ διὰ τοῦθ' οἱ γέροντες οὐκ ὀξὺ ὀρῶσιν· ὥσπερ γὰρ καὶ τὸ ἄλλο δέριμα καὶ τὸ τοῦ ὄμματος ῥυτιδοῦνται τε καὶ παχύτερον γίνεται γηράσκουσιν), λευκὸν δὲ διὰ τὸ τὸ μέλαν μὴ εἶναι διαφανές· αὐτὸ γὰρ τοῦτ' ἔστι τὸ μέλαν, τὸ μὴ διαφαινόμενον. διόπερ οὐδ' οἱ λαμπτήρες δύνανται φαίνειν ἐὰν ὣσιν ἐκ τοιούτου δέρματος.

Ἐν μὲν οὖν τῷ γήρᾳ καὶ ταῖς νόσοις (780b.) διὰ ταύτας τὰς αἰτίας οὐκ ὀξὺ βλέπουσι, τὰ δὲ παιδιά δι' ὀλιγότητα τοῦ ὑγροῦ γλαυκὰ φαίνεται τὸ πρῶτον. ἑτερόγλαυκοι δὲ γίνονται μάλιστα οἱ ἄνθρωποι καὶ οἱ ἵπποι διὰ τὴν αὐτὴν αἰτίαν δι' ἣνπερ ὁ μὲν ἄνθρωπος πολιοῦται μόνον, τῶν δ' ἄλλων ἵππος μόνος ἐπιδήλως γηράσκων λευκαίνεται τὰς τρίχας. ἢ τε γὰρ πολιότης ἀσθενεία τις ἔστι τοῦ ὑγροῦ τοῦ ἐν τῷ ἐγκεφάλῳ καὶ ἀπεψία, καὶ ἡ γλαυκότης· τὸ γὰρ λίαν λεπτὸν ἢ λίαν παχὺ τὴν αὐτὴν ἔχει δύναμιν-τὸ μὲν τῷ ὀλίγῳ τὸ δὲ τῷ πολλῷ ὑγρῷ. ὅταν οὖν μὴ δύνηται ἀπαρτίσαι ἡ φύσις ὁμοίως ἢ πέψασα τὸ ἐν ἀμφοτέροις ὑγρὸν ἢ μὴ πέψασα, ἀλλὰ τὸ μὲν τὸ δὲ μή, τότε συμβαίνει γίνεσθαι ἑτερογλαύκους.

Περὶ δὲ τοῦ τὰ μὲν ὀξυωπὰ εἶναι τῶν ζώων τὰ δὲ μὴ δύο τρόποι τῆς αἰτίας εἰσίν. διχῶς γὰρ λέγεται τὸ ὀξὺ σχεδόν, καὶ περὶ τὸ ἀκούειν καὶ τὸ ὀσφραίνεσθαι ὁμοίως τοῦτ' ἔχει. λέγεται γὰρ ὀξὺ ὄραν ἔν μὲν τὸ πόρρωθεν δύνασθαι ὄραν, ἔν δὲ τὸ τὰς διαφορὰς ὅτι μάλιστα διαισθάνεσθαι τῶν ὀρωμένων. ταῦτα δ' οὐχ ἅμα συμβαίνει τοῖς αὐτοῖς. ὁ γὰρ αὐτὸς ἐπηλυγασάμενος τὴν χεῖρα ἢ δι' αὐλοῦ βλέπων τὰς μὲν διαφορὰς οὐθὲν μᾶλλον οὐδ' ἦττον κρινεῖ τῶν χρωμάτων, ὥσπερ δὲ πορρώτερον· οἱ γοῦν ἐκ τῶν ὀρυγμάτων καὶ φρεάτων ἐνίοτε καὶ ἀστέρας ὀρῶσιν. ὥστ' εἴ τι τῶν ζώων ἔχει μὲν προβολὴν τοῦ ὄμματος πολλήν, τὸ δ' ἐν τῇ κόρῃ ὑγρὸν μὴ καθαρὸν μηδὲ σύμμετρον τῇ κινήσει τῇ θύραθεν μηδὲ τὸ ἐπιπολῆς δέριμα λεπτόν, τοῦτο περὶ μὲν τὰς διαφορὰς οὐκ ἀκριβώσει τῶν χρωμάτων, πόρρωθεν δ' ἔσται ὀρατικόν [ὥσπερ εἰ καὶ ἐγγύθεν] μᾶλλον τῶν τὸ μὲν ὑγρὸν καθαρὸν ἐχόντων καὶ τὸ σκέπασμα αὐτοῦ, μὴ ἐχόντων δ' ἐπισκύνιον πρὸ τῶν ὀμμάτων μηθέν. -τοῦ μὲν γὰρ οὕτως ὀξὺ ὄραν ὥστε διαισθάνεσθαι τὰς διαφορὰς ἐν αὐτῷ τῷ ὀμματί ἐστίν ἡ αἰτία· ὥσπερ γὰρ ἐν ἱματίῳ καθαρῷ καὶ αἱ μικραὶ κηλίδες ἔνδηλοι γίνονται οὕτω καὶ ἐν τῇ καθαρᾷ ὄψει καὶ αἱ μικραὶ κινήσεις δῆλαι καὶ ποιοῦσιν αἴσθησιν.

τοῦ δὲ τὰ πόρρωθεν ὄραν καὶ τὴν ἀπὸ τῶν πόρρωθεν ὀρατῶν ἀφικνεῖσθαι κίνησιν ἢ θέσις αἰτία τῶν ὀφθαλμῶν· τὰ μὲν γὰρ ἐξόφθαλμα οὐκ εὐωπὰ πόρρωθεν, τὰ δ' ἐντὸς ἔχοντα (781a.) τὰ ὄμματα ἐν κοίλῳ κείμενα ὀρατικὰ τῶν πόρρωθεν διὰ τὸ τὴν κίνησιν μὴ σκεδάννυσθαι εἰς ἀχανὲς ἀλλ' εὐθυπορεῖν.

οὐθὲν γὰρ διαφέρει τὸ λέγειν ὄραν, ὥσπερ τινὲς φασι, τῷ τὴν ὄψιν ἐξιέναι (ἂν γὰρ μὴ ἢ τι πρὸ τῶν ὀμμάτων, διασκεδαννυμένην ἀνάγκη ἐλάττω προσπίπτειν τοῖς ὀρωμένοις καὶ ἦττον τὰ πόρρωθεν ὄραν), ἢ τὸ τῇ ἀπὸ τῶν ὀρωμένων κινήσει ὄραν. ὁμοίως γὰρ ἀνάγκη καὶ τὴν ὄψιν τῇ κινήσει ὄραν. μάλιστα μὲν οὖν ἐωρᾶτο ἂν τὰ πόρρωθεν εἰ ἀπὸ τῆς ὀψεως εὐθὺς συνεχῆς ἦν πρὸς τὸ ὀρώμενον οἶον αὐλός· οὐ γὰρ ἂν διελύετο ἡ κίνησις ἢ ἀπὸ τῶν ὀρατῶν· εἰ δὲ μή, ὥσπερ ἂν ἐπὶ πλέον ἐπέχη τοσούτῳ ἀκριβέστερον τὰ πόρρωθεν ὄραν ἀνάγκη.

Καὶ τῆς μὲν τῶν ὀμμάτων διαφορᾶς ἕστωσαν αὗται αἱ αἰτίαι.

## Κεφάλαιο 2

Τὸν αὐτὸν δὲ τρόπον ἔχει καὶ περὶ τὴν ἀκοὴν καὶ τὴν ὀσφρησιν· ἐν μὲν γὰρ ἔστι τοῦ ἀκριβῶς ἀκούειν καὶ ὀσφραίνεσθαι τὸ τὰς διαφορὰς τῶν ὑποκειμένων αἰσθητῶν ὅτι μάλιστα αἰσθάνεσθαι πάσας, ἐν δὲ τὸ πόρρωθεν καὶ ἀκούειν καὶ ὀσφραίνεσθαι. τοῦ μὲν οὖν τὰς διαφορὰς κρίνειν καλῶς τὸ αἰσθητήριον αἶτιον, ὥσπερ ἐπὶ τῆς ὀψεως, ἂν ἢ καθαρὸν αὐτό τε καὶ ἡ περὶ αὐτὸ μῆνιγξ. [[οἱ γὰρ πόροι τῶν αἰσθητηρίων πάντων, ὥσπερ εἴρηται ἐν τοῖς περὶ αἰσθήσεως, τείνουσι πρὸς τὴν καρδίαν, τοῖς δὲ μὴ ἔχουσι καρδίαν πρὸς τὸ ἀνάλογον. ὁ μὲν οὖν τῆς ἀκοῆς, ἐπεὶ ἔστι τὸ αἰσθητήριον ἄερος, ἢ τὸ πνεῦμα τὸ σύμφυτον ποιεῖται ἐνίοις μὲν τὴν σφύξιν τοῖς δὲ τὴν ἀναπνοὴν καὶ εἰσπνοὴν, ταύτη περαίνει· διὸ καὶ ἡ μάθησις γίνεταί τῶν λεγομένων ὥστ' ἀντιφθέγγεσθαι τὸ ἀκουσθέν· οἷς γὰρ ἡ κίνησις εἰσῆλθε διὰ τοῦ αἰσθητηρίου τοιαύτη πάλιν, οἶον ἀπὸ χαρακτῆρος τοῦ αὐτοῦ καὶ ἐνός, διὰ τῆς φωνῆς γίνεταί ἡ κίνησις ὥσθ' ὃ ἤκουσε τοῦτ' εἰπεῖν. καὶ χασμώμενοι καὶ ἐκπνέοντες ἦττον ἀκούουσιν ἢ εἰσπνέοντες διὰ τὸ ἐπὶ τῷ πνευματικῷ μορίῳ τὴν ἀρχὴν τοῦ αἰσθητηρίου εἶναι τοῦ τῆς ἀκοῆς, καὶ σείεσθαι καὶ κινεῖσθαι ἅμα κινουντος τοῦ ὀργάνου τὸ πνεῦμα· κινεῖται γὰρ κινῶν τὸ ὄργανον. καὶ ἐν ταῖς ὑγραῖς ὥραις καὶ κράσεσι συμβαίνει τὸ αὐτὸ πάθος \* καὶ τὰ ὥτα πληροῦσθαι δοκεῖ πνεύματος (781b.) διὰ τὸ γειτνιαῖν τῇ ἀρχῇ τοῦ πνευματικοῦ τόπου†. ἡ μὲν οὖν περὶ τὰς διαφορὰς ἀκρίβεια τῆς κρίσεως καὶ τῶν ψόφων καὶ τῶν ὁσμῶν ἐν τῷ τὸ αἰσθητήριον καθαρὸν εἶναι καὶ τὸν

ὑμένα τὸν ἐπιπολῆς ἐστίν· πᾶσαι γὰρ αἱ κινήσεις διάδηλοι καθάπερ ἐπὶ τῆς ὀψεως καὶ ἐπὶ τῶν τοιούτων συμβαίνουσιν]].

καὶ τὸ πόρρωθεν δὲ αἰσθάνεσθαι, τὰ δὲ μὴ αἰσθάνεσθαι, ὁμοίως συμβαίνει ὥσπερ ἐπὶ τῆς ὀψεως. τὰ γὰρ ἔχοντα πρὸ τῶν αἰσθητηρίων ἐπὶ πολὺ οἶον ὅχετοὺς διὰ τῶν μορίων, ταῦτα πόρρωθεν αἰσθητικά ἐστίν. διὸ ὅσων οἱ μυκτῆρες μακροί, οἶον τῶν Λακωνικῶν κυνιδίων, ὁσφραντικά· ἄνω γὰρ ὄντος τοῦ αἰσθητηρίου αἱ πόρρωθεν κινήσεις οὐ διασπῶνται ἀλλ' εὐθυποροῦσιν, ὥσπερ τοῖς ἐπηλυγαζομένοις πρὸ τῶν ὁμμάτων. ὁμοίως δὲ καὶ ὅσοις τὰ ὦτα μακρὰ καὶ ἀπογεγισσώμενα πόρρωθεν, οἷα ἔχουσιν ἕνια τῶν τετραπόδων, καὶ ἔσω τὴν ἐλίκην μακράν· καὶ γὰρ ταῦτα ἐκ πολλοῦ λαμβάνοντα τὴν κίνησιν ἀποδίδωσι πρὸς τὸ αἰσθητήριον.

Τὴν μὲν οὖν πόρρωθεν ἀκρίβειαν τῶν αἰσθήσεων ἥκιστα ὥς εἰπεῖν ἄνθρωπος ἔχει ὥς κατὰ μέγεθος τῶν ζώων, τὴν δὲ περὶ τὰς διαφορὰς μάλιστα πάντων εὐαίσθητον. αἴτιον δ' ὅτι τὸ αἰσθητήριον καθαρὸν καὶ ἥκιστα γεῶδες καὶ σωματῶδες, καὶ φύσει λεπτοδερμότατον τῶν ζώων ὥς κατὰ μέγεθος ἄνθρωπός ἐστιν.

Εὐλόγως δ' ἀπείργασται ἡ φύσις καὶ τὰ περὶ τὴν φώκην· τετράπουν γὰρ ὄν καὶ ζωοτόκον οὐκ ἔχει ὦτα ἀλλὰ πόρους μόνον. αἴτιον δ' ὅτι ἐν ὑγρῷ αὐτῇ ὁ βίος. τὸ γὰρ τῶν ὠτων μόριον πρόσκειται τοῖς πόροις πρὸς τὸ σῶζειν τὴν τοῦ πόρρωθεν ἀέρος κίνησιν· οὐθὲν οὖν χρήσιμόν ἐστιν αὐτῇ, ἀλλὰ καὶ τούναντίον ἀπεργάζοιτ' ἂν δεχόμενα εἰς αὐτὰ ὑγροῦ πλῆθος.

Καὶ περὶ μὲν ὀψεως καὶ ἀκοῆς καὶ ὁσφρήσεως εἴρηται.

### Κεφάλαιο 3

Τὰ δὲ τριχώματα διαφέρουσι καὶ πρὸς αὐτὰ τοῖς ἀνθρώποις κατὰ τὰς ἡλικίας καὶ πρὸς τὰ γένη τῶν ἄλλων ζώων, ὅσαπερ ἔχει τρίχας αὐτῶν. ἔχει δ' ὅσαπερ ἐν αὐτοῖς ζωοτοκεῖ πάντα σχεδόν· καὶ γὰρ τὰ ἀκανθώδεις ἔχοντα τῶν τοιούτων τριχῶν εἶδος τι ὑποληπτέον, οἶον τὰς τε τῶν χερσαίων ἐχίνων καὶ εἴ τι ἄλλο τοιοῦτόν ἐστι (782a.) τῶν ζωοτόκων. εἰσὶ δὲ διαφοραὶ τῶν τριχῶν κατὰ τε σκληρότητα καὶ μαλακότητα καὶ κατὰ μῆκος καὶ βραχύτητα καὶ εὐθύτητα καὶ οὐλότητα καὶ πλῆθος καὶ ὀλιγότητα, πρὸς δὲ τούτοις καὶ κατὰ τὰς χροὰς, κατὰ τε λευκότητα καὶ μελανίαν καὶ τὰς μεταξὺ τούτων. ἐνίαις δὲ τούτων τῶν διαφορῶν καὶ κατὰ τὰς ἡλικίας διαφέρουσι νέα τε καὶ παλαιούμενα, μάλιστα δὲ τοῦτ' ἐπίδηλον ἐπὶ τῶν ἀνθρώπων· καὶ γὰρ

δασύνεται μᾶλλον πρεσβύτερα γινόμενα καὶ φαλακροῦνται τῆς κεφαλῆς ἔνιοι τὰ πρόσθεν. καὶ παῖδες μὲν ὄντες οὐ γίνονται φαλακροί, -οὐδ' αἱ γυναῖκες· οἱ δ' ἄνδρες προϊούσης ἤδη τῆς ἡλικίας. καὶ πολιοῦνται δὲ τὰς κεφαλὰς γηράσκοντες οἱ ἄνθρωποι, τῶν δ' ἄλλων ζώων οὐθενὶ τοῦθ' ὥς εἰπεῖν γίγνεται ἐπίδηλον, μάλιστα δ' ἵππῳ τῶν ἄλλων. καὶ φαλακροῦνται μὲν οἱ ἄνθρωποι τὰ ἔμπροσθεν τῆς κεφαλῆς, πολιοὶ δὲ πρῶτον γίνονται τοὺς κροτάφους· φαλακροῦνται δ' οὐθεὶς οὔτε τούτους οὔτε τὰ ὀπισθεν τῆς κεφαλῆς. ὅσα δὲ τῶν ζώων μὴ ἔχει τρίχας ἀλλὰ τὸ ἀνάλογον αὐταῖς, οἷον ὄρνιθες μὲν πτερὰ τὸ δὲ τῶν ἰχθύων γένος λεπίδας, καὶ τούτοις συμβαίνει τῶν τοιούτων παθημάτων ἔνια κατὰ τὸν αὐτὸν λόγον.

Τίνος μὲν οὖν ἔνεκα τὸ τῶν τριχῶν ἡ φύσις ἐποίησε γένος τοῖς ζώοις εἴρηται πρότερον ἐν ταῖς αἰτίαις ταῖς περὶ τὰ μέρη τῶν ζώων· τίνων δ' ὑπαρχόντων καὶ διὰ τίνας ἀνάγκας συμβαίνει τούτων ἕκαστον δηλῶσαι τῆς μεθόδου τῆς νῦν ἔστιν.

Παχύτης μὲν οὖν καὶ λεπτότητος αἴτιόν ἐστι μάλιστα τὸ δέρμα· τοῖς μὲν γὰρ παχὺ τοῖς δὲ λεπτὸν καὶ τοῖς μὲν μανὸν τοῖς δὲ πυκνὸν ἐστίν. ἔτι δὲ συναίτιον καὶ τῆς ἐνούσης ὑγρότητος ἡ διαφορὰ· τοῖς μὲν γὰρ ὑπάρχει λιπαρὰ τοῖς δ' ὑδατώδης. ὅλως μὲν γὰρ ἡ τοῦ δέρματος φύσις ὑπόκειται γεώδης· ἐπιπολῆς γὰρ οὕσα ἐξατμίζοντος τοῦ ὑγροῦ στερεὰ γίγνεται καὶ γεώδης, αἱ δὲ τρίχες καὶ τὸ ἀνάλογον αὐταῖς οὐκ ἐκ τῆς σαρκὸς γίνονται ἀλλ' ἐκ τοῦ δέρματος ἐξατμίζοντος καὶ ἀναθυμιωμένου ἐν αὐτοῖς τοῦ ὑγροῦ. διὸ παχεῖται μὲν ἐκ τοῦ παχέος λεπταὶ δὲ ἐκ τοῦ λεπτοῦ δέρματος γίνονται. ἂν μὲν οὖν ἢ τὸ δέρμα μανότερον καὶ παχύτερον, παχεῖται διὰ τε τὸ πλῆθος τοῦ γεώδους καὶ (782b.) διὰ τὸ μέγεθος τῶν πόρων εἰσίν· ἂν δὲ πυκνότερον, λεπταὶ διὰ τὴν στενότητα τῶν πόρων. ἔτι δ' ἂν ἢ ἡ ἰκμὰς ὑδατώδης ταχὺ ἀναξηραιομένης οὐ λαμβάνουσι μέγεθος αἱ τρίχες, ἂν δὲ λιπαρὰ τούναντίον· οὐ γὰρ εὐξήραντον τὸ λιπαρόν. διόπερ ὅλως μὲν τὰ παχυδερμότερα παχυτριχώτερα τῶν ζώων, οὐ μέντοι τὰ μάλιστα μᾶλλον διὰ τὰς εἰρημένας αἰτίας, οἷον τὸ τῶν ὑῶν γένος πρὸς τὸ τῶν βοῶν πέπονθε καὶ πρὸς ἐλέφαντα καὶ πρὸς πολλὰ τῶν ἄλλων. διὰ τὴν αὐτὴν δ' αἰτίαν καὶ αἱ ἐν τῇ κεφαλῇ τρίχες τοῖς ἀνθρώποις παχύταται· τοῦ γὰρ δέρματος τοῦτο παχύτατον καὶ ἐπὶ πλείστη ὑγρότητι, ἔτι δ' ἔχει μανότητα πολλήν. αἴτιον δὲ καὶ τοῦ μακρὰς [ἢ βραχείας] τὰς τρίχας <ἔχειν> τὸ μὴ εὐξήραντον εἶναι τὸ ἐξατμίζον ὑγρόν. τοῦ δὲ μὴ εὐξήραντον εἶναι δύο αἰτίαι, τό τε ποσὸν καὶ τὸ ποιόν· ἂν τε γὰρ πολὺ ἢ τὸ ὑγρὸν οὐκ εὐξήραντον, καὶ ἂν λιπαρόν. καὶ διὰ τοῦτο τοῖς ἀνθρώποις αἱ ἐκ τῆς κεφαλῆς τρίχες μακρόταται· ὁ γὰρ ἐγκέφαλος ὑγρὸς καὶ ψυχρὸς ὦν πολλὴν παρέχει δαψίλειαν τοῦ ὑγροῦ.

Εὐθύτριχα δὲ καὶ οὐλότριχα γίνονται διὰ τὴν ἐν ταῖς θριξίν ἀναθυμίασιν. ἂν μὲν γὰρ ἡ καπνώδης, θερμὴ οὖσα καὶ ξηρὰ οὕλην τὴν τρίχα ποιεῖ. κάμπτεται γὰρ διὰ τὸ δύο φέρεσθαι φοράς· τὸ μὲν γὰρ γεῶδες κάτω τὸ δὲ θερμὸν ἄνω φέρεται. εὐκάμπτου δ' οὔσης δι' ἀσθένειαν στρέφεται· τοῦτο δ' ἐστὶν οὐλότης τριχός. ἐνδέχεται μὲν οὖν οὕτω λαβεῖν τὴν αἰτίαν, ἐνδέχεται δὲ καὶ διὰ τὸ ὀλίγον ἔχειν τὸ ὑγρὸν, πολὺ δὲ τὸ γεῶδες ὑπὸ τοῦ περιέχοντος ξηραίνοντάς συσπᾶσθαι. κάμπτεται γὰρ τὸ εὐθὺ ἐὰν ἐξατμίζεται καὶ συντρέχει ὥσπερ ἐπὶ τοῦ πυρὸς καιομένη θρίξ, ὡς οὔσης τῆς οὐλότητος συσπάσεως δι' ἔνδειαν ὑγροῦ ὑπὸ τῆς τοῦ περιέχοντος θερμότητος. σημεῖον δ' ὅτι καὶ σκληρότεραι αἱ οὐλαι τρίχες τῶν εὐθειῶν εἰσιν· τὸ γὰρ ξηρὸν σκληρόν. εὐθύτριχα δὲ ὅσα ὑγρότητ' ἔχει πολλήν· ῥέον γὰρ ἄλλ' οὐ στάζον προέρχεται ἐν ταύταις τὸ ὑγρὸν. καὶ διὰ τοῦτο οἱ μὲν ἐν τῷ Πόντῳ Σκύθαι καὶ Θρᾷκες εὐθύτριχες· καὶ γὰρ αὐτοὶ ὑγροὶ καὶ ὁ περιέχων αὐτοὺς ἀῆρ ὑγρός· Αἰθίοπες δὲ καὶ οἱ ἐν τοῖς θερμοῖς (783a.) οὐλότριχες· ξηροὶ γὰρ οἱ ἐγκέφαλοι καὶ ὁ ἀῆρ ὁ περιέχων.

Ἔστι δ' ἔνια τῶν παχυδέρμων λεπτότριχα διὰ τὴν εἰρημένην αἰτίαν πρότερον· ὅσω γὰρ ἂν λεπτότεροι οἱ πόροι ὥσιν τοσούτῳ λεπτοτέρας ἀναγκαῖον γίνεσθαι τὰς τρίχας. διὸ τὸ τῶν προβάτων γένος τοιαύτας ἔχει τὰς τρίχας· τὸ γὰρ ἔριον τριχῶν πλῆθός ἐστιν. ἔστι δ' ἔνια τῶν ζώων ἃ μαλακὴν μὲν ἔχει τὴν τρίχα, ἥττον δὲ λεπτὴν, οἷον τὸ τῶν δασυπόδων πρὸς τὸ τῶν προβάτων πέπονθεν. τῶν γὰρ τοιούτων ἐπιπολῆς ἡ θρίξ τοῦ δέρματος. διὸ μῆκος οὐκ ἴσχει ἀλλὰ συμβαίνει παραπλήσιον ὥσπερ τὰ ἀπὸ τῶν λίνων ξυόμενα· καὶ γὰρ ταῦτα μῆκος μὲν οὐθὲν ἴσχει, μαλακὰ δ' ἐστὶ καὶ οὐ δέχεται πλοκὴν. τὰ δ' ἐν τοῖς ψυχροῖς πρόβατα τοῦναντίον πέπονθε τοῖς ἀνθρώποις· οἱ μὲν γὰρ Σκύθαι μαλακότριχες, τὰ δὲ πρόβατα τὰ Σαυροματικὰ σκληρότριχα. τούτου δ' αἴτιον ταῦτό καὶ ἐπὶ τῶν ἀγρίων πάντων. ἡ γὰρ ψυχρότης σκληρύνει διὰ τὸ ξηραίνειν πηγνύουσα· ἐκθλιβομένου γὰρ τοῦ θερμοῦ συνεξατμίζει τὸ ὑγρὸν καὶ γίνονται καὶ αἱ τρίχες καὶ τὸ δέρμα γεῶδες καὶ σκληρόν. αἴτιον δὲ τοῖς μὲν ἀγρίοις ἡ θυραυλία τοῖς δ' ὁ τόπος τοιοῦτος ὢν. σημεῖον δὲ καὶ τὸ ἐπὶ τῶν ποντίων ἐχίνων συμβαῖνον οἷς χρῶνται πρὸς τὰς στραγγουρίας. καὶ γὰρ οὗτοι διὰ τὸ ἐν ψυχρᾷ εἶναι τῇ θαλάττῃ διὰ τὸ βάθος (καθ' ἐξήκοντα γὰρ καὶ ἔτι πλειόνων γίνονται ὀργυῶν) αὐτοὶ μὲν μικροί, τὰς δὲ ἀκάνθας μεγάλας ἔχουσι καὶ σκληράς-μεγάλας μὲν διὰ τὸ ἐνταῦθα τὴν τοῦ σώματος τετράφθαι αὔξησιν (ὀλιγόθερμοι γὰρ ὄντες καὶ οὐ πέττοντες τὴν τροφήν πολὺ περίττωμα ἔχουσιν, αἱ δ' ἄκανθαι καὶ αἱ τρίχες καὶ τὰ τοιαῦτα γίνονται ἐκ περιττώματος), σκληρὰς δὲ καὶ λελιθωμένας διὰ τὴν ψυχρότητα καὶ τὸν πάγον. τὸν αὐτὸν δὲ τρόπον καὶ τᾶλλα τὰ φυόμενα σκληρότερα συμβαίνει γίνεσθαι καὶ γεωδέστερα καὶ λιθωδέστερα τὰ ἐν τοῖς προσβόρροις τῶν πρὸς

νότον καὶ τὰ προσήνεμα τῶν ἐν κοίλοις· ψύχεται γὰρ πάντα μᾶλλον καὶ ἐξατμίζει τὸ ὑγρόν. σκληρύνει μὲν οὖν καὶ τὸ θερμὸν καὶ τὸ ψυχρόν· ἐξατμίζεσθαι γὰρ ὑπ' ἀμφοτέρων συμβαίνει τὸ ὑγρόν, ὑπὸ μὲν τοῦ θερμοῦ καθ' αὐτὸ ὑπὸ δὲ τοῦ ψυχροῦ κατὰ συμβεβηκός (μετὰ τοῦ θερμοῦ γὰρ συνεξέρχεται· οὐθὲν γὰρ ὑγρὸν ἄνευ θερμοῦ). ἀλλὰ τὸ μὲν ψυχρὸν (783b.) οὐ μόνον σκληρύνει ἀλλὰ καὶ πυκνοῖ, τὸ δὲ θερμὸν μανότερον ποιεῖ.

Διὰ τὴν αὐτὴν δ' αἰτίαν καὶ πρεσβυτέρων γιγνομένων τοῖς μὲν τρίχας ἔχουσι σκληρότεροι γίνονται αἱ τρίχες τοῖς δὲ περωτοῖς καὶ λεπιδωτοῖς τὰ πτερὰ καὶ αἱ λεπίδες. τὰ γὰρ δέρματα γίνονται σκληρότερα καὶ παχύτερα πρεσβυτέρων γιγνομένων· ξηραίνεται γάρ, καὶ τὸ γῆρας ἐστὶ κατὰ τοῦνομα γεηρὸν διὰ τὸ ἀπολείπειν τὸ θερμὸν καὶ μετ' αὐτοῦ τὸ ὑγρόν.

Φαλακροῦνται δ' ἐπιδήλως οἱ ἄνθρωποι μάλιστα τῶν ζώων. ἔστι δέ τι καθόλου τὸ τοιοῦτον πάθος· καὶ γὰρ τῶν φυτῶν τὰ μὲν ἀείφυλλα τὰ δὲ φυλλοβολεῖ, καὶ τῶν ὀρνίθων οἱ φωλεύοντες ἀποβάλλουσι τὰ πτερὰ. τοιοῦτον δέ τι πάθος καὶ ἡ φαλακρότης ἐστὶν ἐπὶ τῶν ἀνθρώπων ὅσοις συμβαίνει φαλακροῦσθαι· κατὰ μέρος μὲν γὰρ ἀπορρεῖ καὶ τὰ φύλλα τοῖς φυτοῖς πᾶσι καὶ τὰ πτερὰ καὶ αἱ τρίχες τοῖς ἔχουσιν, ὅταν δ' ἀθρόον γένηται τὸ πάθος λαμβάνει τὰς εἰρημένας ἐπωνυμίας· φαλακροῦσθαί τε γὰρ λέγεται καὶ φυλλορροεῖν <καὶ περορροεῖν>. αἴτιον δὲ τοῦ πάθους ἔνδεια ὑγρότητος θερμῆς, τοιοῦτον δὲ μάλιστα τῶν ὑγρῶν τὸ λιπαρόν· διὸ καὶ τῶν φυτῶν τὰ λιπαρὰ ἀείφυλλα μᾶλλον. ἀλλὰ περὶ μὲν τούτων ἐν ἄλλοις τὸ αἴτιον λεκτέον· καὶ γὰρ ἄλλα συναίτια τούτου τοῦ πάθους αὐτοῖς. γίνεται δὲ τοῖς μὲν φυτοῖς ἐν τῷ χειμῶνι τὸ πάθος (αὕτη γὰρ ἡ μεταβολὴ κυριωτέρα τῆς ἡλικίας) καὶ τοῖς φωλεύουσιν δὲ τῶν ζώων (καὶ γὰρ ταῦτα ἦττον τῶν ἀνθρώπων ὑγρὰ καὶ θερμὰ τὴν φύσιν ἐστίν)· οἱ δ' ἄνθρωποι ταῖς ἡλικίαις χειμῶνα καὶ θέρος ἄγουσιν. διὸ πρὶν ἀφροδισιάζειν οὐ γίνεται φαλακρὸς οὐδεὶς· τότε δὲ τοῖς τοιούτοις τὴν φύσιν μᾶλλον. φύσει γὰρ ἐστὶν ὁ ἐγκέφαλος ψυχρότατον τοῦ σώματος, ὁ δ' ἀφροδισιασμὸς καταψύχει· καθαρᾶς γὰρ καὶ φυσικῆς θερμότητος ἀπόκρισις ἐστίν. εὐλόγως οὖν ὁ ἐγκέφαλος αἰσθάνεται πρῶτον· τὰ γὰρ ἀσθενῆ καὶ φαύλως ἔχοντα μικρᾶς αἰτίας καὶ ῥοπῆς ἐστίν. ὥστ' ἂν τις ἀναλογίσηται ὅτι αὐτός τε ὀλιγόθερμος ὁ ἐγκέφαλος, ἔτι δ' ἀναγκαῖον τὸ πέριξ δέρμα τοιοῦτον εἶναι μᾶλλον, καὶ τούτου τὴν τῶν τριχῶν φύσιν ὅσω πλεῖστον ἀφέστηκεν, εὐλόγως ἂν δόξειε τοῖς σπερματικοῖς περὶ ταύτην τὴν ἡλικίαν συμβαίνειν φαλακροῦσθαι. διὰ τὴν αὐτὴν δ' αἰτίαν καὶ τῆς κεφαλῆς τὸ (784a.) πρόσθιον μόνον γίνονται φαλακροὶ καὶ τῶν ζώων οἱ ἄνθρωποι μόνοι· τὸ μὲν πρόσθιον ὅτι ἐνταῦθα ὁ ἐγκέφαλος, τῶν δὲ ζώων μόνον ὅτι πολὺ πλεῖστον ἔχει ἐγκέφαλον καὶ μάλιστα ὑγρὸν ὁ ἄνθρωπος. καὶ αἱ

γυναῖκες οὐ φαλακροῦνται· παραπλησία γὰρ ἡ φύσις τῇ τῶν παιδίων· ἄγονα γὰρ σπερματικῆς ἐκκρίσεως ἀμφοτέρω. καὶ εὐνοῦχος οὐ γίγνεται φαλακρὸς διὰ τὸ εἰς τὸ θῆλυ μεταβάλλειν. καὶ τὰς ὑστερογενεῖς τρίχας ἢ οὐ φύουσιν ἢ ἀποβάλλουσιν, ἂν τύχωσιν ἔχοντες οἱ εὐνοῦχοι, πλὴν τῆς ἥβης· καὶ γὰρ αἱ γυναῖκες τὰς μὲν οὐκ ἔχουσι τὰς δ' ἐπὶ τῇ ἥβῃ φύουσιν. ἡ δὲ πῆρωσις αὕτη ἐκ τοῦ ἄρρενος εἰς τὸ θῆλυ μεταβολὴ ἐστίν.

Τοῦ δὲ τὰ μὲν φωλεύοντα πάλιν δασύνεσθαι καὶ τὰ φυλλοβολήσαντα πάλιν φύειν φύλλα, τοῖς δὲ φαλακροῖς μὴ ἀναφύεσθαι πάλιν, αἴτιον ὅτι τοῖς μὲν αἱ ὥραι τροπαί εἰσι τοῦ σώματος μᾶλλον, ὥστ' ἐπεὶ μεταβάλλουσιν αὐταὶ μεταβάλλει καὶ τὸ φύειν καὶ τὸ ἀποβάλλειν τοὺς μὲν τὰ πτερὰ καὶ τὰς τρίχας, τὰ δὲ φύλλα τὰ φυτά. τοῖς δ' ἀνθρώποις κατὰ τὴν ἡλικίαν γίγνεται χειμῶν καὶ θέρος καὶ ἔαρ καὶ μετόπωρον, ὥστ' ἐπεὶ αἱ ἡλικίαι οὐ μεταβάλλουσιν οὐδὲ τὰ πάθη τὰ διὰ ταύτας μεταβάλλει, καίπερ τῆς αἰτίας ὁμοίας οὕσης.

Καὶ περὶ μὲν ἄλλα πάθη τὰ τῶν τριχῶν σχεδὸν εἴρηται.

## Κεφάλαιο 4

Τῶν δὲ χρωμάτων αἴτιον τοῖς μὲν ἄλλοις ζώοις καὶ τοῦ μονόχροα εἶναι καὶ τοῦ ποικίλου ἢ τοῦ δέρματος φύσις· τοῖς δ' ἀνθρώποις οὐδὲν πλὴν τῶν πολιῶν, οὐ τῶν διὰ γῆρας ἀλλὰ τῶν διὰ νόσον· ἐν γὰρ τῇ καλουμένῃ λεύκῃ λευκαὶ γίνονται αἱ τρίχες· ἂν δ' αἱ τρίχες ὥσι λευκαὶ <διὰ γῆρας> οὐκ ἀκολουθεῖ τῷ δέρματι ἢ λευκότης. αἴτιον δ' ὅτι ἐκ τοῦ δέρματος φύονται· ἐκ νενοσηκότος οὖν καὶ λευκοῦ τοῦ δέρματος καὶ ἡ θριξ συνοσεῖ, νόσος δὲ τριχὸς πολιότης ἐστίν. ἡ δὲ δι' ἡλικίαν τῶν τριχῶν πολιότης γίγνεται δι' ἀσθένειαν καὶ ἔνδειαν θερμότητος. καὶ γὰρ ἡλικία πᾶσα ῥέπει ἀποκλίνοντος τοῦ σώματος ἐν τῷ γήρῳ ἐπὶ ψύξιν· τὸ γὰρ γῆρας ψυχρὸν καὶ ξηρὸν ἐστίν. δεῖ δὲ νοῆσαι τὴν εἰς ἕκαστον μόνιον ἀφικνουμένην τροφήν ὅτι πέττει μὲν ἢ ἐν ἐκάστῳ οἰκείᾳ (784b.) θερμότης, ἀδυνατούσης δὲ φθείρεται καὶ πῆρωσις γίγνεται ἢ νόσος.

ἀκριβέστερον δὲ περὶ τῆς τοιαύτης αἰτίας ὕστερον λεκτέον ἐν τοῖς περὶ αὐξήσεως καὶ τροφῆς. ὅσοις οὖν τῶν ἀνθρώπων ὀλιγόθερμός ἐστιν ἢ τῶν τριχῶν φύσις καὶ πλείων ἢ εἰσιοῦσα ὑγρότης ἐστί, τῆς οἰκείας θερμότητος ἀδυνατούσης πέττειν σήπεται ὑπὸ τῆς ἐν τῷ περιέχοντι θερμότητος. γίγνεται δὲ σῆψις ὑπὸ θερμότητος μὲν πᾶσα, οὐ τῆς συμφύτου δέ, ὥσπερ εἴρηται ἐν ἑτέροις. ἔστι δ' ἡ σῆψις καὶ ὕδατος καὶ γῆς καὶ τῶν σωματικῶν πάντων τῶν τοιούτων, διὸ καὶ τῆς γεώδους ἀτμίδος οἶον ὁ λεγόμενος εὐρώς· καὶ γὰρ ὁ εὐρώς ἐστὶ σαπρότης γεώδους ἀτμίδος. ὥστε καὶ ἡ ἐν ταῖς θριξὶ τοιαύτη οὐσα

τροφὴ οὐ πεττομένη σήπεται, καὶ γίγνεται ἡ καλουμένη πολιά. λευκὴ δὲ ὅτι καὶ ὁ εὐρώς μόνον τῶν σαπρῶν ὡς εἶπεῖν λευκὸν ἐστίν. αἴτιον δὲ τούτου ὅτι πολὺν ἔχει ἀέρα· πᾶσα γὰρ ἡ γεώδης ἀτμὶς ἀέρος ἔχει δύναμιν παχέος.

ὥσπερ γὰρ ἀντεστραμμένον τῇ πάχνῃ ὁ εὐρώς ἐστίν· ἂν μὲν γὰρ παγῇ ἡ ἀνιοῦσα ἀτμὶς πάχνη γίγνεται, ἐὰν δὲ σαπῇ εὐρώς. διὸ καὶ ἐπιπολῆς ἐστὶν ἄμφω· ἡ γὰρ ἀτμὶς ἐπιπολῆς. καὶ εὖ δὴ οἱ ποιηταὶ ἐν ταῖς κωμωδίαις μεταφέρουσι σκώπτοντες τὰς πολιάς καλοῦντες γήρως εὐρώτα καὶ πάχνην. τὸ μὲν γὰρ τῷ γένει τὸ δὲ τῷ εἶδει ταῦτόν ἐστιν, ἡ μὲν πάχνη τῷ γένει (ἀτμὶς γὰρ ἄμφω), ὁ δὲ εὐρώς τῷ εἶδει (σῆψις γὰρ ἄμφω). σημεῖον δ' ὅτι τοιοῦτόν ἐστιν· καὶ γὰρ ἐκ νόσων πολλοῖς πολιάι ἀνέφυσαν, ὕστερον δ' ὑγιασθεῖσι μέλαιναι ἀντὶ τούτων. αἴτιον δ' ὅτι ἐν τῇ ἀρρωστίᾳ, ὥσπερ καὶ τὸ ὅλον σῶμα ἐν ἐνδείᾳ φυσικῆς θερμότητός ἐστιν, οὕτω καὶ τῶν ἄλλων μορίων καὶ τὰ πάνυ μικρὰ μετέχει τῆς ἀρρωστίας ταύτης. περίπτωμα δὲ πολὺ ἐγγίγνεται ἐν τοῖς σώμασι καὶ ἐν τοῖς μορίοις· διόπερ ἡ ἐν ταῖς σαρκὶν ἀπεψία ποιεῖ τὰς πολιάς. ὑγιάναντες δὲ καὶ ἰσχύσαντες πάλιν μεταβάλλουσι καὶ γίνονται ὥσπερ ἐκ γερόντων νέοι· διὸ καὶ τὰ πάθη συµμεταβάλλουσιν. ὀρθῶς δ' ἔχει καὶ λέγειν τὴν μὲν νόσον γῆρας ἐπίκτητον, τὸ δὲ γῆρας νόσον φυσικὴν· ποιοῦσι γοῦν νόσοι τινὲς ταῦτ' ἅπερ καὶ τὸ γῆρας.

Τοὺς δὲ κροτάφους πολιοῦνται πρῶτον. τὰ μὲν γὰρ ὀπισθεν (785a.) κενὰ ὑγρότητός ἐστι διὰ τὸ μὴ ἔχειν ἐγκέφαλον, τὸ δὲ βρέγμα πολλὴν ἔχει ὑγρότητα· τὸ δὲ πολὺ οὐκ εὐσηπτον. αἱ δ' ἐν τοῖς κροτάφοις τρίχες οὐθ' οὕτως ὀλίγον ἔχουσιν ὑγρὸν ὥστε πέττειν οὔτε πολὺ ὥστε μὴ σήπεσθαι· μέσος γὰρ ὢν ὁ τόπος ἀμφοτέρων ἐκτὸς ἀμφοτέρων τῶν παθῶν ἐστίν.

Περὶ μὲν οὖν τῆς τῶν ἀνθρώπων πολιότητος εἴρηται τὸ αἴτιον.

## Κεφάλαιο 5

Τοῖς δ' ἄλλοις ζώοις τοῦ μὴ γίνεσθαι διὰ τὴν ἡλικίαν ταύτην τὴν μεταβολὴν ἐπιδήλως τὸ αὐτὸ αἴτιον ὅπερ εἴρηται καὶ ἐπὶ τῆς φαλακρότητος· ὀλίγον γὰρ ἔχουσι καὶ <ῆττον> ὑγρὸν τὸν ἐγκέφαλον ὥστε μὴ ἐξαδυνατεῖν τὸ θερμὸν πρὸς τὴν πέψιν. τοῖς δ' ἵπποις πάντων ἐπισημαίνει μάλιστα ὢν ἴσμεν ζώων ὅτι λεπτότατον τὸ ὀστοῦν ὡς κατὰ μέγεθος ἔχουσι τὸ περὶ τὸν ἐγκέφαλον τῶν ἄλλων. τεκμήριον δ' ὅτι καίριος ἡ πληγὴ εἰς τὸν τόπον τοῦτον γίγνεται αὐτοῖς· διὸ καὶ Ὅμηρος οὕτως ἐποίησεν· ἵνα τε πρῶται τρίχες ἵππων κρανίῳ ἐμπεφύασι, μάλιστα δὲ καίριόν ἐστιν.



ῥαδίως οὖν ἐπιρρεούσης τῆς ὑγρότητος διὰ τὴν λεπτότητα τοῦ ὁστοῦ, τῆς δὲ θερμότητος ἐλλειπούσης διὰ τὴν ἡλικίαν, ἐπιπολιοῦνται αἱ τρίχες αὗται. καὶ αἱ πυρραὶ δὲ θᾶττον πολιοῦνται τρίχες τῶν μελαινῶν· ἔστι γὰρ καὶ ἡ πυρρότης ὥσπερ ἄρρωστία τριχός, τὰ δ' ἀσθενῇ γηράσκει πάντα θᾶττον. μελαντέρας δὲ γίνεσθαι γηρασκούσας λέγεται τὰς γεράνους. αἴτιον δ' ἂν εἴη τοῦ πάθους τὸ φύσει λεπτοτέραν αὐτῶν εἶναι τὴν τῶν πτερῶν φύσιν, πλεόν τε γηρασκόντων εἶναι τὸ ὑγρὸν ἐν τοῖς πτεροῖς ἢ ὥστε εὐσηπτον εἶναι.

Ὅτι δὲ γίνεταί ἡ πολιὰ σήψει τινὶ καὶ ὅτι οὐκ ἔστιν, ὥσπερ οἴονταί τινες, αὖανσις, σημεῖον [τοῦ προτέρου ῥηθέντος] τὸ τὰς σκεπαζομένας τρίχας πύλοις ἢ καλύμμασι πολιοῦσθαι θᾶττον (τὰ γὰρ πνεύματα κωλύει τὴν σῆψιν, ἡ δὲ σκέπη ἄπνοιαν ποιεῖ) καὶ τὸ βοηθεῖν τὴν ἄλειψιν τὴν τοῦ ὕδατος καὶ τοῦ ἐλαίου μινγυμένων. τὸ μὲν γὰρ ὕδωρ ψύχει, τὸ δ' ἔλαιον μινγύμενον κωλύει ξηραίνεσθαι ταχέως· τὸ γὰρ ὕδωρ εὐξήραντον. ὅτι δ' οὐκ ἔστιν αὖανσις, οὐδ' ὥσπερ ἡ πόα αὖαινομένη λευκαίνεται οὕτω καὶ ἡ θρίξ, σημεῖον ὅτι φύονται εὐθέως ἔνιαι πολιαί· αὖον δ' οὐθὲν φύεται. λευκαίνονται δὲ καὶ ἐπ' ἄκρου πολλαί· ἐν γὰρ τοῖς ἐσχάτοις καὶ λεπτοτάτοις ἐλαχίστη θερμότης (785b.) ἐγγίγνεται.

Τοῖς δ' ἄλλοις ζώοις ὅσοις γίνονται λευκαὶ αἱ τρίχες, φύσει ἄλλ' οὐ πάθει συμβαίνει γίνεσθαι τοῦτο. αἴτιον δὲ τῶν χρωμάτων τὸ δέρμα τοῖς ἄλλοις· τῶν μὲν γὰρ λευκῶν λευκὸν τὸ δέρμα, τῶν δὲ μελάνων μέλαν, τῶν δὲ ποικίλων καὶ γιγνομένων ἐκ συμμίξεως τῇ μὲν λευκῶν τῇ δὲ μέλαν φαίνεται ὄν. ἐπὶ δὲ τῶν ἀνθρώπων οὐθὲν αἴτιον τὸ δέρμα· καὶ γὰρ οἱ λευκοὶ σφόδρα μελαίνας ἔχουσιν. αἴτιον δ' ὅτι λεπτότατον πάντων δέρμα ὁ ἄνθρωπος ἔχει ὡς κατὰ μέγεθος, διόπερ οὐθὲν ἰσχύει πρὸς τὴν τῶν τριχῶν μεταβολήν, ἀλλὰ διὰ τὴν ἀσθένειαν τὸ δέρμα καὶ μεταβάλλει αὐτὸ τὴν χροάν καὶ γίνεταί ὑπὸ ἡλίων καὶ πνευμάτων μελάντερον· αἱ δὲ τρίχες οὐθὲν συµμεταβάλλουσιν. ἐν δὲ τοῖς ἄλλοις τὸ δέρμα χώρας ἔχει δύναμιν διὰ τὸ πάχος· διὸ αἱ μὲν τρίχες κατὰ τὸ δέρμα μεταβάλλουσι, τὰ δὲ δέρματα οὐθὲν κατὰ τὰ πνεύματα καὶ τὸν ἥλιον.

## Κεφάλαιο 6

Τῶν δὲ ζώων τὰ μὲν ἔστι μονόχροα (λέγω δὲ μονόχροα ὧν τὸ γένος ὅλον ἐν χρωμα ἔχει οἷον λέοντες πυρροὶ πάντες, καὶ τοῦτο καὶ ἐπ' ὀρνίθων καὶ ἐπ' ἰχθύων ἔστι καὶ τῶν ἄλλων ζώων ὁμοίως), τὰ δὲ πολύχροα μὲν, ὁλόχροα δὲ (λέγω δὲ ὧν τὸ σῶμα ὅλον τὴν αὐτὴν ἔχει χροάν, οἷον βοῦς ἔστιν ὅλος λευκὸς ἢ ὅλος μέλας), τὰ δὲ ποικίλα. τοῦτο δὲ διχῶς, τὰ μὲν τῷ γένει, ὥσπερ

πάρδαλις καὶ ταῶς καὶ τῶν ἰχθύων ἔνιοι οἷον αἱ καλούμεναι θρᾶτται, - τῶν δὲ τὸ μὲν γένος ἅπαν οὐ ποικίλον, γίνονται δὲ ποικίλοι οἷον βόες καὶ αἶγες, καὶ ἐν τοῖς ὄρνισιν οἷον αἱ περιστεραί· καὶ ἄλλα δὲ γένη τὸ αὐτὸ πάσχει τῶν ὀρνίθων. μεταβάλλει δὲ τὰ ὁλόχροα πολλῶ μᾶλλον τῶν μονοχρόων, καὶ εἰς τὴν ἀλλήλων χροάν τὴν ἀπλήν, οἷον ἐκ λευκῶν μέλανα καὶ ἐκ μελάνων λευκά, καὶ μεμιγμένα ἐξ ἀμφοτέρων, διὰ τὸ ὅλῳ τῷ γένει ὑπάρχειν ἐν τῇ φύσει τὸ μὴ μίαν ἔχειν χροάν· εὐκίνητον γὰρ ὑπάρχει ἐπ' ἀμφοτέρα τὸ γένος ὥστε καὶ εἰς ἄλληλα μεταβάλλειν καὶ ποικίλλεσθαι μᾶλλον. τὰ δὲ μονόχροα τοῦναντίον· οὐ γὰρ μεταβάλλει ἂν μὴ διὰ πάθος, καὶ τοῦτο σπάνιον· ἦδη γὰρ ὥπται καὶ πέρδιξ λευκὴ καὶ κόραξ καὶ στρουθὸς καὶ ἄρκτος. συμβαίνει

δὲ ταῦτα ὅταν ἐν τῇ γενέσει διαστραφῇ· εὐφθαρτον γὰρ (786a.) καὶ εὐκίνητον τὸ μικρόν, τὸ δὲ γινόμενον τοιοῦτον· ἐν μικρῷ γὰρ ἡ ἀρχὴ τοῖς γιγνομένοις.

Μάλιστα δὲ μεταβάλλουσι καὶ τὰ φύσει ὁλόχροα μὲν ὄντα τῷ γένει δὲ πολύχροα διὰ τὰ ὕδατα· τὰ μὲν γὰρ θερμὰ λευκὴν ποιεῖ τὴν τρίχα τὰ δὲ ψυχρὰ μέλαιναν ὥσπερ καὶ ἐπὶ τῶν φυτῶν. αἴτιον δ' ὅτι τὰ θερμὰ πνεύματος πλεον ἔχει ἢ ὕδατος, ὁ δ' ἀπὸρ διαφανόμενος λευκότητα ποιεῖ καθάπερ καὶ τὸν ἀφρόν. διαφέρει μὲν οὖν, ὥσπερ καὶ τὰ δέρματα τὰ διὰ πάθος λευκὰ τῶν διὰ τὴν φύσιν, οὕτω καὶ ἐν ταῖς θριξίν ἢ τε διὰ νόσον καὶ ἡλικίαν, καὶ ἢ διὰ φύσιν λευκότης τῶν τριχῶν τῷ τὸ αἴτιον ἕτερον εἶναι· τὰς μὲν γὰρ ἡ φυσικὴ θερμότης ποιεῖ λευκὰς τὰς δ' ἡ ἀλλοτρία. τὸ δὲ λευκὸν ὁ ἀτμιδώδης ἀπὸρ παρέχεται ἐγκατακλειόμενος ἐν πᾶσιν. διὸ καὶ ὅσα μὴ μονόχροά ἐστι τὰ ὑπὸ τὴν γαστέρα πάντα λευκότερά ἐστιν. καὶ γὰρ θερμότερα καὶ ἡδυκρεώτερα πάντα τὰ λευκὰ ὡς εἰπεῖν ἐστι διὰ τὴν αὐτὴν αἰτίαν· ἡ μὲν γὰρ πέψις γλυκέα ποιεῖ, τὴν δὲ πέψιν τὸ θερμόν. ἡ δ' αὐτὴ αἰτία καὶ τῶν μονοχρόων μὲν μελάνων δ' ἢ λευκῶν· θερμότης γὰρ καὶ ψυχρότης αἰτία τῆς φύσεως τοῦ δέρματος καὶ τῶν τριχῶν· ἔχει γὰρ ἕκαστον τῶν μορίων θερμότητα οἰκείαν.

Ἔτι δ' αἱ γλῶτται διαφέρουσι τῶν ἀπλῶν τε καὶ ποικίλων καὶ τῶν ἀπλῶν μὲν διαφερόντων δέ, οἷον λευκῶν καὶ μελάνων. αἴτιον δὲ τὸ εἰρημένον πρότερον, ὅτι τὰ δέρματα ποικίλα τῶν ποικίλων, καὶ τῶν λευκοτρίχων καὶ τῶν μελανοτρίχων τῶν μὲν λευκὰ τῶν δὲ μέλανα. τὴν δὲ γλῶτταν δεῖ ὑπολαβεῖν ὥσπερ ἐν μόριον τῶν ἐξωτερικῶν εἶναι, μὴ ὅτι ἐν τῷ στόματι σκεπάζεται, ἀλλ' οἷον χεῖρα ἢ πόδα· ὥστ' ἐπεὶ τῶν ποικίλων τὸ δέρμα οὐ μονόχρων, καὶ τοῦ ἐπὶ τῇ γλῶττι δέρματος τοῦτ' αἴτιον.

Μεταβάλλουσι δὲ τὰ χρώματα καὶ τῶν ὀρνίθων τινὲς καὶ τῶν τετραπόδων τῶν ἀγρίων ἔνια κατὰ τὰς ὥρας. αἴτιον δ' ὅτι ὥσπερ οἱ ἄνθρωποι κατὰ τὴν

ἡλικίαν μεταβάλλουσι, τοῦτ' ἐκείνοις συμβαίνει κατὰ τὰς ὥρας· μείζων γὰρ διαφορὰ αὕτη τῆς κατὰ τὴν ἡλικίαν τροπῆς.

Εἰσὶ δὲ καὶ τὰ παμφαγώτερα ποικιλώτερα ὡς ἐπὶ τὸ πλεῖστον εἰπεῖν εὐλόγως, οἷον αἱ μέλιτται (786b.) μονόχροα μᾶλλον ἢ αἱ ἀνθρῆναι καὶ σφῆκες· εἰ γὰρ αἱ τροφαὶ αἵτιαι τῆς μεταβολῆς, εὐλόγως αἱ ποικίλαι τροφαὶ παντοδαπωτέρας ποιοῦσι τὰς κινήσεις καὶ τὰ περιττώματα τῆς τροφῆς, ἐξ ὧν καὶ τρίχες καὶ πτερὰ καὶ δέρματα γίνονται.

Καὶ περὶ μὲν χρωμάτων καὶ τριχῶν διωρίσθω τὸν τρόπον τοῦτον.

## Κεφάλαιο 7

Περὶ δὲ φωνῆς, ὅτι τὰ μὲν βαρύφωνα τῶν ζώων ἐστὶ τὰ δ' ὀξύφωνα, τὰ δ' εὐτόνα καὶ πρὸς ἀμφοτέρας ἔχοντα τὰς ὑπερβολὰς συμμέτρως, ἔτι δὲ τὰ μὲν μεγαλόφωνα τὰ δὲ μικρόφωνα καὶ λειότητι καὶ τραχύτητι καὶ εὐκαμψίᾳ καὶ ἀκαμψίᾳ διαφέροντα ἀλλήλων, ἐπισκεπτέον διὰ τίνας αἰτίας ὑπάρχει τούτων ἕκαστον. περὶ μὲν οὖν ὀξύτητος καὶ βαρύτητος τὴν αὐτὴν αἰτίαν οἰητέον εἶναι ἥνπερ ἐπὶ τῆς μεταβολῆς ἦν μεταβάλλει νέα ὄντα καὶ πρεσβύτερα. τὰ μὲν γὰρ ἄλλα πάντα νεώτερα ὄντα ὀξύτερον φθέγγεται, τῶν δὲ βοῶν οἱ μόσχοι βαρύτερον. τὸ δ' αὐτὸ συμβαίνει καὶ ἐπὶ τῶν ἄρρένων καὶ θηλειῶν· ἐν μὲν γὰρ τοῖς ἄλλοις γένεσι τὸ θῆλυ ὀξύτερον φθέγγεται τοῦ ἄρρενος (μάλιστα δ' ἐπίδηλον ἐπὶ τῶν ἀνθρώπων τοῦτο· μάλιστα γὰρ τούτοις ταύτην τὴν δύναμιν ἀποδέδωκεν ἡ φύσις διὰ τὸ λόγῳ χρῆσθαι μόνους τῶν ζώων, τοῦ δὲ λόγου ὕλην εἶναι τὴν φωνήν), ἐπὶ δὲ τῶν βοῶν τοῦναντίον· βαρύτερον γὰρ αἱ θήλειαι φθέγγονται τῶν ταύρων. -τίνος μὲν οὖν ἔνεκα φωνὴν ἔχει τὰ ζῶα καὶ τί ἐστὶ φωνὴ καὶ ὅλως ὁ ψόφος, τὰ μὲν ἐν τοῖς περὶ αἰσθήσεως εἴρηται τὰ δ' ἐν τοῖς περὶ ψυχῆς. ἐπεὶ δὲ βαρὺ μὲν ἐστὶν ἐν τῷ βραδεῖαν εἶναι τὴν κίνησιν, ὅξυ δ' ἐν τῷ ταχεῖαν, τοῦ δὲ βραδέως ἢ ταχέως πότερον τὸ κινεῖν αἴτιον ἢ τὸ κινούμενον, ἔχει τινὰ ἀπορίαν. φασὶ γὰρ τινες τὸ μὲν πολὺ βραδέως κινεῖσθαι τὸ δ' ὀλίγον ταχέως, καὶ ταύτην αἰτίαν εἶναι τοῦ τὰ μὲν βαρύφωνα εἶναι τὰ δ' ὀξύφωνα, λέγοντες μέχρι τινὸς καλῶς, ὅλως δ' οὐ καλῶς. τῷ μὲν γὰρ γένει ὀρθῶς ἔοικε λέγεσθαι τὸ βαρὺ ἐν μεγέθει τινὲ εἶναι τοῦ κινουμένου. εἰ γὰρ τοῦτο, καὶ μικρὸν καὶ βαρὺ φθέγγασθαι οὐ ῥάδιον, ὁμοίως δὲ οὐδὲ μέγα καὶ ὅξυ. καὶ δοκεῖ γενναιοτέρας εἶναι φύσεως ἢ βαρυφωνία, καὶ ἐν τοῖς (787a.) μέλεσι τὸ βαρὺ τῶν συντόνων βέλτιον· τὸ γὰρ βέλτιον ἐν ὑπεροχῇ, ἢ δὲ βαρύτης ὑπεροχὴ τις. ἀλλ' ἐπειδὴ ἐστὶν ἕτερον τὸ βαρὺ καὶ τὸ ὅξυ ἐν φωνῇ μεγαλοφωνίας καὶ μικροφωνίας (ἔστι γὰρ καὶ ὀξύφωνα μεγαλόφωνα, καὶ μικρόφωνα βαρύφωνα ὡσαύτως), ὁμοίως δὲ καὶ

κατὰ τὸν μέσον τόνον τούτων-περὶ ὧν τίνι ἂν τις ἄλλω διορίσειεν (λέγω δὲ μεγαλοφωνίαν καὶ μικροφωνίαν) ἢ πλήθει καὶ ὀλιγότητι τοῦ κινουμένου; εἰ οὖν κατὰ τὸν λεγόμενον ἔσται διορισμὸν τὸ ὀξύ καὶ βαρὺ, συμβήσεται τὰ αὐτὰ εἶναι βαρύφωνα καὶ μεγαλόφωνα καὶ ὀξύφωνα καὶ μικρόφωνα. τοῦτο δὲ ψεῦδος.

αἴτιον δ' ὅτι τὸ μέγα καὶ τὸ μικρὸν καὶ τὸ πολὺ καὶ τὸ ὀλίγον τὰ μὲν ἀπλῶς λέγεται τὰ δὲ πρὸς ἄλληλα. μεγαλόφωνα μὲν οὖν ἐστὶν ἐν τῷ πολὺ ἀπλῶς εἶναι τὸ κινούμενον, μικρόφωνα δὲ ἐν τῷ ὀλίγον, βαρύφωνα δὲ καὶ ὀξύφωνα ἐν τῷ πρὸς ἄλληλα ταύτην ἔχειν τὴν διαφοράν. ἐὰν μὲν γὰρ ὑπερέχηι τὸ κινούμενον τῆς τοῦ κινουῦντος ἰσχύος, ἀνάγκη βραδέως φέρεσθαι τὸ φερόμενον, ἂν δ' ὑπερέχηται, ταχέως. τὸ δ' ἰσχύον διὰ τὴν ἰσχὺν ὅτε μὲν πολὺ κινοῦν βραδεῖαν ποιεῖ τὴν κίνησιν, ὅτε δὲ διὰ τὸ κρατεῖν ταχεῖαν. κατὰ τὸν αὐτὸν δὲ λόγον καὶ τῶν κινούντων τὰ ἀσθενῆ τὰ μὲν πλείω κινοῦντα τῆς δυνάμεως βραδεῖαν ποιεῖ τὴν κίνησιν, τὰ δὲ δι' ἀσθενείαν ὀλίγον κινοῦντα ταχεῖαν.

Αἱ μὲν οὖν αἰτίαι τῶν ἐναντιώσεων αὗται τοῦ μήτε πάντα τὰ νέα ὀξύφωνα εἶναι μήτε βαρύφωνα, μήτε τὰ πρεσβύτερα, μήτε τὰ ἄρρενα καὶ θήλεα, πρὸς δὲ τούτοις καὶ τοῦ τοὺς κάμνοντας ὀξύ φθέγγεσθαι καὶ τοὺς εὖ τὸ σῶμα ἔχοντας, ἔτι δὲ καὶ γέροντας γιγνομένους μᾶλλον ὀξυφωνότερους γίνεσθαι τῆς ἡλικίας ἐναντίας οὔσης τῇ τῶν νέων.

Τὰ μὲν οὖν πλεῖστα νεώτερα ὄντα καὶ τὰ θήλεα δι' ἀδυναμίαν ὀλίγον κινοῦντα ἄερα ὀξύφωνα ἐστὶν· ταχὺ γὰρ ὁ ὀλίγος φέρεται, τὸ δὲ ταχὺ ὀξύ ἐν φωνῇ. οἱ δὲ μόσχοι καὶ αἱ βόες αἱ θήλειαι, οἱ μὲν διὰ τὴν ἡλικίαν αἱ δὲ διὰ τὴν φύσιν τῆς θηλότητος, οὐκ ἰσχυρὸν ἔχουσι τὸ μόριον ᾧ κινοῦσι, πολὺ δὲ κινοῦντα (787b.) βαρύφθογγά ἐστιν· βαρὺ γὰρ τὸ βραδέως φερόμενον, ὁ δὲ πολὺς ἀὴρ φέρεται βραδέως. πολὺν δὲ κινοῦσι ταῦτα, τὰ δ' ἄλλ' ὀλίγον, διὰ τὸ τὸ ἀγγεῖον δι' οὗ πρῶτον φέρεται τὸ πνεῦμα τούτοις μὲν διάστημ' ἔχειν μέγα καὶ πολὺν ἀναγκάζεσθαι ἄερα κινεῖν, τοῖς δ' ἄλλοις εὐταμίευτον εἶναι. προϊούσης δὲ τῆς ἡλικίας ἰσχύει μᾶλλον τοῦτο τὸ μόριον τὸ κινοῦν ἐν ἐκάστοις, ὥστε μεταβάλλουσιν εἰς τὸναντίον, καὶ τὰ μὲν ὀξύφωνα βαρυφωνότερα γίνεταί αὐτὰ αὐτῶν, τὰ δὲ βαρύφωνα ὀξυφωνότερα· διόπερ οἱ ταῦροι ὀξυφωνότεροι τῶν μόσχων καὶ τῶν θηλειῶν βοῶν. ἔστι μὲν οὖν πᾶσιν ἡ ἰσχὺς ἐν τοῖς νεύροις, διὸ καὶ τὰ ἀκμάζοντα ἰσχύει μᾶλλον· ἀναρθρα γὰρ τὰ νέα μᾶλλον καὶ ἄνευρα. ἔτι δὲ τοῖς ἐν νέοις οὐπω ἐπιτέταται, τοῖς δὲ γεγηρακόσιν ἤδη ἀνεῖται ἡ συντονία· διὸ ἄμφω ἀσθενῆ καὶ ἀδύνατα πρὸς τὴν κίνησιν. μάλιστα δ' οἱ ταῦροι νευρώδεις, καὶ ἡ καρδία· διόπερ σύντονον ἔχουσι

τοῦτο τὸ μόριον ὧ̃ κινεῖται τὸ πνεῦμα ὥσπερ χορδὴν τεταμένην νευρίνην. δηλοῖ δὲ τοιαύτη τὴν φύσιν οὕσα ἢ καρδία τῶν βοῶν τῷ καὶ ὁστοῦν ἐγγίγνεσθαι ἐν ἐνίαις αὐτῶν· τὰ δ' ὅστ' α̃ ζητεῖ τὴν τοῦ νεύρου φύσιν.

Ἐκτεμνόμενα δὲ πάντα εἰς τὸ θῆλυ μεταβάλλει, καὶ διὰ τὸ ἀνιέσθαι τὴν ἰσχὺν τὴν νευρώδη ἐν τῇ ἀρχῇ ὁμοίαν ἀφίησι φωνὴν τοῖς θήλεσιν. ἢ δ' ἄνεσις παραπλησία γίγνεται ὥσπερ ἂν εἴ τις χορδὴν κατατείνας σύντονον ποιήσῃ τῷ ἐξάψαι τι βάρος, οἷον δὴ ποιοῦσιν αἱ τοὺς ἰστοὺς ὑφαίνουσιν· καὶ γὰρ αὗται τὸν στήμονα κατατείνουνσι προσάπτουσιν τὰς καλουμένας λαιάς. οὕτω γὰρ καὶ ἡ τῶν ὄρχεων φύσις προσήρτηται πρὸς τοὺς σπερματικούς πόρους, οὗτοι δ' ἐκ τῆς φλεβὸς ἧς ἡ ἀρχὴ ἐκ τῆς καρδίας πρὸς αὐτῷ τῷ κινεῖται τὴν φωνήν. διὸ καὶ τῶν σπερματικῶν πόρων μεταβαλλόντων πρὸς τὴν ἡλικίαν ἐν ἣ ἥδη δύνανται τὸ σπέρμα ἐκκρίνειν συµμεταβάλλει καὶ τοῦτο τὸ μόριον. τούτου δὲ μεταβάλλοντος καὶ ἡ φωνὴ μεταβάλλει, μᾶλλον μὲν τοῖς ἄρρεσιν, συμβαίνει δὲ ταῦτο καὶ ἐπὶ τῶν θηλειῶν ἄλλ' ἀδηλότερον, καὶ γίγνεται ὁ (788a.) καλοῦσιν τινες τραγίζειν, ὅταν ἀνώμαλος ἢ ἡ φωνή. μετὰ δὲ ταῦτα καθίσταται εἰς τὴν τῆς ἐπιούσης ἡλικίας βαρύτητα ἢ ὀξύφωνίαν. ἀφαιρουμένων δὲ τῶν ὄρχεων ἀνιέται ἡ κατάτασις τῶν πόρων ὥσπερ ἀπὸ τῆς χορδῆς καὶ τοῦ στήμονος ἀφαιρουμένου τοῦ βάρους. τούτου δ' ἀνιεμένου καὶ ἡ ἀρχὴ ἡ κινεῖσα τὴν φωνὴν ἐκλύεται κατὰ τὸν αὐτὸν λόγον. διὰ μὲν οὖν ταύτην τὴν αἰτίαν τὰ ἐκτεμνόμενα μεταβάλλει εἰς τὸ θῆλυ τὴν τε φωνὴν καὶ τὴν ἄλλην μορφήν διὰ τὸ συμβαίνειν ἀνιέσθαι τὴν ἀρχὴν ἐξ ἧς ὑπάρχει τῷ σώματι ἡ συντονία, ἄλλ' οὐχ ὥσπερ τινὲς ὑπολαμβάνουσιν αὐτοὺς τοὺς ὄρχεις εἶναι σύναμμα πολλῶν ἀρχῶν-ἄλλὰ μικραὶ μεταστάσεις μεγάλων αἰτίαι γίνονται, οὐ δι' αὐτάς, ἀλλ' ὅταν συμβαίνει ἄρχὴν συµμεταβάλλειν. αἱ γὰρ ἀρχαὶ μεγέθει οὕσαι μικραὶ τῇ δυνάμει μεγάλαί εἰσιν· τοῦτο γὰρ ἐστὶ τὸ ἀρχὴν εἶναι, τὸ αὐτὴν μὲν αἰτίαν εἶναι πολλῶν, ταύτης δ' ἄλλο ἄνωθεν μηθέν.

Τῷ δὲ φύσει τὰ μὲν τοιαῦτα συνίστασθαι τῶν ζώων ὥστε βαρύφωνα εἶναι τὰ δ' ὀξύφωνα συµβάλλεται καὶ ἡ θερμότης τοῦ τόπου καὶ ἡ ψυχρότης. τὸ μὲν γὰρ θερμὸν πνεῦμα διὰ παχύτητα ποιεῖ βαρυφωνίαν, τὸ δὲ ψυχρὸν διὰ λεπτότητα τούναντίον. δῆλον δὲ τοῦτο καὶ ἐπὶ τῶν αὐλῶν· οἱ γὰρ θερμότερῳ τῷ πνεύματι χρώμενοι καὶ τοιοῦτον προῖέμενοι οἷον οἱ αἰάζοντες βαρύτερον αὐλοῦσιν. τῆς δὲ τραχυφωνίας αἴτιον καὶ τοῦ λείαν εἶναι τὴν φωνὴν καὶ πάσης τῆς τοιαύτης ἀνωμαλίας τὸ τὸ μόριον καὶ τὸ ὄργανον δι' οὗ φέρεται ἡ φωνὴ ἢ τραχὺ ἢ λεῖον εἶναι ἢ ὅλως ὁμαλὸν ἢ ἀνώμαλον (δῆλον δ' ὅταν ὑγρότης τις ὑπάρχῃ περὶ τὴν ἀρτηρίαν ἢ τραχύτης γένηται ὑπὸ τινος πάθους· τότε γὰρ καὶ ἡ φωνὴ γίγνεται ἀνώμαλος)-τῆς δ' εὐκαμψίας <καὶ τῆς ἀκαμψίας> ἂν μαλακὸν ἢ σκληρὸν ἢ τὸ ὄργανον· τὸ μὲν γὰρ μαλακὸν

δύναται ταμιεύεσθαι καὶ παντοδαπὸν γίνεσθαι, τὸ δὲ σκληρὸν οὐ δύναται. καὶ τὸ μὲν μαλακὸν καὶ μικρὸν δύναται καὶ μέγα φθέγγεσθαι, διὸ καὶ ὅξυ καὶ βαρὺ· ταμιεύεται γὰρ ῥαδίως τοῦ πνεύματος, καὶ αὐτὸ γινόμενον ῥαδίως μέγα καὶ μικρόν· ἡ δὲ σκληρότης ἀταμίευτον.

Περὶ μὲν οὖν φωνῆς (788b.) ὅσα μὴ πρότερον ἐν τοῖς περὶ αἰσθήσεως διώριστα καὶ ἐν τοῖς περὶ ψυχῆς τοσαῦτ' εἰρήσθω.

## Κεφάλαιο 8

Περὶ δὲ ὀδόντων, ὅτι μὲν οὐχ ἑνὸς χάριν οὐδὲ πάντα τοῦ αὐτοῦ ἔνεκα τὰ ζῶα ἔχουσιν ἀλλὰ τὰ μὲν διὰ τὴν τροφήν τὰ δὲ καὶ πρὸς ἀλκὴν καὶ πρὸς τὸν ἐν τῇ φωνῇ λόγον, εἴρηται πρότερον· διότι δ' οἱ μὲν πρόσθιοι γίνονται πρότερον οἱ δὲ γόμφιοι ὕστερον, καὶ οὗτοι μὲν οὐκ ἐκπίπτουσιν ἐκεῖνοι δ' ἐκπίπτουσι καὶ φύονται πάλιν, τοῖς περὶ γενέσεως λόγοις τὴν αἰτίαν συγγενῇ δεῖ νομίζειν.

Εἴρηκε μὲν οὖν περὶ αὐτῶν καὶ Δημόκριτος, οὐ καλῶς δ' εἴρηκεν· οὐ γὰρ ἐπὶ πάντων σκεψάμενος καθόλου λέγει τὴν αἰτίαν. φησὶ γὰρ ἐκπίπτειν μὲν διὰ τὸ πρὸ ὥρας γίνεσθαι τοῖς ζώοις· ἀκμαζόντων γὰρ ὥς εἰπεῖν φύεσθαι κατὰ γε φύσιν, τοῦ δὲ πρὸ ὥρας γίνεσθαι τὸ θηλάζειν αἰτιᾶται. καίτοι θηλάζει γε καὶ ὅς, οὐκ ἐκβάλλει δὲ τοὺς ὀδόντας· ἔτι δὲ τὰ καρχαρόδοντα θηλάζει μὲν πάντα, οὐκ ἐκβάλλει δ' ἔνια αὐτῶν πλὴν τοὺς κυνόδοντας, οἷον οἱ λέοντες. τοῦτο μὲν οὖν ἡμαρτε καθόλου λέγων οὐ σκεψάμενος τὸ συμβαῖνον ἐπὶ πάντων. δεῖ δὲ τοῦτο ποιεῖν· ἀνάγκη γὰρ τὸν λέγοντα καθόλου τι λέγειν περὶ πάντων. ἐπεὶ δὲ τὴν φύσιν ὑποτιθέμεθα, ἐξ ὧν ὁρῶμεν ὑποτιθέμενοι, οὗτ' ἐλλείπουσαν οὕτε μάταιον οὐθὲν ποιοῦσαν τῶν ἐνδεχομένων περὶ ἕκαστον, ἀνάγκη δὲ τοῖς μέλλουσι λαμβάνειν τροφήν μετὰ τὴν [τοῦ γάλακτος] ἀπογαλάκτισιν ἔχειν ὄργανα πρὸς τὴν ἐργασίαν τῆς τροφῆς· εἰ οὖν συνέβαιnen, ὥς ἐκεῖνος λέγει, πρὸς ἥβην, ἐνέλειπεν ἂν ἡ φύσις τῶν ἐνδεχομένων αὐτῇ τι ποιεῖν, καὶ τὸ τῆς φύσεως ἔργον ἐγίγνετ' ἂν παρὰ φύσιν. τὸ γὰρ βίᾳ παρὰ φύσιν, βίᾳ δὲ φησι συμβαίνειν τὴν γένεσιν τῶν ὀδόντων. ὅτι μὲν οὖν τοῦτ' οὐκ ἀληθὲς φανερόν ἐκ τούτων καὶ τοιούτων ἄλλων.

Γίνονται δὲ πρότερον οὗτοι τῶν πλατέων, πρῶτον μὲν ὅτι καὶ τὸ ἔργον τὸ τούτων πρότερον (πρότερον γὰρ ἐστὶ τοῦ λεῖναι τὸ διελεῖν, εἰσὶ δ' ἐκεῖνοι μὲν ἐπὶ τῷ λεαίνειν οὗτοι δ' ἐπὶ τῷ διαιρεῖν), ἔπειθ' ὅτι τὸ ἔλαττον, καὶ ἅμα ὁρμητῇ, θᾶττον γίνεσθαι πέφυκε τοῦ μεζονος. εἰσὶ δ' ἐλάττους οὗτοι τῷ (789a.) μεγέθει τῶν γομφίων [καὶ] τῷ τὸ ὀστοῦν τῆς σιαγόνος ἐκεῖ μὲν πλατὺ

εἶναι, πρὸς δὲ τῷ στόματι στενόν. ἐκ μὲν οὖν τοῦ μείζονος πλείω ἀναγκαῖον ἐπιρρεῖν τροφήν, ἐκ δὲ τοῦ στενωτέρου ἐλάττω.

Τὸ δὲ θηλάζειν αὐτὸ μὲν οὐθὲν συμβάλλεται, ἡ δὲ τοῦ γάλακτος θερμότης ποιεῖ θᾶπτον βλαστάνειν τοὺς ὀδόντας. σημεῖον δ' ὅτι καὶ αὐτῶν τῶν θηλαζόντων τὰ θερμότερῳ γάλακτι χρώμενα τῶν παιδίων ὀδοντοφυεῖ θᾶπτον· ἀύξητικὸν γὰρ τὸ θερμόν.

Ἐκπίπτουσι δὲ γενόμενοι τοῦ μὲν βελτίονος χάριν, ὅτι ταχὺ ἀμβλύνεται τὸ ὀξύ· δεῖ οὖν ἑτέρους διαδέχεσθαι πρὸς τὸ ἔργον. τῶν δὲ πλατέων οὐκ ἔστιν ἀμβλύτης ἀλλὰ τῷ χρόνῳ τριβόμενοι λεαίνονται μόνον. ἐξ ἀνάγκης δ' ἐκπίπτουσιν ὅτι τῶν μὲν ἐν πλατεΐᾳ τῇ σιαγόνι καὶ ἰσχυρῷ ὀστῷ αἱ ρίζαι εἰσὶ, τῶν δὲ προσθίων ἐν λεπτῷ, διὸ ἀσθενεῖς καὶ εὐκίνητοι. φύονται δὲ πάλιν ὅτι ἐν φυομένῳ ἔτι τῷ ὀστῷ ἡ ἐκβολὴ γίγνεται καὶ ἔτι ὥρας οὖσης γίνεσθαι ὀδόντας. τούτου δὲ σημεῖον ὅτι καὶ οἱ πλατεῖς φύονται πολὺν χρόνον· οἱ γὰρ τελευταῖοι ἀνατέλλουσι περὶ τὰ εἴκοσιν ἔτη, ἐνίοις δ' ἤδη καὶ γηράσκουσι γεγέννηται οἱ ἔσχατοι παντελῶς διὰ τὸ πολλὴν εἶναι τροφήν ἐν τῇ εὐρυχωρίᾳ τοῦ ὀστοῦ. τὸ δὲ πρόσθιον διὰ τὴν λεπτότητα ταχὺ (789b.) λαμβάνει τέλος, καὶ οὐ γίγνεται περίττωμα ἐν αὐτῷ ἀλλ' εἰς τὴν αὕξησιν ἀναλίσκεται ἡ τροφή τὴν οἰκείαν.

Δημόκριτος δὲ τὸ οὗ ἔνεκεν ἀφεὶς λέγειν πάντα ἀνάγει εἰς ἀνάγκην οἷς χρῆται ἢ φύσις-οὔσι μὲν τοιούτοις, οὐ μὴν ἀλλ' ἔνεκά τινος οὔσι καὶ τοῦ περὶ ἕκαστον βελτίονος χάριν. ὥστε γίνεσθαι μὲν οὐθὲν κωλύει οὕτω καὶ ἐκπίπτειν, ἀλλ' οὐ διὰ ταῦτα ἀλλὰ διὰ τὸ τέλος· ταῦτα δ' ὥς κινουῦντα καὶ ὥς ὄργανα καὶ ὥς ὕλη αἷτια, ἐπεὶ καὶ τὸ τῷ πνεύματι ἐργάζεσθαι τὰ πολλὰ εἰκὸς ὥς ὀργάνῳ-οἷον γὰρ ἓν πολύχρηστὰ ἔστι τῶν περὶ τὰς τέχνας, ὥσπερ ἐν τῇ χαλκευτικῇ ἡ σφύρα καὶ ὁ ἄκμων, οὕτω καὶ τὸ πνεῦμα ἐν τοῖς φύσει συνεστῶσιν. ὅμοιον δ' ἔοικε τὸ λέγειν τὰ αἷτια ἐξ ἀνάγκης κἂν εἴ τις διὰ τὸ μαχαίριον οἶοιτο τὸ ὕδωρ ἐξεληλυθέναι μόνον τοῖς ὑδρωπιῶσιν, ἀλλ' οὐ διὰ τὸ ὑγιαίνειν οὗ ἔνεκα τὸ μαχαίριον ἔτεμεν.

Περὶ μὲν οὖν ὀδόντων, διότι οἱ μὲν ἐκπίπτουσι καὶ γίνονται πάλιν οἱ δ' οὐ, καὶ ὅλως διὰ τίν' αἰτίαν γίνονται εἴρηται. εἴρηται δὲ καὶ περὶ τῶν ἄλλων τῶν κατὰ τὰ μόρια παθημάτων ὅσα γίνεσθαι συμβαίνει μὴ ἔνεκά του ἀλλ' ἐξ ἀνάγκης καὶ διὰ τὴν αἰτίαν τὴν κινητικήν.

## Περὶ Χρωμάτων (791a) On Colours



[791a] Ἀπλᾶ τῶν χρωμάτων ἐστὶν ὅσα τοῖς στοιχείοις συνακολουθεῖ, οἷον πυρὶ καὶ ἀέρι καὶ ὕδατι καὶ γῇ. ἀήρ μὲν γὰρ καὶ ὕδωρ καθ' ἑαυτὰ τῇ φύσει λευκά, τὸ δὲ πῦρ καὶ ὁ ἥλιος ξανθά. καὶ ἡ γῆ δ' ἐστὶ φύσει λευκή, παρὰ δὲ τὴν βαφὴν πολύχρους φαίνεται. δῆλον δ' ἐπὶ τῆς τέφρας τοῦτ' ἐστίν· ἐκκαυθέντος γὰρ τοῦ τὴν βαφὴν πεποιηκότος ὑγροῦ λευκὴ γίνεται, οὐ παντελῶς δὲ διὰ τὸ τῷ καπνῷ βεβάφθαι μέλανι ὄντι. διὸ καὶ ἡ κονία ξανθὴ γίνεται, τοῦ φλογοειδοῦς καὶ μέλανος ἐπιχρῶζοντος τὸ ὕδωρ. τὸ δὲ μέλαν χρῶμα συνακολουθεῖ τοῖς στοιχείοις εἰς ἀλλήλα μεταβαλλόντων. τὰ δ' ἄλλα ἐκ τούτων εὐσύννοπτα τῇ μίξει κεραννυμένων ἀλλήλοις γίνεται. τὸ δὲ σκότος ἐκλείποντος τοῦ φωτός γίνεται. τριχῶς γὰρ τὸ μέλαν ἡμῖν φαίνεται. ἡ γὰρ ὅλως τὸ μὴ ὁρώμενόν ἐστι τῇ φύσει μέλαν (ἀπάντων γὰρ τῶν τοιούτων ἀνακλᾶται τι φῶς μέλαν), ἡ ἀφ' ὧν μηδὲν ὅλως φέρεται φῶς πρὸς τὰς ὀψεις· τὸ γὰρ μὴ ὁρώμενον, ὅταν ὁ περιέχων τόπος ὁρᾶται, φαντασίαν ποιεῖ μέλανος. φαίνεται δὲ καὶ τὰ τοιαῦτα ἡμῖν ἅπαντα μέλανα, ἀφ' ὧν ἀραιὸν καὶ ὀλίγον ἰσχυρῶς ἀνακλᾶται τὸ φῶς. διὸ καὶ αἱ σκιαὶ φαίνονται μέλαινα. ὁμοίως δὲ καὶ τὸ ὕδωρ, ὅταν τραχυνθῇ, καθάπερ ἡ τῆς θαλάττης φρίκη· διὰ γὰρ τὴν τραχύτητα τῆς ἐπιφανείας ὀλίγων τῶν αὐγῶν προσπιπτουσῶν καὶ διασπωμένου τοῦ φωτός, τὸ σκιερὸν μέλαν φαίνεται. καὶ τὸ νέφος, ὅταν ἡ πυκνὸν ἰσχυρῶς, διὰ τοῦτο. κατὰ τὰ αὐτὰ δὲ τούτοις καὶ τὸ ὕδωρ καὶ ὁ ἀήρ, ὅταν ἡ μὴ παντελῶς διαδῦνον τὸ φῶς. καὶ γὰρ ταῦτα εἶναι δοκεῖ μέλανα, βάθος ἔχοντα, διὰ τὸ παντελῶς ἀραιὰς ἀνακλᾶσθαι [791b] τὰς ἀκτῖνας· τὰ γὰρ μεταξὺ μόρια τοῦ φωτός αὐτῶν ἅπαντα εἶναι δοκεῖ μέλανα διὰ τὸ σκότος. ὅτι δὲ τὸ σκότος οὐ χρῶμα ἀλλὰ στέρησις ἐστὶ φωτός, οὐ χαλεπὸν ἐξ ἄλλων τε πολλῶν καταμαθεῖν, καὶ μάλιστα ἐκ τοῦ μηδὲ αἰσθητὸν εἶναι τὸ πηλίκον καὶ ποῖόν τι τῷ σχήματι τετύχηκεν ὃν τὸ σκότος, καθάπερ ἐπὶ τῶν ἄλλων ὁρατῶν. τὸ δὲ φῶς ὅτι πυρός ἐστὶ χρῶμα, δῆλον ἐκ τοῦ μηδεμίαν ἄλλην ἢ ταύτην ἔχον εὐρίσκεσθαι χροάν, καὶ διὰ τὸ μόνον τοῦτο δι' ἑαυτοῦ ὁρατὸν γίνεσθαι, τὰ δ' ἄλλα διὰ τούτου. ἐπισκεπτέον δὲ τοῦτο. ἔνια γὰρ οὐκ ὄντα πῦρ οὐδὲ πυρὸς εἶδη τὴν φύσιν φῶς ποιεῖν φαίνεται. εἰ μὴ ἄρα τὸ μὲν τοῦ πυρὸς χρῶμα φῶς ἐστίν, οὐ μέντοι καὶ τὸ φῶς πυρός ἐστὶ χρῶμα μόνου, ἀλλ' ἐνδέχεται μὴ μόνῳ μὲν ὑπάρχειν τῷ πυρὶ τὴν χροάν ταύτην, εἶναι μέντοι χρῶμα τὸ φῶς αὐτοῦ. οὐδενὶ γοῦν ἄλλῳ τὴν ὅρασιν αὐτοῦ συμβαίνει γίνεσθαι πλὴν τῷ φωτί, καθάπερ καὶ τὴν τῶν ἄλλων σωμάτων ἀπάντων τῇ τοῦ σώματος φαντασίᾳ. τὸ δὲ μέλαν χρῶμα συμβαίνει γίνεσθαι, ὅταν ὁ ἀήρ καὶ τὸ ὕδωρ ὑπὸ τοῦ πυρὸς διακαυθῇ, διὸ καὶ πάντα τὰ καόμενα μελαίνεται, καθάπερ ξύλα καὶ ἄνθρακες σβεσθέντος τοῦ πυρός, καὶ ὁ ἐκ τοῦ κεράμου



καπνὸς ἐκκρινομένου τοῦ ἐνυπάρχοντος ἐν τῷ κεράμῳ ὑγροῦ καὶ καομένου. διὸ καὶ τοῦ καπνοῦ γίνεται μελάντατος ὁ ἀπὸ τῶν πόνων καὶ λιπαρῶν, οἷον ἐλαίου καὶ πίττης καὶ δαδός, διὰ τὸ μάλιστα ταῦτα κάεσθαι καὶ συνέχειαν ποιεῖν. μέλανα δὲ καὶ ταῦτα γίνεται, δι' ὅσων ῥεῖ τὸ ὕδωρ, ὅταν βρυωθέντων πρῶτον ἀναξηρανθῇ τὸ ὑγρόν, καθάπερ καὶ τὰ ἐν τοῖς τοίχοις κονιάματα. ὁμοίως δὲ καὶ οἱ [792a] καθ' ὕδατος λίθοι· καὶ γὰρ οὗτοι βρυωθέντες, ὕστερον ἀποξηραινόμενοι τῷ χρώματι γίνονται μέλανες. τὰ μὲν οὖν ἀπλᾶ τῶν χρωμάτων ταῦτα καὶ τοσαῦτά ἐστιν.

Τὰ δ' ἄλλα ἐκ τούτων τῇ κράσει καὶ τῷ μᾶλλον καὶ ἥττον γιγνόμενα πολλὰς καὶ ποικίλας ποιεῖ χρωμάτων φαντασίας. κατὰ μὲν τὸ μᾶλλον καὶ ἥττον, ὥσπερ τὸ φοινικοῦν καὶ τὸ ἀλουργές, κατὰ δὲ τὴν κρᾶσιν, ὥσπερ τὸ λευκὸν καὶ τὸ μέλαν, ὅταν μιχθέντα φαιοῦ ποιήσῃ φαντασίαν. διὸ τὸ μέλαν καὶ σκιερὸν τῷ φωτὶ μιγνύμενον φοινικοῦν. τὸ γὰρ μέλαν μιγνύμενον τῷ τε τοῦ ἡλίου καὶ τῷ ἀπὸ τοῦ πυρὸς φωτὶ θεωροῦμεν ἀεὶ γιγνόμενον φοινικοῦν, καὶ τὰ μέλανα πυρωθέντα πάντα εἰς χρῶμα μεταβάλλοντα φοινικοῦν· αἱ τε γὰρ καπνώδεις φλόγες καὶ οἱ ἄνθρακες, ὅταν ὥσι διακεκαυμένοι, φαίνονται χρῶμα ἔχοντες φοινικοῦν. τὸ δ' ἀλουργές εὐανθές μὲν γίνεται καὶ λαμπρόν, ὅταν τῷ μετρίῳ λευκῷ καὶ σκιερῷ κραθῶσιν ἀσθενεῖς αἱ τοῦ ἡλίου αὐγαί. διὸ καὶ περὶ ἀνατολᾶς καὶ δύσεις ὁ ἀῆρ πορφυροειδὴς ἔστιν ὅτε φαίνεται, περὶ ἀνατολὴν καὶ δύσιν ὄντος τοῦ ἡλίου· ἀσθενεῖς γὰρ οὔσαι τότε μάλιστα πρὸς σκιερὸν ὄντα τὸν ἀέρα προσβάλλουσιν. φαίνεται δὲ καὶ ἡ θάλαττα πορφυροειδής, ὅταν τὰ κύματα μετεωριζόμενα κατὰ τὴν ἔγκλισιν σκιασθῇ· πρὸς γὰρ τὸν ταύτης κλισμὸν ἀσθενεῖς αἱ τοῦ ἡλίου αὐγαὶ προσβάλλουσιν ποιοῦσι φαίνεσθαι τὸ χρῶμα ἀλουργές. ὃ καὶ ἐπὶ τῶν πτερωμάτων θεωρεῖται γιγνόμενον· ἐντεινόμενα γὰρ πῶς πρὸς τὸ φῶς ἀλουργές ἔχει τὸ χρῶμα. ἐλάττονος δὲ τοῦ φωτὸς προσβάλλοντος ζοφερόν, ὃ καλοῦσιν ὄρφνιον· πολὺ δὲ καὶ τῷ πρώτῳ μέλανι κραθὲν φοινικοῦν. εὐανθές δ' ὃν καὶ στίλβον εἰς τὸ φλογοειδὲς χρῶμα μεταβάλλει. κατὰ γὰρ τὴν πρὸς ἄλληλα κρᾶσιν οὕτως ληπτέον, ἐξ ὑποκειμένου τεθεωρημένου χρώματος ποιοῦντας τὴν μίξιν, ἀλλὰ μὴ πάντων ὁμοίαν γένεσιν ποιοῦντας. ἔστι γὰρ τῶν χρωμάτων οὐχ ἀπλᾶ μὲν, λόγον δ' ἔχει πρὸς τινὰ τὸν αὐτὸν τῶν συνθέτων ὅνπερ τὰ ἀπλᾶ πρὸς ἑαυτά, διὰ τὸ τὰ ἀπλᾶ πρὸς μίξιν ἐνὸς ἔχειν, [792b] καὶ μὴ εὐσημον ἐν τῷ παντί, καὶ προστεθεωρημένον κατασκευάζειν ὁμοίως. τὴν γὰρ τοῦ ἀλουργοῦ ἢ φοινικιοῦ κρᾶσιν λέγοντας ἀνάγκη ὁμοίως τοῖς ἐκ τούτων μιγνυμένοις καὶ ποιοῦσιν ἄλλην χροάν τὴν γένεσιν διηγεῖσθαι, καὶ μὴ ὁμοίαν ἔμφασιν ποιεῖν. διόπερ ἐκ τοῦ προκατεσκευασμένου ληπτέον καὶ θεωρητέον τὴν κρᾶσιν, οἷον ὅτι τὸ οἶνωπὸν χρῶμα γίνεται, ὅταν ἀκράτῳ τῷ μέλανι καὶ στίλβοντι κραθῶσιν αὐγαὶ ἡεροειδεῖς, ὥσπερ καὶ αἱ τῶν βοτρυῶν ῥᾶγες· καὶ γὰρ

τούτων οἶνωπὸν φαίνεται τὸ χρῶμα ἐν τῷ πεπαίνεσθαι· μελαιομένων γὰρ τὸ φοινικοῦν εἰς τὸ ἄλουργές μεταβάλλει. κατὰ δὲ τὸν ὑποδεδειγμένον τρόπον θεωρητέον πάσας τὰς τῶν χρωμάτων διαφοράς, ἐκ κινήσεως τὴν ὁμοιότητα λαμβάνοντας κατ' αὐτὸ τὸ φαινόμενον, τὴν ἐν ἑκάστῳ μίξιν ὁμοιοῦντας καὶ ἐπὶ τῶν κατὰ μέρος ἐν γενέσει τινὶ καὶ κράσει ποιούντων φαντασίαν, καὶ πίστιν προσφερομένους. δεῖ δὲ καὶ πάντων τούτων ποιεῖσθαι τὴν θεωρίαν μὴ καθάπερ οἱ ζωγράφοι τὰ χρώματα ταῦτα κεραννύντας, ἀλλ' ἀπὸ τῶν εἰρημένων τὰς ἀνακλωμένας αὐγάς πρὸς ἀλλήλας συμβάλλοντας· μάλιστα γὰρ δύναται ἂν τις κατὰ φύσιν θεωρῇσαι τὰς τῶν χρωμάτων κράσεις. τὰς δὲ πίστεις καὶ τὰ ὅμοια δεῖ ἐν οἷς ἡ γένεσις ἔσται φανερά τῶν χρωμάτων. ταῦτα δὲ μάλιστα ἔστι τό τ' ἀπὸ τοῦ ἡλίου φῶς καὶ τὸ ἀπὸ τοῦ πυρός καὶ ὁ ἄηρ καὶ τὸ ὕδωρ· κεραννύμενα γὰρ τῷ μᾶλλον καὶ ἥττον ταῦτα μάλιστα πάσας ὡς εἶπειν τὰς χροάς ἀποτελεῖ. ἐπιληπτέον δὲ καὶ ἀπὸ τῶν ἄλλων χρωμάτων ταῖς αὐγαῖς κεραννυμένων τὴν ὁμοιότητα· οἱ γὰρ ἄνθρακες καὶ ὁ καπνὸς καὶ ὁ ἰὸς καὶ τὸ θεῖον καὶ τὰ πτερώματα κεραννύμενα τὰ μὲν ταῖς τοῦ ἡλίου αὐγαῖς, τὰ δὲ ταῖς τοῦ πυρός, πολλὰς καὶ ποικίλας ποιοῦσι μεταβολὰς χρωμάτων. τὰ δὲ καὶ τῇ πέψει θεωρητέον, γινόμενα ἐν φυτοῖς καὶ καρποῖς καὶ τριχώμασι καὶ πτερώμασι καὶ τοῖς τοιούτοις πᾶσιν.

Δεῖ δὲ μὴ λανθάνειν τὸ πολυειδὲς καὶ τὸ ἄπειρον τῶν χρωμάτων, διὰ πόσα συμβαίνει γίνεσθαι. εὐρήσομεν γὰρ [793a] ἥτοι διὰ τὸ τῷ φωτὶ καὶ ταῖς σκιαῖς ἀνίσως καὶ ἀνωμάλως λαμβάνεσθαι· καὶ γὰρ αἱ σκιαὶ καὶ τὸ φῶς κατὰ τὸ μᾶλλον καὶ ἥττον πολὺ διαφέρουσιν αὐτῶν, ὥστε καὶ καθ' αὐτάς καὶ μετὰ τῶν χρωμάτων μινύμεναι ποιοῦσι μεταβολὰς χρωμάτων, ἢ τῷ τὰ κεραννύμενα τῷ πλήθει καὶ ταῖς δυνάμεσι διαφέρειν, ἢ τῷ λόγους ἔχειν μὴ τοὺς αὐτούς. πολλὰς γὰρ καὶ τὸ ἄλουργές ἔχει διαφοράς καὶ τὸ φοινικοῦν καὶ τὸ λευκὸν καὶ τῶν ἄλλων ἕκαστον καὶ κατὰ τὸ μᾶλλον καὶ ἥττον καὶ κατὰ τὴν πρὸς ἄλληλα μίξιν καὶ εἰλικρίνειαν αὐτῶν. ποιεῖ δὲ διαφορὰν καὶ τὸ λαμπρὸν ἢ στίλβον εἶναι τὸ μινύμενον ἢ τοῦναντίον αὐχμηρὸν καὶ ἀλαμπές. ἔστι δὲ τὸ στίλβον οὐκ ἄλλο τι ἢ συνέχεια φωτὸς καὶ πυκνότης. τὸ γὰρ χρυσοειδὲς γίνεται, ὅταν τὸ ξανθὸν καὶ τὸ ἡλιῶδες πυκνωθὲν ἰσχυρῶς στίλβῃ. διὸ καὶ οἱ τῶν περιστερῶν τράχηλοι καὶ τῶν ὑδάτων οἱ σταλαγμοὶ φαίνονται χρυσοειδεῖς τοῦ φωτὸς ἀνακλωμένου. ἔστι δὲ ἃ λειούμενα τρίψει καὶ δυνάμεσί τισιν ἄλλοίαις ἴσχει καὶ ποικίλας χροάς, ὥσπερ καὶ ὁ ἄργυρος παρατριβόμενος καὶ χρυσὸς καὶ χαλκὸς καὶ σίδηρος, καὶ τινὰ γένη λίθων διαφόρους ποιεῖ χροάς, καθάπερ καὶ ... μέλαιναι γὰρ οὖσαι λευκάς γράφουσι γραμμάς, διὰ τὸ πάντων τῶν τοιούτων τὰς μὲν ἐξ ἀρχῆς συστάσεις ἐκ μικρῶν εἶναι μορίων καὶ πυκνῶν καὶ μελάνων, ὑπὸ δὲ τῆς ἐν τῇ γενέσει βαφῆς ἀπάντων τῶν πόρων κεχρωσμένων δι' ὧν διελήλυθεν αὐτῶν ἡ βαφή, ἄλλην

ἐσχηκέναι τὴν τοῦ χρώματος φαντασίαν. ὁ δ' ἀποτρίβομενος ἀπ' αὐτῶν οὐκέτι γίνεται χρυσοειδὴς οὐδὲ χαλκοειδὴς οὐδ' ἄλλην οὐδεμίαν τοιαύτην ἔχων χροιάν, ἀλλὰ πάντως μέλας, διὰ τὸ τοὺς μὲν πόρους παρατρίβομένων αὐτῶν ἀναρρήγνυσθαι, δι' ὧν ἡ βαφὴ διελήλυθε, φύσει δὲ καὶ τῶν αὐτῶν εἶναι. τοῦ γὰρ προτέρου χρώματος οὐκέτι ὄντος ἡμῖν φανεροῦ παρὰ τὸ διασπᾶσθαι τὴν βαφήν, τὸ κατὰ φύσιν ὑπάρχον αὐτοῖς χρῶμα ὀρῶμεν· διὸ καὶ πάντα φαίνεται μέλανα. ἐν δὲ τῷ παρατρίβεσθαι πρὸς ὁμαλὲς καὶ λεῖον ἕκαστον τούτων, καθάπερ καὶ πρὸς τὰς [793b] βασάνους, ἀποβάλλοντα ἀπολαμβάνει πάλιν τὴν χροάν ἐν τῇ συνάψει καὶ συνεχείᾳ, τὸ τῆς βαφῆς διαφαινόμενον. ἐπὶ δὲ τῶν καυστῶν καὶ διαλυομένων καὶ τηκομένων ἐν τῷ πυρὶ ταῦτα πλείστας ἔχει χροάς, ὅσων ὁ καπνὸς ἐστὶ λεπτὸς καὶ ἀεροειδὴς καὶ τὰ χρώματα σκιώδη, ὥσπερ ὁ τε ἀπὸ τοῦ θείου καὶ τῶν ἰωμένων χαλκείων, καὶ ὅσα ἐστὶ πυκνὰ καὶ λεῖα, καθάπερ ὁ ἄργυρος. ἐπὶ δὲ τῶν ἄλλων ὅσα σκιώδεις ἔχει τὰς χροάς καὶ λειότητος μετέχει, ὥσπερ τὸ ὕδωρ καὶ τὰ νέφη καὶ τὰ πτερώματα τῶν ὀρνίθων· καὶ γὰρ ταῦτα διὰ τε τὴν λειότητα καὶ τὰς προσπιπτούσας αὐγὰς, ἄλλοτε ἄλλως κεραννύμενας, ποιεῖ διαφόρους τὰς χροάς, καθάπερ καὶ τὸ σκότος. τῶν δὲ χρωμάτων οὐδὲν ὀρῶμεν εἰλικρινὲς οἷόν ἐστιν, ἀλλὰ πάντα κεκραμένα ἐν ἑτέροις· καὶ γὰρ ἂν μηδενὶ τῶν ἄλλων, ταῖς γε τοῦ φωτὸς αὐγαῖς καὶ ταῖς σκιαῖς κεραννύμενα ἄλλοῖα, καὶ οὐχ οἷά ἐστι, φαίνεται. διὸ καὶ τὰ ἐν σκιᾷ θεωρούμενα καὶ ἐν φωτὶ καὶ ἡλίῳ, καὶ σκληρᾷ αὐγῇ ἢ μαλακῇ, καὶ κατὰ τὰς ἐγκλίσεις οὕτως ἢ οὕτως ἔχοντι, καὶ κατὰ τὰς ἄλλας διαφοράς, ἄλλοῖα φαίνεται. καὶ ταῖς πρὸς τῷ πυρὶ καὶ τῇ σελήνῃ, καὶ ταῖς τῶν λύχνων αὐγαῖς, διὸ καὶ τὸ φῶς ἑκάστου τούτων ἁλλοιοτέραν ἔχει χροάν. καὶ τῇ πρὸς ἄλληλα δὲ μίξει τῶν χρωμάτων· δι' ἄλληλων γὰρ φερόμενα χρώζεται. τὸ γὰρ φῶς ὅταν προσπεσὼν ὑπὸ τινων χρωσθῇ, καὶ γένηται φοινικιοῦν ἢ ποῶδες, καὶ τὸ ἀνακλασθὲν προσπέσῃ πρὸς ἕτερόν τι χρῶμα, πάλιν ὑπ' ἐκείνου κεραννύμενον ἄλλην τινὰ λαμβάνει τοῦ χρώματος κρᾶσιν. καὶ τοῦτο πάσχον συνεχῶς μὲν οὐκ αἰσθητῶς δὲ ἐνίοτε παραγίνεται πρὸς τὰς ὀψεις ἐκ πολλῶν μὲν κεκραμένον χρωμάτων, ἐνὸς δὲ τινος τῶν μάλιστα ἐπικρατούντων ποιοῦν τὴν αἴσθησιν. διὸ καὶ καθ' ὕδατος ὕδατοειδῇ μᾶλλον φαίνεται, καὶ τὰ ἐν τοῖς κατόπτροις ὁμοίως ἔχοντα χροάς ταῖς τῶν κατόπτρων. ὁ καὶ περὶ τὸν ἀέρα οἰητέον συμβαίνειν. ὥστε ἐκ τριῶν εἶναι τὰς χροάς ἀπάσας μεμιγμένας, τοῦ φωτός, καὶ δι' ὧν φαίνεται τὸ φῶς, οἷον τοῦ τε ὕδατος [794a] καὶ τοῦ ἀέρος, καὶ τρίτου τῶν ὑποκειμένων χρωμάτων, ἀφ' ὧν ἀνακλᾶσθαι συμβαίνει τὸ φῶς. τὸ δὲ λευκὸν καὶ διαφανὲς ὅταν μὲν ἀραιὸν ἢ σφόδρα, φαίνεται τῷ χρώματι ἀεροειδές· ἐπὶ δὲ τῶν πυκνῶν ἐπὶ πάντων ἐπιφαίνεται τις ἀχλύς, καθάπερ ἐπὶ τοῦ ὕδατος καὶ ὑάλου καὶ τοῦ ἀέρος, ὅταν ἢ παχύς. τῶν γὰρ αὐγῶν διὰ τὴν πυκνότητα πανταχόθεν ἐκλείπουσῶν, οὐ δυνάμεθα τὰ ἐντὸς αὐτῶν ἀκριβῶς διορᾶν. ὁ δ' ἀπὸ

ἐγγύθεν μὲν θεωρούμενος οὐδὲν ἔχειν φαίνεται χρῶμα (διὰ γὰρ τὴν ἀραιότητα ὑπὸ τῶν αὐγῶν κρατεῖται, χωριζόμενος ὑπ' αὐτῶν πυκνοτέρων οὐσῶν καὶ διαφαινομένων δι' αὐτοῦ), ἐν βάθει δὲ θεωρουμένου, ἐγγυτάτω φαίνεται τῷ χρώματι κυανοειδὴς διὰ τὴν ἀραιότητα. ἥ γὰρ λείπει τὸ φῶς, ταύτῃ σκότῳ διειλημμένος φαίνεται κυανοειδής. ἐπιπυκνωθεὶς δέ, καθάπερ καὶ τὸ ὕδωρ, πάντων λευκώτατόν ἐστί.

Τὰ δὲ βαπτόμενα πάντα τὰς χροάς ἀπὸ τῶν βαπτόντων λαμβάνει. πολλὰ μὲν γὰρ τοῖς ἄνθεσι βάπτεται τοῖς φυομένοις, πολλὰ δὲ ῥίζαις, πολλὰ δὲ φλοιοῖς ἢ ξύλοις ἢ φύλλοις ἢ καρποῖς. ἔτι δὲ πολλὰ μὲν γῇ, πολλὰ δ' ἀφρῶ, πολλὰ δὲ καὶ μελαντηρία. τὰ δὲ καὶ τοῖς τῶν ζώων χυλοῖς, καθάπερ καὶ τὸ ἀλουργὲς τῇ πορφύρᾳ. τὰ δὲ οἴνω, τὰ δὲ καπνῷ, τὰ δὲ κονία, τὰ δὲ θαλάττῃ, ὥσπερ τὰ τριχώματα τῶν θαλαττίων· καὶ γὰρ ταῦτα πάντα ὑπὸ τῆς θαλάττης γίνονται πυρρά. καὶ ὅλως ὅσα χροάς ἰδίας ἔχει. ἀεὶ γὰρ ἀπὸ πάντων αὐτῶν, ἅμα τῷ τε ὑγρῷ καὶ θερμῷ τῶν χρωμάτων συνεισιόντων εἰς τοὺς τῶν βαπτομένων πόρους, ὅταν ἀποξηρανθῇ, τὰς ἀπ' ἐκείνων χροάς λαμβάνει. διὸ καὶ πολλάκις αὐτῶν ἐκπλύνεται, τῶν ἀνθῶν ἐκ τῶν πόρων ἐκρύνετον. πολλὰς δὲ καὶ αἱ στύψεις ἐν τῇ βαφῇ ποιοῦσι διαφορὰς καὶ μίξεις, καὶ τὰ πάθη τῶν βαπτομένων, ὥσπερ καὶ ἐπὶ τῆς κράσεως εἴρηται πρότερον. βάπτεται δὲ καὶ τὰ μέλανα τῶν ἐρίων, οὐ μὴν ὁμοίως γε τῷ χρώματι γίνετα λαμπρά, διὰ τὸ βάπτεσθαι τοὺς πόρους αὐτῶν εἰς τοὺς τῶν ἀνθῶν εἰσιόντας, τὰ δὲ μεταξὺ [794b] διαστήματα τῆς τριχὸς μηδεμίαν λαμβάνειν βαφήν. ταῦτα λευκὰ μὲν ὄντα, καὶ παρ' ἄλληλα κείμενα τοῖς χρώμασι, ποιεῖ πάντα φαίνεσθαι τὰ ἄνθη λαμπρότερα· τὰ μέλανα δὲ τοῦναντίον σκιερὰ καὶ ζοφώδη. διὸ καὶ τὸ καλούμενον ὄρφνιον εὐανθέστερον γίνεται τῶν μελάνων ἢ τῶν λευκῶν· οὕτω γὰρ ἀκρατέστερον αὐτῶν φαίνεται τὸ ἄνθος, κεραννύμενον ταῖς τοῦ μέλανος αὐγαῖς. καθ' αὐτὸ μὲν γὰρ τὸ μεταξὺ διάστημα τῶν πόρων οὐχ ὁρᾶται διὰ σμικρότητα, καθάπερ οὐδὲ καττίτερος τῷ χαλκῷ κραθεὶς, οὐδὲ τῶν ἄλλων οὐθὲν τῶν τοιούτων. τῶν δὲ βαπτομένων τὰ χρώματα ἀλλοιοῦνται διὰ τὰ Τὰ δὲ τριχώματα καὶ τὰ πτερώματα καὶ τὰ ἄνθη καὶ οἱ καρποὶ καὶ τὰ φυτὰ πάντα ὅτι μὲν ἅμα τῇ πέψει πάσας τὰς τῶν χρωμάτων λαμβάνει μεταβολάς, φανερόν ἐκ πολλῶν· τίνες δὲ εἰσιν ἐκάστοις τῶν φυομένων ἀρχαὶ τῶν χρωμάτων, καὶ ποίας τὰς μεταβολὰς ἐκ ποίων λαμβάνουσι, καὶ δι' ἧς αἰτίας ταῦτα πάσχει, κἂν εἴ τινας ἄλλας ἀπορίας αὐτοῖς συμβαίνει παρακολουθεῖν, περὶ πάντων τούτων ἐπισκεπτέον ἐκ τῶν τοιούτων. ἐν πᾶσι δὲ τοῖς φυτοῖς ἀρχὴ τὸ ποῶδές ἐστι τῶν χρωμάτων· καὶ γὰρ οἱ βλαστοὶ καὶ τὰ φύλλα καὶ οἱ καρποὶ γίνονται κατ' ἀρχὰς ποῶδεις. ἴδιοι δ' ἂν τις τοῦτο καὶ ἐπὶ τῶν ὑομένων ὑδάτων· ὅπου ἂν πλείονα χρόνον συστήῃ τὸ ὕδωρ, πάλιν ἀποξηραινόμενον γίνεται τῷ χρώματι ποῶδες. κατὰ λόγον δὲ

συμβαίνει καὶ τὸ πρῶτον ἐν πᾶσι τοῖς φυομένοις τοῦτο συνίστασθαι τῶν χρωμάτων. τὰ γὰρ ὕδατα πάντα χρονοζόμενα κατ' ἀρχὰς μὲν γίνεται χλωρά, κεραννύμενα ταῖς τοῦ ἡλίου αὐγαῖς, κατὰ μικρὸν δὲ μελαινόμενα, πάλιν μιννύμενα τῷ χλωρῷ, γίνεται ποώδη. τὸ γὰρ ὑγρὸν, ὥσπερ εἴρηται, καθ' ἑαυτὸ παλαιούμενον καὶ καταξηραινόμενον μελαίνεται, καθάπερ καὶ τὰ ἐν ταῖς δεξαμεναῖς κονιάματα· καὶ γὰρ τούτων ὅσα μὲν ἐστὶν ἀεὶ καθ' ὕδατος, ταῦτα μὲν ἅπαντα γίνεται μέλανα διὰ τὸ καθ' αὐτὰ μὴ ξηραίνεσθαι διαψυχόμενον τὸ ὑγρὸν, ὅσον δ' [795a] ἀπαντλούμενον ἡλιοῦται, τὸ μὲν ποώδες γίνεται διὰ τὸ τὸ ξανθὸν τῷ μέλανι κεράννυσθαι. μᾶλλον μὲν οὖν τοῦ ὑγροῦ μελαιομένου τὸ ποώδες γίνεται κατακορὲς ἰσχυρῶς καὶ πρασοειδές. διὸ καὶ πάντων οἱ παλαιοὶ βλαστοὶ πολὺ μᾶλλον εἰσι τῶν νέων μέλανε· οἱ δὲ ξανθότεροι διὰ τὸ μήπω τὸ ὑγρὸν ἐν αὐτοῖς μελαίνεσθαι. τῆς γὰρ αὐξήσεως αὐτῶν βραδυτέρας γιγνομένης, καὶ τῆς ὑγρασίας πολὺν χρόνον ἐμμενούσης, διὰ τὸ ψυχόμενον ἰσχυρῶς μελαίνεσθαι τὸ ὑγρὸν, γίνεται πρασοειδὲς ἀκράτῳ τῷ μέλανι κεραννύμενον. ἐν ὅσοις δὲ τὸ ὑγρὸν μὴ μίννυται ταῖς τοῦ ἡλίου αὐγαῖς, τούτων διαμένει τὸ χρῶμα λευκόν, ἐὰν μὴ χρονοζόμενον καὶ καταξηραινόμενον μελανθῇ πρότερον. διὸ καὶ τὰ μὲν ὑπὲρ γῆς χλωρὰ πάντων τῶν φυομένων τὸ πρῶτόν ἐστι, τὰ δὲ κατὰ γῆς, καυλοὶ καὶ ῥίζαι λευκαί. καὶ οἱ βλαστοὶ κατὰ γῆς μὲν ὄντες εἰσὶ λευκοί, περιαιρεθείσης δὲ τῆς γῆς τὸ μὲν ἐξ ἀρχῆς, ὡς προεῖρηται, πάντες γίνονται ποιώδεις διὰ τὸ καὶ τὴν ὑγρασίαν τὴν διὰ τῶν βλαστῶν εἰς αὐτοὺς διηθουμένην τοιαύτην ἔχειν τὴν τοῦ χρώματος φύσιν, καὶ ταχέως αὐτὴν εἰς τὴν αὕξησιν καταναλίσκεσθαι τὴν τῶν καρπῶν· ὅταν δὲ μηκέτι αὐξάνωνται διὰ τὸ μὴ κρατεῖν ἤδη τὸ θερμὸν τῆς ἐπιρρεούσης τροφῆς, ἀλλὰ καὶ τὸ ὑναντίον ἀναλύηται τὸ ὑγρὸν ὑπὸ τῆς θερμότητος. ὅταν δὲ πεπαίνωνται οἱ καρποὶ πάντες, καὶ τῆς ὑπαρχούσης ἐν αὐτοῖς ὑγρασίας συνεψομένης ὑπὸ τε τοῦ ἡλίου καὶ τῆς τοῦ ἀέρος θερμότητος ἕκαστοι ἀπολαμβάνουσι τὰς ἀπὸ τῶν φυτῶν χροάς, καθάπερ καὶ τὰ βαπτόμενα τῶν ἀνθῶν. διὸ κατὰ μικρὸν χρώζονται, καὶ μάλιστα αὐτῶν τὰ πρὸς τὸν ἥλιον ἐστραμμένα καὶ τὴν ἀλέαν. ὥστε καὶ τὰς χροάς αὐτῶν ἅμα ταῖς ὥραις ἀπάντων μεταβάλλειν. φανερόν δὲ τοῦτο ἐστίν· οἱ γὰρ τοῦ ποώδους χρώματος ἅπαντες ἤδη πεπαινόμενοι μεταβάλλουσιν εἰς τὸ κατὰ φύσιν χρῶμα. καὶ γὰρ λευκοὶ καὶ μέλανε καὶ φαιοὶ καὶ ξανθοὶ καὶ μελανοειδεῖς καὶ σκιοειδεῖς καὶ [795b] φοινικιοῖ καὶ οἰνωποὶ καὶ κροκοειδεῖς καὶ σχεδὸν ἀπάσας ἔχοντες γίνονται τὰς τῶν χρωμάτων διαφοράς. ἐπεὶ δὲ τὰ πλεῖστα γίνεται τῶν χρωμάτων πλειόνων κεραννυμένων ἀλλήλοις, φανερόν ὅτι καὶ τὰς ἐν τοῖς φυτοῖς χροάς ἀνάγκη τὰς αὐτὰς ἔχειν κράσεις· διὰ γὰρ τούτων τὸ ὑγρὸν διηθούμενον, καὶ μεθ' ἑαυτοῦ συνεκκλύζον, ἀπάσας λαμβάνει τὰς τῶν χρωμάτων δυνάμεις. καὶ τούτου συνεψομένου περὶ τὰς τῶν καρπῶν πέψεις ὑπὸ τε τοῦ ἡλίου καὶ τῆς τοῦ ἀέρος θερμότητος, ἕκαστα καθ'

ἑαυτὰ συνίσταται τῶν χρωμάτων, τὰ μὲν θᾶπτον τὰ δὲ βραδύτερον, καθάπερ συμβαίνει καὶ περὶ τὴν βαφὴν τὴν τῆς πορφύρας. καὶ γὰρ ταύτην ὅταν κόψαντες ἅπασαν ἐξ αὐτῆς τὴν ὑγρασίαν ἐκκλύσωσι, καὶ ταύτην ἐγγέαντες ἔψωσιν ἐν ταῖς χύτραις, τὸ μὲν πρῶτον οὐδὲν ὅλως ἐν τῇ βαφῇ τῶν χρωμάτων φανερόν ἐστι διὰ τὸ κατὰ μικρὸν ἕκαστον αὐτῶν τοῦ ὑγροῦ συνεψομένου μᾶλλον καὶ τῶν ἔτι ὑπαρχόντων ἐν αὐτοῖς χρωμάτων μιγνυμένων ἀλλήλοις πολλὰς καὶ ποικίλας λαμβάνειν διαφοράς· καὶ γὰρ μέλαν καὶ λευκὸν καὶ ὄρνιον καὶ ἄεροειδὲς καὶ τότε ἅπαν γίνεται συνεψηθέντων, ὥστε διὰ τὴν κρᾶσιν μηκέτι καθ' αὐτὸ μηδὲν τῶν ἄλλων χρωμάτων φανερόν εἶναι. τὸ δ' αὐτὸ τοῦτο συμβαίνει καὶ ἐπὶ τῶν καρπῶν. ἐν πολλοῖς γὰρ διὰ τὸ μὴ πάσας ἅμα γίνεσθαι τὰς τῶν χρωμάτων πέψεις, ἀλλὰ τὰ μὲν αὐτῶν συνίστασθαι πρότερον τὰ δ' ὕστερον, ἐξ ἐτέρων εἰς ἕτερα μεταβάλλουσιν, ὥσπερ καὶ οἱ βότρυες καὶ οἱ φοῖνικες. καὶ γὰρ τούτων ἔνιοι τὸ μὲν πρῶτον γίνονται φοινικοῖ, τοῦ δὲ μέλανος ἐν αὐτῷ συνισταμένου μεταβάλλουσι πάλιν εἰς τὸ οἴνωπόν· τὸ δὲ τελευταῖον γίνονται κυανοειδεῖς, ὅταν ἤδη καὶ τὸ φοινικιοῦν πολλῷ καὶ ἀκράτῳ τῷ μέλανι μιχθῇ. τὰ γὰρ ὕστερον ἐπιγινόμενα τῶν χρωμάτων, ὅταν κρατήσῃ, τὰς προτέρας χροᾶς ἐξαλλάττει. μάλιστα δὲ τοῦτο ἐπὶ τῶν μελάνων καρπῶν φανερόν ἐστιν· σχεδὸν γὰρ αὐτῶν οἱ πλεῖστοι, καθάπερ [796a] εἴρηται, κατ' ἀρχὰς μὲν ἐκ τοῦ ποώδους μεταβάλλοντες μικρὸν ἐπιφοινικίζουσι καὶ γίνονται πυρροί, ταχὺ δὲ μεθίστανται πάλιν ἐκ τοῦ πυρροῦ καὶ ἀκράτου τοῦ μέλανος ἐν τοῖς τοιούτοις ἐνυπάρχοντος. δηλοῖ δέ· καὶ γὰρ τὰ κλήματα καὶ τὰ ἔρια καὶ τὰ φύλλα πάντων ἐστὶ τῶν τοιούτων μέλανα διὰ τὸ πλείστην ἐν αὐτοῖς ὑπάρχειν τὴν τοιαύτην χροᾶν, ἐπεὶ διότι γε τῶν καρπῶν οἱ μέλανεσ ἀμφοτέρων τῶν χρωμάτων μετέχουσι, φανερόν ἐστιν· πάντων γὰρ ὁ χυλὸς γίνεται τῶν τοιούτων οἴνωπός. τὰ δὲ χρώματα ἐν τῇ γενέσει προτερεῖ τὰ φοινικιά τῶν μελάνων. δηλοῖ δέ· καὶ γὰρ τὰ ὑπὸ τοὺς σταλαγμοὺς ἐδάφη, καὶ ὅλως ὅπου συμβαίνει γίνεσθαι μετρία ὑδάτων ἔκρυσις ἐν τόποις σκιεροῖς, ἅπαντα μεταβάλλει πρῶτον ἐκ τοῦ ποώδους εἰς τὸ φοινικιοῦν χρῶμα, καὶ γίνεται τὸ ἔδαφος ὡς ἂν αἵματος ἀρτίως ἐπεσφαγμένου κατὰ τὸν τόπον τοῦτον, καθ' ὃν ἂν λάβῃ τὸ ποῶδες τῶν χρωμάτων τὴν πέψιν· τὸ δὲ τελευταῖον καὶ τοῦτο μέλαν ἰσχυρῶς γίνεται καὶ κυανοειδές. ὅπερ συμβαίνει καὶ ἐπὶ τῶν καρπῶν. ὅτι δὲ χρωμάτων ὕστερον ἐπιγινόμενων, ὅταν κρατῇται τὰ πρότερον, τὸ χρῶμα τῶν καρπῶν μεταβάλλει, καὶ διὰ τῶν τοιούτων ῥάδιον συνιδεῖν. καὶ γὰρ τῆς ῥοιᾶς ὁ καρπὸς καὶ τὰ τῶν ῥόδων φύλλα κατ' ἀρχὰς μὲν γίνεται λευκά, τὸ δὲ τελευταῖον ἤδη χρωζομένων ἐν αὐτοῖς τῶν χυλῶν ὑπὸ τῆς πέψεως ἀποχραίνεται, καὶ μεταβάλλει πάλιν εἰς τὸ τοῦ ἀλουργοῦ χρῶμα καὶ τὸ φοινικιοῦν. τὰ δὲ καὶ πλείους ἐπ' αὐτοῖς ἔχει χροᾶς, καθάπερ καὶ ἐπὶ τῆς μήκωνος ὁ ὀπὸς καὶ τῆς ἐλαίας ὁ ἀμόργης· καὶ γὰρ οὗτος τὸ μὲν πρῶτον

γίνεται λευκός, καθάπερ καὶ ὁ τῆς ῥοιᾶς καρπός, λευκανθεὶς δὲ πάλιν εἰς τὸ φοινικιοῦν μεταβάλλει χρῶμα, τὸ δὲ τελευταῖον πολλῶ τῷ μέλανι κραθεὶς γίνεται κυανοειδής. διὸ καὶ τὰ τῆς μήκωνος φύλλα τὰ μὲν ἄνω ἔχει φοινικιοῦντα παρὰ τὸ γίνεσθαι ταχεῖαν αὐτῶν τὴν ἔκπεψιν, τὰ δὲ πρὸς ταῖς ἀρχαῖς μέλανα, ἥδη τούτου τοῦ [796b] χρώματος ἐν αὐτοῖς ἐπικρατοῦντος, ὥσπερ καὶ ἐπὶ τοῦ καρποῦ· καὶ γὰρ τὸ τελευταῖον γίνεται μέλας. ἐν ὅσοις δ' ὑπάρχει τῶν φυτῶν ἐν χρῶμα μόνον, οἷον τὸ λευκὸν ἢ τὸ μέλαν ἢ τὸ φοινικιοῦν ἢ τὸ ἀλουργές, τούτων δὲ πάντων οἱ καρποὶ διαμένουσιν ἀεὶ τὴν αὐτὴν ἔχοντες τοῦ χρώματος φύσιν, ὅταν ἅπαξ ἐκ τοῦ ποώδους εἰς ἄλλην χροᾶν μεταβάλλωσιν. τὰ δ' ἄνθη τοῖς καρποῖς ἐπ' ἐνίων μὲν ὁμόχροα συμβαίνει γίνεσθαι, καθάπερ ἔχει καὶ ἐπὶ τῆς ῥοιᾶς· καὶ γὰρ ὁ καρπὸς αὐτῆς γίνεται φοινικιοῦς καὶ τὸ ἄνθος· ἐπ' ἐνίων δὲ πολὺ τῷ χρώματι διαφέρει, οἷον ἐπὶ τε τῆς δάφνης καὶ τοῦ κιττοῦ· τὸ μὲν γὰρ ἄνθος ἐστὶν αὐτῶν ἀπάντων ξανθόν, ὁ δὲ καρπὸς τῶν μὲν μέλας τῶν δὲ φοινικιοῦς. ὁμοίως δ' ἔχει καὶ ἐπὶ τῆς μηλέας· καὶ γὰρ ταύτης τὸ μὲν ἄνθος ἐστὶ λευκὸν ἐπιπορφυρίζον, ὁ δὲ καρπὸς ξανθός. τῆς δὲ μήκωνος τὸ μὲν ἄνθος φοινικιοῦν, ὁ δὲ καρπὸς ὁ μὲν μέλας ὁ δὲ λευκός, παρὰ τὸ καὶ τὰς πέψεις τῶν ἐνυπαρχόντων ἐν αὐτοῖς χυλῶν κατ' ἄλλους γίνεσθαι χρόνους. ῥάδιον δὲ τοῦτο ἐκ πολλῶν συνιδεῖν· καὶ γὰρ τῶν καρπῶν ἔνιοι, καθάπερ εἴρηται, πολλὰς διαφορὰς ἅμα τῇ πέψει λαμβάνουσιν. διὸ καὶ τὰς ὁσμάς καὶ τοὺς χυλοὺς πολὺ διαφόρους συμβαίνει τοῖς ἄνθεσι καὶ τοῖς καρποῖς συνακολουθεῖν. ἔτι δὲ μᾶλλον τοῦτο ἐστὶν ἐπ' αὐτῶν τῶν ἀνθῶν φανερόν· τοῦ γὰρ αὐτοῦ φύλλου τὸ μὲν ἐστὶ μέλαν τὸ δὲ φοινικιοῦν, ἐνίων δὲ τὸ μὲν τι λευκὸν τὸ δὲ πορφυροειδές. οὐχ ἥκιστα δὲ τοῦτο φανερόν ἐστὶν ἐπὶ τῆς ἱριδος· πολλὰς γὰρ ἔχει καὶ τοῦτο τὸ ἄνθος ἐν αὐτῷ ποικιλίας παρὰ τὰς τῆς πέψεως διαφορὰς, ὥσπερ καὶ τῶν βοτρυῶν, ὅταν ἥδη πεπαινώμενοι τυγχάνωσιν. διὸ καὶ πάντων μάλιστα συμβαίνει πέττεσθαι τῶν ἀνθῶν τὰ ἄκρα, τὰ δὲ πρὸς ταῖς ἀρχαῖς ἀχρούστερα γίνεται πολλῶ. σχεδὸν γὰρ ἐνίων ὥσπερ ἐκκάζεται τὸ ὑγρὸν πρότερον ἢ λαβεῖν τὴν οἰκείαν πέψιν. διὸ καὶ τὰ μὲν ἄνθη τῷ χρώματι διαμένει, οἱ δὲ καρποὶ πεττόμενοι μεταβάλλουσιν· τὰ μὲν γὰρ διὰ [797a] μικρότητα τῆς τροφῆς ταχέως ἐκπέττεται, οἱ δὲ καρποὶ διὰ τὸ πλῆθος τῆς ὑγρασίας εἰς πάσας ἅμα τῇ πέψει τὰς κατὰ φύσιν χροᾶς μεταβάλλουσιν. φανερόν δὲ τοῦτο ἐστὶ, καθάπερ εἴρηται πρότερον, καὶ ἐπὶ τῶν βαπτομένων ἀνθῶν. τὰ μὲν γὰρ ἐξ ἀρχῆς, ὅταν βάπτοντες τὴν πορφύραν καθιῶσι τὰς αἱματίδας, ὄρφνιαι γίνονται καὶ μέλαιναι καὶ ἀεροειδεῖς· τοῦ δ' ἄνθους συνεψηθέντος ἱκανῶς ἀλουργές γίνεται εὐανθές καὶ λαμπρόν. ὥστ' ἀνάγκη καὶ τῶν ἀνθῶν ὁμοίως πολλὰ τοῖς χρώμασι τῶν καρπῶν διαλλάττειν, καὶ τὰ μὲν ὑπερβαίνειν τὰ δὲ ἀπολείπειν τῶν κατὰ φύσιν χρωμάτων, διὰ τὸ τῶν μὲν ἀτελῆ τῶν δὲ τελείαν γίνεσθαι τὴν πέψιν. τὰ μὲν οὖν ἄνθη καὶ τοὺς καρποὺς διὰ ταύτας τὰς αἰτίας

συμβαίνει τοῖς χρώμασιν ἀλλήλων διαφέρειν· τὰ δὲ φύλλα τῶν πλείστων δένδρων τὸ τελευταῖον γίνεται ξανθὰ διὰ τὸ τῆς τροφῆς ὑπολειπούσης φθάνειν αὐτὰ καταξηραίνόμενα πρότερον ἢ μεταβάλλειν εἰς τὸ κατὰ φύσιν χρῶμα, ἐπεὶ καὶ τῶν ἀπορρεόντων καρπῶν ἔνιοι γίνονται τῷ χρώματι ξανθοὶ διὰ τὸ καὶ τούτων τῆς πέψεως πρότερον τὴν τροφήν ὑπολείπειν. ἔτι δὲ ὅ τε σῖτος καὶ τὰ φυόμενα πάντα· καὶ γὰρ ταῦτα τὸ τελευταῖον γίνεται ξανθὰ. τὸ γὰρ ὑγρὸν ἐν αὐτοῖς οὐκέτι μελαινόμενον διὰ τὸ καταξηραίνεσθαι ταχέως ποιεῖ τὴν τοῦ χρώματος μεταβολήν. μελαινόμενον γὰρ καὶ τῷ χλωρῷ κεραννύμενον γίνεται, καθάπερ εἴρηται, ποῶδες· ἀσθενεστέρου δὲ τοῦ μέλανος ἀεὶ γινομένου, πάλιν κατὰ μικρὸν εἰς τὸ χλωρὸν μεταβάλλει χρῶμα, καὶ τὸ τελευταῖον γίνεται ξανθόν, ἐπεὶ τὰ γε τῆς ἀπίου φύλλα καὶ τῆς ἀνδράχνης καὶ τινων ἄλλων πεττόμενα γίνεται φοινικιά. πλὴν ὅσα καὶ τούτων καταξηραίνεται ταχέως, ταῦτα γίνεται ξανθὰ διὰ τὸ τούτων πρὸ τῆς πέψεως τὴν τροφήν ὑπολείπειν. τὰς μὲν οὖν τῶν φυτῶν διαφορὰς μάλιστα εὐλογον συμβαίνειν διὰ τὰς εἰρημένους αἰτίας. Γίνεται δὲ καὶ τὰ τριχώματα καὶ τὰ πτερώματα καὶ τὰ δέρματα καὶ ἵππων καὶ βοῶν καὶ προβάτων καὶ ἀνθρώπων καὶ τῶν ἄλλων ζώων ἀπάντων καὶ λευκὰ καὶ [797b] φαιὰ καὶ πυρρὰ καὶ μέλανα διὰ τὴν αὐτὴν αἰτίαν, λευκὰ μὲν ὅταν ἔτι ὑπὸ τῆς πέψεως τὸ ὑγρὸν τὸ οἰκεῖον ἔχον χρῶμα καταξηρανθῇ, μέλανα δὲ τοῦναντίον ὅταν αὐτῶν ἐν τῇ γενέσει τὸ περὶ τὸν χρῶτα ὑγρὸν, καθάπερ ἐν τοῖς ἄλλοις ἅπασι, παλαιούμενον καὶ χρονιζόμενον διὰ τὸ πλῆθος μελανθῇ· πάντων γὰρ τῶν τοιούτων ὅ τε χρῶς καὶ τὰ δέρματα γίνεται μέλανα. φαιὰ δὲ καὶ πυρρὰ καὶ ξανθὰ καὶ τὰς ἄλλας ἔχοντα χροάς, ὅσα φθάνει καταξηραίνόμενα πρότερον ἢ τελέως ἐν αὐτοῖς μεταβάλλειν εἰς τὸ μέλαν χρῶμα τὸ ὑγρὸν. οἷς δ' ἂν ἀνωμάλως τοῦτο συμβῇ, καὶ τὰ χρώματα τοιαῦτα γίνεται ποικίλα. διὸ καὶ πάντα τοῖς δέρμασι καὶ τῷ χρώματι συνακολουθεῖ, ἐπεὶ καὶ τῶν ἀνθρώπων τῶν ἐμπύρρων καὶ τὰ τριχώματα γίνεται λευκόπυρρα, τῶν δὲ μελάνων μέλανα· καὶ κατὰ μέρος τι τοῦ σώματος ἐξανθήσῃ λεύκη, καὶ τὰς τρίχας ἴσχουσιν ἅπαντες λευκάς κατὰ τὸν τόπον τοῦτον, καθάπερ καὶ τὰ ποικίλα τῶν ζώων. οὕτως ἅπαντα τὰ τριχώματα καὶ τὰ πτερώματα τοῖς δέρμασι συνακολουθεῖ, καὶ τὰ κατὰ μέρος καὶ τὰ κατὰ σῶμα ὅλον. ὁμοίως δὲ τούτοις ὀπλαὶ καὶ χηλαὶ καὶ ῥύγχη καὶ κέρατα· καὶ γὰρ ταῦτα τῶν μὲν μελάνων γίνεται μέλανα, τῶν δὲ λευκῶν λευκά, διὰ τὸ καὶ τούτοις ἅπασι διὰ τοῦ δέρματος τὴν τροφήν εἰς τὴν ἐκτὸς περιοχὴν διηθεῖσθαι. ὅτι δὲ τοῦτό ἐστιν αἴτιον, οὐ χαλεπὸν ἐκ πολλῶν συνιδεῖν. τῶν τε γὰρ παιδίων ἀπάντων αἱ κεφαλαὶ κατ' ἀρχὰς μὲν γίνονται πυρραὶ διὰ τὴν ὀλιγότητα τῆς τροφῆς. φανερόν δὲ τοῦτό ἐστιν· καὶ γὰρ ἀσθενεῖς αἱ τρίχες καὶ ἄραιαὶ καὶ βραχεῖαι τὸ πρῶτον ἅπασιν ἐπιγίνονται τοῖς παιδίοις. προϊούσης δὲ τῆς ἡλικίας μελαίνονται πάλιν χρωζομένοις αὐτοῖς διὰ τὸ πλῆθος τῆς ἐπιρρεούσης τροφῆς. ὁμοίως δὲ καὶ περὶ τὴν ἥβην καὶ τὸ



γένειον, ὅταν ἄρχωνται τὸ πρῶτον ἡβᾶν καὶ γενειᾶν, καὶ αὕται γίνονται κατ' ἄρχας μὲν πυρραὶ ταχέως διὰ τὴν ὀλιγότητα τῆς ὑγρασίας ἐν αὐταῖς καταξηραιομένης, τῆς τροφῆς δὲ πλεον ἐπὶ τὸν τόπον ἐπιφερομένης μελαίνονται πάλιν. αἱ δὲ ἐπὶ τοῦ σώματος πλεῖστον χρόνον πυρραὶ διαμένουσι διὰ τὴν ἔνδειαν τῆς τροφῆς, [798a] ἐπεὶ καθ' ὃν ἂν χρόνον αὐξηθῶσι, καὶ ταύτας ὁμοίως συμβαίνει μελαίνεσθαι καθάπερ καὶ τὰς ἐπὶ τῆς ἥβης καὶ τῆς κεφαλῆς. φανερόν δ' ἐστίν· καὶ γὰρ ὅσα μῆκος ἔχει τῶν τριχωμάτων, ὡς τὸ πολὺ ἐστὶ τὰ μὲν πρὸς τῷ σώματι μελάντερα, τὰ δὲ πρὸς τοῖς ἄκροις ξανθότερα. καὶ αἱ μὲν τῶν προβάτων καὶ ἵππων καὶ ἀνθρώπων, διὰ τὸ τὴν τροφήν ἐλαχίστην αὐτοῖς ἐπὶ τούτους φέρεσθαι τοὺς τόπους, καὶ καταξηραίνεσθαι ταχέως. γίνονται δὲ καὶ τὰ πτερώματα τῶν μελάνων ὀρνίθων τὰ μὲν πρὸς τῷ σώματι μελάντερα πάντων, τὰ δὲ πρὸς τοῖς ἄκροις ξανθότερα. τὸν αὐτὸν δὲ τρόπον τοῦτον καὶ τὰ περὶ τὸν τράχηλον, καὶ ὅλως ὅσα βραχεῖαν τὴν τροφήν λαμβάνει. δῆλον δέ· καὶ γὰρ πρὸ τῆς πολιώσεως ἅπαντα τὰ τριχώματα μεταβάλλει καὶ γίνεται πυρρὰ διὰ τὸ πάλιν τὴν τροφήν ὑπολείπουσαν καταξηραίνεσθαι ταχέως. τὸ δὲ τελευταῖον λευκά, πρότερον ἢ μελανθῆναι τὸ ὑγρόν, τῆς τροφῆς ἐν αὐτοῖς ἐκπεττομένης. μάλιστα δὲ τοῦτο ἐπὶ τῶν ὑποζυγίων φανερόν ἐστίν· πάντων γὰρ τὰ τριχώματα γίνεται λευκά. τῶν γὰρ τόπων οὐ δυναμένων ὁμοίως ἐπισπᾶσθαι τὴν τροφήν διὰ τὴν ἀσθένειαν τὴν τοῦ θερμοῦ, ταχέως καταξηραινόμενον τὸ ὑγρὸν γίνεται λευκόν. καὶ τὰ περὶ τοὺς κροτάφους μάλιστα πάντων πολιοῦνται, καὶ ὅλως περὶ τοὺς ἀσθενεῖς καὶ πεπονηκότας τῶν τόπων. παρὸ καὶ παρὰ πάντα μάλιστα εἰς τοῦτο τὸ χρῶμα μεταβάλλει, ὅταν τὴν φύσιν παραλλάξῃ τὴν οἰκείαν. καὶ γὰρ λαγῶς ἤδη γέγονε λευκός, καὶ μέλας δὲ ποτε πέφηνε καὶ ἔλαφος καὶ ἄρκτος, ὁμοίως δὲ τούτοις καὶ ὄρτυξ καὶ πέρδιξ καὶ χελιδών. ὅταν γὰρ ἀσθενήσωσι τῇ γενέσει, πάντα τὰ τοιαῦτα διὰ τὴν ὀλιγότητα τῆς τροφῆς πρὸ ὥρας ἐκπεττόμενα γίνεται λευκά. οὕτως καὶ τὰ τῶν παίδων εὐθὺς καὶ τὰς κεφαλὰς ἴσχει λευκὰς καὶ τὰ βλέφαρα καὶ τὰς ὀφρῦς, ὥσπερ καὶ τῶν ἄλλων ἐκάστω πρὸς τὸ γῆρας φανερώς ἅπασι δι' ἀσθένειαν καὶ ὀλιγότητα [τῆς τροφῆς] συμβαίνει τὸ πάθος. διὸ [798b] καὶ τὰ πλεῖστα τῶν ζώων ἀσθενέστερα γίνεται τὰ λευκὰ τῶν μελάνων· πρότερον γὰρ ἢ τὴν αὕξισιν αὐτῶν τελειωθῆναι διὰ τὴν ὀλιγότητα τῆς τροφῆς ἐκπεττόμενα γίνεται λευκά, καθάπερ καὶ τῶν καρπῶν ὅσοι νεοοσηκότες τυγχάνουσιν· καὶ γὰρ οὗτοι πολὺ μᾶλλον δι' ἀσθένειαν ἐκπέττονται. ὅσα δὲ γίνεται λευκά, πολὺ διαφέροντα ἐκ τῶν ἄλλων, οἷον ἵπποι καὶ κύνες. τὰ δὲ τοιαῦτα μεταβάλλει πάντα ἐκ εἰρημένας αἰτίας.



## Εκ του περι Ακουστων (800a) On Things Heard



[800a] Τὰς δὲ φωνὰς ἀπάσας συμβαίνει γίνεσθαι καὶ τοὺς ψόφους ἢ τῶν σωμάτων ἢ τοῦ ἀέρος πρὸς τὰ σώματα προσπίπτοντος, οὐ τῷ τὸν ἀέρα σχηματίζεσθαι, καθάπερ οἴονταί τινες, ἀλλὰ τῷ κινεῖσθαι παραπλησίως αὐτὸν συστελλόμενον καὶ ἐκτεινόμενον καὶ καταλαμβανόμενον, ἔτι δὲ συγκρούοντα διὰ τὰς τοῦ πνεύματος καὶ τῶν χορδῶν γιγνομένης πληγᾶς. ὅταν γὰρ τὸν ἐφεξῆς ἀέρα πλήξῃ τὸ πνεῦμα τὸ ἐμπύπτον αὐτῷ, ὁ ἄηρ ἤδη φέρεται βία, τὸν ἐχόμενον αὐτοῦ προωθῶν ὁμοίως, ὥστε πάντῃ τὴν φωνὴν διατείνειν τὴν αὐτήν, ἐφ' ὅσον συμβαίνει γίνεσθαι καὶ τοῦ ἀέρος τὴν κίνησιν. διαχεῖται γὰρ ἐπὶ πλεονα ἢ βία τῆς κινήσεως αὐτοῦ γιγνομένης, ὥσπερ καὶ τὰ πνεύματα τὰ ἀπὸ τῶν ποταμῶν καὶ ἀπὸ τῆς χώρας ἀποπνέοντα. τῶν δὲ φωνῶν τυφλαὶ μὲν εἰσι καὶ νεφώδεις ὅσαι τυγχάνουσιν αὐτοῦ καταπεπνιγμέναι· λαμπραὶ δὲ οὗσαι πόρρω διατείνουσι, καὶ πάντα πληροῦσι τὸν συνεχῆ τόπον. ἀναπνέομεν δὲ τὸν μὲν ἀέρα πάντες τὸν αὐτόν, τὸ δὲ πνεῦμα καὶ τὰς φωνὰς ἐκπέμπομεν ἄλλοίαις διὰ τὰς τῶν ὑποκειμένων ἀγγείων διαφοράς, δι' ὧν ἐκάστου τὸ πνεῦμα περαιοῦται [τὰ] πρὸς τὸν ἔξω τόπον. ταῦτα δὲ ἐστὶν ἢ τε ἀρτηρία καὶ ὁ πνεύμων καὶ τὸ στόμα. πλείστην μὲν οὖν διαφορὰν ἀπεργάζονται τῆς φωνῆς αἱ τε τοῦ ἀέρος πληγαὶ καὶ οἱ τοῦ στόματος σχηματισμοί. φανερόν δ' ἐστίν· καὶ γὰρ τῶν φθόγγων αἱ διαφοραὶ πᾶσαι γίνονται διὰ ταύτην τὴν αἰτίαν, καὶ τοὺς αὐτοὺς ὁρῶμεν μιμουμένους καὶ ἵππων φωνὰς καὶ βατράχων καὶ ἀηδόνων καὶ γεράνων καὶ τῶν ἄλλων ζώων σχεδὸν ἀπάντων, τῷ αὐτῷ χρωμένους πνεύματι καὶ ἀρτηρίᾳ, παρὰ τὸ τὸν ἀέρα διαφόρως ἐκπέμπειν αὐτοὺς ἐκ τοῦ στόματος. πολλὰ δὲ καὶ τῶν ὀρνέων, ὅταν ἀκούσωσι, μιμοῦνται τὰς τῶν ἄλλων φωνὰς διὰ τὴν εἰρημένην αἰτίαν. ὁ δὲ πνεύμων ὅταν ᾖ μικρὸς καὶ πυκνὸς καὶ σκληρὸς, οὔτε δέχεσθαι τὸν ἀέρα δύναται πολὺν εἰς αὐτὸν οὔτε ἐκπέμπειν πάλιν ἔξω, οὐδὲ τὴν πληγὴν ἰσχυρὰν οὐδὲ εὖρωστον ποιεῖσθαι τὴν τοῦ πνεύματος. διὰ γὰρ τὸ εἶναι σκληρὸς καὶ πυκνὸς καὶ συνδεδεμένος οὐ δύναται λαμβάνειν τὴν διαστολὴν ἐπὶ πολὺν τόπον, οὐδὲ πάλιν ἐκ πολλοῦ διαστήματος συνάγων [800b] ἑαυτὸν ἐκθλίβειν βία τὸ πνεῦμα, καθάπερ οὐδ' ἡμεῖς ταῖς φύσαις, ὅταν ὥσι σκληραὶ καὶ μήτε διαστέλλεσθαι μήτε πιέζεσθαι δύνωνται ῥαδίως. τοῦτο γάρ ἐστὶ τὸ ποιοῦν τὴν τοῦ πνεύματος πληγὴν εὖρωστον, ὅταν ὁ πνεύμων ἐκ πολλοῦ διαστήματος συνάγων αὐτὸν ἐκθλίβῃ τὸν ἀέρα βιαίως. δῆλον δὲ τοῦτ' ἐστίν· οὐδὲ γὰρ τῶν ἄλλων μορίων οὐθὲν ἐκ μικρᾶς ἀποστάσεως δύναται ποιεῖσθαι τὴν

πληγὴν ἰσχυράν. οὔτε γὰρ τῷ σκέλει δυνατόν ἐστιν οὔτε τῇ χειρὶ πατάξαι σφοδρῶς οὐδὲ ἀπορρίψαι πόρρω τὸ πληγέν, ἐὰν μὴ τις αὐτῶν ἐκατέρω ἐκ πολλοῦ λάβῃ τῆς πληγῆς τὴν ἀπόστασιν. εἰ δὲ μή, σκληρὰ μὲν ἢ πληγὴ γίγνεται διὰ τὴν συντονίαν, ἐκβιάζεσθαι δὲ οὐ δύναται πόρρω τὸ πληγέν, ἐπεὶ οὔθ' οἱ καταπέλται μακρὰν δύνανται βάλλειν οὔθ' ἡ σφενδόνη οὔτε τόξον, ἂν ἢ σκληρὸν καὶ μὴ δύνηται κάμπτεσθαι, μηδὲ τὴν ἀναγωγὴν ἢ νευρὰ λαμβάνειν ἐπὶ πολὺν τόπον. ἐὰν δὲ μέγας ὁ πνεύμων ἢ καὶ μαλακὸς καὶ εὐτόνος, πολὺν τὸν ἀέρα δύναται δέχεσθαι, καὶ τοῦτον ἐκπέμπειν πάλιν, ταμιευόμενος ὥς ἂν βούληται διὰ τὴν μαλακότητα καὶ διὰ τὸ ῥαδίως αὐτὸν συστέλλειν. ἢ δὲ ἀρτηρία μακρὰ μὲν ὅταν ἢ καὶ στενὴ, χαλεπῶς ἐκπέμπουσιν ἔξω τὴν φωνὴν καὶ μετὰ βίας πολλῆς διὰ τὸ μῆκος τῆς τοῦ πνεύματος φορᾶς. φανερόν δ' ἐστίν· πάντα γὰρ τὰ τοὺς τραχήλους ἔχοντα μακροὺς φθέγγονται βιαίως, οἷον οἱ χῆνες καὶ γέρανοι καὶ ἀλεκτρυόνες. μᾶλλον δὲ τοῦτο καταφανές ἐστιν ἐπὶ τῶν αὐτῶν· πάντες γὰρ χαλεπῶς πληροῦσι τοὺς βόμβυκας καὶ μετὰ συντονίας πολλῆς διὰ τὸ μῆκος τῆς ἀποστάσεως. ἔτι δὲ τὸ πνεῦμα διὰ τὴν στενοχωρίαν ὅταν ἐντὸς θλιβόμενον εἰς τὸν ἔξω τόπον ἐκπέσῃ, παραχρῆμα διαχεῖται καὶ σκεδάννυται, καθάπερ καὶ τὰ ῥεύματα φερόμενα διὰ τῶν εὐρίπων, ὥστε μὴ δύνασθαι τὴν φωνὴν συμμένειν μηδὲ διατείνειν ἐπὶ πολὺν τόπον. ἅμα δὲ καὶ δυσταμίευτον ἀνάγκη πάντων τῶν τοιούτων εἶναι τὸ πνεῦμα καὶ μὴ ῥαδίως ὑπηρετεῖν. ὅσων δὲ ἐστὶ μέγα τὸ διάστημα τῆς ἀρτηρίας, τῶν δὲ τοιούτων ἔξω μὲν περαιοῦσθαι συμβαίνει τὸ πνεῦμα ῥαδίως, ἐντὸς δὲ φερόμενον διαχεῖσθαι διὰ τὴν εὐρυχωρίαν, καὶ τὴν φωνὴν γίνεσθαι κενὴν καὶ μὴ συνεστῶσαν, ἔτι δὲ [801a] μὴ δύνασθαι διαιρεῖσθαι τῷ πνεύματι τοὺς τοιούτους διὰ τὸ μὴ συνερίδεσθαι τὴν ἀρτηρίαν αὐτῶν. ὅσων δ' ἐστὶν ἀνωμάλως καὶ μὴ πάντοθεν ἔχει τὴν διάστασιν ὁμοίαν, τούτους ἀναγκαῖον ἀπασῶν μετέχειν τῶν δυσχερειῶν. καὶ γὰρ ἀνωμάλως αὐτοῖς ἀνάγκη τὸ πνεῦμα ὑπηρετεῖν καὶ θλίβεσθαι καὶ καθ' ἕτερον τόπον διαχεῖσθαι πάλιν. βραχείας δὲ τῆς ἀρτηρίας οὔσης ταχὺ μὲν ἀνάγκη τὸ πνεῦμα ἐκπέμπειν καὶ τὴν πληγὴν ἰσχυροτέραν γίνεσθαι τὴν τοῦ ἀέρος, πάντας δὲ τοὺς τοιούτους ὀξύτερον φωνεῖν διὰ τὸ τάχος τῆς τοῦ πνεύματος φορᾶς. οὐ μόνον δὲ συμβαίνει τὰς τῶν ἀγγείων διαφοράς, ἀλλὰ καὶ τὰ πάθη πάντα τὰς φωνὰς ἀλλοιοῦν. ὅταν μὲν γὰρ ὥσιν ὑγρασίας πλήρη πολλῆς ὅ τε πνεύμων καὶ ἡ ἀρτηρία, διασπᾶται τὸ πνεῦμα καὶ οὐ δύναται περαιοῦσθαι εἰς τὸν ἔξω τόπον συνεχῶς διὰ τὸ προσκόπτειν καὶ γίνεσθαι παχὺν καὶ ὑγρὸν καὶ δυσκίνητον, καθάπερ καὶ περὶ τοὺς κατάρρους καὶ τὰς μέθας. ἐὰν δὲ ξηρὸν ἢ τὸ πνεῦμα παντελῶς, σκληροτέρα ἢ φωνὴ γίγνεται καὶ διεσπασμένη· συνέχει γὰρ ἡ νοτίς, ὅταν ἢ λεπτή, τὸν ἀέρα, καὶ ποιεῖ τινὰ τῆς φωνῆς ἀπλότητα. τῶν μὲν οὖν ἀγγείων αἱ διαφοραὶ καὶ τῶν παθῶν τῶν περὶ αὐτὰ γιγνομένων τοιαύτας ἕκασται τὰς φωνὰς ἀποτελοῦσιν. αἱ δὲ φωναὶ δοκοῦσι μὲν εἶναι

καθ' οὓς ἂν ἕκασται γίνωνται τόπους, ἀκούομεν δὲ πασῶν αὐτῶν, ὅταν ἡμῖν προσπέσωσι πρὸς τὴν ἀκοήν. ὁ γὰρ ὥσθεις ὑπὸ τῆς πληγῆς ἀὴρ μέχρι μέν τινος φέρεται συνεχῆς, ἔπειτα κατὰ μικρὸν αἰεὶ διακινεῖται μᾶλλον, καὶ τοῦτω γινώσκομεν πάντας τοὺς ψόφους καὶ τοὺς πόρρω γιγνομένους καὶ τοὺς ἐγγύς. δῆλον δ' ἐστίν· ὅταν γάρ τις λαβὼν κέραμον ἢ αὐλὸν ἢ σάλπιγγα, προσθεῖς τε ἐτέρῳ πρὸς τὴν ἀκοήν, διὰ τούτων λαλῇ, πᾶσαι δοκοῦσιν αἱ φωναὶ παντελῶς εἶναι πλησίον τῆς ἀκοῆς διὰ τὸ μὴ σκεδάννυσθαι τὸν ἀέρα φερόμενον, ἀλλὰ διατηρεῖσθαι τὴν φωνὴν ὁμοίαν ὑπὸ τοῦ περιέχοντος ὀργάνου. καθάπερ οὖν καὶ ἐπὶ τῆς γραφῆς, ὅταν τις τοῖς χρώμασι τὸ μὲν ὅμοιον ποιήσῃ τῷ πόρρω τὸ δὲ τῷ πλησίον, τὸ μὲν ἡμῖν ἀνακεχωρηκέναι δοκεῖ τῆς γραφῆς τὸ δὲ προέχειν, ἀμφοτέρων αὐτῶν ὄντων ἐπὶ τῆς αὐτῆς ἐπιφανείας. οὕτω καὶ ἐπὶ τῶν ψόφων καὶ τῆς φωνῆς, ὅταν ἡ μὲν ἤδη διαλελυμένη προσπίπτῃ πρὸς τὴν ἀκοήν ἡ δὲ τις συνεχῆς, ἀμφοτέρων αὐτῶν ἀφικνουμένων πρὸς τὸν αὐτὸν τόπον, ἡ μὲν ἀφεστηκέναι πόρρω δοκεῖ τῆς ἀκοῆς ἡ δ' εἶναι σύνεγγυς, διὰ τὸ τὴν μέντοι πόρρωθεν [801b] ὁμοίαν εἶναι, τὴν δὲ πλησίον. σαφεῖς δὲ μάλιστα αἱ φωναὶ γίνονται παρὰ τὴν ἀκρίβειαν τῇ τῶν φθόγγων. ἀδύνατον γὰρ μὴ τελέως τούτων διηρθρωμένων τὰς φωνὰς εἶναι σαφεῖς, καθάπερ καὶ τὰς τῶν δακτυλίων σφραγιῖδας, ὅταν μὴ διατυπωθῶσιν ἀκριβῶς. διόπερ οὔτε τὰ παιδία δύνανται διαλέγεσθαι σαφῶς, οὔτε οἱ μεθύοντες, οὔτε οἱ γέροντες, οὔθ' ὅσοι φύσει τραυλοὶ τυγχάνουσιν ὄντες, οὔθ' ὅλως ὅσων εἰσὶν αἱ γλῶτται καὶ τὰ στόματα δυσκίνητα. ὥσπερ γὰρ καὶ τὰ χαλκεῖα καὶ τὰ κέρατα συνηχοῦντα ποιεῖ τοὺς ἀπὸ τῶν ὀργάνων φθόγγους σαφεστέρους, οὕτως καὶ ἐπὶ τῆς διαλέκτου πολλὴν ἀσάφειαν ἀπεργάζεται τὰ ἐκπίπτοντα τῶν πνευμάτων ἐκ τοῦ στόματος, ὅταν μὴ διατυπωθῶσιν ὁμοίως. οὐ μόνον δὲ ἑαυτῶν τινὰ παρεμφαίνουσιν ἀσάφειαν, ἀλλὰ καὶ τοὺς διηρθρωμένους τῶν φθόγγων ἐμποδίζουσιν, ἀνομοίας αὐτῶν γιγνομένης τῆς περὶ τὴν ἀκοήν κινήσεως. διὸ καὶ μᾶλλον ἐνὸς ἀκούοντες συνέμεν ἢ πολλῶν ἅμα ταῦτ' ἀ λεγόντων, καθάπερ καὶ ἐπὶ τῶν χορδῶν· καὶ πολὺ ἥττον, ὅταν προσαυλῇ τις ἅμα καὶ κιθαρίζῃ, διὰ τὸ συγχεῖσθαι τὰς φωνὰς ὑπὸ τῶν ἐτέρων. οὐχ ἥκιστα δὲ τοῦτο ἐπὶ τῶν συμφωνιῶν φανερόν ἐστιν· ἀμφοτέρους γὰρ ἀποκρύπτεσθαι τοὺς ἤχους συμβαίνει ὑπ' ἀλλήλων. ἀσαφεῖς μὲν οὖν φωναὶ γίνονται διὰ τὰς εἰρημένους αἰτίας, λαμπραὶ δὲ γίνονται καθάπερ ἐπὶ τῶν χρωμάτων· καὶ γὰρ ἐκεῖ τὰ μάλιστα δυνάμενα τὰς ὀψεις κινεῖν, ταῦτα εἶναι συμβαίνει τῶν χρωμάτων λαμπρότατα. τὸν αὐτὸν τρόπον τῶν φωνῶν ταύτας ὑποληπτέον εἶναι λαμπροτάτας, ὅσαι μάλιστα δύνανται προσπίπτουσαι κινεῖν τὴν ἀκοήν. τοιαῦται δὲ εἰσιν αἱ σαφεῖς καὶ πυκναὶ καὶ καθαραὶ καὶ πόρρω δυνάμεναι διατείνειν· καὶ γὰρ ἐν τοῖς ἄλλοις αἰσθητοῖς ἅπασιν τὰ ἰσχυρότερα καὶ πυκνότερα καὶ καθαρώτερα σαφεστέρας ποιεῖ τὰς αἰσθήσεις. δῆλον δέ· τὸ γὰρ τελευταῖον αἱ φωναὶ πᾶσαι γίνονται κωφαί, τοῦ ἀέρος ἤδη διαχεομένου.

δῆλον δ' ἐστὶ καὶ τῶν αὐλῶν. τὰ γὰρ ἔχοντα τῶν δευτέρων τὰς γλώττας πλαγίας μαλακωτέραν μὲν ἀποδίδωσι τὴν φωνήν, οὐχ ὁμοίως δὲ λαμπράν· τὸ γὰρ πνεῦμα φερόμενον εὐθέως εἰς εὐρυχωρίαν ἐμπίπτει, καὶ οὐκέτι φέρεται σύντονον οὐδὲ συνεστηκός, ἀλλὰ διεσκεδασμένον. ἐν δὲ ταῖς σκληροτέραις γλώτταις ἡ φωνὴ γίνεται σκληροτέρα καὶ λαμπροτέρα, ἂν πῆσῃ τις αὐτὰς μᾶλλον τοῖς χεῖλεσι, διὰ τὸ φέρεσθαι τὸ πνεῦμα βιαίότερον. αἱ μὲν οὖν λαμπραὶ τῶν φωνῶν γίνονται διὰ τὰς εἰρημένας αἰτίας· [802a] παρὸ καὶ δοκοῦσιν οὐ χεῖρους εἶναι τῶν λευκῶν αἱ καλούμεναι φαῖναι· πρὸς γὰρ τὰ πάθη καὶ τὰς πρεσβυτέρας ἡλικίας μᾶλλον ἀρμόττουσιν αἱ τραχύτεραι καὶ μικρὸν ὑποσυγκεχυμένα καὶ μὴ λίαν ἔχουσαι τὸ λαμπρὸν ἐκφανές. ἅμα δὲ καὶ διὰ τὴν συντονίαν οὐχ ὁμοίως εἰσὶν εὐπειθεῖς. τὸ γὰρ βίᾳ φερόμενον δυσταμίευτον. οὔτε γὰρ ἐπιτεῖναι ῥάδιον, ὥς βούλεται τις, οὔτε ἀνιέναι. ἐπὶ δὲ τῶν αὐλῶν γίνονται αἱ φωναὶ λαμπραί, καὶ τῶν ἄλλων ὀργάνων, ὅταν τὸ ἐκπίπτον πνεῦμα πυκνὸν ᾗ καὶ σύντονον. ἀνάγκη γὰρ καὶ τοῦ ἔξωθεν ἀέρος τοιαύτας γίνεσθαι τὰς πληγὰς, καὶ μάλιστα τὰς φωνὰς οὕτω διαπέμπεσθαι συνεστώσας πρὸς τὴν ἀκοήν, ὥσπερ καὶ τὰς ὁσμάς καὶ τὸ φῶς καὶ τὰς θερμότητας. καὶ γὰρ πάντα ταῦτα ἀραιότερα φαινόμενα πρὸς τὴν αἴσθησιν ἀσημότερα γίνονται, καθάπερ καὶ οἱ χυλοὶ κραθέντες τῷ ὕδατι καὶ ἑτέροις χυλοῖς. τὸ γὰρ ἑαυτοῦ παρέχον αἴσθησιν ἀσαφεῖς ἐκάστω ποιεῖ τὰς δυνάμεις. ἀπὸ δὲ τῶν ἄλλων ὀργάνων οἱ τῶν κεράτων ἦχοι πυκνοὶ καὶ συνεχεῖς πρὸς τὸν ἀέρα προσπίπτοντες ποιοῦσι τὰς φωνὰς ἀμαυράς· διὸ δεῖ τὸ κέρας τὴν φύσιν ἔχειν τῆς αὐξήσεως ὁμαλὴν καὶ λείαν καὶ μὴ ταχέως ἐκδεδραμηκυῖαν. ἀνάγκη γὰρ μαλακώτερα καὶ χαυνότερα γίνεσθαι τὰ τοιαῦτα τῶν κεράτων, ὥστε τοὺς ἦχους διασπᾶσθαι καὶ μὴ συνεχεῖς ἐκπίπτειν δι' αὐτῶν μηδὲ γεγωνεῖν ὁμοίως διὰ τὴν μαλακότητα καὶ τὴν ἀραιότητα τῶν πόρων. μηδὲ πάλιν εἶναι δυσσαυξῆ τὴν φύσιν, μηδὲ τὴν σύμφυσιν ἔχειν πυκνὴν καὶ σκληρὰν καὶ δύσφορον· καθ' ὃ τι γὰρ ἂν προσκόψῃ φερόμενος ὁ ἦχος, αὐτοῦ λαμβάνει τὴν κατάπαυσιν καὶ οὐκέτι περαιοῦται πρὸς τὸν ἔξω τόπον, ὥστε κωφοὺς καὶ ἄνωμάλους ἐκπίπτειν τοὺς ἦχους ἐκ τῶν τοιούτων κεράτων. ὅτι δὲ ἡ φορὰ γίνονται κατὰ τὴν εὐθυπορίαν, φανερόν ἐστιν ἐπὶ τῶν ἰστῶν καὶ ὅλως ἐπὶ τῶν ξύλων τῶν μεγάλων, ὅταν αὐτὰ βασανίζωσιν. ὅταν γὰρ κρούσωσιν ἐκ τοῦ ἑτέρου ἄκρου, κατὰ τὸ ἕτερον ὁ ἦχος φέρεται συνεχής, ἔαν μὴ τι ἔχη σύντριμμα τὸ ξύλον· εἰ δὲ μή, μέχρι τούτου προελθὼν αὐτοῦ καταπαύεται διασπασθεῖς. περικάμπει δὲ καὶ τοὺς ὄζους, καὶ οὐ δυνατὸς δι' αὐτῶν εὐθυπορεῖν. κατάδηλον δὲ τοῦτό ἐστι καὶ ἐπὶ τῶν χαλκείων, ὅταν ῥινῶσι τὰς ἀπηρτημένας στολίδας τῶν ἀνδριάντων ἢ τὰ πτερύγια, τῷ συμμύειν· διὸ ῥοῖζον καὶ πολὺν ἦχον ἀφιάσι καὶ ψόφον. ἂν δέ τις αὐτὰ ταινίᾳ διαδήσῃ, παύεσθαι συμβαίνει τὸν ἦχον· ἕως γὰρ τούτου προελθὼν ὁ τρόμος, ὅταν προσκόψῃ πρὸς τὸ μαλακόν, αὐτοῦ ποιεῖται [802b] τὴν κατάπαυσιν. πολὺ δὲ

καὶ ἡ ὀπτησις ἡ τῶν κεράτων συμβάλλεται καὶ πρὸς εὐφωνίαν. μᾶλλον μὲν γὰρ κατοπτηθέντα παραπλήσιον τὸν ἦχον ἔχουσι τῷ κεράμῳ διὰ τὴν σκληρότητα καὶ τὴν σύγκαυσιν· ἐὰν δέ τις αὐτὰ καταδεέστερον ὀπτήσῃ, ἀπαλώτερον μὲν ἀφήσῃ διὰ τὴν μαλακότητα τὸν ἦχον, οὐ δύναται δὲ γεγωνεῖν ὁμοίως. διὸ καὶ τὰς ἡλικίας ἐκλέγονται· τὰ μὲν γὰρ τῶν γερόντων ἐστὶ ξηρὰ καὶ πεπωρωμένα καὶ χαῦνα, τὰ δὲ τῶν νέων ἀπαλὰ παντελῶς καὶ πολλὴν ἔχοντα ἐν αὐτοῖς ὑγρασίαν. δεῖ δὲ εἶναι, καθάπερ εἴρηται, τὸ κέρας ξηρὸν καὶ πυκνὸν ὁμαλῶς καὶ εὐθύπορον καὶ λεῖον. οὕτω γὰρ ἂν μάλιστα συμβαίνοι καὶ τοὺς ἦχους πυκνοὺς καὶ λεῖους καὶ ὁμαλοὺς φέρεσθαι δι' αὐτῶν, καὶ τοῦ ἔξωθεν ἀέρος τὰς πληγὰς γίνεσθαι τοιαύτας, ἐπεὶ καὶ τῶν χορδῶν εἰσὶν αἱ λειόταται βέλτισται καὶ τοῖς πᾶσιν ὁμαλώταται, καὶ τὴν κατεργασίαν ἔχουσι πάντοθεν ὁμοίαν, καὶ τὰς συμβολὰς ἀδήλους τὰς τῶν νεύρων· οὕτω γὰρ συμβαίνει καὶ ταύτας ποιεῖσθαι τὰς τοῦ ἀέρος πληγὰς ὁμοιοτάτας. δεῖ δὲ καὶ τῶν αὐλῶν εἶναι τὰς γλώττας πυκνὰς καὶ λεῖας καὶ ὁμαλὰς, ὅπως ἂν καὶ τὸ πνεῦμα διαπορεύηται δι' αὐτῶν λεῖον καὶ ὁμαλὸν καὶ μὴ διεσπασμένον. διὸ καὶ τὰ βεβρεγμένα τῶν ζευγῶν καὶ τὰ πεπωκότα τὸ σίαλον εὐφωνότερα γίνονται, τὰ δὲ ξηρὰ κακόφωνα. ὁ γὰρ ἀήρ διὰ ὑγροῦ καὶ λεῖου φέρεται μαλακὸς καὶ ὁμαλός. δῆλον δέ· καὶ γὰρ αὐτὸ τὸ πνεῦμα, ὅταν ἔχῃ νοτίδα, πολὺ ἥττον προσκόπτει πρὸς τὰ ζεύγη καὶ διασπᾶται· τὸ δὲ ξηρὸν μᾶλλον ἀντιλαμβάνεται καὶ τὴν πληγὴν ποιεῖται σκληροτέραν διὰ τὴν βίαν. αἱ μὲν οὖν διαφοραὶ τῶν ἦχων γίνονται διὰ τὰς εἰρημένας αἰτίας. σκληραὶ δ' εἰσὶ τῶν φωνῶν ὅσαι βιαίως πρὸς τὴν ἀκοὴν προσπίπτουσι· διὸ καὶ μάλιστα παρέχουσι τὸν τόνον. τοιαῦται δ' εἰσὶν αἱ δυσκινήτοτεραι καὶ μετὰ πλείστης φερόμεναι βίας· τὸ γὰρ ὑπεῖκον ταχέως οὐ δύναται τὴν πληγὴν ὑπομένειν, ἀλλ' ἀποπηδᾷ πρότερον. δῆλον δέ· τὰ γὰρ ὑπέρογκα τῶν βελῶν βαιοτάτην φέρεται τὴν φορὰν, καὶ τὰ ῥεύματα φερόμενα διὰ τῶν εὐρίπων· καὶ γὰρ ταῦτα γίνονται σφοδρότατα περὶ αὐτὰς τὰς στενοχωρίας οὐ δυνάμενα ταχέως ὑπεῖκειν, ἀλλὰ ὑπὸ πολλῆς ὠθούμενα βίας. ὁμοίως δὲ τοῦ συμβαίνει καὶ περὶ τὰς φωνὰς καὶ τοὺς ψόφους. φανερόν δ' ἐστίν· πάντες γὰρ οἱ βίαιοι γίνονται σκληροί, καθάπερ καὶ τῶν κιβωτίων καὶ τῶν στροφέων, ὅταν ἀνοίγωνται βιαίως, καὶ τοῦ χαλκοῦ καὶ τοῦ σιδήρου. καὶ γὰρ ἀπὸ τῶν ἀκμόνων γίνονται σκληροὶ [803a] καὶ μαλακοί, ὅταν ἐλαύνωσι κατεψυγμένον καὶ σκληρὸν ἤδη τὸν σίδηρον. ἔτι δὲ ἀπὸ τῆς ῥίνης, ὅταν ῥινῶσι καὶ χαράττωσι τὰ σιδήρια καὶ τοὺς πρίονας, ἐπεὶ καὶ τῶν βροντῶν αἱ βαιοτάται γίνονται σκληρόταται καὶ τῶν ὑδάτων τὰ καλούμενα ῥαγδαῖα τὴν βίαν. ἡ μὲν γὰρ ταχυτῆς τοῦ πνεύματος ποιεῖ τὴν φωνὴν ὀξεῖαν, ἡ δὲ βία σκληράν. διόπερ οὐ μόνον συμβαίνει τοὺς αὐτοὺς ὅτε μὲν ὀξυτέραν ὅτε δὲ βαρυτέραν, ἀλλὰ καὶ σκληροτέραν καὶ μαλακωτέραν. καίτοι τινὲς ὑπολαμβάνουσι διὰ τὴν σκληρότητα τῶν ἀρτηριῶν τὰς φωνὰς γίνεσθαι σκληράς, διαμαρτάνοντες·

τοῦτο μὲν γὰρ βραχύ τι συμβάλλεται παντελῶς, ἀλλ' ἡ τοῦ πνεύματος γιγνομένη πληγὴ βιαίως ὑπὸ τοῦ πνεύμονος. ὥσπερ γὰρ καὶ τὰ σώματα τῶν μὲν ἐστὶν ὑγρὰ καὶ μαλακὰ τῶν δὲ σκληρὰ καὶ σύντονα, τὸν αὐτὸν τρόπον καὶ ὁ πνεύμων. διόπερ τῶν μὲν μαλακὸν ἐκπίπτει τὸ πνεῦμα, τῶν δὲ σκληρὸν καὶ βίαιον, ἐπεὶ διότι γε τὴν ἀρτηρίαν αὐτὴν μικράν τινα συμβαίνει παρέχεσθαι δύναμιν, ῥάδιον συνιδεῖν. οὐδεμία γάρ ἐστὶν ἀρτηρία σκληρὰ τοῖς αὐλοῖς ὁμοίως· ἀλλ' οὐθὲν ἦττον δι' αὐτοῦ καὶ διὰ τούτων φερομένου τοῦ πνεύματος οἱ μὲν μαλακῶς αὐλοῦσιν οἱ δὲ σκληρῶς. δῆλον δὲ τοῦτ' ἐστὶ καὶ ἐπ' αὐτῆς τῆς αἰσθήσεως· καὶ γὰρ ἂν ἐπιτείνῃ τις τὸ πνεῦμα βιαιότερον, εὐθέως ἡ φωνὴ γίγνεται σκληροτέρα διὰ τὴν βίαν, κἂν ἢ μαλακωτέρα. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῆς σάλπιγγος· διὸ καὶ πάντες, ὅταν κωμάζωσιν, ἀνιᾶσιν ἐν τῇ σάλπιγγι τὴν τοῦ πνεύματος συντονίαν, ὅπως ἂν ποιῶσι τὸν ἦχον ὡς μαλακώτατον. φανερὸν δ' ἐστὶ καὶ ἐπὶ τῶν ὀργάνων. καὶ γὰρ αἱ κατεστραμμένοι χορδαί, καθάπερ εἴρηται, τὰς φωνὰς ποιοῦσι σκληροτέρας, καὶ τὰ κατωπτημένα τῶν κεράτων. κἂν τις ἅπτηται τῶν χορδῶν ταῖς χερσὶ βιαίως καὶ μὴ μαλακῶς, ἀνάγκη καὶ τὴν ἀνταπόδοσιν αὐτὰς οὕτω πάλιν ποιεῖσθαι βιαιότεραν. αἱ δὲ ἦττον κατεστραμμένοι καὶ τὰ ὠμότερα τῶν κεράτων τὰς φωνὰς ποιεῖ μαλακωτέρας, καὶ τὰ μακρότερα τῶν ὀργάνων. αἱ γὰρ τοῦ ἀέρος πληγαὶ καὶ βραδύτεραι καὶ μαλακώτεραι γίνονται διὰ τὰ μήκη τῶν τόπων, αἱ δ' ἐπὶ τῶν βαρυτέρων σκληρόταται διὰ τὴν κατάτασιν τῶν χορδῶν. δῆλον δ' ἐστίν· καὶ γὰρ αὐτοῦ τοῦ ὀργάνου σκληροτέρας συμβαίνει γίνεσθαι τὰς φωνάς, ὅταν μὴ κατὰ μέσον τις ἅπτηται τῶν χορδῶν, διὰ τὸ μᾶλλον αὐτῶν τὰ πρὸς αὐτῷ τῷ ζυγῷ καὶ τῷ χορδοτόνῳ κατατετάσθαι. συμβαίνει δὲ καὶ τὰ ναρθήκινα τῶν ὀργάνων τὰς φωνὰς ἔχειν ἀπαλωτέρας· οἱ γὰρ ἦχοι [803b] πρὸς μαλακὸν προσπίπτοντες οὐχ ὁμοίως ἀποπηδῶσι μετὰ βίας. τραχύνεσθαι δὲ συμβαίνει τὰς φωνάς, ὅταν ἡ πληγὴ μὴ μία γένηται τοῦ ἀέρος παντός, ἀλλὰ πολλαχῇ κατὰ μικρὰ διεσπασμένη. καθ' αὐτὸ γὰρ ἕκαστον τῶν τοῦ ἀέρος μορίων προσπίπτει πρὸς τὴν ἀκοήν, ὡς ἂν ἀπὸ πληγῆς ἐτέρας ὄν, διεσπασμένην ποιεῖ τὴν αἴσθησιν, ὥστε τὴν μὲν διαλείπειν τὴν φωνήν, τὴν δὲ προσπίπτειν βιαιότερον, καὶ γίνεσθαι τὴν ἀφήν τῆς ἀκοῆς ἀνομοίαν, ὥσπερ καὶ ὅταν τι τῶν τραχέων ἡμῖν προσπίπτῃ πρὸς τὸν χρῶτα. μάλιστα δὲ τοῦτο συμφανές ἐστὶν ἐπὶ τῆς ρίνης· διὰ γὰρ τὸ τὴν τοῦ ἀέρος πληγὴν ἅμα γίνεσθαι κατὰ μικρὰ καὶ πολλά, τραχεῖς οἱ ψόφοι προσπίπτουσιν ἀπ' αὐτῶν πρὸς τὴν ἀκοήν, καὶ μᾶλλον, ὅταν πρὸς σκληρόν τι παρατρίβωνται, καθάπερ καὶ ἐπὶ τῆς ἀφῆς· τὰ γὰρ σκληρὰ καὶ τραχεὰ βιαιότερον ποιεῖται τὴν αἴσθησιν. δῆλον δὲ τοῦτό ἐστι καὶ ἐπὶ τῶν ῥευμάτων· τοῦ γὰρ ἐλαίου γίνεται πολὺ πάντων τῶν ὑγρῶν ὁ ψόφος ἀδηλότερος διὰ τὴν συνέχειαν τὴν τῶν μορίων. λεπταὶ δ' εἰσὶ τῶν φωνῶν, ὅταν ὀλίγον ἢ τὸ πνεῦμα τὸ ἐκπίπτει. διὸ καὶ τῶν παιδίων γίνονται λεπταί, καὶ τῶν γυναικῶν



καὶ τῶν εὐνούχων, ὁμοίως δὲ καὶ τῶν διαλελυμένων διὰ νόσον ἢ πόνον ἢ ἀτροφίαν· οὐ δύνανται γὰρ πολὺ τὸ πνεῦμα διὰ τὴν ἀσθένειαν ἐκπέμπειν. δῆλον δ' ἐστὶ καὶ ἐπὶ τῶν χορδῶν· ἀπὸ γὰρ τῶν λεπτῶν καὶ τὰ φωνία γίνεσθαι λεπτὰ καὶ στενὰ καὶ τριχώδη, διὰ τὸ καὶ τοῦ ἀέρος τὴν πληγὴν γίνεσθαι κατὰ στενόν. οἷας γὰρ ἂν τὰς ἀρχὰς ἔχωσι τῆς κινήσεως αἱ τοῦ ἀέρος πληγαί, τοιαύτας καὶ τὰς φωνὰς συμβαίνει γίνεσθαι προσπιπτούσας πρὸς τὴν ἀκοήν, οἷον ἀραιὰς ἢ πυκνάς, ἢ μαλακὰς ἢ σκληράς, ἢ λεπτὰς ἢ παχείας. αἰεὶ γὰρ ὁ ἕτερος ἀπὸ τὸν ἕτερον κινῶν ὡσαύτως ποιεῖ τὴν φωνὴν ἅπασαν ὁμοίαν, καθάπερ ἔχει καὶ ἐπὶ τῆς ὀξύτητος καὶ τῆς βαρύτητος· καὶ γὰρ τὰ τάχη τὰ τῆς πληγῆς ἕτερα τοῖς ἑτέροις συνακολουθοῦντα διαφυλάττει τὰς φωνὰς ταῖς ἀρχαῖς ὁμοίως. αἱ δὲ πληγαὶ γίνονται μὲν τοῦ ἀέρος ὑπὸ τῶν χορδῶν πολλὰ καὶ κεχωρισμένοι, διὰ δὲ μικρότητα τοῦ μεταξὺ χρόνου τῆς ἀκοῆς οὐ δυναμένης συναισθάνεσθαι τὰς διαλείψεις, μία καὶ συνεχὴς ἡμῖν ἡ φωνὴ φαίνεται, καθάπερ καὶ ἐπὶ τῶν χρωμάτων· καὶ γὰρ τούτων τὰ διεστηκότα δοκεῖ πολλάκις ἡμῖν συνάπτειν ἀλλήλοις, ὅταν φέρονται ταχέως. τὸ δὲ αὐτὸ συμβαίνει τοῦτο καὶ περὶ τὰς συμφωνίας. διὰ γὰρ τὸ περισυγκαταλαμβάνεσθαι τοὺς ἑτέρους ἤχους ὑπὸ τῶν ἑτέρων, καὶ γίνεσθαι τὰς καταπαύσεις αὐτῶν ἅμα, [804a] λανθάνουσιν ἡμᾶς αἱ μεταξὺ γιγνόμεναι φωναί. πλεονάκις μὲν γὰρ ἐν πάσαις ταῖς συμφωνίαις ὑπὸ τῶν ὀξυτέρων φθόγγων αἱ τοῦ ἀέρος γίνονται πληγαὶ διὰ τὸ τάχος τῆς κινήσεως· τὸν δὲ τελευταῖον τῶν ἤχων ἅμα συμβαίνει προσπίπτειν ἡμῖν πρὸς τὴν ἀκοήν καὶ τὸν ἀπὸ τῆς βραδυτέρας γιγνόμενον. ὥστε τῆς ἀκοῆς οὐ δυναμένης αἰσθάνεσθαι, καθάπερ εἴρηται, τὰς μεταξὺ φωνὰς, ἅμα δοκοῦμεν ἀμφοτέρων τῶν φθόγγων ἀκούειν συνεχῶς. παχεῖαι δ' εἰσὶ τῶν φωνῶν τοῦναντίον, ὅταν ἢ τὸ πνεῦμα πολὺ καὶ ἀθρόον ἐκπίπτον· διὸ καὶ τῶν ἀνδρῶν εἰσὶ παχύτεραι καὶ τῶν τελείων αὐλῶν, καὶ μᾶλλον ὅταν πληρώσῃ τις αὐτοὺς τοῦ πνεύματος. φανερόν δ' ἐστίν· καὶ γὰρ ἂν πέσῃ τις τὰ ζεύγη, μᾶλλον ὀξύτερα ἢ φωνὴ γίνεσθαι καὶ λεπτοτέρα. κἂν κατασπάσῃ τις τὰς σύριγγας, κἂν δὲ ἐπιλάβῃ, παμπλείων ὁ ὄγκος γίνεσθαι τῆς φωνῆς διὰ τὸ πλῆθος τοῦ πνεύματος, καθάπερ καὶ ἀπὸ τῶν παχυτέρων χορδῶν. παχεῖαι δὲ γίνονται καὶ τῶν τραγιζόντων καὶ τῶν βραγχιώντων, καὶ μετὰ τοὺς ἐμέτους, διὰ τὴν τραχύτητα τῆς ἀρτηρίας καὶ διὰ τὸ μὴ ὑπεξάγειν ἀλλ' αὐτοῦ προσκόπτουσαν ἀνειλεῖσθαι τὴν φωνὴν καὶ λαμβάνειν ὄγκον, καὶ μάλιστα διὰ τὴν ὑγρότητα τοῦ σώματος. λιγυραὶ δ' εἰσὶ τῶν φωνῶν αἱ λεπταὶ καὶ πυκναί, καθάπερ καὶ ἐπὶ τῶν τεττίγων καὶ τῶν ἀκρίδων καὶ αἱ τῶν ἀηδόνων, καὶ ὅλως ὅσαις λεπταῖς οὖσαις μηθεῖς ἀλλότριος ἤχος παρακολουθεῖ. ὅλως γὰρ οὐκ ἔστιν οὗτ' ἐν ὄγκῳ φωνῆς τὸ λιγυρόν, οὗτ' ἐν τόνοις ἀνιεμένοις καὶ βαρέσιν, οὗτ' ἐν ταῖς τῶν φθόγγων ἀφαῖς, ἀλλὰ μᾶλλον ὀξύτητι καὶ λεπτότητι καὶ ἀκριβεῖα. διὸ καὶ τῶν ὀργάνων τὰ λεπτὰ καὶ σύντονα καὶ μὴ ἔχοντα κέρας τὰς φωνὰς ἔχει

λιγυρωτέρας· ὁ γὰρ ἀπὸ τῶν ὑδάτων ἦχος, καὶ ὅλως ὅταν ἀπὸ τινος γινόμενος παρακολουθῇ, συνέχει τὴν ἀκρίβειαν τὴν τῶν φθόγγων. σαθραὶ δ' εἰσὶ καὶ παρερρυηκυῖαι τῶν φωνῶν ὅσαι μέχρι τινὸς φερόμεναι συνεχεῖς διασπῶνται. φανερώτατον δὲ τοῦτ' ἐστὶν ἐπὶ τοῦ κεράμου· πᾶς γὰρ ὁ ἐκ πληγῆς ῥαγεῖς ποιεῖ τὸν ἦχον σαθρόν, διασπωμένης τῆς κινήσεως κατὰ τὴν πληγὴν, ὥστε μηκέτι γίνεσθαι τοὺς ἐκπίπτοντας ἦχους συνεχεῖς. ὁμοίως δὲ τοῦτο συμβαίνει καὶ ἐπὶ τῶν ἐρρωγότων κεράτων καὶ ἐπὶ τῶν χορδῶν τῶν παρανενευρισμένων. ἐπὶ πάντων γὰρ τῶν τοιούτων μέχρι μὲν [804b] τινος ὁ ἦχος φέρεται συνεχῆς, ἔπειτα διασπᾶται, καθ' ὃ τι ἂν ἢ μὴ συνεχὲς τὸ ὑποκείμενον, ὥστε μὴ μίαν γίνεσθαι πληγὴν ἀλλὰ διεσπασμένην, καὶ φαίνεσθαι τὸν ἦχον σαθρόν. σχεδὸν γὰρ παραπλήσια τυγχάνουσιν οὗσαι ταῖς τραχείαις· πλὴν ἐκεῖναι μὲν εἰσιν ἀπ' ἀλλήλων κατὰ μικρὰ μέρη διεσπασμένοι, τῶν δὲ σαθρῶν αἱ πλεῖσται τὰς μὲν ἀρχὰς ἔχουσι συνεχεῖς, ἔπειτ' εἰς πλείω μέρη τὴν διαίρεσιν λαμβάνουσιν. δασεῖαι δ' εἰσὶ τῶν φωνῶν ὅσαις ἔσωθεν τὸ πνεῦμα εὐθέως συνεκβάλλομεν μετὰ τῶν φθόγγων, ψιλαὶ δ' εἰσὶ τοῦναντίον ὅσαι γίνονται χωρὶς τῆς τοῦ πνεύματος ἐκβολῆς. ἀπορρήγνυσθαι δὲ συμβαίνει τὰς φωνάς, ὅταν μηκέτι δύνωνται τὸν ἀέρα μετὰ πληγῆς ἐκπέμπειν, ἀλλ' ὁ περὶ τὸν πνεύμονα τόπος αὐτῶν ὑπὸ τῆς διαστάσεως ἐκλυθῇ. ὥσπερ γὰρ καὶ τὰ σκεύη καὶ τοὺς ὤμους ἐκλύεσθαι συμβαίνει τὸ τελευταῖον συντόνως, οὕτως καὶ τὸν περὶ τὸν πνεύμονα τόπον. κοῦφον γὰρ ἔξω φέρεσθαι τὸ πνεῦμα διὰ τὸ μὴ γίνεσθαι βίαιον αὐτοῦ τὴν πληγὴν· ἅμα δὲ καὶ διὰ τὸ τετραχύνθαι τὴν ἀρτηρίαν αὐτῶν ἰσχυρῶς, οὐ δύναται τὸ πνεῦμα ἔξω φέρεσθαι συνεχές, ἀλλὰ διεσπασμένον, ὡς ἀπερρωγυίας γίνεσθαι τὰς φωνάς αὐτῶν. καὶ τινες οἶονται διὰ τὴν τοῦ πνεύμονος γλισχρότητα τὸ πνεῦμα οὐ δύνασθαι περαιοῦσθαι περὶ τὸν ἔξω τόπον, διαμαρτάνοντες· φθέγγονται μὲν γὰρ ἀλλ' οὐ δύνανται γεγωνεῖν διὰ τὸ μὴ γίνεσθαι μετὰ συντονίας τὴν τοῦ ἀέρος πληγὴν, ἀλλὰ μόνον φωνοῦσιν, ὡς ἂν ἀπ' αὐτοῦ τοῦ φάρυγγος τὸ πνεῦμα βιαζόμενον. τῶν δ' ἰσχυροφώνων οὔτε περὶ τὰς φλέβας οὔτε περὶ τὰς ἀρτηρίας ἐστὶ τὸ πάθος, ἀλλὰ περὶ τὴν κίνησιν τῆς γλώττης. χαλεπῶς γὰρ αὐτὴν μεταφέρουσιν, ὅταν ἕτερον δέη φθόγγονπεῖν. διὸ καὶ πολὺν χρόνον τὸ αὐτὸ ῥῆμα λέγουσιν, οὐ δυνάμενοι τὸ ἐξῆς εἰπεῖν, ἀλλὰ συνεχῶς τῆς κινήσεως καὶ τοῦ πνεύμονος αὐτῶν ἐπὶ τὴν αὐτὴν ὁρμὴν φερομένου διὰ τὸ πλῆθος καὶ τὴν βίαν τοῦ πνεύματος. ὥσπερ γὰρ καὶ τὸ σῶμα ὅλον τῶν τρεχόντων βιαίως χαλεπὸν ἐστὶν ἐκ τῆς ὁρμῆς εἰς ἄλλην κίνησιν μεταστῆσαι, τὸν αὐτὸν τρόπον καὶ κατὰ μέρος. διὸ καὶ πολλάκις τὸ μὲν ἐξῆς εἰπεῖν οὐ δύνανται, τὸ δὲ μετὰ τοῦτο λέγουσι ῥαδίως, ὅταν ἄλλην ποιήσωνται τῆς κινήσεως ἀρχήν. δῆλον δ' ἐστίν· καὶ γὰρ τοῖς ὀργιζομένοις τοῦτο συμβαίνει πολλάκις διὰ τὸ βίαιον αὐτῶν γίνεσθαι τὴν τοῦ

## Φυσιογνωμονικά (805a) Physiognomonics



♦άν. εἰ ♦ς τ ♦το ♦♦[805a] Ὅτι αἱ διάνοιαι ἔπονται τοῖς σώμασι, καὶ οὐκ εἰσὶν αὐταὶ καθ' ἑαυτὰς ἀπαθεῖς οὕσαι τῶν τοῦ σώματος κινήσεων. τοῦτο δὲ δῆλον πάνυ γίνεται ἔν τε ταῖς μέθαις καὶ ἔν τε ταῖς ἀρρωστίαις· πολὺ γὰρ ἐξαλλάττουσαι φαίνονται αἱ διάνοιαι ὑπὸ τῶν τοῦ σώματος παθημάτων. καὶ τούναντίον δὴ τοῖς τῆς ψυχῆς παθήμασι τὸ σῶμα συμπάσχον φανερόν γίνεται περί τε τοὺς ἔρωτας καὶ τοὺς φόβους τε καὶ τὰς λύπας καὶ τὰς ἡδονάς. ἔτι δὲ ἔν τοις φύσει γινομένοις μᾶλλον ἢ τις συνίδοι ὅτι οὕτως ἔχει πρὸς ἀλλήλα σῶμά τε καὶ ψυχὴ συμφυῶς ὥστε τῶν πλείστων ἀλλήλοις αἷτια γίνεσθαι παθημάτων. οὐδὲν γὰρ πώποτε ζῶον γεγένηται τοιοῦτον ὃ τὸ μὲν εἶδος ἔσχεν ἑτέρου ζώου, τὴν δὲ διάνοιαν ἄλλου, ἀλλ' ἀεὶ τοῦ αὐτοῦ τό τε σῶμα καὶ τὴν ψυχὴν, ὥστε ἀναγκαῖον ἔπεσθαι τῷ τοιῷδε σώματι τοιάνδε διάνοιαν. ἔτι δὲ καὶ τῶν ἄλλων ζώων οἱ περὶ ἕκαστον ἐπιστήμονες ἐκ τῆς ιδέας δύνανται θεωρεῖν, ἵππικοί τε ἵππους καὶ κυνηγέται κύνας. εἰ δὲ ταῦτα ἀληθῆ εἴη (ἀεὶ δὲ ταῦτα ἀληθῆ ἐστίν), εἴη ἂν φυσιογνωμονεῖν. οἱ μὲν οὖν προγεγενημένοι φυσιογνώμονες κατὰ τρεῖς τρόπους ἐπεχείρησαν φυσιογνωμονεῖν, ἕκαστος καθ' ἓνα. οἱ μὲν γὰρ ἐκ τῶν γενῶν τῶν ζώων φυσιογνωμονοῦσι, τιθέμενοι καθ' ἕκαστον γένος εἰδός τι ζώου καὶ διάνοιαν. οἱ δ' ἐπὶ τούτοις σῶμά τι, εἴτα τὸν ὅμοιον τῷ σώματι σῶμα ἔχοντα καὶ τὴν ψυχὴν ὁμοίαν ὑπελάμβανον. ἄλλοι δὲ τινες τοῦτο μὲν ἐποίουν, οὐκ ἐξ ἀπάντων δὲ τῶν ζώων ἐδοκίμαζον, ἀλλ' ἐξ αὐτοῦ τοῦ τῶν ἀνθρώπων γένους, διελόμενοι κατὰ τὰ ἔθνη, ὅσα διέφερε τὰς ὀψεις καὶ τὰ ἥθη, οἷον Αἰγύπτιοι καὶ Θρᾷκες καὶ Σκύθαι, ὁμοίως τὴν ἐκλογὴν τῶν σημείων ἐποιοῦντο. οἱ δὲ τινες ἐκ τῶν ἡθῶν τῶν ἐπιφαινομένων, οἷα διαθέσει ἔπεται ἕκαστον ἥθος, τῷ ὀργιζομένῳ, τῷ φοβουμένῳ, τῷ ἀφροδισιάζοντι, καὶ τῶν ἄλλων δὴ παθημάτων ἐκάστω. ἔστι δὲ κατὰ πάντας τούτους τοὺς τρόπους φυσιογνωμονεῖν, καὶ ἔτι κατ' ἄλλους, καὶ τὴν ἐκλογὴν τῶν σημείων ἀνομοίως ποιεῖσθαι. οἱ μὲν οὖν κατὰ [805b] τὰ ἥθη μόνον φυσιογνωμονοῦντες ἀμαρτάνουσιν, πρῶτον μὲν ὅτι ἔνιοι οὐχ οἱ αὐτοὶ ὄντες τὰ ἐπὶ τῶν προσώπων ἥθη τὰ αὐτὰ ἔχουσιν, οἷον ὁ τε ἀνδρεῖος καὶ ὁ ἀναιδὴς τὰ αὐτὰ ἔχουσι, τὰς διανοίας πολὺ κεχωρισμένοι, δεύτερον δὲ ὅτι κατὰ χρόνους τινὰς τὰ ἥθη οὐ τὰ αὐτὰ ἀλλ' ἑτέρων ἔχουσιν· δυσανόις τε γὰρ οὕσιν ἐνίοτε συνέβη τὴν ἡμέραν ἡδέως διαγαγεῖν καὶ τὸ ἥθος λαβεῖν τὸ τοῦ εὐθύμου, καὶ τούναντίον εὐθυμον λυπηθῆναι, ὥστε τὸ ἥθος τὸ ἐπὶ τοῦ

προσώπου μεταβαλεῖν. ἔτι πρὸς τούτοις περὶ ὀλίγων ἂν τις τοῖς ἐπιφαινομένοις τεκμαίροιο. οἱ δ' ἐκ τῶν θηρίων φυσιογνωμονοῦντες οὐκ ὀρθῶς τὴν ἐκλογὴν τῶν σημείων ποιοῦνται. οὐ γὰρ δὴ ἐκάστου τῶν ζώων τὴν ἰδέαν διεξεληθόντα ἔστιν εἰπεῖν ὅτι, ὅς ἂν ὅμοιος τούτῳ τὸ σῶμα ἦ, καὶ τὴν ψυχὴν ὅμοιος ἔσται. πρῶτον μὲν γὰρ ὡς ἀπλῶς εἰπεῖν οὕτως ὅμοιον θηρίῳ ἄνθρωπον οὐδεὶς ἂν εὖροι, ἀλλὰ προσεικότα μὲν τι. ἔτι πρὸς τούτοις τὰ ζῶα ὀλίγα μὲν τὰ ἴδια ἔχει σημεῖα, πολλὰ δὲ τὰ κοινὰ· ὥστε ἐπειδὴ ὅμοιός τις ἦ μὴ κατὰ τὸ ἴδιον ἀλλὰ κατὰ τὸ κοινόν, τί μᾶλλον οὗτος λέοντι ἢ ἐλάφῳ ὁμοιότερος; εἰκὸς γὰρ τὰ μὲν ἴδια τῶν σημείων ἴδιόν τι σημαίνειν, τὰ δὲ κοινὰ κοινόν. τὰ μὲν οὖν κοινὰ τῶν σημείων οὐδὲν ἂν διασαφηθεῖ τῷ φυσιογνωμονοῦντι. εἰ δέ τις τὰ ἴδια ἐκάστου τῶν θηρίων ἐκλέξειεν, οὐκ ἂν ἔχοι ἀποδοῦναι οὐ ἔστι ταῦτα σημεῖα. εἰκὸς γὰρ τοῦ ἰδίου, ἴδιον δὲ οὐδενὸς οὐδὲν τῶν ζώων τῶν φυσιογνωμονουμένων ἔν γε τῇ διανοίᾳ ἔχοι ἂν τις λαβεῖν· οὔτε γὰρ ἀνδρεῖον μόνον ὁ λέων ἐστίν, ἀλλὰ καὶ ἄλλα πολλά, οὔτε δειλὸν ὁ λαγῶς, ἀλλὰ καὶ ἄλλα μυρία. εἰ οὖν μήτε τὰ κοινὰ σημεῖα ἐκλέξαντι σαφές τι γίνεται μήτε τὰ ἴδια, οὐκ ἂν εἴη καθ' ἕκαστον τῶν ζώων σκέπτεσθαι, ἀλλ' ἐξ ἀνθρώπων τὴν ἐκλογὴν ποιητέον τῶν τὸ αὐτὸ πάθος πασχόντων, οἷον, ἂν μὲν ἀνδρείου ἐπισκοπῇ τις τὰ σημεῖα, τὰ ἀνδρεῖα τῶν ζώων εἰς ἓν λαβόντα δεῖ ἐξετάσαι, ποῖα παθήματα τούτοις μὲν ἅπασιν ὑπάρχει, τῶν δὲ ἄλλων ζώων οὐδενὶ συμβέβηκεν. εἰ γὰρ [806a] οὕτω τις ἐκλέξειεν, ὅτι ταῦτά ἐστι τὰ σημεῖα ἀνδρείας τοῖς προκριθεῖσι ζώοις, μὴ μόνον ἀνδρείας κοινὸν ὑπάρχειν πάθημα τῶν ἐν τῇ διανοίᾳ, ἀλλὰ καὶ ἄλλο τι· οὕτω δ' ἂν ἀπορήσειε πότερον ἀνδρείας ἢ θατέρου τὰ σημεῖα ἐστίν. ἀλλὰ δεῖ ἐκ πλείστων τε ἐκλέγεσθαι ζώων, καὶ μηδὲν πάθος κοινὸν ἐχόντων ἐν τῇ διανοίᾳ ἄλλο τι, οὗ ἂν τὰ σημεῖα σκοπῇ. ὅσα μὲν οὖν τῶν σημείων μόνιμά ἐστι, μόνιμον ἂν τι καὶ σημαῖνοι· ὅσα δὲ ἐπιγινόμενά τε καὶ ἀπολείποντα, πῶς ἂν τὸ σημεῖον ἀληθὲς εἴη τοῦ ἐν τῇ διανοίᾳ μὴ μένοντος; εἰ μὲν γὰρ μόνιμον ἐπιγινόμενόν τε καὶ ἀπολείπον σημεῖόν τις ὑπολάβοι, ἐνδέχοιτο μὲν ἂν αὐτὸ ἀληθὲς εἶναι, οὐ μὴν ἐπεικὲς ἂν εἴη, μὴ ἀεὶ τῷ πράγματι παρεπόμενον. ὅσα δὲ παθήματα ἐγγινόμενα τῇ ψυχῇ μηδὲν τι ἐνδιαλλάττει τὰ σημεῖα τὰ ἐν τῷ σώματι, οἷς χρῆται ὁ φυσιογνώμων, οὐκ ἂν εἴη τὰ τοιαῦτα γνωρίσματα τῇ τέχνῃ, οἷον τὰ περὶ τὰς δόξας καὶ τὰς ἐπιστήμας ἰατρὸν ἢ κιθαριστὴν οὐκ ἐνδέχεται γνωρίζειν· ὁ γὰρ μαθὼν ὅ τι μάθημα, οὐδὲν ἐξήλλαξε τῶν σημείων οἷς χρῆται ὁ φυσιογνώμων.

Δεῖ δὴ οὖν ὀρίσαι περὶ ποῖα ἅττα ἐστὶν ἡ φυσιογνωμονία, ἐπειδὴ οὐ περὶ πάντα, καὶ ἐκ τίνων ἕκαστα σημεῖα λαμβάνεται, ἔπειτ' ἐφεξῆς καθ' ἓν ἕκαστον περὶ τῶν ἐπιφανεστέρων δηλῶσαι. ἡ μὲν οὖν φυσιογνωμονία ἐστὶ, καθάπερ καὶ τοῦνομα αὐτῆς λέγει, περὶ τὰ φυσικὰ παθήματα τῶν ἐν τῇ

διανοίᾳ, καὶ τῶν ἐπικτήτων ὅσα παραγινόμενα μεθίστησι τῶν σημείων τῶν φυσιογνωμονουμένων. ὅποῖα δὲ ταῦτά ἐστιν, ὕστερον δηλωθήσεται. ἐξ ὧν δὲ γενῶν τὰ σημεῖα λαμβάνεται, νῦν ἐρῶ, καὶ ἔστιν ἅπαντα· ἕκ τε γὰρ τῶν κινήσεων φυσιογνωμονοῦσι, καὶ ἐκ τῶν σχημάτων, καὶ ἐκ τῶν χρωμάτων, καὶ ἐκ τῶν ἡθῶν τῶν ἐπὶ τοῦ προσώπου ἐμφαινομένων, καὶ ἐκ τῶν τριχωμάτων, καὶ ἐκ τῆς λειότητος, καὶ ἐκ τῆς φωνῆς, καὶ ἐκ τῆς σαρκός, καὶ ἐκ τῶν μερῶν, καὶ ἐκ τοῦ τύπου ὅλου τοῦ σώματος. καθόλου μὲν οὖν τοιαῦτά ἐστιν ἃ λέγουσιν οἱ φυσιογνώμονες περὶ ὅλων τῶν γενῶν ἐν οἷς ἐστὶ τὰ σημεῖα. εἰ μὲν οὖν ἀσαφὴς ἢ μὴ εὖσημος ἦν ἡ τοιαύτη διέξοδος, ἀπέχρησεν ἂν τὰ εἰρημένα. νυνὶ δ' ἴσως βέλτιόν ἐστι καθ' ἕκαστον περὶ πάντων, ὅσα ἐπιφανῆ παρὰ τῶν φυσιογνωμονουμένων, [806b] ἀκριβέστερον φράσαι, τὰ τε σημεῖα λέγοντα, οἷά τ' ἐστὶν ἕκαστα καὶ ἐπὶ τί ἀναφέρεται, ὅσα μὴ ἐν τοῖς προειρημένοις δεδήλωται. αἱ μὲν οὖν χροιαὶ σημαίνουσιν αἱ μὲν ὀξεῖαι θερμὸν καὶ ὑφαιμον, αἱ δὲ λευκέρυθροι εὐφυῖαν, ὅταν ἐπὶ λείου χρωτὸς συμβῇ τοῦτο τὸ χρῶμα. τὰ δὲ τριχώματα τὰ μὲν μαλακὰ δειλόν, τὰ δὲ σκληρὰ ἀνδρεῖον. τοῦτο δὲ τὸ σημεῖον εἴληπται ἐξ ἁπάντων τῶν ζώων. δειλότατον μὲν γὰρ ἐστὶν ἔλαφος λαγωὸς πρόβατα, καὶ τὴν τρίχα μαλακωτάτην ἔχει· ἀνδρεϊότατον δὲ λέων, ὡς ἄγριος, καὶ τρίχα σκληροτάτην φέρει. ἔστι δὲ καὶ ἐν τοῖς ὄρνισι τὸ αὐτὸ τοῦτο ἰδεῖν· καθόλου τε γὰρ ὅσοι μὲν σκληρὸν τὸ πτερὸν ἔχουσιν, ἀνδρεῖοι, ὅσοι δὲ μαλακόν, δειλοί, καὶ κατὰ μέρη ἔστι ταῦτο τοῦτο ἰδεῖν ἐν τε τοῖς ὀρτυξι καὶ ἐν τοῖς ἀλεκτρυόσιν. ὁμοίως δὲ καὶ ἐπὶ τῶν γενῶν τῶν ἀνθρώπων ταῦτο τοῦτο συμπίπτει· οἱ μὲν γὰρ ὑπὸ ταῖς ἄρκτοις οἰκοῦντες ἀνδρεῖοί τε εἰσι καὶ σκληρότριχες, οἱ δὲ πρὸς μεσημβρίαν δειλοί τε καὶ μαλακὸν τρίχωμα φέρουσιν. ἡ δὲ δασύτης ἢ περὶ τὴν κοιλίαν λαλιὰν σημαίνει. τοῦτο δὲ ἀναφέρεται εἰς τὸ γένος τῶν ὀρνίθων· ἴδιον γὰρ ὀρνίθος τῶν περὶ τὸ σῶμα ἢ δασύτης ἢ περὶ τὴν κοιλίαν, τῶν δὲ περὶ διάνοιαν ἢ λαλιά. ἡ δὲ σὰρξ ἢ μὲν σκληρὰ καὶ εὐεκτικὴ φύσει ἀναίσθητον σημαίνει, ἡ δὲ λεία καὶ εὐφυέα καὶ ἀβέβαιον, ἐὰν μὴ ἐπ' ἰσχυροῦ σώματος καὶ τὰ ἀκρωτήρια ἐγκρατῆ ἔχοντος τοῦτο συμβῇ. αἱ δὲ κινήσεις αἱ μὲν νωθραὶ μαλακὴν διάνοιαν, αἱ δὲ ὀξεῖαι ἔνθερμον. ἐπὶ δὲ τῆς φωνῆς ἡ μὲν βαρεῖα καὶ ἐπιτεινομένη ἀνδρεῖον, ἡ δὲ ὀξεῖα καὶ ἀνειμένη δειλόν. τὰ δὲ σχήματα καὶ τὰ παθήματα τὰ ἐπιφανόμενα ἐπὶ τῶν προσώπων κατὰ τὰς ὁμοιότητας λαμβάνεται τῷ πάθει. ὅταν γὰρ πάσχη τι, γίνεται οἷον εἰ τοιοῦτον ἔχει ὅταν τις ὀργίζεται, ὀργίλον τὸ σημεῖον τοῦ αὐτοῦ γένους. τὸ δὲ ἄρρεν τοῦ θήλεος μεῖζον καὶ ἰσχυρότερον, καὶ τὰ ἀκρωτήρια τοῦ σώματος ἰσχυρότερα καὶ λιπαρότερα καὶ εὐεκτικώτερα καὶ βελτίω κατὰ πάσας τὰς ἀρετάς. ἰσχυρότερα δὲ τῶν ἐπὶ τοῖς μέρεσι σημείων ἐστὶ τὰ ἐν τοῖς ἡθεσι τοῖς ἐν τοῖς ἐπιφανομένοις λαμβανόμενα καὶ τὰ κατὰ τὰς κινήσεις καὶ τὰ σχήματα. ὅλως δὲ τὸ ἐνὶ μὲν πιστεύειν [807a] τῶν σημείων εὐηθες· ὅταν δὲ πλείω

συμφωνοῦντα καθ' ἑνὸς λάβῃ, μᾶλλον ἤδη κατὰ τὸ εἶκος ἂν τις ὑπολαμβάνοι ἀληθῆ εἶναι τὰ σημεῖα. ἔστι δὲ ἄλλος τρόπος καθ' ὃν ἂν τις φυσιογνωμονοίη· οὐδεὶς μέντοι ἐπικεχείρηκεν. οἷον εἰ ἀνάγκη ἐστὶ τὸν ὀργίλον καὶ τὸν δυσάνιον καὶ μικρὸν τὸ ἦθος φθονερὸν εἶναι, εἰ καὶ μή ἐστι φθονεροῦ σημεῖα, ἐξ ἐκείνων δὲ τῶν προτέρων ἐνδέχοιτο ἂν τῷ φυσιογνώμονι καὶ τὸν φθονερὸν εὐρίσκειν, μάλιστα μὲν ἂν ὁ τοιοῦτος ἴδιος τρόπος εἴη τοῦ πεφιλοσοφηκότος. τὸ γὰρ δύνασθαι τινῶν ὄντων ἀναγκαῖον εἶναι, ἴδιον ὑπολαμβάνοιμεν φιλοσοφίας· ὅπερ ἐστὶν ὅτε ἐναντιοῦται τούτῳ κατὰ τὰ πάθη φυσιογνωμονεῖν καὶ τὰ κακά.

Περὶ φωνῆς κατὰ μὲν τὸ πάθος ἐπισκοπῶν ὀξεῖαν οἰηθεῖν ἂν τις δυεῖν ἔνεκεν τιθέναι τοῦ θυμοειδοῦς. ὁ γὰρ ἀγανακτῶν καὶ ὀργιζόμενος ἐπιτείνειν εἴωθε τὸν φθόγγον καὶ ὀξὺ φθέγγεσθαι, ὃ δὲ ῥαθύμως διακείμενος τὸν τε τόνον ἀνίησι καὶ βαρὺ φθέγγεται. τῶν δ' αὖ ζώων τὰ μὲν ἀνδρεῖα βαρύφωνα ἐστὶ, τὰ δὲ δειλὰ ὀξύφωνα, λέων μὲν καὶ ταῦρος, καὶ κύων ὑλακτικός, καὶ τῶν ἀλεκτρυόνων οἱ εὐψυχοὶ βαρύφωνοι φθέγγονται· ἔλαφος δὲ καὶ λαγῶς ὀξύφωνα ἐστὶν. ἀλλ' ἴσως καὶ ἐν τούτοις κρεῖσσόν ἐστι μὴ ἐν τῷ βαρεῖαν ἢ ὀξεῖαν εἶναι τὴν φωνὴν αὐτῶν ἀνδρεῖον ἢ δειλὸν τιθέναι, ἀλλ' ἐν τῷ τὴν μὲν ἔρρωμένην ἀνδρείου τὴν δὲ ἀνειμένην καὶ ἀσθενῆ δειλοῦ ὑποληπτέον εἶναι. ἔστι δὲ κράτιστον, ὅταν τὰ σημεῖα μὴ ὁμολογούμενα ἀλλ' ὑπεναντιούμενα, μηδὲν τιθέναι, εἰ μή ἐστι τῶν διηρημένων ποῖα ποίων πιστότερα, καὶ μάλιστα μὲν εἰς εἶδη ἀλλὰ μὴ εἰς ὅλα τὰ γένη ἀναφέρειν. ὁμοιότερα γάρ ἐστι τῷ ζητουμένῳ· οὐ γὰρ ὅλον τὸ γένος τῶν ἀνθρώπων φυσιογνωμονοῦμεν, ἀλλὰ τινα τῷ Ἀνδρείου σημεῖα τρίχωμα σκληρόν, τὸ σχῆμα τοῦ σώματος ὀρθόν, ὅστ' αἰ καὶ πλευραὶ καὶ τὰ ἀκρωτήρια τοῦ σώματος ἰσχυρὰ καὶ μεγάλα, καὶ κοιλία πλατεῖα καὶ προσεσταλμένη· ὠμοπλάται πλατεῖαι καὶ διεστηκυῖαι, οὔτε λίαν συνδεδεμέναι οὔτε παντάπασιν ἀπολελυμέναι· τράχηλος ἔρρωμένος, οὐ σφόδρα σαρκώδης· τὸ στῆθος σαρκῶδές τε καὶ πλατύ, ἰσχίον προσεσταλμένον, γαστροκνημῖαι κάτω [807b] προσεσπασμέναι· ὄμμα χαροπόν, οὔτε λίαν ἀνεπτυγμένον οὔτε παντάπασι συμμύον· αὐχμηρότερον τὸ χρῶμα τὸ ἐπὶ τοῦ σώματος· ὀξὺ μέτωπον, εὐθύ, οὐ μέγα, ἰσχνόν, οὔτε λεῖον οὔτε παντάπασι ῥυτιδῶδες. δειλοῦ σημεῖα τριχωμάτιον μαλακόν, τὸ σῶμα συγκεκαθικός, οὐκ ἐπισπερχής· αἰ δὲ γαστροκνημῖαι ἄνω ἀνεσπασμέναι· περὶ τὸ πρόσωπον ὑπόχρος· ὄμματα ἀσθενῆ καὶ σκαρδαμύττοντα, καὶ τὰ ἀκρωτήρια τοῦ σώματος ἀσθενῆ, καὶ μικρὰ σκέλη, καὶ χεῖρες λεπταὶ καὶ μακραί· ὀσφὺς δὲ μικρὰ καὶ ἀσθενής· τὸ σχῆμα σύντονον ἐκ ταῖς κινήσεσιν· οὐκ ἰταμὸς ἀλλ' ὑπτιος καὶ τεθαμβηκώς· τὸ ἦθος τὸ ἐπὶ τοῦ προσώπου εὐμετάβολον, κατηφές. εὐφυοῦς σημεῖα σὰρξ ὑγροτέρα καὶ ἀπαλωτέρα, οὐκ εὐεκτική οὐδὲ πιμελώδης σφόδρα· τὰ περὶ τὰς ὠμοπλάτας καὶ τράχηλον ἰσχυρότερα, καὶ τὰ

περὶ τὸ πρόσωπον, καὶ σύνδετα τὰ περὶ τὰς ὠμοπλάτας, καὶ τὰ κάτω ἀφειμένα· εὐλύτα τὰ περὶ τὰς πλευράς· καὶ τὸν νῶτον ἄσαρκότερος· τὸ σῶμα λευκέρυθρον καὶ καθαρὸν· τὸ δερμάτιον λεπτόν, τριχωμάτιον μὴ λίαν σκληρὸν μηδὲ λίαν μέλαν, ὄμμα χαροπὸν, ὑγρὸν. ἀναισθήτου σημεῖα τὰ περὶ τὸν αὐχένα καὶ τὰ σκέλη σαρκώδη καὶ συμπεπλεγμένα καὶ συνδεδεμένα, κοτύλη στρογγύλη, ὠμοπλάται ἄνω ἀνεσπασμένοι, μέτωπον μέγα περιφερὲς σαρκῶδες, ὄμμα χλωρὸν κωφόν, κνῆμαι περὶ σφυρὸν παχεῖαι σαρκώδεις στρογγύλαι, σιαγόνες μεγάλαι σαρκώδεις, ὀσφὺς σαρκώδης, σκέλη μακρά, τράχηλος παχύς, πρόσωπον σαρκῶδες, ὑπόμακρον ἱκανῶς. τὰς δὲ κινήσεις καὶ τὸ σχῆμα καὶ τὸ ἦθος τὸ ἐπὶ τοῦ προσώπου ἐπιφανόμενον κατὰ τὰς ὁμοιότητος ἀναλαμβάνει. ἀναιδοῦς σημεῖα ὀμμάτιον ἀνεπτυγμένον καὶ λαμπρόν, βλέφαρα ὕφαιμα καὶ παχεῖα· μικρὸν ἔγκυρτος· ὠμοπλάται ἄνω ἐπηρμέναι· τῷ σχήματι μὴ ὀρθὸς ἀλλὰ μικρῷ προπετέστερος, ἐν ταῖς κινήσεσιν ὀξύς, ἐπίπυρρος τὸ σῶμα· τὸ χρῶμα ὕφαιμον· στρογγυλοπρόσωπος· τὸ στῆθος ἀνεσπασμένον. κοσμίῳ σημεῖα. ἐν ταῖς κινήσεσιν βραδύς, καὶ διάλεκτος βραδεῖα καὶ φωνὴ πνευματώδης καὶ ἀσμενής, ὀμμάτιον ἀλαμπές μέλαν καὶ μήτε λίαν ἀνεπτυγμένον μήτε παντάπασι συμμεμυκός, σκαρδαμυκτικὸν βραδέως· τὰ μὲν γὰρ ταχέως [808a] σκαρδαμύττοντα τῶν ὀμμάτων τὰ μὲν δειλὸν τὰ δὲ θερμὸν σημαίνει. εὐθύμου σημεῖα μέτωπον εὐμέγεθες καὶ σαρκῶδες καὶ λεῖον, τὰ περὶ τὰ ὄμματα ταπεινότερα. καὶ ὑπνωδέστερον τὸ πρόσωπον φαίνεται, μήτε δεδορκὸς μήτε σύννου. ἐν τε ταῖς κινήσεσιν βραδὺς ἔστω καὶ ἀνειμένος· τῷ σχήματι καὶ τῷ ἦθει τῷ ἐπὶ τοῦ προσώπου μὴ ἐπισπερχῆς ἀλλὰ ἀγαθὸς φαινέσθω. ἀθύμου σημεῖα. τὰ ῥυτιδῶδη τῶν προσώπων καὶ ἰσχνὰ ὄμματα κατακεκλασμένα, ἅμα δὲ καὶ τὰ κεκλασμένα τῶν ὀμμάτων, δύο σημαίνει, τὸ μὲν μαλακὸν καὶ θῆλυ, τὸ δὲ κατηφές καὶ ἄθυμον. ἐν τῷ σχήματι ταπεινὸς καὶ ταῖς κινήσεσιν ἀπηγορευκός. κιναίδου σημεῖα ὄμμα κατακεκλασμένον, γονύκροτος· ἐγκλίσεις τῆς κεφαλῆς εἰς τὰ δεξιὰ· αἱ φοραὶ τῶν χειρῶν ὕπτιαι καὶ ἔκλυτοι, καὶ βαδίσεις διτταί, ἢ μὲν περινεύοντος, ἢ δὲ κρατοῦντος τὴν ὀσφύν· καὶ τῶν ὀμμάτων περιβλέψεις, οἷος ἂν εἴη Διονύσιος ὁ σοφιστής. πικροῦ σημεῖα τὸ πρόσωπον σεσηρόν· μελανόχρως, ἰσχνός· τὰ περὶ τὸ πρόσωπον διεξυσμένα, τὸ πρόσωπον ῥυτιδῶδες ἄσαρκον· εὐθύθριξ καὶ μελάνθριξ. θυμώδους σημεῖα. ὀρθὸς τὸ σῶμα, τῷ σχήματι εὐπλευρος, εὐθυμος, ἐπίπυρρος· ὠμοπλάται διεστηκυῖαι καὶ μεγάλαι καὶ πλατεῖαι· ἀκρωτήρια μεγάλα καὶ ἐγκρατῆ· λεῖος καὶ περὶ τὰ στήθη καὶ περὶ βουβῶνας, εὐπώγων· εὐαυξῆς ὁ περίδρομος τῶν τριχῶν, κάτω κατεληλυθώς. πραέος σημεῖα. ἰσχυρὸς τὸ εἶδος, εὐσαρκός· ὑγρὰ σὰρξ καὶ πολλή· εὐμεγέθης καὶ σύμμετρος· ὕπτιος τῷ σχήματι· ὁ περίδρομος τῶν τριχῶν ἀνεσπασμένος. εἴρωνος σημεῖα πίονα τὰ περὶ τὸ πρόσωπον, καὶ τὰ περὶ τὰ ὄμματα ῥυτιδῶδη· ὑπνώδες τὸ πρόσωπον τῷ ἦθει φαίνεται.

μικροψύχου σημεία. μικρομελής, μικρογλάφυρος, ἰσχνός, μικρόμματος καὶ μικροπρόσωπος, οἷος ἂν εἴη Κορίνθιος ἢ Λευκάδιος. φιλόκυβοι γαλεαγκῶνες καὶ ὀρχησταί. φιλολοῖδοροι οἷς τὸ ἄνω χεῖλος μετέωρον· καὶ τὰ εἶδη προπετεῖς, ἐπίπυρροι. ἐλεήμονες ὅσοι γλαφυροὶ καὶ λευκόχροοι καὶ λιπαρόμματοι καὶ τὰ ῥινία ἄνωθεν διεξυσμένοι, καὶ ἀεὶ δακρύουσιν. οἱ αὐτοὶ οὗτοι καὶ φιλογύναιοι καὶ θηλυγόνοι καὶ περὶ τὰ ἥθη ἐρωτικοὶ καὶ ἀειμνήμονες καὶ εὐφυεῖς καὶ ἔνθερμοι. τούτων δὲ σημεία [808b] εἴρηται. ἐλεήμων ὁ σοφὸς καὶ δειλὸς καὶ κόσμιος, ἀνελέητος ἀμαθὴς καὶ ἀναιδής. ἀγαθοὶ φαγεῖν οἷς τὸ ἀπὸ τοῦ ὀμφαλοῦ πρὸς στῆθος μεῖζόν ἐστιν ἢ τὸ ἐντεῦθεν πρὸς τὸν αὐχένα. λάγνου σημεία. λευκόχρως καὶ δασὺς εὐθείαις θριξὶ καὶ παχείαις καὶ μελαίναις· καὶ οἱ κρόταφοι δασεῖς εὐθείαις θριξί· λιπαρὸν τὸ ὀμμάτιον καὶ μάργον. φίλυπνοι οἱ τὰ ἄνω μείζω ἔχοντες καὶ γυπῶδεις καὶ θερμοί, εὐεκτικὴν σάρκα ἔχοντες, καὶ γλαφυροὶ τὰ εἶδη, καὶ δασεῖς τὰ περὶ τὴν κοιλίαν. μνήμονες οἱ τὰ ἄνω ἐλάττονα ἔχοντες καὶ γλαφυρὰ καὶ σαρκωδέστερα.

Δοκεῖ δέ μοι ἡ ψυχὴ καὶ τὸ σῶμα συμπαθεῖν ἀλλήλοις· καὶ ἡ τῆς ψυχῆς ἕξις ἀλλοιουμένη συναλλοιοῖ τὴν τοῦ σώματος μορφήν, πάλιν τε ἡ τοῦ σώματος μορφή ἀλλοιουμένη συναλλοιοῖ τὴν τῆς ψυχῆς ἕξιν. ἐπειδὴ γὰρ ἐστὶ ψυχῆς τὸ ἀνιᾶσθαί τε καὶ εὐφραίνεσθαι, καταφανὲς ὅτι οἱ ἀνιώμενοι σκυθρωπότεροί εἰσι καὶ οἱ εὐφραϊνόμενοι ἱλαροί. εἰ μὲν οὖν ἦν τῆς ψυχῆς λελυμένης ἔτι τὴν ἐπὶ τοῦ σώματος μορφήν μένειν, ἦν μὲν ἂν καὶ οὕτως ἡ ψυχὴ τε καὶ τὸ σῶμα συμπαθῇ, οὐ μέντοι συνδιατελοῦντα ἀλλήλοις. νῦν δὲ καταφανὲς ὅτι ἐκάτερον ἐκατέρω ἔπεται. μάλιστα μέντοι ἐκ τοῦδε δῆλον γένοιτο. μανία γὰρ δοκεῖ εἶναι περὶ ψυχὴν, καὶ οἱ ἰατροὶ φαρμάκοις καθαίροντες τὸ σῶμα καὶ διαίταις τισὶ πρὸς αὐτοῖς χρησάμενοι ἀπαλλάττουσι τὴν ψυχὴν τῆς μανίας. ταῖς δὲ τοῦ σώματος θεραπείαις καὶ ἅμα ἢ τε τοῦ σώματος μορφή λέλυται καὶ ἡ ψυχὴ μανίας ἀπήλλακται. ἐπειδὴ οὖν ἅμα ἀμφοτέρω λύνονται, δῆλον ὅτι συνδιατελοῦσιν ἀλλήλοις. συμφανὲς δὲ καὶ ὅτι ταῖς δυνάμεσι τῆς ψυχῆς ὅμοιαι αἱ μορφαὶ τοῖς σώμασιν ἐπιγίνονται, ὥστ' ἐστὶν ἅπαντα ἐν τοῖς ζώοις τοῦ αὐτοῦ τινὸς δηλωτικά. πολλὰ δὲ καὶ ὧν διαπράττεται τὰ ζῶα, τὰ μὲν ἴδια ἐκάστου γένους πάθη τῶν ζώων ἐστί, τὰ δὲ κοινά. ἐπὶ μὲν οὖν τοῖς ἰδίοις ἔργοις τῆς ψυχῆς ἴδια τὰ πάθη κατὰ τὸ σῶμα, ἐπὶ δὲ τοῖς κοινοῖς τὰ κοινά. κοινὰ μὲν οὖν ἐστὶν ὕβρις τε καὶ ἡ περὶ τὰ ἀφροδίσια ἔκστασις. τῶν μὲν οὖν λοφούρων κοινόν ἐστὶν ὕβρις, τῶν δὲ ὄνων τε καὶ συῶν ἡ περὶ τὰ ἀφροδίσια ἕξις. ἴδιον δ' ἐστὶν ἐπὶ μὲν τῶν κυνῶν τὸ λοῖδορον, ἐπὶ δὲ τῶν ὄνων τὸ ἄλυπον. ὥς μὲν [809a] οὖν τὸ κοινόν τε καὶ τὸ ἴδιον χρὴ διελέσθαι, εἴρηται. δεῖ μέντοι πρὸς ἅπαντα πολλῆς συνηθείας, εἰ μέλλει τις αὐτὸς ἔσεσθαι ἱκανὸς περὶ τούτων ἕκαστα λέγειν. ἐπειδὴ γὰρ τὰ



ὁρώμενα ἐπὶ τῶν σωμάτων λέγεται ἀναφέρεσθαι ἐπὶ τὰς ὁμοιότητας τὰς τε ἀπὸ τῶν ζώων καὶ τὰς ἀπὸ τῶν πράξεων γινομένας, καὶ ἰδέαι τινὲς ἄλλαι ἀπὸ θερμοτήτων καὶ ἀπὸ ψυχροτήτων γίνονται, ἔστι τε τούτων ἕνια τῶν ἐπιφαινομένων ἐπὶ τε τοῖς σώμασι μικραῖς διαφοραῖς κεχρημένα καὶ τῷ αὐτῷ ὀνόματι προσαγορευόμενα, οἷον αἶ τε ἀπὸ φόβων ὠχρότητες καὶ ἀπὸ πόνων (αὗται γὰρ ὀνόματί τε τῷ αὐτῷ κέχρηται, καὶ διαφορὰν μικρὰν ἔχουσι πρὸς ἀλλήλας), μικρὰς δὲ οὕσης τῆς διαφορᾶς οὐ ῥᾶδιον γινώσκειν ἀλλὰ ἢ ἐκ τῆς συνηθείας τῆς μορφῆς τὴν ἐπιπρέπειαν εἰληφότα, ἔστι μὲν οὖν καὶ τάχιστος καὶ ἄριστος ὁ ἀπὸ τῆς ἐπιπρεπείας, καὶ ἔστι γε οὕτως τούτῳ χρώμενον πολλὰ διαγινώσκειν. καὶ οὐ μόνον καθόλου χρήσιμον ἔστιν, ἀλλὰ καὶ πρὸς τὴν τῶν σημείων ἐκλογὴν· ἕκαστον γὰρ τῶν ἐκλεγομένων καὶ πρέπειν δεῖ τοιοῦτον οἷον τὸ ἐκλεγόμενον θέλει. ἔτι τε κατὰ τὴν ἐκλογὴν τῶν σημείων, καὶ τῷ συλλογισμῷ, ὧς δεῖ χρῆσθαι ὅπου ἂν τι τύχη, προστιθέντας τοῖς προσοῦσι τὰ προσήκοντα, οἷον εἰ ἀναιδὴς τε εἴη καὶ μικρολόγος, καὶ κλέπτῃς ἂν εἴη καὶ ἀνελεύθερος, καὶ κλέπτῃς μὲν ἐπομένως τῇ ἀναιδεΐᾳ, τῇ δὲ μικρολογίᾳ ἀνελεύθερος. ἐπὶ μὲν οὖν τῶν τοιούτων ἑκάστου δεῖ τοῦτον τὸν τρόπον προσαρμόζοντα τὴν μέθοδον ποιεῖσθαι.

Νυνὶ δὲ πρῶτον πειράσομαι τῶν ζώων διελέσθαι, ὅποια αὐτῶν προσήκει διαλλάττειν πρὸς τὸ εἶναι ἀνδρεῖα καὶ δειλὰ καὶ δίκαια καὶ ἄδिका. διαιρετέον δὲ τὸ τῶν ζώων γένος εἰς δύο μορφάς, εἰς ἄρσεν καὶ θῆλυ, προσάπτοντα τὸ πρέπον ἑκατέρᾳ μορφῇ. ἔστι δὲ ὅμοια. ἐπιχειροῦμεν οὖν τρέφειν τῶν θηρίων προσηνέστερα καὶ μαλακώτερα τὰς ψυχὰς τὰ θήλεα τῶν ἀρρένων, ἥττον τε ῥωμαλεύμενα, τὰς τε τροφὰς καὶ τὰς χειροηθείας μᾶλλον προσδεχόμενα. ὥστε τοιαῦτα ὄντα εἴη που ἂν ἀθυμότερα τῶν ἀρρένων. καταφανὲς δὲ τοῦτο ἐξ ἡμῶν πού ἐστιν, ὅτι ἐπὶ ὑπὸ θυμοῦ κρατηθῶμεν, δυσπαραπιστότεροί τε, καὶ μάλιστα ἐρρώμεθα πρὸς τὸ μηδαμῇ μηδὲν εἶξαι, ἐπὶ τὸ βιάζεσθαι δὲ καὶ πρᾶξαι φερόμεθα, πρὸς ὃ ἂν ὁ θυμὸς ὀρμήσῃ. δοκεῖ δέ μοι καὶ κακουργότερα γίνεσθαι τὰ θήλεα τῶν ἀρρένων, καὶ προπετέστερά τε καὶ ἀναλκέστερα. [809b] αἱ μὲν οὖν γυναῖκες καὶ τὰ περὶ ἡμᾶς τρεφόμενα καὶ πάνυ που φανερὰ ὄντα· τὰ δὲ περὶ τὴν ὕλην πάντες ὁμολογοῦσιν οἱ νομεῖς τε καὶ θηρευταὶ ὅτι τοιαῦτά ἐστιν οἷα προεῖρηται. ἀλλὰ μὴν καὶ τόδε δῆλον, ὅτι ἕκαστον ἐν ἑκάστῳ γένει θῆλυ ἄρρενος μικροκεφαλώτερόν ἐστι καὶ στενοπροσωπότερον καὶ λεπτοτραχηλότερον, καὶ τὰ στήθη ἀσθενέστερα ἔχει, καὶ ἀπλευρότερα ἐστι, τὰ τε ἰσχία καὶ τοὺς μηρούς περισαρκότερα τῶν ἀρρένων, γονύκροτα δὲ καὶ τὰς κνήμας λεπτὰς ἔχοντα, τοὺς τε πόδας κομποτέρους, τὴν τε τοῦ σώματος ὅλην μορφήν ἡδίω μάλιστ' ἂν ἢ γενναιοτέραν, ἀνευρότερα δὲ καὶ μαλακώτερα, ὑγροτέραις σαρκὶ κεχρημένα. τὰ δὲ ἄρρενα τούτοις ἅπασιν ἐναντία, τὴν φύσιν ἀνδρειότεραν καὶ δικαιοτέραν εἶναι γένει, τὴν δὲ τοῦ

θήλεος δειλοτέραν καὶ ἀδίκωτέραν. τούτων οὕτως ἔχοντων, φαίνεται τῶν ζώων ἀπάντων λέων τελεώτατα μετεληφέναι τῆς τοῦ ἄρρενος ιδέας. ἔστι γὰρ ἔχων στόμα εὐμέγεθες, τὸ δὲ πρόσωπον τετραγωνότερον, οὐκ ἄγαν ὀστῶδες, τὴν ἄνω τε γένυν οὐ προεξεστηκυῖαν ἀλλὰ ἰσορροποῦσαν τῇ κάτω, ῥίνα δὲ παχυτέραν ἢ λεπτοτέραν, χαροποὺς ὀφθαλμοὺς ἐγκοίλους, οὐ σφόδρα περιφερεῖς οὔτε ἄγαν προμήκεις, μέγεθος δὲ μέτριον, ὄφρυν εὐμεγέθη, μέτωπον τετράγωνον, ἐκ μέσου ὑποκοιλότερον, πρὸς δὲ τὰς ὀφρῦς καὶ τὴν ῥίνα ὑπὸ τοῦ μετώπου οἷον νέφος ἐπανεστηκός. ἄνωθεν δὲ τοῦ μετώπου κατὰ τὴν ῥίνα ἔχει τρίχας ἐκκλινεῖς οἷον ἂν ἄσιλον, κεφαλὴν μετρίαν, τράχηλον εὐμήκη, πάχει σύμμετρον, θριξὶ ξανθαῖς κεκρημένον, οὐ φριξαῖς οὔτε ἄγαν ἀπεστραμμέναις· τὰ περὶ τὰς κλεῖδας εὐλυτώτερα μᾶλλον ἢ συμπεφραγμένα· ὠμούς ῥωμαλέους, καὶ στῆθος νεανικόν, καὶ τὸ μετάφρενον πλατὺ καὶ εὐπλευρον καὶ εὐνωτον ἐπεικῶς· ζῶον ἀσαρκότερον τὰ ἰσχία καὶ τοὺς μηρούς· σκέλη ἔρρωμένα καὶ νευρώδη, βάσιν τε νεανικὴν, καὶ ὅλον τὸ σῶμα ἀρθρώδες καὶ νευρώδες, οὔτε λίαν σκληρὸν οὔτε λίαν ὑγρόν. βαδίζον δὲ βραδέως, καὶ μεγάλα διαβαῖνον, καὶ διασαλεῦον ἐν τοῖς ὠμοῖς, ὅταν πορεύηται. τὰ μὲν οὖν περὶ τὸ σῶμα τοιοῦτον· τὰ δὲ περὶ τὴν ψυχὴν δοτικὸν καὶ ἐλεύθερον, μεγαλόψυχον καὶ φιλόνικον, καὶ πραῦ καὶ δίκαιον καὶ φιλόστοργον πρὸς ἅ ἂν ὁμιλήσῃ. ἡ δὲ πάρδαλις τῶν ἀνδρείων εἶναι δοκούντων θηλυμορφότερόν ἐστιν, ὅτι μὴ κατὰ τὰ σκέλη· τούτοις δὲ συνεργεῖ καὶ τι ἔργον ῥώμης ἀπεργάζεται. ἔστι γὰρ ἔχον πρόσωπον μικρόν, στόμα μέγα, ὀφθαλμοὺς μικροὺς, [810a] ἐκλεύκους, ἐγκοίλους, αὐτοὺς δὲ περιπολαιότερους· μέτωπον προμηκέστερον, πρὸς τὰ ὦτα περιφερέστερον ἢ ἐπιπεδώτερον· τράχηλον μακρὸν ἄγαν καὶ λεπτόν, στῆθος ἄπλευρον, καὶ μακρὸν νῶτον, ἰσχία σαρκώδη καὶ μηρούς, τὰ δὲ περὶ τὰς λαγόνας καὶ γαστέρα ὁμαλὰ μᾶλλον· τὸ δὲ χρῶμα ποικίλον, καὶ ὅλον ἀναρθρόν τε καὶ ἀσύμμετρον. ἡ μὲν οὖν τοῦ σώματος ιδέα τοιαύτη, τὰ δὲ περὶ τὴν ψυχὴν μικρὸν καὶ ἐπίκλοπον καὶ ὅλως εἰπεῖν δολερόν. τὰ μὲν οὖν ἐκπρεπέστερα μετεληφότα ζῶα τῶν δοκούντων ἀνδρείων εἶναι τῆς τε τοῦ ἄρρενος ιδέας καὶ τῆς τοῦ θήλεος εἴρηται. τὰ δ' ἄλλα οἷα τυγχάνει, ῥάδιον ἤδη μετιέναι. ὅσα δὲ πρὸς τὸ φυσιογνωμονῆσαι συνιδεῖν ἀρμόττει ἀπὸ τῶν ζώων, ἐν τῇ τῶν σημείων ἐκλογῇ ῥηθήσεται.

Ἡ δὲ ἐκλογὴ τῶν σημείων ἢ κατὰ τοὺς ἀνθρώπους ὥδε λαμβάνεται. ὅσοις οἱ πόδες εὐφυεῖς τε καὶ μεγάλοι διηρθρωμένοι τε καὶ νευρώδεις, ἔρρωμένοι τὰ περὶ τὴν ψυχὴν· ἀναφέρεται ἐπὶ τὸ ἄρρεν γένος. ὅσοι δὲ τοὺς πόδας μικροὺς στενοὺς ἀνάρθρους ἔχουσιν, ἡδίους τε ἰδεῖν ἢ ῥωμαλεωτέρους, μαλακοὶ τὰ περὶ τὴν ψυχὴν· ἀναφέρεται ἐπὶ τὸ θῆλυ γένος. οἷς τῶν ποδῶν οἱ δάκτυλοι καμπύλοι, ἀναιδεῖς, καὶ ὅσοις ὄνυχες καμπύλαι· ἀναφέρεται ἐπὶ

τοὺς ὄρνεις τοὺς γαμψώνυχας. οἷς τῶν ποδῶν τὰ δάκτυλα συμπεφραγμένα  
ἐστί, δειμαλέοι· ἀναφέρεται ἐπὶ τοὺς ὀρτυγας τοὺς στενόποδας τῶν λιμναίων.  
ὅσοις τὰ περὶ τὰ σφυρὰ νευρώδη τε καὶ διηρθρωμένα ἐστίν, εὖρωστοι τὰς  
ψυχάς· ἀναφέρεται ἐπὶ τὸ ἄρρεν γένος. ὅσοι τὰ σφυρὰ σαρκώδεις καὶ  
ἄναρθροι, μαλακοὶ τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ θῆλυ γένος. ὅσοι τὰς  
κνήμας ἔχουσιν ἡρθρωμένας τε καὶ νευρώδεις καὶ ἐρρωμένας, εὖρωστοι τὴν  
ψυχὴν· ἀναφέρεται ἐπὶ τὸ ἄρρεν. ὅσοι δὲ τὰς κνήμας λεπτὰς νευρώδεις  
ἔχουσι, λάγνοι· ἀναφέρεται ἐπὶ τοὺς ὀρνιθας. ὅσοι τὰς κνήμας περιπλέους  
σφόδρα ἔχουσιν, οἷον ὀλίγου διαρρηγνυμένας, βδελυροὶ καὶ ἀναιδεῖς·  
ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειαν. οἱ γονύκροτοι κίναδοι· ἀναφέρεται ἐπὶ τὴν  
ἐπιπρέπειαν. οἱ τοὺς μηροὺς ὀστώδεις καὶ νευρώδεις ἔχοντες εὖρωστοι·  
ἀναφέρεται ἐπὶ τὸ ἄρρεν. οἱ δὲ τοὺς μηροὺς ὀστώδεις καὶ περιπλέους ἔχοντες  
μαλακοί· ἀναφέρεται [810b] ἐπὶ τὸ θῆλυ. ὅσοι δὲ πῦγα ὀξεῖαν ὀστώδη  
ἔχουσιν, εὖρωστοι, ὅσοι δὲ σαρκώδη πύονα ἔχουσι, μαλακοί. ὅσοι δὲ ἔχουσιν  
ὀλίγην σάρκα, οἷον ἀπωμοργμένα, κακοήθεις· ἀναφέρεται ἐπὶ τοὺς πιθήκους.  
οἱ ζωνοὶ φιλόθηροι· ἀναφέρεται ἐπὶ τοὺς λέοντας καὶ τοὺς κύνας. ἴδοι δ' ἂν  
τις καὶ τῶν κυνῶν τοὺς φιλοθηροτάτους ζωνοὺς ὄντας. οἷς τὰ περὶ τὴν  
κοιλίαν λαπαρά, εὖρωστοι· ἀναφέρεται ἐπὶ τὸ ἄρρεν. ὅσοι δὲ μὴ λαπαροί,  
μαλακοί· ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειαν. ὅσοις τὸ νῶτον εὐμέγεθές τε καὶ  
ἐρρωμένον, εὖρωστοι τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ ἄρρεν. ὅσοι δὲ τὸ νῶτον  
στενὸν καὶ ἀσθενὲς ἔχουσι, μαλακοί· ἀναφέρεται ἐπὶ τὸ θῆλυ. οἱ εὐπλευροὶ  
εὖρωστοι τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ ἄρρεν. οἱ δὲ ἄπλευροὶ μαλακοὶ τὰς  
ψυχάς· ἀναφέρεται ἐπὶ τὸ θῆλυ. ὅσοι δὲ ἐκ τῶν πλευρῶν περίογκοι εἰσιν,  
οἷον πεφουσημένοι, λάλοι καὶ μωρολόγοι· ἀναφέρεται ἐπὶ τοὺς βοῦς ἢ ἐπὶ τοὺς  
βατράχους. ὅσοι δὲ τὸ ἀπὸ τοῦ ὀμφαλοῦ πρὸς τὸ ἀκροστήθιον μεῖζον  
ἔχουσιν ἢ τὸ ἀπὸ τοῦ ἀκροστηθίου πρὸς τὸν τράχηλον, βοροὶ καὶ ἀναίσθητοι,  
βοροὶ μὲν ὅτι τὸ τεῦχος μέγα ἔχουσιν ὧ δέχονται τὴν τροφήν, ἀναίσθητοι δὲ  
ὅτι στενώτερον τὸν τόπον ἔχουσιν αἱ αἰσθήσεις, συνενωμένον τε τῷ τὴν  
τροφὴν δεχομένῳ, ὥστε τὰς αἰσθήσεις βεβαρύνθαι διὰ τὰς τῶν σιτίων  
πληρώσεις ἢ ἐνδείας. ὅσοι δὲ τὰ στηθία ἔχουσι μεγάλα καὶ διηρθρωμένα,  
εὖρωστοι τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ ἄρρεν. ὅσοι δὲ τὸ μετάφρενον ἔχουσι  
μέγα καὶ εὖσαρκον καὶ ἀρθρῶδες, εὖρωστοι τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ  
ἄρρεν. ὅσοι δ' ἀσθενὲς καὶ ἄσαρκον καὶ ἄναρθρον, μαλακοὶ τὰς ψυχάς·  
ἀναφέρεται ἐπὶ τὸ θῆλυ. ὅσοις δὲ τὸ μετάφρενον κυρτόν ἐστι σφόδρα οἱ τε  
ὦμοι πρὸς τὸ στῆθος συνηγμένοι, κακοήθεις· ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειαν,  
ὅτι ἀφανίζεται τὰ ἔμπροσθεν προσήκοντα φαίνεσθαι. ὅσοι δὲ τὸ μετάφρενον  
ὑπτίον ἔχουσι, χαῦνοι καὶ ἀνόητοι· ἀναφέρεται ἐπὶ τοὺς ἵππους. ἐπεὶ δὲ οὔτε  
κυρτὸν σφόδρα δεῖ εἶναι οὔτε κοῖλον, τὸ μέσον ζητητέον τοῦ εὖ πεφυκότος.

ὅσοις αἱ ἐπωμίδες ἐξηρθρωμένοι καὶ οἱ ὦμοι, εὖρωστοι τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ ἄρρεν. ὅσοις δὲ οἱ ὦμοι ἀσθενεῖς, ἀναρθροί, μαλακοὶ τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ θῆλυ. [811a] ταῦτά λέγω ἅπερ περὶ ποδῶν καὶ μηρῶν. ὅσοις ὦμοι εὖλυτοὶ εἰσιν, ἐλευθεροὶ τὰς ψυχάς· ἀναφέρεται δὲ ἀπὸ τοῦ φαινομένου, ὅτι πρέπει τῇ φαινομένῃ μορφῇ ἐλευθεριότης. ὅσοις δὲ οἱ ὦμοι δύσλυτοι συνεσπασμένοι, ἀνελεύθεροι· ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειαν. οἷς τὰ περὶ τὰς κλεῖδας εὖλυτα, αἰσθητικοί· εὐλύτων γὰρ ὄντων τῶν περὶ τὰς κλεῖδας εὐκόλως τὴν κίνησιν τῶν αἰσθήσεων δέχονται. οἷς δὲ τὰ περὶ τὰς κλεῖδας συμπεφραγμένα ἐστίν, ἀναίσθητοι· δυσλύτων γὰρ ὄντων τῶν περὶ τὰς κλεῖδας ἐξαδυνατοῦσι τὴν κίνησιν παραδέχεσθαι τῶν αἰσθήσεων. ὅσοι τὸν τράχηλον παχὺν ἔχουσιν, εὖρωστοι τὰς ψυχάς· ἀναφέρεται ἐπὶ τὸ ἄρρεν. ὅσοι δὲ λεπτόν, ἀσθενεῖς· ἀναφέρεται ἐπὶ τὸ θῆλυ. οἷς τράχηλος παχὺς καὶ πλέως, θυμοειδεῖς· ἀναφέρεται ἐπὶ τοὺς θυμοειδεῖς ταύρους. οἷς δὲ εὐμεγέθης μὴ ἄγαν παχὺς, μεγαλόψυχοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἷς λεπτὸς μακρὸς, δειλοί· ἀναφέρεται ἐπὶ τοὺς ἐλάφους. οἷς δὲ βραχὺς ἄγαν, ἐπίβουλοι· ἀναφέρεται ἐπὶ τοὺς λύκους. οἷς τὰ χεῖλη λεπτά καὶ ἐπ' ἄκραις ταῖς συγγχειλίαις χαλαρά, ὡς ἐπὶ τοῦ ἄνω χεῖλους πρὸς τὸ κάτω ἐπιβεβλήσθαι τὸ πρὸς τὰς συγγχειλίας, μεγαλόψυχοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. ἴδοι δ' ἂν τις τοῦτο καὶ ἐπὶ τῶν μεγάλων καὶ εὖρώστων κυνῶν. οἷς τὰ χεῖλη λεπτά σκληρά, κατὰ τοὺς κυνόδοντας τὸ ἐπανεστηκός, οἱ οὕτως ἔχοντες εὐγενεῖς· ἀναφέρεται ἐπὶ τοὺς ὕς. οἱ δὲ τὰ χεῖλη ἔχοντες παχέα καὶ τὸ ἄνω τοῦ κάτω προκρεμώμενον μωροί· ἀναφέρεται ἐπὶ τοὺς ὄνους τε καὶ πιθήκους. ὅσοι δὲ τὸ ἄνω χεῖλος καὶ τὰ οὖλα προεστηκότα ἔχουσι, φιλολοῖδοροι· ἀναφέρεται ἐπὶ τοὺς κύνας. οἱ δὲ τὴν ῥῖνα ἄκραν παχεῖαν ἔχοντες ῥάθυμοι· ἀναφέρεται ἐπὶ τοὺς βοῦς. οἱ δὲ τὴν ῥῖνα ἀκρόθεν παχεῖαν ἔχοντες ἀναίσθητοι· ἀναφέρεται ἐπὶ τοὺς ὕς. οἱ τὴν ῥῖνα ἄκραν ὀξεῖαν ἔχοντες δυσόρητοι· ἀναφέρεται ἐπὶ τοὺς κύνας. οἱ δὲ τὴν ῥῖνα περιφερῆ ἔχοντες ἄκραν, ἀμβλεῖαν δέ, μεγαλόψυχοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἱ δὲ τὴν ῥῖνα ἄκραν λεπτὴν ἔχοντες ὀρνιθώδεις. οἱ ἐπίγρυπον ἀπὸ τοῦ μετώπου εὐθὺς ἀγομένην ἀναιδεῖς· ἀναφέρεται ἐπὶ τοὺς κόρακας. οἱ δὲ γρυπὴν ἔχοντες καὶ τοῦ μετώπου διηρθρωμένην μεγαλόψυχοι· ἀναφέρεται ἐπὶ τοὺς ἀετούς. οἱ δὲ τὴν ῥῖνα ἔγκοilon ἔχοντες τὰ πρὸ τοῦ μετώπου περιφερῆ, τὴν δὲ περιφέρειαν [811b] ἄνω ἀνεστηκυῖαν, λάγνοι· ἀναφέρεται ἐπὶ τοὺς ἀλεκτρυόνας. οἱ δὲ σιμὴν ἔχοντες λάγνοι· ἀναφέρεται ἐπὶ τοὺς ἐλάφους. οἷς δὲ οἱ μυκτῆρες ἀναπεπταμένοι, θυμώδεις· ἀναφέρεται ἐπὶ τὸ πάθος τὸ ἐν τῷ θυμῷ γινόμενον. οἱ τὸ πρόσωπον σαρκῶδες ἔχοντες ῥάθυμοι· ἀναφέρεται ἐπὶ τοὺς βοῦς. οἱ τὰ πρόσωπα ἰσχνὰ ἔχοντες ἐπιμελεῖς, οἱ δὲ σαρκώδη δειλοί· ἀναφέρεται ἐπὶ τοὺς ὄνους καὶ τὰς ἐλάφους. οἱ μικρὰ τὰ πρόσωπα ἔχοντες μικρόψυχοι·

ἀναφέρεται ἐπὶ αἴλουρον καὶ πίθηκον. οἷς τὰ πρόσωπα μεγάλα, νωθοί· ἀναφέρεται ἐπὶ τοὺς ὄνους καὶ βοῦς. ἐπεὶ δὲ οὔτε μικρὸν οὔτε μέγα δεῖ εἶναι, ἡ μέση ἕξις εἴη ἂν τούτων ἐπεικῆς. οἷς δὲ τὸ πρόσωπον φαίνεται μικροπρεπές, ἀνελεύθεροι· ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειαν. οἷς τὸ ἀπὸ τῶν ὀφθαλμῶν οἶον κύστιδες προκρέμανται, οἰνόφλυγες. ἀναφέρεται ἐπὶ τὸ πάθος· ἔστι γὰρ τοῖς σφόδρα ἐμπεπτωκόσι τὰ πρὸ τῶν ὀφθαλμῶν οἶον κύστιδες. ἐφεστήκασι, φίλυπνοι· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι τοῖς ἐξ ὕπνου ἀνεστηκόσιν ἐπικρέματα τὰ ἐπὶ τοῖς ὀφθαλμοῖς. οἱ τοὺς ὀφθαλμοὺς μικροὺς ἔχοντες μικρόψυχοι· ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειαν καὶ ἐπὶ πίθηκον. οἱ δὲ μεγάλῳφθαλμοι νωθοί· ἀναφέρεται ἐπὶ τοὺς βοῦς. τὸν ἄρα εὖ φύντα δεῖ μήτε μικροὺς μήτε μεγάλους ἔχειν τοὺς ὀφθαλμούς. οἱ δὲ κοίλους ἔχοντες κακοῦργοι· ἀναφέρεται ἐπὶ πίθηκον. ὅσοι ἐξόφθαλμοι, ἀβέλτεροι· ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειάν τε καὶ τοὺς ὄνους. ἐπεὶ δὲ οὔτε ἐξόφθαλμον οὔτε κοιλόφθαλμον δεῖ εἶναι, ἡ μέση ἕξις ἂν κρατοίη. ὅσοις ὀφθαλμοὶ μικρὸν ἐγκοιλότεροι, μεγάλῳψυχοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἷς δ' ἐπὶ πλεῖον, πραεῖς· ἀναφέρεται ἐπὶ τοὺς βοῦς. οἱ τὸ μέτωπον μικρὸν ἔχοντες ἀμαθεῖς· ἀναφέρεται ἐπὶ τοὺς ὕς. οἱ δὲ μέγα ἄγαν ἔχοντες νωθοί· ἀναφέρεται ἐπὶ τοὺς βοῦς. οἱ δὲ περιφερὲς ἔχοντες ἀναίσθητοι· ἀναφέρεται ἐπὶ τοὺς ὄνους. οἱ μακρότερον ἐπίπεδον ἔχοντες ἀναίσθητοι· ἀναφέρεται ἐπὶ τοὺς κύνας. οἱ δὲ τετράγωνον σύμμετρον τῷ μετώπῳ ἔχοντες μεγάλῳψυχοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἱ δὲ συννεφὲς ἔχοντες αὐθάδεις· ἀναφέρεται ἐπὶ ταῦρον καὶ λέοντα. οἱ δ' ἀτενὲς ἔχοντες κόλακες· ἀναφέρεται ἐπὶ τὸ γιγνόμενον πάθος. ἴδοι δ' ἂν τις ἐπὶ τῶν κυνῶν, ὅτι οἱ κύνες ἐπειδὴν θωπεύωσι, γαληνὲς τὸ μέτωπον ἔχουσιν. ἐπειδὴ οὖν ἢ τε [812a] συννεφὴς ἕξις αὐθάδειαν ἐμφαίνει ἢ τε γαληνὴ κολακείαν, ἡ μέση ἂν τούτων ἕξις εὐαρμόστως ἔχοι. οἱ σκυθρωπὰ μέτωπα ἔχοντες δυσάνιοι· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι οἱ ἀνιώμενοι σκυθρωποὶ εἰσιν. οἱ δὲ κατηφεῖς ὀδύρται· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι οἱ ὀδυρόμενοι κατηφεῖς. οἱ τὴν κεφαλὴν μεγάλην ἔχοντες αἰσθητικοί· ἀναφέρεται ἐπὶ τοὺς κύνας. οἱ δὲ μικρὰν ἀναίσθητοι· ἀναφέρεται ἐπὶ τοὺς ὄνους. οἱ τὰς κεφαλὰς φοξοὶ ἀναιδεῖς· ἀναφέρεται ἐπὶ τοὺς γαμψώνυχας. οἱ τὰ ὦτα μικρὰ ἔχοντες πιθηκώδεις, οἱ δὲ μεγάλα ὀνώδεις· ἴδοι δ' ἂν τις καὶ τῶν κυνῶν τοὺς ἀρίστους μέτρια ἔχοντας ὦτα.

Οἱ ἄγαν μέλανεσ δειλοί· ἀναφέρεται ἐπὶ τοὺς Αἰγυπτίους, Αἰθίοπας. οἱ δὲ λευκοὶ ἄγαν δειλοί· ἀναφέρεται ἐπὶ τὰς γυναῖκας. τὸ δὲ πρὸς ἀνδρείαν συντελοῦν χρῶμα μέσον δεῖ τούτων εἶναι. οἱ ξανθοὶ εὖψυχοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἱ πυρροὶ ἄγαν πανοῦργοι· ἀναφέρεται ἐπὶ τὰς ἀλώπεκας. οἱ δὲ ἔνωχροι καὶ τεταραγμένοι τὸ χρῶμα δειλοί· ἀναφέρεται ἐπὶ τὸ πάθος τὸ ἐκ τοῦ φόβου γιγνόμενον. οἱ δὲ μελίχλωροι ἀπεφυγμένοι εἰσιν· τὰ δὲ ψυχρὰ

δυσκίνητα· δυσκινήτων δὲ ὄντων τῶν κατὰ τὸ σῶμα εἶεν ἂν βραδεῖς. οἷς τὸ χρῶμα ἐρυθρόν, ὅξεῖς, ὅτι πάντα τὰ κατὰ τὸ σῶμα ὑπὸ κινήσεως ἐκθερμαινόμενα ἐρυθραίνεται. οἷς δὲ τὸ χρῶμα φλογοειδές, μανικοί, ὅτι τὰ κατὰ τὸ σῶμα σφόδρα ἐκθερμανθέντα φλογοειδῇ χροῖαν ἴσχει· οἱ δὲ ἄκρως θερμανθέντες μανικοὶ ἂν εἴησαν. οἷς δὲ περὶ τὰ στήθη ἐπιφλεγές ἐστὶ τὸ χρῶμα, δυσόργητοι· ἀναφέρεται ἐπὶ τὸ πάθος· τοῖς γὰρ ὀργιζομένοις ἐπιφλέγεται τὰ περὶ τὰ στήθη. οἷς τὰ περὶ τὸν τράχηλον καὶ τοὺς κροτάφους αἱ φλέβες κατατεταμέναι εἰσὶ, δυσόργητοι· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι τοῖς ὀργιζομένοις ταῦτα συμβαίνει. οἷς τὸ πρόσωπον ἐπιφοινίσσον ἐστίν, αἰσχυνητοὶ εἰσιν· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι τοῖς αἰσχυνομένοις ἐπιφοινίσσεται τὸ πρόσωπον. οἷς αἱ γνάθοι ἐπιφοινίσσουσιν, οἰνόφυλγες· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι τοῖς μεθούουσιν ἐπιφοινίσσουσιν αἱ γνάθοι. οἷς δὲ οἱ ὀφθαλμοὶ ἐπιφοινίσσουσιν, ἐκστατικοὶ ὑπὸ ὀργῆς· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι οἱ ὑπ' ὀργῆς ἐξεστηκότερες ἐκφοινίσσονται τοὺς ὀφθαλμούς. οἷς δὲ οἱ ὀφθαλμοὶ [812b] ἄγαν μέλανες, δειλοί· ἢ γὰρ ἄγαν μελαίνη χροῖα ἐφάνη δειλίαν σημαίνουσα. οἱ δὲ μὴ ἄγαν μέλανες ἀλλὰ κλίνοντες πρὸς τὸ ξανθὸν χρῶμα εὐψυχοί. οἷς δὲ οἱ ὀφθαλμοὶ γλαυκοὶ ἢ λευκοί, δειλοί· ἐφάνη γὰρ τὸ λευκὸν χρῶμα δειλίαν σημαῖνον. οἱ δὲ μὴ γλαυκοὶ ἀλλὰ χαροποὶ εὐψυχοί· ἀναφέρεται ἐπὶ λέοντα καὶ ἀετόν. οἷς δὲ οἰνώποϊ, μάργοι· ἀναφέρεται ἐπὶ τὰς αἴγας. οἷς δὲ πυρώδεις, ἀναιδεῖς· ἀναφέρεται ἐπὶ τοὺς κύνας. οἱ ὠχρόματοι ἐντεταραγμένους ἔχοντες τοὺς ὀφθαλμούς δειλοί· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι οἱ φοβηθέντες ἔνωχροι γίνονται χρώματι οὐχ ὁμαλῶ. οἱ δὲ τοὺς ὀφθαλμούς στιλπνοὺς ἔχοντες λάγνοι· ἀναφέρεται ἐπὶ τοὺς ἄλεκτρούνας καὶ κόρακας.

Οἱ δασείας ἔχοντες τὰς κνήμας λάγνοι· ἀναφέρεται ἐπὶ τοὺς τράγους. οἱ δὲ περὶ τὰ στήθη καὶ τὴν κοιλίαν ἄγαν δασέως ἔχοντες οὐδέποτε πρὸς τοῖς αὐτοῖς διατελοῦσιν· ἀναφέρεται ἐπὶ τοὺς ὄρνιθας, ὅτι ταῦτα τὰ στήθη καὶ τὴν κοιλίαν δασυτάτην ἔχουσιν. οἱ τὰ στήθη ψιλὰ ἄγαν ἔχοντες ἀναιδεῖς· ἀναφέρεται ἐπὶ τὰς γυναῖκας. ἐπειδὴ οὖν οὔτε ἄγαν δασέα δεῖ εἶναι οὔτε ψιλὰ, ἢ μέση ἕξις κρατίστη. οἱ τοὺς ὦμους δασεῖς ἔχοντες οὐδέποτε πρὸς τοῖς αὐτοῖς διατελοῦσιν· ἀναφέρεται ἐπὶ τοὺς ὄρνιθας. οἱ τὸν νῶτον δασὺν ἔχοντες ἄγαν ἀναιδεῖς· ἀναφέρεται ἐπὶ τὰ θηρία. οἱ δὲ τὸν αὐχένα ὀπισθεν δασὺν ἔχοντες ἐλευθέριοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἱ δὲ ἀκρογένειοι εὐψυχοί· ἀναφέρεται ἐπὶ τοὺς κύνας. οἱ δὲ συνόφρυες δυσάνιοι· ἀναφέρεται ἐπὶ τὴν τοῦ πάθους ὁμοιότητα. οἱ δὲ τὰς ὀφρῦς κατεσπασμένοι πρὸς τῆς ῥινός, ἀνεσπασμένοι δὲ πρὸς τὸν κρόταφον εὐήθεις· ἀναφέρεται ἐπὶ τοὺς σῦς. οἱ φριξὰς τὰς τρίχας ἔχοντες ἐπὶ τῆς κεφαλῆς δειλοί· ἀναφέρεται ἐπὶ τὸ πάθος, ὅτι καὶ οἱ ἔκφοβοι γιγνόμενοι φρίσσουσιν. οἱ τὰς τρίχας σφόδρα οὐλας

ἔχοντες δειλοί· ἀναφέρεται ἐπὶ τοὺς Αἰθίοπας. ἐπειδὴ οὖν αἱ τε φριξαὶ καὶ αἱ σφόδρα οὐλαὶ δειλίαν ἀναφέρουσιν, αἱ ἄκρουλοι ἂν εἶεν πρὸς εὐψυχίαν ἄγουσαι· ἀναφέρεται δὲ καὶ ἐπὶ τὸν λέοντα. οἱ τοῦ μετώπου τὸ πρὸς τῇ κεφαλῇ ἀναστεῖλον ἔχοντες ἐλευθέριοι· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἱ ἐπὶ τῆς κεφαλῆς προσπεφυκυίας ἔχοντες τὰς τρίχας ἐπὶ τοῦ μετώπου κατὰ τὴν ῥίνα ἀνελεύθεροι· ἀναφέρεται [813a] ἐπὶ τὴν ἐπιπρέπειαν, ὅτι δουλοπρεπὲς τὸ φαινόμενον.

Μακροβάμων καὶ βραδυβάμων εἷη ἂν νωθρεπιθέτης τελεστικός, ὅτι τὸ μακρὰ βαίνειν ἀνυστικόν, τὸ βραδέως δὲ μελλητικόν. βραχυβάμων βραδυβάμων νωθρεπιθέτης οὐ τελεστικός, ὅτι τὸ βραχέα βαίνειν καὶ βραδέως οὐκ ἀνυστικόν. μακροβάμων ταχυβάμων οὐκ ἐπιθετικός, τελεστικός, ὅτι τὸ μὲν τάχος τελεστικόν, ἡ δὲ μακρότης οὐκ ἀνυστικόν. βραχυβάμων ταχυβάμων ἐπιθετικός, οὐ τελεστικός. περὶ δὲ χειρὸς καὶ πήχεος καὶ βραχίονος φορᾶς, αἱ αὐταὶ ἀναφέρονται. οἱ δὲ τοῖς ὤμοις ἐπισαλεύοντες ὀρθοῖς ἐκτεταμένοις γαλεαγκῶνες· ἀναφέρεται ἐπὶ τοὺς ἵππους. οἱ τοῖς ὤμοις ἐπενσαλεύοντες ἐγκεκυφότες μεγαλόφρονες· ἀναφέρεται ἐπὶ τοὺς λέοντας. οἱ δὲ τοῖς ποσὶν ἐξεστραμμένοις πορευόμενοι καὶ ταῖς κνήμαις θηλείαις· ἀναφέρεται ἐπὶ τὰς γυναῖκας. οἱ δὲ τοῖς σώμασι περικλόμενοι καὶ ἐντριβόμενοι κόλακες· ἀναφέρεται ἐπὶ τὸ πάθος. οἱ ἐγκλινόμενοι εἰς τὰ δεξιὰ ἐν τῷ πορεύεσθαι κίμαιδοι· ἀναφέρεται ἐπὶ τὴν ἐπιπρέπειαν. οἱ εὐκινήτους τοὺς ὀφθαλμοὺς ἔχοντες ὀξεῖς, ἀρπαστικοί· ἀναφέρεται ἐπὶ τοὺς ἱέρακας. οἱ σκαρδαμύκται δειλοί, ὅτι ἐν τοῖς ὄμμασι πρῶτα τρέπονται. οἱ κατιλλαντιωρίαν τε, καὶ οἷς τὸ ἕτερον βλέφαρον ἐπιβέβηκε τοῖς ὀφθαλμοῖς, κατὰ μέσον τῆς ὀψεως ἐστηκυίας, καὶ οἱ ὑπὸ βλέφαρα τὰ ἄνω τὰς ὀψίας ἀνάγοντες, μαλακὸν τε βλέποντες, καὶ οἱ τὰ βλέφαρα ἐπιβεβληκότες, ὅλως τε πάντες οἱ μαλακὸν τε καὶ διακεχυμένον βλέποντες, ἀναφέρονται ἐπὶ τὴν ἐπιπρέπειαν καὶ τὰς γυναῖκας. οἱ τοὺς ὀφθαλμοὺς διὰ συχνοῦ χρόνου κινοῦντες, ἔχοντές τε βάμμα λευκώματος ἐπὶ τῷ ὀφθαλμῷ, ὥς προσεστηκότας, ἐννοητικοί· ἂν γὰρ πρὸς τινι ἐννοίᾳ σφόδρα γένηται ἡ ψυχὴ, ἴσταται καὶ ἡ ὄψις.

Οἱ μέγα φωνοῦντες βαρύτονον ὑβρισταί· ἀναφέρεται ἐπὶ τοὺς ὄνους. ὅσοι δὲ φωνοῦσιν ἀπὸ βαρέος ἀρξάμενοι, τελευτῶσι δὲ εἰς ὀξύ, δυσθυμικοί, ὀδύρται· ἀναφέρεται ἐπὶ τοὺς βοῦς καὶ ἐπὶ τὸ πρέπον τῇ φωνῇ. ὅσοι δὲ ταῖς φωναῖς ἄξειαις μαλακαῖς κεκλασμέναις διαλέγονται, κίμαιδοι· ἀναφέρεται [813b] ἐπὶ τὰς γυναῖκας καὶ ἐπὶ τὴν ἐπιπρέπειαν. ὅσοι βαρύτονον φωνοῦσι μέγα, μὴ πεπλεγμένον, ἀναφέρεται ἐπὶ τοὺς εὐρώστους κύνας καὶ ἐπὶ τὴν ἐπιπρέπειαν. ὅσοι μαλακὸν ἄτονον φωνοῦσι, πραεῖς· ἀναφέρεται ἐπὶ τὰς ὄϊς. ὅσοι δὲ φωνοῦσιν ὀξύ καὶ ἐγκεκραγός, μάργοι· ἀναφέρεται ἐπὶ τὰς αἴγας.

Οἱ μικροὶ ἄγαν ὀξεῖς· τῆς γὰρ τοῦ αἵματος φορᾶς μικρὸν τόπον κατεχούσης καὶ αἰ κινήσεις ταχὺ ἄγαν ἀφικνοῦνται ἐπὶ τὸ φρονοῦν. οἱ δὲ ἄγαν μεγάλοι βραδεῖς· τῆς γὰρ τοῦ αἵματος φορᾶς μέγαν τόπον κατεχούσης αἰ κινήσεις βραδέως ἀφικνοῦνται ἐπὶ τὸ φρονοῦν. ὅσοι τῶν μικρῶν ξηραῖς σαρκὶ κεκρημένοι εἰσὶν ἢ καὶ χρώμασιν, ἃ διὰ θερμότητα τοῖς σώμασιν ἐπιγίνονται, οὐδὲν ἀποτελοῦσιν· οὔσης γὰρ τῆς φορᾶς ἐν μικρῷ καὶ ταχείας διὰ τὸ πυρῶδες, οὐδέποτε κατὰ ταῦτόν ἐστι τὸ φρονεῖν, ἀλλὰ ἄλλοτ' ἐπ' ἄλλων, πρὶν τὸ ὑπερέχον περᾶναι. ὅσοι δὲ τῶν μεγάλων ὑγραῖς σαρκὶ κεκρημένοι, ἢ καὶ χρώμασιν ἃ διὰ ψυχρότητα ἐγγίνονται, οὐδὲν ἐπιτελοῦσιν· οὔσης γὰρ τῆς φορᾶς ἐν μεγάλῳ τόπῳ καὶ βραδείας διὰ τὴν ψυχρότητα, οὐ συνανύει ἀφικνουμένην ἐπὶ τὸ φρονοῦν. ὅσοι δὲ τῶν μικρῶν ὑγραῖς σαρκὶ κεκρημένοι εἰσὶ καὶ χρώμασι διὰ ψυχρότητα, γίνονται ἐπιτελεστικοί· οὔσης γὰρ τῆς κινήσεως ἐν μικρῷ, τὸ δυσκίνητον τῆς κράσεως συμμετρίαν παρέσχε τὸ πρῶτον ἐπιτελεῖν. ὅσοι δὲ τῶν μεγάλων ξηραῖς σαρκὶ κεκρημένοι εἰσὶ καὶ χρώμασι διὰ θερμότητα, γίνονται ἐπιτελεστικοὶ καὶ αἰσθητικοί· τὴν γὰρ τοῦ μεγέθους ὑπερβολὴν σαρκῶν τε καὶ χρώματος ἢ θερμότης ἡκέσατο, ὥστε σύμμετρον εἶναι πρὸς τὸ ἐπιτελεῖν. τὰ μὲν οὖν μεγέθεσιν ὑπερβάλλοντα τῶν σωμάτων ἢ σμικρότησιν ἐλλείποντα, ὡς τυχόντα ἐπιτελεστικά ἐστι καὶ ὡς ἀτελῆ, εἴρηται. ἡ δὲ τούτων μέση φύσις πρὸς τὰς αἰσθήσεις κρατίστη καὶ τελεστικωτάτη, οἷς ἂν ἐπιθῇται· αἰ γὰρ κινήσεις οὐ διὰ πολλοῦ οὔσαι ῥαδίως ἀφικνοῦνται πρὸς τὸν νοῦν· οὔσαί τε οὐ κατὰ μικρὸν ὑπερχωροῦσιν. ὥστε τὸν τελεώτατον πρὸς τὸ ἐπιτελεῖν τε ἃ ἂν προθῇται καὶ αἰσθάνεσθαι μέλλοντα μέτριον δεῖ εἶναι τὸ μέγεθος. οἱ ἀσύμμετροι πανοῦργοι· [814a] ἀναφέρεται ἐπὶ τὸ πάθος καὶ τὸ θῆλυ. εἰ γὰρ οἱ ἀσύμμετροι πανοῦργοι, οἱ σύμμετροι δίκαιοι ἂν εἴησαν καὶ ἀνδρεῖοι. τὴν δὲ τῆς συμμετρίας ἀναφορὰν πρὸς τὴν τῶν σωμάτων εὐαγωγίαν καὶ εὐφυῖαν ἀνοιστέον, ἀλλ' οὐ πρὸς τὴν τοῦ ἄρρενος ἰδέαν, ὡσπερ ἐν ἀρχῇ διηρέθη. καλῶς δ' ἔχει καὶ πάντα τὰ σημεῖα, ὅσα προεῖρηται, ἀναφέρειν ἐπὶ τὴν ἐπιπρέπειαν καὶ εἰς ἄρρεν καὶ θῆλυ· ταῦτα γὰρ τελεωτάτην διαίρεσιν διήρηται, καὶ ἐδείχθη ἄρρεν θήλεος δικαιότερον καὶ ἀνδρειότερον καὶ ὅλως εἰπεῖν ἄμεινον. ἐν ἀπάσῃ δὲ [814b] τῇ τῶν σημείων ἐκλογῇ ἕτερα ἐτέρων σημεῖα μᾶλλον δηλοῦσιν ἐναργῶς τὸ ὑποκείμενον. ἐναργέστερα δὲ τὰ ἐν ἐπικαιροτάτοις τόποις ἐγγινόμενα. ἐπικαιρότατος δὲ τόπος ὁ περὶ τὰ ὄμματα τε καὶ τὸ μέτωπον καὶ κεφαλὴν καὶ πρόσωπον, δεύτερος δὲ ὁ περὶ τὰ στήθη καὶ ὦμους, ἔπειτα περὶ τὰ σκέλη τε καὶ πόδας· τὰ δὲ περὶ τὴν κοιλίαν ἥκιστα. ὅλως δὲ εἰπεῖν οὗτοι οἱ τόποι ἐναργέστατα σημεῖα παρέχονται, ἐφ' ὧν καὶ φρονήσεως πλείστης ἐπιπρέπεια γίνεται.

## Περὶ Θαυμασιῶν Ακουσμάτων (830a) On Marvellous Things



## Heard



1 Ἐν τῇ Παιονίᾳ φασὶν ἐν τῷ ὄρει τῷ Ἡσαίνῳ καλουμένῳ, ὃ τὴν Παιονικὴν καὶ τὴν Μαιδικὴν ὀρίζει, εἶναι τι θηρίον τὸ καλούμενον βόλινθον, ὑπὸ δὲ τῶν Παιόνων μόναιπον. τοῦτον λέγουσι τὴν μὲν ὅλην φύσιν παραπλήσιον εἶναι βοῖ, διαφέρειν δὲ τῷ μεγέθει καὶ τῇ εὐρωστίᾳ, προσέτι δὲ καὶ τῇ χαίτῃ• ἔχει γὰρ ἀπὸ τοῦ αὐχένος, ὥσπερ ὁ ἵππος, κατατείνουσιν βαθεῖαν σφόδρα, καὶ ἀπὸ τῆς κορυφῆς ἕως τῶν ὀφθαλμῶν. τὰ δὲ κέρατα οὐχ ὥσπερ οἱ βόες, ἀλλὰ κατεστραμμένα, καὶ τὸ ὅξυ κάτω παρὰ τὰ ὠτα• χωρεῖν δὲ αὐτὰ ἡμιχόου πλεῖον ἐκάτερον αὐτῶν, καὶ μέλανα σφόδρα εἶναι, διαστίλβειν δὲ ὥσανεὶ λελεπισμένα. ὅταν δὲ ἐκδαρῇ τὸ δέρμα, κατέχειν τόπον ὀκτακλίνου. ἡνίκα δὲ πληγῇ, φεύγει, κἂν ἐξαδυνατοῦν μένει. ἔστι δὲ ἡδύκρεων. ἀμύνεται δὲ λακτίζον καὶ προσαφοδεῦον ὡς ἐπὶ τέτταρας ὀργυιάς• ῥαδίως δὲ χρῆται τούτῳ καὶ πολλάκις τῷ εἶδει, καὶ ἐπικαίει δ' ὥστ' ἀποψήχεσθαι τὰς τρίχας τῶν κυνῶν. τεταραγμένου μὲν οὖν τοῦτο ποιεῖν φασὶ τὸν ἄφοδον, ἀταράχου δὲ μὴ ἐπικαίειν. ὅταν δὲ τίκτωσι, πλείους γενόμενοι καὶ συναχθέντες ἅμα πάντες οἱ μέγιστοι τίκτουσι καὶ κύκλῳ προσαφοδεύουσι• πολὺ γάρ τι τούτου τοῦ περιττώματος τὸ θηρίον προίεται.

p240 2 βΤοὺς ἐν Ἀραβίᾳ φασὶ καμήλους μὴ ἀναβαίνειν ἐπὶ τὰς μητέρας, ἀλλὰ κἂν βιάσηται τις, οὐ θέλουσι. καὶ γὰρ ποτε λέγεται, ἐπεὶ οὐκ ἦν ὀχεῖον, τὸν ἐπιμελητὴν καλύψαντα ἐφεῖναι τὸν πῶλον. ὁ δὲ τὸ ὀχεύειν<sup>1</sup> τότε μὲν, ὡς ἔοικε, συνετέλεσε, μικρῷ δ' ὕστερον δάκνων τὸν καμηλίτην ἀπέκτεινεν.

3 Τοὺς κόκκυγας φασὶ τοὺς ἐν Ἑλίκῃ, ὅταν μέλλωσι τίκτειν, μὴ ποιεῖν νεοττιάν, ἀλλ' ἐν ταῖς τῶν φαττῶν ἢ ταῖς τῶν τρυγόνων ἐντίκτειν, καὶ μὴτ' ἐπωάζειν μὴτ' ἐκκολάπτειν μήτε τρέφειν αὐτούς• ἀλλ' ὅταν γεννηθῇ ὁ νεοττός καὶ ἐκτραφῇ, μέθ' ὧν ἂν οὗτος συνῇ, τούτους ἐκ τῆς νεοττιᾶς ἐκβάλλειν. γίγνεται δ', ὡς ἔοικε, μέγας καὶ καλός, ὥστε ῥαδίως κατακρατεῖν τῶν λοιπῶν. τούτῳ δὲ χαίρειν φασὶ καὶ τὰς φάττας οὕτως ὥστε καὶ αὐτὰς συνεκβάλλειν ἐκείνῳ τοὺς ἰδίους νεοττούς.

4 Αἱ ἐν Κρήτῃ αἶγες ὅταν τοξευθῶσι, ζητοῦσιν, ὡς ἔοικε, τὸ δίκταμον τὸ ἐκεῖ φυόμενον. ὅταν γὰρ φάγωσιν, εὐθὺς ἐκβάλλουσι τὰ τοξεύματα.

5 Φασὶ τινὰς ἐν Ἀχαΐᾳ τῶν ἐλάφων, ὅταν ἀποβάλωσι τὰ κέρατα, εἰς τοιούτους τόπους ἔρχεσθαι ὥστε μὴ ῥαδίως εὐρεθῆναι. τοῦτο δὲ ποιεῖν διὰ τὸ

μὴ ἔχειν ὧ ἄμυνοῦνται, 831α καὶ διὰ τὸ πονεῖν τοὺς τόπους ὅθεν τὰ κέρατα ἀπέβαλον. πολλαῖς δὲ καὶ κισσὸν ἐπιπεφυκότα ἐν τῷ τῶν κεράτων τόπῳ ὀρᾶσθαι.

6 Ἐν Ἀρμενίᾳ φάρμακόν τί φασὶ φύεσθαι ὃ καλεῖται παρδάλειον. τούτῳ οὖν, ὅταν ὀφθῇ πάρδαλις, κρίσαντες τὸ ἱερεῖον ἀφιᾶσιν. ἡ δὲ ὅταν ἄψηται αὐτοῦ, ζητεῖ, ὡς ἔοικε, τὴν τοῦ ἀνθρώπου κόπρον. διὸ καὶ οἱ κυνηγοὶ εἰς ἀγγεῖον αὐτὴν p242ἐμβαλόντες ἔκ τινος δένδρου κρεμῶσιν, ἵνα προσαλλομένη καὶ ὑπέρκοτος γενομένη ὑπ' αὐτοῦ παραλυθῇ καὶ ὑποχείριος γένηται.

7 Ἐν Αἰγύπτῳ δὲ τοὺς τροχίλους φασὶν εἰσπετομένους εἰς τὰ στόματα τῶν κροκοδείλων καθαίρειν αὐτῶν τοὺς ὀδόντας, τὰ σαρκία τὰ ἐνεχόμενα τοῖς ρύγχεσιν ἐξέλκοντας• τοὺς δ' ἥδεσθαι καὶ μηδὲν βλάπτειν αὐτούς.

8 Τοὺς ἐν Βυζαντίῳ φασὶν ἐχίνους αἰσθάνεσθαι ὅτε βόρεια καὶ νότια πνεῖ πνεύματα, καὶ μεταβάλλειν εὐθὺς τὰς ὁπὰς, καὶ ὅταν μὲν ἦ νότια, ἐκ τοῦ ἐδάφους τὰς ὁπὰς ποιεῖσθαι, ὅταν δὲ βόρεια, ἐκ τῶν τοίχων.

9 Αἱ ἐν Κεφαλληνίᾳ αἴγες οὐ πίνουσιν, ὡς ἔοικεν, ὥσπερ καὶ τᾶλλα τετράποδα, καθ' ἡμέραν δὲ πρὸς τὸ πέλαγος ἀντία τὰ πρόσωπα ποιήσασαι χάσκουσιν εἰσδεχόμεναι τὰ πνεύματα.

10 Φασὶν ἐν Συρίᾳ τῶν ἀγρίων ὄνων ἓνα ἀφηγεῖσθαι τῆς ἀγέλης, ἐπειδὴν δέ τις νεώτερος ὢν τῶν πῶλων ἐπὶ τινὰ θήλειαν ἀναβῇ, τὸν ἀφηγούμενον θυμοῦσθαι, καὶ διώκειν ἕως τούτου ἕως ἂν καταλάβῃ τὸν πῶλον, καὶ ὑποκύψας ἐπὶ τὰ ὀπίσθια σκέλη τῶν στόματι ἀποσπάσῃ τὰ αἰδοῖα.

11 Τὰς χελώνας λέγουσιν, ὅταν ἔχεως φάγωσιν, ἐπεσθίειν τὴν ὀρίγανον, ἐὰν δὲ μὴ θᾶπτον εὖρη, ἀποθνήσκειν. πολλοὺς δ' ἀποπειράζοντας τῶν ἀγραυλούντων εἰ τοῦτ' ἀληθές ἐστιν, ὅταν ἴδωσιν αὐτὴν τοῦτο πράττουσαν, ἐκτίλλειν τὴν ὀρίγανον• τοῦτο δὲ ὅταν ποιήσωσι, μετὰ μικρὸν αὐτὴν ὀρᾶσθαι ἀποθνήσκουσιν.

12 Ὡς τῆς ἱκτιδος λέγεται αἰδοῖον εἶναι οὐχ ὅμοιον τῇ φύσει τῶν λοιπῶν ζώων, ἀλλὰ στερεὸν p244διὰ παντὸς οἶον ὅστοῦν, ὅπως ἂν ποτε διακειμένη τύχῃ. φασὶ δὲ στραγγουρίας αὐτὸ φάρμακον εἶναι ἐν τοῖς ἀρίστοις, καὶ δίδοσθαι ἐπιζυόμενον.

13 Τὸν δρυοκολάπτην φασὶ τὸ ὄρνεον ἐπὶ τῶν δένδρων βαδίζειν ὥσπερ τοὺς ἀσκαλαβώτας, καὶ ὑπτιον καὶ ἐπὶ τὴν γαστέρα. νέμεσθαι δὲ λέγεται καὶ τοὺς

ἐκ τῶν δένδρων σκώληκας, καὶ οὕτω σφόδρα κατὰ βάθους ὀρύττειν τὰ δένδρα ζητοῦντα τοὺς σκώληκας ὥστε καὶ καταβάλλειν αὐτά.

14 Φασὶ τοὺς πελεκᾶνας τὰς ἐν τοῖς ποταμοῖς γινομένας κόγχας ὀρύττοντας καταπίνειν, ἔπειτα ὅταν πλήθος εἰσφρήσωσιν αὐτῶν, ἐξεμεῖν, εἴθ' οὕτως τὰ μὲν κρέα ἐσθίειν τῶν κόγχων, τῶν δ' ὀστράκων μὴ ἄπτεσθαι.

15 Ἐν Κυλλήνῃ φασὶ τῆς Ἀρκαδίας τοὺς κοσσύφους λευκοὺς γίνεσθαι, ἄλλοθι δ' οὐδαμῇ, καὶ φωνᾶς ποικίλας προῖεσθαι, ἐκπορεύεσθαι τε πρὸς τὴν σελήνην. τὴν δ' ἡμέραν εἴ τις ἐπιχειροίη, σφόδρα δυσθηράτους εἶναι.

16 Λέγεται δ' ὑπὸ τινων μέλι τὸ καλούμενον ἄνθινον περὶ Μῆλον καὶ Κνίδον γίνεσθαι εὐῶδες μὲν τῇ ὁσμῇ, ὀλιγοχρόνιον δέ, ἐν τούτῳ δὲ καὶ τὴν ἐριθάκην γίνεσθαι.

17 Περί Καππαδοκίαν ἔν τισι τόποις ἄνευ κηρίου φασὶν ἐργάζεσθαι τὸ μέλι, γίνεσθαι δὲ τὸ πάχος ὅμοιον ἐλαίῳ.

18 Ἐν Τραπεζοῦντι τῇ ἐν τῷ Πόντῳ γίνεται τὸ ἀπὸ τῆς πύξου μέλι βαρύοσμον• καὶ φασὶ τοῦτο τοὺς μὲν ὑγιαίνοντας ἐξιστάναι, τοὺς δ' ἐπιλήπτους καὶ τελέως ἀπαλλάττειν.

19 Φασὶ δὲ καὶ ἐν Λυδία ἀπὸ τῶν δένδρων τὸ μέλι συλλέγεσθαι πολύ, καὶ ποιεῖν ἐξ αὐτοῦ τοὺς ῥ246ἐνοικοῦντας ἄνευ κηροῦ τροχίσκους, καὶ ἀποτέμνοντας χρῆσθαι διὰ τρίψεως σφοδροτέρας. γίνεται μὲν οὖν καὶ ἐν Θράκῃ, οὐχ οὕτω δὲ στερεόν, ἀλλ' ὥσανεὶ ἀμμῶδες. ἅπαν δὲ μέλι πηγνύμενον τὸν ἴσον ἔχειν ὄγκον φασὶν, οὐχ ὥσπερ τὸ ὕδωρ καὶ τᾶλλα ὑγρά.

20 832a Ἡ Χαλκιδικὴ πόα καὶ τὰ ἀμύγδαλα χρησιμώτατα πρὸς τὸ μέλι ποιεῖν• πλεῖστον γὰρ γόνον φασὶν ἐξ αὐτῶν γίνεσθαι.

21 Τὰς μελίττας λέγουσιν ὑπὸ μύρου καροῦσθαι καὶ οὐκ ἀνέχεσθαι τὴν ὁσμὴν• ἔνιοι δὲ λέγουσι μάλιστα τοὺς μεμυρισμένους τύπτειν.

22 Ἐν Ἰλλυριοῖς φασὶ τοὺς Ταυλαντίους καλουμένους ἐκ τοῦ μέλιτος ποιεῖν οἶνον. ὅταν δὲ τὰ κηρία ἐκθλίψωσιν, ὕδωρ ἐπιχέοντες ἔψουσιν ἐν λέβητι ἕως ἂν ἐκλίπη τὸ ἥμισυ, ἔπειτα εἰς κεράμια ἐκχέαντες [καὶ ἡμίσεα ποιήσαντες] τιθέασιν εἰς σανίδας• ἐν ταύταις δὲ φασὶ ζεῖν πολὺν χρόνον, καὶ γίνεσθαι οἶνῶδες καὶ ἄλλως ἡδὺ καὶ εὖτονον. ἤδη δὲ τισι καὶ τῶν ἐν Ἑλλάδι συμβεβηκέναι λέγουσι τοῦτο, ὥστε μηδὲν διαφέρειν οἶνου παλαιοῦ• καὶ

ζητοῦντας ὕστερον τὴν κρᾶσιν μὴ δύνασθαι εὐρεῖν.

23 Περὶ Θετταλίαν μνημονεύουσιν ὄφεις ζωογονηθῆναι τοσούτους ὥστε, εἰ μὴ ὑπὸ τῶν πελαργῶν ἀνηροῦντο, ἐκχωρῆσαι ἂν αὐτούς. διὸ δὴ καὶ τιμῶσι τοὺς πελαργούς, καὶ κτενεῖν οὐ νόμος• καὶ ἐάν τις κτείνῃ, ἔνοχος τοῖς αὐτοῖς γίνεται οἷσπερ καὶ ὁ ἀνδροφόνος.

24 Ὡσαύτως καὶ ἐν Λακεδαίμονι κατὰ τινες χρόνους μνημονεύεται γενέσθαι τοσοῦτον πλῆθος ὄφεων ὥστε διὰ σπανοσιτίαν καὶ τροφῇ τοὺς p248Λάκωνας χρῆσθαι αὐτοῖς• ὅθεν καὶ τὴν Πυθίαν φασὶ προσαγορεῦσαι αὐτοὺς ὀφιοδείρους.

25 Ἐν Κύπρῳ τῇ νήσῳ λέγεται τοὺς μῦς τὸν σίδηρον ἐσθίειν.

26 Φασὶ δὲ καὶ τοὺς Χάλυβας ἐν τινι ὑπερκειμένῳ αὐτοῖς νησιδίῳ τὸ χρυσίον συμφορεῖσθαι παρὰ πλειόνων. διὸ δὴ καὶ τοὺς ἐν τοῖς μετάλλοις ἀνασχίζουσιν, ὡς ἔοικεν.

27 Λέγεται δὲ ἐκ Σούσων εἰς Μηδίαν ἰοῦσιν ἐν τῷ δευτέρῳ σταθμῷ σκορπίων ἄπλετόν τι πλῆθος γίνεσθαι. διὸ καὶ ὁ βασιλεὺς ὁ Περσῶν, ὅτε διοδεύοι, τρεῖς ἡμέρας ἔμενε, πᾶσι τοῖς αὐτοῦ συντάσσεων ἐκθηρεύειν• τῷ δὲ πλείστους θηρεύσαντι ἄθλον ἐδίδου.

28 Ἐν Κυρήνῃ δέ φασιν οὐχ ἐν εἶναι μύων γένος, ἀλλὰ πλείῳ καὶ διάφορα καὶ ταῖς μορφαῖς καὶ ταῖς χρώαις• ἐνίους γὰρ πλατυπροσώπους, ὥσπερ αἱ γαλαῖ, γίνεσθαι, τινὰς δὲ ἐχινώδεις, οὓς καλοῦσιν ἐχίνας.

29 Περὶ Κιλικίαν δέ φασιν εἶναι ὕδατος συστρεμμάτιον, εἰς ὃ τὰ πεπνιγμένα τῶν ὀρνέων καὶ τῶν λοιπῶν ζώων ὅταν ἀποβαφῇ, πάλιν ἀναβιοῖ.

30 Ἐν δὲ Σκύθαις τοῖς καλουμένοις Γελωνοῖς φασὶ θηρίον τι γίνεσθαι, σπάνιον μὲν ὑπερβολῇ, ὃ ὀνομάζεται τάρανδος• λέγεται δὲ τοῦτο μεταβάλλειν τὰς χρώας τῆς τριχὸς καθ' ὃν ἂν καὶ τόπον ᾗ. διὰ δὲ τοῦτο εἶναι δυσθήρατον [καὶ διὰ τὴν μεταβολήν] καὶ γὰρ δένδρεσι καὶ τόποις, καὶ ὅλως ἐν οἷς ἂν ᾗ, τοιοῦτον τῇ χροίᾳ γίνεσθαι. θαυμασιώτατον δὲ τὸ τὴν τρίχα μεταβάλλειν• τὰ γὰρ λοιπὰ τὸν χρῶτα, οἷον ὃ τε χαμαιλέον καὶ ὁ πολύπους. p250τὸ δὲ μέγεθος ὡσανεὶ βοῦς. τοῦ δὲ προσώπου τὸν τύπον ὅμοιον ἔχει ἐλάφῳ.

31 Λέγεται δὲ τινα ἐν Ἀβύδῳ παρακόψαντα τῇ διανοίᾳ καὶ εἰς τὸ θέατρον ἐρχόμενον ἐπὶ πολλὰς ἡμέρας θεωρεῖν, ὡς ὑποκρινομένων τινῶν, καὶ

ἐπισημαίνεσθαι• καὶ ὥς κατέστη τῆς παρακοπῆς, ἔφησεν ἐκεῖνον αὐτῷ τὸν χρόνον ἥδιστα βεβιωῖσθαι.

32 Καὶ ἐν Τάραντι δέ φασιν οἶνοπώλην τινὰ τὴν μὲν νύκτα μαίνεσθαι, τὴν δ' ἡμέραν οἶνοπωλεῖν. καὶ γὰρ τὸ κλειδίον τοῦ οἰκήματος πρὸς τῷ ζωνίῳ διεφύλαττε, πολλῶν δ' ἐπιχειρούντων παρελῆσθαι καὶ λαβεῖν οὐδέποτε ἀπώλεσεν.

33 Ἐν Τήνῳ τῇ νήσῳ φασὶν εἶναι φιάλιον σύγκραμα ἔχον, ἐξ οὗ πῦρ ἀνάπτουσι πάνυ ῥαδίως. καὶ ἐν Βιθυνίᾳ δὲ τῆς Θράκης ἐν τοῖς μετάλλοις γίνεται ὁ καλούμενος σπίνος, ἐξ οὗ φασὶ πῦρ ἀνάπτεσθαι.

34 Ἐν δὲ Λιπάρᾳ τῇ νήσῳ λέγουσιν εἶναι τινα εἰσπνοήν, εἰς ἣν ἐὰν κρύψωσι χύτραν, ἐμβαλόντες ὃ ἂν ἐθέλωσιν ἔψουσιν.

35 833a Ἔστι δὲ καὶ ἐν Μηδίᾳ καὶ ἐν Ψιττακηνῇ τῆς Περσίδος πυρὰ καίόμενα, τὸ μὲν ἐν Μηδίᾳ ὀλίγον, τὸ δ' ἐν Ψιττακηνῇ πολὺ καὶ καθαρὸν τῇ φλογί• διὸ καὶ μαγειρεῖα πρὸς αὐτῷ κατεσκεύασεν ὁ Περσῶν βασιλεὺς. ἄμφω δ' ἐν ὀμαλοῖς τόποις καὶ οὐκ ἐν ὑψηλοῖς. ταῦτα δὲ καὶ νύκτωρ καὶ μέθ' ἡμέραν φανερά, τὰ δὲ περὶ Παμφυλίαν νύκτωρ μόνον.

36 Φασὶ δὲ καὶ περὶ Ἀιτανίαν, πρὸς τοῖς ὀρίοις τῆς Ἀπολλωνιάτιδος, εἶναι τινα πέτραν ἐξ ἧς τὸ μὲν ἀνιὸν πῦρ οὐ φανερόν ἐστιν, ἐπειδὰν δὲ ἔλαιον ἐπιχυθῇ ἐπ' αὐτήν, ἐκφλογοῦται.

p252 37 Λέγεται δὲ καὶ τὰ ἔξω στηλῶν Ἡρακλείων καίεσθαι, τὰ μὲν διὰ παντός, τὰ δὲ νύκτωρ μόνον, ὥς ὁ Ἄννωνος περίπλους ἱστορεῖ. καὶ τὸ ἐν Λιπάρᾳ δὲ φανερόν καὶ φλογῶδες, οὐ μὴν ἡμέρας, ἀλλὰ νύκτωρ μόνον. εἶναι δὲ καὶ ἐν Πιθηκούσαις φασὶ πυρῶδες μὲν καὶ θερμὸν ἐκτόπως, οὐ μὴν καίόμενον.

38 Τὸ δ' ἐν τῇ Λιπάρᾳ ποτὲ καὶ ἐκλιπεῖν φησὶ Ξενοφάνης ἐπ' ἔτη ἑκκαίδεκα, τῷ δὲ ἑβδόμῳ ἐπανελθεῖν. τὸν δ' ἐν τῇ Αἵτνῃ ῥύακα οὔτε φλογώδη φασὶν οὔτε συνεχῇ, ἀλλὰ διὰ πολλῶν ἐνῶν γίνεσθαι.

39 Λέγεται δὲ καὶ περὶ Λυδίαν ἀναζέσαι πῦρ πάμπληθες, καὶ καίεσθαι ἐφ' ἡμέρας ἑπτά.

40 Θαυμαστὸν δὲ τὸ ἐν Σικελίᾳ περὶ τὸν ῥύακα γινόμενον• τὸ γὰρ πλάτος ἐστὶ τὸ τῆς τοῦ πυρὸς ἀναζέσεως τεσσαράκοντα σταδίων, τὸ δὲ ὕψος δι' οὗ

φέρεται, τριῶν.

41 Φασὶ δὲ τὸν ἐν τῇ Θράκῃ λίθον τὸν καλούμενον σπίνον διακοπέντα καίεσθαι, καὶ συντεθέντα πρὸς ἑαυτόν, ὥσπερ τὴν σμαρίλην, οὕτως κάκεῖνον εἰς ἑαυτὸν τεθέντα καὶ ἐπιρραϊνόμενον ὕδατι καίεσθαι. τὸ δ' αὐτὸ ποιεῖν καὶ τὸν μαριέα.

42 Περὶ Φιλίππους τῆς Μακεδονίας εἶναι λέγουσι μέταλλα, ἐξ ὧν τὰ ἐκβαλλόμενα ἀποσύρματα αὐξάνεσθαι φασὶ καὶ φύειν χρυσίον, καὶ τοῦτ' εἶναι φανερόν.

43 ἡ Φασὶ δὲ καὶ ἐν Κύπρῳ περὶ τὸν καλούμενον Τυρρίαν χαλκὸν ὅμοιον γίνεσθαι. κατακόψαντες γάρ, ὡς ἔοικεν, εἰς μικρὰ σπείρουσιν αὐτόν• εἴθ' ὑδάτων ἐπιγενομένων αὐξάνεται καὶ ἐξανίησι καὶ οὕτως συνάγεται.

p254 44 Φασὶ δὲ καὶ ἐν Μήλῳ τῇ νήσῳ ἐν τοῖς ἐξορυσσομένοις τόποις τῆς γῆς πάλιν ἀναπληρώματα γίνεσθαι.

45 Περὶ Παιονίαν λέγουσιν, ὅταν συνεχεῖς ὄμβροι γένωνται, εὐρίσκεσθαι περιτηκομένης τῆς γῆς χρυσὸν τὸν καλούμενον ἄπυρον. λέγουσι δ' ἐν τῇ Παιονίᾳ οὕτω χρυσίζειν τὴν γῆν ὥστε πολλοὺς εὐρηκεῖν καὶ ὑπὲρ μνᾶν χρυσοῦ ὀλκήν. τῷ δὲ βασιλεῖ τινὰ φασιν εὐρόντα ἀνενεγκεῖν δύο βώλους, τὸν μὲν τρεῖς μνᾶς ἄγοντα, τὸν δὲ πέντε• οὓς φασιν ἐπὶ τῆς τραπέζης αὐτοῦ παρακεῖσθαι, καὶ ἐπ' ἐκείνων πρῶτον, εἴ τι ἐσθίει, ἀπάρχεσθαι.

46 Φασὶ δὲ καὶ ἐν Βάκτροις τὸν Ὠξὸν ποταμὸν καταφέρειν βωλία χρυσοῦ πλήθει πολλά, καὶ ἐν Ἰβηρίᾳ δὲ τὸν καλούμενον Θεόδωρον ποταμὸν ἐκβράσσειν τε πολὺ περὶ τὰ χεῖλη χρυσίον, ὁμοίως δὲ καὶ καταφέρειν.

47 Λέγουσι δὲ καὶ ἐν Πιερίᾳ τῆς Μακεδονίας ἄσημόν τι χρυσίον κατορυγμένον ὑπὸ τῶν ἀρχαίων βασιλέων, χασμάτων τεττάρων ὄντων, ἐξ ἑνὸς αὐτῶν ἀναφῦναι χρυσίον τὸ μέγεθος σπιθαμιαῖον.

48 Λέγεται δὲ ἰδιαιτάτην εἶναι γένεσιν σιδήρου τοῦ Χαλυβικοῦ καὶ τοῦ Ἀμισηνοῦ. συμφύεται γάρ, ὡς γε λέγουσιν, ἐκ τῆς ἄμμου τῆς καταφερομένης ἐκ τῶν ποταμῶν. ταύτην δ' οἱ μὲν ἀπλῶς φασὶ πλύναντας καμινεύειν, οἱ δὲ τὴν ὑπόστασιν τὴν γενομένην ἐκ τῆς πλύσεως πολλάκις πλυθεῖσαν συγκαίειν, παρεμβάλλειν δὲ τὸν πυρίμαχον καλούμενον λίθον• εἶναι δ' ἐν τῇ χώρᾳ πολύν. οὗτος δ' ὁ σίδηρος πολὺ τῶν ἄλλων γίνεται καλλίων. εἰ δὲ μὴ ἐν μιᾷ καμίνῳ ἐκαίετο, οὐδὲν ἔν, ὡς ἔοικε, p256διέφερε τάργυριον. μόνον δὲ φασιν αὐτὸν

ἀνίωτον εἶναι, οὐ πολὺν δὲ γίνεσθαι.

49 834a Φασὶ δὲ καὶ ἐν Ἰνδοῖς τὸν χαλκὸν οὕτως εἶναι λαμπρὸν καὶ καθαρὸν καὶ ἀνίωτον, ὥστε μὴ διαγινώσκεσθαι τῇ χροᾷ πρὸς τὸν χρυσόν, ἀλλ' ἐν τοῖς Δαρείου ποτηρίοις βατιακᾶς εἶναι τινας καὶ πλείους, ἅς εἰ μὴ τῇ ὁσμῇ, ἄλλως οὐκ ἦν διαγινῶναι πότερόν εἰσι χαλκαῖ ἢ χρυσαῖ.

50 Τὸν κασσίτερον τὸν Κελτικὸν τήκεσθαι φασὶ πολὺ τάχιον μολύβδου. σημεῖον δὲ τῆς εὐτηξίας, ὅτι τήκεσθαι δοκεῖ καὶ ἐν τῷ ὕδατι• χρώζει γοῦν, ὡς ἔοικε, ταχύ. τήκεται δὲ καὶ ἐν τοῖς ψύχεσιν, ὅταν γένηται πάγη, ἐγκατακλειομένου ἐντός, ὡς φασί, καὶ συνωθουμένου τοῦ θερμοῦ τοῦ ἐνυπάρχοντος αὐτῷ διὰ τὴν ἀσθένειαν.

51 Ἐν τῷ Πανθείῳ ἐστὶν ἐλαία, καλεῖται δὲ καλλιστέφανος• ταύτης πάντα τὰ φύλλα ταῖς λοιπαῖς ἐλαίαις ἐναντία πέφυκεν• ἔξω γὰρ ἀλλ' οὐκ ἐντὸς ἔχει τὰ χλωρά. ἀφίησί τε τοὺς πόρθους ὥσπερ ἡ μύρτος εἰς τοὺς στεφάνους συμμέτρως. ἀπὸ ταύτης φυτὸν λαβὼν ὁ Ἡρακλῆς ἐφύτευσεν Ὀλυμπίασιν, ἀφ' ἧς οἱ στέφανοι τοῖς ἀθληταῖς δίδονται. ἔστι δὲ αὕτη παρὰ τὸν Ἴλισσὸν ποταμόν, σταδίους ἐξήκοντα τοῦ ποταμοῦ ἀπέχουσα• περιωκοδόμηται δέ, καὶ ζημία μεγάλη τῷ θιγόντι αὐτῆς ἐστίν. ἀπὸ ταύτης δὲ τὸ φυτὸν λαβόντες ἐφύτευσαν Ἡεῖοι ἐν Ὀλυμπίᾳ, καὶ τοὺς στεφάνους ἀπ' αὐτῆς ἔδωκαν.

52 Ἐν τοῖς περὶ Λυδῖαν μετάλλοις τοῖς περὶ Πέργαμον, ἃ δὴ καὶ Κροῖσος εἰργάσατο, πολέμου τινὸς γενομένου κατέφυγον οἱ ἐργαζόμενοι ἐπ' αὐτά, τοῦ δὲ στομίου ἐποικοδομηθέντος ἀπεπνίγησαν• p258 καὶ ὕστερον χρόνῳ πολλῷ τῶν μετάλλων ἀνακαθαρθέντων εὐρέθη οἷς ἐχρῶντο ἀγγείοις πρὸς τὰς ὑπὸ χεῖρα χρείας ἀπολελιθωμένα, οἷον ἀμφορεῖς καὶ τὰ τοιουτότροπα. ταῦτα δὴ πεπληρωμένα οὐ τινὸς ἔτυχον ὑγροῦ ἐλελίθωτο, καὶ προσέτι τὰ ὅστ' αὐτῶν ἀνθρώπων.

53 Ἐν τῇ Ἀσκανίᾳ λίμνῃ οὕτω νιτρῶδές ἐστι τὸ ὕδωρ ὥστε τὰ ἱμάτια οὐδενὸς ἑτέρου ρύμματος προσδεῖσθαι• κἂν πλείῳ χρόνον ἐν τῷ ὕδατι ἑάσῃ τις, διαπίπτει.

54 Περὶ τὴν Ἀσκανίαν λίμνην Πυθόπολις ἐστὶ κώμη ἀπέχουσα Κίου ὡς σταδίους ἑκατὸν εἴκοσι, ἐν ἣ τοῦ χειμῶνος ἀναξηραίνεται πάντα τὰ φρέατα ὥστε μὴ ἐνδέχεσθαι βάψαι τὸ ἀγγεῖον, βτοῦ δὲ θέρους πληροῦται ἕως τοῦ στόματος.

55 Ὁ πορθμὸς ὁ μεταξὺ Σικελίας καὶ Ἰταλίας αὖξεται καὶ φθίνει ἅμα τῷ σεληνίῳ.

56 Καὶ διότι ἐπὶ τῆς ὁδοῦ τῆς εἰς Συρακούσας κρήνη ἐστὶν ἐν λειμῶνι οὔτε μεγάλη οὔτε ὕδωρ ἔχουσα πολὺ• συναπαντήσαντος δὲ εἰς τὸν τόπον ὄχλου πολλοῦ παρέσχεν ὕδωρ ἄφθονον.

57 Ἔστι δὲ καὶ κρήνη τις ἐν Παλικοῖς τῆς Σικελίας, ὡς δεκάκλινος• αὕτη δ' ἀναρρίπτει ὕδωρ εἰς ὕψος ἕξ πήχεις, ὥστε ὑπὸ τῶν ἰδόντων νομίζεσθαι κατακλυσθήσεσθαι τὸ πεδῖον• καὶ πάλιν εἰς ταῦτ' ἀποκαθίσταται. ἔστι δὲ καὶ ὄρκος, ὃς ἅγιος αὐτόθι δοκεῖ εἶναι• ὅσα γὰρ ὄμνυσί τις, γράψας εἰς πινακίδιον ἐμβάλλει εἰς τὸ ὕδωρ. ἐὰν μὲν οὖν εὐορκῇ, ἐπιπολάζει τὸ πινακίδιον• ἐὰν δὲ μὴ εὐορκῇ, τὸ μὲν πινακίδιον βαρὺ γενόμενον ἀφανίζεσθαι φασί, τὸν δ' ἄνθρωπον πίμπρασθαι. διὸ δὴ λαμβάνειν πρὸς τὸν ἱερέα παρ' αὐτοῦ ἐγγύας ὑπὲρ τοῦ καθαίρειν τινὰ τὸ ἱερόν.

58 Δημόνησος ἡ Καλχηδονίων<sup>2</sup> νῆσος ἀπὸ Δημονήσου τοῦ πρώτου ἐργασαμένου τὴν ἐπωνυμίαν εἴληφεν• ἔχει δ' ὁ τόπος κυανοῦ τὸ μέταλλον καὶ χρυσοκόλλης. ταύτης δ' ἡ καλλίστη πρὸς χρυσίον εὐρίσκει τιμὴν• καὶ γὰρ φάρμακον ὀφθαλμῶν ἐστίν. ἔστι δὲ αὐτόθι χαλκὸς κολυμβητῆς ἐν δυοῖν ὀργυιαῖς τῆς θαλάσσης• ὅθεν ὁ ἐν Σικυῶνι ἐστὶν ἀνδριάς ἐν τῷ ἀρχαίῳ νεῷ τοῦ Ἀπόλλωνος καὶ ἐν Φενεῷ οἱ ὀρείχαλκοι καλούμενοι. ἐπιγέγραπται δ' αὐτοῖς “Ἡρακλῆς Ἀμφιτρύωνος Ἥλιν ἐλὼν ἀνέθηκεν.” αἶρεῖ δὲ τὴν Ἥλιν ἡγουμένης κατὰ χρησμόν γυναικός, ἧς τὸν πατέρα Αὐγείαν ἀπέκτεινεν. οἱ δὲ τὸν χαλκὸν ὀρύττοντες ὀξυδερκέστατοι γίνονται, καὶ οἱ βλεφαρίδας μὴ ἔχοντες φύουσι• παρὸ καὶ οἱ ἰατροὶ τῷ ἄνθει τοῦ χαλκοῦ καὶ τῇ τέφρᾳ τῇ Φρυγίᾳ χρῶνται πρὸς τοὺς ὀφθαλμούς.

59 Ἔστι δὲ αὐτόθι σπήλαιον ὃ καλεῖται γλαφυρόν• ἐν δὲ τούτῳ κίονες πεπήγασιν ἀπὸ τινων σταλαγμῶν. ἀποδηλοῖ δὲ τοῦτο ἐν τῇ συναγωγῇ τῇ πρὸς τὸ ἔδαφος• ἔστι γὰρ ταύτῃ στενώτατον.

60 835a Ἐκ τοῦ ζεύγους δὲ τῶν ἀετῶν θάτερον τῶν ἐγγόνων ἀλῖαιετος γίνεται παραλλάξ, ἕως ἂν σύζυγα γένηται. ἐκ δὲ ἀλῖαιέτων φήνη γίνεται, ἐκ δὲ τούτων περκνοὶ καὶ γῦπες• οὗτοι δ' οὐκέτι διορίζουσι περὶ τοὺς γῦπας, ἀλλὰ γεννῶσι τοὺς μεγάλους γῦπας• οὗτοι δ' εἰσὶν ἄγονοι. σημεῖον δὲ τοῦτο, διότι νεοττιὰν οὐδεὶς ἐώρακε γυπὸς μεγάλου.

61 Θαυμαστὸν δὲ τί φασιν ἐν Ἰνδοῖς περὶ τὸν ἐκεῖ μόλυβδον συμβαίνειν•



ὅταν γὰρ τακεῖς εἰς ὕδωρ καταχυθῇ ψυχρόν, ἐκπηδᾷν ἐκ τοῦ ὕδατος.

p262 62 Φασὶ τὸν Μοσσύνοικον χαλκὸν λαμπρότατον καὶ λευκότατον εἶναι, οὐ παραμιγνυμένου αὐτῷ κασσιτέρου, ἀλλὰ γῆς τινὸς αὐτοῦ γινομένης καὶ συνεψομένης αὐτῷ. λέγουσι δὲ τὸν εὐρόντα τὴν κρᾶσιν μηδένα διδάξαι• διὸ τὰ προγεγονότα ἐν τοῖς τόποις χαλκώματα διάφορα, τὰ δ' ἐπιγιγνώμενα οὐκέτι.

63 Ἐν τῷ Πόντῳ λέγουσι τοῦ χειμῶνος τῶν ὀρνέων τινὰ εὐρίσκεσθαι φωλεύοντα, οὔτε ἀφοδεύοντα, οὔτε δὲ ὅταν τὰ πτερὰ αὐτῶν τίλλωσιν, αἰσθάνεσθαι, οὔτε ὅταν ἐπὶ τὸν ὀβελίσκον ἀναπαρῇ. ἀλλ' ὅταν ὑπὸ τοῦ πυρὸς διακαυθῇ. πολλοὺς δὲ καὶ τῶν ἰχθύων λέγουσι περικοπέντας καὶ περιτμηθέντας μὴ αἰσθάνεσθαι, ἀλλ' ὅταν ὑπὸ τοῦ πυρὸς διαθερμανθῶσιν.

64 Ἡ μέλιττα δοκεῖ τὰς τροπὰς σημαίνειν τῷ ἐπὶ τὰ ἔργα βαδίζειν, ὥ καὶ οἱ μελιττοπόλοι σημείῳ χρῶνται• ἡρεμία γὰρ αὐτῶν γίνεται. δοκοῦσι δὲ καὶ οἱ τέττιγες ἄδιν μετὰ τροπὰς.

65 Φασὶ δὲ καὶ τὸν ἐχλῖνον ἄσιτον διαμένειν ἄχρι ἐνιαυτοῦ.

66 Τὸν δὲ γαλεώτην, ὅταν ἐκδύσῃται τὸ δέρμα, καθάπερ οἱ ὄφεις, ἐπιστραφέντα καταπίνειν• τηρεῖσθαι γὰρ ὑπὸ τῶν ἰατρῶν διὰ τὸ χρήσιμον εἶναι τοῖς ἐπιληπτικοῖς.

67 Λέγουσι δὲ καὶ τὸ τῆς ἄρκτου στέαρ, ὅταν διαπεπηγὸς ᾖ διὰ τὸν χειμῶνα, καθ' ὃν ἂν χρόνον ἐκείνη φωλεύῃ, αὐξάνεσθαι καὶ ὑπεραίρειν τὰ ἀγγεῖα ἐν οἷς ἂν ᾖ.

68 Ἐν Κυρήνῃ φασὶ τοὺς ὄντας βατράχους ἀφώνους τὸ παράπαν εἶναι. καὶ ἐν Μακεδονίᾳ ἐν τῇ τῶν Ἡμαθιωτῶν χώρα τοὺς σῦς εἶναι μώνυχας.

p264 69 Ἐν Καππαδοκίᾳ φασὶν ἡμιόνους εἶναι γονίμους καὶ ἐν Κρήτῃ αἰγείρους καρποφόρους.

70 Φασὶ δὲ καὶ ἐν Σερίφῳ τοὺς βατράχους οὐκ ἄδιν• ἐὰν δὲ εἰς ἄλλον τόπον μετενεχθῶσιν, ἄδουσιν.

71 Ἐν Ἰνδοῖς ἐν τῷ Κέρατι καλουμένῳ ἰχθύδι φασὶ γίνεσθαι ἃ ἐν τῷ ξηρῷ πλανᾶται καὶ πάλιν ἀποτρέχει εἰς τὸν ποταμόν.

72 Φασὶ δὲ καὶ περὶ Βαβυλῶνά τινες ἰχθύας τινὰς μένειν ἐν ταῖς τρώγλαις ταῖς ἐχούσαις ὑγρότητα ξηραينوμένου τοῦ ποταμοῦ• τούτους ἐξιόντας ἐπὶ τὰς ἄλως νέμεσθαι, καὶ βαδίζειν ἐπὶ τῶν περύγων, καὶ ἀνακινεῖν τὴν οὐράν• καὶ ὅταν διώκονται, φεύγειν καὶ εἰσδύντας ἀντιπροσώπως ἵστασθαι• πολλάκις γὰρ προσιέναι τινὰς καὶ ἐρεθίζειν. ἔχουσι δὲ τὴν κεφαλὴν ὁμοίαν βατράχου θαλαττίου, τὸ δὲ ἄλλο σῶμα κωβίῳ, βραγχία δὲ ὥσπερ καὶ οἱ ἄλλοι ἰχθύες.

73 Ἐν Ἡρακλείᾳ δὲ τῇ ἐν τῷ Πόντῳ καὶ ἐν Ῥηγίῳ γίνεσθαι φασιν ὀρυκτοὺς ἰχθύς, τούτους δὲ μάλιστα κατὰ τὰ ποτάμια καὶ τὰ ἔνυδρα χωρία. συμβαίνειν δέ ποτε ἀναξηραينوμένων τῶν χωρίων κατὰ τινὰς χρόνους συστέλλεσθαι κατὰ γῆς, εἴτα μᾶλλον ἀναξηραينوμένης διώκοντας τὴν ὑγρότητα διέεσθαι εἰς τὴν ἰλύν,<sup>3</sup> εἴτα ξηραينوμένης διαμένειν ἐν τῇ ἱκμάδι, ὥσπερ τὰ ἐν ταῖς φωλεαῖς διαρκοῦντα. ὅταν δὲ ἀνασκάπτωνται πρὶν ἢ τὰ ὕδατα ἐπιγενέσθαι, τότε κινεῖσθαι.

74 Φασὶ δὲ καὶ περὶ Παφλαγονίαν τοὺς ὀρυκτοὺς γίνεσθαι ἰχθύς κατὰ βάθους, τούτους δὲ τῇ ἀρετῇ ἀγαθοὺς, οὔτε ὑδάτων φανερῶν πλησίον ὄντων οὔτε ποταμῶν ἐπιρρεόντων, ἀλλ' αὐτῆς ζωογονούσης τῆς γῆς.

75 Τὰς ἐν Ἡπείρῳ ἐλάφους κατορύττειν φασὶ τὸ δεξιὸν κέραν, ὅταν ἀποβάλωσι, καὶ εἶναι πρὸς πολλὰ χρήσιμον.

76 Καὶ τὴν λύγκα δέ φασι τὸ οὖρον κατακαλύπτειν διὰ τὸ πρὸς ἄλλα τε χρήσιμον εἶναι καὶ τὰς σφραγίδας.

77 Φασὶ δὲ καὶ τὴν φώκην ἐξεμεῖν τὴν πυτίαν, ὅταν ἀλίσκηται• εἶναι δὲ φαρμακῶδες καὶ τοῖς ἐπιλήπτοις χρήσιμον.

78 Λέγεται δὲ περὶ τὴν Ἰταλίαν ἐν τῷ Κιρκαίῳ ὄρει φάρμακόν τι φύεσθαι θανάσιμον, ὃ τοιαύτην ἔχει τὴν δύναμιν ὥστε, ἂν προσρανθῇ τινί, παραχρῆμα πίπτειν ποιεῖ, <sup>836</sup>καὶ τὰς τρίχας τὰς ἐν τῷ σώματι ἀπομαδᾶν, καὶ τὸ σύνολον τοῦ σώματος διαρρεῖν τὰ μέλη, ὥστε τὴν ἐπιφάνειαν τοῦ σώματος εἶναι τῶν ἀπολλυμένων ἐλεεινήν. τοῦτο δέ φασι μέλλοντας διδόναι Κλεωνύμῳ τῷ Σπαρτιάτῃ Αὐλὸν τὸν Πευκέστιον καὶ Γαῖον φωραθῆναι, καὶ ἐξετασθέντας ὑπὸ Ταραντίνων θανατωθῆναι.

79 Ἐν τῇ Διομηδεῖᾳ νήσῳ, ἣ κεῖται ἐν τῷ Ἀδρίᾳ, φασὶν ἱερόν τι εἶναι τοῦ Διομήδους θαυμαστόν τε καὶ ἅγιον, περὶ δὲ τὸ ἱερὸν κύκλῳ περικαθῆσθαι ὄρνιθας μεγάλους τοῖς μεγέθεσι, καὶ ῥύγχη ἔχοντας μεγάλα καὶ σκληρά. τούτους λέγουσιν, ἔὰν μὲν Ἕλληνες ἀποβαίνωσιν εἰς τὸν τόπον, ἥσυχίαν

ἔχειν, ἔὰν δὲ τῶν βαρβάρων τινὲς τῶν περιοίκων, ἀνίπτασθαι καὶ αἰωρουμένους καταράσσειν αὐτοὺς εἰς τὰς κεφαλὰς αὐτῶν, καὶ τοῖς ῥύγχεσι τιτρώσκοντας ἀποκτείνειν. μυθεύεται δὲ τούτους γενέσθαι ἐκ τῶν ἑταίρων τῶν τοῦ Διομήδους, p268ναυαγησάντων μὲν αὐτῶν περὶ τὴν νῆσον, τοῦ δὲ Διομήδους δολοφονηθέντος ὑπὸ τοῦ Αἰνέου τοῦ τότε βασιλέως τῶν τόπων ἐκείνων γενομένου.

80 Παρὰ τοῖς Ὀμβρικοῖς φασὶ τὰ βοσκήματα τίκτειν τρεῖς τοῦ ἐνιαυτοῦ, καὶ τοὺς καρποὺς αὐτοῖς τὴν γῆν πολλαπλασίους ἀνίσσθαι τῶν καταβαλλομένων• εἶναι δὲ καὶ τὰς γυναῖκας πολυγόνους καὶ σπανίως ἔν τίκτειν, τὰς δὲ πλείστας δύο καὶ τρία.

81 Ἐν ταῖς Ἡλεκτρίσι νήσοις, αἱ κεῖνται ἐν τῷ μυχῷ τοῦ Ἀδρίου, φασὶν εἶναι δύο ἀνδριάντας ἀνακειμένους, τὸν μὲν κασσιτέρινον τὸν δὲ χαλκοῦν, εἰργασμένους τὸν ἀρχαῖον τρόπον. λέγεται δὲ τούτους Δαϊδάλου εἶναι ἔργα, ὑπόμνημα τῶν πάλαι, ὅτε Μίνω φεύγων ἐκ Σικελίας καὶ Κρήτης εἰς τούτους τοὺς τόπους παρέβαλε. ταύτας δὲ τὰς νήσους φασὶ προκεχωκέναι τὸν Ἡριδανὸν ποταμόν. ἔστι δὲ καὶ λίμνη, ὡς ἔοικε, πλησίον τοῦ ποταμοῦ, ὕδωρ ἔχουσα θερμόν• ὁσμὴ δ' ἀπ' αὐτῆς βαρεῖα καὶ χαλεπὴ ἀποπνεῖ, καὶ οὔτε ζῶον οὐδὲν πίνει ἐξ αὐτῆς οὔτε ὄρνεον ὑπερίπταται, ἀλλὰ πίπτει καὶ ἀποθνήσκει. ἔχει δὲ τὸν μὲν κύκλον σταδίων διακοσίων, τὸ δὲ εὖρος ὡς δέκα. μυθεύουσι δὲ οἱ ἐγγώριοι Φαέθοντα κεραυνωθέντα πεσεῖν εἰς ταύτην τὴν λίμνην. εἶναι δ' ἐν αὐτῇ αἰγείρους πολλὰς, ἐξ ὧν ἐκπίπτειν τὸ καλούμενον ἥλεκτρον. τοῦτο δὲ λέγουσιν ὅμοιον εἶναι κόμμι, ἀποσκληρύνεσθαι δὲ ὡσανεὶ λίθον, καὶ συλλεγόμενον ὑπὸ τῶν ἐγγωρίων διαφέρεσθαι εἰς τοὺς Ἑλληνας. εἰς ταύτας οὖν τὰς νήσους Δαίδαλόν φασιν ἐλθεῖν, καὶ κατασχόντα αὐτὰς ἀναθεῖναι ἐν μιᾷ αὐτῶν τὴν αὐτοῦ εἰκόνα, καὶ τὴν τοῦ υἱοῦ Ἰκάρου ἐν τῇ ἑτέρᾳ. ὕστερον δ' ἐπιπλευσάντων ἐπ' αὐτοὺς Πελασγῶν p270τῶν ἐκπεσόντων ἐξ Ἀργούς φυγεῖν τὸν Δαίδαλον, καὶ ἀφικέσθαι εἰς Ἰκαρον τὴν νῆσον.

82 Ἐν τῇ Σικελίᾳ περὶ τὴν καλουμένην Ἑνναν σπήλαιόν τι λέγεται εἶναι, περὶ ὃ κύκλῳ πεφυκέναι φασὶ τῶν τε ἄλλων ἀνθέων πλῆθος ἀνὰ πᾶσαν ὥραν, πολὺ δὲ μάλιστα τῶν ἴων ἀπέραντόν τινα τόπον συμπεπληρῶσθαι, ἃ τὴν σύνεγγυς χώραν εὐωδίας πληροῖ, ὥστε τοὺς κυνηγοῦντας, τῶν κυνῶν κρατουμένων ὑπὸ τῆς ὁδομῆς, ἐξασυνατεῖν τοὺς λαγῶς ἰχνεύειν. διὰ δὲ τούτου τοῦ χάσματος ἀσυμφανὲς ἐστὶν ὑπόνομος, καθ' ὃν φασὶ τὴν ἀρπαγὴν ποιήσασθαι τὸν Πλούτωνα τῆς Κόρης. εὕρισκεσθαι δὲ φασὶ ἐν τούτῳ τῷ τόπῳ πυροὺς οὔτε τοῖς ἐγγωρίοις ὁμοίους οἷς χρῶνται οὔτε ἄλλοις

ἐπεισάκτοις, ἀλλ' ἰδιότητά τινα μεγάλην ἔχοντας. καὶ τούτῳ σημειοῦνται τὸ πρῶτως παρ' αὐτοῖς φανῆναι πύρινον καρπὸν. ὅθεν καὶ τῆς Δήμητρος ἀντιποιοῦνται, φάμενοι παρ' αὐτοῖς τὴν θεὸν γεγονέναι.

83 Ἐν Κρήτῃ λύκους καὶ ἄρκτους τοὺς τ' ἔχεις, ὁμοίως δὲ καὶ τὰ παραπλήσια τούτοις θηρία οὗ φασι γίνεσθαι διὰ τὸ τὸν Δία γενέσθαι ἐν αὐτῇ.

84 Ἐν τῇ θαλάσῃ τῇ ἔξω Ἡρακλείων στηλῶν φασὶν ὑπὸ Καρχηδονίων νῆσον εὑρεθῆναι ἐρήμην, ἔχουσαν ὕλην τε παντοδαπὴν καὶ ποταμοὺς πλωτοὺς, καὶ τοῖς λοιποῖς καρποῖς θαυμαστήν, ἀπέχουσαν δὲ πλειόνων ἡμερῶν πλοῦν. ἐν ᾗ ἐπιμισγομένων τῶν Καρχηδονίων πολλάκις διὰ τὴν εὐδαιμονίαν, ἐνίων γε μὴν καὶ οἰκούντων, 837α τοὺς προεστῶτας τῶν Καρχηδονίων ἀπείπασθαι θανάτῳ ζημιοῦν τοὺς εἰς αὐτὴν πλευσομένους, καὶ τοὺς ἐνοικοῦντας πάντας ἀφανίσαι, ἵνα μὴ διαγγέλλωσι, p272μηδὲ πλῆθος συστραφὲν ἐπ' αὐτῶν ἐπὶ τὴν νῆσον κυρίας τύχῃ καὶ τὴν τῶν Καρχηδονίων εὐδαιμονίαν ἀφέληται.

85 Ἐκ τῆς Ἰταλίας φασὶν ἕως τῆς Κελτικῆς καὶ Κελτολιγύων καὶ Ἰβήρων εἶναι τινα ὁδὸν Ἡράκλειαν καλουμένην, δι' ἧς ἐάν τε Ἑλλήν ἐάν τε ἐγγχώριός τις πορεύηται, τηρεῖσθαι ὑπὸ τῶν παροικούντων, ὅπως μηδὲν ἀδικηθῇ. τὴν γὰρ ζημίαν ἐκτίνειν καθ' οὗς ἂν γένηται τὸ ἀδίκημα.

86 Φασὶ δὲ παρὰ τοῖς Κελτοῖς φάρμακον ὑπάρχειν τὸ καλούμενον ὑπ' αὐτῶν τοξικόν. ὃ λέγουσιν οὕτω ταχεῖαν ποιεῖν τὴν φθορὰν ὥστε τῶν Κελτῶν τοὺς κυνηγοῦντας, ὅταν ἔλαφον ἢ ἄλλο τι ζῷον τοξεύσωσιν, ἐπιτρέχοντας ἐκ σπουδῆς ἐκτέμνειν τῆς σαρκὸς τὸ τετρωμένον πρὸ τοῦ τὸ φάρμακον διαδῦναι, ἅμα μὲν τῆς προσφορᾶς ἔνεκα, ἅμα δὲ ὅπως μὴ σαπῇ τὸ ζῷον. εὐρῆσθαι δὲ τούτῳ λέγουσιν ἀντιφάρμακον τὸν τῆς δρυὸς φλοιόν. οἱ δ' ἕτερόν τι φύλλον, ὃ καλοῦσι κοράκιον διὰ τὸ κατανοηθῆναι ὑπ' αὐτῶν κόρακα, γευσάμενον τοῦ φαρμάκου καὶ κακῶς διατιθέμενον, ἐπὶ τὸ φύλλον ὀρμήσαντα τοῦτο καὶ καταπιόντα παύσασθαι τῆς ἀλγηδόνης.

87 Ἐν τῇ Ἰβηρίᾳ λέγουσι τῶν δρυμῶν ἐμπρησθέντων ὑπὸ τινων ποιμένων, καὶ τῆς γῆς διαθερμανθείσης ὑπὸ τῆς ὕλης, φανερώς ἀργύρῳ ῥεῦσαι τὴν χώραν, καὶ μετὰ χρόνον σεισμῶν ἐπιγενομένων καὶ τῶν τόπων ῥαγέντων ἀμπληθες συναχθῆναι ἀργύριον, ὃ δὴ καὶ τοῖς Μασσαλιώταις πρόσδοον ἐποίησεν οὐ τὴν τυχοῦσαν.

88 Ἐν ταῖς Γυμνησίαις ταῖς κειμέναις νήσοις κατὰ τὴν Ἰβηρίαν, ἃς μετὰ τὰς

λεγομένας ἐπὶ τὰ p274μεγίστας λέγουσιν εἶναι, φασὶν ἔλαιον μὴ γίνεσθαι ἐξ ἔλαιων, ἐκ δὲ τῆς τερμίνθου κομιδῇ πολὺ καὶ εἰς πάντα ἀρμόττον. λέγουσι δὲ οὕτω τοὺς οἰκοῦντας αὐτὰς Ἰβήρας καταγύνους εἶναι ὥστε ἀντὶ ἐνὸς σώματος θηλυκοῦ διδόναι τοῖς ἐμπόροις τέτταρα καὶ πέντε σώματα ἄρρενα. βστρατευόμενοι δὲ παρὰ Καρχηδονίοις τοὺς μισθοὺς ὅταν λάβωσιν, ἄλλο μὲν, ὡς ἔοικεν, οὐδὲν ἀγοράζουσι, γυναῖκας δέ. οὐ γὰρ χρυσίον οὐδὲ ἀργύριον ἔξεστι παρ' αὐτοῖς οὐδένα ἔχειν. ἐπιλέγεται δέ τι τοιοῦτον ἐπὶ τῷ κωλύειν χρήματα εἰσάγειν αὐτούς, ὅτι τὴν στρατείαν Ἡρακλῆς ἐποίησατο ἐπὶ τὴν Ἰβηρίαν διὰ τοὺς τῶν ἐνοικούντων πλούτους.

89 Ἐν τῇ τῶν Μασσαλιωτῶν χώρα περὶ τὴν Λιγυστικήν φασιν εἶναί τινα λίμνην, ταύτην δὲ ἀναζειν καὶ ὑπερχεῖσθαι, καὶ τοσούτους ἰχθῦς ἐκβάλλειν τὸ πλῆθος ὥστε μὴ πιστεύειν. ἐπειδὴν δὲ οἱ ἐτησίαι πνεύσωσιν, ἐπιχώννυσθαι τὸ ἔδαφος ἐπ' αὐτήν, καὶ τοιοῦτον κονιορτὸν γίνεσθαι αὐτόθι, καὶ ἀποστερεοῦσθαι τὴν ἐπιφάνειαν αὐτῆς ὡσανεὶ ἔδαφος. τοῖς δὲ τριόδουσι διακόπτοντας τοὺς ἐγχωρίους ἐτοίμως ὅσους ἂν βούλωνται ἰχθύας ἐξαίρειν ἐξ αὐτῆς.

90 Λέγεται δὲ τινὰς τῶν Λιγύων οὕτω σφενδονᾶν εὖ ὥστε, ὅταν πλείους ἴδωσιν ὄρνιθας, διερεθίζεσθαι πρὸς ἀλλήλους ποῖον ἕκαστος παρασκευάζεται βαλεῖν, ὡς ἐτοίμως ἀπάντων τευξομένων.

91 Ἴδιον δὲ φασὶ καὶ τοῦτο παρ' αὐτοῖς εἶναι• αἱ γυναῖκες ἅμα ἐργαζόμεναι τίκτουσιν, καὶ τὸ παιδίον ὕδατι περικλύσασαι παραχρῆμα σκάπτουσι p276καὶ σκάλλουσι καὶ τὰλλα οἰκονομοῦσιν ἃ καὶ μὴ τικτούσαις αὐταῖς ἦν πρακτέον.

92 Θαῦμα δὲ καὶ τοῦτο παρὰ τοῖς Λίγυσι• φασὶ γὰρ παρ' αὐτοῖς ποταμὸν εἶναι οὗ τὸ ῥεῦμα αἴρεται μετέωρον καὶ ῥεῖ, ὥστε τοὺς πέραν μὴ ὀρᾶσθαι.

93 Ἐν δὲ τῇ Τυρρηνίᾳ λέγεται τις νῆσος Αἰθάλεια ὀνομαζομένη, ἐν ἣ ἐκ τοῦ αὐτοῦ μετάλλου πρότερον μὲν χαλκὸς ὠρύσσετο, ἐξ οὗ φασὶ πάντα κεχαλκευμένα παρ' αὐτοῖς εἶναι, ἔπειτα μηκέτι εὕρισκεσθαι, χρόνου δὲ διελθόντος πολλοῦ φανῆναι ἐκ τοῦ αὐτοῦ μετάλλου σίδηρον, ὃ νῦν ἔτι χρῶνται Τυρρηνοὶ οἱ τὸ καλούμενον Ποπλώνιον οἰκοῦντες.

94 Ἔστι δὲ τις ἐν τῇ Τυρρηνίᾳ πόλις Οἶναρέα καλουμένη, ἣν ὑπερβολῇ φασὶν ὀχυρὰν εἶναι• ἐν γὰρ μέσῃ αὐτῇ λόφος ἐστὶν ὑψηλός, τριάκοντα σταδίους ἀνέχων ἄνω, καὶ κάτω ὕλην παντοδαπὴν καὶ ὕδατα. 838αφοβομένους οὖν τοὺς ἐνοικοῦντας λέγουσι μὴ τις τύραννος γένηται, προῖστασθαι αὐτῶν τοὺς

ἐκ τῶν οἰκετῶν ἡλευθερωμένους• καὶ οὗτοι ἄρχουσιν αὐτῶν, κατ' ἐνιαυτὸν δ' ἄλλους ἀντικαθιστάναι τοιούτους.

95 Ἐν τῇ Κύμῃ τῇ περὶ τὴν Ἰταλίαν δείκνυται τις, ὡς ἔοικε, θάλαμος κατάγειος Σιβύλλης τῆς χρησμολόγου, ἣν πολυχρονιωτάτην γενομένην παρθένον διαμεῖναί φασιν, οὖσαν μὲν Ἑρυθραίαν, ὑπὸ τινων δὲ τὴν Ἰταλίαν κατοικούντων Κυμαίαν, ὑπὸ δὲ τινων Μελάγκραιραν καλουμένην. τοῦτον δὲ τὸν τόπον λέγεται κυριεύεσθαι ὑπὸ Λευκανῶν. εἶναι δὲ λέγουσιν ἐν ἐκείνοις τοῖς τόποις περὶ τὴν Κύμην ποταμόν τινα Κετὸν ὀνομαζόμενον, εἰς ὃν φασὶ τὸν πλείω χρόνον τὸ ἐμβληθὲν πρῶτον περιφύεσθαι καὶ τέλος ἀπολιθοῦσθαι.

p278 96 Ἀλκιμένει τῷ Συβαρίτῃ φασὶ κατασκευασθῆναι ἱμάτιον τοιοῦτον τῇ πολυτελείᾳ, ὥστε προτίθεσθαι αὐτὸ ἐπὶ Λακινίῳ τῇ πανηγύρει τῆς Ἥρας, εἰς ἣν συμπορεύονται πάντες Ἰταλιῶται, τῶν τε δεικνυμένων μάλιστα πάντων ἐκεῖνο θαυμάζεσθαι• οὗ φασὶ κυριεύσαντα Διονύσιον τὸν πρεσβύτερον ἀποδόσθαι Καρχηδονίοις ἑκατὸν καὶ εἴκοσι ταλάντων. ἣν δ' αὐτὸ μὲν ἄλουργές, τῷ δὲ μεγέθει πεντεκαιδεκάπηχυ, ἑκατέρωθεν δὲ διείληπτο ζωδίοις ἐνυφασμένοις, ἄνωθεν μὲν Σούσοις, κάτωθεν δὲ Πέρσαις• ἀνὰ μέσον δὲ ἦν Ζεὺς, Ἥρα, Θέμις, Ἀθηνᾶ, Ἀπόλλων, Ἀφροδίτη. παρὰ δ' ἑκάτερον πέρας Ἀλκιμένης ἦν, ἑκατέρωθεν δὲ Σύβαρις.

97 Περὶ τὴν ἄκραν τὴν Ἰαπυγίαν φασὶν ἔκ τινος τόπου, ἐν ᾧ συνέβη γενέσθαι, ὡς μυθολογοῦσιν, Ἡρακλεῖ πρὸς γίγαντας μάχην, ῥεῖν ἰχώρα πολλὴν καὶ τοιοῦτον ὥστε διὰ τὸ βάρος τῆς ὀσμῆς ἄπλουν εἶναι τὴν κατὰ τὸν τόπον θάλασσαν. λέγουσι δὲ πολλαχοῦ τῆς Ἰταλίας Ἡρακλέους εἶναι πολλὰ μνημόσυνα ἐν ταῖς ὁδοῖς ἃς ἐκεῖνος ἐπορεύθη. περὶ δὲ Πανδοσίαν τῆς Ἰαπυγίας ἵχνη τοῦ θεοῦ δείκνυται, ἐφ' ἃ οὐδενὶ ἐπιβατέον.

98 b Ἔστι καὶ περὶ ἄκραν Ἰαπυγίαν λίθος ἀμαξιαῖος, ὃν ὑπ' ἐκείνου ἀρθέντα μετατεθῆναί φασιν, ἀφ' ἐνὸς δὲ δακτύλου κινεῖσθαι συμβέβηκεν.

99 Ἐν τῇ τῶν Ὀρχομενίων πόλει τῇ ἐν Βοιωτοῖς φανῆναί φασιν ἀλώπεκα, ἣν κυνὸς διώκοντος εἰσδύναί εἰς τινα ὑπόνομον, καὶ τὸν κύνα συνεισδύναί αὐτῇ, καὶ ὑλακτοῦντα ἦχον μέγαν ποιεῖν ὥσανεὶ εὐρυχωρίας τινὸς ὑπαρχούσης αὐτῷ• τοὺς δὲ κυνηγέτας ἔννοϊαν λαβόντας δαιμονίαν, ἀναρρήξαντας τὴν εἰσδυσιν συνῶσαι καὶ αὐτούς• ἰδόντας p280 δὲ διὰ τινων ὁπῶν εἰσερχόμενον ἔσω τὸ φῶς, εὐσυνόπτως τὰ λοιπὰ θεάσασθαι, καὶ ἐλθόντας ἀπαγγεῖλαι τοῖς ἄρχουσιν.

100 Ἐν τῇ Σαρδοῖ τῇ νήσῳ κατασκευάσματά φασιν εἶναι εἰς τὸν Ἑλληνικὸν τρόπον διακείμενα τὸν ἀρχαῖον, ἄλλα τε πολλὰ καὶ καλὰ καὶ θόλους περισσοῖς τοῖς ῥυθμοῖς κατεξεσμένους• τούτους δ' ὑπὸ Ἰολάου τοῦ Ἰφικλέους κατασκευασθῆναι, ὅτε τοὺς Θεσπιάδας τοὺς ἐξ Ἡρακλέους παραλαβὼν ἔπλευσεν εἰς ἐκείνους τοὺς τόπους ἐποικήσων, ὡς κατὰ συγγένειαν αὐτῷ τὴν Ἡρακλέους προσήκοντας διὰ τὸ πάσης τῆς πρὸς ἐσπέραν κύριον Ἡρακλέα γενέσθαι. αὕτη δὲ ἡ νῆσος, ὡς ἔοικεν, ἐκαλεῖτο μὲν πρότερον Ἰχνοῦσσα διὰ τὸ ἐσχηματῖσθαι τῇ περιμέτρῳ ὁμοιότατα ἀνθρωπίνῳ ἴχνει, εὐδαίμων δὲ καὶ πάμφορος ἔμπροσθεν λέγεται εἶναι• τὸν γὰρ Ἀρισταῖον, ὃν φασι γεωργικώτατον εἶναι ἐπὶ τῶν ἀρχαίων, τοῦτον αὐτῶν ἄρξαι μυθολογοῦσιν, ὑπὸ μεγάλων ὀρνέων ἔμπροσθεν καὶ πολλῶν κατεχομένων. νῦν μὲν οὖν οὐκέτι φέρει τοιοῦτον οὐδὲν διὰ τὸ κυριευθεῖσαν ὑπὸ Καρχηδονίων ἐκκοπῆναι πάντας τοὺς χρησίμους εἰς προσφορὰν καρπῶν, καὶ θάνατον τὴν ζημίαν τοῖς ἐγχωρίοις τετάχθαι, ἐάν τις τῶν τοιούτων τι ἀναφυτεύῃ.

101 Ἐν μιᾷ τῶν ἐπτὰ νήσων τῶν Αἰόλου καλουμένων, ἣ καλεῖται Λιπάρα, τάφον εἶναι μυθολογοῦσι, περὶ οὗ καὶ ἄλλα μὲν πολλὰ καὶ τερατώδη λέγουσι, τοῦτο δ' ὅτι οὐκ ἀσφαλές ἐστι προσελθεῖν πρὸς ἐκεῖνον τὸν τόπον τῆς νυκτός, συμφωνοῦσιν• ἐξακούεσθαι γὰρ τυμπάνων καὶ κυμβάλων ἤχον γέλωτά τε μετὰ θορύβου καὶ κροτάλων ἐναργῶς. p282839αλέγουσι δέ τι τερατωδέστερον γεγονέναι περὶ τὸ σπήλαιον• πρὸ ἡμέρας γὰρ ἐγκοιμηθῆναί τινα ἐν αὐτῷ οἰνωμένον, καὶ τοῦτον ὑπὸ τῶν οἰκετῶν ζητούμενον ἐφ' ἡμέρας τρεῖς διατελέσαι, τῇ δὲ τετάρτῃ εὐρεθέντα ὡς νεκρὸν ἀποκομισθῆναι ὑπὸ τῶν οἰκείων εἰς τὸν ἴδιον τάφον, καὶ τῶν νομιζομένων τυχόντα πάντων ἐξαίφνης ἀναστῆναι, καὶ διηγεῖσθαι τὰ καθ' ἑαυτὸν συμβεβηκότα. τοῦτο μὲν οὖν ἡμῖν φαίνεται μυθωδέστερον• ὅμως μέντοι ἔδει μὴ παραλιπεῖν ἀμνημόνευτον αὐτό, τῶν περὶ τὸν τόπον ἐκεῖνον τὴν ἀναγραφὴν ποιούμενον.

102 Περὶ τὴν Κύμην τὴν ἐν Ἰταλίᾳ λίμνη ἐστὶν ἡ προσαγορευομένη ἄορνος, αὕτη μὲν, ὡς ἔοικεν, οὐκ ἔχουσά τι θαυμαστόν• περικεῖσθαι γὰρ λέγουσι περὶ αὐτὴν λόφους κύκλῳ, τὸ ὕψος οὐκ ἐλάσσους τριῶν σταδίων, καὶ αὐτὴν εἶναι τῷ σχήματι κυκλοτερῇ, τὸ βάθος ἔχουσιν ἀνυπέρβλητον. ἐκεῖνο δὲ θαυμάσιον φαίνεται• ὑπερκειμένων γὰρ αὐτῇ πυκνῶν δένδρων, καὶ τινων ἐν αὐτῇ κατακεκλιμένων, οὐδὲν ἔστιν ἰδεῖν φύλλον ἐπὶ τοῦ ὕδατος ἐφ'esτηκός, ἀλλ' οὕτω καθαρώτατόν ἐστι τὸ ὕδωρ ὥστε τοὺς θεωμένους θαυμάζειν. περὶ δὲ τὴν ἀπέχουσιν ἡπειρον αὐτῆς οὐ πολὺ θερμὸν ὕδωρ πολλαχόθεν ἐκπίπτει, καὶ ὁ τόπος ἅπας καλεῖται Πυριφλεγέθων. ὅτι δὲ οὐδὲν διίπταται ὄρνεον αὐτὴν, ψεῦδος• οἱ γὰρ παραγενόμενοι λέγουσι πλῆθός τι κύκνων ἐν αὐτῇ γίνεσθαι.

103 Φασὶ τὰς Σειρηνούσας νήσους κεῖσθαι μὲν ἐν τῇ Ἰταλίᾳ περὶ τὸν πορθμὸν ἐπ' αὐτῆς τῆς ἄκρας, ὅς κεῖται πρὸ τοῦ προπεπτωκότος τόπου καὶ διαλαμβάνοντος τοῖς κόλποις τὸν τε περιέχοντα τὴν Κύμην καὶ τὸν διειληφότα τὴν Ποσειδωνίαν <sup>p284</sup>καλουμένην• ἐν ᾧ καὶ νεῶς αὐτῶν ἱδρύται, καὶ τιμῶνται καθ' ὑπερβολὴν ὑπὸ τῶν περιοίκων θυσίαις ἐπιμελῶς• ὧν καὶ τὰ ὀνόματα μνημονεύοντες καλοῦσι τὴν μὲν Παρθενόπην, τὴν δὲ Λευκωσίαν, τὴν δὲ τρίτην Λίγειαν.

104 βλέγεται δὲ μεταξὺ τῆς Μεντορικῆς καὶ τῆς Ἰστριανῆς ὄρος τι εἶναι τὸ καλούμενον Δέλφιον, ἔχον λόφον ὑψηλόν. ἐπὶ τοῦτον τὸν λόφον ὅταν ἀναβαίνωσιν οἱ Μέντορες οἱ ἐπὶ τοῦ Ἀδρίου οἰκοῦντες, ἀποθεωροῦσιν, ὡς ἔοικε, τὰ εἰς τὸν Πόντον εἰσπλέοντα πλοῖα. εἶναι δὲ καὶ τινα τόπον ἐν τοῖς ἀνὰ μέσον διαστήμασιν, εἰς ὃν ἀγορᾶς κοινῆς γινομένης πωλεῖσθαι παρὰ μὲν τῶν ἐκ τοῦ Πόντου ἐμπόρων ἀναβαινόντων τὰ Λέσβια καὶ Χῖα καὶ Θάσια, παρὰ δὲ τῶν ἐκ τοῦ Ἀδρίου τοὺς Κερκυραῖκοὺς ἀμφορεῖς.

105 Φασὶ δὲ καὶ τὸν Ἰστρον ῥέοντα ἐκ τῶν Ἐρκυνίων καλουμένων δρυμῶν σχίζεσθαι, καὶ τῇ μὲν εἰς τὸν Πόντον ῥεῖν, τῇ δὲ εἰς τὸν Ἀδρίαν ἐκβάλλειν. σημεῖον δὲ οὐ μόνον ἐν τοῖς νῦν καιροῖς ἑωράκαμεν, ἀλλὰ καὶ ἐπὶ τῶν ἀρχαίων μᾶλλον, οἷον τὰ ἐκεῖ ἅπλωτα εἶναι• καὶ γὰρ Ἰάσονα τὸν μὲν εἰσπλουν κατὰ Κυανέας, τὸν δὲ ἐκ τοῦ Πόντου ἔκπλουν κατὰ τὸν Ἰστρον ποιήσασθαι φασι• καὶ φέρουσιν ἄλλα τε τεκμήρια οὐκ ὀλίγα, καὶ κατὰ μὲν τὴν χώραν βωμοὺς ὑπὸ τοῦ Ἰάσονος ἀνακειμένους δεικνύουσιν, ἐν δὲ μιᾷ τῶν νήσων τῶν ἐν τῷ Ἀδρίᾳ ἱερὸν Ἀρτέμιδος ὑπὸ Μηδείας ἰδρυμένον. ἔτι δὲ λέγουσιν ὡς οὐκ ἂν παρέπλευσε τὰς Πλαγκτὰς καλουμένας, εἰ μὴ ἐκεῖθεν ἀπέπλει. καὶ ἐν τῇ Αἰθαλείᾳ δὲ νήσῳ, τῇ κειμένῃ ἐν τῷ Τυρρηνικῷ πελάγει, ἄλλα τε δεικνύουσι μνημεῖα <sup>p286</sup>τῶν ἀριστέων καὶ τὸ ἐπὶ τῶν ψήφων δὲ λεγόμενον• παρὰ γὰρ τὸν αἰγιαλὸν ψήφους φασὶν εἶναι ποικίλας, ταύτας δ' οἱ Ἕλληνες οἱ τὴν νῆσον οἰκοῦντες λέγουσι τὴν χροιάν λαβεῖν ἀπὸ τῶν στλεγγισμάτων ὧν ἐποιοῦντο ἀλειφόμενοι• ἀπὸ ἐκείνων γὰρ τῶν χρόνων οὔτε πρότερον ἑωρᾶσθαι μυθολογοῦσι τοιαύτας ψήφους οὔθ' ὕστερον ἐπιγενομένας. ἔτι δὲ τούτων φανερώτερα σημεῖα λέγουσιν, ὅτι οὐ διὰ τῶν Συμπληγάδων ἐγένετο ὁ ἔκπλους, αὐτῷ τῷ ποιητῇ ἐν ἐκείνοις τοῖς τόποις μάρτυρι χρώμενοι. τὴν γὰρ δυσχέρειαν τοῦ κινδύνου ἐμφανίζοντα λέγειν ὅτι οὐκ ἔστι παραπλεῦσαι τὸν τόπον,

ἀλλὰ θ' ὁμοῦ πίνακας τε νεῶν καὶ σώματα φωτῶν

κύμαθ' ἄλως φορέουσι πυρός τ' ὀλοοῖο θύελλαι.



840 ἀπερὶ μὲν οὖν τὰς Κυανέας οὐ λέγεται πῦρ ἀναπέμπειν, περὶ δὲ τὸν πορθμὸν τὸν διαλαμβάνοντα τὴν Σικελίαν, ἐφ' ἑκάτερα κειμένων τῶν τοῦ πυρὸς ἀναφύσσημάτων, καὶ τῆς τε νήσου συνεχῶς καιομένης, καὶ τοῦ περὶ τὴν Αἴτνην ῥεύματος πολλάκις τὴν χώραν ἐπιδεδραμηκότος.

106 Ἐν Τάραντι ἐναγίζειν κατὰ τινες χρόνους φασὶν Ἀτρεΐδαις καὶ Τυδεΐδαις καὶ Αἰακίδαις καὶ Λαερτιάδαις, καὶ Ἀγαμεμνονίδαις δὲ χωρὶς θυσίαν ἐπιτελεῖν ἐν ἄλλῃ ἡμέρᾳ ἰδίᾳ, ἐν ἣ νόμιμον εἶναι ταῖς γυναιξὶ μὴ γεύσασθαι τῶν ἐκείνοις θυομένων. ἔστι δὲ καὶ Ἀχιλλέως νεῶς παρ' αὐτοῖς. λέγεται δὲ μετὰ τὸ παραλαβεῖν τοὺς Ταραντίνους Ἡράκλειαν τὸν τόπον καλεῖσθαι ὃν νῦν κατοικοῦσιν, ἐν δὲ τοῖς ἄνω χρόνοις τῶν Ἰώνων κατεχόντων Πλεῖον• ἔτι δὲ ἐκείνων ἔμπροσθεν ὑπὸ τῶν Τρώων τῶν κατασχόντων αὐτὴν Σίγειον ὠνομάσθαι.

p288 107 Παρὰ δὲ τοῖς Συβαρίταις λέγεται Φιλοκτῆτην τιμᾶσθαι. κατοικῆσαι γὰρ αὐτὸν ἐκ Τροίας ἀνακομισθέντα τὰ καλούμενα Μύκαλλα τῆς Κροτωνιάτιδος, ἃ φασιν ἀπέχειν ἑκατὸν εἴκοσι σταδίων, καὶ ἀναθεῖναι ἱστοροῦσι τὰ τόξα τὰ Ἡράκλεια αὐτὸν εἰς τὸ τοῦ Ἀπόλλωνος τοῦ ἁλίου. ἐκεῖθεν δέ φασι τοὺς Κροτωνιάτας κατὰ τὴν ἐπικράτειαν ἀναθεῖναι αὐτὰ εἰς τὸ Ἀπολλώνιον τὸ παρ' αὐτοῖς. λέγεται δὲ καὶ τελευτήσαντα ἐκεῖ κεῖσθαι αὐτὸν παρὰ τὸν ποταμὸν τὸν Σύβαριν, βοηθήσαντα Ῥοδίοις τοῖς μετὰ Τληπολέμου εἰς τοὺς ἐκεῖ τόπους ἀπενεχθεῖσι καὶ μάχην συνάψασι πρὸς τοὺς ἐνοικοῦντας τῶν βαρβάρων ἐκείνην τὴν χώραν.

108 Περὶ δὲ τὴν Ἰταλίαν τὴν καλουμένην Γαργαρίαν, ἐγγὺς Μεταποντίου, Ἀθηνᾶς ἱερὸν εἶναί φασιν Ἑλληνίας, ἔνθα τὰ τοῦ Ἐπειοῦ λέγουσιν ἀνακεῖσθαι ὄργανα, ἃ εἰς τὸν δούρειον ἵππον ἐποίησεν, ἐκείνου τὴν ἐπωνυμίαν ἐπιθέντος. φανταζομένην γὰρ αὐτῷ τὴν Ἀθηνᾶν κατὰ τὸν ὕπνον ἄξιοῦν ἀναθεῖναι τὰ ὄργανα, καὶ διὰ τοῦτο βραδυτέρας τυγχάνοντα τῆς ἀναγωγῆς εἰλεῖσθαι ἐν τῷ τόπῳ, μὴ δυνάμενον ἐκπλεῦσαι• ὅθεν Ἑλληνίας Ἀθηνᾶς τὸ ἱερὸν προσαγορεύεσθαι.

109 βλέγεται περὶ τὸν ὀνομαζόμενον τῆς Δαυνίας τόπον ἱερὸν εἶναι Ἀθηνᾶς Ἀχαΐας καλούμενον, ἐν ᾧ δὴ πελέκεις χαλκοῦς καὶ ὅπλα τῶν Διομήδους ἐταίρων καὶ αὐτοῦ ἀνακεῖσθαι. ἐν τούτῳ τῷ τόπῳ φασὶν εἶναι κύνας οἱ τοὺς ἀφικνουμένους τῶν Ἑλλήνων οὐκ ἀδικοῦσιν, ἀλλὰ σαίνουσιν ὥσπερ τοὺς συνηθεστάτους. πάντες δὲ οἱ Δαύνιοι καὶ οἱ πλησιόχωροι αὐτοῖς μελανειμονοῦσι, καὶ ἄνδρες καὶ γυναῖκες, διὰ ταύτην, ὡς ἔοικε, τὴν αἰτίαν. p290 τὰς γὰρ Τρωάδας τὰς ληφθείσας αἰχμαλώτους καὶ εἰς ἐκείνους τοὺς

τόπους ἀφικομένας, εὐλαβηθείσας μὴ πικρᾶς δουλείας τύχωσιν ὑπὸ τῶν ἐν ταῖς πατρίσι προὔπαρχουσῶν τοῖς Ἀχαιοῖς γυναικῶν, λέγεται τὰς ναῦς αὐτῶν ἐμπρῆσαι, ἵν' ἅμα μὲν τὴν προσδοκωμένην δουλείαν ἐκφύγωσιν, ἅμα δ' ὅπως μετ' ἐκείνων μένειν ἀναγκασθέντων συναρμοσθεῖσαι κατάσχωσιν αὐτοὺς ἄνδρας. πάνυ δὲ καὶ τῷ ποιητῇ καλῶς πέφρασται περὶ αὐτῶν• ἐλκεσιπέπλους γὰρ καὶ βαθυκόλπους κάκεινας, ὡς ἔοικεν, ἰδεῖν ἔστιν.

110 Ἐν δὲ τοῖς Πευκετίοις εἶναί φασιν Ἀρτέμιδος ἱερόν, ἐν ᾧ τὴν διωνομασμένην ἐν ἐκείνοις τοῖς τόποις χαλκῆν ἔλικά ἀνακεῖσθαι λέγουσιν, ἔχουσιν ἐπίγραμμα “Διομήδης Ἀρτέμιδι.” μυθολογεῖται δ' ἐκείνον ἐλάφῳ περὶ τὸν τράχηλον περιθεῖναι, τὴν δὲ περιφῦναι, καὶ τοῦτον τὸν τρόπον εὕρισκομένην ὑπὸ Ἀγαθοκλέους ὕστερον τοῦ βασιλέως Σικελιωτῶν εἰς τὸ τοῦ Διὸς ἱερὸν ἀνατεθῆναι φασιν.

111 Ἐν τῇ ἄκρᾳ τῆς Σικελίας τῇ καλουμένη Πελωριάδι τοσοῦτον γίνεσθαι κρόκον, ὥστε παρὰ τισὶ μὲν τῶν ἐν ἐκείνοις τοῖς τόποις κατοικούντων μὴ γνωρίζεσθαι Ἑλλήνων ποῖόν τί ἐστι τὸ ἄνθος, ἐπὶ δὲ τῆς Πελωριάδος ἀμάξας κατακομίζειν μεγάλας τοὺς βουλομένους, καὶ κατὰ τὴν ἑαρινὴν ὥραν τὰς στρωμνὰς καὶ τὰς σκηνὰς ἐκ κρόκου κατασκευάζειν.

112 Φησὶν εἶναι ὁ Πολύκριτος ὁ τὰ Σικελικὰ γεγραφῶς ἐν ἔπεσιν ἓν τι νι τόπῳ τῆς μεσογείου λιμνίον τι ἔχον ὅσον ἀσπίδος τὸ περίμετρον, τοῦτο δ' ἔχει ὕδωρ διαυγὲς μὲν μικρῷ δὲ θολερώτερον. p292841αεῖς τοῦτ' οὖν ἐάν τις εἰσβῇ λούσασθαι χρεῖαν ἔχων, αὖξεται εἰς εὖρος, ἐάν δὲ καὶ δεύτερος,<sup>4</sup> μᾶλλον πλατύνεται• τὸ δὲ πέρας ἕως εἰς πεντήκοντα ἀνδρῶν ὑποδοχὴν μεῖζον γενόμενον διευρύνεται. ἐπειδὴν δὲ τοῦτον τὸν ἀριθμὸν λάβῃ, ἐκ βάθους πάλιν ἀνοικοῦν ἐκβάλλειν μετέωρα τὰ σώματα τῶν λουομένων ἕξω ἐπὶ τὸ ἔδαφος• ὡς δ' ἂν τοῦτο γένηται, εἰς τὸ ἀρχαῖον πάλιν σχῆμα τῆς περιμέτρου καθίσταται. οὐ μόνον δ' ἐπὶ ἀνθρώπων τοῦτο περὶ αὐτὸ γίνεται, ἀλλὰ καὶ ἐάν τι τετράπουν εἰσβῇ, τὸ αὐτὸ πάσχει.

113 Ἐν δὲ τῇ ἐπικρατείᾳ τῶν Καρχηδονίων φασὶν ὅρος εἶναι ὃ καλεῖται Οὐράνιον, παντοδαπῆς μὲν ὕλης γέμον, πολλοῖς δὲ διαπεποικιλμένον ἄνθεσιν, ὥστε τοὺς συνεχεῖς τόπους ἐπὶ πολὺ μεταλαμβάνοντας τῆς εὐωδίας αὐτοῦ ἡδίστην τινὰ τοῖς ὁδοιποροῦσι προσβάλλειν τὴν ἀναπνοήν. πρὸς δὲ τοῦτον τὸν τόπον κρήνην ἐλαίου φασὶν εἶναι, τὴν δὲ ὁσμὴν ἔχειν τῆς κέδρου τοῖς ἀποπτίσμασιν ὁμοίαν. δεῖν δὲ φασὶ τὸν προσιόντα πρὸς αὐτὴν ἀγνὸν εἶναι, καὶ τούτου γινομένου πλεῖον ἀναβλύζειν αὐτὴν τὸ ἔλαιον, ὥστε ἀσφαλῶς ἀρύεσθαι.

114 Φασὶ καὶ ταύτης τῆς κρήνης πλησίον εἶναι τινα πέτραν αὐτοφυῆ, μεγάλην τῷ μεγέθει. ταύτην οὖν λέγουσιν, ἐπειδὴ μὲν ἢ θέρος, φλόγα ἀναπέμπειν πυρός, χειμῶνος δὲ γενομένου ἐκ τοῦ αὐτοῦ τόπου κρουνὸν ὕδατος ἀναρραίνειν οὕτω ψυχροῦ ὥστε χιόνι συμβαλλόμενον μηδὲν διαφέρειν. καὶ τοῦτο φασιν οὐκ ἀπόκρυφον οὐδὲ μικρὸν χρόνον φαίνεσθαι, ἀλλὰ τὸ μὲν πῦρ ἀνιέναι τὴν θερείαν ὅλην, τὸ δὲ ὕδωρ πάντα τὸν χειμῶνα.

115 Λέγεται δὲ καὶ περὶ τὴν τῶν Σιντῶν καὶ p294Μαιδῶν χώραν καλουμένην τῆς Θράκης ποταμόν τινα εἶναι Πόντον προσαγορευόμενον, ἐν ᾧ καταφέρεσθαι τινὰς λίθους οἱ καίονται καὶ τὸναντίον πάσχουσι τοῖς ἐκ τῶν ξύλων ἄνθραξι• ῥιπιζόμενοι γὰρ σβέννυνται ταχέως, ὕδατι δὲ ῥαινόμενοι ἀναλάμπουσι καὶ ἀνάπτουσι κάλλιον. παραπλησίαν δὲ ἀσφάλτῳ, ὅταν καίονται, καὶ πονηρὰν οὕτως ὁσμὴν καὶ δριμεῖαν ἔχουσιν βῶστε μηδὲν τῶν ἔρπετῶν ὑπομένειν ἐν τῷ τόπῳ καιομένων αὐτῶν.

116 Εἶναι δέ φασι καὶ τόπον τινὰ παρ' αὐτοῖς οὐ λίαν μικρόν, ἀλλ' ὥς ἂν εἴκοσί που σταδίων, ὃς φέρει κριθὰς αἷς οἱ μὲν ἄνθρωποι χρῶνται, οἱ δ' ἵπποι καὶ βόες οὐκ ἐθέλουσιν αὐτὰς ἐσθίειν, οὐδ' ἄλλο οὐδέν. ἀλλ' οὐδὲ τῶν ὑῶν οὐδὲ τῶν κυνῶν οὐδεμία τολμᾷ γεύσασθαι τῆς κόπρου τῶν ἀνθρώπων, οἵτινες ἂν ἐκ τῶν κριθῶν τούτων μᾶζαν φαγόντες ἢ ἄρτον ἀφοδεύωσι, τῷ θνήσκειν.

117 Ἐν δὲ Σκοτούσαις τῆς Θετταλίας φασὶν εἶναι κρηνίδιον τι μικρόν, ἐξ οὗ ῥεῖ τοιοῦτον ὕδωρ ὃ τὰ μὲν ἔλκη καὶ θλάσματα ταχέως ὑγιεινὰ ποιεῖ καὶ τῶν ἀνθρώπων καὶ τῶν ὑποζυγίων, ἐὰν δέ τις ξύλον μὴ παντάπασι συντρίψας ἀλλὰ σχίσας ἐμβάλῃ, συμφύεται καὶ πάλιν εἰς τὸ αὐτὸ καθίσταται.

118 Περὶ δὲ τὴν Θράκην τὴν ὑπὲρ Ἀμφίπολιν φασὶ γίνεσθαι τι τερατῶδες καὶ ἄπιστον τοῖς μὴ τεθεαμένοις. ἐξιόντες γὰρ οἱ παῖδες ἐκ τῶν κωμῶν καὶ τῶν ἐγγὺς χωρίων ἐπὶ θήραν τῶν ὀρνιθαρίων συνθηρεύειν παραλαμβάνουσι τοὺς ἰέρακας, καὶ τοῦτο ποιοῦσιν οὕτως. ἐπειδὴ προέλθωσιν εἰς τόπον ἐπιτήδειον, καλοῦσι τοὺς ἰέρακας ὀνομαστὶ κεκραγότες• οἱ δ' ὅταν ἀκούσωσι τῶν παίδων τὴν p296φωνήν, παραγινόμενοι κατασοβοῦσι τοὺς ὀρνίθας• οἱ δὲ δεδιότες ἐκείνους καταφεύγουσιν εἰς τοὺς θάμνους, ὅπου αὐτοὺς οἱ παῖδες ξύλοις τύπτοντες λαμβάνουσιν. ὃ δὲ πάντων ἂν τις μάλιστα θαυμάσειεν• οἱ μὲν γὰρ ἰέρακες ὅταν αὐτοὶ τινα λάβωσι τῶν ὀρνίθων, καταβάλλουσι τοῖς θηρεύουσιν, οἱ δὲ παῖδες ἀπάντων τῶν ἀλόντων μέρος τι τοῖς ἰέραξιν ἀποδόντες ἀπέρχονται.

119 Θαυμαστὸν δέ τι καὶ παρὰ τοῖς Ἑνετοῖς φασὶ γίνεσθαι. ἐπὶ γὰρ τὴν χώραν αὐτῶν πολλάκις κολοιῶν ἀναριθμήτους μυριάδας ἐπιφέρεισθαι καὶ τὸν σῖτον αὐτῶν σπειράντων καταναλίσκειν• οἷς τοὺς Ἑνετοὺς πρὸ τοῦ ἐφίπτασθαι μέλλειν ἐπὶ τὰ μεθόρια τῆς γῆς προτιθέναι δῶρα, παντοδαπῶν καρπῶν καταβάλλοντας σπέρματα, ὧν ἔαν μὲν γεύσωνται οἱ κολοιοί, 842αοὺχ ὑπερβαίνουν ἐπὶ τὴν χώραν αὐτῶν, ἀλλ' οἷδασιν οἱ Ἑνετοὶ ὅτι ἔσονται ἐν εἰρήνῃ• ἔαν δὲ μὴ γεύσωνται, ὥσεὶ πολεμίων ἔφοδον αὐτοῖς γινομένην οὕτω προσδοκῶσιν.

120 Ἐν δὲ τῇ Χαλκιδικῇ τῇ ἐπὶ Θράκης πλησίον Ὀλύνθου φασὶν εἶναι Κανθαρώλεθρον ὀνομαζόμενον τόπον, μικρῷ μείζονα τὸ μέγεθος ἄλλω, εἰς ὃν τῶν μὲν ἄλλων ζῶων ὅταν τι ἀφίκηται, πάλιν ἀπέρχεται, τῶν δὲ κανθάρων τῶν ἐλθόντων οὐδεὶς, ἀλλὰ κύκλῳ περιόντες τὸ χωρίον λιμῷ τελευτῶσιν.

121 Ἐν δὲ Κύκλωψι τοῖς Θραξὶ κρηνίδιον ἔστιν ὕδωρ ἔχον ὃ τῇ μὲν ὄψει καθαρὸν καὶ διαφανὲς καὶ τοῖς ἄλλοις ὅμοιον, ὅταν δὲ πῖη τι ζῶον ἐξ αὐτοῦ, παραχρῆμα διαφθείρεται.

122 Φασὶ δὲ καὶ ἐν τῇ Κραστωνίᾳ παρὰ τὴν Βισαλτῶν χώραν τοὺς ἀλίσκομένους λαγῶς δύο ἥπατα ἔχειν, καὶ τόπον τινὰ εἶναι ὅσον πλεθριαῖον, p298εἰς ὃν ὃ τι ἂν εἰσέλθῃ ζῶον ἀποθνήσκει. ἔστι δὲ καὶ ἄλλο αὐτόθι ἱερὸν Διονύσου μέγα καὶ καλόν, ἐν ᾧ τῆς ἐορτῆς καὶ τῆς θυσίας οὔσης λέγεται, ὅταν μὲν ὁ θεὸς εὐετηρίαν μέλλῃ ποιεῖν, ἐπιφαίνεσθαι μέγα σέλας πυρός, καὶ τοῦτο πάντας ὁρᾶν τοὺς περὶ τὸ τέμενος διατρίβοντας, ὅταν δ' ἀκαρπίαν, μὴ φαίνεσθαι τοῦτο τὸ φῶς, ἀλλὰ σκότος ἐπέχειν τὸν τόπον ὥσπερ καὶ τὰς ἄλλας νύκτας.

123 Ἐν Ἡλιδι λέγουσιν εἶναι τι οἶκημα σταδίους ἀπέχον ὀκτὼ μάλιστα τῆς πόλεως, εἰς ὃ τιθέασι τοῖς Διονυσίοις λέβητας χαλκοῦς τρεῖς κενούς. τοῦτο δὲ ποιήσαντες παρακαλοῦσι τῶν Ἑλλήνων τῶν ἐπιδημούντων τὸν βουλόμενον ἐξετάσαι τὰ ἀγγεῖα καὶ τοῦ οἴκου κατασφραγίζεσθαι τὰς θύρας. καὶ ἐπειδὴ μὲν ἄνοιγιν, ἐπιδείξαντες τοῖς πολίταις καὶ τοῖς ξένοις τὰς σφραγίδας, οὕτως ἀνοίγουσιν. οἱ δ' εἰσελθόντες εὐρίσκουσι τοὺς μὲν λέβητας οἴνου πλήρεις, τὸ δὲ ἔδαφος καὶ τοὺς τοίχους ὑγιεῖς, ὥστε μηδεμίαν εἶναι ὑποψίαν λαβεῖν ὥς τέχνην τινὲ κατασκευάζουσιν. εἶναι δὲ φασὶ παρ' αὐτοῖς καὶ ἰκτίνους, οἱ παρὰ μὲν τῶν διὰ τῆς ἀγορᾶς τὰ κρέα φερόντων ἀρπάζουσι, βτῶν δὲ ἱεροθύτων οὐχ ἄπτονται.

124 Ἐν Κορωνείᾳ δὲ τῆς Βοιωτίας λέγεται τοὺς ἀσπάλακας τὰ ζῶα μὴ

δύνασθαι ζῆν μῆδ' ὀρύσσειν τὴν γῆν, τῆς λοιπῆς Βοιωτίας πολὺ πλῆθος ἔχουσης.

125 Ἐν Λουσοῖς δὲ τῆς Ἀρκαδίας κρήνην εἶναι τινὰ φασιν, ἐν ᾗ χερσαῖοι μῦες γίνονται καὶ κολυμβῶσι, τὴν δίαιταν ἐν ἐκείνῃ ποιούμενοι. λέγεται δ' αὐτὸ τοῦτο καὶ ἐν Λαμψάκῳ εἶναι.

126 Ἐν δὲ Κράννωνι τῆς Θετταλίας φασὶ δύο κόρακας εἶναι μόνους ἐν τῇ πόλει. οὗτοι ὅταν p300ἐκνεοττεύσωσιν, ἑαυτοὺς μὲν, ὡς ἔοικεν, ἐκτοπίζουσιν, ἑτέρους δὲ τοσούτους τῶν ἐξ αὐτῶν γενομένων ἀπολείπουσιν.

127 Ἐν δὲ Ἀπολλωνίᾳ τῇ πλησίον κειμένη τῆς τῶν Ἀτλαντίνων χώρας φασὶ γίνεσθαι ἄσφαλον ὀρυκτὴν καὶ πίσσαν, τὸν αὐτὸν τρόπον ἐκ τῆς γῆς ἀναπηδῶσαν τοῖς ὕδασιν, οὐδὲν διαφέρουσιν τῆς Μακεδονικῆς, μελαντέραν δὲ καὶ παχυτέραν πεφυκέναι ἐκείνης. οὐ πόρρω δὲ τούτου τοῦ χωρίου πῦρ ἐστὶ καίόμενον πάντα τὸν χρόνον, ὡς φασὶν οἱ κατοικοῦντες περὶ τὴν χώραν ἐκείνην. ὁ δὲ καίόμενος τόπος ἐστὶν οὐ πολὺς, ὡς ἔοικεν, ἀλλ' ὅσον μάλιστα πεντακλίνου τὸ μέγεθος. ὅζει δὲ θείου καὶ στυπτηρίας, καὶ πέφυκε περὶ αὐτὸν πόα τε βαθεῖα, ὃ καὶ θαυμάσειεν ἂν τις μάλιστα, καὶ δένδρα μεγάλα, οὐκ ἀπέχοντα τοῦ πυρὸς πήχεις τέσσαρας. καίεται δὲ συνεχῶς περὶ Λυκίαν καὶ Μεγάλην πόλιν τὴν ἐν Πελοποννήσῳ.

128 Λέγεται δὲ καὶ ἐν Ἰλλυριοῖς τίκτειν τὰ βοσκήματα δις τοῦ ἐνιαυτοῦ, καὶ τὰ πλεῖστα διδυμοτοκεῖν, καὶ πολλὰ δὲ τρεῖς ἢ τέσσαρας ἐρίφους τίκτειν, ἕνια δὲ καὶ πέντε καὶ πλείους, ἔτι δὲ γάλακτος ἀφιέναι ῥαδίως τρία ἡμίχρα. λέγουσι δὲ καὶ τὰς ἀλεκτορίδας οὐχ ὥσπερ παρὰ τοῖς ἄλλοις ἅπαξ τίκτειν, ἀλλὰ δις ἢ τρίς τῆς ἡμέρας.

129 Λέγεται δὲ καὶ ἐν Παιονίᾳ τοὺς βοῦς τοὺς ἀγρίους πολὺ μεγίστους ἀπάντων τῶν ἐν τοῖς λοιποῖς ἔθνεσι γίνεσθαι, καὶ τὰ κέρατα αὐτῶν χωρεῖν τέσσαρας χόας, ἐνίων δὲ καὶ πλεῖον.

130 843aΠερὶ δὲ τοῦ πορθμοῦ τῆς Σικελίας καὶ ἄλλοι μὲν πλείους γεγράφασι, καὶ οὗτος δὲ φησι συμβαίνειν τερατῶδες. ἐκ γὰρ τοῦ Τυρρηνικοῦ p302πελάγους πολλῶ ῥοίζῳ φερόμενον τὸν κλύδωνα προσβάλλειν πρὸς ἀμφοτέρω τὰ ἀκρωτήρια, τὸ μὲν τῆς Σικελίας, τὸ δὲ τῆς Ἰταλίας, τὸ προσαγορευόμενον Ῥήγιον, καὶ φερόμενον ἐκ μεγάλου πελάγους εἰς στενὸν συγκλείεσθαι, τούτου δὲ γινομένου κύμα μετέωρον αἶρειν σὺν πολλῶ βρόμῳ ἐπὶ πάνυ πολὺν τόπον τῆς ἄνω φορᾶς, ὥστε τοῖς μακρὰν ἀπέχουσι σύνοπτον

εἶναι τὸν μετεωρισμόν, οὐχ ὅμοιον φαινόμενον θαλάσσης ἀναφορᾶ, λευκὸν δὲ καὶ ἀφρῶδες, παραπλήσιον δὲ τοῖς συρμοῖς τοῖς γινομένοις ἐν τοῖς ἀνυπερβλήτοις χειμῶσι. καὶ ποτὲ μὲν ἀλλήλοις συμπίπτειν ἐπ’ ἀμφοτέρων τῶν ἀκρωτηρίων τοὺς κλύδωνας, καὶ ποιεῖν συγκλυσμὸν ἄπιστον μὲν διηγεῖσθαι, ἀνυπομόνητον δὲ τῇ ὄψει θεάσασθαι• ποτὲ δὲ διισταμένους ἐκ τῆς πρὸς ἀλλήλους συρράξεως οὕτω βαθεῖαν καὶ φρικώδη τὴν ἄποψιν ποιεῖν τοῖς ἐξ ἀνάγκης θεωμένοις, ὥστε πολλοὺς μὲν μὴ κρατεῖν ἑαυτῶν, ἀλλὰ πίπτειν σκοτουμένους ὑπὸ δέους. ἐπειδὴν δὲ προσπεσὸν τὸ κύμα πρὸς ὁποτερονοῦν τῶν τόπων καὶ μετεωρισθὲν ἕως τῶν ἄκρων πάλιν εἰς τὴν ὑπορρέουσαν θάλασσαν κατενεχθῇ, τότε δὴ πάλιν σὺν πολλῷ μὲν βρυχηθῶ μεγάλας δὲ καὶ ταχεῖαις δίναις τὴν θάλασσαν ἀναζειν καὶ μετεωρίζεσθαι κυκωμένην ἐκ βυθῶν, παντοδαπὰς δὲ χροὰς μεταλλάσσειν• ποτὲ μὲν γὰρ ζοφεράν, ποτὲ δὲ κυανῇν, πολλάκις δὲ πορφυρίζουσιν διαφαίνεσθαι. τὸν δὲ δρόμον καὶ τὸ μῆκος αὐτῆς, ἔτι δὲ πρὸς τούτοις τὴν ἀνάρροιν, οὐδὲ ἀκούειν οὐδὲν ἔρπετον οὐθ’ ὅρᾶν ὑπομένειν, φεύγειν δὲ πάντα πρὸς τὰς ὑποκειμένας ὑπωρείας. λήγοντος δὲ τοῦ κλύδωνος τὰς δίνας μετεώρους φέρεσθαι ποικίλας οὕτω τὰς ἀναστροφὰς ποιουμένας, ὥστε p304δοκεῖν πρηστήρων ἢ τινων ἄλλων μεγάλων ὄφρων σπειράματι παρομοίους τὰς κινήσεις ἀποτελεῖν.

131 βΦασὶν οἰκοδομοῦντων Ἀθηναίων τὸ τῆς Δήμητρος ἱερὸν τῆς ἐν Ἐλευσῖνι περιεχομένην στήλην πέτραις εὐρεθῆναι χαλκῇν, ἐφ’ ἧς ἐπεγέγραπτο “Δηϊόπης τόδε σῆμα”, ἦν οἱ μὲν λέγουσι Μουσαίου εἶναι γυναιῖκα, τινὲς δὲ Τριπτολέμου μητέρα γενέσθαι.

132 Ἐν μιᾷ τῶν Αἰόλου προσαγορευομένων νήσων πλῆθός τί φασι γενέσθαι φοινίκων, ὅθεν καὶ Φοινικῶδη καλεῖσθαι. οὐκ ἂν οὖν εἴη τὸ λεγόμενον ὑπὸ Καλλισθένους ἀληθές, ὅτι ἀπὸ Φοινίκων τῆς Συρίας τῶν τὴν παραλίαν οἰκούντων τὸ φυτὸν ἔλαβε τὴν προσηγορίαν. ἀλλὰ καὶ αὐτοὺς τοὺς Φοίνικας ὑπὸ τῶν Ἑλλήνων φασὶ τινες [φοίνικας] προσαγορευθῆναι διὰ τὸ πρῶτους πλέοντας τὴν θάλασσαν, ἧ ἂν ἀποβαίησαν, πάντας ἀποκτείνειν καὶ φονεύειν. καὶ κατὰ γλῶσσαν δ’ ἐστὶ τὴν Περραιβῶν τὸ αἰμάξαι φοινίξαι.

133 Τῆς καλουμένης Αἰνιакῆς χώρας περὶ τὴν ὀνομαζομένην Ὑπάτην λέγεται παλαιὰ τις στήλη εὐρεθῆναι, ἦν οἱ Αἰνιᾶνες τίνος ἦν εἰδέναι βουλόμενοι, ἔχουσιν ἐπιγραφὴν ἀρχαίοις γράμμασιν, ἀπέστειλαν εἰς Ἀθήνας τινὰς κομίζοντας αὐτήν. πορευομένων δὲ διὰ τῆς Βοιωτίας, καὶ τισι τῶν ξένων ὑπὲρ τῆς ἀποδημίας ἀνακοινουμένων, λέγεται αὐτοὺς εἰσαχθῆναι εἰς τὸ καλούμενον Ἰσμήνιον ἐν Θήβαις• ἐκεῖθεν γὰρ μάλιστα ἂν εὐρεθῆναι τὴν τῶν γραμμάτων ἐπιγραφὴν, λέγοντες εἶναί τινα ἀναθήματα ὁμοίους ἔχοντα τοὺς

ῥυθμοὺς τῶν γραμμάτων ἀρχαῖα. ὅθεν αὐτοὺς φασιν ἀπὸ τῶν  
p306γνωριζομένων τὴν εὕρεσιν ποιησαμένους τῶν ἐπιζητουμένων, ἀναγράψαι  
τούσδε τοὺς στίχους•

Ἡρακλῆς τεμένισσε Κυθήρα Φερσεφάσση,

Γηρυόνεως<sup>5</sup> ἀγέλας ἐλάων ἡδ' Ἐρύθειαν ἄγων.

τὰς μ' <sup>6</sup> ἐδάμασσε πόθῳ Πασιφάεσσα θεά.

τῇδε δέ μοι τέκνω τῷ δ' Ἐρύθοντα<sup>7</sup> δάμαρ

νυμφογενῆς Ἐρύθη• δὴ τόδ' ἔδωκα πέδον

μναμόσυνον φιλίας, φηγῶ ὑπο σκιερᾷ.

844ατούτῳ τῷ ἐπιγράμματι ἐπεχώρησε καὶ ὁ τόπος ἐκεῖνος Ἑρυθος  
καλούμενος, καὶ ὅτι ἐκεῖθεν τὰς βοῦς καὶ οὐκ ἐξ Ἐρυθείας ἤγαγεν• οὐδὲ γὰρ  
ἐν τοῖς κατὰ Λιβύην καὶ Ἰβηρίαν τόποις οὐδαμοῦ τὸ ὄνομά φασι λέγεσθαι τῆς  
Ἐρυθείας.

134 Τῆς δὲ Λιβύης ἐν Ἰτύκῃ τῇ καλουμένῃ, ἣ κεῖται μὲν, ὡς λέγουσιν, ἐν τῷ  
κόλπῳ τῷ μεταξὺ Ἑρμαίας καὶ τῆς Ἴππου ἄκρας, ἐπέκεινα δὲ Καρχηδόνος  
ὡς σταδίου διακοσίους (ἣ καὶ πρότερον κτισθῆναι λέγεται ὑπὸ Φοινίκων  
αὐτῆς τῆς Καρχηδόνος ἔτεσι διακοσίοις ὀγδοήκοντα ἐπτά, ὡς ἀναγράφεται  
ἐν ταῖς Φοινικικαῖς ἱστορίαις), γίνεσθαι φασιν ἄλας ὀρυκτούς, ἐπὶ τρεῖς  
ὄργυιās τὸ βάθος, τῇ ὥσφι λευκοὺς καὶ οὐ στερεοὺς, ἀλλ' ὁμοίους τῷ  
γλισχροτάτῳ γλοιῷ• καὶ ὅταν ἀνενεχθῶσιν εἰς τὸν ἥλιον, ἀποστερεοῦσθαι  
καὶ γίνεσθαι ὁμοίους τῷ Παρίῳ λίθῳ. γλύφεσθαι δὲ ἐξ αὐτῶν λέγουσι ζῶδια  
καὶ ἄλλα σκεύη.

135 Τοὺς πρώτους τῶν Φοινίκων ἐπὶ Ταρτησσὸν πλεύσαντας λέγεται  
τοσοῦτον ἀργύριον ἀντιφορτίσασθαι, ἔλαιον καὶ ἄλλον ναυτικὸν ῥῶπον  
εἰσαγαγόντας, ὥστε μηκέτι ἔχειν δύνασθαι μήτε ἐπιδέξασθαι τὸν ἄργυρον,  
ἀλλ' ἀναγκασθῆναι ἀποπλέοντας p308ἐκ τῶν τόπων τὰ τε ἄλλα πάντα  
ἀργυρᾷ οἷς ἐχρῶντο κατασκευάσασθαι, καὶ δὴ καὶ τὰς ἀγκύρας πάσας.

136 Λέγουσι τοὺς Φοίνικας τοὺς κατοικοῦντας τὰ Γάδαιρα καλούμενα, ἔξω  
πλέοντας Ἡρακλείων στηλῶν ἀπηλιώτῃ ἀνέμῳ ἡμέρας τέτταρας,  
παραγίνεσθαι εἰς τινὰς τόπους ἐρήμους, θρύου καὶ φύκους πλήρεις, οὓς ὅταν

μὲν ἄμπωτις ἢ μὴ βαπτίζεσθαι, ὅταν δὲ πλημμύρα, κατακλύζεσθαι, ἐφ' ὧν εὐρίσκεσθαι ὑπερβάλλον θύννων πλῆθος, καὶ τοῖς μεγέθεσιν ἄπιστον καὶ τοῖς πάχεσιν, ὅταν ἐποκείλωσιν• οὕς ταριχεύοντες καὶ συντιθέντες εἰς ἀγγεῖα διακομίζουσιν εἰς Καρχηδόνα. ὧν Καρχηδόνιοι μόνων οὐ ποιοῦνται τὴν ἐξαγωγήν, ἀλλὰ διὰ τὴν ἀρετὴν ἣν ἔχουσι κατὰ τὴν βρῶσιν αὐτοὶ καταναλίσκουσιν.

137 Ἐν τῇ Πηδασίᾳ τῆς Καρίας θυσία τῷ Διὶ συντελεῖται, ἐν ἣ πέμπουσιν αἰγὰ τινα, περὶ ἣν θαυμαστὸν τί φασιν γίνεσθαι. βαδίζουσα γὰρ ἐκ Πηδάσων σταδίους ἑβδομήκοντα δι' ὄχλου πολλοῦ τοῦ θεωροῦντος οὔτε διαταράττεται κατὰ τὴν πορείαν οὔτ' ἐκτρέπεται τῆς ὁδοῦ, δεδεμένη δὲ σχοινίῳ προπορεύεται τοῦ τὴν ἱερωσύνην ἔχοντος. θαυμαστὸν δ' ἐστὶ καὶ τὸ δύο κόρακας εἶναι διὰ τέλους περὶ τὸ τοῦ Διὸς ἱερόν, ἄλλον δὲ μηδένα προσιέναι πρὸς τὸν τόπον, καὶ τὸν ἕτερον αὐτῶν ἔχειν τὸ πρόσθεν τοῦ τραχήλου λευκόν.

138 Ἐν Ἰλλυριοῖς δὲ τοῖς Ἀρδιαίοις καλουμένοις, παρὰ τὰ μεθόρια τῶν Αὐταριατῶν κᾶκείνων, φασὶν ὅρος εἶναι μέγα, τούτου δὲ πλησίον ἄγκος, ὅθεν ὕδωρ ἀναπηδᾷ, οὐ πᾶσαν ὥραν ἀλλὰ τοῦ ἥρος, πολὺ τῷ πλήθει, ὃ λαμβάνοντες τὰς μὲν 310 ἡμέρας ἐν τῷ στεγνῷ φυλάττουσι, τὰς δὲ νύκτας εἰς τὴν αἰθρίαν τιθέασιν. καὶ πέντε ἢ ἕξ ἡμέρας τοῦτο ποιησάντων αὐτῶν πῆγνυται τὸ ὕδωρ, καὶ γίνεται κάλλιστον ἄλας, ὃ ἔνεκεν τῶν βοσκημάτων μάλιστα διατηροῦσιν• οὐ γὰρ εἰσάγονται πρὸς αὐτοὺς ἄλλες διὰ τὸ κατοικεῖν πόρρω αὐτοὺς θαλάσσης καὶ εἶναι αὐτοὺς ἀμίκτους. πρὸς οὖν τὰ βοσκήματα πλείστην αὐτοῦ χρεῖαν ἔχουσιν• ἀλίζουσι γὰρ αὐτὰ δις τοῦ ἐνιαυτοῦ. ἐὰν δὲ μὴ ποιήσωσι τοῦτο, συμβαίνει αὐτοῖς ἀπόλλυσθαι τὰ πλείστα τῶν βοσκημάτων.

139 Ἐν Ἀργεὶ δὲ φασιν γίνεσθαι ἀκρίδος τι γένος ὃ καλεῖται σκορπιόμαχον. ὅταν γὰρ ἴδῃ τάχιστα σκορπίον, ἀνθίσταται αὐτῷ• ὡσαύτως δὲ καὶ ὁ σκορπίος ἐκείνη. καὶ κύκλῳ περιουῖσα τρίζει περὶ αὐτόν• τὸν δὲ τὸ κέντρον ἐπαίροντα ἀντιπεριάγειν ἐν τῷ αὐτῷ τόπῳ, εἶτα κατὰ μικρὸν ἀνιέναι τὸ κέντρον, καὶ τέλος ὅλον ἐκτείνεσθαι, τῆς ἀκρίδος κύκλῳ τρεχούσης. τὰ τελευταῖα δὲ προσελθοῦσα κατεσθίει αὐτόν ἢ ἀκρίς. ἀγαθὸν δὲ φασιν εἶναι καὶ πρὸς τὰς πληγὰς τοῦ σκορπίου ἐπιφαγεῖν αὐτήν.

140 Τοὺς ἐν Νάξῳ σφῆκᾶς φασιν, ὅταν φάγωσι τοῦ ἔχεως (προσφιλῆς δ' αὐτοῖς ἢ σάρξ, ὡς ἔοικεν, ἐστίν), ἐπειδάν τινα κεντήσωσι, περιωδύνους οὕτω ποιεῖν ὥστε χαλεπωτέραν φαίνεσθαι τῆς πληγῆς τῶν ἔχεων.



141 845a Φασὶ τὸ Σκυθικὸν φάρμακον, ᾧ ἀποβάπτουσι τοὺς ὀϊστούς, συντίθεσθαι ἐξ ἐχίδνης. τηροῦσι δέ, ὡς ἔοικεν, οἱ Σκύθαι τὰς ἥδη ζωτοκούσας, καὶ λαβόντες αὐτὰς τήκουσιν ἡμέρας τινάς. ὅταν δὲ ἱκανῶς αὐτοῖς δοκῇ σεσηφθαι πᾶν, τὸ τοῦ ἀνθρώπου αἷμα εἰς χυτρίδιον ἐγχέοντες p312 εἰς τὰς κοπρίας κατορύττουσι πωμάσαντες. ὅταν δὲ καὶ τοῦτο σαπῇ, τὸ ὑφιστάμενον ἐπάνω τοῦ αἵματος, ὃ δὴ ἐστὶν ὕδατῶδες, μὴ γνύουσι τῷ τῆς ἐχίδνης ἰχῶρι, καὶ οὕτω ποιοῦσι θανάσιμον.

142 Ἐν Κουρίῳ τῆς Κύπρου ὄφεων τι γένος εἶναι φασιν, ὃ τὴν δύναμιν ὁμοίαν ἔχει τῇ ἐν Αἰγύπτῳ ἀσπίδι, πλην ὅτι τοῦ χειμῶνος ἐὰν δάκη, οὐδὲν ἐργάζεται, εἴτε δι' ἄλλην τινὰ αἰτίαν, εἴτε διότι τὸ ζῶον δυσκίνητον γίνεται ὑπὸ τοῦ ψύχους ἀποπηγνύμενον καὶ τελέως ἀδύνατον, ἐὰν μὴ θερμανθῇ.

143 Ἐν Κέῳ φασὶν εἶναι τι γένος ἀχέρδου, ὑφ' ἧς ἐὰν τις πληγῇ τῇ ἀκάνθῃ, ἀποθνήσκει.

144 Ἐν Μυσίᾳ φασὶν ἄρκτων τι γένος εἶναι λευκόν, αἷ ὅταν κυνηγῶνται, ἀφιάσι τοιαύτην πνοὴν ὥστε τῶν κυνῶν τὰς σάρκας σήπειν, ὡσαύτως δὲ καὶ τῶν λοιπῶν θηρίων, ἀβρώτους τε ποιεῖν. ἐὰν δέ τις καὶ βιάσῃται καὶ ἐγγίσῃ, ἀφιάσιν ἐκ τοῦ στόματος φλέγμα ἀμπολύ τι, ὡς ἔοικεν, ὃ προσφυσᾷ πρὸς τὰ πρόσωπα τῶν κυνῶν, ὡσαύτως δὲ καὶ τῶν ἀνθρώπων, ὥστε καὶ ἀποπνίγειν καὶ ἀποτυφλοῦν.

145 Ἐν δὲ τῇ Ἀραβίᾳ ὑαινῶν τι γένος φασὶν εἶναι, ὃ ἐπειδὴν προΐδῃ τι θηρίον ἢ ἀνθρώπου ἐπιβῇ ἐπὶ τὴν σκιάν, ἀφωνίαν ἐργάζεται καὶ πῆξιν τοιαύτην ὥστε μὴ δύνασθαι κινεῖν τὸ σῶμα. τοῦτο δὲ ποιεῖν καὶ ἐπὶ τῶν κυνῶν.

146 Κατὰ δὲ Συρίαν εἶναι τί φασι ζῶον ὃ καλεῖται λεοντοφόνον• ἀποθνήσκει γὰρ ὁ λέων, ὡς ἔοικεν, ὅταν αὐτοῦ φάγῃ. ἐκὼν μὲν οὖν τοῦτο οὐ ποιεῖ, ἀλλὰ φεύγει τὸ ζῶον• ὅταν δὲ συλλαβόντες αὐτὸ οἱ κυνηγέται καὶ ὀπτήσαντες ὥσπερ ἄλφιτα λευκὰ p314 περιπάσσωσιν ἄλλῳ ζῳῷ, γευσάμενοι δ' ἀπόλλυσθαί φασι παραχρῆμα. κακοῖ καὶ προσουροῦν τὸν λέοντα τοῦτο τὸ ζῶον.

147 Ἡ λέγεται καὶ τοὺς γῦπας ὑπὸ τῆς τῶν μύρων ὁσμῆς ἀποθνήσκειν, ἐὰν τις αὐτοὺς κρίσῃ ἢ δῶ τι μεμυρισμένον φαγεῖν. ὡσαύτως δὲ καὶ τοὺς κανθάρους ὑπὸ τῆς τῶν ῥόδων ὁσμῆς.

148 Καὶ ἐν Σικελίᾳ δέ φασι καὶ ἐν Ἰταλίᾳ τοὺς γαλεώτας θανάσιμον ἔχειν τὸ δῆγμα, καὶ οὐχ ὥσπερ τοὺς παρ' ἡμῖν ἀσθενὲς καὶ μαλακόν. εἶναι δὲ καὶ μυῶν γένος ἐφιπτάμενον, ὃ ὅταν δάκη, ἀποθνήσκειν ποιεῖ.

149 Ἐν δὲ τῇ Μεσοποταμίᾳ τῆς Συρίας φασὶ καὶ ἐν Ἰστροῦντι ὀφειδιά τινα γίνεσθαι, ἃ τοὺς ἐγχωρίους οὐ δάκνει, τοὺς ξένους δὲ ἀδικεῖ σφόδρα.

150 Περὶ δὲ τὸν Εὐφράτην καὶ τελείως φασὶ τοῦτο γίνεσθαι. πολλοὺς γὰρ φαίνεσθαι περὶ τὰ χεῖλη τοῦ ποταμοῦ καὶ διανέοντας ἐφ' ἑκάτερα, ὥστε τῆς δείλης ἐνταῦθα θεωρουμένους ἅμα τῇ ἡμέρᾳ ἐπὶ θατέρου μέρους φαίνεσθαι, καὶ τοὺς ἀναπαυομένους τῶν μὲν Σύρων μὴ δάκνειν, τῶν δ' Ἑλλήνων μὴ ἀπέχεσθαι.

151 Ἐν Θεσσαλίᾳ φασὶ τὸν ἱερὸν καλούμενον ὄφιν πάντας ἀπολλύειν, οὐ μόνον ἐὰν δάκη, ἀλλὰ καὶ ἐὰν θίγῃ. διὸ καὶ ὅταν φανῇ καὶ τὴν φωνὴν ἀκούσωσι (φαίνεται δὲ σπανίως), φεύγουσι καὶ οἱ ὄφεις καὶ οἱ ἔχεις καὶ τᾶλλα πάντα θηρία. τῷ δὲ μεγέθει οὐκ ἔστι μέγας ἀλλὰ μέτριος. ἐν Τήνῳ δὲ ποτέ φασιν αὐτὸν τῇ πόλει κατὰ Θετταλίαν ἀναιρεθῆναι ὑπὸ γυναικός, γενέσθαι δὲ τὸν θάνατον τοιόνδε. γυναῖκα κύκλον γράψασαν καὶ τὰ φάρμακα θεῖσαν εἰσβῆναι εἰς τὸν κύκλον, αὐτὴν καὶ ῥ316τὸν υἱόν, εἴτα μιμεῖσθαι τὴν φωνὴν τοῦ θηρίου• τὸ δ' ἀντάδειν καὶ προσιέναι. ἄδοντος δὲ καταδαρθεῖν τὴν γυναῖκα, καὶ ἐγγυτέρω προσιόντος μᾶλλον, ὥστε μὴ δύνασθαι κρατεῖν τοῦ ὕπνου. τὸν δ' υἱὸν παρακαθήμενον ἐγείρειν τύπτοντα, κελευούσης ἐκείνης, καὶ λέγειν ὅτι ἐὰν μὲν καθυπνώσῃ, ἀπολεῖται καὶ αὐτὴ καὶ ἐκεῖνος, ἐὰν δὲ βιάσῃται καὶ προσαγάγῃται τὸ θηρίον, σωθήσονται. ὥς δὲ προσῆλθεν ὁ ὄφις εἰς τὸν κύκλον, αὐτὸν εὐθὺς γενέσθαι αὐτόν.

152 Λέγεται περὶ τὰ Τύανα ὕδωρ εἶναι ὀρκίου Διός (καλοῦσι δὲ αὐτὸ Ἀσβαμαῖον), οὗ πηγὴ ἀναδίδοται πάνυ ψυχρά, παφλάζει δὲ ὥσπερ οἱ λέβητες. 846ατοῦτο εὐόρκοις μὲν ἡδύ τε καὶ ἴλεων, ἐπιόρκοις δὲ παρὰ πόδας ἢ δίκη. ἀποσκήπτει γὰρ καὶ εἰς ὀφθαλμοὺς καὶ εἰς χεῖρας καὶ εἰς πόδας, ἀλίσκονται τε ὑδέροις καὶ φθόαις• καὶ οὐδὲ πρόσθεν ἀπελθεῖν δυνατόν, ἀλλ' αὐτόθι ἔχονται καὶ ὀλοφύρονται πρὸς τῷ ὕδατι, ὁμολογοῦντες ἃ ἐπιώρκησαν.

153 Ἀθήνησί φασι τὸν ἱερὸν τῆς ἐλαίας θαλλὸν ἐν ἡμέρᾳ μιᾷ βλαστῆσαι καὶ πλείονα γενέσθαι, ταχὺ δὲ αὐτὸ πάλιν συστέλλεσθαι.

154 Τῶν ἐν Αἴτνῃ κρατήρων ἀναρραγόντων καὶ ἀνὰ τὴν γῆν φερομένων ἔνθα καὶ ἔνθα χειμάρρου δίκην, τὸ τῶν εὐσεβῶν γένος ἐτίμησε τὸ δαιμόνιον.

περικαταληφθέντων γὰρ ὑπὸ τοῦ ῥεύματος διὰ τὸ βαστάζειν γέροντας ἐπὶ τῶν ὤμων γονεῖς καὶ σῶζειν, πλησίον αὐτῶν γενόμενον τὸ τοῦ πυρὸς ῥεῦμα ἐξεσχίσθη, παρέτρεψέ τε τοῦ φλογμοῦ τὸ μὲν ἔνθα τὸ δὲ ἔνθα, καὶ ἐτήρησεν ἀβλαβεῖς ἅμα τοῖς γονεῦσι τοὺς νεανίσκους.

p318 155 Λέγεται τὸν ἀγαλματοποιὸν Φειδίαν κατασκευάζοντα τὴν ἐν ἀκροπόλει Ἀθηνᾶν ἐν μεσότητι ταύτης τῆς ἀσπίδος τὸ ἑαυτοῦ πρόσωπον ἐντυπώσασθαι, καὶ συνδῆσαι τῷ ἀγάλματι διὰ τινος ἀφανοῦς δημιουργίας, ὥστ' ἐξ ἀνάγκης, εἴ τις βούλοιτο αὐτὸ περιαιρεῖν, τὸ σύμπαν ἄγαλμα λύειν τε καὶ συγχεῖν.

156 Φασὶν ὡς ἀνδριᾶς ὁ τοῦ Βίτυος ἐν Ἄργει ἀπέκτεινε <τὸν αἵτιον> τοῦ θανάτου τῷ Βίτυϊ, θεωροῦντι ἐμπεσών. ἔοικεν οὖν οὐκ εἰκῇ τὰ τοιαῦτα γίνεσθαι.

157 Φασὶ τοὺς κύνας μόνον διώκειν τὰ θηρία πρὸς τὰς κορυφὰς τῶν Μελάνων καλουμένων ὄρων, ἀλλ' ἀναστρέφειν, ὅταν ἄχρι τούτων διώκωσιν.

158 Ἐν τῷ Φάσιδι ποταμῷ γεννᾶσθαι ῥάβδον ὀνομαζομένην λευκόφυλλον, ἣν οἱ ζηλότυποι τῶν ἀνδρῶν δρεπόμενοι ῥίπτουσι περὶ τὸν παρθένιον θάλαμον, καὶ ἀνόθευτον τηροῦσι τὸν γάμον.

159 Ἐν δὲ τῷ Τίγριδι γίνεσθαί φασι λίθον μωδῶν κεκλημένον βαρβαρικῶς, τῇ χροῇ πάνυ λευκόν, ὃν ἔαν κατέχη τις, ὑπὸ θηρίων οὐδὲν ἀδικεῖται.

160 Ἐν δὲ τῷ Σκαμάνδρῳ γίνεσθαί φασι βοτάνην σίστρον καλουμένην, ἡ παραπλησίαν ἐρεβίνθῳ, κόκκους δ' ἔχει σειομένους, ὅθεν τὴν προσηγορίαν ἔλαβε• ταύτην τοὺς κατέχοντας μήτε δαιμόνιον μήτε φαντασίαν ἠντιναοῦν φοβεῖσθαι.

161 Περὶ Λιβύην ἄμπελός ἐστιν ἣν καλοῦσι μαινομένην τινές, ἣ τῶν καρπῶν τοὺς μὲν πεπαίνει, τοὺς δ' ὀμφακώδεις ἔχει, τοὺς δ' ἀνθοῦντας καὶ βραχύν τινα χρόνον.

162 Περὶ τὸ Σίτυλον ὄρος γίνεσθαί φασι λίθον p320παρόμοιον κυλίνδρῳ, ὃν οἱ εὐσεβεῖς υἱοὶ ὅταν εὕρωσιν, ἐν τῷ τεμένει τῆς μητρὸς τῶν θεῶν τιθέασι, καὶ οὐδέποτε χάριν ἀσεβείας ἀμαρτάνουσιν, ἀλλ' αἰεὶ εἰσι φιλοπάτορες.

163 Ἐν ὄρει Τηϋγέτῳ γίνεσθαι βοτάνην καλουμένην χαρισίαν, ἣν γυναῖκες ἕαρος ἀρχομένου τοῖς τραχήλοις περιάπτουσι, καὶ ὑπὸ τῶν ἀνδρῶν

συμπαθέστερον ἑρῶνται.

164 Ὅθρυς ὄρος ἐστὶ Θετταλίας, ὃ φέρει ὄφεις τοὺς λεγομένους σῆπας, οἳ οὐκ ἔχουσι μίαν χροίαν, ἀλλ' ἀεὶ ὁμοιοῦνται τῷ χώρῳ ἐν ᾧ οἰκοῦσι. τινὲς δὲ αὐτῶν ὅμοιον ἔχουσι τὸ χρῶμα τοῖς κόχλοις τῆς γῆς. ἄλλοις δὲ χλοάζουσά ἐστιν ἢ φολὶς. ὅσοι δὲ αὐτῶν ἐν ψαμάθοις διατρίβουσι, ταύταις ἐξομοιοῦνται κατὰ τὸ χρῶμα. δάκνοντες δὲ ἐμποιοῦσι δίψος. ἔστι δὲ αὐτῶν τὸ δῆγμα οὐ τραχὺ καὶ ἔμπυρον, ἀλλὰ κακότηες.

165 Τοῦ περκνοῦ ἔχεως τῇ ἐχίδνῃ συγγινομένου, ἡ ἔχιδνα ἐν τῇ συνουσίᾳ τὴν κεφαλὴν ἀποκόπτει. διὰ τοῦτο καὶ τὰ τέκνα, ὥσπερ τὸν θάνατον τοῦ πατρὸς μετερχόμενα, τὴν γαστέρα τῆς μητρὸς διαρρήγνυσιν.

166 Ἐν τῷ Νείλῳ ποταμῷ γεννᾶσθαι λίθον φασὶ κυάμῳ παρόμοιον, ὃν ἂν κύνες ἴδωσιν, οὐχ ὑλακτοῦσι. συντελεῖ δὲ καὶ τοῖς δαίμονί τι γενομένοις κατόχοις• ἅμα γὰρ τῷ προστεθῆναι ταῖς ῥίσιν ἀπέρχεται τὸ δαιμόνιον.

167 Ἐν δὲ τῷ Μαιάνδρῳ ποταμῷ τῆς Ἀσίας λίθον φασὶ σῶφρονα καλούμενον κατ' ἀντίφρασιν• ὃν ἐάν τις εἰς τινος ἐμβάλῃ κόλπον, ἐμμανὴς γίνεται καὶ φονεύει τινὰ τῶν συγγενῶν.

168 Ῥῆνος καὶ Ἰστρος οἱ ποταμοὶ ὑπ' ἄρκτον ῥέουσιν, ὁ μὲν Γερμανοὺς ὁ δὲ Παίονας παραμείβων• καὶ θέρους μὲν ναυσίπορον ἔχουσι τὸ ῥεῖθρον, τοῦ δὲ χειμῶνος παγέντες ὑπὸ κρύους ἐν πεδίου σχήματι καθιππεύονται.

169 Περὶ τὴν Θούριον πόλιν δύο ποταμούς φασιν εἶναι, Σύβαριν καὶ Κρᾶθιν. ὁ μὲν οὖν Σύβαρις τοὺς πίνοντας ἀπ' αὐτοῦ πτυρτικοὺς εἶναι ποιεῖ, ὁ δὲ Κρᾶθις τοὺς ἀνθρώπους ξανθότριχας λουομένους.

170 Ἐν δὲ Εὐβοίᾳ δύο ποταμοὺς εἶναι, ὧν ἀφ' οὗ μὲν τὰ πίνοντα πρόβατα λευκὰ γίνονται• ὃς ὀνομάζεται Κέρβης• ὁ δὲ Νηλεὺς, ὃς μέλανα ποιεῖ.

171 847aΠαρὰ Λυκόρμα ποταμῷ γεννᾶσθαι βοτάνην λόγχῃ παρόμοιον, συντελοῦσαν πρὸς ἀμβλυωπίαν ἄριστα.

172 Τὴν ἐν Συρακούσαις τῆς Σικελίας πηγὴν Ἀρέθουσαν διὰ πενταετηρίδος κινεῖσθαι λέγουσιν.

173 Ἐν ὄρει Βερεκυνθίῳ γεννᾶσθαι λίθον καλούμενον μάχαιραν, ὃν ἐὰν

εὔρη τις τῶν μυστηρίων τῆς Ἑκάτης ἐπιτελουμένων ἐμμανὴς γίνεται, ὡς  
Εὐδοξός φησιν.

174 Ἐν ὄρει δὲ Τιμόλῳ γεννᾶσθαι λίθον παρόμοιον κισσῆρει, ὃς τετράκις τῆς  
ἡμέρας ἀλλάσσει τὴν χροάν• βλέπεσθαι δὲ ὑπὸ παρθένων τῶν μὴ τῷ χρόνῳ  
φρονήσεως μετεχουσῶν.

175 Ἐν Ἀρτέμιδος Ὀρθωσίας βωμῷ ταῦρον ἴστασθαι χρύσειον, ὃς κυνηγῶν  
εἰσελθόντων φωνὴν ἐπαφίησιν.

176 Ἐν Αἰτωλοῖς φασὶν ὄραν τοὺς ἀσπάλακας ἀμυδρῶς, καὶ οὐδὲ σιτεῖσθαι  
γῆν ἄλλ' ἀκρίδας.

177 Τοὺς ἐλέφαντάς φασι κύειν ἔτη δύο, οἱ δὲ μῆνας ὀκτωκαίδεκα• ἐν δὲ τῇ  
ἐκτέξει δυστοκεῖν.

p324 178 Δημάρατον Τιμαίου τοῦ Λοκροῦ ἀκουστὴν νοσήσαντα ἄφωνόν  
φασιν ἐπὶ δέκα γενέσθαι ἡμέρας• ἐν δὲ τῇ ἐνδεκάτῃ ἀνανήψας βραδέως ἐκ  
τῆς παρακοπῆς ἔφησεν ἐκεῖνον τὸν χρόνον ἥδιστα αὐτῷ βεβιωσθαι.

ν ἐν τῷ γένει.

♦ων.♦ί.

## Μηχανικά (847a) Mechanics

[847a] Θαυμάζεται τῶν μὲν κατὰ φύσιν συμβαινόντων, ὅσων ἀγνοεῖται τὸ αἷτιον, τῶν δὲ παρὰ φύσιν, ὅσα γίνεται διὰ τέχνην πρὸς τὸ συμφέρον τοῖς ἀνθρώποις. ἐν πολλοῖς γὰρ ἡ φύσις ὑπεναντίον πρὸς τὸ χρήσιμον ἡμῖν ποιεῖ· ἡ μὲν γὰρ φύσις ἀεὶ τὸν αὐτὸν ἔχει τρόπον καὶ ἀπλῶς, τὸ δὲ χρήσιμον μεταβάλλει πολλαχῶς. ὅταν οὖν δέῃ τι παρὰ φύσιν πρᾶξαι, διὰ τὸ χαλεπὸν ἀπορίαν παρέχει καὶ δεῖται τέχνης. διὸ καὶ καλοῦμεν τῆς τέχνης τὸ πρὸς τὰς τοιαύτας ἀπορίας βοηθοῦν μέρος μηχανήν. καθάπερ γὰρ ἐποίησεν Ἀντιφῶν ὁ ποιητής, οὕτω καὶ ἔχει· τέχνη γὰρ κρατοῦμεν, ὧν φύσει νικώμεθα. τοιαῦτα δὲ ἐστὶν ἐν οἷς τὰ τε ἐλάττωνα κρατεῖ τῶν μειζόνων, καὶ τὰ ῥοπήν ἔχοντα μικρὰν κινεῖ βάρη μεγάλα, καὶ πάντα σχεδὸν ὅσα τῶν προβλημάτων μηχανικὰ προσαγορεύομεν. ἔστι δὲ ταῦτα τοῖς φυσικοῖς προβλήμασιν οὔτε ταῦτα πάμπαν οὔτε κεχωρισμένα λίαν, ἀλλὰ κοινὰ τῶν τε μαθηματικῶν θεωρημάτων καὶ τῶν φυσικῶν· τὸ μὲν γὰρ ὥς διὰ τῶν μαθηματικῶν δῆλον, τὸ δὲ περὶ ὃ διὰ τῶν φυσικῶν. περιέχεται δὲ τῶν ἀπορουμένων [847b] ἐν τῷ γένει τούτῳ τὰ περὶ τὸν μοχλόν. ἄτοπον γὰρ εἶναι δοκεῖ τὸ κινεῖσθαι μέγα βάρος ὑπὸ μικρᾶς ἰσχύος, καὶ ταῦτα μετὰ βάρους πλείονος· ὃ γὰρ ἄνευ μοχλοῦ κινεῖν οὐ δύναται τις, τοῦτο ταῦτὸ βάρος, προσλαβὼν ἔτι τὸ τοῦ μοχλοῦ βάρος, κινεῖ θᾶπτον. πάντων δὲ τῶν τοιούτων ἔχει τῆς αἰτίας τὴν ἀρχὴν ὁ κύκλος. καὶ τοῦτο εὐλόγως συμβέβηκεν· ἐκ μὲν γὰρ θαυμασιωτέρου συμβαίνειν τι θαυμαστὸν οὐδὲν ἄτοπον, θαυμασιώτατον δὲ τὸ τάναντία γίνεσθαι μετ' ἀλλήλων. ὁ δὲ κύκλος συνέστηκεν ἐκ τοιούτων· εὐθύς γὰρ ἐκ κινουμένου τε γεγένηται καὶ μένοντος, ὧν ἡ φύσις ἐστὶν ὑπεναντία ἀλλήλοις. ὥστ' ἐνταῦθα ἔστιν ἐπιβλέψασιν ἥττον θαυμάζειν τὰς συμβαινούσας ὑπεναντιώσεις περὶ αὐτόν. πρῶτον μὲν γὰρ τῇ περιεχούσῃ γραμμῇ τὸν κύκλον, πλάτος οὐθὲν ἐχούσῃ, τάναντία πως προσεμφαίνεται, τὸ κοῖλον καὶ τὸ κυρτόν. ταῦτα δὲ διέστηκεν ἀλλήλων ὃν τρόπον τὸ μέγα καὶ τὸ μικρόν· ἐκείνων τε γὰρ μέσον τὸ ἴσον καὶ τούτων τὸ εὐθύ. διὸ μεταβάλλοντα εἰς ἀλλήλα τὰ μὲν ἀναγκαῖον ἴσα γενέσθαι πρότερον ἢ τῶν [848a] ἄκρων ὁποτερονοῦν, τὴν δὲ γραμμὴν εὐθεῖαν, ὅταν ἐκ κυρτῆς εἰς κοῖλον ἢ πάλιν ἐκ ταύτης γίνηται κυρτὴ καὶ περιφερής. ἐν μὲν οὖν τοῦτο τῶν ἀτόπων ὑπάρχει περὶ τὸν κύκλον, δεύτερον δὲ ὅτι ἅμα κινεῖται τὰς ἐναντίας κινήσεις· ἅμα γὰρ εἰς τὸν ἔμπροσθεν κινεῖται τόπον καὶ τὸν ὀπισθεν. ἢ τε γράφουσα γραμμὴ τὸν κύκλον ὡσαύτως ἔχει· ἐξ οὗ γὰρ ἄρχεται τόπου τὸ πέρας αὐτῆς, εἰς τὸν αὐτὸν τοῦτον τόπον ἔρχεται πάλιν· συνεχῶς γὰρ κινουμένης αὐτῆς τὸ ἔσχατον πάλιν ἀπῆλθε πρῶτον, ὥστε καὶ φανερόν ὅτι μετέβαλεν ἐντεῦθεν. διό, καθάπερ εἴρηται πρότερον, οὐδὲν ἄτοπον τὸ πάντων εἶναι τῶν θαυμάτων αὐτὸν ἀρχήν. τὰ μὲν

οὖν περὶ τὸν ζυγὸν γινόμενα εἰς τὸν κύκλον ἀνάγεται, τὰ δὲ περὶ τὸν μοχλὸν εἰς τὸν ζυγόν, τὰ δ' ἄλλα πάντα σχεδὸν τὰ περὶ τὰς κινήσεις τὰς μηχανικὰς εἰς τὸν μοχλόν. ἔτι δὲ διὰ τὸ μιᾶς οὔσης τῆς ἐκ τοῦ κέντρου γραμμῆς μηθὲν ἕτερον ἑτέρῳ φέρεσθαι τῶν σημείων τῶν ἐν αὐτῇ ἰσοταχῶς, ἀλλ' αἰεὶ τὸ τοῦ μένοντος πέρατος πορρώτερον ὃν θᾶττον, πολλὰ τῶν θαυμαζομένων συμβαίνει περὶ τὰς κινήσεις τῶν κύκλων· περὶ ὧν ἐν τοῖς ἐπομένοις προβλήμασιν ἔσται δῆλον. διὰ δὲ τὸ τὰς ἐναντίας κινήσεις ἅμα κινεῖσθαι τὸν κύκλον, καὶ τὸ μὲν ἕτερον τῆς διαμέτρου τῶν ἄκρων, ἐφ' οὗ τὸ Α, εἰς τοῦμπροσθεν κινεῖσθαι, θάτερον δέ, ἐφ' οὗ τὸ Β, εἰς τοῦπισθεν, κατασκευάζουσιν τινες ὥστ' ἀπὸ μιᾶς κινήσεως πολλοὺς ὑπεναντίους ἅμα κινεῖσθαι κύκλους, ὥσπερ οὓς ἀνατιθέασιν ἐν τοῖς ἱεροῖς ποιήσαντες τροχίσκους χαλκοῦς τε καὶ σιδηροῦς. εἰ γὰρ εἴη τοῦ ΑΒ κύκλου ἀπτόμενος ἕτερος κύκλος ἐφ' οὗ ΓΔ, τοῦ κύκλου τοῦ ἐφ' οὗ ΑΒ κινουμένης τῆς διαμέτρου εἰς τοῦμπροσθεν, κινηθήσεται ἡ ΓΔ εἰς τοῦπισθεν τοῦ κύκλου τοῦ ἐφ' οὗ Α, κινουμένης τῆς διαμέτρου περὶ τὸ αὐτό. εἰς τοῦναντίον ἄρα κινηθήσεται ὁ ἐφ' οὗ ΓΔ κύκλος τῷ ἐφ' οὗ τὸ ΑΒ· καὶ πάλιν αὐτὸς τὸν ἐφεξῆς, ἐφ' οὗ ΕΖ, εἰς τοῦναντίον αὐτῷ κινήσει διὰ τὴν αὐτὴν αἰτίαν. τὸν αὐτὸν δὲ τρόπον κἂν πλείους ὣσι, τοῦτο ποιήσουσιν ἐνὸς μόνου κινήεντος. ταύτην οὖν λαβόντες ὑπάρχουσιν ἐν τῷ κύκλῳ τὴν φύσιν οἱ δημιουργοὶ κατασκευάζουσιν ὄργανον κρύπτοντες τὴν ἀρχήν, ὅπως ἢ τοῦ μηχανήματος φανερόν μόνον τὸ θαυμαστόν, τὸ δ' αἴτιον ἄδηλον.

[848b] Πρῶτον μὲν οὖν τὰ συμβαίνοντα περὶ τὸν ζυγὸν ἀπορεῖται, διὰ τίνα αἰτίαν ἀκριβέστερά ἐστι τὰ ζυγὰ τὰ μείζω τῶν ἐλαττόνων. τούτου δὲ ἀρχή, διὰ τί ποτε ἐν τῷ κύκλῳ ἢ πλεῖον ἀφεστηκυῖα γραμμὴ τοῦ κέντρου τῆς ἐγγυὲς τῇ αὐτῇ ἰσχυὶ κινουμένης θᾶττον φέρεται τῆς ἐλάττονος; τὸ γὰρ θᾶττον λέγεται διχῶς· ἂν τε γὰρ ἐν ἐλάττονι χρόνῳ ἴσον τόπον διεξέλθῃ, θᾶττον εἶναι λέγομεν, καὶ ἐὰν ἐν ἴσῳ πλείω. ἡ δὲ μείζων ἐν ἴσῳ χρόνῳ γράφει μείζονα κύκλον· ὁ γὰρ ἐκτὸς μείζων τοῦ ἐντός. αἴτιον δὲ τούτων ὅτι φέρεται δύο φοράς ἢ γράφουσα τὸν κύκλον. ὅταν μὲν οὖν ἐν λόγῳ τινὶ φέρηται, ἐπ' εὐθείας ἀνάγκη φέρεσθαι τὸ φερόμενον, καὶ γίνεται διάμετρος αὐτὴ τοῦ σχήματος ὃ ποιοῦσιν αἱ ἐν τούτῳ τῷ λόγῳ συντεθεῖσαι γραμμαί. ἔστω γὰρ ὁ λόγος ὃν φέρεται τὸ φερόμενον, ὃν ἔχει ἡ ΑΒ πρὸς τὴν ΑΓ· καὶ τὸ μὲν ΑΓ φερέσθω πρὸς τὸ Β, ἡ δὲ ΑΒ ὑποφερέσθω πρὸς τὴν ΗΓ· ἐννηνέχθω δὲ τὸ μὲν Α πρὸς τὸ Δ, ἡ δὲ ἐφ' ἣ ΑΒ πρὸς τὸ Ε. εἰ οὖν ἐπὶ τῆς φοράς ὁ λόγος ἦν ὃν ἡ ΑΒ ἔχει πρὸς τὴν ΑΓ, ἀνάγκη καὶ τὴν ΑΔ πρὸς τὴν ΑΕ τοῦτον ἔχειν τὸν λόγον. ὅμοιον ἄρα ἐστὶ τῷ λόγῳ τὸ μικρὸν τετράπλευρον τῷ μείζονι, ὥστε καὶ ἡ αὐτὴ διάμετρος αὐτῶν, καὶ τὸ Α ἔσται πρὸς Ζ. τὸν αὐτὸν δὲ τρόπον δειχθήσεται κἂν ὅπουοῦν διαληφθῇ ἡ φορά· αἰεὶ γὰρ ἔσται ἐπὶ τῆς διαμέτρου. φανερόν οὖν ὅτι τὸ κατὰ τὴν διάμετρον φερόμενον ἐν δύο φοράς ἀνάγκη τὸν

τῶν πλευρῶν φέρεσθαι λόγον. εἰ γὰρ ἄλλον τινά, οὐκ οἰσθήσεται κατὰ τὴν  
 διάμετρον. ἔαν δὲ ἐν μηδενὶ λόγῳ φέρηται δύο φορὰς κατὰ μηδένα χρόνον,  
 ἀδύνατον εὐθεῖαν εἶναι τὴν φοράν. ἔστω γὰρ εὐθεῖα. τεθείσης οὖν ταύτης  
 διαμέτρου, καὶ παραπληρωθεισῶν τῶν πλευρῶν, ἀνάγκη τὸν τῶν πλευρῶν  
 λόγον φέρεσθαι τὸ φερόμενον· τοῦτο γὰρ δέδεικται πρότερον. οὐκ ἄρα ποιήσῃ  
 εὐθεῖαν τὸ ἐν μηδενὶ λόγῳ φερόμενον μηδένα χρόνον. ἔαν γὰρ τινα λόγον  
 ἐνεχθῇ ἐν χρόνῳ τινί, τοῦτον ἀνάγκη τὸν χρόνον εὐθεῖαν εἶναι φορὰν διὰ τὰ  
 προειρημένα. ὥστε περιφερὲς γίνεται, δύο φερόμενον φορὰς ἐν μηδενὶ λόγῳ  
 μηδένα χρόνον. ὅτι μὲν τοίνυν ἢ τὸν κύκλον γράφουσα φέρεται δύο φορὰς  
 ἅμα, φανερὸν ἔκ τε τούτων, καὶ ὅτι τὸ φερόμενον κατ' εὐθεῖαν ἐπὶ τὴν  
 κάθετον ἀφικνεῖται, [849a] ὥστε εἶναι πάλιν αὐτὴν ἀπὸ τοῦ κέντρου κάθετον.  
 ἔστω κύκλος ὁ ΑΒΓ, τὸ δ' ἄκρον τὸ ἐφ' οὗ Β φερέσθω ἐπὶ τὸ Δ· ἀφικνεῖται  
 δέ ποτε ἐπὶ τὸ Γ. εἰ μὲν οὖν ἐν τῷ λόγῳ ἐφέρετο ὃν ἔχει ἡ ΒΔ πρὸς τὴν ΔΓ,  
 ἐφέρετο ἂν τὴν διάμετρον τὴν ἐφ' ἣ ΒΓ. νῦν δέ, ἐπεὶ ἐν οὐδενὶ λόγῳ, ἐπὶ  
 τὴν περιφέρειαν φέρεται τὴν ἐφ' ἣ ΒΕΓ. ἔαν δὲ δυοῖν φερομένοις ἀπὸ τῆς  
 αὐτῆς ἰσχύος τὸ μὲν ἐκκρούοιτο πλεῖον τὸ δὲ ἔλαττον, εὐλογον βραδύτερον  
 κινηθῆναι τὸ πλεῖον ἐκκρουόμενον τοῦ ἔλαττον ἐκκρουομένου· ὃ δοκεῖ  
 συμβαίνειν ἐπὶ τῆς μείζονος καὶ ἐλάττονος τῶν ἐκ τοῦ κέντρου γραφουσῶν  
 τοὺς κύκλους. διὰ γὰρ τὸ ἐγγύτερον εἶναι τοῦ μένοντος τῆς ἐλάττονος τὸ  
 ἄκρον ἢ τὸ τῆς μείζονος, ὥσπερ ἀντισπώμενον εἰς τὸ ὑναντίον, ἐπὶ τὸ μέσον  
 βραδύτερον φέρεται τὸ τῆς ἐλάττονος ἄκρον. πάσῃ μὲν οὖν κύκλον γραφούσῃ  
 τοῦτο συμβαίνει, καὶ φέρεται τὴν μὲν κατὰ φύσιν κατὰ τὴν περιφέρειαν, τὴν  
 δὲ παρὰ φύσιν εἰς τὸ πλάγιον καὶ τὸ κέντρον. μείζω δ' ἀεὶ τὴν παρὰ φύσιν ἢ  
 ἐλάττων φέρεται· διὰ γὰρ τὸ ἐγγύτερον εἶναι τοῦ κέντρου τοῦ ἀντισπῶντος  
 κρατεῖται μᾶλλον. ὅτι δὲ μείζον τὸ παρὰ φύσιν κινεῖται ἢ ἐλάττων τῆς  
 μείζονος τῶν ἐκ τοῦ κέντρου γραφουσῶν τοὺς κύκλους, ἐκ τῶνδε δῆλον.  
 ἔστω κύκλος ἐφ' οὗ ΒΓΔΕ, καὶ ἄλλος ἐν τούτῳ ἐλάττων, ἐφ' οὗ ΧΝΜΞ, περὶ  
 τὸ αὐτὸ κέντρον τὸ Α· καὶ ἐκβεβλήσθωσαν αἱ διάμετροι, ἐν μὲν τῷ μεγάλῳ,  
 ἐφ' ὧν ΓΔ καὶ ΒΕ, ἐν δὲ τῷ ἐλάττονι αἱ ΜΧ ΝΞ· καὶ τὸ ἐτερόμηκες  
 παραπεπληρώσθω, τὸ ΔΨΡΓ. εἰ δὴ ἡ ΑΒ γράφουσα κύκλον ἥξει ἐπὶ τὸ αὐτὸ  
 ὅθεν ὠρμήθη ἐπὶ τὴν ΑΕ, δῆλον ὅτι φέρεται πρὸς αὐτήν. ὁμοίως δὲ καὶ ἡ ΑΧ  
 πρὸς τὴν ΑΧ ἥξει. βραδύτερον δὲ φέρεται ἡ ΑΧ τῆς ΑΒ, ὥσπερ εἴρηται, διὰ  
 τὸ γίνεσθαι μείζονα τὴν ἐκκρυσιν καὶ ἀντισπᾶσθαι μᾶλλον τὴν ΑΧ. ἦχθω δὲ  
 ἡ ΑΘΗ, καὶ ἀπὸ τοῦ Θ κάθετος ἐπὶ τὴν ΑΒ ἡ ΘΖ ἐν τῷ κύκλῳ, καὶ πάλιν  
 ἀπὸ τοῦ Θ ἦχθω παρὰ τὴν ΑΒ ἡ ΘΩ, καὶ ἡ ΩΥ ἐπὶ τὴν ΑΒ κάθετον, καὶ ἡ  
 ΗΚ. αἱ δὴ ἐφ' ὧν ΩΥ καὶ ΘΖ ἴσαι. ἢ ἄρα ΒΥ ἐλάττων τῆς ΧΖ· αἱ γὰρ ἴσαι  
 εὐθεῖαι ἐπ' ἀνίσους κύκλους ἐμβληθεῖσαι πρὸς ὀρθὰς τῇ διαμέτρῳ ἔλαττον  
 τμήμα ἀποτεμένουσι τῆς διαμέτρου ἐν τοῖς μείζοσι κύκλοις, ἔστι δὲ ἡ ΩΥ ἴση  
 τῇ ΘΖ. ἐν ὅσῳ [849b] δὴ χρόνῳ ἡ ΑΘ τὴν ΧΘ ἐννέχθη, ἐν τοσούτῳ χρόνῳ



ἐν τῷ κύκλῳ τῷ μείζονι μείζονα τῆς ΒΩ ἐνήνεκται τὸ ἄκρον τῆς ΒΑ. ἡ μὲν γὰρ κατὰ φύσιν φορὰ ἴση, ἡ δὲ παρὰ φύσιν ἐλάττων· ἡ δὲ ΒΥ τῆς ΖΧ. δεῖ δὲ ἀνάλογον εἶναι, ὡς τὸ κατὰ φύσιν πρὸς τὸ κατὰ φύσιν, τὸ παρὰ φύσιν πρὸς τὸ παρὰ φύσιν. μείζονα ἄρα περιφέρειαν διελήλυθε τὴν ΗΒ τῆς ΩΒ. ἀνάγκη δὲ τὴν ΗΒ ἐν τούτῳ τῷ χρόνῳ διεληλυθέναι· ἐνταῦθα γὰρ ἔσται, ὅταν ἀνάλογον ἀμφοτέρως συμβαίνει τὸ παρὰ φύσιν πρὸς τὸ κατὰ φύσιν. εἰ δὴ μείζον ἐστὶ τὸ κατὰ φύσιν ἐν τῇ μείζονι, καὶ τὸ παρὰ φύσιν μᾶλλον ἂν ἐνταῦθα συμπίπτει μοναχῶς, ὥστε τὸ Β ἐνηνέχθαι ἂν τὴν ΒΗ ἐν τῷ ἐφ' οὗ Χ σημείον. ἐνταῦθα γὰρ κατὰ φύσιν μὲν γίνεται τῷ Β σημείῳ τὸ κέντρον (ἔστι γὰρ αὐτὴ ἀπὸ τοῦ Η κάθετος), παρὰ φύσιν δὲ ἐς τὸ ΚΒ. ἔστι δὲ ὡς τὸ ΗΚ πρὸς τὸ ΚΒ, τὸ ΘΖ πρὸς τὸ ΖΧ. φανερόν δὲ ἔαν ἐπιζευχθῶσιν ἀπὸ τῶν ΒΧ ἐπὶ τὰ ΗΘ. εἰ δὲ ἐλάττων ἢ μείζων τῆς ΗΒ ἔσται, ἢν ἡνέχθη τὸ Β, οὐχ ὁμοίως ἔσται οὐδὲ ἀνάλογον ἐν ἀμφοῖν τὸ κατὰ φύσιν πρὸς τὸ παρὰ φύσιν. δι' ἣν μὲν τοίνυν αἰτίαν ἀπὸ τῆς αὐτῆς ἰσχύος φέρεται θᾶττον τὸ πλεόν ἀπέχον τοῦ κέντρου σημείου, δῆλον διὰ τῶν εἰρημένων· διότι δὲ τὰ μὲν μείζω ζυγὰ ἀκριβέστερά ἐστὶ τῶν ἐλαττόνων, φανερόν ἐκ τούτων. γίνεται γὰρ τὸ μὲν σπάρτον κέντρον (μένει γὰρ τοῦτο), τὸ δὲ ἐπὶ ἐκάτερον μέρος τῆς πλάστιγγος αἱ ἐκ τοῦ κέντρου. ἀπὸ οὖν τοῦ αὐτοῦ βάρους ἀνάγκη θᾶττον κινεῖσθαι τὸ ἄκρον τῆς πλάστιγγος, ὅσω ἂν πλεῖον ἀπέχη τοῦ σπάρτου, καὶ ἓνια μὲν μὴ δῆλα εἶναι ἐν τοῖς μικροῖς ζυγοῖς πρὸς τὴν αἴσθησιν ἐπιτιθέμενα βάρη, ἐν δὲ τοῖς μεγάλοις δῆλα οὐθὲν γὰρ κωλύει ἔλαττον κινηθῆναι μέγεθος ἢ ὥστε εἶναι τῇ ὥσει φανερόν. ἐπὶ δὲ τῆς μεγάλης πλάστιγγος ποιεῖ ὁρατὸν τὸ αὐτὸ βάρος μέγεθος. ἓνια δὲ δῆλα μὲν ἐπ' ἀμφοῖν ἐστίν, ἀλλὰ πολλῶ μᾶλλον ἐπὶ τῶν μειζόνων διὰ τὸ πολλῶ μείζον γίνεσθαι τὸ μέγεθος τῆς ῥοπῆς ὑπὸ τοῦ αὐτοῦ βάρους ἐν τοῖς μείζοσι. καὶ διὰ τοῦτο τεχνάζουσιν οἱ ἀλουργοπῶλαι πρὸς τὸ παρακρούεσθαι ἰστάντες, τό τε σπάρτον οὐκ ἐν μέσῳ τιθέντες, καὶ μόλυβδον τῆς φάλαγγος εἰς θάτερον μέρος ἐγγέοντες, ἢ τοῦ ξύλου τὸ πρὸς τὴν ῥίζαν πρὸς ὃ βούλονται ῥέπειν ποιοῦντες, ἢ ἔαν ἔχη ὅζον βαρύτερον [850a] γὰρ ἐν ᾧ μέρος ἢ ῥίζα τοῦ ξύλου ἐστίν, ὃ δὲ ὅζος ῥίζα τίς ἐσ

Διὰ τί, ἔαν μὲν ἄνωθεν ἢ τὸ σπαρτίον, ὅταν κάτωθεν ῥέψαντος ἀφέλῃ τὸ βάρος, πάλιν ἀναφέρεται τὸ ζυγόν, ἔαν δὲ κάτωθεν ὑποστῇ, οὐκ ἀναφέρεται ἀλλὰ μένει; ἢ διότι ἄνωθεν μὲν τοῦ σπαρτίου ὄντος πλεῖον τοῦ ζυγοῦ γίνεται τὸ ἐπέκεινα τῆς καθέτου; τὸ γὰρ σπαρτίον ἐστὶ κάθετος. ὥστε ἀνάγκη ἐστὶ κάτω ῥέπειν τὸ πλεόν, ἕως ἂν ἔλθῃ ἢ δίχα διαιροῦσα τὸ ζυγὸν ἐπὶ τὴν κάθετον αὐτήν, ἐπκειμένου τοῦ βάρους ἐν τῷ ἀνεσπασμένῳ μορίῳ τοῦ ζυγοῦ. ἔστω ζυγὸν ὀρθὸν ἐφ' οὗ ΒΓ, σπαρτίον δὲ τὸ ΑΔ. ἐκβαλλόμενον δὴ τοῦτο κάτω κάθετος ἔσται ἐφ' ἧς ἢ ΑΔΜ. ἔαν οὖν ἐπὶ τὸ Β ἢ ῥοπή ἐπιτεθῇ,

ἔσται τὸ μὲν B οὐ τὸ E, τὸ δὲ Γ οὐ τὸ Z, ὥστε ἡ δίχα διαιροῦσα τὸ ζυγὸν πρῶτον μὲν ἦν ἡ ΔΜ τῆς καθέτου αὐτῆς, ἐπικειμένης δὲ τῆς ῥοπῆς ἔσται ἡ ΔΘ· ὥστε τοῦ ζυγοῦ ἐφ' ᾧ EZ τὸ ἔξω τῆς καθέτου τῆς ἐφ' ἧς AB, τοῦ ἐν ᾧ ΦΠ, μείζω τοῦ ἡμίσεος. ἔαν οὖν ἀφαιρεθῇ τὸ βάρος ἀπὸ τοῦ E, ἀνάγκη κάτω φέρεσθαι τὸ Z· ἔλαττον γὰρ ἐστὶ τὸ E. ἔαν μὲν οὖν ἄνω τὸ σπαρτίον ἔχη, πάλιν διὰ τοῦτο ἀναφέρεται τὸ ζυγόν. ἔαν δὲ κάτωθεν ἦ τὸ ὑποκείμενον, τοῦναντίον ποιεῖ· πλεῖον γὰρ γίνεται τοῦ ἡμίσεος τοῦ ζυγοῦ τὸ κάτω μέρος ἢ ὡς ἡ κάθετος διαιρεῖ ὥστε οὐκ ἀναφέρεται· κουφότερον γὰρ τὸ ἐπηρτημένον. ἔστω ζυγὸν τὸ ἐφ' οὗ ΝΞ, τὸ ὀρθόν, κάθετος δὲ ἡ ΚΛΜ. δίχα δὲ διαιρεῖται τὸ ΝΞ. ἐπιτεθέντος δὲ βάρους ἐπὶ τὸ Ν, ἔσται τὸ μὲν Ν οὐ τὸ Ο, τὸ δὲ Ξ οὐ τὸ Ρ, ἡ δὲ ΚΛ οὐ τὸ ΛΘ, ὥστε μείζον ἐστὶ τὸ ΚΟ τοῦ ΛΡ τῷ ΘΚΛ. καὶ ἀφαιρεθέντος οὖν τοῦ βάρους ἀνάγκη μένειν· ἐπίκειται γὰρ ὥσπερ βάρος ἡ ὑπεροχὴ ἢ τοῦ ἡμίσεος τοῦ ἐν ᾧ τὸ Κ.

Διὰ τί κινοῦσι μεγάλα βάρη μικραὶ δυνάμεις τῷ μοχλῷ, ὥσπερ ἐλέχθη καὶ κατ' ἀρχήν, προσλαβόντι βάρος ἔτι τὸ τοῦ μοχλοῦ; ῥᾶον δὲ τὸ ἔλαττον ἐστὶ κινῆσαι βάρος, ἔλαττον δὲ ἐστὶν ἄνευ τοῦ μοχλοῦ. ἢ ὅτι αἴτιόν ἐστὶν ὁ μοχλός, ζυγὸν [ὦν] κάτωθεν ἔχον τὸ σπαρτίον καὶ εἰς ἄνισα διηρημένον; τὸ γὰρ ὑπομόχλιον ἀντὶ σπαρτίου γίνεται· μένει γὰρ ἄμφω ταῦτα, ὥσπερ τὸ κέντρον. ἐπεὶ δὲ θάττον ὑπὸ τοῦ ἴσου βάρους κινεῖται ἢ μείζων τῶν ἐκ τοῦ κέντρου, ἔστι δὲ τρία τὰ περὶ τὸν μοχλόν, τὸ μὲν ὑπομόχλιον, σπάρτον καὶ κέντρον, δύο δὲ βάρη, ὅ τε κινῶν καὶ τὸ κινούμενον· ὃ [850b] οὖν τὸ κινούμενον βάρος πρὸς τὸ κινοῦν, τὸ μῆκος πρὸς τὸ μῆκος ἀντιπέπονθεν. αἰεὶ δὲ ὅσω ἂν μείζον ἀφεστήκη τοῦ ὑπομοχλίου, ῥᾶον κινήσει. αἰτία δὲ ἐστὶν ἡ προλεχθεῖσα, ὅτι ἡ πλεῖον ἀπέχουσα ἐκ τοῦ κέντρου μείζονα κύκλον γράφει. ὥστε ἀπὸ τῆς αὐτῆς ἰσχύος πλέον μεταστήσεται τὸ κινοῦν τὸ πλεῖον τοῦ ὑπομοχλίου ἀπέχον. ἔστω μοχλὸς ἐφ' οὗ AB, βάρος δὲ ἐφ' ᾧ τὸ Γ, τὸ δὲ κινοῦν ἐφ' ᾧ τὸ Δ, ὑπομόχλιον ἐφ' ᾧ τὸ E, τὸ δὲ ἐφ' ᾧ τὸ Δ κινήσαν ἐφ' ᾧ τὸ Η, κινούμενον δὲ τὸ ἐφ' οὗ Γ, βάρος ἐφ' οὗ Κ.

Διὰ τί οἱ μεσόνεοι μάλιστα τὴν ναῦν κινοῦσιν; ἢ διότι ἡ κόπη μοχλός ἐστίν; ὑπομόχλιον μὲν γὰρ ὁ σκαλμός γίνεται (μένει γὰρ δὴ τοῦτο), τὸ δὲ βάρος ἡ θάλαττα, ἣν ἀπωθεῖ ἡ κόπη· ὁ δὲ κινῶν τὸν μοχλὸν ὁ ναύτης ἐστίν. αἰεὶ δὲ πλέον βάρος κινεῖ, ὅσω ἂν πλέον ἀφεστήκη τοῦ ὑπομοχλίου ὁ κινῶν τὸ βάρος· μείζων γὰρ οὕτω γίνεται ἢ ἐκ τοῦ κέντρου, ὁ δὲ σκαλμός ὑπομόχλιον ὦν κέντρον ἐστίν. ἐν μέσῃ δὲ τῇ νηὶ πλεῖστον τῆς κόπης ἐντός ἐστίν· καὶ γὰρ ἡ ναῦς ταύτῃ εὐρυτάτῃ ἐστίν, ὥστε πλεῖον ἐπ' ἀμφοτέρω ἐνδέχεσθαι μέρος τῆς κόπης ἐκατέρου τοίχου ἐντὸς εἶναι τῆς νεώς. κινεῖται μὲν οὖν ἡ ναῦς διὰ τὸ ἀπεριδομένης τῆς κόπης εἰς τὴν θάλασσαν τὸ ἄκρον

τῆς κώπης τὸ ἐντὸς προῖέναι εἰς τὸ πρόσθεν, τὴν δὲ ναῦν προσδεδεμένην τῷ σκαλμῷ συμπροῖέναι, ἢ τὸ ἄκρον τῆς κώπης. ἢ γὰρ πλείστην θάλασσαν διαιρεῖ ἡ κώπη, ταύτῃ ἀνάγκη μάλιστα προωθεῖσθαι· πλείστην δὲ διαιρεῖ ἡ πλεῖστον μέρος ἀπὸ τοῦ σκαλμοῦ τῆς κώπης ἐστίν. διὰ τοῦτο οἱ μεσόνεοι μάλιστα κινούσιν· μέγιστον γὰρ ἐν μέσῃ νηὶ τὸ ἀπὸ τοῦ σκαλμοῦ τῆς κώπης τὸ ἐντὸς ἐστίν.

Διὰ τί τὸ πηδάλιον μικρὸν ὄν, καὶ ἐπ' ἐσχάτῳ τῷ πλοίῳ, τοσαύτην δύναμιν ἔχει ὥστε ὑπὸ μικροῦ οἴακος καὶ ἐνὸς ἀνθρώπου δυνάμεως, καὶ ταύτης ἡρεμαίας, μεγάλα κινεῖσθαι μεγέθη πλοίων; ἢ διότι καὶ τὸ πηδάλιον ἐστὶ μοχλός, καὶ μοχλεύει ὁ κυβερνήτης. ἢ μὲν οὖν προσήρμостαι τῷ πλοίῳ, γίνεται ὑπομόχλιον, τὸ δὲ ὅλον πηδάλιον ὁ μοχλός, τὸ δὲ βάρος ἡ θάλασσα, ὁ δὲ κυβερνήτης ὁ κινῶν. οὐ κατὰ πλάτος δὲ λαμβάνει τὴν θάλασσαν, ὥσπερ ἡ κώπη, τὸ πηδάλιον. οὐ γὰρ εἰς τὸ πρόσθεν κινεῖ τὸ πλοῖον, ἀλλὰ κινούμενον κλίνει, πλαγίως τὴν θάλατταν δεχόμενον. ἐπεὶ γὰρ τὸ βάρος ἦν ἡ θάλασσα, τοῦναντίον ἀπεριεσπόμενον κλίνει τὸ πλοῖον. τὸ γὰρ ὑπομόχλιον εἰς τοῦναντίον στρέφεται, [851a] ἡ θάλασσα δὲ ἐντὸς· ἐκεῖνο δὲ εἰς τὸ ἐκτός. τούτῳ δὲ ἀκολουθεῖ τὸ πλοῖον διὰ τὸ συνδεδέσθαι. ἢ μὲν οὖν κώπη κατὰ πλάτος τὸ βάρος ὠθοῦσα καὶ ὑπ' ἐκείνου ἀντωθουμένη εἰς τὸ εὐθὺ προάγει· τὸ δὲ πηδάλιον, ὥσπερ κάθηται πλάγιον, τὴν εἰς τὸ πλάγιον, ἢ δεῦρο ἢ ἐκεῖ, ποιεῖ κίνησιν. ἐπ' ἄκρου δὲ καὶ οὐκ ἐν μέσῳ κεῖται, ὅτι ῥᾶστον τὸ κινούμενον κινῆσαι ἀπ' ἄκρου κινούν. τάχιστα γὰρ φέρεται τὸ πρῶτον μέρος διὰ τὸ ὥσπερ ἐν τοῖς φερομένοις ἐπὶ τέλει λήγειν τὴν φοράν, οὕτω καὶ τοῦ συνεχοῦς ἐπὶ τέλους ἀσθενεστάτῃ ἐστὶν ἡ φορά. εἰ δὲ ἀσθενεστάτῃ, ῥαδίᾳ ἐκκρούειν. διὰ τε δὴ ταῦτα ἐν τῇ πρύμνῃ τὸ πηδάλιον ἐστὶ, καὶ ὅτι ἐνταῦθα μικρᾶς κινήσεως γενομένης πολλῶν μείζον τὸ διάστημα ἐπὶ τῷ ἐσχάτῳ γίνεται, διὰ τὸ τὴν ἴσην γωνίαν ἐπὶ μείζονα καθῆσθαι, καὶ ὅσῳ ἂν μείζους ὦσιν αἱ περιέχουσαι. δῆλον δὲ ἐκ τούτου καὶ δι' ἣν αἰτίαν μᾶλλον προέρχεται εἰς τοῦναντίον τὸ πλοῖον ἢ ἡ τῆς κώπης πλάτη· τὸ αὐτὸ γὰρ μέγεθος τῇ αὐτῇ ἰσχύϊ κινούμενον ἐν ἄερί πλεόν ἢ ἐν τῷ ὕδατι πρόεισιν. ἔστω γὰρ ἡ A B κώπη, τὸ δὲ Γ ὁ σκαλμός, τὸ δὲ A τὸ ἐν τῷ πλοίῳ, ἡ ἀρχὴ τῆς κώπης, τὸ δὲ B τὸ ἐν τῇ θαλάττῃ. εἰ δὲ τὸ A οὐ τὸ Δ μετακεκίνηται, τὸ B οὐκ ἔσται οὐ τὸ E· ἴση γὰρ ἡ B E τῇ AΔ. ἴσον οὖν μετακεχωρηκὸς ἔσται. ἀλλ' ἦν ἔλαττον. ἔσται δὲ οὐ τὸ Z ἢ τὸ Θ. ἄρα τοίνυν τὴν AB, καὶ οὐχ ἡ τὸ Γ, καὶ κάτωθεν. ἐλάττων γὰρ ἡ BZ τῆς AΔ, ὥστε καὶ ἡ ΘZ τῆς ΔΘ· ὅμοια γὰρ τὰ τρίγωνα. καθεστηκὸς δὲ ἔσται καὶ τὸ μέσον, τὸ ἐφ' οὗ Γ· εἰς τοῦναντίον γὰρ τῷ ἐν τῇ θαλάττῃ ἄκρῳ τῷ B μεταχωρεῖ, ἥπερ τὸ ἐν τῷ πλοίῳ ἄκρον τὸ A μὴ ἐχώρει οὐ τὸ Δ. ὥστε μετακινηθήσεται τὸ πλοῖον, καὶ ἐκεῖ οὐ ἡ ἀρχὴ τῆς κώπης μεταφέρεται. τὸ δ' αὐτὸ καὶ τὸ πηδάλιον ποιεῖ, πλὴν ὅτι εἰς τὸ πρόσθεν οὐδὲν

συμβάλλεται τῷ πλοίῳ, ὥσπερ ἐλέχθη ἐπὶ ἄνω, ἀλλὰ μόνον τὴν πρύμναν εἰς τὸ πλάγιον ἀπωθεῖ ἔνθα ἢ ἔνθα· εἰς τοῦναντίον γὰρ ἡ πρῶρα οὕτω νεύει. ἡ μὲν δὴ τὸ πηδάλιον προσέζευκται, δεῖ οἷόν τι τοῦ κινουμένου μέσον νοεῖν, καὶ ὥσπερ ὁ σκαλμὸς τῇ κόπῃ· τὸ δὲ μέσον ὑποχωρεῖ, ἡ ὁ οἷαξ μετακινεῖται. ἔὰν μὲν εἴσω ἄγῃ, καὶ ἡ πρύμνα δεῦρο μεθέστηκεν· ἡ δὲ πρῶρα εἰς τοῦναντίον νεύει· ἐν γὰρ τῷ αὐτῷ οὔσης τῆς πρῶρας τὸ πλοῖον μεθέστηκεν ὅλον.

Διὰ τί, ὅσω ἂν ἡ κεραία ἀνωτέρα ᾗ, θᾶττον πλεῖ τὰ πλοῖα τῷ αὐτῷ ἰστίῳ καὶ τῷ αὐτῷ πνεύματι; ἡ διότι γίνεται ὁ μὲν ἰστὸς μοχλός, ὑπομόχλιον δὲ τὸ ἐδῶλιον ἐν ᾧ [851b] ἐμπέπηγεν, ὃ δὲ δεῖ κινεῖν βάρος, τὸ πλοῖον, τὸ δὲ κινεῖν τὸ ἐν τῷ ἰστίῳ πνεῦμα. εἰ δ' ὅσω ἂν πορρώτερον ᾗ τὸ ὑπομόχλιον, ῥᾶον κινεῖ καὶ θᾶττον ἡ αὐτὴ δύναμις τὸ αὐτὸ βάρος, ἡ οὖν κεραία ἀνώτερον ἀγομένη καὶ τὸ ἰστίον πορρώτερον ποιεῖ τοῦ ἐδωλίου ὑπομοχλίου ὄντος.

Διὰ τί, ὅταν ἐξ οὐρίας βούλωνται διαδραμεῖν μὴ οὐρίου τοῦ πνεύματος ὄντος, τὸ μὲν πρὸς τὸν κυβερνήτην τοῦ ἰστίου μέρος στέλλονται, τὸ δὲ πρὸς τὴν πρῶραν ποδιαῖον ποιησάμενοι ἐφιᾶσιν; ἡ διότι ἀντισπᾶν τὸ πηδάλιον πολλῷ μὲν ὄντι τῷ πνεύματι οὐ δύναται, ὀλίγῳ δέ, ὃ ὑποστέλλονται. προάγει μὲν οὖν τὸ πνεῦμα, εἰς οὗριον δὲ καθίστησι τὸ πηδάλιον, ἀντισπῶν καὶ μοχλεῖν τὴν θάλατταν. ἅμα δὲ καὶ οἱ ναῦται μάχονται τῷ πνεύματι· ἀνακλίνουσι γὰρ ἐπὶ τὸ ἐναντίον ἑαυτούς.

Διὰ τί τὰ στρογγύλα καὶ περιφερῆ τῶν σχημάτων εὐκίνητοτερα; τριχῶς δὲ ἐνδέχεται τὸν κύκλον κυλισθῆναι· ἡ γὰρ κατὰ τὴν ἀψίδα, συμμεταβάλλοντος τοῦ κέντρου, ὥσπερ ὁ τροχὸς ὁ τῆς ἀμάξης κυλίνεται· ἡ περὶ τὸ κέντρον μόνον, ὥσπερ αἱ τροχιλαί, τοῦ κέντρου μένοντος· ἡ παρὰ τὸ ἐπίπεδον, τοῦ κέντρου μένοντος, ὥσπερ ὁ κεραμεικὸς τροχὸς κυλίνδεται. εἰ μὲν δὴ τάχιστα τὰ τοιαῦτα, διὰ τε τὸ μικρῷ ἄπτεσθαι τοῦ ἐπιπέδου, ὥσπερ ὁ κύκλος κατὰ στιγμήν, καὶ διὰ τὸ μὴ προσκόπτειν· ἀφέστηκε γὰρ τῆς γῆς ἡ γωνία. καὶ ἔτι ᾧ ἂν ἀπαντήσῃ σῶματι, πάλιν τούτου κατὰ μικρὸν ἄπτεται. εἰ δ' εὐθύγραμμον ᾗ, τῇ εὐθείᾳ ἐπὶ πολὺ ἥπτετο ἂν τοῦ ἐπιπέδου. ἔτι ἡ ῥέπει ἐπὶ τὸ βάρος, ταύτῃ κινεῖ ὁ κινῶν. ὅταν μὲν γὰρ πρὸς ὀρθιον ἡ διάμετρος ᾗ τοῦ κύκλου τῷ ἐπιπέδῳ, ἀπτομένου τοῦ κύκλου κατὰ στιγμήν τοῦ ἐπιπέδου, ἴσον τὸ βάρος ἐπ' ἀμφοτέρα διαλαμβάνει ἡ διάμετρος· ὅταν δὲ κινῆται, εὐθὺς πλέον ἐφ' ᾧ κινεῖται, ὥσπερ ῥέπον. ἐντεῦθεν εὐκίνητοτερον τῷ ὠθοῦντι εἰς τοῦμπροσθεν· ἐφ' ὃ γὰρ ῥέπει ἕκαστον, εὐκίνητόν ἐστιν, εἴπερ καὶ τὸ ἐπὶ τὸ ἐναντίον τῆς ῥοπῆς δυσκίνητον. ἔτι λέγουσιν τινες ὅτι καὶ ἡ γραμμὴ ἡ τοῦ κύκλου ἐν φορᾷ ἐστὶν ἀεὶ, ὥσπερ τὰ μένοντα, διὰ τὸ ἀντερείδειν, οἷον καὶ τοῖς μείζουσι

κύκλοις ὑπάρχει πρὸς τοὺς ἐλάττονας. θᾶπτον γὰρ ὑπὸ τῆς ἴσης ἰσχύος κινοῦνται οἱ μείζους καὶ τὰ βάρη κινοῦσι, διὰ τὸ ῥοπήν τινα ἔχειν τὴν γωνίαν τὴν τοῦ μείζονος κύκλου πρὸς τὴν τοῦ ἐλάττονος, καὶ εἶναι ὅπερ ἡ διάμετρος πρὸς τὴν διάμετρον. ἀλλὰ μὴν πᾶς κύκλος μείζων πρὸς [852a] ἐλάττονα· ἅπειροι γὰρ οἱ ἐλάττονες. εἰ δὲ καὶ πρὸς ἕτερον ἔχει ῥοπήν ὁ κύκλος, ὁμοίως δὲ εὐκίνητος, καὶ ἄλλην ἂν ἔχοι ῥοπήν ὁ κύκλος καὶ τὰ ὑπὸ κύκλου κινούμενα, κἂν μὴ τῇ ἀψίδι ἄπτηται τοῦ ἐπιπέδου, ἀλλ' ἢ παρὰ τὸ ἐπίπεδον, ἢ ὡς αἱ τροχιλαί· καὶ γὰρ οὕτως ἔχοντα ῥᾶστα κινοῦνται καὶ κινοῦσι τὸ βάρος. ἢ οὐ τῷ κατὰ μικρὸν ἄπτεσθαι καὶ προσκρούειν, ἀλλὰ δι' ἄλλην αἰτίαν. αὕτη δὲ ἐστὶν ἡ εἰρημένη πρότερον, ὅτι ἐκ δύο φορῶν γεγένηται ὁ κύκλος, ὥστε μίαν αὐτῶν αἰεὶ ἔχειν ῥοπήν, καὶ οἷον φερόμενον αὐτὸν αἰεὶ κινοῦσιν οἱ κινοῦντες, ὅταν κινῶσι κατὰ τὴν περιφέρειαν ὁπωσοῦν. φερομένην γὰρ αὐτὴν κινοῦσιν· τὴν μὲν γὰρ εἰς τὸ πλάγιον αὐτοῦ κίνησιν ὠθεῖ τὸ κινοῦν, τὴν δὲ ἐπὶ τῆς διαμέτρου αὐτὸς κινεῖται.

Διὰ τί τὰ διὰ τῶν μειζόνων κύκλων αἰρόμενα καὶ ἐλκόμενα ῥᾶον καὶ θᾶπτον κινοῦμεν; οἷον καὶ αἱ τροχιλαὶ αἱ μείζους τῶν ἐλαττόνων, καὶ αἱ σκυτάλαι ὁμοίως. ἢ διότι ὅσω ἂν μείζων ἢ ἐκ τοῦ κέντρου ἦ, ἐν τῷ ἴσῳ χρόνῳ πλεόν κινεῖται χωρίον, ὥστε καὶ τοῦ ἴσου βάρους ἐπόντος ποιήσει τὸ αὐτό, ὥσπερ εἴπομεν καὶ τὰ μείζω ζυγὰ τῶν ἐλαττόνων ἀκριβέστερα εἶναι. τὸ μὲν γὰρ σπαρτίον ἐστὶ κέντρον, τοῦ δὲ ζυγοῦ αἱ ἐπὶ τάδε τοῦ σπαρτίου αἱ ἐκ τοῦ κέντρου.

Διὰ τί ῥᾶον, ὅταν ἄνευ βάρους ἦ, κινεῖται τὸ ζυγόν, ἢ ἔχον βάρος; ὁμοίως δὲ καὶ τροχὸς ἢ ἄλλο τοιοῦτο τὸ βαρύτερον μὲν μείζον δὲ τοῦ ἐλάττονος καὶ κουφοτέρου. ἢ ὅτι οὐ μόνον εἰς τοῦναντίον τὸ βαρὺ, ἀλλὰ καὶ εἰς τὸ πλάγιον δυσκίνητόν ἐστιν. ἐναντίον γὰρ τῇ ῥοπῇ κινῆσαι χαλεπῶς, ἐφ' ὃ δὲ ῥέπει, ῥαδίως· εἰς δὲ τὸ πλάγιον οὐ ῥέπει.

Διὰ τί ἐπὶ τῶν σκυτάλων ῥᾶον τὰ φορτία κομίζεται ἢ ἐπὶ τῶν ἀμαξῶν, ἐχουσῶν τῶν μὲν μεγάλους τροχοὺς, τῶν δὲ μικρούς; ἢ διότι ἐπὶ τῶν σκυτάλων οὐδεμίαν ἔχει πρόσκοψιν, τὸ δὲ ἐπὶ τῶν ἀμαξῶν τὸν ἄξονα, καὶ προσκόπτει αὐτῷ· ἐκ τε γὰρ τῶν ἄνωθεν πιάζει αὐτὸν καὶ ἐκ τῶν πλαγίων. τὸ δὲ ἐπὶ τῶν σκυτάλων ἐπὶ δύο τούτων κινεῖται, τῇ τε κάτω χώρᾳ ὑποκειμένη καὶ τῷ βάρει τῷ ἐπικειμένῳ· ἐπ' ἀμφοτέρων γὰρ τούτων κυλίνεται τῶν τόπων ὁ κύκλος καὶ φερόμενος ὠθεῖται.

Διὰ τί πορρωτέρω τὰ βέλη φέρεται ἀπὸ τῆς σφενδόνης ἢ ἀπὸ τῆς χειρός; καίτοι κρατεῖ γε ὁ βάλλον τῇ χειρὶ [852b] μᾶλλον ἢ ἀπαρτήσας τὸ βάρος. καὶ

ἔτι οὕτω μὲν δύο βάρη κινεῖ, τό τε τῆς σφενδόνης καὶ τὸ βέλος, ἐκείνως δὲ τὸ βέλος μόνον. πότερον ὅτι ἐν μὲν τῇ σφενδόνη κινούμενον τὸ βέλος ῥίπτει ὁ βάλλον (περιαγαγὼν γὰρ κύκλῳ πολλάκις ἀφίησιν), ἐκ δὲ τῆς χειρὸς ἀπὸ τῆς ἡρεμίας ἢ ἀρχῇ· πάντα δὲ εὐκίνητοτερα κινούμενα ἢ ἡρεμοῦντα. ἢ διὰ τε τοῦτο, καὶ διότι ἐν μὲν τῷ σφενδονᾶν ἢ μὲν χεῖρ γίνεται κέντρον, ἢ δὲ σφενδόνη ἢ ἐκ τοῦ κέντρου· ὅσω ἂν ἢ μείζων ἢ ἀπὸ τοῦ κέντρου, κινεῖται θᾶπτον. ἢ δὲ ἀπὸ τῆς χειρὸς βολὴ πρὸς τὴν σφενδόνην βραχεῖα ἐστίν.

Διὰ τί ῥᾶον κινοῦνται περὶ τὸ αὐτὸ ζυγὸν οἱ μείζους τῶν ἐλαττόνων κόλλοπες, καὶ οἱ αὐτοὶ ὄνοι οἱ λεπτότεροι ὑπὸ τῆς αὐτῆς ἰσχύος τῶν παχυτέρων; ἢ διότι ὁ μὲν ὄνος καὶ τὸ ζυγὸν κέντρον ἐστίν, τὰ δὲ ἀπέχοντα μεγέθη αἰ ἐκ τοῦ κέντρου; θᾶπτον δὲ κινοῦνται καὶ πλέον ἀπὸ τῆς αὐτῆς ἰσχύος αἰ τῶν μειζόνων κύκλων ἢ αἰ τῶν ἐλαττόνων· ὑπὸ τῆς αὐτῆς γὰρ ἰσχύος θᾶπτον μεθίσταται τὸ ἄκρον τὸ πορρώτερον τοῦ κέντρου. διὸ πρὸς μὲν τὸ ζυγὸν τοὺς κόλλοπας ὄργανα ποιοῦνται, οἷς ῥᾶον στρέφουσιν· ἐν δὲ τοῖς λεπτοῖς ὄνοις πλεῖον γίνεται τὸ ἔξω τοῦ ξύλου, αὕτη δὲ γίνεται ἢ ἐκ τοῦ κέντρου.

Διὰ τί τὸ αὐτὸ μέγεθος ξύλον ῥᾶον κατεάσσεται περὶ τὸ γόνυ, ἐὰν ἴσον ἀποστήσας τῶν ἄκρων ἐχόμενος καταγνύη, ἢ παρὰ τὸ γόνυ ἐγγὺς ὄντος· καὶ ἐὰν πρὸς τὴν γῆν ἐρείσας καὶ τῷ ποδὶ προσβάς πόρρωθεν τῇ χειρὶ καταγνύη, ἢ ἐγγύθεν; ἢ διότι ἔνθα μὲν τὸ γόνυ κέντρον, ἔνθα δὲ ὁ πούς. ὅσω δ' ἂν πορρώτερον ἢ τοῦ κέντρου, ῥᾶον κινεῖται ἅπαν. κινήθῃναι δὲ ἀνάγκη καταγνύμενον.

Διὰ τί περὶ τοὺς αἰγιαλοὺς αἰ καλούμεναι κρόκαι στρογγύλαι εἰσίν, ἐκ μακρῶν τῶν λίθων καὶ ὀστράκων τὸ ἐξ ὑπαρχῆς ὄντων; ἢ διότι τὰ πλεῖον ἀπέχοντα τοῦ μέσου ἐν ταῖς κινήσεσι θᾶπτον φέρεται. τὸ μὲν γὰρ μέσον γίνεται κέντρον, τὸ δὲ διάστημα ἢ ἐκ τοῦ κέντρου. ἀεὶ δὲ ἢ μείζων ἀπὸ τῆς ἴσης κινήσεως μείζω γράφει κύκλον. τὸ δ' ἐν ἴσῳ χρόνῳ μείζω διεξιὼν θᾶπτον φέρεται. τὰ δὲ φερόμενα θᾶπτον ἐκ τοῦ ἴσου ἀποστήματος σφοδρότερον τύπτει. τὰ δὲ τύπτοντα μᾶλλον καὶ αὐτὰ τύπτεται μᾶλλον. ὥστε ἀνάγκη θραύεσθαι αἰεὶ τὰ πλέον ἀπέχοντα τοῦ μέσου. τοῦτο δὲ πάσχοντα ἀνάγκη γίνεσθαι περιφερῆ. ταῖς δὲ κρόκαις διὰ [853a] τὴν τῆς θαλάττης κίνησιν, διὰ τὸ μετὰ τῆς θαλάττης κινεῖσθαι, συμβαίνει ἀεὶ ἐν κινήσει εἶναι καὶ κυλιομέναις προσκόπτειν. τοῦτο δὲ ἀνάγκη μάλιστα συμβαίνειν αὐτοῖς τοῖς ἄκροις.

Διὰ τί, ὅσω ἂν ἢ μακρότερα τὰ ξύλα, τοσούτω ἀσθενέστερα γίνεται, καὶ

κάμπτεται αἰρόμενα μᾶλλον, κἂν ἢ τὸ μὲν βραχύ, ὅσον δίπηχυ, λεπτόν, τὸ δὲ ἑκατὸν πηχῶν παχύ; ἢ διότι μοχλὸς γίνεται καὶ βάρος καὶ ὑπομόχλιον ἐν τῷ αἵρεσθαι τοῦ ξύλου τὸ μῆκος; τὸ μὲν γὰρ πρῶτον μέρος αὐτοῦ, ὃ ἡ χεὶρ αἵρει, οἷον ὑπομόχλιον γίνεται, τὸ δ' ἐπὶ τῷ ἄκρῳ βάρος. ὥστε ὅσω ἂν ἢ μακρότερον τὸ ἀπὸ τοῦ ὑπομοχλίου, τοσούτῳ ἀνάγκη κάμπτεσθαι μᾶλλον· ὅσω γὰρ ἂν πλεον ἀπέχη τοῦ ὑπομοχλίου, τοσούτῳ ἀνάγκη κάμπτεσθαι μεῖζον. ἀνάγκη οὖν αἵρεσθαι τὰ ἄκρα τοῦ μοχλοῦ. ἐὰν οὖν ἢ καμπτόμενος ὁ μοχλός, ἀνάγκη αὐτὸν κάμπτεσθαι μᾶλλον αἰρόμενον. ὅπερ συμβαίνει ἐπὶ τῶν ξύλων τῶν μακρῶν· ἐν δὲ τοῖς βραχέσιν ἐγγὺς τὸ ἔσχατον τοῦ ὑπομοχλίου γίνεται τοῦ ἡρεμοῦντος.

Διὰ τί τῷ σφηνὶ ὄντι μικρῷ μεγάλα βάρη δίσταται καὶ μεγέθη σωμάτων, καὶ θλίψις ἰσχυρὰ γίνεται; ἢ διότι ὁ σφὴν δύο μοχλοὶ εἰσιν ἐναντίοι ἀλλήλοις, ἔχει δὲ ἑκάτερος τὸ μὲν βάρος τὸ δὲ ὑπομόχλιον, ὃ καὶ ἀνασπᾷ ἢ πιέζει. ἔτι δὲ ἡ τῆς πληγῆς φορὰ τὸ βάρος, ὃ τύπτει καὶ κινεῖ, ποιεῖ μέγα· καὶ διὰ τὸ κινούμενον κινεῖν τῇ ταχυτῇτι ἰσχύει ἔτι πλεον. μικρῷ δὲ ὄντι μεγάλα δυνάμεις ἀκολουθοῦσι· διὸ λανθάνει κινῶν παρὰ τὴν ἀξίαν τοῦ μεγέθους. ἔστω σφὴν ἐφ' ᾧ ΑΒΓ, τὸ δὲ σφηνούμενον ΔΕΗΖ. μοχλὸς δὴ γίνεται ἡ ΑΒ, βάρος δὲ τὸ τοῦ Β κάτωθεν, ὑπομόχλιον δὲ τὸ ΖΔ. ἐναντίος δὲ τούτῳ μοχλὸς τὸ ΒΓ. ἡ δὲ ΑΓ κοπτομένη ἑκατέρᾳ τούτων χρῆται μοχλῷ· ἀνασπᾷ γὰρ τὸ Β.

Διὰ τί, ἐὰν τις δύο τροχιλέας ποιήσας ἐπὶ δυσὶ ξύλοις συμβάλλουσιν ἑαυτοῖς ἐναντίως αὐταῖς κύκλῳ περιβάλῃ καλώδιον, ἔχον τὸ ἄρτημα ἐκ θατέρου τῶν ξύλων, θάτερον δὲ ἢ προσερηρισμένον ἢ προστεθειμένον κατὰ τὰς τροχαλίας, ἐὰν ἔλκη τις τῇ ἀρχῇ τοῦ καλωδίου, μεγάλα βάρη προσάγει, κἂν ἢ μικρὰ ἢ ἔλκουσα ἰσχύς; ἢ διότι τὸ αὐτὸ βάρος ἀπὸ ἐλάττονος ἰσχύος, εἰ μοχλεύεται, ἐγείρεται, ἢ ἀπὸ χειρός; ἢ δὲ τροχιλέα τὸ αὐτὸ ποιεῖ τῷ μοχλῷ, [853b] ὥστε ἡ μία ῥᾶον ἔλξει, καὶ ἀπὸ μιᾶς ὀλκῆς τοῦ κατὰ χεῖρα πολὺ ἔλξει βαρύτερον. τοῦτο δ' αἱ δύο τροχαλῖαι πλεον ἢ διπλασίῳ τάχει αἵρουσαι. ἔλαττον γὰρ ἔτι ἡ ἑτέρα ἔλκει ἢ εἰ αὐτὴ καθ' ἑαυτὴν εἴλκεν, ὅταν παρὰ τῆς ἑτέρας ἐπιβληθῇ τὸ σχοινίον· ἐκείνη γὰρ ἔτι ἔλαττον ἐποίησε τὸ βάρος. καὶ οὕτως ἐὰν εἰς πλείους ἐπιβάλληται τὸ καλώδιον, ἐν ὀλίγαις τροχιλαῖς πολλὴ γίνεται διαφορὰ, ἢ ὥστε ὑπὸ τῆς πρώτης τοῦ βάρους ἔλκοντος τέτταρας μνᾶς, ὑπὸ τῆς τελευταίας ἔλκεσθαι πολλῷ ἐλάττω. καὶ ἐν τοῖς οἰκοδομικοῖς ἔργοις ῥαδίως κινοῦσι μεγάλα βάρη· μεταφέρουσι γὰρ ἀπὸ τῆς αὐτῆς τροχιλέας ἐφ' ἑτέραν, καὶ πάλιν ἀπ' ἐκείνης εἰς ὄνους καὶ μοχλοῦς· τοῦτο δὲ ταύτόν ἐστι τῷ ποιεῖν πολλὰς τροχιλέας.

Διὰ τί, ἐὰν μὲν τις ἐπιθῇ ἐπὶ τὸ ξύλον πέλεκυν μέγαν καὶ φορτίον μέγα ἐπ'

αὐτῷ, οὐ διαιρεῖ τὸ ξύλον, ὅ τι καὶ λόγου ἄξιον· ἐὰν δὲ ἄρας τὸν πέλεκύν τις πατάξῃ αὐτῷ, διασχίζει, ἔλαττον βάρος ἔχοντος τοῦ τύπτοντος πολὺ μᾶλλον ἢ τοῦ ἐπικειμένου καὶ πιεζοῦντος; ἢ διότι πάντα τῇ κινήσει ἐργάζεται, καὶ τὸ βαρὺ τὴν τοῦ βάρους κίνησιν λαμβάνει μᾶλλον κινούμενον ἢ ἡρεμοῦν; ἐπικείμενον οὖν οὐ κινεῖται τὴν τοῦ βάρους κίνησιν, φερόμενον δὲ ταύτην τε καὶ τὴν τοῦ τύπτοντος. ἔτι δὲ καὶ γίνεται σφὴν ὁ πέλεκυς· ὁ δὲ σφὴν μικρὸς ὢν μεγάλα διίστησι διὰ τὸ εἶναι ἐκ δύο μοχλῶν ἐναντίως συγκειμένων.

Διὰ τί αἱ φάλαγγες τὰ κρέα ἰσταῖσιν ἀπὸ μικροῦ ἀρτήματος μεγάλα βάρη, τοῦ ὅλου ἡμιζυγίου ὄντος; οὐ μὲν γὰρ τὸ βάρος ἐντίθεται, κατήρτηται μόνον ἢ πλάστιγξ, ἐπὶ θάτερον δὲ ἢ φάλαγξ ἐστὶ μόνον. ἢ ὅτι ἅμα συμβαίνει ζυγὸν καὶ μοχλὸν εἶναι τὴν φάλαγγα; ζυγὸν μὲν γὰρ, ἢ τῶν σπαρτίων ἕκαστον γίνεται τὸ κέντρον τῆς φάλαγγος. τὸ μὲν οὖν ἐπὶ θάτερα ἔχει πλάστιγγα, τὸ δὲ ἐπὶ θάτερα ἀντὶ τῆς πλάστιγγος τὸ σφαίρωμα, ὃ τῷ ζυγῷ ἔγκειται, ὥσπερ εἴ τις τὴν ἐτέραν πλάστιγγα καὶ τὸν σταθμὸν ἐπιθείῃ ἐπὶ τὸ ἄκρον τῆς πλάστιγγος· δῆλον γὰρ ὅτι ἔλκει τοσοῦτον βάρος ἐν τῇ ἐτέρᾳ κείμενον πλάστιγγι. ὅπως δὲ τὸ ἐν ζυγὸν πολλὰ ἢ ζυγά, τοιαῦτα τὰ σπαρτία πολλὰ ἔγκειται ἐν τῷ τοιούτῳ ζυγῷ, ὢν ἐκάστου τὸ ἐπὶ τάδε ἐπὶ τὸ σφαίρωμα τὸ ἥμισυ τῆς φάλαγγός ἐστι, καὶ ὁ σταθμὸς δι' ἴσου τῶν ἀπ' ἀλλήλων τῶν σπαρτίων κινουμένων, ὥστε συμμετρεῖσθαι πόσον βάρος [854a] ἔλκει τὸ ἐν τῇ πλάστιγγι κείμενον· ὥστε γινώσκειν, ὅταν ὀρθῇ ἢ φάλαγξ ἢ, ἀπὸ ποίου σπάρτου πόσον βάρος ἔχει ἢ πλάστιγξ, καθάπερ εἴρηται. ὅλως μὲν ἐστὶ τοῦτο ζυγόν, ἔχον μίαν μὲν πλάστιγγα, ἐν ἣ ἴσταται τὸ βάρος, τὴν δ' ἐτέραν, ἐν ἣ τὸ σταθμὸν ἐν τῇ φάλαγγι. διὸ σφαίρωμά ἐστιν ἢ φάλαγξ ἐπὶ θάτερον. τοιοῦτον δὲ ὃν πολλὰ ζυγά ἐστὶ, καὶ τοσαῦτα ὅσαπέρ ἐστὶ τὰ σπαρτία. ἀεὶ δὲ τὸ ἐγγύτερον σπαρτίον τῆς πλάστιγγος καὶ τοῦ ἵσταμένου βάρους μεῖζον ἔλκει βάρος, διὰ τὸ γίνεσθαι τὴν μὲν φάλαγγα πᾶσαν μοχλὸν ἀνεστραμμένον (ὑπομόχλιον μὲν γὰρ τὸ σπαρτίον ἕκαστον ἄνωθεν ὄν, τὸ δὲ βάρος τὸ ἐνὸν ἐν τῇ πλάστιγγι), ὅσω δ' ἂν μακρότερον ἢ τὸ μῆκος τοῦ μοχλοῦ τοῦ ἀπὸ τοῦ ὑπομοχλίου, τοσοῦτω ἐκεῖ μὲν ῥᾶον κινεῖ, ἐνταῦθα δὲ σήκωμα ποιεῖ, καὶ ἵστησι τὸ πρὸς τὸ σφαίρωμα βάρος τῆς φάλαγγος.


Διὰ τί οἱ ἰατροὶ ῥᾶον ἐξαιροῦσι τοὺς ὀδόντας προσλαμβάνοντες βάρος τὴν ὀδοντάγραν ἢ τῇ χειρὶ μόνῃ ψιλῇ; πότερον διὰ τὸ μᾶλλον ἐξολισθαίνειν διὰ τῆς χειρὸς τὸν ὀδόντα ἢ ἐκ τῆς ὀδοντάγρας; ἢ μᾶλλον ὀλισθαίνει τῆς χειρὸς ὁ σίδηρος, καὶ οὐ περιλαμβάνει αὐτὸν κύκλῳ· μαλθακὴ γὰρ οὖσα ἢ σὰρξ τῶν δακτύλων καὶ προσμένει μᾶλλον καὶ περιαρμόττει. ἀλλ' ὅτι ἢ ὀδοντάγρα δύο μοχλοὶ εἰσιν ἀντικείμενοι, ἐν τὸ ὑπομόχλιον ἔχοντες τὴν σύναψιν τῆς θερμαστρίδος· τοῦ ῥᾶον οὖν κινῆσαι χρῶνται τῷ ὀργάνῳ πρὸς



τὴν ἐξαίρεσιν. ἔστω γὰρ τῆς ὀδοντάγρας τὸ μὲν ἕτερον ἄκρον ἐφ' ὧ τὸ Α, τὸ δὲ ἕτερον, τὸ Β, ὃ ἐξαιρεῖ· ὁ δὲ μοχλὸς ἐφ' ὧ ΑΔΖ, ὁ δὲ ἄλλος μοχλὸς ἐφ' ὧ Β ΓΕ, ὑπομόχλιον δὲ τὸ ΓΘΔ· ὁ δὲ ὀδοὺς ἐφ' οὗ Ι σύναψις· ὁ δὲ τὸ βάρος. ἐκατέρω οὖν τῶν ΒΖ καὶ ἅμα λαβῶν κινεῖ. ὅταν δὲ κινήσῃ, ἐξεῖλε ῥᾶον τῇ χειρὶ ἢ τῷ ὀργάνῳ.

Διὰ τί τὰ κάρυα ῥαδίως καταγνύουσιν ἄνευ πληγῆς ἐν τοῖς ὀργάνοις ἃ ποιοῦσι πρὸς τὸ καταγνύναι αὐτά; πολλὴ γὰρ ἀφαιρεῖται ἰσχὺς ἢ τῆς φορᾶς καὶ βίας. ἔτι δὲ σκληρῷ καὶ βαρεῖ συνθλίβων θᾶττον ἂν κατάξαι ἢ ξυλίνῳ καὶ κούφῳ τῷ ὀργάνῳ. ἢ διότι οὕτως ἐπ' ἀμφοτέρω θλίβεται ὑπὸ δύο μοχλῶν τὸ κάρυον, τῷ δὲ μοχλῷ ῥαδίως διαιρεῖται τὰ βάρη; τὸ γὰρ ὄργανον ἐκ δύο σύγκειται μοχλῶν, ὑπομόχλιον ἐχόντων τὸ αὐτό, τὴν συναφὴν ἐφ' ἧς τὸ Α. ὥσπερ [854b] οὖν εἰ ἦσαν ἐκβεβλημένα, ὑφ' ὧν κινουμένων εἰς τὰ τῶν ΓΔ ἄκρα αἱ ΕΖ συνήγοντο ῥαδίως ἀπὸ μικρᾶς ἰσχύος· ἦν οὖν ἐν τῇ πληγῇ τὸ βάρος ἐποίει, ταύτην ἢ κρείττων ταύτης, ἢ τὸ ΕΓ καὶ ΖΔ, μοχλοὶ ὄντες ποιοῦσι· τῇ ἄρσει γὰρ εἰς τοῦναντίον αἴρονται, καὶ θλίβοντες καταγνύουσιν τὸ ἐφ' ὧ Κ. δι' αὐτὸ δὲ τοῦτο καὶ ὅσω ἂν ἐγγύτερον ἢ τῆς Α τὸ Κ, συντρίβεται θᾶττον· ὅσω γὰρ ἂν πλεῖον ἀπέχη τοῦ ὑπομοχλίου ὁ μοχλός, ῥᾶον κινεῖ καὶ πλεῖον ἀπὸ τῆς ἰσχύος τῆς αὐτῆς. ἔστιν οὖν τὸ μὲν Α ὑπομόχλιον, ἢ δὲ ΔΑΖ μοχλός, καὶ ἢ ΓΑΕ. ὅσω ἂν οὖν τὸ Κ ἐγγυτέρω ἢ τῆς γωνίας τῶν Α, τοσοῦτω ἐγγύτερον γίνεται τῆς συναφῆς τῶν Α· τοῦτο δὲ ἐστὶ τὸ ὑπομόχλιον. ἀνάγκη τοίνυν ἀπὸ τῆς αὐτῆς ἰσχύος συναγωγῆς τὸ ΖΕ αἴρεσθαι πλέον. ὥστε ἐπεὶ ἐστὶν ἐξ ἐναντίας ἢ ἄρσις, ἀνάγκη θλίβεσθαι μᾶλλον· τὸ δὲ μᾶλλον θλιβόμενον κατάγνυται θᾶττον.

Διὰ τί φερομένων δύο φορᾶς ἐν τῷ ῥόμβῳ τῶν ἄκρων σημείων ἀμφοτέρων, οὐ τὴν ἴσην ἐκάτερον αὐτῶν εὐθεῖαν διέρχεται, ἀλλὰ πολλαπλασίαν θάτερον; ὁ αὐτὸς δὲ λόγος καὶ διὰ τί τὸ ἐπὶ τῆς πλευρᾶς φερόμενον ἐλάττω διέρχεται τῆς πλευρᾶς. τὸ μὲν γὰρ τὴν διάμετρον τὴν ἐλάττω, ἢ δὲ τὴν πλευρὰν τὴν μείζω, καὶ ἢ μὲν μίαν, τὸ δὲ δύο φέρεται φορᾶς. φερέσθω γὰρ ἐπὶ τῆς ΑΒ τὸ μὲν Α πρὸς τὸ Β, τὸ δὲ Β πρὸς τὸ Δ τῷ αὐτῷ τάχει· φερέσθω δὲ καὶ ἢ ΑΒ ἐπὶ τῆς ΑΓ παρὰ τὴν ΓΔ τῷ αὐτῷ τάχει τούτοις. ἀνάγκη δὴ τὸ μὲν Α ἐπὶ τῆς ΑΔ διαμέτρου φέρεσθαι, τὸ δὲ Β ἐπὶ τῆς ΒΓ, καὶ ἅμα διεληλυθέναι ἐκατέραν, καὶ τὴν ΑΒ τὴν ΑΓ πλευράν. ἐνηνέχθω γὰρ τὸ μὲν Α τὴν ΑΕ, ἢ δὲ Α Β τὴν ΑΖ, καὶ ἔστω ἐκβεβλημένη ἢ ΖΗ παρὰ τὴν ΑΒ, καὶ ἀπὸ τοῦ Ε πεπληρώσθω. ὅμοιον οὖν γίνεται τὸ παραπληρωθὲν τῷ ὅλῳ. ἴση ἄρα ἢ ΑΖ τῇ ΑΕ, ὥστε τὸ Α ἐπὶ τῆς πλευρᾶς ἐνήνεκται τῆς ΑΕ. ἢ δὲ ΑΒ τὴν ΑΖ εἶη ἂν ἐνηνεγμένη. ἔσται ἄρα ἐπὶ τῆς διαμέτρου κατὰ τὸ Θ. καὶ αἰεὶ δὲ ἀνάγκη αὐτὸ φέρεσθαι κατὰ τὴν διάμετρον. καὶ ἅμα ἢ πλευρὰ ἢ ΑΒ τὴν

πλευρὰν τὴν ΑΓ δίδεισι, καὶ τὸ Α τὴν διάμετρον δίδεισι τὴν ΑΔ. ὁμοίως δὲ  
 δειχθήσεται καὶ τὸ Β ἐπὶ τῆς ΑΓ διαμέτρου φερόμενον. ἴση γὰρ ἐστὶν ἡ ΒΕ τῇ  
 ΒΗ. παραπληρωθέντος οὖν ἀπὸ τοῦ Η, ὁμοίον ἐστὶ τῷ ὅλῳ τὸ ἐντός. καὶ τὸ  
 Β ἐπὶ τῆς διαμέτρου ἔσται κατὰ τὴν σύναψιν τῶν πλευρῶν, καὶ ἅμα δίδεισιν ἡ  
 [855a] τε πλευρὰ τὴν πλευρὰν καὶ τὸ Β τὴν ΒΓ διάμετρον. ἅμα ἄρα καὶ τὸ Β  
 τὴν πολλαπλασίαν τῆς ΑΒ δίδεισι καὶ ἡ πλευρὰ τὴν ἐλάττονα πλευράν, τῷ  
 αὐτῷ τάχει φερόμενα, καὶ ἡ πλευρὰ μείζω τοῦ Α διελήλυθε μίαν φοράν  
 φερομένη. ὅσω γὰρ ἂν ὀξύτερος γένηται ὁ ῥόμβος, ἡ μὲν διάμετρος ἡ  
 ἐλάττων γίνεται, ἡ δὲ ΒΓ μείζων, ἡ δὲ πλευρὰ τῆς ΒΓ ἐλάττων. ἄτοπον γάρ,  
 ὥσπερ ἐλέχθη, τὸ δύο φοράς φερόμενον ἐνίστε βραδύτερον φέρεσθαι τοῦ μίαν,  
 καὶ ἀμφοτέρων ἰσοταχῶν σημείων δοθέντων μείζω διεξιέναι θάτερον. αἴτιον  
 δὲ ὅτι τοῦ μὲν ἀπὸ τῆς ἀμβλείας φερομένου σχεδὸν ἐναντία ἀμφοτέραι  
 γίνονται, ἦν τε αὐτὴ φέρεται καὶ ἦν ὑπὸ τῆς πλευρᾶς ὑποφέρεται, τοῦ δὲ ἀπὸ  
 τῆς ὀξείας συμβαίνει φέρεσθαι ἐπὶ τὸ αὐτό. συνεπουρίζει γὰρ ἡ τῆς πλευρᾶς  
 τὴν ἐπὶ τῆς διαμέτρου· καὶ ὅσω ἂν τὴν μὲν ὀξυτέραν ποιήσῃ, τὴν δὲ  
 ἀμβλυτέραν, ἡ μὲν βραδυτέρα ἔσται, ἡ δὲ θάπτων. αἱ μὲν γὰρ ἐναντιώτεροι  
 γίνονται διὰ τὸ ἀμβλυτέραν γίνεσθαι τὴν γωνίαν, αἱ δὲ μᾶλλον ἐπὶ τὰ αὐτὰ  
 διὰ τὸ συνάγεσθαι τὰς γραμμάς. τὸ μὲν γὰρ Β σχεδὸν ἐπὶ τὸ αὐτὸ φέρεται  
 κατ' ἀμφοτέρας τὰς φοράς· συνεπουρίζεται οὖν ἡ ἑτέρα, καὶ ὅσω ἂν ὀξυτέρα  
 γίνηται ἡ γωνία, τοσοῦτῳ μᾶλλον. τὸ Α δὲ ἐπὶ τοῦναντίον· αὐτὸ μὲν γὰρ  
 πρὸς τὸ Β φέρεται, ἡ δὲ πλευρὰ ὑποφέρει αὐτὸ πρὸς τὸ Δ. καὶ ὅσω ἂν  
 ἀμβλυτέρα ἡ γωνία ἦ, ἐναντιώτεροι αἱ φοραὶ γίνονται· εὐθυτέρα γὰρ ἡ  
 γραμμὴ γίνεται. εἰ δ' ὅλως εὐθεῖα γένοιτο, παντελῶς ἂν εἴησαν ἐναντία. ἡ δὲ  
 πλευρὰ ὑπ' οὐθενὸς κωλύεται μίαν φερομένην φοράν. εὐλόγως οὖν   
 Ἀπορεῖται διὰ τί ποτε ὁ μείζων κύκλος τῷ ἐλάττονι κύκλῳ ἴσην ἐξελίττεται  
 γραμμὴν, ὅταν περὶ τὸ αὐτὸ κέντρον τεθῶσι; χωρὶς δὲ ἐκκυλιόμενοι, ὥσπερ  
 τὸ μέγεθος αὐτῶν πρὸς τὸ μέγεθος ἔχει, οὕτως καὶ αἱ γραμμαὶ αὐτῶν  
 γίνονται πρὸς ἀλλήλας. ἔτι δὲ ἐνὸς καὶ τοῦ αὐτοῦ κέντρου ὄντος ἀμφοῖν, ὅτε  
 μὲν τηλικαύτη γίνεται ἡ γραμμὴ ἣν ἐκκυλίσκονται, ἡλίγκην ὁ ἐλάττων κύκλος  
 καθ' αὐτὸν ἐκκυλίσκονται, ὅτε δὲ ὅσπην ὁ μείζων. ὅτι μὲν οὖν μείζω ἐκκυλίσκονται ὁ  
 μείζων, φανερόν. γωνία μὲν γὰρ δοκεῖ κατὰ τὴν αἴσθησιν εἶναι ἡ περιφέρεια  
 ἐκάστου τῆς οἰκείας διαμέτρου, ἡ τοῦ μείζονος κύκλου μείζων, ἡ δὲ τοῦ  
 ἐλάττονος ἐλάττων, ὥστε τὸν αὐτὸν τοῦτον ἔξουσι λόγον, καθ' ὃς  
 ἐξεκυλίσθησαν [855b] αἱ γραμμαὶ πρὸς ἀλλήλας κατὰ τὴν αἴσθησιν. ἀλλὰ  
 μὴν καὶ ὅτι τὴν ἴσην ἐκκυλίσκονται, ὅταν περὶ τὸ αὐτὸ κέντρον κείμενοι ᾖσι,  
 δῆλον· καὶ οὕτως γίνεται ὅτε μὲν ἴση τῇ γραμμῇ ἦν ὁ μείζων κύκλος  
 ἐκκυλίσκονται, ὅτε δὲ ἐλάττων. ἔστω γὰρ κύκλος ὁ μείζων μὲν ἐφ' οὗ τὰ ΔΖΓ, ὁ  
 δὲ ἐλάττων ἐφ' οὗ τὰ ΕΗΒ, κέντρον δὲ ἀμφοῖν τὸ Α· καὶ ἦν μὲν ἐξελίττεται  
 καθ' αὐτὸν ὁ μέγας, ἡ ἐφ' ἧς ΖΙ ἔστω, ἦν δὲ ὁ ἐλάττων καθ' αὐτόν, ἡ ἐφ' ἧς

ΗΚ, ἴση τῇ ΑΖ. ἐὰν δὴ κινῶ τὸν ἐλάττονα, τὸ αὐτὸ κέντρον κινῶ, ἐφ' οὗ τὸ Α· ὁ δὲ μέγας προσηρμόσθω. ὅταν οὖν ἡ ΑΒ ὀρθῇ γένηται πρὸς τὴν ΗΚ, ἅμα καὶ ἡ ΑΓ γίνεται ὀρθῇ πρὸς τὴν ΖΛ, ὥστε ἔσται ἴσην ἀεὶ διεληλυθυῖα, τὴν μὲν ΗΚ, ἐφ' ᾧ ΗΒ περιφέρεια, τὴν δὲ ΖΛ ἢ ἐφ' ἧς ΖΓ. εἰ δὲ τὸ τέταρτον μέρος ἴσην ἐξελίπτεται, δῆλον ὅτι καὶ ὁ ὅλος κύκλος τῷ ὅλῳ κύκλῳ ἴσην ἐξελιχθήσεται, ὥστε ὅταν ἡ ΒΗ γραμμὴ ἔλθῃ ἐπὶ τὸ Κ, καὶ ἡ ΖΓ ἔσται περιφέρεια ἐπὶ τῆς ΖΛ, καὶ ὁ κύκλος ὅλος ἐξειλιγμένος. ὁμοίως δὲ καὶ ἐὰν τὸν μέγαν κινῶ, ἐναρμόσας τὸν μικρόν, τοῦ αὐτοῦ κέντρου ὄντος, ἅμα τῇ ΑΓ ἢ ΑΒ κάθετος καὶ ὀρθῇ ἔσται, ἡ μὲν πρὸς τὴν ΖΙ, ἡ δὲ πρὸς τὴν ΗΘ. ὥστε ὅταν ἴσην ἡ μὲν τῇ ΗΘ ἔσται διεληλυθυῖα, ἡ δὲ τῇ ΖΙ, καὶ γένηται ὀρθῇ πάλιν ἡ ΖΑ πρὸς τὴν ΖΛ, καὶ ἡ ΑΓ ὀρθῇ πάλιν, ὡς τὸ ἐξ ἀρχῆς ἔσσονται ἐπὶ τῶν ΘΙ. τὸ δὲ μήτε στάσεως γινομένης τὸ μείζον τῷ ἐλάττονι, ὥστε μένειν τινὰ χρόνον ἐπὶ τοῦ αὐτοῦ σημείου· κινουῖνται γὰρ συνεχῶς ἄμφω ἀμφοτεράκις. μὴ ὑπερπηδῶντος τοῦ ἐλάττονος μηθὲν σημεῖον, τὸν μὲν μείζω τῷ ἐλάττονι ἴσην διεξιέναι, τὸν δὲ τῷ μείζονι, ἄτοπον. ἔτι δὲ μιᾶς κινήσεως οὔσης ἀεὶ τὸ κέντρον τὸ κινούμενον ὅτε μὲν τὴν μεγάλην ὅτε δὲ τὴν ἐλάττονα ἐκκυλίεσθαι θαυμαστόν. τὸ γὰρ αὐτὸ τῷ αὐτῷ τάχει φερόμενον ἴσην πέφυκε διεξιέναι· τῷ αὐτῷ δὲ τάχει ἴσην ἐστὶ κινεῖν ἀμφοτεράκις. ἀρχὴ δὲ ληπτέα ἦδε περὶ τῆς αἰτίας αὐτῶν, ὅτι ἡ αὐτὴ δύναμις καὶ ἴση τὸ μὲν βραδύτερον κινεῖ μέγεθος, τὸ δὲ ταχύτερον. εἰ δὴ τι εἴη ὃ μὴ πέφυκεν ὑφ' ἐαυτοῦ κινεῖσθαι, ἐὰν τοῦτο ἅμα καὶ αὐτὸ κινῇ τὸ πεφυκὸς κινεῖσθαι, βραδύτερον κινηθήσεται ἢ εἰ αὐτὴ καθ' αὐτὴν ἐκινεῖτο. καὶ ἐὰν μὲν πεφυκὸς ἦ κινεῖσθαι, μὴ συγκινῇται δὲ μηθὲν, ὡσαύτως ἔξει. καὶ ἀδύνατον δὴ κινεῖσθαι πλέον ἢ τὸ κινουῖν· οὐ γὰρ τὴν αὐτοῦ κινεῖται κίνησιν, ἀλλὰ [856a] τὴν τοῦ κινουῖντος. εἴη δὴ κύκλος ὁ μὲν μείζων τὸ Α, ὁ δὲ ἐλάττων ἐφ' ᾧ Β. εἰ ὠθοίη δ' ὁ ἐλάττων τὸν μείζω, μὴ κυλιομένου αὐτοῦ, φανερόν ὅτι τοσοῦτον δίεισι τῆς εὐθείας ὁ μείζων, ὅσον ἐώσθη ὑπὸ τοῦ ἐλάττονος. τοσοῦτον δέ γε ἐώσθη ὅσον ὁ μικρὸς ἐκινήθη. ἴσην ἄρα τῆς εὐθείας διεληλύθασιν. ἀνάγκη τοίνυν καὶ εἰ κυλιόμενος ὁ ἐλάττων τὸν μείζω ὠθοίη, κυλισθῆναι μὲν ἅμα τῇ ὥσει, τοσοῦτον δ' ὅσον ὁ ἐλάττων ἐκυλίσθη, εἰ μηθὲν αὐτὸς τῇ αὐτῇ κινήσει κινεῖται. ὡς γὰρ καὶ ὅσον ἐκίνει, τοσοῦτον κεκινήσθαι ἀνάγκη τὸ κινούμενον ὑπ' ἐκείνου. ἀλλὰ μὴν ὅ τε κύκλος τοσοῦτον ἐκίνησε τὸ αὐτό, κύκλῳ τε καὶ ποδιαίαν (ἔστω γὰρ τοσοῦτον ὃ ἐκινήθη), καὶ ὁ μέγας ἄρα τοσοῦτον ἐκινήθη. ὁμοίως δὲ καὶ ὁ μέγας τὸν μικρόν κινήσῃ, ἔσται κεκινήμενος ὁ μικρὸς ὡς καὶ ὁ μείζων. καθ' αὐτὸν μὲν δὴ κινηθεὶς ὅποτεροσοῦν, ἐάν τε ταχὺ ἐάν τε βραδέως· τῷ αὐτῷ δὲ τάχει εὐθὺς ὅσην ὁ μείζων πέφυκεν ἐξελιχθῆναι γραμμὴν. ὅπερ καὶ ποιεῖ τὴν ἀπορίαν, ὅτι οὐκέτι ὁμοίως ποιοῦσιν ὅταν συναρμοσθῶσιν. τὸ δ' ἔστιν, εἰ ὁ ἕτερος ὑπὸ τοῦ ἑτέρου κινεῖται οὐχ ἢν πέφυκεν, οὐδὲ τὴν αὐτοῦ κίνησιν.

οὐθὲν γὰρ διαφέρει περιθεῖναι καὶ ἐναρμόσαι ἢ προσθεῖναι ὁποτερονοῦν ὁποτέρῳ· ὁμοίως γάρ, ὅταν ὁ μὲν κινῇ ὁ δὲ κινῆται ὑπὸ τούτου, ὅσον ἂν κινῇ ἄτερος, τοσοῦτον κινηθήσεται ἄτερος. ὅταν μὲν οὖν προσκείμενον κινῇ ἢ προσκρεμάμενον, οὐκ ἀεὶ κυλίνει τις· ὅταν δὲ περὶ τὸ αὐτὸ κέντρον τεθῶσιν, ἀνάγκη κυλίεσθαι ἀεὶ τὸν ἕτερον ὑπὸ τοῦ ἑτέρου. ἀλλ' οὐθὲν ἦττον οὐ τὴν αὐτοῦ κίνησιν ἄτερος κινεῖται, ἀλλ' ὥσπερ ἂν εἰ μηδεμίαν εἶχε κίνησιν. κἂν ἔχη, μὴ χρῆται δ' αὐτῇ, ταῦτό συμβαίνει. ὅταν μὲν οὖν ὁ μέγας κινῇ ἐνδεδεμένον τὸν μικρόν, ὁ μικρὸς κινεῖται ὅσηνπερ οὗτος· ὅταν δὲ ὁ μικρὸς, πάλιν ὁ μέγας ὅσην οὗτος. χωριζόμενος δὲ ἑκάτερος αὐτὸν κινεῖ αὐτός. ὅτι δὲ τοῦ αὐτοῦ κέντρου ὄντος καὶ κινουντος τῷ αὐτῷ τάχει συμβαίνει ἄνισον διεξιέναι αὐτοὺς γραμμὴν, παραλογίζεται ὁ ἀπορῶν σοφιστικῶς. τὸ αὐτὸ μὲν γάρ ἐστι κέντρον ἀμφοῖν, ἀλλὰ κατὰ συμβεβηκός, ὡς μουσικὸν καὶ λευκόν· τὸ γὰρ εἶναι ἑκατέρου κέντρου τῶν κύκλων οὐ τῷ αὐτῷ χρῆται. ὅταν μὲν οὖν ὁ κινῶν ἢ ὁ μικρὸς, ὡς ἐκείνου κέντρον καὶ ἀρχή, ὅταν δὲ ὁ μέγας, ὡς ἐκείνου. οὐκ οὖν τὸ αὐτὸ κινεῖ ἀπλῶς, ἀλλ' ἔστιν ὡς.

Διὰ τί τὰς κλίνας ποιοῦσι διπλασιοπλεύρους, τὴν μὲν [856b] ἕξ ποδῶν καὶ μικρῷ μείζω πλευράν, τὴν δὲ τριῶν; καὶ διὰ τί ἐντείνουσιν οὐ κατὰ διάμετρον; ἢ τὸ μὲν μέγεθος τηλικαύτας, ὅπως τοῖς σώμασιν ὥσι σύμμετροι; γίνονται γὰρ οὕτω διπλασιόπλευροι, τετραπῆχεις μὲν τὸ μῆκος, διπῆχεις δὲ τὸ πλάτος. ἐντείνουσι δὲ οὐ κατὰ διάμετρον ἀλλ' ἀπ' ἐναντίας, ὅπως τὰ τε ξύλα ἦττον διασπᾶται· τάχιστα γὰρ σχίζεται κατὰ φύσιν διαιρούμενα ταύτῃ, καὶ ἐλκόμενα πονεῖ μάλιστα. ἔτι ἐπειδὴ δεῖ βάρος δύνασθαι τὰ σπαρτία φέρειν, οὕτως ἦττον πονέσει λοξοῖς τοῖς σπαρτίοις ἐπιτιθεμένου τοῦ βάρους ἢ πλαγίοις. ἔτι δὲ ἔλαττον οὕτω σπαρτίον ἀναλίσκεται. ἔστω γὰρ κλίνη ἢ AZHI, καὶ δίχα διηρήσθω ἢ ZH κατὰ τὸ B. ἴσα δὴ τρυπήματά ἐστιν ἐν τῇ ZB καὶ ἐν τῇ ZA. καὶ γὰρ αἱ πλευραὶ ἴσαι εἰσίν· ἢ γὰρ ὅλη ZH διπλασία ἐστίν. ἐντείνουσι δ' ὡς γέγραπται, ἀπὸ τοῦ A ἐπὶ τὸ B, εἴτα οὐ τὸ Γ, εἴτα οὐ τὸ Δ, εἴτα οὐ τὸ Θ, εἴτα οὐ τὸ E. καὶ οὕτως ἀεὶ, ἕως ἂν εἰς γωνίαν καταστρέψωσιν ἄλλην· δύο γὰρ ἔχουσι γωνίαί τὰς ἀρχὰς τοῦ σπαρτίου. ἴσα δὲ ἐστὶ τὰ σπαρτία κατὰ τὰς κάμψεις, τό τε AB καὶ BΓ τῷ ΓΔ καὶ ΔΘ. καὶ τὰ ἄλλα δὲ τὰ τοιαῦτά ἐστίν, ὅτι οὕτως ἔχει ἢ αὐτὴ ἀπόδειξις. ἢ μὲν γὰρ AB τῇ EΘ ἴση· ἴσαι γάρ εἰσιν αἱ πλευραὶ τοῦ BHK A χωρίου, καὶ τὰ τρυπήματα ἴσα διέστηκεν. ἢ δὲ BH ἴση τῇ KA· ἢ γὰρ B γωνία ἴση τῇ H. ἐν ἴσοις γὰρ ἢ μὲν ἐκτός, ἢ δὲ ἐντός· καὶ ἢ μὲν B ἐστὶν ἡμίσεια ὀρθῆς· ἢ γὰρ ZB ἴση τῇ ZA· καὶ γωνία δὲ ἢ κατὰ τὸ Z ὀρθή· ἢ δὲ B γωνία ἴση τῇ κατὰ τὸ H· ἢ γὰρ κατὰ τὸ Z ὀρθή, ἐπειδὴ διπλασιόπλευρον τὸ ἑτερόμηκες καὶ πρὸς μέσον κέκλασται. ὥστε ἢ AG τῇ EH ἴση. ταύτῃ δὲ ἢ KΘ· παράλληλος γάρ. ὥστε ἢ BΓ ἴση τῇ KΘ. ἢ δὲ ΓE τῇ ΔΘ. ὁμοίως δὲ καὶ αἱ ἄλλαι δείκνυνται ὅτι ἴσαι εἰσὶν αἱ κατὰ

τὰς κάμψεις δύο ταῖς δυσίν. ὥστε δῆλον ὅτι τὰ τηλικαῦτα σπαρτία ὅσον τὸ AB, τέσσαρα τοσαῦτ' ἔνεστιν ἐν τῇ κλίνῃ· ὅσον δ' ἐστὶ τὸ πλῆθος τῶν ἐν τῇ ZH πλευρᾷ τρυπημάτων, καὶ ἐν τῷ ἡμίσει τῷ ZB τὰ ἡμίση. ὥστε ἐν τῇ ἡμισείᾳ κλίνῃ τηλικαῦτα μεγέθη σπαρτίων ἐστὶν ὅσον τῷ BA ἔνεστι, τοσαῦτα δὲ τὸ πλῆθος ὅσαπερ ἐν τῷ BH τρυπήματα. ταῦτα δὲ οὐδὲν διαφέρει λέγειν ἢ ὅσα ἐν τῇ AZ καὶ BZ τὰ συνάμφω. εἰ δὲ κατὰ διάμετρον ἐνταθῇ τὰ σπαρτία, ὡς ἐν τῇ ABΓΔ κλίνῃ ἔχει, τὰ ἡμίσεά εἰσιν οὐ τοσαῦτα [857a] ὅσα αἱ πλευραὶ ἀμφοῖν, αἱ AZ ZH· τὰ ἴσα δέ, ὅσα ἐν τῷ ZBZA τρυπήματα ἔνεστιν. μείζονες δὲ εἰσιν αἱ AZ BZ δύο οὔσαι τῆς AB. ὥστε καὶ τὸ σπαρτίον μείζον τοσούτῳ ὅσον αἱ πλευραὶ ἄμφω μείζους εἰσὶ τῆς διαμέτρου.

Διὰ τί χαλεπώτερον τὰ μακρὰ ξύλα ἀπ' ἄκρου φέρειν ἐπὶ τῷ ὤμῳ ἢ κατὰ τὸ μέσον, ἴσου τοῦ βάρους ὄντος; πότερον ὅτι σαλευομένου τοῦ ξύλου τὸ ἄκρον κωλύει φέρειν, μᾶλλον ἀντισπῶν τῇ σαλεύσει τὴν φοράν; ἢ κἂν μηθὲν κάμπτηται μηδ' ἔχη πολὺ μῆκος, ὅμως χαλεπώτερον φέρειν ἀπ' ἄκρου; ἀλλ' ὅτι καὶ ῥᾶον αἴρεται ἀπ' ἄκρου ἢ ἐκ μέσου, διὰ τὸ αὐτὸ καὶ φέρειν οὕτω ῥάδιον. αἴτιον δὲ ὅτι ἐκ μέσου μὲν αἰρόμενον ἀεὶ ἐπικουφίζει ἄλληλα τὰ ἄκρα, καὶ θάτερον μέρος τὸ ἐπὶ θάτερον εὖ αἴρει. ὥσπερ γὰρ κέντρον γίνεται τὸ μέσον, ἢ ἔχει τὸ αἶρον ἢ φέρον. εἰς τὸ ἄνω οὖν κουφίζεται ἐκάτερον τῶν ἄκρων εἰς τὸ κάτω ῥέπον. ἀπὸ δὲ τοῦ ἄκρου αἰρόμενον ἢ φερόμενον οὐ ποιεῖ τοῦτο, ἀλλ' ἅπαν τὸ βάρος ῥέπει ἐφ' ἐν μέσον, εἰς ὅπερ αἴρεται ἢ φέρεται. ἔστω μέσον ἐφ' οὗ A, ἄκρα ΒΓ. αἰρομένου οὖν ἢ φερομένου κατὰ τὸ A, τὸ μὲν B κάτω ῥέπον ἄνω αἴρει τὸ Γ, τὸ δὲ Γ κάτω ῥέπον τὸ B ἄνω αἴρει· ἅμα δὲ αἰρόμενα ἄνω ποιεῖ ταῦτα.

Διὰ τί, ἐὰν ἡ λίαν μακρὸν τὸ αὐτὸ βάρος, χαλεπώτερον φέρειν ἐπὶ τοῦ ὤμου, κἂν μέσον φέρῃ τις, ἢ ἐὰν ἔλαττον ἦ; πάλαι ἐλέγχθη ὡς οὐκ ἔστιν αἴτιον ἡ σάλευσις· ἀλλ' ἡ σάλευσις νῦν αἰτιὸν ἐστίν. ὅταν γὰρ ἡ μακρότερον, τὰ ἄκρα σαλεύεται, ὥστε εἴη ἂν καὶ τὸν φέροντα χαλεπώτερον φέρειν μᾶλλον. αἴτιον δὲ τοῦ σαλεύεσθαι μᾶλλον, ὅτι τῆς αὐτῆς κινήσεως οὔσης μεθίσταται τὰ ἄκρα, ὥσπερ ἂν ἡ μακρότερον τὸ ξύλον. ὁ μὲν γὰρ ὤμος κέντρον, ἐφ' οὗ τὸ A (μένει γὰρ τοῦτο), αἱ δὲ AB καὶ ΑΓ αἱ ἐκ τοῦ κέντρου. ὅσω δ' ἂν ἡ μείζον τὸ ἐκ τοῦ κέντρου ἢ τὸ AB ἢ καὶ τὸ ΑΓ, πλέον μεθίσταται μέγεθος. δέδεικται δὲ τοῦτο πρότερον.

Διὰ τί ἐπὶ τοῖς φρέασι τὰ κηλώνεια ποιοῦσι τοῦτον τὸν τρόπον; προστιθέασι γὰρ βάρος ἐν τῷ ξύλῳ τὸν μόλιβδον, ὄντος βάρους τοῦ κάδου αὐτοῦ, καὶ κενοῦ καὶ πλήρους ὄντος. ἢ ὅτι ἐν δυσὶ χρόνοις διηρημένου τοῦ ἔργου (βάψαι γὰρ δεῖ, καὶ τοῦτ' ἄνω ἐλκύσαι) συμβαίνει καθιέναι μὲν κενὸν

ῥαδίως, [857b] αἴρειν δὲ πλήρη χαλεπῶς; λυσιτελεῖ οὖν μικρῶ βραδύτερον εἶναι τὸ καταγαγεῖν πρὸς τὸ πολὺ κουφίσαι τὸ βάρος ἀνάγοντι. τοῦτο οὖν ποιεῖ ἐπ' ἄκρῳ τῷ κηλωνεῖω ὁ μόλιβδος προσκείμενος ἢ ὁ λίθος. καθιμῶντι μὲν γὰρ γίνεται βάρος μεῖζον ἢ εἰ μόνον κενὸν δεῖ κατάγειν τὸν κάδον· ὅταν δὲ πλήρης ἦ, ἀνάγει ὁ μόλιβδος, ἢ ὅ τι ἂν ἦ τὸ προσκείμενον βάρος. ὥστ' ἐστὶ ῥᾶον αὐτῷ τὰ ἄμφω ἢ ἐκείνῳ.

Διὰ τί, ὅταν φέρωσιν ἐπὶ ξύλου ἢ τινος τοιούτου δύο ἄνθρωποι ἴσον βάρος, οὐχ ὁμοίως θλίβονται, ἐὰν μὴ ἐπὶ τῷ μέσῳ ἢ τὸ βάρος, ἀλλὰ μᾶλλον ὅσῳ ἂν ἐγγύτερον ἢ τῶν φερόντων; ἢ διότι μοχλὸς μὲν γίνεται οὕτως ἐχόντων τὸ ξύλον, τὸ δὲ βάρος ὑπομόχλιον, ὁ δὲ ἐγγύτερος τοῦ βάρους τῶν φερόντων τὸ βάρος τὸ κινούμενον, ἄτερος δὲ τῶν φερόντων τὸ βάρος ὁ κινῶν. ὅσῳ γὰρ πλεον ἀπέχει τοῦ βάρους, τοσούτῳ ῥᾶον κινεῖ, καὶ θλίβει μᾶλλον τὸν ἕτερον εἰς τὸ κάτω, ὥσπερ ἀντερείδοντος τοῦ βάρους τοῦ ἐπικειμένου καὶ γινομένου ὑπομοχλίου. ἐν μέσῳ δὲ ὑποκειμένου τοῦ βάρους, οὐδὲν μᾶλλον ἄτερος θατέρῳ γίνεται βάρος, οὐδὲ κινεῖ, ἀλλ' ὁμοίως ἐκάτερος ἐκατέρῳ γίνεται βάρος.

Διὰ τί οἱ ἀνιστάμενοι πάντες πρὸς ὀξεῖαν γωνίαν τῷ μηρῷ ποιήσαντες τὴν κνήμην ἀνίστανται, καὶ τῷ θώρακι πρὸς τὸν μηρόν; εἰ δὲ μή, οὐκ ἂν δύναιτο ἀναστῆναι. πότερον ὅτι τὸ ἴσον ἡρεμίας πανταχοῦ αἴτιον, ἢ δὲ ὀρθὴ γωνία τοῦ ἴσου, καὶ ποιεῖ στάσιν· διὸ καὶ φέρεται πρὸς ὁμοίας γωνίας τῇ περιφερείᾳ τῆς γῆς. οὐ γὰρ ὅτι καὶ πρὸς ὀρθὴν ἔσται τῷ ἐπιπέδῳ. ἢ ὅτι ἀνιστάμενος γίνεται ὀρθός, ἀνάγκη δὲ τὸν ἐστῶτα κάθετον εἶναι πρὸς τὴν γῆν. εἰ οὖν μέλλει ἔσεσθαι πρὸς ὀρθήν, τοῦτο δέ ἐστι τὸ τὴν κεφαλὴν ἔχειν κατὰ τοὺς πόδας, καὶ γίνεσθαι δὴ ὅτε ἀνίσταται. ὅταν μὲν οὖν καθήμενος ἦ, παράλληλον ἔχει τὴν κεφαλὴν καὶ τοὺς πόδας, καὶ οὐκ ἐπὶ μιᾶς εὐθείας. ἢ κεφαλὴ Α εἴστω, θώραξ ΑΒ, μηρὸς ΒΓ, κνήμη ΓΔ. πρὸς ὀρθὴν δὲ γίνεται ὅ τε θώραξ [ἐφ' ὧν ΑΒ] τῷ μηρῷ καὶ ὁ μηρὸς τῇ κνήμῃ οὕτως καθημένῳ. ὥστε οὕτως ἔχοντα ἀδύνατον ἀναστῆναι. ἀνάγκη δὲ ἐγκλῖναι τὴν κνήμην καὶ ποιεῖν τοὺς πόδας ὑπὸ τὴν κεφαλὴν. τοῦτο δὲ ἔσται, ἐὰν ἢ ΓΔ ἐφ' ἧς τὰ ΓΖ γένηται, καὶ ἅμα ἀναστῆναι συμβήσεται, καὶ ἔχειν ἐπὶ [858a] τῆς αὐτῆς ἴσης τὴν κεφαλὴν τε καὶ τοὺς πόδας. ἢ δὲ ΓΖ ὀξεῖαν ποιεῖ γωνίαν πρὸς τὴν ΒΓ.

Διὰ τί ῥᾶον κινεῖται τὸ κινούμενον ἢ τὸ μένον, οἷον τὰς ἀμάξας θᾶπτον κινουμένας ὑπάγουσιν ἢ ἀρχομένας; ἢ ὅτι χαλεπώτατον μὲν τὸ εἰς τοῦναντίον κινούμενον κινῆσαι βάρος; ἀφαιρεῖται γάρ τι τῆς τοῦ κινουῦντος δυνάμεως, κἂν πολὺ θᾶπτον ἦ. ἀνάγκη γὰρ βραδυτέραν γίνεσθαι τὴν ὥσιν τοῦ ἀντωθουμένου. δεύτερον δέ, ἐὰν ἡρεμῇ· ἀντιτείνει γὰρ καὶ τὸ ἡρεμοῦν. τὸ δὲ

κινούμενον ἐπὶ τὸ αὐτὸ τῷ ὠθοῦντι ὅμοιον ποιεῖ ὥσπερ ἂν εἰ αὐξήσειέ τις τὴν τοῦ κινουῦντος δύναμιν καὶ ταχυτήτα· ὃ γὰρ ὑπ' ἐκείνου ἂν ἔπασχε, τοῦτο αὐτὸ ποιεῖ εἰς τὸ πρὸ ὁδοῦ κινούμενον.

Διὰ τί παύεται φερόμενα τὰ ῥιφέντα; πότερον ὅταν λήγῃ ἡ ἰσχὺς ἢ ἀφεῖσα, ἢ διὰ τὸ ἀντισπᾶσθαι, ἢ διὰ τὴν ῥοπὴν, ἐὰν κρείττων ἢ τῆς ἰσχύος τῆς ῥιψάσης; ἢ ἄτοπον τὸ ταῦτ' ἀπορεῖν, ἀφέντα τὴν ἀρχήν.

Διὰ τί φέρεται τι οὐ τὴν αὐτοῦ φοράν, μὴ ἀκολουθοῦντος καὶ ὠθοῦντος τοῦ ἀφέντος; ἢ δῆλον ὅτι ἐποίησε τοιοῦτον τὸ πρῶτον ὥς θάτερον ὠθεῖν, καὶ τοῦθ' ἕτερον· παύεται δέ, ὅταν μηκέτι δύνηται ποιεῖν τὸ προωθοῦν τὸ φερόμενον ὥστε ὠθεῖν, καὶ ὅταν τὸ τοῦ φερομένου βάρος ῥέπῃ μᾶλλον τῆς εἰς τὸ πρόσθεν δυνάμεως τοῦ ὠθοῦντος.

Διὰ τί οὔτε τὰ ἐλάττονα οὔτε τὰ μεγάλα πόρρω φέρεται ῥιπτούμενα, ἀλλὰ δεῖ συμμετρίαν τινὰ ἔχειν πρὸς τὸν ῥιπτοῦντα; πότερον ὅτι ἀνάγκη τὸ ῥιπτούμενον καὶ ὠθούμενον ἀντερείδειν ὅθεν ὠθεῖται; τὸ δὲ μηθὲν ὑπεῖκον διὰ μέγεθος ἢ μηδὲν ἀντερεῖσαν δι' ἀσθένειαν οὐ ποιεῖ ῥῖψιν οὐδὲ ὥσιν. τὸ μὲν οὖν πολὺ ὑπερβάλλον τῆς ἰσχύος τῆς ὠθούσης οὐθὲν ὑπεῖκει, τὸ δὲ πολὺ ἀσθενέστερον οὐδὲν ἀντερείδει. ἢ ὅτι τοσοῦτον φέρεται τὸ φερόμενον, ὅσον ἂν ἀέρα κινήσῃ εἰς βάθος; τὸ δὲ μηδὲν κινούμενον οὐδ' ἂν κινήσειεν οὐδέν. συμβαίνει δὴ ἀμφοτέρω τούτοις ἔχειν. [858b] τό τε γὰρ σφόδρα μέγα καὶ τὸ σφόδρα μικρὸν ὥσπερ οὐθὲν κινούμενά ἐστι· τὸ μὲν γὰρ αὐτὸ καθ' ἑν κινεῖ, τὸ δ' οὐθὲν κινεῖται.

Διὰ τί τὰ φερόμενα ἐν τῷ δινουμένῳ ὕδατι εἰς τὸ μέσον τελευτῶντα φέρονται ἅπαντα; πότερον ὅτι μέγεθος ἔχει τὸ φερόμενον, ὥστε ἐν δυσὶ κύκλοις εἶναι, τῷ μὲν ἐλάττονι τῷ δὲ μείζονι, ἐκάτερον αὐτοῦ τῶν ἄκρων. ὥστε περισπᾶ ὁ μείζων διὰ τὸ φέρεσθαι θᾶττον, καὶ πλάγιον ἀπωθεῖ αὐτὸ εἰς τὸν ἐλάττω. ἐπεὶ δὲ πλάτος ἔχει τὸ φερόμενον, καὶ οὗτος πάλιν τὸ αὐτὸ ποιεῖ, καὶ ἀπωθεῖ εἰς τὸν ἐντός, ἕως ἂν εἰς τὸ μέσον ἔλθῃ. καὶ τότε μένει διὰ τὸ ὁμοίως ἔχειν πρὸς ἅπαντας τοὺς κύκλους τὸ φερόμενον, διὰ τὸ μέσον· καὶ γὰρ τὸ μέσον ἴσον ἀπέχει ἐν ἐκάστῳ τῶν κύκλων. ἢ ὅτι ὅσων μὲν μὴ κρατεῖ ἢ φορὰ τοῦ δινουμένου ὕδατος διὰ τὸ μέγεθος, ἀλλ' ὑπερέχει τῇ βαρύτητι τῆς τοῦ κύκλου ταχυτήτος, ἀνάγκη ὑπολείπεσθαι καὶ βραδύτερον φέρεσθαι. βραδύτερον δὲ ὁ ἐλάττων κύκλος φέρεται· τὸ αὐτὸ γὰρ ἐν ἴσῳ χρόνῳ ὁ μέγας τῷ μικρῷ στρέφεται κύκλῳ, ὅταν ὥσι περὶ τὸ αὐτὸ μέσον. ὥστε εἰς τὸν ἐλάττονα κύκλον ἀναγκαῖον ἀπολείπεσθαι, ἕως ἂν ἐπὶ τὸ μέσον ἔλθῃ. ὅσων δὲ πρότερον κρατεῖ ἢ φορὰ, λήγουσα ταῦτο ποιήσει. δεῖ γὰρ τὸν μὲν εὐθύ,

τὸν δὲ ἕτερον κρατεῖν τῇ ταχυτῇτι τοῦ βάρους, ὥστε εἰς τὸν ἐντὸς ἀεὶ κύκλον ὑπολείπεσθαι πᾶν. ἀνάγκη γὰρ αὐτὸ ἐντὸς ἢ ἐκτὸς κινεῖσθαι τὸ μὴ κρατούμενον. ἐν αὐτῷ δὲ τοίνυν ἐν ᾧ ἐστίν, ἀδύνατον φέρεσθαι τὸ μὴ κρατούμενον. ἔτι δὲ ἦττον ἐν τῷ ἐκτός· θάπτων γὰρ ἢ φορὰ τοῦ ἐκτὸς κύκλου. λείπεται δὲ εἰς τὸν ἐντὸς τὸ μὴ κρατούμενον μεθίστασθαι. ἀεὶ δὲ ἕκαστον ἐπιδίδωσιν εἰς τὸ μὴ κρατεῖσθαι. ἐπεὶ δὲ πέρας τοῦ μὴ κινεῖσθαι ποιεῖ τὸ εἰς μέσον ἐλθεῖν, μένει δὲ τὸ κέντρον μόνον, ἅπαντα ἀνάγκη εἰς τοῦτο δὴ ἀθροίζεσθαι.

## Προβλήματα (859a) Problems



### CONTENTS

[A. ΟΣΑ ΙΑΤΡΙΚΑ.](#)

[B. ΟΣΑ ΠΕΡΙ ΙΔΡΩΤΑ.](#)

[Γ. ΟΣΑ ΠΕΡΙ ΟΙΝΟΠΟΣΙΑΝ ΚΑΙ ΜΕΘΗΝ.](#)

[Δ. ΟΣΑ ΠΕΡΙ ΑΦΡΟΔΙΣΙΑ.](#)

[Ε. ΟΣΑ ΑΠΟ ΚΟΠΟΥ.](#)

[Ζ. ΟΣΑ ΕΚ ΤΟΥ ΠΩΣ ΚΕΙΣΘΑΙ ΚΑΙ ΕΣΧΗΜΑΤΙΣΘΑΙ ΣΥΜΒΑΙΝΕΙ.](#)

[Ζ. ΟΣΑ ΕΚ ΣΥΜΠΑΘΕΙΑΣ.](#)

[Η. ΟΣΑ ΕΚ ΡΙΓΟΥΣ ΚΑΙ ΦΡΙΚΗΣ.](#)

[Θ. ΟΣΑ ΠΕΡΙ ΥΠΩΠΙΑ ΚΑΙ ΟΥΛΑΣ ΚΑΙ ΜΩΛΩΠΑΣ.](#)

[Ι. ΕΠΙΤΟΜΗ ΦΥΣΙΚΩΝ.](#)

[ΙΑ. ΟΣΑ ΠΕΡΙ ΦΩΝΗΣ.](#)

[ΙΒ. ΟΣΑ ΠΕΡΙ ΤΑ ΕΥΩΔΗ.](#)

[ΙΓ. ΟΣΑ ΠΕΡΙ ΤΑ ΔΥΣΩΔΗ.](#)



ΙΔ. ΟΣΑ ΠΕΡΙ ΚΡΑΣΕΙΣ.

ΙΕ. ΟΣΑ ΜΑΘΗΜΑΤΙΚΗΣ ΜΕΤΕΧΕΙ ΘΕΩΡΙΑΣ.

ΙΖ. ΟΣΑ ΠΕΡΙ ΤΑ ΑΨΥΧΑ.

ΙΖ. ΟΣΑ ΠΕΡΙ ΕΜΨΥΧΑ.

ΙΗ. ΟΣΑ ΠΕΡΙ ΦΙΛΟΛΟΓΙΑΝ.

ΙΘ. ΟΣΑ ΠΕΡΙ ΑΡΜΟΝΙΑΝ.

Κ. ΟΣΑ ΠΕΡΙ ΘΑΜΝΟΥΣ ΚΑΙ ΛΑΧΑΝΩΔΗ.

ΚΑ. ΟΣΑ ΠΕΡΙ ΑΛΦΙΤΑ ΚΑΙ ΜΑΖΑΝ ΚΑΙ ΤΑ ΟΜΟΙΑ.

ΚΒ. ΟΣΑ ΠΕΡΙ ΟΠΩΡΑΝ.

ΚΓ. ΟΣΑ ΠΕΡΙ ΤΟ ΑΛΜΥΡΟΝ ΥΔΩΡ ΚΑΙ ΘΑΛΑΤΤΑΝ

ΚΔ. ΟΣΑ ΠΕΡΙ ΤΑ ΘΕΡΜΑ ΥΔΑΤΑ.

ΚΕ. ΟΣΑ ΠΕΡΙ ΤΟΝ ΑΕΡΑ.

ΚΣ. ΟΣΑ ΠΕΡΙ ΤΟΥΣ ΑΝΕΜΟΥΣ.

ΚΖ. ΟΣΑ ΠΕΡΙ ΦΟΒΟΝ ΚΑΙ ΑΝΔΡΕΙΑΝ.

ΚΗ. ΟΣΑ ΠΕΡΙ ΣΩΦΡΟΣΥΝΗΝ ΚΑΙ ΑΚΟΛΑΣΙΑΝ, ΚΑΙ ΕΓΚΡΑΤΕΙΑΝ ΚΑΙ ΑΚΡΑΣΙΑΝ.

ΚΘ. ΟΣΑ ΠΕΡΙ ΔΙΚΑΙΟΣΥΝΗΝ ΚΑΙ ΑΔΙΚΙΑΝ.

Λ. ΟΣΑ ΠΕΡΙ ΦΡΟΝΗΣΙΝ ΚΑΙ ΝΟΥΝ ΚΑΙ ΣΟΦΙΑΝ.

ΛΑ. ΟΣΑ ΠΕΡΙ ΟΦΘΑΛΜΟΥΣ.

ΛΒ. ΟΣΑ ΠΕΡΙ ΩΤΑ.

ΛΓ. ΟΣΑ ΠΕΡΙ ΜΥΚΤΗΡΑ.

ΛΔ. ΟΣΑ ΠΕΡΙ ΤΟ ΣΤΟΜΑ ΚΑΙ ΤΑ ΕΝ ΑΥΤΩ.

ΛΕ. ΟΣΑ ΠΕΡΙ ΤΑ ΥΠΟ ΤΗΝ ΑΦΗΝ.

ΛΖ. ΟΣΑ ΠΕΡΙ ΠΡΟΣΩΠΟΝ.

ΛΖ. ΟΣΑ ΠΕΡΙ ΟΛΟΝ ΤΟ ΣΩΜΑ.

ΛΗ. ΟΣΑ ΠΕΡΙ ΧΡΟΑΝ.

## **A. ΟΣΑ ΙΑΤΡΙΚΑ.**

[859a] Διὰ τί αἱ μεγάλα ὑπερβολὰ νοσώδεις; ἢ ὅτι ὑπερβολὴν ἢ ἔλλειψιν ποιοῦσιν; τοῦτο δὲ ἦν ἡ νόσος.

Διὰ τί [δὲ] τὰς νόσους ὑγιάζουσιν πολλάκις, ὅταν πολὺ ἐκστῇ τις; καὶ ἐνίων ἰατρῶν τοιαύτη ἡ τέχνη· ὑπερβολαῖς γὰρ ἰῶνται οἶνου ἢ ὕδατος ἢ ἄλμης ἢ σίτου ἢ λιμοῦ. ἢ ὅτι ἐναντία ἀλλήλοις τὰ τὴν νόσον ποιοῦντα· εἰς τὸ μέσον οὖν ἄγει θάτερον ἐκάτερα.

Διὰ τί αἱ τῶν ὥρῶν μεταβολαὶ καὶ πνεύματα ἐπιτείνουσιν ἢ παύουσι καὶ κρίνουσι τὰς νόσους καὶ ποιοῦσιν; ἢ ὅτι θερμαὶ καὶ ψυχραὶ εἰσι καὶ ὑγραὶ καὶ ξηραὶ, αἱ δὲ νόσοι τούτων εἰσὶν ὑπερβολαί, ἡ δὲ ὑγεία ἰσότης. ἔαν οὖν δι' ὑγρότητα καὶ ψύξιν, ἡ ἐναντία ὥρα παύει· ἔαν δὲ ἐναντία ὥρα ἔχῃται, ἡ ὁμοία κρᾶσις ἐπιγενομένη ἐπέτεινε καὶ ἀνεῖλεν. διὰ ταῦτα δὲ καὶ νοσίζουσι τοὺς ὑγιαίνοντας, ὅτι μεταβάλλουσαι λύουσι τὴν κρᾶσιν· ἅμα γὰρ ταῖς οἰκείαις ὥραις καὶ ἡλικίαις καὶ τόποις αὐξάνεται. διὸ δεῖ ἐν ταῖς μεταβολαῖς μάλιστα διακυβεῖν. ὃ δὲ καθόλου περὶ τῶν ὥρῶν εἴρηται, καὶ κατὰ μέρος τὸ αὐτὸ αἴτιον. αἱ γὰρ τῶν πνευμάτων μεταβολαὶ καὶ τῶν ἡλικιῶν καὶ τόπων ὥρας τινός εἰσι μεταβολαί. διὸ καὶ ταῦτα ἐπιτείνει καὶ παύει καὶ κρίνει καὶ ποιεῖ, ὥσπερ αἱ ὥραι, καὶ ἐπιτολαὶ τῶν ἄστρον, ὥσπερ Ὠρίων καὶ Ἄρκτοῦρος καὶ Πλειὰς καὶ Κύων, ὥσπερ πνευμάτων καὶ ὑδάτων καὶ εὐδιῶν καὶ χειμώνων καὶ ἀλέας.

Διὰ τί ἐν ταῖς μεταβολαῖς τῶν ὥρῶν ἐμέτοις οὐ δεῖ χρῆσθαι; ἢ ἵνα μὴ γένηται συντάραξις διαφορῶν γινομένων τῶν περιπτωμάτων διὰ τὰς μεταβολάς.

[859b] Διὰ τί καὶ οἱ κιβδηλιῶντες καὶ ὑπὸ λιμοῦ τοὺς πόδας οἶδοῦσιν; ἢ διὰ τὴν σύντηξιν ἀμφοτέρω; συντήκονται δὲ οἱ μὲν διὰ λιμὸν διὰ τὸ ὅλως μὴ λαμβάνειν τροφήν, οἱ δὲ κιβδηλιῶντες διὰ τὸ μηδὲν ἀπολαύειν ἧς λαμβάνουσι τροφῆς.

Διὰ τί τῶν ἀπὸ χολῆς νοσημάτων ἐν τῷ θέρει (πυρέττουσι γὰρ μάλιστα ἐν τῷ θέρει) τὰ ὀξεῖα ἀπὸ χολῆς ὄντα ἐν τῷ χειμῶνι γίνεται μᾶλλον; ἢ ὅτι μετὰ πυρετοῦ ὄντα ὀξεῖα ἐστὶ διὰ τὸ βίαια εἶναι, ἢ δὲ βία παρὰ φύσιν. ὑγραινομένων γὰρ τινῶν τόπων θερμὴ φλεγμασία γίνεται· ἢ δὲ φλεγμασία ὑπερβολὴ θερμότητος οὕσα ποιεῖ τοὺς πυρετούς. ἐν μὲν οὖν τῷ θέρει ξηραὶ καὶ θερμαί εἰσιν αἱ νόσοι, ἐν δὲ τῷ χειμῶνι ὑγραὶ καὶ θερμαί, διὸ ὀξεῖαι· ταχέως γὰρ ἀναιροῦσιν· οὐ γὰρ θέλει πέττεσθαι διὰ τὸ πλῆθος τοῦ περιττώματος.

Διὰ τί ποτε ὁ λοιμὸς μόνη τῶν νόσων μάλιστα τοὺς πλησιάζοντας τοῖς θεραπευομένοις προσαναπίμπλησιν; ἢ ὅτι μόνη τῶν νόσων κοινὴ ἐστὶν ἅπασιν, ὥστε διὰ τοῦτο πᾶσιν ἐπιφέρει τὸν λοιμόν, ὅσοι φαύλως ἔχοντες προϋπάρχουσιν. καὶ γὰρ διὰ τὸ ὑπέκκαυμα τῆς νόσου τῆς παρὰ τῶν θεραπευομένων γινομένης ταχέως ὑπὸ τοῦ πράγματος ἀλίσκονται.

Διὰ τί τοῦ χειμῶνος βορείου γενομένου, ἐὰν τὸ ἔαρ ἔπομβρον γένηται καὶ νότιον, τὸ θέρος νοσῶδες γίνεται πυρετοῖς καὶ ὀφθαλμίαις; ἢ ὅτι τὰ τε σώματα ἐκδέχεται τὸ θέρος πολλὴν ἔχοντα ἀλλοτρίαν ὑγρότητα, καὶ ἡ γῆ καὶ ὁ τόπος ἐν ᾧ ἂν οἰκῶσι, γίνεται ἔφυδρος καὶ τοιοῦτος οἷοι λέγονται οἱ ἀεὶ νοσῶδεις τόποι; πρῶτον μὲν οὖν ὀφθαλμίαι γίνονται τηκομένης τῆς περὶ τὴν κεφαλὴν περιττώσεως, ἔπειτα πυρετοί. [860a] δεῖ γὰρ νοῆσαι ὅτι τὸ αὐτὸ καὶ θερμότατον γίνεται καὶ ψυχρότατον, οἷον ὕδωρ καὶ λίθος ὁ μὲν ζεῖ, τὸ δὲ κάει μᾶλλον. ἐν τε οὖν ἀέρι πνίγη γίνεται θερμαινομένου τοῦ ἀέρος διὰ πάχος, καὶ ἐν τοῖς σώμασιν ὡσαύτως πνίγη καὶ καύματα, τὸ δὲ ἐν σώματι καῦμα πυρετός ἐστίν, ἐν δὲ ὀφθαλμοῖς ὀφθαλμία. ὅλως δὲ καὶ ἡ μεταβολὴ ἰσχυρὰ οὕσα τὰ σώματα φθείρει, ὅταν τοῦ ἔαρος ὑγροῦ ὄντος εὐθὺς ἐπιλαμβάνῃ τὸ θέρος θερμόν ὄν καὶ ξηρόν. ἔτι δὲ χαλεπώτερον, ἐὰν καὶ τὸ θέρος ἔπομβρον γένηται. ἔχει γὰρ ὁ ἥλιος ὕλην ἣν ποιήσει ζεῖν καὶ ἐν τοῖς σώμασι καὶ ἐν τῇ γῇ καὶ ἀέρι· διὸ γίνονται πυρετοὶ καὶ ὀφθαλμίαι.

Διὰ τί, ἐὰν ὁ χειμὼν νότιος γένηται καὶ ἔπομβρος, τὸ δὲ ἔαρ αὐχμηρόν καὶ βόρειον, νοσῶδες γίνεται καὶ τὸ ἔαρ καὶ τὸ θέρος; ἢ ὅτι ἐν μὲν τῷ χειμῶνι διὰ τὴν ἀλέαν καὶ ὑγρότητα ὁμοίως τὰ σώματα διάκειται τῇ ὥρᾳ; ὑγρὰ γὰρ ἀνάγκη εἶναι καὶ οὐ συνεστηκότα. οὕτω δὲ ἐχόντων, τὸ ἔαρ

ψυχρὸν ὃν ἔπηξε καὶ ἐσκλήρυνεν αὐτὰ διὰ τὸν αὐχμόν, ὥστε ταῖς μὲν κυούσαις ὁ τόκος ὁ ἑαρινὸς εἰς ἐκτρώσεις γίνεται διὰ τὴν θερμασίαν καὶ τὸν σφακελισμὸν τὸν γινόμενον ὑπὸ τῆς ξηρᾶς ψυχρότητος, ἅτε οὐκ ἐκκρινομένης τῆς ὑγρότητος, τὰ δὲ κύόμενα παιδιά ἀσθενῇ γίνεται καὶ πηρὰ διὰ τὴν ὑπερβολὴν τοῦ ψύχους· συμβέβηκε γὰρ τότε γεννώμενα [ἐν εὐδία] καὶ συστήναι καὶ τραφῆναι ἐν τῇ τεκούσῃ. τοῖς δὲ ἄλλοις, ἅτε ἐν τῷ ἑαρι οὐκ ἀποκαθαρθέντος τοῦ φλέγματος τὴν ὑπερβολὴν, ὃ συμβαίνει ὅταν ἀλεινὸν γένηται, ἀλλὰ διὰ ψῦχος συστάντος, ὅταν ἐπιλάβῃ τὸ θέρος καὶ ἡ ἀλέα τήκουσα βία, τοῖς μὲν χολώδεσι καὶ ξηροῖς, διὰ τὸ μὴ διερὰ εἶναι τὰ σώματα αὐτοῖς ἀλλὰ τὴν φύσιν αὐτὸν ἔχειν, γίνονται μὲν ὑγρότητες, αὐταὶ δὲ λεπταί, ὥστε ὀφθαλμίαις ξηραῖς ἀλίσκονται, οἱ δὲ φλεγματώδεις βράγχοις καὶ εἰς τὸν πνεύμονα κατάρροις. ταῖς γυναιξὶ δὲ δυσεντερίαι γίνονται διὰ τὴν ὑγρότητα καὶ ψυχρότητα τῆς φύσεως, τοῖς δὲ γεραιτέροις ἀποπληξίαι, ὅταν ἀθρόον λυθὲν ὑγρὸν ἐπιπέσῃ καὶ δι' ἀσθένειαν τοῦ συμφύτου θερμοῦ παγῇ.

Διὰ τί, ἐὰν μὲν τὸ θέρος αὐχμηρὸν γένηται καὶ βόρειον, τὸ δὲ μετόπωρον ἐναντίον, ὑγρὸν καὶ νότιον, ἐν τῷ χειμῶνι κεφαλαλγίαί τε γίνονται καὶ βράγχοι καὶ βῆχες, [860b] καὶ τελευτῶσιν εἰς φθίσεις; ἢ ὅτι λαμβάνει ὕλην πολλὴν ὁ χειμῶν, ὥστ' αὐτῷ ἔργον ἐστὶ πῆξαι τὴν ὑγρότητα καὶ φλέγμα ποιῆσαι; ἐν μὲν οὖν ταῖς κεφαλαῖς ὅταν ὑγρασία γένηται, βάρη ποιεῖ, ἐὰν δὲ ἢ πολλὴ καὶ ψυχρά, σφακελισμούς· ἐὰν δὲ διὰ πλῆθος μὴ πῆξῃ, ῥεῖ εἰς τὸν ἐχόμενον τόπον, ὅθεν αἱ βῆχες καὶ οἱ βράγχοι καὶ αἱ φθόαι γίνονται.

Διὰ τί, ἐὰν βόρειον γένηται τὸ θέρος καὶ αὐχμῶδες, καὶ τὸ μετόπωρον, συμφέρει τοῖς φλεγματώδεσι καὶ ταῖς γυναιξίν; ἢ ὅτι ἡ φύσις ἐπὶ θάτερα ἀμφοῖν ὑπερβάλλει, ὥστε εἰς τοῦναντίον ἡ ὥρα ἐλκύσασα καθίστησιν εἰς τὴν εὐκρασίαν· καὶ παραχρῆμά τε ὑγιαίνουσιν, ἐὰν μὴ τι δι' ἑαυτοὺς ἀμαρτάνωσι, καὶ εἰς τὸν χειμῶνα οὐχ ὑγροὶ ἀφικνοῦνται, ἔχοντες ὑπεκκαύματα τῷ ψύχει.

Διὰ τί τοῖς χολώδεσι νοσῶδές ἐστὶ τὸ βόρειον καὶ αὐχμῶδες θέρος καὶ μετόπωρον; ἢ ὅτι ἐπὶ ταῦτόν ῥέπει αὐτοῖς τὸ σῶμα καὶ αἱ ὥραι, ὥστε ὥσπερ πῦρ ἐπὶ πυρὶ γίνεται. ξηραιομένων γὰρ τῶν σωμάτων, καὶ τοῦ γλυκυτάτου μὲν ἐξικμαζομένου ἐξ αὐτῶν, ὑπερθερμαινομένων δὲ λίαν, ἀνάγκη διὰ μὲν τὰς συντήξεις ὀφθαλμίας ξηρὰς γίνεσθαι, διὰ δὲ τὸ χολῶδες τοὺς ὑπολειπομένους εἶναι χυμούς, ὑπερθερμαινομένων δὲ καὶ τούτων πυρετοὺς ὀξεῖς γίνεσθαι ἅτε ὑπ' ἀκράτου τῆς χολῆς, ἐνίοις δὲ μανίας, οἷς ἂν μέλαινα χολὴ φύσῃ ἐνῇ· αὕτη γὰρ ἐπιπολάζει ἀναξηραιομένων τῶν ἐναντίων χυμῶν.

Διὰ τί τὸ τὰ ὕδατα μεταβάλλειν νοσῶδές φασιν εἶναι, τὸ δὲ τὸν ἀέρα οὐ;

ἢ ὅτι τοῦτο γίνεται τροφή, καὶ ἔχοντες καὶ ἀπολελαυκότες τοῦ ὕδατος ἀπέρχονται, τοῦ δὲ ἀέρος οὐδέν; ἔτι ὕδατος μὲν πολλὰ εἶδη ἐστὶ καὶ διάφορα καθ' αὐτά, ἀέρος δὲ οὐ, ὥστε καὶ τοῦτο αἴτιον. ἐν μὲν γὰρ τῷ ἀέρι σχεδὸν τῷ αὐτῷ συμβαίνει διατελεῖν καὶ ἀποδημοῦντας, ἐν δὲ ὕδασιν ἄλλοις· διὸ καλῶς δοκεῖ νοσώδης ἡ τοῦ ὕδατος μεταβολὴ εἶναι.

Διὰ τί μᾶλλον ἡ τοῦ ὕδατος ἢ ἡ τῶν σιτίων μεταβολὴ νοσώδης; ἢ ὅτι πλεῖστον ἀναλίσκομεν τὸ ὕδωρ; ἔν τε γὰρ τοῖς σιτίοις ὑπάρχει καὶ ὄψοις, καὶ ἐν τῷ πόματι τὸ πλεῖστον ὕδωρ.

[861a] Διὰ τί ἡ μεταβολὴ νοσώδης; ἢ ὅτι πᾶσα μὲν ἡ μεταβολὴ καὶ ὥρας καὶ ἡλικίας εὐκίνητον. εὐκίνητα γὰρ τὰ ἄκρα, οἷον καὶ αἱ ἀρχαὶ καὶ αἱ τελευταί. ὥστε καὶ αἱ τροφαὶ ἕτεραι οὐσαι ἀλλήλας φθείρουσιν· αἱ μὲν γὰρ ἄρτι, αἱ δὲ οὐπω προσπεφύκασιν. ἔτι δὲ ὥσπερ ἡ ποικίλη τροφή νοσώδης (ταραχώδης γὰρ καὶ οὐ μία πέψις), οὕτω συμβαίνει μεταβάλλουσι τὸ ὕδωρ ποικίλη πόματος χρῆσθαι τῇ τροφῇ· καὶ ἡ τοιαύτη τροφή κυριώτερα τῆς ξηρᾶς ἐστὶ τῷ πλεῖστον εἶναι καὶ ἐξ αὐτῶν τῶν σιτίων τὸ ὑγρὸν γίνεσθαι τροφήν.

Διὰ τί ἡ τῶν ὑδάτων μεταβολὴ τοῖς ἔχουσι φθεῖρας ποιεῖ πολλοὺς ἔχειν; ἢ ὅτι ἀπεψία γινομένη τοῦ ὑγροῦ διὰ τὴν ταραχήν, ἢ γίνεται διὰ τὴν ποικιλίαν τοῦ ὕδατος πυκνὰ μεταβάλλουσιν, ὑγρότητα ἐμποιεῖ, καὶ μάλιστα ἐν τῷ ἐπιτηδείως ὑπάρχοντι τόπῳ; ὁ δὲ ἐγκέφαλος ὑγρός· διὸ καὶ ἡ κεφαλὴ ἀεὶ μάλιστα. δηλοῖ δέ, ὅτι αἱ τρίχες ἔνεισι μάλιστα ἐν αὐτῇ. ἡ δὲ τοῦ τόπου τούτου ὑγρότης φθειρῶν ποιητική. δηλοῖ δὲ ἐπὶ τῶν παίδων· ὑγροκέφαλοί τε γὰρ εἰσι, καὶ πολλάκις ἢ κορυζῶσιν ἢ αἷμα ποιεῖ ῥεῖν, καὶ φθεῖρας πλείους οἱ ἐν ταύτῃ τῇ ἡλικίᾳ ἔχουσιν.

Διὰ τί ἀπὸ Πλειάδος μέχρι ζεφύρου οἱ τὰς μακρὰς νόσους κάμνοντες μάλιστα ἀναιροῦνται, καὶ οἱ γέροντες μᾶλλον τῶν νέων; πότερον ὅτι δύο ἐστὶ τὰ φθαρτικώτατα, ὑπερβολὴ τε καὶ ψυχρος; τὸ γὰρ ζῆν θερμόν, ἡ δὲ ὥρα αὕτη ἄμφω ταῦτ' ἔχει· ψυχρά τε γὰρ ἐστὶ, καὶ ἀκμαιότατος ὁ χειμὼν· τὸ λοιπὸν γὰρ ἔαρ ἐστίν. ἢ ὅτι ὁμοίως μὲν διάκεινται τοῖς γέρουσι τῶν καμνόντων οἱ τὰς μακρὰς κάμνοντες ἀσθενείας; οἷον γὰρ ἤδη γῆρας ἡ μακρὰ ἀσθένεια συμβαίνει· τὸ γὰρ σῶμα ἀμφοῖν ξηρὸν καὶ ψυχρόν ἐστὶ, τῶν μὲν δι' ἡλικίαν, τῶν δὲ διὰ νόσον. ὁ δὲ χειμὼν καὶ οἱ πάγοι ὑπερβολὴ ἐστὶ ψυχρότητος καὶ ξηρότητος. μικρᾶς οὖν δεομένοις αὐτοῖς ῥοπῆς γίνεται οἷον πῦρ ἐπὶ πυρὶ ὁ χειμὼν, καὶ φθείρει διὰ ταῦτα.

Διὰ τί ἐν τοῖς ἐλώδεσι τὰ μὲν ἐν τῇ κεφαλῇ ἔλκη ταχὺ ὑγιάζεται, τὰ δὲ ἐν

ταῖς κνήμαις μόλις; ἢ ὅτι βαρεῖα ἢ ὑγρότης διὰ τὸ γεώδης εἶναι, τὰ δὲ βαρέα εἰς τὸ κάτω ἀποχωρεῖ; τὰ μὲν οὖν ἄνω ἔκκριτα διὰ τὸ ἀποκεχωρηκέναι εἰς τὰ κάτω, τὰ δὲ κάτω πολλῆς γέμει περιττώσεως καὶ εὐσήπτου.

[861b] Διὰ τί, ἐὰν τοῦ χειμῶνος γενομένου βορείου καὶ τοῦ ἔαρος νοτίου καὶ ἐπόμβρου τὸ θέρος λίαν αὐχμηρὸν γένηται, θανατῶδες γίνεται τὸ μετόπωρον πᾶσι, μάλιστα δὲ τοῖς παιδίοις, καὶ τοῖς ἄλλοις δὲ δυσεντερία καὶ τεταρταῖοι χρόνιοι γίνονται ἐν αὐτῷ; ἢ ὅτι μετρίου μὲν ἐπιγενομένου ὕδατος θερινοῦ καταψυχθὲν τὸ ζέον ὑγρὸν ἐν ἡμῖν λωφᾷ, ὅσον ἡθροίσθη ἐν τῷ ἥρι γενομένῳ [τῷ] ὑγρῷ; εἰ δὲ μή, τὰ μὲν παιδιά διὰ τὸ ὑγρὰ εἶναι φύσει καὶ θερμὰ ὑπερζεῖ τῷ πάθει, διὰ τὸ μὴ καταψυχθῆναι. ὅσα δὲ μὴ τοῦ θέρους, τοῦ μετοπώρου ὅσον ἐκζεῖ. αἱ δὲ περιττώσεις ἐὰν μὴ εὐθὺς ἀνέλωσι, περὶ πνεύμονα καὶ ἀρτηρίαν γινόμεναι - ἄνω γὰρ πρῶται συνίστανται διὰ τὸ ὑπὸ τοῦ ἀέρος ἡμᾶς θερμαίνεσθαι· διὰ γὰρ ταῦτα καὶ ὀφθαλμῖαι πυρετῶν πρότερον γίνονται ἐν τῷ νοσερῷ θέρει. ἐὰν οὖν μὴ ἐν τοῖς ἄνω, καθάπερ εἴρηται, τὰ περιττώματα εὐθὺς ἀνέλῃ, καταβαίνουσιν εἰς τὰς κοιλίας ἄπεπτα ὄντα, τοῦτο δὲ ἐστὶ δυσεντερία, διὰ τὸ μὴ ἐκκρίνεσθαι ὑπὸ πλήθους τὸ ὑγρὸν. καὶ ἐὰν παύσωνται, τεταρταῖοι γίνονται τοῖς σωζομένοις· ἡ γὰρ τοῦ ἀπέπτου ὑπόστασις μονιμωτάτη ἐστὶ καὶ σύντονος γίνεται τῷ σώματι, καθάπερ ἡ μέλαινα χολή.

Διὰ τί, ἐὰν τὸ θέρος ἔπομβρον γένηται καὶ νότιον, καὶ τὸ μετόπωρον, ὁ χειμῶν νοσερὸς γίνεται; ἢ ὅτι σφόδρα ὑγρὰ τὰ σώματα ὁ χειμῶν λαμβάνει, καὶ ἡ μεταβολὴ ἔτι μεγάλη γίνεται ἐξ ἀλέας πολλῆς καὶ οὐκ ἐκ προσαγωγῆς, διὰ τὸ καὶ τὸ μετόπωρον γίνεσθαι ἀλεεινόν, ὥστε τοῖς μὲν γίνεσθαι ἀνάγκη τὰ ὀξέα νοσήματα, μὴ ἀραιοῖς οὔσι· τοῖς γὰρ τοιούτοις ἄνω μᾶλλον τὰ ὑγρὰ περιττώματα ἀθροίζεται, διὰ τὸ τούτους μὲν τοὺς τόπους ἔχειν χώραν, τοὺς δὲ κάτω ἑτέρους εἶναι. οἱ οὖν ὄντες πυκνόσαρκοι οὐ πολλὰ περιττώματα δέχονται. ψυχομένης οὖν τῆς περιττώσεως τῆς ἐν τοῖς ἄνω μέρεσι τοῦ σώματος, ὥσπερ τοῖς οἰνωμένοις ὅταν ῥιγῶσι, τὰ εἰρημένα νοσήματα συμβαίνει γίνεσθαι. τοῖς δὲ ἀραιότεροις πυρετῶν γινομένων, τοὺς ἀπὸ πλείστης ἀπεψίας γινομένους πυρετοὺς καύσους συμβαίνει γίνεσθαι, διὰ τὸ τοῖς τοιούτοις ἐσκεδάσθαι μὲν μᾶλλον κατὰ πᾶν τὸ σῶμα τὰ ὑγρὰ ἢ τοῖς πυκνοσάρκοις, συνισταμένης δὲ τῆς σαρκὸς αὐτῶν ὑπὸ τοῦ χειμῶνος θερμαινόμενα τὰ ὑγρὰ πυρετοὺς ποιεῖν. ἡ γὰρ παντὸς τοῦ σώματος ὑπερβάλλουσα [862a] θερμότης ἐστὶ πυρετός· ἐπιτεινομένη δὲ διὰ τὸ πλῆθος τῆς ἐνυπαρχούσης αὐτοῖς ὑγρότητος καὶ σῶος γίνεται.

Διὰ τί, ὅταν ἐκ γῆς ἀτμὸς ἀνίῃ πολὺς ὑπὸ τοῦ ἡλίου, τὸ ἔτος λοιμῶδες

γίνεται; ἢ ὅτι ὑγρὸν ἀνάγκη καὶ ἔπομβρον τὸ ἔτος σημαίνει, καὶ τὴν γῆν ὑγρὰν ἀνάγκη εἶναι; οἷον οὖν ἐν ἐλώδει τόπῳ ἢ οἴκησις γίνεται. νοσώδης δὲ ἢ τοιαύτη ἐστίν. καὶ τὰ σώματα δὴ τότε ἀνάγκη περίττωμα πολὺ ἔχειν, ὥστε ἐν τῷ θέρει ἔχειν ὕλην νοσώδη.

Διὰ τί γίνεται τὰ ἔτη νοσώδη, ὅταν γένηται φορὰ τῶν μικρῶν βατράχων τῶν φρυνοειδῶν; ἢ ὅτι ἕκαστον εὐσθενεῖ ἐν τῇ οἰκείᾳ χώρᾳ τῆς φύσεως; καὶ ταῦτα δὴ φύσει ἐστὶν ὑγρά, ὥστε ἔπομβρον καὶ ὑγρὸν σημαίνει τὸν ἐνιαυτὸν γίνεσθαι. τὰ δὲ τοιαῦτα ἔτη νοσώδη ἐστίν· ὑγρά γὰρ τὰ σώματα ὄντα πολὺ ἔχει τὸ περίττωμα, ὃ ἐστὶ τῶν νόσων αἴτιον. Διὰ τί οἱ νότοι οἱ ξηροὶ καὶ μὴ ὕδατώδεις πυρετώδεις εἰσίν; ἢ ὅτι ὑγρότητα καὶ θερμὴν ἀλλοτρίαν ποιοῦσιν; εἰσὶ γὰρ ὑγροὶ καὶ θερμοὶ φύσει. τοῦτο δ' ἐστὶ πυρετώδης· ὁ γὰρ πυρετὸς ἐξ ἀμφοτέρας τῆς τούτων ἐστὶν ὑπερβολῆς. ὅταν μὲν οὖν ἄνευ ὕδατος πνέωσι, ταύτην ἐν ἡμῖν ποιοῦσι τὴν διάθεσιν, ὅταν δὲ ἅμα ὕδατι, τὸ ὕδωρ καταψύχει ἡμᾶς. οἱ δὲ ἐκ θαλάττης νότοι καὶ συμφέρουσι τοῖς φυτοῖς· ἐψυγμένοι γὰρ ἀπὸ τῆς θαλάττης ἀφικνοῦνται πρὸς αὐτά. αἱ δ' ἐρυσίβαι γίνονται ὑπὸ ὑγρότητος καὶ θερμῆς ἀλλοτρίας.

Διὰ τί ἐν τοῖς νότοις βαρύτερον ἔχουσι καὶ ἀδυνατώτερον οἱ ἄνθρωποι; ἢ ὅτι ἐξ ὀλίγου πολὺ ὑγρὸν γίνεται, διατηκόμενον διὰ τὴν ἀλέαν, καὶ ἐκ πνεύματος κούφου ὑγρὸν βαρὺ; ἔτι δὲ ἡ δύναμις ἡμῶν ἐν τοῖς ἄρθροις ἐστὶ, ταῦτα δὲ ἀνιέται ὑπὸ τῶν νοτίων. δηλοῦσι δὲ οἱ ψόφοι τῶν κεκολλημένων. τὸ γὰρ γλίσχρον ἐν τοῖς ἄρθροις πεπηγὸς μὲν κινεῖσθαι κωλύει ἡμᾶς, ὑγρὸν δὲ λίαν ὃν συντείνεσθαι.

Διὰ τί ἄρρωστοῦσι μὲν μᾶλλον τοῦ θέρους, ἀποθνήσκουσι δὲ μᾶλλον οἱ ἄρρωστοῦντες τοῦ χειμῶνος; ἢ ὅτι τοῦ χειμῶνος διὰ τὴν πυκνότητα ἐντὸς τῶν σωμάτων συνεσταλμένου τοῦ θερμοῦ, καὶ πονοῦντες μᾶλλον, εἰ μὴ πέττοιμεν, τῶν ἐν ἡμῖν συνισταμένων περιττωμάτων, ἰσχυρὰν ἀνάγκη τὴν ἀρχὴν [862b] εἶναι τῆς νόσου; τοιαύτην δὲ οὕσαν φθαρτικὴν εἰκὸς ἐστὶν αὐτὴν εἶναι. ἐν δὲ τῷ θέρει, μανοῦ καὶ κατεψυγμένου παντὸς τοῦ σώματος καὶ ἐκλελυμένου πρὸς τοὺς πόνους ὄντος, ἀρχὰς νόσων ἀνάγκη πλείους μὲν γίνεσθαι διὰ τε κόπους καὶ ἀπεψίαν τῶν εἰσφερομένων (καὶ γὰρ οἱ νέοι καρποὶ τότε εἰσίν), ἀλλ' οὐχ οὕτως ἰσχυράς, διὸ εὐβοήθητοι.

Διὰ τί μετὰ τὰς τροπὰς ἀμφοτέρας μέχρι ἑκατὸν ἡμερῶν ἀποθνήσκουσι μάλιστα; ἢ ὅτι ἄχρι τοσούτου ἑκατέρα ἢ ὑπερβολὴ διέχει, ἢ τε τοῦ θερμοῦ καὶ τοῦ ψυχροῦ; ἢ δὲ ὑπερβολὴ τοῖς ἀσθενέσι ποιεῖ τὰς νόσους καὶ τὰς φθοράς.

Διὰ τί τὸ ἔαρ καὶ τὸ φθινόπωρον νοσώδη; ἢ ὅτι αἱ μεταβολαὶ νοσώδεις; τὸ δὲ μετόπωρον τοῦ ἔαρος νοσώδεστερον, ὅτι μᾶλλον τοῦ θερμοῦ ψυχομένου ἢ τοῦ ψυχροῦ θερμαινομένου νοσοῦμεν. ἔν μὲν οὖν τῷ ἔαρι τὸ ψυχρὸν θερμαίνεται, ἔν δὲ τῷ μετοπώρῳ τὸ θερμὸν ψύχεται.

Διὰ τί ἐν τῷ χειμῶνι ἐλάττω μὲν τὰ ἄρρωστήματα ἢ ἐν τῷ θέρει, θανάσιμα δὲ μᾶλλον; ἢ ὅτι ἐν μὲν τῷ θέρει ἀπὸ μικρᾶς προφάσεως τὰ ἄρρωστήματα, ἐν δὲ τῷ χειμῶνι οὐ; πεπτικώτεροι γὰρ καὶ ὑγιεινότεροι ἡμῶν αὐτῶν, ὥστε εἰκότως τὰ ἀπὸ μείζονος προφάσεως γινόμενα μείζω καὶ ἀναιρετικώτερα. ταῦτὸ δὲ τοῦτο καὶ ἐπὶ τῶν ἀθλητῶν καὶ ὅλως ἐπὶ τῶν ὑγιεινῶς διακειμένων ὁρῶμεν· ἢ γὰρ οὐ λαμβάνονται νόσῳ, ἢ ταχὺ συναπίασι· μεγάλης γὰρ αἰτίας δέονται.

Διὰ τί τοῦ μὲν φθινοπώρου καὶ τοῦ χειμῶνος οἱ καῦσοι μᾶλλον γίνονται ἐν ταῖς ψυχραῖς ὥραις, τοῦ δὲ θερούς τὰ ῥίγη ἐνοχλεῖ καυμάτων ὄντων; ἢ ὅτι τῶν κατὰ τὸν ἄνθρωπον ἡ χολὴ μὲν ἐστὶ θερμόν, τὸ δὲ φλέγμα ψυχρόν; ἐν μὲν οὖν τῷ θέρει τὸ ψυχρὸν ἀναλύεται, καὶ διαχυθὲν ῥίγη καὶ τρόμους παρασκευάζει· ἐν δὲ τῷ χειμῶνι τὸ θερμὸν ὑπὸ τῆς ὥρας κρατεῖται κατεψυγμένον. οἱ δὲ καῦσοι μᾶλλον ἐνοχλοῦσι τοῦ χειμῶνος καὶ τοῦ φθινοπώρου, ὅτι διὰ τὸ ψῦχος τὸ θερμὸν εἴσω συστέλλεται, ὃ δὲ καῦσος ἔσωθέν ἐστι καὶ οὐκ ἐπιπολῆς· εἰκότως οὖν οἱ καῦσοι ταύτην τὴν ὥραν γίνονται. καταμάθοι δ' ἂν τις τοῦτο ἀκριβέστερον ἐπὶ τῶν ψυχρολουτρούντων τοῦ χειμῶνος καὶ τῶν τοῦ χειμῶνος λουομένων τῷ θερμῷ, ὅτι οἱ μὲν τῷ ψυχρῷ λουόμενοι, ἀπορριγώσαντες ὀλίγον χρόνον ἕως λούονται, τὴν λοιπὴν ἡμέραν [863a] οὐδὲν πάσχουσιν ὑπὸ τοῦ ψυχροῦ, οἱ δὲ τῷ θερμῷ ὕδατι χρησάμενοι δυσριγοτέρως διάγουσι. τῶν μὲν γὰρ τῷ ψυχρῷ λουομένων πυκνοῦται ἡ σὰρξ καὶ συστέλλεται εἴσω τὸ θερμόν, τῶν δὲ θερμολουτρούντων ἡ σὰρξ ἀραιοῦται καὶ τὸ θερμὸν ἕως τοῦ ἔξω τόπου περισπᾶται.

Τίς καταπλάσματος ἀρετή; ἢ διὰ τὸ χυτικὸν εἶναι καὶ ἰδρῶτα ποιοῖ καὶ ἀποπνοήν;

Τῷ δῆλον ὅταν ἔμπυον; ἢ ἐὰν καταχεομένου τοῦ θερμοῦ ἀλλαγῇ, ἔμπυον, εἰ δὲ μή, οὐ;

Ποῖα δεῖ καίειν ἢ ποῖα δεῖ τέμνειν; ἢ ὅσα μὲν ἔχει στόμα μέγα καὶ οὐ ταχὺ συμφύεται, ταῦτα καίειν δεῖ, ὅπως ἡ ἐσχάρα ἐκεῖ πέσῃ; οὕτω γὰρ οὐκ ἔσται ὕπουλα.



Τίς ἐναίμου ἀρετή; ἢ τὸ ξηραντικὸν εἶναι καὶ τῆς ἐπιούσης περιπτώσεως σταλτικὸν ἄνευ ἐσχαρώσεως καὶ σήψεως τῆς σαρκός; οὕτω γὰρ ἂν ἀφλέγμαντον εἴη καὶ συμφυτικόν. μὴ ἐπιρρέοντος μὲν γὰρ ἀφλέγμαντον ἔσται, ξηρὸν δὲ ὃν συμφύσεται· ἕως δ' ἂν ὑγρορροῇ, οὐ συμφύσεται. διὰ τοῦτο οὖν δριμέα τὰ πλεῖστα, ὥστε ἀποστύφειν.

Ποῖα τέμνειν δεῖ καὶ ποῖα καίειν, καὶ ποῖα οὐ, ἀλλὰ φαρμάκοις; ἢ τὰ μὲν ἐπὶ ταῖς μασχάλαις καὶ βουβῶσι φαρμάκῳ; μετὰ γὰρ διαίρεσιν τὰ μὲν ἐπίπονα, τὰ δὲ ἐπικίνδυνα. καίειν δὲ τὰ πλατέα τῶν φυμάτων καὶ πολὺ πρόβλημα ἔχοντα, καὶ ἐν φλεβώδεσι καὶ μὴ εὐσάρκοις. τέμνειν δὲ τὰ εἰς ὅξυ συνηγμένα καὶ τὰ μὴ ἐν στερεοῖς.

Διὰ τί, ἐὰν χαλκῷ τις τμηθῇ, ῥᾶον ὑγιάζεται ἢ σιδήρῳ; πότερον ὅτι λειότερον, ὥσθ' ἦττον σπαράττει καὶ ποιεῖ πληγὴν; ἢ εἴπερ ἀκμὴν μᾶλλον ὁ σίδηρος λαμβάνει, ῥᾶον καὶ ἀπαθεστέρα ἢ διαίρεσις; ἀλλὰ μὴν φαρμακῶδες ὁ χαλκός, ἢ δὲ ἀρχὴ ἰσχυρά. τὸ οὖν εὐθὺς ἅμα τῇ τομῇ θᾶττον τὸ φάρμακον ποιεῖ τὴν σύμφυσιν.

Διὰ τί δὲ καὶ τὰ διὰ χαλκοῦ καύματα θᾶττον ὑγιάζεται; ἢ ὅτι μανότερον καὶ ἦττον σωματικόν, ἐν δὲ τοῖς στερεωτέροις πλείων ἡ θερμότης.

Πότερον ἡ πτισάνη κουφοτέρα ἢ κριθίνη καὶ βελτίων πρὸς τὰ ἀρρωστήματα ἢ ἡ πυρίνη; δοκεῖ γὰρ τισιν αὕτη [863b] σημεῖον ποιουμένοις τοὺς μεταχειριζομένους, ὅτι πολὺ εὐχρόστεροι οἱ περὶ τὴν τῶν ἀλεύρων ἐργασίαν ἢ τὴν τῶν ἀλφίτων. εἴθ' ὅτι ὑγροτέρα ἢ κριθή, τὸ δὲ ὑγρότερον πλέονος πέψεως. ἢ οὐθὲν κωλύει ἔνια ἔχειν δυσπεπτότερα καὶ ἔνια πρὸς κουφότητα χρησιμώτερα; οὐ γὰρ μόνον ὑγροτέρα ἐστὶν ἡ κριθή τοῦ πυροῦ, ἀλλὰ καὶ ψυχρότερα. δεῖ δὲ τὸ ῥόφημα καὶ τὸ προσφερόμενον τοιοῦτον εἶναι τῷ πυρέττοντι, ὃ τροφήν τε βραχεῖαν ποιήσει καὶ καταψύξει. ἢ δὲ πτισάνη τοῦτο ἔχει ἢ κριθίνη· διὰ γὰρ τὸ ὑγρότερον ἢ σωματωδέστερον εἶναι ὀλίγον δίδωσι, καὶ τοῦτο ψυκτικόν.

Διὰ τί τὴν αἰμωδίαν παύει ἡ ἀνδράχνη καὶ ἄλες; ἢ ὅτι ἡ μὲν ὑγρότητά τινα ἔχει; φανερὰ δὲ αὕτη μασωμένοις τε, καὶ ἐὰν συνθλασθῇ χρόνον τινά· ἔλκεται γὰρ ἡ ὑγρότης. τὸ δὲ γλίσχρον εἰσδυόμενον ἐξάγει τὸ ὀξύ. καὶ γὰρ ὅτι συγγενής, ἢ ὀξύτης σημαίνει· ἔχει γάρ τινα ὀξύτητα ὁ χυμός. ὁ δὲ ἄλς συντήκων ἐξάγει καὶ τὴν ὀξύτητα. διὰ τί οὖν ἡ κονία καὶ τὸ νίτρον οὐ; ἢ ὅτι στύφει καὶ οὐ τήκει;

Διὰ τί τοὺς μὲν θερινοὺς κόπους λουτρῷ ἰᾶσθαι δεῖ, τοὺς δὲ χειμερινοὺς ἀλείμματι; ἢ τοὺς μὲν ἀλείμματι διὰ τὰς φρίκας καὶ τὰς γινομένας μεταβολάς; θερμῇ γὰρ λύειν δεῖ, ἢ ποιήσει ἀλεάζειν· τὸ δ' ἔλαιον θερμόν. ἐν δὲ τῷ θέρει καθυγραίνειν· ἢ γὰρ ὥρα ξηρά, καὶ οὐ φοβεραὶ αἱ φρίκαι διὰ τὴν εἰς ἀλέαν ἔκκλισιν. ὀλιγοσιτία δὲ καὶ κωθωνισμὸς θέρους, τὸ μὲν ὅλως, τὸ δὲ μᾶλλον, ὁ μὲν πότος θέρους ὅλως διὰ τὴν ξηρότητα, ἢ δὲ ὀλιγοσιτία κοινὸν μὲν, μᾶλλον δὲ θέρους· ἐκθερμαίνεται γὰρ διὰ τὴν ὥραν ὑπὸ τῶν σιτίων.

Διὰ τί τῶν φαρμάκων τὰ μὲν τὴν κοιλίαν λύει, τὴν δὲ κύστιν οὐ, τὰ δὲ τὴν μὲν κύστιν λύει, τὴν κοιλίαν δὲ οὐ; ἢ ὅσα μὲν ἐστὶν ὑγρὰ τὴν φύσιν καὶ ὕδατος μεστά, ταῦτα ἂν ἢ φαρμακῶδη, λύει τὴν κύστιν; ἐκεῖ γὰρ ὑφίσταται τὰ ἀπεπτα τῶν ὑγρῶν· ὑποδοχὴ γάρ ἐστὶν ἡ κύστις τοῦ μὴ πεπτομένου ὑγροῦ ἐν τῇ κοιλίᾳ, ὃ οὐ μένει, ἀλλὰ πρὶν ποιῆσαι τι ἢ παθεῖν ὑποχωρεῖ. ὅσα δὲ ἐκ γῆς τὴν φύσιν ἐστίν, [864a] ἂν ἢ φαρμακῶδη, ταῦτα δὲ τὴν κοιλίαν λύει· εἰς ταύτην γὰρ ἢ φορὰ τῶν γεωδῶν. ὥστε ἂν ἢ κινητικόν, ταραττει.

Διὰ τί δὲ τὰ μὲν τὴν ἄνω κοιλίαν τὰ δὲ τὴν κάτω κινεῖ, οἷον ἐλλέβορος μὲν τὴν ἄνω, σκαμμωνία δὲ τὴν κάτω, τὰ δὲ ἄμφω, οἷον ἐλατήριον καὶ τῆς θαψίας ὁ ὀπός; ἢ ὅτι τὰ μὲν ἐστὶ θερμὰ τὰ δὲ ψυχρὰ τῶν φαρμάκων τῶν τὴν κοιλίαν κινούντων, ὥστε τὰ μὲν διὰ τὴν θερμότητα εὐθὺς ἐν τῇ ἄνω κοιλίᾳ ὄντα φέρεται ἐξ αὐτῆς πρὸς τὸν ἄνω τόπον, κάκεῖθεν συντήξαντα μάλιστα μὲν τὰ ἀλλοτριώτατα καὶ ἥκιστα συμπεφυκότα, ἂν δὲ ἰσχυρὸν ἢ τὸ φάρμακον ἢ πλεονοδοθῇ τῆς φύσεως, ἀνάγει εἰς τὴν ἄνω κοιλίαν ταῦτά τε καὶ ἐάν τι περίττωμα ἢ, καὶ διὰ τὴν θερμότητα ταραττον τὸ πνεῦμα πολὺ γινόμενον ὑπ' αὐτοῦ, προσιστὰν τοὺς ἐμέτους ποιεῖ. τὰ δὲ ψυχρὰ τὴν φύσιν αὐτῶν διὰ βάρος καὶ πρὶν παθεῖν τι ἢ ποιῆσαι κάτω φέρεται, κάκεῖθεν ὀρμώντα τὸ αὐτὸ δρᾷ τοῖς ἄνω· κατὰ γὰρ τοὺς πόρους ἀνιόντα ἐκεῖθεν, καὶ κινήσαντα ὧν ἂν κρατήσῃ περιττωμάτων καὶ συντηγμάτων, λαβόντα τὴν αὐτὴν ἄγει ὁδόν. ὅσα δὲ ἄμφοιν μετέχει καὶ ἐστὶ μικτὰ τῶν φαρμακῶδων ἐκ θερμοῦ καὶ ψυχροῦ, ταῦτα δὲ δι' ἑκατέραν τὴν δύναμιν ἀπεργάζεται ἄμφω, ὥσπερ καὶ νῦν παρασκευάζουσιν οἱ ἱατροὶ μιγνύντες ἀλλήλοις.

Διὰ τί τὰ φάρμακα καθαίρει, ἄλλα δὲ πικρότερα ὄντα καὶ στρυφνότερα καὶ τοῖς ἄλλοις τοῖς τοιούτοις ὑπερβάλλοντα οὐ καθαίρει; ἢ διότι οὐ διὰ τὰς τοιαύτας δυνάμεις καθαίρει, ἀλλ' ὅτι ἀπεπτά ἐστίν; ὅσα γὰρ δι' ὑπερβολὴν θερμότητος ἢ ψυχρότητος, μικρὰ ὄντα τοὺς ὄγκους, ἀπεπτά ἐστὶ καὶ οἷα κρατεῖν ἀλλὰ μὴ κρατεῖσθαι ὑπὸ τῆς τῶν ζώων θερμότητος, εὐδιάχυτα ὄντα ὑπὸ τῶν δύο κοιλιῶν, ταῦτα φάρμακά ἐστίν. ὅταν γὰρ εἰς τὴν κοιλίαν εἰσέλθωσι καὶ διαχυθῶσι, φέρονται καθ' οὔσπερ ἢ τροφὴ πόρους εἰς τὰς

φλέβας, οὐ πεφθέντα δὲ ἀλλὰ κρατήσαντα ἐκπίπτει φέροντα τὰ ἐμπόδια αὐτοῖς· καὶ καλεῖται τοῦτο κάθαρσις. χαλκὸς δὲ καὶ ἄργυρος καὶ τὰ τοιαῦτα ἄπεπτα μὲν ἐστὶν ὑπὸ τῆς τῶν ζώων θερμότητος, ἀλλ’ οὐκ εὐδιάχυτα ταῖς κοιλίαις. ἔλαιον δὲ καὶ μέλι καὶ γάλα καὶ τὰ [864b] τοιαῦτα τῆς τροφῆς καθαίρει, ἀλλ’ οὐ τῷ ποιῶ ἀλλὰ τῷ ποσῶ· ὅταν γὰρ διὰ πλῆθος ἄπεπτα γένηται, τότε καθαίρει, ἄνπερ καθαίρη. διὰ δύο γὰρ αἰτίας ἄπεπτά ἐστὶν, διὰ τὸ ποιᾶ αὐτὰ εἶναι ἢ διὰ τὸ ποσά. διόπερ οὐ φάρμακόν ἐστὶν οὐδὲν τῶν εἰρημένων· οὐδὲ γὰρ διὰ δύναμιν καθαίρει. στρυφνότης δὲ καὶ πικρότης συμβέβηκε τοῖς φαρμάκοις καὶ δυσωδία τῷ ἐναντίον εἶναι τῇ τροφῇ τὸ φάρμακον. τὸ μὲν γὰρ πεφθὲν ὑπὸ τῆς φύσεως, τοῦτο προσφύεται τοῖς σώμασι καὶ καλεῖται τροφή· τὸ δὲ μὴ πεφυκὸς κρατεῖσθαι, εἰσιὼν δὲ εἰς τὰς φλέβας καὶ δι’ ὑπερβολὴν θερμότητος ἢ ψυχρότητος ταραττον, αὕτη δὲ φαρμάκου φύσις ἐστίν.

Διὰ τί τὸ μὲν πέπερι πολὺ μὲν ὄν τὴν κύστιν λύει, ὀλίγον δὲ τὴν κοιλίαν, ἢ δὲ σκαμμωνία πολλὴ οὕσα τὴν κοιλίαν λύει, ὀλίγη δὲ καὶ παλαιὰ τὴν κύστιν; ἢ διότι ἐκάτερον ἐκατέρας ἐστὶ κινητικώτερα; τὸ μὲν γὰρ πέπερι οὐρητικόν ἐστὶν, ἢ δὲ σκαμμωνία καθαρτικόν. τὸ μὲν οὖν πέπερι πολὺ μὲν ὄν φέρεται εἰς τὴν κύστιν καὶ οὐ διαχεῖται εἰς τὴν κοιλίαν, ὀλίγον δὲ ὄν κρατηθὲν διαλύει καὶ γίνεται φάρμακον αὐτῆς. ἢ δὲ σκαμμωνία πολλὴ μὲν οὕσα εἰς τοῦτο κρατεῖται ὥστε διαχυθῆναι, διαχυθεῖσα δὲ γίνεται φάρμακον διὰ τὴν εἰρημένην ἐν τοῖς ἀνωτέρω αἰτίαν· ὀλίγη δὲ οὕσα μετὰ τοῦ ποτοῦ ἀναπίνεται εἰς τοὺς πόρους, καὶ ταχὺ πρὶν ταραῖν καταφέρεται εἰς τὴν κύστιν, καὶ ἐκεῖ τῇ αὐτῆς δυνάμει ἀπάγει τὰ περιττώματα καὶ τὰ συντήγματα ὅσα ἐξ ἐπιπολῆς ἐστίν. ἢ δὲ πολλή, ὥσπερ εἴρηται, διὰ τὴν ἰσχὺν πολὺν χρόνον ἐμμείναςα κατάγει πολλὴν κάθαρσιν καὶ γεώδη.

Διὰ τί τὰς αὐτὰς φλεγμασίας οἱ μὲν ψύχοντες ὑγιάζουσιν, οἱ δὲ θερμαίνοντες πέπτουσιν; ἀλλ’ οἱ μὲν ἀλλοτρίᾳ θερμότητι, οἱ δὲ καταψύχοντες τὴν οἰκείαν συνάγουσιν.

Διὰ τί μεταβάλλειν δεῖ τὰ καταπλάσματα; ἢ ὅτι ὥς μᾶλλον αἰσθάνηται; τὰ γὰρ συνήθη ὥσπερ ἐπὶ τῶν ἐδεσμάτων οὐκέτι φάρμακα ἀλλὰ τροφή γίνεται, οὕτω καὶ ἐπὶ τῶν τοιούτων.

Διὰ τί ὑγιεινὸν τὸ τῆς τροφῆς μὲν ὑποστέλλεσθαι, [865a] πονεῖν δὲ πλείω; ἢ ὅτι τοῦ νοσεῖν αἴτιον περιττώματος πλῆθος, τοῦτο δὲ γίνεται, ἥνικα τροφῆς ὑπερβολὴ ἢ πόνων ἔνδεια.

Διὰ τί τὰ φάρμακα καὶ τὰ πικρὰ ὡς ἐπὶ τὸ πολὺ καὶ τὰ δυσώδη καθαίρει; ἢ ὅτι ἅπαντα τὰ δυσώδη καὶ πικρὰ ἄπεπτά ἐστι; διὸ καὶ τὰ φάρμακα πικρὰ καὶ δυσώδη· τῷ γὰρ ἄπεπτα εἶναι καὶ κινητικὰ μετὰ πικρότητος φάρμακά ἐστιν. καὶ ἐὰν δοθῇ πλείω, διαφθείρει. ὅσα δέ, κἂν μικρὰ δοθῇ, διαφθαρτικά, ταῦτα οὐ φάρμακα λέγεται εἶναι ἀλλὰ θανατηφόρα. οὐδ' ὅσα μὴ τῷ ποιῶ καθαίρει, οὐκ ἔστι φάρμακα. καὶ γὰρ τῆς τροφῆς πολλὰ μὲν ταῦτ' οὖν ποιεῖ, ἐὰν ποσὰ δοθῇ, οἶον γάλα, ἔλαιον, γλεῦκος· ἅπαντα δὲ ταῦτα διὰ τὸ μὴ εἶναι εὔπεπτα καθαίρει, καὶ τούτοις οἷς μὴ εὔπεπτα καθαίρει, καὶ τούτους. ἔστι γὰρ ἄλλα ἄλλοις εὔπεπτα καὶ δύσπεπτα. διὸ οὐ πᾶσι ταῦτ' αὖ φαρμακώδη, ἀλλ' ἐνίοις ἴδια. ὅλως γὰρ τὸ φάρμακον δεῖ οὐ μόνον μὴ πέττεσθαι ἀλλὰ καὶ κινητικὸν εἶναι, ὥσπερ καὶ τὸ γυμνάσιον ἔξωθεν ἦκον ἢ ἔσωθεν τῇ κινήσει ἐκκρίνει τὰ ἀλλότρια.

Διὰ τί τὰ μὲν εὐώδη οὖρητικά καὶ σπέρματα καὶ φυτά; ἢ ὅτι θερμὰ καὶ εὔπεπτα, τὰ δὲ τοιαῦτα οὖρητικά· ταχὺ γὰρ λεπτύνει ἢ ἐνοῦσα θερμότης, καὶ ἢ ὁσμή οὐ σωματώδης, ἐπεὶ καὶ τὰ ὁσμώδη, οἶον σκόροδα, διὰ τὴν θερμότητα οὖρητικά, μᾶλλον μέντοι συντηκτικά· θερμὰ δὲ τὰ εὐώδη σπέρματα.

Διὰ τί δεῖ πρὸς μὲν τὰ μὴ καθαρὰ καὶ φαῦλα τῶν ἐλκῶν ξηροῖς καὶ δριμέσι καὶ στρυφνοῖς χρῆσθαι φαρμάκοις, πρὸς δὲ τὰ καθαρὰ καὶ ὑγιαζόμενα ὑγροῖς καὶ μόνοις; ἢ διότι ἀπὸ μὲν τῶν μὴ καθαρῶν δεῖ ἀφαιρεῖν τι; τοῦτο δ' ἐστὶν ὑγρότης ἀλλοτρία, ἣν ἀφαιρεῖν δεῖ. τὰ δηκτικὰ δὲ καὶ δριμέα καὶ στρυφνὰ τοιαῦτα, καὶ τὸ ξηρὸν μᾶλλον τοῦ ὑγροῦ. τὰ δὲ καθαρὰ συνεπουλώσεως δεῖται μόνον.

Διὰ τί συμφέρει πρὸς τὰ ἀπὸ φλέγματος νοσήματα λαγνεῖα; ἢ ὅτι τὸ σπέρμα περιττώσεως ἀπόκρισις καὶ φύσει ὅμοιον φλέγματι, ὥστε ἀφαιροῦσα πολὺ φλεγματώδες ὠφελεῖ ἢ συνουσία. πότερον δὲ τροφήν προσφέρειν ἀρχομένῳ βέλτιον ἢ ὕστερον; ἢ ἀρχομένῳ, ὅπως μὴ προεξησθηνήκοι ἢ φλεγμασία ἐπιπίπτῃ; ἢ οὖν ἀπισχναντέον εὐθύς, ἢ οὕτω προσοιστέον· ἀναλαμβάνειν χρὴ πρῶτον τοῖς ῥοφήμασι· [865b] πραότερα γὰρ καὶ λειότερα καὶ εὐτηκτότερα, καὶ ἐκδέξασθαι τὴν τροφήν ἐκ τούτου ῥᾶδιόν ἐστιν ἀσθενεῖ σώματι. οὐ γὰρ ἐν τῇ κοιλίᾳ δεῖ παθεῖν τὰ σῖτα πρῶτον, διαχυθῆναι τε καὶ θερμανθῆναι μετὰ πόνου τῷ σώματι ταῦτα πέπονθεν.

Διὰ τί δεῖ σκοπεῖν τὰ περὶ τὸ οὔρον σημεῖα, ἀπολαμβάνοντα τὴν οὔρησιν, εἰ ἤδη πέπεπται, ἢ μὴ μᾶλλον καὶ συνεχῶς οὔρουντα; ἢ διότι σημεῖον μὲν τοῦ πεπέφθαι, ἐὰν ἢ πυρρόν; τοῦτο δὲ γίνεται μᾶλλον διαλαμβάνουσιν. ἢ διότι

ἔνοπτρον γίνεται ἅπαν μᾶλλον ὑγρὸν χροᾶς ὀλίγον ἢ πολὺ ὄν; ἐν μὲν γὰρ τῷ πολλῷ ὑγρῷ τὰ σχήματα ἐνορᾶται, ἐν δὲ τῷ ὀλίγῳ τὰ χρώματα, οἷον καὶ ἐπὶ τῆς δρόσου καὶ τῶν ῥανίδων καὶ ἐπὶ τῶν δακρύων τῶν ἐπὶ ταῖς βλεφαρίσι. συνεχῶς μὲν οὖν ἀφιέμενον γίνεται πλεῖον, διασπώμενον δὲ δέχεται μᾶλλον· ὥστε κἂν ἢ αὐτὸ τοιοῦτον ἤδη διὰ τὴν πέψιν, καὶ φαίνεται μᾶλλον τῆς ἀνακλάσεως γινομένης καὶ ἐνόπτρου ἔνοπτρον διὰ τὴν διαίρεσιν.

ὅτι οὐ δεῖ πυκνοῦν τὴν σάρκα πρὸς ὑγείαν, ἀλλ' ἀραιοῦν· ὥσπερ γὰρ πόλις ὑγιεινὴ καὶ τόπος εὖπνους (διὸ καὶ ἡ θάλασσα ὑγιεινὴ), οὕτω καὶ σῶμα τὸ εὖπνουν μᾶλλον ὑγιεινόν. δεῖ γὰρ ἢ μὴ ὑπάρχειν μηθὲν περίττωμα, ἢ τούτου ὡς τάχιστα ἀπαλλάττεσθαι, καὶ ἀεὶ οὕτως ἔχειν τὸ σῶμα ὥστε λαμβάνον εὐθὺς ἐκκρίνειν τὴν περίττωσιν, καὶ εἶναι ἐν κινήσει καὶ μὴ ἡρεμεῖν. τὸ μὲν γὰρ μένον σήπει, ὥσπερ ὕδωρ τὸ μὴ κινούμενον, σηπόμενον δὲ νοσοποιεῖ· τὸ δὲ ἐκκρινόμενον πρὸ τοῦ διαφθαρῆναι χωρίζεται. τοῦτο οὖν πυκνουμένης μὲν τῆς σαρκὸς οὐ γίνεται (ὥσπερ εἰ γὰρ ἐμφράττονται οἱ πόροι), ἀραιουμένης δὲ συμβαίνει. διὸ καὶ οὐ δεῖ ἐν τῷ ἡλίῳ γυμνὸν βαδίζειν· συνίσταται γὰρ ἡ σὰρξ καὶ κομιδῇ ἀποσαρκοῦται, καὶ ὑγρότερον τὸ σῶμα γίνεται· τὸ μὲν γὰρ ἐντὸς διαμένει, τὸ δ' ἐπιπολῆς ἀπαλλάττεται, ὥσπερ καὶ τὰ κρέα τὰ ὀπτὰ τῶν ἐφθῶν μᾶλλον. οὐδὲ τὰ στήθη γυμνὰ ἔχοντα βαδίζειν· ἀπὸ γὰρ τῶν ἄριστα ὠκοδομημένων τοῦ σώματος ὁ ἥλιος ἀφαιρεῖ, ἃ ἥκιστα δεῖται ἀφαιρέσεως, ἀλλὰ μᾶλλον τὰ ἐντός. ἐκεῖθεν μὲν οὖν διὰ τὸ πόρρω εἶναι, ἐὰν μὴ μετὰ πόνου, οὐκ ἔστιν ἰδρῶτα ἀγαγεῖν, ἀπὸ τούτου δὲ διὰ τὸ πρόχειρον ῥάδιον.

Διὰ τί ποτε τοῖς χιμέτλοις καὶ τὸ ψυχρὸν ὕδωρ [866a] συμφέρει καὶ τὸ θερμόν; ἢ ὅτι τὰ χίμετλα δι' ὑπερβολὴν γίνεται ὑγροῦ; τὸ μὲν οὖν ψυχρὸν συνίστησι καὶ τραχύνει τὸ ὑγρόν, τὸ δὲ θερμόν ἐκπνευματοῖ καὶ ἔξοδον ποιεῖ τῷ πνεύματι, ἀραιοῦν τὴν σάρκα.

Διὰ τί τὸ ψυχρὸν καὶ ποιεῖ καὶ παύει τὰ χίμετλα, καὶ τὸ θερμόν τὰ πυρίκαυστα; ἢ διὰ τὸ αὐτό; ποιεῖ μὲν συντήκοντα, παύει δὲ μᾶλλον ξηραίνοντα.

Ἐν τοῖς πυρετοῖς διδόναι δεῖ τὸ ποτὸν πολλάκις καὶ κατ' ὀλίγον. τὸ μὲν γὰρ πολὺ παραρρεῖ, τὸ δὲ ὀλίγον μὲν πολλάκις δὲ διαβρέχει καὶ εἰς τὰς σάρκας χωρεῖ. οἷα γὰρ τὰ ἐν τῇ γῇ, ἐὰν μὲν κατὰ πολὺ ἔλθῃ τὸ ὕδωρ, παραρρεῖ, ἐὰν δὲ κατ' ὀλίγον, βρέχει μόνον, τὸ αὐτὸ καὶ ἐν τοῖς πυρετοῖς. τὰ γὰρ ῥέοντα ὕδατα ἐὰν τις κατ' ὀλίγον ἄγῃ, ὁ ὀχετὸς ἐκπίνει· ἐὰν δὲ τὸ ἴσον ἀθρόον ἄγῃ, ὅπου ἂν ἄγῃ, χωρεῖ. ἔπειτα κατακείσθω ἀκίνητος ὡς μάλιστα,

ἀκίνητος μὲν, ὅτι καὶ τὸ πῦρ φανερώς, ἐάν τις μὴ κινῇ, καταμαραίνεται. πρὸς πνεῦμα δὲ μὴ κατακείσθω, διότι ὁ ἄνεμος τὸ πῦρ ἐξεγείρει καὶ ῥιπτιζόμενον τὸ πῦρ ἐξ ὀλίγου πολὺ γίνεται. περιστέλλεσθαι δὲ τούτου ἔνεκεν, ὅτι πυρὶ ἐὰν ἀναπνοὴν μὴ διδῶς, σβέννυται. καὶ τὰ ἱμάτια μὴ ἀπογυμνούσθω, ἕως ἂν νοτὶς ἐγγένηται· τὸ φανερόν γὰρ πῦρ τὸ ὑγρὸν σβέννυσιν. κατὰ ταῦτα δὲ καὶ ἐν τῇ φύσει. ἐπὶ δὲ τῶν διαλειπόντων πυρετῶν προπαρασκευάζειν δεῖ καὶ ἐκλύοντα, καὶ πυριάματα πρὸς τοὺς πόδας παρατιθέντα, καὶ περιεσταλμένον ἀναπαύεσθαι, ὅπως ὅτι θερμότητος ἢ πρὸ τοῦ τὴν λῆψιν εἶναι. καὶ γὰρ ὅπου πολὺ πῦρ, λύχνος οὐ δυνήσεται καίεσθαι· τὸ γὰρ πῦρ τὸ πολὺ τὸ ὀλίγον ἄγει πρὸς ἑαυτό. τούτου ἔνεκα πολὺ πῦρ ἐν τῷ σώματι παρασκευάζειν δεῖ, ὅτι ὀλίγον ὁ πυρετὸς πῦρ ἔχει, ὥστε τὸ πολὺ πῦρ τὸ ὀλίγον πρὸς ἑαυτό ἄγει.

Τεταρταίοις πυρετοῖς δεῖ μὴ λεπτύνειν, ἀλλὰ πῦρ ἐν τοῖς σώμασιν ἐμποιεῖν εἰσάγοντα. δεῖ δὲ καὶ τοῖς γυμνασίοις χρῆσθαι. ἡ δὲ ἡμέρα ἡ λῆψις, λουσάμενον ὕπνον μὴ ζητεῖν. διὰ δὲ τοῦτο καὶ συμφέρει θερμαίνουσα δίαιτα, ὅτι ἀσθενὴς ὁ τεταρταῖος πυρετός· εἰ γὰρ μὴ ἦν ἀσθενής, οὐκ ἂν τεταρταῖος ἐγένετο. ὁρᾷς; ὅπου πῦρ πολὺ, λύχνος οὐ δύναται καίεσθαι· τὸ γὰρ πολὺ τὸ ὀλίγον πρὸς ἑαυτό [866b] ἀρπάζει. τούτου δ' ἔνεκεν πολὺ πῦρ ἐν τῷ σώματι ἐμποιεῖν, ὅτι ὀλίγον ὁ πυρετὸς πῦρ ἔχει. ἔστι δὲ τὸ καθ' ἡμέραν διαίτημα τὸ μὲν πῦρ τὸ δὲ νοτίδα εἰς τὸ σῶμα εἰσάγοντα. εἰσὶ δὲ νόσοι αἱ μὲν ἀπὸ πυρός, αἱ δὲ ἀπὸ νοτίδος. ἰατρεύονται δὲ αἱ μὲν ἀπὸ πυρὸς νόσοι νοτίδι, αἱ δὲ ἀπὸ νοτίδος πυρί· νοτίδα γὰρ ξηραίνει.

## **B. ΟΣΑ ΠΕΡΙ ΙΔΡΩΤΑ.**

Διὰ τί οὔτε συντείνουσιν οὔτε κατέχουσι τὸ πνεῦμα γίνεται ἰδρώς, ἀλλὰ μᾶλλον ἀνιέουσιν; ἢ ὅτι τὸ πνεῦμα κατεχόμενον πληροῖ τὰς φλέβας, ὥστε κωλύει ἐξιέναι, ὥσπερ τὸ ὕδωρ τὸ ἐκ τῶν κλεψυδρῶν, ὅταν πλήρεις οὔσας ἐπιλάβῃ τις. ὅταν δὲ ἐξέλθῃ, πολὺς γίνεται διὰ τὸ ἐν αὐτῇ ἐπιληψία ἀθροισθῆναι κατὰ μικρόν.

Διὰ τί οὐχ ἰδροῦσι τὰ ἐν θερμῷ ὕδατι μέρη, οὐδ' ἂν θερμὰ ἦ; ἢ διότι κωλύει τὸ ὕδωρ τήκεσθαι, ὁ δὲ ἰδρώς τὸ κακῶς προσωκοδομημένον ἐστὶν ἐν τῇ σαρκί, ὃ κωλύει τήκεσθαι, ὅταν ἐκκρίνηται διὰ θερμότητα.

Διὰ τί ὁ ἰδρώς ἀλμυρόν; ἢ διότι γίνεται ὑπὸ κινήσεως καὶ θερμότητος, ἀποκρινούσης ὅσον ἀλλότριον ἔνεστιν ἐν τῇ προσφύσει τῆς τροφῆς πρὸς αἷμα καὶ τὰς σάρκας; τοῦτο γὰρ τάχιστα ἀφίσταται διὰ τὸ μὴ οἰκεῖον εἶναι καὶ ἔξω ἐξικμάζει. ἀλμυρὸς δ' ἐστὶ διὰ τὸ τὸ γλυκύτατον καὶ κουφότατον εἰς τὸ

σῶμα ἀνηλῶσθαι, τὸ δὲ ἀλλοτριώτατον καὶ ἀπεπτότατον ἀπολύεσθαι. τὸ τοιοῦτον δὲ ἐν μὲν τῇ κάτω ὑποστάσει οὖρον καλεῖται, ἐν δὲ σαρκὶ ἰδρῶς· ἄμφω δὲ ἀλμυρὰ διὰ τὴν αὐτὴν αἰτίαν.

Διὰ τί τὰ ἄνω ἰδροῦσι μᾶλλον τῶν κάτω; πότερον τὸ θερμὸν ἄνω καὶ ἀνέρχεται καὶ ἔστιν ἄνω, τοῦτο δὲ ἄνω φέρει τὸ ὑγρόν; ἢ ὅτι πνεῦμα ποιεῖ τὸν ἰδρῶτα, τοῦτο δὲ ἐν τοῖς ἄνω; ἢ διότι ἄπεπτον ὑγρὸν ὁ ἰδρῶς ἐστι, τοιοῦτο δὲ ἐν τοῖς ἄνω; ἢ γὰρ κρᾶσις ἄνω.

Διὰ τί τὰς χεῖρας γυμναζόμενοις μάλιστα ἰδρῶς γίνεται, ἐὰν τὰ ἄλλα ὁμοιοσημονῶμεν; ἢ διότι ἰσχύομεν μάλιστα τούτῳ τῷ τόπῳ; τούτῳ γὰρ τὸ πνεῦμα κατέχομεν τῷ ἔγγιστα τοῦ ἰσχύοντος· πονοῦντες δὲ μᾶλλον ἰσχύομεν· οὕτω δὲ ἔχοντες τὸ πνεῦμα μᾶλλον κατέχομεν. [867a] εἴτα καὶ τῇ τριβομένη συμπονοῦμεν μᾶλλον ἢ ὅταν ἄλλο μέρος τριβώμεθα· τῇ γὰρ καθέξει τοῦ πνεύματος καὶ τριβόμενοι γυμναζόμεθα καὶ τρίβοντες.

Διὰ τί ὁ ἰδρῶς ἐκ τῆς κεφαλῆς ἢ οὐκ ὅζει ἢ ἥττον τοῦ ἐκ τοῦ σώματος; ἢ ὅτι εὐπνοὺς ὁ τῆς κεφαλῆς τόπος; δηλοῖ δὲ μανὸς ὢν τῇ τῶν τριχῶν ἐκφύσει. δυσώδεις δὲ οἱ τόποι καὶ τὰ ἐν αὐτοῖς γίνεται, ὅσα μὴ εὐπνοα.

Διὰ τί οἱ γυμναζόμενοι ἐὰν διαναπαυσάμενοι παλαίωσιν, μᾶλλον ἰδροῦσιν ἢ ἐὰν συνεχῶς; ἢ διὰ τὸ ἀθροίζεσθαι διαναπαυομένων· ἔπειτα τοῦτον τὸν ἰδρῶτα ἐξάγει ὕστερον ἢ πάλη. ἢ δὲ συνεχῆς ἀναξηραίνει ὥσπερ ὁ ἥλιος.

Διὰ τί μᾶλλον ἰδροῦσιν, ὅταν μὴ διὰ πολλοῦ χρόνου χρῶνται ταῖς ἀφιδρώσεσιν; ἢ διότι οἱ ἰδρῶτες γίνονται οὐ μόνον δι' ὑγρότητα, ἀλλὰ καὶ διὰ τὸ τοὺς πόρους ἀνεῶχθαι μᾶλλον καὶ ἄραια τὰ σώματα εἶναι; τοῖς μὲν οὖν μὴ χρωμένοις συμμεμύκασιν οἱ πόροι, τοῖς χρωμένοις δ' ἀναστομοῦνται.

Διὰ τί τοῦ ἡλίου μᾶλλον θερμαίνοντος τοὺς γυμνοὺς ἢ τοὺς ἀμπεχομένους, ἰδροῦσι μᾶλλον οἱ ἀμπεχόμενοι; πότερον ὅτι τοὺς πόρους συμμύειν ποιεῖ ἐκκαίων ὁ ἥλιος; ἢ διότι τὰς ἀτμίδας ξηραίνει; ἀμπεχομένοις δὲ ταῦτα ἥττον συμβαίνει.

Διὰ τί ἰδροῦσι μάλιστα τὰ πρόσωπα; ἢ ὅσα ἄραια καὶ ὑγρὰ μάλιστα, διὰ δὲ τούτων ὁ ἰδρῶς διαπορεύεται. δοκεῖ δὲ πηγὴ εἶναι ἡ κεφαλὴ τοῦ ὑγροῦ· διὸ καὶ αἱ τρίχες, διὰ τὸ πολὺ ὑγρόν. ὁ δὲ τόπος ἄραιος καὶ ἰσχνός· δίεισιν ἄρα κατὰ φύσιν. Διὰ τί οὗτ' ἀθρόου ὄντος τοῦ πυρὸς μᾶλλον ἰδροῦσιν, οὗτ' ἐλάττονος αἰεὶ, ἀλλὰ πλείονος ἐπηρεφερομένου; οἱ γὰρ ἐν τοῖς πυριατηρίοις ἰδροῦσι μᾶλλον ἢ εὐθύς εἰ εἴη τοσοῦτον. ἢ ὅτι τὸ σύμμετρον

ἕκαστον ἐργάζεται; οὐκοῦν εἰ τοσοῦτον ποιεῖ, τὸ πλεῖον οὐ ποιήσει πλεῖον ἢ μᾶλλον τοῦναντίον, ὅτι τῷ σύμμετρον εἶναι ἐργάζεται τὸ ἔργον. διὰ μὲν οὖν τοῦτο οὐχὶ πρὸς πλεῖον μᾶλλον ἰδροῦσι, διὰ δὲ τὸ πρὸς ἕκαστον ἄλλην εἶναι συμμετρίαν, καὶ τὸ πεποιηκὸς μηκέτι ποιεῖν προστιθεμένου μᾶλλον. οὐ γὰρ ταῦτο προοδοποιεῖται εἰς ἕκαστον καὶ ἐπιτηδείως ἔχειν παρασκευάζει, καὶ ἤδη τοῦτο ἐργάζεται, ἀλλ' ἕτερον. τὸ μὲν οὖν ὀλίγον μᾶλλον ἢ πολὺ προωδοποίησε καὶ παρεσκεύασε τὸ σῶμα πρὸς [867b] τὸ ἰδροῦν· ἄλλης δὲ δεῖ συμμετρίας καὶ πλείονος πρὸς τὸ ποιῆσαι. τοῦτο δὲ οὐκέτι ποιεῖ ὁ πεποίηκεν, ἀλλὰ μετ' αὐτὸ ὕστερον, ἄλλο τῆς συμμετρίας γινόμενον.

Διὰ τί ἀποστλεγγισαμένοις μᾶλλον ῥεῖ ὁ ἰδρῶς ἢ ἐῶσιν ἐπιμεῖναι; πότερον διὰ τὸ καταψύχεσθαι ὑπὸ τοῦ ἔξω; ἢ ὅτι ὥσπερ πῶμα γίνεται ὁ ἔξω ἰδρῶς ἐπὶ τοῖς πόροις, ὥστε κωλύει τοῦ ἔσωθεν τὴν ὀρμήν.

Διὰ τί τὸ πηγανον δυσώδεις τοὺς ἰδρῶτας ποιεῖ, καὶ ἔνια τῶν μύρων; ἢ ὅτι ὦν ἐν τῇ ὁσμῇ βαρύτης ἐνι, ταῦτα κεραννύμενα ταῖς περιττωματικαῖς ὑγρότησι κακωδεστέραν ποιεῖ τὴν ὁσμήν;

Διὰ τί ἰδροῦμεν τὸν νῶτον μᾶλλον ἢ τὰ πρόσθεν; ἢ ὅτι ἐν μὲν τῷ πρόσθεν ἐστὶ τόπος ἐντός, εἰς ὃν ἀποχετεύεται τὸ ὑγρόν, ἐν δὲ τῷ ὀπισθεν οὐκ ἔστιν, ἀλλ' ἔξω τὴν ἔκκρισιν ἀναγκαῖον γίνεσθαι. τὸ δ' αὐτό ἐστὶν αἴτιον καὶ ὅτι τὴν κοιλίαν ἦττον ἰδροῦμεν ἢ τὸ στῆθος. ἔτι δὲ ὅτι μᾶλλον διαφυλακτικόν ἐστὶ τοῦ ἰδρῶτος τὰ νῶτα καὶ τὰ ὀπισθεν ἢ τὰ πρόσθεν διὰ τὸ μᾶλλον τὰ ἔμπροσθεν τῶν ὀπισθεν ἀποψύχεσθαι. ὅπερ ἐστὶν αἴτιον καὶ τοῦ τὰς μασχάλας ἰδροῦν τάχιστα καὶ μάλιστα· ἥκιστα γὰρ ψύχονται. ἔτι δὲ σαρκωδέστερά ἐστὶ τὰ περὶ τὸν νῶτον τῶν πρόσθεν, ὥστε ὑγρότερα. πλείων δὲ ὑγρότης ἐστὶν ἐν τοῖς ὀπισθεν· ὁ γὰρ μυελὸς κατὰ τὴν ῥάχιν ὦν ὑγρασίαν πολλὴν παρέχει.

Διὰ τί ἐφ' ᾧ κατακείμεθα, οὐχ ἰδροῦμεν; ἢ ὅτι θερμὸς ὦν ὁ τόπος ὧ ἀπτόμεθα, κωλύει διεξιέναι τὸν ἰδρῶτα· ἀναξηραίνει γὰρ αὐτόν. ἔτι δὲ θλίβεται, θλιβόμενον δὲ διαχεῖται τὸ αἷμα, οὗ συμβαίνοντος καταψύχεται μᾶλλον. σημεῖον δὲ ἡ νάρκη· κατάψυξις τε γὰρ ἐστὶ τὸ πάθος, καὶ γίνεται ἐκ θλίψεως ἢ πληγῆς.

Διὰ τί οἱ καθεύδοντες μᾶλλον ἰδροῦσιν; ἢ διὰ τὴν ἀντιπερίστασιν; ἄθροισθὲν γὰρ τὸ θερμὸν ἐντός ἐξελαύνει τὸ ὑγρόν.

Διὰ τί τὸ πρόσωπον μάλιστα ἰδροῦσιν ἀσάρκωτατον ὄν; ἢ ὅτι εὐίδρωτα



μὲν ὅσα ὕφυγρα καὶ ἀραιά, ἡ δὲ κεφαλὴ τοιαύτη; ὑγρότητα γὰρ οἰκείαν ἔχει πλείστην. δηλοῦσι δὲ αἱ φλέβες τείνουσαι ἐντεῦθεν, καὶ οἱ κατάρροι ἐξ αὐτῆς, καὶ ὁ ἐγκέφαλος ὑγρός, καὶ οἱ πόροι πολλοί. σημεῖον δὲ αἱ τρίχες ὅτι πολλοὶ οἱ πόροι εἰσὶ, περαίνοντες [868a] ἔξω. οὐκ οὖν ἐκ τῶν κάτω ὁ ἰδρῶς ἀλλ' ἐκ τῆς κεφαλῆς γίνεται. διὸ ἰδροῦσι καὶ πρῶτον καὶ μάλιστα τὸ μέτωπον· ὑπόκειται γὰρ πρῶτον· τὸ δὲ ὑγρὸν κάτω ῥεῖ ἀλλ' οὐκ ἄνω.

Διὰ τί οἱ ἰδροῦντες ἐὰν ψυχθῶσιν ἢ ὕδατι ἢ πνεύματι, ναυτιῶσιν; πότερον τὸ ὑγρὸν ψυχθὲν ἔσται ἀθρόον, ἔμπροσθεν οὐκ ἡρεμοῦν διὰ τὸ ῥεῖν; ἢ καὶ τὸ πνεῦμα διὸν ἔξω γινόμενον ἰδρῶς διὰ τὴν ψύξιν, τοῦτο ἔσω ψυχθὲν πρὶν ἐξελθεῖν ὑγρὸν ἐγένετο, καὶ προσπεσὸν ποιεῖ τὴν ναυτίαν;

Διὰ τί ποτε ἐκ τῆς κεφαλῆς καὶ τῶν ποδῶν μάλιστα οἱ ἰδρῶτες γίνονται θερμαινομένων; ἢ ὅτι τὸ θερμαινόμενον ἐφέλκει ἑφ' ἑαυτὸ τὸ ὑγρὸν, τὸ δὲ ὑγρὸν οὐκ ἔχει ὅπῃ καταναλίσκηται διὰ τὸ εἶναι τοὺς τόπους τούτους ὁστώδεις. ἐκπίπτει οὖν ἔξω.

Διὰ τί οἱ πονοῦντες, ὅταν παύσωνται, ἰδροῦσιν; ἔδει γάρ, εἴπερ ὁ πόνος αἴτιος, ὅταν πονῶσιν. πότερον ὅτι πονούντων μὲν ὑπὸ τοῦ πνεύματος αἱ φλέβες ἐμφυσώμεναι τοὺς πόρους συμμεμυκέναι ποιοῦσι, παυσαμένων δὲ συνίζουσιν, ὥστε δι' εὐρυτέρων γινομένων τῶν πόρων ῥᾶον διέρχεται τὸ ὑγρὸν. ἢ ὅτι πονούντων μὲν ἀποκρίνει ἡ κίνησις ἐκ τοῦ συμπεφυκότος ὑγροῦ πνεῦμα, καὶ διὰ θερμότητα τὴν ἀπὸ τῆς κινήσεως γίνεται τὸ ὑγρὸν πνεῦμα ἐπιπολῆς· ὅταν δὲ παύσῃται πονῶν, ἅμα καὶ ἡ θερμότης λήγει, καὶ ἐκ τοῦ πνεύματος πυκνουμένου ὑγρότης γίνεται, ὁ καλούμενος ἰδρῶς.

Πότερον δεῖ μᾶλλον τοῦ θέρους παρασκευάζειν τὸ ἰδροῦν ἢ τοῦ χειμῶνος; ἢ ὅτε μᾶλλον ὑγροὶ καὶ χαλεπώτεροι ἄνευ ἐπιμελείας γένοιντ' ἄν, ὥστε τοῦ χειμῶνος ἂν δέοι μᾶλλον, ἢ μεγάλη ἡ μεταβολὴ καὶ τὰ περιττώματα οὐ συνεκπέττεται. πάλιν ψυχθέντος ἔτι παρὰ φύσιν τὸ τοῦ χειμῶνος. δῆλον ἄρα ὅτι τοῦ θέρους μᾶλλον. καὶ γὰρ τὰ ὑγρά σήπεται μᾶλλον ἅπαντα τοῦ θέρους· διὸ τότε δεῖ ἀπαντλεῖν. διὰ τοῦτο δὲ καὶ οἱ ἀρχαῖοι πάντες οὕτως ἔλεγον.

Διὰ τί ἀεὶ τοῦ σώματος ῥέοντος καὶ τῆς ἀπορροῆς γινομένης ἐκ τῶν περιττωμάτων οὐ κουφίζεται τὸ σῶμα, ἐὰν μὴ ἀφιδρώσῃ; ἢ ὅτι ἐλάττων ἡ ἔκκρισις. ὅταν γὰρ ἐξ ὑγροῦ μεταβάλλῃ εἰς ἄερα, πλεῖον γίνεται ἐξ ἐλάττονος· [868b] τὸ γὰρ ὑγρὸν διακρινόμενον πλεῖον. ὥστε πλείονι χρόνῳ ἡ ἔκκρισις. διὰ τε τοῦτο καὶ ὅτι δι' ἐλαττόνων πόρων ἡ ἔκκρισις ἐστίν. ἔτι τὸ γλίσχρον καὶ τὸ κολλῶδες μετὰ μὲν τοῦ ὑγροῦ ἐκκρίνεται διὰ τὴν κατάμιξιν,

μετὰ δὲ τοῦ πνεύματος ἀδυνατεῖ. μάλιστα δὲ τοῦτ' ἐστὶ τὸ λυποῦν. διὸ καὶ οἱ ἔμετοι τῶν ἰδρώτων κουφίζουσι μᾶλλον, ὅτι συνεξάγουσι τοῦτο ἄτε παχύτεροι καὶ σωματωδέστεροι ὄντες. καὶ ὅτι τῇ μὲν σαρκὶ πόρρω ὁ τόπος οὗτος, ἐν ᾧ τὸ γλίσχρον καὶ τὸ κολλῶδες, ὥστε ἔργον μεταστῆσαι, τῇ δὲ κοιλίᾳ ἐγγύς· ἢ γὰρ ἐν αὐτῇ ἐγγίνεται ἢ πλησίον· διὸ καὶ δυσεξάγωγον ἄλλως.

Διὰ τί ἦττον ἰδροῦσιν ἐν αὐτῷ τῷ πονεῖν ἢ ἀνέντες; ἢ ὅτι πονοῦντες μὲν ποιοῦσι, πεπονηκότες δὲ πεποιήκασιν; εἰκότως οὖν ἐκκρίνεται πλεον· ὅτε μὲν γὰρ γίνεται, ὅτε δὲ ἐστίν. ἢ ὅτι πονούντων μὲν συγκλείονται τῆς σαρκὸς οἱ πόροι διὰ τὴν κάθεξιν τοῦ πνεύματος, ὅταν δ' ἄνωσιν, ἀνοίγονται; διὸ καὶ τὸ πνεῦμα κατέχοντες ἦττον ἰδροῦσιν.

Διὰ τί οὐχὶ ὅταν τροχάζωμεν, ὁ ἰδρὼς πλείων, καὶ ὅταν ἐν κινήσει ἦ τὸ σῶμα, ἀλλ' ὅταν παύσωνται; ἢ ὅτι τότε μὲν ὥσπερ ὑπὸ τῆς χειρὸς ἢ ἄλλου τινὸς ἔστιν ὕδωρ ῥέον ἀποφρᾶξαι πανταχόθεν συναθροιζόμενον, ὅταν δὲ ἀφεθῇ, πλεον ἢ ὅσον ἐξ ἀρχῆς. ὡς δὲ ὑπὸ τῆς χειρὸς, οὕτω καὶ ὑπὸ τοῦ πνεύματος ἔστιν ἀποληφθῆναι, ὥσπερ ἐν τῇ κλεψύδρᾳ, καὶ πάλιν πρὸς τὴν κύστιν· ἀπολαμβάνει γὰρ ἐντός. ὁμοίως οὖν πολλῆς κινήσεως οὔσης τὸ πνεῦμα ἐναπολαμβάνεται· διὸ καὶ αἱ φλέβες διατείνονται τοῦ ὑγροῦ οὐ δυναμένου ἐξιέναι. ἀπολαμβάνόμενον δὲ ἀθρόον τὸ ὑγρόν, ὅταν ἀνεθῇ τὸ πνεῦμα, ἀθρόον ἐξέρχεται.

Διὰ τί, ὅταν πίωσιν, ἦττον ἰδροῦσιν ἐπιφαγόντες; ἢ διότι τὰ σιτία ἐπισπᾶται μὲν τὴν ὑγρότητα καθαπερὲ σπόγγος ἐμπεσών, ἔστι δὲ κωλύσαι τὴν ὀρμὴν οὐ μικρὸν μέρος, ὥσπερ ἐν τοῖς ῥεύμασι, τὸ ἐπιλαβεῖν τοὺς πόρους προσενεγκάμενον τὴν τροφήν.

Διὰ τί οἱ ἀγωνιῶντες ἰδροῦσι τοὺς πόδας, τὸ δὲ πρόσωπον οὐ; μᾶλλον γὰρ εὐλογον, ὅταν πᾶν ἰδρῶσι τὸ σῶμα, τότε μᾶλλον καὶ τοὺς πόδας· ψυχρότατος γὰρ ὁ τόπος, διὸ ἥκιστα ἰδροῦσιν. καὶ οἱ ἰατροὶ ἐν ταῖς ἀρρωστίαις μάλιστα περιστέλλειν τοὺς πόδας παραγγέλλουσιν, ὅτι εὐψυκτοὶ εἰσιν, [869a] ὥστε ἀρχὴν ῥαδίως ῥίγους ποιοῦσι καὶ τῷ ἄλλῳ σώματι. ἢ ὅτι καὶ ἡ ἀγωνία ἐστὶ θερμότητος οὐ μετὰστασις ὥσπερ ἐν τῷ φόβῳ ἐκ τῶν ἄνω τόπων εἰς τοὺς κάτω (διὸ καὶ αἱ κοιλίαι λύονται τῶν φοβουμένων) ἀλλ' αὐξήσις θερμοῦ, ὥσπερ ἐν τῷ θυμῷ; καὶ γὰρ ὁ θυμὸς ζέσις τοῦ θερμοῦ ἐστὶ τοῦ περὶ τὴν καρδίαν· καὶ ὁ ἀγωνιῶν οὐ διὰ φόβον καὶ διὰ ψύξιν πάσχει, ἀλλὰ διὰ τὸ μέλλον.

Διὰ τί τὸ πρόσωπον ἐξέρυθροι γίνονται, οὐχ ἰδροῦσι δέ; ἢ διὰ τὸ μᾶλλον

θερμαίνεσθαι, ὥστε τὸ μὲν ἐν τῷ προσώπῳ ὑγρὸν ξηραίνει ἢ θερμότης ἐπιπολάζουσα, τὸ δὲ ἐν τοῖς ποσὶ συντήκει διὰ τὸ ἐλάττων μὲν εἶναι, πλείων δὲ τῆς ἐμφύτου καὶ προϋπαρχούσης.

Διὰ τί καθεύδοντες ἰδροῦσι μᾶλλον ἢ ἐγρηγορότες; ἢ ὅτι ἔσωθεν ἡ ἀρχὴ τοῦ ἰδρώτος, θερμότερα δὲ τὰ ἐντός, ὥστε καὶ ἐκκρίνει διαχέουσα ἢ ἐντὸς θερμότης τὸ ἐντὸς ὑγρὸν. ὅτι ἀεὶ ἔοικεν ἀπορρεῖν τι τοῦ σώματος, ἀλλὰ διὰ τὸ μηθὲν εἶναι πρὸς ὃ προσπίπτον ἀλισθήσεται λανθάνει. σημεῖον δέ· τὰ γὰρ κοῖλα τοῦ σώματος ἀεὶ ἰδροῖ.

Διὰ τί ἐν τοῖς πυριατηρίοις μᾶλλον ἰδροῦσιν, ὅταν ἦ ψυχρός; ἢ ὅτι τὸ θερμὸν οὐ βαδίζει ἔξω διὰ τὴν τοῦ ψυχροῦ περίστασιν (κωλύεται γὰρ ὑπὸ τούτου), ἀλλ' ἐντὸς κατειλούμενον καὶ μένον διαλύει τὰ ἐν ἡμῖν ὑγρά, καὶ ἰδρώτα ποιεῖ ἐξ αὐτῶν.

Διὰ τί ὠφελιμώτερός ἐστιν ὁ ἰδρῶς, κἂν ἐλάττων ἐπέλθῃ, ὁ γυμνοῦ τροχάζοντος γενόμενος ἢ ὁ ἐν ἱματίῳ; ἢ τὸ μὲν πονεῖν τοῦ μὴ πονεῖν βέλτιόν ἐστι καθόλου, καὶ ὁ ἰδρῶς δὲ ὁ μετὰ πόνου τοῦ ἄνευ πόνου βελτίων ἐστί, καὶ ὁ μᾶλλον δὲ μετὰ πόνου τοῦ ἥττον βελτίων; μᾶλλον δ' ἐστὶ μετὰ πόνου ὁ γυμνοῦ τροχάζοντος γινόμενος. ἐὰν γὰρ μὴ πολλῇ συντονίᾳ τροχάσῃ, οὐ δύναται ἰδρῶσαι γυμνὸς ὢν· ἐν ἱματίῳ γὰρ κἂν πάνυ μετρίως τροχάσῃ, ταχὺ ἰδροῖ διὰ τὴν ἀπὸ τοῦ ἱματίου ἀλέαν. καὶ εὐχρόστεροι δὲ γίνονται οἱ γυμνοὶ τρέχοντες τοῦ θέρους τῶν ἐν ἱματίοις, ὅτι ὥσπερ ἅπαντες οἱ ἐν τοῖς εὐπνουστέροις τόποις οἰκοῦντες εὐχρόστεροί εἰσι τῶν ἐν τοῖς καταπεπνιγμένοις οἰκούντων, οὕτω καὶ αὐτὸς αὐτοῦ ὁ ἄνθρωπος, ὅταν ὥσπερ ἐν εὐπνοίᾳ ἦ, τότε εὐχρόστερός ἐστιν ἢ ὅταν καταπεπνιγμένος ἦ καὶ περιεχόμενος ὑπὸ τινος ἀλέας πολλῆς, ὃ συμβαίνει μᾶλλον [869b] τῷ ἐν ἱματίῳ τρέχοντι. διὰ ταῦτα δὲ καὶ οἱ πολὺν χρόνον καθεύδοντες ἀχρόστεροί εἰσι τῶν μέτριον χρόνον καθευδόντων· καταπέπνικται γὰρ καὶ ὁ καθεύδων.

Διὰ τί οἱ ἀγωνιῶντες ἰδροῦσι τοὺς πόδας, τὸ δὲ πρόσωπον οὐ, ἐν τῷ ἄλλῳ βίῳ ἰδρούντων ἡμῶν μάλιστα μὲν τὸ πρόσωπον, ἥκιστα δὲ τοὺς πόδας; ἢ ὅτι ἡ ἀγωνία φόβος τίς ἐστι πρὸς ἀρχὴν ἔργου, ὁ δὲ φόβος κατάψυξις τῶν ἄνω· διὸ καὶ ὠχρίῳσι τὰ πρόσωπα οἱ ἀγωνιῶντες. κινεῦνται δὲ καὶ σκαίρουσι τοῖς ποσίν· ποιοῦσι γὰρ τοῦτο οἱ ἀγωνιῶντες καὶ καθάπερ γυμνάζονται· διόπερ εἰκότως ἰδροῦσι ταῦτα οἷς πονοῦσιν. καὶ τρίβουσι δὲ τὰς χεῖρας καὶ συγκαθιᾶσι καὶ ἐκτείνονται καὶ ἐξάλλονται καὶ οὐδέποτε ἡρεμοῦσιν· ὀρμητικοὶ γάρ εἰσι πρὸς τὸ ἔργον διὰ τὸ τὸ θερμὸν αὐτῶν ἡθροῖσθαι εἰς τὸν περὶ τὸ στῆθος τόπον ὄντα εὐσωματωδέστερον· ὅθεν πάντη

διάττοντος αὐτοῦ τε καὶ τοῦ αἵματος συμβαίνει πυκνὴν καὶ ποικίλην γίνεσθαι κίνησιν. μάλιστα δὲ ἰδροῦσι τοὺς πόδας, ὅτι οὗτοι μὲν συνεχῶς πονοῦσι, τὰ δὲ ἄλλα μέρη τοῦ σώματος ἀναπαύσεως τυγχάνει ταῖς τῶν σχημάτων καὶ κινήσεων μεταβολαῖς.

Διὰ τί ἐν τοῖς πυριατηρίοις οὔτε ἀθρόου τοῦ πυρὸς ὄντος μᾶλλον ἰδροῦσιν, οὔτ' ἐλάττονος ἀεὶ γινομένου, ἀλλὰ πλείονος; ἐπεισφερομένου γὰρ τὰ πυριατήρια μᾶλλον ἰδροῦσιν ἢ εἴπερ εὐθύς ἐξ ἀρχῆς τοσοῦτον ἦν τὸ πῦρ. ἢ τὸ μὲν πολὺ ἐκ πρώτης ξηρὰν λαμβάνον τὴν ἐπιπολῆς σάρκα καὶ δέρμα καίει καὶ ὀστρακοῖ, γενομένη δὲ τοιαύτη τέγγει τοὺς ἰδρώτας. τὸ δὲ ὀλίγον μᾶλλον τὴν σάρκα ἀνιὲν αὐτὴν τε ἄραιοι, καὶ τὰ ἐντὸς καθάπερ ὀργάζει πρὸς τὴν διάκρισιν καὶ ἐξαγωγήν. οὕτω δ' ἐχούσης αὐτῆς, ἐπεισενεχθὲν πλέον πῦρ καὶ εἰσδυόμενον εἰς βάθος τῆς σαρκὸς δι' ἀραιότητα ἐξατμίζει τε τὰ προμαλαχθέντα ὑγρά, καὶ τὰ λεπτὰ αὐτῶν ἀποκρίνον ἐξάγει μετὰ τοῦ πνεύματος.

Πότερον δεῖ μᾶλλον τοῦ θέρους παρασκευάζειν τὸ ἰδροῦν ἢ τοῦ χειμῶνος; ἢ τοῦ μὲν χειμῶνος συστελλόμενον ἐντὸς τὸ θερμὸν ἐκπέττει καὶ πνευματοῖ τὰ ἐν ἡμῖν ὑγρά, διὸ πάντων αὐτῶν ἢ τῶν πλείστων ἀναλισκομένων οὐδὲν δεῖται συγγενοῦς ἀποκρίσεως. τοῦ δὲ θέρους δι' ἀραιᾶς τῆς σαρκὸς ἐκπίπτοντος τοῦ θερμοῦ ἦττον πέττεται τὰ ἐν ἡμῖν ὑγρά· διὸ δεῖται ἀπαντλήσεως. ἐμμείναντα γὰρ διὰ τὴν [870a] ὥραν σήπεται καὶ νοσοποιεῖ. σήπεται γὰρ πᾶν τὸ σηπόμενον ὑπ' ἄλλοτρίου θερμοῦ, ὑπὸ δὲ τοῦ οἰκείου πέττεται. ἐν μὲν οὖν τῷ θέρει τὸ ἀλλότριον ἰσχύει, διὸ σήπεται πάντα μᾶλλον ἐν αὐτῷ, ἐν δὲ τῷ χειμῶνι τὸ οἰκεῖον, διὸ οὐ σήπει ὁ χειμῶν.

Διὰ τί τῶν ἰδρώτων γινομένων ὑπὸ τῆς ἐντὸς θερμασίας ἢ ὑπὸ τῆς ἐκτὸς προσπιπτούσης, πρὸς ἐνίων ἰδρώτων φρίττομεν; ἢ διότι ὑπὸ μὲν τῆς ἐντὸς θερμασίας ὅταν ἐκπίπτωσιν ἐκ πολλοῦ τόπου εἰς ὀλίγον, συστελλομένοις πρὸς τὴν περιοχὴν παντελῶς τὰς τοῦ θερμοῦ περιόδους ἀποφράττουσιν, εἴτα ἡ φρίκη ἐγγίνεται; ἔτι τῆς σαρκὸς παντελῶς διαβρόχου γινομένης καὶ τοῦ θερμοῦ διεξιόντος. ἢ δὲ ἐκτὸς θερμασία προσπίπτουσα ἄραιοι τὸν χρῶτα πρῶτον· εἴτα τὸ ἐντὸς τῆς φύσεως θερμὸν ἀποκρινάμενον τὴν φρίκην ἐποίησεν.

Διὰ τί τῶν ἰδρώτων οἱ θερμοὶ κρίνονται βελτίους εἶναι τῶν ψυχρῶν; ἢ ὅτι πᾶς μὲν ἰδρῶς περιττώματός τινος ἔκκρισις ἐστίν, εἰκὸς δὲ τὸ μὲν ὀλίγον περίττωμα ἐκθερμαίνεσθαι, τὸ δὲ πλεῖον μὴ ὁμοίως, ὥστε ὁ ψυχρὸς ἰδρῶς πολλοῦ περιττώματος ἂν εἴη σημεῖον· διὸ καὶ μακροτέρας τὰς νόσους δηλοῖ.

Διὰ τί τῶν ἰδρώτων διὰ θερμασίαν γινομένων πρὸς τὸ πολὺ πῦρ ἦττον ἰδροῦμεν; ἢ διότι ἦτοι σφόδρα θερμαινομένου τοῦ σώματος εἰς πνεύματα ὑγρὰ διαλύεται, ἢ ἐκπίπτοντος τοῦ ὑγροῦ καὶ ταχὺ περιξηραιομένου τὴν αἴσθησιν οὐ λαμβάνομεν;

Διὰ τί τοῦ ἡλίου μᾶλλον θερμαίνοντος, ἐὰν μηδὲν περίβλημα ἔχωμεν, ἰδρῶτες γίνονται τοῖς ἱματίοις περιστελλομένοις; καὶ περὶ τούτου ταῦτ᾽ ἔροῦμεν τῷ προτέρῳ.

Διὰ τί τῶν ὀξειῶν κινήσεων μᾶλλον θερμαίνειν δοκουσῶν, τῶν δὲ νωθρῶν ἦττον, αἱ πρὸς τὸ σιμὸν πορεῖαι νωθρότεραι οὔσαι ἰδρῶτάς τε μᾶλλον ἐκκρίνουσι καὶ τὸ πνεῦμα προσιστᾷσιν, ὥς θερμαίνουσαι μᾶλλον τῶν κατάντων; ἢ ὅτι τοῖς βάρεσιν εἰς τὸ κάτω φέρεσθαι κατὰ φύσιν ἐστίν, εἰς δὲ τὸ ἄνω παρὰ φύσιν. ἢ οὖν τοῦ θερμοῦ φύσις ἡ φέρουσα ἡμᾶς πρὸς μὲν τὰ κατάντη οὐθὲν συμπονεῖ, πρὸς δὲ τὰ σιμὰ φορτηγοῦσα διατελεῖ. ὥστε διὰ μὲν τὴν τοιαύτην κίνησιν ἐκθερμαίνεται, καὶ μᾶλλον τοὺς ἰδρῶτας ἐκκρίνει, καὶ τὸ πνεῦμα προσίστησιν. συμβάλλεται δέ τι [870b] ἐν ταῖς πορείαις καὶ ἡ τοῦ σώματος σύγκαμψις πρὸς τὸ μὴ εὐθυπορεῖν τὸ πνεῦμα προσιστᾷσα.

Διὰ τί τῶν ἰδρώτων γινομένων, ὅσω ἂν ἐπιβάλληται τις μᾶλλον, οὐχ οἱ τὰ πλεῖστα τῶν ἱματίων ἐπιβαλλόμενοι ἰδροῦσιν; καὶ περὶ τούτου ταῦτ᾽ ἔροῦμεν τῷ ἐπάνω.

Διὰ τί τῶν σωμάτων ξηροτέρων ὄντων τοῦ θέρους ἢ τοῦ χειμῶνος ἰδρωτικωτέρως διακείμεθα τοῦ θέρους; ἢ ὅτι τοῦ μὲν θέρους ἀραιῶν τῶν σωμάτων ὄντων τὸ τῆς φύσεως θερμὸν οὐ πολὺ κατέχεται; διαλύει οὖν τὰ ὑγρὰ εἰς πνεῦμα. τοῦ δὲ χειμῶνος πεπυκνωμένων ἐκτὸς τῶν σωμάτων, πολὺ κατειλημμένον τὸ τῆς φύσεως θερμὸν εἰς πνεῦμα οὐ διαλύει τὰ ὑγρά. ἔτι δὲ καὶ τοῦ μὲν θέρους πολὺ προσφερόμεθα τὸ ὑγρόν, τοῦ δὲ χειμῶνος τοῦναντίον.

Διὰ τί οἱ ἀπὸ τοῦ αὐτομάτου γινόμενοι τοῖς ὑγιαίνουσιν ἰδρῶτες φαυλότεροι δοκοῦσιν εἶναι τῶν ὑπὸ τῶν πόνων; ἢ ὅτι οἱ μὲν πόνοι ἀπαντλοῦντες ἀεὶ τὸ περιττεῦον ὑγρὸν ξηροτέραν τὴν σάρκα παρασκευάζουσιν, ὥστε τὰς κοιλίας τῶν πόρων ὑγιεινὰς εἶναι καὶ τῇ τοῦ θερμοῦ ἡθίσει μηδεμίαν ἔμφραξιν γίνεσθαι, οἱ δ' αὐτόματοι μὲν προσαγορευόμενοι ἰδρῶτες, γινόμενοι δ' ἐξ ἀνάγκης, ὅταν ὑπὸ πλείονος ὑγρασίας συγχεομένων τῶν τῆς φύσεως πόρων τὰ θερμὰ μὴ παντελῶς καταλαμβάνηται, ἀλλ' ἔτι ἀπομάχεσθαι καὶ ἐκκρίνειν αὐτὸ δύνηται, εὐλόγως

νόσου σημεία φαίνεται. τότε γὰρ ὑπὸ πλείονος ὑγρασίας ἢ τοῦ συμμέτρου κατὰ φύσιν ψύχεται, ἢ τε σὰρξ δίομβρος γενομένη τὴν κακίστην πρὸς ὑγίαν διάθεσιν λαμβάνει.

Διὰ τί τοῦ χειμῶνος ἰδρῶτες ἦσσαν γίνονται, καὶ ἡμεῖς οὐχ ὁμοίως παρασκευάζειν βουλόμεθα, ὑγροτέρων ὄντων τῶν σωμάτων τοῦ χειμῶνος; ἢ ἦσσαν μὲν ἰδροῦμεν, ὅτι τὰ ὑγρὰ τοῦ χειμῶνος πέπηγε καὶ συνέστηκε σφόδρα· δυσδιαλυτώτερα οὖν. οὐχ ὑπολαμβάνομεν δὲ δεῖν ἰδρωτοποιεῖσθαι τοῦ χειμῶνος, διότι ἡ τοιαύτη διάθεσις ὑγιεινὴ, ὁ δὲ τοὺς ἰδρῶτας ἐμποιῶν τήκει καὶ συγγεῖ τὴν ἕξιν· ἔτι τε καὶ ἀραιότεραν τοῦ προσήκοντος ἐμποιῶν τό τε ἐντὸς θερμὸν ἀποκρίνων ἔλαττον ποιεῖ, ὥστε μὴ ὁμοίως δύνασθαι τῷ περιέχοντι ψυχρῷ ἀντιτετάχθαι· τό τε ἐκτὸς ὑγρὸν ῥαδιέστερον παρεμπεσεῖται τοῖς σώμασιν, ἀραιῶν τῶν πόρων διὰ τὰς ἰδρωτοποιίας ὄντων.

## Γ. ΟΣΑ ΠΕΡΙ ΟΙΝΟΠΟΣΙΑΝ ΚΑΙ ΜΕΘΗΝ.

[871a] Διὰ τί οἱ μεθύοντες θερμοῦ ὄντος τοῦ οἴνου δύσριγοί εἰσι, καὶ τάχιστα ἀλίσκονται ὑπὸ πλευρίτιδος καὶ τῶν τοιούτων; ἢ διότι πολὺ ὑγρὸν ἐὰν ψυχθῇ, πολὺ ψυχρὸν γίνεται, ὥστε κρατεῖν τῆς φυσικῆς θερμότητος; γίνεται γὰρ ὅμοιον ὥσπερ ἂν εἰ ἐσθῆς βεβρεγμένη εἴη ὑγρῷ ψυχρῷ, οὕτως ἡ σὰρξ ἔνδοθεν.

Διὰ τί οὐχ οἱ σφόδρα μεθύοντες παροινοῦσιν, ἀλλ' οἱ ἀκροθώρακες μάλιστα; ἢ ὅτι οὕθ' οὕτως ὀλίγον πεπώκασιν ὥστε ὁμοίως ἔχειν τοῖς νήφουσιν, οὕθ' οὕτως ὥστε διαλύεσθαι, ὅπερ πάσχουσιν οἱ πολὺ πεπωκότες; ἔτι οἱ μὲν νήφοντες μᾶλλον ὀρθῶς κρίνουσιν, οἱ δὲ σφόδρα μεθύοντες οὐδ' ἐγχειροῦσι κρίνειν· οἱ δὲ ἀκροθώρακες κρίνουνσι μὲν διὰ τὸ μὴ σφόδρα μεθεῖν, κακῶς δὲ διὰ τὸ μὴ νήφειν, καὶ ταχὺ τῶν μὲν καταφρονοῦσιν, ὑπὸ τῶν δὲ ὀλιγωρεῖσθαι δοκοῦσιν.

Διὰ τί μᾶλλον κραιπαλῶσιν οἱ ἀκρατέστερον πίνοντες ἢ οἱ ὅλως ἄκρατον; πότερον διὰ τὴν λεπτότητα ὁ κεκραμένος μᾶλλον εἰσδύεται εἰς πλείους τόπους καὶ στενωτέρους, ὁ δὲ ἄκρατος ἦττον, ὥστε δυσεξαγωγότερος ὁ κεκραμένος; ἢ διότι ἐλάττω πίνουσιν ἄκρατον διὰ τὸ μὴ δύνασθαι, καὶ ἀπεμοῦσι μᾶλλον; ἔτι δὲ συμπέττει τὰ λοιπὰ θερμότερος ὢν, καὶ αὐτὸς αὐτόν· ὁ δὲ ὑδαρὴς τοῦναντίον.

Διὰ τί τῶν οἴνοφλύγων τὸ σπέρμα οὐ γόνιμον ὥς ἐπὶ τὸ πολὺ; ἢ ὅτι ἡ κρᾶσις τοῦ σώματος ἐξύγρानται; τὰ δὲ ὑγρὰ σπέρματα οὐ γόνιμα, ἀλλὰ τὰ

συνεστῶτα καὶ πάχος ἔχοντα.

Διὰ τί οἱ οἰνόφυλγες τρέμουσι, καὶ μᾶλλον ὅσω ἂν ἀκρατοποτῶσιν; ἔστι δὲ ὁ μὲν οἶνος θερμαντικόν, ὁ δὲ τρόμος γίνεται μάλιστα ἀπὸ ψυχροῦ, διὸ οἱ ῥιγῶντες μάλιστα τρέμουσιν. πολλοῖς δ' ἤδη χρωμένοις μόνον ἀκράτῳ τροφῆς χάριν τρόμοι ἰσχυροὶ συνέβησαν, ὥστε ἀπορρίπτειν τοὺς θλίβοντας, καὶ τῷ θερμῷ ὕδατι λουόμενοι ἀναισθήτως εἶχον. ἢ ὅτι γίνεται μὲν ὁ τρόμος διὰ κατάψυξιν, γίνεται δὲ ἡ περισταμένου ἐντὸς τοῦ θερμοῦ διὰ τὸ ἐκτὸς ψυχρός, οἶον τοῦ χειμῶνος, ἢ σβεννυμένου τοῦ κατὰ φύσιν θερμοῦ, σβεννυμένου μὲν τῷ ἐναντίῳ, ἢ διὰ χρόνον, οἶον γῆρας, ἢ τῇ τοῦ ἀλλοτρίου θερμοῦ ὑπερβολῇ, ὃ συμβαίνει τῷ ἐν τῷ ἡλίῳ ἢ πυρὶ καιομένῳ. συμβαίνει δὲ τοῦτο καὶ τοῖς τῷ ἀκράτῳ οἶνῳ χρωμένοις. ὦν γὰρ θερμός, ὅταν ὑπερτείνηται [871b] δυνάμει τῇ τοῦ σώματος οἰκείᾳ θερμότητι μιγνύμενος, ἀποσβέννυσιν αὐτό· σβεσθέντος δὲ καὶ ψυχθέντος τοῦ σώματος συμβαίνει τοὺς τρόμους γίνεσθαι. ἔστι δὲ καὶ παρὰ πάντα τὰ εἰρημένα ἄλλος τρόπος καταψύξεως. ἀναιρεθείσης δὲ τῆς ὕλης, ἢ τὸ θερμὸν ἐκάστω τρέφεται, συμβαίνει καὶ τὸ θερμὸν φθειρεσθαι. τοῦτο δὲ ἐπὶ μὲν τῶν ἀψύχων ἐπὶ τοῦ λύχνου ἐστὶ φανερόν (τοῦ γὰρ ἐλαίου ἀναλωθέντος συμβαίνει σβέννυσθαι τὸ φῶς), ἐπὶ δὲ τῶν ἐμψύχων τό τε γῆρας ταῦτο ποιεῖ τοῦτο καὶ τῶν νόσων αἱ μακραὶ καὶ συντηκτικαί. ἀναιρουμένης γὰρ ἡ λεπτυνομένης τῆς τοῦ θερμοῦ τροφῆς ἐκλύειν αὐτὸ συμβαίνει. ὑγρῷ μὲν γὰρ τρέφεται τὸ θερμόν, τούτῳ δὲ οὐ τῷ τυχόντι, ἀλλὰ λείῳ καὶ πλείονι. διὸ τοῖς νοσοῦσι τὰς εἰρημένας νόσους καὶ πρεσβυτέροις φθειρομένου τοῦ τοιούτου καὶ ἀλλοιουμένου (δριμὺ γὰρ καὶ αὐχμηρὸν ἀντὶ λείου καὶ λιπαροῦ γίνεται) συμβαίνει ἐκλείπειν αὐτό. σημεῖον δὲ τῶν εἰρημένων ἐστὶν αἱ γινόμεναι βοήθειαι τοῖς μαράνσει τὸν βίον ἐκλείπουσιν· ὅ τι γὰρ ἂν ἐπιστάξῃ τις αὐτοῖς τῶν τροφωδῶν ὑγρῶν, προσαναφέρεσθαι συμβαίνει τὸ δὲ ὀπτικὸν αὐτῶν, ὡς τῇ τοῦ τοιούτου ἐκλείψει γινομένης τῆς διαλύσεως. ἔοικε δὲ τοῖς ἀκρατοποτοῦσι τοῦτ' εἶναι αἴτιον. ὦν γὰρ θερμός ὁ οἶνος μετὰ τῆς φύσει ὑπαρχούσης θερμότητος μᾶλλον ἀναλίσκει τὰ ἐν τῷ σώματι ὑπάρχοντα ἐφόδια τῷ οἰκείῳ θερμῷ. διὸ συμβαίνει τοὺς μὲν ὑδρωπικοὺς αὐτῶν γίνεσθαι, τοὺς δὲ ῥευματικούς, τοὺς δὲ εἰς τὴν κοιλίαν. τὰ τε γὰρ λοιπὰ αὐτοῖς ὑγρὰ δριμέα ἐστί, καὶ τὰ εἰσιόντα δι' ἀσθένειαν τοῦ οἰκείου θερμοῦ ἀπαλὰ ὄντα οὐ παχύνεται. ἀσθενὲς δὲ ἐστὶ τὸ θερμὸν τῷ τὴν ὕλην εἶναι τοιαύτην ἐν ᾧ ἔτι σώζεται, καθάπερ τὸ καλάμινον πῦρ· καὶ γὰρ τοῦτο διὰ τὴν τῆς ὕλης ἀσθένειαν ἀσθενέστερόν ἐστι τοῦ ξυλίνου.

Διὰ τί οἱ μεθύοντες θερμοῦ ὄντος τοῦ οἶνου δύσριγοί εἰσι, καὶ τάχιστα ἀλίσκονται ὑπὸ πλευρίτιδος καὶ τῶν τοιούτων νόσων; ἢ ὅτι τὸ πολὺ ὑγρὸν ἐὰν ψυχθῇ, πολὺ ψυχρὸν γίνεται, ὥστε κρατεῖν τῆς φυσικῆς θερμότητος,

πάντα δὲ τὰ ὑγρότερα θερμότερά ἐστι τὴν φύσιν. σημεῖον δέ· θερμαίνεται μὲν γὰρ τοῖς ἐκτός, ὑγραίνεται δὲ οὗ. εἰ δ' ἥττον ἐστι θερμά, καὶ ἀπολείπει δῆλον ὅτι θάττον αὐτὰ ἢ θερμότης ἢ ὑγρότης, ὥστε λειφθέντων ψυχρῶν ὑγρῶν [872a] εἰκότως ῥιγοῦσί τε μᾶλλον οἱ μεθύοντες καὶ τὰ τοῦ ῥίγους οἰκεῖα πάσχουσι πάθη.

Διὰ τί οἱ μὲν παῖδες θερμοὶ ὄντες οὐ φίλοινοί εἰσι, Σκύθαι δὲ καὶ οἱ ἄνδρες οἱ ἀνδρεῖοι θερμοὶ ὄντες φίλοινοι; ἢ ὅτι οἱ μὲν θερμοὶ ὄντες καὶ ξηροὶ (ἢ γὰρ τοῦ ἀνδρὸς ἕξις τοιαύτη), οἱ δὲ παῖδες ὑγροὶ καὶ θερμοί. ἢ δὲ φιλοποσία ἐστὶν ἐπιθυμία ὑγροῦ τινός. ἢ οὖν ὑγρότης κωλύει διψητικούς εἶναι τοὺς παῖδας· ἔνδεια γάρ τις ἐστὶν ἢ ἐπιθυμία.

Διὰ τί μεθύοντες μᾶλλον διαισθανόμεθα τὰ ἀλυκὰ καὶ τὰ μοχθηρὰ ὕδατα, νήφοντες δὲ ἥττον; ἢ ὅτι τὸ οἰκεῖον ὑπὸ τοῦ οἰκείου ἐστὶν ἀπαθές, καὶ τὸ ὁμοίως διακείμενον, τὰ δὲ ἐναντία τῶν ἐναντίων ἐστὶν αἰσθητικώτατα. ὁ μὲν οὖν μεθύων γλυκεῖς ἐν αὐτῷ χυμοὺς ἔχει (τοιοῦτο γὰρ ὁ οἶνος δοκεῖ), καὶ τῶν φαύλων χυμῶν αἰσθητικώτερός ἐστιν, ὁ δὲ νήφων δριμεῖς καὶ ἀλυκοῦς. τῆς τροφῆς οὖν πεπεμμένης οἱ περιττωματικοὶ ἐπιπολάζουσιν. οὗτοί τε οὖν εἰσὶν ἀπαθεῖς ὑπὸ τῶν ὁμοίων, καὶ τὸν ἔχοντα ποιοῦσιν.

Διὰ τί τοῖς μεθύουσι σφόδρα κύκλω πάντα φαίνεται φέρεσθαι, καὶ ἤδη ἀπτομένης τῆς μέθης ἀθρεῖν τὰ πόρρω οὐ δύνανται; διὸ καὶ σημεῖον τῆς μέθης αὐτὸ ποιοῦνται τινες. ἢ ὅτι κινεῖται ὑπὸ τῆς θερμότητος τοῦ οἴνου ἢ ὄψις πυκνάκις; διαφέρει οὖν οὐθὲν τὴν ὄψιν κινεῖν ἢ τὸ ὀρώμενον· ταῦτό γὰρ ποιεῖ πρὸς τὸ φαίνεσθαι τὰ εἰρημένα. ἐπεὶ δὲ καὶ περὶ τὰ πλησίον ὄντα διαψεύδεσθαι τὴν ὄψιν συμβαίνει τῶν μεθυόντων, καὶ περὶ τὰ πόρρω μᾶλλον εἰκὸς ταῦτα πάσχειν. διόπερ ἐκεῖνα μὲν ὅλως οὐχ ὀρᾶται, τὰ δ' ἐγγὺς οὐκ ἐν ὧ τόπῳ ἐστὶν ὀρᾶ. κύκλω δὲ φαίνεται φέρεσθαι, καὶ οὐκ ἐγγὺς καὶ πόρρω, ὅτι εἰς μὲν τὸ πόρρω διὰ τε τὴν κύκλω κίνησιν ἀδυνατωτέρα ἐστὶ φέρεσθαι ἢ ὄψις. ἅμα γὰρ τάναντία ποιεῖν οὐ ῥάδιον. ἔστι δὲ ἢ μὲν πόρρω ἐπιθυμία σφοδρά, ἢ δὲ κύκλω ἐν ᾧ τοῦνομα σημαίνει σχήματι. διὰ τε οὖν τὰ εἰρημένα πόρρω οὐ φέρεται· καὶ εἰ φέροιτο τὸ ἐγγὺς καὶ πόρρω, οὐκ ἂν ταῦθ' ὀρώη. ἀπολείποι γὰρ ἂν ἐν θατέρῳ χρόνῳ αὐτῶν τὸ ὀρώμενον ἐν ταύτῳ τόπῳ, ἀπολείπων δὲ οὐκ ἂν ὀρώη. κύκλω δὲ φέρεται διὰ τὸ ὑπάρχον σχῆμα τῆς ὄψεως. ἔστι γὰρ κῶνος, οὗ ἡ βάσις κύκλος, ἐν ᾧ κινουμένη ὀρᾶ μὲν τοῦτο διὰ [872b] τὸ μηδέποτε ἀπολείπειν αὐτό, διέψευσται δὲ τῷ τόπῳ διὰ τὸ μὴ τὴν αὐτὴν ὄψιν ἐπιβάλλειν ἐπ' αὐτό. ταῦτόν γὰρ ἂν ἦν ἢ τοῦτο πρὸς τὴν ὄψιν κινεῖν ἢ τὴν ὄψιν πρὸς τοῦτο.



Διὰ τί τοῖς μεθύουσιν ἐνίοτε πολλὰ φαίνεται τὸ ἐν ὁρῶσιν; ἢ καθάπερ εἴρηται, κινουμένης τῆς ὄψεως συμβαίνει μηθένα χρόνον τὴν αὐτὴν ἐπὶ ταῦτοῦ ἡρεμεῖν ὄψιν; τὸ δ' ἐν ταύτῳ χρόνῳ ἑτέρως ὁρώμενον ὀψιαίτερον εἶναι δοκεῖ· ἀφ' ἧ γὰρ ὄψεως ὁρᾶται τὸ ὁρώμενον, ἄπτεσθαι δὲ πλείοσιν ἅμα τοῦ αὐτοῦ ἀδύνατον. ὄντος δὲ ἀναισθήτου τοῦ μεταξὺ χρόνου, ἐν ᾧ ἡ ὄψις ἥπτετο καὶ παρήλλαττε τὸ ὁρώμενον, εἰς εἶναι δοκεῖ χρόνος ἐν ᾧ τε ἥπται καὶ παρήλλαχεν· ὥστ' ἐν τῷ αὐτῷ χρόνῳ ταῦτοῦ πλειόνων ἀπτομένων ὄψεων πλείω δοκεῖ εἶναι τὰ ὁρώμενα, διὰ τὸ ταῦτα κατὰ τὸν αὐτὸν τρόπον ἀδύνατον εἶναι ἄπτεσθαι.

Διὰ τί οἱ μεθύνοντες ἀφροδισιάζειν ἀδύνατοί εἰσιν; ἢ ὅτι δεῖ τινὰ τόπον ἐκθερμανθῆναι μᾶλλον τοῦ ἄλλου σώματος, τοῦτο δὲ ποιεῖν διὰ τὸ πλῆθος τῆς ἐν ὅλῳ τῷ σώματι θερμασίας ἀδυνατοῦσιν· ἀποσβέννυται γὰρ τὸ ὑπὸ τῆς κινήσεως γινόμενον θερμὸν ὑπὸ τοῦ περιέχοντος μᾶλλον, ὅτι πολὺ ἐστὶν ἐν αὐτοῖς τὸ ὑγρὸν καὶ ἄπεπτον. ἔτι δὲ τὸ σπέρμα ἐκ τροφῆς, τροφή δὲ πᾶσα πέττεται· ἥς πληρωθέντες ὀρμητικοί εἰσι πρὸς τὰ ἀφροδίσια. διὸ καὶ κελεύουσί τινες πρὸς τὴν πρᾶξιν τὴν τοιαύτην ἀριστᾶν μὲν πολὺ, δειπνεῖν δὲ ὀλίγον, ἵνα ἢ αὐτοῖς ἐλάττω τὰ ἄπεπτα τῶν πεπεμένων.

Διὰ τί ὁ γλυκὺς καὶ ἄκρατος καὶ ὁ κυκεὼν μεταξὺ διαπινόμενοι ἐν τοῖς πότοις νήφειν ποιοῦσιν; καὶ διὰ τί ἥττον μεθύσκονται ταῖς μεγάλαις κωθωνιζόμενοι; ἢ πάντων τὸ αὐτὸ αἴτιόν ἐστιν, ἢ παράκρουσις τοῦ ἐπιπολῆς θερμοῦ; τὸ γὰρ μεθύειν ἐστίν, ὅταν ἢ τὸ θερμὸν ἐν τοῖς περὶ τὴν κεφαλὴν τόποις.

Διὰ τί τοῦ γλυκέος ἐπιπολαστικοῦ ὄντος, ἐάν τις μεθύων ἤδη ἐπιπίη γλυκύ, καταπέττεται ὁ ἐνυπάρχων οἶνος καὶ ἥττον ἐνοχλεῖ; ἢ ὅτι τὸ μὲν γλυκὺ λεαντικόν τέ ἐστὶ καὶ γλίσχρον (ἐμφράττει οὖν τοὺς πόρους), τὸ δὲ αὐστηρὸν τραχυντικόν· καὶ τὸ μὲν εὐπετῇ ποιεῖ τῷ θερμῷ τὴν ἀναφοράν, ὁ δὲ γλυκὺς στέγει αὐτό, τοὺς πόρους ἐμφράττων. [873a] ὅτι δὲ τῶν ἄνω θερμανθέντων ἐστὶν ἡ μέθη, εἴρηται. ἔτι δὲ ὁ μὲν γλυκὺς ἄνοδμος, ὁ δὲ αὐστηρὸς οὗ· ὁσμὴ δὲ πᾶσα βαρύνει κεφαλὴν.

Διὰ τί ἀπὸ τοῦ κεκραμένου μὲν ἀκρατεστέρου δὲ ἕωθεν μᾶλλον πονοῦσι τὴν κεφαλὴν ἢ ἀπὸ τοῦ ἀκράτου; ἢ ὅτι ὁ μὲν ἄκρατος παχυμερὴς ὢν εἰς τοὺς περὶ τὴν κεφαλὴν πόρους στενοὺς ὄντας αὐτὸς μὲν οὐκ εἰσπίπτει, ἡ δὲ δύναμις αὐτοῦ, ἡ ὁσμὴ καὶ θερμότης· ὁ δὲ κεκραμένος μιχθεὶς λεπτῷ τῷ ὕδατι αὐτὸς εἰσδύεται, ἔχων δὲ σῶμα, καὶ τῆς δυνάμεως πολὺ τῆς τοῦ ἀκράτου, δυσπεπτότερός ἐστιν. τὰ τε γὰρ ὑγρὰ πάντων δυσπεπτότατα, καὶ τὰ

σώματα τῶν ἐν αὐτοῖς δυνάμεων.

Διὰ τί μᾶλλον δύνανται πιεῖν εἰς μέθην οἱ ἀγύμναστοι τῶν γεγυμνασμένων, καὶ ῥᾶον ἀπαλλάττουσιν; ἢ ὅτι οἱ ἔχοντες περίττωμα καὶ ὑγρὸν ἐν αὐτοῖς οὐρητικοὶ γίνονται· ὅπερ ποιεῖ δύνασθαι πίνειν καὶ ὕστερον κούφως ἔχειν διὰ τὸ μὴ ἐμμένειν πολὺ ὑγρὸν οἰνώδες. οἱ μὲν οὖν ἀγύμναστοι ὑγροὶ καὶ περιττωματικοὶ εἰσιν, οἱ δὲ γεγυμνασμένοι ξηροί, ὥστ' εἰς τὸ σῶμα τούτοις ἡ ὑγρότης ἡ οἰνηρὰ ἀφικνεῖται. εὐθύς τε οὖν ἀντισπᾷ τῇ οὐρήσει ἡ φορὰ αὕτη, καὶ ὕστερον ἐμμένον τὸ ὑγρὸν τοῦτο ἐν τῷ σώματι βάρος ποιεῖ.

Διὰ τί ὁ οἶνος καὶ τετυφωμένους ποιεῖ καὶ μανικούς; ἐναντία γὰρ ἡ διάθεσις· ὁ μὲν γὰρ μᾶλλον ἤδη ἐν κινήσει, ὁ δὲ ἤττον. ἢ ὥσπερ Χαιρήμων εἶπε, “τῶν χρωμένων γὰρ τοῖς τρόποις κεράννυται.” τὰναντία οὖν ποιεῖ οὐ ταῦτ' ἀλλὰ τὰ μὴ ὁμοίως ἔχοντα, ὥσπερ καὶ τὸ πῦρ τὰ μὲν ξηραίνει τὰ δὲ ὑγραίνει, ἀλλ' οὐ ταῦτά, καὶ τήκει τὸν κρύσταλλον καὶ πήγνυσι τοὺς ἄλλας. καὶ ὁ οἶνος (ὑγρὸς γὰρ ἐστὶ τὴν φύσιν) τοὺς μὲν βραδυτέρους ἐπιτείνει καὶ θάττους ποιεῖ, τοὺς δὲ θάττους ἐκλύει. διὸ ἔνιοι τῶν μελαγχολικῶν τῇ φύσει ἐν ταῖς κραιπάλαις ἐκκελυμένοι γίνονται πάμπαν. ὥσπερ γὰρ τὸ λουτρὸν τοὺς μὲν συνδεδεμένους τὸ σῶμα καὶ σκληροὺς εὐκινήτους ποιεῖ, τοὺς δὲ εὐκινήτους καὶ ὑγροὺς ἐκλύει, οὕτως ὁ οἶνος, ὥσπερ λούων τὰ ἐντός, ἀπεργάζεται τοῦτο.

Διὰ τί ἡ κράμβη παύει τὴν κραιπάλην; ἢ ὅτι τὸν [873b] μὲν χυλὸν γλυκὺν καὶ ῥυπτικὸν ἔχει (διὸ καὶ κλύζουσιν αὐτῷ τὴν κοιλίαν οἱ ἰατροί), αὕτῃ δ' ἐστὶ ψυχρά. σημεῖον δέ· πρὸς γὰρ τὰς σφοδρὰς διαρροίας χρῶνται αὐτῇ οἱ ἰατροί, ἔψοντες σφόδρα καὶ ἀποξηλίζοντες καὶ ψύχοντες. συμβαίνει δὲ τῶν κραιπαλώντων τὸν μὲν χυλὸν αὐτῆς εἰς τὴν κοιλίαν κατασπᾶν τὰ ἐν αὐτοῖς ὑγρά, οἰνηρὰ καὶ ἄπεπτα ὄντα, αὐτὴν δὲ ὑπολειπομένην ἐν τῇ ἄνω κοιλίᾳ ψύχειν τὸ σῶμα. ψυχομένου δὲ ὑγρά λεπτὰ συμβαίνει εἰς τὴν κύστιν φέρεσθαι. ὥστε κατ' ἀμφοτέρω τῶν ὑγρῶν ἐκκρινομένων διὰ τοῦ σώματος, καὶ καταψυχομένου, εἰκότως ἀκραίπαλοι γίνονται· ὁ γὰρ οἶνος ὑγρὸς καὶ θερμὸς ἐστίν. ἔτι δὲ συμβαίνει τῶν ὑγρῶν κατασπωμένων καὶ ἐκκρινομένων κάτω καὶ πνεῦμα ἐπάγεσθαι αὐτοῖς, ὅπερ μόνον ἀπὸ τοῦ οἴνου εἰς τὴν κεφαλὴν φερόμενον τὸν κάρον καὶ τὴν κραιπάλην ποιεῖ. κάτω δὲ ὁρμήσαντος καὶ καταψυχομένου τοῦ σώματος διὰ τὰ εἰρημένα, λύεται ὁ τῆς κραιπάλης πόνος. ἔστι γὰρ ἡ κραιπάλη ζέσις τις καὶ φλεγμασία λήγουσα. λυπεῖ δὲ μᾶλλον τῆς μέθης, ὅτι ἐκείνη μὲν ἐξίστησιν, ἡ δὲ κραιπάλη ἐν αὐτοῖς οὕσι τὸν πόνον παρέχει· καθάπερ οὖν καὶ ὑπὸ τῶν πυρετῶν οἱ λαμβανόμενοι παίζουσι μᾶλλον

ἢ ἀλγοῦσι, παρ' αὐτοῖς δὲ γενόμενοι οἱ αὐτοί, κουφισθέντες τοῦ πάθους, ἀλγοῦσιν. ταῦτ' ἄρα καὶ ἐπὶ τῆς κραιπάλης καὶ ἐπὶ τῆς μέθης συμβαίνει.

Διὰ τί μᾶλλον ἐμετιᾶν ποιεῖ ὁ ὑδαρῆς οἶνος ἢ τὸ ὕδωρ καὶ ὁ ἄκρατος; ἢ ὅτι ἐμεῖν μὲν μάλιστα ποιεῖ τὰ ἐπιπολαστικὰ καὶ ὅσα ἀηδῆ ἐστίν. ἔστι δὲ ὁ μὲν οἶνος κατακρουστικός, τὸ δὲ ὕδωρ λεπτὸν καὶ οὐκ ἀηδές. διὰ μὲν οὖν τὸ λεπτὸν [καὶ οὐκ ἀηδές] εἶναι κάτω διέρχεται ταχύ, διὰ δὲ τὸ μὴ ἀηδές οὐ ποιεῖ καρδιώττειν. ὁ δὲ κεκραμένος λίαν οὐκ ἔστι λεπτὸς ὥστε διαρρεῖν ταχύ, διὰ δὲ τὸ μικρὸν ἔχειν οἴνου ἀηδῆς ἐστίν· ταράττει γὰρ τὴν αἴσθησιν τῷ πλείους ἐν αὐτῇ τὰς κινήσεις ἐμποεῖν, τὴν τ' ἀπὸ τοῦ οἴνου καὶ τοῦ ὕδατος αἰσθηταὶ γὰρ ἄμφω γίνονται. ὁ δ' εὐκράτος τὴν μὲν τοῦ ὕδατος αἴσθησιν ἀφανίζει, οἴνου δὲ μαλακοῦ ποιεῖ αἴσθησιν· διὸ ἡδέως πίνεται. ἀηδῆς δὲ ὢν ὁ ὑδαρῆς οἶνος ἐπιπολαστικός ἐστίν· τὸ δὲ τοιοῦτον ἐμετικόν ἐστίν.

Διὰ τί μεθύοντες μᾶλλον διαισθανόμεθα τὰ ἀλυκὰ [874a] καὶ τὰ μοχθηρὰ ὕδατα, νήφοντες δ' ἥττον; ἢ ὅτι τὰ λυπηρὰ μᾶλλον δῆλα τοῖς μὴ ἐπιθυμοῦσι, τοὺς δ' ἐπιθυμοῦντας διαλανθάνει; ὁ μὲν οὖν ἡδέως ἔχων ὁμοίως τῷ ἐπιθυμοῦντι ἔχει, ὁ δὲ νήφων οὕτως ἔχει· ὁ δὲ μεθύων πλήρης.

Διὰ τί τοῖς μεθύουσι σφόδρα κύκλω πάντα φαίνεται φέρεσθαι, καὶ ἤδη ἀπτομένης μᾶλλον τῆς μέθης ἀριθμεῖν τὰ πόρρω οὐ δύνανται; διὸ καὶ σημεῖον τῆς μέθης ποιοῦνται αὐτό τινες. ἢ ὅτι κινεῖται ὑπὸ τῆς θερμότητος τοῦ οἴνου ἢ ὅψις πυκνάκις; ὥσπερ οὖν ὅταν ὑποθῇ τις ὑπὸ τὸν ὀφθαλμόν, δύο φαίνεται, οὕτω καὶ τοῖς μεθύουσιν. οὐδὲν γὰρ διαφέρει, ἐὰν μὲν ὑποθῇ, κινῇ δὲ τὴν ὄψιν, οὐδ' ἐὰν ἔξωθεν ἢ ἔσωθεν· ἀμφοτέρως γὰρ τὸ αὐτὸ πάσχει ἢ ὄψις. ὥστε οὐ δόξει μένειν τὸ ὀρώμενον, καὶ τὸ πόρρωθεν ἔτι μᾶλλον· ἔτι γὰρ ἥττον κρατεῖ ἀποτεينوμένης τῆς ὀψεως, καὶ πλεον τὸ διάστημα ἐπὶ τῷ ἄκρῳ ποιεῖ ἢ ἐγγὺς αὕτη κίνησις. ἂν δὲ σφόδρα κινῇται καὶ ὁμαλῶς ἄνω καὶ κάτω, ἥττον κρατήσῃ τοῦ πόρρω. πάντα δὲ ἀποτεινόμενα κύκλω φέρεται, οἶον οἱ ὀῖστοι καὶ τὰ καταρτώμενα. καὶ ἡ ὄψις οὖν δι' ἀσθένειαν ταῦτ' ἀσχεῖ ὥσπερ ἂν εἰ πόρρω ἐφέρετο. διαφέρει δ' οὐδὲν τὴν ὄψιν κινεῖν ἢ τὸ ὀρώμενον· ταῦτ' ἄρα ποιεῖ πρὸς τὸ φαίνεσθαι.

Διὰ τί, ὅταν ἀθρόως πίνωσι, ξηρότεραι αἱ κοιλίαι γίνονται, ὅτε δεῖ ὑγραίνεσθαι μᾶλλον ὑπὸ τοῦ πλείονος; ἢ ὅτι τοῦ μὲν πολλοῦ καὶ ἀθρόου οὐ κρατεῖ ἡ κοιλία, ἀλλ' εἰς τὸν αὐτοῦ ἔρχεται τόπον ἀπαθές; ἔστι δὲ ὑγροῦ τόπος ἀπέπτου ἢ κύστις. τοῦ δὲ ὀλίγου κρατεῖ καὶ πέττει, ὥστε μένον ὑγραίνει.

Διὰ τί μᾶλλον κραιπαλῶσιν οἱ εὐκρατον πίνοντες ἢ οἱ ἄκρατον; ἢ διὰ τὴν λεπτότητα εἰς πλείους τόπους ὁ κεκραμένος εἰσέρχεται, καθάπερ ἐν τοῖς ἱματίοις, καὶ ἔστι δυσεξαγωγότερος· τὸ δὲ ὕδωρ λεπτομερέστερον μὲν, ἀλλ' εὐέξοδον. ἢ διότι ἔλαττον πίνουσιν ἄκρατον διὰ τὸ μὴ δύνασθαι, καὶ μᾶλλον ἀπεμοῦσιν; ἔτι δὲ συμπέττει τὰ λοιπά. ταῦτ' οὖν ἐστὶ πρόβλημα.

Διὰ τί ὑπὸ τοῦ ἀκράτου ἀποθνήσκουσιν, ἐάν τις προῖσχνάνας πολὺ πῖνῃ; καὶ μὴ προῖσχνάναντες δὲ πολλοὶ τῶν φιλοπότων ἀθρόον πολὺ πίνοντες ξηροὶ γίνονται· δοκεῖ γὰρ ὅτε οἶνος τῶν θερμῶν εἶναι τὴν φύσιν καὶ τὸ ζῆν, τὸ δὲ [874b] ἀποθνήσκειν κατάψυξις. ἢ ὥσπερ καὶ ἀπὸ τοῦ κωνείου, σβεννυμένου κατὰ μικρὸν τοῦ θερμοῦ τοῦ οἰκείου. ἀλλὰ τρόπον ἕτερον· τὸ μὲν γὰρ τῇ ψυχρότητι πῆγνυσι τὸ ὑγρὸν καὶ θερμόν, ὃ δ' οἶνος τῇ θερμότητι τῇ αὐτοῦ μαραίνει τὴν φυσικὴν θερμότητα. ὥσπερ οὖν ὑπὸ τοῦ πολλοῦ πυρὸς καὶ ἡλίου τὸ ὀλίγον πῦρ ἀποσβέννυται, οὕτως ἢ ἐν τοῖς σώμασι θερμότης ὑπὸ τῆς ἐν τῷ οἴνῳ, ἐάν ὑπερβάλλῃ.

Διὰ τί οἱ μεθύοντες ἀριδάκρυοι μᾶλλον; ἢ ὅτι θερμοὶ καὶ ὑγροὶ γίνονται· ἀκρατεῖς οὖν εἰσίν, ὥστε ὑπὸ μικρῶν κινεῖσθαι.

Διὰ τί ἦττον μεθύσκονται ταῖς μεγάλαις κωθωνιζόμενοι; πάντων γὰρ ταῦτ' αἴτιον ἢ κατάκρουσις, τουτέστιν ἐπιπολῆς. τὸ μὲν γὰρ μεθύειν ἐν τοῖς περὶ κεφαλὴν τόποις. ἢ ὅτι δεῖ πρὸς τοὺς ὕπνους ὑγρότητα ἐνυπάρχειν θερμῇ; αὕτη γὰρ εὐπεπτος. ἂν δὲ μὴ ἐνῇ ὑγρότης ὀλίγη ἢ δύσπεπτος, οὐ γίνεται ὕπνος. διὸ ἐν τοῖς κόποις καὶ μετὰ τὰ σιτία καὶ τοὺς πότους ὑπνωτικώτατοι γίνονται ὑπὸ τῆς θερμῆς. τοῖς δὲ μελαγχολικοῖς καὶ τοῖς μεγάλας πυρίας ἀγρυπνία, τοῖς μὲν ὅτι κατέψυκται τὸ ὑγρὸν, τοῖς δὲ ὅτι οὐκ ἔστιν ἢ ὀλίγον. φανερόν οὖν ὅτι εἰς ταῦτα βλεπτέον καθ' ἕτερον τῶν παθῶν.

Διὰ τί οἱ οἰνόφλυγες τρέμουσι, καὶ μᾶλλον ὅσω ἂν ἀκρατοποτῶσιν; ἔστι δὲ ὁ μὲν οἶνος θερμαντικός, ὃ δὲ τρόμος γίνεται μάλιστα ὑπὸ ψυχροῦ, διὸ οἱ ῥιγῶντες μάλιστα τρέμουσιν. πολλοῖς δ' ἤδη χρωμένοις μόνῳ ἀκράτῳ τροφῆς χάριν τρόμοι τε ἰσχυροὶ συνέβησαν, ὥστε ἀπορρίπτειν τοὺς θλίβοντας, καὶ τῷ θερμῷ ὕδατι λουόμενοι ἀναισθήτως εἶχον. ἕτεροι δὲ τοῦτον τὸν τρόπον διαιτώμενοι, καὶ τρίψεσι χρωμένοι καὶ τροφῇ κρέασι, πρὸς ἀποπληκτικὰς ἀρρωστίας ἤλασαν· οἷς τρόμοι μὲν διὰ τὴν ἀκίνησίαν ἦττον ἐνέπιπτον, πόνος δὲ ἰσχυρὸς καὶ τὸ μὴ δύνασθαι ἡσυχάζειν. ἔτι τοῦ μὲν τρόμου αἰτία ἢ ψυχρότης· φαίνονται γὰρ, ὥσπερ εἴρηται, οἱ τε ῥιγῶντες τοῦτο πάσχοντες καὶ οἱ σφόδρα γέροντες. ἀμφοτέρων δὲ τούτων τῶν μὲν τὸ πάθος ψυχρόν, τῶν δὲ ἢ ἡλικία· ὃ δὲ οἶνος θερμαντικώτατος, ὥσθ' ὑπεναντίον ἂν τι συμβαίνοι. ἢ

οὐθὲν κωλύει γίνεσθαι ταὐτὸ ὑπὸ ἐναντίων, μὴ ὡσαύτως δὲ ποιούντων, οἶον καὶ ὑπὸ τῶν πάγων ἀποκάεται καὶ ὑπὸ θερμοῦ, ὅταν ὁ πάγος ἀθρόον ποιήσῃ τὸ [875a] θερμόν· ὥστ' ἔστι μὲν ὡς ὑπ' ἐναντίων τὸ πάθος τὸ αὐτὸ συμβαίνειν, ἔστι δὲ ὡς ὑπὸ τοῦ αὐτοῦ τὸ αὐτό. ὁ δὲ τρόμος γίνεται μὲν ὑπ' ἐνδείας θερμοῦ, οὐ παντὸς ἀλλὰ τοῦ οἰκείου. φθείρεται δὲ τὸ θερμὸν ἢ μαράνσει ἢ σβέσει, σβέσει μὲν ὑπὸ τῶν ἐναντίων, ὑπὸ ψυχροῦ καὶ ὑγροῦ, μαράνσει δὲ ἐνδεία τροφῆς, οἶον οἱ λύχνοι, ὅταν μὴ ἔχωσιν ὑπέκκαυμα μηδ' ἔλαιον· ἢ ὑπὸ θερμοῦ ἀλλοτρίου, οἶον τὸ πῦρ ἐν τῷ ἡλίῳ καὶ οἱ λύχνοι παρὰ τῷ πυρί. οἱ μὲν οὖν ῥιγῶντες ὑπὸ ψυχροῦ σβεννυμένου τοῦ θερμοῦ τρέμουσιν. διὸ καὶ τοῖς προσχεομένοις τὸ θερμὸν αἱ φρεῖς γίνονται· ἐγκατακλειόμενον γὰρ τὸ ψυχρὸν εἴσω καὶ ἀντιπεριστάμενον ἴστησι τὰς τρίχας· καὶ τῷ ἀρχομένῳ πυρέττειν τὸ γινόμενον ῥῖγος δι' ὁμοίαν αἰτίαν γίνεται. ἐν δὲ τῷ γήρᾳ τὸ θερμὸν μαραίνεται τῆς τροφῆς ὑπολειπούσης. τροφή μὲν γὰρ ὑγρὸν τῷ θερμῷ, τὸ δὲ γήρας ψυχρὸν. οἱ δὲ οἰνόφυλγες μαραινομένης μὲν τῆς οἰκείας θερμότητος τρέμουσιν, κἂν εἴ τις ἄλλοι τοῦτο πάσχουσι διὰ τὸν οἶνον, οὐ τὸν αὐτὸν δὲ τρόπον τοῖς διὰ γήρας, ἀλλ' ἔτι τρίτος ἦν τρόπος τῆς τοῦ θερμοῦ φθορᾶς. ὅταν γὰρ ὑπερβάλλοντι χρῶνται ἐν τῷ σώματι, πολλὴ οὖσα ἡ θερμότης ἢ ἀποσβέννυσιν ἢ ἀσθενῇ ποιεῖ τὴν οἰκείαν θερμότητα ἢ ἰσχύομεν· ἔστι γὰρ ὅταν μὴ κρατῇ τὸ κινεῖν τοῦ κινουμένου, οἶον ὅταν ξύλον μακρὸν καὶ μέγα μὴ εὐκρατῶς ἔχη τις, τὸ ἄκρον τρέμει. γίνεται δὲ τοῦτο ἢ τῷ τὸ ἐχόμενον μεῖζον εἶναι ἢ τῷ τὸ κινεῖν ἔλαττον. συμβαίνει δὲ σβεννυμένου τοῦ θερμοῦ (δοκεῖ γὰρ αἴτιον τοῦτο εἶναι τοῦ κινεῖσθαι τοῖς ζώοις) μὴ κρατεῖν τὴν φύσιν. σημεῖον δ' ὅτι διὰ ψυχρότητα γίνεται τὸ πάθος τοῖς οἰνόφυλξι καὶ τοῖς πρεσβύταις, ὅτι ἄνευ ῥίγους γίνεται ὁ τρόμος.

Διὰ τί ὁ ἀκροθώραξ μᾶλλον παροινεῖ τοῦ μᾶλλον μεθύοντος καὶ τοῦ νήφοντος; ἢ ὅτι ὁ μὲν νήφων εὖ κρίνει, ὁ δὲ παντάπασιν μεθύων διὰ τὸ τὰς αἰσθήσεις ἐπιπεπλασμένας εἶναι, οὐ δυνάμενος τὸ βάρος φέρειν, οὐ κρίνει· οὐ κρίνων δὲ οὐ παροινεῖ. ὁ δὲ ἀκροθώραξ κρίνει τε καὶ διὰ τὸν οἶνον κακῶς κρίνει, ὥστε παροινεῖ· ὥσπερ καὶ Σάτυρον τὸν Κλαζομένιον ὄντα φιλολοῖδορον, φεύγοντα δίκην, ἵνα ὑπὲρ τοῦ πράγματος λέγῃ καὶ μὴ λαιδορῇται, τὰ ὥτα ἐπέπλασαν, ἵνα μὴ ἀκούων εἰς λαιδορίαν τρέπηται· παυομένου δὲ τοῦ ἀντιδίκου ἀφεῖλον· μικρὰ δὲ ἀκούσας ἔτι λέγοντος οὐκ ἀπέσχετο ἀλλὰ κακῶς ἔλεγε, διὰ τὸ αἰσθάνεσθαι μὲν κακῶς δὲ κρίνειν.

[875b] Διὰ τί πρὸς τὸν γλυκὺν οἶνον ἡδίων ὄντα οὐ γίνονται οἰνόφυλγες; ἢ ὅτι οὐκ ἴδιον χυμὸν ἔχει ὁ γλυκύς, ἀλλ' ἀλλότριον; φιλόγλυκός οὖν μᾶλλον ἢ φίλοινος ἔσται ὁ κεκρατημένος.

Διὰ τί οἱ οἰνόφυλγες ὑπὸ τοῦ ἡλίου θερμαινόμενοι μάλιστα χαίρουσιν; ἢ ὅτι δέονται πέψεως; ἔτι δὲ καὶ διὰ τὸ κατεψύχθαι· διὸ καὶ αἱ ἀποπληξίαι καὶ αἱ ἀποναρκώσεις τάχιστα μετὰ τοὺς πότους γίνονται.

Διὰ τί τοῖς μεθύουσιν ἐνίοτε πολλὰ φαίνεται τὸ ἐν ὀρώσιν; ἢ ὅτι αἱ ἀρχαὶ τῶν ὕψων ἔσω μὲν κινουῦνται ὑπὸ τοῦ οἴνου, καθάπερ ἡ ὅλη κεφαλὴ, κινουμένων δὲ τῶν ἀρχῶν οὐκ εἰς ταὐτὸ συμβάλλουσιν αἱ ὕψεις, ἀλλ' οἶον ἐπὶ μέρος ἐκάτερον τοῦ ὀρωμένου· διὸ δύο φαίνεται. ταὐτὸ δὲ τοῦτο γίνεται καὶ ἐάν τις κάτωθεν πῆσῃ τὴν ὕψιν· ἐκίνησε γὰρ τὴν ἀρχὴν τῆς ὕψεως, ὥστε μηκέτι εἰς ταὐτὸ συμβάλλειν τῇ ἐτέρᾳ. ἡ μὲν οὖν τοιαύτη κίνησις ἔξωθεν γίνεται, ἡ δὲ ἀπὸ τοῦ οἴνου ἔσωθεν. διαφέρει δ' οὐθέν· ταῦτά γὰρ ποιήσει ὅπως οὖν κινηθεῖσα.

Διὰ τί τῶν μεθυόντων ἡ γλῶττα πταίει; πότερον ὅτι καθάπερ τὸ ὅλον σῶμα ἐν τῇ μέθῃ σφάλλεται, οὕτω καὶ ἡ γλῶττα σφαλλομένη πταίει καὶ οὐ δύναται τὴν λέξιν διαρθροῦν; ἢ σπογγώδης ἐστὶν ἡ τῆς γλώττης σὰρξ· βρεχομένη οὖν ἐξαίρεται· τούτου δὲ συμβαίνοντος διὰ τὸ πάχος τὸ ἀπὸ τοῦ ὄγκου δυσκίνητοτέρα οὕσα οὐ δύναται διακριβοῦν. ἢ διότι οὔτε ἐν τῷ ὑγρῷ δυνάμεθα λαλεῖν διὰ τὴν ἀπουσίαν τοῦ ἀέρος, οὔθ' ὅταν εἰς τὸ στόμα λάβωμεν ὑγρόν; ἐν τῇ μέθῃ οὖν ἐν ὑγρῷ πολλῷ τῆς γλώττης οὔσης οὐκ ἀκριβοῦμεν· τὸ δὲ μὴ ἀκριβοῦν ἐστὶ τὸ πταίνειν. ἢ διότι ἐν ταῖς μέθαις ἡ ψυχὴ συμπαθὴς γινομένη πταίει; τῆς ψυχῆς οὖν τοῦτο πασχούσης εἰκὸς καὶ τὴν γλῶτταν ταὐτὸ πάσχειν· ἀπ' ἐκείνης γὰρ ἡ τοῦ λέγειν ἀρχή. διὸ καὶ χωρὶς τῆς μέθης, ὅταν ἡ ψυχὴ πάθῃ τι, συμπάσχει καὶ ἡ γλῶττα, οἶον τῶν φοβουμένων.

Διὰ τί οἱ οἰνόφυλγες καὶ οἱ περὶ τὴν θάλατταν χαίρουσιν ἡλίω; ἢ διότι οἱ μὲν οἰνόφυλγες δέονται πέψεως, καὶ ἅμα συμβαίνει τινὰς τόπους κατεψύχθαι; διὸ καὶ ἀποπληξίαι καὶ ἀποναρκώσεις μετὰ τοὺς πότους. οἱ δὲ θαλάττιοι διὰ τὸ ἀεὶ ἐν ὑγρῷ εἶναι τοῦτο ποιοῦσιν.

Διὰ τί οἱ μεθύοντες ἀδύνατοι ἀφροδισιάζουσιν; ἢ ὅτι δεῖ μᾶλλον τινα τόπον ἐκθερμανθῆναι τοῦ ἄλλου σώματος, [876a] οἱ δὲ διὰ τὸ πλῆθος τῆς θερμασίας ἀδυνατοῦσιν. ἀποσβέννυται οὖν τὸ ἀπὸ τῆς κινήσεως, θερμὸν γινόμενον ὑπὸ τοῦ περιέχοντος. ἢ διότι δεῖ μὲν ἐκθερμανθῆναι τοὺς κάτω τόπους, ὃ δ' οἶνος ἄνω πέφυκε φέρεσθαι, ὥστε ἐκεῖ ποιεῖ τὴν θερμασίαν, ἐντεῦθεν δὲ ἀπάγει. καὶ μετὰ τὰ σιτία ἥκιστα ἀφροδισιαστικοί, καὶ κελεύουσιν ἀριστᾶν μὲν πολὺ δειπνεῖν δὲ ὀλίγον· ἀπέπτων μὲν γὰρ ὄντων ἄνω φέρεται, πεπεμμένων δὲ κάτω τὸ θερμὸν καὶ τὸ ὑγρόν· ἡ δὲ τοῦ σπέρματος γένεσις ἐκ τούτων. καὶ οἱ κοπιῶντες ἐξονειρώττουσιν, ὅτι ὑγρὸς καὶ θερμὸς ὁ κόπος· ἐάν οὖν ἐν τῷ

τόπω τούτω γένηται ἢ περίττωσις, συμβαίνει ἐξονειρώττειν. διὰ ταῦτό δὲ καὶ ἐπὶ τοῖς ἀρρωστήμασιν, ὅσοις γίνεται, συμβαίνει. καὶ τοῖς φοβουμένοις καὶ τοῖς ἀποθνήσκουσι συμβαίνει ὡσαύτως.

Διὰ τί νέοι ὄντες ἐνουροῦσι μᾶλλον, ὅταν μεθυσθῶσιν, ἢ πρεσβύτεροι; ἢ διὰ τὸ θερμοὺς καὶ ὑγροὺς εἶναι πολὺ τὸ συρρυέν γίνεται περίττωμα, διὰ τὸ μὴ ἀναλίσκειν τὸ σῶμα τὸ ὑγρόν, ὥστε ὑπερχεῖται· πρεσβυτέροις δὲ γινομένοις διὰ ξηρότητα τὴν ὑπερβολὴν ἀντισπᾶ τὸ σῶμα. ἢ ὅτι μᾶλλον ὑπνωτικώτεροί εἰσιν οἱ νέοι τῶν πρεσβυτέρων; διὸ τοὺς μὲν νέους καθύπνους ὄντας λανθάνει ἡ ὁρμὴ τοῦ οὔρου ἐκπίπτουσα πρὶν διεγερθῆναι, τοὺς δὲ πρεσβυτέρους οὐ, καθάπερ οὐδὲ τῶν ἔξωθεν κινήσεων οὐδὲν ἥττον τι λανθάνει αὐτοὺς ἢ τοὺς νέους. δῆλον δέ· καὶ γὰρ αὐτοὶ οἱ νέοι ἐν τοῖς βαθυτάτοις ὕπνοις μάλιστα ἐνουροῦσιν.

Διὰ τί τὸ ἔλαιον πρὸς τὰς μέθας συμφέρει, καὶ τοῦ δύνασθαι πίνειν τὸ καταρροφεῖν; ἢ διότι οὐρητικόν ἐστι καὶ τῷ πόματι προοδοποιεῖ;

♦ ἦν μείζω διέρχεται.

♦ iv.

## Δ. ΟΣΑ ΠΕΡΙ ΑΦΡΟΔΙΣΙΑ.

Διὰ τί ὁ ἀφροδισιάζων καὶ ὁ ἀποθνήσκων ἀναβάλλει τὰ ὄμματα, καθεύδων δὲ καταβάλλει; ἢ διότι ἄνωθεν τὸ θερμὸν ἐξιδὼν ἀναστρέφει ἵνα περ ὀρῃ· ἐν δὲ τῷ ὑπνῷ κάτω συνάγεται, διὸ ῥέπει κάτω; συγκλείονται δὲ οἱ ὀφθαλμοὶ παρὰ τὸ μὴ ὑπάρχειν ἔτι νοτίδα.

Διὰ τί τῶν πλείοσιν ἀφροδισίοις χρωμένων ἐπιδηλότατα ἐνδίδωσι τὰ ὄμματα καὶ τὰ ἰσχία, τὰ μὲν ἐγγὺς ὄντα, τὰ δὲ πόρρω; πότερον ὅτι καὶ ἐν αὐτῇ τῇ συνουσίᾳ ἐπιδηλότατα συμπονεῖ ταῦτα τῇ ἐργασίᾳ συνιόντα περὶ [876b] τὴν πρόεσιν τοῦ σπέρματος; συνεκθλίβεται οὖν μάλιστα ἐντεῦθεν ὅσον εὐτηκτον τῆς τροφῆς ἔνεστι διὰ τὴν θλίψιν. ἢ διότι παραθερμαινόμενα τήκεται μάλιστα· ὁ δὲ ἀφροδισιασμὸς θερμότητα ἐργάζεται. μάλιστα δὲ ταῦτα θερμαίνεται, ἃ κινεῖται ἐν τῇ ἐργασίᾳ. οἱ δὲ ὀφθαλμοὶ καὶ τὰ περὶ τὴν ἔδραν ἐπιδήλως συμπονεῖ. οὔτε γὰρ μὴ συναγαγόντι τὰ περὶ τὴν ἔδραν ἐνδέχεται προέσθαι, οὔτε μὴ τῶν ὀφθαλμῶν καταβληθέντων· τὰ μὲν γὰρ περὶ τὴν ἔδραν συνιόντα θλίβει, οἷον ἐκ κύστεως τῇ χειρὶ τὸ ὑγρόν, ἢ δὲ τῶν ὀφθαλμῶν συναγωγή τὰ ἀπὸ τοῦ ἐγκεφάλου. ὅτι δὲ μεγάλην ἔχουσι τὰ ὄμματα τὴν δύναμιν καὶ ὁ τόπος αὐτῶν πρὸς γένεσιν, δηλοῖ ἢ τῶν ἀτέκνων καὶ γονίμων γυναικῶν τοῖς ἐναλείμμασι πεῖρα, ὥς δέον ταύτῃ διελθεῖν εἰς τὸ σπέρμα δύναμιν. πίονα δὲ ἄμφω τυγχάνει ὄντα πάντων ἀεί, ἀρχός τε καὶ ὄμματα· διὰ μὲν οὖν τὴν συνεργίαν κοινωνεῖ τῆς θερμασίας, διὰ δὲ ταύτην λεπτύνεται καὶ συναποκρίνεται πολὺ εἰς τὸ σπέρμα. οὔτε γὰρ, ἂν μὴ πῖον ᾗ, ὁμοίως γρύσει ἢ θερμότης, οὔτε πῖον ὄν μὴ συμπονοῦν, οἷον ἐν τῇ κοιλίᾳ· ἀλλὰ οἱ νεφροὶ τῶν ἄλλων μάλιστα αἰσθάνονται διὰ τὴν γεινίασιν. καὶ αὕτη δὲ ἢ τοῦ σπέρματος πάροδος παρὰ τοὺς τόπους τούτους οὔσα ἐπιδηλότατα ἱκανή ἐστι λεπτύνειν· ἀφαιρεῖ γάρ, ἀλλ' οὐ προστίθησι πλησιάζουσα.

Διὰ τί καὶ οἱ ἀφροδισιάζοντες καὶ οἱ εὐνοῦχοι οὐ χρώμενοι ἀφροδισίοις ὁμοίως ἀμφότεροι τὰ ὄμματα πρὸς ὀξυωπίαν βλάπτονται; ἢ ὅτι τοῖς μὲν διὰ λαγνείαν, τοῖς δὲ διὰ τὴν πῆρωσιν τὰ ἄνω ξηρὰ γίνεται μᾶλλον τοῦ δέοντος, ἐπιδηλότατα δ' ἐν τούτοις, ὅσων τὸ ἔργον ἐστὶν ἀκριβές· ἢ δ' ὅψις τοιοῦτον. κατασπωμένων δὲ τῶν ὑγρῶν τὰ ἄνω ξηραίνεται. ὁ μὲν οὖν ἀφροδισιασμὸς δῆλον ὅτι τοῦτο ποιεῖ· τοῖς δὲ εὐνοῦχοις τὰ τε σκέλη οἶδεῖ καὶ αἱ κοιλίαι εὐλυτοὶ ὥς κάτω μεθισταμένου τοῦ ὑγροῦ.

Διὰ τί ἄνθρωπος μόνον, ὅταν ἀρχηται δύνασθαι ἀφροδισιάζειν, ἡβᾷ, τῶν δὲ ἄλλων ζώων ὅσα τρίχας ἔχει οὐθέν; ἢ ἐπειδὴ κατὰ τὰς ἡλικίας μεταβάλλει



τὰ ζῶα εἰς τοῦναντίον; φωνή τε γὰρ βαρεῖα ἐξ ὀξείας γίνεται, καὶ δασύνεται ἐκ ψιλῶν· δῆλον οὖν ὡς καὶ τὰ ἐκ γενετῆς δασέα ζῶα ψιλοῖτ' ἄν, οὐ δασύνονται, σπερματικὰ γινόμενα. οὐ πάσχει δὲ τοῦτο διὰ τὸ τὰ σπερμαίνοντα ξηρότερα γίνεσθαι καὶ [877a] ἀραιότερα, ἐξ ὧν θρῖξ φύεται. δῆλον δὲ ἐκ τοῦ μὴ ἐν ταῖς οὐλαῖς φύεσθαι τρίχας· στεγαναὶ γὰρ αἱ οὐλαί, ἀλλ' οὐκ ἀραιαί. μηδὲ τοῖς παιδίοις καὶ γυναιξίν· ὑγρὰ γὰρ καὶ ἄμφω, ἀλλ' οὐ ξηρά.

Διὰ τί ἡ ἀνυποδησία οὐ συμφέρει πρὸς ἀφροδισιασμούς; ἢ ὅτι τὸ μέλλον ἀφροδισιάζειν σῶμα δεῖ τὰ ἐντὸς θερμὸν εἶναι καὶ ὑγρόν; τοιοῦτον δὲ ἐν τοῖς ὕπνοις μᾶλλον ἢ ἐν τῷ ἐγρηγορέναι· διὸ καὶ ταχὺ καὶ ἄνευ ἐργασίας οἱ ἐξονειρωγμοὶ γίνονται, ἐγρηγοροῦσι δὲ μετὰ πόνου. ἅμα δὲ τὸ σῶμα τοιοῦτον καὶ οἱ πόδες ὑγρότεροι καὶ θερμότεροι· σημεῖον δέ, ὅτι καθευδόντων θερμοί, ὡς ἅμα τοῖς ἐντὸς οὕτως ἔχοντες. ἡ δ' ἀνυποδησία τοῦναντίον ποιεῖ· ξηραίνει γὰρ καὶ ψύχει. ὥστ', εἴτε ἀδύνατον μὴ θερμῶν ὄντων ἀφροδισιάσαι εἴτε χαλεπὸν, ἀνάγκη ἀσύμφορον εἶναι πρὸς τὴν τῶν ἀφροδισίων χρῆσιν.

Διὰ τί ἐκλύεται μάλιστα τῶν ζώων ἀφροδισιάσας ἄνθρωπος; ἢ διότι πλεῖστον προῖεται σπέρμα κατὰ λόγον τοῦ σώματος; διὰ τί δὲ πλεῖστον προῖεται; ἢ ὅτι ἥκιστα ἐκπονεῖ τὴν τροφήν καὶ φύσει ὑγρὸν καὶ θερμὸν ἐστὶ τῶν ζώων μάλιστα; ὧν τὸ μὲν ποιεῖ σπέρμα πολὺ, τὸ δὲ τὴν φύσιν σπερματικὴν ποιεῖ· καὶ γὰρ τὸ σπέρμα τοιοῦτόν ἐστιν, ἕως ἄν σώζηται.

Διὰ τί τοῦ ἀφροδισιάζειν γινομένου διὰ θερμότητα, τοῦ δὲ φόβου ὄντος ψυκτικοῦ καὶ τοῦ ἀποθνήσκειν, ἐνίοις, ὅταν γένωνται ἐν τούτοις τοῖς πάθεσι, σπέρμα προέρχεται; ἢ ὅτι ψυχομένων ἐνίων τόπων ἕτεροι ὑποθερμαίνονται, τὴν τε οἰκείαν ἔχοντες θερμότητα καὶ δεχόμενοι τὴν τῶν καταψυχομένων τόπων; ἅστε καταψυχομένων μὲν συμβαίνει, οὐ διὰ τὸ ψύχεσθαι μέντοι, ἀλλὰ διὰ τὸ θερμαίνεσθαι. δῆλον δὲ καὶ τῇ ὥσει· τῶν γὰρ φοβουμένων τὰ ἄνω λειφαιμεῖ, τὰ δὲ κάτω ὑγραίνεται, καὶ κοιλία καὶ κύστις λύεται. ὑπὸν οὖν τὸ θερμὸν ἐν μὲν τῷ φόβῳ κάτω, ἐν δὲ τῷ θανάτῳ κάτωθεν ἄνω, ἐξυγραῖνον τῇ θερμότητι ποιεῖ τὴν τοῦ σπέρματος ἔξοδον.

Διὰ τί οὐ δεῖ μὴ ὀργῶντα οὔτε ἀφροδισιάζειν οὔτε ἐμεῖν οὔτε πτάρνυσθαι οὔτε φῦσαν ἀφιέναι; ἢ ὅτι μὴ ὀργῶντες ὁμοίως ἔχομεν τοῖς ἐκ τῆς γῆς ἀνασπασμένοις, οἷς προσεκσπᾶται τι ἀλλότριον ἢ ἐγκαταλείπεται ἀποσπασθέν; ἅπαν δὲ ὃ δεῖ μὲν ἐξαρθῆναι, κολοβὸν δὲ ὑπολείπεται, [877b] πλείω χρόνον παρέξει πόνον. ἐάν τέ τις κινήσῃ τι ἀλλότριον, τοῦτο πόνον παρέξει, οὐκ ἐν τῇ αὐτοῦ χώρᾳ ὄν· ἃ συμβήσεται τοῖς μὴ ὀργῶσι ποιοῦσί τι τῶν εἰρημένων.

Διὰ τί νήσταις θᾶττον ἀφροδισιάζουσιν; ἢ διότι οἱ πόροι κενώτεροι οἱ τοῦ σώματος νήσταισι, πλήρεσι δὲ πλήρεις· κωλύουσιν οὖν τὴν εἰς τὸ σπέρμα ὑγρότητα διεξιέναι. δῆλον δὲ ἐπὶ τῆς κύστεως· οὐ γὰρ δύνανται πλήρους οὔσης ταχὺ ἀφροδισιάζειν.

Διὰ τί οἱ νέοι ὅταν πρῶτον ἀφροδισιάζειν ἄρχωνται, αἷς ἂν ὁμιλήσωσι, μετὰ τὴν πρᾶξιν μισοῦσιν; ἢ διὰ τὸ μεγάλην γίνεσθαι τὴν μεταβολήν; τῆς γὰρ συμβαινούσης ὕστερον ἀηδίας μεμνημένοι, ὡς αἰτίαν ἢ ἐπλησίασαν φεύγουσιν.

Διὰ τί οἱ ἱππεύοντες συνεχῶς ἀφροδισιαστικώτεροι γίνονται; ἢ ὅτι διὰ τὴν θερμότητα καὶ τὴν κίνησιν ταῦτὸ πάσχουσιν ὅπερ ἐν τῇ ὁμιλίᾳ; διὸ καὶ τῇ τῆς ἐπεχούσης ἡλικίας ἐπιδόσει περὶ τὰ αἰδοῖα μείζω τὰ μόρια ταῦτα γίνεται. ἀεὶ οὖν τῇ κινήσει ταύτῃ χρωμένων εὖροα τὰ σώματα γίνεται καὶ προωδοπεποιημένα πρὸς τὸν ἀφροδισιασμόν.

Διὰ τί, ὅταν ἄρξωνται ἀφροδισιάζειν δύνασθαι, οἱ χρῶτες ὄζουσι, πρότερον δ' οὐκ ὄζουσι πρὸ ἥβης οὔτε οἱ ἄνδρες οὔτε αἱ γυναῖκες; ἢ ὅτι τὰ ἄπεπτα τοὺς τε χυμοὺς ἀεὶ χεῖρους ἔχει (ἢ γὰρ ὀξύτερος ἢ ἀλμυρώτερος ἢ πικροτέρος) καὶ τὰς ὁσμάς δυσωδεστέρας, τὰ δὲ πεπεμμένα ἢ γλυκεῖς ἢ ἥττον ἀγλυκεῖς, καὶ τὰς ὁσμάς εὐωδεστέρας ἢ ἥττον δυσώδεις; τοῦτο δ' ἐστὶ δῆλον ἐπὶ πάντων θεωμένοις καὶ φυτῶν καὶ ζώων. ἀφαιρεθέντων δὲ τῶν εὐπέπτων, τὰ ὑπολειπόμενα ἄπεπτα, οἷον δὴ καὶ ἐπὶ τῆς τέφρας ἀναλωθέντος τοῦ γλυκέος πικρὰ ἢ κονία, καὶ ὁ ἰδρῶς ἀλμυρός. πέττει δὲ ἡ φυσικὴ θερμότης τὸ σπέρμα, ὃ μικρὸν ὄν πολλὴν ἔχει δύναμιν· ἐκ πολλοῦ γὰρ ὀλίγον συγκεκεφαλαίωται. διὸ ὅταν ἀπέλθῃ, ἐκλύονται ὡς ἐπὶ τὸ πολὺ μᾶλλον καὶ καταψύχονται· ὥστε ἀπεπτότεροι οἱ χυμοὶ γίνονται μᾶλλον, ἀναστομουμένων τῶν πόρων διὰ τὴν ἔκκρισιν αὐτοῦ. ἀλμυρώτεροι οὖν οἱ τῶν παίδων ἰδρῶτες καὶ δυσωδέστεροι διὰ τὴν ἀπεψίαν· καὶ ἐὰν τύχῃ τοιαύτη ἡ φύσις οὔσα ὥστε δυσώδη ἔχειν τὴν ὑπόστασιν τοῦ ἰδρῶτος, τούτοις μᾶλλον ἐπισημαίνει καὶ ἐν τοῖς τόποις τούτοις μάλιστα, οἷον μασχάλη, ἐν ᾧ μάλιστα καὶ τοῖς ἄλλοις.

[878a] Διὰ τί, ἐὰν μὲν ἐκ τοῦ σπέρματος τοῦ ἡμετέρου γένηται τὸ ζῶον, τοῦτο ἡμέτερον ἔκγονόν ἐστιν, ἐὰν δὲ ἐξ ἄλλου τινὸς ἢ μέρους ἢ ἀποκρίσεως, οὐχ ἡμέτερον; γίνεται γὰρ σηπομένων πολλὰ καὶ ἐκ τοῦ σπέρματος. τί δὴ οὖν, ἐὰν μὲν τοιοῦτον οἷον ἡμεῖς, ἡμέτερον, ἐὰν δὲ ἀλλότριον, οὐ; ἢ γὰρ ἅπαντα προσήκει ἢ οὐθέν. ἢ πρῶτον μὲν, ὅτι οὕτω μὲν ἐξ ἡμετέρου γίνεται, ἐκείνως δὲ ἐξ ἀλλοτρίου, ὅσα ἐξ ἀποκαθάρματος γίνεται καὶ ἐκκρίσεως; καὶ ὅλως οὐθὲν τῶν τοῦ ζώου ζῶον γεννᾷ ἀλλ' ἢ τὸ σπέρμα.

τὸ δὲ βλάπτον καὶ τὸ κακὸν οὐθενός ἐστιν οἰκεῖον, οὐδὲ τὸ ἀλλότριον· οὐ γὰρ ταῦτ' οὗτου τι εἶναι καὶ τούτου ἀλλότριον ἢ ἕτερον ἢ κακόν. αἱ δὲ ἐκκρίσεις καὶ σήψεις οὐχ ἡμέτερα, ἀλλ' ἕτερα καὶ ἀλλότρια τῆς φύσεως ἡμῶν εἰσίν. οὐ γὰρ ὅσα ἐν τῷ σώματι γίνεται, τοῦ σώματος θετέον, ἐπεὶ καὶ φύματα γίνεται, ἃ αἴρουσι καὶ ἐκβάλλουσιν. καὶ ὅλως ὅσα παρὰ φύσιν, πάντα ἀλλότρια· παρὰ φύσιν δὲ πολλὰ καὶ τῶν συγγινομένων ἐστίν. εἰ οὖν ἐκ μόνου τούτου τῶν ἡμετέρων γίνεται ζῶον, ὀρθῶς ἂν τὸ ἐκ τούτου γινόμενον ἔκγονον ἡμέτερον εἴη μόνον. καὶ ἐκ τοῦ σπέρματος δὲ ἂν τι ἄλλο γένηται, οἶον σκώληξ σαπέντος, ἢ καὶ ἐν τῇ μήτρᾳ διαφθαρέντος, οἶον ἃ λέγεται τέρατα, οὐκ ἔκγονα λεκτέον. ὅλως γὰρ ἐκ διεφθαρμένου γινόμενα οὐκέτι ἐξ ἡμετέρου ὄντος γίνεται, ἀλλ' ἐξ ἀλλοτρίου, ὥσπερ τὰ ἐκ τῶν ἀποκρίσεων, οἶον τὸ ἐκ τῆς κόπρου. σημεῖον δὲ ὅτι ἐκ διεφθαρμένου πάντα τὰ τοιαῦτα γίνεται· μὴ ἐκ διαφθειρομένου γὰρ τοιοῦτον πέφυκε γίνεσθαι οἶον ἂν ἢ ἐξ οὗ τὸ σπέρμα, ἐὰν ἐξ ἵππου, ἵππος, ἐὰν δὲ ἐξ ἀνθρώπου, ἄνθρωπος. καὶ αὐτό τε οὐ τιμῶμεν τὸ σπέρμα, οὐδὲ πᾶν τὸ ἐν τῇ γενέσει περαινόμενον. καὶ γὰρ ὑγρὸν καὶ ὄγκος τις καὶ σὰρξ γίνεται. ποτὲ δέ, διὰ τὸ μήπω ἔχειν τὴν φύσιν, ἀλλ' ἢ τοσοῦτον μόνον τῆς φύσεως, ὅτι οὕτω διάκειται ὥστε γενέσθαι ἐξ αὐτοῦ τοιοῦτον οἶον ἡμεῖς· ἐκ δὲ διεφθαρμένου οὐδὲ τοιοῦτον. διὰ ταῦτα οὔτε ἐξ ἑτέρου τῶν ἐν ἡμῖν οὔτε ἐκ τούτου διεφθαρμένου ἢ ἀτελῶς ἔχοντος τὸ ἔκγονόν ἐστιν ἡμέτερον.

Διὰ τί ἐν τῷ ὕδατι ἦττον δύνανται ἀφροδισιάζειν οἱ ἄνθρωποι; ἢ ὅτι ἐν ὕδατι οὐθὲν τήκεται, ὅσα ὑπὸ πυρὸς τήκεται, οἶον μόλιβδος ἢ κηρός· ἢ δὲ γονὴ τηκομένη φαίνεται πυρί· πρὶν μὲν γὰρ ἢ τρίψις ἐκθερμάνῃ, οὐ τήκεται. οἱ δὲ ἰχθύες οὐ τρίψει ὀχεύουσιν.

[878b] Διὰ τί τὸ ἀφροδισιάζειν ἡδιστον, καὶ πότερον ἐξ ἀνάγκης ἢ ἔνεκά τινος ὑπάρχει τοῖς ζώοις; ἢ ἡδὺ μὲν ἐστίν ἡτοι διὰ τὸ ἀπὸ παντός τοῦ σώματος ἀπιέναι τὸ σπέρμα, ὥσπερ τινές φασιν, ἢ καὶ ἀπὸ παντός μὲν μὴ ἀπιέναι, διὰ δὲ τοιούτου εἰς ὃ πάντες συντείνουσιν οἱ πόροι τῶν φλεβῶν; οὔσης οὖν τῆς ἡδονῆς ὁμοίας τῆς ἐν τῷ κνησμῷ, τοῦτο συμβαίνει γίνεσθαι ὥσπερ δι' ὅλου τοῦ σώματος. ὁ δὲ κνησμὸς ἡδύς ἐστιν, ὑγροῦ ἔξοδος πνευματώδους ἐγκατακεκλεισμένου παρὰ φύσιν. ἢ δὲ γονὴ τοιούτου εἰς τὸ κατὰ φύσιν ἔξοδος. ἔστι δὲ καὶ ἐξ ἀνάγκης ἡδὺ καὶ ἔνεκά τινος, ἐξ ἀνάγκης μὲν ὅτι ἢ εἰς τὸ κατὰ φύσιν ὁδὸς ἡδύ ἐστιν, ἐὰν ἢ αἰσθητή, ἔνεκα δὲ τινος ἵνα γένεσις ἢ ζῶων· διὰ γὰρ τὴν ἡδονὴν μᾶλλον ὁρμᾷ πρὸς τὴν μῖξιν τὰ ζῶα.

Διὰ τί ἡ λαγνεῖα πρὸς νοσήματ' ἔνια τῶν ἀπὸ φλέγματος συμφέρει; ἢ ὅτι

περιττώματός ἐστιν ἔξοδος, ὥστε συνεκκρίνεται πολλὴ περίττωσις; τὸ δὲ φλέγμα περίττωμα.

Διὰ τί τὰ ἀφροδίσια τὴν κοιλίαν ψύχει καὶ ξηραίνει; ἢ ψύχει μὲν, ὅτι ἐκκρίνεται τὸ θερμὸν ἐν τῇ μίξει; ξηραίνει δὲ ἢ μῖξις· ἐξατμίζεται γὰρ τοῦ θερμοῦ ἐξιόντος, ἐξέρχεται δὲ ψυχομένου. ἔτι καὶ ἡ θερμότης ἐν τῇ ὁμιλίᾳ ξηραίνει.

Διὰ τί, ὅσοις αἱ βλεφαρίδες ῥέουσι, λάγνοι; ἢ διὰ τὸ αὐτὸ καὶ διότι οἱ φαλακροί; ἔστι γὰρ μόρια ἄμφω ταῦτα τοῦ αὐτοῦ. ἔστι δὲ τὸ αἴτιον· ὁπόσαι πρεσβυτέρου γινομένου μὴ αὐξάνονται τῶν συγγενικῶν τριχῶν, ἅπασαι τοῦτο πάσχουσιν ἐν ταῖς λαγνείαις. κεφαλὴ γὰρ καὶ ὄφρυς καὶ βλεφαρίς συγγενικαὶ τρίχες. τούτων δὲ μόνον ἐνίοις αἱ ὄφρυες δασύνονται πρεσβυτέροις γινομένοις (δι' ἣν δὲ αἰτίαν, εἴρηται ἐν ἄλλοις), αἱ ἕτεραι δὲ διὰ τὸ αὐτὸ ἄμφω λείπουσιν. αἴτιον δὲ ὅτι καταψύχει τὰ ἄνω ἢ λαγνεία ὀλίγαιμα ὄντα, ὥστε οὐ πέττει τὴν τροφήν ὁ τόπος· οὐ λαμβάνουσαι δὲ τροφήν ἐκρέουσιν αἱ τρίχες.

Διὰ τί οὐρητιῶντες οὐ δύνανται ἀφροδισιάζειν; ἢ ὅτι πλήρεις γίνονται οἱ πόροι; τὸ δὲ πλήρες ὑγροῦ οὐ δέχεται ἄλλο ὑγρόν.

Διὰ τί αἱ ἰξίαι τοὺς ἔχοντας κωλύουσι γεννᾶν, καὶ ἀνθρώπους καὶ τῶν ἄλλων ζώων ὃ τι ἂν ἔχη; ἢ ὅτι ἡ ἰξία γίνεται μεταστάντος πνεύματος· διὸ καὶ ὠφελεῖ πρὸς τὰ μελαγχολικά. ἔστι δὲ καὶ ὁ ἀφροδισιασμὸς μετὰ πνεύματος [879a] ἐξόδου. εἰ οὖν ὁδοποιεῖται ἡ ὁρμὴ γινομένου αὐτοῦ, οὐ ποιεῖ ὁρμᾶν τὸ σπέρμα, ἀλλὰ καταψύχεται· μαραίνει οὖν τὴν συντονίαν τοῦ αἰδοίου.

Διὰ τί οἱ ἀφροδισιάζοντες ἐκλύονται καὶ ἀσθενέστεροι γίνονται ὡς ἐπὶ τὸ πολὺ; πότερον διὰ τὸ ἀπὸ πάντων ἔκκρισιν εἶναι τὸ σπέρμα, ὥστε οἶον οἰκοδομήματος αἱ ἁρμονίαι, καὶ τοῦ σώματος οὕτω σειομένη ἢ σύνθεσις ἐστὶ τῷ ἀπεληλυθέναι τι, οἶον εἰ τὸ αἷμα ἐξέλθοι ἢ πᾶν ὃ τι ἄλλο μέρος. οὕτω σφόδρα ἐπίκαιρον τὸ ἐξιόν ἐστὶ, καὶ ὃ ἐκ πολλῆς γίνεται τροφῆς ὀλίγον, οἶον τὸ ἀμύλιον ἐκ τοῦ σταιτός.

Διὰ τί οἱ ἀφροδισιάζοντες καὶ οὐρητιῶντες ἐντείνουσιν; ἢ ὅτι πληρουμένων τῶν πόρων ὑγρότητος, τὸ σπέρμα ὑπεξιὸν ἐν ἐλάττονι τόπῳ πλείονά τε ὄγκον ποιεῖ καὶ αἴρει; ἐπικείται γὰρ τὸ αἰδοῖον ἐπὶ τοῖς πόροις.

Διὰ τί ἡ σύντασις γίνεται τοῦ αἰδοίου καὶ ἡ αὔξησις; ἢ διὰ δύο, διὰ τε τὸ βάρος ἐπιγίνεσθαι ἐν τῷ ὀπισθεν τῶν ὄρχεων αἵρεσθαι (ὑπομόχλιον γὰρ οἱ ὄρχεις γίνονται) καὶ διὰ τὸ πνεύματος πληροῦσθαι τοὺς πόρους. ἢ τοῦ ὑγροῦ

αύξανομένου καὶ μεθισταμένου ἢ ἐξ ὑγροῦ γινομένου ὁ ὄγκος μείζων γίνεται; τὰ λίαν δὲ μεγάλα ἥττον αἴρεται διὰ τὸ πορρωτέρω τὸ βάρος τοῦ ὑπομοχλίου γίνεσθαι.

Διὰ τί οἱ ἀφροδισιάζοντες ἢ οἱ τοιοῦτοι δυσώδεις, οἱ δὲ παῖδες οὐ; καὶ τοῦ καλουμένου γράσου ὄζουσιν. ἢ τῶν πνευμάτων, ὥσπερ εἴρηται, τὰ μὲν τῶν παιδίων πέττει τὸ ὑγρὸν καὶ τοὺς ἰδρώτας, οἱ δὲ τῶν ἀνδρῶν ἄπεπτοι;

Διὰ τί ἐν τῷ θέρει οἱ μὲν ἄνδρες ἥττον δύνανται ἀφροδισιάζειν αἱ δὲ γυναῖκες μᾶλλον, καθάπερ καὶ ὁ ποιητὴς λέγει ἐπὶ τῷ σκολύμῳ “μαχλόταται δὲ γυναῖκες, ἀφαυρότατοι δέ τοι ἄνδρες.” πότερον ὅτι οἱ ὄρχεις καθίενται μᾶλλον ἢ ἐν τῷ χειμῶνι; ἀνάγκη δέ, εἰ μέλλει ἀφροδισιάζειν, ἀνασπάσαι. ἢ ὅτι αἱ θερμαὶ φύσεις ἐν τῷ θέρει συμπίπτουσιν ὑπερβάλλοντος τοῦ θερμοῦ, αἱ δὲ ψυχραὶ θάλπουσιν; ἔστι δὲ ὁ μὲν ἀνὴρ ξηρὸς καὶ θερμός, ἡ δὲ γυνὴ ψυχρὰ καὶ ὑγρά. τοῦ μὲν οὖν ἀνδρὸς ἡμαύρωται ἡ δύναμις, τῶν δὲ θάλλει ἐπανισουμένη τῷ ἐναντίῳ.

Διὰ τί ἔνιοι ἀφροδισιαζόμενοι χαίρουσι, καὶ οἱ μὲν ἅμα δρῶντες, οἱ δ' οὐ; ἢ ὅτι ἔστιν ἐκάστη περιπτώσει τόπος [879b] εἰς ὃν πέφυκεν ἀποκρίνεσθαι κατὰ φύσιν, καὶ πόνου ἐγγινομένου τὸ πνεῦμα ἐξιὼν ἀνοιδεῖν ποιεῖ, καὶ συνεκκρίνει αὐτήν, οἷον τὸ μὲν οὖρον εἰς κύστιν, ἡ δ' ἐξικμασμένη τροφή εἰς κοιλίαν, τὸ δὲ δάκρυον εἰς ὄμματα, μύξα δ' εἰς μυκτῆρας, αἷμα δὲ εἰς φλέβας. ὁμοίως δὲ τούτοις καὶ ἡ γονὴ εἰς ὄρχεις καὶ αἰδοῖα. οἷς δὲ οἱ πόροι μὴ κατὰ φύσιν ἔχουσιν, ἀλλ' ἢ διὰ τὸ ἀποτυφλωθῆναι τοὺς εἰς τὸ αἰδοῖον, οἷον συμβαίνει τοῖς εὐνούχοις καὶ εὐνουχίαις, ἢ καὶ ἄλλως, εἰς τὴν ἔδραν συρρεῖ ἡ τοιαύτη ἰκμάς· καὶ γὰρ διεξέρχεται ταύτη. σημεῖον δ' ἐν τῇ συνουσίᾳ ἡ συναγωγὴ τοῦ τοιούτου τόπου καὶ ἡ σύντηξις τῶν περὶ τὴν ἔδραν. ἐὰν οὖν ὑπερβάλλῃ τις τῇ λαγνείᾳ, τούτοις ἐνταῦθα συνέρχεται, ὥστε ὅταν ἡ ἐπιθυμία γένηται, τοῦτ' ἐπιθυμεῖ τῆς τρίψεως εἰς ὃ συλλέγεται. ἡ δ' ἐπιθυμία καὶ ἀπὸ σιτίων καὶ ἀπὸ διανοίας γίνεται. ὅταν γὰρ κινηθῇ ὑφ' ὁτουοῦν, ἐνταῦθα τὸ πνεῦμα συντρέχει, καὶ τὸ τοιοῦτο περίττωμα συρρεῖ οὐ πέφυκεν. κἂν μὲν λεπτὸν ἢ ἡ πνευματώδες, τούτου ἐξελθόντος, ὥσπερ αἱ συντάσεις τοῖς παισὶ καὶ τοῖς ἐν ἡλικίᾳ, ἐνίστε οὐθενὸς ὑγροῦ ἐκκριθέντος, παύονται. ὅταν δὲ κατασβεσθῇ τὸ ὑγρὸν. ἐὰν δὲ μηδέτερον τούτων πάθῃ, ἐπιθυμεῖ ἕως ἄν τι τούτων συμβῇ. οἱ δὲ φύσει θηλυδρίαὶ οὕτω συνεστᾶσιν ὥστ' ἐκεῖ μὲν μὴ ἐκκρίνεσθαι ἢ ὀλίγην, οὐπὲρ τοῖς ἔχουσι κατὰ φύσιν ἐκκρίνεται, εἰς δὲ τὸν τόπον τοῦτον. αἴτιον δὲ ὅτι παρὰ φύσιν συνεστᾶσιν· ἄρσενες γὰρ ὄντες οὕτω διάκεινται ὥστε ἀνάγκη τὸν τόπον τοῦτον πεπηρῶσθαι αὐτῶν. πῆρωσις δὲ ἡ μὲν ὅλως ποιεῖ φθόρον, ἡ δὲ διαστροφήν. ἐκείνη μὲν οὖν οὐκ ἔστιν· γυνὴ γὰρ

ἂν ἐγένετο. ἀνάγκη ἄρα παρεστράφθαι καὶ ἄλλοθί που ὀρμᾶν τῆς γονικῆς ἐκκρίσεως. διὸ καὶ ἄπληστοι, ὥσπερ αἱ γυναῖκες· ὀλίγη γὰρ ἡ ἱκμάς, καὶ οὐ βιάζεται ἐξιέναι, καὶ καταψύχεται ταχύ. καὶ ὅσοις μὲν ἐπὶ τὴν ἔδραν, οὗτοι πάσχειν ἐπιθυμοῦσιν, ὅσοις δ' ἐπ' ἀμφοτέρω, οὗτοι καὶ δρᾶν καὶ πάσχειν· ἐφ' ὁπότερα δὲ πλεῖον, τούτου μᾶλλον ἐπιθυμοῦσιν. ἐνίοις δὲ γίνεται καὶ ἐξ ἔθους τὸ πάθος τοῦτο. ὅσα γὰρ ἂν ποιῶσι, συμβαίνει αὐτοῖς χαίρειν καὶ προΐεσθαι τὴν γονὴν οὕτως. ἐπιθυμοῦσιν οὖν ποιεῖν οἷς ἂν ταῦτα γίνηται, καὶ μᾶλλον τὸ ἔθος ὥσπερ φύσις γίνεται. διὰ τοῦτο ὅσοι ἂν μὴ πρὸ ἡβῆς ἄλλὰ περὶ ἡβὴν ἐθισθῶσιν ἀφροδισιάζεσθαι, [880a] διὰ τὸ γίνεσθαι αὐτοῖς ἐν τῇ χρεῖα τὴν μνήμην, ἅμα δὲ τῇ μνήμῃ τὴν ἡδονήν, διὰ δὲ τὸ ἔθος ὥσπερ πεφυκότες ἐπιθυμοῦσι πάσχειν· τὰ μέντοι πολλὰ καὶ τὸ ἔθος ὥσπερ πεφυκότες γίνεται. ἐὰν δὲ τύχῃ λάγνος ὢν καὶ μαλακός, καὶ θᾶπτον ἕκαστα τούτων συμβαίνει.

Διὰ τί μάλιστα αἰσχύνονται ὁμολογεῖν οἱ ἐπιθυμοῦντες ἀφροδισιάζεσθαι, ἄλλ' οὐ πεῖν οὐδὲ φαγεῖν οὐδὲ ἄλλο τῶν τοιούτων οὐδέν; ἢ ὅτι τῶν μὲν πλείστων ἀναγκαῖαι αἱ ἐπιθυμίαι, ἔνια δὲ καὶ ἀναιρεῖ τοὺς μὴ τυγχάνοντας· ἢ δὲ τῶν ἀφροδισίων ἐκ περιουσίας ἐστίν.

Διὰ τί οἱ μὲν ἄνδρες τοῦ χειμῶνος, αἱ δὲ γυναῖκες τοῦ θέρους ὀρμητικώτεραι πρὸς τὰ ἀφροδίσια; ἢ ὅτι οἱ μὲν ἄνδρες θερμοὶ μᾶλλον καὶ ξηροὶ τὰς φύσεις, αἱ δὲ γυναῖκες ὑγραὶ καὶ κατεψυγμέναι; τοῖς μὲν οὖν τὸ ὑγρὸν καὶ τὸ θερμὸν αὐτάρκες πρὸς τὴν ὀρμὴν τοῦ χειμῶνος (ἢ δὲ τοῦ σπέρματος γένεσις ἐκ τούτων), ταῖς δὲ τὸ θερμὸν ἔλαττον καὶ τὸ ὑγρὸν ἐστὶ πεπηγὸς διὰ τὴν ἔνδειαν τοῦ πυρός· τοῦτο δὲ θέρους. ταῖς μὲν οὖν σύμμετρον τὸ θερμόν, τοῖς δὲ πλεόν τοῦ ἱκανοῦ· τὸ γὰρ ἄγαν πολὺ ἐκλύει τῆς δυνάμεως. διὸ καὶ τὰ παιδιά τοῦ θέρους λεπτότερα· συμβαίνει γὰρ πῦρ ἐπὶ πῦρ φέρειν.

Διὰ τί ὅσοι θερμοὶ τὴν φύσιν, ἐὰν ἰσχυροὶ ᾧσι καὶ εὐτραφεῖς, ἐὰν μὴ ἀφροδισιάσωσι, χολή τε προΐσταται αὐτοῖς πολλάκις καὶ ἐκπικρον ὑποχωρεῖ καὶ φλέγμα ἀλμυρὸν γίνεται, καὶ ἀλλοχροοῦσιν; ἢ ὅτι μετὰ τοῦ σπέρματος αἰεὶ περίττωμα συναπέρχεται; διὸ καὶ ἐνίοις τῶν πνευματικῶν ἰχθύων πλύντρου ὅζει ἡ γονή. ἀφροδισιάζουσι μὲν οὖν τοῦτο συναπέρχεται, ὥστ' οὐ λυπεῖ· μὴ ἀπτομένοις δὲ τῆς ὁμιλίας τὸ περίττωμα ἐκπικροῦται ἢ ἀλμυρὸν γίνεται.

Διὰ τί ἀφροδισιαστικοὶ οἱ μελαγχολικοί; ἢ ὅτι πνευματώδεις, τὸ δὲ σπέρμα πνεύματος ἑξοδός ἐστιν. οἷς οὖν πολὺ τὸ τοιοῦτον, ἀνάγκη πολλάκις ἐπιθυμεῖν τούτους ἀποκαθαίρεσθαι· κουφίζονται γάρ.

Διὰ τί καὶ οἱ ὄρνιθες καὶ οἱ δασεῖς ἄνθρωποι λάγνοι; πότερον ὅτι ὑγρότητα ἔχουσι πολλήν; ἢ οὐ (τὸ γὰρ θῆλυ ὑγρὸν μὲν, ἀλλ' οὐ δασύ), ἀλλ' ὅτι ἀμφοτέραι αἱ φύσεις πεπτικαὶ πολλῆς ὑγρότητος διὰ θερμότητα; σημεῖον δὲ αἱ τρίχες καὶ τὰ πτερά. ἢ ὅτι πολὺ τὸ ὑγρὸν, καὶ κρατεῖται ὑπὸ τοῦ θερμοῦ; οὕτε γὰρ ἂν μὴ πολλῆς οὔσης τῆς ὑγρότητος [880b] οὕτε μὴ κρατουμένης ἐξεφύετο τοῖς μὲν αἱ τρίχες τοῖς δὲ τὰ πτερά. τὸ δὲ σπέρμα γίνεται ἐν τοῖς τοιούτοις πλείστον καὶ τόποις καὶ ὥραις, οἷον ἐν τῷ ἔαρι· ἢ γὰρ φύσις αὐτοῦ ὑγρά καὶ θερμή. διὰ ταῦτόν δὲ καὶ οἱ ὄρνιθες λάγνοι καὶ οἱ χωλοί· ἢ γὰρ τροφή ἀμφοτέροις κάτω μὲν ὀλίγη διὰ τὴν ἀναπηρίαν τῶν σκελῶν, εἰς δὲ τὸν ἄνω τόπον ἔρχεται καὶ εἰς σπέρμα συγκρίνεται.

Διὰ τί, ἐὰν ἀφροδισιάζῃ ὁ ἄνθρωπος, οἱ ὀφθαλμοὶ ἀσθενοῦσι μάλιστα; ἢ δῆλον ὅτι ἀπολείποντος τοῦ ὑγροῦ τοῦτο γίνεται; τεκμήριον δ' ὅτι ἡ γονὴ ψυχρά ἐστίν· οὐ γὰρ γίνεται ὑγρά, ἐὰν μὴ διαθερμάνῃ τὰ θερμά. οὐδὲ δεῖται τήξεως· κέχυται γὰρ ἐν τῷ ἀνθρώπῳ ὥσπερ τὸ αἶμα.

## **Ε. ΟΣΑ ΑΠΟ ΚΟΠΟΥ.**

Διὰ τί μακροὶ μὲν ὄντες οἱ περίπατοι ἐν τοῖς ὀμαλέσι κοπιαρώτεροί εἰσι τῶν ἀνωμάτων, βραχεῖς δὲ ἀκοπώτεροις ἢ ὅτι ἢ τε πολλὴ κίνησις ποιεῖ κόπον καὶ ἡ ἰσχυρά. τοιαύτη δὲ ἡ σπασματώδης, πολλὴ δὲ ἡ συνεχὴς καὶ μία. ἐν μὲν οὖν τοῖς ἀνάντεσιν, ἐὰν ἢ μακρά, ἀνάπαυσις γίνεται ἢ μεταβολή, καὶ οὐ μακρὰ ἡ κίνησις, οὐδὲ ἵππων αὐτῶν, διὰ τὴν μεταβολήν· ἐν δὲ τοῖς ὀμαλέσιν ἡ ὁμοιότης τοῦ σχήματος οὐ διαλαμβάνει οὐδὲ ἀναπαύει τὰ μέρη, ἀλλὰ συνεργάζεται πρὸς τὸ συνεχῆ τὴν κίνησιν εἶναι. ὅταν δὲ ἢ βραχεῖα, διὰ μὲν τὸ πλῆθος τῆς κινήσεως ἐν τοῖς ἐπιπέδοις οὐ γίνεται κόπος· ἐν δὲ τοῖς ἀνάντεσιν διὰ τὸ τὴν μεταβολὴν ἰσχυρὰν γίνεσθαι καὶ ἐναντίαν, ὅτε μὲν ἄνω ὅτε δὲ κάτω, ποιεῖ κόπον. τοιαύτη δέ, ὡς φαμέν, ἐν τοῖς ἀνάντεσιν, ἐν δὲ τοῖς πεδινοῖς τούναντίον.

Διὰ τί τοῖς λειποψυχοῦσι καὶ τοῖς ἐκ τῶν γυμνασίων διαλυομένοις ἐλάττους τε οἱ ὄγκοι καὶ ὀξύτεροι δοκοῦσιν εἶναι αἱ φωναί; ἢ ὅτι αἱ τε φωναὶ ἐλάττους φαινόμεναι ὀξύτεροι φαίνονται (σημεῖον δὲ ὅτι μιμούμενοι τοὺς πόρρωθεν ὀξὺ φθέγγονται) καὶ οἱ ὄγκοι ἐλάττους;

Διὰ τί ἡ γαστήρ μόνον λεπτύνεται τῶν γυμναζομένων; ἢ ὅτι πλείστη ἡ πιμελὴ περὶ τὴν γαστέρα;

Διὰ τί τὸ πῖον τετριμμένον γίνεται τοῖς πονοῦσιν; ἢ διότι τὸ πῖον τήκεται

θερμαινόμενον, ἡ δὲ κίνησις θερμαίνει, ἡ δὲ σὰρξ οὐ τήκεται.

Διὰ τί δὲ τὰ περὶ τὴν κοιλίαν πότατα; πότερον ὅτι [881a] ἐγγύς ἐστι τῆς τροφῆς; ἐν ὅσῳ οὖν τᾶλλα παρ' ἐκείνης λαμβάνει, αὐτὴ πολλάκις λαμβάνει. ἢ ὅτι ἥκιστα πονεῖ· καμπὰς γὰρ οὐκ ἔχει.

Διὰ τί οἱ κόποι μᾶλλον παύονται, ὅταν τις τῷ ἐλαίῳ ὕδωρ συμμίζας ἀνατρίψῃται; ἢ ὅτι μᾶλλον εἰσδύεται τὸ ἔλαιον μετὰ τοῦ ὕδατος; ἐὰν δὲ αὐτὸ καθ' αὐτὸ ἦ, οὐχ ὁμοίως παρεισδύνει διὰ τὸ ἐπιπολαστικὸν εἶναι. μᾶλλον οὖν μαλάττεται τὸ σῶμα εἰσδυομένου, ἐπεὶ τὸ ἔλαιόν ἐστι φύσει θερμόν, τὰ δὲ θερμὰ καὶ ξηραίνει καὶ σκληρύνει, πρὸς δὲ τοὺς κόπους ἀξύμφορόν ἐστιν ἡ ξηρασία καὶ ἡ σκληρότης· μετὰ δὲ τοῦ ὕδατος ἀνατριφθὲν ἥττον ξηραίνει.

Διὰ τί τοῖς κοπιῶσι προστάττουσιν ἐμεῖν, εἴπερ ὁ ἔμετος κοπῳδὲς ἐστιν; ἢ κόπος γίνεται ὁστῶν θλωμένων καὶ πιεζομένων καὶ κοπιωμένων, ταῦτα δὲ ὑπὸ τῶν ἐκτὸς τινος πάσχοι ἂν ἢ τῶν ἐν τῷ σώματι, καὶ τοῦτο διττῶς· ἢ γὰρ σαρκῶν ὑπερτείνουσιν τὴν δύναμιν αὐτῶν, ἢ σώματος μιχθέντος συχνοῦ τῷ ἄλλῳ σώματι, χώραν οἰκείαν οὐκ ἔχοντος, οἷα τὰ περιττώματά ἐστιν. πάντα γὰρ τὰ ἐκτὸς ἡμῖν περιλαμβανόμενα βάρη κοπωδέστερα τῶν τοῦ σώματος μερῶν, καὶ τυχὴ σταθμῷ ὄντα αὐτῶν ἐλαφρότερα. σημεῖον δὲ τῶν εἰρημένων· οἱ γὰρ πλεῖον βεβρωκότες καὶ πεπωκότες, ἔλαττον πονήσαντες ἢ νήστευσι ὄντες, μᾶλλον κοπιῶσι διὰ τὸ μὴ τὴν οἰκείαν χώραν ἔχειν τὰ σιτία ὄντα ἄπεπτα. ἐπεὶ δὲ ὁ κόπος σύντηξιν ποιεῖ, ἡ δὲ σύντηξις περίττωμά ἐστι, τοῦτό ἐστιν ὁ τὸν κόπον ἐν ἡμῖν ποιεῖ, πλανώμενον ἀτάκτως καὶ προσπίπτον ὁστοῖς τε καὶ νεύροις καὶ τοῖς ἐντὸς τῆς σαρκὸς ἀραιοῖς οὖσι καὶ ἀνεωγμένοις. ὁ οὖν ἔμετος ἐξάγων αὐτὸ ὃν αἴτιον τοῦ κόπου, εἰκότως ἀκόπους ποιεῖ· λείπει γὰρ οἷον ἦν ἐν ἀρχῇ τοῦ πόνου τὸ σῶμα. κοπῳδες δ' ἐστὶν ὁ ἔμετος οὐ τῇ τῆς γινομένης ἐν αὐτῷ κινήσεως ὑπερβολῇ, ἀλλ' ὅταν συμβῇ μὴ καλῶς ἐξεμέσαι· λειφθέντων γὰρ πολλῶν σιτίων, καὶ περιττωμάτων τούτοις ἐνόντων, τὸν τοῦ ἐμέτου κόπον γίνεσθαι συμβαίνει, καθάπερ ἐπὶ τῶν πεπληρωμένων εἴρηται. εἰ οὖν μηδ' ἐκείνοις ὁ πόνος ἐστὶ τοῦ κόπου αἴτιος, ἀλλὰ τὸ οὕτως ἔχοντας πονῆσαι, οὐδ' ἂν τοῖς μὴ ἐξαιροῦσι τὰ σιτία ὁ ἔμετος εἴη τοῦ κόπου αἴτιος· χρῆν γὰρ πᾶσι τοῖς ἐμοῦσι γίνεσθαι κόπον, γίνονται δὲ ἀκοπώτεροι πολλοὶ ἐμέσαντες.

Διὰ τί κοπιαιώτερόν ἐστι τῷ βραχίονι τὸ διὰ κενῆς [881b] ῥίπτειν ἢ λιθάζοντα; ἢ ὅτι σπασμωδέστερον τὸ διὰ κενῆς ἐστίν; οὐ γὰρ ἀπερείδεται πρὸς οὐδέν, ὥσπερ ὁ βάλλον πρὸς τὸ ἐν τῇ χειρὶ βέλος. ὁμοίως δὲ τούτῳ καὶ



ὁ πένταθλος πρὸς τοὺς ἀλτῆρας καὶ ὁ θεὸν παρασείων πρὸς τὰς χεῖρας. διὸ ὁ μὲν μεῖζον ἄλλεται ἔχων ἢ μὴ ἔχων ἀλτῆρας, ὁ δὲ θᾶττον θεῖ παρασείων ἢ μὴ παρασείων.

Διὰ τί ἡ ταχυδρομία καὶ ἐπ' ἀνθρώπου καὶ ἐπὶ τῶν ἄλλων ζώων νοσηματικοὺς ποιεῖ τὰ περὶ τὴν κεφαλὴν; καίτοι ὅλως ὁ δρόμος κατασπᾶν δοκεῖ κάτω τὰ περιττώματα, ὥσπερ ὁ περίπατος· διὸ καὶ παχύνονται τὰ σκέλη οἱ πολλὰ περιπατοῦντες, ὅτι εἰς τὰ κάτω ὑπονοστεῖ ἄνωθεν καὶ ἡ τροφή καὶ τὰ περιττώματα. ἢ ἡ μὲν κίνησις ταύτῃ ποιεῖ, ἀλλ' ἡ ταχεῖα διὰ τὴν συντονίαν καὶ τὴν ἀπνευστίαν ἐκθερμαίνει τὴν κεφαλὴν, καὶ τὰς φλέβας ἐμφυσᾷ τὰς ἐν αὐτῇ, καὶ σπαστικὰς τῶν θύραθεν ποιεῖ δυνάμεων, οἷον ψύχους καὶ ἀλέας καὶ τῶν ἐκ τοῦ θώρακος, ὧν εἰσιόντων νοσεῖν ἀναγκαῖον τὸν τόπον ἐστίν.

Διὰ τί κοπιῶσι μὲν μᾶλλον ἐν τοῖς ὀμαλοῖς ἢ ἐν τοῖς ἀνωμάλοις τόποις, θᾶττον δὲ βαδίζουσι τὴν ὀμαλὴν ὁδὸν ἢ τὴν ἀνώμαλον; ἢ ὅτι ἀκοπώτερον μὲν ἐστὶ τὸ μὴ ἀεὶ ἐν τῷ αὐτῷ σχήματι ποιεῖσθαι τὴν κίνησιν, ὃ συμβαίνει ἐν τῇ ἀνωμάλῳ πορείᾳ μᾶλλον; θᾶττον δὲ πορεύονται, ὅτι ἦττον παρὰ φύσιν κινουῦνται. ἐν μὲν οὖν τῷ ὀμαλῷ μικρὰ ἢ ἄρσις καὶ θέσις καὶ πυκνὴ ἐστίν, ἐν δὲ τῷ ἀνωμάλῳ τούναντίον. ἔστι δὲ τὸ αἶρειν παρὰ φύσιν· βία γάρ ἐστὶ πᾶσα ἄρσις. τὸ δὲ παρ' ἐκάστην βάσιν γινόμενον μικρὸν πολὺ γίνεται παρὰ πολλὰς.

Διὰ τί τὰ ἐπίπεδα κοπιαιώτερα ἐγκατακεῖσθαι τῶν κοίλων ἐστίν; ἢ διὰ τὸ αὐτὸ καὶ τὰ κυρτὰ τῶν ἐπιπέδων; ἐφ' ἓνα γὰρ τόπον συναθροιζόμενον τὸ βάρος ἐν τῇ καθέδρᾳ ἢ κατακλίσσει τῇ θλίψει ποιεῖ πόνον. τὸ μὲν οὖν κυρτὸν τοῦ εὐθέος, τοῦτο δὲ τοῦ κοίλου μᾶλλον τοιοῦτόν ἐστι· τὸ γὰρ σῶμα ἡμῶν ἐστὶ περιφερέστερον ἢ εὐθύτερον, τῶν δὲ τοιούτων κατὰ πλεον ἄπτεται τὰ κοῖλα ἢ τὰ ἐπίπεδα. διὰ ταῦτα δὲ καὶ τὰ ἐνδιδόντα τῶν μὴ ἐνδιδόντων ἀκοπώτερά ἐστι καὶ ἐγκατακλιθῆναι καὶ ἐνέζεσθαι.

Διὰ τί οἱ βραχεῖς περίπατοι κοπώδεις εἰσίν; ἢ ὅτι ἀνώμαλοί εἰσι; πολλάκις γὰρ ἴστασθαι ποιοῦσιν. τὸ δ' ἐκ τοῦ ἐναντίου εἰς τούναντίον πυκνὰ μεταβάλλειν κοπῶδές [882a] ἐστὶ· συνήθειαν γὰρ οὐδετέρῳ ποιεῖ, ὃ ἐστὶν ἄκοπον. ἀμφοῖν δ' ἅμα οὐκ ἐνδέχεται συνήθειαν γίνεσθαι.

Διὰ τί οἱ ἐπὶ τῶν ἵππων ὀχούμενοι, ὅσω ἂν μᾶλλον θέῃ ὁ ἵππος, τοσούτῳ μᾶλλον δακρύουσι τὰ ὄμματα; πότερον διὰ τὸ ψυχρότερον εἶναι τὸν ἀεὶ προσπίπτοντα ἀέρα, ὅσω ἂν ἐλάττω χρόνον ἄπτηται τοῦ σώματος, ὅπερ ἐπὶ τῶν γυμνῶν θεόντων συμβαίνει; τὸ δὲ ψῦχος δάκρυον ποιεῖ. ἢ διὰ τούναντίον; καὶ γὰρ τὸ θερμὸν ποιεῖ δακρύνειν, οἷον ὁ ἥλιος· ἢ δὲ κίνησις

θερμότητα ποιεῖ. ἢ διὰ τὴν ὑπὸ τοῦ ἀέρος πληγὴν; ὥς γὰρ οἱ ἄνεμοι ταράττουσιν οἱ ἐξ ἐναντίας τὰ ὄμματα, οὕτως ὁ ἀήρ προσπίπτων, ὅσῳ ἂν θάπτον ἐλαύνῃ, τοσούτῳ μᾶλλον ποιεῖ τὴν πληγὴν μαλακὴν.

Διὰ τί τὰ μὲν ἄλλα τριβόμενα σαρκοῦνται μέρη, ἡ δὲ γαστήρ λεπτοτέρα γίνεται; ἢ οὐδὲ αὐτὴ ἐκ προσαγωγῆς, ἀλλὰ στιφροτέρα; οὐ μὲν ἄλλ' οὐχ ὁμοίως γε καὶ ἡ σὰρξ, διὸ καὶ τὸ πρόβλημά ἐστιν. ὅλως γὰρ ἐν τοῖς γυμνασίοις καὶ πόνοις μάλιστα λεπτύνεται ἡ γαστήρ. αἴτιον δ' ὅτι τὰ πίονα θερμαινόμενα τήκεται, καὶ τὰ φύσει τάσιν ἔχοντα μᾶλλον. τὸ δὲ δέρμα ἐστὶ φύσει ἔχον τάσιν· ἀλλὰ διὰ τὸ παίνεσθαι τάχιστα αἰεὶ τινα ἔχει πύοντα, ἐὰν μὴ κάμνῃ τινὰ νόσον. αἴτιον δὲ τούτου ὅτι ἐγγύς ἐστι τῆς τροφῆς. ἐπεὶ οὖν ὅλως ἡ πιμελὴ οὐκ ἔστι φύσει ἀλλ' ἐπίκτητον, καὶ οὐ τῶν ἀναγκαίων μερῶν ὥσπερ ἡ σὰρξ, καὶ ἡ τῶν γυμνασίων κινήσεις καὶ ἡ τῆς τρίψεως θερμαίνουσιν τήκουσιν αὐτὴν καὶ τὴν τροφὴν ἐκπλεονάζουσιν νέμονται τοῖς ἄλλοις μορίοις. διὸ αἱ μὲν καθέδραι τὴν κοιλίαν παίνουσι, τὸ δ' ἄλλο σῶμα λεπτύνουσιν, αἱ δὲ κινήσεις καὶ αἱ τρίψεις τὴν μὲν κοιλίαν λεπτύνουσιν, τὸ δ' ἄλλο σῶμα παχύνουσιν.

Διὰ τί ἐκ τῶν μακρῶν καὶ σφοδρῶν ὁδῶν καὶ δρόμων, ὅταν στῇ τις ἐπ' ἄκρων τῶν δακτύλων, σείονται τῶν ποδῶν αἱ πτέρναι καὶ σπᾶται κάτω προπετώσιν; ἢ διὰ τὴν συνέχειαν καὶ σφοδρότητα τῆς κινήσεως οὐκ ἀναπαύεται ὁ σεισμὸς τῷ ἀνθρώπῳ τῶν νεύρων; τοῦ μὲν γὰρ ὅλου σώματος κρατεῖ ἡ ψυχὴ πολλάκις, μορίων δ' οὐ, ὁπότεν πως κινηθῇ, οἷον καὶ καρδίας καὶ αἰδοίου. αἴτιον δ' ὅτι πνεῦμα πολὺ περὶ τὰ νεῦρα ἐκκαίεται, ὃ οὐχ ἅμα ἐκψύχεται σπάντι. τοῦτο οὖν σεῖον ὥσπερ ὑποσπῶν τῇ κινήσει κατασπᾶ τε, καὶ τοῦ πορρωτάτῳ ἤκιστα ποιεῖ κρατεῖν· τοιοῦτον δὲ αἱ πτέρναι, οἷον τοῖς ὀργιζομένοις τὸ κάτω χεῖλος.

[882b] Διὰ τί οἱ μὴ σφόδρα συντόνως τρέχοντες ἐν τῷ ῥυθμῷ ἀναπνέουσιν; πότερον ὅτι πᾶς ῥυθμὸς ὠρισμένη μετρεῖται κινήσει, τοιαύτη δ' ἐστὶν ἡ δι' ἴσου οὔσα, ὅπερ οἱ τροχάζοντες ποιοῦσιν. ἅμα οὖν ἀρχόμενοι τροχάζειν ἀναπνέουσιν, ὥστε τὴν ἀναπνοὴν δι' ἴσου γινομένην, διὰ τὸ τῇ ἴσῃ κινήσει μετρεῖσθαι, ῥυθμὸν ποιεῖν. ἢ ὅτι πᾶσα μὲν ἀπλῶς ἀναπνοὴ δι' ἴσου γίνεται τοῖς κατὰ φύσιν αὐτῇ χρωμένοις καὶ μὴ κατέχουσιν; καθημένοις μὲν οὖν καὶ βαδίζουσι μετρίως οὔσης τῆς τοῦ σώματος κινήσεως, οὐκ εὐδηλὸς ὁ ῥυθμὸς γίνεται· συντόνως δὲ τρέχουσιν, οὐ παρακολουθούσης τῇ κινήσει τῆς αἰσθήσεως, οὐ δυνάμεθα συνορᾶν τὸν τῆς ἀναπνοῆς ῥυθμόν. ἐν δὲ τῷ μετρίως τροχάζειν μέτρον ἡ κινήσεις αἰσθητὸν τῆς ἀναπνοῆς ποιοῦσα τὸν ῥυθμὸν δηλοῖ.

Διὰ τί ἐν τῷ τροχάζειν ἐκπνευματοῦσθαι δοκεῖ ἡμῖν ὁ ἀήρ; πότερον ὅτι κινούμενοι διὰ τοῦ τροχάζειν τὸν συνεχῆ τοῖς σώμασιν ἡμῶν ἀέρα κινούμεν, ὃ ἐστὶ πνεῦμα; διόπερ οὐ δοκεῖ μόνον, ἀλλὰ καὶ κατ' ἀλήθειαν ἐκπνευματοῦται ὁ ἀήρ. ἢ διότι τροχάζοντες προσκόπτομεν τῷ ἀέρι, τούτου δὲ συμβαίνοντος μᾶλλον αἴσθησιν λαμβάνομεν τοῦ ἀέρος διὰ τῆς κινήσεως. εἰκότως οὖν ἡμῖν ἐκπνευματοῦσθαι δοκεῖ· τοῦτο γὰρ συμβαίνει διὰ τὴν φορὰν.

Διὰ τί μᾶλλον θέοντες ἢ βαδίζοντες πίπτουσιν; ἢ ὅτι μᾶλλον πρὶν κινεῖσθαι αἴρουσιν; τὸ γὰρ θέειν τοῦ βαδίζειν τούτῳ διαφέρει.

Διὰ τί ποτε ἀναβαίνοντες μὲν τὰ γόνατα πονοῦμεν, καταβαίνοντες δὲ τοὺς μηρούς; ἢ ὅτι ὅταν μὲν ἀναβαίνωμεν, ἀναρριπτοῦμεν ἄνω τὸ σῶμα, καὶ ἡ σπᾶσις πολλὴ τοῦ σώματος καὶ ἡ ἀπὸ τῶν γονάτων γίνεται, διὸ πονοῦμεν τὰ γόνατα· ἐν δὲ τοῖς κατάντεσι, διὰ τὸ ὑποφέρεσθαι τοῖς σκέλεσι, τοῖς μηροῖς ἀποστηριζόμενοι πονοῦμεν αὐτούς. εἴθ' ἅπαν τὸ παρὰ φύσιν γινόμενον πόνον καὶ λύπην παρασκευάζει. ἔστι δὲ τὸ κατὰ φύσιν τοῖς μὲν γόνασιν ἢ εἰς τὸ πρόσθεν κλάσις, τοῖς δὲ μηροῖς ἢ εἰς τοῦπισθεν. ἐν μὲν οὖν τοῖς ἀνάντεσι τὰ γόνατα κλᾶται εἰς τοῦπισθεν διὰ τὸ ἀποστηρίζεσθαι βούλεσθαι, ἐν τοῖς κατάντεσι δ' οἱ μηροὶ εἰς τοῦμπροσθεν κλῶνται διὰ τὸ προπετὲς ἡμῶν εἶναι τὸ σῶμα.

Διὰ τί ποτε ἐν ταῖς ὁδοῖς τῶν μηρῶν τὸ μέσον μάλιστα πονοῦμεν; ἢ ὅτι παντὸς μακροῦ καὶ ἐνὸς ὄντος, ἐστηριγμένου δέ, τοῦ μέσου ὁ πόνος μάλιστα γίνεται; διὸ καὶ κατάγνυται [883a] μάλιστα ἐντεῦθεν. ὁ δὲ μηρός ἐστὶ τοιοῦτον· διὸ καὶ τὸ μέσον αὐτοῦ μάλιστα πονοῦμεν.

Διὰ τί οἱ ὑγροὶ ταχὺ πνίγονται πονήσαντες καὶ ὑπὸ τοῦ καύματος; ἢ ὅτι ἐκθερμαινόμενον τὸ ὑγρὸς ἀήρ γίνεται, καὶ κάει μᾶλλον τὸ πλεόν; ὅταν οὖν μὴ δύνηται ὑπεξάγειν διὰ τὸ πλῆθος, οὐ γίνεται κατάψυξις, ὥστε ταχὺ ἐκπυροῦται ὑπὸ τοῦ συμφύτου καὶ ἐπικτήτου θερμοῦ. διὸ καὶ οἱ γινόμενοι ἰδρῶτες τοῖς γυμναζομένοις καὶ ὅλως τοῖς πονοῦσι καὶ ἡ τοῦ πνεύματος ἔξοδος ὠφέλιμον· διακρινομένου γὰρ καὶ λεπτυνομένου τοῦ ὑγροῦ πνεύμα γίνεται.

Διὰ τί τὰ σύμμετρα τῶν σωμάτων κάμνει τε πολλάκις καὶ ἀπαλλάττει ῥᾶον; ἢ διὰ ταῦτ' ἄμφω; ὁμαλὸν γὰρ τὸ σύμμετρον, τὸ δὲ ὁμαλὸν ὁμοπαθέστερον· ἐὰν οὖν τι πονήσῃ μέρος, εὐθὺς συμπονεῖ τὸ ὅλον. τὸ δὲ ἀσύμμετρον, ἅτε μᾶλλον ἀπηρτημένον, οὐ συναπολαύει τῶν μερῶν. κάμνει

μὲν οὖν πολλάκις διὰ τοῦτο, ῥᾶον δὲ ἀπαλλάττει, ὅτι πᾶν κοινωνεῖ τὸ σῶμα· εἰς πλείω γὰρ διανεμόμενον τὸ πάθος γίνεται ἀσθενέστερον, ὥστε εὐαπαλλακτότερον. τὸ δὲ ἀσύμμετρον, ἅτε οὐ κοινωνοῦν τοῖς μέρεσιν, ἐλαττονάκις μὲν κάμνει, χαλεπώτερον δὲ ἀπαλλάττει· σφοδρὸν γὰρ τὸ πάθος.

Διὰ τί κοπιῶσι μὲν μᾶλλον ἐν τοῖς ὀμαλοῖς ἢ ἐν τοῖς ἀνωμάλοις, θᾶττον δὲ βαδίζουσι τὴν ὀμαλὴν ἢ τὴν ἀνώμαλον; ἢ ὅτι ἀκοπώτερον μὲν τὸ μὴ ἀεὶ ἐν τῇ ἀνωμάλῳ πορεῖα μᾶλλον, θᾶττον δὲ πορεύονται, ὅπου ἐν τῷ ἴσῳ χρόνῳ ἐλάττων ἡ ἀναφορά. ἐν μὲν οὖν τῷ ὀμαλῷ μικρὰ ἢ ἄρσις καὶ πυκνή, ἐν δὲ τῷ ἀνωμάλῳ τούναντίον. τὸ δὲ παρ' ἐκάστην βάσιν γινόμενον πολὺ γίνεται παρὰ πολλὰς.

Διὰ τί καταβαίνοντες μὲν τὰ κατάντη τοὺς μηροὺς μάλιστα πονοῦμεν, ἀναβαίνοντες δὲ τὰς κνήμας; ἢ ὅτι ἀναβαίνοντες μὲν τῷ αἴρειν τὸ σῶμα; ἅπαν γὰρ γίνεται φορτίον τὸ σῶμα. ὥ οὖν ἅπαν ἐπικεῖται καὶ ὥ αἴρομεν, τοῦτο μάλιστα πονεῖ. ἢ δὲ κνήμη τοῦτο. ἔσχατον γάρ, μῆκος ἔχον, καὶ οὐχ ὥσπερ ὁ ποὺς πλάτος ἔχει· διὸ σαλεύεται. ὥστε οἶον τῷ ὥμῳ τὰ βάρη κινεῖται, καὶ ἐπὶ τούτῳ ἔχομεν. τοιγαροῦν καὶ πονοῦμεν τὸν ὥμον μάλιστα. καταβαίνοντες δὲ τῷ ἐμπίπτει τὸ σῶμα κάτω καὶ προωθεῖν παρὰ φύσιν ὁ πόνος ἐστίν, ὥστε ὥ μάλιστα ἐμπίπτει καὶ σαλεύει, τοῦτο παρέχει τὸν πόνον. ἢ μὲν οὖν κνήμη μένει, τὸ δὲ βάρος ὁ θώραξ γίνεται· ὁ δὲ μηρὸς δέχεται τε καὶ σαλεύεται διὰ τὸ μῆκός τε ἔχειν καὶ στρέφεσθαι ἄνωθεν, ἢ ὁ θώραξ ἐμπίπτει.

Διὰ τί πλείων δοκεῖ ἡ ὁδὸς εἶναι, ὅταν μὴ εἰδότες βαδίζωμεν πόση τις, ἢ ὅταν εἰδότες, ἐὰν τᾶλλα ὁμοίως ἔχοντες τύχωμεν; ἢ ὅτι τὸ εἰδέναι πόση τὸ εἰδέναι ἐστὶ τὸν ἀριθμὸν αὐτοῦ· καὶ πλεῖον αἰεὶ τὸ ἀόριστον τοῦ ὠρισμένου; ὥσπερ οὖν εἰ ἤδει ὅτι τοσήδε, πεπερασμένην ἀνάγκη εἶναι, οὕτω καὶ εἰ μὴ οἶδεν, ὥς ἀντιστρέφοντος παραλογίζεται ἡ ψυχὴ, καὶ φαίνεται εἶναι ἄπειρος. ἔτι τὸ ποσὸν ὠρισμένον καὶ τὸ ὠρισμένον ποσόν. ὅταν τοίνυν μὴ φαίνεται ὠρισμένον, ὥσπερ ἄπειρον φαίνεται εἶναι, διὰ τὸ τὸ πεφυκὸς ὠρίσθαι, ἐὰν μὴ ἢ ὠρισμένον, ἄπειρον εἶναι, ὥστε καὶ τὸ φαινόμενον μὴ ὠρίσθαι φαίνεσθαι ἀνάγκη πως ἀπέραντον.

Διὰ τί τοὺς μηροὺς μᾶλλον ἢ τὰς κνήμας κοπιῶσιν; πότερον ὅτι ἐγγὺς τοῦ τόπου τοῦ ἔχοντος τὸ περίττωμα, ὥστε ἂν ὑπερβάλλῃ διὰ τὴν κίνησιν τῇ θερμότητι, συσπῶσιν οἱ μηροὶ μᾶλλον καὶ πλεῖον ἢ αἱ κνήμαι; ἢ διὰ τὸ συμφυεῖς εἶναι μᾶλλον τοὺς μηρούς; μάλιστα γὰρ πονοῦσι τῇ τοῦ συνεχοῦς διαστάσει. καὶ γὰρ ἂν μηδὲν ἔχοντες περίττωμα κοπιάσωσιν, ὅμως τοὺς

μηρούς καὶ τὴν ὀσφὺν πονοῦσι μᾶλλον. ἢ ὅτι καθάπερ οἱ βουβῶνες γίνονται πληγέντες διὰ τὴν συνάρτησιν τῶν φλεβῶν καὶ νεύρων, οὕτω καὶ οὗτος; ἐγγυτέρω δὲ τῆς ἀρχῆς ὁ μηρός. ἢ διότι μᾶλλον ἐν τῷ αὐτῷ σχήματι ὁ μηρός τῆς κνήμης; τοῦτο δὲ κοπιαιώτερον. ἢ ὅτι σαρκώδης, ὥστε πολὺ τὸ κατὰ φύσιν ἔχον ἐν αὐτῷ;

Διὰ τί ἐνίοις, ὅταν πονήσωσιν, ἔλκη ἐκφύουσιν; ἢ ὅταν τὸ σῶμα ἀκάθαρτον ᾖ, ἢ κίνησις θερμαίνουσα καὶ ἄλλα περιττώματα συνεξικμάζει μετὰ τοῦ ἰδρώτος; παχέα δὲ ὄντα καὶ χυμοὺς ἔχοντα μοχθηροὺς, ὀξεῖς καὶ πικροὺς καὶ ἄλμυρούς, τὰ περιττώματα ἐκκρίνεσθαι μὲν οὐ δύναται διὰ πάχος, ἐξαίρεται δὲ διὰ τῆς σαρκὸς καὶ ἐξελκοῖ διὰ πικρότητα τοῦ χυμοῦ.

Διὰ τί τοῖς ἐκ τῶν γυμνασίων καὶ φαρμακοποσιῶν οὐκ εὐθὺς προσφέρουσι τροφήν; ἢ διότι καθαίρεται τὸ σῶμα ἔτι, καὶ οὐκ ἀναπέπαιται πονοῦν, καὶ ἀποκέκριται τὰ περιττώματα;

Διὰ τί χαλεπώτερον θεῖν ἢ βαδίζειν; ἢ ὅτι πλεῖον φορτίον φέρει ὁ θέων; ὅταν γὰρ ἡ μετέωρος, ἅπαν ἐφ' αὐτῷ ἔχει. ὁ δὲ βαδίζων, οἶον οἱ ἐπὶ τοῖς τειχοῖς ἀναπαυόμενοι, ἐπιθεὶς ἔχει ἐπὶ τῷ ἡρεμοῦντι.

[884a] Διὰ τί ἐκ τῶν γυμνασίων οὐ πεινῶσιν εὐθύς; πότερον διὰ τὴν ὑπόλειψιν τῆς συντήξεως, ἕως ἀντιπεφθῆ; ἢ διὰ τὸ πνεῦμα ὃ ποιεῖ ὁ πόνος ἐκ τοῦ ὑγροῦ; ἢ διὰ τὴν δίψαν ἢ γίνεται ἐκ τοῦ θερμαίνεσθαι πονοῦντας; πάντα γὰρ συμβαίνει ταῦτα.

Διὰ τί ἐξονειρωκτικοὶ εἰσιν οἱ κοπιῶντες καὶ φθισιῶντες; ἢ ὅτι ὅλως ἐξονειρωκτικοὶ οἱ θερμοὶ καὶ ὑγροί; τὸ γὰρ σπέρμα τοιοῦτόν ἐστι τὴν φύσιν. τὸ τοιοῦτο δὲ ἐξ οὕτω διακειμένων μάλιστα γίνεται, ὅταν ἡ ἀπὸ τοῦ ὕπνου θερμότης προσγένηται· μικρᾶς γὰρ ῥοπῆς τὰ σώματα δεῖται, καὶ ταύτης ἔσωθεν ἀλλ' οὐκ ἔξωθεν. οἱ δὲ φθισικοὶ καὶ κοπιῶντες οὕτω διάκεινται· οἱ μὲν γὰρ κοπιῶντες διὰ τὸν κόπον καὶ τὴν κίνησιν συντήγματος θερμοῦ πλήρεις εἰσίν, οἱ δὲ φθισικοὶ διὰ τὸν κατάρρουν καὶ τὴν γινομένην θέρμην ὑπὸ τῆς φλεγμασίας.

Διὰ τί τὸ ἀριστερὸν σκέλος χαλεπώτερον τρίβεσθαι ὑφ' ἑαυτοῦ πολὺν χρόνον ἢ τὸ δεξιόν; ἢ ὅτι τοῖς δεξιοῖς πονεῖν δυνάμεθα; ἐν δὲ τοῖς παρὰ φύσιν ἢ τοῦ ἀριστεροῦ σκέλους τρῖψις ἐξεστραμμένως γίνεται. τὰ δὲ παρὰ φύσιν ποιούμενα χαλεπά. τῇ δὲ ἀριστερᾷ τὰ δεξιὰ οὐθὲν ἐπίδηλον διὰ τὸ μηθετέρως ἰσχύειν.

Διὰ τί ὑγιεινὸν τὸ τροφῆς μὲν ὑποστέλλεσθαι, πονεῖν δὲ πλείω; ἢ ὅτι τοῦ νοσεῖν αἴτιον περιττώματος πλῆθος; τοῦτο δὲ γίνεται ἢ διὰ τροφῆς ὑπερβολὴν ἢ διὰ πόνων ἔνδειαν.

Διὰ τί οὐ δεῖ πυκνοῦν τὴν σάρκα πρὸς ὑγίειαν, ἀλλ' ἀραιοῦν; ὥσπερ γὰρ πόλις ὑγιεινὴ καὶ τόπος εὖπνους (διὸ καὶ ἡ θάλαττα ὑγιεινὴ), οὕτω καὶ σῶμα τὸ εὖπνουν μᾶλλον ὑγιεινόν. δεῖ γὰρ ἢ μὴ ὑπάρχειν μηθὲν περίττωμα, ἢ τούτου ὡς τάχιστα ἀπαλλάττεσθαι· καὶ δεῖ οὕτως ἔχειν τὰ σώματα ὥστε λαμβάνοντα εὐθὺς ἐκκρίνειν τὴν περίττωσιν, καὶ εἶναι ἐν κινήσει καὶ μὴ ἡρεμεῖν. τὸ μὲν γὰρ μένον σήπεται, ὥσπερ ὕδωρ, τὸ δὲ σηπόμενον καὶ μὴ κινούμενον νοσοποιεῖ· τὸ δ' ἐκκρινόμενον πρὸ τοῦ διαφθαρῆναι χωρίζεται. τοῦτ' οὖν πυκνουμένης μὲν τῆς σαρκὸς οὐ γίνεται (ὥσπερ εἰ γὰρ ἐμφράττονται οἱ πόροι), ἀραιουμένης δὲ συμβαίνει. διὸ καὶ οὐ δεῖ ἐν τῷ ἡλίῳ γυμνὸν βαδίζειν· συνίσταται γὰρ ἡ σὰρξ, καὶ κομιδῇ ἀποσαρκοῦνται, καὶ ὑγρότερον τὸ σῶμα γίνεται. τὸ μὲν γὰρ ἐντὸς δὴ μένει, τὸ δ' [884b] ἐπιπολῆς ἀπαλλάττεται, ὥσπερ καὶ τὰ κρέα τὰ ἐφθὰ τῶν ὀπτῶν μᾶλλον. οὐδὲ τὰ στήθη γυμνὰ ἔχοντα βαδίζειν· ἀπὸ γὰρ τῶν ἄριστα ὠκοδομημένων ὁ ἥλιος ἀφαιρεῖ, ὃ ἥκιστα δεῖται ἀφαιρέσεως, ἀλλὰ μᾶλλον τὰ ἐντός. ἐκεῖθεν μὲν οὖν διὰ τὸ πόρρω εἶναι, ἂν μὴ μετὰ πόνου, οὐκ ἔστιν ἰδρῶτ' ἀναγαγεῖν, ἀπὸ τούτου δὲ διὰ τὸ πρόχειρον εἶναι ῥάδιον.

Διὰ τί κοπώδεις οἱ βραχεῖς τῶν περιπάτων; ἢ ὅτι πολλάκις συνίστανται καὶ οὐχ ὁμαλῶς κινοῦνται περὶ τὰς καμπάς; τὸ δὲ τοιοῦτον κοπῶδες.

Διὰ τί ἐστηκότες ἐν τῷ ἡλίῳ μᾶλλον θερμαίνονται ἢ κινούμενοι, καὶ ταῦτα τῆς κινήσεως θερμαντικῆς οὔσης; ἢ οὐ πᾶσα κίνησις θερμαίνει, ἀλλ' ἐνία ψύχει, οἷον καὶ ἐπὶ τῶν τὰς χύτρας τὰς ἐψημένας φυσώντων καὶ κινούντων συμβαίνει. εἰ οὖν ἐστηκότι μὲν προσμένει τὸ θερμόν, προσμένον δὲ μᾶλλον θερμαίνει ἢ κινούμενον (ἀεὶ γὰρ τὸ σῶμα ἴδιον ἡμῶν ἀτμίδα τινὰ χλιαρὰν ἀφήσιν ἀφ' ἑαυτοῦ, ἢ θερμαίνει τὸν ἐγγὺς ἀέρα ὥσπερ δαλὸς παρῶν), ἡρεμούντων μὲν ἡμῶν θερμὸς γίνεται ὁ περιέχων ἡμᾶς ἀὴρ διὰ τὰ εἰρημένα, κινουμένων δὲ πνεῦμα γίνεται, ὃ καταψύχει ἡμᾶς· πᾶν γὰρ πνεῦμα ψυχρόν ἐστιν.

Διὰ τί οἱ ἐπὶ τῶν ἵππων ὀχούμενοι, ὅσω ἂν θᾶττον θέῃ ὁ ἵππος, τοσούτω μᾶλλον δακρύουσι τὰ ὄμματα, καὶ οἱ πεζοί, ὅσω ἂν μᾶλλον τρέχωσιν; πότερον διὰ τὸ ψυχρόν εἶναι τὸν προσπίπτοντα ἑέρα; τὸ γὰρ ψῦχος δακρύειν ποιεῖ· συστέλλον γὰρ καὶ πυκνοῦν τὴν σάρκα ἐκκαθαίρει τὸ ὑγρόν. ἢ διὰ τὸ ὑνάντιον; τὸ γὰρ θερμόν ποιεῖ ἰδρῶτας, τὸ δὲ δάκρυον ἰδρῶς τίς ἐστι. διὸ

καὶ γίνονται ὑπὸ θερμασίας ἄμφω ταῦτα, καὶ ἄλυκά ἐστιν ὁμοίως. ἡ δὲ κίνησις θερμότητα ποιεῖ. ἢ διὰ τὴν ὑπὸ τοῦ ἀέρος πληγὴν; ὥς γὰρ οἱ ἄνεμοι ταραττουσιν οἱ ἐξ ἐναντίας τὰ ὄμματα, οὕτω καὶ ὁ ἀήρ ὁ προσπίπτων, ὅσῳ ἂν θᾶπτον ἐλαύνῃ ἢ αὐτὸς τρέχῃ, τοσοῦτῳ μᾶλλον ποιεῖ πληγὴν μαλακὴν, δι' ἣν γίνεται δακρύειν, ἀραιουμένων τῶν τοῦ ὀφθαλμοῦ πόρων ὑπὸ τῆς πληγῆς· πᾶσα γὰρ πληγὴ διαιρετικὸν ἐστὶν ἢ θλαστικόν.

Διὰ τί δεῖ τοὺς μὲν θερινοὺς κόπους λουτρῷ ἰᾶσθαι, τοὺς δὲ χειμερινοὺς ἀλείμματι; ἢ τούτους μὲν διὰ τὰς φρίκας καὶ τὰς γινομένας μεταβολὰς θερμῷ δεῖ λύειν, ὃ ποιήσῃ ἀλεάζειν (τὸ δὲ ἔλαιον θερμόν); ἐν δὲ τῷ θέρει καθυγραίνειν. [885a] ἢ γὰρ ὥρα ξηρά, καὶ οὐ γίνονται φρίκαι διὰ τὴν ἀλέαν. ὀλιγοσιτία δὲ καὶ κωθωνισμὸς θέρους, τὸ μὲν ὅλως, τὸ δὲ μᾶλλον, ὃ μὲν πότος θέρους ὅλως διὰ τὴν ξηρότητα, ἡ δὲ ὀλιγοσιτία κοινὸν μὲν, μᾶλλον δὲ θέρους· ἐκθερμαίνεται γὰρ μᾶλλον διὰ τὴν ὥραν ὑπὸ τῶν σιτίων.

Διὰ τί οἱ θένοντες εὐτόνως μάλιστα λαμβάνουσι σπάσματα, ὅταν τις θέουσιν αὐτοῖς ὑποστῇ; ἢ ὅτι ταῦτα μάλιστα διασπᾶται, ἃ εἰς τοῦναντίον τε καὶ ἰσχυρῶς ἔλκεται καὶ κινεῖται; ὅταν οὖν θέοντος καὶ σφοδρῶς ὠθουμένων τῶν μορίων εἰς τὸ πρόσθεν ὑποστῇ τις, συμβαίνει ἅμα ἀντισπᾶν εἰς τοῦναντίον, ἔτι φερομένων εἰς τοῦμπροσθεν, ὥστε ἡ σπάσις τοσοῦτῳ ἰσχυροτέρα γίνεται, ὅσῳ ἂν θέωσι σφοδρότερον.

Διὰ τί τῶν περιπάτων οἱ κατὰ τὰς ὁδοὺς ἀκοπώτεροί εἰσιν, οἱ ἀνώμαλοι τῶν εὐθέων; ἢ διὰ τὸ τὴν φορὰν ὀρθὴν εἶναι κατὰ φύσιν παντὶ τῷ σώματι; οἱ δ' ἐν τοῖς ὀμαλοῖς τῶν ἀνωμάτων κοπιωδέστεροι· τοῖς γὰρ αὐτοῖς μέρεσι τοὺς πόνους παρέχουσιν, οἱ δ' ἐν τοῖς ἀνωμάλοις διαμερίζουσι μᾶλλον εἰς ἅπαν τὸ σῶμα. αἱ δὲ ἀλέαι μᾶλλον ἰσχυνοῦσι τῶν ἐν τοῖς ψύχεσιν· τοῖς γὰρ ἔξω μέρεσι πλείονα τὸν πόνον παρέχονται, διὸ καὶ τοὺς ἰδρώτας ἐμποιοῦντες ἰσχυναίνουσιν. οἱ δ' ἐν τοῖς ψύχεσι στιφροτέραν τὴν σάρκα ποιοῦσι καὶ τῶν σιτίων ἐπιθυμητικωτέρους· τοῖς γὰρ ἔσω μέρεσι τὴν αὔξησιν τοῦ θερμοῦ ποιοῦνται, καὶ δυσκινήτων γινομένων ὑπὸ τοῦ ψύχους τὸν μὲν ἔσω τόπον καθαίρουσι, τὴν θερμασίαν αὐξάνοντες ἐν αὐτῷ, τὴν δὲ σάρκα στερεὰν ποιοῦσιν, οὐ δυνάμενοι κρατεῖν διὰ πάσης αὐτῆς. ὁμοίως οἱ ἀνάντεις τῶν κατάντων ἐπιπονώτεροι καὶ ἰσχυραντικώτεροι. οἱ μὲν γὰρ ἀνάντεις τὴν ὀσφὺν μάλιστα ποιοῦσι πονεῖν, οἱ δὲ κατάντεις τοὺς μηρούς· τοῖς γὰρ μηροῖς τὸ βάρος πᾶν ἐμπῖπτον κόπους εἴωθε παρέχειν. ἄνω γὰρ παρὰ φύσιν ὑπὸ τοῦ θερμοῦ βία φερόμενος ἐκθερμαίνει. διὸ τοὺς τε ἰδρώτας ἐμποιοῦσι, καὶ τὸ πνεῦμα μετεωρίζοντες ἰσχυναίνουσιν, καὶ τὴν ὀσφὺν ὀδυνῶσιν· τὰ γὰρ σκέλη χαλεπῶς ἀναγόμενα τὴν ὀσφὺν κάμπτουσί τε καὶ ἀνασπῶσιν, ὑφ' ὧν

ἀναγκάζονται μάλιστα πονεῖν. οἱ δ' ἐν ἀντιτύποις περίπατοι τοῖς τε μυσὶ καὶ τοῖς τεταμένοις τῶν σκελῶν παρέχουσι κόπους· συντάσεις γὰρ ἐμποιοῦσι τοῖς νεύροις καὶ τοῖς μυσὶ, βιαίας [885b] γενομένης τῆς ἀπερείσεως αὐτοῖς. οἱ δ' ἐν τοῖς μαλακοῖς τοῖς ἄρθροις κοπιώδεις εἰσίν· τῶν γὰρ ἄρθρων πυκνὰς τὰς κάμψεις ποιοῦσιν, ἅτε ἐνδιδούσης τῆς βάσεως. τὸ δ' αὐτό ἐστὶ πρόβλημα.

Διὰ τί πρὸς τὰ σιμὰ χαλεπῶς βαδίζομεν; ἢ διότι πᾶσα πορεία ἐξ ἄρσεως καὶ θέσεως συντελεῖται; τὸ μὲν οὖν ἄραι παρὰ φύσιν, τὸ δὲ θεῖναι κατὰ φύσιν, τὸ δὲ προσθεῖναι μεσότης· ἐν δὲ τῷ πρὸς τὰ σιμὰ βαδίζειν πολὺ τὸ παρὰ φύσιν.

Διὰ τί οἱ ἄφ' ἵππων ἥττον πίπτουσιν; ἢ διὰ τὸ φοβεῖσθαι φυλάττονται μᾶλλον;

### **Ζ. ΟΣΑ ΕΚ ΤΟΥ ΠΩΣ ΚΕΙΣΘΑΙ ΚΑΙ ΕΣΧΗΜΑΤΙΣΘΑΙ ΣΥΜΒΑΙΝΕΙ.**

Διὰ τί ἡ καθέδρα τοὺς μὲν παχύνει τῶν ἀνθρώπων, τοὺς δὲ ἰσχναίνει; πότερον ὅτι αἱ ἔξεις διαφέρουσιν; οἱ μὲν γὰρ θερμοὶ εἰσιν, οἱ δὲ ψυχροί. οἱ μὲν οὖν θερμοὶ παχύνονται (κρατεῖ γὰρ τὸ σῶμα τῆς τροφῆς διὰ τὴν θερμασίαν)· οἱ δ' ἐψυγμένοι, διὰ τὸ δεῖσθαι ἐπείσάκτου θερμότητος καὶ τοῦτο πάσχειν μάλιστα τὸ σῶμα ὑπὸ τῶν κινήσεων, οὐ δύναται πέττειν ἡρεμοῦντες. ἢ ὅτι οἱ μὲν περιττωματικοὶ εἰσι, καὶ δέονται κινήσεως ἢ ἀναλώσει ταῦτα, οἱ δὲ οὐ;

Διὰ τί δεῖ ποιεῖν διάτασιν τῶν μερῶν, ὃ ποιεῖ ὁ γυμναζόμενος; ἢ ὅτι δεῖ τῷ οἰκείῳ πνεύματι καθαίρεσθαι τοὺς πόρους;

Διὰ τί συγκεκαμμένον βέλτιον κατακεῖσθαι, καὶ πολλοὶ γε παραγγέλλουσι τοῦτο καὶ τῶν ἱατρῶν; ἢ ὅτι ἀλεαίνουσα ἡ κοιλία θᾶττον πέττει; οὕτω δὲ ἀλεαίνει μᾶλλον. ἔτι δεῖ τοῖς πνεύμασι τόπον δίδοναι εἰς ὃν ἀπερείσονται· οὕτω γὰρ ἥκιστα λυπήσουσιν αἱ φῦσαι. διὰ τοῦτο γὰρ καὶ ἰξία καὶ τὰ ἄλλα ἀποστήματα ὑγιεινόν, ὅτι ἔχουσι κοιλίας εἰς ἃς ἀποδέχονται τὰ πνεύματα. ἐκτεταμένου μὲν οὖν οὐ γίνεται κοιλία (ἅπαντα γὰρ τὸν τόπον τὰ σπλάγχνα κατέχει), συγκαμφθέντος δὲ γίνεται.

Διὰ τί ἀνισταμένοις ἱλιγγος μᾶλλον γίνεται ἢ καθίζουσιν; ἢ διότι ἡρεμοῦσι τὸ ὑγρὸν εἰς ἓν μόριον ἀθρόον ἀποκλίνει; διὸ καὶ τὰ ὠμὰ ὦα οὐ δύναται δινεῖσθαι, ἀλλὰ καταπίπτει. κινούμενον δὲ τὸ ὑγρὸν ὁμοίως ἔχει. ἀνίστανται



μὲν [886a] οὖν ἡρεμήσαντες, ὅτε οὕτως διάκεινται· καθιζάνουσι δὲ ἐν κινήσει γενόμενοι, ὅτε ὁμαλῶς ἔχει τὸ ὑγρὸν καὶ ἐσκέδασται.

Διὰ τί ἐπὶ τὰ δεξιὰ κατακειμένοις μᾶλλον ἐπέρχεται ὕπνος; πότερον ὅτι ἐναντίως ἔχοντες ἐγρηγόρασι καὶ καθεύδουσιν; ἐπεὶ οὖν ἐγρηγορότερες ἐπὶ τὰ ἀριστερὰ κατάκεινται, τοῦναντίον ἔσται ἐπ' ἄλλης ἀρχῆς καὶ τῆς ἐναντίας. ἢ ὅτι ἀκίνησία ὁ ὕπνος; τὰ οὖν κινητικὰ μέρη δεῖ ἡρεμεῖν, τὰ δὲ δεξιὰ κινητικά. οὕτω δὲ κατακειμένων οἷον δέδεται ἀρχὴ τις ἐπεγερτική.

Διὰ τί ναρκῶσιν; καὶ διὰ τί χεῖρας καὶ πόδας μᾶλλον; ἢ ὅτι κατάψυξις ἐστὶν ἡ νάρκη; διὰ στέρησιν γὰρ αἵματος γίνεται καὶ μετάστασιν. ἀσαρκότατα δὲ ταῦτα καὶ νευρωδέστατα, μάλιστα δὲ οἱ πόδες. ὥστε προοδοποιεῖται ὑπὸ τῆς φύσεως πρὸς τὸ καταψύχεσθαι ταχέως.

Διὰ τί κατακείμεθα μὲν ἐπὶ τὰ ἀριστερὰ ἡδέως, καθεύδομεν δὲ ἐπὶ τὰ δεξιὰ μᾶλλον; πότερον ὅτι ἀποστραφέντες πρὸς τὸ φῶς οὐ βλέπομεν; ἐν γὰρ τῷ σκότει θάττον ὕπνος λαμβάνει. ἢ διότι ἐγρηγόραμεν κατακείμενοι ἐπὶ τοῖς ἀριστεροῖς, καὶ αἱ χρήσεις ἡμῖν οὕτω πρόχειροι, ὥστε πρὸς τὸ ἐναντίον σχῆμα πρὸ ἔργου; παρακαλεῖ δὲ ἕκαστον πρὸς τὸ ἔργον τὸ σχῆμα μᾶλλον.

## **Z. ΟΣΑ ΕΚ ΣΥΜΠΙΑΘΕΙΑΣ.**

Διὰ τί τοῖς χασμωμένοις ἀντιχασμῶνται ὡς ἐπὶ τὸ πολὺ; ἢ διότι, ἐὰν ἀναμνησθῶσιν ὀργῶντες, ἐνεργοῦσι, μάλιστα δὲ τὰ εὐκίνητα, οἷον οὐροῦσιν. ἢ δὲ χάσμη πνεῦμα καὶ ὑγροῦ κίνησις ἐστὶν. πρόχειρον οὖν, ἐὰν μόνον νοήσῃ· ἔστι γὰρ πλησίον.

Διὰ τί, ἐὰν μὲν τινα ἴδωμεν τὴν χεῖρα ἐκτείνοντα ἢ τὸν πόδα ἢ ἄλλο τι τῶν τοιούτων, οὐκ ἀντιποιοῦμεν τὸ αὐτό, ἐὰν δὲ χασμώμενον, ἀντιχασμώμεθα; ἢ οὐδὲ τοῦτο αἰεὶ, ἀλλ' ἐὰν ὀργῶν τύχῃ τὸ σῶμα καὶ οὕτω διακείμενον ὥστε τὸ ὑγρὸν ἀναθερμαίνεσθαι; τότε γὰρ ἡ μνήμη τὴν κίνησιν ποιεῖ, ὥσπερ καὶ πρὸς ἀφροδίσια καὶ ἐδωδὴν· τὸ γὰρ ποιῆσαν μνήμην εἶναι τὸ ἔχον ὁρμὴν πρὸς τὸ φαντασθὲν πάθος.

Διὰ τί, ἐπειδὴν πρὸς τὸ πῦρ στῶμεν, οὐρητιῶμεν, καὶ ἐὰν πρὸς ὕδωρ, οἷον ἐὰν πρὸς ποταμόν, οὐροῦσιν; ἢ ὅτι τὸ πᾶν [886b] ὕδωρ ὑπόμνησιν δίδωσι τῆς ἐν τῷ σώματι ὑγρότητος, καὶ ἐκκαλεῖται τὸ προσιόν; αὐτὸ δὲ τὸ πῦρ διαχαλᾷ τὸ πεπηγὸς ἐν τῷ σώματι, ὥσπερ ὁ ἥλιος τὴν χιόνα.

Διὰ τί ἀπὸ μὲν νόσων ἐνίων νοσοῦσιν οἱ πλησιάζοντες, ἀπὸ δὲ ὑγείας οὐδεὶς ὑγιάζεται; ἢ ὅτι ἡ μὲν νόσος κίνησις, ἡ δὲ ὑγεία ἡρεμία; ἡ μὲν οὖν κινεῖ, ἡ δ' οὐθέν. ἡ διότι τὸ μὲν ἄκοντι τὸ δ' ἐκόντι γίνεται; καὶ ἄρα τὰ ἀκούσια τῶν ἐκουσίων καὶ τῶν ἐκ προνοίας διαφέρει.

Διὰ τί τῶν μὲν διὰ τῆς ἀκοῆς λυπηρῶν ἔνια φρίττειν ἡμᾶς ποιεῖ, οἷον πρίων ἀκονώμενος καὶ κίσηρις τεμνομένη καὶ λίθος ἀλούμενος, τὰ δὲ διὰ τῆς ὀψεως σημεῖα τῶν παθῶν αὐτὰ ἡμῖν τὰ πάθη ἐμποιεῖ; αἰμωδιῶμέν τε γὰρ τοὺς ὀξὺ ὀρῶντες ἐσθίοντας, καὶ τοὺς ἀπαγχομένους ἔνιοι ὀρῶντες ἐκψύχουσιν. ἡ διότι φωνὴ μὲν πᾶσα καὶ ψόφος πνεῦμα ἐστίν; τοῦτο δὲ εἰσδύομενον ἡμῖν πέφυκε κινεῖν. κινήσει δὲ μᾶλλον ἢ διὰ μέγεθος ἢ διὰ πληγὴν σφοδροτέραν, ποιοῦν ἢ ἀλλοιοῦν τι τῶν ἐν ἡμῖν. τὰ μὲν οὖν μεγάλα καὶ λεῖα πνεύματα τὸν τῆς αἰσθήσεως τόπον τὸν αὐτὸν κινεῖ, διὸ καὶ ἡδύνει τὰ τοιαῦτα· τὰ δὲ τραχέα, πληγὴν ποιοῦντα σφοδράν, σείει τε τὸν τόπον καὶ πόρρω διαδίδωσι τῇ τῆς πληγῆς δυνάμει. διαδίδωσι δὲ καὶ τὰ ψυχρὰ πόρρω· δύναμις γὰρ τίς ἐστίν ἡ ψυχρότης. αὕτη μὲν οὖν ὅτι φρίττειν ποιεῖ, εἴρηται. τὰ δὲ τραχέα τῷ πληγὴν ποιεῖν πυκνὴν, προσκόπτοντα τῇ ἀρχῇ τῶν τριχῶν, ἀπωθεῖ αὐτὴν εἰς τοῦναντίον· ἀπωθουμένης δὲ ἀνάγκη τὴν κορυφὴν τῆς τριχὸς ἀνάπαλιν γίνεσθαι, διὸ συμβαίνει ἴστασθαι αὐτάς· πᾶσαι γὰρ νενεύκασι κάτω. ἡ δὲ φορὰ τοῦ διὰ τῆς ἀκοῆς πνεύματος εἰς τὸ σῶμα ἄνωθεν κάτω ἐστίν. ὄντων οὖν τραχέων τῶν εἰρημένων ψόφων, ἡ φρίκη γίνοιτ' ἂν διὰ τὰ εἰρημένα. γίνονται δ' αὐταὶ μᾶλλον τῷ ἄλλῳ σώματι ἢ ἐν τῇ κεφαλῇ διὰ τὸ τὰς ἐνταῦθα τρίχας ἀσθενεστέρας εἶναι καὶ τὸ πάθος ἀσθενές. τῆς μὲν οὖν ἀκοῆς οὔσης ἀμβλυτέρας αἰσθήσεως ἢ τῆς ὀψεως, ἐπιπόλαια καὶ τὰ πάθη γίνεται ἀπ' αὐτῆς· ἡ δὲ φρίκη τοιοῦτον, διὸ καὶ ἀπὸ πολλῶν καὶ ἀνομοίων γίνεται. τῆς δὲ ὀψεως ἐναργεστάτης οὔσης αἰσθήσεως, ἀνάλογον καὶ τὰ συμβαίνοντα γίνεται ἀπ' αὐτῆς· διὸ ταῦτα μὲν τὰ ἀπὸ τῆς ἀληθείας πάθη συμβαίνει γίνεσθαι ἀπ' αὐτῆς, ἐλαφρότερα [887a] δὲ τῆς ἀληθείας. ἀπὸ δὲ τῆς ἀκοῆς αὐτὰ μὲν οὐ, τὴν δ' ἀπ' αὐτῶν προσδοκίαν φρίττομεν· ἀλγεινοῦ γὰρ κακοῦ προσδοκία ἐστίν.

Διὰ τί χασμησαμένοις ἀντιχασμῶνται, καὶ ὅταν οὐροῦντα ἴδωσιν, οὐροῦσι, καὶ μάλιστα τὰ ὑποζύγια; ἢ διὰ τὴν μνήμην; ὅταν γὰρ μνησθῇ, κινεῖται τοῦτο τὸ μέρος. τοῖς μὲν οὖν ἀνθρώποις, διὰ τὸ εὐαίσθητοτέροις εἶναι, ἰδοῦσιν εὐθὺς συμβαίνει καὶ κινεῖσθαι καὶ ἀναμνησθεσθαι· τοῖς δὲ ὑποζυγίοις οὐκ αὐτάρκες τὸ ἰδεῖν, ἀλλὰ προσδέονται καὶ ἄλλης αἰσθήσεως· διὸ καὶ ὀσφρανθέντα, ὅτι εὐκίνητοτέρα αὕτη ἡ αἴσθησις τοῖς ἄνευ λόγου. καὶ διὰ τοῦτο εἰς τὸν αὐτὸν τόπον ἅπαντα οὐρεῖ, οὔ ἂν τὸ πρῶτον οὐρήσῃ. τότε γὰρ μάλιστα κινεῖνται, ὅταν ὀσφρανθῶσιν· ὀσφραίνονται δ', ὅταν

πλησιάσωσιν.

Διὰ τί, ἐπειδὴν τεμνόμενόν τινα ἴδωμεν ἢ καιόμενον ἢ στρεβλούμενον ἢ ἄλλο τι τῶν δεινῶν πάσχοντα, συναλγοῦμεν τῇ διανοίᾳ; ἢ ὅτι ἡ φύσις ἡμῶν κοινὴ ἅπασιν; συνήλγησεν οὖν, ἐπειδὴν τι τοιοῦτον ἴδῃ, τῷ πάσχοντι διὰ τὴν οἰκειότητα. ἢ ὅτι ὥσπερ αἱ ῥῖνες καὶ αἱ ἄκοαὶ λαμβάνουσιν τινὰς ἀπορροίας κατὰ τὰς οἰκείας δυνάμεις, οὕτω καὶ ἡ ὄψις αὐτὸ πάσχει καὶ ἀπὸ τῶν ἡδέων καὶ λυπηρῶν;

Διὰ τί ἀπὸ φθίσεως καὶ ὀφθαλμίας καὶ ψώρας οἱ πλησιάζοντες ἀλίσκονται, ἀπὸ δὲ ὕδρωπος καὶ πυρετῶν καὶ ἀποπληξίας οὐχ ἀλίσκονται, οὐδὲ τῶν ἄλλων; ἢ ἡ μὲν ὀφθαλμία, ὅτι εὐκίνητότατον ὁ ὀφθαλμός, καὶ μάλιστα ὁμοιοῦται τῷ ὀρωμένῳ τῶν ἄλλων, οἷον κινεῖται ἀπὸ κινουμένου ὥστε καὶ ἀντιβλέπων τεταραγμένῳ ταραττεται μάλιστα; ἢ δὲ φθίσις, ὅτι πνεῦμα φαῦλον ποιεῖ καὶ βαρὺ, τάχιστα δὲ τὰ νοσήματα ταῦτα ἄπτεται πάντων, ὅσα τούτου φθειρομένου γίνεται, οἷον τὰ λοιμώδη. ὁ δὲ πλησιάζων τοιοῦτον ἀναπνεῖ. νοσεῖ μὲν οὖν, ὅτι νοσῶδες· ἀπὸ μόνου δέ, ὅτι ἐκπνεῖ, νοσεῖ, οἱ δὲ ἄλλοι ἐτέραν· τὴν αὐτὴν δὲ νόσον, ὅτι ὥς ἂν ἀσθενήσῃ, τούτῳ ἀναπνεῖ τοιοῦτον οἷον εἰ πεπονθὼς ἦν. ἢ δὲ ψώρα μᾶλλον τῶν ἄλλων, οἷον λέπρας καὶ τῶν τοιούτων, ὅτι ἐπιπολῆς τε καὶ γλίσχρον τὸ ἀπορρέον· τὰ γὰρ κνησμώδη τοιαῦτα. διὸ αὐτὰ τῷ ἐπιπολῆς γίνεσθαι καὶ γλίσχρον εἶναι ἄπτεται. τῶν δ' ἄλλων τὰ μὲν οὐχ ἄπτεται διὰ τὸ μὴ ἐπιπολῆς γίνεσθαι, τὰ δὲ ὄντα ἐπιπολῆς, ὅτι προσμένει διὰ ξηρότητα.

[887b] Διὰ τί τὴν αἰμωδίαν παύει ἡ ἀνδράχνη καὶ ἄλλες; ἢ ὅτι ἡ μὲν ὑγρότητά τινα ἔχει; φανερὰ δὲ αὕτη μασσωμένοις τε, καὶ συντεθῇ χρόνον τινά· ἔλκεται γὰρ ἡ ὑγρότης. τὸ δὲ γλίσχρον εἰσδυόμενον ἐξάγει τὸ ὀξύ. καὶ γὰρ ὅτι συγγενὴς ἡ ὀξύτης σημαίνει· ἔχει γὰρ τινα ὀξύτητα ὁ χυλός. ὁ δὲ ἄλς συντήκων ἐξάγει καὶ τὴν ὀξύτητα. διὰ τί οὖν ἡ κονία καὶ τὸ νίτρον οὐ; ἢ ὅτι στύφει καὶ οὐ τήκει;

## Η. ΟΣΑ ΕΚ ΡΙΓΟΥΣ ΚΑΙ ΦΡΙΚΗΣ.

Διὰ τί οἱ ῥιγῶντες πελιδνοὶ γίνονται; ἢ διότι τὸ αἷμα πήγνυται διὰ τὸ ψῦχος, πηγνύμενον δὲ μελαίνεται διὰ τὴν ἀπουσίαν τοῦ θερμοῦ; τὸ δὲ λευκὸν τοῦ πυρός. διὸ καὶ τοῖς πρεσβύταις μάλιστα πελιδνοῦνται ἢ σάρξ, ὅτι ἐλαχίστην ἔχει θερμότητα.

Διὰ τί οἱ ῥιγῶντες καθεύδειν οὐ δύνανται; ἢ διότι πάντες οἱ ῥιγῶντες

μᾶλλον τὸ πνεῦμα κατέχουσιν, ὁ δὲ καθεύδων ἐκπνεῖ μᾶλλον ἢ εἰσπνεῖ, ὥστε χαλεπὸν ῥιγῶντα καθεύδειν· ἅμα γὰρ ποιεῖν τάναντία ἀδύνατον.

Διὰ τί ἐν τῷ ψύχει ὀξύτεροι καὶ οἱ ἀσθενήσαντες καὶ οἱ λυπούμενοι καὶ οἱ ὀργιζόμενοι; ἢ στιφρότερον ποιεῖ τὸ καταψύχεσθαι;

Διὰ τί οἱ ἀθληταὶ δύσριγοι εὖ ἔχοντες; ἢ ὅτι καθαρὰ καὶ εὐπνοὺς ἢ ἕξις καὶ ἀπίμελος; ἢ τοιαύτη δὲ εὐπαθεστάτη ὑπὸ τοῦ ἀέρος, ὅταν εὐδίοδός τε ἢ καὶ μὴ ἔχη θερμότητα ἐν αὐτῇ· ἢ δὲ πιμελὴ θερμόν, ἂν μὴ δίυγρος.

Διὰ τί μάλιστα τὰ ἀκρωτήρια ῥιγῶσιν; ἢ διὰ στενότητα; καὶ οἱ πόροι ἐν αὐτοῖς στενοὶ ὄντες ὀλίγαιμοί εἰσιν, ὥστε καὶ ὀλιγόθερμοί εἰσι· τὸ γὰρ αἷμα θερμόν.

Διὰ τί, ἐὰν μετέωροι ᾖσιν οἱ πόδες, μᾶλλον ῥιγοῦσιν; πότερον ὑποπνεῖ μᾶλλον; ἢ ὅτι ἐν ἐλάττονι γίνεται τὸ αἷμα κάτω, ὥστε τὸ ἄλλο εὐψυκτότερον ἐκλείποντος τοῦ θερμοῦ;

Διὰ τί οἱ παχεῖς σφόδρα ῥιγοῦσι, τῆς πύοτος θερμῆς οὕσης; ἢ διὰ τὸ μέγεθος τοῦ πάχους τοῦ μὲν ἔσωθεν θερμοῦ πόρρω γίνονται τὰ ἔσχατα, τοῦ δὲ ἔξω ψυχροῦ ἐγγύς;

Διὰ τί παρέντες καὶ οὐρήσαντες φρίττουσιν; ἢ ὅτι κενοῦνται αἱ φλέβες ἐν ἀμφοτέροις, κενωθέντων δὲ ὁ ἀὴρ εἰσέρχεται ψυχρός, ὁ ποιῶν φρίττειν.

Διὰ τί μάλιστα βουλιμιῶσιν ἐπὶ τῷ ψύχει, καὶ τοῦ χειμῶνος μᾶλλον ἢ τοῦ θέρους; ἢ διότι ἢ μὲν βουλιμία γίνεται [888a] δι' ἔνδειαν τῆς ξηραῖς τροφῆς, ἐν δὲ τῷ ψύχει καὶ τῷ χειμῶνι συστελλομένου τοῦ ἐντὸς θερμοῦ εἰς ἐλάττω τοῦτο θᾶπτον ὑπολείπει ἢ ἐντὸς τροφή· τούτου δὲ γινομένου μᾶλλον βουλιμιᾶν εἰκός. ἢ δ' ἐν τῇ βουλιμίᾳ ἔκλυσις καὶ ἀδυναμία γίνεται συντήξεως γινομένης ἐν τῷ σώματι διὰ τὴν τοῦ θερμοῦ ἄθροισιν, ἥς ῥυείσης μὲν εἰς τὸν τῶν σιτίων τόπον αὐτὴ τροφή γίνεται τῷ σώματι, ἐὰν δ' ἐπὶ τὰς ἀρχὰς τῆς ἀναπνοῆς ἔλθῃ, ἀφωνία καὶ ἀδυναμία συμβαίνει, ἀφωνία μὲν διὰ τὸ ἐμφράττεσθαι τὸν τοῦ πνεύματος πόρον, ἀδυναμία δὲ διὰ τὴν τοῦ σώματος ἀτροφίαν καὶ σύντηξιν. ταχεῖαι δὲ καὶ ἀπ' ὀλίγων αἱ βοήθειαι γίνονται τοῖς τοιούτοις διὰ τὸ τὴν ἀρχὴν τοῦ πάθους ἔξωθεν γίνεσθαι. συστέλλον γὰρ τὸ ἐντὸς ψυχρὸν τὸ θερμὸν ἡμῶν ποιεῖ τὴν βουλιμίαν. καθάπερ οὖν ἐν τῷ φόβῳ τρέμοντες καὶ ὠχριῶντες, ἀφέντες τοῦ κινδύνου, παραχρῆμα οἱ αὐτοὶ γίνονται, οὕτω καὶ οἱ βουλιμιῶντες, μικρὰ προσενεγκάμενοι ἐξ ἄρτου, βία κινηθέντες ἐκ τῆς φύσεως, μὴ φθαρέντες δέ· ταχεῖα ἢ ἀποκάθαρσις γίνεται.

ταὐτὸ γὰρ ἀντέτεινε τήν τε κατὰ φύσιν ἀγωγήν, καὶ καθίστησιν εἰς τὴν φύσιν. ἀφεῖναι οὖν μόνον αὐτὴν δεῖ, καὶ καθάπερ τῶν παιδίων τὰ ἀντιτείνοντα εἰς τοῦπισθεν τὰ σπαρτία· καὶ γὰρ ταῦτα ἀφεθέντων τῶν σπαρτίων εὐθὺς πεπτώκασιν ὕπτια.

Διὰ τί οἱ γεγυμνασμένοι δυσριγότεροι τῶν ἀγυμνάστων; πότερον ὅτι τὸ πῖον ὑπὸ τῶν πόνων ἐξήρηται, τοῦτο δὲ ἀλέαν παρέχει· θερμὸν γὰρ τὸ λιπαρόν. ἢ ὅτι εὐπνότερα τὰ σώματα καὶ ἀραιότερα διὰ τὸ τὸ πῖον καὶ τὸ περίττωμα ἐξηρῆσθαι, ὥστε οὐδὲν ἀποστέγειν τὸ ψῦχος; ἢ διὰ τὴν τῶν πόρων ἀποστόμωσιν τοῖς ἰδρώσιν οἷον πολλαὶ θύραι ἐξήρηνται; φανερόν δὲ ὅτι οὐχ ἡ αὐτὴ ἔξις πρὸς ὑγείαν καὶ ἰσχὺν συμφέρει· ἡ μὲν γὰρ πίων, ἡ δὲ ἀραιὰ φαίνεται οὕσα.

Διὰ τί φρίττουσι καὶ τῷ θερμῷ καὶ τῷ ψυχρῷ προσχεόμενοι; ἄτοπον γὰρ τὰ ἐναντία τοῦ αὐτοῦ εἶναι αἴτια. ἢ διότι ὑπὸ μὲν τοῦ ψυχροῦ προσχεόμενοι τὸ ἐντὸς θερμὸν σβεννύμενον ποιεῖ τὴν φρίκην, ὑπὸ δὲ τοῦ θερμοῦ τὸ ἐκτὸς ψυχρὸν ἀντιπεριεστάμενον εἰς ἐν καὶ ἀθροιζόμενον τῇ φυγῇ ἔσω; ὥστε ὑπὸ τοῦ αὐτοῦ ἄμφω γίνεται, ἀλλ' ὅτε μὲν ὑπὸ τοῦ ἔσω, ὅτε δὲ ὑπὸ τοῦ ἔξωθεν.

Διὰ τί φρίττουσιν αἱ τρίχες ἐν τῷ δέρματι; ἢ ὅταν συσπάσῃ τὸ δέρμα, εἰκότως ἐξανέστησαν· συσπῶσι δὲ καὶ ὑπὸ ρίγους καὶ ὑπ' ἄλλων παθῶν.

[888b] Διὰ τί ἐν τῇ τελευταίᾳ προέσει τοῦ οὔρου φρίττομεν; ἢ ὅτι ἐνόντος μὲν τοῦ ὑγροῦ θερμοῦ πλήρεις ἢ τε κύστις καὶ οἱ περὶ αὐτὴν πόροι, ἐξελθόντος δὲ ἀέρος ψυχροῦ ἐνέπλησεν· οὐδὲν γὰρ κενὸν δεῖ εἶναι, ἀλλ' ἡ ἀέρος ἢ σώματος πλήρης. ἅτε οὖν εἰσεληλυθὸς ψυχροῦ ἀέρος εἰκότως φρίττειν συμβαίνει.

Διὰ τί τῶν ριγόντων ἡ γλῶττα, καθάπερ τῶν μεθυόντων, πταίει; πότερον ὑπὸ τοῦ ψύχους πηγνυμένη καὶ σκληρυνομένη δυσκίνητος γίνεται, τούτου δὲ συμβαίνοντος οὐ δύναται σαφηνίζειν; ἢ τῶν ἐκτὸς πυκνουμένων διὰ τὸ ψῦχος εἶσω συρρυνὲν τὸ ὑγρὸν ἐξυγραίνει τὴν γλῶτταν, διόπερ οὐ δύναται ἡ γλῶττα τὸ αὐτῆς ποιεῖν, καθάπερ εἴρηται καὶ ἐπὶ τῶν μεθυόντων. ἢ διὰ τὸν ἀπὸ τοῦ ρίγους τρόπον ἀτάκτου τῆς κινήσεως οὔσης οὐ δύναται τὰ λεγόμενα διαρθροῦν ἡ γλῶττα· διόπερ καὶ πταίει.

Διὰ τί τῶν ριγόντων ὀρθαὶ αἱ ἐν τῷ σώματι τρίχες γίνονται; ἢ διότι ἀπὸ τῆς καταψύξεως τὸ θερμὸν εἰς τὸν ἐντὸς τόπον ἀθροίζεται, ἐκλείποντος δ' ἐκ τῆς σαρκὸς τοῦ θερμοῦ συνίσταται μᾶλλον, συναγομένης δὲ ὀρθότεραι αἱ

τρίχες γίνονται. ἢ διότι

Διὰ τί τοῦ χειμῶνος τρέχοντες μᾶλλον ῥιγῶμεν ἢ ἐστῶτες; ἢ ὅτι ὁ ἀήρ ὁ περὶ τὸ σῶμα ἐστώτων μὲν, ἐπειδὴν ἅπαξ συνθερμανθῇ, οὐκέτι ἐνοχλεῖ, τρεχόντων δὲ ἀεὶ ἄλλος καὶ ἄλλος προσπίπτει ψυχρὸς ὢν, διόπερ μᾶλλον ῥιγῶμεν; ἔτι δὲ καὶ κινούμενος ψυχρότερος γίνεται ὁ ἀήρ· τοῦτο δὲ ἐν τῷ τρέχειν μάλιστα συμπίπτει.

Διὰ τί ὑποφαύσκοντος μᾶλλον ψῦχος ἢ ἐγγυτέρω τοῦ ἡλίου ὄντος; ἢ ὅτι πλείων ὁ χρόνος τῆς τοῦ ἡλίου ἀπουσίας, ὥστε μᾶλλον ἀπέψυκται ἡ γῆ; ἢ ὅτι πρὸς ἡμέραν ἡ δρόσος πίπτει ὥσπερ πάχνη, ταῦτα δὲ ψυχρά; ἢ καὶ ταῦτα πίπτει διὰ τὸ κρατεῖσθαι τὸ ἀναφερόμενον θερμόν, κρατεῖται δὲ διὰ τὴν τοῦ ἡλίου ἀπουσίαν· διὸ καὶ πλεῖον μὲν ἀπέχοντος οὐ πίπτει, ἐγγυτέρω δὲ ὄντος πίπτει καὶ πηγνυται· διότι μᾶλλον ἀπέψυκται ὁ τόπος, πλείω χρόνον τοῦ ἡλίου ἀπόντος. ἢ ὅτι πρὸς ἡμέραν μᾶλλον τὰ ἐκ νυκτῶν πνεύματα τῆς ψύξεως; ἢ ἡμῖν δοκεῖ μᾶλλον εἶναι ψῦχος διὰ τὸ πεπέφθαι τὰ σιτία; κενώτεροι δὲ ὄντες δυσριγότεροι. σημεῖον δὲ τὸ μετὰ τοὺς ἐμέτους μάλιστα ῥιγοῦν.

Διὰ τί πονοῦσιν, ὅταν ῥιγῶντας πρὸς τὸ πῦρ φέρωσιν· ὅταν δὲ κατὰ μικρὸν χλιαίνωσιν, οὐ; ἢ ὅτι ὅλως ἐκ τῶν ἐναντίων [889a] τοῦναντίον γινόμενον μεγάλην ποιεῖ τὴν μεταβολήν; ὥσπερ ἐπὶ τῶν δένδρων, εἰ μὲν κατὰ μικρὸν κάμπτοι τις, οὐκ ἂν πονοῖ, εἰ δὲ σφοδρότερον καὶ μὴ κατὰ μικρόν, κλῶνται. εἰ οὖν τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου ἀπαθές, τὸ δὲ θερμόν τοῦ ῥιγῶντος εἴσω συνίσταται καὶ συνέρχεται, τὸ δὲ ὑγρὸν καταλείπεται καὶ τὸ ψυχρόν, τὸ δὲ ἐναντίον τοῦ ἐναντίου φθαρτικόν· ὥστε ἐὰν μὲν χλιαίνῃ, κατὰ μικρὸν ἐξέρχεται τὸ θερμόν καὶ ἥττον πονεῖ, ἐὰν δὲ μὴ ἀναχλιάνῃ, προσάγει μᾶλλον.

Διὰ τί ψυχθέντες μᾶλλον ἀπὸ τῆς αὐτῆς θερμασίας καιόμεθα καὶ ἀλγοῦμεν; πότερον διὰ πυκνότητα στέγει ἡ σὰρξ τὸ προσπίπτον θερμόν; διὸ μόλιβδος ἐρίου θερμότερος, ἢ βίαιος γίνεται τοῦ θερμοῦ ἢ δίοδος διὰ τὸ πεπηγέναι ὑπὸ τοῦ ψύχους τοὺς πόρους.

Διὰ τί οἱ ὀργιζόμενοι οὐ ῥιγῶσιν; ἢ ὅτι ἡ ὀργὴ τῇ δειλίᾳ ἐναντίον καὶ ὁ θυμός; ἔστι δὲ ἡ μὲν ὀργὴ ἀπὸ τοῦ πυρός· πολὺ γὰρ τὸ πῦρ κατέχοντες εἴσω χλιαίνονται. μάλιστα δ' ἔστιν ἐπὶ τῶν παιδίων καταμαθεῖν. οἱ μὲν γὰρ ἄνδρες βλάπτονται, τὰ δὲ παιδιά πρῶτον μὲν τὸ πνεῦμα πολὺ ἀναλαμβάνουσιν, εἴτα ἐρυθριῶσιν· πολὺ γὰρ εἴσω ὂν τὸ θερμόν καὶ ἐξυγραῖνον ἐρυθριᾶν ποιεῖ, ἐπεὶ εἴ τις αὐτοῖς πολὺ τοῦ ψυχροῦ προσχέοι, παύσονται ἂν ὀργιζόμενοι.

κατασβεσθείη γὰρ ἂν αὐτῶν τὸ θερμόν. οἱ δὲ δειλοὶ καὶ φοβούμενοι τοῦναντίον. ῥιγῶσί τε γὰρ καὶ ψυχροὶ καὶ ὠχροὶ γίνονται· ἐκλείπει γὰρ τὸ θερμόν αὐτοῖς ἐκ τῶν ἐπιπολῆς τόπων.

Διὰ τί, ὅταν φρίξωμεν, αἱ τρίχες ὀρθαὶ ἴστανται; ἢ διὰ τὸ ἐν ὑγρῷ πεφυκέναι κατακεκλεῖσθαι; κρατεῖ γὰρ τοῦ ὑγροῦ τὸ βάθος τῆς τριχός. ἢ δὲ φρίκη γίνεται ὑπὸ τοῦ ψυχροῦ, τὸ δὲ ψῦχος κατὰ φύσιν πῆγνυσι τὸ θερμόν. ὅταν οὖν μεταβάλλῃ τὸ ὑγρόν, ἐξ οὗ πεφύκασιν αἱ τρίχες, καὶ παγῇ, μεταβάλλειν εἰκὸς καὶ τὰς τρίχας. εἰς μὲν οὖν τοῦναντίον εἰ μεταβάλλουσιν, ἢ ἐν ταύτῳ μένουσιν, ἢ ἐπικρατήσῃ πάλιν ἡ θρῖξ τοῦ ὑγροῦ· οὐκ εἰκὸς δὲ πεπηγότος καὶ πεπυκνωμένου τοῦ ὑγροῦ τὴν τρίχα τῷ βάρει κρατεῖν. εἰ δὲ μηδαμόσε κεκλίσθαι δυνατόν τὴν τρίχα τῷ τὸ ὑγρὸν πεπηγέναι, λείπεται ἐστάναι ὀρθήν. ἢ διότι ὑπὸ τῆς καταψύξεως τὸ θερμόν εἰς τὸν ἐντὸς τόπον ἀθροίζεται, ἐκλείποντος δὲ ἐκ τῆς σαρκὸς τοῦ θερμοῦ συνίσταται μᾶλλον ἢ σὰρξ, συναγομένης δὲ ὀρθότεραι αἱ τρίχες γίνονται, καθάπερ ἐάν τις εἰς [889b] τὴν γῆν ἐμπήξας κάρφος ἢ ἄλλο τι συντάττῃ καὶ πάντοθεν συνάγῃ τὴν γῆν, μᾶλλον ὀρθοῦται ἢ ἐὰν ἐᾷ μὴ συνεστηκυῖαν.

Διὰ τί οἱ ῥιγῶντες μάλιστα οὐ καθεύδουσιν; ἢ διότι ὁ ῥιγῶν μᾶλλον κατέχει τὸ πνεῦμα ἢ ἐκπνεῖ, ὁ δὲ καθεύδων ἐκπνεῖ ἢ εἰσπνεῖ; ἐναντίως οὖν ποιεῖ ἔχειν τὸ ῥῖγος τῷ καθεύδειν.

## **Θ. ΟΣΑ ΠΕΡΙ ΥΠΩΠΙΑ ΚΑΙ ΟΥΛΑΣ ΚΑΙ ΜΩΛΩΠΑΣ.**

Διὰ τί τοὺς μώλωπας κωλύει τὰ νεόδρατα δέρματα προστιθέμενα, καὶ μάλιστα κριῶν, καὶ ὥα ἐπικαταγνύμενα; ἢ ὅτι ἄμφω κωλύει τὴν ἄθροισιν τοῦ ὑγροῦ καὶ τὴν ἔπαρσιν; τὸ γὰρ ἀφηλκωμένον ἔλκει ἐπαίρεται διὰ τὴν θερμασίαν· τὰ τε δὴ ὥα διὰ τὴν γλισχρότητα κατακολλῶντα κωλύει ἐπαίρεσθαι, καθάπερ καὶ τὰ καύματα, ὥσπερ καὶ ἡ κόλλα, καὶ τὰ δέρματα τῇ τε γλισχρότητι προσκολλᾶται, καὶ ἅμα τῇ θερμότητι συμπέττει καὶ παύει τὴν φλεγμασίαν· οὐδὲ γὰρ ἀφαιροῦσιν ἡμερῶν τινῶν. ἐξάγειν δὲ βούλονται τὴν φλεγμασίαν καὶ οἱ τῷ ἀλὶ καὶ τῷ ὄξει τρίβοντες.

Διὰ τί ἐν μὲν τῷ ἄλλῳ σώματι αἱ οὐλαὶ μέλαιναι, ἐν δὲ τῷ ὀφθαλμῷ λευκαί; ἢ ὅτι ἐναντίαν χροάν ἡ οὐλὴ λαμβάνει τῇ πρότερον, ὥσπερ πᾶν τὸ νενοσηκός; ἐν τῷ μέλανι δὲ τοῦ ὀφθαλμοῦ τὰ ἔλκη. οὐ μὲν οὐδὲ ἐν τῷ σώματι μέλαιναι εὐθύς, ἀλλ' ἐξ ἀρχῆς λευκαί, οὐδὲ ἐν τῷ ὀφθαλμῷ ἀεὶ μέλαιναι, ἀλλ' ἀποκαθίστανται τῷ χρόνῳ, ἢ ἀπλῶς ἢ εἰς τὸ μᾶλλον.

Διὰ τί ὁ νάρθηξ τὰ κύκλῳ τῆς πληγῆς ποιεῖ ἐρυθρά, τὸ δὲ μέσον λευκόν; πότερον ὅτι ἀποπιέζει τὸ αἷμα ἐκ τοῦ μέσου, καθὼ μάλιστα προσπίπτει περιφερῆς ὢν; ἢ ἔδει ἐπανιέναι διὰ γε τοῦτο πάλιν· ἀλλ' αἵματος συνδρομὴ τὸ ἐρύθημά ἐστι, συνδρομὴ δ' εἰς τὸν πληγέντα τόπον.

Διὰ τί τῷ μὲν νάρθηκι σφόδρα τυπτόμενον τὸ μέσον τῆς σαρκὸς λευκὸν γίνεται, τὸ δὲ κύκλῳ ἐρυθρόν, ξύλῳ δὲ ἐρυθρότερον τὸ μέσον; ἢ ὅτι ὁ μὲν νάρθηξ διὰ κουφότητα, ἐὰν σφόδρα πατάξῃ, τὸ ἐπιπολῆς διεσκέδασεν αἷμα, ὥστε ὅθεν μὲν ἐξέλιπε, λευκὸν φαίνεται, οὗ δὲ πλεον ἦλθεν, ἐρυθρότερον. οἰδησάσης δὲ τῆς πληγῆς, οὐ ταχέως ἀποκαθίσταται τὸ σκεδασθὲν αἷμα διὰ τὸ ὀλίγον τε εἶναι καὶ τὴν φορὰν εἰς τὸ πρόσαντες εἶναι· πλήθει γὰρ βιασθὲν δεῖ τὴν [890a] παρὰ φύσιν φορὰν ἐνεχθῆναι. διὰ δὲ τῶν σκληρῶν αἰ πληγαὶ διὰ τὸ βάρος καὶ τὴν ἰσχὺν θλίψιν καὶ θλάσιν ποιοῦσιν. θλιβόμενον μὲν οὖν κοῖλον γίνεται, θλώμενον δὲ ἀραιόν· τομὴ γὰρ καὶ διαίρεσις ἐστὶ μαλακὴ ἢ θλάσις. κοίλου δὲ καὶ ἀραιοῦ γενομένου τοῦ μέσου, φέρεται εἰς αὐτὸ ἐκ τῶν πέριξ ἐπιπολῆς αἷμα· κάτω τε γὰρ πέφυκε φέρεσθαι, καὶ εἰς τὰ ἀραιὰ τῷ εἴκειν αὐτά. ἀθροιζομένου δ' ἐνταῦθα εἰκότως τοῦ αἵματος τοῦτο μὲν ἐρυθραίνει, ἃ δὲ ἀπολείπει, λευκαίνει.

Διὰ τί αἰ οὐλαὶ μέλαιναι τῶν σπληνιόντων; ἢ ὅτι αἷμα διεφθαρμένον ἔχουσι διὰ τὴν ἐκ τοῦ σπληνὸς σύμμιξιν νοσώδους αἵματος καὶ ὕδαροῦς; ἢ μὲν οὖν οὐλὴ τὸ δέρμα λεπτόν καὶ ἐπιπόλαιον ἴσχει· τὸ δὲ αἷμα, διὰ τὸ ὕδαρες καὶ θερμὸν εἶναι μέλαν ὄν, τοιαύτην ποιεῖ τὴν οὐλὴν διαφανόμενον· καὶ δὴ πλεονάκης ἢ οὐλὴ ἐν τούτῳ γίνεται μελάντερά. γίνεται δὲ διὰ ταῦτό· δι' ἀσθένειαν γὰρ τοῦ δέρματος καταψύχεται τὸ αἷμα, καὶ ἐξατμίζοντος τοῦ θερμοῦ γίνεται μελάντερον. ὁμοίως δὲ καὶ τοῖς πρεσβύταις οἱ τε χρῶτες μελάντεροι γίνονται, καὶ αἰ οὐλαὶ αἰ συγγενεῖς μελάντεραι ἢ νέοις· οἶον ὑπώπιον γὰρ αὐτοῖς ἅπαν τὸ σῶμα οὐ διὰ λεπτότητα τοῦ δέρματος, ἀλλ' ὅτι τὸ θερμὸν ἐκλέλοιπεν.

Πότερον ὅσα τοῦ αὐτοῦ αἷτια, τὴν αὐτὴν ἔχει δύναμιν εἰς τὸ ποιεῖν ἢ οὐ; λέγω δὲ οἶον ἐπεὶ τὰ ὑπώπια καὶ ὁ χαλκὸς ἐξαίρει καὶ ἡ ῥαφανὶς καὶ ὁ κύαμος διαμασώμενος καὶ ὁ πνεύμων καὶ ἡ ἄργιλος καὶ ἕτερά ἅττα, τῇ αὐτῇ δυνάμει, ἢ ὁ μὲν χαλκὸς τῷ ἰὸν εἶναι, τὸν δὲ ἰὸν φαρμακώδη, ὁ δὲ κύαμος καὶ ὁ πνεύμων καὶ ἡ ἄργιλος τῷ ἐπισπᾶν ἐφ' αὐτὰ διὰ μανότητα, ἄλλα δὲ δι' ἑτέρας αἰτίας; ἢ τὸ μὲν ἔσχατον ἐπὶ πάντων τῶν τοιούτων ταῦτό (πολλὰ γὰρ καὶ ἐναντία τούτοις, καθάπερ καὶ τὸ θερμὸν καὶ τὸ ψυχρόν), τὰ δὲ πρὸ τούτων οὐδὲν κωλύει ἕτερα.



Διὰ τί αἱ μὲν ἄλλαι οὐλαὶ μέλαιναι γίνονται, αἱ δὲ ἐν τῷ ὀφθαλμῷ λευκαί; ἢ διότι μεταβάλλουσιν ἐν ᾧ ἂν ὡσι πρὸς τὰς χροιάς, ἐν δὲ τῷ ὀφθαλμῷ μέλανι ὄντι γίνονται, ὥστε ἀνάγκη λευκὰς γίνεσθαι.

Διὰ τί ἀλγεινότερα ἡ πληγὴ τοῦ νάρθηκος ἢ ἐνίων σκληροτέρων, ἐάν τις κατὰ λόγον σκοπῇ τύπτων; εὐλογώτερον γὰρ τὴν τοῦ σκληροτέρου εἶναι ἀλγεινότεραν· μᾶλλον γὰρ [890b] τύπτει. ἢ ὅτι ἡ σὰρξ ἀλγεῖ οὐ μόνον τυπτομένη ἀλλὰ καὶ τύπτουσα; ὑπὸ μὲν οὖν τῶν σκληρῶν τύπτεται μόνον (ὑπέικει γὰρ διὰ τὴν σκληρότητα αὐτῶν), ὑπὸ δὲ τοῦ νάρθηκος ἄμφω αὐτῇ συμβαίνει, τύπτεσθαι τε καὶ διὰ κουφότητα τοῦ βάρους τύπτειν μὴ εἴκουσαν, ὥστε διπλασία γίνεται ἡ πληγὴ.

Διὰ τί ἡ θαψία καὶ ὁ κύαθος τὰ ὑπώπια παύει, ἡ μὲν ἀρχόμενα, ὁ δὲ ὕστερον, ἐναντία ὄντα; ὁ μὲν γὰρ κύαθος ψυχρός, ὥσπερ καὶ ὁ ποιητής φησι “ψυχρὸν δ’ ἔλε χαλκὸν ὁδοῦσιν”, ἡ δὲ θαψία θερμὸν καὶ καυστικόν. ἢ ὁ μὲν κύαθος ὥσπερ τοῖς μικροψυχοῦσι τὸ ὕδωρ; ἀπαντῶσα γὰρ ἡ ψύξις κωλύει ἐξιέναι τὸ θερμὸν ἐκ τοῦ αἵματος ἐξ ἐπιπολῆς διὰ τὴν πληγὴν συνδραμόντος, καὶ ὅταν ἐξέλθῃ τὸ θερμόν, πηγνυμένου. ὥσπερ γὰρ ἂν εἰ ἔξω ὄν πήγνυται, καὶ ἐγγὺς τοῦ ἔξω τὸ αἶμα, ὅταν ἡ ὑπὸ τὸ δέρμα, κωλυθέντος διεξιέναι τοῦ θερμοῦ, διὰ τὴν ψυχρότητα τοῦ χαλκοῦ πήγνυται, ἀλλὰ πάλιν διαχεῖται καὶ ἐπανέρχεται ὅθεν συνέδραμεν. ἡ δὲ θαψία θερμὴ οὖσα τὸ αὐτὸ ποιεῖ· κωλύει γὰρ πήγνυσθαι θερμὴ οὖσα.

Διὰ τί τὰ ὑπώπια διαλύεται προσέχουσι τὰ χαλκᾶ, οἷον κυάθους καὶ τὰ τοιαῦτα; ἢ διότι ψυχρὸν ὁ χαλκός ἐστιν; κωλύει οὖν τὸ θερμὸν ἐξιέναι ἐκ τοῦ συνιόντος αἵματος ὑπὸ τῆς πληγῆς, οὐ ἐξελθόντος ἐκ τοῦ ἐπιπολῆς γίνεται ὑπώπιον. διὸ καὶ ταχὺ δεῖ προστιθέναι πρὶν παγῆναι. καὶ ἡ θαψία δὲ μετὰ μέλιτος βοηθεῖ διὰ τὸ αὐτό· θερμὴ γὰρ οὖσα κωλύει ψύχεσθαι τὸ αἶμα.

Διὰ τί ποτε, ὅταν ἐν τῷ αὐτῷ τόπῳ πλεονάκεις ἔλκος γένηται, ἡ οὐλὴ μέλαινα γίνεται; ἢ ὁπόταν γένηται ἔλκος, πᾶν ἀσθενές ἐστι τοῦτο, καὶ ὅσω ἂν πλεονάκεις, τοσοῦτω μᾶλλον· τὸ δὲ ἀσθενές κατεψυγμένον καὶ ὑγρότητος πλῆρες; διὸ καὶ μέλαν φαίνεται, εἰ τὰ μεγάλα ἔλκη καὶ πολυχρόνια μελαίνας τὰς οὐλὰς ἴσχει. τὸ δὲ πολλάκις λαβεῖν ἔλκος οὐδὲν ἄλλ’ ἢ πολὺν χρόνον ἔχειν ἐστὶν ἔλκος.

Διὰ τί ποτε πρὸς τὰ ὑπώπια τοὺς κυάθους προστιθέμεθα; ἢ διότι, ὅταν πληγῶμεν, ὁ τόπος καταψύχεται, τὸ δὲ θερμὸν ὑποχωρεῖ. προστιθέμενος οὖν ὁ κύαθος, ψυχροῦ ὄντος τοῦ χαλκοῦ, διακωλύει τὸ θερμὸν ἐκπορεύεσθαι.

Διὰ τί ἐν ταῖς οὐλαῖς οὐ γίνονται τρίχες; ἢ ὅτι οἱ πόροι ἐπιτυφλοῦνται ἐξ ὧν αἱ τρίχες, καὶ παραλλάττουσιν;

[891a] Διὰ τί οἷδημα καὶ πελιώματα λαμβάνουσιν αἱ πληγαί; ἢ διότι κατὰ τοῦτον τὸν τόπον διασταλέντα τὰ ὑγρά, εἰς τοὺς πλησίον τόπους προσκόψαντα ἀποπάλλεται πάλιν καὶ τῇ κολλήσει ὑγρὸν συνήγαγεν; ἔαν δὲ καὶ φλέβιά τινα ῥαγῇ, ὕφαιμος ἢ συνδρομὴ γίνεται.

## I. ΕΠΙΤΟΜΗ ΦΥΣΙΚΩΝ.

Διὰ τί τὰ μὲν βήττει, τὰ δ' οὐ, οἷον ἄνθρωπος μὲν βήττει, βοῦς δὲ οὐ; πότερον τῷ εἰς ἄλλο τι τρέπεσθαι τοῖς πλείστοις ζώοις τὸ περιττώμα, ἀνθρώπῳ δὲ δεῦρο; ἢ ὅτι ἐγκέφαλον πλεῖστον καὶ ὑγρότατον ἔχει ὁ ἄνθρωπος, ἡ δὲ βῆξ καταρρέοντος γίνεται φλέγματος.

Διὰ τί ἀνθρώπῳ μόνῳ τῶν ζώων αἷμα ῥεῖ ἐκ τῶν μυκτῆρων; ἢ ὅτι ἐγκέφαλον ἔχει πλεῖστον καὶ ὑγρότατον, ἀφ' οὗ αἱ φλέβες πληροῦμεναι τοῦ περιττώματος διὰ τῶν πόρων προῖενται τὴν ῥύσιν; λεπτότερον γὰρ γίνεται τοῦ αἵματος τοῦ καθαροῦ τὸ νοσερόν, τοῦτο δὲ ἐστὶ τὸ μιχθὲν τοῖς τοῦ ἐγκεφάλου περιττώμασι, καὶ ἐστὶ καθάπερ ἰχώρ.

Διὰ τί τῶν ζώων τὰ μὲν ὑπὸ σάρκα, τὰ δὲ κατὰ σάρκα πίωνά ἐστι, τὰ δὲ κατ' ἀμφοτέρα; ἢ ὅσων μὲν πυκνὴ ἡ σὰρξ, μεταξὺ τοῦ δέρματος καὶ τῆς σαρκὸς συστέλλεται ἡ ἱκμάς διὰ τὸ ταύτη εἶναι τὸ δέρμα ἀφεστὸς φύσει· ἢ πεττομένη γίνεται πιμελή. ὅσα δὲ ἀραιότεραν ἔχει τὴν σάρκα τό τε δέρμα προεστός, κατὰ σάρκα πίονα γίνεται. τὰ δὲ ἀμφοτέρως ἔχοντα ἐπ' ἀμφοτέρα παίνεται.

Διὰ τί οἱ παῖδες καὶ αἱ γυναῖκες ἥττον ἔχουσι λεύκην τῶν ἀνδρῶν, καὶ τῶν μὲν γυναικῶν αἱ πρεσβύτεδες μᾶλλον; ἢ ὅτι ἡ λεύκη ἐστὶ πνεύματος ἔξοδος, ἐστὶ δὲ τὰ μὲν τῶν παίδων οὐκ εὖπνοα σώματα ἀλλὰ πυκνά, καὶ τὰ τῶν γυναικῶν ἥττον ἢ τὰ τῶν ἀνδρῶν· εἰς τὰ καταμήνια γὰρ τρέπεται· δηλοῖ δὲ ἡ λειότης τὴν πυκνότητα τῆς σαρκός. τὰ δὲ τῶν πρεσβυτέρων καὶ τῶν γραῶν εὖπνοα· μόνα γάρ, ὥσπερ τὰ παλαιὰ οἰκοδομήματα, διεστῶσαν ἔχει τὴν σύνθεσιν τῶν μορίων.

Διὰ τί ἄνθρωπος μόνον ἴσχει λεύκην; πότερον ὅτι λεπτοδερμότατον τῶν ζώων ἐστίν, ἅμα δὲ καὶ πνευματωδέστερον; σημεῖον δέ, ὅτι ἡ λεύκη ἐν τοῖς λεπτοδερμοτάτοις μάλιστα καὶ πρῶτον γίνεται μέρεσιν. ἢ διὰ ταῦτά τε, καὶ

[891b] ὅτι μόνον πολιοῦται τῶν ζώων; ἐν γὰρ ταῖς λεύκαις πολιαὶ γίνονται αἱ τρίχες, ὥστε ἀδύνατον, ὅσα μὴ πολιοῦται, λεύκην ἴσχειν.

Διὰ τί αἶγες μὲν καὶ πρόβατα ἀμέλγονται πλεῖστον γάλα, οὐ μέγιστον σῶμα ἔχοντα, ἄνθρωπος δὲ καὶ βοῦς ἔλαττον ὥς κατὰ λόγον; πότερον ὅτι εἰς τὸ σῶμα ἀναλίσκεται, τοῖς δὲ ἄλλοις εἰς τὸ περίττωμα, τοῖς δὲ προβάτοις καὶ ταῖς αἰξὶ τὸ περιγινόμενον τοῦ περιττώματος γάλα γίνεται πᾶν; ἢ ὅτι πολυτοκώτερά ἐστι τῶν μεγάλων, ὥστε πλεῖον σπᾶ περίττωμα διὰ τὸ πλείω τρέφειν; ἢ δι' ἀσθένειαν τῶν σωμάτων πλεῖον περίττωμα γίνεται κύουσιν αὐτοῖς; τὸ δὲ γάλα γίνεται ἐκ τοῦ περιττώματος.

Διὰ τί τῶν ζώων τὰ μὲν, μεταβάλλοντα τὰ ὕδατα, μεταβάλλει τὰς χροὰς καὶ ὅμοια γίνεται τοῖς ἐκεῖ, οἷον αἶγες, τὰ δὲ οὐ, οἷον ἄνθρωποι; καὶ ὅλως δὲ διὰ τί τὰ μὲν μεταβάλλει, τὰ δὲ οὐ, οἷον κόραξ οὐ μεταβάλλει; ἢ ὧν μὲν οὐ κρατεῖ ἡ φύσις τοῦ ὑγροῦ, ὥσπερ ἡ τῶν ὀρνέων (διὸ καὶ κύστιν οὐκ ἔχει), οὐ μεταβάλλει; καὶ διὰ τί οὐκ αὐτὰ ἄλλα τὰ ἔκγονα μεταβάλλει; ἢ ὅτι ἀσθενέστερα τὰ νέα τῶν γεννησάντων;

Διὰ τί τὰ ἄρσενά μείζω τῶν θηλειῶν ὥς ἐπίπαν ἐστίν; πότερον ὅτι θερμότερα, τοῦτο δὲ αὐξητικόν; ἢ ὅτι ὀλόκληρα, τὰ δὲ πεπήρωται; ἢ ὅτι τὰ μὲν ἐν πολλῷ χρόνῳ τελειοῦται, τὰ δὲ ἐν ὀλίγῳ;

Διὰ τί τὰ μὲν ταχυτόκα τῶν ζώων ἐστί, τῶν δὲ πολυχρόνιος ἡ κύησις; ἢ ὅτι τὰ μακροβιώτερα βραδύτερον πέφυκε τελειοῦσθαι; ἔστι δὲ βραδυτόκα τὰ μακρόβια. οὐ μέντοι τὰ μάλιστα, οἷον ἵππος ἀνθρώπου βραδυτοκώτερον μὲν, ὀλιγοχροσιώτερον δέ. τούτου δὲ αἴτιον ἡ σκληρότης τῶν ὑστερῶν· ὥσπερ γὰρ ἡ ξηρὰ γῆ οὐ ταχὺ ἐκτρέφει, οὕτω καὶ ἡ τοῦ ἵππου ὑστέρα.

Διὰ τί τοῖς ἄλλοις ζώοις τὰ ἔκγονα μᾶλλον τὰς φύσεις ὁμοιοῦται ἢ τοῖς ἀνθρώποις; ἢ ὅτι ὁ μὲν ἄνθρωπος πολλαχῶς διατίθεται τὴν ψυχὴν κατὰ τὴν ὁμιλίαν, καθὼς δ' ἂν ὁ πατὴρ καὶ ἡ μήτηρ διατεθῶσιν, οὕτω ποικίλλεται καὶ τὰ τικτόμενα. τὰ δὲ ἄλλα ζῶα τὰ μὲν πλεῖστα πρὸς αὐτὸ τοῦτό εἰσιν. ἔτι δὲ οὐ πληροῦται ὥς ἐπὶ τὸ πολὺ διὰ ταύτην τὴν ἐπιθυμίαν.

[892a] Διὰ τί οἱ λευκοὶ ἄνθρωποι καὶ ἵπποι ὥς ἐπὶ τὸ πολὺ γλαυκοί; ἢ διότι τριῶν χρωμάτων ὄντων τοῖς ὄμμασι, μέλανος καὶ αἰγωποῦ καὶ γλαυκοῦ, τῷ τοῦ σώματος χρώματι καὶ τὸ τοῦ ὀφθαλμοῦ χρῶμα ἀκολουθεῖ, τοῦτο δὲ ἐστι γλαυκότης.

Διὰ τίνα αἰτίαν οἱ νάνοι γίνονται; ἔτι δὲ μᾶλλον καθόλου, διὰ τί τὰ μὲν

ὅλως μεγάλα, τὰ δὲ μικρά; εἴτα οὕτω σκεπτέον. δύο δὲ τὰ αἷτια· ἢ γὰρ ὁ τόπος ἢ ἡ τροφή. ὁ μὲν οὖν τόπος, ἐὰν ἢ στενός, ἢ δὲ τροφή, ἐὰν ἢ ὀλίγη, ὥσπερ καὶ ἤδη γεγενημένων πειρῶνται μικροὺς ποιεῖν, οἷον οἱ τὰ κυνίδια τρέφοντες ἐν τοῖς ὀρυγοτροφείοις. ὅσοις μὲν οὖν ὁ τόπος αἷτιος, οὗτοι πυγμαῖοι γίνονται. τὰ μὲν γὰρ πλάτη καὶ τὰ μήκη ἔχοντες γίνονται κατὰ τὸ τῶν τεκόντων μέγεθος, μικροὶ δὲ ὅλως. τούτου δὲ αἷτιον, ὅτι διὰ τὴν στενότητα τοῦ τόπου συγκλῶμεναι αἱ εὐθεῖαι καμπύλαι γίνονται. ὥσπερ οὖν οἱ ἐπὶ τῶν καπηλείων γραφόμενοι μικροὶ μὲν εἰσι, φαίνονται δ' ἔχοντες πλάτη καὶ βάθη, ὁμοίως συμβαίνει καὶ τοῖς πυγμαίοις. ὅσοι δὲ διὰ τροφῆς ἔνδειαν ἀτελεῖς γίνονται, οὗτοι καὶ παιδαριώδη τὰ μέλη ἔχοντες φαίνονται, καὶ ἐνίους ἰδεῖν ἔστι μικροὺς μὲν σφόδρα, συμμέτρους δέ, ὥσπερ τὰ Μελιταῖα κυνίδια. αἷτιον δὲ ὅτι οὐχ ὥς ὁ τόπος ἡ φύσις ποιεῖ.

Διὰ τί τῶν ζώων τὰ μὲν ἐξ ἀλλήλων γίνεται, τὰ δ' ἐκ τινων συγκρινομένων ὁμοίως τῆς ἐξ ἀρχῆς γενέσεως αὐτοῖς ὑπαρξάσης; καθάπερ οἱ περὶ φύσεως λέγοντες λέγουσι καὶ τὴν ἐξ ἀρχῆς γένεσιν τῶν ζώων γενέσθαι, διὰ τὰς μεταβολὰς καὶ μετακινήσεις τοῦ κόσμου καὶ τοῦ παντὸς οὕτω μεγάλας· καὶ νῦν εἴπερ μέλλει πάλιν ἔσεσθαι, τοιαύτας τινὰς ὑπάρξαι δεῖ κινήσεις; ἢ μὲν γὰρ ἀρχὴ παντὸς ἔργου μέγιστον· ἡμισυ γάρ· τὸ δὲ σπέρμα ἀρχή. τῶν μὲν οὖν μικρῶν ὅσα γίνεται μὴ ἐξ ἀλλήλων, αἷτιον τοιαῦτα γενέσθαι ὥσπερ ἐξ ἀρχῆς ἐγεννήθησαν ἢ τοῦ σπέρματος μικρότης· τοῦ γὰρ ἐλάττονος καὶ ἡ ἀρχὴ ἐλάττων. ὥστε ἱκαναὶ καὶ αἱ τούτου μεταβολαὶ πρὸς τὸ γεννῆσαι αὐτῷ τὸ σπέρμα. ὅπερ συμβαίνει· γίνονται γὰρ ἐν ταῖς μεταβολαῖς μάλιστα. τοῖς δὲ μείζοσι μείζονος δεῖ καὶ μεταβολῆς.

Διὰ τί τὰ μὲν πολύτεκνα τῶν ζώων, οἷον ὕς, κύων, [892b] λαγώς, τὰ δὲ οὐ, οἷον ἄνθρωπος, λέων; ἢ ὅτι τὰ μὲν πολλὰς μήτρας καὶ τύπους ἔχει, ἃς καὶ πίμπλασθαι ἐπιθυμεῖ καὶ εἰς ἃ σχίζεται ἡ γονή, τὰ δὲ τοῦναντίον.

Διὰ τί ἐλάχιστον διάστημα τῶν ὀμμάτων ὁ ἄνθρωπος ἔχει τῶν ζώων κατὰ μέγεθος; ἢ διότι μάλιστα κατὰ φύσιν ἔχει τῶν ἄλλων, ἢ δὲ αἰσθησις φύσει τὸ ἔμπροσθεν· ἐφ' ὃ γὰρ ἡ κίνησις, τοῦτο δεῖ προορᾶν. ὅσω δ' ἂν ἢ πλεῖον τὸ διάστημα τῶν ὀμμάτων, τοσούτω μᾶλλον αἱ ὄψεις ἔσονται ἐν τῷ πλαγίῳ. εἰ οὖν ἔχειν δεῖ κατὰ φύσιν, ὅτι ὀλίγιστον δεῖ τὸ διάστημα εἶναι· οὕτω γὰρ εἰς τὸ πρόσθεν μάλιστα πορεύσεται. ἔτι δὲ τοῖς ἄλλοις ζώοις, ἐπεὶ χεῖρας οὐκ ἔχουσιν, ἀναγκαῖον παρορᾶν εἰς τὰ πλάγια. διὸ πλεῖον διέστηκε τὰ ὀμματα αὐτῶν, καὶ μάλιστα τῶν προβάτων, διὰ τὸ μάλιστα ποιεῖσθαι τὴν πορείαν κύπτοντα.

Διὰ τί τὰ ἄλλα ζῶα τὰ μὲν οὐκ ἐξονειρώττει, τὰ δὲ ὀλιγάκις; πότερον ὅτι οὐδὲν ὑπτιον κατάκειται, ἐξονειρώττει δὲ οὐδὲν μὴ ὑπτιον; ἢ ὅτι οὐκ ἐνυπνιάζει τὰ ἄλλα ὁμοίως, ὁ δὲ ἐξονειρωγμὸς μετὰ φαντασίας γίνεται.

Διὰ τί τῶν ζώων τὰ μὲν κινεῖ τὴν κεφαλὴν, τὰ δὲ οὐ κινεῖ; ἢ ὅτι ἔνια οὐκ ἔχει αὐχένα; διὸ ταῦτα οὐ κινεῖ τὴν κεφαλὴν.

Διὰ τί ἄνθρωπος πτάρνυται τῶν ζώων μάλιστα; πότερον ὅτι τοὺς πόρους εὐρεῖς ἔχει δι' ὧν τὸ πνεῦμα καὶ ὁσμή εἰσέρχεται; τούτοις γὰρ πνεύματος πληρουμένοις πτάρνυται. ὅτι δὲ εὐρεῖς, σημεῖον ὅτι ἥκιστα ὁσφραντικὸν τῶν ἄλλων ζώων· ἀκριβέστεροι δὲ οἱ λεπτότεροι. εἰ οὖν εἰς μὲν τοὺς εὐρεῖς πλέον καὶ πλεονάκις εἰσέρχεται τὸ ὑγρὸν, οὗ πνευματουμένου ὁ παρμὸς γίνεται, τοιούτους δὲ μάλιστα τῶν ζώων οἱ ἄνθρωποι ἔχουσι, πλειστάκις ἂν πτάρνοιντο εἰκότως. ἢ ὅτι ἐλάχιστοι κατὰ τὸ μῆκος οἱ μυκτῆρες, ὥστε τὸ θερμανθὲν ὑγρὸν ταχὺ δύναται πνεῦμα γίνεσθαι. ἐν δὲ τοῖς ἄλλοις διὰ μῆκος καταψύχεται πρότερον.

Διὰ τί ἡ γλῶττα οὐδενὸς περὰ τῶν ζώων; ἢ ὅτι τὸ πῖον πυκνόν, ἡ δὲ γλῶττα ἀραιὰ φύσει ἐστίν, ὅπως τοὺς χυμοὺς γνωρίζῃ;

Διὰ τί τὰ θήλεα συντάσει οὐρεῖ, τὰ δὲ ἄρρενα οὐ; ἢ ὅτι πορρώτερόν ἐστιν ἡ κύστις ἢ τῶν θηλειῶν, καὶ εἰς βάθος καὶ εἰς μῆκος; μεταξὺ γὰρ αὐτῶν ἡ μήτρα τῆς ἑδρας καὶ [893a] στῆς κύστεως. ὥστε δεῖται βίας πλείονος τὸ ἐκπεμπόμενον διὰ γε τὴν ἀπόστασιν τῆς μήτρας. βιάζεται δὲ συντεῖνον τῷ πνεύματι.

Διὰ τί τῶν ζώων ὅσα μὴ πέτεται, πάντα ἀποβάλλει τὰς χειμερινὰς τρίχας, πλὴν ὅσες; καὶ γὰρ κύων ἀποβάλλει καὶ βοῦς. ἢ ὅτι θερμότατον ἡ ὕς ἐστί, καὶ ἐκ θερμοῦ πεφύκασιν αἱ τρίχες αὐτῇ; τοιοῦτον γὰρ ἐστὶ τὸ λιπαρόν. τῶν μὲν οὖν ἄλλων ἢ διὰ τὸ ἀποψύχεσθαι τὸ ὑγρὸν ἀποπίπτουσιν, ἢ πέττειν τροφὴν οὐ δυναμένης τῆς οἰκείας θερμότητος, ἢ διὰ τὸ μηδὲν πάσχειν τὴν ὑγρότητα τὴν ἐν αὐτῇ, διὰ τὸ πέττεσθαι καλῶς τὴν τροφήν, οὐκ ἀποβάλλει τὰς τρίχας. ὁπότε γὰρ ἡ αἰτία τῆς ἀποβολῆς ἐστίν, ἱκανὴ ἢ πίοτης κωλύσαι. πρόβατα δὲ καὶ ἄνθρωποι διὰ πλῆθος καὶ πυκνότητα τῆς τριχὸς ἀπαθῆ ἐστίν· οὐ γὰρ διικνεῖται ἡ ψύξις εἰς βάθος, ὥστε πῆξαι τὴν ὑγρότητα ἢ πέψαι κωλύσαι τὴν θερμότητα.

Διὰ τί τῶν μὲν προβάτων μαλακώτεραι αἱ τρίχες ἀναφύονται τιλλόμεναι, τῶν δὲ ἀνθρώπων σκληρότεραι; ἢ ὅτι τῶν μὲν προβάτων ἐκ τοῦ ἐπιπολῆς

πεφύκασιν; διὸ καὶ ἀλύπως ἐκσπῶνται, μενούσης τῆς ἀρχῆς τῆς τροφῆς ἀδιαφθόρου, ἢ ἐστὶν ἐν σαρκί. τὰ μὲν οὖν περιττώματα ἀνοιχθέντων ἐξατμίζει μᾶλλον, τὸ δὲ ἔριον σαρκὸς οἰκείαν τροφήν λαμβάνει· σὰρξ δὲ μαλακοῖς καὶ γλυκέσι τρέφεται. αἱ δὲ τῶν ἀνθρώπων τρίχες ἐκ βάθους πεφυκυῖαι βίᾳ καὶ μετ' ἀλγηδόνης ἐκσπῶνται. δῆλον δέ· ἐπισπῶνται γὰρ αἷμα. τραυματιζομένου οὖν τοῦ τόπου συμβαίνει αὐτὸν καὶ οὐλοῦσθαι. διὸ τέλος μὲν συμβαίνει γίνεσθαι τοῖς τιλλομένοις· ἕως δ' ἂν ἀνίωσι τρίχες, σκληρὰς ἀνιέναι διὰ τὸ τὴν μὲν τροφὴν τῆς σαρκὸς ἐκλελοιπέναι πᾶσαν τροφήν, ἐκ περιττωμάτων δ' αὐτὰς γίνεσθαι. σημεῖον δέ· τῶν μὲν γὰρ πρὸς μεσημβρίαν πάντων σκληραὶ εἰσιν αἱ τρίχες διὰ τὸ τὸ ἐκτὸς θερμὸν εἰς βάθος δικνούμενον ἐξατμίζειν τὴν εὐπεπτον τροφήν, τῶν δὲ ὑπὸ τὰς ἄρκτους μαλακαί· τούτοις γὰρ ἐπιπολῆς μᾶλλον ἐστὶ τό θ' αἷμα καὶ οἱ γλυκεῖς χυμοί· διὸ καὶ εὐχροοὶ εἰσιν.

Διὰ τί αἱ μὲν τῶν προβάτων τρίχες ὅσω ἂν μακρότεραι ὦσι, σκληρότεραι γίνονται, αἱ δὲ τῶν ἀνθρώπων μαλακώτεραι; ἢ ὅτι αἱ τῶν προβάτων, οἷαν εἴρηται τροφήν ἔχουσαι, μακρὰν τῆς ἀρχῆς ἀπαρτῶμεναι ἀτροφώτεραί εἰσι, καὶ ῥαδίως ἐξ αὐτῶν ἐξατμίζεται ὑπὸ τοῦ [893b] θερμοῦ ἢ ἐνυπάρχουσα τροφή δι' εὐπεψίαν; ξηραινόμεναι δὲ ξηρότεραι γίνονται· τὸ γὰρ ὑγρὸν μαλακόν. αἱ δὲ τῶν ἀνθρώπων ἐλάττω μὲν, μᾶλλον δὲ τῆς ἀρχῆς, πέττεται δὲ αὐταῖς μᾶλλον διὰ τὸ ἐλάττω εἶναι· πεττομένη δὲ μαλακωτέραν ποιεῖ τὴν τρίχα· πάντα γὰρ τὰ πεπεμμένα τῶν ἀπέπτων μαλακωτέρα ἐστίν. ἐκ περιττώματος γὰρ πλείστου ἢ τοῦ ἀνθρώπου θρῖξ ἢ ἢ τοῦ προβάτου. σημεῖον δέ· τὰ γὰρ νέα πρόβατα τῶν παλαιῶν μαλακώτερα ἔχει τὰ ἔρια.

Διὰ τί οἱ ἄνθρωποι καὶ οἱ ὄρνιθες οἱ δασεῖς λάγνοι εἰσίν; ἢ ὅτι θερμοὶ καὶ ὑγροὶ τὴν φύσιν εἰσίν, δεῖ δὲ ἀμφοῖν πρὸς τὴν ὀχείαν. τὸ μὲν γὰρ θερμὸν ἐκκρίνει, τὸ δὲ ὑγρὸν ἐκκρίνεται. διὰ τὸ αὐτὸ δὲ καὶ οἱ χωλοὶ ἄνδρες· ἢ γὰρ τροφή αὐτοῖς ὀλίγη μὲν κάτω ἀφικνεῖται διὰ τὴν ἀναπηρίαν τῶν σκελῶν, εἰς δὲ τὸν ἐπάνω τόπον ἔρχεται πολλή, καὶ εἰς σπέρμα συγκρίνεται.

Διὰ τί ὁ ἄνθρωπος χαίτην οὐκ ἔχει; ἢ διότι πώγωνα ἔχει, ὥστε ἡ ἐκεῖ ἀπελθοῦσα τροφή τῆς τοιαύτης περιττώσεως εἰς τὰς σιαγόνας ἔρχεται;

Διὰ τί πάντα τὰ ζῶα ἄρτίους τοὺς πόδας ἔχει; ἢ ὅτι οὐκ ἐνδέχεται κινεῖσθαι μὴ ἐστηκότος τινός, ἂν μὴ ἄλληται; ἐπεὶ τοίνυν ἐκ δυοῖν τινοῖν κίνησιν ἀνάγκη τῇ πορείᾳ εἶναι, ἔκ τε κινήσεως καὶ στάσεως, ταῦτα δὲ δύο, καὶ ἄρτια ἤδη. καὶ τετράποδα, διότι πλείους· τοὺς μὲν γὰρ δύο κινεῖ, οἱ δὲ δύο ἐστήκασιν. καὶ οἱ ἔξ· καὶ τὰ ἄλλα δὲ δύο ἔτι· τούτων δὲ τὸ μὲν κινεῖται, τὸ δὲ ἔστηκεν.

Διὰ τί τοῖς μὲν ἵπποις καὶ τοῖς ὄνοις ἐκ τῶν οὐλῶν φύονται τρίχες, τοῖς δὲ ἀνθρώποις οὐ; ἢ διότι τοῖς μὲν ἄλλοις ζώοις ἐστὶ τὸ δέρμα μέρος τῆς σαρκός, ἀνθρώπῳ δὲ καθάπερ πάθος σαρκός; δοκεῖ γὰρ αὐτῆς τὸ ἐπιπολῆς καταψυχόμενον στερεώτερον γίνεσθαι, καθάπερ τῶν ἐφθῶν ἀλεύρων αἱ γραῖαι καλούμεναι. ἐπεὶ οὖν κᾶκεῖναί εἰσιν ἄλευρον ἐφθόν, καὶ τὸ τοῦ ἀνθρώπου καλούμενον δέρμα σὰρξ ἂν εἴη. τραυματισθέντος δὲ ἢ τριβέντος ἀνθρώπου μὲν τὴν σάρκα συμβαίνει πυκνοῦσθαι· διὸ ἡλλοιωμένης τῆς ἐπιπολῆς σαρκὸς οὐ τὴν αὐτὴν φύσιν λαμβάνει τὰ τραύματα ἥπερ καὶ ἐκ γενετῆς· ἡλλοιωθείσης δ' αὐτῆς μὴ γίνεσθαι ἔτι τὸ ἐξ αὐτῆς οὐθὲν ἄτοπον, καθάπερ καὶ ἐκ τῶν ἄλωπεκιῶν καλουμένων· καὶ γὰρ αὐταὶ τῆς ἐπιπολῆς σαρκὸς φθοραὶ καὶ ἡλλοιώσεις εἰσίν. τῶν δὲ ὑποζυγίων τριβέντων καὶ ὑγιαζομένων [894a] πάλιν ἀναπληροῦται τὰ νενοσηκότα μέρη τοῦ σώματος τῶν αὐτῶν μὲν, ἀσθενεστέρων δ' ἢ ἐξ ἀρχῆς ἦν. ἐπεὶ δ' ἐστὶ καὶ τὸ δέρμα μέρος αὐτῶν, γίνονται τε ἂν καὶ φύονται τρίχες (ἐκ δέρματος γὰρ φύονται τρίχες), λευκαὶ δὲ φύονται διὰ τὸ τὸ δέρμα ἀσθενέστερον γεγενῆσθαι τοῦ ἐξ ἀρχῆς, καὶ τὴν λευκὴν ἀσθενεστάτην εἶναι τρίχα.

Διὰ τί ἐν μὲν τοῖς ἄλλοις ζώοις διαμένει ὁμοίως τὰ δίδυμα θήλεα καὶ ἄρρενα ὄντα, ἐν δὲ τοῖς ἀνθρώποις οὐ; ἢ διότι τούτῳ ἀσθενῇ μάλιστα τὰ δίδυμα· μονοτόκον γὰρ ἐστίν. ἐν δὲ τοῖς διδύμοις παρὰ φύσιν τὸ θῆλυ γίνεσθαι καὶ ἄρρεν, ὥστε ὃ μάλιστα ἐστὶ παρὰ φύσιν, τοῦτο καὶ ἀσθενέστατον.

Διὰ τί τοῖς μὲν ἵπποις καὶ τοῖς ὄνοις ἐκ τῶν οὐλῶν φύονται τρίχες, τοῖς δὲ ἀνθρώποις οὐ; ἢ διότι ἡ οὐλὴ κωλύει διὰ τὴν πύκνωσιν ἢ διὰ τὸ φθείρειν τὴν τροφήν; τοῖς μὲν οὖν ἀνθρώποις παντελῶς κωλύει διὰ τὴν ἀσθένειαν τῆς τριχός, τοῖς δὲ ἵπποις οὐκ ἐκώλυσε, διέφθειρε δέ.

Διὰ τί τοῖς ζώοις ἄρτιοι πόδες; ἢ ὅτι παντὸς μὲν τοῦ κινουμένου ἀνάγκη τι ἡρεμεῖν, συνέβαινε δὲ περιττῶν ὄντων μὴ γίνεσθαι τοῦτο· ὅπερ κατὰ τὴν ἀντιστοιχίαν τῶν ποδῶν ἦν ἡ κίνησις.

Διὰ τί ἐλάττω χρόνον τὰ ζῶα καθεύδει ἢ ἐγρήγορεν, οὐ συνεχῶς δέ; ἢ διὰ τὸ μὴ ἅμα πᾶσαν πέττεσθαι τὴν περίττωσιν; ἄλλ' ὅταν τι πεφθῇ, κουφισθὲν διεγείρεται. καὶ πλεονάκεις δ' ἐγείρονται, ὅσοις ψυχρὸς ὁ τόπος ὁ πέττων ἐστὶ τὴν περίττωσιν· ταχὺ γὰρ παύεται καὶ πολλάκις, ἢ δὲ διάπαυσις ἔγερσις ἐστίν. ἡδὺ δέ, οὐδὲ εἰκός, διὰ τὸ ἀνάπαυσιν εἶναι φαίνεται. ἄλλ' οὐδ' ἐνταῦθα πλείω χρόνον ἢ ἀνάπαυσις γίνεται τῶν κατὰ φύσιν ἔργων· οὐδ' εἰ τὸ ἐσθίειν ἥδιον τοῦ μή, ὅμως πλείω χρόνον ἐσθίουσιν ἢ ἀσιτοῦσιν.

Διὰ τί τῶν ζώων τὰ μὲν εὐθὺς ἀκολουθεῖ τοῖς γεννήσασι, τὰ δ' ὀψέ, οἷον ἄνθρωπος, ἢ μόλις, ἢ οὐδέποτε; ἢ διότι τὰ μὲν ταχὺ ἀπολαμβάνει τὸ γνωρίζειν, τὰ δ' ὀψέ; καὶ τὰ μὲν ἀναίσθητα τοῦ ὠφελοῦντος, τὰ δὲ ἔχει αἴσθησιν. ὅσα μὲν οὖν ἄμφω ἔχει ταῦτα (λέγω δ' οἷον καὶ αἴσθησιν τοῦ ὠφελοῦντος καὶ ἐπιτέλεσιν τοῦ σώματος), ἀκολουθεῖ, τὰ δὲ μὴ ἄμφω οὐ ποιεῖ τοῦτο· δεῖ γὰρ δύνασθαι καὶ διαισθάνεσθαι.

Διὰ τί λεύκη οὐ γίνεται τοῖς ἄλλοις ζώοις; πότερον ὅτι τοῖς μὲν ἄλλοις νόσημα, τοῖς δὲ ἀνθρώποις γίνεται διάλευκα [894b] τὰ δέρματα καὶ αἱ τρίχες αὐτῶν; ἀλλ' ὅμως ἀπορήσειεν ἂν τις διὰ τί ὕστερον οὐ γίνεται ἀλλ' ἐκ γενετῆς ἢ ποικιλία. ἢ ὅτι τὰ δέρματα τῶν ἄλλων ζώων σκληρά, ἄνθρωπος δὲ φύσει λεπτοδερμότατος; ἢ δὲ λεύκη πνεύματός ἐστιν ἔκκρισις, ὃ κωλύεται διὰ τὴν πυκνότητα ἐξιέναι τοῖς ἄλλοις ζώοις τοῦ δέρματος.

Διὰ τί ἐν μὲν τῇ λεύκῃ πολιαὶ γίνονται, ὅπου δὲ πολιαί, οὐκ αἰεὶ λεύκη; ἢ διότι αἱ τρίχες ἐκ τοῦ δέρματος εἰσίν, ἢ δὲ πολιαὶ ὥσπερ σαπρότης τις τῶν τριχῶν ἐστίν. ὅταν μὲν οὖν τὸ δέσμα κάμνη, ἀνάγκη καὶ τὴν τρίχα ἐξ ἐκείνου οὖσαν κάμνειν· ὅταν δὲ ἡ θρίξ, οὐκ ἀνάγκη τὸ δέσμα.

Διὰ τί τῶν ζώων τὰ μὲν χαλεπά ἐστι μετὰ τὸν τόκον, οἷον κύων καὶ ὄνος, τὰ δὲ οὐδὲν ἐπιδήλως, οἷον γυνή, πρόβατον; ἢ ὅτι ὅσα μὲν περιττωματικᾶ πράεα; ἀπέρχεται γὰρ ἐν τῷ τόκῳ τὰ λυποῦντα. τούτοις δὲ ἀπὸ τῶν εὐ ἐχόντων γίνεται ἡ ἀφαίρεσις, ὥστε ἡ ἰσχνότης ποιεῖ διὰ τὴν ἔξιν τὴν ὀργήν, ὥσπερ καὶ αἱ ἀλεκτορίδες οὐ τεκοῦσαι χαλεπαί, ἀλλ' ἐπωάζουσαι, διὰ τὴν ἀσιτίαν.

Διὰ τί οἱ εὐνοῦχοι τὰ μὲν ἄλλα εἰς τὸ θῆλυ διαφθειρόμενοι μεταβάλλουσι· καὶ γὰρ φωνὴν θηλυκὴν ἴσχουσι καὶ ὀξύτητα καὶ ἀναρθρίαν, καὶ οὕτω σφόδρα μεταπίπτουσιν ὥς καὶ ἐν τοῖς ἄλλοις ζώοις τὰ ἐκτεμνόμενα. ἐναντίως δ' οἱ ταῦροι καὶ οἱ κριοὶ τὰ κέρατα ἴσχουσι, διότι καὶ τὰ θήλεα ἐναντίως αὐτῶν ἔχει. διὸ οἱ μὲν μείζω ἐκτεμνόμενοι ἴσχουσιν, οἱ δὲ ἐλάττω. τὸ δὲ μέγεθος μόνον οἱ εὐνοῦχοι εἰς τὸ ἄρρεν μεταβάλλουσι· μείζους γὰρ γίνονται. ἔστι δὲ τοῦτο τοῦ ἄρρενος· τὰ γὰρ θήλεα ἐλάττω ἐστὶ τῶν ἀρρένων. ἢ οὐδὲ τοῦτο εἰς τὸ ἄρρεν, ἀλλ' εἰς τὸ θῆλυ; οὐ γὰρ εἰς πᾶν τὸ μέγεθος, ἀλλ' εἰς τὸ μῆκος μόνον, τὸ δὲ ἄρρεν καὶ εἰς πλάτος καὶ εἰς βάθος· τότε γὰρ τετελείωται. ἔτι δὲ ὥς ἔχει τὸ θῆλυ πρὸς τὸ ἄρρεν, οὕτως αὐτοῦ τοῦ θήλεος ἡ παρθένος πρὸς τὴν γυναικα· ἢ μὲν γὰρ ἤδη γενναία, ἢ δὲ οὐ. εἰς τὴν τούτων οὖν μεταβάλλει· ἐπὶ μῆκος γὰρ ταύταις ἡ αὔξησις. διὸ καὶ Ὀμηρος εὐ τὸ “μῆκος δ' ἔπορ' Ἄρτεμις ἀγνή,” ὥς διὰ τὴν παρθενίαν, ὃ εἶχε, δυναμένης δοῦναι.



οὐκ οὐκ εἰς τὸ ἄρρεν κατὰ τὸ μέγεθος μεταβάλλει. οὐ γὰρ εἰς τὸ τέλειον μεταβάλλει. οἱ δὲ εὐνοῦχοι εἰς μέγεθος τὸ μήκος ἐπιδιδοῶσιν.

Διὰ τί οἱ εὐνοῦχοι ἢ ὅλως οὐκ ἴσχουσιν ἢ ἥττον ἰξίας; [895a] ἢ ὅτι μεταβάλλουσι τὴν φύσιν ἐν τῇ ἐκτμήσει εἰς τὰ ἄγονα; τοιαῦτα δὲ παῖς καὶ γυνή, ὧν οὐδέτερον ἴσχει ἰξίας, εἰ μὴ τι σπάνιον γυνή.

Διὰ τί μᾶλλον ἄνθρωπος πολλὰς φωνὰς ἀφίησι, τὰ δὲ ἄλλα μίαν, ἀδιάφορα ὄντα τῷ εἶδει; καὶ τοῦ ἀνθρώπου μία φωνή, ἄλλα διάλεκτοι πολλάι.

Διὰ τί δὲ αὐτὴ ἄλλη, τοῖς δὲ ἄλλοις οὐ; ἢ ὅτι οἱ μὲν ἄνθρωποι γράμματα πολλὰ φθέγγονται, τῶν δὲ ἄλλων τὰ μὲν οὐδέν, ἕνια δὲ δύο ἢ τρία τῶν ἀφώνων; ταῦτα δὲ ποιεῖ μετὰ τῶν φωνηέντων τὴν διάλεκτον. ἔστι δὲ ὁ λόγος οὐ τὸ τῇ φωνῇ σημαίνειν, ἀλλὰ τοῖς πάθεσιν αὐτῆς, καὶ μὴ ὅτι ἀλγεῖν χαίρει. τὰ δὲ γράμματα πάθη ἐστὶ τῆς φωνῆς. ὁμοίως δὲ οἱ τε παῖδες καὶ τὰ θηρία δηλοῦσιν· οὐ γὰρ πω οὐδὲ τὰ παιδιά φθέγγονται τὰ γράμματα.

Διὰ τί μόνον τῶν ζώων ἄνθρωπος γίνεται ἰσχνόφωνον; πότερον ὅτι καὶ ἐνεόν, ἢ δὲ ἰσχροφωνία ἐνεότης ἐστίν; ἀλλὰ δὴ καὶ οὐδ' ὅλως πεπλήρωται τοῦτο τὸ μόριον. ἢ ὅτι κοινωνεῖ μᾶλλον λόγου, τὰ δ' ἄλλα φωνῆς; ἔστι δὲ ἢ ἰσχροφωνία οὐ κατὰ τὸ ὄνομα ἐν ἢ οὐ συνεχῶς διεξιέναι.

Διὰ τί ἄνθρωπος γίνεται ἐκ γενετῆς χολὸς μάλιστα τῶν ἄλλων ζώων; πότερον ὅτι ἰσχυρὰ τῶν ἄλλων ἐστὶ σκέλη τῶν ζώων; ὁστώδη γὰρ καὶ νευρώδη καὶ τετράποδα καὶ ὄρνια ἔχουσιν, οἱ δὲ ἄνθρωποι σαρκώδη· διὰ τὴν ἀπαλότητα οὖν θᾶπτον πηροῦνται ἐν τῇ κινήσει. ἢ διότι μόνον τῶν ζώων πολλοὺς ἔχει χρόνους τῆς γενέσεως; καὶ γὰρ ἐπτάμηνα καὶ ὀκτάμηνα καὶ δεκάμηνα γίνεται. τοῖς δ' ἄλλοις εἰς χρόνος τῆς τελειώσεως γέγονεν οὐ διατρίψας· τοῖς δ' ἀνθρώποις πολὺς ὁ χρόνος γίνεται τῆς ἐν πλήθει διατριβῆς, ὥστε κινουμένων διὰ τὸ ἀπαλὰ εἶναι καὶ θραύεται τὰ ἀκρωτήρια ἐν τῷ πλείονι χρόνῳ πλείω.

Διὰ τί οἱ εὐνοῦχοι ἐλκώδεις τὰς κνήμας ἴσχουσι καὶ σαπράς; πότερον ὅτι καὶ αἱ γυναῖκες, οἱ δ' εὐνοῦχοι γυναικικοί; ἢ τοῦτο μὲν συμβέβηκεν, αἵτιον δὲ καὶ ταῖς γυναξίν ὅτι ἡ θερμότης κάτω ὀρμᾷ. δηλοῖ δὲ τὰ γυναικεῖα. διὸ οὐτε οἱ εὐνοῦχοι οὐτε γυναῖκες δασεῖς γίνονται, διὰ πολλὴν ὑγρότητα.

Διὰ τί τῶν ζώων οὐθὲν λιθιᾷ ἄλλ' ἢ ἄνθρωπος; ἢ ὅτι τῶν μὲν ὑποζυγίων καὶ τῶν πολυωνύχων οἱ πόροι τῆς κύστεως εὐρεῖς εἰσίν; ὅσα δὲ μὴ τὸ πρῶτον, ὕστερον δὲ ζωοτοκεῖ [895b] ἐν αὐτοῖς, οἷον ἔνιοι τῶν ἰχθύων,

τούτων δὲ οὐδὲν κύστιν ἔχει, ἀλλ' εἰς τὴν κοιλίαν αὐτοῖς ἡ τοιαύτη συνθλίβεται ὑπόστασις, οἷον καὶ τοῖς ὄρνισιν, ὥστε ταχὺ καὶ διεξέρχεται κατὰ τὴν ἔδραν. ὁ δὲ ἄνθρωπος κύστιν τε ἔχει καὶ στενὸν τὸν καυλὸν ὡς κατὰ μέγεθος. διὰ μὲν οὖν τὸ ἔχειν τοῦτο τὸ μόριον συνθλίβεται τὸ γεῶδες εἰς τὴν κύστιν (διὸ καὶ χρώζονται αἱ ἀμίδες ὑπ' αὐτοῦ), διὰ δὲ τὴν θερμότητα τοῦ τόπου συμπέττεται καὶ παχύνεται μᾶλλον, ἐμμένει δὲ καὶ αὐξάνεται διὰ τὴν στενότητα τοῦ οὐρητήρος· οὐ γὰρ δυνάμενα τὰ γεῶδη ὑποστήματα ῥαδίως ὑπεξίεναι, πρὸς ἄλληλα ὑποστρεφόμενα λίθος γίνεται.

Διὰ τί οὐκ ἐρεύγεται τὰ ὑποζύγια, οὐδὲ οἱ βόες καὶ τὰ κερατοφόρα, οὐδὲ οἱ ὄρνιθες; ἢ διὰ ξηρότητα τῆς κοιλίας; ταχὺ γὰρ ἀναλίσκεται τὸ ὑγρὸν καὶ διηθεῖται· ἐμμένοντος δὲ καὶ πνευματουμένου γίνεται ὁ ἐρευγμός. τοῖς δὲ λοφούροις διὰ μῆκος τοῦ αὐχένος εἰς τὸ κάτω ὁρμᾷ τὸ πνεῦμα, διὸ καὶ ἀποψοφοῦσι μάλιστα. οἱ ὄρνιθες δὲ καὶ τὰ κερατοφόρα οὐ ποιεῖ οὐδέτερον. οὐδὲ ἐρεύγονται δὲ ὅσα μηρυκάζει, διὰ τὸ πολλὰς ἔχειν κοιλίας καὶ τὸν καλούμενον κεκρύφαλον· διὰ πολλῶν οὖν γίνεται καὶ ἄνω καὶ κάτω τῷ πνεύματι ἡ πορεία, καὶ φθάνει ἀναλίσκόμενον τὸ ὑγρὸν πρὶν ἐκπνευματωθῆναι καὶ ποιῆσαι ἢ ἐρυγεῖν ἢ ψοφῆσαι.

Διὰ τί, ὅσα μὲν ἡμερα τῶν ζώων ἐστί, πάντως καὶ ἄγρια, ὅσα δὲ ἄγρια, οὐ πάντως ἡμερα; καὶ γὰρ ἄνθρωποι που φαίνονται ἄγριοι ὄντες καὶ κύνες ἐν Ἰνδοῖς καὶ ἵπποι ἄλλοθι, ἀλλ' οὐ λέοντες ἡμεροὶ οὐδὲ παρδάλεις οὐδ' ἔχεις οὐδ' ἄλλα πολλά. ἢ ὅτι ῥᾶον τὸ φαῦλον καὶ γενέσθαι ἐξ ἀρχῆς καὶ μεταβαλεῖν εἰς αὐτό; ἢ γὰρ φύσις οὐχ ἡ πρώτη ἀλλ' ἡ ἐν τέλει ἐργώδης τυχεῖν εὐθύς. διὸ πάντα καὶ τὰ ἡμερα ἄγρια γίνονται τὸ πρῶτον μᾶλλον ἢ ἡμερα, οἷον παιδίον ἢ ἀνὴρ παμφάγον καὶ τῷ θυμῷ ζῶν· ἀλλ' ἀσθενέστερα. ὥσπερ οὖν καὶ ἐπὶ τῶν τῆς τέχνης ἔργων, οὕτως ἔχει καὶ ἐπὶ τῶν τῆς φύσεως ἔργων. καὶ γὰρ ἐπὶ τούτων πάντ' ἐστὶ φαύλως εἰργασμένα, καὶ πλείω τὰ φαῦλα, κλίνη καὶ ἱμάτιον καὶ ἄλλ' ὅτιοῦν. καὶ ὁ μὲν ἐστὶ καλόν, λαβεῖν ἔστιν ἅπαν καὶ φαῦλον, ὁ δὲ φαῦλον, οὐ πᾶν καὶ καλόν, οἷον εἴ τις ἐπὶ τῶν ἀρχαίων γραφέων καὶ ἀνδριαντοποιῶν σκοπεῖ τὰ ἔργα· οὐ γὰρ ἦν πώποτε οὐδαμῇ γραφὴ σπουδαία οὐδὲ ἀνδριάς, φαῦλα δὲ ἦν. ὁμοίως δὲ καὶ ἡ φύσις φαῦλα μὲν πάντα [896a] ποιεῖ, καὶ πλείους καὶ πλείω, σπουδαῖα δ' ἐλάττω, καὶ οὐ πάντα δύνανται. τὸ δὲ ἡμερον βέλτιον, τὸ δὲ ἄγριον φαῦλον. φύσει δὲ οὐ τῇ ἐξ ἀρχῆς, ἀλλ' ἐφ' ἣν οἶμαι ῥᾶον, ποιεῖ σπουδαῖα καὶ ἡμερα. τὰ δὲ ἐναντία ἢ οὐδέποτε ἢ μόλις, καὶ ἐν τισι τόποις καὶ ἐν χρόνοις, ἢ ἀρτίου, ἢ ποτὲ ἐν τινι κράσει τοῦ ὅλου, γίνονται ἡμερα τὰ ζῶα πάντα. τὸ δ' αὐτὸ καὶ ἐπὶ τῶν χυτῶν πάντων ἐστίν· ὅσα μὲν γὰρ ἡμερα, καὶ ἄγρια, οὐ πάντα δὲ δύνανται ἡμεροῦσθαι, ἀλλ' ὅμως εἰσὶν ἐν ἰδίᾳ χώρᾳ πρὸς πολλὰ ἰδίως

ἐχούσῃ, ὥστε ἡμελημένα καὶ ἄγρια κρείττω καὶ ἡμερώτερα φύεσθαι τῶν ἐν ἄλλῃ γεωργουμένων.

Διὰ τί τοῖς μὲν ἀνθρώποις οἱ ὀμφαλοὶ μεγάλοι γίνονται, τοῖς δ' ἄλλοις ζώοις οὐ φανεροί; ἢ διότι τοῖς μὲν διὰ τὸ πολὺν χρόνον εἴσω μένειν ἀφαισίου καὶ εὐθὺς τείνονται, ὅλον δ' ἐπανοιδοῦσι τὰ ἔλκη, διὸ ἔνιοι τῶν ὀμφαλῶν καὶ αἰσχύους εἰσίν· ὁ δὲ ἄνθρωπος ἀτελὴς ἐξέρχεται, ὥστε ἔφυγροι καὶ ἄναιμοι οἱ ὀμφαλοὶ ἀκολουθοῦσιν. ὅτι δὲ τὰ μὲν τετελειωμένα τὰ δὲ ἀτελῇ ἐξέρχεται, σημεῖον ὅτι τὰ μὲν εὐθὺς δύναται ζῆν, τὰ δὲ παιδία ἐπιμελείας δεῖται.

Διὰ τί τὰ μὲν τῶν ζώων ἅπαξ ὀχεύεται, τὰ δὲ πολλάκις, καὶ τὰ μὲν ὥρα ἔτους, τὰ δ' ὅτε ἔτυχεν, ἄνθρωπος μὲν αἰεὶ, τὰ δὲ ἄγρια οὐ πολλάκις, καὶ ὅς μὲν ἄγριος ἅπαξ, ἡμέρος δὲ πολλάκις; ἢ διὰ τὴν τροφήν καὶ ἀλέαν καὶ πόνον; ἐν πλησμονῇ γὰρ Κύπρις. ἔπειτα τὰ αὐτὰ ἄλλοθι μὲν ἅπαξ τίκτει, ἄλλοθι δὲ πλεονάκις, οἷον τὰ πρόβατα ἐν Μαγνησίᾳ καὶ Λιβύῃ τίκτει δῖς. τὸ δ' αἴτιον ἢ πολυχρονία τοῦ τόκου· οὐ γὰρ ἐπιθυμεῖ ὅταν πλησθῇ, ὥσπερ οὐδὲ τροφῆς τὰ πλήρη. τὰ δὲ κυοῦντα ἥττον ὀχείας ἐπιθυμεῖ διὰ τὸ μὴ γίνεσθαι τὴν κάθαρσιν.

Διὰ τί τῶν ἀνθρώπων οἱ ἀραιοὺς ἔχοντες τοὺς ὀδόντας βραχύβιοι ὥς ἐπὶ τὸ πολὺ; ἢ ὅτι σημεῖον τοῦ τὸ ὀστοῦν πυκνὸν εἶναι; ὥς ὁ ἐγκέφαλος ἀσθενὴς οὐκ εὐπνοῶν, ὥστε ὑγρὸς ὢν τὴν φύσιν ταχὺ σήπεται. καὶ γὰρ τὰ ἄλλα μὴ κινούμενα καὶ ἀπατμίζοντα. διὸ καὶ ἄνθρωπος τὴν κεφαλὴν δασύτατον, καὶ τὸ ἄρρεν τοῦ θήλεος μακροβιώτερον διὰ τὰς ῥαφάς. δεῖ δὲ ἰδεῖν καὶ ἐπὶ τῶν ἄλλων.

Διὰ τί δέ, ὅσοι τὴν διὰ τῆς χειρὸς τομὴν ἔχουσι δι' ὅλης, μακροβιώτεροι; ἢ διότι τὰ ἀναρθρα βραχυβιώτατα, ὥς τὰ ἔνυγρα; εἰ δὲ τὰ ἀναρθρα βραχύβια, δῆλον ὅτι τὰ ἡρθρωμένα τούναντίον. τοιαῦτα δὲ ὢν καὶ τὰ φύσει ἀναρθρα μάλιστα ἡρθρωταί· τῆς δὲ χειρὸς τὸ εἴσω ἀναρθρότατον.

Διὰ τί τῶν ζώων ἄνθρωπος ἢ μόνον ἢ μάλιστα διαστρέφεται; ἢ ὅτι ἢ μόνον ἢ μάλιστα ληπτὸν ἐν τῇ νηπιότητι γίνεται, ὅτε καὶ διαστρέφεσθαι συμβαίνει πᾶσιν.

Διὰ τί τῶν ζώων ἄνθρωπος μάλιστα καπνίζεται; ἢ ὅτι μάλιστα δακρύει, ἢ δὲ κάπνισις μετὰ δακρύου;

Διὰ τί ἵππος ἵππῳ χαίρει καὶ ἐπιθυμεῖ, ἄνθρωπος δὲ ἀνθρώπῳ, καὶ ὅλως δὲ τὰ συγγενῇ τοῖς συγγενέσι καὶ ὁμοίοις; οὐ γὰρ δὴ ὁμοίως ὅτι πᾶν ζῶον

καλόν, ἡ δὲ ἐπιθυμία τοῦ καλοῦ. ἔδει οὖν τὸ καλὸν ἡδίων εἶναι. νῦν δὲ μᾶλλον οὐ πᾶν κάλλος ἡδύ, τὸ καλὸν καὶ τὸ ἡδύ. οὐδὲ πᾶσιν ἡ ἡδονὴ ἢ τὸ καλὸν ἡδύ, οἷον φαγεῖν ἢ πιεῖν ἐστὶν ἡδίων ἐτέρῳ καὶ ἀφροδισιάσαι ἄλλῳ. διότι μὲν οὖν ἕκαστον τῷ συγγενεῖ μινγνύμενον μάλιστα καὶ ἡδιστα ἀφροδισιάζει, ἄλλο πρόβλημα· ὅτι δὲ καὶ κάλλιστον, οὐκέτι ἀληθές. ἀλλὰ ἡμεῖς τὸ εἰς τὴν συνουσίαν ἡδύ, ὅτι ὁ μὲν καλόν, ὅτι ἐπιθυμοῦντες χαίρομεν ὀρώντες. καίτοι καὶ ἐπὶ τῶν ἄλλων ἐπιθυμιῶν ἔχει ὁμοίως· διψῶντες γὰρ ἡδίων ὀρώσι τὸ πόμα. τὸ μὲν οὖν πρὸς χρεῖαν τινὰ καλόν, οὗ καὶ μάλιστα ἐπιθυμοῦμεν, τοῦτο δοκεῖ ἡδιστον εἶναι, τὸ δὲ καθ' αὐτὸ οὐκέτι οὕτως. σημεῖον δὲ τούτου· δοκοῦσι γὰρ ἡμῖν καὶ ἄνδρες καλοὶ εἶναι, πρὸς τὴν συνουσίαν βλέψασιν. ἄρ' οὖν οὕτως ὥστε καὶ ἡσθῆναι ὀρώσι μᾶλλον τῶν εἰς συνουσίαν; οὐδέν γε κωλύει, εἰ μὴ ἐπιθυμοῦντες τύχοιμεν. οὕτω δὲ πόμα κάλλιον· εἰ γὰρ διψῶντες τύχοιμεν, ἡδίων ὁψόμεθα.

Διὰ τί ποτε τοῦ μὲν ἀνθρώπου τὰ ἔμπροσθεν δασύτερα τῶν ὀπισθεν ἐστὶ, τῶν δὲ τετραπόδων τὰ ὀπισθεν; ἢ ὅτι πάντα τὰ δίποδα τὰ ἔμπροσθεν ἔχει δασύτερα; οἱ γὰρ ὄρνιθες τὸν αὐτὸν τρόπον τοῖς ἀνθρώποις ἔχουσιν. ἢ τὰ ἀσθενέστερα μᾶλλον ἀεὶ σκεπάζειν ἢ φύσις εἴωθεν, ἀσθενὲς δὲ ἕκαστόν ἐστὶ τινὰ τρόπον. τῶν δὲ τετραπόδων ἀπάντων τὰ ὀπισθεν ἀσθενέστερά ἐστὶ τῶν ἔμπροσθεν διὰ τὸν τόπον· ὑπὸ γὰρ τῶν ψυχῶν καὶ καυμάτων μᾶλλον δυνατά ἐστὶ πάσχειν· τῶν δὲ ἀνθρώπων τὰ ἔμπροσθεν ἀσθενέστερά ἐστὶ καὶ τὸ αὐτὸ πέπονθεν.

[897a] Διὰ τί ἄνθρωπος τῶν ζώων μάλιστα πτάρνυται; ἢ ὅτι καὶ κορυζᾷ μάλιστα; τούτου δ' αἷτιόν ἐστὶν ὅτι τοῦ θερμοῦ ὄντος περὶ τὴν καρδίαν καὶ πεφυκότος ἄνω φέρεσθαι τοῖς μὲν ἄλλοις ζώοις ἢ κατὰ φύσιν αὐτοῦ φορά ἐστὶν ἐπὶ τοὺς ὦμους, ἐντεῦθεν δὲ ἐξ ἀνακλάσεως σχιζόμενον τὸ μὲν ἐπὶ τὸν τράχηλον καὶ τὴν κεφαλὴν φέρεται αὐτοῦ, τὸ δὲ εἰς τὴν ῥάχιν καὶ τὴν ὀσφύν, διὰ τὸ ἐπὶ τῆς αὐτῆς εὐθείας εἶναι ταῦτα πάντα καὶ παρὰ τὴν βάσιν. φερόμενον δὲ ὁμοίως τὸ σῶμα καὶ τὰ ὑγρὰ μερίζει εἰς αὐτὰ ὁμαλῶς· ἔπεται γὰρ τὰ ὑγρὰ τῷ θερμῷ. διὸ οὐδὲ πάνυ κορυζᾷ τὰ τετράποδα ζῶα, οὐδὲ πτάρνυται· ὁ γὰρ παρμὸς ἢ πνεύματος ἀθρόου φορά ἐστὶν, ὑγρῶν ἐξατμιζόντων τι μᾶλλον τοῦ σώματος, ἢ ὑγρῶν ἀπέπτων. διὸ πρὸ τῶν κατάρρων γίνεται, ἃ οὐ συμβαίνει τοῖς ἄλλοις ζώοις, διὰ τὸ τὴν τοῦ θερμοῦ φορὰν ὁμαλίζειν ἐν αὐτῷ εἰς τὸ πρόσθεν καὶ ὀπισθεν. τοῦ δὲ ἀνθρώπου πρὸς ὀρθῇ πεφυκότος τῇ βάσει, καθάπερ τὰ φυτά, συμβαίνει τοῦ θερμοῦ φορὰν ἐπὶ τὴν κεφαλὴν γίνεσθαι πλείστην καὶ σφοδροτάτην. φερόμενόν τε ἐνταῦθα ἀραιοῖ καὶ θερμαίνει τοὺς περὶ αὐτὴν πόρους. ὄντες δὲ τοιοῦτοι δεκτικοὶ γίνονται τῶν ὑγρῶν μᾶλλον ἢ οἱ κάτω τῆς καρδίας πόροι. ὅταν οὖν συμβῇ

ἐξυγρυνθῆναι μᾶλλον τοῦ δέοντος καὶ καταψυγῆναι, ἔξωθεν συμβαίνει τὸ θερμόν, τροφήν τε ἔχον καὶ συστελλόμενον ἐντός, αὖξεσθαι, αὖξανόμενον δὲ φέρεσθαι ἐπὶ τὴν κεφαλὴν καὶ τοὺς ἐν αὐτῇ πόρους· εἰς οὓς ἀκολουθοῦντα τὰ ὑγρά, ὄντα λεπτὰ καὶ ἄπεπτα, πληροῖ αὐτοὺς καὶ τοὺς κατάρρους ποιεῖ, καὶ παρμouς ὁμοίως. ἐν γὰρ ταῖς ἀρχαῖς τῶν κατάρρων τὸ θερμόν προαναφερόμενον τοῦ ὑγροῦ, καὶ πνευματοῦν τοὺς πόρους, τῇ τ' ἐκβολῇ τοῦ πνεύματος τοὺς παρμouς ποιεῖ καὶ τῇ πρὸ τῶν ὑγρῶν ἀναγωγῇ, ἃ ἐστὶ λεπτὰ καὶ δριμέα. διὸ καὶ συμβαίνει μετὰ τῶν τῆς κορύζης παρμouν ὑδατώδη ἀπομύττεσθαι. πάντων δὲ τούτων ὀρμησάντων τὰ συνεχῇ καὶ πάθος ἔχοντα ὑγρά ἐφίσταται αὐτοῖς, καὶ ἐμφράττει τοὺς περὶ τὴν κεφαλὴν καὶ τὴν ῥῖνα πόρους· ὀγκηρότερα γὰρ γινόμενα καὶ διατείνοντα ποιεῖ τοὺς περὶ τὴν κεφαλὴν πόνους. σημεῖον δὲ τὸ μήτ' ἐκτός ἢ δι' αὐτῶν πνεῦμα ἀφεῖσθαι. διὸ οὔτε πτάρνυνται οὔτε ὀσφραίνονται οἱ κορυζῶντες. οἱ δὲ ἄνευ κορύζης γινόμενοι διὰ μὲν τὰς αὐτὰς αἰτίας γίνονται, μικρὰς δὲ καὶ ἐλαφρὰς ἀρχὰς λαβόντες. ὥστε [897b] συναχθέντα τὰ ὑγρά τῷ θερμῷ, ἐκπνευματούμενα ὑπ' αὐτοῦ δι' ὀλιγότητα, εἰσπίπτει κατὰ τὰς ῥῖνας. ποιεῖ δὲ τὸν ψόφον τοῦ πνεύματος οὐχ ἥττον ἢ βία τῆς φορᾶς ἢ τὸ πλῆθος αὐτοῦ. ἐνεχθέντος γὰρ τοῦ θερμοῦ πρὸς ὀρθὴν πρὸς τὸν ἐγκέφαλον καὶ προσπесόντος αὐτῷ, ἀνακλᾶται ἐπὶ τὰς ῥῖνας διὰ τὸ τοὺς ταύτῃ πόρους ἐκτός ἀπὸ τοῦ ἐγκεφάλου διατείνειν. παρὰ φύσιν οὖν τῆς ἐκτός κλάσεως φορᾶς γινομένης ἐπὶ τὰς ῥῖνας τῷ πνεύματι, σφοδρὰν συμβαίνει γίνεσθαι· διὸ ποιεῖ τοὺς ψόφους. τῶν δὲ ἄλλων ζώων συμβαίνει μάλιστα κορυζᾶν τοὺς ὀρνιθας διὰ τὸ μάλιστα ὁμοιόσχημον εἶναι ἀνθρώπῳ· ἥττον δὲ ἢ ἄνθρωπος πάσχει αὐτό, ὅτι τὰ πολλὰ κάτω ἔχει τὴν κεφαλὴν διὰ τὸ τὴν νομὴν ἀπὸ τῆς γῆς εἶναι.

Διὰ τί τὰ θαλάττια ζῶα τῶν ἐν τῇ γῇ μείζω καὶ εὐτραφέστερά ἐστιν; ἢ ὅτι ὁ ἥλιος καταδαπανῶν τὰ περιέχοντα τὴν γῆν ἀφαιρεῖται τὴν τροφήν; διὸ καὶ τὰ κατακεκλειμένα εὐτραφέστερά ἐστιν. πάντων οὖν τούτων ἀπήλλακται τὰ θαλάττια ζῶα.

Διὰ τί ποτε τὰ μὲν ἄλλα ζῶα πλεονάκις τὴν ξηρὰν τροφήν ἢ τὴν ὑγρὰν προσάγεται, ὁ δὲ ἄνθρωπος τὴν ὑγρὰν ἢ τὴν ξηρὰν; ἢ ὅτι φύσει ὁ ἄνθρωπος θερμότατον; πλείστης οὖν καταψύξεως δεῖται.

Διὰ τί οἱ εὐνοῦχοι οὐ γίνονται φαλακροί; ἢ ὅτι πολὺν ἔχουσι τὸν ἐγκέφαλον; τοῦτο δὲ συμβέβηκεν αὐτοῖς διὰ τὸ μὴ συγγίνεσθαι ταῖς γυναιξίν· ἢ γὰρ γονή ἐστὶν ἀπὸ τοῦ ἐγκεφάλου χωροῦσα διὰ τῆς ῥάχεως. διὰ τοῦτο δὲ οὐ δοκοῦσι καὶ οἱ βόες οἱ ἐκτομίαι μεγάλα τὰ κέρατα ἴσχειν, ὅταν ἐκμηθῶσιν. δοκεῖ δὲ ἡ αὐτὴ αἰτία εἶναι καὶ ὅτι αἱ γυναῖκες καὶ οἱ παῖδες

οὐκ εἰσὶ φαλακροί.

Διὰ τί τὰ μὲν εὐθὺς δύνανται δι' αὐτῶν τρέφεσθαι μετὰ τὴν γένεσιν, τὰ δὲ οὐ; ἢ ὅσα ὀλιγοχρονιώτερα τῶν μνήμης δεκτικῶν; διὸ ἅπαντα καὶ τελευτᾷ θᾶπτον.

Διὰ τί ποτε ὁ μὲν ἄνθρωπος πλείω τὴν ὑποχώρησιν ποιεῖται τὴν ὑγρὰν τῆς ξηρᾶς, οἱ δὲ ἵπποι καὶ οἱ ὄνοι τὴν ξηράν; ἢ διότι ταῦτα μὲν τὰ ζῶα πλείονι τροφῇ χρῆται τῇ ξηρᾷ, ὁ δὲ ἄνθρωπος ὑγρᾷ μᾶλλον ἢ τῇ ξηρᾷ; πᾶσα δὲ περίττωσις ἀπὸ τῆς τροφῆς ἐστὶ, καὶ ἀπὸ τῆς πλείονος πλείω. τὰ μὲν οὖν τῇ ὑγρᾷ μᾶλλον, τὰ δὲ τῇ ξηρᾷ πλείονι τροφῇ χρῆται· διότι τὰ μὲν τῶν ζώων ἐστὶ φύσει [898a] ξηρά, τὰ δὲ ὑγρά. τὰ μὲν οὖν τῇ φύσει ξηρὰ τῆς ὑγρᾶς μᾶλλον ἐπιθυμεῖ (ταύτης γὰρ ἐνδεέστερά ἐῖσι), τὰ δὲ τῇ φύσει ὑγρά τῆς ξηρᾶς· ταύτης γὰρ ἐνδεέστερα καθέστηκεν.

Διὰ τί ὄρνια καὶ ἄνθρωποι καὶ τῶν ζώων τὰ ἀνδρεῖα σκληρότερα; ἢ ὅτι ὁ θυμὸς μετὰ θερμότητος; ὁ γὰρ φόβος κατάψυξις. ὅσων οὖν τὸ αἷμα ἔνθερμόν ἐστι, καὶ ἀνδρεῖα καὶ θυμοειδῆ· τὸ δὲ αἷμα τροφή. ὅσα δὲ θερμῶ ἄρδεται τῶν φυομένων, σκληρότερα πάντα. Διὰ τί τέρατα τίκτουσι μάλιστα τὰ τετράποδα τὰ μὴ μεγάλα, ἄνθρωπος δὲ καὶ τὰ μεγάλα ἦττον, οἷον ἵπποι καὶ ὄνοι; ἢ ὅτι πολύγονα ταῦτα, οἷον κύνες καὶ ὕες καὶ αἶγες καὶ πρόβατα, πολὺ μᾶλλον τῶν μεγάλων, ἐκείνων δὲ τὰ μὲν ὅλως μονοτόκα, τὰ δὲ ὡς ἐπὶ τὸ πολὺ. τὰ δὲ τέρατα γίνεται ἐπαλλαττόντων τῶν σπερμάτων ἀλλήλοις καὶ συγχεομένων ἐν τῇ ἐξόδῳ τῆς γονῆς ἢ ἐν τῇ μίξει τῇ ἐν τῇ ὑστέρα τῆς θηλείας. διὸ καὶ ὄρνια αὐτὰ ποιοῦσιν· τὰ γὰρ ὡὰ δίδυμα τίκτουσι, τὰ δὲ τέρατα ἐκ τῶν διδύμων γίνεται, ὧν ἡ λέκιθος τῷ ὑμένι οὐ διαιρεῖται.

Διὰ τί ἡ κεφαλὴ δασεῖα τῶν ἀνθρώπων μᾶλλον τοῦ ἄλλου σώματος καὶ οὐ κατὰ λόγον, τοῖς δὲ ἄλλοις ζώοις τοῦναντίον; ἢ ὅτι καὶ τῶν ἄλλων τὰ μὲν εἰς ὀδόντας ἐκδίδωσι καθ' ὑπερβολὴν τῆς τροφῆς, τὰ δὲ εἰς κέρατα, τὰ δὲ εἰς τρίχας; ὅσα μὲν εἰς κέρατα, ἦττον τὴν κεφαλὴν ἔχει δασεῖαν· ἐκεῖ γὰρ ἀνήλωται· ὅσα δὲ εἰς ὀδόντας, μᾶλλον μὲν τῶν κερατοφόρων (ἔχει γὰρ λοφίαν), ἦττον δὲ τῶν τοιούτων, οἷον ὀρνέων. ἔχουσι γὰρ ταῦτα καὶ τὴν τῶν ἀνθρώπων· ὁ ἐκείνοις πολλαχῇ διὰ πλῆθος, τοῦτο εἰς κεφαλὴν ἐκδίδωσιν· οὐδὲ γὰρ οὐδὲν ἔχει, οὐδὲ πολὺ οὕτως ὥστε πανταχῇ.

Διὰ τί ἄνθρωπος μόνος τῶν ζώων πολιὰς ἔχει; ἢ ὅτι τὰ μὲν πλεῖστα τῶν ζώων ῥυάδα τὴν τρίχα ἀνὰ πᾶν ἔτος ἔχει, οἷον ἵππος, βοῦς, ἔνια δὲ ῥυάδα μὲν οὐκ ἔχει, βραχύβια δὲ εἰσι, καθάπερ πρόβατον καὶ ἄλλα· οὗ ἡ θριξ ὥσπερ

οὐ γηράσκουσα οὐδὲ πολιοῦται. ὁ δὲ ἄνθρωπος οὔτε ῥυάδα ἔχει τὴν τρίχα, μακρόβιον τέ ἐστίν, ὥστε ὑπὸ τοῦ χρόνου πολιοῦται.

Διὰ τί, ὅσοις τὰ ἀπὸ τοῦ ὀμφαλοῦ κάτω μείζονα ἢ [898b] τὰ πρὸς τὰ στήθη, βραχύβιοι καὶ ἀσθενεῖς; ἢ ὅτι ἡ κοιλία ψυχρὰ διὰ μικρότητα, ὥστε οὐ πεπτικὴ ἀλλὰ περιττωματικὴ; οἱ δὲ τοιοῦτοι νοσακεροί.

Διὰ τί τὰ μὲν γίνεται τῶν ζώων οὐ μόνον ἐξ ἀλλήλων ἀλλὰ καὶ αὐτόματα, τὰ δ' ἐξ ἀλλήλων μόνον, οἷον ἄνθρωπος καὶ ἵππος; ἢ καὶ εἰ καὶ μὴ δι' ἑτέρας αἰτίας, ἀλλ' ὅτι τοῖς μὲν ὀλίγος ὁ χρόνος τῆς γενέσεως, ὥστε ἡ γεννητικὴ ὥρα ὑπερτείνει καὶ ἐνδέχεται γενέσθαι ἐν τῇ μεταβολῇ τῶν ὥρῶν, τῶν δὲ πολὺ ἡ γένεσις ὑπερτείνει. ἐνιαύσιοι γὰρ ἢ δεκάμηνοί εἰσιν· ὥστε ἀνάγκη γίνεσθαι ἢ ἐξ ἀλλήλων γίνεσθαι.

Διὰ τί τῶν Αἰθιοπῶν οἱ μὲν ὀδόντες λευκοί, καὶ λευκότεροι ἢ τῶν ἄλλων, οἱ δὲ ὄνυχες οὐκέτι; ἢ οἱ μὲν ὄνυχες, ὅτι καὶ τὸ δέρμα μέλαν, καὶ μελάντερον ἢ τῶν ἄλλων, οἱ δὲ ὄνυχες ἐκ τοῦ δέρματος φύονται. οἱ δὲ ὀδόντες λευκοὶ διὰ τί; ἢ ὅτι ἐξ ὧν τὸ ὑγρὸν ἐξάγει ὁ ἥλιος ἄνευ τοῦ ἐπιβάπτειν, λευκαίνεται, οἷον καὶ τὸν κηρόν; τὸ μὲν οὖν δέρμα ἐπιβάπτει, τοὺς δὲ ὀδόντας οὐκ ἐπιβάπτει, ἀλλὰ τὸ ὑγρὸν διὰ τὴν ἀλέαν ἐξατμίζεται ἐξ αὐτῶν.

Διὰ τί τὰ μὲν ἀφαιρουμένης τῆς κεφαλῆς ἀποθνήσκει εὐθὺς ἢ ταχύ, τὰ δὲ οὐ; ἢ ὅσα ἄναιμα καὶ ὀλιγότροφα, τοῦτο πάσχει; οὔτε τροφῆς γὰρ δεῖται ταχύ, οὔτε ἐγχεῖται αὐτῶν τὸ θερμὸν ἐν τῷ ὑγρῷ, ὧν ἄνευ οὐχ οἷόν τε ζῆν τοῖς ἐναίμοις. τούτοις δὲ οἷόν τέ ἐστίν· ἀπνευστὶ ζῆν γὰρ δύνανται πολὺ μᾶλλον. ἢ δὲ αἰτία ἐν ἑτέροις εἴρηται.

## ΙΑ. ΟΣΑ ΠΕΡΙ ΦΩΝΗΣ.

Διὰ τί τῶν αἰσθήσεων ἐκ γενετῆς μάλιστα τὴν ἀκοὴν πηροῦνται; ἢ ὅτι ἀπὸ τῆς αὐτῆς ἀρχῆς εἶναι δόξειεν ἂν ἢ τε ἀκοὴ καὶ ἡ φωνή; ῥᾶστα δὲ δοκεῖ διαφθεῖρεσθαι ἡ διάλεκτος οὕσα εἶδος φωνῆς, καὶ χαλεπώτατα ἐπιτελεῖσθαι. σημεῖον δὲ ὅτι μετὰ τὸ γενέσθαι πολὺν χρόνον ἐνεοί ἐσμεν· τὸ μὲν γὰρ πρῶτον ὅλως οὐδὲ λαλοῦμεν οὐδέν, εἴτα ὁψέ ποτε ψελλίζομεν. διὰ τε τὸ τὴν διάλεκτον εὐφθαρτον εἶναι, τὴν αὐτὴν δὲ ἀρχὴν ἀμφοτέρων εἶναι καὶ τῆς διαλέκτου (φωνὴ γάρ τις καὶ τῆς ἀκοῆς ὥσπερ καὶ εἰ συμβεβηκότος), ῥᾶστα τῶν αἰσθήσεων φθείρεται, καὶ οὐ καθ' αὐτήν, ἡ ἀκοή. τεκμήριον δὲ ἔστι καὶ ἐκ τῶν ἄλλων ζώων λαβεῖν, ὅτι παντελῶς [899a] εὐφθαρτός ἐστιν ἡ ἀρχὴ τῆς διαλέκτου· λαλεῖ γὰρ οὐθὲν τῶν ἄλλων ζώων πλὴν ἀνθρώπου, καὶ οὗτοι δὲ ὁψέ ποτε, καθάπερ εἴρηται.

Διὰ τί οἱ κωφοὶ πάντες διὰ τῶν ῥινῶν φθέγγονται; ἢ διὰ τὸ ἐγγὺς τοῦ εἶναι ἐνεοὺς εἶναι; οἱ δὲ ἐνεοὶ λαλοῦσι διὰ τῶν ῥινῶν· ταύτη γὰρ αὐτῶν ἐκπίπτει τὸ πνεῦμα διὰ τὸ τῷ στόματι μεμυκέναι. μεμύκασι δέ, ὅτι οὐθὲν εἰς φωνὴν χρῶνται τῇ γλώττῃ.

Διὰ τί μεγαλόφωνοι πάντες εἰσὶν οἱ θερμοὶ τὴν φύσιν; ἢ ὅτι ἀνάγκη καὶ ἀέρα πολὺν καὶ ψυχρὸν ἐν τούτοις εἶναι; ἔλκει γὰρ τὸ πνεῦμα τὸ θερμὸν πρὸς ἑαυτὸ καὶ ἀέρα, καὶ πλείω τὸ πλεῖον. ἡ δὲ μεγάλη φωνὴ γίνεται ἐν τῷ πολὺν ἀέρα κινεῖν, καὶ ὀξεῖα ἐν τῷ ταχέως· βαρεῖα δὲ ἡ ἐν τῷ βραδέως.

Διὰ τί οἱ κωφοὶ πάντες διὰ τῶν ῥινῶν φθέγγονται; ἢ διὰ τὸ βιαίτερον πνεῖν τοὺς κωφούς; ἐγγὺς γὰρ τοῦ ἐνεοὶ εἶναι εἰσὶν. δίσταται οὖν τῶν μυκτῆρων ὁ πόρος ὑπὸ τοῦ πνεύματος· οἱ τοιοῦτοι δὲ διὰ ῥινῶν φθέγγονται.

Διὰ τί εὐηκοώτερα τὰ τῆς νυκτός; ἢ ὅτι μᾶλλον ἡρεμία διὰ τὴν τοῦ θερμοτάτου ἀπουσίαν; διὸ καὶ ὡς ἐπὶ τὸ πολὺ ἀταρακτότερα. ὁ γὰρ ἥλιος ὁ κινῶν.

Διὰ τί πόρρωθεν αἱ φωναὶ ὀξύτεραι δοκοῦσιν εἶναι; οἱ γοῦν μιμούμενοι τοὺς σφόδρα πόρρω ὄντας καὶ βοῶντας ὀξὺ φθέγγονται καὶ ὅμοιον τοῖς ἀπηχοῦσιν, καὶ τῆς ἡχοῦς ὀξύτερος φαίνεται ὁ ψόφος. ἔστι δὲ πόρρω· ἀνακλᾶται γάρ. οὐκοῦν ἐπεὶ ὀξὺ μὲν ἐν ψόφῳ τὸ ταχύ, βαρὺ δὲ τὸ βραδύ, ἔδει βαρυτέρας πόρρωθεν φαίνεσθαι τὰς φωνάς. τὰ γὰρ αὐτὰ φερόμενα πάντα βραδύτερον φέρεται ὅσω ἂν ἀπέχη τῆς ἀρχῆς πλεῖον, καὶ τέλος πίπτει. πότερ'



οὖν ὅτι οἱ μιμούμενοι ἀμενηνῇ τῇ φωνῇ μιμοῦνται, καὶ λεπτήν τὴν πόρρωθεν φωνήν; λεπτὴ δὲ βαρεῖα οὐκ ἔστιν, οὐδὲ μικρὸν καὶ ἀμενηνὸν φθέγγεσθαι βαρὺ ἀλλ' ὅξυ ἀνάγκη. ἢ οὐ μόνον οἱ μιμούμενοι διὰ τοῦτο μιμοῦνται, ἀλλὰ καὶ οἱ ψόφοι αὐτοὶ ὀξύτεροι γίνονται; αἴτιον δὲ ὅτι ὁ ἀήρ ὁ φερόμενος ποιεῖ τὸν ψόφον· καὶ ὥσπερ τὸ πρῶτον ψοφεῖ τὸ κινῆσαν τὸν ἀέρα, οὕτω δεῖ πάλιν ποιῆσαι τὸν ἀέρα ἀεὶ ἄλλον κινοῦντα εἶναι, τὸ δὲ κινούμενον. διὸ ὁ ψόφος συνεχῆς, ὅτι ἀεὶ ἐκδέχεται [899b] κινοῦντα κινῶν, ἕως ἂν ἀπομαρνανθῇ, ὃ ἐπὶ τῶν σωμάτων ἐστὶ τὸ πεσεῖν, ὅταν μηκέτι δύνηται ὠθεῖν ὁ ἀήρ ἔνθα μὲν τὸ βέλος ἔνθα δὲ τὸν ἀέρα. ἢ μὲν γὰρ φωνὴ γίνεται ἢ συνεχῆς ἀέρος ὠθουμένου ὑπ' ἀέρος, τὸ δὲ βέλος φέρεται σώματος ὑπ' ἀέρος κινουμένου. ἐνταῦθα μὲν οὖν ἀεὶ τὸ αὐτὸ φέρεται σῶμα, ἕως ἂν καταπέσῃ, ἐκεῖ δὲ ἀεὶ ἕτερος ἀήρ. καὶ πρῶτον ἐλάττω θᾶττον μὲν κινεῖται, ἐπ' ὀλίγον δέ. διὸ πόρρω ὀξύτεραι καὶ λεπτότεραι αἱ φωναί. τὸ γὰρ θᾶττον ὅξύ, ὥσπερ καὶ διηπόρηται. ὥσπερ ἡ αὐτὴ αἰτία δι' ἣν καὶ οἱ μὲν παῖδες καὶ οἱ κάμνοντες ὅξυ φθέγγονται, οἱ δὲ ἄνδρες καὶ οἱ ὑγιαίνοντες βαρὺ. τὸ δὲ τοῖς ἐγγύς μὴ ἐπίδηλον εἶναι τὴν φωνὴν ἢ βαρυτέραν ἢ ὀξυτέραν γινομένην, καὶ ὅλως μὴ ὁμοίως ἔχει τοῖς ῥιπτομένοις βάρεσιν, αἴτιον ὅτι τὸ μὲν ῥιφθὲν ἐν φέρεται ἀεὶ τὸ αὐτό, ὁ δὲ ψόφος ἀήρ ἐστὶν ὠθούμενος ὑπὸ ἀέρος. διὸ καὶ τὸ μὲν εἰς ἐν πίπτει, ἢ δὲ φωνὴ πανταχῇ, ὥσπερ ἂν εἰ τὸ ῥιφθὲν ἅμα φερόμενον ἀπείρως θρυφθεῖη, καὶ ἔτι εἰς τοῦπισθεν.

Διὰ τί αἱ νεηλιφεῖς οἰκίαι μᾶλλον ἡχοῦσιν; ἢ ὅτι μᾶλλον ἀνάκλασις γίνεται διὰ τὴν λειότητα; λειότεραι δὲ διὰ τὸ ἀρραγὲς καὶ τὸ συνεχές. δεῖ δὲ μὴ παντελῶς ὑγράν ἀλλ' ἤδη ξηρὰν λαμβάνειν· ἀπὸ πηλοῦ γὰρ οὐκ ἔστιν ἀνάκλασις. διὰ ταῦτα γὰρ καὶ τὰ κονιάματα μᾶλλον ἡχεῖ. συμβάλλεται δὲ ἴσως καὶ ἡ ἀκίνησία τοῦ ἀέρος· ἀθρόος γὰρ ἰὼν μᾶλλον ἀποπλήττεται τὸν προσπίπτοντα.

Διὰ τί, ἐάν τις πίθον καὶ κεράμια κενὰ κατορύξῃ καὶ πωμάσῃ, μᾶλλον ἡχεῖ τὰ οἰκήματα, καὶ ἐὰν φρέαρ ἢ λάκκος ἢ ἐν τῇ οἰκίᾳ; ἢ ὅτι ἐπεὶ ἀνάκλασις ἢ ἡχώ, δεῖ περιειλημμένον ἀθρόον εἶναι τὸν ἀέρα, καὶ ἔχειν πρὸς ὃ ἀνακλασθήσεται, προσπίπτον πυκνὸν καὶ λεῖον; οὕτω γὰρ μάλιστα ἡχος γίνεται. τὸ μὲν οὖν φρέαρ καὶ ὁ λάκκος ἔχει τὴν στενότητα καὶ τὴν ἄθροισιν, οἱ δὲ πίθοι καὶ τὰ κεράμια καὶ τὴν πυκνότητα τῶν περιεχόντων, ὥστε ἐξ ἀμφοτέρων τὸ συμβαῖνον. καὶ γὰρ τὰ κοῖλα μᾶλλον ἡχεῖ· διὰ τοῦτο καὶ ὁ χαλκὸς μάλιστα τῶν ἄλλων. ὅτι δὲ κατορωρυγμένα, οὐθὲν ἄτοπον· ἢ γὰρ φωνὴ φέρεται κάτω οὐχ ἥττον. ὅλως δὲ πανταχῇ δοκεῖ καὶ κύκλῳ φέρεσθαι.

Διὰ τί δὲ μᾶλλον, ἐὰν κατορύξῃ τις, ἡχεῖ, ἢ ἐὰν μὴ; [900a] ἢ ὅτι

περιστεγόμενα μᾶλλον εἰς αὐτὰ δέχεται καὶ κατέχει τὸν ἀέρα; συμβαίνει δὲ καὶ τὴν πληγὴν σφοδρότεραν γίνεσθαι.

Διὰ τί τὸ ὕδωρ τὸ ψυχρὸν ἐκ τοῦ αὐτοῦ ἀγγείου ἐκχεόμενον ὀξύτερον ποιεῖ τὸν ψόφον; ἢ ὅτι θάπτων ἢ φορά; βαρύτερον γάρ. ἢ δὲ θάπτων ὀξύτερον ποιεῖ τὸν ψόφον. τὸ δὲ θερμὸν καὶ τῇ μανότητι καὶ τῇ ἀναφορᾷ κουφίζει. παρόμοιον δὲ ὅτι καὶ αἱ δᾶδες καίόμεναι ἀσθενεστέρα τὴν πληγὴν ποιοῦσιν.

Διὰ τί τοῖς ἡγρυπνηκόσιν ἡ φωνὴ τραχυτέρα; ἢ διότι ὑγρότερον τὸ σῶμα διὰ τὴν ἀπεψίαν, καὶ οὐχ ἥκιστα περὶ τὸν ἄνω τόπον, διὸ καὶ βάρος ἐν τῇ κεφαλῇ· ὑγρότητός τε περὶ τὸν βρόγχον οὔσης ἀνάγκη καὶ τραχυτέραν εἶναι τὴν φωνήν. ἢ μὲν γὰρ τραχύτης διὰ τὴν ἀνωμαλίαν, ἢ δὲ βαρύτης διὰ τὴν ἔμφραξιν· βαρυτέρα γὰρ ἢ φορά.

Διὰ τί μετὰ τὰ σιτία τάχιστα ἀπορρήγνυται ἡ φωνή; ἢ ὅτι κοπτόμενος μὲν ὁ τόπος ἐκθερμαίνεται, θερμαινόμενος δὲ ἔλκει τὴν ὑγρότητα; πλείων δὲ αὕτη καὶ ἐτοιμοτέρα διὰ τὴν προσφοράν.

Διὰ τί οἱ κλαίοντες ὀξὺ φθέγγονται, οἱ δὲ γελῶντες βαρὺ; ἢ ὅτι οἱ μὲν ὀλίγον κινοῦσι πνεῦμα δι' ἀσθένειαν, οἱ δὲ σφοδρῶς, ὃ ποιεῖ ταχὺ φέρεσθαι τὸ πνεῦμα; τὸ δὲ ταχὺ ὀξύ· καὶ γὰρ ἀπὸ συντόνου τοῦ σώματος ῥιπτούμενον ταχὺ φέρεται. ὁ δὲ γελῶν τούναντίον διαλελυμένως· οἱ δὲ ἀσθενεῖς ὀξύ· ὀλίγον γὰρ ἀέρα κινοῦσιν· οἱ δὲ ἐπιπολῆς. ἔτι οἱ μὲν γελῶντες θερμὸν τὸ πνεῦμα ἀφιᾶσιν, οἱ δὲ κλαίοντες, ὥσπερ καὶ ἡ λύπη κατάψυξίς ἐστι τοῦ τόπου τοῦ περὶ τὰ στήθη, καὶ τὸ πνεῦμα ψυχρότερον ἀφιᾶσιν. τὸ μὲν οὖν θερμὸν πολλὸν ἀέρα κινεῖ, ὥστε βραδέως φέρεσθαι, τὸ δὲ ψυχρὸν ὀλίγον. συμβαίνει δὲ τοῦτο καὶ ἐπὶ τῶν αὐλῶν· οἱ γὰρ θερμοὶ τῷ πνεύματι αὐλοῦντες πολὺ βαρύτερον αὐλοῦσιν.

Διὰ τί οἱ παῖδες καὶ τὰ ἄλλα τῶν ζώων τὰ νέα ὀξύτερον φθέγγονται τῶν τελείων, καὶ ταῦτα τῆς ὀξύτητος σφοδρότητος οὔσης; ἢ ἡ φωνὴ ἐστὶν ἀέρος κίνησις, καὶ ἡ θάπτων ὀξύτερα; ῥᾶον δὲ καὶ θᾶπτον ὁ ὀλίγος τοῦ πολλοῦ κινεῖται ἀήρ. κινεῖται δὲ ἢ συγκρινόμενος ἢ διακρινόμενος ὑπὸ θερμοῦ. ἐπεὶ δὲ ἡ μὲν εἰσπνοὴ ἐστὶ ψυχροῦ εἰσαγωγή, συγκρίνοιτ' ἂν ἐν αὐτῇ ὁ ἐν ἡμῖν ἀήρ· ἢ δὲ ἐκπνοή, θερμοῦ κινήσαντος ἀέρα, γίνοιτ' ἂν ἡ φωνή· ἐκπνέοντες γάρ, οὐκ εἰσπνέοντες [900b] φωνοῦμεν. ἐπεὶ δὲ τὰ νέα θερμότερά ἐστι τῶν πρεσβυτέρων καὶ τοὺς ἐν αὐτοῖς πόρους στενωτέρους ἔχει, ἐλάττω ἂν ἀέρα ἔχοι ἐν ἑαυτοῖς. ὄντος δὲ τοῦ τε κινουμένου ἐλάττονος καὶ τοῦ κινουontos θερμοῦ πλείονος ἐν αὐτοῖς, θᾶπτον ἂν δι' ἄμφω ἡ κίνησις γένοιτο τοῦ ἀέρος·

ἡ δὲ θάπτων ὀξυφωνότερα ἂν εἴη διὰ τὰ προειρημένα.

Διὰ τί οἱ κλαίοντες ὀξὺ φθέγγονται, οἱ δὲ γελῶντες βαρὺ; ἢ ὅτι οἱ μὲν κλαίοντες συντείνοντες καὶ συνάγοντες τὸ στόμα φωνοῦσιν; τῇ τε δὴ συντονίᾳ κινεῖται ταχὺ ὁ ἐν αὐτοῖς ἄηρ, καὶ τῷ διὰ στενοῦ τοῦ στόματος φέρεσθαι θᾶπτον φέρεται· δι' ἅμφω οὖν ὀξεῖα γίνεται ἡ φωνή. οἱ δὲ γελῶντες ἀνέντες τὸν τόνον γελῶσι καὶ κεχηνότες. ἐκπέμποντες οὖν διὰ τοῦτ' εὐρέως καὶ βραδέως τὸν ἄερα εἰκότως βαρυφωνοῦσιν.

Διὰ τί οἱ ἄγονοι, οἷον παῖδες, γυναῖκες, καὶ οἱ ἤδη γέροντες καὶ οἱ εὐνοῦχοι, ὀξὺ φθέγγονται, οἱ δὲ ἄνδρες βαρὺ; ἢ καθάπερ ἡ γραμμὴ καὶ τὰ ἄλλα λεπτὰ ἐν διάστημα ἔχει, τὰ δὲ παχέα πλείω, οὕτω καὶ ἡ λεπτὴ φωνὴ ἐν ἂν ἔχοι διάστημα. ῥᾶον δὲ καὶ ποιῆσαι καὶ κινῆσαι ἐστὶν ἐν ἡ πλείω. ἐχόντων οὖν τῶν προειρημένων πνεῦμα ἀσθενές, κινεῖ αὐτῷ ἄερα ὀλίγον. ἐλάχιστος δέ ἐστιν ὁ ἐν διάστημα ἔχων· ὅς ἔσται λεπτὸς διὰ τὰ προειρημένα. καὶ ἡ ἀπ' αὐτοῦ φωνὴ γινομένη τοιαύτη· ἡ δὲ λεπτὴ φωνὴ ὀξεῖα ἐστίν. οἱ μὲν οὖν ἄγονοι διὰ ταῦτα ὀξύφωνοί εἰσιν· οἱ δὲ ἄνδρες ἰσχύοντες τῷ πνεύματι πολλὸν ἄερα κινοῦσι, πολλὸς δὲ ὢν βραδέως ἂν κινοῖτο καὶ βαρεῖαν φωνὴν ποιεῖ. ἐποιεῖ γὰρ ἢ τε λεπτὴ καὶ ἡ ταχεῖα κίνησις ὀξεῖαν φωνήν, ὣν οὐδέτερον ἐπὶ τοῦ ἀνδρὸς συμβαίνει γίνεσθαι.

Διὰ τί αἱ φωναὶ βαρύτεραι ἡμῖν εἰσὶ τοῦ χειμῶνος; ἢ ὅτι παχύτερος ὁ ἀήρ ἐστὶ τότε, καὶ ὁ ἐν ἡμῖν καὶ ὁ ἐκτός; παχυτέρου δὲ ὄντος βραδυτέρα ἡ κίνησις γίνεται, ὥστε ἡ φωνὴ βαρυτέρα. ἔτι ὑπνωτικώτεροί ἐσμεν τοῦ χειμῶνος ἢ τοῦ θέρους, καὶ καθεύδομεν πλείω χρόνον· ἐκ δὲ τῶν ὑπνῶν βαρύτεροί ἐσμεν. ἐν ᾧ οὖν πλείονα χρόνον καθεύδομεν ἢ ἐγρηγόραμεν (οὗτος δέ ἐστιν ὁ χειμῶν), ἐν τούτῳ ἂν εἴημεν βαρυφωνότεροι ἢ ἐν ᾧ τοῦναντίον. τοῦ γὰρ μεταξὺ τῆς ἐγέρσεως ὄντος ὀλίγου χρόνου, ἡ ἐν τῷ ὑπνῷ ἕξις γενομένη διαμένει πρὸς τὴν καθύπνωσιν.

Διὰ τί ἐκ τῶν πότων καὶ τῶν ἐμέτων καὶ ἐν τοῖς ψύχεσι [901a] βαρύτερον φθέγγονται; ἢ διὰ τὴν ἔμφραξιν τοῦ φάρυγγος τὴν γινομένην ὑπὸ τοῦ φλέγματος; ἐπικατασπᾶ γὰρ ρευμάτιον εἰς αὐτόν· καὶ τοῖς μὲν ὁ ἔμετος ἢ ὁ πότος, τοῖς δὲ ἡ ὥρα καὶ τὸ συμπλήρωμα στενώτερον ποιεῖ τὸν φάρυγγα, ὥστε βραδυτέρα γίνεται ἡ φορὰ τοῦ πνεύματος. ἡ δὲ βραδεῖα φορὰ βαρεῖαν ποιεῖ τὴν φωνήν.

Διὰ τί ἐγγύθεν μὲν ἡ βαρυτέρα μᾶλλον ἐξακούεται, πόρρωθεν δὲ ἥττον; ἢ διότι ἡ βαρυτέρα φωνὴ πλείω μὲν ἄερα κινεῖ, οὐκ εἰς μῆκος δέ; πόρρωθεν μὲν

οὖν ἦττον ἀκούομεν, διότι ἐπ' ἔλαττον κινεῖται, ἐγγύθεν δὲ μᾶλλον, διότι πλείων ἡμῖν ἀήρ πρὸς τὸ αἰσθητήριον προσπίπτει. ἡ δὲ ὀξεῖα πόρρω ἀκούεται, ὅτι λεπτοτέρα ἐστί, τὸ δὲ λεπτὸν τὴν εἰς μῆκος αὕξησιν ἔχει. λέγοι δ' ἂν τις ὅτι καὶ θάττων ἐστὶν ἡ ποιοῦσα αὐτὴν κίνησις. εἴη δ' ἂν τοῦτο, εἰ πυκνὸν μὲν στενὸν δ' εἴη τὸ κινεῖν πνεῦμα τὸν ἀέρα. ὁ τε γὰρ ὀλίγος εὐκίνητοτέρος ἐστὶν ἀήρ (κινεῖται γὰρ ὀλίγος ὑπὸ τοῦ στενοῦ), καὶ τὸ πυκνὸν πλείους πληγὰς ποιεῖ, αἱ τὸν ψόφον ποιοῦσιν. ἰδεῖν δ' ἔστι τοῦτο ἐπὶ τῶν ὀργάνων· αἱ γὰρ λεπτότεραι χορδαὶ ὀξύτεραί εἰσι, τῶν ἄλλων τῶν αὐτῶν ὑπαρχόντων αὐταῖς.

Διὰ τί ἡ φωνὴ ὀξύτερα φαίνεται τοῖς μακροτέραν ἀφεστηκόσι, τοῦ ὀξέος ὄντος ἐν τῷ ταχέως φέρεσθαι; τὸ δὲ μακροτέρῳ φερόμενον βραδύτερον κινεῖται. ἢ ὅτι ἡ ὀξύτης τῆς φωνῆς οὐ μόνον ἐστὶν ἐν τῷ ταχέως κινεῖσθαι, ἀλλὰ καὶ ἐν τῷ λεπτότατον ψόφον γίνεσθαι· τοῖς δὲ μακροτέραν ἀφεστηκόσιν ἀεὶ λεπτοτέρα ἡ φωνὴ ἀφικνεῖται διὰ τὴν ὀλιγότητα τοῦ ἀέρος τοῦ κινουμένου. μαραίνεται γὰρ ἡ κίνησις, μαραινόμενος δὲ ὁ ἀριθμὸς μὲν εἰς τὸ ἐν τελευτᾷ, σῶμα δὲ εἰς διάστημα ἔν, ὅ ἐστιν ἐν σώματι λεπτότης. ὁμοίως δὲ [καὶ] ἐν φωνῇ.

Διὰ τί καὶ οἱ γεγυμνασμένοι καὶ οἱ ἀσθενεῖς ὀξὺ φθέγγονται; ἢ ὅτι οἱ μὲν ἀσθενεῖς ὀλίγον ἀέρα κινεῦσιν, ὁ δὲ ὀλίγος τοῦ πλείονος θᾶττον φέρεται· οἱ δὲ γεγυμνασμένοι ἰσχυρῶς κινεῦσι τὸν ἀέρα, ὁ δὲ ἰσχυρῶς κινούμενος ἀήρ θᾶττον φέρεται. τὸ δὲ ταχὺ ἐν φορᾷ ἐν φωνῇ ὀξὺ ἐστὶν.

Διὰ τί τοῖς μετὰ τὰ σιτία κεκραγόσιν ἡ φωνὴ διαφθείρεται; [901b] καὶ πάντας ἂν ἴδοιμεν τοὺς φωνασκοῦντας, οἷον ὑποκριτὰς καὶ χορευτὰς καὶ τοὺς ἄλλους τοὺς τοιούτους, ἔωθέν τε καὶ νήστες ὄντας τὰς μελέτας ποιουμένους. ἢ τὸ διαφθεῖρεσθαι τὴν φωνὴν οὐθὲν ἕτερόν ἐστιν ἢ τὸν τόπον διαφθεῖρεσθαι καθ' ὃν τὸ πνεῦμα διεξέρχεται; διὸ καὶ οἱ βραγχιῶντες διαφθεῖρονται τὰς φωνάς, οὐ τῷ τὸ πνεῦμα γίνεσθαι χειρόν, ὃ ποιεῖ τὴν φωνήν, ἀλλὰ τῷ τετραχύνθαι τὴν ἀρτηρίαν. ὑπὸ δὲ τῆς θερμασίας τῆς σφοδρᾶς μάλιστα τραχύνεσθαι πέφυκεν ὁ τόπος οὗτος. διὸ καὶ οὗθ' οἱ πυρέττοντες οὔτε οἱ σφόδρα πεπυρεχότες εὐθὺς μετὰ τὴν ἄνεσιν τοῦ πυρετοῦ ἄδειν δύνανται· τετράχυνται γὰρ ὁ φάρυξ αὐτοῖς διὰ τὴν θερμασίαν. ἀπὸ δὲ τῶν σιτίων εἰκὸς εἶναι τὸ πνεῦμα καὶ πολὺ καὶ θερμόν· τὸ δὲ τοιοῦτον εὐλογόν ἐστι διεξιὸν ἐλκοῦν τε καὶ τραχύνειν τὴν ἀρτηρίαν· τούτου δὲ συμβαίνοντος εἰκότως ἡ φωνὴ διαφθείρεται.

Διὰ τί, εἴπερ ἡ φωνὴ ἐστὶν ἀήρ τις ἐσχηματισμένος καὶ φερόμενος,

διαλύεται πολλάκις τὸ σχῆμα, ἡ δὲ ἡχώ, ἣ γίνεται πληγέντος τοῦ τοιούτου πρὸς τι στερεόν, οὐ διαλύεται αὕτη, ἀλλὰ σαφῶς ἀκούομεν αὐτῆς; ἢ ὅτι ἀνάκλασις ἐστίν, ἀλλ' οὐ κατάκλασις; οὕτω δὲ τό θ' ὅλον διαμένει, καὶ δύο μέρη ὁμοιοσχήμονα ἐξ αὐτοῦ γίνεται· πρὸς ὁμοίαν γὰρ γωνίαν ἐστὶν ἡ ἀνάκλασις. διὸ καὶ ὁμοία γίνεται ἡ τῆς ἡχοῦς φωνὴ τῇ ἐξ ἀρχῆς.

Διὰ τί τῶν μὲν ἄλλων ζώων τὰ νέα καὶ νήπια ὀξύτερον φθέγγονται τῶν τελείων, οἱ δὲ μόσχοι βαρύτερον τῶν τελείων βοῶν; ἢ ὅτι ἐν ἐκάστῳ γένει τὸ νήπιον ὅμοιον ἐστὶ τῷ ἐν αὐτῷ θήλει; τῶν βοῶν δὲ αἱ θήλειαι βαρύτερον φθέγγονται τῶν ἀρρένων, οἱ δὲ μόσχοι ταύταις ὁμοιότεροί εἰσιν ἢ τοῖς ἄρρεσιν· τὰ δὲ ἄλλα τοῦναντίον.

Διὰ τί, ὅταν ἀχυρωθῶσιν αἱ ὀρχήστραι, ἤττον οἱ χοροὶ γεγώνασιν; ἢ διὰ τὴν τραχύτητα προσπίπτουσα ἢ φωνὴ οὐ πρὸς λεῖον τὸ ἔδαφος ἤττον γίνεται μία, ὥστ' ἐλάττων; οὐ γὰρ συνεχῆς. ὥσπερ καὶ τὸ φῶς ἐπὶ τῶν λείων μᾶλλον [φαίνει] διὰ τὸ μὴ διαλαμβάνεσθαι τοῖς ἐμποδίζουσιν.

[902a] Διὰ τί ποτε ὁ ἄλς, ὅταν εἰς πῦρ ἐμβληθῇ, ψοφεῖ; ἢ ὅτι ὁ ἄλς ὑγρὸν ἔχει οὐ πολὺ, ὃ ὑπὸ τοῦ θερμοῦ ἐκπνευματούμενον καὶ βίᾳ ἐκπῖπτον σχίζει τὸν ἄλα; τὸ δὲ σχιζόμενον ἅπαν ψοφεῖ.

Διὰ τί ποτε τῶν παιδίων ἔνια, πρὶν ἥκειν τὴν ἡλικίαν ἐν ἣ σαφηνίζειν ὥρα αὐτοῖς, φθεγξάμενα καὶ σαφῶς εἰπόντα πάλιν ὁμοίως διάγουσιν, ἕως ἄν ἔλθῃ ὁ εἰωθὺς χρόνος; ἃ δὲ πολλοὶ τέρατα νομίζουσιν εἶναι. ἤδη δ' ἔνια λέγεται καὶ εὐθὺς γινόμενα φθεγξασθαι. ἢ ὅτι ὡς μὲν ἐπὶ πολὺ τὰ πλείω τε τῶν γινομένων γίνεται κατὰ φύσιν, διὸ ὀλίγοις τοῦτο συμβαίνει, καὶ φύσει ἅμα κατάλληλα τελειοῦται· διὸ καὶ ἀκούει τε ἅμα καὶ φωνεῖ καὶ ξυνίησι κατὰ τὴν ἀκοὴν καὶ λέγει καὶ σαφηνίζει. οὐ μὲν ἀλλὰ πολλάκις οὐκ ἀπαρτίζει τὰ αὐτά, ἀλλὰ τὰ μὲν ξυνίησι πρότερον ἢ τοῦτο τὸ μόνον ἀπολυθῆναι ὥς διαλέγεται, τοῖς δὲ τοῦναντίον. ταῦτα μὲν οὖν οὐκ ἂν διαλεχθεῖη συνετῶς (ἃ γὰρ ἂν ἀκούσωσι, διαλέγονται)· ἀλλ' ὅταν ἦκη καιρὸς ἀμφοῖν, ἀποδιδόασιν τὸ κατὰ φύσιν. ὅσοις δὲ ἔμπροσθεν ἢ κατὰ τὴν ἀκοὴν αἴσθησις διακριβοῦται ἐν τῇ ψυχῇ, ὥς πρῶτῳ κινοῦσι τὴν φωνὴν καὶ ποιοῦσι λόγον, τούτοις ἐνίστε γίνεται ἤδη ξυνιεῖσι πολλὰ καὶ δυνάμεις τις τοῦ μορίου καὶ ἀπόλυσις, μάλιστα μὲν μετὰ ὕπνον τινά (τούτου δ' αἴτιον ὅτι ὁ ὕπνος καὶ τὰ σώματα νωθρότερα ποιεῖ καὶ τὰ μόρια ἀναπαύσας), εἰ δὲ μή, καὶ ἄλλην μεταβολὴν λαβόντα τοιαύτην. πολλὰ δὲ ἔχομεν τοιαῦτα ποιεῖν, ἃ μικρῶν δεῖται καιρῶν· κᾶπειτα οὐκέτι ὁμοίως ἔχει, ὅταν οὕτω τύχῃ τὸ μόνον ἔχον καὶ ἀπολυθέν· ὅταν ἐπιπολῆς ἢ ἐν τῇ αἰσθήσει ὧν ἐκινήθη διάνοια, κατὰ τὴν ἀκοὴν τοῦτο ἐπανῆλθε καὶ

ἐφθέγξατο. πολλάκις δὲ καὶ μέλη καὶ ῥήματα ἐπέρχεται οὐκ ἐκ προαιρέσεως ἡμῖν· ἀλλ' ἐὰν τὸ πρῶτον προελόμενοι εἴπωμεν, ὕστερον ἄνευ προαιρέσεως λέγομεν ἢ ἄδομεν, καὶ οὐ δύναται ἐκ τοῦ στόματος ἐξελθεῖν. οὕτω καὶ τοῖς παιδίοις, ὅταν συμβῇ τοῦτο λεπτόν, εἴτα πάλιν καταστῇ εἰς τὴν φύσιν ἐκεῖνο τὸ μόριον, ἕως ἂν ἡ ὥρα ἔλθῃ ἰσχυῖσαι αὐτὸ καὶ ἀποκριθῆναι.

Διὰ τί ἔνια ψοφεῖ καὶ κινεῖται ἐξαίφνης, οἷον τὰ κιβώτια, οὐδενὸς αἰσθητοῦ κινουῦντος; καίτοι κρεῖττον γέγονε τὸ κινεῖν τοῦ κινουμένου. ὁ δὲ αὐτὸς λόγος καὶ φθορᾶς καὶ γήρωος· ὑπὸ ἀναισθήτου γὰρ φθείρεται τὰ λεγόμενα ὑπὸ [902b] τοῦ χρόνου πάντα. ἢ ὅμοιον τοῦτο τοῖς σταλαγμοῖς καὶ τοῖς ὑπὸ τῶν ἐκφυομένων αἵρομένοις λίθοις; οὐ γὰρ τὸ τελευταῖον αἶρει ἢ κινεῖ, ἀλλὰ τὸ συνεχές. ἐπὶ δὲ τούτου συνέβη ἀναισθήτου ὄντος αἰσθητὴν γίνεσθαι τὴν κίνησιν. οὕτω δὲ καὶ τὸ περιεχόμενον αἰσθητοῖς χρόνοις κινεῖται καὶ διαιρεῖται εἰς ἀναισθητα, τῷ δὲ παντὶ καὶ συνεχεῖ ἐκίνησε καὶ διέφθειρεν. συνεχές δέ ἐστιν οὐκ ἐν τῷ νῦν, ἀλλ' ἐν τῷ ὠρισμένῳ χρόνῳ ὑπὸ τοῦ νῦν.

Διὰ τί οἱ χασμώμενοι ἤττον ἀκούουσιν; ἢ ὅτι τοῦ ἐξιόντος πνεύματος ἐν τῇ χάσμῃ πολὺ καὶ εἰς τὰ ὦτα χωρεῖ ἔσωθεν, ὥστε καὶ τῇ αἰσθήσει ἐπίδηλον εἶναι τὴν κίνησιν ἣν ποιεῖ περὶ τὴν ἀκοήν, μάλιστα δ' ἐκ τῶν ὕπνων; ὁ δὲ ψόφος ἀῆρ ἢ πάθος ἀέρος ἐστίν. ἀντιπαίοντος οὖν τοῦ ἔσωθεν εἰσέρχεται ὁ ἔξωθεν ψόφος, καὶ ὑπὸ τῆς κινήσεως καὶ τοῦ ἔξωθεν ψόφου ἐκκρούεται ἡ κίνησις.

Διὰ τί ἰσχνόφωνοι παῖδες ὄντες μᾶλλον ἢ ἄνδρες; ἢ ὥσπερ καὶ τῶν χειρῶν καὶ τῶν ποδῶν ἀεὶ ἤττον κρατοῦσι παῖδες ὄντες, καὶ ὅσοι ἐλάττους οὐ δύνανται βαδίζειν, ὁμοίως καὶ τῆς γλώττης οἱ νεώτεροι οὐ δύνανται; ἐὰν δὲ παντάπασι μικροὶ ὦσιν, οὐδὲ φθέγγεσθαι δύνανται ἀλλ' ἢ ὥσπερ τὰ θηρία, διὰ τὸ μὴ κρατεῖν. εἴη δ' ἂν οὐ μόνον ἐπὶ τοῦ ἰσχυοφώνου, ἀλλὰ καὶ τραυλοὶ καὶ ψελλοί. ἢ μὲν οὖν τραυλότης τῷ γράμματός τινος μὴ κρατεῖν, καὶ τοῦτο οὐ τὸ τυχόν, ἢ δὲ ψελλότης τῷ ἐξαίρειν τι, ἢ γράμμα ἢ συλλαβὴν, ἢ δὲ ἰσχυοφωνία ἀπὸ τοῦ μὴ δύνασθαι ταχὺ συνάψαι τὴν ἑτέραν συλλαβὴν πρὸς τὴν ἑτέραν. ἅπαντα δὲ δι' ἀδυναμίαν· τῇ γὰρ διανοίᾳ οὐχ ὑπηρετεῖ ἡ γλῶττα. ταῦτο δὲ τοῦτο καὶ οἱ μεθύοντες πάσχουσι καὶ οἱ πρεσβῦται· ἤττον δὲ πάντα συμβαίνει.

Διὰ τί ἡ φωνὴ τρέμει καὶ τῶν ἀγωνιόντων καὶ τῶν δεδιότων; ἢ ὅτι σείεται ἡ καρδία τοῦ θερμοῦ ἐξιόντος; ἀμφοτεράκις δὲ πάσχουσι τοῦτο· καὶ γὰρ τοῖς ἀγωνιῶσι συμβαίνει καὶ τοῖς φοβουμένοις. σειομένης δὲ οὐ γίνεται μία ἡ πληγὴ ἀλλὰ πλείους, ὥσπερ ἡ τῶν παρανενευρισμένων χορδῶν.

Διὰ τί οἱ μὲν ἀγωνιῶντες βαρὺ φθέγγονται, οἱ δὲ φοβούμενοι ὀξύ; ἢ ὅτι τοῖς μὲν φοβουμένοις καταψύχεται ὁ τόπος ὁ περὶ τὴν καρδίαν, κάτω ὁρμῶντος τοῦ θερμοῦ, ὥστε ὀλίγον ἄερα κινοῦσιν; ἢ γὰρ ἰσχύς ἐν τῷ θερμῷ· τοῖς [903a] δὲ ἄνω φέρεται τὸ θερμόν, ὥσπερ τοῖς αἰσχυνομένοις· δι' αἰσχύνην γὰρ καὶ ἀγωνιῶσιν. τοῖς δὲ αἰσχυνομένοις ἄνω φέρεται πρὸς τὸ πρόσωπον· σημεῖον δὲ ὅτι ἐξέρυθροι γίνονται μᾶλλον. συντήκει οὖν καὶ παχὺν ποιεῖ τὸν ἄερα ὥ φθέγγονται· ὁ δὲ τοιοῦτος βραδέως ὠθεῖται· τὸ δὲ βραδὺ ἐν φωνῇ βαρὺ ἐστίν.

Διὰ τί εὐηκοωτέρα ἡ νύξ τῆς ἡμέρας ἐστίν; πότερον ὥσπερ Ἀναξαγόρας φησί, διὰ τὸ τῆς μὲν ἡμέρας σίζειν καὶ ψοφεῖν τὸν ἄερα θερμαινόμενον ὑπὸ τοῦ ἡλίου, τῆς δὲ νυκτὸς ἡσυχίαν ἔχειν ἅτε ἐκλελοιπότης τοῦ θερμοῦ, εἶναι δὲ μᾶλλον ἀκουστόν μηθενὸς ὄντος ψόφου; ἢ ὅτι διὰ τοῦ κενωτέρου μᾶλλον ἀκουστόν ἐστίν ἢ διὰ τοῦ πλήρους; ἔστι δὲ τῆς μὲν ἡμέρας ὁ ἀήρ πυκνὸς ἅτε πεπληρωμένος ὑπὸ τοῦ φωτὸς καὶ τῶν ἀκτίνων, τῆς δὲ νυκτὸς ἀραιότερος διὰ τὸ ἀπεληλυθέναι ἐξ αὐτοῦ τὸ πῦρ καὶ τὰς ἀκτῖνας, σώματα ὄντα. ἢ ὅτι τῆς μὲν ἡμέρας τὰ σώματα πρὸς πολλὰ τὴν διάνοιαν ἔλκει· διὸ οὐκ εὐκρινές ἐστι πρὸς τὴν ἀκοήν. καὶ τῷ πράττειν ἡμᾶς πάντα μᾶλλον ἐν τῇ ἡμέρᾳ ἢ τῇ νυκτί, καὶ αὐτὰ περὶ τὰς πράξεις ἐστίν. χωρισθεῖσα δὲ αἴσθησις διανοίας καθάπερ ἀναίσθητον πόνον ἔχει, ὥσπερ εἴρηται τὸ νοῦς ὁρᾷ καὶ νοῦς ἀκούει. νυκτὸς δὲ τῆς ὥψεως ἀργούσης καὶ τῆς διανοίας μᾶλλον ἡρεμούσης ὁ τῆς ἀκοῆς πόρος μᾶλλον ἀνεωγμένος, καθάπερ τῆς ἡμέρας, δεκτικὸς μὲν ἐστὶ τῶν ἡχῶν ὁμοίως, ἐξαγγελτικὸς δὲ μᾶλλον τῇ διανοίᾳ διὰ τὸ μήτε αὐτὴν ἐνεργεῖν μήθ' ὑπὸ τῆς ὥψεως παρενοχλεῖσθαι, καθάπερ καὶ τῆς ἡμέρας.

Διὰ τί οἱ ἄγονοι, οἷον παῖδες καὶ γυναῖκες καὶ οἱ ἤδη γέροντες καὶ οἱ εὐνοῦχοι, ὀξὺ φθέγγονται, οἱ δὲ ἄνδρες βαρύτερον; ἢ δι' ἀσθένειαν τοῦ κινοῦντος μορίου τὸν ἄερα; ὀλίγον γὰρ τὸ ἀσθενὲς κινεῖ, ὁ δὲ ὀλίγος ταχὺ φέρεται, τὸ δὲ ταχὺ φερόμενον ὀξύ. ἢ διότι ὁ πόρος ὁ πρῶτος, δι' οὗ ἡ φωνὴ φέρεται, τοῖς μὲν ἀγόνοις μικρός, ὥστε ὀλίγον ἐξ αὐτοῦ τὸ ὠθοῦν τὸν ἄερα, ὀλίγος δὲ ὢν ταχὺ φέρεται δι' εὐρέος τοῦ ἄνω φάρυγγος· ἀκμάζουσι δὲ καὶ ἀνδρουμένοις δίσταται οὗτος, ὥσπερ καὶ ἐπὶ τοὺς ὄρχεις, ὥστε καὶ πλείων ἐστὶν ὁ ὠθούμενος. βραδύτερον οὖν διῶν βαρὺς γίνεται.

Διὰ τί οἱ ἰσχνόφωνοι οὐ δύνανται διαλέγεσθαι μικρόν; [903b] ἢ ὅτι ἴσχονται τοῦ φωνεῖν, ἐμποδίζοντός τινος; οὐκ ἴσης δὲ ἰσχύος οὐδ' ὁμοίας κινήσεως, μὴ ἐμποδίζοντός τε τὴν κίνησιν μηθενὸς καὶ ἐμποδίζοντος, βιάσασθαι δεῖ. ἢ δὲ φωνὴ κίνησις ἐστὶ· μεῖζον δὲ φθέγγονται μᾶλλον οἱ τῇ ἰσχυί χρώμενοι. ὥστ' ἐπεὶ ἀνάγκη ἀποβιάζεσθαι τὸ κωλῦον, ἀνάγκη μεῖζον

φθέγγεσθαι τοὺς ἰσχυροφώνους.

Διὰ τί δὲ ἀγωνιῶντες μὲν μᾶλλον ἰσχυρόφωνοι γίνονται, ἐν δὲ ταῖς μέθαις ἥττον; ἢ ὅτι ἀποπληξία ὁμοίον ἐστὶ τὸ πάθος μέρους τινὸς τῶν ἐντός, ὃ ἀδυνατοῦσι κινεῖν, ἐμποδίζοντος διὰ τὴν κατάψυξιν; ὁ μὲν οὖν οἶνος φύσει θερμὸς ὦν λύει τὴν κατάψυξιν μᾶλλον, ἢ δὲ ἀγωνία ποιεῖ· φόβος γὰρ τις ἢ ἀγωνία, ὁ δὲ φόβος κατάψυξις.

Διὰ τί ἔξωθεν εἰς τὰς οἰκίας εἰσακούεται μᾶλλον ἢ ἔσωθεν ἔξω; ἢ ὅτι ἔσωθεν ὁ ψόφος διὰ τὸ ἀχανὲς εἶναι διασπᾶται, ὥστε οὐχ ἱκανὸν ἕκαστον μέρος ἀκουσθῆναι, ἢ ἥττον; ἔξωθεν δὲ ἔσω εἰς ἐλάττω τόπον καὶ ἀέρα ἐστῶτα ἢ φωνὴ βαδίζουσα ἀθρόα ἔρχεται, ὥστε μείζων οὖσα ἀκούεται μᾶλλον.

Διὰ τί οἱ ἰσχυρόφωνοι μελαγχολικοί; ἢ ὅτι τὸ τῇ φαντασίᾳ ἀκολουθεῖν ταχέως τὸ μελαγχολικὸν εἶναι ἐστίν, οἱ δὲ ἰσχυρόφωνοι τοιοῦτοι· προτερεῖ γὰρ ἢ ὁρμὴ τοῦ λέγειν τῆς δυνάμεως αὐτοῖς, ὡς θᾶττον ἀκολουθοῦσης τῆς ψυχῆς τῷ φανέντι. καὶ οἱ τραυλοὶ δὲ ὡσαύτως· βραχύτερα γὰρ τὰ μόρια ταῦτα τοῖς τοιούτοις. σημεῖον δέ· οἰνωμένοι γὰρ τοιοῦτοι γίνονται, ὅτε μάλιστα τοῖς φαινομένοις ἀκολουθοῦσι, καὶ οὐ τῷ οἴνω.

Διὰ τί τὰ πράσα συμφέρει πρὸς εὐφωνίαν, ἐπεὶ καὶ τοῖς πέρδιξιν; ἢ ὅτι καὶ τὰ σκόροδα ἐφθὰ λεαίνει, τὰ δὲ πράσα γλισχρότητα ἔχει τινά; ῥυπτικὸν δὲ τοῦ φάρυγγος.

Διὰ τί τὰ μὲν ἄλλα ὀξύτερον φθέγγεται σφοδρότερα ὄντα, ὁ δὲ ἄνθρωπος ἀσθενῶν; ἢ διότι ἐλάττω κινεῖ ἀέρα, οὗτος δὲ ταχὺ διέρχεται, τὸ δὲ ταχὺ ὀξὺν ποιεῖ τὸν ψόφον.

Διὰ τί ἀκούουσι μᾶλλον κατέχοντες τὸ πνεῦμα ἢ ἐκπνέοντες; διὸ καὶ ἐν ταῖς θήραις παραγγέλλουσιν ἑαυτοῖς μὴ πνευστιᾶν. πότερον ὅτι τὸ αἰσθητικὸν ἄνω ἔρχεται αἰρομένων τῶν φλεβῶν; καθευδόντων γὰρ κάτω· διὸ καὶ μᾶλλον τε ἐκπνέουσι καθεύδοντες ἢ εἰσπνέουσι, καὶ ἀνήκοοί εἰσιν. [904a] ἢ καὶ τὸ αἷμα ἀνέρχεται ἐκπεπνευκότος, ὥστε κενοῦται τὰ ἄνω; ἀκούουσι δὲ τῷ κενῷ. ἢ ὅτι ὁ φυσιασμὸς ψόφος τίς ἐστίν, οὗτος δὲ ἐν τῷ ἐκπνεῖν γινόμενος κωλύει ἀκούειν.

Διὰ τί θᾶττον μὲν ψοφοῦσι καὶ πηδῶσιν οἱ μικροὶ ἄλλες, μείζω δὲ ψοφοῦσι καὶ πηδῶσιν οἱ μεγάλοι; ἢ διότι οἱ μὲν ταχὺ σχίζονται (οὐ γὰρ πολὺ ὃ δεῖ διελθεῖν τῷ πυρί) διὰ τὴν μικρότητα, οἱ δὲ βραδέως· μείζον γὰρ ἔργον



τὸ μείζον διασχίσαι ἢ τὸ μικρόν. φοφεῖ δὲ ὁ μὲν μικρὸς μικρόν, ἡ γὰρ πληγὴ μικρά, ὁ δὲ μείζων μεγάλη, μεγάλη γὰρ ἡ πληγὴ· ὁ δὲ ψόφος πληγὴ ἐστίν. καὶ πηδᾷ δὲ μᾶλλον τὸ ἰσχυρότερον, ἂν πληγῇ· ἥττον γὰρ ἐνδίδωσιν.

Διὰ τί, ἐὰν εἰς πολὺ πῦρ ἐμβάλλῃ τις τὸ αὐτὸ μέγεθος ἄλός, ἥττον φοφεῖ ἢ οὐ φοφεῖ; ἢ ὅτι φθάνει κατακαυθεὶς πρὶν σχισθῆναι; καίεται μὲν γὰρ τῷ τὸ ὑγρὸν ἀναλωθῆναι, φοφεῖ δὲ τῷ σχισθῆναι.

Διὰ τί οἱ χασμώμενοι ἥττον ἀκούουσιν; ἢ ὅτι τὸ πνεῦμα ἐναπολαμβάνουσιν, τὸ δὲ ἀπολαμβάνόμενον πνεῦμα περὶ τὰ ὦτα ἀθροίζεται. σημεῖον δέ· ἐν γὰρ τοῖς ὡσὶ ψόφος γίνεται ὅταν χασμησώμεθα. τὸ δὲ ἀπολαμβάνόμενον πνεῦμα κωλύει ἀκούειν. ἔτι δὲ καὶ φωνὴ τις γίνεται τῶν χασμωμένων· τοῦτο δὲ κωλυτικὸν τοῦ ἀκούειν. καὶ συμπίεζεσθαι ἀναγκαῖον τὰς ἀκοὰς διασπωμένου τοῦ στόματος.

Διὰ τί τῆς φωνῆς, ἐπειδὴ ῥύσις τίς ἐστίν, φύσιν ἐχούσης ἄνω φέρεσθαι, μᾶλλον ἐστίν εὐήκοος ἄνωθεν κάτω ἢ κάτωθεν ἄνω; ἢ ὅτι ἡ φωνὴ ἀπὸ τῆς ἐστὶ μεθ' ὑγροῦ· βαρυνόμενος οὖν οὗτος ὑπὸ τοῦ ὑγροῦ φέρεται κάτω καὶ οὐκ ἄνω· τοῦ γὰρ ὑγροῦ κατὰ φύσιν ἡ κάτω φορά. διὸ τοῖς κάτω μᾶλλον ἀκούεται. ἢ τοῦτο μὲν ὑπὸ τῆς τοῦ ζώου φωνῆς μόνον γίνεται (αὕτη γὰρ μεθ' ὑγροῦ), τὸ δὲ συμβαῖνόν ἐστίν καὶ ἐπὶ τῶν ἄλλων ψόφων; καθάπερ οὖν ἡ ὄψις, ἐὰν μὲν ἄνωθεν κάτω προσπέσῃ, τὴν ἀνάκλασιν ἄνω ποιεῖται, κάτωθεν δὲ ἄνω προσπεσοῦσα ἀνεκλάσθη κάτω, τὸν αὐτὸν τρόπον ἡ φωνὴ ἢ φύσιν ἔχουσα ἄνω φέρεσθαι, προσκόψασα τῷ ἐξ ἐναντίας ἀέρι, βιάζεσθαι μὲν οὐ δύναται πλείονα ὄντα καὶ βαρύτερον, ἀνακλασθεὶς δὲ ὁ κινηθεὶς ἀπὸ τοῦναντίον ἠνέχθη κάτω, διὸ καταχεόμενος ἀκούεται κάτω μᾶλλον. τοιοῦτο δὲ καὶ τὸ περὶ τὴν ἡχὴν συμβαῖνον ἐστίν, ἀνάκλασις τῆς φωνῆς ἐπὶ τοῦναντίον.

[904b] Διὰ τί μεθύοντων μᾶλλον ἀπορρήγνυνται ἢ φωνὴ ἢ νηφόντων; ἢ διὰ τὸ πεπληρῶσθαι ταχέως ἀπορρηγνύασι τὴν φωνήν; σημεῖον δὲ τούτου· οὔτε γὰρ οἱ χοροὶ μελετῶσιν ἐξ ἀρίστου οὔτε οἱ ὑποκριταί, ἀλλὰ νήστευς ὄντες. ἐν δὲ τῇ μέθῃ πληρέστεροι ὄντες εὐλόγως μᾶλλον ἀπορρήγνυνται τὰς φωνάς.

Διὰ τί ποτε τῶν ὀξυτέρων φωνῶν πορρώτερον ἀκούουσιν; ἢ διότι τὸ ὀξύ ἐν φωνῇ ταχὺ ἐστίν, θᾶττον δὲ κινεῖται τὰ βίᾳ μᾶλλον φερόμενα, τὰ δὲ σφοδρότερον φερόμενα ἐπὶ πλεόν φέρεται.

Διὰ τί κατέχοντες τὸ πνεῦμα μᾶλλον ἀκούομεν; ἢ ὅτι ἡ ἀνάπνευσις ψόφον τινὰ παρέχει. εἰκότως οὖν τότε μᾶλλον ἀκούομεν, ὅταν ἥττων ὁ ψόφος ᾖ.

ἥττων γὰρ ὁ ψόφος, ὅταν κατέχωμεν τὸ πνεῦμα.

Διὰ τί τὸ μὲν φῶς οὐ διέρχεται διὰ τῶν πυκνῶν, λεπτότερον ὢν καὶ πόρρω ὢν καὶ θᾶπτον, ὁ δὲ ψόφος διέρχεται; ἢ διότι τὸ μὲν φῶς κατ' εὐθεΐαν φέρεται, ὥστε ἂν ἀντιφράξῃ τι τὴν εὐθυωρίαν, ὅλως ἀποκέκλεισται, ὁ δὲ ψόφος φέρεται καὶ οὐκ εὐθὺ διὰ τὸ πνεῦμα εἶναι; διὸ πανταχόθεν ψοφοῦντες ἀκούομεν, καὶ οὐ μόνον τῶν κατ' εὐθυωρίαν τοῖς ὤσιν.

Διὰ τί ποτε οἱ μὲν γελῶντες βαρὺ φθέγγονται, οἱ δὲ κλαίοντες ὀξύ; ἢ διότι ἀπὸ τῶν συντόνων ὀξεῖα ἢ φωνή, τὸ δὲ ὀξύ ἐστὶν ἀσθενές; ἄμφω δὲ ταῦτα μᾶλλον τοῖς κλαίουσιν ὑπάρχει· καὶ γὰρ συντέτανται μᾶλλον οἱ κλαίοντες καὶ ἀσθενέστεροί εἰσιν.

Διὰ τί, εἴπερ ἡ φωνὴ ἀήρ τις ἐσχηματισμένος ἐστί, φερομένη διαλύεται πολλάκις τὸ σχῆμα, ἡ δὲ ἡχώ, ἡ γίνεται πληγέντος τοῦ τοιούτου πρὸς τι στερεόν, οὐ διαλύεται, ἀλλὰ σαφῶς ἀκούομεν; ἢ διότι ἀνάκλασίς ἐστίν, οὐ κατάκλασις; τοῦτο δὲ ὅλον ἀφ' ὅλου. εἴτα τὸ πάθος ἀφ' ὁμοίου· ἀπὸ γὰρ τοῦ ἀέρος ἀνακλᾶται ἐν τῷ κοίλῳ, οὐκ ἀπὸ τοῦ κοίλου.

Διὰ τί ἐνός τε καὶ πολλῶν φθεγγομένων ἅμα οὔτε ἴσος ὁ φθόγος, οὔτε ἐπὶ πλεῖον γεγωνόσιν ὡς κατὰ λόγον εἰς τὸ πόρρω; ἢ ὅτι ἕκαστος τὸν καθ' αὐτὸν ἀέρα προωθεῖ, ἀλλ' οὐ τὸν αὐτόν, πλὴν ἐπὶ μικρόν; ὅμοιον δὲ συμβαίνει ὥσπερ ἂν εἰ πολλοὶ μὲν εἶεν οἱ βάλλοντες, ἕκαστος μέντοι λίθῳ ἐτέρῳ, ἢ οἱ γε πλεῖστοι. οὔτε γὰρ ἐκεῖ πόρρω [905a] οὐθὲν ἀφίξεται βέλος, ἢ οὐ κατὰ λόγον, οὔτε ἐνταῦθα. οὐ γὰρ ἐνὸς ἢ τοσαύτη φωνὴ ἀλλὰ πολλῶν. ἐγγύθεν μὲν οὖν κατὰ λόγον πολλὴ φαίνεται ἡ φωνή (καὶ γὰρ τὰ βέλη πλείω τεύξεται τοῦ αὐτοῦ), πόρρωθεν δὲ οὐκέτι.

Διὰ τί ἀγωνιῶντες μὲν βαρύτερον φθέγγονται, φοβούμενοι δὲ ὀξύτερον; καίτοι καὶ ἡ αἰδὼς φόβος τίς ἐστίν. ἢ διαφέρει πολὺ τὸ πάθος; οἱ μὲν γὰρ αἰδούμενοι ἐρυθριῶσιν (ἡ δὲ ἀγωνία αἰσχὺν τίς ἐστίν), οἱ δὲ φοβούμενοι ὠχριῶσιν. φανερόν οὖν ὅτι τοῖς μὲν φοβουμένοις ἐκλείπει ἄνωθεν τὸ θερμόν, ὥστε κινεῖ ἀσθενές ὢν ὀλίγον ἀέρα τὸ πνεῦμα, τὸ δὲ ὀλίγον ταχὺ φέρεται, τὸ δὲ ταχὺ ἐν φωνῇ τὸ ὀξύ· τοῖς δὲ αἰδουμένοις ἄνω ἔρχεται τὸ θερμόν περὶ τὰ στήθη. σημεῖον δὲ ὅτι γίνονται ἐξέρυθροι. πολὺν δὲ κινεῖ ἀέρα ἡ πολλὴ δύναμις, τὸ δὲ πολὺ βραδέως φέρεται, τὸ δὲ βραδὺ ἐν φωνῇ βαρὺ.

Διὰ τί ἰσχνόφωνοι γίνονται; ἢ αἴτιον ἢ κατάψυξις τοῦ τόπου ᾧ φθέγγονται, ἢ ὥσπερ ἀποπληξία τοῦ μέρους τούτου ἐστίν; διὸ καὶ θερμαινόμενοι ὑπὸ

οἴνου καὶ τοῦ λέγειν συνεχῶς ῥᾶον συνείρουσι τὸν λόγον.

Διὰ τί μόνον τῶν ἄλλων ζώων ἄνθρωπος γίνεται ἰσχνόφωνον; ἢ ὅτι λόγου κοινωνεῖ μόνον, τὰ δὲ ἄλλα φωνῆς; οἱ δὲ ἰσχνόφωνοι φωνοῦσι μὲν, λόγον δὲ οὐ δύνανται συνεῖρειν.

Διὰ τί τοῦ μὲν χειμῶνος ὀξύτερον φθέγγονται καὶ νήφοντες, θέρους δὲ καὶ μεθύοντες βαρύτερον; ἢ ὅτι ὀξύτερα μὲν ἐστὶν ἢ ταχύτερα, ταχύτερα δὲ ἐστὶν ἢ ἀπὸ συντεταμένου φωνῆς; τῶν δὲ νηφόντων καὶ ἐν τῷ χειμῶνι τὰ σώματα συνέστηκε μᾶλλον ἢ μεθυόντων καὶ ἐν τῷ θέρει· τὸ γὰρ θερμὸν καὶ αἰ ἀλέαι διαλύουσι τὰ σώματα.

Διὰ τί ἡ φωνὴ ὕστατον τελειοῦται τοῖς ἀνθρώποις τῶν φθεγγομένων; ἢ διότι πλείστας ἔχει διαφορὰς καὶ εἴδη; τὰ γὰρ ἄλλα ζῶα ἢ οὐθὲν γράμμα ἢ ὀλίγα διαλέγονται. τὸ δὲ ποικιλώτατον καὶ πλείστας ἔχον διαφορὰς ἀνάγκη ἐν πλείστῳ χρόνῳ ἀποτελεῖσθαι.

Διὰ τί ἡ μὲν ὄψις οὐ διέρχεται διὰ τῶν στερεῶν, ἡ δὲ φωνὴ διέρχεται; ἢ ὅτι τῆς μὲν ὄψεως μία φορὰ ἢ κατ' εὐθεῖαν (σημεῖον δὲ αἶ τε τοῦ ἡλίου ἀκτῖνες, καὶ ὅτι ἐξ ἐναντίας μόνον ὁρῶμεν), τῆς δὲ φωνῆς πολλάι; ἀκούομεν γὰρ πανταχόθεν. ὅταν οὖν κωλυθῇ κατ' εὐθεῖαν ἐκπίπτειν διὰ τὸ μὴ κατ' ἀλλήλους εἶναι τοὺς πόρους, ἀδυνατεῖ διορᾶν.

[905b] ὁ δὲ ἀήρ καὶ ἡ φωνή, ἅτε πανταχοῦ φερομένη, διὰ παντὸς διαπίπτει καὶ ἀκούεται. ἐν δὲ τοῖς ὑγροῖς αἰ μὲν ὄψεις διορῶσιν, αἰ δὲ φωναὶ οὐκ ἀκούονται ἢ μόλις, λεπτοτέρου ὄντος τοῦ ὑγροῦ ἢ τῆς γῆς, ὅτι οἱ πόροι μικροὶ καὶ πυκνοὶ καὶ κατ' ἀλλήλους, ὥστε οὐ κωλύεται ἡ ὄψις εὐθυπορεῖν. διὰ τοῦτο καὶ διὰ μὲν τῆς ὑέλου διορᾶται πυκνῆς οὕσης, διὰ δὲ τοῦ νάρθηκος ἀραιοῦ ὄντος οὐ διορᾶται. ἔτι τῆς μὲν οἱ πόροι κατάλληλοι, τῶν δὲ παραλλάττοντες· οὐδὲν δ' ὄφελος εἶναι μεγάλους, ἐὰν μὴ κατ' εὐθεῖαν ᾖσιν. ἡ δὲ φωνὴ οὐκ ἀκούεται, ὅτι ἐλάττω τὰ διάκενα τὰ ἐν τῷ ὕδατι τοῦ ἀέρος, ὥστε οὐ δύναται δέχεσθαι, οὐδὲ μεῖναι τὴν φωνήν, ἀλλὰ μόλις ἢ μετὰ φωνῆς. ἡ γὰρ φωνὴ ἀήρ τις. οὐ γὰρ ἅπαν τὸ μανότερον διαιτικώτερον, ἂν μὴ καὶ οἱ πόροι ᾖσιν ἀρμόττοντες τῷ διόντι. ὥστ' οὐδὲ συνιτικώτερον εἰς αὐτό, ἂν μὴ δεκτικοὶ ᾖσιν οἱ πόροι τῶν σωμάτων. καίτοι τὸ μανὸν μαλακὸν καὶ δυνάμενον εἰς αὐτὸ συνιέναι. ἀλλ' ἔνια κωλύεται διὰ τὴν μικρότητα τῶν πόρων, οἷον ἡ ὕελος· ταύτης γὰρ οὐ συνάγονται, μανοτέρας οὕσης τοῦ νάρθηκος, διὰ τὴν εἰρημένην αἰτίαν. ὁμοίως δὲ καὶ τὸ ὕδωρ καὶ εἴ τι ἄλλο τοιοῦτον. ὥστε καὶ τόδε φανερόν, διότι τοῦ μανοῦ καὶ μαλακοῦ ἢ αὐτοῦ

ὄντος ἢ παραπλησίου τὴν φύσιν, οὐ τὸ μανότερον μᾶλλον συνάγεται εἰς αὐτό· ἢ γὰρ αὐτὴ αἰτία πάντων.

Διὰ τί γίνεται ἐλάττων μὲν ἡ φωνὴ ἐξαιρουμένων, ὁμοία δὲ τὸν χαρακτῆρα; ἢ ὅτι ἐμέμικτο αὐτοῖς; τὸ δὲ μεμιγμένον οὐ τῇ μὲν ἐστὶ τῇ δὲ οὐ, ἀλλὰ πάντῃ. ὁμοίως οὖν πανταχόθεν ἐξαιρουμένων συνέρχεται ὁμοίως, ὥστ' ἐλαττόν τε ἀνάγκη καὶ ὅμοιον εἶναι.

Διὰ τί ἰσχνόφωνοι γίνονται; πότερον διὰ θερμότητα προπετέστεροί εἰσιν, ὥστε προσπταίοντες ἐπίσχουσιν, ὥσπερ οἱ ὀργιζόμενοι; καὶ γὰρ οὗτοι πλήρεις ἄσθματος γίνονται. πολὺ μὲν οὖν τὸ πνεῦμα συμβαίνει. ἢ διὰ τὴν ζέσιν τοῦ θερμοῦ ἀσθμαίνουσιν, διὰ τὸ πολὺ εἶναι καὶ μὴ φθάνειν ὑπεξιδὼν τῷ τῆς ἀναπνοῆς καιρῷ; ἢ μᾶλλον τὸ ὑναντίον κατάψυξις ἢ θερμότης τοῦ τόπου ὃ φθέγγονται, ὥσπερ ἀποπληξία τοῦ μέρους τούτου; διὸ καὶ θερμαινόμενοι ὑπὸ οἴνου καὶ τοῦ λέγειν συνεχῶς ῥᾶον συνείρουσι τὸν λόγον.

Διὰ τί τοῦ χειμῶνος αἱ φωναὶ βαρύτεραι; ἢ ὅτι παχύτερος ὁ ἀήρ, παχύτερου δὲ ὄντος βραδύτερα ἡ κίνησις, ὥσθ' ἡ φωνὴ βαρυτέρα. ἢ διότι διὰ τῶν στέρνων βραδύτερον [906a] χωρεῖ ὁ ἀήρ, συμφράττεται δὲ τὸ περὶ τὸν φάρυγγα ὑπὸ τε τοῦ ψυχροῦ καὶ τοῦ ἐπιρρέοντος φλέγματος.

Διὰ τί τὰ παιδιά καὶ αἱ γυναῖκες καὶ οἱ εὐνοῦχοι καὶ οἱ γέροντες φθέγγονται ὀξύ; ἢ ὅτι θάπτων κινήσις ἐστὶν ἡ ὀξύτερα; ἔστι δὲ τὸ αὐτὸ πλείονος δυσκινητότερον, ὥστε οἱ ἐν ἀκμῇ πλείω συνεπισπῶνται τὸν ἀέρα· οὗτος οὖν βραδύτερον ἰὼν βαρυτέραν παρασκευάζει τὴν φωνήν. ἐν δὲ τοῖς παιδίοις καὶ εὐνούχοις διὰ τὸ ἐλάττω ἔχειν ἐναντίως. τρέμειν δὲ τοὺς πρεσβύτας οὐ δυναμένους κρατεῖν, ὥσπερ τοῖς ἀδυνάτοις καὶ παιδίοις, ὅταν μακρὸν ξύλον λάβωσιν ἀπ' ἄκρου, τὸ ἕτερον ἄκρον σείεται διὰ τὸ μὴ κρατεῖν. διὰ τοῦτο καὶ οἱ πρεσβῦται τρέμουσιν. τὸ αὐτὸ δὲ ὑποληπτέον καὶ ἐπὶ τῶν ἀγωνιόντων καὶ φοβουμένων καὶ ῥιγόντων αἴτιον τοῦ τρόμου τῆς φωνῆς. τοῦ γὰρ ἔχοντος τὴν φωνὴν τοιαύτην, τῶν τοιούτων παθῶν εἴσω περιεστηκότος τοῦ πλείστου, λοιπὸν ὀλίγον ὃν οὐ δύναται κρατεῖν τῆς φωνῆς· διὸ καὶ σείεται καὶ τρέμει. διὸ καὶ οἱ τεχνικοὶ τῶν συνειδότην ὅτι ἀγωνιῶσι μικρὸν διαλέγονται ἀπ' ἀρχῆς, καὶ ἄχρι οὗ ἂν καταστῶσιν· μικρᾶς γὰρ οὔσης τῆς φωνῆς ῥᾶον κρατοῦσιν.

## ΙΒ. ΟΣΑ ΠΕΡΙ ΤΑ ΕΥΩΔΗ.

Διὰ τί τῶν θυμιαμάτων ἥττον αἰσθάνονται πλησίον ὄντες; πότερον ὅτι

ἀκρατεστέρα κερασθεῖσα ἢ ἀπόρροια τῷ ἀέρι ἡδίων, ὥσπερ ἡ σμύρνη τῶν ἱατρῶν; ἢ καὶ τούναντίον εἶη ἄν, ὥστε ἀφαιρεῖσθαι τὸ πῦρ τὴν ὀσμὴν διὰ τὸ καίειν; ἢ γὰρ ὀσμὴ θυμωμένων. διὸ καὶ ἐπὶ τῶν ἀνθράκων οὐκ ὄζει, πορρώτερον δὲ καθαρώτερον φαίνεται καὶ λεπτότατον τοῦτο.

Διὰ τί αἱ ὀσμαὶ ἤττον εὐώδεις τῶν θυμιαμάτων καὶ τῶν ἀνθῶν ἐκ τοῦ ἐγγύς; πότερον ὅτι συναπέρχεται τῇ ὀσμῇ καὶ γῆς μόρια, ἃ προκαταφέρεται διὰ βάρος, ὥστε καθαρὰ πορρώτερον γίνεται ἢ ὀσμή; ἢ οὔτε ἐγγὺς οὔσης τῆς ἀρχῆς πλεῖστον γίνεται τὸ ῥέον, οὔτε λίαν πόρρω; τὸ μὲν γὰρ οὐπω πολύ, τὸ δὲ διασπᾶται.

Λέγεται γὰρ ὡς εὐώδη γίνεται τὰ δένδρα εἰς ἅπερ ἂν ἡ ἴρις κατασκήψη. πότερον οὖν ἀληθές ἐστίν ἢ ψεῦδος; καὶ εἰ ἀληθές, διὰ τίν' αἰτίαν εἶη τὸ συμβαῖνον; ὅτι μὲν [906b] οὖν οὔτε πάντα οὔτε ἀεί, δηλον· πολλάκις γὰρ ἡ ἴρις μὲν γέγονε, τὰ δὲ δένδρα οὐθὲν ἐπίδηλα φαίνεται. ὅταν τε γένηται τοῦτο, οὐκ ἐν πάσῃ γίνεται ὕλη, ἐπεὶ συμβαίνει γέ ποτε· διὸ καὶ λέγεται. τὸ δ' αἴτιον κατὰ συμβεβηκὸς τῇ ἱριδι ἀποδοτέον, ἄλλως τε καὶ εἰ μὴ ἐστί τις φύσις ἡ ἴρις, ἀλλὰ τῆς ὄψεως πάθος ἀνακλωμένης. γίνεται δέ, ὥσπερ ἐλέχθη, οὐχ ὁπωσοῦν ἐχούσης τῆς ὕλης τὸ πάθος· οὔτε γὰρ ἐν τοῖς χλωροῖς δένδροις οὔτε ἐν τοῖς αὔοις, ἀλλ' ἐν τῇ ἐμπερησμένη ὕλῃ φασὶν οἱ νομεῖς μετὰ τὰ ἐπὶ τῇ ἱριδι ὕδατα γίνεσθαι ἐπίδηλον τὴν εὐωδίαν, καὶ μάλιστα οὐ ἂν ἀσπάλαθος ἢ καὶ ῥάμνος καὶ ὦν τὰ ἄνθη εὐώδη ἐστίν. αἴτιον δὲ τῆς εὐωδίας ἐστίν, ὅπερ καὶ ἐπὶ τῆς γῆς· διαθέρμου γὰρ καὶ διακεκαυμένης οὔσης, ὃ ἂν ἐκφύσῃ, τὸ πρῶτον εὐώδες ὄζει. τὰ γὰρ πυρούμενά πως τῶν ὑγρότητα ἐχόντων ὀλίγην εὐώδη γίνεται· πέττει γὰρ τὸ θερμὸν ταύτην. διὸ καὶ τῆς ὅλης γῆς εὐωδέστερα τὰ πρὸς τὸν ἥλιον τῶν πρὸς ἄρκτον ἐστίν. τούτων δὲ τὰ πρὸς ἕω τῶν πρὸς μεσημβρίαν, ὅτι γεώδης μᾶλλον ὁ τόπος ὁ περὶ τὴν Συρίαν καὶ Ἀραβίαν ἐστίν, ἢ δὲ Λιβύη ἀμμόδης καὶ ἄνικμος. δεῖ γὰρ μήτε πολλὴν εἶναι τὴν ἱκμάδα, ἅπεπτος γὰρ ἐστίν ἢ πολλή, μήτε ἄνικμον, οὐ γὰρ γίνεται ἀτμίς. ὃ συμβαίνει καὶ περὶ τὴν νεόκαυστον ὕλην καὶ τὸ γένος τοιαύτην ὥστε ἔχειν εὐωδίαν σὺν αὐτῇ. δηλοῖ δὲ τοῖς ἄνθεσιν· ἀφίησι γὰρ ἐν τούτοις τὴν ὀσμὴν. δοκεῖ δὲ ἐν οἷς ἂν ἐνσκήψῃ ἡ ἴρις γίνεσθαι, ὅτι οὐδὲν ἄνευ ὕδατος οἷόν τε γίνεσθαι· βραχεῖσά τε γὰρ ἡ ὕλη καὶ τῷ ἐνόντι θερμῷ πέψασα τὴν ἐν αὐτῇ γινομένην ἀτμίδα ἀφίησιν. οὔτε πολὺ τὸ ὕδωρ δεῖ εἶναι· ἐκκλύζει γὰρ τὸ πολὺ λίαν, καὶ σβέννυσι τὴν θερμότητα τὴν ἐνυπάρχουσαν ἀπὸ τῆς πυρώσεως. τὰ δὲ μετὰ τὴν ἴριν ὕδατα οὐ πολλὰ γίνεται ἀλλὰ μέτρια ὡς εἶπεῖν. καὶ ἐὰν πολλὰ γίνωνται ἱριδες, οὐ πολὺ γίνεται, ἀλλὰ πολλάκις μὲν ὀλίγον δέ. διὸ εἰκότως τούτου γινομένου, οὐθὲν ἄλλο ὁρῶντες διάφορον πλὴν τὴν ἴριν, ταύτη τὴν αἰτίαν προσέθεσαν τῆς εὐωδίας.

Διὰ τί τὰ ἄνθη καὶ τὰ θυμιώμενα πόρρωθεν μᾶλλον ἥδιον ὄζει, ἐγγύθεν δὲ τὰ μὲν ποωδέστερον τὰ δὲ καπνωδέστερον; ἢ ὅτι ἡ ὁσμὴ θερμότης τίς ἐστι καὶ τὰ εὐώδη θερμά, τὸ δὲ θερμὸν κοῦφον, ὥστε διὰ μὲν τοῦτο πορρωτέρω [907a] διόντων ἀμιγεστέρα γίνεται ἡ ὁσμὴ τῶν συμπαραπομένων ὁσμῶν ἀπὸ τῶν φύλλων καὶ τοῦ καπνοῦ, ὄντος ὑδατώδους ἀτμοῦ, πλησίον δὲ ὄντων τὰ μεμιγμένα αὐτοῖς συνόζει ἐν οἷς ἐστίν.

Διὰ τί πάντα μᾶλλον ὄζει κινούμενα; ἢ ὅτι ἀναπίμπλησι πλείω ἀέρα ἢ ἡσυχάζοντα; διαπέμπεται οὖν ἡ ὁσμὴ θάττον οὕτω πρὸς τὴν αἴσθησιν ἡμῖν.

Διὰ τί τοῦ χειμῶνος ἦττον ὁσφραινόμεθα, καὶ ἐν τοῖς πάγεσιν ἥκιστα; ἢ ὅτι ὁ ἀῆρ ἀκινήτοτέρος ἐστίν ἐν τῷ ψύχει; οὐκ οὐκ ἀφικνεῖται ὁμοίως ἡ κίνησις ἢ ἀπὸ τοῦ σώματος τοῦ τὴν ὁσμὴν ἔχοντος διὰ τὴν δυσκινήσιαν τῆς ἀπορροῆς καὶ τοῦ ἀέρος ἐν ᾧ ἐστίν.

Διὰ τί δριμύτερον ὄζει τῶν ἀρωμάτων ἐπὶ τέφρας θυμιωμένων ἢ ἐπὶ τοῦ πυρός, καὶ μᾶλλον καὶ πλείω χρόνον τὴν αὐτῶν ὁσμὴν ἔχει ἐπὶ τῆς τέφρας θυμιώμενα; ἢ ὅτι ἀπεπτοτέρα ἐστὶν ἡ ὁσμὴ ἐπὶ τῆς τέφρας διὸ καὶ πλείων. τὸ δὲ πῦρ παχὺ πέττον αὐτῶν τὴν δύναμιν, ἄλλοιοῖ τὴν ὁσμὴν· ἡ γὰρ πέψις ἀλλοίωσις ἐστὶ τοῦ πεττομένου.

Διὰ τί ἥδιον ὄζει τῶν ῥόδων ὣν ὁ ὀμφαλὸς τραχὺς ἐστίν ἢ ὣν λεῖος; ἢ ὅτι μᾶλλον ὄζει ἢδὲ ὅσα τὴν φύσιν ἀπείληφε τὴν αὐτῶν; ἀκανθῶδες δὲ φύσει τὸ ῥόδον ἐστί, διὸ μᾶλλον ἔχον τὰ κατὰ φύσιν ἥδιστα ὄζει.

Διὰ τί αἱ ὁσμαὶ ἐγγύθεν ἦττον εὐώδεις καὶ θυμιαμάτων καὶ ἀνθῶν; ἢ ὅτι πλησίον μὲν συναποφέρεται τὸ γεῶδες, ὥστε κεραννύμενον ἀσθενεστέραν ποιεῖ τὴν δύναμιν, εἰς δὲ τὸ πόρρω καταφέρεται ἡ ὁδμή. διὰ ταῦτα δὲ καὶ τριφθέντα τὰ ἄνθη ἀπόλλυσι τὴν ὁσμὴν.

Πότερον αἱ ὁσμαὶ καπνὸς ἢ ἀῆρ ἢ ἀτμίς; διαφέρει γάρ, ἢ τὸ μὲν ὑπὸ τοῦ πυρός, τὸ δὲ καὶ ἄνευ τούτου γίνεται. καὶ πότερον ἀπὸ τῆς αἰσθήσεως τι πρὸς ἐκεῖνα ἢ ἀπ' ἐκείνων πρὸς τὴν αἴσθησιν ἀφικνεῖται, ἀεὶ κινοῦν τὸν πλησίον ἀέρα; καὶ εἰ ἀπ' ἐκείνων ἀπορρεῖ, ἔδει ἔλαττον γίνεσθαι· καίτοι τὰ εὐωδέστατα ὀρώμεν μάλιστα διαμένοντα.

Διὰ τί δριμύτερον ὄζει μᾶλλον τῶν ἀρωμάτων ἐπὶ τέφρας θυμιωμένων ἢ ἐπὶ τοῦ πυρός; ἢ διότι ἀπεπτοτέρα ἡ ὁσμὴ ἐπὶ τῆς τέφρας διὸ καὶ πλείων; πολὺ οὖν καὶ τοῦ γεώδους συναναθυμιᾶται καὶ γίνεται καπνός· τὸ δὲ πῦρ φθάνει ἐκκαῖον τὸ γεῶδες αὐτῶν, ὥστε ἡ ὁσμὴ καθαρωτέρα [907b] καὶ

εἰλικρινῆς ἀφικνεῖται ἄνευ τοῦ καπνοῦ. διὸ καὶ τριβόμενα ἤττον εὐώδη τὰ ἄνθη· τὸ γὰρ γεῶδες καὶ ἡ τρῖψις κινεῖ, καὶ ἡ βραδεῖα θερμότης οὐ φθείρει.

Διὰ τί τὰ εὐώδη οὐρητικὰ καὶ σπέρματα καὶ φυτά; ἢ ὅτι θερμὰ καὶ λεπτά, τὰ δὲ τοιαῦτα οὐρητικά; ταχὺ γὰρ λεπτύνει ἡ ἐνοῦσα θερμότης, καὶ ἡ ὁσμὴ οὐ σωματώδης, ἐπεὶ καὶ τὰ μὴ εὐώδη, οἶον σκόροδα, διὰ τὴν θερμότητα οὐρητικά, μᾶλλον μέντοι τηκτικά. θερμὰ δὲ τὰ εὐώδη σπέρματα, διότι ὅλως ἡ ὁσμὴ διὰ θερμότητα γίνεται. ἀλλὰ τὰ δυσώδη ἄπεπτά ἐστίν· δεῖ δὲ μὴ μόνον θερμὰ εἶναι ἀλλὰ καὶ εὐπεπτα, εἰ ἔσται οὐρητικά, ὅπως συγκατιόντα λεπτύνῃ τὰ ὑγρά.

Διὰ τί ποτε οἱ κεκραμένοι τῶν οἴνων θᾶττον τῶν ἀκράτων ὄζουσιν; ἢ ὅτι ὁ κεκραμένος ἀσθενέστερος τοῦ ἀκράτου ἐστίν; τὸ δὲ ἀσθενέστερον ὑπὸ πάντων ἐξίσταται τοῦ ἰσχυροτέρου. εἴτα ὁ κεκραμένος ἐστὶν εὐπετέστερος τοῦ ἀκράτου. εὐπετέστερον δὲ ἐστὶν ὑπάρξαι ὥτινιοῦν, καὶ ἐκλαβεῖν τι τῶν μὴ ὑπαρχόντων. ὁ μὲν οὖν ἄκρατος ὁσμώδης ἐστίν, ὁ δὲ κεκραμένος ἄνοσμος.

## ΙΓ. ΟΣΑ ΠΕΡΙ ΤΑ ΔΥΣΩΔΗ.

Διὰ τί τὸ μὲν οὔρον, ὅσω ἂν χρονίζεται ἐν τῷ σώματι, δυσωδέστερον γίνεται, ἢ δὲ κόπρος ἤττον; ἢ ὅτι ἡ μὲν ξηραίνεται μᾶλλον χρονιζομένη (τὸ δὲ ξηρὸν ἀσηπτότερον), τὸ δὲ οὔρον παχύνεται, πρόσφατόν τε ὂν ὁμοιότερον τῷ ἐξ ἀρχῆς ἐστὶ πόματι.

Διὰ τί τὰ δυσώδη τοῖς ἐδηδοκόσιν οὐ δοκεῖ ὄζειν; ἢ διὰ τὸ συντετρῆσθαι τὴν ὄσφρησιν τῷ στόματι κατὰ τὸν οὐρανὸν πλήρης ἡ αἴσθησις γίνεται ταχύ, καὶ τῆς τε ἔσω οὐκέθ' ὁμοίως αἰσθάνεται (τὸ γὰρ πρῶτον αἰσθάνονται πάντες, ὅταν δὲ ἄψωνται, οὐκέτι, ὥσπερ συμφυοῦς) καὶ ἡ ἑξωθεν ἡ ὁμοία ἀφανίζεται ὑπὸ τῆς ἔσω.

Διὰ τί τριβόμενα τὰ ἄνθη δυσωδέστερα; ἢ διότι συμμίννυται τῇ ὁσμῇ τὸ γεῶδες τὸ ἐν τῷ ἄνθει.

Διὰ τί τῶν μὲν ζώων οὐθὲν εὐωδές ἐστὶν ἔξω τῆς παρδάλεως (αὕτη δὲ καὶ αὐτοῖς τοῖς θηρίοις· φασὶ γὰρ αὐτῆς τὰ θηρία ἠδέως ὁσμᾶσθαι), φθειρόμενα δὲ καὶ δυσώδη ἐστίν, τῶν δὲ φυτῶν πολλὰ καὶ φθειρόμενα καὶ αὐαίνόμενα ἔτι μᾶλλον εὐώδη γίνεται; πότερον ὅτι τῆς δυσωδίας αἴτιον ἀπεψία τις περιττώματος; διὸ καὶ οἱ ἰδρώτες ἐνίοις καὶ ἐνίοτε τοιοῦτοί εἰσι,

μάλιστα δὲ οἷς μὴ ἀεὶ τοιοῦτοι ἐκ τῶν νόσων γίνονται. καὶ αἱ φῦσαι δὲ καὶ οἱ ἐρυγμοὶ οἱ τῶν ἀπέπτων δυσώδεις εἰσίν. τὸ αὐτὸ δὲ αἷτιον καὶ τοῦ ἐν ταῖς σαρκὶ καὶ τῷ ἀνάλογον· λέγω δὲ ἀνάλογον τὸ ἀντὶ σαρκὸς τοῖς ἄλλοις ἐνυπάρχον ζώοις. ἔστι γὰρ καὶ ἐνταῦθα περίπτωμα ἐνίοις ἀπεπτον· τοῦτο οὖν ζώντων τε αἷτιον τῆς δυσωδίας ἐστὶ καὶ φθειρομένων σηπόμενον. διὸ καὶ τὰ πίονα καὶ ὁστᾶ καὶ τρίχες οὐ δυσώδη ἐστίν, ὅτι τὰ μὲν πέττεται, τὰ δὲ οὐκ ἔχει ὑγρότητα. τοῖς δὲ φυτοῖς οὐκ ἔνι περίπτωμα. ἢ ἔστι μὲν τι καὶ τούτοις, ἀλλ' ὅτι ξηρὰ καὶ θερμὰ τὰ φυτὰ τὴν φύσιν ἐστίν, ὥστε εὐπεπτοτέρα ἢ ἱκμάς καὶ οὐ πηλώδης ἐστὶν αὐτῶν; δηλοῖ δὲ καὶ τῆς γῆς ἢ ἐν τοῖς θερμοῖς εὐώδης οὔσα, Συρία καὶ Ἀραβία, καὶ τὰ εὐώδη τὰ κεῖθεν, ὅτι ξηρὰ καὶ θερμὰ ἐστίν· τὰ δὲ τοιαῦτα ἄσηπτα. τὰ δὲ ζῶα οὐ τοιαῦτά ἐστι καὶ θερμὰ, ὥστε αἱ τε περιπτώσεις ἀπεπτοι καὶ δυσώδεις αὐτῶν εἰσὶ, καὶ διαφυσήσεις ὁμοίως· καὶ διαφθειρομένων σήπεται ἢ ὑγρότης, τῶν δὲ οὐ· οὐ γὰρ ἔχουσιν.

Διὰ τί τὰ δυσώδη θερμὰ ὄντα μᾶλλον δυσώδη ἐστὶν ἢ ἐψυγμένα; ἢ ὅτι ἐστὶν ἢ ὁσμὴ ἀτμὸς καὶ ἀπορροή τις; ὃ τ' οὖν ἀτμὸς ὑπὸ θερμοῦ γίνεται καὶ ἢ ἀπορροή· κίνησις γάρ τις ἐστὶ, τὸ δὲ θερμὸν κινητικόν. τὸ δὲ ψυχρὸν τούναντίον στατικὸν καὶ συσταλτικὸν καὶ φορὸν δὲ κάτω, τὸ δὲ θερμὸν καὶ αἱ ὁσμαι πᾶσαι ἀνωφερεῖς διὰ τὸ ἐν ἀέρι τε εἶναι καὶ τὸ αἰσθητήριον αὐτῶν ἄνω εἶναι, μὴ κάτω· πρὸς γὰρ ἐγκέφαλον περαίνουσα ἢ ὁσμὴ αἰσθησιν ποιεῖ.

Διὰ τί, ἐάν τις σκόροδα φάγη, τὸ οὔρον ὄζει, ἄλλων δὲ ἐχόντων ἰσχυρὰν ὁσμὴν οὐκ ὄζει ἐδεσθέντων; πότερον, ὥσπερ τινὲς τῶν ἡρακλειτιζόντων φασὶν ὅτι ἀναθυμιάται, ὥσπερ ἐν τῷ ὄλῳ, καὶ ἐν τῷ σώματι, εἴτα πάλιν ψυχθὲν συνίσταται ἐκεῖ μὲν ὑγρόν, ἐνταῦθα δὲ οὔρον, ἢ ἐκ τῆς τροφῆς ἀναθυμιάσις, ἐξ οὗ ἐγένετο αὕτη συμμιγνυμένη, ποιεῖ τὴν ὁσμὴν; αὕτη γὰρ ἐστίν, ὅταν μεταβάλλῃ. ἢ ἔδει καὶ τὰ ἄλλα τοῦτο ποιεῖν, ὅσα ἰσχυρὰς ὁσμάς ἔχει· νῦν δὲ οὐ ποιεῖ. ἔτι συγκρινόμενα ἐκ τῆς ἀτμίδος οὐκ εἰς τὸ ἀρχαῖον ἔρχεται, οἶον οἶνος ἐξ οἴνου, ἀλλ' οὐχ ὕδωρ, ὥστε [908b] καὶ τοῦτο ψεῦδος. ἀλλ' ὅτι μόνον φυσητικὸν τῆς κάτω κοιλίας τῶν ὁσμὴν ἐχόντων ἰσχυρὰν ἅμα καὶ οὐρητικὴν, τὰ δὲ ἄλλα ἄνω ποιεῖ, οἶον ἢ ῥάφανος, καὶ τὰ πνεύματα. ἢ οὐκ οὐρητικά. κάτω δὲ τρία ὑπάρχει ταῦτα· καὶ γὰρ οὐρητικόν, καὶ πνεῦμα ποιεῖ, καὶ τοῦτο κάτω. ὁ δὲ τόπος ὁ περίξ τὰ αἰδοῖα καὶ τὴν κύστιν τῶν τοιούτων ἀπολαύει διὰ τὴν γειτνίασιν, καὶ ὅτι πνευματικός ἐστίν· δηλοῖ δὲ ἡ συντονία τοῦ αἰδοίου. δῆλον οὖν ὅτι ἀφικνεῖται τὸ περίπτωμα εἰς τὴν κύστιν αὐτοῦ μάλιστα τῶν τοιούτων ἅμα τῷ πνεύματι, ὃ μιγνύμενον ποιεῖ τοῦ οὔρου τὴν ὁσμὴν.

Διὰ τί τὰ στόματα μηδὲν ἐδηδοκότων ἀλλὰ νηστευσάντων ὄζει μᾶλλον (ὃ



καλεῖται νηστείας ὀζειν), φαγόντων δὲ οὐκέτι, ὅτε ἔδει μᾶλλον; ἢ ὅτι κινουμένης τῆς κοιλίας θερμότερος ὁ ἀὴρ γινόμενος διὰ τὴν ἀκίνησιάν σῆπει τὸ πνεῦμα καὶ τὰ φλεγματώδη περιττώματα; ὅτι δὲ θερμότερος γίνεται, σημεῖον ὅτι καὶ δίψαν ποιεῖ ἡ νηστεία μᾶλλον. φαγόντων δὲ διὰ τὸ ἐλάττων εἶναι ἡ ὁσμὴ τῆς τῶν σιτίων παύεται· κρατεῖ γὰρ τῆς θερμότητος ἡ τῶν σιτίων θερμότης, ὥστε μηθὲν πάσχειν.

Διὰ τί ἡ μασχάλη δυσωδέστατον τῶν τόπων; πότερον ὅτι ἀπνούστατός ἐστιν; ἔστι δὲ ἡ δυσωδία ἐν τοῖς τοιούτοις μάλιστα, διὰ τὸ σῆψιν γίνεσθαι ὑπὸ τῆς ἡσυχίας τῆς ὑγρότητος· ἢ διότι ἀκίνητος καὶ ἀγύμναστος.

Διὰ τί οἱ τοῦ γράσου ὀζοντες, ὅταν ἀλείφονται μύρῳ, δυσωδέστεροι γίνονται; ἢ διότι τοῦτο ἐπὶ πολλῶν γίνεται, οἶον ὀξὺ καὶ γλυκὺ συμμιχθὲν τὸ ὅλον γλυκύτερον ἐγένετο. εἴτα ἰδρώσαντες πάντες δυσωδέστεροί εἰσι, τὸ δὲ μύρον θερμαντικόν ἐστίν· ἰδρῶτας οὖν παρασκευάζει.

Διὰ τί τῶν ἐγκύρτων καὶ κυφοτέρων δυσσομοτέρα καὶ βαρυτέρα ἡ ὁσμὴ τοῦ πνεύματος; ἢ διότι συγκέκλεισται ὁ τόπος ὁ περὶ τὸν πνεύμονα καὶ ἀνέσπασται ἐκ τῆς εὐθυωρίας, ὥστε οὐκ εὐπνους, ἀλλὰ σῆπεται ἡ ἰκμὰς καὶ τὸ πνεῦμα μᾶλλον εἴσω ἐγκατακλειόμενον;

Διὰ τί τὰ πολλὰ τῶν μύρων συνεξιδρῶσαι δυσώδη, ἔνια δὲ ἡδίω ἢ οὐ χεῖρω; ἢ ὅσα μὲν τῇ κινήσει ἢ τῇ τρίψει μεταβάλλοντα, χεῖρω τὰ τοιαῦτα, ὅσα δὲ μή, τούναντίον; ἔστι δὲ ἔνια τοιαῦτα, ὥσπερ καὶ τῶν ἀνθῶν, ἐξ ὧν γίνονται [909a] αἱ εὐωδίαί, τὰ μὲν τριβόμενα ἢ θερμαινόμενα ἢ ξηραίνόμενα φαῦλα, οἶον τὰ λευκοῖα, τὰ δὲ ὅμοια, οἶον τὰ ῥόδα. καὶ τῶν μύρων δὲ ὅσα ἐκ τοιούτων ἐστί, μεταβάλλει, τὰ δὲ οὐ· διὸ τὸ ῥόδινον ἥκιστα. καὶ δυσώδη δὲ φαίνεται μᾶλλον, ὅσων οἱ ἰδρῶτες δυσώδεις, καὶ διὰ τὸ μίγνυσθαι τῷ ἐναντίῳ, ὥσπερ τὸ μέλι μετὰ τοῦ ἀλὸς οὐ μᾶλλον γλυκὺ ἀλλ' ἥττον.

Διὰ τί πάντα μᾶλλον ὀζει κινούμενα; ἢ διότι ἀναπίμπλησι τὸν ἀέρα; διαπέμπεται οὖν θάττον ἡ ὁσμὴ πρὸς τὴν αἴσθησιν.

## ΙΔ. ΟΣΑ ΠΕΡΙ ΚΡΑΣΕΙΣ.

Διὰ τί θηριώδεις τὰ ἔθη καὶ τὰς ὄψεις οἱ ἐν ταῖς ὑπερβολαῖς ὄντες ἢ ψυχους ἢ καύματος; ἢ διὰ τὸ αὐτό; ἢ γὰρ ἀρίστη κρᾶσις καὶ τῇ διανοίᾳ συμφέρει, αἱ δὲ ὑπερβολαὶ ἐξιστᾶσι, καὶ ὥσπερ τὸ σῶμα διαστρέφουσιν, οὕτω καὶ τὴν τῆς διανοίας κρᾶσιν.

Διὰ τί ἐν τῷ Πόντῳ ὁ σῖτος ἐαθεῖς ἐν τῷ ψύχει πολλὰ ἔτη γίνεται ἄκοπος; ἢ ὅτι ἐξικμάζεται τὸ ἀλλότριον ὑγρὸν μετὰ τοῦ θερμοῦ, ὥσπερ ἐν ταῖς σταφυλαῖς; ἔνια μὲν γὰρ ὑπὸ τοῦ ψυχροῦ, ἔνια δὲ ἅμα τῷ θερμῷ.

Διὰ τί ἐν τῇ ψυχροτάτῃ χώρᾳ οἱ καῦσοι μᾶλλον γίνονται; ἢ διότι ἀντιπερίσστησι τὸ ψῦχος εἴσω τὴν θερμότητα; ἐν δὲ τῷ θέρει τοῦναντίον συμβαίνει, τὰ εἴσω ψυχρότερα. ὁ δὲ καῦσος πυρετὸς τῶν ἔξω κατεψυγμένων τὰ ἔσω θερμότητι ὑπερβάλλει.

Διὰ τί οἱ Αἰθίοπες καὶ οἱ Αἰγύπτιοι βλαιοὶ εἰσιν; ἢ διότι ὑπὸ θερμοῦ, ὥσπερ καὶ τὰ ξύλα διαστρέφεται ξηραίνόμενα, οὕτω καὶ τὰ τῶν ζώων σώματα; δηλοῦσι δὲ καὶ αἱ τρίχες· οὐλοτέρας γὰρ ἔχουσιν, ἢ δὲ οὐλότης ἐστὶν ὥσπερ βλαισότης τῶν τριχῶν.

Διὰ τί ἐν τοῖς νοτίοις μᾶλλον θηλυτοκοῦσιν αἱ ὀχεῖαι; ἢ ὅτι τὸ πλεῖον ὑγρὸν βραδύτερον παχύνεται; ἐν δὲ τοῖς νοτίοις διὰ τὴν ὑγρότητα τῆς κράσεως ὑγρότερον τὸ σπέρμα γίνεται.

Διὰ τί ἐν τοῖς ἐλώδεσι τὰ μὲν ἐν τῇ κεφαλῇ ἔλκη ταχὺ ὑγιάζεται, τὰ δὲ ἐν ταῖς κνήμαις μόλις; ἢ ὅτι βαρεῖα ἢ ὑγρότης διὰ τὸ γεώδης εἶναι, τὰ δὲ βαρέα εἰς τὸ κάτω ὑποχωρεῖ; τὰ μὲν οὖν ἄνω εὐπεπτα διὰ τὸ ὑποκεχωρηκέναι εἰς τὸ κάτω, τὰ δὲ κάτω πολλῆς γέμει τῆς περιττώσεως καὶ εὐσήπτου.

[909b] Διὰ τί οἱ μὲν ἐν τοῖς εὐπνόοις τόποις βραδέως γηράσκουσιν, οἱ δὲ ἐν τοῖς κοίλοις καὶ ἐλώδεσι ταχέως; ἢ τὸ γῆρας σηπεδὼν τίς ἐστι, σήπεται δὲ τὸ ἡρεμοῦν· τὸ δὲ ἐν κινήσει ὄν ἢ ὅλως ἀσαπὲς ἢ ἦττον τοῦτο πάσχει, οἷον τὸ ὕδωρ. ἐν μὲν οὖν τοῖς ὑψηλοῖς διὰ τὴν εὐπνοίαν ὁ ἀῆρ ἐν κινήσει ἐστίν, ἐν δὲ τοῖς κοίλοις μένει. ἔτι δὲ ἐκεῖ μὲν διὰ τὴν κίνησιν αἰὲ καθαρὸς ὁ ἀῆρ καὶ ἕτερος γίνεται, ἐν δὲ τοῖς ἐλώδεσι μένει.

Διὰ τί οἱ μὲν ἐν τοῖς θερμοῖς τόποις δειλοὶ εἰσιν, οἱ δὲ ἐν τοῖς ψυχροῖς ἀνδρεῖοι; ἢ ὅτι ἐναντίως τοῖς τόποις καὶ ταῖς ὥραις ἢ φύσιν ἔχει, διὰ τὸ ὁμοίως ἐχόντων ἀνάγκη διακαίεσθαι ταχέως. ἀνδρεῖοι δὲ εἰσιν οἱ τὴν φύσιν θερμοί, δειλοὶ δὲ οἱ κατεψυγμένοι. συμβαίνει δὲ τοὺς μὲν ἐν τοῖς θερμοῖς ὄντας κατεψύχθαι, τοὺς δὲ ἐν τοῖς ψυχροῖς ἐκθερμάνθαι τὴν φύσιν. μεγάλοι δὲ ἄμφω εἰσιν, οἱ μὲν ἐν τοῖς ψυχροῖς διὰ τὴν ἐν αὐτοῖς σύμφυτον θερμότητα, οἱ δ' ἐν τοῖς θερμοῖς διὰ τὴν ἐν τῷ τόπῳ· ἐν γὰρ τοῖς θερμοῖς καὶ ὑπὸ τοῦ θερμοῦ αὐξάνονται. τὸ δὲ ψῦχος πηλτικόν ἐστιν. ἅτε οὖν τῶν μὲν ἐν αὐτοῖς ἐχόντων τὴν ἀρχὴν τῆς αὐξήσεως σφοδράν, τῶν δὲ οὐ κωλυομένων

ὕπὸ τῆς ἔξωθεν ψυχρότητος, εἰκότως ἐπὶ πολὺ τὴν αὔξησιν ἐπιδέχονται. οἱ δὲ περὶ ἡμᾶς ἦττον διὰ τὸ ἐλάττω τε ἔχειν τὴν ἀρχὴν ἐν αὐτοῖς, καὶ διὰ τὸ τοὺς ἐν τοῖς ψυχροῖς συμπλεῖσθαι.

Διὰ τί μακρόβιοι μᾶλλον εἰσιν οἱ ἐν τοῖς θερμοῖς τόποις οἰκοῦντες; ἢ διὰ τὸ ξηροτέραν ἔχειν τὴν φύσιν, τὸ δὲ ξηρότερον ἀσαπέστερον εἶναι καὶ πολυχρονιώτερον, τὸν δὲ θάνατον οἷον σῆψιν τινα εἶναι; ἢ διότι ὁ μὲν θάνατός ἐστι ψύξις τοῦ ἐντὸς θερμοῦ, καταψύχεται δὲ πᾶν ὑπὸ τοῦ περιέχοντος καὶ ψυχροτέρου; ἔστι δὲ ὁ περιέχων ἀῆρ ἐν μὲν τοῖς ἀλεεινοῖς τόποις θερμός, ἐν δὲ τοῖς ψυχροῖς ψυχρός, ὥστε θάττον καὶ μᾶλλον φθείρει τὸ ἐν αὐτοῖς θερμόν.

Διὰ τί οἱ ἐν τοῖς θερμοῖς τόποις μακροβιώτεροι; ἢ ὅτι μᾶλλον τὸ θερμόν καὶ τὸ ὑγρὸν σώζουσιν; ὁ γὰρ θάνατος ἢ τούτων φθορά.

Διὰ τί ἐν τοῖς ἐλώδεσι τόποις ὑπνωδέστεροι γινόμεθα; ἢ διότι κατεψυγμένοι μᾶλλον ἐν αὐτοῖς ἐσμέν, ἢ δὲ κατάψυξις ἡσυχία τις οὕσα παρασκευάζει ὕπνον, ὁ δὲ ὕπνος ἐν τῷ ἡσυχάζειν παραγίνεται.

[910a] Διὰ τί οἱ ἐν τοῖς πλοίοις εὐχροοί, ἐπὶ ὕδατος διαιτώμενοι, μᾶλλον τῶν ἐν τοῖς ἔλεσιν; ἢ ἡ ὥρα καὶ τὸ εὐπνουν αἵτιον; ὡχροὺς δὲ τὸ ὕδωρ ποιεῖ, ὅταν σήπηται, ὃ πάσχει δι' ἀκίνησιν· διὸ ἐν τοῖς ἐλώδεσιν ὕπωχροι.

Διὰ τί ἐν τοῖς χειμερινοῖς χωρίοις πνίγη σφοδρὰ γίνεται πολλά, καὶ μᾶλλον ἢ ἐν τοῖς ἀλεεινοῖς; πότερον διὰ τὴν ὑγρότητα τοῦ ἀέρος; ἀπὸ γὰρ τῆς αὐτῆς θερμότητος ὕδωρ θερμότερον γίνεται τοῦ ἀέρος, ὥστε καὶ ὁ ἀῆρ ὑγρότερος τοῦ θερμοῦ. ἢ οὐδὲ ἔστι ξηρότερος ὁ ἀῆρ ἐν τοῖς τόποις τοῖς τοιούτοις, ἀλλὰ φαίνεται παρὰ τὸ ἐναντίον, ὥσπερ ὁ ἐκ νεφέλης ἥλιος παρὰ τὸ ἐκ τῆς σκιᾶς θιγγάνεσθαι.

Διὰ τί οἱ πρὸς μεσημβρίαν οἰκοῦντες μᾶλλον εἰσι μελανόφθαλμοι; ἢ γλαυκὰ μὲν ἐστι τὰ ὄμματα δι' ὑπερβολὴν τοῦ ἐντὸς θερμοῦ, μέλανα δὲ διὰ τὴν τούτου ἀπουσίαν, ὥσπερ καὶ Ἐμπεδοκλῆς φησίν. καθάπερ οὖν τῶν πρὸς ἄρκτον οἰκούντων γλαυκὰ τὰ ὄμματα ἐστι τῷ τὸ ἐντὸς θερμόν κωλύεσθαι διεκπίπτειν διὰ τὸ ἐκτὸς ψυχρόν, οὕτω τῶν πρὸς μεσημβρίαν οἰκούντων τὸ μὲν ὑγρὸν διὰ τὸ περιέχον θερμόν οὐκ ἐκπίπτει, τὸ δὲ θερμόν μηδενὸς ἀντιφράττοντος ἐκπίπτει, τὸ δὲ λειπόμενον ὑγρὸν μέλαν ποιεῖ· τῇ γὰρ τοῦ φωτὸς ἀπουσίᾳ τὸ λειπόμενόν ἐστι σκοτῶδες. ἢ τοῖς τοῦ λοιποῦ σώματος χρώμασιν ὁμοιοῦται τὸ ἐν τῷ ὀφθαλμῷ χρῶμα; διὸ τῶν πρὸς ἄρκτον λευκῶν

ὄντων γλαυκὰ τὰ ὄμματα (τοῦ γὰρ λευκοῦ τοῦτο ἐγγὺς τὸ χρῶμα), καὶ τῶν πρὸς μεσημβρίαν μελάνων ὄντων μέλανα καὶ τὰ ὄμματα.

Διὰ τί οἱ ἐν τοῖς θερμοῖς τόποις σοφώτεροί εἰσιν ἢ ἐν τοῖς ψυχροῖς; πότερον διὰ τὸ αὐτὸ δι' ὅπερ καὶ οἱ γέροντες τῶν νέων; οἱ μὲν γὰρ διὰ τὴν ψυχρότητα τοῦ τόπου ἐπανιούσης τῆς φύσεως αὐτῶν θερμότεροί εἰσι πολύ, ὥστε λίαν μεθύουσιν ἐοίκασι, καὶ οὐκ εἰσὶ ζητητικοὶ ἀλλὰ ἀνδρεῖοι καὶ εὐέλπιδες· οἱ δὲ ἐν τοῖς ἀλγεινοῖς νήφουσι διὰ τὸ κατεψύχθαι. πανταχοῦ δὲ οἱ φοβούμενοι τῶν θαρρούντων μᾶλλον ἐπιχειροῦσι ζητεῖν, ὥστε καὶ εὕρισκousι μᾶλλον. ἢ διὰ τὸ πολυχρονιώτερον τὸ γένος εἶναι τοῦτο, τοὺς δὲ ὑπὸ τοῦ κατακλισμοῦ ἀπολέσθαι, ὥστε εἶναι καθάπερ νέους πρὸς γέροντας τοὺς ἐν τοῖς ψυχροῖς τόποις πρὸς τοὺς ἐν τοῖς θερμοῖς οἰκοῦντας.

Διὰ τί οἱ μὲν ἐν τοῖς θερμοῖς τόποις δειλοὶ εἰσιν, οἱ δὲ ἐν τοῖς ψυχροῖς ἀνδρεῖοι; ἢ ὅτι ἐναντίως τοῖς τόποις καὶ [910b] ταῖς ὥραις ἢ φύσις ἔχει, διὰ τὸ ὁμοίως ἐχόντων διακάεσθαι ἂν ταχέως; ἀνδρεῖοι δὲ εἰσιν οἱ τὴν φύσιν θερμοί, δειλοὶ δὲ οἱ κατεψυγμένοι. συμβαίνει δὲ τοὺς μὲν ἐν τοῖς θερμοῖς ὄντας καταψύχεσθαι (ἄραιοῦ γὰρ ὄντος αὐτοῖς τοῦ σώματος τὸ θερμὸν αὐτῶν ἔξω διεκπίπτει), τοὺς δ' ἐν τοῖς ψυχροῖς ἐκτεθερμάνθαι τὴν φύσιν διὰ τὸ ἐκ τοῦ ἐκτὸς ψύχους πυκνοῦσθαι τὴν σάρκα, πυκνουμένης δὲ ἐντὸς συστέλλεσθαι τὸ θερμόν.

## ΙΕ. ΟΣΑ ΜΑΘΗΜΑΤΙΚΗΣ ΜΕΤΕΧΕΙ ΘΕΩΡΙΑΣ.

Διὰ τί διάμετρος καλεῖται μόνη τῶν δίχα διαιρουσῶν τὰ εὐθύγραμμα ἢ ἐκ γωνίας εἰς γωνίαν ἀχθεῖσα γραμμὴ; ἢ ὅτι διάμετρος δίχα διαιρεῖ, καθάπερ τούνομα ὑποσημαίνει, οὐ φθείρουσα τὸ μετρούμενον; ἢ μὲν οὖν κατὰ τὰς συνθέσεις διαιροῦσα (λέγω δὲ τὰς γωνίας) διάμετρος ἔσται· οὐ γὰρ φθείρει ἀλλὰ διαιρεῖ, καθάπερ οἱ τὰ στρατιωτικὰ σκεύη διαιροῦντες. ἢ δὲ κατὰ τὰς γραμμὰς σύνθετα τέμνουσα φθείρει· σύγκειται γὰρ τὸ εὐθύγραμμον κατὰ τὰς γωνίας.

Διὰ τί διάμετρος καλεῖται; ἢ διότι δίχα μόνη διαιρεῖ; ὥσπερ οὖν εἴ τις εἴποι διχάμετρός ἐστιν. καὶ διὰ τί μόνη τῶν δίχα τοῦτο καλεῖται. ἢ ὅτι κατὰ μέλη ἢ κέκαμπται μόνη διαιρεῖ, αἱ δὲ ἄλλαι κατὰ πλευράς;

Διὰ τί πάντες ἄνθρωποι, καὶ βάρβαροι καὶ Ἕλληνες, εἰς τὰ δέκα καταριθμοῦσι, καὶ οὐκ εἰς ἄλλον ἀριθμόν, οἷον β', γ', δ', ε', εἴτα πάλιν ἐπαναδιπλοῦσιν, ἐν πέντε, δύο πέντε, ὥσπερ ἑνδεκα, δώδεκα; οὐδ' αὖ

ἐξωτέρω παυσάμενοι τῶν δέκα, εἴτα ἐκεῖθεν ἐπαναδιπλοῦσιν; ἔστι μὲν γὰρ ἕκαστος τῶν ἀριθμῶν ὁ ἔμπροσθεν καὶ ἐν ἡ δύο, καὶ οὗτος ἄλλος τις, ἀριθμοῦσι δ' ὅμως ὀρίσαντες ἄχρι τῶν δέκα. οὐ γὰρ δὴ ἀπὸ τύχης γε αὐτὸ ποιοῦντες φαίνονται καὶ αἰεὶ· τὸ δὲ αἰεὶ καὶ ἐπὶ πάντων οὐκ ἀπὸ τύχης, ἀλλὰ φυσικόν. πότερον ὅτι τὰ δέκα τέλειος ἀριθμός; ἔχων γὰρ πάντα τὰ τοῦ ἀριθμοῦ εἶδη, ἄρτιον περιττόν, τετράγωνον κύβον, μῆκος ἐπίπεδον, πρῶτον σύνθετον. ἢ ὅτι ἀρχὴ ἡ δεκάς; ἐν γὰρ καὶ δύο καὶ τρία καὶ τέτταρα γίνεται δεκάς. ἢ ὅτι τὰ φερόμενα σώματα ἐννέα; ἢ ὅτι ἐν δέκα ἀναλογίαις τέτταρες κυβικοὶ ἀριθμοὶ ἀποτελοῦνται, ἐξ ὧν φασὶν ἀριθμῶν οἱ Πυθαγόρειοι τὸ πᾶν συνεστάναι; ἢ ὅτι πάντες ὑπῆρξαν ἄνθρωποι ἔχοντες δέκα δακτύλους; οἷον οὖν ψήφους ἔχοντες τοῦ οἰκείου [911a] ἀριθμοῦ, τούτῳ τῷ πλήθει καὶ ἄλλα ἀριθμοῦσιν. μόνοι δὲ ἀριθμοῦσι τῶν Θρακῶν γένος τι εἰς τέτταρα, διὰ τὸ ὥσπερ τὰ παιδιά μὴ δύνασθαι μνημονεύειν ἐπὶ πολὺ, μηδὲ χρῆσιν μηδενὸς εἶναι πολλοῦ αὐτοῖς.

Ὅτι ἡ γῆ κέντρον· αἰεὶ γὰρ ὅμοια τὰ φαινόμενα ἡμῖν σχήματα. δοκεῖ τοῦτο εἶναι, ἐὰν μὴ ἀπὸ τοῦ μέσου τις θεωρῇ, ἀλλ' ὅτε μὲν τρίγωνα ὅτε δὲ τραπέζια ὅτε δὲ ἄλλοῖα ἐδόκει ἡ γῆ μέσον ἡμῖν, εἰ ἀπὸ τούτων ἐνὶ ἡμᾶς θεωρεῖν. οὔσης γὰρ σφαιροειδοῦς τῆς γῆς ταῦτ' ὁ κέντρον τούτου καὶ τῆς γῆς ἔσται. ἡμεῖς δὲ ἐπάνω τῆς γῆς οἰκοῦμεν, ὥστε οὐκ ἀπὸ τούτου, ἀλλὰ τὸ ἥμισυ τῆς διαμέτρου ἀφεστῶσιν ἡμῖν τοιαῦτα φαίνεται. τί οὖν κωλύει πλέονος γενομένου τοῦ διαστήματος διαμένειν τὴν τῶν σχημάτων φαντασίαν;

Διὰ τί τοῦ ἡλίου ὁμοτόνως φερομένου ἐν τῷ ἴσῳ χρόνῳ, οὐχ ἡ αὐτὴ αὔξησις καὶ φθίσις τῶν σκιῶν; ἢ ὅτι ἴσαι γίνονται αἱ γωνίαι πρὸς τὰ ὀρώμενα, αἱ ἀπὸ τῶν ἀκτίνων ὑπὸ ταῖς ἴσαις περιφερείαις; εἰ δ' αὐταὶ καὶ ἐμβαλλόμεναι ποιοῦσιν ἀκτῖνας ἐν τῷ τριγώνῳ, ὅπερ ἔχεται ὑπὸ τε τῆς πρώτης ἀκτῖνος καὶ τοῦ ὀρωμένου καὶ τῆς σκιᾶς. εἰ δ' αἱ γωνίαι ἴσαι, ἀνάγκη τὴν πορρωτέρω γραμμὴν τοῦ ὀρωμένου μείζω εἶναι τῆς ἐγγυτέρω· τοῦτο γὰρ ἴσμεν. διηρήσθω οὖν ἡ περιφέρεια εἰς ἴσα ὅσα οὖν πλήθει, ὁράσθω δὲ τὸ Θ. ὅταν οὖν ὁ ἥλιος ἐπὶ τοῦ Α προσλαβὼν τὸ Θ ποιήσῃ τινὰ σκιάν ἐν τῷ ΘΑ, ἀνάγκη δὴ τὴν ἀκτῖνα ἐπὶ τὸ Α πίπτειν. ὅταν δ' ἔλθῃ ἐπὶ τὸ Β, ἢ ἀπὸ τοῦ Β ἀκτὶς ἐντὸς τῆς ΘΑ πεσεῖται, καὶ ὅταν πάλιν ἐπὶ τὸ Γ μεταβῇ, ὡσαύτως· εἰ δὲ μὴ, εὐθεῖα εὐθείας διχῇ ἄψεται. ἐπεὶ οὖν ἴση ἡ ΑΒ τῇ ΒΓ, καὶ αἱ γωνίαι αἱ ὑπὸ ταύτης αἱ πρὸς τῷ Δ ἴσαι ἔσονται· πρὸς τῷ κέντρῳ γάρ. εἰ δὲ τῇ τοῦ Δ, καὶ ἐν τῷ τριγώνῳ· κατὰ κορυφὴν γὰρ ταύταις. ὥστ' ἐπεὶ εἰς ἴσα διαιρεῖται ἡ γωνία, μείζων ἔσται ἡ ΔΕ τῆς ΕΖ τῇ ΔΘ. ὁμοίως δὲ καὶ αἱ ἄλλαι ἅς ποιοῦσιν αἱ ἀπὸ τῆς περιφερείας ἀκτῖνες. ἅμα δὲ δῆλον καὶ ὅτι κατὰ μεσημβρίαν ἐλαχίστην ἀναγκαῖον εἶναι τὴν σκιάν, καὶ ὅτι αἱ ἐπιδόσεις τότε ἐλάχισται.

μάλιστα γὰρ καθ' ἡμᾶς ὁ ἥλιος τῆς μεσημβρίας ἐστί, καὶ πνῖγος γίνεται διὰ τε τὴν εἰρημένην αἰτίαν, καὶ ὅτι ἀπνεύματος· ὅταν γὰρ διακρίνη τὸν πρὸς τῇ γῇ ἀέρα, πνεῦμα γίνεται. εἰ οὖν ἅμα ἐν ἀμφοτέροις [911b] τοῖς ἡμισφαιρίοις, εἰκότως ἂν αἱ μέσαι νύκτες καὶ ἡ μεσημβρία ἀπνεύματοι εἶεν.

Διὰ τί ὁ ἥλιος διὰ τῶν τετραπλεύρων διέχων οὐκ εὐθύγραμμα ποιεῖ τὰ σχήματα ἀλλὰ κύκλους, οἷον ἐν ταῖς ῥιψίν; ἢ ὅτι ἡ τῶν ὄψεων ἔκπτωσις κώνος ἐστί, τοῦ δὲ κώνου κύκλος ἡ βάσις, ὥστε πρὸς ὃ ἂν προσπίπτωσιν αἱ τοῦ ἡλίου ἀκτῖνες, κυκλοτερεῖς φαίνονται. ἀναγκαῖον μὲν γάρ ἐστι καὶ τὸ ὑπὸ τοῦ ἡλίου σχῆμα ὑπ' εὐθειῶν περιέχεσθαι, εἴπερ αἱ ἀκτῖνες εὐθεῖαι. ὅταν γὰρ εὐθεῖαι πρὸς εὐθεῖαν προσπίπτωσιν, εὐθύγραμμον ποιοῦσιν. ἐπὶ δὲ τῶν ἀκτίνων συμβαίνει τοῦτο· πρὸς εὐθεῖαν γὰρ προσπίπτουσι τὴν τοῦ ῥιπὸς γραμμὴν, ἢ δι' οὗ λάμπουσι, καὶ αὐταὶ εὐθεῖαί εἰσιν, ὥστε πρὸς εὐθεῖαν ἔσται ἡ ἔκπτωσις. ἀλλὰ διὰ τὸ ἀσθενεῖς εἶναι τὰς ἀποσχιζόμενας ἀπὸ τῶν ὄψεων πρὸς τὰ ἄκρα τῶν εὐθειῶν, οὐχ ὁρᾶται τὰ ἐν ταῖς γωνίαις· ἀλλ' ὅσον μὲν τῆς εὐθείας ἐνυπάρχει ἐν τῷ κώνῳ, ποιεῖ αὐτήν, τὸ δὲ λοιπὸν οὐ ποιεῖ, ἀλλὰ λανθάνουσιν αἱ ὄψεις ἐπιπίπτουσαι. πολλὰ γὰρ οὐχ ὁρῶμεν ἐφ' ᾧ διικνεῖται ἡ ὄψις, οἷον τὰ ἐν τῷ σκότει. ὅμοιον δὲ τούτῳ καὶ τὸ τὸ τετράγωνον πολυγωνοειδὲς φαίνεσθαι, ἐὰν δὲ πλεον ἀφιστῇ, κύκλον. ὄντος γὰρ κώνου τῆς τῶν ὄψεων ἔκπτώσεως, ἀφισταμένου τοῦ σχήματος εἰς τὸ πόρρω αἱ μὲν εἰς τὰς γωνίας ἀποσχιζόμεναι τῶν ὄψεων διὰ τὸ ἀσθενεῖς εἶναι καὶ ὀλίγαι οὐχ ὁρῶσι, πλεονος τοῦ ἀποστήματος γινομένου, αἱ δὲ εἰς τὸ μέσον προσπίπτουσαι, ἀθρόαι καὶ ἰσχυραὶ οὔσαι, διαμένουσιν. ἐγγὺς μὲν οὖν ὄντος τοῦ σχήματος δύνανται καὶ τὰ ἐν ταῖς γωνίαις ὁρᾶν, πόρρω δὲ αὐτοῦ γινομένου ἀδυνατοῦσιν. διὸ καὶ ἡ περιφερὴς ἀπαγομένη εὐθεῖα φαίνεται. καὶ ἡ σελήνη ὑπὸ εὐθειῶν δοκεῖ περιέχεσθαι τῇ ὀγδόῃ, ἐὰν μὴ κατὰ τὸ πλάτος ἀλλὰ κατὰ τὴν περιέχουσαν γραμμὴν αἱ ὄψεις προσπίπτωσιν. ἐγγὺς μὲν γὰρ οὔσης τῆς περιφερείας δύνανται διακρίνειν αἱ ὄψεις, ὅσω ἐγγύτερόν ἐστι θάτερον θατέρου μέρους τῆς περιφερείας· πόρρω δὲ γινομένης οὐ διαισθάνεται, ἀλλὰ δοκεῖ αὐτῇ ἐξ ἴσου εἶναι. διὸ καὶ εὐθεῖα φαίνεται.

Διὰ τί τῆς σελήνης σφαιροειδοῦς οὔσης εὐθεῖαν ὁρῶμεν, ὅταν ἢ διχότομος; ἢ ὅτι ἐν τῷ αὐτῷ ἐπιπέδῳ ἡ ὄψις γίνεται καὶ ἡ τοῦ κύκλου περιφέρεια, ἣν ὁ ἥλιος ποιεῖ προσβάλλων τῇ σελήνῃ; ὅτε δὲ τοῦτο γένοιτο, εὐθεῖα γραμμὴ ἐφαίνετο [912a] ὁ ἥλιος. ἐπεὶ γὰρ ἀνάγκη τὸ προσβάλλον τὰς ὄψεις πρὸς τὴν σφαῖραν κύκλον ὁρᾶν, ἡ δὲ σελήνη σφαιροειδής, καὶ ὁ ἥλιος ὁρᾷ αὐτήν, κύκλος ἂν εἴη ὁ ὑπὸ τοῦ ἡλίου γινόμενος. οὗτος οὖν ὅταν μὲν ἐξ ἐναντίας ἡμῖν γένηται, ὅλος φαίνεται καὶ δοκεῖ πανσέληνος εἶναι· ὅταν δὲ παραλλάττῃ διὰ τὴν τοῦ ἡλίου μετάβασιν, ἡ περιφέρεια αὐτοῦ κατὰ τὴν ὄψιν

γίνεται, ὥστε εὐθεῖα φαίνεται. τὸ δὲ ἕτερον μέρος περιφερές, ὅτι ἐξ ἐναντίας κεῖται τῇ ὄψει ἡμισφαίριον. τὸ δὲ τοιοῦτο ἐφαίνετο ἡμικύκλιον. ἀεὶ γὰρ ἡ σελήνη κατ' ἀντικρὺ ἐστὶ τῆς ὄψεως. ἀλλ' ὅταν ὁ ἥλιος ἐπιβάλλῃ, οὐχ ὀρώμεν, καὶ ἀναπληροῦται μετὰ τὴν ὀγδόην ἐκ τοῦ μέσου, ὅτι ἐπιπαρεξιών ὁ ἥλιος ἐκκλινέστερον ἡμῖν ποιεῖ τὸν κύκλον. οὕτω δὲ τιθέμενος πρὸς τὴν ὄψιν ὁ κύκλος κώνου τομῇ ἐμφορῆς ἐγένετο. μηνοειδὴς δὲ φαίνεται, ὅταν ὁ ἥλιος μεταβῇ. ὅταν γὰρ κατὰ τὰ ἔσχατα σημεία, καθ' ἃ διχότομος φαίνεται, ὁ κύκλος ὁ τοῦ ἡλίου γένηται, περιφέρεια φαίνεται ἢ τοῦ κύκλου. οὐ γὰρ ἔτι κατ' εὐθεΐαν ἐστὶ τῇ ὄψει, ἀλλὰ παραλλάττει. τούτου δὲ γινομένου, καὶ διὰ τῶν αὐτῶν σημείων τοῦ κύκλου ὄντος, ἀνάγκη μηνοειδῆ φαίνεσθαι. μέρος γάρ τι τοῦ κύκλου κατὰ τὴν ὄψιν εὐθύς ἐστὶ, τοῦ προτέρου ἐξ ἐναντίας ὄντος, ὥστε τοῦ λαμπροῦ ἀποτέμνεται· εἴθ' οὕτως καὶ τὰ ἄκρα μένουσιν ἐν τῷ αὐτῷ, ὥστε ἀνάγκη μηνοειδῆ φαίνεσθαι. μᾶλλον δὲ καὶ ἥττον διὰ τὴν τοῦ ἡλίου κίνησιν. μεταβαίνοντος γὰρ τοῦ ἡλίου καὶ ὁ κύκλος ὃν ὀρᾷ ἐπιστρέφεται, ἐν τοῖς αὐτοῖς σημείοις ὦν· ἀπείρους γὰρ ἐγκλίσεις ἐγχωρεῖ αὐτὸν κλιθῆναι, εἴπερ γραφῆναι τοὺς μεγίστους κύκλους διὰ τῶν αὐτῶν σημείων ἀπείρους ἐνδέχεται.

Διὰ τί ὁ ἥλιος καὶ ἡ σελήνη σφαιροειδῆ ὄντα ἐπίπεδα φαίνεται; ἢ ὅτι πάντων ὅσων τὸ ἀπόστημα ἄδηλον, ὅτε πλεῖον ἢ ἔλαττον ἀφέστηκεν, ἐξ ἴσου φαίνονται; ὥστε καὶ ἐφ' ἐνὸς μὲν μόρια δ' ἔχοντος, ἂν μὴ τῇ χροᾷ διαφέρῃ, ἀνάγκη τὰ μόρια ἐξ ἴσου φαίνεσθαι. τὸ δ' ἐξ ἴσου ὁμαλὸν καὶ ἐπίπεδον ἀνάγκη δοκεῖν εἶναι.

Διὰ τί τὰς σκιὰς ποιεῖ ὁ ἥλιος ἀνίσχων καὶ δύνων μακράς, αἰρόμενος δὲ ἐλάττους, ἐπὶ τῆς μεσημβρίας δ' ἐλαχίστας; ἢ ὅτι ἀνίσχων τὸ μὲν πρῶτον παράλληλον ποιήσει τὴν σκιὰν τῇ γῇ, καὶ ἄπειρον ὡς ἄνισον ὑπερτείνει, ἔπειτα μακράν· ἀεὶ δ' ἐλάττω διὰ τὸ ἀεὶ τὴν ἀπὸ τοῦ ἀνωτέρου σημείου εὐθεΐαν ἐντὸς πίπτειν. γνώμων τὸ AB, ἥλιος οὐ τὸ Γ καὶ οὐ τὸ Δ· ἡ δὲ ἀπὸ τοῦ Γ ἀκτὶς, ἐφ' ἧς τὸ ΓΖ, ἐξωτέρω [912b] ἔσται τῆς ΓΕ. ἔστι δὲ σκιὰ ἡ μὲν BE ἀνωτέρω ὄντος τοῦ ἡλίου, ἡ δὲ BZ κατωτάτω· ἐλαχίστη δέ, ὅσω ἀνωτάτω, ἢ καὶ ὑπὲρ τῆς κεφαλῆς.

Διὰ τί αἱ ἀπὸ τῆς σελήνης σκιαὶ μείζους τῶν ἀπὸ τοῦ ἡλίου, ὅταν ἀπὸ τῆς αὐτῆς ὥσι καθέτου; ἢ διότι ἀνώτερος ὁ ἥλιος τῆς σελήνης; ἀνάγκη οὖν ἐντὸς πίπτειν τὴν ἀπὸ τοῦ ἀνωτέρω ἀκτῖνα. γνώμων ἐφ' ᾧ ΑΔ, σελήνη Β, ἥλιος Γ. ἡ μὲν οὖν ἀπὸ τῆς σελήνης ἀκτὶς ΒΖ, ὥστε ἔσται σκιὰ ἡ τὸ ΔΖ· ἡ δὲ ἀπὸ τοῦ ἡλίου ἡ τὸ ΓΕ, ὥστε ἔσται σκιὰ ἐξ ἀνάγκης ἥττων· ἔσται γὰρ τὸ ΔΕ.

Διὰ τί ἐν ταῖς τοῦ ἡλίου ἐκλείψειςιν, ἐάν τις θεωρῇ διὰ κοσκίνου ἢ φύλλων, οἷον πλατάνου ἢ ἄλλου πλατυφύλλου, ἢ τοὺς δακτύλους τῆς ἐτέρας χειρὸς ἐπὶ τὴν ἐτέραν ἐπιζεύξας, μηνίσκοι αἱ αὐγαὶ ἐπὶ τῆς γῆς γίνονται; ἢ ὅτι ὥσπερ δι' ὀπῆς ἐὰν λάμπῃ εὐγωνίου τὸ φῶς, στρογγύλον καὶ κῶνος γίνεται; αἴτιον δὲ ὅτι δύο γίνονται κῶνοι, ὃ τε ἀπὸ τοῦ ἡλίου πρὸς τὴν ὀπὴν καὶ ὁ ἐντεῦθεν πρὸς τὴν γῆν, καὶ συγκόρυφοι. ὅταν οὖν ἐχόντων οὕτως ἄνωθεν κύκλῳ ἀποτέμνηται, ἔσται μηνίσκος ἐξ ἐναντίας ἐπὶ τῆς γῆς τοῦ φωτός. ἀπὸ τοῦ μηνίσκου γὰρ τῆς περιφερείας γίνονται αἱ ἀκτῖνες, αἱ δὲ ἐν τοῖς δακτύλοις καὶ κοσκίνοις οἷον ὅπαὶ γίνονται· διὸ ἐπιδηλότερον γίνεται ἢ διὰ μεγάλων ὀπῶν. ἀπὸ δὲ τῆς σελήνης οὐ γίνονται, οὔτε ἐκλείπουσης οὔτε ἐν αὐξήσει οὔσης ἢ φθίσει, διὰ τὸ μὴ ἀκριβεῖς τὰς ἀπὸ τῶν ἄκρων αὐγάς εἶναι, ἀλλὰ τῷ μέσῳ φαίνειν· ὁ δὲ μηνίσκος μικρὸν τὸ μέσον ἔχει.

Διὰ τί παρήλιος οὐ γίνεται οὔτε μεσουρανοῦντος τοῦ ἡλίου οὔθ' ὑπὲρ τὸν ἥλιον οὔθ' ὑπὸ τὸν ἥλιον, ἀλλ' ἐκ πλαγίων μόνον; ἢ διότι παρήλιος γίνεται κλωμένης τῆς ὥψεως πρὸς τὸν ἥλιον, αὕτη δὲ τοῦ ἀέρος ἢ στάσις, ἐφ' ἧς ἀνακλᾶται ἡ ὥψις, οὔτ' ἐγγὺς ἂν γένοιτο τοῦ ἡλίου οὔτε πόρρω. ἐγγὺς μὲν γὰρ οὔσαν ὁ ἥλιος διαλύσει, πόρρω δὲ οὔσης ἡ ὥψις οὐκ ἀνακλασθήσεται· ἀπὸ γὰρ μικροῦ ἐνόπτρου πόρρω ἀνατεινομένη ἀσθενὴς γίνεται. διὸ καὶ ἄλλως οὐ γίνεται. ἐξ ἐναντίας τοῦ ἡλίου μὲν οὖν ἐὰν γίνηται καὶ ἐγγύς, διαλύσει ὁ ἥλιος, ἐὰν δὲ πόρρω, ἐλάττων ἢ ὥψις προσπесеῖται. ἐὰν δὲ ἐν τῷ πλαγίῳ, ἔστι τοσοῦτον ἀποστῆναι τὸ ἔνοπτρον ὥστε μήτε τὸν ἥλιον διαλῦσαι μήτε τὴν ὥσιν ἀθρόαν ἀνελθεῖν, διὰ τὸ ὑπὸ τὴν γῆν φέρεσθαι. ὑπὸ δὲ τὸν ἥλιον οὐ γίνεται διὰ τὸ πλησίον μὲν τῆς γῆς ὄντος διαλύεσθαι ἂν ὑπὸ [913a] τοῦ ἡλίου, ἄνω δὲ μεσουρανίου τὴν ὥσιν διασπᾶσθαι. καὶ ὅλως οὐδὲ ἐκ πλαγίας μεσουρανίου γίνεται, ὅτι ἡ ὥψις ὑπὸ τὴν γῆν ἐὰν λίαν φέρεται, ὀλίγη ἦξει εἰς τὸ ἔνοπτρον, ὥστε ἀνακλωμένη πᾶν ἔσται ἀσθενής.

Διὰ τί τῆς σκιᾶς τὸ ἄκρον τοῦ ἡλίου τρέμειν φαίνεται; οὐ γὰρ δὴ διὰ τὸ φέρεσθαι τὸν ἥλιον· ἀδύνατον γὰρ κινεῖσθαι εἰς τάναντία, ὁ δὲ τρόμος τοιοῦτος. ἔτι δὲ ἄδηλος ἡ μετάβασις, ὥσπερ καὶ τοῦ ἡλίου αὐτοῦ. ἢ διὰ τὸ κινεῖσθαι τὰ ἐν τῷ ἀέρι; καλεῖται δὲ ζύσματα. φανερά δὲ ἔσται ἐν ταῖς ἀκτῖσι ταῖς διὰ τῶν θυρίδων· ταῦτα γὰρ κινεῖται κᾶν νηνεμία. ἔκ τε οὖν τῆς σκιᾶς εἰς τὸ φῶς ἔκ τε τοῦ φωτός εἰς τὴν σκιὰν φερομένων ἀεί, καὶ ὁ ὅρος ὁ κοινὸς τοῦ φωτός καὶ τῆς σκιᾶς φαίνεται κινούμενος παρεγγύς. ἢ γὰρ οἷον σκιὰν ποιοῦσιν, ἢ δὲ φῶς, ἐκατέρωθεν μεταβάλλονται ταῦτα. ὥστε ἡ σκιὰ φαίνεται κινεῖσθαι, οὐ κινουμένη αὐτὴ οὕτως, ἀλλ' ἐκεῖναι.

## ΙΣ. ΟΣΑ ΠΕΡΙ ΤΑ ΑΨΥΧΑ.



Διὰ τί αἱ μὲν βάσεις τῶν πομφολύγων λευκαὶ ἐν τοῖς ὕδασι· καὶ ἐὰν ἐν ἡλίῳ τεθῶσι, σκιὰν οὐ ποιοῦσιν, ἀλλ' ἢ μὲν ἄλλη πομφόλυξ σκιὰν ποιεῖ, ἢ δὲ βάσις οὐ ποιεῖ, ἀλλ' ἡλίωται κύκλῳ. τὸ δὲ ἔτι θαυμασιώτερον, ὅτι οὐδ' ἐὰν τι τεθῇ ξύλον εἰς τὸ ὕδωρ ἐν τῷ ἡλίῳ, τέμνεται ὑπὸ τοῦ ὕδατος ταῦτα. ἢ οὐ γίνεται σκιά, ἀλλ' ἡλίῳ διήρηται ἡ σκιά; εἰ οὖν σκιά ἐστὶ τὸ μὴ ὀρώμενον, καὶ ὑπὸ τοῦ ἡλίου κύκλῳ ἂν ὀρῶτο ὁ ὄγκος. τοῦτο δὲ ὅτι ἀδύνατον, δείκνυται ἐν τοῖς ὀπτικοῖς· οὐδὲ γὰρ τὸ ἐλάχιστον ὑπὸ τοῦ μεγίστου ἐνδέχεται ὅλον περιοφθῆναι.

Διὰ τί αἱ πομφόλυγες ἡμισφαίρια; ἢ διὰ τὸ ὥς ἀπὸ κέντρου πρὸς τὸν ἀέρα φέρεσθαι ἄνω ὁμοίως πάντῃ; ἀνάγκη δὲ τοῦτο ἡμισφαίριον εἶναι. τὸ κάτω δὲ ἡμισφαίριον ἀποτεμένεται ὑπὸ τοῦ ἐπιπέδου τοῦ ὑδατώδους, ἐν ᾧ τὸ κέντρον ἐστίν.

Διὰ τί τοῖς ἄνισον τὸ βάθος ἔχουσι μεγέθεσιν, ἐὰν τις τὸ κουφότερον κινῇ, κύκλῳ περιφέρεται τὸ βαλλόμενον, οἷον τοῖς μεμολιβδωμένοις ἀστραγάλοις συμβαίνει, ἂν τις βάλλῃ τὸ κουφότερον πρὸς αὐτὸν στρέψας μέρος; ἢ ὅτι τὸ βαρύτερον ἀδύνατον ἰσοδρομεῖν τῷ κουφοτέρῳ, ἀπὸ τῆς αὐτῆς ἰσχύος ῥιφθέν; ἐπεὶ δὲ ἀνάγκη μὲν ἀμπαν κινεῖσθαι, [913b] ἐξ ἴσου δὲ ἀδύνατον, ὁμοταχῶς μὲν φερόμενα τὴν αὐτὴν οἰσθήσεται γραμμὴν, θᾶπτον δὲ θατέρου φερομένου κύκλον ἀνάγκη φέρεσθαι, ἐπειδὴ ἐν τούτῳ μόνῳ τῷ σχήματι ταῦτα ἀεὶ κατάλληλα ὄντα σημεῖα ἐν ταύτῳ χρόνῳ ἀνίσους διέρχεται γραμμάς.

Διὰ τί τὰ πίπτοντα ἐπὶ τὴν γῆν καὶ ἀφαλλόμενα ὁμοίας γωνίας ποιεῖ πρὸς τὸ ἐπίπεδον ἐφ' ἐκάτερα τοῦ σημείου ᾧ ἤψατο τοῦ ἐπιπέδου; ἢ ὅτι πάντα μὲν φύσει φέρεται πρὸς ὀρθήν; τὰ μὲν οὖν εἰς ὁμαλὲς πεσόντα, τῇ καθέτῳ καὶ τῇ διαμέτρῳ προσκρούσαντα τῷ ἐπιπέδῳ, τοσαύτας ποιεῖ γωνίας ἀφαλλόμενα διὰ τὸ τὴν μὲν διάμετρον ἴσα διαιρεῖν· τὰ δὲ εἰς τὰ πλάγια πίπτοντα, οὐ τῇ καθέτῳ προσκρούοντα τῷ χωρίῳ ἀλλὰ τῷ ἀνωτέρῳ τῆς καθέτου σημείῳ, συμβαίνει πάλιν ἀνωσθέντα ὑπὸ τοῦ πληγέντος τόπου εἰς τοῦναντίον φέρεσθαι, τὰ μὲν στρογγύλα, ὅτι ἐν αὐτῷ φερόμενα εἰς τοῦναντίον τῆς ἀπώσεως ἐξελίττεται, ἐὰν τε ἡρεμῇ τὸ μέσον αὐτῶν ἐὰν τε καὶ τόπον διαλλάττῃ· τὰ δ' εὐθύγραμμα διὰ τε τὴν κάθετον αὐτὴν εἰς τοῦμπροσθεν προσηνέχθη ἐκκρούεσθαι, καθάπερ τοῖς τε ξυρουμένοις τὰ σκέλη συμβαίνει, καὶ ὧν τοὺς κολύθρους ὑφαρπάζουσιν. πάντες γὰρ οὗτοι εἰς τοῦναντίον καὶ ὀπισθεν ἐπιπίπτουσι, διὰ τὸ ἰσάζειν αὐτὰ τὴν κάθετον, μετέωρόν τε εἶναι καὶ εἰς τοῦμπροσθεν ἐκκρούεσθαι· τὰ γὰρ ἐναντία δηλονότι αὐτῆς ὀπισθέν τε καὶ κάτω συμβαίνει γίνεσθαι, κάτω δὲ φερόμενα βαρύτερα ἂν εἴη. ὁ οὖν τούτοις

πτῶμα, τοῖς ἀφαλλομένοις φορὰν συμβαίνει γίνεσθαι. πρὸς ὀρθὴν μὲν οὖν οὐδέτερα αὐτῶν ἀφάλλεται διὰ τὸ τὴν μὲν κάθετον δίχα τῷ βάρει διαιρεῖν τὰ φερόμενα, καθέτους δὲ πλείους πρὸς ταὐτὸ ἐπίπεδον μὴ γίνεσθαι τεμνούσας αὐτάς· ὁ τούτοις συμβήσεται καθέτου γινομένης κατὰ τὴν ἔφασιν, ἣ προσέκρουσε τῷ ἐπιπέδῳ τὸ φερόμενον, διχοτομεῖσθαι πάλιν ὑπ' αὐτῆς αὐτὸ συμβήσεται, ὥστε ἀναγκαῖον τέμνεσθαι ὑπ' αὐτῆς τὴν πρώτην κάθετον ὑφ' ἧς ἐφέρετο. ἐπεὶ δ' εἰς τοῦναντίον μὲν οἰσθήσεται, πρὸς ὀρθὴν δὲ οὐκ οἰσθήσεται, λοιπὸν ὀξεῖαν γίνεσθαι γωνίαν τὴν ἐπὶ θατέρῳ τοῦ προσπεσόντος τῷ ἐπιπέδῳ σημείου· ὅρος γάρ ἐστιν ἡ ὀρθὴ τῶν ἐναντίων γωνιῶν.

Διὰ τί ὁ μὲν κύλινδρος ὡσθεὶς εἰς εὐθύ τε φέρεται καὶ γράφει εὐθείας τοῖς ὀρίζουσιν αὐτὸν κύκλοις, ὁ δὲ κῶνος κύκλῳ περιφέρεται, τῆς κορυφῆς μενούσης, καὶ γράφει [914a] τὸν κύκλον τῷ ὀρίζοντι; κύκλῳ μὲν ἀμφοτέρα φέρεται, γράφει δ' ἐν τῷ ἐπιπέδῳ ὁ μὲν κύλινδρος εὐθείας, ὁ δὲ κῶνος κύκλους, διὰ τὸ τοὺς μὲν ἐν τῷ κώνῳ ἀνίσους εἶναι κύκλους, φέρεσθαι δὲ ἀεὶ θάττον τὸν μείζονα τῶν περὶ τὸ αὐτὸ κέντρον. φερομένων δὲ ἀνίσως πάντων ἅμα τῶν ἐν τῷ κώνῳ κύκλων, συμβαίνει τοὺς ἐξωτάτω πλεῖστον ἐν ταύτῳ χρόνῳ τόπον καὶ γραμμὴν φέρεσθαι· διὸ καὶ κύκλῳ φέρονται, γράφονται τε γὰρ πάντες τῇ αὐτῇ εὐθείᾳ, καὶ τῆς εὐθείας κύκλῳ μὲν φερομένης οὐ πάντα τὰ ἐν αὐτῇ σημεῖα ἴσην ἐν ταύτῳ χρόνῳ γράφει γραμμὴν, εἰς εὐθὺ δὲ φέρει τὴν ἴσην. τοῦ δὲ κυλίνδρου πάντων ἴσων ὄντων τῶν κύκλων καὶ περὶ ταὐτὸ κέντρον, συμβαίνει τὰ ἅμα τοῦ ἐπιπέδου ἐν αὐτοῖς πάνθ' ἀπτομένοις σημεῖα, φέρεσθαί τε ἰσοταχεῖς κυλιομένους διὰ τὸ τοὺς κυλίνδρους ἴσους εἶναι, καὶ ἥκειν ἐπὶ τὸ ἐπίπεδον πάλιν ἅμα ἐκκυλισθέντα ἕκαστον τὸν αὐτοῦ κύκλον, ὥστε καὶ τὰς ἐν τῷ ἐπιπέδῳ εὐθείας ἴσας γίνεσθαι· τῇ γὰρ αὐτῶν ἀφῇ αὐτάς ἔγραψαν, ὄντες ἴσοι τε καὶ ἰσοταχεῖς, ἐγίνοντο δὲ εὐθεῖαι αἱ ὑπὸ τῆς αὐτῆς γραφεῖσαι γραμμῆς εἰς εὐθὺ φερομένης, ὥστε διὰ ταύτας εἰς εὐθὺ ἀναφέροιτο ὁ κύλινδρος. διαφέρει γὰρ οὐθέν, ἢ ἡ πρώτη ἥψατο ὁ κύλινδρος τοῦ ἐπιπέδου γραμμῇ, ταύτῃ ἔλκειν ἐν τῷ ἐπιπέδῳ, ἢ ἐγκυλίειν αὐτό· ἀεὶ γὰρ ἴσην καὶ ὁμοίαν γραμμὴν τῶν ἐν τῷ κυλίνδρῳ συμβήσεται ἄπτεσθαι τοῦ ἐπιπέδου, ἐλκομένου τε καὶ κυλιομένου τοῦ κυλίνδρου.

Διὰ τί τῶν βιβλίων ἡ τομὴ οὕσα ἐπίπεδος καὶ εὐθεῖα, ἐὰν μὲν τις τέμῃ παρὰ τὴν βάσιν, γίνεται εὐθεῖα ἀνελιττομένη, ἐὰν δὲ ἐγκλίνας, σκολιά; ἢ ὅτι συμβαίνει τῶν ἐν τῇ ἑτέρᾳ τομῇ κύκλων ἐν ταύτῳ ἐπιπέδῳ ὄντων τὴν ἐγκεκλιμένην τομὴν μὴ παρακειμένην εἶναι, ἀλλ' ἐν τῇ μὲν πλεῖον τῇ δὲ ἔλαττον αὐτῆς ἀπέχειν, ὥστε ἐξελιττομένου οἱ μὲν ἐν ταύτῳ ἐπιπέδῳ ὄντες κύκλοι, καὶ τὴν ἀρχὴν ἔχοντες ἐν ταύτῳ ἐπιπέδῳ, τὴν ἐξ αὐτῶν ποιήσουσι

γραμμὴν ἐξελιττόμενοι. ἔστι γὰρ ἡ γιγνομένη γραμμὴ ἐκ τῶν κύκλων οἳ εἰσιν ἐν ταύτῳ ἐπιπέδῳ· ὥστε καὶ εὐθεῖα οὕσα ἐν ἐπιπέδῳ. ἢ τε τῆς λοξῆς τομῆς ἐξελιττομένη γραμμὴ οὐκ οὕσα παρὰ τὴν πρώτην, ἀλλὰ τῇ μὲν πλέον τῇ δὲ ἔλαττον αὐτῆς διεστηκυῖα διὰ τὸ καὶ τὴν τομὴν οὕτως ἔχειν πρὸς αὐτήν, οὐκ ἐν ἐπιπέδῳ ἔσται, ὥστε οὐδ' εὐθεῖα· τῆς γὰρ εὐθείας οὐκ ἔστι τὸ μὲν ἐν ἄλλῳ τὸ δὲ ἐν ἄλλῳ ἐπιπέδῳ.

[914b] Διὰ τί διαιρούμενα τὰ μεγέθη ἐλάττω φαίνεται πάντα τοῦ ὅλου; ἢ ὅτι διαιρούμενα μὲν ἀριθμὸν ἔχει πάντα, μεγέθει δὲ ἐλάττω ἐστὶ τοῦ ἑνός; τὸ μὲν γὰρ μέγα τῷ κατὰ συνέχειαν εἶναι καὶ ποσὸν τι μέγα λέγεται, ὃ δὲ ἀριθμὸς τε πᾶς παντὸς μεγέθους ἀριθμοῦ μείζων. διόπερ εἰκὸς τὸ ὅλον διαιρεθέντων τῶν μερῶν μεῖζον φαίνεσθαι· τῶν αὐτῶν γὰρ ὄντων αὐτῶν τὸ μὲν ὅλον τὴν τοῦ μεγέθους ἔχει μᾶλλον φύσιν, συνεχὲς ὄν, τὰ δὲ μέρη τὴν τοῦ ἀριθμοῦ.

Τῶν περὶ τὴν κλεψύδραν συμβαινόντων τὸ μὲν ὅλον ἔοικεν εἶναι αἴτιον καθάπερ Ἀναξαγόρας λέγει· ὁ γὰρ ἀήρ ἐστὶν αἴτιος, ἐναπολαμβάνόμενος ἐν αὐτῇ, τοῦ μὴ εἰσιέναι τὸ ὕδωρ ἐπιληφθέντος τοῦ ἄλλου. οὐ μὴν ἀπλῶς γε αἴτιος· κἂν γάρ τις αὐτὴν πλαγίαν ἐνῇ εἰς τὸ ὕδωρ, ἐπιλαβὼν τὸν αὐλόν, εἴσεισι τὸ ὕδωρ. διόπερ οὐ λέγεται ὑπ' αὐτοῦ ἱκανῶς ἢ αἴτιόν ἐστιν. ἔστι δὲ αἴτιον μὲν, καθάπερ εἴρηται, ὁ ἀήρ· οὗτος δὲ ὠθούμενός τε καὶ καθ' ἑαυτὸν φερόμενος καὶ μὴ βιαζόμενος ἐπ' εὐθείας πέφυκε φέρεσθαι, καθάπερ καὶ ἄλλα στοιχεῖα. πλαγίας μὲν οὖν βαφείσης τῆς κλεψύδρας, διὰ τῶν ἐναντίων τοῖς ἐν τῷ ὕδατι τρυπημάτων ἐπ' εὐθείας μένων ὑπὸ τοῦ ὕδατος ἐξέρχεται, ὑποχωροῦντος δὲ αὐτοῦ τὸ ὕδωρ εἰσέρχεται· ὀρθῆς δὲ εἰς τὸ ὕδωρ βαφείσης τῆς κλεψύδρας, οὐ δυνάμενος πρὸς ὀρθὴν ὑποχωρεῖν διὰ τὸ πεφρᾶσθαι τὰ ἄνω, μένει περὶ τὰ πρῶτα τρυπήματα· ἄπτεσθαι γὰρ εἰς αὐτὸν οὐ πέφυκεν. σημεῖον δ' ἐστὶ τοῦ εἶργειν δύνασθαι τὸ ὕδωρ ἀκινητίζοντα τὸν ἀέρα τὸ ἐπ' αὐτῆς γινόμενον τῆς κλεψύδρας. ἐὰν γάρ τις αὐτῆς αὐτὴν τὴν κωδίαν ἐμπλήσας ὕδατος, ἐπιλαβὼν τὸν αὐλόν, καταστρέψῃ ἐπὶ τὸν αὐλόν, οὐ φέρεται τὸ ὕδωρ διὰ τοῦ αὐλοῦ ἐπὶ στόμα. ἀνοιχθέντος δὲ τοῦ στόματος οὐκ εὐθὺς ἐκρεῖ κατὰ τὸν αὐλόν, ἀλλὰ μικροτέρῳ ὕστερον, ὥς οὐκ ὄν ἐπὶ τῷ στόματι τοῦ αὐλοῦ, ἀλλ' ὕστερον διὰ τούτου φερόμενον ἀνοιχθέντος, πλήρους τε καὶ ὀρθῆς οὔσης τῆς κλεψύδρας, ἀνοιχθέντος τοῦ αὐλοῦ εὐθὺς ῥεῖ διὰ τοῦ ἡθμοῦ, διὰ τὸ ἐκείνου μὲν ἄπτεσθαι, τῶν δὲ ἄκρων τοῦ αὐλοῦ μὴ ἄπτεσθαι. οὐκ εἰσέρχεται μὲν οὖν τὸ ὕδωρ εἰς τὴν κλεψύδραν διὰ τὴν προειρημένην αἰτίαν, ἐξέρχεται δὲ ἀνοιχθέντος τοῦ αὐλοῦ διὰ τὸ τὸν ἐν αὐτῷ ἀέρα κινούμενον ἄνω καὶ κάτω πολλὴν κένωσιν ποιεῖν τοῦ ἐν τῇ κλεψύδρᾳ ὕδατος. ὠθούμενον δὲ κάτω καὶ αὐτὸ ῥέπον εἰς αὐτὸ εἰκότως ἐκρεῖ, βιαζόμενον τὸν ἐκτὸς [915a] τῆς κλεψύδρας ἀέρα κινούμενόν τε καὶ ὄντα ἴσον τῇ δυνάμει τῷ

ἐπωθοῦντι αὐτὸν ἀέρι, τῇ δὲ ἀντερείσει ἀσθενέστερον ἐκείνου διὰ τὸ διὰ στενοῦ αὐτὸν τοῦ αὐλοῦ ῥέοντα θᾶπτον καὶ σφοδρότερον ῥεῖν, καὶ προσπίπτειν τῷ ὕδατι. τοῦ δὲ πωμασθέντος τοῦ αὐλοῦ μὴ συρρεῖν τὸ ὕδωρ αἴτιον, ὅτι τὸ ὕδωρ εἰσιδὼν εἰς τὴν κλεψύδραν ἐξωθεῖ βίᾳ τὸν ἀέρα ἐξ αὐτῆς. σημεῖον δὲ ἐστὶ τὸ γινόμενον ἐν ταύτῃ πνεῦμα καὶ ἐρυγμός. εἰσιόντος δὲ τοῦ ὕδατος, βίᾳ ὠθοῦν συνεισπίπτει εἰς τὸν αὐλὸν αὐτοῦ, καθάπερ τὰ ἐκπιεστὰ ξύλα ἢ χαλκὸς τῇ διαιρέσει πιεζούμενος, μένει ἄνευ παντὸς ἄλλου συνδέσμου ... ἐκκρουσθῇ ἐκ τοῦ ἐναντίου, καθάπερ τοὺς κατεαγότας ὀπιούρους ἐν τοῖς ξύλοις ἐκκρούουσιν. συμβαίνει δὲ τοῦτο ἀνοιχθέντος τοῦ αὐλοῦ γίνεσθαι διὰ τὰ προειρημένα. ἢ οὖν διὰ ταῦτα εἰκὸς ἐστὶν αὐτὸν μὴ ἐκρεῖν, ἢ ἐξιόντος βιαίου ἀέρος καὶ πνευματουμένου. δηλοῖ δὲ ὁ ψόφος ἐπισπᾶσθαι τῷ πνεύματι τὸ ὕδωρ ἄνω, ὥσπερ ἐπὶ πολλῶν συμβαίνει γίνεσθαι. ἐπισπώμενον δὲ καὶ συνεχὲς ὄν αὐτῷ πᾶν τὸ ὕδωρ μένει πιεζούμενον ὑπὸ τοῦ ἀέρος, ἕως ἂν ἀπωσθῇ πάλιν ὑπ' αὐτοῦ. τῆς δὲ ἀρχῆς μενούσης, καὶ τὸ ἄλλο ἐξ αὐτῆς κρέματα ὕδωρ ἐν καὶ συνεχές. εὐλογον δὲ τοῦτο γίνεσθαι· τοῦ γὰρ αὐτοῦ ἐστὶ κινῆσαί τε ἐκ τῆς οἰκείας χώρας τι, καὶ τοῦτο ἴσχειν, ὡς ἐκείνης, ἐν πλείονι δὲ χρόνῳ, ἐὰν ἢ ὅμοια τῇ δυνάμει τό τε ἔχον καὶ τὸ ἐχόμενον, ἢ τὸ ἴσον κρεῖττον, ὅπερ ἐνταῦθα συμβαίνει· πνεῦμα γὰρ ὕδατός ἐστι κρεῖττον τῇ δυνάμει.

Διὰ τί τὰ μόρια τῶν φυτῶν καὶ τῶν ζώων, ὅσα μὴ ὀργανικά, πάντα περιφερῆ, τῶν μὲν φυτῶν τὸ στέλεχος καὶ οἱ πτόρθοι, τῶν δὲ ζώων κνῆμαι, μηροί, βραχίονες, θώραξ· τρίγωνον δὲ οὐδὲ πολύγωνον οὔτε ὅλον οὔτε μωρίον ἐστίν; πότερον, ὥσπερ Ἀρχύτας ἔλεγε, διὰ τὸ ἐν τῇ κινήσει τῇ φυσικῇ ἐνεῖναι τὴν τοῦ ἴσου ἀναλογίαν (κινεῖσθαι γὰρ ἀνάλογον πάντα), ταύτην δὲ μόνην εἰς αὐτὴν ἀνακάμπειν, ὥστε κύκλους ποιεῖν καὶ στρογγύλα, ὅταν ἐγγένηται;

Διὰ τί ἐν τοῖς ἐσχάτοις ἀεὶ γίνεται περιφερῆ; ἢ ὅτι ἡ φύσις ἐκ τῶν ἐνδεχομένων πάντα ποιεῖ ὡς δυνατόν ἄριστα καὶ κάλλιστα, τὸ δὲ σχῆμα τοῦτο κάλλιστον, τὸ αὐτὸ αὐτῷ ὁμοιότατον.

Διὰ τί, ἐὰν κύκλος ῥιφθῇ, τὸ μὲν πρῶτον εὐθεῖαν γράφει, παυόμενος δὲ ἔλικά, ἕως ἂν πέσῃ; ἢ εὐθεῖαν μὲν τὸ πρῶτον, ὅτι ὁμοίως ἔνθεν καὶ ἔνθεν ὁ ἀπὸρθοῖ; ἴσης [915b] οὖν οὔσης τῆς ῥοπῆς ἔνθεν καὶ ἔνθεν, ἀνάγκη καὶ τὴν γραμμὴν τοιαύτην εἶναι, ἢ ἴσον διαιρεῖ τὸν τόπον ἔνθεν καὶ ἔνθεν· τοιαύτη δὲ ἐστὶν εὐθεῖα. ὅταν δὲ βρίσῃ ἐπὶ θάτερον μέρος δι' ἀνωμαλίαν τοῦ περισταμένου ἀέρος, οὐκέτι ἴσην γράφει τό τε ἐντὸς καὶ τὸ ἐκτὸς μέρος, ἀλλ' ἀνάγκη περιφερῆ.

Διὰ τί τοῖς ἄνισον τὸ βάθος ἔχουσι μεγέθεσιν, ἐάν τις κουφότερον κινῇ τῶν μερῶν, κύκλῳ περιφέρεται τὸ βαλλόμενον, οἷον τοῖς μεμολιβδωμένοις ἀστραγάλοις συμβαίνει, ἐάν τις βάλλῃ τὸ κουφότερον πρὸς αὐτὸν στρέψας μέρος; ἢ ὅτι τὸ βαρύτερον ἀδύνατον ἰσοδρομεῖν τῷ κουφοτέρῳ ἀπὸ τῆς αὐτῆς ἰσχύος ῥιφθέν; ἐπεὶ δὲ ἀνάγκη μὲν κινεῖσθαι, ἐξ ἴσου δὲ καὶ ἐπ' εὐθείας ἀδύνατον, ἀνάγκη εἰς τὸ ἐντὸς φερόμενον κύκλῳ φέρεσθαι· οἷον εἰ ὅλως τι ἦν αὐτοῦ ἀκίνητον διὰ βάρος ἐν μέσῳ, τὸ μὲν πρὸς τῷ ἀφιέντι εἰς τὸ πρόσθεν ἂν ἐκινήθῃ αὐτοῦ μέρος, τὸ δὲ ὑπ' ἐκεῖνα πρὸς τὸν ἀφιέντα. ἐπεὶ δὲ κινεῖται μὲν τὸ πᾶν, ἔχει δὲ ἐν μέσῳ τὸ βάρος φερόμενον, ἀνάγκη ταῦτο τοῦτο ποιεῖν.

Διὰ τί τὰ φερόμενα ὅταν ἀντιπέση, ἀφάλλεται εἰς τοῦναντίον ἢ πέφυκε φέρεσθαι, καὶ πρὸς ὁμοίας γωνίας; ἢ ὅτι οὐ μόνον ἐκείνην φέρεται τὴν φορὰν ἣν φέρεται κατὰ τὸ οἰκεῖον μέρος, ἀλλὰ καὶ τὴν ὑπὸ τοῦ ἀφιέντος γινομένην; ἢ μὲν οὖν οἰκεία παύεται, ὅταν εἰς τὸν οἰκεῖον ἔλθῃ τόπον (ἅπαν γὰρ ἡρεμεῖ ἐλθὼν εἰς ὃν φέρεται τόπον κατὰ φύσιν), καθ' ἣν δ' ἔχει ἀλλοτρίαν, ἀνάγκη ἔτι κινεῖσθαι, οὐκ εἰς τὸ πρόσθεν δὲ διὰ τὸ κωλύεσθαι, ἀλλ' ἢ εἰς τὸ πλάγιον ἢ εἰς τὸ ὀρθόν. ἅπαντα δὲ ἀποπηδᾷ πρὸς ὁμοίας γωνίας διὰ τὸ φέρεσθαι μὲν ἐνταῦθα οὐ ἢ κινήσεις φέρει, ἣν ἐποίησεν ὁ ἀφείς· ἐκεῖ δὲ πρὸς ὀξεῖαν ἢ πρὸς ὀρθὴν φέρεσθαι συμβαίνει. ἐπεὶ οὖν τὸ ἀντικροῦσαν κωλύει τὴν εἰς εὐθὺ κίνησιν, ὁμοίως κωλύει τὸ φερόμενον καὶ τὴν φορὰν αὐτοῦ. ὥσπερ οὖν ἐν τοῖς κατόπτροις τὸ ἄκρον τῆς εὐθείας οὐ ξυνέπεσεν ἢ ὀψις φαίνεται, καὶ ἐν τοῖς φερομένοις οὕτω τὸ ἐναντίον γίνεται· τοσαύτην γὰρ γωνίαν ἀπέωσται ὅση γίνεται ἢ κατὰ κορυφήν. δεῖ γὰρ νοῆσαι μετακινουμένην τὴν γωνίαν καὶ τὴν φορὰν. τούτου δὲ γενομένου φανερόν ὅτι πρὸς ὁμοίας γωνίας ἀνάγκη ἀφάλλεσθαι.

## ΙΖ. ΟΣΑ ΠΕΡΙ ΕΜΨΥΧΑ.

Διὰ τί οἱ ἀσύμμετροι παρ' ἀλλήλους θεωρούμενοι μείζους φαίνονται ἢ καθ' αὐτοὺς μόνους; ἢ ὅτι τὸ σύμμετρόν ἐστιν [916a] ἔν, καὶ ἡ συμμετρία ὅτι μάλιστα ἐν ποιεῖ, τὸ δὲ ἐν ἀδιαίρετον βούλεται εἶναι, τὸ δὲ ἀδιαίρετον ἔλαττον ἐστιν, ἢ δὲ συμμετρία κατὰ τὴν διαφορὰν πολλὰ ποιεῖ. καθ' αὐτὰ μὲν οὖν θεωρούμενα μᾶλλον λανθάνει ποῖα ἅττα τὰ μεγέθη ἐστί, παρ' ἀλλήλα δὲ οὐ. τὸ μὲν οὖν ἀδιαίρετον ἐν φαίνεται, καὶ ἡ θεωρία μία ἐστὶν αὐτοῦ διὰ τὴν συμμετρίαν· τὸ δὲ ἀσύμμετρον ὥς πολλὰ ὄν θεωρίαν ποιεῖ πλείω, καὶ μείζω φαίνεται τῷ ἐν ὃν πολλὰ φαίνεσθαι· ἔχει γὰρ τὴν τε τοῦ μεγέθους κατὰ τὴν συνέχειαν φύσιν, καὶ τὴν τοῦ ἀριθμοῦ κατὰ τὸ ἀνώμαλον τῶν μερῶν, διόπερ εἰκότως τὴν ἐξ ἀμφοῖν αὐξὴν ἔχον μείζον φαίνεται παρὰ τὸ ἀπλοῦν

καὶ ἔν.

Διὰ τί ἐπὶ μῆκος μᾶλλον τὰ ζῶα καὶ τὰ φυτὰ φύεται; ἢ ὅτι τὸ μῆκος μὲν τρὶς αὖξεται, τὸ δὲ πλάτος δῖς, τὸ δὲ βάθος ἅπαξ; ἔστι γὰρ μῆκος τὸ ἀπὸ τῆς ἀρχῆς πρῶτον, ὥστε μόνον τε αὖξεται, καὶ ἅμα τῷ πλάτει πάλιν γινόμενον, καὶ τρίτον ἅμα τῷ βάθει. τὸ δὲ πλάτος δῖς, καθ' ἑαυτό τε καὶ ἅμα τῷ μεγέθει.

Πῶς τὸ πρότερον καὶ τὸ ὕστερον δεῖ λαβεῖν; πότερον ὥσπερ ἡμῶν οἱ ἐπὶ Τροίας καὶ ἐκείνων οἱ πρὸ αὐτῶν καὶ ἀεὶ οἱ ἐπάνω πρότεροί εἰσιν; ἢ εἴπερ ἀρχὴ τίς ἐστι καὶ μέσον καὶ τέλος τοῦ παντός, καὶ ὅταν γηράσκων τις ἐπὶ τὸ πέρας ἔλθῃ καὶ πάλιν ἐπαναστρέψῃ ἐπὶ τὴν ἀρχὴν, τὰ δὲ ἐγγυτέρω τῆς ἀρχῆς πρότερα, τί κωλύει ἡμᾶς ἐν τῷ πρὸς τὴν ἀρχὴν εἶναι μᾶλλον; εἰ δὲ τοῦτο, κἂν πρότεροι εἴημεν. ὥσπερ ἐπὶ τοῦ οὐρανοῦ καὶ ἐκάστου τῶν ἄστρον φορᾷ κύκλος τίς ἐστι, τί κωλύει καὶ τὴν γένεσιν καὶ τὴν ἀπώλειαν τῶν φθαρτῶν τοιαύτην εἶναι, ὥστε πάλιν ταῦτα γίνεσθαι καὶ φθείρεσθαι; καθάπερ καὶ φασὶ κύκλον εἶναι τὰ ἀνθρώπινα. τὸ μὲν δὴ τῷ ἀριθμῷ τοὺς αὐτοὺς ἀξιοῦν εἶναι ἀεὶ τοὺς γινομένους εὖηθες, τὸ δὲ τῷ εἶδει μᾶλλον ἂν τις ἀποδέξαιτο· ὥστε κἂν αὐτοὶ πρότεροι εἴημεν, καὶ θεῖη ἂν τις τὴν τοῦ εἵρμοῦ τάξιν τοιαύτην εἶναι ὡς πάλιν ἐπανακάμπτειν ἐπὶ τὴν ἀρχὴν καὶ συνεχὲς ποιεῖν καὶ ἀεὶ κατὰ ταῦτ' ἔχειν. τοὺς γὰρ ἀνθρώπους φησὶν Ἀλκμαίων διὰ τοῦτο ἀπόλλυσθαι, ὅτι οὐ δύνανται τὴν ἀρχὴν τῷ τέλει προσάψαι, κομπῶς εἰρηκῶς, εἴ τις ὡς τύπῳ φράζοντος αὐτοῦ ἀποδέχοιτο καὶ μὴ διακριβοῦν ἐθέλοι τὸ λεχθέν. εἰ δὴ κύκλος ἐστί, τοῦ δὲ κύκλου μήτε ἀρχὴ μήτε πέρας, οὐδ' ἂν πρότεροι εἶεν τῷ ἐγγυτέρω τῆς ἀρχῆς εἶναι, οὐθ' ἡμεῖς ἐκείνων οὐτ' ἐκείνοι ἡμῶν.

## ΙΗ. ΟΣΑ ΠΕΡΙ ΦΙΛΟΛΟΓΙΑΝ.

[916b] Διὰ τί τοὺς μὲν, ἐὰν ἄρξωνται ἀναγινώσκειν, ὕπνος λαμβάνει καὶ μὴ βουλομένους, τοὺς δὲ βουλομένους προσεγρηγορέναι, ὅταν λάβωσι τὸ βιβλίον; ἢ ὅσοις μὲν εἰσι πνευματικαὶ κινήσεις διὰ ψυχρότητα φύσεως ἢ μελαγχολικῶν χυμῶν, δι' οὓς περίττωμα γίνεται πνευματικὸν ἄπεπτον διὰ ψυχρότητα, τούτοις ὅταν μὲν κινῆται ἡ διάνοια καὶ μὴ νοήσῃ ἐπιστήσασά τι, ἐκκρούεται τῇ ἐτέρᾳ κινήσει οὕσῃ καταψυκτικῇ, διὸ μᾶλλον καθεύδουσιν. ὅταν δὲ ἐρείσωσι πρὸς τι ἐν τῇ διανοίᾳ, ὅπερ ἡ ἀνάγνωσις ποιεῖ, κινοῦνται ὑπὸ τῆς θερμαντικῆς κινήσεως οὐκ ἐκκρουομένης ὑπ' οὐδενός, ὥστε οὐ δύνανται καθεύδειν. τῶν δὲ κατὰ φύσιν ἐχόντων ὅταν στῇ πρὸς ἓν ἡ διάνοια καὶ μὴ μεταβάλλῃ πολλαχῇ ἰσχυροτάτῃ οὕσα, ἴσχεται καὶ τὰ ἄλλα ὅσα ἐστὶ περὶ τὸν τόπον τοῦτον, ὧν ἡρέμησις ὁ ὕπνος ἐστίν. ὅταν δὲ στῇ καὶ οἶον κοπιάσῃ ὁ νοῦς, βαρύνει τὴν κεφαλὴν ὧν ἐν αὐτῇ καὶ ποιεῖ τὸν ὕπνον. κινουμένης δὲ τῆς

ψυχῆς κατὰ φύσιν οὐ καθεύδει· ζῆν γὰρ τότε μάλιστα. τὸ δ' ἐγρηγορέναι τοῦ ζῆν αἷτιόν ἐστιν ἢ τὸ καθεύδειν.

Διὰ τί οἱ ἐριστικοὶ λόγοι γυμναστικοὶ εἰσιν; ἢ ὅτι ἔχουσι τὸ νικᾶν ἢ ἡττᾶσθαι πυκνόν. φιλονείκους οὖν εὐθὺς ποιοῦσιν· καὶ γὰρ νικῶντες διὰ τὸ χαίρειν προάγονται μᾶλλον ἐρίζειν καὶ ἡττώμενοι ὡς ἀναμαχοῦμενοι. καὶ οἱ ἐν τοῖς ἄλλοις ἀγῶσι ταῦτό· διὸ καὶ μαχόμενοι καὶ ἡττους ὄντες πολλάκις οὐ βούλονται διαλύεσθαι.

Διὰ τί τοῖς παραδείγμασι χαίρουσιν ἄνθρωποι ἐν ταῖς ῥητορείαις καὶ τοῖς λόγοις μᾶλλον τῶν ἐνθυμημάτων; ἢ ὅτι τῷ τε μανθάνειν χαίρουσι καὶ τῷ ταχύ, ῥᾶον δὲ διὰ τῶν παραδειγμάτων καὶ τῶν λόγων μανθάνουσιν· ἃ γὰρ ἴσασιν, ἔστι ταῦτα καὶ ἐπὶ μέρους, τὰ δὲ ἐνθυμήματα ἀπόδειξις ἐστὶν ἐκ τῶν καθόλου, ἃ ἥττον ἴσμεν ἢ τὰ μέρη. ἔτι οἷς ἂν μαρτυρῶσι πλείους, μᾶλλον πιστεύομεν, τὰ δὲ παραδείγματα καὶ οἱ λόγοι μαρτυρίας ἐοίκασιν· αἱ δὲ διὰ τῶν μαρτύρων ῥᾶδιοι πίστεις. ἔτι τὸ ὅμοιον μανθάνουσιν ἡδέως, τὸ δὲ παράδειγμα καὶ οἱ μῦθοι τὸ ὅμοιον δεικνύουσιν.

Διὰ τί ῥήτορα μὲν καὶ στρατηγὸν καὶ χρηματιστὴν λέγομεν δεινόν, ἀύλητὴν δὲ καὶ ὑποκριτὴν οὐ λέγομεν; ἢ ὅτι τῶν μὲν ἡ δύναμις ἄνευ πλεονεξίας (ἡδονῆς γὰρ στοχαστική ἐστὶ), τῶν δὲ πρὸς τὸ πλεονεκτεῖν· ῥήτωρ γὰρ καὶ στρατηγὸς [917a] καὶ χρηματιστὴς ἀγαθός ἐστὶν ὁ δυνάμενος πλέον ἔχειν, ἡ δὲ δεινότης μάλιστα ἐν τῷ πλεονεκτεῖν ἐστίν.

Διὰ τί τὸν φιλόσοφον τοῦ ῥήτορος οἶονται διαφέρειν; ἢ ὅτι ὁ μὲν τί ἐστὶν ἀδικία, ὁ δὲ ὡς ἀδικὸς ὁ δεῖνα, καὶ ὁ μὲν ὅτι τύραννος, ὁ δὲ οἶον ἢ τυραννίς.

Διὰ τί, ἅπερ ἂν τίνες προέλωνται, ἐνδιατρίβουσι τούτοις ἐνίοτε φαύλοις οὖσι μᾶλλον ἢ ἐν τοῖς σπουδαιοτέροις, οἶον θαυματοποιὸς ἢ μῦθος ἢ συρικτὴς μᾶλλον ἢ ἀστρονόμος ἢ ῥήτωρ εἶναι ἂν βούλοιτο ὁ ταῦτα προελόμενος. ἢ ὅτι βούλονται μὲν ἐνιοὶ τὰ σπουδαιότατα μεταχειρίζεσθαι, διὰ δὲ τὸ μὴ πιστεύειν ἑαυτοῖς ὡς δυνησομένοις, διὰ τοῦτο οὐ πράττουσιν; ἢ ὅτι ἐν οἷς οἴεται ἕκαστος κρατisteύειν, ταῦτα προαιρεῖται· ὃ δὲ αἰρεῖται, καὶ ἐπὶ τοῦτ' ἐπέιξεται, νέμων τὸ πλεῖστον ἡμέρας αὐτῷ μέρος, ἵνα αὐτὸς αὐτοῦ τυγχάνει κράτιστος ὢν. ὅτι δὲ ἂν τινες ἐξ ἀρχῆς προέλωνται καὶ οἷς ἂν συνεθισθῶσιν, οὐδὲ κρίνειν ἔτι δύνανται τὰ βελτίω· διέφθαρται γὰρ ἡ διάνοια διὰ φαύλας προαιρέσεις.

Διὰ τί τοὺς μὲν, ἂν ἄρξωνται ἀναγινώσκειν, ὕπνος λαμβάνει καὶ μὴ

βουλομένους, τοὺς δὲ οὐ βουλομένους ποιεῖ δύνασθαι, ὅταν λάβωσι βιβλίον; ἢ ὅσοις μὲν εἰσι πνευματικαὶ κινήσεις διὰ ψυχρότητα φύσεως ἢ μελαγχολικῶν χυμῶν, δι' οὓς περίπτωμα γίνεται πνευματικὸν ἄπεπτον διὰ ψυχρότητα, τούτοις ὅταν μὲν κινῆται ἡ διάνοια καὶ μὴ νοῇ ἐπιστήσασά τι, ἐκκρούεται ἡ ἑτέρα κίνησις, διὸ μᾶλλον μεταβάλλοντες πολὺ τὴν διάνοιαν καθεύδουσιν· ἡττᾶται γὰρ ἡ πνευματική. ὅταν δὲ ἐρείσῃσι πρὸς τι τὴν διάνοιαν, ὅπερ ἡ ἀνάγνωσις ποιεῖ, κινοῦνται ὑπὸ τῆς πνευματικῆς κινήσεως, οὐκ ἐκκρουομένης ὑπ' οὐδενός, ὥστε οὐ δύνανται καθεύδειν. τῶν δὲ κατὰ φύσιν ἐχόντων ὅταν στῇ πρὸς ἓν ἡ διάνοια καὶ μὴ μεταβάλλῃ πολλαχῇ, ἴσταται καὶ τὰ ἄλλα ὅσα περὶ τὸν τόπον, ὧν ἡρέμησις ὁ ὕπνος ἐστίν. ἐνὸς γὰρ κυρίου στάντος, ὥσπερ ἐν τροπῇ, καὶ τὰ ἄλλα μόρια ἴστασθαι πέφυκεν. φύσει γὰρ ἄνω τὸ κοῦφον φέρεται, τὸ δὲ βαρὺ κάτω. ὅταν οὖν ἡ ψυχὴ κινῆται κατὰ φύσιν, οὐ καθεύδει· οὕτω γὰρ ἔχει. ὅταν δὲ στῇ καὶ οἷον κοπιάσῃ, ὁ μὲν νοῦς μεταβάλλει, καὶ ἄνω τὰ σωματώδη πρὸς τὴν κεφαλὴν ἰόντα ποιεῖ τὸν ὕπνον. δόξειε δ' ἂν ἡ ἀνάγνωσις κωλύειν καθεύδειν. ἔστι δὲ οὐ διὰ τὸ νοεῖν (ῥίσκεται γὰρ τότε μᾶλλον ἡ ψυχὴ) ἀλλὰ διὰ τὸ μεταβάλλειν ἡ ἀγρυπνία, ἐπεὶ καὶ νοήσεις αἰτιαῦνται [917b] ἀγρυπνοὶ εἰσιν, ἐν αἷς ζητεῖ ἡ ψυχὴ καὶ ἀπορεῖ, ἀλλ' οὐκ ἐν αἷς ἀεὶ θεωρεῖ· ἐκεῖναι μὲν γὰρ ἀοριστεῖν ποιοῦσιν, αὗται δὲ οὐ.

Διὰ τί ἐν τοῖς ἐριστικοῖς οὐκ ἔνεστιν ἀδολεσχία; ἢ ὅτι συλλογισμὸς ἐστὶ φαινόμενος, ἐν ὀλίγοις δὲ ὁ συλλογισμὸς· καὶ ἐὰν μηκύνῃ, χρόνου γινομένου ὁ παραλογισμὸς δῆλος, καὶ ἔστιν ὃ ἔδωκεν ἀναλαβεῖν.

Διὰ τί ποτε τῶν ἱστοριῶν ἥδιον ἀκούομεν τῶν περὶ ἓν συνεστηκυῶν ἢ τῶν περὶ πολλὰ πραγματευομένων; ἢ διότι τοῖς γνωριμωτέροις μᾶλλον προσέχομεν καὶ ἥδιον αὐτῶν ἀκούομεν· γνωριμώτερον δὲ ἐστὶ τὸ ῥιζόμενον τοῦ ἀορίστου. τὸ μὲν οὖν ἐν ῥίσκεται, τὰ δὲ πολλὰ τοῦ ἀπείρου μετέχει.

Διὰ τί ἡδόμεθα ἀκούοντες τὰ μήτε λίαν παλαιὰ μήτε κομιδῇ νέα; ἢ διότι τοῖς μὲν πόρρω ἀφ' ἡμῶν ἀπιστοῦμεν, ἐφ' οἷς δὲ ἀπιστοῦμεν, οὐχ ἡδόμεθα· τὰ δὲ ὥσπερ ἔτι αἰσθανόμεθα, καὶ περὶ τούτων ἀκούοντες οὐχ ἡδόμεθα.

## **ΙΘ. ΟΣΑ ΠΕΡΙ ΑΡΜΟΝΙΑΝ.**

Διὰ τί οἱ πονοῦντες καὶ οἱ ἀπολαύοντες αὐλοῦνται; ἢ ἵνα οἱ μὲν ἥττον λυπῶνται, οἱ δὲ μᾶλλον χαίρῳσιν.

Διὰ τί πορρωτέρω ὁ αὐτὸς τῇ αὐτῇ φωνῇ γεγωνεῖ μετ' ἄλλων ᾄδων καὶ βοῶν ἢ μόνος; ἢ ὅτι τὸ ἀθρόως τι ποιεῖν ἢ θλίβειν ἢ ὠθεῖν οὐ



τοσαυταπλάσιόν ἐστιν ὅσος ὁ ἀριθμός, ἀλλ' ὥσπερ ἡ γραμμὴ ἢ δίπους οὐ διπλάσιον ἀλλὰ τετραπλάσιόν τι γράφει, οὕτω τὰ συντιθέμενα πλεον ἰσχύει κατὰ τὸν ἀριθμὸν ἢ ὅταν ἢ διηρημένα. ἀθρόων οὖν ὄντων μία γίνεται ἢ τῆς φωνῆς ἰσχύς καὶ ἅμα ὠθεῖ τὸν ἀέρα, ὥστε πολλαπλάσιον προῖέναι· καὶ γὰρ ἡ ἐκ πάντων φωνὴ μιᾶς ἐκάστης πολλαπλάσιος.

Διὰ τί τὴν παρυπάτην ἄδοντες μάλιστα ἀπορρήγνυνται, οὐχ ἥττον ἢ τὴν νήτην καὶ τὰ ἄνω, μετὰ δὲ διαστάσεως πλείονος; ἢ ὅτι χαλεπώτατα ταύτην ἄδουσι, καὶ αὕτη ἀρχή; τὸ δὲ χαλεπὸν διὰ τὴν ἐπίτασιν καὶ πίεσιν τῆς φωνῆς· ἐν τούτοις δὲ πόνος· πονοῦντα δὲ μᾶλλον διαφθείρεται.

Διὰ τί δὲ ταύτην χαλεπῶς, τὴν δὲ ὑπάτην ῥαδίως; καίτοι δίεσις ἐκατέρας. ἢ ὅτι μετ' ἀνέσεως ἡ ὑπάτη, καὶ ἅμα μετὰ τὴν σύστασιν ἐλαφρὸν τὸ ἄνω βάλλειν; διὰ ταῦτο δὲ ἔοικε καὶ τὰ πρὸς μίαν λεγόμενα πρὸς ταύτην ἢ παρανήτην. δεῖ γὰρ μετὰ συννοίας καὶ καταστάσεως οἰκειοτάτης [918a] τῷ ἦθει πρὸς τὴν βούλησιν. τοῦ δὲ δὴ μετὰ συμφωνίας τίς ἡ αἰτία;

Διὰ τί ἥδιον ἀκούουσιν ἀδόντων ὅσα ἂν προεπιστάμενοι τυγχάνωσι τῶν μελῶν, ἢ ὧν μὴ ἐπίστανται; πότερον ὅτι μᾶλλον δῆλος ὁ τυγχάνων ὥσπερ σκοποῦ, ὅταν γνωρίζωσι τὸ ἀδόμενον; τοῦτο δὲ ἡδὺ θεωρεῖν. ἢ ὅτι ἡδὺ τὸ μανθάνειν; τούτου δὲ αἴτιον ὅτι τὸ μὲν λαμβάνειν τὴν ἐπιστήμην, τὸ δὲ χρῆσθαι καὶ ἀναγνωρίζειν ἐστίν. ἔτι καὶ τὸ σύνηθες ἡδὺ μᾶλλον τοῦ ἀσυνήθους.

Διὰ τί ἡ παρακαταλογὴ ἐν ταῖς ὠδαῖς τραγικόν; ἢ διὰ τὴν ἀνωμαλίαν; παθητικὸν γὰρ τὸ ἀνωμαλὲς καὶ ἐν μεγέθει τύχης ἢ λύπης. τὸ δὲ ὀμαλὲς ἔλαττον γοῶδες.

Διὰ τί οἱ ἀρχαῖοι ἐπταχόρδους ποιοῦντες ἀρμονίας τὴν ὑπάτην ἀλλ' οὐ τὴν νήτην κατέλιπον; πότερον τοῦτο ψεῦδος (ἀμφοτέρας γὰρ κατέλιπον, τὴν δὲ τρίτην ἐξήρουν) ἢ οὐ; ἀλλ' ὅτι ἡ βαρυτέρα ἰσχύει τὸν τῆς ὀξυτέρας φθόγγον, ὥστε μᾶλλον ἡ ὑπάτη ἀπεδίδου τὸ ἀντίφωνον ἢ ἡ νήτη, ἐπεὶ τὸ ὀξὺ δυνάμει μᾶλλον, τὸ δὲ βαρὺ ῥᾶον φθέγγασθαι.

Διὰ τί ἡ βαρεῖα τὸν τῆς ὀξείας ἰσχύει φθόγγον; ἢ ὅτι μεῖζον τὸ βαρὺ; τῇ γὰρ ἀμβλείᾳ ἔοικε, τὸ δὲ τῇ ὀξείᾳ γωνία.

Διὰ τί ἥδιον τῆς μονωδίας ἀκούομεν, ἐάν τις πρὸς αὐλὸν ἢ λύραν ᾄδῃ; καίτοι πρὸς χορδὰς καὶ τὸ αὐτὸ μέλος ἄδουσιν ἀμφοτέρως· εἰ γὰρ ἔτι μᾶλλον τὸ αὐτό, πλεον ἔδει πρὸς πολλοὺς αὐλητάς, καὶ ἔτι ἥδιον εἶναι. ἢ ὅτι

τυγχάνων δῆλος τοῦ σκοποῦ μᾶλλον, ὅταν πρὸς αὐτὸν ἢ λύραν; τὸ δὲ πρὸς πολλοὺς αὐλητὰς ἢ λύρας πολλὰς οὐχ ἥδιον, ὅτι ἀφανίζει τὴν ᾠδὴν.

Διὰ τί, εἰ ἥδιον ἢ ἀνθρώπου φωνή, ἢ ἄνευ λόγου ἄδοντος οὐχ ἡδίον ἐστίν, οἷον τερετιζόντων, ἀλλ' αὐλὸς ἢ λύρα; ἢ οὐδ' ἐκεῖ, ἐὰν μὴ μιμῆται, ὁμοίως ἡδύ; οὐ μὴν ἀλλὰ καὶ διὰ τὸ ἔργον αὐτό. ἢ μὲν γὰρ φωνὴ ἡδίον ἢ τοῦ ἀνθρώπου, κρουστικὰ δὲ μᾶλλον τὰ ὄργανα τοῦ στόματος. διὸ ἥδιον ἀκούειν ἢ τερετίζειν.

Διὰ τί ἡ ἀπηχοῦσα ὀξυτέρα; ἢ ὅτι ἔλαττον, ἀσθενεστέρα γινομένη;

Διὰ τί τῶν χορδῶν ἡ βαρυτέρα ἀεὶ τὸ μέλος λαμβάνει; ἂν γὰρ δέηται ἄσαι τὴν παραμέσσην σὺν ψιλῇ τῇ μέσῃ, γίνεται τὸ μέσον οὐθὲν ἦττον· ἐὰν δὲ τὴν μέσσην δέον ἄμφω, ψιλὰ οὐ γίνεται. ἢ ὅτι τὸ βαρὺ μέγα ἐστίν, ὥστε κρατερόν; [918b] καὶ ἔνεστιν ἐν τῷ μεγάλῳ τὸ μικρόν· καὶ τῇ διαλήψει δύο νῆται ἐν τῇ ὑπάτῃ γίνονται.

Διὰ τί ἐν τῇ διὰ πασῶν τοῦ μὲν ὀξέος ἀντίφωνον γίνεται τὸ βαρὺ, τούτου δὲ τὸ ὀξὺ οὐ; ἢ ὅτι μάλιστα μὲν ἐν ἀμφοῖν ἐστὶ τὸ ἀμφοῖν μέλος, εἰ δὲ μή, ἐν τῷ βαρεῖ· μεῖζον γάρ.

Διὰ τί λανθάνει τὸ διὰ πασῶν, καὶ δοκεῖ ὁμόφωνον εἶναι, οἷον ἐν τῷ φοινικίῳ καὶ ἐν τῷ ἀνθρώπῳ; τὰ γὰρ ἐν τοῖς ὀξέσιν ὄντα οὐχ ὁμόφωνα, ἀλλ' ἀνάλογον ἀλλήλοις διὰ πασῶν. ἢ ὅτι ὥσπερ ὁ αὐτὸς εἶναι δοκεῖ φθόγγος, διὰ τὸ ἀνάλογον ἰσότης ἐπὶ φθόγγων; τὸ δὲ ἴσον τοῦ ἐνός. ταῦτό δὲ τοῦτο καὶ ἐν ταῖς σύριγξιν ἐξαπατῶνται.

Διὰ τί οἱ μὲν νόμοι οὐκ ἐν ἀντιστρόφοις ἐποιοῦντο, αἱ δὲ ἄλλαι ᾠδαὶ αἱ χορικά; ἢ ὅτι οἱ μὲν νόμοι ἀγωνιστῶν ἦσαν, ὧν ἤδη μιμεῖσθαι δυναμένων καὶ διατείνεσθαι ἢ ᾠδὴ ἐγίνετο μακρὰ καὶ πολυειδής; καθάπερ οὖν καὶ τὰ ῥήματα, καὶ τὰ μέλη τῇ μιμήσει ἠκολούθει ἀεὶ ἕτερα γινόμενα. μᾶλλον γὰρ τῷ μέλει ἀνάγκη μιμεῖσθαι ἢ τοῖς ῥήμασιν. διὸ καὶ οἱ διθύραμβοι, ἐπειδὴ μιμητικοὶ ἐγένοντο, οὐκέτι ἔχουσιν ἀντιστρόφους, πρότερον δὲ εἶχον. αἴτιον δὲ ὅτι τὸ παλαιὸν οἱ ἐλεύθεροι ἐχόρευον αὐτοί· πολλοὺς οὖν ἀγωνιστικῶς ἄδειν χαλεπὸν ἦν, ὥστε ἐναρμόνια μέλη ἐνῆδον. μεταβάλλειν γὰρ πολλὰς μεταβολὰς τῷ ἐνὶ ῥῶον ἢ τοῖς πολλοῖς, καὶ τῷ ἀγωνιστῇ ἢ τοῖς τὸ ἦθος φυλάττουσιν. διὸ ἀπλούστερα ἐποίουν αὐτοῖς τὰ μέλη. ἢ δὲ ἀντίστροφος ἀπλοῦν· ἀριθμὸς γάρ ἐστι καὶ ἐνὶ μετρεῖται. τὸ δ' αὐτὸ αἴτιον καὶ διότι τὰ μὲν ἀπὸ τῆς σκηνῆς οὐκ ἀντίστροφα, τὰ δὲ τοῦ χοροῦ ἀντίστροφα· ὁ μὲν

γὰρ ὑποκριτῆς ἀγωνιστῆς καὶ μιμητῆς, ὁ δὲ χορὸς ἤττον μιμεῖται.

Διὰ τί ἥδιον τὸ ἀντίφωνον τοῦ συμφώνου; ἢ ὅτι μᾶλλον διάδηλον γίνεται τὸ συμφωνεῖν ἢ ὅταν πρὸς τὴν συμφωνίαν ᾄδῃ; ἀνάγκη γὰρ τὴν ἑτέραν ὁμοφωνεῖν, ὥστε δύο πρὸς μίαν φωνὴν γινόμεναι ἀφανίζουσι τὴν ἑτέραν.

Διὰ τί πέντε οὐκ ᾄδουσιν ἀντίφωνα; ἢ ὅτι οὐχ ἡ αὐτὴ ἡ σύμφωνος τῇ συμφωνίᾳ, ὥσπερ ἐν τῷ διὰ πασῶν; ἐκείνη γὰρ ἐν τῷ βαρεῖ ἀνάλογον, ὡς ἡ ὀξεῖα ἐν τῷ ὀξεῖ. ὥσπερ οὖν ἡ αὐτὴ ἐστὶν ἅμα καὶ ἄλλη. αἱ δὲ ἐν τῷ διὰ πέντε καὶ διὰ τεττάρων οὐκ ἔχουσιν οὕτως, ὥστε οὐκ ἐμφαίνεται ὁ τῆς ἀντιφώνου φθόγγος· οὐ γὰρ ἐστὶν ὁ αὐτός.

Διὰ τί ἡ διὰ πασῶν συμφωνία ᾄδεται μόνη; μαγαδίζουσι [919a] γὰρ ταύτην, ἄλλην δὲ οὐδεμίαν. ἢ ὅτι μόνη ἐξ ἀντιφώνων ἐστὶ χορδῶν, ἐν δὲ τοῖς ἀντιφώνοις καὶ τὴν ἑτέραν ἐὰν ᾄδῃ, τὸ αὐτὸ ποιεῖ; ἢ γὰρ μία τρόπον τινὰ τὰς ἀμφοτέρων ἔχει φωνάς, ὥστε καὶ μιᾶς ἀδομένης ἐν ταύτῃ τῇ συμφωνίᾳ ᾄδεται ἡ συμφωνία, καὶ ἄμφω ᾄδοντες· ἢ τῆς μὲν ἀδομένης τῆς δὲ ἀνυλόμενης ὥσπερ μίαν ἄμφω ᾄδουσιν. διὸ μόνη μελωδεῖται, ὅτι μιᾶς ἔχει χορδῆς φωνὴν τὰ ἀντίφωνα.

Διὰ τί δὲ ταῖς ἀντιφώνοις τοῦτο μόναις ὑπάρχει; ἢ ὅτι μόναι ἴσον ἀπέχουσι τῆς μέσης; ἢ οὖν μεσότης ὁμοιότητά τινα ποιεῖ τῶν φθόγγων, καὶ ἔοικεν ἡ ἀκοὴ λέγειν ὅτι ἡ αὐτὴ καὶ ὅτι ἀμφοτέραι ἔσχαται.

Διὰ τί, ἐὰν μὲν τις τὴν μέσην κινήσῃ ἡμῶν, ἀρμόσας τὰς ἄλλας χορδάς, καὶ χρῆται τῷ ὀργάνῳ, οὐ μόνον ὅταν κατὰ τὸν τῆς μέσης γένηται φθόγγον, λυπεῖ καὶ φαίνεται ἀνάρμοστον, ἀλλὰ καὶ κατὰ τὴν ἄλλην μελωδίαν· ἐὰν δὲ τὴν λιχανὸν ἢ τινα ἄλλον φθόγγον, τότε φαίνεται διαφέρειν μόνον, ὅταν κάκῃ τις χρῆται; ἢ εὐλόγως τοῦτο συμβαίνει; πάντα γὰρ τὰ χρηστὰ μέλη πολλάκις τῇ μέσῃ χρῆται, καὶ πάντες οἱ ἀγαθοὶ ποιηταὶ πυκνὰ πρὸς τὴν μέσην ἀπαντῶσι, κἂν ἀπέλθωσι, ταχὺ ἐπανέρχονται, πρὸς δὲ ἄλλην οὕτως οὐδεμίαν. καθάπερ ἐκ τῶν λόγων ἐνίων ἐξαιρεθέντων συνδέσμων οὐκ ἔστιν ὁ λόγος Ἑλληνικός, οἷον τὸ τέ καὶ τὸ καί, ἔνιοι δὲ οὐθὲν λυποῦσι διὰ τὸ τοῖς μὲν ἀναγκαῖον εἶναι χρῆσθαι πολλάκις, εἰ ἔσται λόγος, τοῖς δὲ μή, οὕτω καὶ τῶν φθόγγων ἡ μέση ὥσπερ σύνδεσμός ἐστι, καὶ μάλιστα τῶν καλῶν, διὰ τὸ πλειστάκις ἐνυπάρχειν τὸν φθόγγον αὐτῆς.

Διὰ τί τῶν ἀδόντων οἱ βαρύτερον ᾄδοντες τῶν ὀξὺ ἀδόντων, ἐὰν ἀπάδωσι, μᾶλλον κατάδηλοι γίνονται; ὁμοίως δὲ καὶ τῷ ῥυθμῷ οἱ ἐν τῷ

βαρυτέρω πλημμελοῦντες κατάδηλοι μᾶλλον. πότερον ὅτι πλείων ὁ χρόνος ὁ τοῦ βαρέος, οὗτος δὲ μᾶλλον αἰσθητός; ἢ ὅτι ἐν πλείονι χρόνῳ πλείω αἰσθησιν παρέχει, τὸ δὲ ταχὺ καὶ ὀξὺ λανθάνει διὰ τὸ τάχος.

Διὰ τί οἱ πολλοὶ μᾶλλον ἄδοντες τὸν ῥυθμὸν σώζουσιν ἢ οἱ ὀλίγοι; ἢ ὅτι μᾶλλον πρὸς ἓνα τε καὶ ἡγεμόνα βλέπουσι, καὶ βαρύτερον ἄρχονται, ὥστε ῥᾶον τοῦ αὐτοῦ τυγχάνουσιν; ἐν γὰρ τῷ τάχει ἡ ἁμαρτία πλείων.

[919b] Διὰ τί διπλασία ἡ νήτη τῆς ὑπάτης; ἢ πρῶτον μὲν ὅτι ἐκ τοῦ ἡμίσεος ἡ χορδὴ ψαλλομένη καὶ ὅλη συμφωνοῦσα διὰ πασῶν; ὁμοίως δὲ ἔχει καὶ ἐπὶ τῶν συρίγγων· ἡ γὰρ διὰ τοῦ μέσου τῆς σύριγγος τρήματος φωνὴ τῇ δι' ὅλης τῆς σύριγγος συμφωνεῖ διὰ πασῶν. ἔτι ἐν τοῖς ἄλλοις τῷ διπλασίῳ διαστήματι λαμβάνεται τὸ διὰ πασῶν, καὶ οἱ αὐλοτρῦπαι οὕτω λαμβάνουσιν. ὁμοίως δὲ καὶ τὸ διὰ πέντε τῷ ἡμιολίῳ, ὅτι οἱ τὰς σύριγγας ἀρμοττόμενοι εἰς μὲν τὴν ὑπάτην ἄκραν τὸν κηρὸν ἐμπλάττουσι, τὴν δὲ νήτην μέχρι τοῦ ἡμίσεος ἀναπληροῦσιν. ὁμοίως δὲ καὶ τὴν διὰ πέντε τῷ ἡμιολίῳ καὶ τὴν διὰ τεττάρων τῷ ἐπιτρίτῳ διαστήματι λαμβάνουσιν. ἔτι οἱ ἐν τοῖς τριγώνοις ψαλτηρίοις τῆς ἴσης ἐπιτάσεως γινομένης συμφωνοῦσι διὰ πασῶν, ἡ μὲν διπλασία οὖσα, ἡ δὲ ἡμίσεια τῷ μήκει.

Διὰ τί, ἐὰν τις ψήλας τὴν νήτην ἐπιλάβῃ, ἡ ὑπάτη μόνη δοκεῖ ἀντηχεῖν; ἢ ὅτι συμφυῆς μάλιστα γίνεται τῷ φθόγγῳ ὁ ἀπὸ ταύτης ἤχος διὰ τὸ σύμφωνος εἶναι; τῷ οὖν συναυξάνεσθαι τῷ ὁμοίῳ φαίνεται ὁ μόνος, οἱ δὲ ἄλλοι διὰ μικρότητα ἀφανεῖς.

Διὰ τί μέση καλεῖται ἐν ταῖς ἀρμονίαις, τῶν δὲ ὀκτὼ οὐκ ἔστι μέσον; ἢ ὅτι ἐπτάχορδοι ἦσαν αἱ ἀρμονίαι τὸ παλαιόν, τὰ δὲ ἐπτὰ ἔχει μέσον.

Διὰ τί ἐπὶ τὸ ὀξὺ ἀπάδουσιν οἱ πλεῖστοι; πότερον ὅτι ῥᾶον ὀξὺ ἄσαι ἢ βαρὺ; ἢ ὅτι χεῖρον τοῦ βαρέος; ἁμαρτία δέ ἐστι τοῦ χείρονος πρᾶξις.

Διὰ τί τὸ ἀκουστὸν μόνον ἦθος ἔχει τῶν αἰσθητῶν; καὶ γὰρ ἐὰν ἡ ἄνευ λόγου μέλος, ὅμως ἔχει ἦθος· ἀλλ' οὐ τὸ χρῶμα οὐδὲ ἡ ὁσμὴ οὐδὲ ὁ χυμὸς ἔχει. ἢ ὅτι κίνησιν ἔχει μόνον οὐχί, ἦν ὁ ψόφος ἡμᾶς κινεῖ; τοιαύτη μὲν γὰρ καὶ τοῖς ἄλλοις ὑπάρχει· κινεῖ γὰρ καὶ τὸ χρῶμα τὴν ὄψιν· ἀλλὰ τῆς ἐπομένης τῷ τοιούτῳ ψόφῳ αἰσθανόμεθα κινήσεως. αὕτη δὲ ἔχει ὁμοιότητα ἐν τε τοῖς ῥυθμοῖς καὶ ἐν τῇ τῶν φθόγγων τάξει τῶν ὀξέων καὶ βαρέων, οὐκ ἐν τῇ μίξει. ἀλλ' ἡ συμφωνία οὐκ ἔχει ἦθος. ἐν δὲ τοῖς ἄλλοις αἰσθητοῖς τοῦτο οὐκ ἔστιν. αἱ δὲ κινήσεις αὗται πρακτικαὶ εἰσιν, αἱ δὲ πράξεις ἡθους

σημασία ἐστίν.

Διὰ τί νόμοι καλοῦνται οὐς ἄδουσιν; ἢ ὅτι πρὶν ἐπίστασθαι γράμματα, ἤδον τοὺς νόμους, ὅπως μὴ ἐπιλάθωνται, [920a] ὥσπερ ἐν Ἀγαθύρσοις ἔτι εἰώθασιν; καὶ τῶν ὑστέρων οὖν ὠδῶν τὰς πρώτας τὸ αὐτὸ ἐκάλεσαν ὅπερ τὰς πρώτας.

Διὰ τί οἱ ῥυθμοὶ καὶ τὰ μέλη φωνῇ οὔσα ἤθεσιν ἔοικεν, οἱ δὲ χυμοὶ οὐ, ἀλλ' οὐδὲ τὰ χρώματα καὶ αἱ ὀσμαί; ἢ ὅτι κινήσεις εἰσὶν ὥσπερ καὶ αἱ πράξεις; ἤδη δὲ ἡ μὲν ἐνέργεια ἠθικὸν καὶ ποιεῖ ἦθος, οἱ δὲ χυμοὶ καὶ τὰ χρώματα οὐ ποιοῦσιν ὁμοίως.

Διὰ τί οὐδὲ ὑποδωριστὶ οὐδὲ ὑποφρυγιστὶ οὐκ ἔστιν ἐν τραγωδίᾳ χορικόν; ἢ ὅτι οὐκ ἔχει ἀντίστροφον. ἀλλ' ἀπὸ σκηνῆς μιμητικὴ γάρ.

Διὰ τί οἱ περὶ Φρύνιχον ἦσαν μᾶλλον μελοποιοί; ἢ διὰ τὸ πολλαπλάσια εἶναι τότε τὰ μέλη ἐν ταῖς τραγωδίαις τῶν μέτρων;

Διὰ τί διὰ πασῶν καλεῖται, ἀλλ' οὐ κατὰ τὸν ἀριθμὸν δι' ὀκτώ, ὥσπερ καὶ διὰ τεττάρων καὶ διὰ πέντε; ἢ ὅτι ἑπτὰ ἦσαν αἱ χορδαὶ τὸ ἀρχαῖον, εἴτ' ἐξελὼν τὴν τρίτην Τέρπανδρος τὴν νήτην προσέθηκε, καὶ ἐπὶ τούτου ἐκλήθη διὰ πασῶν ἀλλ' οὐ δι' ὀκτώ· δι' ἑπτὰ γὰρ ἦν.

Διὰ τί εὐαρμοστότερον ἀπὸ τοῦ ὀξέος ἐπὶ τὸ βαρὺ ἢ ἀπὸ τοῦ βαρέος ἐπὶ τὸ ὀξύ; πότερον ὅτι τὸ ἀπὸ τῆς ἀρχῆς γίνεται ἄρχεσθαι; ἡ γὰρ μέση καὶ ἡγεμὼν ὀξυτάτη τοῦ τετραχόρδου. τὸ δὲ οὐκ ἀπ' ἀρχῆς ἀλλ' ἀπὸ τελευτῆς. ἢ ὅτι τὸ βαρὺ ἀπὸ τοῦ ὀξέος γενναιότερον καὶ εὐφωνότερον;

Διὰ τί δις μὲν δι' ὀξειῶν καὶ δις διὰ τεττάρων οὐ συμφωνεῖ, δις διὰ πασῶν δέ; ἢ ὅτι ἡ δις δι' ὀξειῶν οὐ δις διὰ τεττάρων ἐστίν, τὸ δὲ διὰ τεττάρων καὶ διὰ πέντε.

Διὰ τί ἡ διὰ πασῶν καλλίστη συμφωνία; ἢ ὅτι ἐν ὅλοις ὅροις οἱ ταύτης λόγοι εἰσὶν, οἱ δὲ τῶν ἄλλων οὐκ ἐν ὅλοις; ἐπεὶ γὰρ διπλασία ἡ νήτη τῆς ὑπάτης, οἷα ἡ νήτη δύο, ἡ ὑπάτη ἓν, καὶ οἷα ἡ ὑπάτη δύο, ἡ νήτη τέσσαρα, καὶ αἰεὶ οὕτως. τῆς δὲ μέσης ἡμιόλια. τὸ γὰρ διὰ πέντε ἡμιόλιον οὐκ ἐν ὅλοις ἀριθμοῖς ἐστίν· οἷον γὰρ ἐν τῷ ἑλαττον, τὸ μεῖζον τοσοῦτον δὲ καὶ ἔτι τὸ ἥμισυ. ὥστε οὐχ ὅλα πρὸς ὅλα συγκρίνεται, ἀλλ' ἔπεστι μέρη. ὁμοίως δὲ καὶ ἐν τῷ διὰ τεττάρων ἔχει· τὸ γὰρ ἐπίτρίτον ἐστίν ὅσον τεμεῖν ὃ καὶ ἔτι ἐν τῶν τεττάρων ἐπίτρίτον ἐστίν. ἢ ὅτι τελεωτάτη ἐξ ἀμφοτέρων οὔσα, καὶ ὅτι

μέτρον τῆς μελωδίας διὰ παντὸς τοῦ φερομένου ἢ κατὰ μέσον κίνησις σφοδροτάτη, [920b] ἀρχομένου δὲ καὶ λήγοντος μαλακωτέρα; ὅτε δὲ σφοδροτάτη ἢ κίνησις, καὶ ἡ φωνὴ ὀξυτέρα τοῦ φερομένου. διὸ καὶ χορδαὶ ἐπιτεινόμεναι ὀξύτερον φθέγγονται· θᾶττον γὰρ ἡ κίνησις γίνεται. ἡ δὲ φωνὴ ἢ ἀέρος ἢ ἄλλου τινὸς φορὰ· τὴν ἀνὰ μέσον τὸν πόρον ὀξυτάτην δεῖ γίνεσθαι. ὥστε εἰ τοῦτο μὴ συμβαίνει, οὐκ ἂν εἴη φορὰ τινος. Διὰ τί, ἐὰν μὲν ἡ μέση κινηθῇ, καὶ αἱ ἄλλαι χορδαὶ ἡχοῦσι φθεγγόμεναι, ἐὰν δὲ αὐτὴ μὲν μένη τῶν δ' ἄλλων τις κινηθῇ, κινηθεῖσα μόνη φθέγγεται; ἢ ὅτι τὸ ἡρμόσθαι ἐστὶν ἀπάσαις, τὸ δὲ ἔχειν πῶς πρὸς τὴν μέσην ἀπάσαις, καὶ ἡ τάξις ἢ ἐκάστης ἤδη δι' ἐκείνην; ἀρθέντος οὖν τοῦ αἰτίου τοῦ ἡρμόσθαι καὶ τοῦ συνέχοντος οὐκέτι ὁμοίως φαίνεται ὑπάρχειν. μιᾶς δὲ ἀναρμόστου οὔσης, τῆς δὲ μέσης μενούσης, εὐλόγως τὸ κατ' αὐτὴν ἐκλειπόμενον· ταῖς γὰρ ἄλλαις ὑπάρχει τὸ ἡρμόσθαι.

Διὰ τί τοῦ ἐν φωνῇ ὀξέος ὄντος κατὰ τὸ ὀλίγον, τοῦ δὲ βαρέος κατὰ τὸ πολὺ (τὸ μὲν γὰρ βαρὺ διὰ τὸ πλῆθος βαρὺ, τὸ δὲ ὀξὺ δι' ὀλιγότητα ταχὺ), ἔργον μᾶλλον ἄδειν τὰ ὀξέα ἢ τὰ βαρέα, καὶ ὀλίγοι τὰ ἄνω δύνανται ἄδειν, καὶ οἱ νόμοι ὀρθιοὶ καὶ οἱ ὀξεῖς χαλεποὶ ἄσαι διὰ τὸ ἀνατεταμένοι εἶναι; καίτοι ἔλαττον ἔργον τὸ ὀλίγον κινεῖν ἢ τὸ πολὺ, ὥστε καὶ ἀέρα. ἢ οὐ ταῦτό γε ὀξύφωνον εἶναι φύσει καὶ τὸ ὀξὺ ἄδειν, ἀλλὰ φύσει μὲν ὀξύφωνα ἅπαντα δι' ἀσθένειαν, τῷ μὴ δύνασθαι πολὺν κινεῖν ἀέρα ἀλλ' ὀλίγον, ὃ δ' ὀλίγος ταχὺ φέρεται, ἐν δὲ τῷ ἄδειν τὸ ὀξὺ δυνάμεως σημεῖον. τὸ μὲν γὰρ σφοδρῶς φερόμενον ταχὺ φέρεται, διὸ τὸ ὀξὺ δυνάμεως σημεῖον. διὸ καὶ οἱ ἐκτικοὶ ὀξύφωνοι. καὶ ἔργον τὰ ἄνω ἄδειν· τὰ δὲ βαρέα κάτω.

Διὰ τί ῥυθμῷ καὶ μέλει καὶ ὅλως ταῖς συμφωνίαις χαίρουσι πάντες; ἢ ὅτι ταῖς κατὰ φύσιν κινήσεσι χαίρομεν κατὰ φύσιν; σημεῖον δὲ τὸ τὰ παιδιά εὐθὺς γενόμενα χαίρειν αὐτοῖς. διὰ δὲ τὸ ἔθος τρόποις μελῶν χαίρομεν. ῥυθμῷ δὲ χαίρομεν διὰ τὸ γνῶριμον καὶ τεταγμένον ἀριθμὸν ἔχειν, καὶ κινεῖν ἡμᾶς τεταγμένως· οἰκειότερα γὰρ ἡ τεταγμένη κίνησις φύσει τῆς ἀτάκτου, ὥστε καὶ κατὰ φύσιν μᾶλλον. σημεῖον δέ· πονοῦντες γὰρ καὶ πίνοντες καὶ ἐσθίοντες τεταγμένα σώζομεν καὶ αὐξομεν τὴν φύσιν καὶ τὴν δύναμιν, ἄτακτα δὲ φθείρομεν καὶ ἐξίσταμεν αὐτήν· [921a] αἱ γὰρ νόσοι τῆς τοῦ σώματος οὐ κατὰ φύσιν τάξεως κινήσεις εἰσίν. συμφωνία δὲ χαίρομεν, ὅτι κρᾶσις ἐστὶ λόγον ἐχόντων ἐναντίων πρὸς ἄλληλα. ὁ μὲν οὖν λόγος τάξις, ὃ ἦν φύσει ἡδύ. τὸ δὲ κεκραμένον τοῦ ἀκράτου πᾶν ἡδίων, ἄλλως τε καὶ αἰσθητὸν ὃν ἀμφοῖν τοῖν ἄκροις ἐξ ἴσου τὴν δύναμιν ἔχει ἐν τῇ συμφωνίᾳ ὁ λόγος.

Διὰ τί ἡδίων ἐστὶ τὸ σύμφωνον τοῦ ὁμοφώνου; ἢ καὶ τὸ μὲν ἀντίφωνον

σύμφωνόν ἐστι διὰ πασῶν; ἐκ παίδων γὰρ νέων καὶ ἀνδρῶν γίνεται τὸ ἀντίφωνον, οἷ διεστᾶσι τοῖς τόνοις ὡς νήτη πρὸς ὑπάτην. συμφωνία δὲ πᾶσα ἡδίων ἀπλοῦ φθόγγου (δι' ἃ δέ, εἴρηται), καὶ τούτων ἡ διὰ πασῶν ἡδίστη· τὸ ὁμόφωνον δὲ ἀπλοῦν ἔχει φθόγγον. μαγαδίζουσι δὲ ἐν τῇ διὰ πασῶν συμφωνίᾳ, ὅτι καθάπερ ἐν τοῖς μέτροις οἱ πόδες ἔχουσι πρὸς αὐτοὺς λόγον ἴσον πρὸς ἴσον ἢ δύο πρὸς ἓν ἢ καὶ τινα ἄλλον, οὕτω καὶ οἱ ἐν τῇ συμφωνίᾳ φθόγγοι λόγον ἔχουσι κινήσεως πρὸς αὐτούς. τῶν μὲν οὖν ἄλλων συμφωνιῶν ἀτελεῖς αἱ θατέρου καταστροφαί εἰσιν, εἰς ἥμισυ τελευτῶσαι· διὸ τῇ δυνάμει οὐκ ἴσαι εἰσίν. οὔσαι δὲ ἄνισοι, διαφορὰ τῇ αἰσθήσει, καθάπερ ἐν τοῖς χοροῖς, ἐν τῷ καταλύειν μεῖζον ἄλλων φθεγγομένοις ἐστίν. ἔτι δὲ ὑπάτη συμβαίνει τὴν αὐτὴν τελευτὴν τῶν ἐν τοῖς φθόγγοις περιόδων ἔχειν. ἡ γὰρ δευτέρα τῆς νεάτης πληγὴ τοῦ ἀέρος ὑπάτη ἐστίν. τελευτώσας δ' εἰς ταυτόν, οὐ ταυτόν ποιούσας, ἐν καὶ κοινὸν τὸ ἔργον συμβαίνει γίνεσθαι, καθάπερ τοῖς ὑπὸ τὴν ὥδην κρούουσιν· καὶ γὰρ οὗτοι τὰ ἄλλα οὐ προσαυλοῦντες, ἐὰν εἰς ταυτόν καταστρέφωσιν, εὐφραίνουσι μᾶλλον τῷ τέλει ἢ λυποῦσι ταῖς πρὸ τοῦ τέλους διαφοραῖς, τῷ τὸ ἐκ διαφορῶν τὸ κοινόν, ἡδιστον ἐκ τοῦ διὰ πασῶν γίνεσθαι. τὸ δὲ μαγαδίζειν ἐξ ἐναντίων φωνῶν. διὰ ταῦτα ἐν τῇ διὰ πασῶν μαγαδίζουσιν.

Διὰ τί ἡδίων ἀκούουσιν ἀδόντων ὅσα ἂν προεπιστάμενοι τύχωσι τῶν μελῶν, ἢ ἐὰν μὴ ἐπιστῶνται; πότερον ὅτι μᾶλλον δῆλός ἐστιν ὁ τυγχάνων ὥσπερ σκοποῦ, ὅταν γνωρίζωσι τὸ ἀδόκον; γνωρίζοντων δὲ ἡδὺ θεωρεῖν. ἢ ὅτι συμπαθὴς ἐστίν ὁ ἀκροατῆς τῷ τὸ γνώριμον ἄδοντι; συνάδει γὰρ αὐτῷ. ἄδει δὲ πᾶς γεγηθὼς ὁ μὴ διὰ τινα ἀνάγκην ποιῶν τοῦτο.

[921b] Διὰ τί δις μὲν δι' ὀξειῶν ἢ δις διὰ τεττάρων οὐ συμφωνεῖ, δις διὰ πασῶν δέ; ἢ ὅτι τὸ μὲν διὰ πέντε ἐστὶν ἐν ἡμιολίῳ λόγῳ, τὸ δὲ διὰ τεττάρων ἐν ἐπιτρίτῳ; ὄντων δὲ ἡμιολίων τριῶν ἐξῆς ἀριθμῶν ἢ ἐπιτρίτων, οἱ ἄκροι πρὸς ἀλλήλους οὐδένα λόγον ἔξουσιν· οὔτε γὰρ ἐπιμόριοι οὔτε πολλαπλάσιοι ἔσσονται. τὸ δὲ διὰ πασῶν ἐπειδὴ ἐστὶν ἐν διπλασίῳ λόγῳ, δις τούτου γινομένου ἐν τετραπλασίῳ λόγῳ ἂν εἶεν οἱ ἄκροι πρὸς ἀλλήλους. ὥστ' ἐπεὶ συμφωνία εὐλογον ἔχόντων φθόγγον πρὸς ἀλλήλους ἐστί, λόγον δὲ οἱ μὲν τὸ δις διὰ πασῶν διάλειμμα ἔχοντες πρὸς ἀλλήλους φθόγγοι ἔχουσιν, οἱ δὲ τὸ δις διὰ τεττάρων ἢ δις διὰ πέντε οὐκ ἔχουσιν, οἱ μὲν δις διὰ πασῶν σύμφωνοι εἶεν ἂν, οἱ δ' ἕτεροι οὐ, διὰ τὰ εἰρημένα.

Διὰ τί, ἐὰν τις ψήλας τὴν νήτην ἐπιλάβῃ, ἡ ὑπάτη μόνη δοκεῖ ὑπηχεῖν; ἢ ὅτι ἡ νεάτη λήγουσα καὶ μαραινομένη ὑπάτη γίνεται; σημεῖον δὲ τὸ ἀπὸ τῆς ὑπάτης τὴν νεάτην δύνασθαι ἄδειν· ὡς γὰρ οὔσης αὐτῆς ὥδῃς νεάτης, τὴν

ὁμοιότητα λαμβάνουσιν ἀπ' αὐτῆς. ἐπεὶ δὲ καὶ ἡχὼ ὥδῃ τίς ἐστιν, ἀφή ἐστι φωνῆς τῆς νεάτης ληγούσης, ἦχος ὧν ὁ αὐτὸς τῷ τῆς ὑπάτης φθόγγῳ κινεῖ, εἰκότως τῇ ὁμοιότητι τὴν ὑπάτην ἢ νήτη δοκεῖ κινεῖν. τὴν μὲν γὰρ νεάτην ἴσμεν οὐ κινεῖται ἐπιληφθεῖσα· τὴν δὲ ὑπάτην αὐτὴν ὀρῶντες ἀκατάληπτον οὖσαν, καὶ φθόγγου αὐτῆς ἀκούοντες, ταύτην οἴομεθα ἡχεῖν· ὅπερ ἐπὶ πολλῶν ἡμῖν συμβαίνει, ἐφ' ὧν μήτε τῷ λογισμῷ μήτε τῇ αἰσθήσει δυνάμεθα εἰδῆσαι τὸ ἀκριβές. ἔτι εἰ πληγείσης τῆς νεάτης μάλιστα ἐντεταμένης συμβαίνει τὸν ζυγὸν κινεῖσθαι, οὐθὲν ἂν εἴη θαυμαστόν. κινήθεντος δὲ πάσας τὰς χορδὰς συγκινεῖσθαι καὶ τιν' ἦχον ποιεῖν οὐκ ἄλογον. ταῖς μὲν οὖν ἄλλαις ὁ τῆς νεάτης φθόγγος ἀλλότριός ἐστι καὶ λήγων καὶ ἀρχόμενος, τῇ δὲ ὑπάτῃ λήγων ὁ αὐτός. οὐ προστεθέντος τῇ ἰδίᾳ αὐτῆς κινήσει, ἐκείνης δόξαι πάντ' αὐτὸν εἶναι οὐθὲν ἄτοπον. ἔσται δὲ μείζων ἢ ὁ κοινὸς τῶν λοιπῶν χορδῶν ἦχος, ὅτι αἱ μὲν ὑπὸ τῆς νεάτης καθάπερ ὠσθεῖσαι μαλακῶς ἤχησαν, ἡ δὲ νεάτη πάσῃ τῇ αὐτῆς δυνάμει, οὖσα αὐτῶν σφοδροτάτη. ὥστε εἰκότως καὶ τὸ δευτερεῖον αὐτῆς κρεῖττον ἂν εἴη ἢ τὸ τῶν ἄλλων· ὥστε καὶ βραχείας κινεῖσθαι, ὡς αὐτῆς τε γεγεννημένης.

[922a] Διὰ τί ἡδίων τῆς μονωδίας ἐστὶν ἐὰν τις πρὸς αὐλὸν ἢ λύραν ᾄδῃ; ἢ ὅτι πᾶν τὸ ἡδίων μιχθὲν ἡδίονι ἔν ἐστιν; ὁ δὲ αὐλὸς ἡδίων τῆς λύρας, ὥστε καὶ ἡ ὥδῃ τούτῳ μιχθεῖσα ἢ λύρα ἡδίων ἂν εἴη, ἐπεὶ τὸ μεμιγμένον τοῦ ἀμίκτου ἡδίων ἐστιν, ἐὰν ἀμφοῖν ἅμα τὴν αἴσθησίν τις λαμβάνῃ. οἶνος γὰρ ἡδίων τοῦ ὀξύμελιτος διὰ τὸ μεμῖχθαι μᾶλλον αὐτοῖς τὰ ὑπὸ τῆς φύσεως μιχθέντα ἢ ὑφ' ἡμῶν. ἔστι γὰρ καὶ ὁ οἶνος μικτὸς ἐξ ὀξέος καὶ γλυκέος χυμοῦ. δηλοῦσι δὲ καὶ αἱ οἰνώδεις ῥοαὶ καλούμεναι. ἡ μὲν οὖν ὥδῃ καὶ ὁ αὐλὸς μίγνυνται αὐτοῖς δι' ὁμοιότητα (πνεύματι γὰρ ἄμφω γίνεται)· ὁ δὲ τῆς λύρας φθόγγος, ἐπειδὴ οὐ πνεύματι γίνεται ἢ ἥττον αἰσθητὸν ἢ ὁ τῶν αὐλῶν, ἀμικτότερός ἐστι τῇ φωνῇ· ποιῶν δὲ διαφορὰν τῇ αἰσθήσει ἥττον ἡδύνει, καθάπερ ἐπὶ τῶν χυμῶν εἴρηται. ἔτι ὁ μὲν αὐλὸς πολλὰ τῷ αὐτοῦ ἦχῳ καὶ τῇ ὁμοιότητι συγκρύπτει τῶν τοῦ ὠδοῦ ἀμαρτημάτων, οἱ δὲ τῆς λύρας φθόγγοι ὄντες ψιλοὶ καὶ ἀμικτότεροι τῇ φωνῇ, καθ' ἑαυτοὺς θεωρούμενοι καὶ ὄντες αὐτοῖς συμφανῇ ποιοῦσι τὴν τῆς ὠδῆς ἀμαρτίαν, καθάπερ κανόνες ὄντες αὐτῶν. πολλῶν δὲ ἐν τῇ ὠδῇ ἀμαρτανομένων, τὸ κοινὸν ἐξ ἀμφοῖν ἀναγκαῖον χειρὸν γίνεσθαι.

Διὰ τί τῶν μὲν ἐπτὰ μέση καλεῖται, τῶν δὲ ὀκτὼ οὐκ ἔστι μέσον; ἢ ὅτι ἐπτὰχορδοὶ ἦσαν αἱ ἁρμονίαι τὸ παλαιόν, τὰ δὲ ἐπτὰ ἔχει μέσον; ἔτι ἐπειδὴ τῶν μεταξὺ τῶν ἄκρων τὸ μέσον μόνον ἀρχὴ τίς ἐστιν (ἔστι γὰρ τῶν θάτερον τῶν ἄκρων νευόντων ἐν τινι διαστήματι ἀνὰ μέσον ὃν ἀρχή), τοῦτ' ἔσται μέσον. ἐπεὶ δ' ἔσχατα μέσον ἐστὶν ἁρμονίας νεάτη καὶ ὑπάτη, τούτων δὲ ἀνὰ



μέσον οἱ λοιποὶ φθόγγοι, ὧν ἡ μέση καλουμένη μόνη ἀρχὴ ἐστὶ θατέρου τετραχόρδου, δικαίως μέση καλεῖται. τῶν γὰρ μεταξύ τινων ἄκρων τὸ μέσον ἦν ἀρχὴ μόνον.

Διὰ τί οἱ πολλοὶ ἄδοντες σώζουσι μᾶλλον τὸν ῥυθμὸν ἢ οἱ ὀλίγοι; ἢ ὅτι μᾶλλον πρὸς ἓνα τε καὶ ἡγεμόνα βλέπουσι, καὶ βραδύτερον ἄρχονται, ὥστε ῥᾶον τοῦ αὐτοῦ τυγχάνουσιν; ἔν μὲν γὰρ τῷ τάχει πλείων γίνεται ἡ ἁμαρτία, συμβαίνει δὲ τῷ ἡγεμόνι προσέχειν τοὺς πολλούς· ἰδιαζόμενος δὲ οὐδεὶς ἂν αὐτῶν διαλάμψειεν ὑπεράρας τὸ πλῆθος. ἐν δὲ τοῖς ὀλίγοις μᾶλλον διαλάμπουσιν· διὸ καθ' αὐτοὺς ἐν αὐτοῖς μᾶλλον ἀγωνίζονται ἢ πρὸς τὸν ἡγεμόνα.

Διὰ τί ἐπὶ τὸ ὅξυ ἀπάδουσιν οἱ πλεῖστοι; ἢ ὅτι ῥᾶον [922b] ὁξὺ ἄσαι ἢ βαρὺ; ἄδουσι γοῦν ὁξὺ μᾶλλον, καὶ ἐν ᾧ ἄδουσιν, ἁμαρτάνουσιν.

Διὰ τί οἱ ἀρχαῖοι ἐπταχόρδους ποιοῦντες τὰς ἀρμονίας τὴν ὑπάτην ἀλλ' οὐ τὴν νήτην κατέλιπον; ἢ οὐ τὴν ὑπάτην ἀλλὰ τὴν νῦν παραμέσῃ καλουμένην ἀφήρουν καὶ τὸ τονιαῖον διάστημα; ἐχρῶντο δὲ τῇ ἐσχάτῃ μέσῃ τοῦ ἐπὶ τὸ ὅξυ πυκνοῦ· διὸ καὶ μέσῃ αὐτὴν προσηγόρευσαν. ἢ ὅτι ἦν τοῦ μὲν ἄνω τετραχόρδου τελευτῇ, τοῦ δὲ κάτω ἀρχῇ, καὶ μέσον εἶχε λόγον τόνω τῶν ἄκρων;

Διὰ τί οἱ ἐν τραγωδίᾳ χοροὶ οὔθ' ὑποδωριστὶ οὔθ' ὑποφρυγιστὶ ἄδουσιν; ἢ ὅτι μέλος ἤκιστα ἔχουσιν αὐταὶ αἱ ἀρμονίαι, οὐ δεῖ μάλιστα τῷ χορῷ; ἦθος δὲ ἔχει ἢ μὲν ὑποφρυγιστὶ πρακτικόν, διὸ καὶ ἔν τε τῷ Γηρυόνη ἢ ἔξοδος καὶ ἢ ἐξόπλισις ἐν ταύτῃ πεποιήται, ἢ δὲ ὑποδωριστὶ μεγαλοπρεπὲς καὶ στάσιμον, διὸ καὶ κιθαρωδικωτάτῃ ἐστὶ τῶν ἀρμονιῶν. ταῦτα δ' ἄμφω χορῷ μὲν ἀνάρμοστα, τοῖς δὲ ἀπὸ σκηνῆς οἰκειότερα. ἐκεῖνοι μὲν γὰρ ἡρώων μιμηταί· οἱ δὲ ἡγεμόνες τῶν ἀρχαίων μόνοι ἦσαν ἥρωες, οἱ δὲ λαοὶ ἄνθρωποι, ὧν ἐστὶν ὁ χορός. διὸ καὶ ἀρμόζει αὐτῷ τὸ γοερὸν καὶ ἡσύχιον ἦθος καὶ μέλος· ἀνθρωπικὰ γάρ. ταῦτα δ' ἔχουσιν αἱ ἄλλαι ἀρμονίαι, ἤκιστα δὲ αὐτῶν ἢ ὑποφρυγιστὶ· ἐνθουσιαστικὴ γὰρ καὶ βακχική. κατὰ μὲν οὖν ταύτην πάσχομέν τι· παθητικοὶ δὲ οἱ ἀσθενεῖς μᾶλλον τῶν δυνατῶν εἰσὶ, διὸ καὶ αὕτη ἀρμόττει τοῖς χοροῖς· κατὰ δὲ τὴν ὑποδωριστὶ καὶ ὑποφρυγιστὶ πράττομεν, ὃ οὐκ οἰκεῖόν ἐστι χορῷ. ἔστι γὰρ ὁ χορὸς κηδευτῆς ἄπρακτος· εὐνοίαν γὰρ μόνον παρέχεται οἷς πάρεστιν.

Διὰ τί τῶν τὴν συμφωνίαν ποιούντων φθόγγων ἐν τῷ βαρυτέρῳ τὸ μαλακώτερον; ἢ ὅτι τὸ μέλος τῇ μὲν αὐτοῦ φύσει μαλακόν ἐστὶ καὶ ἡρεμαῖον,

τῇ δὲ τοῦ ῥυθμοῦ μίξει τραχὺ καὶ κινητικόν; ἐπεὶ δὲ ὁ μὲν βαρὺς φθόγγος μαλακὸς καὶ ἡρεμαῖός ἐστιν, ὁ δὲ ὀξὺς κινητικός, καὶ τῶν ταῦτὸ μέλος ἔχόντων εἴη ἂν μαλακώτερος ὁ βαρύτερος ἐν ταύτῳ μέλει μᾶλλον· ἦν γὰρ τὸ μέλος αὐτῷ μαλακόν.

Διὰ τί ἴσων πίθων καὶ ὁμοίων ἐὰν μὲν ὁ ἕτερος κενὸς ᾗ, ὁ δὲ ἕτερος εἰς τὸ ἥμισυ διάμεστος, διὰ πασῶν συμφωνεῖ ἡ ἡχώ; ἢ ὅτι διπλασία γίνεται καὶ ἡ ἐκ τοῦ ἡμίσεος τῆς ἐκ τοῦ κενοῦ; τί γὰρ διαφέρει τοῦτο ἢ ἐπὶ τῶν συρίγγων; δοκεῖ γὰρ ἡ θάπτων κίνησις ὀξυτέρα εἶναι, ἐν δὲ τοῖς μείζουσι [923a] βραδύτερον ὁ ἀὴρ ἀπαντᾷ, καὶ ἐν τοῖς διπλασίοις τοσοῦτω, καὶ ἐν τοῖς ἄλλοις ἀνάλογον. συμφωνεῖ δὲ διὰ πασῶν καὶ ὁ διπλασίων ἀσκὸς πρὸς τὸν ἥμισυν.

## Κ. ΟΣΑ ΠΕΡΙ ΘΑΜΝΟΥΣ ΚΑΙ ΛΑΧΑΝΩΔΗ.

Διὰ τί τὸ ἀλυκὸν ὕδωρ τὰ μὲν σέλινά δέχεται, τὸ δὲ πράσον οὔ; ἢ ὅτι τοῦ μὲν ἀσθενεῖς αἱ ῥίζαι, τοῦ δὲ ἰσχυραί; τὸ δὲ ἰσχυρότερον ἀπαθέστερον.

Διὰ τί λέγεται “μίνθην ἐν πολέμῳ μὴτ’ ἔσθιε μῆτε φύτευε;” ἢ ὅτι καταψύχει τὰ σώματα; δηλοῖ δὲ ἡ τοῦ σπέρματος φθορά. τοῦτο δὲ ὑπεναντίον πρὸς ἀνδρείαν καὶ θυμὸν ταῦτόν ὃν τῷ γένει.

Διὰ τί ἔνια ἄνθος ἔχοντα ἄκαρπά ἐστιν, οἷον σίκυος καὶ κολόκυνθα καὶ ῥόα; ἢ οὐκ ἄκαρπα, ἀλλὰ ταῦτα καρπὸς ἐστιν; περικάρπιον γοῦν ἐστὶ τὸ ἄνθοῦν, ὁ δὲ σίκυος περικάρπιον.

Διὰ τί τῶν φυομένων τὰ μὲν ἐψανά, τὰ δὲ ὠμὰ βρωτά; ἢ ὅσων οἱ χυμοὶ μὴ εὐθὺς ἐδώδιμοι, τούτων πυρωθέντων γλυκύτεροι γίνονται ὑπὸ τοῦ θερμοῦ, ὅσων δὲ εὐθύς, καὶ ὠμὰ ἐδώδιμα;

Διὰ τί τὰ μὲν ἐψανά, τὰ δὲ ὀπτανά; ἢ ὅτι τὰ μὲν ὑγρότερα οὐ τοσοῦτον, τὰ δὲ ξηρότερα οὐ μᾶλλον ξηρανθῆναι δεῖ; ἐψόμενα δὲ πάντα ὑγρότερα καὶ μαλακώτερα. τὰ δὲ ἥττον ὑγρὰ ἂν πυρωθῇ, γίνεται ξηρά.

Διὰ τί δὲ τὰ μὲν ἄβρωτά ἐστι τὰ δὲ βρωτά; ἢ διὰ τοὺς χυμούς; ὅσα γὰρ καὶ ὠμὰ ἀπέπτους ἔχει καὶ πυρούμενα μὴ μεταβάλλει, ἄβρωτα. ὅσων δὲ βρωτὸς μὲν ὁ χυμὸς ἰσχυρότερος δέ, ταῦτα ἡδύσματά ἐστιν· τὰ γὰρ ἐν μικρῷ ἔχοντα πολλὴν δύναμιν τῶν βρωτῶν ἡδυντικὰ τῶν ἐν πολλῷ.

Διὰ τίνα αἰτίαν τὰ μὲν μέχρι σπέρματος τῶν φυτῶν ζῇ, εἴτα ἐνεγκόντα

αὐαίνεται, οἶον ἢ πόα καὶ τὰ καλούμενα λάχανα, τὰ δὲ οὐ, ἀλλὰ πολλάκις φέρει; καὶ τῶν μέχρι σπέρματος ζώντων τὰ μὲν πολλὰ ἐπέτεια, τὸ δὲ ἵπποσέλινον τῷ ὑστέρω ἔτει φέρει καρπὸν, καὶ ἐνέγκαν ἐξαυαίνεται; ἢ ἅπαντα μὲν μέχρι τούτου ἀκμάζει, ἕως ἂν κατὰ τὸ σπέρμα ἀκμάζη; ἐπεὶ καὶ οἱ ἄνθρωποι μέχρι τριάκοντα ἐτῶν ἐπιδιδόασιν, ὅτε μὲν τῷ πλήθει ὅτε δὲ τῇ παχύτητι. ὅταν δὲ μηκέτι δύνηται φέρειν, ὥσπερ ἐκεῖ, [923b] αὐαίνεται καὶ καταγηράσκει· τὰ δὲ βραδέως καὶ κατὰ λόγον. δι' ἣν μὲν οὖν αἰτίαν τὰ μὲν βραχύβια τὰ δὲ μακρόβιά ἐστίν, ἄλλος ἔστω λόγος· ἐπεὶ δ' ἔστι πᾶσιν ὅρος ἡ τοῦ σπέρματος τελείωσις, ἀνάγκη τοῖς μὲν βραχυβίοις ἅπαξ ἢ ὀλιγάκις ἐνεγκεῖν καρπὸν, τοῖς δὲ μακροβίοις πολλάκις, ὥστε τὰ μὲν ἀσθενέστατα ἅπαξ ἐνέγκοι (διὸ ἀνάγκη αὐαίνεσθαι)· καὶ τούτων τὰ μὲν δυνάμενα ἐνιαυτῷ ἐπέτεια εἶναι, τὰ δέ, ὥσπερ τὸ ἵπποσέλινον, τῷ ὑστέρω ἔτει, ὥσπερ τὰ δένδρα καὶ τὰ φυτά.

Διὰ τί σελίνου, ἐάν τις περιορύξας μέχρι κάτω πρὸς τὰς ῥίζας περιβάλλῃ τῶν καχρυδίων, εἴτα ἄνωθεν τὴν γῆν, καὶ οὕτως ἄρδη, παμμεγέθεις γίνονται αἱ ῥίζαι; ἢ διότι τὸ καχρύδιον θερμὸν ὄν καὶ σομφὸν κατέχει μὲν σύνολκον τὴν τροφήν καὶ οὐ προΐεται ἄνω, πέττει δὲ θερμὸν ὄν, ὥστε πολλὴν τὴν αὕξησιν γίνεσθαι;

Διὰ τί, ἐάν τις τὰς κολοκύνθας εὐθὺς μικρὰς οὔσας κρύψῃ τῇ γῇ ἢ τοὺς σικύους, μείζους γίνονται; ἢ διότι τὰ πνεύματα καὶ ὁ ἥλιος ξηραίνοντα ἀφαιροῦνται τὴν αὕξησιν, καὶ τοὺς ὄγκους ἐλάττους μὲν ποιοῦσι πάντων, στιφροτέρους δέ, ὥσπερ καὶ τῶν δένδρων τὰ τε ἐν προσηνέμοις καὶ ἐλώδεσι καὶ τὰ ἐν κοίλοις καὶ ἐφύδροις (τὰ μὲν γὰρ μεγάλα γίνονται καὶ σομφά, τὰ δὲ μικρὰ καὶ πυκνά)· ἐν δὲ τῇ γῇ κρυφθέντα ἐναντία πάσχοντα ἐναντίως ἀποβαίνει. ὁμοίως δὲ καὶ τὰ εἰς ἀγγεῖα τιθέμενα, σίκυοι εἰς νάρθηκας κοίλους ἢ καλυπτῆρας καὶ ῥοιαὶ καὶ μῆλα εἰς χύτρας, τὰ μὲν μεγάλα σομφὰ δέ, οἱ δὲ μικροὶ στερροὶ αὕξανόμενοι, μὴ εἰς ἀντίτυπον. αἰτία δὲ ἡ τροφή πλείων γινομένη διὰ τὸ μήτε ἀποπνεῖσθαι μήτε ξηραίνεσθαι· τὸ γὰρ ἀποστέγον κωλύει ταῦτα πάσχειν.

Διὰ τί τὰ σπέρματα τῶν δριμέων φυτῶν δριμύτερά ἐστίν ἢ αἱ ῥίζαι καὶ τὰ φύλλα; ἢ διότι ἐκ τοῦ σπέρματος γίνεται ἅπαντα, καὶ εἰς τὰ ἄλλα δίδοται μέρη ἐκ τούτου, οἶονεὶ ἐνυπάρχοντα, ὥς φασί τινες, καὶ οἱ χυμοὶ καὶ αἱ ὀσμαὶ, ἐπεὶ καὶ αἱ ὀσμαὶ ἴδιοι γίνονται ἅμα τοῖς σπέρμασιν ἅπασιν. εἰ οὖν ἐκ τούτου καὶ τοῖς ἄλλοις ἡ δριμύτης ὑπάρχει, εὐλόγον καὶ αὐτὸ ὑπάρχειν μάλιστα.

Διὰ τί αἱ ῥαφανίδες αἱ λεπταὶ δριμύτεραι; ἢ ὅτι αἱ μείζους διὰ τὸν χρόνον

πεπεμμένοι μᾶλλον;

[924a] Διὰ τί ἡ κάππαρις οὐκ ἐθέλει ῥαδίως ἐν τοῖς ἐργασίμοις γίνεσθαι χωρίοις (πολλοὶ γὰρ πεπείρανται καὶ ῥίζας μεταφέροντες καὶ σπέρματα καταβάλλοντες· ἐνιαχοῦ γὰρ λυσιτελεῖ μᾶλλον τῶν ῥόδων), ἀλλὰ φύεται μάλιστα ἐπὶ τῶν τάφων, ὅτι ἀβατώτατος ὁ τόπος ἐστίν. περὶ δὲ δὴ τούτου καὶ ὅσα ἄλλα τοιαῦτα, δεῖ λαβεῖν ὅτι οὐχ ἅπαντα ἐκ τῆς αὐτῆς ὕλης γίνεται οὐδ' αὖξεται, ἀλλ' ἔνια ἐξ ἄλλων φθορᾶς καὶ ἐξ ἀρχῆς γίνεται καὶ αὖξάνεται, οἷον οἱ φθειρες καὶ αἱ τρίχες ἐν τῷ σώματι διαφθειρομένης τῆς τροφῆς, καὶ αἰὲν τὸ χεῖρον ἔχοντος. ὥσπερ οὖν καὶ τῶν ἐν σώματι ἔνια γίνεται ἐκ περιττώματος τροφῆς, τοῦτο δ' ἐστὶν ἀπεψία, καὶ οὐ μὴ ἐδύνατο κρατῆσαι ἡ φύσις, τὰ μὲν προχειρότατα εἰς κύστιν καὶ κοιλίαν ἀποκρίνεται, ἐξ ἐνίων δὲ ζῶα γίνεται, διὸ καὶ αὖξάνονται ταῦτα ἐν γῆρᾳ καὶ νόσοις, οὕτως ἐν τῇ γῇ τὰ μὲν ἐκ πεπεμμένης τῆς τροφῆς γίνεται καὶ αὖξάνεται, τὰ δὲ ἐκ περιττωμάτων καὶ ἐναντίως ἐχόντων. ἡ δὲ γεωργία πέττει καὶ ἐνεργὸν ποιεῖ τὴν τροφήν· ἐξ ἧς συνίστανται οἱ ἡμεροὶ καρποί. ἃ μὲν οὖν ἐκ τοιαύτης γίνεται ἡμερότητος, ἡμερὰ καλεῖται διὰ τὸ ἀπὸ τέχνης ὠφελεῖσθαι ὥσπερ παιδευόμενα· ὅσα δὲ μὴ δύναται ἡ καὶ ἐξ ἐναντίως ἔχοντος συνίσταται, ταῦτα ἄγριά ἐστι καὶ οὐκ ἐθέλει γίνεσθαι ἐν γεωργησίμῳ. ἡ γὰρ γεωργία φέρει αὐτὰ παιδεύουσα· ἐκ γὰρ φθορᾶς γίνεται. ὧν καὶ ἡ κάππαρις ἐστίν.

Διὰ τί, ἐάν τις ῥαφανίδων, ὅταν μάλιστα ἀκμάζωσι τοῦ χειμῶνος, ἀποτεμῶν τὰ φύλλα περισάξῃ τὴν γῆν καὶ καταπατήσῃ ὥστε ἀποστεγέιν τὸ ὕδωρ, αὐταὶ ἐν τῷ θέρει γίνονται ἄπλετοι τὸ πάχος; ἢ ὅτι τοῦ μὲν μὴ φθίρεσθαι τὸ περισεσάχθαι αἴτιον, κωλύον τὸ ὕδωρ σήπειν; ἡ δὲ τροφή, ἣν ἄνω ἀφίει εἰς τὸν βλαστόν, εἰσέρχεται εἰς αὐτήν, ὥστε ἀνάγκη αὐτὴν μείζω γίνεσθαι ἢ ἀφιέναι παραβλαστανούσαν ἄλλας ῥίζας, ὥσπερ τὰ κρόμμυα; καὶ γὰρ ταῦτα, ἐὰν μὴ τις ἐκτίλῃ ἐπέτεια ἀλλ' ἐάσῃ τὸν χειμῶνα, πολλαπλάσια γίνεται. τὰ μὲν οὖν κρόμμυα τῶν παραβλαστανόντων ἐστίν, ἡ δὲ ῥάφανος οὐ, ὥστε ἀνάγκη αὐτὴν γίνεσθαι παχεῖαν διὰ τὸ πᾶσαν λαμβάνειν τὴν τροφήν.

Διὰ τί, ἐάν τις σικύους ἢ κολοκύνθας περὶ φρέαρ φυτεύσας, ὅταν ὠραῖοι ᾧσι, καθεὶς εἰς τὸ φρέαρ ἀποστεγάσῃ, γίνονται δι' ἔτους χλωροί; ἢ διότι ἡ τε ἀπὸ τοῦ ὕδατος ἀτμὶς ψύχουσα κωλύει ξηραίνεσθαι καὶ παρέχει θάλλοντα, καὶ [924b] τὸ ἀποστεγέιν τούτους καὶ τὰ πνεύματα τρέφει τὰ ὑψημένα; τοῦ δὲ διαμένειν αἴτιον τὸ ἔχειν τροφήν ἐωμένων τῶν ῥιζῶν. καὶ γὰρ ἐάν τις ἀφελὼν τὴν βλάστην, ὅταν καρποφορήσωσι, καὶ ἀποτεμῶν περισάξῃ καὶ καταπατήσῃ τὴν γῆν περὶ τὰς ῥίζας, πρωῒμους οἴσει σικύους, ὡς δυναμένων σώζεσθαι τῶν ῥιζῶν· οὐ γὰρ ἔσται σίκυος τῶν προετείων. θᾶπτον δὲ αὐτοὶ

τῶν σπειρομένων οἷσουσι καρπὸν διὰ τὸ πολὺ προϋπάρχειν τοῦ ἔργου τῇ φύσει τὰς ῥίζας, τοῖς δὲ σπειρομένοις δεῖν γίνεσθαι τοῦτο πρῶτον, ἐν ᾗ περισάξεις ἀλέαν ποιεῖν, ὥστε σώζεσθαι καὶ θᾶττον ἐνιέναι βλαστόν. διὸ καὶ ἐάν τις χειμῶνος φυτεύσῃ σπέρμα σικύου ἐν ταλαρίσκοις καὶ ἄρδῃται θερμῷ καὶ εἰς τὸν ἥλιον ἐκφέρῃ καὶ παρὰ πυρὶ τιθῇ, πρῶϊμοι σφόδρα ἔσσονται, ἐὰν ὥς ἔχει ἐν τοῖς ταλάροις εἰς τὴν ἰκνουμένην ὥραν εἰς τὴν γῆν φυτεύσῃ.

Διὰ τί ἀρδεύουσιν ἔωθεν ἢ νυκτὸς ἢ δείλης; πότερον ἵνα μὴ ὁ ἥλιος ἀναλώσῃ; ἢ ὅτι, ἐὰν ἢ θερμὸν τὸ ὕδωρ, διαφθείρει τὰ ἀρδόμενα;

Διὰ τί τὰ εὐώδη οὖρητικά, καὶ σπέρματα καὶ φυτά; ἢ ὅτι θερμὰ καὶ εὐπεπτα, τὰ δὲ τοιαῦτα οὖρητικά· ταχὺ γὰρ λεπτύνει ἢ ἐνοῦσα θερμότης, καὶ ἢ ὁσμή οὐ σωματώδης, ἐπεὶ καὶ τὰ μὴ εὐώδη, οἷον σκόροδα, διὰ τὴν θερμότητα οὖρητικά, μᾶλλον μέντοι συντηκτικά. θερμὰ δὲ τὰ εὐώδη σπέρματα, διότι ὅλως ἢ ὁδμὴ διὰ θερμότητά τινα γίνεται· ἀλλὰ τὰ δυσώδη ἄπεπτά ἐστιν. δεῖ δὲ μὴ μόνον εἶναι θερμὰ ἀλλὰ καὶ εὐπεπτα, εἰ ἔσται οὖρητικά, ὅπως συγκατιόντα λεπτύνῃ τὰ ὑγρά.

Διὰ τί θᾶττον ἐκκαυλεῖ τῶν λαχάνων τὰ ἐκ παλαιότερου σπέρματος, οἷον τριετοῦς ἢ διετοῦς, ἢ τὰ ἐκ τῶν προσφάτων; ἢ ὅτι ὥς ἐπὶ τῶν ζώων θᾶττον σπέρμα φέρει τὸ ἀκμάζον, οὕτω καὶ τῶν σπερμάτων τὰ μὲν λίαν παλαιὰ ἐξίκμασται τὴν δύναμιν, τὰ δὲ ἀσθενέστερα διὰ τὸ ἔτι ἔχειν περίττωμα μὴ οἰκεῖον, τὰ δὲ μέσα τῷ χρόνῳ ἰσχυρότατα ἀπεληλυθότος τοῦ ὑγροῦ· θᾶττον οὖν σπέρμα φέρει. τὸ δὲ ἐκκαυλεῖν τοῦτό ἐστιν· ἐκ γὰρ τοῦ καυλοῦ τὸ σπέρμα.

Διὰ τί πήγανον κάλλιστον καὶ πλεῖστον γίνεται, ἐάν τις ἐκφυτεύσῃ εἰς συκῆν; ἐκφυτεύεται δὲ περὶ τὸν φλοιὸν καὶ περιπλάττεται πηλῷ. ἢ ὅτι θερμότητος δέονται αἱ ῥίζαι τοῦ πηγάνου καὶ ἀλέας (διὸ καὶ τὴν τέφραν ἐάν τις περιβάλλῃ, ὀνίνανται), ἢ δὲ συκὴ θερμὴ ἐστίν. δηλοῖ δὲ καὶ ὁ [925a] ἀπὸς πάντων δριμύτατος ὢν, καὶ ὁ πολὺς καπνός. ἔχει οὖν τοιαύτην θερμότητα καὶ ἰκμάδα οἷαν καὶ ἡ τέφρα, ὥστε εἰ ἐκείνην ὀνίνησιν, ἀναγκαῖον καὶ ἐν τῇ συκῇ μάλιστα εὐσθενεῖν, ὅσω ἢ μὲν τέφρα οὐκ ἐπιρρεῖ, τὸ δ' ἀπὸ τῆς συκῆς ἀεὶ ἐπιρρεῖ, οὐκ ἀναλίσκομένου τοῦ ὑγροῦ τῇ συκῇ.

Διὰ τί ἔνια τῶν φυτῶν ἀεὶ κενὸν φέρει τὸν καυλόν; ἢ ὧν ἀνάγκη ἄλλο φύειν

Διὰ τί ἐν τῇ Ἀττικῇ οἱ μὲν ἄλλοι καρποὶ γλυκύτατοι γίνονται, τὸ δὲ θύμον

δριμύτατον; καίτοι καὶ τοῦτο καρπὸς τίς ἐστίν ... ὥστε οὐ πολὺ ὑγρὸν τὰ φυόμενα ἔχει. ὅσα μὲν οὖν φύσει γλυκέα ἐστί, διὰ μετριότητα τοῦ ἐνυπάρχοντος ὑγροῦ, ὅταν ἀπάγη ὁ ἥλιος τὸ πλεῖστον, τὸ ὑπολειπόμενον ῥαδίως πέττεται· τὸ γὰρ πολὺ ἔργον πεπάνθαι, τὸ δὲ μέτριον ῥᾶον. ὥστε γίνονται οἱ φύσει γλυκεῖς γλυκύτεροι. ἐν δὲ τοῖς φύσει ξηροῖς τε καὶ μὴ γλυκέσι καρποῖς λείπεται δι' ὀλιγότητα τὸ οἰκεῖον, τοῦτο δ' ἐστὶν ἥκιστα γλυκύ· ἀφαιρεῖται γὰρ ὁ ἥλιος τὸ γλυκύτερον καὶ κουφότατον· οὗτοι δὲ οὐκ ἔχουσι περιττὸν ὑγρὸν, ὥσπερ οἱ ἄλλοι καρποί.

Διὰ τί γλήχων καὶ τὰ λείρια καὶ τὰ κρόμμουα τὰ κρεμάμενα ὑπὸ τὰς τροπὰς ἀνθεῖ; ἢ ἐνυπάρχει αὐτοῖς τροφή ἄπεπτος, ἢ τοῦ μὲν χειμῶνος οὐ πέττεται διὰ τὸ ψῦχος, ὑπὸ δὲ τὰς τροπὰς πεττομένης διὰ τὴν ὥραν ἢ αὔξεις γίνεται; αὕτη δὲ διὰ τὸ μὴ ἔχειν ἐπίρρυσιν ταχὺ μαραίνεται. οὐ γάρ τινα ἔχουσα ἀρχὴν οὐδέ τινα ἐπίρρυσιν ἀποξηραίνεται, ὥσπερ Σκύθαις διὰ τὸ πολλὴν τὴν χιόνα γίνεσθαι συμβαίνει τὸν σῖτον μένειν καὶ ταχὺ ἀνατρέχειν.

Διὰ τί τὸ κρόμμουον μόνον οὕτως περιττῶς δάκνει τὴν ὀφθαλμῶ (διὸ καὶ τοῦνομά φασι τοῦτ' ἔχειν αὐτό, ὡς τὴν κόρην ποιεῖν συμμύειν), ἢ δὲ ὀρίγανος οὐ, οὐδ' ἄλλα δριμέα ὄντα; καὶ γὰρ τὸ ἀνάρρινον μᾶλλον δάκνον οὐ ποιεῖ ὁμοίως δακρύνειν προσφερόμενον, τὸ δὲ προσφερόμενον καὶ κατατρωγόμενον. ἢ ὅτι διαφοραὶ πολλαὶ ἀκολουθοῦσιν ἐκάστοις τῶν δριμέων, ἃ ποιεῖ τὴν ἰδίαν ἐκάστου δύναμιν; τὸ μὲν οὖν ἀνάρρινον διὰ τὸ θερμότερον εἶναι ξηραντικώτερον ἐστὶ τῆς γινομένης ὑπ' αὐτοῦ συντήξεως, ἐπεὶ ποιεῖ γε δάκρυον ἐσθιοντι· προσφερόμενον δὲ οὐ, ὅτι οὐκ ἀπατμίζει ἀπ' αὐτοῦ λεπτὸν τι· ξηρότερον γὰρ ἐστὶ καὶ θερμότερον. ἢ δὲ ὀρίγανος [925b] καὶ τὰ τοιαῦτα θερμὰ ξηρὰ ἐστὶν ἡρέμα. δεῖ δὲ τὸ μέλλον δάκρυον ποιήσιν δηκτικὸν καὶ ὑγρὸν εἶναι καὶ γλίσχρον. διὸ καὶ τὸ ἔλαιον ποιεῖ δακρύνειν, ἀσθενῇ ἔχον δῆξιν· διὰ γλίσχρότητα γὰρ καὶ λεπτότητα παραδῶνον ποιεῖ τὸν πόνον, καὶ τὴν σύντηξιν διὰ τὸν πόνον. τὸ δὲ κρόμμουον τοιαύτην ἔχει τὴν δύναμιν ὥστε καὶ τὸ ὑγρὸν καὶ τὴν ἀτμίδα αὐτοῦ θερμὴν καὶ λεπτὴν καὶ γλίσχραν εἶναι. ὥστε προσφερόμενον μὲν, διὰ τὸ τὴν ἀτμίδα τοιαύτην εἶναι καὶ συναφιέναι ὑγρότητα λεπτὴν, ποιεῖ δακρύνειν, ἐσθιομένου δὲ ἢ ἀναθυμιάσις διοῦσα ... τὸ δὲ σκόροδον θερμὸν μὲν καὶ δριμύ ἐστὶ καὶ ὑγρότητα ἔχει, ἀλλ' οὐ γλίσχρον· διὸ οὐ ποιεῖ δακρύνειν.

Διὰ τί τὰ μύρτα ἐν τῇ χειρὶ θλιβέντα γλυκύτερα ἡμῖν δοκεῖ εἶναι τῶν μὴ τεθλιμμένων; ἢ καθάπερ καὶ αἱ ῥᾶγες τετρυγημέναι τῶν βοτρύων γλυκύτεραί εἰσι τῶν ἀτρυγῆτων; ὑπὸ γὰρ τοῦ γλεύκους ὄντος φύσει ἡδέος αἱ μὲν τετρυγημέναι ῥᾶγες ὥσπερ εἰκόασιν ἡδυσμέναι (ἀνάπλεω γὰρ εἰσι καὶ

ἔξωθεν), αἱ δ' ἐπὶ τῶν βοτρύων ἀνήδυντοι. ὁμοίως οὖν καὶ ἐπὶ τῶν μύρτων φύσει γλυκέων καὶ τὴν γλυκύτητα ἔχόντων ἐντός. ὥσπερ αἱ ῥᾶγες οὖν, ὅταν θλιφθῇ, ἀναπίμπλαται ἀπὸ τῆς ἐντὸς γλυκύτητος καὶ ἔξωθεν διαφαίνεται γλυκύτερα ὄντα.

Διὰ τί τῶν τε μύρτων τὰ ἐλάττω ἀπυρηνότερά ἐστι, καὶ ἐν τοῖς φοίνιξι καὶ ἐπὶ τῶν βοτρύων, ἔνθα δ' αἱ μικραὶ ῥᾶγες οὐκ ἔχουσιν ἢ ἐλάττους πυρῆνας; ἢ διὰ τὸ ἀτελέστερα εἶναι οὐκ ἔχει ἀποκεκριμένον; τέλος γὰρ ὁ πυρὴν ἔχει τὸ σπέρμα. διὰ τοῦτο δὲ καὶ ἐλάττους εἰσίν, ὥς ὄντα παραφυάδες καὶ ἀτελεῖ. καὶ ἦττον δὲ γλυκέα τῶν ἔχόντων πυρῆνας· ἀπεπτότερα γὰρ ἐστίν, ἢ δὲ πέψις τελειώσις ἐστίν.

Διὰ τί τῶν περικαρπίων τὰ μὲν πικρότερα τὰ πρὸς τὴν ρίζαν ἔχει, οἷον σίκυοι, τὰ δὲ πρὸς τὸ ἄκρον τὸ ἄνω, οἷον αἱ βάλανοι; ἢ ὅτι τῶν μὲν ταύτη ἀπεπτος ἢ τροφή διὰ τὸ ἐπιρρεῖν κατὰ τὴν ρίζαν ἀεὶ· τὰ δὲ ξηρὰ φύσει ἐστίν, ὥστε ἀπαγομένου τοῦ γλυκέος ἐκ τοῦ ἄκρου καὶ πεπεμμένου ἤδη ξηραίνεται, καὶ λείπεται τὸ πικρὸν ὥσπερ οἱ ἄλεις; ξηραίνόμενον δὲ μᾶλλον πικρὸν γίνεται, καθάπερ ἐλαῖαι καὶ βάλανοι παλαιούμεναι πικραὶ γίνονται.

[926a] Διὰ τί ἔνια βλαστάνει οὐκ ἐν τῇ γῇ ὄντα ἄλλ' ἐκτετμημένα, τὰ δὲ κείμενα, οἷον οἱ τῶν κρίνων καυλοὶ καὶ σκόροδα καὶ κρόμμυα; ἢ ὅτι ἔχουσι τροφήν ἅπαντα ἐν αὐτοῖς, ἄλλ' οὐκ ἐν ἀφωρισμένῳ τόπῳ οὐθὲν φυτόν; ἢ περιουσία οὖν ἐστὶ τῆς τροφῆς ἢ ποιοῦσα βλαστάνειν. δῆλον δέ· καὶ γὰρ καὶ αἱ σκίλλαι καὶ οἱ βολβοὶ ταὐτὸ ποιοῦσιν. αὕξεται δ' ἕκαστον οὐ τῷ ἔχειν, ἄλλ' ὅταν πεφθῇ καὶ διανεμηθῇ. ἔχει μὲν οὖν καὶ ἔμπροσθεν, αὕξεται δέ, ὅταν ἡ ὥρα ἔλθῃ ἐν ᾗ τοῦτο γίνεται πεττούσης ὥρας, οἷον καὶ τὰ τῶν κροκοδείλων ὠά. συνεχὲς δὲ οὐκέτι, ὅτι οὐκ ἐπιρρεῖ ἄλλη τροφή.

Διὰ τί ποτε τὰ σκόροδα καὶ τὰ κρόμμυα ὅσω ἂν ξηρότερα φυτεύηται, τοσούτῳ βελτίῳ γίνεται, τὰ δὲ ἄλλα χείρω; ἢ ὅτι πάντα τὰ τοιαῦτα μάλιστα ὑγρασίας ἐστὶ πλήρη; εὐκράτα οὖν γίνεται τοῦτον τὸν τρόπον φυτευθέντα. καὶ ὅτι ἦττον σήπεται, ὅταν ξηρανθέντα φυτευθῇ.

Διὰ τί ποτε τὰ σκόροδα καὶ τὰ κρόμμυα μόνον τῶν φυτῶν κείμενα βλαστάνει; ἢ διότι ὑγρασίας ἐστὶ πλήρη καὶ τροφῆς; ἢ περιουσία οὖν ἐστὶ τῆς τροφῆς ἢ ποιοῦσα βλαστάνειν. δῆλον δέ· καὶ γὰρ αἱ σκίλλαι καὶ οἱ βολβοὶ ταὐτὸ ποιοῦσιν. αὕξεται δέ, ὅταν ἡ ὥρα ἔλθῃ ἐκάστῳ.

Διὰ τί τὰ τῷ ψυχρῷ ὕδατι ἀρδόμενα γλυκύτερα ἢ τὰ τῷ θερμῷ; πότερον

ὅτι ἐγκατακλειόμενον τὸ θερμὸν ἀλμυρώτερον, ὥσπερ καὶ τὸ ἀλμυρώτερον θερμότερον, τὸ δὲ γλυκὺ ἐναντίον, ὥσπερ ψυχρόν. τροφή δὲ τοῖς λαχάνοις τὸ ὑγρόν, καὶ οἱ χυμοὶ ἐντεῦθεν.

Διὰ τί τὰ σκόροδα ὄζει μᾶλλον ἐγκαυλοῦντα ἢ νέα ὄντα; ἢ ὅτι νέων μὲν ὄντων ἔτι πολὺ ὑγρὸν ἀλλότριον ἐνδὸν ἀφαιρεῖται τὴν δύναμιν αὐτῶν; ὅταν δὲ πεπανθῇ, ἐκκεκριμένου ἤδη τούτου, τότε τὴν οἰκείαν ἔχει ὁδμήν. αὕτη δὲ ἔστι φύσει. ὁμοίως δὲ καὶ οἱ ἄλλοι καρποὶ οἱ πρόσφατοι ὄντες ὑδαρέστεροι. διὸ καὶ τὰ κρόμμυα ἦττον δριμέα τὰ νεώτερα.

Διὰ τί τῶν μυρρινῶν μὲν μὴ τεταριχευμένων τὰ μύρτα ἀπορρεῖ μᾶλλον τῶν φύλλων, ταριχευομένων δὲ τῷ φύκει τὰ μὲν φύλλα ἀπορρεῖ, τὰ δὲ μύρτα οὐκ ἀπορρεῖ; ἢ ἀταριχεύτων μὲν ὄντων οὕτως ἔχει διὰ τὴν φύσιν; ὅταν γὰρ πεπανθῇ, ἀπορρεῖν πέφυκε τὰ μύρτα. τοῦτο δὲ οὐ συμβαίνει κειμένων, ἀλλὰ μόνον κωλύει ἢ ἱκμᾶς τοῦ φύκου μεταβάλλειν τὸ ἐν τῷ μύρτῳ ὑγρόν. τὰ δὲ φύλλα ἀποπίπτει [926b] τοῦναντίον αὐτῶν ξηρανομένων, τὸ δὲ φῦκος ξηραίνει ἀλμυρὸν ὄν. οὐ ταῦτ' οὖν συμβαίνει ἐπὶ τε τῆς μυρρίνης οὔσι καὶ κειμένοις τοῖς φύλλοις.

Διὰ τί οἱ σίκυοι πέπονες ἄριστοι γίνονται ἐν τοῖς ἐλώδεσι πεδίοις, οὔσιν ἐνύγροις, οἷον περὶ Ὀρχομενὸν καὶ ἐν Αἰγύπτῳ; δοκεῖ δ' ἔνυδρος αὕτη ἡ χώρα εἶναι. ἔστι δὲ τὰ ἐλώδη ἔνυδρα· οἱ δὲ σίκυοι αὐτοὶ ὑγρότεροι· διὸ καὶ οἱ κηπαῖοι φαῦλοι εἰσίν. πότερον ὅτι εἰς βάθος διὰ σκληρότητα τῆς γῆς ἀναγκάζονται φυτεύεσθαι; ἢ γὰρ πηλώδης καὶ πεδιάς μάλιστα γίνεται σκληρά, οἱ δὲ εἰς βάθος φυτευθέντες βελτίους. ἢ διότι ξηρὰν δεῖ εἶναι τὴν γῆν διὰ τὸ αὐτὸ εἶναι ὑγρὸν φύσει; οὕτω γὰρ ἀντισπώμενον ἐπὶ τὸ μέσον ἥξει. ἢ δὲ ἐλώδεστέρα μὲν βαθεῖα δὲ τροφήν ἴσχει καὶ διὰ τὸ βάθος τῆς γῆς καὶ διὰ τὸν τόπον, καὶ οὐχ ὑπερβάλλουσιν διὰ τὸ ξηραίνεσθαι τὴν γῆν πάλιν.

Διὰ τί τὸ πηγανὸν δυσώδεις τοὺς ἰδρῶτας ποιεῖ, καὶ ἔνια τῶν μύρων; ἢ ὅτι ὅσων ἐν τῇ ὁσμῇ βαρύτης ἐνὶ καὶ δριμύτης, ταῦτα κεραννύμενα ταῖς περιττωματικαῖς ὑγρότησι κακωδεστέραν ποιεῖ τὴν ὁσμήν;

Διὰ τί τὸ πηγανὸν βασκανίας φασὶ φάρμακον εἶναι; ἢ διότι βασκαίνεσθαι δοκοῦσι λάβρως ἐσθίοντες; ἢ ὑφορώμενοί τινος δυσχερείας καὶ περὶ τὰ προσφερόμενα ὑπόπτως ἔχοντες; ἐπιλέγουσι γοῦν, ὅταν τῆς αὐτῆς τραπέζης ἰδίᾳ τι προσφέρωνται, μεταδιδόντες, “ἵνα μὴ βασκάνης με.” ἅπαντες οὖν μετὰ ταραχῆς τῶν βρωμάτων προσοίσονται τὸ διδόμενον ὑγρὸν ἢ σιτίον, ὑφ' ὧν ἢ καταλαμβανομένων ἢ ἀπεμουμένων μετεωρισθέντα τὰ σιτία συνεξέπεσε καὶ τὰ



πνεύματα ὑπὸ τῶν ὑγρῶν πόνους καὶ στρόφους παρέχει. τὸ πήγανον οὖν προεδεσθέν, θερμαντικὸν ὄν τῇ φύσει, ἡραίωσε τὸ δεχόμενον ἄγγεϊον τὰ σιτία καὶ τὸ ἄλλο σῶμα. διὸ ἔξωθεν τὸ ἐγκαταλαμβανόμενον πνεῦμα συμβαίνει.

Διὰ τί ἡ ὀρίγανος ἐμβαλλομένη τῷ γλεύκει γλυκὺν ποιεῖ τὸν οἶνον; ἐμβάλλονται δὲ δύο κοτύλαι εἰς τὸν ἀμφορέα. ἢ ὅτι ἐξαίρει δι' ὧν ἡ αὐστηρότης γίνεται, τὸ ὑδατῶδες καὶ τὸ τρυγῶδες ἀναδεχομένη τῇ ξηρότητι εἰς αὐτήν; σημεῖον δὲ ὅτι ἐκ τούτων τὸ αὐστηρόν· οἱ γὰρ οἶνοι ἦττον μαλακοί, ἐὰν ὕδωρ παραχέθῃ, καὶ ἐὰν ἐν τῇ τρυγί πλείω χρόνον ἐάσῃ τις. καὶ ὅταν ποιῶσι γλυκύ, ἡλιῶσι τὰς σταφυλὰς πολὺν χρόνον, καὶ ὁ ἥλιος ἀφαιρεῖ τὸ ὑδατῶδες καὶ [927a] τὸ λοιπὸν συμπέττει. ταῦτὸ δὲ τοῦτο ποιεῖ καὶ ἡ ὀρίγανος· ξηρὰ γὰρ καὶ θερμή, ὥστε εἰκότως διαμένει.

Διὰ τί αἱ μέλαιναι μυρρίναι πυκνοφυλλότεροί εἰσι τῶν λευκῶν μυρρινῶν; ἢ ὅτι ἀγριώτεραι τὸ γένος; σημεῖον δὲ ὅτι γίνονται ἐν τοῖς ἀγροῖς καὶ ἥκιστα μεταβάλλουσιν ὑπὸ τῆς ἐπιμελείας. τὰ δὲ ἄγρια πάντα πυκνοφυλλότερα· διὰ γὰρ τὸ ἦττον πέττειν τὸν καρπὸν εἰς τὰ φύλλα ἢ τροφὴν τρέπεται.

## ΚΑ. ΟΣΑ ΠΕΡΙ ΑΛΦΙΤΑ ΚΑΙ ΜΑΖΑΝ ΚΑΙ ΤΑ ΟΜΟΙΑ.

Διὰ τί ἡ ππισάνη καὶ τὸ ἄλευρον ἐλαίου ἐπιχειομένου λευκότερα γίνεται; καίτοι τὸ ἔλαιον πυρρόν. ἢ ὅτι πέφυκε μινγνύμενον τῷ ὑγρῷ ἀφρίζειν; τοῦτο δὲ ἡ λευκότης. ἡ δὲ μῖξις τρίψει καὶ κινήσει. μίγνυται δὲ μᾶλλον τοῖς σωματικοῖς· ἐν δὲ τοῖς ἐψήμασι τοῦτο συμβαίνει, διὸ καὶ λευκότερα ποιεῖ.

Διὰ τί ἡ ἐκ τοῦ πυροῦ τροφή μάλιστα ἀρμόττει τοῖς σώμασι καὶ μᾶλλον τρόφιμος ἢ ἡ ἐκ τῶν κριθῶν; ἢ διότι μετρίαν ἔχει γλισχρότητα; δεῖ δὲ τὴν τροφήν ἔχειν τοῦτο· προσφῦναι γὰρ δεῖ καὶ προσκολληθῆναι τῷ σώματι· οὗ ἄτιον τὸ γλίσχρον. ἀλλὰ ψαθυρότερον· διὸ αἱ τετριμμέναι σφόδρα μᾶζαι τροφιμώτεραι τῶν ἀτρίπτων.

Διὰ τί τῶν μὲν ἀλεύρων τὰ πρῶτα, τῶν δὲ ἀλφίτων τὰ τελευταῖα λαμπρότερα; ἢ διότι τὸ μὲν καπυρὸν ὄν περιθραύεται, τὸ δὲ μαλακὸν ἐνθλίβεται; λαμπρότερον δὲ ἐν ἀμφοτέροις τὸ ἐντός.

Διὰ τί οἱ ἄρτοι λευκότεροι φαίνονται ψυχροὶ ὄντες ἢ θερμοί; ἢ διὰ τὴν αὐτὴν αἰτίαν τρόπον τινὰ καὶ τὸ ἔλαιον λευκότερον τοῦ προσφάτου τὸ παλαιόν; ἄτιον γὰρ τῆς μελανίας τὸ ὕδωρ, τοῦτο δὲ ἐν ἀμφοτέροις πλεῖον προσφάτοις οὖσιν· χρονιζομένοις δὲ διὰ τὸ ἐξατμίζειν λείπεται ἔλαττον τὸ ἐπιπολῆς. ἐξατμίζει δὲ τοῦ μὲν ἐλαίου ἢ ὁ χρόνος ἢ ὁ ἥλιος· ἐκ δὲ τῶν ἄρτων ψυχομένων τὸ θερμὸν ἐξιδὼν ψυχρῶν μὲν ὄντων ἐξελέλυθεν, ἐν δὲ θερμοῖς οὖσιν ἔτι ἔνεστιν.

Διὰ τί οἱ ἀναλοι ἄρτοι πλείονα σταθμὸν ἔχουσι τῶν ἡλισμένων, τῶν ἀλῶν αὐτοῖς ἴσων ὑπαρχόντων; εἰκὸς δὲ ἦν τοῦναντίον· οἱ γὰρ ἄλες πρόσκεινται τε καὶ βαρύτεροι τοῦ ὕδατός εἰσιν. ἢ ὅτι ξηραίνουσιν οἱ ἄλες; διὸ καὶ σώζεται ἄσηπτα τὰ τεταριχευμένα· ἀναλίσκεται γὰρ καὶ ξηραίνεται [927b] τὸ ὑγρὸν ὑπ' αὐτῶν, ὃ σήπεται ὑπὸ τοῦ θερμοῦ. καὶ ἐν τῷ ἄρτῳ οὖν ἀναλίσκεται τὸ ὑγρὸν ὑπὸ τοῦ ἀλός, καὶ ἀποπνεῖ ἔξω. διὸ καὶ οἱ ἔωλοι ἄρτοι κουφότεροί εἰσι τῶν θερμῶν, ψυχρότεροι ὄντες. ἐν δὲ τοῖς μὴ ἡλισμένοις τοῦτο τὸ ὑγρὸν πλεῖον ἐνυπάρχον ποιεῖ βαρυτέρους αὐτούς.

Διὰ τί οἱ μὲν ψυχροὶ ἄρτοι ἂν βρεχθέντες ἄψωνται ἀλλήλων, οὐ συνέχονται, οἱ δὲ θερμοί; ἢ ὅτι οἱ μὲν ψυχροὶ μετὰ τῆς ἀτμίδος ἀφιάσι τὸ ἐν αὐτοῖς γλίσχρον ὑγρόν, οὗ ἐξελθόντος οὐ κολλῶνται (τὸ γὰρ ὕδωρ ὧ ἐβρέχθησαν, ψαθυρότερόν ἐστιν), οἱ δὲ θερμοὶ ἔχουσι τινα γλισχρότητα. ὅταν

μὲν οὖν βεβρεγμένων αὐτῶν ἢ ἀτμὶς ἐξίη, τὸ μὲν θερμὸν διαπνεῖ διὰ λεπτότητα, τὸ δὲ κολλῶδες συνεξιὸν αὐτῷ καὶ μιννύμενον τῷ ὑγρῷ προσέρχεσθαι ποιεῖ ἐν αὐτοῖς.

Διὰ τί τῶν ἀλεύρων τὰ ἄλφιστα λαμπρότερα ἐστὶ, τῶν δὲ ἀλφίτων τὰ τελευταῖα; ἢ ὅτι τὸ μὲν ἄλφιτον καπυρὸν ὄν περιθραύεται, οἶον μάλιστα πάσχει πλεῖστον χρόνον κοπτόμενον, τὸ δὲ μαλακὸν καὶ λεπτὸν ἄλευρον, ὃ ἐστὶν ἐντὸς τοῦ πυροῦ, ἐκθλίβεται πρῶτον. λαμπρότατον δὲ ἐστὶν ἐν ἀμφοτέροις τὸ ἐντός.

Διὰ τί ἡ μὲν μᾶζα ὅσω ἂν μᾶλλον τριφθῇ, δυσδιαχωρητοτέρα γίνεται, ὁ δὲ ἄρτος εὐδιαχωρητότερος; ἢ διὰ τὸ τριφθῆναι σφόδρα τὸ σταῖς μικρότερον γίνεται; τὸ δὲ γλίσχρον τοιοῦτόν ἐστιν, ὑπὸ δὲ τοῦ πυρὸς πάντοθεν ἐξήρηται τὸ ὑγρὸν τοῦ ἄρτου, ὥστε ψαθυρότερον γίνεται τοῦ ὑγροῦ ἐξαιρεθέντος ὅλως, ὅσω ἂν μᾶλλον τριφθῇ, διὰ τὸ ἐν τῇ τρίψει μικρομερέστερον γεγονέναι· τὸ δὲ ψαθυρὸν εὐπεπτότερόν ἐστιν. ἡ δὲ μᾶζα ὅσω ἂν μᾶλλον τριφθῇ, γλίσχροτέρα γίνεται τοῦ ὑγροῦ μεμιγμένου· τὸ δὲ γλίσχρον οὐκ εὐδιαίρετον. τὰ δὲ τοιαῦτα δύσπεπτά ἐστιν· δεῖ γὰρ τὸ πεφθισόμενον διαιρεθῆναι εἰς μικρά.

Διὰ τί ἡ μὲν μᾶζα τριβομένη ἐλάττων γίνεται, τὸ δὲ σταῖς μεῖζον; ἢ ὅτι τὸ μὲν ἄλφιτον βρεχθὲν καὶ τριβόμενον συνίζει τῇ τοῦ ὑγροῦ κολλήσει διὰ τὸ ἄραιον εἶναι καὶ χονδρόν, τὸ δὲ ἄλευρον μετεωρίζεται διὰ τὸ πυκνὸν εἶναι σφόδρα; τὰ γὰρ πυκνὰ τριβόμενα θερμαίνεται, θερμαινόμενα δὲ καὶ πνευματούμενα μετεωρίζεται, καθάπερ καὶ ἡ σὰρξ.

Διὰ τί δὲ πυρούμενον τὸ σταῖς μεῖζον γίνεται ἢ ἡ [928a] μᾶζα; ἢ ὅτι ἔχει ὑγρὸν οὐ κεχωρισμένον, ὥστε ἐξιέναι θερμαινόμενον διὰ τὴν τρίψιν· ἐξ οὗ θερμαινόμενου πνεῦμα γίνεται, ἐκ δὲ τοῦ πλείονος ὑγροῦ ἀνάγκη γίνεσθαι πλεῖον πνεῦμα.

Διὰ τί τοῦ μέλιτος κολλητικωτέρου ὄντος ἢ τοῦ ὕδατος, τὸ τῷ μελικράτῳ φυραθὲν ἄλευρον ψαθυρότερον γίνεται, ὅταν ἐψηθῇ ἢ ὀπτηθῇ, ἢ τὸ τῷ ὕδατι; ἢ διότι τὸ μὲν ὑπὸ τοῦ πυρὸς πήγνυται καὶ συνίσταται, τὸ ὕδωρ, τὸ δὲ μέλι συνιστᾷ μὲν ἀλλ' ἐπιξηραίνει, διὸ μᾶλλον ψαθυρὸν ποιεῖ· ἡ γὰρ ψαθυρότης ὑπὸ ξηρασίας γίνεται.

Διὰ τί οἱ δίπυροι ἄρτοι ψυχθέντες οὐ γίνονται σκληροί; ἢ ὅτι ἔχει τινὰ ἐν αὐτῷ ὁ πυρὸς γλυκὺν καὶ γλίσχρον χυμόν, ὅς ἐστιν αὐτοῦ καθάπερ ψυχῇ;

σημεῖον δέ· ξηραινόμενος μὲν γὰρ ὅλως κενοῦται, νοτιῶν δὲ ἐκφύεται. τοῦ οὖν χυμοῦ τούτου ἐνυπάρχοντος καὶ ἐν τῷ ἀλεύρῳ καὶ μάλιστα τῷ καθαρωτάτῳ, σταιτὸς γενομένου τοῦ ἀλεύρου καὶ τριβομένου συμβαίνει αὐτό. σημεῖον δέ· ἐψόμενον γὰρ διαχωρητικώτερον γίνεται, ὀπτωμένου μὲν οὖν τὸ πρῶτον τοῦ ἄρτου, τὸ ψαθυρὸν καὶ ἐλαφρὸν τοῦ δὲ ὑγροῦ τοῦ ἐκ τοῦ ἄρτου ἀπατμίζει, καὶ τοῦ ἀλεύρου τὸ ἀχυρωδέστατον ἀποκαίεται. ἐξαιρεθέντος δὲ καὶ τριβομένου πάλιν τοῦ σταιτός, τό τε τοῦ ἀλεύρου λειότατον καὶ τοῦ ὑγροῦ γλισχρότατον λειπόμενα μίγνυται μᾶλλον ἑαυτοῖς, διὰ τε τὸ τοιαῦτα καὶ μᾶλλον γεγονέναι, καὶ διὰ τὴν πύρωσιν· βαφῇ γὰρ ἡ μῖξις αὐτῶν ὁμοία γίνεται, ὥστε γίνεσθαι τὸ ὕστερον τριφθὲν σταῖς ὅμοιον τῷ ἐψομένῳ ἀλεύρῳ. καὶ γὰρ ἐκεῖνο, τριφθέντος τοῦ σταιτός καὶ λειφθέντος τοῦ λεπτοτάτου ἀλεύρου καὶ τοῦ γλισχροτάτου ὑγροῦ, πυρωθὲν κολλῶδες γίνεται καὶ ἀνεξίκμαστον· τό τε γὰρ γλίσχρον δυσδιαίρετον, καὶ τὸ πυκνὸν οὐθὲν δι' αὐτοῦ προῖεται. ὑγρότατον οὖν τοῦτο, καὶ διὰ πυρὸς πάσχει ἄρτος διὰ τὰ εἰρημένα· ἔχων δὲ αἰεὶ ὑγρότητα οὐ γίνεται σκληρός.

Διὰ τί τῆς τροφῆς καὶ τῆς ξηρᾶς καὶ τῆς ὑγρᾶς ἐνίοις δυνάμεθα πολὺν χρόνον χρῆσθαι, οἷον τῇ γινομένῃ τροφῇ ἐξ ἀλφίτων καὶ ἀλεύρων καὶ τοῖς οἴνοις τοῖς αὐστηροῖς καὶ ὕδατι, τοῖς δὲ οὐ δυνάμεθα, καὶ ταῦτα ἡδίοσιν οὐσιν; ἢ ὅτι τὰ μὲν ἐστὶ τῶν προσφερομένων ἐπιπολαστικὰ καὶ τρόφιμα, ὥστε καὶ ὅταν κενωθῶσι, τῆς πρώτης τροφῆς ἀναλωθείσης ἔτι ἔνεστιν ἐν τῷ σώματι πολλὴ δύναμις, ὥς [928b] μὲν πρὸς τὴν πρώτην ἐργασίαν τοῦ σώματος πεφθεῖσα, ὥς δὲ πρὸς τὸ τέλος καὶ τὴν ἐκ διαδοχῆς γινομένην ἀπεπτος; τοιαῦτα δὲ ἐστὶ καὶ τῶν ἡδέων τὰ πλεῖστα. τὰ μὲν γὰρ λιπαρὰ καὶ γλυκέα καὶ πίονα ἡδίστα δοκεῖ εἶναι γευόμενοις ἡμῖν, ταῦτα δὲ ἐστὶ πάντα τὰ τρόφιμα καὶ οὐκ ἀπεπτα καὶ ἐπιπολαστικά, ἐν ἧ ἂν ἡ διαφορᾶ· ὥστε ἔναυλον εἶναι τὴν δύναμιν, ἐάν τις αὐτῶν πληρωθῇ καὶ μὴ ταχὺ ἐκλίπη τὴν αἴσθησιν. οὐ γὰρ μόνον ἐν τῇ κοιλίᾳ ἐνόντων γίνεται ἡ πλήρωσις, ἀλλὰ καὶ διαδοθείσης τῆς τροφῆς ἐν ἄλλοις μέρεσιν. ἢ οὐ μόνον τοῦτο αἶτιον, ἀλλὰ καὶ τὸ τῇ φύσει ἔνια σύμμετρα εἶναι καὶ οἰκεῖα ἡμῖν; πάντα γὰρ τὰ τοιαῦτα διὰ τὸ κατὰ φύσιν εἶναι μᾶλλον προσίεται τὰ σώματα, τὰ δὲ παρὰ φύσιν ἥττον. ἄλλα τε ἄλλη κράσει ἀρμόττει, οἷον τὸ μέλι ταῖς μελίτταις κατὰ φύσιν ἐστὶν ὥστε προσφέρεσθαι μόνον· καίτοι ἀσθενεῖς γέ εἰσι τὴν δύναμιν. ὥστε δεῖ λείπειν τὸ ἀναλίσκόμενον, ἀλλ' εἶναι ἀνάλογον τὸ πλῆθος πρὸς τὴν ἰσχὺν τὴν ἀπὸ τῶν ἀνθρώπων· ὥστε ὅσα τῶν ἡδέων τοιαῦτά ἐστι, διὰ μὲν τὸ ἐν τῇ φύσει ἥττον ὑπάρχειν ἡδέα φαίνεται, ὀλίγον δὲ χρόνον· εἴτα πληροῖ ταχύ. τῶν δὲ κατὰ φύσιν αἰεὶ δέονται, ὥστε καὶ προσφερομένων συνεχῶς δι' αὐτὰ οὐ τῶν ἡδίστων, ἀλλ' ἑτέρων ἥττον πληροῦνται.

Διὰ τί τὰ αὐτὰ συνεθιζομένοις τε ἡδέα φαίνεται καὶ λίαν συνεχῶς προσφερομένοις οὐχ ἡδέα; τὸ δὲ ἔθος ἐστὶ τὸ πολλάκις καὶ συνεχῶς τι ποιεῖν. ἢ ὅτι τὸ μὲν ἔθος ἕξιν δεκτικὴν τινος ἐν ἡμῖν ποιεῖ, οὐ πλήρῳσιν, τὸ δὲ συνεχῶς προσφέρεσθαι τι πληροῖ τὴν ἐπιθυμίαν, καὶ καθάπερ αἷτιον; ἔστι γάρ τι καὶ ἡ ἐπιθυμία. αἱ μὲν οὖν ἕξεις γυμναζόμεναι αὖξονται καὶ ἐπιδιδόασιν· τὰ δὲ ἄγγεῖα σαπτόμενα οὐδὲν μείζω γίνεται. διόπερ τὸ μὲν ἔθος ὃν γυμνάσιον αὖξει τὴν δεκτικὴν ἕξιν· τὸ δὲ συνεχῶς προσφερόμενον σάττει μὲν καὶ πληροῖ τὴν ἐπιθυμίαν, ἥς πληρωθείσης οὐκέτι προσιέμεθα, αὖξει δὲ οὐθὲν αὐτὴν διὰ τὰ προειρημένα ἐπὶ τῆς σάξεως. ἔτι τὸ ἔθος οὐ τῷ ἀεὶ ἡδύνειν ἡδύ ἐστι (λυπεῖ γὰρ καὶ τὰ τοιαῦτα, ἐάν τις συνεχῶς ποιῇ) ἀλλὰ τῷ τὴν ἀρχὴν τοῦ ἔργου ἡδέως ἡμᾶς προσιέσθαι, καὶ πλείῳ χρόνον δύνασθαι ταῦτόν ποιεῖν ἢ ἀσυνήθεις ὄντας. ἐν ᾧ οὖν καὶ τοῦτο λυπεῖ ἡδὺ ὄν, ἐν ταύτῳ καὶ τὰ ἄλλα ἡδέα. συνεχῶς γὰρ γινόμενα ἢ προσφερόμενα ἀμφοτέρω λυπεῖ. [929a] αἷτιον δὲ τὸ μὴ ἀπείρους ἡμᾶς ἐν αὐτοῖς δυνάμεις ἔχειν τὰς δεκτικὰς καὶ ποιητικὰς, ἀλλὰ πεπερασμένας, αἱ τυγχάνουσιν τοῦ συμμέτρου αὐταῖς (τοῦτο γὰρ συνεχῶς ἐστὶν αἰσθητὸν εἰς ἐπίδοσιν) αἱ μὲν πληροῦνται, αἱ δὲ ἀδυνατοῦσιν ἐνεργεῖν.

Διὰ τί τὸ μὲν σταῖς γίνεται τριβόμενον λευκόν, ἡ δὲ μᾶζα μελαντέρα; πότερον ὅτι ξηραίνεται μᾶλλον τὸ ἐπιπολῆς ἐν τῷ ἀλφίτῳ, οἷον ἐν ὑγρῷ θερμόν, ὃ ποιεῖ τὴν λευκότητα; ἢ διὰ τὸ πεπυρῶσθαι ἔλκει τὸ ὑγρὸν εἰς αὐτό, μεγαλομερέστερον ὄν.

Διὰ τί τὰ ἄλφιστα μᾶλλον τῷ ὕδατι συμμένει φυρόμενα ἢ τῷ ἐλαίῳ, ὄντι γλίσχροτέρῳ; καίτοι κολλητικώτερον τὸ γλίσχρον, τὸ δὲ ἔλαιον τοῦ ὕδατος γλίσχρότερον, ἢ ὅτι λεπτότερον τὸ ὕδωρ, ὥστε εἰσέρχεται εἰς ἅπαν καὶ μαλακὰ ποιεῖ, συμφύεται τε μᾶλλον καὶ συνθλίβεται πρὸς ἄλληλα, καίτοι θλιβόμενα καὶ χωρὶς τῆς τρίψεως.

Διὰ τί οἱ ἄτριπτοι ἄρτοι καὶ οἱ σφόδρα τετριμμένοι ρήγνυνται; ἢ ὅτι οἱ μὲν ἄτριπτοι διὰ τὸ ἀσύνδετοι εἶναι; ἢ γὰρ τρίψις συνδεῖ· προωδοποιοῦνται οὖν τὸ ρήγνυσθαι. ἔτι ἀμιγῆς καὶ πολὺ ἔχουσι τὸ ὑγρὸν. οἱ δὲ τετριμμένοι σφόδρα λίαν εἰσὶ ξηροὶ διὰ τὸ ὀλίγον ἔχειν ὑγρὸν· θερμαινομένων γὰρ πᾶν ἐξέρχεται. ὥστε ἄμφω διὰ τὸ πολὺ ὑγρὸν ἐξιέναι ρήγνυνται· πολὺ γὰρ ἐν μὲν τοῖς ἀτρίπτοις ἀπλῶς ἔνεστιν, ἐν δὲ τοῖς τετριμμένοις πρὸς τὸ ὑπόλοιπον.

Διὰ τί κουφότερον τὸ φύραμα γίνεται ἢ ἄμφω, τό τε ὑγρὸν καὶ τὸ ἄλφιτον; πότερον ὅτι μιγνυμένων πνεῦμα συγκατακλείεται; ἢ ὅτι ὑπὸ τοῦ θερμοῦ τοῦ ἐν τοῖς ἀλφίτοις ἐξατμίζεται τοῦ ὕδατος, ὥστε ἔλαττον γίνεται τὸ μεμιγμένον;

ὁ δὲ ἄηρ, εἰ καὶ μίγνυται, οὐθὲν ἂν κουφότερον ποιοῖ· ἔχει γὰρ βάρος καὶ ὁ ἄηρ ἐν τῷ ἀέρι.

Διὰ τί μετὰ τοῦ ἀλφίτου πινόμενον τὸ γάλα καὶ ὁ γλυκὺς φαίνεται γλυκύτερα; πότερον παρὰ τὸ μὴ γλυκὺ μᾶλλον φαίνεται; τὸ γὰρ ἄλφιτον οὐ γλυκύ. ἢ ὅτι ἐνδιατρίβει τὸ ἄλφιτον ἔχον γλυκύτητα, ὥστε πλείονι χρόνῳ ἢ αἴσθησις.

Διὰ τί ἦττον ἄκρατον φαίνεται τὸ αὐτὸ πόμα μετὰ τοῦ ἀλφίτου πινόμενον; πότερον ἢ ὅτι κεράννυσιν ἄλλο ἔχον μετ' ἄλλου; ἢ ὅτι ἀντιφράττει τῷ πόματι καὶ ἀφανίζει, ἀντισπῶν εἰς αὐτό;

[929b] Διὰ τί ὁ χόνδρος πλεῖον ὕδωρ δέχεται ἢ οἱ πυροὶ ἐξ ὧν ὁ τοιοῦτος ἐγένετο χόνδρος; ἢ ὅτι ἄλευρά πῶς ἐστὶν ὁ χόνδρος, τὰ δὲ ἄλευρα πλεῖον δέχεται. καὶ γὰρ γίνεται ὁ ὄγκος πλείων ἢ ὁ τῶν πυρῶν· σέσακται γὰρ καὶ τὰ ἐν τοῖς πυροῖς. τὰ δὲ πλείω χωρεῖ πλεῖον. καὶ τοῦτο καὶ ὅτι ἔχει θερμότητα καὶ τὰ ἄλευρα καὶ ὁ χόνδρος. τὸ δὲ θερμὸν καὶ ἔλκει μᾶλλον τὸ ὑγρὸν, καὶ ἐξαναλίσκει ἐξατμίζον.

Διὰ τί τὸ ἄλευρον τριβόμενον μεῖζον πολὺ γίνεται ἢ τὸ ἄλφιτον κατὰ λόγον; ἢ ὅτι τὸ μὲν πολὺ ὕδωρ δέχεται, τὸ δὲ ὀλίγον; διὰ τί δὲ δέχεται πλεῖον; μᾶλλον γὰρ εἰκὸς τὸ ἄλφιτον· πεπύρωται γάρ, τὸ δὲ ἄπυρον· μᾶλλον δὲ ξηρὸν τὸ πεπυρωμένον. ἢ διότι τρῖψιν μᾶλλον δέχεται τὸ ἄλευρον; τούτου δὲ αἴτιον τὸ μικρομερέστερον εἶναι. ὥσπερ οὖν ὅσα πλάσιόν ἐστι δυνάμει τῇ μικρότητι, τοσαυταπλάσιον δέχεται τὸ ὕδωρ. κόλλη γὰρ χρῆται τῷ ὕδατι, ὥσπερ καὶ Ἐμπεδοκλῆς μετήνεγκεν ἐν τοῖς Περσικοῖς εἰπὼν “ἄλφιτον ὕδατι κολλήσας.” καὶ ἀναλίσκει πολὺ διὰ τοῦτο.

Διὰ τί δὲ καὶ πεπυρωμένον τὸ σταῖς μεῖζον γίνεται ἢ ἡ μᾶζα; ἢ ὅτι ἔχει ὑγρὸν οὐ κεχωρισμένον, ὥστε ἐξιέναι θερμαινόμενον, οὐ πνεῦμα γινόμενον, καὶ οὐ δυνάμενον ἐξιέναι ὁμοίως καὶ ἐν τῇ μάζῃ διὰ τὴν πυκνότητα τοῦ σταιτός; πυκνὸν γὰρ τὸ ἐκ μικρομερεστέρων. αἶρει οὖν, καὶ ποιεῖ τὸν ὄγκον. ἔτι δὲ καὶ πλεῖον ἔχει τὸ ὑγρὸν, ἐξ οὗ θερμαινόμενου πνεῦμα γίνεται· ἐκ δὲ τοῦ πλείονος ἀνάγκη γίνεσθαι πλεῖον.

Διὰ τί οἱ περὶ τὴν τῶν σιτίων ἐργασίαν, οἱ μὲν περὶ τὰς κριθὰς ἄχρροι γίνονται καὶ καταρροϊκοί, οἱ δὲ περὶ τοὺς πυροὺς εὐεκτικοί; ἢ διότι εὐπεπτότερος ὁ πυρὸς τῆς κριθῆς, διόπερ καὶ αἱ ἀπόρροιαι;

Διὰ τί ὁ ἄρτος, ἐὰν μὲν τις αὐτὸν ὀπτᾷ, σκληρότερος γίνεται, ἐὰν δέ τις

αὐτὸν χλιαίνῃ, ὑγρότερος ἄχρι τινός; ἢ ὅτι ὀπτωμένου αὐτοῦ τὸ ὑγρὸν ἐκπορεύεται; σκληρότερος οὖν γίνεται· ἐπιθερμαινομένου δὲ τὸ ὑγρὸν συσταθὲν διαχεῖται ὑπὸ τοῦ πυρός, διὸ ὑγρότεροι γίνονται.

Διὰ τί τὰ μὲν ἄλευρα ψυχόμενα ἥττον σάττεται, τὰ δὲ ἄλφιστα μᾶλλον; ἢ ὅτι τὰ μὲν μικρομερῇ οὐ διαλείπει χώραν, καὶ τὰ βαρέα τῇ θλίψει τὰ πλείω ἐλάττω κατέχει τὸ ἴσον; τὰ μὲν οὖν ἄλφιστα ἀδρά ἐστίν. ψυχόμενα οὖν ἐλάττω γίνεται, ὥστε τὸ ἔλαττον συμπίζει τὸ πλεόν. τὰ [930a] δὲ ἄλευρα ὑπάρχει μὲν μικρομερῇ ὄντα, ὥστε οὐ διὰ τοῦτο ψύχεται, ἀλλ' ἵνα ἡ κουφότερα καὶ μὴ σάττηται διὰ τὴν θλίψιν· βαρύτερον γὰρ φύσει τὸ ἄλευρον τοῦ ἀλφίτου ἐστίν.

## ΚΒ. ΟΣΑ ΠΕΡΙ ΟΠΩΡΑΝ.

Διὰ τί τὴν ὀπώραν ὕστερον ἢ πρότερον φαγοῦσιν οὐκ ἀνάλογον τοῖς αὐτοῖς ὁ ὄγκος τῆς πληρώσεως γίνεται; ἢ ὅτι βαρυτέρα ἐστὶν ἡ ὀπώρα τῶν σιτίων πολὺ. δηλοῖ δὲ καὶ τὰ σῦκα, ἐὰν ὕστατα βρωθῇ· τελευταῖα γὰρ ἐμεῖται. ἐὰν μὲν οὖν πρῶτα, διὰ βάρος κάτω πορευόμενα εὐρυχωρίαν ἄνω ποιεῖ, ὥστε ῥαδίως δέχεσθαι τὸν ὄγκον τῶν σιτίων. ἀνάπαλιν δὲ εἰσελθόντα τὰ σιτία, διὰ τὸ μὴ κάτω φέρεσθαι, ταχὺ τοῦ ἄνω κενοῦ προσλαμβάνει.

Διὰ τί τῶν γλυκέων ὄντων ὁμοιοτέρων ἡμῖν ἢ τῶν δριμέων, θᾶττον πληρούμεθα ὑπὸ τῶν γλυκέων; εἰκὸς δὲ ἦν ἥττον· ὑπὸ γὰρ τῶν ὁμοίων ἥττον ἦν εἰκὸς πληροῦσθαι. ἢ ὅτι οὐχ ὁμοίως τό τε ἀγγεῖον πληροῦται ταχύ, ἐξ οὗ πληρούμεθα, καὶ τὸ τρεφόμενον, ἀλλ' ἐνίοτε ἡ μὲν κοιλία πλήρης ἐστίν, οἶον τῶν διψώντων, τὸ δὲ δίψος οὐδὲν ἥττον ἐστίν. οὐ γὰρ τῷ ταύτην εἶναι πλήρη παυόμεθα διψῶντες, ἀλλὰ τῷ ἕκαστον τῶν τοῦ σώματος τὸ αὐτῷ οἰκεῖον ἐσπακέναι, καὶ ὅταν ἐκεῖνα ἀπολάβῃ ἱκανῶς, τότε παυόμεθα διψῶντες. καὶ πεινῶντες δὲ ὡσαύτως.

Διὰ τί θᾶττον πληρούμεθα ἀπὸ τῶν γλυκέων ἢ ἀπὸ τῶν δριμέων; ἢ ὅτι θᾶττον παυόμεθα ἐπιθυμοῦντες τῶν γλυκέων; ἢ ὥς μὲν ἡ κοιλία πληροῦται, οὕτω καὶ ἡμεῖς ὑπὸ τῶν γλυκέων; οὐχ ὁμολογεῖται· ὅτι δὲ ἡ ἐπιθυμία θᾶττον ὑπ' αὐτῶν πληροῦται, τοῦτ' ἂν εἴη λεκτέον. ἢ ὅτι ἡ μὲν ἐπιθυμία ὥς ἀπλῶς εἰπεῖν ἔστι μὲν ἔνδεια, καὶ ὅταν μηκέτι ἔχωμεν τροφήν ἢ ὀλίγην; τὰ μὲν οὖν δριμέα οὐκ ἔστι τρόφιμα, ἀλλὰ τροφήν μὲν ὀλίγην ἔχει, τὸ δὲ περίττωμα πολὺ. εἰκότως οὖν πολλὰ ταῦτα ζητοῦμεν ἐσθίειν, καὶ οὐκ ἐμπιπλάμεθα αὐτῶν τὴν ἐπιθυμίαν, διὰ τὸ ἔτι προσδεῖσθαι τροφῆς, ταῦτα δὲ μὴ ἔχειν τροφήν. τὰ δὲ γλυκέα ἅπαντά ἐστι τροφή, καὶ ἀπὸ μικρῶν τοιούτων πολλήν

λαμβάνει τὸ σῶμα. ὅταν οὖν ἀπολάβῃ πολλὴν τροφήν, οὐκέτι δύναται ἐσθίειν διὰ τὸ μὴ ὑποφέρειν. εἰκότως οὖν θᾶττον ὑπὸ τῶν γλυκέων πληρούμεθα.

Διὰ τί τὰ περικάρπια καὶ τὰ κρέα, καὶ ὅσα τοιαῦτα, [930b] ἐν τοῖς ἀσκοῖς ἄσηπτα γίνεται, ὅταν σφόδρα φυσηθῶσι, καὶ τὰ ἐν τοῖς ἀκριβῶς περιπωματιζομένοις ὡσαύτως; ἢ διότι σήπεται μὲν κινούμενα πάντα, τὰ δὲ πλήρη ἀκίνητα· ἀδύνατον γὰρ ἄνευ κενοῦ κινηθῆναι, ταῦτα δὲ πλήρη.

Διὰ τί μετὰ τὰ σαπρὰ τῶν περικαρπίων ὁ οἶνος πικρὸς φαίνεται πινόμενος; ἢ ὅτι τὴν πικρότητα ἔχει ἢ σαπρότης ἢ τοιαύτη; τὸ οὖν ἐπιμένον ἐπὶ τῇ γλώττῃ, μινύμενον τῷ πόματι καὶ διαχεόμενον, πικρὸν ποιεῖ τὸ πόμα. αὐτὸ δὲ καθ' αὐτὸ ἦττον φαίνεται ἐσθιόμενον διὰ τὸ πολλῶν ἄπτεσθαι καὶ εἰς μικρὰ διανενεμῆσθαι τὸν τοιοῦτον χυμόν.

Διὰ τί τὰ τραγήματα ἐδεστέον; ἢ ἔνεκα τοῦ πιεῖν ἱκανόν; οὐ γὰρ μόνον ποτέον τῆς δίψης χάριν τῆς ἐπὶ τοῖς σιτίοις, ἀλλὰ καὶ μετὰ τὸ σιτίον.

Διὰ τί τὰ ὀπτὰ κάρυα ψυχθέντα χεῖρω γίνεται, καὶ ὁ ἄρτος δὲ καὶ ὁ βάλανος καὶ πολλὰ τῶν τοιούτων, θερμανθέντα δὲ πάλιν βελτίω; ἢ διότι ψυχθέντος μὲν πέπηγεν ὁ χυμός, ἀναχλιανθέντος δὲ πάλιν χεῖται; ἢ δὲ ἡδονὴ γίνεται διὰ τὸν χυμόν.

Διὰ τί ἐπὶ τῇ ἀπολαύσει τῆς ὀπώρας, οἶον σύκων καὶ τῶν τοιούτων, ἢ οἶνον ἄκρατον δεῖ ἐπιπίνειν ἢ ὕδωρ; ταῦτα δὲ ἐναντία. ἢ ὅτι ἡ ὀπώρα καὶ θερμὴ ἐστὶ καὶ ὑγρὰ διὰ τὴν γένεσιν; ἔχει γὰρ πολὺ πῦρ καὶ ὑγρότητα, ὥστε διὰ μὲν τὸ πῦρ οἶον ζέσιν ποιεῖ ὁ χυμὸς εἴσω, ὅπερ ἔξω τὸ γλεῦκος ποιεῖ. ἦττον δὲ ἔχει δύναμιν καὶ τὰ ἄλλα τὰ ἀκρόδρυα. τὸ δὲ τῆς ὑγρότητος πλῆθος ἀπεψίαν ποιεῖ. τὸ μὲν οὖν ὕδωρ διὰ τὴν ψυχρότητα σβεννύει τὴν ζέσιν, ὁ δὲ οἶνος διὰ τὴν θερμότητα ὡς ἐπὶ τὸ πολὺ· ὥσπερ γὰρ πῦρ ἐνίστε πυρός, ἐὰν ἢ ἔλαττον, ἀφαιρεῖται τὴν ἰσχύν. μᾶλλον δὲ τῇ θερμότητι πεπτικός ἐστὶ τῆς ὑγρότητος, καὶ διὰ βάρος κατακρατεῖ τὸν τῆς ζέσεως ἐπιπολασμόν.

Διὰ τί τῶν ἰσχάδων γλυκύταται αἱ δίχα ἐσχισμένοι, οὔτε δὲ αἱ πολυσχιδεῖς οὔτε αἱ ἀσχιδεῖς; ἢ διότι ἐκ μὲν τῶν πολυσχιδῶν διαπέπνευκε καὶ ἐξίκμακε μετὰ τοῦ ὑγροῦ τὸ πλεῖστον τοῦ γλυκέος, ἐν δὲ ταῖς μεμυκυῖαις πολὺ τὸ ὑδατῶδες ἐστὶ διὰ τὸ μὴ ἡτμικέναι. αἱ δ' ἐσχισμένοι μὲν, μὴ εἰς πολλὰ δέ, ἀμφοτέρων τούτων ἐκτός εἰσι τῶν παθημάτων.

Διὰ τί ταῖς καμίνοις ξηραινόμενα τὰ σῦκα σκληρότερα [931a] γίνεται, ἐὰν



ψυχθῆ ἔν τῇ καμίνῳ, ἢ ἂν ἐξαιρεθέντα ψυχθῆ; ἢ ὅτι ἔν μὲν τῇ καμίνῳ ἐξατμίζει πᾶν τὸ ὑγρὸν ὑπὸ τοῦ θερμοῦ, ἔξω δὲ περιεστηκῶς ὁ ἀήρ ψύχων κωλύει τὸ ὑγρὸν ἐξιέναι καὶ συνίστασθαι; μᾶλλον γὰρ ἐξατμίζει. ἔστι δὲ τὰ μὲν ξηρὰ σκληρά, τὰ δὲ ὑγρὰ μαλακά.

Διὰ τί παρὰ τὰ στρυφνὰ ὁ οἶνος καὶ τὸ ὕδωρ φαίνεται γλυκύτερα, οἶον ἐάν τις βαλάνους ἢ μύρτα ἢ τι τῶν τοιούτων διατράγῃ; ἢ εἰκότως, καθάπερ καὶ ἐπὶ τῶν ἄλλων; πᾶν γὰρ τὸ αὐτὸ παρὰ τὸ ἐναντίον μᾶλλον φαίνεται, οἱ δὲ τῶν ἐναντίων χυμοὶ ἀντικείμενοί πῶς εἰσιν. ἢ ὅτι, καθάπερ ἐπὶ τῶν βαπτομένων, ὑπὸ τῶν στρυφνῶν ἡ γλῶττα προδιεργάζεται καὶ τοὺς πόρους ἀνοίγεται, ὥστε μᾶλλον διέναι τὸ γλυκύ; καὶ γὰρ τὰ βαπτόμενα τούτου ἔνεκεν προβρέχουσιν ἐν τοῖς στρυφνοῖς, τῷ διεργασθὲν μᾶλλον δέχεσθαι τὴν βαφὴν.

Διὰ τί τὰ γλυκέα ἥττον δοκεῖ γλυκέα εἶναι θερμὰ ὄντα ἢ ὅταν ψυχθῆ; πότερον ὅτι ἅμα δύο αἰσθήσεις γίνονται ἀμφοῖν, ὥστε ἢ τοῦ θερμοῦ ἐκκρούει τὴν ἐτέραν; ἢ ὅτι καὶ τὸ γλεῦκος θερμόν· ὥσπερ οὖν πῦρ γίνεται ἐπὶ πῦρ. κωλύει οὖν ἡ θερμότης. ἢ ὅτι τὸ πῦρ ἀφαιρεῖται τὰς δυνάμεις ἀπάντων διὰ τὸ κινητικὸν εἶναι. ἐγγυτέρω οὖν τοῦ μεταβάλλειν ἐστὶ θερμὰ ὄντα, ἀποψυχθέντα δὲ ἔστηκεν.

Διὰ τί ποτε τὰ ἄχυρα τὰ μὲν σκληρὰ πέττει, τὰ δὲ πεπεμμένα οὐ σήπει; ἢ ὅτι τὰ ἄχυρα θερμόν τε καὶ ὀλκόν ἐστίν; τῇ μὲν οὖν θερμότητι πέττει, τῷ δὲ ὀλκὸν εἶναι τὸν ἰχώρα τὸν σηπόμενον δέχεται, διὸ οὐ σήπει.

Διὰ τί τὰ σῦκα μαλακὰ καὶ γλυκέα ὄντα λυμαίνεται τοὺς ὀδόντας; ἢ διὰ τὴν γλισχρότητα προσέρχεται τοῖς οὖλοις, καὶ παρεμπίπτει διὰ τῶν ὀδόντων εἰς τὰ διὰ μέσου διὰ τὸ μαλακὰ εἶναι, καὶ σῆψιν ποιεῖ ταχέως ἅτε θερμὰ ὄντα; τάχα δὲ ἴσως καὶ διὰ τὴν σκληρότητα τῶν κεγχραμίδων ἐν τῇ τούτων κατεργασίᾳ πονοῦσι ταχέως οἱ ὀδόντες.

## **ΚΓ. ΟΣΑ ΠΕΡΙ ΤΟ ΑΛΜΥΡΟΝ ΥΔΩΡ ΚΑΙ ΘΑΛΑΤΤΑΝ**

Διὰ τί τὸ κύμα οὐκ ἐπιγελᾷ ἐν τοῖς βαθέσι πελάγεσιν ἀλλ' ἐν τοῖς μικροῖς καὶ βραχέσιν; ἢ ὅτι τὸ μικρὸν ὑγρὸν φερόμενον μᾶλλον διαιρεῖται ὑπὸ τοῦ πνεύματος ἢ τὸ πολὺ;

Διὰ τί τὰ κύματα πρότερον φοιτᾷ ἐνίοτε τῶν ἀνέμων; ἢ ὅτι πρὸς τῇ ἀρχῇ τοῦ πνεύματος ἡ θάλαττα ὠσθεῖσα [931b] πρώτη τὴν ἐχομένην ἀεὶ ταύτῃ

ποιεῖ; διόπερ οὔσης αὐτῆς συνεχοῦς καθάπερ μιᾷ πληγῇ συνεχεῖ πάσαις γίνεται. τὸ δὲ ἐν ἐνὶ χρόνῳ γίνεται, ὥστε συμβαίνει τὴν τε πρώτην καὶ τὴν ἐσχάτην ἅμα κινεῖσθαι. ὁ δὲ ἄηρ οὐ πάσχει τοῦτο, ὅτι οὔτ' ἐστὶν ἐν σῶμα συνεχές, τῷ πολλὰς πάντοθεν ἀντικρούσεις λαμβάνειν, αἱ πολλάκις κωλύουσι τὴν πρώτην καὶ νεανικωτάτην κίνησιν, τὴν τε θάλασσαν οὐ ποιοῦσι τοῦτο διὰ τὸ βαρυτέραν καὶ δυσκινητοτέραν αὐτοῦ εἶναι.

Διὰ τί τὰ πλοῖα γέμειν δοκεῖ μᾶλλον ἐν τῷ λιμένι ἢ ἐν τῷ πελάγει, καὶ θεῖ δὲ θᾶπτον ἐκ τοῦ πελάγους πρὸς τὴν γῆν ἢ ἀπὸ τῆς γῆς εἰς τὸ πέλαγος; ἢ ὅτι τὸ πλεον ὕδωρ ἀντερείδει μᾶλλον ἐκ τοῦ ὀλίγου, ἐν δὲ τῷ ὀλίγῳ δέδυκε, διὰ τὸ κρατεῖν αὐτοῦ μᾶλλον; ὠθεῖ γὰρ κάτω τὸ ὕδωρ ἄνωθεν. ἐν μὲν οὖν τῷ λιμένι ὀλίγη ἐστὶν ἡ θάλασσα, ἐν δὲ τῷ πελάγει βαθεῖα. ὥστε καὶ ἄγειν πλεον δόξει ἐν τῷ λιμένι καὶ κινήσεται χαλεπώτερον διὰ τὸ δεδυκέναι μᾶλλον καὶ ἥττον ἀντερείδειν τὸ ὕδωρ. ἐν τῷ πελάγει δὲ τάναντία τούτων ἐστίν.

Διὰ τί, ὅταν τι ῥιφθῇ εἰς τὴν θάλατταν κυμαίνουσιν, οἶον ἢ ἄγκυρα, γαλήνη γίνεται; ἢ διότι ἴσταται ἡ θάλαττα τῷ φερομένῳ, μεθ' οὗ ἄηρ συγκαταφέρεται, ὅς ἐπ' εὐθείας κάτω φερόμενος καὶ ἐνταῦθα ἐπισπασθεὶς συνεπισπᾶται τὸ ἐκ πλαγίου κινοῦν τὴν θάλατταν; ὁ δὲ κλύδων τῆς θαλάττης οὐκ ἄνωθεν κάτω γίνεται ἀλλ' ἐπιπολῆς· οὗ λήξαντος γαλήνη γίνεται. ἔτι συνιοῦσα ἡ θάλασσα εἰς τὰ διαστάντα τῷ φερομένῳ δίνην ποιεῖ. ἡ δὲ δίνη κύκλῳ φέρεται. ἐπεὶ δὲ ἡ εὐθεῖα τοῦ κύκλου κατὰ σημεῖον ἄπτεται, τὰ δὲ κύματα ἐπ' εὐθείας λοξῆς φέρεται, συμβαίνοι ἂν αὐτὰ τοῦ ἐξωτάτου τῆς δίνης κατὰ σημεῖον ἄπτεσθαι, διὰ τε τὰ εἰρημένα καὶ διὰ τὴν τῆς δίνης φοράν, ἢ προσιοῦσα ἀπωθεῖται αὐτά. ἀκύμου δὲ ὄντος τοῦ κατ' αὐτὴν τόπου, γαλήνην ἐν τῇ ῥήξει αὐτῆς συμβαίνει γίνεσθαι, ὅτι συγκαταβάς ὁ ἄηρ τῷ ἐνεχθέντι κάτω, ἀναφερόμενος καὶ ὠθὼν ἄνω τὴν θάλατταν ὥσπερ πομφολυγοῖ αὐτήν· ἡ γὰρ πομφόλυξ ὑγροῦ ὑπ' ἀέρος κάτωθεν ἀνωθουμένου ἐστίν. πομφόλυξ δὲ πᾶσα λεία καὶ γαληνός ἐστιν. σημεῖα δὲ τῶν εἰρημένων ἐστί· μετέωρος γὰρ ἡ κατὰ τὸ ἐνεχθὲν κάτω θάλαττα τῆς πέριξ γίνεται μικρὸν ὕστερον.

Διὰ τί ἐνίοτε πλοῖα θέοντα ἐν τῇ θαλάττῃ εὐδίας καταπίνεται [932a] καὶ ἀφανῇ γίνεται, ὥστε μηδὲ ναυάγιον ἀναπλεῖν; ἢ ὅταν ἀνθρώδης τόπος ἐν τῇ ὑπὸ τὴν θάλατταν γῇ ῥαγῇ, ἅμα εἰς τὴν θάλατταν καὶ ἔσω ἀκολουθεῖ τῇ τοῦ πνεύματος φορᾷ; ὁμοίως δὲ καὶ πάντῃ φερομένη κύκλῳ φέρεται κάτω. τοῦτο δ' ἔστι δῖνος. τὰ δὲ περὶ Μεσσηνὴν ἐν τῷ πορθμῷ πάσχει μὲν τοῦτο διὰ τὸν ῥοῦν (γίνονται γὰρ αἱ δῖναι ὑπὸ τούτου) καὶ καταπίνεται εἰς βυθὸν διὰ ταῦτά τε, καὶ ὅτι θάλαττά τε βαθεῖα καὶ γῆ ὕπαντρος μέχρι πόρρω. φέρουσιν οὖν εἰς ταῦτα ἀποβιαζόμεναι αἱ δῖναι· διὸ οὐκ ἀναπλεῖ αὐτόθι τὰ ναυάγια. ὁ δὲ ῥοῦς

γίνεται, ὅταν παυσαμένου τοῦ προτέρου ἀντιπνεύση ἐπὶ τῆς θαλάττης ῥεούσης τῷ προτέρῳ πνεύματι, μάλιστα δὲ ὅταν νότος ἀντιπνεύση. ἀντιπνέοντα γὰρ ἀλλήλοις τὰ ῥεύματα παρεκθλίνεται ὥσπερ ἐν τοῖς ποταμοῖς, καὶ γίνονται αἱ δῖναι. φέρεται δὲ ἐλιττομένη ἡ ἀρχὴ τῆς κινήσεως ἄνωθεν ἰσχυρὰ οὖσα. ἐπεὶ οὖν εἰς πλάγιον οὐκ ἔστιν ὁρμᾶν (ἀντωθεῖται γὰρ ὑπ' ἀλλήλων), ἀνάγκη εἰς βάθος ὠθεῖσθαι, ὥστε καὶ ὁ ἂν ληφθῇ ὑπὸ τῆς δίνης, ἀνάγκη συγκαταφέρεσθαι. διὸ ἀνάσιμα τὰ πλοῖα ποιοῦνται ἤδη γὰρ ὀρθόν ποτε μνημονεύεται καταποθέν.

Διὰ τί ἡ θάλαττα λευκότερα ἢ ἐν τῷ Πόντῳ ἢ ἐν τῷ Αἰγαίῳ; πότερον διὰ τὴν ἀνάκλασιν τῆς ὄψεως τὴν γινομένην ἀπὸ τῆς θαλάττης εἰς τὸν ἀέρα; ὁ μὲν γὰρ περὶ τὸν Πόντον ἀῆρ παχὺς καὶ λευκός, ὥστε καὶ τῆς θαλάττης ἡ ἐπιφάνεια τοιαύτη φαίνεται, ὁ δὲ ἐν τῷ Αἰγαίῳ κυανοῦς διὰ τὸ μέχρι πόρρῳ εἶναι καθαρός, ὥστε καὶ ἡ θάλαττα ἀνταυγοῦσα τοιαύτη φαίνεται. ἢ ὅτι πᾶσαι αἱ λίμναι λευκότεραι τῆς θαλάττης; ὁ δὲ Πόντος ἐστὶ λιμνώδης διὰ τὸ πολλοὺς ποταμοὺς εἰς αὐτὸν ῥεῖν. αἱ δὲ λίμναι διαλευκότεραι τῆς θαλάττης καὶ τῶν ποταμῶν· γράφουσι γοῦν οἱ γραφεῖς τοὺς μὲν ποταμοὺς ὠχρούς, τὴν δὲ θάλατταν κυανέαν. ἢ ὅτι διὰ μὲν τοῦ ποτίμου διέρχεται ταχὺ ἢ ὄψις, καὶ οὐκ ἀνακλᾶται πρὸς τὸν ἀέρα, ἀπὸ δὲ τῆς θαλάσσης οὔ; οὔτ' ἄνω ἀνακλᾶται διὰ τὸ μὴ λεῖον εἶναι τὸ ὕδωρ· κάτω δὲ ἀποκάμνει βαδίζουσα· διὸ μέλαινα φαίνεται. ἐν δὲ τοῖς λιμνώδεσιν ἐπιπολῆς ὄντος τοῦ ποτίμου, κάτω δὲ τοῦ ἄλμυροῦ, οὐ διέρχεται, ἀλλ' ἀνακλᾶται πρὸς τὴν αὐγὴν· διὸ φαίνεται λευκὴ ἡ ἐπιφάνεια αὐτῆς.

Διὰ τί ἡ θάλαττα τοῦ ποτίμου ὕδατος ἥττον ψυχρά, [932b] καὶ τὰ ἀλυκὰ τῶν γλυκέων; πότερον ὅτι πυκνότερον ἢ θάλαττα καὶ μᾶλλον σῶμα; τὰ δὲ τοιαῦτα ἥττον ψύχεται, ὥσπερ καὶ θερμαίνεται μᾶλλον· σωστικώτερα γὰρ τοῦ θερμοῦ διὰ τὴν πυκνότητα. ἢ ὅτι λιπαρώτερα ἢ θάλαττα; διὸ καὶ οὐ σβέννυσι τὴν φλόγα. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. τὸ δὲ λιπαρώτερον θερμότερον. ἢ ὅτι γῆς πολὺ ἔχει, ὥστε ξηρότερον; τὸ δὲ ξηρότερον θερμότερον.

Διὰ τί ἡ θάλαττα εὐδιοπτοτέρα τοῦ ποτίμου, παχυτέρα οὖσα; λεπτότερον γὰρ τὸ πότιμον τοῦ ἄλμυροῦ. ἢ οὐ τὸ λεπτὸν αἴτιον, ἀλλ' εὐθυωρία τῶν πόρων πλεῖσται καὶ μέγισταί εἰσιν; τὸ μὲν οὖν πότιμον πυκνὸν διὰ λεπτομέρειάν ἐστι, τὸ δὲ ἄλμυρον μέγала ἔχει τὰ διάκενα. ἢ ὅτι καθαρώτερον ἢ θάλαττα; γῆ μὲν γὰρ οὐκ ἔστιν, ἡ δὲ ἄμμος βαρεῖα οὖσα ὑφίσταται. τὰ δὲ πότιμα γεώδη. αὕτῃ δὲ ἐν τῷ μεταξὺ φερομένη ἀναθολοῦται ταχύ.

Διὰ τί ἐν τοῖς βορείοις εὐδιοπτοτέρα ἢ θάλαττα ἢ ἐν τοῖς νοτίοις; ἢ ὅτι ἐν

τῇ γαλήνῃ χρῶμα ἔχει ἢ θάλαττα; λιπαρὸν γὰρ ἔνεστιν ἐν τῷ ἁλμυρῷ χυμῷ. σημεῖον δέ· ἐκκρίνεται γὰρ ἔλαιον ἐν ταῖς ἀλέαις. εὐδίας οὖν οὕσης καὶ ἁλεινοτέρας τῆς θαλάττης διὰ κουφότητα, ἐπανθεῖ ἄνω ὁ τοιοῦτος χυμός. τοῖς δὲ βορείοις ἦττον διὰ τὸ ψῦχος. ἔστι δὲ τὸ ὕδωρ εὐδιοπτότερον τοῦ ἐλαίου· τὸ γὰρ ἔλαιον χρῶμα ἔχει, τὸ δὲ ὕδωρ ἄχροον παρεμφαινόμενον σαφεστέραν ποιεῖ τὴν ἔμφασιν.

Διὰ τί λουσάμενοι τῇ θαλάττῃ θάττον ξηραίνονται, βαρυτέρα οὕση τῶν ποτίμων; ἢ ὅτι παχύτερα καὶ γεώδης ἢ θάλαττα; ὀλίγον οὖν ἔχουσα τὸ ὑγρὸν ξηρανίνεται θάττον.

Διὰ τί τὰ κύματα ἀνεμώδη; ἢ ὅτι σημεῖα ἔστι πνεύματος ἐσομένου; ἔστι γὰρ τὸ πνεῦμα σύνωσις ἀέρος. ἢ διὰ τὸ αἰεὶ προωθεῖσθαι γίνεται; προωθεῖ δὲ οὐ συνεχές πῶ ὃν τὸ πνεῦμα, ἀλλὰ ἀρχόμενον. τὸ μὲν δὴ πρῶτον ὥσπερ προεμαράνθη, ἄλλο δὲ τοῦτο προέωσε καὶ ἄλλην πυκνότητα ἤγαγεν καὶ ἀπεμαράνθη. ὥστε δῆλον, ὅταν ἦδη τὸ προωθούμενον παρῇ, ὅτι ἤξει καὶ τὸ κινεῖν· ἀρχόμενον γὰρ τοῦτο ποιεῖ.

Διὰ τί τὸ κύμα προεκπίπτει τοῦ πνεύματος; ἢ ὅτι οὐχ ἅμα παύεται τὸ πνεῦμα [τὸ] πνέον καὶ ἢ θάλαττα κυμαίνουσα, ἀλλ' ὕστερον ἢ θάλαττα, ἐνδέχεται τὸ κινῆσαν [933a] πνεῦμα φθαρῆναι πρὸ τοῦ γενέσθαι αἰσθητόν. ὥστε οὐ πρότερον τὸ κύμα πνεύματος, ἀλλὰ τὸ μὲν λανθάνει τὸ δὲ οὐ. ἢ οὐχὶ τὰ πνεύματα ἅμα πανταχοῦ πνεῖ, ἀλλ' ὅθεν ἢ ἀρχὴ πρότερον; ἅμα δὲ πνεῖ καὶ τὴν πλησίον θάλατταν κινεῖ, αὕτη δὲ τὴν ἐχομένην· καὶ οὕτως ἂν ἐνδέχοιτο πρότερον τὸ κύμα ἐκπίπτειν. ὑπὸ γὰρ τῆς θαλάσσης καὶ οὐχ ὑπὸ τοῦ πνεύματος ἢ κίνησις ἢ θάττων τοῦ ἀέρος ἢ τῆς θαλάττης.

Διὰ τί ἐν τῇ θαλάττῃ μᾶλλον νεῖν δύνανται ἢ ἐν τοῖς ποταμοῖς; ἢ ὅτι ὁ νέων αἰεὶ ἐπιστηριζόμενος ἐν τῷ ὕδατι νεῖ, ἐν δὲ τῷ σωματωδεστέρῳ μᾶλλον ἀποστηρίζεσθαι δυνάμεθα, σωματωδέστερον δὲ ἔστι τὸ θαλάττιον ὕδωρ τοῦ ποταμίου· παχύτερον γὰρ ἔστι καὶ μᾶλλον ἀντερείδειν δυνάμενον.

Διὰ τί ποτε ἐν τῇ θαλάττῃ πλείω χρόνον διατελεῖν δύνανται ἢ ἐν τῷ ποταμῷ; ἢ διότι τὸ ποτάμιον ὕδωρ λεπτόν ἐστιν; μᾶλλον οὖν παρεισδυόμενον πνίγει.

Διὰ τί ἢ μὲν θάλαττα κάεται, τὸ δὲ ὕδωρ οὐ; ἢ κάεται μὲν κάκεῖνο, ἢ δὲ θάλαττα ἦττον σβέννυσι τὸ πῦρ διὰ τὸ λιπαρωτέρα εἶναι; σημεῖον δὲ ὅτι λιπαρωτέρα· ἀπὸ γὰρ τῶν ἁλῶν ἔλαιον ἀφαιρεῖται. ἢ καὶ ἦττον δύνανται οἱ

πόροι ἀρμόττειν τῷ πυρὶ διὰ τὸ παχύτεροι εἶναι, καὶ μᾶλλον γε δὴ, ἅτε καὶ τῶν ἄλῳν ἐνυπαρχόντων; ὥσπερ οὖν τὸ ξηρὸν τοῦ ὑγροῦ ἦττον σβεστικόν, καὶ τὸ ξηρὸν μᾶλλον κατὰ λόγον καυστικόν ἐστὶ, καὶ ἕτερον ἑτέρου μᾶλλον, τῷ ἐγγυτέρω τοῦ θερμοῦ εἶναι, τὸ ξηρότερον δὲ τῇ θαλάττῃ· ἄμφω δὲ ταῦτα μᾶλλον ὑπάρχει.

Διὰ τί ἀπὸ μὲν τῆς θαλάττης οὐκ ἀποπνεῖ ἕωθεν ψυχρόν, ἀπὸ δὲ τῶν ποταμῶν; ἢ ὅτι ἡ μὲν θάλαττά ἐστὶν ἐν ἀναπεπταμένοις τόποις, οἱ δὲ ποταμοὶ ἐν στενοῖς; ἡ μὲν οὖν ἀπὸ τῆς θαλάττης αὔρα εἰς πολὺν τόπον σκίδνεται, ὥστε εἶναι ἀσθενής, ἡ δὲ ἀπὸ τῶν ποταμῶν ἀθρόως φέρεται καὶ μᾶλλον ἰσχύει, διὸ μᾶλλον εἰκότως φαίνεται ψυχρά. ἢ οὐ τοῦτό ἐστὶν αἴτιον, ἀλλ' οἱ μὲν ποταμοὶ ψυχροὶ εἰσιν, ἡ δὲ θάλαττα οὔτε θερμὴ οὔτε ψυχρά; γίνεται δὲ ἡ αὔρα καὶ ἡ ἀναπνοὴ θερμαινομένων ἢ ψυχομένων τῶν ὑγρῶν· ὁπότερον γὰρ ἂν τούτων πάσχη, ἐξαεροῦται, ἐξαερουμένου δὲ τοῦ ὕδατος ὁ ἀῆρ ὁ γινόμενος φέρεται, ὅ ἐστιν αὔρα. τὸ μὲν οὖν ἀπὸ τῶν ψυχρῶν ψυχρὸν εἰκότως ἀποπνεῖ, τὸ δὲ ἀπὸ τῶν σφόδρα θερμῶν ἀποπνέον ψύχεται καὶ γίνεται ψυχρόν. τοὺς μὲν οὖν ποταμοὺς ψυχροὺς [933b] ἅπαντας εὖροι τις ἂν, ἡ δὲ θάλαττα οὔτε ψυχρὰ οὔτε θερμὴ σφόδρα ἐστίν. οὔτε οὖν τὸ ἀποπνέον ψυχρὸν ἀπ' αὐτῆς ἐστί, διὰ τὸ μὴ ψυχρὰν εἶναι, οὔτε ψύχεται ταχύ, διὰ τὸ μὴ θερμὴν εἶναι σφόδρα.

Διὰ τί ἐν τοῖς μείζοσι πελάγεσι βραδύτερον καθίσταται κύματα ἢ ἐν τοῖς βραχέσιν; ἢ ὅτι ἐκ τῆς πολλῆς κινήσεως βραδύτερον καθίσταται πᾶν ἢ ἐκ τῆς ὀλίγης; ἐν δὲ τοῖς μεγάλοις πελάγεσι πλείων ἢ ἄμπωτις γίνεται ἢ ἐν τοῖς βραχέσιν. οὐθὲν οὖν ἄλογον τὸ πλεῖον βραδύτερον καθίστασθαι.

Διὰ τί τὸ ἄλμυρὸν ὕδωρ ψυχρὸν μὲν οὐ πότιμον, θερμαινόμενον δὲ μᾶλλον γίνεται πότιμον, καὶ θερμὸν δὲ ὄν καὶ ἀποψυχόμενον; ἢ διότι εἰς τὸ ἐναντίον ἀπὸ τοῦ ἐναντίου πέφυκε μεταβάλλειν; ἔστι δὲ τὸ πότιμον τῷ ἄλμυρῷ ἀντικείμενον· καὶ θερμαινομένου μὲν ἀφέψεται τὸ ἄλμυρόν, ψυχομένου δὲ ὑφίσταται.

Διὰ τί τὰ πρὸς τῇ θαλάττῃ ὥς ἐπὶ τὸ πολὺ ὕδατα γλυκέα [ὕδατα] ἀλλ' οὐχ ἄλμυρά; ἢ διὰ τὸ ποτιμώτερα διηθούμενα γίνεσθαι; διηθεῖται δὲ τὸ ἐγγύτερον τῆς θαλάττης μᾶλλον.

Διὰ τί τὸ ἄλμυρὸν ὕδωρ οὐκ ἀπόρρυτόν ἐστιν; ἢ διότι τὸ μὲν βαρὺ στάσιμον, τὸ δὲ ἄλμυρὸν βαρὺ; διὸ καὶ τὰ θερμὰ μόνα τῶν ἄλμυρῶν ὑδάτων ἀπόρρυτά ἐστιν. ἔχει γὰρ κουφότητα ἐν αὐτοῖς, ἢ κρατεῖ τῆς κατὰ τὴν

άλμυρίδα βαρύτητος· τὸ γὰρ θερμὸν κουφότερόν ἐστιν. ἔτι τὰ μὲν ἀπόρρυτα διηθεῖται διὰ τῆς γῆς· ἡθουμένων δὲ ἀεὶ μάλιστα ὑφίσταται τὸ παχύτατον καὶ βαρύτατον, ἐκκρίνεται δὲ τὸ κοῦφον καὶ καθαρὸν· ἔστι γὰρ τὸ μὲν ἄλμυρὸν βαρὺ, τὸ δὲ γλυκὺ κοῦφον. διόπερ ἐστὶ γλυκέα τὰ ἀπόρρυτα. τὸ δ' αὐτὸ αἴτιόν ἐστι καὶ διὰ τί τὸ ἄλμυρὸν ὕδωρ κινούμενον καὶ μεταβάλλον γλυκύτερον γίνεται· κουφότερον γὰρ καὶ ἀσθενέστερον διὰ τὴν κίνησιν γίνεται.

Διὰ τί ἐν τῇ Λιβύῃ ἐὰν ὀρύξη τις παρὰ τὴν θάλατταν, τὸ πρῶτον πότιμον, εἴθ' ἄλμυρὸν γίνεται ταχύ, ἐν δὲ τοῖς ἄλλοις τόποις ἥττον ποιεῖ τοῦτο; πότερον ὅτι τὸ μὲν πρῶτον τὸ ὑπάρχον ὕδωρ ἐν τῷ τόπῳ καὶ τὸ πεπεμμένον ὑπὸ τῆς γῆς ἐστίν, ὅταν δὲ χρονισθῇ, ἡ θάλαττα προσδιηθουμένη διὰ τὸ πρόσφατον εἶναι ποιεῖ ἄλμυρώτερον; ἐν δὲ τοῖς ἄλλοις ἢ οὐκ ἔχει ἢ πολὺ ὕδωρ διὰ τὸ μὴ ξηραίνεσθαι τὸν τόπον.

[934a] Διὰ τί τοὺς ἄλας θᾶττον τήκει τὸ ἄλμυρὸν ὕδωρ ἢ τὸ πότιμον; ἢ διότι τὸ μὲν τήκεσθαι ἐστὶ τὸ ὑπὸ τοῦ ὑγροῦ θερμοῦ εἰσιόντος διαιρεῖσθαι, ὥστε ὑγρὸν εἶναι; οὐ τήκει δὲ ἢ τὰ ὅλως μὴ δυνάμενα εἰσιέναι, ἢ τὰ οὕτως ὥστε μὴ θιγγάνειν. μόλις δὲ τήκει τὰ ῥαδίως διεξιόντα· τὰ δ' ἐπιόντα βιαζόμενα, ταῦτα τάχιστα διαιρεῖ. οὐκ εἰσέρχεται δὲ τὰ λίαν μεγαλομερῇ· ὑπερέχει γὰρ τῶν πόρων. τὰ δὲ μικρομερέστερα διέρχεται οὐ ψαυόμενα. ἔστι δὲ τὸ μὲν πότιμον λεπτόν, τὸ δὲ ἄλμυρὸν παχύτερον. ὥστε τὸ μὲν ῥαδίως διὰ τὴν λεπτότητα διαδύνον μόλις τήκει, τὸ δὲ εἰσέρχεται μὲν ἥττον δὲ διὰ τὸ μεγαλομερέστερον εἶναι διαιρεῖ, καὶ βιάζεται θᾶττον.

Διὰ τί τὸ ὕδωρ ἥττον φαίνεται λευκόν, ἐὰν κινῆται, οἶον καὶ ἡ φρίκη; διὸ καὶ Ὅμηρος ἀρχομένου φησὶ τοῦ πνεύματος “μελάνει δέ τε πόντος ὑπ' αὐτοῦ.” ἢ διὰ δύο αἰτίας, ἐγγύθεν μὲν τῆς ὀψεως οὕσης, διὰ τὸ διέναι τὴν ἄψιν μᾶλλον ἡρεμοῦντος, κινουμένου δὲ μὴ εὐθυπορεῖν· τὸ δὲ διαφανὲς λευκὸν φαίνεται. δι' οὗ γὰρ μὴ διέρχεται ἡ ὄψις, μέλαν φησὶν εἶναι. διὸ καὶ ὁ ἀῆρ πόρρωθεν μέλας φαίνεται, ὁ δὲ ἐγγὺς λευκός, καὶ θαλάττης τὸ μὲν ἐγγὺς λευκόν, τὸ δὲ πόρρωθεν κυανοῦν καὶ μέλαν. πόρρωθεν δέ, κινουμένης πῶς τῆς ὀψεως, καὶ τῷ διανακλᾶσθαι ἀθρόον τὴν ὄψιν, ἐὰν ἡρεμῇ πρὸς τὸ φῶς, κινουμένου δὲ μὴ δύνασθαι.

Διὰ τί ἐν τοῖς βαθέσι πελάγεσι τὸ κύμα οὐκ ἐπιγελᾷ, ἀλλ' ἐν τοῖς μικροῖς; πότερον ὅτι τὸ μικρὸν φερόμενον ὕδωρ διαιρεῖται ὑπὸ τοῦ ἀέρος μᾶλλον ἢ τὸ πολὺ; διὸ θραύεται πατάξαν μᾶλλον. ἐν μὲν οὖν τῷ βαθεῖ πολὺ τὸ κινούμενον, ἐν δὲ τῷ βραχεῖ ὀλίγον.

Διὰ τί οἱ πρὸς νότον τόποι ἀλυκώτερα τὰ ὕδατα ἔχουσιν; ἢ διὰ τὸ τὴν θάλατταν ὑπὸ νότου ὠθεῖσθαι ὑπὸ τὴν γῆν κεράννυται;

Διὰ τί τῶν ὑδάτων τὸ ἀλμυρὸν ἐπὶ τῷ γλυκεῖ οἶνῳ μᾶλλον ἐπιπολάζει ἢ ἐπὶ τῷ αὐστηρῷ; πότερον ὅτι μᾶλλον ἔχει γῆν ὁ γλυκύς, ὥσπερ ἡ ἀσταφίς; ἢ ὅτι βαρύτερος καὶ γλισχρότερος ὁ γλυκύς, ὥσθ' ἦττον μίγνυται, μὴ μιγνύμενος δὲ ἐφίσταται.

Διὰ τί ὅλως ἐφίσταται γεῶδες ὄν; ἡ γὰρ οἰκεία φορὰ κάτω. πότερον ὅτι μᾶλλον ἔχει γῆν ὁ γλυκύς; ἢ διὰ τὴν [934b] θερμότητα, καθάπερ οἱ ἄλλες; ὅμοιον γὰρ ἐξανθήματι. ἢ δι' ἄλλην αἰτίαν; εἰ γὰρ οὐ διὰ τοῦτο καὶ ἐπὶ τῷ γλυκεῖ μᾶλλον, οὐκ ἄλογον· θερμότητος γάρ.

Διὰ τί τὰ κύματα πρότερον φοιτᾷ ἐνίοτε τῶν ἀνέμων; ἢ διότι καὶ τελευτᾷ ὕστερον; τὸ γὰρ πρῶτον πνεῦμα ὥσανεὶ προδιαλύεται τοῦ ὠσθέντος κύματος· ἀφικνεῖται δὲ οὐκ αὐτὸ τὸ πρῶτον ὠσθέν, ἀλλ' ἀεὶ ἡ ὥσις γίνεται τοῦ ἐχομένου.

Διὰ τί αἱ κυματωδέστεραι γαῖ στερραὶ γίνονται πολλάκις οὕτω σφόδρα ὥσπερ ἡδαφισμέναι; καὶ ἡ μὲν κυματώδης γῆ στερρά, ἡ δὲ ἄποθεν χαῦνος. ἢ διότι ἡ μικρὰ ἄμμος οὐ πόρρωθεν ἐκβάλλεται ὑπὸ τοῦ κύματος, ἀλλὰ ἡ μείζων μᾶλλον; ὥσπερ καὶ τῇ χειρὶ βάλλειν πόρρω οὐ τὸ ἐλάχιστον μάλιστα δυνατόν. ἔπειτα πολλῶν κυκωμένων τὰ ἐλάχιστα ἐμπίπτοντα πυκνοῖ. ἡ δὲ τοῦ κύματος λωφῶντος κίνησις ἐδαφίζει, κινεῖ δὲ οὐκέτι. διὰ μὲν οὖν τὸ τὰ μικρότατα μὴ πόρρω δύνασθαι πηδᾶν, ἐκ μικρῶν σφόδρα συντέθεται· διὰ δὲ τὸ πολλάκις κινεῖσθαι συνεχῆς γίνεται πιπτούσης ἄμμου, ἕως ἂν συναρμόσῃ· διὰ δὲ τὸ κύμα τὸ τελευταῖον ἐδαφίζεται, καὶ τὸ ἥρέμα ὑγρὸν συγκολλᾷ. ἡ δὲ πόρρω ξηρὰ τε οὕσα δίσταται, καὶ ἐκ μειζόνων ἐστὶ λιθιδίων καὶ ἀνεδάφιστος.

Διὰ τί τῆς θαλάσσης τὰ ἄνω τῶν ἐν τῷ βάθει ἀλμυρώτερα καὶ θερμότερα; ὁμοίως δὲ καὶ ἐν τοῖς φρέασι τοῖς ποτίμοις τὸ ἐπιπολῆς ἀλμυρώτερον τοῦ εἰς βάθος· καίτοι ἔδει τὸ κατωτέρω βαρύτερον γὰρ τὸ ἀλμυρόν. ἢ διότι ὁ ἥλιος καὶ ὁ ἀῆρ ἀνάγει ἀεὶ τὸ ἐλαφρότατον ἀπὸ τῶν ὑγρῶν; τὸ δὲ ποτιμώτερον ἀεὶ κουφότερον, μᾶλλον δὲ ἀπάγει ἀπὸ τῶν ἐγγυτέρω τόπων. ὥστε καὶ τῆς θαλάττης ἀπὸ τῶν ἐπιπολῆς καὶ τῶν ποτίμων ἀνάγκη τὸ λειπόμενον ἀλμυρώτερον εἶναι, ἀφ' ὧν ἀνῆκται, ἢ ἀφ' ὧν μὴθὲν ἢ ἔλαττον τὸ γλυκύ. διὰ τοῦτο δὲ καὶ θερμότερα τὰ ἄνω· τὸ γὰρ ἀλμυρὸν θερμότερον τοῦ ποτίμου. διὸ καὶ φασὶ τινες τῶν ἡρακλειτιζόντων ἐκ μὲν τοῦ ποτίμου

ξηρανομένου καὶ πηγνυμένου λίθους γίνεσθαι καὶ γῆν, ἐκ δὲ τῆς θαλάττης τὸν ἥλιον ἀναθυμιάσθαι.

Διὰ τί τῆς θαλάττης τὰ πρὸς τῇ γῇ γλυκύτερά ἐστιν; ἢ διότι ἐν τῇ κινήσει μᾶλλον ἐστιν; κινούμενον δὲ τὸ ἄλμυρὸν γλυκύτερον γίνεται. ἢ ὅτι καὶ ἐν τῷ βάθει ἄλμυρώτερόν [935a] ἐστὶ τὸ ὕδωρ, τὰ δὲ πρὸς τῇ γῇ ἥττον ἐστὶ βαθέα. διὸ καὶ τὰ γχιβαθῇ ἄλμυρά ἐστὶ καὶ οὐχ ὁμοίως γλυκέα. τούτου δ' αἴτιον ὅτι βαρὺ ὂν τὸ ἄλμυρὸν φέρεται μᾶλλον εἰς βάθος.

Διὰ τί ἡ θάλαττα μόνον τῶν ὑδάτων κάεται, τὰ δὲ πότιμα καὶ ποτάμια οὐ; πότερον ὅτι γῆν πολλὴν ἔχει; δηλοῦσι δὲ οἱ ἄλλες. ἢ διότι λιπαρά; δηλοῖ δὲ τὸ ἐν τοῖς ἄλασιν ὑφιστάμενον ἔλαιον.

Διὰ τί ἐν ταῖς λίμναις ἄμμος οὐ γίνεται ἢ ἥττον ἢ ἐν τῇ θαλάττῃ καὶ τοῖς ποταμοῖς; ἢ ὅτι ἐν τῇ θαλάττῃ πέτραι γίνονται, καὶ ἡ γῆ ἐκκέκασται μάλιστα; ἢ δὲ ἄμμος ἐστὶ πέτρα ἐψηγμένη εἰς μικρὰ καὶ ἐλάχιστα μόρια. ψήχεται δὲ διὰ τὴν πληγὴν τῶν κυμάτων. ἐν δὲ ταῖς λίμναις οὐ γίνονται ὁμοίως πέτραι καθαραί, οὐδὲ θραύονται ὁμοίως διὰ τὸ μὴ γίνεσθαι κύματα ὁμοίως. ἐν δὲ τοῖς ποταμοῖς μᾶλλον, ὅτι τὴν μὲν γῆν καταφέρουσι, τὰς δὲ πέτρας τῇ πληγῇ θραύουσιν.

Διὰ τί, ὅταν ἡ λίμνη ἢ κοπάση ἢ ξηρὰ γένηται, ἀποκάεται ὁ σῖτος ἐν τῷ πεδίῳ μᾶλλον; πότερον ὅτι τὸ ὑγρὸν τὸ ἐν τῇ λίμνῃ ἀπατμίζον τῇ ἀτμίδι θερμαίνει τὸν ἀέρα, ὥστε ἐλάττους καὶ ἀσθενεστέρους ποιεῖ τοὺς πάγους ἢ ἐν τοῖς κοίλοις καὶ προσελώδεσι τόποις; ἢ ἐκ τῆς γῆς, ὥσπερ λέγεται, τὰ ψύχη ἄρχεται καὶ λανθάνει εἰσδυόμενα; ξηρὰς οὖν οὕσης τῆς λίμνης, διὰ πλείονος τόπου ἢ ψυχρότης πλείων προσπίπτουσα πηγνυσι καὶ ἀποκάει μᾶλλον. ἐν δὲ ταῖς τοιαύταις χώραις τὰ ψύχη κάτωθεν γίνεται, ὥσπερ καὶ δοκεῖ. καίτοι ἡ γῆ θερμὴ τοῦ χειμῶνος· ἀλλὰ διὰ τὸ ἔφυγρον εἶναι κατέψυκται τὸ ἐπιπολῆς θερμὸν τὸ ἐν τῇ γῇ. τὸ γὰρ ὑγρὸν οὔτε οὕτω πόρρω ἐστὶν ὥστε μὴ ψύχεσθαι, διὰ τὴν ἐνοῦσαν θερμότητα ἐν τοῖς ὑγροῖς, οὔτε οὕτως ὀλίγον ὥστε μηθὲν ἰσχύειν, διὰ τὸ διάβροχον εἶναι τὴν γῆν. οἷον οὖν διὰ τὴν ψύξιν αὐτοῦ συμβαίνει ἐπὶ κρυστάλλου περιπατεῖν καὶ οἰκεῖν.

Διὰ τί ἡ θάλαττα ἄλμυρά καὶ πικρά ἐστὶν; ἢ ὅτι ἐν τῇ θαλάττῃ πλείους εἰσὶν οἱ χυμοί; καὶ γὰρ τὸ ἄλμυρὸν καὶ τὸ πικρὸν ἅμα φαίνεται.

Διὰ τί τὰ ἐν τῇ θαλάττῃ ὄστρακα καὶ λίθοι στρογγύλα γίνεται; ἢ ὅτι ὁμοίως περιθραυόμενα τὰ ἔσχατα εἰς [935b] τὸ στρογγύλον σχῆμα ἔρχεται;



τούτου γὰρ τὸ ἔσχατον ὅμοιον, ἡ δὲ θάλαττα πάντα κινουῖσα ὁμοίως περιθραύει.

Διὰ τί ἐνιαχοῦ, ἐάν τις ὀρύξῃ παρὰ τὴν θάλατταν, τὸ μὲν πρῶτον πότιμόν ἐστιν ὕδωρ, εἴθ' ἄλμυρόν γίνεται; ἢ ὅτι αὐτῆς ἐστὶ τῆς θαλάττης τῆς διηθούσης ὑπὸ τὴν γῆν τὸ ὕδωρ; εἰκότως οὖν τὸ πρῶτόν ἐστι γλυκὺ· ἐλαφρότερον γὰρ ἐστὶ τὸ γλυκὺ τοῦ ἄλμυροῦ, καὶ ἡ θάλαττα ἔχει τι τοῦ γλυκέος, ὃ μυχθὲν τῇ γῇ μᾶλλον ἐπιπολάζει. τὸ δὲ ἄλμυρόν διὰ τὸ βάρος καὶ διὰ τὸ τμητικὸν εἶναι κάτω φέρεται. εἴτε οὖν οὕτως εἴτε κατὰ τὰς φλέβας ἐκ τῆς ἡπείρου ῥεῖ ἐπὶ τὴν θάλατταν τὸ γλυκὺ ὕδωρ, εἰκότως ἂν ἐπιπολῆς εἴη τῆς θαλάττης, ἢ μίγνυται αὐτῇ. ἀνοιχθέντων δὲ τῶν πόρων, ὕστερον διὰ πλῆθος τὸ ἀλυκὸν κρατοῦν τοιοῦτο πᾶν ποιεῖ. συμβαίνει γὰρ πεφραγμένων τῶν ἄνω πόρων ἄλλην ὁδὸν ζητεῖν τὸ ἐπιρρέον· ἀνοιχθέντων δὲ ἐνταῦθα πᾶν φέρεται, καθάπερ ἐπὶ τῶν τοῦ σώματος φλεβῶν.

Διὰ τί ἡ θάλαττα οὔσα βαρυτέρα τοῦ ποτίμου ὕδατος μᾶλλον ἐστὶν εὐδίοπτος; πότερον ὅτι λιπαρωτέρα; τὸ δὲ ἔλαιον ἐπιχυθὲν ποιεῖ μᾶλλον εὐδίοπτον. ἔχουσα δὲ ἐν αὐτῇ λίπος εἰκότως μᾶλλον εὐδίοπτός ἐστιν. ἢ οὐχ ἅπαν τὸ ἐλαφρότερον καὶ εὐδίοπτότερον; αὐτὸ γὰρ τὸ ἔλαιον ἐλαφρότερον τοῦ ὕδατος, εὐδίοπτότερον δὲ οὐ. ἢ οὐκ εὐδίοπτότερόν ἐστιν, ἀλλὰ φαίνεται; τὸ γὰρ πότιμον ὕδωρ ἀπὸ τῆς γῆς ἢ ἀπὸ ῥευμάτων ἐστίν, ἡ δὲ πηγὴ συναφίησι μετὰ τοῦ ὕδατος καὶ γῆν, ὥστε τῷ μὴ καθαρὰ εἶναι τὰ ῥεύματα συγκατάγει τὴν γῆν καὶ ἰλύν. αὕτη οὖν ἐστὶν ἡ αἰτία τοῦ ἥττον εἶναι εὐδίοπτον.

Διὰ τί οἱ νέοντες ἐν τῇ θαλάττῃ λαπαροὶ γίνονται; εἰ γὰρ ὅτι πονοῦσι, καὶ οἱ τροχιζόμενοι ἰσχυρὸν πονοῦσι πόνον καὶ οὐ λαπάττονται. ἢ ὅτι οὐ πᾶς πόνος ποιεῖ λάπαξιν, ἀλλ' ὃ μὴ ποιῶν σύντηξιν; ἡ δὲ ἐν τῇ θαλάττῃ διατριβὴ καὶ ὅλως δοκεῖ βρωτικωτέρους ποιεῖν καὶ λαπαρούς· θερμὴ τε γὰρ ἐστὶ καὶ ξηρὰ ἢ ἀπ' αὐτῆς ἀτμῖς.

Διὰ τί Πᾶσα λίμνη πότιμος οὔσα πλύνει καὶ ῥύπτει τὰ ἱμάτια; πλύνει μὲν γὰρ τὸ γλυκὺ, ῥύπτει δὲ τὸ πικρόν, ἅμα δὲ οὐχ οἶόν τε ἔχειν ταῦτα. ἢ οὐ τῷ πικρὸν εἶναι οὐθὲν ῥύπτει, ἀλλ' ἡ γλίσχρότης ῥυπτικόν; διὸ καὶ τὰ ἀκροκώλια καὶ ὅσα μυξώδη τοιαῦτα. ὥστε καὶ τῶν πικρῶν [936a] ὅσα τούτου μετέχει. ἐν δὲ τῇ λίμνῃ ταύτῃ συμβέβηκε τοῦτο, ὥστε τῆς νιτρώδους δυνάμεως τὸ μὲν πικρὸν ἐκκεκαῦσθαι, ἐμμένειν δὲ τὸ λιπαρὸν καὶ γλίσχρον. τούτῳ μὲν οὖν ῥύπτει, πλύνει δὲ τῷ ποτίμῳ αὐτῆς.

Διὰ τί τὸ γαληνίζον τῆς θαλάττης λευκὸν φαίνεται, τὸ δὲ κατάφορον μέλαν; ἢ ὅτι τὸ ἥττον ὀρώμενον μελάντερον μᾶλλον φαίνεται; ἥττον δὲ φαίνεται τὸ κινούμενον τοῦ ἡρεμοῦντος. ἢ διότι τὸ μὲν διαφαινόμενον λευκόν, τὸ δὲ μὴ διαφαινόμενον μέλαν; ἥττον δὲ διαφαίνεται τὸ κινούμενον.

## ΚΔ. ΟΣΑ ΠΕΡΙ ΤΑ ΘΕΡΜΑ ΥΔΑΤΑ.

Διὰ τί τὸ θερμὸν ὕδωρ, ἐὰν ἐπικεχρισμένοι ὦσιν ἐλαίῳ, ἥττον θερμὸν ἔστι καταχέομενον, τοῦ ἐλαίου θερμοῦ ὄντος; ἢ διὰ τὸ λεαίνειν ὀλισθαίνει καὶ ἥττον ἐνδύνει;

Διὰ τί τὰ ὕδατα ἐν τοῖς φρέασι μετὰ μεσημβρίαν γίνεται τοῦ θέρους θερμά; ἢ διότι τηνικαῦτα ἤδη κεκράτηκε τὸ θερμὸν τὸν ἀέρα; πρὸ μεσημβρίας δὲ τὸ θερμὸν λύει τὸ ψυχρὸν καὶ παύει· οὐχ ἅμα δὲ πέπαυται καὶ κρατεῖ, ἀλλ' ὅταν ἐπιχρονίση.

Διὰ τί τὸ ὕδωρ θερμότερον ἐνίοτε τῆς φλογὸς γινόμενον οὐ κατακάει τὰ ξύλα, ἢ δὲ φλὸξ κατακάει; ἢ ὅτι ἡ μὲν φλὸξ λεπτομερές, καὶ τὸ ἀπ' αὐτῆς πνεῦμα, τὸ δὲ ὕδωρ μεγαλομερές, ὥστε οὐκ εἰσδύεται; ἢ δὲ φλὸξ καὶ τὸ ἀπὸ τῶν ἀνθράκων διὰ λεπτότητα εἰσιὸν διαλύει.

Διὰ τί τὸ μὲν ὕδωρ τὸ ζέον οὐ τήκει, ἢ δὲ κοιλία τήκει; πότερον ὅτι τὸ μὲν θερμὸν τὸ ἐν τῇ κοιλίᾳ εἰσέρχεται διὰ λεπτότητα, τὸ δὲ ὕδωρ οὐκ εἰσέρχεται διὰ παχύτητα; ἢ διότι καὶ τὰ ἄλλα κωλύει τήκεσθαι τὸ ὑγρόν; οὐθὲν γὰρ ἐν ὑγρῷ τήκεται. ἐν δὲ τῇ κοιλίᾳ τὸ ὑγρὸν εἰς τὴν κύστιν ὑπονοστοῦν οὕτω λύει.

Διὰ τί τῶν ἀγγείων ὁ πυθμὴν οὐ κάει ἐνόντος τοῦ ὕδατος καὶ ζέοντος, ἀλλὰ καὶ φέρουσι τοῦ πυθμένου ἐχόμενοι, ἐξαιρεθέντος δὲ κάει; ἢ ὅτι σβέννυται τὸ ἐγγινόμενον θερμὸν ἐν τῷ πυθμένι ὑπὸ τοῦ ὕδατος; διὸ καὶ οὐ τήκεται τὰ τηκτά, ἂν μὴ ψόφος ἐμπέσῃ.

Διὰ τί οὐχ ὑπερζεῖ τοῦ χειμῶνος ὁμοίως καὶ τοῦ θέρους τὸ ὕδωρ, οὐ μόνον ὁμοίως θερμαινόμενον, ἀλλὰ καὶ μᾶλλον καὶ ὁμοίως θερμὸν ὄν, καὶ ἔτι μᾶλλον; ἢ διότι ἡ [936b] ὑπέρζεσις ἐστὶν ἡ ἀναβολὴ τῶν πομφολύγων; τὸ μὲν οὖν ὕδωρ αὐτὸ θερμαίνεται τότε οὐθὲν ἥττον ἢ τοῦ ψύχους, αἱ δὲ πομφόλυγες αἶρεσθαι οὐ δύνανται ὁμοίως διὰ τὸ τὸν περιέχοντα ἀέρα εἶναι ψυχρόν, ἀλλ' ἐλάττους τε τὰ μεγέθη αἴρονται ὑπὸ τοῦ ψύχους θλιβόμενα, καὶ διακόπτοντος τοῦ ἀέρος ταχὺ διαπίπτουσιν. ὥστε ἐλάττους τε τῷ ὄγκῳ καὶ

τῷ πλήθει γίνονται τοῦ χειμῶνος, τοῦ δὲ θέρους τοῦναντίον. ἡ δὲ ὑπέρζεσις γίνεται διὰ τὸ πλήθος καὶ τὸ μέγεθος τοῦ ἀφροῦ.

Διὰ τί τὸ μὲν θερμὸν ὕδωρ ῥυτιδοῖ, τὸ δὲ πῦρ θερμὸν ὄν οὐ; ἢ ὅτι τὸ μὲν πῦρ ποιεῖ πνεῦμα, ὥστε ὀγκοῖ; περιτείνεται γὰρ τὸ δέρμα. ἡ δὲ κάμψις ῥυτίς ἐστίν.

Διὰ τί τῶν ἀγγείων οἱ πυθμένες θερμαινομένου τοῦ ὕδατος, ἕως ἂν ἡ ψυχρὸν τὸ ὕδωρ, θερμότεροί εἰσιν; ἢ διότι ψυχροῦ μὲν ἔτι ὄντος τοῦ ὕδατος ἐγκατακλείεται τὸ θερμὸν καὶ ἀντιπεριίσταται εἴσω, κωλυόμενον ἐξιέναι, ὅταν δὲ διαθερμανθῇ τὸ ἐνὸν ὕδωρ, οὐκέτι ἀποστέγοντος ἀλλὰ διαπνέοντος καὶ ἐλάττονος γινομένου τοῦ πυρὸς ψυχρότερος γίνεται ὁ πυθμὴν, ὁμοίως ὥσπερ καὶ τὰ βαλανεῖα· καὶ γὰρ ταῦτα τοῦ χειμῶνος θερμότερα ἢ τοῦ θέρους διὰ τὸ ἐγκατακλείεσθαι τὸ θερμὸν ἐν τῷ χειμῶνι μᾶλλον ἢ ἐν τῷ θέρει ὑπὸ τοῦ περιέχοντος ἀέρος ὄντος ψυχροῦ.

Διὰ τί τὸ μὲν ὕδωρ ζέον οὐκ ἐκπαφλάζει, τὸ δὲ ἔτνος καὶ ἡ φακῆ; καίτοι κουφότερον τὸ ὕδωρ τούτων, τὰ δὲ κοῦφα ῥᾶον ῥῖψαι πόρρω. ποιεῖ δὲ καὶ τὸ ἀργύριον ταῦτό, καὶ τοῦτο καθαιρόμενον· διὸ οἱ ἐν τῷ ἀργυροκοπείῳ καλλύνοντες κερδαίνουσιν· τὸ γὰρ διαρριπτούμενον συγκαλλύνοντες λαμβάνουσι τὰ λείψανα. ἢ διότι ποιεῖ μὲν τὸν ἐκπαφλασμὸν τὸ θερμὸν ἐξατμίζον καὶ βιαζόμενον τὰ ἀντικρούοντα τῇ κατὰ φύσιν αὐτοῦ φορᾷ; τὸ μὲν οὖν ὕδωρ διὰ κουφότητα καὶ λεπτότητα οὐκ ἀποβιάζεται, ὥστε οὐκ ἀθροίζεται πολὺ θερμόν, ἀλλὰ πρὶν ἀλισθῆναι φθάνει διακόψαν τὸ ἀεὶ προσελθόν. τὰ δὲ ἔχοντα ἐν αὐτοῖς σῶμα, οἷον τὰ ῥοφήματα ἢ ὁ ἄργυρος, διὰ βάρος τὸ σωματοειδὲς ἔχοντα πολὺ, καὶ ἀνταπωθοῦντα διὰ τὸ ἀποβιάζεσθαι βίᾳ, ἐξιόντος ἀποσφαιρίζεται ἢ ἂν κρατήσῃ τὸ θερμόν· οὐ γὰρ δίδεισι διὰ πυκνότητα, ἀλλὰ κρατεῖ, ἕως ἂν ὑπὸ τοῦ ἐπιρρέοντος θερμοῦ ἀπορριφθῇ. γίνεται δὲ πληγὴ, οὐκ ὥσις, διὰ τὸ ταχὺ φέρεσθαι τὸ θερμὸν κάτωθεν ἄνω.

[937a] Διὰ τί τὰ μὲν ὀλίγον χρόνον ἐν τῷ θερμῷ βρεχόμενα ἀνοιδεῖ, τὰ δὲ πολλὸν συμπίπτει καὶ γίνεται ῥυσά; ἢ διότι τὸ θερμὸν ἐκ πεπηγότος ὑγρὸν ποιεῖ, ἐκ δὲ ὑγροῦ πνεῦμα, τὰ δὲ πυκνὰ ἀραιοῖ; τὸ μὲν οὖν πρῶτον θερμαῖνον τὰ πεπηγότα ὑγρότερα ποιεῖ, καὶ ἐξ ὑγρῶν πνευματοποιοῦν ὀγκηρὰ ποιεῖ διαχέον· ὅταν δὲ μᾶλλον θερμαίνῃ τὸ περίξ, ἀραιὸν ποιεῖ, ὥστε ἀποπνεῖται ἡ ἀτμίς, καὶ τὸ ὑγρὸν ξηραίνόμενον συμπίπτειν ποιεῖ τοὺς ὄγκους. συμπιπτόντων δὲ ῥυσοῦται τὸ περίξ δέρμα πάντων. ἢ δὲ ἀνωμάλως, ταύτη ῥυσὸν γίνεται.

Διὰ τί ὑπὸ τῶν θερμῶν ὑδάτων μᾶλλον ἢ ὑπὸ τῶν ψυχρῶν πήγνυνται λίθοι; πότερον ὅτι τῇ τοῦ ὑγροῦ ἐκλείπει γίνεται λίθος, μᾶλλον δὲ ὑπὸ τοῦ θερμοῦ ἢ τοῦ ψυχροῦ ἐκλείπει τὸ ὑγρόν, καὶ ἀπολιθοῦται δὴ διὰ τὸ θερμόν, καθάπερ καὶ Ἐμπεδοκλῆς φησὶ τὰς τε πέτρας καὶ τοὺς λίθους καὶ τὰ θερμὰ τῶν ὑδάτων γίνεσθαι. ἢ τὸ θερμόν ἀπολιθοῖ· καὶ ὑπὸ τοῦ ψυχροῦ δὲ λιθοῦται διὰ τὸ τὴν ὑπερβολὴν τοῦ πάγου τὸ ὑγρὸν ἀναλίσκουσαν σκληρύνειν; δῆλον οὖν ἐκ τῆς ὑπερβολῆς καὶ τὸ ἀπλῶς.

Διὰ τί ἐν τῷ θερμῷ ὕδατι ἐὰν τὸν πόδα ἔχη τις, ἡρεμοῦντος μὲν ἦσσαν δοκεῖ εἶναι θερμόν, ἐὰν δὲ κινηθῇ, θερμότερον; ἢ ὥσπερ καὶ ἐπὶ τοῦ σώματος, ἐὰν ἐν τῷ πνεύματι τροχάζῃ τις, αἰεὶ ὁ προϊστάμενος ἀῆρ ψυχρότερος· εἰς δὲ τὸ πορρώτερον εἰσιῶν μᾶλλον ἀσθάνεται.

Διὰ τί ἐν τῷ ἡλίῳ μᾶλλον ἢ τῇ σκιᾷ τὰ θερμὰ ψύχεται; πότερον ὅτι τὸ θερμόν τὸ ἔλαττον ὑπὸ τοῦ πλείονος φθείρεται; ἢ ὅτι ἐν μὲν τῇ σκιᾷ τὸ ψυχρὸν περιεστηκὸς θλίβει τὸ ἐνὸν θερμόν καὶ οὐκ ἐᾷ ἐπεξιέναι, ὥσπερ καὶ τοῖς θνήσκουσι ποιεῖ τὸ ψυχρὸν προσχεόμενον· ἐγκατακλείει γὰρ τὸ θερμόν καὶ κωλύει ἐξιέναι· καὶ ὅλως τοῦ χειμῶνος ἅπασι συμβαίνει τὰ ἔσωθεν θερμότερα· ἐν δὲ τῷ ἡλίῳ οὐδενὸς ἀντιφράττοντος φέρεται καὶ θᾶττον ἀπολείπει.

Διὰ τί τὸ ἐν τῷ ἡλίῳ θερμαινόμενον ὕδωρ ὥστε λούεσθαι οὐκ ἔστιν ὑγιεινότερον; πότερον ὅτι διὰ τὸ ψύχεσθαι; καὶ ἔτι ἐπεὶ τὸ σωματίον φρίττειν ποιεῖ; ἢ ποιεῖ μὲν καὶ τοῦτο, ἀλλὰ κἂν πολλάκις λούηται τις, νοσερόν ἐστιν; τὸ μὲν γὰρ θερμόν ὅλως πεπτικόν ἐστι καὶ ξηραντικόν, τὸ δὲ ψυχρὸν σταλτικόν, ὥστε ἄμφω ποιεῖ τι ἀγαθόν. διὸ καὶ [937b] τὸ ὕδωρ καὶ τὸ ψυχρὸν λουομένοις καὶ τὸ θερμόν τὸ ὑπὸ τοῦ πυρὸς χρήσιμον· τὸ δὲ ὑπὸ τοῦ ἡλίου διὰ τὴν ἀσθένειαν τῆς θερμότητος οὐδέτερον τούτων ποιεῖ, ἀλλὰ ὑγραίνει ὥσπερ τὸ τῆς σελήνης φῶς.

Διὰ τί τὸ ἐν τῷ ἡλίῳ θερμανθὲν ὕδωρ οὐκ ἀγαθόν; ἢ ὅτι τὰ ψυχόμενα ῥιγοῦν ποιεῖ;

Διὰ τί τὰ ἐν Μαγνησίᾳ καὶ τὰ ἐν Ἀταρνεῖ θερμὰ πότιμά ἐστιν; ἢ διότι ἐμβάλλει ὕδωρ πλεῖον ἀπορρέοντι τῷ θερμῷ, οὗ ἢ μὲν ἀλμυρότης ἀφανίζεται, ἢ δὲ θερμότης διαμένει;

Διὰ τί ἐν Μαγνησίᾳ τὰ θερμὰ τοῦ μὲν θερμὰ εἶναι ἐπαύσατο, ἀλμυρὸν δὲ ἦν τὸ ὕδωρ; ἢ πλεῖον ἐπεχύθη ἅμα ψυχρὸν ἐπὶ τὰς πηγὰς ἀλλότριον, καὶ

ἐναπέσβεσε τὴν θερμότητα; ἡ δὲ γῆ ἀλμυρὰ μὲν ἦν, θερμὴ δὲ οὐ, διὰ τὸ πλῆθος τοῦ ὕδατος τοῦ ἐμβάλλοντος. ὅμοιον οὖν συνέβη τῷ διὰ τῆς τέφρας ὕδατι ἡθουμένῳ· καὶ γὰρ τοῦτο διὰ θερμῆς ἡθούμενον ἐκείνην μὲν καταψύχει, καὶ αὐτὸ ψυχρὸν γίνεται, ἀλμυρόν τε καὶ πικρὸν διὰ τὴν τέφραν ἐστίν. ἐπεὶ δὲ τὸ προσιδὸν ἡλλοτριωμένον ἐστί, δι' ἄλλην αἰτίαν ἐκράτησεν ἡ θερμότης ἐνοῦσα ἐν τῇ γῇ τῆς ψυχρότητος τοῦ ὕδατος δι' ὀλιγότητα, καὶ ἐγένετο πάλιν θερμά.

Διὰ τί τὰ ὅλα τῶν θερμῶν ὑδάτων ἀλμυρά; ἡ διότι τὰ πολλὰ διὰ γῆς ἡθεῖται στυπτηριώδους (δηλοῖ δὲ ἡ ὁσμὴ αὐτῶν) κεκαυμένης δέ; ἡ δὲ τέφρα πάντων ἀλμυρὰ καὶ θείου ὄζει. διὸ καὶ συγκάει οὕτως ὥσπερ ὁ κεραυνός. πολλὰ οὖν θερμά ἐστίν ἀπὸ ἐπισημάνσεως κεραυνῶν.

Διὰ τί τὰ θερμὰ λουτρὰ ἱερά; ἡ ὅτι ἀπὸ τῶν ἱερωτάτων γίνονται, θείου καὶ κεραυνοῦ;

## **ΚΕ. ΟΣΑ ΠΕΡΙ ΤΟΝ ΑΕΡΑ.**

Διὰ τί ἐν τοῖς ἀσκοῖς τοῖς πεφουσημένοις ἐναπολαμβάνόμενα τὰ μέλη πόνον παρέχει; πότερον διὰ τὴν πίεσιν τοῦ ἀέρος; ὥσπερ γὰρ οὐδὲ τοῖς ἔξωθεν πιέζουσι τὸν ἀσκὸν ἐνδίδωσιν ὁ ἀήρ, ἀλλ' ἀπωθεῖ, οὕτω καὶ τὰ ἐντὸς ἐναπολαμβάνόμενα θλίβει ὁ ἀήρ. ἡ διότι βία κατέχεται καὶ πεπίληται; ἔξω οὖν πάντῃ ὁρμῶν κατὰ φύσιν προσαπερείδεται πρὸς τὸ ἐντὸς ἀπειλημένον σῶμα.

Διὰ τί ἐν τοῖς ἔλεσι τοῖς παρὰ τοὺς ποταμοὺς γίνονται οἱ καλούμενοι βούμυκοι, οὓς μυθολογοῦσι ταύρους ἱεροὺς [938a] εἶναι τοῦ θεοῦ; ἔστι δὲ τὸ γινόμενον ψόφος ὅμοιος φωνῇ ταύρου, ὥστε αἱ βόες οὕτω διατίθενται ἀκούουσαι ὥσπερ ταύρου μυκωμένου. ἡ ὅτι ὅσοι ποταμοὶ λιμνάζουσιν εἰς ἔλη, ἡ ὅσα ἔλη λιμνάζονται, ἡ ὑπὸ θαλάττης ἀντικρούονται, ἡ τὸ πνεῦμα ἀφιᾶσιν ἀθροώτερον, ἐν τοῖς τοιούτοις γίνεται τοῦτο; αἴτιον δὲ ὅτι αἱ κοιλίαι τῆς γῆς γίνονται. οὕτως οὖν κλυζόμενον τὸ ὕδωρ, διὰ τὸ ἐνεῖναι ῥεῦμα ἐν τῇ τοιαύτῃ λιμνασίᾳ, ἀπωθεῖται τὸν ἀέρα διὰ στενοῦ εἰς εὐρυτέραν κοιλίαν, οἷον εἴ τις εἰς ἀμφορέα κενὸν κατὰ τὸ στόμιον ποιοῖ ψόφον, μυκήματι ὅμοιον γίνεται· καὶ γὰρ ἡ μύκησις διὰ τοῦτο γίνεται τὸ σχῆμα τοῖς βουσίν. πολλὰς δὲ καὶ ἀτόπους φωνὰς ποιοῦσι τὰ σχήματα τῶν κοιλιῶν ἀνώμαλα ὄντα, ἐπεὶ καὶ ἀμφορέως τὸν πύνδακα ἐάν τις ἀφελὼν διὰ τοῦ πυθμένος τρίβῃ ἔλκων ἔσω καὶ ἔξω, εἰ τρίψει διὰ τοῦ καταδήματος, ψόφον ποιεῖ, ὥστε φεύγειν τὰ θηρία, ὅταν οἱ ὀπωροφύλακες κατασκευάσωσιν αὐτό.

Διὰ τί ὁ ἀήρ οὐχ ὑγρός, ἀπτόμενος τοῦ ὕδατος; τῶν γὰρ ἄλλων οὐθὲν ὅτι οὐχ ὑγρόν, ἂν ἄψηται. ἢ διότι τὸ ἔσχατον αὐτῶν ἅμα, τὸ δὲ ἐπίπεδον ἑκατέρου οὐχ ἕτερον; τὰ μὲν οὖν ἄλλα βαρύτερα, ὁ δὲ ἀήρ οὐ ῥέπει κατωτέρω τοῦ ἐσχάτου. ἄπτεται μὲν οὖν, ὅτι οὐθὲν μεταξύ, οὐ βρέχεται δέ, ὅτι ἀεὶ ἄνωθεν τοῦ ὕδατος.

Διὰ τί μέσων νυκτῶν καὶ μεσημβρίας μάλιστα εὐδία γίνεται; ἢ διότι ἡ νηνεμία ἐστὶν ἀέρος στάσις, ἔστηκε δὲ μάλιστα, ὅταν κρατῇ ἢ κρατῇται, μαχόμενος δὲ κινεῖται. κρατεῖ μὲν οὖν μάλιστα μέσων νυκτῶν, κρατεῖται δὲ μεσημβρίας· τότε μὲν γὰρ ὁ ἥλιος πορρωτάτῳ, τότε δὲ ἐγγυτάτῳ γίνεται. ἔτι ἄρχεται τὰ πνεύματα ἢ περὶ ἕω ἢ περὶ δυσμάς, λήγει δὲ τὸ μὲν ἕωθεν, ὅταν κρατηθῇ, τὸ δὲ ἀπὸ δυσμῶν, ὅταν παύσῃται κρατῶν. συμβαίνει οὖν τὰ μὲν μεσημβρίας παύεσθαι, τὰ δὲ μέσων νυκτῶν.

Διὰ τί ὑποφωσκούσης ἕω καὶ ἤδη πρωτὶ μᾶλλον ἐστὶ ψῦχος ἢ τῆς νυκτός, ἐγγυτέρω ὄντος τοῦ ἡλίου ἡμῶν; ἢ ὅτι πρὸς ἡμέραν δρόσος καὶ πάχνη πίπτει, ταῦτα δὲ ἐστὶ ψυχρά· ὥσπερ οὖν ῥανθέντος τοῦ παντὸς τόπου ὑγρῷ ψυχρῷ γίνεται κατάψυξις.

Διὰ τί ἐν τῷ Πόντῳ καὶ ψύχη μάλιστα καὶ πνίγη; ἢ διὰ τὴν παχύτητα τοῦ ἀέρος; τοῦ μὲν γὰρ χειμῶνος οὐ δύναται διαθερμαίνεσθαι, τοῦ δὲ θέρους, ὅταν θερμανθῇ, [938b] κάει διὰ τὴν παχύτητα. ἢ δὲ αὐτὴ αἰτία καὶ διότι τὰ ἐλώδη τοῦ μὲν χειμῶνος ψυχρά, τοῦ δὲ θέρους θερμά. ἢ διὰ τὴν τοῦ ἡλίου φοράν; τοῦ μὲν γὰρ χειμῶνος πόρρω γίνεται, τοῦ δὲ θέρους ἐγγύς.

Διὰ τί τῆς νυκτός αἰθρία μᾶλλον ἢ μεθ' ἡμέραν; ἢ καὶ τοῦ πνεύματος καὶ τῆς ταραχῆς ὁ ἥλιος αἴτιος; ταῦτα γὰρ κινήσεώς τινος γενομένης συμβαίνει γίνεσθαι. αἴτιον τοίνυν τὸ θερμόν. ὅταν οὖν τοῦτο μὴ παρῇ, ἡρεμεῖ τὸ πᾶν, καὶ αἰρομένου τοῦ ἡλίου μᾶλλον ἢ τοῦναντίον· καὶ τὸ “μήποτ' ἄπ' ἡπείρου” τοῦτ' ἐστίν, ὅτι οὐ πλείστη κίνησις, ἐκεῖ ἥκιστα ἂν τι μένοι καὶ συσταίῃ, μὴ ὁμαλοῦ ὄντος καὶ κρατοῦντος τοῦ συνισταμένου. τοῦ μὲν δὲ χειμῶνος ἡ θάλαττα τοιοῦτον, τοῦ δὲ θέρους ἡ γῆ.

Διὰ τί, ὅταν διαχυθῇ τὸ ὑγρὸν εἰς ἀσκούς, οὐ μόνον τὸ ὑγρὸν δέχεται ὁ πίθος μετὰ τῶν ἀσκῶν, ἀλλὰ καὶ ἄλλο προσλαμβάνει; ἢ ὅτι ἐν τῷ ὑγρῷ ἐνυπάρχει ὁ ἀήρ; οὗτος οὖν ὅταν μὴ ἐν τῷ πίθῳ ἐνῇ, οὐ δύναται ἐκκρίνεσθαι διὰ τὸ μέγεθος τοῦ πίθου· ἐκ γὰρ τοῦ μείζονος χαλεπώτερον ἐκθλίψαι ὀπιούν καὶ ὑγρὸν καὶ πνεῦμα, ὥσπερ καὶ ἐκ τῶν σπόγγων. ὅταν δὲ μερίζεται εἰς μικρά, ἐκθλίβεται ἐκ τοῦ ἀσκοῦ μετὰ τοῦ ἐνόντος, ὥσθ' ἡ τοῦ ἀέρος χώρα

κενή γίνεται, διὸ καὶ τοὺς ἀσκοὺς καὶ ἔτι ἄλλο ὑγρὸν δέχεται ὁ πίθος. καὶ μᾶλλον ἐπὶ τοῦ οἴνου τοῦτο γίνεται, ὅτι πλείων ἀήρ ἐν τῷ οἴνῳ ἔνεστιν ἢ ἐν τῷ ὕδατι. ὅμοιον δὲ τούτῳ καὶ τὸ ταῦτὸ ἀγγεῖον τὴν τε κονίαν καὶ τὸ ὕδωρ χωρεῖν ἅμα, ὅσον ἐκάτερον χωρὶς ἐγχεόμενον. ἔοικε γὰρ πολλὰ εἶναι τὰ διάκενα τῆς τέφρας. ἅτε οὖν λεπτότερον τὸ ὕδωρ διαδύνει μᾶλλον καὶ συσάττει ἤδη ὥστε πυκνοῦσθαι, καὶ διὰ τὸ παρ' ἑκαστον τῶν μερῶν εἶναι τὴν σάξιν (μᾶλλον γὰρ σάττεται κατὰ μικρὸν σαπτόμενον ἅπαν ἢ ἀθρόον), τούτου δὲ γινομένου ὑποκαταβαίνειν τὴν κονίαν· ἅμα δὲ καὶ ἡ τέφρα εἰς αὐτὴν δέχεται τὸ ὑγρὸν διὰ τὸ ἔχειν κοιλίας. ἡ δὲ βαλλομένη τέφρα εἰς τὸ ὕδωρ θερμὴ οὕσα τέμνει αὐτὸ καὶ ἐξαεροῖ. καὶ πρότερον δὲ ὕδατος ἐγχυθέντος καὶ ὕστερον κονίας ἐμπιπτούσης τὸ αὐτὸ γίνεται, ὥστε καὶ τὸ ὕδωρ ἔχει ἂν κοιλίας καὶ διάκενα αὐτὸ ἐν αὐτῷ. ἢ οὐ τὸ ὕδωρ τὸ δεχόμενον τὴν κονίαν, ἀλλ' ἡ κονία τὸ ὕδωρ; τὸ γὰρ λεπτομερέστερον εἶκος εἶναι τὸ εἰσιόν. ἔτι καὶ ἐκ τῆς πείρας δῆλον. ὅταν γὰρ ἐπιπάττηται ἡ τέφρα, καθ' ὃν ἂν [939a] τόπον ἐπιπάττηται, εἰς τοῦτον συρρεῖ τὸ ἄλλο ὕδωρ· ἔδει δὲ τὸ ἐναντίον, εἴπερ ἦν τὸ ὕδωρ τὸ δεχόμενον. ἢ οὐ συμβαίνει τοῦτο, ἐὰν πρότερον ἐγχυθῇ τὸ ὕδωρ καὶ σφόδρα διαμεστώσῃ· ἀλλ' ἐὰν ὁτιοῦν ἐπιβληθῇ, ὑπερχεῖται. ἐὰν δ' ἅπαξ ὑπερχυθῇ καὶ ἐπιπέσῃ ἡ τέφρα, ἤδη συμβαίνει· ἡ γὰρ τέφρα ἦν δεχομένη. ταῦτὸ δὲ τοῦτο καὶ ὅτι οἱ βόθυνοι τὴν ἐκβληθεῖσαν ἐξ αὐτῶν γῆν οὐ δέχονται· ἔοικε γὰρ δὴ ἀήρ τις προκαταλαμβάνων τὸν τόπον καὶ διὰ τοῦτο μὴ δέχεσθαι.

Διὰ τί ὁ ἀήρ παχύτερος ὢν τοῦ φωτὸς διέρχεται διὰ τῶν στερεῶν; ἢ διότι τὸ μὲν φῶς κατ' εὐθεΐαν φέρεται μόνον, διὸ καὶ διὰ τῶν ἀραιῶν οὐ διορᾷ ἢ ὄψις, οἷον κισήριδος; ἐπαλλάττουσι γὰρ οἱ πόροι· ἀλλ' οὐκ ἐν τῇ ὑάλῳ. ὁ δὲ ἀήρ οὐ κωλύεται διὰ τὸ μὴ εὐθυπορεῖν οὐ διέρχεται.

Διὰ τί ὁ ἀήρ ψυχρὸς μὲν γίνεται διὰ τὸ ἄπτεσθαι τοῦ ὕδατος, δίυγρος δὲ οὐ, κἂν σφόδρα τις φουσᾷ εἰς τὸ ὕδωρ ὥστε κυμαίνειν; ὅτι δὲ ψυχρὸς, δηλοῖ μεθιστάμενος· ψύχει γὰρ ἀπὸ τῶν ὑδάτων. ἢ ὅτι ψυχρὸς μὲν πέφυκεν εἶναι καὶ θερμὸς, ὥστε μεταβάλλει τῇ ἀφῇ οὐ ἂν τινος ἄπτηται, ὑγρὸς δὲ οὐκέτι διὰ τὸ κουφότερος εἶναι· καὶ οὐδέποτε εἰς τὸ βάθος τοῦ ὕδατος ἔρχεται, ἀλλ' αἰεὶ τοῦ ἐπιπέδου ἄπτεται, κἂν βιάζεται κάτω· καὶ τὸ ὕδωρ ἔτι κατωτέρω φέρεται, ὥστε μήποτε εἰς βάθος ἵεναι.

Διὰ τί ὁ ἐκ τῶν πομφολύγων καὶ κάτωθεν ἀνιῶν οὐ διερὸς ἐξέρχεται; ἢ διότι οὐκ ἐπιμένει τὸ ὑγρὸν, ἀλλ' ὀλισθαίνει τὸ ὕδωρ; τὸ δ' ἐπὶ τῇ πομφόλυγι καὶ ἔλαττον ἐστὶν ἢ ὥστε διαιρεῖν.

Διὰ τί ὁ ἀήρ οὐκ ἀναπίμπλησι, τὸ δὲ ὕδωρ; καὶ εἰς τὸν ἀέρα γὰρ μετατιθέμενον διερὸν. ἢ ὅτι ὥσπερ οὐδὲ ὁ λίθος; οὐ γὰρ πᾶν ἐστὶν ἀναπληστικόν, ἀλλὰ τὸ γλίσχρον ἢ ὑγρόν.

ἢ ὅτι ὁ ἀήρ ἄνω φέρεται; ὁ γὰρ ἀσκὸς ὅταν μὲν κενὸς ᾖ, κάτω φέρεται, ὅταν δὲ φυσηθῇ, ἄνω ἐπιμένει διὰ τὸ τοῦτον ἀναφέρειν. εἰ δὲ ὁ ἀήρ ἀνακουφίζει καὶ κωλύει κάτω φέρεσθαι, διὰ τί βαρύτεροι γίνονται φυσηθέντες; καὶ πῶς, ὅτε μὲν βαρύτερός ἐστιν, ἐπιμένει, κουφότερος δὲ γενόμενος καταφέρεται;

Διὰ τί ὁ ἀήρ οὐκ ἄνω φέρεται; εἰ γὰρ τὰ πνεύματα [939b] τούτου κινουμένου ὑπὸ τοῦ θερμοῦ γίνεται, πέφυκε δὲ τὸ πῦρ ἄνω φέρεσθαι, καὶ τὸ πνεῦμα εἰς τὸ ἄνω ἐβάδιζεν, εἴπερ τό τε κινεῖν εἰς τὸ ἄνω θεῖ καὶ τὸ κινούμενον οὕτω πέφυκε φέρεσθαι. νῦν δὲ φαίνεται λοξὴν τὴν φορὰν ποιούμενος.

Διὰ τί τὸ ἀφ' ἧς ψυχρότερον ἢ τὸ ἀφ' ἐσπέρας; ἢ ὅτι τὸ μὲν ἐγγύτερον μέσων νυκτῶν, τὸ δὲ μεσημβρίας; ἔστι δὲ ἡ μεσημβρία θερμότατον διὰ τὸ εἶναι ἐγγύτατον ἡλίου, αἱ δὲ μέσαι νύκτες ψυχρότεραι διὰ τὸ ἐναντίον.

Διὰ τί αἱ νύκτες τῶν ἡμερῶν ἐν ταῖς ἀλέαις πνιγνρότεραι; ἢ διὰ τὴν ἄπνοιαν; οἱ γὰρ ἐτησῖαι καὶ πρόδρομοι τὰς νύκτας ἡττον πνέουσιν.

Διὰ τί τὰ ἐν τοῖς ἀσκοῖς ἄσηπτα φυσηθεῖσι, καὶ ἐν τοῖς περιπωματιζομένοις; ἢ διότι σήπεται μὲν κινούμενα, ἅπαντα δὲ τὰ πλήρη ἀκίνητα, ταῦτα δὲ πλήρη.

Διὰ τί τῆς αἰθρίας μᾶλλον ψῦχος γίνεται ἢ ἐπινεφέλων ὄντων; τὰ δὲ ἄστρα καὶ ὁ οὐρανὸς θερμός. ἢ ὅτι οὐθὲν ἀποστέγει ἐν τῇ αἰθρίᾳ τὴν ἀτμίδα, ἀλλὰ διαχεῖται· ἐν δὲ τοῖς ἐπινεφέλοις ἀποστέγεται; καὶ βορείων γε ἢ νοτίων διὰ τὸ αὐτό· ὁ μὲν γὰρ νότος ἄγει τὸ τοιοῦτον, ὁ δὲ ἀπωθεῖ. καὶ ἀτμίζειν δὲ φαίνεται βορείοις μᾶλλον ἢ νοτίοις, καὶ χειμῶνος ἢ θέρους. ἢ παρὰ τὸ ἀνόμοιον; ἢ ὅτι θερμοῦ ψυχομένου ἐστὶν ἡ ἀτμὶς;

Διὰ τί ἀήρ ὁ ἐλάττων θερμότερος τοῦ πλείονος; αἱ γὰρ στενοχωρίαι ἀλεεινότεραι. ἢ διότι κινεῖται μᾶλλον ὁ πολὺς, ἢ δὲ κίνησις ποιεῖ ψυχρόν; σημεῖον δὲ τούτου, ὅτι κινούμενα ψύχεται τὰ θερμά.

Διὰ τί ὕδωρ μὲν καὶ γῆ σήπεται, ἀήρ δὲ καὶ πῦρ οὐ σήπεται; ἢ ὅτι θερμότατον γίνεται τὸ σηπόμενον ἅπαν, πυρὸς δὲ οὐθὲν θερμότερον; ἢ ὅτι



ψυχθῆναι δεῖ πρότερον, τὸ δὲ πῦρ ἀεὶ θερμόν, ὁ δὲ ἀήρ πυρὸς πλήρης. σήπεται δὲ οὐθὲν θερμόν, ἀλλὰ ψυχθέν· γῆ δὲ καὶ ὕδωρ καὶ ἀήρ καὶ θερμὰ καὶ ψυχρὰ γίνεται.

Διὰ τί τὰ ἐπινέφελα ἀλειυνότερα τῶν αἰθρίων; πότερον ὡς οἱ ἀρχαῖοι ἔλεγον, ὅτι τὰ ἄστρα ψυχρά; ἢ λίαν τοῦτό γε ἄτοπον, ἀλλὰ διότι ἀτμίζει; ἐπισημαντέον δὲ ὅτι ἐν νηνεμία ἡ δρόσος καὶ ἡ πάχνη γίνεται. ὅταν μὲν οὖν αἰθρία ᾖ, διαπνεῖ τὸ θερμόν, ὑφ' οὗ ἀνάγεται τὸ ὑγρόν, ὥστε ψυχρὸς ὁ ἀήρ· διὸ καὶ δροσίζει ἀφιέμενον τὸ ὑγρὸν ἀπὸ τοῦ θερμοῦ. ὅταν δὲ ἐπινέφελον ᾖ, ἀποστέγεται, διὸ οὐ [940a] γίνεται δρόσος οὐδὲ πάχνη ὄντων ἐπινεφέλων. περὶ οὖν τὴν γῆν ὑπομένον τὸ θερμόν ποιεῖ τὴν ἀλέαν.

Διὰ τί ἐν τοῖς ὑψηλοῖς τῶν οἰκῶν ὁ ἀήρ διευριπίζει, καὶ μάλιστα ταῖς εὐδαίαις; ἢ διότι ὁ ἀήρ πολυκενὸς τίς ἐστι τὴν σύγκρισιν. ὅταν οὖν ἄρξηται εἶσω ρεῖν, συγχωρεῖ ὁ ἐν τῷ οἰκήματι ἀήρ καὶ συστέλλεται. τούτου δὲ συμπίπτοντος τῷ χρόνῳ πολυκενώτερος γίνεται ὁ ἕξωθεν, καὶ χώραν πολλὴν ἴσχει. εἰς ταύτην οὖν τὴν χώραν πίπτει ὁ ἐκ τοῦ οἰκήματος ἀήρ, ὣν πλησίον, καὶ φέρεται εἰς ταύτην τὴν χώραν διὰ τὸ κρέμασθαι καὶ τὴν τοῦ κενοῦ φύσιν μὴ δύνασθαι ἀντιστηρίζειν. κατὰ πολλὰ δὲ αὐτοῦ μέρη τούτου συμβαίνοντος, ἔπεται αὐτῷ ὁ πλησίον διὰ τὴν πρόσοψιν· εἶτα πολλοῦ ἕξωθεν φερομένου ὁ μὲν ἕσω τόπος πολυκενὸς γίνεται, ὁ δὲ ἕξω πυκνότερος, καὶ πάλιν ἕξωθεν εἶσω φέρεται. καὶ ταῦτα ἀλλάσσονται.

## ΚΣ. ΟΣΑ ΠΕΡΙ ΤΟΥΣ ΑΝΕΜΟΥΣ.

Διὰ τί ὁ καικίας μόνος τῶν ἀνέμων ἐφ' ἑαυτὸν ἄγει τὰ νέφη; ἢ ὅτι ἀφ' ὑψηλοτέρων τόπων πνεῖ; ἔστι γὰρ τὰ πρὸς ἕω ὑψηλότερα τῶν πρὸς ἐσπέραν· σημεῖον δὲ τὸ τῆς πρὸς ἐσπέραν θαλάττης μέγεθος καὶ βάθος. πνέων δὲ ἄνωθεν εἰς τοῦναντίον γραμμὴν ποιεῖ τῇ φορᾷ τὰ κοῖλα πρὸς τὴν γῆν ἔχουσιν. προσπίπτων δέ, ὡς εἴρηται, τοῖς πρὸς ἐσπέραν τῆς γῆς τόποις, καὶ συστέλλων τὰ νέφη διὰ τὸ τῆς γραμμῆς σχῆμα, τῇ ἐκεῖθεν ἀνακλάσει ἐπ' αὐτὸν ὠθεῖ αὐτά. ποιεῖ δὲ μόνος τοῦτο τῶν λοιπῶν τῷ τοὺς μὲν ὑψηλοτέρους τοὺς δ' ἐναντίους εἶναι τόπους, πρὸς οὓς ἐκ τοῦ κάτωθεν ἢ ἐπ' εὐθείας τὴν φορὰν γίνεσθαι συμβαίνει, τὰ κυρτὰ πρὸς τὴν γῆν ἐχούσης, ὥστε ἀνάκλασιν μὴ γίνεσθαι τοῦ πνεύματος τῷ μὴ πρὸς τὴν γῆν ἐχούσης ἀέρα ἔχειν τὴν τελευτὴν τῆς φορᾶς, ἐν ᾧ οὐδὲ νέφη ἐστὶ περὶ τὴν γῆν· τοῖς δὲ ἥττον κοίλοις καὶ τῷ ἀπηλιώτῃ τῷ μὴ εἶναι ὑγρόν. ὥστε οὐ συνιστὰς ἥττον καταφανής ἐστιν αὐτοῦ ποιῶν τοῦτο ὃ ποιεῖ.

Διὰ τί βορέαι μὲν ἐτήσιοι γίνονται, νότοι δὲ οὐ; ἢ γίνονται μὲν καὶ νότοι, ἀλλ' οὐ συνεχεῖς, ὅτι πόρρω ἡμῶν ἡ ἀρχὴ τοῦ νότου ἐστίν, ὑπὸ δὲ τῷ βορέᾳ οἰκοῦμεν; ἔτι οἱ μὲν ἐτησῖαι βορέαι καθεστηκότος τοῦ ἀέρος πνέουσι (θέρους [940b] γὰρ πνέουσιν), οἱ δὲ νότοι ἥρος, ὅθ' ἦττον ἔστηκε τὰ περὶ τὸν ἀέρα. πρὸς δὲ τούτοις ὁ μὲν νότος ὑγρός, τῷ δ' ὑγρῷ ὁ ἄνω τόπος ἀλλότριός ἐστιν· διὸ ταχὺ διαλύεται τὰ ἐν αὐτῷ συνιστάμενα ὑγρά. καὶ τὰ ὑγρά πλανητικά ἐστιν, ὥστε οὐ μένων ἐν ταύτῳ τόπῳ συμμεθίστησι καὶ τὴν τοῦ ἀέρος κίνησιν. κινουμένου δὲ μὴ ἐν ταύτῳ πνεύματα ἄλλα συμβαίνει γίνεσθαι· ἔστι γὰρ πνεῦμα ἀέρος κίνησις.

Διὰ τί νότος πνεῖ μετὰ πάχνην; ἢ διότι ἡ μὲν πάχνη γίνεται πέψεως γινομένης, μετὰ δὲ τὴν πέψιν καὶ τὴν ἀποκάθαρσιν ἡ μεταβολὴ εἰς τοῦναντίον γίνεται; ἔναντίον δὲ τῷ βορρᾷ νότος ἐστίν. διὰ ταῦτό δὲ καὶ μετὰ τὴν χιόνα πνεῖ νότος. ὅλως δὲ καὶ ἡ χιών καὶ ἡ χάλαζα καὶ τὸ ὕδωρ καὶ πᾶσα ἡ τοιαύτη ἀποκάθαρσις πέψεως σημεῖόν ἐστιν. διὸ καὶ μετὰ τὸν ὑετὸν καὶ τὰς τοιαύτας χειμασίας πίπτει τὰ πνεύματα.

Διὰ τί αἱ τροπαὶ πνέουσιν; ἢ διὰ τὸ αὐτὸ ὃ καὶ οἱ εὐριποὶ ῥέουσιν; μέχρι γὰρ τοῦ ῥεῖν καὶ ἡ θάλαττα φέρεται καὶ ὁ ἀήρ· εἴθ' ὅταν ἀντιπέση καὶ μηκέτι δύνηται τὰ ἀπόγεια προάγειν διὰ τὸ μὴ ἰσχυρὰν ἔχειν τὴν ἀρχὴν τῆς κινήσεως καὶ φορᾶς, πάλιν ἀνταποδίδωσιν.

Διὰ τί αἱ τροπαὶ ἐκ τῆς θαλάττης εἰσίν; ἢ ὅτι ἡ θάλαττα πλησίον; ἢ ὅτι ἔναντίον ἐστὶ τῇ ἀπογείᾳ ἡ τροπαία, καὶ ἔστιν ἡ τροπαία οἷον ἀναστροφὴ ἀπογείας. ἡ δὲ ἀπογεία τὸ ἐκ τῆς γῆς πρὸς τὴν θάλατταν πνεῦμα γινόμενον, ἡ δὲ τροπαία ἡ τούτου παλίνροια. ὥστε ἀνάγκη ἐκ θαλάττης εἶναι. [ἢ ἡ θάλαττά ἐστι] διὰ τὸ εἰς τὴν θάλατταν ἀθροισθῆναι τὸν ῥυέντα ἀέρα; τοῦ δὲ μὴ εἰς τὴν γῆν τοῦτο συνίστασθαι καὶ τοῦ ἀνακάμπειν ἀπὸν αἶτιον, ὅτι ἡ θάλαττα ἐν κοίλῳ ἐστίν· ὁ δὲ ἀήρ, ὥσπερ τὸ ὕδωρ, ῥεῖ ἀεὶ εἰς τὸ κοιλότατον.

Διὰ τί οἱ ἐκνεφῖαι ὕδατος γενομένου θᾶπτον παύονται; ἢ ὅτι αἱ κοιλίαι συμπίπτουσι τοῦ νέφους, ὕδατος γενομένου, ἐν αἷς ἡ ἀρχὴ τοῦ πνεύματος συνίσταται;

Διὰ τί οὐχ οἱ αὐτοὶ ἄνεμοι πανταχοῦ ὑέτιοί εἰσιν; ἢ ὅτι οὐχ οἱ αὐτοὶ πανταχοῦ πρὸς ὄρη ἀντιπνέουσιν, ἀλλ' ἕτεροι κεῖνται πρὸς ἕτερα ὄρη; οἷον γὰρ πρὸς ἀνάντη μόλις ῥεόντων, ἐνταῦθα ὑφίσταται μᾶλλον τὰ νέφη, οὐ ἀδυνατεῖ ἔτι προωθεῖν αὐτὰ ἄνεμος. ὑφιστάμενα δὲ καὶ πιεζόμενα ῥήγνυται.

[941a] Διὰ τί αἱ μὲν καθαυτὰς δύοσις εὐδιεινὸν σημεῖον, αἱ δὲ τεταραγμέναι χειμερινόν; ἢ ὅτι χειμῶν γίνεται συνισταμένου καὶ πυκνουμένου τοῦ ἀέρος; ὅταν μὲν οὖν κρατῇ ὁ ἥλιος, διακρίνει καὶ αἰθριάζει αὐτόν, ὅταν δὲ κρατῇται, ἐπινεφῇ ποιεῖ. ἐὰν μὲν οὖν ἰσχυρὰ ἦ ἡ σύστασις, εὐθύς ἡμέρας γίνεται χειμῶν· ἐὰν δὲ ἀσθενεστέρα, μὴ παντάπασι δὲ κρατουμένη, τὸ συνιστάμενον ἐξωθεῖται πρὸς τὰς δύοσις. ἐνταῦθα δὲ μένει διὰ τὸ παχύτατον εἶναι τὸν περὶ τὴν γῆν ἀέρα τοῦ χειμῶνος. ταχὺ δὲ συνίσταται καὶ ὁ ἄλλος διὰ τὸ ἔχειν ἀρχὴν καὶ ἔρεισμα, ὃ δέξεται καὶ ἀθροίσει τὸ προσιὸν καθάπερ ὄρθρος· ὥσπερ γὰρ ἐν τροπῇ ἐνὸς ἀντιστάντος καὶ οἱ ἄλλοι μένουσιν, οὕτω καὶ ἐπὶ τοῦ ἀέρος. διὸ ταχὺ καὶ ἐξαίφνης ἐνίστε γίνεται καὶ ἐπινέφελα. ὅταν οὖν αἱ δύοσις τεταραγμέναι ᾧσι, σημεῖόν ἐστιν ἰσχυρὸν ὅτι οὐ κεκράτηκεν ὁ ἥλιος τῆς συστάσεως, πολὺν χρόνον ἐναντιούμενος αὐτῇ, ὥστε εἰκότως ἔστι συστῆναι πλέον. καὶ ἦττον δὲ ἐστι φοβερὸν, ὅταν προχειμάσαντος ἢ ὅταν ἐξ εὐδίας τοῦτο συμβῇ. ἐκείνως μὲν γὰρ ἔοικεν ὥσπερ ὑπόλειμμά τι εἶναι, οὕτω δὲ ἀρχὴ συστάσεως.

Διὰ τί λέγεται “οὐ ποτε νυκτερινὸς βορέας τρίτον ἔκετο φέγγος;” ἢ διότι ἀσθενῇ τὰ πνεύματα τὰ ἀπὸ τῆς ἄρκτου, ὅταν ἡ νυκτερινὰ; σημεῖον γὰρ ὅτι οὐ πολὺς ὁ κινηθεὶς ἀήρ, τὸ τηνικαῦτα πνεῦσαι, ὅτε ὀλίγη θερμότης ὑπῆρχεν· ἢ δὲ ὀλίγη ὀλίγον ἐκίνει ἀέρα. τελευτᾷ δὲ ἐν τρισὶ πάντα, καὶ τὰ ἐλάχιστα ἐν τῇ πρώτῃ τριάδι, ὥστε καὶ τοῦτο τὸ πνεῦμα.

Διὰ τί ὁ βορέας πυκνότερον πνεῖ ἢ ὁ νότος; ἢ ὅτι ὁ μὲν βορέας γειννιῶν τῇ οἰκουμένη οὐ λανθάνει ὀλιγοχρόνιος ὢν (ἅμα γὰρ πνεῖ καὶ πάρεστιν), ὁ δὲ νότος οὐκ ἀφικνεῖται διὰ τὸ πόρρωθεν πνεῖν.

Διὰ τί ὁ νότος ἦττον μετὰ χειμερινὰς νύκτας πνεῖ ἢ μεθ’ ἡμέρας; ἢ ὅτι καὶ τῆς νυκτὸς ὁ ἥλιος ἐγγὺς ἐστι τῇ πρὸς νότον χώρα, καὶ ἀλεεινότεραι αἱ νύκτες ἐκεῖ ἢ πρὸς ἄρκτον αἱ ἡμέραι; ὥστε πολὺς κινεῖται ὁ ἀήρ, καὶ οὐθὲν ἐλάττων ἢ μεθ’ ἡμέραν· ἀλλ’ αἱ θερμότεραι ἡμέραι κωλύουσι μᾶλλον πνεῖν, ξηραίνουσαι τὰς ὑγρότητας.

Διὰ τί ἐπὶ κυνὶ ὁ νότος πνεῖ, καὶ τοῦτο ὥσπερ τι ἄλλο γίνεται τεταγμένως; ἢ διότι θερμὰ τὰ κάτω, τοῦ ἡλίου πόρρω ὄντος, ὥστε πολλὴ ἡ ἀτμὶς γίνεται; καὶ πολλοὶ δὲ ἔπνεον, [941b] εἰ μὴ διὰ τοὺς ἐτησίας. νῦν δὲ οὗτοι κωλύουσιν. ἢ ὅτι ἐπὶ πᾶσι μὲν σημαίνει τοῖς ἀστροῖς δυομένοις ἢ ἐπιτέλλουσιν, οὐχ ἥκιστα δὲ ἐπὶ τούτῳ; δῆλον οὖν ὅτι πνεύματα μάλιστα ἐπὶ τούτῳ καὶ μετ’ αὐτόν. ἐπεὶ δὲ πνίγει, καὶ πνεύματα εἰκότως ἐπ’ αὐτῷ τὰ θερμότερα κινεῖται· ὁ δὲ νότος θερμὸς ἐστιν. ἐπεὶ δὲ εἴθισται μάλιστα ἐκ τῶν

ἐναντίων εἰς τὰ ἐναντία μεταβάλλειν, πρὸ κυνὸς δὲ οἱ πρόδρομοι πνέουσιν ὄντες βορέαι, εἰκότως μετὰ κύνα νότος πνεῖ, ἐπειδὴ ἐπισημαίνει μὲν, ἐπιτέλλουσι δὲ τοῖς ἄστροις. τὸ δὲ ἐπισημαίνειν ἐστὶ μεταβολὴν τοῦ ἀέρος ποιεῖν· μεταβάλλει δὲ πάντα εἰς τοὺς ἐναντίους ἢ τοὺς ἐπὶ δεξιὰ ἀνέμους τὰ πνεύματα. ἐπεὶ δὲ βορέας εἰς τοὺς ἐπιδεξιούς μεταβάλλει, εἴη ἂν αὐτῷ λοιπὸν εἰς νότον μεταβάλλειν. ἔστι δὲ καὶ ἡ μετὰ τὰς χειμερινὰς τροπὰς πεντεκαιδεκάτη νότιος, διὰ τὸ τὰς μὲν τροπὰς ἀρχὴν τινα εἶναι, κινεῖν δὲ τὸν κατ' αὐτὴν μάλιστα ἀέρα τὸν ἥλιον, εἶναι δὲ ἐν ταύταις ταῖς τροπαῖς πρὸς νότον. καθάπερ οὖν καὶ τὰ ἀπ' ἀνατολῆς κινῶν ἀπηλιώτας ἀνέμους ἡγείρεν, οὕτω καὶ τὰ ἀπὸ μεσημβρίας κινῶν νότους ἐγείρει. οὐκ εὐθὺ δὲ ἀπὸ τροπῶν ποιεῖ τοῦτο διὰ τὸ βραχυτάτας ποιεῖσθαι τὰς μεταστάσεις τότε, ἀλλ' ἐν τῇ πεντεκαιδεκάτῃ διὰ τὸ τὸν χρόνον τοῦτον συμμέτρως ἔχειν τῇ κατὰ τὴν μετάστασιν πρώτη φαντασίᾳ· ὅλου γάρ ἐστι μέρος εὐσημότατον ὃ εἰρημένος χρόνος.

Διὰ τί ἐπὶ Ὠρίωνι γίνονται αἰόλοι μάλιστα αἱ ἡμέραι καὶ ἀκαιρίαι τῶν πνευμάτων; ἢ ὅτι ἐν μεταβολῇ αἰεὶ πάντα ἀοριστεῖ μάλιστα, ὃ δ' Ὠρίων ἀνατέλλει μὲν ἐν ἀρχῇ ὁπώρας, δύνει δὲ χειμῶνος, ὥστε διὰ τὸ μήπω καθεστάναι μίαν ὥραν, ἀλλὰ τὴν μὲν γίνεσθαι τὴν δὲ παύεσθαι, διὰ ταῦτα ἀνάγκη καὶ τὰ πνεύματα ἀκατάστατα εἶναι διὰ τὸ ἐπαμφοτερίζειν τὰ ἐξ ἐκάτερας. καὶ χαλεπὸς δὴ λέγεται καὶ δύνων καὶ ἀνατέλλων ὁ Ὠρίων διὰ τὴν ἀοριστίαν τῆς ὥρας· ἀνάγκη γὰρ ταραχώδη εἶναι καὶ ἀνώμαλον.

Διὰ τί ὁ νυκτερινὸς βορέας τριταῖος λήγει; πότερον ὅτι ἀπὸ μικρᾶς καὶ ἀσθενοῦς ἀρχῆς, ἢ τρίτῃ δὲ κρίσιμος; ἢ ὅτι ἀθρόος ἢ ἔκχυσις, ὥσπερ τῶν ἐκνεφιῶν; ταχεῖα οὖν ἢ παῦλα.

Διὰ τί βορέαι πλεῖστοι πνέουσι τῶν ἀνέμων; ἢ διὰ τὸ πρὸς τούτῳ τὴν οἰκουμένην τῷ τόπῳ ὑποκεῖσθαι ὄντι ὑψηλῷ [942a] καὶ ἔξω τροπῶν καὶ πλήρει χιόνος, ἢ οὐδέποτε ἔνια ὄρη λείπει; τὸ πολὺ οὖν ὑγραινομένων τῶν πεπηγότων πολλάκις πνεῦμα γίνεται. τοῦτο δὲ ἐστὶ βορέας, τὸ ἐκ τῶν ἀπὸ τῆς ἄρκτου τόπων πνεῦμα.

Διὰ τί οἱ νότοι πνέουσι μὲν χειμῶνος καὶ ἔαρος ἀρχομένου καὶ μετοπώρου λήγοντος, εἰσὶ δὲ κυματοειδεῖς καὶ συνεστραμμένοι, καὶ τοῖς ἐν Λιβύῃ ὁμοίως ψυχροὶ ὥς οἱ βορέαι ἐνταῦθα; ἢ διότι πλησίον τοῦ ἡλίου ὄντος ἀνάγκη κινεῖσθαι τὰ πνεύματα; ὃ δὲ ἥλιος τοῦ χειμῶνος πρὸς νότον φέρεται, καὶ τοῦ μὲν ἔαρος ἀρχομένου τοῦ δὲ μετοπώρου τελευτῶντος ἤδη θερμαίνει, τὸ δὲ θέρος πρὸς βορέαν φέρεται, ἐκείνους δὲ ἀπολείπει τοὺς τόπους. θερμὸς δὲ ἐστι

διὰ τὸ μίγνυσθαι τὸ πνεῦμα τῷ κατὰ Λιβύην ἀέρι θερμῷ ὄντι· καὶ διὰ τοῦτο μεγαλοκύμων νοτίζειν ποιεῖ τὸ θέρος, ἐμπίπτων εἰς τὴν θάλατταν.

Διὰ τί ὁ νότος δυσώδης; ἢ ὅτι ὑγρὰ καὶ θερμὰ ποιεῖ τὰ σώματα, ταῦτα δὲ σήπεται μάλιστα; οἱ δὲ ἐκ τῆς θαλάττης νότοι ἀγαθοὶ φυτοῖς· ἐκ θαλάττης γὰρ αὐτοῖς προσπίπτει. καὶ τῆς Ἀττικῆς τῷ Θριασίῳ πεδίῳ αἶτιον, διότι ἀπεψυγμένος ἀφικνεῖται. αἱ δ' ἐρυσίβαι γίνονται ὑπὸ ὑγρότητος θερμῆς μὲν ἄλλοτρίας δέ.

Διὰ τί ἄνεμος γίνεται πρὸ τῶν ἐκλείψεων ὥς τὰ πολλά, ἀκρόνυχον μὲν πρὸ τῶν μεσονυκτίων ἐκλείψεων, μεσονύκτιον δὲ πρὸ τῶν ἐώων; ἢ διότι ἀμαυροῦται τὸ θερμὸν τὸ ἀπὸ τῆς σελήνης διὰ τὸ πλησίον ἤδη φορὰν εἶναι, ἐν ᾧ γενομένῳ ἔσται ἡ ἐκλειψις; ἀνιεμένου οὖν ᾧ κατείχετο ὁ ἀῆρ καὶ ἡρέμει, πάλιν κινεῖται καὶ γίνεται πνεῦμα τῆς ὀψιαίτερον ἐκλείψεως ὀψιαίτερον.

Διὰ τί ὁ νότος οὐκ ἀρχόμενος ἀλλὰ λήγων ὑέτιος; πότερον ὅτι πόρρωθεν συνάγει τὸν ἀέρα; γίνεται δὲ συνιστάντος τὸ ὕδωρ, συνίσταται δὲ ὕστερον ἢ ἀρχεται. ἢ ὅτι ἀρχομένου θερμός ἐστιν ὁ ἀῆρ ἔτι διὰ τὸ ἐκ τοιούτου ἐληλυθέναι, ἐπιχρονιζόμενος δὲ ψυχθεὶς συνίσταται μᾶλλον εἰς ὕδωρ.

Διὰ τί ὁ νότος, ὅταν μὲν ἐλάττων ᾖ, αἶθριός ἐστιν, ὅταν δὲ μέγας, νεφώδης καὶ χρονιώτερος; πότερον, ὥσπερ τινὲς λέγουσι, διὰ τὴν ἀρχήν; ἐὰν μὲν γὰρ ἀπ' ἐλάττονος, αἶθριος, ἐὰν δὲ ἀπὸ πλείονος ὀρμήσῃ, νεφελώδης. ἢ ὅτι ἐλάττων ἀρχόμενός ἐστιν, ὥστε οὐ πολὺν ἀέρα ὠθεῖ, ἐπὶ [942b] τέλει δὲ εἴωθε γίνεσθαι μέγας. διὸ καὶ παροιμιάζονται “ἀρχομένου γε νότου καὶ λήγοντος βορέαο.”

Διὰ τί προῖεται τοῦ χειμῶνος ἀπὸ τῆς ἔω τὰ πνεύματα, τοῦ θέρους δὲ καὶ ἀφ' ἐσπέρας; ἢ ὅτι ὅταν μηκέτι κρατῇ ὁ ἥλιος, ἀφιέμενος ὁ ἀῆρ ῥεῖ; δύνων τε οὖν καταλείπει νέφη, ἀφ' ὧν οἱ ζέφυροι· καὶ ὅσον ἂν ἐπαγάγῃ ἐκείνοις τοῖς ἐν τῷ κάτω ἡμισφαιρίῳ οἰκοῦσιν, ἐωθινὸν πνεῦμα γίνεται. τάναντία δέ, ὅταν δύνῃ ἐν τῷ κάτω μέρει, ἐκείνοις τε ζεφύρους ποιήσει καὶ ἐνταῦθα ἐωθινὸν πνεῦμα ἀπὸ τοῦ ἐπομένου ἀέρος αὐτῷ. διὰ τοῦτο καὶ καταλάβῃ ἄλλον ἄνεμον, μείζων γίνεται αἶρομένου, ὅτι προσέθηκεν.

Διὰ τί οἱ κύνες τὰ ἴχνη ἥκιστα εὐρίσκουσι ζεφύρου πνέοντος; ἢ διότι μάλιστα συγχεῖ διὰ τὸ συνεχέστατος εἶναι τῶν ἀνέμων καὶ μάλιστα ὑπὸ τὴν γῆν πνεῖν;

Διὰ τί, ὅταν ἀστέρες διάπτωσιν, ἀνέμου σημεῖον; ἢ ὅτι ὑπὸ τοῦ πνεύματος φέρονται, καὶ πρότερον ἐκεῖ γίνεται πνεῦμα ἢ παρ' ἡμῖν; διὸ καὶ ἀφ' οὗ ἂν τόπου φέρονται οἱ ἀστέρες, ἐν τούτῳ καὶ τὸ πνεῦμα γίνεται.

Διὰ τί μεγίστας νεφέλας τῶν ἀνέμων ὁ ζέφυρος ἄγει; ἢ διότι ἐκ πελάγους πνεῖ καὶ κατὰ τὴν θάλατταν; ἐκ πολλοῦ οὖν καὶ συνάγει.

Διὰ τί οἱ ἐπὶ τέλει ἄνεμοι μέγιστοι; ἢ ὅτι ὅταν ἄθροοι ἐκπνεύσωσιν, ὀλίγον τὸ θερμόν;

Διὰ τί, ἐὰν περὶ ἰσημερίαν λίψ πνεύση, ὕδωρ γίνεται; ἢ ὅτι καθ' ὃν ἂν ἡ ὁ ἥλιος τόπον τοῦ κόσμου, τὰ ἐντεῦθεν πνεύματα κινεῖ; διὸ καὶ ἡ τῶν πνευμάτων περίστασις κατὰ τὴν τοῦ ἡλίου φορὰν γίνεται. ἐπεὶ δ' ἡ ἰσημερία μεθόριόν ἐστι χειμῶνος καὶ θέρους, ὅταν συμβῇ τὸν ἥλιον κατὰ τὴν ἡμῖν φαινομένην ἰσημερίαν ὑπερβεβληκέναι ἢ ἐκλείπειν τοῦ ἀκριβοῦς ὅρου καὶ εἶναι μᾶλλον ἐν τοῖς χειμερίοις, συμβαίνει τοὺς ἐκ τούτου τοῦ μέρους ἀνέμους πνεῖν, ὧν ἐστὶ πρῶτος λίψ, ὧν ὑγρὸς φύσει. ὄντος δὲ τοῦ ἡλίου μᾶλλον ἐν τῷ χειμερίῳ μέρει τοῦ κόσμου, καὶ κινουντος τὰ ἐν αὐτῷ πνεύματα, τὰ χειμῶνος ἔργα συμβαίνει γίνεσθαι· τούτων δὲ ἐστὶν ὁ ὄμβρος. ἔτι δὲ ἐπειδὴ ἡ ἰσημερία ἐστὶ καθάπερ χειμῶν καὶ θέρους ἰσοκρατῆς, ἐὰν ὁποτερωοῦν αὐτῶν τι προστεθῇ, εὐσημον τὴν ρόπην ποιεῖ, καθάπερ ἐπὶ τῶν [943a] ἰσαζόντων ζυγῶν. ἐπεὶ δὲ ὁ λίψ ἔκ τε τῆς χειμερίου τάξεώς ἐστι καὶ ὑγρὸς φύσει, προστεθεὶς ἐν τῇ ἰσημερίᾳ ρόπην χειμῶνος ἐποίησε καὶ ὄμβρον· ὁ γὰρ ὄμβρος χειμῶν ἐστὶν οἰκειότατος τῷ πνεύσαντι πνεύματι.

Διὰ τί ὁ νότος καὶ ὁ εὖρος θερμότεροι ὄντες τῶν ἐναντίων, ὁ μὲν τοῦ βορέου, ὁ δὲ τοῦ ζεφύρου, ὕδατωδέστεροί εἰσιν; καίτοι διὰ ψυχρότητα ὕδωρ ἐξ ἀέρος γίνεται. οὐ γὰρ διὰ τὸ ἀπωθεῖν τὸν βορέαν ἐντεῦθεν γίνεται τὰ νέφη· ὁ γὰρ ζέφυρος καὶ ὁ εὖρος ἀπάγουσιν ἄμφω (ὁμοίως γὰρ πλάγιοι), καὶ οἱ ἄλλοι δὲ πάντες, ὅθεν πνέουσιν. πότερον ὅτι ἀντιπερίσταται τὸ ψυχρὸν εἴσω μᾶλλον, ὅταν ἢ ἔξω τὸ θερμὸν μᾶλλον; ἢ ἐστὶ μὲν τι καὶ διὰ τὸ ὅθεν πνέουσιν, αἰθρίους εἶναι; καὶ γὰρ εὖρος ἀπ' ἡοῦς ἐστίν. ἦδε δὲ ἡ χώρα πρὸς ἐσπέραν κεῖται, καὶ ζέφυρος. ἀλλὰ καὶ διότι πρότερον θερμαινόμενος ὁ ἀήρ, ὥσπερ καὶ τὰ ὕδατα, τάχιστα καὶ μάλιστα ψύχεται. φέρεται οὖν ὁ μὲν ἀπὸ τοῦ εὖρου ἀπ' ἀνατολῆς ἀήρ θερμός, ὁ δὲ ἀπὸ τοῦ νότου ἀπὸ μεσημβρίας. ὅταν οὖν ἔλθωσιν εἰς τὸν ψυχρότερον τόπον, ταχὺ πῆγνυνται καὶ συνίστανται εἰς ὕδωρ. καὶ μᾶλλον ὁ εὖρος ποιεῖ ὕδωρ, ὅτι ἀπὸ τοῦ ἡλίου μᾶλλον φέρει τὸν ἀέρα, καὶ ὁμοίως θερμόν. ὁ δὲ νότος λήγων ὕδατώδης, ὅτι ψυχρὸς ὁ πρῶτος φερόμενος ἀήρ ἀπὸ τῆς θαλάττης, ὁ δὲ τελευταῖος διάθερμος ὧν ἀπὸ

τῆς γῆς κομίζει. ἢ οὐ μόνον τοῦτ' αἴτιον, ἀλλ' ὅτι καὶ μείζων λήγων ὁ νότος γίνεται; διὸ καὶ ἡ παροιμία εἰς αὐτὸν “ἀρχομένου τε νότου.” οἱ δὲ μείζους ψυχρότεροι. ὥστε πηγνύει ὕστερον τὰ νέφη. ἢ διὰ τοῦτο ὑδατωδέστερος ἢ ἀρχόμενος;

Διὰ τί οἱ ἄνεμοι ξηραίνουνσι ψυχροὶ ὄντες; ἢ διότι ἀτμίζειν ποιοῦσιν οἱ ψυχρότεροι; διὰ τί δὲ μᾶλλον ἢ ὁ ἥλιος; ἢ διότι ἀπάγουσι τὴν ἀτμίδα, ὁ δὲ ἥλιος καταλείπει; ὑγραίνει μὲν οὖν μᾶλλον, ξηραίνει δὲ ἥττον.

Διὰ τί ὁ καικίας μόνος τῶν ἀνέμων ἐφ' ἑαυτὸν ἄγει τὰ νέφη, ὥσπερ καὶ ἡ παροιμία λέγει “ἔλκων ἐφ' αὐτὸν ὥσπερ καικίας νέφος.” οἱ γὰρ ἄλλοι, ὅθεν ἂν πνέωσιν, ἐνταῦθα ἀναστέλλουσιν. πότερον αἴτιον ὅτι ἅμα ὁ ἐναντίος πνεῖ; ἢ οὐκ ἂν ἐλάνθανεν, ἀλλὰ πέφυκε τὸ πνεῦμα κύκλου γραμμὴν φέρεσθαι; οἱ μὲν οὖν ἄλλοι περὶ τὴν γῆν πνέουσιν· [943b] τοῦτο δὲ τὸ κοῖλον τῆς γραμμῆς πρὸς τὸν οὐρανὸν καὶ οὐκ ἐπὶ τὴν γῆν ἐστίν, ὥστε ἐπὶ τὴν ἀρχὴν πνέων ἐφ' ἑαυτὸν τὰ νέφη ἄγει.

Διὰ τί ἀπὸ μὲν τῆς θαλάττης οὐκ ἀποπνεῖ ἔωθεν ψυχρόν, ἀπὸ δὲ τῶν ποταμῶν; ἢ ὅτι ἡ μὲν θάλαττά ἐστιν ἐν ἀναπεπταμένοις τόποις, οἱ δὲ ποταμοὶ ἐν στενοῖς; ἢ οὖν ἀπὸ τῆς θαλάττης αὔρα εἰς πολὺν τόπον σκίδνεται, ὥστε εἶναι ἀσθενής, ἢ δὲ ἀπὸ τῶν ποταμῶν ἀθρόως φέρεται καὶ μᾶλλον ἰσχύει, διὸ μᾶλλον εἰκότως φαίνεται ψυχρά. ἢ οὐ τοῦτ' ἐστὶν αἴτιον, ἀλλ' οἱ μὲν ποταμοὶ ψυχροὶ εἰσιν, ἢ δὲ θάλαττα οὔτε θερμὴ οὔτε ψυχρά; γίνεται δὲ ἡ αὔρα καὶ ἀποπνοὴ θερμαινομένων ἢ ψυχομένων· ὁπότερον γὰρ ἂν τούτων πάσχη, ἐξαεροῦται, ἐξαερουμένου δὲ τοῦ ὕδατος ὁ ἀῆρ γινόμενος φέρεται, ὃ ἐστὶν αὔρα. τὸ μὲν οὖν ἀπὸ τῶν ψυχρῶν ψυχρὸν εἰκότως ἀποπνεῖ, τὰ δὲ ἀπὸ τῶν σφόδρα θερμῶν ἀποπνέοντα ψύχεται καὶ γίνεται ψυχρά. τοὺς μὲν οὖν ποταμοὺς ψυχροὺς ἅπαντας εὗροι τις ἂν, ἢ δὲ θάλαττα οὔτε ψυχρά οὔτε θερμὴ σφόδρα ἐστίν. οὔτε οὖν τὸ ἀποπνέον ψυχρὸν ἀπ' αὐτῆς ἐστί, διὰ τὸ μὴ ψυχρὰν εἶναι σφόδρα, οὔτε ψύχεται ταχύ, διὰ τὸ μὴ θερμὴν εἶναι σφόδρα.

Διὰ τί ὁ ζέφυρος εὐδιεινὸς καὶ ἡδιστος δοκεῖ εἶναι τῶν ἀνέμων, καὶ οἶον καὶ Ὅμηρος ἐν τῷ Ἡλυσίῳ πεδίῳ, “ἀλλ' αἰεὶ ζεφύριοιο διαπνεΐουσιν ἀῆται;” ἢ πρῶτον μὲν ὅτι ἔχει τὴν τοῦ ἀέρος κρᾶσιν; οὔτε γὰρ θερμὸς ὥσπερ οἱ ἀπὸ μεσημβρίας καὶ ἔω, οὔτε ψυχρὸς ὥσπερ οἱ ἀπὸ τῆς ἄρκτου, ἀλλ' ἐν μεθορίῳ ἐπὶ τῶν ψυχρῶν καὶ θερμῶν πνευμάτων· γειτνιῶν δὲ ἀμφοῖν τῆς δυνάμεως αὐτῶν κοινωνεῖ, διὸ καὶ εὐκρατός ἐστι καὶ πνεῖ ἕαρος μάλιστα. ἔτι τὰ πνεύματα περιίσταται ἢ εἰς τάναντία ἢ εἰς τὰ δεξιὰ. μετὰ οὖν τὸν βορέαν πνέων (ἐπὶ δεξιὰ γὰρ ὁ τόπος) εὐδοκιμεῖ, ὥσπερ παρὰ χαλεπὸν πρᾶος. καὶ

ἄμα ὅταν ἀποχειμάσῃ, εὐδία εἴωθε γίνεσθαι ὡς ἐπὶ τὸ πολὺ. ὁ δὲ βορέας χειμέριος ἄνεμος. [καὶ ὁ ἀπηλιώτης δὲ ἐν τῷ μέσῳ ὧν τῶν θερμῶν καὶ τῶν ψυχρῶν πνευμάτων ἦττον αὐτοῖς κοινωνεῖ. ἀπηλιώτης μὲν γὰρ πνέων τὰ πρὸς νότου πνεύματα κινεῖ (ἐνταῦθα γὰρ ἡ μετάστασις αὐτοῦ ἐστίν), κινῶν δὲ οὐ μίγνυται αὐτοῖς. ὁ δὲ ζέφυρος καὶ κινεῖται ὑπὸ τῶν νοτίων, καὶ [944a] πνέων κινεῖ τὰ βόρεια· τελευτᾷ γὰρ ἐνταῦθα ἡ περίοδος τῶν πνευμάτων. διὸ τῶν μὲν τὴν τελευτὴν τῶν δὲ τὴν ἀρχὴν ἔχων ἐν αὐτῷ δικαίως ἡδύς ἐστι καὶ δοκεῖ εἶναι.]

Διὰ τί ἐπὶ κυνὶ νότος πνεῖ; ἢ ὅτι ἐπὶ πᾶσι μὲν σημαίνει τοῖς ἄστροις δυομένοις ἢ ἐπιτέλλουσιν, οὐχ ἥκιστα δὲ ἐπὶ τούτῳ; δῆλον οὖν ὅτι πνεύματα μάλιστα ἐπὶ τούτῳ καὶ μετ' αὐτόν. ἐπεὶ δὲ πνίγει, καὶ πνεύματα εἰκότως ἐπ' αὐτῷ τὰ θερμότατα κινεῖται· ὁ δὲ νότος θερμός ἐστιν. ἐπεὶ δὲ - χρόνος. (p. 941b 423.)

Διὰ τί ὁ ζέφυρος πρὸς τὴν δειλὴν πνεῖ, πρῶτ' οὐ; ἢ αἴτιος μὲν ἐστὶν ὡς ἐπὶ τὸ πολὺ τῶν πνευμάτων ὁ ἥλιος ἀνατέλλων καὶ δύνων; ὅταν γὰρ ὑγρὸν ὄντα τὸν ἀέρα διαθερμαίνων πέττη καὶ διακρίνῃ, εἰς πνεῦμα διακρίνει· ἐὰν δὲ ἢ πνευματώδης ὁ ἀήρ, ἔτι μᾶλλον ἐκπνευματοῦται ὑπὸ τοῦ ἡλίου. ὅταν μὲν οὖν ἐπ' ἀνατολῇ ἢ ὁ ἥλιος, πόρρω ἐστὶ τοῦ ζεφύρου· ἀπὸ γὰρ δυσμῶν πνεῖ. ὅταν δὲ περὶ τὸ δύνειν ἦδῃ, τότε διακεκριμένον ἐστὶ τὸ πνεῦμα τελέως. ἀπὸ δὲ μέσου ἡμέρας καὶ πρὸς τὴν δειλὴν συμμετρότατα ἔχει πρὸς τὸ διαθερμᾶναι καὶ διακρίναι. διὰ ταῦτα δὲ καὶ ὁ ἀπηλιώτης πρῶτ' ἄρχεται πνεῖν· τοῦ γὰρ ὑπὲρ γῆς ἀέρος τῆς νυκτὸς ἐξυγραινόμενου καὶ τῇ γῇ πλησιάσαντος διὰ βάρος, ἔωθεν διακρίνων αὐτόν ὁ ἥλιος τὸν καθ' αὐτόν κινεῖ πρῶτον. τὸ δὲ ἀπὸ τοῦ ἡλίου πνεῦμα ἀνατέλλοντος ἐντεῦθεν ἀπηλιώτης καλεῖται.

Διὰ τί αἰρομένου τοῦ ἡλίου καὶ αὐξάνεται καὶ πίπτει τὰ πνεύματα; ἢ ὅτι τὸ πνεῦμά ἐστιν ἥτοι τοῦ ἀέρος ἢ τοῦ ἀναχυθέντος ὑγροῦ κίνησις; αὕτη δὲ ὅταν μὲν ἐλάττων ἢ, ταχὺ καταναλίσκεται ὑπὸ τοῦ ἡλίου, ὥστε οὐ γίνεται πνεῦμα· ὅταν δὲ πλείων, κινεῖται μᾶλλον τοῦ ἡλίου ἀνατείλαντος· ὁ γὰρ ἥλιος ἀρχὴ τῶν κινήσεων ἐστίν.

Διὰ τί ὁ ζέφυρος τῆς δειλῆς πνεῖ; ἢ ἅπαντα τὰ πνεύματα τοῦ ἡλίου διαχέοντος τὸ ὑγρὸν γίνεται; τότε γὰρ συνεστηκός, ὅταν ἢ τοῦ θερμοῦ δύναμις πλησιάζῃ, ἐξάπτει. ὁ δὲ ζέφυρος ἀφ' ἐσπέρας πνεῖ. εἰκότως οὖν τῆς δειλῆς γίνεται· τότε γὰρ ὁ ἥλιος εἰς τὸν τόπον αὐτοῦ ἀφικνεῖται. καὶ ὁ βορέας καὶ ὁ νότος διὰ τοῦτο πλειστάκις πνέουσιν, ὅτι τὸ ἐναντίον ὑπὸ τοῦ ἐναντίου κρατούμενον κατ' εὐθυωρίαν ἥκιστα δύναται διαμένειν, ἀλλὰ μᾶλλον ἐκ τοῦ



πλαγίου. [944b] ὁ μὲν οὖν νότος καὶ βορέας ἐκ τῶν ἐφ' ἐκάτερα τόπων τῆς τοῦ ἡλίου φορᾶς πνέουσιν, οἱ δὲ ἄλλοι μᾶλλον ἐκ τοῦ κατ' ἀντικρύ.

Πότερον τὸ πνεῦμα ἀπὸ πηγῆς τινὸς φέρεται ὥσπερ τὸ ὕδωρ, καὶ ταύτης οὐκ ἔστιν ἀνωτέρω αὐτὸ ἐνεχθῆναι, ἢ οὐ; καὶ πότερον ἀπὸ ἐνὸς σημείου ἢ ἀπὸ πλείονος τόπου; ἔνια μὲν οὖν ἐστὶν ὅμοια ἃ καὶ ἐπὶ τῶν ὑδάτων συμβαίνει γίνεσθαι. τό τε γὰρ ὕδωρ, ὅταν εἰς τὸ κάταντες φέρηται, θᾶπτον ῥεῖ ἢ ὅταν ἐν τῷ ἐπιπέδῳ καὶ ὁμαλῷ λιμνάζῃ. ὁμοίως δὲ καὶ τὰ πνεύματα· ἐπὶ μὲν γὰρ τοῖς ἄκροις καὶ τοῖς ὑψηλοῖς αἰὲν ἐν κινήσει ὁ ἀήρ, ἐν δὲ τοῖς κοίλοις ἡρεμεῖ πολλάκις καὶ ἄπνοια γίνεται. ἔτι ἐπὶ τοῖς σφόδρα ὑψηλοῖς ὄρεσιν οὐ γίνεται τὰ πνεύματα, οἷον ἐπὶ τῷ Ἄθῳ καὶ τοῖς ἄλλοις τοῖς τοιούτοις. σημεῖον δέ· ἃ γὰρ ἂν καταλείπωσιν οἱ τῷ προτέρῳ ἔτει θύοντες, εὐρίσκεσθαι φασὶ διαμένοντα τῷ ὑστέρῳ. δῆλον οὖν ὅτι ὥσπερ ἀπὸ πηγῆς τινὸς καὶ ἡ τοῦ πνεύματος φορὰ γίνεται. εἰς τὸ ἄνω οὖν οὐκέτι δύναται διικνεῖσθαι. διὰ τοῦτο οὖν ἐπὶ τοῖς ὑψηλοῖς τοῦτο συμβαίνει. ὁμοίως δ' ἂν καὶ ἐπὶ τοῦ ὕδατος εἴη· οὔτε γὰρ ὕδωρ λάβρον οὔτε πνεῦμα ἐξαΐσιον ἐν τοῖς ὑψηλοῖς φαίνεται γίνεσθαι.

Διὰ τί ποτε τοῦ μὲν νότου πνέοντος ἡ θάλαττα κυανέα γίνεται, τοῦ δὲ βορέου ζοφώδης; ἢ ὅτι ὁ βορέας ἦπτον τὴν θάλατταν ταραττει, τὸ δὲ ἀτακτότερον ἅπαν μέλαν φαίνεται.

Διὰ τί οἱ νότοι μικρὰ μὲν πνέοντες οὐ ποιοῦσιν ἐπίνεψιν [ἥτοι συννέφειαν], μεγάλοι δὲ γενόμενοι ἐπινεφοῦσιν; ἢ διότι μικροὶ μὲν πνέοντες οὐ δύνανται πολλὰ νέφη ποιεῖν; ὀλίγον οὖν τόπον κατίσχουσιν. ὅταν δὲ μεγάλοι γίνωνται, πολλὰ ἀπωθοῦσι, διὸ καὶ δοκοῦσι μᾶλλον ἐπινεφεῖν.

Διὰ τί ὁ μὲν βορέας ἀρχόμενος μέγας, λήγων δὲ μικρός, ὁ δὲ νότος ἀρχόμενος μὲν μικρός, λήγων δὲ μέγας; ἢ ὅτι ὁ μὲν βορέας ἐγγὺς ἡμῶν, ὁ δὲ νότος πόρρω; ὁ μὲν οὖν ὅταν ἄρξηται, εὐθὺς παρ' ἡμῖν, τοῦ δὲ ἄτε διὰ πολλοῦ χρόνου ἡ ἀρχὴ διασκεδάννυται, καὶ πρὸς ἡμᾶς μικρὸν ἐξικνεῖται αὐτῆς τὸ πρῶτον· τῆς δὲ τελευτῆς τοῦ μὲν αἰσθανόμεθα, τοῦ δὲ ὅλως οὐκ αἰσθανόμεθα. ὥστε εἰκότως ὁ μὲν ἀσθενὴς παυόμενος (ἀσθενὴς γὰρ ἡ τελευτὴ πάντων), ὁ δὲ οὐ· τῆς γὰρ τελευτῆς οὐκέτι αἰσθανόμεθα αὐτοῦ.

[945a] Διὰ τί οὗ μὲν κόλποι εἰσὶ, τροπαῖαι γίνονται, οὗ δὲ ἀναπεπταμένα πελάγη, οὐ γίνονται; ἢ διότι εἰς μὲν τοὺς κόλπους ῥέον οὐ διασπᾶται τὸ πνεῦμα μᾶλλον, ἀλλ' ἀθρόον ἐπὶ πολὺ φέρεται, ἐν δὲ τοῖς ἀναπεπταμένοις ἐξ ἀρχῆς τε αἱ ἀπογέαι εὐθὺς διασπῶνται μᾶλλον, καὶ ὅταν ῥέωσι, ταῦτο

πάσχουσι διὰ τὸ πολλαχῇ ἐξεῖναι ὀρμῆσαι· ἔστι γὰρ ἡ τροπαία ἀπόγεος ἀνάκλασις.

Διὰ τί λέγεται “ἀρχομένου τε νότου καὶ λήγοντος βορέας;” ἢ διότι ὁ μὲν βορέας, διὰ τὸ ὑπείκειν ἡμᾶς αὐτῷ καὶ εἶναι τὴν οἴκησιν πρὸς ἄρκτον, εὐθύς μέγα πνεῖ; ἅμα γὰρ ἄρχεται καὶ πάρεστιν. διὸ παυόμενος ἡδὺ πνεῖ· τότε γὰρ ἀσθενὴς πνεῖ. ὁ δὲ νότος διὰ τὸ πόρρωθεν ὕστερον μείζων ἀφικνεῖται.

Διὰ τί ἐν τοῖς νοτίοις βαρύτερον ἔχουσι καὶ ἀδυνατώτερον οἱ ἄνθρωποι; ἢ διότι ἐξ ὀλίγου πολὺ ὑγρὸν γίνεται, διατηκόμενον διὰ τὴν ἀλέαν, καὶ ἐκ πνεύματος κούφου ὑγρὸν βαρὺ· εἴτα ἡ δύναμις ἀτονεῖ.

Διὰ τί ἐν τοῖς βορείοις βρωτικώτεροι ἢ ἐν τοῖς νοτίοις; ἢ διότι ψυχρότερα τὰ βόρεια;

Διὰ τί ὁ νότος οὐ πνεῖ κατ’ αὐτὴν τὴν Αἴγυπτον τὰ πρὸς θάλατταν, οὐδ’ ὅσον ἡμέρας δρόμον καὶ νυκτός· τὰ δὲ ὑπὲρ Μέμφεως καὶ ἀποσχόντι δρόμον ἡμέρας καὶ νυκτός λαμπρός· καὶ πρὸς ἐσπέραν οὐ πνεῖ, ὅσον δύο ἡμερῶν καὶ νυκτῶν δρόμον, τὰ δὲ πρὸς ἕω λίβες πνέουσιν; ἢ διότι κοίλη τὰ κάτω ἢ Αἴγυπτός ἐστι, διὸ ὑπερπίπτει αὐτῆς, ἄνω δὲ καὶ πόρρω ὑψηλότεροι οἱ τόποι.

Διὰ τί ὁ νότος ἀρχόμενος μὲν μικρός ἐστι, λήγων δὲ μείζων γίνεται, ὁ δὲ βορέας ἀνάπαλιν, διὸ καὶ ἡ παροιμία λέγει εὖ πλεῖν ἀρχομένου τε νότου καὶ λήγοντος βορέας; ἢ διότι πρὸς ἄρκτον μᾶλλον ἢ πρὸς μεσημβρίαν οἰκοῦμεν, πνεῖ δὲ ὁ μὲν βορέας ἀπὸ τῆς ἄρκτου, ὁ δὲ νότος ἀπὸ τῆς μεσημβρίας. εἰκότως οὖν ὁ μὲν ἀρχόμενος εὐθύς σφοδρὸς πρόσκειται τοῖς πλησίον τοῖς μᾶλλον, καὶ μετὰ ταῦτα μεταλλάττει τὸ σφοδρὸν πρὸς ἐκείνους. ὁ δὲ νότος τὸναντίον ἀρχόμενος μὲν τοῖς πρὸς μεσημβρίαν οἰκοῦσιν ἔγκειται, ἐπειδὴν δὲ παραλλάξῃ, τοῖς πρὸς ἄρκτον λαμπρὸς καταπνεῖ.

Διὰ τί λέγεται “εἰ δ’ ὁ νότος βορέαν προκαλέσσεται, αὐτίκα χειμών;” ἢ διότι ὁ νότος τοιοῦτός ἐστιν οἷος νεφέλας καὶ ὕδωρ πολὺ συναίρειν; ὅταν οὖν τοιαύτης τῆς καταστάσεως [945b] οὔσης ἐπιπνεύσῃ ὁ βορέας, πολλῆς αὐτῷ ὕλης ὑπαρχούσης πῆγνυσι καὶ χειμῶνα ποιεῖ. διὸ λέγεται “εἰ βορρᾶς πηλὸν καταλήψεται, αὐτίκα χειμών.” ὁ δὲ πηλὸς καὶ ὅλως τὰ ὕδατα ὑπὸ τοῦ νότου ἢ μάλιστα ἢ πλειστάκις γίνεται.

Διὰ τί ἐπὶ μὲν τῷ νότῳ ταχὺς ὁ βορέας, ἐπὶ δὲ τούτῳ ὁ νότος οὐ ταχὺς ἐπιπίπτει; ἢ ὅτι τῷ μὲν ἐγγύθεν τῷ δὲ πόρρωθεν ἡ ἀφίξις; ἢ γὰρ οἴκησις πρὸς βορέαν ἡμῶν.

Διὰ τί τὰ πνεύματα ψυχρά ἐστίν, ὄντα ἀπὸ τῆς τοῦ θερμοῦ συγκινήσεως; ἢ οὐ πάντως ἢ ὑπὸ τοῦ θερμοῦ κίνησις θερμὴ γίνεται, ἐὰν μὴ τρόπον τινὰ γίνηται; ἀλλ' ἐὰν μὲν ἀθρόως ἐμπίπτῃ, καίει αὐτὸ τὸ ἀφιέν θερμὴ· ἐὰν δὲ διὰ στενοῦ καὶ κατὰ μικρόν, αὐτὴ μὲν θερμὴ, ὁ δὲ ὑπὸ τούτου κινούμενος ἀήρ, οἷος ἂν ποτε τυγχάνῃ προϋπάρχων, τοιαύτην καὶ τὴν κίνησιν ἀπετέλεσεν, ὥσπερ καὶ ἐπὶ τοῦ σώματος. φασὶ γὰρ ἐκ τοῦ αὐτοῦ θερμὸν καὶ ψυχρὸν ἡμᾶς πνεῖν, τοῦτο δὲ οὐκ ἀληθές, ἀλλὰ τὸ μὲν ἐξιὸν θερμὸν αἰεὶ. σημεῖον δὲ τὸ ἐγγὺς προσαγαγόντι τοιοῦτον φαίνεσθαι. διαφέρει δὲ ἡ ἔκπτωσις αὐτοῦ. ἐὰν μὲν γὰρ διὰ πολλοῦ ἀφίωμεν χανόντες, θερμὸν φαίνεται διὰ τὸ αὐτοῦ αἰσθάνεσθαι, ἐὰν δὲ διὰ στενοῦ, σφοδρότερον γινόμενον ὠθεῖ τὸν πλησίον ἀέρα, κάκεινος τὸν ἐχόμενον. ψυχροῦ δὲ ὄντος τοῦ ἀέρος καὶ ἡ κίνησις αὐτοῦ ψυχρὰ γίνεται. μήποτε δὲ καὶ ἐπὶ τῶν πνευμάτων τὸ αὐτὸ συμβαίνει, καὶ διὰ στενοῦ ἢ πρώτη κίνησις· εἴτ' ἐκεῖνον μὲν διήνεγκεν, ἕτερος δὲ ἀήρ ἐπιρρεῖ. διὸ καὶ τοῦ μὲν θέρους θερμά, τοῦ δὲ χειμῶνος ψυχρὰ τὰ πνεύματα, ὅτι ἐν ἐκατέρῳ τοιοῦτος ὁ ἀήρ ὁ προϋπάρχων· ἐπεὶ ὅτι γε οὔτε αὐτὸς ὑφ' ἑαυτοῦ κινούμενος ὁ ἀήρ οὔτε ὑπὸ τοῦ θερμοῦ κρατούμενος φέρεται ταύτην τὴν φοράν, δῆλον οὐ μόνον τούτῳ ὅτι θερμαίνει τὰ πνεύματα πλείονος τοῦ θερμοῦ ἐνότος, ἀλλὰ καὶ ἄνω ἐφέρετο. τὸ γὰρ πῦρ τοιοῦτον, τὸ δὲ ψυχρὸν κάτω πέφυκε φέρεσθαι. τὰ δὲ πνεύματα πλάγια εἰκότως· ἐπεὶ γὰρ τὸ μὲν ἄνω τὸ δὲ κάτω βιάζεται, καὶ οὐδέτερον κρατεῖ, μένειν δὲ οὐχ οἷόν τε, λοξὴν τὴν φοράν εἰκότως γίνεσθαι.

Διὰ τί οἱ νότοι ἐν τῇ Λιβύῃ ψυχροί, ὥσπερ παρ' ἡμῖν οἱ βορέαι; ἢ πρῶτον μὲν διὰ τὸ ἐγγυτέρω εἶναι ἡμῖν τε κάκεινοισι τὰς ἀρχὰς τῶν πνευμάτων. εἰ γάρ, ὥσπερ εἵπομεν, διὰ στενοῦ γίνεται τὰ πνεύματα, τοῖς ἐγγυτέρω ψυχρότερα ἔσται διὰ τὴν σφοδρότητα τῆς κινήσεως· εἰς [946a] γὰρ τὸ πόρρω προΐούσης διαχεῖται. διὸ καὶ παρ' ἡμῖν οἱ βορέαι ψυχροί, ὅτι ἐγγυτέρω καὶ παντελῶς πρὸς τῇ ἄρκτῳ οἰκοῦμεν.

Διὰ τί οἱ νότοι οἱ ξηροὶ καὶ μὴ ὑδατώδεις πυρετώδεις; ἢ ὅτι ὑγρότητα θερμὴν ἀλλοτρίαν ἐμποιοῦσι τοῖς σώμασιν; εἰσὶ γὰρ ὑγροὶ καὶ θερμοὶ φύσει, τοῦτο δ' ἐστὶ πυρετώδεις· ὁ γὰρ πυρετὸς ὑπ' ἀμφοτέρων τούτων ἐστὶν ὑπερβολῆς. ὅταν μὲν οὖν ὑπὸ τοῦ ἡλίου ἄνευ ὕδατος πνέωσι, ταύτην τὴν τάξιν, ὅταν δὲ ἅμα τῷ ὕδατι, τὸ ὕδωρ καταψύχει.

Διὰ τί οἱ ἐτησῖαι ταύτην δὴ τὴν ὥραν αἰεὶ καὶ τοσοῦτοι πνέουσιν; καὶ διὰ τί ληγούσης τῆς ἡμέρας λήγουσι καὶ τῆς νυκτὸς οὐ πνέουσιν; ἢ τοῦτο μὲν διὰ τὸ τὴν χιόνα τηκομένην παύεσθαι ὑπὸ τοῦ ἡλίου πρὸς ἐσπέραν καὶ τὴν νύκτα; ὅλως δὲ πνέουσιν, ὅταν ὁ ἥλιος κρατεῖν καὶ λύειν ἄρξῃται τὸν πρὸς βορέαν

πάγον. ἀρχομένου μὲν οὖν οἱ πρόδρομοι, ἤδη δὲ λυομένου οἱ ἔτησίαι.

Διὰ τί ὁ ζέφυρος λειότατός τε τῶν ἀνέμων καὶ ψυχρός, καὶ δύο ὥρας πνεῖ μάλιστα, ἔαρ τε καὶ μετόπωρον, καὶ πρὸς ἐσπέραν τῆς ἡμέρας, καὶ ἐπὶ τὴν γῆν μάλιστα; ἢ ψυχρὸς μὲν διὰ τὸ πνεῖν ἀπὸ τῆς θαλάττης καὶ πεδίων ἀναπεπταμένων; ἦττον μὲν οὖν ψυχρὸς τοῦ βορέου διὰ τὸ ἀφ' ὕδατος πνευματουμένου καὶ μὴ χιόνος πνεῖν, ψυχρὸς δὲ διὰ τὸ μετὰ χειμῶνα, ἄρτι τοῦ ἡλίου κρατοῦντος, πνεῖν. καὶ μετοπώρου, ὅτι οὐκέτι κρατεῖ ὁ ἥλιος· οὐ γὰρ ὥσπερ ἐν γῇ ὑπομένει τὴν ὕλην, ἀλλὰ πλανᾶται διὰ τὸ ἐφ' ὑγροῦ βεβηκέναι. καὶ ὁμαλὸς διὰ τὸ αὐτό· οὐ γὰρ ἀπὸ ὀρέων πνεῖ, οὐδὲ βίᾳ τηκομένου, ἀλλὰ ῥαδίως ὥσπερ δι' αὐλῶνος ῥέων. τὰ μὲν γὰρ πρὸς βορέαν καὶ νότον ὀρεινά· πρὸς ἐσπέραν δὲ οὔτε ὄρος οὔτε γῆ ἐστίν, ἀλλὰ τὸ Ἀτλαντικὸν πέλαγος, ὥστε ἐπὶ τῆς γῆς φέρεται. καὶ πρὸς ἐσπέραν δὲ τῆς ἡμέρας πνεῖ διὰ τὸν τόπον· τότε γὰρ ὁ ἥλιος πλησιάζει τῷ τόπῳ. καὶ τῆς νυκτὸς παύεται διὰ τὸ ἐκλείπειν τὴν τοῦ ἡλίου κίνησιν.

Διὰ τί, ὅταν ὁ εὖρος πνεῖ, μείζω φαίνεται τὰ πάντα; ἢ ὅτι ζοφωδέστατον τὸν ἀέρα ποιεῖ;

Διὰ τί τὸν μὲν χειμῶνα πρωὶ ἀπὸ τῆς ἕως τὰ πνεύματα πνεῖ, τὸ δὲ θέρος δείλης καὶ ἀπὸ δυσμῶν ἡλίου; ἢ ὅτι ἃ ἡμῖν συμβαίνει τοῦ θέρους, ταῦτα τοῦ χειμῶνος τοῖς τὸ ἐναντίον τῆς γῆς ἡμισφαίριον οἰκοῦσιν, ἡμῖν δὲ τοῦ χειμῶνος πρωὶ καὶ ἀφ' ἕως τὰ πνεύματα πνεῖ διὰ τὸ τὸν ἀέρα κάθυγρον [946b] ἐν τῇ νυκτὶ διακρίνεσθαι καὶ κινεῖσθαι τὸ πρωὶ ὑπὸ τοῦ ἡλίου, καὶ πρῶτον τὸν ἔγγιστα τοῦ ἡλίου. ποιεῖ δὲ τοῦτο ὁ ἥλιος καὶ πρὸ ἀνατολῆς· διὸ αὖραι οὐχ ἦττον πρὸ ἀνατολῆς πνέουσιν. ἐπειδὴ οὖν καὶ ἐφ' ἑαυτὸν ἔλκει ὁ ἥλιος τὰ ὑγρά καὶ κινεῖ πρὸ ἀνατολῆς τοῦ χειμῶνος ὑγρὸν ὄντα τὸν παρ' ἡμῖν ἀέρα, δῆλον ὡς καὶ ἐφ' ἑαυτὸν ἂν ἔλκοι, ὦν ἐν τῷ κάτω ἡμισφαιρίῳ, καὶ δειλὴ ἐκείνοις ὃ ἡμῖν ἐστὶν ὄρθρος. ὥστε συμβαίνοι ἂν τὸν ὑπὸ τοῦ ἡλίου πρὸ ἀνατολῆς παρ' ἡμῶν ἐφ' ἑαυτὸν ἐλκόμενον ἀέρα, τοῦτον τοῖς κάτω γενέσθαι ζέφυρον καὶ δείλης πνεῖν. ὃ δὲ ἐν τῷ παρ' ἡμῖν χειμῶνι, τῆς ἕως ἐκείνοις συμβαίνει, ὃ δὲ ἐν τῷ θέρει, τῆς δείλης ἡμῖν. ὅτε γὰρ παρ' ἡμῖν θέρος, ἐκεῖ χειμὼν ἐστὶ, καὶ ἡ ἡμετέρα δειλὴ ἐκείνοις ὄρθρος. καθ' ἣν ἐκείνοις μὲν αὖρας ἐξ ἑώας συμβαίνει πνεῖν, ἡμῖν δὲ ζεφύρους διὰ ταῦτά τοις προειρημένοις. τοῦ δὲ θέρους καὶ ἑώαι μὲν οὐ πνέουσιν, ὅτι εἰς ξηρότερον ἔτι τὸν παρ' ἡμῖν ἀέρα ὁ ἥλιος ἀνατέλλει διὰ τὸ ὀλίγον χρόνον αὐτοῦ ἀπογεγονέναι· ζέφυροι δὲ οὐ πνέουσι δείλης τοῦ χειμῶνος, ὅτι οὐδ' ἐν τῷ κάτω ἡμισφαιρίῳ ἑώαι ταύτην τὴν ὥραν διὰ τὰ προειρημένα, ὅθεν ὁ ἥλιος ἐφ' ἑαυτὸν ἔλκων τὰ ὑγρά τὸν παρ' ἡμῖν ζέφυρον ποιεῖ.

Διὰ τί ὁ ζέφυρος εὐδιεινὸς καὶ ἡδιστος δοκεῖ εἶναι τῶν ἀνέμων; ἢ ὅτι ἐν μεθορίῳ ἐστὶ τῶν θερμῶν καὶ ψυχρῶν πνευμάτων, γειτνιῶν δὲ ἀμφοῖν τῆς δυνάμεως αὐτῶν κοινωνεῖ· διὸ εὐκρατός ἐστιν. ὁ δὲ ἀπηλιώτης ἦττον κοινωνεῖ, ὢν ἐν τῷ μέσῳ τῶν αὐτῶν. ἀπηλιώτης μὲν γὰρ πνέων τὰ πρὸς νότον πνεύματα κινεῖ (ἐνταῦθα γὰρ ἡ μετάστασις αὐτοῦ ἐστίν), κινῶν δὲ οὐ μίγνυται αὐτοῖς. ὁ δὲ ζέφυρος καὶ κινεῖται ὑπὸ τῶν νότων καὶ πνέων κινεῖ τὰ βόρεια· τελευτᾷ γὰρ ἐνταῦθα ἡ περίοδος τῶν πνευμάτων. διὸ τῶν μὲν τὴν τελευτὴν τῶν δὲ τὴν ἀρχὴν ἔχων ἐν ἑαυτῷ δικαίως ἡδύς ἐστι καὶ δοκεῖ εἶναι.

Διὰ τί ἄλλοις ἄλλοι τῶν ἀνέμων ὑέτιοι, οἷον ἐν μὲν τῇ Ἀττικῇ καὶ ταῖς νήσοις ὁ Ἑλλησποντίας, ἐν Ἑλλησπόντῳ δὲ ὁ βορέας καὶ ἐν Κυρήνῃ, περὶ Λέσβον δὲ νότος; ἢ ὅπου ἂν ἄθροισις νεφῶν, ἐνταῦθα ὕδωρ; ἐνταῦθα γὰρ ἡ πύκνωσις ἀθροίζεται, ὅπου ἂν προκαθίζεσθαι ἔχη. διὸ καὶ ἐν τοῖς ὄρεσι μᾶλλον ὕει ἢ ὅπου ἂν τὸ πλῆθος ὑπεξάγειν δύνηται· περικαταλαμβανόμενον γὰρ πυκνοῦται· δεῖ δὲ τοῦτο γενέσθαι. καὶ ἐν ταῖς εὐδαίαις μᾶλλον ὕει. ἐν Ἑλλησπόντῳ [947a] μὲν οὖν ἄνωθεν ὁ βορέας πολλὰ συνωθεῖ νέφη, πρὸς δὲ τὴν Ἀττικὴν καὶ τὰς νήσους ὁ Ἑλλησποντίας, ὥσπερ ὕλην ἔχων· καὶ γὰρ περιίσταται τὰ πολλὰ ἐκ τοῦ βορέου. περὶ δὲ Λέσβον ὁ εὖρος καὶ ὁ νότος ἐκ τοῦ πελάγους φέροντες πολλὰ νέφη προσβάλλει τῇ χώρᾳ. τὸν αὐτὸν τρόπον καὶ ἐπὶ τῶν ἄλλων.

Διὰ τί λέγεται “μή ποτ’ ἀπ’ ἡπείρου δείσης νέφος ἄλλ’ ἀπὸ πόντου χειμῶνος, θέρεος δὲ ἀπ’ ἡπείροιο μελαίνης;” ἢ διότι τοῦ μὲν χειμῶνος ἡ θάλαττα θερμότερα, ὥστε εἴ τι συνέστη, δῆλον ὅτι ἀπ’ ἀρχῆς ἰσχυρᾶς συνέστηκεν· ἐλύθη γὰρ ἂν διὰ τὸ ἀλεεινὸν εἶναι τὸν τόπον. τοῦ δὲ θέρους ἡ μὲν θάλαττα ψυχρά, καὶ τὰ πόντια πνεύματα, ἡ δὲ γῆ θερμή, ὥστε εἴ τι ἀπὸ τῆς γῆς φέρεται, διὰ μείζονος ἀρχῆς συνέστη· διελύθη γὰρ ἂν, εἰ ἀσθενὲς ἦν.

Διὰ τί ἐν τῇ Ἀρκαδίᾳ ὑψηλῇ οὕση τὰ μὲν πνεύματα οὐθὲν ψυχρότερα τῶν παρὰ τοῖς ἄλλοις, ὅταν δὲ νηνεμία ἦ καὶ ἐπινέφελα, ψυχρά, ὥσπερ ἐν τοῖς ὀμαλέσι τοῖς ἐλώδεσιν; ἢ ὅτι καὶ ἡ Ἀρκαδία ὁμοία γίνεται τοῖς ἐλώδεσιν· οὐ γὰρ ἔχει ἐξόδους τοῖς ὕδασιν εἰς θάλατταν, διὸ καὶ βάραθρα πολλὰ αὐτόθι ἐστίν. ὅταν μὲν οὖν ἦ ἄνεμος, ἀπορριπίζει τὴν ἐκ τῆς γῆς ἀναθυμίασιν, οὕσαν ψυχράν· αὐτὰ δὲ τὰ πνεύματα οὐ ψυχρά διὰ τὸ ἀπὸ τῆς θαλάττης προσβάλλειν· ἐν δὲ ταῖς νηνεμίαις ἀνιοῦσα ἡ ἀτμὶς ἀπὸ τοῦ ἐμμένοντος ὕδατος ποιεῖ τὸ ψῦχος.

Διὰ τί, ἂν ἔωθεν πνεῖν ἄρξεται, διημερεύει μᾶλλον; ἢ διότι ἀρχομένου τοῦ ἡλίου σφοδροτάτη ἡ φορά, διὸ ἐκτείνεται τοιαύτη οὕσα. σημεῖον δὲ ὅτι

ἰσχυρὰ ἢ σύστασις.

Διὰ τί βορέας τὴν ἡμέραν μὲν λαμπρός, τὴν δὲ νύκτα πίπτει; ἢ διότι γίνεται ἀπὸ πεπηγότος ὑετοῦ, ὅταν ἀναθυμιᾶται διὰ τὸν ἥλιον; πίπτει δὲ νυκτός, ὅτι οὐχ ἡ αὐτὴ γένεσις, ἀλλὰ τούναντίον ποιεῖ· τὰς γὰρ νύκτας ἐκπνεῖ, τὰς δὲ ἡμέρας ἥττον.

Διὰ τί τὰ ἀράχνια τὰ πολλὰ ὅταν φέρηται, πνεύματός ἐστι σημεῖα; πότερον ὅτι ἐργάζεται ὁ ἀράχνης ἐν ταῖς εὐδαίαις, φέρεται δὲ διὰ τὸ ψυχόμενον τὸν ἀέρα συνιέναι πρὸς τὴν γῆν, τὸ δὲ ψύχεσθαι ἀρχὴ χειμῶνος· σημεῖον οὖν ἡ φορὰ τῶν ἀραχνίων. ἢ ὅτι μετὰ τὰ ὕδατα καὶ τοὺς χειμῶνας γίνεται τῶν ἀραχνίων ἀθρόα ἡ φορὰ, ἐν ταῖς εὐδαίαις ἐργαζομένων, διὰ τὸ ἐν τῷ χειμῶνι μὴ φαίνεσθαι; [947b] δύσριγον γὰρ τόδε. καὶ φερόμενοι ὑπὸ τοῦ πνεύματος πολὺ ἐκπηνίζονται. μετὰ δὲ τὰ ὕδατα εἴωθε πνεύματα γίνεσθαι ὡς τὰ πολλὰ.

Διὰ τί οἱ βορέαι μεγάλοι τοῦ χειμῶνος ἐν τοῖς ψυχροῖς τόποις ἐπινέφελοι, ἔξω δὲ αἶθριοι; ἢ ὅτι ἅμα ψυχροὶ εἰσι καὶ μεγάλοι, ἐγγὺς δὲ μᾶλλον ψυχροί, ὥστε φθάνουσι πηγνύντες πρὶν ἀπῶσαι τὰ νέφη· ὅταν δὲ παγῇ, μένουσι διὰ βάρος. ἔξω δὲ τῷ μεγέθει ἐργάζονται μᾶλλον ἢ τῷ ψυχρῷ.

## **ΚΖ. ΟΣΑ ΠΕΡΙ ΦΟΒΟΝ ΚΑΙ ΑΝΔΡΕΙΑΝ.**

Διὰ τί οἱ φοβούμενοι τρέμουσιν; ἢ διὰ τὴν κατάψυξιν; ἐκλείπει γὰρ τὸ θερμὸν καὶ συστέλλεται· διὸ καὶ αἱ κοιλίαι λύνονται τοῖς πολλοῖς.

Διὰ τί οὖν καὶ διψῶσιν ἔνιοι, καθάπερ οἱ μέλλοντες κολάζεσθαι; οὐ γὰρ ἔδει καταψυχομένων. ἢ οὐκ ἐν ταύτῳ τόπῳ ἡ κατάψυξις καὶ ἡ θερμότης, ἀλλ' ἢ μὲν ἐν τῷ ἐπιπολῆς, ἔνθεν ἐκλείπει τὸ θερμόν, ἢ δὲ ἐν τῷ ἐντός, ὥστε ἐκθερμαίνει; σημεῖον δὲ καὶ τὸ λύεσθαι τὰς κοιλίας. ἀναξηραιομένου δὲ τοῦ κυρίου τόπου τὸ δίψος. ὅμοιον δὲ ἔοικεν ὥσπερ τοῖς ἡπιαλοῦσιν, οἱ ἅμα τῷ ῥιγοῦν διψῶσιν· οὐδὲ γὰρ ὁ αὐτὸς οὐδ' ἐκεῖ τόπος ψύχεται καὶ θερμαίνεται.

Διὰ τί ἐν μὲν τοῖς θυμοῖς εἰς τὸ ἐντός ἀθροιζομένου τοῦ θερμοῦ διάθερμοι καὶ θαρραλέοι, ἐν δὲ τοῖς φόβοις ἀνάπαλιν; ἢ οὐκ εἰς τὸν αὐτὸν τόπον, ἀλλὰ τοῖς μὲν ὀργιζομένοις περὶ τὴν καρδίαν, διὸ καὶ θαρρητικοὶ καὶ ἐν ἐρυθήματι καὶ πνεύματος πλήρεις, ἄνω τῆς φορᾶς οὔσης, τοῖς δὲ φοβουμένοις κάτω συμφευγόντων τοῦ αἵματος καὶ τοῦ θερμοῦ, διὸ καὶ ἡ λύσις τῶν κοιλιῶν· ἐπεὶ καὶ ἡ τῆς καρδίας πήδησις οὐχ ὁμοία, ἀλλὰ τοῖς μὲν ὡς ἄν

διὰ τὴν ἔκλειψιν πυκνὴ καὶ νυγματώδης, τοῖς δὲ ὥς ἂν ἀθροιζομένου πλείονος θερμοῦ· διὸ καὶ τὸ ἀναζεῖν καὶ τὸ ὀρίνεσθαι τὸν θυμὸν καὶ ταράττεσθαι, καὶ ὅσα τοιαῦτα λέγουσιν οὐ κακῶς ἀλλ' οἰκείως. ἄρ' οὖν καὶ διὰ τοῦτο τὸ δίψος, ἐπεὶ τό γε ξηρὸν πτύειν καὶ ὁ σαυσαρισμὸς καὶ τὰ τοιαῦτα γίνεται διὰ τὴν ἀναφορὰν τοῦ πνεύματος ἅμα καὶ θερμοῦ. καὶ τὸ δίψος δὲ δῆλον ὡς ἐκθερμαινομένου τοῦ σώματος. πῶς οὖν ὁ αὐτὸς τόπος ἀναξηραίνεται ἀμφοῖν, ὧ διψῶμεν, καὶ τῷ φοβουμένῳ καὶ τῷ ὀργιζομένῳ; ὁ δὲ φόβος ὅτι διψητικόν, καὶ [948a] οἱ ἐν ταῖς τροπαῖς δηλοῦσιν· οὐδαμοῦ γὰρ οὕτω διψῶσιν. καὶ οἱ ἀγωνιῶντες δὲ σφόδρα· διὸ καὶ διακλύζονται καὶ ἐπιρροφοῦσι, καθάπερ Παρμένων ὁ ὑποκριτής. ἢ τούτοις μὲν οὐκ ἔστι δίψος, ἀλλὰ ξηρότης πεφευγότες τοῦ αἵματος, ὅθεν καὶ ὠχροί; σημεῖον δὲ τὸ μὴ πίνειν πολὺ, ἀλλὰ καὶ βροχθίσαι. οἱ δ' ἐν ταῖς τροπαῖς μετὰ πόνου. διὸ διψῶσι καὶ οἱ μέλλοντες κολάζεσθαι· καὶ οὐθὲν ἄτοπον. ἐν δὲ τοῖς πολεμικοῖς ἔνιοι καὶ τῶν ἀνδρείων, ὅταν διασκευασθῶσι, καὶ τρέμουσιν οὐκ ἐξεστηκότες ἀλλὰ θαρροῦντες· ὧν εἰώθασι μαστιγοῦν τὸ σῶμα πλατεῖ νάρθηκι, εἰ δὲ μή, ταῖς χερσὶν ἀναθερμανθέντες. ἔοικε δὲ διὰ τὴν ὀξύτητα καὶ τὴν φορὰν τοῦ θερμοῦ ἀνωμαλία τις εἶναι περὶ τὸ σῶμα ταραχώδης.

Διὰ τί οἱ ἀνδρεῖοι ὥς ἐπὶ τὸ πολὺ φίλοινοι; ἢ ὅτι οἱ ἀνδρεῖοι θερμοί, ἢ δὲ θερμότης περὶ τὰ στήθη. ἐνταῦθα γὰρ καὶ ὁ φόβος φαίνεται, γινόμενος κατάψυξις τις. ὥστε περὶ τὴν καρδίαν ἦττον μὲν μένει, τοῖς δὲ πηδᾷ ψυχομένη. ὅσοι οὖν τὸν πνεύμονα ἔχουσιν ἔναιμον, θερμὸν ἔχουσι τοῦτον ὥσπερ οἴνωμένοι, ὥστε οὐ ψύχει ἡ φαντασία τοῦ δεινοῦ. οἱ δὲ τοιοῦτοι καὶ φιλοπόται. ἢ τε γὰρ τοῦ ποτοῦ ἐπιθυμία διὰ τὴν τούτου τοῦ μορίου θερμότητά ἐστιν (εἴρηται δὲ περὶ αὐτοῦ ἐν ἄλλοις) καὶ τοῦ παυστικοῦ ἢ ἐπιθυμία. ὁ δὲ οἶνος θερμὸς μὲν τὴν φύσιν, παύει δὲ τὴν δίψαν μᾶλλον τοῦ ὕδατος, καὶ μάλιστα τῶν αὐτῶν· δι' ἣν αἰτίαν, εἴρηται ἐν ἄλλοις. διὸ καὶ οἱ ἐν τῇ περιπνευμονίᾳ καὶ οἱ μαινόμενοι ἀμφοτέρω ἐπιθυμοῦσιν οἴνου· καίτοι τῶν μὲν διὰ τὴν θερμασίαν θερμὸς ὁ πνεύμων, τῶν δὲ διὰ τὴν ταραχήν. ἐπεὶ οὖν οἱ αὐτοὶ ὥς ἐπὶ τὸ πολὺ τῷ γένει διψητικοὶ καὶ ἀνδρεῖοι, οἴνου δὲ οἱ διψητικοὶ ἐπιθυμητικοί, οἱ δὲ τοιοῦτοι φιλοπόται, ἀναγκαῖον ὥς ἐπὶ τὸ πολὺ παρακολουθεῖν ἀλλήλοις τὰς φύσεις. διὸ καὶ οἱ οἴνωμένοι ἀνδρεῖότεροι τῶν μή.

Διὰ τί μάλιστα τὴν ἀνδρείαν τιμῶσιν αἱ πόλεις, οὐ βελτίστην οὕσαν τῶν ἀρετῶν; ἢ ὅτι διατελοῦσιν ἢ πολεμοῦντες ἢ πολεμούμενοι, αὕτη δὲ ἐν ἀμφοῖν χρησιμωτάτη ἐστίν. τιμῶσι δὲ οὐ τὰ βέλτιστα, ἀλλὰ τὰ αὐτοῖς βέλτιστα.

Διὰ τί οἱ φοβούμενοι μάλιστα τρέμουν τὴν φωνὴν καὶ τὰς χεῖρας καὶ τὸ κάτω χεῖλος; ἢ διότι ἔκλειψίς ἐστι τὸ πάθος θερμοῦ ἐκ τῶν ἄνω τόπων· διὸ καὶ ὠχρίῳσιν. διὰ μὲν οὖν τὸ ἐκ τοῦ στήθους ἡ φωνὴ τρέμει, ψυχομένου ὧ κινεῖται. ὁμοίως δὲ καὶ αἱ χεῖρες· ἐκ τοῦ στήθους γὰρ ἤρτηνται. τὸ δὲ [948b] κάτω χεῖλος, ἀλλ' οὐ τὸ ἄνωθεν, κάτω κρέμαται ἢ ῥέπει· τὸ δὲ κάτωθεν ἄνω παρὰ φύσιν, ἀλλ' ὑπὸ τοῦ θερμοῦ ἄνω ἡρεμεῖ· οὗ ὑφαιρουμένου διὰ τὸ ψύχεσθαι τρέμει. καὶ ἐν τοῖς θυμοῖς δὲ διὰ τὸ αὐτὸ ἀποκρεμάννυται τὸ χεῖλος. δῆλον δὲ ἐπὶ τῶν παιδίων· συνθεῖ γὰρ εἰς τὴν καρδίαν τὸ θερμόν.

Διὰ τί οἱ φοβούμενοι τρέμουν, καὶ μάλιστα τὴν φωνὴν καὶ τοῦ σώματος τὰς χεῖρας καὶ τὸ κάτω χεῖλος; ἢ διότι ἐκ τούτου τοῦ τόπου ἐκλείπει τὸ θερμόν ἐν ὧ ἡ φωνή; τὸ δὲ χεῖλος καὶ τὰς χεῖρας, ὅτι εὐκίνητότατα καὶ ἥκιστα ἔναιμα. καὶ προῖενται μὲν τὴν χολήν, συσπῶσι δὲ τὰ αἰδοῖα, προῖενται μὲν διὰ τὸ συντήκειν τὸ καταβαῖνον θερμόν, ἀνασπῶσι δέ, ὅτι ἔξωθεν φόβος· εἰς τοῦναντίον οὖν ἡ φυγή.

Διὰ τί οἱ φοβούμενοι καὶ διψῶσι καὶ ῥιγῶσιν; ταῦτα δὲ ἐναντία τὰ πάθη. ἢ ῥιγοῦσι μὲν ψυχόμενοι, διψῶσι δὲ θερμαινόμενοι; διότι ἐν τῷ φοβεῖσθαι τὸ θερμόν ἐκλείπει καὶ τὸ ὑγρὸν ἐκ τῶν ἄνω τόπων. δηλοῖ δὲ τὸ χρώμα καὶ αἱ κοιλίαι· τὸ μὲν γὰρ πρόσωπον ὠχρόν, αἱ δὲ κοιλίαι ἐνίοτε λύονται. διὰ μὲν οὖν τὸ ἐκλείπειν τὸ θερμόν ἐκ τῶν ἄνωθεν τὸ ῥίγος γίνεται, διὰ δὲ τὸ ὑγρὸν ἡ δίψα.

Διὰ τί τοῦ τε φόβου λύπης τινὸς ὄντος καὶ τῆς ἀλγηδόνης, οἱ μὲν ἀλγοῦντες ἀναβοῶσιν, οἱ δὲ φοβούμενοι σιωπῶσιν; ἢ οἱ μὲν ἀλγοῦντες κατέχουσι τὸ πνεῦμα (διὸ ἀθρόον ἐξιὸν μετὰ φωνῆς ἐξέρχεται), τῶν δὲ φοβουμένων κατέψυκται τὸ σῶμα καὶ τὸ θερμόν κάτω ἐνήνεκται, ὃ ποιεῖ πνεύματα. ἢ οὖν ἐνήνεκται μάλιστα, ἐνταῦθα καὶ ποιεῖ αὐτά. διὸ καὶ ἀποψοφοῦσιν οἱ φοβούμενοι. ἢ δὲ φωνὴ ἐστι φορὰ πνεύματος ἄνω πως καὶ διὰ τινων γινομένη. τοῦ δὲ τοὺς ἀλγοῦντας κατέχειν τὸ πνεῦμα αἴτιον, ὅτι ταῖς ἐνυπαρχούσαις ἡμῖν βοηθείαις φύσει εὐθὺς πάντες παθόντες ἄνευ λογισμοῦ χρώμεθα, καθάπερ καὶ τὰ ἄλλα ζῶα· τὰ μὲν γὰρ κέρασι, τὰ δὲ ὀδοῦσι, τὰ δὲ ὄνυξιν ἀμύνεται. πρὸς δὲ τὰ ἀλγήματα πάντα ἢ τὰ πλεῖστα βοηθεῖ ἡ θερμότης. ὃ ποιεῖ ὁ κατέχων τὸ πνεῦμα· θερμαίνει γὰρ καὶ ἐκπέττει τὸ ἄλγημα, συστέλλων ἐντὸς τὸ θερμόν τῷ πνεύματι.

Διὰ τί τοῖς φοβουμένοις αἱ κοιλίαι λύονται καὶ οὐρητιῶσιν; ἢ τὸ θερμόν τὸ ἐν ἡμῖν ἐστὶν ὥσπερ ζῶον; τοῦτ' οὖν φεύγει ὃ τι ἂν φοβηθῇ. ἔξωθεν οὖν γινομένων τῶν τε ὑπὸ τῆς ἀγωνίας φόβων καὶ τῶν τοιούτων, καὶ ἐκ τῶν



ἄνωθεν εἰς τὰ κάτω καὶ ἐκ τῶν ἐπιπολῆς εἰς τὰ ἐντός, ἐκθερμαινόμενοι [949a] δὲ οἱ περὶ τὴν κοιλίαν τόποι καὶ τὴν κύστιν διαλύονται, καὶ ποιοῦσιν αὐτάς εὐτρεπεῖς. καὶ γὰρ τὰ ἄνηθα καὶ τὰ ἀψίνθια, καὶ ὅσα οὐρητικά, θερμαντικά. ὁμοίως δὲ καὶ τὰ πρὸς τὴν κοιλίαν φάρμακα, τὰ κάτω θερμαντικά· καὶ τὰ μὲν τῶν εἰσενεχθέντων μόνων λυτικά, τὰ δὲ καὶ ἑτέραν σύντηξιν ποιεῖ, οἷον τὸ σκόροδον εἰς τὸ οὖρον. τὸ αὐτὸ δὲ τοῖς τοιούτοις ἢ ἐκ τῶν ἐπιπολῆς θερμασία εἰς τούτους τοὺς τόπους συνιοῦσα δρᾷ.

Διὰ τί οἱ φοβούμενοι συσπῶσι τὰ αἰδοῖα; εἰκὸς γὰρ ἦν τοῦναντίον, τοῦ θερμοῦ εἰς τοῦτον τὸν τόπον ἀθροιζομένου τῶν φοβουμένων, ἀνίσθαι αὐτά. ἢ οἱ φοβούμενοι σχεδὸν ἅπαντες ὥσπερ ῥιγοῦντές εἰσιν; ἐκλελοιπότης οὖν ἐκ τῶν ἐπιπολῆς τοῦ θερμοῦ συσπῶσιν. διὸ καὶ βομβυλιάζουσιν οἱ δεινῶς δεδιότες. δοκεῖ δὲ συσπᾶν τὸ ἐπιπολῆς καὶ τὸ δέρμα τῶν ῥιγούντων, ἅτε τοῦ θερμοῦ ἐκκεκριμένου· διὸ καὶ φρίττουσιν. συσπᾶται δὲ καὶ ἡ ὀσχέα τοῦ αἰδοίου ἄνω, καὶ συνεφέλκονται καὶ οἱ ὄρχεις αὐτοῖς συστελλομένων. θᾶπτον δὲ φαίνεται ἐπὶ τῶν ἀφροδισίων· ὁ γὰρ φόβος ἐκκρίνει, καὶ πολλοῖς τῶν ἀγωνιόντων καὶ τῶν περιφόβων συγκινεῖ ἡ τῆς γονῆς πρόεσις.

## **ΚΗ. ΟΣΑ ΠΕΡΙ ΣΩΦΡΟΣΥΝΗΝ ΚΑΙ ΑΚΟΛΑΣΙΑΝ, ΚΑΙ ΕΓΚΡΑΤΕΙΑΝ ΚΑΙ ΑΚΡΑΣΙΑΝ.**

Διὰ τί ἔνιοι κάμνουσιν, ὅταν ἐθισθέντες ἀκολάστως ζῇν μὴ ἀκολάστως διαιτῶνται, οἷον Διονύσιος ὁ τύραννος, ἐπεὶ ἐν τῇ πολιορκίᾳ ἐπαύσατο πίνων ὀλίγον τινὰ χρόνον, εὐθὺς ἐφθισίασεν, ἕως πάλιν εἰς τὴν μέθην μετέβαλεν. ἢ μέγα μὲν τι καὶ τὸ ἔθος ἐστὶν ἐκάστοις· φύσις γὰρ ἤδη γίνεται. καθάπερ ἂν ἰχθὺς ἐν ἁέρι ἢ ἄνθρωπος ἐν ὕδατι διατελῶν φαύλως ἂν ἴσχοι, οὕτω καὶ οἱ τὰ ἔθη μεταβάλλοντες χαλεπῶς ἀπαλλάττουσιν, καὶ τὸ πάλιν εἰς τὰ εἰωθότα ἐλθεῖν σωτηρία γίνεται αὐτοῖς ὥσπερ εἰς φύσεως κατάστασιν. ἔτι δὲ καὶ συντηκτικοὶ γίνονται, εἰωθότες τροφῇ χρῆσθαι δαψιλεῖ τῇ ἰδίᾳ· μὴ λαμβάνοντες γὰρ τὴν εἰωθυῖαν ὥσπερ ὅλως μὴ λαμβάνοντες διατίθενται. οὐ μὴν ἀλλὰ καὶ τὰ περιττώματα τροφῇ μεμιγμένα πολλῇ ἀφανίζεται, αὐτὰ δὲ ἐπιπολάζει μόνα ὄντα, καὶ φέρεται εἰς ὄμματα ἢ πνεύμονα· προσενεγκαμένοις δὲ τροφὴν κατακεραννύμενα ὕδαρῃ [949b] γίνεται καὶ ἀβλαβῇ. γίνεται δὲ τοῖς ἀκολάστως ζῶσι πλείω τὰ περιττώματα ἄχρι τινὸς λήξασι τοῦ εἰωθότος βίου, διὰ τὸ πολλὴν ἀκαταχώριστον ἐν αὐτοῖς ὕλην ὑπάρχειν ἐκ τοῦ προτέρου βίου, ἧς τηκομένης ὑπὸ τοῦ συμφύτου θερμοῦ, καθάπερ χιόνος πολλῆς, ῥεύματα ἀδρὰ συμβαίνει γίνεσθαι.

Διὰ τί κατὰ δύο μόνας αἰσθήσεις ἀκρατεῖς λέγομεν, οἷον ἀφὴν καὶ γεῦσιν;

ἢ διὰ τὰς ἀπὸ τούτων γινομένης ἡδονᾶς ἡμῖν καὶ τοῖς ἄλλοις ζώοις; ἅτε οὖν κοιναὶ οὔσαι ἀτιμότεραί εἰσι, διὸ καὶ μάλιστα ἢ μόναι ἐπονείδιστοί εἰσιν. ὥστε τὸν ὑπὸ τούτων ἡττώμενον ψέγομεν καὶ ἀκρατῇ καὶ ἀκόλαστον εἶναι φαμέν, διὰ τὸ ὑπὸ τῶν χειρίστων ἡδονῶν ἡττᾶσθαι.

Διὰ τί ἀκρατεῖς λέγονται κατὰ τὰς ἐπιθυμίας μόνον, οὔσης τῆς ἀκρασίας καὶ περὶ τὴν ὀργήν; ἢ ὅτι ἀκρατῆς μὲν ἐστὶν ὁ παρὰ τὸν λόγον τι πράττων καὶ ἀκρασία ἢ παρὰ τὸν λόγον ἀγωγή, εἰσὶ δὲ αἱ μὲν ἐπιθυμίαι ὡς ἐπίπαν εἰπεῖν παρὰ τὸν λόγον, αἱ δὲ ὀργαὶ μετὰ λόγου, οὐχ ὡς κελεύσαντος τοῦ λόγου, ἀλλ' ὡς δηλώσαντος τὸν προπηλακισμόν ἢ τὴν αἰτίαν.

Διὰ τί τὴν μὲν ἐγκράτειαν καὶ τὴν σωφροσύνην ἐπὶ τῶν νέων καὶ πλουσίων μάλιστα ἐξετάζομεν, τὴν δὲ δικαιοσύνην ἐπὶ τῶν πενήτων; ἢ ὅτι οὐ μάλιστα δεῖται τις, εἰ τούτου ἀπέχεται, μᾶλλον θαυμάζοιτ' ἂν ἢ τῶν ἐναντίων; ὁ μὲν οὖν πένης εὐπορίας δεῖται, ὁ δὲ νέος καὶ πλούσιος ἀπολαύσεως.

Διὰ τί ἡττον ἀνέχονται διψῶντες ἢ πεινῶντες; πότερον ὅτι λυπηρότερον; σημεῖον δὲ τοῦ λυπηροτέρου, ὅτι ἡδίων τὸ διψῶντα πιεῖν ἢ πεινῶντα φαγεῖν. τὸ δὲ ἐναντίον τῷ ἡδεῖ λυπηρότερον. ἢ διότι μᾶλλον δεῖται τὸ θερμὸν τοῦ ὑγροῦ ἢ τὸ ξηρὸν ὧ ζῶμεν; ἢ ὅτι δυοῖν ἢ δίψα ἐπιθυμία, ποτοῦ καὶ τροφῆς, ἢ δὲ πεῖνα ἐνὸς μόνου, τροφῆς;

Διὰ τί ἡττον καρτεροῦμεν διψῶντες ἢ πεινῶντες; ἢ διότι λυπούμεθα μᾶλλον; σημεῖον δὲ τῆς λύπης ἢ ἡδονὴ σφοδρότερα. εἴτα ὁ μὲν διψῶν δυοῖν ἐνδεής, τροφῆς τε καὶ καταψύξεως (ἄμφω γὰρ ἔχει τὸ ποτόν), ὁ δὲ πεινῶν θατέρου μόνον.

Διὰ τί οἱ κατὰ τὴν τῆς ἀφῆς ἢ γεύσεως ἡδονήν, οἳ ἂν ὑπερβάλλωσιν, ἀκρατεῖς λέγονται; οἳ τε γὰρ περὶ τὰ [950a] ἀφροδίσια ἀκόλαστοι, οἳ τε περὶ τὰς τῆς τροφῆς ἀπολαύσεις. τῶν δὲ κατὰ τὴν τροφήν ἀπ' ἐνίων μὲν ἐν τῇ γλώττῃ τὸ ἡδύ, ἀπ' ἐνίων δὲ ἐν τῷ λάρυγγι, διὸ καὶ Φιλόξενος γεράνου φάρυγγα εὔχετο ἔχειν. οἱ δὲ κατὰ τὴν ὄψιν καὶ τὴν ἀκοὴν οὐκέτι. ἢ διὰ τὸ τὰς ἀπὸ τούτων γινομένης ἡδονᾶς κοινὰς εἶναι ἡμῖν καὶ τοῖς ἄλλοις ζώοις; ἅτε οὖν οὔσαι κοιναὶ ἀτιμότεραί εἰσι καὶ μάλιστα ἢ μόναι ἐπονείδιστοι, ὥστε τὸν ὑπὸ τούτων ἡττώμενον ψέγομεν καὶ ἀκρατῇ καὶ ἀκόλαστον λέγομεν διὰ τὸ ὑπὸ τῶν χειρίστων ἡδονῶν ἡττᾶσθαι. οὐσῶν δὲ τῶν αἰσθήσεων πέντε, τὰ τε ἄλλα ζῶα ἀπὸ δύο μόνων τῶν προειρημένων ἡδεται, κατὰ δὲ τὰς ἄλλας ἢ ὅλως οὐχ ἡδεται ἢ κατὰ συμβεβηκὸς τοῦτο πάσχει. ὁρῶν μὲν γὰρ ὁ ὁρῶν, ἢ καὶ ὁσφραϊνόμενος, χαίρει ὅτι ἀπολαύει· καὶ ὅταν πληρωθῇ, οὐδὲ τὰ τοιαῦτα

ἡδέα αὐτῷ, ὥσπερ οὐδὲ ἡμῖν ἢ τοῦ ταρίχου ὁδμή, ὅταν ἄδην ἔχωμεν τοῦ φαγεῖν. ὅταν δὲ ἐνδεεῖς ὦμεν, ἡδέα. ἢ δὲ τοῦ ῥόδου ἀεὶ ἡδεῖα.

Διὰ τί ἥττον κατέχουσι τὸν γέλωτα παρόντων τῶν γνωρίμων; ἢ ὅταν σφόδρα ἐξηρημένον ἢ τι, εὐκίνητόν ἐστιν; ἢ δ' εὖνοια εἶπειν μᾶλλον γελοῖον, ὥστε κινεῖ.

## **ΚΘ. ΟΣΑ ΠΕΡΙ ΔΙΚΑΙΟΣΥΝΗΝ ΚΑΙ ΑΔΙΚΙΑΝ.**

Διὰ τί μείζονος ὄντος ἀδικήματος, ἐάν τις βλάβη εἰς τὸ μείζον ἀγαθόν, τῆς δὲ τιμῆς οὕσης μείζονος ἀγαθοῦ, ἢ τῶν χρημάτων ἀδικία μᾶλλον δοκεῖ, καὶ οἱ ἄδικοι μᾶλλον εἶναι δοκοῦσι περὶ τὰ χρήματα; ἢ διότι αἰροῦνται τὰ χρήματα μᾶλλον τῆς τιμῆς, καὶ πᾶσιν ἐστὶ κοινότατον, ἢ δὲ τιμὴ ὀλίγοις, καὶ ὀλιγάκις συμβαίνει ἢ χρῆσις αὐτῆς.

Διὰ τί παρακαταθήκην δεινότερον ἀποστερεῖν ἢ δάνειον; ἢ ὅτι αἰσχροὺς ἀδικεῖν φίλον. ὁ μὲν οὖν τὴν παρακαταθήκην ἀποστερῶν φίλον ἀδικεῖ· οὐδεὶς γὰρ παρακατατίθεται μὴ πιστεύων. οὐ δὲ τὸ χρέος, οὐ φίλος· οὐ γὰρ δανεῖζει, ἐάν ἢ φίλος, ἀλλὰ δίδωσιν. ἢ ὅτι μείζον τὸ ἀδίκημα· πρὸς γὰρ τῇ ζημίᾳ καὶ τὴν πίστιν παραβαίνει, δι' ἣν, εἰ καὶ μηδὲν ἕτερον, δεῖ ἀπέχεσθαι τοῦ ἀδικεῖν. ἔτι τὸ μὴ τοῖς ἴσοις ἀμύνεσθαι φαῦλον· ὁ μὲν οὖν ἔδωκεν ὡς φίλῳ, ὁ δὲ ἀπεστέρησεν ὡς ἐχθρόν· ὁ δὲ δανεῖζων οὐχ ὡς φίλος ἔδωκεν. ἔτι τῶν μὲν ἢ δόσις φυλακῆς καὶ ἀποδόσεως χάριν, τῶν δὲ καὶ ὠφελείας· ἥττον δὲ ἀγανακτοῦμεν ἀποβάλλοντες, εἰ κέρδος θηρεύομεν, [950b] οἷον οἱ ἄλιεῖς τὰ δελέατα· προφανῆς γὰρ ὁ κίνδυνος. ἔτι παρακατατίθενται μὲν ὡς ἐπὶ τὸ πολὺ οἱ ἐπιβουλευόμενοι καὶ ἀτυχοῦντες, δανεῖζουσι δὲ οἱ εὐποροῦντες· δεινότερον δὲ ἐστὶ τὸν ἀτυχοῦντα ἢ τὸν εὐτυχοῦντα ἀδικεῖν.

Διὰ τί ἐνίοις δικαστηρίοις τοῖς γένεσι μᾶλλον ἢ ταῖς διαθήκαις ψηφιοῦνται; ἢ ὅτι γένους μὲν οὐκ ἔστι καταψεύσασθαι, ἀλλὰ τὸ ὄν ἀποφαίνειν· διαθήκαι δὲ πολλὰ ψευδεῖς ἤδη ἐξηλέγχθησαν οὔσαι.

Διὰ τί ἡ πενία παρὰ τοῖς χρηστοῖς τῶν ἀνθρώπων μᾶλλον ἢ παρὰ τοῖς φαύλοις ἐστίν; ἢ διὰ τὸ ὑπὸ πάντων μισεῖσθαι καὶ ἐξελαύνεσθαι πρὸς τοὺς ἐπαικεῖς καταφεύγει, οἰομένη μάλιστα παρὰ τούτοις σωτηρίας τυχεῖν καὶ διαμεῖναι· εἰ δὲ πρὸς πονηροὺς ἔλθοι, οὐκ ἂν διαμεῖναι ἐν τῇ αὐτῇ δυνάμει αὐτούς, ἀλλ' ἢ κλέπτειν ἢ ληΐζεσθαι, ὧν γινομένων οὐκ ἂν ἔτι εἶναι αὐτὴν παρ' αὐτοῖς. ἢ ὅτι τοὺς ἐπαικεῖς οἶεται τῶν ἀνθρώπων ἄριστα ἂν αὐτῇ χρῆσθαι, καὶ ἥκιστα ἂν ὑβρισθῆναι ὑπ' αὐτῶν. καθάπερ οὖν τὰς τῶν

χρημάτων παρακαταθήκας πρὸς τοὺς ἐπεικεῖς τιθέμεθα, οὕτω καὶ αὐτὴ ὑπὲρ αὐτῆς διατάσσεται. ἢ ὅτι θήλεια οὕσα ἀπορωτέρα ἐστίν, ὥστε τῶν ἐπεικῶν δεῖται. ἢ ὅτι αὐτὴ κακὸν οὕσα πρὸς τὸ κακὸν οὐκ ἂν ἔλθοι· εἰ γὰρ τὸ κακὸν ἔλοιτο, παντάπασιν ἂν δυσίατον εἴη.

Διὰ τί οὐχ ὁμοίως αἱ ἀδικίαι μείζους περὶ τὰ ῥήματα καὶ τὰ ἄλλα, οἷον ὁ μικρὸν εἰπὼν οὐκ ἂν καὶ τὸ ἀπόρρητον εἴποι, ἀλλ' ὁ ἕνα προδοὺς καὶ πόλιν, ὥσπερ ὁ ὀβολὸν ἀποστερήσας καὶ τάλαντον; ἢ ὅτι ἀπὸ μείζονος ἀδικίας ἕνια ἐλάττω ἐστὶ δι' ἀδυναμίαν.

Διὰ τί παρακαταθήκην αἰσχροὺς ἀποστερῆσαι μικρὰν ἢ πολὺ δανεισάμενον; ἢ ὅτι ὁ τὴν παρακαταθήκην ἀποστερῶν τὸν ὑπολαβόντα εἶναι αὐτὸν ἐπεικῇ ἐξαπατᾷ; ἢ ὅτι ὁ τοῦτο κἂν ἐκεῖνο ποιήσειεν;

Διὰ τί ἄνθρωπος μάλιστα παιδείας μετέχων ζώων ἀπάντων ἀδικώτατόν ἐστιν; ἢ ὅτι πλείστου λογισμοῦ κεκοινώνηκεν; μάλιστα οὖν τὰς ἡδονὰς καὶ τὴν εὐδαιμονίαν ἐξήτακεν· ταῦτα δ' ἄνευ ἀδικίας οὐκ ἔστιν.

Διὰ τί ὁ πλοῦτος ὥς ἐπὶ τὸ πολὺ παρὰ τοῖς φαύλοις μᾶλλον ἢ τοῖς ἐπεικέσιν ἐστίν; ἢ διότι τυφλὸς ὢν τὴν διάνοιαν οὐ δύναται κρίνειν οὐδὲ αἰρεῖσθαι τὸ βέλτιστον;

[951a] Διὰ τί δικαιότερον εἶναι νενόμισται τοῖς τετελευτηκόσιν ἢ τοῖς ζῶσιν ἐπαμύνειν; ἢ ὅτι οἱ μὲν ζῶντες δύναιнт' ἂν αὐτοῖς ἐπαρκέσαι, ὁ δὲ τετελευτηκὼς οὐκέτι;

Διὰ τί ὑγιαίνουντι μὲν ὁ συνὼν οὐδὲν ὑγιέστερος γίνεται, οὐδὲ ἰσχυρῶ ἢ καλῶ εἰς τὰς ἕξεις ἐπιδίδωσιν οὐθέν, δικαίῳ δὲ καὶ σώφρονι καὶ ἀγαθῷ; ἢ διότι τὰ μὲν ἀμίμητα τὰ δὲ μιμητὰ τῇ ψυχῇ; ἀγαθὸς δὲ τῇ ψυχῇ, ὑγιὴς δὲ τῷ σώματι· ἐθίζεται οὖν χαίρειν ὀρθῶς καὶ λυπεῖσθαι. ὁ δὲ ὑγιεῖ συνὼν οὐκέτι· οὐ γὰρ ἐν τῷ τισὶ χαίρειν ἢ μὴ ὁ ὑγιὴς· οὐθέν γὰρ τούτων ποιεῖ ὑγίειαν.

Διὰ τί δεινότερον γυναῖκα ἀποκτεῖναι ἢ ἄνδρα; καίτοι βέλτιον τὸ ἄρρεν τοῦ θήλεος φύσει. ἢ διότι ἀσθενέστερον, ὥστε ἐλάττω ἀδικεῖ. ἢ ὅτι οὐ νεανικὸν τὸ ἰσχυρίζεσθαι πρὸς τὸ πολὺ ἥττον;

Διὰ τί ποτε τῷ φεύγοντι ἐν τῷ δικαστηρίῳ τὴν δεξιὰν στάσιν διδόασιν; ἢ διότι ἐπανισοῦν βούλονται; πλεονεκτοῦντος οὖν τοῦ διώκοντος τὴν στάσιν τῷ φεύγοντι διδόασιν. εἴθ' ὥς ἐπὶ τὸ πολὺ οἱ φεύγοντες παραφυλάττονται· ἐπὶ δεξιᾷ δὲ ἡ φυλακὴ γίνεται, ἐὰν ὁ φεύγων ἔχη τὴν ἐν δεξιᾷ στάσιν.

Διὰ τί ποτε, ὅταν τῷ φεύγοντι καὶ τῷ διώκοντι φαίνωνται αἱ ψῆφοι ἴσαι, ὁ φεύγων νικᾷ; ἢ ὅτι ὁ μὲν φεύγων ἐν τῷ ἀγῶνι μόνον ἀκήκοεν αὐτοῦ πρὸς ἃ δεῖ αὐτὸν ἀπηγορεῖσθαι, καὶ τοὺς μάρτυρας παρασχέσθαι πρὸς τὰ κατηγορημένα ἔχεσθαι, εἴ τι μέλλουσιν ὠφελῆσθαι; οὐ ῥάδιον δὲ τὸ μαντεύσασθαι τινὰ ὧν δεῖ αὐτὸν παρασκευάσασθαι ἢ μάρτυρας ἢ ἄλλο τεκμήριον ὅτι οὐθὲν ἀδικεῖ. τῷ δὲ διώκοντι ἔστιν ὅπως βούλεται, καὶ πρὸ τοῦ τὴν δίκην κλητεύσασθαι, ἐνστήσασθαι τὸ πρᾶγμα, καὶ ἤδη κεκληκότα, πλασάμενον ὅ τι βούλεται πιθανόν, κατηγορεῖν αὐτοῦ. ὁρῶν δὲ κατὰ πάντα ταῦτα ἐλαττούμενον ὁ νομοθέτης τὸν φεύγοντα, προσέθετο τῷ φεύγοντι ὅ τι ἂν οἱ δικασταὶ ἀμφιδοξήσωσιν. ἀλλὰ μὴν καὶ τοῦτ' ἂν τις ἴδοι. ἐν γὰρ τοῖς φόβοις ὄντες πολλὰ παραλιμπάνουσιν ὧν αὐτοὺς ἔδει εἰπεῖν ἢ πρᾶξαι, οἱ δὲ φεύγοντες ἀεὶ ἐν μείζοσι κινδύνοις ὥς ἐπὶ τὸ πολὺ τυγχάνουσιν ὄντες, ὥστ' εἰ παραλιμπάνουσιν ὧν δεῖ αὐτούς, εἴπερ ἐξισοῦνται τοῖς δικαίοις, δῆλον ὅτι εἰ μὴ παρελίμπανον, ἐκράτουν ἄν. ἔτι δὲ ἕκαστος ἡμῶν μᾶλλον ἂν προέλοιτο τοῦ [951b] ἀδικοῦντος ἀποψηφίσασθαι ὥς οὐκ ἀδικεῖ ἢ τοῦ μὴ ἀδικοῦντος καταψηφίσασθαι ὥς ἀδικεῖ, οἷον εἴ τις φεύγει δουλείας ἢ ἀνδροφονίας. τούτων γὰρ ἐκάστου ὄντων, ἃ κατηγορεῖ αὐτῶν, μᾶλλον ἂν ἀποψηφίσασθαι ἐλοίμεθα ἢ μὴ ὄντων καταψηφίσασθαι. ἔστι γάρ, ὅταν τις ἀμφιδοξῇ, τὰ ἐλάττω τῶν ἀμαρτημάτων αἰρετέον. δεινὸν γὰρ καὶ τὸ τοῦ δούλου ὥς ἐλεύθερός ἐστι καταγνῶναι· πολὺ δὲ δινότερον, ὅταν τις τοῦ ἐλευθέρου ὥς δούλου καταψηφίσῃται. ἔτι δὲ ἐὰν ὁ μὲν τύχη ἐγκαλῶν ὁ δὲ ἀμφισβητῶν ὑπὲρ ὅτου οὖν, οὐκ εὐθὺς οἴομεθα δεῖν ἀποδοῦναι τῷ ἐγκαλοῦντι, ἀλλὰ νέμεσθαι τὸν κεκτημένον, ἕως ἂν κριθῇ. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν πλειόνων, ὅταν ἰσάζῃ τὸ πλῆθος τῶν τε φασκόντων ἀδικεῖν καὶ τῶν μὴ ὁμολογούντων, ὥσπερ ὅτε ἐξ ἀρχῆς ὁ μὲν ἐνεκάλει ὁ δὲ ἀπηρενῆτο, οὐκ οἴομεθα δεῖν τὸν νομοθέτην προστιθέναι τῷ ἐγκαλοῦντι, ἀλλὰ τὸν φεύγοντα κύριον εἶναι, ἕως ἂν ὑπεροχὴν τινὰ ἔχῃ ὁ ἀδικῶν. ὁμοίως δὲ καὶ ἐπὶ τῶν κριτῶν, ἐπειδὴ οὐδεμίαν ὑπεροχὴν ἴσασθαι τῶν ψήφων, κατὰ χώραν εἶασεν ὁ νομοθέτης ἔχειν. ἔτι δὲ τῶν μὲν ἀξιολόγων ἀμαρτημάτων μεγάλαι καὶ αἱ κολάσεις εἰσίν, ὥστε ἀδίκως μὲν καταψηφισαμένοις καὶ μὴ γνοῦσιν οὐκ ἔστιν ἐπανορθοῦσθαι καιρὸν λαβόντας· ἀπολύσασι δὲ παρὰ τὸ προσῆκον, εἰ μὲν οὕτως εὐλαβῶς ὥστε μηθὲν ἔτι ποτὲ ἀμαρτεῖν, τί ἂν καὶ μέγα ἡμαρτηκότες οἱ κριταὶ εἴησαν, τοιοῦτον ἄνθρωπον ἀπολύσαντες θανάτου; εἰ δέ τι ἐξ ὑστέρου ἀμαρτάνοι, δι' ἀμφοτέρω ἂν αὐτὸν κολάζεσθαι ἀξιοῖ. ἢ ὅτι ἀδικωτέρου μὲν ἐστὶν ἀνδρὸς ταῦτα ἀδικεῖν ἃ ἥττον εἰκὸς ἐστὶν ἀδίκως ἐγκαλεῖσθαι; τὸ μὲν γὰρ ἀδικεῖν καὶ δι' ὀργὴν καὶ διὰ φόβον καὶ δι' ἐπιθυμίαν καὶ δι' ἄλλα πολλὰ γίνεται, καὶ οὐ μόνον ἐκ προνοίας· τὸ δὲ ἀδίκως ἐγκαλεῖν ὥς τὸ πολὺ ἐκ προνοίας ἐστίν. ὥστε ἐπεὶ ἴσαι αἱ ψῆφοι γεγόνασι, τὸ δὲ ἀδίκως τὸν ἐγκαλοῦντα ἐγκαλεῖν καὶ τὸν φεύγοντα ἀδικεῖν,

φαύλου κριθέντος τοῦ ἀδίκως ἐγκαλοῦντος τὸ νικᾶν τῷ φεύγοντι ὁ νομοθέτης ἀπένειμεν. ἔτι δὲ καὶ αὐτοὶ οὕτως ἔχομεν πρὸς τοὺς θεράποντας, ὥστε ὅταν ὑποπτεύσωμέν τι αὐτοὺς ἡμαρτηκέναι καὶ μηθὲν ἀκριβὲς ἔχωμεν, ἀλλ' ὅμως αὐτοὺς ὑπολαμβάνωμεν πεπραχέναι, οὐκ εὐθὺς ἐπὶ τὸ κολάζειν ἐρχόμεθα· καὶ ἐὰν μηθὲν μᾶλλον [952a] δυνώμεθα ἐξετάσαι, ἀφίεμεν ταύτης τῆς αἰτίας. ἔτι μείζω μὲν ἀδικεῖ ὁ ἐκ προνοίας ἀδικῶν ἢ ὁ μὴ ἐκ προνοίας. ὁ μὲν δὴ συκοφαντῶν ἀεὶ ἐκ προνοίας ἀδικεῖ, ὁ δὲ ἕτερόν τι ἀδικῶν τὰ μὲν δι' ἀνάγκην τὰ δὲ δι' ἄγνοιαν, τὰ δὲ ὅπως ἔτυχεν ἀδικεῖν αὐτῷ συμπίπτει. ὅταν δὲ ἴσαι γένωνται αἱ ψῆφοι, ὁ μὲν διώκων κέκριται ὑπὸ τῶν ἡμίσεων ἐκ προνοίας ἀδικεῖν, ὁ δὲ φεύγων ὑπὸ τῶν λοιπῶν αὐτὸ ἀδικεῖν μὲν οὐ μέντοι γε ἐκ προνοίας, ὥστε ἐπεὶ ἀδικεῖν μείζω κέκριται ὁ διώκων τοῦ φεύγοντος, εἰκότως ὁ νομοθέτης νικᾶν ἔκρινε τὸν τὰ ἐλάττω ἀδικοῦντα. ἔτι δὲ ἀεὶ μὲν ἀδικώτερός ἐστίν ὁ μὴ οἰόμενος λανθάνειν ὃν ἀδικεῖ καὶ ὅμως ἀδικῶν, ἢ ὁ οἰόμενος λανθάνειν. ὁ μὲν γὰρ ἀδίκως τινὲς ἐγκαλῶν οὐκ οἴεται λανθάνειν τοῦτον ὃν συκοφαντεῖ, οἱ δ' ἄλλοι τι ἀδικοῦντες ὥς ἐπὶ τὸ πολὺ οἰόμενοι λανθάνειν ὃν ἀδικοῦσιν ἐπιχειροῦσιν ἀδικεῖν, ὥστε ἀδικώτεροι ἂν κρίναιντο οἱ διώκοντες ἢ οἱ φεύγοντες.

Διὰ τί ποτε, ἐὰν μὲν τις ἐκ βαλανείου κλέψη ἢ ἐκ παλαίστρας ἢ ἐξ ἀγορᾶς ἢ τῶν τοιούτων τινός, θανάτῳ ζημιοῦται, ἐὰν δέ τις ἐξ οἰκίας, διπλοῦν τῆς ἀξίας τοῦ κλέμματος ἀποτίνει; ἢ ὅτι ἐν μὲν ταῖς οἰκίαις φυλάξαι ὁπωσοῦν ἔστιν· καὶ γὰρ ὁ τοῖχος ἰσχυρὸς καὶ κλεῖς ἐστί, καὶ οἰκέταις τοῖς ἐν τῇ οἰκίᾳ πᾶσιν ἐπιμελὲς ἐστίν ὅπως σώζεται τὰ ἐνόντα. ἐν δὲ τῷ βαλανείῳ, καὶ ἐν τοῖς οὕτω κοινοῖς οὗσιν ὥσπερ τὸ βαλανεῖον, ῥάδιον τῷ βουλομένῳ κακουργεῖν· οὐδὲν γὰρ ἰσχυρὸν ἔχουσι πρὸς τὴν φυλακὴν οἱ τιθέντες ἀλλ' ἢ τὸ αὐτῶν ὄμμα, ὥστε ἂν μόνον τις παραβλέψη, ἐπὶ τῷ κλέπτοντι ἤδη γίνεται. διὸ ὁ νομοθέτης οὐχ ἱκανοὺς ὄντας ἡγησάμενος εἶναι φύλακας, τὸν νόμον αὐτοῖς ἐπέστησεν ἀπειλοῦντα σφοδρῶς ὥς οὐ βιωσομένοις ἐὰν τι σφετερίζωνται τῶν ἀλλοτρίων. ἔτι δὲ εἰς μὲν τὴν οἰκίαν ἐπὶ τῷ κεκτημένῳ ἐστὶν ὃν τινα ἂν βούληται εἰσδέχεσθαι, καὶ ὧ μὴ πιστεύει εἰσφέρεισθαι· τῷ δὲ ἐν τῷ βαλανείῳ θεμένῳ τι οὐκ ἔξεστιν οὐθέννα κωλύσαι οὔτε εἰσιέναι, οὔτε εἰσελθόντα μὴ παρὰ κλέπτην τὸ αὐτοῦ ἱμάτιον θέσθαι ἀποδύντα ἄν· ἀλλ' ὥς οὐ βούλεται, ἐν τῷ αὐτῷ ἢ τε τοῦ κλέπτου ἐσθῆς καὶ ἢ τοῦ μέλλοντος ἀπολλύναι ἀναμειγμένα κεῖνται. διὸ ὁ νομοθέτης τῷ μὲν ἐκόντι εἰσδεξαμένῳ τὸν κλέπτην καὶ αὐτῷ ἡμαρτηκότι [952b] οὐ λίαν μεγάλας τιμωρίαις βεβοήθηκεν, τοῖς δὲ ἐξ ἀνάγκης κοινωνοῦσι τῆς εἰς τὸ βαλανεῖον εἰσόδου καὶ τῆς ἀναμίξεως μεγάλας τιμωρίας φανερός ἐστι καθιστὰς τοῖς κλέπτουσιν. ἔτι δὲ οἱ μὲν ἐν τοῖς οὕτω κοινοῖς οὗσι τῷ βουλομένῳ εἰσιέναι κλέπτοντες καταφανεῖς ἅπασιν γίνονται ὅτι φανεροὶ εἰσιν, ὥστε περιγενόμενοι

οὐδὲ καρπισμοῦ ἔτι χάριν ἐπικεῖς εἶναι δοκεῖν βούλονται, ὥς μάτην αὐτοῖς ὄν πρὸς τοὺς γνόντας πλάττεσθαι ὅτι ἐπικεῖς εἰσὶν· καταφανῶς οὖν ἤδη πονηροὶ διατελοῦσιν ὄντες. οἱ δὲ ἐνὶ μόνῳ φανεροὶ γενόμενοι πρὸς τοὺς ἄλλους ἐπιχειροῦσι πείθειν, ἀποτίσαντές τι, ὅπως μὴ καταφανεῖς αὐτοὺς ποιήσῃ· διὸ οὐ παντελῶς ἂν εἶεν πονηροὶ διὰ τέλους, ἀνθ' ὧν ὁ νομοθέτης ἐλάττω αὐτοῖς τὰ ἐπιζήμια ἐποίησεν. ἔτι δὲ τῶν ἀμαρτιῶν μάλιστα αἰσχύνουσι τὴν πόλιν αἱ ἐν τοῖς κοινοτάτοις συλλόγοις τε καὶ συνόδοις γινόμεναι, ὥσπερ καὶ τιμὴν φέρουσι πολὺ μάλιστα αἱ ἐν τῷ κοινῷ εὐταξία· καταφανεῖς γὰρ μάλιστα διὰ τῶν τοιούτων καὶ αὐτοῖς καὶ τοῖς ἄλλοις. συμβαίνει οὖν οὐ μόνον ἰδίᾳ τὸν ἀπολέσαντα βλάπτεσθαι ἐκ τῶν τοιούτων τινός, ἀλλὰ καὶ πρὸς τὴν πόλιν λοιδορίας γίνεσθαι. διὸ καὶ τὸν κλέψαντα ταῖς μείζουσι ζημίαις ἐκόλασε τῶν ἐξ οἰκίας τινὸς ἀφελομένων. ἔτι δὲ καὶ ὁ ἐξ οἰκίας τινὸς ἀπολέσας ἐν τοιούτῳ τόπῳ τυγχάνει ὦν, ὅθεν ῥάδιον μήτε παθόντα μήτε χλευασθέντα ὑπὸ τινων, οἵκοι ὄντα τὸ ἀτύχημα φέρειν. τῷ δ' ἢ τε ἀποχώρησις ἐργώδης γεγυμνωμένῳ, προσέτι δὲ χλευάζεσθαι ὑπὸ τινων ὑπάρχει τοῖς πολλοῖς, ὃ πολὺ δυσχερέστερόν ἐστι τῆς ἀπωλείας. διὸ καὶ ὁ νομοθέτης μείζους αὐτοῖς ζημίας ἐνέγραψεν. ἔτι δὲ παραπλήσια τούτοις πολλὰ φαίνονται νενομοθετηκότες, οἷον καὶ ἐὰν μὲν τις ἄρχοντα κακῶς εἴπῃ, μέγала τὰ ἐπιτίμια, ἐὰν δέ τις ἰδιώτην, οὐθέν. καὶ καλῶς· οἴεται γὰρ τότε οὐ μόνον εἰς τὸν ἄρχοντα ἐξαμαρτάνειν τὸν κακηγοροῦντα, ἀλλὰ καὶ εἰς τὴν πόλιν ὑβρίζειν. τὸν αὐτὸν δὲ τρόπον καὶ τὸν ἐν τῷ λιμένι κλέπτοντα οὐ μόνον τὸν ἰδιώτην βλάπτειν, ἀλλὰ καὶ τὴν πόλιν αἰσχύνειν. ὁμοίως δὲ καὶ ἐν τοῖς ἄλλοις, οὗ κοινῇ που συνερχόμεθα.

Διὰ τί ἐν τοῖς δικαστηρίοις ἐὰν ἴσαι γένωνται ψῆφοι τοῖς ἀντιδίκοις, ὁ φεύγων νικᾷ; ἢ ὅτι ὁ φεύγων ὑπὸ τοῦ [953a] διώκοντος οὐθὲν πέπονθεν, ἀλλ' ἐν τοῖς ἴσοις αὐτῷ ἤδη ἔμελλε νικᾷν;

Διὰ τί ἐπὶ μὲν κλοπῇ θάνατος ἢ ζημία, ἐπὶ δὲ ὕβρει, μείζονι οὖσῃ ἀδικία, τίμησις τί χρὴ παθεῖν ἢ ἀποτίσαι; ἢ διότι τὸ μὲν ὑβρίζειν ἀνθρώπινόν ἐστι πάθος, καὶ πάντες πλέον ἢ ἔλαττον αὐτοῦ μετέχουσι, τὸ δὲ κλέπτειν οὐ τῶν ἀναγκαίων; καὶ ὅτι ὁ κλέπτειν ἐπιχειρῶν καὶ ὑβρίζειν ἂν προέλοιτο.

## Λ. ΟΣΑ ΠΕΡΙ ΦΡΟΝΗΣΙΝ ΚΑΙ ΝΟΥΝ ΚΑΙ ΣΟΦΙΑΝ.

Διὰ τί πάντες ὅσοι περιττοὶ γεγονάσιν ἄνδρες ἢ κατὰ φιλοσοφίαν ἢ πολιτικὴν ἢ ποιήσιν ἢ τέχνας φαίνονται μελαγχολικοὶ ὄντες, καὶ οἱ μὲν οὕτως ὥστε καὶ λαμβάνεσθαι τοῖς ἀπὸ μελαίνης χολῆς ἄρρωσθήμασιν, οἷον λέγεται τῶν τε ἡρωϊκῶν τὰ περὶ τὸν Ἡρακλέα. καὶ γὰρ ἐκεῖνος ἔοικε γενέσθαι ταύτης τῆς φύσεως, διὸ καὶ τὰ ἄρρωσθήματα τῶν ἐπιληπτικῶν ἀπ' ἐκείνου προσηγόρευον οἱ ἀρχαῖοι ἱερὰν νόσον. καὶ ἡ περὶ τοὺς παῖδας ἔκστασις καὶ ἡ πρὸ τῆς ἀφανίσεως ἐν Οἴτῃ τῶν ἐλκῶν ἔκφυσις γενομένη τοῦτο δηλοῖ. καὶ γὰρ τοῦτο γίνεται πολλοῖς ἀπὸ μελαίνης χολῆς. συνέβη δὲ καὶ Λυσάνδρῳ τῷ Λάκωνι πρὸ τῆς τελευτῆς γενέσθαι τὰ ἔλκη ταῦτα. ἔτι δὲ τὰ περὶ Αἴαντα καὶ Βελλεροφόντην, ὧν ὁ μὲν ἐκστατικὸς ἐγένετο παντελῶς, ὁ δὲ τὰς ἐρημίας ἐδίωκεν, διὸ οὕτως ἐποίησεν Ὅμηρος “αὐτὰρ ἐπεὶ καὶ κεῖνος ἀπήχθετο πᾶσι θεοῖσιν, ἦτοι ὁ καππεδίων τὸ Ἀλγῆιον οἶος ἀλᾶτο, ὃν θυμὸν κατέδων, πάτον ἀνθρώπων ἀλεείνων.” καὶ ἄλλοι δὲ πολλοὶ τῶν ἡρώων ὁμοιοπαθεῖς φαίνονται τούτοις. τῶν δὲ ὕστερον Ἐμπεδοκλῆς καὶ Πλάτων καὶ Σωκράτης καὶ ἕτεροι συχνοὶ τῶν γνωρίμων. ἔτι δὲ τῶν περὶ τὴν ποιήσιν οἱ πλεῖστοι. πολλοῖς μὲν γὰρ τῶν τοιούτων γίνεται νοσήματα ἀπὸ τῆς τοιαύτης κράσεως τῷ σώματι, τοῖς δὲ ἡ φύσις δῆλη ρέπουσα πρὸς τὰ πάθη. πάντες δ' οὖν ὡς εἰπεῖν ἀπλῶς εἰσὶ, καθάπερ ἐλέχθη, τοιοῦτοι τὴν φύσιν. δεῖ δὲ λαβεῖν τὴν αἰτίαν πρῶτον ἐπὶ παραδείγματος προχειρισάμενους. ὁ γὰρ οἶνος ὁ πολὺς μάλιστα φαίνεται παρασκευάζειν τοιούτους οἶους λέγομεν τοὺς μελαγχολικοὺς εἶναι, καὶ πλεῖστα ἦθη ποιεῖν πινόμενος, οἷον ὀργίλους, φιλανθρώπους, ἐλεήμονας, ἱταμούς. ἀλλ' οὐχὶ τὸ μέλι οὐδὲ τὸ γάλα οὐδὲ τὸ ὕδωρ οὐδ' ἄλλο τῶν τοιούτων οὐδέν. ἴδοι δ' ἂν τις ὅτι παντοδαποὺς ἀπεργάζεται, θεωρῶν ὡς μεταβάλλει τοὺς πίνοντας ἐκ προσαγωγῆς. παραλαβὼν [953b] γὰρ ἀπεψυγμένους ἐν τῷ νήφειν καὶ σιωπηλοὺς μικρῷ μὲν πλείων ποθεῖς λαλίστέρους ποιεῖ, ἔτι δὲ πλείων ῥητορικοὺς καὶ θαρραλέους, προϊόντας δὲ πρὸς τὸ πράττειν ἱταμούς, ἔτι δὲ μᾶλλον πινόμενος ὕβριστάς, ἔπειτα μανικούς, λίαν δὲ πολὺς ἐκλύει καὶ ποιεῖ μωρούς, ὥσπερ τοὺς ἐκ παίδων ἐπιλήπτους ἢ καὶ ἐχομένους τοῖς μελαγχολικοῖς ἄγαν. ὥσπερ οὖν ὁ εἷς ἄνθρωπος μεταβάλλει τὸ ἦθος πίνων καὶ χρώμενος τῷ οἴνῳ ποσῷ τινί, οὕτω καθ' ἕκαστον τὸ ἦθος εἰσὶ τινες ἄνθρωποι. οἶος γὰρ οὗτος μεθύων νῦν ἐστίν, ἄλλος τις τοιοῦτος φύσει ἐστίν, ὁ μὲν λάλος, ὁ δὲ κεκινημένος, ὁ δὲ ἀρίδακρυς. ποιεῖ γὰρ τινας καὶ τοιούτους, διὸ καὶ Ὅμηρος ἐποίησε “καὶ μέφησι δάκρυ πλῶειν βεβαρημένον οἴνω.” καὶ γὰρ ἐλεήμονές ποτε γίνονται καὶ ἄγριοι καὶ σιωπηλοί. ἔνιοι γὰρ αὖ ἀποσιωπῶσι, καὶ μάλιστα τῶν μελαγχολικῶν ὅσοι ἐκστατικοί. ποιεῖ δὲ καὶ φιλητικοὺς ὁ οἶνος. σημεῖον δὲ



ὅτι προάγεται ὁ πίνων καὶ τῷ στόματι φιλεῖν, οὐς νήφων οὐδ' ἂν εἴς φιλήσειεν ἢ διὰ τὸ εἶδος ἢ διὰ τὴν ἡλικίαν. ὁ μὲν οὖν οἶνος οὐ πολὺν χρόνον ποιεῖ περιττόν, ἀλλ' ὀλίγον, ἡ δὲ φύσις ἀεί, ἕως τις ἂν ἦ· οἱ μὲν γὰρ θρασεῖς, οἱ δὲ σιωπηλοί, οἱ δὲ ἐλεήμονες, οἱ δὲ δειλοὶ γίνονται φύσει. ὥστε δῆλον ὅτι διὰ τὸ αὐτὸ ποιεῖ ὁ τε οἶνος καὶ ἡ φύσις ἐκάστου τὸ ἦθος· πάντα γὰρ κατεργάζεται τῇ θερμότητι ταμιευόμενα. ὁ τε δὴ χυμὸς καὶ ἡ κρᾶσις ἡ τῆς μελαίνης χολῆς πνευματικά ἐστιν· διὸ καὶ τὰ πνευματώδη πάθη καὶ τὰ ὑποχόνδρια μελαγχολικὰ οἱ ἰατροὶ φασιν εἶναι. καὶ ὁ οἶνος δὲ πνευματώδης τὴν δύναμιν. διὸ δὴ ἐστὶ τὴν φύσιν ὅμοια ὁ τε οἶνος καὶ ἡ κρᾶσις. δηλοῖ δὲ ὅτι πνευματώδης ὁ οἶνός ἐστιν ὁ ἀφρός· τὸ μὲν γὰρ ἔλαιον θερμὸν ὄν οὐ ποιεῖ ἀφρόν, ὁ δὲ οἶνος πολύν, καὶ μᾶλλον ὁ μέλας τοῦ λευκοῦ, ὅτι θερμότερος καὶ σωματωδέστερος. καὶ διὰ τοῦτο ὁ τε οἶνος ἀφροδισιαστικούς ἀπεργάζεται, καὶ ὀρθῶς Διόνυσος καὶ Ἀφροδίτη λέγονται μετ' ἀλλήλων εἶναι, καὶ οἱ μελαγχολικοὶ οἱ πλείστοι λάγνοι εἰσίν. ὁ τε γὰρ ἀφροδισιασμὸς πνευματώδης. σημεῖον δὲ τὸ αἰδοῖον, ὡς ἐκ μικροῦ ταχεῖαν ποιεῖται τὴν αὔξησιν διὰ τὸ ἐμφυσᾶσθαι. καὶ ἔτι πρὶν δύνασθαι προῖεσθαι σπέρμα, γίνεται τις ἡδονὴ ἐπὶ παισὶν οὖσιν, ὅταν ἐγγὺς ὄντες τοῦ ἡβᾶν ζύωνται τὰ αἰδοῖα δι' ἀκολασίαν· γίνεται δὲ δῆλον διὰ τὸ πνεῦμα διεξιέναι διὰ τῶν πόρων, δι' ὧν ὕστερον τὸ ὑγρὸν φέρεται. ἢ τε ἔκχυσις τοῦ [954a] σπέρματος ἐν ταῖς ὁμιλίαις καὶ ἡ ῥῖψις ὑπὸ τοῦ πνεύματος ὠθοῦντος φανερόν γίνεσθαι. ὥστε καὶ τῶν ἐδεσμάτων καὶ ποτῶν εὐλόγως ταῦτ' ἐστὶν ἀφροδισιαστικά, ὅσα πνευματώδη τὸν περὶ τὰ αἰδοῖα ποιεῖ τόπον. διὸ καὶ ὁ μέλας οἶνος οὐδενὸς ἥττον τοιούτους ἀπεργάζεται, οἷοι καὶ οἱ μελαγχολικοὶ πνευματώδεις. δῆλοι δ' εἰσὶν ἐπ' ἐνίων· σκληροὶ γὰρ οἱ πλείους τῶν μελαγχολικῶν, καὶ αἱ φλέβες ἐξέχουσιν· τούτου δ' αἴτιον οὐ τὸ τοῦ αἵματος πλῆθος, ἀλλὰ τοῦ πνεύματος. διότι δὲ οὐδὲ πάντες οἱ μελαγχολικοὶ σκληροὶ οὐδὲ μέλανες, ἀλλ' οἱ μᾶλλον κακόχυμοι, ἄλλος λόγος· περὶ οὗ δὲ ἐξ ἀρχῆς προειλόμεθα διελθεῖν, ὅτι ἐν τῇ φύσει εὐθύς ὁ τοιοῦτος χυμὸς ὁ μελαγχολικὸς κεράννυται· θερμοῦ γὰρ καὶ ψυχροῦ κρᾶσις ἐστίν· ἐκ τούτων γὰρ τῶν δυοῖν ἡ φύσις συνέστηκεν. διὸ καὶ ἡ μέλαινα χολὴ καὶ θερμότατον καὶ ψυχρότατον γίνεται. τὸ γὰρ αὐτὸ πάσχειν πέφυκε ταῦτ' ἄμφω, οἶον καὶ τὸ ὕδωρ ὄν ψυχρόν, ὅμως ἐὰν ἱκανῶς θερμανθῇ, οἶον τὸ ζέον, τῆς φλογὸς αὐτῆς θερμότερόν ἐστι, καὶ λίθος καὶ σίδηρος διάπυρα γενόμενα μᾶλλον θερμὰ γίνεται ἄνθρακος, ψυχρὰ ὄντα φύσει. εἴρηται δὲ σαφέστερον περὶ τούτων ἐν τοῖς περὶ πυρός. καὶ ἡ χολὴ δὲ ἡ μέλαινα φύσει ψυχρὰ καὶ οὐκ ἐπιπολαίως οὕσα, ὅταν μὲν οὕτως ἔχη ὡς εἴρηται, ἐὰν ὑπερβάλλῃ ἐν τῷ σώματι, ἀποπληξίας ἢ νάρκας ἢ ἀθυμίας ποιεῖ ἢ φόβους, ἐὰν δὲ ὑπερθερμανθῇ, τὰς μετ' ὠδῆς εὐθυμίας καὶ ἐκστάσεις καὶ ἐκζέσεις ἐλκῶν καὶ ἄλλα τοιαῦτα. τοῖς μὲν οὖν πολλοῖς ἀπὸ τῆς καθ' ἡμέραν

τροφῆς ἐγγινομένη οὐδὲν τὸ ἥθος ποιεῖ διαφόρους, ἀλλὰ μόνον νόσημά τι μελαγχολικὸν ἀπειργάσατο. ὅσοις δὲ ἐν τῷ φύσει συνέστη κρᾶσις τοιαύτη, εὐθύς οὗτοι τὰ ἥθη γίνονται παντοδαποί, ἄλλος κατ' ἄλλην κρᾶσιν· οἷον ὅσοις μὲν πολλὴ καὶ ψυχρὰ ἐνυπάρχει, νωθοὶ καὶ μωροί, ὅσοις δὲ λίαν πολλὴ καὶ θερμή, μανικοὶ καὶ εὐφυεῖς καὶ ἐρωτικοὶ καὶ εὐκίνητοι πρὸς τοὺς θυμοὺς καὶ τὰς ἐπιθυμίας, ἔνιοι δὲ καὶ λάλοι μᾶλλον. πολλοὶ δὲ καὶ διὰ τὸ ἐγγὺς εἶναι τοῦ νοεροῦ τόπου τὴν θερμότητα ταύτην νοσήμασιν ἀλίσκονται μανικοῖς ἢ ἐνθουσιαστικοῖς, ὅθεν Σίβυλλαι καὶ Βάκιδες καὶ οἱ ἔνθεοι γίνονται πάντες, ὅταν μὴ νοσήματι γένωνται ἀλλὰ φυσικῇ κράσει. Μαρακὸς δὲ ὁ Συρακούσιος καὶ ἀμείνων ἦν ποιητής, ὅτ' ἐκσταίη. ὅσοις δ' ἂν ἐπανθῇ τὴν ἄγαν θερμότητα [954b] πρὸς τὸ μέσον, οὗτοι μελαγχολικοὶ μὲν εἰσι, φρονιμώτεροι δέ, καὶ ἥττον μὲν ἔκτοποι, πρὸς πολλὰ δὲ διαφέροντες τῶν ἄλλων, οἱ μὲν πρὸς παιδείαν, οἱ δὲ πρὸς τέχνας, οἱ δὲ πρὸς πολιτείαν. πολλὴν δὲ καὶ εἰς τοὺς κινδύνους ποιεῖ διαφορὰν ἢ τοιαύτη ἕξις τοῦ ἐνίοτε ἀνωμάλους εἶναι μὲν τοῖς φόβοις πολλοὺς τῶν ἀνδρῶν. ὥς γὰρ ἂν τύχῃσι τὸ σῶμα ἔχοντες πρὸς τὴν τοιαύτην κρᾶσιν, διαφέρουσιν αὐτοὶ αὐτῶν. ἡ δὲ μελαγχολικὴ κρᾶσις, ὥσπερ καὶ ἐν ταῖς νόσοις ἀνωμάλους ποιεῖ, οὕτω καὶ αὐτὴ ἀνώμαλός ἐστιν· ὅτε μὲν γὰρ ψυχρὰ ἐστὶν ὥσπερ ὕδωρ, ὅτε δὲ θερμή. ὥστε φοβερὸν τι ὅταν εἰσαγγελθῇ, ἐὰν μὲν ψυχροτέρας οὔσης τῆς κράσεως τύχη, δειλὸν ποιεῖ· προωδοπεποίηκε γὰρ τῷ φόβῳ, καὶ ὁ φόβος καταψύχει. δηλοῦσι δὲ οἱ περίφοβοι· τρέμουνσι γάρ. ἐὰν δὲ μᾶλλον θερμή, εἰς τὸ μέτριον κατέστησεν ὁ φόβος, καὶ ἐν αὐτῷ καὶ ἀπαθῇ. ὁμοίως δὲ καὶ πρὸς τὰς καθ' ἡμέραν ἀθυμίας· πολλάκις γὰρ οὕτως ἔχομεν ὥστε λυπεῖσθαι, ἐφ' ὅτῳ δέ, οὐκ ἂν ἔχοιμεν εἰπεῖν· ὅτε δὲ εὐθύμως, ἐφ' ᾧ δ', οὐ δῆλον. τὰ δὲ τοιαῦτα πάθη καὶ τὰ παλαιὰ λεχθέντα κατὰ μὲν τι μικρὸν πᾶσι γίνεται· πᾶσι γὰρ μέμικταί τι τῆς δυνάμεως· ὅσοις δ' εἰς βάθος, οὗτοι δ' ἤδη ποιοῖ τινές εἰσι τὰ ἥθη. ὥσπερ γὰρ τὸ εἶδος ἕτεροι γίνονται οὐ τῷ πρόσωπον ἔχειν, ἀλλὰ τῷ ποῖόν τι τὸ πρόσωπον, οἱ μὲν καλόν, οἱ δὲ αἰσχρόν, οἱ δὲ μηθὲν ἔχοντες περιττόν, οὗτοι δὲ μέσοι τὴν φύσιν, οὕτω καὶ οἱ μὲν μικρὰ μετέχοντες τῆς τοιαύτης κράσεως μέσοι εἰσίν, οἱ δὲ πλήθους ἤδη ἀνόμοιοι τοῖς πολλοῖς. ἐὰν μὲν γὰρ σφόδρα κατακορῆς ἦ ἢ ἕξις, μελαγχολικοὶ εἰσι λίαν, ἐὰν δὲ πῶς κραθῶσι, περιττοί. ῥέπουσι δ', ἂν ἀμελῶσιν, ἐπὶ τὰ μελαγχολικὰ νοσήματα, ἄλλοι περὶ ἄλλο μέρος τοῦ σώματος· καὶ τοῖς μὲν ἐπιληπτικὰ ἀποσημαίνει, τοῖς δὲ ἀποπληκτικά, ἄλλοις δὲ ἀθυμίαι ἰσχυραὶ ἢ φόβοι, τοῖς δὲ θάρρη λίαν, οἷον καὶ Ἀρχελάῳ συνέβαινε τῷ Μακεδονίας βασιλεῖ. αἴτιον δὲ τῆς τοιαύτης δυνάμεως ἢ κρᾶσις, ὅπως ἂν ἔχη ψύξεώς τε καὶ θερμότητος. ψυχροτέρα μὲν γὰρ οὖσα τοῦ καιροῦ δυσθυμίας ποιεῖ ἀλόγους· διὸ αἱ τ' ἀγχόνας μάλιστα τοῖς νέοις, ἐνίοτε δὲ καὶ πρεσβυτέροις. πολλοὶ δὲ καὶ μετὰ τὰς μέθας

διαφθείρουσιν ἑαυτούς. ἔνιοι δὲ τῶν μελαγχολικῶν ἐκ τῶν πότων ἀθύμως διάγουσιν· σβέννυσι γὰρ ἢ τοῦ οἴνου θερμότης τὴν φυσικὴν θερμότητα. τὸ δὲ θερμὸν τὸ περὶ [955a] τὸν τόπον ὧ φρονοῦμεν καὶ ἐλπίζομεν ποιεῖ εὐθύμους. καὶ διὰ τοῦτο πρὸς τὸ πίνειν εἰς μέθην πάντες ἔχουσι προθύμως, ὅτι πάντας ὁ οἶνος ὁ πολὺς εὐέλπιδας ποιεῖ, καθάπερ ἡ νεότης τοὺς παῖδας· τὸ μὲν γὰρ γῆρας δύσελπί ἐστιν, ἡ δὲ νεότης ἐλπίδος πλήρης. εἰσὶ δὲ τινες ὀλίγοι οὓς πίνοντας δυσθυμίας λαμβάνουσι, διὰ τὴν αὐτὴν αἰτίαν δι' ἣν καὶ μετὰ τοὺς πότους ἐνίου. ὅσοις μὲν οὖν μαραινόμενου τοῦ θερμοῦ αἱ ἀθυμίας γίνονται, μᾶλλον ἀπάγχονται. διὸ καὶ οἱ νέοι ἢ καὶ οἱ πρεσβῦται μᾶλλον ἀπάγχονται· τὸ μὲν γὰρ γῆρας μαραίνει τὸ θερμόν, τῶν δὲ τὸ πάθος φυσικὸν ὄν καὶ αὐτὸ τὸ μαραινόμενον θερμόν. ὅσοις δὲ σβεννυμένου, ἐξαίφνης οἱ πλεῖστοι διαχρῶνται ἑαυτούς, ὥστε θαυμάζειν πάντας διὰ τὸ μηθὲν ποιῆσαι σημεῖον πρότερον. ψυχροτέρα μὲν οὖν γινομένη ἡ κρᾶσις ἢ ἀπὸ τῆς μελαίνης χολῆς, ὥσπερ εἴρηται, ποιεῖ ἀθυμίας παντοδαπάς, θερμότερα δὲ οὕσα εὐθυμίας. διὸ καὶ οἱ μὲν παῖδες εὐθυμότεροι, οἱ δὲ γέροντες δυσθυμότεροι. οἱ μὲν γὰρ θερμοί, οἱ δὲ ψυχροί· τὸ γὰρ γῆρας κατάψυξις τις. συμβαίνει δὲ σβέννυσθαι ἐξαίφνης ὑπὸ τε τῶν ἐκτὸς αἰτιῶν, ὡς καὶ παρὰ φύσιν τὰ πυρωθέντα, οἶον ἄνθρακα ὕδατος ἐπιχυθέντος. διὸ καὶ ἐκ μέθης ἔνιοι ἑαυτοὺς διαχρῶνται· ἡ γὰρ ἀπὸ τοῦ οἴνου θερμότης ἐπίσασκτός ἐστιν, ἥς σβεννυμένης συμβαίνει τὸ πάθος. καὶ μετὰ τὰ ἀφροδίσια οἱ πλεῖστοι ἀθυμότεροι γίνονται, ὅσοι δὲ περίττωμα πολὺ προΐενται μετὰ τοῦ σπέρματος, οὗτοι εὐθυμότεροι· κουφίζονται γὰρ περιττώματός τε καὶ πνεύματος καὶ θερμοῦ ὑπερβολῆς. ἐκεῖνοι δὲ ἀθυμότεροι πολλάκις καταψύχονται γὰρ ἀφροδισιάσαντες διὰ τὸ τῶν ἱκανῶν τι ἀφαιρεθῆναι· δηλοῖ δὲ τοῦτο τὸ μὴ πολλὴν τὴν ἀπορροὴν γεγονέναι. ὡς οὖν ἐν κεφαλαίῳ εἶπεῖν, διὰ μὲν τὸ ἀνώμαλον εἶναι τὴν δύναμιν τῆς μελαίνης χολῆς ἀνώμαλοί εἰσιν οἱ μελαγχολικοί· καὶ γὰρ ψυχρὰ σφόδρα γίνεται καὶ θερμή. διὰ δὲ τὸ ἡθοποιὸς εἶναι (ἡθοποιὸν γὰρ τὸ θερμὸν καὶ ψυχρὸν μάλιστα τῶν ἐν ἡμῖν ἐστίν) ὥσπερ ὁ οἶνος πλείων καὶ ἐλάττων κεραννύμενος τῷ σώματι ποιεῖ τὸ ἥθος ποιούς τινας ἡμᾶς. ἄμφω δὲ πνευματικά, καὶ ὁ οἶνος καὶ ἡ μέλαινα χολή. ἐπεὶ δ' ἔστι καὶ εὐκρατον εἶναι τὴν ἀνωμαλίαν καὶ καλῶς πως ἔχειν, καὶ ὅπου δεῖ θερμότεραν εἶναι τὴν διάθεσιν καὶ πάλιν ψυχράν, ἢ τούναντίον διὰ τὸ ὑπερβολὴν ἔχειν, περιττοὶ μὲν εἰσι πάντες οἱ μελαγχολικοί, οὐ διὰ νόσον, ἀλλὰ διὰ φύσιν

[955b] Διὰ τί κατ' ἐνίας μὲν τῶν ἐπιστημῶν ἕξιν ἔχειν λέγομεν, κατ' ἐνίας δὲ οὐ; ἢ καθ' ὅσας εὐρετικοὶ ἐσμεν, ἕξιν ἔχειν λεγόμεθα; τὸ γὰρ εὐρίσκειν ἀπὸ ἕξεως.

Διὰ τί τῶν ζώων ὁ ἄνθρωπος φρονιμώτατος; πότερον ὅτι

μικροκεφαλώτατον κατὰ λόγον τοῦ σώματος; ἢ ὅτι ἄνωμάλως ἐλάχιστον; διὰ γὰρ τοῦτο καὶ μικροκέφαλον, καὶ αὐτῶν οἱ τοιοῦτοι μᾶλλον τῶν μεγαλοκεφάλων φρονιμώτεροι.

Διὰ τί δοκεῖ ἡμῖν πλείων εἶναι ἡ ὁδός, ὅταν μὴ εἰδότες πόση τίς ἐστι βαδίζωμεν, μᾶλλον ἢ ὅταν εἰδότες, ἐὰν τὰ ἄλλα ὁμοίως τύχωμεν ἔχοντες; ἢ ὅτι τὸ εἰδέναι [πόση] ἐστὶν εἰδέναι τὸν ἀριθμόν; τὸ γὰρ ἄπειρον καὶ ἀναρίθμητον ταῦτόν, καὶ πλέον αἰετὶ τὸ ἄπειρον τοῦ ὠρισμένου. ὥσπερ οὖν εἰ ἦδει ὅτι τοσὴδε ἐστί, πεπερασμένην αὐτὴν ἀνάγκη εἶναι, οὕτως εἰ μὴ οἶδε πόση τίς ἐστίν, ὡς ἀντιστρέφοντος παραλογίζεται ἡ ψυχὴ, καὶ φαίνεται αὕτη εἶναι ἄπειρος, ἐπεὶ τὸ ποσὸν ὠρισμένον ἐστὶ καὶ τὸ ὠρισμένον ποσόν. ὅταν τοίνυν μὴ φαίνεται ὠρισμένον, ὥσπερ ἄπειρον δόξει εἶναι, διὰ τὸ τὸ πεφυκὸς ὠρίσθαι, ἂν μὴ ἢ ὠρισμένον, ἄπειρον εἶναι, καὶ τὸ φαινόμενον μὴ ὠρίσθαι φαίνεσθαι ἀνάγκη πως ἀπέραντον.

Διὰ τί πρεσβύτεροι μὲν γινόμενοι μᾶλλον νοῦν ἔχομεν, νεώτεροι δὲ ὄντες θᾶπτον μανθάνομεν; ἢ ὅτι ὁ θεὸς ὄργανα ἐν ἑαυτοῖς ἡμῖν δέδωκε δύο, ἐν οἷς χρῆσόμεθα τοῖς ἐκτὸς ὀργάνοις, σώματι μὲν χεῖρα, ψυχῇ δὲ νοῦν. ἔστι γὰρ καὶ ὁ νοῦς τῶν φύσει ἐν ἡμῖν ὥσπερ ὄργανον ὑπάρχων· αἱ δὲ ἄλλαι ἐπιστήμαι καὶ τέχναι τῶν ὑφ' ἡμῶν ποιητῶν εἰσὶν, ὁ δὲ νοῦς τῶν φύσει. καθάπερ οὖν τῇ χειρὶ οὐκ εὐθὺς γενόμενοι χρώμεθα βέλτιστα, ἀλλ' ὅταν ἡ φύσις αὐτὴν ἐπιτελέσῃ (προϊούσης γὰρ τῆς ἡλικίας ἡ χεὶρ μάλιστα δύναται ἀποτελεῖν τὸ ἑαυτῆς ἔργον), τὸν αὐτὸν τρόπον καὶ ὁ νοῦς τῶν φύσει οὐκ εὐθὺς ἀλλ' ἐπὶ γήρως ἡμῖν μάλιστα παραγίνεται καὶ τότε ἀποτελεῖται μάλιστα, ἂν μὴ ὑπὸ τινος πηρωθῇ, καθάπερ καὶ τὰ ἄλλα τὰ φύσει ὑπάρχοντα. ὕστερον δὲ τῆς τῶν χειρῶν δυνάμεως ὁ νοῦς παραγίνεται ἡμῖν, ὅτι καὶ τὰ τοῦ νοῦ ὄργανά ἐστι τῶν τῆς χειρός. ἔστι γὰρ νοῦ μὲν ὄργανον ἐπιστήμη (τούτῳ γὰρ ἐστὶ χρήσιμος, καθάπερ αὐλοὶ αὐλητῇ), χειρῶν δὲ πολλὰ τῶν φύσει ὄντων· ἡ δὲ φύσις αὐτὴ τε ἐπιστήμης πρότερον, καὶ τὰ ὑπ' αὐτῆς γινόμενα. ὦν δὲ τὰ ὄργανα πρότερα, καὶ τὰς δυνάμεις πρότερον εἰκὸς [956a] ἐγγίνεσθαι ἡμῖν· τούτοις γὰρ χρώμενοι ἔξιν λαμβάνομεν, καὶ ἔχει ὁμοίως τὸ ἐκάστου ὄργανον πρὸς αὐτό· καὶ ἀνάπαλιν, ὡς τὰ ὄργανα πρὸς ἄλληλα, οὕτω τὰ ὄργανα πρὸς αὐτά. ὁ μὲν οὖν νοῦς διὰ ταύτην τὴν αἰτίαν πρεσβυτέροις οὖσιν ἡμῖν μᾶλλον ἐγγίνεται. μανθάνομεν δὲ θᾶπτον νεώτεροι ὄντες διὰ τὸ μηδὲν πω ἐπίστασθαι. ὅταν δὲ ἐπιστώμεθα, οὐκέτι ὁμοίως δυνάμεθα. δυνάμεθα δὲ ἔχεσθαι, καθάπερ καὶ μνημονεύομεν μᾶλλον οἷς ἂν ἔωθεν πρῶτον ἐντυγχάνωμεν, ἔπειτα προϊούσης τῆς ἡμέρας οὐκέτι ὁμοίως διὰ τὸ πολλοῖς ἐντετυχηκέναι.

Διὰ τί ἄνθρωπῳ πειστέον μᾶλλον ἢ ἄλλῳ ζώῳ; πότερον ὥσπερ Πλάτων Νεοκλεῖ ἀπεκρίνατο, ὅτι ἀριθμεῖν μόνον ἐπίσταται τῶν ἄλλων ζώων; ἢ ὅτι θεοὺς νομίζει μόνον; ἢ ὅτι μιμητικώτατον; μανθάνειν γὰρ δύναται διὰ τοῦτο.

Διὰ τί οὐ χαίρομεν θεώμενοι οὐδὲ ἐλπίζοντες ὅτι τὸ τρίγωνον δύο ὀρθαῖς ἴσας ἔχει τὰς ἐντὸς γωνίας, οὐδὲ τῶν ἄλλων τῶν τοιούτων οὐθέν, εἰ μὴ τῇ θεωρίᾳ, αὕτη δὲ ὁμοίως ἐστὶν ἡδεῖα καὶ εἰ τρισὶν ὀρθαῖς ἢ πλείοσιν ἴσας ἔσχεν. ἀλλ' ὅτι Ὀλυμπία ἐνικῶμεν, καὶ περὶ τῆς ναυμαχίας τῆς ἐν Σαλαμῖνι, χαίρομεν καὶ μεμνημένοι καὶ ἐλπίζοντες τοιαῦτα, ἀλλ' οὐ τάναντία τοῖς τοιούτοις. ἢ ὅτι ἐπὶ μὲν τοῖς τοιούτοις χαίρομεν ὡς γενομένοις ἢ οὕσιν, ἐπὶ δὲ τοῖς κατὰ φύσιν ὡς κατὰ ἀλήθειαν θεωρίας ἡδονῇ, ὡς ἔχει, μόνην ἡμῖν ποιεῖν, τὰς δὲ πράξεις τὴν ἀπὸ τῶν συμβαινόντων ἀπ' αὐτῶν. ἀνομοίων οὖν οὐσῶν τῶν πράξεων, καὶ τὰ ἀποβαίνοντα ἀπ' αὐτῶν γίνεται τὰ μὲν λυπηρὰ τὰ δὲ ἡδέα· φεύγομεν δὲ καὶ διώκομεν καθ' ἡδονὴν καὶ λύπην ἅπαντα.

Διὰ τί μέχρι ὑγείας πραγματεύονται οἱ ἰατροί; ἰσχναίνει γάρ, εἴτα ἐκ τούτου ξηραίνει, εἴτα ὑγίαν ἐποίησεν, εἴτα ἐνταῦθα ἔστη. πότερον οὐκ ἔστι δυνατόν ἐκ τούτου γενέσθαι ἄλλο; ἢ εἰ δυνατόν, ἄλλης ἐπιστήμης, καὶ ἔσται ὅ τις ἐξ ὑγείας ποιήσει ἄλλο τι; εἰ δὴ γίνεται ἐκ τῶν ἐναντίων καὶ τῶν μεταξύ, δῆλον ὅτι ἀρρωστεῖ, ἢ ξηρότερος ἢ ὑγρότερος ἢ τι τοιοῦτον. ποιεῖ δὴ ἐκ ψύχους ἥττον σφόδρα, καὶ τέλεον ὡδὶ θερμὸν καὶ ὡδὶ ξηρὸν ἢ ὑγρὸν μεταβαῖνον ἐκ τῶν ἐναντίων, ἢ μεταξύ, ἕως ἂν ἔλθῃ εἰς τὸ οὕτως ἔχειν, ὃ ἦν τοῦ ὑγιαίνειν· ἔκ τε τούτου οὐ πέφυκεν ἄλλο τι ὄν ἢ τὸ μεταξύ. δύναται μὲν οὖν ποιῆσαι ὃ ἔχων. ὡς γὰρ ἦλθεν, ἀναλῦσαι δύναται καὶ ἀπελθεῖν, οὐ μὴν ἢ γε τέχνη τούτου ἐστίν. ἀεὶ γὰρ βέλτιον. ὥστε οὐδὲ ἄλλη, οὔτε αὐτὴ ποιήσει [956b] ἐξ ὑγείας ἄλλο τι· οὐθέν γὰρ ἐγίνετο ἢ τὸ ἐναντίον τούτου, εἴπερ ἢ αὐτὴ ἐπιστήμη. οὕτω καὶ ἐπὶ οἰκίας οὐδὲν ποιήσειεν ἂν τοῦναντίον· οὐκ ἔστιν ἐν ἄλλῃ τέχνῃ ἐκ τούτου ποιήσουσα, πλὴν ὡς μέρους, οἷον ἢ σκυτικὴ ὑπόδημα ἐκ προσχίσματος. ἐξ ἑκατέρου γὰρ γίνεται διττῶς, ἢ συντιθεμένου ἢ φθειρομένου.

Διὰ τί τὸν φιλόσοφον τοῦ ῥήτορος οἶονται διαφέρειν; ἢ ὅτι ὁ μὲν φιλόσοφος περὶ αὐτὰ τὰ εἶδη τῶν πραγμάτων διατρίβει, ὁ δὲ περὶ τὰ μετέχοντα, οἷον ὁ μὲν τί ἐστὶν ἀδικία, ὁ δὲ ὡς ἀδικος ὁ δεῖνα, καὶ ὁ μὲν τί ἡ τυραννίς, ὁ δὲ οἷόν τι ὁ τύραννος.

Διὰ τί οἱ Διονυσιακοὶ τεχνῖται ὡς ἐπὶ τὸ πολὺ πονηροὶ εἰσιν; ἢ ὅτι ἥκιστα λόγου σοφίας κοινωνοῦσι διὰ τὸ περὶ τὰς ἀναγκαίας τέχνας τὸ πολὺ μέρος τοῦ βίου εἶναι, καὶ ὅτι ἐν ἀκρασίαις τὸ πολὺ τοῦ βίου εἰσίν, τὰ δὲ καὶ ἐν

ἀπορίαις; ἀμφότερα δὲ φαυλότητος παρασκευαστικά.

Διὰ τί οἱ ἐξ ἀρχῆς τῆς μὲν κατὰ τὸ σῶμα ἀγωνίας ἄθλόν τι προὔταξαν, σοφίας δὲ οὐθὲν ἔθηκαν; ἢ ὅτι ἐπεικῶς δεῖ τοὺς κριτάς, ἃ παρὰ διάνοιάν ἐστιν, ἢ μηθὲν χείρους τῶν ἀγωνιστῶν εἶναι ἢ κρείττους; εἰ δὲ ἔδει σοφία τοὺς πρωτεύοντας ἀγωνίζεσθαι καὶ ἄθλον προὔτέτακτο, κριτῶν ἂν ἤπορουν αὐτοῖς. ἐπὶ δὲ τῶν γυμνικῶν ἀγώνων ἅπαντός ἐστι κρῖναι, τῇ ὅψει μόνῃ θεασάμενον. ἔτι δὲ ὁ ἐξ ἀρχῆς κατασκευάζων οὐκ ἐβούλετο τοιαύτην ἀγωνίαν προθεῖναι τοῖς Ἑλλήσιν, ἐξ ὧν ἔμελλον στάσεις καὶ ἔχθραι μεγάλαι ἔσεσθαι· οἷον οἱ ἄνθρωποι, ὅταν τις ἢ ἐκκριθῇ ἢ προσδεχθῇ εἰς τι τῶν κατὰ τὸ σῶμα ἀθλημάτων, οὐ πάντῃ χαλεπῶς φέρουσιν οὐδὲ εἰς ἔχθραν καθίστανται τοῖς κρίνουσιν, ὑπὲρ δὲ τοῦ φρονιμωτέρους ἢ μοχθηροτέρους εἶναι τοῖς κρίνουσι μάλιστα ὀργίζονται καὶ ἀγανακτοῦσιν. στασιῶδες δὲ καὶ μοχθηρὸν τὸ τοιοῦτόν ἐστιν. ἔτι δὲ δεῖ τῆς ἀγωνίας τὸ ἄθλον κρείττον εἶναι. ἐπὶ μὲν γὰρ τῶν γυμνικῶν ἀθλημάτων τὸ ἄθλον αἰρετώτερον καὶ βέλτιον τῆς ἀγωνίας· σοφίας δὲ τί ἂν ἄθλον βέλτιον γένοιτο;

Διὰ τί ἄλλο νοεῖ καὶ ποιεῖ ἄνθρωπος μάλιστα; ἢ ὅτι τῶν ἐναντίων ἡ αὐτὴ ἐπιστήμη; ἢ ὅτι ὁ μὲν νοῦς πολλῶν ἐστίν, ἡ δὲ ὄρεξις ἑνός; ὁ μὲν οὖν ἄνθρωπος τῷ νῷ τὰ πλεῖστα ζῇ, τὰ δὲ θηρία ὀρέξει καὶ θυμῷ καὶ ἐπιθυμίᾳ.

Διὰ τί φρόνιμοί τινες κτώμενοι οὐ χρώμενοι διατελοῦσιν; πότερον ὅτι τῷ ἔθει χρώνται; ἢ διὰ τὸ ἐν ἐλπίδι ἡδύ;

ὅτι ἡ αἴσθησις καὶ ἡ διάνοια τῷ ἡρεμεῖν τὴν ψυχὴν ἐνεργεῖ· ὁ καὶ ἡ ἐπιστήμη δοκεῖ εἶναι, ὅτι τὴν ψυχὴν ἵστησιν. [957a] κινουμένης γὰρ καὶ φερομένης οὔτε αἰσθῆσθαι οὔτε διανοηθῆναι δυνατόν. διὸ καὶ τὰ παῖδιά καὶ οἱ μεθύοντες καὶ οἱ μαινόμενοι ἀνόητοι· διὰ γὰρ τὸ πλῆθος τοῦ θερμοῦ τοῦ ἐνυπάρχοντος πλείστη κίνησις αὐτοῖς καὶ σφοδροτάτη συμβαίνει, ληγούσης δὲ ταύτης ἐμφρονέστεροι γίνονται· ἀταράχου γὰρ οὔσης τῆς διανοίας μᾶλλον ἐφιστάναι δύνανται αὐτήν. οἱ τ' ἐν τῷ καθεύδειν ἐνυπνιαζόμενοι ἵσταμένης τῆς διανοίας, καὶ καθ' ὅσον ἡρεμεῖ, ὀνειρώπτουσιν. μάλιστα γὰρ ἐν τοῖς ὕπνοις ἡ ψυχὴ κινεῖται. περισταμένου γὰρ τοῦ θερμοῦ ἐκ τοῦ ἄλλου σώματος εἰς τὸν ἐντὸς τόπον, τότε πλείστη καὶ σφοδροτάτη κίνησις ὑπάρχει, οὐχ ὥσπερ οἱ πολλοὶ ὑπολαμβάνουσι τότε ἡρεμεῖν καὶ καθ' αὐτήν εἶναι, καὶ μάλιστα ὅταν μηδὲν ἴδωσιν ἐνύπνιον. συμβαίνει δὲ τοῦναντίον· διὰ γὰρ τὸ ἐν πλείστη κινήσει εἶναι καὶ μηδὲ κατὰ μικρὸν ἡρεμεῖν, οὐδὲ διανοεῖσθαι δύναται. ἐν πλείστη δὲ κινήσει, ὅταν ἡδιστα καθεύδῃ, εἰκότως ἐστίν, ὅτι τότε μάλιστα καὶ πλεῖστον θερμὸν ἀθροίζεται εἰς τὸν εἶσω τόπον. ὅτι δὲ ἐν τῇ κινήσει οὔσα ἡ

ψυχὴ οὐ μόνον ὕπαρ ἄλλ' οὐδ' ἐν τοῖς ὕπνοις δύναται διανοεῖσθαι, κἀκεῖνο σημεῖον· ἐν γὰρ τοῖς μετὰ τὴν πρόσεσιν τῶν σιτίων ὕπνοις ἤκιστα ἔστιν ἐνύπνια ὀρᾶν. τότε δὲ μάλιστα συμβαίνει κινεῖσθαι αὐτὴν διὰ τὴν ἐπεισενεχθεῖσαν τροφήν. τό τε ἐνύπνιον ἔστιν, ὅταν διανοοῦμένοις καὶ πρὸ ὁμμάτων τιθεμένοις ὕπνος ἐπέλθῃ. διὸ καὶ ταῦτα μάλιστα ὀρῶμεν ἢ πράττομεν ἢ μέλλομεν ἢ βουλόμεθα· περὶ γὰρ τούτων μάλιστα πλειστάκις λογισμοὶ καὶ φαντασίαι ἐπιγίνονται. καὶ οἱ βελτίους βελτίω τὰ ἐνύπνια ὀρῶσι διὰ ταῦτα, ὅτι καὶ ἐγρηγορότες περὶ βελτιόνων διανοοῦνται, οἱ δὲ χεῖρον ἢ τὴν διάνοιαν ἢ τὸ σῶμα διακείμενοι χεῖρω. καὶ γὰρ ἢ τοῦ σώματος διάθεσις πρὸς τὴν τῶν ἐνυπνίων φαντασίαν συμβλητικόν· τοῦ γὰρ νοσοῦντος καὶ αἱ τῆς διανοίας προθέσεις φαῦλαι, καὶ ἔτι διὰ τὴν ἐν τῷ σώματι ταραχὴν ἐνοῦσαν ἢ ψυχὴ οὐ δύναται ἡρεμεῖν. οἱ δὲ μελαγχολικοὶ διὰ τοῦτο ἐξάπτουσιν ἐν τοῖς ὕπνοις, ὅτι πλείονος τῆς θερμασίας οὔσης μᾶλλον τοῦ μετρίου ἢ ψυχὴ ἐν κινήσει, σφοδροτέρας δὲ τῆς κινήσεως οὔσης οὐ δύνανται καθεύδειν.

## ΛΑ. ΟΣΑ ΠΕΡΙ ΟΦΘΑΛΜΟΥΣ.

Διὰ τί τρίψαντες τὸν ὀφθαλμὸν παυόμεθα τῶν παρμῶν; ἢ ὅτι ἀναπνοὴ ταύτῃ γίνεται τῷ ὑγρῷ; δακρύει γὰρ ὁ ὀφθαλμὸς μετὰ τὴν τρίψιν· ὁ δὲ παρμὸς διὰ πλῆθος [957b] ὑγροῦ. ἢ ὅτι τὸ ἔλαττον θερμὸν φθείρεται ὑπὸ τοῦ πλείονος; ὁ δὲ ὀφθαλμὸς τριφθεὶς πλείω λαμβάνει θερμότητα τῆς ἐν τῇ ῥίνι. διὰ τοῦτο δὲ κἄν τις αὐτὴν τὴν ῥίνα τρίψῃ, παύεται ὁ παρμὸς.

Διὰ τί τῷ ἐνὶ ὀφθαλμῷ ἀκριβέστερον ὀρῶσιν ἢ τοῖν δυοῖν; ἢ ὅτι πλείους οὔσαι κινήσεις τοῖν δυοῖν γίνονται, οἷον τοῖς διεστραμμένοις; οὐκουν μία ἢ κινήσεις, τοῦ δὲ ἐνὸς ἀπλῆ. ἦττον οὖν ὀρῶσιν ἀκριβέστερον.

Διὰ τί ὀργιζόμενοι μὲν τοὺς ὀφθαλμοὺς μᾶλλον ἐπιδιδόασιν πρὸς τὸ ἐρυθριᾶν, αἰσχυνόμενοι δὲ τὰ ὦτα; ἢ διότι οἱ μὲν καταψύχονται ἐν τῇ αἰδοῖ (ἐν ὀφθαλμοῖς γὰρ αἰδώς) ἀντιβλέπειν οὐ δύνανται; καὶ ἡ δειλία κατάψυξις τίς ἔστιν ἐνταῦθα. μεθίσταται δὲ εἰς τὸναντίον τῷ ἔμπροσθεν τὸ ὀπισθεν. τὰ δὲ ὦτα ἀντίκειται· διὸ καὶ μάλιστα ἐρυθριῶσιν αἰσχυνόμενοι. ἐν δὲ τῷ κνήθεσθαι ἐπὶ τὸ αἰσθητικώτερον καὶ κινητικώτερον ἢ βοήθεια ὡς ἀδικουμένου· φοβουμένοις γὰρ ἐνταῦθα ἐκλείπει μάλιστα.

Διὰ τί θατέρου καταληφθέντος ὀφθαλμοῦ ὁ ἕτερος ἀτενίζει μᾶλλον; ἢ διότι ἐκ ταύτου ἡρτηνται αἱ ἀρχαὶ τῶν ὀφθαλμῶν; θατέρου οὖν κινουμένου καὶ ἡ κοινὴ ἀρχὴ κινεῖται, ἐκείνης δὲ κινουμένης καὶ ὁ ἕτερος. λεφθέντος οὖν

θατέρου ἢ κίνησις κινήσει αὐτόν, ὥστε δύναται ἀτενίζειν μᾶλλον.

Διὰ τί οἱ ἐκ γενετῆς τυφλοὶ οὐ γίνονται φαλακροί; ἢ ὅτι πημαίνει τὰ ὄμματα ὑγρότης οὕσα πολλὴ ἐν τῷ περὶ τὴν κεφαλὴν τόπῳ; διὸ τῶν ῥευματικῶν εἰς τοὺς ὀφθαλμοὺς τὰς τε περὶ τοὺς κροτάφους φλέβας κάουσι, πυκνοῦντες τοὺς τῶν ὑγρῶν πόρους, καὶ ξύουσι τὴν κεφαλὴν, διατέμνοντες τὸ ἐν αὐτῇ δέρμα. ἐπεὶ οὖν πημαίνει τοὺς ὀφθαλμοὺς τὸ ἐν αὐτῇ περίττωμα γινόμενον, κωλύοι ἂν αὐτοὺς ταῦτο τοῦτο ἐξ ἀρχῆς γίνεσθαι, πλεον συνιστάμενον ἐν αὐτῇ. ἐπεὶ δὲ ἐκ περιττωμάτων θρὶξ φύεται, τοῦτο δὲ ἐν τῇ τῶν τυφλῶν κεφαλῇ ἐκ γενετῆς ἐστὶ πολὺ, εἰκότως οὐκ εἰσὶ φαλακροί.

Διὰ τί οἱ ἐξόφθαλμοι καπνίζονται μᾶλλον; ἢ ὅτι τάχιστα προσπίπτει πρὸς τὰ προέχοντα;

Διὰ τί εἰς μὲν τὰ δεξιὰ ἀμφοτέρας τὰς ὀψεις ἅμα διαστρέφειν δυνάμεθα, καὶ εἰς τὰ ἀριστερὰ καὶ πρὸς τὴν ῥῖνα, καὶ εἰς τὸ ἀριστερὸν δὲ ἢ τὸ δεξιὸν τὴν ἐτέραν, ἅμα δὲ εἰς τὸ δεξιὸν καὶ ἀριστερὸν ἀδυνατοῦμεν; ὁμοίως δὲ καὶ εἰς τὸ κάτω καὶ εἰς τὸ ἄνω· ἅμα μὲν γὰρ ἐπὶ ταῦτο δυνάμεθα, χωρὶς δὲ οὐ. ἢ ὅτι αἱ ὀψεις δύο οὕσαι ὁμοίως ἐξ ἐνὸς συνήρτηνται; [958a] ὅσα δὲ τοιαῦτα, ἄκρου θατέρου κινουμένου ἀνάγκη θάτερον ἀκολουθεῖν ἐπὶ ταῦτό. τῷ γὰρ ἐτέρῳ ἄκρῳ ἢ ἀρχὴ θάτερον ἄκρον. εἰ οὖν τὸ ἐν ἀδύνατον ἅμα εἰς τὰναντία κινεῖσθαι, ἀδύνατον καὶ τὰς ὀψεις. τὰ μὲν γὰρ ἄκρα εἰς τὰναντία ἂν κινοῖτο, εἰ τὸ μὲν ἄνω τὸ δὲ κάτω κινοῖτο, ἢ δὲ ἀρχὴ ἀμφοῖν ἂν ἀκολουθοίη· ὅπερ ἀδύνατον. ἢ δὲ διαστροφή ἐστὶ τῶν ὀμμάτων διὰ τὸ ἀρχὴν ἔχειν τὰς σφαίρας, καὶ μέχρι τοῦ στρέφεσθαι εἰς τὰ ἄνω καὶ κάτω καὶ εἰς πλάγιον. ὅταν οὖν ἔχουσαι ὥς ἂν ὁμοίως ἔχοιεν τῇ θέσει ἀλλήλαις, καὶ ἐν μέσῳ τοῦ ἐπὶ τὸ ἄνω καὶ κάτω κινεῖσθαι, καὶ εἰς πλάγιον ἐπὶ τοῦ αὐτοῦ σημείου ἑαυτῶν λάβωσι τὴν ὀψιν, αὗται μὲν ἀδιάστροφοί τε καὶ μάλιστα ἀκίνητοι τῇ θέσει· ὅσαι δὲ ἐπὶ ταῦτο σημείου λάβωσι τὰς ὀψεις, ἀδιάστροφοι μὲν εἰσι, διαφέρουσι δὲ ἀλλήλων. καίτοι κρύπτεται τοῦ μέλανός τι καὶ τοῖς ἄνω βάλλουσι τὰ λευκά, οἷον μελλέπταρμοι· ἕτεροι δὲ εἰς τὸ πλάγιον, ὥσπερ οἱ μανικοί, οἱ δὲ εἰς τοὺς μυκτῆρας, ὥσπερ τὰ τραγικὰ πρόσωπα καὶ οἱ στρυφνοί· σύννουν γὰρ τὸ βλέμμα. ὅσοι δὲ μήθ' ὁμοίως κειμένων τῶν σφαιρῶν ἐπὶ ταύτῳ σημείῳ ἔχουσι τὰς ὀψεις, ἢ ὁμοίως μὲν κειμένων μὴ ἐπὶ τῷ αὐτῷ δέ, οὗτοι διεστραμμένοι εἰσίν· διὸ ὑποβλέπουσι καὶ συνάγουσι τὰ ὄμματα. πειρῶνται γὰρ ἐπὶ ταῦτόν καταστῆσαι σχῆμα τὴν σφαῖραν. ὥστε τὸν μὲν ἐῷσι, τὸν δὲ σχηματίζουν τῶν ὀφθαλμῶν. ἐὰν γὰρ μὴ κατ' αὐτὸ σημεῖον τεθῶσιν αἱ ὀψεις, ἀνάγκη διεστράφθαι. ὥσπερ γὰρ τοῖς ὑποβάλλουσιν ὑπὸ τὸν ὀφθαλμόν [τὸ ἐν] δύο φαίνεται (καὶ γὰρ ἐκείνοις κεκίνηται ἢ ἀρχή), καὶ



τούτοις ὁμοίως. ἔαν μὲν οὖν ἄνω κινηθῇ ὁ ὀφθαλμός, τὸ πέρας κάτω τῆς ὀψεως γίνεται, ἔαν δὲ κάτω, ἄνω τὸ πέρας. ἐν ἐνὶ δὲ ὀφθαλμῷ μεθισταμένῳ κινεῖσθαι μὲν τὸ ὀρώμενον δοκεῖ διὰ ταῦτα ἄνω ἢ κάτω, ὅτι καὶ ἡ ὄψις, δύο δὲ οὐ φαίνεται, ἂν μὴ δύο αἱ ὀψεις ὦσι, καὶ διαστρέφει. τοιαύτη μὲν τῷ ἑτεροφθάλμῳ γίνεται, ὥστε δύο φαίνεσθαι· κατὰ τὴν θέσιν δὲ γίνεται τῷ μὴ κατὰ μέσον τοῦ ὀμματος κεῖσθαι.

ἂ τί οἱ μύωπες μικρὰ γράμματα γράφουσιν; ἄτοπον γὰρ τὸ μὴ ὀξὺ ὀρῶντας ποιεῖν ἔργον ὀξὺ ὀρώντων. πότερον ὅτι μεγάλα φαίνεται τὰ μικρά, ἔαν ἢ ἐγγύς· οἱ δὲ προσάγοντες γράφουσιν; ἢ διὰ τὸ συνάγοντας τὰ βλέφαρα γράφειν; δι' ἀσθένειαν γὰρ τῆς ὀψεως, ἂν μὲν ἀναπεπταμένοις [958b] γράφωσι τοῖς ὀμμασι, διασπωμένα ἢ ὄψις ἀμβλὺ ὀρᾷ, οὕτω δὲ ἀθρόως προσπίπτει· γωνίαν δὲ μικρὰν ποιοῦσα ἐξ ἀνάγκης ποιεῖ μικρὰ γράφειν.

Διὰ τί ὀφθαλμιάσαντες ἔνιοι ὀξύτερον ὀρῶσιν; ἢ διὰ τὸ ἀποκεκαθάρθαι τὰ ὀμματα; πολλάκις γὰρ ἢ ἕξω πυκνότης ἀποστέγει τὴν ὄψιν, ἀποδακρύσαντι δὲ λύεται. διὸ καὶ τὸ ἀποδάκνεσθαι συμφέρει, οἷον κρόμμυον· θάτερον δὲ πολέμιον, οἷον ὀρίγανον.

Διὰ τί τῇ μιᾷ ὄψει ἀπαθέστεροι; ἢ διότι ἔλαττον ἢ ψυχὴ πάσχει, ὥστε ἔλαττον τὸ πάθος.

Διὰ τί τοῖς δισταμένοις δύο φαίνεται; ἢ διότι οὐκ ἀφικνεῖται ἐπὶ τὸ αὐτὸ σημεῖον ἑκατέρου τῶν ὀμμάτων ἢ κινήσεις; ὥσπερ οὖν δύο ὀρᾷν τὸ δις ὀρᾷν οἶται ἢ ψυχῇ. ὅμοιον καὶ ἐπὶ τῶν δακτύλων τῆς ἐπαλλάξεως· δύο γὰρ τὸ ἐν δοκεῖ ὡς δις ἀπτομένη ἐνί.

Διὰ τί οὐ διαφέρουσιν αἱ αἰσθήσεις αἱ ἐν τοῖς δεξιοῖς τῶν ἀριστερῶν, ἐν δὲ τοῖς ἄλλοις πᾶσι κρείττω τὰ δεξιὰ; πότερον διὰ τὸ ἔθος, ὅτι εὐθὺς ὁμοίως ἀμφοῖν ἐθιζόμεθα αἰσθάνεσθαι; τὰ δὲ δεξιὰ τῷ ἔθει δοκεῖ διαφέρειν, ἐπεὶ ἐθισθεῖσιν ἀμφιδέξιοι γίνονται. ἢ ὅτι τὸ μὲν αἰσθάνεσθαι πάσχειν τί ἐστι, τὰ δὲ δεξιὰ διαφέρει τῷ ποιητικώτερα εἶναι καὶ ἀπαθέστερα τῶν ἀριστερῶν.

Διὰ τί ἐν μὲν τοῖς ἄλλοις κρείττω τὰ δεξιὰ, ἐν δὲ ταῖς αἰσθήσεσιν ὅμοια; ἢ διότι ταῦτα μὲν ὁμοίως ἐθιζόμεθα κατ' ἀμφοτέρα τῷ ἔθει; ἔτι τὸ μὲν αἰσθάνεσθαι πάσχειν τί ἐστιν, ἢ δὲ τῶν δεξιῶν διαφορὰ τῷ εἰς τὸ ποιεῖν καὶ οὐκ εἰς τὸ πάσχειν.

Διὰ τί τὸ γυμνάζεσθαι ἀσύμφορον πρὸς ὀξυωπίαν; ἢ ὅτι ξηρὸν ποιεῖ τὸ

ὄμμα ἢ γυμνασία, ὥσπερ καὶ τὸ ἄλλο σῶμα; ἢ δὲ ξηρότης σκληρύνει τὸ δέρμα πᾶν, ὥστε καὶ τὸ ἐπὶ τῇ κόρῃ. διὸ καὶ οἱ πρεσβῦται οὐκ ὀξὺ ὀρώσιν· καὶ γὰρ τῶν γερόντων σκληρόδερμα, ἅμα δὲ καὶ ῥυσά, ὥστε ἐπικαλύπτεται ἡ ὄψις.

Διὰ τί οἱ μύωπες βλέπουσι μὲν οὐκ ὀξὺ, γράφουσι δὲ μικρά; καίτοι τὸ μικρὸν ὀξὺ βλέποντος καθορᾶν ἐστίν. ἢ διότι ἀσθενῇ ἔχοντες τὴν ὄψιν συνάγουσι τὰ βλέφαρά εἰς μικρόν; ἀθρόα γὰρ ἐξιοῦσα ἡ ὄψις μᾶλλον ὀρᾷ, ἀναπεπταμένου δὲ τοῦ ὀμματος διασπᾶται. διὰ μὲν οὖν τὴν ἀσθένειαν συνάγουσι τὸ βλέφαρον, διὰ δὲ τὸ ἐκ μικροῦ ὀρᾶν μικρὸν [959a] μέγεθος ὀρώσιν. ὅσον δὲ ὀρώσι μέγεθος, τοσοῦτον καὶ γράφουσιν.

Διὰ τί οἱ μύωπες συνάγοντες τὰ βλέφαρα ὀρώσιν; ἢ δι' ἀσθένειαν τῆς ὀψεως, ὥσπερ καὶ οἱ πρὸς τὰ πόρρω τὴν χεῖρα προσάγοντες, οὕτω καὶ τὰ βλέφαρα πρὸς τὰ ἐγγὺς προστίθενται ὥσπερ χεῖρα; τοῦτο δὲ ποιοῦσιν, ἵνα ἀθροωτέρα ἡ ὄψις ἐξίῃ, δι' ἐλάττονος ἐξιοῦσα, καὶ μὴ εὐθύς ἐξ ἀναπεπταμένου ἐξιοῦσα διασπασθῇ. ὀρᾷ δὲ ἡ πλείων μεῖζον.

Διὰ τί εἰς τὸ πλάγιον κινουῖσι τὸν ὀφθαλμὸν οὐ φαίνεται δύο τὸ ἓν; ἢ ὅτι ἐπὶ τῆς αὐτῆς γίνεται γραμμῆς ἡ ἀρχή; δύο δὲ φαίνεται ταύτης μεταβαλλούσης ἄνω ἢ κάτω. εἰς δὲ πλάγιον οὐδὲν διαφέρει, ἐὰν μὴ ἅμα καὶ ἄνω. τί δὴ ἐπὶ μὲν τῆς ὀψεως ἔστιν ὥστε φαίνεσθαι τὸ ἓν δύο, ἅν πως τεθῶσιν οἱ ὀφθαλμοὶ πρὸς ἀλλήλους, ἐπὶ δὲ τῶν ἄλλων αἰσθήσεων οὐκ ἔστιν; ἢ καὶ ἐπὶ τῆς ἀφῆς γίνεται τῇ ἐπαλλάξει τῶν δακτύλων τὸ ἓν δύο; ἐπὶ δὲ τῶν ἄλλων οὐ γίνεται, ὅτι οὕτε ἔξω ἀποτεινομένων αἰσθάνεται, οὐδὲ δύο. γίνεται δὲ διὰ τοῦτο διόπερ καὶ ἐπὶ τῶν δακτύλων· μιμεῖται γὰρ τὴν ὄψιν.

Διὰ τί τοῦ μὲν ἄλλου σώματος τὰ ἀριστερὰ ἀσθενέστερα, τῶν δὲ ὀφθαλμῶν οὐ, ἀλλ' ὁμοίως ὀξὺ; ἢ ὅτι τὰ μὲν δεξιὰ τῷ ποιητικῷ εἶναι διαφέρουσι, τῷ δὲ παθητικῷ οὐ διαφέρουσιν; αἱ δὲ ὀψεις παθητικά.

Διὰ τί τῇ ὄψει πρὸς μὲν τὰ ἄλλα ἀτενίζοντες χεῖρον διατιθέμεθα, πρὸς δὲ τὰ χλωρὰ καὶ ποώδη, οἷον λάχανα καὶ τὰ τούτοις ὅμοια, βέλτιον; ἢ ὅτι πρὸς μὲν τὸ λευκὸν καὶ μέλαν ἥκιστα δυνάμεθα ἀτενίζειν (ἄμφω γὰρ λυμαίνεται τὴν ὄψιν), τὰ δὲ τοιαῦτα τῶν χρωμάτων μέσον ἔχει τούτων· διὸ μετρίως τῆς ὀψεως διατιθεμένης οὐδὲ ἐξαδυνατοῦμεν αὐτῇ, βέλτιον δὲ διατιθέμεθα. τάχα δὲ ἴσως καθάπερ ἐπὶ τῶν σωμάτων σφοδρότερον πονοῦντες χεῖρον ἔχομεν, τὸ μέσον δὲ βέλτιστα διατίθησι, τὸν αὐτὸν τρόπον καὶ τὴν ὄψιν. πρὸς μὲν γὰρ στερεὰ ἀτενίζοντες πονοῦμεν αὐτήν, πρὸς δὲ τὰ ὑγρά μηδενὸς

ἀντιφράττοντος οὐ διαπονοῦμεν. τὰ δὲ χλωρὰ στερεὰ τε μετρίως, καὶ ὑγρὸν ἐν αὐτοῖς ἱκανόν. διὸ βλάπτει τε οὐθέν, καὶ διαναγκάζει τὴν ὄψιν πρὸς τούτοις εἶναι διὰ τὸ τὴν τοῦ χρώματος κρᾶσιν σύμμετρον ἔχειν πρὸς τὴν ὄψιν.

Διὰ τί τὰ μὲν ἄλλα ἀμφοτέροις τοῖς ὀφθαλμοῖς μᾶλλον ὁρῶμεν, τὸ δὲ εὐθύ τὸ ἐπὶ τῶν στίχων τῷ ἐνὶ προσάγοντες πρὸς τὰ γράμματα μᾶλλον καθορῶμεν; ἢ ἀμφοτέραι [959b] μὲν αἱ ὄψεις συμπίπτουσιν, καθάπερ λέγουσιν οἱ περὶ τὰ ὀπτικά, ταραχὴν παρέχουσιν, ἐπειδὴ δὲ τῇ μιᾷ θεωρῶμεν, πρὸς εὐθεῖαν τὴν ὄψιν, ὥσπερ πρὸς κανόνα, μᾶλλον φαίνεται τὸ εὐθύ.

Διὰ τί ὁ καπνὸς τοὺς ὀφθαλμοὺς μᾶλλον δάκνει; ἢ ὅτι μόνοι ἀσθενέστατοι; ἀεὶ γὰρ τὰ ἔσω τοῦ σώματος ἀσθενέστατα. σημεῖον δὲ ὅτι καὶ τὸ ὄξος καὶ ἕκαστον τῶν δριμέων τὴν μὲν ἔξω σάρκα οὐ δάκνει, τὴν δὲ ἐντός, ὅτι ἀραιοτάτη τοῦ σώματος καὶ μάλιστ' ἔχει πόρους· αἱ γὰρ ὄψεις διὰ τινων πόρων ἐκπίπτουσιν, ὥστε τὸ ἔσω δηκτικώτατον ἀπὸ τῆς σαρκὸς ἀποπίπτει. ὁμοίως δὲ καὶ τὸ κρόμμυον, καὶ ὅσα ἄλλα δάκνει τοὺς ὀφθαλμούς. τὸ δὲ ἔλαιον μάλιστα τῶν ὑγρῶν, ὅτι λεπτομερέστατον· τοιοῦτον δ' ὃν εἰσδύνει διὰ τῶν πόρων· τὸ δ' ὄξος ἐν φαρμάκῳ τῇ ἄλλῃ σαρκί.

Διὰ τί ὁ ὀφθαλμὸς μόνον τοῦ σώματος, ἀσθενέστατος ὢν, οὐ ῥιγοῖ; ἢ ὅτι πίων ἐστὶν ὁ ὀφθαλμός, σαρκὸς δὲ οὐθέν; τὰ δὲ τοιαῦτα ἄριγά ἐστίν. οὐ γὰρ δὴ ὅτι γε πῦρ ἐστὶν ἡ ὄψις, διὰ τοῦτο οὐ ῥιγοῖ· οὐ γὰρ τοιοῦτόν γε ἐστὶ τὸ πῦρ ὥστε θερμαίνειν.

Διὰ τί δάκρυα, ἐὰν μὲν κλαίοντες ἀφίωμεν, θερμά ἐστίν, ἐὰν δὲ πονοῦντες τοὺς ὀφθαλμοὺς δακρύωμεν, ψυχρά; ἢ ὅτι τὸ μὲν ἀπεπτον ψυχρόν, τὸ δὲ πεπεμμένον θερμόν; ἢ δὲ μαλακία ὅλως πᾶσά ἐστίν ἐξ ἀπεψίας, καὶ τῶν τοὺς ὀφθαλμοὺς πονούντων ἀπεπτόν ἐστὶ τὸ δάκρυον· διὸ ψυχρόν. διὰ τοῦτο καὶ οἱ ἰατροὶ οἷοντα σημεῖον εἶναι μεγάλης νόσου τοὺς ψυχροὺς ἰδρῶτας, τοὺς δὲ θερμοὺς τοῦναντίον ἀπαλλακτικούς. ὅταν μὲν γὰρ ἡ τὸ περίττωμα πολὺ, οὐ δύναται τὸ ἐντὸς θερμὸν πέττειν, ὥστε ἀνάγκη ψυχρὸν εἶναι· ὅταν δὲ ὀλίγον, κρατεῖ. γίνονται δὲ ἐκ τῶν περιττωμάτων αἱ ἄρρωστία.

Διὰ τί ποτε εὐκινήτων ὄντων τῶν δεξιῶν μερῶν ὁ ὀφθαλμὸς ὁ ἀριστερὸς μᾶλλον τοῦ δεξιοῦ συνάγεται; ἢ ὅτι τὰ ἀριστερὰ πάντα ὑγρότερα τῶν δεξιῶν ἐστί, τὰ δὲ ὑγρότερα μᾶλλον συνάγεσθαι πέφυκεν· εἴτα εἰς τὸ δεξιὸν μᾶλλον ἀποτελεῖν δύναται, τοῦ ἀριστεροῦ δυναμένου καὶ καθ' αὐτό.

Διὰ τί ἀμφοτέροι κατὰ ἀσθενείαν τινὰ τῶν ὀφθαλμῶν διακείμενοι, ὃ τε μύωψ καὶ ὁ πρεσβύτες, ὁ μὲν ἐγγὺς προσάγει, ἅν τι βούληται ἰδεῖν, ὁ δὲ πόρρω ἀπάγει; ἢ ὅτι οὐχ ὁμοία ἡ ἀσθένεια παρέπεται αὐτοῖς; ὁ μὲν γὰρ πρεσβύτες [960a] αὐτὸ ἰδεῖν ἀδύνατός ἐστιν· οὗ δὲ συμπίπτει ἡ ὄψις αὐτῷ, ἀπάγει τὸ θεώμενον, ἅτε καὶ μάλιστα μέλλων ὀψεσθαι· πόρρω δὲ συμπίπτει. ὁ δὲ αὐτὸ μὲν ὁρᾷ, ποῖα δὲ κοῖλα καὶ ποῖα ἐξέχοντα τοῦ ὀρωμένου, οὐκέτι δύναται κρίνειν, ἀλλὰ περὶ ταῦτα ἀπατᾶται. τὰ δὲ κοῖλα καὶ τὰ ἐξέχοντα μάλιστα τῇ αὐγῇ κρίνεται. πόρρωθεν μὲν οὖν οὐ δύναται τῇ αὐγῇ καταμαθεῖν πῶς ἐπιβάλλει ἐπὶ τὸ ὁρατόν· ἐγγύθεν δὲ μᾶλλον καταφανής ἐστιν.

Διὰ τί τῶν ζώων ἄνθρωπος ἢ μόνον ἢ μάλιστα διαστρέφεται; ἢ ὅτι ἢ μόνον ἢ μάλιστα ἐπίληπτον ἐν τῇ νεότητι γίνεται, ὅτε καὶ διαστρέφεσθαι συμβαίνει πᾶσιν;

Διὰ τί οἱ ἄνθρωποι μόνοι τῶν ἄλλων ζώων τὰ ὄμματα διαστρέφονται; πότερον διὰ τὸ ἐλάχιστον διάστημα εἶναι τῶν ὀμμάτων, καὶ ἐπ' εὐθείας, ὥστε εὐδελον σφόδρα γίνεται τὸ μὴ κατωρθωμένον. ἢ διότι τῶν ἄλλων μονόχροα τὰ ὄμματά ἐστι μᾶλλον· εἰ δ' ἦν ἐν χρωμά τι τοῦ ὀμματος, οὐκ ἦν διαστροφή. ἢ διότι μόνοι ἐν τῷ γένει ἐπίληπτοι γίνονται τῶν ζώων, ἢ δ' ἐπίληψις διαστροφήν ποιεῖ, ὅταν γένηται, ὥσπερ καὶ τῶν ἄλλων μορίων· ἀλλ' ἐνίοις ὀψὲ παντελῶς γίνεται ἡ διαστροφή, ὅσοις τὸ ἄρρώστημα.

Διὰ τί πρὸς τὸν λύχνον καὶ πρὸς τὸν ἥλιον προστησάμενοι τὴν χεῖρα πρὸ τοῦ φωτὸς μᾶλλον ὁρῶμεν; ἢ ὅτι τὸ ἀπὸ τοῦ ἡλίου καὶ λύχνου φῶς προσπίπτον μὲν ἡμῶν πρὸς τὴν ὄψιν ἀσθενεστέραν ποιεῖ δι' ὑπερβολήν; φθεῖρει γὰρ αὐτὰ καὶ τὰ συγγενῇ τῇ ὑπερβολῇ. εἰρχθέντα δὲ ὑπὸ τῆς χειρὸς τὴν μὲν ὄψιν οὐ πημαίνει, τὸ δὲ ὀρώμενον ὁμοίως ἐστὶν ἐν φωτί. διὸ ἡ μὲν μᾶλλον δρᾷ, τὸ δὲ ὀρώμενον οὐδὲν ἥττον ὁρᾷται.

Διὰ τί χεῖρ μὲν καὶ ποὺς διαφορὰν ἔχει πρὸς τὰ δεξιὰ τὰ ἀριστερά, ὄμμα δὲ καὶ ἀκοὴ οὐ; ἢ ὅτι τὰ στοιχεῖα τὰ εἰλικρινῇ ἀδιάφορα, ἐν δὲ τοῖς ἐκ τῶν στοιχείων ἡ διαφορά; αὐτὰ δὲ αἰ αἰσθήσεις εἰσὶν ἐξ εἰλικρινῶν, ἡ μὲν ὄψις πυρός, ἡ δ' ἀκοὴ ἀέρος.

## **ΛΒ. ΟΣΑ ΠΕΡΙ ΩΤΑ.**

Διὰ τί τὰ ὦτα ὄντα ἀναιμότατα τοῦ προσώπου, ὅταν αἰσχύνονται, ἐρυθριᾷ μάλιστα; πότερον ὅτι εἰς τὸ κενὸν μάλιστα πορεύεσθαι πέφυκε τὸ ἀλλότριον ὑγρόν, ὥστε ὅταν διαλυθῇ ὑπὸ τῆς θερμότητος, ἢ γίνεται

αἰσχυνομένοις, συνέρχεται εἰς ταῦτα; ἢ διότι ἐπὶ τοῖς κροτάφοις ἐπικεῖνται, [960b] εἰς οὓς τὸ ὑγρὸν ἀθροίζεται μάλιστα; αἰσχυνομένων δὲ εἰς τὸ πρόσωπον ἔρχεται ἡ ὑγρότης· διὸ καὶ ἐρυθριῶσιν. τοῦ δὲ προσώπου ἥκιστα βάθος ἔχει τὰ ὦτα· καὶ φύσει θερμότετα καὶ εὐχροα, ἐὰν μὴ ἀπηρτημένα πόρρωθεν ἢ τῷ ψύχει. διὸ καὶ εὐχρούστατον τῶν ἐν τῷ προσώπῳ μορίων. ὥστε ὅταν σκεδασθῇ ἡ θερμότης, μάλιστα ἐπιπολῆς οὖσα ἐν τούτοις ποιεῖ ἐρυθριᾶν.

Διὰ τί τὰ ὦτα ἐν τῇ θαλάττῃ ῥήγνυνται τοῖς κολυμβῶσιν; πότερον διὰ τὸ κατέχειν τὸ πνεῦμα πληρούμενον βιάζεται; ἢ εἰ τοῦτ' αἷτιον, ἔδει καὶ ἐν τῷ ἄερι. ἢ ὅτι μὴ ὑπεῖκον διακόπτεται θάττον, καὶ ἀπὸ σκληροτέρου ἢ μαλακοῦ; τὸ οὖν πεφυσημένον ἦττον ὑπεῖκει. τὰ δὲ ὦτα, ὥσπερ εἴρηται, ὑπὸ τοῦ κατέχεσθαι τὸ πνεῦμα ἐμφυσᾶται, ὥστε τὸ ὕδωρ, σκληρότερον ὢν τοῦ ἀέρος, προσπίπτον διακόπτει.

Διὰ τί οἱ κολυμβηταὶ σπόγγους περὶ τὰ ὦτα καταδοῦνται; ἢ ἵνα ἡ θάλαττα βίᾳ ἰοῦσα μὴ ῥηγνύῃ τὰ ὦτα. οὕτω μὲν γὰρ οὐ γίνεται, ὥσπερ ἀφηρημένων, πλήρη.

Διὰ τί ὁ ἐν τοῖς ὠσὶ ῥύπος πικρός ἐστίν; ἢ διότι ἰδρώς ἐστι σαπρός; ἔστιν οὖν ἄλμυρὸν σαπρὸν. τὸ δὲ σαπρὸν ἄλμυρὸν πικρόν.

Διὰ τί οἱ σπογγεῖς διατέμνονται τὰ ὦτα καὶ τοὺς μυκτῆρας; ἢ ὅπως εὐπνότεροι ὦσι; ταύτῃ γὰρ ἐξιέναι δοκεῖ τὸ πνεῦμα. ἀνατέμνουσι δὲ καὶ τὸν τόπον καὶ πρὸς εὐπνοίαν· πονεῖν γὰρ δὴ φασὶ μᾶλλον αὐτοὺς ἐν τῇ δυσπνοίᾳ, τῷ μὴ δύνασθαι προῖεσθαι θύραζε· ὅταν δὲ ὥσπερ ἐξεράσωσι, κουφίζονται. ἄτοπον οὖν εἰ μὴ δύνανται τυγχάνειν ἀναπνοῆς καταψύξεως χάριν· ἀλλ' ἔοικε τοῦτο ἀναγκαιότερον εἶναι. ἢ εὐλόγως ὁ πόνος πλείων κατέχουσιν, ὀγκουμένων καὶ διατεινομένων; φαίνεται δὲ καὶ αὐτόματός τις εἶναι φορὰ τοῦ πνεύματος ἔξω· εἰ δὲ καὶ εἴσω, σκεπτέον. ἔοικε δέ· ὁμοίως γὰρ ἀναπνοὴν ποιοῦσι τοῖς κολυμβηταῖς λέβητα καταφέντες. οὐ πίμπλαται γὰρ οὗτος τοῦ ὕδατος, ἀλλὰ τηρεῖ τὸν ἀέρα. μετὰ βίας γὰρ ἢ κάθεσις. ὀρθὸν γὰρ ὅτι οὖν παρεγκλιθὲν εἰσερεῖ.

Διὰ τί ἔνιοι τὰ ὦτα σκαλεύοντες βήττουσιν; ἢ ὅτι ἐπὶ τοῦ αὐτοῦ πόρου τῷ πνεύμονι καὶ τῇ ἀρτηρίᾳ ἡ ἀκοή; σημεῖον δέ, ὅτι ἀναπηρεῖνται καὶ γίνονται ἐνεοί. θερμαινομένου οὖν τῇ τρίψει συντήκεται ἐπὶ τὴν ἀρτηρίαν ἀπὸ τοῦ πόνου κάτωθεν ὑγρόν· ὃ ποιεῖ τὴν βῆχα.

Διὰ τί τὸ ἀριστερὸν οὖς θᾶπτον συμφύεται ὥς ἐπὶ τὸ [961a] πολὺ, ὅταν τρυπηθῇ; διὸ καὶ αἱ γυναῖκες τὸ μὲν ἄρρεν τὸ δὲ θῆλυ καλοῦσι τῶν ὥτων. ἢ ὅτι τὰ ἀριστερὰ ὑγρὰ καὶ θερμὰ μᾶλλον, συμφύεται δὲ τὰ τοιαῦτα μάλιστα. διὸ καὶ ἐν φυτοῖς τοῖς χλωροῖς ἢ σύμφυσις· καὶ τὰ τῶν νέων δὲ ἔλκη μᾶλλον συμφύεται ἢ τὰ τῶν πρεσβυτέρων. σημεῖον δὲ ὅτι ὑγρὰ μᾶλλον καὶ ὅλως θηλυκώτερα τὰ ἀριστερά.

Διὰ τί τοῖς μὲν αἰσχυνομένοις ἄκρα τὰ ὦτα ἐπιφοινίσσεται, τοῖς δὲ ὀργιζομένοις οἱ ὀφθαλμοί; ἢ ὅτι ἡ μὲν αἰδὼς ἐν ὀφθαλμοῖς κατάψυξις τις μετὰ φόβου, ὥστε εἰκότως ἀπολείπει τὸ θερμὸν τοὺς ὀφθαλμούς· χωριζόμενον δὲ εἰς τὸν δεκτικώτατον φέρεται τόπον. τοιοῦτος δὲ ὁ ἐν τοῖς ἄκροις τῶν ὥτων· ὁ γὰρ ἄλλος ὀστώδης. ὀργιζομένοις δ' ἐπανερχεται τὸ θερμόν. μάλιστα δὲ γίνεται φανερόν ἐν τοῖς ὀφθαλμοῖς διὰ τὴν χροάν οὖσαν λευκὴν.

Διὰ τί ὁ ἦχος ὁ ἐν τοῖς ὠσίν, ἐάν τις ψοφήσῃ, παύεται; ἢ ὅτι ὁ μείζων ψόφος τὸν ἐλάττω ἐκκρούεται;

Διὰ τί, ἐάν εἰς τὸ οὖς ὕδωρ ἐγχυθῇ, ἔλαιον προσεγγέονται, οὐ δυναμένου τοῦ ἐνόντος ὑγροῦ ἐξελθεῖν δι' ἄλλου ὑγροῦ; πότερον διὰ τὸ ἐπιπολῆς γίνεσθαι τὸ ἔλαιον τοῦ ὕδατος, καὶ διὰ γλισχρότητα αὐτοῦ ἔχεσθαι τὸ ὕδωρ ἐξίόντος τοῦ ἐλαίου, ἵνα συνεξίῃ τὸ ὕδωρ; ἢ ἵνα ὀλισθηροῦ τοῦ ὠτός γενομένου ἐξέλθῃ τὸ ὕδωρ; τὸ γὰρ ἔλαιον λεῖον ὃν ποιεῖ ὀλισθαίνειν.

Διὰ τί ἦπτον ὦτα ῥήγνυται τοῖς κολυμβῶσιν, ἐάν προσεγγέωσιν εἰς τὰ ὦτα ἔλαιον; ἢ τοῦ μὲν ῥήγνυσθαι τὰ ὦτα εἴρηται πρότερον ἢ αἰτία, τὸ δὲ ἔλαιον ἐγχυθὲν εἰς τὰ ὦτα τὴν ὕστερον θάλατταν ἀπολισθαίνειν ποιεῖ, καθάπερ ἐπὶ τῶν ἔξω τοῦ σώματος συμβαίνει τοῖς ἀηλιμμένοις. ὀλισθαίνουσα δὲ πληγὴν οὐ ποιεῖ εἰς τὸ ἐντὸς τοῦ ὠτός, διόπερ οὐ ῥήγνυσιν.

Διὰ τί τῶν ὥτων ἀναίμων ὄντων μάλιστα οἱ αἰσχυνομένοι ἐρυθριῶσιν; ἢ ἕκαστον εἰς τὸ κενὸν ἐκάστου μάλιστα φέρεται; δοκεῖ δὲ τοῦ αἰσχυνομένου ἄνω θερμὸν φέρεσθαι τὸ αἶμα. εἰς οὖν τὸ κενώτατον ἐρυθριᾶν ποιεῖ. τὸ δ' αὐτὸ τοῦτο καὶ ἐπὶ τῶν γνάθων. ἔτι δὲ καὶ ὅτι λεπτότατον τὸ δέρμα τὸ περιτεταμένον, μάλιστα δὴ φαίνεται δι' αὐτά.

Διὰ τί οὐδεὶς χασμώμενος τὸ οὖς σκαλεύει; ἢ ὅτι ὅτε χασμᾶται, ἐμφυσᾶται καὶ ἡ μῆνιγξ, δι' ἧς ἀκούει; σημεῖον δέ· ἥκιστα γὰρ ἀκούουσι χασμώμενοι. τὸ γὰρ πνεῦμα, ὥσπερ καὶ κατὰ τὸ στόμα, καὶ εἰς τὰ ὦτα ἐντὸς πορευόμενον, ἐξωθεῖται [961b] τὸν ὑμένα καὶ κωλύει τὸν ψόφον εἰσιέναι. ἐάν

οὖν οὕτως ἔχοντος ἄψηται τῆς ἀκοῆς ὡς σκαλεύειν, μάλιστ' ἂν βλάψειεν· πρὸς ἀντιπίπτον γὰρ ἡ πληγὴ γίνεται, καὶ οὐ πρὸς ὑπεῖκον τὸ τοῦ πνεύματος. τὸ δὲ δέρμα καὶ τὴν μήνιγγα ἀφεστάναι τῶν στερεῶν δῆλον. ὥστε πόνον μάλιστα οὕτω ποιεῖ, καὶ τραυματίζοι ἄν.

## ΛΓ. ΟΣΑ ΠΕΡΙ ΜΥΚΤΗΡΑ.

Διὰ τί ὁ παρμὸς λυγμὸν μὲν παύει, ἐρυγμὸν δὲ οὐ παύει; ἢ διότι οὐ τοῦ αὐτοῦ τόπου τὸ πάθος ἐκάτερον, ἀλλ' ὁ μὲν ἐρυγμὸς κοιλίας, ὁ δὲ λυγμὸς τοῦ περὶ τὸν πνεύμονα κατάψυξις καὶ ἀπεψία πνεύματος καὶ ὑγροῦ; κοινωνοῦσι δὲ οἱ περὶ τὸν ἐγκέφαλον τόποι τῷ πνεύμονι, οἷον τοῖς ὡσίν. φανερόν δέ· ἅμα γὰρ ἐνεοὶ καὶ κωφοὶ γίνονται, καὶ αἱ νόσοι ἀντιπερίστανται αἱ τοῦ ὡτὸς εἰς τὰ τοῦ πνεύμονος πάθη. ἐνίοις δὲ σκαλεύουσι τὸ οὖς βῆχες ἐγγίνονται. τὸ δὲ περὶ τὸν παρνύμενον τόπον εἶναι τῆς ῥινὸς κοινωνίαν τῷ πνεύμονι δηλοῖ ἡ ἀναπνοὴ κοινὴ οὖσα. ὥστε πάρνυται μὲν θερμαινόμενου αὐτοῦ· τῷ δὲ συμπάσχειν ὁ κάτω τόπος, ἐν ᾧ ἐστὶν ὁ λυγμός. ἡ δὲ θερμασία πέττει. διὸ ὄξος τε παύει λυγμὸν καὶ ἡ ἀπνευστία, ἐὰν ἡρεμαία ἢ ἡ λύγξ. ἐκθερμαίνει γὰρ τὸ πνεῦμα κατεχόμενον. ὥστε καὶ ἐν τῷ παρμῷ ἡ ἀντικατάσχεσις γενομένη τοῦ πνεύματος τοῦτο ποιεῖ, καὶ οἰκείως ἡ ἔκπνευσις γίνεται, καὶ ἐκ τοῦ ἄνω τόπου· ἀδύνατον γὰρ πάρειν μὴ ἐκπνέοντα. ἡ οὖν ὀρμὴ ῥήγνυσι τὸ ἐγκατελημμένον πνεῦμα, ὃ ποιεῖ τὸν λυγμόν.

Διὰ τί, ἐάν τις μέλλων πάρνυσθαι τρίψῃ τὸν ὀφθαλμόν, ἥττον πάρνυται; ἢ διότι τὸ ποιοῦν τὸν παρμὸν θερμότης τίς ἐστίν, ἡ δὲ τρῖψις θερμότητα ποιεῖ, ἢ διὰ τὸ πλησίον εἶναι τῶν ὀφθαλμῶν τὸν τόπον ᾧ πάρνυται, ἀφανίζει τὴν ἐτέραν, ὥσπερ τὸ ἔλαττον πῦρ ὑπὸ τοῦ πλείονος μαραινόμενον.

Διὰ τί δις πάρνυται ὡς ἐπὶ τὸ πολὺ, καὶ οὐχ ἅπαξ ἢ πλεονάκις; ἢ διότι δύο εἰσὶ μυκτῆρες; καθ' ἕτερον οὖν διέσχισται τὸ φλέβιον, δι' οὗ πνεῦμα ῥεῖ.

Διὰ τί πρὸς τὸν ἥλιον βλέψαντες πάρνυνται μᾶλλον; ἢ διότι κινεῖ θερμαίνων· καθάπερ οὖν πτεροῖς θιγγάνοντες. ἀμφοτέρω γὰρ τὸ αὐτὸ ποιοῦσιν· τῇ γὰρ κινήσει θερμαίνοντες ἐκ τοῦ ὑγροῦ θᾶπτον πνεῦμα ποιοῦσιν. τούτου δὲ ἡ ἔξοδος παρμός.

[962a] Διὰ τί λύγγα παύει παρμὸς καὶ πνεύματος ἐπίσχεσις καὶ ὄξος; ἢ ὅτι ὁ μὲν παρμός, διότι ἀντιπερίστασις ἐστὶ τοῦ κάτω πνεύματος, ὥσπερ αἱ ἄνω φαρμακεῖται πρὸς τὴν κάτω κοιλίαν; ἡ δὲ ἀπνευστία τὰς ἀσθενεῖς λύγγας, ὅτι ἡ μικρὰ ὀρμὴ τοῦ πνεύματος ἡ ἀνιοῦσα, ὥσπερ περὶ τὴν βῆχα, ἐάν τις

κατάσχη, παύεται, οὕτω καὶ ἐνταῦθα καὶ κατέσπασε καὶ κατέπνιξε καὶ συναπεβιάσατο. τὸ δὲ ὅξος παύει, ὅτι τὸ περιστὸς ὑγρὸν καὶ κωλύον ἀπερυγεῖν ἐπνευμάτωσε τῇ θερμασίᾳ. ἔστι γὰρ ἐρυγμὸς μὲν, ὅταν πνευματωθῇ τὸ ἐν τῇ ἄνω κοιλίᾳ ὑγρὸν καὶ πεφθῇ, ἢ δὲ λύγξ, ὅταν ὑπὸ ὑγροῦ κατέχηται πνεῦμα περιττὸν περὶ τὸν πνευματικὸν τόπον. τοῦτο γὰρ ὁρμῶν καὶ μὴ δυνάμενον διακόψαι σπασμὸν ποιεῖ, ὁ δὲ σπασμὸς οὗτος καλεῖται λύγξ. καὶ διὰ τοῦτο ῥιγώσαντας λὺγξ λαμβάνει, ὅτι τὸ ψῦχος τὸ ὑγρὸν ποιεῖ συστὰν ἐκ τοῦ πνεύματος ἔτι· περιλαμβανόμενον δὲ τὸ ἄλλο πηδᾷ· οὗ ἡ κίνησις λυγμὸς ἐστίν. Διὰ τί ἐνίοις ὕδωρ ψυχρὸν προσχέομεν [καὶ] πρὸς τὸ πρόσωπον, ἡνίκα αἷμα ῥεῖ ἐκ τῶν μυκτῆρων; ἢ ἀντιπεριίσταται εἴσω τὸ θερμόν; ἂν οὖν ἐπιπολῆς τύχη αἷμα, ἐξυγραίνει μᾶλλον.

Διὰ τί τὸν μὲν παρμὸν θεὸν ἡγούμεθα εἶναι, τὴν δὲ βῆχᾱ ἢ τὴν κόρουζαν οὐ; ἢ διότι ἐκ τοῦ θειοτάτου τῶν περὶ ἡμᾶς τῆς κεφαλῆς, ὅθεν ὁ λογισμὸς ἐστίν, γίνεται; ἢ ὅτι τὰ μὲν ἄλλα ἀπὸ νοσοῦντων γίνεται, τοῦτο δὲ οὐ;

Διὰ τί τρίψαντες τὸν ὀφθαλμὸν παυόμεθα τῶν παρμῶν; ἢ ὅτι ἀνάπνοια ταύτῃ γίνεται τῷ ὑγρῷ; δακρύει γὰρ ὁ ὀφθαλμὸς μετὰ τρῖψιν, ὁ δὲ παρμὸς διὰ πλῆθος ὑγρότητος. ἢ ὅτι τὸ ἔλαττον θερμὸν φθείρεται ὑπὸ τοῦ πλείονος, ὁ δὲ ὀφθαλμὸς τριφθεὶς πλείω λαμβάνει θερμότητα τῆς ἐν τῇ ῥινί. διὰ ταῦτα δὲ καὶ τις αὐτὴν τὴν ῥίνα τρίψη, παύεται ὁ παρμὸς.

Διὰ τί τῶν μὲν ἄλλων πνευμάτων αἱ ἔξοδοι, οἷον φύσης καὶ ἐρυγμοῦ, οὐχ ἱεραί, ἢ δὲ τοῦ παρμοῦ ἱερά; πότερον ὅτι τριῶν τόπων ὄντων, κεφαλῆς καὶ θώρακος καὶ τῆς κάτω κοιλίας, ἡ κεφαλὴ θειότατον; ἔστι δὲ φῦσα μὲν ἀπὸ τῆς κάτω κοιλίας πνεῦμα, ἐρυγμὸς δὲ τῆς ἄνω, ὁ δὲ παρμὸς τῆς κεφαλῆς. διὰ τὸ ἱερώτατον οὖν εἶναι τὸν τόπον καὶ τὸ πνεῦμα τὸ ἐντεῦθεν ὡς ἱερὸν προσκυνοῦσιν. ἢ ὅτι ἅπαντα τὰ πνεύματα σημαίνει τοὺς εἰρημένους τόπους βέλτιον ἔχειν ὡς ἐπὶ τὸ πολὺ; μὴ διαχωρούντων γὰρ κουφίζει τὸ πνεῦμα διεξιόν, [962b] ὥστε καὶ ὁ παρμὸς τὸν περὶ τὴν κεφαλὴν τόπον, ὅτι ὑγιαίνει καὶ δύναται πέττειν. ὅταν γὰρ κρατήσῃ ἢ ἐν τῇ κεφαλῇ θερμότης τὴν ὑγρότητα, τὸ πνεῦμα τότε γίνεται παρμὸς. διὸ καὶ τοὺς ἐκθνήσκοντας κινεῖσι παρμικῶ, ὡς ἐὰν μὴ τούτῳ δύνωνται πάσχειν, ἀσώτους ὄντας. ὥστε ὡς σημεῖον ὑγείας τοῦ ἀρρώστου καὶ ἱερωτάτου τόπου προσκυνοῦσιν ὡς ἱερόν, καὶ φήμην ἀγαθὴν ποιοῦνται.

Διὰ τί ἄνθρωπος πτάρνυται μάλιστα τῶν ἄλλων ζώων; πότερον ὅτι τοὺς πόρους εὐρεῖς ἔχει, δι' ὧν τὸ πνεῦμα καὶ ἡ ῥύμη εἰσέρχεται; τούτοις γὰρ πληρουμένοις πνεύματος πτάρνυται. ὅτι δ' εὐρεῖς, σημεῖον ὅτι ἥκιστα



ὁσφραντικὸν τῶν ζώων. ἀκριβέστεροι δὲ οἱ λεπτοὶ πόροι. εἰ οὖν εἰς μὲν τοὺς εὐρεῖς πλεῖον καὶ πλεονάκις εἰσέρχεται τὸ ὑγρὸν, οὗ πνευματουμένου ὁ παρμὸς γίνεται, τοιούτους δὲ μάλιστα τῶν ζώων οἱ ἄνθρωποι ἔχουσι, πλειστάκις ἂν πάρνυντο εἰκότως, ὅσοις ἐλάχιστοι οἱ μυκτῆρες, ὥστε τὸ θερμανθὲν ὑγρὸν ταχὺ ἐξιέναι δύναται πνεῦμα γενόμενον· ἐν δὲ τοῖς ἄλλοις διὰ μῆκος καταψύχεται πρότερον.

Διὰ τί οἱ μὲν ἀπὸ μέσων νυκτῶν ἄχρι μέσης ἡμέρας οὐκ ἀγαθοὶ παρμοί, οἱ δὲ ἀπὸ μέσης ἡμέρας ἄχρι μέσων νυκτῶν; ἢ ὅτι ὁ μὲν παρμὸς μᾶλλον δοκεῖ ἐπισχεῖν τοὺς ἀρχομένους καὶ ἐν τῇ ἀρχῇ; διὸ ὅταν μέλλωσιν ἀρχομένοις συμβῆναι, μάλιστα ἀποτρεπόμεθα τοῦ πράττειν. ἢ μὲν οὖν ἡὼς καὶ τὸ ἀπὸ μέσων νυκτῶν οἷον ἀρχή τις· διὸ εὐλαβούμεθα πτάρειν, μὴ κωλύσωμεν ὠρμημένον. πρὸς δείλης δὲ καὶ ἐπὶ μέσας νύκτας οἷον τελευτή τις καὶ ἐναντίον ἐκείνῳ, ὥστε ἐν τῷ ἐναντίῳ ταῦτόν αἰρετέον.

Διὰ τί οἱ πρεσβῦται χαλεπῶς πτάρνυνται; πότερον οἱ πόροι συμπεπτώκασι δι' ὧν τὸ πνεῦμα; ἢ ὅτι αἶρειν τὰ ἄνω οὐκέτι δυνάμενοι ῥαδίως, εἶτα βία ἀφιάσι κάτω;

Διὰ τί, ἐάν τις ἀπνευστιάζη, ἡ λυγὴ παύεται; ἢ διότι ἡ μὲν ὑπὸ καταψύξεως γίνεται (διὸ καὶ οἱ φοβούμενοι καὶ οἱ ῥιγοῦντες λύζουσιν), κατεχόμενον δὲ τὸ πνεῦμα ἐκθερμαίνει τὸν ἐντὸς τόπον;

Διὰ τί οἱ κωφοὶ ἐκ τῶν μυκτῆρων διαλέγονται ὡς ἐπὶ τὸ πολὺ; ἢ ὅτι ὁ πνεύμων ἐστὶ τούτοις πεπονηκώς; τοῦτο γὰρ ἐστὶν ἡ κωφότης, πλήρωσις τοῦ τόπου τοῦ πνευμονικοῦ. οὐκουν ῥαδίως ἡ φωνὴ φέρεται, ἀλλ' ὥσπερ τὸ πνεῦμα τῶν πνευστιώντων ἢ ἀσθμαίνόντων δι' ἀδυναμίαν ἀθρόον, οὕτως ἐκείνοις ἡ φωνή. βιάζεται οὖν καὶ διὰ τῶν μυκτῆρων. βιαζομένη [963a] δὲ τῇ τρίψει ποιεῖ τὸν ἦχον. ἔστι γὰρ ἡ διὰ τῶν ῥινῶν διάλεκτος γινομένη, ὅταν τὸ ἄνω τῆς ῥινὸς εἰς τὸν οὐρανόν, ἢ συντέτρηται, κοῖλον γένηται· ὥσπερ κώδων γὰρ ὑπηγεῖ, τοῦ κάτωθεν στενοῦ ὄντος.

Διὰ τί μόνον ὁ παρμὸς ἡμῖν καθεύδουσιν οὐ γίνεται, ἀλλ' ὡς εἶπεῖν ἅπαντα ἐγρηγορόσιν; ἢ ὅτι ὁ μὲν παρμὸς γίνεται καὶ ὑπὸ θερμοῦ τινὸς κινήσαντος τὸν τόπον τοῦτον ἀφ' οὗ γίνεται· διὸ καὶ ἀνακύπτομεν πρὸς τὸν ἥλιον, ὅταν βουλόμεθα πτάρειν· ὅτι καθευδόντων ἡμῶν ἀντιπερίσταται τὸ θερμὸν ἐντός. διὸ καὶ γίνεται τὰ κάτω θερμὰ τῶν καθευδόντων, καὶ τὸ πνεῦμα τὸ πολὺ αἰτίον ἐστὶ τοῦ ἐξονειρώττειν ἡμᾶς. εἰκότως οὖν οὐ πταρνύμεθα· ἀπαλλαγέντος γὰρ τοῦ θερμοῦ τοῦ ἐκ τῆς κεφαλῆς, ὃ κινεῖν

πέφυκε τὸ ἐνταῦθα ὑγρόν, οὗ ἑξαερουμένου γίνεται ὁ παρμός, καὶ τὸ συμβαῖνον πάθος εἰκὸς μὴ γίνεσθαι. ἀποψοφοῦσι δὲ μᾶλλον ἢ πτάρνυνται, καὶ ἐρεύγονται καθεύδοντες ἢ ἐγρηγορότες, ὅτι ἐκθερμαινομένου τοῦ περὶ τὴν κοιλίαν τόπου ἐν τοῖς ὕπνοις μᾶλλον ἐκπνευματοῦσθαι συμβαίνει τὰ περὶ αὐτὴν ὑγρά, πνευματούμενα δὲ εἰς τοὺς ἔγγιστα τόπους φέρεσθαι. ἐνταῦθα γὰρ καὶ συναπωθεῖται ὑπὸ τοῦ ἐν τῷ ὕπνῳ γινομένου πνεύματος. καθεκτικώτερος γὰρ ἐστὶν ἢ προετικώτερος ὁ καθεύδων τοῦ πνεύματος, διὸ καὶ συστέλλει τὸ θερμὸν ἐντός. ὁ δὲ κατέχων τὸ πνεῦμα ὠθεῖ κάτω αὐτό· παρὰ φύσιν γὰρ ἐστὶ τῷ πνεύματι ἢ κάτω φορά, διὸ καὶ χαλεπὸν ἐστὶ κατέχειν τὸ πνεῦμα. τὸ δ' αὐτὸ αἴτιον καὶ τοῦ καθεύδειν ἡμῖν ἐστίν. οὔσης γὰρ τῆς ἐγρηγόρσεως κινήσεως, ταύτης δ' ἐν τοῖς αἰσθητηρίοις ἡμῶν γινομένης μάλιστα ἐν τῷ ἐγρηγορέναι ἡμᾶς, δῆλον ὡς καὶ ἡρεμούντων ἡμῶν καθεύδοιμεν ἄν. ἐπεὶ δὲ τὸ μὲν πῦρ κινητικὸν ἐστὶ τῶν ἐν ἡμῖν μορίων, τοῦτο δ' ἐν τῷ ὕπνῳ ἐντὸς περιίσταται, λιπὸν τὸν περὶ τὴν κεφαλὴν τόπον οὗ ἐστὶ τὸ αἰσθητήριον, ἡρεμοίῃ ἄν μάλιστα ἡμῶν τότε τὰ αἰσθητήρια· ὃ εἴη ἄν αἴτιον τοῦ καθεύδειν.

Διὰ τί πτάραντες καὶ οὐρήσαντες φρίττουσιν; ἢ ὅτι κενοῦνται αἱ φλέβες ἀμφοτέροις τούτοις τοῦ πρότερον ἐνυπάρχοντος ἀέρος θερμοῦ, κενωθέντων δὲ ἄλλος ἄηρ ἕξωθεν εἰσέρχεται ψυχρότερος τοῦ προϋπάρχοντος ἐν ταῖς φλεψίν· τοιοῦτος δ' εἰσιῶν ποιεῖ φρίττειν.

Διὰ τί τοὺς λυγμοὺς οἱ παρμοὶ παύουσιν; ἢ ὅτι ὁ λυγμὸς οὐχ ὥσπερ οἱ ἐρυγμοὶ ἀπὸ τῆς τὰ σιτία δεχομένης κοιλίας ἐστὶν ἄλλ' ἀπὸ τοῦ πνεύματος, συμβαίνει δὲ μάλιστα [963b] ἀπὸ καταψύξεως ἐκ ῥίγους καὶ λύπης καὶ φαρμακείας τῆς ἄνω μάλιστα γίνεσθαι. θερμὸς γὰρ ὢν φύσει ὁ τόπος, ὅταν καταψυχθῇ, οὐ προσίεται τὸ πνεῦμα πᾶν, ἄλλ' ὥσπερ πομφόλυγας ποιεῖ· διὸ καὶ τὸ πνεῦμα κατασχοῦσι παύεται (ἐκθερμαίνεται γὰρ ὁ τόπος), καὶ τὸ ὄξος, θερμαντικὸν ὄν, προσφερόμενον. τοῦ δὲ θερμοῦ συμβαίνοντος ἀπὸ θερμασίας καὶ τοῦ ἐγκεφάλου, τῶν ἄνω τόπων εἰς τὸν πνεύμονα συντετρημένων, θερμοῦ τοῦ πνεύμονος ὄντος, ἢ τε πρὸ τοῦ παρμοῦ κατοχὴ καὶ ἢ ἄνωθεν κατάκρουσις λύει τὸ πάθος.

Διὰ τί οἱ οὐλότριχες, καὶ οἷς ἐπέστραπται τὸ τρίχιον, ὡς ἐπὶ τὸ πολὺ σιμότεροι; ἢ εἴπερ ἡ οὐλότης ἐν παχύτητι, ἢ δὲ παχύτης μετὰ σκληρότητος, σκληρὸν δ' ὄν τὸ αἷμα θερμόν, ἢ δὲ θερμότης οὐ ποιεῖ περίττωσιν, τὸ δὲ ὅστοῦν ἐκ περιττώματος, ὁ δὲ χόνδρος ὅστοῦν, εὐλόγως ἄν ἔκλειψις εἴη τοῦ μορίου; σημεῖον δὲ τὸ τὰ παιδιά πάντα εἶναι σιμά.

## ΛΔ. ΟΣΑ ΠΕΡΙ ΤΟ ΣΤΟΜΑ ΚΑΙ ΤΑ ΕΝ ΑΥΤΩ.

Διὰ τί οἱ μανοῦς ἔχοντες τοὺς ὀδόντας οὐ μακρόβιοι; ἢ ὅτι τὰ μακρόβια πλείους ἔχουσιν, οἷον τὰ ἄρσενά τῶν θηλειῶν, ἄνδρες γυναικῶν, πρόβατα προβάτων. οἱ οὖν ἀραιώδοντες ὥσπερ ἂν ἐλάττονας ἔχουσιν ὀδόντας εὐόικασιν.

Διὰ τί οἱ ὀδόντες ἰσχυρότεροι τῶν σαρκῶν ὄντες ὅμως τοῦ ψυχροῦ αἰσθάνονται μᾶλλον; ἢ ὅτι ἐπὶ τοὺς πόρους προσπεφύκασιν, ἐν οἷς ὀλίγον ὄν τὸ θερμὸν ταχὺ ὑπὸ τοῦ ψυχροῦ κρατούμενον ποιεῖ τὴν ἀλγηδόνα;

Διὰ τί τοῦ ψυχροῦ μᾶλλον αἰσθάνονται οἱ ὀδόντες ἢ τοῦ θερμοῦ, ἢ δὲ σὰρξ τοῦναντίον; πότερον ὅτι ἡ μὲν σὰρξ τοῦ μέσου καὶ εὐκρατος, οἱ δὲ ὀδόντες ψυχροί, ὥστε τοῦ ἐναντίου μᾶλλον αἰσθητικοί; ἢ διότι λεπτῶν πόρων εἰσίν, ἐν οἷς μικρὸν τὸ θερμόν, ὥστε ταχὺ πάσχουσιν ὑπὸ τοῦ ἐναντίου; ἢ δὲ σὰρξ θερμόν, ὥστε οὐδὲν πάσχει ὑπὸ τοῦ ψυχροῦ, τοῦ δὲ θερμοῦ ταχὺ αἰσθάνεται· ὥσπερ γὰρ πῦρ ἐπὶ πυρὶ γίνεται.

Διὰ τί ἡ γλῶττα σημαντικὸν πολλῶν; καὶ γὰρ τῶν πυρετῶν ἐν τοῖς ὀξέσι νοσήμασι, καὶ ἐὰν χάλαζαι ἐνῶσιν· καὶ τῶν ποικίλων προβάτων ποικίλαι. ἢ ὅτι ὑγρότητος δεκτικόν, καὶ ἐπὶ τῷ πνεύμονι ἐπίκειται, οὐ ἡ ἀρχὴ ἐπὶ τῶν πυρετῶν. πολύχροα δὲ πάντα διὰ τὴν πολύχροιαν τῶν ὑγρῶν· βάπτεται δὲ πρῶτον δι' οὗ πρῶτον ἡθεῖται· ἢ δὲ γλῶττα τοιοῦτον. αἱ τε χάλαζαι διὰ τὸ σομφὴν εἶναι συλλέγονται· ἔστι γὰρ ἡ χάλαζα οἶονεὶ ἰονθος ἄπεπτος ἐν τοῖς ἐντός.

[964a] Διὰ τί ἡ γλῶττα γλυκεῖα μὲν οὐ γίνεται, πικρὰ δὲ καὶ ἀλμυρὰ καὶ ὀξεῖα; ἢ ὅτι διαφθοραὶ ταῦτ' ἐστί, τῆς δὲ φύσεως οὐκ αἰσθάνεται;

Διὰ τί, ὅσας ἂν χροὰς ἔχη τὸ δέρμα, τοσαύτας ἔχει καὶ ἡ γλῶττα; πότερον ὅτι ἐν μέρος ἐστὶν ὥσπερ ἄλλο τι τῶν ἔξωθεν, ἀλλ' ἐντὸς περιείληπται; διὰ δὲ τὸ λεπτὸν εἶναι ταύτη τὸ δέρμα καὶ ἡ μικρὰ ποικιλία ἐμφαίνεται. ἢ διότι τὸ ὕδωρ ἐστὶν ὃ ποιεῖ μεταβάλλειν τὰς χροὰς; ἢ δὲ γλῶττα μάλιστα πάσχει ὑπὸ τοῦ πόματος.

Διὰ τί ἐκ τοῦ στόματος καὶ θερμὸν καὶ ψυχρὸν πνέουσιν; φουσῶσι μὲν γὰρ ψυχρόν, ἀάζουσι δὲ θερμόν. σημεῖον δὲ ὅτι θερμαίνει, ἐὰν πλησίον προσάγῃ τις τὴν χεῖρα τοῦ στόματος. ἢ ἀμφοτέρως ὁ ἀῆρ κινούμενος ψυχρός· ὁ δὲ φουσῶν κινεῖ τὸν ἀέρα οὐκ ἀθρόως, ἀλλὰ διὰ στενοῦ τοῦ στόματος· ὀλίγον

οὖν ἐκπνέων πολὺν κινεῖ τὸν θύραθεν, ἐν ᾧ τὸ θερμὸν ὄν τὸ ἐκ τοῦ στόματος οὐ φαίνεται δι' ὀλιγότητα. ὁ δὲ ἀάζων ἀθρόον ἐκπνεῖ· διὸ θερμόν. ἔστι γὰρ φυσασμοῦ τῷ διαφέρειν τῇ συστροφῇ· ὁ δ' ἀασμὸς ἀθρόου ἔκπνευσις.

Διὰ τί, ἐὰν σφόδρα καὶ ἀθρόον ἐκπνεύσωσιν, ἀδυνατοῦσι πάλιν ἐκπνεῦσαι; ὁμοίως δὲ ἔχει καὶ ἐπὶ τοῦ ἀναπνεῦσαι· ἀδυνατοῦσι γὰρ δις ἐφεξῆς ποιεῖν αὐτό. ἢ ὅτι τὸ μὲν δίωσίς τις ἐστὶ, τὸ δὲ συναγωγή τόπου· ἃ ἄχρι τινός ἐστι δυνατὰ γίνεσθαι. φανερόν οὖν ὅτι ἐναλλάξ ἀνάγκη ἄμφω γίνεσθαι, καὶ ἀδύνατον δις ἐφεξῆς.

Διὰ τί ἐτέρου τόπου ὄντος ἢ τὰ σῖτα καὶ τὸ ποτὸν διεξέρχεται καὶ ἢ ἀναπνέομεν, ἐὰν μείζω ψωμὸν καταπίωμεν, πνιγόμεθα; οὐδὲν δὴ ἄτοπον· οὐ γὰρ μόνον ἐάν τι ἐμπέσῃ εἰς τὸν τόπον τοῦτον, ἀλλὰ καὶ ἔτι φραγθῇ, οὕτω μᾶλλον πνιγόμεθα. ταῦτα δὲ παράλληλά ἐστι, καθ' ὃ τε τὰ σιτία δεχόμεθα καὶ καθ' ὃ ἀναπνέομεν. ὅταν οὖν ἐμπέσῃ μείζων ψωμός, καὶ ἡ ἀναπνοὴ συμφράττει, ὥστε μὴ εἶναι τῷ πνεύματι ἔξοδον.

Διὰ τί, ὅσοι τὴν διὰ χειρὸς τομὴν ἔχουσι δι' ὅλης, μακροβιώτατοι; ἢ διότι τὰ ἀναρθρα βραχύβια καὶ ἀσθενῆ; σημεῖον δὲ τῆς μὲν ἀσθενείας τὰ νέα, τῆς δὲ βραχυβιότητος τὰ ἔνυγρ. δῆλον ἄρα ὅτι τὰ ἡρθρωμένα τούναντίον. τοιαῦτα δέ, ὧν καὶ τὰ φύσει ἀναρθρα μάλιστα ἡρθρωται. τῆς δὲ χειρὸς τὸ ἔσω ἀναρθρότατον.

Διὰ τί ἐν τῷ μακρὸν ἀναπνεῖν ἐλκόντων μὲν εἴσω τὸ [964b] πνεῦμα συμπίπτει ἡ κοιλία, ἐκπνεόντων δὲ πληροῦται; πιθανὸν δ' ἐστὶ τούναντίον συμβαίνειν. ἢ ὅτι τῶν μὲν ἀναπνεόντων συμπιεζομένη ταῖς πλευραῖς κάτω, καθάπερ αἱ φῦσαι, προσογκεῖν φαίνεται;

Διὰ τί ἀναπνέομεν; ἢ καθάπερ τὸ ὑγρὸν εἰς πνεῦμα διαλύεται, οὕτω καὶ τὸ πνεῦμα εἰς τὸ πῦρ; τὸ τῆς φύσεως οὖν θερμὸν ὅταν τὸ πολὺ τοῦ πνεύματος πῦρ ποιήσῃ, ἀλγηδόνα ἐμποιεῖ, τοῖς δὲ πόροις καὶ ὄγκον· διόπερ ἐξωθοῦμεν τὸ πῦρ μετὰ τοῦ πνεύματος. ὅταν δὲ ἐξέλθῃ τὸ πνεῦμα καὶ τὸ πῦρ, συμπιπτόντων τῶν πόρων καὶ καταψυχομένων ἀλγηδόνες γίνονται· ἔλκομεν οὖν τὸ πνεῦμα πάλιν. εἴτα ἀνοίξαντες τοῦ σώματος τοὺς πόρους καὶ βοηθήσαντες, πάλιν γίνεται τὸ πῦρ, καὶ πάλιν ἀλγοῦντες ἐκπέμπομεν, καὶ διὰ τέλους τοῦτο πράττομεν, καθάπερ καὶ σκαρδαμύσσομεν κατὰ τὸ καταψύχεσθαι τὸ περὶ τὸν ὀφθαλμὸν σῶμα καὶ ξηραίνεσθαι. καὶ βαδίζομεν οὖν προσέχοντες τῇ βαδίσει τὸν νοῦν, κυβερνωμένης δὲ τῆς διανοίας αὐτοῖς .... τοῦτον οὖν τὸν τρόπον καὶ τὰ περὶ τὴν ἀναπνοὴν ποιοῦμεν· μηχανώμενοι γὰρ τὸν ἀέρα

ἔλκειν ἀναπνέομεν, καὶ πάλιν ἔλκομεν.

## ΛΕ. ΟΣΑ ΠΕΡΙ ΤΑ ΥΠΟ ΤΗΝ ΑΦΗΝ.

Διὰ τί μᾶλλον φρίττομεν ἑτέρου θιγόντος πως ἢ αὐτοὶ ἡμῶν; ἢ ὅτι αἰσθητικωτέρα ἢ ἀφή τοῦ ἄλλοτρίου ἢ ἡ τοῦ οἰκείου; τὸ γὰρ συμφυὲς ἀναίσθητον. καὶ φοβερώτερον τὸ λάθρα καὶ ἑξαπιναίως γινόμενον, ὃ δὲ φόβος κατάψυξις· ἢ δὲ ἄλλοτρία ἀφή πρὸς τὴν οἰκείαν ἄμφω ταῦτα ἔχει καὶ ὅλως δὲ παθητικὸν ἕκαστον πέφυκεν ἢ μᾶλλον ἢ μόνον ὑπ' ἄλλου ἢ ὑφ' αὐτοῦ, οἷον καὶ ἐπὶ τοῦ γαργαλίζεσθαι συμβαίνει.

Διὰ τί γαργαλίζονται τὰς μασχάλας καὶ τὰ ἐντὸς τῶν ποδῶν; ἢ διὰ τὴν λεπτότητα τοῦ δέρματος; καὶ ὧν ἀσυνήθης ἢ ἀφή, οἷον τούτων καὶ τοῦ ὠτός;

Διὰ τί φρίττουσιν οὐκ ἐπὶ τοῖς αὐτοῖς πάντες; ἢ ὅτι οὐδ' ἐπὶ τοῖς αὐτοῖς πάντες ἡδόμεθα, ὥσπερ οὐδὲ λυπούμεθα ἐπὶ τοῖς αὐτοῖς πάντες; ὁμοίως δὲ οὐ φρίττομεν ἐπὶ τοῖς αὐτοῖς· ἔστι γὰρ ἡ αὐτὴ κατάψυξις τις. διὸ οἱ μὲν τοῦ ἱματίου δακνομένου φρίττουσιν, οἱ δὲ πρίονος ἀκονουμένου ἢ ἐλκομένου, οἱ δὲ κισήρεως τεμνομένης, οἱ δὲ ὄνου λίθον ἀλοῦντος.

Διὰ τί τοῦ μὲν θέρους ὄντος θερμοῦ, τοῦ δὲ χειμῶνος ψυχροῦ, [965a] τὰ σώματα θιγγανόντων ψυχρινότερά ἐστι τοῦ θέρους ἢ τοῦ χειμῶνος; πότερον ὅτι ὁ ἰδρῶς καὶ ἡ ἴδρις καταψύχει τὰ σώματα, τοῦτο δ' ἐν μὲν τῷ θέρει γίνεται, ἐν δὲ τῷ χειμῶνι οὐ. ἢ ὅτι ἀντιπερίσταται ἐναντίως τὸ ψυχρὸν καὶ τὸ θερμὸν τῇ ὥρᾳ, καὶ ἔσω φεύγει ἐν τῷ θέρει, διὸ καὶ ἰδρῶτα ἀνίησιν· ἐν δὲ τῷ χειμῶνι ἀποστέγει τὸ ψῦχος καὶ ἀτμίζει τὸ σῶμα ὥσπερ ἡ γῆ;

Διὰ τί φρίττουσιν αἱ τρίχες ἐν τῷ δέρματι; ἢ ὅταν σπάσωσι τὸ δέσμα, εἰκότως ἐξανέστησαν; συσπῶσι δὲ καὶ ὑπὸ ρίγους καὶ ὑπ' ἄλλων παθῶν.

Διὰ τί αὐτὸς αὐτὸν οὐθεὶς γαργαλίζει; ἢ ὅτι καὶ ὑπ' ἄλλου ἤττον, ἐὰν προαίσθηται, μᾶλλον δ', ἢ μὴ ὀρᾷ; ὥσθ' ἥκιστα γαργαλισθήσεται, ὅταν μὴ λανθάνῃ τοῦτο πάσχων. ἔστι δὲ ὁ γέλως παρακοπή τις καὶ ἀπάτη. διὸ καὶ τυπτόμενοι εἰς τὰς φρένας γελῶσιν· οὐ γὰρ ὁ τυχὼν τόπος ἐστὶν ὧ γελῶσιν. τὸ δὲ λαθραῖον ἀπατητικόν. διὰ τοῦτο καὶ γίνεται ὁ γέλως καὶ οὐ γίνεται ὑπ' αὐτοῦ.

Διὰ τί ποτε τὰ χεῖλη μάλιστα γαργαλιζόμεθα; ἢ διότι δεῖ τὸ γαργαλιζόμενον μὴ πρόσω τοῦ αἰσθητικοῦ εἶναι; ἔστι δὲ τὰ χεῖλη περὶ τὸν τόπον τοῦτον μάλιστα. διὰ τοῦτο δὲ γαργαλίζεται τὰ χεῖλη τῶν περὶ τὴν κεφαλὴν τόπων, ἃ

ἐστὶν εὐσάρκα. εὐκίνητότατα οὖν μάλιστα ἐστὶν.

Διὰ τί, ἐάν τις τὸν περὶ τὰς μασχάλας τόπον κνήσῃ, ἐκγελῶσιν, ἐὰν δέ τινα ἄλλον, οὐ; ἢ διὰ τί περὶ τὰς ῥίνας κνήσαντες πάρνυνται; ἢ τόποι εἰσὶ τῶν φλεβίων, ὧν καταψυχομένων ἢ τοῦναντίον πασχόντων ὑγραίνονται; ἢ εἰς πνεῦμα ἐκ τοῦ ὑγροῦ διαλύεται; ὥσπερ ἐὰν τὰς ἐπὶ τοῦ τραχήλου πιέσῃ τις φλέβας, καθεύδουσιν. ἢ μὲν ἡδονὴ θερμασία τίς ἐστὶν· τοῦτο δέ, ὅταν πλεον τὸ πνεῦμα ἐγγένηται, ἀθρόον ἕξω ἀφίεμεν. ὡσαύτως καὶ ἐπὶ πταρμῶ τῷ περὶ διαθερμάναντες καὶ κινήσαντες διελύσαμεν εἰς πνεῦμα· πλεονος δὲ γενομένου ἐξεώσαμεν.

Διὰ τί μετὰ τὰ σιτία φρίττομεν πολλάκις; ἢ ὅτι ψυχρὰ εἰσπορευόμενα ἀπὸ πρώτης κρατεῖ μᾶλλον τοῦ φυσικοῦ θερμοῦ ἢ κρατεῖται;

Διὰ τί τὸ περιεγόμενον ἐναλλάξ τοῖς δακτύλοις δύο φαίνεται; ἢ διότι δυσὶν αἰσθητηρίοις ἀπτόμεθα; τοῖς γὰρ ἐντὸς τῶν δακτύλων, κατὰ φύσιν ἔχοντες τὴν χεῖρα, ἀμφοτέροις οὐ δυνατόν εἰπεῖν.

## ΛΣ. ΟΣΑ ΠΕΡΙ ΠΡΟΣΩΠΟΝ.

[965b] Διὰ τί τοῦ προσώπου τὰς εἰκόνας ποιοῦνται; πότερον ὅτι τοῦτο δηλοῖ ποῖοί τινες; ἢ ὅτι μάλιστα γινώσκεται;

Διὰ τί τὸ πρόσωπον ἰδίουςι μάλιστα, ἀσαρκότατον ὄν; ἢ διότι εὐῖδρωτα μὲν ὅσα ὑφυγρα καὶ ἀραιά, ἢ δὲ κεφαλὴ τοιαύτη; ὑγρότητα γὰρ οἰκείαν ἔχει πλείστην. δηλοῦσι δ' αἱ φλέβες τείνουσαι ἐντεῦθεν, καὶ οἱ κατάρροι γινόμενοι ἐξ αὐτῆς, καὶ ὁ ἐγκέφαλος ὑγρός, καὶ οἱ πόροι πολλοί· σημεῖον δ' αἱ τρίχες, ὅτι πολλοὶ πόροι εἰσὶ περαίνοντες ἕξω. οὐκ οὖν ἐκ τῶν κάτω ὁ ἰδρώς, ἀλλ' ἐκ τῆς κεφαλῆς γίνεται. διὸ ἰδίουςι καὶ πρώτον μάλιστα τὸ μέτωπον· ὑπόκειται γὰρ τὸ πρῶτον. τὸ δ' ὑγρὸν κάτω ῥεῖ, ἀλλ' οὐκ ἄνω.

Διὰ τί ἐν τῷ προσώπῳ μάλιστα οἱ ἰονθοί; ἢ διότι μανὸς ὁ τόπος καὶ ὑγρότητα ἔχει; σημεῖον δὲ ἢ τε τῶν τριχῶν ἔκφυσις καὶ ἢ τῶν αἰσθήσεων δύναμις· ὁ δὲ ἰονθος ὥσπερ ἐξάνθημα ὑγρότητός τινος ἀπέπτου.

## ΛΖ. ΟΣΑ ΠΕΡΙ ΟΛΟΝ ΤΟ ΣΩΜΑ.

Διὰ τί ἀεὶ τοῦ σώματος ῥέοντος, καὶ τῆς ἀπορροῆς γινομένης ἐκ τῶν περιττωμάτων, οὐ κουφίζεται τὸ σῶμα, ἐὰν μὴ ἰδίῃ; ἢ διότι ἐλάττων ἢ

ἔκκρισις γίνεται; ὅταν γὰρ ἐξ ὑγροῦ μεταβάλλῃ εἰς ἀέρα, πλέον γίνεται ἐξ ἐλάττονος· τὸ γὰρ διακρινόμενον πλέον, ὥστε ἐν πλείονι χρόνῳ ἢ ἔκκρισις.

Διὰ τί δὲ τοῦτο; ἢ διότι δι' ἐλαττόνων πόρων ἢ ἔξοδος ἐστίν; τὸ γὰρ γλίσχρον καὶ τὸ κολλῶδες μετὰ μὲν τοῦ ὑγροῦ ἐκκρίνεται διὰ τὴν κατάμιξιν, μετὰ δὲ τοῦ πνεύματος ἀδυνατεῖ. μάλιστα δὲ τοῦτ' ἐστὶ τὸ λυποῦν. διὸ καὶ οἱ ἔμετοι τῶν ιδρώτων κουφίζουσι μᾶλλον, ὅτι συνεξάγουσι τοῦτο, ἅτε παχύτεροι καὶ σωματωδέστεροι ὄντες. ἢ καὶ ὅτι τῇ μὲν σαρκὶ πόρρω οὗτος ὁ τόπος, ἐν ᾧ τὸ γλίσχρον καὶ κολλῶδες, ὥστε ἔργον μεταστῆσαι, τῇ δὲ κοιλίᾳ ἐγγύς; ἢ γὰρ ἐν ταύτῃ γίνεται ἢ πλησίον· διὸ καὶ δυσεξάγωγος ἄλλως.

Διὰ τί αἱ τρίψεις σαρκούσιν; ἢ ὅτι αὐξητικώτατον τῶν ἐν τῷ σώματι τὸ θερμόν ἐστιν; τοῦ μὲν γὰρ ἐνυπάρχοντος μείζους οἱ ὄγκοι γίνονται διὰ τὸ ἀεὶ αὐτὸ ἐν κινήσει εἶναι καὶ εἰς τὸ ἄνω φέρεσθαι καὶ πνευματοῦν τὰ ἐν [966a] ἡμῖν ὑγρά, ὃ ἐν τῇ τρίψει γίνεται· ἐκλείποντος δὲ φθίνει καὶ ἐλαττοῦται τὸ σῶμα. ἢ ὅτι ὀγκότερα τῆς τροφῆς γίνεται ἢ σὰρξ διὰ τὴν θερμασίαν; ἅπαν γὰρ τὸ θερμόν ἐπισπαστικὸν τοῦ ὑγροῦ ἐστίν, ἢ δ' εἰς τὴν σάρκα διαδιδόμενη τροφή ὑγρά ἐστὶ, καὶ ἐπιδέχεται τὴν τροφήν μᾶλλον διὰ τὴν ἀραίωσιν· ἀραιότερα γὰρ γινομένη μᾶλλον δύναται δέχεσθαι ὥσπερ σπογγία. ἢ δὲ τρίψις εὐπνουν καὶ ἀραιὰν ποιεῖ τὴν σάρκα, καὶ κωλύει συστάσεις γίνεσθαι κατὰ τὸ σῶμα. τούτου δὲ μὴ ὄντος οὐδὲ συντήξεις γίνονται· αἱ γὰρ ἀτροφίαι καὶ αἱ συντήξεις ἐκ τῶν ἀθροισθέντων εἰσίν. εὐπνούστερα δὲ καὶ ἀραιότερα καὶ ὀμαλέστερα γινόμενα εἰκὸς μᾶλλον ὀγκοῦσθαι. τῆς τε γὰρ τροφῆς δεκτικώτερα καὶ τῶν ἐκκρίσεων προετικώτερα γίνεται, ὅτι οὐ δεῖ πυκνοῦν τὴν σάρκα πρὸς ὑγίειαν, ἀλλ' ἀραιοῦν· ὥσπερ γὰρ πόλις ὑγιεινὴ ἐστὶ καὶ τόπος εὐπνους (διὸ καὶ ἡ θάλαττα ὑγιεινή), οὕτω καὶ σῶμα τὸ εὐπνουν μᾶλλον ὑγιεινόν ἐστὶ τοῦ ἐναντίως ἔχοντος. δεῖ γὰρ ἢ μὴ ὑπάρχειν μηδέν, ἢ τούτου ὡς τάχιστα ἀπαλλάττεσθαι· καὶ δεῖ οὕτως ἔχειν τὸ σῶμα ὥστε λαμβάνον εὐθὺς ἐκκρίνειν τὴν περίττωσιν, καὶ εἶναι ἐν κινήσει ἀεὶ καὶ μηδέποτε ἡρεμεῖν. τὸ μὲν γὰρ μένον σήπεται, ὥσπερ καὶ ὕδωρ τὸ μὴ κινούμενον· σηπόμενον δὲ νόσον ποιεῖ· τὸ δὲ ἐκκρινόμενον πρὸ τοῦ διαφθαῖναι χωρίζεται. τοῦτο οὖν πυκνουμένης μὲν τῆς σαρκὸς οὐ γίνεται (ὥσπερ γὰρ ἐμφράττονται οἱ πόροι), ἀραιουμένης δὲ συμβαίνει. διὸ καὶ οὐ δεῖ ἐν τῷ ἡλίῳ γυμνὸν βαδίζειν (συνίσταται γὰρ ἡ σὰρξ καὶ κομιδῇ ἀποσαρκοῦται· τὸ μὲν γὰρ ἐντὸς ὑγρὸν διαμένει, τὸ δ' ἐπιπολῆς ἀπαλλάττεται ἐξατμιζόμενον, ὥσπερ καὶ τὰ κρέα τὰ ὀπτὰ τῶν ἐφθῶν μᾶλλον τὰ ἐντὸς ὑγρά ἐστίν) οὐδὲ τὰ στήθη γυμνὰ ἔχοντα βαδίζειν ἐν ἡλίῳ (ἀπὸ γὰρ τῶν ἄριστα ὠκοδομημένων τοῦ σώματος ὁ ἥλιος φέρει, ὃ ἥκιστα δεῖται ἀφαιρέσεως), ἀλλὰ μᾶλλον τὰ ἐντὸς ξηραντέον. ἐκεῖθεν μὲν οὖν διὰ τὸ πόρρω εἶναι, ἐὰν

μὴ μετὰ πόνου, οὐκ ἔστιν ἰδρῶτα ἄγειν· ἀπὸ τούτων δὲ διὰ τὸ πρόχειρα εἶναι ῥάδιον ἀναλῶσαι τὸ ὑγρὸν.

Διὰ τί ψυχθέντες ἀπὸ τῆς αὐτῆς θερμασίας καίόμεθα μᾶλλον καὶ ἀλγοῦμεν; πότερον διὰ τὴν πυκνότητα στέγει ἢ σὰρξ τὸ προσπίπτον θερμόν; διὸ μόλιβδος ἐρίου θερμότερος. ἢ βίαιος γίνεται τοῦ θερμοῦ ἢ δίοδος διὰ τὸ πεπηγέναι ὑπὸ ψυχροῦ τὸ σῶμα;

[966b] Διὰ τί αἱ ξηροτριβίαι στερεὰν τὴν σάρκα παρασκευάζουσιν; ἢ ὅτι διὰ τὴν τρίψιν τῆς θερμασίας ἐπιγινομένης τὸ ὑγρὸν καταναλίσκεται. πρὸς δὲ τούτοις ἢ σὰρξ τριβομένη πυκνοῦται· ἅπαντα δὲ ὅσα πλείονος τρίψεως τυγχάνει πυκνοῦται καὶ στερεὰ γίνεται. θεωρῆσαι δὲ τὸ τοιοῦτον ἔστιν ἐπὶ πολλῶν· τὸ γὰρ σταῖς ἢ πηλὸς ἢ ἄλλο τι τῶν τοιούτων, ἐὰν μὲν ὕδωρ ἐπιχέας ἔλκης, ὑγρὰ καὶ κλυδῶντα διαμένει, ἐὰν δὲ πλείω τρίψιν προσάγῃς, πυκνοῦταί τε καὶ στερεοῦται ταχέως καὶ γλίσχρα γίνεται.

Διὰ τί αἱ τρίψεις μᾶλλον σαρκοῦσι τῶν δρόμων; ἢ ὅτι οἱ μὲν δρόμοι περιψύχουσι τὴν σάρκα καὶ οὐ δεκτικὴν τροφῆς παρασκευάζουσιν, ἀλλὰ τὰ μὲν συσσεύεται κάτω, τὰ δ' ἐπὶ πολλοῦ τοῦ φυσικοῦ θερμοῦ ἐπιτελουμένου παντελῶς λεπυνόμενα εἰς πνεῦμα διακρίνεται; ἢ δὲ παλάμη τῇ τρίψει τὴν σάρκα ἄραιαν καὶ δεκτικὴν αὐτῆς παρασκευάζει. καὶ ἡ ἔξωθεν δὲ ἀφῇ ἐναντιούμενη διὰ τῆς πλήσεως τῇ φορᾷ αὐτὸν συνέχει μᾶλλον, καὶ ἀνάκλασιν τῆς σαρκὸς ποιεῖται.

## ΛΗ. ΟΣΑ ΠΕΡΙ ΧΡΟΑΝ.

Διὰ τί τὸν μὲν κηρὸν καὶ τοῦλαιον λευκαίνει ὁ ἥλιος, τὴν δὲ σάρκα μελαίνει; ἢ ὅτι τὰ μὲν λευκαίνει ἀπάγων τὸ ὕδωρ (φύσει γὰρ τὸ ὑγρὸν μέλαν διὰ τὴν μίξιν τοῦ γεώδους ὕδατος), τὴν δὲ σάρκα ἐπικαίει;

Διὰ τί οἱ ἄλιεῖς καὶ πορφυρεῖς καὶ ἀπλῶς οἱ τὴν θάλατταν ἐργαζόμενοι πυρροὶ εἰσιν; πότερον ὅτι ἡ θάλαττα θερμὴ καὶ αὐχμώδης ἐστὶ διὰ τὴν ἄλμην; τὸ δὲ τοιοῦτον πυρρὰς ποιεῖ τὰς τρίχας, καθάπερ ἢ τε κονία καὶ τὸ ἄρσενικόν. ἢ τὰ μὲν ἐκτὸς γίνονται θερμότεροι, τὰ δ' ἐντὸς περιψύχονται διὰ τὸ βρεχομένων αὐτῶν ἀεὶ ξηραίνεσθαι ὑπὸ τοῦ ἡλίου τὰ πέριξ; τούτων δὲ τοῦτο πασχόντων αἱ τρίχες ξηραίνόμεναι λεπτύνονται καὶ πυρροῦνται. καὶ πάντες δὲ οἱ πρὸς ἄρκτον πυρρότριχες καὶ λεπτότριχες εἰσιν.

Διὰ τί οἱ μὲν ἐν ἱματίῳ δρόμοι καὶ ἡ τοῦ ἐλαίου εἰς ἱμάτιον χρῆσις



εὔχρους ποιεῖ, οἱ δὲ γυμνοὶ δρόμοι ἄχρους; ἢ ὅτι ἡ μὲν εὐπνοια εὔχροιαν ποιεῖ, ἡ δὲ κατάπνιξις τοῦναντίον. διὰ δὲ τὸ συνθερμαινόμενον τὸ ἐπιπολῆς ὑγρὸν μὴ διαψύχεσθαι ἄχροιαν ποιεῖ. ἄμφω δὲ ταῦτόν ποιεῖ, ἡ ἐν τῷ ἱματίῳ ἴδισις καὶ ἡ εἰς τὸ ἱμάτιον ἄλειψις· ἐγκατακλείεται [967a] γὰρ ἡ θερμότης. οἱ δὲ γυμνοὶ δρόμοι ἄχρουν ποιοῦσι διὰ τοῦναντίον, ὅτι καταψύχει ὁ ἀήρ τὰς συνισταμένας ἐκκρίσεις καὶ διαπνεῖ τὸ σῶμα. ἔτι τὸ ἔλαιον ὑγρὸν ὄν καὶ λεπτόν, ὑπαλειφθὲν καὶ τοὺς πόρους ἐμφρᾶττον, οὔτε τὸ ἐκ τοῦ σώματος ὑγρὸν καὶ πνεῦμα ἔξω ῥεῖν ἔα, οὔτε τὸ ἐκτὸς πνεῦμα ἐντός. διὸ καταπνιγόμενα ἐν τῷ σώματι ὑγρὰ περιττώματα σηπόμενα ἄχροιαν ποιεῖ.

Διὰ τί ἡ εὐπνοια εὔχρους ποιεῖ; ἢ ὅτι ἄχροια ἔοικεν εἶναι οἶον σῆψις τις χρωτός; ὅταν οὖν τὸ ἐπιπολῆς ὑγρὸν καὶ θερμὸν ᾖ, τοῦτο συμβαίνει χλωρὸν γίνεσθαι, ἔαν μὴ ψυχθῇ καὶ ἀποπνεύσῃ τὸ θερμόν.

Διὰ τί οἱ μὲν ἰδρώσαντες ἐκ τῶν γυμνασίων εὔχροοί εἰσιν εὐθύς, οἱ δὲ ἀθληταὶ ἄχροοι; ἢ διότι ὑπὸ μὲν τοῦ μετρίου πόνου τὸ θερμόν ἐκκάεται καὶ ἐπιπολάζει, ὑπὸ δὲ τῶν πολλῶν ἐξηθεῖται μετὰ τοῦ ἰδρώτος καὶ τοῦ πνεύματος, ἀραιουμένου τοῦ σώματος ἐν τῷ πονεῖν; ὅταν μὲν οὖν ἐπιπολάσῃ τὸ θερμόν, εὔχροοι γίνονται, καθάπερ οἱ τε θερμαινόμενοι καὶ αἰσχυνόμενοι· ὅταν δὲ ἐκλίπῃ, ἄχροοι. οἱ μὲν οὖν ἰδιῶται μέτρια γυμνάζονται, οἱ δὲ ἀθληταὶ πολλά.

Διὰ τί μᾶλλον καίονται ὑπὸ τοῦ ἡλίου οἱ καθεζόμενοι τῶν γυμναζομένων; ἢ ὅτι οἱ ἐν κινήσει ὄντες ὥσπερ ῥιπίζονται ὑπὸ τοῦ πνεύματος διὰ τὸ κινεῖν τὸν ἀέρα, οἱ δὲ καθήμενοι οὐ πάσχουσι τοῦτο;

Διὰ τί ὁ μὲν ἥλιος ἐπικάει, τὸ δὲ πῦρ οὐ; ἢ διότι λεπτότερός ἐστιν ὁ ἥλιος, καὶ μᾶλλον δύναται διαδύεσθαι εἰς τὴν σάρκα; τὸ δὲ πῦρ, ἔαν καὶ ἐπικάυσῃ, ἄνω μόνον ποιεῖ τὸ χρῶμα, τὰς φοῖδας καλουμένας· εἴσω δὲ οὐκ εἰσδύεται.

[967b] Διὰ τί τὸ πῦρ οὐ ποιεῖ μέλανας, ὁ δὲ ἥλιος ποιεῖ· τὸν δὲ κέραμον ποιεῖ, ὁ δὲ ἥλιος οὐ; ἢ οὐχ ὁμοίως ἐκάτερον ποιεῖ, ἀλλ' ὁ μὲν ἐπικάων τὴν χροάν μελαίνει, τὸ δὲ πῦρ τὸν κέραμον ἀναπιμπλᾷ, ἢ ἀναφέρει ἀσβόλῳ. τοῦτο δ' ἐστὶ λεπτῆς μαρίλης, ἀποθραυομένων ἅμα καὶ καομένων τῶν ἀνθράκων. τοὺς δ' ἀνθρώπους ὁ μὲν ἥλιος μελαίνει, τὸ δὲ πῦρ οὐ, ὅτι τοῦ μὲν μαλθακὴ ἡ θερμότης, καὶ διὰ μικρομέρειαν δύναται τὸ δέρμα αὐτὸ κάειν· ὥστε διὰ μὲν τὸ τῆς σαρκὸς μὴ ἄπτεσθαι οὐκ ἀλγεινόν, διὰ δὲ τὸ κάειν μέλαν ποιεῖ. τὸ δὲ πῦρ ἢ οὐχ ἄπτεται ἢ εἴσω διέρχεται, ἐπεὶ μέλανα καὶ τὰ πυρίκαυστα γίνεται,

ἀλλ' οὐ μόνον ἐκεῖνον τὸν τόπον κάει οὐδ' ἡ χροιά.

Διὰ τί οἱ γηράσκοντες μελάντεροι γίνονται; ἢ ὅτι πᾶν σηπόμενον μελάντερον γίνεται, πλὴν εὐρώτος; τοῦτο δ' ἐστὶ γῆρας καὶ σαπρότης. ἔτι ἐπειδὴ τὸ αἷμα ξηραίνόμενον μελάντερον γίνεται, εἰκότως ἂν μελάντεροι εἶεν οἱ πρεσβύτεροι· τοῦτο γάρ ἐστι τὸ χρῶζον ἡμῶν τὰ σώματα φυσικῶς.

Διὰ τί περὶ τὴν τῶν σιτίων ἐργασίαν, οἱ μὲν περὶ τὰς κριθὰς ἄχροοι γίνονται καὶ καταρροϊκοί, οἱ δὲ περὶ τοὺς πυροὺς εὐεκτικοί; ἢ διότι εὐπεπτότερος ὁ πυρὸς τῆς κριθῆς, ὥστε καὶ αἱ ἀπόρροια;

Διὰ τί ὁ μὲν ἥλιος τὸ μὲν ἔλαιον λευκαίνει, τὴν δὲ σάρκα μελαίνει; ἢ ὅτι τοῦ μὲν ἐλαίου ἀπάγει τὸ γεῶδες; τοῦτο δὲ ἦν τὸ μέλαν, ὥσπερ τὸ γεῶδες τοῦ οἴνου. τὴν δὲ σάρκα μελαίνει, ὅτι κάει· τὸ γὰρ γεῶδες καόμενον ἅπαν γίνεται μέλαν.

### Περὶ Ατομῶν Γραμμῶν (968a) On Indivisible Lines



❖iv.❖❖vται· ἀνάλογον γὰρ ἔχουσιν, ὅτι τὸ ἄρθρον διάφορόν πως ἐστίν, διὸ καὶ Ἐμπεδοκλῆς ἐποίησε διὸ δεῖ ὀρθῶς. ἡ δὲ στιγμή καὶ τὸ ἐν τοῖς ἀκινήτοις. ἔτι οὐδεὶς ἔχει ἄπειρα ἄρθρα ἐν τῷ σώματι ἢ τῇ χειρὶ, στιγμᾶς δ' ἀπείρους. ἔτι λίθου ἄρθρον οὐκ ἔστιν, οὐδ' ἔχει, στιγμᾶς δὲ ἔ❖

### Ανεμῶν Θεσεῖς καὶ Προσηγορίαι-εκ τῶν Ἀριστοτελοῦς περὶ Σημειῶν (973a) The Situations and Names of Winds



[973a] Βορρᾶς. οὗτος ἐν μὲν Μαλλῶ Παγρεὺς· πνεῖ γὰρ ἀπὸ κρημνῶν μεγάλων καὶ ὀρῶν διπλῶν παρ' ἄλληλα κειμένων, ἃ καλεῖται Παγρικά. ἐν δὲ Καύνῳ Μέσης. ἐν δὲ Ῥόδῳ Καυνίας· πνεῖ γὰρ ἀπὸ Καύνου, ἐνοχλῶν τὸν λιμένα αὐτῶν τὸν ἀκανίαν. ἐν δὲ Ὀλβίᾳ τῇ κατὰ Μύγαλον τῆς Παμφυλίας Γαυρεὺς· πνεῖ γὰρ ἀπὸ νήσου ἢ καλεῖται Γαυρίς. τινὲς δὲ αὐτὸν βορρᾶν οἶοντα εἶναι, ἐν οἷς καὶ Λυρναντεῖς οἱ κατὰ Φασηλίδα. Καικίας. οὗτος ἐν μὲν Λέσβῳ καλεῖται Θηβάνας· πνεῖ γὰρ ἀπὸ Θήβης πεδίου τοῦ ὑπὲρ τὸν Ἐλαιατικὸν κόλπον τῆς Μυσίας, ἐνοχλεῖ δὲ τὸν Μιτυληναίων λιμένα, μάλιστα

δὲ τὸν Μαλόεντα· παρὰ δὲ αἰκανίαις, ὃν ἄλλοι βορρᾶν οἶονται εἶναι. Ἀπηλιώτης. οὗτος ἐν μὲν Τριπόλει τῆς Φοινίκης Ποταμεὺς καλεῖται, πνεῖ δὲ ἐκ πεδίου ὁμοίου ἄλωνι μεγάλῃ, περιεχομένου ὑπὸ τε τοῦ Λιβάνου καὶ τοῦ Βαπύρου ὄρους· παρὸ καὶ Ποταμεὺς καλεῖται. ἐνοχλεῖ δὲ τὸ Ποσειδώνειον. ἐν δὲ τῷ Ἴσσικῳ κόλπῳ καὶ περὶ Ῥωσσὸν Συριάνδος· πνεῖ δὲ ἀπὸ τῶν Συρίων πυλῶν, ἃς διέστηκεν ὅ τε Ταῦρος καὶ Ταυρόσια ὄρη. ἐν δὲ τῷ Τριπολιτικῳ κόλπῳ Μαρσεύς, ἀπὸ Μάρσου κώμης. ἐν δὲ Προκοννήσῳ καὶ ἐν Τέῳ καὶ ἐν Κρήτῃ καὶ Εὐβοίᾳ καὶ Κυρήνῃ Ἑλλησποντίας. μάλιστα δὲ ἐνοχλεῖ τὸν τε τῆς Εὐβοίας Καφηρέα καὶ τὸν Κυρηναῖον λιμένα, καλούμενον δὲ Ἀπολλωνίαν· πνεῖ δὲ ἀφ' Ἑλλησπόντου. ἐν δὲ Σινώπῃ Βερεκυντίας ἀπὸ τῶν κατὰ Φρυγίαν τόπων πνέων. ἐν δὲ Σικελίᾳ Καταπορθμίας, πνέων [973b] ἀπὸ τοῦ πορθμοῦ. τινὲς δὲ αὐτὸν Καικίαν οἶονται εἶναι, Θηβάναν προσαγορεύοντες. Εὐρος. οὗτος ἐν μὲν Αἰγαῖς ταῖς κατὰ Συρίαν Σκοπελεὺς καλεῖται ἀπὸ τοῦ Ῥωσίων σκοπέλου, ἐν δὲ Κυρήνῃ Κάρβας ἀπὸ τῶν Καρβανῶν τῶν κατὰ Φοινίκην· διὸ καὶ τὸν αὐτὸν Φοινικίαν καλοῦσιν οἱ τινες. εἰσὶ δὲ οἱ καὶ Ἀπηλιώτην νομίζουσιν εἶναι. Ὀρθόνοτος. τοῦτον οἱ μὲν Εὐρον, οἱ δὲ Ἀμνέα προσαγορεύουσιν. Νότος δὲ ὁμοίως παρὰ πᾶσι καλεῖται· τὸ δὲ ὄνομα διὰ τὸ νωσώδη εἶναι· ἔξω δὲ κάτομβρον, κατ' ἀμφοτέρω δὲ νότον. Λευκόνωτος ὁμοίως· τὸ δὲ ὄνομα ἀπὸ τοῦ συμβαίνοντος· λευκαίνεται γὰρ ... Λίψ. καὶ οὗτος τὸ ὄνομα ἀπὸ Λιβύης, ὅθεν πνεῖ. Ζέφυρος. καὶ οὗτος τότε τὸ ὄνομα διὰ τὸ ἀφ' ἐσπέρας πνεῖν. ἡ δὲ ἐσπέρα ... Ἰάπυξ. οὗτος ἐν Τάραντι Σκυλητίνος ἀπὸ χωρίου Σκυλαντίμου. κατὰ δὲ οραλεοντο Φρυγίας. ὑπὸ δὲ τινων Φαραγγίτης· πνεῖ γὰρ ἔκ τινος φάραγγος τῶν κατὰ τὸ Πηγαῖον. παρὰ πολλοῖς δὲ Ἀργέστης. Θρακίας κατὰ μὲν Θράκην Στρυμονίας (πνεῖ γὰρ ἀπὸ τοῦ Στρυμόνος ποταμοῦ), κατὰ δὲ τὴν Μεγαρικὴν Σκίρρων ἀπὸ τῶν Σκιρρωνίδων πετρῶν, ἐν δὲ Ἰταλίᾳ καὶ Σικελίᾳ Κίρκας διὰ τὸ πνεῖν ἀπὸ τοῦ Κίρκαίου. ἐν δὲ Εὐβοίᾳ καὶ Λέσβῳ Ὀλυμπίας, τὸ δὲ ὄνομα ἀπὸ τοῦ Πιερικοῦ Ὀλύμπου· ὀχλεῖ δὲ Πυρραίου. ὑπογέγραφα δέ σοι καὶ τὰς θέσεις αὐτῶν, ὥς κεῖνται καὶ πνέουσιν, ὑπογράψας τὸν τῆς γῆς κύκλον, ἵνα καὶ πρὸ ὀφθαλμῶν σοι τεθῶσιν.

## **Περὶ Ξενοφάνους, περὶ Ζηνωνοῦ, περὶ Γοργίου (974a) On Melissus, Xenophanes, and Gorgias**



### **CONTENTS**

[ΠΕΡΙ ΞΕΝΟΦΑΝΟΥΣ.](#)

[ΠΕΡΙ ΖΗΝΩΝΟΣ.](#)

[ΠΕΡΙ ΓΟΡΓΙΟΥ.](#)

## **ΠΕΡΙ ΞΕΝΟΦΑΝΟΥΣ.**

[974a] Αἰδίων εἶναι φησιν εἴ τί ἐστιν, εἴπερ μὴ ἐνδέχεται γενέσθαι μηδὲν ἐκ μηδενός. εἴτε γὰρ ἅπαντα γέγονεν εἴτε μὴ πάντα αἰδί· ἀμφοτέρως. ἐξ οὐδενός γὰρ αὐτῶν ἂν γινόμενα. ἅπαντων τε γὰρ γινομένων οὐδὲν προϋπάρχειν· εἴτ' ὄντων τινῶν ἀεὶ ἕτερα προσγίνοιτο, πλεόν ἂν καὶ μεῖζον τὸ ἐν γεγονέναι. ὥ δὴ πλεόν καὶ μεῖζον, τοῦτο γενέσθαι ἂν ἐξ οὐδενός· τῷ γὰρ ἐλάττονι τὸ πλεόν, ἢ δ' ἐν τῷ μικροτέρῳ τὸ μεῖζον οὐχ ὑπάρχειν. αἰδίων δὲ ὃν ἄπειρον εἶναι, ὅτι οὐκ ἔχει ἀρχὴν ὅθεν ἐγένετο, οὐδὲ τελευτὴν εἰς ὃ γινόμενον ἐτελεύτησέ ποτε· πᾶν δὲ καὶ ἄπειρον ὃν εἶναι. εἰ γὰρ πλεόν ἢ δύο εἴη, πέρατ' ἂν εἶναι ταῦτα πρὸς ἄλληλα. ἐν δὲ ὅμοιον εἶναι πάντα· εἰ γὰρ ἀνόμοια πλείω ὄντα, οὐκ ἂν ἔτι ἐν θεῖναι ἀλλὰ πολλά. αἰδίων δὲ ὃν μέτριόν τε καὶ ὅμοιον πάντῃ ἀκίνητον εἶναι τὸ ἐν. οὐ γὰρ ἂν κινηθῆναι μὴ ἔς τι ὑποχωρῆσαν. ὑποχωρῆσαι δὲ ἀνάγκη εἶναι ἥτοι εἰς πλήρες ἢ κενόν. τούτων δὲ τὸ μὲν οὐκ ἂν δέξασθαι τὸ πλήρες, τὸ δὲ οὐκ εἶναι οὐδὲν [ἢ] τὸ κενόν. τοιοῦτο δὲ ὃν τὸ ἐν ἀνώδυνόν τε καὶ ἀνάληπτον ὑγιές τε καὶ ἄνοσον εἶναι, οὔτε μετακοσμούμενον θέσει, οὔτε ἑτεροιούμενον εἶδει, οὔτε μιγνύμενον ἄλλῳ. κατὰ πάντα γὰρ ταῦτα πολλά τε τὸ ἐν γίνεσθαι καὶ τὸ μὴ ὃν τεκνοῦσθαι καὶ τὸ ὃν φθείρεσθαι ἀναγκάζεσθαι. ταῦτα δὲ ἀδύνατα εἶναι. καὶ γὰρ εἰ τὸ μεμῖχθαι τι ἐν ἐκ πλειόνων λέγοιτο, καὶ εἴη πολλά κινούμενα εἰς ἄλληλα τὰ πράγματα, καὶ ἢ μῖξις ἢ ὡς ἐν ἐνὶ σύνθεσις εἴη τῶν πλειόνων, ἢ τῇ ἀπαλλάξει οἶον ἐπιπρόσθησις γίνοιτο τῶν मिχθέντων, ἐκείνους μὲν ἂν δι' ἀλλήλων χωριζόντων εἶναι τὰ मिχθέντα, ἐπιπροσθήσεως δ' οὔσης ἐν τῇ τρίψει γίνεσθαι ἂν ἕκαστον φανερόν, ἀφαιρουμένων [974b] τῶν πρώτων τὰ ὑπ' ἄλληλα τεθέντα τῶν मिχθέντων· ὧν οὐδέτερον συμβαίνειν. διὰ τοῦτον δὲ τὸν τρόπον κἂν εἶναι πολλά κἂν ἡμῖν, ὡς τὸ φαίνεσθαι μόνως. ὥστ' ἐπειδὴ οὐχ οἶόν θ' οὕτως, οὐδὲ πολλά δυνατὸν εἶναι τὰ ὄντα, ἀλλὰ ταῦτα δοκεῖν οὐκ ὀρθῶς. πολλά γὰρ καὶ ἄλλα κατὰ τὴν αἴσθησιν φαντάζεσθαι ἅπασαν. λόγον δ' οὔτ' ἀναιρεῖ τὰ αὐτὰ γίνεσθαι, οὔτε πολλά εἶναι τὸ ὄν, ἀλλ' αἰδίων τε καὶ ἄπειρον καὶ πάντῃ ὅμοιον αὐτὸ αὐτῷ. ἄρ' οὖν δεῖ πρῶτον μὲν μὴ πᾶσαν λαβόντα δόξαν ἄρχεσθαι, ἀλλ' ἀεὶ μάλιστα ὃν βέβαιον. ὥστ' εἰ μὲν ἅπαντα τὰ δοκοῦντα μὴ ὀρθῶς ὑπολαμβάνεται, οὐθὲν ἴσως προσήκει οὐδὲ τούτῳ προχρῆσθαι τῷ δόγματι, οὐκ ἂν ποτε οὐδὲν γένοιτο ἐκ μηδενός. μία γάρ τις

ἐστὶ δόξα καὶ αὕτη τῶν οὐκ ὀρθῶν, ἣν ἐκ τοῦ αἰσθάνεσθαι πως ἐπὶ πολλῶν ὄντες ὑπελήφαμεν. εἰ δὲ μὴ πάντα ἡμῖν ψευδῆ τὰ φαινόμενα, ἀλλὰ τινὲς εἰσι καὶ τούτων ὀρθαὶ ὑπολήψεις ἢ ἐπιδείξαι τὰς τοιαύτας ποιότητος μάλιστα δοκούσας ὀρθάς, ταύτας ληπτέον, ἃς ἀεὶ βεβαιότερας εἶναι δεῖ ἢ αἱ μέλλουσιν ἐξ ἐκείνων τῶν λόγων δειχθήσεσθαι. εἰ γὰρ καὶ εἶεν δύο δόξαι ὑπεναντίαι ἀλλήλαις, ὥσπερ οἶεται, εἰ μὴ πολλὰ γενέσθαι φησὶν, ἀνάγκη εἶναι ἐκ μὴ ὄντων. εἰ δὲ τοῦτο μὴ οἶόν τε, οὐκ εἶναι τὰ ὄντα πολλὰ. γένοιτο γὰρ ἂν ὅν, ὅτι ἔστιν ἄπειρον εἶναι. εἰ δ' οὕτως, καὶ ἔν. ὁμοίως μὲν δὴ ἡμῖν ὁ ἀμφοτέρων π οὐδὲν μᾶλλον τι ἔν, ἢ ὅτι πολλὰ δείκνυται. εἰ δὲ βέβαιος μᾶλλον ἢ ἑτέρα, ἀπὸ ταύτης συμπερανθέντα μᾶλλον δέδεικται. τυγχανόμενα δέ, ἔχοντος ἀμφοτέρας τὰς ὑπολήψεις ταύτας, καὶ κινούμενα μὲν ἐστὶ τὰ ὄντα. ἀμφοῖν δὲ πιστὴ μᾶλλον αὕτη, καὶ θᾶττον ἂν προεῖντο πάντες ταύτην ἐκείνης τὴν δόξαν. ὥστ' εἰ καὶ συμβαίνει ἐναντίας [975a] εἶναι τὰς φάσεις, καὶ ἀδύνατον γίνεσθαι τε ἐκ μὴ ὄντος καὶ μὴ πολλὰ εἶναι τὰ πράγματα, ἐλέγχοιτο μὲν ἂν ὑπ' ἀλλήλων ταῦτα, ἀλλὰ τί μᾶλλον οὕτως ἂν ἔχοι; ἴσως τε κἂν φαίη τις τούτοις τᾶναντία. οὔτε γὰρ δείξας ὅτι ὀρθὴ δόξα ἀφ' ἧς ἄρχεται, οὔτε μᾶλλον βέβαιον ἢ περὶ ἧς δείκνυσι λαβών, διελέχθη. μᾶλλον γὰρ λαμβάνεται εἰκὸς εἶναι γίνεσθαι ἐκ μὴ ὄντος ἢ μὴ πολλὰ εἶναι. λέγεται τε καὶ σφόδρα ὑπὲρ αὐτῶν γίνεσθαι τε τὰ μὴ ὄντα, καὶ μὴ γεγονέναι πολλὰ ἐκ μὴ ὄντων, καὶ οὐχ ὅτι οἱ τυγχάνοντες, ἀλλὰ καὶ τῶν δοξάντων εἶναι σοφῶν τινὲς εἰρήκασιν. αὐτίκα δ' Ἡσίοδος “πρῶτον μὲν πάντων” φησὶ “χάος ἐγένετ'”, αὐτὰρ ἔπειτα γαῖ' εὐρύστερνος, πάντων ἔδος ἀσφαλὲς αἰεὶ, ἡδ' ἔρος, ὃς πάντεσσι μεταπρέπει ἀθανάτοισιν.” τὰ δ' ἄλλα φησὶ γενέσθαι, ταῦτα δ' ἐξ οὐδενός. πολλοὶ δὲ καὶ ἕτεροι εἶναι μὲν οὐδὲν φασί, γίνεσθαι δὲ πάντα, λέγοντες ἐξ οὐκ ὄντων γίνεσθαι τὰ γινόμενα. ὥστε τοῦτο μὲν δῆλον, ὅτι ἐνίοις γε δοκεῖ καὶ ἐξ οὐκ ὄντων Ἄλλ' ἄρα εἰ μὲν δυνατὰ ἐστὶν ἢ ἀδύνατα ἃ λέγει, ἐατέον. τὸ δὲ πότερον συμπεραίνεται αὐτὸ ἐξ ὧν λαμβάνει, ἢ οὐδὲν κωλύει καὶ ἄλλως ἔχειν, ἱκανῶς σκέψασθαι· ἕτερον γὰρ ἂν τι τοῦτ' ἴσως ἐκείνου εἴη. καὶ πρῶτον τεθέντος, ὃ πρῶτον λαμβάνει, μηδὲν γενέσθαι ἂν ἐκ μὴ ὄντος, ἄρα ἀνάγκη ἀγέννητα πάντα εἶναι, ἢ οὐδὲν κωλύει γεγονέναι ἕτερα ἐξ ἑτέρων, καὶ τοῦτο εἰς ἄπειρον ἰέναι; ἢ καὶ ἀνακάμπει κύκλῳ, ὥστε τὸ ἕτερον ἐκ τοῦ ἑτέρου γεγονέναι, αἰεὶ τε οὕτως ὄντος τινός, καὶ ἀπειράκις ἐκάστου γεγενημένου ἐξ ἀλλήλων. ὥστε οὐδὲν ἂν κωλύοιτο ἅπαντα γεγονέναι, κειμένου τοῦ μηδὲν γενέσθαι ἂν ἐκ μὴ ὄντος, καὶ ἄπειρα ὄντα πρὸς ἐκεῖνον προσαγορεύσαι οὐδὲν κωλύει τῶν τῷ ἐνὶ ἐπομένῳ ὀνομάτων. ἅπαντα γὰρ εἶναι καὶ λέγεσθαι καὶ ἐκεῖνος τῷ ἀπείρῳ προσάπτει. οὐδὲν τε κωλύει, καὶ μὴ ἀπείρων ὄντων, κύκλῳ αὐτῶν εἶναι τὴν γένεσιν. ἔτι εἰ ἅπαντα γίνεσθαι, ἔστι δὲ οὐδὲν, ὥς τινες λέγουσιν, πῶς ἐν αἰδία εἴη; ἀλλὰ γὰρ τοῦ μὲν εἶναι ἔν τι ὡς ὄντος καὶ κειμένου διαλέγεται. εἰ γάρ, φησί, μὴ ἐγένετο,

ἔστω δὲ αἰδία, ὡς δέον ὑπάρχειν τὸ εἶναι τοῖς πράγμασιν. ἔτι εἰ καὶ ὅτι μάλιστα μήτε τὸ μὴ ὄν ἐνδέχεται γενέσθαι μήτε ἀπολέσθαι τὸ μὴ ὄν, ὅμως τί κωλύει τὰ μὲν γενόμενα αὐτῶν εἶναι, τὰ δ' αἰδία, ὡς καὶ Ἐμπεδοκλῆς λέγει; [975b] ἅπαντα γὰρ κάκεῖνος ταῦτα ὁμολογήσας, ὅτι ἕκ τε μὴ ὄντος ἀμήχανόν ἐστι γενέσθαι, τό τε ὄν ἐξόλλυσθαι ἀνήνυστον καὶ ἄπρηκτον, αἰεὶ γὰρ θήσεσθαι ὅπη κέ τις αἰὲν ἐρείδῃ, ὅμως τῶν ὄντων τὰ μὲν αἰδία εἶναι φησι, πῦρ καὶ ὕδωρ καὶ γῆν καὶ ἀέρα, τὰ δ' ἄλλα γίνεσθαι τε καὶ γεγενῆσθαι ἐκ τούτων. οὐδεμία γὰρ ἑτέρα, ὡς οἶται, γένεσις ἐστι τοῖς οὕσιν, ἀλλὰ μόνον μῖξις τε διάλλαξις τε μιγέντων ἐστίν· φύσις δ' ἐπὶ τοῖς ὀνομάζεται ἀνθρώποις. τὴν δὲ γένεσιν προσιοῦσαν τοῖς αἰδίοις καὶ τῷ ὅτι γίνεσθαι λέγει, ἐπεὶ τοῦτο γε ἀδύνατον ὤετο. πῶς γάρ, φήσει, καὶ ἔπαρξις ἴετο, παντί τε καὶ ποθὲν ἐλθόν; ἀλλὰ μισγομένων τε καὶ συντιθεμένων πυρὸς καὶ τῶν μετὰ πυρὸς γίνεσθαι τὰ πολλά, διαλλαττομένων τε καὶ διακρινομένων φθείρεσθαι πάλιν, καὶ εἶναι τῇ μὲν μίξει πολλά τε καὶ τῇ διακρίσει, τῇ δὲ φύσει τέτταρ' ἄνευ τῶν αἰτίων, ἢ ἕν· ἢ εἰ καὶ ἄπειρα εὐθύς εἴη ταῦτα, ἐξ ὧν συντιθεμένων γίγνεται, διακρινομένων δὲ φθίρεται, ὡς καὶ τὸν Ἀναξαγόραν φασὶ τινες λέγειν ἐξ αἰεὶ ὄντων καὶ ἀπείρων τὰ γινόμενα γίνεσθαι. κἂν οὕτως, οὐκ ἂν εἴη αἰδία πάντα, ἀλλὰ καὶ γινόμενα ἅττα καὶ γενομένα τ' ἐξ ὄντων καὶ φθειρόμενα εἰς οὐσίας τινὰς ἄλλας. ἔτι οὐδὲν κωλύει μίαν τινὰ οὐσίαν τὸ πᾶν μορφήν, ὡς καὶ ὁ Ἀναξίμανδρος καὶ ὁ Ἀναξίμενης λέγουσιν, ὁ μὲν ὕδωρ εἶναι φάμενος τὸ πᾶν, ὁ δέ, ὁ Ἀναξίμενης, ἀέρα, καὶ ὅσοι ἄλλοι οὕτως εἶναι τὸ πᾶν ἐν ἡξιώκασιν. τοῦτο ἤδη σχήμασί τε καὶ πλήθεσι καὶ ὀλιγότητι, καὶ τῷ μανὸν ἢ πυκνὸν γίνεσθαι, πολλὰ καὶ ἄπειρα ὄντα τε καὶ γινόμενα ἀπεργάζεται τὸ ὅλον. φησὶ δὲ καὶ ὁ Δημόκριτος τὸ ὕδωρ τε καὶ τὸν ἀέρα ἕκαστόν τε τῶν πολλῶν, τοῦτο ὄν, ῥυθμῷ διαφέρειν. τί δὴ κωλύει καὶ οὕτως τὰ πολλὰ γίνεσθαι τε καὶ ἀπόλλυσθαι, ἐξ ὄντος αἰεὶ ἐς ὄν μεταβάλλοντος ταῖς εἰρημέναις διαφοραῖς τοῦ ἑνός, καὶ οὐδὲν οὔτε πλέονος οὔτε ἐλάττονος γιγνομένου τοῦ ὅλου; ἔτι τί κωλύει ποτὲ μὲν ἐξ ἄλλων τὰ σώματα γίνεσθαι τε καὶ ἀπόλλυσθαι πάλιν; εἰ δὲ καὶ ταῦτά τις συγχωροίη, καὶ εἴη τι καὶ ἀγέννητον, τί μᾶλλον ἄπειρον δείκνυται; ἄπειρον γὰρ εἶναι φησιν, εἰ ἔστι μὲν, μὴ γεγενῆσθαι. πέρατα γὰρ εἶναι τὴν τῆς γενέσεως ἀρχὴν τε καὶ τελευτήν. καίτοι τί κωλύει ἀγέννητον ὄν ἔχειν πέρας ἐκ τῶν εἰρημένων; εἰ γὰρ ἐγένετο, ἀρχὴν ἔχειν ἀξιοῖ ταύτην [976a] ὅθεν γίγνοιτο, εἰ γινόμενα. τί δὴ κωλύει, καὶ εἰ μὴ ἐγένετο, ἔχειν ἀρχήν; οὐ μέντοι γε ἐξ ἧς γε ἐγένετο, ἀλλὰ καὶ ἑτέραν, καὶ εἶναι περαίνοντα πρὸς ἄλληλα αἰδία ὄντα. ἔτι τί κωλύει τὸ μὲν ὅλον ἀγέννητον ὄν ἄπειρον εἶναι, τὰ δ' ἐν αὐτῷ γινόμενα πεπεράνθαι, ἔχοντ' ἀρχὴν καὶ τελευτήν γενέσεως; ἔτι καὶ ὡς ὁ Παρμενίδης φησί, τί κωλύει καὶ τὸ πᾶν ἐν ὄν καὶ ἀγέννητον ὅμως πεπεράνθαι, καὶ εἶναι πάντοθεν ἐγκύκλου

σφαίρας ἐναλίγκιον ὄγκῳ, μέσσοθεν ἰσοπαλὲς πάντῃ· τὸ γὰρ οὔτε τι μεῖζον οὔτε τι βαιότερον εἶναι μέχρι ὅν ἐστι τῇ ἢ τῇ. ἔχον δὲ μέσον καὶ ἔσχατα, πέρας ἔχει ἀγέννητον ὄν, ἐπεὶ εἰ καί, ὡς αὐτὸς λέγει, ἐν ἐστι, καὶ τοῦτο σῶμα, ἔχει ἄλλα ἐαυτοῦ μέρη, εἰ τάδε ὅμοια πάντα. καὶ γὰρ ὅμοιον οὕτω λέγει τὸ πᾶν εἶναι οὐ... ἄλλω τινὶ ὃ περανθῆναι ὀρᾷς, ἐλέγχει εἴ τι ὅμοιον τὸ ἄπειρον. τό γε ὅμοιον ἐτέρῳ ὅμοιον, ὥστε δύο ἢ πλείω ὄντα οὐκ ἂν ἐν οὐδ' ἄπειρον εἶναι. ἀλλ' ἴσως τὸ ὅμοιον πρὸς αὐτὸ λέγει, καὶ φησὶν αὐτὸ ὅμοιον εἶναι πᾶν, ὅτι ὁμοιομερὲς ὕδωρ ὃν ἅπαν ἢ γῆ ἢ εἴ τι τοιοῦτον ἄλλο. δῆλος γὰρ οὗτος ἀξιῶν εἶναι ἐν τῶν διμερῶν ἕκαστον σῶμα ὄν, οὐκ ἄπειρόν ἐστιν. τὸ γὰρ ὅλον ἄπειρον, ὥστε ταῦτα περαίνει πρὸς ἄλληλα ἀγέννητα ὄντα. ἔτι εἰ ἀϊδίον τε καὶ ἄπειρόν ἐστι, πῶς ἂν εἴη ἐν σῶμα ὄν; εἰ μὲν γὰρ ἀνομοίων ἀμερῶν εἴη, πολλά, καὶ αὐτὸς οὕτω γ' εἶναι ἀξιοῖ. εἰ δὲ ἅπαν ὕδωρ ἢ ἅπαν γῆ ἢ ὃ τι δὴ τὸ ὄν τοῦτ' ἐστί, πολλὰ ἂν ἔχοι μέρη, ὡς καὶ Ζήνων ἐπιχειρεῖ ὄν δεικνύναι τὸ οὕτως ὄν ἐν. εἴη οὖν ἂν καὶ πλείονα αὐτοῦ μέρη ἐλαττόνων τε καὶ μικροτέρων, ἀλλὰ τε πάντῃ ἂν ταύτῃ ἄλλοῖον εἴη οὐδενὸς προσγιγνομένου σώματος οὐδ' ἀπογιγνομένου. εἰ δὲ μήτε σῶμα μήτε πλάτος μήτε μήκος ἔχον μηδέν, πῶς ἂν ἄπειρον ἂν εἴη; τί κωλύει πολλὰ καὶ ἐνάριθμα τοιαῦτα εἶναι; τί κωλύει καὶ πλείω ὄντα ἐνὸς μεγέθει ἄπειρα εἶναι; ὡς καὶ Ξενοφάνης ἄπειρον τό τε βάθος τῆς γῆς καὶ τοῦ ἀέρος φησὶν εἶναι. δηλοῖ δὲ καὶ ὁ Ἐμπεδοκλῆς· ἐπιτιμᾷ γὰρ ὡς λεγόντων τινῶν τοιαῦτα ἀδύνατα εἶναι, οὕτως ἐχόντων ξυμβαίνειν αὐτά, εἴπερ ἀπείρονα γῆς τε βάθη καὶ δαψιλὸς αἰθήρ, ὃς διὰ πολλῶν δὴ βροτέων ῥηθέντα ματαίως ἐκκέχυται στομάτων, ὀλίγον τοῦ παντὸς ἰδόντων. ἔτι ὄν ἐν οὐδὲν ἄτοπον εἰ μὴ πάντῃ ὅμοιον ἐστιν. εἰ γὰρ ἐστιν [976b] ὕδωρ ἅπαν ἢ πῦρ ἢ ὃ τι δὴ ἄλλο τοιοῦτον, οὐδὲν κωλύει πλείω εἰπεῖν τοῦ ὄντος ἐνός, εἰ δὴ δι' ἕκαστον ὅμοιον αὐτὸ ἐαυτῷ. καὶ γὰρ μανόν, τὸ δὲ πυκνὸν εἶναι, μὴ ὄντος ἐν τῷ μανῶ κενοῦ. οὐδὲν κωλύειν γάρ, τῷ μανῶ οὐκ ἔστιν ἐν τισὶ μέρεσι χωρὶς ἀποκεκριμένον τὸ κενόν, ὡς τὸ τοῦ ὅλου, τὸ μὲν εἶναι πυκνόν, καὶ τουτὶ δέ ἐστι μανὸν τὸ πᾶν οὕτως ἔχον· ἀλλ' ὁμοίως ἅπαν πληρὲς ὄν, ὁμοίως ἦττον πληρὲς ἐστί τοῦ πυκνοῦ. εἰ δὲ καὶ ἔστιν, ἀγέννητόν ἐστιν, καὶ διὰ τοῦτο δοθείη ἄπειρον εἶναι, καὶ μηδὲ ἐνδέχεσθαι ἄλλο καὶ ἄλλο ἄπειρον εἶναι. διὰ τοῦτο καὶ ἐν τούτῳ ἤδη προσαγορευτέον καὶ ἀδύνατον· πῶς γὰρ ἂν τὸ ἄπειρον ὅσον ἢ τὸ κενὸν μὴ ὅλον ἂν οἶόν τε εἶναι; ἀκίνητον δ' εἶναι φησὶν, εἰ κενὸν μὴ ἐστιν· ἅπαντα γὰρ κινεῖσθαι τῷ ἀλλάττειν τόπον. πρῶτον μὲν οὖν τοῦτο πολλοῖς οὐ συνδοκεῖ, ἀλλ' εἶναι τι κενόν, οὐ μέντοι τοῦτό γέ τι σῶμα εἶναι, ἀλλ' οἶον καὶ ὁ Ἡσίοδος ἐν τῇ γενέσει πρῶτον τὸ χάος φησὶ γενέσθαι, ὡς δὲ χώραν πρῶτον ὑπάρχειν τοῖς οὐσιν. τοιοῦτον δέ τι καὶ τὸ κενὸν οἶον ἀγγεῖόν τι ἀνὰ μέσον εἶναι ζητοῦμεν. ἀλλὰ δὴ καὶ εἰ μὴ ἐστι κενόν, μηδέ τι ἦσσαν ἂν κινεῖτο, ἐπεὶ καὶ Ἀναξαγόρας τὸ πρὸς αὐτὸ πραγματευθεὶς, καὶ οὐ μόνον ἀποχρήσαν αὐτῷ

ἀποφήνασθαι ὅτι οὐκ ἔστιν, ὅμως κινεῖσθαι φησι τὰ ὄντα, οὐκ ὄντος κενοῦ. ὁμοίως δὲ καὶ ὁ Ἐμπεδοκλῆς κινεῖσθαι μὲν ἀεί φησι συγκινούμενα τὸν ἅπαντα ἐνδελεχῶς χρόνον, οὐδὲν εἶναι λέγων ὡς τοῦ παντός, οὐδὲ κενοῦ. πόθεν οὖν τί κ' ἐπέλθοι; ὅταν δὲ εἰς μίαν μορφήν συγκριθῇ, ὡς ἐν εἶναι, οὐδὲν φησι τό γε κενοῦ πέλει οὐδὲ περισσόν. τί γὰρ κωλύει εἰς ἄλληλα φέρεσθαι καὶ περιίστασθαι ἅμα ὁτουοῦν εἰς ἄλλο, καὶ τούτου εἰς ἕτερον, καὶ εἰς τὸ πρῶτον, ἄλλου μεταβάλλοντος ἀεί. ἔτι καὶ τὴν ἐν τῷ αὐτῷ μένοντος τοῦ πράγματος τόπῳ τοῦ εἶδους μεταβολήν, ἣν ἀλλοίωσιν οἱ τ' ἄλλοι κάκεῖνος λέγει, [οὐδὲν] ἐκ τῶν εἰρημένων αὐτῷ κωλύει κινεῖσθαι τὰ πράγματα, ὅταν ἐκ λευκοῦ μέλαν ἢ ἐκ πικροῦ γένηται γλυκύ. οὐδὲν γὰρ τὸ μὴ εἶναι κενὸν ἢ μὴ δέχεσθαι τὸ πλήρες ἀλλοιοῦσθαι κωλύει. ὥστε οὔτε ἅπαντα αἶδια οὔθ' ἐν οὔτ' ἄπειρον ἀνάγκη εἶναι, ἀλλ' ἄπειρα πολλά. οὔτε ἐν θ' ὅμοιον, οὔτ' ἀκίνητον, οὔτ' εἰ ἐν οὔτ' εἰ πόλλ' ἄττα. τούτων δὲ κειμένων καὶ μετακοσμεῖσθαι καὶ ἑτεροιοῦσθαι τὰ ὄντα οὐδὲν κωλύει ἐκ τῶν ὑπ' ἐκείνῳ εἰρημένων, [977a] καὶ ἐνὸς ὄντος τοῦ παντός κινήσεως οὔσης, καὶ πλήθει καὶ ὀλιγότητι διαφέροντος, καὶ ἀλλοιουμένου οὐδενὸς προσγινομένου. εἰ δ' ἄρα τινός, οὐ τοῦ σώματος, καὶ εἰ πολλὰ συμμισγομένων καὶ συνδιακρινομένων ἀλλήλοις. τὴν γὰρ μῖξιν οὔτ' ἐπιπρόσθεσιν τοιαύτην εἶναι οὔτε σύνθεσιν εἰκὸς οἶαν λέγειν. ὥστε ἢ χωρὶς εὐθύς εἶναι, ἢ καὶ ἀποστρεφθέντος ἐπίπροσθεν ἕτερα ἑτέρων φέρεσθαι χωρὶς ἀλλήλων ταῦτα, ἀλλ' οὔτω συγκεῖσθαι ταχθέντα ὥστε ὅτιοῦν μίγνυμένου παρ' ὅτιοῦν ὧ μίγνυσθαι μέρος, οὔτως ὡς μὴ ἀναληφθῆναι συγκείμενα, ἀλλὰ μεμιγμένα, μηδ' ὁποιοῦν αὐτῷ μέρη. ἐπεὶ γὰρ οὐκ ἔστι σῶμα τὸ ἐλάχιστον, ἅπαν ἅπαντι μέρος μέμικται ὁμοίως καὶ τὸ ὅλον.

## ΠΕΡΙ ΖΗΝΩΝΟΣ.

Ἀδύνατόν φησιν εἶναι, εἴ τι ἔστι, γενέσθαι, τοῦτο λέγων ἐπὶ τοῦ θεοῦ. ἀνάγκη γὰρ ἦτοι ἐξ ὁμοίων ἢ ἐξ ἀνομοίων γενέσθαι τὸ γενόμενον. δυνατόν δὲ οὐδέτερον. οὔτε γὰρ ὅμοιον ὑφ' ὁμοίου προσήκειν τεκνωθῆναι μᾶλλον ἢ τεκνώσαι (ταῦτά γὰρ ἅπαντα τοῖς γε ἴσοις ἢ ὁμοίοις ὑπάρχειν πρὸς ἄλληλα) οὔτ' ἂν ἐξ ἀνομοίου τὸ ἀνόμοιον γενέσθαι. εἰ γὰρ γίγνοιτο ἐξ ἀσθενεστέρου τὸ ἰσχυρότερον ἢ ἐξ ἐλάττονος τὸ μεῖζον ἢ ἐκ χείρονος τὸ κρεῖττον, ἢ τούναντίον τὰ χεῖρω ἐκ τῶν κρειπτόνων, τὸ οὐκ ὂν ἐξ ὄντος ἂν γενέσθαι· ὅπερ ἀδύνατον. αἰδῖον μὲν οὖν διὰ ταῦτ' εἶναι τὸν θεόν. εἰ δ' ἔστιν ὁ θεὸς ἅπάντων κράτιστον, ἕνα φησὶν αὐτὸν προσήκειν εἶναι. εἰ γὰρ δύο ἢ ἔτι πλείους εἶεν, οὐκ ἂν ἔτι κράτιστον καὶ βέλτιστον αὐτὸν εἶναι πάντων. ἕκαστος γὰρ ἂν θεὸς τῶν πολλῶν ὅμοιος ὢν τοιοῦτος εἴη. τοῦτο γὰρ θεὸν καὶ θεοῦ δύναμιν εἶναι, κρατεῖν, ἀλλὰ μὴ κρατεῖσθαι, καὶ πάντα κρατεῖσθαι εἶναι.



ὥστε καθὸ μὴ κρείττων, κατὰ τοσοῦτον οὐκ εἶναι θεόν. πλειόνων οὖν ὄντων, εἰ μὲν εἶεν τὰ μὲν ἀλλήλων κρείττους τὰ δὲ ἥττους, οὐκ ἂν εἶναι θεούς· πεφυκέναι γὰρ θεὸν μὴ κρατεῖσθαι. ἴσων δὲ ὄντων, οὐκ ἂν ἔχειν θεὸν φύσιν δεῖν εἶναι κράτιστον· τὸ δὲ ἴσον οὔτε βέλτιον οὔτε χεῖρον εἶναι τοῦ ἴσου. ὥστ' εἶπερ εἴη τε καὶ τοιοῦτον εἴη θεός, ἓνα μόνον εἶναι τὸν θεόν. οὐδὲ γὰρ οὐδὲ πάντα δύνασθαι ἂν ἃ βούλοιτο. οὐδὲ γὰρ ἂν δύνασθαι πλειόνων ὄντων ἓνα εἶναι μόνον. ἓνα δ' ὄντα ὅμοιον εἶναι πάντη, ὁρᾶν τε καὶ ἀκούειν, τὰς τε ἄλλας αἰσθήσεις ἔχοντα πάντη. εἰ γὰρ μή, κρατεῖν ἂν καὶ κρατεῖσθαι ὑπ' ἀλλήλων τὰ μέρη θεοῦ ὄντα· ὅπερ ἀδύνατον. [977b] πάντη δ' ὅμοιον ὄντα σφαιροειδῆ εἶναι· οὐ γὰρ τῇ μὲν τῇ δ' οὐ τοιοῦτον εἶναι, ἀλλὰ πάντη. αἰδίων δ' ὄντα καὶ ἓνα καὶ σφαιροειδῆ οὔτ' ἄπειρον οὔτε πεπεράσθαι. ἄπειρον ὃ μὴ ὄν εἶναι· τοῦτο γὰρ οὔτε μέσον οὔτ' ἀρχὴν καὶ τέλος οὔτ' ἄλλο μέρος οὐδὲν ἔχειν, τοιοῦτον δ' εἶναι τὸ ἄπειρον. οἷον δὲ τὸ μὴ ὄν, οὐκ ἂν εἶναι τὸ ὄν, περαίνειν δὲ πρὸς ἀλλήλα, εἰ πλείω εἶεν. τὸ δὲ ἓν οὔτε τῷ οὐκ ὄντι οὔτε τοῖς πολλοῖς ὁμοιοῦσθαι· ἓν γὰρ οὐκ ἔχει πρὸς ὃ τι περανεῖ. τὸ δὲ τοιοῦτον ὄν ἓν, ὄν τὸν θεὸν εἶναι λέγει, οὔτε κινεῖσθαι οὔτε κινητὸν εἶναι. ἀκίνητον μὲν γὰρ εἶναι τὸ μὴ ὄν. οὔτε γὰρ ἂν εἰς αὐτὸ ἕτερον οὔτε ἐκεῖνο εἰς ἄλλο ἐλθεῖν. κινεῖσθαι δὲ τὰ πλείω ὄντα ἑνός. ἕτερον γὰρ εἰς ἕτερον δεῖν κινεῖσθαι. εἰς μὲν οὖν τὸ μὴ ὄν οὐδὲν ἂν κινηθῆναι· τὸ γὰρ μὴ ὄν οὐδαμῇ εἶναι. εἰ δὲ εἰς ἀλλήλα μεταβάλλοι, πλείω αὐτὸν εἶναι ἑνός. διὰ ταῦτα δὴ κινεῖσθαι μὲν ἂν τὰ δύο ἢ πλείω ἑνός, ἡρεμεῖν δὲ καὶ ἀκίνητον εἶναι τὸ οὐδέν. τὸ δὲ ἓν οὔτε ἀτρεμεῖν οὔτε κινεῖσθαι· οὔτε γὰρ τῷ μὴ ὄντι οὔτε τοῖς πολλοῖς ὅμοιον εἶναι. κατὰ πάντα δὲ οὕτως ἔχειν τὸν θεόν, αἰδίων τε καὶ ἓνα, ὁμοίον τε καὶ σφαιροειδῆ ὄντα, οὔτε ἄπειρον οὔτε πεπερασμένον, οὔτε ἡρεμεῖν οὔτε ἀκίνητον εἶναι.

Πρῶτον μὲν οὖν λαμβάνει καὶ οὗτος τὸ γινόμενον γίνεσθαι ἐξ ὄντος, ὥσπερ ὁ Μέλισσος. καίτοι τί κωλύει μήτ' ἐξ ὁμοίου τὸ γινόμενον γίνεσθαι, ἀλλ' ἐκ μὴ ὄντος; ἔτι οὐδὲν μᾶλλον ὁ θεὸς ἀγέννητος ἢ καὶ τᾶλλα πάντα, εἶπερ ἅπαντα ἐξ ὁμοίου ἢ ἀνομοίου γέγονεν· ὅπερ ἀδύνατον. ὥστε ἢ οὐδὲν ἐστὶ παρὰ τὸν θεόν, ἢ καὶ τᾶλλα αἰδία πάντα. ἔτι κράτιστον τὸν θεὸν λαμβάνει, τοῦτο δυνατώτατον καὶ βέλτιστον λέγων. οὐ δοκεῖ δὲ τοῦτο κατὰ τὸν νόμον, ἀλλὰ πολλὰ κρείττους εἶναι ἀλλήλων οἱ θεοί. οὐκ οὖν ἐκ τοῦ δοκοῦντος εἴληφε ταύτην κατὰ τοῦ θεοῦ τὴν ὁμολογίαν. τό τε κράτιστον εἶναι τὸν θεὸν οὐχ οὕτως ὑπολαμβάνων λέγεται ὡς πρὸς ἄλλο τι τοιαύτη ἢ τοῦ θεοῦ φύσις, ἀλλὰ πρὸς τὴν αὐτοῦ διάθεσιν, ἐπεὶ τοί γε πρὸς ἕτερον οὐδὲν ἂν κωλύοι μὴ τῇ αὐτοῦ ἐπικεία καὶ ῥώμῃ ὑπερέχειν, ἀλλὰ διὰ τὴν τῶν ἄλλων ἀσθένειαν. θέλοι δ' ἂν οὐδεὶς οὕτω τὸν θεὸν φάναι κράτιστον εἶναι, ἀλλ' ὅτι αὐτὸς ἔχει ὡς οἷόν τε ἄριστα, καὶ οὐδὲν ἐκλείπει καὶ εὖ καὶ καλῶς ἔχειν

αὐτῷ· ἅμα γὰρ ἴσως ἔχοντι κάκεῖνο ἂν συμβαίῃ. οὕτω δὲ διακεῖσθαι καὶ πλείους αὐτοὺς ὄντας οὐδὲν κωλύει, ἅπαντας ὡς [978a] οἶόν τε ἄριστα διακειμένους, καὶ κρατίστους τῶν ἄλλων, οὐχ αὐτῶν ὄντας. ἔστι δ', ὡς ἔοικε, καὶ ἄλλα. κράτιστον γὰρ εἶναι τὸν θεόν φησι, τοῦτο δέ τι εἶναι ἀνάγκη, ἓνα τὰ πάντα ὁρᾶν καὶ ἀκούειν οὐδὲν προσήκει· οὐ γὰρ εἰ μὴ καὶ τῇδ' ὁρᾶ, χειρὸν ὁρᾶ ταύτη, ἀλλ' οὐχ ὁρᾶ. ἀλλ' ἴσως τοῦτο βούλεται τὸ πάντῃ αἰσθάνεσθαι, ὅτι οὕτως ἂν βέλπιστα ἔχοι, ὅμοιος ὢν πάντῃ. ἔτι τοιοῦτος ὢν διὰ τί σφαιροειδὴς ἂν εἴη, ἀλλ' οὐχ ὅτι ἑτέραν τινὰ μᾶλλον ἔχων ἰδέαν, ὅτι πάντῃ ἀκούει καὶ πάντῃ κρατεῖ; ὥσπερ γὰρ ὅταν λέγωμεν τὸ ψιμμύθιον ὅτι πάντα ἐστὶ λευκόν, οὐδὲν ἄλλο τι σημαίνομεν ἢ ὅτι ἐν ἅπασιν αὐτοῦ τοῖς μέρεσιν ἐγκέχρωσται ἢ λευκότης· τί δὴ κωλύει οὕτω κάκεῖ τὸ πάντῃ ὁρᾶν καὶ ἀκούειν καὶ κρατεῖν λέγεσθαι, ὅτι ἅπαν ὃ ἂν τις αὐτοῦ λαμβάνῃ μέρος, τοῦτ' ἔσται πεπονθός; ὥσπερ δὲ οὐδὲ τὸ ψιμμύθιον, οὐδὲ τὸν θεὸν ἀνάγκη διὰ τοῦτο εἶναι σφαιροειδῆ. ἔτι μήτε ἄπειρον μήτε πεπεράνθαι σῶμα γε ὃν καὶ ἔχον μέγεθος πῶς οἶόν τε, εἴπερ τοῦτ' ἐστὶν ἄπειρον ὃ ἂν μὴ ἔχῃ πέρας δεκτικὸν ὃν πέρατος. πέρας δ' ἐν μεγέθει καὶ πλήθει ἐγγίνεται, καὶ ἐν ἅπαντι τῷ ποσῷ, ὥστε ἂν μὴ ἔχῃ πέρας μέγεθος ὢν, ἄπειρόν ἐστιν. ἔτι δὲ σφαιροειδῆ ὄντα ἀνάγκη πέρας ἔχειν. ἔσχατα γὰρ ἔχει, εἴπερ μέσον ἔχει αὐτοῦ τοῦ πλεῖστον ἀπέχειν. μέσον δ' ἔχει, σφαιροειδὲς ὢν· τοῦτο γάρ ἐστι σφαιροειδὲς ὃ ἐκ τοῦ μέσου ὁμοίως πρὸς τὰ ἔσχατα. σῶμα ἔσχατα ἢ πέρατα ἔχειν, οἶον διαφορεῖ. εἰ γὰρ καὶ τὸ μὴ ὃν ἀπλοῦν, οὐκ ἂν καὶ τὸ ὃν ἄπειρον. τί γὰρ κωλύει ἓνα ταῦτά λεχθῆναι κατὰ τοῦ ὄντος καὶ μὴ ὄντος; τό τε γὰρ ὃν οὐκ ὃν οὐδεὶς νῦν αἰσθάνεται, καὶ ὃν δέ τις οὐκ ἂν αἰσθάνοιτο νῦν· ἄμφω δὲ λεκτά, ὅπως διανοητά. οὐ λευκὸν δὲ τὸ μὴ ὢν· εἰ οὖν διὰ τοῦτο τὰ ὄντα πάντα λευκά, ὅπως μὴ τι ταῦτό κατὰ τοῦ ὄντος σημαίνωμεν καὶ μὴ ὄντος, ἢ οὐδὲν κωλύει καὶ τῶν ὄντων τι μὴ ὢν εἶναι λευκόν; οὕτω δὲ καὶ ἄλλην ἂν ἀπόφασιν δέξαιτο τὸ ἄπειρον, εἰ μὴ τὸ πάλα λεχθέντι μᾶλλον, παρὰ τὸ μὴ ἔχειν ἢ μὴ ἔχειν ἐστὶν ἅπαν. ὥστε καὶ τὸ ὢν ἢ ἄπειρον ἢ πέρας ἔχον ἐστίν. ἴσως δὲ ἄτοπον καὶ τὸ προσάπτειν τῷ μὴ ὄντι ἀπειρίαν. οὐ γὰρ πᾶν, εἰ μὴ ἔχει πέρας, ἄπειρον λέγομεν, ὥσπερ οὐδ' ἄνισον οὐκ ἂν φαῖμεν εἶναι τὸ μὴ ὢν. ἔτι οὐκ ἂν ἔχοι ὁ θεὸς πέρας εἰς ὢν, ἀλλ' οὐ πρὸς θεόν. εἰ δὲ ἐν μόνον ἐστίν, ὁ θεὸς ἂν εἴη [978b] μόνον καὶ τὰ τοῦ θεοῦ μέρη. ἐπεὶ καὶ τοῦτ' ἄτοπον, εἰ τοῖς πολλοῖς συμβέβηκε πεπεράνθαι πρὸς ἄλληλα, διὰ τοῦτο τὸ ἐν μὴ ἔχειν πέρας. πολλὰ γὰρ τοῖς πολλοῖς καὶ τῷ ἐνὶ ὑπάρχει ταῦτά, ἐπεὶ καὶ τὸ εἶναι κοινὸν αὐτοῖς ἐστίν. ἄτοπον οὖν ἴσως ἂν εἴη, εἰ διὰ τοῦτο μὴ φαῖμεν εἶναι τὸν θεόν, εἰ τὰ πολλὰ ἐστίν, ὅπως μὴ ὅμοιον ἔσται αὐτοῖς ταύτῃ. ἔτι τί κωλύει πεπεράνθαι καὶ ἔχειν πέρατα ἐν ὄντα τὸν θεόν; ὡς καὶ ὁ Παρμενίδης λέγει ἐν ὄν εἶναι αὐτὸν πάντοθεν εὐκύκλου σφαίρας ἐναλίγκιον ὄγκῳ, μεσσόθεν ἰσοπαλές. τὸ γὰρ πέρας τινὸς μὲν ἀνάγκη ἴσως εἶναι, οὐ

μέντοι πρὸς τι γε, οὐδὲ ἀνάγκη τὸ ἔχον πέρας πρὸς τι ἔχειν πέρας, ὡς πεπερασμένον πρὸς τὸ μὴ ἐφεξῆς ἀπείρου, ἀλλ' ἐστὶ τὸ πεπεράνθαι ἔσχατα ἔχειν, ἔσχατα δ' ἔχον οὐκ ἀνάγκη πρὸς τι ἔχειν. ἐνίοις μὲν οὐ συμβαίνει πᾶν καὶ πεπεράνθαι. πάλιν περὶ τοῦ ἀκίνητον εἶναι τὸ ἐν καὶ τὸ ὄν, ὅτι καὶ τὸ ὄν κινεῖται, ἴσως ὁμοίως τοῖς ἔμπροσθεν ἄτοπον. καὶ ἔτι ἄρά γε οὐ ταὐτὸ ἂν τις ὑπολάβοι τὸ μὴ κινεῖσθαι καὶ τὸ ἀκίνητον εἶναι, ἀλλὰ τὸ μὲν ἀπόφασιν τοῦ κινεῖσθαι, ὥσπερ τὸ μὴ ἴσον, ὅπερ καὶ κατὰ τοῦ μὴ ὄντος, εἴπερ ἀληθές, τὸ δὲ ἀκίνητον τῷ ἔχειν πῶς ἤδη λέγεσθαι, ὥσπερ τὸ ἄνισον, καὶ ἐπὶ τῷ ἐναντίῳ τοῦ κινεῖσθαι τῷ ἡρεμεῖν, ὡς καὶ σχεδὸν οἱ ἀπὸ τοῦ α ἀποφάσεις ἐπὶ ἐναντίοις λέγονται. τὸ μὲν οὖν μὴ κινεῖσθαι ἀληθές ἐπὶ τοῦ μὴ ὄντος, τὸ δὲ ἡρεμεῖν οὐχ ὑπάρχει τῷ μὴ ὄντι. ὁμοίως δὲ οὐδὲ ἀκίνητον εἶναι σημαίνει ταυτόν. ἀλλ' οὗτος ἐπὶ τῷ ἡρεμεῖν αὐτῷ χρῆται, καὶ φησὶ τὸ μὴ ὄν ἡρεμεῖν, ὅτι οὐκ ἔχει μετὰβασιν. ὅπερ τε καὶ ἐν τοῖς ἄνω εἵπομεν, ἄτοπον ἴσως, εἴ τι τῷ μὴ ὄντι προσάπτομεν, τοῦτο μὴ ἀληθές εἶναι κατὰ τοῦ ὄντος εἰπεῖν, ἄλλως τε κἂν ἀποφασίς ἢ τὸ λεχθέν, των καὶ τὸ μὴ κινεῖσθαι μηδὲ μεταλαμβάνειν ἐστίν. πολλὰ γὰρ ἂν, καθάπερ καὶ ἐλέχθη, ἀφαιροῖτο τῶν ὄντων κατηγορεῖ. οὐδὲ γὰρ ἂν πολλὰ ἀληθές εἰπεῖν εἴη μὴ ἔν, εἴπερ καὶ τὸ μὴ ὄν ἐστὶ μὴ ἔν, εἴτε ἐπ' ἐνίων τάναντία συμβαίνειν δοκεῖ κατὰ τοσαύτας ἀποφάσεις· ὡς ἀνάγκη ἢ ἴσον ἢ ἄνισον, ἂν τι πλῆθος ἢ, καὶ μὴ ὡς ἢ καὶ ἄρτιον ἢ περιττόν, ἂν ἀριθμὸς ἢ. ὁμοίως δὲ ὡς καὶ τὸ ἡρεμεῖν ἢ κινεῖσθαι ἀνάγκη, ἂν σῶμα ἢ. ἔτι εἰ καὶ διὰ τοῦτο μὴ κινεῖται ὁ θεός τε καὶ τὸ ἐν, ὅτι τὰ πολλὰ κινεῖται τῷ [979a] εἰς ἄλληλα ἰέναι, τί κωλύει καὶ τὸν θεὸν κινεῖσθαι εἰς ἄλλο; οὐδα τι μόνον, ἀλλ' ὅτι εἷς μόνος θεός. εἰ δὲ καὶ αὐτός, τί κωλύει εἰς ἄλληλα κινουμένων τῶν μερῶν τοῦ ... κύκλῳ φε... θεόν; οὐ γὰρ δὴ τὸ τοιοῦτον ἔν, ὥσπερ ὁ Ζήνων πολλὰ εἶναι φύσει. αὐτὸς γὰρ σῶμα λέγει εἶναι τὸν θεόν, εἴτε τόδε τὸ πᾶν, εἴτε ὅ τι δήποτε αὐτὸ λέγων. ἀσώματος γὰρ ὦν πῶς ἂν σφαιροειδὴς εἴη ἐπιμόνως, ὅταν οὕτως οὕτ' ἂν κινεῖτο οὕτ' ἂν ἡρεμοῖ μηδαμοῦ γε ὦν; ἐπεὶ δὲ σῶμά ἐστι, τί ἂν αὐτὸ κωλύοι κινεῖσθαι ὡς ἐλέχθη;

## ΠΕΡΙ ΓΟΡΓΙΟΥ.

Οὐκ εἶναί φησιν οὐδέν· εἰ δ' ἔστιν, ἄγνωστον εἶναι· εἰ δὲ καὶ ἔστι καὶ γνωστόν, ἀλλ' οὐ δηλωτὸν ἄλλοις. καὶ ὅτι μὲν οὐκ ἔστι, συνθεὶς τὰ ἑτέροις εἰρημένα, ὅσοι περὶ τῶν ὄντων λέγοντες τάναντία, ὡς δοκοῦσιν, ἀποφαίνονται αὐτοῖς, οἱ μὲν ὅτι ἐν καὶ οὐ πολλά, οἱ δὲ αὖ ὅτι πολλά καὶ οὐχ ἔν, καὶ οἱ μὲν ὅτι ἀγέννητα, οἱ δ' ὡς γενόμενα ἐπιδεικνύντες ταῦτα, συλλογίζεται κατ' ἀμφοτέρων. ἀνάγκη γάρ, φησὶν, εἴ τί ἐστι, μήτε ἐν μήτε πολλά εἶναι, μήτε ἀγέννητα μήτε γενόμενα, οὐδὲν ἂν εἴη. εἰ γὰρ μὴ εἴη τι,

τούτων ἂν θάτερα εἶη. ὅτι οὐκ ἔστιν οὔτε ἓν οὔτε πολλά, οὔτε ἀγέννητα οὔτε γενόμενα, τὰ μὲν ὡς Μελίσσος, τὰ δὲ ὡς Ζήνων ἐπιχειρεῖ δεικνύειν μετὰ τὴν πρώτην ἴδιον αὐτοῦ ἀπόδειξιν, ἐν ἣ λέγει ὅτι οὐκ ἔστιν οὔτε εἶναι οὔτε μὴ εἶναι. εἰ μὲν γὰρ τὸ μὴ εἶναι ἔστι μὴ εἶναι, οὐδὲν ἂν ἦττον, τὸ μὴ ὄν τοῦ ὄντος εἶη. τό τε γὰρ μὴ ὄν ἐστι μὴ ὄν, καὶ τὸ ὄν ὄν, ὥστε οὐδὲν μᾶλλον ἢ εἶναι ἢ οὐκ εἶναι τὰ πράγματα. εἰ δ' ὅμως τὸ μὴ εἶναί ἐστι, τὸ εἶναι, φησίν, οὐκ ἔστι τὸ ἀντικείμενον. εἰ γὰρ τὸ μὴ εἶναί ἐστι, τὸ εἶναι [ἢ] μὴ εἶναι προσήκει. ὥστε οὐκ ἂν οὕτως, φησίν, οὐδὲν ἂν εἶη, εἰ μὴ ταυτόν ἐστιν εἶναί τε καὶ μὴ εἶναι. εἰ δὲ ταυτό, καὶ οὕτως οὐκ ἂν εἶη οὐδέν· τό τε γὰρ μὴ ὄν οὐκ ἔστι καὶ τὸ ὄν, ἐπεὶ περ ταυτό τῷ μὴ ὄντι. οὗτος μὲν οὖν ὁ αὐτὸς λόγος ἐκείνου.

Οὐδαμόθεν δὲ συμβαίνει ἐξ ὧν εἴρηκεν, μὴδὲν εἶναι. ἃ γὰρ καὶ ἀποδείκνυσιν, οὕτως διαλέγεται. εἰ τὸ μὴ ὄν ἐστιν ἢ ἔστιν, ἀπλῶς εἰπεῖν εἶη, καὶ ἔστιν ὅμοιον μὴ ὄν. τοῦτο δὲ οὔτε φαίνεται οὕτως οὔτε ἀνάγκη, ἀλλ' ὥσπερ εἰ δυοῖν, ὄντος, τοῦ δ' οὐκ ὄντος, τὸ μὲν ἔστι, τὸ δ' οὐκ ἀληθές, ὅτι ἐστὶ [979b] τὸ μὲν μὴ ὄν. διότι οὖν οὐκ ἔστιν, οὔτε εἶναι οὔτε μὴ εἶναι τὰ ἄμφω οὔθ' ἕτερον οὐκ ἔστιν. οὐδὲν γάρ, φησίν, εἶη ἂν τὸ μὴ εἶναι τοῦ εἶναι, εἴπερ εἶη τι καὶ τὸ μὴ εἶναι. οὐδεὶς φησιν εἶναι τὸ μὴ εἶναι οὐδαμῶς. εἰ δὲ καὶ ἔστι τὸ μὴ ὄν μὴ ὄν, οὐδ' οὕτως ὁμοίως ἂν εἶη τὸ μὴ ὄν τῷ ὄντι· τὸ μὲν γὰρ ἐστι μὴ ὄν, τὸ δὲ καὶ ἔστιν ἔτι. εἰ δὲ καὶ ἀπλῶς εἰπεῖν ἀληθές, ὡς δὴ θαυμάσιόν τ' ἂν εἶη τὸ μὴ ὄν ἐστιν. ἀλλ' εἰ δὴ οὕτω, πότερον μᾶλλον συμβαίνει τὰ πάντα εἶναι ἢ μὴ εἶναι; αὐτὸ γὰρ οὕτω γε τὸ ὑναντίον ἔοικε γίνεσθαι. εἰ γὰρ τό τε μὴ ὄν ἐστι καὶ τὸ ὄν ὄν ἐστιν, ἅπαντά ἐστιν. καὶ γὰρ τὰ ὄντα καὶ τὰ μὴ ὄντα ἐστίν. οὐκ ἀνάγκη γάρ, εἰ τὸ μὴ ὄν ἐστι, καὶ τὸ ὄν μὴ εἶναι. εἰ δὴ καὶ οὕτω τις συγχωρεῖ, καὶ τὸ μὲν μὴ ὄν εἶη, τὸ δὲ ὄν μὴ εἶη, ὅμως οὐδὲν ἦττον εἶη ἂν· τὰ γὰρ μὴ ὄντα εἶη κατὰ τὸν ἐκείνου λόγον. εἰ δὲ ταυτόν ἐστι καὶ τὸ εἶναι καὶ τὸ μὴ εἶναι, οὐδ' οὕτως μᾶλλον οὐκ [εἶη] ἂν τι εἶη. ὡς γὰρ κάκεῖνος λέγει, ὅτι εἰ ταυτόν μὴ ὄν καὶ ὄν, τό τε ὄν οὐκ ἔστι καὶ τὸ μὴ ὄν. ὥστε οὐδέν ἐστιν, ἀντιστρέψαντι ἔστιν ὁμοίως φάναι ὅτι πάντα ἐστίν. τό τε γὰρ μὴ ὄν ἐστι καὶ τὸ ὄν, ὥστε πάντα ἐστίν. μετὰ δὲ τοῦτον τὸν λόγον φησίν· εἰ δὲ ἔστιν, ἦτοι ἀγέννητον ἢ γενόμενον εἶναι. καὶ εἰ μὲν ἀγέννητον, ἄπειρον αὐτὸ τοῖς τοῦ Μελίσσου ἀξιώμασι λαμβάνει· τὸ δ' ἄπειρον οὐκ ἂν εἶναι ποτε. οὔτε γὰρ ἐν αὐτῷ οὔτ' ἂν ἐν ἄλλῳ εἶναι· δύο γὰρ ἂν οὕτως ἢ πλείω εἶναι, τό τε ἐνὸν καὶ τὸ ἐν ᾧ, μηδαμοῦ δὲ ὄν οὐδὲ εἶναι κατὰ τὸν Ζήνωνος λόγον περὶ τῆς χώρας. ἀγέννητον μὲν οὖν διὰ ταῦτ' οὐκ εἶναι, οὐ μὴν οὐδὲ γενόμενον. γενέσθαι γοῦν οὐδὲν ἂν οὔτ' ἐξ ὄντος οὔτ' ἐκ μὴ ὄντος. εἰ γὰρ τὸ ὄν μεταπέσοι, οὐκ ἂν ἔτ' εἶναι τὸ ὄν, ὥσπερ γ' εἰ καὶ τὸ μὴ ὄν γένοιτο, οὐκ ἂν ἔτι εἶη μὴ ὄν. οὐδὲ μὴν οὐδ' ἐξ ὄντος ἂν γενέσθαι. εἰ μὲν

γὰρ μή ἐστι τὸ μὴ ὄν, οὐδὲν ἂν ἐκ μηδενὸς ἂν γενέσθαι· εἰ δ' ἔστι τὸ μὴ ὄν, δι' ἅπερ οὐδ' ἐκ τοῦ ὄντος, διὰ ταῦτα οὐδ' ἐκ τοῦ μὴ ὄντος γενέσθαι. εἰ οὖν ἀνάγκη μέν, εἴπερ ἔστι τι, ἥτοι ἀγέννητον εἶναι ἢ γενόμενον, ταῦτα δὲ ἀδύνατόν τι καὶ εἶναι. ἔτι εἴπερ ἔστιν, ἔν ἢ πλείω, φησίν, ἐστίν· εἴτε μήτε ἔν μήτε πολλά, οὐδὲν ἂν εἴη. καὶ ἔν μὲν ... καὶ ὅτι ἀσώματον ἂν εἴη τὸ ἔν η ἐνσυχονμέν γε τῷ τοῦ Ζήνωνος λόγου. ἐνὸς δὲ ὄντος οὐδ' ἂν ... εἶναι οὐδὲ μὴ ... μήτε πολλά. εἰ γὰρ μήτε ἔν μήτε [980a] πολλά ἐστίν, οὐδ' ἂν κινηθῆναι φησιν. οὐδενὶ γὰρ κινηθείη, ἢ οὐκ ἂν ἔτι, ἢ ὡσαύτως ἔχον, ἀλλὰ τὸ μὲν οὐκ ἂν εἴη, τὸ δ' οὐκ ὄν γεγονὸς εἴη. ἔτι δὲ ἢ κινεῖ ἢ κινεῖται, καὶ εἰ μεταφέρεται οὐ συνεχὲς ὄν, διήρηται τὸ ὄν, οὔτε τι ταύτη· ὥστε πάντῃ κινεῖται, πάντῃ διήρηται. εἰ δ' οὕτως, πάντα οὐκ ἔστιν. ἐκλιπὲς γὰρ ταύτη, φησίν, ἢ διήρηται, τοῦ ὄντος, ἀντὶ τοῦ κενοῦ τὸ διηρηθῆσθαι λέγων, καθάπερ ἐν τοῖς Λευκίππου καλουμένοις λόγοις γέγραπται. εἰ μὲν οὖν οὐδέν, τὰς ἀποδείξεις λέγειν ἅπαντα. δεῖ γὰρ τὰ φρονούμενα εἶναι, καὶ τὸ μὴ ὄν, εἴπερ μή ἐστι, μηδὲ φρονεῖσθαι. εἰ δ' οὕτως, οὐδὲν ἂν εἶναι ψεῦδος οὐδεὶς φησιν, οὐδ' εἰ ἐν τῷ πελάγει φαίη ἀμιλλᾶσθαι ἄρματα. πάντα γὰρ ἂν ταῦτα εἴη. καὶ γὰρ τὰ ὁρώμενα καὶ ἀκουόμενα διὰ τοῦτο ἐστίν, ὅτι φρονεῖται ἕκαστα αὐτῶν· εἰ δὲ μὴ διὰ τοῦτο, ἀλλ' ὥσπερ οὐδὲν μᾶλλον ἢ ὁρώμεν ἐστίν, οὕτω μᾶλλον ἢ ὁρώμεν ἢ διανοούμεθα. καὶ γὰρ ὥσπερ ἐκεῖ πολλοὶ ἂν ταῦτα ἴδοιεν, καὶ ἐνταῦθα πολλοὶ ἂν ταῦτα διανοηθείημεν. τὸ οὖν μᾶλλον δὴ τοιάδ' ἐστί, ποῖα δὲ τάληθῃ, ἄδηλον. ὥστε καὶ εἰ ἔστιν, ἡμῖν γε ἄγνωστα εἶναι τὰ πράγματα. εἰ δὲ καὶ γνωστά, πῶς ἂν τις, φησί, δηλώσειεν ἄλλω; ὃ γὰρ εἶδε, πῶς ἂν τις, φησί, τοῦτο εἴποι λόγῳ; ἢ πῶς ἂν ἐκείνῳ δῆλον ἀκούσαντι γίγνοιτο, μὴ ἰδόντι; [980b] ὥσπερ γὰρ οὐδὲ ἢ ὄψις τοὺς φθόγγους γινώσκει, οὕτως οὐδὲ ἢ ἀκοὴ τὰ χρώματα ἀκούει, ἀλλὰ φθόγγους· καὶ λέγει ὁ λέγων, ἀλλ' οὐ χρῶμα οὐδὲ πρᾶγμα. ὃ οὖν τις μὴ ἐννοεῖ, πῶς αἰτεῖ παρ' ἄλλου λόγῳ ἢ σημείῳ τινὶ ἑτέρου πράγματος ἐννοήσειεν, ἀλλ' ἢ ἔὰν μὲν χρῶμα ἰδὼν, ἔὰν δὲ μος. ἀρχὴν γὰρ οὐ λέγε γοεὶ δὲ χρῶμα, ἀλλὰ λόγον, ὥστ' οὐδὲ διανοεῖσθαι χρῶμα ἔστιν, ἀλλ' ὁρᾶν, οὐδὲ ψόφον, ἀλλ' ἀκούειν. εἰ δὲ καὶ ἐνδέχεται, γινώσκει τε καὶ ἀναγινώσκει λέγων. ἀλλὰ πῶς ὁ ἀκούων τὸ αὐτὸ ἐννοήσει; οὐ γὰρ οἷόν τε τὸ αὐτὸ ἅμα ἐν πλείοσι καὶ χωρὶς οὗσιν εἶναι· δύο γὰρ ἂν εἴη τὸ ἔν. εἰ δὲ καὶ εἴη, φησίν, ἐν πλείοσι καὶ ταῦτόν, οὐδὲν κωλύει μὴ ὅμοιον φαίνεσθαι αὐτοῖς, μὴ πάντῃ ὁμοίοις ἐκείνοις οὗσιν καὶ ἐν τῷ αὐτῷ, εἴ τι ἐν τοιούτου εἴησαν, ἀλλ' οὐ δύο εἶεν. φαίνεται δὲ οὐδ' αὐτὸς αὐτῷ ὅμοια αἰσθανόμενος ἐν τῷ αὐτῷ χρόνῳ, ἀλλ' ἕτερα τῇ ἀκοῇ καὶ τῇ ὄψει, καὶ νῦν τε καὶ πάλαι διαφόρως. ὥστε σχολῇ ἄλλῳ πᾶν ταῦτο αἰσθητό τις. οὕτως οὐκ ἔστιν, ἔν ἐστι γνωστόν, οὐδεὶς ἂν αὐτὸ ἑτέρῳ δηλώσειεν, διὰ τε τὸ μὴ εἶναι τὰ πράγματα λεκτά, καὶ ὅτι οὐδεὶς ἕτερον ἑτέρῳ ταῦτόν ἐννοεῖ. ἅπαντες δὲ καὶ οὕτως ἑτέρων ἀρχαιοτέρων εἰσὶν ἀπορίαι, ὥστε ἐν τῇ

περὶ ἐκείνων σκέψει καὶ ταῦτα ἐξεταστέον.

## Ψυχολογικά - Metaphysics

### Μεταφυσικά (980a) Metaphysics



## CONTENTS

[A](#)

[A ELATTON](#)

[B](#)

[Γ](#)

[Δ](#)

[E](#)

[Z](#)

[H](#)

[Θ](#)

[I](#)

[K](#)

[Λ](#)

[M](#)

[N](#)

ν ἂν γενέσθαι.

❖ει.❖ς

## A

[980a] Πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει. σημεῖον δ' ἡ τῶν αἰσθήσεων ἀγάπησις· καὶ γὰρ χωρὶς τῆς χρείας ἀγαπῶνται δι' αὐτάς, καὶ μάλιστα τῶν ἄλλων ἢ διὰ τῶν ὁμμάτων. οὐ γὰρ μόνον ἵνα πράττωμεν ἀλλὰ καὶ μηθὲν μέλλοντες πράττειν τὸ ὁρᾶν αἰρούμεθα ἀντὶ πάντων ὡς εἰπεῖν τῶν ἄλλων. αἴτιον δ' ὅτι μάλιστα ποιεῖ γνωρίζειν ἡμᾶς αὕτη τῶν αἰσθήσεων καὶ πολλὰς δηλοῖ διαφοράς. φύσει μὲν οὖν αἰσθησιν ἔχοντα γίγνεται τὰ ζῶα, ἐκ δὲ ταύτης τοῖς μὲν αὐτῶν οὐκ ἐγγίγνεται μνήμη, τοῖς δ' ἐγγίγνεται.

[980b] καὶ διὰ τοῦτο ταῦτα φρονιμώτερα καὶ μαθητικώτερα τῶν μὴ δυναμένων μνημονεύειν ἐστί, φρόνιμα μὲν ἄνευ τοῦ μαθάνειν ὅσα μὴ δύναται τῶν ψόφων ἀκούειν (οἷον μέλιττα κἂν εἴ τι τοιοῦτον ἄλλο γένος ζώων ἔστι), μαθάνει δ' ὅσα πρὸς τῇ μνήμῃ καὶ ταύτην ἔχει τὴν αἰσθησιν. τὰ μὲν οὖν ἄλλα ταῖς φαντασίαις ζῇ καὶ ταῖς μνήμαις, ἐμπειρίας δὲ μετέχει μικρόν· τὸ δὲ τῶν ἀνθρώπων γένος καὶ τέχνη καὶ λογισμοῖς. γίγνεται δ' ἐκ τῆς μνήμης ἐμπειρία τοῖς ἀνθρώποις· αἱ γὰρ πολλαὶ μνήμαι τοῦ αὐτοῦ πράγματος [981a] μιᾶς ἐμπειρίας δύναμιν ἀποτελοῦσιν. καὶ δοκεῖ σχεδὸν ἐπιστήμη καὶ τέχνη ὅμοιον εἶναι καὶ ἐμπειρία, ἀποβαίνει δ' ἐπιστήμη καὶ τέχνη διὰ τῆς ἐμπειρίας τοῖς ἀνθρώποις· ἡ μὲν γὰρ ἐμπειρία τέχνην ἐποίησεν, ὡς φησὶ Πῶλος, ἡ δ' ἀπειρία τύχην. γίγνεται δὲ τέχνη ὅταν ἐκ πολλῶν τῆς ἐμπειρίας ἐννοημάτων μία καθόλου γένηται περὶ τῶν ὁμοίων ὑπόληψις. τὸ μὲν γὰρ ἔχειν ὑπόληψιν ὅτι Καλλία κάμνοντι τὴνδὲ τὴν νόσον τοδὶ συνήνεγκε καὶ Σωκράτει καὶ καθ' ἕκαστον οὕτω πολλοῖς, ἐμπειρίας ἐστίν· τὸ δ' ὅτι πᾶσι τοῖς τοιοῖσδε κατ' εἶδος ἐν ἀφορισθεῖσι, κάμνουσι τὴνδὲ τὴν νόσον, συνήνεγκεν, οἷον τοῖς φλεγματώδεσιν ἢ χολώδεσι [ἢ] πυρέττουσι καύσω, τέχνης. - πρὸς μὲν οὖν τὸ πράττειν ἐμπειρία τέχνης οὐδὲν δοκεῖ διαφέρειν, ἀλλὰ καὶ μᾶλλον ἐπιτυχάνουσιν οἱ ἔμπειροι τῶν ἄνευ τῆς ἐμπειρίας λόγον ἔχόντων (αἴτιον δ' ὅτι ἡ μὲν ἐμπειρία τῶν καθ' ἕκαστόν ἐστι γνώσις ἡ δὲ τέχνη τῶν καθόλου, αἱ δὲ πράξεις καὶ αἱ γενέσεις πᾶσαι περὶ τὸ καθ' ἕκαστόν εἰσιν· οὐ γὰρ ἄνθρωπον ὑγιάζει ὁ ἰατρεύων ἀλλ' ἢ κατὰ συμβεβηκός, ἀλλὰ Καλλίαν ἢ Σωκράτην ἢ τῶν ἄλλων τινὰ τῶν οὕτω λεγομένων ὧ συμβέβηκεν ἀνθρώπῳ εἶναι· ἐὰν οὖν ἄνευ τῆς ἐμπειρίας ἔχη τις τὸν λόγον, καὶ τὸ καθόλου μὲν γνωρίζῃ τὸ δ' ἐν τούτῳ καθ' ἕκαστον ἀγνοῇ, πολλάκις διαμαρτήσεται τῆς θεραπείας· θεραπευτὸν γὰρ τὸ καθ' ἕκαστον). ἀλλ' ὅμως τό γε εἰδέναι καὶ τὸ ἐπαῖειν τῇ τέχνῃ τῆς ἐμπειρίας ὑπάρχειν οἴομεθα μᾶλλον, καὶ σοφωτέρους τοὺς τεχνίτας τῶν ἐμπίρων ὑπολαμβάνομεν, ὡς κατὰ τὸ εἰδέναι μᾶλλον ἀκολουθοῦσαν τὴν σοφίαν πᾶσι· τοῦτο δ' ὅτι οἱ μὲν τὴν αἰτίαν ἴσασιν οἱ δ'



οὐ. οἱ μὲν γὰρ ἔμπειροι τὸ ὅτι μὲν ἴσασι, διότι δ' οὐκ ἴσασιν· οἱ δὲ τὸ διότι καὶ τὴν αἰτίαν γνωρίζουσιν. διὸ καὶ τοὺς ἀρχιτέκτονας περὶ ἕκαστον τιμιωτέρους καὶ μᾶλλον εἰδέναι νομίζομεν τῶν χειροτεχνῶν [981b] καὶ σοφωτέρους, ὅτι τὰς αἰτίας τῶν ποιουμένων ἴσασιν (τοὺς δ', ὥσπερ καὶ τῶν ἀψύχων ἕνια ποιεῖ μὲν, οὐκ εἰδότα δὲ ποιεῖ ἃ ποιεῖ, οἷον καίει τὸ πῦρ - τὰ μὲν οὖν ἄψυχα φύσει τινὶ ποιεῖν τούτων ἕκαστον τοὺς δὲ χειροτέχνους δι' ἔθος), ὥς οὐ κατὰ τὸ πρακτικοὺς εἶναι σοφωτέρους ὄντας ἀλλὰ κατὰ τὸ λόγον ἔχειν αὐτοὺς καὶ τὰς αἰτίας γνωρίζειν. ὅλως τε σημείον τοῦ εἰδότος καὶ μὴ εἰδότος τὸ δύνασθαι διδάσκειν ἐστίν, καὶ διὰ τοῦτο τὴν τέχνην τῆς ἐμπειρίας ἡγούμεθα μᾶλλον ἐπιστήμην εἶναι· δύνανται γάρ, οἱ δὲ οὐ δύνανται διδάσκειν. ἔτι δὲ τῶν αἰσθήσεων οὐδεμίαν ἡγούμεθα εἶναι σοφίαν· καίτοι κυριώταταί γ' εἰσὶν αὗται τῶν καθ' ἕκαστα γνώσεις· ἀλλ' οὐ λέγουσι τὸ διὰ τί περὶ οὐδενός, οἷον διὰ τί θερμὸν τὸ πῦρ, ἀλλὰ μόνον ὅτι θερμόν. τὸ μὲν οὖν πρῶτον εἰκὸς τὸν ὁποιοῦν εὐρόντα τέχνην παρὰ τὰς κοινὰς αἰσθήσεις θαυμάζεσθαι ὑπὸ τῶν ἀνθρώπων μὴ μόνον διὰ τὸ χρήσιμον εἶναι τι τῶν εὐρεθέντων ἀλλ' ὥς σοφὸν καὶ διαφέροντα τῶν ἄλλων· πλειόνων δ' εὐρισκομένων τεχνῶν καὶ τῶν μὲν πρὸς τὰναγκαῖα τῶν δὲ πρὸς διαγωγὴν οὐσῶν, ἀεὶ σοφωτέρους τοὺς τοιούτους ἐκείνων ὑπολαμβάνεσθαι διὰ τὸ μὴ πρὸς χρῆσιν εἶναι τὰς ἐπιστήμας αὐτῶν. ὅθεν ἤδη πάντων τῶν τοιούτων κατεσκευασμένων αἱ μὴ πρὸς ἡδονὴν μηδὲ πρὸς τὰναγκαῖα τῶν ἐπιστημῶν εὐρέθησαν, καὶ πρῶτον ἐν τούτοις τοῖς τόποις οὐ πρῶτον ἐσχόλασαν· διὸ περὶ Αἴγυπτον αἱ μαθηματικαὶ πρῶτον τέχναι συνέστησαν, ἐκεῖ γὰρ ἀφείθη σχολάζειν τὸ τῶν ἱερέων ἔθνος. εἴρηται μὲν οὖν ἐν τοῖς ἠθικοῖς τίς διαφορὰ τέχνης καὶ ἐπιστήμης καὶ τῶν ἄλλων τῶν ὁμογενῶν· οὐ δ' ἔνεκα νῦν ποιούμεθα τὸν λόγον τοῦτ' ἐστίν, ὅτι τὴν ὀνομαζομένην σοφίαν περὶ τὰ πρῶτα αἷτια καὶ τὰς ἀρχὰς ὑπολαμβάνουσι πάντες· ὥστε, καθάπερ εἴρηται πρότερον, ὁ μὲν ἔμπειρος τῶν ὁποιοῦν ἐχόντων αἴσθησιν εἶναι δοκεῖ σοφώτερος, ὁ δὲ τεχνίτης τῶν ἐμπείρων, χειροτέχνου δὲ ἀρχιτέκτων, [982a] αἱ δὲ θεωρητικαὶ τῶν ποιητικῶν μᾶλλον. ὅτι μὲν οὖν ἡ σοφία περί τινος ἀρχὰς καὶ αἰτίας ἐστὶν ἐπιστήμη, δῆλον.

Ἐπεὶ δὲ ταύτην τὴν ἐπιστήμην ζητοῦμεν, τοῦτ' ἂν εἴη σκεπτέον, ἡ περὶ ποίας αἰτίας καὶ περὶ ποίας ἀρχὰς ἐπιστήμη σοφία ἐστίν. εἰ δὴ λάβοι τις τὰς ὑπολήψεις ἃς ἔχομεν περὶ τοῦ σοφοῦ, τάχ' ἂν ἐκ τούτου φανερόν γένοιτο μᾶλλον. ὑπολαμβάνομεν δὴ πρῶτον μὲν ἐπίστασθαι πάντα τὸν σοφὸν ὥς ἐνδέχεται, μὴ καθ' ἕκαστον ἔχοντα ἐπιστήμην αὐτῶν· εἴτα τὸν τὰ χαλεπὰ γινῶναι δυνάμενον καὶ μὴ ῥάδια ἀνθρώπῳ γινῶσκειν, τοῦτον σοφόν (τὸ γὰρ αἰσθάνεσθαι πάντων κοινόν, διὸ ῥάδιον καὶ οὐδὲν σοφόν). ἔτι τὸν ἀκριβέστερον καὶ τὸν διδασκαλικώτερον τῶν αἰτιῶν σοφώτερον εἶναι περὶ

παῖσαν ἐπιστήμην· καὶ τῶν ἐπιστημῶν δὲ τὴν αὐτῆς ἕνεκεν καὶ τοῦ εἰδέναι χάριν αἰρετὴν οὕσαν μᾶλλον εἶναι σοφίαν ἢ τὴν τῶν ἀποβαινόντων ἕνεκεν, καὶ τὴν ἀρχικωτέραν τῆς ὑπηρετούσης μᾶλλον σοφίαν· οὐ γὰρ δεῖν ἐπιτάττεσθαι τὸν σοφὸν ἄλλ’ ἐπιτάττειν, καὶ οὐ τοῦτον ἐτέρῳ πείθεσθαι, ἀλλὰ τούτῳ τὸν ἥττον σοφόν. - τὰς μὲν οὖν ὑπολήψεις τοιαύτας καὶ τοσαύτας ἔχομεν περὶ τῆς σοφίας καὶ τῶν σοφῶν· τούτων δὲ τὸ μὲν πάντα ἐπίστασθαι τῷ μάλιστα ἔχοντι τὴν καθόλου ἐπιστήμην ἀναγκαῖον ὑπάρχειν (οὗτος γὰρ οἶδέ πως πάντα τὰ ὑποκείμενα), σχεδὸν δὲ καὶ χαλεπώτατα ταῦτα γνωρίζειν τοῖς ἀνθρώποις, τὰ μάλιστα καθόλου (πορρωτάτῳ γὰρ τῶν αἰσθήσεων ἐστίν), ἀκριβέστεραι δὲ τῶν ἐπιστημῶν αἱ μάλιστα τῶν πρώτων εἰσὶν (αἱ γὰρ ἐξ ἐλαττόνων ἀκριβέστεραι τῶν ἐκ προσθέσεως λεγομένων, οἷον ἀριθμητικὴ γεωμετρίας)· ἀλλὰ μὴν καὶ διδασκαλική γε ἡ τῶν αἰτιῶν θεωρητικὴ μᾶλλον (οὗτοι γὰρ διδάσκουσιν, οἱ τὰς αἰτίας λέγοντες περὶ ἐκάστου), τὸ δ’ εἰδέναι καὶ τὸ ἐπίστασθαι αὐτῶν ἕνεκα μάλισθ’ ὑπάρχει τῇ τοῦ μάλιστα ἐπιστητοῦ ἐπιστήμῃ (ὁ γὰρ τὸ ἐπίστασθαι δι’ αὐτὸ αἰρούμενος τὴν μάλιστα [982b] ἐπιστήμην μάλιστα αἰρήσεται, τοιαύτη δ’ ἐστὶν ἡ τοῦ μάλιστα ἐπιστητοῦ), μάλιστα δ’ ἐπιστητὰ τὰ πρῶτα καὶ τὰ αἷτια (διὰ γὰρ ταῦτα καὶ ἐκ τούτων τ’ ἄλλα γνωρίζεται ἄλλ’ οὐ ταῦτα διὰ τῶν ὑποκειμένων), ἀρχικωτάτῃ δὲ τῶν ἐπιστημῶν, καὶ μᾶλλον ἀρχικὴ τῆς ὑπηρετούσης, ἡ γνωρίζουσα τίνος ἕνεκὲν ἐστὶ πρακτέον ἕκαστον· τοῦτο δ’ ἐστὶ τ’ ἀγαθὸν ἐκάστου, ὅλως δὲ τὸ ἄριστον ἐν τῇ φύσει πάσῃ. ἐξ ἀπάντων οὖν τῶν εἰρημένων ἐπὶ τὴν αὐτὴν ἐπιστήμην πίπτει τὸ ζητούμενον ὄνομα· δεῖ γὰρ ταύτην τῶν πρώτων ἀρχῶν καὶ αἰτιῶν εἶναι θεωρητικὴν· καὶ γὰρ τ’ ἀγαθὸν καὶ τὸ οὐ ἕνεκα ἔν τῶν αἰτιῶν ἐστίν.

Ὅτι δ’ οὐ ποιητικὴ, δῆλον καὶ ἐκ τῶν πρώτων φιλοσοφησάντων· διὰ γὰρ τὸ θαυμάζειν οἱ ἄνθρωποι καὶ νῦν καὶ τὸ πρῶτον ἤρξαντο φιλοσοφεῖν, ἐξ ἀρχῆς μὲν τὰ πρόχειρα τῶν ἀτόπων θαυμάσαντες, εἶτα κατὰ μικρὸν οὕτω προϊόντες καὶ περὶ τῶν μειζόνων διαπορήσαντες, οἷον περὶ τε τῶν τῆς σελήνης παθημάτων καὶ τῶν περὶ τὸν ἥλιον καὶ ἄστρα καὶ περὶ τῆς τοῦ παντὸς γενέσεως. ὁ δ’ ἀπορῶν καὶ θαυμάζων οἴεται ἀγνοεῖν (διὸ καὶ ὁ φιλόμυθος φιλόσοφος πῶς ἐστίν· ὁ γὰρ μῦθος σύγκειται ἐκ θαυμασίων)· ὥστ’ εἴπερ διὰ τὸ φεύγειν τὴν ἄγνοιαν ἐφιλοσόφησαν, φανερόν ὅτι διὰ τὸ εἰδέναι τὸ ἐπίστασθαι ἐδίωκον καὶ οὐ χρήσεώς τινος ἕνεκεν. μαρτυρεῖ δὲ αὐτὸ τὸ συμβεβηκός· σχεδὸν γὰρ πάντων ὑπαρχόντων τῶν ἀναγκαίων καὶ πρὸς ῥαστώνην καὶ διαγωγὴν ἢ τοιαύτη φρόνησις ἤρξατο ζητεῖσθαι. δῆλον οὖν ὡς δι’ οὐδεμίαν αὐτὴν ζητοῦμεν χρεῖαν ἐτέραν, ἀλλ’ ὥσπερ ἄνθρωπος, φαμέν, ἐλεύθερος ὁ αὐτοῦ ἕνεκα καὶ μὴ ἄλλου ὦν, οὕτω καὶ αὐτὴν ὡς μόνην οὕσαν ἐλευθέραν τῶν ἐπιστημῶν· μόνη γὰρ αὕτη αὐτῆς ἕνεκὲν ἐστίν. διὸ καὶ δικαίως ἂν οὐκ ἀνθρωπίνῃ νομίζοιτο αὐτῆς ἢ κτῆσις· πολλαχῇ γὰρ ἡ φύσις

δούλη τῶν ἀνθρώπων ἐστίν, ὥστε κατὰ Σιμωνίδην “θεὸς ἂν μόνος τοῦτ’ ἔχοι γέρας”, ἄνδρα δ’ οὐκ ἄξιον μὴ οὐ ζητεῖν τὴν καθ’ αὐτὸν ἐπιστήμην. εἰ δὲ λέγουσί τι οἱ ποιηταὶ καὶ πέφυκε φθονεῖν [983a] τὸ θεῖον, ἐπὶ τούτου συμβῆναι μάλιστα εἰκὸς καὶ δυστυχεῖς εἶναι πάντας τοὺς περιττούς. ἀλλ’ οὔτε τὸ θεῖον φθονερὸν ἐνδέχεται εἶναι, ἀλλὰ κατὰ τὴν παροιμίαν πολλὰ ψεύδονται ἄοιδοί, οὔτε τῆς τοιαύτης ἄλλην χρὴ νομίζειν τιμιωτέραν. ἡ γὰρ θειοτάτη καὶ τιμιωτάτη τοιαύτη δὲ διχῶς ἂν εἴη μόνη· ἦν τε γὰρ μάλιστ’ ἂν ὁ θεὸς ἔχοι, θεία τῶν ἐπιστημῶν ἐστί, κἂν εἴ τις τῶν θείων εἴη. μόνη δ’ αὕτη τούτων ἀμφοτέρων τετύχηκεν· ὅ τε γὰρ θεὸς δοκεῖ τῶν αἰτίων πᾶσιν εἶναι καὶ ἀρχὴ τις, καὶ τὴν τοιαύτην ἢ μόνος ἢ μάλιστ’ ἂν ἔχοι ὁ θεός. ἀναγκαιότεραι μὲν οὖν πᾶσαι ταύτης, ἀμείνων δ’ οὐδεμία. - δεῖ μέντοι πως καταστῆναι τὴν κτῆσιν αὐτῆς εἰς τοῦναντίον ἡμῖν τῶν ἐξ ἀρχῆς ζητήσεων. ἄρχονται μὲν γάρ, ὥσπερ εἵπομεν, ἀπὸ τοῦ θαυμάζειν πάντες εἰ οὕτως ἔχει, καθάπερ <περὶ> τῶν θαυμάτων ταυτόματα [τοῖς μήπω τεθεωρηκόσι τὴν αἰτίαν] ἢ περὶ τὰς τοῦ ἡλίου τροπὰς ἢ τὴν τῆς διαμέτρου ἀσυμμετρίαν (θαυμαστὸν γὰρ εἶναι δοκεῖ πᾶσι <τοῖς μήπω τεθεωρηκόσι τὴν αἰτίαν> εἴ τι τῷ ἐλαχίστῳ μὴ μετρεῖται)· δεῖ δὲ εἰς τοῦναντίον καὶ τὸ ἄμεινον κατὰ τὴν παροιμίαν ἀποτελευτῆσαι, καθάπερ καὶ ἐν τούτοις ὅταν μάθωσιν· οὐθὲν γὰρ ἂν οὕτως θαυμάσειεν ἀνὴρ γεωμετρικὸς ὥς εἰ γένοιτο ἡ διάμετρος μετρητή. τίς μὲν οὖν ἡ φύσις τῆς ἐπιστήμης τῆς ζητουμένης, εἴρηται, καὶ τίς ὁ σκοπὸς οὗ δεῖ τυγχάνειν τὴν ζητησιν καὶ τὴν ὅλην μέθοδον.

Ἐπεὶ δὲ φανερόν ὅτι τῶν ἐξ ἀρχῆς αἰτίων δεῖ λαβεῖν ἐπιστήμην (τότε γὰρ εἰδέναι φαμὲν ἕκαστον, ὅταν τὴν πρώτην αἰτίαν οἴώμεθα γνωρίζειν), τὰ δ’ αἷτια λέγεται τετραχῶς, ὧν μίαν μὲν αἰτίαν φαμὲν εἶναι τὴν οὐσίαν καὶ τὸ τί ἦν εἶναι (ἀνάγεται γὰρ τὸ διὰ τί εἰς τὸν λόγον ἔσχατον, αἷτιον δὲ καὶ ἀρχὴ τὸ διὰ τί πρῶτον), ἑτέραν δὲ τὴν ὕλην καὶ τὸ ὑποκείμενον, τρίτην δὲ ὅθεν ἡ ἀρχὴ τῆς κινήσεως, τετάρτην δὲ τὴν ἀντικειμένην αἰτίαν ταύτη, τὸ οὗ ἕνεκα καὶ τάγαθόν (τέλος γὰρ γενέσεως καὶ κινήσεως πάσης τοῦτ’ ἐστίν), τεθεώρηται μὲν οὖν ἱκανῶς περὶ αὐτῶν ἡμῖν ἐν τοῖς περὶ φύσεως, [983b] ὅμως δὲ παραλάβωμεν καὶ τοὺς πρότερον ἡμῶν εἰς ἐπίσκεψιν τῶν ὄντων ἐλθόντας καὶ φιλοσοφήσαντας περὶ τῆς ἀληθείας, δῆλον γὰρ ὅτι κἀκεῖνοι λέγουσιν ἀρχὰς τινὰς καὶ αἰτίας· ἐπελθοῦσιν οὖν ἔσται τι προὔργου τῇ μεθόδῳ τῇ νῦν· ἢ γὰρ ἕτερόν τι γένος εὐρήσομεν αἰτίας ἢ ταῖς νῦν λεγομέναις μᾶλλον πιστεύσομεν. - τῶν δὲ πρώτων φιλοσοφησάντων οἱ πλεῖστοι τὰς ἐν ὕλης εἶδει μόνας ὠήθησαν ἀρχὰς εἶναι πάντων· ἐξ οὗ γὰρ ἔστιν ἅπαντα τὰ ὄντα καὶ ἐξ οὗ γίγνεται πρῶτου καὶ εἰς ὃ φθείρεται τελευταῖον, τῆς μὲν οὐσίας ὑπομενούσης τοῖς δὲ πάθεσι μεταβαλλούσης, τοῦτο στοιχεῖον καὶ ταύτην ἀρχὴν φασιν εἶναι τῶν ὄντων, καὶ διὰ τοῦτο οὔτε γίγνεσθαι οὐθὲν

οἴονται οὔτε ἀπόλλυσθαι, ὥς τῆς τοιαύτης φύσεως ἀεὶ σωζομένης, ὥσπερ οὐδὲ τὸν Σωκράτην φαμὲν οὔτε γίνεσθαι ἀπλῶς ὅταν γίγνηται καλὸς ἢ μουσικὸς οὔτε ἀπόλλυσθαι ὅταν ἀποβάλλῃ ταύτας τὰς ἕξεις, διὰ τὸ ὑπομένειν τὸ ὑποκείμενον τὸν Σωκράτην αὐτόν, οὕτως οὐδὲ τῶν ἄλλων οὐδέν· ἀεὶ γὰρ εἶναι τινα φύσιν ἢ μίαν ἢ πλείους μιᾶς ἐξ ὧν γίγνεται ἄλλα σωζομένης ἐκείνης. τὸ μέντοι πλῆθος καὶ τὸ εἶδος τῆς τοιαύτης ἀρχῆς οὐ τὸ αὐτὸ πάντες λέγουσιν, ἀλλὰ Θαλῆς μὲν ὁ τῆς τοιαύτης ἀρχηγὸς φιλοσοφίας ὕδωρ φησὶν εἶναι (διὸ καὶ τὴν γῆν ἐφ' ὕδατος ἀπεφώνηκε εἶναι), λαβὼν ἴσως τὴν ὑπόληψιν ταύτην ἐκ τοῦ πάντων ὁρᾶν τὴν τροφὴν ὑγρὰν οὔσαν καὶ αὐτὸ τὸ θερμὸν ἐκ τούτου γιγνόμενον καὶ τούτῳ ζῶν (τὸ δ' ἐξ οὗ γίγνεται, τοῦτ' ἐστὶν ἀρχὴ πάντων) - διὰ τε δὴ τοῦτο τὴν ὑπόληψιν λαβὼν ταύτην καὶ διὰ τὸ πάντων τὰ σπέρματα τὴν φύσιν ὑγρὰν ἔχειν, τὸ δ' ὕδωρ ἀρχὴν τῆς φύσεως εἶναι τοῖς ὑγροῖς. εἰσὶ δέ τινες οἱ καὶ τοὺς παμπαλαίους καὶ πολὺ πρὸ τῆς νῦν γενέσεως καὶ πρώτους θεολογήσαντας οὕτως οἴονται περὶ τῆς φύσεως ὑπολαβεῖν· Ὡκεανὸν τε γὰρ καὶ Τηθὺν ἐποίησαν τῆς γενέσεως πατέρας, καὶ τὸν ὄρκον τῶν θεῶν ὕδωρ, τὴν καλουμένην ὑπ' αὐτῶν Στύγα [τῶν ποιητῶν]. τιμιώτατον μὲν γὰρ τὸ πρεσβύτατον, ὄρκος δὲ τὸ τιμιώτατόν ἐστιν. εἰ μὲν οὖν [984a] ἀρχαία τις αὕτη καὶ παλαιὰ τετύχηκεν οὔσα περὶ τῆς φύσεως ἡ δόξα, τάχ' ἂν ἄδηλον εἶη, Θαλῆς μέντοι λέγεται οὕτως ἀποφήνασθαι περὶ τῆς πρώτης αἰτίας (Ἴππωνα γὰρ οὐκ ἂν τις ἀξιόσκει θεῖναι μετὰ τούτων διὰ τὴν εὐτέλειαν αὐτοῦ τῆς διανοίας). Ἀναξιμένης δὲ ἀέρα καὶ Διογένης πρότερον ὕδατος καὶ μάλιστα ἀρχὴν τιθέασι τῶν ἀπλῶν σωμάτων, Ἴππασος δὲ πῦρ ὁ Μεταποντῖνος καὶ Ἡράκλειτος ὁ Ἐφέσιος, Ἐμπεδοκλῆς δὲ τὰ τέτταρα, πρὸς τοῖς εἰρημένοις γῆν προστιθεὶς τέταρτον (ταῦτα γὰρ ἀεὶ διαμένειν καὶ οὐ γίνεσθαι ἄλλ' ἢ πλήθει καὶ ὀλιγότητι, συγκρινόμενα καὶ διακρινόμενα εἰς ἓν τε καὶ ἐξ ἑνός). Ἀναξαγόρας δὲ ὁ Κλαζομένιος τῇ μὲν ἡλικίᾳ πρότερος ὢν τούτου τοῖς δ' ἔργοις ὕστερος ἀπείρους εἶναι φησι τὰς ἀρχάς· σχεδὸν γὰρ ἅπαντα τὰ ὁμοιομερῆ καθάπερ ὕδωρ ἢ πῦρ οὕτω γίνεσθαι καὶ ἀπόλλυσθαί φησι, συγκρίσει καὶ διακρίσει μόνον, ἄλλως δ' οὔτε γίνεσθαι οὔτ' ἀπόλλυσθαι ἀλλὰ διαμένειν αἴδια. - ἐκ μὲν οὖν τούτων μόνην τις αἰτίαν νομίσειεν ἂν τὴν ἐν ὕλης εἶδει λεγομένην· προϊόντων δ' οὕτως, αὐτὸ τὸ πρᾶγμα ὠδοποίησεν αὐτοῖς καὶ συνηνάγκασε ζητεῖν· εἰ γὰρ ὅτι μάλιστα πᾶσα γένεσις καὶ φθορὰ ἐκ τινος ἑνὸς ἢ καὶ πλειόνων ἐστίν, διὰ τί τοῦτο συμβαίνει καὶ τί τὸ αἴτιον; οὐ γὰρ δὴ τό γε ὑποκείμενον αὐτὸ ποιεῖ μεταβάλλειν ἑαυτό· λέγω δ' οἶον οὔτε τὸ ξύλον οὔτε ὁ χαλκὸς αἴτιος τοῦ μεταβάλλειν ἑκάτερον αὐτῶν, οὐδὲ ποιεῖ τὸ μὲν ξύλον κλίνην ὁ δὲ χαλκὸς ἀνδριάντα, ἀλλ' ἕτερόν τι τῆς μεταβολῆς αἴτιον. τὸ δὲ τοῦτο ζητεῖν ἐστὶ τὸ τὴν ἑτέραν ἀρχὴν ζητεῖν, ὥς ἂν ἡμεῖς φαίμεν, ὅθεν ἡ ἀρχὴ τῆς κινήσεως. οἱ μὲν οὖν πάντες ἐξ ἀρχῆς ἀψάμενοι τῆς μεθόδου τῆς τοιαύτης καὶ ἐν φάσκοντες εἶναι τὸ

ὑποκείμενον οὐθὲν ἐδυσχέραναν ἑαυτοῖς, ἀλλ' ἔνιοί γε τῶν ἐν λεγόντων, ὥσπερ ἡττηθέντες ὑπὸ ταύτης τῆς ζητήσεως, τὸ ἐν ἀκίνητόν φασιν εἶναι καὶ τὴν φύσιν ὅλην οὐ μόνον κατὰ γένεσιν καὶ φθοράν (τοῦτο μὲν γὰρ ἀρχαῖόν τε καὶ πάντες ὁμολόγησαν) ἀλλὰ καὶ κατὰ τὴν ἄλλην μεταβολὴν [984b] πᾶσαν· καὶ τοῦτο αὐτῶν ἰδίον ἐστίν. τῶν μὲν οὖν ἐν φασκόντων εἶναι τὸ πᾶν οὐθενὶ συνέβη τὴν τοιαύτην συνιδεῖν αἰτίαν πλὴν εἰ ἄρα Παρμενίδη, καὶ τούτῳ κατὰ τοσοῦτον ὅσον οὐ μόνον ἐν ἀλλὰ καὶ δύο πως τίθησιν αἰτίας εἶναι· τοῖς δὲ δὴ πλείῳ ποιοῦσι μᾶλλον ἐνδέχεται λέγειν, οἷον τοῖς θερμὸν καὶ ψυχρὸν ἢ πῦρ καὶ γῆν· χρῶνται γὰρ ὡς κινητικὴν ἔχοντι τῷ πυρὶ τὴν φύσιν, ὕδατι δὲ καὶ γῇ καὶ τοῖς τοιούτοις τούναντίον. - μετὰ δὲ τούτους καὶ τὰς τοιαύτας ἀρχάς, ὡς οὐχ ἱκανῶν οὐσῶν γεννηῖσαι τὴν τῶν ὄντων φύσιν, πάλιν ὑπ' αὐτῆς τῆς ἀληθείας, ὥσπερ εἶπομεν, ἀναγκαζόμενοι τὴν ἐχομένην ἐζήτησαν ἀρχήν. τοῦ γὰρ εὖ καὶ καλῶς τὰ μὲν ἔχειν τὰ δὲ γίνεσθαι τῶν ὄντων ἴσως οὔτε πῦρ οὔτε γῆν οὔτ' ἄλλο τῶν τοιούτων οὐθὲν οὔτ' εἰκὸς αἴτιον εἶναι οὔτ' ἐκείνους οἰηθῆναι· οὐδ' αὖ τῷ αὐτομάτῳ καὶ τύχῃ τοσοῦτον ἐπιτρέψαι πρᾶγμα καλῶς εἶχεν. νοῦν δὲ τις εἰπὼν ἐνεῖναι, καθάπερ ἐν τοῖς ζώοις, καὶ ἐν τῇ φύσει τὸν αἴτιον τοῦ κόσμου καὶ τῆς τάξεως πάσης οἷον νήφων ἐφάνη παρ' εἰκῇ λέγοντας τοὺς πρότερον. φανερώς μὲν οὖν Ἀναξαγόραν ἴσμεν ἀψάμενον τούτων τῶν λόγων, αἰτίαν δ' ἔχει πρότερον Ἑρμότιμος ὁ Κλαζομένιος εἰπεῖν. οἱ μὲν οὖν οὕτως ὑπολαμβάνοντες ἅμα τοῦ καλῶς τὴν αἰτίαν ἀρχὴν εἶναι τῶν ὄντων ἔθεσαν, καὶ τὴν τοιαύτην ὅθεν ἡ κίνησις ὑπάρχει τοῖς οὕσιν· ὑποπτεύσειε δ' ἂν τις Ἡσίοδον πρῶτον ζητῆσαι τὸ τοιοῦτον, κἂν εἴ τις ἄλλος ἔρωτα ἢ ἐπιθυμίαν ἐν τοῖς οὕσιν ἔθηκεν ὡς ἀρχήν, οἷον καὶ Παρμενίδης· καὶ γὰρ οὗτος κατασκευάζων τὴν τοῦ παντὸς γένεσιν “πρώτιστον μὲν” φησιν “ἔρωτα θεῶν μητίσατο πάντων”, Ἡσίοδος δὲ “πάντων μὲν πρώτιστα χάος γένητ', αὐτὰρ ἔπειτα γαῖ' εὐρύστερνος ... ἡδ' ἔρος, ὃς πάντεσσι μεταπρέπει ἀθανάτοισιν”, ὡς δέον ἐν τοῖς οὕσιν ὑπάρχειν τιν' αἰτίαν ἣτις κινήσει καὶ συνάξει τὰ πράγματα. τούτους μὲν οὖν πῶς χρὴ διανεῖμαι περὶ τοῦ τίς πρῶτος, ἐξέστω κρίνειν ὕστερον· ἐπεὶ δὲ καὶ τάναντία τοῖς ἀγαθοῖς ἐνόητα ἐφαίνετο ἐν τῇ φύσει, καὶ οὐ μόνον τάξις καὶ [985a] τὸ καλὸν ἀλλὰ καὶ ἀταξία καὶ τὸ αἰσχρόν, καὶ πλείῳ τὰ κακὰ τῶν ἀγαθῶν καὶ τὰ φαῦλα τῶν καλῶν, οὕτως ἄλλος τις φιλίαν εἰσήνεγκε καὶ νεῖκος, ἐκάτερον ἐκατέρων αἴτιον τούτων. εἰ γὰρ τις ἀκολουθοίη καὶ λαμβάνοι πρὸς τὴν διάνοιαν καὶ μὴ πρὸς ἃ ψελλίζεται λέγων Ἐμπεδοκλῆς, εὐρήσει τὴν μὲν φιλίαν αἰτίαν οὔσαν τῶν ἀγαθῶν τὸ δὲ νεῖκος τῶν κακῶν· ὥστ' εἴ τις φαίη τρόπον τινὰ καὶ λέγειν καὶ πρῶτον λέγειν τὸ κακὸν καὶ τὸ ἀγαθὸν ἀρχὰς Ἐμπεδοκλέα, τάχ' ἂν λέγοι καλῶς, εἴπερ τὸ τῶν ἀγαθῶν ἀπάντων αἴτιον αὐτὸ τὰγαθὸν ἐστί [καὶ τῶν κακῶν τὸ κακόν]. - οὗτοι μὲν οὖν, ὥσπερ λέγομεν, καὶ μέχρι τούτου δυοῖν αἰτίαν ὧν ἡμεῖς διωρίσαμεν ἐν τοῖς περὶ φύσεως ἡμμένοι φαίνονται, τῆς τε

ὑλης καὶ τοῦ ὅθεν ἡ κίνησις, ἀμυδρῶς μέντοι καὶ οὐθὲν σαφῶς ἄλλ' οἷον ἐν ταῖς μάχαις οἱ ἀγύμναστοι ποιοῦσιν· καὶ γὰρ ἐκεῖνοι περιφερόμενοι τύπτουσι πολλάκις καλὰς πληγὰς, ἄλλ' οὔτε ἐκεῖνοι ἀπὸ ἐπιστήμης οὔτε οὔτοι εὐοίκασιν εἰδέναι ὅ τι λέγουσιν· σχεδὸν γὰρ οὐθὲν χρώμενοι φαίνονται τούτοις ἄλλ' ἢ κατὰ μικρόν. Ἀναξαγόρας τε γὰρ μηχανῇ χρῆται τῷ νῶ πρὸς τὴν κοσμοποιίαν, καὶ ὅταν ἀπορήσῃ διὰ τίν' αἰτίαν ἐξ ἀνάγκης ἐστί, τότε παρέλκει αὐτόν, ἐν δὲ τοῖς ἄλλοις πάντα μᾶλλον αἰτιᾶται τῶν γιγνομένων ἢ νοῦν, καὶ Ἐμπεδοκλῆς ἐπὶ πλέον μὲν τούτου χρῆται τοῖς αἰτίοις, οὐ μὴν οὔθ' ἱκανῶς, οὔτ' ἐν τούτοις εὐρίσκει τὸ ὁμολογούμενον. πολλαχοῦ γοῦν αὐτῷ ἡ μὲν φιλία διακρίνει τὸ δὲ νεῖκος συγκρίνει. ὅταν μὲν γὰρ εἰς τὰ στοιχεῖα διίστηται τὸ πᾶν ὑπὸ τοῦ νείκους, τότε τὸ πῦρ εἰς ἓν συγκρίνεται καὶ τῶν ἄλλων στοιχείων ἕκαστον· ὅταν δὲ πάλιν ὑπὸ τῆς φιλίας συνίωσιν εἰς τὸ ἓν, ἀναγκαῖον ἐξ ἐκάστου τὰ μόρια διακρίνεσθαι πάλιν. - Ἐμπεδοκλῆς μὲν οὖν παρὰ τοὺς πρότερον πρῶτος τὸ τὴν αἰτίαν διελεῖν εἰσήνεγκεν, οὐ μίαν ποιήσας τὴν τῆς κινήσεως ἀρχὴν ἄλλ' ἑτέρας τε καὶ ἐναντίας, ἔτι δὲ τὰ ὡς ἐν ὑλης εἶδει λεγόμενα στοιχεῖα τέτταρα πρῶτος εἶπεν (οὐ μὴν χρῆται γε τέτταρσιν ἄλλ' ὡς δυσὶν οὔσι μόνοις, [985b] πυρὶ μὲν καθ' αὐτὸ τοῖς δ' ἀντικειμένοις ὡς μιᾷ φύσει, γῇ τε καὶ ἀέρι καὶ ὕδατι· λάβοι δ' ἅν τις αὐτὸ θεωρῶν ἐκ τῶν ἐπῶν)· - οὗτος μὲν οὖν, ὥσπερ λέγομεν, οὕτω τε καὶ τοσαύτας εἵρηκε τὰς ἀρχάς· Λεύκιππος δὲ καὶ ὁ ἑταῖρος αὐτοῦ Δημόκριτος στοιχεῖα μὲν τὸ πλήρες καὶ τὸ κενὸν εἶναι φασί, λέγοντες τὸ μὲν ὄν τὸ δὲ μὴ ὄν, τούτων δὲ τὸ μὲν πλήρες καὶ στερεὸν τὸ ὄν, τὸ δεινὸν τὸ μὴ ὄν (διὸ καὶ οὐθὲν μᾶλλον τὸ ὄν τοῦ μὴ ὄντος εἶναι φασιν, ὅτι οὐδὲ τοῦ κενοῦ τὸ σῶμα), αἷτια δὲ τῶν ὄντων ταῦτα ὡς ὑλὴν. καὶ καθάπερ οἱ ἐν ποιοῦντες τὴν ὑποκειμένην οὐσίαν τᾶλλα τοῖς πάθεσιν αὐτῆς γεννῶσι, τὸ μανὸν καὶ τὸ πυκνὸν ἀρχὰς τιθέμενοι τῶν παθημάτων, τὸν αὐτὸν τρόπον καὶ οὔτοι τὰς διαφορὰς αἰτίας τῶν ἄλλων εἶναι φασιν. ταύτας μέντοι τρεῖς εἶναι λέγουσι, σχῆμά τε καὶ τάξιν καὶ θέσιν· διαφέρειν γὰρ φασί τὸ ὄν ῥυσμῷ καὶ διαθιγῇ καὶ τροπῇ μόνον· τούτων δὲ ὁ μὲν ῥυσμὸς σχῆμά ἐστιν ἡ δὲ διαθιγὴ τάξις ἡ δὲ τροπὴ θέσις· διαφέρει γὰρ τὸ μὲν A τοῦ N σχήματι τὸ δὲ AN τοῦ NA τάξει τὸ δὲ Ζ τοῦ Η θέσει. περὶ δὲ κινήσεως, ὅθεν ἡ πῶς ὑπάρξει τοῖς οὔσι, καὶ οὔτοι παραπλησίως τοῖς ἄλλοις ῥαθύμως ἀφεῖσαν. περὶ μὲν οὖν τῶν δύο αἰτιῶν, ὥσπερ λέγομεν, ἐπὶ τοσοῦτον ἔοικεν ἐζητῆσθαι Ἐν δὲ τούτοις καὶ πρὸ τούτων οἱ καλούμενοι Πυθαγόρειοι τῶν μαθημάτων ἀψάμενοι πρῶτοι ταῦτά τε προήγαγον, καὶ ἐντραφέντες ἐν αὐτοῖς τὰς τούτων ἀρχὰς τῶν ὄντων ἀρχὰς ὠήθησαν εἶναι πάντων. ἐπεὶ δὲ τούτων οἱ ἀριθμοὶ φύσει πρῶτοι, ἐν δὲ τούτοις ἐδόκουν θεωρεῖν ὁμοιώματα πολλὰ τοῖς οὔσι καὶ γιγνομένοις, μᾶλλον ἢ ἐν πυρὶ καὶ γῇ καὶ ὕδατι, ὅτι τὸ μὲν τοιονδὶ τῶν ἀριθμῶν πάθος δικαιοσύνη

τὸ δὲ τοιονδὶ ψυχὴ τε καὶ νοῦς ἕτερον δὲ καιρὸς καὶ τῶν ἄλλων ὡς εἶπεῖν ἕκαστον ὁμοίως, ἔτι δὲ τῶν ἁρμονιῶν ἐν ἀριθμοῖς ὁρῶντες τὰ πάθη καὶ τοὺς λόγους, - ἐπεὶ δὴ τὰ μὲν ἄλλα τοῖς ἀριθμοῖς ἐφαίνοντο τὴν φύσιν ἀφωμοιῶσθαι πᾶσαν, οἱ [986a] δ' ἀριθμοὶ πάσης τῆς φύσεως πρῶτοι, τὰ τῶν ἀριθμῶν στοιχεῖα τῶν ὄντων στοιχεῖα πάντων ὑπέλαβον εἶναι, καὶ τὸν ὅλον οὐρανὸν ἁρμονίαν εἶναι καὶ ἀριθμόν· καὶ ὅσα εἶχον ὁμολογούμενα ἔν τε τοῖς ἀριθμοῖς καὶ ταῖς ἁρμονίαις πρὸς τὰ τοῦ οὐρανοῦ πάθη καὶ μέρη καὶ πρὸς τὴν ὅλην διακόσμησιν, ταῦτα συνάγοντες ἐφήρμοτον. καὶ εἴ τί που διέλειπε, προσεγλίχοντο τοῦ συνειρομένην πᾶσαν αὐτοῖς εἶναι τὴν πραγματείαν· λέγω δ' οἷον, ἐπειδὴ τέλειον ἢ δεκάς εἶναι δοκεῖ καὶ πᾶσαν περιειληφέναι τὴν τῶν ἀριθμῶν φύσιν, καὶ τὰ φερόμενα κατὰ τὸν οὐρανὸν δέκα μὲν εἶναί φασιν, ὄντων δὲ ἐννέα μόνον τῶν φανερῶν διὰ τοῦτο δεκάτην τὴν ἀντίχθονα ποιοῦσιν. διώριστα δὲ περὶ τούτων ἐν ἑτέροις ἡμῖν ἀκριβέστερον. ἄλλ' οὐ δὴ χάριν ἐπερχόμεθα, τοῦτό ἐστιν ὅπως λάβωμεν καὶ παρὰ τούτων τίνας εἶναι τιθέασι τὰς ἀρχὰς καὶ πῶς εἰς τὰς εἰρημένας ἐμπίπτουσιν αἰτίας. φαίνονται δὴ καὶ οὗτοι τὸν ἀριθμὸν νομίζοντες ἀρχὴν εἶναι καὶ ὡς ὕλην τοῖς οὐσι καὶ ὡς πάθη τε καὶ ἕξεις, τοῦ δὲ ἀριθμοῦ στοιχεῖα τό τε ἄρτιον καὶ τὸ περιττόν, τούτων δὲ τὸ μὲν πεπερασμένον τὸ δὲ ἄπειρον, τὸ δ' ἐν ἑξ ἀμφοτέρων εἶναι τούτων (καὶ γὰρ ἄρτιον εἶναι καὶ περιττόν), τὸν δ' ἀριθμὸν ἐκ τοῦ ἐνός, ἀριθμοὺς δέ, καθάπερ εἴρηται, τὸν ὅλον οὐρανόν. - ἕτεροι δὲ τῶν αὐτῶν τούτων τὰς ἀρχὰς δέκα λέγουσιν εἶναι τὰς κατὰ συστοιχίαν λεγομένας, πέρας [καὶ] ἄπειρον, περιττόν [καὶ] ἄρτιον, ἐν [καὶ] πλῆθος, δεξιὸν [καὶ] ἀριστερόν, ἄρρεν [καὶ] θῆλυ, ἡρεμοῦν [καὶ] κινούμενον, εὐθὺ [καὶ] καμπύλον, φῶς [καὶ] σκότος, ἀγαθὸν [καὶ] κακόν, τετράγωνον [καὶ] ἑτερόμηκες· ὥν περ τρόπον ἔοικε καὶ Ἀλκμαίων ὁ Κροτωνιάτης ὑπολαβεῖν, καὶ ἦτοι οὗτος παρ' ἐκείνων ἢ ἐκεῖνοι παρὰ τούτου παρέλαβον τὸν λόγον τοῦτον· καὶ γὰρ [ἐγένετο τὴν ἡλικίαν] Ἀλκμαίων [ἐπὶ γέροντι Πυθαγόρᾳ,] ἀπεφήνατο [δὲ] παραπλησίως τούτοις· φησὶ γὰρ εἶναι δύο τὰ πολλὰ τῶν ἀνθρωπίνων, λέγων τὰς ἐναντιότητας οὐχ ὥσπερ οὗτοι διωρισμένας ἀλλὰ τὰς τυχούσας, οἷον λευκὸν μέλαν, γλυκὺ πικρόν, ἀγαθὸν κακόν, μέγα μικρόν. οὗτος μὲν οὖν ἀδιορίστως ἀπέρριψε περὶ [986b] τῶν λοιπῶν, οἱ δὲ Πυθαγόρειοι καὶ πόσαι καὶ τίνες αἱ ἐναντιώσεις ἀπεφήναντο. παρὰ μὲν οὖν τούτων ἀμφοῖν τοσοῦτον ἔστι λαβεῖν, ὅτι τάναντία ἀρχαὶ τῶν ὄντων· τὸ δ' ὅσαι παρὰ τῶν ἑτέρων, καὶ τίνες αὐταὶ εἰσιν. πῶς μέντοι πρὸς τὰς εἰρημένας αἰτίας ἐνδέχεται συνάγειν, σαφῶς μὲν οὐ διήρθρωται παρ' ἐκείνων, εἰκόασι δ' ὡς ἐν ὕλης εἶδει τὰ στοιχεῖα τάττειν· ἐκ τούτων γὰρ ὡς ἐνυπαρχόντων συνεστάναι καὶ πεπλάσθαι φασὶ τὴν οὐσίαν. - τῶν μὲν οὖν παλαιῶν καὶ πλείω λεγόντων τὰ στοιχεῖα τῆς φύσεως ἐκ τούτων ἱκανόν ἐστι θεωρῆσαι τὴν διάνοιαν· εἰσὶ δέ τινες οἱ περὶ τοῦ παντὸς ὡς μιᾶς οὐσης φύσεως ἀπεφήναντο, τρόπον δὲ οὐ τὸν αὐτὸν πάντες οὔτε τοῦ καλῶς

οὔτε τοῦ κατὰ τὴν φύσιν. εἰς μὲν οὖν τὴν νῦν σκέψιν τῶν αἰτίων οὐδαμῶς συναρμόττει περὶ αὐτῶν ὁ λόγος (οὐ γὰρ ὥσπερ ἔνιοι τῶν φυσιολόγων ἐν ὑποθέμενοι τὸ ὄν ὅμως γεννῶσιν ὡς ἐξ ὕλης τοῦ ἐνός, ἀλλ' ἕτερον τρόπον οὗτοι λέγουσιν· ἐκεῖνοι μὲν γὰρ προστιθέασιν κίνησιν, γεννῶντές γε τὸ πᾶν, οὗτοι δὲ ἀκίνητον εἶναί φασιν)· οὐ μὴν ἀλλὰ τοσοῦτόν γε οἰκεῖόν ἐστι τῇ νῦν σκέψει. Παρμενίδης μὲν γὰρ ἔοικε τοῦ κατὰ τὸν λόγον ἐνός ἄπτεσθαι, Μέλισσος δὲ τοῦ κατὰ τὴν ὕλην (διὸ καὶ ὁ μὲν πεπερασμένον ὁ δ' ἄπειρόν φησιν εἶναι αὐτό)· Ξενοφάνης δὲ πρῶτος τούτων ἐνίσας (ὁ γὰρ Παρμενίδης τούτου λέγεται γενέσθαι μαθητής) οὐθὲν διεσαφήνισεν, οὐδὲ τῆς φύσεως τούτων οὐδετέρας ἔοικε θιγεῖν, ἀλλ' εἰς τὸν ὅλον οὐρανὸν ἀποβλέψας τὸ ἐν εἶναί φησι τὸν θεόν. οὗτοι μὲν οὖν, καθάπερ εἶπομεν, ἀφετέοι πρὸς τὴν νῦν ζήτησιν, οἱ μὲν δύο καὶ ἀμπαν ὡς ὄντες μικρὸν ἀγροικότεροι, Ξενοφάνης καὶ Μέλισσος· Παρμενίδης δὲ μᾶλλον βλέπων ἔοικέ που λέγειν· παρὰ γὰρ τὸ ὄν τὸ μὴ ὄν οὐθὲν ἀξιῶν εἶναι, ἐξ ἀνάγκης ἐν οἶεται εἶναι, τὸ ὄν, καὶ ἄλλο οὐθέν (περὶ οὗ σαφέστερον ἐν τοῖς περὶ φύσεως εἰρήκαμεν), ἀναγκαζόμενος δ' ἀκολουθεῖν τοῖς φαινομένοις, καὶ τὸ ἐν μὲν κατὰ τὸν λόγον πλείω δὲ κατὰ τὴν αἴσθησιν ὑπολαμβάνων εἶναι, δύο τὰς αἰτίας καὶ δύο τὰς ἀρχὰς πάλιν τίθησι, θερμὸν καὶ ψυχρόν, οἷον πῦρ καὶ γῆν λέγων· τούτων [987a] δὲ κατὰ μὲν τὸ ὄν τὸ θερμὸν τάττει θάτερον δὲ κατὰ τὸ μὴ ὄν. - ἐκ μὲν οὖν τῶν εἰρημένων καὶ παρὰ τῶν συνηδρευκότων ἤδη τῷ λόγῳ σοφῶν ταῦτα παρειλήφαμεν, παρὰ μὲν τῶν πρώτων σωματικὴν τε τὴν ἀρχὴν (ὔδωρ γὰρ καὶ πῦρ καὶ τὰ τοιαῦτα σώματά ἐστιν), καὶ τῶν μὲν μίαν τῶν δὲ πλείους τὰς ἀρχὰς τὰς σωματικές, ἀμφοτέρων μέντοι ταύτας ὡς ἐν ὕλης εἶδει τιθέντων, παρὰ δὲ τινων ταύτην τε τὴν αἰτίαν τιθέντων καὶ πρὸς ταύτην τὴν ὄθεν ἢ κίνησιν, καὶ ταύτην παρὰ τῶν μὲν μίαν παρὰ τῶν δὲ δύο. μέχρι μὲν οὖν τῶν Ἰταλικῶν καὶ χωρὶς ἐκείνων μορυχώτερον εἰρήκασιν οἱ ἄλλοι περὶ αὐτῶν, πλην ὥσπερ εἶπομεν δυοῖν τε αἰτίαιν τυγχάνουσι κεχημένοι, καὶ τούτων τὴν ἑτέραν οἱ μὲν μίαν οἱ δὲ δύο ποιοῦσι, τὴν ὄθεν ἢ κίνησιν· οἱ δὲ Πυθαγόρειοι δύο μὲν τὰς ἀρχὰς κατὰ τὸν αὐτὸν εἰρήκασιν τρόπον, τοσοῦτον δὲ προσεπέθεσαν ὃ καὶ ἰδίον ἐστὶν αὐτῶν, ὅτι τὸ πεπερασμένον καὶ τὸ ἄπειρον [καὶ τὸ ἐν] οὐχ ἑτέρας τινὰς ὠήθησαν εἶναι φύσεις, οἷον πῦρ ἢ γῆν ἢ τι τοιοῦτον ἕτερον, ἀλλ' αὐτὸ τὸ ἄπειρον καὶ αὐτὸ τὸ ἐν οὐσίαν εἶναι τούτων ὧν κατηγοροῦνται, διὸ καὶ ἀριθμὸν εἶναι τὴν οὐσίαν πάντων. περὶ τε τούτων οὖν τοῦτον ἀπεφάναντο τὸν τρόπον, καὶ περὶ τοῦ τί ἐστὶν ἤρξαντο μὲν λέγειν καὶ ὀρίζεσθαι, λίαν δ' ἀπλῶς ἐπραγματεύθησαν. ὠρίζοντό τε γὰρ ἐπιπολαίως, καὶ ὡ πρῶτῳ ὑπάρξειεν ὁ λεχθεὶς ὅρος, τοῦτ' εἶναι τὴν οὐσίαν τοῦ πράγματος ἐνόμιζον, ὥσπερ εἴ τις οἴοιτο ταῦτόν εἶναι διπλάσιον καὶ τὴν δυάδα διότι πρῶτον ὑπάρχει τοῖς δυσὶ τὸ διπλάσιον. ἀλλ' οὐ ταῦτόν ἴσως



ἐστὶ τὸ εἶναι διπλασίω καὶ δυάδι· εἰ δὲ μή, πολλὰ τὸ ἐν ἔσται, ὃ κἀκείνοις συνέβαινεν. παρὰ μὲν οὖν τῶν πρότερον καὶ τῶν ἄλλων τοσαῦτα ἔστι λαβεῖν.

Μετὰ δὲ τὰς εἰρημένας φιλοσοφίας ἡ Πλάτωνος ἐπεγένετο πραγματεία, τὰ μὲν πολλὰ τούτοις ἀκολουθοῦσα, τὰ δὲ καὶ ἴδια παρὰ τὴν τῶν Ἰταλικῶν ἔχουσα φιλοσοφίαν. Ἐκ νέου τε γὰρ συνήθης γενόμενος πρῶτον Κρατύλῳ καὶ ταῖς Ἡρακλειτείοις δόξαις, ὡς ἀπάντων τῶν αἰσθητῶν ἀεὶ ῥεόντων καὶ ἐπιστήμης περὶ αὐτῶν οὐκ οὔσης, ταῦτα μὲν καὶ ὕστερον [987b] οὕτως ὑπέλαβεν· Σωκράτους δὲ περὶ μὲν τὰ ἠθικὰ πραγματευομένου περὶ δὲ τῆς ὅλης φύσεως οὐθέν, ἐν μέντοι τούτοις τὸ καθόλου ζητοῦντος καὶ περὶ ὀρισμῶν ἐπιστήσαντος πρώτου τὴν διάνοιαν, ἐκεῖνον ἀποδεξάμενος διὰ τὸ τοιοῦτον ὑπέλαβεν ὡς περὶ ἐτέρων τοῦτο γιγνόμενον καὶ οὐ τῶν αἰσθητῶν· ἀδύνατον γὰρ εἶναι τὸν κοινὸν ὅρον τῶν αἰσθητῶν τινός, ἀεὶ γε μεταβαλλόντων. οὗτος οὖν τὰ μὲν τοιαῦτα τῶν ὄντων ιδέας προσηγόρευσε, τὰ δ' αἰσθητὰ παρὰ ταῦτα καὶ κατὰ ταῦτα λέγεσθαι πάντα· κατὰ μέθεξιν γὰρ εἶναι τὰ πολλὰ ὁμώνυμα τοῖς εἶδεσιν. τὴν δὲ μέθεξιν τοῦνομα μόνον μετέβαλεν· οἱ μὲν γὰρ Πυθαγόρειοι μιμήσει τὰ ὄντα φασὶν εἶναι τῶν ἀριθμῶν, Πλάτων δὲ μεθέξει, τοῦνομα μεταβαλὼν. τὴν μέντοι γε μέθεξιν ἢ τὴν μίμησιν ἣτις ἂν εἴη τῶν εἰδῶν ἀφεῖσαν ἐν κοινῷ ζητεῖν. ἔτι δὲ παρὰ τὰ αἰσθητὰ καὶ τὰ εἶδη τὰ μαθηματικὰ τῶν πραγμάτων εἶναί φησι μεταξύ, διαφέροντα τῶν μὲν αἰσθητῶν τῷ ἁΐδια καὶ ἀκίνητα εἶναι, τῶν δ' εἰδῶν τῷ τὰ μὲν πόλλ' ἄττα ὅμοια εἶναι τὸ δὲ εἶδος αὐτὸ ἐν ἑκάστον μόνον. ἐπεὶ δ' αἷτια τὰ εἶδη τοῖς ἄλλοις, τὰκείνων στοιχεῖα πάντων ὡήθη τῶν ὄντων εἶναι στοιχεῖα. ὡς μὲν οὖν ὕλην τὸ μέγα καὶ τὸ μικρὸν εἶναι ἀρχάς, ὡς δ' οὐσίαν τὸ ἐν· ἐξ ἐκείνων γὰρ κατὰ μέθεξιν τοῦ ἐνὸς [τὰ εἶδη] εἶναι τοὺς ἀριθμούς. τὸ μέντοι γε ἐν οὐσίαν εἶναι, καὶ μὴ ἕτερόν γε τι ὄν λέγεσθαι ἐν, παραπλησίως τοῖς Πυθαγορείοις ἔλεγε, καὶ τὸ τοὺς ἀριθμοὺς αἰτίους εἶναι τοῖς ἄλλοις τῆς οὐσίας ὡσαύτως ἐκείνοις· τὸ δὲ ἀντὶ τοῦ ἀπείρου ὡς ἐνὸς δυάδα ποιῆσαι, τὸ δ' ἀπειρον ἐκ μεγάλου καὶ μικροῦ, τοῦτ' ἴδιον· καὶ ἔτι ὁ μὲν τοὺς ἀριθμοὺς παρὰ τὰ αἰσθητά, οἱ δ' ἀριθμοὺς εἶναί φασιν αὐτὰ τὰ πράγματα, καὶ τὰ μαθηματικὰ μεταξύ τούτων οὐ τιθέασιν. τὸ μὲν οὖν τὸ ἐν καὶ τοὺς ἀριθμοὺς παρὰ τὰ πράγματα ποιῆσαι, καὶ μὴ ὥσπερ οἱ Πυθαγόρειοι, καὶ ἡ τῶν εἰδῶν εἰσαγωγή διὰ τὴν ἐν τοῖς λόγοις ἐγένετο σκέψιν (οἱ γὰρ πρότεροι διαλεκτικῆς οὐ μετεῖχον), τὸ δὲ δυάδα ποιῆσαι τὴν ἐτέραν φύσιν διὰ τὸ τοὺς ἀριθμοὺς ἔξω τῶν πρώτων εὐφυῶς ἐξ αὐτῆς γεννᾶσθαι ὥσπερ [988a] ἐκ τινος ἐκμαγείου. καίτοι συμβαίνει γ' ἐναντίως· οὐ γὰρ εὐλογον οὕτως. οἱ μὲν γὰρ ἐκ τῆς ὕλης πολλὰ ποιοῦσιν, τὸ δ' εἶδος ἅπαξ γεννᾷ μόνον, φαίνεται δ' ἐκ μιᾶς ὕλης μία τράπεζα, ὁ δὲ τὸ εἶδος ἐπιφέρων εἰς ὧν πολλὰς ποιεῖ. ὁμοίως δ' ἔχει καὶ τὸ ἄρρεν πρὸς τὸ θῆλυ· τὸ μὲν γὰρ ὑπὸ μιᾶς πληροῦται ὁχείας, τὸ

δ' ἄρρεν πολλὰ πληροῖ· καίτοι ταῦτα μιμήματα τῶν ἀρχῶν ἐκείνων ἐστίν. Πλάτων μὲν οὖν περὶ τῶν ζητούμενων οὕτω διώρισεν· φανερόν δ' ἐκ τῶν εἰρημένων ὅτι δυοῖν αἰτίαι μόνον κέχρηται, τῇ τε τοῦ τί ἐστὶ καὶ τῇ κατὰ τὴν ὕλην (τὰ γὰρ εἶδη τοῦ τί ἐστὶν αἰτία τοῖς ἄλλοις, τοῖς δ' εἶδεσι τὸ ἔν), καὶ τίς ἢ ὕλη ἢ ὑποκειμένη καθ' ἧς τὰ εἶδη μὲν ἐπὶ τῶν αἰσθητῶν τὸ δ' ἐν ἐν τοῖς εἶδεσι λέγεται, ὅτι αὕτη δυάς ἐστὶ, τὸ μέγα καὶ τὸ μικρόν, ἔτι δὲ τὴν τοῦ εὖ καὶ τοῦ κακῶς αἰτίαν τοῖς στοιχείοις ἀπέδωκεν ἑκατέροις ἑκατέραν, ὥσπερ φασὲν καὶ τῶν προτέρων ἐπιζητῆσαί τινας φιλοσόφων, οἷον Ἐμπεδοκλέα καὶ Ἀναξαγόραν.

Συντόμως μὲν οὖν καὶ κεφαλαιωδῶς ἐπεληλύθαμεν τίνες τε καὶ πῶς τυγχάνουσιν εἰρηκότες περί τε τῶν ἀρχῶν καὶ τῆς ἀληθείας· ὅμως δὲ τοσοῦτόν γ' ἔχομεν ἐξ αὐτῶν, ὅτι τῶν λεγόντων περὶ ἀρχῆς καὶ αἰτίας οὐθεὶς ἔξω τῶν ἐν τοῖς περὶ φύσεως ἡμῖν διωρισμένων εἴρηκεν, ἀλλὰ πάντες ἀμυδρῶς μὲν ἐκείνων δέ πως φαίνονται θιγγάνοντες. οἱ μὲν γὰρ ὡς ὕλην τὴν ἀρχὴν λέγουσιν, ἂν τε μίαν ἂν τε πλείους ὑποθῶσι, καὶ ἑάν τε σῶμα ἑάν τε ἀσώματον τοῦτο τιθῶσιν (οἷον Πλάτων μὲν τὸ μέγα καὶ τὸ μικρόν λέγων, οἱ δ' Ἰταλικοὶ τὸ ἄπειρον, Ἐμπεδοκλῆς δὲ πῦρ καὶ γῆν καὶ ὕδωρ καὶ ἀέρα, Ἀναξαγόρας δὲ τὴν τῶν ὁμοιομερῶν ἀπειρίαν· οὗτοί τε δὴ πάντες τῆς τοιαύτης αἰτίας ἡμμένοι εἰσὶ, καὶ ἔτι ὅσοι ἀέρα ἢ πῦρ ἢ ὕδωρ ἢ πυρὸς μὲν πυκνότερον ἀέρος δὲ λεπτότερον· καὶ γὰρ τοιοῦτόν τινες εἰρήκασιν εἶναι τὸ πρῶτον στοιχεῖον)· - οὗτοι μὲν οὖν ταύτης τῆς αἰτίας ἥψαντο μόνον, ἕτεροι δὲ τινες ὅθεν ἡ ἀρχὴ τῆς κινήσεως (οἷον ὅσοι φιλίαν καὶ νεῖκος ἢ νοῦν ἢ ἔρωτα ποιοῦσιν ἀρχήν)· τὸ δὲ τί ἦν εἶναι καὶ τὴν οὐσίαν σαφῶς μὲν οὐθεὶς ἀποδέδωκε, μάλιστα δ' οἱ τὰ [988b] εἶδη τιθέντες λέγουσιν (οὔτε γὰρ ὡς ὕλην τοῖς αἰσθητοῖς τὰ εἶδη καὶ τὸ ἐν τοῖς εἶδεσιν οὔθ' ὡς ἐντεῦθεν τὴν ἀρχὴν τῆς κινήσεως γιγνομένην ὑπολαμβάνουσιν - ἀκινήσιας γὰρ αἰτία μᾶλλον καὶ τοῦ ἐν ἡρεμίᾳ εἶναι φασιν - ἀλλὰ τὸ τί ἦν εἶναι ἐκάστῳ τῶν ἄλλων τὰ εἶδη παρέχονται, τοῖς δ' εἶδεσι τὸ ἔν)· τὸ δ' οὐ ἔνεκα αἰ πράξεις καὶ αἰ μεταβολαὶ καὶ αἰ κινήσεις τρόπον μὲν τινα λέγουσιν αἴτιον, οὕτω δὲ οὐ λέγουσιν οὐδ' ὄνπερ πέφυκεν. οἱ μὲν γὰρ νοῦν λέγοντες ἢ φιλίαν ὡς ἀγαθὸν μὲν ταύτας τὰς αἰτίας τιθέασιν, οὐ μὴν ὡς ἔνεκά γε τούτων ἢ ὄν ἢ γιγνόμενόν τι τῶν ὄντων ἄλλ' ὡς ἀπὸ τούτων τὰς κινήσεις οὔσας λέγουσιν· ὡς δ' αὐτως καὶ οἱ τὸ ἐν ἢ τὸ ὄν φάσκοντες εἶναι τὴν τοιαύτην φύσιν τῆς μὲν οὐσίας αἰτίον φασιν εἶναι, οὐ μὴν τούτου γε ἔνεκα ἢ εἶναι ἢ γίγνεσθαι, ὥστε λέγειν τε καὶ μὴ λέγειν πως συμβαίνει αὐτοῖς τὰ ἀγαθὸν αἴτιον· οὐ γὰρ ἀπλῶς ἀλλὰ κατὰ συμβεβηκὸς λέγουσιν. - ὅτι μὲν οὖν ὀρθῶς διώρισται περὶ τῶν αἰτίων καὶ πόσα καὶ ποῖα, μαρτυρεῖν ἐοίκασιν ἡμῖν καὶ οὗτοι πάντες, οὐ δυνάμενοι θιγεῖν ἄλλης αἰτίας, πρὸς δὲ τούτοις ὅτι ζητητέαι αἱ ἀρχαὶ ἢ οὕτως ἅπασαι ἢ τινὰ τρόπον

τοιοῦτον, δῆλον· πῶς δὲ τούτων ἕκαστος εἶρηκε καὶ πῶς ἔχει περὶ τῶν ἀρχῶν, τὰς ἐνδεχομένας ἀπορίας μετὰ τοῦτο διέλθωμεν περὶ αὐτῶν.

Ὅσοι μὲν οὖν ἔν τε τὸ πᾶν καὶ μίαν τινὰ φύσιν ὡς ὕλην τιθέασι, καὶ ταύτην σωματικὴν καὶ μέγεθος ἔχουσιν, δῆλον ὅτι πολλαχῶς ἀμαρτάνουσιν. τῶν γὰρ σωμάτων τὰ στοιχεῖα τιθέασι μόνον, τῶν δ' ἄσωμάτων οὐ, ὄντων καὶ ἄσωμάτων. καὶ περὶ γενέσεως καὶ φθορᾶς ἐπιχειροῦντες τὰς αἰτίας λέγειν, καὶ περὶ πάντων φυσιολογοῦντες, τὸ τῆς κινήσεως αἴτιον ἀναιροῦσιν. ἔτι δὲ τῷ τὴν οὐσίαν μηθενὸς αἰτίαν τιθέναι μηδὲ τὸ τί ἐστὶ, καὶ πρὸς τούτοις τῷ ῥαδίως τῶν ἀπλῶν σωμάτων λέγειν ἀρχὴν ὅτιοῦν πλὴν γῆς, οὐκ ἐπισκεψάμενοι τὴν ἐξ ἀλλήλων γένεσιν πῶς ποιοῦνται, λέγω δὲ πῦρ καὶ ὕδωρ καὶ γῆν καὶ ἀέρα. τὰ μὲν γὰρ συγκρίσει τὰ δὲ διακρίσει ἐξ ἀλλήλων γίνεσθαι, τοῦτο δὲ πρὸς τὸ πρότερον εἶναι καὶ ὕστερον διαφέρει πλεῖστον. τῇ μὲν γὰρ ἂν δόξειε στοιχειωδέστατον εἶναι πάντων ἐξ οὗ γίνονται συγκρίσει [989a] πρώτου, τοιοῦτον δὲ τὸ μικρομερέστατον καὶ λεπτότατον ἂν εἴη τῶν σωμάτων (διόπερ ὅσοι πῦρ ἀρχὴν τιθέασι, μάλιστα ὁμολογουμένως ἂν τῷ λόγῳ τούτῳ λέγοιεν· τοιοῦτον δὲ καὶ τῶν ἄλλων ἕκαστος ὁμολογεῖ τὸ στοιχεῖον εἶναι τὸ τῶν σωμάτων· οὐθεὶς γοῦν ἠξίωσε τῶν ἐν λεγόντων γῆν εἶναι στοιχεῖον, δηλονότι διὰ τὴν μεγαλομέρειαν, τῶν δὲ τριῶν ἕκαστον στοιχείων εἴληφέ τινα κριτὴν, οἱ μὲν γὰρ πῦρ οἱ δ' ὕδωρ οἱ δ' ἀέρα τοῦτ' εἶναί φασιν· καίτοι διὰ τί ποτ' οὐ καὶ τὴν γῆν λέγουσιν, ὥσπερ οἱ πολλοὶ τῶν ἀνθρώπων; πάντα γὰρ εἶναί φασι γῆν, φησὶ δὲ καὶ Ἡσίοδος τὴν γῆν πρώτην γενέσθαι τῶν σωμάτων· οὕτως ἀρχαίαν καὶ δημοτικὴν συμβέβηκεν εἶναι τὴν ὑπόληψιν)· - κατὰ μὲν οὖν τοῦτον τὸν λόγον οὗτ' εἴ τις τούτων τι λέγει πλὴν πυρός, οὗτ' εἴ τις ἄερος μὲν πυκνότερον τοῦτο τίθησιν ὕδατος δὲ λεπτότερον, οὐκ ὀρθῶς ἂν λέγοι· εἰ δ' ἐστὶ τὸ τῇ γενέσει ὕστερον τῇ φύσει πρότερον, τὸ δὲ πεπεμμένον καὶ συγκεκριμένον ὕστερον τῇ γενέσει, τοῦναντίον ἂν εἴη τούτων, ὕδωρ μὲν ἄερος πρότερον γῆ δὲ ὕδατος. - περὶ μὲν οὖν τῶν μίαν τιθεμένων αἰτίαν οἷαν εἵπομεν, ἔστω ταῦτ' εἰρημένα· τὸ δ' αὐτὸ κἂν εἴ τις ταῦτα πλείω τίθησιν, οἷον Ἐμπεδοκλῆς τέτταρά φησιν εἶναι σώματα τὴν ὕλην. καὶ γὰρ τούτῳ τὰ μὲν ταῦτ' αὐτὰ τὰ δ' ἴδια συμβαίνειν ἀνάγκη. γιγνόμενά τε γὰρ ἐξ ἀλλήλων ὁρῶμεν ὡς οὐκ ἀεὶ διαμένοντος πυρός καὶ γῆς τοῦ αὐτοῦ σώματος (εἴρηται δὲ ἐν τοῖς περὶ φύσεως περὶ αὐτῶν), καὶ περὶ τῆς τῶν κινουμένων αἰτίας, πότερον ἐν ἡ δύο θετέον, οὗτ' ὀρθῶς οὔτε εὐλόγως οἰητέον εἰρησθαι παντελῶς. ὅλως τε ἀλλοίωσιν ἀναιρεῖσθαι ἀνάγκη τοῖς οὕτω λέγουσιν· οὐ γὰρ ἐκ θερμοῦ ψυχρὸν οὐδὲ ἐκ ψυχροῦ θερμὸν ἔσται. τί γὰρ αὐτὰ ἂν πάσχοι τάναντία, καὶ τίς εἴη ἂν μία φύσις ἡ γιγνομένη πῦρ καὶ ὕδωρ, ὃ ἐκεῖνος οὐ φησιν. Ἀναξαγόραν δ' εἴ τις ὑπολάβοι δύο λέγειν στοιχεῖα, μάλιστ' ἂν ὑπολάβοι κατὰ λόγον, ὃν ἐκεῖνος αὐτὸς μὲν οὐ διήρθρωσεν, ἠκολούθησε μέντ' ἂν ἐξ

ἀνάγκης τοῖς ἐπάγουσιν αὐτόν. ἀτόπου γὰρ ὄντος καὶ ἄλλως τοῦ φάσκειν μεμῖχθαι τὴν ἀρχὴν πάντα, καὶ διὰ [989b] τὸ συμβαίνειν ἄμικτα δεῖν προϋπάρχειν καὶ διὰ τὸ μὴ πεφυκέναι τῷ τυχόντι μίγνυσθαι τὸ τυχόν, πρὸς δὲ τούτοις ὅτι τὰ πάθη καὶ τὰ συμβεβηκότα χωρίζοιτ' ἂν τῶν οὐσιῶν (τῶν γὰρ αὐτῶν μῖξις ἐστὶ καὶ χωρισμός), ὅμως εἴ τις ἀκολουθήσειε συνδιαρθρῶν ἃ βούλεται λέγειν, ἴσως ἂν φανεῖν καινοπρεπεστέρως λέγων. ὅτε γὰρ οὐθὲν ἦν ἀποκεκριμένον, δῆλον ὡς οὐθὲν ἦν ἀληθὲς εἰπεῖν κατὰ τῆς οὐσίας ἐκείνης, λέγω δ' οἷον ὅτι οὔτε λευκὸν οὔτε μέλαν ἢ φαιὸν ἢ ἄλλο χρῶμα, ἀλλ' ἄχρων ἦν ἐξ ἀνάγκης· εἶχε γὰρ ἂν τι τούτων τῶν χρωμάτων· ὁμοίως δὲ καὶ ἄχυμον τῷ αὐτῷ λόγῳ τούτῳ, οὐδὲ ἄλλο τῶν ὁμοίων οὐθέν· οὔτε γὰρ ποιόν τι οἷόν τε αὐτὸ εἶναι οὔτε ποσὸν οὔτε τί. τῶν γὰρ ἐν μέρει τι λεγομένων εἰδῶν ὑπῆρχεν ἂν αὐτῷ, τοῦτο δὲ ἀδύνατον μεμιγμένων γε πάντων· ἤδη γὰρ ἂν ἀπεκέκριτο, φησὶ δ' εἶναι μεμιγμένα πάντα πλὴν τοῦ νοῦ, τοῦτον δὲ ἀμιγῆ μόνον καὶ καθαρὸν. ἐκ δὴ τούτων συμβαίνει λέγειν αὐτῷ τὰς ἀρχὰς τό τε ἔν (τοῦτο γὰρ ἀπλοῦν καὶ ἀμιγές) καὶ θάτερον, οἷον τίθεμεν τὸ ἀόριστον πρὶν ὀρισθῆναι καὶ μετασχεῖν εἰδους τινός, ὥστε λέγει μὲν οὗτ' ὀρθῶς οὔτε σαφῶς, βούλεται μέντοι τι παραπλήσιον τοῖς τε ὕστερον λέγουσι καὶ τοῖς νῦν φαινομένοις μᾶλλον. - ἀλλὰ γὰρ οὗτοι μὲν τοῖς περὶ γένεσιν λόγοις καὶ φθορὰν καὶ κίνησιν οἰκεῖοι τυγχάνουσι μόνον (σχεδὸν γὰρ περὶ τῆς τοιαύτης οὐσίας καὶ τὰς ἀρχὰς καὶ τὰς αἰτίας ζητοῦσι μόνης)· ὅσοι δὲ περὶ μὲν ἀπάντων τῶν ὄντων ποιοῦνται τὴν θεωρίαν, τῶν δ' ὄντων τὰ μὲν αἰσθητὰ τὰ δ' οὐκ αἰσθητὰ τιθέασιν, δῆλον ὡς περὶ ἀμφοτέρων τῶν γενῶν ποιοῦνται τὴν ἐπίσκεψιν· διὸ μᾶλλον ἂν τις ἐνδιατρίψειε περὶ αὐτῶν, τί καλῶς ἢ μὴ καλῶς λέγουσιν εἰς τὴν τῶν νῦν ἡμῖν προκειμένων σκέψιν. οἱ μὲν οὖν καλούμενοι Πυθαγόρειοι ταῖς μὲν ἀρχαῖς καὶ τοῖς στοιχείοις ἐκτοπωτέροις χρῶνται τῶν φυσιολόγων (τὸ δ' αἴτιον ὅτι παρέλαβον αὐτὰς οὐκ ἐξ αἰσθητῶν· τὰ γὰρ μαθηματικὰ τῶν ὄντων ἄνευ κινήσεως ἐστὶν ἔξω τῶν περὶ τὴν ἀστρολογίαν), διαλέγονται μέντοι καὶ πραγματεύονται περὶ φύσεως πάντα· γεννῶσί τε γὰρ τὸν οὐρανόν, [990a] καὶ περὶ τὰ τούτου μέρη καὶ τὰ πάθη καὶ τὰ ἔργα διατηροῦσι τὸ συμβαῖνον, καὶ τὰς ἀρχὰς καὶ τὰ αἶτια εἰς ταῦτα καταναλίσκουσιν, ὡς ὁμολογοῦντες τοῖς ἄλλοις φυσιολόγοις ὅτι τό γε ὄν τοῦτ' ἐστὶν ὅσον αἰσθητόν ἐστι καὶ περιεῖληφεν ὁ καλούμενος οὐρανός. τὰς δ' αἰτίας καὶ τὰς ἀρχὰς, ὥσπερ εἵπομεν, ἱκανὰς λέγουσιν ἐπαναβῆναι καὶ ἐπὶ τὰ ἀνωτέρω τῶν ὄντων, καὶ μᾶλλον ἢ τοῖς περὶ φύσεως λόγοις ἀρμοστούσας. ἐκ τίνος μέντοι τρόπου κίνησις ἔσται πέρατος καὶ ἀπείρου μόνων ὑποκειμένων καὶ περιττοῦ καὶ ἀρτίου, οὐθὲν λέγουσιν, ἢ πῶς δυνατόν ἄνευ κινήσεως καὶ μεταβολῆς γένεσιν εἶναι καὶ φθορὰν ἢ τὰ τῶν φερομένων ἔργα κατὰ τὸν οὐρανόν. ἔτι δὲ εἴτε δοίη τις αὐτοῖς ἐκ τούτων εἶναι μέγεθος εἴτε δειχθεῖν τοῦτο, ὅμως τίνα τρόπον ἔσται τὰ μὲν κοῦφα τὰ δὲ βάρος ἔχοντα τῶν

σωμάτων; ἐξ ὧν γὰρ ὑποτίθενται καὶ λέγουσιν, οὐθὲν μᾶλλον περὶ τῶν μαθηματικῶν λέγουσι σωμάτων ἢ τῶν αἰσθητῶν· διὸ περὶ πυρὸς ἢ γῆς ἢ τῶν ἄλλων τῶν τοιούτων σωμάτων οὐδ' ὅτιοῦν εἰρήκασιν, ἅτε οὐθὲν περὶ τῶν αἰσθητῶν οἶμαι λέγοντες ἴδιον. ἔτι δὲ πῶς δεῖ λαβεῖν αἵτια μὲν εἶναι τὰ τοῦ ἀριθμοῦ πάθη καὶ τὸν ἀριθμὸν τῶν κατὰ τὸν οὐρανὸν ὄντων καὶ γιγνομένων καὶ ἐξ ἀρχῆς καὶ νῦν, ἀριθμὸν δ' ἄλλον μηθένα εἶναι παρὰ τὸν ἀριθμὸν τοῦτον ἐξ οὗ συνέστηκεν ὁ κόσμος; ὅταν γὰρ ἐν τῷ μὲν τῷ μέρει δόξα καὶ καιρὸς αὐτοῖς ἦ, μικρὸν δὲ ἄνωθεν ἢ κάτωθεν ἀδικία καὶ κρίσις ἢ μῆξις, ἀπόδειξιν δὲ λέγωσιν ὅτι τούτων μὲν ἕκαστον ἀριθμὸς ἐστὶ, συμβαίνει δὲ κατὰ τὸν τόπον τοῦτον ἤδη πλήθος εἶναι τῶν συνισταμένων μεγεθῶν διὰ τὸ τὰ πάθη ταῦτα ἀκολουθεῖν τοῖς τόποις ἐκάστοις, πότερον οὗτος ὁ αὐτός ἐστιν ἀριθμὸς, ὁ ἐν τῷ οὐρανῷ, ὃν δεῖ λαβεῖν ὅτι τούτων ἕκαστόν ἐστιν, ἢ παρὰ τοῦτον ἄλλος; ὁ μὲν γὰρ Πλάτων ἕτερον εἶναι φησιν· καίτοι κἀκεῖνος ἀριθμοὺς οἶεται καὶ ταῦτα εἶναι καὶ τὰς τούτων αἰτίας, ἀλλὰ τοὺς μὲν νοητοὺς αἰτίους τούτους δὲ αἰσθητοὺς. Περὶ μὲν οὖν τῶν Πυθαγορείων ἀφείσθω τὰ νῦν (ἱκανὸν γὰρ αὐτῶν ἄψασθαι τοσοῦτον)· οἱ δὲ τὰς ἰδέας αἰτίας [990b] τιθέμενοι πρῶτον μὲν ζητοῦντες τῶν ὄντων λαβεῖν τὰς αἰτίας ἕτερα τούτοις ἴσα τὸν ἀριθμὸν ἐκόμισαν, ὥσπερ εἴ τις ἀριθμῆσαι βουλόμενος ἐλαττόνων μὲν ὄντων οἴοιτο μὴ δυνήσεσθαι, πλείω δὲ ποιήσας ἀριθμοίη (σχεδὸν γὰρ ἴσα - ἢ οὐκ ἐλάττω - ἐστὶ τὰ εἶδη τούτοις περὶ ὧν ζητοῦντες τὰς αἰτίας ἐκ τούτων ἐπ' ἐκεῖνα προῆλθον· καθ' ἕκαστον γὰρ ὁμώνυμόν τι ἐστὶ καὶ παρὰ τὰς οὐσίας, τῶν τε ἄλλων ἐστὶν ἐν ἐπὶ πολλῶν, καὶ ἐπὶ τοῖσδε καὶ ἐπὶ τοῖς αἰδίοις)· ἔτι δὲ καθ' οὓς τρόπους δείκνυμεν ὅτι ἔστι τὰ εἶδη, καθ' οὐθένα φαίνεται τούτων· ἐξ ἐνίων μὲν γὰρ οὐκ ἀνάγκη γίνεσθαι συλλογισμόν, ἐξ ἐνίων δὲ καὶ οὐχ ὧν οἴομεθα τούτων εἶδη γίνεσθαι. κατὰ τε γὰρ τοὺς λόγους τοὺς ἐκ τῶν ἐπιστημῶν εἶδη ἔσται πάντων ὅσων ἐπιστῆμαι εἰσὶ, καὶ κατὰ τὸ ἐν ἐπὶ πολλῶν καὶ τῶν ἀποφάσεων, κατὰ δὲ τὸ νοεῖν τι φθαρέντος τῶν φθαρτῶν· φάντασμα γάρ τι τούτων ἔστιν. ἔτι δὲ οἱ ἀκριβέστεροι τῶν λόγων οἱ μὲν τῶν πρὸς τι ποιοῦσιν ἰδέας, ὧν οὗ φαμεν εἶναι καθ' αὐτὸ γένος, οἱ δὲ τὸν τρίτον ἄνθρωπον λέγουσιν. ὅλως τε ἀναιροῦσιν οἱ περὶ τῶν εἰδῶν λόγοι ἃ μᾶλλον εἶναι βουλόμεθα [οἱ λέγοντες εἶδη] τοῦ τὰς ἰδέας εἶναι· συμβαίνει γὰρ μὴ εἶναι τὴν δυάδα πρώτην ἀλλὰ τὸν ἀριθμὸν, καὶ τὸ πρὸς τι τοῦ καθ' αὐτό, καὶ πάνθ' ὅσα τινὲς ἀκολουθήσαντες ταῖς περὶ τῶν ἰδεῶν δόξαις ἠναντιώθησαν ταῖς ἀρχαῖς. - ἔτι κατὰ μὲν τὴν ὑπόληψιν καθ' ἣν εἶναι φαμεν τὰς ἰδέας οὐ μόνον τῶν οὐσιῶν ἔσται εἶδη ἀλλὰ πολλῶν καὶ ἐτέρων (καὶ γὰρ τὸ νόημα ἐν οὐ μόνον περὶ τὰς οὐσίας ἀλλὰ καὶ κατὰ τῶν ἄλλων ἐστί, καὶ ἐπιστῆμαι οὐ μόνον τῆς οὐσίας εἰσὶν ἀλλὰ καὶ ἐτέρων, καὶ ἄλλα δὲ μυρία συμβαίνει τοιαῦτα)· κατὰ δὲ τὸ

ἀναγκαῖον καὶ τὰς δόξας τὰς περὶ αὐτῶν, εἴ ἔστι μεθεκτὰ τὰ εἶδη, τῶν οὐσιῶν ἀναγκαῖον ἰδέας εἶναι μόνον. οὐ γὰρ κατὰ συμβεβηκὸς μετέχονται ἀλλὰ δεῖ ταύτη ἐκάστου μετέχειν ἢ μὴ καθ' ὑποκειμένου λέγεται (λέγω δ' οἶον, εἴ τι αὐτοδιπλασίου μετέχει, τοῦτο καὶ ἀϊδίου μετέχει, ἀλλὰ κατὰ συμβεβηκός· συμβέβηκε γὰρ τῷ διπλασίῳ ἀϊδίῳ εἶναι), ὥστ' ἔσται οὐσία τὰ εἶδη· ταῦτα δὲ ἐνταῦθα [991a] οὐσίαν σημαίνει κάκεῖ· ἢ τί ἔσται τὸ εἶναι τι παρὰ ταῦτα, τὸ ἐν ἐπὶ πολλῶν; καὶ εἰ μὲν ταῦτ' οἷον εἶδος τῶν ἰδεῶν καὶ τῶν μετεχόντων, ἔσται τι κοινόν (τί γὰρ μᾶλλον ἐπὶ τῶν φθαρτῶν δυάδων, καὶ τῶν πολλῶν μὲν ἀϊδίων δέ, τὸ δυὰς ἐν καὶ ταυτόν, ἢ ἐπὶ τ' αὐτῆς καὶ τῆς τινός;). εἰ δὲ μὴ τὸ αὐτὸ εἶδος, ὁμώνυμα ἂν εἴη, καὶ ὅμοιον ὥσπερ ἂν εἴ τις καλοῖ ἄνθρωπον τόν τε Καλλίαν καὶ τὸ ξύλον, μηδεμίαν κοινωνίαν ἐπιβλέψας αὐτῶν. - πάντων δὲ μάλιστα διαπορήσειεν ἂν τις τί ποτε συμβάλλεται τὰ εἶδη τοῖς ἀϊδίῳ τῶν αἰσθητῶν ἢ τοῖς γιγνομένοις καὶ φθειρομένοις· οὔτε γὰρ κινήσεως οὔτε μεταβολῆς οὐδεμιᾶς ἐστὶν αἷτια αὐτοῖς. ἀλλὰ μὴν οὔτε πρὸς τὴν ἐπιστήμην οὐθὲν βοηθεῖ τὴν τῶν ἄλλων (οὐδὲ γὰρ οὐσία ἐκεῖνα τούτων· ἐν τούτοις γὰρ ἂν ἦν), οὔτε εἰς τὸ εἶναι, μὴ ἐνυπάρχοντά γε τοῖς μετέχουσιν· οὔτω μὲν γὰρ ἂν ἴσως αἷτια δόξειεν εἶναι ὡς τὸ λευκὸν μεμιγμένον τῷ λευκῷ, ἀλλ' οὗτος μὲν ὁ λόγος λίαν εὐκίνητος, ὃν Ἀναξαγόρας μὲν πρῶτος Εὐδοξος δ' ὕστερον καὶ ἄλλοι τινὲς ἔλεγον (ῥάδιον γὰρ συναγαγεῖν πολλὰ καὶ ἀδύνατα πρὸς τὴν τοιαύτην δόξαν). ἀλλὰ μὴν οὐδ' ἐκ τῶν εἰδῶν ἐστὶ τᾶλλα κατ' οὐθέν· τρόπον τῶν εἰωθότων λέγεσθαι. τὸ δὲ λέγειν παραδείγματα αὐτὰ εἶναι καὶ μετέχειν αὐτῶν τᾶλλα κενολογεῖν ἐστὶ καὶ μεταφορὰς λέγειν ποιητικάς. τί γὰρ ἐστὶ τὸ ἐργαζόμενον πρὸς τὰς ἰδέας ἀποβλέπον; ἐνδέχεται τε καὶ εἶναι καὶ γίνεσθαι ὅμοιον ὁτιοῦν καὶ μὴ εἰκαζόμενον πρὸς ἐκεῖνο, ὥστε καὶ ὄντος Σωκράτους καὶ μὴ ὄντος γένοιτ' ἂν οἶος Σωκράτης· ὁμοίως δὲ δῆλον ὅτι καὶ ἦν ὁ Σωκράτης ἀϊδίος. ἔσται τε πλείω παραδείγματα τοῦ αὐτοῦ, ὥστε καὶ εἶδη, οἶον τοῦ ἀνθρώπου τὸ ζῶον καὶ τὸ δίπουν, ἅμα δὲ καὶ τὸ αὐτοάνθρωπος. ἔτι οὐ μόνον τῶν αἰσθητῶν παραδείγματα τὰ εἶδη ἀλλὰ καὶ αὐτῶν, οἶον τὸ γένος, ὡς γένος εἰδῶν· ὥστε τὸ αὐτὸ ἔσται παράδειγμα καὶ [991b] εἰκῶν. ἔτι δόξειεν ἂν ἀδύνατον εἶναι χωρὶς τὴν οὐσίαν καὶ οὐ ἢ οὐσία· ὥστε πῶς ἂν αἱ ἰδέαι οὐσίαι τῶν πραγμάτων οὔσαι χωρὶς εἶεν; ἐν δὲ τῷ Φαίδωνι οὔτω λέγεται, ὡς καὶ τοῦ εἶναι καὶ τοῦ γίνεσθαι αἷτια τὰ εἶδη ἐστίν· καίτοι τῶν εἰδῶν ὄντων ὅμως οὐ γίγνεται τὰ μετέχοντα ἂν μὴ ἢ τὸ κινῆσον, καὶ πολλὰ γίγνεται ἕτερα, οἶον οἰκία καὶ δακτύλιος, ὧν οὐ φαμεν εἶδη εἶναι· ὥστε δῆλον ὅτι ἐνδέχεται καὶ τᾶλλα καὶ εἶναι καὶ γίνεσθαι διὰ τοιαύτας αἰτίας οἷας καὶ τὰ ῥηθέντα νῦν. - ἔτι εἴπερ εἰσὶν ἀριθμοὶ τὰ εἶδη, πῶς αἷτιοι ἔσονται; πότερον ὅτι ἕτεροι ἀριθμοὶ εἰσὶ τὰ ὄντα, οἶον ὁδὸς μὲν <ὁ> ἀριθμὸς ἄνθρωπος ὁδὸς δὲ Σωκράτης ὁδὸς δὲ Καλλίας; τί οὖν ἐκεῖνοι τούτοις αἷτιοί εἰσιν; οὐδὲ γὰρ εἰ οἱ μὲν ἀῖδιοι οἱ δὲ μὴ, οὐδὲν διοίσει. εἰ δ' ὅτι λόγοι

ἀριθμῶν τάνταυθα, οἷον ἡ συμφωνία, δῆλον ὅτι ἐστὶν ἓν γέ τι ὧν εἰσὶ λόγοι. εἰ δὴ τι τοῦτο, ἡ ὕλη, φανερόν ὅτι καὶ αὐτοὶ οἱ ἀριθμοὶ λόγοι τινὲς ἔσσονται ἑτέρου πρὸς ἕτερον. λέγω δ' οἷον, εἰ ἔστιν ὁ Καλλίας λόγος ἐν ἀριθμοῖς πυρὸς καὶ γῆς καὶ ὕδατος καὶ ἀέρος, καὶ ἄλλων τινῶν ὑποκειμένων ἔσται καὶ ἡ ἰδέα ἀριθμός· καὶ αὐτοάνθρωπος, εἴτ' ἀριθμός τις ὧν εἴτε μή, ὅμως ἔσται λόγος ἐν ἀριθμοῖς τινῶν καὶ οὐκ ἀριθμός, οὐδ' ἔσται τις διὰ ταῦτα ἀριθμός. ἔτι ἐκ πολλῶν ἀριθμῶν εἰς ἀριθμὸς γίγνεται, ἐξ εἰδῶν δὲ ἓν εἶδος πῶς; εἰ δὲ μὴ ἐξ αὐτῶν ἀλλ' ἐκ τῶν ἐν τῷ ἀριθμῷ, οἷον ἐν τῇ μυριάδι, πῶς ἔχουσιν αἱ μονάδες; εἴτε γὰρ ὁμοειδεῖς, πολλὰ συμβήσεται ἄτοπα, εἴτε μὴ ὁμοειδεῖς, μήτε αὐταὶ ἀλλήλαις μήτε αἱ ἄλλαι πᾶσαι πάσαις· τίτι γὰρ διοίσουσιν ἀπαθεῖς οὐσαι; οὔτε γὰρ εὐλόγα ταῦτα οὔτε ὁμολογούμενα τῇ νοήσει. ἔτι δ' ἀναγκαῖον ἕτερον γένος ἀριθμοῦ κατασκευάζειν περὶ ὃ ἡ ἀριθμητική, καὶ πάντα τὰ μεταξὺ λεγόμενα ὑπὸ τινων, ἃ πῶς ἢ ἐκ τίνων ἐστὶν ἀρχῶν; ἢ διὰ τί μεταξὺ τῶν δεῦρό τ' ἔσται καὶ αὐτῶν; ἔτι αἱ μονάδες αἱ ἐν τῇ δυάδι ἑκατέρω ἐκ τινος [992a] προτέρας δυάδος· καίτοι ἀδύνατον. ἔτι διὰ τί ἐν ὁ ἀριθμὸς συλλαμβανόμενος; ἔτι δὲ πρὸς τοῖς εἰρημένοις, εἴπερ εἰσὶν αἱ μονάδες διάφοροι, ἐχρήν οὕτω λέγειν ὥσπερ καὶ ὅσοι τὰ στοιχεῖα τέτταρα ἢ δύο λέγουσιν· καὶ γὰρ τούτων ἕκαστος οὐ τὸ κοινὸν λέγει στοιχεῖον, οἷον τὸ σῶμα, ἀλλὰ πῦρ καὶ γῆν, εἴτ' ἔστι τι κοινόν, τὸ σῶμα, εἴτε μή. νῦν δὲ λέγεται ὡς ὄντος τοῦ ἐνὸς ὥσπερ πυρὸς ἢ ὕδατος ὁμοιομεροῦς· εἰ δ' οὕτως, οὐκ ἔσσονται οὐσίαι οἱ ἀριθμοί, ἀλλὰ δῆλον ὅτι, εἴπερ ἐστὶ τι ἐν αὐτὸ καὶ τοῦτό ἐστιν ἀρχή, πλεοναχῶς λέγεται τὸ ἓν· ἄλλως γὰρ ἀδύνατον. - βουλόμενοι δὲ τὰς οὐσίας ἀνάγειν εἰς τὰς ἀρχὰς μήκη μὲν τίθεμεν ἐκ βραχείος καὶ μακροῦ, ἐκ τινος μικροῦ καὶ μεγάλου, καὶ ἐπίπεδον ἐκ πλατέος καὶ στενοῦ, σῶμα δ' ἐκ βαθέος καὶ ταπεινοῦ. καίτοι πῶς ἔξει ἢ τὸ ἐπίπεδον γραμμὴν ἢ τὸ στερεὸν γραμμὴν καὶ ἐπίπεδον; ἄλλο γὰρ γένος τὸ πλατὺ καὶ στενὸν καὶ βαθὺ καὶ ταπεινόν· ὥσπερ οὖν οὐδ' ἀριθμὸς ὑπάρχει ἐν αὐτοῖς, ὅτι τὸ πολὺ καὶ ὀλίγον ἕτερον τούτων, δῆλον ὅτι οὐδ' ἄλλο οὐθὲν τῶν ἄνω ὑπάρξει τοῖς κάτω. ἀλλὰ μὴν οὐδὲ γένος τὸ πλατὺ τοῦ βαθέος· ἦν γὰρ ἂν ἐπίπεδόν τι τὸ σῶμα. ἔτι αἱ στιγμαὶ ἐκ τίνος ἐνυπάρξουσιν; τούτῳ μὲν οὖν τῷ γένει καὶ διεμάχετο Πλάτων ὡς ὄντι γεωμετρικῷ δόγματι, ἀλλ' ἐκάλει ἀρχὴν γραμμῆς - τοῦτο δὲ πολλάκις ἐτίθει - τὰς ἀτόμους γραμμάς. καίτοι ἀνάγκη τούτων εἶναί τι πέρας· ὥστ' ἐξ οὗ λόγου γραμμὴ ἔστι, καὶ στιγμή ἔστιν. - ὅλως δὲ ζητούσης τῆς σοφίας περὶ τῶν φανερῶν τὸ αἷτιον, τοῦτο μὲν εἰάκαμεν (οὐθὲν γὰρ λέγομεν περὶ τῆς αἰτίας ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς), τὴν δ' οὐσίαν οἰόμενοι λέγειν αὐτῶν ἑτέρας μὲν οὐσίας εἶναί φαμεν, ὅπως δ' ἐκείναι τούτων οὐσίαι, διὰ κενῆς λέγομεν· τὸ γὰρ μετέχειν, ὥσπερ καὶ πρότερον εἴπομεν, οὐθέν ἐστιν. οὐδὲ δὴ ὅπερ ταῖς ἐπιστήμαις ὀρώμεν ὃν αἷτιον, δι' ὃ καὶ πᾶς νοῦς καὶ πᾶσα φύσις

ποιεῖ, οὐδὲ ταύτης τῆς αἰτίας, ἣν φαμεν εἶναι μίαν τῶν ἀρχῶν, οὐθὲν ἄπτεται τὰ εἶδη, ἀλλὰ γέγονε τὰ μαθήματα τοῖς νῦν ἢ φιλοσοφία, φασκόντων ἄλλων χάριν [992b] αὐτὰ δεῖν πραγματεύεσθαι. ἔτι δὲ τὴν ὑποκειμένην οὐσίαν ὡς ὕλην μαθηματικωτέραν ἢ τις ὑπολάβοι, καὶ μᾶλλον κατηγορεῖσθαι καὶ διαφορὰν εἶναι τῆς οὐσίας καὶ τῆς ὕλης ἢ ὕλην, οἷον τὸ μέγα καὶ τὸ μικρόν, ὥσπερ καὶ οἱ φυσιολόγοι φασὶ τὸ μανὸν καὶ τὸ πυκνόν, πρῶτας τοῦ ὑποκειμένου φάσκοντες εἶναι διαφορὰς ταύτας· ταῦτα γὰρ ἐστὶν ὑπεροχὴ τις καὶ ἑλλειψις. περί τε κινήσεως, εἰ μὲν ἔσται ταῦτα κίνησις, δῆλον ὅτι κινήσεται τὰ εἶδη· εἰ δὲ μή, πόθεν ἦλθεν; ὅλη γὰρ ἢ περὶ φύσεως ἀνήρηται σκέψις. ὅ τε δοκεῖ ῥάδιον εἶναι, τὸ δεῖξαι ὅτι ἐν ἅπαντα, οὐ γίγνεται· τῇ γὰρ ἐκθέσει οὐ γίγνεται πάντα ἐν ἄλλ' αὐτό τι ἔν, ἂν διδῶ τις πάντα· καὶ οὐδὲ τοῦτο, εἰ μὴ γένος δώσει τὸ καθόλου εἶναι· τοῦτο δ' ἐν ἐνίοις ἀδύνατον. οὐθέννα δ' ἔχει λόγον οὐδὲ τὰ μετὰ τοὺς ἀριθμοὺς μήκη τε καὶ ἐπίπεδα καὶ στερεά, οὔτε ὅπως ἔστιν ἢ ἔσται οὔτε τίνα ἔχει δύναμιν· ταῦτα γὰρ οὔτε εἶδη οἷόν τε εἶναι (οὐ γὰρ εἰσὶν ἀριθμοί) οὔτε τὰ μεταξύ (μαθηματικὰ γὰρ ἐκεῖνα) οὔτε τὰ φθαρτά, ἀλλὰ πάλιν τέταρτον ἄλλο φαίνεται τοῦτό τι γένος. ὅλως τε τὸ τῶν ὄντων ζητεῖν στοιχεῖα μὴ διελόντας, πολλαχῶς λεγομένων, ἀδύνατον εὐρεῖν, ἄλλως τε καὶ τοῦτον τὸν τρόπον ζητοῦντας ἐξ οἷων ἐστὶ στοιχείων. ἐκ τίνων γὰρ τὸ ποιεῖν ἢ πάσχειν ἢ τὸ εὐθύ, οὐκ ἔστι δήπου λαβεῖν, ἀλλ' εἴπερ, τῶν οὐσιῶν μόνον ἐνδέχεται· ὥστε τὸ τῶν ὄντων ἀπάντων τὰ στοιχεῖα ἢ ζητεῖν ἢ οἶεσθαι ἔχειν οὐκ ἀληθές. πῶς δ' ἂν τις καὶ μάθοι τὰ τῶν πάντων στοιχεῖα; δῆλον γὰρ ὡς οὐθὲν οἷόν τε προϋπάρχειν γνωρίζοντα πρότερον. ὥσπερ γὰρ τῷ γεωμετρεῖν μανθάνοντι ἄλλα μὲν ἐνδέχεται προειδέναι, ὧν δὲ ἢ ἐπιστήμη καὶ περὶ ὧν μέλλει μανθάνειν οὐθὲν προγιγνώσκει, οὕτω δὲ καὶ ἐπὶ τῶν ἄλλων, ὥστ' εἴ τις τῶν πάντων ἔστιν ἐπιστήμη, οἷαν δὴ τινὲς φασιν, οὐθὲν ἂν προϋπάρχοι γνωρίζων οὗτος. καίτοι πᾶσα μάθησις διὰ προγιγνωσκομένων ἢ πάντων ἢ τινῶν ἐστί, καὶ ἢ δι' ἀποδείξεως «καὶ» ἢ δι' ὀρισμῶν (δεῖ γὰρ ἐξ ὧν ὁ ὀρισμὸς προειδέναι καὶ εἶναι γνώριμα)· ὁμοίως δὲ καὶ ἢ δι' ἐπαγωγῆς. ἀλλὰ μὴν [993a] εἰ καὶ τυγχάνοι σύμφυτος οὐσα, θαυμαστὸν πῶς λανθάνομεν ἔχοντες τὴν κρατίστην τῶν ἐπιστημῶν. ἔτι πῶς τις γνωριεῖ ἐκ τίνων ἐστί, καὶ πῶς ἔσται δῆλον; καὶ γὰρ τοῦτ' ἔχει ἀπορίαν· ἀμφισβητήσῃ γὰρ ἂν τις ὥσπερ καὶ περὶ ἐνίας συλλαβάς· οἱ μὲν γὰρ τὸ ζα ἐκ τοῦ σ καὶ δ καὶ α φασὶν εἶναι, οἱ δὲ τινες ἕτερον φθόγγον φασὶν εἶναι καὶ οὐθέννα τῶν γνωρίμων. ἔτι δὲ ὧν ἐστὶν αἴσθησις, ταῦτα πῶς ἂν τις μὴ ἔχων τὴν αἴσθησιν γνοίῃ; καίτοι ἔδει, εἴγε πάντων ταῦτα στοιχεῖά ἐστιν ἐξ ὧν, ὥσπερ αἱ σύνθετοι φωναὶ εἰσὶν ἐκ τῶν οἰκείων στοιχείων.

Ὅτι μὲν οὖν τὰς εἰρημένας ἐν τοῖς φυσικοῖς αἰτίας ζητεῖν ἐοίκασι πάντες, καὶ τούτων ἐκτὸς οὐδεμίαν ἔχοιμεν ἂν εἴπειν, δῆλον καὶ ἐκ τῶν πρότερον



εἰρημένων· ἀλλ' ἀμυδρῶς ταύτας, καὶ τρόπον μὲν τινα πᾶσαι πρότερον εἴρηνται τρόπον δέ τινα οὐδαμῶς. ψελλιζομένη γὰρ ἔοικεν ἡ πρώτη φιλοσοφία περὶ πάντων, ἅτε νέα τε καὶ κατ' ἀρχὰς οὕσα [καὶ τὸ πρῶτον], ἐπεὶ καὶ Ἐμπεδοκλῆς ὁστοῦν τῷ λόγῳ φησὶν εἶναι, τοῦτο δ' ἐστὶ τὸ τί ἦν εἶναι καὶ ἡ οὐσία τοῦ πράγματος. ἀλλὰ μὴν ὁμοίως ἀναγκαῖον καὶ σάρκας καὶ τῶν ἄλλων ἕκαστον εἶναι τὸν λόγον, ἢ μηδὲ ἓν· διὰ τοῦτο γὰρ καὶ σὰρξ καὶ ὁστοῦν ἔσται καὶ τῶν ἄλλων ἕκαστον καὶ οὐ διὰ τὴν ὕλην, ἣν ἐκεῖνος λέγει, πῦρ καὶ γῆν καὶ ὕδωρ καὶ ἀέρα. ἀλλὰ ταῦτα ἄλλου μὲν λέγοντος συνέφησεν ἂν ἐξ ἀνάγκης, σαφῶς δὲ οὐκ εἴρηκεν. περὶ μὲν οὖν τούτων δεδήλωται καὶ πρότερον· ὅσα δὲ περὶ τῶν αὐτῶν τούτων ἀπορήσειεν ἂν τις, ἐπανέλθωμεν πάλιν· τάχα γὰρ ἂν ἐξ αὐτῶν εὐπορήσαιμεν τι πρὸς τὰς ὕστερον ἀπορίας.

## Α ΕΛΑΤΤΟΝ

Ἡ περὶ τῆς ἀληθείας θεωρία τῇ μὲν χαλεπῇ τῇ δὲ ῥαδία. σημεῖον δὲ τὸ μήτ' ἀξίως μηδένα δύνασθαι θιγεῖν [993b] αὐτῆς μήτε πάντας ἀποτυγχάνειν, ἀλλ' ἕκαστον λέγειν τι περὶ τῆς φύσεως, καὶ καθ' ἓνα μὲν ἢ μηθὲν ἢ μικρὸν ἐπιβάλλειν αὐτῇ, ἐκ πάντων δὲ συναθροιζομένων γίνεσθαι τι μέγεθος· ὥστ' εἴπερ ἔοικεν ἔχειν καθάπερ τυγχάνομεν παροιμιαζόμενοι, τίς ἂν θύρας ἀμάρτοι; ταύτῃ μὲν ἂν εἴη ῥαδία, τὸ δ' ὅλον τι ἔχειν καὶ μέρος μὴ δύνασθαι δηλοῖ τὸ χαλεπὸν αὐτῆς. ἴσως δὲ καὶ τῆς χαλεπότητος οὔσης κατὰ δύο τρόπους, οὐκ ἓν τοῖς πράγμασιν ἀλλ' ἓν ἡμῖν τὸ αἴτιον αὐτῆς· ὥσπερ γὰρ τὰ τῶν νυκτερίδων ὄμματα πρὸς τὸ φέγγος ἔχει τὸ μεθ' ἡμέραν, οὕτω καὶ τῆς ἡμετέρας ψυχῆς ὁ νοῦς πρὸς τὰ τῇ φύσει φανερώτατα πάντων. οὐ μόνον δὲ χάριν ἔχειν δίκαιον τούτοις ὧν ἂν τις κοινώσαιο ταῖς δόξαις, ἀλλὰ καὶ τοῖς ἐπιπολαιότερον ἀποφνηαμένοις· καὶ γὰρ οὗτοι συνεβάλοντό τι· τὴν γὰρ ἔξιν προήσκησαν ἡμῶν· εἰ μὲν γὰρ Τιμόθεος μὴ ἐγένετο, πολλὴν ἂν μελοποιίαν οὐκ εἴχομεν· εἰ δὲ μὴ Φρῦνις, Τιμόθεος οὐκ ἂν ἐγένετο. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν περὶ τῆς ἀληθείας ἀποφνηαμένων· παρὰ μὲν γὰρ ἐνίων παρειλήφαμεν τινας δόξας, οἱ δὲ τοῦ γενέσθαι τούτους αἵτιοι γεγόνασιν. ὀρθῶς δ' ἔχει καὶ τὸ καλεῖσθαι τὴν φιλοσοφίαν ἐπιστήμην τῆς ἀληθείας. θεωρητικῆς μὲν γὰρ τέλος ἀλήθεια πρακτικῆς δ' ἔργον· καὶ γὰρ ἂν τὸ πῶς ἔχει σκοπῶσιν, οὐ τὸ αἶδιον ἀλλ' ὃ πρὸς τι καὶ νῦν θεωροῦσιν οἱ πρακτικοί. οὐκ ἴσμεν δὲ τὸ ἀληθὲς ἄνευ τῆς αἰτίας· ἕκαστον δὲ μάλιστα αὐτὸ τῶν ἄλλων καθ' ὃ καὶ τοῖς ἄλλοις ὑπάρχει τὸ συνώνυμον (οἷον τὸ πῦρ θερμότατον· καὶ γὰρ τοῖς ἄλλοις τὸ αἴτιον τοῦτο τῆς θερμότητος)· ὥστε καὶ ἀληθέστατον τὸ τοῖς ὑστέροις αἴτιον τοῦ ἀληθέσιν εἶναι. διὸ τὰς τῶν ἀεὶ ὄντων ἀρχὰς ἀναγκαῖον ἀεὶ εἶναι ἀληθεστάτας (οὐ γάρ ποτε ἀληθεῖς, οὐδ' ἐκείναις αἰτίον τί ἐστὶ τοῦ εἶναι, ἀλλ' ἐκείναις τοῖς ἄλλοις), ὥσθ' ἕκαστον ὥς ἔχει τοῦ εἶναι,

οὕτω καὶ τῆς ἀληθείας.

[994a] Ἀλλὰ μὴν ὅτι γ' ἔστιν ἀρχή τις καὶ οὐκ ἄπειρα τὰ αἴτια τῶν ὄντων οὗτ' εἰς εὐθυωρίαν οὔτε κατ' εἶδος, δῆλον. οὔτε γὰρ ὡς ἐξ ὕλης τόδ' ἐκ τοῦδε δυνατὸν ἰέναι εἰς ἄπειρον (οἶον σάρκα μὲν ἐκ γῆς, γῆν δ' ἐξ ἀέρος, ἀέρα δ' ἐκ πυρός, καὶ τοῦτο μὴ ἴστασθαι), οὔτε ὅθεν ἡ ἀρχὴ τῆς κινήσεως (οἶον τὸν μὲν ἄνθρωπον ὑπὸ τοῦ ἀέρος κινήθῃναι, τοῦτον δ' ὑπὸ τοῦ ἡλίου, τὸν δὲ ἡλίον ὑπὸ τοῦ νείκους, καὶ τούτου μηδὲν εἶναι πέρας). ὁμοίως δὲ οὐδὲ τὸ οὗ ἔνεκα εἰς ἄπειρον οἶόν τε ἰέναι, βάδισιν μὲν ὑγιείας ἔνεκα, ταύτην δ' εὐδαιμονίας, τὴν δ' εὐδαιμονίαν ἄλλου, καὶ οὕτως ἀεὶ ἄλλο ἄλλου ἔνεκεν εἶναι· καὶ ἐπὶ τοῦ τί ἦν εἶναι δ' ὡσαύτως. τῶν γὰρ μέσων, ὧν ἐστὶ τι ἔσχατον καὶ πρότερον, ἀναγκαῖον εἶναι τὸ πρότερον αἴτιον τῶν μετ' αὐτό. εἰ γὰρ εἰπεῖν ἡμᾶς δέοι τί τῶν τριῶν αἴτιον, τὸ πρῶτον ἐροῦμεν· οὐ γὰρ δὴ τό γ' ἔσχατον, οὐδενὸς γὰρ τὸ τελευταῖον· ἀλλὰ μὴν οὐδὲ τὸ μέσον, ἐνὸς γάρ (οὐθὲν δὲ διαφέρει ἐν ἡ πλείω εἶναι, οὐδ' ἄπειρα ἢ πεπερασμένα). τῶν δ' ἀπείρων τοῦτον τὸν τρόπον καὶ ὅλως τοῦ ἀπείρου πάντα τὰ μόρια μέσα ὁμοίως μέχρι τοῦ νῦν· ὥστ' εἴπερ μηδὲν ἐστὶ πρῶτον, ὅλως αἴτιον οὐδὲν ἐστίν. - ἀλλὰ μὴν οὐδ' ἐπὶ τὸ κάτω οἶόν τε εἰς ἄπειρον ἰέναι, τοῦ ἄνω ἔχοντος ἀρχήν, ὥστ' ἐκ πυρός μὲν ὕδωρ, ἐκ δὲ τούτου γῆν, καὶ οὕτως ἀεὶ ἄλλο τι γίνεσθαι γένος. διχῶς γὰρ γίνεταί τόδε ἐκ τοῦδε - μὴ ὡς τόδε λέγεται μετὰ τόδε, οἶον ἐξ Ἰσθμίων Ὀλύμπια, ἀλλ' ἢ ὡς ἐκ παιδὸς ἀνὴρ μεταβάλλοντος ἢ ὡς ἐξ ὕδατος ἀήρ. ὡς μὲν οὖν ἐκ παιδὸς ἄνδρα γίνεσθαί φαμεν, ὡς ἐκ τοῦ γιγνομένου τὸ γεγονὸς ἢ ἐκ τοῦ ἐπιτελουμένου τὸ τετελεσμένον (ἀεὶ γὰρ ἐστὶ μεταξύ, ὥσπερ τοῦ εἶναι καὶ μὴ εἶναι γενέσεις, οὕτω καὶ τὸ γιγνόμενον τοῦ ὄντος καὶ μὴ ὄντος· ἔστι γὰρ ὁ μανθάνων γιγνόμενος ἐπιστήμων, καὶ τοῦτ' ἐστὶν ὃ λέγεται, ὅτι γίνεταί ἐκ μανθάνοντος ἐπιστήμων). τὸ δ' ὡς ἐξ ἀέρος ὕδωρ, φθειρομένου θατέρου. διὸ ἐκεῖνα μὲν οὐκ ἀνακάμπει εἰς ἀλληλα, οὐδὲ γίνεταί ἐξ ἀνδρὸς παῖς (οὐ γὰρ γίνεταί [994b] ἐκ τῆς γενέσεως τὸ γιγνόμενον ἀλλ' «ὃ» ἔστι μετὰ τὴν γένεσιν· οὕτω γὰρ καὶ ἡμέρα ἐκ τοῦ πρωῒ, ὅτι μετὰ τοῦτο· διὸ οὐδὲ τὸ πρωῒ ἐξ ἡμέρας). θάτερα δὲ ἀνακάμπει. ἀμφοτέρως δὲ ἀδύνατον εἰς ἄπειρον ἰέναι· τῶν μὲν γὰρ ὄντων μεταξὺ ἀνάγκη τέλος εἶναι, τὰ δ' εἰς ἀλληλα ἀνακάμπει· ἢ γὰρ θατέρου φθορὰ θατέρου ἐστὶ γενέσεις. - ἅμα δὲ καὶ ἀδύνατον τὸ πρῶτον αἰδιδιὸν ὄν φθαρήναι· ἐπεὶ γὰρ οὐκ ἄπειρος ἡ γένεσις ἐπὶ τὸ ἄγω, ἀνάγκη ἐξ οὗ φθαρέντος πρώτου τι ἐγένετο μὴ αἰδιδιὸν εἶναι. ἔτι δὲ τὸ οὗ ἔνεκα τέλος, τοιοῦτον δὲ ὃ μὴ ἄλλου ἔνεκα ἀλλὰ τᾶλλα ἐκείνου, ὥστ' εἰ μὲν ἔσται τοιοῦτόν τι ἔσχατον, οὐκ ἔσται ἄπειρον, εἰ δὲ μηθὲν τοιοῦτον, οὐκ ἔσται τὸ οὗ ἔνεκα, ἀλλ' οἱ τὸ ἄπειρον ποιοῦντες λανθάνουσιν ἐξαίρουντες τὴν τοῦ ἀγαθοῦ φύσιν (καίτοι οὐθεὶς ἂν ἐγχειρήσειεν οὐδὲν πράττειν μὴ μέλλων ἐπὶ

πέρας ἤξειν). οὐδ' ἂν εἴη νοῦς ἐν τοῖς οὖσιν· ἔνεκα γάρ τινος ἀεὶ πράττει ὁ γε νοῦν ἔχων, τοῦτο δέ ἐστι πέρας· τὸ γὰρ τέλος πέρας ἐστίν. ἀλλὰ μὴν οὐδὲ τὸ τί ἦν εἶναι ἐνδέχεται ἀνάγεσθαι εἰς ἄλλον ὁρισμὸν πλεονάζοντα τῷ λόγῳ· ἀεὶ τε γὰρ ἔστιν ὁ ἔμπροσθεν μᾶλλον, ὁ δ' ὕστερος οὐκ ἔστιν, οὗ δὲ τὸ πρῶτον μὴ ἔστιν, οὐδὲ τὸ ἐχόμενον· ἔτι τὸ ἐπίστασθαι ἀναιροῦσιν οἱ οὕτως λέγοντες, οὐ γὰρ οἷόν τε εἰδέναι πρὶν εἰς τὰ ἄτομα ἐλθεῖν· καὶ τὸ γινώσκειν οὐκ ἔστιν, τὰ γὰρ οὕτως ἄπειρα πῶς ἐνδέχεται νοεῖν; οὐ γὰρ ὅμοιον ἐπὶ τῆς γραμμῆς, ἢ κατὰ τὰς διαιρέσεις μὲν οὐχ ἴσταται, νοῆσαι δ' οὐκ ἔστι μὴ στήσαντα (διόπερ οὐκ ἀριθμήσει τὰς τομὰς ὁ τὴν ἄπειρον διεξιὼν), ἀλλὰ καὶ τὴν ὅλην οὐ κινουμένῳ νοεῖν ἀνάγκη. καὶ ἀπείρῳ οὐδενὶ ἔστιν εἶναι· εἰ δὲ μή, οὐκ ἄπειρόν γ' ἐστὶ τὸ ἀπείρῳ εἶναι. - ἀλλὰ μὴν καὶ εἰ ἄπειρά γ' ἦσαν πλήθει τὰ εἶδη τῶν αἰτίων, οὐκ ἂν ἦν οὐδ' οὕτω τὸ γινώσκειν· τότε γὰρ εἰδέναι οἰόμεθα ὅταν τὰ αἷτια γνωρίσωμεν· τὸ δ' ἄπειρον κατὰ τὴν πρόσθεσιν οὐκ ἔστιν ἐν πεπερασμένῳ διεξελθεῖν.

Αἱ δ' ἀκροάσεις κατὰ τὰ ἔθνη συμβαίνουσιν· ὥς γὰρ [995a] εἰώθαμεν οὕτως ἀξιοῦμεν λέγεσθαι, καὶ τὰ παρὰ ταῦτα οὐχ ὅμοια φαίνεται ἀλλὰ διὰ τὴν ἀσυνήθειαν ἀγνωστότερα καὶ ξενικώτερα· τὸ γὰρ σύνηθες γνώριμον. ἡλικίην δὲ ἰσχὺν ἔχει τὸ σύνηθες οἱ νόμοι δηλοῦσιν, ἐν οἷς τὰ μυθώδη καὶ παιδαριώδη μεῖζον ἰσχύει τοῦ γινώσκειν περὶ αὐτῶν διὰ τὸ ἔθος. οἱ μὲν οὖν ἐὰν μὴ μαθηματικῶς λέγῃ τις οὐκ ἀποδέχονται τῶν λεγόντων, οἱ δ' ἂν μὴ παραδειγματικῶς, οἱ δὲ μάρτυρα ἀξιοῦσιν ἐπάγεσθαι ποιητήν. καὶ οἱ μὲν πάντα ἀκριβῶς, τοὺς δὲ λυπεῖ τὸ ἀκριβὲς ἢ διὰ τὸ μὴ δύνασθαι συνείρειν ἢ διὰ τὴν μικρολογίαν· ἔχει γάρ τι τὸ ἀκριβὲς τοιοῦτον, ὥστε, καθάπερ ἐπὶ τῶν συμβολαίων, καὶ ἐπὶ τῶν λόγων ἀνελεύθερον εἶναί τισι δοκεῖ. διὸ δεῖ πεπαιδεῦσθαι πῶς ἕκαστα ἀποδεκτέον, ὥς ἄτοπον ἅμα ζητεῖν ἐπιστήμην καὶ τρόπον ἐπιστήμης· ἔστι δ' οὐδὲ θάτερον ῥάδιον λαβεῖν. τὴν δ' ἀκριβολογίαν τὴν μαθηματικὴν οὐκ ἐν ἅπασιν ἀπαιτητέον, ἀλλ' ἐν τοῖς μὴ ἔχουσιν ὕλην. διόπερ οὐ φυσικὸς ὁ τρόπος· ἅπαντα γὰρ ἴσως ἢ φύσις ἔχει ὕλην. διὸ σκεπτέον πρῶτον τί ἐστὶν ἡ φύσις· οὕτω γὰρ καὶ περὶ τίνων ἡ φυσικὴ δῆλον ἔσται [καὶ εἰ μιᾶς ἐπιστήμης ἢ πλειόνων τὰ αἷτια καὶ τὰς ἀρχὰς θεωρήσαί ἐστιν].

## B

Ἀνάγκη πρὸς τὴν ἐπιζητουμένην ἐπιστήμην ἐπελθεῖν ἡμᾶς πρῶτον περὶ ὧν ἀπορῆσαι δεῖ πρῶτον· ταῦτα δ' ἐστὶν ὅσα τε περὶ αὐτῶν ἄλλως ὑπειλήφασί τινες, κἂν εἴ τι χωρὶς τούτων τυγχάνει παρεωραμένον. ἔστι δὲ τοῖς εὐπορῆσαι βουλομένοις προὔργου τὸ διαπορῆσαι καλῶς· ἢ γὰρ ὕστερον εὐπορία λύσις τῶν πρότερον ἀπορουμένων ἐστί, λύειν δ' οὐκ ἔστιν

ἀγνοοῦντας τὸν δεσμόν, ἀλλ' ἡ τῆς διανοίας ἀπορία δηλοῖ τοῦτο περὶ τοῦ πράγματος· ἡ γὰρ ἀπορεῖ, ταύτη παραπλήσιον πέπονθε τοῖς δεδεμένοις· ἀδύνατον γὰρ ἀμφοτέρως προελθεῖν εἰς τὸ πρόσθεν. διὸ δεῖ τὰς δυσχερείας τεθεωρηκέναι πάσας πρότερον, τούτων τε χάριν καὶ διὰ τὸ τοὺς ζητοῦντας ἄνευ τοῦ διαπορῆσαι πρῶτον ὁμοίους εἶναι τοῖς ποῖ δεῖ βαδίζειν ἀγνοοῦσι, καὶ πρὸς τούτοις οὐδ' εἴ ποτε τὸ ζητούμενον [995b] εὔρηκεν ἢ μὴ γινώσκειν· τὸ γὰρ τέλος τούτῳ μὲν οὐ δῆλον τῷ δὲ προηπορηκότι δῆλον. ἔτι δὲ βέλτιον ἀνάγκη ἔχειν πρὸς τὸ κρῖναι τὸν ὥσπερ ἀντιδίκων καὶ τῶν ἀμφισβητούντων λόγων ἀκηκοότα πάντων. - ἔστι δ' ἀπορία πρώτη μὲν περὶ ὧν ἐν τοῖς πεφρομισασμένοις διηπορήσαμεν, πότερον μιᾶς ἢ πολλῶν ἐπιστημῶν θεωρῆσαι τὰς αἰτίαι· καὶ πότερον τὰς τῆς οὐσίας ἀρχὰς τὰς πρώτας ἐστὶ τῆς ἐπιστήμης ἰδεῖν μόνον ἢ καὶ περὶ τῶν ἀρχῶν ἐξ ὧν δεικνύουσι πάντες, οἷον πότερον ἐνδέχεται ταῦτόν καὶ ἐν ἅμα φάναι καὶ ἀποφάναι ἢ οὐ, καὶ περὶ τῶν ἄλλων τῶν τοιούτων· εἴ τ' ἐστὶ περὶ τὴν οὐσίαν, πότερον μία περὶ πάσας ἢ πλείονές εἰσι, κἂν εἰ πλείονες πότερον ἅπασαι συγγενεῖς ἢ τὰς μὲν σοφίας τὰς δὲ ἄλλο τι λεκτέον αὐτῶν. καὶ τοῦτο δ' αὐτὸ τῶν ἀναγκαίων ἐστὶ ζητῆσαι, πότερον τὰς αἰσθητὰς οὐσίας εἶναι μόνον φατέον ἢ καὶ παρὰ ταύτας ἄλλας, καὶ πότερον μοναχῶς ἢ πλείονα γένη τῶν οὐσιῶν, οἷον οἱ ποιοῦντες τὰ τε εἴδη καὶ τὰ μαθηματικὰ μεταξὺ τούτων τε καὶ τῶν αἰσθητῶν. περί τε τούτων οὖν, καθάπερ φαμέν, ἐπισκεπτέον, καὶ πότερον περὶ τὰς οὐσίας ἢ θεωρία μόνον ἐστὶν ἢ καὶ περὶ τὰ συμβεβηκότα καθ' αὐτὰ ταῖς οὐσίαις, πρὸς δὲ τούτοις περὶ ταῦτο καὶ ἑτέρου καὶ ὁμοίου καὶ ἀνομοίου καὶ ἐναντιότητος, καὶ περὶ προτέρου καὶ ὑστέρου καὶ τῶν ἄλλων ἀπάντων τῶν τοιούτων περὶ ὧν οἱ διαλεκτικοὶ πειρῶνται σκοπεῖν ἐκ τῶν ἐνδόξων μόνων ποιοῦμενοι τὴν σκέψιν, τίνας ἐστὶ θεωρῆσαι περὶ πάντων· ἔτι δὲ τούτοις αὐτοῖς ὅσα καθ' αὐτὰ συμβέβηκεν, καὶ μὴ μόνον τί ἐστὶ τούτων ἕκαστον ἀλλὰ καὶ ἄρα ἐν ἐνὶ ἐναντίον· καὶ πότερον αἱ ἀρχαὶ καὶ τὰ στοιχεῖα τὰ γένη ἐστὶν ἢ εἰς ἃ διαιρεῖται ἐνυπάρχοντα ἕκαστον· καὶ εἰ τὰ γένη, πότερον ὅσα ἐπὶ τοῖς ἀτόμοις λέγεται τελευταῖα ἢ τὰ πρῶτα, οἷον πότερον ζῶον ἢ ἄνθρωπος ἀρχή τε καὶ μᾶλλον ἔστι παρὰ τὸ καθ' ἕκαστον. μάλιστα δὲ ζητητέον καὶ πραγματευτέον πότερον ἔστι τι παρὰ τὴν ὕλην αἴτιον καθ' αὐτὸ ἢ οὐ, καὶ τοῦτο χωριστὸν ἢ οὐ, καὶ πότερον ἐν ἢ πλείω τὸν ἀριθμόν, καὶ πότερον ἔστι τι παρὰ τὸ σύνολον (λέγω δὲ τὸ σύνολον, ὅταν κατηγορηθῇ τι τῆς ὕλης) ἢ οὐθέν, ἢ τῶν μὲν τῶν δ' οὐ, καὶ ποῖα τοιαῦτα τῶν ὄντων.

[996a] ἔτι αἱ ἀρχαὶ πότερον ἀριθμῶ ἢ εἶδει ὠρισμέναι, καὶ αἱ ἐν τοῖς λόγοις καὶ αἱ ἐν τῷ ὑποκειμένῳ; καὶ πότερον τῶν φθαρτῶν καὶ ἀφθάρτων αἱ αὐταὶ ἢ ἕτεραι, καὶ πότερον ἀφθαρτοὶ πᾶσαι ἢ τῶν φθαρτῶν φθαρταί; ἔτι δὲ τὸ πάντων χαλεπώτατον καὶ πλείστην ἀπορίαν ἔχον, πότερον τὸ ἐν καὶ τὸ ὄν,

καθάπερ οἱ Πυθαγόρειοι καὶ Πλάτων ἔλεγεν, οὐχ ἕτερόν τί ἐστὶν ἄλλ' οὐσία τῶν ὄντων; ἢ οὐ, ἀλλ' ἕτερόν τι τὸ ὑποκείμενον, ὥσπερ Ἐμπεδοκλῆς φησὶ φιλίαν ἄλλος δέ τις πῦρ ὃ δὲ ὕδωρ ἢ ἀέρα· καὶ πότερον αἱ ἀρχαὶ καθόλου εἰσὶν ἢ ὥς τὰ καθ' ἕκαστα τῶν πραγμάτων, καὶ δυνάμει ἢ ἐνεργείᾳ· ἔτι πότερον ἄλλως ἢ κατὰ κίνησιν· καὶ γὰρ ταῦτα ἀπορίαν ἂν παράσχοι πολλήν. πρὸς δὲ τούτοις πότερον οἱ ἀριθμοὶ καὶ τὰ μήκη καὶ τὰ σχήματα καὶ αἱ στιγμαὶ οὐσίαι τινὲς εἰσὶν ἢ οὐ, κἂν εἰ οὐσίαι πότερον κεχωρισμέναι τῶν αἰσθητῶν ἢ ἐνυπάρχουσαι ἐν τούτοις; περὶ γὰρ τούτων ἀπάντων οὐ μόνον χαλεπὸν τὸ εὐπορεῖσθαι τῆς ἀληθείας ἀλλ' οὐδὲ τὸ διαπορεῖσθαι τῷ λόγῳ ῥάδιον καλῶς.

Πρῶτον μὲν οὖν περὶ ὧν πρῶτον εἵπομεν, πότερον μιᾶς ἢ πλειόνων ἐστὶν ἐπιστημῶν θεωρεῖσθαι πάντα τὰ γένη τῶν αἰτίων. μιᾶς μὲν γὰρ ἐπιστήμης πῶς ἂν εἴη μὴ ἐναντίας οὐσας τὰς ἀρχὰς γνωρίζειν; ἔτι δὲ πολλοῖς τῶν ὄντων οὐχ ὑπάρχουσι πᾶσαι· τίνα γὰρ τρόπον οἶόν τε κινήσεως ἀρχὴν εἶναι τοῖς ἀκινήτοις ἢ τὴν τάγαθοῦ φύσιν, εἴπερ ἅπαν ὃ ἂν ἢ ἀγαθὸν καθ' αὐτὸ καὶ διὰ τὴν αὐτοῦ φύσιν τέλος ἐστὶν καὶ οὕτως αἴτιον ὅτι ἐκείνου ἔνεκα καὶ γίνεταί καὶ ἔστι τᾶλλα, τὸ δὲ τέλος καὶ τὸ οὗ ἔνεκα πράξεώς τινός ἐστι τέλος, αἱ δὲ πράξεις πᾶσαι μετὰ κινήσεως; ὥστ' ἐν τοῖς ἀκινήτοις οὐκ ἂν ἐνδέχοιτο ταύτην εἶναι τὴν ἀρχὴν οὐδ' εἶναί τι αὐτοαγαθόν. διὸ καὶ ἐν τοῖς μαθήμασιν οὐθὲν δείκνυται διὰ ταύτης τῆς αἰτίας, οὐδ' ἔστιν ἀπόδειξις οὐδεμία διότι βέλτιον ἢ χειρόν, ἀλλ' οὐδὲ τὸ παράπαν μέμνηται οὐθεὶς οὐθενὸς τῶν τοιούτων, ὥστε διὰ ταῦτα τῶν σοφιστῶν τινὲς οἶον Ἀρίστιππος προεπηλάκιζεν αὐτάς· ἐν μὲν γὰρ ταῖς ἄλλαις τέχναις, καὶ ταῖς βαναύσοις, οἶον ἐν τεκτονικῇ καὶ σκυτικῇ, διότι βέλτιον ἢ χειρόν λέγεσθαι πάντα, τὰς δὲ μαθηματικὰς [996b] οὐθένα ποιεῖσθαι λόγον περὶ ἀγαθῶν καὶ κακῶν. - ἀλλὰ μὴν εἴ γε πλείους ἐπιστῆμαι τῶν αἰτίων εἰσὶ καὶ ἑτέρα ἑτέρας ἀρχῆς, τίνα τούτων φατέον εἶναι τὴν ζητουμένην, ἢ τίνα μάλιστα τοῦ πράγματος τοῦ ζητουμένου ἐπιστήμονα τῶν ἐχόντων αὐτάς; ἐνδέχεται γὰρ τῷ αὐτῷ πάντας τοὺς τρόπους τοὺς τῶν αἰτίων ὑπάρχειν, οἶον οἰκίας ὅθεν μὲν ἡ κίνησις ἢ τέχνη καὶ ὁ οἰκοδόμος, οὗ δ' ἔνεκα τὸ ἔργον, ὕλη δὲ γῆ καὶ λίθοι, τὸ δ' εἶδος ὁ λόγος. ἐκ μὲν οὖν τῶν πάσαι διωρισμένων τίνα χρὴ καλεῖν τῶν ἐπιστημῶν σοφίαν ἔχει λόγον ἐκάστην προσαγορεύειν; ἢ μὲν γὰρ ἀρχικωτάτη καὶ ἡγεμονικωτάτη καὶ ἢ ὥσπερ δούλας οὐδ' ἀντειπεῖν τὰς ἄλλας ἐπιστήμας δίκαιον, ἢ τοῦ τέλους καὶ τάγαθοῦ τοιαύτη (τούτου γὰρ ἔνεκα τᾶλλα), ἢ δὲ τῶν πρώτων αἰτίων καὶ τοῦ μάλιστα ἐπιστητοῦ διωρίσθη εἶναι, ἢ τῆς οὐσίας ἂν εἴη τοιαύτη· πολλαχῶς γὰρ ἐπισταμένων τὸ αὐτὸ μᾶλλον μὲν εἶδέναι φαμέν τὸν τῷ εἶναι γνωρίζοντα τί τὸ πρᾶγμα ἢ τῷ μὴ εἶναι, αὐτῶν δὲ τούτων ἕτερον ἑτέρου μᾶλλον, καὶ μάλιστα τὸν τί ἐστὶν ἀλλ' οὐ τὸν πόσον ἢ ποῖον ἢ τί ποιεῖν ἢ

πάσχειν πέφυκεν. ἔτι δὲ καὶ ἐν τοῖς ἄλλοις τὸ εἰδέναι ἕκαστον καὶ ὧν ἀποδείξεις εἰσὶ, τότε οἴομεθα ὑπάρχειν ὅταν εἰδῶμεν τί ἐστίν (οἷον τί ἐστὶ τὸ τετραγωνίζειν, ὅτι μέσης εὐρεσις· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων), περὶ δὲ τὰς γενέσεις καὶ τὰς πράξεις καὶ περὶ πᾶσαν μεταβολὴν ὅταν εἰδῶμεν τὴν ἀρχὴν τῆς κινήσεως· τοῦτο δ' ἕτερον καὶ ἀντικείμενον τῷ τέλει, ὥστ' ἄλλης ἂν δόξειεν ἐπιστήμης εἶναι τὸ θεωρῆσαι τῶν αἰτίων τούτων ἕκαστον. - ἀλλὰ μὴν καὶ περὶ τῶν ἀποδεικτικῶν ἀρχῶν, πότερον μιᾶς ἐστὶν ἐπιστήμης ἢ πλείονων, ἀμφισβητήσιμόν ἐστιν (λέγω δὲ ἀποδεικτικὰς τὰς κοινὰς δόξας ἐξ ὧν ἅπαντες δεικνύουσιν) οἷον ὅτι πᾶν ἀναγκαῖον ἢ φάναι ἢ ἀποφάναι, καὶ ἀδύνατον ἅμα εἶναι καὶ μὴ εἶναι, καὶ ὅσαι ἄλλαι τοιαῦται προτάσεις, πότερον μία τούτων ἐπιστήμη καὶ τῆς οὐσίας ἢ ἕτέρα, καὶ εἰ μὴ μία, ποτέραν χρὴ προσαγορεύειν τὴν ζητουμένην νῦν. μιᾶς μὲν οὖν οὐκ εὐλογον εἶναι· τί γὰρ μᾶλλον γεωμετρίας ἢ ὁποιασοῦν περὶ τούτων ἐστὶν ἴδιον τὸ ἐπαίειν; εἴπερ οὖν ὁμοίως μὲν ὁποιασοῦν ἐστίν, ἀπασῶν δὲ μὴ ἐνδέχεται, [997a] ὥσπερ οὐδὲ τῶν ἄλλων οὕτως οὐδὲ τῆς γνωρίζουσης τὰς οὐσίας ἴδιόν ἐστι τὸ γινώσκειν περὶ αὐτῶν. ἅμα δὲ καὶ τίνα τρόπον ἔσται αὐτῶν ἐπιστήμη; τί μὲν γὰρ ἕκαστον τούτων τυγχάνει ὄν καὶ νῦν γνωρίζομεν (χρῶνται γοῦν ὡς γινωσκομένοις αὐτοῖς καὶ ἄλλαι τέχναι)· εἰ δὲ ἀποδεικτικὴ περὶ αὐτῶν ἐστί, δεήσει τι γένος εἶναι ὑποκείμενον καὶ τὰ μὲν πάθη τὰ δ' ἀξιώματ' αὐτῶν (περὶ πάντων γὰρ ἀδύνατον ἀπόδειξιν εἶναι), ἀνάγκη γὰρ ἔκ τινων εἶναι καὶ περὶ τι καὶ τινῶν τὴν ἀπόδειξιν· ὥστε συμβαίνει πάντων εἶναι γένος ἓν τι τῶν δεικνυμένων, πᾶσαι γὰρ αἱ ἀποδεικτικαὶ χρῶνται τοῖς ἀξιώμασιν. - ἀλλὰ μὴν εἰ ἕτέρα ἢ τῆς οὐσίας καὶ ἢ περὶ τούτων, ποτέρα κυριώτερα καὶ προτέρα πέφυκεν αὐτῶν; καθόλου γὰρ μάλιστα καὶ πάντων ἀρχαὶ τὰ ἀξιώματ' ἐστίν, εἴ τ' ἐστὶ μὴ τοῦ φιλοσόφου, τίνας ἔσται περὶ αὐτῶν ἄλλου τὸ θεωρῆσαι τὸ ἀληθὲς καὶ ψεῦδος; - ὅλως τε τῶν οὐσιῶν πότερον μία πασῶν ἐστὶν ἢ πλείους ἐπιστῆμαι; εἰ μὲν οὖν μὴ μία, ποίας οὐσίας θετέον τὴν ἐπιστήμην ταύτην; τὸ δὲ μίαν πασῶν οὐκ εὐλογον· καὶ γὰρ ἂν ἀποδεικτικὴ μία περὶ πάντων εἴη τῶν συμβεβηκότων, εἴπερ πᾶσα ἀποδεικτικὴ περὶ τοῦ ὑποκείμενον θεωρεῖ τὰ καθ' αὐτὰ συμβεβηκότα ἐκ τῶν κοινῶν δοξῶν. περὶ οὖν τὸ αὐτὸ γένος τὰ συμβεβηκότα καθ' αὐτὰ τῆς αὐτῆς ἐστὶ θεωρῆσαι ἐκ τῶν αὐτῶν δοξῶν. περὶ τε γὰρ ὃ μιᾶς καὶ ἐξ ὧν μιᾶς, εἴτε τῆς αὐτῆς εἴτε ἄλλης, ὥστε καὶ τὰ συμβεβηκότα, εἴθ' αὐταὶ θεωροῦσιν εἴτ' ἐκ τούτων μία. - ἔτι δὲ πότερον περὶ τὰς οὐσίας μόνον ἢ θεωρία ἐστὶν ἢ καὶ περὶ τὰ συμβεβηκότα ταύταις; λέγω δ' οἷον, εἰ τὸ στερεὸν οὐσία τίς ἐστὶ καὶ γραμμαὶ καὶ ἐπίπεδα, πότερον τῆς αὐτῆς ταῦτα γνωρίζειν ἐστὶν ἐπιστήμης καὶ τὰ συμβεβηκότα περὶ ἕκαστον γένος περὶ ὧν αἱ μαθηματικαὶ δεικνύουσιν, ἢ ἄλλης. εἰ μὲν γὰρ τῆς αὐτῆς, ἀποδεικτικὴ τις ἂν εἴη καὶ ἢ τῆς οὐσίας, οὐ δοκεῖ δὲ τοῦ τί ἐστίν

ἀπόδειξις εἶναι· εἰ δ' ἑτέρας, τίς ἔσται ἡ θεωροῦσα περὶ τὴν οὐσίαν τὰ συμβεβηκότα; τοῦτο γὰρ ἀποδοῦναι παγχάλεπον. - ἔτι δὲ πότερον τὰς αἰσθητὰς οὐσίας μόνας εἶναι φατέον ἢ καὶ παρὰ ταύτας ἄλλας, καὶ πότερον μοναχῶς ἢ [997b] πλείω γένη τετύχηκεν ὄντα τῶν οὐσιῶν, οἷον οἱ λέγοντες τὰ τε εἶδη καὶ τὰ μεταξύ, περὶ ἃ τὰς μαθηματικὰς εἶναι φασιν ἐπιστήμας; ὥς μὲν οὖν λέγομεν τὰ εἶδη αἰτία τε καὶ οὐσίας εἶναι καθ' ἑαυτὰς εἴρηται ἐν τοῖς πρώτοις λόγοις περὶ αὐτῶν· πολλαχῇ δὲ ἐχόντων δυσκολίαν, οὐθενὸς ἦπτον ἄτοπον τὸ φάναι μὲν εἶναι τινὰς φύσεις παρὰ τὰς ἐν τῷ οὐρανῷ, ταύτας δὲ τὰς αὐτὰς φάναι τοῖς αἰσθητοῖς πλὴν ὅτι τὰ μὲν αἰδία τὰ δὲ φθαρτά. αὐτὸ γὰρ ἄνθρωπὸν φασιν εἶναι καὶ ἵππον καὶ ὑγίειαν, ἄλλο δ' οὐδέν, παραπλήσιον ποιοῦντες τοῖς θεοῖς μὲν εἶναι φάσκουσιν ἀνθρωποειδεῖς δέ· οὔτε γὰρ ἐκεῖνοι οὐδὲν ἄλλο ἐποιοῦν ἢ ἀνθρώπους αἰδίους, οὔθ' οὔτοι τὰ εἶδη ἄλλ' ἢ αἰσθητὰ αἰδία. ἔτι δὲ εἴ τις παρὰ τὰ εἶδη καὶ τὰ αἰσθητὰ τὰ μεταξύ θήσεται, πολλὰς ἀπορίας ἔξει· δῆλον γὰρ ὥς ὁμοίως γραμμαί τε παρά τ' αὐτὰς καὶ τὰς αἰσθητὰς ἔσσονται καὶ ἕκαστον τῶν ἄλλων γενῶν· ὥστ' ἐπεὶπερ ἡ ἀστρολογία μία τούτων ἐστίν, ἔσται τις καὶ οὐρανὸς παρὰ τὸν αἰσθητὸν οὐρανὸν καὶ ἥλιός τε καὶ σελήνη καὶ τὰλλα ὁμοίως τὰ κατὰ τὸν οὐρανόν. καίτοι πῶς δεῖ πιστεῦσαι τούτοις; οὐδὲ γὰρ ἀκίνητον εὐλογον εἶναι, κινούμενον δὲ καὶ παντελῶς ἀδύνατον· ὁμοίως δὲ καὶ περὶ ὧν ἡ ὀπτική πραγματεύεται καὶ ἡ ἐν τοῖς μαθήμασιν ἀρμονική· καὶ γὰρ ταῦτα ἀδύνατον εἶναι παρὰ τὰ αἰσθητὰ διὰ τὰς αὐτὰς αἰτίας· εἰ γὰρ ἔστιν αἰσθητὰ μεταξύ καὶ αἰσθήσεις, δῆλον ὅτι καὶ ζῶα ἔσσονται μεταξύ αὐτῶν τε καὶ τῶν φθαρτῶν. ἀπορήσειε δ' ἂν τις καὶ περὶ ποῖα τῶν ὄντων δεῖ ζητεῖν ταύτας τὰς ἐπιστήμας. εἰ γὰρ τούτῳ διοίσει τῆς γεωδαισίας ἢ γεωμετρίας μόνον, ὅτι ἡ μὲν τούτων ἐστὶν ὧν αἰσθανόμεθα ἢ δ' οὐκ αἰσθητῶν, δῆλον ὅτι καὶ παρ' ἱατρικὴν ἔσται τις ἐπιστήμη καὶ παρ' ἐκάστην τῶν ἄλλων μεταξύ αὐτῆς τε ἱατρικῆς καὶ τῆσδε τῆς ἱατρικῆς· καίτοι πῶς τοῦτο δυνατόν; καὶ γὰρ ἂν ὑγιεῖν' ἄττα εἴη παρὰ τὰ αἰσθητὰ καὶ αὐτὸ τὸ ὑγιεινόν. ἅμα δὲ οὐδὲ τοῦτο ἀληθές, ὥς ἡ γεωδαισία τῶν αἰσθητῶν ἐστὶ μεγεθῶν καὶ φθαρτῶν· ἐφθείρετο γὰρ ἂν φθειρομένων. - ἀλλὰ μὴν οὐδὲ τῶν αἰσθητῶν ἂν εἴη μεγεθῶν οὐδὲ περὶ τὸν οὐρανὸν ἡ ἀστρολογία τόνδε. οὔτε γὰρ αἰ αἰσθηταὶ [998a] γραμμαὶ τοιαῦτα εἰσιν οἷας λέγει ὁ γεωμέτρης (οὐθὲν γὰρ εὐθὺ τῶν αἰσθητῶν οὕτως οὐδὲ στρογγύλον· ἄπτεται γὰρ τοῦ κανόνος οὐ κατὰ στιγμήν ὁ κύκλος ἄλλ' ὥσπερ Πρωταγόρας ἔλεγεν ἐλέγχων τοὺς γεωμέτρους), οὔθ' αἰ κινήσεις καὶ ἑλικες τοῦ οὐρανοῦ ὅμοιαι περὶ ὧν ἡ ἀστρολογία ποιεῖται τοὺς λόγους, οὔτε τὰ σημεία τοῖς ἀστροῖς τὴν αὐτὴν ἔχει φύσιν. εἰσὶ δὲ τινες οἱ φασιν εἶναι μὲν τὰ μεταξύ ταῦτα λεγόμενα τῶν τε εἰδῶν καὶ τῶν αἰσθητῶν, οὐ μὴν χωρὶς γε τῶν αἰσθητῶν ἄλλ' ἐν τούτοις· οἷς τὰ συμβαίνοντα ἀδύνατα πάντα μὲν πλείονος λόγου διελθεῖν, ἱκανὸν δὲ καὶ τὰ

τοιαῦτα θεωρῆσαι. οὔτε γὰρ ἐπὶ τούτων εὐλογον ἔχειν οὕτω μόνον, ἀλλὰ δῆλον ὅτι καὶ τὰ εἶδη ἐνδέχονται ἂν ἐν τοῖς αἰσθητοῖς εἶναι (τοῦ γὰρ αὐτοῦ λόγου ἀμφοτέρω ταῦτά ἐστιν), ἔτι δὲ δύο στερεὰ ἐν τῷ αὐτῷ ἀναγκαῖον εἶναι τόπω, καὶ μὴ εἶναι ἀκίνητα ἐν κινουμένοις γε ὄντα τοῖς αἰσθητοῖς. ὅλως δὲ τίνος ἔνεκ' ἂν τις θεῖη εἶναι μὲν αὐτά, εἶναι δ' ἐν τοῖς αἰσθητοῖς; ταῦτά γὰρ συμβήσεται ἄτοπα τοῖς προειρημένοις· ἔσται γὰρ οὐρανός τις παρὰ τὸν οὐρανόν, πλὴν γ' οὐ χωρὶς ἀλλ' ἐν τῷ αὐτῷ τόπῳ· ὅπερ ἐστὶν ἀδυνατώτερον.

Περὶ τε τούτων οὖν ἀπορία πολλὴ πῶς δεῖ θέμενον τυχεῖν τῆς ἀληθείας, καὶ περὶ τῶν ἀρχῶν πότερον δεῖ τὰ γένη στοιχεῖα καὶ ἀρχὰς ὑπολαμβάνειν ἢ μᾶλλον ἐξ ὧν ἐνυπαρχόντων ἐστὶν ἕκαστον πρώτων, οἷον φωνῆς στοιχεῖα καὶ ἀρχαὶ δοκοῦσιν εἶναι ταῦτ' ἐξ ὧν σύγκεινται αἱ φωναὶ πρώτων, ἀλλ' οὐ τὸ κοινὸν ἢ φωνή· καὶ τῶν διαγραμμάτων ταῦτα στοιχεῖα λέγομεν ὧν αἱ ἀποδείξεις ἐνυπάρχουσιν ἐν ταῖς τῶν ἄλλων ἀποδείξεσιν ἢ πάντων ἢ τῶν πλείστων, ἔτι δὲ τῶν σωμάτων καὶ οἱ πλείω λέγοντες εἶναι στοιχεῖα καὶ οἱ ἔν, ἐξ ὧν σύγκειται καὶ ἐξ ὧν συνέστηκεν ἀρχὰς λέγουσιν εἶναι, οἷον Ἐμπεδοκλῆς πῦρ καὶ ὕδωρ καὶ τὰ μετὰ τούτων στοιχεῖα φησὶν εἶναι ἐξ ὧν ἐστὶ τὰ ὄντα ἐνυπαρχόντων, ἀλλ' οὐχ ὥς γένη λέγει ταῦτα τῶν ὄντων. πρὸς δὲ [998b] τούτοις καὶ τῶν ἄλλων εἴ τις ἐθέλει τὴν φύσιν ἀθρεῖν, οἷον κλίνην ἐξ ὧν μορίων συνέστηκε καὶ πῶς συγκειμένων, τότε γνωρίζει τὴν φύσιν αὐτῆς. - ἐκ μὲν οὖν τούτων τῶν λόγων οὐκ ἂν εἴησαν αἱ ἀρχαὶ τὰ γένη τῶν ὄντων· εἰ δ' ἕκαστον μὲν γνωρίζομεν διὰ τῶν ὀρισμῶν, ἀρχαὶ δὲ τὰ γένη τῶν ὀρισμῶν εἰσὶν, ἀνάγκη καὶ τῶν ὀριστῶν ἀρχὰς εἶναι τὰ γένη. κἂν εἰ ἔστι τὴν τῶν ὄντων λαβεῖν ἐπιστήμην τὸ τῶν εἰδῶν λαβεῖν καθ' ἃ λέγονται τὰ ὄντα, τῶν γε εἰδῶν ἀρχαὶ τὰ γένη εἰσὶν. φαίνονται δὲ τινες καὶ τῶν λεγόντων στοιχεῖα τῶν ὄντων τὸ ἐν ἢ τὸ ὄν ἢ τὸ μέγα καὶ μικρὸν ὥς γένεσιν αὐτοῖς χρῆσθαι. - ἀλλὰ μὴν οὐδὲ ἀμφοτέρως γε οἷόν τε λέγειν τὰς ἀρχὰς. ὁ μὲν γὰρ λόγος τῆς οὐσίας εἷς· ἕτερος δ' ἔσται ὁ διὰ τῶν γενῶν ὀρισμὸς καὶ ὁ λέγων ἐξ ὧν ἔστιν ἐνυπαρχόντων. - πρὸς δὲ τούτοις εἰ καὶ ὅτι μάλιστα ἀρχαὶ τὰ γένη εἰσὶ, πότερον δεῖ νομίζειν τὰ πρῶτα τῶν γενῶν ἀρχὰς ἢ τὰ ἔσχατα κατηγορούμενα ἐπὶ τῶν ἀτόμων; καὶ γὰρ τοῦτο ἔχει ἀμφισβήτησιν. εἰ μὲν γὰρ αἰεὶ τὰ καθόλου μᾶλλον ἀρχαί, φανερόν ὅτι τὰ ἀνωτάτω τῶν γενῶν· ταῦτα γὰρ λέγεται κατὰ πάντων. τοσαῦτα οὖν ἔσονται ἀρχαὶ τῶν ὄντων ὅσαπερ τὰ πρῶτα γένη, ὥστ' ἔσται τό τε ὄν καὶ τὸ ἐν ἀρχαὶ καὶ οὐσία· ταῦτα γὰρ κατὰ πάντων μάλιστα λέγεται τῶν ὄντων. οὐχ οἷόν τε δὲ τῶν ὄντων ἐν εἶναι γένος οὔτε τὸ ἐν οὔτε τὸ ὄν· ἀνάγκη μὲν γὰρ τὰς διαφορὰς ἐκάστου γένους καὶ εἶναι καὶ μίαν εἶναι ἐκάστην, ἀδύνατον δὲ κατηγορεῖσθαι ἢ τὰ εἶδη τοῦ γένους ἐπὶ τῶν οἰκείων διαφορῶν ἢ τὸ γένος ἄνευ τῶν αὐτοῦ



εἰδῶν, ὥστ' εἴπερ τὸ ἐν γένος ἢ τὸ ὄν, οὐδεμία διαφορὰ οὔτε ὄν οὔτε ἐν ἔσται. ἀλλὰ μὴν εἰ μὴ γένη, οὐδ' ἀρχαὶ ἔσονται, εἴπερ ἀρχαὶ τὰ γένη. ἔτι καὶ τὰ μεταξὺ συλλαμβανόμενα μετὰ τῶν διαφορῶν ἔσται γένη μέχρι τῶν ἀτόμων (νῦν δὲ τὰ μὲν δοκεῖ τὰ δ' οὐ δοκεῖ). πρὸς δὲ τούτοις ἔτι μᾶλλον αἱ διαφοραὶ ἀρχαὶ ἢ τὰ γένη. εἰ δὲ καὶ αὗται ἀρχαί, ἅπειροι ὥς εἰπεῖν ἀρχαὶ γίνονται, ἄλλως τε καὶ τις τὸ [999a] πρῶτον γένος ἀρχὴν τιθῇ. ἀλλὰ μὴν καὶ εἰ μᾶλλον γε ἀρχοειδὲς τὸ ἐν ἔστιν, ἐν δὲ τὸ ἀδιαίρετον, ἀδιαίρετον δὲ ἅπαν ἢ κατὰ τὸ ποσὸν ἢ κατ' εἶδος, πρότερον δὲ τὸ κατ' εἶδος, τὰ δὲ γένη διαιρετὰ εἰς εἶδη, μᾶλλον ἂν ἐν τὸ ἔσχατον εἴη κατηγορούμενον. οὐ γάρ ἐστι γένος ἄνθρωπος τῶν τινῶν ἀνθρώπων. ἔτι ἐν οἷς τὸ πρότερον καὶ ὕστερόν ἐστιν, οὐχ οἷόν τε τὸ ἐπὶ τούτων εἶναι τι παρὰ ταῦτα (οἷον εἰ πρώτη τῶν ἀριθμῶν ἡ δυάς, οὐκ ἔσται τις ἀριθμὸς παρὰ τὰ εἶδη τῶν ἀριθμῶν. ὁμοίως δὲ οὐδὲ σχῆμα παρὰ τὰ εἶδη τῶν σχημάτων. εἰ δὲ μὴ τούτων, σχολῇ τῶν γε ἄλλων ἔσται τὰ γένη παρὰ τὰ εἶδη. τούτων γὰρ δοκεῖ μάλιστα εἶναι γένη). ἐν δὲ τοῖς ἀτόμοις οὐκ ἔστι τὸ μὲν πρότερον τὸ δ' ὕστερον. ἔτι ὅπου τὸ μὲν βέλτιον τὸ δὲ χεῖρον, αἰεὶ τὸ βέλτιον πρότερον. ὥστ' οὐδὲ τούτων ἂν εἴη γένος. - ἐκ μὲν οὖν τούτων μᾶλλον φαίνεται τὰ ἐπὶ τῶν ἀτόμων κατηγορούμενα ἀρχαὶ εἶναι τῶν γενῶν. πάλιν δὲ πῶς αὖ δεῖ ταύτας ἀρχὰς ὑπολαβεῖν οὐ ῥᾶδιον εἰπεῖν. τὴν μὲν γὰρ ἀρχὴν δεῖ καὶ τὴν αἰτίαν εἶναι παρὰ τὰ πράγματα ὧν ἀρχή, καὶ δύνασθαι εἶναι χωριζομένην αὐτῶν. τοιοῦτον δέ τι παρὰ τὸ καθ' ἕκαστον εἶναι διὰ τί ἂν τις ὑπολάβοι, πλὴν ὅτι καθόλου κατηγορεῖται καὶ κατὰ πάντων; ἀλλὰ μὴν εἰ διὰ τοῦτο, τὰ μᾶλλον καθόλου μᾶλλον θετέον ἀρχάς. ὥστε ἀρχαὶ τὰ πρῶτ' ἂν εἴησαν γένη.

Ἔστι δ' ἐχομένη τε τούτων ἀπορία καὶ πασῶν χαλεπωτάτη καὶ ἀναγκαιοτάτη θεωρῆσαι, περὶ ἧς ὁ λόγος ἐφέστηκε νῦν. εἴτε γὰρ μὴ ἔστι τι παρὰ τὰ καθ' ἕκαστα, τὰ δὲ καθ' ἕκαστα ἅπειρα, τῶν δ' ἀπείρων πῶς ἐνδέχεται λαβεῖν ἐπιστήμην; ἢ γὰρ ἐν τι καὶ ταυτόν, καὶ ἢ καθόλου τι ὑπάρχει, ταύτη πάντα γνωρίζομεν. - ἀλλὰ μὴν εἰ τοῦτο ἀναγκαῖόν ἐστι καὶ δεῖ τι εἶναι παρὰ τὰ καθ' ἕκαστα, ἀναγκαῖον ἂν εἴη τὰ γένη εἶναι παρὰ τὰ καθ' ἕκαστα, ἥτοι τὰ ἔσχατα ἢ τὰ πρῶτα. τοῦτο δ' ὅτι ἀδύνατον ἄρτι διηπορήσαμεν. - ἔτι εἰ ὅτι μάλιστα ἔστι τι παρὰ τὸ σύνολον ὅταν κατηγορηθῇ τι τῆς ὕλης, πότερον, εἰ ἔστι, παρὰ πάντα δεῖ εἶναι τι, ἢ παρὰ μὲν ἔνια [999b] εἶναι παρὰ δ' ἔνια μὴ εἶναι, ἢ παρ' οὐδέν; εἰ μὲν οὖν μηδὲν ἐστι παρὰ τὰ καθ' ἕκαστα, οὐθὲν ἂν εἴη νοητὸν ἀλλὰ πάντα αἰσθητὰ καὶ ἐπιστήμη οὐδενός, εἰ μή τις εἶναι λέγει τὴν αἴσθησιν ἐπιστήμην. ἔτι δ' οὐδ' αἰδῖον οὐθὲν οὐδ' ἀκίνητον (τὰ γὰρ αἰσθητὰ πάντα φθείρεται καὶ ἐν κινήσει ἐστίν). ἀλλὰ μὴν εἴ γε αἰδῖον μηθὲν ἐστίν, οὐδὲ γένεσιν εἶναι δυνατόν. ἀνάγκη γὰρ εἶναι τι τὸ γιγνόμενον καὶ ἐξ οὗ γίγνεται καὶ τούτων τὸ ἔσχατον ἀγέννητον,

εἴπερ ἴσταταί τε καὶ ἐκ μὴ ὄντος γενέσθαι ἀδύνατον· ἔτι δὲ γενέσεως οὔσης καὶ κινήσεως ἀνάγκη καὶ πέρας εἶναι (οὔτε γὰρ ἄπειρός ἐστιν οὐδεμία κίνησις ἀλλὰ πάσης ἔστι τέλος, γίνεσθαι τε οὐχ οἷόν τε τὸ ἀδύνατον γενέσθαι· τὸ δὲ γεγονὸς ἀνάγκη εἶναι ὅτε πρῶτον γέγονεν)· ἔτι δ' εἴπερ ἡ ὕλη ἔστι διὰ τὸ ἀγέννητος εἶναι, πολὺ ἔτι μᾶλλον εὐλογον εἶναι τὴν οὐσίαν, ὃ ποτε ἐκείνη γίγνεται· εἰ γὰρ μήτε τοῦτο ἔσται μήτε ἐκείνη, οὐθὲν ἔσται τὸ παράπαν, εἰ δὲ τοῦτο ἀδύνατον, ἀνάγκη τι εἶναι παρὰ τὸ σύνολον, τὴν μορφήν καὶ τὸ εἶδος. - εἰ δ' αὖ τις τοῦτο θήσῃ, ἀπορία ἐπὶ τίνων τε θήσῃ τοῦτο καὶ ἐπὶ τίνων οὐ. ὅτι μὲν γὰρ ἐπὶ πάντων οὐχ οἷόν τε, φανερόν· οὐ γὰρ ἂν θείημεν εἶναί τινα οἰκίαν παρὰ τὰς τινὰς οἰκίας. πρὸς δὲ τούτοις πότερον ἢ οὐσία μία πάντων ἔσται, οἷον τῶν ἀνθρώπων; ἀλλ' ἄτοπον· ἔν γὰρ πάντα ὧν ἡ οὐσία μία. ἀλλὰ πολλὰ καὶ διάφορα; ἀλλὰ καὶ τοῦτο ἄλογον. ἅμα δὲ καὶ πῶς γίγνεται ἡ ὕλη τούτων ἕκαστον καὶ ἔστι τὸ σύνολον ἅμφω ταῦτα; - ἔτι δὲ περὶ τῶν ἀρχῶν καὶ τόδε ἀπορήσειεν ἄν τις. εἰ μὲν γὰρ εἶδει εἰσὶν ἔν, οὐθὲν ἔσται ἀριθμῶ ἔν, οὐδ' αὐτὸ τὸ ἔν καὶ τὸ ὄν· καὶ τὸ ἐπίστασθαι πῶς ἔσται, εἰ μὴ τι ἔσται ἔν ἐπὶ πάντων; - ἀλλὰ μὴν εἰ ἀριθμῶ ἔν καὶ μία ἐκάστη τῶν ἀρχῶν, καὶ μὴ ὥσπερ ἐπὶ τῶν αἰσθητῶν ἄλλαι ἄλλων (οἷον τῆσδε τῆς συλλαβῆς τῷ εἶδει τῆς αὐτῆς οὔσης καὶ αἱ ἀρχαὶ εἶδει αἱ αὐταί· καὶ γὰρ αὐταὶ ὑπάρχουσιν ἀριθμῶ ἕτεραι), - εἰ δὲ μὴ οὕτως ἀλλ' αἱ τῶν ὄντων ἀρχαὶ ἀριθμῶ ἔν εἰσιν, οὐκ ἔσται παρὰ τὰ στοιχεῖα οὐθὲν ἕτερον· τὸ γὰρ ἀριθμῶ ἔν ἢ τὸ καθ' ἕκαστον λέγειν διαφέρει οὐθέν· οὕτω γὰρ λέγομεν τὸ καθ' ἕκαστον, [1000a] τὸ ἀριθμῶ ἔν, καθόλου δὲ τὸ ἐπὶ τούτων. ὥσπερ οὖν εἰ τὰ τῆς φωνῆς ἀριθμῶ ἦν στοιχεῖα ὠρισμένα, ἀναγκαῖον ἦν ἂν τοσαῦτα εἶναι τὰ πάντα γράμματα ὅσαπερ τὰ στοιχεῖα, μὴ ὄντων γε δύο τῶν αὐτῶν μηδὲ πλειόνων.

Οὐθενὸς δ' ἐλάττων ἀπορία παραλέλειπται καὶ τοῖς νῦν καὶ τοῖς πρότερον, πότερον αἱ αὐταὶ τῶν φθαρτῶν καὶ τῶν ἀφθάρτων ἀρχαὶ εἰσιν ἢ ἕτεραι. εἰ μὲν γὰρ αἱ αὐταί, πῶς τὰ μὲν φθαρτὰ τὰ δὲ ἀφθαρτα, καὶ διὰ τίν' αἰτίαν; οἱ μὲν οὖν περὶ Ἡσίοδον καὶ πάντες ὅσοι θεολόγοι μόνον ἐφρόντισαν τοῦ πιθανοῦ τοῦ πρὸς αὐτούς, ἡμῶν δ' ὠλιγόρησαν (θεοὺς γὰρ ποιοῦντες τὰς ἀρχὰς καὶ ἐκ θεῶν γεγονέναι, τὰ μὴ γευσάμενα τοῦ νέκταρος καὶ τῆς ἀμβροσίας θνητὰ γενέσθαι φασίν, δῆλον ὡς ταῦτα τὰ ὀνόματα γνώριμα λέγοντες αὐτοῖς· καίτοι περὶ αὐτῆς τῆς προσφορᾶς τῶν αἰτίων τούτων ὑπὲρ ἡμᾶς εἰρήκασιν· εἰ μὲν γὰρ χάριν ἡδονῆς αὐτῶν θιγγάνουσιν, οὐθὲν αἵτια τοῦ εἶναι τὸ νέκταρ καὶ ἡ ἀμβροσία, εἰ δὲ τοῦ εἶναι, πῶς ἂν εἶεν αἰδίοι δεόμενοι τροφῆς)· - ἀλλὰ περὶ μὲν τῶν μυθικῶς σοφιζομένων οὐκ ἄξιον μετὰ σπουδῆς σκοπεῖν· παρὰ δὲ τῶν δι' ἀποδείξεως λεγόντων δεῖ πυνθάνεσθαι διερωτῶντας τί δή ποτ' ἐκ τῶν αὐτῶν ὄντα τὰ μὲν αἰδία τὴν φύσιν ἐστὶ τὰ δὲ φθείρεται τῶν ὄντων. ἐπεὶ δὲ οὔτε αἰτίαν λέγουσιν οὔτε εὐλογον οὕτως ἔχειν,

δῆλον ὡς οὐχ αἱ αὐταὶ ἀρχαὶ οὐδὲ αἰτίαι αὐτῶν ἂν εἶεν. καὶ γὰρ ὄνπερ οἰηθεῖν λέγειν ἂν τις μάλιστα ὁμολογουμένως αὐτῷ, Ἐμπεδοκλῆς, καὶ οὗτος ταύτῳ πέπονθεν· τίθησι μὲν γὰρ ἀρχὴν τινα αἰτίαν τῆς φθορᾶς τὸ νεῖκος, δόξειε δ' ἂν οὐθὲν ἦττον καὶ τοῦτο γεννᾶν ἔξω τοῦ ἐνός· ἅπαντα γὰρ ἐκ τούτου τᾷ ἄλλῳ ἐστὶ πλὴν ὁ θεός. λέγει γοῦν “ἐξ ὧν πάνθ' ὅσα τ' ἦν ὅσα τ' ἔσθ' ὅσα τ' ἔσται ὀπίσσω, δένδρεά τ' ἐβλάστησε καὶ ἄνδρες ἡδὲ γυναῖκες, θῆρες τ' οἰωνοὶ τε καὶ ὑδατοθρέμμονες ἰχθῦς, καὶ τε θεοὶ δολιχαίωνες”. καὶ χωρὶς δὲ τούτων δῆλον· [1000b] εἰ γὰρ μὴ ἦν ἐν τοῖς πράγμασιν, ἐν ἃν ἦν ἅπαντα, ὡς φησὶν· ὅταν γὰρ συνέλθῃ, τότε δ' “ἔσχατον ἴστατο νεῖκος”. διὸ καὶ συμβαίνει αὐτῷ τὸν εὐδαιμονέστατον θεὸν ἦττον φρόνιμον εἶναι τῶν ἄλλων· οὐ γὰρ γνωρίζει ἅπαντα· τὸ γὰρ νεῖκος οὐκ ἔχει, ἡ δὲ γνώσις τοῦ ὁμοίου τῷ ὁμοίῳ. “γαίη μὲν γάρ,” φησί, “γαῖαν ὀπώπαμεν, ὕδατι δ' ὕδωρ, αἰθέρι δ' αἰθέρα δῖον, ἀτὰρ πυρὶ πῦρ αἶδηλον, στοργὴν δὲ στοργῇ, νεῖκος δὲ τε νεϊκεῖ λυγρῷ.” ἄλλ' ὅθεν δὴ ὁ λόγος, τοῦτό γε φανερόν, ὅτι συμβαίνει αὐτῷ τὸ νεῖκος μὴθὲν μᾶλλον φθορᾶς ἢ τοῦ εἶναι αἵτιον· ὁμοίως δ' οὐδ' ἡ φιλότης τοῦ εἶναι, συνάγουσα γὰρ εἰς τὸ ἐν φθείρει τὰ ἄλλα. καὶ ἅμα δὲ αὐτῆς τῆς μεταβολῆς αἵτιον οὐθὲν λέγει ἄλλ' ἢ ὅτι οὕτως πέφυκεν· “ἄλλ' ὅτε δὴ μέγα νεῖκος ἐνὶ μελέεσσιν ἐθρέφθη, εἰς τιμὰς τ' ἀνόρουσε τελειομένοιο χρόνιο ὅς σφιν ἀμοιβαῖος πλατέος παρ' ἐλήλαται ὄρκου.” ὡς ἀναγκαῖον μὲν ὄν μεταβάλλειν· αἰτίαν δὲ τῆς ἀνάγκης οὐδεμίαν δηλοῖ. ἄλλ' ὅμως τοσοῦτόν γε μόνος λέγει ὁμολογουμένως· οὐ γὰρ τὰ μὲν φθαρτὰ τὰ δὲ ἀφθαρτα ποιεῖ τῶν ὄντων ἄλλὰ πάντα φθαρτὰ πλὴν τῶν στοιχείων. ἡ δὲ νῦν λεγομένη ἀπορία ἐστὶ διὰ τί τὰ μὲν τὰ δ' οὐ, εἴπερ ἐκ τῶν αὐτῶν ἐστίν. - ὅτι μὲν οὖν οὐκ ἂν εἶησαν αἱ αὐταὶ ἀρχαί, τοσαῦτα εἰρήσθω· εἰ δὲ ἕτεραι ἀρχαί, μία μὲν ἀπορία πότερον ἀφθαρτοὶ καὶ αὗται ἔσονται ἢ φθαρταί· εἰ μὲν γὰρ φθαρταί, δῆλον ὡς ἀναγκαῖον καὶ ταύτας ἐκ τινων εἶναι (πάντα γὰρ φθίρεται εἰς ταῦτ' ἐξ ὧν ἔστιν), ὥστε συμβαίνει τῶν ἀρχῶν ἑτέρας ἀρχὰς εἶναι προτέρας, τοῦτο δ' ἀδύνατον, καὶ εἰ ἴσταται καὶ εἰ βαδίζει εἰς ἄπειρον· ἔτι δὲ πῶς ἔσται τὰ φθαρτά, εἰ αἱ ἀρχαὶ ἀναιρεθήσονται; εἰ δὲ ἀφθαρτοὶ, διὰ τί ἐκ μὲν τούτων ἀφθάρτων οὐσῶν φθαρτὰ ἔσται, ἐκ δὲ τῶν ἑτέρων ἀφθαρτα; τοῦτο γὰρ οὐκ εὐλόγον, ἀλλ' ἡ ἀδύνατον ἢ πολλοῦ λόγου δεῖται. ἔτι δὲ οὐδ' ἐγκεχείρηκεν οὐδεὶς [1001a] ἑτέρας, ἀλλὰ τὰς αὐτὰς ἀπάντων λέγουσιν ἀρχάς. ἀλλὰ τὸ πρῶτον ἀπορηθὲν ἀποτρώγουσιν ὥσπερ τοῦτο μικρόν τι λαμβάνοντες.

Πάντων δὲ καὶ θεωρῆσαι χαλεπώτατον καὶ πρὸς τὸ γνῶναι τάληθές ἀναγκαιότατον πότερον ποτε τὸ ὄν καὶ τὸ ἐν οὐσίαι τῶν ὄντων εἰσί, καὶ ἑκάτερον αὐτῶν οὐχ ἕτερόν τι ὄν τὸ μὲν ἐν τὸ δὲ ὄν ἐστίν, ἢ δεῖ ζητεῖν τί ποτ' ἐστὶ τὸ ὄν καὶ τὸ ἐν ὡς ὑποκειμένης ἄλλης φύσεως. οἱ μὲν γὰρ ἐκείνως οἱ δ' οὕτως οἴονται τὴν φύσιν ἔχειν. Πλάτων μὲν γὰρ καὶ οἱ Πυθαγόρειοι οὐχ

ἕτερόν τι τὸ ὄν οὐδὲ τὸ ἐν ἀλλὰ τοῦτο αὐτῶν τὴν φύσιν εἶναι, ὡς οὐσης τῆς οὐσίας αὐτοῦ τοῦ ἐν εἶναι καὶ ὄντι· οἱ δὲ περὶ φύσεως, οἷον Ἐμπεδοκλῆς ὡς εἰς γνωριμώτερον ἀνάγων λέγει ὅτι τὸ ἐν ἐστίν· δόξειε γὰρ ἂν λέγειν τοῦτο τὴν φιλίαν εἶναι (αἰτία γοῦν ἐστὶν αὕτη τοῦ ἐν εἶναι πᾶσιν), ἕτεροι δὲ πῦρ, οἱ δ' ἄερα φασὶν εἶναι τὸ ἐν τοῦτο καὶ τὸ ὄν, ἐξ οὗ τὰ ὄντα εἶναι τε καὶ γεγονέναι. ὥς δ' αὐτως καὶ οἱ πλείω τὰ στοιχεῖα τιθέμενοι· ἀνάγκη γὰρ καὶ τούτοις τοσαῦτα λέγειν τὸ ἐν καὶ τὸ ὄν ὅσας περ ἀρχὰς εἶναι φασιν. συμβαίνει δέ, εἰ μὲν τις μὴ θήσεται εἶναι τινα οὐσίαν τὸ ἐν καὶ τὸ ὄν, μηδὲ τῶν ἄλλων εἶναι τῶν καθόλου μηθέν (ταῦτα γὰρ ἐστὶ καθόλου μάλιστα πάντων, εἰ δὲ μὴ ἐστὶ τὸ ἐν αὐτὸ μηδ' αὐτὸ ὄν, σχολῇ τῶν γε ἄλλων τι ἂν εἴη παρὰ τὰ λεγόμενα καθ' ἕκαστα), ἔτι δὲ μὴ ὄντος τοῦ ἐνὸς οὐσίας, δῆλον ὅτι οὐδ' ἂν ἀριθμὸς εἴη ὡς κεχωρισμένη τις φύσις τῶν ὄντων (ὁ μὲν γὰρ ἀριθμὸς μονάδες, ἡ δὲ μονὰς ὅπερ ἐν τί ἐστίν)· εἰ δ' ἐστὶ τὸ αὐτὸ ἐν καὶ ὄν, ἀναγκαῖον οὐσίαν αὐτῶν εἶναι τὸ ἐν καὶ τὸ ὄν· οὐ γὰρ ἕτερόν τι καθόλου κατηγορεῖται ἀλλὰ ταῦτα αὐτά. - ἀλλὰ μὴν εἴ γ' ἐστὶ τὸ αὐτὸ ὄν καὶ αὐτὸ ἐν, πολλὴ ἀπορία πῶς ἐστὶ τὸ παρὰ ταῦτα ἕτερον, λέγω δὲ πῶς ἐστὶ πλείω ἐνὸς τὰ ὄντα. τὸ γὰρ ἕτερον τοῦ ὄντος οὐκ ἐστίν, ὥστε κατὰ τὸν Παρμενίδου συμβαίνειν ἀνάγκη λόγον ἐν ἅπαντα εἶναι τὰ ὄντα καὶ [1001b] τοῦτο εἶναι τὸ ὄν. ἀμφοτέρως δὲ δύσκολον· ἂν τε γὰρ μὴ ἦ τὸ ἐν οὐσία ἂν τε ἦ τὸ αὐτὸ ἐν, ἀδύνατον τὸν ἀριθμὸν οὐσίαν εἶναι. ἐὰν μὲν οὖν μὴ ἦ, εἴρηται πρότερον δι' ὅ· ἐὰν δὲ ἦ, ἡ αὐτὴ ἀπορία καὶ περὶ τοῦ ὄντος. ἐκ τίνος γὰρ παρὰ τὸ ἐν ἐστὶ αὐτὸ ἄλλο ἐν; ἀνάγκη γὰρ μὴ ἐν εἶναι· ἅπαντα δὲ τὰ ὄντα ἢ ἐν ἢ πολλὰ ὧν ἐν ἕκαστον. ἔτι εἰ ἀδιαίρετον αὐτὸ τὸ ἐν, κατὰ μὲν τὸ Ζήνωνος ἀξίωμα οὐθέν ἂν εἴη (ὁ γὰρ μήτε προστιθέμενον μήτε ἀφαιρούμενον ποιεῖ μείζον μηδὲ ἔλαττον, οὗ φησιν εἶναι τοῦτο τῶν ὄντων, ὡς δηλονότι ὄντος μεγέθους τοῦ ὄντος· καὶ εἰ μέγεθος, σωματικόν· τοῦτο γὰρ πάντῃ ὄν· τὰ δὲ ἄλλα πῶς μὲν προστιθέμενα ποιήσει μείζον, πῶς δ' οὐθέν, οἷον ἐπίπεδον καὶ γραμμὴ, στιγμὴ δὲ καὶ μονὰς οὐδαμῶς)· ἀλλ' ἐπειδὴ οὗτος θεωρεῖ φορτικῶς, καὶ ἐνδέχεται εἶναι ἀδιαίρετόν τι ὥστε [καὶ οὕτως] καὶ πρὸς ἐκεῖνόν τιν' ἀπολογίαν ἔχειν (μείζον μὲν γὰρ οὐ ποιήσει πλεῖον δὲ προστιθέμενον τὸ τοιοῦτον)· - ἀλλὰ πῶς δὴ ἐξ ἐνὸς τοιούτου ἢ πλειόνων τοιούτων ἐστὶ μέγεθος; ὅμοιον γὰρ καὶ τὴν γραμμὴν ἐκ στιγμῶν εἶναι φάσκειν. ἀλλὰ μὴν καὶ εἴ τις οὕτως ὑπολαμβάνει ὥστε γενέσθαι, καθάπερ λέγουσί τινες, ἐκ τοῦ ἐνὸς αὐτοῦ καὶ ἄλλου μὴ ἐνός τινος τὸν ἀριθμόν, οὐθέν ἦττον ζητητέον διὰ τί καὶ πῶς ὅτε μὲν ἀριθμὸς ὅτε δὲ μέγεθος ἐστὶ τὸ γενόμενον, εἴπερ τὸ μὴ ἐν ἢ ἀνισότης καὶ ἡ αὐτὴ φύσις ἦν. οὔτε γὰρ ὅπως ἐξ ἐνὸς καὶ ταύτης οὔτε ὅπως ἐξ ἀριθμοῦ τινὸς καὶ ταύτης γένοιτ' ἂν τὰ μεγέθη, δῆλον.

Τούτων δ' ἔχομένη ἀπορία πότερον οἱ ἀριθμοὶ καὶ τὰ σώματα καὶ τὰ ἐπίπεδα καὶ αἱ στιγμαὶ οὐσίαι τινές εἰσιν ἢ οὐ. εἰ μὲν γὰρ μή εἰσιν, διαφεύγει τί τὸ ὄν καὶ τίνες αἱ οὐσίαι τῶν ὄντων· τὰ μὲν γὰρ πάθη καὶ αἱ κινήσεις καὶ τὰ πρὸς τι καὶ αἱ διαθέσεις καὶ οἱ λόγοι οὐθενὸς δοκοῦσιν οὐσίαν σημαίνειν (λέγονται γὰρ πάντα καθ' ὑποκειμένου τινός, καὶ οὐθέν τόδε τι)· ἃ δὲ μάλιστ' ἂν δόξειε σημαίνειν οὐσίαν, ὕδωρ καὶ γῆ καὶ πῦρ καὶ ἀήρ, ἐξ ὧν [1002a] τὰ σύνθετα σώματα συνέστηκε, τούτων θερμότητες μὲν καὶ ψυχρότητες καὶ τὰ τοιαῦτα πάθη, οὐκ οὐσίαι, τὸ δὲ σῶμα τὸ ταῦτα πεπονθὸς μόνον ὑπομένει ὡς ὄν τι καὶ οὐσία τις οὐσα. ἀλλὰ μὴν τό γε σῶμα ἦττον οὐσία τῆς ἐπιφανείας, καὶ αὕτη τῆς γραμμῆς, καὶ αὕτη τῆς μονάδος καὶ τῆς στιγμῆς· τούτοις γὰρ ὠρισταί τὸ σῶμα, καὶ τὰ μὲν ἄνευ σώματος ἐνδέχασθαι δοκεῖ εἶναι τὸ δὲ σῶμα ἄνευ τούτων ἀδύνατον. διόπερ οἱ μὲν πολλοὶ καὶ οἱ πρότερον τὴν οὐσίαν καὶ τὸ ὄν ὥροντο τὸ σῶμα εἶναι τὰ δὲ ἄλλα τούτου πάθη, ὥστε καὶ τὰς ἀρχὰς τὰς τῶν σωμάτων τῶν ὄντων εἶναι ἀρχάς· οἱ δ' ὕστεροι καὶ σοφώτεροι τούτων εἶναι δόξαντες ἀριθμούς. καθάπερ οὖν εἵπομεν, εἰ μὴ ἔστιν οὐσία ταῦτα, ὅλως οὐδὲν ἔστιν οὐσία οὐδὲ ὄν οὐθέν· οὐ γὰρ δὴ τά γε συμβεβηκότα τούτοις ἄξιον ὄντα καλεῖν. - ἀλλὰ μὴν εἰ τοῦτο μὲν ὁμολογεῖται, ὅτι μᾶλλον οὐσία τὰ μήκη τῶν σωμάτων καὶ αἱ στιγμαί, ταῦτα δὲ μὴ ὀρώμεν ποίων ἂν εἶεν σωμάτων (ἐν γὰρ τοῖς αἰσθητοῖς ἀδύνατον εἶναι), οὐκ ἂν εἴη οὐσία οὐδεμία. ἔτι δὲ φαίνεται ταῦτα πάντα διαιρέσεις ὄντα τοῦ σώματος, τὸ μὲν εἰς πλάτος τὸ δ' εἰς βάθος τὸ δ' εἰς μήκος. πρὸς δὲ τούτοις ὁμοίως ἔνεστιν ἐν τῷ στερεῷ ὁποιοῦν σχῆμα· ὥστ' εἰ μὴδ' ἐν τῷ λίθῳ Ἑρμῆς, οὐδὲ τὸ ἥμισυ τοῦ κύβου ἐν τῷ κύβῳ οὕτως ὡς ἀφορισμένον· οὐκ ἄρα οὐδ' ἐπιφάνεια (εἰ γὰρ ὁποιοῦν, κἂν αὕτη ἂν ἦν ἡ ἀφορίζουσα τὸ ἥμισυ), ὁ δ' αὐτὸς λόγος καὶ ἐπὶ γραμμῆς καὶ στιγμῆς καὶ μονάδος, ὥστ' εἰ μάλιστα μὲν οὐσία τὸ σῶμα, τούτου δὲ μᾶλλον ταῦτα, μὴ ἔστι δὲ ταῦτα μηδὲ οὐσίαι τινές, διαφεύγει τί τὸ ὄν καὶ τίς ἡ οὐσία τῶν ὄντων. πρὸς γὰρ τοῖς εἰρημένοις καὶ τὰ περὶ τὴν γένεσιν καὶ τὴν φθορὰν συμβαίνει ἄλογα. δοκεῖ μὲν γὰρ ἡ οὐσία, ἐὰν μὴ οὐσα πρότερον νῦν ἢ ἢ πρότερον οὐσα ὕστερον μὴ ἢ, μετὰ τοῦ γίνεσθαι καὶ φθεῖρεσθαι ταῦτα πάσχειν· τὰς δὲ στιγμὰς καὶ τὰς γραμμὰς καὶ τὰς ἐπιφανείας οὐκ ἐνδέχεται οὔτε γίνεσθαι οὔτε φθεῖρεσθαι, ὅτε μὲν οὐσας ὅτε δὲ οὐκ οὐσας. ὅταν γὰρ ἄπτηται ἢ διαιρῇται [1002b] τὰ σώματα, ἅμα ὅτε μὲν μία ἀπτομένων ὅτε δὲ δύο διαιρουμένων γίνονται· ὥστ' οὔτε συγκειμένων ἔστιν ἄλλ' ἔφθαρται, διηρημένων τε εἰσὶν αἱ πρότερον οὐκ οὐσαι (οὐ γὰρ δὴ ἡ γ' ἀδιαίρετος στιγμή διηρέθη εἰς δύο), εἴ τε γίνονται καὶ φθεῖρονται, ἐκ τίνος γίνονται; παραπλησίως δ' ἔχει καὶ περὶ τὸ νῦν τὸ ἐν τῷ χρόνῳ· οὐδὲ γὰρ τοῦτο ἐνδέχεται γίνεσθαι καὶ φθεῖρεσθαι, ἀλλ' ὅμως ἔτερον ἀεὶ δοκεῖ εἶναι, οὐκ οὐσία τις οὐσα. ὁμοίως δὲ δῆλον ὅτι ἔχει καὶ περὶ τὰς στιγμὰς καὶ τὰς γραμμὰς καὶ τὰ ἐπίπεδα· ὁ γὰρ αὐτὸς

λόγος· ἅπαντα γὰρ ὁμοίως ἢ πέρατα ἢ διαιρέσεις εἰσίν.

Ὅλως δ' ἀπορήσειεν ἄν τις διὰ τί καὶ δεῖ ζητεῖν ἄλλ' ἅττα παρά τε τὰ αἰσθητὰ καὶ τὰ μεταξύ, οἷον ἃ τίθεμεν εἶδη. εἰ γὰρ διὰ τοῦτο, ὅτι τὰ μὲν μαθηματικὰ τῶν δεῦρο ἄλλω μὲν τινι διαφέρει, τῷ δὲ πόλλ' ἅττα ὁμοειδῆ εἶναι οὐθὲν διαφέρει, ὥστ' οὐκ ἔσονται αὐτῶν αἱ ἀρχαὶ ἀριθμῷ ἀφωρισμένοι (ὥσπερ οὐδὲ τῶν ἐνταῦθα γραμμάτων ἀριθμῷ μὲν πάντων οὐκ εἰσίν αἱ ἀρχαὶ ὠρισμένοι, εἶδει δέ, ἐὰν μὴ λαμβάνῃ τις τησδὶ τῆς συλλαβῆς ἢ τησδὶ τῆς φωνῆς· τούτων δ' ἔσονται καὶ ἀριθμῷ ὠρισμένοι - ὁμοίως δὲ καὶ ἐπὶ τῶν μεταξύ· ἅπειρα γὰρ κάκεῖ τὰ ὁμοειδῆ), ὥστ' εἰ μὴ ἔστι παρά τὰ αἰσθητὰ καὶ τὰ μαθηματικὰ ἕτερ' ἅττα οἷα λέγουσι τὰ εἶδη τινές, οὐκ ἔσται μία ἀριθμῷ ἄλλ' εἶδει οὐσία, οὐδ' αἱ ἀρχαὶ τῶν ὄντων ἀριθμῷ ἔσονται ποσαὶ τινες ἄλλὰ εἶδει· - εἰ οὖν τοῦτο ἀναγκαῖον, καὶ τὰ εἶδη ἀναγκαῖον διὰ τοῦτο εἶναι τιθέναι. καὶ γὰρ εἰ μὴ καλῶς διαρθροῦσιν οἱ λέγοντες, ἄλλ' ἔστι γε τοῦθ' ὃ βούλονται, καὶ ἀνάγκη ταῦτα λέγειν αὐτοῖς, ὅτι τῶν εἰδῶν οὐσία τις ἕκαστόν ἐστι καὶ οὐθὲν κατὰ συμβεβηκός. - ἄλλὰ μὴν εἴ γε θήσομεν τὰ τε εἶδη εἶναι καὶ ἐν ἀριθμῷ τὰς ἀρχὰς ἄλλὰ μὴ εἶδει, εἰρήκαμεν ἃ συμβαίνειν ἀναγκαῖον ἀδύνατα. - σύνεγγυς δὲ τούτων ἐστὶ τὸ διαπορῆσαι πότερον δυνάμει ἔστι τὰ στοιχεῖα ἢ τιν' ἕτερον τρόπον. εἰ μὲν γὰρ ἄλλως πως, πρότερόν τι ἔσται τῶν ἀρχῶν [1003a] ἄλλο (πρότερον γὰρ ἢ δύναμις ἐκείνης τῆς αἰτίας, τὸ δὲ δυνατόν οὐκ ἀναγκαῖον ἐκείνως πᾶν ἔχειν)· εἰ δ' ἔστι δυνάμει τὰ στοιχεῖα, ἐνδέχεται μὴθὲν εἶναι τῶν ὄντων· δυνατόν γὰρ εἶναι καὶ τὸ μήπω ὄν· γίγνεται μὲν γὰρ τὸ μὴ ὄν, οὐθὲν δὲ γίγνεται τῶν εἶναι ἀδυνάτων. - ταύτας τε οὖν τὰς ἀπορίας ἀναγκαῖον ἀπορῆσαι περὶ τῶν ἀρχῶν, καὶ πότερον καθόλου εἰσίν ἢ ὥς λέγομεν τὰ καθ' ἕκαστα. εἰ μὲν γὰρ καθόλου, οὐκ ἔσονται οὐσίαι (οὐθὲν γὰρ τῶν κοινῶν τόδε τι σημαίνει ἄλλὰ τοιόνδε, ἢ δ' οὐσία τόδε τι· εἰ δ' ἔσται τόδε τι καὶ ἐν θέσθαι τὸ κοινῇ κατηγορούμενον, πολλὰ ἔσται ζῶα ὁ Σωκράτης, αὐτός τε καὶ ὁ ἄνθρωπος καὶ τὸ ζῶον, εἴπερ σημαίνει ἕκαστον τόδε τι καὶ ἔν)· - εἰ μὲν οὖν καθόλου αἱ ἀρχαί, ταῦτα συμβαίνει· εἰ δὲ μὴ καθόλου ἄλλ' ὥς τὰ καθ' ἕκαστα, οὐκ ἔσονται ἐπιστηταί (καθόλου γὰρ ἢ ἐπιστήμη πάντων), ὥστ' ἔσονται ἀρχαὶ ἕτεραι πρότεραι τῶν ἀρχῶν αἱ καθόλου κατηγορούμεναι, ἅπερ μέλλη ἔσεσθαι αὐτῶν ἐπιστήμη.

## Γ

Ἔστιν ἐπιστήμη τις ἢ θεωρεῖ τὸ ὄν ἢ ὄν καὶ τὰ τούτῳ ὑπάρχοντα καθ' αὐτό. αὕτη δ' ἐστὶν οὐδεμιᾶ τῶν ἐν μέρει λεγομένων ἢ αὐτῇ· οὐδεμία γὰρ τῶν ἄλλων ἐπισκοπεῖ καθόλου περὶ τοῦ ὄντος ἢ ὄν, ἄλλὰ μέρος αὐτοῦ τι

ἀποτεμόμεναι περὶ τούτου θεωροῦσι τὸ συμβεβηκός, οἷον αἱ μαθηματικαὶ τῶν ἐπιστημῶν. ἐπεὶ δὲ τὰς ἀρχὰς καὶ τὰς ἀκροτάτας αἰτίας ζητοῦμεν, δῆλον ὡς φύσεώς τινος αὐτὰς ἀναγκαῖον εἶναι καθ' αὐτήν. εἰ οὖν καὶ οἱ τὰ στοιχεῖα τῶν ὄντων ζητοῦντες ταύτας τὰς ἀρχὰς ἐζητουν, ἀνάγκη καὶ τὰ στοιχεῖα τοῦ ὄντος εἶναι μὴ κατὰ συμβεβηκός ἀλλ' ἢ ὄν· διὸ καὶ ἡμῖν τοῦ ὄντος ἢ ὄν τὰς πρώτας αἰτίας ληπτέον.

Τὸ δὲ ὄν λέγεται μὲν πολλαχῶς, ἀλλὰ πρὸς ἓν καὶ μίαν τινὰ φύσιν καὶ οὐχ ὁμωνύμως ἀλλ' ὥσπερ καὶ τὸ ὑγιεινὸν ἅπαν πρὸς ὑγίειαν, τὸ μὲν τῷ φυλάττειν τὸ δὲ τῷ ποιεῖν τὸ δὲ τῷ σημεῖον εἶναι τῆς ὑγείας τὸ δ' ὅτι [1003b] δεκτικὸν αὐτῆς, καὶ τὸ ἱατρικὸν πρὸς ἱατρικὴν (τὸ μὲν γὰρ τῷ ἔχειν ἱατρικὴν λέγεται ἱατρικὸν τὸ δὲ τῷ εὐφυῆς εἶναι πρὸς αὐτήν τὸ δὲ τῷ ἔργον εἶναι τῆς ἱατρικῆς), ὁμοιοτρόπως δὲ καὶ ἄλλα ληψόμεθα λεγόμενα τούτοις, - οὕτω δὲ καὶ τὸ ὄν λέγεται πολλαχῶς μὲν ἀλλ' ἅπαν πρὸς μίαν ἀρχήν· τὰ μὲν γὰρ ὅτι οὐσίαι, ὄντα λέγεται, τὰ δ' ὅτι πάθη οὐσίας, τὰ δ' ὅτι ὁδὸς εἰς οὐσίαν ἢ φθοραὶ ἢ στερήσεις ἢ ποιότητες ἢ ποιητικὰ ἢ γεννητικὰ οὐσίας ἢ τῶν πρὸς τὴν οὐσίαν λεγομένων, ἢ τούτων τινὸς ἀποφάσεις ἢ οὐσίας· διὸ καὶ τὸ μὴ ὄν εἶναι μὴ ὄν φαμεν. καθάπερ οὖν καὶ τῶν ὑγιεινῶν ἀπάντων μία ἐπιστήμη ἔστιν, ὁμοίως τοῦτο καὶ ἐπὶ τῶν ἄλλων. οὐ γὰρ μόνον τῶν καθ' ἓν λεγομένων ἐπιστήμης ἐστὶ θεωρῆσαι μιᾶς ἀλλὰ καὶ τῶν πρὸς μίαν λεγομένων φύσιν· καὶ γὰρ ταῦτα τρόπον τινὰ λέγονται καθ' ἓν. δῆλον οὖν ὅτι καὶ τὰ ὄντα μιᾶς θεωρῆσαι ἢ ὄντα. πανταχοῦ δὲ κυρίως τοῦ πρώτου ἢ ἐπιστήμη, καὶ ἐξ οὗ τὰ ἄλλα ἡρτηται, καὶ δι' ὃ λέγονται. εἰ οὖν τοῦτ' ἐστὶν ἡ οὐσία, τῶν οὐσιῶν ἂν δέοι τὰς ἀρχὰς καὶ τὰς αἰτίας ἔχειν τὸν φιλόσοφον. - ἅπαντος δὲ γένους καὶ αἴσθησις μία ἐνὸς καὶ ἐπιστήμη, οἷον γραμματικὴ μία οὕσα πάσας θεωρεῖ τὰς φωνάς· διὸ καὶ τοῦ ὄντος ἢ ὄν ὅσα εἶδη θεωρῆσαι μιᾶς ἐστὶν ἐπιστήμης τῷ γένει, τὰ τε εἶδη τῶν εἰδῶν. εἰ δὴ τὸ ὄν καὶ τὸ ἓν ταῦτόν καὶ μία φύσις τῷ ἀκολουθεῖν ἀλλήλοις ὥσπερ ἀρχὴ καὶ αἴτιον, ἀλλ' οὐχ ὡς ἐνὶ λόγῳ δηλούμενα (διαφέρει δὲ οὐθὲν οὐδ' ἂν ὁμοίως ὑπολάβωμεν, ἀλλὰ καὶ πρὸ ἔργου μᾶλλον)· ταῦτό γὰρ εἷς ἄνθρωπος καὶ ἄνθρωπος, καὶ ὦν ἄνθρωπος καὶ ἄνθρωπος, καὶ οὐχ ἕτερόν τι δηλοῖ κατὰ τὴν λέξιν ἐπαναδιπλούμενον τὸ εἷς ἄνθρωπος καὶ εἷς ὦν ἄνθρωπος (δῆλον δ' ὅτι οὐ χωρίζεται οὗτ' ἐπὶ γενέσεως οὗτ' ἐπὶ φθορᾶς), ὁμοίως δὲ καὶ ἐπὶ τοῦ ἐνός, ὥστε φανερόν ὅτι ἡ πρόσθεσις ἐν τούτοις ταῦτό δηλοῖ, καὶ οὐδὲν ἕτερον τὸ ἐν παρὰ τὸ ὄν, ἔτι δ' ἡ ἐκάστου οὐσία ἐν ἐστὶν οὐ κατὰ συμβεβηκός, ὁμοίως δὲ καὶ ὅπερ ὄν τι - ὥσθ' ὅσα περ τοῦ ἐνός εἶδη, τοσαῦτα καὶ τοῦ ὄντος· περὶ ὦν τὸ τί ἐστὶ τῆς αὐτῆς ἐπιστήμης τῷ γένει θεωρῆσαι, λέγω δ' οἷον περὶ ταῦτοῦ καὶ ὁμοίου καὶ τῶν ἄλλων τῶν τοιούτων. σχεδὸν δὲ [1004a] πάντα ἀνάγεται τάναντία εἰς τὴν ἀρχὴν ταύτην· τεθεωρήσθω δ' ἡμῖν ταῦτα ἐν τῇ

ἐκλογῇ τῶν ἐναντίων. καὶ τοσαῦτα μέρη φιλοσοφίας ἔστιν ὅσαι περ αἱ οὐσίαι· ὥστε ἀναγκαῖον εἶναι τινὰ πρώτην καὶ ἐχομένην αὐτῶν. ὑπάρχει γὰρ εὐθὺς γένη ἔχον τὸ ὄν [καὶ τὸ ἔν]· διὸ καὶ αἱ ἐπιστῆμαι ἀκολουθήσουσι τούτοις. ἔστι γὰρ ὁ φιλόσοφος ὥσπερ ὁ μαθηματικὸς λεγόμενος· καὶ γὰρ αὕτη ἔχει μέρη, καὶ πρώτη τις καὶ δευτέρα ἔστιν ἐπιστήμη καὶ ἄλλαι ἐφεξῆς ἐν τοῖς μαθήμασιν. - ἐπεὶ δὲ μιᾶς τάντικείμενα θεωρῆσαι, τῷ δὲ ἐνὶ ἀντίκειται πλῆθος - ἀπόφασιν δὲ καὶ στέρησιν μιᾶς ἐστὶ θεωρῆσαι διὰ τὸ ἀμφοτέρως θεωρεῖσθαι τὸ ἐν οὐ ἢ ἀπόφασιν ἢ ἢ στέρησιν (ἢ «γὰρ» ἀπλῶς λέγομεν ὅτι οὐχ ὑπάρχει ἐκεῖνο, ἢ τινι γένει· ἔνθα μὲν οὖν τῷ ἐνὶ ἢ διαφορὰ πρόσσεσι παρὰ τὸ ἐν τῇ ἀποφάσει, ἀπουσία γὰρ ἢ ἀπόφασιν ἐκείνου ἐστίν, ἐν δὲ τῇ στέρησει καὶ ὑποκειμένη τις φύσις γίγνεται καθ' ἣς λέγεται ἢ στέρησις) [τῷ δ' ἐνὶ πλῆθος ἀντίκειται] - ὥστε καὶ τάντικείμενα τοῖς εἰρημένοις, τό τε ἕτερον καὶ ἀνόμοιον καὶ ἄνισον καὶ ὅσα ἄλλα λέγεται ἢ κατὰ ταῦτα ἢ κατὰ πλῆθος καὶ τὸ ἔν, τῆς εἰρημένης γνωρίζειν ἐπιστήμης· ὧν ἐστὶ καὶ ἡ ἐναντιότης· διαφορὰ γὰρ τις ἢ ἐναντιότης, ἢ δὲ διαφορὰ ἑτερότης. ὥστ' ἐπειδὴ πολλαχῶς τὸ ἐν λέγεται, καὶ ταῦτα πολλαχῶς μὲν λεχθήσεται, ὅμως δὲ μιᾶς ἅπαντ' ἐστὶ γνωρίζειν· οὐ γὰρ εἰ πολλαχῶς, ἑτέρας, ἄλλ' εἰ μήτε καθ' ἐν μήτε πρὸς ἐν οἱ λόγοι ἀναφέρονται. ἐπεὶ δὲ πάντα πρὸς τὸ πρῶτον ἀναφέρεται, οἷον ὅσα ἐν λέγεται πρὸς τὸ πρῶτον ἐν, ὡσαύτως φατέον καὶ περὶ ταύτου καὶ ἑτέρου καὶ τῶν ἐναντίων ἔχειν· ὥστε διελόμενον ποσαχῶς λέγεται ἕκαστον, οὕτως ἀποδοτέον πρὸς τὸ πρῶτον ἐν ἐκάστη κατηγορίᾳ πῶς πρὸς ἐκεῖνο λέγεται· τὰ μὲν γὰρ τῷ ἔχειν ἐκεῖνο τὰ δὲ τῷ ποιεῖν τὰ δὲ κατ' ἄλλους λεχθήσεται τοιούτους τρόπους. - φανερόν οὖν [ὅπερ ἐν ταῖς ἀπορίαις ἐλέχθη] ὅτι μιᾶς περὶ τούτων καὶ τῆς οὐσίας ἐστὶ λόγον ἔχειν (τοῦτο δ' ἦν ἐν τῶν ἐν τοῖς ἀπορήμασιν), καὶ ἔστι τοῦ φιλοσόφου περὶ πάντων [1004b] δύνασθαι θεωρεῖν. εἰ γὰρ μὴ τοῦ φιλοσόφου, τίς ἔσται ὁ ἐπισκεψόμενος εἰ ταὐτὸ Σωκράτης καὶ Σωκράτης καθήμενος, ἢ εἰ ἐν ἐνὶ ἐναντίον, ἢ τί ἐστὶ τὸ ἐναντίον ἢ ποσαχῶς λέγεται; ὁμοίως δὲ καὶ περὶ τῶν ἄλλων τῶν τοιούτων. ἐπεὶ οὖν τοῦ ἐνὸς ἢ ἐν καὶ τοῦ ὄντος ἢ ὄν ταῦτα καθ' αὐτὰ ἐστὶ πάθη, ἄλλ' οὐχ ἢ ἀριθμοὶ ἢ γραμμαὶ ἢ πῦρ, δῆλον ὡς ἐκείνης τῆς ἐπιστήμης καὶ τί ἐστὶ γνωρίσαι καὶ τὰ συμβεβηκότ' αὐτοῖς. καὶ οὐ ταύτη ἀμαρτάνουσιν οἱ περὶ αὐτῶν σκοπούμενοι ὡς οὐ φιλοσοφοῦντες, ἀλλ' ὅτι πρότερον ἢ οὐσία, περὶ ἣς οὐθὲν ἐπαΐουσιν, ἐπεὶ ὥσπερ ἔστι καὶ ἀριθμοῦ ἢ ἀριθμὸς ἴδια πάθη, οἷον περιττότης ἀρτιότης, συμμετρία ἰσότης, ὑπεροχὴ ἑλλειψις, καὶ ταῦτα καὶ καθ' αὐτοὺς καὶ πρὸς ἀλλήλους ὑπάρχει τοῖς ἀριθμοῖς (ὁμοίως δὲ καὶ στερεῶ καὶ ἀκινήτῳ καὶ κινουμένῳ ἀβαρεῖ τε καὶ βάρος ἔχοντι ἔστιν ἕτερα ἴδια), οὕτω καὶ τῷ ὄντι ἢ ὄν ἔστι τινὰ ἴδια, καὶ ταῦτ' ἐστὶ περὶ ὧν τοῦ φιλοσόφου ἐπισκέψασθαι τὸ ἀληθές. σημεῖον δέ· οἱ γὰρ διαλεκτικοὶ καὶ σοφισταὶ τὸ αὐτὸ μὲν ὑποδύονται σχῆμα τῷ φιλοσόφῳ· ἢ γὰρ σοφιστικὴ φαινομένη μόνον σοφία ἐστὶ, καὶ οἱ



διαλεκτικοὶ διαλέγονται περὶ ἀπάντων, κοινὸν δὲ πᾶσι τὸ ὄν ἐστίν, διαλέγονται δὲ περὶ τούτων δῆλον ὅτι διὰ τὸ τῆς φιλοσοφίας ταῦτα εἶναι οἵκεῖα. περὶ μὲν γὰρ τὸ αὐτὸ γένος στρέφεται ἡ σοφιστικὴ καὶ ἡ διαλεκτικὴ τῇ φιλοσοφίᾳ, ἀλλὰ διαφέρει τῆς μὲν τῷ τρόπῳ τῆς δυνάμεως, τῆς δὲ τοῦ βίου τῇ προαιρέσει· ἔστι δὲ ἡ διαλεκτικὴ πειραστικὴ περὶ ὧν ἡ φιλοσοφία γνωριστικὴ, ἡ δὲ σοφιστικὴ φαινομένη, οὕσα δ' οὕ.

Ἔτι τῶν ἐναντίων ἡ ἑτέρα συστοιχία στέρησις, καὶ πάντα ἀνάγεται εἰς τὸ ὄν καὶ τὸ μὴ ὄν, καὶ εἰς ἓν καὶ πλῆθος, οἷον στάσις τοῦ ἐνὸς κίνησις δὲ τοῦ πλῆθους· τὰ δ' ὄντα καὶ τὴν οὐσίαν ὁμολογοῦσιν ἐξ ἐναντίων σχεδὸν ἅπαντες συγκεῖσθαι· πάντες γοῦν τὰς ἀρχὰς ἐναντίας λέγουσιν· οἱ μὲν γὰρ περιττὸν καὶ ἄρτιον, οἱ δὲ θερμὸν καὶ ψυχρόν, οἱ δὲ πέρας καὶ ἄπειρον, οἱ δὲ φιλίαν καὶ νεῖκος. πάντα δὲ καὶ τᾶλλα ἀναγόμενα φαίνεται εἰς τὸ ἓν καὶ πλῆθος (εἰλήφθω γὰρ [1005a] ἡ ἀναγωγὴ ἡμῖν), αἱ δ' ἀρχαὶ καὶ παντελῶς αἱ παρὰ τῶν ἄλλων ὡς εἰς γένη ταῦτα πίπτουσιν. φανερόν οὖν καὶ ἐκ τούτων ὅτι μιᾶς ἐπιστήμης τὸ ὄν ἢ ὄν θεωρῆσαι. πάντα γὰρ ἢ ἐναντία ἢ ἐξ ἐναντίων, ἀρχαὶ δὲ τῶν ἐναντίων τὸ ἓν καὶ πλῆθος. ταῦτα δὲ μιᾶς ἐπιστήμης, εἴτε καθ' ἓν λέγεται εἴτε μή, ὥσπερ ἴσως ἔχει καὶ τάληθές. ἀλλ' ὅμως εἰ καὶ πολλαχῶς λέγεται τὸ ἓν, πρὸς τὸ πρῶτον τᾶλλα λεχθήσεται καὶ τὰ ἐναντία ὁμοίως, [καὶ διὰ τοῦτο] καὶ εἰ μὴ ἔστι τὸ ὄν ἢ τὸ ἓν καθόλου καὶ ταὐτὸ ἐπὶ πάντων ἢ χωριστόν, ὥσπερ ἴσως οὐκ ἔστιν ἀλλὰ τὰ μὲν πρὸς ἓν τὰ δὲ τῷ ἐφεξῆς. καὶ διὰ τοῦτο οὐ τοῦ γεωμέτρου θεωρῆσαι τί τὸ ἐναντίον ἢ τέλειον ἢ ἓν ἢ ὄν ἢ ταὐτόν ἢ ἕτερον, ἀλλ' ἢ ἐξ ὑποθέσεως. ὅτι μὲν οὖν μιᾶς ἐπιστήμης τὸ ὄν ἢ ὄν θεωρῆσαι καὶ τὰ ὑπάρχοντα αὐτῷ ἢ ὄν, δῆλον, καὶ ὅτι οὐ μόνον τῶν οὐσιῶν ἀλλὰ καὶ τῶν ὑπαρχόντων ἢ αὐτὴ θεωρητικὴ, τῶν τε εἰρημένων καὶ περὶ προτέρου καὶ ὑστέρου, καὶ γένους καὶ εἶδους, καὶ ὅλου καὶ μέρους καὶ τῶν ἄλλων τῶν τοιούτων.

Λεκτέον δὲ πότερον μιᾶς ἢ ἑτέρας ἐπιστήμης περί τε τῶν ἐν τοῖς μαθήμασι καλουμένων ἀξιωμαμάτων καὶ περὶ τῆς οὐσίας. φανερόν δὲ ὅτι μιᾶς τε καὶ τῆς τοῦ φιλοσόφου καὶ ἡ περὶ τούτων ἐστὶ σκέψις· ἅπασι γὰρ ὑπάρχει τοῖς οὖσιν ἀλλ' οὐ γένει τινὶ χωρὶς ἰδίᾳ τῶν ἄλλων. καὶ χρῶνται μὲν πάντες, ὅτι τοῦ ὄντος ἐστὶν ἢ ὄν, ἕκαστον δὲ τὸ γένος ὄν· ἐπὶ τοσοῦτον δὲ χρῶνται ἐφ' ὅσον αὐτοῖς ἱκανόν, τοῦτο δ' ἔστιν ὅσον ἐπέχει τὸ γένος περὶ οὗ φέρουσι τὰς ἀποδείξεις· ὥστ' ἐπεὶ δῆλον ὅτι ἢ ὄντα ὑπάρχει πᾶσι (τοῦτο γὰρ αὐτοῖς τὸ κοινόν), τοῦ περὶ τὸ ὄν ἢ ὄν γνωρίζοντος καὶ περὶ τούτων ἐστὶν ἡ θεωρία. διόπερ οὐθεὶς τῶν κατὰ μέρος ἐπισκοπούντων ἐγχειρεῖ λέγειν τι περὶ αὐτῶν, εἰ ἀληθὴ ἢ μή, οὔτε γεωμέτρης οὔτ' ἀριθμητικός, ἀλλὰ τῶν φυσικῶν ἔνιοι, εἰκότως τοῦτο δρῶντες· μόνοι γὰρ ὥοντο περί τε τῆς ὅλης φύσεως σκοπεῖν

καὶ περὶ τοῦ ὄντος. ἐπεὶ δ' ἔστιν ἔτι τοῦ φυσικοῦ τις ἀνωτέρω (ἐν γάρ τι γένος τοῦ ὄντος ἢ φύσις), τοῦ καθόλου καὶ τοῦ περὶ τὴν πρώτην οὐσίαν θεωρητικοῦ καὶ ἡ [1005b] περὶ τούτων ἂν εἴη σκέψις· ἔστι δὲ σοφία τις καὶ ἡ φυσική, ἀλλ' οὐ πρώτη. ὅσα δ' ἐγχειροῦσι τῶν λεγόντων τινὲς περὶ τῆς ἀληθείας ὃν τρόπον δεῖ ἀποδέχεσθαι, δι' ἀπαιδευσίαν τῶν ἀναλυτικῶν τοῦτο δρῶσιν· δεῖ γὰρ περὶ τούτων ἥκειν προεπισταμένους ἀλλὰ μὴ ἀκούοντας ζητεῖν. - ὅτι μὲν οὖν τοῦ φιλοσόφου, καὶ τοῦ περὶ πάσης τῆς οὐσίας θεωροῦντος ἢ πέφυκεν, καὶ περὶ τῶν συλλογιστικῶν ἀρχῶν ἐστὶν ἐπισκέψασθαι, δῆλον· προσήκει δὲ τὸν μάλιστα γνωρίζοντα περὶ ἕκαστον γένος ἔχειν λέγειν τὰς βεβαιωτάτας ἀρχὰς τοῦ πράγματος, ὥστε καὶ τὸν περὶ τῶν ὄντων ἢ ὄντα τὰς πάντων βεβαιωτάτας. ἔστι δ' οὗτος ὁ φιλόσοφος. βεβαιωτάτη δ' ἀρχὴ πασῶν περὶ ἣν διαψευσθῆναι ἀδύνατον· γνωριμωτάτην τε γὰρ ἀναγκαῖον εἶναι τὴν τοιαύτην (περὶ γὰρ ἃ μὴ γνωρίζουσιν ἀπατῶνται πάντες) καὶ ἀνυπόθετον. ἦν γὰρ ἀναγκαῖον ἔχειν τὸν ὁτιοῦν ξυνιέντα τῶν ὄντων, τοῦτο οὐχ ὑπόθεσις· ὃ δὲ γνωρίζει ἀναγκαῖον τῷ ὁτιοῦν γνωρίζοντι, καὶ ἥκειν ἔχοντα ἀναγκαῖον. ὅτι μὲν οὖν βεβαιωτάτη ἢ τοιαύτη πασῶν ἀρχή, δῆλον· τίς δ' ἔστιν αὕτη, μετὰ ταῦτα λέγωμεν. τὸ γὰρ αὐτὸ ἅμα ὑπάρχειν τε καὶ μὴ ὑπάρχειν ἀδύνατον τῷ αὐτῷ καὶ κατὰ τὸ αὐτό (καὶ ὅσα ἄλλα προσδιορισαίμεθ' ἂν, ἔστω προσδιωρισμένα πρὸς τὰς λογικὰς δυσχερείας)· αὕτη δὲ πασῶν ἐστὶ βεβαιωτάτη τῶν ἀρχῶν· ἔχει γὰρ τὸν εἰρημένον διορισμόν. ἀδύνατον γὰρ ὄντινοῦν ταῦτόν ὑπολαμβάνειν εἶναι καὶ μὴ εἶναι, καθάπερ τινὲς οἴονται λέγειν Ἡράκλειτον. οὐκ ἔστι γὰρ ἀναγκαῖον, ἃ τις λέγει, ταῦτα καὶ ὑπολαμβάνειν· εἰ δὲ μὴ ἐνδέχεται ἅμα ὑπάρχειν τῷ αὐτῷ τάναντία (προσδιωρίσθω δ' ἡμῖν καὶ ταύτῃ τῇ προτάσει τὰ εἰωθότα), ἐναντία δ' ἐστὶ δόξα δόξη ἢ τῆς ἀντιφάσεως, φανερόν ὅτι ἀδύνατον ἅμα ὑπολαμβάνειν τὸν αὐτὸν εἶναι καὶ μὴ εἶναι τὸ αὐτό· ἅμα γὰρ ἂν ἔχοι τὰς ἐναντίας δόξας ὁ διεψευσμένος περὶ τούτου. διὸ πάντες οἱ ἀποδεικνύοντες εἰς ταύτην ἀνάγουσιν ἐσχάτην δόξαν· φύσει γὰρ ἀρχὴ καὶ τῶν ἄλλων ἀξιωματῶν αὕτη πάντων.

Εἰσὶ δὲ τινες οἵ, καθάπερ εἵπομεν, αὐτοὶ τε ἐνδέχεσθαι [1006a] φασὶ τὸ αὐτὸ εἶναι καὶ μὴ εἶναι, καὶ ὑπολαμβάνειν οὕτως. χρῶνται δὲ τῷ λόγῳ τούτῳ πολλοὶ καὶ τῶν περὶ φύσεως. ἡμεῖς δὲ νῦν εἰλήφαμεν ὡς ἀδυνάτου ὄντος ἅμα εἶναι καὶ μὴ εἶναι, καὶ διὰ τούτου ἐδείξαμεν ὅτι βεβαιωτάτη αὕτη τῶν ἀρχῶν πασῶν. ἀξιοῦσι δὲ καὶ τοῦτο ἀποδεικνύναι τινὲς δι' ἀπαιδευσίαν· ἔστι γὰρ ἀπαιδευσία τὸ μὴ γινώσκειν τίνων δεῖ ζητεῖν ἀπόδειξιν καὶ τίνων οὐ δεῖ· ὅλως μὲν γὰρ ἀπάντων ἀδύνατον ἀπόδειξιν εἶναι (εἰς ἅπειρον γὰρ ἂν βαδίζοι, ὥστε μηδ' οὕτως εἶναι ἀπόδειξιν), εἰ δὲ τινων μὴ δεῖ ζητεῖν ἀπόδειξιν, τίνα ἀξιοῦσιν εἶναι μᾶλλον τοιαύτην ἀρχὴν οὐκ ἂν ἔχοιεν εἰπεῖν.

ἔστι δ' ἀποδείξαι ἐλεγκτικῶς καὶ περὶ τούτου ὅτι ἀδύνατον, ἂν μόνον τι λέγῃ ὁ ἀμφισβητῶν· ἂν δὲ μηθέν, γελοῖον τὸ ζητεῖν λόγον πρὸς τὸν μηθενὸς ἔχοντα λόγον, ἢ μὴ ἔχει· ὁμοίος γὰρ φυτῷ ὁ τοιοῦτος ἢ τοιοῦτος ἦδη. τὸ δ' ἐλεγκτικῶς ἀποδείξαι λέγω διαφέρειν καὶ τὸ ἀποδείξαι, ὅτι ἀποδεικνύων μὲν ἂν δόξειεν αἰτεῖσθαι τὸ ἐν ἀρχῇ, ἄλλου δὲ τοῦ τοιούτου αἰτίου ὄντος ἔλεγχος ἂν εἴη καὶ οὐκ ἀπόδειξις. ἀρχὴ δὲ πρὸς ἅπαντα τὰ τοιαῦτα οὐ τὸ ἀξιοῦν ἢ εἶναι τι λέγειν ἢ μὴ εἶναι (τοῦτο μὲν γὰρ τάχ' ἂν τις ὑπολάβοι τὸ ἐξ ἀρχῆς αἰτεῖν), ἀλλὰ σημαίνειν γέ τι καὶ αὐτῷ καὶ ἄλλω· τοῦτο γὰρ ἀνάγκη, εἴπερ λέγοι τι. εἰ γὰρ μή, οὐκ ἂν εἴη τῷ τοιούτῳ λόγος, οὔτ' αὐτῷ πρὸς αὐτὸν οὔτε πρὸς ἄλλον. ἂν δέ τις τοῦτο διδῷ, ἔσται ἀπόδειξις· ἦδη γάρ τι ἔσται ὠρισμένον. ἀλλ' αἴτιος οὐχ ὁ ἀποδεικνὺς ἀλλ' ὁ ὑπομένων· ἀναιρῶν γὰρ λόγον ὑπομένει λόγον. ἔτι δὲ ὁ τοῦτο συγχωρήσας συγκεχώρηκέ τι ἀληθὲς εἶναι χωρὶς ἀποδείξεως [ὥστε οὐκ ἂν πᾶν οὕτως καὶ οὐχ οὕτως ἔχοι]. - πρῶτον μὲν οὖν δῆλον ὡς τοῦτο γ' αὐτὸ ἀληθές, ὅτι σημαίνει τὸ ὄνομα τὸ εἶναι ἢ μὴ εἶναι τοδί, ὥστ' οὐκ ἂν πᾶν οὕτως καὶ οὐχ οὕτως ἔχοι· ἔτι εἰ τὸ ἄνθρωπος σημαίνει ἔν, ἔστω τοῦτο τὸ ζῶον δίπουν. λέγω δὲ τὸ ἔν σημαίνειν τοῦτο· εἰ τοῦτ' ἔστιν ἄνθρωπος, ἂν ἢ τι ἄνθρωπος, τοῦτ' ἔσται τὸ ἀνθρώπῳ εἶναι (διαφέρει δ' οὐθὲν οὐδ' εἰ πλείω τις φαίη σημαίνειν [1006b] μόνον δὲ ὠρισμένα, τεθείη γὰρ ἂν ἐφ' ἐκάστῳ λόγῳ ἕτερον ὄνομα· λέγω δ' οἶον, εἰ μὴ φαίη τὸ ἄνθρωπος ἔν σημαίνειν, πολλὰ δέ, ὧν ἑνὸς μὲν εἷς λόγος τὸ ζῶον δίπουν, εἷεν δὲ καὶ ἕτεροι πλείους, ὠρισμένοι δὲ τὸν ἀριθμόν· τεθείη γὰρ ἂν ἴδιον ὄνομα καθ' ἕκαστον τὸν λόγον· εἰ δὲ μή [τεθείη], ἀλλ' ἄπειρα σημαίνειν φαίη, φανερόν ὅτι οὐκ ἂν εἴη λόγος· τὸ γὰρ μὴ ἔν σημαίνειν οὐθὲν σημαίνειν ἐστίν, μὴ σημαίνοντων δὲ τῶν ὀνομάτων ἀνήρηται τὸ διαλέγεσθαι πρὸς ἀλλήλους, κατὰ δὲ τὴν ἀλήθειαν καὶ πρὸς αὐτόν· οὐθὲν γὰρ ἐνδέχεται νοεῖν μὴ νοοῦντα ἔν, εἰ δ' ἐνδέχεται, τεθείη ἂν ὄνομα τούτῳ τῷ πράγματι ἔν). - ἔστω δὴ, ὥσπερ ἐλέχθη κατ' ἀρχάς, σημαῖνόν τι τὸ ὄνομα καὶ σημαῖνον ἔν· οὐ δὴ ἐνδέχεται τὸ ἀνθρώπῳ εἶναι σημαίνειν ὅπερ ἀνθρώπῳ μὴ εἶναι, εἰ τὸ ἄνθρωπος σημαίνει μὴ μόνον καθ' ἑνὸς ἀλλὰ καὶ ἔν (οὐ γὰρ τοῦτο ἀξιόϋμεν τὸ ἔν σημαίνειν, τὸ καθ' ἑνός, ἐπεὶ οὕτω γε κἂν τὸ μουσικὸν καὶ τὸ λευκὸν καὶ τὸ ἄνθρωπος ἔν ἐσήμαινεν, ὥστε ἔν ἅπαντα ἔσται· συνώνυμα γάρ). καὶ οὐκ ἔσται εἶναι καὶ μὴ εἶναι τὸ αὐτὸ ἀλλ' ἢ καθ' ὁμωνυμίαν, ὥσπερ ἂν εἰ ὄν ἡμεῖς ἄνθρωπον καλοῦμεν, ἄλλοι μὴ ἄνθρωπον καλοῖεν· τὸ δ' ἀπορούμενον οὐ τοῦτό ἐστιν, εἰ ἐνδέχεται τὸ αὐτὸ ἅμα εἶναι καὶ μὴ εἶναι ἄνθρωπον τὸ ὄνομα, ἀλλὰ τὸ πρᾶγμα. εἰ δὲ μὴ σημαίνει ἕτερον τὸ ἄνθρωπος καὶ τὸ μὴ ἄνθρωπος, δῆλον ὅτι καὶ τὸ μὴ εἶναι ἀνθρώπῳ τοῦ εἶναι ἀνθρώπῳ, ὥστ' ἔσται τὸ ἀνθρώπῳ εἶναι μὴ ἀνθρώπῳ εἶναι· ἔν γὰρ ἔσται. τοῦτο γὰρ σημαίνει τὸ εἶναι ἔν, τὸ ὡς λώπιον καὶ ἰμάτιον, εἰ ὁ λόγος εἷς· εἰ δὲ ἔσται ἔν, ἔν σημαίνει τὸ ἀνθρώπῳ εἶναι καὶ μὴ ἀνθρώπῳ. ἀλλ' ἐδέδεικτο ὅτι ἕτερον

σημαίνει. ἀνάγκη τοίνυν, εἴ τί ἐστιν ἀληθὲς εἰπεῖν ὅτι ἄνθρωπος, ζῶον εἶναι δίπουν (τοῦτο γὰρ ἦν ὃ ἐσήμαινε τὸ ἄνθρωπος)· εἰ δ' ἀνάγκη τοῦτο, οὐκ ἐνδέχεται μὴ εἶναι <τότε> τὸ αὐτὸ ζῶον δίπουν (τοῦτο γὰρ σημαίνει τὸ ἀνάγκη εἶναι, τὸ ἀδύνατον εἶναι μὴ εἶναι [ἄνθρωπον])· οὐκ ἄρα ἐνδέχεται ἅμα ἀληθὲς εἶναι εἰπεῖν τὸ αὐτὸ ἄνθρωπον εἶναι καὶ μὴ εἶναι ἄνθρωπον. ὁ δ' αὐτὸς [1007a] λόγος καὶ ἐπὶ τοῦ μὴ εἶναι ἄνθρωπον· τὸ γὰρ ἀνθρώπῳ εἶναι καὶ τὸ μὴ ἀνθρώπῳ εἶναι ἕτερον σημαίνει, εἴπερ καὶ τὸ λευκὸν εἶναι καὶ τὸ ἄνθρωπον εἶναι ἕτερον· πολὺ γὰρ ἀντίκειται ἐκεῖνο μᾶλλον, ὥστε σημαίνειν ἕτερον. εἰ δὲ καὶ τὸ λευκὸν φήσῃ τὸ αὐτὸ καὶ ἐν σημαίνειν, πάλιν τὸ αὐτὸ ἐροῦμεν ὅπερ καὶ πρότερον ἐλέχθη, ὅτι ἐν πάντα ἔσται καὶ οὐ μόνον τὰ ἀντικείμενα. εἰ δὲ μὴ ἐνδέχεται τοῦτο, συμβαίνει τὸ λεχθέν, ἂν ἀποκρίνηται τὸ ἐρωτώμενον. ἔαν δὲ προστιθῇ ἐρωτῶντος ἀπλῶς καὶ τὰς ἀποφάσεις, οὐκ ἀποκρίνεται τὸ ἐρωτώμενον. οὐθὲν γὰρ κωλύει εἶναι τὸ αὐτὸ καὶ ἄνθρωπον καὶ λευκὸν καὶ ἄλλα μυρία τὸ πλῆθος· ἀλλ' ὅμως ἐρομένου εἰ ἀληθὲς εἰπεῖν ἄνθρωπον τοῦτο εἶναι ἢ οὐ, ἀποκριτέον τὸ ἐν σημαῖνον καὶ οὐ προσθετόν ὅτι καὶ λευκὸν καὶ μέγα. καὶ γὰρ ἀδύνατον ἅπειρά γ' ὄντα τὰ συμβεβηκότα διελθεῖν· ἢ οὖν ἅπαντα διελθέτω ἢ μηθέν. ὁμοίως τοίνυν εἰ καὶ μυριάκις ἐστὶ τὸ αὐτὸ ἄνθρωπος καὶ οὐκ ἄνθρωπος, οὐ προσαποκριτέον τῷ ἐρομένῳ εἰ ἔστιν ἄνθρωπος, ὅτι ἐστὶν ἅμα καὶ οὐκ ἄνθρωπος, εἰ μὴ καὶ τὰλλα ὅσα συμβέβηκε προσαποκριτέον, ὅσα ἐστὶν ἢ μὴ ἔστιν· ἔαν δὲ τοῦτο ποιῇ, οὐ διαλέγεται. - ὅλως δ' ἀναιροῦσιν οἱ τοῦτο λέγοντες οὐσίαν καὶ τὸ τί ἦν εἶναι. πάντα γὰρ ἀνάγκη συμβεβηκέναι φάσκειν αὐτοῖς, καὶ τὸ ὅπερ ἀνθρώπῳ εἶναι ἢ ζῶν εἶναι μὴ εἶναι. εἰ γὰρ ἔσται τι ὅπερ ἀνθρώπῳ εἶναι, τοῦτο οὐκ ἔσται μὴ ἀνθρώπῳ εἶναι ἢ μὴ εἶναι ἀνθρώπῳ (καίτοι αὗται ἀποφάσεις τούτου)· ἐν γὰρ ἦν ὃ ἐσήμαινε, καὶ ἦν τοῦτό τινος οὐσία. τὸ δ' οὐσίαν σημαίνειν ἐστὶν ὅτι οὐκ ἄλλο τι τὸ εἶναι αὐτῷ. εἰ δ' ἔσται αὐτῷ τὸ ὅπερ ἀνθρώπῳ εἶναι ἢ ὅπερ μὴ ἀνθρώπῳ εἶναι ἢ ὅπερ μὴ εἶναι ἀνθρώπῳ, ἄλλο ἔσται, ὥστ' ἀναγκαῖον αὐτοῖς λέγειν ὅτι οὐθενὸς ἔσται τοιοῦτος λόγος, ἀλλὰ πάντα κατὰ συμβεβηκός· τούτῳ γὰρ διώρισται οὐσία καὶ τὸ συμβεβηκός· τὸ γὰρ λευκὸν τῷ ἀνθρώπῳ συμβέβηκεν ὅτι ἔστι μὲν λευκὸς ἀλλ' οὐχ ὅπερ λευκόν. εἰ δὲ πάντα κατὰ συμβεβηκὸς λέγεται, οὐθὲν ἔσται πρῶτον τὸ καθ' οὗ, εἰ ἀεὶ τὸ συμβεβηκὸς καθ' ὑποκειμένου τινὸς σημαίνει τὴν κατηγορίαν.[1007b] ἀνάγκη ἄρα εἰς ἅπειρον ἵεναι. ἀλλ' ἀδύνατον· οὐδὲ γὰρ πλείω συμπλέκεται δυοῖν· τὸ γὰρ συμβεβηκὸς οὐ συμβεβηκότι συμβεβηκός, εἰ μὴ ὅτι ἅμφω συμβέβηκε ταύτῳ, λέγω δ' οἷον τὸ λευκὸν μουσικὸν καὶ τοῦτο λευκὸν ὅτι ἅμφω τῷ ἀνθρώπῳ συμβέβηκεν. ἀλλ' οὐχ ὁ Σωκράτης μουσικὸς οὕτως, ὅτι ἅμφω συμβέβηκεν ἐτέρῳ τινί. ἐπεὶ τοίνυν τὰ μὲν οὕτως τὰ δ' ἐκείνως λέγεται συμβεβηκότα, ὅσα οὕτως λέγεται ὡς τὸ

λευκὸν τῷ Σωκράτει, οὐκ ἐνδέχεται ἄπειρα εἶναι ἐπὶ τὸ ἄνω, οἷον τῷ Σωκράτει τῷ λευκῷ ἕτερόν τι συμβεβηκός· οὐ γὰρ γίγνεται τι ἐν ἑξ ἀπάντων. οὐδὲ δὴ τῷ λευκῷ ἕτερόν τι ἔσται συμβεβηκός, οἷον τὸ μουσικόν· οὐθέν τε γὰρ μᾶλλον τοῦτο ἐκείνῳ ἢ ἐκεῖνο τούτῳ συμβέβηκεν, καὶ ἅμα διώριστα ὅτι τὰ μὲν οὕτω συμβέβηκε τὰ δ' ὥς τὸ μουσικὸν Σωκράτει· ὅσα δ' οὕτως, οὐ συμβεβηκότι συμβέβηκε συμβεβηκός, ἀλλ' ὅσα ἐκείνως, ὥστ' οὐ πάντα κατὰ συμβεβηκὸς λεχθήσεται. ἔσται ἄρα τι καὶ ὡς οὐσίαν σημαῖνον. εἰ δὲ τοῦτο, δέδεικται ὅτι ἀδύνατον ἅμα κατηγορεῖσθαι τὰς ἀντιφάσεις. - ἔτι εἰ ἀληθεῖς αἱ ἀντιφάσεις ἅμα κατὰ τοῦ αὐτοῦ πᾶσαι, δῆλον ὡς ἅπαντα ἔσται ἓν. ἔσται γὰρ τὸ αὐτὸ καὶ τριήρης καὶ τοῖχος καὶ ἄνθρωπος, εἰ κατὰ παντός τι ἢ καταφῆσαι ἢ ἀποφῆσαι ἐνδέχεται, καθάπερ ἀνάγκη τοῖς τὸν Πρωταγόρου λέγουσι λόγον. εἰ γὰρ τῷ δοκεῖ μὴ εἶναι τριήρης ὁ ἄνθρωπος, δῆλον ὡς οὐκ ἔστι τριήρης· ὥστε καὶ ἔστιν, εἴπερ ἡ ἀντίφασις ἀληθής. καὶ γίγνεται δὴ τὸ τοῦ Ἀναξαγόρου, ὁμοῦ πάντα χρήματα· ὥστε μηθὲν ἀληθῶς ὑπάρχειν. τὸ ἀόριστον οὖν εἰκόσκει λέγειν, καὶ οἰόμενοι τὸ ὄν λέγειν περὶ τοῦ μὴ ὄντος λέγουσιν· τὸ γὰρ δυνάμει ὄν καὶ μὴ ἐντελεχείᾳ τὸ ἀόριστόν ἐστιν. ἀλλὰ μὴν λεκτέον γ' αὐτοῖς κατὰ παντός <παντός> τὴν κατάφασιν ἢ τὴν ἀπόφασιν· ἄτοπον γὰρ εἰ ἐκάστω ἢ μὲν αὐτοῦ ἀπόφασις ὑπάρξει, ἢ δ' ἑτέρου ὃ μὴ ὑπάρχει αὐτῷ οὐχ ὑπάρξει· λέγω δ' οἷον εἰ ὀληθὲς εἶπεῖν τὸν ἄνθρωπον ὅτι οὐκ ἄνθρωπος, δῆλον ὅτι καὶ ἡ τριήρης ἢ οὐ τριήρης. εἰ μὲν οὖν ἡ κατάφασις, ἀνάγκη καὶ τὴν ἀπόφασιν· εἰ δὲ μὴ ὑπάρχει ἡ κατάφασις, ἢ γε ἀπόφασις ὑπάρξει [1008a] μᾶλλον ἢ ἡ αὐτοῦ. εἰ οὖν κάκεινη ὑπάρχει, ὑπάρξει καὶ ἡ τῆς τριήρους· εἰ δ' αὕτη, καὶ ἡ κατάφασις. - ταῦτά τε οὖν συμβαίνει τοῖς λέγουσι τὸν λόγον τοῦτον, καὶ ὅτι οὐκ ἀνάγκη ἢ φάναι ἢ ἀποφάναι. εἰ γὰρ ἀληθὲς ὅτι ἄνθρωπος καὶ οὐκ ἄνθρωπος, δῆλον ὅτι καὶ οὕτ' ἄνθρωπος οὕτ' οὐκ ἄνθρωπος ἔσται· τοῖν γὰρ δυοῖν δύο ἀποφάσεις, εἰ δὲ μία ἑξ ἀμφοῖν ἐκείνη, καὶ αὕτη μία ἂν εἴη ἀντικειμένη. - ἔτι ἥτοι περὶ ἅπαντα οὕτως ἔχει, καὶ ἔστι καὶ λευκὸν καὶ οὐ λευκὸν καὶ ὄν καὶ οὐκ ὄν, καὶ περὶ τὰς ἄλλας φάσεις καὶ ἀποφάσεις ὁμοιοτρόπως, ἢ οὐ ἀλλὰ περὶ μὲν τινος, περὶ τινος δ' οὐ. καὶ εἰ μὲν μὴ περὶ πάσας, αὐταὶ ἂν εἶεν ὁμολογούμεναι· εἰ δὲ περὶ πάσας, πάλιν ἥτοι καθ' ὅσων τὸ φῆσαι καὶ ἀποφῆσαι καὶ καθ' ὅσων ἀποφῆσαι καὶ φῆσαι, ἢ κατὰ μὲν ὧν φῆσαι καὶ ἀποφῆσαι, καθ' ὅσων δὲ ἀποφῆσαι οὐ πάντων φῆσαι. καὶ εἰ μὲν οὕτως, εἴη ἂν τι παγίως οὐκ ὄν, καὶ αὕτη βεβαία δόξα, καὶ εἰ τὸ μὴ εἶναι βέβαιόν τι καὶ γνώριμον, γνωριμωτέρα ἂν εἴη ἢ φάσις ἢ ἀντικειμένη· εἰ δὲ ὁμοίως καὶ ὅσα ἀποφῆσαι φάναι, ἀνάγκη ἥτοι ἀληθὲς διαιροῦντα λέγειν, οἷον ὅτι λευκὸν καὶ πάλιν ὅτι οὐ λευκόν, ἢ οὐ. καὶ εἰ μὲν μὴ ἀληθὲς διαιροῦντα λέγειν, οὐ λέγει τε ταῦτα καὶ οὐκ ἔστιν οὐθέν (τὰ δὲ μὴ ὄντα πῶς ἂν φθέγγαιτο ἢ βαδίσαιεν;), καὶ πάντα δ' ἂν εἴη ἓν, ὥσπερ καὶ

πρότερον εἴρηται, καὶ ταῦτόν ἐστι καὶ ἄνθρωπος καὶ θεὸς καὶ τριήρης καὶ αἱ ἀντιφάσεις αὐτῶν (εἰ γὰρ ὁμοίως καθ' ἑκάστου, οὐδὲν διοίσει ἕτερον ἑτέρου· εἰ γὰρ διοίσει, τοῦτ' ἐστὶ ἀληθὲς καὶ ἴδιον)· ὁμοίως δὲ καὶ εἰ διαιροῦντα ἐνδέχεται ἀληθεύειν, συμβαίνει τὸ λεχθέν, πρὸς δὲ τούτῳ ὅτι πάντες ἂν ἀληθεύοιεν καὶ πάντες ἂν ψεύδοιντο, καὶ αὐτὸς αὐτὸν ὁμολογεῖ ψεύδεσθαι. ἅμα δὲ φανερόν ὅτι περὶ οὐθενός ἐστι πρὸς τοῦτον ἡ σκέψις· οὐθὲν γὰρ λέγει. οὔτε γὰρ οὕτως οὔτ' οὐχ οὕτως λέγει, ἀλλ' οὕτως τε καὶ οὐχ οὕτως· καὶ πάλιν γε ταῦτα ἀπόφησιν ἄμφω, ὅτι οὐθ' οὕτως οὔτε οὐχ οὕτως· εἰ γὰρ μή, ἤδη ἂν τι εἴη ὠρισμένον. - ἔτι εἰ ὅταν ἡ φάσις ἀληθὴς ἢ, ἡ ἀπόφασις ψευδής, κἂν αὕτη ἀληθὴς ἢ, ἡ κατάφασις ψευδής, οὐκ ἂν εἴη τὸ αὐτὸ ἅμα φάναι καὶ [1008b] ἀποφάναι ἀληθῶς. ἀλλ' ἴσως φαῖεν ἂν τοῦτ' εἶναι τὸ ἐξ ἀρχῆς κείμενον. - ἔτι ἄρα ὁ μὲν ἢ ἔχειν πως ὑπολαμβάνων ἢ μὴ ἔχειν διέψευσται, ὁ δὲ ἄμφω ἀληθεύει; εἰ γὰρ ἀληθεύει, τί ἂν εἴη τὸ λεγόμενον ὅτι τοιαύτη τῶν ὄντων ἡ φύσις; εἰ δὲ μὴ ἀληθεύει, ἀλλὰ μᾶλλον ἀληθεύει ἢ ὁ ἐκείνως ὑπολαμβάνων, ἤδη πως ἔχοι ἂν τὰ ὄντα, καὶ τοῦτ' ἀληθὲς ἂν εἴη, καὶ οὐχ ἅμα καὶ οὐκ ἀληθές. εἰ δὲ ὁμοίως ἅπαντες καὶ ψεύδονται καὶ ἀληθῆ λέγουσιν, οὔτε φθέγγασθαι οὔτ' εἰπεῖν τῷ τοιούτῳ ἐστὶ· ἅμα γὰρ ταῦτά τε καὶ οὐ ταῦτα λέγει. εἰ δὲ μὴθὲν ὑπολαμβάνει ἀλλ' ὁμοίως οἴεται καὶ οὐκ οἴεται, τί ἂν διαφερόντως ἔχοι τῶν γε φυτῶν; ὅθεν καὶ μάλιστα φανερόν ἐστιν ὅτι οὐδεὶς οὕτω διάκειται οὔτε τῶν ἄλλων οὔτε τῶν λεγόντων τὸν λόγον τοῦτον. διὰ τί γὰρ βαδίζει Μέγαράδε ἀλλ' οὐχ ἡσυχάζει, οἰόμενος βαδίζειν δεῖν; οὐδ' εὐθέως ἔωθεν πορεύεται εἰς φρέαρ ἢ εἰς φάραγγα, ἐὰν τύχη, ἀλλὰ φαίνεται εὐλαβούμενος, ὡς οὐχ ὁμοίως οἰόμενος μὴ ἀγαθὸν εἶναι τὸ ἐμπεσεῖν καὶ ἀγαθόν; δῆλον ἄρα ὅτι τὸ μὲν βέλτιον ὑπολαμβάνει τὸ δ' οὐ βέλτιον. εἰ δὲ τοῦτο, καὶ τὸ μὲν ἄνθρωπον τὸ δ' οὐκ ἄνθρωπον καὶ τὸ μὲν γλυκὺ τὸ δ' οὐ γλυκὺ ἀνάγκη ὑπολαμβάνειν. οὐ γὰρ ἐξ ἴσου ἅπαντα ζητεῖ καὶ ὑπολαμβάνει, ὅταν οἰηθεὶς βέλτιον εἶναι τὸ πειν ὕδωρ καὶ ἰδεῖν ἄνθρωπον εἶτα ζητῇ αὐτά· καίτοι ἔδει γε, εἰ ταῦτόν ἦν ὁμοίως καὶ ἄνθρωπος καὶ οὐκ ἄνθρωπος. ἀλλ' ὅπερ ἐλέχθη, οὐθεὶς ὃς οὐ φαίνεται τὰ μὲν εὐλαβούμενος τὰ δ' οὐ· ὥστε, ὡς ἔοικε, πάντες ὑπολαμβάνουσιν ἔχειν ἀπλῶς, εἰ μὴ περὶ ἅπαντα, ἀλλὰ περὶ τὸ ἄμεινον καὶ χεῖρον. εἰ δὲ μὴ ἐπιστάμενοι ἀλλὰ δοξάζοντες, πολὺ μᾶλλον ἐπιμελητέον ἂν εἴη τῆς ἀληθείας, ὥσπερ καὶ νοσῶδει ὄντι ἢ ὑγιεινῷ τῆς ὑγιείας· καὶ γὰρ ὁ δοξάζων πρὸς τὸν ἐπιστάμενον οὐχ ὑγιεινῶς διάκειται πρὸς τὴν ἀλήθειαν. - ἔτι εἰ ὅτι μάλιστα πάντα οὕτως ἔχει καὶ οὐχ οὕτως, ἀλλὰ τό γε μᾶλλον καὶ ἥττον ἔνεστιν ἐν τῇ φύσει τῶν ὄντων· οὐ γὰρ ἂν ὁμοίως φήσαιμεν εἶναι τὰ δύο ἄρτια καὶ τὰ τρία, οὐδ' ὁμοίως διέψευσται ὁ τὰ τέτταρα πέντε οἰόμενος καὶ ὁ χίλια. εἰ οὖν μὴ ὁμοίως, δῆλον ὅτι ἄτερος ἥττον, ὥστε μᾶλλον ἀληθεύει. εἰ οὖν τὸ [1009a] μᾶλλον ἐγγύτερον, εἴη γε ἂν τι ἀληθὲς οὐ ἐγγύτερον τὸ μᾶλλον ἀληθές, κἂν

εἰ μὴ ἔστιν, ἀλλ' ἤδη γέ τι ἔστι βεβαιότερον καὶ ἀληθινώτερον, καὶ τοῦ λόγου ἀπηλλαγμένοι ἂν εἶημεν τοῦ ἀκράτου καὶ κωλύοντός τι τῇ διανοίᾳ ὀρίσαι. Ἔστι δ' ἀπὸ τῆς αὐτῆς δόξης καὶ ὁ Πρωταγόρου λόγος, καὶ ἀνάγκη ὁμοίως αὐτοὺς ἄμφω ἢ εἶναι ἢ μὴ εἶναι· εἴτε γὰρ τὰ δοκοῦντα πάντα ἐστὶν ἀληθῆ καὶ τὰ φαινόμενα, ἀνάγκη εἶναι πάντα ἅμα ἀληθῆ καὶ ψευδῆ (πολλοὶ γὰρ τάναντία ὑπολαμβάνουσιν ἀλλήλοις, καὶ τοὺς μὴ ταῦτα δοξάζοντας ἑαυτοῖς διεψεῦσθαι νομίζουσιν· ὥστ' ἀνάγκη τὸ αὐτὸ εἶναί τε καὶ μὴ εἶναι), καὶ εἰ τοῦτ' ἔστιν, ἀνάγκη τὰ δοκοῦντα εἶναι πάντ' ἀληθῆ (τὰ ἀντικείμενα γὰρ δοξάζουσιν ἀλλήλοις οἱ διεψευσμένοι καὶ ἀληθεύοντες· εἰ οὖν ἔχει τὰ ὄντα οὕτως, ἀληθεύσουσι πάντες). ὅτι μὲν οὖν ἀπὸ τῆς αὐτῆς εἰς διανοίας ἀμφοτέρω οἱ λόγοι, δῆλον· ἔστι δ' οὐχ ὁ αὐτὸς τρόπος πρὸς ἅπαντας τῆς ἐντεύξεως· οἱ μὲν γὰρ πειθοῦς δέονται οἱ δὲ βίας. ὅσοι μὲν γὰρ ἐκ τοῦ ἀπορῆσαι ὑπέλαβον οὕτως, τούτων εὐΐατος ἢ ἄγνοια (οὐ γὰρ πρὸς τὸν λόγον ἀλλὰ πρὸς τὴν διάνοιαν ἢ ἀπάντησις αὐτῶν)· ὅσοι δὲ λόγου χάριν λέγουσι, τούτων δ' ἔλεγχος ἴσας τοῦ ἐν τῇ φωνῇ λόγου καὶ τοῦ ἐν τοῖς ὀνόμασιν. ἐλήλυθε δὲ τοῖς διαποροῦσιν αὕτη ἡ δόξα ἐκ τῶν αἰσθητῶν, ἢ μὲν τοῦ ἅμα τὰς ἀντιφάσεις καὶ τάναντία ὑπάρχειν ὁρῶσιν ἐκ ταύτου γινόμενα τάναντία· εἰ οὖν μὴ ἐνδέχεται γίνεσθαι τὸ μὴ ὄν, προὔπηρχεν ὁμοίως τὸ πρᾶγμα ἄμφω ὄν, ὥσπερ καὶ Ἀναξαγόρας μεμῖχθαι πᾶν ἐν παντί φησι καὶ Δημόκριτος· καὶ γὰρ οὗτος τὸ κενὸν καὶ τὸ πλήρες ὁμοίως καθ' ὅτιον ὑπάρχειν μέρος, καίτοι τὸ μὲν ὄν τούτων εἶναι τὸ δὲ μὴ ὄν. πρὸς μὲν οὖν τοὺς ἐκ τούτων ὑπολαμβάνοντας ἐροῦμεν ὅτι τρόπον μὲν τινα ὀρθῶς λέγουσι τρόπον δέ τινα ἀγνοοῦσιν· τὸ γὰρ ὄν λέγεται διχῶς, ὥστ' ἔστιν ὄν τρόπον ἐνδέχεται γίνεσθαι τι ἐκ τοῦ μὴ ὄντος, ἔστι δ' ὄν οὐ, καὶ ἅμα τὸ αὐτὸ εἶναι καὶ ὄν καὶ μὴ ὄν, ἀλλ' οὐ κατὰ ταῦτ' [ὄν]· δυνάμει μὲν γὰρ ἐνδέχεται ἅμα ταῦτ' εἶναι τὰ ἐναντία, ἐντελεχείᾳ δ' οὐ. ἔτι δ' ἀξιώσομεν αὐτοὺς ὑπολαμβάνειν καὶ ἄλλην τινὰ οὐσίαν εἶναι τῶν ὄντων ἢ οὔτε κίνησις ὑπάρχει οὔτε φθορὰ οὔτε γένεσις τὸ παράπαν. - ὁμοίως δὲ καὶ [1009b] ἡ περὶ τὰ φαινόμενα ἀλήθεια ἐνίοις ἐκ τῶν αἰσθητῶν ἐλήλυθεν. τὸ μὲν γὰρ ἀληθὲς οὐ πλήθει κρίνεσθαι οἶονται προσήκειν οὐδὲ ὀλιγότητι, τὸ δ' αὐτὸ τοῖς μὲν γλυκὺ γευομένοις δοκεῖν εἶναι τοῖς δὲ πικρόν, ὥστ' εἰ πάντες ἔκαμνον ἢ πάντες παρεφρόνουν, δύο δ' ἢ τρεῖς ὑγίαινον ἢ νοῦν εἶχον, δοκεῖν ἂν τούτους κάμνειν καὶ παραφρονεῖν τοὺς δ' ἄλλους οὐ· ἔτι δὲ καὶ πολλοῖς τῶν ἄλλων ζώων τάναντία [περὶ τῶν αὐτῶν] φαίνεσθαι καὶ ἡμῖν, καὶ αὐτῷ δὲ ἐκάστῳ πρὸς αὐτὸν οὐ ταῦτα κατὰ τὴν αἴσθησιν αἰεὶ δοκεῖν. ποῖα οὖν τούτων ἀληθῆ ἢ ψευδῆ, ἄδηλον· οὐθὲν γὰρ μᾶλλον τάδε ἢ τάδε ἀληθῆ, ἀλλ' ὁμοίως. διὸ Δημόκριτός γε φησιν ἥτοι οὐθὲν εἶναι ἀληθὲς ἢ ἡμῖν γ' ἄδηλον. ὅλως δὲ διὰ τὸ ὑπολαμβάνειν φρόνησιν μὲν τὴν αἴσθησιν, ταύτην δ' εἶναι ἀλλοίωσιν, τὸ φαινόμενον κατὰ τὴν αἴσθησιν ἐξ ἀνάγκης ἀληθὲς εἶναί φασιν· ἐκ τούτων

γὰρ καὶ Ἐμπεδοκλῆς καὶ Δημόκριτος καὶ τῶν ἄλλων ὡς ἔπος εἶπεῖν ἕκαστος τοιαύταις δόξαις γεγένηται ἔνοχοι. καὶ γὰρ Ἐμπεδοκλῆς μεταβάλλοντας τὴν ἕξιν μεταβάλλειν φησὶ τὴν φρόνησιν· “πρὸς παρεὸν γὰρ μῆτις ἐναύζεται ἀνθρώποισιν.” καὶ ἐν ἑτέροις δὲ λέγει ὅτι “ὅσσον <δ> ἄλλοῖοι μετέφυν, τόσον ἄρ σφισιν αἰεὶ καὶ τὸ φρονεῖν ἄλλοῖα παρίστατο”. καὶ Παρμενίδης δὲ ἀποφαίνεται τὸν αὐτὸν τρόπον· “ὥς γὰρ ἕκαστος ἔχει κρᾶσιν μελέων πολυκάμπτων, τῶς νόος ἀνθρώποισι παρίσταται· τὸ γὰρ αὐτὸ ἔστιν ὅπερ φρονέει, μελέων φύσις ἀνθρώποισιν καὶ πᾶσιν καὶ παντί· τὸ γὰρ πλεον ἔστι νόημα.” Ἀναξαγόρου δὲ καὶ ἀπόφθεγμα μνημονεύεται πρὸς τῶν ἐταίρων τινάς, ὅτι τοιαῦτ’ αὐτοῖς ἔσται τὰ ὄντα οἷα ἂν ὑπολάβωσιν. φασὶ δὲ καὶ τὸν Ὅμηρον ταύτην ἔχοντα φαίνεσθαι τὴν δόξαν, ὅτι ἐποίησε τὸν Ἑκτορα, ὡς ἐξέστη ὑπὸ τῆς πληγῆς, κεῖσθαι ἄλλοφρογέοντα, ὡς φρονοῦντας μὲν καὶ τοὺς παραφρονοῦντας ἄλλ’ οὐ ταῦτά. δῆλον οὖν ὅτι, εἰ ἀμφοτέραι φρονήσεις, καὶ τὰ ὄντα ἅμα οὕτω τε καὶ οὐχ οὕτως ἔχει. ἥ καὶ χαλεπώτατον τὸ συμβαῖνόν ἐστιν· εἰ γὰρ οἱ μάλιστα τὸ ἐνδεχόμενον ἀληθὲς ἐωρακότες - οὗτοι δ’ εἰσὶν οἱ μάλιστα ζητοῦντες αὐτὸ καὶ φιλοῦντες - οὗτοι τοιαύτας ἔχουσι τὰς δόξας καὶ ταῦτα ἀποφαίνονται περὶ τῆς ἀληθείας, πῶς οὐκ ἄξιον ἀθυμῆσαι τοὺς φιλοσοφεῖν ἐγχειροῦντας; τὸ γὰρ τὰ πετόμενα διώκειν τὸ ζητεῖν ἂν [1010a] εἴη τὴν ἀλήθειαν. - αἴτιον δὲ τῆς δόξης τούτοις ὅτι περὶ τῶν ὄντων μὲν τὴν ἀλήθειαν ἐσκόπουν, τὰ δ’ ὄντα ὑπέλαβον εἶναι τὰ αἰσθητὰ μόνον· ἐν δὲ τούτοις πολλὴ ἡ τοῦ ἀορίστου φύσις ἐνυπάρχει καὶ ἡ τοῦ ὄντος οὕτως ὥσπερ εἶπομεν· διὸ εἰκότως μὲν λέγουσιν, οὐκ ἀληθὴ δὲ λέγουσιν (οὕτω γὰρ ἀρμόττει μᾶλλον εἶπεῖν ἢ ὥσπερ Ἐπίχαρμος εἰς Ξενοφάνην). ἔτι δὲ πᾶσαν ὀρώντες ταύτην κινουμένην τὴν φύσιν, κατὰ δὲ τοῦ μεταβάλλοντος οὐθὲν ἀληθεύομενον, περὶ γε τὸ πάντῃ πάντως μεταβάλλον οὐκ ἐνδέχεσθαι ἀληθεύειν. ἐκ γὰρ ταύτης τῆς ὑπολήψεως ἐξήνθησεν ἡ ἀκροτάτη δόξα τῶν εἰρημένων, ἡ τῶν φασκόντων ἡρακλειτίζειν καὶ οἷαν Κρατύλος εἶχεν, ὅς τὸ τελευταῖον οὐθὲν ὤετο δεῖν λέγειν ἀλλὰ τὸν δάκτυλον ἐκίνει μόνον, καὶ Ἡρακλείτῳ ἐπετίμα εἰπόντι ὅτι δις τῷ αὐτῷ ποταμῷ οὐκ ἔστιν ἐμβῆναι· αὐτὸς γὰρ ὤετο οὐδ’ ἅπαξ. ἡμεῖς δὲ καὶ πρὸς τοῦτον τὸν λόγον ἐροῦμεν ὅτι τὸ μὲν μεταβάλλον ὅτε μεταβάλλει ἔχει τινὰ αὐτοῖς λόγον μὴ οἴεσθαι εἶναι, καίτοι ἔστι γε ἀμφισβητήσιμον· τό τε γὰρ ἀποβάλλον ἔχει τι τοῦ ἀποβαλλομένου, καὶ τοῦ γιγνομένου ἤδη ἀνάγκη τι εἶναι, ὅλως τε εἰ φθείρεται, ὑπάρξει τι ὄν, καὶ εἰ γίγνεται, ἐξ οὗ γίγνεται καὶ ὑφ’ οὗ γεννᾶται ἀναγκαῖον εἶναι, καὶ τοῦτο μὴ ἰέναι εἰς ἄπειρον. ἀλλὰ ταῦτα παρέντες ἐκεῖνα λέγωμεν, ὅτι οὐ ταῦτό ἐστι τὸ μεταβάλλειν κατὰ τὸ ποσὸν καὶ κατὰ τὸ ποιόν· κατὰ μὲν οὖν τὸ ποσὸν ἔστω μὴ μένον, ἀλλὰ κατὰ τὸ εἶδος ἅπαντα γινώσκομεν. ἔτι δ’ ἄξιον ἐπιτιμῆσαι τοῖς οὕτως ὑπολαμβάνουσιν, ὅτι καὶ αὐτῶν τῶν αἰσθητῶν ἐπὶ τῶν ἐλαττόνων τὸν ἀριθμὸν ἰδόντες οὕτως ἔχοντα



περὶ ὅλου τοῦ οὐρανοῦ ὁμοίως ἀπεφάναντο· ὁ γὰρ περὶ ἡμᾶς τοῦ αἰσθητοῦ τόπος ἐν φθορᾷ καὶ γενέσει διατελεῖ μόνος ὢν, ἀλλ' οὗτος οὐθὲν ὡς εἰπεῖν μόριον τοῦ παντός ἐστιν, ὥστε δικαιότερον ἂν δι' ἐκεῖνα τούτων ἀπεψηφίσαντο ἢ διὰ ταῦτα ἐκείνων κατεψηφίσαντο. ἔτι δὲ δῆλον ὅτι καὶ πρὸς τούτους ταῦτ' αὖτε τοῖς πάλαι λεχθεῖσιν ἐροῦμεν· ὅτι γὰρ ἔστιν ἀκίνητός τις φύσις δεικτέον αὐτοῖς καὶ πειστέον αὐτούς. καίτοι γε συμβαίνει τοῖς ἅμα φάσκουσιν εἶναι καὶ μὴ εἶναι ἡρεμεῖν μᾶλλον φάναι πάντα ἢ κινεῖσθαι· οὐ γὰρ ἔστιν εἰς ὃ τι μεταβαλεῖ· ἅπαντα γὰρ ὑπάρχει [1010b] πᾶσιν. - περὶ δὲ τῆς ἀληθείας, ὡς οὐ πᾶν τὸ φαινόμενον ἀληθές, πρῶτον μὲν ὅτι οὐδ' «εἰ» ἢ αἰσθησις «μὴ» ψευδὴς τοῦ γε ἰδίου ἐστίν, ἀλλ' ἢ φαντασία οὐ ταῦτόν τῃ αἰσθήσει. εἴτ' ἄξιον θαυμάσαι εἰ τοῦτ' ἀποροῦσι, πότερον τηλικαῦτά ἐστι τὰ μεγέθη καὶ τὰ χρώματα τοιαῦτα οἷα τοῖς ἄπωθεν φαίνεται ἢ οἷα τοῖς ἐγγύθεν, καὶ πότερον οἷα τοῖς ὑγιαίνουσιν ἢ οἷα τοῖς κάμνουσιν, καὶ βαρύτερα πότερον ἢ τοῖς ἀσθενοῦσιν ἢ ἢ τοῖς ἰσχύουσιν, καὶ ἀληθῆ πότερον ἢ τοῖς καθεύδουσιν ἢ ἢ τοῖς ἐγρηγορόσιν. ὅτι μὲν γὰρ οὐκ οἴονται γε, φανερόν· οὐθεὶς γοῦν, ἐὰν ὑπολάβῃ νύκτωρ Ἀθήνησιν εἶναι ὢν ἐν Λιβύῃ, πορεύεται εἰς τὸ ὠδεῖον. ἔτι δὲ περὶ τοῦ μέλλοντος, ὥσπερ καὶ Πλάτων λέγει, οὐ δήπου ὁμοίως κυρία ἢ τοῦ ἱατροῦ δόξα καὶ ἢ τοῦ ἀγνοοῦντος, οἷον περὶ τοῦ μέλλοντος ἔσεσθαι ὑγιούς ἢ μὴ μέλλοντος. ἔτι δὲ ἐπ' αὐτῶν τῶν αἰσθήσεων οὐχ ὁμοίως κυρία ἢ τοῦ ἄλλοτρίου καὶ ἰδίου ἢ τοῦ πλησίον καὶ τοῦ αὐτῆς, ἀλλὰ περὶ μὲν χρώματος ὄψις, οὐ γεῦσις, περὶ δὲ χυμοῦ γεῦσις, οὐκ ὄψις· ὢν ἐκάστη ἐν τῷ αὐτῷ χρόνῳ περὶ τὸ αὐτὸ οὐδέποτε φησιν ἅμα οὕτω καὶ οὐχ οὕτως ἔχειν. ἀλλ' οὐδὲ ἐν ἑτέρῳ χρόνῳ περὶ γε τὸ πάθος ἡμφισβήτησεν, ἀλλὰ περὶ τὸ ὧ συμβέβηκε τὸ πάθος. λέγω δ' οἷον ὁ μὲν αὐτὸς οἶνος δόξειεν ἂν ἢ μεταβαλὼν ἢ τοῦ σώματος μεταβαλόντος ὅτε μὲν εἶναι γλυκὺς ὅτε δὲ οὐ γλυκύς· ἀλλ' οὐ τό γε γλυκύ, οἷον ἐστίν ὅταν ἦ, οὐδεπώποτε μετέβαλεν, ἀλλ' ἀεὶ ἀληθεύει περὶ αὐτοῦ, καὶ ἔστιν ἐξ ἀνάγκης τὸ ἐσόμενον γλυκὺ τοιοῦτον. καίτοι τοῦτο ἀναιροῦσιν οὗτοι οἱ λόγοι ἅπαντες, ὥσπερ καὶ οὐσίαν μὴ εἶναι μηθενός, οὕτω μὴδ' ἐξ ἀνάγκης μηθέν· τὸ γὰρ ἀναγκαῖον οὐκ ἐνδέχεται ἄλλως καὶ ἄλλως ἔχειν, ὥστ' εἴ τι ἔστιν ἐξ ἀνάγκης, οὐχ ἔξει οὕτω τε καὶ οὐχ οὕτως. - ὅλως τ' εἴπερ ἔστι τὸ αἰσθητὸν μόνον, οὐθὲν ἂν εἴη μὴ ὄντων τῶν ἐμψύχων· αἰσθησις γὰρ οὐκ ἂν εἴη. τὸ μὲν οὖν μήτε τὰ αἰσθητὰ εἶναι μήτε τὰ αἰσθήματα ἴσως ἀληθές (τοῦ γὰρ αἰσθανομένου πάθος τοῦτό ἐστι), τὸ δὲ τὰ ὑποκείμενα μὴ εἶναι, ἃ ποιεῖ τὴν αἴσθησιν, καὶ ἄνευ αἰσθήσεως, ἀδύνατον. οὐ γὰρ δὴ ἢ γ' αἴσθησις αὐτὴ ἑαυτῆς ἐστίν, ἀλλ' ἔστι τι καὶ ἕτερον παρὰ τὴν αἴσθησιν, ὃ ἀνάγκη πρότερον εἶναι τῆς αἰσθήσεως· τὸ γὰρ κινεῖν τοῦ κινουμένου [1011a] φύσει πρότερόν ἐστι, κἂν εἰ λέγεται πρὸς ἄλληλα ταῦτα, οὐθὲν ἥττον.

Εἰσὶ δέ τινες οἱ ἀποροῦσι καὶ τῶν ταῦτα πεπεισμένων καὶ τῶν τοὺς λόγους τούτους μόνον λεγόντων· ζητοῦσι γὰρ τίς ὁ κρινῶν τὸν ὑγιαίνοντα καὶ ὅλως τὸν περὶ ἕκαστα κρινοῦντα ὀρθῶς. τὰ δὲ τοιαῦτα ἀπορήματα ὅμοιά ἐστι τῷ ἀπορεῖν πότερον καθεύδομεν νῦν ἢ ἐγρηγόραμεν, δύναται δ' αἱ ἀπορίαι αἱ τοιαῦται πᾶσαι τὸ αὐτό· πάντων γὰρ λόγον ἀξιοῦσιν εἶναι οὗτοι· ἀρχὴν γὰρ ζητοῦσι, καὶ ταύτην δι' ἀποδείξεως λαμβάνειν, ἐπεὶ ὅτι γε πεπεισμένοι οὐκ εἰσὶ, φανεροί εἰσιν ἐν ταῖς πράξεσιν. ἀλλ' ὅπερ εἵπομεν, τοῦτο αὐτῶν τὸ πάθος ἐστίν· λόγον γὰρ ζητοῦσιν ὧν οὐκ ἔστι λόγος· ἀποδείξεως γὰρ ἀρχὴ οὐκ ἀπόδειξις ἐστίν. οὗτοι μὲν οὖν ῥαδίως ἂν τοῦτο πεισθεῖεν (ἔστι γὰρ οὐ χαλεπὸν λαβεῖν)· οἱ δ' ἐν τῷ λόγῳ τὴν βίαν μόνον ζητοῦντες ἀδύνατον ζητοῦσιν· ἐναντία γὰρ εἶπεῖν ἀξιοῦσιν, εὐθύς ἐναντία λέγοντες. εἰ δὲ μὴ ἔστι πάντα πρὸς τι, ἀλλ' ἑνὶ ἐστὶ καὶ αὐτὰ καθ' αὐτά, οὐκ ἂν εἴη πᾶν τὸ φαινόμενον ἀληθές· τὸ γὰρ φαινόμενον τινὶ ἐστὶ φαινόμενον· ὥστε ὁ λέγων ἅπαντα τὰ φαινόμενα εἶναι ἀληθῆ ἅπαντα ποιεῖ τὰ ὄντα πρὸς τι. διὸ καὶ φυλακτέον τοῖς τὴν βίαν ἐν τῷ λόγῳ ζητοῦσιν, ἅμα δὲ καὶ ὑπέχειν λόγον ἀξιοῦσιν, ὅτι οὐ τὸ φαινόμενον ἔστιν ἀλλὰ τὸ φαινόμενον ὧ φαίνεται καὶ ὅτε φαίνεται καὶ ἢ καὶ ὥς. ἂν δ' ὑπέχωσι μὲν λόγον, μὴ οὕτω δ' ὑπέχωσι, συμβήσεται αὐτοῖς τάναντία ταχὺ λέγειν. ἐνδέχεται γὰρ τὸ αὐτὸ κατὰ μὲν τὴν ὄψιν μέλι φαίνεσθαι τῇ δὲ γεύσει μὴ, καὶ τῶν ὀφθαλμῶν δυοῖν ὄντοιν μὴ ταῦτά ἐκατέρᾳ τῇ ὄψει, ἂν ὥσιν ἀνόμοιαι· ἐπεὶ πρὸς γε τοὺς διὰ τὰς πάλαι εἰρημένους αἰτίας τὸ φαινόμενον φάσκοντας ἀληθές εἶναι, καὶ διὰ τοῦτο πάνθ' ὁμοίως εἶναι ψευδῆ καὶ ἀληθῆ· οὔτε γὰρ ἅπασι ταῦτά φαίνεσθαι οὔτε ταῦτ' ἄει ταῦτά, ἀλλὰ πολλάκις τάναντία κατὰ τὸν αὐτὸν χρόνον (ἢ μὲν γὰρ ἀφ᾽ ἑνὸς λέγει ἐν τῇ ἐπαλλάξει τῶν δακτύλων ἢ δ' ὀψις ἕν)· - ἀλλ' οὐ τι τῇ αὐτῇ γε καὶ κατὰ τὸ αὐτὸ αἰσθήσει καὶ ὡσαύτως καὶ ἐν τῷ αὐτῷ [1011b] χρόνῳ, ὥστε τοῦτ' ἂν εἴη ἀληθές. ἀλλ' ἴσως διὰ τοῦτ' ἀνάγκη λέγειν τοῖς μὴ δι' ἀπορίαν ἀλλὰ λόγου χάριν λέγουσιν, ὅτι οὐκ ἔστιν ἀληθές τοῦτο ἀλλὰ τούτῳ ἀληθές. καὶ ὥσπερ δὴ πρότερον εἴρηται, ἀνάγκη πρὸς τι ποιεῖν ἅπαντα καὶ πρὸς δόξαν καὶ αἰσθησιν, ὥστ' οὔτε γέγονεν οὔτ' ἔσται οὐθὲν μηθενὸς προδοξάσαντος. εἰ δὲ γέγονεν ἢ ἔσται, δῆλον ὅτι οὐκ ἂν εἴη ἅπαντα πρὸς δόξαν. ἔτι εἰ ἔν, πρὸς ἓν ἢ πρὸς ὠρισμένον· καὶ εἰ τὸ αὐτὸ καὶ ἡμισυ καὶ ἴσον, ἀλλ' οὐ πρὸς τὸ διπλάσιόν γε τὸ ἴσον. πρὸς δὴ τὸ δοξάζον εἰ ταῦτ' ἄνθρωπος καὶ τὸ δοξαζόμενον, οὐκ ἔσται ἄνθρωπος τὸ δοξάζον ἀλλὰ τὸ δοξαζόμενον. εἰ δ' ἕκαστον ἔσται πρὸς τὸ δοξάζον, πρὸς ἅπειρα ἔσται τῷ εἶδει τὸ δοξάζον.

Ὅτι μὲν οὖν βεβαιωτάτη δόξα πασῶν τὸ μὴ εἶναι ἀληθεῖς ἅμα τὰς ἀντικειμένας φάσεις, καὶ τί συμβαίνει τοῖς οὕτω λέγουσι, καὶ διὰ τί οὕτω λέγουσι, τοσαῦτα εἰρήσθω· ἐπεὶ δ' ἀδύνατον τὴν ἀντίφασιν ἅμα ἀληθεύεσθαι

κατὰ τοῦ αὐτοῦ, φανερόν ὅτι οὐδὲ τάναντία ἅμα ὑπάρχειν ἐνδέχεται τῷ αὐτῷ· τῶν μὲν γὰρ ἐναντίων θάτερον στέρησις ἐστὶν οὐχ ἥττον, οὐσίας δὲ στέρησις· ἡ δὲ στέρησις ἀπόφασις ἐστὶν ἀπὸ τινος ὠρισμένου γένους· εἰ οὖν ἀδύνατον ἅμα καταφάναι καὶ ἀποφάναι ἀληθῶς, ἀδύνατον καὶ τάναντία ὑπάρχειν ἅμα, ἀλλ' ἢ πῇ ἄμφω ἢ θάτερον μὲν πῇ θάτερον δὲ ἀπλῶς.

Ἀλλὰ μὴν οὐδὲ μεταξὺ ἀντιφάσεως ἐνδέχεται εἶναι οὐθέν, ἀλλ' ἀνάγκη ἢ φάναι ἢ ἀποφάναι ἐν καθ' ἑνὸς ὁτιοῦν. δῆλον δὲ πρῶτον μὲν ὀρισασμένοις τί τὸ ἀληθές καὶ ψεῦδος· τὸ μὲν γὰρ λέγειν τὸ ὄν μὴ εἶναι ἢ τὸ μὴ ὄν εἶναι ψεῦδος, τὸ δὲ τὸ ὄν εἶναι καὶ τὸ μὴ ὄν μὴ εἶναι ἀληθές, ὥστε καὶ ὁ λέγων εἶναι ἢ μὴ ἀληθεύσει ἢ ψεύσεται· ἀλλ' οὔτε τὸ ὄν λέγεται μὴ εἶναι ἢ εἶναι οὔτε τὸ μὴ ὄν. ἔτι ἥτοι μεταξὺ ἔσται τῆς ἀντιφάσεως ὥσπερ τὸ φαῖον μέλανος καὶ λευκοῦ, ἢ ὡς τὸ μηδέτερον ἀνθρώπου καὶ ἵππου. εἰ μὲν οὖν οὕτως, οὐκ ἂν μεταβάλλοι (ἐκ μὴ ἀγαθοῦ γὰρ εἰς ἀγαθὸν μεταβάλλει ἢ ἐκ τούτου εἰς μὴ ἀγαθόν), νῦν δ' αἰεὶ φαίνεται (οὐ γὰρ ἔστι μεταβολὴ ἀλλ' ἢ εἰς τὰ ἀντικείμενα καὶ μεταξύ)· εἰ δ' ἔστι μεταξύ, καὶ οὕτως εἴη ἂν [1012a] τις εἰς λευκὸν οὐκ ἐκ μὴ λευκοῦ γένεσις, νῦν δ' οὐχ ὁράται. ἔτι πᾶν τὸ διανοητὸν καὶ νοητὸν ἢ διάνοια ἢ κατάφησιν ἢ ἀπόφησιν - τοῦτο δ' ἐξ ὀρισμοῦ δῆλον - ὅταν ἀληθεύῃ ἢ ψεύδῃται· ὅταν μὲν ὡδὶ συνθῇ φᾶσα ἢ ἀποφᾶσα, ἀληθεύει, ὅταν δὲ ὡδί, ψεύδεται. ἔτι παρὰ πάσας δεῖ εἶναι τὰς ἀντιφάσεις, εἰ μὴ λόγου ἔνεκα λέγεται· ὥστε καὶ οὔτε ἀληθεύσει τις οὔτ' οὐκ ἀληθεύσει, καὶ παρὰ τὸ ὄν καὶ τὸ μὴ ὄν ἔσται, ὥστε καὶ παρὰ γένεσιν καὶ φθορὰν μεταβολὴ τις ἔσται. ἔτι ἐν ὅσοις γένεσιν ἢ ἀπόφασις τὸ ἐναντίον ἐπιφέρει, καὶ ἐν τούτοις ἔσται, οἷον ἐν ἀριθμοῖς οὔτε περιττὸς οὔτε οὐ περιττὸς ἀριθμός· ἀλλ' ἀδύνατον· ἐκ τοῦ ὀρισμοῦ δὲ δῆλον. ἔτι εἰς ἄπειρον βαδιεῖται, καὶ οὐ μόνον ἡμιόλια τὰ ὄντα ἔσται ἀλλὰ πλείω. πάλιν γὰρ ἔσται ἀποφῆσαι τοῦτο πρὸς τὴν φάσιν καὶ τὴν ἀπόφασιν, καὶ τοῦτ' ἔσται τι· ἡ γὰρ οὐσία ἐστὶ τις αὐτοῦ ἄλλη. ἔτι ὅταν ἐρομένου εἰ λευκὸν ἐστὶν εἴπῃ ὅτι οὐ, οὐθὲν ἄλλο ἀποπέφηκεν ἢ τὸ εἶναι· ἀπόφασις δὲ τὸ μὴ εἶναι. ἐλήλυθε δ' ἐνίοις αὕτη ἡ δόξα ὥσπερ καὶ ἄλλαι τῶν παραδόξων· ὅταν γὰρ λύειν μὴ δύνωνται λόγους ἐριστικούς, ἐνδόντες τῷ λόγῳ σύμφασιν ἀληθές εἶναι τὸ συλλογισθέν. οἱ μὲν οὖν διὰ τοιαύτην αἰτίαν λέγουσιν, οἱ δὲ διὰ τὸ πάντων ζητεῖν λόγον. ἀρχὴ δὲ πρὸς ἅπαντας τούτους ἐξ ὀρισμοῦ. ὀρισμὸς δὲ γίγνεται ἐκ τοῦ σημαίνειν τι ἀναγκαῖον εἶναι αὐτούς· ὁ γὰρ λόγος οὐ τὸ ὄνομα σημεῖον ὀρισμὸς ἔσται. ἔοικε δ' ὁ μὲν Ἡρακλείτου λόγος, λέγων πάντα εἶναι καὶ μὴ εἶναι, ἅπαντα ἀληθῆ ποιεῖν, ὁ δ' Ἀναξαγόρου, εἶναί τι μεταξὺ τῆς ἀντιφάσεως, πάντα ψευδῆ· ὅταν γὰρ μιχθῇ, οὔτε ἀγαθὸν οὔτε οὐκ ἀγαθὸν τὸ μῖγμα, ὥστ' οὐδὲν εἶπεῖν ἀληθές.

παρὰ τῶν πρότερον.Ἐ κ

## Δ

Ἀρχὴ λέγεται ἡ μὲν ὅθεν ἂν τις τοῦ πράγματος κινηθεῖ πρῶτον, οἷον τοῦ μήκους καὶ ὁδοῦ ἐντεῦθεν μὲν αὕτη [1013a] ἀρχή, ἐξ ἐναντίας δὲ ἑτέρα· ἡ δὲ ὅθεν ἂν κάλλιστα ἕκαστον γένοιτο, οἷον καὶ μαθήσεως οὐκ ἀπὸ τοῦ πρώτου καὶ τῆς τοῦ πράγματος ἀρχῆς ἐνίοτε ἀρκτέον ἄλλ’ ὅθεν ῥᾶστ’ ἂν μάθοι· ἡ δὲ ὅθεν πρῶτον γίνεταί ἐνυπάρχοντος, οἷον ὡς πλοίου τρόπις καὶ οἰκίας θεμέλιος, καὶ τῶν ζώων οἱ μὲν καρδίαν οἱ δὲ ἐγκέφαλον οἱ δ’ ὅτι ἂν τύχῃσι τοιοῦτον ὑπολαμβάνουσιν· ἡ δὲ ὅθεν γίνεταί πρῶτον μὴ ἐνυπάρχοντος καὶ ὅθεν πρῶτον ἡ κίνησις πέφυκεν ἄρχεσθαι καὶ ἡ μεταβολή, οἷον τὸ τέκνον ἐκ τοῦ πατρὸς καὶ τῆς μητρὸς καὶ ἡ μάχη ἐκ τῆς λοιδορίας· ἡ δὲ οὗ κατὰ προαίρεσιν κινεῖται τὰ κινούμενα καὶ μεταβάλλει τὰ μεταβάλλοντα, ὥσπερ αἱ τε κατὰ πόλεις ἀρχαὶ καὶ αἱ δυναστεῖαι καὶ αἱ βασιλεῖαι καὶ τυραννίδες ἀρχαὶ λέγονται καὶ αἱ τέχναι, καὶ τούτων αἱ ἀρχιτεκτονικαὶ μάλιστα. ἔτι ὅθεν γνωστὸν τὸ πρᾶγμα πρῶτον, καὶ αὕτη ἀρχὴ λέγεται τοῦ πράγματος, οἷον τῶν ἀποδείξεων αἱ ὑποθέσεις. ἰσαχῶς δὲ καὶ τὰ αἷτια λέγεται· πάντα γὰρ τὰ αἷτια ἀρχαί. πασῶν μὲν οὖν κοινὸν τῶν ἀρχῶν τὸ πρῶτον εἶναι ὅθεν ἢ ἔστιν ἢ γίνεταί ἢ γιγνώσκεται· τούτων δὲ αἱ μὲν ἐνυπάρχουσαι εἰσιν αἱ δὲ ἐκτός. διὸ ἢ τε φύσις ἀρχὴ καὶ τὸ στοιχεῖον καὶ ἡ διάνοια καὶ ἡ προαίρεσις καὶ οὐσία καὶ τὸ οὐ ἔνεκα· πολλῶν γὰρ καὶ τοῦ γινῶναι καὶ τῆς κινήσεως ἀρχὴ τάγαθόν καὶ τὸ καλόν.

Αἷτιον λέγεται ἓνα μὲν τρόπον ἐξ οὗ γίγνεταί τι ἐνυπάρχοντος, οἷον ὁ χαλκὸς τοῦ ἀνδριάντος καὶ ὁ ἄργυρος τῆς φιάλης καὶ τὰ τούτων γένη· ἄλλον δὲ τὸ εἶδος καὶ τὸ παράδειγμα, τοῦτο δ’ ἐστὶν ὁ λόγος τοῦ τί ἦν εἶναι καὶ τὰ τούτου γένη (οἷον τοῦ διὰ πασῶν τὸ δύο πρὸς ἓν καὶ ὅλως ὁ ἀριθμός) καὶ τὰ μέρη τὰ ἐν τῷ λόγῳ. ἔτι ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς ἢ πρώτη ἢ τῆς ἡρεμήσεως, οἷον ὁ βουλευσας αἷτιος, καὶ ὁ πατήρ τοῦ τέκνου καὶ ὅλως τὸ ποιοῦν τοῦ ποιουμένου καὶ τὸ μεταβλητικὸν τοῦ μεταβάλλοντος. ἔτι ὡς τὸ τέλος· τοῦτο δ’ ἐστὶ τὸ οὐ ἔνεκα, οἷον τοῦ περιπατεῖν ἢ ὑγίεια. διὰ τί γὰρ περιπατεῖ; φάμεν. ἵνα ὑγιαίνῃ. καὶ εἰπόντες οὕτως οἰόμεθα ἀποδεδωκέναι τὸ αἷτιον. καὶ ὅσα δὴ κινήσαντος ἄλλου μεταξὺ γίνεταί τοῦ τέλους, οἷον τῆς [1013b] ὑγείας ἢ ἰσχυασίας ἢ ἡ κάθαρσις ἢ τὰ φάρμακα ἢ τὰ ὄργανα· πάντα γὰρ ταῦτα τοῦ τέλους ἔνεκά ἐστι, διαφέρει δὲ ἀλλήλων ὡς ὄντα τὰ μὲν ὄργανα τὰ δ’ ἔργα. τὰ μὲν οὖν αἷτια σχεδὸν τοσαυταχῶς λέγεται, συμβαίνει δὲ πολλαχῶς λεγομένων τῶν αἰτίων καὶ πολλὰ τοῦ αὐτοῦ αἷτια εἶναι οὐ κατὰ συμβεβηκός (οἷον τοῦ ἀνδριάντος καὶ ἡ ἀνδριαντοποιητικὴ καὶ ὁ χαλκὸς οὐ καθ’ ἕτερόν τι ἄλλ’ ἢ ἀνδριάς· ἄλλ’ οὐ τὸν αὐτὸν τρόπον ἀλλὰ τὸ μὲν ὡς

ὕλη τὸ δ' ὡς ὅθεν ἢ κίνησις), καὶ ἀλλήλων αἷτια (οἷον τὸ πονεῖν τῆς εὐεξίας καὶ αὕτη τοῦ πονεῖν· ἀλλ' οὐ τὸν αὐτὸν τρόπον ἀλλὰ τὸ μὲν ὡς τέλος τὸ δ' ὡς ἀρχὴ κινήσεως). ἔτι δὲ ταῦτὸ τῶν ἐναντίων ἐστίν· ὃ γὰρ παρὸν αἷτιον τουδί, τοῦτ' ἀπὸν αἷτιώμεθα ἐνίστε τοῦ ἐναντίου, οἷον τὴν ἀπουσίαν τοῦ κυβερνήτου τῆς ἀνατροπῆς, οὗ ἦν ἡ παρουσία αἷτία τῆς σωτηρίας· ἄμφω δέ, καὶ ἡ παρουσία καὶ ἡ στέρησις, αἷτια ὡς κινουῦντα. - ἅπαντα δὲ τὰ νῦν εἰρημένα αἷτια εἰς τέτταρας τρόπους πίπτει τοὺς φανερωτάτους. τὰ μὲν γὰρ στοιχεῖα τῶν συλλαβῶν καὶ ἡ ὕλη τῶν σκευαστῶν καὶ τὸ πῦρ καὶ ἡ γῆ καὶ τὰ τοιαῦτα πάντα τῶν σωμάτων καὶ τὰ μέρη τοῦ ὅλου καὶ αἱ ὑποθέσεις τοῦ συμπεράσματος ὡς τὸ ἐξ οὗ αἷτία ἐστίν· τούτων δὲ τὰ μὲν ὡς τὸ ὑποκείμενον, οἷον τὰ μέρη, τὰ δὲ ὡς τὸ τί ἦν εἶναι, τό τε ὅλον καὶ ἡ σύνθεσις καὶ τὸ εἶδος. τὸ δὲ σπέρμα καὶ ὁ ἰατρὸς καὶ ὁ βουλευσας καὶ ὅλως τὸ ποιοῦν, πάντα ὅθεν ἢ ἀρχὴ τῆς μεταβολῆς ἢ στάσεως. τὰ δ' ὡς τὸ τέλος καὶ τὰγαθὸν τῶν ἄλλων· τὸ γὰρ οὐ ἔνεκα βέλτιστον καὶ τέλος τῶν ἄλλων ἐθέλει εἶναι· διαφερέτω δὲ μηδὲν αὐτὸ εἰπεῖν ἀγαθὸν ἢ φαινόμενον ἀγαθόν. - τὰ μὲν οὖν αἷτια ταῦτα καὶ τοσαῦτά ἐστι τῷ εἶδει, τρόποι δὲ τῶν αἷτιων ἀριθμῷ μὲν εἰσι πολλοί, κεφαλαιούμενοι δὲ καὶ οὕτοι ἐλάττους. λέγονται γὰρ αἷτια πολλαχῶς, καὶ αὐτῶν τῶν ὁμοειδῶν προτέρως καὶ ὑστέρωσ ἄλλο ἄλλου, οἷον ὑγιείας ὁ ἰατρὸς καὶ ὁ τεχνίτης, καὶ τοῦ διὰ πασῶν τὸ διπλάσιον καὶ ἀριθμός, καὶ ἀεὶ τὰ περιέχοντα ὅτιοῦν τῶν καθ' ἕκαστα. ἔτι δ' ὡς τὸ συμβεβηκὸς καὶ τὰ τούτων γένη, οἷον ἀνδριάντος ἄλλως Πολύκλειτος καὶ ἄλλως ἀνδριαντοποιός, ὅτι συμβέβηκε τῷ ἀνδριαντοποιῷ [1014a] Πολυκλείτῳ εἶναι· καὶ τὰ περιέχοντα δὲ τὸ συμβεβηκός, οἷον ἄνθρωπος αἷτιος ἀνδριάντος, ἢ καὶ ὅλως ζῶον, ὅτι ὁ Πολύκλειτος ἄνθρωπος ὁ δὲ ἄνθρωπος ζῶον. ἔστι δὲ καὶ τῶν συμβεβηκόντων ἄλλα ἄλλων πορρώτερον καὶ ἐγγύτερον, οἷον εἰ ὁ λευκὸς καὶ ὁ μουσικὸς αἷτιος λέγοιτο τοῦ ἀνδριάντος, ἀλλὰ μὴ μόνον Πολύκλειτος ἢ ἄνθρωπος. παρὰ πάντα δὲ καὶ τὰ οἰκείως λεγόμενα καὶ τὰ κατὰ συμβεβηκός, τὰ μὲν ὡς δυνάμενα λέγεται τὰ δ' ὡς ἐνεργοῦντα, οἷον τοῦ οἰκοδομεῖσθαι οἰκοδόμος ἢ οἰκοδομῶν οἰκοδόμος. ὁμοίως δὲ λεχθήσεται καὶ ἐφ' ὧν αἷτια τὰ αἷτια τοῖς εἰρημένοις, οἷον τοῦδε τοῦ ἀνδριάντος ἢ ἀνδριάντος ἢ ὅλως εἰκόνας, καὶ χαλκοῦ τοῦδε ἢ χαλκοῦ ἢ ὅλως ὕλης· καὶ ἐπὶ τῶν συμβεβηκόντων ὡσαύτως. ἔτι δὲ συμπλεκόμενα καὶ ταῦτα κάκεῖνα λεχθήσεται, οἷον οὐ Πολύκλειτος οὐδὲ ἀνδριαντοποιὸς ἀλλὰ Πολύκλειτος ἀνδριαντοποιός. ἀλλ' ὅμως ἅπαντά γε ταῦτ' ἐστὶ τὸ μὲν πλῆθος ἔξ, λεγόμενα δὲ διχῶς· ἢ γὰρ ὡς τὸ καθ' ἕκαστον ἢ ὡς τὸ γένος, ἢ ὡς τὸ συμβεβηκός ἢ ὡς τὸ γένος τοῦ συμβεβηκότος, ἢ ὡς συμπλεκόμενα ταῦτα ἢ ὡς ἀπλῶς λεγόμενα, πάντα δὲ ἢ ὡς ἐνεργοῦντα ἢ κατὰ δύναμιν. διαφέρει δὲ τοσοῦτον, ὅτι τὰ μὲν ἐνεργοῦντα καὶ τὰ καθ' ἕκαστον ἅμα ἔστι καὶ οὐκ ἔστι καὶ ὧν

αἷτια, οἷον ὅδε ὁ ἰατρεύων τῷδε τῷ ὑγιαζομένῳ καὶ ὅδε ὁ οἰκοδόμος τῷδε τῷ οἰκοδομουμένῳ, τὰ δὲ κατὰ δύναμιν οὐκ αἰεὶ· φθείρεται γὰρ οὐχ ἅμα ἢ οἰκία καὶ ὁ οἰκοδόμος.

Στοιχεῖον λέγεται ἐξ οὗ σύγκειται πρώτου ἐνυπάρχοντος ἀδιαίρετου τῷ εἶδει εἰς ἕτερον εἶδος, οἷον φωνῆς στοιχεῖα ἐξ ὧν σύγκειται ἡ φωνὴ καὶ εἰς ἃ διαιρεῖται ἔσχατα, ἐκεῖνα δὲ μηκέτ' εἰς ἄλλας φωνὰς ἐτέρας τῷ εἶδει αὐτῶν, ἀλλὰ κἂν διαιρῇται, τὰ μόρια ὁμοειδῆ, οἷον ὕδατος τὸ μόριον ὕδωρ, ἀλλ' οὐ τῆς συλλαβῆς. ὁμοίως δὲ καὶ τὰ τῶν σωμάτων στοιχεῖα λέγουσιν οἱ λέγοντες εἰς ἃ διαιρεῖται τὰ σώματα ἔσχατα, ἐκεῖνα δὲ μηκέτ' εἰς ἄλλα εἶδει διαφέροντα· καὶ εἴτε ἐν εἴτε πλείω τὰ τοιαῦτα, ταῦτα στοιχεῖα λέγουσιν. παραπλησίως δὲ καὶ τὰ τῶν διαγραμμάτων στοιχεῖα λέγεται, καὶ ὅλως τὰ τῶν ἀποδείξεων· αἱ γὰρ πρῶται ἀποδείξεις καὶ ἐν πλείοσιν ἀποδείξεσιν [1014b] ἐνυπάρχουσαι, αὗται στοιχεῖα τῶν ἀποδείξεων λέγονται· εἰσὶ δὲ τοιοῦτοι συλλογισμοὶ οἱ πρῶτοι ἐκ τῶν τριῶν δι' ἐνὸς μέσου. καὶ μεταφέροντες δὲ στοιχεῖον καλοῦσιν ἐντεῦθεν ὃ ἂν ἐν ὄν καὶ μικρὸν ἐπὶ πολλὰ ἢ χρήσιμον, διὸ καὶ τὸ μικρὸν καὶ ἀπλοῦν καὶ ἀδιαίρετον στοιχεῖον λέγεται. ὅθεν ἐλήλυθε τὰ μάλιστα καθόλου στοιχεῖα εἶναι, ὅτι ἕκαστον αὐτῶν ἐν ὄν καὶ ἀπλοῦν ἐν πολλοῖς ὑπάρχει ἢ πᾶσιν ἢ ὅτι πλείστοις, καὶ τὸ ἐν καὶ τὴν στιγμὴν ἀρχὰς τισι δοκεῖν εἶναι. ἐπεὶ οὖν τὰ καλούμενα γένη καθόλου καὶ ἀδιαίρετα (οὐ γὰρ ἔστι λόγος αὐτῶν), στοιχεῖα τὰ γένη λέγουσιν τινες, καὶ μᾶλλον ἢ τὴν διαφορὰν ὅτι καθόλου μᾶλλον τὸ γένος· ὥ μὲν γὰρ ἡ διαφορὰ ὑπάρχει, καὶ τὸ γένος ἀκολουθεῖ, ὥ δὲ τὸ γένος, οὐ παντὶ ἡ διαφορά. ἀπάντων δὲ κοινὸν τὸ εἶναι στοιχεῖον ἐκάστου τὸ πρῶτον ἐνυπάρχον ἐκάστῳ.

Φύσις λέγεται ἓνα μὲν τρόπον ἢ τῶν φυομένων γένεσις, οἷον εἴ τις ἐπεκτείνας λέγοι τὸ υ, ἓνα δὲ ἐξ οὗ φύεται πρώτου τὸ φυόμενον ἐνυπάρχοντος· ἔτι ὅθεν ἡ κίνησις ἢ πρώτη ἐν ἐκάστῳ τῶν φύσει ὄντων ἐν αὐτῷ ἢ αὐτὸ ὑπάρχει· φύεσθαι δὲ λέγεται ὅσα αὔξησιν ἔχει δι' ἐτέρου τῷ ἄπτεσθαι καὶ συμπεφυκέναι ἢ προσπεφυκέναι ὥσπερ τὰ ἔμβρυα· διαφέρει δὲ σύμφυσις ἀφῆς, ἐνθα μὲν γὰρ οὐδὲν παρὰ τὴν ἀφὴν ἕτερον ἀνάγκη εἶναι, ἐν δὲ τοῖς συμπεφυκόσιν ἔστι τι ἐν τὸ αὐτὸ ἐν ἀμφοῖν ὃ ποιεῖ ἀντὶ τοῦ ἄπτεσθαι συμπεφυκέναι καὶ εἶναι ἐν κατὰ τὸ συνεχὲς καὶ ποσόν, ἀλλὰ μὴ κατὰ τὸ ποιόν. ἔτι δὲ φύσις λέγεται ἐξ οὗ πρώτου ἢ ἔστιν ἢ γίγνεται τι τῶν φύσει ὄντων, ἀρρυθμίστου ὄντος καὶ ἀμεταβλήτου ἐκ τῆς δυνάμεως τῆς αὐτοῦ, οἷον ἀνδριάντος καὶ τῶν σκευῶν τῶν χαλκῶν ὁ χαλκὸς ἢ φύσις λέγεται, τῶν δὲ ξυλίνων ξύλον· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ἐκ τούτων γὰρ ἔστιν ἕκαστον διασωζομένης τῆς πρώτης ὕλης· τοῦτον γὰρ τὸν τρόπον καὶ τῶν φύσει ὄντων τὰ στοιχεῖα φασιν εἶναι φύσιν, οἱ μὲν πῦρ οἱ δὲ γῆν οἱ δ'

ἀέρα οἱ δ' ὕδωρ οἱ δ' ἄλλο τι τοιοῦτον λέγοντες, οἱ δ' ἔνια τούτων οἱ δὲ πάντα ταῦτα. ἔτι δ' ἄλλον τρόπον λέγεται ἡ φύσις ἡ τῶν φύσει ὄντων οὐσία, οἷον οἱ λέγοντες τὴν φύσιν εἶναι τὴν πρώτην σύνθεσιν, ἡ ὥσπερ Ἐμπεδοκλῆς [1015a] λέγει ὅτι “φύσις οὐδενὸς ἔστιν ἐόντων, ἀλλὰ μόνον μῖξις τε διάλλαξις τε μιγέντων ἔστι, φύσις δ' ἐπὶ τοῖς ὀνομάζεται ἀνθρώποισιν”. διὸ καὶ ὅσα φύσει ἔστιν ἢ γίγνεται, ἤδη ὑπάρχοντος ἐξ οὗ πέφυκε γίνεσθαι ἢ εἶναι, οὕτω φαμέν τὴν φύσιν ἔχειν ἐὰν μὴ ἔχη τὸ εἶδος καὶ τὴν μορφήν. φύσει μὲν οὖν τὸ ἐξ ἀμφοτέρων τούτων ἐστίν, οἷον τὰ ζῶα καὶ τὰ μόρια αὐτῶν· φύσις δὲ ἢ τε πρώτη ὕλη (καὶ αὕτη διχῶς, ἢ ἡ πρὸς αὐτὸ πρώτη ἢ ἡ ὅλως πρώτη, οἷον τῶν χαλκῶν ἔργων πρὸς αὐτὰ μὲν πρῶτος ὁ χαλκός, ὅλως δ' ἴσως ὕδωρ, εἰ πάντα τὰ τηκτὰ ὕδωρ) καὶ τὸ εἶδος καὶ ἡ οὐσία· τοῦτο δ' ἐστὶ τὸ τέλος τῆς γενέσεως. μεταφορᾷ δ' ἤδη καὶ ὅλως πᾶσα οὐσία φύσις λέγεται διὰ ταύτην, ὅτι καὶ ἡ φύσις οὐσία τίς ἐστίν. ἐκ δὲ τῶν εἰρημένων ἡ πρώτη φύσις καὶ κυρίως λεγομένη ἐστὶν ἡ οὐσία ἡ τῶν ἐχόντων ἀρχὴν κινήσεως ἐν αὐτοῖς ἢ αὐτά· ἢ γὰρ ὕλη τῷ ταύτης δεκτικῇ εἶναι λέγεται φύσις, καὶ αἱ γενέσεις καὶ τὸ φύεσθαι τῷ ἀπὸ ταύτης εἶναι κινήσεις. καὶ ἡ ἀρχὴ τῆς κινήσεως τῶν φύσει ὄντων αὕτη ἐστίν, ἐνυπάρχουσά πως ἢ δυνάμει ἢ ἐντελεχείᾳ.

Ἀναγκαῖον λέγεται οὗ ἄνευ οὐκ ἐνδέχεται ζῆν ὡς συναιτίου (οἷον τὸ ἀναπνεῖν καὶ ἡ τροφή τῷ ζῳῷ ἀναγκαῖον, ἀδύνατον γὰρ ἄνευ τούτων εἶναι), καὶ ὣν ἄνευ τὸ ἀγαθὸν μὴ ἐνδέχεται ἢ εἶναι ἢ γενέσθαι, ἢ τὸ κακὸν ἀποβαλεῖν ἢ στερηθῆναι (οἷον τὸ πιεῖν τὸ φάρμακον ἀναγκαῖον ἵνα μὴ κάμνη, καὶ τὸ πλεῦσαι εἰς Αἴγιναν ἵνα ἀπολάβῃ τὰ χρήματα). ἔτι τὸ βίαιον καὶ ἡ βία· τοῦτο δ' ἐστὶ τὸ παρὰ τὴν ὁρμὴν καὶ τὴν προαίρεσιν ἐμποδίζον καὶ κωλυτικόν, τὸ γὰρ βίαιον ἀναγκαῖον λέγεται, διὸ καὶ λυπηρόν (ὥσπερ καὶ Εὐρηνός φησι “πᾶν γὰρ ἀναγκαῖον πρᾶγμ' ἀνιάρδον ἔφυ”), καὶ ἡ βία ἀνάγκη τις (ὥσπερ καὶ Σοφοκλῆς λέγει “ἀλλ' ἡ βία με ταῦτ' ἀναγκάζει ποιεῖν”), καὶ δοκεῖ ἡ ἀνάγκη ἀμετάπειστον τι εἶναι, ὀρθῶς· ἐναντίον γὰρ τῇ κατὰ τὴν προαίρεσιν κινήσει καὶ κατὰ τὸν λογισμόν. ἔτι τὸ μὴ ἐνδεχόμενον ἄλλως ἔχειν ἀναγκαῖόν φαμεν οὕτως ἔχειν· καὶ κατὰ τοῦτο τὸ ἀναγκαῖον καὶ τὰλλα λέγεταί πως ἅπαντα ἀναγκαῖα· τό τε γὰρ βίαιον ἀναγκαῖον λέγεται [1015b] ἢ ποιεῖν ἢ πάσχειν τότε, ὅταν μὴ ἐνδέχεται κατὰ τὴν ὁρμὴν διὰ τὸ βιαζόμενον, ὡς ταύτην ἀνάγκην οὕσαν δι' ἣν μὴ ἐνδέχεται ἄλλως, καὶ ἐπὶ τῶν συναιτίων τοῦ ζῆν καὶ τοῦ ἀγαθοῦ ὡσαύτως· ὅταν γὰρ μὴ ἐνδέχεται ἔνθα μὲν τὸ ἀγαθὸν ἔνθα δὲ τὸ ζῆν καὶ τὸ εἶναι ἄνευ τινῶν, ταῦτα ἀναγκαῖα καὶ ἡ αἰτία ἀνάγκη τίς ἐστίν αὕτη. ἔτι ἡ ἀπόδειξις τῶν ἀναγκαίων, ὅτι οὐκ ἐνδέχεται ἄλλως ἔχειν, εἰ ἀποδέδεικται ἀπλῶς· τούτου δ' αἷτια τὰ πρῶτα, εἰ ἀδύνατον ἄλλως ἔχειν ἐξ ὧν ὁ συλλογισμός. τῶν μὲν δὲ ἕτερον αἷτιον τοῦ ἀναγκαῖα εἶναι, τῶν δὲ οὐδέν, ἀλλὰ διὰ ταῦτα ἕτερά ἐστιν ἐξ ἀνάγκης. ὥστε τὸ



πρῶτον καὶ κυρίως ἀναγκαῖον τὸ ἀπλοῦν ἐστίν· τοῦτο γὰρ οὐκ ἐνδέχεται πλεοναχῶς ἔχειν, ὥστ' οὐδὲ ἄλλως καὶ ἄλλως· ἤδη γὰρ πλεοναχῶς ἂν ἔχοι. εἰ ἄρα ἔστιν ἅττα αἰδία καὶ ἀκίνητα, οὐδὲν ἐκείνοις ἐστὶ βίαιον οὐδὲ παρὰ φύσιν.

Ἐν λέγεται τὸ μὲν κατὰ συμβεβηκὸς τὸ δὲ καθ' αὐτό, κατὰ συμβεβηκὸς μὲν οἶον Κορίσκος καὶ τὸ μουσικόν, καὶ Κορίσκος μουσικός (ταῦτ' οὖν γὰρ εἰπεῖν Κορίσκος καὶ τὸ μουσικόν, καὶ Κορίσκος μουσικός), καὶ τὸ μουσικόν καὶ τὸ δίκαιον, καὶ μουσικὸς <Κορίσκος> καὶ δίκαιος Κορίσκος· πάντα γὰρ ταῦτα ἐν λέγεται κατὰ συμβεβηκός, τὸ μὲν δίκαιον καὶ τὸ μουσικόν ὅτι μιᾷ οὐσίᾳ συμβέβηκεν, τὸ δὲ μουσικόν καὶ Κορίσκος ὅτι θάτερον θατέρω συμβέβηκεν· ὁμοίως δὲ τρόπον τινὰ καὶ ὁ μουσικὸς Κορίσκος τῷ Κορίσκῳ ἐν ὅτι θάτερον τῶν μορίων θατέρω συμβέβηκε τῶν ἐν τῷ λόγῳ, οἶον τὸ μουσικόν τῷ Κορίσκῳ· καὶ ὁ μουσικὸς Κορίσκος δικαίῳ Κορίσκῳ ὅτι ἑκατέρου μέρος τῷ αὐτῷ ἐνὶ συμβέβηκεν ἐν. ὡσαύτως δὲ καὶ ἐπὶ γένους καὶ ἐπὶ τῶν καθόλου τινὸς ὀνομάτων λέγεται τὸ συμβεβηκός, οἶον ὅτι ἄνθρωπος τὸ αὐτὸ καὶ μουσικὸς ἄνθρωπος· ἢ γὰρ ὅτι τῷ ἀνθρώπῳ μιᾷ οὐσίᾳ συμβέβηκε τὸ μουσικόν, ἢ ὅτι ἄμφω τῶν καθ' ἕκαστόν τι συμβέβηκεν, οἶον Κορίσκῳ. πλὴν οὐ τὸν αὐτὸν τρόπον ἄμφω ὑπάρχει, ἀλλὰ τὸ μὲν ἴσως ὡς γένος καὶ ἐν τῇ οὐσίᾳ τὸ δὲ ὡς ἕξις ἢ πάθος τῆς οὐσίας. - ὅσα μὲν οὖν κατὰ συμβεβηκὸς λέγεται ἐν, τοῦτον τὸν τρόπον λέγεται· τῶν δὲ καθ' ἑαυτὰ ἐν λεγομένων τὰ μὲν λέγεται τῷ [1016a] συνεχῇ εἶναι, οἶον φάκελος δεσμῷ καὶ ξύλα κόλλη· καὶ γραμμὴ, καὶ κεκαμμένη ἢ, συνεχῆς δέ, μία λέγεται, ὥσπερ καὶ τῶν μερῶν ἕκαστον, οἶον σκέλος καὶ βραχίον. αὐτῶν δὲ τούτων μᾶλλον ἐν τὰ φύσει συνεχῇ ἢ τέχνῃ. συνεχὲς δὲ λέγεται οὐ κίνησις μία καθ' αὐτὸ καὶ μὴ οἷόν τε ἄλλως· μία δ' οὐ ἀδιαίρετος, ἀδιαίρετος δὲ κατὰ χρόνον. καθ' αὐτὰ δὲ συνεχῇ ὅσα μὴ ἀφῇ ἐν· εἰ γὰρ θείης ἀπτόμενα ἀλλήλων ξύλα, οὐ φήσεις ταῦτα εἶναι ἐν οὔτε ξύλον οὔτε σῶμα οὔτ' ἄλλο συνεχὲς οὐδέν. τὰ τε δὴ ὅλως συνεχῇ ἐν λέγεται καὶ ἔχη κάμψιν, καὶ ἔτι μᾶλλον τὰ μὴ ἔχοντα κάμψιν, οἶον κνήμη ἢ μηρὸς σκέλους, ὅτι ἐνδέχεται μὴ μίαν εἶναι τὴν κίνησιν τοῦ σκέλους. καὶ ἡ εὐθεΐα τῆς κεκαμμένης μᾶλλον ἐν· τὴν δὲ κεκαμμένην καὶ ἔχουσαν γωνίαν καὶ μίαν καὶ οὐ μίαν λέγομεν, ὅτι ἐνδέχεται καὶ μὴ ἅμα τὴν κίνησιν αὐτῆς εἶναι καὶ ἅμα· τῆς δ' εὐθείας ἀεὶ ἅμα, καὶ οὐδὲν μόνον ἔχον μέγεθος τὸ μὲν ἡρεμεῖ τὸ δὲ κινεῖται, ὥσπερ τῆς κεκαμμένης. ἔτι ἄλλον τρόπον ἐν λέγεται τῷ τὸ ὑποκείμενον τῷ εἶδει εἶναι ἀδιάφορον· ἀδιάφορον δ' ὧν ἀδιαίρετον τὸ εἶδος κατὰ τὴν αἴσθησιν· τὸ δ' ὑποκείμενον ἢ τὸ πρῶτον ἢ τὸ τελευταῖον πρὸς τὸ τέλος· καὶ γὰρ οἶνος εἰς λέγεται καὶ ὕδωρ ἐν, ἢ ἀδιαίρετον κατὰ τὸ εἶδος, καὶ οἱ χυμοὶ πάντες λέγονται ἐν (οἶον ἔλαιον οἶνος) καὶ τὰ τηκτά, ὅτι πάντων τὸ ἔσχατον

ὑποκείμενον τὸ αὐτό· ὕδωρ γὰρ ἢ ἀήρ πάντα ταῦτα. λέγεται δ' ἐν καὶ ὧν τὸ γένος ἐν διαφέρον ταῖς ἀντικειμέναις διαφοραῖς - καὶ ταῦτα λέγεται πάντα ἐν ὅτι τὸ γένος ἐν τὸ ὑποκείμενον ταῖς διαφοραῖς (οἷον ἵππος ἄνθρωπος κύων ἐν τι ὅτι πάντα ζῶα), καὶ τρόπον δὴ παραπλήσιον ὥσπερ ἡ ὕλη μία. ταῦτα δὲ ὅτε μὲν οὕτως ἐν λέγεται, ὅτε δὲ τὸ ἄνω γένος ταῦτόν λέγεται - ἂν ἢ τελευταῖα τοῦ γένους εἶδη - τὸ ἀνωτέρω τούτων, οἷον τὸ ἰσοσκελὲς καὶ τὸ ἰσόπλευρον ταῦτό καὶ ἐν σχῆμα ὅτι ἄμφω τρίγωνα· τρίγωνα δ' οὐ ταῦτά. ἔτι δὲ ἐν λέγεται ὅσων ὁ λόγος ὁ τὸ τί ἦν εἶναι λέγων ἀδιαίρετος πρὸς ἄλλον τὸν δηλοῦντα [τί ἦν εἶναι] τὸ πρᾶγμα (αὐτὸς γὰρ καθ' αὐτόν πᾶς λόγος διαιρετός). οὕτω γὰρ καὶ τὸ ηὔξημένον καὶ φθίνον ἐν ἐστίν, ὅτι ὁ λόγος εἷς, ὥσπερ ἐπὶ τῶν ἐπιπέδων ὁ τοῦ [1016b] εἶδους. ὅλως δὲ ὧν ἡ νόησις ἀδιαίρετος ἢ νοοῦσα τὸ τί ἦν εἶναι, καὶ μὴ δύναται χωρίσαι μήτε χρόνῳ μήτε τόπῳ μήτε λόγῳ, μάλιστα ταῦτα ἐν, καὶ τούτων ὅσα οὐσίαι· καθόλου γὰρ ὅσα μὴ ἔχει διαίρεσιν, ἢ μὴ ἔχει, ταύτη ἐν λέγεται, οἷον εἰ ἢ ἄνθρωπος μὴ ἔχει διαίρεσιν, εἷς ἄνθρωπος, εἰ δ' ἢ ζῶον, ἐν ζῶον, εἰ δὲ ἢ μέγεθος, ἐν μέγεθος. τὰ μὲν οὖν πλεῖστα ἐν λέγεται τῷ ἑτερόν τι ἢ ποιεῖν ἢ ἔχειν ἢ πάσχειν ἢ πρὸς τι εἶναι ἐν, τὰ δὲ πρώτως λεγόμενα ἐν ὧν ἡ οὐσία μία, μία δὲ ἢ συνεχεία ἢ εἶδει ἢ λόγῳ· καὶ γὰρ ἀριθμοῦμεν ὡς πλείῳ ἢ τὰ μὴ συνεχῇ ἢ ὧν μὴ ἐν τὸ εἶδος ἢ ὧν ὁ λόγος μὴ εἷς. ἔτι δ' ἔστι μὲν ὡς ὁτιοῦν ἐν φαμεν εἶναι ἂν ἢ ποσὸν καὶ συνεχές, ἔστι δ' ὡς οὐ, ἂν μὴ τι ὅλον ἢ, τοῦτο δὲ ἂν μὴ τὸ εἶδος ἔχη ἐν· οἷον οὐκ ἂν φαῖμεν ὁμοίως ἐν ἰδόντες ὁποσοῦν τὰ μέρη συγκείμενα τοῦ ὑποδήματος, ἐὰν μὴ διὰ τὴν συνέχειαν, ἀλλ' ἐὰν οὕτως ὥστε ὑπόδημα εἶναι καὶ εἶδος τι ἔχειν ἤδη ἐν· διὸ καὶ ἡ τοῦ κύκλου μάλιστα μία τῶν γραμμῶν, ὅτι ὅλη καὶ τέλειος ἐστίν. - τὸ δὲ ἐν εἶναι ἀρχῇ τινὶ ἐστίν ἀριθμοῦ εἶναι· τὸ γὰρ πρῶτον μέτρον ἀρχή, ὃ γὰρ πρώτῳ γνωρίζομεν, τοῦτο πρῶτον μέτρον ἐκάστου γένους· ἀρχὴ οὖν τοῦ γνωστοῦ περὶ ἕκαστον τὸ ἐν. οὐ ταῦτό δὲ ἐν πᾶσι τοῖς γένεσι τὸ ἐν. ἔνθα μὲν γὰρ δίεσις ἔνθα δὲ τὸ φωνῆεν ἢ ἄφωνον· βάρους δὲ ἕτερον καὶ κινήσεως ἄλλο. πανταχοῦ δὲ τὸ ἐν ἢ τῷ ποσῷ ἢ τῷ εἶδει ἀδιαίρετον. τὸ μὲν οὖν κατὰ τὸ ποσὸν ἀδιαίρετον, τὸ μὲν πάντῃ καὶ ἄθετον λέγεται μονάς, τὸ δὲ πάντῃ καὶ θέσιν ἔχον στιγμὴ, τὸ δὲ μοναχῇ γραμμὴ, τὸ δὲ διχῇ ἐπίπεδον, τὸ δὲ πάντῃ καὶ τριχῇ διαιρετὸν κατὰ τὸ ποσὸν σῶμα· καὶ ἀντιστρέψαντι δὴ τὸ μὲν διχῇ διαιρετὸν ἐπίπεδον, τὸ δὲ μοναχῇ γραμμὴ, τὸ δὲ μηδαμῇ διαιρετὸν κατὰ τὸ ποσὸν στιγμὴ καὶ μονάς, ἢ μὲν ἄθετος μονάς ἢ δὲ θετὸς στιγμὴ. ἔτι δὲ τὰ μὲν κατ' ἀριθμὸν ἐστίν ἐν, τὰ δὲ κατ' εἶδος, τὰ δὲ κατὰ γένος, τὰ δὲ κατ' ἀναλογίαν, ἀριθμῷ μὲν ὧν ἡ ὕλη μία, εἶδει δ' ὧν ὁ λόγος εἷς, γένει δ' ὧν τὸ αὐτὸ σχῆμα τῆς κατηγορίας, κατ' ἀναλογίαν δὲ ὅσα ἔχει ὡς ἄλλο πρὸς ἄλλο. ἀεὶ δὲ τὰ ὕστερα τοῖς ἔμπροσθεν ἀκολουθεῖ, οἷον ὅσα ἀριθμῷ καὶ εἶδει ἐν, ὅσα δ' εἶδει οὐ πάντα ἀριθμῷ· [1017a] ἀλλὰ γένει πάντα ἐν ὅσαπερ

καὶ εἶδει, ὅσα δὲ γένει οὐ πάντα εἶδει ἄλλ' ἀναλογία· ὅσα δὲ ἀνολογία οὐ πάντα γένει. φανερόν δὲ καὶ ὅτι τὰ πολλὰ ἀντικειμένως λεχθήσεται τῷ ἐνί· τὰ μὲν γὰρ τῷ μὴ συνεχῇ εἶναι, τὰ δὲ τῷ διαιρετὴν ἔχειν τὴν ὕλην κατὰ τὸ εἶδος, ἢ τὴν πρώτην ἢ τὴν τελευταίαν, τὰ δὲ τῷ τοὺς λόγους πλείους τοὺς τί ἦν εἶναι λέγον·

Τὸ ὃν λέγεται τὸ μὲν κατὰ συμβεβηκὸς τὸ δὲ καθ' αὐτό, κατὰ συμβεβηκὸς μὲν, οἷον τὸν δίκαιον μουσικὸν εἶναί φαμεν καὶ τὸν ἄνθρωπον μουσικὸν καὶ τὸν μουσικὸν ἄνθρωπον, παραπλησίως λέγοντες ὥσπερ εἰ τὸν μουσικὸν οἰκοδομεῖν ὅτι συμβέβηκε τῷ οἰκοδόμῳ μουσικῷ εἶναι ἢ τῷ μουσικῷ οἰκοδόμῳ (τὸ γὰρ τότε εἶναι τότε σημαίνει τὸ συμβεβηκέναι τῷδε τότε), - οὕτω δὲ καὶ ἐπὶ τῶν εἰρημένων· τὸν γὰρ ἄνθρωπον ὅταν μουσικὸν λέγωμεν καὶ τὸν μουσικὸν ἄνθρωπον, ἢ τὸν λευκὸν μουσικὸν ἢ τοῦτον λευκόν, τὸ μὲν ὅτι ἄμφω τῷ αὐτῷ συμβεβήκασι, τὸ δ' ὅτι τῷ ὄντι συμβέβηκε, τὸ δὲ μουσικὸν ἄνθρωπον ὅτι τούτῳ τὸ μουσικὸν συμβέβηκεν (οὕτω δὲ λέγεται καὶ τὸ μὴ λευκὸν εἶναι, ὅτι ὧ συμβέβηκεν, ἐκεῖνο ἔστιν)· - τὰ μὲν οὖν κατὰ συμβεβηκὸς εἶναι λεγόμενα οὕτω λέγεται ἢ διότι τῷ αὐτῷ ὄντι ἄμφω ὑπάρχει, ἢ ὅτι ὄντι ἐκείνῳ ὑπάρχει, ἢ ὅτι αὐτὸ ἔστιν ὧ ὑπάρχει οὐ αὐτὸ κατηγορεῖται· καθ' αὐτὰ δὲ εἶναι λέγεται ὅσαπερ σημαίνει τὰ σχήματα τῆς κατηγορίας· ὅσαχῶς γὰρ λέγεται, τοσαυταχῶς τὸ εἶναι σημαίνει. ἐπεὶ οὖν τῶν κατηγορουμένων τὰ μὲν τί ἐστι σημαίνει, τὰ δὲ ποιόν, τὰ δὲ ποσόν, τὰ δὲ πρὸς τι, τὰ δὲ ποιεῖν ἢ πάσχειν, τὰ δὲ πού, τὰ δὲ ποτέ, ἐκάστω τούτων τὸ εἶναι ταὐτὸ σημαίνει· οὐθὲν γὰρ διαφέρει τὸ ἄνθρωπος ὑγιαίνων ἐστὶν ἢ τὸ ἄνθρωπος ὑγιαίνει, οὐδὲ τὸ ἄνθρωπος βαδίζων ἐστὶν ἢ τέμνων τοῦ ἄνθρωπος βαδίζει ἢ τέμνει, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ἔτι τὸ εἶναι σημαίνει καὶ τὸ ἔστιν ὅτι ἀληθές, τὸ δὲ μὴ εἶναι ὅτι οὐκ ἀληθές ἀλλὰ ψεῦδος, ὁμοίως ἐπὶ καταφάσεως καὶ ἀποφάσεως, οἷον ὅτι ἔστι Σωκράτης μουσικός, ὅτι ἀληθές τοῦτο, ἢ ὅτι ἔστι Σωκράτης οὐ λευκός, ὅτι ἀληθές· τὸ δ' οὐκ ἔστιν ἢ διάμετρος σύμμετρος, ὅτι ψεῦδος. ἔτι τὸ εἶναι σημαίνει [1017b] καὶ τὸ ὃν τὸ μὲν δυνάμει ῥητὸν τὸ δ' ἐντελεχείᾳ τῶν εἰρημένων τούτων· ὁρῶν τε γὰρ εἶναί φαμεν καὶ τὸ δυνάμει ὁρῶν καὶ τὸ ἐντελεχείᾳ, καὶ [τὸ] ἐπίστασθαι ὡσαύτως καὶ τὸ δυνάμενον χρῆσθαι τῇ ἐπιστήμῃ καὶ τὸ χρώμενον, καὶ ἡρεμοῦν καὶ ὧ ἤδη ὑπάρχει ἡρεμία καὶ τὸ δυνάμενον ἡρεμεῖν. ὁμοίως δὲ καὶ ἐπὶ τῶν οὐσιῶν· καὶ γὰρ Ἑρμῆν ἐν τῷ λίθῳ φαμέν εἶναι, καὶ τὸ ἥμισυ τῆς γραμμῆς, καὶ σῖτον τὸν μήπω ἄδρόν. πότε δὲ δυνατὸν καὶ πότε οὕπω, ἐν ἄλλοις διοριστέον.

Οὐσία λέγεται τὰ τε ἀπλᾶ σώματα, οἷον γῆ καὶ πῦρ καὶ ὕδωρ καὶ ὅσα τοιαῦτα, καὶ ὅλως σώματα καὶ τὰ ἐκ τούτων συνεστῶτα ζῶα τε καὶ δαιμόνια

καὶ τὰ μόρια τούτων· ἅπαντα δὲ ταῦτα λέγεται οὐσία ὅτι οὐ καθ' ὑποκειμένου λέγεται ἀλλὰ κατὰ τούτων τὰ ἄλλα. ἄλλον δὲ τρόπον ὃ ἂν ἦ αἴτιον τοῦ εἶναι, ἐνυπάρχον ἐν τοῖς τοιούτοις ὅσα μὴ λέγεται καθ' ὑποκειμένου, οἷον ἡ ψυχὴ τῷ ζῳῷ. ἔτι ὅσα μόρια ἐνυπάρχοντά ἐστιν ἐν τοῖς τοιούτοις ὀρίζοντά τε καὶ τόδε τι σημαίνοντα, ὧν ἀναιρουμένων ἀναιρεῖται τὸ ὅλον, οἷον ἐπιπέδου σῶμα, ὡς φασί τινες, καὶ ἐπίπεδον γραμμῆς· καὶ ὅλως ὁ ἀριθμὸς δοκεῖ εἶναι τισι τοιοῦτος (ἀναιρουμένου τε γὰρ οὐδὲν εἶναι, καὶ ὀρίζειν πάντα)· ἔτι τὸ τί ἦν εἶναι, οὗ ὁ λόγος ὀρισμός, καὶ τοῦτο οὐσία λέγεται ἐκάστου. συμβαίνει δὲ κατὰ δύο τρόπους τὴν οὐσίαν λέγεσθαι, τό θ' ὑποκείμενον ἔσχατον, ὃ μηκέτι κατ' ἄλλου λέγεται, καὶ ὃ ἂν τόδε τι ὄν καὶ χωριστὸν ἦ· τοιοῦτον δὲ ἐκάστου ἡ μορφή καὶ τὸ εἶδος.

Ταῦτά λέγεται τὰ μὲν κατὰ συμβεβηκός, οἷον τὸ λευκὸν καὶ τὸ μουσικὸν τὸ αὐτὸ ὅτι τῷ αὐτῷ συμβέβηκε, καὶ ἄνθρωπος καὶ μουσικὸν ὅτι θάτερον θατέρῳ συμβέβηκεν, τὸ δὲ μουσικὸν ἄνθρωπος ὅτι τῷ ἀνθρώπῳ συμβέβηκεν· ἐκατέρῳ δὲ τοῦτο καὶ τούτῳ ἐκάτερον ἐκείνων, καὶ γὰρ τῷ ἀνθρώπῳ τῷ μουσικῷ καὶ ὁ ἄνθρωπος καὶ τὸ μουσικὸν ταῦτό λέγεται, καὶ τούτοις ἐκεῖνο (διὸ καὶ πάντα ταῦτα καθόλου οὐ λέγεται· οὐ γὰρ ἀληθὲς εἰπεῖν ὅτι πᾶς ἄνθρωπος ταῦτό καὶ τὸ μουσικόν· τὰ γὰρ καθόλου καθ' αὐτὰ ὑπάρχει, τὰ [1018a] δὲ συμβεβηκότα οὐ καθ' αὐτά· ἀλλ' ἐπὶ τῶν καθ' ἕκαστα ἀπλῶς λέγεται· ταῦτό γὰρ δοκεῖ Σωκράτης καὶ Σωκράτης εἶναι μουσικός· τὸ δὲ Σωκράτης οὐκ ἐπὶ πολλῶν, διὸ οὐ πᾶς Σωκράτης λέγεται ὥσπερ πᾶς ἄνθρωπος)· - καὶ τὰ μὲν οὕτως λέγεται ταῦτά, τὰ δὲ καθ' αὐτὰ ὁσαῦτα πεπονημένα καὶ τὸ ἔν· καὶ γὰρ ὧν ἡ ὕλη μία ἢ εἶδει ἢ ἀριθμῷ ταῦτά λέγεται καὶ ὧν ἡ οὐσία μία, ὥστε φανερόν ὅτι ἡ ταυτότης ἐνότης τίς ἐστιν ἡ πλειόνων τοῦ εἶναι ἢ ὅταν χρῆται ὡς πλείοσιν, οἷον ὅταν λέγῃ αὐτὸ αὐτῷ ταῦτόν· ὡς δυσὶ γὰρ χρῆται αὐτῷ. - ἕτερα δὲ λέγεται ὧν ἡ τὰ εἶδη πλείω ἢ ἡ ὕλη ἢ ὁ λόγος τῆς οὐσίας· καὶ ὅλως ἀντικειμένως τῷ ταῦτῳ λέγεται τὸ ἕτερον.

Διάφορα δὲ λέγεται ὅσ' ἕτερά ἐστι τὸ αὐτό τι ὄντα, μὴ μόνον ἀριθμῷ ἀλλ' ἢ εἶδει ἢ γένει ἢ ἀναλογίᾳ· ἔτι ὧν ἕτερον τὸ γένος, καὶ τὰ ἐναντία, καὶ ὅσα ἔχει ἐν τῇ οὐσίᾳ τὴν ἑτερότητα. ὅμοια λέγεται τὰ τε πάντῃ ταῦτό πεπονημένα, καὶ τὰ πλείω ταῦτά πεπονημένα ἢ ἕτερα, καὶ ὧν ἡ ποιότης μία· καὶ καθ' ὅσα ἀλλοιοῦσθαι ἐνδέχεται τῶν ἐναντίων, τούτων τὸ πλείω ἔχον ἢ κυριώτερα ὅμοιον τούτῳ. ἀντικειμένως δὲ τοῖς ὁμοίοις τὰ ἀνόμοια.

Ἀντικείμενα λέγεται ἀντίφασις καὶ τάναντία καὶ τὰ πρὸς τι καὶ στερήσις καὶ ἕξις καὶ ἐξ ὧν καὶ εἰς ἃ ἔσχατα αἱ γενέσεις καὶ φθοραί· καὶ ὅσα μὴ ἐνδέχεται ἅμα παρεῖναι τῷ ἀμφοῖν δεκτικῷ, ταῦτα ἀντικεῖσθαι λέγεται ἢ

αὐτὰ ἢ ἐξ ὧν ἐστίν. φαιδὸν γὰρ καὶ λευκὸν ἅμα τῷ αὐτῷ οὐχ ὑπάρχει· διὸ ἐξ ὧν ἐστὶν ἀντίκειται. ἐναντία λέγεται τὰ τε μὴ δυνατὰ ἅμα τῷ αὐτῷ παρεῖναι τῶν διαφερόντων κατὰ γένος, καὶ τὰ πλεῖστον διαφέροντα τῶν ἐν τῷ αὐτῷ γένει, καὶ τὰ πλεῖστον διαφέροντα τῶν ἐν ταύτῳ δεκτικῷ, καὶ τὰ πλεῖστον διαφέροντα τῶν ὑπὸ τὴν αὐτὴν δύναμιν, καὶ ὧν ἡ διαφορὰ μεγίστη ἢ ἀπλῶς ἢ κατὰ γένος ἢ κατ' εἶδος. τὰ δ' ἄλλα ἐναντία λέγεται τὰ μὲν τῷ τὰ τοιαῦτα ἔχειν, τὰ δὲ τῷ δεκτικῶς εἶναι τῶν τοιούτων, τὰ δὲ τῷ ποιητικῶς ἢ παθητικῶς εἶναι τῶν τοιούτων, ἢ ποιοῦντα ἢ πάσχοντα, ἢ ἀποβολαῖ ἢ λήψεις, ἢ ἕξεις ἢ στερήσεις εἶναι τῶν τοιούτων. ἐπεὶ δὲ τὸ ἐν καὶ τὸ ὄν πολλαχῶς λέγεται, ἀκολουθεῖν ἀνάγκη καὶ τὰλλα ὅσα κατὰ ταῦτα λέγεται, ὥστε καὶ τὸ ταῦτόν καὶ τὸ ἕτερον καὶ τὸ ἐναντίον, ὥστ' εἶναι ἕτερον καθ' ἐκάστην κατηγορίαν. - ἕτερα δὲ τῷ εἶδει [1018b] λέγεται ὅσα τε ταῦτοῦ γένους ὄντα μὴ ὑπάλληλά ἐστι, καὶ ὅσα ἐν τῷ αὐτῷ γένει ὄντα διαφορὰν ἔχει, καὶ ὅσα ἐν τῇ οὐσίᾳ ἐναντίωσιν ἔχει· καὶ τὰ ἐναντία ἕτερα τῷ εἶδει ἀλλήλων ἢ πάντα ἢ τὰ λεγόμενα πρῶτως, καὶ ὅσων ἐν τῷ τελευταίῳ τοῦ γένους εἶδει οἱ λόγοι ἕτεροι (οἷον ἄνθρωπος καὶ ἵππος ἅτομα τῷ γένει οἱ δὲ λόγοι ἕτεροι αὐτῶν), καὶ ὅσα ἐν τῇ αὐτῇ οὐσίᾳ ὄντα ἔχει διαφορὰν. ταῦτα δὲ τῷ εἶδει τὰ ἀντικειμένως λεγόμενα τούτοις.

Πρότερα καὶ ὕστερα λέγεται ἕνια μὲν, ὡς ὄντος τινὸς πρώτου καὶ ἀρχῆς ἐν ἐκάστῳ γένει, τῷ ἐγγύτερον «εἶναι» ἀρχῆς τινὸς ὠρισμένης ἢ ἀπλῶς καὶ τῇ φύσει ἢ πρὸς τι ἢ ποῦ ἢ ὑπὸ τινων, οἷον τὰ μὲν κατὰ τόπον τῷ εἶναι ἐγγύτερον ἢ φύσει τινὸς τόπου ὠρισμένου (οἷον τοῦ μέσου ἢ τοῦ ἐσχάτου) ἢ πρὸς τὸ τυχόν, τὸ δὲ πορρώτερον ὕστερον· τὰ δὲ κατὰ χρόνον (τὰ μὲν γὰρ τῷ πορρώτερον τοῦ νῦν, οἷον ἐπὶ τῶν γενομένων, πρότερον γὰρ τὰ Τρωϊκὰ τῶν Μηδικῶν ὅτι πορρώτερον ἀπέχει τοῦ νῦν· τὰ δὲ τῷ ἐγγύτερον τοῦ νῦν, οἷον ἐπὶ τῶν μελλόντων, πρότερον γὰρ Νέμεα Πυθίων ὅτι ἐγγύτερον τοῦ νῦν τῷ νῦν ὡς ἀρχῇ καὶ πρώτῳ χρησαμένων)· τὰ δὲ κατὰ κίνησιν (τὸ γὰρ ἐγγύτερον τοῦ πρώτου κινήσαντος πρότερον, οἷον παῖς ἀνδρός· ἀρχὴ δὲ καὶ αὕτη τις ἀπλῶς)· τὰ δὲ κατὰ δύναμιν (τὸ γὰρ ὑπερέχον τῇ δυνάμει πρότερον, καὶ τὸ δυνατώτερον· τοιοῦτον δ' ἐστὶν οὐ κατὰ τὴν προαίρεσιν ἀνάγκη ἀκολουθεῖν θάτερον καὶ τὸ ὕστερον, ὥστε μὴ κινουντός τε ἐκείνου μὴ κινεῖσθαι καὶ κινουντος κινεῖσθαι· ἢ δὲ προαίρεσις ἀρχή)· τὰ δὲ κατὰ τάξιν (ταῦτα δ' ἐστὶν ὅσα πρὸς τι ἐν ὠρισμένον διέστηκεν κατὰ τινὰ λόγον, οἷον παραστάτης τριτοστάτου πρότερον καὶ παρανήτη νήτης· ἔνθα μὲν γὰρ ὁ κορυφαῖος ἔνθα δὲ ἡ μέση ἀρχή)· - ταῦτα μὲν οὖν πρότερα τοῦτον λέγεται τὸν τρόπον, ἄλλον δὲ τρόπον τὸ τῇ γνώσει πρότερον ὡς καὶ ἀπλῶς πρότερον. τούτων δὲ ἄλλως τὰ κατὰ τὸν λόγον καὶ τὰ κατὰ τὴν αἴσθησιν. κατὰ μὲν γὰρ τὸν λόγον τὰ καθόλου πρότερα κατὰ δὲ τὴν αἴσθησιν τὰ καθ' ἕκαστα· καὶ κατὰ τὸν λόγον

δὲ τὸ συμβεβηκὸς τοῦ ὅλου πρότερον, οἷον τὸ μουσικὸν τοῦ μουσικοῦ ἀνθρώπου· οὐ γὰρ ἔσται ὁ λόγος ὅλος ἄνευ τοῦ μέρους· καίτοι οὐκ ἐνδέχεται μουσικὸν εἶναι μὴ ὄντος μουσικοῦ τινός. ἔτι πρότερα λέγεται τὰ τῶν προτέρων πάθη, οἷον εὐθύτης λειότητος· τὸ μὲν [1019a] γὰρ γραμμῆς καθ' αὐτὴν πάθος τὸ δὲ ἐπιφανείας. τὰ μὲν δὴ οὕτω λέγεται πρότερα καὶ ὕστερα, τὰ δὲ κατὰ φύσιν καὶ οὐσίαν, ὅσα ἐνδέχεται εἶναι ἄνευ ἄλλων, ἐκεῖνα δὲ ἄνευ ἐκείνων μὴ· ἢ διαιρέσει ἐχρήσατο Πλάτων. (ἐπεὶ δὲ τὸ εἶναι πολλαχῶς, πρῶτον μὲν τὸ ὑποκείμενον πρότερον, διὸ ἡ οὐσία πρότερον, ἔπειτα ἄλλως τὰ κατὰ δύναμιν καὶ κατ' ἐντελέχειαν· τὰ μὲν γὰρ κατὰ δύναμιν πρότερά ἐστι τὰ δὲ κατὰ ἐντελέχειαν, οἷον κατὰ δύναμιν μὲν ἡ ἡμίσεια τῆς ὅλης καὶ τὸ μόριον τοῦ ὅλου καὶ ἡ ὕλη τῆς οὐσίας, κατ' ἐντελέχειαν δ' ὕστερον· διαλυθέντος γὰρ κατ' ἐντελέχειαν ἔσται.) τρόπον δὴ τινα πάντα τὰ πρότερον καὶ ὕστερον λεγόμενα κατὰ ταῦτα λέγεται· τὰ μὲν γὰρ κατὰ γένεσιν ἐνδέχεται ἄνευ τῶν ἐτέρων εἶναι, οἷον τὸ ὅλον τῶν μορίων, τὰ δὲ κατὰ φθοράν, οἷον τὸ μόριον τοῦ ὅλου. ὁμοίως δὲ καὶ τὰλλα.

Δύναμις λέγεται ἡ μὲν ἀρχὴ κινήσεως ἢ μεταβολῆς ἡ ἐν ἐτέρῳ ἢ ἡ ἕτερον, οἷον ἡ οἰκοδομικὴ δύναμις ἐστίν ἢ οὐχ ὑπάρχει ἐν τῷ οἰκοδομουμένῳ, ἀλλ' ἡ ἰατρικὴ δύναμις οὕσα ὑπάρχει ἂν ἐν τῷ ἰατρευομένῳ, ἀλλ' οὐχ ἡ ἰατρευόμενος. ἡ μὲν οὖν ὅλως ἀρχὴ μεταβολῆς ἢ κινήσεως λέγεται δύναμις ἐν ἐτέρῳ ἢ ἡ ἕτερον, ἡ δ' ὑφ' ἐτέρου ἢ ἡ ἕτερον (καθ' ἣν γὰρ τὸ πάσχον πάσχει τι, ὅτε μὲν ἐὰν ὁτιοῦν, δυνατόν αὐτό φαμεν εἶναι παθεῖν, ὅτε δ' οὐ κατὰ πᾶν πάθος ἀλλ' ἂν ἐπὶ τὸ βέλτιον). ἔτι ἡ τοῦ καλῶς τοῦτ' ἐπιτελεῖν ἢ κατὰ προαίρεσιν· ἐνίοτε γὰρ τοὺς μόνον ἂν πορευθέντας ἢ εἰπόντας, μὴ καλῶς δὲ ἢ μὴ ὡς προείλοντο, οὗ φαμεν δύνασθαι λέγειν ἢ βαδίζειν· ὁμοίως δὲ καὶ ἐπὶ τοῦ πάσχειν. ἔτι ὅσαι ἕξεις καθ' ἃς ἀπαθῇ ὅλως ἢ ἀμετάβλητα ἢ μὴ ῥαδίως ἐπὶ τὸ χεῖρον εὐμετακίνητα, δυνάμεις λέγονται· κλᾶται μὲν γὰρ καὶ συντριβεται καὶ κάμπτεται καὶ ὅλως φθείρεται οὐ τῷ δύνασθαι ἀλλὰ τῷ μὴ δύνασθαι καὶ ἐλλείπειν τινός· ἀπαθῇ δὲ τῶν τοιούτων ἃ μόλις καὶ ἡρέμα πάσχει διὰ δύναμιν καὶ τῷ δύνασθαι καὶ τῷ ἔχειν πῶς. λεγομένης δὲ τῆς δυνάμεως τοσαυταχῶς, καὶ τὸ δυνατόν ἔνα μὲν τρόπον λεχθήσεται τὸ ἔχον κινήσεως ἀρχὴν ἢ μεταβολῆς (καὶ γὰρ τὸ στατικὸν δυνατόν τι) ἐν ἐτέρῳ ἢ ἡ ἕτερον, ἔνα δ' ἐὰν ἔχη [1019b] τι αὐτοῦ ἄλλο δύναμιν τοιαύτην, ἔνα δ' ἐὰν ἔχη μεταβάλλειν ἐφ' ὁτιοῦν δύναμιν, εἴτ' ἐπὶ τὸ χεῖρον εἴτ' ἐπὶ τὸ βέλτιον (καὶ γὰρ τὸ φθειρόμενον δοκεῖ δυνατόν εἶναι φθειρεσθαι, ἢ οὐκ ἂν φθαρῆναι εἰ ἦν ἀδύνατον· νῦν δὲ ἔχει τινὰ διάθεσιν καὶ αἰτίαν καὶ ἀρχὴν τοῦ τοιούτου πάθους· ὅτε μὲν δὴ τῷ ἔχειν τι δοκεῖ, ὅτε δὲ τῷ ἐστερῆσθαι τοιοῦτον εἶναι· εἰ δ' ἡ στέρησίς ἐστιν ἕξις πῶς, πάντα τῷ ἔχειν ἂν εἴη τι, [εἰ δὲ μὴ] ὥστε τῷ τε ἔχειν ἕξιν τινὰ καὶ ἀρχὴν

ἐστὶ δυνατόν [ὁμωνύμως] καὶ τῷ ἔχειν τὴν τούτου στέρησιν, εἰ ἐνδέχεται ἔχειν στέρησιν· <εἰ δὲ μή, ὁμωνύμως>· ἓνα δὲ τῷ μὴ ἔχειν αὐτοῦ δύναμιν ἢ ἀρχὴν ἄλλο ἢ ἢ ἄλλο φθαρτικὴν. ἔτι δὲ ταῦτα πάντα ἢ τῷ μόνον ἂν συμβῆναι γενέσθαι ἢ μὴ γενέσθαι, ἢ τῷ καλῶς. καὶ γὰρ ἐν τοῖς ἀψύχοις ἔνεστιν ἡ τοιαύτη δύναμις, οἷον ἐν τοῖς ὀργάνοις· τὴν μὲν γὰρ δύνασθαι φασὶ φθέγγεσθαι λύραν, τὴν δ' οὐδέν, ἂν ἢ μὴ εὐφωνος. ἀδυναμία δὲ ἐστὶ στέρησις δυνάμεως καὶ τῆς τοιαύτης ἀρχῆς οἷα εἴρηται, ἢ ὅλως ἢ τῷ πεφυκότει ἔχειν, ἢ καὶ ὅτε πέφυκεν ἤδη ἔχειν· οὐ γὰρ ὁμοίως ἂν φαῖεν ἀδύνατον εἶναι γεννᾶν παῖδα καὶ ἄνδρα καὶ εὐνοῦχον. ἔτι δὲ καθ' ἑκατέραν δύναμιν ἔστιν ἀδυναμία ἀντικειμένη, τῇ τε μόνον κινητικῇ καὶ τῇ καλῶς κινητικῇ. καὶ ἀδύνατα δὴ τὰ μὲν κατὰ τὴν ἀδυναμίαν ταύτην λέγεται, τὰ δὲ ἄλλον τρόπον, οἷον δυνατόν τε καὶ ἀδύνατον, ἀδύνατον μὲν οὐ τὸ ἐναντίον ἐξ ἀνάγκης ἀληθές (οἷον τὸ τὴν διάμετρον σύμμετρον εἶναι ἀδύνατον ὅτι ψεῦδος τὸ τοιοῦτον οὐ τὸ ἐναντίον οὐ μόνον ἀληθές ἀλλὰ καὶ ἀνάγκη [ἀσύμμετρον εἶναι]· τὸ ἄρα σύμμετρον οὐ μόνον ψεῦδος ἀλλὰ καὶ ἐξ ἀνάγκης ψεῦδος)· τὸ δ' ἐναντίον τούτῳ, τὸ δυνατόν, ὅταν μὴ ἀναγκαῖον ἢ τὸ ἐναντίον ψεῦδος εἶναι, οἷον τὸ καθῆσθαι ἄνθρωπον δυνατόν· οὐ γὰρ ἐξ ἀνάγκης τὸ μὴ καθῆσθαι ψεῦδος. τὸ μὲν οὖν δυνατόν ἓνα μὲν τρόπον, ὥσπερ εἴρηται, τὸ μὴ ἐξ ἀνάγκης ψεῦδος σημαίνει, ἓνα δὲ τὸ ἀληθές [εἶναι], ἓνα δὲ τὸ ἐνδεχόμενον ἀληθές εἶναι. κατὰ μεταφορὰν δὲ ἡ ἐν γεωμετρίᾳ λέγεται δύναμις. ταῦτα μὲν οὖν τὰ δυνατὰ οὐ κατὰ δύναμιν· τὰ δὲ λεγόμενα κατὰ δύναμιν πάντα λέγεται πρὸς [1020a] τὴν πρώτην [μίαν]· αὕτη δ' ἐστὶν ἀρχὴ μεταβολῆς ἐν ἄλλῳ ἢ ἢ ἄλλο. τὰ γὰρ ἄλλα λέγεται δυνατὰ τῷ τὰ μὲν ἔχειν αὐτῶν ἄλλο τι τοιαύτην δύναμιν τὰ δὲ μὴ ἔχειν τὰ δὲ ὡδὶ ἔχειν. ὁμοίως δὲ καὶ τὰ ἀδύνατα. ὥστε ὁ κύριος ὅρος τῆς πρώτης δυνάμεως ἂν εἴη ἀρχὴ μεταβλητικὴ ἐν ἄλλῳ ἢ ἢ ἄλλο.

Ποσὸν λέγεται τὸ διαιρετὸν εἰς ἐνυπάρχοντα ὧν ἑκάτερον ἢ ἑκαστον ἓν τι καὶ τόδε τι πέφυκεν εἶναι. πλῆθος μὲν οὖν ποσόν τι ἐὰν ἀριθμητὸν ἢ, μέγεθος δὲ ἂν μετρητὸν ἢ. λέγεται δὲ πλῆθος μὲν τὸ διαιρετὸν δυνάμει εἰς μὴ συνεχῇ, μέγεθος δὲ τὸ εἰς συνεχῇ· μεγέθους δὲ τὸ μὲν ἐφ' ἐν συνεχές μῆκος τὸ δ' ἐπὶ δύο πλάτος τὸ δ' ἐπὶ τρία βάθος. τούτων δὲ πλῆθος μὲν τὸ πεπερασμένον ἀριθμὸς μῆκος δὲ γραμμὴ πλάτος δὲ ἐπιφάνεια βάθος δὲ σῶμα. ἔτι τὰ μὲν λέγεται καθ' αὐτὰ ποσά, τὰ δὲ κατὰ συμβεβηκός, οἷον ἡ μὲν γραμμὴ ποσόν τι καθ' ἑαυτό, τὸ δὲ μουσικὸν κατὰ συμβεβηκός. τῶν δὲ καθ' αὐτὰ τὰ μὲν κατ' οὐσίαν ἐστίν, οἷον ἡ γραμμὴ ποσόν τι (ἐν γὰρ τῷ λόγῳ τῷ τί ἐστὶ λέγοντι τὸ ποσόν τι ὑπάρχει), τὰ δὲ πάθη καὶ ἕξεις τῆς τοιαύτης ἐστὶν οὐσίας, οἷον τὸ πολὺ καὶ τὸ ὀλίγον, καὶ μακρὸν καὶ βραχύ, καὶ πλατὺ καὶ στενόν, καὶ βαθὺ καὶ ταπεινόν, καὶ βαρὺ καὶ κοῦφον, καὶ τὰ ἄλλα τὰ τοιαῦτα. ἔστι δὲ καὶ τὸ μέγα καὶ τὸ μικρὸν καὶ μείζον καὶ ἔλαττον, καὶ καθ' αὐτὰ καὶ πρὸς ἄλληλα

λεγόμενα, τοῦ ποσοῦ πάθη καθ' αὐτά· μεταφέρονται μέντοι καὶ ἐπ' ἄλλα ταῦτα τὰ ὀνόματα. τῶν δὲ κατὰ συμβεβηκὸς λεγομένων ποσῶν τὰ μὲν οὕτως λέγεται ὥσπερ ἐλέχθη ὅτι τὸ μουσικὸν ποσὸν καὶ τὸ λευκὸν τῷ εἶναι ποσόν τι ὧ ὑπάρχουσι, τὰ δὲ ὡς κίνησις καὶ χρόνος· καὶ γὰρ ταῦτα πόσ' ἄττα λέγεται καὶ συνεχῇ τῷ ἐκεῖνα διαιρετὰ εἶναι ὧν ἔστι ταῦτα πάθη. λέγω δὲ οὐ τὸ κινούμενον ἀλλ' ὃ ἐκινήθη· τῷ γὰρ ποσὸν εἶναι ἐκεῖνο καὶ ἡ κίνησις ποσῇ, ὃ δὲ χρόνος τῷ ταύτην.

[Τὸ] ποιὸν λέγεται ἓνα μὲν τρόπον ἢ διαφορὰ τῆς οὐσίας, οἷον ποιόν τι ἄνθρωπος ζῶον ὅτι δίπουν, ἵππος δὲ τετράπουν, καὶ κύκλος ποιόν τι σχῆμα ὅτι ἄγωνιον, ὡς τῆς διαφορᾶς [1020b] τῆς κατὰ τὴν οὐσίαν ποιότητος οὔσης· - ἓνα μὲν δὴ τρόπον τοῦτον λέγεται ἢ ποιότης διαφορὰ οὐσίας, ἓνα δὲ ὡς τὰ ἀκίνητα καὶ τὰ μαθηματικά, ὥσπερ οἱ ἀριθμοὶ ποιοὶ τινες, οἷον οἱ σύνθετοι καὶ μὴ μόνον ἐφ' ἓν ὄντες ἀλλ' ὧν μίμημα τὸ ἐπίπεδον καὶ τὸ στερεόν (οὗτοι δ' εἰσὶν οἱ ποσάκις ποσοὶ ἢ ποσάκις ποσάκις ποσοί), καὶ ὅλως ὃ παρὰ τὸ ποσὸν ὑπάρχει ἐν τῇ οὐσίᾳ· οὐσία γὰρ ἐκάστου ὃ ἅπαξ, οἷον τῶν ἕξ οὐχ ὃ δις ἢ τρίς εἰσὶν ἀλλ' ὃ ἅπαξ· ἕξ γὰρ ἅπαξ ἕξ. ἔτι ὅσα πάθη τῶν κινουμένων οὐσιῶν, οἷον θερμότης καὶ ψυχρότης, καὶ λευκότης καὶ μελανία, καὶ βαρύτης καὶ κουφότης, καὶ ὅσα τοιαῦτα, καθ' ἃ λέγονται καὶ ἀλλοιοῦσθαι τὰ σώματα μεταβαλλόντων. ἔτι κατ' ἀρετὴν καὶ κακίαν καὶ ὅλως τὸ κακὸν καὶ ἀγαθόν. σχεδὸν δὴ κατὰ δύο τρόπους λέγοιτ' ἂν τὸ ποιόν, καὶ τούτων ἓνα τὸν κυριώτατον· πρώτη μὲν γὰρ ποιότης ἢ τῆς οὐσίας διαφορὰ (ταύτης δέ τι καὶ ἡ ἐν τοῖς ἀριθμοῖς ποιότης μέρος· διαφορὰ γάρ τις οὐσιῶν, ἀλλ' ἢ οὐ κινουμένων ἢ οὐχ ἢ κινούμενα), τὰ δὲ πάθη τῶν κινουμένων ἢ κινούμενα, καὶ αἱ τῶν κινήσεων διαφοραί. ἀρετὴ δὲ καὶ κακία τῶν παθημάτων μέρος τι· διαφορὰς γὰρ δηλοῦσι τῆς κινήσεως καὶ τῆς ἐνεργείας, καθ' ἃς ποιοῦσιν ἢ πάσχουσι καλῶς ἢ φαύλως τὰ ἐν κινήσει ὄντα· τὸ μὲν γὰρ ὡδὶ δυνάμενον κινεῖσθαι ἢ ἐνεργεῖν ἀγαθὸν τὸ δ' ὡδὶ καὶ ἐναντίως μοχθηρόν. μάλιστα δὲ τὸ ἀγαθὸν καὶ τὸ κακὸν σημαίνει τὸ ποιὸν ἐπὶ τῶν ἐμψύχων, καὶ τούτων μάλιστα ἐπὶ τοῖς ἔχουσι προαίρεσιν.

Πρὸς τι λέγεται τὰ μὲν ὡς διπλάσιον πρὸς ἥμισυ καὶ τριπλάσιον πρὸς τριτημόριον, καὶ ὅλως πολλαπλάσιον πρὸς πολλοστημόριον καὶ ὑπερέχον πρὸς ὑπερεχόμενον· τὰ δ' ὡς τὸ θερμαντικὸν πρὸς τὸ θερμαντὸν καὶ τὸ τμητικὸν πρὸς τὸ τμητόν, καὶ ὅλως τὸ ποιητικὸν πρὸς τὸ παθητικόν· τὰ δ' ὡς τὸ μετρητὸν πρὸς τὸ μέτρον καὶ ἐπιστητὸν πρὸς ἐπιστήμην καὶ αἰσθητὸν πρὸς αἴσθησιν. λέγεται δὲ τὰ μὲν πρῶτα κατ' ἀριθμὸν ἢ ἀπλῶς ἢ ὠρισμένως, πρὸς αὐτοὺς ἢ πρὸς ἓν (οἷον τὸ μὲν διπλάσιον πρὸς ἓν ἀριθμὸς ὠρισμένος, τὸ δὲ πολλαπλάσιον κατ' ἀριθμὸν πρὸς ἓν, οὐχ ὠρισμένον δέ, οἷον τόνδε [1021a] ἢ



τόνδε· τὸ δὲ ἡμιόλιον πρὸς τὸ ὑφημιόλιον κατ' ἀριθμὸν πρὸς ἀριθμὸν ὠρισμένον· τὸ δ' ἐπιμόριον πρὸς τὸ ὑπεπιμόριον κατὰ ἀόριστον, ὥσπερ τὸ πολλαπλάσιον πρὸς τὸ ἕν· τὸ δ' ὑπερέχον πρὸς τὸ ὑπερεχόμενον ὅλως ἀόριστον κατ' ἀριθμόν· ὁ γὰρ ἀριθμὸς σύμμετρος, κατὰ μὴ συμμέτρου δὲ ἀριθμὸς οὐ λέγεται, τὸ δὲ ὑπερέχον πρὸς τὸ ὑπερεχόμενον τοσοῦτόν τε ἐστὶ καὶ ἔτι, τοῦτο δ' ἀόριστον· ὁπότερον γὰρ ἔτυχεν ἐστίν, ἢ ἴσον ἢ οὐκ ἴσον· ταῦτά τε οὖν τὰ πρὸς τι πάντα κατ' ἀριθμὸν λέγεται καὶ ἀριθμοῦ πάθη, καὶ ἔτι τὸ ἴσον καὶ ὅμοιον καὶ ταῦτ' ὅσον κατ' ἄλλον τρόπον (κατὰ γὰρ τὸ ἕν λέγεται πάντα, ταῦτά μὲν γὰρ ὧν μία ἡ οὐσία, ὅμοια δ' ὧν ἡ ποιότης μία, ἴσα δὲ ὧν τὸ ποσὸν ἕν· τὸ δ' ἕν τοῦ ἀριθμοῦ ἀρχὴ καὶ μέτρον, ὥστε ταῦτα πάντα πρὸς τι λέγεται κατ' ἀριθμὸν μὲν, οὐ τὸν αὐτὸν δὲ τρόπον)· τὰ δὲ ποιητικὰ καὶ παθητικὰ κατὰ δυνάμιν ποιητικὴν καὶ παθητικὴν καὶ ἐνεργείας τὰς τῶν δυνάμεων, οἷον τὸ θερμαντικὸν πρὸς τὸ θερμαντὸν ὅτι δύνатаι, καὶ πάλιν τὸ θερμαῖνον πρὸς τὸ θερμαινόμενον καὶ τὸ τέμνον πρὸς τὸ τεμνόμενον ὡς ἐνεργοῦντα. τῶν δὲ κατ' ἀριθμὸν οὐκ εἰσὶν ἐνέργειαι ἄλλ' ἢ ὃν τρόπον ἐν ἐτέροις εἴρηται· αἱ δὲ κατὰ κίνησιν ἐνέργειαι οὐχ ὑπάρχουσιν. τῶν δὲ κατὰ δυνάμιν καὶ κατὰ χρόνους ἤδη λέγονται πρὸς τι οἷον τὸ πεποιηκὸς πρὸς τὸ πεποιημένον καὶ τὸ ποιῆσον πρὸς τὸ ποιησόμενον. οὕτω γὰρ καὶ πατήρ υἱοῦ λέγεται πατήρ· τὸ μὲν γὰρ πεποιηκὸς τὸ δὲ πεπονθὸς τί ἐστίν. ἔτι ἔνια κατὰ στέρησιν δυνάμεως, ὥσπερ τὸ ἀδύνατον καὶ ὅσα οὕτω λέγεται, οἷον τὸ ἀόρατον. τὰ μὲν οὖν κατ' ἀριθμὸν καὶ δυνάμιν λεγόμενα πρὸς τι πάντα ἐστὶ πρὸς τι τῷ ὅπερ ἐστὶν ἄλλου λέγεσθαι αὐτὸ ὅ ἐστιν, ἀλλὰ μὴ τῷ ἄλλο πρὸς ἐκεῖνο· τὸ δὲ μετρητὸν καὶ τὸ ἐπιστητὸν καὶ τὸ διανοητὸν τῷ ἄλλο πρὸς αὐτὸ λέγεσθαι πρὸς τι λέγονται. τό τε γὰρ διανοητὸν σημαίνει ὅτι ἐστὶν αὐτοῦ διάνοια, οὐκ ἔστι δ' ἡ διάνοια πρὸς τοῦτο οὐ ἐστὶ διάνοια (δὶς γὰρ ταῦτόν εἰρημένον ἂν εἴη), ὁμοίως δὲ καὶ τινὸς ἐστὶν ἡ ὄψις ὄψις, οὐχ [1021b] οὐ ἐστὶν ὄψις (καίτοι γ' ἀληθὲς τοῦτο εἰπεῖν) ἀλλὰ πρὸς χρῶμα ἢ πρὸς ἄλλο τι τοιοῦτον. ἐκείνως δὲ δὶς τὸ αὐτὸ λεχθήσεται, ὅτι ἐστὶν οὐ ἐστὶν ἡ ὄψις. τὰ μὲν οὖν καθ' ἑαυτὰ λεγόμενα πρὸς τι τὰ μὲν οὕτω λέγεται, τὰ δὲ ἂν τὰ γένη αὐτῶν ἢ τοιαῦτα, οἷον ἡ ἰατρικὴ τῶν πρὸς τι ὅτι τὸ γένος αὐτῆς ἡ ἐπιστήμη δοκεῖ εἶναι πρὸς τι· ἔτι καθ' ὅσα τὰ ἔχοντα λέγεται πρὸς τι, οἷον ἰσότης ὅτι τὸ ἴσον καὶ ὁμοιότης ὅτι τὸ ὅμοιον· τὰ δὲ κατὰ συμβεβηκός, οἷον ἄνθρωπος πρὸς τι ὅτι συμβέβηκεν αὐτῷ διπλασίῳ εἶναι, τοῦτο δ' ἐστὶ τῶν πρὸς τι· ἢ τὸ λευκόν, εἰ τῷ αὐτῷ συμβέβηκε διπλασίῳ καὶ λευκῷ εἶναι.

Τέλειον λέγεται ἐν μὲν οὐ μὴ ἔστιν ἔξω τι λαβεῖν μηδὲ ἐν μόριον (οἷον χρόνος τέλειος ἐκάστου οὗτος οὐ μὴ ἔστιν ἔξω λαβεῖν χρόνον τινὰ ὃς τούτου μέρος ἐστὶ τοῦ χρόνου), καὶ τὸ κατ' ἀρετὴν καὶ τὸ εὐ μὴ ἔχον ὑπερβολὴν πρὸς τὸ γένος, οἷον τέλειος ἰατρὸς καὶ τέλειος αὐλητὴς ὅταν κατὰ τὸ εἶδος

τῆς οἰκείας ἀρετῆς μηδὲν ἐλλείπωσιν (οὕτω δὲ μεταφέροντες καὶ ἐπὶ τῶν κακῶν λέγομεν συκοφάντην τέλειον καὶ κλέπτην τέλειον, ἐπειδὴ καὶ ἀγαθοὺς λέγομεν αὐτούς, οἷον κλέπτην ἀγαθὸν καὶ συκοφάντην ἀγαθόν· καὶ ἡ ἀρετὴ τελειώσις τις· ἕκαστον γὰρ τότε τέλειον καὶ οὐσία πᾶσα τότε τελεία, ὅταν κατὰ τὸ εἶδος τῆς οἰκείας ἀρετῆς μηδὲν ἐλλείπη μόνιον τοῦ κατὰ φύσιν μεγέθους). ἔτι οἷς ὑπάρχει τὸ τέλος, σπουδαῖον <ὄν>, ταῦτα λέγεται τέλεια· κατὰ γὰρ τὸ ἔχειν τὸ τέλος τέλεια, ὥστ' ἐπεὶ τὸ τέλος τῶν ἐσχάτων τί ἐστι, καὶ ἐπὶ τὰ φαῦλα μεταφέροντες λέγομεν τελείως ἀπολωλέναι καὶ τελείως ἐφθάρθαι, ὅταν μηδὲν ἐλλείπη τῆς φθορᾶς καὶ τοῦ κακοῦ ἀλλ' ἐπὶ τῷ ἐσχάτῳ ἢ διὸ καὶ ἡ τελευτὴ κατὰ μεταφορὰν λέγεται τέλος, ὅτι ἄμφω ἔσχατα· τέλος δὲ καὶ τὸ οὐ ἔνεκα ἔσχατον. τὰ μὲν οὖν καθ' αὐτὰ λεγόμενα τέλεια τοσαυταχῶς λέγεται, τὰ μὲν τῷ κατὰ τὸ εὖ μηδὲν ἐλλείπειν μηδ' ἔχειν ὑπερβολὴν μηδὲ ἔξω τι λαβεῖν, τὰ δ' ὅλως κατὰ τὸ μὴ ἔχειν ὑπερβολὴν ἐν ἐκάστῳ γένοι μηδ' εἶναι τι ἔξω· τὰ δὲ ἄλλα ἤδη κατὰ ταῦτα τῷ ἢ ποιεῖν τι τοιοῦτον ἢ ἔχειν ἢ ἀρμόττειν τούτῳ ἢ ἀμῶς γέ πως λέγεσθαι πρὸς τὰ πρῶτως λεγόμενα τέλεια.

Πέρας λέγεται τό τε ἔσχατον ἐκάστου καὶ οὐ ἔξω μηδὲν ἔστι λαβεῖν πρῶτου καὶ οὐ ἔσω πάντα πρῶτου, καὶ ὃ ἂν ἢ εἶδος μεγέθους ἢ ἔχοντος μέγεθος, καὶ τὸ τέλος ἐκάστου (τοιοῦτον δ' ἐφ' ὃ ἡ κίνησις καὶ ἡ πρᾶξις, καὶ οὐκ ἄφ' οὐ - ὅτε δὲ ἄμφω, καὶ ἄφ' οὐ καὶ ἐφ' ὃ καὶ τὸ οὐ ἔνεκα), καὶ ἡ οὐσία ἢ ἐκάστου καὶ τὸ τί ἦν εἶναι ἐκάστῳ· τῆς γνώσεως γὰρ τοῦτο πέρας· εἰ δὲ τῆς γνώσεως, καὶ τοῦ πράγματος. ὥστε φανερόν ὅτι ὁσαυχῶς τε ἡ ἀρχὴ λέγεται, τοσαυταχῶς καὶ τὸ πέρας, καὶ ἔτι πλεοναχῶς· ἡ μὲν γὰρ ἀρχὴ πέρας τι, τὸ δὲ πέρας οὐ πᾶν ἀρχή.

Τὸ καθ' ὃ λέγεται πολλαχῶς, ἓνα μὲν τρόπον τὸ εἶδος καὶ ἡ οὐσία ἐκάστου πράγματος, οἷον καθ' ὃ ἀγαθός, αὐτὸ ἀγαθόν, ἓνα δὲ ἐν ᾧ πρῶτω πέφυκε γίγνεσθαι, οἷον τὸ χρῶμα ἐν τῇ ἐπιφανείᾳ. τὸ μὲν οὖν πρῶτως λεγόμενον καθ' ὃ τὸ εἶδος ἐστι, δευτέρως δὲ ὡς ἡ ὕλη ἐκάστου καὶ τὸ ὑποκείμενον ἐκάστῳ πρῶτον. ὅλως δὲ τὸ καθ' ὃ ἰσαχῶς καὶ τὸ αἴτιον ὑπάρξει· κατὰ τί γὰρ ἐλήλυθεν ἢ οὐ ἔνεκα ἐλήλυθε λέγεται, καὶ κατὰ τί παραλελόγισται ἢ συλλελόγισται, ἢ τί τὸ αἴτιον τοῦ συλλογισμοῦ ἢ παραλογισμοῦ. ἔτι δὲ τὸ καθ' ὃ τὸ κατὰ θέσιν λέγεται, καθ' ὃ ἔστηκεν ἢ καθ' ὃ βαδίζει· πάντα γὰρ ταῦτα τόπον σημαίνει καὶ θέσιν. ὥστε καὶ τὸ καθ' αὐτὸ πολλαχῶς ἀνάγκη λέγεσθαι. ἐν μὲν γὰρ καθ' αὐτὸ τὸ τί ἦν εἶναι ἐκάστῳ, οἷον ὁ Καλλίας καθ' αὐτὸν Καλλίας καὶ τὸ τί ἦν εἶναι Καλλία· ἐν δὲ ὅσα ἐν τῷ τί ἐστίν ὑπάρχει, οἷον ζῶον ὁ Καλλίας καθ' αὐτόν· ἐν γὰρ τῷ λόγῳ ἐνυπάρχει τὸ ζῶον· ζῶον γάρ τι ὁ Καλλίας. ἔτι δὲ εἰ ἐν αὐτῷ δέδεκται πρῶτω

ἢ τῶν αὐτοῦ τινί, οἷον ἡ ἐπιφάνεια λευκὴ καθ' ἑαυτήν, καὶ ζῆ ὁ ἄνθρωπος καθ' αὐτόν· ἡ γὰρ ψυχὴ μέρος τι τοῦ ἀνθρώπου, ἐν ᾗ πρώτη τὸ ζῆν. ἔτι οὐ μὴ ἔστιν ἄλλο αἷτιον· τοῦ γὰρ ἀνθρώπου πολλὰ αἷτια, τὸ ζῶον, τὸ δίπουν, ἀλλ' ὅμως καθ' αὐτὸν ἄνθρωπος ὁ ἀνθρώπος ἐστίν. ἔτι ὅσα μόνῳ ὑπάρχει καὶ ἢ μόνον δι' αὐτὸ κεχωρισμένον καθ' αὐτό.

[1022b] Διάθεσις λέγεται τοῦ ἔχοντος μέρη τάξις ἢ κατὰ τόπον ἢ κατὰ δύναμιν ἢ κατ' εἶδος· θέσιν γὰρ δεῖ τινὰ εἶναι, ὥσπερ καὶ τοῦνομα δηλοῖ ἡ διάθεσις.

Ἐξίς δὲ λέγεται ἓνα μὲν τρόπον οἷον ἐνέργειά τις τοῦ ἔχοντος καὶ ἐχομένου, ὥσπερ πρᾶξις τις ἢ κίνησις (ὅταν γὰρ τὸ μὲν ποιῇ τὸ δὲ ποιῇται, ἔστι ποίησις μεταξύ· οὕτω καὶ τοῦ ἔχοντος ἐσθῆτα καὶ τῆς ἐχομένης ἐσθῆτος ἔστι μεταξύ ἔξις)· - ταύτην μὲν οὖν φανερόν ὅτι οὐκ ἐνδέχεται ἔχειν ἔξιν (εἰς ἄπειρον γὰρ βαδιεῖται, εἰ τοῦ ἐχομένου ἔσται ἔχειν τὴν ἔξιν), ἄλλον δὲ τρόπον ἔξις λέγεται διάθεσις καθ' ἣν ἢ εὖ ἢ κακῶς διάκειται τὸ διακείμενον, καὶ ἢ καθ' αὐτὸ ἢ πρὸς ἄλλο, οἷον ἡ ὑγίεια ἔξις τις· διάθεσις γὰρ ἐστὶ τοιαύτη. ἔτι ἔξις λέγεται ἂν ἢ μόριον διαθέσεως τοιαύτης· διὸ καὶ ἡ τῶν μερῶν ἀρετὴ ἔξις τίς ἐστίν.

Πάθος λέγεται ἓνα μὲν τρόπον ποιότης καθ' ἣν ἀλλοιοῦσθαι ἐνδέχεται, οἷον τὸ λευκὸν καὶ τὸ μέλαν, καὶ γλυκὺ καὶ πικρόν, καὶ βαρύτης καὶ κουφότης, καὶ ὅσα ἄλλα τοιαῦτα· ἓνα δὲ αἱ τούτων ἐνέργειαι καὶ ἀλλοιώσεις ἤδη. ἔτι τούτων μᾶλλον αἱ βλαβεραὶ ἀλλοιώσεις καὶ κινήσεις, καὶ μάλιστα αἱ λυπηραὶ βλάβαι. ἔτι τὰ μεγέθη τῶν συμφορῶν καὶ λυπηρῶν πάθη λέγεται.

Στέρησις λέγεται ἓνα μὲν τρόπον ἂν μὴ ἔχη τι τῶν πεφυκότων ἔχεσθαι, κἂν μὴ αὐτὸ ἢ πεφυκὸς ἔχειν, οἷον φυτὸν ὁμμάτων ἐστερῆσθαι λέγεται· ἓνα δὲ ἂν πεφυκὸς ἔχειν, ἢ αὐτὸ ἢ τὸ γένος, μὴ ἔχη, οἷον ἄλλως ἄνθρωπος ὁ τυφλὸς ὅψεως ἐστέρηται καὶ ἀσπάλαξ, τὸ μὲν κατὰ τὸ γένος τὸ δὲ καθ' αὐτό. ἔτι ἂν πεφυκὸς καὶ ὅτε πέφυκεν ἔχειν μὴ ἔχη· ἡ γὰρ τυφλότης στερήσις τις, τυφλὸς δ' οὐ κατὰ πᾶσαν ἡλικίαν, ἀλλ' ἐν ᾗ πέφυκεν ἔχειν, ἂν μὴ ἔχη. ὁμοίως δὲ καὶ ἐν ᾧ ἂν ἢ «πεφυκὸς» καὶ καθ' ὃ καὶ πρὸς ὃ καὶ ὥς, ἂν μὴ ἔχη [πεφυκός]. ἔτι ἡ βιαία ἐκάστου ἀφαίρεσις στέρησις λέγεται. καὶ ὁσαυτῶς δὲ αἱ ἀπὸ τοῦ α ἀποφάσεις λέγονται, τοσαυταῶς καὶ αἱ στερήσεις λέγονται· ἄνισον μὲν γὰρ τῷ μὴ ἔχειν ἰσότητα πεφυκὸς λέγεται, ἀόρατον δὲ καὶ τῷ ὅλως μὴ ἔχειν χρῶμα καὶ τῷ φαύλως, καὶ ἄπουν καὶ τῷ μὴ ἔχειν ὅλως πόδας καὶ τῷ φαύλους. ἔτι καὶ τῷ [1023a] μικρὸν ἔχειν, οἷον τὸ ἀπύρηνον· τοῦτο δ' ἐστὶ τὸ φαύλως πως ἔχειν. ἔτι τῷ μὴ ῥαδίως ἢ τῷ μὴ καλῶς, οἷον τὸ ἄτμητον οὐ μόνον τῷ μὴ τέμνεσθαι ἀλλὰ καὶ τῷ μὴ ῥαδίως ἢ μὴ καλῶς. ἔτι τῷ πάντῃ μὴ

ἔχειν· τυφλὸς γὰρ οὐ λέγεται ὁ ἑτερόφθαλμος ἀλλ' ὁ ἐν ἀμφοῖν μὴ ἔχων ὄψιν· διὸ οὐ πᾶς ἀγαθὸς ἢ κακός, ἢ δίκαιος ἢ ἀδίκος, ἀλλὰ καὶ τὸ μεταξύ.

Τὸ ἔχειν λέγεται πολλαχῶς, ἓνα μὲν τρόπον τὸ ἄγειν κατὰ τὴν αὐτοῦ φύσιν ἢ κατὰ τὴν αὐτοῦ ὁρμήν, διὸ λέγεται πυρετός τε ἔχειν τὸν ἄνθρωπον καὶ οἱ τύραννοι τὰς πόλεις καὶ τὴν ἐσθῆτα οἱ ἀμπεχόμενοι· ἓνα δ' ἐν ᾧ ἂν τι ὑπάρχη ὡς δεκτικῶ, οἷον ὁ χαλκὸς ἔχει τὸ εἶδος τοῦ ἀνδριάντος καὶ τὴν νόσον τὸ σῶμα· ἓνα δὲ ὡς τὸ περιέχον τὰ περιεχόμενα· ἐν ᾧ γάρ ἐστι περιέχοντι, ἔχεσθαι ὑπὸ τούτου λέγεται, οἷον τὸ ἀγγεῖον ἔχειν τὸ ὑγρὸν φαμεν καὶ τὴν πόλιν ἀνθρώπους καὶ τὴν ναῦν ναύτας, οὕτω δὲ καὶ τὸ ὅλον ἔχειν τὰ μέρη. ἔτι τὸ κωλύον κατὰ τὴν αὐτοῦ ὁρμήν τι κινεῖσθαι ἢ πράττειν ἔχειν λέγεται τοῦτο αὐτό, οἷον καὶ οἱ κίονες τὰ ἐπικείμενα βάρη, καὶ ὡς οἱ ποιηταὶ τὸν Ἄτλαντα ποιοῦσι τὸν οὐρανὸν ἔχειν ὡς συμπεσόντ' ἂν ἐπὶ τὴν γῆν, ὥσπερ καὶ τῶν φυσιολόγων τινὲς φασιν· τοῦτον δὲ τὸν τρόπον καὶ τὸ συνέχον λέγεται ἃ συνέχει ἔχειν, ὡς διαχωρισθέντα ἂν κατὰ τὴν αὐτοῦ ὁρμήν ἕκαστον. καὶ τὸ ἐν τινι δὲ εἶναι ὁμοτρόπως λέγεται καὶ ἐπομένως τῷ ἔχειν.

Τὸ ἐκ τινος εἶναι λέγεται ἓνα μὲν τρόπον ἐξ οὗ ἐστὶν ὡς ὕλης, καὶ τοῦτο διχῶς, ἢ κατὰ τὸ πρῶτον γένος ἢ κατὰ τὸ ὕστατον εἶδος, οἷον ἔστι μὲν ὡς ἅπαντα τὰ τηκτὰ ἐξ ὕδατος, ἔστι δ' ὡς ἐκ χαλκοῦ ὁ ἀνδριάς· ἓνα δ' ὡς ἐκ τῆς πρώτης κινήσεως ἀρχῆς (οἷον ἐκ τίνος ἢ μάχης; ἐκ λοιδορίας, ὅτι αὕτη ἀρχὴ τῆς μάχης)· ἓνα δ' ἐκ τοῦ συνθέτου ἐκ τῆς ὕλης καὶ τῆς μορφῆς, ὥσπερ ἐκ τοῦ ὅλου τὰ μέρη καὶ ἐκ τῆς Ἰλιάδος τὸ ἔπος καὶ ἐκ τῆς οἰκίας οἱ λίθοι· τέλος μὲν γάρ ἐστιν ἡ μορφή, τέλειον δὲ τὸ ἔχον τέλος. τὰ δὲ ὡς ἐκ τοῦ μέρους τὸ εἶδος, οἷον ἄνθρωπος ἐκ τοῦ δίποδος καὶ ἡ συλλαβὴ ἐκ τοῦ στοιχείου· ἄλλως γὰρ τοῦτο [1023b] καὶ ὁ ἀνδριάς ἐκ χαλκοῦ· ἐκ τῆς αἰσθητῆς γὰρ ὕλης ἢ συνθετῆ οὐσίας, ἀλλὰ καὶ τὸ εἶδος ἐκ τῆς τοῦ εἶδους ὕλης. τὰ μὲν οὖν οὕτω λέγεται, τὰ δ' ἐὰν κατὰ μέρος τι τούτων τις ὑπάρχη τῶν τρόπων, οἷον ἐκ πατρὸς καὶ μητρὸς τὸ τέκνον καὶ ἐκ γῆς τὰ φυτά, ὅτι ἐκ τινος μέρους αὐτῶν. ἓνα δὲ μεθ' ὃ τῷ χρόνῳ, οἷον ἐξ ἡμέρας νύξ καὶ ἐξ εὐδίας χειμών, ὅτι τοῦτο μετὰ τοῦτο· τούτων δὲ τὰ μὲν τῷ ἔχειν μεταβολὴν εἰς ἄλληλα οὕτω λέγεται, ὥσπερ καὶ τὰ νῦν εἰρημένα, τὰ δὲ τῷ κατὰ τὸν χρόνον ἐφεξῆς μόνον, οἷον ἐξ ἰσημερίας ἐγένετο ὁ πλοῦς ὅτι μετ' ἰσημερίαν ἐγένετο, καὶ ἐκ Διονυσίων Θαργήλια ὅτι μετὰ τὰ Διονύσια.

Μέρος λέγεται ἓνα μὲν τρόπον εἰς ὃ διαιρεθῇ ἂν τὸ ποσὸν ὁπωσοῦν (ἀεὶ γὰρ τὸ ἀφαιρούμενον τοῦ ποσοῦ ἢ ποσὸν μέρος λέγεται ἐκείνου, οἷον τῶν τριῶν τὰ δύο μέρος λέγεται πῶς), ἄλλον δὲ τρόπον τὰ καταμετροῦντα τῶν τοιούτων μόνον· διὸ τὰ δύο τῶν τριῶν ἔστι μὲν ὡς λέγεται μέρος, ἔστι δ' ὡς

οὐ. ἔτι εἰς ἃ τὸ εἶδος διαιρεθῇ ἂν ἄνευ τοῦ ποσοῦ, καὶ ταῦτα μόρια λέγεται τούτου· διὸ τὰ εἶδη τοῦ γένους φασὶν εἶναι μόρια. ἔτι εἰς ἃ διαιρεῖται ἢ ἐξ ὧν σύγκειται τὸ ὅλον, ἢ τὸ εἶδος ἢ τὸ ἔχον τὸ εἶδος, οἷον τῆς σφαίρας τῆς χαλκῆς ἢ τοῦ κύβου τοῦ χαλκοῦ καὶ ὁ χαλκὸς μέρος (τοῦτο δ' ἐστὶν ἢ ὅλη ἐν ἢ τὸ εἶδος) καὶ ἡ γωνία μέρος. ἔτι τὰ ἐν τῷ λόγῳ τῷ δηλοῦντι ἕκαστον, καὶ ταῦτα μόρια τοῦ ὅλου· διὸ τὸ γένος τοῦ εἶδους καὶ μέρος λέγεται, ἄλλως δὲ τὸ εἶδος τοῦ γένους μέρος.

Ὅλον λέγεται οὗ τε μηθὲν ἄπεστι μέρος ἐξ ὧν λέγεται ὅλον φύσει, καὶ τὸ περιέχον τὰ περιεχόμενα ὥστε ἔν τι εἶναι ἐκεῖνα· τοῦτο δὲ διχῶς· ἢ γὰρ ὡς ἕκαστον ἐν ἢ ὡς ἐκ τούτων τὸ ἔν. τὸ μὲν γὰρ καθόλου, καὶ τὸ ὅλως λεγόμενον ὡς ὅλον τι ὄν, οὕτως ἐστὶ καθόλου ὡς πολλὰ περιέχον τῷ κατηγορεῖσθαι καθ' ἐκάστου καὶ ἐν ἅπαντα εἶναι ὡς ἕκαστον, οἷον ἄνθρωπον ἵππον θεόν, διότι ἅπαντα ζῶα· τὸ δὲ συνεχὲς καὶ πεπερασμένον, ὅταν ἔν τι ἐκ πλειόνων ἢ, ἐνυπαρχόντων μάλιστα μὲν δυνάμει, εἰ δὲ μή, ἐνεργείᾳ. τούτων δ' αὐτῶν μᾶλλον τὰ φύσει ἢ τέχνῃ τοιαῦτα, ὥσπερ καὶ ἐπὶ τοῦ ἐνὸς ἐλέγομεν, ὡς οὔσης τῆς ὁλότητος ἐνότητός τινος.

[1024a] ἔτι τοῦ ποσοῦ ἔχοντος δὲ ἀρχὴν καὶ μέσον καὶ ἔσχατον, ὅσων μὲν μὴ ποιεῖ ἢ θέσις διαφορὰν, πᾶν λέγεται, ὅσων δὲ ποιεῖ, ὅλον. ὅσα δὲ ἄμφω ἐνδέχεται, καὶ ὅλα καὶ πάντα· ἔστι δὲ ταῦτα ὅσων ἢ μὲν φύσις ἢ αὐτὴ μένει τῇ μεταθέσει, ἢ δὲ μορφῇ οὐ, οἷον κηρὸς καὶ ἱμάτιον· καὶ γὰρ ὅλον καὶ πᾶν λέγεται· ἔχει γὰρ ἄμφω. ὕδωρ δὲ καὶ ὅσα ὑγρὰ καὶ ἀριθμὸς πᾶν μὲν λέγεται, ὅλος δ' ἀριθμὸς καὶ ὅλον ὕδωρ οὐ λέγεται, ἂν μὴ μεταφορᾷ. πάντα δὲ λέγεται ἐφ' οἷς τὸ πᾶν ὡς ἐφ' ἐνί, ἐπὶ τούτοις τὸ πάντα ὡς ἐπὶ διηρημένοις· πᾶς οὗτος ὁ ἀριθμὸς, πᾶσαι αὗται αἱ μονάδες.

Κολοβὸν δὲ λέγεται τῶν ποσῶν οὐ τὸ τυχόν, ἀλλὰ μεριστόν τε δεῖ αὐτὸ εἶναι καὶ ὅλον. τά τε γὰρ δύο οὐ κολοβὰ θατέρου ἀφαιρουμένου ἐνός (οὐ γὰρ ἴσον τὸ καλόβωμα καὶ τὸ λοιπὸν οὐδέποτε· ἐστίν) οὐδ' ὅλως ἀριθμὸς οὐδεὶς· καὶ γὰρ τὴν οὐσίαν δεῖ μένειν· εἰ κύλιξ κολοβός, ἔτι εἶναι κύλικα· ὁ δὲ ἀριθμὸς οὐκέτι ὁ αὐτός. πρὸς δὲ τούτοις κἂν ἀνομοιομερῇ ἢ, οὐδὲ ταῦτα πάντα (ὁ γὰρ ἀριθμὸς ἔστιν ὡς καὶ ἀνόμοια ἔχει μέρη, οἷον δυάδα τριάδα), ἀλλ' ὅλως ὧν μὴ ποιεῖ ἢ θέσις διαφορὰν οὐδὲν κολοβόν, οἷον ὕδωρ ἢ πῦρ, ἀλλὰ δεῖ τοιαῦτα εἶναι ἃ κατὰ τὴν οὐσίαν θέσιν ἔχει. ἔτι συνεχῇ· ἢ γὰρ ἀρμονία ἐξ ἀνομοίων μὲν καὶ θέσιν ἔχει, κολοβὸς δὲ οὐ γίγνεται. πρὸς δὲ τούτοις οὐδ' ὅσα ὅλα, οὐδὲ ταῦτα ὅπου οὖν μορίου στερήσει κολοβά. οὐ γὰρ δεῖ οὔτε τὰ κύρια τῆς οὐσίας οὔτε τὰ ὅπου οὖν ὄντα· οἷον ἂν τρυπηθῇ ἢ κύλιξ, οὐ κολοβός, ἀλλ' ἂν τὸ οὖς ἢ ἀκρωτήριόν τι, καὶ ὁ ἄνθρωπος οὐκ ἔαν

σάρκα ἢ τὸν σπλῆνα, ἀλλ' ἐὰν ἀκρωτήριόν τι, καὶ τοῦτο οὐ πᾶν ἀλλ' ὃ μὴ ἔχει γένεσιν ἀφαιρεθὲν ὅλον. διὰ τοῦτο οἱ φαλακροὶ οὐ κολοβοί.

Γένος λέγεται τὸ μὲν ἐὰν ἢ ἡ γένεσις συνεχῆς τῶν τὸ εἶδος ἐχόντων τὸ αὐτό, οἷον λέγεται ἕως ἂν ἀνθρώπων γένος ἢ, ὅτι ἕως ἂν ἢ ἡ γένεσις συνεχῆς αὐτῶν· τὸ δὲ ἀφ' οὗ ἂν ὥσι πρώτου κινήσαντος εἰς τὸ εἶναι· οὕτω γὰρ λέγονται Ἕλληνες τὸ γένος οἱ δὲ Ἴωνες, τῷ οἱ μὲν ἀπὸ Ἑλληνος οἱ δὲ ἀπὸ Ἴωνος εἶναι πρώτου γεννήσαντος· καὶ μᾶλλον οἱ ἀπὸ τοῦ γεννήσαντος ἢ τῆς ὕλης (λέγονται γὰρ καὶ ἀπὸ τοῦ θήλεος τὸ γένος, οἷον οἱ ἀπὸ Πύρρας). ἔτι δὲ ὥς τὸ ἐπίπεδον [1024b] τῶν σχημάτων γένος τῶν ἐπίπεδων καὶ τὸ στερεὸν τῶν στερεῶν· ἕκαστον γὰρ τῶν σχημάτων τὸ μὲν ἐπίπεδον τοιονδί τὸ δὲ στερεόν ἐστι τοιονδί· τοῦτο δ' ἐστὶ τὸ ὑποκείμενον ταῖς διαφοραῖς. ἔτι ὥς ἐν τοῖς λόγοις τὸ πρῶτον ἐνυπάρχον, ὃ λέγεται ἐν τῷ τί ἐστι, τοῦτο γένος, οὐ διαφορὰι λέγονται αἱ ποιότητες. τὸ μὲν οὖν γένος τοσαυταχῶς λέγεται, τὸ μὲν κατὰ γένεσιν συνεχῇ τοῦ αὐτοῦ εἶδους, τὸ δὲ κατὰ τὸ πρῶτον κινήσαν ὁμοειδές, τὸ δ' ὥς ὕλη· οὗ γὰρ ἡ διαφορὰ καὶ ἡ ποιότης ἐστί, τοῦτ' ἐστὶ τὸ ὑποκείμενον, ὃ λέγομεν ὕλην. ἕτερα δὲ τῷ γένει λέγεται ὡς ἕτερον τὸ πρῶτον ὑποκείμενον καὶ μὴ ἀναλύεται θάτερον εἰς θάτερον μηδ' ἄμφω εἰς ταῦτόν, οἷον τὸ εἶδος καὶ ἡ ὕλη ἕτερον τῷ γένει, καὶ ὅσα καθ' ἕτερον σχῆμα κατηγορίας τοῦ ὄντος λέγεται (τὰ μὲν γὰρ τί ἐστι σημαίνει τῶν ὄντων τὰ δὲ ποιόν τι τὰ δ' ὥς διήρηται πρότερον)· οὐδὲ γὰρ ταῦτα ἀναλύεται οὕτ' εἰς ἄλληλα οὕτ' εἰς ἓν τι.

Τὸ ψεῦδος λέγεται ἄλλον μὲν τρόπον ὥς πρᾶγμα ψεῦδος, καὶ τούτου τὸ μὲν τῷ μὴ συγκεῖσθαι ἢ ἀδύνατον εἶναι συντεθῆναι (ὥσπερ λέγεται τὸ τὴν διάμετρον εἶναι σύμμετρον ἢ τὸ σὲ καθῆσθαι· τούτων γὰρ ψεῦδος τὸ μὲν ἀεὶ τὸ δὲ ποτέ· οὕτω γὰρ οὐκ ὄντα ταῦτα), τὰ δὲ ὅσα ἔστι μὲν ὄντα, πέφυκε μέντοι φαίνεσθαι ἢ μὴ οἷα ἐστίν ἢ ἃ μὴ ἔστιν (οἷον ἡ σκιαγραφία καὶ τὰ ἐνύπνια· ταῦτα γὰρ ἔστι μὲν τι, ἀλλ' οὐχ ὧν ἐμποιεῖ τὴν φαντασίαν)· - πράγματα μὲν οὖν ψευδῇ οὕτω λέγεται, ἢ τῷ μὴ εἶναι αὐτὰ ἢ τῷ τὴν ἀπ' αὐτῶν φαντασίαν μὴ ὄντος εἶναι· λόγος δὲ ψευδῆς ὁ τῶν μὴ ὄντων, ἢ ψευδής, διὸ πᾶς λόγος ψευδῆς ἑτέρου ἢ οὗ ἐστὶν ἀληθῆς, οἷον ὁ τοῦ κύκλου ψευδῆς τριγώνου. ἑκάστου δὲ λόγος ἔστι μὲν ὥς εἷς, ὁ τοῦ τί ἦν εἶναι, ἔστι δ' ὥς πολλοί, ἐπεὶ ταῦτό πως αὐτὸ καὶ αὐτὸ πεπονθός, οἷον Σωκράτης καὶ Σωκράτης μουσικός (ὁ δὲ ψευδῆς λόγος οὐθενός ἐστιν ἀπλῶς λόγος)· διὸ Ἀντισθένης ὤρετο εὐήθως μὴθὲν ἀξιῶν λέγεσθαι πλὴν τῷ οἰκείῳ λόγῳ, ἐν ἐφ' ἑνός· ἐξ ὧν συνέβαινε μὴ εἶναι ἀντιλέγειν, σχεδὸν δὲ μὴδὲ ψεύδεσθαι. ἔστι δ' ἕκαστον λέγειν οὐ μόνον τῷ αὐτοῦ λόγῳ ἀλλὰ καὶ τῷ ἑτέρου, ψευδῶς μὲν καὶ παντελῶς, ἔστι δ' ὥς καὶ ἀληθῶς, [1025a] ὥσπερ τὰ ὀκτὼ διπλάσια τῷ

τῆς δυάδος λόγῳ. τὰ μὲν οὖν οὕτω λέγεται ψευδῇ, ἄνθρωπος δὲ ψευδῆς ὁ εὐχερὴς καὶ προαιρετικὸς τῶν τοιούτων λόγων, μὴ δι' ἕτερόν τι ἀλλὰ δι' αὐτό, καὶ ὁ ἄλλοις ἐμποητικὸς τῶν τοιούτων λόγων, ὥσπερ καὶ τὰ πράγματά φαμεν ψευδῇ εἶναι ὅσα ἐμποιεῖ φαντασίαν ψευδῇ. διὸ ὁ ἐν τῷ Ἰππία λόγος παρακρούεται ὡς ὁ αὐτὸς ψευδῆς καὶ ἀληθής. τὸν δυνάμενον γὰρ ψεύσασθαι λαμβάνει ψευδῇ (οὗτος δ' ὁ εἰδὼς καὶ ὁ φρόνιμος). ἔτι τὸν ἐκόντα φαῦλον βελτίῳ. τοῦτο δὲ ψεῦδος λαμβάνει διὰ τῆς ἐπαγωγῆς - ὁ γὰρ ἐκὼν χολαίνων τοῦ ἄκοντος κρείττων - τὸ χολαίνειν τὸ μιμεῖσθαι λέγων, ἐπεὶ εἴ γε χολὸς ἐκὼν, χείρων ἴσως, ὥσπερ ἐπὶ τοῦ ἥθους, καὶ οὗτος.

Συμβεβηκὸς λέγεται ὃ ὑπάρχει μὲν τινὶ καὶ ἀληθὲς εἰπεῖν, οὐ μέντοι οὕτ' ἐξ ἀνάγκης οὔτε <ὡς> ἐπὶ τὸ πολὺ, οἷον εἴ τις ὀρύττων φυτῷ βόθρον εὔρεθησαυρόν. τοῦτο τοίνυν συμβεβηκὸς τῷ ὀρύττοντι τὸν βόθρον, τὸ εὐρεῖν θησαυρόν· οὔτε γὰρ ἐξ ἀνάγκης τοῦτο ἐκ τούτου ἢ μετὰ τοῦτο, οὔθ' ὡς ἐπὶ τὸ πολὺ ἂν τις φυτεῦν θησαυρόν εὐρίσκει. καὶ μουσικὸς γ' ἂν τις εἴη λευκός· ἀλλ' ἐπεὶ οὔτε ἐξ ἀνάγκης οὔθ' ὡς ἐπὶ τὸ πολὺ τοῦτο γίνεται, συμβεβηκὸς αὐτὸ λέγομεν. ὥστ' ἐπεὶ ἔστιν ὑπάρχον τι καὶ τινί, καὶ ἔνια τούτων καὶ ποὺ καὶ ποτέ, ὃ τι ἂν ὑπάρχη μὲν, ἀλλὰ μὴ διότι τοδὶ ἦν ἢ νῦν ἢ ἐνταῦθα, συμβεβηκὸς ἔσται. οὐδὲ δὴ αἴτιον ὠρισμένον οὐδὲν τοῦ συμβεβηκότος ἀλλὰ τὸ τυχόν· τοῦτο δ' ἄοριστον. συνέβη τῷ εἰς Αἴγιναν ἐλθεῖν, εἰ μὴ διὰ τοῦτο ἀφίκετο ὅπως ἐκεῖ ἔλθῃ, ἀλλ' ὑπὸ χειμῶνος ἐξωσθεὶς ἢ ὑπὸ ληστῶν ληφθεὶς. γέγονε μὲν δὴ ἢ ἔστι τὸ συμβεβηκός, ἀλλ' οὐχ ἢ αὐτὸ ἀλλ' ἢ ἕτερον· ὁ γὰρ χειμῶν αἴτιος τοῦ μὴ ὅπου ἔπλει ἐλθεῖν, τοῦτο δ' ἦν Αἴγινα. λέγεται δὲ καὶ ἄλλως συμβεβηκός, οἷον ὅσα ὑπάρχει ἐκάστω καθ' αὐτὸ μὴ ἐν τῇ οὐσίᾳ ὄντα, οἷον τῷ τριγώνῳ τὸ δύο ὀρθὰς ἔχειν. καὶ ταῦτα μὲν ἐνδέχεται αἰδία εἶναι, ἐκείνων δὲ οὐδέν. λόγος δὲ τούτου ἐν ἐτέροις.

## E

[1025b] Αἱ ἀρχαὶ καὶ τὰ αἴτια ζητεῖται τῶν ὄντων, δῆλον δὲ ὅτι ἢ ὄντα. ἔστι γάρ τι αἴτιον ὑγιείας καὶ εὐεξίας, καὶ τῶν μαθηματικῶν εἰσὶν ἀρχαὶ καὶ στοιχεῖα καὶ αἴτια, καὶ ὅλως δὲ πᾶσα ἐπιστήμη διανοητικὴ ἢ μετέχουσά τι διανοίας περὶ αἰτίας καὶ ἀρχάς ἐστιν ἢ ἀκριβεστέρας ἢ ἀπλουστέρας. ἀλλὰ πᾶσαι αὗται περὶ ὅν τι καὶ γένος τι περιγραφάμεναι περὶ τούτου πραγματεύονται, ἀλλ' οὐχὶ περὶ ὄντος ἀπλῶς οὐδὲ ἢ ὄν, οὐδὲ τοῦ τί ἐστιν οὐθέν· λόγον ποιοῦνται, ἀλλ' ἐκ τούτου, αἰ μὲν αἰσθήσει ποιήσασαι αὐτὸ δῆλον αἰ δ' ὑπόθεσιν λαβοῦσαι τὸ τί ἐστιν, οὕτω τὰ καθ' αὐτὰ ὑπάρχοντα τῷ γένει περὶ ὃ εἰσὶν ἀποδεικνύουσιν ἢ ἀναγκαιότερον ἢ μαλακώτερον· διόπερ φανερόν ὅτι οὐκ ἔστιν ἀπόδειξις οὐσίας οὐδὲ τοῦ τί ἐστιν ἐκ τῆς τοιαύτης

ἐπαγωγῆς, ἀλλὰ τις ἄλλος τρόπος τῆς δηλώσεως. ὁμοίως δὲ οὐδ' εἰ ἔστιν ἡ μὴ ἔστι τὸ γένος περὶ ὃ πραγματεύονται οὐδὲν λέγουσι, διὰ τὸ τῆς αὐτῆς εἶναι διανοίας τό τε τί ἐστὶ δῆλον ποιεῖν καὶ εἰ ἔστιν. - ἐπεὶ δὲ καὶ ἡ φυσικὴ ἐπιστήμη τυγχάνει οὕσα περὶ γένος τι τοῦ ὄντος (περὶ γὰρ τὴν τοιαύτην ἐστὶν οὐσίαν ἐν ἣ ἡ ἀρχὴ τῆς κινήσεως καὶ στάσεως ἐν αὐτῇ), δῆλον ὅτι οὔτε πρακτικὴ ἐστὶν οὔτε ποιητικὴ (τῶν μὲν γὰρ ποιητῶν ἐν τῷ ποιοῦντι ἡ ἀρχή, ἡ νοῦς ἡ τέχνη ἡ δύναμις τις, τῶν δὲ πρακτῶν ἐν τῷ πράττοντι, ἡ προαίρεσις· τὸ αὐτὸ γὰρ τὸ πρακτὸν καὶ προαιρετόν), ὥστε εἰ πᾶσα διάνοια ἡ πρακτικὴ ἡ ποιητικὴ ἡ θεωρητικὴ, ἡ φυσικὴ θεωρητικὴ τις ἂν εἴη, ἀλλὰ θεωρητικὴ περὶ τοιοῦτον ὄν ὃ ἐστὶ δυνατόν κινεῖσθαι, καὶ περὶ οὐσίαν τὴν κατὰ τὸν λόγον ὡς ἐπὶ τὸ πολὺ ὡς οὐ χωριστὴν μόνον. δεῖ δὲ τὸ τί ἦν εἶναι καὶ τὸν λόγον πῶς ἐστὶ μὴ λανθάνειν, ὡς ἄνευ γε τούτου τὸ ζητεῖν μηδὲν ἐστὶ ποιεῖν. ἔστι δὲ τῶν ὀριζομένων καὶ τῶν τί ἐστὶ τὰ μὲν ὡς τὸ σιμὸν τὰ δ' ὡς τὸ κοῖλον. διαφέρει δὲ ταῦτα ὅτι τὸ μὲν σιμὸν συνειλημμένον ἐστὶ μετὰ τῆς ὕλης (ἔστι γὰρ τὸ σιμὸν κοίλη ρίς), ἡ δὲ κοιλότης ἄνευ ὕλης αἰσθητῆς. εἰ δὲ πάντα τὰ φυσικὰ ὁμοίως τῷ [1026a] σιμῷ λέγονται, οἷον ρίς ὀφθαλμὸς πρόσωπον σὰρξ ὅστοῦν, ὅλως ζῶον, φύλλον ρίζα φλοιός, ὅλως φυτόν (οὐθενὸς γὰρ ἄνευ κινήσεως ὁ λόγος αὐτῶν, ἀλλ' ἀεὶ ἔχει ὕλην), δῆλον πῶς δεῖ ἐν τοῖς φυσικοῖς τὸ τί ἐστὶ ζητεῖν καὶ ὀρίζεσθαι, καὶ διότι καὶ περὶ ψυχῆς ἐνίας θεωρῆσαι τοῦ φυσικοῦ, ὅση μὴ ἄνευ τῆς ὕλης ἐστίν. ὅτι μὲν οὖν ἡ φυσικὴ θεωρητικὴ ἐστὶ, φανερόν ἐκ τούτων· ἀλλ' ἔστι καὶ ἡ μαθηματικὴ θεωρητικὴ· ἀλλ' εἰ ἀκινήτων καὶ χωριστῶν ἐστί, νῦν ἄδηλον, ὅτι μέντοι ἔνια μαθήματα ἢ ἀκίνητα καὶ ἢ χωριστὰ θεωρεῖ, δῆλον. εἰ δὲ τί ἐστὶν αἰδῖον καὶ ἀκίνητον καὶ χωριστόν, φανερόν ὅτι θεωρητικῆς τὸ γινῶναι, οὐ μέντοι φυσικῆς γε (περὶ κινήτων γὰρ τινῶν ἡ φυσικὴ) οὐδὲ μαθηματικῆς, ἀλλὰ προτέρας ἀμφοῖν. ἡ μὲν γὰρ φυσικὴ περὶ χωριστὰ μὲν ἀλλ' οὐκ ἀκίνητα, τῆς δὲ μαθηματικῆς ἔνια περὶ ἀκίνητα μὲν οὐ χωριστὰ δὲ ἴσως ἀλλ' ὡς ἐν ὕλῃ· ἡ δὲ πρώτη καὶ περὶ χωριστὰ καὶ ἀκίνητα. ἀνάγκη δὲ πάντα μὲν τὰ αἷτια αἰδῖα εἶναι, μάλιστα δὲ ταῦτα· ταῦτα γὰρ αἷτια τοῖς φανεροῖς τῶν θείων. ὥστε τρεῖς ἂν εἴεν φιλοσοφίαι θεωρητικά, μαθηματικὴ, φυσικὴ, θεολογικὴ (οὐ γὰρ ἄδηλον ὅτι εἴ που τὸ θεῖον ὑπάρχει, ἐν τῇ τοιαύτῃ φύσει ὑπάρχει), καὶ τὴν τιμιωτάτην δεῖ περὶ τὸ τιμιώτατον γένος εἶναι. αἱ μὲν οὖν θεωρητικαὶ τῶν ἄλλων ἐπιστημῶν αἰρετώταται, αὕτη δὲ τῶν θεωρητικῶν. ἀπορήσειε γὰρ ἂν τις πότερόν ποθ' ἡ πρώτη φιλοσοφία καθόλου ἐστὶν ἢ περὶ τι γένος καὶ φύσιν τινὰ μίαν (οὐ γὰρ ὁ αὐτὸς τρόπος οὐδ' ἐν ταῖς μαθηματικαῖς, ἀλλ' ἡ μὲν γεωμετρία καὶ ἀστρολογία περὶ τινὰ φύσιν εἰσίν, ἡ δὲ καθόλου πασῶν κοινή)· εἰ μὲν οὖν μὴ ἔστι τις ἑτέρα οὐσία παρὰ τὰς φύσει συνεστηκυίας, ἡ φυσικὴ ἂν εἴη πρώτη ἐπιστήμη· εἰ δ' ἔστι τις οὐσία ἀκίνητος, αὕτη προτέρα καὶ φιλοσοφία πρώτη, καὶ καθόλου οὕτως ὅτι πρώτη· καὶ περὶ τοῦ ὄντος ἢ ὄν ταύτης ἂν εἴη



θεωρῆσαι, καὶ τί ἐστὶ καὶ τὰ ὑπάρχοντα ἢ ὄν.

Ἀλλ' ἐπεὶ τὸ ὄν τὸ ἀπλῶς λεγόμενον λέγεται πολλαχῶς, ὧν ἓν μὲν ἦν τὸ κατὰ συμβεβηκός, ἕτερον δὲ τὸ ὡς ἀληθές, καὶ τὸ μὴ ὄν ὡς τὸ ψεῦδος, παρὰ ταῦτα δ' ἐστὶ τὰ σχήματα τῆς κατηγορίας (οἷον τὸ μὲν τί, τὸ δὲ ποιόν, τὸ δὲ ποσόν, τὸ δὲ πού, τὸ δὲ ποτέ, καὶ εἴ τι ἄλλο [1026b] σημαίνει τὸν τρόπον τοῦτον), ἔτι παρὰ ταῦτα πάντα τὸ δυνάμει καὶ ἐνεργείᾳ· - ἐπεὶ δὴ πολλαχῶς λέγεται τὸ ὄν, πρῶτον περὶ τοῦ κατὰ συμβεβηκός λεκτέον, ὅτι οὐδεμία ἐστὶ περὶ αὐτὸ θεωρία. σημεῖον δέ· οὐδεμιᾶ γὰρ ἐπιστήμῃ ἐπιμελὲς περὶ αὐτοῦ οὔτε πρακτικῇ οὔτε ποιητικῇ οὔτε θεωρητικῇ. οὔτε γὰρ ὁ ποιῶν οἰκίαν ποιεῖ ὅσα συμβαίνει ἅμα τῇ οἰκίᾳ γιγνομένη (ἄπειρα γάρ ἐστιν· τοῖς μὲν γὰρ ἡδεῖαν τοῖς δὲ βλαβερὰν τοῖς δ' ὠφέλιμον οὐθὲν εἶναι κωλύει τὴν ποιηθεῖσαν, καὶ ἑτέραν ὡς εἰπεῖν πάντων τῶν ὄντων· ὧν οὐθενός ἐστὶν ἡ οἰκοδομικὴ ποιητικὴ), τὸν αὐτὸν δὲ τρόπον οὐδ' ὁ γεωμέτρης θεωρεῖ τὰ οὕτω συμβεβηκότα τοῖς σχήμασιν, οὐδ' εἰ ἕτερόν ἐστι τρίγωνον καὶ τρίγωνον δύο ὀρθὰς ἔχον. καὶ τοῦτ' εὐλόγως συμπίπτει· ὥσπερ γὰρ ὀνομά τι μόνον τὸ συμβεβηκός ἐστὶν. διὸ Πλάτων τρόπον τινὰ οὐ κακῶς τὴν σοφιστικὴν περὶ τὸ μὴ ὄν ἔταξεν. εἰσὶ γὰρ οἱ τῶν σοφιστῶν λόγοι περὶ τὸ συμβεβηκός ὡς εἰπεῖν μάλιστα πάντων, πότερον ἕτερον ἢ ταῦτόν μουσικὸν καὶ γραμματικόν, καὶ μουσικὸς Κορίσκος καὶ Κορίσκος, καὶ εἰ πᾶν ὃ ἂν ἦ, μὴ ἀεὶ δέ, γέγονεν, ὥστ' εἰ μουσικὸς ὧν γραμματικὸς γέγονε, καὶ γραμματικὸς ὧν μουσικός, καὶ ὅσοι δὴ ἄλλοι τοιοῦτοι τῶν λόγων εἰσὶν· φαίνεται γὰρ τὸ συμβεβηκός ἐγγύς τι τοῦ μὴ ὄντος. δῆλον δὲ καὶ ἐκ τῶν τοιούτων λόγων· τῶν μὲν γὰρ ἄλλον τρόπον ὄντων ἔστι γενεαίς καὶ φθορά, τῶν δὲ κατὰ συμβεβηκός οὐκ ἔστιν. ἄλλ' ὅμως λεκτέον ἔτι περὶ τοῦ συμβεβηκότος ἐφ' ὅσον ἐνδέχεται, τίς ἡ φύσις αὐτοῦ καὶ διὰ τί· αἰτίαν ἔστιν· ἅμα γὰρ δῆλον ἴσως ἔσται καὶ διὰ τί ἐπιστήμῃ οὐκ ἔστιν αὐτοῦ. - ἐπεὶ οὖν ἐστὶν ἐν τοῖς οὔσι τὰ μὲν ἀεὶ ὡσαύτως ἔχοντα καὶ ἐξ ἀνάγκης, οὐ τῆς κατὰ τὸ βίαιον λεγομένης ἄλλ' ἦν λέγομεν τῷ μὴ ἐνδέχεσθαι ἄλλως, τὰ δ' ἐξ ἀνάγκης μὲν οὐκ ἔστιν οὐδ' ἀεὶ, ὡς δ' ἐπὶ τὸ πολὺ, αὕτη ἀρχὴ καὶ αὕτη αἰτία ἐστὶ τοῦ εἶναι τὸ συμβεβηκός· ὃ γὰρ ἂν ἦ μήτ' ἀεὶ μήθ' ὡς ἐπὶ τὸ πολὺ, τοῦτό φαμεν συμβεβηκός εἶναι. οἷον ἐπὶ κυνὶ ἂν χειμῶν γένηται καὶ ψῦχος, τοῦτο συμβῆναί φαμεν, ἄλλ' οὐκ ἂν πνίγος καὶ ἀλέα, ὅτι τὸ μὲν ἀεὶ ἢ ὡς ἐπὶ τὸ πολὺ τὸ δ' οὔ. καὶ τὸν ἄνθρωπον λευκὸν εἶναι συμβέβηκεν (οὔτε γὰρ ἀεὶ οὔθ' ὡς ἐπὶ τὸ πολὺ), ζῶον δ' οὐ κατὰ συμβεβηκός. καὶ τὸ ὑγιάζειν δὲ τὸν οἰκοδόμον [1027a] συμβεβηκός, ὅτι οὐ πέφυκε τοῦτο ποιεῖν οἰκοδόμος ἀλλὰ ἱατρός, ἀλλὰ συνέβη ἱατρὸν εἶναι τὸν οἰκοδόμον. καὶ ὀψοποιὸς ἡδονῆς στοχαζόμενος ποιήσειεν ἂν τι ὑγιεινόν, ἀλλ' οὐ κατὰ τὴν ὀψοποιητικὴν· διὸ συνέβη, φασί, καὶ ἔστιν ὡς ποιεῖ, ἀπλῶς δ' οὔ. τῶν μὲν γὰρ ἄλλων [ἐνίοτε] δυνάμεις εἰσὶν

αἱ ποιητικά, τῶν δ' οὐδεμία τέχνη οὐδὲ δύναμις ὠρισμένη· τῶν γὰρ κατὰ συμβεβηκὸς ὄντων ἢ γιγνομένων καὶ τὸ αἷτιόν ἐστι κατὰ συμβεβηκός. ὥστ' ἐπεὶ οὐ πάντα ἐστὶν ἐξ ἀνάγκης καὶ ἀεὶ ἢ ὄντα ἢ γιγνόμενα, ἀλλὰ τὰ πλεῖστα ὡς ἐπὶ τὸ πολὺ, ἀνάγκη εἶναι τὸ κατὰ συμβεβηκὸς ὄν· οἷον οὗτ' ἀεὶ οὐθ' ὡς ἐπὶ τὸ πολὺ ὁ λευκὸς μουσικὸς ἐστίν, ἐπεὶ δὲ γίγνεται ποτε, κατὰ συμβεβηκὸς ἔσται (εἰ δὲ μή, πάντ' ἔσται ἐξ ἀνάγκης)· ὥστε ἡ ὕλη ἔσται αἰτία ἢ ἐνδεχομένη παρὰ τὸ ὡς ἐπὶ τὸ πολὺ ἄλλως τοῦ συμβεβηκότος. ἀρχὴν δὲ τὴνδὲ ληπτέον, πότερον οὐδέν ἐστίν οὗτ' αἰεὶ οὐθ' ὡς ἐπὶ τὸ πολὺ. ἢ τοῦτο ἀδύνατον; ἔστιν ἄρα τι παρὰ ταῦτα τὸ ὁπότερ' ἔτυχε καὶ κατὰ συμβεβηκός. ἀλλὰ πότερον τὸ ὡς ἐπὶ τὸ πολὺ, τὸ δ' ἀεὶ οὐθενὶ ὑπάρχει, ἢ ἔστιν ἅττα αἰτία; περὶ μὲν οὖν τούτων ὕστερον σκεπτέον, ὅτι δ' ἐπιστήμη οὐκ ἔστι τοῦ συμβεβηκότος φανερόν· ἐπιστήμη μὲν γὰρ πᾶσα ἢ τοῦ ἀεὶ ἢ τοῦ ὡς ἐπὶ τὸ πολὺ - πῶς γὰρ ἢ μαθήσεται ἢ διδάξει ἄλλον; δεῖ γὰρ ὠρίσθαι ἢ τῷ ἀεὶ ἢ τῷ ὡς ἐπὶ τὸ πολὺ, οἷον ὅτι ὠφέλιμον τὸ μελίκρατον τῷ πυρέττοντι ὡς ἐπὶ τὸ πολὺ - τὸ δὲ παρὰ τοῦτο οὐχ ἔξει λέγειν, πότε οὐ, οἷον νοσηνία· ἢ γὰρ ἀεὶ ἢ ὡς ἐπὶ τὸ πολὺ καὶ τὸ τῇ νοσηνία· τὸ δὲ συμβεβηκός ἐστι παρὰ ταῦτα. τί μὲν οὖν ἐστὶ τὸ συμβεβηκός καὶ διὰ τίν' αἰτίαν καὶ ὅτι ἐπιστήμη οὐκ ἔστιν αὐτοῦ, εἴρηται.

Ὅτι δ' εἰσὶν ἀρχαὶ καὶ αἰτία γενητὰ καὶ φθαρτὰ ἄνευ τοῦ γίγνεσθαι καὶ φθειρεσθαι, φανερόν. εἰ γὰρ μὴ τοῦτ', ἐξ ἀνάγκης πάντ' ἔσται, εἰ τοῦ γιγνομένου καὶ φθειρομένου μὴ κατὰ συμβεβηκὸς αἷτιόν τι ἀνάγκη εἶναι. πότερον γὰρ ἔσται τοδὶ ἢ οὐ; ἐάν γε τοδὶ γένηται· εἰ δὲ μή, οὐ. τοῦτο δὲ ἐὰν ἄλλο. καὶ οὕτω δῆλον ὅτι ἀεὶ χρόνου ἀφαιρουμένου [1027b] ἀπὸ πεπερασμένου χρόνου ἥξει ἐπὶ τὸ νῦν, ὥστε ὁδὶ ἀποθανεῖται [νόσω ἢ] βία, ἐάν γε ἐξέλθῃ· τοῦτο δὲ ἐὰν διψήσῃ· τοῦτο δὲ ἐὰν ἄλλο· καὶ οὕτως ἥξει εἰς ὃ νῦν ὑπάρχει, ἢ εἰς τῶν γεγονότων τι. οἷον ἐὰν διψήσῃ· τοῦτο δὲ εἰ ἐσθίει δριμέα· τοῦτο δ' ἦτοι ὑπάρχει ἢ οὐ· ὥστ' ἐξ ἀνάγκης ἀποθανεῖται ἢ οὐκ ἀποθανεῖται. ὁμοίως δὲ καὶ ὑπερπηδήσῃ τις εἰς τὰ γενόμενα, ὁ αὐτὸς λόγος· ἥδη γὰρ ὑπάρχει τοῦτο ἐν τινι, λέγω δὲ τὸ γεγονός· ἐξ ἀνάγκης ἄρα πάντα ἔσται τὰ ἐσόμενα, οἷον τὸ ἀποθανεῖν τὸν ζῶντα· ἥδη γάρ τι γέγονεν, οἷον τὰ ἐναντία ἐν τῷ αὐτῷ. ἀλλ' εἰ νόσω ἢ βία, οὕπω, ἀλλ' ἐὰν τοδὶ γένηται. δῆλον ἄρα ὅτι μέχρι τινὸς βαδίζει ἀρχῆς, αὕτη δ' οὐκέτι εἰς ἄλλο. ἔσται οὖν ἢ τοῦ ὁπότερ' ἔτυχεν αὕτη, καὶ αἷτιον τῆς γενέσεως αὐτῆς ἄλλο οὐθέν. ἀλλ' εἰς ἀρχὴν ποῖαν καὶ αἷτιον ποῖον ἢ ἀναγωγὴ ἢ τοιαύτη, πότερον ὡς εἰς ὕλην ἢ ὡς εἰς τὸ οὐ ἔνεκα ἢ ὡς εἰς τὸ κινῆσαν, μάλιστα σκεπτέον.

Περὶ μὲν οὖν τοῦ κατὰ συμβεβηκὸς ὄντος ἀφείσθω (διώριστα γὰρ ἱκανῶς)· τὸ δὲ ὡς ἀληθὲς ὄν, καὶ μὴ ὄν ὡς ψεῦδος, ἐπειδὴ παρὰ σύνθεσιν

ἐστὶ καὶ διαίρεσιν, τὸ δὲ σύνολον περὶ μερισμὸν ἀντιφάσεως (τὸ μὲν γὰρ ἀληθὲς τὴν κατάφασιν ἐπὶ τῷ συγκειμένῳ ἔχει τὴν δ' ἀπόφασιν ἐπὶ τῷ διηρημένῳ, τὸ δὲ ψεῦδος τούτου τοῦ μερισμοῦ τὴν ἀντίφασιν· πῶς δὲ τὸ ἅμα ἢ τὸ χωρὶς νοεῖν συμβαίνει, ἄλλος λόγος, λέγω δὲ τὸ ἅμα καὶ τὸ χωρὶς ὥστε μὴ τὸ ἐφεξῆς ἀλλ' ἓν τι γίνεσθαι)· οὐ γάρ ἐστὶ τὸ ψεῦδος καὶ τὸ ἀληθὲς ἐν τοῖς πράγμασιν, οἷον τὸ μὲν ἀγαθὸν ἀληθὲς τὸ δὲ κακὸν εὐθὺς ψεῦδος, ἀλλ' ἐν διανοίᾳ, περὶ δὲ τὰ ἀπλᾶ καὶ τὰ τί ἐστὶν οὐδ' ἐν διανοίᾳ· - ὅσα μὲν οὖν δεῖ θεωρῆσαι περὶ τὸ οὕτως ὄν καὶ μὴ ὄν, ὕστερον ἐπισκεπτέον· ἐπεὶ δὲ ἡ συμπλοκὴ ἐστὶν καὶ ἡ διαίρεσις ἐν διανοίᾳ ἀλλ' οὐκ ἐν τοῖς πράγμασι, τὸ δ' οὕτως ὄν ἕτερον ὄν τῶν κυρίως (ἢ γὰρ τὸ τί ἐστὶν ἢ ὅτι ποιὸν ἢ ὅτι ποσὸν ἢ τι ἄλλο συνάπτει ἢ ἀφαιρεῖ ἢ διάνοια), τὸ μὲν ὡς συμβεβηκὸς καὶ τὸ ὡς ἀληθὲς ὄν ἀφετέον - τὸ γὰρ αἴτιον τοῦ μὲν ἀόριστον τοῦ δὲ τῆς [1028a] διανοίας τι πάθος, καὶ ἀμφοτέρω περὶ τὸ λοιπὸν γένος τοῦ ὄντος, καὶ οὐκ ἔξω δηλοῦσιν οὐσάν τινα φύσιν τοῦ ὄντος - διὸ ταῦτα μὲν ἀφείσθω, σκεπτέον δὲ τοῦ ὄντος αὐτοῦ τὰ αἴτια καὶ τὰς ἀρχὰς ἧ ὄν. [φανερὸν δ' ἐν οἷς διωρισάμεθα περὶ τοῦ ποσαχῶς λέγεται ἕκαστον, ὅτι πολλαχῶς λέγεται τὸ ὄν.]

## Z

Τὸ ὄν λέγεται πολλαχῶς, καθάπερ διειλόμεθα πρότερον ἐν τοῖς περὶ τοῦ ποσαχῶς· σημαίνει γὰρ τὸ μὲν τί ἐστὶ καὶ τόδε τι, τὸ δὲ ποιὸν ἢ ποσὸν ἢ τῶν ἄλλων ἕκαστον τῶν οὕτω κατηγορουμένων. τοσαυταχῶς δὲ λεγομένου τοῦ ὄντος φανερόν ὅτι τούτων πρῶτον ὄν τὸ τί ἐστὶν, ὅπερ σημαίνει τὴν οὐσίαν (ὅταν μὲν γὰρ εἴπωμεν ποῖόν τι τόδε, ἢ ἀγαθὸν λέγομεν ἢ κακόν, ἀλλ' οὐ τρίπηχυ ἢ ἄνθρωπον· ὅταν δὲ τί ἐστὶν, οὐ λευκὸν οὐδὲ θερμὸν οὐδὲ τρίπηχυ, ἀλλὰ ἄνθρωπον ἢ θεόν), τὰ δ' ἄλλα λέγεται ὄντα τῷ τοῦ οὕτως ὄντος τὰ μὲν ποσότητες εἶναι, τὰ δὲ ποιότητες, τὰ δὲ πάθη, τὰ δὲ ἄλλο τι. διὸ κἂν ἀπορήσειέ τις πότερον τὸ βαδίζειν καὶ τὸ ὑγιαίνειν καὶ τὸ καθῆσθαι ἕκαστον αὐτῶν ὄν σημαίνει, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων ὅτουοῦν τῶν τοιούτων· οὐδὲν γὰρ αὐτῶν ἐστὶν οὔτε καθ' αὐτὸ πεφυκὸς οὔτε χωρίζεσθαι δυνατόν τῆς οὐσίας, ἀλλὰ μᾶλλον, εἴπερ, τὸ βαδίζον τῶν ὄντων καὶ τὸ καθήμενον καὶ τὸ ὑγιαῖνον. ταῦτα δὲ μᾶλλον φαίνεται ὄντα, διότι ἔστι τι τὸ ὑποκείμενον αὐτοῖς ὠρισμένον (τοῦτο δ' ἐστὶν ἢ οὐσία καὶ τὸ καθ' ἕκαστον), ὅπερ ἐμφαίνεται ἐν τῇ κατηγορίᾳ τῇ τοιαύτῃ· τὸ ἀγαθὸν γὰρ ἢ τὸ καθήμενον οὐκ ἄνευ τούτου λέγεται. δῆλον οὖν ὅτι διὰ ταύτην κἀκείνων ἕκαστον ἔστιν, ὥστε τὸ πρῶτον ὄν καὶ οὐ τὸ ἄλλ' ὄν ἀπλῶς ἢ οὐσία ἂν εἴη. πολλαχῶς μὲν οὖν λέγεται τὸ πρῶτον· ὅμως δὲ πάντως ἢ οὐσία πρῶτον, καὶ λόγῳ καὶ γνώσει καὶ χρόνῳ. τῶν μὲν γὰρ ἄλλων κατηγορημάτων οὐθὲν χωριστόν, αὕτη δὲ μόνη· καὶ τῷ λόγῳ δὲ τοῦτο πρῶτον (ἀνάγκη γὰρ ἐν τῷ ἑκάστου λόγῳ τὸν τῆς

οὐσίας ἐνυπάρχειν)· καὶ εἶδέναι δὲ τότε οἴομεθα ἕκαστον μάλιστα, ὅταν τί ἐστὶν ὁ ἄνθρωπος γινώμεν ἢ τὸ πῦρ, μᾶλλον ἢ τὸ ποιὸν ἢ τὸ [1028b] ποσὸν ἢ τὸ πού, ἐπεὶ καὶ αὐτῶν τούτων τότε ἕκαστον ἴσμεν, ὅταν τί ἐστὶ τὸ ποσὸν ἢ τὸ ποιὸν γινώμεν. καὶ δὴ καὶ τὸ πάλαι τε καὶ νῦν καὶ ἀεὶ ζητούμενον καὶ ἀεὶ ἀπορούμενον, τί τὸ ὄν, τοῦτό ἐστὶ τίς ἡ οὐσία (τοῦτο γὰρ οἱ μὲν ἐν εἶναί φασιν οἱ δὲ πλείω ἢ ἓν, καὶ οἱ μὲν πεπερασμένα οἱ δὲ ἄπειρα), διὸ καὶ ἡμῖν καὶ μάλιστα καὶ πρῶτον καὶ μόνον ὡς εἰπεῖν περὶ τοῦ οὕτως ὄντος θεωρητέον τί ἐστὶν.

Δοκεῖ δ' ἡ οὐσία ὑπάρχειν φανερώτατα μὲν τοῖς σώμασιν (διὸ τὰ τε ζῶα καὶ τὰ φυτὰ καὶ τὰ μόρια αὐτῶν οὐσίας εἶναι φαμεν, καὶ τὰ φυσικὰ σώματα, οἶον πῦρ καὶ ὕδωρ καὶ γῆν καὶ τῶν τοιούτων ἕκαστον, καὶ ὅσα ἢ μόρια τούτων ἢ ἐκ τούτων ἐστίν, ἢ μορίων ἢ πάντων, οἶον ὁ τε οὐρανὸς καὶ τὰ μόρια αὐτοῦ, ἄστρα καὶ σελήνη καὶ ἥλιος)· πότερον δὲ αὗται μόναι οὐσῖαι εἰσὶν ἢ καὶ ἄλλαι, ἢ τούτων τινὲς ἢ καὶ ἄλλαι, ἢ τούτων μὲν οὐθὲν ἕτεραι δέ τινες, σκεπτέον. δοκεῖ δέ τις τὰ τοῦ σώματος πέρατα, οἶον ἐπιφάνεια καὶ γραμμὴ καὶ στιγμή καὶ μονάς, εἶναι οὐσῖαι, καὶ μᾶλλον ἢ τὸ σῶμα καὶ τὸ στερεόν. ἔτι παρὰ τὰ αἰσθητὰ οἱ μὲν οὐκ οἴονται εἶναι οὐδὲν τοιοῦτον, οἱ δὲ πλείω καὶ μᾶλλον ὄντα αἰδία, ὥσπερ Πλάτων τὰ τε εἶδη καὶ τὰ μαθηματικὰ δύο οὐσῖας, τρίτην δὲ τὴν τῶν αἰσθητῶν σωμάτων οὐσίαν, Σπεύσιππος δὲ καὶ πλείους οὐσῖας ἀπὸ τοῦ ἐνὸς ἀρξάμενος, καὶ ἀρχὰς ἐκάστης οὐσῖας, ἄλλην μὲν ἀριθμῶν ἄλλην δὲ μεγεθῶν, ἔπειτα ψυχῆς· καὶ τοῦτον δὴ τὸν τρόπον ἐπεκτείνει τὰς οὐσῖας. ἔνιοι δὲ τὰ μὲν εἶδη καὶ τοὺς ἀριθμοὺς τὴν αὐτὴν ἔχειν φασὶ φύσιν, τὰ δὲ ἄλλα ἐχόμενα, γραμμάς καὶ ἐπίπεδα, μέχρι πρὸς τὴν τοῦ οὐρανοῦ οὐσίαν καὶ τὰ αἰσθητά. περὶ δὴ τούτων τί λέγεται καλῶς ἢ μὴ καλῶς, καὶ τίνες εἰσὶν οὐσῖαι, καὶ πότερον εἰσὶ τινες παρὰ τὰς αἰσθητάς ἢ οὐκ εἰσὶ, καὶ αὗται πῶς εἰσὶ, καὶ πότερον ἔστι τις χωριστὴ οὐσία, καὶ διὰ τί καὶ πῶς, ἢ οὐδεμία, παρὰ τὰς αἰσθητάς, σκεπτέον, ὑποτυπωσαμένοις τὴν οὐσίαν πρῶτον τί ἐστὶν.

Λέγεται δ' ἡ οὐσία, εἰ μὴ πλεοναχῶς, ἀλλ' ἐν τέτταρσί γε μάλιστα· καὶ γὰρ τὸ τί ἦν εἶναι καὶ τὸ καθόλου καὶ τὸ γένος οὐσία δοκεῖ εἶναι ἑκάστου, καὶ τέταρτον τούτων τὸ ὑποκείμενον. τὸ δ' ὑποκείμενόν ἐστὶ καθ' οὗ τὰ ἄλλα λέγεται, ἐκεῖνο δὲ αὐτὸ μηκέτι κατ' ἄλλου· διὸ πρῶτον περὶ τούτου [1029a] διοριστέον· μάλιστα γὰρ δοκεῖ εἶναι οὐσία τὸ ὑποκείμενον πρῶτον. τοιοῦτον δὲ τρόπον μὲν τινα ἢ ὕλη λέγεται, ἄλλον δὲ τρόπον ἢ μορφή, τρίτον δὲ τὸ ἐκ τούτων (λέγω δὲ τὴν μὲν ὕλην οἶον τὸν χαλκόν, τὴν δὲ μορφήν τὸ σχῆμα τῆς ἰδέας, τὸ δ' ἐκ τούτων τὸν ἀνδριάντα τὸ σύνολον), ὥστε εἰ τὸ εἶδος τῆς ὕλης πρότερον καὶ μᾶλλον ὄν, καὶ τοῦ ἐξ ἀμφοῖν πρότερον ἔσται διὰ τὸν αὐτὸν

λόγον. νῦν μὲν οὖν τύπῳ εἴρηται τί ποτ' ἐστὶν ἡ οὐσία, ὅτι τὸ μὴ καθ' ὑποκειμένου ἀλλὰ καθ' οὗ τὰ ἄλλα· δεῖ δὲ μὴ μόνον οὕτως· οὐ γὰρ ἱκανόν· αὐτὸ γὰρ τοῦτο ἄδηλον, καὶ ἔτι ἡ ὕλη οὐσία γίγνεται. εἰ γὰρ μὴ αὕτη οὐσία, τίς ἐστὶν ἄλλη διαφεύγει· περιαιρουμένων γὰρ τῶν ἄλλων οὐ φαίνεται οὐδὲν ὑπομένον· τὰ μὲν γὰρ ἄλλα τῶν σωμάτων πάθη καὶ ποιήματα καὶ δυνάμεις, τὸ δὲ μῆκος καὶ πλάτος καὶ βάθος ποσότητές τινες ἀλλ' οὐκ οὐσίαι (τὸ γὰρ ποσὸν οὐκ οὐσία), ἀλλὰ μᾶλλον ὥ ὑπάρχει ταῦτα πρῶτω, ἐκεῖνό ἐστὶν οὐσία. ἀλλὰ μὴν ἀφαιρουμένου μήκους καὶ πλάτους καὶ βάθους οὐδὲν ὀρῶμεν ὑπολειπόμενον, πλὴν εἴ τί ἐστὶ τὸ ὀριζόμενον ὑπὸ τούτων, ὥστε τὴν ὕλην ἀνάγκη φαίνεσθαι μόνην οὐσίαν οὕτω σκοπούμενοις. λέγω δ' ὕλην ἢ καθ' αὐτὴν μήτε τί μήτε ποσὸν μήτε ἄλλο μηδὲν λέγεται οἷς ὥριστα τὸ ὄν. ἔστι γὰρ τι καθ' οὗ κατηγορεῖται τούτων ἕκαστον, ὥ τὸ εἶναι ἕτερον καὶ τῶν κατηγοριῶν ἑκάστη (τὰ μὲν γὰρ ἄλλα τῆς οὐσίας κατηγορεῖται, αὕτη δὲ τῆς ὕλης), ὥστε τὸ ἔσχατον καθ' αὐτὸ οὔτε τί οὔτε ποσὸν οὔτε ἄλλο οὐδὲν ἐστὶν· οὐδὲ δὴ αἱ ἀποφάσεις, καὶ γὰρ αὗται ὑπάρξουσιν κατὰ συμβεβηκός. ἐκ μὲν οὖν τούτων θεωροῦσι συμβαίνει οὐσίαν εἶναι τὴν ὕλην· ἀδύνατον δέ· καὶ γὰρ τὸ χωριστὸν καὶ τὸ τόδε τι ὑπάρχειν δοκεῖ μάλιστα τῇ οὐσίᾳ, διὸ τὸ εἶδος καὶ τὸ ἐξ ἀμφοῖν οὐσία δόξειεν ἂν εἶναι μᾶλλον τῆς ὕλης. τὴν μὲν τοίνυν ἐξ ἀμφοῖν οὐσίαν, λέγω δὲ τὴν ἔκ τε τῆς ὕλης καὶ τῆς μορφῆς, ἀφετέον, ὑστέρα γὰρ καὶ δήλη· φανερά δέ πως καὶ ἡ ὕλη· περὶ δὲ τῆς τρίτης σκεπτέον, αὕτη γὰρ ἀπορωτάτη. ὁμολογοῦνται δ' οὐσίαι εἶναι τῶν αἰσθητῶν τινές, ὥστε ἐν ταύταις ζητητέον πρῶτον.

[1029b] πρὸ ἔργου γὰρ τὸ μεταβαίνειν εἰς τὸ γνωριμώτερον. ἡ γὰρ μάθησις οὕτω γίγνεται πᾶσι διὰ τῶν ἥττον γνωρίμων φύσει εἰς τὰ γνώριμα μᾶλλον· καὶ τοῦτο ἔργον ἐστίν, ὥσπερ ἐν ταῖς πράξεσι τὸ ποιῆσαι ἐκ τῶν ἑκάστῳ ἀγαθῶν τὰ ὅλως ἀγαθὰ ἑκάστῳ ἀγαθὰ, οὕτως ἐκ τῶν αὐτῷ γνωριμωτέρων τὰ τῇ φύσει γνώριμα αὐτῷ γνώριμα. τὰ δ' ἑκάστοις γνώριμα καὶ πρῶτα πολλάκις ἡρέμα ἐστὶ γνώριμα, καὶ μικρὸν ἢ οὐθὲν ἔχει τοῦ ὄντος· ἀλλ' ὅμως ἐκ τῶν φαύλως μὲν γνωστῶν αὐτῷ δὲ γνωστῶν τὰ ὅλως γνωστὰ γινώσκειν πειρατέον, μεταβαίνοντας, ὥσπερ εἴρηται, διὰ τούτων αὐτῶν.

Ἐπεὶ δ' ἐν ἀρχῇ διειλόμεθα πόσοις ὀρίζομεν τὴν οὐσίαν, καὶ τούτων ἐν τι ἐδόκει εἶναι τὸ τί ἦν εἶναι, θεωρητέον περὶ αὐτοῦ. καὶ πρῶτον εἰπωμεν ἓνια περὶ αὐτοῦ λογικῶς, ὅτι ἐστὶ τὸ τί ἦν εἶναι ἑκάστου ὃ λέγεται καθ' αὐτό. οὐ γὰρ ἐστὶ τὸ σοὶ εἶναι τὸ μουσικῶς εἶναι· οὐ γὰρ κατὰ σαυτὸν εἶ μουσικός. ὃ ἄρα κατὰ σαυτόν. οὐδὲ δὴ τοῦτο πᾶν· οὐ γὰρ τὸ οὕτως καθ' αὐτὸ ὡς ἐπιφανεία λευκόν, ὅτι οὐκ ἔστι τὸ ἐπιφανεία εἶναι τὸ λευκῶς εἶναι. ἀλλὰ μὴν οὐδὲ τὸ ἐξ ἀμφοῖν, τὸ ἐπιφανεία λευκῇ, ὅτι πρόσσεστιν αὐτό. ἐν ᾧ ἄρα μὴ

ένέσται λόγῳ αὐτό, λέγοντι αὐτό, οὗτος ὁ λόγος τοῦ τί ἦν εἶναι ἐκάστῳ, ὥστ' εἰ τὸ ἐπιφανεία λευκῇ εἶναί ἐστι τὸ ἐπιφανεία εἶναι λεία, τὸ λευκῷ καὶ λείῳ εἶναι τὸ αὐτὸ καὶ ἔν. ἐπεὶ δ' ἔστι καὶ κατὰ τὰς ἄλλας κατηγορίας σύνθετα (ἔστι γάρ τι ὑποκείμενον ἐκάστῳ, οἷον τῷ ποιῷ καὶ τῷ ποσῷ καὶ τῷ ποτὲ καὶ τῷ ποῦ καὶ τῇ κινήσει), σκεπτέον ἄρ' ἔστι λόγος τοῦ τί ἦν εἶναι ἐκάστῳ αὐτῶν, καὶ ὑπάρχει καὶ τούτοις τὸ τί ἦν εἶναι, οἷον λευκῷ ἀνθρώπῳ [τί ἦν λευκῷ ἀνθρώπῳ]. ἔστω δὴ ὄνομα αὐτῷ ἱμάτιον. τί ἐστι τὸ ἱματίῳ εἶναι; ἀλλὰ μὴν οὐδὲ τῶν καθ' αὐτὸ λεγομένων οὐδὲ τοῦτο. ἢ τὸ οὐ καθ' αὐτὸ λέγεται διχῶς, καὶ τούτου ἐστὶ τὸ μὲν ἐκ προσθέσεως τὸ δὲ οὐ. τὸ μὲν γὰρ τῷ αὐτὸ ἄλλῳ προσκεῖσθαι λέγεται ὃ ὀρίζεται, οἷον εἰ τὸ λευκῷ εἶναι ὀριζόμενος λέγοι λευκοῦ ἀνθρώπου λόγον· τὸ δὲ τῷ ἄλλο αὐτῷ, οἷον εἰ σημαίνει τὸ ἱμάτιον λευκὸν ἀνθρώπον, ὃ δὲ ὀρίζοιτο ἱμάτιον ὡς λευκόν. τὸ [1030a] δὴ λευκὸς ἀνθρώπος ἔστι μὲν λευκόν, οὐ μέντοι <τὸ> τί ἦν εἶναι λευκῷ εἶναι. - ἀλλὰ τὸ ἱματίῳ εἶναι ἄρά ἐστι τί ἦν εἶναί τι [ἦ] ὅλως; ἢ οὐ; ὅπερ γάρ τί ἐστι τὸ τί ἦν εἶναι· ὅταν δ' ἄλλο κατ' ἄλλου λέγεται, οὐκ ἔστιν ὅπερ τόδε τι, οἷον ὁ λευκὸς ἀνθρώπος οὐκ ἔστιν ὅπερ τόδε τι, εἴπερ τὸ τόδε ταῖς οὐσίαις ὑπάρχει μόνον· ὥστε τὸ τί ἦν εἶναί ἐστιν ὅσων ὁ λόγος ἐστὶν ὀρισμός. ὀρισμός δ' ἐστὶν οὐκ ἂν ὄνομα λόγῳ ταῦτὸ σημαίνει (πάντες γὰρ ἂν εἶεν οἱ λόγοι ὅροι· ἔσται γὰρ ὄνομα ὁτιοῦν λόγῳ, ὥστε καὶ ἡ Ἰλιάς ὀρισμός ἐσται), ἀλλ' ἐὰν πρώτου τινὸς ἦ· τοιαῦτα δ' ἐστὶν ὅσα λέγεται μὴ τῷ ἄλλο κατ' ἄλλου λέγεσθαι. οὐκ ἔσται ἄρα οὐδενὶ τῶν μὴ γένους εἰδῶν ὑπάρχον τὸ τί ἦν εἶναι, ἀλλὰ τούτοις μόνον (ταῦτα γὰρ δοκεῖ οὐ κατὰ μετοχὴν λέγεσθαι καὶ πάθος οὐδ' ὡς συμβεβηκός)· ἀλλὰ λόγος μὲν ἔσται ἐκάστου καὶ τῶν ἄλλων τί σημαίνει, ἐὰν ἦ ὄνομα, ὅτι τόδε τῷδε ὑπάρχει, ἢ ἀντὶ λόγου ἀπλοῦ ἀκριβέστερος· ὀρισμός δ' οὐκ ἔσται οὐδὲ τὸ τί ἦν εἶναι. ἢ καὶ ὁ ὀρισμός ὥσπερ καὶ τὸ τί ἐστι πλεοναχῶς λέγεται; καὶ γὰρ τὸ τί ἐστὶν ἓνα μὲν τρόπον σημαίνει τὴν οὐσίαν καὶ τὸ τόδε τι, ἄλλον δὲ ἕκαστον τῶν κατηγορουμένων, ποσὸν ποιὸν καὶ ὅσα ἄλλα τοιαῦτα. ὥσπερ γὰρ καὶ τὸ ἔστιν ὑπάρχει πᾶσιν, ἀλλ' οὐχ ὁμοίως ἀλλὰ τῷ μὲν πρώτως τοῖς δ' ἐπομένως, οὕτω καὶ τὸ τί ἐστὶν ἀπλῶς μὲν τῇ οὐσίᾳ πῶς δὲ τοῖς ἄλλοις· καὶ γὰρ τὸ ποιὸν ἐροίμεθ' ἂν τί ἐστὶν, ὥστε καὶ τὸ ποιὸν τῶν τί ἐστὶν, ἀλλ' οὐχ ἀπλῶς, ἀλλ' ὥσπερ ἐπὶ τοῦ μὴ ὄντος λογικῶς φασὶ τινες εἶναι τὸ μὴ ὄν, οὐχ ἀπλῶς ἀλλὰ μὴ ὄν, οὕτω καὶ τὸ ποιόν. - δεῖ μὲν οὖν σκοπεῖν καὶ τὸ πῶς δεῖ λέγειν περὶ ἕκαστον, οὐ μὴν μᾶλλον γε ἢ τὸ πῶς ἔχει· διὸ καὶ νῦν ἐπεὶ τὸ λεγόμενον φανερόν, καὶ τὸ τί ἦν εἶναι ὁμοίως ὑπάρξει πρώτως μὲν καὶ ἀπλῶς τῇ οὐσίᾳ, εἶτα καὶ τοῖς ἄλλοις, ὥσπερ καὶ τὸ τί ἐστὶν, οὐχ ἀπλῶς τί ἦν εἶναι ἀλλὰ ποιῷ ἢ ποσῷ τί ἦν εἶναι. δεῖ γὰρ ἢ ὁμωνύμως ταῦτα φάναι εἶναι ὄντα, ἢ προστιθέντας καὶ ἀφαιροῦντας, ὥσπερ καὶ τὸ μὴ ἐπιστητὸν ἐπιστητόν, ἐπεὶ τό γε ὀρθόν ἐστι

μήτε ὁμωνύμως φάναι μήτε ὡσαύτως ἀλλ' ὥσπερ τὸ ἱατρικὸν τῷ πρὸς τὸ αὐτὸ [1030b] μὲν καὶ ἔν, οὐ τὸ αὐτὸ δὲ καὶ ἔν, οὐ μέντοι οὐδὲ ὁμωνύμως· οὐδὲ γὰρ ἱατρικὸν σῶμα καὶ ἔργον καὶ σκεῦος λέγεται οὔτε ὁμωνύμως οὔτε καθ' ἓν ἀλλὰ πρὸς ἓν. ἀλλὰ ταῦτα μὲν ὅποτέρως τις ἐθέλει λέγειν διαφέρει οὐδέν· ἐκεῖνο δὲ φανερόν ὅτι ὁ πρῶτος καὶ ἀπλῶς ὀρισμὸς καὶ τὸ τί ἦν εἶναι τῶν οὐσιῶν ἐστίν. οὐ μὴν ἀλλὰ καὶ τῶν ἄλλων ὁμοίως ἐστὶ, πλὴν οὐ πρῶτος. οὐ γὰρ ἀνάγκη, ἂν τοῦτο τιθῶμεν, τούτου ὀρισμὸν εἶναι ὃ ἂν λόγῳ τὸ αὐτὸ σημαίνει, ἀλλὰ τινὶ λόγῳ· τοῦτο δὲ ἐὰν ἑνὸς ἦ, μὴ τῷ συνεχεῖ ὥσπερ ἡ Ἰλιάς ἢ ὅσα συνδέσμων, ἀλλ' ἐὰν ὁσαυχῶς λέγεται τὸ ἔν· τὸ δ' ἐν λέγεται ὥσπερ τὸ ὄν· τὸ δὲ ὄν τὸ μὲν τότε τι τὸ δὲ ποσὸν τὸ δὲ ποιόν τι σημαίνει. διὸ καὶ λευκοῦ ἀνθρώπου ἔσται λόγος καὶ ὀρισμὸς, ἄλλον δὲ τρόπον καὶ τοῦ λευκοῦ καὶ οὐσίας.

Ἔχει δ' ἀπορίαν, ἐὰν τις μὴ φῇ ὀρισμὸν εἶναι τὸν ἐκ προσθέσεως λόγον, τίνος ἔσται ὀρισμὸς τῶν οὐχ ἀπλῶν ἀλλὰ συνδεδυασμένων· ἐκ προσθέσεως γὰρ ἀνάγκη δηλοῦν. λέγω δὲ οἶον ἔστι ρῖς καὶ κοιλότης, καὶ σιμότης τὸ ἐκ τῶν δυοῖν λεγόμενον τῷ τότε ἐν τῷδε, καὶ οὐ κατὰ συμβεβηκός γε οὔθ' ἡ κοιλότης οὔθ' ἡ σιμότης πάθος τῆς ρίνος, ἀλλὰ καθ' αὐτήν· οὐδ' ὡς τὸ λευκὸν Καλλία, ἢ ἀνθρώπῳ, ὅτι Καλλίας λευκὸς ὧ συμβέβηκεν ἀνθρώπῳ εἶναι, ἀλλ' ὡς τὸ ἄρρεν τῷ ζῶω καὶ τὸ ἴσον τῷ ποσῷ καὶ πάντα ὅσα λέγεται καθ' αὐτὰ ὑπάρχειν. ταῦτα δ' ἐστὶν ἐν ὅσοις ὑπάρχει ἢ ὁ λόγος ἢ τοῦνομα οὐ ἐστὶ τοῦτο τὸ πάθος, καὶ μὴ ἐνδέχεται δηλωσαι χωρίς, ὥσπερ τὸ λευκὸν ἄνευ τοῦ ἀνθρώπου ἐνδέχεται ἀλλ' οὐ τὸ θῆλυ ἄνευ τοῦ ζώου· ὥστε τούτων τὸ τί ἦν εἶναι καὶ ὀρισμὸς ἢ οὐκ ἔστιν οὐδενὸς ἢ, εἴ ἔστιν, ἄλλως, καθάπερ εἰρήκαμεν. ἔστι δὲ ἀπορία καὶ ἑτέρα περὶ αὐτῶν. εἰ μὲν γὰρ τὸ αὐτό ἐστι σιμὴ ρῖς καὶ κοίλη ρῖς, τὸ αὐτὸ ἔσται τὸ σιμὸν καὶ τὸ κοῖλον· εἰ δὲ μή, διὰ τὸ ἀδύνατον εἶναι εἰπεῖν τὸ σιμὸν ἄνευ τοῦ πράγματος οὐ ἐστὶ πάθος καθ' αὐτό (ἔστι γὰρ τὸ σιμὸν κοιλότης ἐν ρίνι), τὸ ρῖνα σιμὴν εἰπεῖν ἢ οὐκ ἔστιν ἢ δις τὸ αὐτὸ ἔσται εἰρημένον, ρῖς ρῖς κοίλη (ἢ γὰρ ρῖς ἢ σιμὴ ρῖς ρῖς κοίλη ἔσται), διὸ ἄτοπον τὸ ὑπάρχειν τοῖς τοιούτοις τὸ τί ἦν εἶναι· εἰ δὲ μή, εἰς ἄπειρον εἴσιν· ρῖνι γὰρ ρῖνι σιμῇ ἔτι [1031a] ἄλλο ἐνέσται. δῆλον τοίνυν ὅτι μόνης τῆς οὐσίας ἐστὶν ὁ ὀρισμὸς. εἰ γὰρ καὶ τῶν ἄλλων κατηγορίων, ἀνάγκη ἐκ προσθέσεως εἶναι, οἶον τοῦ ποιοῦ καὶ περιττοῦ· οὐ γὰρ ἄνευ ἀριθμοῦ, οὐδὲ τὸ θῆλυ ἄνευ ζώου (τὸ δὲ ἐκ προσθέσεως λέγω ἐν οἷς συμβαίνει δις τὸ αὐτὸ λέγειν ὥσπερ ἐν τούτοις). εἰ δὲ τοῦτο ἀληθές, οὐδὲ συνδυαζομένων ἔσται, οἶον ἀριθμοῦ περιττοῦ· ἀλλὰ λανθάνει ὅτι οὐκ ἀκριβῶς λέγονται οἱ λόγοι. εἰ δ' εἰσὶ καὶ τούτων ὅροι, ἥτοι ἄλλον τρόπον εἴσιν ἢ καθάπερ ἐλέχθη πολλαχῶς λεκτέον εἶναι τὸν ὀρισμὸν καὶ τὸ τί ἦν εἶναι, ὥστε ὡδὶ μὲν οὐδενὸς ἔσται ὀρισμὸς οὐδὲ τὸ τί ἦν εἶναι οὐδενὶ

ὑπάρξει πλὴν ταῖς οὐσίαις, ὥδι δ' ἔσται. ὅτι μὲν οὖν ἐστὶν ὁ ὁρισμὸς ὁ τοῦ τί ἦν εἶναι λόγος, καὶ τὸ τί ἦν εἶναι ἢ μόνων τῶν οὐσιῶν ἐστὶν ἢ μάλιστα καὶ πρώτως καὶ ἀπλῶς, δῆλον.

Πότερον δὲ ταῦτόν ἐστιν ἢ ἕτερον τὸ τί ἦν εἶναι καὶ ἕκαστον, σκεπτέον. ἔστι γάρ τι πρὸ ἔργου πρὸς τὴν περὶ τῆς οὐσίας σκέψιν· ἕκαστόν τε γὰρ οὐκ ἄλλο δοκεῖ εἶναι τῆς ἑαυτοῦ οὐσίας, καὶ τὸ τί ἦν εἶναι λέγεται εἶναι ἢ ἐκάστου οὐσία. ἐπὶ μὲν δὴ τῶν λεγομένων κατὰ συμβεβηκὸς δόξειεν ἂν ἕτερον εἶναι, οἷον λευκὸς ἄνθρωπος ἕτερον καὶ τὸ λευκῷ ἀνθρώπῳ εἶναι (εἰ γὰρ τὸ αὐτό, καὶ τὸ ἀνθρώπῳ εἶναι καὶ τὸ λευκῷ ἀνθρώπῳ τὸ αὐτό· τὸ αὐτὸ γὰρ ἄνθρωπος καὶ λευκὸς ἄνθρωπος, ὡς φασίν, ὥστε καὶ τὸ λευκῷ ἀνθρώπῳ καὶ τὸ ἀνθρώπῳ· ἢ οὐκ ἀνάγκη ὅσα κατὰ συμβεβηκὸς εἶναι ταῦτά, οὐ γὰρ ὡσαύτως τὰ ἄκρα γίνεταί ταῦτά· ἀλλ' ἴσως γε ἐκεῖνο δόξειεν ἂν συμβαίνειν, τὰ ἄκρα γίνεσθαι ταῦτά τὰ κατὰ συμβεβηκός, οἷον τὸ λευκῷ εἶναι καὶ τὸ μουσικῷ· δοκεῖ δὲ οὕτως). ἐπὶ δὲ τῶν καθ' αὐτὰ λεγομένων ἄρ' ἀνάγκη ταῦτό εἶναι, οἷον εἴ τινες εἰσὶν οὐσίαι ὧν ἕτεραι μὴ εἰσὶν οὐσίαι μηδὲ φύσεις ἕτεραι πρότεραι, οἷας φασὶ τὰς ιδέας εἶναι τινες; εἰ γὰρ ἔσται ἕτερον αὐτὸ τὸ ἀγαθὸν καὶ τὸ ἀγαθῷ εἶναι, καὶ ζῶον καὶ τὸ ζῶω, καὶ τὸ ὄντι καὶ τὸ [1031b] ὄν, ἔσονται ἄλλαι τε οὐσίαι καὶ φύσεις καὶ ιδέαι παρὰ τὰς λεγομένας, καὶ πρότεραι οὐσίαι ἐκεῖναι, εἰ τὸ τί ἦν εἶναι οὐσία ἐστίν. καὶ εἰ μὲν ἀπολελυμένοι ἀλλήλων, τῶν μὲν οὐκ ἔσται ἐπιστήμη τὰ δ' οὐκ ἔσται ὄντα (λέγω δὲ τὸ ἀπολελύσθαι εἰ μήτε τῷ ἀγαθῷ αὐτῷ ὑπάρχει τὸ εἶναι ἀγαθῷ μήτε τούτῳ τὸ εἶναι ἀγαθόν). ἐπιστήμη τε γὰρ ἐκάστου ἔστιν ὅταν τὸ τί ἦν ἐκεῖνῳ εἶναι γινώμεν, καὶ ἐπὶ ἀγαθοῦ καὶ τῶν ἄλλων ὁμοίως ἔχει, ὥστε εἰ μηδὲ τὸ ἀγαθῷ εἶναι ἀγαθόν, οὐδὲ τὸ ὄντι ὄν οὐδὲ τὸ ἐνὶ ἔν· ὁμοίως δὲ πάντα ἔστιν ἢ οὐθὲν τὰ τί ἦν εἶναι, ὥστ' εἰ μηδὲ τὸ ὄντι ὄν, οὐδὲ τῶν ἄλλων οὐδέν. ἔτι ὥ μὴ ὑπάρχει ἀγαθῷ εἶναι, οὐκ ἀγαθόν. ἀνάγκη ἄρα ἐν εἶναι τὸ ἀγαθὸν καὶ ἀγαθῷ εἶναι καὶ καλὸν καὶ καλῷ εἶναι, «καὶ» ὅσα μὴ κατ' ἄλλο λέγεται, ἀλλὰ καθ' αὐτὰ καὶ πρῶτα· καὶ γὰρ τοῦτο ἱκανὸν ἂν ὑπάρχη, κἂν μὴ ἦ εἶδη, μᾶλλον δ' ἴσως κἂν ἦ εἶδη (ἅμα δὲ δῆλον καὶ ὅτι εἴπερ εἰσὶν αἱ ιδέαι οἷας τινὲς φασιν, οὐκ ἔσται τὸ ὑποκείμενον οὐσία· ταύτας γὰρ οὐσίας μὲν ἀναγκαῖον εἶναι, μὴ καθ' ὑποκειμένου δέ· ἔσονται γὰρ κατὰ μέθεξιν). - ἔκ τε δὴ τούτων τῶν λόγων ἐν καὶ ταῦτό οὐ κατὰ συμβεβηκὸς αὐτὸ ἕκαστον καὶ τὸ τί ἦν εἶναι, καὶ ὅτι γε τὸ ἐπίστασθαι ἕκαστον τοῦτό ἐστι, τὸ τί ἦν εἶναι ἐπίστασθαι, ὥστε καὶ κατὰ τὴν ἔκθεσιν ἀνάγκη ἐν τι εἶναι ἅμφω (τὸ δὲ κατὰ συμβεβηκὸς λεγόμενον, οἷον τὸ μουσικὸν ἢ λευκόν, διὰ τὸ διττὸν σημαίνειν οὐκ ἀληθὲς εἰπεῖν ὡς ταῦτό τὸ τί ἦν εἶναι καὶ αὐτό· καὶ γὰρ ὥ συμβέβηκε λευκὸν καὶ τὸ συμβεβηκός, ὥστ' ἔστι μὲν ὡς ταῦτόν, ἔστι δὲ ὡς οὐ ταῦτό τὸ τί ἦν εἶναι καὶ αὐτό· τῷ μὲν γὰρ ἀνθρώπῳ καὶ τῷ λευκῷ ἀνθρώπῳ οὐ



ταυτό, τῷ πάθει δὲ ταυτό). ἄτοπον δ' ἂν φανείη καὶ εἴ τις ἐκάστω ὄνομα θεῖτο τῶν τί ἦν εἶναι· ἔσται γὰρ καὶ παρ' ἐκεῖνο ἄλλο, οἷον τῷ τί ἦν εἶναι ἵππῳ τί ἦν εἶναι [ἵππῳ] ἕτερον. καίτοι τί κωλύει καὶ νῦν εἶναι ἕνια εὐθύς τί ἦν εἶναι, εἴπερ οὐσία τὸ τί ἦν εἶναι; ἀλλὰ μὴν οὐ μόνον ἓν, ἀλλὰ καὶ ὁ [1032a] λόγος ὁ αὐτὸς αὐτῶν, ὡς δῆλον καὶ ἐκ τῶν εἰρημένων· οὐ γὰρ κατὰ συμβεβηκὸς ἓν τὸ ἐνὶ εἶναι καὶ ἓν. ἔτι εἰ ἄλλο ἔσται, εἰς ἄπειρον εἴσιν· τὸ μὲν γὰρ ἔσται τί ἦν εἶναι τοῦ ἐνὸς τὸ δὲ τὸ ἓν, ὥστε καὶ ἐπ' ἐκείνων ὁ αὐτὸς ἔσται λόγος. ὅτι μὲν οὖν ἐπὶ τῶν πρώτων καὶ καθ' αὐτὰ λεγομένων τὸ ἐκάστω εἶναι καὶ ἕκαστον τὸ αὐτὸ καὶ ἓν ἐστὶ, δῆλον· οἱ δὲ σοφιστικοὶ ἔλεγχοι πρὸς τὴν θέσιν ταύτην φανερόν ὅτι τῇ αὐτῇ λύονται λύσει καὶ εἰ ταυτό Σωκράτης καὶ Σωκράτει εἶναι· οὐδὲν γὰρ διαφέρει οὔτε ἐξ ὧν ἐρωτήσκειν ἂν τις οὔτε ἐξ ὧν λύων ἐπιτύχοι. πῶς μὲν οὖν τὸ τί ἦν εἶναι ταυτόν καὶ πῶς οὐ ταυτόν ἐκάστω, εἴρηται.

Τῶν δὲ γιγνομένων τὰ μὲν φύσει γίνεταί τὰ δὲ τέχνῃ τὰ δὲ ἀπὸ ταῦτομάτου, πάντα δὲ τὰ γιγνόμενα ὑπὸ τέ τινος γίνεταί καὶ ἐκ τινος καὶ τί· τὸ δὲ τί λέγω καθ' ἐκάστην κατηγορίαν· ἡ γὰρ τόδε ἡ ποσὸν ἡ ποιὸν ἡ πού. αἱ δὲ γενέσεις αἱ μὲν φυσικαὶ αὐταὶ εἴσιν ὧν ἡ γένεσις ἐκ φύσεως ἐστίν, τὸ δ' ἐξ οὗ γίνεταί, ἦν λέγομεν ὕλην, τὸ δὲ ὑφ' οὗ τῶν φύσει τι ὄντων, τὸ δὲ τί ἄνθρωπος ἡ φυτὸν ἡ ἄλλο τι τῶν τοιούτων, ἃ δὴ μάλιστα λέγομεν οὐσίας εἶναι - ἅπαντα δὲ τὰ γιγνόμενα ἡ φύσει ἡ τέχνῃ ἔχει ὕλην· δυνατόν γὰρ καὶ εἶναι καὶ μὴ εἶναι ἕκαστον αὐτῶν, τοῦτο δ' ἐστὶν ἡ ἐν ἐκάστω ὕλη - καθόλου δὲ καὶ ἐξ οὗ φύσις καὶ καθ' ὃ φύσις (τὸ γὰρ γιγνόμενον ἔχει φύσιν, οἷον φυτὸν ἡ ζῶον) καὶ ὑφ' οὗ ἡ κατὰ τὸ εἶδος λεγομένη φύσις ἡ ὁμοειδής (αὕτη δὲ ἐν ἄλλῳ)· ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ· - οὕτω μὲν οὖν γίνεταί τὰ γιγνόμενα διὰ τὴν φύσιν, αἱ δ' ἄλλαι γενέσεις λέγονται ποιήσεις. πάσαι δὲ εἴσιν αἱ ποιήσεις ἡ ἀπὸ τέχνης ἡ ἀπὸ δυνάμεως ἡ ἀπὸ διανοίας. τούτων δὲ τινες γίνονται καὶ ἀπὸ ταῦτομάτου καὶ ἀπὸ τύχης παραπλησίως ὥσπερ ἐν τοῖς ἀπὸ φύσεως γιγνομένοις· ἕνια γὰρ κάκεῖ ταῦτα καὶ ἐκ σπέρματος γίνεταί καὶ ἄνευ σπέρματος. περὶ μὲν οὖν τούτων ὕστερον ἐπισκεπτέον, ἀπὸ τέχνης [1032b] δὲ γίνεταί ὅσων τὸ εἶδος ἐν τῇ ψυχῇ (εἶδος δὲ λέγω τὸ τί ἦν εἶναι ἐκάστου καὶ τὴν πρώτην οὐσίαν)· καὶ γὰρ τῶν ἐναντίων τρόπον τινὰ τὸ αὐτὸ εἶδος· τῆς γὰρ στερήσεως οὐσία ἡ οὐσία ἡ ἀντικειμένη, οἷον ὑγία νόσου, ἐκείνης γὰρ ἀπουσία ἡ νόσος, ἡ δὲ ὑγία ὁ ἐν τῇ ψυχῇ λόγος καὶ ἡ ἐπιστήμη. γίνεταί δὲ τὸ ὑγιὲς νοήσαντος οὕτως· ἐπειδὴ τοδὶ ὑγία, ἀνάγκη εἰ ὑγιὲς ἔσται τοδὶ ὑπάρξαι, οἷον ὁμαλότητα, εἰ δὲ τοῦτο, θερμότητα· καὶ οὕτως ἀεὶ νοεῖ, ἕως ἂν ἀγάγῃ εἰς τοῦτο ὃ αὐτὸς δύναται ἔσχατον ποιεῖν. εἴτα ἤδη ἡ ἀπὸ τούτου κίνησις ποίησις καλεῖται, ἡ ἐπὶ τὸ ὑγιαίνειν. ὥστε συμβαίνει τρόπον τινὰ τὴν ὑγίαν ἐξ ὑγίας γίνεσθαι καὶ τὴν οἰκίαν ἐξ

οἰκίας, τῆς ἄνευ ὕλης τὴν ἔχουσαν ὕλην· ἡ γὰρ ἰατρικὴ ἐστὶ καὶ ἡ οἰκοδομικὴ τὸ εἶδος τῆς ὑγιείας καὶ τῆς οἰκίας, λέγω δὲ οὐσίαν ἄνευ ὕλης τὸ τί ἦν εἶναι.

Τῶν δὴ γενέσεων καὶ κινήσεων ἡ μὲν νόησις καλεῖται ἡ δὲ ποίησις, ἡ μὲν ἀπὸ τῆς ἀρχῆς καὶ τοῦ εἶδους νόησις ἡ δ' ἀπὸ τοῦ τελευταίου τῆς νοήσεως ποίησις. ὁμοίως δὲ καὶ τῶν ἄλλων τῶν μεταξὺ ἕκαστον γίνεταί. λέγω δ' οἶον εἰ ὑγιανεῖ, δέοι ἂν ὀμαλυνθῆναι. τί οὖν ἐστὶ τὸ ὀμαλυνθῆναι; τοδί, τοῦτο δ' ἔσται εἰ θερμανθήσεται. τοῦτο δὲ τί ἐστὶ; τοδί. ὑπάρχει δὲ τοδί δυνάμει· τοῦτο δὲ ἤδη ἐπ' αὐτῷ. τὸ δὴ ποιοῦν καὶ ὅθεν ἄρχεται ἡ κίνησις τοῦ ὑγιαίνειν, ἂν μὲν ἀπὸ τέχνης, τὸ εἶδος ἐστὶ τὸ ἐν τῇ ψυχῇ, ἐὰν δ' ἀπὸ ταῦτομάτου, ἀπὸ τούτου ὅ ποτε τοῦ ποιεῖν ἄρχεται τῷ ποιοῦντι ἀπὸ τέχνης, ὥσπερ καὶ ἐν τῷ ἰατρεύειν ἴσως ἀπὸ τοῦ θερμαίνειν ἡ ἀρχή (τοῦτο δὲ ποιεῖ τῇ τρίψει)· ἡ θερμότης τοίνυν ἡ ἐν τῷ σώματι ἡ μέρος τῆς ὑγιείας ἡ ἔπεται τι αὐτῇ τοιοῦτον ὅ ἐστὶ μέρος τῆς ὑγιείας, ἡ διὰ πλειόνων· τοῦτο δ' ἔσχατόν ἐστι, τὸ ποιοῦν τὸ μέρος τῆς ὑγιείας, - καὶ τῆς οἰκίας (οἶον οἱ λίθοι) καὶ τῶν ἄλλων· ὥστε, καθάπερ λέγεται, ἀδύνατον γενέσθαι εἰ μηδὲν προϋπάρχοι. ὅτι μὲν οὖν τι μέρος ἐξ ἀνάγκης ὑπάρξει φανερόν· ἡ γὰρ ὕλη μέρος (ἐνυπάρχει [1033a] γὰρ καὶ γίνεταί αὕτη). ἄλλ' ἄρα καὶ τῶν ἐν τῷ λόγῳ; ἀμφοτέρως δὴ λέγομεν τοὺς χαλκοὺς κύκλους τί εἴσι, καὶ τὴν ὕλην λέγοντες ὅτι χαλκός, καὶ τὸ εἶδος ὅτι σχῆμα τοιόνδε, καὶ τοῦτό ἐστι τὸ γένος εἰς ὃ πρῶτον τίθεται. ὁ δὲ χαλκοὺς κύκλος ἔχει ἐν τῷ λόγῳ τὴν ὕλην. - ἐξ οὗ δὲ ὡς ὕλης γίνεταί ἓνια λέγεται, ὅταν γένηται, οὐκ ἐκεῖνο ἀλλ' ἐκείνινον, οἶον ὁ ἀνδριᾶς οὐ λίθος ἀλλὰ λίθινος, ὁ δὲ ἄνθρωπος ὁ ὑγιαίνων οὐ λέγεται ἐκεῖνο ἐξ οὗ· αἴτιον δὲ ὅτι γίνεταί ἐκ τῆς στέρησεως καὶ τοῦ ὑποκειμένου, ὃ λέγομεν τὴν ὕλην (οἶον καὶ ὁ ἄνθρωπος καὶ ὁ κάμνων γίνεταί ὑγιής), μᾶλλον μέντοι λέγεται γίνεσθαι ἐκ τῆς στέρησεως, οἶον ἐκ κάμνοντος ὑγιῆς ἢ ἐξ ἀνθρώπου, διὸ κάμνων μὲν ὁ ὑγιῆς οὐ λέγεται, ἄνθρωπος δέ, καὶ ὁ ἄνθρωπος ὑγιῆς· ὦν δ' ἡ στέρησις ἄδηλος καὶ ἀνώνυμος, οἶον ἐν χαλκῷ σχήματος ὁποιοῦν ἢ ἐν πλίνθοις καὶ ξύλοις οἰκίας, ἐκ τούτων δοκεῖ γίνεσθαι ὡς ἐκεῖ ἐκ κάμνοντος· διὸ ὥσπερ οὐδ' ἐκεῖ ἐξ οὗ τοῦτο, ἐκεῖνο οὐ λέγεται, οὐδ' ἐνταῦθα ὁ ἀνδριᾶς ξύλον, ἀλλὰ παράγεται ξύλινος, [οὐ ξύλον,] καὶ χαλκοὺς ἀλλ' οὐ χαλκός, καὶ λίθινος ἀλλ' οὐ λίθος, καὶ ἡ οἰκία πλινθίνη ἀλλ' οὐ πλίνθοι, ἐπεὶ οὐδὲ ὡς ἐκ ξύλου γίνεταί ἀνδριᾶς ἢ ἐκ πλίνθων οἰκία, ἐὰν τις ἐπιβλέπη σφόδρα, οὐκ ἂν ἀπλῶς εἴπειεν, διὰ τὸ δεῖν μεταβάλλοντος γίνεσθαι ἐξ οὗ, ἀλλ' οὐχ ὑπομένοντος. διὰ μὲν οὖν τοῦτο οὕτως λέγεται.

Ἐπεὶ δὲ ὑπὸ τινός τε γίνεταί τὸ γιγνόμενον (τοῦτο δὲ λέγω ὅθεν ἡ ἀρχὴ τῆς γενέσεώς ἐστι) καὶ ἐκ τινος (ἔστω δὲ μὴ ἡ στέρησις τοῦτο ἀλλ' ἡ ὕλη·

ἤδη γὰρ διώρισται ὃν τρόπον τοῦτο λέγομεν) καὶ τὶ γίνεται (τοῦτο δ' ἐστὶν ἢ σφαῖρα ἢ κύκλος ἢ ὅ τι ἔτυχε τῶν ἄλλων), ὥσπερ οὐδὲ τὸ ὑποκείμενον ποιεῖ, τὸν χαλκόν, οὕτως οὐδὲ τὴν σφαῖραν, εἰ μὴ κατὰ συμβεβηκὸς ὅτι ἡ χαλκῇ σφαῖρα σφαῖρά ἐστιν ἐκείνην δὲ ποιεῖ. τὸ γὰρ τόδε τι ποιεῖν ἐκ τοῦ ὅλως ὑποκειμένου τόδε τι ποιεῖν ἐστὶν (λέγω δ' ὅτι τὸν χαλκὸν στρογγύλον ποιεῖν ἐστὶν οὐ τὸ στρογγύλον ἢ τὴν σφαῖραν ποιεῖν ἄλλ' ἕτερόν τι, οἷον τὸ εἶδος τοῦτο ἐν ἄλλῳ· εἰ γὰρ ποιεῖ, ἔκ [1033b] τινος ἂν ποιοίῃ ἄλλου, τοῦτο γὰρ ὑπέκειτο· οἷον ποιεῖ χαλκῇ σφαῖραν, τοῦτο δὲ οὕτως ὅτι ἐκ τουδί, ὃ ἐστὶ χαλκός, τοδὶ ποιεῖ, ὃ ἐστὶ σφαῖρα)· εἰ οὖν καὶ τοῦτο ποιεῖ αὐτό, δῆλον ὅτι ὡσαύτως ποιήσει, καὶ βαδιοῦνται αἱ γενέσεις εἰς ἄπειρον. φανερόν ἄρα ὅτι οὐδὲ τὸ εἶδος, ἢ ὅτιδήποτε χρή καλεῖν τὴν ἐν τῷ αἰσθητῷ μορφήν, οὐ γίνεται, οὐδ' ἐστὶν αὐτοῦ γένεσις, οὐδὲ τὸ τί ἦν εἶναι (τοῦτο γὰρ ἐστὶν ὃ ἐν ἄλλῳ γίνεται ἢ ὑπὸ τέχνης ἢ ὑπὸ φύσεως ἢ δυνάμεως). τὸ δὲ χαλκῇ σφαῖραν εἶναι ποιεῖ· ποιεῖ γὰρ ἐκ χαλκοῦ καὶ σφαίρας· εἰς τοδὶ γὰρ τὸ εἶδος ποιεῖ, καὶ ἐστὶ τοῦτο σφαῖρα χαλκῇ. τοῦ δὲ σφαίρα εἶναι ὅλως εἰ ἔσται γένεσις, ἔκ τινος τὶ ἔσται. δεήσει γὰρ διαιρετὸν εἶναι ἀεὶ τὸ γιγνόμενον, καὶ εἶναι τὸ μὲν τόδε τὸ δὲ τόδε, λέγω δ' ὅτι τὸ μὲν ὕλην τὸ δὲ εἶδος. εἰ δὲ ἐστὶ σφαῖρα τὸ ἐκ τοῦ μέσου σχῆμα ἴσον, τούτου τὸ μὲν ἐν ᾧ ἔσται ὃ ποιεῖ, τὸ δ' ἐν ἐκείνῳ, τὸ δὲ ἅπαν τὸ γεγονός, οἷον ἡ χαλκῇ σφαῖρα. φανερόν δὴ ἐκ τῶν εἰρημένων ὅτι τὸ μὲν ὡς εἶδος ἢ οὐσία λεγόμενον οὐ γίνεται, ἡ δὲ σύνολος ἢ κατὰ ταύτην λεγομένη γίνεται, καὶ ὅτι ἐν παντὶ τῷ γεννωμένῳ ὕλη ἔνεστι, καὶ ἔστι τὸ μὲν τόδε τὸ δὲ τόδε. - πότερον οὖν ἔστι τις σφαῖρα παρὰ τάσδε ἢ οἰκία παρὰ τὰς πλίνθους; ἢ οὐδ' ἂν ποτε ἐγίγνετο, εἰ οὕτως ἦν, τόδε τι, ἀλλὰ τὸ τοιόνδε σημαίνει, τόδε δὲ καὶ ὠρισμένον οὐκ ἔστιν, ἀλλὰ ποιεῖ καὶ γεννᾷ ἐκ τοῦδε τοιόνδε, καὶ ὅταν γεννηθῇ, ἔστι τόδε τοιόνδε; τὸ δὲ ἅπαν τόδε, Καλλίας ἢ Σωκράτης, ἐστὶν ὥσπερ ἡ σφαῖρα ἢ χαλκῇ ἡδί, ὃ δ' ἄνθρωπος καὶ τὸ ζῶον ὥσπερ σφαῖρα χαλκῇ ὅλως. φανερόν ἄρα ὅτι ἡ τῶν εἰδῶν αἰτία, ὡς εἰώθασι τινες λέγειν τὰ εἶδη, εἰ ἔστιν ἅττα παρὰ τὰ καθ' ἕκαστα, πρὸς γε τὰς γενέσεις καὶ τὰς οὐσίας οὐθὲν χρησίμη· οὐδ' ἂν εἶεν διὰ γε ταῦτα οὐσίαι καθ' αὐτάς. ἐπὶ μὲν δὴ τινων καὶ φανερόν ὅτι τὸ γεννῶν τοιοῦτον μὲν οἷον τὸ γεννώμενον, οὐ μέντοι τὸ αὐτό γε, οὐδὲ ἐν τῷ ἀριθμῷ ἀλλὰ τῷ εἶδει, οἷον ἐν τοῖς φυσικοῖς - ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ - ἂν μὴ τι παρὰ φύσιν γένηται, οἷον ἵππος ἡμίονον (καὶ ταῦτα δὲ ὁμοίως· ὃ γὰρ ἂν κοινὸν εἶη ἐφ' ἵππου καὶ ὄνου [1034a] οὐκ ὠνόμασται, τὸ ἐγγύτατα γένος, εἴη δ' ἂν ἄμφω ἴσως, οἷον ἡμίονος)· ὥστε φανερόν ὅτι οὐθὲν δεῖ ὡς παράδειγμα εἶδος κατασκευάζειν (μάλιστα γὰρ ἂν ἐν τούτοις ἐπεζητοῦντο· οὐσίαι γὰρ αἱ μάλιστα αὐταὶ) ἀλλὰ ἱκανὸν τὸ γεννῶν ποιῆσαι καὶ τοῦ εἶδους αἴτιον εἶναι ἐν τῇ ὕλῃ. τὸ δ' ἅπαν ἤδη, τὸ τοιόνδε εἶδος ἐν ταῖσδε ταῖς σαρκὶ καὶ ὀστοῖς, Καλλίας καὶ Σωκράτης· καὶ ἕτερον μὲν διὰ τὴν ὕλην (ἐτέρα γάρ), ταῦτο δὲ

τῷ εἶδει (ἄτομον γὰρ τὸ εἶδος).

Απορήσειε δ' ἂν τις διὰ τί τὰ μὲν γίνεταί καὶ τέχνη καὶ ἀπὸ ταῦτομάτου, οἶον ὑγίεια, τὰ δ' οὐ, οἶον οἰκία. αἴτιον δὲ ὅτι τῶν μὲν ἡ ὕλη ἡ ἄρχουσα τῆς γενέσεως ἐν τῷ ποιεῖν καὶ γίνεσθαι τι τῶν ἀπὸ τέχνης, ἐν ἣ ὑπάρχει τι μέρος τοῦ πράγματος, - ἡ μὲν τοιαύτη ἐστὶν οἷα κινεῖσθαι ὑφ' αὐτῆς ἡ δ' οὐ, καὶ ταύτης ἡ μὲν ὡδὶ οἷα τε ἡ δὲ ἀδύνατος· πολλὰ γὰρ δυνατὰ μὲν ὑφ' αὐτῶν κινεῖσθαι ἄλλ' οὐχ ὡδί, οἶον ὀρχήσασθαι. ὅσων οὖν τοιαύτη ἡ ὕλη, οἶον οἱ λίθοι, ἀδύνατον ὡδὶ κινηθῆναι εἰ μὴ ὑπ' ἄλλου, ὡδὶ μέντοι ναί - καὶ τὸ πῦρ. διὰ τοῦτο τὰ μὲν οὐκ ἔσται ἄνευ τοῦ ἔχοντος τὴν τέχνην τὰ δὲ ἔσται· ὑπὸ γὰρ τούτων κινηθήσεται τῶν οὐκ ἔχόντων τὴν τέχνην, κινεῖσθαι δὲ δυναμένων αὐτῶν ὑπ' ἄλλων οὐκ ἔχόντων τὴν τέχνην ἢ ἐκ μέρους. δῆλον δ' ἐκ τῶν εἰρημένων καὶ ὅτι τρόπον τινὰ πάντα γίνεταί ἐξ ὁμωνύμου, ὥσπερ τὰ φύσει, ἢ ἐκ μέρους ὁμωνύμου (οἶον ἡ οἰκία ἐξ οἰκίας, ἢ ὑπὸ νοῦ· ἡ γὰρ τέχνη τὸ εἶδος) [ἢ ἐκ μέρους] ἢ ἔχοντός τι μέρος, - ἐὰν μὴ κατὰ συμβεβηκὸς γίγνηται· τὸ γὰρ αἴτιον τοῦ ποιεῖν πρῶτον καθ' αὐτὸ μέρος. θερμότης γὰρ ἡ ἐν τῇ κινήσει θερμότητα ἐν τῷ σώματι ἐποίησεν· αὕτη δὲ ἐστὶν ἡ ὑγίεια ἡ μέρος, ἡ ἀκολουθεῖ αὐτῇ μέρος τι τῆς ὑγείας ἢ αὐτὴ ἡ ὑγίεια· διὸ καὶ λέγεται ποιεῖν, ὅτι ἐκεῖνο ποιεῖ [τὴν ὑγίειαν] ὥ ἀκολουθεῖ καὶ συμβέβηκε [θερμότης]. ὥστε, ὥσπερ ἐν τοῖς συλλογισμοῖς, πάντων ἀρχὴ ἡ οὐσία· ἐκ γὰρ τοῦ τί ἐστὶν οἱ συλλογισμοὶ εἰσιν, ἐνταῦθα δὲ αἱ γενέσεις. ὁμοίως δὲ καὶ τὰ φύσει συνιστάμενα τούτοις ἔχει. τὸ μὲν γὰρ σπέρμα ποιεῖ ὥσπερ τὰ ἀπὸ τέχνης (ἔχει γὰρ δυνάμει [1034b] τὸ εἶδος, καὶ ἀφ' οὗ τὸ σπέρμα, ἐστὶ πως ὁμώνυμον - οὐ γὰρ πάντα οὕτω δεῖ ζητεῖν ὥς ἐξ ἀνθρώπου ἄνθρωπος· καὶ γὰρ γυνὴ ἐξ ἀνδρός - ἐὰν μὴ πῆρωμα ἢ· διὸ ἡμίονος οὐκ ἐξ ἡμιόνου)· ὅσα δὲ ἀπὸ ταῦτομάτου ὥσπερ ἐκεῖ γίνεταί, ὅσων ἡ ὕλη δύναται καὶ ὑφ' αὐτῆς κινεῖσθαι ταύτην τὴν κίνησιν ἦν τὸ σπέρμα κινεῖ· ὅσων δὲ μή, ταῦτα ἀδύνατα γίνεσθαι ἄλλως πως ἢ ἐξ αὐτῶν. - οὐ μόνον δὲ περὶ τῆς οὐσίας ὁ λόγος δηλοῖ τὸ μὴ γίνεσθαι τὸ εἶδος, ἀλλὰ περὶ πάντων ὁμοίως τῶν πρώτων κοινὸς ὁ λόγος, οἶον ποσοῦ ποιοῦ καὶ τῶν ἄλλων κατηγοριῶν. γίνεταί γὰρ ὥσπερ ἡ χαλκῇ σφαῖρα ἄλλ' οὐ σφαῖρα οὐδὲ χαλκός, καὶ ἐπὶ χαλκοῦ, εἰ γίνεταί (ἀεὶ γὰρ δεῖ προϋπάρχειν τὴν ὕλην καὶ τὸ εἶδος), οὕτως καὶ ἐπὶ τοῦ τί ἐστὶ καὶ ἐπὶ τοῦ ποιοῦ καὶ ποσοῦ καὶ τῶν ἄλλων ὁμοίως κατηγοριῶν· οὐ γὰρ γίνεταί τὸ ποιὸν ἀλλὰ τὸ ποιὸν ξύλον, οὐδὲ τὸ ποσὸν ἀλλὰ τὸ ποσὸν ξύλον ἢ ζῶον. ἄλλ' ἴδιον τῆς οὐσίας ἐκ τούτων λαβεῖν ἔστιν ὅτι ἀναγκαῖον προϋπάρχειν ἑτέραν οὐσίαν ἐντελεχείᾳ οὖσαν ἢ ποιεῖ, οἶον ζῶον εἰ γίνεταί ζῶον· ποιὸν δ' ἢ ποσὸν οὐκ ἀνάγκη ἄλλ' ἢ δυνάμει μόνον.

Ἐπεὶ δὲ ὁ ὁρισμὸς λόγος ἐστὶ, πᾶς δὲ λόγος μέρη ἔχει, ὥς δὲ ὁ λόγος

πρὸς τὸ πρᾶγμα, καὶ τὸ μέρος τοῦ λόγου πρὸς τὸ μέρος τοῦ πράγματος ὁμοίως ἔχει, ἀπορεῖται ἤδη πότερον δεῖ τὸν τῶν μερῶν λόγον ἐνυπάρχειν ἐν τῷ τοῦ ὅλου λόγῳ ἢ οὐ. ἐπ' ἐνίων μὲν γὰρ φαίνονται ἐνόντες ἐνίων δ' οὐ. τοῦ μὲν γὰρ κύκλου ὁ λόγος οὐκ ἔχει τὸν τῶν τμημάτων, ὁ δὲ τῆς συλλαβῆς ἔχει τὸν τῶν στοιχείων· καίτοι διαιρεῖται καὶ ὁ κύκλος εἰς τὰ τμήματα ὥσπερ καὶ ἡ συλλαβὴ εἰς τὰ στοιχεῖα. ἔτι δὲ εἰ πρότερα τὰ μέρη τοῦ ὅλου, τῆς δὲ ὀρθῆς ἢ ὀξεῖα μέρος καὶ ὁ δάκτυλος τοῦ ζώου, πρότερον ἂν εἴη ἢ ὀξεῖα τῆς ὀρθῆς καὶ ὁ δάκτυλος τοῦ ἀνθρώπου. δοκεῖ δ' ἐκεῖνα εἶναι πρότερα· τῷ λόγῳ γὰρ λέγονται ἐξ ἐκείνων, καὶ τῷ εἶναι δὲ ἄνευ ἀλλήλων πρότερα. - ἡ πολλαχῶς λέγεται τὸ μέρος, ὧν εἰς μὲν τρόπος τὸ μετροῦν κατὰ τὸ ποσόν - ἀλλὰ τοῦτο μὲν ἀφείσθω· ἐξ ὧν δὲ ἡ οὐσία ὡς με [1035a] εἰ οὖν ἐστὶ τὸ μὲν ὕλη τὸ δὲ εἶδος τὸ δ' ἐκ τούτων, καὶ οὐσία ἢ τε ὕλη καὶ τὸ εἶδος καὶ τὸ ἐκ τούτων, ἔστι μὲν ὡς καὶ ἡ ὕλη μέρος τινὸς λέγεται, ἔστι δ' ὡς οὐ, ἀλλ' ἐξ ὧν ὁ τοῦ εἶδους λόγος. οἶον τῆς μὲν κοιλότητος οὐκ ἔστι μέρος ἡ σὰρξ (αὕτη γὰρ ἡ ὕλη ἐφ' ἧς γίγνεται), τῆς δὲ σιμότητος μέρος· καὶ τοῦ μὲν συνόλου ἀνδριάντος μέρος ὁ χαλκὸς τοῦ δ' ὡς εἶδους λεγομένου ἀνδριάντος οὐ (λεκτέον γὰρ τὸ εἶδος καὶ ἡ εἶδος ἔχει ἕκαστον, τὸ δ' ὑλικὸν οὐδέποτε καθ' αὐτὸ λεκτέον)· διὸ ὁ μὲν τοῦ κύκλου λόγος οὐκ ἔχει τὸν τῶν τμημάτων, ὁ δὲ τῆς συλλαβῆς ἔχει τὸν τῶν στοιχείων· τὰ μὲν γὰρ στοιχεῖα τοῦ λόγου μέρη τοῦ εἶδους καὶ οὐχ ὕλη, τὰ δὲ τμήματα οὕτως μέρη ὡς ὕλη ἐφ' ἧς ἐπιγίγνεται· ἐγγυτέρω μέντοι τοῦ εἶδους ἢ ὁ χαλκὸς ὅταν ἐν χαλκῷ ἢ στρογγυλότης ἐγγένηται. ἔστι δ' ὡς οὐδὲ τὰ στοιχεῖα πάντα τῆς συλλαβῆς ἐν τῷ λόγῳ ἐνέσται, οἶον ταδὶ τὰ κήρινα ἢ τὰ ἐν τῷ ἀέρι· ἤδη γὰρ καὶ ταῦτα μέρος τῆς συλλαβῆς ὡς ὕλη αἰσθητή. καὶ γὰρ ἡ γραμμὴ οὐκ εἰ διαιρουμένη εἰς τὰ ἡμίση φθείρεται, ἢ ὁ ἄνθρωπος εἰς τὰ ὀστέα καὶ νεῦρα καὶ σάρκας, διὰ τοῦτο καὶ εἰσὶν ἐκ τούτων οὕτως ὡς ὄντων τῆς οὐσίας μερῶν, ἀλλ' ὡς ἐξ ὕλης, καὶ τοῦ μὲν συνόλου μέρη, τοῦ εἶδους δὲ καὶ οὐ ὁ λόγος οὐκέτι· διόπερ οὐδ' ἐν τοῖς λόγοις. τῷ μὲν οὖν ἐνέσται ὁ τῶν τοιούτων μερῶν λόγος, τῷ δ' οὐ δεῖ ἐνεῖναι, ἂν μὴ ἢ τοῦ συνειλημμένου· διὰ γὰρ τοῦτο ἕνια μὲν ἐκ τούτων ὡς ἀρχῶν ἐστὶν εἰς ἃ φθείρονται, ἕνια δὲ οὐκ ἔστιν. ὅσα μὲν οὖν συνειλημμένα τὸ εἶδος καὶ ἡ ὕλη ἐστίν, οἶον τὸ σιμὸν ἢ ὁ χαλκοῦς κύκλος, ταῦτα μὲν φθείρεται εἰς ταῦτα καὶ μέρος αὐτῶν ἡ ὕλη· ὅσα δὲ μὴ συνειληπται τῇ ὕλει ἀλλὰ ἄνευ ὕλης, ὧν οἱ λόγοι τοῦ εἶδους μόνον, ταῦτα δ' οὐ φθείρεται, ἢ ὅλως ἢ οὔτοι οὔτω γε· ὥστ' ἐκείνων μὲν ἀρχαὶ καὶ μέρη ταῦτα τοῦ δὲ εἶδους οὔτε μέρη οὔτε ἀρχαί. καὶ διὰ τοῦτο φθείρεται ὁ πῆλινος ἀνδριάς εἰς πηλὸν καὶ ἡ σφαῖρα εἰς χαλκὸν καὶ ὁ Καλλίας εἰς σάρκα καὶ ὀστέα, ἔτι δὲ ὁ κύκλος εἰς τὰ τμήματα· ἔστι γὰρ τις ὃς συνειληπται τῇ [1035b] ὕλει· ὁμωνύμως γὰρ λέγεται κύκλος ὃ τε ἀπλῶς λεγόμενος καὶ ὁ καθ' ἕκαστα διὰ τὸ μὴ εἶναι ἴδιον ὄνομα τοῖς καθ' ἕκαστον. - εἴρηται μὲν οὖν καὶ νῦν τὸ

ἀληθές, ὅμως δ' ἔτι σαφέστερον εἵπωμεν ἐπαναλαμβάνοντες. ὅσα μὲν γὰρ τοῦ λόγου μέρη καὶ εἰς ἃ διαιρεῖται ὁ λόγος, ταῦτα πρότερα ἢ πάντα ἢ ἕνια· ὁ δὲ τῆς ὀρθῆς λόγος οὐ διαιρεῖται εἰς ὀξείας λόγον, ἀλλ' <ὁ> τῆς ὀξείας εἰς ὀρθήν· χρῆται γὰρ ὁ ὀριζόμενος τὴν ὀξεῖαν τῇ ὀρθῇ· “ἐλάττων” γὰρ “ὀρθῆς” ἢ ὀξεῖα. ὁμοίως δὲ καὶ ὁ κύκλος καὶ τὸ ἡμικύκλιον ἔχουσιν· τὸ γὰρ ἡμικύκλιον τῷ κύκλῳ ὀρίζεται καὶ ὁ δάκτυλος τῷ ὅλῳ· “τὸ” γὰρ “τοιόνδε μέρος ἀνθρώπου” δάκτυλος. ὥσθ' ὅσα μὲν μέρη ὡς ὕλη καὶ εἰς ἃ διαιρεῖται ὡς ὕλην, ὕστερα· ὅσα δὲ ὡς τοῦ λόγου καὶ τῆς οὐσίας τῆς κατὰ τὸν λόγον, πρότερα ἢ πάντα ἢ ἕνια. ἐπεὶ δὲ ἡ τῶν ζώων ψυχὴ (τοῦτο γὰρ οὐσία τοῦ ἐμψύχου) ἢ κατὰ τὸν λόγον οὐσία καὶ τὸ εἶδος καὶ τὸ τί ἦν εἶναι τῷ τοιῷδε σώματι (ἕκαστον γοῦν τὸ μέρος ἐὰν ὀρίζεται καλῶς, οὐκ ἄνευ τοῦ ἔργου ὀριεῖται, ὃ οὐχ ὑπάρξει ἄνευ αἰσθήσεως), ὥστε τὰ ταύτης μέρη πρότερα ἢ πάντα ἢ ἕνια τοῦ συνόλου ζώου, καὶ καθ' ἕκαστον δὴ ὁμοίως, τὸ δὲ σῶμα καὶ τὰ τούτου μόρια ὕστερα ταύτης τῆς οὐσίας, καὶ διαιρεῖται εἰς ταῦτα ὡς εἰς ὕλην οὐχ ἡ οὐσία ἀλλὰ τὸ σύνολον, - τοῦ μὲν οὖν συνόλου πρότερα ταῦτ' ἔστιν ὡς, ἔστι δ' ὡς οὗ (οὐδὲ γὰρ εἶναι δύναται χωριζόμενα· οὐ γὰρ ὁ πάντως ἔχων δάκτυλος ζώου, ἀλλ' ὁμώνυμος ὁ τεθνεώς)· ἕνια δὲ ἅμα, ὅσα κύρια καὶ ἐν ᾧ πρώτῳ ὁ λόγος καὶ ἡ οὐσία, οἷον εἰ τοῦτο καρδία ἢ ἐγκέφαλος· διαφέρει γὰρ οὐθὲν πότερον τοιοῦτον. ὁ δ' ἄνθρωπος καὶ ὁ ἵππος καὶ τὰ οὕτως ἐπὶ τῶν καθ' ἕκαστα, καθόλου δέ, οὐκ ἔστιν οὐσία ἀλλὰ σύνολόν τι ἐκ τουδὶ τοῦ λόγου καὶ τησδὶ τῆς ὕλης ὡς καθόλου· καθ' ἕκαστον δ' ἐκ τῆς ἐσχάτης ὕλης ὁ Σωκράτης ἤδη ἐστίν, καὶ ἐπὶ τῶν ἄλλων ὁμοίως. - μέρος μὲν οὖν ἐστὶ καὶ τοῦ εἶδους (εἶδος δὲ λέγω τὸ τί ἦν εἶναι) καὶ τοῦ συνόλου τοῦ ἐκ τοῦ εἶδους καὶ τῆς ὕλης <καὶ τῆς ὕλης> αὐτῆς. ἀλλὰ τοῦ λόγου μέρη τὰ τοῦ εἶδους μόνον ἐστίν, ὁ δὲ λόγος ἐστὶ τοῦ [1036a] καθόλου· τὸ γὰρ κύκλῳ εἶναι καὶ κύκλος καὶ ψυχῇ εἶναι καὶ ψυχὴ ταυτό. τοῦ δὲ συνόλου ἤδη, οἷον κύκλου τουδὶ καὶ τῶν καθ' ἕκαστά τινος ἢ αἰσθητοῦ ἢ νοητοῦ - λέγω δὲ νοητοὺς μὲν οἷον τοὺς μαθηματικούς, αἰσθητοὺς δὲ οἷον τοὺς χαλκοῦς καὶ τοὺς ξυλίνους - τούτων δὲ οὐκ ἔστιν ὀρισμός, ἀλλὰ μετὰ νοήσεως ἢ αἰσθήσεως γνωρίζονται, ἀπελθόντες δὲ ἐκ τῆς ἐντελεχείας οὐ δῆλον πότερον εἰσὶν ἢ οὐκ εἰσὶν· ἀλλ' ἀεὶ λέγονται καὶ γνωρίζονται τῷ καθόλου λόγῳ. ἡ δ' ὕλη ἄγνωστος καθ' αὐτήν. ὕλη δὲ ἢ μὲν αἰσθητὴ ἐστὶν ἢ δὲ νοητὴ, αἰσθητὴ μὲν οἷον χαλκὸς καὶ ξύλον καὶ ὄση κινητὴ ὕλη, νοητὴ δὲ ἢ ἐν τοῖς αἰσθητοῖς ὑπάρχουσα μὴ ἢ αἰσθητά, οἷον τὰ μαθηματικά. πῶς μὲν οὖν ἔχει περὶ ὅλου καὶ μέρους καὶ περὶ τοῦ προτέρου καὶ ὑστέρου, εἴρηται· πρὸς δὲ τὴν ἐρώτησιν ἀνάγκη ἀπαντᾶν, ὅταν τις ἔρηται πότερον ἡ ὀρθὴ καὶ ὁ κύκλος καὶ τὸ ζῶον πρότερον ἢ εἰς ἃ διαιροῦνται καὶ ἐξ ὧν εἰσὶ, τὰ μέρη, ὅτι οὐχ ἀπλῶς. εἰ μὲν γάρ ἐστι καὶ ἡ ψυχὴ ζῶον ἢ ἐμψυχον, ἢ ἕκαστον ἢ ἐκάστου, καὶ κύκλος τὸ κύκλῳ εἶναι, καὶ ὀρθὴ τὸ ὀρθῇ εἶναι καὶ ἡ οὐσία ἢ τῆς ὀρθῆς, τί μὲν καὶ τινὸς

φατέον ὕστερον, οἷον τῶν ἐν τῷ λόγῳ καὶ τινὸς ὀρθῆς (καὶ γὰρ ἢ μετὰ τῆς ὕλης, ἢ χαλκῇ ὀρθῇ, καὶ ἢ ἐν ταῖς γραμμαῖς ταῖς καθ' ἕκαστα), ἢ δ' ἄνευ ὕλης τῶν μὲν ἐν τῷ λόγῳ ὑστέρα τῶν δ' ἐν τῷ καθ' ἕκαστα μορίων προτέρα, ἀπλῶς δ' οὐ φατέον· εἰ δ' ἑτέρα καὶ μὴ ἔστιν ἡ ψυχὴ ζῶον, καὶ οὕτω τὰ μὲν φατέον τὰ δ' οὐ φατέον, ὥσπερ εἴρηται.

Ἀπορεῖται δὲ εἰκότως καὶ ποῖα τοῦ εἶδους μέρη καὶ ποῖα οὐ, ἀλλὰ τοῦ συνειλημμένου. καίτοι τούτου μὴ δήλου ὄντος οὐκ ἔστιν ὀρίσασθαι ἕκαστον· τοῦ γὰρ καθόλου καὶ τοῦ εἶδους ὁ ὀρισμός· ποῖα οὖν ἐστὶ τῶν μερῶν ὡς ὕλη καὶ ποῖα οὐ, ἐὰν μὴ ἡ φανερά, οὐδὲ ὁ λόγος ἔσται φανερός ὁ τοῦ πράγματος. ὅσα μὲν οὖν φαίνεται ἐπιγιγνώμενα ἐφ' ἑτέρων τῷ εἶδει, οἷον κύκλος ἐν χαλκῷ καὶ λίθῳ καὶ ξύλῳ, ταῦτα μὲν δηλὰ εἶναι δοκεῖ ὅτι οὐδὲν τῆς τοῦ κύκλου οὐσίας ὁ χαλκὸς οὐδ' ὁ λίθος διὰ τὸ χωρίζεσθαι αὐτῶν· ὅσα δὲ μὴ ὀρᾶται χωριζόμενα, οὐδὲν μὲν κωλύει ὁμοίως ἔχειν [1036b] τούτοις, ὥσπερ κἂν εἰ οἱ κύκλοι πάντες ἐωρῶντο χαλκοῖ· οὐδὲν γὰρ ἂν ἦττον ἦν ὁ χαλκὸς οὐδὲν τοῦ εἶδους· χαλεπὸν δὲ ἀφελεῖν τοῦτον τῇ διανοίᾳ. οἷον τὸ τοῦ ἀνθρώπου εἶδος ἀεὶ ἐν σαρκὶ φαίνεται καὶ ὅστοις καὶ τοῖς τοιούτοις μέρεσιν· ἄρ' οὖν καὶ ἐστὶ ταῦτα μέρη τοῦ εἶδους καὶ τοῦ λόγου; ἢ οὐ, ἀλλ' ὕλη, ἀλλὰ διὰ τὸ μὴ καὶ ἐπ' ἄλλων ἐπιγίγνεσθαι ἀδυνατοῦμεν χωρίσαι; ἐπεὶ δὲ τοῦτο δοκεῖ μὲν ἐνδέχεσθαι ἄδηλον δὲ πότε, ἀποροῦσί τινες ἤδη καὶ ἐπὶ τοῦ κύκλου καὶ τοῦ τριγώνου ὡς οὐ προσῆκον γραμμαῖς ὀρίζεσθαι καὶ τῷ συνεχεῖ, ἀλλὰ πάντα καὶ ταῦτα ὁμοίως λέγεσθαι ὡσανεὶ σάρκες καὶ ὅστ' αὖ τοῦ ἀνθρώπου καὶ χαλκὸς καὶ λίθος τοῦ ἀνδριάντος· καὶ ἀνάγουσι πάντα εἰς τοὺς ἀριθμούς, καὶ γραμμῆς τὸν λόγον τὸν τῶν δύο εἶναί φασιν. καὶ τῶν τὰς ιδέας λεγόντων οἱ μὲν αὐτογραμμὴν τὴν δυάδα, οἱ δὲ τὸ εἶδος τῆς γραμμῆς, ἕνια μὲν γὰρ εἶναι τὸ αὐτὸ τὸ εἶδος καὶ οὐ τὸ εἶδος (οἷον δυάδα καὶ τὸ εἶδος δυάδος), ἐπὶ γραμμῆς δὲ οὐκέτι. συμβαίνει δὴ ἔν τε πολλῶν εἶδος εἶναι ὧν τὸ εἶδος φαίνεται ἕτερον (ὅπερ καὶ τοῖς Πυθαγορείοις συνέβαινεν), καὶ ἐνδέχεται ἐν πάντων ποιεῖν αὐτὸ εἶδος, τὰ δ' ἄλλα μὴ εἶδη· καίτοι οὕτως ἐν πάντα ἔσται.

Ὅτι μὲν οὖν ἔχει τινὰ ἀπορίαν τὰ περὶ τοὺς ὀρισμούς, καὶ διὰ τίν' αἰτίαν, εἴρηται· διὸ καὶ τὸ πάντα ἀνάγειν οὕτω καὶ ἀφαιρεῖν τὴν ὕλην περίεργον· ἕνια γὰρ ἴσως τόδ' ἐν τῷ δ' ἐστὶν ἡ ὠδὶ ταδὶ ἔχοντα. καὶ ἡ παραβολὴ ἢ ἐπὶ τοῦ ζώου, ἢ ἐν εἰώθει λέγειν Σωκράτης ὁ νεώτερος, οὐ καλῶς ἔχει· ἀπάγει γὰρ ἀπὸ τοῦ ἀληθοῦς, καὶ ποιεῖ ὑπολαμβάνειν ὡς ἐνδεχόμενον εἶναι τὸν ἄνθρωπον ἄνευ τῶν μερῶν, ὥσπερ ἄνευ τοῦ χαλκοῦ τὸν κύκλον. τὸ δ' οὐχ ὅμοιον· αἰσθητὸν γάρ τι τὸ ζῶον, καὶ ἄνευ κινήσεως οὐκ ἔστιν ὀρίσασθαι, διὸ οὐδ' ἄνευ τῶν μερῶν ἐχόντων πῶς. οὐ γὰρ πάντως τοῦ ἀνθρώπου μέρος ἡ

χείρ, ἀλλ' ἢ δυναμένη τὸ ἔργον ἀποτελεῖν, ὥστε ἔμψυχος οὐσα· μὴ ἔμψυχος δὲ οὐ μέρος. περὶ δὲ τὰ μαθηματικὰ διὰ τί οὐκ εἰσὶ μέρη οἱ λόγοι τῶν λόγων, οἷον τοῦ κύκλου τὰ ἡμικύκλια; οὐ γὰρ ἐστὶν αἰσθητὰ ταῦτα. ἢ οὐθὲν διαφέρει; ἔσται γὰρ ὕλη ἐνίων καὶ μὴ αἰσθητῶν· [1037a] καὶ παντὸς γὰρ ὕλη τις ἔστιν ὃ μὴ ἔστι τί ἦν εἶναι καὶ εἶδος αὐτὸ καθ' αὐτὸ ἀλλὰ τότε τι. κύκλου μὲν οὖν οὐκ ἔσται τοῦ καθόλου, τῶν δὲ καθ' ἕκαστα ἔσται μέρη ταῦτα, ὥσπερ εἴρηται πρότερον· ἔστι γὰρ ὕλη ἢ μὲν αἰσθητὴ ἢ δὲ νοητή. δῆλον δὲ καὶ ὅτι ἢ μὲν ψυχὴ οὐσία ἢ πρώτη, τὸ δὲ σῶμα ὕλη, ὃ δ' ἄνθρωπος ἢ τὸ ζῶον τὸ ἐξ ἀμφοῖν ὡς καθόλου· Σωκράτης δὲ καὶ Κορίσκος, εἰ μὲν καὶ ἡ ψυχὴ Σωκράτης, διττόν (οἱ μὲν γὰρ ὡς ψυχὴν οἱ δ' ὡς τὸ σύνολον), εἰ δ' ἀπλῶς ἡ ψυχὴ ἦδε καὶ <τὸ> σῶμα τότε, ὥσπερ τὸ καθόλου [τε] καὶ τὸ καθ' ἕκαστον. πότερον δὲ ἔστι παρὰ τὴν ὕλην τῶν τοιούτων οὐσιῶν τις ἄλλη, καὶ δεῖ ζητεῖν οὐσίαν ἑτέραν τινὰ οἷον ἀριθμοὺς ἢ τι τοιοῦτον, σκεπτέον ὕστερον. τούτου γὰρ χάριν καὶ περὶ τῶν αἰσθητῶν οὐσιῶν πειρώμεθα διορίζειν, ἐπεὶ τρόπον τινὰ τῆς φυσικῆς καὶ δευτέρας φιλοσοφίας ἔργον ἢ περὶ τὰς αἰσθητὰς οὐσίας θεωρία· οὐ γὰρ μόνον περὶ τῆς ὕλης δεῖ γνωρίζειν τὸν φυσικὸν ἀλλὰ καὶ τῆς κατὰ τὸν λόγον, καὶ μᾶλλον. ἐπὶ δὲ τῶν ὀρισμῶν πῶς μέρη τὰ ἐν τῷ λόγῳ, καὶ διὰ τί εἷς λόγος ὁ ὀρισμός (δῆλον γὰρ ὅτι τὸ πρᾶγμα ἓν, τὸ δὲ πρᾶγμα τίνι ἓν, μέρη γε ἔχον;), σκεπτέον ὕστερον.

Τί μὲν οὖν ἐστὶ τὸ τί ἦν εἶναι καὶ πῶς αὐτὸ καθ' αὐτό, καθόλου περὶ παντὸς εἴρηται, καὶ διὰ τί τῶν μὲν ὁ λόγος ὁ τοῦ τί ἦν εἶναι ἔχει τὰ μόρια τοῦ ὀριζομένου τῶν δ' οὐ, καὶ ὅτι ἐν μὲν τῷ τῆς οὐσίας λόγῳ τὰ οὕτω μόρια ὡς ὕλη οὐκ ἐνέσται - οὐδὲ γὰρ ἔστιν ἐκείνης μόρια τῆς οὐσίας ἀλλὰ τῆς συνόλου, ταύτης δὲ γ' ἔστι πῶς λόγος καὶ οὐκ ἔστιν· μετὰ μὲν γὰρ τῆς ὕλης οὐκ ἔστιν (ἀόριστον γάρ), κατὰ τὴν πρώτην δ' οὐσίαν ἔστιν, οἷον ἀνθρώπου ὁ τῆς ψυχῆς λόγος· ἢ γὰρ οὐσία ἐστὶ τὸ εἶδος τὸ ἐνόν, ἐξ οὗ καὶ τῆς ὕλης ἢ σύνολος λέγεται οὐσία, οἷον ἡ κοιλότης (ἐκ γὰρ ταύτης καὶ τῆς ῥινὸς σιμὴ ῥίς καὶ ἡ σιμότης ἐστί [δὶς γὰρ ἐν τούτοις ὑπάρξει ἡ ῥίς]) - ἐν δὲ τῇ συνόλῳ οὐσίᾳ, οἷον ῥινὴ σιμῇ ἢ Καλλίᾳ, ἐνέσται καὶ ἡ ὕλη· καὶ ὅτι τὸ τί ἦν [1037b] εἶναι καὶ ἕκαστον ἐπὶ τινῶν μὲν ταῦτό, ὥσπερ ἐπὶ τῶν πρώτων οὐσιῶν, οἷον καμπυλότης καὶ καμπυλότητι εἶναι, εἰ πρώτη ἐστίν (λέγω δὲ πρώτην ἢ μὴ λέγεται τῷ ἄλλῳ ἐν ἄλλῳ εἶναι καὶ ὑποκειμένῳ ὡς ὕλη), ὅσα δὲ ὡς ὕλη ἢ ὡς συνειλημμένα τῇ ὕλει, οὐ ταῦτό, οὐδ' <εἰ> κατὰ συμβεβηκὸς ἓν, οἷον Σωκράτης καὶ τὸ μουσικόν· ταῦτα γὰρ ταῦτά κατὰ συμβεβηκός.

Νῦν δὲ λέγωμεν πρῶτον ἐφ' ὅσον ἐν τοῖς ἀναλυτικοῖς περὶ ὀρισμοῦ μὴ εἴρηται· ἢ γὰρ ἐν ἐκείνοις ἀπορία λεχθεῖσα πρὸ ἔργου τοῖς περὶ τῆς οὐσίας ἐστὶ λόγοις. λέγω δὲ ταύτην τὴν ἀπορίαν, διὰ τί ποτε ἓν ἐστὶν οὐ τὸν λόγον



ὀρισμὸν εἶναί φαμεν, οἷον τοῦ ἀνθρώπου τὸ ζῶον δίπουν· ἔστω γὰρ οὗτος αὐτοῦ λόγος. διὰ τί δὴ τοῦτο ἔν ἐστιν ἄλλ' οὐ πολλά, ζῶον καὶ δίπουν· ἐπὶ μὲν γὰρ τοῦ ἀνθρώπου καὶ λευκὸν πολλὰ μὲν ἐστὶν ὅταν μὴ ὑπάρχη θατέρω θάτερον, ἔν δὲ ὅταν ὑπάρχη καὶ πάθῃ τι τὸ ὑποκείμενον, ὁ ἀνθρώπος (τότε γὰρ ἔν γίγνεται καὶ ἔστιν ὁ λευκὸς ἀνθρώπος)· ἐνταῦθα δ' οὐ μετέχει θατέρου θάτερον· τὸ γὰρ γένος οὐ δοκεῖ μετέχειν τῶν διαφορῶν (ἅμα γὰρ ἂν τῶν ἐναντίων τὸ αὐτὸ μετεῖχεν· αἱ γὰρ διαφοραὶ ἐναντία αἷς διαφέρει τὸ γένος). εἰ δὲ καὶ μετέχει, ὁ αὐτὸς λόγος, εἴπερ εἰσὶν αἱ διαφοραὶ πλείους, οἷον πεζὸν δίπουν ἄπτερον. διὰ τί γὰρ ταῦθ' ἐν ἄλλ' οὐ πολλά; οὐ γὰρ ὅτι ἐνυπάρχει· οὕτω μὲν γὰρ ἐξ ἀπάντων ἔσται ἔν. δεῖ δέ γε ἐν εἶναι ὅσα ἐν τῷ ὀρισμῷ· ὁ γὰρ ὀρισμὸς λόγος τίς ἐστιν εἷς καὶ οὐσίας, ὥστε ἐνός τινος δεῖ αὐτὸν εἶναι λόγον· καὶ γὰρ ἡ οὐσία ἔν τι καὶ τόδε τι σημαίνει, ὡς φαμέν. - δεῖ δὲ ἐπισκοπεῖν πρῶτον περὶ τῶν κατὰ τὰς διαιρέσεις ὀρισμῶν. οὐδὲν γὰρ ἕτερόν ἐστιν ἐν τῷ ὀρισμῷ πλην τὸ πρῶτον λεγόμενον γένος καὶ αἱ διαφοραὶ· τὰ δ' ἄλλα γένη ἐστὶ τό τε πρῶτον καὶ μετὰ τούτου αἱ συλλαμβανόμεναι διαφοραὶ, οἷον τὸ πρῶτον ζῶον, τὸ δὲ ἐχόμενον ζῶον δίπουν, καὶ πάλιν ζῶον δίπουν ἄπτερον· ὁμοίως δὲ [1038a] κἂν διὰ πλειόνων λέγηται. ὅλως δ' οὐδὲν διαφέρει διὰ πολλῶν ἢ δι' ὀλίγων λέγεσθαι, ὥστ' οὐδὲ δι' ὀλίγων ἢ διὰ δυοῖν· τοῖν δυοῖν δὲ τὸ μὲν διαφορὰ τὸ δὲ γένος, οἷον τοῦ ζῶου δίπουν τὸ μὲν ζῶον γένος διαφορὰ δὲ θάτερον. εἰ οὖν τὸ γένος ἀπλῶς μὴ ἔστι παρὰ τὰ ὡς γένους εἶδη, ἢ εἰ ἔστι μὲν ὡς ὕλη δ' ἐστὶν (ἢ μὲν γὰρ φωνὴ γένος καὶ ὕλη, αἱ δὲ διαφοραὶ τὰ εἶδη καὶ τὰ στοιχεῖα ἐκ ταύτης ποιοῦσιν), φανερόν ὅτι ὁ ὀρισμὸς ἐστὶν ὁ ἐκ τῶν διαφορῶν λόγος. ἀλλὰ μὴν καὶ δεῖ γε διαιρεῖσθαι τῇ τῆς διαφορᾶς διαφορᾷ, οἷον ζώου διαφορὰ τὸ ὑπόπουν· πάλιν τοῦ ζώου τοῦ ὑπόποδος τὴν διαφορὰν δεῖ εἶναι ἢ ὑπόπουν, ὥστ' οὐ λεκτέον τοῦ ὑπόποδος τὸ μὲν πτερωτὸν τὸ δὲ ἄπτερον, ἔάνπερ λέγῃ καλῶς (ἀλλὰ διὰ τὸ ἀδυνατεῖν ποιήσῃ τοῦτο), ἄλλ' ἢ τὸ μὲν σχιζόπουν τὸ δ' ἄσχιστον· αὗται γὰρ διαφοραὶ ποδός· ἢ γὰρ σχιζοποδία ποδότης τις. καὶ οὕτως ἀεὶ βούλεται βαδίζειν ἕως ἂν ἔλθῃ εἰς τὰ ἀδιάφορα· τότε δ' ἔσονται τοσαῦτα εἶδη ποδὸς ὅσαιπερ αἱ διαφοραὶ, καὶ τὰ ὑπόποδα ζῶα ἴσα ταῖς διαφοραῖς. εἰ δὴ ταῦτα οὕτως ἔχει, φανερόν ὅτι ἡ τελευταία διαφορὰ ἢ οὐσία τοῦ πράγματος ἔσται καὶ ὁ ὀρισμὸς, εἴπερ μὴ δεῖ πολλάκις ταῦτὰ λέγειν ἐν τοῖς ὅροις· περιέργον γάρ. συμβαίνει δέ γε τοῦτο· ὅταν γὰρ εἴπῃ ζῶον ὑπόπουν δίπουν, οὐδὲν ἄλλο εἴρηκεν ἢ ζῶον πόδας ἔχον, δύο πόδας ἔχον· κἂν τοῦτο διαιρῇ τῇ οἰκείᾳ διαιρέσει, πλεονάκις ἐρεῖ καὶ ἰσάκις ταῖς διαφοραῖς. ἐὰν μὲν δὴ διαφορᾶς διαφορὰ γίγνηται, μία ἔσται ἡ τελευταία τὸ εἶδος καὶ ἡ οὐσία· ἐὰν δὲ κατὰ συμβεβηκός, οἷον εἰ διαιροῖ τοῦ ὑπόποδος τὸ μὲν λευκὸν τὸ δὲ μέλαν, τοσαῦτα ὅσαι ἂν αἱ τομαὶ ᾖσιν. ὥστε φανερόν ὅτι ὁ ὀρισμὸς λόγος ἐστὶν ὁ

ἐκ τῶν διαφορῶν, καὶ τούτων τῆς τελευταίας κατὰ γε τὸ ὀρθόν. δῆλον δ' ἂν εἴη, εἴ τις μετατάξειε τοὺς τοιούτους ὀρισμούς, οἷον τὸν τοῦ ἀνθρώπου, λέγων ζῶον δίπουν ὑπόπουν· περιέργον γὰρ τὸ ὑπόπουν εἰρημένου τοῦ δίποδος. τάξις δ' οὐκ ἔστιν ἐν τῇ οὐσίᾳ· πῶς γὰρ δεῖ νοῆσαι τὸ μὲν ὕστερον τὸ δὲ πρότερον; περὶ μὲν οὖν τῶν κατὰ τὰς διαιρέσεις ὀρισμῶν τοσαῦτα εἰρήσθω τὴν πρώτην, ποῖοί τινές εἰσιν.

[1038b] Ἐπεὶ δὲ περὶ τῆς οὐσίας ἡ σκέψις ἐστὶ, πάλιν ἐπανέλθωμεν. λέγεται δ' ὥσπερ τὸ ὑποκείμενον οὐσία εἶναι καὶ τὸ τί ἦν εἶναι καὶ τὸ ἐκ τούτων, καὶ τὸ καθόλου. περὶ μὲν οὖν τοῖν δυοῖν εἴρηται (καὶ γὰρ περὶ τοῦ τί ἦν εἶναι καὶ τοῦ ὑποκειμένου, ὅτι διχῶς ὑπόκειται, ἢ τόδε τι ὄν, ὥσπερ τὸ ζῶον τοῖς πάθεσιν, ἢ ὡς ἡ ὕλη τῇ ἐντελεχείᾳ), δοκεῖ δὲ καὶ τὸ καθόλου αἰτιὸν τισιν εἶναι μάλιστα, καὶ εἶναι ἀρχὴ τὸ καθόλου· διὸ ἐπέλθωμεν καὶ περὶ τούτου. ἔοικε γὰρ ἀδύνατον εἶναι οὐσίαν εἶναι ὁτιοῦν τῶν καθόλου λεγομένων. πρῶτον μὲν γὰρ οὐσία ἐκάστου ἢ ἴδιος ἐκάστῳ, ἢ οὐχ ὑπάρχει ἄλλῳ, τὸ δὲ καθόλου κοινόν· τοῦτο γὰρ λέγεται καθόλου ὃ πλείοσιν ὑπάρχειν πέφυκεν. τίνος οὖν οὐσία τοῦτ' ἔσται; ἢ γὰρ πάντων ἢ οὐδενός, πάντων δ' οὐχ οἷόν τε· ἐνός δ' εἰ ἔσται, καὶ τᾶλλα τοῦτ' ἔσται· ὦν γὰρ μία ἡ οὐσία καὶ τὸ τί ἦν εἶναι ἓν, καὶ αὐτὰ ἓν. ἔτι οὐσία λέγεται τὸ μὴ καθ' ὑποκειμένου, τὸ δὲ καθόλου καθ' ὑποκειμένου τινὸς λέγεται ἀεί. ἀλλ' ἄρα οὕτω μὲν οὐκ ἐνδέχεται ὡς τὸ τί ἦν εἶναι, ἐν τούτῳ δὲ ἐνυπάρχειν, οἷον τὸ ζῶον ἐν τῷ ἀνθρώπῳ καὶ ἵππῳ; οὐκοῦν δῆλον ὅτι ἔστι τις αὐτοῦ λόγος. διαφέρει δ' οὐθὲν οὐδ' εἰ μὴ πάντων λόγος ἔστι τῶν ἐν τῇ οὐσίᾳ· οὐδὲν γὰρ ἦττον οὐσία τοῦτ' ἔσται τινός, ὡς ὁ ἄνθρωπος τοῦ ἀνθρώπου ἐν ᾧ ὑπάρχει, ὥστε τὸ αὐτὸ συμβήσεται πάλιν· ἔσται γὰρ ἐκείνου οὐσία, οἷον τὸ ζῶον, ἐν ᾧ ὡς ἴδιον ὑπάρχει. ἔτι δὲ καὶ ἀδύνατον καὶ ἄτοπον τὸ τόδε καὶ οὐσίαν, εἰ ἔστιν ἐκ τινων, μὴ ἐξ οὐσιῶν εἶναι μὴδ' ἐκ τοῦ τόδε τι ἄλλ' ἐκ ποιοῦ· πρότερον γὰρ ἔσται μὴ οὐσία τε καὶ τὸ ποιοὺν οὐσίας τε καὶ τοῦ τόδε. ὅπερ ἀδύνατον· οὔτε λόγῳ γὰρ οὔτε χρόνῳ οὔτε γενέσει οἷόν τε τὰ πάθη τῆς οὐσίας εἶναι πρότερα· ἔσται γὰρ καὶ χωριστά. ἔτι τῷ Σωκράτει ἐνυπάρξει οὐσία οὐσία, ὥστε δυοῖν ἔσται οὐσία. ὅλως δὲ συμβαίνει, εἰ ἔστιν οὐσία ὁ ἄνθρωπος καὶ ὅσα οὕτω λέγεται, μὴδὲν τῶν ἐν τῷ λόγῳ εἶναι μὴδὲν οὐσίαν μὴδὲ χωρὶς ὑπάρχειν αὐτῶν μὴδ' ἐν ἄλλῳ, λέγω δ' οἷον οὐκ εἶναί τι ζῶον παρὰ τὰ τινά, οὐδ' ἄλλο τῶν ἐν τοῖς λόγοις οὐδέν. ἔκ τε δὴ τούτων θεωροῦσι φανερόν ὅτι οὐδὲν τῶν καθόλου ὑπαρχόντων οὐσία ἐστὶ, καὶ [1039a] ὅτι οὐδὲν σημαίνει τῶν κοινῇ κατηγορουμένων τόδε τι, ἀλλὰ τοιόνδε. εἰ δὲ μή, ἄλλα τε πολλὰ συμβαίνει καὶ ὁ τρίτος ἄνθρωπος. ἔτι δὲ καὶ ὥδε δῆλον. ἀδύνατον γὰρ οὐσίαν ἐξ οὐσιῶν εἶναι ἐνυπαρχουσῶν ὡς ἐντελεχεία· τὰ γὰρ δύο οὕτως ἐντελεχεία οὐδέποτε ἐν ἐντελεχείᾳ, ἀλλ' ἐὰν δυνάμει δύο ἢ, ἔσται ἓν (οἷον ἡ διπλασία

ἐκ δύο ἡμίσεων δυνάμει γε· ἡ γὰρ ἐντελέχεια χωρίζει), ὥστ' εἰ ἡ οὐσία ἔν, οὐκ ἔσται ἐξ οὐσιῶν ἐνυπαρχουσῶν καὶ κατὰ τοῦτον τὸν τρόπον, ὃν λέγει Δημόκριτος ὀρθῶς· ἀδύνατον γὰρ εἶναί φησιν ἐκ δύο ἐν ἡ ἐξ ἐνὸς δύο γενέσθαι· τὰ γὰρ μεγέθη τὰ ἄτομα τὰς οὐσίας ποιεῖ. ὁμοίως τοίνυν δῆλον ὅτι καὶ ἐπ' ἀριθμοῦ ἔξει, εἴπερ ἐστὶν ὁ ἀριθμὸς σύνθεσις μονάδων, ὥσπερ λέγεται ὑπὸ τινων· ἡ γὰρ οὐχ ἐν ἡ δυὰς ἡ οὐκ ἔστι μονὰς ἐν αὐτῇ ἐντελεχείᾳ. - ἔχει δὲ τὸ συμβαῖνον ἀπορίαν. εἰ γὰρ μήτε ἐκ τῶν καθόλου οἶόν τ' εἶναι μηδεμίαν οὐσίαν διὰ τὸ τοιόνδε ἀλλὰ μὴ τόδε τι σημαίνειν, μήτ' ἐξ οὐσιῶν ἐνδέχεται ἐντελεχεία εἶναι μηδεμίαν οὐσίαν σύνθετον, ἀσύνθετον ἂν εἴη οὐσία πᾶσα, ὥστ' οὐδὲ λόγος ἂν εἴη οὐδεμιᾶς οὐσίας. ἀλλὰ μὴν δοκεῖ γε πᾶσι καὶ ἐλέχθη πάλοι ἡ μόνον οὐσίας εἶναι ὅρον ἢ μάλιστα· νῦν δ' οὐδὲ ταύτης. οὐδενὸς ἄρ' ἔσται ὁρισμός· ἡ τρόπον μὲν τινα ἔσται τρόπον δέ τινα οὐ. δῆλον δ' ἔσται τὸ λεγόμενον ἐκ τῶν ὕστερον μᾶλλον.

Φανερόν δ' ἐξ αὐτῶν τούτων τὸ συμβαῖνον καὶ τοῖς τὰς ιδέας λέγουσιν οὐσίας τε χωριστὰς εἶναι καὶ ἅμα τὸ εἶδος ἐκ τοῦ γένους ποιοῦσι καὶ τῶν διαφορῶν. εἰ γὰρ ἔστι τὰ εἶδη, καὶ τὸ ζῶον ἐν τῷ ἀνθρώπῳ καὶ ἵππῳ, ἥτοι ἐν καὶ ταῦτόν τῳ ἀριθμῷ ἐστὶν ἡ ἕτερον· τῷ μὲν γὰρ λόγῳ δῆλον ὅτι ἐν· τὸν γὰρ αὐτὸν διέξεισι λόγον ὁ λέγων ἐν ἐκατέρῳ. εἰ οὖν ἐστὶ τις ἄνθρωπος αὐτὸς καθ' αὐτὸν τόδε τι καὶ κεχωρισμένον, ἀνάγκη καὶ ἐξ ὧν, οἶον τὸ ζῶον καὶ τὸ δίπουν, τόδε τι σημαίνειν καὶ εἶναι χωριστὰ καὶ οὐσίας· ὥστε καὶ τὸ ζῶον. εἰ μὲν οὖν τὸ αὐτὸ καὶ ἐν τῷ ἵππῳ καὶ τῷ ἀνθρώπῳ, ὥσπερ σὺ σαυτῷ, πῶς τὸ ἐν [1039b] ἐν τοῖς οὐσι χωρὶς ἐν ἔσται, καὶ διὰ τί οὐ καὶ χωρὶς αὐτοῦ ἔσται τὸ ζῶον τοῦτο; ἔπειτα εἰ μὲν μεθέξει τοῦ δίποδος καὶ τοῦ πολypoδος, ἀδύνατόν τι συμβαίνει, τάναντία γὰρ ἅμα ὑπάρξει αὐτῷ ἐνὶ καὶ τῷδέ τινι ὄντι· εἰ δὲ μή, τίς ὁ τρόπος ὅταν εἴπῃ τις τὸ ζῶον εἶναι δίπουν ἢ πεζόν; ἀλλ' ἴσως σύγκειται καὶ ἄπτεται ἢ μέμικται· ἀλλὰ πάντα ἄτοπα. ἀλλ' ἕτερον ἐν ἐκάστῳ· οὐκοῦν ἄπειρα ὥς ἔπος εἰπεῖν ἔσται ὧν ἡ οὐσία ζῶον· οὐ γὰρ κατὰ συμβεβηκὸς ἐκ ζώου ἄνθρωπος. ἔτι πολλὰ ἔσται αὐτὸ τὸ ζῶον· οὐσία τε γὰρ τὸ ἐν ἐκάστῳ ζῶον (οὐ γὰρ κατ' ἄλλο λέγεται· εἰ δὲ μή, ἐξ ἐκείνου ἔσται ὁ ἄνθρωπος καὶ γένος αὐτοῦ ἐκεῖνο), καὶ ἔτι ιδέαι ἅπαντα ἐξ ὧν ὁ ἄνθρωπος· οὐκοῦν οὐκ ἄλλου μὲν ιδέα ἔσται ἄλλου δ' οὐσία (ἀδύνατον γάρ)· αὐτὸ ἄρα ζῶον ἐν ἑκαστῷ ἔσται τῶν ἐν τοῖς ζώοις. ἔτι ἐκ τίνος τοῦτο, καὶ πῶς ἐξ αὐτοῦ ζώου; ἡ πῶς οἶόν τε εἶναι τὸ ζῶον, ὧ οὐσία τοῦτο αὐτό, παρ' αὐτὸ τὸ ζῶον; ἔτι δ' ἐπὶ τῶν αἰσθητῶν ταῦτά τε συμβαίνει καὶ τούτων ἀτοπώτερα. εἰ δὴ ἀδύνατον οὕτως ἔχειν, δῆλον ὅτι οὐκ ἔστιν εἶδη αὐτῶν οὕτως ὥς τινές φασιν.

Ἐπεὶ δ' ἡ οὐσία ἑτέρα, τό τε σύνολον καὶ ὁ λόγος (λέγω δ' ὅτι ἡ μὲν

οὕτως ἐστὶν οὐσία, σὺν τῇ ὕλῃ συνειλημμένος ὁ λόγος, ἢ δ' ὁ λόγος ὅλως), ὅσαι μὲν οὖν οὕτω λέγονται, τούτων μὲν ἔστι φθορά (καὶ γὰρ γενέσεις), τοῦ δὲ λόγου οὐκ ἔστιν οὕτως ὥστε φθείρεσθαι (οὐδὲ γὰρ γενέσεις, οὐ γὰρ γίνεταί τὸ οἰκία εἶναι ἀλλὰ τὸ τῆδε τῇ οἰκία), ἀλλ' ἄνευ γενέσεως καὶ φθορᾶς εἰσὶ καὶ οὐκ εἰσίν· δέδεικται γὰρ ὅτι οὐδεὶς ταῦτα γεννᾷ οὐδὲ ποιεῖ. διὰ τοῦτο δὲ καὶ τῶν οὐσιῶν τῶν αἰσθητῶν τῶν καθ' ἕκαστα οὔτε ὁρισμὸς οὔτε ἀπόδειξις ἔστιν, ὅτι ἔχουσιν ὕλην ἧς ἡ φύσις τοιαύτη ὥστ' ἐνδέχεσθαι καὶ εἶναι καὶ μὴ· διὸ φθαρτὰ πάντα τὰ καθ' ἕκαστα αὐτῶν. εἰ οὖν ἢ τ' ἀπόδειξις τῶν ἀναγκαίων καὶ ὁ ὁρισμὸς ἐπιστημονικόν, καὶ οὐκ ἐνδέχεται, ὥσπερ οὐδ' ἐπιστήμην ὅτε μὲν ἐπιστήμην ὅτε δ' ἄγνοιαν εἶναι, ἀλλὰ δόξα τὸ τοιοῦτόν ἐστιν, οὕτως οὐδ' ἀπόδειξιν οὐδ' ὁρισμόν, ἀλλὰ δόξα [1040a] ἐστὶ τοῦ ἐνδεχομένου ἄλλως ἔχειν, δῆλον ὅτι οὐκ ἂν εἴη αὐτῶν οὔτε ὁρισμὸς οὔτε ἀπόδειξις. ἄδηλά τε γὰρ τὰ φθειρόμενα τοῖς ἔχουσι τὴν ἐπιστήμην, ὅταν ἐκ τῆς αἰσθήσεως ἀπέλθῃ, καὶ σωζομένων τῶν λόγων ἐν τῇ ψυχῇ τῶν αὐτῶν οὐκ ἔσται οὔτε ὁρισμὸς ἔτι οὔτε ἀπόδειξις. διὸ δεῖ, τῶν πρὸς ὅρον ὅταν τις ὀρίζηται τι τῶν καθ' ἕκαστον, μὴ ἀγνοεῖν ὅτι αἰὲ ἀναιρεῖν ἔστιν· οὐ γὰρ ἐνδέχεται ὀρίσασθαι.

Οὐδὲ δὴ ιδέα οὐδεμίαν ἔστιν ὀρίσασθαι. τῶν γὰρ καθ' ἕκαστον ἡ ιδέα, ὡς φασί, καὶ χωριστή· ἀναγκαῖον δὲ ἐξ ὀνομάτων εἶναι τὸν λόγον, ὄνομα δ' οὐ ποιήσει ὁ ὀριζόμενος (ἄγνωστον γὰρ ἔσται), τὰ δὲ κείμενα κοινὰ πᾶσιν· ἀνάγκη ἄρα ὑπάρχειν καὶ ἄλλω ταῦτα· οἷον εἴ τις σὲ ὀρίσαιτο, ζῶον ἐρεῖ ἰσχνὸν ἢ λευκὸν ἢ ἕτερόν τι ὃ καὶ ἄλλω ὑπάρξει. εἰ δέ τις φαίῃ μηδὲν κωλύειν χωρὶς μὲν πάντα πολλοῖς ἅμα δὲ μόνω τούτῳ ὑπάρχειν, λεκτέον πρῶτον μὲν ὅτι καὶ ἀμφοῖν, οἷον τὸ ζῶον δίπουν τῷ ζῳῷ καὶ τῷ δίποδι (καὶ τοῦτο ἐπὶ μὲν τῶν αἰδίων καὶ ἀνάγκη εἶναι, πρότερά γ' ὄντα καὶ μέρη τοῦ συνθέτου· ἀλλὰ μὴν καὶ χωριστά, εἴπερ τὸ ἄνθρωπος χωριστόν· ἢ γὰρ οὐθὲν ἢ ἄμφω· εἰ μὲν οὖν μηθέν, οὐκ ἔσται τὸ γένος παρὰ τὰ εἶδη, εἰ δ' ἔσται, καὶ ἢ διαφορά)· εἴθ' ὅτι πρότερα τῷ εἶναι· ταῦτα δὲ οὐκ ἀνταναιρεῖται. ἔπειτα εἰ ἐξ ἰδεῶν αἱ ιδέαι (ἀσυνθετώτερα γὰρ τὰ ἐξ ὧν), ἔτι ἐπὶ πολλῶν δεήσει κάκεῖνα κατηγορεῖσθαι ἐξ ὧν ἡ ιδέα, οἷον τὸ ζῶον καὶ τὸ δίπουν. εἰ δὲ μή, πῶς γνωρισθήσεται; ἔσται γὰρ ιδέα τις ἣν ἀδύνατον ἐπὶ πλειόνων κατηγορεῖσθαι ἢ ἐνός. οὐ δοκεῖ δέ, ἀλλὰ πᾶσα ιδέα εἶναι μεθεκτή. ὥσπερ οὖν εἴρηται, λανθάνει ὅτι ἀδύνατον ὀρίσασθαι ἐν τοῖς αἰδίοις, μάλιστα δὲ ὅσα μοναχά, οἷον ἥλιος ἢ σελήνη. οὐ μόνον γὰρ διαμαρτάνουσι τῷ προστιθέναι τοιαῦτα ὧν ἀφαιρουμένων ἔτι ἔσται ἥλιος, ὥσπερ τὸ περὶ γῆν ἰὸν ἢ νυκτικρυφές (ἂν γὰρ στῇ ἢ φανῇ, οὐκέτι ἔσται ἥλιος· ἀλλ' ἄτοπον εἰ μὴ· ὁ γὰρ ἥλιος οὐσίαν τινὰ σημαίνει)· ἔτι ὅσα ἐπ' ἄλλου ἐνδέχεται, οἷον ἐὰν ἕτερος γένηται τοιοῦτος, δῆλον ὅτι ἥλιος ἔσται· κοινὸς [1040b] ἄρα ὁ λόγος·

ἀλλ' ἦν τῶν καθ' ἕκαστα ὁ ἥλιος, ὥσπερ Κλέων ἢ Σωκράτης· ἐπεὶ διὰ τί οὐδεὶς ὅρον ἐκφέρει αὐτῶν ιδέας; γένοιτο γὰρ ἂν δῆλον πειρωμένων ὅτι ἀληθὲς τὸ νῦν εἰρημένον.

Φανερόν δὲ ὅτι καὶ τῶν δοκουσῶν εἶναι οὐσιῶν αἱ πλεῖσται δυνάμεις εἰσὶ, τὰ τε μόρια τῶν ζώων (οὐθὲν γὰρ κεχωρισμένον αὐτῶν ἐστίν· ὅταν δὲ χωρισθῇ, καὶ τότε ὄντα ὡς ὕλη πάντα) καὶ γῆ καὶ πῦρ καὶ ἀήρ· οὐδὲν γὰρ αὐτῶν ἓν ἐστίν, ἀλλ' οἶον σωρός, πρὶν ἢ πεφθῇ καὶ γένηται τι ἐξ αὐτῶν ἓν. μάλιστα δ' ἂν τις τὰ τῶν ἐμψύχων ὑπολάβοι μόρια καὶ τὰ τῆς ψυχῆς πάρεγγυς ἄμφω γίνεσθαι, ὄντα καὶ ἐντελεχεία καὶ δυνάμει, τῷ ἀρχᾶς ἔχειν κινήσεως ἀπὸ τινος ἐν ταῖς καμπαῖς· διὸ ἔνια ζῶα διαιρούμενα ζῆ. ἀλλ' ὅμως δυνάμει πάντ' ἔσται, ὅταν ἡ ἓν καὶ συνεχὲς φύσει, ἀλλὰ μὴ βία ἢ συμφύσει· τὸ γὰρ τοιοῦτον πῆρωσις. ἐπεὶ δὲ τὸ ἓν λέγεται ὥσπερ καὶ τὸ ὄν, καὶ ἡ οὐσία ἡ τοῦ ἐνὸς μία, καὶ ὧν μία ἀριθμῷ ἐν ἀριθμῷ, φανερόν ὅτι οὔτε τὸ ἓν οὔτε τὸ ὄν ἐνδέχεται οὐσίαν εἶναι τῶν πραγμάτων, ὥσπερ οὐδὲ τὸ στοιχείω εἶναι ἢ ἀρχῇ· ἀλλὰ ζητοῦμεν τίς οὖν ἡ ἀρχή, ἵνα εἰς γνωριμώτερον ἀναγάγωμεν. μᾶλλον μὲν οὖν τούτων οὐσία τὸ ὄν καὶ ἐν ἢ ἡ τε ἀρχὴ καὶ τὸ στοιχεῖον καὶ τὸ αἴτιον, οὐπω δὲ οὐδὲ ταῦτα, εἴπερ μηδ' ἄλλο κοινὸν μηδὲν οὐσία· οὐδενὶ γὰρ ὑπάρχει ἡ οὐσία ἀλλ' ἡ αὐτῇ τε καὶ τῷ ἔχοντι αὐτήν, οὗ ἐστὶν οὐσία. ἔτι τὸ ἓν πολλαχῇ οὐκ ἂν εἴη ἅμα, τὸ δὲ κοινὸν ἅμα πολλαχῇ ὑπάρχει· ὥστε δῆλον ὅτι οὐδὲν τῶν καθόλου ὑπάρχει παρὰ τὰ καθ' ἕκαστα χωρίς. ἀλλ' οἱ τὰ εἶδη λέγοντες τῇ μὲν ὀρθῶς λέγουσι χωρίζοντες αὐτά, εἴπερ οὐσίαι εἰσὶ, τῇ δ' οὐκ ὀρθῶς, ὅτι τὸ ἓν ἐπὶ πολλῶν εἶδος λέγουσιν. αἴτιον δ' ὅτι οὐκ ἔχουσιν ἀποδοῦναι τίνες αἱ τοιαῦται οὐσίαι αἱ ἄφθαρτοι παρὰ τὰς καθ' ἕκαστα καὶ αἰσθητάς· ποιοῦσιν οὖν τὰς αὐτάς τῷ εἶδει τοῖς φθαρτοῖς (ταύτας γὰρ ἴσμεν), αὐτοάνθρωπον καὶ αὐτόϊππον, προστιθέντες τοῖς αἰσθητοῖς τὸ ῥῆμα τὸ “αὐτό”. καίτοι καὶ εἰ μὴ [1041a] ἐωράκειμεν τὰ ἄστρα, οὐδὲν ἂν ἤττον, οἶμαι, ἦσαν οὐσίαι αἰδίοι παρ' ἃς ἡμεῖς ἡδαιμεν· ὥστε καὶ νῦν εἰ μὴ ἔχομεν τίνες εἰσὶν, ἀλλ' εἶναι γέ τινας ἴσως ἀναγκαῖον. ὅτι μὲν οὖν οὔτε τῶν καθόλου λεγομένων οὐδὲν οὐσία οὔτ' ἐστὶν οὐσία οὐδεμία ἐξ οὐσιῶν, δῆλον.

❖ ὧν, τοῦτο σκεπτέον.

❖ ας.

## Η

[1042a] Ἐκ δὴ τῶν εἰρημένων συλλογίσασθαι δεῖ καὶ συναγαγόντας τὸ κεφάλαιον τέλος ἐπιθεῖναι. εἴρηται δὴ ὅτι τῶν οὐσιῶν ζητεῖται τὰ αἷτια καὶ αἱ ἀρχαὶ καὶ τὰ στοιχεῖα. οὐσίαι δὲ αἱ μὲν ὁμολογούμεναί εἰσιν ὑπὸ πάντων, περὶ δὲ ἐνίων ἰδίᾳ τινὲς ἀπεφάναντο· ὁμολογούμεναι μὲν αἱ φυσικαί, οἷον πῦρ γῆ ὕδωρ ἀήρ καὶ τᾶλλα τὰ ἀπλᾶ σώματα, ἔπειτα τὰ φυτὰ καὶ τὰ μόρια αὐτῶν, καὶ τὰ ζῶα καὶ τὰ μόρια τῶν ζώων, καὶ τέλος ὁ οὐρανὸς καὶ τὰ μόρια τοῦ οὐρανοῦ· ἰδίᾳ δὲ τινες οὐσίας λέγουσιν εἶναι τὰ τ' εἶδη καὶ τὰ μαθηματικά. ἄλλας δὲ δὴ συμβαίνει ἐκ τῶν λόγων οὐσίας εἶναι, τὸ τί ἦν εἶναι καὶ τὸ ὑποκείμενον· ἔτι ἄλλως τὸ γένος μᾶλλον τῶν εἰδῶν καὶ τὸ καθόλου τῶν καθ' ἕκαστα· τῷ δὲ καθόλου καὶ τῷ γένει καὶ αἱ ἰδέαι συνάπτουσιν (κατὰ τὸν αὐτὸν γὰρ λόγον οὐσίαι δοκοῦσιν εἶναι). ἐπεὶ δὲ τὸ τί ἦν εἶναι οὐσία, τούτου δὲ λόγος ὁ ὀρισμός, διὰ τοῦτο περὶ ὀρισμοῦ καὶ περὶ τοῦ καθ' αὐτὸ διώριστα· ἐπεὶ δὲ ὁ ὀρισμὸς λόγος, ὁ δὲ λόγος μέρη ἔχει, ἀναγκαῖον καὶ περὶ μέρους ἦν ἰδεῖν, ποῖα τῆς οὐσίας μέρη καὶ ποῖα οὐ, καὶ εἰ ταῦτα καὶ τοῦ ὀρισμοῦ. ἔτι τοίνυν οὔτε τὸ καθόλου οὐσία οὔτε τὸ γένος· περὶ δὲ τῶν ἰδεῶν καὶ τῶν μαθηματικῶν ὕστερον σκεπτέον· παρὰ γὰρ τὰς αἰσθητὰς οὐσίας ταύτας λέγουσί τινες εἶναι. - νῦν δὲ περὶ τῶν ὁμολογουμένων οὐσιῶν ἐπέλθωμεν. αὗται δ' εἰσὶν αἱ αἰσθηταί· αἱ δ' αἰσθηταὶ οὐσίαι πᾶσαι ὕλην ἔχουσιν. ἔστι δ' οὐσία τὸ ὑποκείμενον, ἄλλως μὲν ἢ ὕλη (ὕλην δὲ λέγω ἢ μὴ τόδε τι οὕσα ἐνεργείᾳ δυνάμει ἐστὶ τόδε τι), ἄλλως δ' ὁ λόγος καὶ ἡ μορφή, ὃ τόδε τι ὄν τῷ λόγῳ χωριστόν ἐστιν· τρίτον δὲ τὸ ἐκ τούτων, οὗ γένεσις μόνου καὶ φθορά ἐστι, καὶ χωριστὸν ἀπλῶς· τῶν γὰρ κατὰ τὸν λόγον οὐσιῶν αἱ μὲν αἱ δ' οὐ. ὅτι δ' ἐστὶν οὐσία καὶ ἡ ὕλη, δῆλον· ἐν πάσαις γὰρ ταῖς ἀντικειμέναις μεταβολαῖς ἐστὶ τι τὸ ὑποκείμενον ταῖς μεταβολαῖς, οἷον κατὰ τόπον τὸ νῦν μὲν ἐνταῦθα πάλιν δ' ἄλλοθι, καὶ κατ' αὔξησιν ὃ νῦν μὲν τηλικόνδε πάλιν δ' ἔλαττον ἢ μεῖζον, καὶ κατ' ἀλλοίωσιν ὃ νῦν μὲν ὑγιὲς [1042b] πάλιν δὲ κάμνον· ὁμοίως δὲ καὶ κατ' οὐσίαν ὃ νῦν μὲν ἐν γενέσει πάλιν δ' ἐν φθορᾷ, καὶ νῦν μὲν ὑποκείμενον ὡς τόδε τι πάλιν δ' ὑποκείμενον ὡς κατὰ στέρησιν. καὶ ἀκολουθοῦσι δὴ ταύτῃ αἱ ἄλλαι μεταβολαί, τῶν δ' ἄλλων ἢ μιᾶ ἢ δυοῖν αὕτη οὐκ ἀκολουθεῖ· οὐ γὰρ ἀνάγκη, εἴ τι ὕλην ἔχει τοπικὴν, τοῦτο καὶ γεννητὴν καὶ φθαρτὴν ἔχειν. τίς μὲν οὖν διαφορὰ τοῦ ἀπλῶς γίνεσθαι καὶ μὴ ἀπλῶς, ἐν τοῖς φυσικοῖς εἴρηται.

Ἐπεὶ δ' ἡ μὲν ὡς ὑποκειμένη καὶ ὡς ὕλη οὐσία ὁμολογεῖται, αὕτη δ' ἐστὶν ἡ δυνάμει, λοιπὸν τὴν ὡς ἐνεργείαν οὐσίαν τῶν αἰσθητῶν εἰπεῖν τίς ἐστιν. Δημόκριτος μὲν οὖν τρεῖς διαφορὰς ἔοικεν οἰομένῳ εἶναι (τὸ μὲν γὰρ

ὑποκείμενον σῶμα, τὴν ὕλην, ἐν καὶ ταυτόν, διαφέρειν δὲ ἢ ῥυσμῷ, ὃ ἐστὶ σχῆμα, ἢ τροπῇ, ὃ ἐστὶ θέσις, ἢ διαθιγῇ, ὃ ἐστὶ τάξις). φαίνονται δὲ πολλὰ διαφορὰ οὐσαι, οἷον τὰ μὲν συνθέσει λέγεται τῆς ὕλης, ὥσπερ ὅσα κράσει καθάπερ μελίκρατον, τὰ δὲ δεσμῷ οἷον φάκελος, τὰ δὲ κόλλῃ οἷον βιβλίον, τὰ δὲ γόμφῳ οἷον κιβώτιον, τὰ δὲ πλείοσι τούτων, τὰ δὲ θέσει οἷον οὐδὸς καὶ ὑπέρθυρον (ταῦτα γὰρ τῷ κεῖσθαι πῶς διαφέρει), τὰ δὲ χρόνῳ οἷον δεῖπνον καὶ ἄριστον, τὰ δὲ τόπῳ οἷον τὰ πνεύματα· τὰ δὲ τοῖς τῶν αἰσθητῶν πάθεσιν οἷον σκληρότητι καὶ μαλακότητι, καὶ πυκνότητι καὶ ἀραιότητι, καὶ ξηρότητι καὶ ὑγρότητι, καὶ τὰ μὲν ἐνίοις τούτων τὰ δὲ πᾶσι τούτοις, καὶ ὅλως τὰ μὲν ὑπεροχῇ τὰ δὲ ἐλλείψει. ὥστε δῆλον ὅτι καὶ τὸ ἔστι τοσαυταχῶς λέγεται· οὐδὸς γὰρ ἔστιν ὅτι οὕτως κεῖται, καὶ τὸ εἶναι τὸ οὕτως αὐτὸ κεῖσθαι σημαίνει, καὶ τὸ κρύσταλλον εἶναι τὸ οὕτω πεπυκνῶσθαι. ἐνίων δὲ τὸ εἶναι καὶ πᾶσι τούτοις ὀρισθήσεται, τῷ τὰ μὲν μεμῖχθαι, τὰ δὲ κεκρᾶσθαι, τὰ δὲ δεδέσθαι, τὰ δὲ πεπυκνῶσθαι, τὰ δὲ ταῖς ἄλλαις διαφοραῖς κεχρῆσθαι, ὥσπερ χεῖρ ἢ πούς. ληπτέα οὖν τὰ γένη τῶν διαφορῶν (αὗται γὰρ ἀρχαὶ ἔσονται τοῦ εἶναι), οἷον τὰ τῷ μᾶλλον καὶ ἥττον ἢ πυκνῷ καὶ μανῷ καὶ τοῖς ἄλλοις τοῖς τοιούτοις· πάντα γὰρ ταῦτα ὑπεροχῇ καὶ ἐλλειψίς ἐστίν. εἰ δέ τι σχήματι ἢ λειότητι καὶ τραχύτητι, πάντα εὐθεῖ καὶ καμπύλῳ. τοῖς δὲ τὸ [1043a] εἶναι τὸ μεμῖχθαι ἔσται, ἀντικειμένως δὲ τὸ μὴ εἶναι. φανερόν δὴ ἐκ τούτων ὅτι εἴπερ ἡ οὐσία αἰτία τοῦ εἶναι ἕκαστον, ὅτι ἐν τούτοις ζητητέον τί τὸ αἷτιον τοῦ εἶναι τούτων ἕκαστον. οὐσία μὲν οὖν οὐδὲν τούτων οὐδὲ συνδυαζόμενον, ὅμως δὲ τὸ ἀνάλογον ἐν ἑκάστῳ· καὶ ὡς ἐν ταῖς οὐσίαις τὸ τῆς ὕλης κατηγορούμενον αὐτῇ ἢ ἐνέργεια, καὶ ἐν τοῖς ἄλλοις ὀρισμοῖς μάλιστα. οἷον εἰ οὐδὸν δέοι ὀρίσασθαι, ξύλον ἢ λίθον ὡδὶ κείμενον ἐροῦμεν, καὶ οἰκίαν πλίνθους καὶ ξύλα ὡδὶ κείμενα (ἢ ἔτι καὶ τὸ οὗ ἔνεκα ἐπ' ἐνίων ἔστιν), εἰ δὲ κρύσταλλον, ὕδωρ πεπηγὸς ἢ πεπυκνωμένον ὡδί· συμφωνία δὲ ὀξέος καὶ βαρέος μῖξις τοιαδί· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων. φανερόν δὴ ἐκ τούτων ὅτι ἡ ἐνέργεια ἄλλη ἄλλης ὕλης καὶ ὁ λόγος· τῶν μὲν γὰρ ἡ σύνθεσις τῶν δ' ἡ μῖξις τῶν δὲ ἄλλο τι τῶν εἰρημένων. διὸ τῶν ὀριζομένων οἱ μὲν λέγοντες τί ἐστὶν οἰκία, ὅτι λίθοι πλίνθοι ξύλα, τὴν δυνάμει οἰκίαν λέγουσιν, ὕλη γὰρ ταῦτα· οἱ δὲ ἀγγεῖον σκεπαστικὸν χρημάτων καὶ σωμάτων ἢ τι ἄλλο τοιοῦτον προτιθέντες, τὴν ἐνέργειαν λέγουσιν· οἱ δ' ἄμφω ταῦτα συντιθέντες τὴν τρίτην καὶ τὴν ἐκ τούτων οὐσίαν (ἔοικε γὰρ ὁ μὲν διὰ τῶν διαφορῶν λόγος τοῦ εἶδους καὶ τῆς ἐνεργείας εἶναι, ὁ δ' ἐκ τῶν ἐνυπαρχόντων τῆς ὕλης μᾶλλον). ὁμοίως δὲ καὶ οἷους Ἀρχύτας ἀπεδέχετο ὅρους· τοῦ συνάμφω γὰρ εἰσιν. οἷον τί ἐστὶ νηνεμία; ἡρεμία ἐν πλήθει ἀέρος· ὕλη μὲν γὰρ ὁ ἀήρ, ἐνέργεια δὲ καὶ οὐσία ἡ ἡρεμία. τί ἐστὶ γαλήνη; ὁμαλότης θαλάττης· τὸ μὲν ὑποκείμενον ὡς ὕλη ἢ θάλαττα, ἡ δὲ ἐνέργεια καὶ ἡ μορφὴ ἢ ὁμαλότης. φανερόν δὴ ἐκ τῶν εἰρημένων τίς ἡ αἰσθητὴ οὐσία ἐστὶ καὶ πῶς· ἡ μὲν γὰρ

ὥς ὕλη, ἢ δ' ὥς μορφὴ καὶ ἐνέργεια, ἢ δὲ τρίτῃ ἢ ἐκ τούτων.

Δεῖ δὲ μὴ ἀγνοεῖν ὅτι ἐνίστε λανθάνει πότερον σημαίνει τὸ ὄνομα τὴν σύνθετον οὐσίαν ἢ τὴν ἐνέργειαν καὶ τὴν μορφὴν, οἷον ἢ οἰκία πότερον σημείον τοῦ κοινοῦ ὅτι σκέπασμα ἐκ πλίνθων καὶ λίθων ὥδὲ κειμένων, ἢ τῆς ἐνεργείας καὶ τοῦ εἶδους ὅτι σκέπασμα, καὶ γραμμὴ πότερον δυὰς ἐν μήκει ἢ [ὅτι] δυὰς, καὶ ζῶον πότερον ψυχὴ ἐν σώματι ἢ ψυχὴ· αὕτη γὰρ οὐσία καὶ ἐνέργεια σώματός τινος. εἴη δ' ἂν καὶ ἐπ' ἀμφοτέροις τὸ ζῶον, οὐχ ὥς ἐνὶ λόγῳ λεγόμενον ἀλλ' ὥς πρὸς ἕν. ἀλλὰ ταῦτα πρὸς μὲν τι ἄλλο διαφέρει, πρὸς δὲ τὴν ζήτησιν τῆς οὐσίας τῆς [1043b] αἰσθητῆς οὐδέν· τὸ γὰρ τί ἦν εἶναι τῷ εἶδει καὶ τῇ ἐνεργείᾳ ὑπάρχει. ψυχὴ μὲν γὰρ καὶ ψυχῇ εἶναι ταυτόν, ἀνθρώπῳ δὲ καὶ ἀνθρωπος οὐ ταυτόν, εἰ μὴ καὶ ἡ ψυχὴ ἀνθρωπος λεχθήσεται· οὕτω δὲ τινὲ μὲν τινὲ δ' οὐ. - οὐ φαίνεται δὲ ζητοῦσιν ἢ συλλαβὴ ἐκ τῶν στοιχείων οὐσα καὶ συνθέσεως, οὐδ' ἢ οἰκία πλίνθοι τε καὶ σύνθεσις. καὶ τοῦτο ὀρθῶς· οὐ γὰρ ἐστὶν ἡ σύνθεσις οὐδ' ἢ μῖξις ἐκ τούτων ὧν ἐστὶ σύνθεσις ἢ μῖξις. ὁμοίως δὲ οὐδὲ τῶν ἄλλων οὐθέν, οἷον εἰ ὁ οὐδὸς θέσει, οὐκ ἐκ τοῦ οὐδοῦ ἢ θέσις ἀλλὰ μᾶλλον οὗτος ἐξ ἐκείνης. οὐδὲ δὲ ὁ ἀνθρωπὸς ἐστὶ τὸ ζῶον καὶ δίπουν, ἀλλὰ τι δεῖ εἶναι ὃ παρὰ ταῦτά ἐστιν, εἰ ταῦθ' ὕλη, οὔτε δὲ στοιχεῖον οὗτ' ἐκ στοιχείου, ἀλλ' ἢ οὐσία· ὃ ἐξαιροῦντες τὴν ὕλην λέγουσιν. εἰ οὖν τοῦτ' αἴτιον τοῦ εἶναι, καὶ οὐσία τοῦτο, αὐτὴν ἂν τὴν οὐσίαν οὐ λέγοιεν. (ἀνάγκη δὲ ταύτην ἢ αἰδῖον εἶναι ἢ φθαρτὴν ἄνευ τοῦ φθειρεσθαι καὶ γεγονέναι ἄνευ τοῦ γίνεσθαι. δέδεικται δὲ καὶ δεδήλωται ἐν ἄλλοις ὅτι τὸ εἶδος οὐθεὶς ποιεῖ οὐδὲ γεννᾷ, ἀλλὰ ποιεῖται τόδε, γίγνεται δὲ τὸ ἐκ τούτων. εἰ δ' εἰσὶ τῶν φθαρτῶν αἱ οὐσίαι χωρισταί, οὐδέν πω δῆλον· πλὴν ὅτι γ' ἐνίων οὐκ ἐνδέχεται δῆλον, ὅσα μὴ οἷόν τε παρὰ τὰ τινὰ εἶναι, οἷον οἰκίαν ἢ σκεῦος. ἴσως μὲν οὖν οὐδ' οὐσίαι εἰσὶν οὗτ' αὐτὰ ταῦτα οὔτε τι τῶν ἄλλων ὅσα μὴ φύσει συνέστηκεν· τὴν γὰρ φύσιν μόνην ἂν τις θεῖη τὴν ἐν τοῖς φθαρτοῖς οὐσίαν.) ὥστε ἡ ἀπορία ἦν οἱ Ἀντισθένηιοι καὶ οἱ οὕτως ἀπαίδευτοι ἠπόρουν ἔχει τινὰ καιρόν, ὅτι οὐκ ἔστι τὸ τί ἔστιν ὀρίσασθαι (τὸν γὰρ ὅρον λόγον εἶναι μακρόν), ἀλλὰ ποῖον μὲν τί ἐστὶν ἐνδέχεται καὶ διδάξαι, ὥσπερ ἄργυρον, τί μὲν ἐστὶν οὐ, ὅτι δ' οἷον καττίτερος· ὥστ' οὐσίας ἔστι μὲν ἥς ἐνδέχεται εἶναι ὅρον καὶ λόγον, οἷον τῆς συνθέτου, ἐάν τε αἰσθητὴ ἐάν τε νοητὴ ἢ· ἐξ ὧν δ' αὕτη πρώτων, οὐκέτι, εἴπερ τί κατὰ τινὸς σημαίνει ὁ λόγος ὁ ὀριστικὸς καὶ δεῖ τὸ μὲν ὥσπερ ὕλην εἶναι τὸ δὲ ὥς μορφὴν. - φανερόν δὲ καὶ διότι, εἴπερ εἰσὶ πῶς ἀριθμοὶ αἱ οὐσίαι, οὕτως εἰσὶ καὶ οὐχ ὥς τινες λέγουσι μονάδων· ὅ τε γὰρ ὀρισμὸς ἀριθμὸς τις· διαιρετός τε γὰρ καὶ εἰς ἀδιαίρετα (οὐ γὰρ ἄπειροι οἱ λόγοι), καὶ ὁ ἀριθμὸς δὲ τοιοῦτον. καὶ ὥσπερ οὐδ' ἀπ' ἀριθμοῦ ἀφαιρεθέντος τινὸς ἢ προστεθέντος ἐξ ὧν ὁ ἀριθμὸς ἐστίν, οὐκέτι ὁ αὐτὸς ἀριθμὸς ἐστὶν ἀλλ' ἕτερος, κἂν τοῦλάχιστον [1044a]



ἀφαιρεθῇ ἢ προστεθῇ, οὕτως οὐδὲ ὁ ὁρισμὸς οὐδὲ τὸ τί ἦν εἶναι οὐκέτι ἔσται ἀφαιρεθέντος τινὸς ἢ προστεθέντος. καὶ τὸν ἀριθμὸν δεῖ εἶναι τι ὧς εἷς, ὃ νῦν οὐκ ἔχουσι λέγειν τίνι εἷς, εἴπερ ἐστὶν εἷς (ἢ γὰρ οὐκ ἔστιν ἄλλ' οἶον σωρός, ἢ εἴπερ ἐστί, λεκτέον τί τὸ ποιοῦν ἔν ἐκ πολλῶν). καὶ ὁ ὁρισμὸς εἷς ἐστίν, ὁμοίως δὲ οὐδὲ τοῦτον ἔχουσι λέγειν. καὶ τοῦτο εἰκότως συμβαίνει· τοῦ αὐτοῦ γὰρ λόγου, καὶ ἡ οὐσία ἐν οὕτως, ἄλλ' οὐχ ὡς λέγουσιν τινες οἶον μόνας τις οὐσα ἢ στιγμή, ἄλλ' ἐντελέχεια καὶ φύσις τις ἐκάστη. καὶ ὥσπερ οὐδὲ ὁ ἀριθμὸς ἔχει τὸ μᾶλλον καὶ ἥττον, οὐδ' ἡ κατὰ τὸ εἶδος οὐσία, ἄλλ' εἴπερ, ἡ μετὰ τῆς ὕλης. περὶ μὲν οὖν γενέσεως καὶ φθορᾶς τῶν λεγομένων οὐσιῶν, πῶς τ' ἐνδέχεται καὶ πῶς ἀδύνατον, καὶ περὶ τῆς εἰς τὸν ἀριθμὸν ἀναγωγῆς, ἔστω μέχρι τούτων διωρισμένον.

Περὶ δὲ τῆς ὑλικῆς οὐσίας δεῖ μὴ λανθάνειν ὅτι εἰ καὶ ἐκ τοῦ αὐτοῦ πάντα πρώτου ἢ τῶν αὐτῶν ὡς πρώτων καὶ ἡ αὐτὴ ὕλη ὡς ἀρχὴ τοῖς γιγνομένοις, ὅμως ἔστι τις οἰκεία ἐκάστου, οἶον φλέγματος [ἐστὶ πρώτη ὕλη] τὰ γλυκέα ἢ λιπαρά, χολῆς δὲ τὰ πικρὰ ἢ ἄλλα· ἴσως δὲ ταῦτα ἐκ τοῦ αὐτοῦ. γίνονται δὲ πλείους ὕλαι τοῦ αὐτοῦ ὅταν θατέρου ἢ ἐτέρα ἢ, οἶον φλέγμα ἐκ λιπαροῦ καὶ γλυκέος εἰ τὸ λιπαρὸν ἐκ τοῦ γλυκέος, ἐκ δὲ χολῆς τῷ ἀναλύεσθαι εἰς τὴν πρώτην ὕλην τὴν χολήν. διχῶς γὰρ τόδ' ἐκ τοῦδε, ἢ ὅτι πρὸ ὁδοῦ ἔσται ἢ ὅτι ἀναλυθέντος εἰς τὴν ἀρχήν. ἐνδέχεται δὲ μιᾶς τῆς ὕλης οὐσης ἕτερα γίνεσθαι διὰ τὴν κινουσαν αἰτίαν, οἶον ἐκ ξύλου καὶ κιβωτὸς καὶ κλίνη. ἐνίων δ' ἐτέρα ἢ ὕλη ἐξ ἀνάγκης ἐτέρων ὄντων, οἶον πρίων οὐκ ἂν γένοιτο ἐκ ξύλου, οὐδ' ἐπὶ τῇ κινούσῃ αἰτίᾳ τοῦτο· οὐ γὰρ ποιήσει πρίονα ἐξ ἐρίου ἢ ξύλου. εἰ δ' ἄρα τὸ αὐτὸ ἐνδέχεται ἐξ ἄλλης ὕλης ποιῆσαι, δῆλον ὅτι ἡ τέχνη καὶ ἡ ἀρχὴ ἢ ὡς κινουσα ἢ αὐτὴ· εἰ γὰρ καὶ ἡ ὕλη ἐτέρα καὶ τὸ κινοῦν, καὶ τὸ γεγονός. - ὅταν δὲ τις ζητῇ τὸ αἴτιον, ἐπεὶ πλεοναχῶς τὰ αἴτια λέγεται, πάσας δεῖ λέγειν τὰς ἐνδεχομένας αἰτίας. οἶον ἀνθρώπου τίς αἰτία ὡς ὕλη; ἄρα τὰ καταμήνια; τί δ' ὡς κινοῦν; ἄρα τὸ σπέρμα; τί δ' ὡς τὸ εἶδος; τὸ τί ἦν εἶναι. τί δ' ὡς οὐ ἔνεκα; τὸ [1044b] τέλος. ἴσως δὲ ταῦτα ἅμφω τὸ αὐτό. δεῖ δὲ τὰ ἐγγύτατα αἴτια λέγειν. τίς ἢ ὕλη; μὴ πῦρ ἢ γῆν ἄλλὰ τὴν ἴδιον. περὶ μὲν οὖν τὰς φυσικὰς οὐσίας καὶ γενητὰς ἀνάγκη οὕτω μετιέναι εἴ τις μέτεισιν ὀρθῶς, εἴπερ ἄρα αἴτια τε ταῦτα καὶ τοσαῦτα καὶ δεῖ τὰ αἴτια γνωρίζειν· ἐπὶ δὲ τῶν φυσικῶν μὲν αἰτιῶν δὲ οὐσιῶν ἄλλος λόγος. ἴσως γὰρ ἕνια οὐκ ἔχει ὕλην, ἢ οὐ τοιαύτην ἄλλὰ μόνον κατὰ τόπον κινητήν. οὐδ' ὅσα δὴ φύσει μὲν, μὴ οὐσίαι δέ, οὐκ ἔστι τούτοις ὕλη, ἄλλὰ τὸ ὑποκείμενον ἢ οὐσία. οἶον τί αἴτιον ἐκλείψεως, τίς ὕλη; οὐ γὰρ ἔστιν, ἄλλ' ἡ σελήνη τὸ πάσχον. τί δ' αἴτιον ὡς κινήσαν καὶ φθεῖραν τὸ φῶς; ἡ γῆ. τὸ δ' οὐ ἔνεκα ἴσως οὐκ ἔστιν. τὸ δ' ὡς εἶδος ὁ λόγος, ἄλλὰ ἄδηλος ἐὰν μὴ μετὰ τῆς αἰτίας ἢ ὁ λόγος. οἶον τί ἐκλειψις; στέρησις φωτός. ἐὰν δὲ προστεθῇ τὸ ὑπὸ γῆς ἐν μέσῳ γιγνομένης, ὁ

σὺν τῷ αἰτίῳ λόγος οὗτος. ὕπνου δ' ἄδηλον τί τὸ πρῶτον πάσχον. ἀλλ' ὅτι τὸ ζῶον; ναί, ἀλλὰ τοῦτο κατὰ τί, καὶ τί πρῶτον; καρδία ἢ ἄλλο τι. εἴτα ὑπὸ τίνος; εἴτα τί τὸ πάθος, τὸ ἐκείνου καὶ μὴ τοῦ ὅλου; ὅτι ἀκίνησία τοιαδί; ναί, ἀλλ' αὕτη τῷ τί πάσχειν τὸ πρῶτον;

Ἐπεὶ δ' ἔνια ἄνευ γενέσεως καὶ φθορᾶς ἔστι καὶ οὐκ ἔστιν, οἷον αἱ στιγμαί, εἴπερ εἰσὶ, καὶ ὅλως τὰ εἶδη (οὐ γὰρ τὸ λευκὸν γίγνεται ἀλλὰ τὸ ξύλον λευκόν, εἰ ἔκ τινος καὶ τὸ πᾶν τὸ γιγνόμενον γίγνεται), οὐ πάντα ἂν τάναντία γίγνοιτο ἐξ ἀλλήλων, ἀλλ' ἐτέρως λευκὸς ἄνθρωπος ἐκ μέλανος ἀνθρώπου καὶ λευκὸν ἐκ μέλανος· οὐδὲ παντὸς ὕλη ἔστιν ἀλλ' ὅσων γένεσις ἔστι καὶ μεταβολὴ εἰς ἀλλήλα· ὅσα δ' ἄνευ τοῦ μεταβάλλειν ἔστιν ἢ μή, οὐκ ἔστι τούτων ὕλη. - ἔχει δ' ἀπορίαν πῶς πρὸς τάναντία ἢ ὕλη ἢ ἐκάστου ἔχει. οἷον εἰ τὸ σῶμα δυνάμει ὑγιεινόν, ἐναντίον δὲ νόσος ὑγεία, ἄρα ἄμφω δυνάμει; καὶ τὸ ὕδωρ δυνάμει οἶνος καὶ ὄξος; ἢ τοῦ μὲν καθ' ἑξιν καὶ κατὰ τὸ εἶδος ὕλη, τοῦ δὲ κατὰ στέρησιν καὶ φθορὰν τὴν παρὰ φύσιν; ἀπορία δέ τις ἔστι καὶ διὰ τί ὁ οἶνος οὐχ ὕλη τοῦ ὄξους οὐδὲ δυνάμει ὄξος (καίτοι γίγνεται ἐξ αὐτοῦ ὄξος) καὶ ὁ ζῶν δυνάμει νεκρός. ἢ οὐ, ἀλλὰ κατὰ συμβεβηκὸς [1045a] αἱ φθοραί, ἢ δὲ τοῦ ζώου ὕλη αὐτὴ κατὰ φθορὰν νεκροῦ δύναμις καὶ ὕλη, καὶ τὸ ὕδωρ ὄξους· γίγνεται γὰρ ἐκ τούτων ὥσπερ ἐξ ἡμέρας νύξ. καὶ ὅσα δὴ οὕτω μεταβάλλει εἰς ἀλλήλα, εἰς τὴν ὕλην δεῖ ἐπανελθεῖν, οἷον εἰ ἐκ νεκροῦ ζῶον, εἰς τὴν ὕλην πρῶτον, εἴθ' οὕτω ζῶον· καὶ τὸ ὄξος εἰς ὕδωρ, εἴθ' οὕτως οἶνος.

Περὶ δὲ τῆς ἀπορίας τῆς εἰρημένης περί τε τοὺς ὁρισμοὺς καὶ περὶ τοὺς ἀριθμούς, τί αἴτιον τοῦ ἔν εἶναι; πάντων γὰρ ὅσα πλείω μέρη ἔχει καὶ μὴ ἔστιν οἷον σωρὸς τὸ πᾶν ἀλλ' ἔστι τι τὸ ὅλον παρὰ τὰ μόρια, ἔστι τι αἴτιον, ἐπεὶ καὶ ἐν τοῖς σώμασι τοῖς μὲν ἀφ' αἰτίας τοῦ ἔν εἶναι τοῖς δὲ γλισχρότης ἢ τι πάθος ἕτερον τοιοῦτον. ὁ δ' ὁρισμὸς λόγος ἐστὶν εἷς οὐ συνδέσμῳ καθάπερ ἡ Ἰλιάς ἀλλὰ τῷ ἐνὸς εἶναι. τί οὖν ἐστὶν ὁ ποιεῖ ἔν τὸν ἄνθρωπον, καὶ διὰ τί ἔν ἀλλ' οὐ πολλά, οἷον τό τε ζῶον καὶ τὸ δίπουν, ἄλλως τε δὴ καὶ εἰ ἔστιν, ὥσπερ φασὶ τινες, αὐτό τι ζῶον καὶ αὐτὸ δίπουν; διὰ τί γὰρ οὐκ ἐκεῖνα αὐτὰ ὁ ἄνθρωπος ἐστὶ, καὶ ἔσονται κατὰ μέθεξιν οἱ ἄνθρωποι οὐκ ἀνθρώπου οὐδ' ἐνὸς ἀλλὰ δυοῖν, ζώου καὶ δίποδος, καὶ ὅλως δὴ οὐκ ἂν εἴη ὁ ἄνθρωπος ἐν ἀλλὰ πλείω, ζῶον καὶ δίπουν; φανερόν δὴ ὅτι οὕτω μὲν μετιοῦσιν ὡς εἰώθασιν ὀρίζεσθαι καὶ λέγειν, οὐκ ἐνδέχεται ἀποδοῦναι καὶ λῦσαι τὴν ἀπορίαν· εἰ δ' ἐστίν, ὥσπερ λέγομεν, τὸ μὲν ὕλη τὸ δὲ μορφή, καὶ τὸ μὲν δυνάμει τὸ δὲ ἐνεργεία, οὐκέτι ἀπορία δόξειεν ἂν εἶναι τὸ ζητούμενον. ἔστι γὰρ αὕτη ἢ ἀπορία ἢ αὐτὴ κἂν εἰ ὁ ὅρος εἴη ἱματίου στρογγύλος χαλκός· εἴη γὰρ ἂν σημεῖον τοῦνομα τοῦτο τοῦ λόγου, ὥστε τὸ ζητούμενόν ἐστι τί αἴτιον

τοῦ ἔν εἶναι τὸ στρογγύλον καὶ τὸν χαλκόν. οὐκέτι δὴ ἀπορία φαίνεται, ὅτι τὸ μὲν ὕλη τὸ δὲ μορφή. τί οὖν τούτου αἷτιον, τοῦ τὸ δυνάμει ὄν ἐνεργεία εἶναι, παρὰ τὸ ποιῆσαν, ἐν ὅσοις ἔστι γένεσις; οὐθὲν γάρ ἐστιν αἷτιον ἕτερον τοῦ τὴν δυνάμει σφαῖραν ἐνεργεία εἶναι σφαῖραν, ἀλλὰ τοῦτ' ἦν τὸ τί ἦν εἶναι ἐκατέρω. ἔστι δὲ τῆς ὕλης ἢ μὲν νοητὴ ἢ δ' αἰσθητή, καὶ ἀεὶ τοῦ λόγου τὸ μὲν ὕλη τὸ δὲ ἐνεργεία ἐστίν, οἷον ὁ κύκλος σχῆμα ἐπίπεδον. ὅσα δὲ μὴ ἔχει ὕλην μήτε νοητὴν μήτε αἰσθητήν, εὐθὺς [1045b] ὅπερ ἔν τί [εἶναι] ἐστίν ἕκαστον, ὥσπερ καὶ ὅπερ ὄν τι, τὸ τόδε, τὸ ποιόν, τὸ ποσόν - διὸ καὶ οὐκ ἔνεστιν ἐν τοῖς ὀρισμοῖς οὔτε τὸ ὄν οὔτε τὸ ἔν - , καὶ τὸ τί ἦν εἶναι εὐθὺς ἔν τί ἐστίν ὥσπερ καὶ ὄν τι - διὸ καὶ οὐκ ἔστιν ἕτερόν τι αἷτιον τοῦ ἔν εἶναι οὐθενὶ τούτων οὐδὲ τοῦ ὄν τι εἶναι· εὐθὺς γὰρ ἕκαστόν ἐστίν ὄν τι καὶ ἔν τι, οὐχ ὥς ἐν γένει τῷ ὄντι καὶ τῷ ἐνί, οὐδ' ὥς χωριστῶν ὄντων παρὰ τὰ καθ' ἕκαστα. διὰ ταύτην δὲ τὴν ἀπορίαν οἱ μὲν μέθεξιν λέγουσι, καὶ αἷτιον τί τῆς μεθέξεως καὶ τί τὸ μετέχειν ἀποροῦσιν· οἱ δὲ συνουσίαν [ψυχῆς], ὥσπερ Λυκόφρων φησὶν εἶναι τὴν ἐπιστήμην τοῦ ἐπίστασθαι καὶ ψυχῆς· οἱ δὲ σύνθεσιν ἢ σύνδεσμον ψυχῆς σώματι τὸ ζῆν. καίτοι ὁ αὐτὸς λόγος ἐπὶ πάντων· καὶ γὰρ τὸ ὑγιαίνειν ἔσται ἢ συνουσία ἢ σύνδεσμος ἢ σύνθεσις ψυχῆς καὶ ὑγιείας, καὶ τὸ τὸν χαλκὸν εἶναι τρίγωνον σύνθεσις χαλκοῦ καὶ τριγώνου, καὶ τὸ λευκὸν εἶναι σύνθεσις ἐπιφανείας καὶ λευκότητος. αἷτιον δ' ὅτι δυνάμεως καὶ ἐντελεχείας ζητοῦσι λόγον ἐνοποιὸν καὶ διαφοράν. ἔστι δ', ὥσπερ εἴρηται, ἢ ἐσχάτη ὕλη καὶ ἢ μορφή ταῦτ' ὅν καὶ ἔν, δυνάμει, τὸ δὲ ἐνεργεία, ὥστε ὅμοιον τὸ ζητεῖν τοῦ ἐνὸς τί αἷτιον καὶ τοῦ ἔν εἶναι· ἐν γάρ τι ἕκαστον, καὶ τὸ δυνάμει καὶ τὸ ἐνεργεία ἔν πῶς ἐστίν, ὥστε αἷτιον οὐθὲν ἄλλο πλὴν εἴ τι ὥς κινήσαν ἐκ δυνάμεως εἰς ἐνεργείαν. ὅσα δὲ μὴ ἔχει ὕλην, πάντα ἀπλῶς ὅπερ ἔν τι.



Περὶ μὲν οὖν τοῦ πρώτως ὄντος καὶ πρὸς ὃ πᾶσαι αἱ ἄλλαι κατηγορίαι τοῦ ὄντος ἀναφέρονται εἴρηται, περὶ τῆς οὐσίας (κατὰ γὰρ τὸν τῆς οὐσίας λόγον λέγεται τᾶλλα ὄντα, τό τε ποσόν καὶ τὸ ποιόν καὶ τᾶλλα τὰ οὕτω λεγόμενα· πάντα γὰρ ἔξει τὸν τῆς οὐσίας λόγον, ὥσπερ εἵπομεν ἐν τοῖς πρώτοις λόγοις)· ἐπεὶ δὲ λέγεται τὸ ὄν τὸ μὲν τὸ τί ἢ ποιόν ἢ ποσόν, τὸ δὲ κατὰ δύναμιν καὶ ἐντελέχειαν καὶ κατὰ τὸ ἔργον, διορίσωμεν καὶ περὶ δυνάμεως καὶ ἐντελεχείας, καὶ πρῶτον περὶ δυνάμεως ἢ λέγεται μὲν μάλιστα κυρίως, οὐ μὴν χρησιμωτάτη γέ ἐστι πρὸς [1046a] ὃ βουλόμεθα νῦν· ἐπὶ πλέον γάρ ἐστίν ἢ δύναμις καὶ ἢ ἐνεργεία τῶν μόνον λεγομένων κατὰ κίνησιν. ἀλλ' εἰπόντες περὶ ταύτης, ἐν τοῖς περὶ τῆς ἐνεργείας διορισμοῖς δηλώσομεν καὶ περὶ τῶν ἄλλων. ὅτι μὲν οὖν λέγεται πολλαχῶς ἢ δύναμις καὶ τὸ δύνασθαι,

διώριστα ἡμῖν ἐν ἄλλοις· τούτων δ' ὅσαι μὲν ὁμωνύμως λέγονται δυνάμεις ἀφείσθωσαν (ἔναι γὰρ ὁμοιότητι τινι λέγονται, καθάπερ ἐν γεωμετρίας καὶ δυνατὰ καὶ ἀδύνατα λέγομεν τῷ εἶναι πῶς ἢ μὴ εἶναι), ὅσαι δὲ πρὸς τὸ αὐτὸ εἶδος, πᾶσαι ἀρχαὶ τινές εἰσι, καὶ πρὸς πρώτην μίαν λέγονται, ἢ ἐστὶν ἀρχὴ μεταβολῆς ἐν ἄλλῳ ἢ ἢ ἄλλο. ἢ μὲν γὰρ τοῦ παθεῖν ἐστὶ δύναμις, ἢ ἐν αὐτῷ τῷ πάσχοντι ἀρχὴ μεταβολῆς παθητικῆς ὑπ' ἄλλου ἢ ἢ ἄλλο· ἢ δ' ἔξις ἀπαθείας τῆς ἐπὶ τὸ χεῖρον καὶ φθορᾶς τῆς ὑπ' ἄλλου ἢ ἢ ἄλλο ὑπ' ἀρχῆς μεταβλητικῆς. ἐν γὰρ τούτοις ἔνεστι πᾶσι τοῖς ὅροις ὁ τῆς πρώτης δυνάμεως λόγος. πάλιν δ' αὗται δυνάμεις λέγονται ἢ τοῦ μόνον ποιῆσαι ἢ [τοῦ] παθεῖν ἢ τοῦ καλῶς, ὥστε καὶ ἐν τοῖς τούτων λόγοις ἐνυπάρχουσί πῶς οἱ τῶν προτέρων δυνάμεων λόγοι. - φανερόν οὖν ὅτι ἔστι μὲν ὡς μία δύναμις τοῦ ποιεῖν καὶ πάσχειν (δυνατὸν γὰρ ἐστὶ καὶ τῷ ἔχειν αὐτὸ δύναμιν τοῦ παθεῖν καὶ τῷ ἄλλο ὑπ' αὐτοῦ), ἔστι δὲ ὡς ἄλλη. ἢ μὲν γὰρ ἐν τῷ πάσχοντι (διὰ γὰρ τὸ ἔχειν τινὰ ἀρχήν, καὶ εἶναι καὶ τὴν ὕλην ἀρχήν τινα, πάσχει τὸ πάσχον, καὶ ἄλλο ὑπ' ἄλλου· τὸ λιπαρὸν μὲν γὰρ καυστὸν τὸ δ' ὑπεῖκον ὡδὶ θλαστὸν, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων), ἢ δ' ἐν τῷ ποιοῦντι, οἷον τὸ θερμὸν καὶ ἡ οἰκοδομικὴ, ἢ μὲν ἐν τῷ θερμαντικῷ ἢ δ' ἐν τῷ οἰκοδομικῷ· διὸ ἢ συμπέφυκεν, οὐθὲν πάσχει αὐτὸ ὑφ' ἑαυτοῦ· ἐν γὰρ καὶ οὐκ ἄλλο. καὶ ἡ ἀδυναμία καὶ τὸ ἀδύνατον ἢ τῇ τοιαύτῃ δυνάμει ἐναντία στερήσις ἐστίν, ὥστε τοῦ αὐτοῦ καὶ κατὰ τὸ αὐτὸ πᾶσα δύναμις ἀδυναμία. ἢ δὲ στερήσις λέγεται πολλαχῶς· καὶ γὰρ τὸ μὴ ἔχον καὶ τὸ πεφυκὸς ἂν μὴ ἔχη, ἢ ὅλως ἢ ὅτε πέφυκεν, καὶ ἢ ὡδί, οἷον παντελῶς, ἢ κἂν ὁπωσοῦν. ἐπ' ἐνίων δέ, ἂν πεφυκότα ἔχειν μὴ ἔχη βία, ἐστερηθῆσθαι ταῦτα λέγομεν.

Ἐπεὶ δ' αἱ μὲν ἐν τοῖς ἀψύχοις ἐνυπάρχουσιν ἀρχαὶ τοιαῦται, αἱ δ' ἐν τοῖς ἐμψύχοις καὶ ἐν ψυχῇ καὶ τῆς [1046b] ψυχῆς ἐν τῷ λόγον ἔχοντι, δῆλον ὅτι καὶ τῶν δυνάμεων αἱ μὲν ἔσσονται ἄλογοι αἱ δὲ μετὰ λόγου· διὸ πᾶσαι αἱ τέχναι καὶ αἱ ποιητικαὶ ἐπιστήμαι δυνάμεις εἰσίν· ἀρχαὶ γὰρ μεταβλητικαὶ εἰσιν ἐν ἄλλῳ ἢ ἢ ἄλλο. καὶ αἱ μὲν μετὰ λόγου πᾶσαι τῶν ἐναντίων αἱ αὐταί, αἱ δὲ ἄλογοι μία ἐνός, οἷον τὸ θερμὸν τοῦ θερμαίνειν μόνον· ἢ δὲ ἰατρικὴ νόσου καὶ ὑγείας. αἷτιον δὲ ὅτι λόγος ἐστὶν ἢ ἐπιστήμη, ὁ δὲ λόγος ὁ αὐτὸς δηλοῖ τὸ πρᾶγμα καὶ τὴν στερήσιν, πλὴν οὐχ ὡσαύτως, καὶ ἔστιν ὡς ἀμφοῖν ἔστι δ' ὡς τοῦ ὑπάρχοντος μᾶλλον, ὥστ' ἀνάγκη καὶ τὰς τοιαύτας ἐπιστήμας εἶναι μὲν τῶν ἐναντίων, εἶναι δὲ τοῦ μὲν καθ' αὐτὰς τοῦ δὲ μὴ καθ' αὐτάς· καὶ γὰρ ὁ λόγος τοῦ μὲν καθ' αὐτὸ τοῦ δὲ τρόπον τινὰ κατὰ συμβεβηκός· ἀποφάσει γὰρ καὶ ἀποφορᾷ δηλοῖ τὸ ἐναντίον· ἢ γὰρ στερήσις ἢ πρώτη τὸ ἐναντίον, αὕτη δὲ ἀποφορὰ θατέρου. ἐπεὶ δὲ τὰ ἐναντία οὐκ ἐγγίγνεται ἐν τῷ αὐτῷ, ἢ δ' ἐπιστήμη δύναμις τῷ λόγον ἔχειν, καὶ ἡ ψυχὴ κινήσεως ἔχει ἀρχήν, τὸ μὲν ὑγιεινὸν ὑγίειαν μόνον ποιεῖ καὶ τὸ θερμαντικὸν

θερμότητα καὶ τὸ ψυκτικὸν ψυχρότητα, ὃ δ' ἐπιστήμων ἄμφω. λόγος γάρ ἐστιν ἄμφοιν μὲν, οὐχ ὁμοίως δέ, καὶ ἐν ψυχῇ ἢ ἔχει κινήσεως ἀρχήν· ὥστε ἄμφω ἀπὸ τῆς αὐτῆς ἀρχῆς κινήσει πρὸς ταῦτ' οὐκ ἀνάγκη· διὸ τὰ κατὰ λόγον δυνατὰ τοῖς ἄνευ λόγου δυνατοῖς ποιεῖ τὰναντία· μὴ γὰρ ἀρχῇ περιέχεται, τῷ λόγῳ. φανερόν δὲ καὶ ὅτι τῇ μὲν τοῦ εὖ δυνάμει ἀκολουθεῖ ἢ τοῦ μόνον ποιῆσαι ἢ παθεῖν δύναμις, ταύτη δ' ἐκείνη οὐκ ἀεί· ἀνάγκη γὰρ τὸν εὖ ποιοῦντα καὶ ποιεῖν, τὸν δὲ μόνον ποιοῦντα οὐκ ἀνάγκη καὶ εὖ ποιεῖν.

Εἰσὶ δὲ τινες οἳ φασιν, οἷον οἱ Μεγαρικοί, ὅταν ἐνεργῇ μόνον δύνασθαι, ὅταν δὲ μὴ ἐνεργῇ οὐ δύνασθαι, οἷον τὸν μὴ οἰκοδομοῦντα οὐ δύνασθαι οἰκοδομεῖν, ἀλλὰ τὸν οἰκοδομοῦντα ὅταν οἰκοδομῇ· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. οἷς τὰ συμβαίνοντα ἄτοπα οὐ χαλεπὸν ἰδεῖν. δῆλον γὰρ ὅτι οὗτ' οἰκοδόμος ἔσται ἐὰν μὴ οἰκοδομῇ (τὸ γὰρ οἰκοδόμῳ εἶναι τὸ δυνατῷ εἶναι ἔστιν οἰκοδομεῖν), ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τεχνῶν. εἰ οὖν ἀδύνατον τὰς τοιαύτας ἔχειν τέχνας μὴ μαθόντα ποτέ καὶ λαβόντα, καὶ μὴ ἔχειν [1047a] μὴ ἀποβαλόντα ποτέ (ἢ γὰρ λήθη ἢ πάθει τινὶ ἢ χρόνῳ· οὐ γὰρ δὴ τοῦ γε πράγματος φθαρέντος, ἀεὶ γὰρ ἔστιν), ὅταν παύσηται, οὐκ ἔξει τὴν τέχνην, πάλιν δ' εὐθὺς οἰκοδομήσει πῶς λαβὼν; καὶ τὰ ἄψυχα δὴ ὁμοίως· οὔτε γὰρ ψυχρὸν οὔτε θερμὸν οὔτε γλυκὺ οὔτε ὅλως αἰσθητὸν οὐθέν ἔσται μὴ αἰσθανομένων· ὥστε τὸν Πρωταγόρου λόγον συμβήσεται λέγειν αὐτοῖς. ἀλλὰ μὴν οὐδ' αἰσθησιν ἔξει οὐδὲν ἂν μὴ αἰσθάνηται μηδ' ἐνεργῇ. εἰ οὖν τυφλὸν τὸ μὴ ἔχον ὄψιν, πεφυκὸς δὲ καὶ ὅτε πέφυκε καὶ ἔτι ὄν, οἱ αὐτοὶ τυφλοὶ ἔσονται πολλάκις τῆς ἡμέρας, καὶ κωφοί. ἔτι εἰ ἀδύνατον τὸ ἐστερημένον δυνάμεως, τὸ μὴ γινόμενον ἀδύνατον ἔσται γενέσθαι· τὸ δ' ἀδύνατον γενέσθαι ὃ λέγων ἢ εἶναι ἢ ἔσεσθαι ψεύσεται (τὸ γὰρ ἀδύνατον τοῦτο ἐσήμαινεν), ὥστε οὗτοι οἱ λόγοι ἐξαιροῦσι καὶ κίνησιν καὶ γένεσιν. ἀεὶ γὰρ τό τε ἐστηκὸς ἐστήξεται καὶ τὸ καθήμενον καθεδεῖται· οὐ γὰρ ἀναστήσεται ἂν καθέζεται· ἀδύνατον γὰρ ἔσται ἀναστῆναι ὃ γε μὴ δύναται ἀναστῆναι. εἰ οὖν μὴ ἐνδέχεται ταῦτα λέγειν, φανερόν ὅτι δύναμις καὶ ἐνέργεια ἕτερόν ἐστιν (ἐκεῖνοι δ' οἱ λόγοι δύναμιν καὶ ἐνέργειαν ταῦτ' οὐ ποιοῦσιν, διὸ καὶ οὐ μικρόν τι ζητοῦσιν ἀναιρεῖν), ὥστε ἐνδέχεται δυνατόν μὲν τι εἶναι μὴ εἶναι δέ, καὶ δυνατόν μὴ εἶναι εἶναι δέ, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων κατηγοριῶν δυνατόν βαδίζειν ὃν μὴ βαδίζειν, καὶ μὴ βαδίζειν δυνατόν ὃν βαδίζειν. ἔστι δὲ δυνατόν τοῦτο ὡς ἐὰν ὑπάρξῃ ἢ ἐνέργεια οὐ λέγεται ἔχειν τὴν δύναμιν, οὐθέν ἔσται ἀδύνατον. λέγω δὲ οἷον, εἰ δυνατόν καθῆσθαι καὶ ἐνδέχεται καθῆσθαι, τούτῳ ἐὰν ὑπάρξῃ τὸ καθῆσθαι, οὐδὲν ἔσται ἀδύνατον· καὶ εἰ κινήσθαι ἢ κινῆσαι ἢ στήναι ἢ στήσαι ἢ εἶναι ἢ γίνεσθαι ἢ μὴ εἶναι ἢ μὴ γίνεσθαι, ὁμοίως. ἐλήλυθε δ' ἡ ἐνέργεια τοῦνομα, ἢ πρὸς τὴν ἐντελέχειαν συντιθεμένη, καὶ ἐπὶ τὰ ἄλλα ἐκ τῶν κινήσεων μάλιστα· δοκεῖ γὰρ ἡ ἐνέργεια μάλιστα ἢ κινήσεις

εἶναι, διὸ καὶ τοῖς μὴ οὖσιν οὐκ ἀποδιδόασιν τὸ κινεῖσθαι, ἄλλας δέ τινας κατηγορίας, οἷον διανοητὰ καὶ ἐπιθυμητὰ εἶναι τὰ μὴ ὄντα, κινούμενα δὲ οὐ, τοῦτο δὲ ὅτι οὐκ ὄντα ἐνεργείᾳ ἔσσονται ἐνεργείᾳ.

[1047b] τῶν γὰρ μὴ ὄντων ἓν ἐν δυνάμει ἐστίν· οὐκ ἔστι δέ, ὅτι οὐκ ἐντελεχείᾳ ἐστίν.

Εἰ δὲ ἐστὶ τὸ εἰρημένον τὸ δυνατόν ἢ ἀκολουθεῖ, φανερόν ὅτι οὐκ ἐνδέχεται ἀληθὲς εἶναι τὸ εἰπεῖν ὅτι δυνατόν μὲν τοδί, οὐκ ἔσται δέ, ὥστε τὰ ἀδύνατα εἶναι ταύτῃ διαφεύγειν· λέγω δὲ οἷον εἴ τις φαίη δυνατόν τὴν διάμετρον μετρηθῆναι οὐ μέντοι μετρηθήσεσθαι - ὁ μὴ λογιζόμενος τὸ ἀδύνατον εἶναι - ὅτι οὐθὲν κωλύει δυνατόν τι ὄν εἶναι ἢ γενέσθαι μὴ εἶναι μηδ' ἔσεσθαι. ἀλλ' ἐκεῖνο ἀνάγκη ἐκ τῶν κειμένων, εἰ καὶ ὑποθοίμεθα εἶναι ἢ γεγονέναι ὃ οὐκ ἔστι μὲν δυνατόν δέ, ὅτι οὐθὲν ἔσται ἀδύνατον· συμβήσεται δέ γε, τὸ γὰρ μετρεῖσθαι ἀδύνατον. οὐ γὰρ δὴ ἐστὶ ταῦτό τὸ ψεῦδος καὶ τὸ ἀδύνατον· τὸ γὰρ σε ἐστάναι νῦν ψεῦδος μὲν, οὐκ ἀδύνατον δέ. ἄμα δὲ δῆλον καὶ ὅτι, εἰ τοῦ Α ὄντος ἀνάγκη τὸ Β εἶναι, καὶ δυνατοῦ ὄντος εἶναι τοῦ Α καὶ τὸ Β ἀνάγκη εἶναι δυνατόν· εἰ γὰρ μὴ ἀνάγκη δυνατόν εἶναι, οὐθὲν κωλύει μὴ εἶναι δυνατόν εἶναι. ἔστω δὴ τὸ Α δυνατόν. οὐκοῦν ὅτε τὸ Α δυνατόν εἴη εἶναι, εἰ τεθείη τὸ Α, οὐθὲν ἀδύνατον εἶναι συνέβαινεν· τὸ δέ γε Β ἀνάγκη εἶναι. ἀλλ' ἦν ἀδύνατον. ἔστω δὴ ἀδύνατον. εἰ δὴ ἀδύνατον [ἀνάγκη] εἶναι τὸ Β, ἀνάγκη καὶ τὸ Α εἶναι. ἀλλ' ἦν ἄρα τὸ πρῶτον ἀδύνατον· καὶ τὸ δεύτερον ἄρα. ἂν ἄρα ἦ τὸ Α δυνατόν, καὶ τὸ Β ἔσται δυνατόν, εἴπερ οὕτως εἶχον ὥστε τοῦ Α ὄντος ἀνάγκη εἶναι τὸ Β. ἐὰν δὲ οὕτως ἐχόντων τῶν Α Β μὴ ἦ δυνατόν τὸ Β οὕτως, οὐδὲ τὰ Α Β ἔξει ὡς ἐτέθη· καὶ εἰ τοῦ Α δυνατοῦ ὄντος ἀνάγκη τὸ Β δυνατόν εἶναι, εἰ ἔστι τὸ Α ἀνάγκη εἶναι καὶ τὸ Β. τὸ γὰρ δυνατόν εἶναι ἐξ ἀνάγκης τὸ Β εἶναι, εἰ τὸ Α δυνατόν, τοῦτο σημαίνει, ἐὰν ἦ τὸ Α καὶ ὅτε καὶ ὡς ἦν δυνατόν εἶναι, κάκεῖνο τότε καὶ οὕτως εἶναι ἀναγκαῖον.

Ἀπασῶν δὲ τῶν δυνάμεων οὐσῶν τῶν μὲν συγγενῶν οἷον τῶν αἰσθήσεων, τῶν δὲ ἔθει οἷον τῆς τοῦ αὐλεῖν, τῶν δὲ μαθήσει οἷον τῆς τῶν τεχνῶν, τὰς μὲν ἀνάγκη προενεργήσαντας ἔχειν, ὅσαι ἔθει καὶ λόγῳ, τὰς δὲ μὴ τοιαύτας καὶ τὰς ἐπὶ τοῦ πάσχειν οὐκ ἀνάγκη. ἐπεὶ δὲ τὸ δυνατόν [1048a] τί δυνατόν καὶ ποτὲ καὶ πῶς καὶ ὅσα ἄλλα ἀνάγκη προσεῖναι ἐν τῷ διορισμῷ, καὶ τὰ μὲν κατὰ λόγον δύναται κινεῖν καὶ αἱ δυνάμεις αὐτῶν μετὰ λόγου, τὰ δὲ ἄλογα καὶ αἱ δυνάμεις ἄλογοι, κάκεῖνας μὲν ἀνάγκη ἐν ἐμψύχῳ εἶναι ταύτας δὲ ἐν ἀμφοῖν, τὰς μὲν τοιαύτας δυνάμεις ἀνάγκη, ὅταν ὡς δύνανται τὸ ποιητικὸν καὶ τὸ παθητικὸν πλησιάζωσι, τὸ μὲν ποιεῖν τὸ δὲ

πάσχειν, ἐκείνας δ' οὐκ ἀνάγκη· αὐταὶ μὲν γὰρ πᾶσαι μία ἐνὸς ποιητική, ἐκεῖναι δὲ τῶν ἐναντίων, ὥστε ἅμα ποιήσει τὰ ἐναντία· τοῦτο δὲ ἀδύνατον. ἀνάγκη ἄρα ἕτερόν τι εἶναι τὸ κύριον· λέγω δὲ τοῦτο ὄρεξιν ἢ προαίρεσιν. ὁποτέρου γὰρ ἂν ὀρέγηται κυρίως, τοῦτο ποιήσει ὅταν ὡς δύναται ὑπάρχη καὶ πλησιάζῃ τῷ παθητικῷ· ὥστε τὸ δυνατόν κατὰ λόγον ἅπαν ἀνάγκη, ὅταν ὀρέγηται οὐ ἔχει τὴν δύναμιν καὶ ὡς ἔχει, τοῦτο ποιεῖν· ἔχει δὲ παρόντος τοῦ παθητικοῦ καὶ ὡδὶ ἔχοντος [ποιεῖν]· εἰ δὲ μή, ποιεῖν οὐ δυνήσεται (τὸ γὰρ μηθενὸς τῶν ἔξω κωλύοντος προσδιορίζεσθαι οὐθὲν ἔτι δεῖ· τὴν γὰρ δύναμιν ἔχει ὡς ἔστι δύναμις τοῦ ποιεῖν, ἔστι δ' οὐ πάντως ἄλλ' ἐχόντων πῶς, ἐν οἷς ἀφορισθήσεται καὶ τὰ ἔξω κωλύοντα· ἀφαιρεῖται γὰρ ταῦτα τῶν ἐν τῷ διορισμῷ προσόντων ἕνια)· διὸ οὐδ' ἐὰν ἅμα βούληται ἢ ἐπιθυμῇ ποιεῖν δύο ἢ τὰ ἐναντία, οὐ ποιήσει· οὐ γὰρ οὕτως ἔχει αὐτῶν τὴν δύναμιν οὐδ' ἔστι τοῦ ἅμα ποιεῖν ἢ δύναμις, ἐπεὶ ὧν ἐστὶν οὕτως ποιήσει.

Ἐπεὶ δὲ περὶ τῆς κατὰ κίνησιν λεγομένης δυνάμεως εἴρηται, περὶ ἐνεργείας διορίσωμεν τί τέ ἐστὶν ἡ ἐνέργεια καὶ ποῖόν τι. καὶ γὰρ τὸ δυνατόν ἅμα δῆλον ἔσται διαιροῦσιν, ὅτι οὐ μόνον τοῦτο λέγομεν δυνατόν ὃ πέφυκε κινεῖν ἄλλο ἢ κινεῖσθαι ὑπ' ἄλλου ἢ ἀπλῶς ἢ τρόπον τινά, ἀλλὰ καὶ ἐτέρως, διὸ ζητοῦντες καὶ περὶ τούτων διήλθομεν. ἔστι δὲ ἐνέργεια τὸ ὑπάρχειν τὸ πρᾶγμα μὴ οὕτως ὥσπερ λέγομεν δυνάμει· λέγομεν δὲ δυνάμει οἷον ἐν τῷ ξύλῳ Ἑρμῆν καὶ ἐν τῇ ὅλῃ τὴν ἡμίσειαν, ὅτι ἀφαιρεθεῖ ἂν, καὶ ἐπιστήμονα καὶ τὸν μὴ θεωροῦντα, ἂν δυνατός ᾗ θεωρῆσαι· τὸ δὲ ἐνέργεια. δῆλον δ' ἐπὶ τῶν καθ' ἕκαστα τῇ ἐπαγωγῇ ὃ βουλόμεθα λέγειν, καὶ οὐ δεῖ παντὸς ὅρον ζητεῖν ἀλλὰ καὶ τὸ ἀνάλογον συνορᾶν, ὅτι ὡς τὸ οἰκοδομοῦν [1048b] πρὸς τὸ οἰκοδομικόν, καὶ τὸ ἐγρηγορὸς πρὸς τὸ καθεῦδον, καὶ τὸ ὀρῶν πρὸς τὸ μῦον μὲν ὅψιν δὲ ἔχον, καὶ τὸ ἀποκεκριμένον ἐκ τῆς ὕλης πρὸς τὴν ὕλην, καὶ τὸ ἀπειργασμένον πρὸς τὸ ἀνέργαστον. ταύτης δὲ τῆς διαφορᾶς θατέρω μορίῳ ἔστω ἡ ἐνέργεια ἀφωρισμένη θατέρω δὲ τὸ δυνατόν. λέγεται δὲ ἐνεργεία οὐ πάντα ὁμοίως ἄλλ' ἢ τῷ ἀνάλογον, ὡς τοῦτο ἐν τούτῳ ἢ πρὸς τοῦτο, τόδ' ἐν τῷδε ἢ πρὸς τόδε· τὰ μὲν γὰρ ὡς κίνησις πρὸς δύναμιν τὰ δ' ὡς οὐσία πρὸς τινά ὕλην. ἄλλως δὲ καὶ τὸ ἄπειρον καὶ τὸ κενόν, καὶ ὅσα τοιαῦτα, λέγεται δυνάμει καὶ ἐνεργεία <ἢ> πολλοῖς τῶν ὄντων, οἷον τῷ ὀρῶντι καὶ βαδίζοντι καὶ ὀρωμένῳ. ταῦτα μὲν γὰρ ἐνδέχεται καὶ ἀπλῶς ἀληθεύεσθαι ποτε (τὸ μὲν γὰρ ὀρώμενον ὅτι ὀρᾶται, τὸ δὲ ὅτι ὀρᾶσθαι δυνατόν)· τὸ δ' ἄπειρον οὐχ οὕτω δυνάμει ἔστιν ὡς ἐνεργεία ἐσόμενον χωριστόν, ἀλλὰ γνώσει. τὸ γὰρ μὴ ὑπολείπειν τὴν διαίρεσιν ἀποδίδωσι τὸ εἶναι δυνάμει ταύτην τὴν ἐνέργειαν, τὸ δὲ χωρίζεσθαι οὐ.

Ἐπεὶ δὲ τῶν πράξεων ὧν ἔστι πέρας οὐδεμία τέλος ἀλλὰ τῶν περὶ τὸ

τέλος, οἷον τὸ ἰσχναίνειν ἢ ἰσχνασία [αὐτό], αὐτὰ δὲ ὅταν ἰσχναίνη οὕτως ἐστὶν ἐν κινήσει, μὴ ὑπάρχοντα ὦν ἔνεκα ἢ κινήσεις, οὐκ ἔστι ταῦτα πρᾶξις ἢ οὐ τελεία γε (οὐ γὰρ τέλος). ἀλλ' ἐκείνη <ἦ> ἐνυπάρχει τὸ τέλος καὶ [ἡ] πρᾶξις. οἷον ὁρᾷ ἅμα <καὶ ἐώρακε,> καὶ φρονεῖ <καὶ πεφρόνηκε,> καὶ νοεῖ καὶ νενόηκεν, ἀλλ' οὐ μανθάνει καὶ μεμάθηκεν οὐδ' ὑγιάζεται καὶ ὑγιάσται· εὖ ζῇ καὶ εὖ ἔζηκεν ἅμα, καὶ εὐδαιμονεῖ καὶ εὐδαιμόνηκεν. εἰ δὲ μή, ἔδει ἂν ποτε παύεσθαι ὥσπερ ὅταν ἰσχναίνη, νῦν δ' οὐ, ἀλλὰ ζῇ καὶ ἔζηκεν. τούτων δὴ <δεῖ> τὰς μὲν κινήσεις λέγειν, τὰς δ' ἐνεργείας. πᾶσα γὰρ κίνησις ἀτελής, ἰσχνασία μάθησις βάδισις οἰκοδόμησις· αὐταὶ δὴ κινήσεις, καὶ ἀτελεῖς γε. οὐ γὰρ ἅμα βαδίζει καὶ βεβάδικεν, οὐδ' οἰκοδομεῖ καὶ ὠκοδόμηκεν, οὐδὲ γίγνεται καὶ γέγονεν ἢ κινεῖται καὶ κεκίνηται, ἀλλ' ἕτερον, καὶ κινεῖ καὶ κεκίνηκεν· ἐώρακε δὲ καὶ ὁρᾷ ἅμα τὸ αὐτό, καὶ νοεῖ καὶ νενόηκεν. τὴν μὲν οὖν τοιαύτην ἐνεργείαν λέγω, ἐκείνην δὲ κίνησιν. τὸ μὲν οὖν ἐνεργεῖα τί τέ ἐστι καὶ ποῖον, ἐκ τούτων καὶ τῶν τοιούτων δῆλον ἡμῖν ἔστω.

Πότε δὲ δυνάμει ἔστιν ἕκαστον καὶ πότε οὐ, διοριστέον· [1049a] οὐ γὰρ ὅποτε οὖν. οἷον ἡ γῆ ἄρ' ἐστὶ δυνάμει ἄνθρωπος; ἢ οὐ, ἀλλὰ μᾶλλον ὅταν ἤδη γένηται σπέρμα, καὶ οὐδὲ τότε ἴσως; ὥσπερ οὖν οὐδ' ὑπὸ ἰατρικῆς ἅπαν ἂν ὑγιασθεῖη οὐδ' ἀπὸ τύχης, ἀλλ' ἔστι τι ὃ δυνατόν ἐστι, καὶ τοῦτ' ἔστιν ὑγιαῖνον δυνάμει. ὅρος δὲ τοῦ μὲν ἀπὸ διανοίας ἐντελεχείᾳ γιγνομένου ἐκ τοῦ δυνάμει ὄντος, ὅταν βουλευθέντος γίγνηται μηθενὸς κωλύοντος τῶν ἐκτός, ἐκεῖ δ' ἐν τῷ ὑγιαζομένῳ, ὅταν μηθὲν κωλύῃ τῶν ἐν αὐτῷ. ὁμοίως δὲ δυνάμει καὶ οἰκία· εἰ μηθὲν κωλύει τῶν ἐν τούτῳ καὶ τῇ ὕλῃ τοῦ γίνεσθαι οἰκίαν, οὐδ' ἔστιν ὃ δεῖ προσγενέσθαι ἢ ἀπογενέσθαι ἢ μεταβαλεῖν, τοῦτο δυνάμει οἰκία· καὶ ἐπὶ τῶν ἄλλων ὡσαύτως ὅσων ἔξωθεν ἡ ἀρχὴ τῆς γενέσεως. καὶ ὅσων δὴ ἐν αὐτῷ τῷ ἔχοντι, ὅσα μηθενὸς τῶν ἔξωθεν ἐμποδίζοντος ἔσται δι' αὐτοῦ· οἷον τὸ σπέρμα οὐπω (δεῖ γὰρ ἐν ἄλλῳ <πεσεῖν> καὶ μεταβάλλειν), ὅταν δ' ἤδη διὰ τῆς αὐτοῦ ἀρχῆς ἢ τοιοῦτον, ἤδη τοῦτο δυνάμει· ἐκεῖνο δὲ ἐτέρας ἀρχῆς δεῖται, ὥσπερ ἡ γῆ οὐπω ἀνδριᾶς δυνάμει (μεταβαλοῦσα γὰρ ἔσται χαλκός). ἔοικε δὲ ὃ λέγομεν εἶναι οὐ τότε ἀλλ' ἐκείνινον - οἷον τὸ κιβώτιον οὐ ξύλον ἀλλὰ ξύλινον, οὐδὲ τὸ ξύλον γῆ ἀλλὰ γῆϊνον, πάλιν ἡ γῆ εἰ οὕτως μὴ ἄλλο ἀλλὰ ἐκείνινον - ἀεὶ ἐκεῖνο δυνάμει ἀπλῶς τὸ ὕστερόν ἐστιν. οἷον τὸ κιβώτιον οὐ γῆϊνον οὐδὲ γῆ ἀλλὰ ξύλινον· τοῦτο γὰρ δυνάμει κιβώτιον καὶ ὕλη κιβωτίου αὕτη, ἀπλῶς μὲν τοῦ ἀπλῶς τουδὶ δὲ τοδὶ τὸ ξύλον. εἰ δέ τί ἐστι πρῶτον ὃ μηκέτι κατ' ἄλλο λέγεται ἐκείνινον, τοῦτο πρώτη ὕλη· οἷον εἰ ἡ γῆ ἀερίνη, ὃ δ' ἀήρ μὴ πῦρ ἀλλὰ πύρινος, τὸ πῦρ ὕλη πρώτη οὐ τότε τι οὕσα. τούτῳ γὰρ διαφέρει τὸ καθ' οὐ καὶ τὸ ὑποκείμενον, τῷ εἶναι τότε τι ἢ μὴ εἶναι· οἷον τοῖς πάθεσι τὸ ὑποκείμενον ἄνθρωπος καὶ σῶμα καὶ ψυχὴ, πάθος δὲ τὸ μουσικὸν καὶ λευκόν



(λέγεται δὲ τῆς μουσικῆς ἐγγενομένης ἐκεῖνο οὐ μουσικὴ ἀλλὰ μουσικόν, καὶ οὐ λευκότης ὁ ἄνθρωπος ἀλλὰ λευκόν, οὐδὲ βάδις ἢ κίνησις ἀλλὰ βαδίζον ἢ κινούμενον, ὡς τὸ ἐκείνινον)· - ὅσα μὲν οὖν οὕτω, τὸ ἔσχατον οὐσία· ὅσα δὲ μὴ οὕτως ἀλλ' εἰδός τι καὶ τόδε τι τὸ κατηγορούμενον, τὸ ἔσχατον ὕλη καὶ οὐσία ὑλική. καὶ ὁρθῶς δὴ συμβαίνει τὸ [1049b] ἐκείνινον λέγεσθαι κατὰ τὴν ὕλην καὶ τὰ πάθη· ἄμφω γὰρ ἀόριστα. πότε μὲν οὖν λεκτέον δυνάμει καὶ πότε οὐ, εἴρηται.

Ἐπεὶ δὲ τὸ πρότερον διώριστα ποσαχῶς λέγεται, φανερόν ὅτι πρότερον ἐνέργεια δυνάμεως ἐστίν. λέγω δὲ δυνάμεως οὐ μόνον τῆς ὠρισμένης ἢ λέγεται ἀρχὴ μεταβλητικὴ ἐν ἄλλῳ ἢ ἡ ἄλλο, ἀλλ' ὅλως πάσης ἀρχῆς κινητικῆς ἢ στατικῆς. καὶ γὰρ ἡ φύσις ἐν ταύτῳ [γίνεται· ἐν ταύτῳ γὰρ] γένει τῇ δυνάμει· ἀρχὴ γὰρ κινητικὴ, ἀλλ' οὐκ ἐν ἄλλῳ ἀλλ' ἐν αὐτῷ ἡ αὐτό. - πάσης δὲ τῆς τοιαύτης προτέρα ἐστὶν ἡ ἐνέργεια καὶ λόγῳ καὶ τῇ οὐσίᾳ· χρόνῳ δ' ἐστὶ μὲν ὥς, ἐστὶ δὲ ὡς οὐ. τῷ λόγῳ μὲν οὖν ὅτι προτέρα, δῆλον (τῷ γὰρ ἐνδέχεσθαι ἐνεργῆσαι δυνατόν ἐστὶ τὸ πρῶτως δυνατόν, οἷον λέγω οἰκοδομικὸν τὸ δυνάμενον οἰκοδομεῖν, καὶ ὁρατικὸν τὸ ὁρᾶν, καὶ ὁρατὸν τὸ δυνατόν ὁρᾶσθαι· ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων, ὥστ' ἀνάγκη τὸν λόγον προϋπάρχειν καὶ τὴν γνῶσιν τῆς γνώσεως)· τῷ δὲ χρόνῳ πρότερον ὧδε· τὸ τῷ εἶδει τὸ αὐτὸ ἐνεργοῦν πρότερον, ἀριθμῷ δ' οὐ. λέγω δὲ τοῦτο ὅτι τοῦδε μὲν τοῦ ἀνθρώπου τοῦ ἤδη ὄντος κατ' ἐνέργειαν καὶ τοῦ σίτου καὶ τοῦ ὀρώντος πρότερον τῷ χρόνῳ ἢ ὕλη καὶ τὸ σπέρμα καὶ τὸ ὁρατικόν, ἃ δυνάμει μὲν ἐστὶν ἄνθρωπος καὶ σῖτος καὶ ὀρών, ἐνεργείᾳ δ' οὐπω· ἀλλὰ τούτων πρότερα τῷ χρόνῳ ἕτερα ὄντα ἐνεργείᾳ ἐξ ὧν ταῦτα ἐγένετο· ἀεὶ γὰρ ἐκ τοῦ δυνάμει ὄντος γίνεται τὸ ἐνεργείᾳ ὄν ὑπὸ ἐνεργείᾳ ὄντος, οἷον ἄνθρωπος ἐξ ἀνθρώπου, μουσικὸς ὑπὸ μουσικοῦ, ἀεὶ κινουντός τινος πρώτου· τὸ δὲ κινοῦν ἐνεργείᾳ ἤδη ἐστίν. εἴρηται δὲ ἐν τοῖς περὶ τῆς οὐσίας λόγοις ὅτι πᾶν τὸ γιγνόμενον γίνεται ἔκ τινος τι καὶ ὑπό τινος, καὶ τοῦτο τῷ εἶδει τὸ αὐτό. διὸ καὶ δοκεῖ ἀδύνατον εἶναι οἰκοδόμον εἶναι μὴ οἰκοδομήσαντα μηθὲν ἢ κιθαριστὴν μηθὲν κιθαρίσαντα· ὁ γὰρ μανθάνων κιθαρίζειν κιθαρίζων μανθάνει κιθαρίζειν, ὁμοίως δὲ καὶ οἱ ἄλλοι. ὅθεν ὁ σοφιστικὸς ἔλεγχος ἐγένετο ὅτι οὐκ ἔχων τις τὴν ἐπιστήμην ποιήσει οὐ ἢ ἐπιστήμη· ὁ γὰρ μανθάνων οὐκ ἔχει. ἀλλὰ διὰ τὸ τοῦ γιγνομένου γεγενῆσθαι τι καὶ τοῦ ὅλως κινουμένου κεκινήσθαι τι (δῆλον δ' ἐν τοῖς περὶ κινήσεως [1050a] τοῦτο) καὶ τὸν μανθάνοντα ἀνάγκη ἔχειν τι τῆς ἐπιστήμης ἴσως. ἀλλ' οὖν καὶ ταύτῃ γε δῆλον ὅτι ἡ ἐνέργεια καὶ οὕτω προτέρα τῆς δυνάμεως κατὰ γένεσιν καὶ χρόνον.

Ἀλλὰ μὴν καὶ οὐσία γε, πρῶτον μὲν ὅτι τὰ τῇ γενέσει ὕστερα τῷ εἶδει

καὶ τῇ οὐσίᾳ πρότερα (οἷον ἀνὴρ παιδὸς καὶ ἄνθρωπος σπέρματος· τὸ μὲν γὰρ ἤδη ἔχει τὸ εἶδος τὸ δ' οὐ), καὶ ὅτι ἅπαν ἐπ' ἀρχὴν βαδίζει τὸ γιγνόμενον καὶ τέλος (ἀρχὴ γὰρ τὸ οὐ ἔνεκα, τοῦ τέλους δὲ ἔνεκα ἢ γένεσις), τέλος δ' ἢ ἐνέργεια, καὶ τούτου χάριν ἢ δύνάμις λαμβάνεται. οὐ γὰρ ἵνα ὅψιν ἔχωσιν ὁρῶσι τὰ ζῶα ἀλλ' ὅπως ὁρῶσιν ὅψιν ἔχουσιν, ὁμοίως δὲ καὶ οἰκοδομικὴν ἵνα οἰκοδομῶσι καὶ τὴν θεωρητικὴν ἵνα θεωρῶσιν· ἀλλ' οὐ θεωροῦσιν ἵνα θεωρητικὴν ἔχωσιν, εἰ μὴ οἱ μελετῶντες· οὗτοι δὲ οὐχὶ θεωροῦσιν ἀλλ' ἢ ὡδί, ἢ ὅτι οὐδὲν δέονται θεωρεῖν. ἔτι ἡ ὕλη ἔστι δυνάμει ὅτι ἔλθοι ἂν εἰς τὸ εἶδος· ὅταν δέ γε ἐνεργείᾳ ἦ, τότε ἐν τῷ εἶδει ἐστίν. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, καὶ ὧν κίνησις τὸ τέλος, διὸ ὥσπερ οἱ διδάσκοντες ἐνεργοῦντα ἐπιδείξαντες οἴονται τὸ τέλος ἀποδεδωκέναι, καὶ ἡ φύσις ὁμοίως. εἰ γὰρ μὴ οὕτω γίγνεται, ὁ Παύσωνος ἔσται Ἑρμῆς· ἀδηλος γὰρ καὶ ἡ ἐπιστήμη εἰ ἔσω ἢ ἔξω, ὥσπερ κἀκεῖνος. τὸ γὰρ ἔργον τέλος, ἡ δὲ ἐνέργεια τὸ ἔργον, διὸ καὶ τοῦνομα ἐνέργεια λέγεται κατὰ τὸ ἔργον καὶ συντείνει πρὸς τὴν ἐντελέχειαν. ἐπεὶ δ' ἐστὶ τῶν μὲν ἔσχατον ἢ χρήσις (οἷον ὄψεως ἢ ὄρασις, καὶ οὐθὲν γίγνεται παρὰ ταύτην ἕτερον ἀπὸ τῆς ὄψεως), ἀπ' ἐνίων δὲ γίγνεται τι (οἷον ἀπὸ τῆς οἰκοδομικῆς οἰκία παρὰ τὴν οἰκοδόμησιν), ὅμως οὐθὲν ἦττον ἐνθα μὲν τέλος, ἐνθα δὲ μᾶλλον τέλος τῆς δυνάμεως ἐστίν· ἡ γὰρ οἰκοδόμησις ἐν τῷ οἰκοδομουμένῳ, καὶ ἅμα γίγνεται καὶ ἔστι τῇ οἰκίᾳ. ὅσων μὲν οὖν ἕτερόν τι ἐστὶ παρὰ τὴν χρῆσιν τὸ γιγνόμενον, τούτων μὲν ἡ ἐνέργεια ἐν τῷ ποιουμένῳ ἐστίν (οἷον ἢ τε οἰκοδόμησις ἐν τῷ οἰκοδομουμένῳ καὶ ἡ ὕφανσις ἐν τῷ ὑφαινομένῳ, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων, καὶ ὅλως ἡ κίνησις ἐν τῷ κινουμένῳ)· ὅσων δὲ μὴ ἔστιν ἄλλο τι ἔργον παρὰ τὴν ἐνέργειαν, ἐν αὐτοῖς ὑπάρχει ἡ ἐνέργεια (οἷον ἡ ὄρασις ἐν τῷ ὁρῶντι καὶ ἡ θεωρία ἐν τῷ θεωροῦντι καὶ ἡ [1050b] ζωὴ ἐν τῇ ψυχῇ, διὸ καὶ ἡ εὐδαιμονία· ζωὴ γὰρ ποιά τις ἐστίν). ὥστε φανερόν ὅτι ἡ οὐσία καὶ τὸ εἶδος ἐνέργειά ἐστίν. κατὰ τε δὴ τοῦτον τὸν λόγον φανερόν ὅτι πρότερον τῇ οὐσίᾳ ἐνέργεια δυνάμεως, καὶ ὥσπερ εἵπομεν, τοῦ χρόνου ἀεὶ προλαμβάνει ἐνέργεια ἑτέρα πρὸ ἑτέρας ἕως τῆς τοῦ ἀεὶ κινουντος πρώτως. - ἀλλὰ μὴν καὶ κυριωτέρως· τὰ μὲν γὰρ αἰδία πρότερα τῇ οὐσίᾳ τῶν φθαρτῶν, ἔστι δ' οὐθὲν δυνάμει αἰδίων. λόγος δὲ ὅδε· πᾶσα δυνάμις ἅμα τῆς ἀντιφάσεώς ἐστίν· τὸ μὲν γὰρ μὴ δυνατόν ὑπάρχειν οὐκ ἂν ὑπάρξειεν οὐθενί, τὸ δυνατόν δὲ πᾶν ἐνδέχεται μὴ ἐνεργεῖν. τὸ ἄρα δυνατόν εἶναι ἐνδέχεται καὶ εἶναι καὶ μὴ εἶναι· τὸ αὐτὸ ἄρα δυνατόν καὶ εἶναι καὶ μὴ εἶναι. τὸ δὲ δυνατόν μὴ εἶναι ἐνδέχεται μὴ εἶναι· τὸ δὲ ἐνδεχόμενον μὴ εἶναι φθαρτόν, ἢ ἀπλῶς ἢ τοῦτο αὐτὸ ὃ λέγεται ἐνδέχεσθαι μὴ εἶναι, ἢ κατὰ τόπον ἢ κατὰ τὸ ποσὸν ἢ ποιόν· ἀπλῶς δὲ τὸ κατ' οὐσίαν. οὐθὲν ἄρα τῶν ἀφθάρτων ἀπλῶς δυνάμει ἔστιν ἀπλῶς (κατὰ τι δὲ οὐδὲν κωλύει, οἷον ποιὸν ἢ πού)· ἐνεργείᾳ ἄρα πάντα·

οὐδὲ τῶν ἐξ ἀνάγκης ὄντων (καίτοι ταῦτα πρῶτα· εἰ γὰρ ταῦτα μὴ ἦν, οὐθὲν ἂν ἦν)· οὐδὲ δὴ κίνησις, εἴ τίς ἐστὶν αἰδῖος· οὐδ' εἴ τι κινούμενον αἰδῖον, οὐκ ἔστι κατὰ δύνάμιν κινούμενον ἄλλ' ἢ ποθὲν ποί (τούτου δ' ὕλην οὐδὲν κωλύει ὑπάρχειν), διὸ ἀεὶ ἐνεργεῖ ἥλιος καὶ ἄστρα καὶ ὅλος ὁ οὐρανός, καὶ οὐ φοβερὸν μὴ ποτε στῇ, ὃ φοβοῦνται οἱ περὶ φύσεως. οὐδὲ κάμνει τοῦτο δρῶντα· οὐ γὰρ περὶ τὴν δύνάμιν τῆς ἀντιφάσεως αὐτοῖς, οἷον τοῖς φθαρτοῖς, ἢ κίνησις, ὥστε ἐπίπονον εἶναι τὴν συνέχειαν τῆς κινήσεως· ἢ γὰρ οὐσία ὕλη καὶ δυνάμεις οὐσα, οὐκ ἐνέργεια, αἰτία τούτου. μιμεῖται δὲ τὰ ἄφθαρτα καὶ τὰ ἐν μεταβολῇ ὄντα, οἷον γῆ καὶ πῦρ. καὶ γὰρ ταῦτα ἀεὶ ἐνεργεῖ· καθ' αὐτὰ γὰρ καὶ ἐν αὐτοῖς ἔχει τὴν κίνησιν. αἱ δὲ ἄλλαι δυνάμεις, ἐξ ὧν διώρισται, πᾶσαι τῆς ἀντιφάσεως εἰσιν· τὸ γὰρ δυνάμενον ὡδὶ κινεῖν δύναται καὶ μὴ ὡδί, ὅσα γε κατὰ λόγον· αἱ δ' ἄλλοι τῷ παρεῖναι καὶ μὴ τῆς ἀντιφάσεως ἔσσονται αἱ αὐταί. εἰ ἄρα τινὲς εἰσὶ φύσεις τοιαῦται ἢ οὐσίαι οἷας λέγουσιν οἱ ἐν τοῖς λόγοις τὰς ιδέας, πολὺ μᾶλλον ἐπιστήμον ἂν τι εἴη ἢ αὐτὸ ἐπιστήμη [1051a] καὶ κινούμενον ἢ κίνησις· ταῦτα γὰρ ἐνέργειαι μᾶλλον, ἐκεῖναι δὲ δυνάμεις τούτων. ὅτι μὲν οὖν πρότερον ἢ ἐνέργεια καὶ δυνάμεως καὶ πάσης ἀρχῆς μεταβλητικῆς, φανερόν.

Ὅτι δὲ καὶ βελτίων καὶ τιμιωτέρα τῆς σπουδαίας δυνάμεως ἢ ἐνέργεια, ἐκ τῶνδε δῆλον. ὅσα γὰρ κατὰ τὸ δύνασθαι λέγεται, ταῦτόν ἐστι δυνατόν τάναντία, οἷον τὸ δύνασθαι λεγόμενον ὑγιαίνειν ταῦτόν ἐστι καὶ τὸ νοσεῖν, καὶ ἅμα· ἢ αὐτὴ γὰρ δυνάμεις τοῦ ὑγιαίνειν καὶ κάμνειν, καὶ ἡρεμεῖν καὶ κινεῖσθαι, καὶ οἰκοδομεῖν καὶ καταβάλλειν, καὶ οἰκοδομεῖσθαι καὶ καταπίπτειν. τὸ μὲν οὖν δύνασθαι τάναντία ἅμα ὑπάρχει· τὰ δ' ἐναντία ἅμα ἀδύνατον, καὶ τὰς ἐνεργείας δὲ ἅμα ἀδύνατον ὑπάρχειν (οἷον ὑγιαίνειν καὶ κάμνειν), ὥστ' ἀνάγκη τούτων θάτερον εἶναι τάγαθόν, τὸ δὲ δύνασθαι ὁμοίως ἀμφοτέρων ἢ οὐδέτερον· ἢ ἄρα ἐνέργεια βελτίων. ἀνάγκη δὲ καὶ ἐπὶ τῶν κακῶν τὸ τέλος καὶ τὴν ἐνέργειαν εἶναι χεῖρον τῆς δυνάμεως· τὸ γὰρ δυνάμενον ταῦτόν ἄμφω τάναντία. δῆλον ἄρα ὅτι οὐκ ἔστι τὸ κακὸν παρὰ τὰ πράγματα· ὕστερον γὰρ τῇ φύσει τὸ κακὸν τῆς δυνάμεως. οὐκ ἄρα οὐδ' ἐν τοῖς ἐξ ἀρχῆς καὶ τοῖς αἰδῖοις οὐθὲν ἔστιν οὔτε κακὸν οὔτε ἀμάρτημα οὔτε διεφθαρμένον (καὶ γὰρ ἡ διαφθορὰ τῶν κακῶν ἐστίν). εὐρίσκεται δὲ καὶ τὰ διαγράμματα ἐνεργεία· διαιροῦντες γὰρ εὐρίσκουσιν. εἰ δ' ἦν διηρημένα, φανερὰ ἂν ἦν· νῦν δ' ἐνυπάρχει δυνάμει. διὰ τί δύο ὀρθαὶ τὸ τρίγωνον; ὅτι αἱ περὶ μίαν στιγμὴν γωνία ἴσαι δύο ὀρθαῖς. εἰ οὖν ἀνῆκτο ἢ παρὰ τὴν πλευράν, ἰδόντι ἂν ἦν εὐθύς δῆλον διὰ τί. ἐν ἡμικυκλίῳ ὀρθὴ καθόλου διὰ τί; ἔαν ἴσαι τρεῖς, ἢ τε βάσις δύο καὶ ἡ ἐκ μέσου ἐπισταθεῖσα ὀρθή, ἰδόντι δῆλον τῷ ἐκεῖνο εἰδότι. ὥστε φανερόν ὅτι τὰ δυνάμει ὄντα εἰς ἐνέργειαν ἀγόμενα εὐρίσκεται· αἴτιον δὲ ὅτι ἡ νόησις ἐνέργεια· ὥστ' ἐξ ἐνεργείας ἢ δυνάμεις, καὶ

διὰ τοῦτο ποιοῦντες γινώσκουσιν (ὕστερον γὰρ γενέσει ἢ ἐνέργεια ἢ κατ' ἀριθμόν).

Ἐπεὶ δὲ τὸ ὄν λέγεται καὶ τὸ μὴ ὄν τὸ μὲν κατὰ τὰ σχήματα τῶν κατηγοριῶν, τὸ δὲ κατὰ δύναμιν ἢ ἐνέργειαν [1051b] τούτων ἢ τάναντία, τὸ δὲ [κυριώτατα ὄν] ἀληθὲς ἢ ψεῦδος, τοῦτο δ' ἐπὶ τῶν πραγμάτων ἐστὶ τῷ συγκεῖσθαι ἢ διηρηθῆναι, ὥστε ἀληθεύει μὲν ὁ τὸ διηρημένον οἰόμενος διηρηθῆναι καὶ τὸ συγκείμενον συγκεῖσθαι, ἔψευσται δὲ ὁ ἐναντίως ἔχων ἢ τὰ πράγματα, πότ' ἔστιν ἢ οὐκ ἔστι τὸ ἀληθὲς λεγόμενον ἢ ψεῦδος; τοῦτο γὰρ σκεπτέον τί λέγομεν. οὐ γὰρ διὰ τὸ ἡμᾶς οἶεσθαι ἀληθῶς σε λευκὸν εἶναι εἰ σὺ λευκός, ἀλλὰ διὰ τὸ σε εἶναι λευκὸν ἡμεῖς οἱ φάντες τοῦτο ἀληθεύομεν. εἰ δὴ τὰ μὲν ἀεὶ σύγκειται καὶ ἀδύνατα διαιρεθῆναι, τὰ δ' ἀεὶ διήρηται καὶ ἀδύνατα συντεθῆναι, τὰ δ' ἐνδέχεται τάναντία, τὸ μὲν εἶναι ἐστὶ τὸ συγκεῖσθαι καὶ ἐν εἶναι, τὸ δὲ μὴ εἶναι τὸ μὴ συγκεῖσθαι ἀλλὰ πλείω εἶναι· περὶ μὲν οὖν τὰ ἐνδεχόμενα ἢ αὐτὴ γίγνεται ψευδὴς καὶ ἀληθὴς δόξα καὶ ὁ λόγος ὁ αὐτός, καὶ ἐνδέχεται ὅτε μὲν ἀληθεύειν ὅτε δὲ ψεύδεσθαι· περὶ δὲ τὰ ἀδύνατα ἄλλως ἔχειν οὐ γίγνεται ὅτε μὲν ἀληθὲς ὅτε δὲ ψεῦδος, ἀλλ' ἀεὶ ταῦτά ἀληθῆ καὶ ψευδῆ. - περὶ δὲ δὴ τὰ ἀσύνθετα τί τὸ εἶναι ἢ μὴ εἶναι καὶ τὸ ἀληθὲς καὶ τὸ ψεῦδος; οὐ γὰρ ἐστὶ σύνθετον, ὥστε εἶναι μὲν ὅταν συγκέηται, μὴ εἶναι δὲ ἐὰν διηρημένον ἦ, ὥσπερ τὸ λευκὸν <τὸ> ξύλον ἢ τὸ ἀσύμμετρον τὴν διάμετρον· οὐδὲ τὸ ἀληθὲς καὶ τὸ ψεῦδος ὁμοίως ἔτι ὑπάρξει καὶ ἐπ' ἐκείνων. ἢ ὥσπερ οὐδὲ τὸ ἀληθὲς ἐπὶ τούτων τὸ αὐτό, οὕτως οὐδὲ τὸ εἶναι, ἀλλ' ἔστι τὸ μὲν ἀληθὲς ἢ ψεῦδος, τὸ μὲν θιγεῖν καὶ φάναι ἀληθές (οὐ γὰρ ταῦτο κατάφασις καὶ φάσις), τὸ δ' ἀγνοεῖν μὴ θιγγάνειν (ἀπατηθῆναι γὰρ περὶ τὸ τί ἐστὶν οὐκ ἔστιν ἀλλ' ἢ κατὰ συμβεβηκός· ὁμοίως δὲ καὶ περὶ τὰς μὴ συνθετὰς οὐσίας, οὐ γὰρ ἔστιν ἀπατηθῆναι· καὶ πᾶσαι εἰσὶν ἐνέργεια, οὐ δυνάμει, ἐγίγνοντο γὰρ ἂν καὶ ἐφθείροντο, νῦν δὲ τὸ ὄν αὐτὸ οὐ γίγνεται οὐδὲ φθίρεται, ἔκ τινος γὰρ ἂν ἐγίγνετο· - ὅσα δὴ ἐστὶν ὅπερ εἶναι τι καὶ ἐνέργεια, περὶ ταῦτα οὐκ ἔστιν ἀπατηθῆναι ἀλλ' ἢ νοεῖν ἢ μὴ· ἀλλὰ τὸ τί ἐστὶ ζητεῖται περὶ αὐτῶν, εἰ τοιαῦτά ἐστὶν ἢ μὴ)· τὸ δὲ εἶναι ὡς τὸ ἀληθές, καὶ τὸ μὴ εἶναι τὸ ὡς τὸ ψεῦδος, ἐν μὲν ἐστὶν, εἰ σύγκειται, ἀληθές, τὸ δ' εἰ μὴ σύγκειται, ψεῦδος· τὸ δὲ ἐν, εἴπερ ὄν, οὕτως ἐστίν, [1052a] εἰ δὲ μὴ οὕτως, οὐκ ἔστιν· τὸ δὲ ἀληθὲς τὸ νοεῖν ταῦτα· τὸ δὲ ψεῦδος οὐκ ἔστιν, οὐδὲ ἀπάτη, ἀλλὰ ἄγνοια, οὐχ οἷα ἡ τυφλότης· ἢ μὲν γὰρ τυφλότης ἐστὶν ὡς ἂν εἰ τὸ νοητικὸν ὅλως μὴ ἔχοι τις. φανερόν δὲ καὶ ὅτι περὶ τῶν ἀκινήτων οὐκ ἔστιν ἀπάτη κατὰ τὸ ποτέ, εἴ τις ὑπολαμβάνει ἀκίνητα. οἷον τὸ τρίγωνον εἰ μὴ μεταβάλλειν οἶεται, οὐκ οἰήσεται ποτὲ μὲν δύο ὀρθὰς ἔχειν ποτὲ δὲ οὐ (μεταβάλλοι γὰρ ἂν), ἀλλὰ τὸ μὲν τὸ δ' οὐ, οἷον ἄρτιον ἀριθμὸν πρῶτον εἶναι μηθέν, ἢ τινὰς μὲν τινὰς δ' οὐ· ἀριθμῷ δὲ

περὶ ἓνα οὐδὲ τοῦτο· οὐ γὰρ ἔτι τινὰ μὲν τινὰ δὲ οὐ οἰήσεται, ἀλλ' ἀληθεύσει ἢ ψεύσεται ὡς ἀεὶ οὕτως ἔχοντος.

## I

Τὸ ἐν ὅτι μὲν λέγεται πολλαχῶς, ἐν τοῖς περὶ τοῦ ποσαχῶς διηρημένοις εἴρηται πρότερον· πλεοναχῶς δὲ λεγομένου οἱ συγκεφαλαιούμενοι τρόποι εἰσὶ τέτταρες τῶν πρώτων καὶ καθ' αὐτὰ λεγομένων ἐν ἄλλὰ μὴ κατὰ συμβεβηκός. τό τε γὰρ συνεχὲς ἢ ἀπλῶς ἢ μάλιστά γε τὸ φύσει καὶ μὴ ἀφ' ἡ μηδὲ δεσμῶ (καὶ τούτων μᾶλλον ἐν καὶ πρότερον οὐ ἀδιαιρετωτέρα ἢ κίνησις καὶ μᾶλλον ἀπλῆ). ἔτι τοιοῦτον καὶ μᾶλλον τὸ ὅλον καὶ ἔχον τινὰ μορφήν καὶ εἶδος, μάλιστα δ' εἴ τι φύσει τοιοῦτον καὶ μὴ βία, ὥσπερ ὅσα κόλλη ἢ γόμφῳ ἢ συνδέσμῳ, ἀλλὰ ἔχει ἐν αὐτῷ τὸ αἴτιον αὐτῷ τοῦ συνεχὲς εἶναι. τοιοῦτον δὲ τῷ μίαν τὴν κίνησιν εἶναι καὶ ἀδιαίρετον τόπῳ καὶ χρόνῳ, ὥστε φανερόν, εἴ τι φύσει κινήσεως ἀρχὴν ἔχει τῆς πρώτης τὴν πρώτην, οἷον λέγω φορᾶς κυκλοφορίαν, ὅτι τοῦτο πρῶτον μέγεθος ἐν. τὰ μὲν δὲ οὕτως ἐν ἢ συνεχὲς ἢ ὅλον, τὰ δὲ ὧν ἂν ὁ λόγος εἰς ἢ, τοιαῦτα δὲ ὧν ἢ νόησις μία, τοιαῦτα δὲ ὧν ἀδιαίρετος, ἀδιαίρετος δὲ τοῦ ἀδιαίρετου εἶδει ἢ ἀριθμῶ· ἀριθμῶ μὲν οὖν τὸ καθ' ἕκαστον ἀδιαίρετον, εἶδει δὲ τὸ τῷ γνωστῷ καὶ τῇ ἐπιστήμῃ, ὥσθ' ἐν ἂν εἴη πρῶτον τὸ ταῖς οὐσίαις αἴτιον τοῦ ἐνός. λέγεται μὲν οὖν τὸ ἐν τοσαυταχῶς, τό τε συνεχὲς φύσει καὶ τὸ ὅλον, καὶ τὸ καθ' ἕκαστον καὶ τὸ καθόλου, πάντα δὲ ταῦτα ἐν τῷ ἀδιαίρετον εἶναι τῶν μὲν [1052b] τὴν κίνησιν τῶν δὲ τὴν νόησιν ἢ τὸν λόγον. - δεῖ δὲ κατανοεῖν ὅτι οὐχ ὡσαύτως ληπτέον λέγεσθαι ποῖά τε ἐν λέγεται, καὶ τί ἐστὶ τὸ ἐν εἶναι καὶ τίς αὐτοῦ λόγος. λέγεται μὲν γὰρ τὸ ἐν τοσαυταχῶς, καὶ ἕκαστον ἔσται ἐν τούτων, ὧ ἂν ὑπάρχη τις τούτων τῶν τρόπων· τὸ δὲ ἐν εἶναι ὅτε μὲν τούτων τινὲς ἔσται, ὅτε δὲ ἄλλῳ ὃ καὶ μᾶλλον ἐγγὺς τῷ ὀνόματί ἐστι, τῇ δυνάμει δ' ἐκεῖνα, ὥσπερ καὶ περὶ στοιχείου καὶ αἰτίου εἰ δέοι λέγειν ἐπὶ τε τοῖς πράγμασι διορίζοντα καὶ τοῦ ὀνόματος ὅρον ἀποδιδόντα. ἔστι μὲν γὰρ ὡς στοιχεῖον τὸ πῦρ (ἔστι δ' ἴσως καθ' αὐτὸ καὶ τὸ ἄπειρον ἢ τι ἄλλο τοιοῦτον), ἔστι δ' ὡς οὐ· οὐ γὰρ τὸ αὐτὸ πυρὶ καὶ στοιχείῳ εἶναι, ἀλλ' ὡς μὲν πρᾶγμα τι καὶ φύσις τὸ πῦρ στοιχεῖον, τὸ δὲ ὄνομα σημαίνει τὸ τοδὶ συμβεβηκέναι αὐτῷ, ὅτι ἐστὶ τι ἐκ τούτου ὡς πρώτου ἐνυπάρχοντος. οὕτω καὶ ἐπὶ αἰτίου καὶ ἐνός καὶ τῶν τοιούτων ἀπάντων, διὸ καὶ τὸ ἐν εἶναι τὸ ἀδιαίρετῳ ἐστὶν εἶναι, ὅπερ τόδε ὄντι καὶ ἰδίᾳ χωριστῷ ἢ τόπῳ ἢ εἶδει ἢ διανοίᾳ, ἢ καὶ τὸ ὅλῳ καὶ ἀδιαίρετῳ, μάλιστα δὲ τὸ μέτρῳ εἶναι πρώτῳ ἐκάστου γένους καὶ κυριώτατα τοῦ ποσοῦ· ἐντεῦθεν γὰρ ἐπὶ τὰ ἄλλα ἐλήλυθεν. μέτρον γὰρ ἐστὶν ὧ τὸ ποσὸν γινώσκεται· γινώσκεται δὲ ἢ ἐνὶ ἢ ἀριθμῶ τὸ ποσὸν ἢ ποσόν, ὃ δὲ ἀριθμὸς ἅπας ἐνὶ, ὥστε πᾶν τὸ ποσὸν γινώσκεται ἢ ποσὸν τῷ ἐνὶ, καὶ ὧ

πρώτῳ ποσὰ γινώσκεται, τοῦτο αὐτὸ ἔν· διὸ τὸ ἐν ἀριθμοῦ ἀρχὴ ἢ ἀριθμός· ἐντεῦθεν δὲ καὶ ἐν τοῖς ἄλλοις λέγεται μέτρον τε ὧ ἕκαστον πρώτῳ γινώσκεται, καὶ τὸ μέτρον ἑκάστου ἔν, ἐν μήκει, ἐν πλάτει, ἐν βάθει, ἐν βάρει, ἐν τάχει (τὸ γὰρ βάρος καὶ τάχος κοινὸν ἐν τοῖς ἐναντίοις· διττὸν γὰρ ἑκάτερον αὐτῶν, οἷον βάρος τό τε ὀποσηνοῦν ἔχον ῥοπὴν καὶ τὸ ἔχον ὑπεροχὴν ῥοπῆς, καὶ τάχος τό τε ὀποσηνοῦν κίνησιν ἔχον καὶ τὸ ὑπεροχὴν κινήσεως· ἔστι γάρ τι τάχος καὶ τοῦ βραδέος καὶ βάρος τοῦ κουφοτέρου). ἐν πᾶσι δὴ τούτοις μέτρον καὶ ἀρχὴ ἔν τι καὶ ἀδιαίρετον, ἐπεὶ καὶ ἐν ταῖς γραμμαῖς χρῶνται ὡς ἀτόμῳ τῇ ποδιαίᾳ. πανταχοῦ γὰρ τὸ μέτρον ἔν τι ζητοῦσι καὶ ἀδιαίρετον· τοῦτο δὲ τὸ ἀπλοῦν ἢ τῷ ποιῶ ἢ τῷ ποσῶ. ὅπου μὲν οὖν δοκεῖ μὴ εἶναι ἀφελεῖν ἢ προσθεῖναι, τοῦτο ἀκριβὲς τὸ μέτρον (διὸ [1053a] τὸ τοῦ ἀριθμοῦ ἀκριβέστατον· τὴν γὰρ μονάδα τιθέασι πάντῃ ἀδιαίρετον)· ἐν δὲ τοῖς ἄλλοις μιμοῦνται τὸ τοιοῦτον· ἀπὸ γὰρ σταδίου καὶ ταλάντου καὶ ἀεὶ τοῦ μείζονος λάθοι ἂν καὶ προστεθέν τι καὶ ἀφαιρεθὲν μᾶλλον ἢ ἀπὸ ἐλάττονος· ὥστε ἀφ' οὗ πρώτου κατὰ τὴν αἴσθησιν μὴ ἐνδέχεται, τοῦτο πάντες ποιοῦνται μέτρον καὶ ὑγρῶν καὶ ξηρῶν καὶ βάρους καὶ μεγέθους· καὶ τότε οἶονται εἶδέναι τὸ ποσόν, ὅταν εἰδῶσι διὰ τούτου τοῦ μέτρου. καὶ δὴ καὶ κίνησιν τῇ ἀπλῇ κινήσει καὶ τῇ ταχίστῃ (ὀλίγιστον γὰρ αὕτη ἔχει χρόνον)· διὸ ἐν τῇ ἀστρολογίᾳ τὸ τοιοῦτον ἐν ἀρχῇ καὶ μέτρον (τὴν κίνησιν γὰρ ὁμαλὴν ὑποτίθενται καὶ ταχίστην τὴν τοῦ οὐρανοῦ, πρὸς ἣν κρίνουσι τὰς ἄλλας), καὶ ἐν μουσικῇ δίεσις, ὅτι ἐλάχιστον, καὶ ἐν φωνῇ στοιχεῖον. καὶ ταῦτα πάντα ἔν τι οὕτως, οὐχ ὡς κοινόν τι τὸ ἐν ἄλλ' ὥσπερ εἴρηται. - οὐκ ἀεὶ δὲ τῷ ἀριθμῷ ἐν τὸ μέτρον ἄλλ' ἐνίστε πλείω, οἷον αἱ διέσεις δύο, αἱ μὴ κατὰ τὴν ἀκοὴν ἄλλ' ἐν τοῖς λόγοις, καὶ αἱ φωναὶ πλείους αἷς μετροῦμεν, καὶ ἡ διάμετρος δυσὶ μετρεῖται καὶ ἡ πλευρά, καὶ τὰ μεγέθη πάντα. οὕτω δὴ πάντων μέτρον τὸ ἔν, ὅτι γνωρίζομεν ἐξ ὧν ἐστὶν ἡ οὐσία διαιροῦντες ἢ κατὰ τὸ ποσὸν ἢ κατὰ τὸ εἶδος. καὶ διὰ τοῦτο τὸ ἐν ἀδιαίρετον, ὅτι τὸ πρῶτον ἑκάστων ἀδιαίρετον. οὐχ ὁμοίως δὲ πᾶν ἀδιαίρετον, οἷον πούς καὶ μονάς, ἀλλὰ τὸ μὲν πάντῃ, τὸ δ' εἰς ἀδιαίρετα πρὸς τὴν αἴσθησιν θετέον, ὥσπερ εἴρηται ἤδη· ἴσως γὰρ πᾶν συνεχὲς διαιρετόν. ἀεὶ δὲ συγγενὲς τὸ μέτρον· μεγεθῶν μὲν γὰρ μέγεθος, καὶ καθ' ἕκαστον μήκος μῆκος, πλάτους πλάτος, φωνῆς φωνή, βάρους βάρος, μονάδων μονάς. οὕτω γὰρ δεῖ λαμβάνειν, ἄλλ' οὐχ ὅτι ἀριθμῶν ἀριθμός· καίτοι ἔδει, εἰ ὁμοίως· ἄλλ' οὐχ ὁμοίως ἀξιοῖ ἄλλ' ὥσπερ εἰ μονάδων μονάδας ἀξιῶσιν μέτρον ἀλλὰ μὴ μονάδα· ὁ δ' ἀριθμὸς πλῆθος μονάδων. καὶ τὴν ἐπιστήμην δὲ μέτρον τῶν πραγμάτων λέγομεν καὶ τὴν αἴσθησιν διὰ τὸ αὐτό, ὅτι γνωρίζομεν τι αὐταῖς, ἐπεὶ μετροῦνται μᾶλλον ἢ μετροῦσιν. ἀλλὰ συμβαίνει ἡμῖν ὥσπερ ἂν εἰ ἄλλου ἡμᾶς μετροῦντος ἐγνωρίσαμεν πηλίκοι ἐσμὲν τῷ τὸν πῆχυν ἐπὶ

τοσοῦτον ἡμῶν ἐπιβάλλειν. Πρωταγόρας δ' ἄνθρωπόν φησι πάντων εἶναι μέτρον, ὥσπερ ἂν εἰ τὸν [1053b] ἐπιστήμονα εἰπὼν ἢ τὸν αἰσθανόμενον· τούτους δ' ὅτι ἔχουσιν ὁ μὲν αἴσθησιν ὁ δὲ ἐπιστήμην, ἃ φαμεν εἶναι μέτρα τῶν ὑποκειμένων. οὐθὲν δὴ λέγοντες περιττὸν φαίνονται τι λέγειν. ὅτι μὲν οὖν τὸ ἐνὶ εἶναι μάλιστά ἐστι κατὰ τὸ ὄνομα ἀφορίζοντι μέτρον τι, καὶ κυριώτατα τοῦ ποσοῦ, εἴτα τοῦ ποιοῦ, φανερόν· ἔσται δὲ τοιοῦτον τὸ μὲν ἂν ἢ ἀδιαίρετον κατὰ τὸ ποσόν, τὸ δὲ ἂν κατὰ τὸ ποιόν· διόπερ ἀδιαίρετον τὸ ἐν ἢ ἀπλῶς ἢ ἢ

Κατὰ δὲ τὴν οὐσίαν καὶ τὴν φύσιν ζητητέον ποτέρως ἔχει, καθάπερ ἐν τοῖς διαπορήμασιν ἐπὶ ἡλθομεν τί τὸ ἐν ἐστὶ καὶ πῶς δεῖ περὶ αὐτοῦ λαβεῖν, πότερον ὡς οὐσίας τινὸς οὐσης αὐτοῦ τοῦ ἐνός, καθάπερ οἱ τε Πυθαγόρειοί φασι πρότερον καὶ Πλάτων ὕστερον, ἢ μᾶλλον ὑπόκειται τις φύσις καὶ [πῶς] δεῖ γνωριμωτέρως λεχθῆναι καὶ μᾶλλον ὥσπερ οἱ περὶ φύσεως· ἐκείνων γὰρ ὁ μὲν τις φιλίαν εἶναι φησι τὸ ἐν ὁ δ' ἄερα ὁ δὲ τὸ ἄπειρον. εἰ δὴ μηδὲν τῶν καθόλου δυνατὸν οὐσίαν εἶναι, καθάπερ ἐν τοῖς περὶ οὐσίας καὶ περὶ τοῦ ὄντος εἴρηται λόγοις, οὐδ' αὐτὸ τοῦτο οὐσίαν ὡς ἐν τι παρὰ τὰ πολλὰ δυνατὸν εἶναι (κοινὸν γάρ) ἄλλ' ἢ κατηγορήμα μόνον, δῆλον ὡς οὐδὲ τὸ ἐν· τὸ γὰρ ὄν καὶ τὸ ἐν καθόλου κατηγορεῖται μάλιστα πάντων. ὥστε οὔτε τὰ γένη φύσεις τινὲς καὶ οὐσίαι χωρισταὶ τῶν ἄλλων εἰσὶν, οὔτε τὸ ἐν γένος ἐνδέχεται εἶναι διὰ τὰς αὐτὰς αἰτίας δι' ἃσπερ οὐδὲ τὸ ὄν οὐδὲ τὴν οὐσίαν. ἔτι δ' ὁμοίως ἐπὶ πάντων ἀναγκαῖον ἔχειν· λέγεται δ' ἰσαχῶς τὸ ὄν καὶ τὸ ἐν· ὥστ' ἐπεὶ ἐν τοῖς ποιοῖς ἐστὶ τι τὸ ἐν καὶ τις φύσις, ὁμοίως δὲ καὶ ἐν τοῖς ποσοῖς, δῆλον ὅτι καὶ ὅλως ζητητέον τί τὸ ἐν, ὥσπερ καὶ τί τὸ ὄν, ὡς οὐχ ἱκανὸν ὅτι τοῦτο αὐτὸ ἢ φύσις αὐτοῦ. ἀλλὰ μὴν ἐν γε χρώμασιν ἐστὶ τὸ ἐν χρῶμα, οἷον τὸ λευκόν, εἴτα τὰ ἄλλα ἐκ τούτου καὶ τοῦ μέλανος φαίνεται γιγνόμενα, τὸ δὲ μέλαν στέρησις λευκοῦ ὥσπερ καὶ φωτὸς σκότος [τοῦτο δ' ἐστὶ στέρησις φωτός]· ὥστε εἰ τὰ ὄντα ἦν χρώματα, ἦν ἂν ἀριθμὸς τις τὰ ὄντα, ἀλλὰ τίνων; δῆλον δὴ ὅτι χρωμάτων, καὶ τὸ ἐν ἦν ἂν τι ἐν, οἷον τὸ λευκόν. ὁμοίως δὲ καὶ εἰ μέλη τὰ ὄντα ἦν, ἀριθμὸς ἂν ἦν, διέσεων μέντοι, ἀλλ' οὐκ ἀριθμὸς ἢ οὐσία αὐτῶν· καὶ τὸ ἐν ἦν ἂν τι οὐ ἢ οὐσία οὐ [1054a] τὸ ἐν ἀλλὰ διέσεις. ὁμοίως δὲ καὶ ἐπὶ τῶν φθόγγων στοιχείων ἂν ἦν τὰ ὄντα ἀριθμὸς, καὶ τὸ ἐν στοιχεῖον φωνῆεν. καὶ εἰ σχήματα εὐθύγραμμα, σχημάτων ἂν ἦν ἀριθμὸς, καὶ τὸ ἐν τὸ τρίγωνον. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων γενῶν, ὥστ' εἴπερ καὶ ἐν τοῖς πάθεσι καὶ ἐν τοῖς ποιοῖς καὶ ἐν τοῖς ποσοῖς καὶ ἐν κινήσει ἀριθμῶν ὄντων καὶ ἐνός τινος ἐν ἅπασιν ὅ τε ἀριθμὸς τινῶν καὶ τὸ ἐν τὸ ἐν, ἀλλ' οὐχὶ τοῦτο αὐτὸ ἢ οὐσία, καὶ ἐπὶ τῶν οὐσιῶν ἀνάγκη ὡσαύτως ἔχειν· ὁμοίως γὰρ ἔχει ἐπὶ πάντων. - ὅτι μὲν οὖν τὸ ἐν ἐν ἅπαντι γένει ἐστὶ τις φύσις, καὶ οὐδενὸς τοῦτο γ' αὐτὸ ἢ φύσις τὸ ἐν, φανερόν, ἀλλ'

ὥσπερ ἐν χρώμασι χρώμα ἐν ζητητέον αὐτὸ τὸ ἔν, οὕτω καὶ ἐν οὐσίᾳ οὐσίαν μίαν αὐτὸ τὸ ἔν· ὅτι δὲ ταὐτὸ σημαίνει πως τὸ ἔν καὶ τὸ ὄν, δῆλον τῷ τε παρακολουθεῖν ἰσαχῶς ταῖς κατηγορίαις καὶ μὴ εἶναι ἐν μηδεμιᾷ (οἶον οὐτ' ἐν τῇ τί ἐστίν οὐτ' ἐν τῇ ποῖον, ἀλλ' ὁμοίως ἔχει ὥσπερ τὸ ὄν) καὶ τῷ μὴ προσκατηγορεῖσθαι ἕτερόν τι τὸ εἷς ἄνθρωπος τοῦ ἄνθρωπος (ὥσπερ οὐδὲ τὸ εἶναι παρὰ τὸ τί ἢ ποῖον ἢ πόσον) καὶ <τῷ εἶναι> τὸ ἐν εἶναι τὸ ἐκάστῳ εἶναι.

Ἀντίκειται δὲ τὸ ἔν καὶ τὰ πολλὰ κατὰ πλείους τρόπους, ὧν ἓνα τὸ ἔν καὶ τὸ πλῆθος ὡς ἀδιαίρετον καὶ διαιρετόν· τὸ μὲν γὰρ ἢ διηρημένον ἢ διαιρετόν πλῆθός τι λέγεται, τὸ δὲ ἀδιαίρετον ἢ μὴ διηρημένον ἔν. ἐπεὶ οὖν αἱ ἀντιθέσεις τετραχῶς, καὶ τούτων κατὰ στέρησιν λέγεται θάτερον, ἐναντία ἂν εἴη καὶ οὔτε ὡς ἀντίφασιν οὔτε ὡς τὰ πρὸς τι λεγόμενα. λέγεται δὲ ἐκ τοῦ ἐναντίου καὶ δηλοῦνται τὸ ἔν, ἐκ τοῦ διαιρετοῦ τὸ ἀδιαίρετον, διὰ τὸ μᾶλλον αἰσθητὸν τὸ πλῆθος εἶναι καὶ τὸ διαιρετόν ἢ τὸ ἀδιαίρετον, ὥστε τῷ λόγῳ πρότερον τὸ πλῆθος τοῦ ἀδιαίρετου διὰ τὴν αἴσθησιν. ἔστι δὲ τοῦ μὲν ἑνός, ὥσπερ καὶ ἐν τῇ διαιρέσει τῶν ἐναντίων διεγράψαμεν, τὸ ταὐτὸ καὶ ὅμοιον καὶ ἴσον, τοῦ δὲ πλήθους τὸ ἕτερον καὶ ἀνόμοιον καὶ ἄνισον. λεγομένου δὲ τοῦ ταύτοῦ πολλαχῶς, ἓνα μὲν τρόπον κατ' ἀριθμὸν λέγομεν ἐνίοτε αὐτό, τὸ δ' ἐὰν καὶ λόγῳ καὶ ἀριθμῷ ἐν ἧ, οἶον σὺ σαυτῷ καὶ τῷ εἶδει καὶ τῇ ὕλῃ ἔν· ἔτι δ' ἐὰν ὁ λόγος [1054b] ὁ τῆς πρώτης οὐσίας εἷς ἧ, οἶον αἱ ἴσαι γραμμαὶ εὐθεῖαι αἱ αὐταί, καὶ τὰ ἴσα καὶ ἰσογώνια τετράγωνα, καίτοι πλείω· ἀλλ' ἐν τούτοις ἡ ἰσότης ἐνόηται. ὅμοια δὲ ἐὰν μὴ ταὐτὰ ἀπλῶς ὄντα, μηδὲ κατὰ τὴν οὐσίαν ἀδιάφορα τὴν συγκεκριμένην, κατὰ τὸ εἶδος ταὐτὰ ἧ, ὥσπερ τὸ μεῖζον τετράγωνον τῷ μικρῷ ὅμοιον, καὶ αἱ ἄνισοι εὐθεῖαι· αὐταὶ γὰρ ὅμοιαι μὲν, αἱ αὐταὶ δὲ ἀπλῶς οὐ. τὰ δὲ ἐὰν τὸ αὐτὸ εἶδος ἔχοντα, ἐν οἷς τὸ μᾶλλον καὶ ἥττον ἐγγίγνεται, μήτε μᾶλλον ἢ μήτε ἥττον. τὰ δὲ ἐὰν ἢ τὸ αὐτὸ πάθος καὶ ἐν τῷ εἶδει, οἶον τὸ λευκόν, σφόδρα καὶ ἥττον, ὅμοιά φασιν εἶναι ὅτι ἐν τὸ εἶδος αὐτῶν. τὰ δὲ ἐὰν πλείω ἔχη ταὐτὰ ἢ ἕτερα, ἢ ἀπλῶς ἢ τὰ πρόχειρα, οἶον καττίτερος ἀργύρῳ ἢ λευκόν, χρυσὸς δὲ πυρὶ ἢ ξανθὸν καὶ πυρρόν. ὥστε δῆλον ὅτι καὶ τὸ ἕτερον καὶ τὸ ἀνόμοιον πολλαχῶς λέγεται. καὶ τὸ μὲν ἄλλο ἀντικειμένως καὶ τὸ ταὐτό, διὸ ἅπαν πρὸς ἅπαν ἢ ταὐτὸ ἢ ἄλλο· τὸ δ' ἐὰν μὴ καὶ ἡ ὕλη καὶ ὁ λόγος εἷς, διὸ σὺ καὶ ὁ πλησίον ἕτερος· τὸ δὲ τρίτον ὡς τὰ ἐν τοῖς μαθηματικοῖς. τὸ μὲν οὖν ἕτερον ἢ ταὐτὸ διὰ τοῦτο πᾶν πρὸς πᾶν λέγεται, ὅσα λέγεται ἐν καὶ ὄν· οὐ γὰρ ἀντίφασίς ἐστι τοῦ ταύτοῦ, διὸ οὐ λέγεται ἐπὶ τῶν μὴ ὄντων (τὸ δὲ μὴ ταὐτὸ λέγεται), ἐπὶ δὲ τῶν ὄντων πάντων· ἢ γὰρ ἐν ἢ οὐχ ἐν πέφυχ' ὅσα ὄν καὶ ἐν. τὸ μὲν οὖν ἕτερον καὶ ταὐτὸν οὕτως ἀντίκειται, διαφορὰ δὲ καὶ ἐτερότης ἄλλο. τὸ μὲν γὰρ ἕτερον καὶ οὐ ἕτερον οὐκ ἀνάγκη εἶναι τινὶ ἕτερον· πᾶν γὰρ ἢ ἕτερον ἢ



ταὐτὸ ὅ τι ἂν ᾖ ὄν· τὸ δὲ διάφορον τινὸς τινὶ διάφορον, ὥστε ἀνάγκη ταὐτό τι εἶναι ὥ διαφέρουσιν. τοῦτο δὲ τὸ ταὐτὸ γένος ἢ εἶδος· πᾶν γὰρ τὸ διαφέρον διαφέρει ἢ γένει ἢ εἴδει, γένει μὲν ὧν μὴ ἔστι κοινὴ ἢ ὕλη, μηδὲ γένεσις εἰς ἄλληλα, οἷον ὅσων ἄλλο σχῆμα τῆς κατηγορίας, εἶδει δὲ ὧν τὸ αὐτὸ γένος (λέγεται δὲ γένος ὃ ἄμφω τὸ αὐτὸ λέγονται κατὰ τὴν οὐσίαν τὰ διάφορα). τὰ δ' ἐναντία διάφορα, καὶ ἡ ἐναντίωσις διαφορὰ τις. ὅτι δὲ καλῶς τοῦτο ὑποτιθέμεθα, δῆλον ἐκ τῆς ἐπαγωγῆς· πάντα γὰρ διαφέροντα φαίνεται καὶ ταῦτα, οὐ μόνον ἕτερα ὄντα ἀλλὰ τὰ μὲν τὸ γένος ἕτερα τὰ δ' ἐν τῇ αὐτῇ συστοιχίᾳ [1055a] τῆς κατηγορίας, ὥστ' ἐν ταύτῳ γένει καὶ ταῦτα τῷ γένει. διώριστα δ' ἐν ἄλλοις ποῖα τῷ γένει ταῦτα ἢ ἕτερα.

Ἐπεὶ δὲ διαφέρειν ἐνδέχεται ἀλλήλων τὰ διαφέροντα πλεῖον καὶ ἔλαττον, ἔστι τις καὶ μεγίστη διαφορὰ, καὶ ταύτην λέγω ἐναντίωσιν. ὅτι δ' ἡ μεγίστη ἐστὶ διαφορὰ, δῆλον ἐκ τῆς ἐπαγωγῆς. τὰ μὲν γὰρ γένει διαφέροντα οὐκ ἔχει ὁδὸν εἰς ἄλληλα, ἀλλ' ἀπέχει πλέον καὶ ἀσύμβλητα· τοῖς δ' εἶδει διαφέρουσιν αἱ γενέσεις ἐκ τῶν ἐναντίων εἰσὶν ὡς ἐσχάτων, τὸ δὲ τῶν ἐσχάτων διάστημα μέγιστον, ὥστε καὶ τὸ τῶν ἐναντίων. ἀλλὰ μὴν τό γε μέγιστον ἐν ἐκάστῳ γένει τέλειον. μέγιστόν τε γὰρ οὐ μὴ ἔστιν ὑπερβολή, καὶ τέλειον οὐ μὴ ἔστιν ἔξω λαβεῖν τι δυνατόν· τέλος γὰρ ἔχει ἡ τελεία διαφορὰ (ὥσπερ καὶ τὰλλα τῷ τέλει ἔχειν λέγεται τέλεια), τοῦ δὲ τέλους οὐθέν ἐξω· ἐσχατον γὰρ ἐν παντὶ καὶ περιέχει, διὸ οὐδὲν ἐξω τοῦ τέλους, οὐδὲ προσδεῖται οὐδενὸς τὸ τέλειον. ὅτι μὲν οὖν ἡ ἐναντιότης ἐστὶ διαφορὰ τέλειος, ἐκ τούτων δῆλον· πολλαχῶς δὲ λεγομένων τῶν ἐναντίων, ἀκολουθήσει τὸ τελείως οὕτως ὡς ἂν καὶ τὸ ἐναντίοις εἶναι ὑπάρχη αὐτοῖς. τούτων δὲ ὄντων φανερόν ὅτι οὐκ ἐνδέχεται ἐνὶ πλείῳ ἐναντία εἶναι (οὔτε γὰρ τοῦ ἐσχάτου ἐσχατώτερον εἴη ἂν τι, οὔτε τοῦ ἐνὸς διαστήματος πλείῳ δυοῖν ἔσχατα), ὅλως τε εἰ ἔστιν ἡ ἐναντιότης διαφορὰ, ἡ δὲ διαφορὰ δυοῖν, ὥστε καὶ ἡ τέλειος. ἀνάγκη δὲ καὶ τοὺς ἄλλους ὅρους ἀληθεῖς εἶναι τῶν ἐναντίων. καὶ γὰρ πλεῖστον διαφέρει ἡ τέλειος διαφορὰ (τῶν τε γὰρ γένει διαφερόντων οὐκ ἔστιν ἐξωτέρω λαβεῖν καὶ τῶν εἶδει· δέδεικται γὰρ ὅτι πρὸς τὰ ἐξω τοῦ γένους οὐκ ἔστι διαφορὰ, τούτων δ' αὕτη μεγίστη), καὶ τὰ ἐν ταύτῳ γένει πλεῖστον διαφέροντα ἐναντία (μεγίστη γὰρ διαφορὰ τούτων ἡ τέλειος), καὶ τὰ ἐν τῷ αὐτῷ δεκτικῷ πλεῖστον διαφέροντα ἐναντία (ἡ γὰρ ὕλη ἢ αὐτὴ τοῖς ἐναντίοις) καὶ τὰ ὑπὸ τὴν αὐτὴν δύναμιν πλεῖστον διαφέροντα (καὶ γὰρ ἡ ἐπιστήμη περὶ ἐν γένος ἢ μία)· ἐν οἷς ἡ τελεία διαφορὰ μεγίστη. - πρώτη δὲ ἐναντίωσις ἕξις καὶ στέρησις ἐστίν· οὐ πᾶσα δὲ στέρησις (πολλαχῶς γὰρ λέγεται ἡ στέρησις) ἀλλ' ἥτις ἂν τελεία ᾖ. τὰ δ' ἄλλα ἐναντία κατὰ ταῦτα λεχθήσεται, τὰ μὲν τῷ ἔχειν τὰ δὲ τῷ ποιεῖν ἢ ποιητικὰ εἶναι τὰ δὲ τῷ λήψει εἶναι καὶ ἀποβολαὶ τούτων ἢ ἄλλων ἐναντίων. εἰ δὲ ἀντίκειται μὲν ἀντίφασις καὶ στέρησις καὶ [1055b] ἐναντιότης

καὶ τὰ πρὸς τι, τούτων δὲ πρῶτον ἀντίφασις, ἀντιφάσεως δὲ μηδὲν ἔστι μεταξύ, τῶν δὲ ἐναντίων ἐνδέχεται, ὅτι μὲν οὐ ταῦτόν ἀντίφασις καὶ τάναντία δῆλον· ἡ δὲ στέρησις ἀντίφασίς τις ἔστιν· ἡ γὰρ τὸ ἀδύνατον ὅλως ἔχειν, ἡ δ' ἂν πεφυκὸς ἔχειν μὴ ἔχη, ἐστέρηται ἡ ὅλως ἡ πῶς ἀφορισθέν (πολλαχῶς γὰρ ἤδη τοῦτο λέγομεν, ὥσπερ διήρηται ἡμῖν ἐν ἄλλοις), ὥστ' ἔστιν ἡ στέρησις ἀντίφασίς τις ἡ ἀδυναμία διορισθεῖσα ἡ συνειλημμένη τῷ δεκτικῷ· διὸ ἀντιφάσεως μὲν οὐκ ἔστι μεταξύ, στέρησεως δὲ τινος ἔστιν· ἴσον μὲν γὰρ ἡ οὐκ ἴσον πᾶν, ἴσον δ' ἡ ἄνισον οὐ πᾶν, ἀλλ' εἴπερ, μόνον ἐν τῷ δεκτικῷ τοῦ ἴσου. εἰ δὲ αἱ γενέσεις τῇ ὕλῃ ἐκ τῶν ἐναντίων, γίνονται δὲ ἡ ἐκ τοῦ εἶδους καὶ τῆς τοῦ εἶδους ἕξεως ἡ ἐκ στέρησεώς τινος τοῦ εἶδους καὶ τῆς μορφῆς, δῆλον ὅτι ἡ μὲν ἐναντίωσις στέρησις ἂν εἴη πᾶσα, ἡ δὲ στέρησις ἴσως οὐ πᾶσα ἐναντιότης (αἴτιον δ' ὅτι πολλαχῶς ἐνδέχεται ἐστερῆσθαι τὸ ἐστερημένον)· ἐξ ὧν γὰρ αἱ μεταβολαὶ ἐσχάτων, ἐναντία ταῦτα. φανερόν δὲ καὶ διὰ τῆς ἐπαγωγῆς. πᾶσα γὰρ ἐναντίωσις ἔχει στέρησιν θάτερον τῶν ἐναντίων, ἀλλ' οὐχ ὁμοίως πάντα· ἀνισότης μὲν γὰρ ἰσότητος ἀνομοιότης δὲ ὁμοιότητος κακία δὲ ἀρετῆς, διαφέρει δὲ ὥσπερ εἴρηται· τὸ μὲν γὰρ ἐὰν μόνον ἡ ἐστερημένον, τὸ δ' ἐὰν ἡ ποτὲ ἡ ἐν τινι, οἷον ἂν ἐν ἡλικίᾳ τινὶ ἡ τῷ κυρίῳ, ἡ πάντῃ· διὸ τῶν μὲν ἔστι μεταξύ, καὶ ἔστιν οὔτε ἀγαθὸς ἄνθρωπος οὔτε κακός, τῶν δὲ οὐκ ἔστιν, ἀλλ' ἀνάγκη εἶναι ἡ περιττόν ἡ ἄρτιον. ἔτι τὰ μὲν ἔχει τὸ ὑποκείμενον ὠρισμένον, τὰ δ' οὔ. ὥστε φανερόν ὅτι ἀεὶ θάτερον τῶν ἐναντίων λέγεται κατὰ στέρησιν· ἀπόχρη δὲ καὶ τὰ πρῶτα καὶ τὰ γένη τῶν ἐναντίων, οἷον τὸ ἐν καὶ τὰ πολλά· τὰ γὰρ ἄλλα εἰς ταῦτα ἀνάγεται.

Ἐπεὶ δὲ ἐν ἐνὶ ἐναντίον, ἀπορήσειεν ἂν τις πῶς ἀντίκειται τὸ ἐν καὶ τὰ πολλά, καὶ τὸ ἴσον τῷ μεγάλῳ καὶ τῷ μικρῷ. εἰ γὰρ τὸ πότερον ἀεὶ ἐν ἀντιθέσει λέγομεν, οἷον πότερον λευκὸν ἢ μέλαν, καὶ πότερον λευκὸν ἢ οὐ λευκόν (πότερον δὲ ἄνθρωπος ἢ λευκὸν οὐ λέγομεν, ἐὰν μὴ ἐξ ὑποθέσεως καὶ ζητοῦντες οἷον πότερον ἦλθε Κλέων ἢ Σωκράτης - ἀλλ' οὐκ ἀνάγκη ἐν οὐδενὶ γένει τοῦτο· ἀλλὰ καὶ τοῦτο ἐκεῖθεν ἐλήλυθεν· τὰ γὰρ ἀντικείμενα μόνον οὐκ ἐνδέχεται ἅμα ὑπάρχειν, ὥ καὶ ἐνταῦθα χρῆται ἐν τῷ πότερος ἦλθεν· [1056a] εἰ γὰρ ἅμα ἐνεδέχετο, γελοῖον τὸ ἐρώτημα· εἰ δέ, καὶ οὕτως ὁμοίως ἐμπίπτει εἰς ἀντίθεσιν, εἰς τὸ ἐν ἢ πολλά, οἷον πότερον ἀμφοτέροι ἦλθον ἢ ἄτερος)· - εἰ δὲ ἐν τοῖς ἀντικειμένοις ἀεὶ τοῦ ποτέρου ἡ ζήτησις, λέγεται δὲ πότερον μείζον ἢ ἔλαττον ἢ ἴσον, τίς ἔστιν ἡ ἀντίθεσις πρὸς ταῦτα τοῦ ἴσου; οὔτε γὰρ θατέρῳ μόνῳ ἐναντίον οὔτ' ἀμφοῖν· τί γὰρ μᾶλλον τῷ μείζονι ἢ τῷ ἐλάττονι; ἔτι τῷ ἀνίσῳ ἐναντίον τὸ ἴσον, ὥστε πλείοσιν ἔσται ἡ ἐνί. εἰ δὲ τὸ ἄνισον σημαίνει τὸ αὐτὸ ἅμα ἀμφοῖν, εἴη μὲν ἂν ἀντικείμενον ἀμφοῖν (καὶ ἡ ἀπορία βοηθεῖ τοῖς φάσκουσι τὸ ἄνισον δυάδα εἶναι), ἀλλὰ συμβαίνει ἐν δυοῖν ἐναντίον· ὅπερ ἀδύνατον. ἔτι τὸ μὲν ἴσον μεταξύ φαίνεται

μεγάλου καὶ μικροῦ, ἐναντίωσις δὲ μεταξύ οὐδεμία οὔτε φαίνεται οὔτε ἐκ τοῦ ὀρισμοῦ δυνατόν· οὐ γὰρ ἂν εἴη τελεία μεταξύ τινος οὔσα, ἀλλὰ μᾶλλον ἔχει ἀεὶ ἐαυτῆς τι μεταξύ. λείπεται δὴ ἢ ὡς ἀπόφασιν ἀντικεῖσθαι ἢ ὡς στέρησιν. θατέρου μὲν δὴ οὐκ ἐνδέχεται (τί γὰρ μᾶλλον τοῦ μεγάλου ἢ μικροῦ;). ἀμφοῖν ἄρα ἀπόφασις στερητική, διὸ καὶ πρὸς ἀμφοτέρα τὸ πότερον λέγεται, πρὸς δὲ θάτερον οὐ (οἷον πότερον μεῖζον ἢ ἴσον, ἢ πότερον ἴσον ἢ ἔλαττον), ἀλλ' ἀεὶ τρία. οὐ στέρησις δὲ ἐξ ἀνάγκης· οὐ γὰρ πᾶν ἴσον ὃ μὴ μεῖζον ἢ ἔλαττον, ἀλλ' ἐν οἷς πέφυκεν ἐκεῖνα. - ἔστι δὴ τὸ ἴσον τὸ μήτε μέγα μήτε μικρόν, πεφυκὸς δὲ ἢ μέγα ἢ μικρόν εἶναι· καὶ ἀντίκειται ἀμφοῖν ὡς ἀπόφασις στερητική, διὸ καὶ μεταξύ ἐστίν. καὶ τὸ μήτε ἀγαθὸν μήτε κακὸν ἀντίκειται ἀμφοῖν, ἀλλ' ἀνώνυμον· πολλαχῶς γὰρ λέγεται ἐκάτερον καὶ οὐκ ἔστιν ἐν τὸ δεκτικόν, ἀλλὰ μᾶλλον τὸ μήτε λευκὸν μήτε μέλαν. ἐν δὲ οὐδὲ τοῦτο λέγεται, ἀλλ' ὠρισμένα πως ἐφ' ὧν λέγεται στερητικῶς ἢ ἀπόφασις αὕτη· ἀνάγκη γὰρ ἢ φαιδὸν ἢ ὠχρὸν εἶναι ἢ τοιοῦτόν τι ἄλλο. ὥστε οὐκ ὀρθῶς ἐπιτιμῶσιν οἱ νομίζοντες ὁμοίως λέγεσθαι πάντα, ὥστε ἔσεσθαι ὑποδήματος καὶ χειρὸς μεταξύ τὸ μήτε ὑπόδημα μήτε χεῖρα, ἔπειτα καὶ τὸ μήτε ἀγαθὸν μήτε κακὸν τοῦ ἀγαθοῦ καὶ τοῦ κακοῦ, ὡς πάντων ἐσομένου τινὸς μεταξύ. οὐκ ἀνάγκη δὲ τοῦτο συμβαίνειν. ἢ μὲν γὰρ ἀντικειμένων συναπόφασίς ἐστίν ὧν ἔστι μεταξύ τι καὶ διάστημά τι πέφυκεν [1056b] εἶναι· τῶν δ' οὐκ ἔστι διαφορά· ἐν ἄλλῳ γὰρ γένει ὧν αἱ συναποφάσεις, ὥστ' οὐχ ἐν τὸ ὑποκείμενον.

Ὅμοίως δὲ καὶ περὶ τοῦ ἐνὸς καὶ τῶν πολλῶν ἀπορήσειεν ἂν τις. εἰ γὰρ τὰ πολλὰ τῷ ἐνὶ ἀπλῶς ἀντίκειται, συμβαίνει ἕνια ἀδύνατα. τὸ γὰρ ἐν ὀλίγον ἢ ὀλίγα ἔσται· τὰ γὰρ πολλὰ καὶ τοῖς ὀλίγοις ἀντίκειται. ἔτι τὰ δύο πολλὰ, εἴπερ τὸ διπλάσιον πολλαπλάσιον λέγεται δὲ κατὰ τὰ δύο· ὥστε τὸ ἐν ὀλίγον· πρὸς τί γὰρ πολλὰ τὰ δύο εἰ μὴ πρὸς ἐν τε καὶ τὸ ὀλίγον; οὐθὲν γὰρ ἐστίν ἔλαττον. ἔτι εἰ ὡς ἐν μήκει τὸ μακρὸν καὶ βραχύ, οὕτως ἐν πλήθει τὸ πολὺ καὶ ὀλίγον, καὶ ὃ ἂν ἢ πολὺ καὶ πολλὰ, καὶ τὰ πολλὰ πολὺ (εἰ μὴ τι ἄρα διαφέρει ἐν συνεχεῖ εὐορίστῳ), τὸ ὀλίγον πληθὸς τι ἔσται. ὥστε τὸ ἐν πληθὸς τι, εἴπερ καὶ ὀλίγον· τοῦτο δ' ἀνάγκη, εἰ τὰ δύο πολλὰ. ἀλλ' ἴσως τὰ πολλὰ λέγεται μὲν πως καὶ [τὸ] πολὺ, ἀλλ' ὡς διαφέρον, οἷον ὕδωρ πολὺ, πολλὰ δ' οὐ. ἀλλ' ὅσα διαιρετά, ἐν τούτοις λέγεται, ἕνα μὲν τρόπον εἶναι ἢ πληθὸς ἔχον ὑπεροχὴν ἢ ἀπλῶς ἢ πρὸς τι (καὶ τὸ ὀλίγον ὡσαύτως πληθὸς ἔχον ἔλλειψιν), τὸ δὲ ὡς ἀριθμός, ὃ καὶ ἀντίκειται τῷ ἐνὶ μόνον. οὕτως γὰρ λέγομεν ἐν ἢ πολλὰ, ὥσπερ εἴ τις εἴποι ἐν καὶ ἕνα ἢ λευκὸν καὶ λευκά, καὶ τὰ μεμετρημένα πρὸς τὸ μέτρον [καὶ τὸ μετρητόν]· οὕτως καὶ τὰ πολλαπλάσια λέγεται· πολλὰ γὰρ ἕκαστος ὁ ἀριθμὸς ὅτι ἕνα καὶ ὅτι μετρητὸς ἐνὶ ἕκαστος, καὶ ὡς τὸ ἀντικείμενον τῷ ἐνὶ, οὐ τῷ ὀλίγῳ. οὕτω μὲν οὖν ἐστὶ πολλὰ καὶ τὰ δύο, ὡς

δὲ πλῆθος ἔχον ὑπεροχὴν ἢ πρὸς τι ἢ ἀπλῶς οὐκ ἔστιν, ἀλλὰ πρῶτον. ὀλίγα δ' ἀπλῶς τὰ δύο· πλῆθος γάρ ἐστιν ἔλλειψιν ἔχον πρῶτον (διὸ καὶ οὐκ ὀρθῶς ἀπέστη Ἀναξαγόρας εἰπὼν ὅτι ὁμοῦ πάντα χρήματα ἦν ἄπειρα καὶ πλήθει καὶ μικρότητι, ἔδει δ' εἰπεῖν ἀντὶ τοῦ “καὶ μικρότητι” “καὶ ὀλιγότητι”· οὐ γὰρ ἄπειρα), ἐπεὶ τὸ ὀλίγον οὐ διὰ τὸ ἓν, ὥσπερ τινὲς φασιν, ἀλλὰ διὰ τὰ δύο. - ἀντίκειται δὴ τὸ ἓν καὶ τὰ πολλὰ τὰ ἐν ἀριθμοῖς ὡς μέτρον μετρητῶ· ταῦτα δὲ ὡς τὰ πρὸς τι, ὅσα μὴ καθ' αὐτὰ τῶν πρὸς τι. διήρηται δ' ἡμῖν ἐν ἄλλοις ὅτι διχῶς λέγεται τὰ πρὸς τι, τὰ μὲν ὡς ἐναντία, τὰ δ' ὡς ἐπιστήμη πρὸς ἐπιστητόν, τῷ λέγεσθαί τι [1057a] ἄλλο πρὸς αὐτό. τὸ δὲ ἐν ἔλαττον εἶναι τινός, οἷον τοῖν δυοῖν, οὐδὲν κωλύει· οὐ γάρ, εἰ ἔλαττον, καὶ ὀλίγον. τὸ δὲ πλῆθος οἷον γένος ἐστὶ τοῦ ἀριθμοῦ· ἔστι γὰρ ἀριθμὸς πλῆθος ἐνὶ μετρητόν, καὶ ἀντίκειται πῶς τὸ ἐν καὶ ἀριθμός, οὐχ ὡς ἐναντίον ἀλλ' ὥσπερ εἴρηται τῶν πρὸς τι ἕνια· ἢ γὰρ μέτρον τὸ δὲ μετρητόν, ταύτῃ ἀντίκειται, διὸ οὐ πᾶν ὃ ἂν ἢ ἐν ἀριθμός ἐστιν, οἷον εἴ τι ἀδιαίρετόν ἐστιν. ὁμοίως δὲ λεγομένη ἢ ἐπιστήμη πρὸς τὸ ἐπιστητόν οὐχ ὁμοίως ἀποδίδωσιν. δόξειε μὲν γὰρ ἂν μέτρον ἢ ἐπιστήμη εἶναι τὸ δὲ ἐπιστητόν τὸ μετρούμενον, συμβαίνει δὲ ἐπιστήμην μὲν πᾶσαν ἐπιστητόν εἶναι τὸ δὲ ἐπιστητόν μὴ πᾶν ἐπιστήμην, ὅτι τρόπον τινὰ ἢ ἐπιστήμη μετρεῖται τῷ ἐπιστητῷ. τὸ δὲ πλῆθος οὔτε τῷ ὀλίγῳ ἐναντίον - ἀλλὰ τούτῳ μὲν τὸ πολὺ ὡς ὑπερέχον πλῆθος ὑπερεχομένῳ πλήθει - οὔτε τῷ ἐνὶ πάντως· ἀλλὰ τὸ μὲν ὥσπερ εἴρηται, ὅτι διαίρετόν τὸ δ' ἀδιαίρετον, τὸ δ' ὡς πρὸς τι ὥσπερ ἢ ἐπιστήμη ἐπιστητῷ, ἐὰν ἢ ἀριθμὸς τὸ δ' ἐν μέτρον.

Ἐπεὶ δὲ τῶν ἐναντίων ἐνδέχεται εἶναι τι μεταξὺ καὶ ἐνίων ἔστιν, ἀνάγκη ἐκ τῶν ἐναντίων εἶναι τὰ μεταξὺ. πάντα γὰρ τὰ μεταξὺ ἐν τῷ αὐτῷ γένει ἐστὶ καὶ ὧν ἐστὶ μεταξὺ. μεταξὺ μὲν γὰρ ταῦτα λέγομεν εἰς ὅσα μεταβάλλειν ἀνάγκη πρότερον τὸ μεταβάλλον (οἷον ἀπὸ τῆς ὑπάτης ἐπὶ τὴν νήτην εἰ μεταβαίνοι τῷ ὀλιγίστῳ, ἥξει πρότερον εἰς τοὺς μεταξὺ φθόγγους, καὶ ἐν χρώμασιν εἰ [ἥξει] ἐκ τοῦ λευκοῦ εἰς τὸ μέλαν, πρότερον ἥξει εἰς τὸ φοινικοῦν καὶ φαιδὸν ἢ εἰς τὸ μέλαν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων)· μεταβάλλειν δ' ἐξ ἄλλου γένους εἰς ἄλλο γένος οὐκ ἔστιν ἀλλ' ἢ κατὰ συμβεβηκός, οἷον ἐκ χρώματος εἰς σχῆμα. ἀνάγκη ἄρα τὰ μεταξὺ καὶ αὐτοῖς καὶ ὧν μεταξὺ εἰσιν ἐν τῷ αὐτῷ γένει εἶναι. ἀλλὰ μὴν πάντα γε τὰ μεταξὺ ἐστὶν ἀντικειμένων τινῶν· ἐκ τούτων γὰρ μόνων καθ' αὐτὰ ἔστι μεταβάλλειν (διὸ ἀδύνατον εἶναι μεταξὺ μὴ ἀντικειμένων· εἴη γὰρ ἂν μεταβολὴ καὶ μὴ ἐξ ἀντικειμένων). τῶν δ' ἀντικειμένων ἀντιφάσεως μὲν οὐκ ἔστι μεταξὺ (τοῦτο γὰρ ἐστὶν ἀντίφασις, ἀντίθεσις ἧς ὀπωοῦν θάτερον μόριον πάρεστιν, οὐκ ἐχούσης οὐθὲν μεταξὺ), τῶν δὲ λοιπῶν τὰ μὲν πρὸς τι τὰ δὲ στέρησις τὰ δὲ ἐναντία ἐστίν. τῶν δὲ πρὸς τι ὅσα μὴ ἐναντία, οὐκ ἔχει μεταξὺ· αἴτιον δ' ὅτι

οὐκ ἐν τῷ αὐτῷ γένει ἐστίν. τί γὰρ [1057b] ἐπιστήμης καὶ ἐπιστητοῦ μεταξύ; ἀλλὰ μεγάλου καὶ μικροῦ. εἰ δ' ἐστὶν ἐν ταύτῳ γένει τὰ μεταξύ, ὥσπερ δέδεικται, καὶ μεταξύ ἐναντίων, ἀνάγκη αὐτὰ συγκεῖσθαι ἐκ τούτων τῶν ἐναντίων. ἢ γὰρ ἔσται τι γένος αὐτῶν ἢ οὐθέν. καὶ εἰ μὲν γένος ἔσται οὕτως ὥστ' εἶναι πρότερόν τι τῶν ἐναντίων, αἱ διαφοραὶ πρότεραι ἐναντία ἔσονται αἱ ποιήσουσαι τὰ ἐναντία εἴδη ὡς γένους· ἐκ γὰρ τοῦ γένους καὶ τῶν διαφορῶν τὰ εἴδη (οἷον εἰ τὸ λευκὸν καὶ μέλαν ἐναντία, ἔστι δὲ τὸ μὲν διακριτικὸν χρῶμα τὸ δὲ συγκριτικὸν χρῶμα, αὗται αἱ διαφοραί, τὸ διακριτικὸν καὶ συγκριτικόν, πρότεραι· ὥστε ταῦτα ἐναντία ἀλλήλοις πρότερα). ἀλλὰ μὴν τὰ γε ἐναντίως διαφέροντα μᾶλλον ἐναντία· καὶ τὰ λοιπὰ καὶ τὰ μεταξύ ἐκ τοῦ γένους ἔσται καὶ τῶν διαφορῶν (οἷον ὅσα χρώματα τοῦ λευκοῦ καὶ μέλανός ἐστι μεταξύ, ταῦτα δεῖ ἐκ τε τοῦ γένους λέγεσθαι - ἔστι δὲ γένος τὸ χρῶμα - καὶ ἐκ διαφορῶν τινῶν· αὗται δὲ οὐκ ἔσονται τὰ πρῶτα ἐναντία· εἰ δὲ μή, ἔσται ἕκαστον ἢ λευκὸν ἢ μέλαν· ἕτεραι ἄρα· μεταξύ ἄρα τῶν πρώτων ἐναντίων αὗται ἔσονται, αἱ πρῶται δὲ διαφοραὶ τὸ διακριτικὸν καὶ συγκριτικόν· ὥστε ταῦτα πρῶτα ζητητέον ὅσα ἐναντία μὴ ἐν γένει, ἐκ τίνος τὰ μεταξύ αὐτῶν (ἀνάγκη γὰρ τὰ ἐν τῷ αὐτῷ γένει ἐκ τῶν ἀσυνθέτων τῷ γένει συγκεῖσθαι ἢ ἀσύνθετα εἶναι). τὰ μὲν οὖν ἐναντία ἀσύνθετα ἐξ ἀλλήλων, ὥστε ἀρχαί· τὰ δὲ μεταξύ ἢ πάντα ἢ οὐθέν. ἐκ δὲ τῶν ἐναντίων γίγνεται τι, ὥστ' ἔσται μεταβολὴ εἰς τοῦτο πρὶν ἢ εἰς αὐτά· ἐκατέρου γὰρ καὶ ἦττον ἔσται καὶ μᾶλλον. μεταξύ ἄρα ἔσται καὶ τοῦτο τῶν ἐναντίων, καὶ τὰλλα ἄρα πάντα σύνθετα τὰ μεταξύ· τὸ γὰρ τοῦ μὲν μᾶλλον τοῦ δ' ἦττον σύνθετόν πως ἐξ ἐκείνων ὧν λέγεται εἶναι τοῦ μὲν μᾶλλον τοῦ δ' ἦττον. ἐπεὶ δ' οὐκ ἔστιν ἕτερα πρότερα ὁμογενῇ τῶν ἐναντίων, ἅπαντ' ἂν ἐκ τῶν ἐναντίων εἴη τὰ μεταξύ, ὥστε καὶ τὰ κάτω πάντα, καὶ τὰναντία καὶ τὰ μεταξύ, ἐκ τῶν πρώτων ἐναντίων ἔσονται. ὅτι μὲν οὖν τὰ μεταξύ ἔν τε ταύτῳ γένει πάντα καὶ μεταξύ ἐναντίων καὶ σύγκειται ἐκ τῶν ἐναντίων πάντα, δῆλον.

Τὸ δ' ἕτερον τῷ εἶδει τινὸς τὶ ἕτερόν ἐστι, καὶ δεῖ τοῦτο ἀμφοῖν ὑπάρχειν· οἷον εἰ ζῶον ἕτερον τῷ εἶδει, ἄμφω ζῶα. ἀνάγκη ἄρα ἐν γένει τῷ αὐτῷ εἶναι τὰ ἕτερα τῷ εἶδει· τὸ γὰρ τοιοῦτο γένος καλῶ ὃ ἄμφω ἐν ταύτῳ λέγεται, μὴ [1058a] κατὰ συμβεβηκὸς ἔχον διαφορὰν, εἴτε ὡς ὕλη ὃν εἴτε ἄλλως. οὐ μόνον γὰρ δεῖ τὸ κοινὸν ὑπάρχειν, οἷον ἄμφω ζῶα, ἀλλὰ καὶ ἕτερον ἐκατέρω τοῦτο αὐτὸ τὸ ζῶον, οἷον τὸ μὲν ἵππον τὸ δὲ ἄνθρωπον, διὸ τοῦτο τὸ κοινὸν ἕτερον ἀλλήλων ἐστὶ τῷ εἶδει. ἔσται δὲ καθ' αὐτὰ τὸ μὲν τοιονδί ζῶον τὸ δὲ τοιονδί, οἷον τὸ μὲν ἵππος τὸ δ' ἄνθρωπος. ἀνάγκη ἄρα τὴν διαφορὰν ταύτην ἐτερότητα τοῦ γένους εἶναι. λέγω γὰρ γένους διαφορὰν ἐτερότητα ἢ ἕτερον ποιεῖ τοῦτο αὐτό. ἐναντίωσις τοίνυν ἔσται αὕτη (δῆλον δὲ καὶ ἐκ τῆς ἐπαγωγῆς)· πάντα γὰρ διαιρεῖται τοῖς ἀντικειμένοις, καὶ ὅτι τὰ

έναντία ἐν ταύτῳ γένει, δέδεικται· ἡ γὰρ ἐναντιότης ἦν διαφορὰ τελεία, ἡ δὲ διαφορὰ ἡ εἶδει πᾶσα τινὸς τί, ὥστε τοῦτο τὸ αὐτό τε καὶ γένος ἐπ' ἀμφοῖν (διὸ καὶ ἐν τῇ αὐτῇ συστοιχίᾳ πάντα τὰ ἐναντία τῆς κατηγορίας ὅσα εἶδει διάφορα καὶ μὴ γένει, ἕτερα τέ ἀλλήλων μάλιστα - τελεία γὰρ ἡ διαφορὰ - καὶ ἅμα ἀλλήλοις οὐ γίνονται). ἡ ἄρα διαφορὰ ἐναντίωσίς ἐστιν. τοῦτο ἄρα ἐστὶ τὸ ἑτέροις εἶναι τῷ εἶδει, τὸ ἐν ταύτῳ γένει ὄντα ἐναντίωσιν ἔχειν ἄτομα ὄντα (ταύτᾳ δὲ τῷ εἶδει ὅσα μὴ ἔχει ἐναντίωσιν ἄτομα ὄντα)· ἐν γὰρ τῇ διαιρέσει καὶ ἐν τοῖς μεταξὺ γίνονται ἐναντιώσεις πρὶν εἰς τὰ ἄτομα ἐλθεῖν· ὥστε φανερόν ὅτι πρὸς τὸ καλούμενον γένος οὔτε ταύτὸν οὔτε ἕτερον τῷ εἶδει οὐθέν ἐστι τῶν ὡς γένους εἰδῶν (προσηκόντως· ἡ γὰρ ὕλη ἀποφάσει δηλοῦται, τὸ δὲ γένος ὕλη οὐ λέγεται γένος - μὴ ὡς τὸ τῶν Ἡρακλειδῶν ἀλλ' ὡς τὸ ἐν τῇ φύσει), οὐδὲ πρὸς τὰ μὴ ἐν ταύτῳ γένει, ἀλλὰ διοίσει τῷ γένει ἐκείνων, εἶδει δὲ τῶν ἐν ταύτῳ γένει. ἐναντίωσιν γὰρ ἀνάγκη εἶναι τὴν διαφορὰν οὐ διαφέρει εἶδει· αὕτη δὲ ὑπάρχει τοῖς ἐν ταύτῳ γένει οὐσι μόνοις.

Ἀπορήσειε δ' ἂν τις διὰ τί γυνὴ ἀνδρὸς οὐκ εἶδει διαφέρει, ἐναντίου τοῦ θήλεος καὶ τοῦ ἄρρενος ὄντος τῆς δὲ διαφορᾶς ἐναντιώσεως, οὐδὲ ζῶον θῆλυ καὶ ἄρρεν ἕτερον τῷ εἶδει· καίτοι καθ' αὐτὸ τοῦ ζώου αὕτη ἡ διαφορὰ καὶ οὐχ ὡς λευκότης ἢ μελανία ἀλλ' ἢ ζῶον καὶ τὸ θῆλυ καὶ τὸ ἄρρεν ὑπάρχει. ἔστι δ' ἡ ἀπορία αὕτη σχεδὸν ἡ αὐτὴ καὶ διὰ τί ἡ μὲν ποιεῖ τῷ εἶδει ἕτερα ἐναντίωσις ἡ δ' οὐ, οἷον τὸ πεζὸν καὶ τὸ πτερωτόν, λευκότης δὲ καὶ μελανία οὐ. ἢ ὅτι τὰ μὲν οἰκεῖα πάθη τοῦ γένους τὰ δ' ἥττον; καὶ ἐπειδὴ ἐστὶ [1058b] τὸ μὲν λόγος τὸ δ' ὕλη, ὅσαι μὲν ἐν τῷ λόγῳ εἰσὶν ἐναντιότητες εἶδει ποιοῦσι διαφορὰν, ὅσαι δ' ἐν τῷ συνειλημμένῳ τῇ ὕλῃ οὐ ποιοῦσιν. διὸ ἀνθρώπου λευκότης οὐ ποιεῖ οὐδὲ μελανία, οὐδὲ τοῦ λευκοῦ ἀνθρώπου ἔστι διαφορὰ κατ' εἶδος πρὸς μέλανα ἄνθρωπον, οὐδ' ἂν ὄνομα ἐν τεθῇ. ὡς ὕλη γὰρ ὁ ἄνθρωπος, οὐ ποιεῖ δὲ διαφορὰν ἡ ὕλη· οὐδ' ἀνθρώπου γὰρ εἶδη εἰσὶν οἱ ἄνθρωποι διὰ τοῦτο, καίτοι ἕτεραι αἱ σάρκες καὶ τὰ ὅστ' ἔξ ὧν ὁδε καὶ ὁδε· ἀλλὰ τὸ σύνολον ἕτερον μὲν, εἶδει δ' οὐχ ἕτερον, ὅτι ἐν τῷ λόγῳ οὐκ ἔστιν ἐναντιώσεις. τοῦτο δ' ἐστὶ τὸ ἔσχατον ἄτομον· ὁ δὲ Καλλίας ἐστὶν ὁ λόγος μετὰ τῆς ὕλης· καὶ ὁ λευκὸς δὴ ἄνθρωπος, ὅτι Καλλίας λευκός· κατὰ συμβεβηκὸς οὖν ὁ ἄνθρωπος. οὐδὲ χαλκοῦς δὴ κύκλος καὶ ξύλινος· οὐδὲ τρίγωνον χαλκοῦν καὶ κύκλος ξύλινος, οὐ διὰ τὴν ὕλην εἶδει διαφέρουσιν ἀλλ' ὅτι ἐν τῷ λόγῳ ἔνεστιν ἐναντιώσεις. πότερον δ' ἡ ὕλη οὐ ποιεῖ ἕτερα τῷ εἶδει, οὐσά πως ἑτέρα, ἢ ἔστιν ὡς ποιεῖ; διὰ τί γὰρ ὁδὶ ὁ ἵππος τουδὶ «τοῦ» ἀνθρώπου ἕτερος τῷ εἶδει; καίτοι σὺν τῇ ὕλῃ οἱ λόγοι αὐτῶν. ἢ ὅτι ἔνεστιν ἐν τῷ λόγῳ ἐναντιώσεις; καὶ γὰρ τοῦ λευκοῦ ἀνθρώπου καὶ μέλανος ἵππου, καὶ ἔστι γε εἶδει, ἀλλ' οὐχ ἢ ὁ μὲν λευκὸς ὁ δὲ μέλας, ἐπεὶ καὶ εἰ ἄμφω λευκὰ ἦν, ὅμως ἂν ἦν εἶδει ἕτερα. τὸ δὲ ἄρρεν καὶ θῆλυ τοῦ ζώου οἰκεῖα

μὲν πάθη, ἀλλ' οὐ κατὰ τὴν οὐσίαν ἀλλ' ἐν τῇ ὕλῃ καὶ τῷ σώματι, διὸ τὸ αὐτὸ σπέρμα θῆλυ ἢ ἄρρεν γίγνεται παθόν τι πάθος. τί μὲν οὖν ἐστὶ τὸ τῷ εἶδει ἕτερον εἶναι, καὶ διὰ τί τὰ μὲν διαφέρει εἶδει τὰ δ' οὐ, εἴρηται.

Ἐπειδὴ δὲ τὰ ἐναντία ἕτερα τῷ εἶδει, τὸ δὲ φθαρτὸν καὶ τὸ ἄφθαρτον ἐναντία (στέρησις γὰρ ἀδυναμία διωρισμένη), ἀνάγκη ἕτερον εἶναι τῷ γένει τὸ φθαρτὸν καὶ τὸ ἄφθαρτον. νῦν μὲν οὖν ἐπ' αὐτῶν εἰρήκαμεν τῶν καθόλου ὀνομάτων, ὥστε δόξειεν ἂν οὐκ ἀναγκαῖον εἶναι ὅτιοῦν ἄφθαρτον καὶ φθαρτὸν ἕτερα εἶναι τῷ εἶδει, ὥσπερ οὐδὲ λευκὸν καὶ μέλαν (τὸ γὰρ αὐτὸ ἐνδέχεται εἶναι, καὶ ἅμα, ἐὰν ἢ τῶν καθόλου, ὥσπερ ὁ ἄνθρωπος εἴη ἂν καὶ λευκὸς καὶ μέλας, καὶ τῶν καθ' ἕκαστον· εἴη γὰρ ἂν, μὴ ἅμα, ὁ αὐτὸς λευκὸς καὶ μέλας· καίτοι ἐναντίον τὸ λευκὸν τῷ μέλανι)· ἀλλὰ τῶν ἐναντίων τὰ μὲν κατὰ συμβεβηκὸς ὑπάρχει ἐνίοις, οἷον καὶ τὰ νῦν εἰρημένα καὶ ἄλλα πολλά, τὰ δὲ [1059a] ἀδύνατον, ὧν ἐστὶ καὶ τὸ φθαρτὸν καὶ τὸ ἄφθαρτον· οὐδὲν γὰρ ἐστὶ φθαρτὸν κατὰ συμβεβηκός· τὸ μὲν γὰρ συμβεβηκὸς ἐνδέχεται μὴ ὑπάρχειν, τὸ δὲ φθαρτὸν τῶν ἐξ ἀνάγκης ὑπαρχόντων ἐστὶν οἷς ὑπάρχει· ἢ ἔσται τὸ αὐτὸ καὶ ἐν φθαρτὸν καὶ ἄφθαρτον, εἰ ἐνδέχεται μὴ ὑπάρχειν αὐτῷ τὸ φθαρτόν. ἢ τὴν οὐσίαν ἄρα ἢ ἐν τῇ οὐσίᾳ ἀνάγκη ὑπάρχειν τὸ φθαρτὸν ἐκάστῳ τῶν φθαρτῶν. ὁ δ' αὐτὸς λόγος καὶ περὶ τοῦ ἄφθάρτου· τῶν γὰρ ἐξ ἀνάγκης ὑπαρχόντων ἅμφω. ἢ ἄρα καὶ καθ' ὃ πρῶτον τὸ μὲν φθαρτὸν τὸ δ' ἄφθαρτον, ἔχει ἀντίθεσιν, ὥστε ἀνάγκη γένει ἕτερα εἶναι. φανερόν τοίνυν ὅτι οὐκ ἐνδέχεται εἶναι εἶδη τοιαῦτα οἷα λέγουσί τινες· ἔσται γὰρ καὶ ἄνθρωπος ὁ μὲν φθαρτὸς ὁ δ' ἄφθαρτος. καίτοι τῷ εἶδει ταῦτά λέγεται εἶναι τὰ εἶδη τοῖς πῶς καὶ οὐχ ὁμώνυμα· τὰ δὲ γένει ἕτερα πλεῖον διέστηκεν ἢ τὰ εἶδει.

## K

Ὅτι μὲν ἡ σοφία περὶ ἀρχὰς ἐπιστήμη τίς ἐστὶ, δῆλον ἐκ τῶν πρώτων ἐν οἷς διηπόρηται πρὸς τὰ ὑπὸ τῶν ἄλλων εἰρημένα περὶ τῶν ἀρχῶν· ἀπορήσειε δ' ἂν τις πότερον μίαν ὑπολαβεῖν εἶναι δεῖ τὴν σοφίαν ἐπιστήμην ἢ πολλάς· εἰ μὲν γὰρ μίαν, μία γ' ἐστὶν ἀεὶ τῶν ἐναντίων, αἱ δ' ἀρχαὶ οὐκ ἐναντία· εἰ δὲ μὴ μία, ποίας δεῖ θεῖναι ταύτας; ἔτι τὰς ἀποδεικτικὰς ἀρχὰς θεωρῆσαι μιᾶς ἢ πλειόνων; εἰ μὲν γὰρ μιᾶς, τί μᾶλλον ταύτης ἢ ὁποιασοῦν; εἰ δὲ πλειόνων, ποίας δεῖ ταύτας τιθέναι; ἔτι πότερον πασῶν τῶν οὐσιῶν ἢ οὐ; εἰ μὲν γὰρ μὴ πασῶν, ποίων χαλεπὸν ἀποδοῦναι· εἰ δὲ πασῶν μία, ἄδηλον πῶς ἐνδέχεται πλειόνων τὴν αὐτὴν ἐπιστήμην εἶναι. ἔτι πότερον περὶ τὰς οὐσίας μόνον ἢ καὶ τὰ συμβεβηκότα [ἀπόδειξις ἐστίν]; εἰ γὰρ περὶ γε τὰ συμβεβηκότα ἀπόδειξις ἐστίν, περὶ τὰς οὐσίας οὐκ ἔστιν· εἰ δ' ἑτέρα, τίς ἑκάτερα καὶ ποτέρα σοφία; ἢ

μὲν γὰρ ἀποδεικτική, σοφία ἢ περὶ τὰ συμβεβηκότα· ἡ δὲ περὶ τὰ πρῶτα, ἡ τῶν οὐσιῶν. ἀλλ' οὐδὲ περὶ τὰς ἐν τοῖς φυσικοῖς εἰρημένους αἰτίας τὴν ἐπιζητουμένην ἐπιστήμην θετέον· οὔτε γὰρ περὶ τὸ οὐ ἔνεκεν (τοιοῦτον γὰρ τὸ ἀγαθόν, τοῦτο δ' ἐν τοῖς πρακτοῖς ὑπάρχει καὶ ταῖς οὖσιν ἐν κινήσει· καὶ τοῦτο πρῶτον κινεῖ - τοιοῦτον γὰρ τὸ τέλος - τὸ δὲ πρῶτον κινήσαν οὐκ ἔστιν ἐν τοῖς ἀκινήτοις)· ὅλως δ' ἀπορίαν ἔχει πότερον ποτε περὶ τὰς αἰσθητὰς οὐσίας ἐστὶν [1059b] ἢ ζητουμένη νῦν ἐπιστήμη ἢ οὐ, περὶ δὲ τινος ἑτέρας. εἰ γὰρ περὶ ἄλλας, ἢ περὶ τὰ εἶδη εἴη ἢ περὶ τὰ μαθηματικά. τὰ μὲν οὖν εἶδη ὅτι οὐκ ἔστι, δῆλον (ὅμως δὲ ἀπορίαν ἔχει, κἂν εἶναι τις αὐτὰ θῇ, διὰ τί ποτ' οὐχ ὥσπερ ἐπὶ τῶν μαθηματικῶν, οὕτως ἔχει καὶ ἐπὶ τῶν ἄλλων ὧν ἔστιν εἶδη· λέγω δ' ὅτι τὰ μαθηματικά μὲν μεταξύ τε τῶν εἰδῶν τιθέασιν καὶ τῶν αἰσθητῶν οἷον τρίτα τινὰ παρὰ τὰ εἶδη τε καὶ τὰ δεῦρο, τρίτος δ' ἄνθρωπος οὐκ ἔστιν οὐδ' ἵππος παρ' αὐτόν τε καὶ τοὺς καθ' ἕκαστον· εἰ δ' αὖ μὴ ἔστιν ὡς λέγουσι, περὶ ποῖα θετέον πραγματεύεσθαι τὸν μαθηματικόν; οὐ γὰρ δὴ περὶ τὰ δεῦρο· τούτων γὰρ οὐθέν ἐστιν οἷον αἱ μαθηματικαὶ ζητοῦσι τῶν ἐπιστημῶν)· οὐδὲ μὴν περὶ τὰ μαθηματικά ἢ ζητουμένη νῦν ἐστὶν ἐπιστήμη (χωριστὸν γὰρ αὐτῶν οὐθέν)· ἀλλ' οὐδὲ τῶν αἰσθητῶν οὐσιῶν· φθαρταὶ γάρ. ὅλως δ' ἀπορήσειέ τις ἂν ποίας ἐστὶν ἐπιστήμης τὸ διαπορῆσαι περὶ τῆς τῶν μαθηματικῶν ὕλης. οὔτε γὰρ τῆς φυσικῆς, διὰ τὸ περὶ τὰ ἔχοντα ἐν αὐτοῖς ἀρχὴν κινήσεως καὶ στάσεως τὴν τοῦ φυσικοῦ πᾶσαν εἶναι πραγματείαν, οὐδὲ μὴν τῆς σκοπούσης περὶ ἀποδείξεώς τε καὶ ἐπιστήμης· περὶ γὰρ αὐτὸ τοῦτο τὸ γένος τὴν ζήτησιν ποιεῖται. λείπεται τοίνυν τὴν προκειμένην φιλοσοφίαν περὶ αὐτῶν τὴν σκέψιν ποιεῖσθαι. διαπορήσειε δ' ἂν τις εἰ δεῖ θεῖναι τὴν ζητουμένην ἐπιστήμην περὶ τὰς ἀρχάς, τὰ καλούμενα ὑπὸ τινων στοιχεῖα· ταῦτα δὲ πάντες ἐνυπάρχοντα τοῖς συνθέτοις τιθέασιν. μᾶλλον δ' ἂν δόξειε τῶν καθόλου δεῖν εἶναι τὴν ζητουμένην ἐπιστήμην· πᾶς γὰρ λόγος καὶ πᾶσα ἐπιστήμη τῶν καθόλου καὶ οὐ τῶν ἐσχάτων, ὥστ' εἴη ἂν οὕτω τῶν πρώτων γενῶν. ταῦτα δὲ γίγνοιτ' ἂν τό τε ὄν καὶ τὸ ἔν· ταῦτα γὰρ μάλιστ' ἂν ὑποληφθεῖη περιέχειν τὰ ὄντα πάντα καὶ μάλιστα ἀρχαῖς εἰσὶν εἶναι διὰ τὸ εἶναι πρῶτα τῇ φύσει· φθαρέντων γὰρ αὐτῶν συναναιρεῖται καὶ τὰ λοιπά· πᾶν γὰρ ὄν καὶ ἔν. ἡ δὲ τὰς διαφορὰς αὐτῶν ἀνάγκη μετέχειν εἰ θήσει τις αὐτὰ γένη, διαφορὰ δ' οὐδεμία τοῦ γένους μετέχει, ταύτῃ δ' οὐκ ἂν δόξειε δεῖν αὐτὰ τιθέναι γένη οὐδ' ἀρχάς. ἔτι δ' εἰ μᾶλλον ἀρχὴ τὸ ἀπλούστερον τοῦ ἥττον τοιούτου, τὰ δ' ἔσχατα τῶν ἐκ τοῦ γένους ἀπλούστερα τῶν γενῶν (ἄτομα γάρ, τὰ γένη δ' εἰς εἶδη πλείω καὶ διαφέροντα διαιρεῖται), μᾶλλον ἂν ἀρχὴ δόξειεν εἶναι τὰ εἶδη τῶν γενῶν. ἡ δὲ συναναιρεῖται τοῖς γένεσι τὰ εἶδη, τὰ γένη ταῖς ἀρχαῖς ἔοικε μᾶλλον· [1060a] ἀρχὴ γὰρ τὸ συναναιροῦν. τὰ μὲν οὖν τὴν ἀπορίαν ἔχοντα ταῦτα καὶ



τοιαῦτ' ἐστὶν ἕτερα.

Ἐτι πότερον δεῖ τιθέναι τι παρὰ τὰ καθ' ἕκαστα ἢ οὐ, ἀλλὰ τούτων ἡ ζητούμενη ἐπιστήμη; ἀλλὰ ταῦτα ἄπειρα· τὰ γε μὴν παρὰ τὰ καθ' ἕκαστα γένη ἢ εἶδη ἐστίν, ἀλλ' οὐδετέρου τούτων ἡ ζητούμενη νῦν ἐπιστήμη. διότι γὰρ ἀδύνατον τοῦτο, εἴρηται. καὶ γὰρ ὅλως ἀπορίαν ἔχει πότερον δεῖ τινὰ ὑπολαβεῖν οὐσίαν εἶναι χωριστὴν παρὰ τὰς αἰσθητὰς οὐσίας καὶ τὰς δεῦρο, ἢ οὐ, ἀλλὰ ταῦτ' εἶναι τὰ ὄντα καὶ περὶ ταῦτα τὴν σοφίαν ὑπάρχειν. ζητεῖν μὲν γὰρ εἰκόκαμεν ἄλλην τινά, καὶ τὸ προκείμενον τοῦτ' ἔστιν ἡμῖν, λέγω δὲ τὸ ἰδεῖν εἴ τι χωριστὸν καθ' αὐτὸ καὶ μηδενὶ τῶν αἰσθητῶν ὑπάρχον. ἔτι δ' εἰ παρὰ τὰς αἰσθητὰς οὐσίας ἔστι τις ἑτέρα οὐσία, παρὰ ποίας τῶν αἰσθητῶν δεῖ τιθέναι ταύτην εἶναι; τί γὰρ μᾶλλον παρὰ τοὺς ἀνθρώπους ἢ τοὺς ἵππους ἢ τῶν ἄλλων ζώων θήσει τις αὐτὴν ἢ καὶ τῶν ἀψύχων ὅλως; τό γε μὴν ἴσας ταῖς αἰσθηταῖς καὶ φθαρταῖς οὐσίαις αἰδίους ἑτέρας κατασκευάζειν ἐκτὸς τῶν εὐλόγων δόξειεν ἂν πίπτειν. εἰ δὲ μὴ χωριστὴ τῶν σωμάτων ἡ ζητούμενη νῦν ἀρχή, τίνα ἂν τις ἄλλην θείη μᾶλλον τῆς ὕλης; αὕτη γε μὴν ἐνεργεία μὲν οὐκ ἔστι, δυνάμει δ' ἔστιν. μᾶλλον τ' ἂν ἀρχὴ κυριωτέρα ταύτης δόξειεν εἶναι τὸ εἶδος καὶ ἡ μορφή· τοῦτο δὲ φθαρτόν, ὥσθ' ὅλως οὐκ ἔστιν αἰδῖος οὐσία χωριστὴ καὶ καθ' αὐτήν. ἀλλ' ἄτοπον· ἔοικε γὰρ καὶ ζητεῖται σχεδὸν ὑπὸ τῶν χαριεστάτων ὡς οὐσά τις ἀρχὴ καὶ οὐσία τοιαύτη· πῶς γὰρ ἔσται τάξις μὴ τινος ὄντος αἰδίου καὶ χωριστοῦ καὶ μένοντος; ἔτι δ' εἴπερ ἔστι τις οὐσία καὶ ἀρχὴ τοιαύτη τὴν φύσιν οἷαν νῦν ζητοῦμεν, καὶ αὕτη μία πάντων καὶ ἡ αὐτὴ τῶν αἰδίων τε καὶ φθαρτῶν, ἀπορίαν ἔχει διὰ τί ποτε τῆς αὐτῆς ἀρχῆς οὔσης τὰ μὲν ἐστὶν αἰδία τῶν ὑπὸ τὴν ἀρχὴν τὰ δ' οὐκ αἰδία (τοῦτο γὰρ ἄτοπον)· εἰ δ' ἄλλη μὲν ἐστὶν ἀρχὴ τῶν φθαρτῶν ἄλλη δὲ τῶν αἰδίων, εἰ μὲν αἰδῖος καὶ ἡ τῶν φθαρτῶν, ὁμοίως ἀπορήσομεν (διὰ τί γὰρ οὐκ αἰδίου τῆς ἀρχῆς οὔσης καὶ τὰ ὑπὸ τὴν ἀρχὴν αἰδία;)· φθαρτῆς δ' οὔσης ἄλλη τις ἀρχὴ γίγνεται ταύτης κάκεινης ἑτέρα, καὶ τοῦτ' εἰς ἄπειρον πρόεισιν. εἰ δ' αὖ τις τὰς δοκούσας μάλιστ' ἀρχὰς ἀκινήτους εἶναι, τό τε ὄν καὶ τὸ ἔν, θήσει, πρῶτον [1060b] μὲν εἰ μὴ τότε τι καὶ οὐσίαν ἐκάτερον αὐτῶν σημαίνει, πῶς ἔσονται χωριστὰ καὶ καθ' αὐτάς; τοιαύτας δὲ ζητοῦμεν τὰς αἰδίους τε καὶ πρῶτας ἀρχάς. εἴ γε μὴν τότε τι καὶ οὐσίαν ἐκάτερον αὐτῶν δηλοῖ, πάντ' ἐστὶν οὐσίαι τὰ ὄντα· κατὰ πάντων γὰρ τὸ ὄν κατηγορεῖται (κατ' ἐνίων δὲ καὶ τὸ ἔν)· οὐσίαν δ' εἶναι πάντα τὰ ὄντα ψεῦδος. ἔτι δὲ τοῖς τὴν πρώτην ἀρχὴν τὸ ἔν λέγουσι καὶ τοῦτ' οὐσίαν, ἐκ δὲ τοῦ ἐνὸς καὶ τῆς ὕλης τὸν ἀριθμὸν γεννῶσι πρῶτον καὶ τοῦτον οὐσίαν φάσκουσιν εἶναι, πῶς ἐνδέχεται τὸ λεγόμενον ἀληθὲς εἶναι; τὴν γὰρ δυάδα καὶ τῶν λοιπῶν ἕκαστον ἀριθμῶν τῶν συνθέτων πῶς ἔν δεῖ νοῆσαι; περὶ τούτου γὰρ οὔτε λέγουσιν οὐδὲν οὔτε ῥάδιον εἰπεῖν. εἴ γε μὴν γραμμὰς ἢ τὰ τούτων ἐχόμενα (λέγω δὲ ἐπιφανείας

τὰς πρώτας) θήσει τις ἀρχάς, ταῦτά γ' οὐκ εἰσὶν οὐσίαι χωρισταί, τομαὶ δὲ καὶ διαιρέσεις αἱ μὲν ἐπιφανειῶν αἱ δὲ σωμάτων (αἱ δὲ στιγμαὶ γραμμῶν), ἔτι δὲ πέρατα τῶν αὐτῶν τούτων· πάντα δὲ ταῦτα ἐν ἄλλοις ὑπάρχει καὶ χωριστὸν οὐδέν ἐστιν. ἔτι πῶς οὐσίαν ὑπολαβεῖν εἶναι δεῖ τοῦ ἐνὸς καὶ στιγμῆς; οὐσίας μὲν γὰρ πάσης γένεσις ἔστι, στιγμῆς δ' οὐκ ἔστιν· διαίρεσις γὰρ ἡ στιγμή. παρέχει δ' ἀπορίαν καὶ τὸ πᾶσαν μὲν ἐπιστήμην εἶναι τῶν καθόλου καὶ τοῦ τοιουδί, τὴν δ' οὐσίαν μὴ τῶν καθόλου εἶναι, μᾶλλον δὲ τόδε τι καὶ χωριστόν, ὥστ' εἰ περὶ τὰς ἀρχάς ἐστιν ἐπιστήμη, πῶς δεῖ τὴν ἀρχὴν ὑπολαβεῖν οὐσίαν εἶναι; ἔτι πότερον ἔστι τι παρὰ τὸ σύνολον ἢ οὐ (λέγω δὲ τὴν ὕλην καὶ τὸ μετὰ ταύτης); εἰ μὲν γὰρ μή, τὰ γε ἐν ὕλῃ φθαρτὰ πάντα· εἰ δ' ἔστι τι, τὸ εἶδος ἂν εἴη καὶ ἡ μορφή· τοῦτ' οὖν ἐπὶ τίνων ἔστι καὶ ἐπὶ τίνων οὐ, χαλεπὸν ἀφορίσαι· ἐπ' ἐνίων γὰρ δῆλον οὐκ ὄν χωριστὸν τὸ εἶδος, οἶον οἰκίας. ἔτι πότερον αἱ ἀρχαὶ εἶδει ἢ ἀριθμῶ αἱ αὐταί; εἰ γὰρ ἀριθμῶ ἔν, Ἐπεὶ δ' ἐστὶν ἡ τοῦ φιλοσόφου ἐπιστήμη τοῦ ὄντος ἢ ὄν καθόλου καὶ οὐ κατὰ μέρος, τὸ δ' ὄν πολλαχῶς καὶ οὐ καθ' ἓνα λέγεται τρόπον· εἰ μὲν οὖν ὁμωνύμως κατὰ δὲ κοινὸν μηδέν, οὐκ ἔστιν ὑπὸ μίαν ἐπιστήμην (οὐ γὰρ ἐν γένος τῶν τοιούτων), εἰ δὲ κατὰ τι κοινόν, εἴη ἂν ὑπὸ μίαν ἐπιστήμην. ἔοικε δὲ τὸν εἰρημένον λέγεσθαι τρόπον καθάπερ τό τε ἰατρικὸν καὶ ὑγιεινόν· καὶ γὰρ τούτων ἑκάτερον πολλαχῶς [1061a] λέγομεν. λέγεται δὲ τοῦτον τὸν τρόπον ἕκαστον τῷ τὸ μὲν πρὸς τὴν ἰατρικὴν ἐπιστήμην ἀναγέσθαι πῶς τὸ δὲ πρὸς ὑγίειαν τὸ δ' ἄλλως, πρὸς ταῦτό δ' ἕκαστον. ἰατρικὸς γὰρ λόγος καὶ μαχαίριον λέγεται τῷ τὸ μὲν ἀπὸ τῆς ἰατρικῆς ἐπιστήμης εἶναι τὸ δὲ ταύτῃ χρήσιμον. ὁμοίως δὲ καὶ ὑγιεινόν· τὸ μὲν γὰρ ὅτι σημαντικὸν ὑγιείας τὸ δ' ὅτι ποιητικόν. ὁ δ' αὐτὸς τρόπος καὶ ἐπὶ τῶν λοιπῶν. τὸν αὐτὸν δὲ τρόπον καὶ τὸ ὄν ἅπαν λέγεται· τῷ γὰρ τοῦ ὄντος ἢ ὄν πάθος ἢ ἕξις ἢ διάθεσις ἢ κίνησις ἢ τῶν ἄλλων τι τῶν τοιούτων εἶναι λέγεται ἕκαστον αὐτῶν ὄν. ἐπεὶ δὲ παντὸς τοῦ ὄντος πρὸς ἓν τι καὶ κοινόν ἡ ἀναγωγὴ γίγνεται, καὶ τῶν ἐναντιώσεων ἑκάστη πρὸς τὰς πρώτας διαφορὰς καὶ ἐναντιώσεις ἀναχθήσεται τοῦ ὄντος, εἴτε πλήθος καὶ ἐν εἴθ' ὁμοιότης καὶ ἀνομοιότης αἱ πρῶται τοῦ ὄντος εἰσὶ διαφοραί, εἴτ' ἄλλαι τινές· ἔστωσαν γὰρ αὐταὶ τεθεωρημέναι. διαφέρει δ' οὐδέν τὴν τοῦ ὄντος ἀναγωγὴν πρὸς τὸ ὄν ἢ πρὸς τὸ ἐν γίγνεσθαι. καὶ γὰρ εἰ μὴ ταῦτόν ἄλλο δ' ἐστίν, ἀντιστρέφει γε· τό τε γὰρ ἐν καὶ ὄν πῶς, τό τε ὄν ἔν. - ἐπεὶ δ' ἐστὶ τὰ ἐναντία πάντα τῆς αὐτῆς καὶ μιᾶς ἐπιστήμης θεωρῆσαι, λέγεται δ' ἕκαστον αὐτῶν κατὰ στέρησιν - καίτοι γ' ἔνια ἀπορήσειε τις ἂν πῶς λέγεται κατὰ στέρησιν, ὧν ἔστιν ἀνὰ μέσον τι, καθάπερ ἀδίκου καὶ δικαίου - περὶ πάντα δὲ τὰ τοιαῦτα τὴν στέρησιν δεῖ τιθέναι μὴ τοῦ ὅλου λόγου, τοῦ τελευταίου δὲ εἰδους· οἶον εἰ ἔστιν ὁ δίκαιος καθ' ἑξὶν τινὰ πειθαρχικὸς τοῖς νόμοις, οὐ πάντως ὁ ἄδικος ἔσται τοῦ ὅλου στερούμενος λόγου, περὶ δὲ τὸ πείθεσθαι τοῖς νόμοις ἐκλείπων πη, καὶ ταύτῃ

ἡ στέρησις ὑπάρξει αὐτῷ· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων. - καθάπερ δ' ὁ μαθηματικὸς περὶ τὰ ἐξ ἀφαιρέσεως τὴν θεωρίαν ποιεῖται (περιελὼν γὰρ πάντα τὰ αἰσθητὰ θεωρεῖ, οἷον βάρος καὶ κουφότητα καὶ σκληρότητα καὶ τοῦναντίον, ἔτι δὲ καὶ θερμότητα καὶ ψυχρότητα καὶ τὰς ἄλλας αἰσθητὰς ἐναντιώσεις, μόνον δὲ καταλείπει τὸ ποσὸν καὶ συνεχές, τῶν μὲν ἐφ' ἑν τῶν δ' ἐπὶ δύο τῶν δ' ἐπὶ τρία, καὶ τὰ πάθη τὰ τούτων ἢ ποσὰ ἐστὶ καὶ συνεχῇ, καὶ οὐ καθ' ἕτερόν τι θεωρεῖ, καὶ τῶν μὲν τὰς πρὸς ἄλληλα θέσεις σκοπεῖ καὶ τὰ ταύταις ὑπάρχοντα, [1061b] τῶν δὲ τὰς συμμετρίας καὶ ἀσυμμετρίας, τῶν δὲ τοὺς λόγους, ἀλλ' ὅμως μίαν πάντων καὶ τὴν αὐτὴν τίθεμεν ἐπιστήμην τὴν γεωμετρικὴν), τὸν αὐτὸν δὲ τρόπον ἔχει καὶ περὶ τὸ ὄν. τὰ γὰρ τούτῳ συμβεβηκότα καθ' ὅσον ἐστὶν ὄν, καὶ τὰς ἐναντιώσεις αὐτοῦ ἢ ὄν, οὐκ ἄλλης ἐπιστήμης ἢ φιλοσοφίας θεωρῆσαι. τῇ φυσικῇ μὲν γὰρ οὐχ ἢ ὄντα, μᾶλλον δ' ἢ κινήσεως μετέχει, τὴν θεωρίαν τις ἀπονείμειεν ἄν· ἢ γε μὴν διαλεκτικὴ καὶ ἡ σοφιστικὴ τῶν συμβεβηκότων μὲν εἰσι τοῖς οὖσιν, οὐχ ἢ δ' ὄντα οὐδὲ περὶ τὸ ὄν αὐτὸ καθ' ὅσον ὄν ἐστίν· ὥστε λείπεται τὸν φιλοσόφον, καθ' ὅσον ὄντ' ἐστίν, εἶναι περὶ τὰ λεχθέντα θεωρητικόν. ἐπεὶ δὲ τό τε ὄν ἅπαν καθ' ἑν τι καὶ κοινὸν λέγεται πολλαχῶς λεγόμενον, καὶ τάναντία τὸν αὐτὸν τρόπον (εἰς τὰς πρώτας γὰρ ἐναντιώσεις καὶ διαφορὰς τοῦ ὄντος ἀνάγεται), τὰ δὲ τοιαῦτα δυνατὸν ὑπὸ μίαν ἐπιστήμην εἶναι, διαλύοιτ' ἂν ἢ κατ' ἀρχὰς ἀπορία λεχθεῖσα, λέγω δ' ἐν ἢ διηπορεῖτο πῶς ἔσται πολλῶν καὶ διαφόρων ὄντων τῷ γένει μία τις ἐπιστήμη. - ἐπεὶ δὲ καὶ ὁ μαθηματικὸς χρῆται τοῖς κοινοῖς ἰδίως, καὶ τὰς τούτων ἀρχὰς ἂν εἴη θεωρῆσαι τῆς πρώτης φιλοσοφίας. ὅτι γὰρ ἀπὸ τῶν ἴσων ἴσων ἀφαιρεθέντων ἴσα τὰ λειπόμενα, κοινὸν μὲν ἐστὶν ἐπὶ πάντων τῶν ποσῶν, ἡ μαθηματικὴ δ' ἀπολαβοῦσα περὶ τι μέρος τῆς οἰκείας ὕλης ποιεῖται τὴν θεωρίαν, οἷον περὶ γραμμὰς ἢ γωνίας ἢ ἀριθμοὺς ἢ τῶν λοιπῶν τι ποσῶν, οὐχ ἢ δ' ὄντα ἀλλ' ἢ συνεχές αὐτῶν ἕκαστον ἐφ' ἑν ἢ δύο ἢ τρία· ἡ δὲ φιλοσοφία περὶ τῶν ἐν μέρει μὲν, ἢ τούτων ἑκάστω τι συμβέβηκεν, οὐ σκοπεῖ, περὶ τὸ ὄν δέ, ἢ ὄν τῶν τοιούτων ἕκαστον, θεωρεῖ. τὸν αὐτὸν δ' ἔχει τρόπον καὶ περὶ τὴν φυσικὴν ἐπιστήμην τῇ μαθηματικῇ· τὰ συμβεβηκότα γὰρ ἢ φυσικὴ καὶ τὰς ἀρχὰς θεωρεῖ τὰς τῶν ὄντων ἢ κινούμενα καὶ οὐχ ἢ ὄντα (τὴν δὲ πρώτην εἰρήκαμεν ἐπιστήμην τούτων εἶναι καθ' ὅσον ὄντα τὰ ὑποκείμενά ἐστιν, ἀλλ' οὐχ ἢ ἕτερόν τι)· διὸ καὶ ταύτην καὶ τὴν μαθηματικὴν ἐπιστήμην μέρη τῆς σοφίας εἶναι θετέον.

Ἔστι δέ τις ἐν τοῖς οὖσιν ἀρχὴ περὶ ἣν οὐκ ἔστι διεψεῦσθαι, τοῦναντίον δὲ ἀναγκαῖον ἀεὶ ποιεῖν, λέγω δὲ ἀληθεύειν, οἷον ὅτι οὐκ ἐνδέχεται τὸ αὐτὸ καθ' ἑνα καὶ τὸν αὐτὸν χρόνον [1062a] εἶναι καὶ μὴ εἶναι, καὶ τᾶλλα τὰ τοῦτον αὐτοῖς ἀντικείμενα τὸν τρόπον. καὶ περὶ τῶν τοιούτων ἀπλῶς μὲν οὐκ

ἔστιν ἀπόδειξις, πρὸς τόνδε δὲ ἔστιν· οὐ γὰρ ἔστιν ἐκ πιστοτέρας ἀρχῆς αὐτοῦ τούτου ποιήσασθαι συλλογισμόν, δεῖ δέ γ' εἴπερ ἔσται τὸ ἀπλῶς ἀποδεδείχθαι. πρὸς δὲ τὸν λέγοντα τὰς ἀντικειμένας φάσεις τῷ δεικνύντι διότι ψεῦδος ληπτέον τι τοιοῦτον ὃ ταῦτ' οὐ μὲν ἔσται τῷ μὴ ἐνδέχεσθαι ταῦτ' εἶναι καὶ μὴ εἶναι καθ' ἓνα καὶ τὸν αὐτὸν χρόνον, μὴ δόξει δ' εἶναι ταῦτόν· οὕτω γὰρ μόνως ἂν ἀποδειχθεῖ πρὸς τὸν φάσκοντα ἐνδέχεσθαι τὰς ἀντικειμένας φάσεις ἀληθεύεσθαι κατὰ τοῦ αὐτοῦ. τοὺς δὲ μέλλοντας ἀλλήλοις λόγου κοινωνήσιν δεῖ τι συνιέναι αὐτῶν· μὴ γιγνομένου γὰρ τούτου πῶς ἔσται κοινωνία τούτοις πρὸς ἀλλήλους λόγου; δεῖ τοίνυν τῶν ὀνομάτων ἕκαστον εἶναι γνώριμον καὶ δηλοῦν τι, καὶ μὴ πολλά, μόνον δὲ ἓν· ἂν δὲ πλείονα σημαίνει, φανερόν ποιεῖν ἐφ' ὃ φέρει τοῦνομα τούτων. ὁ δὲ λέγων εἶναι τοῦτο καὶ μὴ εἶναι, τοῦτο ὃ φησιν οὐ φησιν, ὥσθ' ὃ σημαίνει τοῦνομα τοῦτ' οὐ φησι σημαίνει· τοῦτο δ' ἀδύνατον. ὥστ' εἴπερ σημαίνει τι τὸ εἶναι τότε, τὴν ἀντίφασιν ἀδύνατον ἀληθεύειν. ἔτι δ' εἴ τι σημαίνει τοῦνομα καὶ τοῦτ' ἀληθεύεται, δεῖ τοῦτ' ἐξ ἀνάγκης εἶναι· τὸ δ' ἐξ ἀνάγκης ὃν οὐκ ἐνδέχεται ποτε μὴ εἶναι· τὰς ἀντικειμένας ἄρα οὐκ ἐνδέχεται φάσεις καὶ ἀποφάσεις ἀληθεύειν κατὰ τοῦ αὐτοῦ. ἔτι δ' εἰ μὴθὲν μᾶλλον ἢ φάσις ἢ ἡ ἀπόφασις ἀληθεύεται, ὁ λέγων ἄνθρωπον ἢ οὐκ ἄνθρωπον οὐθὲν μᾶλλον ἀληθεύσει· δόξειε δὲ καὶ οὐχ ἵππον εἶναι φάσκων τὸν ἄνθρωπον ἢ μᾶλλον ἢ οὐχ ἦττον ἀληθεύειν ἢ οὐκ ἄνθρωπον, ὥστε καὶ ἵππον φάσκων εἶναι τὸν αὐτὸν ἀληθεύσει (τὰς γὰρ ἀντικειμένας ὁμοίως ἢν ἀληθεύειν)· συμβαίνει τοίνυν τὸν αὐτὸν ἄνθρωπον εἶναι καὶ ἵππον ἢ τῶν ἄλλων τι ζώων. - ἀπόδειξις μὲν οὖν οὐδεμία τούτων ἐστὶν ἀπλῶς, πρὸς μέντοι τὸν ταῦτα τιθέμενον ἀπόδειξις. ταχέως δ' ἂν τις καὶ αὐτὸν τὸν Ἡράκλειτον τοῦτον ἐρωτῶν τὸν τρόπον ἠνάγκασεν ὁμολογεῖν μηδέποτε τὰς ἀντικειμένας φάσεις δυνατὸν εἶναι κατὰ τῶν αὐτῶν ἀληθεύεσθαι· νῦν δ' οὐ συνιεὶς ἑαυτοῦ τί ποτε λέγει, ταύτην ἔλαβε τὴν δόξαν. ὅλως δ' εἰ τὸ λεγόμενον ὑπ' αὐτοῦ ἐστὶν ἀληθές, οὐδ' ἂν αὐτὸ [1062b] τοῦτο εἴη ἀληθές, λέγω δὲ τὸ ἐνδέχεσθαι τὸ αὐτὸ καθ' ἓνα καὶ τὸν αὐτὸν χρόνον εἶναί τε καὶ μὴ εἶναι· καθάπερ γὰρ καὶ διηρημένων αὐτῶν οὐδὲν μᾶλλον ἢ κατάφασις ἢ ἡ ἀπόφασις ἀληθεύεται, τὸν αὐτὸν τρόπον καὶ τοῦ συναμφοτέρου καὶ τοῦ συμπεπλεγμένου καθάπερ μιᾶς τινὸς καταφάσεως οὔσης οὐθὲν μᾶλλον <ἢ> ἢ ἀπόφασις [ἢ] τὸ ὅλον ὡς ἐν καταφάσει τιθέμενον ἀληθεύεται. ἔτι δ' εἰ μὴθὲν ἔστιν ἀληθῶς καταφῆσαι, καὶ αὐτὸ τοῦτο ψεῦδος εἴη τὸ φάναι μηδεμίαν ἀληθῆ κατάφασιν ὑπάρχειν. εἰ δ' ἔστι τι, λύοιτ' ἂν τὸ λεγόμενον ὑπὸ τῶν τὰ τοιαῦτα ἐνισταμένων καὶ παντελῶς ἀναιρούντων τὸ διαλέγεσθαι.

Παραπλήσιον δὲ τοῖς εἰρημένοις ἐστὶ καὶ τὸ λεχθὲν ὑπὸ τοῦ Πρωταγόρου· καὶ γὰρ ἐκεῖνος ἔφη πάντων εἶναι χρημάτων μέτρον ἄνθρωπον, οὐδὲν ἕτερον

λέγων ἢ τὸ δοκοῦν ἐκάστω τοῦτο καὶ εἶναι παγίως· τούτου δὲ γιγνομένου τὸ αὐτὸ συμβαίνει καὶ εἶναι καὶ μὴ εἶναι, καὶ κακὸν καὶ ἀγαθὸν εἶναι, καὶ τᾶλλα τὰ κατὰ τὰς ἀντικειμένας λεγόμενα φάσεις, διὰ τὸ πολλάκις τοισδὶ μὲν φαίνεσθαι τόδε εἶναι καλὸν τοισδὶ δὲ τοῦναντίον, μέτρον δ' εἶναι τὸ φαινόμενον ἐκάστω. λύοιτο δ' ἂν αὕτη ἡ ἀπορία θεωρήσασι πόθεν ἐλήλυθεν ἡ ἀρχὴ τῆς ὑπολήψεως ταύτης· ἔοικε γὰρ ἐνίοις μὲν ἐκ τῆς τῶν φυσιολόγων δόξης γεγενῆσθαι, τοῖς δ' ἐκ τοῦ μὴ ταῦτ' ἀπαντας γινώσκειν ἀλλὰ τοῖσδε μὲν ἡδὺν τόδε φαίνεσθαι τοῖσδε δὲ τοῦναντίον. τὸ γὰρ μηδὲν ἐκ μὴ ὄντος γίνεσθαι, πᾶν δ' ἐξ ὄντος, σχεδὸν ἀπάντων ἐστὶ κοινὸν δόγμα τῶν περὶ φύσεως· ἐπεὶ οὖν οὐ λευκὸν γίνετα λευκοῦ τελέως ὄντος καὶ οὐδαμῇ μὴ λευκοῦ [νῦν δὲ γεγενημένον μὴ λευκόν], γίγνοιτ' ἂν ἐκ μὴ ὄντος λευκοῦ τὸ γιγνόμενον [μὴ] λευκόν· ὥστε ἐκ μὴ ὄντος γίγνοιτ' ἂν κατ' ἐκείνους, εἰ μὴ ὑπῆρχε λευκὸν τὸ αὐτὸ καὶ μὴ λευκόν. οὐ χαλεπὸν δὲ διαλύειν τὴν ἀπορίαν ταύτην· εἴρηται γὰρ ἐν τοῖς φυσικοῖς πῶς ἐκ τοῦ μὴ ὄντος γίνετα τὰ γιγνόμενα καὶ πῶς ἐξ ὄντος. τό γε μὴν ὁμοίως προσέχειν ταῖς δόξαις καὶ ταῖς φαντασίαις τῶν πρὸς αὐτοὺς διαμφισβητούντων εὐηθες· δῆλον γὰρ ὅτι τοὺς ἑτέρους αὐτῶν ἀνάγκη διεψεῦσθαι. φανερόν δὲ τοῦτ' ἐκ τῶν γιγνομένων κατὰ τὴν αἴσθησιν· οὐδέποτε γὰρ [1063a] τὸ αὐτὸ φαίνεται τοῖς μὲν γλυκὺ τοῖς δὲ τοῦναντίον, μὴ διεφθαρμένων καὶ λελωβημένων τῶν ἑτέρων τὸ αἰσθητήριον καὶ κριτήριο τῶν λεχθέντων χυμῶν. τούτου δ' ὄντος τοιούτου τοὺς ἑτέρους μὲν ὑποληπτέον μέτρον εἶναι τοὺς δ' ἄλλους οὐχ ὑποληπτέον. ὁμοίως δὲ τοῦτο λέγω καὶ ἐπὶ ἀγαθοῦ καὶ κακοῦ, καὶ καλοῦ καὶ αἰσχροῦ, καὶ τῶν ἄλλων τῶν τοιούτων. οὐδὲν γὰρ διαφέρει τοῦτ' ἀξιοῦν ἢ τὰ φαινόμενα τοῖς ὑπὸ τὴν ὄψιν ὑποβάλλουσι τὸν δάκτυλον καὶ ποιοῦσιν ἐκ τοῦ ἐνὸς φαίνεσθαι δύο, δύο δεῖν εἶναι διὰ τὸ φαίνεσθαι τοσαῦτα, καὶ πάλιν ἓν· τοῖς γὰρ μὴ κινουῖσι τὴν ὄψιν ἐν φαίνεται τὸ ἓν. ὅλως δὲ ἄτοπον ἐκ τοῦ φαίνεσθαι τὰ δεῦρο μεταβάλλοντα καὶ μηδέποτε διαμένοντα ἐν τοῖς αὐτοῖς, ἐκ τούτου περὶ τῆς ἀληθείας τὴν κρίσιν ποιεῖσθαι· δεῖ γὰρ ἐκ τῶν ἀεὶ κατὰ ταῦτ' ἐχόντων καὶ μηδεμίαν μεταβολὴν ποιουμένων τᾶληθές θηρεύειν, τοιαῦτα δ' ἐστὶ τὰ κατὰ τὸν κόσμον· ταῦτα γὰρ οὐχ ὅτε μὲν τοιαδὶ πάλιν δ' ἄλλοῖα φαίνεται, ταῦτα δ' ἀεὶ καὶ μεταβολῆς οὐδεμιᾶς κοινωνοῦντα. ἔτι δ' εἰ κίνησις ἔστι, καὶ κινούμενόν τι, κινεῖται δὲ πᾶν ἐκ τινος καὶ εἷς τι· δεῖ ἄρα τὸ κινούμενον εἶναι ἐν ἐκείνῳ ἐξ οὗ κινήσεται καὶ οὐκ εἶναι ἐν αὐτῷ, καὶ εἰς τοδὶ κινεῖσθαι καὶ γίνεσθαι ἐν τούτῳ, τὸ δὲ κατὰ τὴν ἀντίφασιν μὴ συναληθεύεσθαι κατ' αὐτούς. καὶ εἰ κατὰ τὸ ποσὸν συνεχῶς τὰ δεῦρο ῥεῖ καὶ κινεῖται, καὶ τις τοῦτο θεῖη καίπερ οὐκ ἀληθές ὄν, διὰ τί κατὰ τὸ ποιὸν οὐ μενεῖ; φαίνονται γὰρ οὐχ ἥκιστα τὰ κατὰ τὰς ἀντιφάσεις ταύτου κατηγορεῖν ἐκ τοῦ τὸ ποσὸν ὑπειληφέναι μὴ μένειν ἐπὶ τῶν σωμάτων, διὸ καὶ εἶναι

τετράπηχυ τὸ αὐτὸ καὶ οὐκ εἶναι. ἡ δ' οὐσία κατὰ τὸ ποιόν, τοῦτο δὲ τῆς ὠρισμένης φύσεως, τὸ δὲ ποσὸν τῆς ἀορίστου. ἔτι διὰ τί προστάττοντος τοῦ ἱατροῦ τοδὶ τὸ σιτίον προσενέγκασθαι προσφέρονται; τί γὰρ μᾶλλον τοῦτο ἄρτος ἐστὶν ἢ οὐκ ἔστιν; ὥστ' οὐθὲν ἂν διέχοι φαγεῖν ἢ μὴ φαγεῖν· νῦν δ' ὡς ἀληθεύοντες περὶ αὐτὸ καὶ ὄντος τοῦ προσταχθέντος σιτίου τούτου προσφέρονται τοῦτο· καίτοι γ' οὐκ ἔδει μὴ διαμενούσης παγίως μηδεμιᾶς φύσεως ἐν τοῖς αἰσθητοῖς ἄλλ' ἀεὶ πασῶν κινουμένων καὶ ῥεουσῶν. ἔτι δ' εἰ μὲν ἀλλοιούμεθα ἀεὶ καὶ μηδέποτε διαμένομεν οἱ αὐτοί, τί καὶ θαυμαστὸν εἰ μηδέποθ' ἡμῖν ταῦτά φαίνεται καθάπερ τοῖς κάμνουσιν (καὶ γὰρ τούτοις [1063b] διὰ τὸ μὴ ὁμοίως διακεῖσθαι τὴν ἕξιν καὶ ὅθ' ὑγίαινον, οὐχ ὅμοια φαίνεται τὰ κατὰ τὰς αἰσθήσεις, αὐτὰ μὲν οὐδεμιᾶς διὰ γε τοῦτο μεταβολῆς κοινωνοῦντα τὰ αἰσθητά, αἰσθήματα δ' ἕτερα ποιοῦντα τοῖς κάμνουσι καὶ μὴ τὰ αὐτά· τὸν αὐτὸν δὴ τρόπον ἔχειν καὶ τῆς εἰρημένης μεταβολῆς γιγνομένης ἴσως ἀναγκαῖόν ἐστιν); εἰ δὲ μὴ μεταβάλλομεν ἄλλ' οἱ αὐτοὶ διατελοῦμεν ὄντες, εἴη ἂν τι μένον. - πρὸς μὲν οὖν τοὺς ἐκ λόγου τὰς εἰρημένας ἀπορίας ἔχοντας οὐ ῥάδιον διαλῦσαι μὴ τιθέντων τι καὶ τούτου μηκέτι λόγον ἀπαιτούντων· οὕτω γὰρ πᾶς λόγος καὶ πᾶσα ἀπόδειξις γίνεταί· μηθὲν γὰρ τιθέντες ἀναιροῦσι τὸ διαλέγεσθαι καὶ ὅλως λόγον, - ὥστε πρὸς μὲν τοὺς τοιούτους οὐκ ἔστι λόγος, πρὸς δὲ τοὺς διαποροῦντας ἐκ τῶν παραδεδομένων ἀποριῶν ῥάδιον ἀπαντᾶν καὶ διαλύειν τὰ ποιοῦντα τὴν ἀπορίαν ἐν αὐτοῖς· δῆλον δ' ἐκ τῶν εἰρημένων. ὥστε φανερὸν ἐκ τούτων. ὅτι οὐκ ἐνδέχεται τὰς ἀντικειμένας φάσεις περὶ τοῦ αὐτοῦ καθ' ἓνα χρόνον ἀληθεύειν, οὐδὲ τὰ ἐναντία, διὰ τὸ λέγεσθαι κατὰ στέρησιν πᾶσαν ἐναντιότητα· δῆλον δὲ τοῦτ' ἐπ' ἀρχὴν τοὺς λόγους ἀναλύουσι τοὺς τῶν ἐναντίων. ὁμοίως δ' οὐδὲ τῶν ἀνὰ μέσον οὐδὲν οἷόν τε κατηγορεῖσθαι καθ' ἑνὸς καὶ τοῦ αὐτοῦ· λευκοῦ γὰρ ὄντος τοῦ ὑποκειμένου λέγοντες αὐτὸ εἶναι οὔτε μέλαν οὔτε λευκὸν ψευσόμεθα· συμβαίνει γὰρ εἶναι λευκὸν αὐτὸ καὶ μὴ εἶναι· θάτερον γὰρ τῶν συμπεπλεγμένων ἀληθεύσεται κατ' αὐτοῦ, τοῦτο δ' ἐστὶν ἀντίφασις τοῦ λευκοῦ. οὔτε δὲ καθ' Ἡράκλειτον ἐνδέχεται λέγοντας ἀληθεύειν, οὔτε κατ' Ἀναξαγόραν· εἰ δὲ μή, συμβήσεται τάναντία τοῦ αὐτοῦ κατηγορεῖν· ὅταν γὰρ ἐν παντὶ φῇ παντὸς εἶναι μοῖραν, οὐδὲν μᾶλλον εἶναί φησι γλυκὺ ἢ πικρὸν ἢ τῶν λοιπῶν ὅποιανοῦν ἐναντιώσεων, εἴπερ ἐν ἅπαντι πᾶν ὑπάρχει μὴ δυνάμει μόνον ἄλλ' ἐνεργείᾳ καὶ ἀποκεκριμένον. ὁμοίως δὲ οὐδὲ πάσας ψευδεῖς οὐδ' ἀληθεῖς τὰς φάσεις δυνατόν εἶναι, δι' ἄλλα τε πολλὰ τῶν συναχθέντων ἂν δυσχερῶν διὰ ταύτην τὴν θέσιν, καὶ διότι ψευδῶν μὲν οὐσῶν πασῶν οὐδ' αὐτὸ τοῦτό τις φάσκων ἀληθεύσει, ἀληθῶν δὲ ψευδεῖς εἶναι πάσας λέγων οὐ ψεύσεται.

Πᾶσα δ' ἐπιστήμη ζητεῖ τινὰς ἀρχὰς καὶ αἰτίας περὶ ἕκαστον τῶν ὑφ'

αὐτὴν ἐπιστητῶν, οἷον ἰατρικὴ καὶ γυμναστικὴ [1064a] καὶ τῶν λοιπῶν ἐκάστη τῶν ποιητικῶν καὶ μαθηματικῶν. ἐκάστη γὰρ τούτων περιγραφασμένη τι γένος αὐτῇ περὶ τοῦτο πραγματεύεται ὡς ὑπάρχον καὶ ὄν, οὐχ ἢ δὲ ὄν, ἀλλ' ἐτέρα τις αὕτη παρὰ ταύτας τὰς ἐπιστήμας ἐστὶν ἐπιστήμη. τῶν δὲ λεχθεισῶν ἐπιστημῶν ἐκάστη λαβοῦσά πως τὸ τί ἐστὶν ἐν ἐκάστῳ γένει πειρᾶται δεικνύναι τὰ λοιπὰ μαλακώτερον ἢ ἀκριβέστερον. λαμβάνουσι δὲ τὸ τί ἐστὶν αἱ μὲν δι' αἰσθήσεως αἱ δ' ὑποτιθέμεναι· διὸ καὶ δῆλον ἐκ τῆς τοιαύτης ἐπαγωγῆς ὅτι τῆς οὐσίας καὶ τοῦ τί ἐστὶν οὐκ ἔστιν ἀπόδειξις. ἐπεὶ δ' ἔστι τις ἡ περὶ φύσεως ἐπιστήμη, δῆλον ὅτι καὶ πρακτικῆς ἐτέρα καὶ ποιητικῆς ἔσται. ποιητικῆς μὲν γὰρ ἐν τῷ ποιοῦντι καὶ οὐ τῷ ποιουμένῳ τῆς κινήσεως ἡ ἀρχή, καὶ τοῦτ' ἔστιν εἴτε τέχνη τις εἴτ' ἄλλη τις δύναμις· ὁμοίως δὲ καὶ τῆς πρακτικῆς οὐκ ἐν τῷ πρακτῷ μᾶλλον δ' ἐν τοῖς πράττουσιν ἡ κίνησις. ἡ δὲ τοῦ φυσικοῦ περὶ τὰ ἔχοντ' ἐν ἑαυτοῖς κινήσεως ἀρχὴν ἐστίν. ὅτι μὲν τοίνυν οὔτε πρακτικὴν οὔτε ποιητικὴν ἀλλὰ θεωρητικὴν ἀναγκαῖον εἶναι τὴν φυσικὴν ἐπιστήμην, δῆλον ἐκ τούτων (εἰς ἐν γάρ τι τούτων τῶν γενῶν ἀνάγκη πίπτειν)· ἐπεὶ δὲ τὸ τί ἐστὶν ἀναγκαῖον ἐκάστη πως τῶν ἐπιστημῶν εἰδέναι καὶ τούτῳ χρῆσθαι ἀρχῇ, δεῖ μὴ λανθάνειν πῶς ὀριστέον τῷ φυσικῷ καὶ πῶς ὁ τῆς οὐσίας λόγος ληπτέος, πότερον ὡς τὸ σιμὸν ἢ μᾶλλον ὡς τὸ κοῖλον. τούτων γὰρ ὁ μὲν τοῦ σιμοῦ λόγος μετὰ τῆς ὕλης λέγεται τῆς τοῦ πράγματος, ὁ δὲ τοῦ κοίλου χωρὶς τῆς ὕλης· ἡ γὰρ σιμότης ἐν ῥινὶ γίνεται, διὸ καὶ ὁ λόγος αὐτῆς μετὰ ταύτης θεωρεῖται· τὸ σιμὸν γὰρ ἐστὶ ῥὶς κοίλη. φανερόν οὖν ὅτι καὶ σαρκὸς καὶ ὀφθαλμοῦ καὶ τῶν λοιπῶν μορίων μετὰ τῆς ὕλης αἰετὸν λόγον ἀποδοτέον. ἐπεὶ δ' ἔστι τις ἐπιστήμη τοῦ ὄντος ἢ ὄν καὶ χωριστόν, σκεπτέον πότερόν ποτε τῇ φυσικῇ τὴν αὐτὴν θετέον εἶναι ταύτην ἢ μᾶλλον ἐτέραν. ἡ μὲν οὖν φυσικὴ περὶ τὰ κινήσεως ἔχοντ' ἀρχὴν ἐν αὐτοῖς ἐστίν, ἡ δὲ μαθηματικὴ θεωρητικὴ μὲν καὶ περὶ μένοντά τις αὕτη, ἀλλ' οὐ χωριστά. περὶ τὸ χωριστόν ἄρα ὄν καὶ ἀκίνητον ἐτέρα τούτων ἀμφοτέρων τῶν ἐπιστημῶν ἔστι τις, εἴπερ ὑπάρχει τις οὐσία τοιαύτη, λέγω δὲ χωριστὴ καὶ ἀκίνητος, ὅπερ πειρασόμεθα δεικνύναι. καὶ εἴπερ ἔστι τις τοιαύτη φύσις ἐν τοῖς οὖσιν, ἐνταῦθ' ἂν εἴη που καὶ τὸ θεῖον, καὶ αὕτη [1064b] ἂν εἴη πρώτη καὶ κυριωτάτη ἀρχή. δῆλον τοίνυν ὅτι τρία γένη τῶν θεωρητικῶν ἐπιστημῶν ἔστι, φυσικὴ, μαθηματικὴ, θεολογικὴ. βέλτιστον μὲν οὖν τὸ τῶν θεωρητικῶν γένος, τούτων δ' αὐτῶν ἡ τελευταία λεχθεῖσα· περὶ τὸ τιμιώτατον γὰρ ἐστὶ τῶν ὄντων, βελτίων δὲ καὶ χείρων ἐκάστη λέγεται κατὰ τὸ οἰκεῖον ἐπιστητόν. ἀπορήσειε δ' ἂν τις πότερόν ποτε τὴν τοῦ ὄντος ἢ ὄν ἐπιστήμην καθόλου δεῖ θεῖναι ἢ οὐ. τῶν μὲν γὰρ μαθηματικῶν ἐκάστη περὶ ἐν τι γένος ἀφωρισμένον ἐστίν, ἡ δὲ καθόλου κοινὴ περὶ πάντων. εἰ μὲν οὖν αἱ φυσικαὶ οὐσίαι πρῶται τῶν ὄντων εἰσὶ, κἂν ἡ φυσικὴ πρώτη τῶν ἐπιστημῶν εἴη· εἰ δ'

ἔστιν ἑτέρα φύσις καὶ οὐσία χωριστὴ καὶ ἀκίνητος, ἑτέραν ἀνάγκη καὶ τὴν ἐπιστήμην αὐτῆς εἶναι καὶ προτέραν τῆς φυσικῆς καὶ καθόλου τῷ προτέραν.

Ἐπεὶ δὲ τὸ ἀπλῶς ὄν κατὰ πλείους λέγεται τρόπους, ὧν εἷς ἐστὶν ὁ κατὰ συμβεβηκὸς εἶναι λεγόμενος, σκεπτέον πρῶτον περὶ τοῦ οὕτως ὄντος. ὅτι μὲν οὖν οὐδεμία τῶν παραδεδομένων ἐπιστημῶν πραγματεύεται περὶ τὸ συμβεβηκός, δῆλον (οὔτε γὰρ οἰκοδομικὴ σκοπεῖ τὸ συμβησόμενον τοῖς τῇ οἰκίᾳ χρησομένοις, οἷον εἰ λυπηρῶς ἢ τούναντίον οἰκήσουσιν, οὔθ' ὑφαντικὴ οὔτε σκυτοτομικὴ οὔτε ὀψοποιική, τὸ δὲ καθ' αὐτὴν ἴδιον ἐκάστη τούτων σκοπεῖ τῶν ἐπιστημῶν μόνον, τοῦτο δ' ἐστὶ τὸ οἰκεῖον τέλος· [οὐδὲ μουσικὸν καὶ γραμματικόν,] οὐδὲ τὸν ὄντα μουσικὸν ὅτι γενόμενος γραμματικὸς ἅμα ἔσται τὰ ἀμφοτέρω, πρότερον οὐκ ὦν, ὃ δὲ μὴ ἀεὶ ὄν ἔστιν, ἐγένετο τοῦτο, ὥσθ' ἅμα μουσικὸς ἐγένετο καὶ γραμματικὸς, - τοῦτο δὲ οὐδεμία ζητεῖ τῶν ὁμολογουμένως οὐσῶν ἐπιστημῶν πλην ἢ σοφιστικῆ· περὶ τὸ συμβεβηκὸς γὰρ αὕτη μόνη πραγματεύεται, διὸ Πλάτων οὐ κακῶς εἴρηκε φήσας τὸν σοφιστὴν περὶ τὸ μὴ ὄν διατρίβειν). ὅτι δ' οὐδ' ἐνδεχόμενον ἐστὶν εἶναι τοῦ συμβεβηκὸς ἐπιστήμην, φανερόν ἐστιν πειραθεῖσιν ἰδεῖν τί ποτ' ἐστὶ τὸ συμβεβηκός. πᾶν δὴ φαμεν εἶναι τὸ μὲν ἀεὶ καὶ ἐξ ἀνάγκης (ἀνάγκης δ' οὐ τῆς κατὰ τὸ βίαιον λεγομένης ἀλλ' ἢ χρώμεθα ἐν τοῖς κατὰ τὰς ἀποδείξεις), τὸ δ' ὡς ἐπὶ τὸ πολὺ, τὸ δ' οὔθ' ὡς ἐπὶ τὸ πολὺ οὔτ' ἀεὶ καὶ ἐξ ἀνάγκης ἀλλ' ὅπως ἔτυχεν· οἷον ἐπὶ κυνὶ γένοιτ' ἂν ψῦχος, ἀλλὰ τοῦτ' οὔτ' [ὡς] ἀεὶ καὶ ἐξ ἀνάγκης οὔθ' ὡς ἐπὶ τὸ [1065a] πολὺ γίγνεται, συμβαίη δέ ποτ' ἂν. ἔστι δὴ τὸ συμβεβηκὸς ὃ γίγνεται μὲν, οὐκ ἀεὶ δ' οὐδ' ἐξ ἀνάγκης οὐδ' ὡς ἐπὶ τὸ πολὺ. τί μὲν οὖν ἐστὶ τὸ συμβεβηκός, εἴρηται, διότι δ' οὐκ ἔστιν ἐπιστήμη τοῦ τοιούτου, δῆλον· ἐπιστήμη μὲν γὰρ πᾶσα τοῦ ἀεὶ ὄντος ἢ ὡς ἐπὶ τὸ πολὺ, τὸ δὲ συμβεβηκὸς ἐν οὐδετέρῳ τούτων ἐστίν. ὅτι δὲ τοῦ κατὰ συμβεβηκὸς ὄντος οὐκ εἰσὶν αἰτίαι καὶ ἀρχαὶ τοιαῦται οἷαίπερ τοῦ καθ' αὐτὸ ὄντος, δῆλον· ἔσται γὰρ ἅπαντ' ἐξ ἀνάγκης. εἰ γὰρ τόδε μὲν ἔστι τοῦδε ὄντος τόδε δὲ τοῦδε, τοῦτο δὲ μὴ ὅπως ἔτυχεν ἀλλ' ἐξ ἀνάγκης, ἐξ ἀνάγκης ἔσται καὶ οὐ τοῦτ' ἦν αἴτιον ἕως τοῦ τελευταίου λεγομένου αἰτιατοῦ (τοῦτο δ' ἦν κατὰ συμβεβηκός), ὥστ' ἐξ ἀνάγκης ἅπαντ' ἔσται, καὶ τὸ ὁποτέρως ἔτυχε καὶ τὸ ἐνδέχεσθαι καὶ γενέσθαι καὶ μὴ παντελῶς ἐκ τῶν γιγνομένων ἀναιρεῖται. καὶ μὴ ὄν δὲ ἀλλὰ γιγνόμενον τὸ αἴτιον ὑποτεθεῖ, ταῦτά συμβήσεται· πᾶν γὰρ ἐξ ἀνάγκης γενήσεται. ἢ γὰρ αὔριον ἔκλειψις γενήσεται ἂν τόδε γένηται, τοῦτο δ' ἂν ἕτερόν τι, καὶ τοῦτ' ἂν ἄλλο· καὶ τοῦτον δὴ τὸν τρόπον ἀπὸ πεπερασμένου χρόνου τοῦ ἀπὸ τοῦ νῦν μέχρι αὔριον ἀφαιρουμένου χρόνου ἥξει ποτὲ εἰς τὸ ὑπάρχον, ὥστ' ἐπεὶ τοῦτ' ἔστιν, ἅπαντ' ἐξ ἀνάγκης τὰ μετὰ τοῦτο γενήσεται, ὥστε πάντα ἐξ ἀνάγκης γίγνεσθαι. τὸ δ' ὡς ἀληθὲς ὄν καὶ κατὰ συμβεβηκὸς τὸ μὲν ἐστὶν ἐν



συμπλοκῇ διανοίας καὶ πάθος ἐν ταύτῃ (διὸ περὶ μὲν τὸ οὕτως ὄν οὐ ζητοῦνται αἱ ἀρχαί, περὶ δὲ τὸ ἔξω ὄν καὶ χωριστόν)· τὸ δ' οὐκ ἀναγκαῖον ἄλλ' ἀόριστον, λέγω δὲ τὸ κατὰ συμβεβηκός· τοῦ τοιούτου δ' ἄτακτα καὶ ἄπειρα τὰ αἷτια. - τὸ δὲ ἔνεκά του ἐν τοῖς φύσει γιγνομένοις ἢ ἀπὸ διανοίας ἐστίν, τύχη δὲ ἐστὶν ὅταν τι τούτων γένηται κατὰ συμβεβηκός· ὥσπερ γὰρ καὶ ὄν ἐστὶ τὸ μὲν καθ' αὐτὸ τὸ δὲ κατὰ συμβεβηκός, οὕτω καὶ αἷτιον. ἡ τύχη δ' αἷτια κατὰ συμβεβηκός ἐν τοῖς κατὰ προαίρεσιν τῶν ἔνεκά του γιγνομένοις, διὸ περὶ ταύτῃ τύχῃ καὶ διάνοια· προαίρεσις γὰρ οὐ χωρὶς διανοίας. τὰ δ' αἷτια ἀόριστα ἀφ' ὧν ἂν γένοιτο τὰ ἀπὸ τύχης, διὸ ἄδηλος ἀνθρωπίνῳ λογισμῷ καὶ αἷτιον κατὰ συμβεβηκός, ἀπλῶς δ' οὐδενός. ἀγαθὴ δὲ τύχη καὶ κακὴ ὅταν ἀγαθὸν ἢ φαῦλον [1065b] ἀποβῇ· εὐτυχία δὲ καὶ δυστυχία περὶ μέγεθος τούτων. ἐπεὶ δ' οὐθὲν κατὰ συμβεβηκός πρότερον τῶν καθ' αὐτό, οὐδ' ἄρ' αἷτια· εἰ ἄρα τύχη ἢ τὸ αὐτόματον αἷτιον τοῦ οὐρανοῦ, πρότερον νοῦς αἷτιος καὶ φύσις.

Ἔστι δὲ τὸ μὲν ἐνεργείᾳ μόνον τὸ δὲ δυνάμει τὸ δὲ δυνάμει καὶ ἐνεργείᾳ, τὸ μὲν ὄν τὸ δὲ ποσὸν τὸ δὲ τῶν λοιπῶν. οὐκ ἔστι δέ τις κίνησις παρὰ τὰ πράγματα· μεταβάλλει γὰρ αἰεὶ κατὰ τὰς τοῦ ὄντος κατηγορίας, κοινὸν δ' ἐπὶ τούτων οὐδὲν ἐστὶν ὃ οὐδ' ἐν μιᾷ κατηγορίᾳ. ἕκαστον δὲ διχῶς ὑπάρχει πᾶσιν (οἷον τὸ τόδε - τὸ μὲν γὰρ μορφή αὐτοῦ τὸ δὲ στέρησις - καὶ κατὰ τὸ ποιὸν τὸ μὲν λευκὸν τὸ δὲ μέλαν, καὶ κατὰ τὸ ποσὸν τὸ μὲν τέλειον τὸ δὲ ἀτελές, καὶ κατὰ φοράν τὸ μὲν ἄνω τὸ δὲ κάτω, ἢ κοῦφον καὶ βαρύν)· ὥστε κινήσεως καὶ μεταβολῆς τοσαῦτ' εἶδη ὅσα τοῦ ὄντος. διηρημένου δὲ καθ' ἕκαστον γένος τοῦ μὲν δυνάμει τοῦ δ' ἐντελεχείᾳ, τὴν τοῦ δυνάμει ἢ τοιοῦτόν ἐστιν ἐνέργειαν λέγω κίνησιν. ὅτι δ' ἀληθῆ λέγομεν, ἐνθένδε δῆλον· ὅταν γὰρ τὸ οἰκοδομητόν, ἢ τοιοῦτον αὐτὸ λέγομεν εἶναι, ἐνεργείᾳ ἢ, οἰκοδομεῖται, καὶ ἔστι τοῦτο οἰκοδόμησις· ὁμοίως μάθησις, ἰατρεισις, βάδισις, ἄλσις, γήρανσις, ἄδρυνσις. συμβαίνει δὲ κινεῖσθαι ὅταν ἡ ἐντελέχεια ἢ αὐτή, καὶ οὔτε πρότερον οὔθ' ὕστερον. ἡ δὲ τοῦ δυνάμει ὄντος, ὅταν ἐντελεχεία ὄν ἐνεργῇ, οὐχ ἢ αὐτὸ ἄλλ' ἢ κινήτόν, κίνησις ἐστὶν. λέγω δὲ τὸ ἢ ὥδε. ἔστι γὰρ ὁ χαλκὸς δυνάμει ἀνδριάς· ἄλλ' ὅμως οὐχ ἡ τοῦ χαλκοῦ ἐντελέχεια, ἢ χαλκός, κίνησις ἐστὶν. οὐ γὰρ ταῦτόν χαλκῷ εἶναι καὶ δυνάμει τινί, ἐπεὶ εἰ ταῦτόν ἦν ἀπλῶς κατὰ τὸν λόγον, ἦν ἂν ἡ τοῦ χαλκοῦ ἐντελέχεια κίνησις τις. οὐκ ἔστι δὲ ταῦτό (δῆλον δ' ἐπὶ τῶν ἐναντίων· τὸ μὲν γὰρ δύνασθαι ὑγιαίνειν καὶ δύνασθαι κάμνειν οὐ ταῦτόν - καὶ γὰρ ἂν τὸ ὑγιαίνειν καὶ τὸ κάμνειν ταῦτόν ἦν - τὸ δ' ὑποκείμενον καὶ ὑγιαῖνον καὶ νοσοῦν, εἴθ' ὑγρότης εἴθ' αἷμα, ταῦτό καὶ ἔν). ἐπεὶ δὲ οὐ τὸ αὐτό, ὥσπερ οὐδὲ χρῶμα ταῦτόν καὶ ὁρατόν, ἢ τοῦ δυνατοῦ καὶ ἢ δυνατόν ἐντελέχεια κίνησις ἐστὶν. ὅτι μὲν οὖν ἐστὶν αὕτη, καὶ ὅτι συμβαίνει τότε κινεῖσθαι ὅταν ἡ ἐντελέχεια ἢ αὐτή, καὶ οὔτε πρότερον

οὐθ' ὕστερον, δῆλον [1066a] (ἐνδέχεται γὰρ ἕκαστον ὅτε μὲν ἐνεργεῖν ὅτε δὲ μὴ, οἷον τὸ οἰκοδομητὸν ἢ οἰκοδομητόν, καὶ ἡ τοῦ οἰκοδομητοῦ ἐνέργεια ἢ οἰκοδομητὸν οἰκοδόμησις ἐστίν· ἡ γὰρ τοῦτο ἐστίν, ἡ οἰκοδόμησις, ἡ ἐνέργεια, ἡ οἰκία· ἀλλ' ὅταν οἰκία ᾖ, οὐκέτι οἰκοδομητόν, οἰκοδομεῖται δὲ τὸ οἰκοδομητόν· ἀνάγκη ἄρα οἰκοδόμησιν τὴν ἐνέργειαν εἶναι, ἡ δ' οἰκοδόμησις κίνησις τις, ὃ δ' αὐτὸς λόγος καὶ ἐπὶ τῶν ἄλλων κινήσεων). ὅτι δὲ καλῶς εἴρηται, δῆλον ἐξ ὧν οἱ ἄλλοι λέγουσι περὶ αὐτῆς, καὶ ἐκ τοῦ μὴ ῥάδιον εἶναι διορίσαι ἄλλως αὐτήν. οὔτε γὰρ ἐν ἄλλῳ τις γένει δύναται ἂν θεῖναι αὐτήν· δῆλον δ' ἐξ ὧν λέγουσιν· οἱ μὲν γὰρ ἑτερότητα καὶ ἀνισότητα καὶ τὸ μὴ ὄν, ὧν οὐδὲν ἀνάγκη κινεῖσθαι, ἀλλ' οὐδ' ἡ μεταβολὴ οὔτ' εἰς ταῦτα οὔτ' ἐκ τούτων μᾶλλον ἢ τῶν ἀντικειμένων. αἴτιον δὲ τοῦ εἰς ταῦτα τιθέναι ὅτι ἀόριστόν τι δοκεῖ εἶναι ἡ κίνησις, τῆς δ' ἑτέρας συστοιχίας αἱ ἀρχαὶ διὰ τὸ στερητικαὶ εἶναι ἀόριστοι· οὔτε γὰρ τότε οὔτε τοιόνδε οὐδεμία αὐτῶν οὔτε τῶν λοιπῶν κατηγοριῶν. τοῦ δὲ δοκεῖν ἀόριστον εἶναι τὴν κίνησιν αἴτιον ὅτι οὔτ' εἰς δύναμιν τῶν ὄντων οὔτ' εἰς ἐνέργειαν ἔστι θεῖναι αὐτήν· οὔτε γὰρ τὸ δυνατόν ποσὸν εἶναι κινεῖται ἐξ ἀνάγκης, οὔτε τὸ ἐνεργεῖν ποσόν, ἢ τε κίνησις ἐνέργεια μὲν εἶναι δοκεῖ τις, ἀτελὴς δέ· αἴτιον δ' ὅτι ἀτελὲς τὸ δυνατόν οὐ ἐστὶν ἐνέργεια. καὶ διὰ τοῦτο χαλεπὸν αὐτὴν λαβεῖν τί ἐστίν· ἡ γὰρ εἰς στερῆσιν ἀνάγκη θεῖναι ἢ εἰς δύναμιν ἢ εἰς ἐνέργειαν ἀπλῆν, τούτων δ' οὐδὲν φαίνεται ἐνδεχόμενον, ὥστε λείπεται τὸ λεχθὲν εἶναι, καὶ ἐνέργειαν καὶ [μὴ] ἐνέργειαν τὴν εἰρημένην, ἰδεῖν μὲν χαλεπὴν ἐνδεχομένην δ' εἶναι. καὶ ὅτι ἐστὶν ἡ κίνησις ἐν τῷ κινητῷ, δῆλον· ἐντελέχεια γὰρ ἐστὶ τούτου ὑπὸ τοῦ κινητικοῦ. καὶ ἡ τοῦ κινητικοῦ ἐνέργεια οὐκ ἄλλη ἐστίν. δεῖ μὲν γὰρ εἶναι ἐντελέχειαν ἀμφοῖν· κινητικὸν μὲν γὰρ ἐστὶ τῷ δύνασθαι, κινουὶν δὲ τῷ ἐνεργεῖν, ἀλλ' ἔστιν ἐνεργητικὸν τοῦ κινητοῦ, ὥσθ' ὁμοίως μία ἢ ἀμφοῖν ἐνέργεια ὥσπερ τὸ αὐτὸ διάστημα ἐν πρὸς δύο καὶ δύο πρὸς ἓν, καὶ τὸ ἄναντες καὶ τὸ κάταντες, ἀλλὰ τὸ εἶναι οὐχ ἓν· ὁμοίως δὲ καὶ ἐπὶ τοῦ κινουῦντος καὶ κινουμένου.

Τὸ δ' ἄπειρον ἢ τὸ ἀδύνατον διελθεῖν τῷ μὴ πεφυκέναι διέναι, καθάπερ ἡ φωνὴ ἀόρατος, ἢ τὸ διέξοδον ἔχον ἀτελεύτητον, ἢ ὃ μόλις, ἢ ὃ πεφυκὸς ἔχειν μὴ ἔχει διέξοδον [1066b] ἢ πέρας· ἔτι προσθέσει ἢ ἀφαιρέσει ἢ ἄμφω. χωριστὸν μὲν δὴ αὐτό τι ὄν οὐχ οἷόν τ' εἶναι· εἰ γὰρ μήτε μέγεθος μήτε πλῆθος, οὐσία δ' αὐτὸ τὸ ἄπειρον καὶ μὴ συμβεβηκός, ἀδιαίρετον ἔσται (τὸ γὰρ διαιρετὸν ἢ μέγεθος ἢ πλῆθος), εἰ δὲ ἀδιαίρετον, οὐκ ἄπειρον, εἰ μὴ καθάπερ ἡ φωνὴ ἀόρατος· ἀλλ' οὐχ οὕτω λέγουσιν οὐδ' ἡμεῖς ζητοῦμεν, ἀλλ' ὡς ἀδιέξοδον, ἔτι πῶς ἐνδέχεται καθ' αὐτὸ εἶναι ἄπειρον, εἰ μὴ καὶ ἀριθμὸς καὶ μέγεθος, ὧν πάθος τὸ ἄπειρον; ἔτι εἰ κατὰ συμβεβηκός, οὐκ ἂν εἴη στοιχεῖον τῶν ὄντων ἢ ἄπειρον, ὥσπερ οὐδὲ τὸ ἀόρατον τῆς διαλέκτου,

καίτοι ἡ φωνὴ ἀόρατος. καὶ ὅτι οὐκ ἔστιν ἐνεργεῖα εἶναι τὸ ἄπειρον, δῆλον. ἔσται γὰρ ὅτιοῦν αὐτοῦ ἄπειρον μέρος τὸ λαμβανόμενον (τὸ γὰρ ἀπείρῳ εἶναι καὶ ἄπειρον τὸ αὐτό, εἴπερ οὐσία τὸ ἄπειρον καὶ μὴ καθ' ὑποκειμένου), ὥστε ἢ ἀδιαίρετον, ἢ εἰς ἄπειρα διαιρετόν, εἰ μεριστόν· πολλὰ δ' εἶναι τὸ αὐτὸ ἀδύνατον ἄπειρα (ὥσπερ γὰρ ἀέρος ἀἷρ μέρος, οὕτως ἄπειρον ἀπείρου, εἰ ἔστιν οὐσία καὶ ἀρχή)· ἀμέριστον ἄρα καὶ ἀδιαίρετον. ἀλλὰ ἀδύνατον τὸ ἐντελεχεῖα ὄν ἄπειρον (ποσὸν γὰρ εἶναι ἀνάγκη)· κατὰ συμβεβηκὸς ἄρα ὑπάρχει. ἀλλ' εἰ οὕτως, εἴρηται ὅτι οὐκ ἐνδέχεται εἶναι ἀρχήν, ἀλλ' ἐκεῖνο ὧ συμβέβηκε, τὸν ἀέρα ἢ τὸ ἄρτιον. - αὕτη μὲν οὖν ἡ ζήτησις καθόλου, ὅτι δ' ἐν τοῖς αἰσθητοῖς οὐκ ἔστιν, ἐνθένδε δῆλον· εἰ γὰρ σώματος λόγος τὸ ἐπιπέδοις ὠρισμένον, οὐκ εἴη ἂν ἄπειρον σῶμα οὗτ' αἰσθητὸν οὔτε νοητόν, οὐδ' ἀριθμὸς ὡς κεχωρισμένος καὶ ἄπειρος· ἀριθμητὸν γὰρ ὁ ἀριθμὸς ἢ τὸ ἔχον ἀριθμόν. φυσικῶς δὲ ἐκ τῶνδε δῆλον· οὔτε γὰρ σύνθετον οἶόν τ' εἶναι οὔθ' ἀπλοῦν. σύνθετον μὲν γὰρ οὐκ ἔσται σῶμα, εἰ πεπέρανται τῷ πλήθει τὰ στοιχεῖα (δεῖ γὰρ ἰσάζειν τὰ ἐναντία καὶ μὴ εἶναι ἐν αὐτῶν ἄπειρον· εἰ γὰρ ὁτῶοῦν λείπεται ἡ θατέρου σώματος δύναμις, φθαρήσεται ὑπὸ τοῦ ἀπείρου τὸ πεπερασμένον· ἕκαστον δ' ἄπειρον εἶναι ἀδύνατον, σῶμα γὰρ ἐστὶ τὸ πάντῃ ἔχον διάστασιν, ἄπειρον δὲ τὸ ἀπεράντως διεστηκός, ὥστ' εἰ τὸ ἄπειρον σῶμα, πάντῃ ἔσται ἄπειρον)· οὐδὲ ἐν δὲ καὶ ἀπλοῦν ἐνδέχεται τὸ ἄπειρον εἶναι σῶμα, οὔθ' ὡς λέγουσί τινες, παρὰ τὰ στοιχεῖα ἐξ οὗ γεννῶσι ταῦτα (οὐκ ἔστι γὰρ τοιοῦτο σῶμα παρὰ τὰ στοιχεῖα· ἅπαν γάρ, ἐξ οὗ ἐστί, καὶ διαλύεται εἰς τοῦτο, οὐ φαίνεται δὲ τοῦτο [1067a] παρὰ τὰ ἀπλᾶ σώματα), οὐδὲ πῦρ οὐδ' ἄλλο τῶν στοιχείων οὐθέν· χωρὶς γὰρ τοῦ ἄπειρον εἶναι τι αὐτῶν, ἀδύνατον τὸ ἅπαν, κἂν ἢ πεπερασμένον, ἢ εἶναι ἢ γίγνεσθαι ἐν τι αὐτῶν, ὥσπερ Ἡράκλειτός φησιν ἅπαντα γίγνεσθαι ποτε πῦρ. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τοῦ ἐνὸς ὃ ποιοῦσι παρὰ τὰ στοιχεῖα οἱ φυσικοί· πᾶν γὰρ μεταβάλλει ἐξ ἐναντίου, οἶον ἐκ θερμοῦ εἰς ψυχρόν. - ἔτι τὸ αἰσθητὸν σῶμα πού, καὶ ὁ αὐτὸς τόπος ὅλου καὶ μορίου, οἶον τῆς γῆς, ὥστ' εἰ μὲν ὁμοειδές, ἀκίνητον ἔσται ἢ ἀεὶ οἰσθήσεται, τοῦτο δὲ ἀδύνατον (τί γὰρ μᾶλλον κάτω ἢ ἄνω ἢ ὅπουοῦν; οἶον εἰ βῶλος εἴη, ποῦ αὕτη κινήσεται ἢ μενεῖ; ὁ γὰρ τόπος τοῦ συγγενοῦς αὐτῇ σώματος ἄπειρος· καθέξει οὖν τὸν ὅλον τόπον; καὶ πῶς; τίς οὖν ἡ μονὴ καὶ ἡ κίνησις; ἢ πανταχοῦ μενεῖ - οὐ κινήσεται ἄρα, ἢ πανταχοῦ κινήσεται - οὐκ ἄρα στήσεται)· εἰ δ' ἀνόμοιον τὸ πᾶν, ἀνόμοιοι καὶ οἱ τόποι, καὶ πρῶτον μὲν οὐχ ἐν τῷ σῶμα τοῦ παντὸς ἀλλ' ἢ τῷ ἅπτεσθαι, εἴτα ἢ πεπερασμένα ταῦτ' ἔσται ἢ ἄπειρα εἶδει. πεπερασμένα μὲν οὖν οὐχ οἶόν τε (ἔσται γὰρ τὰ μὲν ἄπειρα τὰ δ' οὐ, εἰ τὸ πᾶν ἄπειρον, οἶον πῦρ ἢ ὕδωρ· φθορὰ δὲ τὸ τοιοῦτον τοῖς ἐναντίοις)· εἰ δ' ἄπειρα καὶ ἀπλᾶ, καὶ οἱ τόποι ἄπειροι καὶ ἔσται ἄπειρα

στοιχεῖα· εἰ δὲ τοῦτ' ἀδύνατον καὶ οἱ τόποι πεπερασμένοι, καὶ τὸ πᾶν ἀνάγκη πεπεράνθαι. ὅλως δ' ἀδύνατον ἄπειρον εἶναι σῶμα καὶ τόπον τοῖς σώμασιν, εἰ πᾶν σῶμα αἰσθητὸν ἢ βάρος ἔχει ἢ κουφότητα· ἢ γὰρ ἐπὶ τὸ μέσον ἢ ἄνω οἰσθήσεται, ἀδύνατον δὲ τὸ ἄπειρον ἢ πᾶν ἢ τὸ ἥμισυ ὀποτερονοῦν πεπονθέναι· πῶς γὰρ διελεῖς; ἢ πῶς τοῦ ἀπείρου ἔσται τὸ μὲν κάτω τὸ δ' ἄνω, ἢ ἔσχατον καὶ μέσον; ἔτι πᾶν σῶμα αἰσθητὸν ἐν τόπῳ, τόπου δὲ εἶδη ἔξ, ἀδύνατον δ' ἐν τῷ ἀπείρῳ σώματι ταῦτ' εἶναι. ὅλως δ' εἰ ἀδύνατον τόπον ἄπειρον εἶναι, καὶ σῶμα ἀδύνατον· τὸ γὰρ ἐν τόπῳ πού, τοῦτο δὲ σημαίνει ἢ ἄνω ἢ κάτω ἢ τῶν λοιπῶν τι, τούτων δ' ἕκαστον πέρας τι. τὸ δ' ἄπειρον οὐ ταῦτόν ἐν μεγέθει καὶ κινήσει καὶ χρόνῳ ὡς μία τις φύσις, ἀλλὰ τὸ ὕστερον λέγεται κατὰ τὸ πρότερον, οἷον κίνησις κατὰ τὸ μέγεθος ἐφ' οὗ κινεῖται ἢ ἀλλοιοῦται ἢ αὖξεται, χρόνος δὲ διὰ τὴν κίνησιν.

[1067b] Μεταβάλλει δὲ τὸ μεταβάλλον τὸ μὲν κατὰ συμβεβηκός, ὡς τὸ μουσικὸν βαδίζει, τὸ δὲ τῷ τούτου τι μεταβάλλειν ἀπλῶς λέγεται μεταβάλλειν, οἷον ὅσα κατὰ μέρη (ὑγιάζεται γὰρ τὸ σῶμα, ὅτι ὁ ὀφθαλμός), ἔστι δέ τι ὃ καθ' αὐτὸ πρῶτον κινεῖται, καὶ τοῦτ' ἔστι τὸ καθ' αὐτὸ κινητόν. ἔστι δέ [τι] καὶ ἐπὶ τοῦ κινουῦντος ὡσαύτως· κινεῖ γὰρ κατὰ συμβεβηκός τὸ δὲ κατὰ μέρος τὸ δὲ καθ' αὐτό· ἔστι δέ τι τὸ κινουῦν πρῶτον· ἔστι δέ τι τὸ κινούμενον, ἔτι ἐν ᾧ χρόνῳ καὶ ἐξ οὗ καὶ εἰς ὅ. τὰ δ' εἶδη καὶ τὰ πάθη καὶ ὁ τόπος, εἰς ἃ κινοῦνται τὰ κινούμενα, ἀκίνητά ἐστιν, οἷον ἐπιστήμη καὶ θερμότης· ἔστι δ' οὐχ ἡ θερμότης κίνησις ἀλλ' ἡ θερμανσις. ἡ δὲ μὴ κατὰ συμβεβηκός μεταβολὴ οὐκ ἐν ἅπασιν ὑπάρχει ἀλλ' ἐν τοῖς ἐναντίοις καὶ μεταξύ καὶ ἐν ἀντιφάσει· τούτου δὲ πίστις ἐκ τῆς ἐπαγωγῆς. μεταβάλλει δὲ τὸ μεταβάλλον ἢ ἐξ ὑποκειμένου εἰς ὑποκείμενον, ἢ οὐκ ἐξ ὑποκειμένου εἰς οὐχ ὑποκείμενον, ἢ ἐξ ὑποκειμένου εἰς οὐχ ὑποκείμενον, ἢ οὐκ ἐξ ὑποκειμένου εἰς ὑποκείμενον (λέγω δὲ ὑποκείμενον τὸ καταφάσει δηλούμενον), ὥστ' ἀνάγκη τρεῖς εἶναι μεταβολάς· ἡ γὰρ ἐξ οὐχ ὑποκειμένου εἰς μὴ ὑποκείμενον οὐκ ἔστι μεταβολή· οὔτε γὰρ ἐναντία οὔτε ἀντίφασίς ἐστιν, ὅτι οὐκ ἀντίθεσις. ἡ μὲν οὖν οὐκ ἐξ ὑποκειμένου εἰς ὑποκείμενον κατ' ἀντίφασιν γένεσις ἐστιν, ἡ μὲν ἀπλῶς ἀπλῆ, ἡ δὲ τινὸς τίς· ἡ δ' ἐξ ὑποκειμένου εἰς μὴ ὑποκείμενον φθορά, ἡ μὲν ἀπλῶς ἀπλῆ, ἡ δὲ τινὸς τίς. εἰ δὲ τὸ μὴ ὄν λέγεται πλεοναχῶς, καὶ μήτε τὸ κατὰ σύνθεσιν ἢ διαίρεσιν ἐνδέχεται κινεῖσθαι μήτε τὸ κατὰ δύναμιν τὸ τῷ ἀπλῶς ὄντι ἀντικείμενον (τὸ γὰρ μὴ λευκὸν ἢ μὴ ἀγαθὸν ὅμως ἐνδέχεται κινεῖσθαι κατὰ συμβεβηκός, εἴη γὰρ ἂν ἄνθρωπος τὸ μὴ λευκόν· τὸ δ' ἀπλῶς μὴ τότε οὐδαμῶς), ἀδύνατον τὸ μὴ ὄν κινεῖσθαι (εἰ δὲ τοῦτο, καὶ τὴν γένεσιν κίνησιν εἶναι· γίγνεται γὰρ τὸ μὴ ὄν· εἰ γὰρ καὶ ὅτι μάλιστα κατὰ συμβεβηκός γίγνεται, ἀλλ' ὅμως ἀληθὲς εἶπεῖν ὅτι ὑπάρχει τὸ μὴ ὄν κατὰ τοῦ γιγνομένου ἀπλῶς)· ὁμοίως δὲ καὶ τὸ ἡρεμεῖν. ταῦτά τε δὴ συμβαίνει δυσχερῆ, καὶ εἰ

πάν τὸ κινούμενον ἐν τόπῳ, τὸ δὲ μὴ ὄν οὐκ ἔστιν ἐν τόπῳ· εἴη γὰρ ἂν πού. οὐδὲ δὴ ἡ φθορὰ κινήσεις· ἐναντίον γὰρ κινήσει κινήσεις ἢ ἡρεμία, [1068a] φθορὰ δὲ γενέσει. ἐπεὶ δὲ πᾶσα κινήσεις μεταβολή τις, μεταβολαὶ δὲ τρεῖς αἰ εἰρημέναι, τούτων δ' αἰ κατὰ γενέσιν καὶ φθορὰν οὐ κινήσεις, αὗται δ' εἰσὶν αἰ κατ' ἀντίφασιν, ἀνάγκη τὴν ἐξ ὑποκειμένου εἰς ὑποκείμενον κίνησιν εἶναι μόνην. τὰ δ' ὑποκείμενα ἢ ἐναντία ἢ μεταξύ (καὶ γὰρ ἡ στέρησις κείσθω ἐναντίον), καὶ δηλοῦνται καταφάσει, οἷον τὸ γυμνὸν καὶ νωδὸν καὶ μέλαν.

Εἰ οὖν αἰ κατηγορίαι διήρηνται οὐσία, ποιότητι, τόπῳ, τῷ ποιεῖν ἢ πάσχειν, τῷ πρὸς τι, τῷ ποσῶ, ἀνάγκη τρεῖς εἶναι κινήσεις, ποιοῦ ποσοῦ τόπου· κατ' οὐσίαν δ' οὐ, διὰ τὸ μηθὲν εἶναι οὐσία ἐναντίον, οὐδὲ τοῦ πρὸς τι (ἔστι γὰρ θατέρου μεταβάλλοντος μὴ ἀληθεύεσθαι θάτερον μηδὲν μεταβάλλον, ὥστε κατὰ συμβεβηκὸς ἡ κινήσεις αὐτῶν), οὐδὲ ποιοῦντος καὶ πάσχοντος, ἢ κινουῦντος καὶ κινουμένου, ὅτι οὐκ ἔστι κινήσεως κινήσεις οὐδὲ γενέσεως χένεσις, οὐδ' ὅλως μεταβολῆς μεταβολή. διχῶς γὰρ ἐνδέχεται κινήσεως εἶναι κίνησιν, ἢ ὡς ὑποκειμένου (οἷον ὁ ἄνθρωπος κινεῖται ὅτι ἐκ λευκοῦ εἰς μέλαν μεταβάλλει, ὥστε οὕτω καὶ ἡ κινήσεις ἢ θερμαίνεται ἢ ψύχεται ἢ τόπον ἀλλάττει ἢ αὖξεται· τοῦτο δὲ ἀδύνατον· οὐ γὰρ τῶν ὑποκειμένων τι ἢ μεταβολή), ἢ τῷ ἑτερόν τι ὑποκείμενον ἐκ μεταβολῆς μεταβάλλειν εἰς ἄλλο εἶδος, οἷον ἄνθρωπον ἐκ νόσου εἰς ὑγίειαν. ἀλλ' οὐδὲ τοῦτο δυνατόν πλην κατὰ συμβεβηκός. πᾶσα γὰρ κινήσεις ἐξ ἄλλου εἰς ἄλλο ἐστὶ μεταβολή, καὶ γενέσεις καὶ φθορὰ ὡσαύτως· πλην αἰ μὲν εἰς ἀντικείμενα ὡδί, ἢ δ' ὡδί, ἢ κινήσεις. ἅμα οὖν μεταβάλλει ἐξ ὑγιείας εἰς νόσον, καὶ ἐξ αὐτῆς ταύτης τῆς μεταβολῆς εἰς ἄλλην. δῆλον δὴ ὅτι ἂν νοσήσῃ, μεταβεβληκὸς ἔσται εἰς ὅποιον (ἐνδέχεται γὰρ ἡρεμεῖν) καὶ ἔτι εἰς μὴ τὴν τυχοῦσαν αἰ· κἀκείνη ἔκ τινος εἰς τι ἄλλο ἔσται· ὥσθ' ἡ ἀντικείμενη ἔσται, ὑγίανσις, ἀλλὰ τῷ συμβεβηκέναι, οἷον ἐξ ἀναμνήσεως εἰς λήθην μεταβάλλει ὅτι ὦ ὑπάρχει ἐκεῖνο μεταβάλλει, ὅτε μὲν εἰς ἐπιστήμην ὅτε δὲ εἰς ἄγνοϊαν. - ἔτι εἰς ἄπειρον βαδιεῖται, εἰ ἔσται μεταβολῆς μεταβολή καὶ γενέσεως γενέσεις. ἀνάγκη δὴ καὶ τὴν προτέραν, εἰ ἢ ὑστέρα· οἷον εἰ ἡ ἀπλῆ γενέσεις [1068b] ἐγίγνετό ποτε, καὶ τὸ γιγνόμενον ἐγίγνετο· ὥστε οὕτω ἦν τὸ γιγνόμενον ἀπλῶς, ἀλλὰ τι γιγνόμενον [ἢ] γιγνόμενον ἤδη. καὶ τοῦτ' ἐγίγνετό ποτε, ὥστ' οὐκ ἦν πῶ τότε γιγνόμενον. ἐπεὶ δὲ τῶν ἀπείρων οὐκ ἔστι τι πρῶτον, οὐκ ἔσται τὸ πρῶτον, ὥστ' οὐδὲ τὸ ἐχόμενον. οὔτε γίγνεσθαι οὖν οὔτε κινεῖσθαι οἷον τε οὔτε μεταβάλλειν οὐδέν. ἔτι τοῦ αὐτοῦ κινήσεις ἢ ἐναντία καὶ ἡρέμησις, καὶ γενέσεις καὶ φθορά, ὥστε τὸ γιγνόμενον, ὅταν γένηται γιγνόμενον, τότε φθείρεται· οὔτε γὰρ εὐθὺς γιγνόμενον οὔθ' ὕστερον· εἶναι γὰρ δεῖ τὸ φθειρόμενον. ἔτι δεῖ ὕλην ὑπεῖναι τῷ γιγνομένῳ καὶ μεταβάλλοντι. τίς οὖν ἔσται ὥσπερ τὸ ἀλλοιωτὸν σῶμα ἢ ψυχὴ - οὕτω τί τὸ γιγνόμενον

κίνησις ἢ γένεσις; καὶ ἔτι τί εἰς ὃ κινοῦνται; δεῖ γὰρ εἶναι τὴν τοῦδε ἐκ τοῦδε εἰς τόδε κίνησιν ἢ γένεσιν. πῶς οὖν; οὐ γὰρ ἔσται μάθησις τῆς μαθήσεως, ὥστ' οὐδὲ γένεσις γενέσεως. ἐπεὶ δ' οὐτ' οὐσίας οὔτε τοῦ πρὸς τι οὔτε τοῦ ποιεῖν καὶ πάσχειν, λείπεται κατὰ τὸ ποιὸν καὶ ποσὸν καὶ τόπον κίνησιν εἶναι (τούτων γὰρ ἑκάστω ἐναντίωσις ἔστιν), λέγω δὲ τὸ ποιὸν οὐ τὸ ἐν τῇ οὐσίᾳ (καὶ γὰρ ἡ διαφορὰ ποιόν) ἀλλὰ τὸ παθητικόν, καθ' ὃ λέγεται πάσχειν ἢ ἀπαθεῖς εἶναι. τὸ δὲ ἀκίνητον τό τε ὅλως ἀδύνατον κινηθῆναι καὶ τὸ μόλις ἐν χρόνῳ πολλῷ ἢ βραδέως ἀρχόμενον, καὶ τὸ πεφυκὸς μὲν κινεῖσθαι καὶ δυνάμενον «μὴ κινούμενον» δὲ ὅτε πέφυκε καὶ οὐ καὶ ὥς· ὃ καλῶ ἡρεμεῖν τῶν ἀκινήτων μόνον· ἐναντίον γὰρ ἡρεμία κινήσει, ὥστε στέρησις ἂν εἴη τοῦ δεκτικοῦ.

πάντ' ἔσται ταῦτά.

ἐν.

## Λ

Περὶ τῆς οὐσίας ἡ θεωρία· τῶν γὰρ οὐσιῶν αἱ ἀρχαὶ καὶ τὰ αἷτια ζητοῦνται. καὶ γὰρ εἰ ὥς ὅλον τι τὸ πᾶν, ἡ οὐσία πρῶτον μέρος· καὶ εἰ τῷ ἐφεξῆς, κἂν οὕτως πρῶτον ἡ οὐσία, εἴτα τὸ ποιόν, εἴτα τὸ ποσόν. ἅμα δὲ οὐδ' ὄντα ὥς εἰπεῖν ἀπλῶς ταῦτα, ἀλλὰ ποιότητες καὶ κινήσεις, ἢ καὶ τὸ οὐ λευκὸν καὶ τὸ οὐκ εὐθύ· λέγομεν γοῦν εἶναι καὶ ταῦτα, οἷον ἔστιν οὐ λευκόν. ἔτι οὐδὲν τῶν ἄλλων χωριστόν. μαρτυροῦσι δὲ καὶ οἱ ἀρχαῖοι ἔργῳ· τῆς γὰρ οὐσίας ἐζήτουν ἀρχὰς καὶ στοιχεῖα καὶ αἷτια. οἱ μὲν οὖν νῦν τὰ καθόλου οὐσίας μᾶλλον τιθέασιν (τὰ γὰρ γένη καθόλου, ἃ φασιν ἀρχὰς καὶ οὐσίας εἶναι μᾶλλον διὰ τὸ λογικῶς ζητεῖν)· οἱ δὲ πάλαι τὰ καθ' ἕκαστα, οἷον πῦρ καὶ γῆν, ἀλλ' οὐ τὸ κοινόν, σῶμα. οὐσίαι δὲ τρεῖς, μία μὲν αἰσθητή - ἥς ἡ μὲν αἰδῖος ἡ δὲ φθαρτή, ἦν πάντες ὁμολογοῦσιν, οἷον τὰ φυτὰ καὶ τὰ ζῶα [ἡ δ' αἰδῖος] - ἥς ἀνάγκη τὰ στοιχεῖα λαβεῖν, εἴτε ἓν εἴτε πολλά· ἄλλη δὲ ἀκίνητος, καὶ ταύτην φασὶ τινες εἶναι χωριστήν, οἱ μὲν εἰς δύο διαιροῦντες, οἱ δὲ εἰς μίαν φύσιν τιθέντες τὰ εἶδη καὶ τὰ μαθηματικά, οἱ δὲ τὰ μαθηματικὰ μόνον τούτων. ἐκεῖναι μὲν δὴ φυσικῆς [1069b] (μετὰ κινήσεως γάρ), αὕτη δὲ ἑτέρας, εἰ μηδεμία αὐτοῖς ἀρχὴ κοινή.

Ἡ δ' αἰσθητὴ οὐσία μεταβλητή. εἰ δ' ἡ μεταβολὴ ἐκ τῶν ἀντικειμένων ἢ τῶν μεταξὺ, ἀντικειμένων δὲ μὴ πάντων (οὐ λευκὸν γὰρ ἢ φωνή) ἄλλ' ἐκ τοῦ ἐναντίου, ἀνάγκη ὑπεῖναι τι τὸ μεταβάλλον εἰς τὴν ἐναντίωσιν· οὐ γὰρ τὰ ἐναντία μεταβάλλει. ἔτι τὸ μὲν ὑπομένει, τὸ δ' ἐναντίον οὐχ ὑπομένει· ἔστιν ἄρα τι τρίτον παρὰ τὰ ἐναντία, ἡ ὕλη. εἰ δὴ αἱ μεταβολαὶ τέτταρες, ἢ κατὰ τὸ τί ἢ κατὰ τὸ ποῖον ἢ πόσον ἢ ποῦ, καὶ γένεσις μὲν ἢ ἀπλῆ καὶ φθορὰ ἢ κατὰ <τὸ> τόδε, αὐξήσις δὲ καὶ φθίσις ἢ κατὰ τὸ ποσόν, ἀλλοίωσις δὲ ἢ κατὰ τὸ πάθος, φθορὰ δὲ ἢ κατὰ τόπον, εἰς ἐναντιώσεις ἂν εἶεν τὰς καθ' ἕκαστον αἱ μεταβολαί. ἀνάγκη δὴ μεταβάλλειν τὴν ὕλην δυναμένην ἅμφω· ἐπεὶ δὲ διττὸν τὸ ὄν, μεταβάλλει πᾶν ἐκ τοῦ δυνάμει ὄντος εἰς τὸ ἐνεργεῖα ὄν (οἷον ἐκ λευκοῦ δυνάμει εἰς τὸ ἐνεργεῖα λευκόν, ὁμοίως δὲ καὶ ἐπ' αὐξήσεως καὶ φθίσεως), ὥστε οὐ μόνον κατὰ συμβεβηκὸς ἐνδέχεται γίνεσθαι ἐκ μὴ ὄντος, ἀλλὰ καὶ ἐξ ὄντος γίνεταί πάντα, δυνάμει μέντοι ὄντος, ἐκ μὴ ὄντος δὲ ἐνεργεία. καὶ τοῦτ' ἔστι τὸ Ἀναξαγόρου ἔν· βέλτιον γὰρ ἢ “ὁμοῦ πάντα” - καὶ Ἐμπεδοκλέους τὸ μῖγμα καὶ Ἀναξιμάνδρου, καὶ ὥς Δημόκριτός φησιν - “ἦν ὁμοῦ πάντα δυνάμει, ἐνεργεία δ' οὐ”· ὥστε τῆς ὕλης ἂν εἶεν ἡμμένοι· πάντα δ' ὕλην ἔχει ὅσα μεταβάλλει, ἀλλ' ἑτέραν· καὶ τῶν αἰδίων ὅσα μὴ γενητὰ κινήτὰ δὲ φθορᾷ, ἀλλ' οὐ γενητὴν ἀλλὰ ποθὲν ποί. ἀπορήσειε δ' ἂν τις ἐκ ποίου μὴ ὄντος ἢ γένεσις· τριχῶς γὰρ τὸ μὴ ὄν. εἰ δὴ τι ἔστι δυνάμει, ἀλλ'

ὁμῶς οὐ τοῦ τυχόντος ἀλλ' ἕτερον ἐξ ἑτέρου· οὐδ' ἱκανὸν ὅτι ὁμοῦ πάντα χρήματα· διαφέρει γὰρ τῇ ὕλῃ, ἐπεὶ διὰ τί ἄπειρα ἐγένετο ἀλλ' οὐχ ἓν; ὁ γὰρ νοῦς εἷς, ὥστ' εἰ καὶ ἡ ὕλη μία, ἐκεῖνο ἐγένετο ἐνεργεία οὐ ἡ ὕλη ἦν δυνάμει. τρία δὲ τὰ αἷτια καὶ τρεῖς αἱ ἀρχαί, δύο μὲν ἡ ἐναντίωσις, ἥς τὸ μὲν λόγος καὶ εἶδος τὸ δὲ στέρησις, τὸ δὲ τρίτον ἡ ὕλη.

Μετὰ ταῦτα ὅτι οὐ γίνεταί οὔτε ἡ ὕλη οὔτε τὸ εἶδος, λέγω δὲ τὰ ἔσχατα. πᾶν γὰρ μεταβάλλει τὶ καὶ ὑπὸ [1070a] τινος καὶ εἷς τι· ὑφ' οὗ μὲν, τοῦ πρώτου κινουῦντος· ὃ δέ, ἡ ὕλη· εἷς ὃ δέ, τὸ εἶδος. εἷς ἄπειρον οὖν εἴσιν, εἰ μὴ μόνον ὁ χαλκὸς γίνεταί στρογγύλος ἀλλὰ καὶ τὸ στρογγύλον ἢ ὁ χαλκός· ἀνάγκη δὴ στήναι. - μετὰ ταῦτα ὅτι ἐκάστη ἐκ συνωνύμου γίνεταί οὐσία (τὰ γὰρ φύσει οὐσίαι καὶ τὰ ἄλλα). ἡ γὰρ τέχνη ἢ φύσει γίνεταί ἢ τύχῃ ἢ τῷ αὐτομάτῳ. ἡ μὲν οὖν τέχνη ἀρχὴ ἐν ἄλλῳ, ἡ δὲ φύσις ἀρχὴ ἐν αὐτῷ (ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ), αἱ δὲ λοιπαὶ αἰτίαι στερήσεις τούτων. οὐσίαι δὲ τρεῖς, ἡ μὲν ὕλη τόδε τι οὕσα τῷ φαίνεσθαι (ὅσα γὰρ ἀφῆ καὶ μὴ συμφύσει, ὕλη καὶ ὑποκείμενον), ἡ δὲ φύσις τόδε τι καὶ ἕξις τις εἷς ἦν· ἔτι τρίτη ἡ ἐκ τούτων ἡ καθ' ἑκάστα, οἷον Σωκράτης ἢ Καλλίας. ἐπὶ μὲν οὖν τινῶν τὸ τόδε τι οὐκ ἔστι παρὰ τὴν συνθετὴν οὐσίαν, οἷον οἰκίας τὸ εἶδος, εἰ μὴ ἡ τέχνη (οὐδ' ἔστι γένεσις καὶ φθορὰ τούτων, ἀλλ' ἄλλον τρόπον εἰσὶ καὶ οὐκ εἰσὶν οἰκία τε ἡ ἄνευ ὕλης καὶ ὑγίεια καὶ πᾶν τὸ κατὰ τέχνην), ἀλλ' εἵπερ, ἐπὶ τῶν φύσει· διὸ δὲ οὐ κακῶς Πλάτων ἔφη ὅτι εἶδη ἔστιν ὁπόσα φύσει, εἵπερ ἔστιν εἶδη ἄλλα τούτων οἷον πῦρ σὰρξ κεφαλή· ἅπαντα γὰρ ὕλη ἐστί, καὶ τῆς μάλιστ' οὐσίας ἡ τελευταία. τὰ μὲν οὖν κινουῦντα αἷτια ὡς προγεγενημένα ὄντα, τὰ δ' ὡς ὁ λόγος ἅμα. ὅτε γὰρ ὑγιαίνει ὁ ἄνθρωπος, τότε καὶ ἡ ὑγίεια ἔστιν, καὶ τὸ σχῆμα τῆς χαλκῆς σφαίρας ἅμα καὶ ἡ χαλκῇ σφαῖρα (εἰ δὲ καὶ ὑστερόν τι ὑπομένει, σκεπτέον· ἐπ' ἐνίων γὰρ οὐδὲν κωλύει, οἷον εἰ ἡ ψυχὴ τοιοῦτον, μὴ πᾶσα ἀλλ' ὁ νοῦς· πᾶσαν γὰρ ἀδύνατον ἴσως). φανερόν δὲ ὅτι οὐδὲν δεῖ διὰ γε ταῦτ' εἶναι τὰς ιδέας· ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ, ὁ καθ' ἑκάστον τὸν τινά· ὁμοίως δὲ καὶ ἐπὶ τῶν τεχνῶν· ἡ γὰρ ἰατρικὴ τέχνη ὁ λόγος τῆς ὑγείας ἐστίν.

Τὰ δ' αἷτια καὶ αἱ ἀρχαὶ ἄλλα ἄλλων ἔστιν ὥς, ἔστι δ' ὥς, ἂν καθόλου λέγῃ τις καὶ κατ' ἀναλογίαν, ταῦτά πάντων. ἀπορήσειε γὰρ ἂν τις πότερον ἕτεραι ἢ αἱ αὐταὶ ἀρχαὶ καὶ στοιχεῖα τῶν οὐσιῶν καὶ τῶν πρὸς τι, καὶ καθ' ἐκάστην δὴ τῶν κατηγοριῶν ὁμοίως. ἀλλ' ἄτοπον εἰ ταῦτά πάντων· ἐκ τῶν αὐτῶν γὰρ ἔσται τὰ πρὸς τι καὶ αἱ οὐσίαι.

[1070b] τί οὖν τοῦτ' ἔσται; παρὰ γὰρ τὴν οὐσίαν καὶ τᾶλλα τὰ κατηγορούμενα οὐδὲν ἐστὶ κοινόν, πρότερον δὲ τὸ στοιχεῖον ἢ ὧν στοιχεῖον·



ἀλλὰ μὴν οὐδ' ἡ οὐσία στοιχεῖον τῶν πρὸς τι, οὐδὲ τούτων οὐδὲν τῆς οὐσίας. ἔτι πῶς ἐνδέχεται πάντων εἶναι ταῦτ' ἀ στοιχεῖα; οὐδὲν γὰρ οἶον τ' εἶναι τῶν στοιχείων τῷ ἐκ στοιχείων συγκειμένῳ τὸ αὐτό, οἶον τῷ ΒΑ τὸ Β ἢ Α (οὐδὲ δὴ τῶν νοητῶν στοιχεῖόν ἐστιν, οἶον τὸ ὄν ἢ τὸ ἔν· ὑπάρχει γὰρ ταῦτα ἐκάστω καὶ τῶν συνθέτων). οὐδὲν ἄρ' ἔσται αὐτῶν οὔτ' οὐσία οὔτε πρὸς τι· ἀλλ' ἀναγκαῖον. οὐκ ἔστιν ἄρα πάντων ταῦτ' ἀ στοιχεῖα. - ἡ ὥσπερ λέγομεν, ἔστι μὲν ὥς, ἔστι δ' ὥς οὔ, οἶον ἴσως τῶν αἰσθητῶν σωμάτων ὥς μὲν εἶδος τὸ θερμὸν καὶ ἄλλον τρόπον τὸ ψυχρὸν ἢ στέρησις, ὕλη δὲ τὸ δυνάμει ταῦτα πρῶτον καθ' αὐτό, οὐσίαι δὲ ταῦτά τε καὶ τὰ ἐκ τούτων, ὧν ἀρχαὶ ταῦτα, ἢ εἴ τι ἐκ θερμοῦ καὶ ψυχροῦ γίνεται ἔν, οἶον σὰρξ ἢ ὀστοῦν· ἕτερον γὰρ ἀνάγκη ἐκείνων εἶναι τὸ γενόμενον. τούτων μὲν οὖν ταῦτ' ἀ στοιχεῖα καὶ ἀρχαί (ἄλλων δ' ἄλλα), πάντων δὲ οὕτω μὲν εἰπεῖν οὐκ ἔστιν, τῷ ἀνάλογον δέ, ὥσπερ εἴ τις εἴποι ὅτι ἀρχαὶ εἰσὶ τρεῖς, τὸ εἶδος καὶ ἡ στέρησις καὶ ἡ ὕλη. ἀλλ' ἕκαστον τούτων ἕτερον περὶ ἕκαστον γένος ἐστίν, οἶον ἐν χρώματι λευκὸν μέλαν ἐπιφάνεια· φῶς σκότος ἀήρ, ἐκ δὲ τούτων ἡμέρα καὶ νύξ. ἐπεὶ δὲ οὐ μόνον τὰ ἐνυπάρχοντα αἴτια, ἀλλὰ καὶ τῶν ἐκτὸς οἶον τὸ κινεῖν, δῆλον ὅτι ἕτερον ἀρχὴ καὶ στοιχεῖον, αἴτια δ' ἄμφω, καὶ εἰς ταῦτα διαιρεῖται ἡ ἀρχή, τὸ δ' ὥς κινεῖν ἢ ἰστὰν ἀρχὴ τις καὶ οὐσία, ὥστε στοιχεῖα μὲν κατ' ἀναλογίαν τρία, αἰτίαι δὲ καὶ ἀρχαὶ τέτταρες· ἄλλο δ' ἐν ἄλλῳ, καὶ τὸ πρῶτον αἴτιον ὥς κινεῖν ἄλλο ἄλλῳ. ὑγίεια, νόσος, σῶμα· τὸ κινεῖν ἰατρική. εἶδος, ἀταξία τοιαδί, πλίνθοι· τὸ κινεῖν οἰκοδομική [καὶ εἰς ταῦτα διαιρεῖται ἡ ἀρχή]. ἐπεὶ δὲ τὸ κινεῖν ἐν μὲν τοῖς φυσικοῖς ἀνθρώπῳ ἀνθρωπος, ἐν δὲ τοῖς ἀπὸ διανοίας τὸ εἶδος ἢ τὸ ἐναντίον, τρόπον τινὰ τρία αἴτια ἂν εἴη, ὡδὶ δὲ τέτταρα. ὑγίεια γὰρ πῶς ἢ ἰατρική, καὶ οἰκίας εἶδος ἢ οἰκοδομική, καὶ ἀνθρωπος ἀνθρωπον γεννᾷ· ἔτι παρὰ ταῦτα τὸ ὥς πρῶτον πάντων κινεῖν πάντα.

Ἐπεὶ δ' ἐστὶ τὰ μὲν χωριστὰ τὰ δ' οὐ χωριστά, οὐσίαι [1071a] ἐκεῖνα. καὶ διὰ τοῦτο πάντων αἴτια ταῦτά, ὅτι τῶν οὐσιῶν ἄνευ οὐκ ἔστι τὰ πάθη καὶ αἱ κινήσεις. ἔπειτα ἔσται ταῦτα ψυχὴ ἴσως καὶ σῶμα, ἢ νοῦς καὶ ὄρεξις καὶ σῶμα. - ἔτι δ' ἄλλον τρόπον τῷ ἀνάλογον ἀρχαὶ αἱ αὐταί, οἶον ἐνέργεια καὶ δύναμις· ἀλλὰ καὶ ταῦτα ἄλλα τε ἄλλοις καὶ ἄλλως. ἐν ἐνίοις μὲν γὰρ τὸ αὐτὸ ὅτε μὲν ἐνεργεῖα ἔστιν ὅτε δὲ δυνάμει, οἶον οἶνος ἢ σὰρξ ἢ ἀνθρωπος (πίπτει δὲ καὶ ταῦτα εἰς τὰ εἰρημένα αἴτια· ἐνεργεῖα μὲν γὰρ τὸ εἶδος, ἐὰν ἢ χωριστόν, καὶ τὸ ἐξ ἀμφοῖν στέρησις δέ, οἶον σκότος ἢ κάμνον, δυνάμει δὲ ἢ ὕλη· τοῦτο γὰρ ἐστὶ τὸ δυνάμενον γίνεσθαι ἄμφω)· ἄλλως δ' ἐνεργεῖα καὶ δυνάμει διαφέρει ὧν μὴ ἔστιν ἡ αὐτὴ ὕλη, ὧν «ἐνίων» οὐκ ἔστι τὸ αὐτὸ εἶδος ἀλλ' ἕτερον, ὥσπερ ἀνθρώπου αἴτιον τὰ τε στοιχεῖα, πῦρ καὶ γῆ ὥς ὕλη καὶ τὸ ἴδιον εἶδος, καὶ ἔτι τι ἄλλο ἔξω οἶον ὁ πατήρ, καὶ παρὰ ταῦτα ὁ ἥλιος καὶ

ὁ λοξὸς κύκλος, οὔτε ὕλη ὄντα οὔτ' εἶδος οὔτε στέρησις οὔτε ὁμοειδὲς ἀλλὰ κινουῖντα. ἔτι δὲ ὁρᾶν δεῖ ὅτι τὰ μὲν καθόλου ἔστιν εἰπεῖν, τὰ δ' οὔ. πάντων δὴ πρῶται ἀρχαὶ τὸ ἐνεργεῖα πρῶτον τοδὶ καὶ ἄλλο ὃ δυνάμει. ἐκεῖνα μὲν οὖν τὰ καθόλου οὐκ ἔστιν· ἀρχὴ γὰρ τὸ καθ' ἕκαστον τῶν καθ' ἕκαστον· ἄνθρωπος μὲν γὰρ ἀνθρώπου καθόλου, ἀλλ' οὐκ ἔστιν οὐδεὶς, ἀλλὰ Πηλεὺς Ἀχιλλέως σοῦ δὲ ὁ πατήρ, καὶ τοδὶ τὸ Β τουδὶ τοῦ ΒΑ, ὅλως δὲ τὸ Β τοῦ ἀπλῶς ΒΑ. ἔπειτα, εἰ δὴ τὰ τῶν οὐσιῶν, ἀλλὰ δὲ ἄλλων αἵτια καὶ στοιχεῖα, ὥσπερ ἐλέχθη, τῶν μὴ ἐν ταύτῳ γένει, χρωμάτων ψόφων οὐσιῶν ποσότητος, πλὴν τῷ ἀνάλογον· καὶ τῶν ἐν ταύτῳ εἶδει ἕτερα, οὐκ εἶδει ἀλλ' ὅτι τῶν καθ' ἕκαστον ἄλλο, ἢ τε σὴ ὕλη καὶ τὸ εἶδος καὶ τὸ κινήσαν καὶ ἡ ἐμή, τῷ καθόλου δὲ λόγῳ ταῦτά. τὸ δὲ ζητεῖν τίνες ἀρχαὶ ἢ στοιχεῖα τῶν οὐσιῶν καὶ πρὸς τι καὶ ποιῶν, πότερον αἰ αὐταὶ ἢ ἕτεραι, δῆλον ὅτι πολλαχῶς γε λεγομένων ἔστιν ἐκάστου, διαιρεθέντων δὲ οὐ ταῦτά ἀλλ' ἕτερα, πλὴν ὡδὶ καὶ πάντων, ὡδὶ μὲν ταῦτά ἢ τὸ ἀνάλογον, ὅτι ὕλη, εἶδος, στέρησις, τὸ κινουῖν, καὶ ὡδὶ τὰ τῶν οὐσιῶν αἵτια ὡς αἵτια πάντων, ὅτι ἀναιρεῖται ἀναιρουμένων· ἔτι τὸ πρῶτον ἐντελεχείᾳ· ὡδὶ δὲ ἕτερα πρῶτα ὅσα τὰ ἐναντία ἅ μήτε ὡς γένη λέγεται μήτε πολλαχῶς λέγεται· [1071b] καὶ ἔτι αἰ ὕλαι. τίνες μὲν οὖν αἰ ἀρχαὶ τῶν αἰσθητῶν καὶ πόσαι, καὶ πῶς αἰ αὐταὶ καὶ πῶς ἕτεραι, εἴρηται.

Ἐπεὶ δ' ἦσαν τρεῖς οὐσίαι, δύο μὲν αἰ φυσικαὶ μία δ' ἡ ἀκίνητος, περὶ ταύτης λεκτέον ὅτι ἀνάγκη εἶναι αἰδιόν τινα οὐσίαν ἀκίνητον. αἶ τε γὰρ οὐσίαι πρῶται τῶν ὄντων, καὶ εἰ πᾶσαι φθαρταί, πάντα φθαρτά· ἀλλ' ἀδύνατον κίνησιν ἢ γενέσθαι ἢ φθαρῆναι (ἀεὶ γὰρ ἦν), οὐδὲ χρόνον. οὐ γὰρ οἶόν τε τὸ πρότερον καὶ ὕστερον εἶναι μὴ ὄντος χρόνου· καὶ ἡ κίνησις ἄρα οὕτω συνεχῆς ὥσπερ καὶ ὁ χρόνος· ἢ γὰρ τὸ αὐτὸ ἢ κινήσεώς τι πάθος. κίνησις δ' οὐκ ἔστι συνεχῆς ἀλλ' ἢ ἡ κατὰ τόπον, καὶ ταύτης ἡ κύκλω.

Ἀλλὰ μὴν εἰ ἔστι κινητικὸν ἢ ποιητικόν, μὴ ἐνεργοῦν δέ τι, οὐκ ἔσται κίνησις· ἐνδέχεται γὰρ τὸ δύναναι ἔχον μὴ ἐνεργεῖν. οὐθὲν ἄρα ὄφελος οὐδ' ἐὰν οὐσίας ποιήσωμεν αἰδιόους, ὥσπερ οἱ τὰ εἶδη, εἰ μὴ τις δυναμένη ἐνέσται ἀρχὴ μεταβάλλειν· οὐ τοίνυν οὐδ' αὕτη ἱκανή, οὐδ' ἄλλη οὐσία παρὰ τὰ εἶδη· εἰ γὰρ μὴ ἐνεργήσει, οὐκ ἔσται κίνησις. ἔτι οὐδ' εἰ ἐνεργήσει, ἢ δ' οὐσία αὐτῆς δύναναι· οὐ γὰρ ἔσται κίνησις αἰδιός· ἐνδέχεται γὰρ τὸ δυνάμει ὄν μὴ εἶναι. δεῖ ἄρα εἶναι ἀρχὴν τοιαύτην ἣς ἡ οὐσία ἐνέργεια. ἔτι τοίνυν ταύτας δεῖ τὰς οὐσίας εἶναι ἄνευ ὕλης· αἰδιόους γὰρ δεῖ, εἴπερ γε καὶ ἄλλο τι αἰδιόν. ἐνέργεια ἄρα. καίτοι ἀπορία· δοκεῖ γὰρ τὸ μὲν ἐνεργοῦν πᾶν δύνασθαι τὸ δὲ δυνάμενον οὐ πᾶν ἐνεργεῖν, ὥστε πρότερον εἶναι τὴν δύναναι. ἀλλὰ μὴν εἰ τοῦτο, οὐθὲν ἔσται τῶν ὄντων· ἐνδέχεται γὰρ δύνασθαι μὲν

εἶναι μήπω δ' εἶναι. καίτοι εἰ ὡς λέγουσιν οἱ θεολόγοι οἱ ἐκ νυκτὸς γεννῶντες, ἢ ὡς οἱ φυσικοὶ ὁμοῦ πάντα χρήματά φασι, τὸ αὐτὸ ἀδύνατον. πῶς γὰρ κινηθήσεται, εἰ μὴ ἔσται ἐνεργεία τι αἷτιον; οὐ γὰρ ἢ γε ὕλη κινήσει αὐτὴ ἐαυτήν, ἀλλὰ τεκτονική, οὐδὲ τὰ ἐπιμήνια οὐδ' ἡ γῆ, ἀλλὰ τὰ σπέρματα καὶ ἡ γονή. διὸ ἔνιοι ποιοῦσιν ἀεὶ ἐνέργειαν, οἷον Λεύκιππος καὶ Πλάτων· ἀεὶ γὰρ εἶναί φασι κίνησιν. ἀλλὰ διὰ τί καὶ τίνα οὐ λέγουσιν, οὐδ', «εἰ» ὡδὶ «ἦ» ὡδί, τὴν αἰτίαν. οὐδὲν γὰρ ὡς ἔτυχε κινεῖται, ἀλλὰ δεῖ τι ἀεὶ ὑπάρχειν, ἔσπερ νῦν φύσει μὲν ὡδί, βία δὲ ἢ ὑπὸ νοῦ ἢ ἄλλου ὡδί. (εἵτα ποία πρώτη; διαφέρει γὰρ ἀμήχανον ὅσον). ἀλλὰ μὴν οὐδὲ Πλάτωνί [1072a] γε οἷόν τε λέγειν ἦν οἶεται ἐνίοτε ἀρχὴν εἶναι, τὸ αὐτὸ ἐαυτὸ κινεῖν· ὕστερον γὰρ καὶ ἅμα τῷ οὐρανῷ ἡ ψυχὴ, ὡς φησίν. τὸ μὲν δὴ δύναμιν οἶεσθαι ἐνεργείας πρότερον ἔστι μὲν ὡς καλῶς ἔστι δ' ὡς οὐ (εἴρηται δὲ πῶς)· ὅτι δ' ἐνέργεια πρότερον, μαρτυρεῖ Ἀναξαγόρας (ὁ γὰρ νοῦς ἐνέργεια) καὶ Ἐμπεδοκλῆς φιλίαν καὶ τὸ νεῖκος, καὶ οἱ ἀεὶ λέγοντες κίνησιν εἶναι, ὥσπερ Λεύκιππος· ὥστ' οὐκ ἦν ἄπειρον χρόνον χάος ἢ νύξ, ἀλλὰ ταῦτά ἀεὶ ἢ περιόδῳ ἢ ἄλλως, εἴπερ πρότερον ἐνέργεια δυνάμεως. εἰ δὴ τὸ αὐτὸ ἀεὶ περιόδῳ, δεῖ τι ἀεὶ μένειν ὡσαύτως ἐνεργοῦν. εἰ δὲ μέλλει γένεσις καὶ φθορὰ εἶναι, ἄλλο δεῖ εἶναι ἀεὶ ἐνεργοῦν ἄλλως καὶ ἄλλως. ἀνάγκη ἄρα ὡδὶ μὲν καθ' αὐτὸ ἐνεργεῖν ὡδὶ δὲ κατ' ἄλλο· ἦτοι ἄρα καθ' ἕτερον ἢ κατὰ τὸ πρῶτον. ἀνάγκη δὴ κατὰ τοῦτο· πάλιν γὰρ ἐκεῖνο αὐτῷ τε αἷτιον κἀκείνῳ. οὐκοῦν βέλτιον τὸ πρῶτον· καὶ γὰρ αἷτιον ἦν ἐκεῖνο τοῦ ἀεὶ ὡσαύτως· τοῦ δ' ἄλλως ἕτερον, τοῦ δ' ἀεὶ ἄλλως ἄμφω δηλονότι. οὐκοῦν οὕτως καὶ ἔχουσιν αἱ κινήσεις. τί οὖν ἄλλας δεῖ ζητεῖν ἀρχάς;

Ἐπεὶ δ' οὕτω τ' ἐνδέχεται, καὶ εἰ μὴ οὕτως, ἐκ νυκτὸς ἔσται καὶ ὁμοῦ πάντων καὶ ἐκ μὴ ὄντος, λύοιτ' ἂν ταῦτα, καὶ ἔστι τι ἀεὶ κινούμενον κίνησιν ἄπαυστον, αὕτη δ' ἡ κύκλω (καὶ τοῦτο οὐ λόγῳ μόνον ἀλλ' ἔργῳ δῆλον), ὥστ' αἰδῖος ἂν εἴη ὁ πρῶτος οὐρανός. ἔστι τοίνυν τι καὶ ὃ κινεῖ. ἐπεὶ δὲ τὸ κινούμενον καὶ κινεῖν [καὶ] μέσον, τοίνυν ἔστι τι ὃ οὐ κινούμενον κινεῖ, αἰδῖον καὶ οὐσία καὶ ἐνέργεια οὕσα. κινεῖ δὲ ὧδε τὸ ὀρεκτὸν καὶ τὸ νοητόν· κινεῖ οὐ κινούμενα. τούτων τὰ πρῶτα τὰ αὐτά. ἐπιθυμητὸν μὲν γὰρ τὸ φαινόμενον καλόν, βουλευτὸν δὲ πρῶτον τὸ ὄν καλόν· ὀρεγόμεθα δὲ διότι δοκεῖ μᾶλλον ἢ δοκεῖ διότι ὀρεγόμεθα· ἀρχὴ γὰρ ἡ νόησις. νοῦς δὲ ὑπὸ τοῦ νοητοῦ κινεῖται, νοητὴ δὲ ἡ ἑτέρα συστοιχία καθ' αὐτήν· καὶ ταύτης ἡ οὐσία πρώτη, καὶ ταύτης ἡ ἀπλῆ καὶ κατ' ἐνέργειαν (ἔστι δὲ τὸ ἐν καὶ τὸ ἀπλοῦν οὐ τὸ αὐτό· τὸ μὲν γὰρ ἐν μέτρον σημαίνει, τὸ δὲ ἀπλοῦν πῶς ἔχον αὐτό). ἀλλὰ μὴν καὶ τὸ καλὸν καὶ τὸ δι' αὐτὸ αἰρετὸν ἐν τῇ αὐτῇ συστοιχίᾳ· καὶ ἔστιν ἄριστον [1072b] ἀεὶ ἢ ἀνάλογον τὸ πρῶτον. ὅτι δ' ἔστι τὸ οὐ ἔνεκα ἐν τοῖς ἀκινήτοις, ἢ διαίρεσις δηλοῖ· ἔστι γὰρ τινὶ τὸ οὐ ἔνεκα «καὶ» τινός, ὧν τὸ

μὲν ἔστι τὸ δ' οὐκ ἔστι. κινεῖ δὴ ὡς ἐρώμενον, κινούμενα δὲ τᾶλλα κινεῖ. εἰ μὲν οὖν τι κινεῖται, ἐνδέχεται καὶ ἄλλως ἔχειν, ὥστ' εἰ [ἡ] φορὰ πρώτη ἢ ἐνέργειά ἐστιν, ἢ κινεῖται ταύτη γε ἐνδέχεται ἄλλως ἔχειν, κατὰ τόπον, καὶ εἰ μὴ κατ' οὐσίαν· ἐπεὶ δὲ ἔστι τι κινεῖν αὐτὸ ἀκίνητον ὄν, ἐνέργειά ὄν, τοῦτο οὐκ ἐνδέχεται ἄλλως ἔχειν οὐδαμῶς. φορὰ γὰρ ἢ πρώτη τῶν μεταβολῶν, ταύτης δὲ ἢ κύκλω· ταύτην δὲ τοῦτο κινεῖ. ἐξ ἀνάγκης ἄρα ἐστὶν ὄν· καὶ ἢ ἀνάγκῃ, καλῶς, καὶ οὕτως ἀρχή. τὸ γὰρ ἀναγκαῖον τοσαυταχῶς, τὸ μὲν βίᾳ ὅτι παρὰ τὴν ὁρμήν, τὸ δὲ οὐ οὐκ ἄνευ τὸ εὖ, τὸ δὲ μὴ ἐνδεχόμενον ἄλλως ἄλλ' ἀπλῶς. - ἐκ τοιαύτης ἄρα ἀρχῆς ἡρτηται ὁ οὐρανὸς καὶ ἡ φύσις. διαγωγὴ δ' ἐστὶν οἷα ἢ ἀρίστη μικρὸν χρόνον ἡμῖν (οὕτω γὰρ ἀεὶ ἐκεῖνο· ἡμῖν μὲν γὰρ ἀδύνατον), ἐπεὶ καὶ ἡδονὴ ἢ ἐνέργεια τούτου (καὶ διὰ τοῦτο ἐγρήγορσις αἴσθησις νόησις ἡδιστον, ἐλπίδες δὲ καὶ μνημαὶ διὰ ταῦτα). ἢ δὲ νόησις ἢ καθ' αὐτὴν τοῦ καθ' αὐτὸ ἀρίστου, καὶ ἢ μάλιστα τοῦ μάλιστα. αὐτὸν δὲ νοεῖ ὁ νοῦς κατὰ μετάληψιν τοῦ νοητοῦ· νοητὸς γὰρ γίνεταί θιγγάνων καὶ νοῶν, ὥστε ταῦτὸν νοῦς καὶ νοητόν. τὸ γὰρ δεκτικὸν τοῦ νοητοῦ καὶ τῆς οὐσίας νοῦς, ἐνεργεῖ δὲ ἔχων, ὥστ' ἐκείνου μᾶλλον τοῦτο ὃ δοκεῖ ὁ νοῦς θεῖον ἔχειν, καὶ ἢ θεωρία τὸ ἡδιστον καὶ ἄριστον. εἰ οὖν οὕτως εὖ ἔχει, ὡς ἡμεῖς ποτέ, ὁ θεὸς ἀεὶ, θαυμαστόν· εἰ δὲ μᾶλλον, ἔτι θαυμασιώτερον. ἔχει δὲ ὧδε. καὶ ζωὴ δὲ γε ὑπάρχει· ἢ γὰρ νοῦ ἐνέργεια ζωή, ἐκεῖνος δὲ ἢ ἐνέργεια· ἐνέργεια δὲ ἢ καθ' αὐτὴν ἐκείνου ζωὴ ἀρίστη καὶ αἰδῖος. φαμὲν δὴ τὸν θεὸν εἶναι ζῶον αἰδῖον ἄριστον, ὥστε ζωὴ καὶ αἰῶν συνεχὴς καὶ αἰδῖος ὑπάρχει τῷ θεῷ· τοῦτο γὰρ ὁ θεός. ὅσοι δὲ ὑπολαμβάνουσιν, ὥσπερ οἱ Πυθαγόρειοι καὶ Σπεύσιππος τὸ κάλλιστον καὶ ἄριστον μὴ ἐν ἀρχῇ εἶναι, διὰ τὸ καὶ τῶν φυτῶν καὶ τῶν ζώων τὰς ἀρχὰς αἴτια μὲν εἶναι τὸ δὲ καλὸν καὶ τέλειον ἐν τοῖς ἐκ τούτων, οὐκ ὀρθῶς οἴονται. τὸ γὰρ σπέρμα ἐξ ἐτέρων ἐστὶ προτέρων τελείων, καὶ τὸ [1073a] πρῶτον οὐ σπέρμα ἐστὶν ἀλλὰ τὸ τέλειον· οἷον πρότερον ἄνθρωπον ἂν φαίη τις εἶναι τοῦ σπέρματος, οὐ τὸν ἐκ τούτου γενόμενον ἀλλ' ἕτερον ἐξ οὗ τὸ σπέρμα. ὅτι μὲν οὖν ἔστιν οὐσία τις αἰδῖος καὶ ἀκίνητος καὶ κεχωρισμένη τῶν αἰσθητῶν, φανερόν ἐκ τῶν εἰρημένων· δέδεικται δὲ καὶ ὅτι μέγεθος οὐδὲν ἔχειν ἐνδέχεται ταύτην τὴν οὐσίαν ἄλλ' ἀμερῆς καὶ ἀδιαίρετός ἐστιν (κινεῖ γὰρ τὸν ἄπειρον χρόνον, οὐδὲν δ' ἔχει δύναμιν ἄπειρον πεπερασμένον· ἐπεὶ δὲ πᾶν μέγεθος ἢ ἄπειρον ἢ πεπερασμένον, πεπερασμένον μὲν διὰ τοῦτο οὐκ ἂν ἔχοι μέγεθος, ἄπειρον δ' ὅτι ὅλως οὐκ ἔστιν οὐδὲν ἄπειρον μέγεθος)· ἀλλὰ μὴν καὶ ὅτι ἀπαθὲς καὶ ἀναλλοίωτον· πᾶσαι γὰρ αἱ ἄλλαι κινήσεις ὕστεραι τῆς κατὰ τόπον. ταῦτα μὲν οὖν δῆλα διότι τοῦτον ἔχει τὸν τρόπον.

Πότερον δὲ μίαν θετέον τὴν τοιαύτην οὐσίαν ἢ πλείους, καὶ πόσας, δεῖ μὴ λανθάνειν, ἀλλὰ μεμνησθαι καὶ τὰς τῶν ἄλλων ἀποφάσεις, ὅτι περὶ πλήθους

οὐθὲν εἰρήκασιν ὅ τι καὶ σαφὲς εἶπειν. ἡ μὲν γὰρ περὶ τὰς ἰδέας ὑπόληψις οὐδεμίαν ἔχει σκέψιν ἰδίαν (ἀριθμοὺς γὰρ λέγουσι τὰς ἰδέας οἱ λέγοντες ἰδέας, περὶ δὲ τῶν ἀριθμῶν ὅτε μὲν ὡς περὶ ἀπείρων λέγουσιν ὅτε δὲ ὡς μέχρι τῆς δεκάδος ὠρισμένων· δι' ἣν δ' αἰτίαν τοσοῦτον τὸ πλῆθος τῶν ἀριθμῶν, οὐδὲν λέγεται μετὰ σπουδῆς ἀποδεικτικῆς)· ἡμῖν δ' ἐκ τῶν ὑποκειμένων καὶ διωρισμένων λεκτέον. ἡ μὲν γὰρ ἀρχὴ καὶ τὸ πρῶτον τῶν ὄντων ἀκίνητον καὶ καθ' αὐτὸ καὶ κατὰ συμβεβηκός, κινοῦν δὲ τὴν πρώτην αἰδίον καὶ μίαν κίνησιν· ἐπεὶ δὲ τὸ κινούμενον ἀνάγκη ὑπὸ τινος κινεῖσθαι, καὶ τὸ πρῶτον κινοῦν ἀκίνητον εἶναι καθ' αὐτό, καὶ τὴν αἰδίον κίνησιν ὑπὸ αἰδίου κινεῖσθαι καὶ τὴν μίαν ὑφ' ἑνός, ὁρῶμεν δὲ παρὰ τὴν τοῦ παντός τὴν ἀπλὴν φορὰν, ἣν κινεῖν φαμέν τὴν πρώτην οὐσίαν καὶ ἀκίνητον, ἄλλας φορὰς οὕσας τὰς τῶν πλανήτων αἰδίους (αἰδίον γὰρ καὶ ἄστατον τὸ κύκλῳ σῶμα· δέδεικται δ' ἐν τοῖς φυσικοῖς περὶ τούτων), ἀνάγκη καὶ τούτων ἐκάστην τῶν φορῶν ὑπ' ἀκινήτου τε κινεῖσθαι καθ' αὐτὴν καὶ αἰδίου οὐσίας. ἢ τε γὰρ τῶν ἄστρον φύσις αἰδῖος οὐσία τις οὕσα, καὶ τὸ κινοῦν αἰδίον καὶ πρότερον τοῦ κινουμένου, καὶ τὸ πρότερον οὐσίας οὐσίαν ἀναγκαῖον εἶναι. φανερόν τοίνυν ὅτι τοσαύτας τε οὐσίας ἀναγκαῖον εἶναι τὴν τε φύσιν αἰδίου καὶ ἀκινήτους καθ' αὐτάς, καὶ ἄνευ μεγέθους [1073b] διὰ τὴν εἰρημένην αἰτίαν πρότερον. - ὅτι μὲν οὖν εἰσὶν οὐσίαι, καὶ τούτων τις πρώτη καὶ δευτέρα κατὰ τὴν αὐτὴν τάξιν ταῖς φοραῖς τῶν ἄστρον, φανερόν· τὸ δὲ πλῆθος ἤδη τῶν φορῶν ἐκ τῆς οἰκαιοτάτης φιλοσοφίας τῶν μαθηματικῶν ἐπιστημῶν δεῖ σκοπεῖν, ἐκ τῆς ἀστρολογίας· αὕτη γὰρ περὶ οὐσίας αἰσθητῆς μὲν αἰδίου δὲ ποιεῖται τὴν θεωρίαν, αἱ δ' ἄλλαι περὶ οὐδεμιᾶς οὐσίας, οἷον ἢ τε περὶ τοὺς ἀριθμοὺς καὶ τὴν γεωμετρίαν. ὅτι μὲν οὖν πλείους τῶν φερομένων αἱ φοραί, φανερόν τοῖς καὶ μετρίως ἡμμένοις (πλείους γὰρ ἕκαστον φέρεται μιᾶς τῶν πλανωμένων ἄστρον)· πόσαι δ' αὗται τυγχάνουσιν οὕσαι, νῦν μὲν ἡμεῖς ἃ λέγουσι τῶν μαθηματικῶν τινὲς ἐννοίας χάριν λέγομεν, ὅπως ἢ τι τῇ διανοίᾳ πλῆθος ὠρισμένον ὑπολαβεῖν· τὸ δὲ λοιπὸν τὰ μὲν ζητοῦντας αὐτοὺς δεῖ τὰ δὲ πυνθανομένους παρὰ τῶν ζητούντων, ἃν τι φαίνεται παρὰ τὰ νῦν εἰρημένα τοῖς ταῦτα πραγματευομένοις, φιλεῖν μὲν ἀμφοτέρους, πείθεσθαι δὲ τοῖς ἀκριβεστέροις. - Εὐδοξος μὲν οὖν ἡλίου καὶ σελήνης ἑκατέρου τὴν φορὰν ἐν τρισὶν ἐτίθετ' εἶναι σφαίραις, ὧν τὴν μὲν πρώτην τὴν τῶν ἀπλανῶν ἄστρον εἶναι, τὴν δὲ δευτέραν κατὰ τὸν διὰ μέσων τῶν ζωδίων, τὴν δὲ τρίτην κατὰ τὸν λελοξωμένον ἐν τῷ πλάτει τῶν ζωδίων (ἐν μείζονι δὲ πλάτει λελοξῶσθαι καθ' ὃν ἡ σελήνη φέρεται ἢ καθ' ὃν ὁ ἥλιος), τῶν δὲ πλανωμένων ἄστρον ἐν τέτταρσιν ἐκάστου σφαίραις, καὶ τούτων δὲ τὴν μὲν πρώτην καὶ δευτέραν τὴν αὐτὴν εἶναι ἐκείναις (τὴν τε γὰρ τῶν ἀπλανῶν τὴν ἀπάσας φέρουσιν εἶναι, καὶ τὴν ὑπὸ ταύτῃ τεταγμένην καὶ κατὰ τὸν διὰ μέσων τῶν ζωδίων τὴν φορὰν ἔχουσιν κοινήν ἀπασῶν εἶναι), τῆς δὲ τρίτης ἀπάντων τοὺς πόλους ἐν

τῷ διὰ μέσων τῶν ζωδίων εἶναι, τῆς δὲ τετάρτης τὴν φορὰν κατὰ τὸν λελοξωμένον πρὸς τὸν μέσον ταύτης· εἶναι δὲ τῆς τρίτης σφαίρας τοὺς πόλους τῶν μὲν ἄλλων ἰδίους, τοὺς δὲ τῆς Ἀφροδίτης καὶ τοῦ Ἑρμοῦ τοὺς αὐτοὺς· Κάλλιππος δὲ τὴν μὲν θέσιν τῶν σφαιρῶν τὴν αὐτὴν ἐτίθετο Εὐδόξω [τοῦτ' ἔστι τῶν ἀποστημάτων τὴν τάξιν], τὸ δὲ πλῆθος τῷ μὲν τοῦ Διὸς καὶ τῷ τοῦ Κρόνου τὸ αὐτὸ ἐκείνῳ ἀπεδίδου, τῷ δ' ἡλίῳ καὶ τῇ σελήνῃ δύο ὤετο ἔτι προσθετέας εἶναι σφαίρας, τὰ φαινόμενα εἰ μέλλει τις ἀποδώσειν, τοῖς δὲ λοιποῖς τῶν πλανήτων ἑκάστω μίαν. ἀναγκαῖον δέ, εἰ μέλλουσι συντεθεῖσαι [1074a] πᾶσαι τὰ φαινόμενα ἀποδώσειν, καθ' ἕκαστον τῶν πλανωμένων ἑτέρας σφαίρας μιᾷ ἐλάττονας εἶναι τὰς ἀνελιπτούσας καὶ εἰς τὸ αὐτὸ ἀποκαθιστάσας τῇ θέσει τὴν πρώτην σφαῖραν ἀεὶ τοῦ ὑποκάτω τεταγμένου ἄστρου· οὕτω γὰρ μόνως ἐνδέχεται τὴν τῶν πλανήτων φορὰν ἅπαντα ποιεῖσθαι. ἐπεὶ οὖν ἐν αἷς μὲν αὐτὰ φέρεται σφαίραις αἱ μὲν ὀκτὼ αἱ δὲ πέντε καὶ εἴκοσιν εἰσιν, τούτων δὲ μόνας οὐ δεῖ ἀνελιχθῆναι ἐν αἷς τὸ κατωτάτω τεταγμένον φέρεται, αἱ μὲν τὰς τῶν πρώτων δύο ἀνελίπτουσαι ἔξ ἔσσονται, αἱ δὲ τὰς τῶν ὕστερον τεττάρων ἑκκαίδεκα· ὁ δὲ ἅπασων ἀριθμὸς τῶν τε φερουσῶν καὶ τῶν ἀνελιπτουσῶν ταύτας πεντήκοντά τε καὶ πέντε. εἰ δὲ τῇ σελήνῃ τε καὶ τῷ ἡλίῳ μὴ προστιθεῖται τις ἅς εἵπομεν κινήσεις, αἱ πᾶσαι σφαῖραι ἔσσονται ἑπτὰ τε καὶ τεσσαράκοντα. - τὸ μὲν οὖν πλῆθος τῶν σφαιρῶν ἔστω τοσοῦτον, ὥστε καὶ τὰς οὐσίας καὶ τὰς ἀρχὰς τὰς ἀκινήτους [καὶ τὰς αἰσθητάς] τοσαύτας εὐλογον ὑπολαβεῖν (τὸ γὰρ ἀναγκαῖον ἀφείσθω τοῖς ἰσχυροτέροις λέγειν)· εἰ δὲ μηδεμίαν οἶόν τ' εἶναι φορὰν μὴ συντείνουσιν πρὸς ἄστρου φορὰν, ἔτι δὲ πᾶσαν φύσιν καὶ πᾶσαν οὐσίαν ἀπαθῆ καὶ καθ' αὐτὴν τοῦ ἀρίστου τετυχηκυῖαν τέλος εἶναι δεῖ νομίζειν, οὐδεμία ἂν εἴη παρὰ ταύτας ἑτέρα φύσις, ἀλλὰ τοῦτον ἀνάγκη τὸν ἀριθμὸν εἶναι τῶν οὐσιῶν. εἴτε γὰρ εἰσὶν ἕτεραι, κινοῖεν ἂν ὡς τέλος οὔσαι φορᾶς· ἀλλὰ εἶναι γε ἄλλας φορὰς ἀδύνατον παρὰ τὰς εἰρημένας. τοῦτο δὲ εὐλογον ἐκ τῶν φερομένων ὑπολαβεῖν. εἰ γὰρ πᾶν τὸ φέρον τοῦ φερομένου χάριν πέφυκε καὶ φορὰ πᾶσα φερομένου τινός ἐστιν, οὐδεμία φορὰ αὐτῆς ἂν ἔνεκα εἴη οὐδ' ἄλλης φορᾶς, ἀλλὰ τῶν ἄστρον ἔνεκα. εἰ γὰρ ἔσται φορὰ φορᾶς ἔνεκα, καὶ ἐκείνην ἑτέρου δεήσει χάριν εἶναι· ὥστ' ἐπειδὴ οὐχ οἶόν τε εἰς ἄπειρον, τέλος ἔσται πάσης φορᾶς τῶν φερομένων τι θείων σωμάτων κατὰ τὸν οὐρανόν. ὅτι δὲ εἷς οὐρανός, φανερόν. εἰ γὰρ πλείους οὐρανοὶ ὥσπερ ἄνθρωποι, ἔσται εἶδει μία ἢ περὶ ἕκαστον ἀρχή, ἀριθμῷ δέ γε πολλά. ἀλλ' ὅσα ἀριθμῷ πολλά, ὕλην ἔχει (εἷς γὰρ λόγος καὶ ὁ αὐτὸς πολλῶν, οἶον ἀνθρώπου, Σωκράτης δὲ εἷς)· τὸ δὲ τί ἦν εἶναι οὐκ ἔχει ὕλην τὸ πρῶτον· ἐντελέχεια γάρ. ἐν ἅρᾳ καὶ λόγῳ καὶ ἀριθμῷ τὸ πρῶτον κινοῦν ἀκίνητον ὄν· καὶ τὸ κινούμενον ἅρᾳ ἀεὶ καὶ συνεχῶς· εἷς ἅρᾳ οὐρανὸς μόνος. παραδέδοται [1074b] δὲ παρὰ τῶν ἀρχαίων

καὶ παμπαλαίων ἐν μύθου σχήματι καταλελειμμένα τοῖς ὕστερον ὅτι θεοὶ τέ  
εἰσιν οὗτοι καὶ περιέχει τὸ θεῖον τὴν ὅλην φύσιν. τὰ δὲ λοιπὰ μυθικῶς ἤδη  
προσῆκται πρὸς τὴν πειθῶ τῶν πολλῶν καὶ πρὸς τὴν εἰς τοὺς νόμους καὶ τὸ  
συμφέρον χρῆσιν· ἀνθρωποειδεῖς τε γὰρ τούτους καὶ τῶν ἄλλων ζώων  
ὁμοίους τισὶ λέγουσι, καὶ τούτοις ἕτερα ἀκόλουθα καὶ παραπλήσια τοῖς  
εἰρημένοις, ὧν εἴ τις χωρίσας αὐτὸ λάβοι μόνον τὸ πρῶτον, ὅτι θεοὺς ὦντο  
τὰς πρώτας οὐσίας εἶναι, θεῖως ἂν εἰρῆσθαι νομίσειεν, καὶ κατὰ τὸ εἰκὸς  
πολλάκις εὐρημένης εἰς τὸ δυνατόν ἐκάστης καὶ τέχνης καὶ φιλοσοφίας καὶ  
πάλιν φθειρομένων καὶ ταύτας τὰς δόξας ἐκείνων οἷον λείψανα περισεσῶσθαι  
μέχρι τοῦ νῦν. ἢ μὲν οὖν πάτριος δόξα καὶ ἡ παρὰ τῶν πρώτων ἐπὶ τοσοῦτον  
ἡμῖν φανερά μό❖

Τὰ δὲ περὶ τὸν νοῦν ἔχει τινὰς ἀπορίας· δοκεῖ μὲν γὰρ εἶναι τῶν  
φαινομένων θεϊότατον, πῶς δ' ἔχων τοιοῦτος ἂν εἴη, ἔχει τινὰς δυσκολίας.  
εἴτε γὰρ μηδὲν νοεῖ, τί ἂν εἴη τὸ σεμνόν, ἀλλ' ἔχει ὥσπερ ἂν εἰ ὁ καθεύδων·  
εἴτε νοεῖ, τούτου δ' ἄλλο κύριον, οὐ γὰρ ἐστὶ τοῦτο ὃ ἐστὶν αὐτοῦ ἡ οὐσία  
νόησις, ἀλλὰ δύνάμις, οὐκ ἂν ἡ ἀρίστη οὐσία εἴη· διὰ γὰρ τοῦ νοεῖν τὸ  
τίμιον αὐτῷ ὑπάρχει. ἔτι δὲ εἴτε νοῦς ἡ οὐσία αὐτοῦ εἴτε νόησις ἐστὶ, τί νοεῖ;  
ἢ γὰρ αὐτὸς αὐτὸν ἢ ἕτερόν τι· καὶ εἰ ἕτερόν τι, ἢ τὸ αὐτὸ ἀεὶ ἢ ἄλλο.  
πότερον οὖν διαφέρει τι ἢ οὐδὲν τὸ νοεῖν τὸ καλὸν ἢ τὸ τυχόν; ἢ καὶ ἄτοπον  
τὸ διανοεῖσθαι περὶ ἐνίων; δῆλον τοίνυν ὅτι τὸ θεϊότατον καὶ τιμιώτατον νοεῖ,  
καὶ οὐ μεταβάλλει· εἰς χεῖρον γὰρ ἡ μεταβολή, καὶ κίνησις τις ἤδη τὸ  
τοιοῦτον. πρῶτον μὲν οὖν εἰ μὴ νόησις ἐστὶν ἀλλὰ δύνάμις, εὐλογον  
ἐπίπονον εἶναι τὸ συνεχὲς αὐτῷ τῆς νοήσεως· ἔπειτα δῆλον ὅτι ἄλλο τι ἂν εἴη  
τὸ τιμιώτερον ἢ ὁ νοῦς, τὸ νοούμενον. καὶ γὰρ τὸ νοεῖν καὶ ἡ νόησις ὑπάρξει  
καὶ τὸ χεῖριστον νοοῦντι, ὥστ' εἰ φευκτὸν τοῦτο (καὶ γὰρ μὴ ὁρᾶν ἔνια  
κρεῖττον ἢ ὁρᾶν), οὐκ ἂν εἴη τὸ ἄριστον ἡ νόησις. αὐτὸν ἄρα νοεῖ, εἴπερ  
ἐστὶ τὸ κράτιστον, καὶ ἔστιν ἡ νόησις νοήσεως νόησις. φαίνεται δ' ἀεὶ ἄλλου  
ἢ ἐπιστήμη καὶ ἡ αἴσθησις καὶ ἡ δόξα καὶ ἡ διάνοια, αὐτῆς δ' ἐν παρέργῳ.  
ἔτι εἰ ἄλλο τὸ νοεῖν καὶ τὸ νοεῖσθαι, κατὰ πότερον αὐτῷ τὸ εὖ ὑπάρχει;  
οὐδὲ γὰρ ταῦτὸ τὸ εἶναι νοήσει καὶ νοουμένῳ. ἢ ἐπ' [1075a] ἐνίων ἢ  
ἐπιστήμη τὸ πρᾶγμα, ἐπὶ μὲν τῶν ποιητικῶν ἄνευ ὕλης ἡ οὐσία καὶ τὸ τί ἦν  
εἶναι, ἐπὶ δὲ τῶν θεωρητικῶν ὁ λόγος τὸ πρᾶγμα καὶ ἡ νόησις; οὐχ ἑτέρου  
οὖν ὄντος τοῦ νοουμένου καὶ τοῦ νοῦ, ὅσα μὴ ὕλην ἔχει, τὸ αὐτὸ ἔσται, καὶ  
ἡ νόησις τῷ νοουμένῳ μία. ἔτι δὲ λείπεται ἀπορία, εἰ σύνθετον τὸ νοούμενον·  
μεταβάλλοι γὰρ ἂν ἐν τοῖς μέρεσι τοῦ ὅλου. ἢ ἀδιαίρετον πᾶν τὸ μὴ ἔχον  
ὕλην - ὥσπερ ὁ ἀνθρώπινος νοῦς ἢ ὁ γε τῶν συνθέτων ἔχει ἔν τι χρόνῳ (οὐ  
γὰρ ἔχει τὸ εὖ ἐν τῷδὲ ἢ ἐν τῷδί, ἀλλ' ἐν ὅλῳ τινὶ τὸ ἄριστον, ὃν ἄλλο τι) -  
οὕτως δ' ἔχει αὐτὴ αὐτῆς ἡ νόησις τὸν ἅπαντα αἰῶνα;

Ἐπισκεπτέον δὲ καὶ ποτέρως ἔχει ἢ τοῦ ὅλου φύσις τὸ ἀγαθὸν καὶ τὸ ἄριστον, πότερον κεχωρισμένον τι καὶ αὐτὸ καθ' αὐτό, ἢ τὴν τάξιν. ἢ ἀμφοτέρως ὥσπερ στράτευμα; καὶ γὰρ ἐν τῇ τάξει τὸ εὖ καὶ ὁ στρατηγός, καὶ μᾶλλον οὗτος· οὐ γὰρ οὗτος διὰ τὴν τάξιν ἀλλ' ἐκείνη διὰ τοῦτόν ἐστιν. πάντα δὲ συντέτακται πως, ἀλλ' οὐχ ὁμοίως, καὶ πλωτὰ καὶ πτηνὰ καὶ φυτὰ· καὶ οὐχ οὕτως ἔχει ὥστε μὴ εἶναι θατέρω πρὸς θάτερον μηδέν, ἀλλ' ἔστι τι. πρὸς μὲν γὰρ ἐν ἅπαντα συντέτακται, ἀλλ' ὥσπερ ἐν οἰκίᾳ τοῖς ἐλευθέροις ἥκιστα ἔξεστιν ὅ τι ἔτυχε ποιεῖν, ἀλλὰ πάντα ἢ τὰ πλεῖστα τέτακται, τοῖς δὲ ἀνδραπόδοις καὶ τοῖς θηρίοις μικρὸν τὸ εἰς τὸ κοινόν, τὸ δὲ πολὺ ὅ τι ἔτυχεν· τοιαύτη γὰρ ἐκάστου ἀρχὴ αὐτῶν ἢ φύσις ἐστίν. λέγω δ' οἶον εἰς γε τὸ διακριθῆναι ἀνάγκη ἅπασιν ἐλθεῖν, καὶ ἄλλα οὕτως ἔστιν ὧν κοινωνεῖ ἅπαντα εἰς τὸ ὅλον. - ὅσα δὲ ἀδύνατα συμβαίνει ἢ ἄτοπα τοῖς ἄλλως λέγουσι, καὶ ποῖα οἱ χαριεστέως λέγοντες, καὶ ἐπὶ ποίων ἐλάχισται ἀπορίαι, δεῖ μὴ λανθάνειν. πάντες γὰρ ἐξ ἐναντίων ποιοῦσι πάντα. οὔτε δὲ τὸ πάντα οὔτε τὸ ἐξ ἐναντίων ὀρθῶς, οὔτ' ἐν ὅσοις τὰ ἐναντία ὑπάρχει, πῶς ἐκ τῶν ἐναντίων ἔσται, οὐ λέγουσιν· ἀπαθῆ γὰρ τὰ ἐναντία ὑπ' ἀλλήλων. ἡμῖν δὲ λύεται τοῦτο εὐλόγως τῷ τρίτον τι εἶναι. οἱ δὲ τὸ ἕτερον τῶν ἐναντίων ὕλην ποιοῦσιν, ὥσπερ οἱ τὸ ἄνισον τῷ ἴσῳ ἢ τῷ ἐνὶ τὰ πολλά. λύεται δὲ καὶ τοῦτο τὸν αὐτὸν τρόπον· ἢ γὰρ ὕλη ἢ μία οὐδενὶ ἐναντίον. ἔτι ἅπαντα τοῦ φαύλου μεθέξει ἔξω τοῦ ἐνός· τὸ γὰρ κακὸν αὐτὸ θάτερον τῶν στοιχείων. οἱ δ' ἄλλοι οὐδ' ἀρχὰς τὸ ἀγαθὸν καὶ τὸ κακόν· καίτοι ἐν ἅπασιν μάλιστα τὸ ἀγαθὸν ἀρχή. οἱ δὲ τοῦτο μὲν ὀρθῶς ὅτι ἀρχήν, ἀλλὰ πῶς τὸ ἀγαθὸν ἀρχὴ οὐ λέγουσιν, πότερον ὡς τέλος ἢ ὡς κινήσαν ἢ ὡς εἶδος. ἀτόπως δὲ καὶ Ἐμπεδοκλῆς· τὴν γὰρ φιλίαν ποιεῖ τὸ ἀγαθόν, αὕτη δ' ἀρχὴ καὶ ὡς κινουσα (συνάγει γάρ) καὶ ὡς ὕλη· μόριον γὰρ τοῦ μίγματος. εἰ δὲ καὶ τῷ αὐτῷ συμβέβηκεν καὶ ὡς ὕλη ἀρχῇ εἶναι καὶ ὡς κινοῦντι, ἀλλὰ τό γ' εἶναι οὐ ταῦτό. κατὰ πότερον οὖν φιλία; ἄτοπον δὲ καὶ τὸ ἄφθαρτον εἶναι τὸ νεῖκος· τοῦτο δ' ἐστὶν αὐτῷ ἢ τοῦ κακοῦ φύσις. Ἀναξαγόρας δὲ ὡς κινοῦν τὸ ἀγαθὸν ἀρχήν· ὁ γὰρ νοῦς κινεῖ. ἀλλὰ κινεῖ ἕνεκά τινος, ὥστε ἕτερον, πλὴν ὡς ἡμεῖς λέγομεν· ἢ γὰρ ἰατρικὴ ἐστὶ πως ἢ ὑγίεια. ἄτοπον δὲ καὶ τὸ ἐναντίον μὴ ποιῆσαι τῷ ἀγαθῷ καὶ τῷ νῷ. πάντες δ' οἱ τὰναντία λέγοντες οὐ χρῶνται τοῖς ἐναντίοις, ἐὰν μὴ ῥυθμίση τις. καὶ διὰ τί τὰ μὲν φθαρτὰ τὰ δ' ἄφθαρτα, οὐδεὶς λέγει· πάντα γὰρ τὰ ὄντα ποιοῦσιν ἐκ τῶν αὐτῶν ἀρχῶν. ἔτι οἱ μὲν ἐκ τοῦ μὴ ὄντος ποιοῦσι τὰ ὄντα· οἱ δ' ἵνα μὴ τοῦτο ἀναγκασθῶσιν, ἐν πάντα ποιοῦσιν. - ἔτι διὰ τί ἀεὶ ἔσται γενέσεις καὶ τί αἴτιον γενέσεως, οὐδεὶς λέγει. καὶ τοῖς δύο ἀρχὰς ποιοῦσιν ἄλλην ἀνάγκη ἀρχὴν κυριωτέραν εἶναι, καὶ τοῖς τὰ εἶδη ἔτι ἄλλη ἀρχὴ κυριωτέρα· διὰ τί γὰρ μετέσχεν ἢ μετέχει; καὶ τοῖς μὲν ἄλλοις ἀνάγκη τῇ σοφίᾳ καὶ τῇ τιμιωτάτῃ ἐπιστήμῃ εἶναί τι ἐναντίον, ἡμῖν δ' οὔ. οὐ γὰρ ἐστὶν ἐναντίον τῷ πρώτῳ



οὐδέν· πάντα γὰρ τὰ ἐναντία ὕλην ἔχει, καὶ δυνάμει ταῦτα ἔστιν· ἡ δὲ ἐναντία ἄγνοια εἰς τὸ ἐναντίον, τῷ δὲ πρώτῳ ἐναντίον οὐδέν. εἴ τε μὴ ἔσται παρὰ τὰ αἰσθητὰ ἄλλα, οὐκ ἔσται ἀρχὴ καὶ τάξις καὶ γένεσις καὶ τὰ οὐράνια, ἀλλ’ ἀεὶ τῆς ἀρχῆς ἀρχή, ὥσπερ τοῖς θεολόγοις καὶ τοῖς φυσικοῖς πᾶσιν. εἰ δ’ ἔσται τὰ εἶδη· ἢ <οἱ> ἀριθμοί, οὐδενὸς αἴτια· εἰ δὲ μὴ, οὔτι κινήσεώς γε. ἔτι πῶς ἔσται ἐξ ἀμεγεθῶν μέγεθος καὶ συνεχές; ὁ γὰρ ἀριθμὸς οὐ ποιήσει συνεχές, οὔτε ὥς κινεῖν οὔτε ὥς εἶδος. ἀλλὰ μὴν οὐδέν γ’ ἔσται τῶν ἐναντίων ὅπερ καὶ ποιητικὸν καὶ κινητικόν; ἐνδέχοιτο γὰρ ἂν μὴ εἶναι. ἀλλὰ μὴν ὕστερόν γε τὸ ποιεῖν δυνάμεως, οὐκ ἄρα αἴδια τὰ ὄντα. ἀλλ’ ἔστιν· ἀναιρετέον ἄρα τούτων τι. τοῦτο δ’ εἴρηται πῶς. ἔτι τίνοι οἱ ἀριθμοὶ ἐν ἡ ἡ ψυχῇ καὶ τὸ σῶμα καὶ ὅλως τὸ εἶδος καὶ τὸ πρᾶγμα, οὐδέν λέγει οὐδεὶς· οὐδ’ ἐνδέχεται εἰπεῖν, ἐὰν μὴ ὥς ἡμεῖς εἴπη, ὥς τὸ κινεῖν ποιεῖ. οἱ δὲ λέγοντες τὸν ἀριθμὸν πρῶτον τὸν μαθηματικὸν καὶ οὕτως ἀεὶ ἄλλην ἐχομένην οὐσίαν καὶ ἀρχὰς [1076a] ἐκάστης ἄλλας, ἐπεισοδιώδη τὴν τοῦ παντὸς οὐσίαν ποιοῦσιν (οὐδέν γὰρ ἢ ἑτέρα τῇ ἑτέρᾳ συμβάλλεται οὐσα ἢ μὴ οὐσα) καὶ ἀρχὰς πολλὰς· τὰ δὲ ὄντα οὐ βούλεται πολιτεύεσθαι κακῶς. “οὐκ ἀγαθὸν πολυκοιρανίη· εἰς κοίρανος ἔστω.”

## M

Περὶ μὲν οὖν τῆς τῶν αἰσθητῶν οὐσίας εἴρηται τίς ἐστιν, ἐν μὲν τῇ μεθόδῳ τῇ τῶν φυσικῶν περὶ τῆς ὕλης, ὕστερον δὲ περὶ τῆς κατ’ ἐνέργειαν· ἐπεὶ δ’ ἡ σκέψις ἐστὶ πότερον ἔστι τις παρὰ τὰς αἰσθητὰς οὐσίας ἀκίνητος καὶ αἰδιος ἢ οὐκ ἔστι, καὶ εἰ ἔστι τίς ἐστι, πρῶτον τὰ παρὰ τῶν ἄλλων λεγόμενα θεωρητέον, ὅπως εἴτε τι μὴ καλῶς λέγουσι, μὴ τοῖς αὐτοῖς ἔνοχοι ὦμεν, καὶ εἴ τι δόγμα κοινὸν ἡμῖν κἀκείνοις, τοῦτ’ ἰδίᾳ μὴ καθ’ ἡμῶν δυσχεραίνωμεν· ἀγαπητὸν γὰρ εἴ τις τὰ μὲν κάλλιον λέγοι τὰ δὲ μὴ χεῖρον. δύο δ’ εἰσὶ δόξαι περὶ τούτων· τὰ τε γὰρ μαθηματικά φασιν οὐσίας εἶναι τινες, οἷον ἀριθμοὺς καὶ γραμμὰς καὶ τὰ συγγενῇ τούτοις, καὶ πάλιν τὰς ιδέας. ἐπεὶ δὲ οἱ μὲν δύο ταῦτα γένη ποιοῦσι, τὰς τε ιδέας καὶ τοὺς μαθηματικοὺς ἀριθμοὺς, οἱ δὲ μίαν φύσιν ἀμφοτέρων, ἕτεροι δὲ τινες τὰς μαθηματικὰς μόνον οὐσίας εἶναι φασι, σκεπτέον πρῶτον μὲν περὶ τῶν μαθηματικῶν, μηδεμίαν προστιθέντας φύσιν ἄλλην αὐτοῖς, οἷον πότερον ιδέαι τυγχάνουσιν οὐσαι ἢ οὐ, καὶ πότερον ἀρχαὶ καὶ οὐσαί τῶν ὄντων ἢ οὐ, ἀλλ’ ὥς περὶ μαθηματικῶν μόνον εἴτ’ εἰσὶν εἴτε μὴ εἰσὶ, καὶ εἰ εἰσὶ πῶς εἰσὶν· ἔπειτα μετὰ ταῦτα χωρὶς περὶ τῶν ιδεῶν αὐτῶν ἀπλῶς καὶ ὅσον νόμου χάριν· τεθρύληται γὰρ τὰ πολλὰ καὶ ὑπὸ τῶν ἐξωτερικῶν λόγων, ἔτι δὲ πρὸς ἐκείνην δεῖ τὴν σκέψιν ἀπαντᾶν τὸν πλείω λόγον, ὅταν ἐπισκοπῶμεν εἰ αἱ οὐσαί καὶ αἱ ἀρχαὶ τῶν ὄντων ἀριθμοὶ καὶ ιδέαι εἰσὶν· μετὰ γὰρ τὰς ιδέας αὕτη λείπεται

τρίτη σκέψις. - ἀνάγκη δ', εἴπερ ἔστι τὰ μαθηματικά, ἢ ἐν τοῖς αἰσθητοῖς εἶναι αὐτὰ καθάπερ λέγουσί τινες, ἢ κεχωρισμένα τῶν αἰσθητῶν (λέγουσι δὲ καὶ οὕτω τινές). ἢ εἰ μηδετέρως, ἢ οὐκ εἰσὶν ἢ ἄλλον τρόπον εἰσὶν. ὥσθ' ἢ ἀμφισβήτησις ἡμῖν ἔσται οὐ περὶ τοῦ εἶναι ἀλλ' ὅτι μὲν τοίνυν ἔν γε τοῖς αἰσθητοῖς ἀδύνατον εἶναι καὶ ἅμα πλασματίας ὁ λόγος, εἴρηται μὲν καὶ ἐν τοῖς [1076b] διαφορήμασιν ὅτι δύο ἅμα στερεὰ εἶναι ἀδύνατον, ἔτι δὲ καὶ ὅτι τοῦ αὐτοῦ λόγου καὶ τὰς ἄλλας δυνάμεις καὶ φύσεις ἐν τοῖς αἰσθητοῖς εἶναι καὶ μηδεμίαν κεχωρισμένην. - ταῦτα μὲν οὖν εἴρηται πρότερον, ἀλλὰ πρὸς τούτοις φανερόν ὅτι ἀδύνατον διαιρεθῆναι ὁτιοῦν σῶμα· κατ' ἐπίπεδον γὰρ διαιρεθήσεται, καὶ τοῦτο κατὰ γραμμὴν καὶ αὕτη κατὰ στιγμὴν, ὥστ' εἰ τὴν στιγμὴν διελεῖν ἀδύνατον, καὶ τὴν γραμμὴν, εἰ δὲ ταύτην, καὶ τὰ ἄλλα. τί οὖν διαφέρει ἢ ταύτας εἶναι τοιαύτας φύσεις, ἢ αὐτὰς μὲν μή, εἶναι δ' ἐν αὐταῖς τοιαύτας φύσεις; τὸ αὐτὸ γὰρ συμβήσεται· διαιρουμένων γὰρ τῶν αἰσθητῶν διαιρεθήσονται, ἢ οὐδὲ αἰ αἰσθηταί. ἀλλὰ μὴν οὐδὲ κεχωρισμένας γ' εἶναι φύσεις τοιαύτας δυνατόν. εἰ γὰρ ἔσται στερεὰ παρὰ τὰ αἰσθητὰ κεχωρισμένα τούτων ἕτερα καὶ πρότερα τῶν αἰσθητῶν, δῆλον ὅτι καὶ παρὰ τὰ ἐπίπεδα ἕτερα ἀναγκαῖον εἶναι ἐπίπεδα κεχωρισμένα καὶ στιγμὰς καὶ γραμμὰς (τοῦ γὰρ αὐτοῦ λόγου). εἰ δὲ ταῦτα, πάλιν παρὰ τὰ τοῦ στερεοῦ τοῦ μαθηματικοῦ ἐπίπεδα καὶ γραμμὰς καὶ στιγμὰς ἕτερα κεχωρισμένα (πρότερα γὰρ τῶν συγκειμένων ἔστι τὰ ἀσύνθετα· καὶ εἴπερ τῶν αἰσθητῶν πρότερα σώματα μὴ αἰσθητά, τῷ αὐτῷ λόγῳ καὶ τῶν ἐπιπέδων τῶν ἐν τοῖς ἀκινήτοις στερεοῖς τὰ αὐτὰ καθ' αὐτά, ὥστε ἕτερα ταῦτα ἐπίπεδα καὶ γραμμαὶ τῶν ἅμα τοῖς στερεοῖς τοῖς κεχωρισμένοις· τὰ μὲν γὰρ ἅμα τοῖς μαθηματικοῖς στερεοῖς τὰ δὲ πρότερα τῶν μαθηματικῶν στερεῶν). πάλιν τοίνυν τούτων τῶν ἐπιπέδων ἔσονται γραμμαί, ὧν πρότερον δεήσει ἑτέρας γραμμὰς καὶ στιγμὰς εἶναι διὰ τὸν αὐτὸν λόγον· καὶ τούτων <τῶν> ἐκ ταῖς προτέραις γραμμαῖς ἑτέρας προτέρας στιγμὰς, ὧν οὐκέτι πρότεραι ἕτεραι. ἄτοπός τε δὴ γίνεταί ἢ σώρευσις (συμβαίνει γὰρ στερεὰ μὲν μοναχὰ παρὰ τὰ αἰσθητά, ἐπίπεδα δὲ τριττὰ παρὰ τὰ αἰσθητά - τὰ τε παρὰ τὰ αἰσθητὰ καὶ τὰ ἐν τοῖς μαθηματικοῖς στερεοῖς καὶ <τὰ> παρὰ τὰ ἐν τούτοις - γραμμαὶ δὲ τετραξαί, στιγμαὶ δὲ πενταξαί· ὥστε περὶ ποῖα αἰ ἐπιστῆμαι ἔσονται αἰ μαθηματικαὶ τούτων; οὐ γὰρ δὴ περὶ τὰ ἐν τῷ στερεῷ τῷ ἀκινήτῳ ἐπίπεδα καὶ γραμμὰς καὶ στιγμὰς· ἀεὶ γὰρ περὶ τὰ πρότερα ἢ ἐπιστήμη). ὁ δ' αὐτὸς λόγος καὶ περὶ τῶν ἀριθμῶν· παρ' ἐκάστας γὰρ τὰς στιγμὰς ἕτεραι ἔσονται μονάδες, καὶ παρ' ἑκάστα τὰ ὄντα, <τὰ> αἰσθητά, εἴτα τὰ νοητά, ὥστ' ἔσται γένη τῶν μαθηματικῶν ἀριθμῶν. ἔτι ἅπερ καὶ ἐν τοῖς [1077a] ἀπορήμασιν ἐπήλθομεν πῶς ἐνδέχεται λύειν; περὶ ἃ γὰρ ἡ ἀστρολογία ἐστίν, ὁμοίως ἔσται παρὰ τὰ αἰσθητὰ καὶ περὶ ἃ ἡ γεωμετρία· εἶναι δ' οὐρανὸν καὶ τὰ μόρια αὐτοῦ πῶς

δυνατόν, ἢ ἄλλο ὅτιοῦν ἔχον κίνησιν; ὁμοίως δὲ καὶ τὰ ὀπτικά καὶ τὰ ἁρμονικά· ἔσται γὰρ φωνή τε καὶ ὄψις παρὰ τὰ αἰσθητὰ καὶ τὰ καθ' ἑκάστα, ὥστε δῆλον ὅτι καὶ αἱ ἄλλαι αἰσθήσεις καὶ τὰ ἄλλα αἰσθητά· τί γὰρ μᾶλλον τάδε ἢ τάδε; εἰ δὲ ταῦτα, καὶ ζῶα ἔσονται, εἴπερ καὶ αἰσθήσεις. ἔτι γράφεται ἓν καθόλου ὑπὸ τῶν μαθηματικῶν παρὰ ταύτας τὰς οὐσίας. ἔσται οὖν καὶ αὕτη τις ἄλλη οὐσία μεταξὺ κεχωρισμένη τῶν τ' ἰδεῶν καὶ τῶν μεταξύ, ἢ οὔτε ἀριθμός ἐστιν οὔτε στιγμή καὶ οὔτε μέγεθος οὔτε χρόνος. εἰ δὲ τοῦτο ἀδύνατον, δῆλον ὅτι κάκεῖνα ἀδύνατον εἶναι κεχωρισμένα τῶν αἰσθητῶν. ὅλως δὲ τούναντίον συμβαίνει καὶ τοῦ ἀληθοῦς καὶ τοῦ εἰωθότος ὑπολαμβάνεσθαι, εἴ τις θήσει οὕτως εἶναι τὰ μαθηματικά ὡς κεχωρισμένας τινὰς φύσεις. ἀνάγκη γὰρ διὰ τὸ μὲν οὕτως εἶναι αὐτὰς προτέρας εἶναι τῶν αἰσθητῶν μεγεθῶν, κατὰ τὸ ἀληθές δὲ ὑστέρας· τὸ γὰρ ἀτελές μέγεθος γενέσκει μὲν πρότερόν ἐστι, τῇ οὐσίᾳ δ' ὕστερον, οἷον ἄψυχον ἐμψύχου. ἔτι τίτι καὶ πότ' ἔσται ἓν τὰ μαθηματικά μεγέθη; τὰ μὲν γὰρ ἐνταῦθα ψυχῇ ἢ μέρει ψυχῆς ἢ ἄλλῳ τινί, εὐλόγως (εἰ δὲ μή, πολλά, καὶ διαλύεται), ἐκείνοις δὲ διαιρετοῖς καὶ ποσοῖς οὕσι τί αἴτιον τοῦ ἓν εἶναι καὶ συμμένειν; ἔτι αἱ γενέσεις δηλοῦσιν. πρῶτον μὲν γὰρ ἐπὶ μῆκος γίνεται, εἴτα ἐπὶ πλάτος, τελευταῖον δ' εἰς βάθος, καὶ τέλος ἔσχεν. εἰ οὖν τὸ τῇ γενέσει ὕστερον τῇ οὐσίᾳ πρότερον, τὸ σῶμα πρότερον ἂν εἴη ἐπιπέδου καὶ μήκους· καὶ ταύτη καὶ τέλειον καὶ ὅλον μᾶλλον, ὅτι ἐμψυχον γίνεται· γραμμὴ δὲ ἐμψυχος ἢ ἐπίπεδον πῶς ἂν εἴη; ὑπὲρ γὰρ τὰς αἰσθήσεις τὰς ἡμετέρας ἂν εἴη τὸ ἀξίωμα. ἔτι τὸ μὲν σῶμα οὐσία τις (ἤδη γὰρ ἔχει πῶς τὸ τέλειον), αἱ δὲ γραμμαὶ πῶς οὐσῖαι; οὔτε γὰρ ὡς εἶδος καὶ μορφή τις, οἷον εἰ ἄρα ἡ ψυχὴ τοιοῦτον, οὔτε ὡς ἡ ὕλη, οἷον τὸ σῶμα· οὐθέν γὰρ ἐκ γραμμῶν οὐδ' ἐπιπέδων οὐδὲ στιγμῶν φαίνεται συνίστασθαι δυνάμενον, εἰ δ' ἦν οὐσία τις ὑλική, τοῦτ' ἂν ἐφαίνετο δυνάμενα πᾶσχειν. τῷ μὲν [1077b] οὖν λόγῳ ἔστω πρότερα, ἀλλ' οὐ πάντα ὅσα τῷ λόγῳ πρότερα καὶ τῇ οὐσίᾳ πρότερα. τῇ μὲν γὰρ οὐσίᾳ πρότερα ὅσα χωριζόμενα τῷ εἶναι ὑπερβάλλει, τῷ λόγῳ δὲ ὅσων οἱ λόγοι ἐκ τῶν λόγων· ταῦτα δὲ οὐχ ἅμα ὑπάρχει. εἰ γὰρ μὴ ἔστι τὰ πάθη παρὰ τὰς οὐσίας, οἷον κινούμενόν τι ἢ λευκόν, τοῦ λευκοῦ ἀνθρώπου τὸ λευκὸν πρότερον κατὰ τὸν λόγον ἀλλ' οὐ κατὰ τὴν οὐσίαν· οὐ γὰρ ἐνδέχεται εἶναι κεχωρισμένον ἀλλ' ἀεὶ ἅμα τῷ συνόλῳ ἐστίν (σύνολον δὲ λέγω τὸν ἄνθρωπον τὸν λευκόν), ὥστε φανερόν ὅτι οὔτε τὸ ἐξ ἀφαιρέσεως πρότερον οὔτε τὸ ἐκ προσθέσεως ὕστερον· ἐκ προσθέσεως γὰρ τῷ λευκῷ ὁ λευκὸς ἄνθρωπος λέγεται.

Ὅτι μὲν οὖν οὔτε οὐσῖαι μᾶλλον τῶν σωμάτων εἰσὶν οὔτε πρότερα τῷ εἶναι τῶν αἰσθητῶν ἀλλὰ τῷ λόγῳ μόνον, οὔτε κεχωρισμένα που εἶναι δυνατόν, εἴρηται ἱκανῶς· ἐπεὶ δ' οὐδ' ἐν τοῖς αἰσθητοῖς ἐνεδέχετο αὐτὰ

εἶναι, φανερόν ὅτι ἢ ὅλως οὐκ ἔστιν ἢ τρόπον τινὰ ἔστι καὶ διὰ τοῦτο οὐχ ἀπλῶς ἔστιν· πολλαχῶς γὰρ τὸ εἶναι λέγομεν. ὥσπερ γὰρ καὶ τὰ καθόλου ἐν τοῖς μαθήμασιν οὐ περὶ κεχωρισμένων ἐστὶ παρὰ τὰ μεγέθη καὶ τοὺς ἀριθμοὺς ἀλλὰ περὶ τούτων μὲν, οὐχ ἢ δὲ τοιαῦτα οἷα ἔχειν μέγεθος ἢ εἶναι διαιρετά, δῆλον ὅτι ἐνδέχεται καὶ περὶ τῶν αἰσθητῶν μεγεθῶν εἶναι καὶ λόγους καὶ ἀποδείξεις, μὴ ἢ δὲ αἰσθητὰ ἀλλ' ἢ τοιαδί. ὥσπερ γὰρ καὶ ἢ κινούμενα μόνον πολλοὶ λόγοι εἰσὶ, χωρὶς τοῦ τί ἕκαστόν ἐστι τῶν τοιούτων καὶ τῶν συμβεβηκότων αὐτοῖς, καὶ οὐκ ἀνάγκη διὰ ταῦτα ἢ κεχωρισμένον τι εἶναι κινούμενον τῶν αἰσθητῶν ἢ ἐν τούτοις τινὰ φύσιν εἶναι ἀφωρισμένην, οὕτω καὶ ἐπὶ τῶν κινουμένων ἔσονται λόγοι καὶ ἐπιστῆμαι, οὐχ ἢ κινούμενα δὲ ἀλλ' ἢ σώματα μόνον, καὶ πάλιν ἢ ἐπίπεδα μόνον καὶ ἢ μήκη μόνον, καὶ ἢ διαιρετά καὶ ἢ ἀδιαίρετα ἔχοντα δὲ θέσιν καὶ ἢ ἀδιαίρετα μόνον, ὥστ' ἐπεὶ ἀπλῶς λέγειν ἀληθὲς μὴ μόνον τὰ χωριστὰ εἶναι ἀλλὰ καὶ τὰ μὴ χωριστὰ (οἷον κινούμενα εἶναι), καὶ τὰ μαθηματικὰ ὅτι ἔστιν ἀπλῶς ἀληθὲς εἰπεῖν, καὶ τοιαῦτά γε οἷα λέγουσιν. καὶ ὥσπερ καὶ τὰς ἄλλας ἐπιστήμας ἀπλῶς ἀληθὲς εἰπεῖν τούτου εἶναι, οὐχὶ τοῦ συμβεβηκότος (οἷον ὅτι λευκοῦ, εἰ τὸ ὑγεινὸν λευκόν, ἢ δ' ἔστιν ὑγεινοῦ) ἀλλ' ἐκείνου [1078a] οὐ ἔστιν ἐκάστη, εἰ <ἢ> ὑγεινὸν ὑγεινοῦ, εἰ δ' ἢ ἄνθρωπος ἀνθρώπου, οὕτω καὶ τὴν γεωμετρίαν· οὐκ εἰ συμβέβηκεν αἰσθητὰ εἶναι ὧν ἐστὶ, μὴ ἔστι δὲ ἢ αἰσθητά, οὐ τῶν αἰσθητῶν ἔσονται αἱ μαθηματικαὶ ἐπιστῆμαι, οὐ μέντοι οὐδὲ παρὰ ταῦτα ἄλλων κεχωρισμένων. πολλὰ δὲ συμβέβηκε καθ' αὐτὰ τοῖς πράγμασιν ἢ ἕκαστον ὑπάρχει τῶν τοιούτων, ἐπεὶ καὶ ἢ θῆλυ τὸ ζῶον καὶ ἢ ἄρρεν, ἴδια πάθη ἔστιν (καίτοι οὐκ ἔστι τι θῆλυ οὐδ' ἄρρεν κεχωρισμένον τῶν ζώων)· ὥστε καὶ ἢ μήκη μόνον καὶ ἢ ἐπίπεδα. καὶ ὅσω δὴ ἂν περὶ προτέρων τῶ λόγῳ καὶ ἀπλουστέρων, τοσούτῳ μᾶλλον ἔχει τὸ ἀκριβές (τοῦτο δὲ τὸ ἀπλοῦν ἐστίν), ὥστε ἄνευ τε μεγέθους μᾶλλον ἢ μετὰ μεγέθους, καὶ μάλιστα ἄνευ κινήσεως, ἐὰν δὲ κίνησιν, μάλιστα τὴν πρώτην· ἀπλουστάτη γάρ, καὶ ταύτης ἢ ὁμαλή. ὁ δ' αὐτὸς λόγος καὶ περὶ ἀρμονικῆς καὶ ὀπτικῆς· οὐδετέρα γὰρ ἢ ὅψις ἢ ἢ φωνὴ θεωρεῖ, ἀλλ' ἢ γραμμαὶ καὶ ἀριθμοὶ (οἵκεῖα μέντοι ταῦτα πάθη ἐκείνων), καὶ ἢ μηχανικῇ δὲ ὡσαύτως, ὥστ' εἴ τις θέμενος κεχωρισμένα τῶν συμβεβηκότων σκοπεῖ τι περὶ τούτων ἢ τοιαῦτα, οὐθὲν διὰ τοῦτο ψεῦδος ψεύσεται, ὥσπερ οὐδ' ὅταν ἐν τῇ γῇ γράφῃ καὶ ποδιαίαν φῇ τὴν μὴ ποδιαίαν· οὐ γὰρ ἐν ταῖς προτάσεσι τὸ ψεῦδος. ἄριστα δ' ἂν οὕτω θεωρηθεῖ ἕκαστον, εἴ τις τὸ μὴ κεχωρισμένον θεῖη χωρίσας, ὅπερ ὁ ἀριθμητικὸς ποιεῖ καὶ ὁ γεωμέτρης. ἐν μὲν γὰρ καὶ ἀδιαίρετον ὁ ἄνθρωπος ἢ ἄνθρωπος· ὁ δ' ἔθετο ἐν ἀδιαίρετον, εἴτ' ἐθεώρησεν εἴ τι τῷ ἀνθρώπῳ συμβέβηκεν ἢ ἀδιαίρετος. ὁ δὲ γεωμέτρης οὐθ' ἢ ἄνθρωπος οὐθ' ἢ ἀδιαίρετος ἀλλ' ἢ στερεόν. ἃ γὰρ κἂν εἰ μὴ που ἦν ἀδιαίρετος ὑπῆρχεν αὐτῷ, δῆλον ὅτι

καὶ ἄνευ τούτων ἐνδέχεται αὐτῷ ὑπάρχειν [τὸ δυνατόν], ὥστε διὰ τοῦτο ὀρθῶς οἱ γεωμέτραι λέγουσι, καὶ περὶ ὄντων διαλέγονται, καὶ ὄντα ἐστίν· διπτὸν γὰρ τὸ ὄν, τὸ μὲν ἐντελεχεῖα τὸ δ' ὑλικῶς. ἐπεὶ δὲ τὸ ἀγαθὸν καὶ τὸ καλὸν ἕτερον (τὸ μὲν γὰρ ἀεὶ ἐν πράξει, τὸ δὲ καλὸν καὶ ἐν τοῖς ἀκινήτοις), οἱ φάσκοντες οὐδὲν λέγειν τὰς μαθηματικὰς ἐπιστήμας περὶ καλοῦ ἢ ἀγαθοῦ ψεύδονται. λέγουσι γὰρ καὶ δεικνύουσι μάλιστα· οὐ γὰρ εἰ μὴ ὀνομάζουσι τὰ δ' ἔργα καὶ τοὺς λόγους δεικνύουσιν, οὐ λέγουσι περὶ αὐτῶν. τοῦ δὲ καλοῦ μέγιστα εἶδη [1078b] τάξις καὶ συμμετρία καὶ τὸ ὠρισμένον, ἃ μάλιστα δεικνύουσιν αἱ μαθηματικαὶ ἐπιστήμαι. καὶ ἐπεὶ γε πολλῶν αἴτια φαίνεται ταῦτα (λέγω δ' οἶον ἢ τάξις καὶ τὸ ὠρισμένον), δῆλον ὅτι λέγοιεν ἂν καὶ τὴν τοιαύτην αἰτίαν τὴν ὡς τὸ καλὸν αἴτιον τρόπον τινά. μᾶλλον δὲ γνωρίμως ἐν ἄλλοις περὶ αὐτῶν ἐροῦμεν.

Περὶ μὲν οὖν τῶν μαθηματικῶν, ὅτι τε ὄντα ἐστὶ καὶ πῶς ὄντα, καὶ πῶς πρότερα καὶ πῶς οὐ πρότερα, τοσαῦτα εἰρήσθω· περὶ δὲ τῶν ἰδεῶν πρῶτον αὐτὴν τὴν κατὰ τὴν ἰδέαν δόξαν ἐπισκεπτέον, μηθὲν συνάπτοντας πρὸς τὴν τῶν ἀριθμῶν φύσιν, ἀλλ' ὡς ὑπέλαβον ἐξ ἀρχῆς οἱ πρῶτοι τὰς ἰδέας φήσαντες εἶναι. συνέβη δ' ἡ περὶ τῶν εἰδῶν δόξα τοῖς εἰποῦσι διὰ τὸ πεισθῆναι περὶ τῆς ἀληθείας τοῖς Ἡρακλειτείοις λόγοις ὡς πάντων τῶν αἰσθητῶν ἀεὶ ῥεόντων, ὥστ' εἴπερ ἐπιστήμη τινὸς ἔσται καὶ φρόνησις, ἑτέρας δεῖν τινὰς φύσεις εἶναι παρὰ τὰς αἰσθητὰς μενούσας· οὐ γὰρ εἶναι τῶν ῥεόντων ἐπιστήμην. Σωκράτους δὲ περὶ τὰς ἠθικὰς ἀρετὰς πραγματευομένου καὶ περὶ τούτων ὀρίζεσθαι καθόλου ζητοῦντος πρώτου (τῶν μὲν γὰρ φυσικῶν ἐπὶ μικρὸν Δημόκριτος ἤψατο μόνον καὶ ὠρίσατό πως τὸ θερμὸν καὶ τὸ ψυχρόν· οἱ δὲ Πυθαγόρειοι πρότερον περὶ τινων ὀλίγων, ὧν τοὺς λόγους εἰς τοὺς ἀριθμοὺς ἀνῆπτον, οἶον τί ἐστὶ καιρὸς ἢ τὸ δίκαιον ἢ γάμος· ἐκεῖνος δ' εὐλόγως ἐζήτει τὸ τί ἐστίν· συλλογίζεσθαι γὰρ ἐζήτει, ἀρχὴ δὲ τῶν συλλογισμῶν τὸ τί ἐστίν· διαλεκτικὴ γὰρ ἰσχὺς οὕτω τότε ἦν ὥστε δύνασθαι καὶ χωρὶς τοῦ τί ἐστὶ τάναντία ἐπισκοπεῖν, καὶ τῶν ἐναντίων εἰ ἡ αὐτὴ ἐπιστήμη· δύο γὰρ ἐστὶν ἃ τις ἂν ἀποδοίη Σωκράτει δικαίως, τοὺς τ' ἐπακτικοὺς λόγους καὶ τὸ ὀρίζεσθαι καθόλου· ταῦτα γὰρ ἐστὶν ἄμφω περὶ ἀρχὴν ἐπιστήμης)· - ἀλλ' ὁ μὲν Σωκράτης τὰ καθόλου οὐ χωριστὰ ἐποίει οὐδὲ τοὺς ὀρισμούς· οἱ δ' ἐχώρισαν, καὶ τὰ τοιαῦτα τῶν ὄντων ἰδέας προσηγόρευσαν, ὥστε συνέβαινεν αὐτοῖς σχεδὸν τῷ αὐτῷ λόγῳ πάντων ἰδέας εἶναι τῶν καθόλου λεγομένων, καὶ παραπλήσιον ὥσπερ ἂν εἴ τις ἀριθμῆσαι βουλόμενος ἐλαττόνων μὲν ὄντων οἶοιτο μὴ δυνήσεσθαι, πλείω δὲ ποιήσας ἀριθμοίη· πλείω γὰρ ἐστὶ τῶν καθ' ἕκαστα [1079a] αἰσθητῶν ὡς εἶπεῖν τὰ εἶδη, περὶ ὧν ζητοῦντες τὰς αἰτίας ἐκ τούτων ἐκεῖ προῆλθον· καθ' ἕκαστόν τε γὰρ ὁμώνυμόν <τι> ἔστι καὶ παρὰ τὰς οὐσίας, τῶν τε ἄλλων ἐν ἔστιν ἐπὶ

πολλῶν, καὶ ἐπὶ τοῖσδε καὶ ἐπὶ τοῖς ἀϊδίοις. ἔτι καθ' οὓς τρόπους δείκνυται ὅτι ἔστι τὰ εἶδη, κατ' οὐθένα φαίνεται τούτων· ἐξ ἐνίων μὲν γὰρ οὐκ ἀνάγκη γίνεσθαι συλλογισμόν, ἐξ ἐνίων δὲ καὶ οὐχ ὧν οἴονται τούτων εἶδη γίνονται. κατὰ τε γὰρ τοὺς λόγους τοὺς ἐκ τῶν ἐπιστημῶν ἔσται εἶδη πάντων ὅσων ἐπιστῆμαι εἰσίν, καὶ κατὰ τὸ ἐν ἐπὶ πολλῶν καὶ τῶν ἀποφάσεων, κατὰ δὲ τὸ νοεῖν τι φθαρέντος τῶν φθαρτῶν· φάντασμα γάρ τι τούτων ἔστιν. ἔτι δὲ οἱ ἀκριβέστατοι τῶν λόγων οἱ μὲν τῶν πρὸς τι ποιοῦσιν ἰδέας, ὧν οὐ φασιν εἶναι καθ' αὐτὸ γένος, οἱ δὲ τὸν τρίτον ἄνθρωπον λέγουσιν. ὅλως τε ἀναιροῦσιν οἱ περὶ τῶν εἰδῶν λόγοι ἃ μᾶλλον βούλονται εἶναι οἱ λέγοντες εἶδη τοῦ τὰς ἰδέας εἶναι· συμβαίνει γὰρ μὴ εἶναι πρῶτον τὴν δυάδα ἀλλὰ τὸν ἀριθμόν, καὶ τούτου τὸ πρὸς τι καὶ τοῦτο τοῦ καθ' αὐτό, καὶ πάνθ' ὅσα τινὲς ἀκολουθήσαντες ταῖς περὶ τῶν εἰδῶν δόξαις ἠγναντιώθησαν ταῖς ἀρχαῖς. ἔτι κατὰ μὲν τὴν ὑπόληψιν καθ' ἣν φασιν εἶναι τὰς ἰδέας οὐ μόνον τῶν οὐσιῶν ἔσονται εἶδη ἀλλὰ καὶ ἄλλων πολλῶν (τὸ γὰρ νόημα ἐν οὐ μόνον περὶ τὰς οὐσίας ἀλλὰ καὶ κατὰ μὴ οὐσιῶν ἐστί, καὶ ἐπιστῆμαι οὐ μόνον τῆς οὐσίας εἰσὶ· συμβαίνει δὲ καὶ ἄλλα μυρία τοιαῦτα)· κατὰ δὲ τὸ ἀναγκαῖον καὶ τὰς δόξας τὰς περὶ αὐτῶν, εἰ ἔστι μεθεκτὰ τὰ εἶδη, τῶν οὐσιῶν ἀναγκαῖον ἰδέας εἶναι μόνον· οὐ γὰρ κατὰ συμβεβηκὸς μετέχονται ἀλλὰ δεῖ ταύτη ἐκάστου μετέχειν ἢ μὴ καθ' ὑποκειμένου λέγονται (λέγω δ' οἶον, εἴ τι αὐτοῦ διπλασίου μετέχει, τοῦτο καὶ ἀϊδίου μετέχει, ἀλλὰ κατὰ συμβεβηκός· συμβέβηκε γὰρ τῷ διπλασίῳ ἀϊδίῳ εἶναι), ὥστε ἔσται οὐσία τὰ εἶδη· ταῦτα δ' ἐνταῦθα οὐσίαν σημαίνει κάκεῖ· ἢ τί ἔσται τὸ εἶναι φάναι τι παρὰ ταῦτα, τὸ ἐν ἐπὶ πολλῶν; καὶ εἰ μὲν ταῦτό ἐῖδος τῶν ἰδεῶν καὶ τῶν μετεχόντων, ἔσται τι κοινόν (τί γὰρ μᾶλλον ἐπὶ τῶν φθαρτῶν δυάδων, καὶ τῶν δυάδων τῶν πολλῶν μὲν ἀϊδίων δέ, τὸ δυὰς ἐν καὶ ταυτόν, ἢ ἐπ' αὐτῆς καὶ τῆς τινός;); εἰ δὲ μὴ [1079b] τὸ αὐτὸ εἶδος, ὁμώνυμα ἂν εἴη, καὶ ὅμοιον ὥσπερ ἂν εἴ τις καλοῖ ἄνθρωπον τόν τε Καλλίαν καὶ τὸ ξύλον, μηδεμίαν κοινωνίαν ἐπιβλέψας αὐτῶν. εἰ δὲ τὰ μὲν ἄλλα τοὺς κοινούς λόγους ἐφαρμόττειν θήσομεν τοῖς εἴδεσιν, οἶον ἐπ' αὐτὸν τὸν κύκλον σχῆμα ἐπίπεδον καὶ τὰ λοιπὰ μέρη τοῦ λόγου, τὸ δ' ὃ ἔστι προστεθήσεται, σκοπεῖν δεῖ μὴ κενὸν ἢ τοῦτο παντελῶς. τίτι τε γὰρ προστεθήσεται; τῷ μέσῳ ἢ τῷ ἐπιπέδῳ ἢ πᾶσιν; πάντα γὰρ τὰ ἐν τῇ οὐσίᾳ ἰδέαι, οἶον τὸ ζῶον καὶ τὸ δίπουν. ἔτι δὴλον ὅτι ἀνάγκη αὐτὸ εἶναί τι, ὥσπερ τὸ ἐπίπεδον, φύσιν τινὰ ἢ πᾶσιν ἐνυπάρξει τοῖς εἴδεσιν ὡς γένος.

Πάντων δὲ μάλιστα διαπορήσειεν ἂν τις τί ποτε συμβάλλονται τὰ εἶδη ἢ τοῖς ἀϊδίοις τῶν αἰσθητῶν ἢ τοῖς γιγνομένοις καὶ [τοῖς] φθειρομένοις· οὔτε γὰρ κινήσεώς ἐστιν οὔτε μεταβολῆς οὐδεμιᾶς αἷτια αὐτοῖς. ἀλλὰ μὴν οὔτε πρὸς τὴν ἐπιστήμην οὐθὲν βοηθεῖ τὴν τῶν ἄλλων (οὐδὲ γὰρ οὐσία ἐκεῖνα τούτων· ἐν τούτοις γὰρ ἂν ἦν), οὔτ' εἰς τὸ εἶναι, μὴ ἐνυπάρχοντά γε τοῖς

μετέχουσιν· οὕτω μὲν γὰρ ἴσως αἴτια δόξειεν ἂν εἶναι ὡς τὸ λευκὸν μεμιγμένον τῷ λευκῷ, ἀλλ' οὗτος μὲν ὁ λόγος λίαν εὐκίνητος, ὃν Ἀναξαγόρας μὲν πρότερος Εὐδοξος δὲ ὕστερος ἔλεγε διαπορῶν καὶ ἕτεροί τινες (ῥᾶδιον γὰρ πολλὰ συναγαγεῖν καὶ ἀδύνατα πρὸς τὴν τοιαύτην δόξαν)· ἀλλὰ μὴν οὐδὲ ἐκ τῶν εἰδῶν ἐστὶ τᾶλλα κατ' οὐθέννα τρόπον τῶν εἰωθότων λέγεσθαι. τὸ δὲ λέγειν παραδείγματα εἶναι καὶ μετέχειν αὐτῶν τὰ ἄλλα κενολογεῖν ἐστὶ καὶ μεταφορᾶς λέγειν ποιητικᾶς. τί γάρ ἐστι τὸ ἐργαζόμενον πρὸς τὰς ιδέας ἀποβλέπον; ἐνδέχεται τε καὶ εἶναι καὶ γίνεσθαι ὁτιοῦν καὶ μὴ εἰκαζόμενον, ὥστε καὶ ὄντος Σωκράτους καὶ μὴ ὄντος γένοιτ' ἂν οἷος Σωκράτης· ὁμοίως δὲ δῆλον ὅτι καὶ εἴ ἦν ὁ Σωκράτης αἰδῖος. ἔσται τε πλείω παραδείγματα τοῦ αὐτοῦ, ὥστε καὶ εἶδη, οἷον τοῦ ἀνθρώπου τὸ ζῶον καὶ τὸ δίπουν, ἅμα δὲ καὶ αὐτοάνθρωπος. ἔτι οὐ μόνον τῶν αἰσθητῶν παραδείγματα τὰ εἶδη ἀλλὰ καὶ αὐτῶν, οἷον τὸ γένος τῶν ὡς γένους εἰδῶν· ὥστε τὸ αὐτὸ ἔσται παράδειγμα καὶ εἰκῶν. ἔτι δόξειεν ἂν ἀδύνατον χωρὶς εἶναι τὴν οὐσίαν καὶ οὐ ἢ οὐσία· [1080a] ὥστε πῶς ἂν αἱ ιδέαι οὐσίαι τῶν πραγμάτων οὔσαι χωρὶς εἶεν; ἐν δὲ τῷ Φαίδωνι τοῦτον λέγεται τὸν τρόπον, ὡς καὶ τοῦ εἶναι καὶ τοῦ γίνεσθαι αἴτια τὰ εἶδη ἐστίν· καίτοι τῶν εἰδῶν ὄντων ὅμως οὐ γίνεταί ἂν μὴ ἢ τὸ κινῆσον, καὶ πολλὰ γίνεταί ἕτερα, οἷον οἰκία καὶ δακτύλιος, ὧν οὐ φασιν εἶναι εἶδη· ὥστε δῆλον ὅτι ἐνδέχεται κάκεῖνα, ὧν φασὶν ιδέας εἶναι, καὶ εἶναι καὶ γίνεσθαι διὰ τοιαύτας αἰτίας οἷας καὶ τὰ ῥηθέντα νῦν, ἀλλ' οὐ διὰ τὰ εἶδη. ἀλλὰ περὶ μὲν τῶν ιδεῶν καὶ τοῦτον τὸν τρόπον καὶ διὰ λογικωτέρων καὶ ἀκριβεστέρων λόγων ἔστι πολλὰ συναγαγεῖν ὅμοια τοῖς τεθεωρημένοις.

Ἐπεὶ δὲ διώριστα περὶ τούτων, καλῶς ἔχει πάλιν θεωρῆσαι τὰ περὶ τοὺς ἀριθμοὺς συμβαίνοντα τοῖς λέγουσιν οὐσίας αὐτοὺς εἶναι χωριστὰς καὶ τῶν ὄντων αἰτίας πρώτας. ἀνάγκη δ', εἴπερ ἐστὶν ὁ ἀριθμὸς φύσις τις καὶ μὴ ἄλλη τίς ἐστὶν αὐτοῦ ἢ οὐσία ἀλλὰ τοῦτ' αὐτό, ὥσπερ φασὶ τινες, ἦτοι εἶναι τὸ μὲν πρῶτόν τι αὐτοῦ τὸ δ' ἐχόμενον, ἕτερον ὃν τῷ εἶδει ἕκαστον, - καὶ τοῦτο ἢ ἐπὶ τῶν μονάδων εὐθὺς ὑπάρχει καὶ ἔστιν ἀσύμβλητος ὅποιοι ὡν μονὰς ὅποιοι ὡν μονάδι, ἢ εὐθὺς ἐφεξῆς πᾶσαι καὶ συμβληταὶ ὅποιοι ὡν ὅποιοι ὡν, οἷον λέγουσιν εἶναι τὸν μαθηματικὸν ἀριθμὸν (ἐν γὰρ τῷ μαθηματικῷ οὐδὲν διαφέρει οὐδεμία μονὰς ἕτερα ἕτερας)· ἢ τὰς μὲν συμβλητὰς τὰς δὲ μή (οἷον εἰ ἔστι μετὰ τὸ ἐν πρώτη ἢ δυάς, ἔπειτα ἢ τριάς καὶ οὕτω δὴ ὁ ἄλλος ἀριθμός, εἰσὶ δὲ συμβληταὶ αἱ ἐν ἐκάστῳ ἀριθμῷ μονάδες, οἷον αἱ ἐν τῇ δυάδι τῇ πρώτῃ αὐταῖς, καὶ αἱ ἐν τῇ τριάδι τῇ πρώτῃ αὐταῖς, καὶ οὕτω δὴ ἐπὶ τῶν ἄλλων ἀριθμῶν· αἱ δ' ἐν τῇ δυάδι αὐτῇ πρὸς τὰς ἐν τῇ τριάδι αὐτῇ ἀσύμβλητοι, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων τῶν ἐφεξῆς ἀριθμῶν· διὸ καὶ ὁ μὲν μαθηματικὸς ἀριθμεῖται μετὰ τὸ ἐν δύο, πρὸς τῷ ἔμπροσθεν ἐνὶ ἄλλο ἔν, καὶ τὰ τρία πρὸς τοῖς δυσὶ τούτοις ἄλλο ἔν, καὶ ὁ

λοιπὸς δὲ ὡσαύτως· οὗτος δὲ μετὰ τὸ ἓν δύο ἕτερα ἄνευ τοῦ ἑνὸς τοῦ πρώτου, καὶ ἡ τριάς ἄνευ τῆς δυάδος, ὁμοίως δὲ καὶ ὁ ἄλλος ἀριθμός). ἢ τὸν μὲν εἶναι τῶν ἀριθμῶν οἷος ὁ πρῶτος ἐλέχθη, τὸν δ' οἷον οἱ μαθηματικοὶ λέγουσι, τρίτον δὲ τὸν ῥηθέντα τελευταῖον· ἔτι τούτους ἢ χωριστοὺς εἶναι τοὺς [1080b] ἀριθμοὺς τῶν πραγμάτων, ἢ οὐ χωριστοὺς ἀλλ' ἐν τοῖς αἰσθητοῖς (οὐχ οὕτως δ' ὡς τὸ πρῶτον ἐπεσκοποῦμεν, ἀλλ' ὡς ἐκ τῶν ἀριθμῶν ἐνυπαρχόντων ὄντα τὰ αἰσθητά) ἢ τὸν μὲν αὐτῶν εἶναι τὸν δὲ μή, ἢ πάντας εἶναι. - οἱ μὲν οὖν τρόποι καθ' οὓς ἐνδέχεται αὐτοὺς εἶναι οὗτοί εἰσιν ἐξ ἀνάγκης μόνοι, σχεδὸν δὲ καὶ οἱ λέγοντες τὸ ἓν ἀρχὴν εἶναι καὶ οὐσίαν καὶ στοιχεῖον πάντων, καὶ ἐκ τούτου καὶ ἄλλου τινὸς εἶναι τὸν ἀριθμόν, ἕκαστος τούτων τινὰ τῶν τρόπων εἴρηκε, πλὴν τοῦ πάσας τὰς μονάδας εἶναι ἀσυμβλήτους. καὶ τοῦτο συμβέβηκεν εὐλόγως· οὐ γὰρ ἐνδέχεται ἔτι ἄλλον τρόπον εἶναι παρὰ τοὺς εἰρημένους. οἱ μὲν οὖν ἀμφοτέρους φασὶν εἶναι τοὺς ἀριθμούς, τὸν μὲν ἔχοντα τὸ πρότερον καὶ ὕστερον τὰς ιδέας, τὸν δὲ μαθηματικὸν παρὰ τὰς ιδέας καὶ τὰ αἰσθητά, καὶ χωριστοὺς ἀμφοτέρους τῶν αἰσθητῶν· οἱ δὲ τὸν μαθηματικὸν μόνον ἀριθμὸν εἶναι, τὸν πρῶτον τῶν ὄντων, κεχωρισμένον τῶν αἰσθητῶν. καὶ οἱ Πυθαγόρειοι δ' ἓνα, τὸν μαθηματικόν, πλὴν οὐ κεχωρισμένον ἀλλ' ἐκ τούτου τὰς αἰσθητὰς οὐσίας συνεστάναι φασὶν· τὸν γὰρ ὅλον οὐρανὸν κατασκευάζουσιν ἐξ ἀριθμῶν, πλὴν οὐ μοναδικῶν, ἀλλὰ τὰς μονάδας ὑπολαμβάνουσιν ἔχειν μέγεθος· ὅπως δὲ τὸ πρῶτον ἓν συνέστη ἔχον μέγεθος, ἀπορεῖν εἰκόασιν. ἄλλος δέ τις τὸν πρῶτον ἀριθμὸν τὸν τῶν εἰδῶν ἓνα εἶναι, ἔνιοι δὲ καὶ τὸν μαθηματικὸν τὸν αὐτὸν τοῦτον εἶναι. ὁμοίως δὲ καὶ περὶ τὰ μήκη καὶ περὶ τὰ ἐπίπεδα καὶ περὶ τὰ στερεά. οἱ μὲν γὰρ ἕτερα τὰ μαθηματικὰ καὶ τὰ μετὰ τὰς ιδέας· τῶν δὲ ἄλλως λεγόντων οἱ μὲν τὰ μαθηματικὰ καὶ μαθηματικῶς λέγουσιν, ὅσοι μὴ ποιοῦσι τὰς ιδέας ἀριθμοὺς μηδὲ εἶναί φασιν ιδέας, οἱ δὲ τὰ μαθηματικά, οὐ μαθηματικῶς δέ· οὐ γὰρ τέμνεσθαι οὔτε μέγεθος πᾶν εἰς μεγέθη, οὔθ' ὅποιασοῦν μονάδας δυάδα εἶναι. μοναδικοὺς δὲ τοὺς ἀριθμοὺς εἶναι πάντες τιθέασι, πλὴν τῶν Πυθαγορείων, ὅσοι τὸ ἓν στοιχεῖον καὶ ἀρχὴν φασιν εἶναι τῶν ὄντων· ἐκεῖνοι δ' ἔχοντας μέγεθος, καθάπερ εἴηται πρότερον. ὁσαυτῶς μὲν οὖν ἐνδέχεται λεχθῆναι περὶ αὐτῶν, καὶ ὅτι πάντες εἰσὶν εἰρημένοι οἱ τρόποι, φανερόν ἐκ τούτων· ἔστι δὲ πάντα μὲν ἀδύνατα, μᾶλλον δ' ἴσως θάτερα τῶν ἑτέρων.

Πρῶτον μὲν οὖν σκεπτέον εἰ συμβληταὶ αἱ μονάδες ἢ [1081a] ἀσύμβλητοι, καὶ εἰ ἀσύμβλητοι, ποτέρως ὥνπερ διείλομεν. ἔστι μὲν γὰρ ὅποιανοῦν εἶναι ὅποιαοῦν μονάδι ἀσύμβλητον, ἔστι δὲ τὰς ἐν αὐτῇ τῇ δυάδι πρὸς τὰς ἐν αὐτῇ τῇ τριάδι, καὶ οὕτως δὴ ἀσυμβλήτους εἶναι τὰς ἐν ἐκάστῳ τῷ πρώτῳ ἀριθμῷ πρὸς ἀλλήλας. εἰ μὲν οὖν πᾶσαι συμβληταὶ καὶ ἀδιάφοροι



αἱ μονάδες, ὁ μαθηματικὸς γίνεταί ἀριθμὸς καὶ εἷς μόνος, καὶ τὰς ἰδέας οὐκ ἐνδέχεται εἶναι τοὺς ἀριθμούς (ποῖος γὰρ ἔσται ἀριθμὸς αὐτὸ ἄνθρωπος ἢ ζῶον ἢ ἄλλο ὅτιοῦν τῶν εἰδῶν; ἰδέα μὲν γὰρ μία ἐκάστου, οἷον αὐτοῦ ἀνθρώπου μία καὶ αὐτοῦ ζώου ἄλλη μία· οἱ δ' ὅμοιοι καὶ ἀδιάφοροι ἄπειροι, ὥστ' οὐθὲν μᾶλλον ἢδε ἢ τριάς αὐτοάνθρωπος ἢ ὁποιαοῦν), εἰ δὲ μὴ εἰσὶν ἀριθμοὶ αἱ ἰδέαι, οὐδ' ὅλως οἷόν τε αὐτὰς εἶναι (ἐκ τίνων γὰρ ἔσσονται ἀρχῶν αἱ ἰδέαι; ὁ γὰρ ἀριθμὸς ἐστὶν ἐκ τοῦ ἐνὸς καὶ τῆς δυάδος τῆς ἀορίστου, καὶ αἱ ἀρχαὶ καὶ τὰ στοιχεῖα λέγονται τοῦ ἀριθμοῦ εἶναι, τάξαι τε οὔτε προτέρας ἐνδέχεται τῶν ἀριθμῶν αὐτὰς οὔθ' ὑστέρας)· εἰ δ' ἀσύμβλητοι αἱ μονάδες, καὶ οὕτως ἀσύμβλητοι ὥστε ἡπισοῦν ἡτινιοῦν, οὔτε τὸν μαθηματικὸν ἐνδέχεται εἶναι τοῦτον τὸν ἀριθμόν (ὁ μὲν γὰρ μαθηματικὸς ἐξ ἀδιαφόρων, καὶ τὰ δεικνύμενα κατ' αὐτοῦ ὡς ἐπὶ τοιούτου ἀρμόττει) οὔτε τὸν τῶν εἰδῶν. οὐ γὰρ ἔσται ἡ δυὰς πρώτη ἐκ τοῦ ἐνὸς καὶ τῆς ἀορίστου δυάδος, ἔπειτα οἱ ἐξῆς ἀριθμοί, ὡς λέγεται δυὰς, τριάς, τετράς - ἅμα γὰρ αἱ ἐν τῇ δυάδι τῇ πρώτῃ μονάδες γεννῶνται, εἴτε ὥσπερ ὁ πρῶτος εἰπὼν ἐξ ἀνίσων (ἰσασθέντων γὰρ ἐγένοντο) εἴτε ἄλλως - , ἐπεὶ εἰ ἔσται ἡ ἑτέρα μονὰς τῆς ἑτέρας προτέρα, καὶ τῆς δυάδος τῆς ἐκ τούτων ἔσται προτέρα· ὅταν γὰρ ἡ τι τὸ μὲν πρότερον τὸ δὲ ὕστερον, καὶ τὸ ἐκ τούτων τοῦ μὲν ἔσται πρότερον τοῦ δ' ὕστερον. ἔτι ἐπειδὴ ἔστι πρῶτον μὲν αὐτὸ τὸ ἓν, ἔπειτα τῶν ἄλλων ἔστι τι πρῶτον ἓν δεύτερον δὲ μετ' ἐκεῖνο, καὶ πάλιν τρίτον τὸ δεύτερον μὲν μετὰ τὸ δεύτερον τρίτον δὲ μετὰ τὸ πρῶτον ἓν, - ὥστε πρότεραι ἂν εἴεν αἱ μονάδες ἢ οἱ ἀριθμοὶ ἐξ ὧν λέγονται, οἷον ἐν τῇ δυάδι τρίτη μονὰς ἔσται πρὶν τὰ τρία εἶναι, καὶ ἐν τῇ τριάδι τετάρτη καὶ [ἡ] πέμπτη πρὶν τοὺς ἀριθμοὺς τούτους. οὐδεὶς μὲν οὖν τὸν τρόπον τοῦτον εἴρηκεν αὐτῶν τὰς μονάδας ἀσυμβλήτους, ἔστι δὲ κατὰ μὲν τὰς ἐκείνων ἀρχὰς εὐλογον καὶ οὕτως, [1081b] κατὰ μέντοι τὴν ἀλήθειαν ἀδύνατον. τὰς τε γὰρ μονάδας προτέρας καὶ ὑστέρας εἶναι εὐλογον, εἴπερ καὶ πρώτη τις ἔστι μονὰς καὶ ἓν πρῶτον, ὁμοίως δὲ καὶ δυάδας, εἴπερ καὶ δυὰς πρώτη ἔστιν· μετὰ γὰρ τὸ πρῶτον εὐλογον καὶ ἀναγκαῖον δευτέρον τι εἶναι, καὶ εἰ δεύτερον, τρίτον, καὶ οὕτω δὴ τὰ ἄλλα ἐφεξῆς (ἅμα δ' ἀμφοτέρω λέγειν, μονάδα τε μετὰ τὸ ἓν πρώτην εἶναι καὶ δευτέραν, καὶ δυάδα πρώτην, ἀδύνατον). οἱ δὲ ποιοῦσι μονάδα μὲν καὶ ἓν πρῶτον, δεύτερον δὲ καὶ τρίτον οὐκέτι, καὶ δυάδα πρώτην, δευτέραν δὲ καὶ τρίτην οὐκέτι. φανερόν δὲ καὶ ὅτι οὐκ ἐνδέχεται, εἰ ἀσύμβλητοι πᾶσαι αἱ μονάδες, δυάδα εἶναι αὐτὴν καὶ τριάδα καὶ οὕτω τοὺς ἄλλους ἀριθμούς. ἂν γὰρ ὥσιν ἀδιάφοροι αἱ μονάδες ἂν τε διαφέρουσιν ἐκάστη ἐκάστης, ἀνάγκη ἀριθμεῖσθαι τὸν ἀριθμὸν κατὰ πρόσθεσιν, οἷον τὴν δυάδα πρὸς τῷ ἐνὶ ἄλλου ἐνὸς προστεθέντος, καὶ τὴν τριάδα ἄλλου ἐνὸς πρὸς τοῖς δυσὶ προστεθέντος, καὶ τὴν τετράδα ὡσαύτως· τούτων δὲ ὄντων ἀδύνατον τὴν γένεσιν εἶναι τῶν

ἀριθμῶν ὡς γεννῶσιν ἐκ τῆς δυάδος καὶ τοῦ ἑνός. μόνιον γὰρ γίγνεται ἡ δυὰς τῆς τριάδος καὶ αὕτη τῆς τετράδος, τὸν αὐτὸν δὲ τρόπον συμβαίνει καὶ ἐπὶ τῶν ἐχομένων. ἀλλ' ἐκ τῆς δυάδος τῆς πρώτης καὶ τῆς ἀόριστου δυάδος ἐγίγνετο ἡ τετράς, δύο δυάδες παρ' αὐτὴν τὴν δυάδα· εἰ δὲ μή, μόνιον ἔσται αὕτη ἡ δυὰς, ἑτέρα δὲ προσέσται μία δυὰς, καὶ ἡ δυὰς ἔσται ἐκ τοῦ ἑνὸς αὐτοῦ καὶ ἄλλου ἑνός· εἰ δὲ τοῦτο, οὐχ οἷόν τ' εἶναι τὸ ἕτερον στοιχεῖον δυάδα ἀόριστον· μονάδα γὰρ μίαν γεννᾷ ἀλλ' οὐ δυάδα ὠρισμένην. ἔτι παρ' αὐτὴν τὴν τριάδα καὶ αὐτὴν τὴν δυάδα πῶς ἔσονται ἄλλαι τριάδες καὶ δυάδες; καὶ τίνα τρόπον ἐκ προτέρων μονάδων καὶ ὑστέρων σύγκεινται; πάντα γὰρ ταῦτ' «ἄτοπα» ἐστὶ καὶ πλασματώδη, καὶ ἀδύνατον εἶναι πρώτην δυάδα, εἴτ' αὐτὴν τριάδα. ἀνάγκη δ', ἐπεὶ ἔσται τὸ ἓν καὶ ἡ ἀόριστος δυὰς στοιχεῖα. εἰ δ' ἀδύνατα τὰ συμβαίνοντα, καὶ τὰς ἀρχὰς εἶναι ταύτας ἀδύνατον. - εἰ μὲν οὖν διάφοροι αἱ μονάδες ὅποιαοῦν ὅποιαοῦν, ταῦτα καὶ τοιαῦθ' ἕτερα συμβαίνει ἐξ ἀνάγκης· εἰ δ' αἱ μὲν ἐν ἄλλῳ διάφοροι αἱ δ' ἐν τῷ αὐτῷ ἀριθμῷ ἀδιάφοροι ἀλλήλαις μόναι, καὶ οὕτως οὐθὲν ἐλάττω συμβαίνει τὰ δυσχερῆ.[1082a] οἷον γὰρ ἐν τῇ δεκάδι αὐτῇ ἔννεϊσι δέκα μονάδες, σύγκειται δὲ καὶ ἐκ τούτων καὶ ἐκ δύο πεντάδων ἡ δεκάς. ἐπεὶ δ' οὐχ ὁ τυχὼν ἀριθμὸς αὕτη ἡ δεκάς οὐδὲ σύγκειται ἐκ τῶν τυχουσῶν πεντάδων, ὥσπερ οὐδὲ μονάδων, ἀνάγκη διαφέρειν τὰς μονάδας τὰς ἐν τῇ δεκάδι ταύτῃ. ἂν γὰρ μὴ διαφέρωσιν, οὐδ' αἱ πεντάδες διοίσουσιν ἐξ ὧν ἐστὶν ἡ δεκάς· ἐπεὶ δὲ διαφέρουσι, καὶ αἱ μονάδες διοίσουσιν. εἰ δὲ διαφέρουσι, πότερον οὐκ ἐνέσονται πεντάδες ἄλλαι ἀλλὰ μόνον αὗται αἱ δύο, ἢ ἔσονται; εἴτε δὲ μὴ ἐνέσονται, ἄτοπον· εἴτ' ἐνέσονται, ποῖα ἔσται δεκάς ἐξ ἐκείνων; οὐ γὰρ ἔστιν ἑτέρα δεκάς ἐν τῇ δεκάδι παρ' αὐτὴν. ἀλλὰ μὴν καὶ ἀνάγκη γε μὴ ἐκ τῶν τυχουσῶν δυάδων τὴν τετράδα συγκεῖσθαι· ἡ γὰρ ἀόριστος δυὰς, ὡς φασι, λαβοῦσα τὴν ὠρισμένην δυάδα δύο δυάδας ἐποίησεν· τοῦ γὰρ ληφθέντος ἦν δυοποιός. - ἔτι τὸ εἶναι παρὰ τὰς δύο μονάδας τὴν δυάδα φύσιν τινά, καὶ τὴν τριάδα παρὰ τὰς τρεῖς μονάδας, πῶς ἐνδέχεται; ἡ γὰρ μεθέξει θατέρου θατέρου, ὥσπερ λευκὸς ἄνθρωπος παρὰ λευκὸν καὶ ἄνθρωπον (μετέχει γὰρ τούτων), ἢ ὅταν ἡ θατέρου θάτερον διαφορά τις, ὥσπερ ὁ ἄνθρωπος παρὰ ζῶον καὶ δίπουν. ἔτι τὰ μὲν ἀφ' ἧς ἐστὶν ἓν τὰ δὲ μίξει τὰ δὲ θέσει· ὧν οὐδὲν ἐνδέχεται ὑπάρχειν ταῖς μονάσιν ἐξ ὧν ἡ δυὰς καὶ ἡ τριάς· ἀλλ' ὥσπερ οἱ δύο ἄνθρωποι οὐχ ἓν τι παρ' ἀμφοτέρους, οὕτως ἀνάγκη καὶ τὰς μονάδας. καὶ οὐχ ὅτι ἀδιαίρετοι, διοίσουσι διὰ τοῦτο· καὶ γὰρ αἱ στιγμαὶ ἀδιαίρετοι, ἀλλ' ὅμως παρὰ τὰς δύο οὐθὲν ἕτερον ἢ δυὰς αὐτῶν. - ἀλλὰ μὴν οὐδὲ τοῦτο δεῖ λανθάνειν, ὅτι συμβαίνει προτέρας καὶ ὑστέρας εἶναι δυάδας, ὁμοίως δὲ καὶ τοὺς ἄλλους ἀριθμούς. αἱ μὲν γὰρ ἐν τῇ τετράδι δυάδες ἔστωσαν ἀλλήλαις ἅμα· ἀλλ' αὗται τῶν ἐν τῇ ὀκτάδι πρότεραί εἰσι, καὶ ἐγέννησαν, ὥσπερ ἡ δυὰς ταύτας, αὗται τὰς τετράδας τὰς ἐν τῇ ὀκτάδι αὐτῇ, ὥστε εἰ καὶ ἡ πρώτη

δυὰς ἰδέα, καὶ αὕται ἰδέαι τινὲς ἔσονται. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῶν μονάδων· αἱ γὰρ ἐν τῇ δυάδι τῇ πρώτῃ μονάδες γεννῶσι τὰς τέτταρας τὰς ἐν τῇ τετράδι, ὥστε πᾶσαι αἱ μονάδες ἰδέαι γίνονται καὶ συγκρίσεται ἰδέα ἐξ ἰδεῶν· ὥστε δῆλον ὅτι κάκεῖνα ὧν ἰδέαι αὗται τυγχάνουσιν οὕσαι συγκείμενα ἔσται, οἷον εἰ τὰ ζῶα φαίη [1082b] τις συγκεῖσθαι ἐκ ζώων, εἰ τούτων ἰδέαι εἰσίν. - ὅλως δὲ τὸ ποιεῖν τὰς μονάδας διαφόρους ὅπως οὖν ἄτοπον καὶ πλασματῶδες (λέγω δὲ πλασματῶδες τὸ πρὸς ὑπόθεσιν βεβιασμένον)· οὔτε γὰρ κατὰ τὸ ποσὸν οὔτε κατὰ τὸ ποιὸν ὁρῶμεν διαφέρουσιν μονάδα μονάδος, ἀνάγκη τε ἢ ἴσον ἢ ἄνισον εἶναι ἀριθμόν, πάντα μὲν ἄλλὰ μάλιστα τὸν μοναδικόν, ὥστ' εἰ μήτε πλείων μήτ' ἐλάττων, ἴσος· τὰ δὲ ἴσα καὶ ὅλως ἀδιάφορα ταῦτά ὑπολαμβάνομεν ἐν τοῖς ἀριθμοῖς. εἰ δὲ μή, οὐδ' αἱ ἐν αὐτῇ τῇ δεκάδι δυάδες ἀδιάφοροι ἔσονται ἴσαι οὕσαι· τίνα γὰρ αἰτίαν ἔξει λέγειν ὁ φάσκων ἀδιαφόρους εἶναι; ἔτι εἰ ἅπασα μονὰς καὶ μονὰς ἄλλη δύο, ἢ ἐκ τῆς δυάδος αὐτῆς μονὰς καὶ ἢ ἐκ τῆς τριάδος αὐτῆς δυὰς ἔσται ἐκ διαφερουσῶν τε, καὶ πότερον προτέρα τῆς τριάδος ἢ ὑστέρα; μᾶλλον γὰρ ἔοικε προτέραν ἀναγκαῖον εἶναι· ἢ μὲν γὰρ ἅμα τῇ τριάδι ἢ δ' ἅμα τῇ δυάδι τῶν μονάδων. καὶ ἡμεῖς μὲν ὑπολαμβάνομεν ὅλως ἐν καὶ ἓν, καὶ ἐὰν ἢ ἴσα ἢ ἄνισα, δύο εἶναι, οἷον τὸ ἀγαθὸν καὶ τὸ κακόν, καὶ ἄνθρωπον καὶ ἵππον· οἱ δ' οὕτως λέγοντες οὐδὲ τὰς μονάδας. εἴτε δὲ μὴ ἔστι πλείων ἀριθμὸς ὁ τῆς τριάδος αὐτῆς ἢ ὁ τῆς δυάδος, θαυμαστόν· εἴτε ἐστὶ πλείων, δῆλον ὅτι καὶ ἴσος ἔνεστι τῇ δυάδι, ὥστε οὗτος ἀδιάφορος αὐτῇ τῇ δυάδι. ἀλλ' οὐκ ἐνδέχεται, εἰ πρῶτός τις ἔστιν ἀριθμὸς καὶ δεύτερος. οὐδὲ ἔσονται αἱ ἰδέαι ἀριθμοί. τοῦτο μὲν γὰρ αὐτὸ ὀρθῶς λέγουσιν οἱ διαφόρους τὰς μονάδας ἀξιοῦντες εἶναι, εἵπερ ἰδέαι ἔσονται, ὥσπερ εἴρηται πρότερον· ἐν γὰρ τὸ εἶδος, αἱ δὲ μονάδες εἰ ἀδιάφοροι, καὶ αἱ δυάδες καὶ αἱ τριάδες ἔσονται ἀδιάφοροι. διὸ καὶ τὸ ἀριθμεῖσθαι οὕτως, ἐν δύο, μὴ προσλαμβάνομένου πρὸς τῷ ὑπάρχοντι ἀναγκαῖον αὐτοῖς λέγειν (οὔτε γὰρ ἡ γένεσις ἔσται ἐκ τῆς ἀορίστου δυάδος, οὔτ' ἰδέαν ἐνδέχεται εἶναι· ἐνυπάρξει γὰρ ἑτέρα ἰδέα ἐν ἑτέρᾳ, καὶ πάντα τὰ εἶδη ἐνὸς μέρη)· διὸ πρὸς μὲν τὴν ὑπόθεσιν ὀρθῶς λέγουσιν, ὅλως δ' οὐκ ὀρθῶς· πολλὰ γὰρ ἀναιροῦσιν, ἐπεὶ τοῦτό γ' αὐτὸ ἔχει τινὰ φήσουσιν ἀπορίαν, πότερον, ὅταν ἀριθμῶμεν καὶ εἴπωμεν ἐν δύο τρία, προσλαμβάνοντες ἀριθμοῦμεν ἢ κατὰ μερίδας. ποιοῦμεν δὲ ἀμφοτέρως· διὸ γελοῖον ταύτην εἰς τηλικαύτην τῆς οὐσίας ἀνάγειν διαφοράν. - [1083a] πάντων δὲ πρῶτον καλῶς ἔχει διορίσασθαι τίς ἀριθμοῦ διαφορά, καὶ μονάδος, εἰ ἔστιν. ἀνάγκη δ' ἢ κατὰ τὸ ποσὸν ἢ κατὰ τὸ ποιὸν διαφέρειν· τούτων δ' οὐδέτερον φαίνεται ἐνδέχεσθαι ὑπάρχειν. ἀλλ' ἢ ἀριθμός, κατὰ τὸ ποσόν. εἰ δὲ δὴ καὶ αἱ μονάδες τῷ ποσῷ διέφερον, κἂν ἀριθμὸς ἀριθμοῦ διέφερον ὁ ἴσος τῷ πλήθει τῶν μονάδων. ἔτι πότερον αἱ πρῶται μείζους ἢ ἐλάττους, καὶ

αἱ ὕστερον ἐπιδιδόασιν ἢ τοῦναντίον; πάντα γὰρ ταῦτα ἄλογα. ἀλλὰ μὴν οὐδὲ κατὰ τὸ ποιὸν διαφέρειν ἐνδέχεται. οὐθὲν γὰρ αὐταῖς οἶόν τε ὑπάρχειν πάθος· ὕστερον γὰρ καὶ τοῖς ἀριθμοῖς φασὶν ὑπάρχειν τὸ ποιὸν τοῦ ποσοῦ. ἔτι οὗτ' ἂν ἀπὸ τοῦ ἐνὸς τοῦτ' αὐταῖς γένοιτο οὗτ' ἂν ἀπὸ τῆς δυάδος· τὸ μὲν γὰρ οὐ ποιὸν ἢ δὲ ποσοποιόν· τοῦ γὰρ πολλὰ τὰ ὄντα εἶναι αἰτία αὕτη ἢ φύσις. εἰ δ' ἄρα ἔχει πῶς ἄλλως, λεκτέον ἐν ἀρχῇ μάλιστα τοῦτο καὶ διοριστέον περὶ μονάδος διαφορᾶς, μάλιστα μὲν καὶ διότι ἀνάγκη ὑπάρχειν· εἰ δὲ μή, τίνα λέγουσιν; - ὅτι μὲν οὖν, εἴπερ εἰσὶν ἀριθμοὶ αἱ ἰδέαι, οὔτε συμβλητὰς τὰς μονάδας ἀπάσας ἐνδέχεται εἶναι, φανερόν, οὔτε ἀσυμβλήτους ἀλλήλαις οὐδέτερον τῶν τρόπων· ἀλλὰ μὴν οὐδ' ὥς ἕτεροὶ τινες λέγουσι περὶ τῶν ἀριθμῶν λέγεται καλῶς. εἰσὶ δ' οὗτοι ὅσοι ἰδέας μὲν οὐκ οἶονται εἶναι οὔτε ἀπλῶς οὔτε ὥς ἀριθμούς τινας οὔσας, τὰ δὲ μαθηματικὰ εἶναι καὶ τοὺς ἀριθμοὺς πρῶτους τῶν ὄντων, καὶ ἀρχὴν αὐτῶν εἶναι αὐτὸ τὸ ἔν. ἄτοπον γὰρ τὸ ἐν μὲν εἶναι τι πρῶτον τῶν ἐνῶν, ὥσπερ ἐκεῖνοί φασι, δυάδα δὲ τῶν δυάδων μή, μηδὲ τριάδα τῶν τριάδων· τοῦ γὰρ αὐτοῦ λόγου πάντα ἐστίν. εἰ μὲν οὖν οὕτως ἔχει τὰ περὶ τὸν ἀριθμὸν καὶ θήσῃ τις εἶναι τὸν μαθηματικὸν μόνον, οὐκ ἔστι τὸ ἐν ἀρχῇ (ἀνάγκη γὰρ διαφέρειν τὸ ἐν τὸ τοιοῦτο τῶν ἄλλων μονάδων· εἰ δὲ τοῦτο, καὶ δυάδα τινὰ πρῶτην τῶν δυάδων, ὁμοίως δὲ καὶ τοὺς ἄλλους ἀριθμοὺς τοὺς ἐφεξῆς)· εἰ δὲ ἐστὶ τὸ ἐν ἀρχῇ, ἀνάγκη μᾶλλον ὥσπερ Πλάτων ἔλεγεν ἔχειν τὰ περὶ τοὺς ἀριθμούς, καὶ εἶναι δυάδα πρῶτην καὶ τριάδα, καὶ οὐ συμβλητοὺς εἶναι τοὺς ἀριθμοὺς πρὸς ἀλλήλους. ἂν δ' αὖ πάλιν τις τιθῇ ταῦτα, εἴρηται ὅτι ἀδύνατα πολλὰ συμβαίνει. ἀλλὰ μὴν ἀνάγκη γε ἢ οὕτως ἢ ἐκείνως ἔχειν, ὥστ' εἰ μηδετέρως, οὐκ ἂν ἐνδέχοιτο [1083b] εἶναι τὸν ἀριθμὸν χωριστόν. - φανερόν δ' ἐκ τούτων καὶ ὅτι χεῖριστα λέγεται ὁ τρίτος τρόπος, τὸ εἶναι τὸν αὐτὸν ἀριθμὸν τὸν τῶν εἰδῶν καὶ τὸν μαθηματικόν. ἀνάγκη γὰρ εἰς μίαν δόξαν συμβαίνειν δύο ἁμαρτίας· οὔτε γὰρ μαθηματικὸν ἀριθμὸν ἐνδέχεται τοῦτον εἶναι τὸν τρόπον, ἀλλ' ἰδίας ὑποθέσεις ὑποθέμενον ἀνάγκη μηκύνειν, ὅσα τε τοῖς ὥς εἶδη τὸν ἀριθμὸν λέγουσι συμβαίνει, καὶ ταῦτα ἀναγκαῖον λέγειν. - ὁ δὲ τῶν Πυθαγορείων τρόπος τῇ μὲν ἐλάττους ἔχει δυσχερείας τῶν πρότερον εἰρημένων, τῇ δὲ ἰδίας ἑτέρας. τὸ μὲν γὰρ μὴ χωριστὸν ποιεῖν τὸν ἀριθμὸν ἀφαιρεῖται πολλὰ τῶν ἀδυνάτων· τὸ δὲ τὰ σώματα ἐξ ἀριθμῶν εἶναι συγκείμενα, καὶ τὸν ἀριθμὸν τοῦτον εἶναι μαθηματικόν, ἀδύνατόν ἐστιν. οὔτε γὰρ ἄτομα μεγέθη λέγειν ἀληθές, εἴ θ' ὅτι μάλιστα τοῦτον ἔχει τὸν τρόπον, οὐχ αἶ γε μονάδες μέγεθος ἔχουσιν· μέγεθος δὲ ἐξ ἀδιαιρέτων συγκεῖσθαι πῶς δυνατόν; ἀλλὰ μὴν ὅ γ' ἀριθμητικὸς ἀριθμὸς μοναδικός ἐστιν. ἐκεῖνοι δὲ τὸν ἀριθμὸν τὰ ὄντα λέγουσιν· τὰ γοῦν θεωρήματα προσάπτουσι τοῖς σώμασιν ὥς ἐξ ἐκείνων ὄντων τῶν ἀριθμῶν. - εἰ τοίνυν ἀνάγκη μὲν, εἴπερ ἐστὶν ἀριθμὸς τῶν ὄντων τι καθ' αὐτό, τούτων εἶναι τινα τῶν εἰρημένων τρόπων, οὐθένα δὲ τούτων

ἐνδέχεται, φανερόν ὥς οὐκ ἔστιν ἀριθμοῦ τις τοιαύτη φύσις οἷαν κατασκευάζουσιν οἱ χωριστὸν ποιοῦντες αὐτόν. - ἔτι πότερον ἐκάστη μονὰς ἐκ τοῦ μεγάλου καὶ μικροῦ ἰσασθέντων ἐστίν, ἢ ἡ μὲν ἐκ τοῦ μικροῦ ἡ δ' ἐκ τοῦ μεγάλου; εἰ μὲν δὴ οὕτως, οὔτε ἐκ πάντων τῶν στοιχείων ἕκαστον οὔτε ἀδιάφοροι αἱ μονάδες (ἐν τῇ μὲν γὰρ τὸ μέγα ἐν τῇ δὲ τὸ μικρὸν ὑπάρχει, ἐναντίον τῇ φύσει ὄν). ἔτι αἱ ἐν τῇ τριάδι αὐτῇ πῶς; μία γὰρ περιττή· ἀλλὰ διὰ τοῦτο ἴσως αὐτὸ τὸ ἐν ποιοῦσιν ἐν τῷ περιττῷ μέσον. εἰ δ' ἐκατέρα τῶν μονάδων ἐξ ἀμφοτέρων ἐστὶν ἰσασθέντων, ἢ δυὰς πῶς ἔσται μία τις οὕσα φύσις ἐκ τοῦ μεγάλου καὶ μικροῦ; ἢ τί διοίσει τῆς μονάδος; ἔτι προτέρα ἢ μονὰς τῆς δυάδος (ἀναιρουμένης γὰρ ἀναιρεῖται ἡ δυὰς). ἰδέαν οὖν ἰδέας ἀναγκαῖον αὐτὴν εἶναι, προτέραν γ' οὕσαν ἰδέας, καὶ γεγονέναι προτέραν. ἐκ τίνος οὖν; ἢ γὰρ ἀόριστος δυὰς δυοποιὸς ἦν. - ἔτι ἀνάγκη ἦτοι ἄπειρον τὸν ἀριθμὸν εἶναι ἢ πεπερασμένον· χωριστὸν γὰρ ποιοῦσι τὸν [1084a] ἀριθμόν, ὥστε οὐχ οἷόν τε μὴ οὐχὶ τούτων θάτερον ὑπάρχειν. ὅτι μὲν τοίνυν ἄπειρον οὐκ ἐνδέχεται, δῆλον (οὔτε γὰρ περιττὸς ὁ ἄπειρός ἐστιν οὔτ' ἄρτιος, ἢ δὲ γένεσις τῶν ἀριθμῶν ἢ περιττοῦ ἀριθμοῦ ἢ ἀρτίου ἀεὶ ἐστίν· ὡδὲ μὲν τοῦ ἐνὸς εἰς τὸν ἄρτιον πίπτοντος περιττός, ὡδὲ δὲ τῆς μὲν δυάδος ἐμπιπτούσης ὁ ἀφ' ἐνὸς διπλασιαζόμενος, ὡδὲ δὲ τῶν περιττῶν ὁ ἄλλος ἄρτιος· ἔτι εἰ πᾶσα ἰδέα τινὸς οἱ δὲ ἀριθμοὶ ἰδέαι, καὶ ὁ ἄπειρος ἔσται ἰδέα τινός, ἢ τῶν αἰσθητῶν ἢ ἄλλου τινός· καίτοι οὔτε κατὰ τὴν θέσιν ἐνδέχεται οὔτε κατὰ λόγον, τάττους γ' οὕτω τὰς ἰδέας). εἰ δὲ πεπερασμένος, μέχρι πόσου; τοῦτο γὰρ δεῖ λέγεσθαι οὐ μόνον ὅτι ἀλλὰ καὶ διότι. ἀλλὰ μὴν εἰ μέχρι τῆς δεκάδος ὁ ἀριθμός, ὥσπερ τινὲς φασιν, πρῶτον μὲν ταχὺ ἐπιλείψει τὰ εἶδη - οἷον εἰ ἔστιν ἡ τριάς αὐτοάνθρωπος, τίς ἔσται ἀριθμὸς αὐτόϊππος; αὐτὸ γὰρ ἕκαστος ἀριθμὸς μέχρι δεκάδος· ἀνάγκη δὲ τῶν ἐν τούτοις ἀριθμῶν τινὰ εἶναι (οὐσίαι γὰρ καὶ ἰδέαι οὗτοι). ἀλλ' ὅμως ἐπιλείψει (τὰ τοῦ ζώου γὰρ εἶδη ὑπερέξει) - ἅμα δὲ δῆλον ὅτι εἰ οὕτως ἡ τριάς αὐτοάνθρωπος, καὶ αἱ ἄλλαι τριάδες (ὅμοιαι γὰρ αἱ ἐν τοῖς αὐτοῖς ἀριθμοῖς), ὥστ' ἄπειροι ἔσονται ἄνθρωποι, εἰ μὲν ἰδέα ἐκάστη τριάς, αὐτὸ ἕκαστος ἄνθρωπος, εἰ δὲ μή, ἀλλ' ἄνθρωποί γε. καὶ εἰ μέρος ὁ ἐλάττων τοῦ μείζονος, ὁ ἐκ τῶν συμβλητῶν μονάδων τῶν ἐν τῷ αὐτῷ ἀριθμῷ, εἰ δὴ ἡ τετράς αὐτῇ ἰδέα τινός ἐστιν, οἷον ἵππου ἢ λευκοῦ, ὁ ἄνθρωπος ἔσται μέρος ἵππου, εἰ δυὰς ὁ ἄνθρωπος. ἄτοπον δὲ καὶ τὸ τῆς μὲν δεκάδος εἶναι ἰδέαν ἐνδεκάδος δὲ μή, μηδὲ τῶν ἐχομένων ἀριθμῶν. ἔτι δὲ καὶ ἔστι καὶ γίνεταί ἕνια καὶ ὧν εἶδη οὐκ ἔστιν, ὥστε διὰ τί οὐ κἀκείνων εἶδη ἔστιν; οὐκ ἄρα αἴτια τὰ εἶδη ἐστίν. ἔτι ἄτοπον εἰ ὁ ἀριθμὸς ὁ μέχρι τῆς δεκάδος μᾶλλον τι ὢν καὶ εἶδος αὐτῆς τῆς δεκάδος, καίτοι τοῦ μὲν οὐκ ἔστι γένεσις ὥς ἐνός, τῆς δ' ἔστιν. πειρῶνται δ' ὥς τοῦ μέχρι τῆς δεκάδος τελείου ὄντος ἀριθμοῦ. γεννῶσι γοῦν τὰ ἐπόμενα, οἷον τὸ κενόν, ἀναλογίαν, τὸ περιττόν, τὰ ἄλλα τὰ τοιαῦτα, ἐντὸς τῆς δεκάδος· τὰ μὲν γὰρ ταῖς ἀρχαῖς

ἀποδιδόασιν, οἷον κίνησιν στάσιν, ἀγαθὸν κακόν, τὰ δ' ἄλλα τοῖς ἀριθμοῖς· διὸ τὸ ἓν τὸ περιπτόν· εἰ γὰρ ἓν τῇ τριάδι, πῶς ἢ πεντάς περιπτόν; ἔτι τὰ μεγέθη καὶ ὅσα [1084b] τοιαῦτα μέχρι ποσοῦ, οἷον ἡ πρώτη γραμμή, <ἡ> ἄτομος, εἴτα δυάς, εἴτα καὶ ταῦτα μέχρι δεκάδος. - ἔτι εἰ ἔστι χωριστὸς ὁ ἀριθμός, ἀπορήσειεν ἂν τις πότερον πρότερον τὸ ἓν ἢ ἡ τριάς καὶ ἡ δυάς. ἢ μὲν δὴ σύνθετος ὁ ἀριθμός, τὸ ἓν, ἢ δὲ τὸ καθόλου πρότερον καὶ τὸ εἶδος, ὁ ἀριθμός· ἐκάστη γὰρ τῶν μονάδων μόνιον τοῦ ἀριθμοῦ ὡς ὕλη, ὁ δ' ὡς εἶδος. καὶ ἔστι μὲν ὡς ἡ ὀρθὴ προτέρα τῆς ὀξεΐας, ὅτι ὠρίσται καὶ τῷ λόγῳ· ἔστι δ' ὡς ἡ ὀξεΐα, ὅτι μέρος καὶ εἰς ταύτην διαιρεῖται. ὡς μὲν δὴ ὕλη ἡ ὀξεΐα καὶ τὸ στοιχεῖον καὶ ἡ μονὰς πρότερον, ὡς δὲ κατὰ τὸ εἶδος καὶ τὴν οὐσίαν τὴν κατὰ τὸν λόγον ἡ ὀρθὴ καὶ τὸ ὅλον τὸ ἐκ τῆς ὕλης καὶ τοῦ εἶδους· ἐγγύτερον γὰρ τοῦ εἶδους καὶ οὗ ὁ λόγος τὸ ἄμφω, γενέσει δ' ὕστερον. πῶς οὖν ἀρχὴ τὸ ἓν; ὅτι οὐ διαιρετόν, φασίν· ἀλλ' ἀδιαίρετον καὶ τὸ καθόλου καὶ τὸ ἐπὶ μέρους καὶ τὸ στοιχεῖον. ἀλλὰ τρόπον ἄλλον, τὸ μὲν κατὰ λόγον τὸ δὲ κατὰ χρόνον. ποτέρως οὖν τὸ ἓν ἀρχή; ὥσπερ γὰρ εἴρηται, καὶ ἡ ὀρθὴ τῆς ὀξεΐας καὶ αὕτη ἐκείνης δοκεῖ προτέρα εἶναι, καὶ ἑκατέρα μία· ἀμφοτέρως δὴ ποιοῦσι τὸ ἓν ἀρχήν. ἔστι δὲ ἀδύνατον· τὸ μὲν γὰρ ὡς εἶδος καὶ ἡ οὐσία τὸ δ' ὡς μέρος καὶ ὡς ὕλη. ἔστι γάρ πως ἓν ἑκάτερον - τῇ μὲν ἀληθείᾳ δυνάμει (εἴ γε ὁ ἀριθμὸς ἓν τι καὶ μὴ ὡς σωρὸς ἀλλ' ἕτερος ἐξ ἑτέρων μονάδων, ὥσπερ φασίν), ἐντελεχείᾳ δ' οὗ, ἔστι μονὰς ἑκατέρα· αἴτιον δὲ τῆς συμβαινούσης ἀμαρτίας ὅτι ἅμα ἐκ τῶν μαθημάτων ἐθήρευον καὶ ἐκ τῶν λόγων τῶν καθόλου, ὥστ' ἐξ ἐκείνων μὲν ὡς στιγμὴν τὸ ἓν καὶ τὴν ἀρχὴν ἔθηκαν (ἡ γὰρ μονὰς στιγμὴ ἄθετός ἐστιν· καθάπερ οὖν καὶ ἕτεροί τινες ἐκ τοῦ ἐλαχίστου τὰ ὄντα συνετίθεσαν, καὶ οὗτοι, ὥστε γίνεταί ἡ μονὰς ὕλη τῶν ἀριθμῶν, καὶ ἅμα προτέρα τῆς δυάδος, πάλιν δ' ὕστερα ὡς ὅλου τινὸς καὶ ἐνὸς καὶ εἶδους τῆς δυάδος οὔσης)· διὰ δὲ τὸ καθόλου ζητεῖν τὸ κατηγορούμενον ἓν καὶ οὕτως ὡς μέρος ἔλεγον. ταῦτα δ' ἅμα τῷ αὐτῷ ἀδύνατον ὑπάρχειν. εἰ δὲ τὸ ἓν αὐτὸ δεῖ μόνον ἄθετον εἶναι (οὐθενὶ γὰρ διαφέρει ἢ ὅτι ἀρχή), καὶ ἡ μὲν δυάς διαιρετὴ ἡ δὲ μονὰς οὗ, ὁμοιοτέρα ἂν εἴη τῷ ἐνὶ αὐτῷ ἡ μονὰς. εἰ δ' ἡ μονὰς, κάκεῖνο τῇ μονάδι ἢ τῇ δυάδι· ὥστε προτέρα ἂν εἴη ἑκατέρα ἡ μονὰς τῆς δυάδος. οὗ φασὶ δέ· γεννώσι γοῦν τὴν δυάδα [1085a] πρῶτον. ἔτι εἰ ἔστιν ἡ δυάς ἓν τι αὐτὴ καὶ ἡ τριάς αὐτή, ἄμφω δυάς. ἐκ τίνος οὖν αὕτη ἡ δυάς; Ἀπορήσειε δ' ἂν τις καὶ ἐπεὶ ἀφ' ἧς μὲν οὐκ ἔστιν ἓν τοῖς ἀριθμοῖς, τὸ δ' ἐφεξῆς, ὅσων μὴ ἔστι μεταξὺ μονάδων (οἷον τῶν ἐν τῇ δυάδι ἢ τῇ τριάδι), πότερον ἐφεξῆς τῷ ἐνὶ αὐτῷ ἢ οὗ, καὶ πότερον ἡ δυάς προτέρα τῶν ἐφεξῆς ἢ τῶν μονάδων ὁποτεραοῦν. - ὁμοίως δὲ καὶ περὶ τῶν ὕστερον γενῶν τοῦ ἀριθμοῦ συμβαίνει τὰ δυσχερῆ, γραμμῆς τε καὶ ἐπιπέδου καὶ σώματος. οἱ μὲν γὰρ ἐκ τῶν εἰδῶν τοῦ μεγάλου καὶ τοῦ μικροῦ

ποιοῦσιν, οἷον ἐκ μακροῦ μὲν καὶ βραχέος τὰ μήκη, πλατέος δὲ καὶ στενοῦ τὰ ἐπίπεδα, ἐκ βαθέος δὲ καὶ ταπεινοῦ τοὺς ὄγκους· ταῦτα δὲ ἐστὶν εἶδη τοῦ μεγάλου καὶ μικροῦ. τὴν δὲ κατὰ τὸ ἐν ἀρχὴν ἄλλοι ἄλλως τιθέασι τῶν τοιούτων. καὶ ἐν τούτοις δὲ μυρία φαίνεται τὰ τε ἀδύνατα καὶ τὰ πλασματώδη καὶ τὰ ὑπεναντία πᾶσι τοῖς εὐλόγοις. ἀπολελυμένα τε γὰρ ἀλλήλων συμβαίνει, εἰ μὴ συνακολουθοῦσι καὶ αἱ ἀρχαὶ ὥστ' εἶναι τὸ πλατὺ καὶ στενὸν καὶ μακρὸν καὶ βραχύ (εἰ δὲ τοῦτο, ἔσται τὸ ἐπίπεδον γραμμὴ καὶ τὸ στερεὸν ἐπίπεδον· ἔτι δὲ γωνία καὶ σχήματα καὶ τὰ τοιαῦτα πῶς ἀποδοθήσεται;), ταυτό τε συμβαίνει τοῖς περὶ τὸν ἀριθμόν· ταῦτα γὰρ πάθη μεγέθους ἐστίν, ἄλλ' οὐκ ἐκ τούτων τὸ μέγεθος, ὥσπερ οὐδ' ἐξ εὐθέος καὶ καμπύλου τὸ μῆκος οὐδ' ἐκ λείου καὶ τραχέος τὰ στερεά. - πάντων δὲ κοινὸν τούτων ὅπερ ἐπὶ τῶν εἰδῶν τῶν ὡς γένους συμβαίνει διαπορεῖν, ὅταν τις θῇ τὰ καθόλου, πότερον τὸ ζῶον αὐτὸ ἐν τῷ ζῳῷ ἢ ἕτερον αὐτοῦ ζώου. τοῦτο γὰρ μὴ χωριστοῦ μὲν ὄντος οὐδεμίαν ποιήσει ἀπορίαν· χωριστοῦ δέ, ὥσπερ οἱ ταῦτα λέγοντές φασι, τοῦ ἐνὸς καὶ τῶν ἀριθμῶν οὐ ῥάδιον λῦσαι, εἰ μὴ ῥάδιον δεῖ λέγειν τὸ ἀδύνατον. ὅταν γὰρ νοῇ τις ἐν τῇ δυάδι τὸ ἐν καὶ ὅλως ἐν ἀριθμῷ, πότερον αὐτὸ νοεῖ τι ἢ ἕτερον; - οἱ μὲν οὖν τὰ μεγέθη γεννώσιν ἐκ τοιαύτης ὕλης, ἕτεροι δὲ ἐκ τῆς στιγμῆς (ἢ δὲ στιγμή αὐτοῖς δοκεῖ εἶναι οὐχ ἐν ἀλλ' οἷον τὸ ἐν) καὶ ἄλλης ὕλης οἷας τὸ πλῆθος, ἄλλ' οὐ πλήθους· περὶ ὧν οὐδὲν ἤττον συμβαίνει τὰ αὐτὰ ἀπορεῖν. εἰ μὲν γὰρ μία ἡ ὕλη, ταυτό γραμμὴ καὶ ἐπίπεδον καὶ στερεόν (ἐκ γὰρ τῶν αὐτῶν τὸ αὐτὸ καὶ ἐν [1085b] ἔσται)· εἰ δὲ πλείους αἱ ὕλαι καὶ ἑτέρα μὲν γραμμῆς ἑτέρα δὲ τοῦ ἐπίπεδου καὶ ἄλλη τοῦ στερεοῦ, ἥτοι ἀκολουθοῦσιν ἀλλήλαις ἢ οὐ, ὥστε ταῦτα συμβήσεται καὶ οὕτως· ἢ γὰρ οὐχ ἔξει τὸ ἐπίπεδον γραμμὴν ἢ ἔσται γραμμὴ. - ἔτι πῶς μὲν ἐνδέχεται εἶναι ἐκ τοῦ ἐνὸς καὶ πλήθους τὸν ἀριθμὸν οὐθὲν ἐπιχειρεῖται· ὅπως δ' οὖν λέγουσι ταῦτα συμβαίνει δυσχερῇ ἅπερ καὶ τοῖς ἐκ τοῦ ἐνὸς καὶ ἐκ τῆς δυάδος τῆς ἀορίστου. ὁ μὲν γὰρ ἐκ τοῦ κατηγορουμένου καθόλου γεννᾷ τὸν ἀριθμὸν καὶ οὐ τινὸς πλήθους, ὁ δ' ἐκ τινὸς πλήθους, τοῦ πρώτου δέ (τὴν γὰρ δυάδα πρῶτόν τι εἶναι πλῆθος), ὥστε διαφέρει οὐθὲν ὡς εἶπεῖν, ἄλλ' αἱ ἀπορίαι αἱ αὐταὶ ἀκολουθήσουσι, μῖξις ἢ θέσις ἢ κρᾶσις ἢ γένεσις καὶ ὅσα ἄλλα τοιαῦτα. μάλιστα δ' ἂν τις ἐπιζητήσκειν, εἰ μία ἐκάστη μονάς, ἐκ τίνος ἐστίν· οὐ γὰρ δὴ αὐτό γε τὸ ἐν ἐκάστη. ἀνάγκη δὲ ἐκ τοῦ ἐνὸς αὐτοῦ εἶναι καὶ πλήθους ἢ μορίου τοῦ πλήθους. τὸ μὲν οὖν πλῆθος τι εἶναι φάναι τὴν μονάδα ἀδύνατον, ἀδιαίρετόν γ' οὕσαν· τὸ δ' ἐκ μορίου ἄλλας ἔχει πολλὰς δυσχερείας· ἀδιαίρετόν τε γὰρ ἕκαστον ἀναγκαῖον εἶναι τῶν μορίων (ἢ πλῆθος εἶναι καὶ τὴν μονάδα διαιρετήν) καὶ μὴ στοιχεῖον εἶναι τὸ ἐν καὶ τὸ πλῆθος (ἢ γὰρ μονὰς ἐκάστη οὐκ ἐκ πλήθους καὶ ἐνός)· ἔτι οὐθὲν ἄλλο ποιεῖ ὁ τοῦτο λέγων ἄλλ' ἢ

ἀριθμὸν ἕτερον· τὸ γὰρ πλῆθος ἀδιαιρέτων ἐστὶν ἀριθμός. ἔτι ζητητέον καὶ περὶ τοὺς οὕτω λέγοντας πότερον ἄπειρος ὁ ἀριθμὸς ἢ πεπερασμένος. ὑπῆρχε γάρ, ὡς ἔοικε, καὶ πεπερασμένον πλῆθος, ἐξ οὗ αἱ πεπερασμέναι μονάδες καὶ τοῦ ἑνός· ἔστι τε ἕτερον αὐτὸ πλῆθος καὶ πλῆθος ἄπειρον· ποῖον οὖν πλῆθος στοιχεῖόν ἐστι καὶ τὸ ἕν; ὁμοίως δὲ καὶ περὶ στιγμῆς ἂν τις ζητήσῃ καὶ τοῦ στοιχείου ἐξ οὗ ποιοῦσι τὰ μεγέθη. οὐ γὰρ μία γε μόνον στιγμή ἐστὶν αὕτη· τῶν γοῦν ἄλλων στιγμῶν ἐκάστη ἐκ τίνος; οὐ γὰρ δὴ ἕκ γε διαστήματός τινος καὶ αὐτῆς στιγμῆς. ἀλλὰ μὴν οὐδὲ μόρια ἀδιαιρέτα ἐνδέχεται τοῦ διαστήματος εἶναι [μόρια], ὥσπερ τοῦ πλήθους ἐξ ὧν αἱ μονάδες· ὁ μὲν γὰρ ἀριθμὸς ἐξ ἀδιαιρέτων σύγκειται τὰ δὲ μεγέθη οὐ. - πάντα δὲ ταῦτα καὶ ἄλλα τοιαῦτα φανερόν ποιεῖ ὅτι ἀδύνατον εἶναι τὸν ἀριθμὸν καὶ τὰ μεγέθη χωριστά, ἔτι δὲ τὸ διαφωνεῖν τοὺς τρόπους περὶ [1086a] τῶν ἀριθμῶν σημεῖον ὅτι τὰ πράγματα αὐτὰ οὐκ ὄντα ἀληθῆ παρέχει τὴν ταραχὴν αὐτοῖς. οἱ μὲν γὰρ τὰ μαθηματικὰ μόνον ποιοῦντες παρὰ τὰ αἰσθητά, ὀρῶντες τὴν περὶ τὰ εἶδη δυσχέρειαν καὶ πλάσιν, ἀπέστησαν ἀπὸ τοῦ εἰδητικοῦ ἀριθμοῦ καὶ τὸν μαθηματικὸν ἐποίησαν· οἱ δὲ τὰ εἶδη βουλόμενοι ἅμα καὶ ἀριθμοὺς ποιεῖν, οὐχ ὀρῶντες δέ, εἰ τὰς ἀρχὰς τις ταύτας θήσεται, πῶς ἔσται ὁ μαθηματικὸς ἀριθμὸς παρὰ τὸν εἰδητικόν, τὸν αὐτὸν εἰδητικὸν καὶ μαθηματικὸν ἐποίησαν ἀριθμὸν τῷ λόγῳ, ἐπεὶ ἔργῳ γε ἀνήρηται ὁ μαθηματικός (ἰδίας γὰρ καὶ οὐ μαθηματικὰς ὑποθέσεις λέγουσιν)· ὁ δὲ πρῶτος θέμενος τὰ εἶδη εἶναι καὶ ἀριθμοὺς τὰ εἶδη καὶ τὰ μαθηματικὰ εἶναι εὐλόγως ἐχώρισεν· ὥστε πάντας συμβαίνει κατὰ μὲν τι λέγειν ὀρθῶς, ὅλως δ' οὐκ ὀρθῶς. καὶ αὐτοὶ δὲ ὁμολογοῦσιν οὐ ταῦτα λέγοντες ἀλλὰ τὰ ἐναντία. αἴτιον δ' ὅτι αἱ ὑποθέσεις καὶ αἱ ἀρχαὶ ψευδεῖς. χαλεπὸν δ' ἐκ μὴ καλῶς ἐχόντων λέγειν καλῶς, κατ' Ἐπίχαρμον· ἀρτίως τε γὰρ λέλεκται, καὶ εὐθέως φαίνεται οὐ καλῶς ἔχον. - ἀλλὰ περὶ μὲν τῶν ἀριθμῶν ἱκανὰ τὰ διηπορημένα καὶ διωρισμένα (μᾶλλον γὰρ ἐκ πλειόνων ἂν ἔτι πεισθῇ τις πεπεισμένος, πρὸς δὲ τὸ πεισθῆναι μὴ πεπεισμένος οὐθὲν μᾶλλον)· περὶ δὲ τῶν πρώτων ἀρχῶν καὶ τῶν πρώτων αἰτίων καὶ στοιχείων ὅσα μὲν λέγουσιν οἱ περὶ μόνης τῆς αἰσθητῆς οὐσίας διορίζοντες, τὰ μὲν ἐν τοῖς περὶ φύσεως εἴρηται, τὰ δ' οὐκ ἔστι τῆς μεθόδου τῆς νῦν· ὅσα δὲ οἱ φάσκοντες εἶναι παρὰ τὰς αἰσθητὰς ἑτέρας οὐσίας, ἐχόμενόν ἐστι θεωρῆσαι τῶν εἰρημένων. ἐπεὶ οὖν λέγουσί τινες τοιαύτας εἶναι τὰς ιδέας καὶ τοὺς ἀριθμούς, καὶ τὰ τούτων στοιχεῖα τῶν ὄντων εἶναι στοιχεῖα καὶ ἀρχάς, σκεπτέον περὶ τούτων τί λέγουσι καὶ πῶς λέγουσιν. οἱ μὲν οὖν ἀριθμοὺς ποιοῦντες μόνον καὶ τούτους μαθηματικοὺς ὕστερον ἐπισκεπτέοι· τῶν δὲ τὰς ιδέας λεγόντων ἅμα τὸν τε τρόπον θεάσαιοι· ἂν τις καὶ τὴν ἀπορίαν τὴν περὶ αὐτῶν. ἅμα γὰρ καθόλου τε [ὡς οὐσίας] ποιοῦσι τὰς ιδέας καὶ πάλιν ὡς χωριστὰς καὶ τῶν καθ' ἕκαστον. ταῦτα δ' ὅτι οὐκ ἐνδέχεται διηπόρηται πρότερον. αἴτιον δὲ τοῦ συνάψαι ταῦτα



εἰς ταῦτόν τοις λέγουσι τὰς οὐσίας καθόλου, ὅτι τοῖς αἰσθητοῖς οὐ τὰς αὐτὰς [οὐσίας] ἐποιοῦν· τὰ μὲν οὖν ἐν τοῖς αἰσθητοῖς καθ' ἕκαστα ῥεῖν [1086b] ἐνόμιζον καὶ μένειν οὐθὲν αὐτῶν, τὸ δὲ καθόλου παρὰ ταῦτα εἶναι τε καὶ ἕτερόν τι εἶναι. τοῦτο δ', ὥσπερ ἐν τοῖς ἔμπροσθεν ἐλέγομεν, ἐκίνησε μὲν Σωκράτης διὰ τοὺς ὀρισμούς, οὐ μὴν ἐχώρισέ γε τῶν καθ' ἕκαστον· καὶ τοῦτο ὀρθῶς ἐνόησεν οὐ χωρίσας. δηλοῖ δὲ ἐκ τῶν ἔργων· ἄνευ μὲν γὰρ τοῦ καθόλου οὐκ ἔστιν ἐπιστήμην λαβεῖν, τὸ δὲ χωρίζειν αἷτιον τῶν συμβαινόντων δυσχερῶν περὶ τὰς ιδέας ἐστίν. οἱ δ' ὥς ἀναγκαῖον, εἴπερ ἔσονται τινες οὐσίαι παρὰ τὰς αἰσθητάς καὶ ῥεούσας, χωριστάς εἶναι, ἄλλας μὲν οὐκ εἶχον ταύτας δὲ τὰς καθόλου λεγομένας ἐξέθεσαν, ὥστε συμβαίνειν σχεδὸν τὰς αὐτὰς φύσεις εἶναι τὰς καθόλου καὶ τὰς καθ' ἕκαστον. αὕτη μὲν οὖν αὕτη καθ' αὐτὴν εἴη τις ἂν δυσχέρεια τῶν εἰρημένων.

Ὁ δὲ καὶ τοῖς λέγουσι τὰς ιδέας ἔχει τινὰ ἀπορίαν καὶ τοῖς μὴ λέγουσιν, καὶ κατ' ἀρχὰς ἐν τοῖς διαπορήμασιν ἐλέχθη πρότερον, λέγωμεν νῦν. εἰ μὲν γὰρ τις μὴ θήσει τὰς οὐσίας εἶναι κεχωρισμένας, καὶ τὸν τρόπον τοῦτον ὡς λέγεται τὰ καθ' ἕκαστα τῶν ὄντων, ἀναιρήσει τὴν οὐσίαν ὡς βουλόμεθα λέγειν· ἂν δέ τις θῇ τὰς οὐσίας χωριστάς, πῶς θήσει τὰ στοιχεῖα καὶ τὰς ἀρχὰς αὐτῶν; εἰ μὲν γὰρ καθ' ἕκαστον καὶ μὴ καθόλου, τοσαῦτ' ἔσται τὰ ὄντα ὅσαπερ τὰ στοιχεῖα, καὶ οὐκ ἐπισητὰ τὰ στοιχεῖα (ἔστωσαν γὰρ αἱ μὲν ἐν τῇ φωνῇ συλλαβαὶ οὐσίαι τὰ δὲ στοιχεῖα αὐτῶν στοιχεῖα τῶν οὐσιῶν· ἀνάγκη δὴ τὸ BA ἐν εἶναι καὶ ἐκάστην τῶν συλλαβῶν μίαν, εἴπερ μὴ καθόλου καὶ τῷ εἶδει αἱ αὐταὶ ἀλλὰ μία ἐκάστη τῷ ἀριθμῷ καὶ τόδε τι καὶ μὴ ὁμώνυμον· ἔτι δ' αὐτὸ ὃ ἔστιν ἐν ἕκαστον τιθέασιν· εἰ δ' αἱ συλλαβαί, οὕτω καὶ ἐξ ὧν εἰσίν· οὐκ ἔσται ἄρα πλείω ἄλφα ἐνός, οὐδὲ τῶν ἄλλων στοιχείων οὐθὲν κατὰ τὸν αὐτὸν λόγον ὄνπερ οὐδὲ τῶν [ἄλλων] συλλαβῶν ἢ αὐτὴ ἄλλη καὶ ἄλλη· ἀλλὰ μὴν εἰ τοῦτο, οὐκ ἔσται παρὰ τὰ στοιχεῖα ἕτερα ὄντα, ἀλλὰ μόνον τὰ στοιχεῖα· ἔτι δὲ οὐδ' ἐπισητὰ τὰ στοιχεῖα· οὐ γὰρ καθόλου, ἢ δ' ἐπιστήμη τῶν καθόλου· δηλον δ' ἐκ τῶν ἀποδείξεων καὶ τῶν ὀρισμῶν, οὐ γὰρ γίνεταί συλλογισμὸς ὅτι τόδε τὸ τρίγωνον δύο ὀρθαῖς, εἰ μὴ πᾶν τρίγωνον δύο ὀρθαί, οὐδ' ὅτι ὁδὶ ὁ ἄνθρωπος ζῶον, εἰ μὴ πᾶς ἄνθρωπος ζῶον)· ἀλλὰ μὴν εἶγε καθόλου αἱ ἀρχαί, ἢ καὶ αἱ [1087a] ἐκ τούτων οὐσίαι καθόλου <ἢ> ἔσται μὴ οὐσία πρότερον οὐσίας· τὸ μὲν γὰρ καθόλου οὐκ οὐσία, τὸ δὲ στοιχεῖον καὶ ἡ ἀρχὴ καθόλου, πρότερον δὲ τὸ στοιχεῖον καὶ ἡ ἀρχὴ ὧν ἀρχὴ καὶ στοιχεῖόν ἐστιν. ταῦτά τε δὴ πάντα συμβαίνει εὐλόγως, ὅταν ἐκ στοιχείων τε ποιῶσι τὰς ιδέας καὶ παρὰ τὰς τὸ αὐτὸ εἶδος ἐχούσας οὐσίας [καὶ ιδέας] ἔν τι ἀξιῶσιν εἶναι κεχωρισμένον· εἰ δὲ μὴθὲν κωλύει ὥσπερ ἐπὶ τῶν τῆς φωνῆς στοιχείων πολλὰ εἶναι τὰ ἄλφα καὶ τὰ βῆτα καὶ μὴθὲν εἶναι παρὰ τὰ πολλὰ αὐτὸ ἄλφα καὶ αὐτὸ βῆτα, ἔσονται ἔνεκά γε τούτου ἄπειροι

αἱ ὅμοιαι συλλαβαί. τὸ δὲ τὴν ἐπιστήμην εἶναι καθόλου πᾶσαν, ὥστε ἀναγκαῖον εἶναι καὶ τὰς τῶν ὄντων ἀρχὰς καθόλου εἶναι καὶ μὴ οὐσίας κεχωρισμένας, ἔχει μὲν μάλιστ' ἀπορίαν τῶν λεχθέντων, οὐ μὴν ἀλλὰ ἔστι μὲν ὡς ἀληθὲς τὸ λεγόμενον, ἔστι δ' ὡς οὐκ ἀληθές. ἡ γὰρ ἐπιστήμη, ὡσπερ καὶ τὸ ἐπίστασθαι, διττόν, ὧν τὸ μὲν δυνάμει τὸ δὲ ἐνεργείᾳ. ἡ μὲν οὖν δύναμις ὡς ὕλη [τοῦ] καθόλου οὐσα καὶ ἀόριστος τοῦ καθόλου καὶ ἀορίστου ἐστίν, ἡ δ' ἐνέργεια ὠρισμένη καὶ ὠρισμένου, τότε τι οὐσα τοῦδέ τινος, ἀλλὰ κατὰ συμβεβηκὸς ἢ ὅψις τὸ καθόλου χρῶμα ὁρᾷ ὅτι τότε τὸ χρῶμα ὃ ὁρᾷ χρῶμά ἐστιν, καὶ ὃ θεωρεῖ ὁ γραμματικός, τότε τὸ ἄλφα ἄλφα· ἐπεὶ εἰ ἀνάγκη τὰς ἀρχὰς καθόλου εἶναι, ἀνάγκη καὶ τὰ ἐκ τούτων καθόλου, ὡσπερ ἐπὶ τῶν ἀποδείξεων· εἰ δὲ τοῦτο, οὐκ ἔσται χωριστὸν οὐθὲν οὐδ' οὐσία. ἀλλὰ δῆλον ὅτι ἔστι μὲν ὡς ἡ ἐπιστήμη καθόλου, ἔστι δ' ὡς οὐ.

## N

Περὶ μὲν οὖν τῆς οὐσίας ταύτης εἰρήσθω τοσαῦτα, πάντες δὲ ποιοῦσι τὰς ἀρχὰς ἐναντίας, ὡσπερ ἐν τοῖς φυσικοῖς, καὶ περὶ τὰς ἀκινήτους οὐσίας ὁμοίως. εἰ δὲ τῆς τῶν ἀπάντων ἀρχῆς μὴ ἐνδέχεται πρότερόν τι εἶναι, ἀδύνατον ἂν εἴη τὴν ἀρχὴν ἕτερόν τι οὐσαν εἶναι ἀρχήν, οἷον εἴ τις λέγοι τὸ λευκὸν ἀρχὴν εἶναι οὐχ ἢ ἕτερον ἀλλ' ἢ λευκόν, εἶναι μέντοι καθ' ὑποκειμένου καὶ ἕτερόν τι ὃν λευκὸν εἶναι· ἐκεῖνο γὰρ πρότερον ἔσται. ἀλλὰ μὴν γίγνεται πάντα ἐξ ἐναντίων ὡς ὑποκειμένου τινός· ἀνάγκη ἄρα μάλιστα τοῖς ἐναντίοις [1087b] τοῦθ' ὑπάρχειν. ἀεὶ ἄρα πάντα τὰ ἐναντία καθ' ὑποκειμένου καὶ οὐθὲν χωριστόν, ἀλλ' ὡσπερ καὶ φαίνεται οὐθὲν οὐσία ἐναντίον, καὶ ὁ λόγος μαρτυρεῖ. οὐθὲν ἄρα τῶν ἐναντίων κυρίως ἀρχὴ πάντων ἀλλ' ἑτέρα. - οἱ δὲ τὸ ἕτερον τῶν ἐναντίων ὕλην ποιοῦσιν, οἱ μὲν τῷ ἐνὶ [τῷ ἴσῳ] τὸ ἄνισον, ὡς τοῦτο τὴν τοῦ πλήθους οὐσαν φύσιν, οἱ δὲ τῷ ἐνὶ τὸ πλήθος (γεννῶνται γὰρ οἱ ἀριθμοὶ τοῖς μὲν ἐκ τῆς τοῦ ἀνίσου δυάδος, τοῦ μεγάλου καὶ μικροῦ, τῷ δ' ἐκ τοῦ πλήθους, ὑπὸ τῆς τοῦ ἐνὸς δὲ οὐσίας ἀμφοῖν)· καὶ γὰρ ὁ τὸ ἄνισον καὶ ἐν λέγων τὰ στοιχεῖα, τὸ δ' ἄνισον ἐκ μεγάλου καὶ μικροῦ δυάδα, ὡς ἐν ὄντα τὸ ἄνισον καὶ τὸ μέγα καὶ τὸ μικρὸν λέγει, καὶ οὐ διορίζει ὅτι λόγῳ ἀριθμῷ δ' οὐ. ἀλλὰ μὴν καὶ τὰς ἀρχὰς ἅς στοιχεῖα καλοῦσιν οὐ καλῶς ἀποδιδόασιν, οἱ μὲν τὸ μέγα καὶ τὸ μικρὸν λέγοντες μετὰ τοῦ ἐνός, τρία ταῦτα στοιχεῖα τῶν ἀριθμῶν, τὰ μὲν δύο ὕλην τὸ δ' ἐν τὴν μορφήν, οἱ δὲ τὸ πολὺ καὶ ὀλίγον, ὅτι τὸ μέγα καὶ τὸ μικρὸν μεγέθους οἰκειότερα τὴν φύσιν, οἱ δὲ τὸ καθόλου μᾶλλον ἐπὶ τούτων, τὸ ὑπερέχον καὶ τὸ ὑπερεχόμενον. διαφέρει δὲ τούτων οὐθὲν ὡς εἰπεῖν πρὸς ἕνια τῶν συμβαινόντων, ἀλλὰ πρὸς τὰς λογικὰς μόνον δυσχερείας, ἅς φυλάττονται διὰ τὸ καὶ αὐτοὶ λογικὰς φέρειν τὰς ἀποδείξεις. πλὴν τοῦ αὐτοῦ

γε λόγου ἐστὶ τὸ ὑπερέχον καὶ ὑπερεχόμενον εἶναι ἀρχὰς ἀλλὰ μὴ τὸ μέγα καὶ τὸ μικρόν, καὶ τὸν ἀριθμὸν πρότερον τῆς δυάδος ἐκ τῶν στοιχείων· καθόλου γὰρ ἀμφοτέρωτα μᾶλλον ἐστίν. νῦν δὲ τὸ μὲν λέγουσι τὸ δ' οὐ λέγουσιν. οἱ δὲ τὸ ἕτερον καὶ τὸ ἄλλο πρὸς τὸ ἐν ἀντιτιθέασιν, οἱ δὲ πλῆθος καὶ τὸ ἐν. εἰ δὲ ἐστίν, ὥσπερ βούλονται, τὰ ὄντα ἐξ ἐναντίων, τῷ δὲ ἐνὶ ἡ οὐθὲν ἐναντίον ἢ εἴπερ ἄρα μέλλει, τὸ πλῆθος, τὸ δ' ἄνισον τῷ ἴσῳ καὶ τὸ ἕτερον τῷ ταύτῳ καὶ τὸ ἄλλο αὐτῷ, μάλιστα μὲν οἱ τὸ ἐν τῷ πλήθει ἀντιτιθέντες ἔχονται τινος δόξης, οὐ μὴν οὐδ' οὗτοι ἱκανῶς· ἔσται γὰρ τὸ ἐν ὀλίγον· πλῆθος μὲν γὰρ ὀλιγότητι τὸ δὲ πολὺ τῷ ὀλίγῳ ἀντίκειται. - τὸ δ' ἐν ὅτι μέτρον σημαίνει, φανερόν. καὶ ἐν παντὶ ἔστι τι ἕτερον ὑποκείμενον, οἷον ἐν ἀρμονίᾳ δίεσις, ἐν δὲ μεγέθει δάκτυλος ἢ ποὺς ἢ τι τοιοῦτον, ἐν δὲ ῥυθμοῖς βάσις ἢ συλλαβή· ὁμοίως δὲ καὶ ἐν βάρει σταθμός τις ὠρισμένος ἐστίν· καὶ κατὰ πάντων δὲ τὸν αὐτὸν [1088a] τρόπον, ἐν μὲν τοῖς ποιοῖς ποιόν τι, ἐν δὲ τοῖς ποσοῖς ποσόν τι, καὶ ἀδιαίρετον τὸ μέτρον, τὸ μὲν κατὰ τὸ εἶδος τὸ δὲ πρὸς τὴν αἴσθησιν, ὡς οὐκ ὄντος τινὸς τοῦ ἐνὸς καθ' αὐτὸ οὐσίας. καὶ τοῦτο κατὰ λόγον· σημαίνει γὰρ τὸ ἐν ὅτι μέτρον πλῆθους τινός, καὶ ὁ ἀριθμὸς ὅτι πλῆθος μεμετρημένον καὶ πλῆθος μέτρων (διὸ καὶ εὐλόγως οὐκ ἔστι τὸ ἐν ἀριθμός· οὐδὲ γὰρ τὸ μέτρον μέτρα, ἀλλ' ἀρχὴ καὶ τὸ μέτρον καὶ τὸ ἐν). δεῖ δὲ ἀεὶ τὸ αὐτό τι ὑπάρχειν πᾶσι τὸ μέτρον, οἷον εἰ ἵπποι, τὸ μέτρον ἵππος, καὶ εἰ ἄνθρωποι, ἄνθρωπος. εἰ δ' ἄνθρωπος καὶ ἵππος καὶ θεός, ζῶον ἴσως, καὶ ὁ ἀριθμὸς αὐτῶν ἔσται ζῶα. εἰ δ' ἄνθρωπος καὶ λευκὸν καὶ βαδίζον, ἥκιστα μὲν ἀριθμὸς τούτων διὰ τὸ ταύτῳ πάντα ὑπάρχειν καὶ ἐνὶ κατὰ ἀριθμόν, ὅμως δὲ γενῶν ἔσται ὁ ἀριθμὸς ὁ τούτων, ἢ τινος ἄλλης τοιαύτης προσηγορίας.

Οἱ δὲ τὸ ἄνισον ὡς ἐν τι, τὴν δυάδα δὲ ἀόριστον ποιοῦντες μεγάλου καὶ μικροῦ, πόρρω λίαν τῶν δοκούντων καὶ δυνατῶν λέγουσιν· πάθη τε γὰρ ταῦτα καὶ συμβεβηκότα μᾶλλον ἢ ὑποκείμενα τοῖς ἀριθμοῖς καὶ τοῖς μεγέθεσιν ἐστίν, τὸ πολὺ καὶ ὀλίγον ἀριθμοῦ, καὶ μέγα καὶ μικρόν μεγέθους, ὥσπερ ἄρτιον καὶ περιττόν, καὶ λεῖον καὶ τραχύ, καὶ εὐθὺ καὶ καμπύλον· ἔτι δὲ πρὸς ταύτη τῇ ἀμαρτίᾳ καὶ πρὸς τι ἀνάγκη εἶναι τὸ μέγα καὶ τὸ μικρόν καὶ ὅσα τοιαῦτα· τὸ δὲ πρὸς τι πάντων ἥκιστα φύσις τις ἢ οὐσία [τῶν κατηγοριῶν] ἐστίν, καὶ ὑστέρα τοῦ ποιοῦ καὶ ποσοῦ· καὶ πάθος τι τοῦ ποσοῦ τὸ πρὸς τι, ὥσπερ ἐλέγχθη, ἀλλ' οὐχ ὕλη, εἴ τι ἕτερον καὶ τῷ ὅλως κοινῷ πρὸς τι καὶ τοῖς μέρεσιν αὐτοῦ καὶ εἴδεσιν. οὐθὲν γὰρ ἐστίν οὔτε μέγα οὔτε μικρόν, οὔτε πολὺ οὔτε ὀλίγον, οὔτε ὅλως πρὸς τι, ὃ οὐχ ἕτερόν τι ὄν πολὺ ἢ ὀλίγον ἢ μέγα ἢ μικρόν ἢ πρὸς τί ἐστίν. σημεῖον δ' ὅτι ἥκιστα οὐσί τις καὶ ὄν τι τὸ πρὸς τι τὸ μόνου μὴ εἶναι γένεσιν αὐτοῦ μηδὲ φθορὰν μηδὲ κίνησιν ὥσπερ κατὰ τὸ ποσὸν αὕξησις καὶ φθίσις, κατὰ τὸ ποιὸν ἀλλοίωσις, κατὰ τόπον φορά, κατὰ

τὴν οὐσίαν ἢ ἀπλῇ γένεσις καὶ φθορά, - ἀλλ' οὐ κατὰ τὸ πρὸς τι· ἄνευ γὰρ τοῦ κινηθῆναι ὅτε μὲν μεῖζον ὅτε δὲ ἔλαττον ἢ ἴσον ἔσται θατέρου κινηθέντος κατὰ τὸ ποσόν.

[1088b] ἀνάγκη τε ἐκάστου ὕλην εἶναι τὸ δυνάμει τοιοῦτον, ὥστε καὶ οὐσίας· τὸ δὲ πρὸς τι οὔτε δυνάμει οὐσία οὔτε ἐνεργεία. ἄτοπον οὖν, μᾶλλον δὲ ἀδύνατον, τὸ οὐσίας μὴ οὐσίαν ποιεῖν στοιχεῖον καὶ πρότερον· ὕστερον γὰρ πᾶσαι αἱ κατηγορίαι. ἔτι δὲ τὰ στοιχεῖα οὐ κατηγορεῖται καθ' ὧν στοιχεῖα, τὸ δὲ πολὺ καὶ ὀλίγον καὶ χωρὶς καὶ ἅμα κατηγορεῖται ἀριθμοῦ, καὶ τὸ μακρὸν καὶ τὸ βραχὺ γραμμῆς, καὶ ἐπίπεδόν ἐστι καὶ πλατὺ καὶ στενόν. εἰ δὲ δὴ καὶ ἔστι τι πλῆθος οὐ τὸ μὲν αἰεὶ, <τὸ> ὀλίγον, οἶον ἢ δυάς (εἰ γὰρ πολὺ, τὸ ἐν ἅν ὀλίγον εἴη), κἂν πολὺ ἀπλῶς εἴη, οἶον ἢ δεκάς πολὺ, [καὶ] εἰ ταύτης μὴ ἐστι πλεῖον, ἢ τὰ μύρια. πῶς οὖν ἔσται οὕτως ἐξ ὀλίγου καὶ πολλοῦ ὁ ἀριθμός; ἢ γὰρ ἄμφω ἔδει κατηγορεῖσθαι ἢ μηδέτερον· νῦν δὲ τὸ ἕτερον μόνον κατηγορεῖται.

Ἀπλῶς δὲ δεῖ σκοπεῖν, ἄρα δυνατόν τὰ αἰδία ἐκ στοιχείων συγκεῖσθαι; ὕλην γὰρ ἔξει· σύνθετον γὰρ πᾶν τὸ ἐκ στοιχείων. εἰ τοίνυν ἀνάγκη, ἐξ οὗ ἐστίν, εἰ καὶ αἰεὶ ἔστι, κἂν, εἰ ἐγένετο, ἐκ τούτου γίνεσθαι, γίνεταί δὲ πᾶν ἐκ τοῦ δυνάμει ὄντος τοῦτο ὃ γίνεταί (οὐ γὰρ ἂν ἐγένετο ἐκ τοῦ ἀδυνάτου οὐδὲ ἦν), τὸ δὲ δυνατόν ἐνδέχεται καὶ ἐνεργεῖν καὶ μὴ, εἰ καὶ ὅτι μάλιστα αἰεὶ ἔστιν ὁ ἀριθμὸς ἢ ὅτιοῦν ἄλλο ὕλην ἔχον, ἐνδέχοιτ' ἂν μὴ εἶναι, ὥσπερ καὶ τὸ μίαν ἡμέραν ἔχον καὶ τὸ ὅποσαοῦν ἔτη· εἰ δ' οὕτω, καὶ τὸ τοσοῦτον χρόνον οὐ μὴ ἔστι πέρας. οὐκ ἂν τοίνυν εἴη αἰδία, εἴπερ μὴ αἰδίων τὸ ἐνδεχόμενον μὴ εἶναι, καθάπερ ἐν ἄλλοις λόγοις συνέβη πραγματευθῆναι. εἰ δέ ἐστι τὸ λεγόμενον νῦν ἀληθὲς καθόλου, ὅτι οὐδεμία ἐστὶν αἰδία οὐσία ἐὰν μὴ ἢ ἐνέργεια, τὰ δὲ στοιχεῖα ὕλη τῆς οὐσίας, οὐδεμιᾶς ἂν εἴη αἰδίου οὐσίας στοιχεῖα ἐξ ὧν ἐστὶν ἐνυπαρχόντων. εἰσὶ δέ τινες οἱ δυάδα μὲν ἀόριστον ποιοῦσι τὸ μετὰ τοῦ ἐνὸς στοιχεῖον, τὸ δ' ἄνισον δυσχεραίνουσιν εὐλόγως διὰ τὰ συμβαίνοντα ἀδύνατα· οἷς τοσαῦτα μόνον ἀφήρηται τῶν δυσχερῶν ὅσα διὰ τὸ ποιεῖν τὸ ἄνισον καὶ τὸ πρὸς τι στοιχεῖον ἀναγκαῖα συμβαίνει τοῖς λέγουσιν· ὅσα δὲ χωρὶς ταύτης τῆς δόξης, ταῦτα κἀκείνοις ὑπάρχειν ἀναγκαῖον, ἐὰν τε τὸν εἰδητικὸν ἀριθμὸν ἐξ αὐτῶν ποιῶσιν ἐὰν τε τὸν μαθηματικόν. - πολλὰ μὲν οὖν τὰ αἰτία [1089a] τῆς ἐπὶ ταύτας τὰς αἰτίας ἐκτροπῆς, μάλιστα δὲ τὸ ἀπορῆσαι ἀρχαϊκῶς. ἔδοξε γὰρ αὐτοῖς πάντ' ἔσεσθαι ἐν τὰ ὄντα, αὐτὸ τὸ ὄν, εἰ μὴ τις λύσει καὶ ὁμόσε βαδιεῖται τῷ Παρμενίδου λόγῳ “οὐ γὰρ μήποτε τοῦτο δαμῇ, εἶναι μὴ ἔόντα,” ἀλλ' ἀνάγκη εἶναι τὸ μὴ ὄν δεῖξαι ὅτι ἔστιν· οὕτω γάρ, ἐκ τοῦ ὄντος καὶ ἄλλου τινός, τὰ ὄντα ἔσεσθαι, εἰ πολλὰ ἐστίν. καίτοι πρῶτον μὲν, εἰ τὸ ὄν πολλαχῶς (τὸ μὲν

γὰρ [ὅτι] οὐσίαν σημαίνει, τὸ δ' ὅτι ποιόν, τὸ δ' ὅτι ποσόν, καὶ τὰς ἄλλας δὴ κατηγορίας), ποῖον οὖν τὰ ὄντα πάντα ἔν, εἰ μὴ τὸ μὴ ὄν ἔσται; πότερον αἱ οὐσίαι, ἢ τὰ πάθη καὶ τὰ ἄλλα δὴ ὁμοίως, ἢ πάντα, καὶ ἔσται ἔν τὸ τότε καὶ τὸ τοιόνδε καὶ τὸ τοσόνδε καὶ τὰ ἄλλα ὅσα ἔν τι σημαίνει; ἀλλ' ἄτοπον, μᾶλλον δὲ ἀδύνατον, τὸ μίαν φύσιν τινὰ γενομένην αἰτίαν εἶναι τοῦ τοῦ ὄντος τὸ μὲν τότε εἶναι τὸ δὲ τοιόνδε τὸ δὲ τοσόνδε τὸ δὲ πού. ἔπειτα ἐκ ποίου μὴ ὄντος καὶ ὄντος τὰ ὄντα; πολλαχῶς γὰρ καὶ τὸ μὴ ὄν, ἐπειδὴ καὶ τὸ ὄν· καὶ τὸ μὲν μὴ ἄνθρωπον «εἶναι» σημαίνει τὸ μὴ εἶναι τοδί, τὸ δὲ μὴ εὐθύ τὸ μὴ εἶναι τοιονδί, τὸ δὲ μὴ τρίπηχυ τὸ μὴ εἶναι τοσονδί. ἐκ ποίου οὖν ὄντος καὶ μὴ ὄντος πολλὰ τὰ ὄντα; βούλεται μὲν δὴ τὸ ψεῦδος καὶ ταύτην τὴν φύσιν λέγειν τὸ οὐκ ὄν, ἐξ οὗ καὶ τοῦ ὄντος πολλὰ τὰ ὄντα, διὸ καὶ ἐλέγετο ὅτι δεῖ ψεῦδός τι ὑποθέσθαι, ὥσπερ καὶ οἱ γεωμέτραι τὸ ποδιαίαν εἶναι τὴν μὴ ποδιαίαν· ἀδύνατον δὲ ταῦθ' οὕτως ἔχειν, οὔτε γὰρ οἱ γεωμέτραι ψεῦδος οὐθὲν ὑποτίθενται (οὐ γὰρ ἔν τῷ συλλογισμῷ ἡ πρότασις), οὔτε ἐκ τοῦ οὕτω μὴ ὄντος τὰ ὄντα γίνεταί οὐδὲ φθείρεται. ἀλλ' ἐπειδὴ τὸ μὲν κατὰ τὰς πτώσεις μὴ ὄν ἰσαχῶς ταῖς κατηγορίαις λέγεται, παρὰ τοῦτο δὲ τὸ ὡς ψεῦδος λέγεται [τὸ] μὴ ὄν καὶ τὸ κατὰ δύναμιν, ἐκ τούτου ἡ γένεσις ἐστίν, ἐκ τοῦ μὴ ἀνθρώπου δυνάμει δὲ ἀνθρώπου ἄνθρωπος, καὶ ἐκ τοῦ μὴ λευκοῦ δυνάμει δὲ λευκοῦ λευκόν, ὁμοίως ἂν τε ἔν τι γίγνηται ἂν τε πολλὰ. - φαίνεται δὲ ἡ ζήτησις πῶς πολλὰ τὸ ὄν τὸ κατὰ τὰς οὐσίας λεγόμενον· ἀριθμοὶ γὰρ καὶ μήκη καὶ σώματα τὰ γεννώμενά ἐστιν. ἄτοπον δὴ τὸ ὅπως μὲν πολλὰ τὸ ὄν τὸ τί ἐστὶ ζητῆσαι, πῶς δὲ ἡ ποιά ἢ ποσά, μή. οὐ γὰρ δὴ ἡ δυὰς ἢ ἀόριστος αἰτία οὐδὲ τὸ μέγα καὶ τὸ μικρὸν τοῦ δύο λευκὰ ἢ πολλὰ [1089b] εἶναι χρώματα ἢ χυμοὺς ἢ σχήματα· ἀριθμοὶ γὰρ ἂν καὶ ταῦτα ἦσαν καὶ μονάδες. ἀλλὰ μὴν εἴ γε ταῦτ' ἐπῆλθον, εἶδον ἂν τὸ αἴτιον καὶ τὸ ἐν ἐκείνοις· τὸ γὰρ αὐτὸ καὶ τὸ ἀνάλογον αἴτιον. αὕτη γὰρ ἡ παρέκβασις αἰτία καὶ τοῦ τὸ ἀντικείμενον ζητοῦντας τῷ ὄντι καὶ τῷ ἐνί, ἐξ οὗ καὶ τούτων τὰ ὄντα, τὸ πρὸς τι καὶ τὸ ἄνισον ὑποθεῖναι, ὃ οὕτ' ἐναντίον οὕτ' ἀπόφασις ἐκείνων, μία τε φύσις τῶν ὄντων ὥσπερ καὶ τὸ τί καὶ τὸ ποῖον. καὶ ζητεῖν ἔδει καὶ τοῦτο, πῶς πολλὰ τὰ πρὸς τι ἀλλ' οὐχ ἔν· νῦν δὲ πῶς μὲν πολλαὶ μονάδες παρὰ τὸ πρῶτον ἔν ζητεῖται, πῶς δὲ πολλὰ ἄνισα παρὰ τὸ ἄνισον οὐκέτι. καίτοι χρῶνται καὶ λέγουσι μέγα μικρόν, πολὺ ὀλίγον, ἐξ ὧν οἱ ἀριθμοί, μακρὸν βραχύ, ἐξ ὧν τὸ μῆκος, πλατὺ στενόν, ἐξ ὧν τὸ ἐπίπεδον, βαθὺ ταπεινόν, ἐξ ὧν οἱ ὄγκοι· καὶ ἔτι δὴ πλείω εἶδη λέγουσι τοῦ πρὸς τι· τούτοις δὴ τί αἴτιον τοῦ πολλὰ εἶναι; - ἀνάγκη μὲν οὖν, ὥσπερ λέγομεν, ὑποθεῖναι τὸ δυνάμει ὄν ἐκάστω (τοῦτο δὲ προσαπεφάνητο ὅ ταῦτα λέγων, τί τὸ δυνάμει τότε καὶ οὐσία, μὴ ὄν δὲ καθ' αὐτό, ὅτι τὸ πρὸς τι, ὥσπερ εἰ εἶπε τὸ ποιόν, ὃ οὔτε δυνάμει ἐστὶ τὸ ἐν ἢ τὸ ὄν οὔτε ἀπόφασις τοῦ ἐνὸς οὐδὲ τοῦ ὄντος ἀλλ' ἔν τι τῶν ὄντων), πολὺ τε μᾶλλον, ὥσπερ ἐλέχθη, εἰ ἐζήτει πῶς πολλὰ τὰ ὄντα,

μὴ τὰ ἐν τῇ αὐτῇ κατηγορίᾳ ζητεῖν, πῶς πολλαὶ οὐσίαι ἢ πολλὰ ποιά, ἀλλὰ πῶς πολλὰ τὰ ὄντα· τὰ μὲν γὰρ οὐσίαι τὰ δὲ πάθη τὰ δὲ πρὸς τι. ἐπὶ μὲν οὖν τῶν ἄλλων κατηγοριῶν ἔχει τινὰ καὶ ἄλλην ἐπίστασιν πῶς πολλὰ (διὰ γὰρ τὸ μὴ χωριστὰ εἶναι τῷ τὸ ὑποκείμενον πολλὰ γίνεσθαι καὶ εἶναι ποιά τε πολλὰ [εἶναι] καὶ ποσά· καίτοι δεῖ γέ τινα εἶναι ὕλην ἐκάστω γενεῇ, πλὴν χωριστὴν ἀδύνατον τῶν οὐσιῶν)· ἀλλ' ἐπὶ τῶν τόδε τι ἔχει τινὰ λόγον πῶς πολλὰ τὸ τόδε τι, εἰ μὴ τι ἔσται καὶ τόδε τι καὶ φύσις τις τοιαύτη· αὕτη δὲ ἐστὶν ἐκεῖθεν μᾶλλον ἢ ἀπορία, πῶς πολλαὶ ἐνεργεῖαι οὐσίαι ἀλλ' οὐ μία. ἀλλὰ μὴν καὶ εἰ μὴ ταυτόν ἐστι τὸ τόδε καὶ τὸ ποσόν, οὐ λέγεται πῶς καὶ διὰ τί πολλὰ τὰ ὄντα, ἀλλὰ πῶς ποσὰ πολλὰ. ὁ γὰρ ἀριθμὸς πᾶς ποσόν τι σημαίνει, καὶ ἡ μονάς, εἰ μὴ μέτρον καὶ τὸ κατὰ τὸ ποσόν ἀδιαίρετον. εἰ μὲν οὖν ἕτερον τὸ ποσόν καὶ τὸ τί ἐστίν, οὐ λέγεται [1090a] τὸ τί ἐστίν ἐκ τίνος οὐδὲ πῶς πολλὰ· εἰ δὲ ταυτό, πολλὰς ὑπομένει ὁ λέγων ἐναντιώσεις. - ἐπιστήσῃ δ' ἂν τις τὴν σκέψιν καὶ περὶ τῶν ἀριθμῶν πόθεν δεῖ λαβεῖν τὴν πίστιν ὡς εἰσίν. τῷ μὲν γὰρ ἰδέας τιθεμένῳ παρέχονται τιν' αἰτίαν τοῖς οὖσιν, εἴπερ ἕκαστος τῶν ἀριθμῶν ἰδέα τις ἢ δ' ἰδέα τοῖς ἄλλοις αἰτία τοῦ εἶναι ὃν δὴ ποτε τρόπον (ἔστω γὰρ ὑποκείμενον αὐτοῖς τοῦτο)· τῷ δὲ τοῦτον μὲν τὸν τρόπον οὐκ οἰομένῳ διὰ τὸ τὰς ἐνούσας δυσχερείας ὁρᾶν περὶ τὰς ἰδέας ὥστε διὰ γε ταῦτα μὴ ποιεῖν ἀριθμούς, ποιοῦντι δὲ ἀριθμὸν τὸν μαθηματικόν, πόθεν τε χρὴ πιστεῦσαι ὡς ἔστι τοιοῦτος ἀριθμός, καὶ τί τοῖς ἄλλοις χρήσιμος; οὐθενὸς γὰρ οὔτε φησὶν ὁ λέγων αὐτὸν εἶναι, ἀλλ' ὡς αὐτὴν τινα λέγει καθ' αὐτὴν φύσιν οὔσαν, οὔτε φαίνεται ὢν αἴτιος· τὰ γὰρ θεωρήματα τῶν ἀριθμητικῶν πάντα καὶ κατὰ τῶν αἰσθητῶν ὑπάρξει, καθάπερ ἐλέχθη. Οἱ μὲν οὖν τιθέμενοι τὰς ἰδέας εἶναι, καὶ ἀριθμούς αὐτὰς εἶναι, <τῷ> κατὰ τὴν ἔκθεσιν ἐκάστου παρὰ τὰ πολλὰ λαμβάνειν [τὸ] ἔν τι ἕκαστον πειρῶνται γε λέγειν πῶς διὰ τί ἔστιν, οὐ μὴν ἀλλὰ ἐπεὶ οὔτε ἀναγκαῖα οὔτε δυνατὰ ταῦτα, οὐδὲ τὸν ἀριθμὸν διὰ γε ταῦτα εἶναι λεκτέον· οἱ δὲ Πυθαγόρειοι διὰ τὸ ὁρᾶν πολλὰ τῶν ἀριθμῶν πάθη ὑπάρχοντα τοῖς αἰσθητοῖς σώμασιν, εἶναι μὲν ἀριθμούς ἐποίησαν τὰ ὄντα, οὐ χωριστοὺς δέ, ἀλλ' ἐξ ἀριθμῶν τὰ ὄντα· διὰ τί δέ; ὅτι τὰ πάθη τὰ τῶν ἀριθμῶν ἐν ἀρμονίᾳ ὑπάρχει καὶ ἐν τῷ οὐρανῷ καὶ ἐν πολλοῖς ἄλλοις. τοῖς δὲ τὸν μαθηματικὸν μόνον λέγουσιν εἶναι ἀριθμὸν οὐθὲν τοιοῦτον ἐνδέχεται λέγειν κατὰ τὰς ὑποθέσεις, ἀλλ' ὅτι οὐκ ἔσονται αὐτῶν αἱ ἐπιστῆμαι ἐλέγετο. ἡμεῖς δὲ φάμεν εἶναι, καθάπερ εἵπομεν πρότερον. καὶ δῆλον ὅτι οὐ κεχώρισται τὰ μαθηματικά· οὐ γὰρ ἂν κεχωρισμένων τὰ πάθη ὑπῆρχεν ἐν τοῖς σώμασιν. οἱ μὲν οὖν Πυθαγόρειοι κατὰ μὲν τὸ τοιοῦτον οὐθενὶ ἔνοχοι εἰσιν, κατὰ μέντοι τὸ ποιεῖν ἐξ ἀριθμῶν τὰ φυσικὰ σώματα, ἐκ μὴ ἐχόντων βάρος μηδὲ κουφότητα ἔχοντα κουφότητα καὶ βάρος, εἰκόασι περὶ ἄλλου οὐρανοῦ λέγειν καὶ σωμάτων ἀλλ' οὐ τῶν αἰσθητῶν· οἱ δὲ χωριστὸν ποιοῦντες, ὅτι ἐπὶ τῶν αἰσθητῶν οὐκ ἔσται τὰ

ἀξιώματα, ἀληθῆ δὲ τὰ λεγόμενα καὶ σαίνει τὴν ψυχὴν, εἶναί τε ὑπολαμβάνουσι καὶ χωριστὰ [1090b] εἶναι· ὁμοίως δὲ καὶ τὰ μεγέθη τὰ μαθηματικά. δῆλον οὖν ὅτι καὶ ὁ ἐναντιούμενος λόγος τὰναντία ἐρεῖ, καὶ ὁ ἄρτι ἠπορήθη λυτέον τοῖς οὕτω λέγουσι, διὰ τί οὐδαμῶς ἐν τοῖς αἰσθητοῖς ὑπαρχόντων τὰ πάθη ὑπάρχει αὐτῶν ἐν τοῖς αἰσθητοῖς. εἰσὶ δέ τινες οἱ ἐκ τοῦ πέρατα εἶναι καὶ ἔσχατα τὴν στιγμὴν μὲν γραμμῆς, ταύτην δ' ἐπιπέδου, τοῦτο δὲ τοῦ στερεοῦ, οἷονταί εἶναι ἀνάγκην τοιαύτας φύσεις εἶναι. δεῖ δὲ καὶ τοῦτον ὁρᾶν τὸν λόγον, μὴ λίαν ἤ μαλακός. οὔτε γὰρ οὐσίαι εἰσὶ τὰ ἔσχατα ἀλλὰ μᾶλλον πάντα ταῦτα πέρατα (ἐπεὶ καὶ τῆς βαδίσεως καὶ ὅλως κινήσεως ἔστι τι πέρας· τοῦτ' οὖν ἔσται τόδε τι καὶ οὐσία τις· ἀλλ' ἄτοπον)· - οὐ μὴν ἀλλὰ εἰ καὶ εἰσὶ, τῶνδε τῶν αἰσθητῶν ἔσονται πάντα (ἐπὶ τούτων γὰρ ὁ λόγος εἴρηκεν)· διὰ τί οὖν χωριστὰ ἔσται; - ἔτι δὲ ἐπιζητήσκειν ἂν τις μὴ λίαν εὐχερῆς ὢν περὶ μὲν τοῦ ἀριθμοῦ παντὸς καὶ τῶν μαθηματικῶν τὸ μηθὲν συμβάλλεσθαι ἀλλήλοις τὰ πρότερα τοῖς ὕστερον (μὴ ὄντος γὰρ τοῦ ἀριθμοῦ οὐθὲν ἦττον τὰ μεγέθη ἔσται τοῖς τὰ μαθηματικὰ μόνον εἶναι φαιμένοις, καὶ τούτων μὴ ὄντων ἡ ψυχὴ καὶ τὰ σώματα τὰ αἰσθητά· οὐκ ἔοικε δ' ἡ φύσις ἐπεισοδιώδης οὕσα ἐκ τῶν φαινομένων, ὥσπερ μοχθηρὰ τραγωδία)· τοῖς δὲ τὰς ἰδέας τιθεμένοις τοῦτο μὲν ἐκφεύγει - ποιοῦσι γὰρ τὰ μεγέθη ἐκ τῆς ὕλης καὶ ἀριθμοῦ, ἐκ μὲν τῆς δυάδος τὰ μήκη, ἐκ τριάδος δ' ἴσως τὰ ἐπίπεδα, ἐκ δὲ τῆς τετράδος τὰ στερεὰ ἢ καὶ ἐξ ἄλλων ἀριθμῶν· διαφέρει γὰρ οὐθὲν - , ἀλλὰ ταῦτά γε πότερον ἰδέαι ἔσονται, ἢ τίς ὁ τρόπος αὐτῶν, καὶ τί συμβάλλονται τοῖς οὕσιν; οὐθὲν γάρ, ὥσπερ οὐδὲ τὰ μαθηματικά, οὐδὲ ταῦτα συμβάλλεται. ἀλλὰ μὴν οὐδ' ὑπάρχει γε κατ' αὐτῶν οὐθὲν θεώρημα, ἐὰν μὴ τις βούληται κινεῖν τὰ μαθηματικὰ καὶ ποιεῖν ἰδίας τινὰς δόξας. ἔστι δ' οὐ χαλεπὸν ὁποιασοῦν ὑποθέσεις λαμβάνοντας μακροποιεῖν καὶ συνείρειν. οὗτοι μὲν οὖν ταύτῃ προσγλιχόμενοι ταῖς ἰδέαις τὰ μαθηματικὰ διαμαρτάνουσιν· οἱ δὲ πρῶτοι δύο τοὺς ἀριθμοὺς ποιήσαντες, τὸν τε τῶν εἰδῶν καὶ τὸν μαθηματικόν, οὗτ' εἰρήκασιν οὗτ' ἔχοιεν ἂν εἰπεῖν πῶς καὶ ἐκ τίνος ἔσται ὁ μαθηματικός. ποιοῦσι γὰρ αὐτὸν μεταξὺ τοῦ εἰδητικοῦ καὶ τοῦ αἰσθητοῦ. εἰ μὲν γὰρ ἐκ τοῦ μεγάλου καὶ μικροῦ, ὁ αὐτὸς ἐκείνῳ ἔσται τῷ τῶν ἰδεῶν (ἐξ ἄλλου δέ τινος μικροῦ [1091a] καὶ μεγάλου τὰ [γὰρ] μεγέθη ποιεῖ)· εἰ δ' ἕτερόν τι ἐρεῖ, πλείω τὰ στοιχεῖα ἐρεῖ· καὶ εἰ ἐν τι ἑκατέρου ἢ ἀρχῇ, κοινόν τι ἐπὶ τούτων ἔσται τὸ ἐν, ζητητέον τε πῶς καὶ ταῦτα πολλὰ τὸ ἐν καὶ ἅμα τὸν ἀριθμὸν γενέσθαι ἄλλως ἢ ἐξ ἐνὸς καὶ δυάδος ἀορίστου ἀδύνατον κατ' ἐκείνον. πάντα δὲ ταῦτα ἄλογα, καὶ μάχεται καὶ αὐτὰ ἑαυτοῖς καὶ τοῖς εὐλόγοις, καὶ ἔοικεν ἐν αὐτοῖς εἶναι ὁ Σιμωνίδου μακρὸς λόγος· γίγνεται γὰρ ὁ μακρὸς λόγος ὥσπερ ὁ τῶν δούλων ὅταν μηθὲν ὑγιὲς λέγωσιν. φαίνεται δὲ καὶ αὐτὰ τὰ στοιχεῖα τὸ μέγα καὶ τὸ μικρὸν βοᾶν

ὥς ἐλκόμενα· οὐ δύναται γὰρ οὐδαμῶς γεννῆσαι τὸν ἀριθμὸν ἀλλ' ἢ τὸν ἀφ' ἐνὸς διπλασιαζόμενον. - ἄτοπον δὲ καὶ γένεσιν ποιεῖν ἀϊδίῳ ὄντων, μᾶλλον δ' ἐν τι τῶν ἀδυνάτων. οἱ μὲν οὖν Πυθαγόρειοι πότερον οὐ ποιοῦσιν ἢ ποιοῦσι γένεσιν οὐδὲν δεῖ διστάζειν· φανερώς γὰρ λέγουσιν ὡς τοῦ ἐνὸς συσταθέντος, εἴτ' ἐξ ἐπιπέδων εἴτ' ἐκ χροιάς εἴτ' ἐκ σπέρματος εἴτ' ἐξ ὧν ἀποροῦσιν εἰπεῖν, εὐθύς τὸ ἔγγιστα τοῦ ἀπείρου ὅτι εἴλκετο καὶ ἐπεραίνετο ὑπὸ τοῦ πέρας. ἀλλ' ἐπειδὴ κοσμοποιοῦσι καὶ φυσικῶς βούλονται λέγειν, δίκαιον αὐτοὺς ἐξετάζειν τι περὶ φύσεως, ἐκ δὲ τῆς νῦν ἀφεῖναι μεθόδου· τὰς γὰρ ἐν τοῖς ἀκινήτοις ζητοῦμεν ἀρχάς, ὥστε καὶ τῶν ἀριθμῶν τῶν τοιούτων ἐπισκεπτέον τὴν γένεσιν. Τοῦ μὲν οὖν περιττοῦ γένεσιν οὐ φασιν, ὡς δηλονότι τοῦ ἀρτίου οὔσης γενέσεως· τὸν δ' ἄρτιον πρῶτον ἐξ ἀνίσων τινὲς κατασκευάζουσι τοῦ μεγάλου καὶ μικροῦ ἰσασθέντων. ἀνάγκη οὖν πρότερον ὑπάρχειν τὴν ἀνισότητα αὐτοῖς τοῦ ἰσασθῆναι· εἰ δ' ἀεὶ ἦσαν ἰσασμένα, οὐκ ἂν ἦσαν ἄνισα πρότερον (τοῦ γὰρ ἀεὶ οὐκ ἔστι πρότερον οὐθέν), ὥστε φανερόν ὅτι οὐ τοῦ θεωρῆσαι ἔνεκεν ποιοῦσι τὴν γένεσιν τῶν ἀριθμῶν. - ἔχει δ' ἀπορίαν καὶ εὐπορήσαντι ἐπιτίμησιν πῶς ἔχει πρὸς τὸ ἀγαθὸν καὶ τὸ καλὸν τὰ στοιχεῖα καὶ αἱ ἀρχαί· ἀπορίαν μὲν ταύτην, πότερόν ἐστὶ τι ἐκείνων οἶον βουλόμεθα λέγειν αὐτὸ τὸ ἀγαθὸν καὶ τὸ ἄριστον, ἢ οὐ, ἀλλ' ὑστερογενῆ. παρὰ μὲν γὰρ τῶν θεολόγων ἔοικεν ὁμολογεῖσθαι τῶν νῦν τισίν, οἱ οὐ φασιν, ἀλλὰ προελθούσης τῆς τῶν ὄντων φύσεως καὶ τὸ ἀγαθὸν καὶ τὸ καλὸν ἐμφαίνεσθαι (τοῦτο δὲ ποιοῦσιν εὐλαβούμενοι ἀληθινήν δυσχέρειαν ἢ συμβαίνει τοῖς λέγουσιν, [1091b] ὥσπερ ἔνιοι, τὸ ἐν ἀρχῇ· ἔστι δ' ἡ δυσχέρεια οὐ διὰ τὸ τῇ ἀρχῇ τὸ εὖ ἀποδιδόναι ὡς ὑπάρχον, ἀλλὰ διὰ τὸ τὸ ἐν ἀρχῇ καὶ ἀρχὴν ὡς στοιχεῖον καὶ τὸν ἀριθμὸν ἐκ τοῦ ἐνός), - οἱ δὲ ποιηταὶ οἱ ἀρχαῖοι ταύτῃ ὁμοίως, ἢ βασιλεύειν καὶ ἄρχειν φασὶν οὐ τοὺς πρῶτους, οἶον νύκτα καὶ οὐρανὸν ἢ χάος ἢ ὠκεανόν, ἀλλὰ τὸν Δία· οὐ μὴν ἀλλὰ τούτοις μὲν διὰ τὸ μεταβάλλειν τοὺς ἄρχοντας τῶν ὄντων συμβαίνει τοιαῦτα λέγειν, ἐπεὶ οἱ γε μεμιγμένοι αὐτῶν [καὶ] τῷ μὴ μυθικῶς πάντα λέγειν, οἶον Φερεκύδης καὶ ἕτεροί τινες, τὸ γεννῆσαν πρῶτον ἄριστον τιθέασιν, καὶ οἱ Μάγοι, καὶ τῶν ὑστέρων δὲ σοφῶν οἶον Ἐμπεδοκλῆς τε καὶ Ἀναξαγόρας, ὁ μὲν τὴν φιλίαν στοιχεῖον ὁ δὲ τὸν νοῦν ἀρχὴν ποιήσας. τῶν δὲ τὰς ἀκινήτους οὐσίας εἶναι λεγόντων οἱ μὲν φασιν αὐτὸ τὸ ἐν τὸ ἀγαθὸν αὐτὸ εἶναι· οὐσίαν μέντοι τὸ ἐν αὐτοῦ ὦντο εἶναι μάλιστα. - ἡ μὲν οὖν ἀπορία αὕτη, ποτέρως δεῖ λέγειν· θαυμαστὸν δ' εἰ τῷ πρώτῳ καὶ ἀϊδίῳ καὶ αὐταρκεστάτῳ τοῦτ' αὐτὸ πρῶτον οὐχ ὡς ἀγαθὸν ὑπάρχει, τὸ αὐταρκες καὶ ἡ σωτηρία. ἀλλὰ μὴν οὐ δι' ἄλλο τι ἀφθαρτον ἢ διότι εὖ ἔχει, οὐδ' αὐταρκες, ὥστε τὸ μὲν φάναι τὴν ἀρχὴν τοιαύτην εἶναι εὐλογον ἀληθὲς εἶναι, τὸ μέντοι ταύτην εἶναι τὸ ἔν, ἢ εἰ μὴ τοῦτο, στοιχεῖόν γε καὶ στοιχεῖον ἀριθμῶν, ἀδύνατον. συμβαίνει γὰρ πολλὴ δυσχέρεια - ἦν ἔνιοι φεύγοντες ἀπειρήκασιν,



οἱ τὸ ἐν μὲν ὁμολογοῦντες ἀρχὴν εἶναι πρώτην καὶ στοιχεῖον, τοῦ ἀριθμοῦ δὲ τοῦ μαθηματικοῦ - ἅπασαι γὰρ αἱ μονάδες γίνονται ὅπερ ἀγαθόν τι, καὶ πολλή τις εὐπορία ἀγαθῶν. ἔτι εἰ τὰ εἶδη ἀριθμοί, τὰ εἶδη πάντα ὅπερ ἀγαθόν τι· ἀλλὰ μὴν ὅτου βούλεται τιθέναι τις εἶναι ἰδέας· εἰ μὲν γὰρ τῶν ἀγαθῶν μόνον, οὐκ ἔσονται οὐσίαι αἱ ἰδέαι, εἰ δὲ καὶ τῶν οὐσιῶν, πάντα τὰ ζῶα καὶ τὰ φυτὰ ἀγαθὰ καὶ τὰ μετέχοντα. ταῦτά τε δὴ συμβαίνει ἄτοπα, καὶ τὸ ἐναντίον στοιχεῖον, εἴτε πλήθος ὃν εἴτε τὸ ἄνισον καὶ μέγα καὶ μικρόν, τὸ κακὸν αὐτό (διόπερ ὁ μὲν ἔφευγε τὸ ἀγαθὸν προσάπτειν τῷ ἐνὶ ὧς ἀναγκαῖον ὄν, ἐπειδὴ ἐξ ἐναντίων ἡ γένεσις, τὸ κακὸν τὴν τοῦ πλήθους φύσιν εἶναι· οἱ δὲ λέγουσι τὸ ἄνισον τὴν τοῦ κακοῦ φύσιν)· συμβαίνει δὴ πάντα τὰ ὄντα μετέχειν τοῦ κακοῦ ἕξω ἐνὸς αὐτοῦ τοῦ ἐνός, καὶ μᾶλλον ἀκράτου μετέχειν τοὺς ἀριθμοὺς ἢ τὰ [1092a] μεγέθη, καὶ τὸ κακὸν τοῦ ἀγαθοῦ χώραν εἶναι, καὶ μετέχειν καὶ ὀρέγεσθαι τοῦ φθαρτικοῦ· φθαρτικὸν γὰρ τοῦ ἐναντίου τὸ ἐναντίον. καὶ εἰ ὥσπερ ἐλέγομεν ὅτι ἡ ὕλη ἐστὶ τὸ δυνάμει ἕκαστον, οἷον πυρὸς τοῦ ἐνεργείᾳ τὸ δυνάμει πῦρ, τὸ κακὸν ἔσται αὐτὸ τὸ δυνάμει ἀγαθόν. ταῦτα δὴ πάντα συμβαίνει, τὸ μὲν ὅτι ἀρχὴν πᾶσαν στοιχεῖον ποιοῦσι, τὸ δ' ὅτι τάναντία ἀρχάς, τὸ δ' ὅτι τὸ ἐν ἀρχήν, τὸ δ' ὅτι τοὺς ἀριθμοὺς τὰς πρώτας οὐσίας καὶ χωριστὰ καὶ εἶδη. εἰ οὖν καὶ τὸ μὴ τιθέναι τὸ ἀγαθὸν ἐν ταῖς ἀρχαῖς καὶ τὸ τιθέναι οὕτως ἀδύνατον, δῆλον ὅτι αἱ ἀρχαὶ οὐκ ὀρθῶς ἀποδίδονται οὐδὲ αἱ πρῶται οὐσίαι. οὐκ ὀρθῶς δ' ὑπολαμβάνει οὐδ' εἴ τις παρεικάζει τὰς τοῦ ὅλου ἀρχάς τῇ τῶν ζώων καὶ φυτῶν, ὅτι ἐξ ἀορίστων ἀτελῶν τε αἰεὶ τὰ τελειότερα, διὸ καὶ ἐπὶ τῶν πρώτων οὕτως ἔχειν φησίν, ὥστε μηδὲ ὄν τι εἶναι τὸ ἐν αὐτό. εἰσὶ γὰρ καὶ ἐνταῦθα τέλειαι αἱ ἀρχαὶ ἐξ ὧν ταῦτα· ἄνθρωπος γὰρ ἄνθρωπον γεννᾷ, καὶ οὐκ ἔστι τὸ σπέρμα πρῶτον. ἄτοπον δὲ καὶ τὸ τόπον ἅμα τοῖς στερεοῖς τοῖς μαθηματικοῖς ποιῆσαι (ὁ μὲν γὰρ τόπος τῶν καθ' ἕκαστον ἴδιος, διὸ χωριστὰ τόπων, τὰ δὲ μαθηματικὰ οὐ πού), καὶ τὸ εἰπεῖν μὲν ὅτι πού ἔσται, τί δὲ ἐστὶν ὁ τόπος μή. - ἔδει δὲ τοὺς λέγοντας ἐκ στοιχείων εἶναι τὰ ὄντα καὶ τῶν ὄντων τὰ πρῶτα τοὺς ἀριθμούς, διελομένους πῶς ἄλλο ἐξ ἄλλου ἐστίν, οὕτω λέγειν τίνα τρόπον ὁ ἀριθμὸς ἐστὶν ἐκ τῶν ἀρχῶν. πότερον μίξει; ἄλλ' οὔτε πᾶν μικτόν, τό τε γιγνόμενον ἕτερον, οὐκ ἔσται τε χωριστὸν τὸ ἐν οὐδ' ἑτέρα φύσις· οἱ δὲ βούλονται. ἀλλὰ συνθέσει, ὥσπερ συλλαβή; ἀλλὰ θέσιν τε ἀνάγκη ὑπάρχειν, καὶ χωρὶς ὁ νοῶν νοήσει τὸ ἐν καὶ τὸ πλήθος. τοῦτ' οὖν ἔσται ὁ ἀριθμὸς, μονὰς καὶ πλήθος, ἢ τὸ ἐν καὶ ἄνισον. καὶ ἐπεὶ τὸ ἐκ τινῶν εἶναι ἔστι μὲν ὡς ἐνυπαρχόντων ἔστι δὲ ὡς οὔ, ποτέρως ὁ ἀριθμὸς; οὕτως γὰρ ὡς ἐνυπαρχόντων οὐκ ἔστιν ἄλλ' ἢ ὧν γένεσις ἔστιν. ἄλλ' ὡς ἀπὸ σπέρματος; ἄλλ' οὐχ οἷόν τε τοῦ ἀδιαιρέτου τι ἀπελθεῖν. ἄλλ' ὡς ἐκ τοῦ ἐναντίου μὴ ὑπομένοντος; ἄλλ' ὅσα οὕτως ἔστι, καὶ ἐξ ἄλλου τινός ἐστιν ὑπομένοντος. ἐπεὶ τοίνυν τὸ ἐν ὁ μὲν τῷ πλήθει ὡς

έναντίον [1092b] τίθησιν, ὁ δὲ τῷ ἀνίσω, ὡς ἴσω τῷ ἐνὶ χρώμενος, ὡς ἐξ ἐναντίων εἴη ἂν ὁ ἀριθμός· ἔστιν ἄρα τι ἕτερον ἐξ οὗ ὑπομένοντος καὶ θατέρου ἐστὶν ἢ γέγονεν. ἔτι τί δὴ ποτε τὰ μὲν ἄλλ' ὅσα ἐξ ἐναντίων ἢ οἷς ἔστιν ἐναντία φθείρεται κἂν ἐκ παντὸς ἦ, ὁ δὲ ἀριθμὸς οὐ; περὶ τούτου γὰρ οὐθὲν λέγεται. καίτοι καὶ ἐνυπάρχον καὶ μὴ ἐνυπάρχον φθείρει τὸ ἐναντίον, οἷον τὸ νεῖκος τὸ μῖγμα (καίτοι γε οὐκ ἔδει· οὐ γὰρ ἐκείνω γε ἐναντίον). - οὐθὲν δὲ διώριστα οὐδὲ ὁποτέρως οἱ ἀριθμοὶ αἵτιοι τῶν οὐσιῶν καὶ τοῦ εἶναι, πότερον ὡς ὄροι (οἷον αἱ στιγμαὶ τῶν μεγεθῶν, καὶ ὡς Εὐρυτος ἔταπτε τίς ἀριθμὸς τίνος, οἷον ὁδὶ μὲν ἀνθρώπου ὁδὶ δὲ ἵππου, ὥσπερ οἱ τοὺς ἀριθμοὺς ἄγοντες εἰς τὰ σχήματα τρίγωνον καὶ τετράγωνον, οὕτως ἀφομοιωῶν ταῖς ψήφοις τὰς μορφὰς τῶν φυτῶν), ἢ ὅτι [ὁ] λόγος ἢ συμφωνία ἀριθμῶν, ὁμοίως δὲ καὶ ἄνθρωπος καὶ τῶν ἄλλων ἕκαστον; τὰ δὲ δὴ πάθη πῶς ἀριθμοί, τὸ λευκὸν καὶ γλυκὺ καὶ τὸ θερμόν; ὅτι δὲ οὐχ οἱ ἀριθμοὶ οὐσία οὐδὲ τῆς μορφῆς αἵτιοι, δῆλον· ὁ γὰρ λόγος ἢ οὐσία, ὁ δ' ἀριθμὸς ὕλη. οἷον σαρκὸς ἢ ὁστοῦ ἀριθμὸς ἢ οὐσία οὕτω, τρία πυρὸς γῆς δὲ δύο· καὶ ἀεὶ ὁ ἀριθμὸς ὃς ἂν ἦ τινῶν ἐστὶν, ἢ πύρινος ἢ γῆϊνος ἢ μοναδικός, ἀλλ' ἢ οὐσία τὸ τοσόνδ' εἶναι πρὸς τοσόνδε κατὰ τὴν μῆξιν· τοῦτο δ' οὐκέτι ἀριθμὸς ἀλλὰ λόγος μίξεως ἀριθμῶν σωματικῶν ἢ ὁποιωνοῦν. οὔτε οὖν τῷ ποιῆσαι αἴτιος ὁ ἀριθμὸς, οὔτε ὅλως ὁ ἀριθμὸς οὔτε ὁ μοναδικός, οὔτε ὕλη οὔτε λόγος καὶ εἶδος τῶν πραγμάτων. ἀλλὰ μὴν οὐδ' ὡς τὸ οὗ ἔνεκα.

Ἀπορήσειε δ' ἂν τις καὶ τί τὸ εὖ ἐστὶ τὸ ἀπὸ τῶν ἀριθμῶν τῷ ἐν ἀριθμῷ εἶναι τὴν μῆξιν, ἢ ἐν εὐλογίστῳ ἢ ἐν περιττῷ. νυνὶ γὰρ οὐθὲν ὑγιεινότερον τρὶς τρία ἂν ἢ τὸ μελίκρατον κεκραμένον, ἀλλὰ μᾶλλον ὠφελήσειεν ἂν ἐν οὐθενὶ λόγῳ ὃν ὑδαρὲς δὲ ἢ ἐν ἀριθμῷ ἄκρατον ὄν. ἔτι οἱ λόγοι ἐν προσθέσει ἀριθμῶν εἰσὶν οἱ τῶν μίξεων, οὐκ ἐν ἀριθμοῖς, οἷον τρία πρὸς δύο ἀλλ' οὐ τρὶς δύο. τὸ γὰρ αὐτὸ δεῖ γένος εἶναι ἐν ταῖς πολλαπλασιώσεσιν, ὥστε δεῖ μετρεῖσθαι τῷ τε Α τὸν στοῖχον ἐφ' οὗ ΑΒΓ καὶ τῷ Δ τὸν ΔΕΖ· ὥστε τῷ αὐτῷ πάντα. οὐκ οὖν ἔσται πυρὸς ΒΕΓΖ [1093a] καὶ ὕδατος ἀριθμὸς δις τρία. - εἰ δ' ἀνάγκη πάντα ἀριθμοῦ κοινωνεῖν, ἀνάγκη πολλὰ συμβαίνειν τὰ αὐτά, καὶ ἀριθμὸν τὸν αὐτὸν τῷδε καὶ ἄλλῳ. ἄρ' οὖν τοῦτ' αἴτιον καὶ διὰ τοῦτό ἐστι τὸ πρᾶγμα, ἢ ἄδηλον; οἷον ἔστι τις τῶν τοῦ ἡλίου φορῶν ἀριθμὸς, καὶ πάλιν τῶν τῆς σελήνης, καὶ τῶν ζώων γε ἕκαστου τοῦ βίου καὶ ἡλικίας· τί οὖν κωλύει ἐνίους μὲν τούτων τετραγώνους εἶναι ἐνίους δὲ κύβους, καὶ ἴσους τοὺς δὲ διπλασίους; οὐθὲν γὰρ κωλύει, ἀλλ' ἀνάγκη ἐν τούτοις στρέφεσθαι, εἰ ἀριθμοῦ πάντα ἐκοινωνεῖ. ἐνεδέχεται τε τὰ διαφέροντα ὑπὸ τὸν αὐτὸν ἀριθμὸν πίπτειν· ὥστ' εἴ τις ὁ αὐτὸς ἀριθμὸς συνεβεβήκει, ταῦτά ἂν ἦν ἀλλήλοις ἐκεῖνα τὸ αὐτὸ εἶδος ἀριθμοῦ ἔχοντα, οἷον ἡλῖος καὶ σελήνη τὰ αὐτά. ἀλλὰ διὰ τί αἴτια ταῦτα; ἐπτὰ μὲν φωνήεντα, ἐπτὰ δὲ χορδαὶ ἢ

ἄρμονία, ἐπτὰ δὲ αἱ πλειάδες, ἐν ἐπτὰ δὲ ὀδόντας βάλλει (ἔνια γε, ἔνια δ' οὐ), ἐπτὰ δὲ οἱ ἐπὶ Θήβας. ἄρ' οὖν ὅτι τοιοσδὶ ὁ ἀριθμὸς πέφυκεν, διὰ τοῦτο ἢ ἐκεῖνοι ἐγένοντο ἐπτὰ ἢ ἡ πλειὰς ἐπτὰ ἀστέρων ἐστίν; ἢ οἱ μὲν διὰ τὰς πύλας ἢ ἄλλην τινὰ αἰτίαν, τὴν δὲ ἡμεῖς οὕτως ἀριθμοῦμεν, τὴν δὲ ἄρκτον γε δώδεκα, οἱ δὲ πλείους· ἐπεὶ καὶ τὸ ΞΨΖ συμφωνίας φασὶν εἶναι, καὶ ὅτι ἐκεῖναι τρεῖς, καὶ ταῦτα τρία· ὅτι δὲ μυρία ἂν εἴη τοιαῦτα, οὐθὲν μέλει (τῷ γὰρ Γ καὶ Ρ εἴη ἂν ἓν σημεῖον)· εἰ δ' ὅτι διπλάσιον τῶν ἄλλων ἕκαστον, ἄλλο δ' οὐ, αἴτιον δ' ὅτι τριῶν ὄντων τόπων ἐν ἐφ' ἐκάστου ἐπιφέρεται τῷ σίγμα, διὰ τοῦτο τρία μόνον ἐστὶν ἄλλ' οὐχ ὅτι αἱ συμφωνίαι τρεῖς, ἐπεὶ πλείους γε αἱ συμφωνίαι, ἐνταῦθα δ' οὐκέτι δύναται. ὅμοιοι δὲ καὶ οὗτοι τοῖς ἀρχαίοις Ὀμηρικοῖς, οἱ μικρὰς ὁμοιότητας ὁρῶσι μεγάλας δὲ παρορῶσιν. λέγουσι δὲ τινες ὅτι πολλὰ τοιαῦτα, οἷον αἱ τε μέσαι ἢ μὲν ἐννέα ἢ δὲ ὀκτώ, καὶ τὸ ἔπος δεκαεπτὰ, ἰσάριθμον τούτοις, βαίνεται δ' ἐν [1093b] μὲν τῷ δεξιῷ ἐννέα συλλαβαῖς, ἐν δὲ τῷ ἀριστερῷ ὀκτώ· καὶ ὅτι ἴσον τὸ διάστημα ἐν τε τοῖς γράμμασιν ἀπὸ τοῦ Α πρὸς τὸ Ω, καὶ ἀπὸ τοῦ βόμβυκος ἐπὶ τὴν ὀξυτάτην [νεάτην] ἐν αὐλοῖς, ἧς ὁ ἀριθμὸς ἴσος τῇ οὐλομελείᾳ τοῦ οὐρανοῦ. ὁρᾷν δὲ δεῖ μὴ τοιαῦτα οὐθεὶς ἂν ἀπορήσειεν οὔτε λέγειν οὔθ' εὐρίσκειν ἐν τοῖς αἰτίοις, ἐπεὶ καὶ ἐν τοῖς φθαρτοῖς. ἀλλ' αἱ ἐν τοῖς ἀριθμοῖς φύσεις αἱ ἐπαινούμεναι καὶ τὰ τούτοις ἐναντία καὶ ὅλως τὰ ἐν τοῖς μαθήμασιν, ὥς μὲν λέγουσιν τινες καὶ αἴτια ποιοῦσι τῆς φύσεως, ἔοικεν οὕτωςί γε σκοπούμενοις διαφεύγειν (κατ' οὐδένα γὰρ τρόπον τῶν διωρισμένων περὶ τὰς ἀρχὰς οὐδὲν αὐτῶν αἴτιον)· ἔστιν ὥς μέντοι ποιοῦσι φανερόν ὅτι τὸ εὖ ὑπάρχει καὶ τῆς συστοιχίας ἐστὶ τῆς τοῦ καλοῦ τὸ περιττόν, τὸ εὐθύ, τὸ ἰσάκις ἴσον, αἱ δυνάμεις ἐνίων ἀριθμῶν· ἅμα γὰρ ὦραι καὶ ἀριθμὸς τοιοσδὶ· καὶ τὰ ἄλλα δὴ ὅσα συνάγουσιν ἐκ τῶν μαθηματικῶν θεωρημάτων πάντα ταύτην ἔχει τὴν δύναμιν. διὸ καὶ ἔοικε συμπτώμασιν· ἔστι γὰρ συμβεβηκότα μὲν, ἀλλ' οἰκεῖα ἀλλήλοις πάντα, ἐν δὲ τῷ ἀνάλογον· ἐν ἐκάστη γὰρ τοῦ ὄντος κατηγορία ἐστὶ τὸ ἀνάλογον, ὥς εὐθὺ ἐν μήκει οὕτως ἐν πλάτει τὸ ὁμαλόν, ἴσως ἐν ἀριθμῷ τὸ περιττόν, ἐν δὲ χροιά τὸ λευκόν. - ἔτι οὐχ οἱ ἐν τοῖς εἶδεσιν ἀριθμοὶ αἴτιοι τῶν ἀρμονικῶν καὶ τῶν τοιούτων (διαφέρουσι γὰρ ἐκεῖνοι ἀλλήλων οἱ ἴσοι εἶδει· καὶ γὰρ αἱ μονάδες)· ὥστε διὰ γε ταῦτα εἶδη οὐ ποιητέον. τὰ μὲν οὖν συμβαίνοντα ταῦτά τε κἂν ἔτι πλείω συναχθεῖη· ἔοικε δὲ τεκμήριον εἶναι τὸ πολλὰ κακοπαθεῖν περὶ τὴν γένεσιν αὐτῶν καὶ μηδένα τρόπον δύνασθαι συνεῖραι τοῦ μὴ χωριστὰ εἶναι τὰ μαθηματικὰ τῶν αἰσθητῶν, ὥς ἔνιοι λέγουσι, μηδὲ ταύτας εἶναι τὰς ἀρχάς.

## **Ἠθικά καὶ Πολιτικῶν - Ethics and Politics**

### **Ἠθικῶν Νικομαχείων (1094a) Nicomachean Ethics**



## CONTENTS

[Βιβλίο 1](#)

[Βιβλίο 2](#)

[Βιβλίο 3](#)

[Βιβλίο 4](#)

[Βιβλίο 5](#)

[Βιβλίο 6](#)

[Βιβλίο 7](#)

[Βιβλίο 8](#)

[Βιβλίο 9](#)

[Βιβλίο 10](#)

λὰ περὶ τοῦ τρόπου.

♦ον.

## Βιβλίο 1

Πᾶσα τέχνη καὶ πᾶσα μέθοδος, ὁμοίως δὲ πρᾶξις τε καὶ προαίρεσις, ἀγαθοῦ τινὸς ἐφίεσθαι δοκεῖ· διὸ καλῶς ἀπεφήναντο τᾶγαθόν, οὐ πάντ' ἐφίεται. διαφορὰ δέ τις φαίνεται τῶν τελῶν· τὰ μὲν γὰρ εἰσιν ἐνέργειαι, τὰ δὲ παρ' αὐτάς [5] ἔργα τινά. ὧν δ' εἰσὶ τέλη τινὰ παρὰ τὰς πράξεις, ἐν τούτοις βελτίω πέφυκε τῶν ἐνεργειῶν τὰ ἔργα. πολλῶν δὲ πράξεων οὐσῶν καὶ τεχνῶν καὶ ἐπιστημῶν πολλὰ γίνεται καὶ τὰ τέλη· ἱατρικῆς μὲν γὰρ ὑγίεια, ναυπηγικῆς δὲ πλοῖον, στρατηγικῆς δὲ νίκη, οἰκονομικῆς δὲ πλοῦτος. διαφέρει δ' οὐδὲν τὰς ἐνεργείας αὐτάς εἶναι τὰ τέλη τῶν πράξεων ἢ παρὰ ταύτας ἄλλο τι, καθάπερ ἐπὶ τῶν λεχθεῖσων ἐπιστημῶν.

Εἰ δὴ τι τέλος ἐστὶ τῶν πρακτῶν ὃ δι' αὐτὸ βουλόμεθα, τᾶλλα δὲ διὰ τοῦτο, καὶ μὴ [20] πάντα δι' ἕτερον αἰρούμεθα (πρόεισι γὰρ οὕτω γ' εἰς ἄπειρον, ὥστ' εἶναι κενὴν καὶ ματαίαν τὴν ὄρεξιν), δῆλον ὡς τοῦτ' ἂν εἴη τᾶγαθόν καὶ τὸ ἄριστον. ἄρ' οὖν καὶ πρὸς τὸν βίον ἡ γνῶσις αὐτοῦ μεγάλην ἔχει ῥοπήν, καὶ καθάπερ τοξόται σκοπὸν ἔχοντες μᾶλλον ἂν τυγχάνοιμεν τοῦ δέοντος; εἰ δ' [25] οὕτω, πειρατέον τύπῳ γε περιλαβεῖν αὐτὸ τί ποτ' ἐστὶ καὶ τίνος τῶν ἐπιστημῶν ἢ δυνάμεων. δόξειε δ' ἂν τῆς κυριωτάτης καὶ μάλιστα ἀρχιτεκτονικῆς. τοιαύτη δ' ἡ πολιτικὴ φαίνεται· τίνας γὰρ εἶναι χρεῶν τῶν ἐπιστημῶν ἐν ταῖς πόλεσι, 1094b [1] καὶ ποίας ἐκάστους μανθάνειν καὶ μέχρι τίνος, αὕτη διατάσσει· ὁρῶμεν δὲ καὶ τὰς ἐντιμοτάτας τῶν δυνάμεων ὑπὸ ταύτην οὔσας, οἷον στρατηγικὴν οἰκονομικὴν ῥητορικὴν· χρωμένης δὲ ταύτης ταῖς λοιπαῖς [πρακτικαῖς] τῶν ἐπιστημῶν, [5] ἔτι δὲ νομοθετοῦσης τί δεῖ πράττειν καὶ τίνων ἀπέχεσθαι, τὸ ταύτης τέλος περιέχοι ἂν τὰ τῶν ἄλλων, ὥστε τοῦτ' ἂν εἴη τάνθρωπινον ἀγαθόν. εἰ γὰρ καὶ ταυτόν ἐστιν ἐνὶ καὶ πόλει, μεῖζόν γε καὶ τελειότερον τὸ τῆς πόλεως φαίνεται καὶ λαβεῖν καὶ σώζειν· ἀγαπητὸν μὲν γὰρ καὶ ἐνὶ [10] μόνῳ, κάλλιον δὲ καὶ θειότερον ἔθνει καὶ πόλεσιν. ἡ μὲν οὖν μέθοδος τούτων ἐφίεται, πολιτικὴ τις οὔσα.

Λέγοιτο δ' ἂν ἱκανῶς, εἰ κατὰ τὴν ὑποκειμένην ὕλην διασαφηθείη· τὸ γὰρ ἀκριβὲς οὐχ ὁμοίως ἐν ἅπασιν τοῖς λόγοις ἐπιζητητέον, ὥσπερ οὐδ' ἐν τοῖς δημιουργουμένοις. τὰ δὲ καλὰ καὶ τὰ δίκαια, [15] περὶ ὧν ἡ πολιτικὴ σκοπεῖται, πολλὴν ἔχει διαφορὰν καὶ πλάνην, ὥστε δοκεῖν νόμῳ μόνον εἶναι, φύσει δὲ μή. τοιαύτην δὲ τινα πλάνην ἔχει καὶ τᾶγαθὰ διὰ τὸ πολλοῖς συμβαίνειν βλάβας ἀπ' αὐτῶν· ἤδη γὰρ τινες ἀπώλοντο διὰ πλοῦτον, ἕτεροι δὲ δι' ἀνδρείαν. ἀγαπητὸν οὖν περὶ τοιούτων [20] καὶ ἐκ τοιούτων λέγοντας παχυλῶς καὶ τύπῳ τάληθες ἐνδείκνυσθαι, καὶ περὶ τῶν ὡς ἐπὶ τὸ πολὺ καὶ

ἐκ τοιούτων λέγοντας τοιαῦτα καὶ συμπεραίνεισθαι. τὸν αὐτὸν δὲ τρόπον καὶ ἀποδέχεσθαι χρεὼν ἕκαστα τῶν λεγομένων· πεπαιδευμένου γὰρ ἐστὶν ἐπὶ τοσοῦτον τὰκριβὲς ἐπιζητεῖν καθ' ἕκαστον [25] γένος, ἐφ' ὅσον ἢ τοῦ πράγματος φύσις ἐπιδέχεται· παραπλήσιον γὰρ φαίνεται μαθηματικοῦ τε πιθανολογοῦντος ἀποδέχεσθαι καὶ ῥητορικὸν ἀποδείξεις ἀπαιτεῖν.

Ἕκαστος δὲ κρίνει καλῶς ἃ γινώσκει, καὶ τούτων ἐστὶν ἀγαθὸς κριτής. 1095a [1] καθ' ἕκαστον μὲν ἄρα ὁ πεπαιδευμένος, ἀπλῶς δ' ὁ περὶ πᾶν πεπαιδευμένος. διὸ τῆς πολιτικῆς οὐκ ἔστιν οἰκεῖος ἀκροατῆς ὁ νέος· ἄπειρος γὰρ τῶν κατὰ τὸν βίον πράξεων, οἱ λόγοι δ' ἐκ τούτων καὶ περὶ τούτων· ἔτι δὲ τοῖς πάθεσιν ἀκολουθητικὸς ὢν [5] ματαιῶς ἀκούσεται καὶ ἀνωφελῶς, ἐπειδὴ τὸ τέλος ἐστὶν οὐ γνῶσις ἀλλὰ πρᾶξις. διαφέρει δ' οὐδὲν νέος τὴν ἡλικίαν ἢ τὸ ἦθος νεαρός· οὐ γὰρ παρὰ τὸν χρόνον ἢ ἔλλειψις, ἀλλὰ διὰ τὸ κατὰ πάθος ζῆν καὶ διώκειν ἕκαστα. τοῖς γὰρ τοιούτοις ἀνόνητος ἢ γνῶσις γίνεται, καθάπερ τοῖς ἀκρατέσιν· [10] τοῖς δὲ κατὰ λόγον τὰς ὀρέξεις ποιούμενοις καὶ πράττουσι πολυωφελὲς ἂν εἴη τὸ περὶ τούτων εἰδέναι.

Καὶ περὶ μὲν ἀκροατοῦ, καὶ πῶς ἀποδεκτέον, καὶ τί προτιθέμεθα, πεφροimiάσθω ταῦτα.

Λέγωμεν δ' ἀναλαβόντες, ἐπειδὴ πᾶσα γνῶσις καὶ προαίρεσις [15] ἀγαθοῦ τινὸς ὀρέγεται, τί ἐστὶν οὗ λέγομεν τὴν πολιτικὴν ἐφίεσθαι καὶ τί τὸ πάντων ἀκρότατον τῶν πρακτῶν ἀγαθῶν. ὀνόματι μὲν οὖν σχεδὸν ὑπὸ τῶν πλείστων ὁμολογεῖται· τὴν γὰρ εὐδαιμονίαν καὶ οἱ πολλοὶ καὶ οἱ χαρίεντες λέγουσιν, τὸ δ' εὖ ζῆν καὶ τὸ εὖ πράττειν ταῦτόν ὑπολαμβάνουσι [20] τῷ εὐδαιμονεῖν· περὶ δὲ τῆς εὐδαιμονίας, τί ἐστὶν, ἀμφισβητοῦσι καὶ οὐχ ὁμοίως οἱ πολλοὶ τοῖς σοφοῖς ἀποδιδόασιν. οἱ μὲν γὰρ τῶν ἐναργῶν τι καὶ φανερῶν, οἷον ἡδονὴν ἢ πλοῦτον ἢ τιμὴν, ἄλλοι δ' ἄλλο — πολλάκις δὲ καὶ ὁ αὐτὸς ἕτερον· νοσήσας μὲν γὰρ ὑγίειαν, πενόμενος δὲ [25] πλοῦτον· συνειδότες δ' ἑαυτοῖς ἄγνοιαν τοὺς μέγα τι καὶ ὑπὲρ αὐτοὺς λέγοντας θαυμάζουσιν. ἔνιοι δ' ὥντο παρὰ τὰ πολλὰ ταῦτα ἀγαθὰ ἄλλο τι καθ' αὐτὸ εἶναι, ὃ καὶ τούτοις πᾶσιν αἰτιὸν ἐστὶ τοῦ εἶναι ἀγαθὰ. ἀπάσας μὲν οὖν ἐξετάζειν τὰς δόξας ματαιότερον ἴσως ἐστίν, ἱκανὸν δὲ τὰς μάλιστα [30] ἐπιπολαζούσας ἢ δοκούσας ἔχειν τινὰ λόγον.

Μὴ λανθανέτω δ' ἡμᾶς ὅτι διαφέρουσιν οἱ ἀπὸ τῶν ἀρχῶν λόγοι καὶ οἱ ἐπὶ τὰς ἀρχάς. εὖ γὰρ καὶ ὁ Πλάτων ἠπόρει τοῦτο καὶ ἐζήτηι, πότερον ἀπὸ τῶν ἀρχῶν ἢ ἐπὶ τὰς ἀρχάς ἐστὶν ἡ ὁδός, 1095b [1] ὥσπερ ἐν τῷ σταδίῳ ἀπὸ τῶν ἀθλοθετῶν ἐπὶ τὸ πέρασ ἢ ἀνάπαλιν. ἀρκτέον μὲν γὰρ ἀπὸ τῶν

γνωρίμων, ταῦτα δὲ διττῶς· τὰ μὲν γὰρ ἡμῖν τὰ δ' ἀπλῶς. ἴσως οὖν ἡμῖν γε ἀρκτέον ἀπὸ τῶν ἡμῖν γνωρίμων. διὸ δεῖ τοῖς ἔθεσιν ἡχθαι καλῶς τὸν [5] περὶ καλῶν καὶ δικαίων καὶ ὅλως τῶν πολιτικῶν ἀκουσόμενον ἱκανῶς. ἀρχὴ γὰρ τὸ ὅτι, καὶ εἰ τοῦτο φαίνοιτο ἀρκούντως, οὐδὲν προσδεήσει τοῦ διότι· ὁ δὲ τοιοῦτος ἔχει ἢ λάβοι ἂν ἀρχὰς ῥαδίως. ὥ δὲ μηδέτερον ὑπάρχει τούτων, ἀκουσάτω τῶν Ἡσιόδου· [10] οὗτος μὲν πανάριστος ὃς αὐτὸς πάντα νοήση,

ἐσθλὸς δ' αὖτ' ἀκέραιος ὃς εὖ εἰπόντι πίθηται.

ὃς δέ κε μήτ' αὐτὸς νοέη μήτ' ἄλλου ἀκούων

ἐν θυμῷ βάλληται, ὃ δ' αὖτ' ἀχρήσιος ἀνὴρ.

Ἡμεῖς δὲ λέγωμεν ὅθεν παρεξέβημεν. τὸ γὰρ ἀγαθὸν [15] καὶ τὴν εὐδαιμονίαν οὐκ ἀλόγως εἰκόασιν ἐκ τῶν βίων ὑπολαμβάνειν οἱ μὲν πολλοὶ καὶ φορτικώτατοι τὴν ἡδονήν· διὸ καὶ τὸν βίον ἀγαπῶσι τὸν ἀπολαυστικόν. τρεῖς γάρ εἰσι μάλιστα οἱ προύχοντες, ὃ τε νῦν εἰρημένος καὶ ὁ πολιτικὸς καὶ τρίτος ὁ θεωρητικός. οἱ μὲν οὖν πολλοὶ παντελῶς [20] ἀνδραποδώδεις φαίνονται βοσκημάτων βίον προαιρούμενοι, τυγχάνουσι δὲ λόγου διὰ τὸ πολλοὺς τῶν ἐν ταῖς ἐξουσίαις ὁμοιοπαθεῖν Σαρδαναπάλλω. οἱ δὲ χαρίεντες καὶ πρακτικοὶ τιμὴν· τοῦ γὰρ πολιτικοῦ βίου σχεδὸν τοῦτο τέλος. φαίνεται δ' ἐπιπολαιότερον εἶναι τοῦ ζητουμένου· δοκεῖ γὰρ ἐν [25] τοῖς τιμῶσι μᾶλλον εἶναι ἢ ἐν τῷ τιμωμένῳ, τάγαθόν δὲ οἰκεῖόν τι καὶ δυσσφαίρετον εἶναι μαντευόμεθα. ἔτι δ' εἰκόασι τὴν τιμὴν διώκειν ἵνα πιστεύσωσιν ἑαυτοὺς ἀγαθοὺς εἶναι· ζητοῦσι γοῦν ὑπὸ τῶν φρονίμων τιμᾶσθαι, καὶ παρ' οἷς γινώσκονται, καὶ ἐπ' ἀρετῇ· δῆλον οὖν ὅτι κατὰ γε [30] τούτους ἡ ἀρετὴ κρείττων. τάχα δὲ καὶ μᾶλλον ἂν τις τέλος τοῦ πολιτικοῦ βίου ταύτην ὑπολάβοι. φαίνεται δὲ ἀτελεστέρα καὶ αὕτη· δοκεῖ γὰρ ἐνδέχεσθαι καὶ καθεύδειν ἔχοντα τὴν ἀρετὴν ἢ ἀπρακτεῖν διὰ βίου, καὶ πρὸς τούτοις κακοπαθεῖν καὶ ἀτυχεῖν τὰ μέγιστα· 1096a [1] τὸν δ' οὕτω ζῶντα οὐδεὶς ἂν εὐδαιμονίσειεν, εἰ μὴ θέσιν διαφυλάττων. καὶ περὶ μὲν τούτων ἄλλος· ἱκανῶς γὰρ καὶ ἐν τοῖς ἐγκυκλίοις εἴρηται περὶ αὐτῶν. τρίτος δ' ἐστὶν ὁ θεωρητικός, ὑπὲρ οὗ [5] τὴν ἐπίσκεψιν ἐν τοῖς ἐπομένοις ποιησόμεθα.

Ὁ δὲ χρηματιστὴς βίαιός τις ἐστίν, καὶ ὁ πλοῦτος δῆλον ὅτι οὐ τὸ ζητούμενον ἀγαθόν· χρήσιμον γὰρ καὶ ἄλλου χάριν. διὸ μᾶλλον τὰ πρότερον λεχθέντα τέλη τις ἂν ὑπολάβοι· δι' αὐτὰ γὰρ ἀγαπᾶται. φαίνεται δ' οὐδ' ἐκεῖνα· καίτοι πολλοὶ λόγοι [10] πρὸς αὐτὰ καταβέβληνται. ταῦτα μὲν οὖν ἀφείσθω.

Τὸ δὲ καθόλου βέλτιον ἴσως ἐπισκέψασθαι καὶ διαπορῆσαι πῶς λέγεται, καίπερ προσάντους τῆς τοιαύτης ζητήσεως γινομένης διὰ τὸ φίλους ἄνδρας εἰσαγαγεῖν τὰ εἶδη. δόξειε δ' ἂν ἴσως βέλτιον εἶναι καὶ δεῖν ἐπὶ σωτηρίᾳ γε τῆς [15] ἀληθείας καὶ τὰ οἰκεῖα ἀναιρεῖν, ἄλλως τε καὶ φιλοσόφους ὄντας· ἀμφοῖν γὰρ ὄντοιν φίλοιν ὅσιον προτιμᾶν τὴν ἀλήθειαν.

Οἱ δὲ κομίσαντες τὴν δόξαν ταύτην οὐκ ἐποιοῦν ἰδέας ἐν οἷς τὸ πρότερον καὶ ὕστερον ἔλεγον, διόπερ οὐδὲ τῶν ἀριθμῶν ἰδέαν κατεσκεύαζον· τὸ δ' ἀγαθὸν λέγεται καὶ ἐν [20] τῷ τί ἐστὶ καὶ ἐν τῷ ποιῶ καὶ ἐν τῷ πρὸς τι, τὸ δὲ καθ' αὐτὸ καὶ ἡ οὐσία πρότερον τῇ φύσει τοῦ πρὸς τι (παραφυάδι γὰρ τοῦτ' ἔοικε καὶ συμβεβηκότι τοῦ ὄντος)· ὥστ' οὐκ ἂν εἴη κοινὴ τις ἐπὶ τούτοις ἰδέα. ἔτι δ' ἐπεὶ τὰγαθὸν ἰσαχῶς λέγεται τῷ ὄντι (καὶ γὰρ ἐν τῷ τί λέγεται, οἷον ὁ θεὸς καὶ [25] ὁ νοῦς, καὶ ἐν τῷ ποιῶ αἱ ἀρεταί, καὶ ἐν τῷ ποσῷ τὸ μέτριον, καὶ ἐν τῷ πρὸς τι τὸ χρήσιμον, καὶ ἐν χρόνῳ καιρὸς, καὶ ἐν τόπῳ δίαίτα καὶ ἕτερα τοιαῦτα), δῆλον ὡς οὐκ ἂν εἴη κοινόν τι καθόλου καὶ ἕν· οὐ γὰρ ἂν ἐλέγετ' ἐν πάσαις ταῖς κατηγορίαις, ἀλλ' ἐν μιᾷ μόνῃ. ἔτι δ' ἐπεὶ τῶν [30] κατὰ μίαν ἰδέαν μία καὶ ἐπιστήμη, καὶ τῶν ἀγαθῶν ἀπάντων ἦν ἂν μία τις ἐπιστήμη· νῦν δ' εἰσὶ πολλὰ καὶ τῶν ὑπὸ μίαν κατηγορίαν, οἷον καιροῦ, ἐν πολέμῳ μὲν γὰρ στρατηγικὴ ἐν νόσῳ δ' ἰατρικὴ, καὶ τοῦ μετρίου ἐν τροφῇ μὲν ἰατρικὴ ἐν πόνοις δὲ γυμναστικὴ. ἀπορήσειε δ' ἂν τις τί [35] ποτε καὶ βούλονται λέγειν αὐτοέκαστον, εἴπερ ἕν τε αὐτοανθρώπῳ 1096b [1] καὶ ἐν ἀνθρώπῳ εἷς καὶ ὁ αὐτὸς λόγος ἐστὶν ὁ τοῦ ἀνθρώπου. ἡ γὰρ ἄνθρωπος, οὐδὲν διοίσουσιν· εἰ δ' οὕτως, οὐδ' ἡ ἀγαθόν. ἀλλὰ μὴν οὐδὲ τῷ αἰδίου εἶναι μᾶλλον ἀγαθὸν ἔσται, εἴπερ μηδὲ λευκότερον τὸ πολυχρόνιον τοῦ [5] ἐφημέρου. πιθανώτερον δ' εἰκόασιν οἱ Πυθαγόρειοι λέγειν περὶ αὐτοῦ, τιθέντες ἐν τῇ τῶν ἀγαθῶν συστοιχίᾳ τὸ ἕν· οἷς δὲ καὶ Σπεύσιππος ἐπακολουθήσαι δοκεῖ.

Ἀλλὰ περὶ μὲν τούτων ἄλλος ἔστω λόγος· τοῖς δὲ λεχθεῖσιν ἀμφισβήτησις τις ὑποφαίνεται διὰ τὸ μὴ περὶ παντὸς ἀγαθοῦ τοὺς λόγους [10] εἰρῆσθαι, λέγεσθαι δὲ καθ' ἕν εἶδος τὰ καθ' αὐτὰ διωκόμενα καὶ ἀγαπώμενα, τὰ δὲ ποιητικὰ τούτων ἢ φυλακτικὰ πῶς ἢ τῶν ἐναντίων κωλυτικὰ διὰ ταῦτα λέγεσθαι καὶ τρόπον ἄλλον. δῆλον οὖν ὅτι διττῶς λέγοιτ' ἂν τὰγαθὰ, καὶ τὰ μὲν καθ' αὐτὰ, θάτερα δὲ διὰ ταῦτα. χωρίσαντες [15] οὖν ἀπὸ τῶν ὠφελίμων τὰ καθ' αὐτὰ σκεψώμεθα εἰ λέγεται κατὰ μίαν ἰδέαν. καθ' αὐτὰ δὲ ποῖα θείη τις ἂν; ἢ ὅσα καὶ μονούμενα διώκεται, οἷον τὸ φρονεῖν καὶ ὁρᾶν καὶ ἡδοναί τινες καὶ τιμαί; ταῦτα γὰρ εἰ καὶ δι' ἄλλο τι διώκομεν, ὅμως τῶν καθ' αὐτὰ ἀγαθῶν θείη τις ἂν. ἢ οὐδ' [20] ἄλλο οὐδὲν πλὴν τῆς ἰδέας; ὥστε μάταιον ἔσται τὸ εἶδος. εἰ δὲ καὶ ταῦτ' ἐστὶ τῶν καθ' αὐτὰ, τὸν τὰγαθοῦ λόγον ἐν



ἅπασιν αὐτοῖς τὸν αὐτὸν ἐμφαίνεσθαι δεήσει, καθάπερ ἐν χιόνι καὶ ψιμυθίῳ τὸν τῆς λευκότητος. τιμῆς δὲ καὶ φρονήσεως καὶ ἡδονῆς ἕτεροι καὶ διαφέροντες οἱ λόγοι ταύτῃ [25] ἢ ἀγαθὰ. οὐκ ἔστιν ἄρα τὸ ἀγαθὸν κοινόν τι κατὰ μίαν ἰδέαν.

Ἀλλὰ πῶς δὴ λέγεται; οὐ γὰρ ἔοικε τοῖς γε ἀπὸ τύχης ὁμωνύμοις. ἀλλ' ἄρα γε τῷ ἀφ' ἐνὸς εἶναι ἢ πρὸς ἐν ἅπαντα συντελεῖν, ἢ μᾶλλον κατ' ἀναλογίαν; ὡς γὰρ ἐν σώματι ὄψις, ἐν ψυχῇ νοῦς, καὶ ἄλλο δὴ ἐν ἄλλῳ. [30] ἀλλ' ἴσως ταῦτα μὲν ἀφετέον τὸ νῦν. ἐξακριβοῦν γὰρ ὑπὲρ αὐτῶν ἄλλης ἂν εἴη φιλοσοφίας οἰκειότερον. ὁμοίως δὲ καὶ περὶ τῆς ἰδέας· εἰ γὰρ καὶ ἔστιν ἐν τι τὸ κοινῇ κατηγορούμενον ἀγαθὸν ἢ χωριστὸν αὐτό τι καθ' αὐτό, δῆλον ὡς οὐκ ἂν εἴη πρακτὸν οὐδὲ κτητὸν ἀνθρώπῳ· νῦν δὲ τοιοῦτόν τι [35] ζητεῖται. τάχα δέ τῳ δόξειεν ἂν βέλτιον εἶναι γνωρίζειν αὐτὸ 1097a [1] πρὸς τὰ κτητὰ καὶ πρακτὰ τῶν ἀγαθῶν· οἷον γὰρ παράδειγμα τοῦτ' ἔχοντες μᾶλλον εἰσόμεθα καὶ τὰ ἡμῖν ἀγαθὰ, κἂν εἰδῶμεν, ἐπιτευξόμεθα αὐτῶν. πιθανότητα μὲν οὖν τινα ἔχει ὁ λόγος, ἔοικε δὲ ταῖς ἐπιστήμαις διαφωνεῖν· [5] πᾶσαι γὰρ ἀγαθοῦ τινὸς ἐφιέμεναι καὶ τὸ ἐνδεὲς ἐπιζητοῦσαι παραλείπουσι τὴν γνῶσιν αὐτοῦ. καίτοι βοήθημα τηλικοῦτον τοὺς τεχνίτας ἅπαντας ἀγνοεῖν καὶ μὴδ' ἐπιζητεῖν οὐκ εὖλογον. ἄπορον δὲ καὶ τί ὠφελήσεται ὑφάντης ἢ τέκτων πρὸς τὴν αὐτοῦ τέχνην εἰδὼς τὸ αὐτὸ τοῦτο ἀγαθόν, [10] ἢ πῶς ἱατρικώτερος ἢ στρατηγικώτερος ἔσται ὁ τὴν ἰδέαν αὐτὴν τεθεαμένος. φαίνεται μὲν γὰρ οὐδὲ τὴν ὑγίειαν οὕτως ἐπισκοπεῖν ὁ ἰατρός, ἀλλὰ τὴν ἀνθρώπου, μᾶλλον δ' ἴσως τὴν τοῦδε· καθ' ἕκαστον γὰρ ἰατρεύει. καὶ περὶ μὲν τούτων ἐπὶ τοσοῦτον εἰρήσθω.

[15] Πάλιν δ' ἐπανέλθωμεν ἐπὶ τὸ ζητούμενον ἀγαθόν, τί ποτ' ἂν εἴη. φαίνεται μὲν γὰρ ἄλλο ἐν ἄλλῃ πράξει καὶ τέχνῃ· ἄλλο γὰρ ἐν ἱατρικῇ καὶ στρατηγικῇ καὶ ταῖς λοιπαῖς ὁμοίως. τί οὖν ἐκάστης τάγαθόν; ἢ οὐ χάριν τὰ λοιπὰ πράττεται; τοῦτο δ' ἐν ἱατρικῇ μὲν ὑγίεια, ἐν στρατηγικῇ [20] δὲ νίκη, ἐν οἰκοδομικῇ δ' οἰκία, ἐν ἄλλῳ δ' ἄλλο, ἐν ἀπάσῃ δὲ πράξει καὶ προαιρέσει τὸ τέλος· τούτου γὰρ ἔνεκα τὰ λοιπὰ πράττουσι πάντες. ὥστ' εἴ τι τῶν πρακτῶν ἀπάντων ἐστὶ τέλος, τοῦτ' ἂν εἴη τὸ πρακτὸν ἀγαθόν, εἰ δὲ πλείω, ταῦτα.

Μεταβαίνων δὴ ὁ λόγος εἰς αὐτὸν ἀφίκται· τοῦτο [25] δ' ἔτι μᾶλλον διασαφῆσαι πειρατέον. ἐπεὶ δὲ πλείω φαίνεται τὰ τέλη, τούτων δ' αἰρούμεθά τινα δι' ἕτερον, οἷον πλοῦτον αὐλοῦς καὶ ὅλως τὰ ὄργανα, δῆλον ὡς οὐκ ἔστι πάντα τέλεια· τὸ δ' ἄριστον τέλειόν τι φαίνεται. ὥστ' εἰ μὲν ἔστιν ἐν τι μόνον τέλειον, τοῦτ' ἂν εἴη τὸ ζητούμενον, [30] εἰ δὲ πλείω, τὸ τελειότατον

τούτων. τελειότερον δὲ λέγομεν τὸ καθ' αὐτὸ διωκτὸν τοῦ δι' ἕτερον καὶ τὸ μηδέποτε δι' ἄλλο αἵρετὸν τῶν <καὶ> καθ' αὐτὰ καὶ δι' αὐτὸ αἵρετῶν, καὶ ἀπλῶς δὴ τέλειον τὸ καθ' αὐτὸ αἵρετὸν ἀεὶ καὶ μηδέποτε δι' ἄλλο. τοιοῦτον δ' ἡ εὐδαιμονία μάλιστ' εἶναι δοκεῖ.

1097b [1] Ταύτην γὰρ αἰρούμεθα ἀεὶ δι' αὐτὴν καὶ οὐδέποτε δι' ἄλλο, τιμὴν δὲ καὶ ἡδονὴν καὶ νοῦν καὶ πᾶσαν ἀρετὴν αἰρούμεθα μὲν καὶ δι' αὐτά (μηθενὸς γὰρ ἀποβαίνοντος ἐλοίμεθ' ἂν ἕκαστον αὐτῶν), αἰρούμεθα δὲ καὶ τῆς εὐδαιμονίας χάριν, [5] διὰ τούτων ὑπολαμβάνοντες εὐδαιμονήσειν. τὴν δ' εὐδαιμονίαν οὐδεὶς αἰρεῖται τούτων χάριν, οὐδ' ὅλως δι' ἄλλο. φαίνεται δὲ καὶ ἐκ τῆς αὐταρκείας τὸ αὐτὸ συμβαίνειν· τὸ γὰρ τέλειον ἀγαθὸν αὐταρκές εἶναι δοκεῖ. τὸ δ' αὐταρκές λέγομεν οὐκ αὐτῷ μόνῳ, τῷ ζῶντι βίον μονώτην, ἀλλὰ καὶ γονεῦσι [10] καὶ τέκνοις καὶ γυναικὶ καὶ ὅλως τοῖς φίλοις καὶ πολίταις, ἐπειδὴ φύσει πολιτικὸν ὁ ἄνθρωπος. τούτων δὲ ληπτέος ὅρος τις· ἐπεκτείνουντι γὰρ ἐπὶ τοὺς γονεῖς καὶ τοὺς ἀπογόνους καὶ τῶν φίλων τοὺς φίλους εἰς ἅπειρον πρόεισιν. ἀλλὰ τοῦτο μὲν εἰσαυθις ἐπισκεπτέον· τὸ δ' αὐταρκές τίθεμεν ὁ μονούμενον [15] αἵρετὸν ποιεῖ τὸν βίον καὶ μηδενοῦς ἐνδεᾶ· τοιοῦτον δὲ τὴν εὐδαιμονίαν οἰόμεθα εἶναι· ἔτι δὲ πάντων αἵρετωτάτην μὴ συναριθμουμένην — συναριθμουμένην δὲ δῆλον ὡς αἵρετωτέραν μετὰ τοῦ ἐλαχίστου τῶν ἀγαθῶν· ὑπεροχὴ γὰρ ἀγαθῶν γίνεται τὸ προστιθέμενον, ἀγαθῶν δὲ τὸ μεῖζον αἵρετώτερον ἀεὶ. [20] τέλειον δὴ τι φαίνεται καὶ αὐταρκές ἡ εὐδαιμονία, τῶν πρακτῶν οὕσα τέλος.

Ἄλλ' ἴσως τὴν μὲν εὐδαιμονίαν τὸ ἄριστον λέγειν ὁμολογούμενόν τι φαίνεται, ποθεῖται δ' ἐναργέστερον τί ἐστὶν ἔτι λεχθῆναι. τάχα δὴ γένοιτ' ἂν τοῦτ', εἰ ληφθεῖν τὸ ἔργον [25] τοῦ ἀνθρώπου. ὥσπερ γὰρ αὐλητῇ καὶ ἀγαλματοποιῷ καὶ παντὶ τεχνίτῃ, καὶ ὅλως ὧν ἔστιν ἔργον τι καὶ πρᾶξις, ἐν τῷ ἔργῳ δοκεῖ τὰγαθὸν εἶναι καὶ τὸ εὖ, οὕτω δόξειεν ἂν καὶ ἀνθρώπῳ, εἴπερ ἔστι τι ἔργον αὐτοῦ. πότερον οὖν τέκτονος μὲν καὶ σκυτέως ἔστιν ἔργα τινὰ καὶ πράξεις, ἀνθρώπου δ' [30] οὐδέν ἐστιν, ἀλλ' ἀργὸν πέφυκεν; ἢ καθάπερ ὀφθαλμοῦ καὶ χειρὸς καὶ ποδὸς καὶ ὅλως ἐκάστου τῶν μορίων φαίνεται τι ἔργον, οὕτω καὶ ἀνθρώπου παρὰ πάντα ταῦτα θεῖναι τις ἂν ἔργον τι; τί οὖν δὴ τοῦτ' ἂν εἴη ποτέ; τὸ μὲν γὰρ ζῆν κοινὸν εἶναι φαίνεται καὶ τοῖς φυτοῖς, ζητεῖται δὲ τὸ ἴδιον. 1098a [1] ἀφοριστέον ἄρα τὴν τε θρεπτικὴν καὶ τὴν αὐξητικὴν ζωὴν. ἐπομένη δὲ αἰσθητικὴ τις ἂν εἴη, φαίνεται δὲ καὶ αὕτη κοινὴ καὶ ἵππῳ καὶ βοῖ καὶ παντὶ ζῳῷ. λείπεται δὴ πρακτικὴ τις τοῦ λόγον ἔχοντος· τούτου δὲ τὸ μὲν ὡς ἐπιπειθὲς λόγῳ, τὸ δ' ὡς [5] ἔχον καὶ διανοούμενον. διττῶς δὲ καὶ ταύτης λεγομένης τὴν κατ' ἐνέργειαν θετέον· κυριώτερον γὰρ αὕτη δοκεῖ λέγεσθαι. εἰ δ' ἐστὶν ἔργον ἀνθρώπου ψυχῆς ἐνέργεια κατὰ λόγον ἢ μὴ ἄνευ

λόγου, τὸ δ' αὐτό φαμεν ἔργον εἶναι τῷ γένει τοῦδε καὶ τοῦδε σπουδαίου, ὥσπερ κιθαριστοῦ καὶ σπουδαίου [10] κιθαριστοῦ, καὶ ἀπλῶς δὴ τοῦτ' ἐπὶ πάντων, προστιθεμένης τῆς κατὰ τὴν ἀρετὴν ὑπεροχῆς πρὸς τὸ ἔργον· κιθαριστοῦ μὲν γὰρ κιθαρίζειν, σπουδαίου δὲ τὸ εὖ· εἰ δ' οὕτως, [ἀνθρώπου δὲ τίθεμεν ἔργον ζωὴν τινα, ταύτην δὲ ψυχῆς ἐνέργειαν καὶ πράξεις μετὰ λόγου, σπουδαίου δ' ἀνδρὸς εὖ ταῦτα καὶ [15] καλῶς, ἕκαστον δ' εὖ κατὰ τὴν οἰκείαν ἀρετὴν ἀποτελεῖται· εἰ δ' οὕτω,] τὸ ἀνθρώπινον ἀγαθὸν ψυχῆς ἐνέργεια γίνεται κατ' ἀρετὴν, εἰ δὲ πλείους αἱ ἀρεταί, κατὰ τὴν ἀρίστην καὶ τελειοτάτην.

Ἔτι δ' ἐν βίῳ τελείω. μία γὰρ χελιδὼν ἕαρ οὐ ποιεῖ, οὐδὲ μία ἡμέρα· οὕτω δὲ οὐδὲ μακάριον καὶ εὐδαίμονα [20] μία ἡμέρα οὐδ' ὀλίγος χρόνος.

Περιγεγράφθω μὲν οὖν τἀγαθὸν ταύτη· δεῖ γὰρ ἴσως ὑποτυπῶσαι πρῶτον, εἴθ' ὕστερον ἀναγράψαι. δόξειε δ' ἂν παντὸς εἶναι προαγαγεῖν καὶ διαρθρῶσαι τὰ καλῶς ἔχοντα τῇ περιγραφῇ, καὶ ὁ χρόνος τῶν τοιούτων εὐρετῆς ἢ συνεργὸς ἀγαθοῦ εἶναι· ὅθεν καὶ τῶν τεχνῶν [25] γεγόνασιν αἱ ἐπιδόσεις· παντὸς γὰρ προσθεῖναι τὸ ἐλλεῖπον. μεμνησθαι δὲ καὶ τῶν προειρημένων χρή, καὶ τὴν ἀκρίβειαν μὴ ὁμοίως ἐν ἅπασιν ἐπιζητεῖν, ἀλλ' ἐν ἑκάστοις κατὰ τὴν ὑποκειμένην ὕλην καὶ ἐπὶ τοσοῦτον ἐφ' ὅσον οἰκεῖον τῇ μεθόδῳ. καὶ γὰρ τέκτων καὶ γεωμέτρης διαφερόντως [30] ἐπιζητοῦσι τὴν ὀρθήν· ὃ μὲν γὰρ ἐφ' ὅσον χρησίμη πρὸς τὸ ἔργον, ὃ δὲ τί ἐστὶν ἢ ποῖόν τι· θεατῆς γὰρ τάληθοῦς. τὸν αὐτὸν δὴ τρόπον καὶ ἐν τοῖς ἄλλοις ποιητέον, ὅπως μὴ τὰ πάρεργα τῶν ἔργων πλείω γίνηται. 1098b [1] οὐκ ἀπαιτητέον δ' οὐδὲ τὴν αἰτίαν ἐν ἅπασιν ὁμοίως, ἀλλ' ἱκανὸν ἔν τισι τὸ ὅτι δειχθῆναι καλῶς, οἷον καὶ περὶ τὰς ἀρχάς· τὸ δ' ὅτι πρῶτον καὶ ἀρχή. τῶν ἀρχῶν δ' αἱ μὲν ἐπαγωγῇ θεωροῦνται, αἱ δ' αἰσθήσει, αἱ δ' ἐθισμῶ τινί, καὶ ἄλλαι δ' ἄλλως. μετιέναι [5] δὲ πειρατέον ἑκάστας ἢ πεφύκασιν, καὶ σπουδαστέον ὅπως διορισθῶσι καλῶς· μεγάλην γὰρ ἔχουσι ῥοπὴν πρὸς τὰ ἐπόμενα. δοκεῖ γὰρ πλεῖον ἢ ἥμισυ τοῦ παντὸς εἶναι ἡ ἀρχή, καὶ πολλὰ συμφανῇ γίνεσθαι δι' αὐτῆς τῶν ζητουμένων.

Σκεπτέον δὲ περὶ αὐτῆς οὐ μόνον ἐκ τοῦ συμπεράσματος [10] καὶ ἐξ ὧν ὁ λόγος, ἀλλὰ καὶ ἐκ τῶν λεγομένων περὶ αὐτῆς· τῷ μὲν γὰρ ἀληθεῖ πάντα συνάδει τὰ ὑπάρχοντα, τῷ δὲ ψευδεῖ ταχὺ διαφωνεῖ τἀληθές. νενεμημένων δὴ τῶν ἀγαθῶν τριχῇ, καὶ τῶν μὲν ἐκτὸς λεγομένων τῶν δὲ περὶ ψυχὴν καὶ σῶμα, τὰ περὶ ψυχὴν κυριώτατα λέγομεν καὶ [15] μάλιστα ἀγαθὰ, τὰς δὲ πράξεις καὶ τὰς ἐνεργείας τὰς ψυχικὰς περὶ ψυχὴν τίθεμεν. ὥστε καλῶς ἂν λέγοιτο κατὰ γε ταύτην τὴν δόξαν παλαιὰν οὔσαν καὶ ὁμολογουμένην ὑπὸ

τῶν φιλοσοφούντων. ὀρθῶς δὲ καὶ ὅτι πράξεις τινὲς λέγονται καὶ ἐνέργειαι τὸ τέλος· οὕτω γὰρ τῶν περὶ ψυχὴν ἀγαθῶν [20] γίνεται καὶ οὐ τῶν ἐκτός. συνάδει δὲ τῷ λόγῳ καὶ τὸ εὖ ζῆν καὶ τὸ εὖ πράττειν τὸν εὐδαίμονα· σχεδὸν γὰρ εὐζωία τις εἴρηται καὶ εὐπραξία. φαίνεται δὲ καὶ τὰ ἐπιζητούμενα τὰ περὶ τὴν εὐδαιμονίαν ἅπανθ' ὑπάρχειν τῷ λεχθέντι. τοῖς μὲν γὰρ ἀρετὴ τοῖς δὲ φρόνησις ἄλλοις δὲ σοφία τις εἶναι δοκεῖ, [25] τοῖς δὲ ταῦτα ἢ τούτων τι μεθ' ἡδονῆς ἢ οὐκ ἄνευ ἡδονῆς· ἕτεροι δὲ καὶ τὴν ἐκτὸς εὐετηρίαν συμπαραλαμβάνουσιν. τούτων δὲ τὰ μὲν πολλοὶ καὶ παλαιοὶ λέγουσιν, τὰ δὲ ὀλίγοι καὶ ἔνδοξοι ἄνδρες· οὐδετέρους δὲ τούτων εὐλογον διαμαρτάνειν τοῖς ὅλοις, ἀλλ' ἔν γε τι ἢ καὶ τὰ πλεῖστα κατορθοῦν.

[30] Τοῖς μὲν οὖν λέγουσι τὴν ἀρετὴν ἢ ἀρετὴν τινα συνωδός ἐστιν ὁ λόγος· ταύτης γὰρ ἐστὶν ἢ κατ' αὐτὴν ἐνέργεια. διαφέρει δὲ ἴσως οὐ μικρὸν ἐν κτήσει ἢ χρήσει τὸ ἄριστον ὑπολαμβάνειν, καὶ ἐν ἔξει ἢ ἐνεργείᾳ. τὴν μὲν γὰρ ἔξιν ἐνδέχεται μηδὲν ἀγαθὸν ἀποτελεῖν ὑπάρχουσιν, 1099a [1] οἷον τῷ καθεύδοντι ἢ καὶ ἄλλως πως ἐξηρηγηκότι, τὴν δ' ἐνέργειαν οὐχ οἷόν τε· πράξει γὰρ ἐξ ἀνάγκης, καὶ εὖ πράξει. ὥσπερ δ' Ὀλυμπίασιν οὐχ οἱ κάλλιστοι καὶ ἰσχυρότατοι στεφανοῦνται ἀλλ' [5] οἱ ἀγωνιζόμενοι (τούτων γὰρ τινες νικῶσιν), οὕτω καὶ τῶν ἐν τῷ βίῳ καλῶν καγαθῶν οἱ πράττοντες ὀρθῶς ἐπήβολοι γίνονται.

Ἔστι δὲ καὶ ὁ βίος αὐτῶν καθ' αὐτὸν ἡδύς. τὸ μὲν γὰρ ἡδεσθαι τῶν ψυχικῶν, ἐκάστω δ' ἐστὶν ἡδὺ πρὸς ὃ λέγεται φιλοτοιοῦτος, οἷον ἵππος μὲν τῷ φιλίππῳ, θέαμα [10] δὲ τῷ φιλοθεώρῳ· τὸν αὐτὸν δὲ τρόπον καὶ τὰ δίκαια τῷ φιλοδικαίῳ καὶ ὅλως τὰ κατ' ἀρετὴν τῷ φιλαρέτῳ. τοῖς μὲν οὖν πολλοῖς τὰ ἡδέα μάχεται διὰ τὸ μὴ φύσει τοιαῦτ' εἶναι, τοῖς δὲ φιλοκάλοις ἐστὶν ἡδέα τὰ φύσει ἡδέα· τοιαῦτα δ' αἱ κατ' ἀρετὴν πράξεις, ὥστε καὶ τούτοις εἰσὶν ἡδεῖαι καὶ [15] καθ' αὐτάς. οὐδὲν δὲ προσδεῖται τῆς ἡδονῆς ὁ βίος αὐτῶν ὥσπερ περιάπτου τινός, ἀλλ' ἔχει τὴν ἡδονὴν ἐν ἑαυτῷ. πρὸς τοῖς εἰρημένοις γὰρ οὐδ' ἐστὶν ἀγαθὸς ὁ μὴ χαίρων ταῖς καλαῖς πράξεσιν· οὔτε γὰρ δίκαιον οὐθεὶς ἂν εἴποι τὸν μὴ χαίροντα τῷ δικαιοπραγεῖν, οὔτ' ἐλευθέριον τὸν μὴ χαίροντα [20] ταῖς ἐλευθερίοις πράξεσιν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. εἰ δ' οὕτω, καθ' αὐτάς ἂν εἶεν αἱ κατ' ἀρετὴν πράξεις ἡδεῖαι. ἀλλὰ μὴν καὶ ἀγαθαί γε καὶ καλαί, καὶ μάλιστα τούτων ἕκαστον, εἴπερ καλῶς κρίνει περὶ αὐτῶν ὁ σπουδαῖος· κρίνει δ' ὡς εἴπομεν. ἄριστον ἄρα καὶ κάλλιστον καὶ ἡδιστον ἢ [25] εὐδαιμονία, καὶ οὐ διώριστα ταῦτα κατὰ τὸ Δηλιακὸν ἐπίγραμμα·

κάλλιστον τὸ δικαιοτάτον, λῶστον δ' ὑγιαίνειν·

ἥδιστον δὲ πέφυχ' οὐ τις ἐρᾷ τὸ τυχεῖν.

Ἄπαντα γὰρ ὑπάρχει ταῦτα ταῖς ἀρίσταις ἐνεργείαις· ταύτας [30] δέ, ἢ μίαν τούτων τὴν ἀρίστην, φαμέν εἶναι τὴν εὐδαιμονίαν.

Φαίνεται δ' ὅμως καὶ τῶν ἐκτὸς ἀγαθῶν προσδεομένη, καθάπερ εἵπομεν· ἀδύνατον γὰρ ἢ οὐ ῥᾶδιον τὰ καλὰ πράττειν ἀχορήγητον ὄντα. πολλὰ μὲν γὰρ πράττεται, 1099b [1] καθάπερ δι' ὀργάνων, διὰ φίλων καὶ πλούτου καὶ πολιτικῆς δυνάμεως· ἐνίων δὲ τητῶμενοι ῥυπαίνουσι τὸ μακάριον, οἷον εὐγενείας εὐτεκνίας κάλλους· οὐ πάνυ γὰρ εὐδαιμονικὸς ὁ τὴν ιδέαν παναίσχης ἢ δυσγενῆς ἢ μονώτης καὶ ἄτεκνος, [5] ἔτι δ' ἴσως ἦττον, εἴ τω πάγκακοι παῖδες εἶεν ἢ φίλοι, ἢ ἀγαθοὶ ὄντες τεθνῶσιν. καθάπερ οὖν εἵπομεν, ἔοικε προσδεῖσθαι καὶ τῆς τοιαύτης εὐημερίας· ὅθεν εἰς ταὐτὸ τάττουσιν ἔνιοι τὴν εὐτυχίαν τῇ εὐδαιμονίᾳ, ἕτεροι δὲ τὴν ἀρετήν.

Ὅθεν καὶ ἀπορεῖται πότερόν ἐστι μαθητὸν ἢ ἐθιστὸν ἢ καὶ [10] ἄλλως πως ἀσκητόν, ἢ κατὰ τινα θείαν μοῖραν ἢ καὶ διὰ τύχην παραγίνεται. εἰ μὲν οὖν καὶ ἄλλο τί ἐστι θεῶν δώρημα ἀνθρώποις, εὐλογον καὶ τὴν εὐδαιμονίαν θεόσδοτον εἶναι, καὶ μάλιστα τῶν ἀνθρωπίνων ὅσω βέλτιστον. ἀλλὰ τοῦτο μὲν ἴσως ἄλλης ἂν εἴη σκέψεως οἰκειότερον, φαίνεται δὲ κἂν εἰ [15] μὴ θεόπεμπτός ἐστιν ἀλλὰ δι' ἀρετὴν καὶ τινα μάθησιν ἢ ἀσκησιν παραγίνεται, τῶν θειοτάτων εἶναι· τὸ γὰρ τῆς ἀρετῆς ἄθλον καὶ τέλος ἄριστον εἶναι φαίνεται καὶ θεῖόν τι καὶ μακάριον.

Εἴη δ' ἂν καὶ πολύκοινον· δυνατὸν γὰρ ὑπάρξαι πᾶσι τοῖς μὴ πεπηρωμένοις πρὸς ἀρετὴν διὰ τινος μαθήσεως [20] καὶ ἐπιμελείας. εἰ δ' ἐστὶν οὕτω βέλτιον ἢ τὸ διὰ τύχην εὐδαιμονεῖν, εὐλογον ἔχειν οὕτως, εἴπερ τὰ κατὰ φύσιν, ὡς οἷόν τε κάλλιστα ἔχειν, οὕτω πέφυκεν, ὁμοίως δὲ καὶ τὰ κατὰ τέχνην καὶ πᾶσαν αἰτίαν, καὶ μάλιστα <τὰ> κατὰ τὴν ἀρίστην. τὸ δὲ μέγιστον καὶ κάλλιστον ἐπιτρέψαι τύχῃ λίαν πλημμελὲς [25] ἂν εἴη.

Συμφανὲς δ' ἐστὶ καὶ ἐκ τοῦ λόγου τὸ ζητούμενον· εἴρηται γὰρ ψυχῆς ἐνέργεια κατ' ἀρετὴν ποιά τις. τῶν δὲ λοιπῶν ἀγαθῶν τὰ μὲν ὑπάρχειν ἀναγκαῖον, τὰ δὲ συνεργὰ καὶ χρήσιμα πέφυκεν ὀργανικῶς. ὁμολογούμενα δὲ ταῦτ' ἂν εἴη καὶ τοῖς ἐν ἀρχῇ· τὸ γὰρ τῆς πολιτικῆς [30] τέλος ἄριστον ἐτίθεμεν, αὕτη δὲ πλείστην ἐπιμέλειαν ποιεῖται τοῦ ποιούς τινος καὶ ἀγαθοῦς τοὺς πολίτας ποιῆσαι καὶ πρακτικοὺς τῶν καλῶν.

Εἰκότως οὖν οὔτε βοῦν οὔτε ἵππον οὔτε ἄλλο τῶν ζώων οὐδὲν εὐδαιμον

λέγομεν· 1100a [1] οὐδὲν γὰρ αὐτῶν οἷόν τε κοινωνῆσαι τοιαύτης ἐνεργείας. διὰ ταύτην δὲ τὴν αἰτίαν οὐδὲ παῖς εὐδαίμων ἐστίν· οὐπω γὰρ πρακτικὸς τῶν τοιούτων διὰ τὴν ἡλικίαν· οἱ δὲ λεγόμενοι διὰ τὴν ἐλπίδα μακαρίζονται. δεῖ γάρ, ὥσπερ εἵπομεν, καὶ ἀρετῆς τελείας [5] καὶ βίου τελείου. πολλὰ γὰρ μεταβολαὶ γίνονται καὶ παντοῖαι τύχαι κατὰ τὸν βίον, καὶ ἐνδέχεται τὸν μάλιστ' εὐθηνοῦντα μεγάλαις συμφοραῖς περιπεσεῖν ἐπὶ γήρως, καθάπερ ἐν τοῖς Τρωικοῖς περὶ Πριάμου μυθεύεται· τὸν δὲ τοιαύταις χρησάμενον τύχαις καὶ τελευτήσαντα ἀθλίως οὐδεὶς εὐδαιμονίζει.

[10] Πότερον οὖν οὐδ' ἄλλον οὐδένα ἀνθρώπων εὐδαιμονιστέον ἕως ἂν ζῇ, κατὰ Σόλωνα δὲ χρεὼν τέλος ὀρᾶν; εἰ δὲ δὴ καὶ θετέον οὕτως, ἄρα γε καὶ ἔστιν εὐδαίμων τότε ἐπειδὰν ἀποθάνῃ; ἢ τοῦτό γε παντελῶς ἄτοπον, ἄλλως τε καὶ τοῖς λέγουσιν ἡμῖν ἐνέργειαν τινα τὴν εὐδαιμονίαν; εἰ δὲ μὴ λέγομεν [15] τὸν τεθνεῶτα εὐδαίμονα, μηδὲ Σόλων τοῦτο βούλεται, ἀλλ' ὅτι τηνικαῦτα ἂν τις ἀσφαλῶς μακαρίσειεν ἄνθρωπον ὥς ἐκτὸς ἤδη τῶν κακῶν ὄντα καὶ τῶν δυστυχημάτων, ἔχει μὲν καὶ τοῦτ' ἀμφισβήτησιν τινα· δοκεῖ γὰρ εἶναι τι τῷ τεθνεῶτι καὶ κακὸν καὶ ἀγαθόν, εἴπερ καὶ τῷ ζῶντι μὴ [20] αἰσθανομένῳ δέ, οἷον τιμαὶ καὶ ἀτιμίαι καὶ τέκνων καὶ ὅλως ἀπογόνων εὐπραξία τε καὶ δυστυχία. ἀπορίαν δὲ καὶ ταῦτα παρέχει· τῷ γὰρ μακαρίως βεβιωκότι μέχρι γήρως καὶ τελευτήσαντι κατὰ λόγον ἐνδέχεται πολλὰς μεταβολὰς συμβαίνειν περὶ τοὺς ἐκγόνους, καὶ τοὺς μὲν αὐτῶν [25] ἀγαθοὺς εἶναι καὶ τυχεῖν βίου τοῦ κατ' ἀξίαν, τοὺς δ' ἐξ ἐναντίας· δῆλον δ' ὅτι καὶ τοῖς ἀποστήμασι πρὸς τοὺς γονεῖς παντοδαπῶς ἔχειν αὐτοὺς ἐνδέχεται. ἄτοπον δὲ γίνοιτ' ἂν, εἰ συμμεταβάλλοι καὶ ὁ τεθνεὼς καὶ γίνοιτο ὅτ' ἐν εὐδαίμων πάλιν δ' ἀθλιος· ἄτοπον δὲ καὶ τὸ μηδὲν μηδ' ἐπὶ [30] τινα χρόνον συνικνεῖσθαι τὰ τῶν ἐκγόνων τοῖς γονεῦσιν.

Ἄλλ' ἐπανιτέον ἐπὶ τὸ πρότερον ἀπορηθέν· τάχα γὰρ ἂν θεωρηθεῖ καὶ τὸ νῦν ἐπιζητούμενον ἐξ ἐκείνου. εἰ δὲ τὸ τέλος ὀρᾶν δεῖ καὶ τότε μακαρίζειν ἕκαστον οὐχ ὥς ὄντα μακάριον ἀλλ' ὅτι πρότερον ἦν, πῶς οὐκ ἄτοπον, εἰ ὅτ' ἔστιν εὐδαίμων, [35] μὴ ἀληθεύσεται κατ' αὐτοῦ τὸ ὑπάρχον 1100b [1] διὰ τὸ μὴ βούλεσθαι τοὺς ζῶντας εὐδαιμονίζειν διὰ τὰς μεταβολὰς, καὶ διὰ τὸ μόνιμόν τι τὴν εὐδαιμονίαν ὑπειληφέναι καὶ μηδαμῶς εὐμετάβολον, τὰς δὲ τύχας πολλάκις ἀνακυκλεῖσθαι περὶ τοὺς αὐτούς; δῆλον γὰρ ὥς εἰ συνακολουθοίημεν [5] ταῖς τύχαις, τὸν αὐτὸν εὐδαίμονα καὶ πάλιν ἀθλιον ἐροῦμεν πολλάκις, χαμαιλέοντά τινα τὸν εὐδαίμονα ἀποφαίνοντες καὶ σαθρῶς ἰδρυμένον. ἢ τὸ μὲν ταῖς τύχαις ἐπακολουθεῖν οὐδαμῶς ὀρθόν; οὐ γὰρ ἐν ταύταις τὸ εὖ ἢ κακῶς, ἀλλὰ προσδεῖται τούτων ὁ ἀνθρώπινος βίος, καθάπερ εἵπομεν, κύρια [10] δ' εἰσὶν αἱ κατ' ἀρετὴν ἐνέργειαι τῆς εὐδαιμονίας, αἱ δ'

έναντία τοῦ ἐναντίου.

Μαρτυρεῖ δὲ τῷ λόγῳ καὶ τὸ νῦν διαπορηθέν. περὶ οὐδὲν γὰρ οὕτως ὑπάρχει τῶν ἀνθρωπίνων ἔργων βεβαιότης ὥς περὶ τὰς ἐνεργείας τὰς κατ' ἀρετὴν· μονιμώτεραι γὰρ καὶ τῶν ἐπιστημῶν αὐταὶ δοκοῦσιν εἶναι. [15] τούτων δ' αὐτῶν αἱ τιμιώταται μονιμώτεραι διὰ τὸ μάλιστα καὶ συνεχέστατα καταζῆν ἐν αὐταῖς τοὺς μακαρίους· τοῦτο γὰρ ἔοικεν αἰτίῳ τοῦ μὴ γίνεσθαι περὶ αὐτὰς λήθην. ὑπάρξει δὴ τὸ ζητούμενον τῷ εὐδαίμονι, καὶ ἔσται διὰ βίου τοιοῦτος· ἀεὶ γὰρ ἢ μάλιστα πάντων πράξει καὶ θεωρήσει [20] τὰ κατ' ἀρετὴν, καὶ τὰς τύχας οἷσει κάλλιστα καὶ πάντῃ πάντως ἐμμελῶς ὃ γ' ὥς ἀληθῶς ἀγαθὸς καὶ τετράγωνος ἄνευ ψόγου.

Πολλῶν δὲ γινομένων κατὰ τύχην καὶ διαφερόντων μεγέθει καὶ μικρότητι, τὰ μὲν μικρὰ τῶν εὐτυχημάτων, ὁμοίως δὲ καὶ τῶν ἀντικειμένων, δῆλον ὥς οὐ ποιεῖ [25] ῥοπὴν τῆς ζωῆς, τὰ δὲ μεγάλα καὶ πολλὰ γινόμενα μὲν εὖ μακαριώτερον τὸν βίον ποιήσει (καὶ γὰρ αὐτὰ συνεπικοσμεῖν πέφυκεν, καὶ ἡ χρῆσις αὐτῶν καλὴ καὶ σπουδαία γίνεται), ἀνάπαλιν δὲ συμβαίνοντα θλίβει καὶ λυμαίνεται τὸ μακάριον· λύπας τε γὰρ ἐπιφέρει καὶ ἐμποδίζει πολλαῖς [30] ἐνεργείαις. ὅμως δὲ καὶ ἐν τούτοις διαλάμπει τὸ καλόν, ἐπειδὴν φέρη τις εὐκόλως πολλὰς καὶ μεγάλας ἀτυχίας, μὴ δι' ἀναλγησίαν, ἀλλὰ γεννάδας ὦν καὶ μεγαλόψυχος.

Εἰ δ' εἰσὶν αἱ ἐνέργειαι κύριαι τῆς ζωῆς, καθάπερ εἵπομεν, οὐδεὶς ἂν γένοιτο τῶν μακαρίων ἄθλιος· οὐδέποτε [35] γὰρ πράξει τὰ μισητὰ καὶ τὰ φαῦλα. 1101a [1] τὸν γὰρ ὥς ἀληθῶς ἀγαθὸν καὶ ἔμφρονα πάσας οἰόμεθα τὰς τύχας εὐσχημόνως φέρειν καὶ ἐκ τῶν ὑπαρχόντων ἀεὶ τὰ κάλλιστα πράττειν, καθάπερ καὶ στρατηγὸν ἀγαθὸν τῷ παρόντι στρατοπέδῳ χρῆσθαι πολεμικώτατα καὶ σκυτοτόμον ἐκ τῶν δοθέντων [5] σκυτῶν κάλλιστον ὑπόδημα ποιεῖν· τὸν αὐτὸν δὲ τρόπον καὶ τοὺς ἄλλους τεχνίτας ἅπαντας. εἰ δ' οὕτως, ἄθλιος μὲν οὐδέποτε γένοιτ' ἂν ὁ εὐδαίμων, οὐ μὴν μακάριός γε, ἂν Πριαμικαῖς τύχαις περιπέσῃ.

Οὐδὲ δὴ ποικίλος γε καὶ εὐμετάβολος· οὔτε γὰρ ἐκ τῆς εὐδαιμονίας κινηθήσεται ῥαδίως, [10] οὐδ' ὑπὸ τῶν τυχόντων ἀτυχημάτων ἀλλ' ὑπὸ μεγάλων καὶ πολλῶν, ἐκ τε τῶν τοιούτων οὐκ ἂν γένοιτο πάλιν εὐδαίμων ἐν ὀλίγῳ χρόνῳ, ἀλλ' εἴπερ, ἐν πολλῷ τινὶ καὶ τελείῳ, μεγάλων καὶ καλῶν ἐν αὐτῷ γενόμενος ἐπήβολος.

Τί οὖν κωλύει λέγειν εὐδαίμονα τὸν κατ' ἀρετὴν τελείαν [15] ἐνεργοῦντα καὶ

τοῖς ἐκτὸς ἀγαθοῖς ἱκανῶς κεχορηγημένον μὴ τὸν τυχόντα χρόνον ἀλλὰ τέλειον βίον; ἢ προσθετέον καὶ βιωσόμενον οὕτω καὶ τελευτήσοντα κατὰ λόγον; ἔπειδὴ τὸ μέλλον ἀφανὲς ἡμῖν ἐστίν, τὴν εὐδαιμονίαν δὲ τέλος καὶ τέλειον τίθεμεν πάντῃ πάντως. εἰ δ' οὕτω, μακαρίους ἐροῦμεν [20] τῶν ζώντων οἷς ὑπάρχει καὶ ὑπάρξει τὰ λεχθέντα, μακαρίους δ' ἀνθρώπους. καὶ περὶ μὲν τούτων ἐπὶ τοσοῦτον διωρίσθω.

Τὰς δὲ τῶν ἀπογόνων τύχας καὶ τῶν φίλων ἀπάντων τὸ μὲν μηδοτιοῦν συμβάλλεσθαι λίαν ἄφιλον φαίνεται καὶ ταῖς δόξαις ἐναντίον· πολλῶν δὲ καὶ παντοίας ἐχόντων διαφορὰς [25] τῶν συμβαινόντων, καὶ τῶν μὲν μᾶλλον συνικνουμένων τῶν δ' ἥττον, καθ' ἕκαστον μὲν διαιρεῖν μακρὸν καὶ ἀπέραντον φαίνεται, καθόλου δὲ λεχθὲν καὶ τύπῳ τάχ' ἂν ἱκανῶς ἔχοι. εἰ δὲ, καθάπερ καὶ τῶν περὶ αὐτὸν ἀτυχημάτων τὰ μὲν ἔχει τι βρῖθος καὶ ῥοπήν πρὸς τὸν βίον τὰ [30] δ' ἐλαφροτέροις ἔοικεν, οὕτω καὶ τὰ περὶ τοὺς φίλους ὁμοίως ἅπαντας, διαφέρει δὲ τῶν παθῶν ἕκαστον περὶ ζῶντας ἢ τελευτήσαντας συμβαίνειν πολὺ μᾶλλον ἢ τὰ παράνομα καὶ δεινὰ προϋπάρχειν ἐν ταῖς τραγωδίαις ἢ πράττεσθαι, συλλογιστέον δὴ καὶ ταύτην τὴν διαφοράν, μᾶλλον δ' ἴσως [35] τὸ διαπορεῖσθαι περὶ τοὺς κεκμηκότας εἴ τινας ἀγαθοῦ κοινωνοῦσιν ἢ τῶν ἀντικειμένων. 1101b [1] ἔοικε γὰρ ἐκ τούτων εἰ καὶ διικνεῖται πρὸς αὐτοὺς ὅτιοῦν, εἴτ' ἀγαθὸν εἴτε τὸ ἐναντίον, ἀφαιρόν τι καὶ μικρὸν ἢ ἀπλῶς ἢ ἐκείνοις εἶναι, εἰ δὲ μή, τοσοῦτόν γε καὶ τοιοῦτον ὥστε μὴ ποιεῖν εὐδαίμονας τοὺς μὴ ὄντας [5] μηδὲ τοὺς ὄντας ἀφαιρεῖσθαι τὸ μακάριον. συμβάλλεσθαι μὲν οὖν τι φαίνονται τοῖς κεκμηκόσιν αἱ εὐπραξίαι τῶν φίλων, ὁμοίως δὲ καὶ αἱ δυσπραξίαι, τοιαῦτα δὲ καὶ τηλικαῦτα ὥστε μήτε τοὺς εὐδαίμονας μὴ εὐδαίμονας ποιεῖν μήτ' ἄλλο τῶν τοιούτων μηδέν.

[10] Διωρισμένων δὲ τούτων ἐπισκεψώμεθα περὶ τῆς εὐδαιμονίας πότερα τῶν ἐπαινετῶν ἐστὶν ἢ μᾶλλον τῶν τιμίων· δῆλον γὰρ ὅτι τῶν γε δυνάμεων οὐκ ἔστιν. φαίνεται δὲ πᾶν τὸ ἐπαινετὸν τῷ ποιόν τι εἶναι καὶ πρὸς τι πῶς ἔχειν ἐπαινεῖσθαι· τὸν γὰρ δίκαιον καὶ τὸν ἀνδρεῖον καὶ ὅλως τὸν [15] ἀγαθόν τε καὶ τὴν ἀρετὴν ἐπαινοῦμεν διὰ τὰς πράξεις καὶ τὰ ἔργα, καὶ τὸν ἰσχυρὸν δὲ καὶ τὸν δρομικὸν καὶ τῶν ἄλλων ἕκαστον τῷ ποιόν τινα πεφυκέναι καὶ ἔχειν πῶς πρὸς ἀγαθόν τι καὶ σπουδαῖον. δῆλον δὲ τοῦτο καὶ ἐκ τῶν περὶ τοὺς θεοὺς ἐπαίνων· γελοῖοι γὰρ φαίνονται πρὸς ἡμᾶς ἀναφερόμενοι, [20] τοῦτο δὲ συμβαίνει διὰ τὸ γίνεσθαι τοὺς ἐπαίνους δι' ἀναφορᾶς, ὥσπερ εἴπομεν. εἰ δ' ἐστὶν ὁ ἔπαινος τῶν τοιούτων, δῆλον ὅτι τῶν ἀρίστων οὐκ ἔστιν ἔπαινος, ἀλλὰ μεῖζόν τι καὶ βέλτιον, καθάπερ καὶ φαίνεται· τοὺς τε γὰρ θεοὺς μακαρίζομεν καὶ εὐδαιμονίζομεν καὶ τῶν ἀνδρῶν τοὺς θειοτάτους [25] [μακαρίζομεν]. ὁμοίως δὲ καὶ τῶν ἀγαθῶν· οὐδεὶς γὰρ τὴν εὐδαιμονίαν



ἐπαινεῖ καθάπερ τὸ δίκαιον, ἀλλ' ὥς θειότερόν τι καὶ βέλτιον μακαρίζει.

Δοκεῖ δὲ καὶ Εὐδοξος καλῶς συνηγορῆσαι περὶ τῶν ἀριστείων τῇ ἡδονῇ· τὸ γὰρ μὴ ἐπαινέσθαι τῶν ἀγαθῶν οὐσαν μηνύειν ὥετο ὅτι κρεῖττόν ἐστι [30] τῶν ἐπαινετῶν, τοιοῦτον δ' εἶναι τὸν θεὸν καὶ τ'ἀγαθόν· πρὸς ταῦτα γὰρ καὶ τ'ἄλλα ἀναφέρεσθαι. ὁ μὲν γὰρ ἔπαινος τῆς ἀρετῆς· πρακτικοὶ γὰρ τῶν καλῶν ἀπὸ ταύτης· τὰ δ' ἐγκώμια τῶν ἔργων ὁμοίως καὶ τῶν σωματικῶν καὶ τῶν ψυχικῶν. ἀλλὰ ταῦτα μὲν ἴσως οἰκειότερον ἐξακριβοῦν [35] τοῖς περὶ τὰ ἐγκώμια πεπονημένοις· ἡμῖν δὲ δῆλον ἐκ τῶν εἰρημένων 1102a [1] ὅτι ἐστὶν ἡ εὐδαιμονία τῶν τιμίων καὶ τελείων. ἔοικε δ' οὕτως ἔχειν καὶ διὰ τὸ εἶναι ἀρχή· ταύτης γὰρ χάριν τὰ λοιπὰ πάντα πάντες πράττομεν, τὴν ἀρχὴν δὲ καὶ τὸ αἷτιον τῶν ἀγαθῶν τίμιόν τι καὶ θεῖον τίθεμεν.

[5] Ἐπεὶ δ' ἐστὶν ἡ εὐδαιμονία ψυχῆς ἐνέργειά τις κατ' ἀρετὴν τελείαν, περὶ ἀρετῆς ἐπισκεπτέον ἂν εἴη· τάχα γὰρ οὕτως ἂν βέλτιον καὶ περὶ τῆς εὐδαιμονίας θεωρήσαιμεν. δοκεῖ δὲ καὶ ὁ κατ' ἀλήθειαν πολιτικὸς περὶ ταύτην μάλιστα πεπονηθῆσθαι· βούλεται γὰρ τοὺς πολίτας ἀγαθοὺς ποιεῖν καὶ τῶν [10] νόμων ὑπηκόους. παράδειγμα δὲ τούτων ἔχομεν τοὺς Κρητῶν καὶ Λακεδαιμονίων νομοθέτας, καὶ εἴ τινες ἕτεροι τοιοῦτοι γεγένηται. εἰ δὲ τῆς πολιτικῆς ἐστὶν ἡ σκέψις αὕτη, δῆλον ὅτι γίνοιτ' ἂν ἡ ζήτησις κατὰ τὴν ἐξ ἀρχῆς προαίρεσιν. περὶ ἀρετῆς δὲ ἐπισκεπτέον ἀνθρωπίνης δῆλον ὅτι· καὶ γὰρ τ'ἀγαθόν [15] ἀνθρώπινον ἐζητοῦμεν καὶ τὴν εὐδαιμονίαν ἀνθρωπίνην. ἀρετὴν δὲ λέγομεν ἀνθρωπίνην οὐ τὴν τοῦ σώματος ἀλλὰ τὴν τῆς ψυχῆς· καὶ τὴν εὐδαιμονίαν δὲ ψυχῆς ἐνέργειαν λέγομεν. εἰ δὲ ταῦθ' οὕτως ἔχει, δῆλον ὅτι δεῖ τὸν πολιτικὸν εἰδέναι πῶς τὰ περὶ ψυχῆς, ὥσπερ καὶ τὸν ὀφθαλμοὺς θεραπεύσοντα [20] καὶ πᾶν <τὸ> σῶμα, καὶ μᾶλλον ὅσω τιμιωτέρα καὶ βελτίων ἡ πολιτικὴ τῆς ἱατρικῆς· τῶν δ' ἱατρῶν οἱ χαρίεντες πολλὰ πραγματεύονται περὶ τὴν τοῦ σώματος γνῶσιν. θεωρητέον δὲ καὶ τῷ πολιτικῷ περὶ ψυχῆς, θεωρητέον δὲ τούτων χάριν, καὶ ἐφ' ὅσον ἱκανῶς ἔχει πρὸς τὰ ζητούμενα· [25] τὸ γὰρ ἐπὶ πλεῖον ἐξακριβοῦν ἐργωδέστερον ἴσως ἐστὶ τῶν προκειμένων.

Λέγεται δὲ περὶ αὐτῆς καὶ ἐν τοῖς ἐξωτερικοῖς λόγοις ἀρκούντως ἔνια, καὶ χρηστέον αὐτοῖς· οἷον τὸ μὲν ἄλογον αὐτῆς εἶναι, τὸ δὲ λόγον ἔχον. ταῦτα δὲ πότερον διώριστα καθάπερ τὰ τοῦ σώματος μόρια καὶ πᾶν τὸ [30] μεριστόν, ἢ τῷ λόγῳ δύο ἐστὶν ἀχώριστα πεφυκότα καθάπερ ἐν τῇ περιφερείᾳ τὸ κυρτὸν καὶ τὸ κοῖλον, οὐθὲν διαφέρει πρὸς τὸ παρόν.

Τοῦ ἀλόγου δὲ τὸ μὲν ἔοικε κοινῷ καὶ φυτικῷ, λέγω δὲ τὸ αἷτιον τοῦ

τρέφεσθαι καὶ αὖξεσθαι· τὴν τοιαύτην γὰρ δύναμιν τῆς ψυχῆς ἐν ἅπασιν τοῖς τρεφομένοις θεῖν τις ἂν 1102b [1] καὶ ἐν τοῖς ἐμβρύοις, τὴν αὐτὴν δὲ ταύτην καὶ ἐν τοῖς τελείοις· εὐλογώτερον γὰρ ἢ ἄλλην τινά. ταύτης μὲν οὖν κοινὴ τις ἀρετὴ καὶ οὐκ ἀνθρωπίνη φαίνεται· δοκεῖ γὰρ ἐν τοῖς ὕπνοις ἐνεργεῖν μάλιστα τὸ μόνον τοῦτο καὶ [5] ἡ δύναμις αὕτη, ὃ δ' ἀγαθὸς καὶ κακὸς ἥκιστα διάδηλοι καθ' ὕπνον (ὅθεν φασὶν οὐδὲν διαφέρειν τὸ ἥμισυ τοῦ βίου τοὺς εὐδαίμονας τῶν ἀθλίων· συμβαίνει δὲ τοῦτο εἰκότως· ἀργία γάρ ἐστίν ὁ ὕπνος τῆς ψυχῆς ἢ λέγεται σπουδαία καὶ φαύλη), πλὴν εἰ μὴ κατὰ μικρὸν καὶ διυκνοῦνται τινες τῶν κινήσεων, [10] καὶ ταύτῃ βελτίω γίνεται τὰ φαντάσματα τῶν ἐπεικῶν ἢ τῶν τυχόντων. ἀλλὰ περὶ μὲν τούτων ἄλλος, καὶ τὸ θρεπτικὸν ἑατέον, ἐπειδὴ τῆς ἀνθρωπικῆς ἀρετῆς ἄμοιρον πέφυκεν.

Ἔοικε δὲ καὶ ἄλλη τις φύσις τῆς ψυχῆς ἄλογος εἶναι, μετέχουσα μέντοι πη λόγου. τοῦ γὰρ ἐγκρατοῦς καὶ ἀκρατοῦς τὸν [15] λόγον καὶ τῆς ψυχῆς τὸ λόγον ἔχον ἐπαινοῦμεν· ὀρθῶς γὰρ καὶ ἐπὶ τὰ βέλτιστα παρακαλεῖ· φαίνεται δ' ἐν αὐτοῖς καὶ ἄλλο τι παρὰ τὸν λόγον πεφυκός, ὃ μάχεται καὶ ἀντιτείνει τῷ λόγῳ. ἀτεχνῶς γὰρ καθάπερ τὰ παραλελυμένα τοῦ σώματος μόρια εἰς τὰ δεξιὰ προαιρουμένων κινῆσαι [20] τοῦναντίον εἰς τὰ ἀριστερὰ παραφέρεται, καὶ ἐπὶ τῆς ψυχῆς οὕτως· ἐπὶ τάναντία γὰρ αἱ ὁρμαὶ τῶν ἀκρατῶν. ἀλλ' ἐν τοῖς σώμασι μὲν ὀρῶμεν τὸ παραφερόμενον, ἐπὶ δὲ τῆς ψυχῆς οὐχ ὀρῶμεν. ἴσως δ' οὐδὲν ἥττον καὶ ἐν τῇ ψυχῇ νομιστέον εἶναί τι παρὰ τὸν λόγον, ἐναντιούμενον τούτῳ καὶ ἀντιβαῖνον. [25] πῶς δ' ἕτερον, οὐδὲν διαφέρει. λόγου δὲ καὶ τοῦτο φαίνεται μετέχειν, ὥσπερ εἵπομεν· πειθαρχεῖ γοῦν τῷ λόγῳ τὸ τοῦ ἐγκρατοῦς — ἔτι δ' ἴσως εὐηκοώτερόν ἐστι τὸ τοῦ σώφρονος καὶ ἀνδρείου· πάντα γὰρ ὁμοφωνεῖ τῷ λόγῳ.

Φαίνεται δὲ καὶ τὸ ἄλογον διττόν. τὸ μὲν γὰρ φυτικὸν οὐδαμῶς κοινωνεῖ [30] λόγου, τὸ δ' ἐπιθυμητικὸν καὶ ὅλως ὀρεκτικὸν μετέχει πῶς, ἢ κατήκοόν ἐστιν αὐτοῦ καὶ πειθαρχικόν· οὕτω δὲ καὶ τοῦ πατρὸς καὶ τῶν φίλων φαιμέν ἔχειν λόγον, καὶ οὐχ ὥσπερ τῶν μαθηματικῶν. ὅτι δὲ πείθεται πῶς ὑπὸ λόγου τὸ ἄλογον, μηνύει καὶ ἡ νουθέτησις καὶ πᾶσα ἐπιτίμησις τε καὶ παράκλησις. 1103a [1] εἰ δὲ χρὴ καὶ τοῦτο φάναι λόγον ἔχειν, διττὸν ἔσται καὶ τὸ λόγον ἔχον, τὸ μὲν κυρίως καὶ ἐν αὐτῷ, τὸ δ' ὥσπερ τοῦ πατρὸς ἀκουστικόν τι.

Διορίζεται δὲ καὶ ἡ ἀρετὴ κατὰ τὴν διαφορὰν ταύτην· λέγομεν γὰρ αὐτῶν τὰς [5] μὲν διανοητικὰς τὰς δὲ ἠθικάς, σοφίαν μὲν καὶ σύνεσιν καὶ φρόνησιν διανοητικὰς, ἐλευθεριότητα δὲ καὶ σωφροσύνην ἠθικάς. λέγοντες γὰρ περὶ τοῦ ἥθους οὐ λέγομεν ὅτι σοφὸς ἢ συνετὸς ἀλλ' ὅτι πρᾶος ἢ σώφρων· ἐπαινοῦμεν δὲ καὶ τὸν σοφὸν κατὰ τὴν ἕξιν· τῶν ἕξεων δὲ τὰς ἐπαινετάς

ἀρετὰς [10] λέγομεν.

## Βιβλίο 2

Διττῆς δὴ τῆς ἀρετῆς οὕσης, τῆς μὲν διανοητικῆς τῆς [15] δὲ ἠθικῆς, ἡ μὲν διανοητικὴ τὸ πλεῖον ἐκ διδασκαλίας ἔχει καὶ τὴν γένεσιν καὶ τὴν αὕξησιν, διόπερ ἐμπειρίας δεῖται καὶ χρόνου, ἡ δ' ἠθικὴ ἐξ ἔθους περιγίνεται, ὅθεν καὶ τοῦνομα ἔσχηκε μικρὸν παρεκκλῖνον ἀπὸ τοῦ ἔθους. ἐξ οὗ καὶ δῆλον ὅτι οὐδεμία τῶν ἠθικῶν ἀρετῶν φύσει ἡμῖν ἐγγίνεται· οὐθὲν [20] γὰρ τῶν φύσει ὄντων ἄλλως ἐθίζεται, οἷον ὁ λίθος φύσει κάτω φερόμενος οὐκ ἂν ἐθισθεῖν ἄνω φέρεσθαι, οὐδ' ἂν μυριάκις αὐτὸν ἐθίζη τις ἄνω ῥιπτῶν, οὐδὲ τὸ πῦρ κάτω, οὐδ' ἄλλο οὐδὲν τῶν ἄλλως πεφυκότων ἄλλως ἂν ἐθισθεῖν. οὗτ' ἄρα φύσει οὔτε παρὰ φύσιν ἐγγίνονται αἱ ἀρεταί, ἀλλὰ [25] πεφυκόσι μὲν ἡμῖν δέξασθαι αὐτάς, τελειουμένοις δὲ διὰ τοῦ ἔθους.

Ἔτι ὅσα μὲν φύσει ἡμῖν παραγίνεται, τὰς δυνάμεις τούτων πρότερον κομιζόμεθα, ὕστερον δὲ τὰς ἐνεργείας ἀποδίδομεν (ὅπερ ἐπὶ τῶν αἰσθήσεων δῆλον· οὐ γὰρ ἐκ τοῦ πολλάκις ἰδεῖν ἢ πολλάκις ἀκοῦσαι τὰς αἰσθήσεις ἐλάβομεν, [30] ἀλλ' ἀνάπαλιν ἔχοντες ἐχρησάμεθα, οὐ χρησάμενοι ἔσχομεν)· τὰς δ' ἀρετὰς λαμβάνομεν ἐνεργήσαντες πρότερον, ὥσπερ καὶ ἐπὶ τῶν ἄλλων τεχνῶν· ἃ γὰρ δεῖ μαθόντας ποιεῖν, ταῦτα ποιοῦντες μανθάνομεν, οἷον οἰκοδομοῦντες οἰκοδόμοι γίνονται καὶ κιθαρίζοντες κιθαρισταί· 1103b [1] οὕτω δὴ καὶ τὰ μὲν δίκαια πράττοντες δίκαιοι γινόμεθα, τὰ δὲ σώφρονα σώφρονες, τὰ δ' ἀνδρεῖα ἀνδρεῖοι. Μαρτυρεῖ δὲ καὶ τὸ γινόμενον ἐν ταῖς πόλεσιν· οἱ γὰρ νομοθέται τοὺς πολίτας ἐθίζοντες ποιοῦσιν ἀγαθοὺς, καὶ τὸ μὲν βούλημα παντὸς νομοθέτου [5] τοῦτ' ἐστίν, ὅσοι δὲ μὴ εὖ αὐτὸ ποιοῦσιν ἀμαρτάνουσιν, καὶ διαφέρει τούτῳ πολιτεία πολιτείας ἀγαθῇ φαύλης.

Ἔτι ἐκ τῶν αὐτῶν καὶ διὰ τῶν αὐτῶν καὶ γίνεται πᾶσα ἀρετὴ καὶ φθείρεται, ὁμοίως δὲ καὶ τέχνη· ἐκ γὰρ τοῦ κιθαρίζειν καὶ οἱ ἀγαθοὶ καὶ κακοὶ γίνονται κιθαρισταί. ἀνάλογον [10] δὲ καὶ οἰκοδόμοι καὶ οἱ λοιποὶ πάντες· ἐκ μὲν γὰρ τοῦ εὖ οἰκοδομεῖν ἀγαθοὶ οἰκοδόμοι ἔσονται, ἐκ δὲ τοῦ κακῶς κακοί. εἰ γὰρ μὴ οὕτως εἶχεν, οὐδὲν ἂν ἔδει τοῦ διδάζοντος, ἀλλὰ πάντες ἂν ἐγίνοντο

ἀγαθοὶ ἢ κακοί. οὕτω δὲ καὶ ἐπὶ τῶν ἀρετῶν ἔχει· πράττοντες γὰρ τὰ ἐν τοῖς συναλλάγμασι [15] τοῖς πρὸς τοὺς ἀνθρώπους γινόμεθα οἱ μὲν δίκαιοι οἱ δὲ ἄδικοι, πράττοντες δὲ τὰ ἐν τοῖς δεινοῖς καὶ ἐθιζόμενοι φοβεῖσθαι ἢ θάρρῃν οἱ μὲν ἀνδρεῖοι οἱ δὲ δειλοί. ὁμοίως δὲ καὶ τὰ περὶ τὰς ἐπιθυμίας ἔχει καὶ τὰ περὶ τὰς ὀργάς· οἱ μὲν γὰρ σώφρονες καὶ πρᾶοι γίνονται, οἱ δ' ἀκόλαστοι καὶ ὀργίλοι, [20] οἱ μὲν ἐκ τοῦ οὕτως ἐν αὐτοῖς ἀναστρέφεσθαι, οἱ δὲ ἐκ τοῦ οὕτως. καὶ ἐνὶ δὴ λόγῳ ἐκ τῶν ὁμοίων ἐνεργειῶν αἱ ἕξεις γίνονται. διὸ δεῖ τὰς ἐνεργείας ποιάς ἀποδιδόναι· κατὰ γὰρ τὰς τούτων διαφορὰς ἀκολουθοῦσιν αἱ ἕξεις. οὐ μικρὸν οὖν διαφέρει τὸ οὕτως ἢ οὕτως εὐθὺς ἐκ νέων ἐθίζεσθαι, [25] ἀλλὰ πάμπλου, μᾶλλον δὲ τὸ πᾶν.

Ἐπεὶ οὖν ἡ παροῦσα πραγματεία οὐ θεωρίας ἕνεκά ἐστιν ὥσπερ αἱ ἄλλαι (οὐ γὰρ ἵνα εἰδῶμεν τί ἐστὶν ἡ ἀρετὴ σκεπτόμεθα, ἀλλ' ἵν' ἀγαθοὶ γενώμεθα, ἐπεὶ οὐδὲν ἄν ἦν ὄφελος αὐτῆς), ἀναγκαῖον ἐπισκέψασθαι τὰ περὶ τὰς [30] πράξεις, πῶς πρακτέον αὐτάς· αὐταὶ γὰρ εἰσι κύρια καὶ τοῦ ποιάς γενέσθαι τὰς ἕξεις, καθάπερ εἰρήκαμεν. τὸ μὲν οὖν κατὰ τὸν ὀρθὸν λόγον πράττειν κοινὸν καὶ ὑποκείσθω — ῥηθήσεται δ' ὕστερον περὶ αὐτοῦ, καὶ τί ἐστὶν ὁ ὀρθὸς λόγος, καὶ πῶς ἔχει πρὸς τὰς ἄλλας ἀρετάς. 1104a [1] ἐκεῖνο δὲ προδιομολογείσθω, ὅτι πᾶς ὁ περὶ τῶν πρακτῶν λόγος τύπῳ καὶ οὐκ ἀκριβῶς ὀφείλει λέγεσθαι, ὥσπερ καὶ κατ' ἀρχὰς εἵπομεν ὅτι κατὰ τὴν ὕλην οἱ λόγοι ἀπαιτητέοι· τὰ δ' ἐν ταῖς πράξεσι καὶ τὰ συμφέροντα οὐδὲν ἐστηκὸς ἔχει, ὥσπερ [5] οὐδὲ τὰ ὑγιεινά. τοιούτου δ' ὄντος τοῦ καθόλου λόγου, ἔτι μᾶλλον ὁ περὶ τῶν καθ' ἕκαστα λόγος οὐκ ἔχει τὰκριβές· οὔτε γὰρ ὑπὸ τέχνην οὔθ' ὑπὸ παραγγελίαν οὐδεμίαν πίπτει, δεῖ δ' αὐτοὺς ἀεὶ τοὺς πράττοντας τὰ πρὸς τὸν καιρὸν σκοπεῖν, ὥσπερ καὶ ἐπὶ τῆς ἰατρικῆς ἔχει καὶ τῆς [10] κυβερνητικῆς. ἀλλὰ καίπερ ὄντος τοιούτου τοῦ παρόντος λόγου πειρατέον βοηθεῖν. πρῶτον οὖν τοῦτο θεωρητέον, ὅτι τὰ τοιαῦτα πέφυκεν ὑπ' ἐνδείας καὶ ὑπερβολῆς φθείρεσθαι, (δεῖ γὰρ ὑπὲρ τῶν ἀφανῶν τοῖς φανεροῖς μαρτυρίοις χρῆσθαι) ὥσπερ ἐπὶ τῆς ἰσχύος καὶ τῆς ὑγείας ὀρῶμεν· [15] τὰ τε γὰρ ὑπερβάλλοντα γυμνάσια καὶ τὰ ἐλλείποντα φθείρει τὴν ἰσχύν, ὁμοίως δὲ καὶ τὰ ποτὰ καὶ τὰ σιτία πλείω καὶ ἐλάττω γινόμενα φθείρει τὴν ὑγίειαν, τὰ δὲ σύμμετρα καὶ ποιεῖ καὶ αὔξει καὶ σώζει. οὕτως οὖν καὶ ἐπὶ σωφροσύνης καὶ ἀνδρείας ἔχει καὶ τῶν ἄλλων ἀρετῶν. [20] ὅ τε γὰρ πάντα φεύγων καὶ φοβούμενος καὶ μηδὲν ὑπομένων δειλὸς γίνεται, ὅ τε μηδὲν ὅλως φοβούμενος ἀλλὰ πρὸς πάντα βαδίζων θρασύς· ὁμοίως δὲ καὶ ὁ μὲν πάσης ἡδονῆς ἀπολαύων καὶ μηδεμιᾶς ἀπεχόμενος ἀκόλαστος, ὁ δὲ πᾶσαν φεύγων, ὥσπερ

οἱ ἄγροικοι, ἀναίσθητός [25] τις· φθείρεται δὴ σωφροσύνη καὶ ἡ ἀνδρεία ὑπὸ τῆς ὑπερβολῆς καὶ τῆς ἐλλείψεως, ὑπὸ δὲ τῆς μεσότητος σώζεται.

Ἄλλ' οὐ μόνον αἱ γενέσεις καὶ αὐξήσεις καὶ αἱ φθοραὶ ἐκ τῶν αὐτῶν καὶ ὑπὸ τῶν αὐτῶν γίνονται, ἀλλὰ καὶ αἱ ἐνέργειαι ἐν τοῖς αὐτοῖς ἔσονται· καὶ γὰρ ἐπὶ τῶν [30] ἄλλων τῶν φανερωτέρων οὕτως ἔχει, οἷον ἐπὶ τῆς ἰσχύος· γίνεται γὰρ ἐκ τοῦ πολλὴν τροφὴν λαμβάνειν καὶ πολλοὺς πόνους ὑπομένειν, καὶ μάλιστα ἂν δύναιτ' αὐτὰ ποιεῖν ὁ ἰσχυρός. οὕτω δ' ἔχει καὶ ἐπὶ τῶν ἀρετῶν· ἔκ τε γὰρ τοῦ ἀπέχεσθαι τῶν ἡδονῶν γινόμεθα σώφρονες, καὶ γενόμενοι [35] μάλιστα δυνάμεθα ἀπέχεσθαι αὐτῶν· 1104b [1] ὁμοίως δὲ καὶ ἐπὶ τῆς ἀνδρείας· ἐθιζόμενοι γὰρ καταφρονεῖν τῶν φοβερῶν καὶ ὑπομένειν αὐτὰ γινόμεθα ἀνδρεῖοι, καὶ γενόμενοι μάλιστα δυνησόμεθα ὑπομένειν τὰ φοβερά.

Σημεῖον δὲ δεῖ ποιεῖσθαι τῶν ἕξεων τὴν ἐπιγινομένην ἡδονὴν ἢ λύπην [5] τοῖς ἔργοις· ὁ μὲν γὰρ ἀπεχόμενος τῶν σωματικῶν ἡδονῶν καὶ αὐτῷ τούτῳ χαίρων σώφρων, ὁ δ' ἀχθόμενος ἀκόλαστος, καὶ ὁ μὲν ὑπομένων τὰ δεινὰ καὶ χαίρων ἢ μὴ λυπούμενός γε ἀνδρεῖος, ὁ δὲ λυπούμενος δειλός. περὶ ἡδονὰς γὰρ καὶ λύπας ἐστὶν ἡ ἠθικὴ ἀρετὴ· διὰ μὲν γὰρ [10] τὴν ἡδονὴν τὰ φαῦλα πράττομεν, διὰ δὲ τὴν λύπην τῶν καλῶν ἀπεχόμεθα. διὸ δεῖ ἡχθαί πως εὐθύς ἐκ νέων, ὥς ὁ Πλάτων φησὶν, ὥστε χαίρειν τε καὶ λυπεῖσθαι οἷς δεῖ· ἢ γὰρ ὀρθὴ παιδεία αὕτη ἐστίν.

Ἔτι δ' εἰ αἱ ἀρεταὶ εἰσι περὶ πράξεις καὶ πάθη, παντὶ δὲ πάθει καὶ πάσῃ πράξει ἔπεται [15] ἡδονὴ καὶ λύπη, καὶ διὰ τοῦτ' ἂν εἴη ἡ ἀρετὴ περὶ ἡδονὰς καὶ λύπας. μηνύουσι δὲ καὶ αἱ κολάσεις γινόμεναι διὰ τούτων· ἰατρεῖαι γάρ τινες εἰσιν, αἱ δὲ ἰατρεῖαι διὰ τῶν ἐναντίων πεφύκασι γίνεσθαι.

Ἔτι, ὥς καὶ πρῶην εἵπομεν, πᾶσα ψυχῆς ἕξις, ὑφ' οἷων πέφυκε γίνεσθαι [20] χείρων καὶ βελτίων, πρὸς ταῦτα καὶ περὶ ταῦτα τὴν φύσιν ἔχει· δι' ἡδονὰς δὲ καὶ λύπας φαῦλοι γίνονται, τῷ διώκειν ταύτας καὶ φεύγειν, ἢ ἄς μὴ δεῖ ἢ ὅτε οὐ δεῖ ἢ ὥς οὐ δεῖ ἢ ὁσαυχῶς ἄλλως ὑπὸ τοῦ λόγου διορίζεται τὰ τοιαῦτα. διὸ καὶ ὀρίζονται τὰς ἀρετὰς ἀπαθείας τινὰς [25] καὶ ἡρεμίας· οὐκ εὖ δέ, ὅτι ἀπλῶς λέγουσιν, ἀλλ' οὐχ ὥς δεῖ καὶ ὥς οὐ δεῖ καὶ ὅτε, καὶ ὅσα ἄλλα προστίθεται. ὑπόκειται ἄρα ἡ ἀρετὴ εἶναι ἡ τοιαύτη περὶ ἡδονὰς καὶ λύπας τῶν βελτίστων πρακτικῇ, ἢ δὲ κακία τούναντίον.

Γένοιτο δ' ἂν ἡμῖν καὶ ἐκ τούτων φανερόν ὅτι περὶ τῶν [30] αὐτῶν. τριῶν γὰρ ὄντων τῶν εἰς τὰς αἰρέσεις καὶ τριῶν τῶν εἰς τὰς φυγάς, καλοῦ συμφέροντος ἡδέος, καὶ [τριῶν] τῶν ἐναντίων, αἰσχροῦ βλαβεροῦ λυπηροῦ, περὶ ταῦτα μὲν πάντα ὁ ἀγαθὸς κατορθωτικός ἐστίν ὁ δὲ κακὸς ἀμαρτητικός, μάλιστα δὲ περὶ τὴν ἡδονήν· κοινὴ τε γὰρ αὕτη [35] τοῖς ζώοις, καὶ πᾶσι τοῖς ὑπὸ τὴν αἵρεσιν παρακολουθεῖ· 1105a [1] καὶ γὰρ τὸ καλὸν καὶ τὸ συμφέρον ἡδὺ φαίνεται.

Ἔτι δ' ἐκ νηπίου πᾶσιν ἡμῖν συντέθραπται· διὸ χαλεπὸν ἀποτρίψασθαι τοῦτο τὸ πάθος ἐγκεχρωσμένον τῷ βίῳ. κανονίζομεν δὲ καὶ τὰς πράξεις, οἷ μὲν μᾶλλον οἷ δ' ἦττον, [5] ἡδονῇ καὶ λύπῃ. διὰ τοῦτ' οὖν ἀναγκαῖον εἶναι περὶ ταῦτα τὴν πᾶσαν πραγματείαν· οὐ γὰρ μικρὸν εἰς τὰς πράξεις εὖ ἢ κακῶς χαίρειν καὶ λυπεῖσθαι.

Ἔτι δὲ χαλεπώτερον ἡδονῇ μάχεσθαι ἢ θυμῷ, καθάπερ φησὶν Ἡράκλειτος, περὶ δὲ τὸ χαλεπώτερον αἰεὶ καὶ τέχνη γίνεται καὶ ἀρετὴ· [10] καὶ γὰρ τὸ εὖ βέλτιον ἐν τούτῳ. ὥστε καὶ διὰ τοῦτο περὶ ἡδονὰς καὶ λύπας πᾶσα ἡ πραγματεία καὶ τῇ ἀρετῇ καὶ τῇ πολιτικῇ· ὁ μὲν γὰρ εὖ τούτοις χρώμενος ἀγαθὸς ἔσται, ὁ δὲ κακῶς κακός.

Ὅτι μὲν οὖν ἐστὶν ἡ ἀρετὴ περὶ ἡδονὰς καὶ λύπας, καὶ ὅτι ἐξ ὧν γίνεται, ὑπὸ τούτων καὶ αὖξεται [15] καὶ φθείρεται μὴ ὡσαύτως γινομένων, καὶ ὅτι ἐξ ὧν ἐγένετο, περὶ ταῦτα καὶ ἐνεργεῖ, εἰρήσθω.

Ἀπορήσειε δ' ἂν τις πῶς λέγομεν ὅτι δεῖ τὰ μὲν δίκαια πράττοντας δικαίους γίνεσθαι, τὰ δὲ σώφρονα σώφρονες· εἰ γὰρ πράττουσι τὰ δίκαια καὶ σώφρονα, [20] ἤδη εἰσὶ δίκαιοι καὶ σώφρονες, ὥσπερ εἰ τὰ γραμματικὰ καὶ τὰ μουσικά, γραμματικοὶ καὶ μουσικοί. ἢ οὐδ' ἐπὶ τῶν τεχνῶν οὕτως ἔχει; ἐνδέχεται γὰρ γραμματικόν τι ποιῆσαι καὶ ἀπὸ τύχης καὶ ἄλλου ὑποθεμένου. τότε οὖν ἔσται γραμματικός, ἐὰν καὶ γραμματικόν τι ποιήσῃ καὶ [25] γραμματικῶς· τοῦτο δ' ἐστὶ τὸ κατὰ τὴν ἐν αὐτῷ γραμματικὴν.

Ἔτι οὐδ' ὅμοιον ἐστὶν ἐπὶ τε τῶν τεχνῶν καὶ τῶν ἀρετῶν· τὰ μὲν γὰρ ὑπὸ τῶν τεχνῶν γινόμενα τὸ εὖ ἔχει ἐν αὐτοῖς· ἀρκεῖ οὖν ταῦτά πως ἔχοντα γενέσθαι· τὰ δὲ κατὰ τὰς ἀρετὰς γινόμενα οὐκ ἐὰν αὐτά πως ἔχη, δικαίως [30] ἢ σωφρόνως πράττεται, ἀλλὰ καὶ ἐὰν ὁ πράττων πῶς ἔχων πράττῃ, πρῶτον μὲν ἐὰν εἰδώς, ἔπειτ' ἐὰν προαιρούμενος, καὶ προαιρούμενος δι' αὐτά, τὸ δὲ τρίτον ἐὰν καὶ βεβαίως καὶ ἀμετακινήτως ἔχων πράττῃ.

1105b [1] Ταῦτα δὲ πρὸς μὲν τὸ τὰς ἄλλας τέχνας ἔχειν οὐ συναριθμεῖται, πλην αὐτὸ τὸ εἰδέναι· πρὸς δὲ τὸ τὰς ἀρετὰς τὸ μὲν εἰδέναι οὐδὲν ἢ μικρὸν ἰσχύει, τὰ δ' ἄλλα οὐ μικρὸν ἀλλὰ τὸ πᾶν δύναται, ἅπερ ἐκ τοῦ πολλάκις πράττειν τὰ δίκαια καὶ [5] σώφρονα περιγίνεται.

Τὰ μὲν οὖν πράγματα δίκαια καὶ σώφρονα λέγεται, ὅταν ἢ τοιαῦτα οἷα ἂν ὁ δίκαιος ἢ ὁ σώφρων πράξειεν· δίκαιος δὲ καὶ σώφρων ἐστὶν οὐχ ὁ ταῦτα πράττων, ἀλλὰ καὶ [ὁ] οὕτω πράττων ὥς οἱ δίκαιοι καὶ σώφρονες πράττουσιν. εὖ οὖν λέγεται ὅτι ἐκ τοῦ τὰ δίκαια πράττειν [10] ὁ δίκαιος γίνεται καὶ ἐκ τοῦ

τὰ σώφρονα ὁ σώφρων· ἐκ δὲ τοῦ μὴ πράττειν ταῦτα οὐδεὶς ἂν οὐδὲ μελλήσειε γίνεσθαι ἀγαθός.

Ἄλλ' οἱ πολλοὶ ταῦτα μὲν οὐ πράττουσιν, ἐπὶ δὲ τὸν λόγον καταφεύγοντες οἷονται φιλοσοφεῖν καὶ οὕτως ἔσεσθαι σπουδαῖοι, ὅμοιόν τι ποιοῦντες τοῖς [15] κάμνουσιν, οἱ τῶν ἰατρῶν ἀκούουσι μὲν ἐπιμελῶς, ποιοῦσι δ' οὐδὲν τῶν προσταττομένων. ὥσπερ οὖν οὐδ' ἐκεῖνοι εὖ ἔξουσι τὸ σῶμα οὕτω θεραπευόμενοι, οὐδ' οὗτοι τὴν ψυχὴν οὕτω φιλοσοφοῦντες.

Μετὰ δὲ ταῦτα τί ἐστὶν ἡ ἀρετὴ σκεπτέον. ἐπεὶ οὖν [20] τὰ ἐν τῇ ψυχῇ γινόμενα τρία ἐστί, πάθη δυνάμεις ἔξεις, τούτων ἂν τι εἴη ἡ ἀρετή. λέγω δὲ πάθη μὲν ἐπιθυμίαν ὀργὴν φόβον θάρσος φθόνον χαρὰν φιλίαν μῖσος πόθον ζῆλον ἔλεον, ὅλως οἷς ἔπεται ἡδονὴ ἢ λύπη· δυνάμεις δὲ καθ' ἃς παθητικοὶ τούτων λεγόμεθα, οἷον καθ' ἃς δυνατοὶ [25] ὀργισθῆναι ἢ λυπηθῆναι ἢ ἐλεῆσθαι· ἔξεις δὲ καθ' ἃς πρὸς τὰ πάθη ἔχομεν εὖ ἢ κακῶς, οἷον πρὸς τὸ ὀργισθῆναι, εἰ μὲν σφοδρῶς ἢ ἀνειμένως, κακῶς ἔχομεν, εἰ δὲ μέσως, εὖ· ὁμοίως δὲ καὶ πρὸς τὰ ἄλλα.

Πάθη μὲν οὖν οὐκ εἰσὶν οὔθ' αἱ ἀρεταὶ οὔθ' αἱ κακίαι, ὅτι οὐ λεγόμεθα [30] κατὰ τὰ πάθη σπουδαῖοι ἢ φαῦλοι, κατὰ δὲ τὰς ἀρετὰς καὶ τὰς κακίας λεγόμεθα, καὶ ὅτι κατὰ μὲν τὰ πάθη οὔτ' ἐπαινούμεθα οὔτε ψεγόμεθα (οὐ γὰρ ἐπαινεῖται ὁ φοβούμενος οὐδὲ ὁ ὀργιζόμενος, οὐδὲ ψέγεται ὁ ἀπλῶς ὀργιζόμενος ἀλλ' ὁ πῶς), 1106a [1] κατὰ δὲ τὰς ἀρετὰς καὶ τὰς κακίας ἐπαινούμεθα ἢ ψεγόμεθα.

Ἐπὶ ὀργιζόμεθα μὲν καὶ φοβούμεθα ἀπροαιρέτως, αἱ δ' ἀρεταὶ προαιρέσεις τινὲς ἢ οὐκ ἄνευ προαιρέσεως. πρὸς δὲ τούτοις κατὰ μὲν τὰ πάθη [5] κινεῖσθαι λεγόμεθα, κατὰ δὲ τὰς ἀρετὰς καὶ τὰς κακίας οὐ κινεῖσθαι ἀλλὰ



διακεῖσθαί πως.

Διὰ ταῦτα δὲ οὐδὲ δυνάμεις εἰσὶν· οὔτε γὰρ ἀγαθοὶ λεγόμεθα τῷ δύνασθαι πάσχειν ἀπλῶς οὔτε κακοί, οὔτ' ἐπαινούμεθα οὔτε ψεγόμεθα· ἔτι δυνατοὶ μὲν ἔσμεν φύσει, ἀγαθοὶ δὲ ἢ κακοὶ [10] οὐ γινόμεθα φύσει· εἵπομεν δὲ περὶ τούτου πρότερον. εἰ οὖν μήτε πάθη εἰσὶν αἱ ἀρεταὶ μήτε δυνάμεις, λείπεται ἕξεις αὐτὰς εἶναι.

Ὅ τι μὲν οὖν ἐστὶ τῷ γένει ἡ ἀρετή, εἴρηται.

Δεῖ δὲ μὴ μόνον οὕτως εἰπεῖν, ὅτι ἕξις, ἀλλὰ καὶ [15] ποία τις. ῥητέον οὖν ὅτι πᾶσα ἀρετή, οὗ ἂν ἢ ἀρετή, αὐτό τε εὖ ἔχον ἀποτελεῖ καὶ τὸ ἔργον αὐτοῦ εὖ ἀποδίδωσιν, οἷον ἡ τοῦ ὀφθαλμοῦ ἀρετὴ τὸν τε ὀφθαλμὸν σπουδαῖον ποιεῖ καὶ τὸ ἔργον αὐτοῦ· τῇ γὰρ τοῦ ὀφθαλμοῦ ἀρετῇ εὖ ὁρῶμεν. ὁμοίως ἡ τοῦ ἵππου ἀρετὴ ἵππον τε [20] σπουδαῖον ποιεῖ καὶ ἀγαθὸν δραμεῖν καὶ ἐνεγκεῖν τὸν ἐπιβάτην καὶ μεῖναι τοὺς πολεμίους. εἰ δὲ τοῦτ' ἐπὶ πάντων οὕτως ἔχει, καὶ ἡ τοῦ ἀνθρώπου ἀρετὴ εἴη ἂν ἡ ἕξις ἀφ' ἧς ἀγαθὸς ἄνθρωπος γίνεται καὶ ἀφ' ἧς εὖ τὸ ἑαυτοῦ ἔργον ἀποδώσει.

Πῶς δὲ τοῦτ' ἔσται, ἥδη μὲν εἰρήκαμεν, ἔτι [25] δὲ καὶ ὧδ' ἔσται φανερόν, ἐὰν θεωρήσωμεν ποία τίς ἐστὶν ἡ φύσις αὐτῆς. ἐν παντὶ δὲ συνεχεῖ καὶ διαιρετῷ ἔστι λαβεῖν τὸ μὲν πλεῖον τὸ δ' ἔλαττον τὸ δ' ἴσον, καὶ ταῦτα ἢ κατ' αὐτὸ τὸ πρᾶγμα ἢ πρὸς ἡμᾶς· τὸ δ' ἴσον μέσον τι ὑπερβολῆς καὶ ἐλλείψεως. λέγω δὲ τοῦ μὲν πράγματος [30] μέσον τὸ ἴσον ἀπέχον ἀφ' ἑκατέρου τῶν ἄκρων, ὅπερ ἐστὶν ἐν καὶ τὸ αὐτὸ πᾶσιν, πρὸς ἡμᾶς δὲ ὃ μήτε πλεονάζει μήτε ἐλλείπει· τοῦτο δ' οὐχ ἔν, οὐδὲ ταῦτόν πᾶσιν. οἷον εἰ τὰ δέκα πολλὰ τὰ δὲ δύο ὀλίγα, τὰ ἕξ μέσα λαμβάνουσι κατὰ τὸ πρᾶγμα· ἴσω γὰρ ὑπερέχει τε καὶ [35] ὑπερέχεται· τοῦτο δὲ μέσον ἐστὶ κατὰ τὴν ἀριθμητικὴν

ἀναλογίαν. τὸ δὲ πρὸς ἡμᾶς οὐχ οὕτω ληπτέον· 1106b [1] οὐ γὰρ εἴ τῳ δέκα μναῖ φαγεῖν πολὺ δύο δὲ ὀλίγον, ὃ ἀλείπτῃς ἕξ μναῖς προστάξει· ἔστι γὰρ ἴσως καὶ τοῦτο πολὺ τῷ ληψομένῳ ἢ ὀλίγον· Μίλωνι μὲν γὰρ ὀλίγον, τῷ δὲ ἀρχομένῳ τῶν γυμνασίων πολὺ. ὁμοίως ἐπὶ δρόμου καὶ [5] πάλης. οὕτω δὲ πᾶς ἐπιστήμων τὴν ὑπερβολὴν μὲν καὶ τὴν ἔλλειψιν φεύγει, τὸ δὲ μέσον ζητεῖ καὶ τοῦθ' αἰρεῖται, μέσον δὲ οὐ τὸ τοῦ πράγματος ἀλλὰ τὸ πρὸς ἡμᾶς.

Εἰ δὲ πᾶσα ἐπιστήμη οὕτω τὸ ἔργον εὖ ἐπιτελεῖ, πρὸς τὸ μέσον βλέπουσα καὶ εἰς τοῦτο ἄγουσα τὰ ἔργα (ὅθεν εἰώθασιν [10] ἐπιλέγειν τοῖς εὖ ἔχουσιν ἔργοις ὅτι οὗτ' ἀφελεῖν ἔστιν οὔτε προσθεῖναι, ὡς τῆς μὲν ὑπερβολῆς καὶ τῆς ἐλλείψεως φθειρούσης τὸ εὖ, τῆς δὲ μεσότητος σωζούσης, οἱ δ' ἀγαθοὶ τεχνῖται, ὡς λέγομεν, πρὸς τοῦτο βλέποντες ἐργάζονται)· ἡ δ' ἀρετὴ πάσης τέχνης ἀκριβεστέρα καὶ [15] ἀμείνων ἐστὶν ὥσπερ καὶ ἡ φύσις, τοῦ μέσου ἂν εἴη στοχαστική. λέγω δὲ τὴν ἠθικὴν· αὕτη γὰρ ἐστὶ περὶ πάθη καὶ πράξεις, ἐν δὲ τούτοις ἔστιν ὑπερβολὴ καὶ ἔλλειψις καὶ τὸ μέσον. οἷον καὶ φοβηθῆναι καὶ θάρρῆσαι καὶ ἐπιθυμῆσαι καὶ ὀργισθῆναι καὶ ἐλεῆσαι καὶ ὅλως ἡσθῆναι [20] καὶ λυπηθῆναι ἔστι καὶ μᾶλλον καὶ ἥττον, καὶ ἀμφοτέρω οὐκ εὖ· τὸ δ' ὅτε δεῖ καὶ ἐφ' οἷς καὶ πρὸς οὓς καὶ οὗ ἕνεκα καὶ ὡς δεῖ, μέσον τε καὶ ἄριστον, ὅπερ ἐστὶ τῆς ἀρετῆς. ὁμοίως δὲ καὶ περὶ τὰς πράξεις ἔστιν ὑπερβολὴ καὶ ἔλλειψις καὶ τὸ μέσον. ἡ δ' ἀρετὴ περὶ πάθη καὶ [25] πράξεις ἐστίν, ἐν οἷς ἡ μὲν ὑπερβολὴ ἀμαρτάνεται καὶ ἡ ἔλλειψις [ψέγεται], τὸ δὲ μέσον ἐπαινεῖται καὶ κατορθοῦται· ταῦτα δ' ἄμφω τῆς ἀρετῆς. μεσότης τις ἄρα ἐστὶν ἡ ἀρετή, στοχαστικὴ γε οὕσα τοῦ μέσου.

Ἔτι τὸ μὲν ἀμαρτάνειν πολλαχῶς ἔστιν (τὸ γὰρ κακὸν τοῦ ἀπείρου, ὡς οἱ [30] Πυθαγόρειοι εἵκαζον, τὸ δ' ἀγαθὸν τοῦ πεπερασμένου), τὸ δὲ κατορθοῦν μοναχῶς (διὸ καὶ τὸ μὲν ῥάδιον τὸ δὲ χαλεπὸν, ῥάδιον μὲν τὸ ἀποτυχεῖν τοῦ σκοποῦ, χαλεπὸν δὲ τὸ ἐπιτυχεῖν)· καὶ διὰ ταῦτ' οὖν τῆς μὲν κακίας ἡ ὑπερβολὴ καὶ ἡ ἔλλειψις, τῆς δ' ἀρετῆς ἡ μεσότης.

[35] ἐσθλοὶ μὲν γὰρ ἀπλῶς, παντοδαπῶς δὲ κακοί.

Anon.

ἔστιν ἄρα ἡ ἀρετὴ ἕξις προαιρετική, ἐν μεσότητι οὔσα τῇ πρὸς ἡμᾶς, 1107a  
[1] ὠρισμένη λόγῳ καὶ ᾧ ἂν ὁ φρόνιμος ὀρίσειεν. μεσότης δὲ δύο κακιῶν,  
τῆς μὲν καθ' ὑπερβολὴν τῆς δὲ κατ' ἔλλειψιν· καὶ ἔτι τῷ τὰς μὲν ἐλλείπειν  
τὰς δ' ὑπερβάλλειν τοῦ δέοντος ἔν τε τοῖς πάθεσι καὶ ἐν [5] ταῖς πράξεσι, τὴν  
δ' ἀρετὴν τὸ μέσον καὶ εὕρισκιν καὶ αἰρεῖσθαι. διὸ κατὰ μὲν τὴν οὐσίαν  
καὶ τὸν λόγον τὸν τὸ τί ἦν εἶναι λέγοντα μεσότης ἐστὶν ἡ ἀρετή, κατὰ δὲ τὸ  
ἄριστον καὶ τὸ εὖ ἀκρότης.

Οὐ πᾶσα δ' ἐπιδέχεται πρᾶξις οὐδὲ πᾶν πάθος τὴν μεσότητα· ἔνια γὰρ εὐθὺς  
ὠνόμασται [10] συνειλημμένα μετὰ τῆς φαυλότητος, οἷον ἐπichαιρεκακία  
ἀναισχυντία φθόνος, καὶ ἐπὶ τῶν πράξεων μοιχεία κλοπὴ ἀνδροφονία· πάντα  
γὰρ ταῦτα καὶ τὰ τοιαῦτα λέγεται τῷ αὐτὰ φαῦλα εἶναι, ἀλλ' οὐχ αἱ  
ὑπερβολαὶ αὐτῶν οὐδ' αἱ ἐλλείψεις. οὐκ ἔστιν οὖν οὐδέποτε περὶ αὐτὰ  
κατορθοῦν, [15] ἀλλ' ἀεὶ ἀμαρτάνειν· οὐδ' ἔστι τὸ εὖ ἢ μὴ εὖ περὶ τὰ  
τοιαῦτα ἐν τῷ ἦν δεῖ καὶ ὅτε καὶ ὥς μοιχεύειν, ἀλλ' ἀπλῶς τὸ ποιεῖν ὅτιοῦν  
τούτων ἀμαρτάνειν ἐστίν. ὅμοιον οὖν τὸ ἀξιοῦν καὶ περὶ τὸ ἀδικεῖν καὶ  
δειλαίνειν καὶ ἀκολασταίνειν εἶναι μεσότητα καὶ ὑπερβολὴν καὶ ἔλλειψιν· [20]  
ἔσται γὰρ οὕτω γε ὑπερβολῆς καὶ ἐλλείψεως μεσότης καὶ ὑπερβολῆς  
ὑπερβολὴ καὶ ἔλλειψις ἐλλείψεως. ὥσπερ δὲ σωφροσύνης καὶ ἀνδρείας οὐκ  
ἔστιν ὑπερβολὴ καὶ ἔλλειψις διὰ τὸ τὸ μέσον εἶναι πῶς ἄκρον, οὕτως οὐδ'  
ἐκείνων μεσότης οὐδ' ὑπερβολὴ καὶ ἔλλειψις, ἀλλ' ὥς ἂν [25] πράττῃται  
ἀμαρτάνεται· ὅλως γὰρ οὐθ' ὑπερβολῆς καὶ ἐλλείψεως μεσότης ἔστιν, οὔτε  
μεσότητος ὑπερβολὴ καὶ ἔλλειψις.

Δεῖ δὲ τοῦτο μὴ μόνον καθόλου λέγεσθαι, ἀλλὰ καὶ τοῖς καθ' ἕκαστα ἐφαρμόττειν. ἐν γὰρ τοῖς περὶ τὰς [30] πράξεις λόγοις οἱ μὲν καθόλου κοινότεροί εἰσιν, οἱ δ' ἐπὶ μέρους ἀληθινώτεροι· περὶ γὰρ τὰ καθ' ἕκαστα αἱ πράξεις, δέον δ' ἐπὶ τούτων συμφωνεῖν. ληπτέον οὖν ταῦτα ἐκ τῆς διαγραφῆς. περὶ μὲν οὖν φόβους καὶ θάρρη ἀνδρεία μεσότης· 1107b [1] τῶν δ' ὑπερβαλλόντων ὁ μὲν τῇ ἀφοβία ἀνώνυμος (πολλὰ δ' ἐστὶν ἀνώνυμα), ὁ δ' ἐν τῷ θαρρῆν ὑπερβάλλων θρασύς, ὁ δ' ἐν τῷ μὲν φοβεῖσθαι ὑπερβάλλων τῷ δὲ θαρρῆν ἐλλείπων δειλός. περὶ ἡδονὰς δὲ καὶ λύπας — οὐ [5] πάσας, ἦττον δὲ “καὶ” περὶ τὰς λύπας — μεσότης μὲν σωφροσύνη, ὑπερβολὴ δὲ ἀκολασία. ἐλλείποντες δὲ περὶ τὰς ἡδονὰς οὐ πάνυ γίνονται· διόπερ οὐδ' ὀνόματος τετυχήκασιν οὐδ' οἱ τοιοῦτοι, ἔστωσαν δὲ ἀναίσθητοι.

Περὶ δὲ δόσιν χρημάτων καὶ λῆψιν μεσότης μὲν ἐλευθεριότης, ὑπερβολὴ [10] δὲ καὶ ἔλλειψις ἀσωτία καὶ ἀνελευθερία. ἐναντίως δ' ἐν αὐταῖς ὑπερβάλλουσι καὶ ἐλλείπουσιν· ὁ μὲν γὰρ ἄσωτος ἐν μὲν προέσει ὑπερβάλλει ἐν δὲ λήψει ἐλλείπει, ὁ δ' ἀνελεύθερος ἐν μὲν λήψει ὑπερβάλλει ἐν δὲ προέσει ἐλλείπει. νῦν μὲν οὖν τύπῳ καὶ ἐπὶ κεφαλαίου λέγομεν, [15] ἀρκούμενοι αὐτῷ τούτῳ· ὕστερον δὲ ἀκριβέστερον περὶ αὐτῶν διορισθήσεται. περὶ δὲ χρήματα καὶ ἄλλαι διαθέσεις εἰσὶ, μεσότης μὲν μεγαλοπρέπεια (ὁ γὰρ μεγαλοπρεπὴς διαφέρει ἐλευθερίου· ὁ μὲν γὰρ περὶ μεγάλα, ὁ δὲ περὶ μικρά), ὑπερβολὴ δὲ ἀπειροκαλία καὶ βαναυσία, ἔλλειψις [20] δὲ μικροπρέπεια· διαφέρουσι δ' αὗται τῶν περὶ τὴν ἐλευθεριότητα, πῇ δὲ διαφέρουσιν, ὕστερον ῥηθήσεται. περὶ δὲ τιμὴν καὶ ἀτιμίαν μεσότης μὲν μεγαλοψυχία, ὑπερβολὴ δὲ χαυνότης τις λεγομένη, ἔλλειψις δὲ μικροψυχία· ὥς δ' ἐλέγομεν ἔχειν πρὸς τὴν μεγαλοπρέπειαν τὴν ἐλευθεριότητα, [25] <τῷ> περὶ μικρὰ διαφέρουσιν, οὕτως ἔχει τις καὶ πρὸς τὴν μεγαλοψυχίαν, περὶ τιμὴν οὕσαν μεγάλην, αὐτὴ περὶ μικρὰν οὕσα· ἔστι γὰρ ὥς δεῖ ὀρέγεσθαι τιμῆς καὶ μᾶλλον ἢ δεῖ καὶ ἦττον, λέγεται δ' ὁ μὲν ὑπερβάλλων ταῖς ὀρέξεσι φιλότιμος, ὁ δ' ἐλλείπων ἀφιλότιμος, ὁ δὲ [30] μέσος ἀνώνυμος. ἀνώνυμοι δὲ καὶ αἱ διαθέσεις, πλὴν ἡ τοῦ φιλοτίμου φιλοτιμία. ὅθεν ἐπιδικάζονται οἱ ἄκροι τῆς μέσης χώρας· καὶ ἡμεῖς δὲ ἔστι μὲν ὅτε τὸν μέσον φιλότιμον καλοῦμεν ἔστι δ' ὅτε ἀφιλότιμον, 1108a [1] καὶ ἔστι μὲν ὅτε ἐπαινοῦμεν τὸν φιλότιμον ἔστι δ' ὅτε τὸν ἀφιλότιμον. διὰ τίνα δ' αἰτίαν τοῦτο ποιοῦμεν, ἐν τοῖς ἐξῆς ῥηθήσεται· νῦν δὲ περὶ τῶν λοιπῶν λέγωμεν κατὰ τὸν ὑφηγημένον τρόπον.

Ἔστι δὲ καὶ περὶ τὴν ὀργὴν ὑπερβολὴ καὶ ἔλλειψις καὶ [5] μεσότης, σχεδὸν δὲ ἀνωρύμων ὄντων αὐτῶν τὸν μέσον πρᾶον λέγοντες τὴν μεσότητα πραότητα καλέσωμεν· τῶν δ' ἄκρων ὁ μὲν ὑπερβάλλον ὀργίλος ἔστω, ἡ δὲ κακία ὀργιλότης, ὁ δ' ἐλλείπων ἀόργητός τις, ἡ δ' ἔλλειψις ἀοργησία.

Εἰσὶ δὲ καὶ ἄλλαι τρεῖς μεσότητες, ἔχουσαι μὲν [10] τινα ὁμοιότητα πρὸς ἀλλήλας, διαφέρουσαι δ' ἀλλήλων· πᾶσαι μὲν γὰρ εἰσι περὶ λόγων καὶ πράξεων κοινωνίαν, διαφέρουσι δὲ ὅτι ἡ μὲν ἐστὶ περὶ τᾶληθές τὸ ἐν αὐτοῖς, αἱ δὲ περὶ τὸ ἡδύ· τούτου δὲ τὸ μὲν ἐν παιδιᾷ τὸ δ' ἐν πᾶσι τοῖς κατὰ τὸν βίον. ῥητέον οὖν καὶ περὶ τούτων, ἵνα [15] μᾶλλον κατίδωμεν ὅτι ἐν πᾶσιν ἡ μεσότης ἐπαινετόν, τὰ δ' ἄκρα οὐτ' ἐπαινετὰ οὐτ' ὀρθὰ ἀλλὰ ψεκτά. εἰσὶ μὲν οὖν καὶ τούτων τὰ πλείω ἀνώνυμα, πειρατέον δ', ὥσπερ καὶ ἐπὶ τῶν ἄλλων, αὐτοὺς ὀνοματοποιεῖν σαφηνείας ἕνεκα καὶ τοῦ εὐπαρακολουθήτου. περὶ μὲν οὖν τὸ ἀληθές [20] ὁ μὲν μέσος ἀληθής τις καὶ ἡ μεσότης ἀλήθεια λεγέσθω, ἡ δὲ προσποίησις ἡ μὲν ἐπὶ τὸ μεῖζον ἀλαζονεία καὶ ὁ ἔχων αὐτὴν ἀλαζών, ἡ δ' ἐπὶ τὸ ἔλαττον εἰρωνεία καὶ εἴρων <ὁ ἔχων>. περὶ δὲ τὸ ἡδύ τὸ μὲν ἐν παιδιᾷ ὁ μὲν μέσος εὐτράπελος καὶ ἡ διάθεσις εὐτραπελία, ἡ δ' ὑπερβολὴ βωμολοχία [25] καὶ ὁ ἔχων αὐτὴν βωμολόχος, ὁ δ' ἐλλείπων ἄγροικός τις καὶ ἡ ἕξις ἀγροικία· περὶ δὲ τὸ λοιπὸν ἡδὺ τὸ ἐν τῷ βίῳ ὁ μὲν ὡς δεῖ ἡδὺς ὢν φίλος καὶ ἡ μεσότης φιλία, ὁ δ' ὑπερβάλλον, εἰ μὲν οὐδενὸς ἕνεκα, ἄρεσκος, εἰ δ' ὠφελείας τῆς αὐτοῦ, κόλαξ, ὁ δ' ἐλλείπων [30] καὶ ἐν πᾶσιν ἀηδὴς δύσερίς τις καὶ δύσκολος.

Εἰσὶ δὲ καὶ ἐν τοῖς παθήμασι καὶ περὶ τὰ πάθη μεσότητες· ἡ γὰρ αἰδῶς ἀρετὴ μὲν οὐκ ἔστιν, ἐπαινεῖται δὲ καὶ ὁ αἰδήμων. καὶ γὰρ ἐν τούτοις ὁ μὲν λέγεται μέσος, ὁ δ' ὑπερβάλλον, ὡς ὁ καταπλήξ ὁ πάντα αἰδούμενος· ὁ δ' ἐλλείπων [35] ἢ μηδὲν ὅλως ἀναίσχυντος, ὁ δὲ μέσος αἰδήμων. 1108b [1] νέμεσις δὲ μεσότης φθόνου καὶ ἐπιχαιρεκακίας, εἰσὶ δὲ περὶ λύπην καὶ ἡδονὴν τὰς ἐπὶ τοῖς συμβαίνουσι τοῖς πέλας γινομένας· ὁ μὲν γὰρ νεμεσητικὸς λυπεῖται ἐπὶ τοῖς ἀναξίως εὖ πράττουσιν, ὁ δὲ φθονερὸς ὑπερβάλλον τοῦτον ἐπὶ [5] πᾶσι λυπεῖται, ὁ δ' ἐπιχαιρέκακος τοσοῦτον ἐλλείπει τοῦ λυπεῖσθαι ὥστε καὶ χαίρειν. ἀλλὰ περὶ μὲν τούτων καὶ ἄλλοθι καιρὸς ἔσται· περὶ δὲ

δικαιοσύνης, ἐπεὶ οὐχ ἀπλῶς λέγεται, μετὰ ταῦτα διελόμενοι περὶ ἑκατέρας ἐροῦμεν πῶς μεσότητές εἰσιν· ὁμοίως δὲ καὶ περὶ τῶν λογικῶν [10] ἀρετῶν.

Τριῶν δὴ διαθέσεων οὐσῶν, δύο μὲν κακιῶν, τῆς μὲν καθ' ὑπερβολὴν τῆς δὲ κατ' ἔλλειψιν, μιᾶς δ' ἀρετῆς τῆς μεσότητος, πᾶσαι πάσαις ἀντίκεινται πως· αἱ μὲν γὰρ ἄκραι καὶ τῇ μέσῃ καὶ ἀλλήλαις ἐναντίαι εἰσίν, ἡ δὲ [15] μέση ταῖς ἄκραις· ὥσπερ γὰρ τὸ ἴσον πρὸς μὲν τὸ ἔλαττον μείζον πρὸς δὲ τὸ μείζον ἔλαττον, οὕτως αἱ μέσαι ἕξεις πρὸς μὲν τὰς ἐλλείψεις ὑπερβάλλουσι πρὸς δὲ τὰς ὑπερβολὰς ἐλλείπουσιν ἔν τε τοῖς πάθεσι καὶ ταῖς πράξεσιν. ὁ γὰρ ἀνδρεῖος πρὸς μὲν τὸν δειλὸν θρασὺς φαίνεται, [20] πρὸς δὲ τὸν θρασὺν δειλός· ὁμοίως δὲ καὶ ὁ σώφρων πρὸς μὲν τὸν ἀναίσθητον ἀκόλαστος, πρὸς δὲ τὸν ἀκόλαστον ἀναίσθητος, ὁ δ' ἐλευθέριος πρὸς μὲν τὸν ἀνελεύθερον ἄσωτος, πρὸς δὲ τὸν ἄσωτον ἀνελεύθερος. διὸ καὶ ἀπωθοῦνται τὸν μέσον οἱ ἄκροι ἑκάτερος πρὸς ἑκάτερον, καὶ καλοῦσι [25] τὸν ἀνδρεῖον ὁ μὲν δειλὸς θρασὺν ὁ δὲ θρασὺς δειλόν, καὶ ἐπὶ τῶν ἄλλων ἀνάλογον. Οὕτω δ' ἀντικειμένων ἀλλήλοις τούτων, πλείστη ἐναντιότης ἐστὶ τοῖς ἄκροις πρὸς ἄλληλα ἢ πρὸς τὸ μέσον· πορρότερον γὰρ ταῦτα ἀφέστηκεν ἀλλήλων ἢ τοῦ μέσου, ὥσπερ τὸ μέγα τοῦ μικροῦ καὶ τὸ μικρὸν [30] τοῦ μεγάλου ἢ ἄμφω τοῦ ἴσου. ἔτι πρὸς μὲν τὸ μέσον ἐνίοις ἄκροις ὁμοιότης τις φαίνεται, ὡς τῇ θρασύτητι πρὸς τὴν ἀνδρείαν καὶ τῇ ἄσωτίᾳ πρὸς τὴν ἐλευθεριότητα· τοῖς δὲ ἄκροις πρὸς ἄλληλα πλείστη ἀνομοιότης· τὰ δὲ πλεῖστον ἀπέχοντα ἀπ' ἀλλήλων ἐναντία ὀρίζονται, ὥστε καὶ [35] μᾶλλον ἐναντία τὰ πλεῖον ἀπέχοντα. Πρὸς δὲ τὸ μέσον 1109a [1] ἀντίκειται μᾶλλον ἐφ' ὧν μὲν ἡ ἔλλειψις ἐφ' ὧν δὲ ἡ ὑπερβολή, οἷον ἀνδρεία μὲν οὐχ ἡ θρασύτης ὑπερβολή οὕσα, ἀλλ' ἡ δειλία ἔλλειψις οὕσα, τῇ δὲ σωφροσύνη οὐχ ἡ ἀναισθησία ἔνδεια οὕσα, ἀλλ' ἡ ἀκολασία ὑπερβολή [5] οὕσα. διὰ δύο δ' αἰτίας τοῦτο συμβαίνει, μίαν μὲν τὴν ἐξ αὐτοῦ τοῦ πράγματος· τῷ γὰρ ἐγγύτερον εἶναι καὶ ὁμοιότερον τὸ ἕτερον ἄκρον τῷ μέσω, οὐ τοῦτο ἀλλὰ τὸ ἐναντίον ἀντιτίθεμεν μᾶλλον· οἷον ἐπεὶ ὁμοιότερον εἶναι δοκεῖ τῇ ἀνδρείᾳ ἡ θρασύτης καὶ ἐγγύτερον, ἀνομοιότερον [10] δ' ἡ δειλία, ταύτην μᾶλλον ἀντιτίθεμεν· τὰ γὰρ ἀπέχοντα πλεῖον τοῦ μέσου ἐναντιώτερα δοκεῖ εἶναι. μία μὲν οὖν αἰτία αὕτη, ἐξ αὐτοῦ τοῦ πράγματος· ἑτέρα δὲ ἐξ ἡμῶν αὐτῶν· πρὸς ἃ γὰρ αὐτοὶ μᾶλλον πεφύκαμέν πως, ταῦτα μᾶλλον ἐναντία τῷ μέσω φαίνεται. οἷον αὐτοὶ μᾶλλον [15] πεφύκαμεν πρὸς τὰς ἡδονάς, διὸ εὐκαταφορώτεροί ἐσμεν πρὸς ἀκολασίαν ἢ πρὸς κοσμιότητα. ταῦτ' οὖν μᾶλλον ἐναντία λέγομεν, πρὸς ἃ ἡ ἐπίδοσις μᾶλλον γίνεται· καὶ διὰ τοῦτο ἡ ἀκολασία ὑπερβολή οὕσα

έναντιωτέρα έστὶ τῇ σωφροσύνῃ.

[20] Ὅτι μὲν οὖν έστὶν ἡ άρετὴ ἡ ἠθικὴ μεσότης, καὶ πῶς, καὶ ὅτι μεσότης δύο κακιῶν, τῆς μὲν καθ' ὑπερβολὴν τῆς δὲ κατ' ἔλλειψιν, καὶ ὅτι τοιαύτη έστὶ διὰ τὸ στοχαστικὴ τοῦ μέσου εἶναι τοῦ ἐν τοῖς πάθεσι καὶ ἐν ταῖς πράξεσιν, ἱκανῶς εἴρηται. διὸ καὶ ἔργον έστὶ σπουδαῖον εἶναι. ἐν ἐκάστῳ [25] γάρ τὸ μέσον λαβεῖν ἔργον, οἷον κύκλου τὸ μέσον οὐ παντὸς ἀλλὰ τοῦ εἰδότος· οὕτω δὲ καὶ τὸ μὲν ὀργισθῆναι παντὸς καὶ ῥάδιον, καὶ τὸ δοῦναι ἀργύριον καὶ δαπανῆσαι· τὸ δ' ὥ καὶ ὅσον καὶ ὅτε καὶ οὐ ἔνεκα καὶ ὥς, οὐκέτι παντὸς οὐδὲ ῥάδιον· διόπερ τὸ εὖ καὶ σπάνιον καὶ ἐπαινετὸν καὶ [30] καλόν. διὸ δεῖ τὸν στοχαζόμενον τοῦ μέσου πρῶτον μὲν ἀποχωρεῖν τοῦ μᾶλλον ἐναντίου, καθάπερ καὶ ἡ Καλυψὼ παραινεῖ τούτου μὲν καπνοῦ καὶ κύματος ἐκτὸς ἔεργε νῆα.

Hom. Od. 12.219

Τῶν γὰρ ἄκρων τὸ μὲν έστὶν ἀμαρτωλότερον τὸ δ' ἥττον· ἐπεὶ οὖν τοῦ μέσου τυχεῖν ἄκρως χαλεπόν, κατὰ τὸν δεύτερον, [35] φασί, πλοῦν τὰ ἐλάχιστα ληπτέον τῶν κακῶν· τοῦτο δ' ἔσται μάλιστα τοῦτον τὸν τρόπον ὃν λέγομεν. 1109b [1] σκοπεῖν δὲ δεῖ πρὸς ἃ καὶ αὐτοὶ εὐκατάφοροί έσμεν· ἄλλοι γὰρ πρὸς ἄλλα πεφύκαμεν· τοῦτο δ' ἔσται γνώριμον ἐκ τῆς ἡδονῆς καὶ τῆς λύπης τῆς γινομένης περὶ ἡμᾶς. εἰς τούναντίον [5] δ' ἑαυτοὺς ἀφέλκειν δεῖ· πολὺ γὰρ ἀπάγοντες τοῦ ἀμαρτάνειν εἰς τὸ μέσον ἤξομεν, ὅπερ οἱ τὰ διεστραμμένα τῶν ξύλων ὀρθοῦντες ποιοῦσιν.

Ἐν παντὶ δὲ μάλιστα φυλακτέον τὸ ἡδὺ καὶ τὴν ἡδονήν· οὐ γὰρ ἀδέκαστοι κρίνομεν αὐτήν. ὅπερ οὖν οἱ δημογέροντες ἔπαθον πρὸς τὴν Ἑλένην, [10] τοῦτο δεῖ παθεῖν καὶ ἡμᾶς πρὸς τὴν ἡδονήν, καὶ ἐν πᾶσι τὴν ἐκείνων

ἐπιλέγειν φωνήν· οὕτω γὰρ αὐτὴν ἀποπεμπόμενοι ἤττον ἀμαρτησόμεθα. ταῦτ' οὖν ποιοῦντες, ὥς ἐν κεφαλαίῳ εἶπεῖν, μάλιστα δυνησόμεθα τοῦ μέσου τυγχάνειν.

Χαλεπὸν δ' ἴσως τοῦτο, καὶ μάλιστ' ἐν τοῖς καθ' ἕκαστον· οὐ [15] γὰρ ῥᾶδιον διορίσαι καὶ πῶς καὶ τίσι καὶ ἐπὶ ποίοις καὶ πόσον χρόνον ὀργιστέον· καὶ γὰρ ἡμεῖς ὅτε μὲν τοὺς ἐλλείποντας ἐπαινοῦμεν καὶ πράους φαμέν, ὅτε δὲ τοὺς χαλεπαίνοντας ἀνδρώδεις ἀποκαλοῦντες. ἀλλ' ὁ μὲν μικρὸν τοῦ εὖ παρεκβαίνων οὐ ψέγεται, οὗτ' ἐπὶ τὸ μᾶλλον οὗτ' ἐπὶ τὸ [20] ἤττον, ὁ δὲ πλέον· οὗτος γὰρ οὐ λανθάνει. ὁ δὲ μέχρι τίνος καὶ ἐπὶ πόσον ψεκτὸς οὐ ῥᾶδιον τῷ λόγῳ ἀφορίσαι· οὐδὲ γὰρ ἄλλο οὐδὲν τῶν αἰσθητῶν· τὰ δὲ τοιαῦτα ἐν τοῖς καθ' ἕκαστα, καὶ ἐν τῇ αἰσθήσει ἡ κρίσις. τὸ μὲν ἄρα τοσοῦτο δηλοῖ ὅτι ἡ μέση ἕξις ἐν πᾶσιν ἐπαινετὴ, ἀποκλίνειν δὲ [25] δεῖ ὅτε μὲν ἐπὶ τὴν ὑπερβολὴν ὅτε δ' ἐπὶ τὴν ἑλλειψιν· οὕτω γὰρ ῥᾶστα τοῦ μέσου καὶ τοῦ εὖ τευξόμεθα.

### Βιβλίο 3

τῆς ἀρετῆς δὴ περὶ πάθη τε καὶ πράξεις οὔσης, καὶ ἐπὶ μὲν τοῖς ἐκουσίοις ἐπαίνων καὶ ψόγων γινομένων, ἐπὶ δὲ τοῖς ἀκουσίοις συγγνώμης, ἐνίοτε δὲ καὶ ἐλέου, τὸ ἐκούσιον καὶ τὸ ἀκούσιον ἀναγκαῖον ἴσως διορίσαι τοῖς περὶ ἀρετῆς ἐπισκοποῦσι, χρήσιμον δὲ καὶ τοῖς νομοθετοῦσι πρὸς τε τὰς [35] τιμὰς καὶ τὰς κολάσεις. δοκεῖ δὴ ἀκούσια εἶναι τὰ βία ἢ δι' ἄγνοιαν γινόμενα· 1110a [1] βίαιον δὲ οὗ ἡ ἀρχὴ ἕξωθεν, τοιαύτη οὖσα ἐν ᾗ μηδὲν συμβάλλεται ὁ πράττων ἢ ὁ πάσχων, οἷον εἰ πνεῦμα κομίσαι ποι ἢ ἄνθρωποι κύριοι ὄντες.

ὅσα δὲ διὰ φόβον μειζόνων κακῶν πράττεται ἢ διὰ [5] καλόν τι, οἷον εἰ τύραννος προστάττοι αἰσχρόν τι πράττει κύριος ὢν γονέων καὶ τέκνων, καὶ πράξαντος μὲν σώζονται μὴ πράξαντος δ' ἀποθνήσκοιεν, ἀμφισβήτησιν ἔχει πότερον ἀκούσιά ἐστιν ἢ ἐκούσια. τοιοῦτον δέ τι συμβαίνει καὶ περὶ τὰς ἐν τοῖς χειμῶσιν ἐκβολάς· ἀπλῶς μὲν γὰρ οὐδεὶς ἀποβάλλεται [10] ἐκῶν, ἐπὶ σωτηρίᾳ δ' αὐτοῦ καὶ τῶν λοιπῶν ἅπαντες οἱ νοῦν ἔχοντες. μικτὰ μὲν οὖν εἰσιν αἱ τοιαῦται πράξεις, εἰκότα δὲ μᾶλλον ἐκουσίους· αἵρεται γὰρ εἰσι τότε



ὅτε πράττονται, τὸ δὲ τέλος τῆς πράξεως κατὰ τὸν καιρὸν ἐστίν. καὶ τὸ ἐκούσιον δὴ καὶ τὸ ἀκούσιον, ὅτε πράττει, [15] λεκτέον. πράττει δὲ ἐκὼν· καὶ γὰρ ἡ ἀρχὴ τοῦ κινεῖν τὰ ὀργανικὰ μέρη ἐν ταῖς τοιαύταις πράξεσιν ἐν αὐτῷ ἐστίν· ὣν δ' ἐν αὐτῷ ἡ ἀρχή, ἐπ' αὐτῷ καὶ τὸ πράττειν καὶ μή. ἐκούσια δὴ τὰ τοιαῦτα, ἀπλῶς δ' ἴσως ἀκούσια· οὐδεὶς γὰρ ἂν ἔλοιτο καθ' αὐτὸ τῶν τοιούτων οὐδέν. [20] ἐπὶ ταῖς πράξεσι δὲ ταῖς τοιαύταις ἐνίοτε καὶ ἐπαινοῦνται, ὅταν αἰσchrόν τι ἢ λυπηρὸν ὑπομένωσιν ἀντὶ μεγάλων καὶ καλῶν· ἂν δ' ἀνάπαλιν, ψέγονται· τὰ γὰρ αἰσchrισθ' ὑπομεῖναι ἐπὶ μηδενὶ καλῷ ἢ μετρίῳ φαύλου. ἐπ' ἐνίοις δ' ἔπαινος μὲν οὐ γίνεται, συγγνώμη δ', ὅταν διὰ τοιαῦτα πράξη [25] τις ἢ μὴ δεῖ, ἢ τὴν ἀνθρωπίνην φύσιν ὑπερτείνει καὶ μηδεὶς ἂν ὑπομεῖναι. ἔνια δ' ἴσως οὐκ ἔστιν ἀναγκασθῆναι, ἀλλὰ μᾶλλον ἀποθανετέον παθόντι τὰ δεινότατα· καὶ γὰρ τὸν Εὐριπίδου Ἀλκμαίωνα γελοῖα φαίνεται τὰ ἀναγκάσαντα μητροκτονῆσαι. ἔστι δὲ χαλεπὸν ἐνίοτε διακρίναι [30] ποῖον ἀντὶ ποίου αἰρετέον καὶ τί ἀντὶ τίνος ὑπομενετέον, ἔτι δὲ χαλεπώτερον ἐμμεῖναι τοῖς γνωσθεῖσιν· ὥς γὰρ ἐπὶ τὸ πολὺ ἐστὶ τὰ μὲν προσδοκώμενα λυπηρά, ἃ δ' ἀναγκάζονται αἰσchrά, ὅθεν ἔπαινοι καὶ ψόγοι γίνονται περὶ τοὺς ἀναγκασθέντας ἢ μή.

1110b [1] τὰ δὴ ποῖα φατέον βίαια; ἢ ἀπλῶς μὲν, ὁπότ' ἂν ἡ αἰτία ἐν τοῖς ἐκτὸς ἢ καὶ ὁ πράττων μηδὲν συμβάλληται; ἢ δὲ καθ' αὐτὰ μὲν ἀκούσιά ἐστι, νῦν δὲ καὶ ἀντὶ τῶνδε αἰρετά, καὶ ἡ ἀρχὴ ἐν τῷ πράττοντι, [5] καθ' αὐτὰ μὲν ἀκούσιά ἐστι, νῦν δὲ καὶ ἀντὶ τῶνδε ἐκούσια. μᾶλλον δ' ἔοικεν ἐκούσιοις· αἱ γὰρ πράξεις ἐν τοῖς καθ' ἕκαστα, ταῦτα δ' ἐκούσια. ποῖα δ' ἀντὶ ποίων αἰρετέον, οὐ ῥᾶδιον ἀποδοῦναι· πολλὰ γὰρ διαφοραὶ εἰσιν ἐν τοῖς καθ' ἕκαστα.

εἰ δέ τις τὰ ἡδέα καὶ τὰ καλὰ φαίη βίαια [10] εἶναι (ἀναγκάζειν γὰρ ἔξω ὄντα), πάντα ἂν εἶη αὐτῷ βίαια· τούτων γὰρ χάριν πάντες πάντα πράττουσιν. καὶ οἱ μὲν βία καὶ ἄκοντες λυπηρῶς, οἱ δὲ διὰ τὸ ἡδὺ καὶ καλὸν μεθ' ἡδονῆς· γελοῖον δὲ τὸ αἰτιᾶσθαι τὰ ἐκτός, ἀλλὰ μὴ αὐτὸν εὐθήρατον ὄντα ὑπὸ τῶν τοιούτων, καὶ τῶν μὲν [15] καλῶν ἑαυτόν, τῶν δ' αἰσchrῶν τὰ ἡδέα. ἔοικε δὴ τὸ βίαιον εἶναι οὗ ἕξωθεν ἡ ἀρχή, μηδὲν συμβαλλομένου τοῦ βιασθέντος.

τὸ δὲ δι' ἄγνοιαν οὐχ ἑκούσιον μὲν ἅπαν ἐστίν, ἀκούσιον δὲ τὸ ἐπίλυπον καὶ ἐν μεταμελείᾳ· ὁ γὰρ δι' ἄγνοιαν [20] πράξας ὁτιοῦν, μηδέν τι δυσχεραίνων ἐπὶ τῇ πράξει, ἐκὼν μὲν οὐ πέπραχεν, ὃ γε μὴ ἤδει, οὐδ' αὖ ἄκων, μὴ λυπούμενός γε. τοῦ δὲ δι' ἄγνοιαν ὁ μὲν ἐν μεταμελείᾳ ἄκων δοκεῖ, ὁ δὲ μὴ μεταμελόμενος, ἐπεὶ ἕτερος, ἔστω οὐχ ἐκὼν· ἐπεὶ γὰρ διαφέρει, βέλτιον ὄνομα ἔχειν ἴδιον. ἕτερον δ' [25] ἔοικε καὶ τὸ δι' ἄγνοιαν πράττειν τοῦ ἀγνοοῦντα· ὁ γὰρ μεθύων ἢ ὀργιζόμενος οὐ δοκεῖ δι' ἄγνοιαν πράττειν ἀλλὰ διὰ τι τῶν εἰρημένων, οὐκ εἰδώς δὲ ἄλλ' ἀγνοῶν.

ἀγνοεῖ μὲν οὖν πᾶς ὁ μοχθηρὸς ἃ δεῖ πράττειν καὶ ὧν ἀφεκτέον, καὶ διὰ τὴν τοιαύτην ἁμαρτίαν ἄδικοι καὶ ὅλως [30] κακοὶ γίνονται· τὸ δ' ἀκούσιον βούλεται λέγεσθαι οὐκ εἴ τις ἀγνοεῖ τὰ συμφέροντα· οὐ γὰρ ἢ ἐν τῇ προαιρέσει ἄγνοια αἰτία τοῦ ἀκουσίου ἀλλὰ τῆς μοχθηρίας, οὐδ' ἢ καθόλου (ψέγονται γὰρ διὰ γε ταύτην) ἀλλ' ἢ καθ' ἕκαστα, ἐν οἷς καὶ περὶ ἃ ἡ πρᾶξις· 1111a [1] ἐν τούτοις γὰρ καὶ ἔλεος καὶ συγγνώμη· ὁ γὰρ τούτων τι ἀγνοῶν ἀκουσίως πράττει.

ἴσως οὖν οὐ χεῖρον διορίσαι αὐτά, τίνα καὶ πόσα ἐστί, τίς τε δὴ καὶ τί καὶ περὶ τί ἢ ἐν τίνι πράττει, ἐνίοτε δὲ καὶ [5] τίνι, οἷον ὀργάνῳ, καὶ ἔνεκα τίνος, οἷον σωτηρίας, καὶ πῶς, οἷον ἡρέμα ἢ σφόδρα. ἅπαντα μὲν οὖν ταῦτα οὐδεὶς ἂν ἀγνοήσκει μὴ μαινόμενος, δῆλον δ' ὡς οὐδὲ τὸν πράττοντα· πῶς γὰρ ἑαυτὸν γε; ὃ δὲ πράττει ἀγνοήσκειν ἂν τις, οἷον “λέγοντές φασιν ἐκπεσεῖν αὐτούς”, ἢ οὐκ εἰδέναι ὅτι ἀπόρρητα [10] ἦν, ὥσπερ Αἰσχύλος τὰ μυστικά, ἢ δεῖξαι βουλόμενος ἀφεῖναι, ὡς ὁ τὸν καταπέλτην. οἴηθείη δ' ἂν τις καὶ τὸν υἱὸν πολέμιον εἶναι ὥσπερ ἡ Μερόπη, καὶ ἐσφαιρῶσθαι τὸ λελογχωμένον δόρυ, ἢ τὸν λίθον κίσσηριν εἶναι· καὶ ἐπὶ σωτηρίᾳ πίσας ἀποκτείνειν ἄν· καὶ θῆξαι βουλόμενος, [15] ὥσπερ οἱ ἀκροχειριζόμενοι, πατάξειεν ἄν. περὶ πάντα δὴ ταῦτα τῆς ἀγνοίας οὔσης, ἐν οἷς ἡ πρᾶξις, ὁ τούτων τι ἀγνοήσας ἄκων δοκεῖ πεπραχέναι, καὶ μάλιστα ἐν τοῖς κυριωτάτοις· κυριώτατα δ' εἶναι δοκεῖ ἐν οἷς ἡ πρᾶξις καὶ οὗ ἔνεκα. τοῦ δὲ κατὰ τὴν τοιαύτην ἄγνοιαν ἀκουσίου

λεγομένου [20] ἔτι δεῖ τὴν πράξιν λυπηρὰν εἶναι καὶ ἐν μεταμελείᾳ.

ὄντος δ' ἄκουσίου τοῦ βίᾳ καὶ δι' ἄγνοιαν, τὸ ἐκούσιον δόξειεν ἂν εἶναι οὗ ἢ ἀρχὴ ἐν αὐτῷ εἰδότι τὰ καθ' ἕκαστα ἐν οἷς ἢ πράξεις. ἴσως γὰρ οὐ καλῶς λέγεται ἀκούσια [25] εἶναι τὰ διὰ θυμὸν ἢ ἐπιθυμίαν. πρῶτον μὲν γὰρ οὐδὲν ἔτι τῶν ἄλλων ζώων ἐκουσίως πράξει, οὐδ' οἱ παῖδες· εἴτα πότερον οὐδὲν ἐκουσίως πράττομεν τῶν δι' ἐπιθυμίαν καὶ θυμόν, ἢ τὰ καλὰ μὲν ἐκουσίως τὰ δ' αἰσχροὶ ἀκουσίως; ἢ γελοῖον ἐνός γε αἰτίου ὄντος; ἄτοπον δὲ ἴσως [30] ἀκούσια φάναι ὧν δεῖ ὀρέγεσθαι· δεῖ δὲ καὶ ὀργίζεσθαι ἐπὶ τισι καὶ ἐπιθυμεῖν τινῶν, οἷον ὑγιείας καὶ μαθήσεως. δοκεῖ δὲ καὶ τὰ μὲν ἀκούσια λυπηρὰ εἶναι, τὰ δὲ κατ' ἐπιθυμίαν ἡδέα. ἔτι δὲ τί διαφέρει τῷ ἀκούσια εἶναι τὰ κατὰ λογισμὸν ἢ θυμὸν ἀμαρτηθέντα; φευκτὰ μὲν γὰρ ἅμφω, 1111b [1] δοκεῖ δὲ οὐχ ἦττον ἀνθρωπικὰ εἶναι τὰ ἄλογα πάθη, ὥστε καὶ αἱ πράξεις τοῦ ἀνθρώπου <αἱ> ἀπὸ θυμοῦ καὶ ἐπιθυμίας. ἄτοπον δὲ τὸ τιθέναι ἀκούσια ταῦτα.

διωρισμένων δὲ τοῦ τε ἐκουσίου καὶ τοῦ ἀκουσίου, [5] περὶ προαιρέσεως ἔπεται διελθεῖν· οἰκειότατον γὰρ εἶναι δοκεῖ τῇ ἀρετῇ καὶ μᾶλλον τὰ ἥθη κρίνειν τῶν πράξεων.

ἡ προαίρεσις δὲ ἐκούσιον μὲν φαίνεται, οὐ ταῦτόν δέ, ἀλλ' ἐπὶ πλεον τὸ ἐκούσιον· τοῦ μὲν γὰρ ἐκουσίου καὶ παῖδες καὶ τᾶλλα ζῶα κοινωνεῖ, προαιρέσεως δ' οὐ, καὶ τὰ ἐξαίφνης [10] ἐκούσια μὲν λέγομεν, κατὰ προαίρεσιν δ' οὐ.

οἱ δὲ λέγοντες αὐτὴν ἐπιθυμίαν ἢ θυμὸν ἢ βούλησιν ἢ τινα δόξαν οὐκ εἰκόασιν ὀρθῶς λέγειν. οὐ γὰρ κοινὸν ἢ προαίρεσις καὶ τῶν ἀλόγων, ἐπιθυμία δὲ καὶ θυμός. καὶ ὁ ἀκρατὴς ἐπιθυμῶν μὲν πράττει, προαιρούμενος

δ' οὐ· ὁ ἐγκρατὴς δ' ἀνάπαλιν [15] προαιρούμενος μὲν, ἐπιθυμῶν δ' οὐ. καὶ προαιρέσει μὲν ἐπιθυμία ἐναντιοῦται, ἐπιθυμία δ' ἐπιθυμία οὐ. καὶ ἡ μὲν ἐπιθυμία ἡδέος καὶ ἐπιλύπου, ἡ προαίρεσις δ' οὔτε λυπηροῦ οὔθ' ἡδέος.

θυμὸς δ' ἔτι ἥττον· ἥκιστα γὰρ τὰ διὰ θυμὸν κατὰ προαίρεσιν εἶναι δοκεῖ.

ἀλλὰ μὴν οὐδὲ βούλησις [20] γε, καίπερ σύνεγγυς φαινόμενον· προαίρεσις μὲν γὰρ οὐκ ἔστι τῶν ἀδυνάτων, καὶ εἴ τις φαίη προαιρεῖσθαι, δοκοίη ἂν ἡλίθιος εἶναι· βούλησις δ' ἔστι <καὶ> τῶν ἀδυνάτων, οἷον ἀθανασίας. καὶ ἡ μὲν βούλησις ἔστι καὶ περὶ τὰ μηδαμῶς δι' αὐτοῦ πραχθέντα ἂν, οἷον ὑποκριτὴν τινα νικᾶν ἢ ἀθλητὴν· [25] προαιρεῖται δὲ τὰ τοιαῦτα οὐδεὶς, ἀλλ' ὅσα οἴεται γενέσθαι ἂν δι' αὐτοῦ. ἔτι δ' ἡ μὲν βούλησις τοῦ τέλους ἔστι μᾶλλον, ἡ δὲ προαίρεσις τῶν πρὸς τὸ τέλος, οἷον ὑγιαίνειν βουλόμεθα, προαιρούμεθα δὲ δι' ὧν ὑγιανοῦμεν, καὶ εὐδαιμονεῖν βουλόμεθα μὲν καὶ φαμέν, προαιρούμεθα δὲ λέγειν οὐχ ἀρμόζει· ὅλως [30] γὰρ ἔοικεν ἡ προαίρεσις περὶ τὰ ἐφ' ἡμῖν εἶναι.

οὐδὲ δὴ δόξα ἂν εἴη· ἡ μὲν γὰρ δόξα δοκεῖ περὶ πάντα εἶναι, καὶ οὐδὲν ἥττον περὶ τὰ αἰδία καὶ τὰ ἀδύνατα ἢ τὰ ἐφ' ἡμῖν· καὶ τῷ ψευδεῖ καὶ ἀληθεῖ διαίρεται, οὐ τῷ κακῷ καὶ ἀγαθῷ, ἡ προαίρεσις δὲ τούτοις μᾶλλον.

1112a [1] ὅλως μὲν οὖν δόξη ταῦτόν ἴσως οὐδὲ λέγει οὐδεὶς. ἀλλ' οὐδὲ τινί· τῷ γὰρ προαιρεῖσθαι τάγαθὰ ἢ τὰ κακὰ ποιοῖ τινὲς ἔσμεν, τῷ δὲ δοξάζειν οὐ. καὶ προαιρούμεθα μὲν λαβεῖν ἢ φυγεῖν [ἢ] τι τῶν τοιούτων, δοξάζομεν δὲ τί ἔστιν ἢ τίτι συμφέρει ἢ πῶς· [5] λαβεῖν δ' ἢ φυγεῖν οὐ πάνυ δοξάζομεν. καὶ ἡ μὲν προαίρεσις ἐπαινεῖται τῷ εἶναι οὐ δεῖ μᾶλλον ἢ τῷ ὀρθῶς, ἡ δὲ δόξα τῷ ὡς ἀληθῶς. καὶ προαιρούμεθα μὲν ἃ μάλιστα ἴσμεν ἀγαθὰ ὄντα, δοξάζομεν δὲ ἃ οὐ πάνυ ἴσμεν· δοκοῦσι δὲ οὐχ οἱ αὐτοὶ προαιρεῖσθαι τε ἄριστα καὶ

δοξάζειν, ἀλλ' [10] ἔνιοι δοξάζειν μὲν ἄμεινον, διὰ κακίαν δ' αἰρεῖσθαι οὐχ ἂν δεῖ. εἰ δὲ προγίνεται δόξα τῆς προαιρέσεως ἢ παρακολουθεῖ, οὐδὲν διαφέρει· οὐ τοῦτο γὰρ σκοποῦμεν, ἀλλ' εἰ ταῦτόν ἐστι δόξη τινί. τί οὖν ἢ ποῖόν τι ἐστίν, ἐπειδὴ τῶν εἰρημένων οὐθέν; ἐκούσιον μὲν δὴ φαίνεται, τὸ δ' ἐκούσιον οὐ πᾶν προαιρετόν. [15] ἀλλ' ἄρά γε τὸ προβεβουλευμένον; ἢ γὰρ προαίρεσις μετὰ λόγου καὶ διανοίας. ὑποσημαίνειν δ' ἔοικε καὶ τοῦνομα ὡς ὃν πρὸ ἑτέρων αἰρετόν.

βουλευόνται δὲ πότερον περὶ πάντων, καὶ πᾶν βουλευτόν ἐστιν, ἢ περὶ ἐνίων οὐκ ἔστι βουλή; λεκτέον δ' ἴσως βουλευτόν [20] οὐχ ὑπὲρ οὗ βουλευσάιτ' ἂν τις ἡλίθιος ἢ μαινόμενος, ἀλλ' ὑπὲρ ὧν ὁ νοῦν ἔχων. περὶ δὴ τῶν αἰδίων οὐδεὶς βουλεύεται, οἷον περὶ τοῦ κόσμου ἢ τῆς διαμέτρου καὶ τῆς πλευρᾶς, ὅτι ἀσύμμετροι. ἀλλ' οὐδὲ περὶ τῶν ἐν κινήσει, ἀεὶ δὲ κατὰ ταῦτ' ἀγνομένων, εἴτ' ἐξ ἀνάγκης εἴτε καὶ [25] φύσει ἢ διὰ τινα αἰτίαν ἄλλην, οἷον τροπῶν καὶ ἀνατολῶν. οὐδὲ περὶ τῶν ἄλλοτε ἄλλως, οἷον αὐχμῶν καὶ ὄμβρων. οὐδὲ περὶ τῶν ἀπὸ τύχης, οἷον θησαυροῦ εὐρέσεως. ἀλλ' οὐδὲ περὶ τῶν ἀνθρωπίνων ἀπάντων, οἷον πῶς ἂν Σκύθαι ἄριστα πολιτεύοντο οὐδεὶς Λακεδαιμονίων βουλεύεται. [30] οὐ γὰρ γένοιτ' ἂν τούτων οὐθέν δι' ἡμῶν. βουλευόμεθα δὲ περὶ τῶν ἐφ' ἡμῖν καὶ πρακτῶν· ταῦτα δὲ καὶ ἔστι λοιπὰ. αἰτίαι γὰρ δοκοῦσιν εἶναι φύσις καὶ ἀνάγκη καὶ τύχη, ἔτι δὲ νοῦς καὶ πᾶν τὸ δι' ἀνθρώπου. τῶν δ' ἀνθρώπων ἕκαστοι βουλεύονται περὶ τῶν δι' αὐτῶν πρακτῶν. 1112b [1] καὶ περὶ μὲν τὰς ἀκριβεῖς καὶ αὐτάρκεις τῶν ἐπιστημῶν οὐκ ἔστι βουλή, οἷον περὶ γραμμάτων (οὐ γὰρ διστάζομεν πῶς γραπτέον)· ἀλλ' ὅσα γίνεται δι' ἡμῶν, μὴ ὡσαύτως δ' αἰεὶ, περὶ τούτων βουλευόμεθα, οἷον περὶ τῶν κατ' ἰατρικὴν καὶ χρηματιστικὴν, [5] καὶ περὶ κυβερνητικὴν μᾶλλον ἢ γυμναστικὴν, ὅσῳ ἥττον διηκρίβωται, καὶ ἔτι περὶ τῶν λοιπῶν ὁμοίως, μᾶλλον δὲ καὶ περὶ τὰς τέχνας ἢ τὰς ἐπιστήμας· μᾶλλον γὰρ περὶ ταύτας διστάζομεν. τὸ βουλευέσθαι δὲ ἐν τοῖς ὡς ἐπὶ τὸ πολὺ, ἀδήλοις δὲ πῶς ἀποβήσεται, καὶ ἐν οἷς ἀδιόριστον. [10] συμβούλους δὲ παραλαμβάνομεν εἰς τὰ μεγάλα, ἀπιστοῦντες ἡμῖν αὐτοῖς ὡς οὐχ ἱκανοῖς διαγνῶναι. βουλευόμεθα δ' οὐ περὶ τῶν τελῶν ἀλλὰ περὶ τῶν πρὸς τὰ τέλη. οὔτε γὰρ ἰατρὸς βουλεύεται εἰ ὑγιᾶσει, οὔτε ῥήτωρ εἰ πείσει, οὔτε πολιτικὸς εἰ εὐνομίαν ποιήσει, οὐδὲ τῶν λοιπῶν οὐδεὶς [15] περὶ τοῦ τέλους· ἀλλὰ θέμενοι τὸ τέλος τὸ πῶς καὶ διὰ τίνων ἔσται σκοποῦσι· καὶ διὰ πλειόνων μὲν φαινομένου γίνεσθαι διὰ τίνος ῥᾶστα καὶ κάλλιστα ἐπισκοποῦσι, δι' ἐνὸς δ' ἐπιτελουμένου πῶς διὰ τούτου ἔσται κάκεῖνο διὰ τίνος, ἕως ἂν ἔλθωσιν ἐπὶ

τὸ πρῶτον αἷτιον, ὃ ἐν τῇ εὐρέσει ἔσχατόν [20] ἐστίν. ὁ γὰρ βουλευόμενος ἔοικε ζητεῖν καὶ ἀναλύειν τὸν εἰρημένον τρόπον ὥσπερ διάγραμμα (φαίνεται δ' ἢ μὲν ζήτησις οὐ πᾶσα εἶναι βούλευσις, οἷον αἱ μαθηματικά, ἢ δὲ βούλευσις πᾶσα ζήτησις), καὶ τὸ ἔσχατον ἐν τῇ ἀναλύσει πρῶτον εἶναι ἐν τῇ γενέσει. κἂν μὲν ἀδυνάτῳ ἐντύχωσιν, [25] ἀφίστανται, οἷον εἰ χρημάτων δεῖ, ταῦτα δὲ μὴ οἷόν τε πορισθῆναι· ἐὰν δὲ δυνατόν φαίνεται, ἐγχειροῦσι πράττειν. δυνατόν δὲ ἂν δι' ἡμῶν γένοιτ' ἂν· τὰ γὰρ διὰ τῶν φίλων δι' ἡμῶν πῶς ἐστίν· ἢ γὰρ ἀρχὴ ἐν ἡμῖν. ζητεῖται δ' ὅτε μὲν τὰ ὄργανα ὅτε δ' ἢ χρεῖα αὐτῶν· [30] ὁμοίως δὲ καὶ ἐν τοῖς λοιποῖς ὅτε μὲν δι' οὐ ὅτε δὲ πῶς ἢ διὰ τίνος. ἔοικε δὴ, καθάπερ εἴρηται, ἄνθρωπος εἶναι ἀρχὴ τῶν πράξεων· ἢ δὲ βουλὴ περὶ τῶν αὐτῶν πρακτῶν, αἱ δὲ πράξεις ἄλλων ἔνεκα. οὐ γὰρ ἂν εἴη βουλευτὸν τὸ τέλος ἀλλὰ τὰ πρὸς τὰ τέλη· οὐδὲ δὴ τὰ καθ' ἕκαστα, 1113a [1] οἷον εἰ ἄρτος τοῦτο ἢ πέπεπται ὥς δεῖ· αἰσθήσεως γὰρ ταῦτα. εἰ δὲ ἀεὶ βουλεύσεται, εἰς ἄπειρον ἥξει. βουλευτὸν δὲ καὶ προαιρετὸν τὸ αὐτό, πλὴν ἀφωρισμένον ἤδη τὸ προαιρετόν· τὸ γὰρ ἐκ τῆς βουλῆς κριθέν προαιρετόν [5] ἐστίν. παύεται γὰρ ἕκαστος ζητῶν πῶς πράξει, ὅταν εἰς αὐτὸν ἀναγάγῃ τὴν ἀρχήν, καὶ αὐτοῦ εἰς τὸ ἡγούμενον· τοῦτο γὰρ τὸ προαιρούμενον. δῆλον δὲ τοῦτο καὶ ἐκ τῶν ἀρχαίων πολιτειῶν, ἃς Ὅμηρος ἐμμεῖτο· οἱ γὰρ βασιλεῖς ἂν προείλοντο ἀνήγγελλον τῷ δήμῳ. ὄντος δὲ τοῦ [10] προαιρετοῦ βουλευτοῦ ὀρεκτοῦ τῶν ἐφ' ἡμῖν, καὶ ἡ προαίρεσις ἂν εἴη βουλευτικὴ ὄρεξις τῶν ἐφ' ἡμῖν· ἐκ τοῦ βουλεύσασθαι γὰρ κρίναντες ὀρεγόμεθα κατὰ τὴν βούλευσιν. ἢ μὲν οὖν προαίρεσις τύπῳ εἰρήσθω, καὶ περὶ ποῖά ἐστι καὶ ὅτι τῶν πρὸς τὰ τέλη.

[15] ἢ δὲ βούλησις ὅτι μὲν τοῦ τέλους ἐστὶν εἴρηται, δοκεῖ δὲ τοῖς μὲν τάγαθοῦ εἶναι, τοῖς δὲ τοῦ φαινομένου ἀγαθοῦ. συμβαίνει δὲ τοῖς μὲν [τὸ] βουλευτὸν τάγαθόν λέγουσι μὴ εἶναι βουλευτὸν ὃ βούλεται ὃ μὴ ὀρθῶς αἰρούμενος (εἰ γὰρ ἔσται βουλευτόν, καὶ ἀγαθόν· ἦν δ', εἰ οὕτως ἔτυχε, κακόν), [20] τοῖς δ' αὖ τὸ φαινόμενον ἀγαθὸν βουλευτὸν λέγουσι μὴ εἶναι φύσει βουλευτόν, ἀλλ' ἐκάστῳ τὸ δοκοῦν· ἄλλο δ' ἄλλῳ φαίνεται, καὶ εἰ οὕτως ἔτυχε, τάναντία. εἰ δὲ δὴ ταῦτα μὴ ἀρέσκει, ἄρα φατέον ἀπλῶς μὲν καὶ κατ' ἀλήθειαν βουλευτὸν εἶναι τάγαθόν, ἐκάστῳ δὲ τὸ φαινόμενον; [25] τῷ μὲν οὖν σπουδαίῳ τὸ κατ' ἀλήθειαν εἶναι, τῷ δὲ φαύλῳ τὸ τυχόν, ὥσπερ καὶ ἐπὶ τῶν σωμάτων τοῖς μὲν εὖ διακειμένοις ὑγιεινά ἐστι τὰ κατ' ἀλήθειαν τοιαῦτα ὄντα, τοῖς δ' ἐπινόσοις ἕτερα, ὁμοίως δὲ καὶ πικρὰ καὶ γλυκέα καὶ θερμὰ καὶ βαρέα καὶ τῶν ἄλλων ἕκαστα· ὁ σπουδαῖος γὰρ [30] ἕκαστα κρίνει

ὀρθῶς, καὶ ἐν ἐκάστοις τάληθές αὐτῷ φαίνεται. καθ' ἐκάστην γὰρ ἕξιν ἰδιά ἐστι καλὰ καὶ ἡδέα, καὶ διαφέρει πλεῖστον ἴσως ὁ σπουδαῖος τῷ τάληθές ἐν ἐκάστοις ὀρᾶν, ὥσπερ κανὼν καὶ μέτρον αὐτῶν ὦν. ἐν τοῖς πολλοῖς δὲ ἡ ἀπάτη διὰ τὴν ἡδονὴν ἔοικε γίνεσθαι· οὐ γὰρ οὕσα ἀγαθὸν φαίνεται. 1113b [1] αἰροῦνται οὖν τὸ ἡδὺ ὡς ἀγαθόν, τὴν δὲ λύπην ὡς κακὸν φεύγουσιν. ὄντος δὲ βουλευτοῦ μὲν τοῦ τέλους, βουλευτῶν δὲ καὶ προαιρετῶν τῶν πρὸς τὸ τέλος, αἱ περὶ ταῦτα πράξεις [5] κατὰ προαίρεσιν ἂν εἶεν καὶ ἐκούσιοι. αἱ δὲ τῶν ἀρετῶν ἐνέργειαι περὶ ταῦτα. ἐφ' ἡμῖν δὲ καὶ ἡ ἀρετή, ὁμοίως δὲ καὶ ἡ κακία. ἐν οἷς γὰρ ἐφ' ἡμῖν τὸ πράττειν, καὶ τὸ μὴ πράττειν, καὶ ἐν οἷς τὸ μὴ, καὶ τὸ ναί· ὥστ' εἰ τὸ πράττειν καλὸν ὃν ἐφ' ἡμῖν ἐστί, καὶ τὸ μὴ πράττειν ἐφ' ἡμῖν [10] ἔσται αἰσχροὺς ὃν, καὶ εἰ τὸ μὴ πράττειν καλὸν ὃν ἐφ' ἡμῖν, καὶ τὸ πράττειν αἰσχροὺς ὃν ἐφ' ἡμῖν. εἰ δ' ἐφ' ἡμῖν τὰ καλὰ πράττειν καὶ τὰ αἰσχρά, ὁμοίως δὲ καὶ τὸ μὴ πράττειν, τοῦτο δ' ἦν τὸ ἀγαθοῖς καὶ κακοῖς εἶναι, ἐφ' ἡμῖν ἄρα τὸ ἐπαικέσι καὶ φαύλοις εἶναι. τὸ δὲ λέγειν ὡς οὐδεὶς ἐκῶν [15] πονηρὸς οὐδ' ἄκων μακάριος ἔοικε τὸ μὲν ψευδεῖ τὸ δ' ἀληθεῖ· μακάριος μὲν γὰρ οὐδεὶς ἄκων, ἡ δὲ μοχθηρία ἐκούσιον. ἡ τοῖς γε νῦν εἰρημένοις ἀμφισβητητέον, καὶ τὸν ἄνθρωπον οὐ φατέον ἀρχὴν εἶναι οὐδὲ γεννητὴν τῶν πράξεων ὥσπερ καὶ τέκνων. εἰ δὲ ταῦτα φαίνεται καὶ μὴ ἔχομεν [20] εἰς ἄλλας ἀρχὰς ἀναγαγεῖν παρὰ τὰς ἐν ἡμῖν, ὦν καὶ αἱ ἀρχαὶ ἐν ἡμῖν, καὶ αὐτὰ ἐφ' ἡμῖν καὶ ἐκούσια. τούτοις δ' ἔοικε μαρτυρεῖσθαι καὶ ἰδίᾳ ὑφ' ἐκάστων καὶ ὑπ' αὐτῶν τῶν νομοθετῶν· κολάζουσι γὰρ καὶ τιμωροῦνται τοὺς δρῶντας μοχθηρά, ὅσοι μὴ βία ἢ δι' ἄγνοιαν ἥς μὴ αὐτοὶ [25] αἵτιοι, τοὺς δὲ τὰ καλὰ πράττοντας τιμῶσιν, ὡς τοὺς μὲν προτρέφοντες τοὺς δὲ κωλύσοντες. καίτοι ὅσα μήτ' ἐφ' ἡμῖν ἐστὶ μήθ' ἐκούσια, οὐδεὶς προτρέπεται πράττειν, ὡς οὐδὲν πρὸ ἔργου ὃν τὸ πεισθῆναι μὴ θερμαίνεσθαι ἢ ἀλγεῖν ἢ πεινῆν ἢ ἄλλ' ὅτιοῦν τῶν τοιούτων· οὐθὲν γὰρ ἦττον πεισόμεθα [30] αὐτά. καὶ γὰρ ἐπ' αὐτῷ τῷ ἀγνοεῖν κολάζουσιν, ἐὰν αἷτιος εἶναι δοκῇ τῆς ἀγνοίας, οἷον τοῖς μεθούουσι διπλᾶ τὰ ἐπιτίμια· ἡ γὰρ ἀρχὴ ἐν αὐτῷ· κύριος γὰρ τοῦ μὴ μεθυσθῆναι, τοῦτο δ' αἷτιον τῆς ἀγνοίας. καὶ τοὺς ἀγνοοῦντάς τι τῶν ἐν τοῖς νόμοις, ἃ δεῖ ἐπίστασθαι καὶ μὴ χαλεπά ἐστι, 1114a [1] κολάζουσιν, ὁμοίως δὲ καὶ ἐν τοῖς ἄλλοις, ὅσα δι' ἀμέλειαν ἀγνοεῖν δοκοῦσιν, ὡς ἐπ' αὐτοῖς ὃν τὸ μὴ ἀγνοεῖν· τοῦ γὰρ ἐπιμεληθῆναι κύριοι. ἀλλ' ἴσως τοιοῦτός ἐστιν ὥστε μὴ ἐπιμεληθῆναι. ἀλλὰ τοῦ τοιούτους γενέσθαι αὐτοὶ αἷτιοι [5] ζῶντες ἀνειμένως, καὶ τοῦ ἀδίκους ἢ ἀκολάστους εἶναι, οἱ μὲν κακουργοῦντες, οἱ δὲ ἐν πότοις καὶ τοῖς τοιούτοις διάγοντες· αἱ γὰρ περὶ ἕκαστα ἐνέργειαι τοιούτους ποιοῦσιν. τοῦτο δὲ δῆλον ἐκ τῶν μελετώντων πρὸς ἡντινοῦν ἀγωνίαν ἢ πρᾶξιν· διατελοῦσι γὰρ ἐνεργοῦντες. τὸ μὲν οὖν ἀγνοεῖν ὅτι ἐκ τοῦ [10] ἐνεργεῖν περὶ ἕκαστα αἱ ἕξεις γίνονται, κομιδῇ ἀναισθήτου. ἔτι δ' ἄλογον τὸν ἀδικοῦντα μὴ βούλεσθαι ἄδικον εἶναι

ἢ τὸν ἀκολασταίνοντα ἀκόλαστον. εἰ δὲ μὴ ἀγνοῶν τις πράττει ἐξ ὧν ἔσται ἄδικος, ἐκὼν ἄδικος ἂν εἴη, οὐ μὴν ἐάν γε βούληται, ἄδικος ὧν παύσεται καὶ ἔσται δίκαιος. οὐδὲ γὰρ [15] ὁ νοσῶν ὑγίης. καὶ εἰ οὕτως ἔτυχεν, ἐκὼν νοσεῖ, ἀκρατῶς βιοτεύων καὶ ἀπειθῶν τοῖς ἰατροῖς. τότε μὲν οὖν ἐξῆν αὐτῷ μὴ νοσεῖν, προεμένῳ δ' οὐκέτι, ὥσπερ οὐδ' ἀφέντι λίθον ἔτ' αὐτὸν δυνατὸν ἀναλαβεῖν. ἀλλ' ὅμως ἐπ' αὐτῷ τὸ βαλεῖν [καὶ ῥῖψαι]. ἡ γὰρ ἀρχὴ ἐν αὐτῷ. οὕτω δὲ καὶ τῷ ἀδίκῳ [20] καὶ τῷ ἀκολάστῳ ἐξ ἀρχῆς μὲν ἐξῆν τοιούτοις μὴ γενέσθαι, διὸ ἐκόντες εἰσίν· γενομένοις δ' οὐκέτι ἔστι μὴ εἶναι. οὐ μόνον δ' αἱ τῆς ψυχῆς κακίαι ἐκούσιοί εἰσιν, ἀλλ' ἐνίοις καὶ αἱ τοῦ σώματος, οἷς καὶ ἐπιτιμῶμεν. τοῖς μὲν γὰρ διὰ φύσιν αἰσχροῖς οὐδεὶς ἐπιτιμᾷ, τοῖς δὲ δι' ἀγυμνασίαν καὶ [25] ἀμέλειαν. ὁμοίως δὲ καὶ περὶ ἀσθένειαν καὶ πῆρῳσιν· οὐθεὶς γὰρ ἂν ὀνειδίσειε τυφλῷ φύσει ἢ ἐκ νόσου ἢ ἐκ πληγῆς, ἀλλὰ μᾶλλον ἐλεῆσαι. τῷ δ' ἐξ οἰνοφλυγίας ἢ ἄλλης ἀκολασίας πᾶς ἂν ἐπιτιμήσῃ. τῶν δὲ περὶ τὸ σῶμα κακιῶν αἱ ἐφ' ἡμῖν ἐπιτιμῶνται, αἱ δὲ μὴ ἐφ' ἡμῖν οὐ. εἰ [30] δ' οὕτω, καὶ ἐπὶ τῶν ἄλλων αἱ ἐπιτιμώμεναι τῶν κακιῶν ἐφ' ἡμῖν ἂν εἴεν. εἰ δέ τις λέγοι ὅτι πάντες ἐφίενται τοῦ φαινομένου ἀγαθοῦ, τῆς δὲ φαντασίας οὐ κύριοι, 1114b [1] ἀλλ' ὁποῖός ποθ' ἕκαστός ἐστι, τοιοῦτο καὶ τὸ τέλος φαίνεται αὐτῷ· εἰ μὲν οὖν ἕκαστος ἐαυτῷ τῆς ἕξεως ἐστὶ πῶς αἷτιος, καὶ τῆς φαντασίας ἔσται πῶς αὐτὸς αἷτιος· εἰ δὲ μή, οὐθεὶς αὐτῷ αἷτιος τοῦ κακοποιεῖν, ἀλλὰ δι' ἄγνοιαν τοῦ τέλους ταῦτα [5] πράττει, διὰ τούτων οἰόμενος αὐτῷ τὸ ἄριστον ἔσεσθαι, ἡ δὲ τοῦ τέλους ἕφεσις οὐκ αὐθαίρετος, ἀλλὰ φῦναι δεῖ ὥσπερ ὄψιν ἔχοντα, ἣ κρινεῖ καλῶς καὶ τὸ κατ' ἀλήθειαν ἀγαθὸν αἰρήσεται, καὶ ἔστιν εὐφυῆς ὥ τοῦτο καλῶς πέφυκεν· τὸ γὰρ μέγιστον καὶ κάλλιστον, καὶ ὃ παρ' ἑτέρου μὴ οἷόν [10] τε λαβεῖν μηδὲ μαθεῖν, ἀλλ' οἷον ἔφυ τοιοῦτον ἔξει, καὶ τὸ εὖ καὶ τὸ καλῶς τοῦτο πεφυκέναι ἢ τελεία καὶ ἀληθινῇ ἂν εἴη εὐφυῖα. εἰ δὲ ταῦτ' ἐστὶν ἀληθῆ, τί μᾶλλον ἢ ἀρετὴ τῆς κακίας ἔσται ἐκούσιον; ἀμφοῖν γὰρ ὁμοίως, τῷ ἀγαθῷ καὶ τῷ κακῷ, τὸ τέλος φύσει ἢ ὁπωσδήποτε φαίνεται [15] καὶ κεῖται, τὰ δὲ λοιπὰ πρὸς τοῦτο ἀναφέροντες πράττουσιν ὁπωσδήποτε. εἴτε δὲ τὸ τέλος μὴ φύσει ἐκάστω φαίνεται οἷονδήποτε, ἀλλὰ τι καὶ παρ' αὐτὸν ἐστίν, εἴτε τὸ μὲν τέλος φυσικόν, τῷ δὲ τὰ λοιπὰ πράττειν ἐκουσίως τὸν σπουδαῖον ἢ ἀρετὴ ἐκούσιόν ἐστίν, οὐθὲν ἦττον καὶ ἡ κακία [20] ἐκούσιον ἂν εἴη· ὁμοίως γὰρ καὶ τῷ κακῷ ὑπάρχει τὸ δι' αὐτὸν ἐν ταῖς πράξεσι καὶ εἰ μὴ ἐν τῷ τέλει. εἰ οὖν, ὥσπερ λέγεται, ἐκούσιοί εἰσιν αἱ ἀρεταί (καὶ γὰρ τῶν ἕξεων συναίτιοί πῶς αὐτοὶ ἐσμεν, καὶ τῷ ποιοῖ τινες εἶναι τὸ τέλος τοιόνδε τιθέμεθα), καὶ αἱ κακίαι ἐκούσιοι ἂν εἴεν· [25] ὁμοίως γάρ. κοινῇ μὲν οὖν περὶ τῶν ἀρετῶν εἴρηται ἡμῖν τό τε γένος τύπῳ, ὅτι μεσότητές εἰσιν καὶ ὅτι ἕξεις, ὑφ' ὧν τε γίνονται, ὅτι τούτων πρακτικαὶ <καὶ> καθ' αὐτάς, καὶ ὅτι



ἐφ' ἡμῖν καὶ ἐκούσιοι, καὶ οὕτως ὡς ἂν ὁ ὀρθὸς λόγος [30] προστάξῃ. οὐχ ὁμοίως δὲ αἱ πράξεις ἐκούσιοί εἰσι καὶ αἱ ἕξεις· τῶν μὲν γὰρ πράξεων ἀπ' ἀρχῆς μέχρι τοῦ τέλους κύριοι ἐσμεν, εἰδότες τὰ καθ' ἕκαστα, τῶν ἕξεων δὲ τῆς ἀρχῆς, 1115a [1] καθ' ἕκαστα δὲ ἢ πρόσθεσις οὐ γνώριμος, ὥσπερ ἐπὶ τῶν ἀρρώστων· ἀλλ' ὅτι ἐφ' ἡμῖν ἦν οὕτως ἢ μὴ οὕτω χρήσασθαι, διὰ τοῦτο ἐκούσιοι. ἀναλαμβάνοντες δὲ περὶ ἐκάστης εἵπωμεν τίνες εἰσὶ καὶ [5] περὶ ποῖα καὶ πῶς· ἅμα δ' ἔσται δῆλον καὶ πόσαι εἰσὶν. καὶ πρῶτον περὶ ἄνδρε

ὅτι μὲν οὖν μεσότης ἐστὶ περὶ φόβους καὶ θάρρη, ἥδη φανερόν γεγένηται· φοβούμεθα δὲ δῆλον ὅτι τὰ φοβερά, ταῦτα δ' ἐστὶν ὡς ἀπλῶς εἰπεῖν κακὰ· διὸ καὶ τὸν φόβον ὀρίζονται προσδοκίαν κακοῦ. [10] φοβούμεθα μὲν οὖν πάντα τὰ κακὰ, οἷον ἀδοξίαν πενίαν νόσον ἀφιλίαν θάνατον, ἀλλ' οὐ περὶ πάντα δοκεῖ ὁ ἀνδρεῖος εἶναι· ἔνια γὰρ καὶ δεῖ φοβεῖσθαι καὶ καλόν, τὸ δὲ μὴ αἰσχρόν, οἷον ἀδοξίαν· ὁ μὲν γὰρ φοβούμενος ἐπεικῆς καὶ αἰδήμων, ὁ δὲ μὴ φοβούμενος ἀναίσχυντος. λέγεται [15] δ' ὑπὸ τινων ἀνδρεῖος κατὰ μεταφοράν· ἔχει γάρ τι ὅμοιον τῷ ἀνδρεῖω· ἄφοβος γάρ τις καὶ ὁ ἀνδρεῖος. πενίαν δ' ἴσως οὐ δεῖ φοβεῖσθαι οὐδὲ νόσον, οὐδ' ὅλως ὅσα μὴ ἀπὸ κακίας μηδὲ δι' αὐτόν. ἀλλ' οὐδ' ὁ περὶ ταῦτα ἄφοβος ἀνδρεῖος. λέγομεν δὲ καὶ τοῦτον καθ' ὁμοιότητα· [20] ἔνιοι γὰρ ἐν τοῖς πολεμικοῖς κινδύνοις δειλοὶ ὄντες ἐλευθέριοι εἰσι καὶ πρὸς χρημάτων ἀποβολὴν εὐθαρσῶς ἔχουσιν. οὐδὲ δὴ εἴ τις ὕβριν περὶ παῖδας καὶ γυναῖκα φοβεῖται ἢ φθόνον ἢ τι τῶν τοιούτων, δειλὸς ἐστίν· οὐδ' εἰ θάρρεῖ μέλλων μαστιγοῦσθαι, ἀνδρεῖος. περὶ ποῖα οὖν τῶν φοβερῶν [25] ὁ ἀνδρεῖος; ἢ περὶ τὰ μέγιστα; οὐθεὶς γὰρ ὑπομενετικώτερος τῶν δεινῶν. φοβερώτατον δ' ὁ θάνατος· πέρας γάρ, καὶ οὐδὲν ἔτι τῷ τεθνεῶτι δοκεῖ οὔτ' ἀγαθὸν οὔτε κακὸν εἶναι. δόξειε δ' ἂν οὐδὲ περὶ θάνατον τὸν ἐν παντὶ ὁ ἀνδρεῖος εἶναι, οἷον ἐν θαλάττῃ ἢ νόσοις. ἐν τίσιν οὖν; ἢ ἐν [30] τοῖς καλλίστοις; τοιοῦτοι δὲ οἱ ἐν πολέμῳ· ἐν μεγίστῳ γὰρ καὶ καλλίστῳ κινδύνῳ. ὁμόλογοι δὲ τούτοις εἰσὶ καὶ αἱ τιμαὶ αἱ ἐν ταῖς πόλεσι καὶ παρὰ τοῖς μονάρχοις. κυρίως δὲ λέγοιτ' ἂν ἀνδρεῖος ὁ περὶ τὸν καλὸν θάνατον ἀδεής, καὶ ὅσα θάνατον ἐπιφέρει ὑπόγυια ὄντα· τοιαῦτα δὲ μάλιστα [35] τὰ κατὰ πόλεμον. οὐ μὴν ἀλλὰ καὶ ἐν θαλάττῃ καὶ ἐν νόσοις ἀδεής ὁ ἀνδρεῖος, 1115b [1] οὐχ οὕτω δὲ ὡς οἱ θαλάττιοι· οἱ μὲν γὰρ ἀπεγνώκασιν τὴν σωτηρίαν καὶ τὸν θάνατον τὸν τοιοῦτον δυσχεραίνουσιν, οἱ δὲ εὐέλπιδες εἰσι παρὰ τὴν ἐμπειρίαν. ἅμα δὲ καὶ ἀνδρίζονται ἐν οἷς ἐστὶν ἀλκὴ [5] ἢ καλὸν τὸ ἀποθανεῖν· ἐν ταῖς τοιαύταις δὲ φθοραῖς οὐδέτερον ὑπάρχει.

τὸ δὲ φοβερὸν οὐ πᾶσι μὲν τὸ αὐτό, λέγομεν δέ τι καὶ ὑπὲρ ἄνθρωπον. τοῦτο μὲν οὖν παντὶ φοβερὸν τῷ γε νοῦν ἔχοντι· τὰ δὲ κατ' ἄνθρωπον διαφέρει μεγέθει καὶ τῷ [10] μᾶλλον καὶ ἥττον· ὁμοίως δὲ καὶ τὰ θαρράλεια. ὁ δὲ ἀνδρεῖος ἀνέκπληκτος ὡς ἄνθρωπος. φοβήσεται μὲν οὖν καὶ τὰ τοιαῦτα, ὡς δεῖ δὲ καὶ ὡς ὁ λόγος ὑπομενεῖ τοῦ καλοῦ ἔνεκα· τοῦτο γὰρ τέλος τῆς ἀρετῆς. ἔστι δὲ μᾶλλον καὶ ἥττον ταῦτα φοβεῖσθαι, καὶ ἔτι τὰ μὴ φοβερὰ ὡς τοιαῦτα [15] φοβεῖσθαι. γίνεται δὲ τῶν ἀμαρτιῶν ἢ μὲν ὅτι <ὁ> οὐ δεῖ, ἢ δὲ ὅτι οὐχ ὡς δεῖ, ἢ δὲ ὅτι οὐχ ὅτε, ἢ τι τῶν τοιούτων· ὁμοίως δὲ καὶ περὶ τὰ θαρράλεια. ὁ μὲν οὖν ἂν δεῖ καὶ οὐ ἔνεκα ὑπομένων καὶ φοβούμενος, καὶ ὡς δεῖ καὶ ὅτε, ὁμοίως δὲ καὶ θαρράων, ἀνδρεῖος· κατ' ἀξίαν γάρ, καὶ ὡς ἂν ὁ λόγος, [20] πάσχει καὶ πράττει ὁ ἀνδρεῖος. τέλος δὲ πάσης ἐνεργείας ἐστὶ τὸ κατὰ τὴν ἔξιν. καὶ τῷ ἀνδρείῳ δὲ ἡ ἀνδρεία καλόν. τοιοῦτον δὲ καὶ τὸ τέλος· ὀρίζεται γὰρ ἕκαστον τῷ τέλει. καλοῦ δὲ ἔνεκα ὁ ἀνδρεῖος ὑπομένει καὶ πράττει τὰ κατὰ τὴν ἀνδρείαν. τῶν δ' ὑπερβαλλόντων ὁ μὲν τῇ ἀφοβίᾳ [25] ἀνώνυμος (εἴρηται δ' ἡμῖν ἐν τοῖς πρότερον ὅτι πολλά ἐστὶν ἀνώνυμα), εἴη δ' ἂν τις μαινόμενος ἢ ἀνάληγτος, εἰ μὴδὲν φοβοῖτο, μήτε σεισμὸν μήτε κύματα, καθάπερ φασὶ τοὺς Κελτούς· ὁ δὲ τῷ θαρρεῖν ὑπερβάλλων περὶ τὰ φοβερὰ θρασὺς. δοκεῖ δὲ καὶ ἀλαζῶν εἶναι ὁ θρασὺς καὶ [30] προσποιητικὸς ἀνδρείας· ὡς γοῦν ἐκεῖνος περὶ τὰ φοβερὰ ἔχει, οὗτος βούλεται φαίνεσθαι· ἐν οἷς οὖν δύναται, μιμεῖται. διὸ καὶ εἰσὶν οἱ πολλοὶ αὐτῶν θρασυδείλοι· ἐν τούτοις γὰρ θρασυνόμενοι τὰ φοβερὰ οὐχ ὑπομένουσιν. ὁ δὲ τῷ φοβεῖσθαι ὑπερβάλλων δειλός· καὶ γὰρ ἂν μὴ δεῖ [35] καὶ ὡς οὐ δεῖ, καὶ πάντα τὰ τοιαῦτα ἀκολουθεῖ αὐτῷ. 1116a [1] ἐλλείπει δὲ καὶ τῷ θαρρεῖν· ἀλλ' ἐν ταῖς λύπαις ὑπερβάλλων μᾶλλον καταφανής ἐστίν. δύσελπις δὲ τις ὁ δειλός· πάντα γὰρ φοβεῖται. ὁ δ' ἀνδρεῖος ἐναντίως· τὸ γὰρ θαρρεῖν εὐέλπιδος. περὶ ταῦτα μὲν οὖν ἐστὶν ὅ τε δειλὸς [5] καὶ ὁ θρασὺς καὶ ὁ ἀνδρεῖος, διαφόρως δ' ἔχουσι πρὸς αὐτά· οἱ μὲν γὰρ ὑπερβάλλουσι καὶ ἐλλείπουσιν, ὁ δὲ μέσως ἔχει καὶ ὡς δεῖ· καὶ οἱ μὲν θρασεῖς προπετεῖς, καὶ βουλόμενοι πρὸ τῶν κινδύνων ἐν αὐτοῖς δ' ἀφίστανται, οἱ δ' ἀνδρεῖοι ἐν τοῖς ἔργοις ὀξεῖς, πρότερον δ' ἡσύχιοι. [10] καθάπερ οὖν εἴρηται, ἡ ἀνδρεία μεσότης ἐστὶ περὶ θαρράλεια καὶ φοβερά, ἐν οἷς εἴρηται, καὶ ὅτι καλὸν αἰρεῖται καὶ ὑπομένει, ἢ ὅτι αἰσχροὺς τὸ μῆ. τὸ δ' ἀποθνήσκειν φεύγοντα πενίαν ἢ ἔρωτα ἢ τι λυπηρὸν οὐκ ἀνδρείου, ἀλλὰ μᾶλλον δειλοῦ· μαλακία γὰρ τὸ φεύγειν τὰ ἐπίπονα, καὶ [15] οὐχ ὅτι καλὸν ὑπομένει, ἀλλὰ φεύγων κακόν.

ἔστι μὲν οὖν ἡ ἀνδρεία τοιοῦτόν τι, λέγονται δὲ καὶ ἕτεραι κατὰ πέντε τρόπους· πρῶτον μὲν ἡ πολιτική· μάλιστα γὰρ ἔοικεν· δοκοῦσι γὰρ ὑπομένειν τοὺς κινδύνους οἱ πολῖται διὰ τὰ ἐκ τῶν νόμων ἐπιτίμια καὶ τὰ ὀνειδή καὶ διὰ τὰς τιμὰς· [20] καὶ διὰ τοῦτο ἀνδρειότατοι δοκοῦσιν εἶναι παρ' οἷς οἱ δειλοὶ ἄτιμοι καὶ οἱ ἀνδρεῖοι ἔντιμοι· τοιούτους δὲ καὶ Ὅμηρος ποιεῖ, οἷον τὸν Διομήδην καὶ τὸν Ἑκτορα·

Πουλυδάμας μοι πρῶτος ἐλεγχεῖν ἀναθήσει·

καὶ [Διομήδης] [25]

Ἑκτωρ γάρ ποτε φήσει ἐνὶ Τρώεσσ' ἀγορεύων

Τυδείδης ὑπ' ἐμεῖο.

ὡμοίωται δ' αὕτη μάλιστα τῇ πρότερον εἰρημένη, ὅτι δι' ἀρετὴν γίνεται· δι' αἰδῶ γὰρ καὶ διὰ καλοῦ ὄρεξιν (τιμῆς γάρ) καὶ φυγὴν ὀνειδούς, αἰσχροῦ ὄντος· τάξαι δ' ἂν τις [30] καὶ τοὺς ὑπὸ τῶν ἀρχόντων ἀναγκαζομένους εἰς ταυτό· χείρους δ', ὅσω οὐ δι' αἰδῶ ἀλλὰ διὰ φόβον αὐτὸ δρῶσι, καὶ φεύγοντες οὐ τὸ αἰσχρὸν ἀλλὰ τὸ λυπηρόν· ἀναγκάζουσι γὰρ οἱ κύριοι, ὥσπερ ὁ Ἑκτωρ

ὄν δέ κ' ἐγὼν ἀπάνευθε μάχης πτώσσοντα νοήσω,

οὗ οἱ ἄρκιον ἐσσεῖται φῶκα καὶ οἱ προστάττοντες, κἂν ἀναχωρῶσι τύπτοντες, τὸ αὐτὸ δρῶσι, 1116b [1] καὶ οἱ πρὸ τῶν τάφρων καὶ τῶν τοιούτων παρατάττοντες· πάντες γὰρ ἀναγκάζουσιν. δεῖ δ' οὐ δι' ἀνάγκην ἀνδρεῖον εἶναι, ἀλλ' ὅτι καλόν. δοκεῖ δὲ καὶ ἡ ἐμπειρία ἢ περὶ ἕκαστα ἀνδρεία εἶναι· ὅθεν καὶ ὁ Σωκράτης ὠήθη [5] ἐπιστήμην εἶναι τὴν ἀνδρείαν. τοιοῦτοι δὲ ἄλλοι μὲν ἐν ἄλλοις, ἐν τοῖς πολεμικοῖς δ' οἱ στρατιῶται· δοκεῖ γὰρ εἶναι πολλὰ κενὰ τοῦ πολέμου, ἃ μάλιστα συνεωράκασιν οὗτοι· φαίνονται δὲ ἀνδρεῖοι, ὅτι οὐκ ἴσασιν οἱ ἄλλοι οἷά ἐστιν. εἴτα ποιῆσαι καὶ μὴ παθεῖν μάλιστα δύνανται ἐκ τῆς ἐμπειρίας, [10] δυνάμενοι χρῆσθαι τοῖς ὅπλοις καὶ τοιαῦτα ἔχοντες ὅποῖα ἂν εἴη καὶ πρὸς τὸ ποιῆσαι καὶ πρὸς τὸ μὴ παθεῖν κράτιστα· ὥσπερ οὖν ἀνόπλοις ὠπλισμένοι μάχονται καὶ ἀθληταὶ ἰδιώταις· καὶ γὰρ ἐν τοῖς τοιούτοις ἀγῶσιν οὐχ οἱ ἀνδρειότατοι μαχιμώτατοί εἰσιν, ἀλλ' οἱ μάλιστα [15] ἰσχύοντες καὶ τὰ σώματα ἄριστα ἔχοντες. οἱ στρατιῶται δὲ δειλοὶ γίνονται, ὅταν ὑπερτείνῃ ὁ κίνδυνος καὶ λείπωνται τοῖς πλήθεσι καὶ ταῖς παρασκευαῖς· πρῶτοι γὰρ φεύγουσι, τὰ δὲ πολιτικὰ μένοντα ἀποθνήσκει, ὅπερ κάπὶ τῷ Ἑρμαίῳ συνέβη. τοῖς μὲν γὰρ αἰσχροὺς τὸ φεύγειν [20] καὶ ὁ θάνατος τῆς τοιαύτης σωτηρίας αἰρετώτερος· οἱ δὲ καὶ ἐξ ἀρχῆς ἐκινδύνευον ὡς κρείττους ὄντες, γνόντες δὲ φεύγουσι, τὸν θάνατον μᾶλλον τοῦ αἰσχροῦ φοβούμενοι· ὁ δ' ἀνδρεῖος οὐ τοιοῦτος. καὶ τὸν θυμὸν δ' ἐπὶ τὴν ἀνδρείαν φέρουσιν· ἀνδρεῖοι γὰρ εἶναι δοκοῦσι καὶ οἱ διὰ θυμὸν [25] ὥσπερ τὰ θηρία ἐπὶ τοὺς τρώσαντας φερόμενα, ὅτι καὶ οἱ ἀνδρεῖοι θυμοειδεῖς· ἱτητικώτατον γὰρ ὁ θυμὸς πρὸς τοὺς κινδύνους, ὅθεν καὶ Ὅμηρος “σθένος ἔμβαλε θυμῷ” καὶ “μένος καὶ θυμὸν ἔγειρε” καὶ “δριμὺν δ' ἀνὰ ῥῖνας μένος” καὶ “ἔξεσεν αἶμα”· πάντα γὰρ τὰ τοιαῦτα ἔοικε σημαίνειν [30] τὴν τοῦ θυμοῦ ἔγερσιν καὶ ὁρμήν. οἱ μὲν οὖν ἀνδρεῖοι διὰ τὸ καλὸν πράττουσιν, ὁ δὲ θυμὸς συνεργεῖ αὐτοῖς· τὰ θηρία δὲ διὰ λύπην· διὰ γὰρ τὸ πληγῆναι ἢ διὰ τὸ φοβεῖσθαι, ἐπεὶ ἐάν γε ἐν ὕλῃ [ἢ ἐν ἔλει] ἦ, οὐ προσέρχονται. οὐ δὲ ἐστὶν ἀνδρεία διὰ τὸ ὑπ' ἀλγηδόνης καὶ θυμοῦ ἐξελαυνόμενα [35] πρὸς τὸν κίνδυνον ὁρμᾶν, οὐθὲν τῶν δεινῶν προσρῶντα, ἐπεὶ οὕτω γε κἂν οἱ ὄνοι ἀνδρεῖοι εἶεν πεινῶντες· τυπτόμενοι γὰρ οὐκ ἀφίστανται τῆς νομῆς· 1117a [1] καὶ οἱ μοιχοὶ δὲ διὰ τὴν ἐπιθυμίαν τολμηρὰ πολλὰ δρῶσιν. [οὐ δὲ ἐστὶν ἀνδρεία τὰ δι' ἀλγηδόνης ἢ θυμοῦ ἐξελαυνόμενα πρὸς τὸν κίνδυνον.] φυσικωτάτη δ' ἔοικεν ἢ διὰ τὸν θυμὸν εἶναι, καὶ προσλαβοῦσα [5] προαίρεσιν καὶ τὸ οὗ ἔνεκα ἀνδρεία εἶναι. καὶ οἱ ἄνθρωποι δὲ ὀργιζόμενοι μὲν ἀλγοῦσι, τιμωρούμενοι δ'

ἥδονται· οἱ δὲ διὰ ταῦτα μαχόμενοι μάχιμοι μὲν, οὐκ ἀνδρεῖοι δέ· οὐ γὰρ διὰ τὸ καλὸν οὐδ' ὥς ὁ λόγος, ἀλλὰ διὰ πάθος· παραπλήσιον δ' ἔχουσι τι. οὐδὲ δὴ οἱ εὐέλπιδες [10] ὄντες ἀνδρεῖοι· διὰ γὰρ τὸ πολλάκις καὶ πολλοὺς νενικηκέναι θάρροῦσιν ἐν τοῖς κινδύνους· παρόμοιοι δέ, ὅτι ἄμφω θάρραλέοι· ἀλλ' οἱ μὲν ἀνδρεῖοι διὰ τὰ πρότερον εἰρημένα θάρραλέοι, οἱ δὲ διὰ τὸ οἴεσθαι κράτιστοι εἶναι καὶ μηθὲν ἂν παθεῖν. τοιοῦτον δὲ ποιοῦσι καὶ οἱ μεθυσκόμενοι· [15] εὐέλπιδες γὰρ γίνονται. ὅταν δὲ αὐτοῖς μὴ συμβῇ τὰ τοιαῦτα, φεύγουσιν· ἀνδρείου δ' ἦν τὰ φοβερά· ἀνθρώπῳ ὄντα καὶ φαινόμενα ὑπομένειν, ὅτι καλὸν καὶ αἰσχρὸν τὸ μή. διὸ καὶ ἀνδρειότερου δοκεῖ εἶναι τὸ ἐν τοῖς αἰφνιδίους φόβοις ἄφοβον καὶ ἀτάραχον εἶναι ἢ ἐν τοῖς προδήλοις· [20] ἀπὸ ἕξεως γὰρ μᾶλλον ἦν, ὅτι ἦττον ἐκ παρασκευῆς· τὰ προφανῆ μὲν γὰρ κἂν ἐκ λογισμοῦ καὶ λόγου τις προέλοιτο, τὰ δ' ἐξαίφνης κατὰ τὴν ἕξιν. ἀνδρεῖοι δὲ φαίνονται καὶ οἱ ἀγνοοῦντες, καὶ εἰσὶν οὐ πόρρω τῶν εὐελπίδων, χεῖρους δ' ὅσω ἀξίωμα οὐδὲν ἔχουσιν, ἐκεῖνοι δέ. διὸ καὶ μένουσί τινα [25] χρόνον· οἱ δ' ἠπατημένοι, ἐὰν γνῶσιν ὅτι ἕτερον ἢ ὑποπτεύσωσι, φεύγουσιν· ὅπερ οἱ Ἀργεῖοι ἔπαθον περιπεσόντες τοῖς Λάκωσιν ὡς Σικυωνίοις. οἳ τε δὴ ἀνδρεῖοι εἴρηνται ποῖοί τινες, καὶ οἱ δοκοῦντες ἀνδρεῖοι. περὶ θάρρη δὲ καὶ φόβους ἡ ἀνδρεία οὕσα οὐχ ὁμοίως [30] περὶ ἄμφω ἐστίν, ἀλλὰ μᾶλλον περὶ τὰ φοβερά· ὁ γὰρ ἐν τούτοις ἀτάραχος καὶ περὶ ταῦθ' ὥς δεῖ ἔχων ἀνδρείος μᾶλλον ἢ ὁ περὶ τὰ θάρραλέα. τῷ δὴ τὰ λυπηρὰ ὑπομένειν, ὥς εἴρηται, ἀνδρεῖοι λέγονται. διὸ καὶ ἐπίλυπον ἢ ἀνδρεία, καὶ δικαίως ἐπαινεῖται· χαλεπώτερον γὰρ τὰ λυπηρὰ [35] ὑπομένειν ἢ τῶν ἡδέων ἀπέχεσθαι. 1117b [1] οὐ μὴν ἀλλὰ δόξειεν ἂν εἶναι τὸ κατὰ τὴν ἀνδρείαν τέλος ἡδύ, ὑπὸ τῶν κύκλῳ δ' ἀφανίζεσθαι, οἷον κἂν τοῖς γυμνικοῖς ἀγῶσι γίνεται· τοῖς γὰρ πύκταις τὸ μὲν τέλος ἡδύ, οὐ ἔνεκα, ὁ στέφανος καὶ αἱ τιμαί, τὸ δὲ τύπτεσθαι ἀλγεινόν, εἴπερ [5] σάρκινος, καὶ λυπηρόν, καὶ πᾶς ὁ πόνος· διὰ δὲ τὸ πολλὰ ταῦτ' εἶναι, μικρὸν ὂν τὸ οὐ ἔνεκα οὐδὲν ἡδὺ φαίνεται ἔχειν. εἰ δὴ τοιοῦτόν ἐστι καὶ τὸ περὶ τὴν ἀνδρείαν, ὁ μὲν θάνατος καὶ τὰ τραύματα λυπηρὰ τῷ ἀνδρείῳ καὶ ἄκοντι ἔσται, ὑπομενεῖ δὲ αὐτὰ ὅτι καλὸν ἢ ὅτι αἰσχρὸν τὸ μή. καὶ [10] ὅσω ἂν μᾶλλον τὴν ἀρετὴν ἔχη πᾶσαν καὶ εὐδαιμονέστερος ἦ, μᾶλλον ἐπὶ τῷ θανάτῳ λυπήσεται· τῷ τοιούτῳ γὰρ μάλιστα ζῆν ἄξιον, καὶ οὗτος μεγίστων ἀγαθῶν ἀποστερεῖται εἰδώς, λυπηρόν δὲ τοῦτο. ἀλλ' οὐδὲν ἦττον ἀνδρείος, ἴσως δὲ καὶ μᾶλλον, ὅτι τὸ ἐν τῷ πολέμῳ καλὸν ἀντ' [15] ἐκείνων αἰρεῖται. οὐ δὴ ἐν ἀπάσαις ταῖς ἀρεταῖς τὸ ἡδέως ἐνεργεῖν ὑπάρχει, πλὴν ἐφ' ὅσον τοῦ τέλους ἐφάπτεται. στρατιώτας δ' οὐδὲν ἴσως κωλύει μὴ τοὺς τοιούτους κρατίστους εἶναι, ἀλλὰ τοὺς ἦττον μὲν ἀνδρείους, ἄλλο δ' ἀγαθὸν μηδὲν ἔχοντας· ἔτοιμοι γὰρ οὗτοι πρὸς τοὺς κινδύνους, καὶ τὸν [20] βίον πρὸς μικρὰ κέρδη καταλλάττονται. περὶ μὲν οὖν ἀνδρείας ἐπὶ τοσοῦτον εἰρήσθω· τί δ' ἐστίν, οὐ χαλεπὸν τύπῳ γε περιλαβεῖν

ἐκ τῶν εἰρημένων.

μετὰ δὲ ταύτην περὶ σωφροσύνης λέγωμεν· δοκοῦσι γὰρ τῶν ἀλόγων μερῶν αὗται εἶναι αἱ ἀρεταί. ὅτι μὲν [25] οὖν μεσότης ἐστὶ περὶ ἡδονᾶς ἢ σωφροσύνη, εἴρηται ἡμῖν· ἦττον γὰρ καὶ οὐχ ὁμοίως ἐστὶ περὶ τὰς λύπας· ἐν τοῖς αὐτοῖς δὲ καὶ ἡ ἀκολασία φαίνεται. περὶ ποίας οὖν τῶν ἡδονῶν, νῦν ἀφορίσωμεν. διηρήσθωσαν δὴ αἱ ψυχικαὶ καὶ αἱ σωματικαί, οἷον φιλοτιμία φιλομάθεια· ἐκάτερος γὰρ [30] τούτων χαίρει, οὗ φιλητικός ἐστίν, οὐδὲν πάσχοντος τοῦ σώματος, ἀλλὰ μᾶλλον τῆς διανοίας· οἱ δὲ περὶ τὰς τοιαύτας ἡδονὰς οὔτε σώφρονες οὔτε ἀκόλαστοι λέγονται. ὁμοίως δ' οὐδ' οἱ περὶ τὰς ἄλλας ὅσαι μὴ σωματικαὶ εἰσιν· τοὺς γὰρ φιλομύθους καὶ διηγητικούς καὶ περὶ τῶν τυχόντων [35] κατατρίβοντας τὰς ἡμέρας ἀδολέσχας, ἀκολάστους δ' οὐ λέγομεν, 1118a [1] οὐδὲ τοὺς λυπουμένους ἐπὶ χρήμασιν ἢ φίλοις. περὶ δὲ τὰς σωματικὰς εἴη ἂν ἡ σωφροσύνη, οὐ πάσας δὲ οὐδὲ ταύτας· οἱ γὰρ χαίροντες τοῖς διὰ τῆς ὄψεως, οἷον χρώμασι καὶ σχήμασι καὶ γραφῇ, οὔτε σώφρονες οὔτε ἀκόλαστοι [5] λέγονται· καίτοι δόξειεν ἂν εἶναι καὶ ὡς δεῖ χαίρειν καὶ τούτοις, καὶ καθ' ὑπερβολὴν καὶ ἑλλειψιν. ὁμοίως δὲ καὶ ἐν τοῖς περὶ τὴν ἀκοήν· τοὺς γὰρ ὑπερβεβλημένως χαίροντας μέλεσιν ἢ ὑποκρίσει οὐθεὶς ἀκολάστους λέγει, οὐδὲ τοὺς ὡς δεῖ σώφρονας. οὐδὲ τοὺς περὶ τὴν ὁσμήν, πλὴν κατὰ [10] συμβεβηκός· τοὺς γὰρ χαίροντας μήλων ἢ ῥόδων ἢ θυμιαμάτων ὁσμαῖς οὐ λέγομεν ἀκολάστους, ἀλλὰ μᾶλλον τοὺς μύρων ἢ ὄψων· χαίρουσι γὰρ τούτοις οἱ ἀκόλαστοι, ὅτι διὰ τούτων ἀνάμνησις γίνεται αὐτοῖς τῶν ἐπιθυμημάτων. ἴδοι δ' ἂν τις καὶ τοὺς ἄλλους, ὅταν πεινῶσι, χαίροντας ταῖς [15] τῶν βρωμάτων ὁσμαῖς· τὸ δὲ τοιούτοις χαίρειν ἀκολάστου· τούτῳ γὰρ ἐπιθυμήματα ταῦτα. οὐκ ἔστι δὲ οὐδ' ἐν τοῖς ἄλλοις ζώοις κατὰ ταύτας τὰς αἰσθήσεις ἡδονὴ πλὴν κατὰ συμβεβηκός. οὐδὲ γὰρ ταῖς ὁσμαῖς τῶν λαγῶν αἱ κύνες χαίρουσιν ἀλλὰ τῇ βρώσει, τὴν δ' αἰσθησιν ἢ ὁσμὴν ἐποίησεν· [20] οὐδ' ὁ λέων τῇ φωνῇ τοῦ βοῦς ἀλλὰ τῇ ἐδωδῇ· ὅτι δ' ἐγγύς ἐστι, διὰ τῆς φωνῆς ἦσθετο, καὶ χαίρειν δὴ ταύτη φαίνεται· ὁμοίως δ' οὐδ' ἰδὼν “ἢ [εὐρύων] ἑλαφον ἢ ἄγριον αἶγα,” ἀλλ' ὅτι βορὰν ἔξει. περὶ τὰς τοιαύτας δ' ἡδονὰς ἢ σωφροσύνη καὶ ἡ ἀκολασία ἐστὶν ὦν καὶ τὰ λοιπὰ [25] ζῶα κοινωνεῖ, ὅθεν ἀνδραποδώδεις καὶ θηριώδεις φαίνονται· αὗται δ' εἰσὶν ἀφῆ καὶ γεῦσις. φαίνονται δὲ καὶ τῇ γεύσει ἐπὶ μικρὸν ἢ οὐθὲν χρῆσθαι· τῆς γὰρ γεύσεως ἐστίν ἡ κρίσις τῶν χυμῶν, ὅπερ ποιοῦσιν οἱ τοὺς οἶνους δοκιμάζοντες καὶ τὰ ὄψα ἀρτύοντες· οὐ πάνυ δὲ χαίρουσι τούτοις, ἢ οὐχ [30] οἱ γε ἀκόλαστοι, ἀλλὰ τῇ ἀπολαύσει, ἢ γίνεται πᾶσα δι' ἀφῆς καὶ ἐν σιτίοις καὶ ἐν ποτοῖς καὶ τοῖς ἀφροδισίοις λεγομένοις. διὸ καὶ ἠὔξατό τις ὀψοφάγος ὦν τὸν φάρυγγα αὐτῷ μακρότερον γεράνου

γενέσθαι, ὡς ἡδόμενος τῇ ἀφῆ. 1118b [1] κοινοτάτη δὴ τῶν αἰσθήσεων καθ' ἣν ἡ ἀκολασία· καὶ δόξειεν ἂν δικαίως ἐπονείδιστος εἶναι, ὅτι οὐχ ἡ ἄνθρωποι ἐσμεν ὑπάρχει, ἀλλ' ἡ ζῶα. τὸ δὴ τοιούτοις χαίρειν καὶ μάλιστα ἀγαπᾶν θηριῶδες. καὶ γὰρ αἱ ἐλευθεριώταται [5] τῶν διὰ τῆς ἀφῆς ἡδονῶν ἀφήρηνται, οἷον αἱ ἐν τοῖς γυμνασίοις διὰ τρίψεως καὶ τῆς θερμασίας γινόμεναι· οὐ γὰρ περὶ πᾶν τὸ σῶμα ἡ τοῦ ἀκολάστου ἀφή, ἀλλὰ περὶ τινα μέρη.

τῶν δ' ἐπιθυμιῶν αἱ μὲν κοιναὶ δοκοῦσιν εἶναι, αἱ δ' ἴδιοι καὶ ἐπίθετοι· οἷον ἡ μὲν τῆς τροφῆς φυσική· [10] πᾶς γὰρ ἐπιθυμεῖ ὁ ἐνδεὴς ξηρᾶς ἢ ὑγρᾶς τροφῆς, ὅτε δὲ ἀμφοῖν, καὶ εὐνῆς, φησὶν Ὅμηρος, ὁ νέος καὶ ἀκμάζων· τὸ δὲ τοιαῦσδε ἢ τοιαῦσδε, οὐκέτι πᾶς, οὐδὲ τῶν αὐτῶν. διὸ φαίνεται ἡμέτερον εἶναι. οὐ μὲν ἄλλ' ἔχει γέ τι καὶ φυσικόν· ἕτερα γὰρ ἑτέροις ἐστὶν ἡδέα, καὶ ἕνια πᾶσιν ἡδίω [15] τῶν τυχόντων. ἐν μὲν οὖν ταῖς φυσικαῖς ἐπιθυμίαις ὀλίγοι ἀμαρτάνουσι καὶ ἐφ' ἑν, ἐπὶ τὸ πλεῖον· τὸ γὰρ ἐσθίειν τὰ τυχόντα ἢ πίνειν ἕως ἂν ὑπερπλησθῇ, ὑπερβάλλειν ἐστὶ τὸ κατὰ φύσιν τῷ πλήθει· ἀναπλήρωσις γὰρ τῆς ἐνδεείας ἡ φυσικὴ ἐπιθυμία. διὸ λέγονται οὗτοι γαστρίμαργοι, ὡς [20] παρὰ τὸ δέον πληροῦντες αὐτήν. τοιοῦτοι δὲ γίνονται οἱ λίαν ἀνδραποδώδεις. περὶ δὲ τὰς ἰδίας τῶν ἡδονῶν πολλοὶ καὶ πολλαχῶς ἀμαρτάνουσιν. τῶν γὰρ φιλοτοιούτων λεγομένων ἢ τῷ χαίρειν οἷς μὴ δεῖ, ἢ τῷ μᾶλλον ἢ ὡς οἱ πολλοί, ἢ μὴ ὡς δεῖ, κατὰ πάντα δ' οἱ ἀκόλαστοι ὑπερβάλλουσιν· [25] καὶ γὰρ χαίρουσιν ἐνίοις οἷς οὐ δεῖ (μισητὰ γάρ), καὶ εἴ τισι δεῖ χαίρειν τῶν τοιούτων, μᾶλλον ἢ δεῖ καὶ ἢ ὡς οἱ πολλοὶ χαίρουσιν. ἡ μὲν οὖν περὶ τὰς ἡδονὰς ὑπερβολὴ ὅτι ἀκολασία καὶ ψεκτόν, δῆλον· περὶ δὲ τὰς λύπας οὐχ ὥσπερ ἐπὶ τῆς ἀνδρείας τῷ ὑπομένειν λέγεται [30] σώφρων οὐδ' ἀκόλαστος τῷ μῇ, ἀλλ' ὁ μὲν ἀκόλαστος τῷ λυπεῖσθαι μᾶλλον ἢ δεῖ ὅτι τῶν ἡδέων οὐ τυγχάνει (καὶ τὴν λύπην δὲ ποιεῖ αὐτῷ ἡ ἡδονή), ὁ δὲ σώφρων τῷ μὴ λυπεῖσθαι τῇ ἀπουσίᾳ καὶ τῷ ἀπέχεσθαι τοῦ ἡδέος. 1119a [1] ὁ μὲν οὖν ἀκόλαστος ἐπιθυμεῖ τῶν ἡδέων πάντων ἢ τῶν μάλιστα, καὶ ἄγεται ὑπὸ τῆς ἐπιθυμίας ὥστε ἀντὶ τῶν ἄλλων ταῦθ' αἰρεῖσθαι· διὸ καὶ λυπεῖται καὶ ἀποτυγχάνων καὶ ἐπιθυμῶν· μετὰ λύπης γὰρ ἡ ἐπιθυμία· ἀτόπῳ [5] δ' ἔοικε τὸ δι' ἡδονὴν λυπεῖσθαι. ἐλλείποντες δὲ τὰ περὶ τὰς ἡδονὰς καὶ ἥττον ἢ δεῖ χαίροντες οὐ πάνυ γίνονται· οὐ γὰρ ἀνθρωπικὴ ἐστὶν ἡ τοιαύτη ἀναισθησία· καὶ γὰρ τὰ λοιπὰ ζῶα διακρίνει τὰ βρώματα, καὶ τοῖς μὲν χαίρει τοῖς δ' οὐ· εἰ δέ τῳ μηδὲν ἐστὶν ἡδὺ μηδὲ διαφέρει ἕτερον ἑτέρου, πόρρῳ [10] ἂν εἴη τοῦ ἄνθρωπος εἶναι· οὐ τέτευχε δ' ὁ τοιοῦτος ὀνόματος διὰ τὸ μὴ

πάνυ γίνεσθαι. ὁ δὲ σώφρων μέσως μὲν περὶ ταῦτ' ἔχει· οὔτε γὰρ ἥδεται οἷς  
μάλιστα ὁ ἀκόλαστος, ἀλλὰ μᾶλλον δυσχεραίνει, οὐδ' ὅλως οἷς μὴ δεῖ οὐδὲ  
σφόδρα τοιούτῳ οὐδενί, οὔτ' ἀπόντων λυπεῖται οὐδ' ἐπιθυμεῖ, ἢ μετρίως,  
οὐδὲ [15] μᾶλλον ἢ δεῖ, οὐδ' ὅτε μὴ δεῖ, οὐδ' ὅλως τῶν τοιούτων οὐδέν·  
ὅσα δὲ πρὸς ὑγίειάν ἐστιν ἢ πρὸς εὐεξίαν ἡδέα ὄντα, τούτων ὀρέζεται μετρίως  
καὶ ὥς δεῖ, καὶ τῶν ἄλλων ἡδέων μὴ ἐμποδίων τούτοις ὄντων ἢ παρὰ τὸ  
καλὸν ἢ ὑπὲρ τὴν οὐσίαν. ὁ γὰρ οὕτως ἔχων μᾶλλον ἀγαπᾷ τὰς τοιαύτας  
ἡδονὰς τῆς [20] ἀξίας· ὁ δὲ σώφρων οὐ τοιοῦτος, ἀλλ' ὥς ὁ ὀρθὸς λόγος.

❖ γέειν κύνας.

❖ ας.



## Βιβλίο 4

λέγωμεν δ' ἐξῆς περὶ ἐλευθεριότητος. δοκεῖ δὴ εἶναι ἢ περὶ χρήματα μεσότης· ἐπαινέεται γὰρ ὁ ἐλευθέριος οὐκ ἐν τοῖς πολεμικοῖς, οὐδ' ἐν οἷς ὁ σὼφρων, οὐδ' αὖ ἐν ταῖς κρίσεσιν, [25] ἀλλὰ περὶ δόσιν χρημάτων καὶ λήψιν, μᾶλλον δ' ἐν τῇ δόσει. χρήματα δὲ λέγομεν πάντα ὅσων ἡ ἀξία νομίσματι μετρεῖται. ἔστι δὲ καὶ ἡ ἀσωτία καὶ ἡ ἀνελευθερία περὶ χρήματα ὑπερβολαὶ καὶ ἐλλείψεις· καὶ τὴν μὲν ἀνελευθερίαν προσάπτομεν ἀεὶ τοῖς μᾶλλον ἢ δεῖ περὶ χρήματα [30] σπουδάζουσι, τὴν δ' ἀσωτίαν ἐπιφέρομεν ἐνίστε συμπλέκοντες· τοὺς γὰρ ἀκρατεῖς καὶ εἰς ἀκολασίαν δαπανηροὺς ἀσώτους καλοῦμεν. διὸ καὶ φαυλότατοι δοκοῦσιν εἶναι· πολλὰς γὰρ ἅμα κακίας ἔχουσιν. οὐ δὴ οἰκείως προσαγορεύονται· βούλεται γὰρ ἄσωτος εἶναι ὁ ἐν κακὸν ἔχων, 1120a [1] τὸ φθείρειν τὴν οὐσίαν· ἄσωτος γὰρ ὁ δι' αὐτὸν ἀπολλύμενος, δοκεῖ δ' ἀπώλειά τις αὐτοῦ εἶναι καὶ ἡ τῆς οὐσίας φθορά, ὡς τοῦ ζῆν διὰ τούτων ὄντος. οὕτω δὴ τὴν ἀσωτίαν ἐκδεχόμεθα. ὦν δ' ἐστὶ χρεῖα, ἔστι τούτοις χρῆσθαι καὶ εὖ καὶ κακῶς. [5] ὁ πλοῦτος δ' ἐστὶ τῶν χρησίμων· ἐκάστω δ' ἄριστα χρῆται ὁ ἔχων τὴν περὶ τοῦτο ἀρετὴν· καὶ πλούτῳ δὴ χρήσεται ἄριστα ὁ ἔχων τὴν περὶ τὰ χρήματα ἀρετὴν· οὗτος δ' ἐστὶν ὁ ἐλευθέριος. χρῆσις δ' εἶναι δοκεῖ χρημάτων δαπάνη καὶ δόσις· ἡ δὲ λήψις καὶ ἡ φυλακὴ κτήσις μᾶλλον. διὸ μᾶλλον [10] ἐστὶ τοῦ ἐλευθερίου τὸ διδόναι οἷς δεῖ ἢ λαμβάνειν ὅθεν δεῖ καὶ μὴ λαμβάνειν ὅθεν οὐ δεῖ. τῆς γὰρ ἀρετῆς μᾶλλον τὸ εὖ ποιεῖν ἢ τὸ εὖ πάσχειν, καὶ τὰ καλὰ πράττειν μᾶλλον ἢ τὰ αἰσχροῖα μὴ πράττειν· οὐκ ἄδηλον δ' ὅτι τῇ μὲν δόσει ἔπεται τὸ εὖ ποιεῖν καὶ τὸ καλὰ πράττειν, τῇ δὲ λήψει [15] τὸ εὖ πάσχειν ἢ μὴ αἰσχροπραγεῖν. καὶ ἡ χάρις τῷ διδόντι, οὐ τῷ μὴ λαμβάνοντι, καὶ ὁ ἔπαινος δὲ μᾶλλον. καὶ ῥᾶον δὲ τὸ μὴ λαβεῖν τοῦ δοῦναι· τὸ γὰρ οἰκεῖον ἦττον προΐενται μᾶλλον ἢ οὐ λαμβάνουσι τὸ ἀλλότριον. καὶ ἐλευθέριοι δὲ λέγονται οἱ διδόντες· οἱ δὲ μὴ λαμβάνοντες οὐκ [20] εἰς ἐλευθεριότητα ἐπαινοῦνται, ἀλλ' οὐχ ἦττον εἰς δικαιοσύνην· οἱ δὲ λαμβάνοντες οὐδ' ἐπαινοῦνται πάνυ. φιλοῦνται δὲ σχεδὸν μάλιστα οἱ ἐλευθέριοι τῶν ἀπ' ἀρετῆς· ὠφέλιμοι γὰρ, τοῦτο δ' ἐν τῇ δόσει. αἱ δὲ κατ' ἀρετὴν πράξεις καλαὶ καὶ τοῦ καλοῦ ἔνεκα. καὶ ὁ ἐλευθέριος οὖν δώσει τοῦ καλοῦ ἔνεκα [25] καὶ ὀρθῶς· οἷς γὰρ δεῖ καὶ ὅσα καὶ ὅτε, καὶ τᾶλλα ὅσα ἔπεται τῇ ὀρθῇ δόσει· καὶ ταῦτα ἡδέως ἢ ἀλύπως· τὸ γὰρ κατ' ἀρετὴν ἢ δὴ ἢ ἄλυπον, ἥκιστα δὲ λυπηρόν. ὁ δὲ διδοὺς οἷς μὴ δεῖ, ἢ μὴ τοῦ καλοῦ ἔνεκα ἀλλὰ διὰ τιν' ἄλλην αἰτίαν, οὐκ ἐλευθέριος ἀλλ' ἄλλος τις ῥηθήσεται. οὐδ' ὁ λυπηρῶς [30] μᾶλλον γὰρ ἔλοιτ' ἂν τὰ χρήματα τῆς καλῆς πράξεως, τοῦτο δ' οὐκ ἐλευθερίου. οὐδὲ λήψεται δὲ ὅθεν μὴ δεῖ· οὐ γὰρ ἐστὶ τοῦ μὴ τιμῶντος τὰ χρήματα ἢ τοιαύτη λήψις. οὐκ ἂν εἴη δὲ οὐδ' αἰτητικός· οὐ γάρ

ἐστὶ τοῦ εὖ ποιοῦντος εὐχερῶς εὐεργετεῖσθαι. ὅθεν δὲ δεῖ, λήψεται, 1120b [1] οἷον ἀπὸ τῶν ἰδίων κτημάτων, οὐχ ὥς καλὸν ἀλλ' ὥς ἀναγκαῖον, ὅπως ἔχη διδόναι. οὐδ' ἀμελήσει τῶν ἰδίων, βουλόμενός γε διὰ τούτων τισὶν ἐπαρκεῖν. οὐδὲ τοῖς τυχοῦσι δώσει, ἵνα ἔχη διδόναι οἷς δεῖ καὶ ὅτε καὶ οὗ καλόν. ἐλευθερίου δ' ἐστὶ [5] σφόδρα καὶ τὸ ὑπερβάλλειν ἐν τῇ δόσει, ὥστε καταλείπειν ἑαυτῷ ἐλάττω· τὸ γὰρ μὴ βλέπειν ἐφ' ἑαυτὸν ἐλευθερίου. κατὰ τὴν οὐσίαν δ' ἡ ἐλευθεριότης λέγεται· οὐ γὰρ ἐν τῷ πλήθει τῶν διδομένων τὸ ἐλευθέριον, ἀλλ' ἐν τῇ τοῦ διδόντος ἔξει, αὕτη δὲ κατὰ τὴν οὐσίαν δίδωσιν. οὐθὲν δὴ κωλύει [10] ἐλευθεριώτερον εἶναι τὸν τὰ ἐλάττω διδόντα, ἐὰν ἀπ' ἐλαττόνων διδῶ. ἐλευθεριώτεροι δὲ εἶναι δοκοῦσιν οἱ μὴ κτησάμενοι ἀλλὰ παραλαβόντες τὴν οὐσίαν· ἄπειροί τε γὰρ τῆς ἐνδείας, καὶ πάντες ἀγαπῶσι μᾶλλον τὰ αὐτῶν ἔργα, ὥσπερ οἱ γονεῖς καὶ οἱ ποιηταί. πλουτεῖν δ' οὐ ῥάδιον τὸν [15] ἐλευθέριον, μήτε ληπτικὸν ὄντα μήτε φυλακτικόν, προετικὸν δὲ καὶ μὴ τιμῶντα δι' αὐτὰ τὰ χρήματα ἀλλ' ἔνεκα τῆς δόσεως. διὸ καὶ ἐγκαλεῖται τῇ τύχῃ ὅτι οἱ μάλιστα ἄξιοι ὄντες ἥκιστα πλουτοῦσιν. συμβαίνει δ' οὐκ ἀλόγως τοῦτο· οὐ γὰρ οἷόν τε χρήματ' ἔχειν μὴ ἐπιμελόμενον ὅπως ἔχη, ὥσπερ [20] οὐδ' ἐπὶ τῶν ἄλλων. οὐ μὴν δώσει γε οἷς οὐ δεῖ οὐδ' ὅτε μὴ δεῖ, οὐδ' ὅσα ἄλλα τοιαῦτα· οὐ γὰρ ἂν ἔτι πράττοι κατὰ τὴν ἐλευθεριότητα, καὶ εἰς ταῦτα ἀναλώσας οὐκ ἂν ἔχοι εἰς ἃ δεῖ ἀναλίσκειν. ὥσπερ γὰρ εἴρηται, ἐλευθερίος ἐστὶν ὁ κατὰ τὴν οὐσίαν δαπανῶν καὶ εἰς ἃ δεῖ· ὁ δ' ὑπερβάλλων [25] ἄσωτος. διὸ τοὺς τυράννους οὐ λέγομεν ἄσώτους· τὸ γὰρ πλῆθος τῆς κτήσεως οὐ δοκεῖ ῥάδιον εἶναι ταῖς δόσεσι καὶ ταῖς δαπάναις ὑπερβάλλειν. τῆς ἐλευθεριότητος δὲ μεσότητος οὔσης περὶ χρημάτων δόσιν καὶ λῆψιν, ὁ ἐλευθέριος καὶ δώσει καὶ δαπανήσῃ εἰς ἃ δεῖ καὶ ὅσα δεῖ, ὁμοίως ἐν μικροῖς [30] καὶ μεγάλοις, καὶ ταῦτα ἡδέως· καὶ λήψεται δ' ὅθεν δεῖ καὶ ὅσα δεῖ. τῆς ἀρετῆς γὰρ περὶ ἅμφω οὔσης μεσότητος, ποιήσει ἀμφοτέρω ὥς δεῖ· ἔπεται γὰρ τῇ ἐπικεῖ δόσει ἢ τοιαύτῃ λῆψις, ἢ δὲ μὴ τοιαύτῃ ἐναντία ἐστίν. αἱ μὲν οὖν ἐπόμεναι γίνονται ἅμα ἐν τῷ αὐτῷ, αἱ δ' ἐναντίαι δῆλον ὡς οὐ. 1121a [1] ἐὰν δὲ παρὰ τὸ δέον καὶ τὸ καλῶς ἔχον συμβαίνει αὐτῷ ἀναλίσκειν, λυπῆσεται, μετρίως δὲ καὶ ὥς δεῖ· τῆς ἀρετῆς γὰρ καὶ ἡδεσθαι καὶ λυπεῖσθαι ἐφ' οἷς δεῖ καὶ ὥς δεῖ. καὶ εὐκοινώνητος δ' ἐστὶν ὁ ἐλευθέριος εἰς χρήματα· [5] δύναται γὰρ ἀδικεῖσθαι, μὴ τιμῶν γε τὰ χρήματα, καὶ μᾶλλον ἀχθόμενος εἴ τι δέον μὴ ἀνάλωσεν ἢ λυπούμενος εἴ μὴ δέον τι ἀνάλωσεν, καὶ τῷ Σιμωνίδῃ οὐκ ἀρεσκόμενος. ὁ δ' ἄσωτος καὶ ἐν τούτοις διαμαρτάνει· οὔτε γὰρ ἡδεται ἐφ' οἷς δεῖ οὐδὲ ὥς δεῖ οὔτε λυπεῖται· ἔσται δὲ προῖοῦσι φανερώτερον. [10] εἴρηται δὲ ἡμῖν ὅτι ὑπερβολαὶ καὶ ἐλλείψεις εἰσὶν ἡ ἄσωτία καὶ ἡ ἀνελευθερία, καὶ ἐν δυσὶν, ἐν δόσει καὶ λήψει· καὶ τὴν δαπάνην γὰρ εἰς τὴν δόσιν τίθεμεν. ἡ μὲν οὖν ἄσωτία τῷ διδόναι καὶ

μὴ λαμβάνειν ὑπερβάλλει, τῷ δὲ λαμβάνειν ἐλλείπει, ἡ δ' ἀνελευθερία τῷ διδόναι μὲν ἐλλείπει, [15] τῷ λαμβάνειν δ' ὑπερβάλλει, πλὴν ἐν μικροῖς. τὰ μὲν οὖν τῆς ἀσωτίας οὐ πάνυ συνδυάζεται· οὐ γὰρ ῥάδιον μηδαμόθεν λαμβάνοντα πᾶσι διδόναι· ταχέως γὰρ ἐπιλείπει ἡ οὐσία τοὺς ιδιώτας διδόντας, οἵπερ καὶ δοκοῦσιν ἄσωτοι εἶναι· ἐπεὶ ὅ γε τοιοῦτος δόξειεν ἂν οὐ μικρῶ βελτίων εἶναι [20] τοῦ ἀνελευθέρου. εὐίατός τε γὰρ ἐστὶ καὶ ὑπὸ τῆς ἡλικίας καὶ ὑπὸ τῆς ἀπορίας, καὶ ἐπὶ τὸ μέσον δύναται ἐλθεῖν. ἔχει γὰρ τὰ τοῦ ἐλευθερίου· καὶ γὰρ δίδωσι καὶ οὐ λαμβάνει, οὐδέτερον δ' ὥς δεῖ οὐδ' εὔ. εἰ δὴ τοῦτο ἐθισθεῖν ἢ πῶς ἄλλως μεταβάλοι, εἴη ἂν ἐλευθέριος· δώσει γὰρ οἷς δεῖ, [25] καὶ οὐ λήψεται ὅθεν οὐ δεῖ. διὸ καὶ δοκεῖ οὐκ εἶναι φαῦλος τὸ ἦθος· οὐ γὰρ μοχθηροῦ οὐδ' ἀγεννοῦς τὸ ὑπερβάλλειν διδόντα καὶ μὴ λαμβάνοντα, ἡλιθίου δέ. ὁ δὲ τοῦτον τὸν τρόπον ἄσωτος πολὺ δοκεῖ βελτίων τοῦ ἀνελευθέρου εἶναι διὰ τε τὰ εἰρημένα, καὶ ὅτι ὁ μὲν ὠφελεῖ πολλούς, ὁ δὲ οὐθέννα, [30] ἀλλ' οὐδ' αὐτόν. ἀλλ' οἱ πολλοὶ τῶν ἀσώτων, καθάπερ εἴρηται, καὶ λαμβάνουσιν ὅθεν μὴ δεῖ, καὶ εἰσὶ κατὰ τοῦτο ἀνελεύθεροι. ληπτικοὶ δὲ γίνονται διὰ τὸ βούλεσθαι μὲν ἀναλίσκειν, εὐχερῶς δὲ τοῦτο ποιεῖν μὴ δύνασθαι· ταχὺ γὰρ ἐπιλείπει αὐτοὺς τὰ ὑπάρχοντα. ἀναγκάζονται οὖν ἑτέρωθεν πορίζειν. 1121b [1] ἅμα δὲ καὶ διὰ τὸ μηδὲν τοῦ καλοῦ φροντίζειν ὀλιγώρως καὶ πάντοθεν λαμβάνουσιν· διδόναι γὰρ ἐπιθυμοῦσι, τὸ δὲ πῶς ἢ πόθεν οὐδὲν αὐτοῖς διαφέρει. διόπερ οὐδ' ἐλευθέριοι αἱ δόσεις αὐτῶν εἰσὶν· οὐ γὰρ καλαί, οὐδὲ τούτου [5] ἔνεκα, οὐδὲ ὥς δεῖ· ἀλλ' ἐνίοτε οὐς δεῖ πένεσθαι, τούτους πλουσίους ποιοῦσι, καὶ τοῖς μὲν μετρίοις τὰ ἦθη οὐδὲν ἂν δοῖεν, τοῖς δὲ κόλαξιν ἢ τιν' ἄλλην ἡδονὴν πορίζουσι πολλά. διὸ καὶ ἀκόλαστοι αὐτῶν εἰσὶν οἱ πολλοί· εὐχερῶς γὰρ ἀναλίσκοντες καὶ εἰς τὰς ἀκολασίας δαπανηροὶ εἰσι, καὶ διὰ τὸ μὴ πρὸς [10] τὸ καλὸν ζῆν πρὸς τὰς ἡδονὰς ἀποκλίνουσιν. ὁ μὲν οὖν ἄσωτος ἀπαιδαγώγητος γενόμενος εἰς ταῦτα μεταβαίνει, τυχὼν δ' ἐπιμελείας εἰς τὸ μέσον καὶ εἰς τὸ δέον ἀφίκοιτ' ἄν. ἡ δ' ἀνελευθερία ἀνίατός τ' ἐστίν (δοκεῖ γὰρ τὸ γῆρας καὶ πᾶσα ἀδυναμία ἀνελευθέρους ποιεῖν), καὶ συμφυέστερον τοῖς ἀνθρώποις [15] τῆς ἀσωτίας· οἱ γὰρ πολλοὶ φιλοχρήματοι μᾶλλον ἢ δοτικοί. καὶ διατείνει δ' ἐπὶ πολὺ, καὶ πολυειδὲς ἐστίν· πολλοὶ γὰρ τρόποι δοκοῦσι τῆς ἀνελευθερίας εἶναι. ἐν δυσὶ γὰρ οὐσα, τῇ τ' ἐλλείψει τῆς δόσεως καὶ τῇ ὑπερβολῇ τῆς λήψεως, οὐ πᾶσιν ὀλόκληρος παραγίνεται, ἀλλ' ἐνίοτε χωρίζεται, [20] καὶ οἱ μὲν τῇ λήψει ὑπερβάλλουσιν, οἱ δὲ τῇ δόσει ἐλλείπουσιν. οἱ μὲν γὰρ ἐν ταῖς τοιαύταις προσηγορίαις οἷον φειδωλοὶ γλίσχροι κίμβικες, πάντες τῇ δόσει ἐλλείπουσι, τῶν δ' ἄλλοτρίων οὐκ ἐφίενται οὐδὲ βούλονται λαμβάνειν, οἱ μὲν διὰ τινὰ ἐπιείκειαν καὶ εὐλάβειαν τῶν αἰσχυρῶν [25] (δοκοῦσι γὰρ ἔνιοι ἢ φασί γε διὰ τοῦτο φυλάττειν, ἵνα μή ποτ' ἀναγκασθῶσιν αἰσχυρόν τι πρᾶξαι· τούτων δὲ καὶ ὁ κυμινοπρίστης καὶ πᾶς ὁ τοιοῦτος· ὠνόμασται δ' ἀπὸ τῆς ὑπερβολῆς τοῦ

μηδὲν ἂν δοῦναι)· οἱ δ' αὖ διὰ φόβον ἀπέχονται τῶν ἀλλοτρίων ὥς οὐ  
ῥάδιον αὐτὸν μὲν τὰ ἐτέρων [30] λαμβάνειν, τὰ δ' αὐτοῦ ἐτέρους μή·  
ἀρέσκει οὖν αὐτοῖς τὸ μήτε λαμβάνειν μήτε διδόναι. οἱ δ' αὖ κατὰ τὴν λῆψιν  
ὑπερβάλλουσι τῷ πάντοθεν λάνειν καὶ πᾶν, οἷον οἱ τὰς ἀνελευθέρους  
ἐργασίας ἐργαζόμενοι, πορνοβοσκοὶ καὶ πάντες οἱ τοιοῦτοι, καὶ τοκισταὶ κατὰ  
μικρὰ καὶ ἐπὶ πολλῷ. 1122a [1] πάντες γὰρ οὗτοι ὅθεν οὐ δεῖ λαμβάνουσι,  
καὶ ὅποσον οὐ δεῖ. κοινὸν δ' ἐπ' αὐτοῖς ἡ αἰσχροκέρδεια φαίνεται· πάντες  
γὰρ ἔνεκα κέρδους, καὶ τούτου μικροῦ, ὀνειδῆ ὑπομένουσιν. τοὺς γὰρ τὰ  
μεγάλα μὴ ὅθεν δὲ δεῖ λαμβάνοντας, μηδὲ ἂν δεῖ, οὐ [5] λέγομεν  
ἀνελευθέρους, οἷον τοὺς τυράννους πόλεις πορθοῦντας καὶ ἱερὰ συλῶντας,  
ἀλλὰ πονηροὺς μᾶλλον καὶ ἀσεβεῖς καὶ ἀδίκους. ὁ μέντοι κυβευτῆς καὶ ὁ  
λωποδύτης καὶ ὁ ληστῆς τῶν ἀνελευθέρων εἰσὶν· αἰσχροκερδεῖς γάρ. κέρδους  
γὰρ ἔνεκα ἀμφοτέρωτεροι πραγματεύονται καὶ ὀνειδῆ ὑπομένουσιν, καὶ [10] οἱ  
μὲν κινδύνους τοὺς μεγίστους ἔνεκα τοῦ λήμματος, οἱ δ' ἀπὸ τῶν φίλων  
κερδαίνουσιν, οἷς δεῖ διδόναι. ἀμφοτέρωτεροι δὲ ὅθεν οὐ δεῖ κερδαίνειν  
βουλόμενοι αἰσχροκερδεῖς· καὶ πᾶσαι δὲ αἱ τοιαῦται λήψεις ἀνελεύθεροι.  
εἰκότως δὲ τῇ ἐλευθεριότητι ἀνελευθερία ἐναντίον λέγεται· μεῖζόν τε γὰρ ἐστὶ  
κακὸν τῆς [15] ἀσωτίας, καὶ μᾶλλον ἐπὶ ταύτην ἀμαρτάνουσιν ἢ κατὰ τὴν  
λεχθεῖσαν ἀσωτίαν. περὶ μὲν οὖν ἐλευθεριότητος καὶ τῶν ἀντικειμένων  
κακιῶν τοσαῦτ' εἶρή

δόξαι δ' ἂν ἀκόλουθον εἶναι καὶ περὶ μεγαλοπρεπείας διελθεῖν. δοκεῖ γὰρ καὶ  
αὕτη περὶ χρήματά τις ἀρετὴ εἶναι· [20] οὐχ ὥσπερ δ' ἡ ἐλευθεριότης  
διατείνει περὶ πάσας τὰς ἐν χρήμασι πράξεις, ἀλλὰ περὶ τὰς δαπανηρὰς μόνον·  
ἐν τούτοις δ' ὑπερέχει τῆς ἐλευθεριότητος μεγέθει. καθάπερ γὰρ τοῦνομα  
αὐτὸ ὑποσημαίνει, ἐν μεγέθει πρέπουσα δαπάνη ἐστίν. τὸ δὲ μέγεθος πρὸς τι·  
οὐ γὰρ τὸ αὐτὸ δαπάνημα τριηράρχῳ [25] καὶ ἀρχιθεωρῷ. τὸ πρέπον δὲ πρὸς  
αὐτόν, καὶ ἐν ᾧ καὶ περὶ ὅ. ὁ δ' ἐν μικροῖς ἢ ἐν μετρίοις κατ' ἀξίαν  
δαπανῶν οὐ λέγεται μεγαλοπρεπής, οἷον τὸ

πολλάκι δόσκον ἀλήτη,

Hom. ἀλλ' ὁ ἐν μεγάλοις οὕτως. ὁ μὲν γὰρ μεγαλοπρεπὴς ἐλευθέριος, ὁ δ' ἐλευθέριος οὐδὲν μᾶλλον μεγαλοπρεπής. τῆς [30] τοιαύτης δ' ἕξεως ἢ μὲν ἔλλειψις μικροπρέπεια καλεῖται, ἢ δ' ὑπερβολὴ βαναυσία καὶ ἀπειροκαλία καὶ ὅσαι τοιαῦται, οὐχ ὑπερβάλλουσαι τῷ μεγέθει περὶ ἃ δεῖ, ἀλλ' ἐν οἷς οὐ δεῖ καὶ ὡς οὐ δεῖ λαμπρυνόμεναι· ὕστερον δ' ὑπὲρ αὐτῶν ἐροῦμεν. ὁ δὲ μεγαλοπρεπὴς ἐπιστήμονι ἔοικεν· τὸ πρέπον γὰρ [35] δύναται θεωρῆσαι καὶ δαπανῆσαι μεγάλα ἐμμελῶς. 1122b [1] ὥσπερ γὰρ ἐν ἀρχῇ εἶπομεν, ἢ ἕξις ταῖς ἐνεργείαις ὀρίζεται, καὶ ὧν ἐστίν. αἱ δὲ τοῦ μεγαλοπρεποῦς δαπάναι μεγάλαι καὶ πρέπουσαι. τοιαῦτα δὴ καὶ τὰ ἔργα· οὕτω γὰρ ἔσται μέγα δαπάνημα καὶ πρέπον τῷ ἔργῳ. ὥστε τὸ μὲν ἔργον τῆς δαπάνης [5] ἄξιον δεῖ εἶναι, τὴν δὲ δαπάνην τοῦ ἔργου, ἢ καὶ ὑπερβάλλειν. δαπανήσει δὲ τὰ τοιαῦτα ὁ μεγαλοπρεπὴς τοῦ καλοῦ ἔνεκα· κοινὸν γὰρ τοῦτο ταῖς ἀρεταῖς. καὶ ἔτι ἡδέως καὶ προετικῶς· ἢ γὰρ ἀκριβολογία μικροπρεπές. καὶ πῶς κάλλιστον καὶ πρεπωδέστατον, σκέψαιτ' ἂν μᾶλλον ἢ πόσου καὶ [10] πῶς ἐλαχίστου. ἀναγκαῖον δὴ καὶ ἐλευθέριον τὸν μεγαλοπρεπῆ εἶναι. καὶ γὰρ ὁ ἐλευθέριος δαπανήσει ἃ δεῖ καὶ ὡς δεῖ· ἐν τούτοις δὲ τὸ μέγα τοῦ μεγαλοπρεποῦς, οἷον μέγεθος, περὶ ταῦτα τῆς ἐλευθεριότητος οὔσης, καὶ ἀπὸ τῆς ἴσης δαπάνης τὸ ἔργον ποιήσει μεγαλοπρεπέστερον. οὐ γὰρ ἢ αὐτὴ [15] ἀρετὴ κτήματος καὶ ἔργου. κτῆμα μὲν γὰρ τὸ πλείστου ἄξιον τιμιώτατον, οἷον χρυσός, ἔργον δὲ τὸ μέγα καὶ καλόν (τοῦ γὰρ τοιούτου ἡ θεωρία θαυμαστή, τὸ δὲ μεγαλοπρεπές θαυμαστόν)· καὶ ἔστιν ἔργου ἀρετὴ, μεγαλοπρέπεια, ἐν μεγέθει. ἔστι δὲ τῶν δαπανημάτων οἷα λέγομεν τὰ τίμια, οἷον τὰ [20] περὶ θεούς, ἀναθήματα καὶ κατασκευαὶ καὶ θυσίαι, ὁμοίως δὲ καὶ περὶ πᾶν τὸ δαιμόνιον, καὶ ὅσα πρὸς τὸ κοινὸν εὐφιλοτίμητά ἐστιν, οἷον εἴ ποτε χορηγεῖν οἴονται δεῖν λαμπρῶς ἢ τριηραρχεῖν ἢ καὶ ἐστιᾶν τὴν πόλιν. ἐν ἅπασιν δ' ὥσπερ εἴρηται, καὶ πρὸς τὸν πράττοντα ἀναφέρεται τὸ τίς [25] ὢν καὶ τίνων ὑπαρχόντων· ἄξια γὰρ δεῖ τούτων εἶναι, καὶ μὴ μόνον τῷ ἔργῳ ἀλλὰ καὶ τῷ ποιοῦντι πρέπειν. διὸ πένης μὲν οὐκ ἂν εἴη μεγαλοπρεπής· οὐ γὰρ ἔστιν ἀφ' ὧν πολλὰ δαπανήσει πρεπόντως· ὁ δ' ἐπιχειρῶν ἡλίθιος· παρὰ τὴν ἀξίαν γὰρ καὶ τὸ δέον, κατ' ἀρετὴν δὲ τὸ ὀρθῶς. πρέπει [30] δὲ [καὶ] οἷς τοιαῦτα προϋπάρχει δι' αὐτῶν ἢ τῶν προγόνων ἢ ὧν αὐτοῖς μέτεστιν, καὶ τοῖς εὐγενέσι καὶ τοῖς ἐνδόξοις καὶ ὅσα τοιαῦτα· πάντα γὰρ ταῦτα μέγεθος ἔχει καὶ ἀξίωμα. μάλιστα μὲν οὖν τοιοῦτος ὁ μεγαλοπρεπής, καὶ ἐν τοῖς τοιούτοις δαπανήμασιν ἢ μεγαλοπρέπεια, ὥσπερ [35] εἴρηται· μέγιστα γὰρ καὶ ἐντιμώτατα· τῶν δὲ ἰδίων ὅσα εἰσάπαξ γίνεται, 1123a [1] οἷον γάμος καὶ εἴ τι τοιοῦτον, καὶ εἰ περί τι ἢ πᾶσα πόλις σπουδάζει ἢ οἱ ἐν ἀξιώματι, καὶ περὶ ξένων δὲ ὑποδοχὰς καὶ ἀποστολάς, καὶ δωρεὰς καὶ ἀντιδωρεάς· οὐ γὰρ εἰς ἑαυτὸν δαπανηρὸς ὁ μεγαλοπρεπὴς ἀλλ' [5] εἰς τὰ κοινά, τὰ δὲ δῶρα τοῖς ἀναθήμασιν ἔχει τι ὅμοιον. μεγαλοπρεποῦς δὲ καὶ οἶκον κατασκευάσασθαι πρεπόντως τῷ πλούτῳ (κόσμος γάρ τις καὶ

οὗτος), καὶ περὶ ταῦτα μᾶλλον δαπανᾷν ὅσα πολυχρόνια τῶν ἔργων (κάλλιστα γὰρ ταῦτα), καὶ ἐν ἐκάστοις τὸ πρέπον· οὐ γὰρ ταῦτ' ἀρμόζει [10] θεοῖς καὶ ἀνθρώποις, οὐδ' ἐν ἱερῷ καὶ τάφῳ. καὶ ἐπεὶ τῶν δαπανημάτων ἕκαστον μέγα ἐν τῷ γένει, καὶ μεγαλοπρεπέστατον <ἀπλῶς> μὲν τὸ ἐν μεγάλῳ μέγα, ἐνταῦθα δὲ τὸ ἐν τούτοις μέγα, καὶ διαφέρει τὸ ἐν τῷ ἔργῳ μέγα τοῦ ἐν τῷ δαπανήματι· σφαῖρα μὲν γὰρ ἢ καλλίστη ἢ λήκυθος μεγαλοπρέπειαν [15] ἔχει παιδικοῦ δώρου, ἢ δὲ τούτου τιμὴ μικρὸν καὶ ἀνελεύθερον· διὰ τοῦτό ἐστι τοῦ μεγαλοπρεποῦς, ἐν ᾧ ἂν ποιῇ γένει, μεγαλοπρεπῶς ποιεῖν (τὸ γὰρ τοιοῦτον οὐκ εὐπέρβλητον) καὶ ἔχον κατ' ἀξίαν τοῦ δαπανήματος. τοιοῦτος μὲν οὖν ὁ μεγαλοπρεπής· ὁ δ' ὑπερβάλλων καὶ βάνυστος τῷ [20] παρὰ τὸ δέον ἀναλίσκειν ὑπερβάλλει, ὥσπερ εἴρηται. ἐν γὰρ τοῖς μικροῖς τῶν δαπανημάτων πολλὰ ἀναλίσκει καὶ λαμπρύνεται παρὰ μέλος, οἷον ἐρανιστὰς γαμικῶς ἐστιῶν, καὶ κωμωδοῖς χορηγῶν ἐν τῇ παρόδῳ πορφύραν εἰσφέρον, ὥσπερ οἱ Μεγαροῖ. καὶ πάντα τὰ τοιαῦτα ποιήσει οὐ τοῦ [25] καλοῦ ἔνεκα, ἀλλὰ τὸν πλοῦτον ἐπιδεικνύμενος, καὶ διὰ ταῦτα οἰόμενος θαυμάζεσθαι, καὶ οὗ μὲν δεῖ πολλὰ ἀναλῶσαι, ὀλίγα δαπανῶν, οὐ δ' ὀλίγα, πολλά. ὁ δὲ μικροπρεπής περὶ πάντα ἐλλείπει, καὶ τὰ μέγιστα ἀναλώσας ἐν μικρῷ τὸ καλὸν ἀπολεῖ, καὶ ὅ τι ἂν ποιῇ μέλλων καὶ [30] σκοπῶν πῶς ἂν ἐλάχιστον ἀναλώσαι, καὶ ταῦτ' ὀδυρόμενος, καὶ πάντ' οἰόμενος μείζω ποιεῖν ἢ δεῖ. εἰσὶ μὲν οὖν αἱ ἕξεις αὗται κακίαι, οὐ μὴν ὀνειδῆ γ' ἐπιφέρουσι διὰ τὸ μήτε βλαβεραὶ τῷ πέλας εἶναι μήτε λίαν ἀσχήμονες.

ἢ δὲ μεγαλοψυχία περὶ μεγάλα μὲν καὶ ἐκ τοῦ ὀνόματος [35] ἔοικεν εἶναι, περὶ ποῖα δ' ἐστὶ πρῶτον λάβωμεν· 1123b [1] διαφέρει δ' οὐδὲν τὴν ἕξιν ἢ τὸν κατὰ τὴν ἕξιν σκοπεῖν. δοκεῖ δὲ μεγαλόψυχος εἶναι ὁ μεγάλων αὐτὸν ἀξιῶν ἄξιος ὢν· ὁ γὰρ μὴ κατ' ἀξίαν αὐτὸ ποιῶν ἡλίθιος, τῶν δὲ κατ' ἀρετὴν οὐδεὶς ἡλίθιος οὐδ' ἀνόητος. μεγαλόψυχος μὲν οὖν ὁ εἰρημένος. [5] ὁ γὰρ μικρῶν ἄξιος καὶ τούτων ἀξιῶν ἑαυτὸν σώφρων, μεγαλόψυχος δ' οὗ· ἐν μεγέθει γὰρ ἢ μεγαλοψυχία, ὥσπερ καὶ τὸ κάλλος ἐν μεγάλῳ σώματι, οἱ μικροὶ δ' ἀστεῖοι καὶ σύμμετροι, καλοὶ δ' οὗ. ὁ δὲ μεγάλων ἑαυτὸν ἀξιῶν ἀνάξιος ὢν χαῦνος· ὁ δὲ μειζόνων ἢ ἄξιος οὐ πᾶς χαῦνος. ὁ δ' ἐλαττόνων [10] ἢ ἄξιος μικρόψυχος, ἐάν τε μεγάλων ἐάν τε μετρίων, ἐάν τε καὶ μικρῶν ἄξιος ὢν ἔτι ἐλαττόνων αὐτὸν ἀξιοῖ. καὶ μάλιστα ἂν δόξειεν ὁ μεγάλων ἄξιος· τί γὰρ ἂν ἐποίει, εἰ μὴ τοσούτων ἦν ἄξιος; ἔστι δὲ ὁ μεγαλόψυχος τῷ μὲν μεγέθει ἄκρος, τῷ δὲ ὡς δεῖ μέσος· τοῦ γὰρ κατ' ἀξίαν αὐτὸν [15] ἀξιοῖ· οἱ δ' ὑπερβάλλουσι καὶ ἐλλείπουσιν. εἰ δὲ μεγάλων ἑαυτὸν ἀξιοῖ ἄξιος ὢν, καὶ μάλιστα τῶν μεγίστων, περὶ ἓν μάλιστα ἂν εἴη. ἢ δ' ἀξία λέγεται πρὸς τὰ

ἐκτὸς ἀγαθᾶ· μέγιστον δὲ τοῦτ' ἂν θείημεν ὃ τοῖς θεοῖς ἀπονέμεται, καὶ οὗ  
μάλιστα ἑφίενται οἱ ἐν ἀξιώματι, καὶ τὸ ἐπὶ τοῖς καλλίστοις [20] ἄθλον·  
τοιοῦτον δ' ἡ τιμὴ· μέγιστον γὰρ δὴ τοῦτο τῶν ἐκτὸς ἀγαθῶν· περὶ τιμᾶς δὴ  
καὶ ἀτιμίας ὁ μεγαλόψυχός ἐστιν ὡς δεῖ. καὶ ἄνευ δὲ λόγου φαίνονται οἱ  
μεγαλόψυχοι περὶ τιμὴν εἶναι· τιμῆς γὰρ μάλιστα [οἱ μεγάλοι] ἀξιοῦσιν  
ἑαυτούς, κατ' ἀξίαν δέ. ὁ δὲ μικρόψυχος ἐλλείπει καὶ πρὸς ἑαυτὸν [25] καὶ  
πρὸς τὸ τοῦ μεγαλοψύχου ἀξίωμα. ὁ δὲ χαῦνος πρὸς ἑαυτὸν μὲν ὑπερβάλλει,  
οὐ μὴν τὸν γε μεγαλόψυχον. ὁ δὲ μεγαλόψυχος, εἴπερ τῶν μεγίστων ἄξιος,  
ἄριστος ἂν εἴη· μείζονος γὰρ αἰεὶ ὁ βελτίων ἄξιος, καὶ μεγίστων ὁ ἄριστος.  
τὸν ὡς ἀληθῶς ἄρα μεγαλόψυχον δεῖ ἀγαθὸν εἶναι. καὶ [30] δόξειεν <ἂν>  
εἶναι μεγαλοψύχου τὸ ἐν ἐκάστη ἀρετῇ μέγα. οὐδαμῶς τ' ἂν ἀρμόζοι  
μεγαλοψύχῳ φεύγειν παρασεῖσαντι, οὐδ' ἀδικεῖν· τίνος γὰρ ἔνεκα πράξει  
αἰσχρὰ ὧ γ' οὐδὲν μέγα; καθ' ἕκαστα δ' ἐπισκοποῦντι πάμπαν γελοῖος  
φαίνοιτ' ἂν ὁ μεγαλόψυχος μὴ ἀγαθὸς ὢν. οὐκ εἴη δ' ἂν οὐδὲ τιμῆς ἄξιος  
[35] φαῦλος ὢν· τῆς ἀρετῆς γὰρ ἄθλον ἡ τιμὴ, καὶ ἀπονέμεται τοῖς ἀγαθοῖς.  
1124a [1] ἔοικε μὲν οὖν ἡ μεγαλοψυχία οἷον κόσμος τις εἶναι τῶν ἀρετῶν·  
μείζους γὰρ αὐτάς ποιεῖ, καὶ οὐ γίνεται ἄνευ ἐκείνων. διὰ τοῦτο χαλεπὸν τῇ  
ἀληθείᾳ μεγαλόψυχον εἶναι· οὐ γὰρ οἷόν τε ἄνευ καλοκαγαθίας. μάλιστα [5]  
μὲν οὖν περὶ τιμᾶς καὶ ἀτιμίας ὁ μεγαλόψυχός ἐστι· καὶ ἐπὶ μὲν ταῖς  
μεγάλαις καὶ ὑπὸ τῶν σπουδαίων μετρίως ἡσθήσεται, ὡς τῶν οἰκείων  
τυγχάνων ἢ καὶ ἐλαττόνων· ἀρετῆς γὰρ παντελοῦς οὐκ ἂν γένοιτο ἀξία τιμὴ,  
οὐ μὴν ἀλλ' ἀποδέχεται γε τῷ μὴ ἔχειν αὐτοὺς μείζω αὐτῷ ἀπονέμειν· [10]  
τῆς δὲ παρὰ τῶν τυχόντων καὶ ἐπὶ μικροῖς πάμπαν ὀλιγορήσει· οὐ γὰρ  
τούτων ἄξιος ὁμοίως δὲ καὶ ἀτιμίας· οὐ γὰρ ἔσται δικαίως περὶ αὐτόν.  
μάλιστα μὲν οὖν ἐστίν, ὥσπερ εἴρηται, ὁ μεγαλόψυχος περὶ τιμᾶς, οὐ μὴν  
ἀλλὰ καὶ περὶ πλοῦτον καὶ δυναστείαν καὶ πᾶσαν εὐτυχίαν καὶ ἀτυχίαν [15]  
μετρίως ἔξει, ὅπως ἂν γίνηται, καὶ οὗτ' εὐτυχῶν περιχαρὴς ἔσται οὗτ'  
ἀτυχῶν περίλυπος. οὐδὲ γὰρ περὶ τιμὴν οὕτως ἔχει ὡς μέγιστον ὢν. αἱ γὰρ  
δυναστεῖαι καὶ ὁ πλοῦτος διὰ τὴν τιμὴν ἐστὶν αἰρετά· οἱ γοῦν ἔχοντες αὐτὰ  
τιμᾶσθαι δι' αὐτῶν βούλονται· ὧ δὲ καὶ ἡ τιμὴ μικρόν ἐστι, τούτῳ καὶ  
τάλλα. [20] διὸ ὑπερόπται δοκοῦσιν εἶναι. δοκεῖ δὲ καὶ τὰ εὐτυχήματα  
συμβάλλεσθαι πρὸς μεγαλοψυχίαν. οἱ γὰρ εὐγενεῖς ἀξιοῦνται τιμῆς καὶ οἱ  
δυναστεύοντες ἢ πλουτοῦντες· ἐν ὑπεροχῇ γάρ, τὸ δ' ἀγαθῷ ὑπερέχον πᾶν  
ἐντιμότερον. διὸ καὶ τὰ τοιαῦτα μεγαλοψυχοτέρους ποιεῖ· τιμῶνται γὰρ ὑπὸ  
τινῶν· [25] κατ' ἀλήθειαν δ' ὁ ἀγαθὸς μόνος τιμητός· ὧ δ' ἄμφω ὑπάρχει,  
μᾶλλον ἀξιοῦται τιμῆς. οἱ δ' ἄνευ ἀρετῆς τὰ τοιαῦτα ἀγαθὰ ἔχοντες οὔτε  
δικαίως ἑαυτοὺς μεγάλων ἀξιοῦσιν οὔτε ὀρθῶς μεγαλόψυχοι λέγονται· ἄνευ  
γὰρ ἀρετῆς παντελοῦς οὐκ ἔστι ταῦτα. ὑπερόπται δὲ καὶ ὑβρισταὶ καὶ οἱ [30]

τὰ τοιαῦτα ἔχοντες ἀγαθὰ γίνονται. ἄνευ γὰρ ἀρετῆς οὐ ῥάδιον φέρειν ἐμμελῶς τὰ εὐτυχήματα· 1124b [1] οὐ δυνάμενοι δὲ φέρειν καὶ οἰόμενοι τῶν ἄλλων ὑπερέχειν ἐκείνων μὲν καταφρονοῦσιν, αὐτοὶ δ' ὅ τι ἂν τύχῃσι πράττουσιν. μιμοῦνται γὰρ τὸν μεγαλόψυχον οὐχ ὅμοιοι ὄντες, τοῦτο δὲ δρῶσιν ἐν οἷς δύνανται· τὰ μὲν οὖν κατ' ἀρετὴν οὐ πράττουσι, καταφρονοῦσι [5] δὲ τῶν ἄλλων. ὁ μὲν γὰρ μεγαλόψυχος δικαίως καταφρονεῖ (δοξάζει γὰρ ἀληθῶς), οἱ δὲ πολλοὶ τυχόντως. οὐκ ἔστι δὲ μικροκίνδυνος οὐδὲ φιλοκίνδυνος διὰ τὸ ὀλίγα τιμᾶν, μεγαλοκίνδυνος δέ, καὶ ὅταν κινδυνεύῃ, ἀφειδῆς τοῦ βίου ὥς οὐκ ἄξιον ὄν πάντως ζῆν. καὶ οἷος εὖ ποιεῖν, εὐεργετούμενος [10] δ' αἰσχύνεται· τὸ μὲν γὰρ ὑπερέχοντος, τὸ δ' ὑπερεχομένου. καὶ ἀντευεργετικὸς πλειόνων· οὕτω γὰρ οἱ προσοφλήσει ὁ ὑπάρξας καὶ ἔσται εὖ πεπονθώς. δοκοῦσι δὲ καὶ μνημονεύειν οὐ ἂν ποιήσωσιν εὖ, ὧν δ' ἂν πάθωσιν οὐ (ἐλάττων γὰρ ὁ παθὼν εὖ τοῦ ποιήσαντος, βούλεται δ' ὑπερέχειν), καὶ [15] τὰ μὲν ἡδέως ἀκούειν, τὰ δ' ἀηδῶς· διὸ καὶ τὴν Θέτιν οὐ λέγειν τὰς εὐεργεσίας τῷ Δίι, οὐδ' οἱ Λάκωνες πρὸς τοὺς Ἀθηναίους, ἀλλ' ἃ πεπόνθεσαν εὖ. μεγαλοψύχου δὲ καὶ τὸ μηδενὸς δεῖσθαι ἢ μόλις, ὑπηρετεῖν δὲ προθύμως, καὶ πρὸς μὲν τοὺς ἐν ἀξιώματι καὶ εὐτυχίαις μέγαν εἶναι, πρὸς δὲ [20] τοὺς μέσους μέτριον· τῶν μὲν γὰρ ὑπερέχειν χαλεπὸν καὶ σεμνόν, τῶν δὲ ῥάδιον, καὶ ἐπ' ἐκείνοις μὲν σεμνύνεσθαι οὐκ ἀγεννές, ἐν δὲ τοῖς ταπεινοῖς φορτικόν, ὥσπερ εἰς τοὺς ἀσθενεῖς ἰσχυρίζεσθαι· καὶ εἰς τὰ ἔντιμα μὴ ἰέναι, ἢ οὐ πρωτεύουσιν ἄλλοι· καὶ ἀργὸν εἶναι καὶ μελλητηνὴν ἀλλ' ἢ ὅπου [25] τιμὴ μεγάλη ἢ ἔργον, καὶ ὀλίγων μὲν πρακτικόν, μεγάλων δὲ καὶ ὀνομαστῶν. ἀναγκαῖον δὲ καὶ φανερομισῆ εἶναι καὶ φανερόφιλον (τὸ γὰρ λανθάνειν φοβούμενου, καὶ ἀμελεῖν τῆς ἀληθείας μᾶλλον ἢ τῆς δόξης), καὶ λέγειν καὶ πράττειν φανερώς (παρρησιαστικῆς γὰρ διὰ τὸ καταφρονητικὸς εἶναι, [30] καὶ ἀληθευτικός, πλὴν ὅσα μὴ δι' εἰρωνεῖαν [εἰρωνεῖα δὲ] πρὸς τοὺς πολλούς), καὶ πρὸς ἄλλον μὴ δύνασθαι ζῆν ἀλλ' ἢ φίλον· 1125a [1] δουρικὸν γάρ· διὸ καὶ πάντες οἱ κόλακες θητικοὶ καὶ οἱ ταπεινοὶ κόλακες. οὐδὲ θαυμαστικός· οὐδὲν γὰρ μέγα αὐτῷ ἐστίν. οὐδὲ μνησικάκος· οὐ γὰρ μεγαλοψύχου τὸ ἀπομνημονεύειν, ἄλλως τε καὶ κακά, ἀλλὰ [5] μᾶλλον παρορᾶν. οὐδ' ἀνθρωπολόγος· οὔτε γὰρ περὶ αὐτοῦ ἐρεῖ οὔτε περὶ ἑτέρου· οὔτε γὰρ ἵνα ἐπαινῇται μέλει αὐτῷ οὔθ' ὅπως οἱ ἄλλοι ψέγωνται· οὐδ' αὖ ἐπαινετικός ἐστίν· διόπερ οὐδὲ κακολόγος, οὐδὲ τῶν ἐχθρῶν, εἰ μὴ δι' ὕβριν. καὶ περὶ ἀναγκαίων ἢ μικρῶν ἥκιστα ὀλοφυρτικός [10] καὶ δεητικός· σπουδάζοντος γὰρ οὕτως ἔχειν περὶ ταῦτα. καὶ οἷος κεκτῆσθαι μᾶλλον τὰ καλὰ καὶ ἄκαρπα τῶν καρπίμων καὶ ὠφελίμων· αὐτάρκους γὰρ μᾶλλον. καὶ κίνησις δὲ βραδεῖα τοῦ μεγαλοψύχου δοκεῖ εἶναι, καὶ φωνὴ βαρεῖα, καὶ λέξις στάσιμος· οὐ γὰρ σπευστικός ὁ περὶ ὀλίγα [15] σπουδάζων, οὐδὲ σύντονος ὁ μηδὲν μέγα οἰόμενος· ἢ δ' ὀξυφωνία καὶ ἢ



ταχυτῆς διὰ τούτων. τοιοῦτος μὲν οὖν ὁ μεγαλόψυχος· ὁ δ' ἐλλείπων μικρόψυχος, ὁ δ' ὑπερβάλλον χαῦνος. οὐ κακοὶ μὲν οὖν δοκοῦσιν εἶναι οὐδ' οὗτοι (οὐ γὰρ κακοποιοὶ εἰσιν), ἡμαρτημένοι δέ. ὁ μὲν γὰρ μικρόψυχος [20] ἄξιός ὢν ἀγαθῶν ἑαυτὸν ἀποστερεῖ ὢν ἄξιός ἐστι, καὶ ἔοικε κακὸν ἔχειν τι ἐκ τοῦ μὴ ἀξιοῦν ἑαυτὸν τῶν ἀγαθῶν, καὶ ἀγνοεῖν δ' ἑαυτόν· ὠρέγετο γὰρ ἂν ὢν ἄξιός ἦν, ἀγαθῶν γε ὄντων. οὐ μὴν ἡλίθιοί γε οἱ τοιοῦτοι δοκοῦσιν εἶναι, ἀλλὰ μᾶλλον ὀκνηροί. ἡ τοιαύτη δὲ δόξα δοκεῖ καὶ χεῖρους ποιεῖν· [25] ἕκαστοι γὰρ ἐφίενται τῶν κατ' ἀξίαν, ἀφίστανται δὲ καὶ τῶν πράξεων τῶν καλῶν καὶ τῶν ἐπιτηδευμάτων ὡς ἀνάξιοι ὄντες, ὁμοίως δὲ καὶ τῶν ἐκτὸς ἀγαθῶν. οἱ δὲ χαῦνοι ἡλίθιοι καὶ ἑαυτοὺς ἀγνοοῦντες, καὶ ταῦτ' ἐπιφανῶς· οὐ γὰρ ἄξιοι ὄντες τοῖς ἐντίμοις ἐπιχειροῦσιν, εἴτα ἐξελέγχονται· [30] καὶ ἐσθῆτι κοσμοῦνται καὶ σχήματι καὶ τοῖς τοιούτοις, καὶ βούλονται τὰ εὐτυχήματα καὶ φανερὰ εἶναι αὐτῶν, καὶ λέγουσι περὶ αὐτῶν ὡς διὰ τούτων τιμηθησόμενοι. ἀντιτίθεται δὲ τῇ μεγαλοψυχίᾳ ἡ μικροψυχία μᾶλλον τῆς χαυνότητος· καὶ γὰρ γίνεται μᾶλλον καὶ χεῖρόν ἐστιν. ἡ μὲν οὖν μεγαλοψυχία [35] περὶ τιμὴν ἐστὶ μέγαν, ὥσπερ εἴρηται.

1125b [1] ἔοικε δὲ καὶ περὶ ταύτην εἶναι ἀρετὴ τις, καθάπερ ἐν τοῖς πρώτοις ἐλέχθη, ἡ δόξειεν ἂν παραπλησίως ἔχειν πρὸς τὴν μεγαλοψυχίαν ὥσπερ καὶ ἡ ἐλευθεριότης πρὸς τὴν μεγαλοπρέπειαν. ἄμφω γὰρ αὗται τοῦ μὲν μεγάλου ἀφεστᾶσι, [5] περὶ δὲ τὰ μέτρια καὶ μικρὰ διατιθέασιν ἡμᾶς ὡς δεῖ· ὥσπερ δ' ἐν λήψει καὶ δόσει χρημάτων μεσότης ἔστι καὶ ὑπερβολή τε καὶ ἔλλειψις, οὕτω καὶ ἐν τιμῇ ὀρέξει τὸ μᾶλλον ἢ δεῖ καὶ ἥττον, καὶ τὸ ὅθεν δεῖ καὶ ὡς δεῖ. τὸν τε γὰρ φιλότιμον ψέγομεν ὡς μᾶλλον ἢ δεῖ καὶ ὅθεν οὐ δεῖ [10] τῆς τιμῆς ἐφίεμενον, τὸν τε ἀφιλότιμον ὡς οὐδ' ἐπὶ τοῖς καλοῖς προαιρούμενον τιμᾶσθαι. ἔστι δ' ὅτε τὸν φιλότιμον ἐπαινοῦμεν ὡς ἀνδρώδη καὶ φιλόκαλον, τὸν δ' ἀφιλότιμον ὡς μέτριον καὶ σώφρονα, ὥσπερ καὶ ἐν τοῖς πρώτοις εἴπομεν. δῆλον δ' ὅτι πλεοναχῶς τοῦ φιλοτοιοῦτου λεγομένου οὐκ [15] ἐπὶ τὸ αὐτὸ φέρομεν ἀεὶ τὸ φιλότιμον, ἀλλ' ἐπαινοῦντες μὲν ἐπὶ τὸ μᾶλλον ἢ οἱ πολλοί, ψέγοντες δ' ἐπὶ τὸ μᾶλλον ἢ δεῖ. ἀνωνύμου δ' οὔσης τῆς μεσότητος, ὡς ἐρήμης ἔοικεν ἀμφισβητεῖν τὰ ἄκρα. ἐν οἷς δ' ἔστιν ὑπερβολή καὶ ἔλλειψις, καὶ τὸ μέσον· ὀρέγονται δὲ τῆς τιμῆς καὶ μᾶλλον ἢ [20] δεῖ καὶ ἥττον· ἔστι δὲ καὶ ὡς δεῖ· ἐπαινεῖται δ' οὖν ἡ ἕξις αὕτη, μεσότης οὕσα περὶ τιμὴν ἀνωνυμος. φαίνεται δὲ πρὸς μὲν τὴν φιλοτιμίαν ἀφιλοτιμία, πρὸς δὲ τὴν ἀφιλοτιμίαν φιλοτιμία, πρὸς ἀμφοτέρω δὲ ἀμφοτέρω πως. ἔοικε δὲ τοῦτ' εἶναι καὶ περὶ τὰς ἄλλας ἀρετάς. ἀντικεῖσθαι δ' ἐνταῦθα [25] οἱ ἄκροι φαίνονται διὰ τὸ μὴ ὠνομάσθαι τὸν μέσον.

πραότης δ' ἐστὶ μεσότης περὶ ὀργάς· ἀνωνύμου δ' ὄντος τοῦ μέσου, σχεδὸν δὲ καὶ τῶν ἄκρων, ἐπὶ τὸ μέσον τὴν πραότητα φέρομεν, πρὸς τὴν ἔλλειψιν ἀποκλίνουσιν, ἀνωνυμον οὖσαν. ἡ δ' ὑπερβολὴ ὀργιλότης τις λέγοιτ' ἄν. [30] τὸ μὲν γὰρ πάθος ἐστὶν ὀργή, τὰ δ' ἐμποιοῦντα πολλὰ καὶ διαφέροντα. ὁ μὲν οὖν ἐφ' οἷς δεῖ καὶ οἷς δεῖ ὀργιζόμενος, ἔτι δὲ καὶ ὡς δεῖ καὶ ὅτε καὶ ὅσον χρόνον, ἐπαινεῖται· πρῶτος δὲ οὗτος ἂν εἴη, εἵπερ ἡ πραότης ἐπαινεῖται. βούλεται γὰρ ὁ πρῶτος ἀτάραχος εἶναι καὶ μὴ ἄγεσθαι ὑπὸ τοῦ πάθους, [35] ἀλλ' ὡς ἂν ὁ λόγος τάξη, οὕτω καὶ ἐπὶ τούτοις καὶ ἐπὶ τοσοῦτον χρόνον χαλεπαίνειν. 1126a [1] ἀμαρτάνειν δὲ δοκεῖ μᾶλλον ἐπὶ τὴν ἔλλειψιν· οὐ γὰρ τιμωρητικὸς ὁ πρῶτος, ἀλλὰ μᾶλλον συγγνωμονικός. ἡ δ' ἔλλειψις, εἴτ' ἀοργησία τίς ἐστὶν εἴθ' ὅτι δὴ ποτε, ψέγεται. οἱ γὰρ μὴ ὀργιζόμενοι ἐφ' οἷς [5] δεῖ ἡλίθιοι δοκοῦσιν εἶναι, καὶ οἱ μὴ ὡς δεῖ μὴδ' ὅτε μὴδ' οἷς δεῖ· δοκεῖ γὰρ οὐκ αἰσθάνεσθαι οὐδὲ λυπεῖσθαι, μὴ ὀργιζόμενός τε οὐκ εἶναι ἀμυντικός, τὸ δὲ προπηλακιζόμενον ἀνέχεσθαι καὶ τοὺς οἰκείους περιορᾶν ἀνδραποδῶδες. ἡ δ' ὑπερβολὴ κατὰ πάντα μὲν γίνεται (καὶ γὰρ οἷς οὐ δεῖ, [10] καὶ ἐφ' οἷς οὐ δεῖ, καὶ μᾶλλον ἢ δεῖ, καὶ θᾶττον, καὶ πλείω χρόνον), οὐ μὴν ἅπαντά γε τῷ αὐτῷ ὑπάρχει. οὐ γὰρ ἂν δύναιτ' εἶναι· τὸ γὰρ κακὸν καὶ ἑαυτὸ ἀπόλλυσι, κἂν ὀλόκληρον ἦ, ἀφόρητον γίνεται. οἱ μὲν οὖν ὀργίλοι ταχέως μὲν ὀργίζονται καὶ οἷς οὐ δεῖ καὶ ἐφ' οἷς οὐ δεῖ καὶ μᾶλλον ἢ [15] δεῖ, παύονται δὲ ταχέως· ὁ καὶ βέλτιστον ἔχουσιν. συμβαίνει δ' αὐτοῖς τοῦτο, ὅτι οὐ κατέχουσι τὴν ὀργὴν ἀλλ' ἀνταποδιδόασιν ἢ φανεροί εἰσι διὰ τὴν ὀξύτητα, εἴτ' ἀποπαύονται. ὑπερβολῇ δ' εἰσὶν οἱ ἀκρόχολοι ὀξεῖς καὶ πρὸς πᾶν ὀργίλοι καὶ ἐπὶ παντί· ὅθεν καὶ τοῦνομα. οἱ δὲ πικροὶ [20] δυσδιάλυτοι, καὶ πολλὸν χρόνον ὀργίζονται· κατέχουσι γὰρ τὸν θυμόν. παῦλα δὲ γίνεται ὅταν ἀνταποδιδῶ· ἡ γὰρ τιμωρία παύει τῆς ὀργῆς, ἡδονὴν ἀντὶ τῆς λύπης ἐμποιοῦσα. τούτου δὲ μὴ γινομένου τὸ βάρος ἔχουσιν· διὰ γὰρ τὸ μὴ ἐπιφανὲς εἶναι οὐδὲ συμπεῖθαι αὐτοὺς οὐδεῖς, ἐν αὐτῷ δὲ πέσαι [25] τὴν ὀργὴν χρόνου δεῖ. εἰσὶ δ' οἱ τοιοῦτοι ἑαυτοῖς ὀχληρότατοι καὶ τοῖς μάλιστα φίλοις. χαλεποὺς δὲ λέγομεν τοὺς ἐφ' οἷς τε μὴ δεῖ χαλεπαίνοντας καὶ μᾶλλον ἢ δεῖ καὶ πλείω χρόνον, καὶ μὴ διαλλαττομένους ἄνευ τιμωρίας ἢ κολάσεως. τῇ πραότητι δὲ μᾶλλον τὴν ὑπερβολὴν ἀντιτίθεμεν· καὶ [30] γὰρ μᾶλλον γίνεται· ἀνθρωπικώτερον γὰρ τὸ τιμωρεῖσθαι· καὶ πρὸς τὸ συμβιοῦν οἱ χαλεποὶ χεῖρους. ὁ δὲ καὶ ἐν τοῖς πρότερον εἴρηται, καὶ ἐκ τῶν λεγομένων δῆλον· οὐ γὰρ ῥᾶδιον διορίσαι τὸ πῶς καὶ τίσι καὶ ἐπὶ ποίοις καὶ πόσον χρόνον ὀργιστέον, καὶ τὸ μέχρι τίνος ὀρθῶς ποιεῖ τις ἢ ἀμαρτάνει. [35] ὁ μὲν γὰρ μικρὸν παρεκβαίνων οὐ ψέγεται, οὔτ' ἐπὶ τὸ μᾶλλον οὔτ' ἐπὶ τὸ ἥττον·

ένίοτε γὰρ τοὺς ἐλλείποντας ἐπαινοῦμεν καὶ πράους φαμέν, 1126b [1] καὶ τοὺς χαλεπαίνοντας ἀνδρώδεις ὡς δυναμένους ἄρχειν. ὁ δὲ πόσον καὶ πῶς παρεκβαίνων ψεκτός, οὐ ῥάδιον τῷ λόγῳ ἀποδοῦναι· ἐν γὰρ τοῖς καθ' ἕκαστα κἂν τῇ αἰσθήσει ἢ κρίσις. ἀλλὰ τό γε τοσοῦτον [5] δῆλον, ὅτι ἢ μὲν μέση ἕξις ἐπαινετή, καθ' ἣν οἷς δεῖ ὀργιζόμεθα καὶ ἐφ' οἷς δεῖ καὶ ὡς δεῖ καὶ πάντα τὰ τοιαῦτα, αἱ δ' ὑπερβολαὶ καὶ ἐλλείψεις ψεκταί, καὶ ἐπὶ μικρὸν μὲν γινόμεναι ἡρέμα, ἐπὶ πλεον δὲ μᾶλλον, ἐπὶ πολὺ δὲ σφόδρα. δῆλον οὖν ὅτι τῆς μέσης ἕξεως ἀνθεκτέον. αἱ μὲν οὖν [10] περὶ τὴν ὀργὴν ἕξεις εἰρήσθωσαν.

ἐν δὲ ταῖς ὁμιλίαις καὶ τῷ συζῆν καὶ λόγων καὶ πραγμάτων κοινωνεῖν οἱ μὲν ἄρεσκοι δοκοῦσιν εἶναι, οἱ πάντα πρὸς ἡδονὴν ἐπαινοῦντες καὶ οὐθὲν ἀντιτείνοντες, ἀλλ' οἰόμενοι δεῖν ἄλυποι τοῖς ἐντυγχάνουσιν εἶναι· οἱ δ' ἐξ ἐναντίας τούτοις [15] πρὸς πάντα ἀντιτείνοντες καὶ τοῦ λυπεῖν οὐδ' ὅτιοῦν φροντίζοντες δύσκολοι καὶ δυσέριδες καλοῦνται. ὅτι μὲν οὖν αἱ εἰρημέναι ἕξεις ψεκταί εἰσιν, οὐκ ἄδηλον, καὶ ὅτι ἢ μέση τούτων ἐπαινετή, καθ' ἣν ἀποδέχεται ἃ δεῖ καὶ ὡς δεῖ, ὁμοίως δὲ καὶ δυσχερανεῖ. ὄνομα δ' οὐκ ἀποδέδοται αὐτῇ [20] τι, ἔοικε δὲ μάλιστα φιλία. τοιοῦτος γὰρ ἐστὶν ὁ κατὰ τὴν μέσην ἕξιν οἷον βουλόμεθα λέγειν τὸν ἐπικτῆ φίλον, τὸ στέργειν προσλαβόντα. διαφέρει δὲ τῆς φιλίας, ὅτι ἄνευ πάθους ἐστὶ καὶ τοῦ στέργειν οἷς ὁμιλεῖ· οὐ γὰρ τῷ φιλεῖν ἢ ἐχθαίρειν ἀποδέχεται ἕκαστα ὡς δεῖ, ἀλλὰ τῷ τοιοῦτος [25] εἶναι. ὁμοίως γὰρ πρὸς ἀγνώτας καὶ γνωρίμους καὶ συνήθεις καὶ ἀσυνήθεις αὐτὸ ποιήσει, πλὴν καὶ ἐν ἐκάστοις ὡς ἀρμόζει· οὐ γὰρ ὁμοίως προσήκει συνήθων καὶ ὀθνείων φροντίζειν, οὐδ' αὖ λυπεῖν. καθόλου μὲν οὖν εἴρηται ὅτι ὡς δεῖ ὁμιλήσει, ἀναφέρων δὲ πρὸς τὸ καλὸν καὶ τὸ συμφέρον στοχάζεται [30] τοῦ μὴ λυπεῖν ἢ συνηδύνειν. ἔοικε μὲν γὰρ περὶ ἡδονὰς καὶ λύπας εἶναι τὰς ἐν ταῖς ὁμιλίαις γινομένας· τούτων δ' ὅσας μὲν αὐτῷ ἐστὶ μὴ καλὸν ἢ βλαβερὸν συνηδύνειν, δυσχερανεῖ, καὶ προαιρήσεται λυπεῖν· κἂν τῷ ποιοῦντι δ' ἀσχημοσύνην φέρῃ, καὶ ταύτην μὴ μικράν, ἢ βλάβην, ἢ δ' ἐναντίωσις [35] μικράν λύπην, οὐκ ἀποδέχεται ἀλλὰ δυσχερανεῖ. διαφερόντως δ' ὁμιλήσει τοῖς ἐν ἀξιώμασι καὶ τοῖς τυχοῦσι, 1127a [1] καὶ μᾶλλον ἢ ἥττον γνωρίμοις, ὁμοίως δὲ καὶ κατὰ τὰς ἄλλας διαφοράς, ἐκάστοις ἀπονέμων τὸ πρέπον, καὶ καθ' αὐτὸ μὲν αἰρούμενος τὸ συνηδύνειν, λυπεῖν δ' εὐλαβούμενος, τοῖς δ' ἀποβαίνουσιν, ἔαν ἢ μείζω, συνεπόμενος, λέγω δὲ [5] τῷ καλῷ καὶ τῷ συμφέροντι. καὶ ἡδονῆς δ' ἕνεκα τῆς εἰσαϋθις μεγάλης μικρὰ λυπήσει. ὁ μὲν οὖν μέσος τοιοῦτός ἐστιν, οὐκ

ώνόμασται δέ· τοῦ δὲ συνηδύνοντος ὁ μὲν τοῦ ἡδύς εἶναι στοχαζόμενος μὴ διὰ τι ἄλλο ἄρεσκος, ὁ δ' ὅπως ὠφέλειά τις αὐτῷ γίνηται εἰς χρήματα καὶ ὅσα διὰ χρημάτων, [10] κόλαξ· ὁ δὲ πᾶσι δυσχεραίνων εἴρηται ὅτι δύσκολος καὶ δύσερις. ἀντικεῖσθαι δὲ φαίνεται τὰ ἄκρα ἑαυτοῖς διὰ τὸ ἀνώνυμον εἶναι τὸ μέσον.

περὶ τὰ αὐτὰ δὲ σχεδόν ἐστι καὶ ἡ τῆς ἀλαζονείας <καὶ εἰρωνείας> μεσότης· ἀνώνυμος δὲ καὶ αὐτή. οὐ χεῖρον δὲ καὶ [15] τὰς τοιαύτας ἐπελθεῖν· μᾶλλον τε γὰρ ἂν εἰδείημεν τὰ περὶ τὸ ἦθος, καθ' ἕκαστον διελθόντες, καὶ μεσότητας εἶναι τὰς ἀρετὰς πιστεύσαιμεν ἂν, ἐπὶ πάντων οὕτως ἔχον συνιδόντες. ἐν δὲ τῷ συζῆν οἱ μὲν πρὸς ἡδονὴν καὶ λύπην ὁμιλοῦντες εἴρηνται, περὶ δὲ τῶν ἀληθεύοντων τε καὶ ψευδομένων εἴπωμεν [20] ὁμοίως ἐν λόγοις καὶ πράξεσι καὶ τῷ προσποιήματι. δοκεῖ δὲ ὁ μὲν ἀλαζών προσποιητικὸς τῶν ἐνδόξων εἶναι καὶ μὴ ὑπαρχόντων καὶ μειζόνων ἢ ὑπάρχει, ὁ δὲ εἴρων ἀνάπαλιν ἀρνεῖσθαι τὰ ὑπάρχοντα ἢ ἐλάττω ποιεῖν, ὁ δὲ μέσος αὐθέκαστος τις ὢν ἀληθευτικὸς καὶ τῷ βίῳ καὶ τῷ λόγῳ, τὰ [25] ὑπάρχοντα ὁμολογῶν εἶναι περὶ αὐτόν, καὶ οὔτε μείζω οὔτε ἐλάττω. ἔστι δὲ τούτων ἕκαστα καὶ ἔνεκά τινος ποιεῖν καὶ μηδενός. ἕκαστος δ' οἷός ἐστι, τοιαῦτα λέγει καὶ πράττει καὶ οὕτω ζῇ, ἔαν μή τινος ἔνεκα πράττη. καθ' αὐτὸ δὲ τὸ μὲν ψεῦδος φαῦλον καὶ ψεκτόν, τὸ δ' ἀληθές καλὸν καὶ [30] ἐπαινετόν. οὕτω δὲ καὶ ὁ μὲν ἀληθευτικὸς μέσος ὢν ἐπαινετός, οἱ δὲ ψευδόμενοι ἀμφοτέρω μὲν ψεκτοί, μᾶλλον δ' ὁ ἀλαζών. περὶ ἑκατέρου δ' εἴπωμεν, πρότερον δὲ περὶ τοῦ ἀληθευτικοῦ. οὐ γὰρ περὶ τοῦ ἐν ταῖς ὁμολογίαις ἀληθεύοντος λέγομεν, οὐδ' ὅσα εἰς ἀδικίαν ἢ δικαιοσύνην συντείνει 1127b [1] (ἄλλης γὰρ ἂν εἴη ταῦτ' ἀρετῆς), ἀλλ' ἐν οἷς μηδενὸς τοιούτου διαφέροντος καὶ ἐν λόγῳ καὶ ἐν βίῳ ἀληθεύει τῷ τὴν ἕξιν τοιοῦτος εἶναι. δόξειε δ' ἂν ὁ τοιοῦτος ἐπιεικὴς εἶναι. ὁ γὰρ φιλαλήθης, καὶ ἐν οἷς μὴ διαφέρει ἀληθεύων, ἀληθεύσει [5] καὶ ἐν οἷς διαφέρει ἔτι μᾶλλον· ὥς γὰρ αἰσχρὸν τὸ ψεῦδος εὐλαβήσεται, ὅ γε καὶ καθ' αὐτὸ ἠὺλαβεῖτο· ὁ δὲ τοιοῦτος ἐπαινετός. ἐπὶ τὸ ἔλαττον δὲ μᾶλλον τοῦ ἀληθοῦς ἀποκλίνει· ἐμμελέστερον γὰρ φαίνεται διὰ τὸ ἐπαχθεῖς τὰς ὑπερβολὰς εἶναι. ὁ δὲ μείζω τῶν ὑπαρχόντων προσποιούμενος [10] μηδενὸς ἔνεκα φαύλῳ μὲν ἔοικεν (οὐ γὰρ ἂν ἔχαιρε τῷ ψεύδει), μάταιος δὲ φαίνεται μᾶλλον ἢ κακός· εἰ δ' ἔνεκά τινος, ὁ μὲν δόξης ἢ τιμῆς οὐ λίαν ψεκτός, “ὥς ὁ ἀλαζών”, ὁ δὲ ἀργυρίου, ἢ ὅσα εἰς ἀργύριον, ἀσχημονέστερος (οὐκ ἐν τῇ δυνάμει δ' ἐστὶν ὁ ἀλαζών, ἀλλ' ἐν τῇ προαιρέσει· [15] κατὰ τὴν ἕξιν γὰρ καὶ τῷ τοιόσδε εἶναι ἀλαζών ἐστιν)· ὥσπερ καὶ ψεύστης ὁ μὲν τῷ ψεύδει

αὐτῷ χαίρων, ὃ δὲ δόξης ὀρεγόμενος ἢ κέρδους. οἱ μὲν οὖν δόξης χάριν ἀλαζονεύοντο τὰ τοιαῦτα προσποιοῦνται ἐφ' οἷς ἔπαινος ἢ εὐδαιμονισμός, οἱ δὲ κέρδους, ὧν καὶ ἀπόλαυσις ἐστὶ τοῖς πέλας καὶ διαλαθεῖν [20] ἐστὶ μὴ ὄντα, οἷον μάντιν σοφὸν ἰατρὸν. διὰ τοῦτο οἱ πλεῖστοι προσποιοῦνται τὰ τοιαῦτα καὶ ἀλαζονεύονται· ἐστὶ γὰρ ἐν αὐτοῖς τὰ εἰρημένα. οἱ δ' εἴρωνες ἐπὶ τὸ ἔλαττον λέγοντες χαριέστεροι μὲν τὰ ἥθη φαίνονται· οὐ γὰρ κέρδους ἔνεκα δοκοῦσι λέγειν, ἀλλὰ φεύγοντες τὸ ὀγκηρόν· [25] μάλιστα δὲ καὶ οὗτοι τὰ ἔνδοξα ἀπαρνοῦνται, οἷον καὶ Σωκράτης ἐποίει. οἱ δὲ τὰ μικρὰ καὶ φανερά [προσποιοῦμενοι] βαυκοπανοῦργοι λέγονται καὶ εὐκαταφρονητότεροί εἰσιν· καὶ ἐνίοτε ἀλαζονεία φαίνεται, οἷον ἡ τῶν Λακῶνων ἐσθής· καὶ γὰρ ἡ ὑπερβολὴ καὶ ἡ λίαν ἔλλειψις ἀλαζονικόν. οἱ δὲ [30] μετρίως χρώμενοι τῇ εἴρωνείᾳ καὶ περὶ τὰ μὴ λίαν ἐμποδῶν καὶ φανερά εἴρωνευόμενοι χαρίεντες φαίνονται. ἀντικεῖσθαι δ' ὁ ἀλαζὼν φαίνεται τῷ ἀληθευτικῷ· χείρων γάρ.

οὔσης δὲ καὶ ἀναπαύσεως ἐν τῷ βίῳ, καὶ ἐν ταύτῃ διαγωγῇ μετὰ παιδιᾶς, δοκεῖ καὶ ἐνταῦθα εἶναι ὁμιλία τις ἐμμελής, 1128a [1] καὶ οἷα δεῖ λέγειν καὶ ὥς, ὁμοίως δὲ καὶ ἀκούειν. διοίσει δὲ καὶ τὸ ἐν τοιούτοις λέγειν ἢ τοιούτων ἀκούειν. δῆλον δ' ὥς καὶ περὶ ταῦτ' ἐστὶν ὑπερβολή τε καὶ ἔλλειψις τοῦ μέσου. οἱ μὲν οὖν τῷ γελοίῳ ὑπερβάλλοντες βωμολόχοι [5] δοκοῦσιν εἶναι καὶ φορτικοί, γλιχόμενοι πάντως τοῦ γελοίου, καὶ μᾶλλον στοχαζόμενοι τοῦ γέλωτα ποιῆσαι ἢ τοῦ λέγειν εὐσχήμονα καὶ μὴ λυπεῖν τὸν σκωπτόμενον· οἱ δὲ μήτ' αὐτοὶ ἂν εἰπόντες μηδὲν γελοῖον τοῖς τε λέγουσι δυσχεραίνοντες ἄγροικοι καὶ σκληροὶ δοκοῦσιν εἶναι. οἱ δ' ἐμμελῶς [10] παίζοντες εὐτράπελοι προσαγορεύονται, οἷον εὐτροποι· τοῦ γὰρ ἥθους αἱ τοιαῦται δοκοῦσι κινήσεις εἶναι, ὥσπερ δὲ τὰ σώματα ἐκ τῶν κινήσεων κρίνεται, οὕτω καὶ τὰ ἥθη. ἐπιπολάζοντος δὲ τοῦ γελοίου, καὶ τῶν πλείστων χαιρόντων τῇ παιδιᾷ καὶ τῷ σκώπτειν μᾶλλον ἢ δεῖ, καὶ οἱ βωμολόχοι [15] εὐτράπελοι προσαγορεύονται ὥς χαρίεντες· ὅτι δὲ διαφέρουσι, καὶ οὐ μικρόν, ἐκ τῶν εἰρημένων δῆλον. τῇ μέσῃ δ' ἔξει οἰκεῖον καὶ ἡ ἐπιδεξιότης ἐστίν· τοῦ δ' ἐπιδεξίου ἐστὶ τοιαῦτα λέγειν καὶ ἀκούειν οἷα τῷ ἐπεικεῖ καὶ ἐλευθερίῳ ἀρμόττει· ἐστὶ γάρ τινα πρόποντα τῷ τοιούτῳ λέγειν ἐν [20] παιδιᾷ μέρει καὶ ἀκούειν, καὶ ἡ τοῦ ἐλευθερίου παιδιὰ διαφέρει τῆς τοῦ ἀνδραποδώδους, καὶ πεπαιδευμένου καὶ ἀπαιδευτοῦ. ἴδοι δ' ἅν τις καὶ ἐκ τῶν κωμωδιῶν τῶν παλαιῶν καὶ τῶν καινῶν· τοῖς μὲν γὰρ ἦν γελοῖον ἡ αἰσχρολογία, τοῖς δὲ μᾶλλον ἢ ὑπόνοια· διαφέρει δ' οὐ μικρόν ταῦτα [25] πρὸς εὐσχημοσύνην. πότερον οὖν τὸν εὐ σκώπτοντα ὀριστείον τῷ λέγειν μὴ ἀπρεπῇ ἐλευθερίῳ, ἢ

τῷ μὴ λυπεῖν τὸν ἀκούοντα ἢ καὶ τέρπειν; ἢ καὶ τό γε τοιοῦτον ἀόριστον; ἄλλο γὰρ ἄλλῳ μισητόν τε καὶ ἡδύ. τοιαῦτα δὲ καὶ ἀκούσεται· ἃ γὰρ ὑπομένει ἀκούων, ταῦτα καὶ ποιεῖν δοκεῖ. οὐ δὴ πᾶν ποιήσει· [30] τὸ γὰρ σκῶμμα λοιδόρημά τι ἐστίν, οἱ δὲ νομοθέται ἔνια λοιδορεῖν κωλύουσιν· ἔδει δ' ἴσως καὶ σκώπτειν. ὁ δὲ χαρίεις καὶ ἐλευθέριος οὕτως ἔξει, οἷον νόμος ὦν ἐαυτῷ. τοιοῦτος μὲν οὖν ὁ μέσος ἐστίν, εἴτ' ἐπιδέξιος εἴτ' εὐτράπελος λέγεται. ὁ δὲ βωμολόχος ἥττων ἐστὶ τοῦ γελοίου, καὶ οὔτε ἐαυτοῦ οὔτε [35] τῶν ἄλλων ἀπεχόμενος εἰ γέλωτα ποιήσει, καὶ τοιαῦτα λέγων 1128b [1] ὦν οὐδὲν ἂν εἴποι ὁ χαρίεις, ἔνια δ' οὐδ' ἂν ἀκούσαι. ὁ δ' ἄγροικος εἰς τὰς τοιαύτας ὁμιλίας ἀχρεῖος· οὐθὲν γὰρ συμβαλλόμενος πᾶσι δυσχεραίνει. δοκεῖ δὲ ἡ ἀνάπαυσις καὶ ἡ παιδιὰ ἐν τῷ βίῳ εἶναι ἀναγκαῖον. τρεῖς οὖν αἱ εἰρημέναι [5] ἐν τῷ βίῳ μεσότητες, εἰσὶ δὲ πᾶσαι περὶ λόγων τινῶν καὶ πράξεων κοινωνίαν. διαφέρουσι δ' ὅτι ἡ μὲν περὶ ἀλήθειαν ἐστίν, αἱ δὲ περὶ τὸ ἡδύ. τῶν δὲ περὶ τὴν ἡδονὴν ἡ μὲν ἐν ταῖς παιδιαῖς, ἡ δ' ἐν ταῖς κατὰ τὸν ἄλλον βίον ὁμιλίαις.

[10] περὶ δὲ αἰδοῦς ὥς τινος ἀρετῆς οὐ προσήκει λέγειν· πάθει γὰρ μᾶλλον ἔοικεν ἢ ἔξει. ὀρίζεται γοῦν φόβος τις ἀδοξίας, καὶ ἀποτελεῖται τῷ περὶ τὰ δεινὰ φόβῳ παραπλήσιον· ἐρυθραίνονται γὰρ οἱ αἰσχυρόμενοι, οἱ δὲ τὸν θάνατον φοβούμενοι ὠχριῶσιν. σωματικὰ δὲ φαίνεται πως εἶναι [15] ἀμφοτέρω, ὅπερ δοκεῖ πάθους μᾶλλον ἢ ἔξεως εἶναι. οὐ πάσῃ δ' ἡλικίᾳ τὸ πάθος ἀρμόζει, ἀλλὰ τῇ νέᾳ. οἴομεθα γὰρ δεῖν τοὺς τηλικούτους αἰδήμονας εἶναι διὰ τὸ πάθει ζῶντας πολλὰ ἀμαρτάνειν, ὑπὸ τῆς αἰδοῦς δὲ κωλύεσθαι· καὶ ἐπαινοῦμεν τῶν μὲν νέων τοὺς αἰδήμονας, πρεσβύτερον δ' [20] οὐδεὶς ἂν ἐπαινέσειεν ὅτι αἰσχυνηλός· οὐδὲν γὰρ οἴομεθα δεῖν αὐτὸν πράττειν ἐφ' οἷς ἐστὶν αἰσχύνη. οὐδὲ γὰρ ἐπεικοῦς ἐστὶν ἡ αἰσχύνη, εἴπερ γίνεται ἐπὶ τοῖς φαύλοις (οὐ γὰρ πρακτέον τὰ τοιαῦτα· εἰ δ' ἐστὶ τὰ μὲν κατ' ἀλήθειαν αἰσχυρὰ τὰ δὲ κατὰ δόξαν, οὐδὲν διαφέρει· οὐδέτερα γὰρ πρακτέα, [25] ὥστ' οὐκ αἰσχυντέον)· φαύλου δὲ καὶ τὸ εἶναι τοιοῦτον οἷον πράττειν τι τῶν αἰσχυρῶν. τὸ δ' οὕτως ἔχειν ὥστ' εἰ πράξει τι τῶν τοιούτων αἰσχύनेσθαι, καὶ διὰ τοῦτ' οἶεσθαι ἐπεικῇ εἶναι, ἄτοπον· ἐπὶ τοῖς ἐκουσίοις γὰρ ἡ αἰδώς, ἐκῶν δ' ὁ ἐπεικῆς οὐδέποτε πράξει τὰ φαῦλα. εἴη δ' ἂν ἡ αἰδώς ἐξ [30] ὑποθέσεως ἐπεικῆς· εἰ γὰρ πράξει, αἰσχύνοιτ' ἂν· οὐκ ἔστι δὲ τοῦτο περὶ τὰς ἀρετάς. εἰ δ' ἡ ἀναισχυντία φαῦλον καὶ τὸ μὴ αἰδεῖσθαι τὰ αἰσχυρὰ πράττειν, οὐδὲν μᾶλλον τὸν τὰ τοιαῦτα πράττοντα αἰσχύनेσθαι ἐπεικῆς. οὐκ ἔστι δ' οὐδ' ἡ ἐγκράτεια ἀρετὴ, ἀλλὰ τις μικτὴ· δειχθήσεται δὲ περὶ [35] αὐτῆς ἐν

τοῖς ὕστερον. νῦν δὲ περὶ δικαιοσύνης εἵπωμεν.

## Βιβλίο 5

περὶ δὲ δικαιοσύνης καὶ ἀδικίας σκεπτέον, περὶ ποίας τε τυγχάνουσιν οὕσαι πράξεις, καὶ ποία μεσότης ἐστὶν ἡ [5] δικαιοσύνη, καὶ τὸ δίκαιον τίνων μέσον. ἡ δὲ σκέψις ἡμῖν ἔστω κατὰ τὴν αὐτὴν μέθοδον τοῖς προειρημένοις. ὁρῶμεν δὴ πάντας τὴν τοιαύτην ἔξιν βουλομένους λέγειν δικαιοσύνην, ἅφ' ἧς πρακτικοὶ τῶν δικαίων εἰσὶ καὶ ἅφ' ἧς δικαιοπραγοῦσι καὶ βούλονται τὰ δίκαια: τὸν αὐτὸν δὲ τρόπον καὶ [10] περὶ ἀδικίας, ἅφ' ἧς ἀδικοῦσι καὶ βούλονται τὰ ἄδικα. διὸ καὶ ἡμῖν πρῶτον ὥς ἐν τύπῳ ὑποκείσθω ταῦτα. οὐδὲ γὰρ τὸν αὐτὸν ἔχει τρόπον ἐπὶ τε τῶν ἐπιστημῶν καὶ δυνάμεων καὶ ἐπὶ τῶν ἔξεων. δύνάμις μὲν γὰρ καὶ ἐπιστήμη δοκεῖ τῶν ἐναντίων ἢ αὐτὴ εἶναι, ἔξις δ' ἡ ἐναντία τῶν ἐναντίων [15] οὕ, οἷον ἀπὸ τῆς ὑγιείας οὐ πράττεται τὰ ἐναντία, ἀλλὰ τὰ ὑγιεινὰ μόνον: λέγομεν γὰρ ὑγιεινῶς βαδίζειν, ὅταν βαδίζῃ ὥς ἂν ὁ ὑγιαίνων. πολλάκις μὲν οὖν γνωρίζεται ἡ ἐναντία ἔξις ἀπὸ τῆς ἐναντίας, πολλάκις δὲ αἱ ἔξεις ἀπὸ τῶν ὑποκειμένων: ἐάν τε γὰρ ἡ εὐεξία ἢ φανερά, καὶ ἡ [20] καχεξία φανερά γίνεται, καὶ ἐκ τῶν εὐεκτικῶν ἢ εὐεξία καὶ ἐκ ταύτης τὰ εὐεκτικά. εἰ γὰρ ἐστὶν ἡ εὐεξία πυκνότης σαρκός, ἀνάγκη καὶ τὴν καχεξίαν εἶναι μανότητα σαρκὸς καὶ τὸ εὐεκτικὸν τὸ ποιητικὸν πυκνότητος ἐν σαρκί. ἀκολουθεῖ δ' ὥς ἐπὶ τὸ πολὺ, ἐὰν θάτερον πλεοναχῶς λέγηται, [25] καὶ θάτερον πλεοναχῶς λέγεσθαι, οἷον εἰ τὸ δίκαιον, καὶ τὸ ἄδικον. ἔοικε δὲ πλεοναχῶς λέγεσθαι ἡ δικαιοσύνη καὶ ἡ ἀδικία, ἀλλὰ διὰ τὸ σύνεγγυς εἶναι τὴν ὁμωνυμίαν αὐτῶν λανθάνει καὶ οὐχ ὥσπερ ἐπὶ τῶν πόρρω δήλη μᾶλλον, ἡ γὰρ διαφορὰ πολλὴ ἢ κατὰ τὴν ιδέαν οἷον ὅτι καλεῖται [30] κλείς ὁμωνύμως ἢ τε ὑπὸ τὸν αὐχένα τῶν ζώων καὶ ἢ τὰς θύρας κλείουσιν. εἰλήφθω δὴ ὁ ἄδικος ποσαχῶς λέγεται. δοκεῖ δὴ ὁ τε παράνομος ἄδικος εἶναι καὶ ὁ πλεονέκτης καὶ ἄνισος, ὥστε δῆλον ὅτι καὶ [ὁ] δίκαιος ἔσται ὁ τε νόμιμος καὶ ὁ ἴσος. τὸ μὲν δίκαιον ἄρα τὸ νόμιμον καὶ τὸ ἴσον, τὸ δ' ἄδικον τὸ παράνομον καὶ τὸ ἄνισον.

1129b [1] ἐπεὶ δὲ πλεονέκτης ὁ ἄδικος, περὶ τάγαθὰ ἔσται, οὐ πάντα, ἀλλὰ περὶ ὅσα εὐτυχία καὶ ἀτυχία, ἃ ἐστὶ μὲν ἀπλῶς ἀεὶ ἀγαθὰ, τινὲς δ' οὐκ ἀεὶ. οἱ δ' ἄνθρωποι ταῦτα εὗχονται καὶ διώκουσιν: [5] δεῖ δ' οὕ, ἀλλ' εὗχεσθαι μὲν τὰ ἀπλῶς ἀγαθὰ καὶ αὐτοῖς ἀγαθὰ εἶναι, αἰρεῖσθαι δὲ τὰ αὐτοῖς ἀγαθὰ. ὁ δ' ἄδικος οὐκ ἀεὶ τὸ πλεον αἰρεῖται, ἀλλὰ καὶ τὸ ἔλαττον ἐπὶ τῶν ἀπλῶς

κακῶν: ἀλλ' ὅτι δοκεῖ καὶ τὸ μείον κακὸν ἀγαθὸν πως εἶναι, τοῦ δ' ἀγαθοῦ ἐστὶν ἡ πλεονεξία, διὰ τοῦτο δοκεῖ [10] πλεονέκτης εἶναι. ἔστι δ' ἄνισος: τοῦτο γὰρ περιέχει καὶ κοινόν. ἐπεὶ δ' ὁ παράνομος ἄδικος ἦν ὁ δὲ νόμιμος δίκαιος, δῆλον ὅτι πάντα τὰ νόμιμά ἐστὶ πως δίκαια: τὰ τε γὰρ ὠρισμένα ὑπὸ τῆς νομοθετικῆς νόμιμά ἐστι, καὶ ἕκαστον τούτων δίκαιον εἶναι φαμεν. οἱ δὲ νόμοι ἀγορεύουσι περὶ πάντων, [15] στοχαζόμενοι ἢ τοῦ κοινῇ συμφέροντος πᾶσιν ἢ τοῖς ἀρίστοις ἢ τοῖς κυρίοις [κατ' ἀρετὴν] ἢ κατ' ἄλλον τινὰ τρόπον τοιοῦτον: ὥστε ἓνα μὲν τρόπον δίκαια λέγομεν τὰ ποιητικὰ καὶ φυλακτικὰ εὐδαιμονίας καὶ τῶν μορίων αὐτῆς τῇ πολιτικῇ κοινωνίᾳ. προστάττει δ' ὁ νόμος καὶ τὰ [20] τοῦ ἀνδρείου ἔργα ποιεῖν, οἷον μὴ λείπειν τὴν τάξιν μηδὲ φεύγειν μηδὲ ῥιπτεῖν τὰ ὅπλα, καὶ τὰ τοῦ σώφρονος, οἷον μὴ μοιχεύειν μηδ' ὑβρίζειν, καὶ τὰ τοῦ πράου, οἷον μὴ τύπτειν μηδὲ κακηγορεῖν, ὁμοίως δὲ καὶ κατὰ τὰς ἄλλας ἀρετὰς καὶ μοχθηρίας τὰ μὲν κελεύων τὰ δ' ἀπαγορεύων, ὀρθῶς [25] μὲν ὁ κείμενος ὀρθῶς, χεῖρον δ' ὁ ἀπεσχεδιασμένος. αὕτη μὲν οὖν ἡ δικαιοσύνη ἀρετὴ μὲν ἐστὶ τελεία, ἀλλ' οὐχ ἀπλῶς ἀλλὰ πρὸς ἕτερον. καὶ διὰ τοῦτο πολλάκις κρατίστη τῶν ἀρετῶν εἶναι δοκεῖ ἡ δικαιοσύνη, καὶ οὐθ' ἔσπερος οὐθ' ἐῷος οὕτω θαυμαστός: καὶ παροιμιαζόμενοι φαμεν

[30] ἐν δὲ δικαιοσύνῃ συλλήβδην πᾶς ἀρετὴ ἐνι

καὶ τελεία μάλιστα ἀρετὴ, ὅτι τῆς τελείας ἀρετῆς χρῆσις ἐστίν. τελεία δ' ἐστίν, ὅτι ὁ ἔχων αὐτὴν καὶ πρὸς ἕτερον δύναται τῇ ἀρετῇ χρῆσθαι, ἀλλ' οὐ μόνον καθ' αὐτόν: πολλοὶ γὰρ ἐν μὲν τοῖς οἰκείοις τῇ ἀρετῇ δύναται χρῆσθαι, ἐν δὲ τοῖς πρὸς ἕτερον ἀδυνατοῦσιν.

1130a [1] καὶ διὰ τοῦτο εὖ δοκεῖ ἔχειν τὸ τοῦ Βίαντος, ὅτι ἀρχὴ ἄνδρα δείξει: πρὸς ἕτερον γὰρ καὶ ἐν κοινωνίᾳ ἤδη ὁ ἄρχων. διὰ δὲ τὸ αὐτὸ τοῦτο καὶ ἀλλότριον ἀγαθὸν δοκεῖ εἶναι ἡ δικαιοσύνη μόνη τῶν ἀρετῶν, ὅτι πρὸς ἕτερόν ἐστιν: ἄλλω [5] γὰρ τὰ συμφέροντα πράττει, ἢ ἄρχοντι ἢ κοινωνῷ. κάκιστος μὲν οὖν ὁ καὶ πρὸς αὐτόν καὶ πρὸς τοὺς φίλους χρώμενος τῇ



μοχθηρία, ἄριστος δ' οὐχ ὁ πρὸς αὐτὸν τῇ ἀρετῇ ἀλλὰ πρὸς ἕτερον: τοῦτο γὰρ ἔργον χαλεπὸν. αὕτη μὲν οὖν ἡ δικαιοσύνη οὐ μέρος ἀρετῆς ἀλλ' ὅλη ἀρετὴ ἐστίν, οὐδ' ἡ ἐναντία [10] ἀδικία μέρος κακίας ἀλλ' ὅλη κακία. τί δὲ διαφέρει ἡ ἀρετὴ καὶ ἡ δικαιοσύνη αὕτη, δῆλον ἐκ τῶν εἰρημένων: ἔστι μὲν γὰρ ἡ αὕτη, τὸ δ' εἶναι οὐ τὸ αὐτό, ἀλλ' ἢ μὲν πρὸς ἕτερον, δικαιοσύνη, ἢ δὲ τοιάδε ἕξις ἀπλῶς, ἀρετή.

ζητοῦμεν δέ γε τὴν ἐν μέρει ἀρετῆς δικαιοσύνην: ἔστι [15] γὰρ τις, ὡς φαμέν. ὁμοίως δὲ καὶ περὶ ἀδικίας τῆς κατὰ μέρος. σημεῖον δ' ὅτι ἔστιν: κατὰ μὲν γὰρ τὰς ἄλλας μοχθηρίας ὁ ἐνεργῶν ἀδικεῖ μὲν, πλεονεκτεῖ δ' οὐδέν, οἷον ὁ ῥίψας τὴν ἀσπίδα διὰ δειλίαν ἢ κακῶς εἰπὼν διὰ χαλεπότητα ἢ οὐ βοηθήσας χρήμασι δι' ἀνελευθερίαν: ὅταν δὲ [20] πλεονεκτῇ, πολλάκις κατ' οὐδεμίαν τῶν τοιούτων, ἀλλὰ μὴν οὐδὲ κατὰ πάσας, κατὰ πονηρίαν δέ γε τινὰ ψέγομεν γὰρ καὶ κατ' ἀδικίαν. ἔστιν ἄρ' ἄλλη τις ἀδικία ὡς μέρος τῆς ὅλης, καὶ ἄδικόν τι ἐν μέρει τοῦ ὅλου ἀδίκου τοῦ παρὰ τὸν νόμον. ἔτι εἰ ὁ μὲν τοῦ κερδαίνειν ἔνεκα μοιχεύει καὶ [25] προσλαμβάνων, ὁ δὲ προστιθεὶς καὶ ζημιούμενος δι' ἐπιθυμίαν, οὗτος μὲν ἀκόλαστος δόξειεν ἂν εἶναι μᾶλλον ἢ πλεονέκτης, ἐκεῖνος δ' ἄδικος, ἀκόλαστος δ' οὐ: δῆλον ἄρα ὅτι διὰ τὸ κερδαίνειν. ἔτι περὶ μὲν τᾶλλα πάντα ἀδικήματα γίνεται ἡ ἐπαναφορὰ ἐπὶ τινὰ μοχθηρίαν αἰεὶ, οἷον εἰ ἐμοίχευσεν, [30] ἐπ' ἀκολασίαν, εἰ ἐγκατέλιπε τὸν παραστάτην, ἐπὶ δειλίαν, εἰ ἐπάταξεν, ἐπ' ὀργήν: εἰ δ' ἐκέρδανεν, ἐπ' οὐδεμίαν μοχθηρίαν ἀλλ' ἢ ἐπ' ἀδικίαν. ὥστε φανερόν ὅτι ἔστι τις ἀδικία παρὰ τὴν ὅλην ἄλλη ἐν μέρει, συνώνυμος, ὅτι ὁ ὁρισμὸς ἐν τῷ αὐτῷ γένει: 1130b [1] ἄμφω γὰρ ἐν τῷ πρὸς ἕτερον ἔχουσι τὴν δύναμιν, ἀλλ' ἢ μὲν περὶ τιμὴν ἢ χρήματα ἢ σωτηρίαν, ἢ εἴ τιτι ἔχοιμεν ἐνὶ ὀνόματι περιλαβεῖν ταῦτα πάντα, καὶ δι' ἡδονὴν τὴν ἀπὸ τοῦ κέρδους, ἢ δὲ περὶ ἅπαντα περὶ ὅσα [5] ὁ σπουδαῖος.

ὅτι μὲν οὖν εἰσὶν αἱ δικαιοσύναι πλείους, καὶ ὅτι ἔστι τις καὶ ἑτέρα παρὰ τὴν ὅλην ἀρετὴν, δῆλον: τίς δὲ καὶ ποία τις, ληπτέον. διώρισται δὲ τὸ ἄδικον τό τε παράνομον καὶ τὸ ἄνισον, τὸ δὲ δίκαιον τό τε νόμιμον καὶ τὸ ἴσον. κατὰ [10] μὲν οὖν τὸ παράνομον ἢ πρότερον εἰρημένη ἀδικία ἐστίν. ἐπεὶ δὲ τὸ ἄνισον καὶ τὸ παράνομον οὐ ταῦτόν ἀλλ' ἕτερον ὡς μέρος πρὸς ὅλον· τὸ μὲν γὰρ

ἄνισον ἅπαν παράνομον, τὸ δὲ παράνομον οὐχ ἅπαν ἄνισον, καὶ τὸ ἄδικον καὶ ἡ ἀδικία οὐ ταῦτ' ἄλλ' ἕτερα ἐκείνων, τὰ μὲν ὡς μέρη τὰ δ' ὡς ὅλα: μέρος γὰρ [15] αὕτη ἡ ἀδικία τῆς ὅλης ἀδικίας, ὁμοίως δὲ καὶ ἡ δικαιοσύνη τῆς δικαιοσύνης. ὥστε καὶ περὶ τῆς ἐν μέρει δικαιοσύνης καὶ περὶ τῆς ἐν μέρει ἀδικίας λεκτέον, καὶ τοῦ δικαίου καὶ ἀδίκου ὡσαύτως. ἡ μὲν οὖν κατὰ τὴν ὅλην ἀρετὴν τεταγμένη δικαιοσύνη καὶ ἀδικία, ἡ μὲν τῆς ὅλης ἀρετῆς [20] οὕσα χρήσις πρὸς ἄλλον ἢ δὲ τῆς κακίας, ἀφείσθω. καὶ τὸ δίκαιον δὲ καὶ τὸ ἄδικον τὸ κατὰ ταύτας φανερόν ὡς διοριστέον: σχεδὸν γὰρ τὰ πολλὰ τῶν νομίμων τὰ ἀπὸ τῆς ὅλης ἀρετῆς προσταττόμενά ἐστιν: καθ' ἑκάστην γὰρ ἀρετὴν προστάττει ζῆν καὶ καθ' ἑκάστην μοχθηρίαν κωλύει ὁ νόμος. [25] τὰ δὲ ποιητικὰ τῆς ὅλης ἀρετῆς ἐστὶ τῶν νομίμων ὅσα νενομοθέτηται περὶ παιδείαν τὴν πρὸς τὸ κοινόν. περὶ δὲ τῆς καθ' ἑκάστον παιδείας, καθ' ἣν ἀπλῶς ἀνὴρ ἀγαθός ἐστι, πότερον τῆς πολιτικῆς ἐστὶν ἢ ἐτέρας, ὕστερον διοριστέον: οὐ γὰρ ἴσως ταῦτ' ἀνδρὶ τ' ἀγαθῷ εἶναι καὶ πολίτῃ παντί. [30] τῆς δὲ κατὰ μέρος δικαιοσύνης καὶ τοῦ κατ' αὐτὴν δικαίου ἐν μὲν ἐστὶν εἶδος τὸ ἐν ταῖς διανομαῖς τιμῆς ἢ χρημάτων ἢ τῶν ἄλλων ὅσα μεριστὰ τοῖς κοινωνοῦσι τῆς πολιτείας· ἐν τούτοις γὰρ ἔστι καὶ ἄνισον ἔχειν καὶ ἴσον ἕτερον ἐτέρου, 1131a [1] ἐν δὲ τὸ ἐν τοῖς συναλλάγμασι διορθωτικόν. τούτου δὲ μέρη δύο: τῶν γὰρ συναλλαγμάτων τὰ μὲν ἐκούσια ἐστὶ τὰ δ' ἀκούσια, ἐκούσια μὲν τὰ τοιάδε οἷον πρᾶσις ὦνὴ δανεισμός ἐγγύη χρήσις παρακαταθήκη μίσθωσις· ἐκούσια δὲ λέγεται, [5] ὅτι ἡ ἀρχὴ τῶν συναλλαγμάτων τούτων ἐκούσιοσ', τῶν δ' ἀκουσίων τὰ μὲν λαθραῖα, οἷον κλοπὴ μοιχεία φαρμακεία προαγωγεία δουλαπατία δολοφονία ψευδομαρτυρία, τὰ δὲ βίαια, οἷον αἰκία δεσμός θάνατος ἄρπαγὴ πῆρσις κακηγορία προπηλακισμός.

[10] ἐπεὶ δ' ὅ τ' ἄδικος ἄνισος καὶ τὸ ἄδικον ἄνισον, δῆλον ὅτι καὶ μέσον τι ἔστι τοῦ ἀνίσου. τοῦτο δ' ἐστὶ τὸ ἴσον: ἐν ᾗ ὅποι' ἀδικεῖ ἔστι τὸ πλεόν καὶ τὸ ἔλαττον, ἔστι καὶ τὸ ἴσον. εἰ οὖν τὸ ἄδικον ἄνισον, τὸ δίκαιον ἴσον: ὅπερ καὶ ἄνευ λόγου δοκεῖ πᾶσιν. ἐπεὶ δὲ τὸ ἴσον μέσον, τὸ δίκαιον μέσον τι ἂν [15] εἴη. ἔστι δὲ τὸ ἴσον ἐν ἐλαχίστοις δυσὶν. ἀνάγκη τοίνυν τὸ δίκαιον μέσον τε καὶ ἴσον εἶναι καὶ πρὸς τι καὶ τισίν, καὶ ἡ μὲν μέσον, τινῶν ταῦτα δ' ἐστὶ πλεόν καὶ ἔλαττον, ἡ δ' ἴσον, δυοῖν, ἡ δὲ δίκαιον, τισίν. ἀνάγκη ἄρα τὸ δίκαιον ἐν ἐλαχίστοις εἶναι τέτταρσιν: οἷς τε γὰρ δίκαιον τυγχάνει [20] ὅν, δύο ἐστί, καὶ ἐν οἷς, τὰ πράγματα, δύο. καὶ ἡ αὐτὴ ἐστὶ ἰσότης, οἷς καὶ ἐν οἷς: ὡς γὰρ ἐκεῖνα ἔχει, τὰ ἐν οἷς, οὕτω καὶ ἐκεῖνα ἔχει: εἰ γὰρ μὴ ἴσοι, οὐκ ἴσα

ἔξουσιν, ἀλλ' ἐντεῦθεν αἱ μάχαι καὶ τὰ ἐγκλήματα, ὅταν ἢ μὴ ἴσα ἴσοι ἢ μὴ ἴσοι ἴσα ἔχωσι καὶ νέμονται. ἔτι ἐκ τοῦ κατ' ἀξίαν [25] τοῦτο δῆλον: τὸ γὰρ δίκαιον ἐν ταῖς νομαῖς ὁμολογοῦσι πάντες κατ' ἀξίαν τινὰ δεῖν εἶναι, τὴν μέντοι ἀξίαν οὐ τὴν αὐτὴν λέγουσι πάντες [ὑπάρχειν], ἀλλ' οἱ μὲν δημοκρατικοὶ ἐλευθερίαν, οἱ δ' ὀλιγαρχικοὶ πλοῦτον, οἱ δ' εὐγένειαν, οἱ δ' ἀριστοκρατικοὶ ἀρετήν. ἔστιν ἄρα τὸ δίκαιον ἀνάλογόν τι. [30] τὸ γὰρ ἀνάλογον οὐ μόνον ἐστὶ μοναδικοῦ ἀριθμοῦ ἴδιον, ἀλλ' ὅλως ἀριθμοῦ: ἡ γὰρ ἀναλογία ἰσότης ἐστὶ λόγων, καὶ ἐν τέτταρσιν ἐλαχίστοις. ἡ μὲν οὖν διηρημένη ὅτι ἐν τέτταρσι, δῆλον. ἀλλὰ καὶ ἡ συνεχής: τῷ γὰρ ἐνὶ ὧς δυσὶ χρήται καὶ δις λέγει, 1131b [1] οἶον ὡς ἡ τοῦ α πρὸς τὴν τοῦ β, οὕτως ἡ τοῦ β πρὸς τὴν τοῦ γ. δις οὖν ἡ τοῦ β εἴρηται: ὥστ' ἐὰν ἡ τοῦ β τεθῇ δις, τέτταρα ἔσται τὰ ἀνάλογα. ἔστι δὲ καὶ τὸ δίκαιον ἐν τέτταρσιν ἐλαχίστοις, καὶ ὁ λόγος ὁ αὐτός: [5] διήρηται γὰρ ὁμοίως οἷς τε καὶ ἅ. ἔσται ἄρα ὡς ὁ α ὅρος πρὸς τὸν β, οὕτως ὁ γ πρὸς τὸν δ, καὶ ἐναλλάξ ἄρα, ὡς ὁ α πρὸς τὸν γ, ὁ β πρὸς τὸν δ. ὥστε καὶ τὸ ὅλον πρὸς τὸ ὅλον: ὅπερ ἡ νομὴ συνδυάζει, κἂν οὕτω συντεθῇ, δικαίως συνδυάζει. ἡ ἄρα τοῦ α ὅρου τῷ γ καὶ ἡ τοῦ β τῷ δ σύζευξις [10] τὸ ἐν διανομῇ δίκαιόν ἐστι, καὶ μέσον τὸ δίκαιον τοῦτ' ἐστὶ, τὸ παρὰ τὸ ἀνάλογον: τὸ γὰρ ἀνάλογον μέσον, τὸ δὲ δίκαιον ἀνάλογον. καλοῦσι δὲ τὴν τοιαύτην ἀναλογίαν γεωμετρικὴν οἱ μαθηματικοί: ἐν γὰρ τῇ γεωμετρικῇ συμβαίνει καὶ τὸ ὅλον πρὸς τὸ ὅλον ὅπερ ἐκάτερον πρὸς ἐκάτερον. [15] ἔστι δ' οὐ συνεχὴς αὕτη ἡ ἀναλογία: οὐ γὰρ γίνεται εἰς ἀριθμῷ ὅρος, ὧ καὶ ὅ. τὸ μὲν οὖν δίκαιον τοῦτο, τὸ ἀνάλογον: τὸ δ' ἄδικον τὸ παρὰ τὸ ἀνάλογον. γίνεται ἄρα τὸ μὲν πλεόν τὸ δ' ἔλαττον, ὅπερ καὶ ἐπὶ τῶν ἔργων συμβαίνει: ὁ μὲν γὰρ ἀδικῶν πλεόν ἔχει, ὁ δ' ἀδικούμενος [20] ἔλαττον τοῦ ἀγαθοῦ. ἐπὶ δὲ τοῦ κακοῦ ἀνάπαλιν: ἐν ἀγαθοῦ γὰρ λόγῳ γίνεται τὸ ἔλαττον κακὸν πρὸς τὸ μείζον κακόν: ἔστι γὰρ τὸ ἔλαττον κακὸν μᾶλλον αἰρετὸν τοῦ μείζονος, τὸ δ' αἰρετὸν ἀγαθόν, καὶ τὸ μᾶλλον μείζον. τὸ μὲν οὖν ἐν εἶδος τοῦ δικαίου τοῦτ' ἐστίν.

[25] τὸ δὲ λοιπὸν ἐν τὸ διορθωτικόν, ὃ γίνεται ἐν τοῖς συναλλάγμασι καὶ τοῖς ἐκουσίοις καὶ τοῖς ἀκουσίοις. τοῦτο δὲ τὸ δίκαιον ἄλλο εἶδος ἔχει τοῦ πρότερον. τὸ μὲν γὰρ διανεμητικὸν δίκαιον τῶν κοινῶν ἀεὶ κατὰ τὴν ἀναλογίαν ἐστὶ τὴν εἰρημένην: καὶ γὰρ ἀπὸ χρημάτων κοινῶν ἐὰν γίνηται [30] ἡ διανομή, ἔσται κατὰ τὸν λόγον τὸν αὐτὸν ὅνπερ ἔχουσι πρὸς ἄλληλα τὰ εἰσενεχθέντα: καὶ τὸ ἄδικον τὸ ἀντικείμενον τῷ δικαίῳ τούτῳ τὸ παρὰ τὸ ἀνάλογόν ἐστιν. τὸ δ' ἐν τοῖς συναλλάγμασι δίκαιον ἐστὶ μὲν ἴσον τι, καὶ τὸ

ἄδικον ἄνισον, 1132a [1] ἀλλ' οὐ κατὰ τὴν ἀναλογίαν ἐκείνην ἀλλὰ κατὰ τὴν ἀριθμητικὴν. οὐδὲν γὰρ διαφέρει, εἰ ἐπεικῆς φαῦλον ἀπεστέρησεν ἢ φαῦλος ἐπεικῆ, οὐδ' εἰ ἐμοίχευσεν ἐπεικῆς ἢ φαῦλος: ἀλλὰ πρὸς τοῦ βλάβους τὴν διαφορὰν μόνον βλέπει [5] ὁ νόμος, καὶ χρῆται ὡς ἴσοις, εἰ ὁ μὲν ἀδικεῖ ὁ δ' ἀδικεῖται, καὶ εἰ ἔβλαψεν ὁ δὲ βέβλαπται. ὥστε τὸ ἄδικον τοῦτο ἄνισον ὃν ἰσάζειν πειρᾶται ὁ δικαστής: καὶ γὰρ ὅταν ὁ μὲν πληγῇ ὁ δὲ πατάξῃ, ἢ καὶ κτείνῃ ὁ δ' ἀποθάνῃ, διήρηται τὸ πάθος καὶ ἡ πρᾶξις εἰς ἄνισα: ἀλλὰ πειρᾶται τῇ [10] ζημίᾳ ἰσάζειν, ἀφαιρῶν τοῦ κέρδους. λέγεται γὰρ ὡς ἀπλῶς εἰπεῖν ἐπὶ τοῖς τοιούτοις, κἂν εἰ μὴ τισιν οἴκεῖον ὄνομα εἴῃ, τὸ κέρδος, οἷον τῷ πατάξαντι, καὶ ἡ ζημία τῷ παθόντι: ἀλλ' ὅταν γε μετρηθῇ τὸ πάθος, καλεῖται τὸ μὲν ζημία τὸ δὲ κέρδος. ὥστε τοῦ μὲν πλείονος καὶ ἐλάττονος τὸ ἴσον [15] μέσον, τὸ δὲ κέρδος καὶ ἡ ζημία τὸ μὲν πλεον τὸ δ' ἔλαττον ἐναντίως, τὸ μὲν τοῦ ἀγαθοῦ πλεον τοῦ κακοῦ δ' ἔλαττον κέρδος, τὸ δ' ἐναντίον ζημία: ὧν ἦν μέσον τὸ ἴσον, ὃ λέγομεν εἶναι δίκαιον: ὥστε τὸ ἐπανορθωτικὸν δίκαιον ἂν εἴῃ τὸ μέσον ζημίας καὶ κέρδους. διὸ καὶ ὅταν ἀμφισβητῶσιν, [20] ἐπὶ τὸν δικαστὴν καταφεύγουσιν: τὸ δ' ἐπὶ τὸν δικαστὴν ἰέναι ἰέναι ἐστὶν ἐπὶ τὸ δίκαιον: ὁ γὰρ δικαστὴς βούλεται εἶναι οἷον δίκαιον ἔμψυχον: καὶ ζητοῦσι δικαστὴν μέσον, καὶ καλοῦσιν ἔνιοι μεσιδίους, ὡς ἐὰν τοῦ μέσου τύχωσι, τοῦ δικαίου τευξόμενοι. μέσον ἄρα τι τὸ δίκαιον, εἴπερ καὶ ὁ δικαστής. ὁ δὲ [25] δικαστὴς ἐπανισοῖ, καὶ ὥσπερ γραμμῆς εἰς ἄνισα τετμημένης, ᾧ τὸ μείζον τμήμα τῆς ἡμισείας ὑπερέχει, τοῦτ' ἀφεῖλε καὶ τῷ ἐλάττονι τμήματι προσέθηκεν. ὅταν δὲ δίχα διαιρεθῇ τὸ ὅλον, τότε φασὶν ἔχειν τὸ αὐτοῦ ὅταν λάβωσι τὸ ἴσον. τὸ δ' ἴσον μέσον ἐστὶ τῆς μείζονος καὶ [30] ἐλάττονος κατὰ τὴν ἀριθμητικὴν ἀναλογίαν. διὰ τοῦτο καὶ ὀνομάζεται δίκαιον, ὅτι δίχα ἐστίν, ὥσπερ ἂν εἴ τις εἴποι δίχαιον, καὶ ὁ δικαστὴς διχαστής. ἐπ' ἂν γὰρ δύο ἴσων ἀφαιρεθῇ ἀπὸ θατέρου, πρὸς θάτερον δὲ προστεθῇ, δυσὶ τούτοις ὑπερέχει θάτερον: εἰ γὰρ ἀφηρέθη μὲν, μὴ προστεθῇ δέ, ἐνὶ ἂν μόνον ὑπερεῖχεν.

1132b [1] τοῦ μέσου ἄρα ἐνί, καὶ τὸ μέσον, ἀφ' οὗ ἀφηρέθη, ἐνί. τούτῳ ἄρα γνωριοῦμεν τί τε ἀφελεῖν δεῖ ἀπὸ τοῦ πλεον ἔχοντος, καὶ τί προσθεῖναι τῷ ἔλαττον ἔχοντι: ᾧ μὲν γὰρ τὸ μέσον ὑπερέχει, τοῦτο προσθεῖναι [5] δεῖ τῷ ἔλαττον ἔχοντι, ᾧ δ' ὑπερέχεται, ἀφελεῖν ἀπὸ τοῦ μεγίστου. ἴσαι αἱ ἐφ' ὧν αα ββ γγ ἀλλήλαις: ἀπὸ τῆς αα ἀφηρήσθω τὸ αε, καὶ προσκείσθω τῇ γγ τὸ ἐφ' ᾧ γδ, ὥστε ὅλη ἡ δγγ τῆς εα ὑπερέχει τῷ γδ καὶ τῷ γζ: τῆς ἄρα ββ τῷ γδ. [ἔστι δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων τεχνῶν: [10] ἀνηροῦντο γὰρ ἂν, εἰ μὴ

ἐποίει τὸ ποιοῦν καὶ ὅσον καὶ οἶον, καὶ τὸ πάσχον ἔπασχε τοῦτο καὶ τοσοῦτον καὶ τοιοῦτον.] ἐλήλυθε δὲ τὰ ὀνόματα ταῦτα, ἢ τε ζημία καὶ τὸ κέρδος, ἐκ τῆς ἐκουσίου ἀλλαγῆς: τὸ μὲν γὰρ πλεον ἔχειν ἢ τὰ αὐτοῦ κερδαίνειν λέγεται, τὸ δ' ἔλαττον τῶν ἐξ ἀρχῆς ζημιοῦσθαι, [15] οἶον ἐν τῷ ὠνεῖσθαι καὶ πωλεῖν καὶ ἐν ὅσοις ἄλλοις ἄδειαν δέδωκεν ὁ νόμος: ὅταν δὲ μήτε πλεον μήτ' ἔλαττον ἀλλ' αὐτὰ δι' αὐτῶν γένηται, τὰ αὐτῶν φασὶν ἔχειν καὶ οὔτε ζημιοῦσθαι οὔτε κερδαίνειν. ὥστε κέρδους τινὸς καὶ ζημίας μέσον τὸ δίκαιόν ἐστι τῶν παρὰ τὸ ἐκούσιον, τὸ ἴσον ἔχειν [20] καὶ πρότερον καὶ ὕστερον.

δοκεῖ δέ τισι καὶ τὸ ἀντιπεπονθὸς εἶναι ἀπλῶς δίκαιον, ὥσπερ οἱ Πυθαγόρειοι ἔφασαν: ὠρίζοντο γὰρ ἀπλῶς τὸ δίκαιον τὸ ἀντιπεπονθὸς ἄλλω. τὸ δ' ἀντιπεπονθὸς οὐκ ἐφαρμόττει οὔτ' ἐπὶ τὸ νεμητικὸν δίκαιον οὔτ' ἐπὶ τὸ διορθωτικόν — καίτοι [25] βούλονται γε τοῦτο λέγειν καὶ τὸ Ῥαδαμάνθυος δίκαιον:

εἴ κε πάθοι τά τ' ἔρεξε, δίκη κ' ἰθεῖα γένοιτο

— πολλαχοῦ γὰρ διαφωνεῖ: οἶον εἰ ἀρχὴν ἔχων ἐπάταξεν, οὐ δεῖ ἀντιπληγῆναι, καὶ εἰ ἄρχοντα ἐπάταξεν, οὐ πληγῆναι [30] μόνον δεῖ ἀλλὰ καὶ κολασθῆναι. ἔτι τὸ ἐκούσιον καὶ τὸ ἀκούσιον διαφέρει πολύ. ἀλλ' ἐν μὲν ταῖς κοινωνίαις ταῖς ἀλλακτικαῖς συνέχει τὸ τοιοῦτον δίκαιον, τὸ ἀντιπεπονθὸς κατ' ἀναλογίαν καὶ μὴ κατ' ἰσότητα. τῷ ἀντιποιεῖν γὰρ ἀνάλογον συμμένει ἢ πόλις. ἢ γὰρ τὸ κακῶς ζητοῦσιν: 1133a [1] εἰ δὲ μή, δουλεία δοκεῖ εἶναι [εἰ μὴ ἀντιποιήσῃ]: ἢ τὸ εὖ: εἰ δὲ μή, μετάδοσις οὐ γίνεται, τῇ μεταδόσει δὲ συμμένουσιν. διὸ καὶ Χαρίτων ἱερὸν ἐμποδῶν ποιοῦνται, ἵν' ἀνταπόδοσις ᾗ: τοῦτο γὰρ ἴδιον χάριτος: ἀνθυπηρετῆσαι γὰρ δεῖ τῷ [5] χαρισαμένῳ, καὶ πάλιν αὐτὸν ἄρξαι χαριζόμενον. ποιεῖ δὲ τὴν ἀντίδοσιν τὴν κατ' ἀναλογίαν ἢ κατὰ διάμετρον σύζευξις. οἰκοδόμος ἐφ' ὧ α, σκυτοτόμος ἐφ' ὧ β, οἰκία ἐφ' ὧ γ, ὑπόδημα ἐφ' ὧ δ. δεῖ οὖν λαμβάνειν τὸν οἰκοδόμον παρὰ τοῦ

σκυτοτόμου τὸ ἐκείνου ἔργον, καὶ αὐτὸν [10] ἐκείνῳ μεταδιδόναι τὸ αὐτοῦ. ἔαν οὖν πρῶτον ἢ τὸ κατὰ τὴν ἀναλογίαν ἴσον, εἴτα τὸ ἀντιπεπονθὸς γένηται, ἔσται τὸ λεγόμενον. εἰ δὲ μή, οὐκ ἴσον, οὐδὲ συμμένει: οὐθὲν γὰρ κωλύει κρεῖττον εἶναι τὸ θατέρου ἔργον ἢ τὸ θατέρου: δεῖ οὖν ταῦτα ἴσασθῆναι. ἔστι δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων τεχνῶν: ἀνηροῦντο [15] γὰρ ἄν, εἰ μὴ ἐποίει τὸ ποιοῦν καὶ ὅσον καὶ οἶον, καὶ τὸ πάσχον ἔπασχε τοῦτο καὶ τοσοῦτον καὶ τοιοῦτον. οὐ γὰρ ἐκ δύο ἱατρῶν γίνεται κοινωνία, ἀλλ' ἐξ ἱατροῦ καὶ γεωργοῦ, καὶ ὅλως ἐτέρων καὶ οὐκ ἴσων: ἀλλὰ τούτους δεῖ ἴσασθῆναι. διὸ πάντα συμβλητὰ δεῖ πῶς εἶναι, ὧν ἐστὶν ἀλλαγὴ. [20] ἐφ' ὃ τὸ νόμισμ' ἐλήλυθε, καὶ γίνεται πῶς μέσον: πάντα γὰρ μετρεῖ, ὥστε καὶ τὴν ὑπεροχὴν καὶ τὴν ἔλλειψιν, πόσα ἄττα δὴ ὑποδήματ' ἴσον οἰκίᾳ ἢ τροφῇ. δεῖ τοίνυν ὅπερ οἰκοδόμος πρὸς σκυτοτόμον, τοσαδὶ ὑποδήματα πρὸς οἰκίαν ἢ τροφήν. εἰ γὰρ μὴ τοῦτο, οὐκ ἔσται ἀλλαγὴ οὐδὲ κοινωνία. [25] τοῦτο δ', εἰ μὴ ἴσα εἴη πῶς, οὐκ ἔσται. δεῖ ἄρα ἐνὶ τινὶ πάντα μετρεῖσθαι, ὥσπερ ἐλέχθη πρότερον. τοῦτο δ' ἐστὶ τῇ μὲν ἀληθείᾳ ἢ χρειᾷ, ἢ πάντα συνέχει: εἰ γὰρ μηθὲν δέοιντο ἢ μὴ ὁμοίως, ἢ οὐκ ἔσται ἀλλαγὴ ἢ οὐχ ἢ αὐτῇ: οἶον δ' ὑπάλλαγμα τῆς χρειᾶς τὸ νόμισμα γέγονε κατὰ συνθήκην: [30] καὶ διὰ τοῦτο τοῦνομα ἔχει νόμισμα, ὅτι οὐ φύσει ἀλλὰ νόμῳ ἐστί, καὶ ἐφ' ἡμῖν μεταβαλεῖν καὶ ποιῆσαι ἄχρηστον. ἔσται δὲ ἀντιπεπονθός, ὅταν ἴσασθῇ, ὥστε ὅπερ γεωργὸς πρὸς σκυτοτόμον, τὸ ἔργον τὸ τοῦ σκυτοτόμου πρὸς τὸ τοῦ γεωργοῦ.

1133b [1] εἰς σχῆμα δ' ἀναλογίας οὐ δεῖ ἄγειν, ὅταν ἀλλάζωνται· εἰ δὲ μή, ἀμφοτέρας ἔξει τὰς ὑπεροχὰς τὸ ἕτερον ἄκρον, ἀλλ' ὅταν ἔχωσι τὰ αὐτῶν. οὕτως ἴσοι καὶ κοιωνοί, ὅτι αὕτη ἢ ἰσότης δύναται ἐπ' αὐτῶν γίνεσθαι. γεωργὸς α, τροφὴ γ, [5] σκυτοτόμος β, τὸ ἔργον αὐτοῦ τὸ ἴσασμένον δ. εἰ δ' οὕτω μὴ ἦν ἀντιπεπονθέναι, οὐκ ἂν ἦν κοινωνία. ὅτι δ' ἡ χρειᾷ συνέχει ὥσπερ ἔν τι ὄν, δηλοῖ ὅτι ὅταν μὴ ἐν χρειᾷ ὣσιν ἀλλήλων, ἢ ἀμφοτέροι ἢ ἄτερος, οὐκ ἀλλάττονται, ὥσπερ ὅταν οὐ ἔχει αὐτὸς δέηταί τις, οἶον οἴνου, διδόντες σίτου ἐξαγωγὴν.† [10] δεῖ ἄρα τοῦτο ἴσασθῆναι. ὑπὲρ δὲ τῆς μελλούσης ἀλλαγῆς, εἰ νῦν μηδὲν δεῖται, ὅτι ἔσται ἂν δεηθῇ, τὸ νόμισμα οἶον ἐγγυητὴς ἐσθ' ἡμῖν: δεῖ γὰρ τοῦτο φέροντι εἶναι λαβεῖν. πάσχει μὲν οὖν καὶ τοῦτο τὸ αὐτό: οὐ γὰρ ἀεὶ ἴσον δύναται: ὅμως δὲ βούλεται μένειν μᾶλλον. διὸ δεῖ πάντα [15] τετιμῆσθαι: οὕτω γὰρ ἀεὶ ἔσται ἀλλαγὴ, εἰ δὲ τοῦτο, κοινωνία. τὸ δὲ νόμισμα ὥσπερ μέτρον σύμμετρα ποιῆσαν ἰσάζει: οὔτε γὰρ ἂν μὴ οὔσης ἀλλαγῆς κοινωνία ἦν, οὔτ' ἀλλαγὴ ἰσότητος μὴ οὔσης, οὔτ' ἰσότης μὴ οὔσης

συμμετρίας. τῇ μὲν οὖν ἀληθείᾳ ἀδύνατον τὰ τοσοῦτον διαφέροντα σύμμετρα [20] γενέσθαι, πρὸς δὲ τὴν χρεῖαν ἐνδέχεται ἱκανῶς. Ἐν δὲ τι δεῖ εἶναι, τοῦτο δ' ἐξ ὑποθέσεως: διὸ νόμισμα καλεῖται: τοῦτο γὰρ πάντα ποιεῖ σύμμετρα: μετρεῖται γὰρ πάντα νομίσματι. οἰκία α, μναῖ δέκα β, κλίνη γ. τὸ α τοῦ β ἥμισυ, εἰ πέντε μνῶν ἀξία ἡ οἰκία, ἢ ἴσον: ἡ δὲ κλίνη δέκατον [25] μέρος, τὸ γ τοῦ β: δῆλον τοίνυν πόσαι κλῖναι ἴσον οἰκία, ὅτι πέντε. ὅτι δ' οὕτως ἡ ἀλλαγὴ ἦν πρὶν τὸ νόμισμα εἶναι, δῆλον: διαφέρει γὰρ οὐδὲν ἢ κλῖναι πέντε ἀντὶ οἰκίας, ἢ ὅσου αἱ πέντε κλῖναι.

τί μὲν οὖν τὸ ἄδικον καὶ τί τὸ δίκαιόν ἐστιν, εἴρηται. [30] διωρισμένων δὲ τούτων δῆλον ὅτι ἡ δικαιοπραγία μέσον ἐστὶ τοῦ ἀδικεῖν καὶ ἀδικεῖσθαι: τὸ μὲν γὰρ πλεον ἔχειν τὸ δ' ἔλαττον ἐστίν. ἡ δὲ δικαιοσύνη μεσότης τίς ἐστιν, οὐ τὸν αὐτὸν δὲ τρόπον ταῖς ἄλλαις ἀρεταῖς, ἀλλ' ὅτι μέσου ἐστίν: ἡ δ' ἀδικία τῶν ἀκρων.

1134a [1] καὶ ἡ μὲν δικαιοσύνη ἐστὶ καθ' ἣν ὁ δίκαιος λέγεται πρακτικὸς κατὰ προαίρεσιν τοῦ δικαίου, καὶ διανεμητικὸς καὶ αὐτῷ πρὸς ἄλλον καὶ ἑτέρῳ πρὸς ἕτερον οὐχ οὕτως ὥστε τοῦ μὲν αἶρετοῦ πλεον αὐτῷ ἔλαττον δὲ τῷ [5] πλησίον, τοῦ βλαβεροῦ δ' ἀνάπαλιν, ἀλλὰ τοῦ ἴσου τοῦ κατ' ἀναλογίαν, ὁμοίως δὲ καὶ ἄλλῳ πρὸς ἄλλον. ἡ δ' ἀδικία τὸναντίον τοῦ ἀδίκου. τοῦτο δ' ἐστὶν ὑπερβολὴ καὶ ἔλλειψις τοῦ ὠφελίμου ἢ βλαβεροῦ παρὰ τὸ ἀνάλογον. διὸ ὑπερβολὴ καὶ ἔλλειψις ἡ ἀδικία, ὅτι ὑπερβολῆς καὶ ἐλλείψεως ἐστίν, ἐφ' [10] αὐτοῦ μὲν ὑπερβολῆς μὲν τοῦ ἀπλῶς ὠφελίμου, ἐλλείψεως δὲ τοῦ βλαβεροῦ: ἐπὶ δὲ τῶν ἄλλων τὸ μὲν ὅλον ὁμοίως, τὸ δὲ παρὰ τὸ ἀνάλογον, ὁποτέρως ἔτυχεν. τοῦ δὲ ἀδικήματος τὸ μὲν ἔλαττον ἀδικεῖσθαί ἐστι, τὸ δὲ μεῖζον τὸ ἀδικεῖν. περὶ μὲν οὖν δικαιοσύνης καὶ ἀδικίας, τίς ἑκατέρας ἐστὶν [15] ἡ φύσις, εἰρήσθω τοῦτον τὸν τρόπον, ὁμοίως δὲ καὶ περὶ δικαίου καὶ ἀδίκου καθόλου.

ἐπεὶ δ' ἔστιν ἀδικοῦντα μήπω ἄδικον εἶναι, ὁ ποῖα ἀδικήματα ἀδικῶν ἤδη

ἄδικός ἐστιν ἐκάστην ἀδικίαν, οἷον κλέπτῃς ἢ μοιχὸς ἢ ληστής; ἢ οὕτω μὲν οὐδὲν διοίσει; καὶ γὰρ [20] ἂν συγγένοιτο γυναικὶ εἰδῶς τὸ ἦ, ἀλλ' οὐ διὰ προαιρέσεως ἀρχὴν ἀλλὰ διὰ πάθος. ἀδικεῖ μὲν οὖν, ἄδικος δ' οὐκ ἔστιν, οἷον οὐ κλέπτῃς, ἔκλεψε δέ, οὐδὲ μοιχός, ἐμοίχευσε δέ: ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. πῶς μὲν οὖν ἔχει τὸ ἀντιπεπονηθὸς πρὸς τὸ δίκαιον, εἴρηται πρότερον: δεῖ δὲ μὴ λανθάνειν [25] ὅτι τὸ ζητούμενόν ἐστι καὶ τὸ ἀπλῶς δίκαιον καὶ τὸ πολιτικὸν δίκαιον. τοῦτο δ' ἔστιν ἐπὶ κοινωνῶν βίου πρὸς τὸ εἶναι αὐτάρκειαν, ἐλευθέρων καὶ ἴσων ἢ κατ' ἀναλογίαν ἢ κατ' ἀριθμόν: ὥστε ὅσοις μὴ ἐστι τοῦτο, οὐκ ἔστι τούτοις πρὸς ἀλλήλους τὸ πολιτικὸν δίκαιον, ἀλλὰ τι δίκαιον καὶ καθ' [30] ὁμοιότητα. ἔστι γὰρ δίκαιον, οἷς καὶ νόμος πρὸς αὐτούς: νόμος δ', ἐν οἷς ἀδικία: ἡ γὰρ δίκη κρίσις τοῦ δικαίου καὶ τοῦ ἀδίκου. ἐν οἷς δ' ἀδικία, καὶ τὸ ἀδικεῖν ἐν τούτοις ἐν οἷς δὲ τὸ ἀδικεῖν, οὐ πᾶσιν ἀδικία, τοῦτο δ' ἐστὶ τὸ πλέον αὐτῷ νέμειν τῶν ἀπλῶς ἀγαθῶν, ἔλαττον δὲ τῶν ἀπλῶς κακῶν. [35] διὸ οὐκ ἐῷμεν ἄρχειν ἄνθρωπον, ἀλλὰ τὸν λόγον, ὅτι ἐαυτῷ τοῦτο ποιεῖ

1134a [1] καὶ ἡ μὲν δικαιοσύνη ἐστὶ καθ' ἣν ὁ δίκαιος λέγεται πρακτικὸς κατὰ προαίρεσιν τοῦ δικαίου, καὶ διανεμητικὸς καὶ αὐτῷ πρὸς ἄλλον καὶ ἑτέρῳ πρὸς ἕτερον οὐχ οὕτως ὥστε τοῦ μὲν αἶρετοῦ πλέον αὐτῷ ἔλαττον δὲ τῷ [5] πλησίον, τοῦ βλαβεροῦ δ' ἀνάπαλιν, ἀλλὰ τοῦ ἴσου τοῦ κατ' ἀναλογίαν, ὁμοίως δὲ καὶ ἄλλῳ πρὸς ἄλλον. ἡ δ' ἀδικία τὸναντίον τοῦ ἀδίκου. τοῦτο δ' ἐστὶν ὑπερβολὴ καὶ ἑλλειψὶς τοῦ ὠφελίμου ἢ βλαβεροῦ παρὰ τὸ ἀνάλογον. διὸ ὑπερβολὴ καὶ ἑλλειψὶς ἡ ἀδικία, ὅτι ὑπερβολῆς καὶ ἑλλείψεως ἐστίν, ἐφ' [10] αὐτοῦ μὲν ὑπερβολῆς μὲν τοῦ ἀπλῶς ὠφελίμου, ἑλλείψεως δὲ τοῦ βλαβεροῦ: ἐπὶ δὲ τῶν ἄλλων τὸ μὲν ὅλον ὁμοίως, τὸ δὲ παρὰ τὸ ἀνάλογον, ὅποτέρως ἔτυχεν. τοῦ δὲ ἀδικήματος τὸ μὲν ἔλαττον ἀδικεῖσθαι ἐστὶ, τὸ δὲ μεῖζον τὸ ἀδικεῖν. περὶ μὲν οὖν δικαιοσύνης καὶ ἀδικίας, τίς ἐκατέρας ἐστὶν [15] ἡ φύσις, εἰρήσθω τοῦτον τὸν τρόπον, ὁμοίως δὲ καὶ περὶ δικαίου καὶ ἀδίκου καθόλου.

ἐπεὶ δ' ἔστιν ἀδικοῦντα μήπω ἄδικον εἶναι, ὁ ποῖα ἀδικήματα ἀδικῶν ἤδη ἄδικός ἐστιν ἐκάστην ἀδικίαν, οἷον κλέπτῃς ἢ μοιχὸς ἢ ληστής; ἢ οὕτω μὲν οὐδὲν διοίσει; καὶ γὰρ [20] ἂν συγγένοιτο γυναικὶ εἰδῶς τὸ ἦ, ἀλλ' οὐ διὰ προαιρέσεως ἀρχὴν ἀλλὰ διὰ πάθος. ἀδικεῖ μὲν οὖν, ἄδικος δ' οὐκ ἔστιν,



οἷον οὐ κλέπτῃς, ἔκλεψε δέ, οὐδὲ μοιχός, ἐμοίχευσε δέ: ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. πῶς μὲν οὖν ἔχει τὸ ἀντιπεπονηθὸς πρὸς τὸ δίκαιον, εἴρηται πρότερον: δεῖ δὲ μὴ λανθάνειν [25] ὅτι τὸ ζητούμενόν ἐστι καὶ τὸ ἀπλῶς δίκαιον καὶ τὸ πολιτικὸν δίκαιον. τοῦτο δ' ἐστὶν ἐπὶ κοινωνῶν βίου πρὸς τὸ εἶναι αὐτάρκειαν, ἐλευθέρων καὶ ἴσων ἢ κατ' ἀναλογίαν ἢ κατ' ἀριθμόν: ὥστε ὅσοις μὴ ἐστὶ τοῦτο, οὐκ ἐστὶ τούτοις πρὸς ἀλλήλους τὸ πολιτικὸν δίκαιον, ἀλλὰ τι δίκαιον καὶ καθ' [30] ὁμοιότητα. ἐστὶ γὰρ δίκαιον, οἷς καὶ νόμος πρὸς αὐτούς: νόμος δ', ἐν οἷς ἀδικία: ἡ γὰρ δίκη κρίσις τοῦ δικαίου καὶ τοῦ ἀδίκου. ἐν οἷς δ' ἀδικία, καὶ τὸ ἀδικεῖν ἐν τούτοις ἐν οἷς δὲ τὸ ἀδικεῖν, οὐ πᾶσιν ἀδικία, τοῦτο δ' ἐστὶ τὸ πλεον αὐτῷ νέμειν τῶν ἀπλῶς ἀγαθῶν, ἔλαττον δὲ τῶν ἀπλῶς κακῶν. [35] διὸ οὐκ ἐῷμεν ἄρχειν ἄνθρωπον, ἀλλὰ τὸν λόγον, ὅτι ἐαυτῷ τοῦτο ποιεῖ 1135a [1] ὅμοιά ἐστι τοῖς μέτροις: οὐ γὰρ πανταχοῦ ἴσα τὰ οἰνηρὰ καὶ σιτηρὰ μέτρα, ἀλλ' οὐ μὲν ὠνοῦνται, μείζω, οὐ δὲ πωλοῦσιν, ἐλάττω. ὁμοίως δὲ καὶ τὰ μὴ φυσικὰ ἀλλ' ἀνθρώπινα δίκαια οὐ ταῦτά πανταχοῦ, ἐπεὶ οὐδ' αἱ πολιτεῖαι, [5] ἀλλὰ μία μόνον πανταχοῦ κατὰ φύσιν ἢ ἀρίστη. τῶν δὲ δικαίων καὶ νομίμων ἕκαστον ὡς τὰ καθόλου πρὸς τὰ καθ' ἕκαστα ἔχει: τὰ μὲν γὰρ πραττόμενα πολλά, ἐκείνων δ' ἕκαστον ἓν: καθόλου γάρ. διαφέρει δὲ τὸ ἀδίκημα καὶ τὸ ἄδικον καὶ τὸ δικαίωμα καὶ τὸ δίκαιον: ἄδικον μὲν γάρ [10] ἐστὶ τῇ φύσει ἢ τάξει: αὐτὸ δὲ τοῦτο, ὅτανπραχθῇ, ἀδίκημά ἐστι, πρὶν δὲπραχθῆναι, οὐπω, ἀλλ' ἄδικον. ὁμοίως δὲ καὶ δικαίωμα: καλεῖται δὲ μᾶλλον δικαιοπράγημα τὸ κοινόν, δικαίωμα δὲ τὸ ἐπανόρθωμα τοῦ ἀδικήματος. καθ' ἕκαστον δὲ αὐτῶν, ποῖά τε εἶδη καὶ πόσα καὶ περὶ ποῖα [15] τυγχάνει ὄντα, ὕστερον ἐπισκεπτέον. ὄντων δὲ τῶν δικαίων καὶ ἀδίκων τῶν εἰρημένων, ἀδικεῖ μὲν καὶ δικαιοπραγεῖ ὅταν ἐκὼν τις αὐτὰ πράττῃ: ὅταν δ' ἄκων, οὐτ' ἀδικεῖ οὔτε δικαιοπραγεῖ ἀλλ' ἢ κατὰ συμβεβηκός: οἷς γὰρ συμβέβηκε δικαίοις εἶναι ἢ ἀδίκους, πράττουσιν. ἀδίκημα δὲ καὶ [20] δικαιοπράγημα ὠρίσται τῷ ἐκουσίῳ καὶ ἀκουσίῳ: ὅταν γὰρ ἐκούσιον ἦ, ψέγεται, ἅμα δὲ καὶ ἀδίκημα τότε ἐστίν: ὥστ' ἐστὶ τι ἄδικον μὲν ἀδίκημα δ' οὐπω, ἂν μὴ τὸ ἐκούσιον προσῇ. λέγω δ' ἐκούσιον μὲν, ὥσπερ καὶ πρότερον εἴρηται, ὃ ἂν τις τῶν ἐφ' αὐτῷ ὄντων εἰδὼς καὶ μὴ ἀγνοῶν πράττῃ [25] μήτε ὄν μήτε ὧ μήτε οὐ, οἷον τίνα τύπτει καὶ τίνι καὶ τίνος ἔνεκα, κἀκείνων ἕκαστον μὴ κατὰ συμβεβηκός μηδὲ βίᾳ ὥσπερ εἴ τις λαβὼν τὴν χεῖρα αὐτοῦ τύπτει ἕτερον, οὐχ ἐκὼν: οὐ γὰρ ἐπ' αὐτῷ: ἐνδέχεται δὲ τὸν τυπτόμενον πατέρα εἶναι, τὸν δ' ὅτι μὲν ἄνθρωπος ἢ τῶν παρόντων τις [30] γινώσκειν, ὅτι δὲ πατὴρ ἀγνοεῖν: ὁμοίως δὲ τὸ τοιοῦτον διωρίσθω καὶ ἐπὶ τοῦ οὐ ἔνεκα, καὶ περὶ τὴν πρᾶξιν ὅλην. τὸ δὲ ἀγνοούμενον, ἢ μὴ ἀγνοούμενον μὲν μὴ ἐπ' αὐτῷ δ' ὄν, ἢ βίᾳ, ἀκούσιον. πολλὰ γὰρ καὶ τῶν φύσει ὑπαρχόντων 1135b [1] εἰδότες καὶ πράττομεν καὶ πάσχομεν, ὧν οὐθὲν οὐθ'

ἐκούσιον οὐτ' ἀκούσιόν ἐστιν, οἷον τὸ γηρᾶν ἢ ἀποθνήσκειν. ἔστι δ' ὁμοίως ἐπὶ τῶν ἀδίκων καὶ τῶν δικαίων καὶ τὸ κατὰ συμβεβηκός: καὶ γὰρ ἂν τὴν παρακαταθήκην ἀποδοίη τις ἄκων καὶ διὰ [5] φόβον, ὃν οὐτε δίκαια πράττειν οὐτε δικαιοπραγεῖν φατέον ἀλλ' ἢ κατὰ συμβεβηκός. ὁμοίως δὲ καὶ τὸν ἀναγκαζόμενον καὶ ἄκοντα τὴν παρακαταθήκην μὴ ἀποδιδόντα κατὰ συμβεβηκός φατέον ἀδικεῖν καὶ τὰ ἄδικα πράττειν. τῶν δὲ ἐκουσίων τὰ μὲν προελόμενοι πράττομεν τὰ δ' οὐ προελόμενοι, [10] προελόμενοι μὲν ὅσα προβουλευσάμενοι, ἀπροαίρετα δὲ ὅσ' ἀπροβούλευτα. τριῶν δὲ οὐσῶν βλαβῶν τῶν ἐν ταῖς κοινωνίαις, τὰ μὲν μετ' ἀγνοίας ἀμαρτήματά ἐστιν, ὅταν μήτε ὃν μήτε ὃ μήτε ὧ μήτε οὐ ἔνεκα ὑπέλαβε πράξει: ἢ γὰρ οὐ βάλλειν ἢ οὐ τούτῳ ἢ οὐ τοῦτον ἢ οὐ τούτου ἔνεκα ὠήθη, [15] ἀλλὰ συνέβη οὐχ οὐ ἔνεκα ὠήθη, οἷον οὐχ ἵνα τρώσῃ ἀλλ' ἵνα κεντήσῃ, ἢ οὐχ ὄν, ἢ οὐχ ὧ. ὅταν μὲν οὖν παραλόγως ἢ βλάβη γένηται, ἀτύχημα: ὅταν δὲ μὴ παραλόγως, ἄνευ δὲ κακίας, ἀμάρτημά ἀμαρτάνει μὲν γὰρ ὅταν ἡ ἀρχὴ ἐν αὐτῷ ἢ τῆς αἰτίας, ἀτυχεῖ δ' ὅταν ἔξωθεν: ὅταν δὲ [20] εἰδὼς μὲν μὴ προβουλεύσας δέ, ἀδίκημα, οἷον ὅσα τε διὰ θυμὸν καὶ ἄλλα πάθη, ὅσα ἀναγκαῖα ἢ φυσικὰ συμβαίνει τοῖς ἀνθρώποις: ταῦτα γὰρ βλάπτοντες καὶ ἀμαρτάνοντες ἀδικοῦσι μὲν, καὶ ἀδικήματά ἐστιν, οὐ μέντοι πῶς ἀδικοὶ διὰ ταῦτα οὐδὲ πονηροί: οὐ γὰρ διὰ μοχθηρίαν ἢ βλάβη: [25] ὅταν δ' ἐκ προαιρέσεως, ἄδικος καὶ μοχθηρός. διὸ καλῶς τὰ ἐκ θυμοῦ οὐκ ἐκ προνοίας κρίνεται: οὐ γὰρ ἄρχει ὁ θυμῷ ποιῶν, ἀλλ' ὁ ὀργίσας. ἔτι δὲ οὐδὲ περὶ τοῦ γενέσθαι ἢ μὴ ἀμφισβητεῖται, ἀλλὰ περὶ τοῦ δικαίου: ἐπὶ φαινομένῃ γὰρ ἀδικία ἢ ὀργή ἐστιν. οὐ γὰρ ὥσπερ ἐν τοῖς συναλλάγμασι [30] περὶ τοῦ γενέσθαι ἀμφισβητοῦσιν, ὧν ἀνάγκη τὸν ἕτερον εἶναι μοχθηρόν, ἂν μὴ διὰ λήθην αὐτὸ δρῶσιν: ἀλλ' ὁμολογοῦντες περὶ τοῦ πράγματος, περὶ δὲ τοῦ ποτέρως δίκαιον ἀμφισβητοῦσιν ὁ δ' ἐπιβουλεύσας οὐκ ἀγνοεῖ, ὥστε ὃ μὲν οἶται ἀδικεῖσθαι, ὃ δ' οὐ.

1136a [1] ἐὰν δ' ἐκ προαιρέσεως βλάβη, ἀδικεῖ: καὶ κατὰ ταῦτ' ἤδη τὰ ἀδικήματα ὁ ἀδικῶν ἄδικος, ὅταν παρὰ τὸ ἀνάλογον ἢ ἢ παρὰ τὸ ἴσον. ὁμοίως δὲ καὶ δίκαιος, ὅταν προελόμενος δικαιοπραγῇ: δικαιοπραγεῖ δέ, ἂν μόνον ἐκὼν [5] πράττῃ. τῶν δ' ἐκουσίων τὰ μὲν ἐστὶ συγγνωμονικά τὰ δ' οὐ συγγνωμονικά. ὅσα μὲν γὰρ μὴ μόνον ἀγνοοῦντες ἀλλὰ καὶ δι' ἀγνοίαν ἀμαρτάνουσι, συγγνωμονικά, ὅσα δὲ μὴ δι' ἀγνοίαν, ἀλλ' ἀγνοοῦντες μὲν διὰ πάθος δὲ μήτε φυσικὸν μήτ' ἀνθρώπινον, οὐ συγγνωμονικά.

[10] ἀπορήσειε δ' ἄν τις, εἰ ἱκανῶς διώρισται περὶ τοῦ ἀδικεῖσθαι καὶ ἀδικεῖν, πρῶτον μὲν εἰ ἔστιν ὥσπερ Εὐριπίδης εἴρηκε, λέγων ἀτόπως

μητέρα κατέκταν τὴν ἐμήν, βραχὺς λόγος. ἐκὼν ἐκοῦσαν, ἢ ἐκοῦσαν οὐχ ἐκὼν;

[15] πότερον γὰρ ὡς ἀληθῶς ἔστιν ἐκόντα ἀδικεῖσθαι, ἢ οὐ ἄλλ' ἀκούσιον ἅπαν, ὥσπερ καὶ τὸ ἀδικεῖν πᾶν ἐκούσιον; καὶ ἄρα πᾶν οὕτως ἢ ἐκείνως, [ὥσπερ καὶ τὸ ἀδικεῖν πᾶν ἐκούσιον,] ἢ τὸ μὲν ἐκούσιον τὸ δ' ἀκούσιον; ὁμοίως δὲ καὶ ἐπὶ τοῦ δικαιοῦσθαι: τὸ γὰρ δικαιοπραγεῖν πᾶν ἐκούσιον: ὥστ' εὐλόγον [20] ἀντικεῖσθαι ὁμοίως καθ' ἐκάτερον, τό τ' ἀδικεῖσθαι καὶ δικαιοῦσθαι ἢ ἐκούσιον ἢ ἀκούσιον εἶναι. ἄτοπον δ' ἄν δόξειε καὶ ἐπὶ τοῦ δικαιοῦσθαι, εἰ πᾶν ἐκούσιον: ἔνιοι γὰρ δικαιοῦνται οὐχ ἐκόντες. ἔπειτα καὶ τόδε διαπορήσειεν ἄν τις, πότερον ὁ τὸ ἄδικον πεπονθὼς ἀδικεῖται πᾶς, ἢ ὥσπερ καὶ ἐπὶ τοῦ πράττειν, [25] καὶ ἐπὶ τοῦ πάσχειν ἐστίν: κατὰ συμβεβηκὸς γὰρ ἐνδέχεται ἐπ' ἀμφοτέρων μεταλαμβάνειν τῶν δικαίων: ὁμοίως δὲ δῆλον ὅτι καὶ ἐπὶ τῶν ἀδίκων: οὐ γὰρ ταῦτόν τὸ τᾶδिका πράττειν τῷ ἀδικεῖν οὐδὲ τὸ ἄδικα πάσχειν τῷ ἀδικεῖσθαι: ὁμοίως δὲ καὶ ἐπὶ τοῦ δικαιοπραγεῖν καὶ δικαιοῦσθαι: ἀδύνατον [30] γὰρ ἀδικεῖσθαι μὴ ἀδικοῦντος ἢ δικαιοῦσθαι μὴ δικαιοπραγοῦντος. εἰ δ' ἐστὶν ἀπλῶς τὸ ἀδικεῖν τὸ βλάπτειν ἐκόντα τινά, τὸ δ' ἐκόντα εἰδότα καὶ ὄν καὶ ᾧ καὶ ὡς, ὁ δ' ἀκρατὴς ἐκὼν βλάπτει αὐτὸς αὐτόν, ἐκὼν τ' ἄν ἀδικοῖτο κἂν ἐνδέχοιτο αὐτὸς αὐτόν ἀδικεῖν. ἔστι δὲ καὶ τοῦτο ἐν τῶν ἀπορουμένων, 1136b [1] εἰ ἐνδέχεται αὐτόν αὐτόν ἀδικεῖν. ἔτι ἐκὼν ἄν τις δι' ἀκρασίαν ὑπ' ἄλλου βλάπτοιτο ἐκόντος, ὥστ' εἴη ἄν ἐκόντ' ἀδικεῖσθαι. ἢ οὐκ ὀρθὸς ὁ διορισμός, ἀλλὰ προσθετέον τῷ βλάπτειν εἰδότα καὶ ὄν καὶ ᾧ καὶ ὡς τὸ παρὰ τὴν ἐκείνου [5] βούλησιν; βλάπτεται μὲν οὖν τις ἐκὼν καὶ τᾶδिका πάσχει, ἀδικεῖται δ' οὐδεὶς ἐκὼν: οὐδεὶς γὰρ βούλεται, οὐδ' ὁ ἀκρατής, ἀλλὰ παρὰ τὴν βούλησιν πράττει: οὔτε γὰρ βούλεται οὐδεὶς ὃ μὴ οἶεται εἶναι σπουδαῖον, ὃ τε ἀκρατὴς οὐχ ἃ οἶεται δεῖν πράττειν πράττει. ὁ δὲ τὰ αὐτοῦ διδούς, ὥσπερ Ὀμηρὸς φησι [10] δοῦναι τὸν Γλαῦκον τῷ Διομήδει

χρύσεια χαλκείων, ἑκατόμβοι' ἐννεαβοίων,

1 οὐκ ἀδικεῖται: ἐπ' αὐτῷ γάρ ἐστι τὸ δίδοναι, τὸ δ' ἀδικεῖσθαι οὐκ ἐπ' αὐτῷ, ἀλλὰ τὸν ἀδικοῦντα δεῖ ὑπάρχειν. περὶ μὲν οὖν τοῦ ἀδικεῖσθαι, ὅτι οὐχ ἑκούσιον, δῆλον.

[15] ἔτι δ' ὧν προειλόμεθα δύ' ἔστιν εἰπεῖν, πότερόν ποτ' ἀδικεῖ ὁ νείμας παρὰ τὴν ἀξίαν τὸ πλεόν ἢ ὁ ἔχων, καὶ εἰ ἔστιν αὐτὸν αὐτὸν ἀδικεῖν. εἰ γὰρ ἐνδέχεται τὸ πρότερον λεχθὲν καὶ ὁ διανέμων ἀδικεῖ ἀλλ' οὐχ ὁ ἔχων τὸ πλεόν, εἴ τις πλεόν αὐτοῦ ἐτέρῳ νέμει εἰδῶς καὶ ἐκῶν, οὗτος αὐτὸς [20] αὐτὸν ἀδικεῖ: ὅπερ δοκοῦσιν οἱ μέτριοι ποιεῖν: ὁ γὰρ ἐπικτῆς ἐλαττωτικός ἐστιν. ἢ οὐδὲ τοῦτο ἀπλοῦν; ἐτέρου γὰρ ἀγαθοῦ, εἰ ἔτυχεν, πλεονεκτεῖ, οἷον δόξης ἢ τοῦ ἀπλῶς καλοῦ. ἔτι λύεται κατὰ τὸν διορισμὸν τοῦ ἀδικεῖν: οὐδὲν γὰρ παρὰ τὴν αὐτοῦ πάσχει βούλησιν, ὥστε οὐκ ἀδικεῖται διὰ γε τοῦτο, [25] ἀλλ' εἴπερ, βλάπτεται μόνον. φανερόν δὲ ὅτι καὶ ὁ διανέμων ἀδικεῖ, ἀλλ' οὐχ ὁ τὸ πλεόν ἔχων ἀεὶ: οὐ γὰρ ὧ τὸ ἄδικον ὑπάρχει ἀδικεῖ, ἀλλ' ὧ τὸ ἐκόντα τοῦτο ποιεῖν: τοῦτο δ' ὅθεν ἡ ἀρχὴ τῆς πράξεως, ἢ ἐστιν ἐν τῷ διανέμοντι ἀλλ' οὐκ ἐν τῷ λαμβάνοντι. ἔτι ἐπεὶ πολλαχῶς τὸ ποιεῖν [30] λέγεται, καὶ ἔστιν ὡς τὰ ἄψυχα κτείνει καὶ ἡ χεὶρ καὶ ὁ οἰκέτης ἐπιτάξαντος, οὐκ ἀδικεῖ μὲν, ποιεῖ δὲ τὰ ἄδικα. ἔτι εἰ μὲν ἀγνοῶν ἔκρινεν, οὐκ ἀδικεῖ κατὰ τὸ νομικὸν δίκαιον οὐδ' ἄδικος ἢ κρίσις ἐστίν, ἔστι δ' ὡς ἄδικος: ἕτερον γὰρ τὸ νομικὸν δίκαιον καὶ τὸ πρῶτον: εἰ δὲ γινώσκων ἔκρινεν ἀδίκως, 1137a [1] πλεονεκτεῖ καὶ αὐτὸς ἢ χάριτος ἢ τιμωρίας. ὥσπερ οὖν κὰν εἴ τις μερίσαιτο τοῦ ἀδικήματος, καὶ ὁ διὰ ταῦτα κρίνας ἀδίκως πλεόν ἔχει: καὶ γὰρ ἐπ' ἐκείνῳ τὸν ἀγρὸν κρίνας οὐκ ἀγρὸν ἀλλ' ἀργύριον ἔλαβεν. οἱ δ' [5] ἄνθρωποι ἐφ' ἑαυτοῖς οἷονται εἶναι τὸ ἀδικεῖν: διὸ καὶ τὸ δίκαιον εἶναι ῥάδιον. τὸ δ' οὐκ ἔστιν: συγγενέσθαι μὲν γὰρ τῇ τοῦ γείτονος καὶ πατάξαι τὸν πλησίον καὶ δοῦναι τῇ χειρὶ τὸ ἀργύριον ῥάδιον καὶ ἐπ' αὐτοῖς, ἀλλὰ τὸ ὠδὶ ἔχοντας ταῦτα ποιεῖν οὔτε ῥάδιον οὔτ' ἐπ' αὐτοῖς. ὁμοίως δὲ καὶ τὸ [10] γινῶναι τὰ δίκαια καὶ τὰ ἄδικα οὐδὲν οἷονται σοφὸν εἶναι, ὅτι περὶ ὧν οἱ νόμοι λέγουσιν οὐ χαλεπὸν συνιέναι· ἀλλ' οὐ ταῦτ' ἐστὶ τὰ δίκαια ἀλλ' ἢ κατὰ συμβεβηκόσ: ἀλλὰ πῶς πραττόμενα καὶ πῶς νεμόμενα δίκαια, τοῦτο δὴ

πλέον ἔργον ἢ τὰ ὑγιεινὰ εἰδέναι: ἐπεὶ κάκεῖ μέλι καὶ οἶνον καὶ [15] ἐλλέβορον καὶ καῦσιν καὶ τομὴν εἰδέναι ῥάδιον, ἀλλὰ πῶς δεῖ νεῖμαι πρὸς ὑγίειαν καὶ τίνι καὶ πότε, τοσοῦτον ἔργον ὅσον ἰατρὸν εἶναι. δι' αὐτὸ δὲ τοῦτο καὶ τοῦ δικαίου οἶοντα εἶναι οὐδὲν ἥττον τὸ ἀδικεῖν, ὅτι οὐχ ἥττον ὁ δίκαιος ἀλλὰ καὶ μᾶλλον δύναιτ' ἂν ἕκαστον πρᾶξαι τούτων: καὶ γὰρ [20] συγγενέσθαι γυναικὶ καὶ πατάξαι: καὶ ὁ ἀνδρεῖος τὴν ἀσπίδα ἀφεῖναι καὶ στραφεῖς ἐφ' ὅποτεραοῦν τρέχειν. ἀλλὰ τὸ δειλαίνειν καὶ ἀδικεῖν οὐ τὸ ταῦτα ποιεῖν ἐστί, πλὴν κατὰ συμβεβηκός, ἀλλὰ τὸ ὠδὶ ἔχοντα ταῦτα ποιεῖν, ὥσπερ καὶ τὸ ἰατρεύειν καὶ τὸ ὑγιάζειν οὐ τὸ τέμνειν ἢ μὴ [25] τέμνειν ἢ φαρμακεύειν ἢ μὴ φαρμακεύειν ἐστίν, ἀλλὰ τὸ ὠδί. ἔστι δὲ τὰ δίκαια ἐν τούτοις οἷς μέτεστι τῶν ἀπλῶς ἀγαθῶν, ἔχουσι δ' ὑπερβολὴν ἐν τούτοις καὶ ἔλλειψιν: τοῖς μὲν γὰρ οὐκ ἔστιν ὑπερβολὴ αὐτῶν, οἷον ἴσως τοῖς θεοῖς, τοῖς δ' οὐδὲν μόνον ὠφέλιμον, τοῖς ἀνιάτως κακοῖς, ἀλλὰ πάντα [30] βλάπτει, τοῖς δὲ μέχρι τοῦ: διὰ τοῦτ' ἀνθρώπινόν ἐστιν.

περὶ δὲ ἐπεικειάς καὶ τοῦ ἐπεικοῦς, πῶς ἔχει ἡ μὲν ἐπεικεία πρὸς δικαιοσύνην τὸ δ' ἐπεικὲς πρὸς τὸ δίκαιον, ἐχόμενόν ἐστιν εἰπεῖν. οὔτε γὰρ ὡς ταῦτόν ἀπλῶς οὔθ' ὡς ἕτερον τῷ γένει φαίνεται σκοπούμενοις: καὶ ὅτε μὲν τὸ ἐπεικὲς [35] ἐπαινοῦμεν καὶ ἄνδρα τὸν τοιοῦτον, ὥστε καὶ ἐπὶ τὰ ἄλλα 1137b [1] ἐπαινοῦντες μεταφέρομεν ἀντὶ τοῦ ἀγαθοῦ, τὸ ἐπεικέστερον ὅτι βέλτιον δηλοῦντες: ὅτε δὲ τῷ λόγῳ ἀκολουθοῦσι φαίνεται ἄτοπον εἰ τὸ ἐπεικὲς παρὰ τὸ δίκαιόν τι ὄν ἐπαινετόν ἐστιν: ἢ γὰρ τὸ δίκαιον οὐ σπουδαῖον, ἢ τὸ ἐπεικὲς οὐ [5] δίκαιον, εἰ ἄλλο: ἢ εἰ ἄμφω σπουδαῖα, ταῦτόν ἐστιν. ἢ μὲν οὖν ἀπορία σχεδὸν συμβαίνει διὰ ταῦτα περὶ τὸ ἐπεικὲς, ἔχει δ' ἅπαντα τρόπον τινὰ ὀρθῶς καὶ οὐδὲν ὑπεναντίον ἑαυτοῖς: τό τε γὰρ ἐπεικὲς δικαίου τινὸς ὄν βέλτιόν ἐστι δίκαιον, καὶ οὐχ ὡς ἄλλο τι γένος ὄν βέλτιόν ἐστι τοῦ δικαίου. [10] ταῦτόν ἄρα δίκαιον καὶ ἐπεικὲς, καὶ ἀμφοῖν σπουδαῖον ὄντοιν κρεῖττον τὸ ἐπεικὲς. ποιεῖ δὲ τὴν ἀπορίαν ὅτι τὸ ἐπεικὲς δίκαιον μὲν ἐστιν, οὐ τὸ κατὰ νόμον δέ, ἀλλ' ἐπανόρθωμα νομίμου δικαίου. αἴτιον δ' ὅτι ὁ μὲν νόμος καθόλου πᾶς, περὶ ἐνίων δ' οὐχ οἷόν τε ὀρθῶς εἰπεῖν καθόλου. ἐν οἷς οὖν [15] ἀνάγκη μὲν εἰπεῖν καθόλου, μὴ οἷόν τε δὲ ὀρθῶς, τὸ ὡς ἐπὶ τὸ πλέον λαμβάνει ὁ νόμος, οὐκ ἀγνοῶν τὸ ἁμαρτανόμενον. καὶ ἔστιν οὐδὲν ἥττον ὀρθός: τὸ γὰρ ἁμάρτημα οὐκ ἐν τῷ νόμῳ οὐδ' ἐν τῷ νομοθέτῃ ἄλλ' ἐν τῇ φύσει τοῦ πράγματός ἐστιν: εὐθὺς γὰρ τοιαύτη ἡ τῶν πρακτῶν ὕλη ἐστίν. [20] ὅταν οὖν λέγῃ μὲν ὁ νόμος καθόλου, συμβῇ δ' ἐπὶ τούτου παρὰ τὸ καθόλου, τότε ὀρθῶς ἔχει, ἢ παραλείπει ὁ

νομοθέτης καὶ ἥμαρτεν ἀπλῶς εἰπὼν, ἐπανορθοῦν τὸ ἐλλειφθέν, ὃ καὶ ὁ νομοθέτης αὐτὸς ἂν εἶπεν ἐκεῖ παρὼν, καὶ εἰ ἦδει, ἐνομοθέτησεν. διὸ δίκαιον μὲν ἐστὶ, καὶ βέλτιόν τινος δικαίου, [25] οὐ τοῦ ἀπλῶς δὲ ἀλλὰ τοῦ διὰ τὸ ἀπλῶς ἁμαρτήματος. καὶ ἔστιν αὕτη ἡ φύσις ἡ τοῦ ἐπεικοῦς, ἐπανόρθωμα νόμου, ἢ ἐλλείπει διὰ τὸ καθόλου. τοῦτο γὰρ αἴτιον καὶ τοῦ μὴ πάντα κατὰ νόμον εἶναι, ὅτι περὶ ἐνίων ἀδύνατον θέσθαι νόμον, ὥστε ψηφίσματος δεῖ. τοῦ γὰρ ἀορίστου ἀόριστος καὶ [30] ὁ κανὼν ἐστίν, ὥσπερ καὶ τῆς Λεσβίας οἰκοδομίας ὁ μολίβδινος κανὼν: πρὸς γὰρ τὸ σχῆμα τοῦ λίθου μετακινεῖται καὶ οὐ μένει ὁ κανὼν, καὶ τὸ ψηφισμα πρὸς τὰ πράγματα. τί μὲν οὖν ἐστὶ τὸ ἐπεικές, καὶ ὅτι δίκαιον καὶ τινὸς βέλτιον δικαίου, δῆλον. φανερόν δ' ἐκ τούτου καὶ ὁ ἐπεικῆς τίς [35] ἐστίν: ὁ γὰρ τῶν τοιούτων προαιρετικὸς καὶ πρακτικὸς, καὶ 1138a [1] ὁ μὴ ἀκριβοδίκαιος ἐπὶ τὸ χεῖρον ἄλλ' ἐλαττωτικὸς, καίπερ ἔχων τὸν νόμον βοηθόν, ἐπεικῆς ἐστὶ, καὶ ἡ ἕξις αὕτη ἐπείκεια, δικαιοσύνη τις οὕσα καὶ οὐχ ἑτέρα τις ἕξις.

πότερον δ' ἐνδέχεται ἑαυτὸν ἀδικεῖν ἢ οὐ, φανερόν ἐκ [5] τῶν εἰρημένων. τὰ μὲν γὰρ ἐστὶ τῶν δικαίων τὰ κατὰ πᾶσαν ἀρετὴν ὑπὸ τοῦ νόμου τεταγμένα, οἷον οὐ κελεύει ἀποκτινύναι ἑαυτὸν ὁ νόμος, ἃ δὲ μὴ κελεύει, ἀπαγορεύει. ἔτι ὅταν παρὰ τὸν νόμον βλάβη μὴ ἀντιβλάβη ἐκὼν, ἀδικεῖ, ἐκὼν δὲ ὁ εἰδὼς καὶ ὄν καὶ ὦ: ὁ δὲ δι' ὀργὴν ἑαυτὸν [10] σφάττων ἐκὼν τοῦτο δρᾷ παρὰ τὸν ὀρθὸν λόγον, ὃ οὐκ ἐᾷ ὁ νόμος: ἀδικεῖ ἄρα. ἀλλὰ τίνα; ἢ τὴν πόλιν, αὐτὸν δ' οὐ; ἐκὼν γὰρ πάσχει, ἀδικεῖται δ' οὐδεὶς ἐκὼν. διὸ καὶ ἡ πόλις ζημιοῖ, καὶ τις ἀτιμία πρόσσεστι τῷ ἑαυτὸν διαφθείραντι ὡς τὴν πόλιν ἀδικοῦντι. ἔτι καθ' ὃ ἀδικὸς μόνον ὁ ἀδικῶν [15] καὶ μὴ ὅλως φαῦλος, οὐκ ἔστιν ἀδικῆσαι ἑαυτόν τοῦτο γὰρ ἄλλος ἐκείνου: ἔστι γὰρ πῶς ὁ ἀδικὸς οὕτω πονηρὸς ὥσπερ ὁ δειλός, οὐχ ὡς ὅλην ἔχων τὴν πονηρίαν, ὥστ' οὐδὲ κατὰ ταύτην ἀδικεῖ: ἅμα γὰρ ἂν τῷ αὐτῷ εἴη ἀφρηῆσθαι καὶ προσκεῖσθαι τὸ αὐτό: τοῦτο δὲ ἀδύνατον, ἀλλ' ἀεὶ ἐν πλείοσιν [20] ἀνάγκη εἶναι τὸ δίκαιον καὶ τὸ ἄδικον. ἔτι δὲ ἐκούσιόν τε καὶ ἐκ προαιρέσεως καὶ πρότερον: ὁ γὰρ διότι ἔπαθε καὶ τὸ αὐτὸ ἀντιποιῶν οὐ δοκεῖ ἀδικεῖν: αὐτὸς δ' αὐτόν, ταῦτά ἅμα καὶ πάσχει καὶ ποιεῖ. ἔτι εἴη ἂν ἐκόντα ἀδικεῖσθαι. πρὸς δὲ τούτοις, ἄνευ τῶν κατὰ μέρος ἀδικημάτων [25] οὐδεὶς ἀδικεῖ, μοιχεύει δ' οὐδεὶς τὴν ἑαυτοῦ οὐδὲ τοιχωρυχεῖ τὸν ἑαυτοῦ τοῖχον οὐδὲ κλέπτει τὰ αὐτοῦ. ὅλως δὲ λύεται τὸ αὐτὸν ἀδικεῖν καὶ κατὰ τὸν διορισμὸν τὸν περὶ τοῦ ἐκουσίως ἀδικεῖσθαι. φανερόν δὲ καὶ ὅτι ἅμφω μὲν φαῦλα, καὶ τὸ ἀδικεῖσθαι καὶ τὸ ἀδικεῖν τὸ μὲν γὰρ ἔλαττον τὸ [30] δὲ πλεον ἔχειν ἐστὶ τοῦ μέσου καὶ ὥσπερ

ὑγιεινὸν μὲν ἐν ἰατρικῇ, εὐεκτικὸν δὲ ἐν γυμναστικῇ: ἀλλ' ὅμως χεῖρον τὸ ἀδικεῖν: τὸ μὲν γὰρ ἀδικεῖν μετὰ κακίας καὶ ψεκτόν, καὶ κακίας ἢ τῆς τελείας καὶ ἀπλῶς ἢ ἐγγύς· οὐ γὰρ ἅπαν τὸ ἐκούσιον μετὰ ἀδικίας, τὸ δ' ἀδικεῖσθαι ἄνευ κακίας καὶ [35] ἀδικίας. καθ' αὐτὸ μὲν οὖν τὸ ἀδικεῖσθαι ἦττον φαῦλον, 1138b [1] κατὰ συμβεβηκὸς δ' οὐδὲν κωλύει μείζον εἶναι κακόν. ἀλλ' οὐδὲν μέλει τῇ τέχνῃ, ἀλλὰ πλευρῖτιν λέγει μείζω νόσον προσπταίσματος: καίτοι γένοιτ' ἄν ποτε θάτερον κατὰ συμβεβηκός, εἰ προσπταίσαντα διὰ τὸ πεσεῖν συμβαίῃ [5] ὑπὸ τῶν πολεμίων ληφθῆναι ἢ ἀποθανεῖν. κατὰ μεταφορὰν δὲ καὶ ὁμοιότητα ἔστιν οὐκ αὐτῷ πρὸς αὐτὸν δίκαιον ἀλλὰ τῶν αὐτοῦ τισίν, οὐ πᾶν δὲ δίκαιον ἀλλὰ τὸ δεσποτικὸν ἢ τὸ οἰκονομικόν. ἐν τούτοις γὰρ τοῖς λόγοις διέστηκε τὸ λόγον ἔχον μέρος τῆς ψυχῆς πρὸς τὸ ἄλογον: εἰς [10] ἃ δὴ βλέπουσι καὶ δοκεῖ εἶναι ἀδικία πρὸς αὐτόν, ὅτι ἐν τούτοις ἔστι πάσχειν τι παρὰ τὰς ἑαυτῶν ὀρέξεις: ὥσπερ οὖν ἄρχοντι καὶ ἀρχομένῳ εἶναι πρὸς ἄλληλα δίκαιόν τι καὶ τούτοις. περὶ μὲν οὖν δικαιοσύνης καὶ τῶν ἄλλων, τῶν ἠθικῶν ἀρετῶν, διωρίσθω τὸν τρόπον τοῦτον.

## Βιβλίο 6

ἐπεὶ δὲ τυγχάνομεν πρότερον εἰρηκότες ὅτι δεῖ τὸ μέσον αἰρεῖσθαι, μὴ τὴν ὑπερβολὴν μηδὲ τὴν ἑλλειψιν, τὸ [20] δὲ μέσον ἐστὶν ὡς ὁ λόγος ὁ ὀρθὸς λέγει, τοῦτο διέλωμεν. ἐν πάσαις γὰρ ταῖς εἰρημέναις ἔξεσι, καθάπερ καὶ ἐπὶ τῶν ἄλλων, ἔστι τις σκοπὸς πρὸς ὃν ἀποβλέπων ὁ τὸν λόγον ἔχων ἐπιτείνει καὶ ἀνίησιν, καὶ τις ἔστιν ὅρος τῶν μεσοτήτων, ὃς μεταξὺ φαμεν εἶναι τῆς ὑπερβολῆς καὶ τῆς ἐλλείψεως, [25] οὕσας κατὰ τὸν ὀρθὸν λόγον. ἔστι δὲ τὸ μὲν εἰπεῖν οὕτως ἀληθὲς μὲν, οὐθὲν δὲ σαφές· καὶ γὰρ ἐν ταῖς ἄλλαις ἐπιμελείαις, περὶ ὅσας ἐστὶν ἐπιστήμη, τοῦτ' ἀληθὲς μὲν εἰπεῖν, ὅτι οὔτε πλείω οὔτε ἐλάττω δεῖ πονεῖν οὐδὲ ῥαθυμεῖν, ἀλλὰ τὰ μέσα καὶ ὡς ὁ ὀρθὸς λόγος· τοῦτο δὲ μόνον ἔχων ἄν [30] τις οὐδὲν ἄν εἰδείῃ πλέον, οἷον ποῖα δεῖ προσφέρεσθαι πρὸς τὸ σῶμα, εἴ τις εἴπειεν ὅτι ὅσα ἡ ἰατρικὴ κελεύει καὶ ὡς ὁ ταύτην ἔχων. διὸ δεῖ καὶ περὶ τὰς τῆς ψυχῆς ἔξεις μὴ μόνον ἀληθῶς εἶναι τοῦτ' εἰρημένον, ἀλλὰ καὶ διωρισμένον τίς ἐστὶν ὁ ὀρθὸς λόγος καὶ τούτου τίς ὅρος.

[35] τὰς δὴ τῆς ψυχῆς ἀρετὰς διελόμενοι 1139a [1] τὰς μὲν εἶναι τοῦ ἥθους ἔφαμεν τὰς δὲ τῆς διανοίας. περὶ μὲν οὖν τῶν ἠθικῶν διεληλύθαμεν, περὶ δὲ

τῶν λοιπῶν, περὶ ψυχῆς πρῶτον εἰπόντες, λέγωμεν οὕτως. πρότερον μὲν οὖν ἐλέχθη δὴ εἶναι μέρη τῆς ψυχῆς, τό τε λόγον ἔχον καὶ τὸ ἄλογον· [5] νῦν δὲ περὶ τοῦ λόγον ἔχοντος τὸν αὐτὸν τρόπον διαιρετέον. καὶ ὑποκείσθω δύο τὰ λόγον ἔχοντα, ἓν μὲν ὧ θεωροῦμεν τὰ τοιαῦτα τῶν ὄντων ὅσων αἱ ἀρχαὶ μὴ ἐνδέχονται ἄλλως ἔχειν, ἓν δὲ ὧ τὰ ἐνδεχόμενα· πρὸς γὰρ τὰ τῷ γένει ἕτερα καὶ τῶν τῆς ψυχῆς μορίων ἕτερον τῷ [10] γένει τὸ πρὸς ἐκάτερον πεφυκός, εἴπερ καθ' ὁμοιότητά τινα καὶ οἰκειότητα ἡ γνώσις ὑπάρχει αὐτοῖς. λεγέσθω δὲ τούτων τὸ μὲν ἐπιστημονικὸν τὸ δὲ λογιστικόν· τὸ γὰρ βουλευέσθαι καὶ λογίζεσθαι ταῦτόν, οὐδεὶς δὲ βουλεύεται περὶ τῶν μὴ ἐνδεχομένων ἄλλως ἔχειν. ὥστε τὸ λογιστικόν ἐστίν [15] ἓν τι μέρος τοῦ λόγον ἔχοντος. ληπτέον ἅρ' ἐκατέρου τούτων τίς ἡ βελτίστη ἕξις· αὕτη γὰρ ἀρετὴ ἐκατέρου, ἡ δ' ἀρετὴ πρὸς τὸ ἔργον τὸ οἰκεῖον. τρία δὲ ἐστίν ἓν τῇ ψυχῇ τὰ κύρια πράξεως καὶ ἀληθείας, αἴσθησις νοῦς ὄρεξις. τούτων δ' ἡ αἴσθησις οὐδεμιᾶς ἀρχῇ πράξεως· δῆλον δὲ τῷ [20] τὰ θηρία αἴσθησιν μὲν ἔχειν πράξεως δὲ μὴ κοινωνεῖν. ἐστὶ δ' ὅπερ ἐν διανοίᾳ κατάφασις καὶ ἀπόφασις, τοῦτ' ἐν ὀρέξει δίωξις καὶ φυγή· ὥστ' ἐπειδὴ ἡ ἠθικὴ ἀρετὴ ἕξις προαιρετικῇ, ἡ δὲ προαίρεσις ὄρεξις βουλευτικῇ, δεῖ διὰ ταῦτα μὲν τὸν τε λόγον ἀληθῆ εἶναι καὶ τὴν ὄρεξιν ὀρθήν, [25] εἴπερ ἡ προαίρεσις σπουδαία, καὶ τὰ αὐτὰ τὸν μὲν φάναι τὴν δὲ διώκειν. αὕτη μὲν οὖν ἡ διάνοια καὶ ἡ ἀλήθεια πρακτικῇ· τῆς δὲ θεωρητικῆς διανοίας καὶ μὴ πρακτικῆς μηδὲ ποιητικῆς τὸ εὖ καὶ κακῶς τ' ἀληθές ἐστὶ καὶ ψεῦδος (τοῦτο γὰρ ἐστὶ παντὸς διανοητικοῦ ἔργον)· τοῦ δὲ πρακτικοῦ [30] καὶ διανοητικοῦ ἀλήθεια ὁμολόγως ἔχουσα τῇ ὀρέξει τῇ ὀρθῇ. πράξεως μὲν οὖν ἀρχὴ προαίρεσις — ὅθεν ἡ κίνησις ἄλλ' οὐχ οὐ ἔνεκα — προαιρέσεως δὲ ὄρεξις καὶ λόγος ὁ ἔνεκά τινος. διὸ οὗτ' ἄνευ νοῦ καὶ διανοίας οὗτ' ἄνευ ἠθικῆς ἐστὶν ἕξεως ἡ προαίρεσις· εὐπραξία γὰρ καὶ τὸ [35] ἐναντίον ἐν πράξει ἄνευ διανοίας καὶ ἡθους οὐκ ἐστίν. διάνοια δ' αὐτὴ οὐθὲν κινεῖ, ἄλλ' ἡ ἔνεκά του καὶ πρακτικῇ· 1139b [1] αὕτη γὰρ καὶ τῆς ποιητικῆς ἀρχαί· ἔνεκα γὰρ του ποιεῖ πᾶς ὁ ποιῶν, καὶ οὐ τέλος ἀπλῶς (ἀλλὰ πρὸς τι καὶ τινός) τὸ ποιητόν, ἀλλὰ τὸ πρακτόν· ἡ γὰρ εὐπραξία τέλος, ἡ δ' ὄρεξις τούτου. διὸ ἡ ὀρεκτικὸς νοῦς ἡ προαίρεσις [5] ἡ ὄρεξις διανοητικῇ, καὶ ἡ τοιαύτη ἀρχὴ ἄνθρωπος. οὐκ ἐστὶ δὲ προαιρετὸν οὐδὲν γεγονός, οἷον οὐδεὶς προαιρεῖται Ἴλιον πεπορθηκέναι· οὐδὲ γὰρ βουλεύεται περὶ τοῦ γεγονότος ἀλλὰ περὶ τοῦ ἐσομένου καὶ ἐνδεχομένου, τὸ δὲ γεγονὸς οὐκ ἐνδέχεται μὴ γενέσθαι· διὸ ὀρθῶς Ἀγάθων

[10] μόνου γὰρ αὐτοῦ καὶ θεὸς στερίσκεται, ἀγέννητα ποιεῖν ἅσ' ἂν ἦ



πεπραγμένα.

ἀμφοτέρων δὴ τῶν νοητικῶν μορίων ἀλήθεια τὸ ἔργον. καθ' ὅς οὖν μάλιστα ἔξεις ἀληθεύσει ἑκάτερον, αὐτὰ ἄρετὰ ἀμφοῖν.

ἀρξάμενοι οὖν ἄνωθεν περὶ αὐτῶν πάλιν λέγωμεν. [15] ἔστω δὴ οἷς ἀληθεύει ἢ ψυχὴ τῷ καταφάναι ἢ ἀποφάναι, πέντε τὸν ἀριθμόν· ταῦτα δ' ἐστὶ τέχνη ἐπιστήμη φρόνησις σοφία νοῦς· ὑπολήψει γὰρ καὶ δόξη ἐνδέχεται διαψεύδεσθαι. ἐπιστήμη μὲν οὖν τί ἐστίν, ἐντεῦθεν φανερόν, εἰ δεῖ ἀκριβολογεῖσθαι καὶ μὴ ἀκολουθεῖν ταῖς ὁμοιότησιν. [20] πάντες γὰρ ὑπολαμβάνομεν, ὃ ἐπιστάμεθα, μὴδ' ἐνδέχεσθαι ἄλλως ἔχειν· τὰ δ' ἐνδεχόμενα ἄλλως, ὅταν ἔξω τοῦ θεωρεῖν γένηται, λανθάνει εἰ ἔστιν ἢ μή. ἐξ ἀνάγκης ἄρα ἐστὶ τὸ ἐπιστητόν. αἰδίων ἄρα· τὰ γὰρ ἐξ ἀνάγκης ὄντα ἀπλῶς πάντα αἰδία, τὰ δ' αἰδία ἀγένητα καὶ ἄφθαρτα. [25] ἔτι διδακτὴ ἅπασα ἐπιστήμη δοκεῖ εἶναι, καὶ τὸ ἐπιστητόν μαθητόν. ἐκ προγινωσκομένων δὲ πᾶσα διδασκαλία, ὥσπερ καὶ ἐν τοῖς ἀναλυτικοῖς λέγομεν· ἢ μὲν γὰρ δι' ἐπαγωγῆς, ἢ δὲ συλλογισμῷ. ἢ μὲν δὴ ἐπαγωγή ἀρχή ἐστι καὶ τοῦ καθόλου, ὃ δὲ συλλογισμὸς ἐκ τῶν καθόλου. εἰσὶν [30] ἄρα ἀρχαὶ ἐξ ὧν ὁ συλλογισμὸς, ὧν οὐκ ἔστι συλλογισμὸς· ἐπαγωγή ἄρα. ἢ μὲν ἄρα ἐπιστήμη ἐστὶν ἔξις ἀποδεικτική, καὶ ὅσα ἄλλα προσδιορίζομεθα ἐν τοῖς ἀναλυτικοῖς· ὅταν γὰρ πῶς πιστεύῃ καὶ γνώριμοι αὐτῷ ὧσιν αἱ ἀρχαί, ἐπίσταται· εἰ γὰρ μὴ μᾶλλον τοῦ συμπεράσματος, [35] κατὰ συμβεβηκὸς ἔξει τὴν ἐπιστήμην. περὶ μὲν οὖν ἐπιστήμης διωρίσθω τὸν τρόπον τοῦτον.

1140a [1] τοῦ δ' ἐνδεχομένου ἄλλως ἔχειν ἔστι τι καὶ ποιητὸν καὶ πρακτόν· ἕτερον δ' ἐστὶ ποίησις καὶ πρᾶξις (πιστεύομεν δὲ περὶ αὐτῶν καὶ τοῖς ἐξωτερικοῖς λόγοις)· ὥστε καὶ ἢ μετὰ λόγου ἔξις πρακτικὴ ἕτερόν ἐστι τῆς μετὰ λόγου ποιητικῆς [5] ἔξεως. διὸ οὐδὲ περιέχεται ὑπ' ἀλλήλων· οὔτε γὰρ ἢ πρᾶξις ποίησις οὔτε ἢ ποίησις πρᾶξις ἐστίν. ἐπεὶ δ' ἢ οἰκοδομικὴ τέχνη τίς ἐστὶ καὶ ὅπερ ἔξις τις μετὰ λόγου ποιητικῆς, καὶ οὐδεμία οὔτε τέχνη ἐστὶν ἣτις

οὐ μετὰ λόγου ποιητικὴ ἕξις ἐστίν, οὔτε τοιαύτη ἢ οὐ τέχνη, ταύτῃ [10] ἂν εἴη τέχνη καὶ ἕξις μετὰ λόγου ἀληθοῦς ποιητικῆ. ἔστι δὲ τέχνη πᾶσα περὶ γένεσιν καὶ τὸ τεχνάζειν καὶ θεωρεῖν ὅπως ἂν γένηται τι τῶν ἐνδεχομένων καὶ εἶναι καὶ μὴ εἶναι, καὶ ὧν ἡ ἀρχὴ ἐν τῷ ποιοῦντι ἀλλὰ μὴ ἐν τῷ ποιουμένῳ· οὔτε γὰρ τῶν ἐξ ἀνάγκης ὄντων ἢ γινομένων ἢ [15] τέχνη ἐστίν, οὔτε τῶν κατὰ φύσιν· ἐν αὐτοῖς γὰρ ἔχουσι ταῦτα τὴν ἀρχήν. ἐπεὶ δὲ ποιήσις καὶ πρᾶξις ἕτερον, ἀνάγκη τὴν τέχνην ποιήσεως ἀλλ’ οὐ πράξεως εἶναι. καὶ τρόπον τινὰ περὶ τὰ αὐτὰ ἐστὶν ἡ τύχη καὶ ἡ τέχνη, καθάπερ καὶ Ἀγάθων φησὶ

τέχνη τύχην ἑσπερξε καὶ τύχη τέχνην.

[20] ἡ μὲν οὖν τέχνη, ὥσπερ εἴρηται, ἕξις τις μετὰ λόγου ἀληθοῦς ποιητικῆ ἐστίν, ἡ δ’ ἀτεχνία τοῦναντίον μετὰ λόγου ψευδοῦς ποιητικῆ ἕξις, περὶ τὸ ἐνδεχόμενον ἄλλως ἔχειν.

περὶ δὲ φρονήσεως οὕτως ἂν λάβοιμεν, θεωρήσαντες [25] τίνας λέγομεν τοὺς φρονίμους. δοκεῖ δὴ φρονίμου εἶναι τὸ δύνασθαι καλῶς βουλευσάσθαι περὶ τὰ αὐτῷ ἀγαθὰ καὶ συμφέροντα, οὐ κατὰ μέρος, οἷον ποῖα πρὸς ὑγίειαν, πρὸς ἰσχύν, ἀλλὰ ποῖα πρὸς τὸ εὖ ζῆν ὅλως. σημεῖον δ’ ὅτι καὶ τοὺς περὶ τι φρονίμους λέγομεν, ὅταν πρὸς τέλος τι σπουδαῖον [30] εὖ λογίσωνται, ὧν μὴ ἐστὶ τέχνη. ὥστε καὶ ὅλως ἂν εἴη φρόνιμος ὁ βουλευτικός. βουλεύεται δ’ οὐθεὶς περὶ τῶν ἀδυνάτων ἄλλως ἔχειν, οὐδὲ τῶν μὴ ἐνδεχομένων αὐτῷ πρᾶξαι. ὥστ’ εἶπερ ἐπιστήμη μὲν μετ’ ἀποδείξεως, ὧν δ’ αἱ ἀρχαὶ ἐνδέχονται ἄλλως ἔχειν, τούτων μὴ ἐστὶν ἀπόδειξις [35] (πάντα γὰρ ἐνδέχεται καὶ ἄλλως ἔχειν), 1140b [1] καὶ οὐκ ἔστι βουλευσάσθαι περὶ τῶν ἐξ ἀνάγκης ὄντων, οὐκ ἂν εἴη ἡ φρόνησις ἐπιστήμη οὐδὲ τέχνη, ἐπιστήμη μὲν ὅτι ἐνδέχεται τὸ πρακτὸν ἄλλως ἔχειν, τέχνη δ’ ὅτι ἄλλο τὸ γένος πράξεως καὶ ποιήσεως. λείπεται ἄρα αὐτὴν εἶναι [5] ἕξιν ἀληθῆ μετὰ λόγου πρακτικὴν περὶ τὰ ἀνθρώπῳ ἀγαθὰ καὶ κακά. τῆς μὲν γὰρ ποιήσεως ἕτερον τὸ τέλος, τῆς δὲ πράξεως οὐκ ἂν εἴη· ἔστι γὰρ αὐτὴ ἡ εὐπραξία τέλος. διὰ τοῦτο Περικλέα καὶ

τοὺς τοιούτους φρονίμους οἰόμεθα εἶναι, ὅτι τὰ αὐτοῖς ἀγαθὰ καὶ τὰ τοῖς ἀνθρώποις δύνανται θεωρεῖν· [10] εἶναι δὲ τοιούτους ἡγούμεθα τοὺς οἰκονομικοὺς καὶ τοὺς πολιτικούς. ἔνθεν καὶ τὴν σωφροσύνην τούτῳ προσαγορεύομεν τῷ ὀνόματι, ὥς σώζουσιν τὴν φρόνησιν. σώζει δὲ τὴν τοιαύτην ὑπόληψιν. οὐ γὰρ ἅπασαν ὑπόληψιν διαφθείρει οὐδὲ διαστρέφει τὸ ἡδὺ καὶ λυπηρόν, οἷον ὅτι τὸ τρίγωνον [15] δύο ὀρθὰς ἔχει ἢ οὐκ ἔχει, ἀλλὰ τὰς περὶ τὸ πρακτόν. αἱ μὲν γὰρ ἀρχαὶ τῶν πρακτῶν τὸ οὐ ἔνεκα τὰ πρακτά· τῷ δὲ διεφθαρμένῳ δι' ἡδονὴν ἢ λύπην εὐθὺς οὐ φαίνεται ἀρχή, οὐδὲ δεῖν τούτου ἔνεκεν οὐδὲ διὰ τοῦθ' αἰρεῖσθαι πάντα καὶ πράττειν· ἔστι γὰρ ἡ κακία φθαρτικὴ [20] ἀρχῆς. ὥστ' ἀνάγκη τὴν φρόνησιν ἔξιν εἶναι μετὰ λόγου ἀληθῆ περὶ τὰ ἀνθρώπινα ἀγαθὰ πρακτικὴν. ἀλλὰ μὴν τέχνης μὲν ἔστιν ἀρετὴ, φρονήσεως δ' οὐκ ἔστιν· καὶ ἐν μὲν τέχνῃ ὁ ἐκὼν ἀμαρτάνων αἰρετώτερος, περὶ δὲ φρόνησιν ἦττον, ὥσπερ καὶ περὶ τὰς ἀρετάς. δῆλον οὖν ὅτι ἀρετὴ [25] τις ἐστὶ καὶ οὐ τέχνη. δυοῖν δ' ὄντοιν μεροῖν τῆς ψυχῆς τῶν λόγον ἔχόντων, θατέρου ἂν εἴη ἀρετὴ, τοῦ δοξαστικοῦ· ἢ τε γὰρ δόξα περὶ τὸ ἐνδεχόμενον ἄλλως ἔχειν καὶ ἡ φρόνησις. ἀλλὰ μὴν οὐδ' ἔξις μετὰ λόγου μόνον· σημεῖον δ' ὅτι λήθη μὲν τῆς τοιαύτης ἔξεως ἔστι, φρονήσεως δ' [30] οὐκ ἔστιν.

ἐπεὶ δ' ἡ ἐπιστήμη περὶ τῶν καθόλου ἐστὶν ὑπόληψις καὶ τῶν ἐξ ἀνάγκης ὄντων, εἰσὶ δ' ἀρχαὶ τῶν ἀποδεικτῶν καὶ πάσης ἐπιστήμης (μετὰ λόγου γὰρ ἢ ἐπιστήμη), τῆς ἀρχῆς τοῦ ἐπιστητοῦ οὗτ' ἂν ἐπιστήμη εἴη οὔτε τέχνη οὔτε [35] φρόνησις· τὸ μὲν γὰρ ἐπιστητὸν ἀποδεικτόν, 1141a [1] αἱ δὲ τυγχάνουσιν οὔσαι περὶ τὰ ἐνδεχόμενα ἄλλως ἔχειν. >οὐδὲ δὴ σοφία τούτων ἐστίν· τοῦ γὰρ σοφοῦ περὶ ἐνίων ἔχειν ἀπόδειξιν ἐστίν. εἰ δὴ οἷς ἀληθεύομεν καὶ μηδέποτε διαψευδόμεθα περὶ τὰ μὴ ἐνδεχόμενα ἢ καὶ ἐνδεχόμενα ἄλλως [5] ἔχειν, ἐπιστήμη καὶ φρόνησις ἐστὶ καὶ σοφία καὶ νοῦς, τούτων δὲ τῶν τριῶν μηδὲν ἐνδέχεται εἶναι (λέγω δὲ τρία φρόνησιν ἐπιστήμην σοφίαν), λείπεται νοῦν εἶναι τῶν ἀρχῶν.

τὴν δὲ σοφίαν ἔν τε ταῖς τέχναις τοῖς ἀκριβεστάτοις [10] τὰς τέχνας ἀποδίδομεν, οἷον Φειδίαν λιθουργὸν σοφὸν καὶ Πολύκλειτον ἀνδριαντοποιόν, ἐνταῦθα μὲν οὖν οὐθὲν ἄλλο σημαίνοντες τὴν σοφίαν ἢ ὅτι ἀρετὴ τέχνης

ἐστίν· εἶναι δέ τινας σοφοὺς οἰόμεθα ὅλως οὐ κατὰ μέρος οὐδ' ἄλλο τι σοφούς, ὥσπερ Ὀμηρὸς φησιν ἐν τῷ Μαργίτη

[15] τὸν δ' οὗτ' ἄρ σκαπτῆρα θεοὶ θέσαν οὗτ' ἀροτῆρα οὗτ' ἄλλως τι σοφόν.

ὥστε δῆλον ὅτι ἀκριβεστάτη ἂν τῶν ἐπιστημῶν εἴη ἡ σοφία. δεῖ ἄρα τὸν σοφὸν μὴ μόνον τὰ ἐκ τῶν ἀρχῶν εἰδέναι, ἀλλὰ καὶ περὶ τὰς ἀρχὰς ἀληθεύειν. ὥστ' εἴη ἂν ἡ σοφία νοῦς καὶ ἐπιστήμη, ὥσπερ κεφαλὴν ἔχουσα ἐπιστήμη [20] τῶν τιμωτάτων. ἄτοπον γὰρ εἴ τις τὴν πολιτικὴν ἢ τὴν φρόνησιν σπουδαιοτάτην οἶεται εἶναι, εἰ μὴ τὸ ἄριστον τῶν ἐν τῷ κόσμῳ ἀνθρώπος ἐστίν. εἰ δὲ ὑγιεινὸν μὲν καὶ ἀγαθὸν ἕτερον ἀνθρώποις καὶ ἰχθύσι, τὸ δὲ λευκὸν καὶ εὐθὺ ταῦτόν ἀεὶ, καὶ τὸ σοφὸν ταῦτό πάντες ἂν εἴποιεν, φρόνιμον [25] δὲ ἕτερον· τὰ γὰρ περὶ αὐτὸ ἕκαστα τὸ εὖ θεωροῦν φησὶν εἶναι φρόνιμον, καὶ τούτῳ ἐπιτρέψει αὐτά. διὸ καὶ τῶν θηρίων ἔνια φρονιμά φασιν εἶναι, ὅσα περὶ τὸν αὐτῶν βίον ἔχοντα φαίνεται δύναμιν προνοητικὴν. φανερόν δὲ καὶ ὅτι οὐκ ἂν εἴη ἡ σοφία καὶ ἡ πολιτικὴ ἡ αὐτή· εἰ γὰρ [30] τὴν περὶ τὰ ὠφέλιμα τὰ αὐτοῖς ἐροῦσι σοφίαν, πολλὰ ἔσονται σοφαί· οὐ γὰρ μία περὶ τὸ ἀπάντων ἀγαθὸν τῶν ζώων, ἀλλ' ἑτέρα περὶ ἕκαστον, εἰ μὴ καὶ ἰατρικὴ μία περὶ πάντων τῶν ὄντων. εἰ δ' ὅτι βέλτιστον ἀνθρώπος τῶν ἄλλων ζώων, οὐδὲν διαφέρει· καὶ γὰρ ἀνθρώπου ἄλλα πολὺ θειότερα τὴν φύσιν, 1141b [1] οἷον φανερώτατά γε ἐξ ὧν ὁ κόσμος συνέστηκεν. ἐκ δὲ τῶν εἰρημένων δῆλον ὅτι ἡ σοφία ἐστὶ καὶ ἐπιστήμη καὶ νοῦς τῶν τιμωτάτων τῇ φύσει. διὸ Ἀναξαγόραν καὶ Θαλῆν καὶ τοὺς τοιούτους σοφοὺς μὲν φρονίμους [5] δ' οὐ φασιν εἶναι, ὅταν ἴδωσιν ἀγνοοῦντας τὰ συμφέροντα ἑαυτοῖς, καὶ περιττὰ μὲν καὶ θαυμαστὰ καὶ χαλεπὰ καὶ δαιμόνια εἰδέναι αὐτοὺς φασιν, ἄχρηστα δ', ὅτι οὐ τὰ ἀνθρώπινα ἀγαθὰ ζητοῦσιν. ἡ δὲ φρόνησις περὶ τὰ ἀνθρώπινα καὶ περὶ ὧν ἔστι βουλευέσθαι· τοῦ γὰρ φρονίμου [10] μάλιστα τοῦτ' ἔργον εἶναί φαμεν, τὸ εὖ βουλευέσθαι, βουλεύεται δ' οὐδεὶς περὶ τῶν ἀδυνάτων ἄλλως ἔχειν, οὐδ' ὅσων μὴ τέλος τι ἔστι, καὶ τοῦτο πρακτὸν ἀγαθόν. ὁ δ' ἀπλῶς εὐβουλος ὁ τοῦ ἀρίστου ἀνθρώπῳ τῶν πρακτῶν στοχαστικὸς κατὰ τὸν λογισμόν. οὐδ' ἐστὶν ἡ φρόνησις τῶν [15] καθόλου μόνον, ἀλλὰ δεῖ καὶ τὰ καθ' ἕκαστα γνωρίζειν· πρακτικὴ γάρ, ἡ δὲ πρᾶξις περὶ τὰ καθ' ἕκαστα. διὸ καὶ ἔνιοι οὐκ εἰδότες ἑτέρων εἰδότες

πρακτικώτεροι, καὶ ἐν τοῖς ἄλλοις οἱ ἔμπειροι· εἰ γὰρ εἰδείη ὅτι τὰ κοῦφα εὐπεπτα κρέα καὶ ὑγιεινά, ποῖα δὲ κοῦφα ἀγνοοῖ, οὐ ποιήσει ὑγίειαν, [20] ἀλλ' ὁ εἰδὼς ὅτι τὰ ὀρνίθεια [κοῦφα καὶ] ὑγιεινὰ ποιήσει μᾶλλον. ἡ δὲ φρόνησις πρακτική· ὥστε δεῖ ἄμφω ἔχειν, ἢ ταύτην μᾶλλον. εἴη δ' ἂν τις καὶ ἐνταῦθα ἀρχιτεκτονική. ἔστι δὲ καὶ ἡ πολιτική καὶ ἡ φρόνησις ἡ αὕτη μὲν ἕξις, τὸ μέντοι εἶναι οὐ ταῦτόν αὐταῖς. τῆς δὲ περὶ [25] πόλιν ἡ μὲν ὡς ἀρχιτεκτονικὴ φρόνησις νομοθετική, ἡ δὲ ὡς τὰ καθ' ἕκαστα τὸ κοινὸν ἔχει ὄνομα, πολιτική· αὕτη δὲ πρακτικὴ καὶ βουλευτική· τὸ γὰρ ψήφισμα πρακτὸν ὡς τὸ ἔσχατον. διὸ πολιτεύεσθαι τούτους μόνον λέγουσιν· μόνοι γὰρ πράττουσιν οὗτοι ὥσπερ οἱ χειροτέχναι. δοκεῖ [30] δὲ καὶ φρόνησις μάλιστ' εἶναι ἡ περὶ αὐτὸν καὶ ἕνα· καὶ ἔχει αὕτη τὸ κοινὸν ὄνομα, φρόνησις· ἐκείνων δὲ ἡ μὲν οἰκονομία ἡ δὲ νομοθεσία ἡ δὲ πολιτική, καὶ ταύτης ἡ μὲν βουλευτικὴ ἡ δὲ δικαστική. εἶδος μὲν οὖν τι ἂν εἴη γνώσεως τὸ αὐτῷ εἰδέναι· ἀλλ' ἔχει διαφορὰν πολλήν· 1142a [1] καὶ δοκεῖ ὁ τὰ περὶ αὐτὸν εἰδὼς καὶ διατρίβων φρόνιμος εἶναι, οἱ δὲ πολιτικοὶ πολυπράγμονες· διὸ Εὐριπίδης

πῶς δ' ἂν φρονοῖν, ὧ παρῆν ἀπραγμόνως ἐν τοῖσι πολλοῖς ἡριθμημένον στρατοῦ ἴσον μετασχεῖν; τοὺς γὰρ περισσοὺς καὶ τι πράσσοντας πλέον . . . 1

ζητοῦσι γὰρ τὸ αὐτοῖς ἀγαθόν, καὶ οἶονται τοῦτο δεῖν πράττειν. ἐκ ταύτης οὖν τῆς δόξης ἐλήλυθε τὸ τούτους φρονίμους εἶναι· καίτοι ἴσως οὐκ ἔστι τὸ αὐτοῦ εὖ ἄνευ οἰκονομίας [10] οὐδ' ἄνευ πολιτείας. ἔτι δὲ τὰ αὐτοῦ πῶς δεῖ διοικεῖν, ἄδηλον καὶ σκεπτέον. σημεῖον δ' ἐστὶ τοῦ εἰρημένου καὶ διότι γεωμετρικοὶ μὲν νέοι καὶ μαθηματικοὶ γίνονται καὶ σοφοὶ τὰ τοιαῦτα, φρόνιμος δ' οὐ δοκεῖ γίνεσθαι. αἴτιον δ' ὅτι καὶ τῶν καθ' ἕκαστά ἐστὶν ἡ φρόνησις, ἃ γίνεται [15] γνώριμα ἐξ ἐμπειρίας, νέος δ' ἔμπειρος οὐκ ἔστιν· πλῆθος γὰρ χρόνου ποιεῖ τὴν ἐμπειρίαν· ἐπεὶ καὶ τοῦτ' ἂν τις σκέψαιτο, διὰ τί δὴ μαθηματικὸς μὲν παῖς γένοιτ' ἂν, σοφὸς δ' ἢ φυσικὸς οὐ. ἢ ὅτι τὰ μὲν δι' ἀφαιρέσεως ἐστὶν, τῶν δ' αἱ ἀρχαὶ ἐξ ἐμπειρίας· καὶ τὰ μὲν οὐ πιστεύουσιν [20] οἱ νέοι ἀλλὰ λέγουσιν, τῶν δὲ τὸ τί ἐστὶν οὐκ ἄδηλον; ἔτι ἡ ἀμαρτία ἡ περὶ τὸ καθόλου ἐν τῷ βουλευσασθαι ἢ περὶ τὸ καθ' ἕκαστον· ἡ γὰρ ὅτι πάντα τὰ βαρύσταθμα ὕδατα φαῦλα, ἢ ὅτι τοδὶ βαρύσταθμον. ὅτι δ' ἡ φρόνησις οὐκ ἐπιστήμη, φανερόν· τοῦ γὰρ ἐσχάτου ἐστίν, ὥσπερ εἴρηται· [25]

τὸ γὰρ πρακτὸν τοιοῦτον. ἀντίκειται μὲν δὴ τῷ νῶ· ὁ μὲν γὰρ νοῦς τῶν ὄρων, ὧν οὐκ ἔστι λόγος, ἢ δὲ τοῦ ἐσχάτου, οὗ οὐκ ἔστιν ἐπιστήμη ἀλλ' αἴσθησις, οὐχ ἢ τῶν ἰδίων, ἀλλ' οἷα αἰσθανόμεθα ὅτι τὸ [ἐν τοῖς μαθηματικοῖς] ἔσχατον τρίγωνον· στήσεται γὰρ κάκεῖ. ἀλλ' αὕτη μᾶλλον [30] αἴσθησις ἢ φρόνησις, ἐκείνης δ' ἄλλο εἶδος.

τὸ ζητεῖν δὲ καὶ τὸ βουλευέσθαι διαφέρει· τὸ γὰρ βουλευέσθαι ζητεῖν τι ἐστίν. δεῖ δὲ λαβεῖν καὶ περὶ εὐβουλίας τί ἐστι, πότερον ἐπιστήμη τις ἢ δόξα ἢ εὐστοχία ἢ ἄλλο τι γένος. ἐπιστήμη μὲν δὴ οὐκ ἔστιν· οὐ γὰρ ζητοῦσι περὶ ὧν ἴσασιν, 1142b [1] ἢ δ' εὐβουλία βουλή τις, ὃ δὲ βουλευόμενος ζητεῖ καὶ λογίζεται. ἀλλὰ μὴν οὐδ' εὐστοχία· ἄνευ τε γὰρ λόγου καὶ ταχύ τι ἢ εὐστοχία, βουλευόνται δὲ πολὺν χρόνον, καὶ φασὶ πράττειν μὲν δεῖν ταχὺ τὰ βουλευθέντα, [5] βουλευέσθαι δὲ βραδέως. ἔτι ἢ ἀγχίνοια ἕτερον καὶ ἢ εὐβουλία· ἔστι δ' εὐστοχία τις ἢ ἀγχίνοια. οὐδὲ δὴ δόξα ἢ εὐβουλία οὐδεμία. ἀλλ' ἐπεὶ ὁ μὲν κακῶς βουλευόμενος ἀμαρτάνει, ὁ δ' εὖ ὀρθῶς βουλεύεται, δῆλον ὅτι ὀρθότης τις ἢ εὐβουλία ἐστίν, οὗτ' ἐπιστήμης δὲ οὔτε δόξης· [10] ἐπιστήμης μὲν γὰρ οὐκ ἔστιν ὀρθότης (οὐδὲ γὰρ ἀμαρτία), δόξης δ' ὀρθότης ἀλήθεια· ἅμα δὲ καὶ ὥριστα ἤδη πᾶν οὗ δόξα ἐστίν. ἀλλὰ μὴν οὐδ' ἄνευ λόγου ἢ εὐβουλία. διανοίας ἄρα λείπεται· αὕτη γὰρ οὕπω φάσις· καὶ γὰρ ἢ δόξα οὐ ζήτησις ἀλλὰ φάσις τις ἤδη, ὃ δὲ βουλευόμενος, ἐάν [15] τε εὖ ἐάν τε καὶ κακῶς βουλεύηται, ζητεῖ τι καὶ λογίζεται. ἀλλ' ὀρθότης τίς ἐστιν ἢ εὐβουλία βουλῆς· διὸ ἢ βουλὴ ζητητέα πρῶτον τί καὶ περὶ τί. ἐπεὶ δ' ἢ ὀρθότης πλεοναχῶς, δῆλον ὅτι οὐ πᾶσα· ὁ γὰρ ἀκρατὴς καὶ ὁ φαῦλος ὃ προτίθεται τῖδεῖν† ἐκ τοῦ λογισμοῦ τεύζεται, ὥστε ὀρθῶς ἔσται [20] βεβουλευμένος, κακὸν δὲ μέγα εἰληφώς. δοκεῖ δ' ἀγαθόν τι τὸ εὖ βεβουλευθῆσθαι· ἢ γὰρ τοιαύτη ὀρθότης βουλῆς εὐβουλία, ἢ ἀγαθοῦ τευκτική. ἀλλ' ἔστι καὶ τούτου ψευδεῖ συλλογισμῷ τυχεῖν, καὶ ὃ μὲν δεῖ ποιῆσαι τυχεῖν, δι' οὗ δ' οὗ, ἀλλὰ ψευδῇ τὸν μέσον ὅρον εἶναι· ὥστ' οὐδ' [25] αὕτη πω εὐβουλία, καθ' ἣν οὗ δεῖ μὲν τυγχάνει, οὐ μέντοι δι' οὗ ἔδει. ἔτι ἔστι πολὺν χρόνον βουλευόμενον τυχεῖν, τὸν δὲ ταχύ. οὐκοῦν οὐδ' ἐκείνη πω εὐβουλία, ἀλλ' ὀρθότης ἢ κατὰ τὸ ὠφέλιμον, καὶ οὗ δεῖ καὶ ὥς καὶ ὅτε. ἔτι ἔστι καὶ ἀπλῶς εὖ βεβουλευθῆσθαι καὶ πρὸς τι τέλος. ἢ μὲν [30] δὴ ἀπλῶς ἢ πρὸς τὸ τέλος τὸ ἀπλῶς κατορθοῦσα, τίς δὲ ἢ πρὸς τι τέλος. εἰ δὴ τῶν φρονίμων τὸ εὖ βεβουλευθῆσθαι, ἢ εὐβουλία εἴη ἂν ὀρθότης ἢ κατὰ τὸ συμφέρον πρὸς τὸ τέλος, οὗ ἢ φρόνησις ἀληθὴς ὑπόληψις ἐστίν.

ἔστι δὲ καὶ ἡ σύνεσις καὶ ἡ εὐσυνεσία, 1143a [1] καθ' ἃς λέγομεν συνετοὺς καὶ εὐσυνέτους, οὗθ' ὅλως τὸ αὐτὸ ἐπιστήμη ἢ δόξη (πάντες γὰρ ἂν ἦσαν συνετοί) οὔτε τις μία τῶν κατὰ μέρος ἐπιστημῶν, οἷον ἡ ἱατρικὴ περὶ ὑγιεινῶν, ἡ γεωμετρία περὶ μεγέθων· οὔτε γὰρ περὶ τῶν ἀεὶ ὄντων καὶ [5] ἀκινήτων ἡ σύνεσις ἐστίν οὔτε περὶ τῶν γιγνομένων ὁπουοῦν, ἀλλὰ περὶ ὧν ἀπορήσειεν ἂν τις καὶ βουλεύσαιτο. διὸ περὶ τὰ αὐτὰ μὲν τῇ φρονήσει ἐστίν, οὐκ ἔστι δὲ τὸ αὐτὸ σύνεσις καὶ φρόνησις. ἡ μὲν γὰρ φρόνησις ἐπιτακτικὴ ἐστίν· τί γὰρ δεῖ πράττειν ἢ μή, τὸ τέλος αὐτῆς ἐστίν· ἡ δὲ σύνεσις [10] κριτικὴ μόνον. ταῦτ' οὖν γὰρ σύνεσις καὶ εὐσυνεσία καὶ συνετοὶ καὶ εὐσύνετοι. ἔστι δ' οὔτε τὸ ἔχειν τὴν φρόνησιν οὔτε τὸ λαμβάνειν ἡ σύνεσις· ἀλλ' ὥσπερ τὸ μανθάνειν λέγεται συνιέναι, ὅταν χρῆται τῇ ἐπιστήμῃ, οὕτως ἐν τῷ χρῆσθαι τῇ δόξῃ ἐπὶ τὸ κρίνειν περὶ τούτων περὶ ὧν ἡ [15] φρόνησις ἐστίν, ἄλλου λέγοντος, καὶ κρίνειν καλῶς· τὸ γὰρ εὖ τῷ καλῶς τὸ αὐτό. καὶ ἐντεῦθεν ἐλήλυθε τοῦνομα ἡ σύνεσις, καθ' ἣν εὐσύνετοι, ἐκ τῆς ἐν τῷ μανθάνειν· λέγομεν γὰρ τὸ μανθάνειν συνιέναι πολλάκις.

ἡ δὲ καλουμένη γνώμη, καθ' ἣν συγγνώμονας καὶ [20] ἔχειν φαμὲν γνώμην, ἡ τοῦ ἐπεικοῦς ἐστὶ κρίσις ὀρθή. σημεῖον δέ· τὸν γὰρ ἐπεικῇ μάλιστα φαμεν εἶναι συγγνωμονικόν, καὶ ἐπεικὲς τὸ ἔχειν περὶ ἕνια συγγνώμην. ἡ δὲ συγγνώμη γνώμη ἐστὶ κριτικὴ τοῦ ἐπεικοῦς ὀρθή· ὀρθὴ δ' ἡ τοῦ ἀληθοῦς.

[25] εἰσὶ δὲ πᾶσαι αἱ ἕξεις εὐλόγως εἰς ταῦτ' οὗτοι τείνουσαι· λέγομεν γὰρ γνώμην καὶ σύνεσιν καὶ φρόνησιν καὶ νοῦν ἐπὶ τοὺς αὐτοὺς ἐπιφέροντες γνώμην ἔχειν καὶ νοῦν ἤδη καὶ φρονίμους καὶ συνετούς. πᾶσαι γὰρ αἱ δυνάμεις αὗται τῶν ἐσχάτων εἰσὶ καὶ τῶν καθ' ἕκαστον· καὶ ἐν μὲν τῷ [30] κριτικὸς εἶναι περὶ ὧν ὁ φρόνιμος, συνετὸς καὶ εὐγνώμων ἢ συγγνώμων· τὰ γὰρ ἐπεικῇ κοινὰ τῶν ἀγαθῶν ἀπάντων ἐστὶν ἐν τῷ πρὸς ἄλλον. ἔστι δὲ τῶν καθ' ἕκαστα καὶ τῶν ἐσχάτων ἅπαντα τὰ πρακτά· καὶ γὰρ τὸν φρόνιμον δεῖ γινώσκειν αὐτά, καὶ ἡ σύνεσις καὶ ἡ γνώμη περὶ τὰ [35] πρακτά, ταῦτα δ' ἔσχατα. καὶ ὁ νοῦς τῶν ἐσχάτων ἐπ' ἀμφοτέρω· καὶ γὰρ τῶν πρώτων ὄρων καὶ τῶν ἐσχάτων 1143b [1] νοῦς ἐστὶ καὶ οὐ λόγος, καὶ ὁ μὲν κατὰ τὰς

ἀποδείξεις τῶν ἀκινήτων ὄρων καὶ πρώτων, ὁ δ' ἐν ταῖς πρακτικαῖς τοῦ ἐσχάτου καὶ ἐνδεχομένου καὶ τῆς ἐτέρας προτάσεως· ἀρχαὶ γὰρ τοῦ οὗ ἔνεκα αὐται· ἐκ τῶν καθ' ἕκαστα γὰρ [5] τὰ καθόλου· τούτων οὖν ἔχειν δεῖ αἰσθῆσιν, αὕτη δ' ἐστὶ νοῦς. διὸ καὶ φυσικὰ δοκεῖ εἶναι ταῦτα, καὶ φύσει σοφὸς μὲν οὐδεὶς, γνώμην δ' ἔχειν καὶ σύνεσιν καὶ νοῦν. σημεῖον δ' ὅτι καὶ ταῖς ἡλικίαις οἰόμεθα ἀκολουθεῖν, καὶ ἦδε ἡ ἡλικία νοῦν ἔχει καὶ γνώμην, ὡς τῆς φύσεως αἰτίας οὔσης. [διὸ [10] καὶ ἀρχὴ καὶ τέλος νοῦς· ἐκ τούτων γὰρ αἱ ἀποδείξεις καὶ περὶ τούτων.] ὥστε δεῖ προσέχειν τῶν ἐμπείρων καὶ πρεσβυτέρων ἢ φρονίμων ταῖς ἀναποδείκτοις φάσεσι καὶ δόξαις οὐχ ἥττον τῶν ἀποδείξεων· διὰ γὰρ τὸ ἔχειν ἐκ τῆς ἐμπειρίας ὅμμα ὁρῶσιν ὁρθῶς. τί μὲν οὖν ἐστὶν ἡ [15] φρόνησις καὶ ἡ σοφία, καὶ περὶ τί ἑκάτερα τυγχάνει οὔσα, καὶ ὅτι ἄλλου τῆς ψυχῆς μορίου ἀρετὴ ἑκάτερα, εἴρηται.

διαπορήσειε δ' ἂν τις περὶ αὐτῶν τί χρήσιμοι εἰσιν. ἡ μὲν γὰρ σοφία οὐδὲν θεωρήσει ἐξ ὧν ἔσται εὐδαίμων [20] ἄνθρωπος (οὐδεμιᾶς γὰρ ἐστὶ γενέσεως), ἡ δὲ φρόνησις τοῦτο μὲν ἔχει, ἀλλὰ τίνος ἔνεκα δεῖ αὐτῆς; εἴπερ ἡ μὲν φρόνησις ἐστὶν ἡ περὶ τὰ δίκαια καὶ καλὰ καὶ ἀγαθὰ ἀνθρώπῳ, ταῦτα δ' ἐστὶν ἃ τοῦ ἀγαθοῦ ἐστὶν ἀνδρὸς πράττειν, οὐδὲν δὲ πρακτικώτεροι τῷ εἰδέναι αὐτὰ ἐσμεν, εἴπερ ἔξεις [25] αἱ ἀρεταὶ εἰσιν, ὥσπερ οὐδὲ τὰ ὑγιεινὰ οὐδὲ τὰ εὐεκτικά, ὅσα μὴ τῷ ποιεῖν ἀλλὰ τῷ ἀπὸ τῆς ἔξεως εἶναι λέγεται· οὐθὲν γὰρ πρακτικώτεροι τῷ ἔχειν τὴν ἱατρικὴν καὶ γυμναστικὴν ἐσμεν. εἰ δὲ μὴ τούτων χάριν φρόνιμον ῥητέον ἀλλὰ τοῦ γίνεσθαι, τοῖς οὖσι σπουδαίοις οὐθὲν ἂν εἴη χρήσιμος· [30] ἔτι δ' οὐδὲ τοῖς μὴ ἔχουσιν· οὐδὲν γὰρ διοίσει αὐτοὺς ἔχειν ἢ ἄλλοις ἔχουσι πείθεσθαι, ἱκανῶς τ' ἔχοι ἂν ἡμῖν ὥσπερ καὶ περὶ τὴν ὑγίειαν· βουλόμενοι γὰρ ὑγιαίνειν ὅμως οὐ μανθάνομεν ἱατρικὴν. πρὸς δὲ τούτοις ἄτοπον ἂν εἶναι δόξειεν, εἰ χείρων τῆς σοφίας οὔσα κυριώτερα αὐτῆς ἔσται· [35] ἡ γὰρ ποιοῦσα ἄρχει καὶ ἐπιτάττει περὶ ἕκαστον. περὶ δὲ τούτων λεκτέον· νῦν μὲν γὰρ ἠπόρηται περὶ αὐτῶν μόνον. 1144a [1] πρῶτον μὲν οὖν λέγωμεν ὅτι καθ' αὐτὰς ἀναγκαῖον αἰρετάς αὐτὰς εἶναι, ἀρετάς γ' οὐσας ἑκάτεραν ἑκατέρου τοῦ μορίου, καὶ εἰ μὴ ποιοῦσι μηδὲν μηδετέρα αὐτῶν. ἔπειτα καὶ ποιοῦσι μὲν, οὐχ ὡς ἡ ἱατρικὴ δὲ ὑγίειαν, ἀλλ' ὡς ἡ ὑγίεια, οὕτως [5] ἡ σοφία εὐδαιμονίαν· μέρος γὰρ οὔσα τῆς ὅλης ἀρετῆς τῷ ἔχεσθαι ποιεῖ καὶ τῷ ἐνεργεῖν εὐδαίμονα.† ἔτι τὸ ἔργον ἀποτελεῖται κατὰ τὴν φρόνησιν καὶ τὴν ἠθικὴν ἀρετὴν· ἡ μὲν γὰρ ἀρετὴ τὸν σκοπὸν ποιεῖ ὁρθόν, ἡ δὲ φρόνησις τὰ πρὸς τοῦτον. τοῦ δὲ τετάρτου μορίου τῆς ψυχῆς οὐκ ἔστιν [10] ἀρετὴ τοιαύτη, τοῦ θρεπτικοῦ· οὐδὲν γὰρ ἐπ' αὐτῷ



πράττειν ἢ μὴ πράττειν. περὶ δὲ τοῦ μηθὲν εἶναι πρακτικωτέρους διὰ τὴν φρόνησιν τῶν καλῶν καὶ δικαίων, μικρὸν ἄνωθεν ἀρκτέον, λαβόντας ἀρχὴν ταύτην. ὥσπερ γὰρ καὶ τὰ δίκαια λέγομεν πράττοντάς τινας οὕτω δικαίους εἶναι, οἷον [15] τοὺς τὰ ὑπὸ τῶν νόμων τεταγμένα ποιοῦντας ἢ ἄκοντας ἢ δι' ἄγνοιαν ἢ δι' ἕτερόν τι καὶ μὴ δι' αὐτά (καίτοι πράττουσιν γε ἃ δεῖ καὶ ὅσα χρὴ τὸν σπουδαῖον), οὕτως, ὡς ἔοικεν, ἔστι τὸ πῶς ἔχοντα πράττειν ἕκαστα ὥστ' εἶναι ἀγαθόν, λέγω δ' οἷον διὰ προαίρεσιν καὶ αὐτῶν ἔνεκα τῶν [20] πραττομένων. τὴν μὲν οὖν προαίρεσιν ὀρθὴν ποιεῖ ἡ ἀρετή, τὸ δ' ὅσα ἐκείνης ἔνεκα πέφυκε πράττεσθαι οὐκ ἔστι τῆς ἀρετῆς ἀλλ' ἑτέρας δυνάμεως. λεκτέον δ' ἐπιστήσασιν σαφέστερον περὶ αὐτῶν. ἔστι δὲ δύναμις ἣν καλοῦσι δεινότητα· αὕτη δ' ἐστὶ τοιαύτη ὥστε τὰ πρὸς τὸν ὑποτεθέντα [25] σκοπὸν συντείνοντα δύνασθαι ταῦτα πράττειν καὶ τυγχάνειν αὐτοῦ. ἂν μὲν οὖν ὁ σκοπὸς ἦ καλός, ἐπαινετὴ ἐστίν, ἐὰν δὲ φαῦλος, πανουργία· διὸ καὶ τοὺς φρονίμους δεινοὺς καὶ πανούργους φαμέν εἶναι. ἔστι δ' ἡ φρόνησις οὐχ ἡ δύναμις, ἀλλ' οὐκ ἄνευ τῆς δυνάμεως ταύτης. ἡ δ' ἕξις τῷ [30] ὅμματι τούτῳ γίνεται τῆς ψυχῆς οὐκ ἄνευ ἀρετῆς, ὡς εἴρηται τε καὶ ἔστι δῆλον· οἱ γὰρ συλλογισμοὶ τῶν πρακτῶν ἀρχὴν ἔχοντές εἰσιν, ἐπειδὴ τοιόνδε τὸ τέλος καὶ τὸ ἄριστον, ὅτιδήποτε ὄν (ἔστω γὰρ λόγου χάριν τὸ τυχόν)· τοῦτο δ' εἰ μὴ τῷ ἀγαθῷ, οὐ φαίνεται· διαστρέφει γὰρ ἡ [35] μοχθηρία καὶ διαψεύδεσθαι ποιεῖ περὶ τὰς πρακτικὰς ἀρχάς. ὥστε φανερόν ὅτι ἀδύνατον φρόνιμον εἶναι μὴ ὄντα ἀγαθόν.

Od. 17.420

❖ θω.αμβ

## Βιβλίο 7

μετὰ δὲ ταῦτα λεκτέον, ἄλλην ποιησαμένους ἀρχήν, ὅτι τῶν περὶ τὰ ἥθη φευκτῶν τρία ἐστὶν εἶδη, κακία ἀκρασία θηριότης. τὰ δ' ἐναντία τοῖς μὲν δυσὶ δῆλα· τὸ μὲν γὰρ ἀρετὴν τὸ δ' ἐγκράτειαν καλοῦμεν· πρὸς δὲ τὴν θηριότητα μάλιστ' ἂν ἀρμόττοι λέγειν τὴν ὑπὲρ ἡμᾶς ἀρετὴν, [20] ἥρωικὴν τινα καὶ θείαν, ὥσπερ Ὅμηρος περὶ Ἑκτορος πεποίηκε λέγοντα τὸν Πρίαμον ὅτι σφόδρα ἦν ἀγαθός,

οὐδὲ ἐώκει ἀνδρός γε θνητοῦ πάις ἔμμεναι ἀλλὰ θεοῖο.

ὥστ' εἰ, καθάπερ φασίν, ἐξ ἀνθρώπων γίνονται θεοὶ δι' ἀρετῆς ὑπερβολήν, τοιαύτη τις ἂν εἴη δῆλον ὅτι ἡ τῇ θηριώδει [25] ἀντιτιθεμένη ἕξις· καὶ γὰρ ὥσπερ οὐδὲ θηρίου ἐστὶ κακία οὐδ' ἀρετή, οὕτως οὐδὲ θεοῦ, ἀλλ' ἢ μὲν τιμιώτερον ἀρετῆς, ἢ δ' ἕτερόν τι γένος κακίας. ἐπεὶ δὲ σπάνιον καὶ τὸ θεῖον ἄνδρα εἶναι, καθάπερ οἱ Λάκωνες εἰώθασι προσαγορεύειν, ὅταν ἀγασθῶσι σφόδρα του, σεῖος ἀνὴρ φασιν, οὕτω καὶ [30] ὁ θηριώδης ἐν τοῖς ἀνθρώποις σπάνιος· μάλιστα δ' ἐν τοῖς βαρβάροις ἐστίν, γίνεται δ' ἔνια καὶ διὰ νόσους καὶ πηρώσεις· καὶ τοὺς διὰ κακίαν δὲ τῶν ἀνθρώπων ὑπερβάλλοντας οὕτως ἐπιδυσφημοῦμεν. ἀλλὰ περὶ μὲν τῆς διαθέσεως τῆς τοιαύτης ὕστερον ποιητέον τινὰ μνείαν, περὶ δὲ κακίας [35] εἴρηται πρότερον· περὶ δὲ ἀκρασίας καὶ μαλακίας καὶ τρυφῆς λεκτέον, καὶ περὶ ἐγκρατείας καὶ καρτερίας· 1145b [1] οὔτε γὰρ ὥς περὶ τῶν αὐτῶν ἕξεων τῇ ἀρετῇ καὶ τῇ μοχθηρίᾳ ἐκατέραν αὐτῶν ὑποληπτέον, οὔθ' ὥς ἕτερον γένος. δεῖ δ', ὥσπερ ἐπὶ τῶν ἄλλων, τιθέντας τὰ φαινόμενα καὶ πρῶτον διαπορήσαντας οὕτω δεικνύναι μάλιστα μὲν πάντα τὰ [5] ἔνδοξα περὶ ταῦτα τὰ πάθη, εἰ δὲ μή, τὰ πλεῖστα καὶ κυριώτατα· ἐὰν γὰρ λύηται τε τὰ δυσχερῆ καὶ καταλείπηται τὰ ἔνδοξα, δεδειγμένον ἂν εἴη ἱκανῶς.

δοκεῖ δὲ ἢ τε ἐγκράτεια καὶ καρτερία τῶν σπουδαίων καὶ [τῶν] ἐπαινετῶν

εἶναι, ἢ δ' ἀκρασία τε καὶ μαλακία [10] τῶν φαύλων καὶ ψεκτῶν, καὶ ὁ αὐτὸς ἐγκρατὴς καὶ ἐμμενετικὸς τῷ λογισμῷ, καὶ ἀκρατὴς καὶ ἐκστατικὸς τοῦ λογισμοῦ. καὶ ὁ μὲν ἀκρατὴς εἰδὼς ὅτι φαῦλα πράττει διὰ πάθος, ὁ δ' ἐγκρατὴς εἰδὼς ὅτι φαῦλαι αἱ ἐπιθυμίαι οὐκ ἀκολουθεῖ διὰ τὸν λόγον. καὶ τὸν σώφρονα μὲν ἐγκρατῆ καὶ [15] καρτερικόν, τὸν δὲ τοιοῦτον οἱ μὲν πάντα σώφρονα οἱ δ' οὐ, καὶ τὸν ἀκόλαστον ἀκρατῆ καὶ τὸν ἀκρατῆ ἀκόλαστον συγκεχυμένως, οἱ δ' ἑτέρους εἶναι φασιν. τὸν δὲ φρόνιμον ὅτε μὲν οὐ φασιν ἐνδέχεσθαι εἶναι ἀκρατῆ, ὅτε δ' ἐνίους φρονίμους ὄντας καὶ δεινοὺς ἀκρατεῖς εἶναι. ἔτι ἀκρατεῖς λέγονται καὶ [20] θυμοῦ καὶ τιμῆς καὶ κέρδους. τὰ μὲν οὖν λεγόμενα ταῦτ' ἐστίν.

ἀπορήσειε δ' ἂν τις πῶς ὑπολαμβάνων ὀρθῶς ἀκρατεύεται τις. ἐπιστάμενον μὲν οὖν οὐ φασί τινες οἶόν τε εἶναι· δεινὸν γὰρ ἐπιστήμης ἐνούσης, ὡς ᾤετο Σωκράτης, ἄλλο τι κρατεῖν καὶ περιέλκειν αὐτὴν ὥσπερ ἀνδράποδον. [25] Σωκράτης μὲν γὰρ ὅλως ἐμάχετο πρὸς τὸν λόγον ὡς οὐκ οὔσης ἀκρασίας· οὐθένα γὰρ ὑπολαμβάνοντα πράττειν παρὰ τὸ βέλτιστον, ἀλλὰ δι' ἄγνοιαν. οὗτος μὲν οὖν ὁ λόγος ἀμφισβητεῖ τοῖς φαινομένοις ἐναργῶς, καὶ δέον ζητεῖν περὶ τὸ πάθος, εἰ δι' ἄγνοιαν, τίς ὁ τρόπος γίνεται τῆς ἀγνοίας. [30] ὅτι γὰρ οὐκ οἶεται γε ὁ ἀκρατευόμενος πρὶν ἐν τῷ πάθει γενέσθαι, φανερόν. εἰσὶ δέ τινες οἱ τὰ μὲν συγχωροῦσι τὰ δ' οὐ· τὸ μὲν γὰρ ἐπιστήμης μηθὲν εἶναι κρεῖττον ὁμολογοῦσιν, τὸ δὲ μηθένα πράττειν παρὰ τὸ δόξαν βέλτιον οὐχ ὁμολογοῦσιν, καὶ διὰ τοῦτο τὸν ἀκρατῆ φασὶν οὐκ ἐπιστήμην [35] ἔχοντα κρατεῖσθαι ὑπὸ τῶν ἡδονῶν ἀλλὰ δόξαν. ἀλλὰ μὴν εἴγε δόξα καὶ μὴ ἐπιστήμη, μὴδ' ἰσχυρὰ ὑπόληψις 1146a [1] ἢ ἀντιτείνουσα ἀλλ' ἡρεμαία, καθάπερ ἐν τοῖς διστάζουσι, συγγνώμη τῷ μὴ μένειν ἐν αὐταῖς πρὸς ἐπιθυμίας ἰσχυράς· τῇ δὲ μοχθηρίᾳ οὐ συγγνώμη, οὐδὲ τῶν ἄλλων οὐδενὶ τῶν ψεκτῶν. φρονήσεως ἄρα ἀντιτεινούσης; [5] αὕτη γὰρ ἰσχυρότατον. ἀλλ' ἄτοπον· ἔσται γὰρ ὁ αὐτὸς ἅμα φρόνιμος καὶ ἀκρατὴς, φήσειε δ' οὐδ' ἂν εἷς φρονίμου εἶναι τὸ πράττειν ἐκόντα τὰ φαυλότατα. πρὸς δὲ τούτοις δέδεικται πρότερον ὅτι πρακτικὸς γε ὁ φρόνιμος (τῶν γὰρ ἐσχάτων τις) καὶ τὰς ἄλλας ἔχων ἀρετάς. ἔτι εἰ μὲν ἐν [10] τῷ ἐπιθυμίας ἔχειν ἰσχυρὰς καὶ φαύλας ὁ ἐγκρατὴς, οὐκ ἔσται ὁ σώφρων ἐγκρατὴς οὐδ' ὁ ἐγκρατὴς σώφρων· οὔτε γὰρ τὸ ἄγαν σώφρωνος οὔτε τὸ φαύλας ἔχειν. ἀλλὰ μὴν δεῖ γε· εἰ μὲν γὰρ χρησταὶ αἱ ἐπιθυμίαι, φαύλη ἢ κωλύουσα ἔξις μὴ ἀκολουθεῖν, ὥσθ' ἡ ἐγκράτεια οὐ πᾶσα [15] σπουδαία· εἰ δ' ἀσθενεῖς καὶ μὴ φαῦλαι, οὐθὲν σεμνόν, οὐδ' εἰ φαῦλαι καὶ ἀσθενεῖς, οὐδὲν μέγα. ἔτι εἰ πάσῃ δόξῃ ἐμμενετικὸν ποιεῖ ἡ ἐγκράτεια,

φαύλη, οἶον εἰ καὶ τῇ ψευδεῖ· καὶ εἰ πάσης δόξης ἡ ἀκρασία ἐκστατικόν, ἔσται τις σπουδαία ἀκρασία, οἶον ὁ Σοφοκλέους Νεοπτόλεμος ἐν [20] τῷ Φιλοκτήτῃ· ἐπαινετὸς γὰρ οὐκ ἐμμένων οἷς ἐπείσθη ὑπὸ τοῦ Ὀδυσσεύως διὰ τὸ λυπεῖσθαι ψευδόμενος. ἔτι ὁ σοφιστικὸς λόγος [ψευδόμενος] ἀπορία· διὰ γὰρ τὸ παράδοξα βούλεσθαι ἐλέγχειν, ἵνα δεινοὶ ὦσιν ὅταν ἐπιτύχωσιν, ὁ γενόμενος συλλογισμὸς ἀπορία γίνεται· δέδεται γὰρ ἡ [25] διάνοια, ὅταν μένειν μὴ βούληται διὰ τὸ μὴ ἀρέσκειν τὸ συμπερανθέν, προϊέναι δὲ μὴ δύνηται διὰ τὸ λῦσαι μὴ ἔχειν τὸν λόγον. συμβαίνει δὲ ἔκ τινος λόγου ἡ ἀφροσύνη μετ' ἀκρασίας ἀρετῇ· τάναντία γὰρ πράττει ὧν ὑπολαμβάνει διὰ τὴν ἀκρασίαν, ὑπολαμβάνει δὲ τὰγαθὰ [30] κακὰ εἶναι καὶ οὐ δεῖν πράττειν, ὥστε τὰγαθὰ καὶ οὐ τὰ κακὰ πράξει. ἔτι ὁ τῷ πεπεῖσθαι πράττων καὶ διώκων τὰ ἡδέα καὶ προαιρούμενος βελτίων ἂν δόξειεν τοῦ μὴ διὰ λογισμὸν ἀλλὰ δι' ἀκρασίαν· εὐιατότερος γὰρ διὰ τὸ μεταπεισθῆναι ἂν. ὁ δ' ἀκρατὴς ἔνοχος τῇ παροιμίᾳ ἐν ἣ [35] φαμέν “ὅταν τὸ ὕδωρ πνίγη, τί δεῖ ἐπιπίνειν;” εἰ μὲν γὰρ ἐπέπειστο ἃ πράττει, 1146b [1] μεταπεισθεὶς ἂν ἐπαύσατο· νῦν δὲ πεπεισμένος οὐδὲν ἥττον [ἄλλα] πράττει. ἔτι εἰ περὶ πάντα ἀκρασία ἐστὶ καὶ ἐγκράτεια, τίς ὁ ἀπλῶς ἀκρατής; οὐδεὶς γὰρ ἀπάσας ἔχει τὰς ἀκρασίας, φαμέν δ' εἶναι τινὰς [5] ἀπλῶς.

αἱ μὲν οὖν ἀπορίαι τοιαῦταί τινες συμβαίνουσιν, τούτων δὲ τὰ μὲν ἀνελεῖν δεῖ τὰ δὲ καταλιπεῖν· ἡ γὰρ λύσις τῆς ἀπορίας εὗρεσίς ἐστιν. πρῶτον μὲν οὖν σκεπτέον πότερον εἰδότες ἢ οὐ, καὶ πῶς εἰδότες· εἴτα περὶ ποῖα τὸν ἀκρατῆ [10] καὶ τὸν ἐγκρατῆ θετέον, λέγω δὲ πότερον περὶ πᾶσαν ἡδονὴν καὶ λύπην ἢ περὶ τινὰς ἀφωρισμένας, καὶ τὸν ἐγκρατῆ καὶ τὸν καρτερικόν, πότερον ὁ αὐτὸς ἢ ἕτερός ἐστιν· ὁμοίως δὲ καὶ περὶ τῶν ἄλλων ὅσα συγγενῇ τῆς θεωρίας ἐστὶ ταύτης. ἔστι δ' ἀρχὴ τῆς σκέψεως, πότερον [15] ὁ ἐγκρατὴς καὶ ὁ ἀκρατὴς εἰσι τῷ περὶ ἃ ἡ τῷ ὥς ἔχοντες τὴν διαφοράν, λέγω δὲ πότερον τῷ περὶ ταδὶ εἶναι μόνον ἀκρατὴς ὁ ἀκρατής, ἢ οὐ ἀλλὰ τῷ ὥς, ἢ οὐ ἀλλ' ἐξ ἀμφοῖν· ἔπειτ' εἰ περὶ πάντ' ἐστὶν ἀκρασία καὶ ἐγκράτεια ἢ οὐ. οὔτε γὰρ περὶ ἅπαντ' ἐστὶν ὁ ἀπλῶς ἀκρατής, [20] ἀλλὰ περὶ ἅπερ ὁ ἀκόλαστος, οὔτε τῷ πρὸς ταῦτα ἀπλῶς ἔχειν (ταυτόν γὰρ ἂν ἦν τῇ ἀκολασίᾳ), ἀλλὰ τῷ ὥδι ἔχειν. ὁ μὲν γὰρ ἄγεται προαιρούμενος, νομίζων ἀεὶ δεῖν τὸ παρὸν ἡδὺ διώκειν· ὁ δ' οὐκ οἶεται μὲν, διώκει δέ. περὶ μὲν οὖν τοῦ δόξαν ἀληθῆ ἀλλὰ μὴ ἐπιστήμην [25] εἶναι παρ' ἣν ἀκρατεύονται, οὐδὲν διαφέρει πρὸς τὸν λόγον· ἔνιοι γὰρ τῶν δοξαζόντων οὐ διστάζουσιν, ἀλλ' οἶονται ἀκριβῶς εἰδέναι. εἰ οὖν διὰ τὸ ἡρέμα πιστεύειν οἱ δοξάζοντες μᾶλλον τῶν

ἐπισταμένων παρὰ τὴν ὑπόληψιν πράξουσιν, οὐθὲν διοίσει ἐπιστήμη δόξης· ἔνιοι γὰρ πιστεύουσιν οὐδὲν [30] ἥττον οἷς δοξάζουσιν ἢ ἕτεροι οἷς ἐπίστανται· δηλοῖ δ' Ἡράκλειτος. ἀλλ' ἐπεὶ διχῶς λέγομεν τὸ ἐπίστασθαι καὶ γὰρ ὁ ἔχων μὲν οὐ χρώμενος δὲ τῇ ἐπιστήμῃ καὶ ὁ χρώμενος λέγεται ἐπίστασθαι, διοίσει τὸ ἔχοντα μὲν μὴ θεωροῦντα δὲ καὶ τὸ θεωροῦντα ἃ μὴ δεῖ πράττειν [τοῦ ἔχοντα καὶ θεωροῦντα]· [35] τοῦτο γὰρ δοκεῖ δεινόν, ἀλλ' οὐκ εἰ μὴ θεωρῶν. 1147a [1] ἔτι ἐπεὶ δύο τρόποι τῶν προτάσεων, ἔχοντα μὲν ἀμφοτέρας οὐδὲν κωλύει πράττειν παρὰ τὴν ἐπιστήμην, χρώμενον μέντοι τῇ καθόλου ἀλλὰ μὴ τῇ κατὰ μέρος· πρακτὰ γὰρ τὰ καθ' ἕκαστα. διαφέρει δὲ καὶ τὸ καθόλου· τὸ μὲν γὰρ ἐφ' ἑαυτοῦ [5] τὸ δ' ἐπὶ τοῦ πράγματός ἐστιν· οἷον ὅτι παντὶ ἀνθρώπῳ συμφέρει τὰ ξηρά, καὶ ὅτι αὐτὸς ἄνθρωπος, ἢ ὅτι ξηρὸν τὸ τοιόνδε· ἀλλ' εἰ τόδε τοιόνδε, ἢ οὐκ ἔχει ἢ οὐκ ἐνεργεῖ· κατὰ τε δὴ τούτους διοίσει τοὺς τρόπους ἀμήχανον ὅσον, ὥστε δοκεῖν οὕτω μὲν εἰδέναι μηδὲν ἄτοπον, ἄλλως δὲ θαυμαστόν. [10] ἔτι τὸ ἔχειν τὴν ἐπιστήμην ἄλλον τρόπον τῶν νῦν ῥηθέντων ὑπάρχει τοῖς ἀνθρώποις· ἐν τῷ γὰρ ἔχειν μὲν μὴ χρῆσθαι δὲ διαφέρουσιν ὁρῶμεν τὴν ἔξιν, ὥστε καὶ ἔχειν πως καὶ μὴ ἔχειν, οἷον τὸν καθεύδοντα καὶ μαινόμενον καὶ οἰνωμένον. ἀλλὰ μὴν οὕτω διατίθενται οἱ γε ἐν [15] τοῖς πάθεσιν ὄντες· θυμοὶ γὰρ καὶ ἐπιθυμίαι ἀφροδισίων καὶ ἔνια τῶν τοιούτων ἐπιδήλως καὶ τὸ σῶμα μεθιστᾷσιν, ἐνίοις δὲ καὶ μανίας ποιοῦσιν. δῆλον οὖν ὅτι ὁμοίως ἔχειν λεκτέον τοὺς ἀκρατεῖς τούτοις. τὸ δὲ λέγειν τοὺς λόγους τοὺς ἀπὸ τῆς ἐπιστήμης οὐδὲν σημεῖον· καὶ γὰρ οἱ ἐν τοῖς πάθεσι [20] τούτοις ὄντες ἀποδείξεις καὶ ἔπη λέγουσιν Ἐμπεδοκλέους, καὶ οἱ πρῶτον μαθόντες συνείρουσι μὲν τοὺς λόγους, ἴσασι δ' οὐπω· δεῖ γὰρ συμφυῆναι, τοῦτο δὲ χρόνου δεῖται· ὥστε καθάπερ τοὺς ὑποκρινομένους, οὕτως ὑποληπτέον λέγειν καὶ τοὺς ἀκρατευομένους. ἔτι καὶ ὥδε φυσικῶς ἄν τις ἐπιβλέψειε [25] τὴν αἰτίαν. ἡ μὲν γὰρ καθόλου δόξα, ἡ δ' ἑτέρα περὶ τῶν καθ' ἕκαστά ἐστιν, ὧν αἴσθησις ἤδη κυρία· ὅταν δὲ μία γένηται ἐξ αὐτῶν, ἀνάγκη τὸ συμπερανθέν ἐνθα μὲν φάναι τὴν ψυχὴν, ἐν δὲ ταῖς ποιητικαῖς πράττειν εὐθύς· οἷον, εἰ παντὸς γλυκέος γεύεσθαι δεῖ, τουτὶ δὲ γλυκὺ ὥς [30] ἐν τι τῶν καθ' ἕκαστον, ἀνάγκη τὸν δυνάμενον καὶ μὴ κωλυόμενον ἅμα τοῦτο καὶ πράττειν. ὅταν οὖν ἡ μὲν καθόλου ἐνῇ κωλύουσα γεύεσθαι, ἡ δέ, ὅτι πᾶν γλυκὺ ἡδύ, τουτὶ δὲ γλυκύ (αὕτη δὲ ἐνεργεῖ), τύχῃ δ' ἐπιθυμία ἐνοῦσα, ἡ μὲν οὖν λέγει φεύγειν τοῦτο, ἡ δ' ἐπιθυμία ἄγει· [35] κινεῖν γὰρ ἕκαστον δύναται τῶν μορίων· 1147b [1] ὥστε συμβαίνει ὑπὸ λόγου πως καὶ δόξης ἀκρατεῦεσθαι, οὐκ ἐναντίας δὲ καθ' αὐτήν, ἀλλὰ κατὰ συμβεβηκός — ἡ γὰρ ἐπιθυμία ἐναντία, ἀλλ' οὐχ ἡ δόξα — τῷ ὀρθῷ λόγῳ· ὥστε καὶ διὰ τοῦτο τὰ θηρία οὐκ ἀκρατῇ, ὅτι οὐκ ἔχει καθόλου ὑπόληψιν [5] ἀλλὰ τῶν καθ' ἕκαστα φαντασίαν καὶ μνήμην. πῶς δὲ λύεται ἡ ἄγνοια καὶ πάλιν γίνεται ἐπιστήμων ὁ ἀκρατής, ὁ αὐτὸς λόγος καὶ περὶ οἰνωμένου καὶ

καθεύδοντος καὶ οὐκ ἴδιος τούτου τοῦ πάθους, ὃν δεῖ παρὰ τῶν φυσιολόγων ἀκούειν. ἐπεὶ δ' ἡ τελευταία πρότασις δόξα τε [10] αἰσθητοῦ καὶ κυρία τῶν πράξεων, ταύτην ἢ οὐκ ἔχει ἐν τῷ πάθει ὢν, ἢ οὕτως ἔχει ὥς οὐκ ἦν τὸ ἔχειν ἐπίστασθαι ἀλλὰ λέγειν ὥσπερ ὁ οἴνωμένος τὰ Ἐμπεδοκλέους. καὶ διὰ τὸ μὴ καθόλου μὴδ' ἐπιστημονικὸν ὁμοίως εἶναι δοκεῖν τῷ καθόλου τὸν ἔσχατον ὅρον καὶ ἔοικεν ὃ ἐζήτει [15] Σωκράτης συμβαίνειν· οὐ γὰρ τῆς κυρίως ἐπιστήμης εἶναι δοκούσης παρούσης γίνεται τὸ πάθος, οὐδ' αὕτη περιέλεκεται διὰ τὸ πάθος, ἀλλὰ τῆς αἰσθητικῆς. περὶ μὲν οὖν τοῦ εἰδότα καὶ μή, καὶ πῶς εἰδότα ἐνδέχεται ἀκρατεῦεσθαι, τοσαῦτα εἶρή

[20] πότερον δ' ἐστὶ τις ἀπλῶς ἀκρατὴς ἢ πάντες κατὰ μέρος, καὶ εἰ ἔστι, περὶ ποῖα ἐστὶ, λεκτέον ἐφεξῆς. ὅτι μὲν οὖν περὶ ἡδονὰς καὶ λύπας εἰσὶν οἱ τ' ἐγκρατεῖς καὶ καρτερικοὶ καὶ οἱ ἀκρατεῖς καὶ μαλακοί, φανερόν. ἐπεὶ δ' ἐστὶ τὰ μὲν ἀναγκαῖα τῶν ποιούντων ἡδονήν, τὰ δ' αἰρετὰ μὲν [25] καθ' αὐτὰ ἔχοντα δ' ὑπερβολήν, ἀναγκαῖα μὲν τὰ σωματικά (λέγω δὲ τὰ τοιαῦτα, τὰ τε περὶ τὴν τροφήν καὶ τὴν τῶν ἀφροδισίων χρεῖαν, καὶ τὰ τοιαῦτα τῶν σωματικῶν περὶ ἃ τὴν ἀκολασίαν ἔθεμεν καὶ τὴν σωφροσύνην), τὰ δ' ἀναγκαῖα μὲν οὐχί, αἰρετὰ δὲ καθ' αὐτὰ (λέγω δ' [30] οἶον νίκην τιμὴν πλοῦτον καὶ τὰ τοιαῦτα τῶν ἀγαθῶν καὶ ἡδέων)· τοὺς μὲν οὖν πρὸς ταῦτα παρὰ τὸν ὀρθὸν λόγον ὑπερβάλλοντας τὸν ἐν αὐτοῖς ἀπλῶς μὲν οὐ λέγομεν ἀκρατεῖς, προστιθέντες δὲ τὸ χρημάτων ἀκρατεῖς καὶ κέρδους καὶ τιμῆς καὶ θυμοῦ, ἀπλῶς δ' οὐ, ὡς ἑτέρους καὶ καθ' [35] ὁμοιότητα λεγομένους, ὥσπερ ἄνθρωπος ὁ τὰ Ὀλύμπια νικῶν· 1148a [1] ἐκείνῳ γὰρ ὁ κοινὸς λόγος τοῦ ἰδίου μικρὸν διέφερεν, ἀλλ' ὅμως ἕτερος ἦν. σημεῖον δέ· ἡ μὲν γὰρ ἀκρασία ψέγεται οὐχ ὡς ἀμαρτία μόνον ἀλλὰ καὶ ὡς κακία τις ἢ ἀπλῶς οὕσα ἢ κατὰ τι μέρος, τούτων δ' οὐδεῖς. τῶν δὲ [5] περὶ τὰς σωματικὰς ἀπολαύσεις, περὶ ἃς λέγομεν τὸν σώφρονα καὶ ἀκόλαστον, ὁ μὴ τῷ προαιρεῖσθαι τῶν ἡδέων διώκων τὰς ὑπερβολὰς — καὶ τῶν λυπηρῶν φεύγων, πείνης καὶ δίψης καὶ ἀλέας καὶ ψύχους καὶ πάντων τῶν περὶ ἀφῆν καὶ γεῦσιν — ἀλλὰ παρὰ τὴν προαίρεσιν καὶ τὴν [10] διάνοιαν, ἀκρατὴς λέγεται, οὐ κατὰ πρόσθεσιν, ὅτι περὶ τάδε, καθάπερ ὀργῆς, ἀλλ' ἀπλῶς μόνον. σημεῖον δέ· καὶ γὰρ μαλακοὶ λέγονται περὶ ταύτας, περὶ ἐκείνων δ' οὐδεμίαν. καὶ διὰ τοῦτ' εἰς ταὐτὸ τὸν ἀκρατῆ καὶ τὸν ἀκόλαστον τίθεμεν καὶ ἐγκρατῆ καὶ σώφρονα, ἀλλ' οὐκ ἐκείνων [15] οὐδένα, διὰ τὸ περὶ τὰς αὐτάς πως ἡδονὰς καὶ λύπας εἶναι· οἱ δ' εἰσὶ μὲν περὶ ταῦτά, ἀλλ' οὐχ ὡσαύτως εἰσὶν, ἀλλ' οἱ μὲν προαιροῦνται οἱ δ' οὐ προαιροῦνται. διὸ μᾶλλον ἀκόλαστον ἂν εἴποιμεν ὅστις μὴ ἐπιθυμῶν ἢ ἡρέμα διώκει τὰς ὑπερβολὰς καὶ φεύγει μετρίας λύπας, ἢ τοῦτον ὅστις διὰ [20] τὸ ἐπιθυμεῖν σφόδρα· τί γὰρ ἂν ἐκεῖνος ποιήσειεν, εἰ προσγένοιτο

ἐπιθυμία νεανικὴ καὶ περὶ τὰς τῶν ἀναγκαίων ἐνδείας λύπη ἰσχυρά; ἐπεὶ δὲ τῶν ἐπιθυμιῶν καὶ τῶν ἡδονῶν αἱ μὲν εἰσι τῷ γένει καλῶν καὶ σπουδαίων (τῶν γὰρ ἡδέων ἔνια φύσει αἰρετά), τὰ δ' ἐναντία τούτων, τὰ δὲ [25] μεταξύ, καθάπερ διείλομεν πρότερον, οἷον χρήματα καὶ κέρδος καὶ νίκη καὶ τιμή· πρὸς ἅπαντα δὲ καὶ τὰ τοιαῦτα καὶ τὰ μεταξύ οὐ τῷ πάσχειν καὶ ἐπιθυμεῖν καὶ φιλεῖν ψέγονται, ἀλλὰ τῷ πῶς καὶ ὑπερβάλλειν (διὸ ὅσοι μὲν παρὰ τὸν λόγον ἢ κρατοῦνται ἢ διώκουσι τῶν φύσει τι καλῶν [30] καὶ ἀγαθῶν, οἷον οἱ περὶ τιμὴν μᾶλλον ἢ δεῖ σπουδάζοντες ἢ περὶ τέκνα καὶ γονεῖς· καὶ γὰρ ταῦτα τῶν ἀγαθῶν, καὶ ἐπαινοῦνται οἱ περὶ ταῦτα σπουδάζοντες· ἀλλ' ὅμως ἔστι τις ὑπερβολὴ καὶ ἐν τούτοις, εἴ τις ὥσπερ ἡ Νιόβη μάχοιτο καὶ πρὸς τοὺς θεοὺς, ἢ ὥσπερ Σάτυρος 1148b [1] ὁ φιλοπάτωρ ἐπικαλούμενος περὶ τὸν πατέρα· λίαν γὰρ ἐδόκει μωραίνειν)· μοχθηρία μὲν οὖν οὐδεμία περὶ ταῦτ' ἐστὶ διὰ τὸ εἰρημένον, ὅτι φύσει τῶν αἰρετῶν ἕκαστόν ἐστι δι' αὐτό, φαῦλαι δὲ καὶ φευκταὶ αὐτῶν εἰσὶν αἱ ὑπερβολαί. ὁμοίως [5] δ' οὐδ' ἀκρασία· ἡ γὰρ ἀκρασία οὐ μόνον φευκτὸν ἀλλὰ καὶ τῶν ψεκτῶν ἐστίν· δι' ὁμοιότητα δὲ τοῦ πάθους προσεπιτιθέντες τὴν ἀκρασίαν περὶ ἕκαστον λέγουσιν, οἷον κακὸν ἰατρὸν καὶ κακὸν ὑποκριτήν, ὃν ἀπλῶς οὐκ ἂν εἴποιεν κακόν. ὥσπερ οὖν οὐδ' ἐνταῦθα, διὰ τὸ μὴ κακίαν εἶναι [10] ἐκάστην αὐτῶν ἀλλὰ τῷ ἀνάλογον ὁμοίαν, οὕτω δῆλον ὅτι κάκεῖ ὑποληπτέον μόνην ἀκρασίαν καὶ ἐγκράτειαν εἶναι ἣτις ἐστὶ περὶ ταῦτα τῇ σωφροσύνῃ καὶ ἀκολασίᾳ, περὶ δὲ θυμοῦ καθ' ὁμοιότητα λέγομεν· διὸ καὶ προστιθέντες ἀκρατῇ θυμοῦ ὥσπερ τιμῆς καὶ κέρδους φαμέν.

[15] ἐπεὶ δ' ἐστὶν ἔνια μὲν ἡδέα φύσει, καὶ τούτων τὰ μὲν ἀπλῶς τὰ δὲ κατὰ γένη καὶ ζῶων καὶ ἀνθρώπων, τὰ δ' οὐκ ἔστιν, ἀλλὰ τὰ μὲν διὰ πηρώσεις τὰ δὲ δι' ἔθνη γίνεται, τὰ δὲ διὰ μοχθηρὰς φύσεις, ἔστι καὶ περὶ τούτων ἕκαστα παραπλησίας ἰδεῖν ἔξεις· λέγω δὲ τὰς θηριώδεις, [20] οἷον τὴν ἄνθρωπον ἢν λέγουσι τὰς κυούσας ἀνασχίζουσιν τὰ παιδιά κατεσθίειν, ἢ οἷσι χαίρειν φασὶν ἐνίοις τῶν ἀπηγριωμένων περὶ τὸν Πόντον, τοὺς μὲν ὠμοῖς τοὺς δὲ ἀνθρώπων κρέασιν, τοὺς δὲ τὰ παιδιά δανείζειν ἀλλήλοις εἰς εὐωχίαν, ἢ τὸ περὶ Φάλαριν λεγόμενον. αὐταὶ μὲν θηριώδεις, [25] αἱ δὲ διὰ νόσους γίνονται (καὶ διὰ μανίαν ἐνίοις, ὥσπερ ὁ τὴν μητέρα καθιερεύσας καὶ φαγών, καὶ ὁ τοῦ συνδούλου τὸ ἥπαρ) αἱ δὲ νοσηματώδεις ἢ ἐξ ἔθους, οἷον τριχῶν τίλσεις καὶ ὀνύχων τρώξεις, ἔτι δ' ἀνθράκων καὶ γῆς, πρὸς δὲ τούτοις ἢ τῶν ἀφροδισίων τοῖς ἄρρεσιν· τοῖς μὲν γὰρ φύσει [30] τοῖς δ' ἐξ ἔθους συμβαίνουσιν, οἷον τοῖς ὑβριζομένοις ἐκ παίδων. ὅσοις μὲν οὖν φύσις αἰτία, τούτους μὲν οὐδεὶς

ἂν εἴπειεν ἀκρατεῖς, ὥσπερ οὐδὲ τὰς γυναῖκας, ὅτι οὐκ ὀπύουσιν ἀλλ' ὀπύονται· ὡσαύτως δὲ καὶ ὅσοι νοσηματώδως ἔχουσι δι' ἔθος. τὸ μὲν οὖν ἔχειν ἕκαστα τούτων 1149a [1] ἔξω τῶν ὄρων ἐστὶ τῆς κακίας, καθάπερ καὶ ἡ θηριότης· τὸν δ' ἔχοντα κρατεῖν ἢ κρατεῖσθαι οὐχ ἡ ἀπλῆ ἀκρασία ἀλλ' ἡ καθ' ὁμοιότητα, καθάπερ καὶ τὸν περὶ τοὺς θυμοὺς ἔχοντα τοῦτον τὸν τρόπον τοῦ πάθους, ἀκρατῇ δ' οὐ λεκτέον. πᾶσα [5] γὰρ ὑπερβάλλουσα καὶ ἀφροσύνη καὶ δειλία καὶ ἀκολασία καὶ χαλεπότης αἱ μὲν θηριώδεις αἱ δὲ νοσηματώδεις εἰσὶν· ὁ μὲν γὰρ φύσει τοιοῦτος οἷος δεδιέναι πάντα, κἂν ψοφήσῃ μῦς, θηριώδη δειλίαν δειλός, ὃ δὲ τὴν γαλῆν ἐδεδίει διὰ νόσον· καὶ τῶν ἀφρόνων οἱ μὲν ἐκ φύσεως ἀλόγιστοι [10] καὶ μόνον τῇ αἰσθήσει ζῶντες θηριώδεις, ὥσπερ ἔνια γένη τῶν πόρρω βαρβάρων, οἱ δὲ διὰ νόσους, οἷον τὰς ἐπιληπτικάς, ἢ μανίας νοσηματώδεις. τούτων δ' ἔστι μὲν ἔχειν τινὰ ἐνίοτε μὲν μόνον, μὴ κρατεῖσθαι δέ, λέγω δὲ οἷον εἰ Φάλαρις κατεῖχεν ἐπιθυμῶν παιδίου φαγεῖν ἢ πρὸς ἀφροδισίων [15] ἄτοπον ἡδονήν· ἔστι δὲ καὶ κρατεῖσθαι, μὴ μόνον ἔχειν· ὥσπερ οὖν καὶ μοχθηρίας ἢ μὲν κατ' ἄνθρωπον ἀπλῶς λέγεται μοχθηρία, ἢ δὲ κατὰ πρόσθεσιν, ὅτι θηριώδης ἢ νοσηματώδης, ἀπλῶς δ' οὐ, τὸν αὐτὸν τρόπον δῆλον ὅτι καὶ ἀκρασία ἐστὶν ἢ μὲν θηριώδης ἢ δὲ νοσηματώδης, ἀπλῶς [20] δὲ ἢ κατὰ τὴν ἀνθρωπίνην ἀκολασίαν μόνη.

ὅτι μὲν οὖν ἀκρασία καὶ ἐγκράτειά ἐστι μόνον περὶ ἅπερ ἀκολασία καὶ σωφροσύνη, καὶ ὅτι περὶ τὰ ἄλλα ἐστὶν ἄλλο εἶδος ἀκρασίας, λεγόμενον κατὰ μεταφορὰν καὶ οὐχ ἀπλῶς, δῆλον. ὅτι δὲ καὶ ἡττον αἰσχυρὰ ἀκρασία [25] ἢ τοῦ θυμοῦ ἢ ἡ τῶν ἐπιθυμιῶν, θεωρήσωμεν. ἔοικε γὰρ ὁ θυμὸς ἀκούειν μὲν τι τοῦ λόγου, παρακούειν δέ, καθάπερ οἱ ταχεῖς τῶν διακόνων, οἱ πρὶν ἀκοῦσαι πᾶν τὸ λεγόμενον ἐκθέουσιν, εἴτα ἀμαρτάνουσι τῆς προστάξεως, καὶ οἱ κύνες, πρὶν σκέψασθαι εἰ φίλος, ἂν μόνον ψοφήσῃ, ὑλακτοῦσιν· οὕτως [30] ὁ θυμὸς διὰ θερμότητα καὶ ταχυτήτα τῆς φύσεως ἀκούσας μὲν, οὐκ ἐπίταγμα δ' ἀκούσας, ὁρμᾷ πρὸς τὴν τιμωρίαν. ὁ μὲν γὰρ λόγος ἢ ἡ φαντασία ὅτι ὕβρις ἢ ὀλιγωρία ἐδήλωσεν, ὃ δ' ὥσπερ συλλογισάμενος ὅτι δεῖ τῷ τοιούτῳ πολεμεῖν χαλεπαίνει δὴ εὐθύς· ἢ δ' ἐπιθυμία, ἐὰν [35] μόνον εἴπῃ ὅτι ἡδὺ ὁ λόγος ἢ ἡ αἴσθησις, ὁρμᾷ πρὸς τὴν ἀπόλαυσιν. 1149b [1] ὥσθ' ὁ μὲν θυμὸς ἀκολουθεῖ τῷ λόγῳ πως, ἢ δ' ἐπιθυμία οὐ. αἰσχύων οὖν· ὁ μὲν γὰρ τοῦ θυμοῦ ἀκρατῆς τοῦ λόγου πως ἡττᾶται, ὃ δὲ τῆς ἐπιθυμίας καὶ οὐ τοῦ λόγου. ἔτι ταῖς φυσικαῖς μᾶλλον συγγνώμη ἀκολουθεῖν ὀρέξεσιν, [5] ἐπεὶ καὶ ἐπιθυμίαις ταῖς τοιαύταις μᾶλλον ὅσαι κοιναὶ πᾶσι, καὶ ἐφ' ὅσον κοιναί· ὁ δὲ θυμὸς φυσικώτερον καὶ ἢ



χαλεπότης τῶν ἐπιθυμιῶν τῶν τῆς ὑπερβολῆς καὶ τῶν μὴ ἀναγκαίων, ὥσπερ ὁ ἀπολογούμενος ὅτι τὸν πατέρα τύπτει “καὶ γὰρ οὗτος” ἔφη “τὸν ἑαυτοῦ κάκεῖνος τὸν ἄνωθεν,” [10] καὶ τὸ παιδίον δείξας “καὶ οὗτος ἐμέ” ἔφη, “ὅταν ἀνὴρ γένηται· συγγενὲς γὰρ ἡμῖν.” καὶ ὁ ἐλκόμενος ὑπὸ τοῦ υἱοῦ παύεσθαι ἐκέλευε πρὸς ταῖς θύραις· καὶ γὰρ αὐτὸς ἐλκύσαι τὸν πατέρα μέχρις ἐνταῦθα. ἔτι ἀδικώτεροι οἱ ἐπιβουλότεροι. ὁ μὲν οὖν θυμώδης οὐκ ἐπίβουλος, οὐδ’ ὁ θυμός, [15] ἀλλὰ φανερός· ἡ δ’ ἐπιθυμία, καθάπερ τὴν Ἀφροδίτην φασίν·

δολοπλόκου γὰρ κυπρογενοῦς·

καὶ τὸν κεστὸν ἱμάντα Ὅμηρος·

πάρφασις, ἥ τ’ ἔκλεψε νόον πύκα περ φρονέοντος.

ὥστ’ εἴπερ ἀδικωτέρα καὶ αἰσχίων ἡ ἀκρασία αὕτη τῆς περὶ τὸν θυμόν ἐστι, καὶ ἀπλῶς ἀκρασία καὶ [20] κακία πως. ἔτι οὐδεὶς ὑβρίζει λυπούμενος, ὁ δ’ ὀργῇ ποιῶν πᾶς ποιεῖ λυπούμενος, ὁ δ’ ὑβρίζων μεθ’ ἡδονῆς. εἰ οὖν οἷς ὀργίζεσθαι μάλιστα δίκαιον, ταῦτα ἀδικώτερα, καὶ ἡ ἀκρασία ἡ δι’ ἐπιθυμίαν· οὐ γὰρ ἐστὶν ἐν θυμῷ ὕβρις. ὥς μὲν τοίνυν αἰσχίων ἡ περὶ ἐπιθυμίας ἀκρασία τῆς περὶ τὸν θυμόν, [25] καὶ ὅτι ἔστιν ἐγκράτεια καὶ ἡ ἀκρασία περὶ ἐπιθυμίας καὶ ἡδονᾶς σωματικές, δῆλον· αὐτῶν δὲ τούτων τὰς διαφορὰς ληπτέον. ὥσπερ γὰρ εἴρηται κατ’ ἀρχάς, αἱ μὲν ἀνθρώπιναί εἰσι καὶ φυσικαὶ καὶ τῷ γένει καὶ τῷ μεγέθει, αἱ δὲ θηριώδεις, αἱ δὲ διὰ πηρώσεις καὶ νοσήματα. [30] τούτων δὲ περὶ τὰς πρώτας σωφροσύνη καὶ ἀκολασία μόνον ἐστίν· διὸ καὶ τὰ θηρία οὔτε σώφρονα οὔτ’ ἀκόλαστα λέγομεν ἄλλ’ ἢ κατὰ μεταφορὰν καὶ εἴ τιτι ὅλως ἄλλο πρὸς ἄλλο διαφέρει γένος τῶν ζώων ὕβρει καὶ σιναμωρία καὶ τῷ παμφάγον εἶναι· οὐ γὰρ ἔχει προαίρεσιν [35] οὐδὲ λογισμόν, ἀλλ’ ἐξέστηκε τῆς φύσεως, ὥσπερ οἱ μαινόμενοι τῶν ἀνθρώπων.

1150a [1] ἔλαττον δὲ θηριότης κακίας, φοβερώτερον δέ· οὐ γὰρ διέφθαρται τὸ βέλτιον, ὥσπερ ἐν τῷ ἀνθρώπῳ, ἀλλ' οὐκ ἔχει. ὅμοιον οὖν ὥσπερ ἄψυχον συμβάλλειν πρὸς ἔμψυχον, πότερον κάκιον· ἀσινεστέρα γὰρ ἢ [5] φαυλότης αἰὲρ ἢ τοῦ μὴ ἔχοντος ἀρχήν, ὃ δὲ νοῦς ἀρχή. παραπλήσιον οὖν τὸ συμβάλλειν ἀδικίαν πρὸς ἄνθρωπον ἄδικον. ἔστι γὰρ ὡς ἐκάτερον κάκιον· μυριοπλάσια γὰρ ἂν κακὰ ποιήσειεν ἄνθρωπος κακὸς θηρίου.

περὶ δὲ τὰς δι' ἀφῆς καὶ γεύσεως ἡδονὰς καὶ λύπας [10] καὶ ἐπιθυμίας καὶ φυγὰς, περὶ ἃς ἢ τε ἀκόλασία καὶ ἢ σωφροσύνη διωρίσθη πρότερον, ἔστι μὲν οὕτως ἔχειν ὥστε ἡττᾶσθαι καὶ ὧν οἱ πολλοὶ κρείττους, ἔστι δὲ κρατεῖν καὶ ὧν οἱ πολλοὶ ἡττους· τούτων δ' ὁ μὲν περὶ ἡδονὰς ἀκρατὴς ὃ δ' ἐγκρατής, ὃ δὲ περὶ λύπας μαλακὸς ὃ δὲ καρτερικός. [15] μεταξὺ δ' ἢ τῶν πλείστων ἔξις, κἂν εἰ ῥέπουσι μᾶλλον πρὸς τὰς χεῖρους. ἐπεὶ δ' ἔνιαι τῶν ἡδονῶν ἀναγκαῖαί εἰσιν αἱ δ' οὐ, καὶ μέχρι τινός, αἱ δ' ὑπερβολαὶ οὐ, οὐδ' αἱ ἐλλείψεις, ὁμοίως δὲ καὶ περὶ ἐπιθυμίας ἔχει καὶ λύπας, ὃ μὲν τὰς ὑπερβολὰς διώκων τῶν ἡδέων †ἢ καθ' ὑπερβολὰς† [20] ἢ διὰ προαίρεσιν, δι' αὐτὰς καὶ μηδὲν δι' ἕτερον ἀποβαῖνον, ἀκόλαστος· ἀνάγκη γὰρ τοῦτον μὴ εἶναι μεταμελητικόν, ὥστ' ἀνίατος· ὃ γὰρ ἀμεταμέλητος ἀνίατος. ὃ δ' ἐλλείπων ὃ ἀντικείμενος, ὃ δὲ μέσος σώφρων. ὁμοίως δὲ καὶ ὃ φεύγων τὰς σωματικὰς λύπας μὴ δι' ἡτταν ἀλλὰ διὰ προαίρεσιν. [25] τῶν δὲ μὴ προαιρουμένων ὃ μὲν ἄγεται διὰ τὴν ἡδονήν, ὃ δὲ διὰ τὸ φεύγειν τὴν λύπην τὴν ἀπὸ τῆς ἐπιθυμίας, ὥστε διαφέρουσιν ἀλλήλων. παντὶ δ' ἂν δόξειε χείρων εἶναι, εἴ τις μὴ ἐπιθυμῶν ἢ ἡρέμα πράττοι τι αἰσχρόν, ἢ εἰ σφόδρα ἐπιθυμῶν, καὶ εἰ μὴ ὀργιζόμενος τύπτοι ἢ [30] εἰ ὀργιζόμενος· τί γὰρ ἂν ἐποίει ἐν πάθει ὧν; διὸ ὁ ἀκόλαστος χείρων τοῦ ἀκρατοῦς. τῶν δὲ λεχθέντων τὸ μὲν μαλακίας εἶδος μᾶλλον, ὃ δ' ἀκόλαστος. ἀντίκειται δὲ τῷ μὲν ἀκρατεῖ ὃ ἐγκρατής, τῷ δὲ μαλακῷ ὃ καρτερικός· τὸ μὲν γὰρ καρτερεῖν ἐστὶν ἐν τῷ ἀντέχειν, ἢ δ' ἐγκράτεια [35] ἐν τῷ κρατεῖν, ἕτερον δὲ τὸ ἀντέχειν καὶ κρατεῖν, ὥσπερ καὶ τὸ μὴ ἡττᾶσθαι τοῦ νικᾶν· διὸ καὶ αἰρετώτερον ἐγκράτεια καρτερίας ἐστίν. 1150b [1] ὃ δ' ἐλλείπων πρὸς ἃ οἱ πολλοὶ καὶ ἀντιτείνουσι καὶ δύνανται, οὗτος μαλακὸς καὶ τρυφῶν· καὶ γὰρ ἡ τρυφή μαλακία τίς ἐστίν· ὃς ἔλκει τὸ ἱμάτιον, ἵνα μὴ πονήσῃ τὴν ἀπὸ τοῦ αἵρειν λύπην, καὶ μιμούμενος τὸν [5] κάμνοντα οὐκ οἶεται ἄθλιος εἶναι, ἀθλίῳ ὅμοιος ὧν. ὁμοίως δ' ἔχει καὶ περὶ ἐγκράτειαν καὶ ἀκρασίαν. οὐ γὰρ εἴ τις ἰσχυρῶν καὶ ὑπερβαλλουσῶν ἡδονῶν ἡττᾶται ἢ λυπῶν, θαυμαστόν, ἀλλὰ συγγνωμονικὸν εἰ ἀντιτείνων, ὥσπερ ὁ Θεοδέκτου Φιλοκτήτης ὑπὸ τοῦ ἔχεως πεπληγμένος ἢ ὁ [10] Καρκίνου ἐν τῇ

Ἀλόπη Κερκύων, καὶ ὥσπερ οἱ κατέχειν πειρώμενοι τὸν γέλωτα ἄθρόον ἐκκαγχάζουσιν, οἷον συνέπεσε Ξενοφάντῳ· ἀλλ' εἴ τις πρὸς ἃς οἱ πολλοὶ δύνανται ἀντέχειν, τούτων ἡττᾶται καὶ μὴ δύναται ἀντιτείνειν, μὴ διὰ φύσιν τοῦ γένους ἢ διὰ νόσον, οἷον ἐν τοῖς Σκυθῶν βασιλεῦσιν [15] ἢ μαλακία διὰ τὸ γένος, καὶ ὥς τὸ θῆλυ πρὸς τὸ ἄρρεν διέστηκεν. δοκεῖ δὲ καὶ ὁ παιδιώδης ἀκόλαστος εἶναι, ἔστι δὲ μαλακός. ἢ γὰρ παιδιὰ ἄνεσις ἐστίν, εἴπερ ἀνάπαυσις· τῶν δὲ πρὸς ταύτην ὑπερβαλλόντων ὁ παιδιώδης ἐστίν. ἀκρασίας δὲ τὸ μὲν προπέτεια τὸ δ' ἀσθένεια. [20] οἳ μὲν γὰρ βουλευσάμενοι οὐκ ἐμμένουσιν οἷς ἐβουλεύσαντο διὰ τὸ πάθος, οἳ δὲ διὰ τὸ μὴ βουλεύσασθαι ἄγονται ὑπὸ τοῦ πάθους· ἔνιοι γάρ, ὥσπερ προγαργαλίσαντες οὐ γαργαλίζονται, οὕτω καὶ προαισθόμενοι καὶ προϊδόντες καὶ προεγείραντες ἑαυτοὺς καὶ τὸν λογισμὸν οὐχ ἡττῶνται ὑπὸ τοῦ πάθους, οὗτ' [25] ἂν ἡδὺ ἢ οὗτ' ἂν λυπηρόν. μάλιστα δ' οἱ ὀξεῖς καὶ μελαγχολικοὶ τὴν προπετῇ ἀκρασίαν εἰσὶν ἀκρατεῖς· οἳ μὲν γὰρ διὰ τὴν ταχυτῆτα οἳ δὲ διὰ τὴν σφοδρότητα οὐκ ἀναμένουσι τὸν λόγον, διὰ τὸ ἀκολουθητικοὶ εἶναι τῇ φαντασίᾳ.

ἔστι δ' ὁ μὲν ἀκόλαστος, ὥσπερ ἐλέχθη, οὐ μεταμελητικός· [30] ἐμμένει γὰρ τῇ προαιρέσει· ὁ δ' ἀκρατὴς μεταμελητικὸς πᾶς. διὸ οὐχ ὥσπερ ἡπορήσαμεν, οὕτω καὶ ἔχει, ἀλλ' ὁ μὲν ἀνίατος ὁ δ' ἰατός· ἔοικε γὰρ ἢ μὲν μοχθηρία τῶν νοσημάτων οἷον ὑδέρῳ καὶ φθίσει, ἢ δ' ἀκρασία τοῖς ἐπιληπτικοῖς· ἢ μὲν γὰρ συνεχὴς ἢ δ' οὐ συνεχὴς [35] πονηρία. καὶ ὅλως δ' ἕτερον τὸ γένος ἀκρασίας καὶ κακίας· ἢ μὲν γὰρ κακία λανθάνει, ἢ δ' ἀκρασία οὐ λανθάνει. 1151a [1] αὐτῶν δὲ τούτων βελτίους οἱ ἐκστατικοὶ ἢ οἱ τὸν λόγον ἔχοντες μὲν, μὴ ἐμμένοντες δέ· ὑπ' ἐλάττονος γὰρ πάθους ἡττῶνται, καὶ οὐκ ἀπροβούλευτοι ὥσπερ ἄτεροι· ὅμοιος γὰρ ὁ ἀκρατὴς ἐστὶ τοῖς ταχὺ μεθυσκομένοις καὶ ὑπ' ὀλίγου [5] οἴνου καὶ ἐλάττονος ἢ ὥς οἱ πολλοί. ὅτι μὲν οὖν κακία ἢ ἀκρασία οὐκ ἔστι, φανερόν (ἀλλὰ πῇ ἴσως)· τὸ μὲν γὰρ παρὰ προαίρεσιν τὸ δὲ κατὰ τὴν προαίρεσιν ἐστίν· οὐ μὴν ἀλλ' ὅμοιόν γε κατὰ τὰς πράξεις, ὥσπερ τὸ Δημοδόκου εἰς Μιλησίους

Μιλήσιοι ἀξύνετοι μὲν οὐκ εἰσὶν, δρῶσιν δ' οἷάπερ ἀξύνετοι,

[10] καὶ οἱ ἀκρατεῖς ἄδικοι μὲν οὐκ εἰσὶν, ἀδικήσουσι δέ. ἐπεὶ δ' ὁ μὲν τοιοῦτος οἶος μὴ διὰ τὸ πεπεῖσθαι διώκειν τὰς καθ' ὑπερβολὴν καὶ παρὰ τὸν ὀρθὸν λόγον σωματικὰς ἡδονάς, ὃ δὲ πέπεισται διὰ τὸ τοιοῦτος εἶναι οἶος διώκειν αὐτάς, ἐκεῖνος μὲν οὖν εὐμετάπειστος, οὗτος δὲ οὐ· [15] ἡ γὰρ ἀρετὴ καὶ μοχθηρία τὴν ἀρχὴν ἢ μὲν φθείρει ἢ δὲ σώζει, ἐν δὲ ταῖς πράξεσι τὸ οὐ ἔνεκα ἀρχή, ὥσπερ ἐν τοῖς μαθηματικοῖς αἱ ὑποθέσεις· οὔτε δὲ ἐκεῖ ὁ λόγος διδασκαλικὸς τῶν ἀρχῶν οὔτε ἐνταῦθα, ἀλλ' ἀρετὴ ἢ φυσικὴ ἢ ἐθιστὴ τοῦ ὀρθοδοξεῖν περὶ τὴν ἀρχήν. σώφρων μὲν οὖν ὁ [20] τοιοῦτος, ἀκόλαστος δ' ὁ ἐναντίος. ἔστι δὲ τις διὰ πάθος ἐκστατικὸς παρὰ τὸν ὀρθὸν λόγον, ὃν ὥστε μὲν μὴ πράττειν κατὰ τὸν ὀρθὸν λόγον κρατεῖ τὸ πάθος, ὥστε δ' εἶναι τοιοῦτον οἶον πεπεῖσθαι διώκειν ἀνέδην δεῖν τὰς τοιαύτας ἡδονὰς οὐ κρατεῖ· οὗτός ἐστιν ὁ ἀκρατής, βελτίων τοῦ ἀκολάστου, [25] οὐδὲ φαῦλος ἀπλῶς· σώζεται γὰρ τὸ βέλτιστον, ἡ ἀρχή. ἄλλος δ' ἐναντίος, ὁ ἐμμενετικὸς καὶ οὐκ ἐκστατικὸς διὰ γε τὸ πάθος. φανερόν δὲ ἐκ τούτων ὅτι ἡ μὲν σπουδαία ἔξις, ἡ δὲ φαύλη.

πότερον οὖν ἐγκρατὴς ἐστὶν ὁ ὀποιοῦν λόγῳ καὶ ὀποιοῦν [30] προαιρέσει ἐμμένων ἢ ὁ τῇ ὀρθῇ, καὶ ἀκρατὴς δὲ ὁ ὀποιοῦν μὴ ἐμμένων προαιρέσει καὶ ὀποιοῦν λόγῳ ἢ ὁ τῷ μὴ ψευδεῖ λόγῳ καὶ τῇ προαιρέσει τῇ ὀρθῇ, ὥσπερ ἡπορήθη πρότερον; ἢ κατὰ μὲν συμβεβηκὸς ὀποιοῦν, καθ' αὐτὸ δὲ τῷ ἀληθεῖ λόγῳ καὶ τῇ ὀρθῇ προαιρέσει [35] ὁ μὲν ἐμμένει ὁ δ' οὐκ ἐμμένει; εἰ γὰρ τις τοδὶ διὰ τοδὶ αἰρεῖται ἢ διώκει, 1151b[1] καθ' αὐτὸ μὲν τοῦτο διώκει καὶ αἰρεῖται, κατὰ συμβεβηκὸς δὲ τὸ πρότερον. ἀπλῶς δὲ λέγομεν τὸ καθ' αὐτό. ὥστε ἔστι μὲν ὡς ὀποιοῦν δόξῃ ὁ μὲν ἐμμένει ὁ δ' ἐξίσταται, ἀπλῶς δὲ [ὁ] τῇ ἀληθεῖ. εἰσὶ δὲ τινες οἱ [5] ἐμμενετικοὶ τῇ δόξῃ εἰσὶν, οὓς καλοῦσιν ἰσχυρογνώμονας, οἱ δύσπειστοι καὶ οὐκ εὐμετάπειστοι· οἱ ὅμοιον μὲν τι ἔχουσι τῷ ἐγκρατεῖ, ὥσπερ ὁ ἄσωτος τῷ ἐλευθερίῳ καὶ ὁ θρασὺς τῷ θαρραλέῳ, εἰσὶ δ' ἕτεροι κατὰ πολλὰ. ὁ μὲν γὰρ διὰ πάθος καὶ ἐπιθυμίαν οὐ μεταβάλλει [ὁ ἐγκρατὴς], ἐπεὶ [10] εὐπείστος, ὅταν τύχῃ, ἔσται ὁ ἐγκρατής· οἱ δὲ οὐχ ὑπὸ λόγου, ἐπεὶ ἐπιθυμίας γε λαμβάνουσι, καὶ ἄγονται πολλοὶ ὑπὸ τῶν ἡδονῶν. εἰσὶ δὲ ἰσχυρογνώμονες οἱ ἰδιογνώμονες καὶ οἱ ἀμαθεῖς καὶ οἱ ἄγροικοι, οἱ μὲν ἰδιογνώμονες δι' ἡδονὴν καὶ λύπην· χαίρουσι γὰρ νικῶντες ἐὰν μὴ μεταπείθωνται, [15] καὶ λυποῦνται ἐὰν ἄκυρα τὰ αὐτῶν ἢ ὥσπερ ψηφίσματα· ὥστε μᾶλλον τῷ ἀκρατεῖ ἐοίκασιν ἢ τῷ ἐγκρατεῖ. εἰσὶ δὲ τινες οἱ τοῖς δόξασιν οὐκ ἐμμένουσιν οὐ δι' ἀκρασίαν, οἶον ἐν τῷ Φιλοκτήτῃ τῷ

Σοφοκλέους ὁ Νεοπτόλεμος· καίτοι δι' ἡδονὴν οὐκ ἐνέμεινεν, ἀλλὰ καλήν·  
[20] τὸ γὰρ ἀληθεύειν αὐτῷ καλὸν ἦν, ἐπείσθη δ' ὑπὸ τοῦ Ὀδυσσεώς  
ψεύδεσθαι. οὐ γὰρ πᾶς ὁ δι' ἡδονὴν τι πράττων οὔτ' ἀκόλαστος οὔτε φαῦλος  
οὔτ' ἀκρατής, ἀλλ' ὁ δι' αἰσχράν.

ἐπεὶ δ' ἔστι τις καὶ τοιοῦτος οἷος ἦττον ἢ δεῖ τοῖς σωματικοῖς χαίρειν, καὶ  
οὐκ ἐμμένων τῷ λόγῳ, ὁ [τοιοῦτος] [25] τούτου καὶ τοῦ ἀκρατοῦς μέσος ὁ  
ἐγκρατής· ὁ μὲν γὰρ ἀκρατής οὐκ ἐμμένει τῷ λόγῳ διὰ τὸ μᾶλλον τι, οὗτος  
δὲ διὰ τὸ ἦττόν τι· ὁ δ' ἐγκρατής ἐμμένει καὶ οὐδὲ δι' ἕτερον μεταβάλλει. δεῖ  
δέ, εἴπερ ἡ ἐγκράτεια σπουδαῖον, ἀμφοτέρας τὰς ἐναντίας ἕξεις φαύλας εἶναι,  
ὥσπερ καὶ φαίνονται. [30] ἀλλὰ διὰ τὸ τὴν ἑτέραν ἐν ὀλίγοις καὶ ὀλιγάκις  
εἶναι φανεράν, ὥσπερ ἡ σωφροσύνη τῇ ἀκολασίᾳ δοκεῖ ἐναντίον εἶναι μόνον,  
οὕτω καὶ ἡ ἐγκράτεια τῇ ἀκρασίᾳ. ἐπεὶ δὲ καθ' ὁμοιότητα πολλὰ λέγεται, καὶ  
ἡ ἐγκράτεια ἡ τοῦ σώφρονος καθ' ὁμοιότητα ἠκολούθηκεν· ὁ τε γὰρ ἐγκρατής  
[35] οἷος μηδὲν παρὰ τὸν λόγον διὰ τὰς σωματικὰς ἡδονὰς ποιεῖν καὶ ὁ  
σώφρων, 1152a [1] ἀλλ' ὁ μὲν ἔχων ὁ δ' οὐκ ἔχων φαύλας ἐπιθυμίας, καὶ ὁ  
μὲν τοιοῦτος οἷος μὴ ἡδεσθαι παρὰ τὸν λόγον, ὁ δ' οἷος ἡδεσθαι ἀλλὰ μὴ  
ἄγεσθαι. ὅμοιοι δὲ καὶ ὁ ἀκρατής καὶ ἀκόλαστος, ἕτεροι μὲν ὄντες, [5]  
ἀμφοτέροι δὲ τὰ σωματικὰ ἡδέα διώκουσιν, ἀλλ' ὁ μὲν καὶ οἰόμενος δεῖν, ὁ  
δ' οὐκ οἰόμενος. οὐδ' ἅμα φρόνιμον καὶ ἀκρατῆ ἐνδέχεται εἶναι τὸν αὐτόν·  
ἅμα γὰρ φρόνιμος καὶ σπουδαῖος τὸ ἦθος δέδεικται ὣν. ἔτι οὐ τῷ εἰδέναι  
μόνον φρόνιμος ἀλλὰ καὶ τῷ πρακτικῷ· ὁ δ' ἀκρατής οὐ πρακτικός [10] —  
τὸν δὲ δεινὸν οὐδὲν κωλύει ἀκρατῆ εἶναι· διὸ καὶ δοκοῦσιν ἐνίοτε φρόνιμοι  
μὲν εἶναι τινες ἀκρατεῖς δέ, διὰ τὸ τὴν δεινότητα διαφέρειν τῆς φρονήσεως  
τὸν εἰρημένον τρόπον ἐν τοῖς πρώτοις λόγοις, καὶ κατὰ μὲν τὸν λόγον ἐγγὺς  
εἶναι, διαφέρειν δὲ κατὰ τὴν προαίρεσιν — οὐδὲ δὴ ὡς ὁ εἰδὼς καὶ θεωρῶν,  
[15] ἀλλ' ὡς ὁ καθεύδων ἢ οἴνωμένος. καὶ ἐκὼν μὲν τρόπον γὰρ τινα εἰδὼς  
καὶ ὁ ποιεῖ καὶ οὗ ἔνεκά, πονηρὸς δ' οὗ· ἡ γὰρ προαίρεσις ἐπαικῆς· ὥσθ'  
ἡμιπόνηρος. καὶ οὐκ ἄδικος· οὐ γὰρ ἐπίβουλος· ὁ μὲν γὰρ αὐτῶν οὐκ  
ἐμμενετικός οἷς ἂν βουλευσῇται, ὁ δὲ μελαγχολικός οὐδὲ βουλευτικός ὅλως.  
[20] καὶ ἔοικε δὴ ὁ ἀκρατής πόλει ἢ ψηφίζεται μὲν ἅπαντα τὰ δέοντα καὶ  
νόμους ἔχει σπουδαίους, χρήται δὲ οὐδέν, ὥσπερ Ἀναξανδρίδης ἔσκωψεν

ἡ πόλις ἐβούλεθ', ἥ νόμων οὐδέν μέλει·

ὁ δὲ πονηρὸς χρωμένη μὲν τοῖς νόμοις, πονηροῖς δὲ χρωμένη. [25] ἔστι δ' ἀκρασία καὶ ἐγκράτεια περὶ τὸ ὑπερβάλλον τῆς τῶν πολλῶν ἕξεως· ὁ μὲν γὰρ ἐμμένει μᾶλλον ὃ δ' ἥττον τῆς τῶν πλείστων δυνάμεως. εὐιατοτέρα δὲ τῶν ἀκρασιῶν, ἣν οἱ μελαγχολικοὶ ἀκρατεύονται, τῶν βουλευομένων μὲν μὴ ἐμμενόντων δέ, καὶ οἱ δι' ἐθισμοῦ ἀκρατεῖς τῶν φυσικῶν· ῥᾶον [30] γὰρ ἔθος μετακινῆσαι φύσεως· διὰ γὰρ τοῦτο καὶ τὸ ἔθος χαλεπόν, ὅτι τῇ φύσει ἔοικεν, ὥσπερ καὶ Εὐηνος λέγει

φημὶ πολυχρόνιον μελέτην ἔμεναι, φίλε, καὶ δὴ ταύτην ἀνθρώποισι τελευτῶσαν φύσιν εἶναι.

τί μὲν οὖν ἐστὶν ἐγκράτεια καὶ τί ἀκρασία καὶ τί καρτερία [35] καὶ τί μαλακία, καὶ πῶς ἔχουσιν αἱ ἕξεις αὐταὶ πρὸς ἀλλήλας, εἴρηται.

1152b [1] περὶ δὲ ἡδονῆς καὶ λύπης θεωρῆσαι τοῦ τὴν πολιτικὴν φιλοσοφοῦντος· οὗτος γὰρ τοῦ τέλους ἀρχιτέκτων, πρὸς ὃ βλέποντες ἕκαστον τὸ μὲν κακὸν τὸ δ' ἀγαθὸν ἀπλῶς λέγομεν. ἔτι δὲ καὶ τῶν ἀναγκαίων ἐπισκέψασθαι περὶ αὐτῶν· τὴν [5] τε γὰρ ἀρετὴν καὶ τὴν κακίαν τὴν ἠθικὴν περὶ λύπας καὶ ἡδονᾶς ἔθεμεν, καὶ τὴν εὐδαιμονίαν οἱ πλείστοι μεθ' ἡδονῆς εἶναι φασιν· διὸ καὶ τὸν μακάριον ὠνομάκασιν ἀπὸ τοῦ χαίρειν. τοῖς μὲν οὖν δοκεῖ οὐδεμία ἡδονὴ εἶναι ἀγαθόν, οὔτε καθ' αὐτὸ οὔτε κατὰ συμβεβηκός· οὐ γὰρ εἶναι ταῦτ' ὁ ἀγαθόν [10] καὶ ἡδονήν· τοῖς δ' ἔναι μὲν εἶναι, αἱ δὲ πολλὰ φαῦλαι. ἔτι δὲ τούτων τρίτον, εἰ καὶ πᾶσαι ἀγαθόν, ὅμως μὴ ἐνδέχεσθαι εἶναι τὸ ἄριστον ἡδονήν. ὅλως μὲν οὖν οὐκ ἀγαθόν, ὅτι πᾶσα ἡδονὴ γένεσις ἐστὶν εἰς φύσιν αἰσθητή, οὐδεμία δὲ γένεσις συγγενῆς τοῖς τέλεσιν, οἷον οὐδεμία οἰκοδόμησις [15] οἰκία. ἔτι ὁ σῶφρων φεύγει τὰς

ἡδονάς. ἔτι ὁ φρόνιμος τὸ ἄλυπον διώκει, οὐ τὸ ἡδύ. ἔτι ἐμπόδιον τῷ φρονεῖν αἱ ἡδοναί, καὶ ὅσω μᾶλλον χαίρει, μᾶλλον, οἶον τῇ τῶν ἀφροδισίων· οὐδένα γὰρ ἂν δύνασθαι νοῆσαι τι ἐν αὐτῇ. ἔτι τέχνη οὐδεμία ἡδονῆς· καίτοι πᾶν ἀγαθὸν τέχνης ἔργον. ἔτι παιδία [20] καὶ θηρία διώκει τὰς ἡδονάς. τοῦ δὲ μὴ πάσας σπουδαίας, ὅτι εἰσὶ καὶ αἰσχροὶ καὶ ὀνειδιζόμενοι, καὶ ὅτι βλαβεραί· νοσώδη γὰρ ἔνια τῶν ἡδέων. ὅτι δ' οὐ τᾶριστον ἡδονή, ὅτι οὐ τέλος ἀλλὰ γένεσις. τὰ μὲν οὖν λεγόμενα σχεδὸν ταῦτ' ἐστίν.

[25] ὅτι δ' οὐ συμβαίνει διὰ ταῦτα μὴ εἶναι ἀγαθὸν μηδὲ τὸ ἄριστον, ἐκ τῶνδε δῆλον. πρῶτον μὲν, ἐπεὶ τὸ ἀγαθὸν διχῶς (τὸ μὲν γὰρ ἀπλῶς τὸ δὲ τινί), καὶ αἱ φύσεις καὶ αἱ ἕξεις ἀκολουθήσουσιν, ὥστε καὶ αἱ κινήσεις καὶ αἱ γενέσεις, καὶ αἱ φαῦλαι δοκοῦσαι εἶναι αἱ μὲν ἀπλῶς φαῦλαι τινὶ [30] δ' οὐ ἀλλ' αἵρεται τῷδε, ἔνια δ' οὐδὲ τῷδε ἀλλὰ ποτὲ καὶ ὀλίγον χρόνον αἵρεται, <ἀπλῶς> δ' οὐ· αἱ δ' οὐδ' ἡδοναί, ἀλλὰ φαίνονται, ὅσαι μετὰ λύπης καὶ ἰατρείας ἔνεκεν, οἶον αἱ τῶν καμνόντων. ἔτι ἐπεὶ τοῦ ἀγαθοῦ τὸ μὲν ἐνέργεια τὸ δ' ἕξις, κατὰ συμβεβηκὸς αἱ καθιστᾶσαι εἰς τὴν φυσικὴν ἕξιν ἡδεΐαι [35] εἰσιν· ἔστι δ' ἡ ἐνέργεια ἐν ταῖς ἐπιθυμίαις τῆς ὑπολοίπου ἕξεως καὶ φύσεως, ἐπεὶ καὶ ἄνευ λύπης καὶ ἐπιθυμίας εἰσὶν ἡδοναί, 1153a [1] οἶον αἱ τοῦ θεωρεῖν [ἐνέργειαι], τῆς φύσεως οὐκ ἐνδεοῦς οὔσης. σημεῖον δ' ὅτι οὐ τῷ αὐτῷ ἡδεῖ χαίρουσιν ἀναπληρουμένης τε τῆς φύσεως καὶ καθεστηκυίας, ἀλλὰ καθεστηκυίας μὲν τοῖς ἀπλῶς ἡδέσιν, ἀναπληρουμένης δὲ καὶ τοῖς ἐναντίοις· [5] καὶ γὰρ ὀξέσι καὶ πικροῖς χαίρουσιν, ὧν οὐδὲν οὔτε φύσει ἡδὺ οὔθ' ἀπλῶς ἡδύ. ὥστ' οὐδ' ἡδοναί· ὡς γὰρ τὰ ἡδέα πρὸς ἀλληλα διέστηκεν, οὕτω καὶ αἱ ἡδοναὶ αἱ ἀπὸ τούτων. ἔτι οὐκ ἀνάγκη ἕτερόν τι εἶναι βέλτιον τῆς ἡδονῆς, ὥσπερ τινὲς φασὶ τὸ τέλος τῆς γενέσεως· οὐ γὰρ γενέσεις εἰσὶν οὐδὲ μετὰ γενέσεως [10] πᾶσαι, ἀλλ' ἐνέργειαι καὶ τέλος· οὐδὲ γινομένων συμβαίνουσιν ἀλλὰ χρωμένων· καὶ τέλος οὐ πασῶν ἕτερόν τι, ἀλλὰ τῶν εἰς τὴν τελέωσιν ἀγομένων τῆς φύσεως. διὸ καὶ οὐ καλῶς ἔχει τὸ αἰσθητὴν γένεσιν φάναι εἶναι τὴν ἡδονήν, ἀλλὰ μᾶλλον λεκτέον ἐνέργειαν τῆς κατὰ φύσιν ἕξεως, [15] ἀντὶ δὲ τοῦ αἰσθητὴν ἀνεμπόδιστον. δοκεῖ δὲ γένεσις τισιν εἶναι, ὅτι κυρίως ἀγαθόν· τὴν γὰρ ἐνέργειαν γένεσιν οἶονται εἶναι, ἔστι δ' ἕτερον. τὸ δ' εἶναι φαύλας ὅτι νοσώδη ἔνια ἡδέα, τὸ αὐτὸ καὶ ὅτι ὑγιεινὰ ἔνια φαῦλα πρὸς χρηματισμόν. ταύτη οὖν φαῦλα ἄμφω, ἀλλ' οὐ φαῦλα κατὰ γε τοῦτο, [20] ἐπεὶ καὶ τὸ θεωρεῖν ποτὲ βλάπτει πρὸς ὑγίειαν. ἐμποδίζει δὲ οὔτε φρονήσει οὔθ' ἕξει οὐδεμιᾷ ἢ ἀφ' ἐκάστης ἡδονῆς, ἀλλ' αἱ ἀλλότριά, ἐπεὶ αἱ ἀπὸ τοῦ θεωρεῖν καὶ μανθάνειν μᾶλλον ποιήσουσι θεωρεῖν καὶ

μανθάνειν. τὸ δὲ τέχνης μὴ εἶναι ἔργον ἡδονὴν μηδεμίαν εὐλόγως συμβέβηκεν· οὐδὲ γὰρ ἄλλης [25] ἐνεργείας οὐδεμιᾶς τέχνη ἐστίν, ἀλλὰ τῆς δυνάμεως· καίτοι καὶ ἡ μυρεψικὴ τέχνη καὶ ἡ ὀψοποιητικὴ δοκεῖ ἡδονῆς εἶναι. τὸ δὲ τὸν σὼφρονα φεύγειν καὶ τὸν φρόνιμον διώκειν τὸν ἄλυπον βίον, καὶ τὸ τὰ παῖδιά καὶ τὰ θηρία διώκειν, τῷ αὐτῷ λύεται πάντα. ἐπεὶ γὰρ εἴρηται πῶς ἀγαθὰ [30] ἀπλῶς καὶ πῶς οὐκ ἀγαθὰ πᾶσαι αἱ ἡδοναί, τὰς τοιαύτας καὶ τὰ θηρία καὶ τὰ παῖδιά διώκει, καὶ τὴν τούτων ἄλυπίαν ὁ φρόνιμος, τὰς μετ' ἐπιθυμίας καὶ λύπης, καὶ τὰς σωματικές (τοιαῦται γὰρ αὗται) καὶ τὰς τούτων ὑπερβολάς, καθ' ἃς ὁ ἀκόλαστος ἀκόλαστος. διὸ ὁ σὼφρων φεύγει ταύτας, [35] ἐπεὶ εἰσὶν ἡδοναὶ καὶ σὼφρονος.

1153b [1] ἀλλὰ μὴν ὅτι καὶ ἡ λύπη κακόν, ὁμολογεῖται, καὶ φευκτόν· ἡ μὲν γὰρ ἀπλῶς κακόν, ἡ δὲ τῷ πῇ ἐμποδιστική. τῷ δὲ φευκτῷ τὸ ἐναντίον ἡ φευκτόν τι καὶ κακόν, ἀγαθόν. ἀνάγκη οὖν τὴν ἡδονὴν ἀγαθόν τι εἶναι. ὥς γὰρ [5] Σπεύσιππος ἔλυσεν, οὐ συμβαίνει ἡ λύσις, ὥσπερ τὸ μεῖζον τῷ ἐλάττονι καὶ τῷ ἴσῳ ἐναντίον· οὐ γὰρ ἂν φαίη ὅπερ κακόν τι εἶναι τὴν ἡδονήν. τᾶριστόν τ' οὐδὲν κωλύει ἡδονὴν τινα εἶναι, εἰ ἔνιαι φαῦλαι ἡδοναί, ὥσπερ καὶ ἐπιστήμην τινὰ ἐνίων φαύλων οὐσῶν. ἴσως δὲ καὶ ἀναγκαῖον, εἴπερ ἐκάστης [10] ἕξεώς εἰσὶν ἐνέργειαι ἀνεμπόδιστοι, εἴθ' ἡ πασῶν ἐνέργειά ἐστὶν εὐδαιμονία εἴτε ἡ τινὸς αὐτῶν, ἂν ἡ ἀνεμπόδιστος, αἰρετωτάτην εἶναι· τοῦτο δ' ἐστὶν ἡδονή. ὥστε εἴη ἂν τις ἡδονὴ τὸ ἄριστον, τῶν πολλῶν ἡδονῶν φαύλων οὐσῶν, εἰ ἔτυχεν, ἀπλῶς. καὶ διὰ τοῦτο πάντες τὸν εὐδαίμονα ἡδὺν οἶοντα βίον [15] εἶναι, καὶ ἐμπλέκουσι τὴν ἡδονὴν εἰς τὴν εὐδαιμονίαν, εὐλόγως· οὐδεμία γὰρ ἐνέργεια τέλειος ἐμποδιζομένη, ἡ δ' εὐδαιμονία τῶν τελείων· διὸ προσδεῖται ὁ εὐδαίμων τῶν ἐν σώματι ἀγαθῶν καὶ τῶν ἐκτὸς καὶ τῆς τύχης, ὅπως μὴ ἐμποδίζεται ταῦτα. οἱ δὲ τὸν τροχιζόμενον καὶ τὸν δυστυχίαις μεγάλαις [20] περιπίπτοντα εὐδαίμονα φάσκοντες εἶναι, ἐὰν ἡ ἀγαθός, ἡ ἐκόντες ἡ ἄκοντες οὐδὲν λέγουσιν. διὰ δὲ τὸ προσδεῖσθαι τῆς τύχης δοκεῖ τισὶ ταῦτόν εἶναι ἡ εὐτυχία τῇ εὐδαιμονίᾳ, οὐκ οὕσα, ἐπεὶ καὶ αὐτὴ ὑπερβάλλουσα ἐμπόδιός ἐστιν, καὶ ἴσως οὐκέτι εὐτυχίαν καλεῖν δίκαιον· πρὸς γὰρ τὴν εὐδαιμονίαν [25] ὁ ὅρος αὐτῆς. καὶ τὸ διώκειν δ' ἅπαντα καὶ θηρία καὶ ἀνθρώπους τὴν ἡδονὴν σημειόν τι τοῦ εἶναι πῶς τὸ ἄριστον αὐτήν·



φήμη δ' οὕτως πάμπαν ἀπόλλυται, ἦν τινα λαοὶ πολλοί. . .

ἀλλ' ἐπεὶ οὐχ ἡ αὐτὴ οὔτε φύσις οὔθ' ἕξις ἡ ἀρίστη οὔτ' ἔστιν [30] οὔτε δοκεῖ, οὐδ' ἡδονὴν διώκουσι τὴν αὐτὴν πάντες, ἡδονὴν μέντοι πάντες. ἴσως δὲ καὶ διώκουσιν οὐχ ἦν οἶονται οὐδ' ἦν ἂν φαῖεν, ἀλλὰ τὴν αὐτήν· πάντα γὰρ φύσει ἔχει τι θεῖον. ἀλλ' εἰλήφασιν τὴν τοῦ ὀνόματος κληρονομίαν αἰ σωματικὰ ἡδονὰ διὰ τὸ πλειστάκις τε παραβάλλειν εἰς αὐτὰς καὶ [35] πάντας μετέχειν αὐτῶν· διὰ τὸ μόνας οὖν γνωρίμους εἶναι ταύτας μόνας οἶονται εἶναι. 1154a [1] φανερόν δὲ καὶ ὅτι, εἰ μὴ ἡδονὴ ἀγαθὸν καὶ ἡ ἐνέργεια, οὐκ ἔσται ζῆν ἡδέως τὸν εὐδαίμονα· τίνος γὰρ ἔνεκα δέοι ἂν αὐτῆς, εἴπερ μὴ ἀγαθόν, ἀλλὰ καὶ λυπηρῶς ἐνδέχεται ζῆν; οὔτε κακὸν γὰρ οὔτ' ἀγαθὸν ἡ [5] λύπη, εἴπερ μὴδ' ἡδονή· ὥστε διὰ τί ἂν φεύγοι; οὐδὲ δὴ ἡδίων ὁ βίος ὁ τοῦ σπουδαίου, εἰ μὴ καὶ αἱ ἐνέργειαι αὐτοῦ.

περὶ δὲ δὴ τῶν σωματικῶν ἡδονῶν ἐπισκεπτέον τοῖς λέγουσιν ὅτι ἔνιαί γε ἡδονὰ αἰρετὰ σφόδρα, οἶον αἱ καλαί, [10] ἀλλ' οὐχ αἱ σωματικαὶ καὶ περὶ ἃς ὁ ἀκόλαστος. διὰ τί οὖν αἱ ἐναντία λῦπαι μοχθηραί; κακῶ γὰρ ἀγαθὸν ἐναντίον. ἢ οὕτως ἀγαθαὶ αἱ ἀναγκαῖαι, ὅτι καὶ τὸ μὴ κακὸν ἀγαθόν ἐστιν; ἢ μέχρι τοῦ ἀγαθαί; τῶν μὲν γὰρ ἕξεων καὶ κινήσεων ὅσων μὴ ἔστι τοῦ βελτίονος ὑπερβολή, οὐδὲ τῆς ἡδονῆς· ὅσων [15] δ' ἔστι, καὶ τῆς ἡδονῆς. ἔστιν δὲ τῶν σωματικῶν ἀγαθῶν ὑπερβολή, καὶ ὁ φαῦλος τῷ διώκειν τὴν ὑπερβολὴν ἐστιν, ἀλλ' οὐ τὰς ἀναγκαίας· πάντες γὰρ χαίρουσί πως καὶ ὄψοις καὶ οἶνοις καὶ ἀφροδισίοις, ἀλλ' οὐχ ὥς δεῖ. ἐναντίως δ' ἐπὶ τῆς λύπης· οὐ γὰρ τὴν ὑπερβολὴν φεύγει, ἀλλ' ὅλως· [20] οὐ γάρ ἐστι τῇ ὑπερβολῇ λύπη ἐναντία ἀλλ' ἡ τῷ διώκοντι τὴν ὑπερβολὴν.

ἐπεὶ δ' οὐ μόνον δεῖ τάληθες εἰπεῖν ἀλλὰ καὶ τὸ αἴτιον τοῦ ψεύδους· τοῦτο γὰρ συμβάλλεται πρὸς τὴν πίστιν· ὅταν γὰρ εὐλογον φανῇ τὸ διὰ τί φαίνεται ἀληθές οὐκ ὃν [25] ἀληθές, πιστεύειν ποιεῖ τῷ ἀληθεῖ μᾶλλον· ὥστε λεκτέον διὰ τί φαίνονται αἱ σωματικαὶ ἡδοναὶ αἰρετώτεραι. πρῶτον μὲν οὖν δὴ ὅτι

ἐκκρούει τὴν λύπην· καὶ διὰ τὰς ὑπερβολὰς τῆς λύπης, ὡς οὕσης ἰατρείας, τὴν ἡδονὴν διώκουσι τὴν ὑπερβάλλουσιν καὶ ὅλως τὴν σωματικὴν. σφοδραὶ δὲ γίνονται [30] αἱ ἰατρεῖαι, διὸ καὶ διώκονται, διὰ τὸ παρὰ τὸ ἐναντίον φαίνεσθαι. καὶ οὐ σπουδαῖον δὴ δοκεῖ ἡ ἡδονὴ διὰ δύο ταῦτα, ὥσπερ εἴρηται, ὅτι αἱ μὲν φαύλης φύσεώς εἰσι πράξεις (ἢ ἐκ γενετῆς, ὥσπερ θηρίου, ἢ δι' ἔθος, οἷον αἱ τῶν φαύλων ἀνθρώπων), αἱ δ' ἰατρεῖαι [ὅτι] ἐνδεοῦς, καὶ ἔχειν βέλτιον ἢ γίγεσθαι. 1154b[1] αἱ δὲ συμβαίνουσι τελευτουμένων· κατὰ συμβεβηκὸς οὖν σπουδαῖαι. ἔτι διώκονται διὰ τὸ σφοδραὶ εἶναι ὑπὸ τῶν ἄλλαις μὴ δυναμένων χαίρειν· αὐτοὶ γοῦν αὐτοῖς δίψας τινὰς παρασκευάζουσιν. ὅταν μὲν οὖν ἀβλαβεῖς, ἀνεπιτίμητον, [5] ὅταν δὲ βλαβεράς, φαῦλον. οὐτε γὰρ ἔχουσιν ἕτερα ἔφ' οἷς χαίρουσιν, τό τε μηδέτερον πολλοῖς λυπηρὸν διὰ τὴν φύσιν. ἀεὶ γὰρ πονεῖ τὸ ζῶον, ὥσπερ καὶ οἱ φυσιολόγοι μαρτυροῦσι, τὸ ὁρᾶν, τὸ ἀκούειν φάσκοντες εἶναι λυπηρόν· ἀλλ' ἤδη συνήθεις ἐσμέν, ὡς φασίν. ὁμοίως δ' ἐν μὲν τῇ [10] νεότητι διὰ τὴν αὔξησιν ὥσπερ οἱ οἴνωμένοι διάκεινται, καὶ ἡδὺ ἡ νεότης. οἱ δὲ μελαγχολικοὶ τὴν φύσιν δέονται ἀεὶ ἰατρείας· καὶ γὰρ τὸ σῶμα δακνόμενον διατελεῖ διὰ τὴν κρᾶσιν, καὶ ἀεὶ ἐν ὀρέξει σφοδρᾷ εἰσίν· ἐξελαύνει δὲ ἡδονὴ λύπην ἢ τ' ἐναντία καὶ ἡ τυχοῦσα, ἐὰν ἡ ἰσχυρά· καὶ διὰ [15] ταῦτα ἀκόλαστοι καὶ φαῦλοι γίνονται. αἱ δ' ἄνευ λυπῶν οὐκ ἔχουσιν ὑπερβολήν· αὗται δὲ τῶν φύσει ἡδέων καὶ μὴ κατὰ συμβεβηκός. λέγω δὲ κατὰ συμβεβηκός ἡδέα τὰ ἰατρεύοντα· ὅτι γὰρ συμβαίνει ἰατρεύεσθαι τοῦ ὑπομένουτος ὑγιοῦς πράττοντός τι, διὰ τοῦτο ἡδὺ δοκεῖ εἶναι· [20] φύσει δ' ἡδέα, ἃ ποιεῖ πρᾶξιν τῆς τοιαύτης φύσεως. οὐκ ἀεὶ δ' οὐθὲν ἡδὺ τὸ αὐτὸ διὰ τὸ μὴ ἀπλῆν ἡμῶν εἶναι τὴν φύσιν, ἀλλ' ἐνεῖναι τι καὶ ἕτερον, καθὸ φθαρτοί, ὥστε ἂν τι θάτερον πράττη, τοῦτο τῇ ἑτέρᾳ φύσει παρὰ φύσιν, ὅταν δ' ἰσάζῃ, οὐτε λυπηρὸν δοκεῖ οὔθ' ἡδὺ τὸ πραττόμενον· ἐπεὶ [25] εἴ του ἡ φύσις ἀπλῆ εἴη, ἀεὶ ἡ αὐτὴ πρᾶξις ἡδίστη ἔσται. διὸ ὁ θεὸς ἀεὶ μίαν καὶ ἀπλῆν χαίρει ἡδονήν· οὐ γὰρ μόνον κινήσεώς ἐστίν ἐνέργεια ἀλλὰ καὶ ἀκινήσις, καὶ ἡδονὴ μᾶλλον ἐν ἡρεμίᾳ ἐστὶν ἢ ἐν κινήσει. μεταβολὴ δὲ πάντων γλυκύ, κατὰ τὸν ποιητὴν, διὰ πονηρίαν τινά· ὥσπερ γὰρ [30] ἄνθρωπος εὐμετάβολος ὁ πονηρός, καὶ ἡ φύσις ἡ δεομένη μεταβολῆς· οὐ γὰρ ἀπλῆ οὐδ' ἐπικερής.

περὶ μὲν οὖν ἐγκρατείας καὶ ἀκρασίας καὶ περὶ ἡδονῆς καὶ λύπης εἴρηται, καὶ τί ἕκαστον καὶ πῶς τὰ μὲν ἀγαθὰ αὐτῶν ἐστὶ τὰ δὲ κακά· λοιπὸν δὲ καὶ περὶ φιλίας ἐροῦμεν.

## Βιβλίο 8

μετὰ δὲ ταῦτα περὶ φιλίας ἔποιτ' ἂν διελθεῖν· ἔστι γὰρ ἀρετὴ τις ἢ μετ' ἀρετῆς, ἔτι δ' ἀναγκαιότατον εἰς τὸν [5] βίον. ἄνευ γὰρ φίλων οὐδεὶς ἔλοιτ' ἂν ζῆν, ἔχων τὰ λοιπὰ ἀγαθὰ πάντα· καὶ γὰρ πλουτοῦσι καὶ ἀρχὰς καὶ δυναστείας κεκτημένοις δοκεῖ φίλων μάλιστ' εἶναι χρεῖα· τί γὰρ ὄφελος τῆς τοιαύτης εὐετηρίας ἀφαιρεθείσης εὐεργεσίας, ἢ γίνεται μάλιστα καὶ ἐπαινετωτάτη πρὸς φίλους; ἢ πῶς ἂν τηρηθεῖ [10] καὶ σώζοιτ' ἄνευ φίλων; ὅσω γὰρ πλείων, τοσοῦτω ἐπισφαλεστέρα. ἐν πενίᾳ τε καὶ ταῖς λοιπαῖς δυστυχίαις μόνην οἶονται καταφυγὴν εἶναι τοὺς φίλους. καὶ νέοις δὲ πρὸς τὸ ἀναμάρτητον καὶ πρεσβυτέροις πρὸς θεραπείαν καὶ τὸ ἐλλεῖπον τῆς πράξεως δι' ἀσθένειαν βοηθείας, τοῖς τ' ἐν ἀκμῇ [15] πρὸς τὰς καλὰς πράξεις· σὺν τε δὲ ἔρχομένω·<sup>1</sup> καὶ γὰρ νοῆσαι καὶ πράττειν δυνατότεροι. φύσει τ' ἐνυπάρχειν ἔοικε πρὸς τὸ γεγεννημένον τῷ γεννήσαντι καὶ πρὸς τὸ γεννῆσαν τῷ γεννηθέντι, οὐ μόνον ἐν ἀνθρώποις ἀλλὰ καὶ ἐν ὄρνισι καὶ τοῖς πλείστοις τῶν ζώων, καὶ τοῖς ὁμοεθnéσι πρὸς ἄλληλα, [20] καὶ μάλιστα τοῖς ἀνθρώποις, ὅθεν τοὺς φιланθρώπους ἐπαινοῦμεν. ἴδοι δ' ἂν τις καὶ ἐν ταῖς πλάναις ὡς οἰκεῖον ἅπας ἄνθρωπος ἀνθρώπῳ καὶ φίλον. ἔοικε δὲ καὶ τὰς πόλεις συνέχειν ἢ φιλία, καὶ οἱ νομοθέται μᾶλλον περὶ αὐτὴν σπουδάζειν ἢ τὴν δικαιοσύνην· ἢ γὰρ ὁμόνοια ὁμοίον τι τῇ [25] φιλίᾳ ἔοικεν εἶναι, ταύτης δὲ μάλιστ' ἐφίενται καὶ τὴν στάσιν ἔχθραν οὔσαν μάλιστα ἐξελαύνουσιν· καὶ φίλων μὲν ὄντων οὐδὲν δεῖ δικαιοσύνης, δίκαιοι δ' ὄντες προσδέονται φιλίας, καὶ τῶν δικαίων τὸ μάλιστα φιλικὸν εἶναι δοκεῖ. οὐ μόνον δ' ἀναγκαῖόν ἐστίν ἀλλὰ καὶ καλόν· τοὺς γὰρ φιλοφίλους [30] ἐπαινοῦμεν, ἢ τε πολυφιλία δοκεῖ τῶν καλῶν ἐν τι εἶναι· καὶ ἔτι τοὺς αὐτοὺς οἶονται ἄνδρας ἀγαθοὺς εἶναι καὶ φίλους.

διαμφισβητεῖται δὲ περὶ αὐτῆς οὐκ ὀλίγα. οἱ μὲν γὰρ ὁμοιότητά τινα τιθέασιν αὐτὴν καὶ τοὺς ὁμοίους φίλους, ὅθεν τὸν ὁμοίον φασιν ὡς τὸν ὅμοιον, καὶ κολιὸν ποτὶ [35] κολιόν, καὶ τὰ τοιαῦτα· οἱ δ' ἐξ ἐναντίας κεραμεῖς πάντας τοὺς τοιούτους ἀλλήλοις φασὶν εἶναι. 1155b [1] καὶ περὶ αὐτῶν τούτων ἀνώτερον ἐπιζητοῦσι καὶ φυσικώτερον, Εὐριπίδης μὲν φάσκων ἐρᾶν μὲν ὄμβρου γαῖαν ξηρανθεῖσαν, ἐρᾶν δὲ σεμνὸν οὐρανὸν πληρούμενον ὄμβρου πεσεῖν ἐς γαῖαν, καὶ Ἡράκλειτος τὸ [5] ἀντίξουν συμφέρον καὶ ἐκ τῶν διαφερόντων καλλίστην ἀρμονίαν καὶ πάντα κατ' ἔριν γίνεσθαι· ἐξ ἐναντίας δὲ τούτοις ἄλλοι τε καὶ Ἐμπεδοκλῆς· τὸ γὰρ ὅμοιον τοῦ ὁμοίου ἐφίεσθαι. τὰ μὲν οὖν φυσικὰ τῶν ἀπορημάτων ἀφείσθω (οὐ γὰρ οἰκεῖα τῆς παρούσης

σκέψεως). ὅσα δ' ἐστὶν ἀνθρωπικὰ καὶ [10] ἀνήκει εἰς τὰ ἥθη καὶ τὰ πάθη, ταῦτ' ἐπισκεψώμεθα, οἷον πότερον ἐν πᾶσι γίνεται φιλία ἢ οὐχ οἷόν τε μοχθηροὺς ὄντας φίλους εἶναι, καὶ πότερον ἐν εἶδος τῆς φιλίας ἐστὶν ἢ πλείω. οἱ μὲν γὰρ ἐν οἰόμενοι, ὅτι ἐπιδέχεται τὸ μᾶλλον καὶ [τὸ] ἥττον, οὐχ ἱκανῶς πεπιστεύκασι σημείω· δέχεται γὰρ [15] τὸ μᾶλλον καὶ [τὸ] ἥττον καὶ τὰ ἕτερα τῷ εἶδει. εἴρηται δ' ὑπὲρ αὐτῶν ἔμπροσθεν.

τάχα δ' ἂν γένοιτο περὶ αὐτῶν φανερόν γγνωρισθέντος τοῦ φιλητοῦ. δοκεῖ γὰρ οὐ πᾶν φιλεῖσθαι ἀλλὰ τὸ φιλητόν, τοῦτο δ' εἶναι ἀγαθὸν ἢ ἡδὺ ἢ χρήσιμον· δόξειε δ' ἂν χρήσιμον [20] εἶναι δι' οὗ γίνεται ἀγαθόν τι ἢ ἡδονή, ὥστε φιλητὰ ἂν εἴη τάγαθόν τε καὶ τὸ ἡδὺ ὡς τέλη. πότερον οὖν τάγαθὸν φιλοῦσιν ἢ τὸ αὐτοῖς ἀγαθόν; διαφωνεῖ γὰρ ἐνίοτε ταῦτα. ὁμοίως δὲ καὶ περὶ τὸ ἡδύ. δοκεῖ δὲ τὸ αὐτῷ ἀγαθὸν φιλεῖν ἕκαστος, καὶ εἶναι ἀπλῶς μὲν τάγαθὸν φιλητόν, ἐκάστω [25] δὲ τὸ ἐκάστω· φιλεῖ δ' ἕκαστος οὐ τὸ ὄν αὐτῷ ἀγαθὸν ἀλλὰ τὸ φαινόμενον. διοίσει δ' οὐδέν· ἔσται γὰρ τὸ φιλητόν φαινόμενον. τριῶν δ' ὄντων δι' ἃ φιλοῦσιν, ἐπὶ μὲν τῇ τῶν ἀψύχων φιλήσει οὐ λέγεται φιλία· οὐ γὰρ ἐστὶν ἀντιφίλησις, οὐδὲ βούλησις ἐκείνῳ ἀγαθοῦ (γελοῖον γὰρ ἴσως τῷ οἴνῳ βούλεσθαι [30] τάγαθὰ, ἀλλ' εἴπερ, σώζεσθαι βούλεται αὐτόν, ἵνα αὐτὸς ἔχη)· τῷ δὲ φίλῳ φασὶ δεῖν βούλεσθαι τάγαθὰ ἐκείνου ἔνεκα. τοὺς δὲ βουλομένους οὕτω τάγαθὰ εὖνους λέγουσιν, ἂν μὴ ταῦτὸ καὶ παρ' ἐκείνου γίνηται· εὖνοια γὰρ ἐν ἀντιπεπονθόσι φιλίαν εἶναι. ἢ προσθετέον μὴ λανθάνουσιν; πολλοὶ γάρ [35] εἰσιν εὖνοι οἷς οὐχ ἐωράκασιν, ὑπολαμβάνουσι δὲ ἐπικεῖς εἶναι ἢ χρησίμους· 1156a [1] τοῦτο δὲ τὸ αὐτὸ κἂν ἐκείνων τις πάθοι πρὸς τοῦτον. εὖνοι μὲν οὖν οὗτοι φαίνονται ἀλλήλοις· φίλους δὲ πῶς ἂν τις εἴποι λανθάνοντας ὡς ἔχουσιν ἑαυτοῖς; δεῖ ἄρα εὖνοεῖν ἀλλήλοις καὶ βούλεσθαι τάγαθὰ μὴ λανθάνοντας [5] δι' ἓν τι τῶν εἰρημένων.

διαφέρει δὲ ταῦτα ἀλλήλων εἶδει· καὶ αἱ φιλήσεις ἄρα καὶ αἱ φιλίαι. τρία δὲ τὰ τῆς φιλίας εἶδη, ἰσάριθμα τοῖς φιλητοῖς· καθ' ἕκαστον γὰρ ἐστὶν ἀντιφίλησις οὐ λανθάνουσα, οἱ δὲ φιλοῦντες ἀλλήλους βούλονται τάγαθὰ ἀλλήλοις [10] ταύτῃ ἢ φιλοῦσιν. οἱ μὲν οὖν διὰ τὸ χρήσιμον φιλοῦντες ἀλλήλους οὐ καθ' αὐτοὺς φιλοῦσιν, ἀλλ' ἢ γίνεται τι αὐτοῖς παρ' ἀλλήλων ἀγαθόν. ὁμοίως δὲ καὶ οἱ δι' ἡδονήν· οὐ γὰρ τῷ ποιούς τινας εἶναι ἀγαπῶσι

τοὺς εὐτραπέλους, ἀλλ' ὅτι ἡδεῖς αὐτοῖς. οἷ τε δὴ διὰ τὸ χρήσιμον φιλοῦντες διὰ τὸ αὐτοῖς [15] ἀγαθὸν στέργουσι, καὶ οἱ δι' ἡδονὴν διὰ τὸ αὐτοῖς ἡδύ, καὶ οὐχ ἢ ὁ φιλούμενός ἐστιν, ἀλλ' ἢ χρήσιμος ἢ ἡδύς. κατὰ συμβεβηκός τε δὴ αἱ φιλίαι αὐταὶ εἰσιν· οὐ γὰρ ἢ ἐστὶν ὅσπερ ἐστὶν ὁ φιλούμενος, ταύτη φιλεῖται, ἀλλ' ἢ πορίζουσιν οἱ μὲν ἀγαθόν τι οἱ δ' ἡδονήν. εὐδιάλυτοι δὲ αἱ τοιαῦται [20] εἰσι, μὴ διαμενόντων αὐτῶν ὁμοίων· ἐὰν γὰρ μηκέτι ἡδεῖς ἢ χρήσιμοι ὦσι, παύονται φιλοῦντες. τὸ δὲ χρήσιμον οὐ διαμένει, ἀλλ' ἄλλοτε ἄλλο γίνεται. ἀπολυθέντος οὖν δι' ὃ φίλοι ἦσαν, διαλύεται καὶ ἡ φιλία, ὡς οὔσης τῆς φιλίας πρὸς ἐκεῖνα. μάλιστα δ' ἐν τοῖς πρεσβύταις ἡ τοιαύτη δοκεῖ [25] φιλία γίνεσθαι (οὐ γὰρ τὸ ἡδὺ οἱ τηλικοῦτοι διώκουσιν ἀλλὰ τὸ ὠφέλιμον), καὶ τῶν ἐν ἀκμῇ καὶ νέων ὅσοι τὸ συμφέρον διώκουσιν. οὐ πάνυ δ' οἱ τοιοῦτοι οὐδὲ συζῶσι μετ' ἀλλήλων· ἐνίστε γὰρ οὐδ' εἰσὶν ἡδεῖς· οὐδὲ δὴ προσδέονται τῆς τοιαύτης ὁμιλίας, ἐὰν μὴ ὠφέλιμοι ὦσιν· ἐπὶ τοσοῦτον [30] γὰρ εἰσιν ἡδεῖς ἐφ' ὅσον ἐλπίδας ἔχουσιν ἀγαθοῦ. εἰς ταύτας δὲ καὶ τὴν ξενικὴν τιθέασιν. ἡ δὲ τῶν νέων φιλία δι' ἡδονὴν εἶναι δοκεῖ· κατὰ πάθος γὰρ οὔτοι ζῶσι, καὶ μάλιστα διώκουσι τὸ ἡδὺ αὐτοῖς καὶ τὸ παρόν· τῆς ἡλικίας δὲ μεταπιπτούσης καὶ τὰ ἡδέα γίνεται ἕτερα. διὸ ταχέως γίνονται [35] φίλοι καὶ παύονται· ἅμα γὰρ τῷ ἡδεῖ ἡ φιλία μεταπίπτει, 1156b [1] τῆς δὲ τοιαύτης ἡδονῆς ταχεῖα ἡ μεταβολή. καὶ ἐρωτικοὶ δ' οἱ νέοι· κατὰ πάθος γὰρ καὶ δι' ἡδονὴν τὸ πολὺ τῆς ἐρωτικῆς· διόπερ φιλοῦσι καὶ ταχέως παύονται, πολλάκις τῆς αὐτῆς ἡμέρας μεταπίπτοντες. συνημερεύειν δὲ καὶ [5] συζῆν οὔτοι βούλονται· γίνεται γὰρ αὐτοῖς τὸ κατὰ τὴν φιλίαν οὕτως.

τελεία δ' ἐστὶν ἡ τῶν ἀγαθῶν φιλία καὶ κατ' ἀρετὴν ὁμοίων· οὔτοι γὰρ τ' ἀγαθὰ ὁμοίως βούλονται ἀλλήλοις ἢ ἀγαθοί, ἀγαθοὶ δ' εἰσὶ καθ' αὐτούς. οἱ δὲ βουλόμενοι τ' ἀγαθὰ [10] τοῖς φίλοις ἐκείνων ἔνεκα μάλιστα φίλοι· δι' αὐτοὺς γὰρ οὕτως ἔχουσι, καὶ οὐ κατὰ συμβεβηκός· διαμένει οὖν ἡ τούτων φιλία ἕως ἂν ἀγαθοὶ ὦσιν, ἢ δ' ἀρετὴ μόνιμον. καὶ ἔστιν ἐκάτερος ἀπλῶς ἀγαθὸς καὶ τῷ φίλῳ· οἱ γὰρ ἀγαθοὶ καὶ ἀπλῶς ἀγαθοὶ καὶ ἀλλήλοις ὠφέλιμοι. ὁμοίως δὲ καὶ [15] ἡδεῖς· καὶ γὰρ ἀπλῶς οἱ ἀγαθοὶ ἡδεῖς καὶ ἀλλήλοις· ἐκάστῳ γὰρ καθ' ἡδονὴν εἰσιν αἱ οἰκεῖαι πράξεις καὶ αἱ τοιαῦται, τῶν ἀγαθῶν δὲ αἱ αὐταὶ ἢ ὅμοιαι. ἡ τοιαύτη δὲ φιλία μόνιμος εὐλόγως ἐστίν· συνάπτει γὰρ ἐν αὐτῇ πάνθ' ὅσα τοῖς φίλοις δεῖ ὑπάρχειν. πᾶσα γὰρ φιλία δι' ἀγαθόν ἐστίν [20] ἢ δι' ἡδονήν, ἢ ἀπλῶς ἢ τῷ φιλοῦντι, καὶ καθ' ὁμοιότητά τινα· ταύτη δὲ πάνθ' ὑπάρχει τὰ εἰρημένα καθ' αὐτούς· ταύτη γὰρ ὅμοια καὶ τὰ λοιπά, τό τε ἀπλῶς ἀγαθὸν καὶ ἡδὺ ἀπλῶς ἐστίν, μάλιστα δὲ ταῦτα

φιλητά· καὶ τὸ φιλεῖν δὴ καὶ ἡ φιλία ἐν τούτοις μάλιστα καὶ ἀρίστη. σπανίας δ' [25] εἰκὸς τὰς τοιαύτας εἶναι· ὀλίγοι γὰρ οἱ τοιοῦτοι. ἔτι δὲ προσδεῖται χρόνου καὶ συνηθείας· κατὰ τὴν παροιμίαν γὰρ οὐκ ἔστιν εἰδῆσαι ἀλλήλους πρὶν τοὺς λεγομένους ἄλλας συναναλῶσαι· οὐδ' ἀποδέξασθαι δὴ πρότερον οὐδ' εἶναι φίλους, πρὶν ἂν ἑκάτερος ἑκατέρῳ φανῇ φιλητὸς καὶ πιστευθῇ. οἱ δὲ ταχέως [30] τὰ φιλικὰ πρὸς ἀλλήλους ποιοῦντες βούλονται μὲν φίλοι εἶναι, οὐκ εἰσὶ δέ, εἰ μὴ καὶ φιλητοί, καὶ τοῦτ' ἴσασιν· βούλησις μὲν γὰρ ταχεῖα φιλίας γίνεται, φιλία δ' οὔ.

αὕτη μὲν οὖν καὶ κατὰ τὸν χρόνον καὶ κατὰ τὰ λοιπὰ τελεία ἐστί, καὶ κατὰ πάντα ταῦτά γίνεται καὶ ὅμοια ἑκατέρῳ [35] παρ' ἑκατέρου, ὅπερ δεῖ τοῖς φίλοις ὑπάρχειν. 1157a [1] ἡ δὲ διὰ τὸ ἡδὺ ὁμοίωμα ταύτης ἔχει· καὶ γὰρ οἱ ἀγαθοὶ ἡδεῖς ἀλλήλοις. ὁμοίως δὲ καὶ ἡ διὰ τὸ χρήσιμον· καὶ γὰρ τοιοῦτοι ἀλλήλοις οἱ ἀγαθοί. μάλιστα δὲ καὶ ἐν τούτοις αἱ φιλίαι μένουσιν, ὅταν τὸ αὐτὸ γίνηται παρ' ἀλλήλων, οἷον [5] ἡδονή, καὶ μὴ μόνον οὕτως ἀλλὰ καὶ ἀπὸ τοῦ αὐτοῦ, οἷον τοῖς εὐτραπέλοις, καὶ μὴ ὡς ἐραστῇ καὶ ἐρωμένῳ. οὐ γὰρ ἐπὶ τοῖς αὐτοῖς ἡδονταὶ οὗτοι, ἀλλ' ὁ μὲν ὁρῶν ἐκεῖνον, ὁ δὲ θεραπευόμενος ὑπὸ τοῦ ἐραστοῦ· ληγούσης δὲ τῆς ὥρας ἐνίοτε καὶ ἡ φιλία λήγει (τῷ μὲν γὰρ οὐκ ἔστιν ἡδεῖα ἢ [10] ὄψις, τῷ δ' οὐ γίνεται ἡ θεραπεία)· πολλοὶ δ' αὖ διαμένουσιν, ἐὰν ἐκ τῆς συνηθείας τὰ ἥθη στέρξωσιν, ὁμοήθεις ὄντες. οἱ δὲ μὴ τὸ ἡδὺ ἀντικαταλλαττόμενοι ἀλλὰ τὸ χρήσιμον ἐν τοῖς ἐρωτικοῖς καὶ εἰσὶν ἥττον φίλοι καὶ διαμένουσιν. οἱ δὲ διὰ τὸ χρήσιμον ὄντες φίλοι ἅμα τῷ συμφέροντι [15] διαλύονται· οὐ γὰρ ἀλλήλων ἦσαν φίλοι ἀλλὰ τοῦ λυσιτελοῦς. δι' ἡδονὴν μὲν οὖν καὶ διὰ τὸ χρήσιμον καὶ φαύλους ἐνδέχεται φίλους ἀλλήλοις εἶναι καὶ ἐπικεῖς φαύλοις καὶ μηδέτερον ὁποιοῦν, δι' αὐτοὺς δὲ δῆλον ὅτι μόνους τοὺς ἀγαθοὺς· οἱ γὰρ κακοὶ οὐ χαίρουσιν ἑαυτοῖς, [20] εἰ μὴ τις ὠφέλεια γένοιτο. καὶ μόνη δὲ ἡ τῶν ἀγαθῶν φιλία ἀδιάβλητός ἐστιν· οὐ γὰρ ῥάδιον οὐδενὶ πιστεῦσαι περὶ τοῦ ἐν πολλῷ χρόνῳ ὑφ' αὐτοῦ δεδοκιμασμένου· καὶ τὸ πιστεύειν ἐν τούτοις, καὶ τὸ μηδέποτ' ἂν ἀδικῆσαι, καὶ ὅσα ἄλλα ἐν τῇ ὥς ἀληθῶς φιλία ἀξιοῦται. ἐν δὲ ταῖς ἐτέραις [25] οὐδὲν κωλύει τὰ τοιαῦτα γίνεσθαι. ἐπεὶ γὰρ οἱ ἄνθρωποι λέγουσι φίλους καὶ τοὺς διὰ τὸ χρήσιμον, ὥσπερ αἱ πόλεις (δοκοῦσι γὰρ αἱ συμμαχίαι ταῖς πόλεσι γίνεσθαι ἔνεκα τοῦ συμφέροντος), καὶ τοὺς δι' ἡδονὴν ἀλλήλους στέργοντας, ὥσπερ οἱ παῖδες, ἴσως λέγειν μὲν δεῖ καὶ ἡμᾶς φίλους τοὺς [30] τοιούτους, εἶδη δὲ τῆς φιλίας πλείω, καὶ πρώτως μὲν καὶ κυρίως τὴν τῶν ἀγαθῶν ἢ ἀγαθῶν, τὰς δὲ λοιπὰς καθ' ὁμοιότητα· ἡ γὰρ ἀγαθὸν τι καὶ

ὅμοιόν τι, ταύτη φίλοι· καὶ γὰρ τὸ ἡδὺ ἀγαθὸν τοῖς φιληδέσιν. οὐ πάνυ δ' αὐταὶ συνάπτουσιν, οὐδὲ γίνονται οἱ αὐτοὶ φίλοι διὰ τὸ χρήσιμον [35] καὶ διὰ τὸ ἡδύ· οὐ γὰρ πάνυ συνδυάζεται τὰ κατὰ συμβεβηκός.

[1157b [1] εἰς ταῦτα δὲ τὰ εἶδη τῆς φιλίας νενεμημένης οἱ μὲν φαῦλοι ἔσονται φίλοι δι' ἡδονὴν ἢ τὸ χρήσιμον, ταύτη ὅμοιοι ὄντες, οἱ δ' ἀγαθοὶ δι' αὐτοὺς φίλοι· ἢ γὰρ ἀγαθοί. οὗτοι μὲν οὖν ἀπλῶς φίλοι, ἐκεῖνοι δὲ κατὰ συμβεβηκός [5] καὶ τῷ ὁμοιωσθαι τούτοις. ὥσπερ δ' ἐπὶ τῶν ἀρετῶν οἱ μὲν καθ' ἕξιν οἱ δὲ κατ' ἐνέργειαν ἀγαθοὶ λέγονται, οὕτω καὶ ἐπὶ τῆς φιλίας· οἱ μὲν γὰρ συζῶντες χαίρουσιν ἀλλήλοις καὶ πορίζουσι τ' ἀγαθὰ, οἱ δὲ καθεύδοντες ἢ κεχωρισμένοι τοῖς τόποις οὐκ ἐνεργοῦσι μὲν, οὕτω δ' ἔχουσιν ὥστ' [10] ἐνεργεῖν φιλικῶς· οἱ γὰρ τόποι οὐ διαλύουσι τὴν φιλίαν ἀπλῶς, ἀλλὰ τὴν ἐνέργειαν. ἐὰν δὲ χρόνιος ἡ ἀπουσία γίνηται, καὶ τῆς φιλίας δοκεῖ λήθην ποιεῖν· ὅθεν εἴρηται

πολλὰς δὲ φιλίας ἀπροσηγορία διέλυσεν.

οὐ φαίνονται δ' οὕθ' οἱ πρεσβῦται οὕθ' οἱ στρυφνοὶ φιλικοὶ εἶναι· βραχὺ [15] γὰρ ἐν αὐτοῖς τὸ τῆς ἡδονῆς, οὐδεὶς δὲ δύναται συνημερεῦειν τῷ λυπηρῷ οὐδὲ τῷ μὴ ἡδεῖ· μάλιστα γὰρ ἡ φύσις φαίνεται τὸ λυπηρὸν φεύγειν, ἐφίεσθαι δὲ τοῦ ἡδέος. οἱ δ' ἀποδεχόμενοι ἀλλήλους, μὴ συζῶντες δέ, εὖνοις ἐοίκασιν μᾶλλον ἢ φίλοις. οὐδὲν γὰρ οὕτως ἐστὶ φίλων ὥς τὸ συζῆν [20] (ὠφελείας μὲν γὰρ οἱ ἐνδεεῖς ὀρέγονται, συνημερεῦειν δὲ καὶ οἱ μακάριοι· μονώταις γὰρ εἶναι τούτοις ἥκιστα προσήκει)· συνδιάγειν δὲ μετ' ἀλλήλων οὐκ ἔστι μὴ ἡδεῖς ὄντας μηδὲ χαίροντας τοῖς αὐτοῖς, ὅπερ ἡ ἑταιρικὴ δοκεῖ ἔχειν.

[25] μάλιστα μὲν οὖν ἐστὶ φιλία ἢ τῶν ἀγαθῶν, καθάπερ πολλάκις εἴρηται· δοκεῖ γὰρ φιλητὸν μὲν καὶ αἰρετὸν τὸ ἀπλῶς ἀγαθὸν ἢ ἡδύ, ἐκάστῳ δὲ τὸ

αὐτῷ τοιοῦτον· ὁ δ' ἀγαθὸς τῷ ἀγαθῷ δι' ἄμφω ταῦτα. ἔοικε δ' ἡ μὲν φίλησις πάθει, ἡ δὲ φιλία ἔξει· ἡ γὰρ φίλησις οὐχ ἥττον [30] πρὸς τὰ ἄψυχά ἐστιν, ἀντιφιλοῦσι δὲ μετὰ προαιρέσεως, ἡ δὲ προαίρεσις ἀφ' ἑξέως· καὶ τὰγαθὰ βούλονται τοῖς φιλουμένοις ἐκείνων ἔνεκα, οὐ κατὰ πάθος ἀλλὰ καθ' ἑξιν. καὶ φιλοῦντες τὸν φίλον τὸ αὐτοῖς ἀγαθὸν φιλοῦσιν· ὁ γὰρ ἀγαθὸς φίλος γινόμενος ἀγαθὸν γίνεται ὡς φίλος. ἐκότερος [35] οὖν φιλεῖ τε τὸ αὐτῷ ἀγαθόν, καὶ τὸ ἴσον ἀνταποδίδωσι τῇ βουλήσει καὶ τῷ ἡδεῖ· λέγεται γὰρ φιλότης ἰσότης, 1158a [1] μάλιστα δὲ τῇ τῶν ἀγαθῶν ταῦθ' ὑπάρχει. ἐν δὲ τοῖς στρυφνοῖς καὶ πρεσβυτικοῖς ἥττον γίνεται ἡ φιλία, ὅσω δυσκολώτεροί εἰσι καὶ ἥττον ταῖς ὁμιλίαις χαίρουσιν· ταῦτα γὰρ δοκεῖ μάλιστα εἶναι φιλικὰ καὶ ποιητικὰ φιλίας. διὸ [5] νέοι μὲν γίνονται φίλοι ταχύ, πρεσβῦται δ' οὐ· οὐ γὰρ γίνονται φίλοι οἷς ἂν μὴ χαίρωσιν· ὁμοίως δ' οὐδ' οἱ στρυφνοί. ἀλλ' οἱ τοιοῦτοι εὖνοι μὲν εἰσιν ἀλλήλοις· βούλονται γὰρ τὰγαθὰ καὶ ἀπαντῶσιν εἰς τὰς χρείας· φίλοι δ' οὐ πάνυ εἰσὶ διὰ τὸ μὴ συνημερεῦν μηδὲ χαίρειν ἀλλήλοις, [10] ἃ δὲ μάλιστα εἶναι δοκεῖ φιλικὰ. πολλοῖς δ' εἶναι φίλον κατὰ τὴν τελείαν φιλίαν οὐκ ἐνδέχεται, ὥσπερ οὐδ' ἐρᾶν πολλῶν ἅμα (ἔοικε γὰρ ὑπερβολῇ, τὸ τοιοῦτο δὲ πρὸς ἓνα πέφυκε γίνεσθαι)· πολλοὺς δ' ἅμα τῷ αὐτῷ ἀρέσκειν σφόδρα οὐ ῥᾶδιον, ἴσως δ' οὐδ' ἀγαθοὺς εἶναι. δεῖ δὲ καὶ ἐμπειρίαν [15] λαβεῖν καὶ ἐν συνηθείᾳ γενέσθαι, ὃ παγχάλεπον. διὰ τὸ χρήσιμον δὲ καὶ τὸ ἡδὺ πολλοῖς ἀρέσκειν ἐνδέχεται· πολλοὶ γὰρ οἱ τοιοῦτοι, καὶ ἐν ὀλίγῳ χρόνῳ αἱ ὑπηρεσίαι. τούτων δὲ μᾶλλον ἔοικε φιλία ἢ διὰ τὸ ἡδύ, ὅταν ταῦτά ἀπ' ἀμφοῖν γίνηται καὶ χαίρωσιν ἀλλήλοις ἢ τοῖς [20] αὐτοῖς, οἷαι τῶν νέων εἰσὶν αἱ φιλίαι· μᾶλλον γὰρ ἐν ταύταις τὸ ἐλευθέριον. ἡ δὲ διὰ τὸ χρήσιμον ἀγοραίων. καὶ οἱ μακάριοι δὲ χρησίμων μὲν οὐδὲν δέονται, ἡδέων δέ· συζῆν μὲν γὰρ βούλονταί τισι, τὸ δὲ λυπηρὸν ὀλίγον μὲν χρόνον φέρουσιν, συνεχῶς δ' οὐδεὶς ἂν ὑπομεῖναι, οὐδ' αὐτὸ [25] τὸ ἀγαθόν, εἰ λυπηρὸν αὐτῷ εἴη· διὸ τοὺς φίλους ἡδεῖς ζητοῦσιν. δεῖ δ' ἴσως καὶ ἀγαθοὺς τοιούτους ὄντας, καὶ ἔτι αὐτοῖς· οὕτω γὰρ ὑπάρξει αὐτοῖς ὅσα δεῖ τοῖς φίλοις. οἱ δ' ἐν ταῖς ἐξουσίαις διηρημένοι φαίνονται χρῆσθαι τοῖς φίλοις· ἄλλοι γὰρ αὐτοῖς εἰσὶ χρήσιμοι καὶ ἕτεροι ἡδεῖς, ἄμφω δ' οἱ αὐτοὶ [30] οὐ πάνυ· οὔτε γὰρ ἡδεῖς μετ' ἀρετῆς ζητοῦσιν οὔτε χρησίμους εἰς τὰ καλά, ἀλλὰ τοὺς μὲν εὐτραπέλους τοῦ ἡδέος ἐφιέμενοι, τοὺς δὲ δεινοὺς πρᾶξαι τὸ ἐπιταχθέν, ταῦτα δ' οὐ πάνυ γίνεται ἐν τῷ αὐτῷ. ἡδὺς δὲ καὶ χρήσιμος ἅμα εἴρηται ὅτι ὁ σπουδαῖος· ἀλλ' ὑπερέχοντι οὐ γίνεται ὁ τοιοῦτος φίλος, ἐὰν μὴ [35] καὶ τῇ ἀρετῇ ὑπερέχεται· εἰ δὲ μή, οὐκ ἰσάζει ἀνάλογον ὑπερεχόμενος. οὐ πάνυ δ' εἰώθασι τοιοῦτοι γίνεσθαι.



1158b [1] εἰσὶ δ' οὖν αἱ εἰρημέναι φιλίαι ἐν ἰσότητι· τὰ γὰρ αὐτὰ γίνεται ἅπ' ἄμφοιν καὶ βούλονται ἀλλήλοις, ἢ ἕτερον ἀνθ' ἑτέρου καταλλάττονται, οἷον ἡδονὴν ἀντ' ὠφελείας· ὅτι δὲ καὶ ἡττόν εἰσιν αὐταὶ φιλίαι καὶ μένουσιν, εἴρηται. [5] δοκοῦσι δὲ [καὶ] δι' ὁμοιότητα καὶ ἀνομοιότητα ταῦτο εἶναι τε καὶ οὐκ εἶναι φιλίαι· καθ' ὁμοιότητα γὰρ τῆς κατ' ἀρετὴν φαίνονται φιλίαι (ἢ μὲν γὰρ τὸ ἡδὺ ἔχει ἢ δὲ τὸ χρήσιμον, ταῦτα δ' ὑπάρχει κάκειν), τῷ δὲ τὴν μὲν ἀδιάβλητον καὶ μόνιμον εἶναι, ταύτας δὲ ταχέως [10] μεταπίπτειν ἄλλοις τε διαφέρειν πολλοῖς, οὐ φαίνονται φιλίαι, δι' ἀνομοιότητα ἐκείνης. ἕτερον δ' ἐστὶ φιλίας εἶδος τὸ καθ' ὑπεροχὴν, οἷον πατρὶ πρὸς υἱὸν καὶ ὅλως πρεσβυτέρῳ πρὸς νεώτερον, ἀνδρὶ τε πρὸς γυναῖκα καὶ παντὶ ἄρχοντι πρὸς ἀρχόμενον. διαφέρουσι δ' αὐταὶ καὶ ἀλλήλων· [15] οὐ γὰρ ἡ αὐτὴ γονεῦσι πρὸς τέκνα καὶ ἄρχουσι πρὸς ἀρχομένους, ἀλλ' οὐδὲ πατρὶ πρὸς υἱὸν καὶ υἱῷ πρὸς πατέρα, οὐδ' ἀνδρὶ πρὸς γυναῖκα καὶ γυναικὶ πρὸς ἄνδρα. ἑτέρα γὰρ ἐκάστου τούτων ἀρετὴ καὶ τὸ ἔργον, ἕτερα δὲ καὶ δι' ἃ φιλοῦσιν· ἕτεραι οὖν καὶ αἱ φιλήσεις καὶ αἱ φιλίαι. [20] ταῦτά μὲν δὴ οὕτε γίνεται ἐκατέρῳ παρὰ θατέρου οὔτε δεῖ ζητεῖν· ὅταν δὲ γονεῦσι μὲν τέκνα ἀπονέμῃ ἃ δεῖ τοῖς γεννήσασιν, γονεῖς δὲ [υἱέσιν] ἃ δεῖ τοῖς τέκνοις, μόνιμος ἢ τῶν τοιούτων καὶ ἐπιεικὴς ἔσται φιλία. ἀνάλογον δ' ἐν πάσαις ταῖς καθ' ὑπεροχὴν οὔσαις φιλίαις καὶ τὴν φίλησιν [25] δεῖ γίνεσθαι, οἷον τὸν ἀμείνω μᾶλλον φιλεῖσθαι ἢ φιλεῖν, καὶ τὸν ὠφελιμώτερον, καὶ τῶν ἄλλων ἕκαστον ὁμοίως· ὅταν γὰρ κατ' ἀξίαν ἢ φίλησις γίνηται, τότε γίνεται πως ἰσότης, ὃ δὴ τῆς φιλίας εἶναι δοκεῖ.

οὐχ ὁμοίως δὲ τὸ ἴσον ἐν τε τοῖς δικαίοις καὶ ἐν τῇ [30] φιλίᾳ φαίνεται ἔχειν· ἔστι γὰρ ἐν μὲν τοῖς δικαίοις ἴσον πρῶτως τὸ κατ' ἀξίαν, τὸ δὲ κατὰ ποσὸν δευτέρως, ἐν δὲ τῇ φιλίᾳ τὸ μὲν κατὰ ποσὸν πρῶτως, τὸ δὲ κατ' ἀξίαν δευτέρως. δῆλον δ', ἂν πολὺ διάστημα γένηται ἀρετῆς ἢ κακίας ἢ εὐπορίας ἢ τινος ἄλλου· οὐ γὰρ ἔτι φίλοι εἰσὶν [35] ἀλλ' οὐδ' ἀξιοῦσιν. ἐμφανέστατον δὲ τοῦτ' ἐπὶ τῶν θεῶν· πλεῖστον γὰρ οὗτοι πᾶσι τοῖς ἀγαθοῖς ὑπερέχουσιν. 1159a [1] δῆλον δὲ καὶ ἐπὶ τῶν βασιλέων· οὐδὲ γὰρ τούτοις ἀξιοῦσιν εἶναι φίλοι οἱ πολὺ καταδεέστεροι, οὐδὲ τοῖς ἀρίστοις ἢ σοφωτάτοις οἱ μηδενὸς ἀξιοί. ἀκριβὲς μὲν οὖν ἐν τοῖς τοιούτοις οὐκ ἔστιν ὁρισμός, ἕως τίνος οἱ φίλοι· πολλῶν γὰρ ἀφαιρουμένων ἔτι [5] μένει, πολὺ δὲ χωρισθέντος, οἷον τοῦ θεοῦ, οὐκέτι. ὅθεν καὶ ἀπορεῖται, μή ποτ' οὐ βούλονται οἱ φίλοι τοῖς φίλοις τὰ μέγιστα τῶν ἀγαθῶν, οἷον θεοὺς εἶναι· οὐ γὰρ ἔτι φίλοι ἔσσονται αὐτοῖς, οὐδὲ δὴ ἀγαθὰ· οἱ γὰρ φίλοι ἀγαθὰ. εἰ δὴ καλῶς εἴρηται ὅτι ὁ φίλος τῷ φίλῳ

βούλεται τὰγαθὰ [10] ἐκείνου ἔνεκα, μένειν ἂν δέοι οἷός ποτ' ἐστὶν ἐκεῖνος· ἀνθρώπῳ δὲ ὄντι βουλήσεται τὰ μέγιστα ἀγαθὰ. ἴσως δ' οὐ πάντα· αὐτῷ γὰρ μάλισθ' ἕκαστος βούλεται τὰγαθὰ. οἱ πολλοὶ δὲ δοκοῦσι διὰ φιλοτιμίαν βούλεσθαι φιλεῖσθαι μᾶλλον ἢ φιλεῖν· διὸ φιλοκόλακες οἱ πολλοί· ὑπερεχόμενος γὰρ [15] φίλος ὁ κόλαξ, ἢ προσποιεῖται τοιοῦτος καὶ μᾶλλον φιλεῖν ἢ φιλεῖσθαι· τὸ δὲ φιλεῖσθαι ἐγγὺς εἶναι δοκεῖ τοῦ τιμᾶσθαι, οὐ δὲ οἱ πολλοὶ ἐφίενται. οὐ δι' αὐτὸ δ' εὐοίκασιν αἰρεῖσθαι τὴν τιμὴν, ἀλλὰ κατὰ συμβεβηκός· χαίρουσι γὰρ οἱ μὲν πολλοὶ ὑπὸ τῶν ἐν ταῖς ἐξουσίαις τιμώμενοι [20] διὰ τὴν ἐλπίδα (οἷονται γὰρ τεύξεσθαι παρ' αὐτῶν, ἂν του δέωνται· ὡς δὲ σημείῳ τῆς εὐπαθείας χαίρουσι τῇ τιμῇ)· οἱ δ' ὑπὸ τῶν ἐπεικῶν καὶ εἰδότων ὀρεγόμενοι τιμῆς βεβαιῶσαι τὴν οἰκείαν δόξαν ἐφίενται περὶ αὐτῶν· χαίρουσι δὴ, ὅτι εἰσὶν ἀγαθοὶ πιστεύοντες τῇ τῶν λεγόντων κρίσει. [25] τῷ φιλεῖσθαι δὲ καθ' αὐτὸ χαίρουσιν· διὸ δόξειεν ἂν κρεῖττον εἶναι τοῦ τιμᾶσθαι, καὶ ἡ φιλία καθ' αὐτὴν αἰρετὴ εἶναι. δοκεῖ δ' ἐν τῷ φιλεῖν μᾶλλον ἢ ἐν τῷ φιλεῖσθαι εἶναι. σημεῖον δ' αἱ μητέρες τῷ φιλεῖν χαίρουσαι· ἔναι γὰρ διδόασιν τὰ ἑαυτῶν τρέφεσθαι, καὶ φιλοῦσι μὲν εἰδυῖαι, [30] ἀντιφιλεῖσθαι δ' οὐ ζητοῦσιν, ἔὰν ἀμφοτέρω μὴ ἐνδέχῃται, ἀλλ' ἱκανὸν αὐταῖς ἔοικεν εἶναι ἔὰν ὁρῶσιν εὖ πράττοντας, καὶ αὐταὶ φιλοῦσιν αὐτοὺς κἂν ἐκεῖνοι μηδὲν ὦν μητρὶ προσήκει ἀπονέμωσι διὰ τὴν ἄγνοιαν. μᾶλλον δὲ τῆς φιλίας οὔσης ἐν τῷ φιλεῖν, καὶ τῶν φιλοφίλων ἐπαινουμένων, φίλων [35] ἀρετὴ τὸ φιλεῖν ἔοικεν, ὥστ' ἐν οἷς τοῦτο γίνεται κατ' ἀξίαν, 1159b [1] οὗτοι μόνιμοι φίλοι καὶ ἡ τούτων φιλία. οὕτω δ' ἂν καὶ οἱ ἄνισοι μάλιστ' εἶεν φίλοι· ἰσάζοιντο γὰρ ἂν. ἢ δ' ἰσότης καὶ ὁμοιότης φιλότης, καὶ μάλιστα μὲν ἢ τῶν κατ' ἀρετὴν ὁμοιότης· μόνιμοι γὰρ ὄντες καθ' αὐτοὺς καὶ πρὸς ἀλλήλους [5] μένουσι, καὶ οὔτε δέονται φαύλων οὔθ' ὑπηρετοῦσι τοιαῦτα, ἀλλ' ὡς εἰπεῖν καὶ διακωλύουσιν· τῶν ἀγαθῶν γὰρ μήτ' αὐτοὺς ἀμαρτάνειν μήτε τοῖς φίλοις ἐπιτρέπειν. οἱ δὲ μοχθηροὶ τὸ μὲν βέβαιον οὐκ ἔχουσιν· οὐδὲ γὰρ αὐτοῖς διαμένουσιν ὅμοιοι ὄντες· ἐπ' ὀλίγον δὲ χρόνον γίνονται φίλοι, [10] χαίροντες τῇ ἀλλήλων μοχθηρίᾳ. οἱ χρήσιμοι δὲ καὶ ἡδεῖς ἐπὶ πλεῖον διαμένουσιν· ἕως γὰρ ἂν πορίζωσιν ἡδονὰς ἢ ὠφελείας ἀλλήλοις. ἐξ ἐναντίων δὲ μάλιστα μὲν δοκεῖ ἢ διὰ τὸ χρήσιμον γίνεσθαι φιλία, οἷον πένης πλουσίῳ, ἀμαθῆς εἰδότι· οὐ γὰρ τυγχάνει τις ἐνδεὴς ὦν, τούτου ἐφίεμενος ἀντιδωρεῖται [15] ἄλλο. ἐνταῦθα δ' ἂν τις ἔλκοι καὶ ἐραστὴν καὶ ἐρώμενον, καὶ καλὸν καὶ αἰσχρόν. διὸ φαίνονται καὶ οἱ ἐρασταὶ γελοῖοι ἐνίοτε, ἀξιοῦντες φιλεῖσθαι ὡς φιλοῦσιν· ὁμοίως δὲ φιλητοὺς ὄντας ἴσως ἀξιωτέον, μηδὲν δὲ τοιοῦτον ἔχοντας γελοῖον. ἴσως δὲ οὐδ' ἐφίεται τὸ ἐναντίον τοῦ ἐναντίου [20] καθ' αὐτό, ἀλλὰ κατὰ συμβεβηκός, ἢ δ' ὄρεξις τοῦ μέσου ἐστίν· τοῦτο γὰρ ἀγαθόν, οἷον τῷ ξηρῷ οὐχ ὑγρῷ γενέσθαι ἀλλ' ἐπὶ τὸ μέσον ἐλθεῖν, καὶ τῷ

θερμῷ καὶ τοῖς ἄλλοις ὁμοίως. ταῦτα μὲν οὖν ἀφείσθω· καὶ γὰρ ἔστιν ἄλλοτριώτερα.

[25] ἔοικε δέ, καθάπερ ἐν ἀρχῇ εἴρηται, περὶ ταῦτά καὶ ἐν τοῖς αὐτοῖς εἶναι ἢ τε φιλία καὶ τὸ δίκαιον. ἐν ἀπάσῃ γὰρ κοινωνίᾳ δοκεῖ τι δίκαιον εἶναι, καὶ φιλία δέ· προσαγορεύουσι γοῦν ὥς φίλους τοὺς σύμπλους καὶ τοὺς συστρατιώτας, ὁμοίως δὲ καὶ τοὺς ἐν ταῖς ἄλλαις κοινωνίαις. καθ’ [30] ὅσον δὲ κοινωνοῦσιν, ἐπὶ τοσοῦτόν ἐστι φιλία· καὶ γὰρ τὸ δίκαιον. καὶ ἡ παροιμία “κοινὰ τὰ φίλων,” ὀρθῶς· ἐν κοινωνίᾳ γὰρ ἡ φιλία. ἔστι δ’ ἀδελφοῖς μὲν καὶ ἑταίροις πάντα κοινά, τοῖς δ’ ἄλλοις ἀφωρισμένα, καὶ τοῖς μὲν πλείω τοῖς δ’ ἐλάττω· καὶ γὰρ τῶν φιλιῶν αἱ μὲν μᾶλλον [35] αἱ δ’ ἥττον. διαφέρει δὲ καὶ τὰ δίκαια· 1160a [1] οὐ γὰρ ταῦτά γονεῦσι πρὸς τέκνα καὶ ἀδελφοῖς πρὸς ἀλλήλους, οὐδ’ ἑταίροις καὶ πολίταις, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων φιλιῶν. ἕτερα δὲ καὶ τὰ ἄδिका πρὸς ἐκάστους τούτων, καὶ αὕξησιν λαμβάνει τῷ μᾶλλον πρὸς φίλους εἶναι, οἷον χρήματα [5] ἀποστερῆσαι ἑταῖρον δεινότερον ἢ πολίτην, καὶ μὴ βοηθῆσαι ἀδελφῷ ἢ ὀθνείῳ, καὶ πατάξαι πατέρα ἢ ὄντινοῦν ἄλλον. αὕξεσθαι δὲ πέφυκεν ἅμα τῇ φιλίᾳ καὶ τὸ δίκαιον, ὥς ἐν τοῖς αὐτοῖς ὄντα καὶ ἐπ’ ἴσον διήκοντα. αἱ δὲ κοινωνίαι πᾶσαι μορίοις ἐοίκασιν τῆς πολιτικῆς· συμπορεύονται [10] γὰρ ἐπὶ τινι συμφέροντι, καὶ ποριζόμενοί τι τῶν εἰς τὸν βίον· καὶ ἡ πολιτικὴ δὲ κοινωνία τοῦ συμφέροντος χάριν δοκεῖ καὶ ἐξ ἀρχῆς συνελθεῖν καὶ διαμένειν· τούτου γὰρ καὶ οἱ νομοθέται στοχάζονται, καὶ δίκαιόν φασιν εἶναι τὸ κοινῇ συμφέρον. αἱ μὲν οὖν ἄλλαι κοινωνίαι κατὰ μέρη [15] τοῦ συμφέροντος ἐφίενται, οἷον πλωτῆρες μὲν τοῦ κατὰ τὸν πλοῦν πρὸς ἐργασίαν χρημάτων ἢ τι τοιοῦτον, συστρατιῶται δὲ τοῦ κατὰ τὸν πόλεμον, εἴτε χρημάτων εἴτε νίκης ἢ πόλεως ὀρεγόμενοι, ὁμοίως δὲ καὶ φυλέται καὶ δημόται. [ἔναι δὲ τῶν κοινωνιῶν δι’ ἡδονὴν δοκοῦσι γίνεσθαι, θιασωτῶν [20] καὶ ἐρανιστῶν· αὗται γὰρ θυσίας ἔνεκα καὶ συνουσίας.] πᾶσαι δ’ αὗται ὑπὸ τὴν πολιτικὴν ἐοίκασιν εἶναι· οὐ γὰρ τοῦ παρόντος συμφέροντος ἡ πολιτικὴ ἐφίεται, ἀλλ’ εἰς ἅπαντα τὸν βίον . . . θυσίας τε ποιοῦντες καὶ περὶ ταύτας συνόδους, τιμὰς ἀπονέμοντες τοῖς θεοῖς, καὶ αὐτοῖς ἀναπαύσεις [25] πορίζοντες μεθ’ ἡδονῆς. αἱ γὰρ ἀρχαῖαι θυσίαι καὶ σύνοδοι φαίνονται γίνεσθαι μετὰ τὰς τῶν καρπῶν συγκομιδὰς οἷον ἀπαρχαί· μάλιστα γὰρ ἐν τούτοις ἐσχόλαζον τοῖς καιροῖς. πᾶσαι δὲ φαίνονται αἱ κοινωνίαι μόρια τῆς πολιτικῆς εἶναι· ἀκολουθήσουσι δὲ αἱ τοιαῦται φιλίαι ταῖς [30] τοιαύταις κοινωνίαις.

πολιτείας δ' ἐστὶν εἴδη τρία, ἴσαι δὲ καὶ παρεκβάσεις, οἷον φθοραὶ τούτων. εἰσὶ δ' αἱ μὲν πολιτεῖαι βασιλεία τε καὶ ἀριστοκρατία, τρίτη δὲ ἀπὸ τιμημάτων, ἣν τιμοκρατικὴν λέγειν οἴκεῖον φαίνεται, πολιτείαν δ' αὐτὴν [35] εἰώθασιν οἱ πλεῖστοι καλεῖν. τούτων δὲ βελτίστη μὲν ἡ βασιλεία, χειρίστη δ' ἡ τιμοκρατία. παρέκβασις δὲ βασιλείας μὲν τυραννίς· 1160b [1] ἄμφω γὰρ μοναρχίαι, διαφέρουσι δὲ πλεῖστον· ὁ μὲν γὰρ τύραννος τὸ αὐτῷ συμφέρον σκοπεῖ, ὁ δὲ βασιλεὺς τὸ τῶν ἀρχομένων. οὐ γάρ ἐστι βασιλεὺς ὁ μὴ αὐτάρκης καὶ πᾶσι τοῖς ἀγαθοῖς ὑπερέχων· ὁ δὲ [5] τοιοῦτος οὐδενὸς προσδεῖται· τὰ ὠφέλιμα οὖν αὐτῷ μὲν οὐκ ἂν σκοποίη, τοῖς δ' ἀρχομένοις· ὁ γὰρ μὴ τοιοῦτος κληρωτὸς ἂν τις εἴη βασιλεὺς. ἡ δὲ τυραννὶς ἐξ ἐναντίας ταύτης· τὸ γὰρ ἑαυτῷ ἀγαθὸν διώκει. καὶ φανερώτερον ἐπὶ ταύτης ὅτι χειρίστη· κάκιστον δὲ τὸ ἐναντίον τῷ βελτίστῳ. [10] μεταβαίνει δ' ἐκ βασιλείας εἰς τυραννίδα· φαυλότης γάρ ἐστι μοναρχίας ἡ τυραννίς, ὁ δὲ μοχθηρὸς βασιλεὺς τύραννος γίνεται. ἐξ ἀριστοκρατίας δὲ εἰς ὀλιγαρχίαν κακία τῶν ἀρχόντων, οἱ νέμονται τὰ τῆς πόλεως παρὰ τὴν ἀξίαν, καὶ πάντα ἢ τὰ πλεῖστα τῶν ἀγαθῶν ἑαυτοῖς, καὶ τὰς ἀρχάς [15] αἰετὶ τοῖς αὐτοῖς, περὶ πλείστου ποιούμενοι τὸ πλουτεῖν· ὀλίγοι δὲ ἄρχουσι καὶ μοχθηροὶ ἀντὶ τῶν ἐπιεικεστάτων. ἐκ δὲ τιμοκρατίας εἰς δημοκρατίαν· σύνοροι γὰρ εἰσιν αὗται· πλήθους γὰρ βούλεται καὶ ἡ τιμοκρατία εἶναι, καὶ ἴσοι πάντες οἱ ἐν τῷ τιμήματι. ἥκιστα δὲ μοχθηρόν ἐστὶν ἡ [20] δημοκρατία· ἐπὶ μικρὸν γὰρ παρεκβαίνει τὸ τῆς πολιτείας εἶδος. μεταβάλλουσι μὲν οὖν μάλισθ' οὕτως αἱ πολιτεῖαι· ἐλάχιστον γὰρ οὕτω καὶ ῥᾶστα μεταβαίνουσιν. ὁμοιώματα δ' αὐτῶν καὶ οἷον παραδείγματα λάβοι τις ἂν καὶ ἐν ταῖς οἰκίαις. ἡ μὲν γὰρ πατρὸς πρὸς υἱεῖς κοινωνία βασιλείας [25] ἔχει σχῆμα· τῶν τέκνων γὰρ τῷ πατρὶ μέλει· ἐντεῦθεν δὲ καὶ Ὀμηρὸς τὸν Δία πατέρα προσαγορεύει· πατρικὴ γὰρ ἀρχὴ βούλεται ἡ βασιλεία εἶναι. ἐν Πέρσαις δ' ἡ τοῦ πατρὸς τυραννικὴ· χρῶνται γὰρ ὡς δούλοις τοῖς υἱέσιν. τυραννικὴ δὲ καὶ ἡ δεσπότου πρὸς δούλους· τὸ γὰρ [30] τοῦ δεσπότου συμφέρον ἐν αὐτῇ πράττεται. αὕτη μὲν οὖν ὀρθὴ φαίνεται, ἡ Περσικὴ δ' ἡμαρτημένη· τῶν διαφερόντων γὰρ αἱ ἀρχαὶ διάφοροι. ἀνδρὸς δὲ καὶ γυναικὸς ἀριστοκρατικὴ φαίνεται· κατ' ἀξίαν γὰρ ὁ ἀνὴρ ἄρχει, καὶ περὶ ταῦτα ἃ δεῖ τὸν ἄνδρα· ὅσα δὲ γυναικὶ ἀρμόζει, [35] ἐκείνη ἀποδίδωσιν. ἀπάντων δὲ κυριεύων ὁ ἀνὴρ εἰς ὀλιγαρχίαν μεθίστησιν· παρὰ τὴν ἀξίαν γὰρ αὐτὸ ποιεῖ, καὶ οὐχ ἡ ἀμείνων. 1161a [1] ἐνίοτε δὲ ἄρχουσιν αἱ γυναῖκες ἐπὶ κληροῖ οὔσαι· οὐ δὲ γίνονται κατ' ἀρετὴν αἱ ἀρχαί, ἀλλὰ διὰ πλοῦτον καὶ δύναμιν, καθάπερ ἐν ταῖς ὀλιγαρχίαις. τιμοκρατικῇ δ' ἔοικεν ἡ τῶν ἀδελφῶν· ἴσοι γάρ, πλὴν ἐφ' ὅσον [5] ταῖς ἡλικίαις διαλλάττουσιν· διόπερ ἂν πολὺ ταῖς ἡλικίαις διαφέρωσιν, οὐκέτι ἀδελφικὴ

γίνεται ἡ φιλία. δημοκρατία δὲ μάλιστα μὲν ἐν ταῖς ἀδεσπότοις τῶν οἰκίσεων (ἐνταῦθα γὰρ πάντες ἐξ ἴσου), καὶ ἐν αἷς ἀσθενῆς ὁ ἄρχων καὶ ἐκάστῳ ἐξουσία.

[10] καθ' ἐκάστην δὲ τῶν πολιτειῶν φιλία φαίνεται, ἐφ' ὅσον καὶ τὸ δίκαιον, βασιλεῖ μὲν πρὸς τοὺς βασιλευμένους ἐν ὑπεροχῇ εὐεργεσίας· εὖ γὰρ ποιεῖ τοὺς βασιλευμένους, εἴπερ ἀγαθὸς ὢν ἐπιμελεῖται αὐτῶν, ἵν' εὖ πράττωσιν, ὥσπερ νομεὺς προβάτων· ὅθεν καὶ Ὅμηρος τὸν Ἀγαμέμνονα [15] ποιμένα λαῶν εἶπεν. τοιαύτη δὲ καὶ ἡ πατρική, διαφέρει δὲ τῷ μεγέθει τῶν εὐεργετημάτων· αἴτιος γὰρ τοῦ εἶναι, δοκοῦντος μεγίστου, καὶ τροφῆς καὶ παιδείας. καὶ τοῖς προγόνοις δὲ ταῦτα προσνέμεται· φύσει τε ἀρχικὸν πατὴρ υἱῶν καὶ πρόγονοι ἐκγόνων καὶ βασιλεὺς βασιλευμένων. [20] ἐν ὑπεροχῇ δὲ αἱ φιλίαι αὗται, διὸ καὶ τιμῶνται οἱ γονεῖς. καὶ τὸ δίκαιον δὴ ἐν τούτοις οὐ ταῦτ' ἀλλὰ τὸ κατ' ἀξίαν· οὕτω γὰρ καὶ ἡ φιλία. καὶ ἀνδρὸς δὲ πρὸς γυναῖκα ἡ αὐτὴ φιλία καὶ ἐν ἀριστοκρατίᾳ· κατ' ἀρετὴν γάρ, καὶ τῷ ἀμείνονι πλεον ἀγαθόν, καὶ τὸ ἀρμόζον ἐκάστω· [25] οὕτω δὲ καὶ τὸ δίκαιον. ἡ δὲ τῶν ἀδελφῶν τῇ ἐταιρικῇ ἔοικεν· ἴσοι γὰρ καὶ ἡλικιωταί, οἱ τοιοῦτοι δ' ὁμοπαθεῖς καὶ ὁμοήθεις ὡς ἐπὶ τὸ πολὺ. ἔοικε δὲ ταύτῃ καὶ ἡ κατὰ τὴν τιμοκρατικὴν· ἴσοι γὰρ οἱ πολῖται βούλονται καὶ ἐπεικεῖς εἶναι· ἐν μέρει δὴ τὸ ἄρχειν, καὶ ἐξ ἴσου· οὕτω δὴ [30] καὶ ἡ φιλία. ἐν δὲ ταῖς παρεκβάσεσιν, ὥσπερ καὶ τὸ δίκαιον ἐπὶ μικρὸν ἐστίν, οὕτω καὶ ἡ φιλία, καὶ ἥκιστα ἐν τῇ χειρίστῃ· ἐν τυραννίδι γὰρ οὐδὲν ἢ μικρὸν φιλίας. ἐν οἷς γὰρ μηδὲν κοινόν ἐστι τῷ ἄρχοντι καὶ ἀρχομένῳ, οὐδὲ φιλία· οὐδὲ γὰρ δίκαιον· οἷον τεχνίτη πρὸς ὄργανον καὶ [35] ψυχῇ πρὸς σῶμα καὶ δεσπότη πρὸς δοῦλον· 1161b [1] ὠφελεῖται μὲν γὰρ πάντα ταῦτα ὑπὸ τῶν χρωμένων, φιλία δ' οὐκ ἔστι πρὸς τὰ ἄψυχα οὐδὲ δίκαιον. ἀλλ' οὐδὲ πρὸς ἵππον ἢ βοῦν, οὐδὲ πρὸς δοῦλον ἢ δοῦλος. οὐδὲν γὰρ κοινόν ἐστίν· ὁ γὰρ δοῦλος ἔμψυχον ὄργανον, τὸ δ' ὄργανον ἄψυχος δοῦλος. [5] ἡ μὲν οὖν δοῦλος, οὐκ ἔστι φιλία πρὸς αὐτόν, ἡ δ' ἄνθρωπος· δοκεῖ γὰρ εἶναι τι δίκαιον παντὶ ἀνθρώπῳ πρὸς πάντα τὸν δυνάμενον κοινωνῆσαι νόμου καὶ συνθήκης· καὶ φιλία δὴ, καθ' ὅσον ἄνθρωπος. ἐπὶ μικρὸν δὴ καὶ ἐν ταῖς τυραννίσιν αἱ φιλίαι καὶ τὸ δίκαιον, ἐν δὲ ταῖς δημοκρατίαις [10] ἐπὶ πλεῖον· πολλὰ γὰρ τὰ κοινὰ ἴσοις οὖσιν.

ἐν κοινωνίᾳ μὲν οὖν πᾶσα φιλία ἐστίν, καθάπερ εἴρηται. ἀφορίσειε δ' ἂν τις τὴν τε συγγενικὴν καὶ τὴν ἑταιρικὴν. αἱ δὲ πολιτικαὶ καὶ φυλετικαὶ καὶ συμπλοϊκαί, καὶ ὅσαι τοιαῦται, κοινωνικαῖς ἐοίκασιν μᾶλλον· οἷον γὰρ [15] καθ' ὁμολογίαν τινὰ φαίνονται εἶναι. εἰς ταύτας δὲ τάξειεν ἂν τις καὶ τὴν ξενικὴν. καὶ ἡ συγγενικὴ δὲ φαίνεται πολυειδὴς εἶναι, ἡρτῆσθαι δὲ πᾶσα ἐκ τῆς πατρικῆς· οἱ γονεῖς μὲν γὰρ στέργουσι τὰ τέκνα ὡς ἑαυτῶν τι ὄντα, τὰ δὲ τέκνα τοὺς γονεῖς ὡς ἅπ' ἐκείνων τι ὄντα. [20] μᾶλλον δ' ἴσασιν οἱ γονεῖς τὰ ἐξ αὐτῶν ἢ τὰ γεννηθέντα ὅτι ἐκ τούτων, καὶ μᾶλλον συνωκείωται τὸ ἅφ' οὗ τῷ γεννηθέντι ἢ τὸ γενόμενον τῷ ποιήσαντι· τὸ γὰρ ἐξ αὐτοῦ οἰκεῖον τῷ ἅφ' οὗ, οἷον ὁδοὺς θρῖξ ὅτιοῦν τῷ ἔχοντι· ἐκείνῳ δ' οὐδὲν τὸ ἅφ' οὗ, ἢ ἦττον. καὶ τῷ πλήθει δὲ τοῦ χρόνου· οἱ μὲν [25] γὰρ εὐθὺς γενόμενα στέργουσιν, τὰ δὲ προελθόντος χρόνου τοὺς γονεῖς, σύνεσιν ἢ αἴσθησιν λαβόντα. ἐκ τούτων δὲ δῆλον καὶ δι' ἃ φιλοῦσιν μᾶλλον αἱ μητέρες. γονεῖς μὲν οὖν τέκνα φιλοῦσιν ὡς ἑαυτούς (τὰ γὰρ ἐξ αὐτῶν οἷον ἕτεροι αὐτοὶ τῷ κεχωρίσθαι), τέκνα δὲ γονεῖς ὡς ἅπ' ἐκείνων πεφυκότα, [30] ἀδελφοὶ δ' ἀλλήλους τῷ ἐκ τῶν αὐτῶν πεφυκέναι· ἡ γὰρ πρὸς ἐκεῖνα ταυτότης ἀλλήλοις ταὐτὸ ποιεῖ· ὅθεν φασὶ ταὐτὸν αἷμα καὶ ῥίζαν καὶ τὰ τοιαῦτα. εἰσὶ δὲ ταὐτό πως καὶ ἐν διηρημένοις. μέγα δὲ πρὸς φιλίαν καὶ τὸ σύντροφον καὶ τὸ καθ' ἡλικίαν· ἡλιξ γὰρ ἡλικα, [35] καὶ οἱ συνήθεις ἑταῖροι· διὸ καὶ ἡ ἀδελφικὴ τῇ ἑταιρικῇ ὁμοιοῦται. 1162a [1] ἀνεψιοὶ δὲ καὶ οἱ λοιποὶ συγγενεῖς ἐκ τούτων συνωκείωνται· τῷ γὰρ ἀπὸ τῶν αὐτῶν εἶναι. γίνονται δ' οἱ μὲν οἰκειότεροι οἱ δ' ἀλλοτριώτεροι τῷ σύνεγγυς ἢ πόρρω τὸν ἀρχηγὸν εἶναι. ἔστι δ' ἡ μὲν πρὸς γονεῖς φιλία τέκνοις, [5] καὶ ἀνθρώποις πρὸς θεοὺς, ὡς πρὸς ἀγαθὸν καὶ ὑπερέχον· εὐ γὰρ πεποιήκασιν τὰ μέγιστα· τοῦ γὰρ εἶναι καὶ τραφῆναι αἵτιοι, καὶ γενομένοις τοῦ παιδευθῆναι· ἔχει δὲ καὶ τὸ ἡδὺ καὶ τὸ χρήσιμον ἢ τοιαύτη φιλία μᾶλλον τῶν ὀθνείων, ὅσω καὶ κοινότερος ὁ βίος αὐτοῖς ἐστίν. ἔστι δὲ καὶ ἐν τῇ [10] ἀδελφικῇ ἄπερ καὶ ἐν τῇ ἑταιρικῇ καὶ μᾶλλον ἐν τοῖς ἐπεικέσι, καὶ ὅλως ἐν τοῖς ὁμοίοις, ὅσω οἰκειότεροι καὶ ἐκ γενετῆς ὑπάρχουσι στέργοντες ἀλλήλους, καὶ ὅσω ὁμοιθέστεροι οἱ ἐκ τῶν αὐτῶν καὶ σύντροφοι καὶ παιδευθέντες ὁμοίως· καὶ ἡ κατὰ τὸν χρόνον δοκιμασία πλείστη καὶ [15] βεβαιωτάτη. ἀνάλογον δὲ καὶ ἐν τοῖς λοιποῖς τῶν συγγενῶν τὰ φιλικά. ἀνδρὶ δὲ καὶ γυναικὶ φιλία δοκεῖ κατὰ φύσιν ὑπάρχειν· ἄνθρωπος γὰρ τῇ φύσει συνδυαστικὸν μᾶλλον ἢ πολιτικόν, ὅσω πρότερον καὶ ἀναγκαιότερον οἰκία πόλεως, καὶ τεκνοποιία κοινότερον τοῖς ζώοις. τοῖς μὲν οὖν [20] ἄλλοις ἐπὶ τοσοῦτον ἡ κοινωνία ἐστίν, οἱ δ' ἄνθρωποι οὐ μόνον τῆς τεκνοποιίας χάριν συνοικοῦσιν, ἀλλὰ καὶ τῶν εἰς τὸν βίον· εὐθὺς γὰρ διήρηται τὰ ἔργα, καὶ ἔστιν ἕτερα ἀνδρὸς καὶ γυναικός· ἐπαρκοῦσιν οὖν ἀλλήλοις, εἰς τὸ κοινὸν τιθέντες τὰ ἴδια. διὰ ταῦτα δὲ καὶ τὸ χρήσιμον εἶναι

δοκεῖ [25] καὶ τὸ ἥδὺ ἐν ταύτῃ τῇ φιλίᾳ. εἴη δ' ἂν καὶ δι' ἀρετὴν, εἰ ἐπεικεῖς εἶεν· ἔστι γὰρ ἐκατέρου ἀρετὴ, καὶ χαίρουεν ἂν τῷ τοιούτῳ. σύνδεσμος δὲ τὰ τέκνα δοκεῖ εἶναι· διὸ θάπτον οἱ ἄτεκνοι διαλύονται· τὰ γὰρ τέκνα κοινὸν ἀγαθὸν ἀμφοῖν, συνέχει δὲ τὸ κοινόν. τὸ δὲ πῶς βιωτέον ἀνδρὶ [30] πρὸς γυναῖκα καὶ ὅλως φίλῳ πρὸς φίλον, οὐδὲν ἕτερον φαίνεται ζητεῖσθαι ἢ πῶς δίκαιον· οὐ γὰρ ταῦτόν φαίνεται τῷ φίλῳ πρὸς τὸν φίλον καὶ τὸν ὀθνεῖον καὶ τὸν ἑταῖρον καὶ τὸν συμφοιτητήν.

τριπτῶν δ' οὐσῶν φιλιῶν, καθάπερ ἐν ἀρχῇ εἴρηται, [35] καὶ καθ' ἑκάστην τῶν μὲν ἐν ἰσότητι φίλων ὄντων τῶν δὲ καθ' ὑπεροχὴν (καὶ γὰρ ὁμοίως ἀγαθοὶ φίλοι γίνονται καὶ ἀμείνων χείρονι, 1162b [1] ὁμοίως δὲ καὶ ἡδεῖς καὶ διὰ τὸ χρήσιμον, ἰσάζοντες ταῖς ὠφελείαις καὶ διαφέροντες), τοὺς ἴσους μὲν κατ' ἰσότητά δεῖ τῷ φιλεῖν καὶ τοῖς λοιποῖς ἰσάζειν, τοὺς δ' ἀνίσους τὸ ἀνάλογον ταῖς ὑπεροχαῖς ἀποδιδόναι. [5] γίνεται δὲ τὰ ἐγκλήματα καὶ αἱ μέμψεις ἐν τῇ κατὰ τὸ χρήσιμον φιλίᾳ ἢ μόνη ἢ μάλιστα, εὐλόγως. οἱ μὲν γὰρ δι' ἀρετὴν φίλοι ὄντες εὐ δρᾶν ἀλλήλους προθυμοῦνται (τοῦτο γὰρ ἀρετῆς καὶ φιλίας), πρὸς τοῦτο δ' ἀμιλλωμένων οὐκ ἔστιν ἐγκλήματα οὐδὲ μάχα· τὸν γὰρ φιλοῦντα καὶ [10] εὖ ποιοῦντα οὐδεὶς δυσχεραίνει, ἀλλ' ἂν ἢ χαρίεις, ἀμύνεται εὐ δρῶν. ὁ δ' ὑπερβάλλον, τυγχάνων οὐ ἐφίεται, οὐκ ἂν ἐγκαλοῖη τῷ φίλῳ· ἕκαστος γὰρ τοῦ ἀγαθοῦ ὀρέγεται. οὐ πάνυ δ' οὐδ' ἐν τοῖς δι' ἡδονὴν· ἅμα γὰρ ἀμφοῖν γίνεται οὐ ὀρέγονται, εἰ τῷ συνδιαγείν χαίρουσιν· γελοῖος [15] δ' ἂν φαίνοιτο καὶ ὁ ἐγκαλῶν τῷ μὴ τέρποντι, ἐξὸν μὴ συνημερεύειν. ἢ δὲ διὰ τὸ χρήσιμον ἐγκληματική· ἐπ' ὠφελείᾳ γὰρ χρώμενοι ἀλλήλοις ἀεὶ τοῦ πλείονος δέονται, καὶ ἔλαττον ἔχειν οἶονται τοῦ προσήκοντος, καὶ μέμφονται ὅτι οὐχ ὅσων δέονται τοσούτων τυγχάνουσιν ἄξιοι ὄντες· [20] οἱ δ' εὖ ποιοῦντες οὐ δύνανται ἐπαρκεῖν τοσαῦτα ὅσων οἱ πάσχοντες δέονται. ἔοικε δέ, καθάπερ τὸ δίκαιόν ἐστι διττόν, τὸ μὲν ἄγραφον τὸ δὲ κατὰ νόμον, καὶ τῆς κατὰ τὸ χρήσιμον φιλίας ἢ μὲν ἠθικὴ ἢ δὲ νομικὴ εἶναι. γίνεται οὖν τὰ ἐγκλήματα μάλισθ' ὅταν μὴ κατὰ τὴν αὐτὴν συναλλάξωσι [25] καὶ διαλύωνται. ἔστι δ' ἡ νομικὴ μὲν ἢ ἐπὶ ῥητοῖς, ἢ μὲν πάμπαν ἀγοραία ἐκ χειρὸς εἰς χεῖρα, ἢ δὲ ἐλευθεριωτέρα εἰς χρόνον, καθ' ὁμολογίαν δὲ τί ἀντὶ τίνος. δῆλον δ' ἐν ταύτῃ τὸ ὀφείλημα κοῦκ ἀμφίλογον, φιλικὸν δὲ τὴν ἀναβολὴν ἔχει· διόπερ ἐνίοις οὐκ εἰσὶ τούτων [30] δίκαι, ἀλλ' οἶονται δεῖν στέργειν τοὺς κατὰ πίστιν συναλλάξαντας. ἢ δ' ἠθικὴ οὐκ ἐπὶ ῥητοῖς, ἀλλ' ὥς φίλῳ δωρεῖται ἢ ὅτιδήποτε ἄλλο· κομίζεσθαι δὲ ἄξιοι τὸ ἴσον ἢ πλεόν, ὥς οὐ δεδωκὼς ἀλλὰ χρήσας· οὐχ ὁμοίως δὲ συναλλάξας καὶ

διαλυόμενος ἐγκαλέσει. τοῦτο δὲ συμβαίνει [35] διὰ τὸ βούλεσθαι μὲν πάντας ἢ τοὺς πλείστους τὰ καλὰ, προαιρεῖσθαι δὲ τὰ ὠφέλιμα· καλὸν δὲ τὸ εὖ ποιεῖν μὴ ἵνα ἀντιπάθῃ, 1163a [1] ὠφέλιμον δὲ τὸ εὐεργετεῖσθαι. δυναμένω δὲ ἀνταποδοτέον τὴν ἀξίαν ὧν ἔπαθεν [καὶ ἐκόντι] (ἄκοντα γὰρ φίλον οὐ ποιητέον· ὥς δὲ διαμαρτόντα ἐν τῇ ἀρχῇ καὶ εὖ παθόντα ὑφ' οὐ οὐκ ἔδει — οὐ γὰρ ὑπὸ φίλου, οὐδὲ δι' [5] αὐτὸ τοῦτο δρῶντος — καθάπερ οὖν ἐπὶ ῥητοῖς εὐεργετηθέντα διαλυτέον)· καὶ ὁμολογήσαι δ' ἂν δυνάμενος ἀποδώσειν· ἀδυνατοῦντα δ' οὐδ' ὁ διδοὺς ἠξίωσεν ἄν. ὥστ' εἰ δυνατόν, ἀποδοτέον. ἐν ἀρχῇ δ' ἐπισκεπτέον ὑφ' οὗ εὐεργετεῖται καὶ ἐπὶ τίνι, ὅπως ἐπὶ τούτοις ὑπομένη ἢ μή. ἀμφισβήτησιν [10] δ' ἔχει πότερα δεῖ τῇ τοῦ παθόντος ὠφελείᾳ μετρεῖν καὶ πρὸς ταύτην ποιεῖσθαι τὴν ἀνταπόδοσιν, ἢ τῇ τοῦ δράσαντος εὐεργεσίᾳ. οἱ μὲν γὰρ παθόντες τοιαῦτά φασι λαβεῖν παρὰ τῶν εὐεργετῶν ἃ μικρὰ ἦν ἐκείνοις καὶ ἐξῆν παρ' ἐτέρων λαβεῖν, κατασμικρίζοντες· οἱ δ' ἀνάπαλιν τὰ μέγιστα [15] τῶν παρ' αὐτοῖς, καὶ ἃ παρ' ἄλλων οὐκ ἦν, καὶ ἐν κινδύνοις ἢ τοιαύταις χρείαις. ἄρ' οὖν διὰ μὲν τὸ χρήσιμον τῆς φιλίας οὔσης ἢ τοῦ παθόντος ὠφέλεια μέτρον ἐστίν; οὗτος γὰρ ὁ δεόμενος, καὶ ἐπαρκεῖ αὐτῷ ὥς κομιούμενος τὴν ἴσην· τοσαύτη οὖν γεγένηται ἢ ἐπικουρία ὅσον οὗτος ὠφέληται, [20] καὶ ἀποδοτέον δὲ αὐτῷ ὅσον ἐπηύρετο, ἢ καὶ πλεον· κάλλιον γάρ. ἐν δὲ ταῖς κατ' ἀρετὴν ἐγκλήματα μὲν οὐκ ἔστιν, μέτρῳ δ' ἔοικεν ἢ τοῦ δράσαντος προαίρεσις· τῆς ἀρετῆς γὰρ καὶ τοῦ ἥθους ἐν τῇ προαιρέσει τὸ κύριον.

διαφέρονται δὲ καὶ ἐν ταῖς καθ' ὑπεροχὴν φιλίαις· [25] ἀξιοῖ γὰρ ἑκάτερος πλεον ἔχειν, ὅταν δὲ τοῦτο γίνηται, διαλύεται ἡ φιλία. οἴεται γὰρ ὅ τε βελτίων προσήκειν αὐτῷ πλεον ἔχειν· τῷ γὰρ ἀγαθῷ νέμεσθαι πλεον· ὁμοίως δὲ καὶ ὁ ὠφελιμώτερος· ἀχρεῖον γὰρ ὄντα οὐ φασι δεῖν ἴσον ἔχειν· λειτουργίαν τε γὰρ γίνεσθαι καὶ οὐ φιλίαν, εἰ μὴ [30] κατ' ἀξίαν τῶν ἔργων ἔσται τὰ ἐκ τῆς φιλίας. οἴονται γάρ, καθάπερ ἐν χρημάτων κοινωνίᾳ πλεῖον λαμβάνουσιν οἱ συμβαλλόμενοι πλεῖον, οὕτω δεῖν καὶ ἐν τῇ φιλίᾳ. ὁ δ' ἐνδεὴς καὶ ὁ χείρων ἀνάπαλιν· φίλου γὰρ ἀγαθοῦ εἶναι τὸ ἐπαρκεῖν τοῖς ἐνδεέσιν· τί γάρ, φασίν, ὄφελος σπουδαίῳ [35] ἢ δυνάστη φίλον εἶναι, μηδὲν γε μέλλοντα ἀπολαύειν; 1163b [1] ἔοικε δ' οὖν ἑκάτερος ὀρθῶς ἀξιοῦν, καὶ δεῖν ἑκατέρῳ πλεον νέμειν ἐκ τῆς φιλίας, οὐ τοῦ αὐτοῦ δέ, ἀλλὰ τῷ μὲν ὑπερέχοντι τιμῆς τῷ δ' ἐνδεεῖ κέρδους· τῆς μὲν γὰρ ἀρετῆς καὶ τῆς εὐεργεσίας ἢ τιμῇ γέρας, τῆς δ' ἐνδείας ἐπικουρία [5] τὸ κέρδος. οὕτω δ' ἔχειν τοῦτο καὶ ἐν ταῖς πολιτείαις φαίνεται· οὐ γὰρ τιμᾶται ὁ μηδὲν ἀγαθὸν τῷ κοινῷ πορίζων· τὸ κοινὸν γὰρ



δίδοται τῷ τὸ κοινὸν εὐεργετοῦντι, ἢ τιμὴ δὲ κοινόν. οὐ γὰρ ἔστιν ἅμα χρηματίζεσθαι ἀπὸ τῶν κοινῶν καὶ τιμᾶσθαι. ἐν πᾶσι γὰρ τὸ ἔλαττον οὐδεὶς ὑπομένει· [10] τῷ δὲ περὶ χρήματα ἐλαττουμένῳ τιμὴν ἀπονέμουσι καὶ τῷ δωροδόκῳ χρήματα· τὸ κατ' ἀξίαν γὰρ ἐπανισοῖ καὶ σώζει τὴν φιλίαν, καθάπερ εἴρηται. οὕτω δὲ καὶ τοῖς ἀνίσοις ὁμιλητέον, καὶ τῷ εἰς χρήματα ὠφελουμένῳ ἢ εἰς ἀρετὴν τιμὴν ἀνταποδοτέον, ἀποδιδόντα τὰ ἐνδεχόμενα. [15] τὸ δυνατὸν γὰρ ἢ φιλία ἐπιζητεῖ, οὐ τὸ κατ' ἀξίαν· οὐδὲ γὰρ ἔστιν ἐν πᾶσι, καθάπερ ἐν ταῖς πρὸς τοὺς θεοὺς τιμαῖς καὶ τοὺς γονεῖς· οὐδεὶς γὰρ τὴν ἀξίαν ποτ' ἂν ἀποδοίη, εἰς δύναμιν δὲ ὁ θεραπεύων ἐπικικῆς εἶναι δοκεῖ. διὸ κἂν δόξειεν οὐκ ἐξεῖναι υἱῷ πατέρα ἀπείπασθαι, πατρὶ δ' υἱόν· [20] ὀφείλοντα γὰρ ἀποδοτέον, οὐδὲν δὲ ποιήσας ἄξιον τῶν ὑπεργμένων δέδρακεν, ὥστ' ἀεὶ ὀφείλει. οἷς δ' ὀφείλεται, ἐξουσία ἀφεῖναι· καὶ τῷ πατρὶ δὲ. ἅμα δ' ἴσως οὐδεὶς ποτ' ἂν ἀποστῆναι δοκεῖ μὴ ὑπερβάλλοντος μοχθηρίας· χωρὶς γὰρ τῆς φυσικῆς φιλίας τὴν ἐπικουρίαν ἀνθρωπικὸν μὴ [25] διωθεῖσθαι. τῷ δὲ φευκτὸν ἢ οὐ σπουδαστὸν τὸ ἐπαρκεῖν, μοχθηρῷ ὄντι· εὖ πάσχειν γὰρ οἱ πολλοὶ βούλονται, τὸ δὲ ποιεῖν φεύγουσιν ὥς ἀλυσιτελές. περὶ μὲν οὖν τούτων ἐπὶ τοσοῦτον εἰρήσθω.

## Βιβλίο 9

ἐν πάσαις δὲ ταῖς ἀνομοιοειδέσι φιλίαις τὸ ἀνάλογον ἰσάζει καὶ σώζει τὴν φιλίαν, καθάπερ εἴρηται, οἷον καὶ ἐν τῇ πολιτικῇ τῷ σκυτοτόμῳ ἀντὶ τῶν ὑποδημάτων ἀμοιβή [35] γίνεται κατ' ἀξίαν, καὶ τῷ ὑφάντῃ καὶ τοῖς λοιποῖς. 1164a [1] ἐνταῦθα μὲν οὖν πεπόρισται κοινὸν μέτρον τὸ νόμισμα, καὶ πρὸς τοῦτο δὲ πάντα ἀναφέρεται καὶ τούτῳ μετρεῖται· ἐν δὲ τῇ ἐρωτικῇ ἐνίοτε μὲν ὁ ἐραστὴς ἐγκαλεῖ ὅτι ὑπερφιλῶν οὐκ ἀντιφιλεῖται, οὐδὲν ἔχων φιλητόν, εἰ οὕτως ἔτυχεν, [5] πολλάκις δ' ὁ ἐρώμενος ὅτι πρότερον ἐπαγγελλόμενος πάντα νῦν οὐδὲν ἐπιτελεῖ. συμβαίνει δὲ τὰ τοιαῦτα, ἐπειδὴν ὁ μὲν δι' ἡδονὴν τὸν ἐρώμενον φιλεῖ, ὁ δὲ διὰ τὸ χρήσιμον τὸν ἐραστήν, ταῦτα δὲ μὴ ἀμφοῖν ὑπάρχει. διὰ ταῦτα γὰρ τῆς φιλίας οὔσης διάλυσις γίνεται, ἐπειδὴν [10] μὴ γίνηται ὧν ἕνεκα ἐφίλουν· οὐ γὰρ αὐτοὺς ἔστεργον ἀλλὰ τὰ ὑπάρχοντα, οὐ μόνιμα ὄντα· διὸ τοιαῦτα καὶ αἱ φιλίαι. ἢ δὲ τῶν ἡθῶν καθ' αὐτὴν οὐσα μένει, καθάπερ εἴρηται. διαφέρονται δ' ὅταν ἕτερα γίνηται αὐτοῖς καὶ μὴ ὧν ὀρέγονται· ὅμοιον γὰρ τῷ μηδὲν γίνεσθαι, ὅταν [15] οὐ ἐφίεται μὴ τυγχάνῃ, οἷον καὶ τῷ κιθαρωδῷ ὁ ἐπαγγελλόμενος, καὶ ὅσω ἄμεινον ἄσειεν, τοσοῦτω πλείω· εἰς ἔω δ' ἀπαιτοῦντι τὰς ὑποσχέσεις ἀνθ' ἡδονῆς ἡδονὴν ἀποδεδωκέναι ἔφη. εἰ μὲν οὖν ἑκάτερος τοῦτο ἐβούλετο, ἱκανῶς ἂν εἶχεν· εἰ δ' ὁ μὲν τέρψιν ὁ δὲ κέρδος, καὶ ὁ μὲν ἔχει [20] ὁ δὲ μή, οὐκ ἂν εἴη τὰ κατὰ τὴν κοινωνίαν καλῶς· ὧν γὰρ δεόμενος τυγχάνει, τούτοις καὶ προσέχει,

κάκεινους γε χάριν ταῦτα δώσει. τὴν ἀξίαν δὲ ποτέρου τάξαι ἐστί, τοῦ προϊεμένου ἢ τοῦ προλαβόντος; ὁ γὰρ προϊέμενος ἔοικ' ἐπιτρέπειν ἐκείνῳ. ὅπερ φασὶ καὶ Πρωταγόραν ποιεῖν. [25] ὅτε γὰρ διδάξειεν ἀδήποτε, τιμῆσαι τὸν μαθόντα ἐκέλευεν ὅσου δοκεῖ ἀξία ἐπίστασθαι, καὶ ἐλάμβανε τοσοῦτον. ἐν τοῖς τοιούτοις δ' ἐνίοις ἀρέσκει τὸ “μισθὸς δ' ἀνδρί.” οἱ δὲ προλαμβάνοντες τὸ ἀργύριον, εἴτα μηδὲν ποιοῦντες ὧν ἔφασαν διὰ τὰς ὑπερβολὰς τῶν ἐπαγγελιῶν, εἰκότως ἐν ἐγκλήμασι [30] γίνονται· οὐ γὰρ ἐπιτελοῦσιν ἃ ὡμολόγησαν. τοῦτο δ' ἴσως ποιεῖν οἱ σοφισταὶ ἀναγκάζονται διὰ τὸ μηδένα ἂν δοῦναι ἀργύριον ὧν ἐπίστανται. οὗτοι μὲν οὖν ὧν ἔλαβον τὸν μισθόν, μὴ ποιοῦντες εἰκότως ἐν ἐγκλήμασιν εἰσιν. ἐν οἷς δὲ μὴ γίνεται διομολογία τῆς ὑπουργίας, οἱ μὲν δι' αὐτοὺς [35] προϊέμενοι εἴρηται ὅτι ἀνέγκλητοι (τοιαύτη γὰρ ἢ κατ' ἀρετὴν φιλία), 1164b [1] τὴν ἀμοιβὴν τε ποιητέον κατὰ τὴν προαίρεσιν (αὕτη γὰρ τοῦ φίλου καὶ τῆς ἀρετῆς)· οὕτω δ' ἔοικε καὶ τοῖς φιλοσοφίας κοινωνήσασιν· οὐ γὰρ πρὸς χρήμαθ' ἡ ἀξία μετρεῖται, τιμὴ τ' ἰσόρροπος οὐκ ἂν γένοιτο, ἀλλ' [5] ἴσως ἱκανόν, καθάπερ καὶ πρὸς θεοὺς καὶ πρὸς γονεῖς, τὸ ἐνδεχόμενον. μὴ τοιαύτης δ' οὔσης τῆς δόσεως ἀλλ' ἐπὶ τινι, μάλιστα μὲν ἴσως δεῖ τὴν ἀνταπόδοσιν γίνεσθαι δοκοῦσαν ἀμφοῖν κατ' ἀξίαν εἶναι, εἰ δὲ τοῦτο μὴ συμβαίνει, οὐ μόνον ἀναγκαῖον δόξειεν ἂν τὸν προέχοντα τάττειν, [10] ἀλλὰ καὶ δίκαιον· ὅσον γὰρ οὗτος ὠφελήθη ἢ ἀνθ' ὅσου τὴν ἡδονὴν εἴлет' ἂν, τοσοῦτον ἀντιλαβὼν ἔξει τὴν παρὰ τούτου ἀξίαν. καὶ γὰρ ἐν τοῖς ὠνίοις οὕτω φαίνεται γινόμενον, ἐνιαχοῦ τ' εἰσὶ νόμοι τῶν ἐκουσίων συμβολαίων δίκας μὴ εἶναι, ὥς δέον, ὃ ἐπίστευσε, διαλυθῆναι πρὸς τοῦτον [15] καθάπερ ἐκοινωνήσεν. ὃ γὰρ ἐπετράφη, τοῦτον οἶεται δικαιότερον εἶναι τάξαι τοῦ ἐπιτρέψαντος. τὰ πολλὰ γὰρ οὐ τοῦ ἴσου τιμῶσιν οἱ ἔχοντες καὶ οἱ βουλόμενοι λαβεῖν· τὰ γὰρ οἰκεῖα καὶ ἃ διδόασιν ἐκάστοις φαίνεται πολλοῦ ἀξία· ἀλλ' ὅμως ἡ ἀμοιβὴ γίνεται πρὸς τοσοῦτον ὅσον ἂν τάττωσιν [20] οἱ λαμβάνοντες. δεῖ δ' ἴσως οὐ τοσούτου τιμᾶν ὅσου ἔχοντι φαίνεται ἀξίον, ἀλλ' ὅσου πρὶν ἔχειν ἐτίμα.

ἀπορίαν δ' ἔχει καὶ τὰ τοιαῦτα, οἷον πότερον δεῖ πάντα τῷ πατρὶ ἀπονέμειν καὶ πείθεσθαι, ἢ κάμνοντα μὲν ἰατρῷ πιστεύειν, στρατηγὸν δὲ χειροτονητέον τὸν πολεμικόν. [25] ὁμοίως δὲ φίλῳ μᾶλλον ἢ σπουδαίῳ ὑπηρετητέον, καὶ εὐεργέτῃ ἀνταποδοτέον χάριν μᾶλλον ἢ ἐταίρῳ προετέον, ἐὰν ἄμφω μὴ ἐνδέχῃται. ἄρ' οὖν πάντα τὰ τοιαῦτα ἀκριβῶς μὲν διορίσαι οὐ ῥάδιον; πολλὰς γὰρ καὶ παντοίας ἔχει διαφορὰς καὶ μεγέθει καὶ μικρότητι καὶ τῷ καλῷ καὶ [30] ἀναγκαίῳ. ὅτι δ' οὐ πάντα τῷ αὐτῷ ἀποδοτέον, οὐκ ἄδηλον·

καὶ τὰς μὲν εὐεργεσίας ἀνταποδοτέον ὥς ἐπὶ τὸ πολὺ μᾶλλον ἢ χαριστέον  
ἐταίροις, ὥσπερ καὶ δάνειον ὧ ὀφείλει ἀποδοτέον μᾶλλον ἢ ἐταίρῳ δοτέον.  
ἴσως δ' οὐδὲ τοῦτ' ἀεὶ, οἷον τῷ λυτρωθέντι παρὰ ληστῶν πότερα τὸν  
λυσάμενον [35] ἀντιλυτρωτέον, κἂν ὅστισοῦν ἦ, ἢ μὴ ἐαλωκότι ἀπαιτοῦντι  
δὲ ἀποδοτέον, 1165a [1] ἢ τὸν πατέρα λυτρωτέον; δόξειε γὰρ ἂν καὶ ἑαυτοῦ  
μᾶλλον τὸν πατέρα. ὅπερ οὖν εἴρηται, καθόλου μὲν τὸ ὀφείλημα ἀποδοτέον,  
ἐὰν δ' ὑπερτείνῃ ἢ δόσις τῷ καλῷ ἢ τῷ ἀναγκαίῳ, πρὸς ταῦτ' ἀποκλιτέον.  
[5] ἐνίστε γὰρ οὐδ' ἐστὶν ἴσον τὸ τὴν προὔπαρχὴν ἀμείψασθαι, ἐπειδὴν ὁ  
μὲν σπουδαῖον εἰδὼς εὖ ποιήσῃ, τῷ δὲ ἢ ἀνταπόδοσις γίνηται ὃν οἶεται  
μοχθηρὸν εἶναι. οὐδὲ γὰρ τῷ δανείσαντι ἐνίστε ἀντιδανειστέον· ὁ μὲν γὰρ  
οἰόμενος κομιεῖσθαι ἐδάνεισεν ἐπικεῖ ὄντι, ὁ δ' οὐκ ἐλπίζει κομιεῖσθαι [10]  
παρὰ πονηροῦ. εἴτε τοίνυν τῇ ἀληθείᾳ οὕτως ἔχει, οὐκ ἴσον τὸ ἀξίωμα· εἴτ'  
ἔχει μὲν μὴ οὕτως οἶονται δέ, οὐκ ἂν δόξαιεν ἄτοπα ποιεῖν. ὅπερ οὖν  
πολλάκις εἴρηται, οἱ περὶ τὰ πάθη καὶ τὰς πράξεις λόγοι ὁμοίως ἔχουσι τὸ  
ὠρισμένον τοῖς περὶ ἅ εἰσιν. ὅτι μὲν οὖν οὐ ταῦτ' ἅπαν ἀποδοτέον, [15]  
οὐδὲ τῷ πατρὶ πάντα, καθάπερ οὐδὲ τῷ Διὶ θύεται, οὐκ ἄδηλον· ἐπεὶ δ' ἕτερα  
γονεῦσι καὶ ἀδελφοῖς καὶ ἐταίροις καὶ εὐεργέταις, ἐκάστοις τὰ οἰκεῖα καὶ τὰ  
ἀρμόττοντα ἀπονεμητέον. οὕτω δὲ καὶ ποιεῖν φαίνονται· εἰς γάμους μὲν γὰρ  
καλοῦσι τοὺς συγγενεῖς· τούτοις γὰρ κοινὸν τὸ γένος [20] καὶ αἱ περὶ τοῦτο  
δὴ πράξεις· καὶ εἰς τὰ κήδη δὲ μάλιστ' οἶονται δεῖν τοὺς συγγενεῖς ἀπαντᾶν  
διὰ ταῦτό. δόξειε δ' ἂν τροφῆς μὲν γονεῦσι δεῖν μάλιστ' ἐπαρκεῖν, ὥς  
ὀφείλοντας, καὶ τοῖς αἰτίοις τοῦ εἶναι κάλλιον ὢν ἢ ἑαυτοῖς εἰς ταῦτ'  
ἐπαρκεῖν· καὶ τιμὴν δὲ γονεῦσι καθάπερ θεοῖς, οὐ [25] πᾶσαν δέ· οὐδὲ γὰρ  
τὴν αὐτὴν πατρὶ καὶ μητρί, οὐδ' αὖ τὴν τοῦ σοφοῦ ἢ τὴν τοῦ στρατηγοῦ,  
ἀλλὰ τὴν πατρικὴν, ὁμοίως δὲ καὶ μητρικὴν. καὶ παντὶ δὲ τῷ πρεσβυτέρῳ  
τιμὴν καθ' ἡλικίαν, ὑπαναστάσει καὶ κατακλίσει καὶ τοῖς τοιούτοις· πρὸς  
ἐταίρους δ' αὖ καὶ ἀδελφοὺς παρρησίαν καὶ [30] ἀπάντων κοινότητα. καὶ  
συγγενέσι δὲ καὶ φυλέταις καὶ πολίταις καὶ τοῖς λοιποῖς ἅπασιν αἰεὶ πειρατέον  
τὸ οἰκεῖον ἀπονέμειν, καὶ συγκρίνειν τὰ ἐκάστοις ὑπάρχοντα κατ' οἰκειότητα  
καὶ ἀρετὴν ἢ χρῆσιν. τῶν μὲν οὖν ὁμογενῶν ῥάων ἢ σύγκρισις, τῶν δὲ  
διαφερόντων ἐργωδεστέρα. οὐ μὴν διὰ [35] γε τοῦτο ἀποστατέον, ἀλλ' ὥς ἂν  
ἐνδέχεται, οὕτω διοριστέον.

ἔχει δ' ἀπορίαν καὶ περὶ τοῦ διαλύεσθαι τὰς φιλίας 1165b [1] ἢ μὴ πρὸς τοὺς  
μὴ διαμένοντας. ἢ πρὸς μὲν τοὺς διὰ τὸ χρήσιμον ἢ τὸ ἡδὺ φίλους ὄντας,  
ὅταν μηκέτι ταῦτ' ἔχωσιν, οὐδὲν ἄτοπον διαλύεσθαι; ἐκείνων γὰρ ἦσαν φίλοι·

ὧν ἀπολιπόντων εὖλογον τὸ μὴ φιλεῖν. ἐγκαλέσειε δ' ἄν τις, [5] εἰ διὰ τὸ χρήσιμον ἢ τὸ ἡδὺ ἀγαπῶν προσεποιεῖτο διὰ τὸ ἥθος. ὁ γὰρ ἐν ἀρχῇ εἵπομεν, πλεῖστα διαφορὰ γίνονται τοῖς φίλοις, ὅταν μὴ ὁμοίως οἴωνται καὶ ὧσι φίλοι. ὅταν μὲν οὖν διαψευσθῇ τις καὶ ὑπολάβῃ φιλεῖσθαι διὰ τὸ ἥθος, μηδὲν τοιοῦτον ἐκείνου πράττοντος, ἑαυτὸν [10] αἰτιῶν· ἄν· ὅταν δ' ὑπὸ τῆς ἐκείνου προσποιήσεως ἀπατηθῇ, δίκαιον ἐγκαλεῖν τῷ ἀπατήσαντι, καὶ μᾶλλον ἢ τοῖς τὸ νόμισμα κιβδηλεύουσιν, ὅσω περὶ τιμιώτερον ἢ κακουργία. ἔαν δ' ἀποδέχεται ὡς ἀγαθόν, γένηται δὲ μοχθηρὸς καὶ δοκῇ, ἄρ' ἔτι φιλητέον; ἢ οὐ δυνατόν, εἴπερ μὴ πᾶν φιλητὸν [15] ἀλλὰ τ' ἀγαθόν; οὔτε δὲ φιλητὸν πονηρὸν οὔτε δεῖ· φιλοπόνηρον γὰρ οὐ χρὴ εἶναι, οὐδ' ὁμοιοῦσθαι φαύλῳ· εἴρηται δ' ὅτι τὸ ὅμοιον τῷ ὁμοίῳ φίλον. ἄρ' οὖν εὐθὺς διαλυτέον; ἢ οὐ πᾶσιν, ἀλλὰ τοῖς ἀνιάτοις κατὰ τὴν μοχθηρίαν; ἐπανόρθωσιν δ' ἔχουσι μᾶλλον βοηθητέον εἰς τὸ ἥθος ἢ τὴν [20] οὐσίαν, ὅσω βέλτιον καὶ τῆς φιλίας οἰκειότερον. δόξειε δ' ἄν ὁ διαλυόμενος οὐδὲν ἄτοπον ποιεῖν· οὐ γὰρ τῷ τοιούτῳ φίλος ἦν· ἀλλοιωθέντα οὖν ἀδυνατῶν ἀνασῶσαι ἀφίσταται. εἰ δ' ὁ μὲν διαμένοι ὁ δ' ἐπεικέστερος γίνοιτο καὶ πολὺ διαλλάττοι τῇ ἀρετῇ, ἄρα χρηστέον φίλῳ; ἢ οὐκ ἐνδέχεται; [25] ἐν μεγάλῃ δὲ διαστάσει μάλιστα δῆλον γίνεται, οἷον ἐν ταῖς παιδικαῖς φιλίαις· εἰ γὰρ ὁ μὲν διαμένοι τὴν διάνοιαν παῖς ὁ δ' ἀνὴρ εἴη οἷος κράτιστος, πῶς ἄν εἶεν φίλοι μὴτ' ἀρεσκόμενοι τοῖς αὐτοῖς μήτε χαίροντες καὶ λυπούμενοι; οὐδὲ γὰρ περὶ ἀλλήλους ταῦθ' ὑπάρξει αὐτοῖς, ἄνευ [30] δὲ τούτων οὐκ ἦν φίλους εἶναι· συμβιοῦν γὰρ οὐχ οἷόν τε. εἴρηται δὲ περὶ τούτων. ἄρ' οὖν οὐθὲν ἀλλοιότερον πρὸς αὐτὸν ἐκτέον ἢ εἰ μὴ ἐγεγόνει φίλος μηδέποτε; ἢ δεῖ μνείαν ἔχειν τῆς γενομένης συνηθείας, καὶ καθάπερ φίλοις μᾶλλον ἢ ὀθνείοις οἰόμεθα δεῖν χαρίζεσθαι, οὕτω καὶ τοῖς [35] γενομένοις ἀπονεμητέον τι διὰ τὴν προγενομένην φιλίαν, ὅταν μὴ δι' ὑπερβολὴν μοχθηρίας διάλυσιν γένηται.

1166a [1] τὰ φιλικὰ δὲ τὰ πρὸς τοὺς πέλας, καὶ οἷς αἱ φιλίαι ὀρίζονται, ἔοικεν ἐκ τῶν πρὸς ἑαυτὸν ἐληλυθέναι. τιθέασιν γὰρ φίλον τὸν βουλόμενον καὶ πράττοντα τ' ἀγαθὰ ἢ τὰ φαινόμενα ἐκείνου ἔνεκα, ἢ τὸν βουλόμενον εἶναι καὶ [5] ζῆν τὸν φίλον αὐτοῦ χάριν· ὅπερ αἱ μητέρες πρὸς τὰ τέκνα πεπόνθασιν, καὶ τῶν φίλων οἱ προσκεκρουκότες. οἱ δὲ τὸν συνδιάγοντα καὶ ταῦτ' αἰρούμενον, ἢ τὸν συναλγοῦντα καὶ συγχαίροντα τῷ φίλῳ· μάλιστα δὲ καὶ τοῦτο περὶ τὰς μητέρας συμβαίνει. τούτων δέ τινι καὶ τὴν φιλίαν [10] ὀρίζονται. πρὸς ἑαυτὸν δὲ τούτων ἕκαστον τῷ ἐπεικεῖ ὑπάρχει (τοῖς δὲ λοιποῖς, ἢ τοιοῦτοι ὑπολαμβάνουσιν εἶναι· ἔοικε δέ, καθάπερ εἴρηται, μέτρον ἐκάστων ἢ ἀρετῇ

καὶ ὁ σπουδαῖος εἶναι)· οὗτος γὰρ ὁμογνωμονεῖ ἑαυτῷ, καὶ τῶν αὐτῶν ὀρέγεται κατὰ πᾶσαν τὴν ψυχὴν· καὶ βούλεται [15] δὴ ἑαυτῷ τὰγαθὰ καὶ τὰ φαινόμενα καὶ πράττει (τοῦ γὰρ ἀγαθοῦ τὰγαθὸν διαπονεῖν) καὶ ἑαυτοῦ ἕνεκα (τοῦ γὰρ διανοητικοῦ χάριν, ὅπερ ἕκαστος εἶναι δοκεῖ)· καὶ ζῆν δὲ βούλεται ἑαυτὸν καὶ σώζεσθαι, καὶ μάλιστα τοῦτο ὧ φρονεῖ. ἀγαθὸν γὰρ τῷ σπουδαίῳ τὸ εἶναι, ἕκαστος δ' [20] ἑαυτῷ βούλεται τὰγαθὰ, γενόμενος δ' ἄλλος αἰρεῖται οὐδεὶς πάντ' ἔχειν [ἐκεῖνο τὸ γενόμενον] (ἔχει γὰρ καὶ νῦν ὁ θεὸς τὰγαθόν) ἀλλ' ὧν ὅ τι ποτ' ἐστίν· δόξειε δ' ἂν τὸ νοοῦν ἕκαστος εἶναι ἢ μάλιστα. συνδιάγειν τε ὁ τοιοῦτος ἑαυτῷ βούλεται· ἡδέως γὰρ αὐτὸ ποιεῖ· τῶν τε γὰρ πεπραγμένων [25] ἐπιτερπεῖς αἱ μνημαί, καὶ τῶν μελλόντων ἐλπίδες ἀγαθαί, αἱ τοιαῦται δ' ἡδεῖαι. καὶ θεωρημάτων δ' εὐπορεῖ τῇ διανοίᾳ. συναλγεῖ τε καὶ συνήδεται μάλισθ' ἑαυτῷ· πάντοτε γὰρ ἐστὶ τὸ αὐτὸ λυπηρόν τε καὶ ἡδύ, καὶ οὐκ ἄλλοτ' ἄλλο· ἀμεταμέλητος γὰρ ὡς εἶπειν. τῷ δὲ πρὸς [30] αὐτὸν ἕκαστα τούτων ὑπάρχειν τῷ ἐπικεῖ, πρὸς δὲ τὸν φίλον ἔχειν ὥσπερ πρὸς αὐτόν (ἐστὶ γὰρ ὁ φίλος ἄλλος αὐτός), καὶ ἡ φιλία τούτων εἶναι τι δοκεῖ, καὶ φίλοι οἷς ταῦθ' ὑπάρχει. πρὸς αὐτὸν δὲ πότερον ἔστιν ἢ οὐκ ἔστι φιλία, ἀφείσθω ἐπὶ τοῦ παρόντος· δόξειε δ' ἂν [35] ταύτῃ εἶναι φιλία, ἣ ἐστὶ δύο ἢ πλείω, ἐκ τῶν εἰρημένων, 1166b [1] καὶ ὅτι ἡ ὑπερβολὴ τῆς φιλίας τῇ πρὸς αὐτὸν ὁμοιοῦται. φαίνεται δὲ τὰ εἰρημένα καὶ τοῖς πολλοῖς ὑπάρχειν, καίπερ οὐσί φαύλοις. ἄρ' οὖν ἢ τ' ἀρέσκουσιν ἑαυτοῖς καὶ ὑπολαμβάνουσιν ἐπικεῖς εἶναι, ταύτῃ μετέχουσιν αὐτῶν; [5] ἐπεὶ τῶν γε κομιδῇ φαύλων καὶ ἀνοσιουργῶν οὐδενὶ ταῦθ' ὑπάρχει, ἀλλ' οὐδὲ φαίνεται. σχεδὸν δὲ οὐδὲ τοῖς φαύλοις· διαφέρονται γὰρ ἑαυτοῖς, καὶ ἐτέρων μὲν ἐπιθυμοῦσιν ἄλλα δὲ βούλονται, οἷον οἱ ἀκρατεῖς· αἰροῦνται γὰρ ἀντὶ τῶν δοκούντων ἑαυτοῖς ἀγαθῶν εἶναι τὰ ἡδέα βλαβερὰ [10] ὄντα· οἱ δ' αὖ διὰ δειλίαν καὶ ἀργίαν ἀφίστανται τοῦ πράττειν ἃ οἶονται ἑαυτοῖς βέλτιστα εἶναι. οἷς δὲ πολλὰ καὶ δεινὰ πέπρακται καὶ διὰ τὴν μοχθηρίαν μισοῦνται, καὶ φεύγουσι τὸ ζῆν καὶ ἀναιροῦσιν ἑαυτούς. ζητοῦσί τε οἱ μοχθηροὶ μεθ' ὧν συνημερεύουσιν, ἑαυτοὺς δὲ φεύγουσιν· [15] ἀναμιμνήσκονται γὰρ πολλῶν καὶ δυσχερῶν, καὶ τοιαῦθ' ἕτερα ἐλπίζουσι, καθ' ἑαυτοὺς ὄντες, μεθ' ἐτέρων δ' ὄντες ἐπιλανθάνονται. οὐδέν τε φιλητὸν ἔχοντες οὐδὲν φιλικὸν πάσχουσι πρὸς ἑαυτούς. οὐδὲ δὴ συγχαίρουσιν οὐδὲ συναλγοῦσιν οἱ τοιοῦτοι ἑαυτοῖς· στασιάζει γὰρ αὐτῶν ἡ ψυχὴ, [20] καὶ τὸ μὲν διὰ μοχθηρίαν ἀλγεῖ ἀπεχόμενόν τινων, τὸ δ' ἡδεῖται, καὶ τὸ μὲν δεῦρο τὸ δ' ἐκεῖσε ἔλκει ὥσπερ διασπῶντα. εἰ δὲ μὴ οἷόν τε ἅμα λυπεῖσθαι καὶ ἡδεσθαι, ἀλλὰ μετὰ μικρόν γε λυπεῖται ὅτι ἦσθη, καὶ οὐκ ἂν ἐβούλετο ἡδέα ταῦτα γενέσθαι αὐτῷ· μεταμελείας γὰρ [25] οἱ φαῦλοι γέμουσιν. οὐ δὲ φαίνεται ὁ φαῦλος οὐδὲ πρὸς ἑαυτὸν φιλικῶς διακεῖσθαι διὰ τὸ μηδὲν ἔχειν φιλητόν. εἰ δὲ τὸ οὕτως ἔχειν

λίαν ἐστὶν ἄθλιον, φευκτέον τὴν μοχθηρίαν διατεταμένως καὶ πειρατέον ἐπεικῇ εἶναι· οὕτω γὰρ καὶ πρὸς ἑαυτὸν φιλικῶς ἂν ἔχοι καὶ ἑτέρῳ φίλος γένοιτο.

[30] ἡ δ' εὐνοια φιλικῶς μὲν ἔοικεν, οὐ μὴν ἔστι γε φιλία· γίνεται γὰρ εὐνοια καὶ πρὸς ἀγνώτας καὶ λανθάνουσα, φιλία δ' οὐ. καὶ πρότερον δὲ ταῦτ' εἴρηται. ἀλλ' οὐδὲ φίλησίς ἐστιν. οὐ γὰρ ἔχει διάτασιν οὐδ' ὄρεξιν, τῇ φιλήσει δὲ ταῦτ' ἀκολουθεῖ· καὶ ἡ μὲν φίλησις μετὰ συνηθείας, ἡ [35] δ' εὐνοια καὶ ἐκ προσπαίου, οἷον καὶ περὶ τοὺς ἀγωνιστὰς συμβαίνει· 1167a [1] εὐνοιοὶ γὰρ αὐτοῖς γίνονται καὶ συνθέλουσιν, συμπράξαιεν δ' ἂν οὐδέν· ὅπερ γὰρ εἴπομεν, προσπαίως εὐνοιοὶ γίνονται καὶ ἐπιπολαίως στέργουσιν. ἔοικε δὲ ἄρχῃ φιλίας εἶναι, ὥσπερ τοῦ ἐρᾶν ἡ διὰ τῆς ὀψεως ἡδονή· μὴ γὰρ [5] προησθεὶς τῇ ιδέᾳ οὐδεὶς ἐρᾷ, ὁ δὲ χαίρων τῷ εἶδει οὐδὲν μᾶλλον ἐρᾷ, ἀλλ' ὅταν καὶ ἀπόντα ποθῇ καὶ τῆς παρουσίας ἐπιθυμῇ· οὕτω δὲ καὶ φίλους οὐχ οἷόν τ' εἶναι μὴ εὐνοὺς γενομένους, οἱ δ' εὐνοιοὶ οὐδὲν μᾶλλον φιλοῦσιν· βούλονται γὰρ μόνον τᾶγαθὰ οἷς εἰσὶν εὐνοιοὶ, συμπράξαιεν δ' [10] ἂν οὐδέν, οὐδ' ὀχληθεῖεν ὑπὲρ αὐτῶν. διὸ μεταφέρων φαίη τις ἂν αὐτὴν ἀργὴν εἶναι φιλίαν, χρονιζομένην δὲ καὶ εἰς συνήθειαν ἀφικνουμένην γίνεσθαι φιλίαν, οὐ τὴν διὰ τὸ χρήσιμον οὐδὲ τὴν διὰ τὸ ἡδύ· οὐδὲ γὰρ εὐνοια ἐπὶ τούτοις γίνεται. ὁ μὲν γὰρ εὐεργετηθεὶς ἀνθ' ὧν πέπονθεν [15] ἀπονέμει τὴν εὐνοίαν, τὰ δίκαια δρῶν· ὁ δὲ βουλόμενός τιν' εὐπραγεῖν, ἐλπίδα ἔχων εὐπορίας δι' ἐκείνου, οὐκ ἔοικ' εὐνοὺς ἐκείνῳ εἶναι, ἀλλὰ μᾶλλον ἑαυτῷ, καθάπερ οὐδὲ φίλος, εἰ θεραπεύει αὐτὸν διὰ τινα χρήσιν. ὅλως δ' εὐνοια δι' ἀρετὴν καὶ ἐπείκειάν τινα γίνεται, ὅταν τῷ φανῇ [20] καλὸς τις ἢ ἀνδρεῖος ἢ τι τοιοῦτον, καθάπερ καὶ ἐπὶ τῶν ἀγωνιστῶν εἴπομεν.

φιλικὸν δὲ καὶ ἡ ὁμόνοια φαίνεται. διόπερ οὐκ ἔστιν ὁμοδοξία· τοῦτο μὲν γὰρ καὶ ἀγνοοῦσιν ἀλλήλους ὑπάρξειεν ἂν· οὐδὲ τοὺς περὶ ὁτουοῦν ὁμογνωμονοῦντας ὁμονοεῖν φασίν, [25] οἷον τοὺς περὶ τῶν οὐρανίων (οὐ γὰρ φιλικὸν τὸ περὶ τούτων ὁμονοεῖν), ἀλλὰ τὰς πόλεις ὁμονοεῖν φασίν, ὅταν περὶ τῶν συμφερόντων ὁμογνωμονῶσι καὶ ταῦτ' αὐτὰ προαιρῶνται καὶ πράττωσι τὰ κοινῇ δόξαντα. περὶ τὰ πρακτὰ δὲ ὁμονοοῦσιν, καὶ τούτων περὶ τὰ ἐν μεγέθει καὶ ἐνδεχόμενα [30] ἀμφοῖν ὑπάρχειν ἢ πᾶσιν, οἷον αἱ πόλεις, ὅταν

πᾶσι δοκῇ τὰς ἀρχὰς αἰρετὰς εἶναι, ἢ συμμαχεῖν Λακεδαιμονίοις, ἢ ἄρχειν Πιπτακὸν ὅτε καὶ αὐτὸς ἤθελεν. ὅταν δ' ἐκάτερος ἐαυτὸν βούληται, ὥσπερ οἱ ἐν ταῖς Φοινίσσαις, στασιάζουσιν· οὐ γὰρ ἐστὶν ὁμονοεῖν τὸ αὐτὸ ἐκάτερον ἐννοεῖν [35] ὁδήποτε, ἀλλὰ τὸ ἐν τῷ αὐτῷ, οἷον ὅταν καὶ ὁ δῆμος 1167b [1] καὶ οἱ ἐπεικεῖς τοὺς ἀρίστους ἄρχειν· οὕτω γὰρ πᾶσι γίνεται οὐ ἐφίενται. πολιτικὴ δὴ φιλία φαίνεται ἢ ὁμόνοια, καθάπερ καὶ λέγεται· περὶ τὰ συμφέροντα γὰρ ἐστὶ καὶ τὰ εἰς τὸν βίον ἥκοντα. ἔστι δ' ἡ τοιαύτη ὁμόνοια [5] ἐν τοῖς ἐπεικέσιν· οὗτοι γὰρ καὶ ἐαυτοῖς ὁμονοοῦσι καὶ ἀλλήλοις, ἐπὶ τῶν αὐτῶν ὄντες ὡς εἰπεῖν τῶν τοιούτων γὰρ μένει τὰ βουλήματα καὶ οὐ μεταρρεῖ ὥσπερ εὐριπὸς, βούλονται τε τὰ δίκαια καὶ τὰ συμφέροντα, τούτων δὲ καὶ κοινῇ ἐφίενται. τοὺς δὲ φαύλους οὐχ οἷόν τε ὁμονοεῖν [10] πλὴν ἐπὶ μικρόν, καθάπερ καὶ φίλους εἶναι, πλεονεξίας ἐφιεμένους ἐν τοῖς ὠφελίμοις, ἐν δὲ τοῖς πόνοις καὶ ταῖς λειτουργίαις ἐλλείποντας· ἐαυτῷ δ' ἕκαστος βουλόμενος ταῦτα τὸν πέλας ἐξετάζει καὶ κωλύει· μὴ γὰρ τηρούντων τὸ κοινὸν ἀπόλλυται. συμβαίνει οὖν αὐτοῖς στασιάζειν, ἀλλήλους [15] μὲν ἐπαναγκάζοντας, αὐτοὺς δὲ μὴ βουλομένους τὰ δίκαια ποιεῖν.

οἱ δ' εὐεργέται τοὺς εὐεργετηθέντας δοκοῦσι μᾶλλον φιλεῖν ἢ οἱ εὖ παθόντες τοὺς δράσαντας, καὶ ὡς παρὰ λόγον γινόμενον ἐπιζητεῖται. τοῖς μὲν οὖν πλείστοις φαίνεται [20] ὅτι οἱ μὲν ὀφείλουσι τοῖς δὲ ὀφείλεται· καθάπερ οὖν ἐπὶ τῶν δανείων οἱ μὲν ὀφείλοντες βούλονται μὴ εἶναι οἷς ὀφείλουσιν, οἱ δὲ δανείσαντες καὶ ἐπιμελοῦνται τῆς τῶν ὀφειλόντων σωτηρίας, οὕτω καὶ τοὺς εὐεργετήσαντας βούλεσθαι εἶναι τοὺς παθόντας ὡς κομιουμένους τὰς χάριτας, [25] τοῖς δ' οὐκ εἶναι ἐπιμελὲς τὸ ἀνταποδοῦναι. Ἐπίχαρμος μὲν οὖν τάχ' ἂν φαίη ταῦτα λέγειν αὐτοὺς ἐκ πονηροῦ θεωμένους, ἔοικε δ' ἀνθρωπικῶ· ἀμνήμονες γὰρ οἱ πολλοί, καὶ μᾶλλον εὖ πάσχειν ἢ ποιεῖν ἐφίενται. δόξειε δ' ἂν φυσικώτερον εἶναι τὸ αἶτιον, καὶ οὐδ' ὅμοιον τὸ περὶ τοὺς [30] δανείσαντας· οὐ γὰρ ἐστὶ φίλησις περὶ ἐκείνους, ἀλλὰ τοῦ σώζεσθαι βούλησις τῆς κομιδῆς ἕνεκα· οἱ δ' εὖ πεποιηκότες φιλοῦσι καὶ ἀγαπῶσι τοὺς πεπονθότας κἂν μηδὲν ὦσι χρήσιμοι μηδ' εἰς ὕστερον γένοιντ' ἂν. ὅπερ καὶ ἐπὶ τῶν τεχνιτῶν συμβέβηκεν· πᾶς γὰρ τὸ οἰκεῖον ἔργον ἀγαπᾷ [35] μᾶλλον ἢ ἀγαπηθείη ἂν ὑπὸ τοῦ ἔργου ἐμψύχου γενομένου· 1168a [1] μάλιστα δ' ἴσως τοῦτο περὶ τοὺς ποιητὰς συμβαίνει· ὑπεραγαπῶσι γὰρ οὗτοι τὰ οἰκεῖα ποιήματα, στέργοντες ὥσπερ τέκνα. τοιούτῳ δὴ ἔοικε καὶ τὸ τῶν εὐεργετῶν· τὸ γὰρ εὖ πεπονθὸς ἔργον ἐστὶν αὐτῶν· τοῦτο δὴ ἀγαπῶσι μᾶλλον ἢ [5] τὸ ἔργον τὸν ποιήσαντα. τούτου δ' αἶτιον ὅτι τὸ εἶναι πᾶσιν αἰρετὸν καὶ φιλητόν,

ἔσμεν δ' ἐνεργείᾳ (τῷ ζῆν γὰρ καὶ πράττειν), ἐνεργείᾳ δὲ ὁ ποιήσας τὸ ἔργον ἔστι πως· στέργει δὴ τὸ ἔργον, διότι καὶ τὸ εἶναι. τοῦτο δὲ φυσικόν· ὃ γὰρ ἔστι δύναμις, τοῦτο ἐνεργείᾳ τὸ ἔργον μηνύει. ἅμα δὲ καὶ [10] τῷ μὲν εὐεργέτη καλὸν τὸ κατὰ τὴν πράξιν, ὥστε χαίρειν ἐν ᾧ τοῦτο, τῷ δὲ παθόντι οὐδὲν καλὸν ἐν τῷ δράσαντι, ἀλλ' εἴπερ, συμφέρον· τοῦτο δ' ἦττον ἢ δὴ καὶ φιλητόν. ἡδεῖα δ' ἔστι τοῦ μὲν παρόντος ἢ ἐνέργεια, τοῦ δὲ μέλλοντος ἢ ἐλπίς, τοῦ δὲ γεγεννημένου ἢ μνήμη· ἡδιστον δὲ τὸ κατὰ [15] τὴν ἐνέργειαν, καὶ φιλητόν ὁμοίως. τῷ μὲν οὖν πεποιηκότι μένει τὸ ἔργον (τὸ καλὸν γὰρ πολυχρόνιον), τῷ δὲ παθόντι τὸ χρήσιμον παροίχεται. ἢ τε μνήμη τῶν μὲν καλῶν ἡδεῖα, τῶν δὲ χρησίμων οὐ πάνυ ἢ ἦττον· ἢ προσδοκία δ' ἀνάπαλιν ἔχειν ἔοικεν. καὶ ἢ μὲν φίλησις ποιήσει ἔοικεν, [20] τὸ φιλεῖσθαι δὲ τῷ πάσχειν· τοῖς ὑπερέχουσι δὲ περὶ τὴν πράξιν ἔπεται τὸ φιλεῖν καὶ τὰ φιλικὰ. ἔτι δὲ τὰ ἐπιπόνως γενόμενα πάντες μᾶλλον στέργουσιν, οἷον καὶ τὰ χρήματα οἱ κτησάμενοι τῶν παραλαβόντων· δοκεῖ δὲ τὸ μὲν εὖ πάσχειν ἄπονον εἶναι, τὸ δ' εὖ ποιεῖν ἐργῶδες. διὰ ταῦτα [25] δὲ καὶ αἱ μητέρες φιλοτεκνότεραι· ἐπιπονωτέρα γὰρ ἢ γέννησις, καὶ μᾶλλον ἴσασις ὅτι αὐτῶν. δόξειε δ' ἂν τοῦτο καὶ τοῖς εὐεργέταις οἷον ἀπορεῖται δὲ καὶ πότερον δεῖ φιλεῖν ἑαυτὸν μάλιστα ἢ ἄλλον τινά. ἐπιτιμῶσι γὰρ τοῖς ἑαυτοὺς μάλιστ' ἀγαπῶσι, [30] καὶ ὡς ἐν αἰσχυρῷ φιλαύτους ἀποκαλοῦσι, δοκεῖ τε ὁ μὲν φαῦλος ἑαυτοῦ χάριν πάντα πράττειν, καὶ ὅσω ἂν μοχθηρότερος ἦ, τοσούτῳ μᾶλλον — ἐγκαλοῦσι δὴ αὐτῷ οἷον ὅτι οὐδὲν ἄφ' ἑαυτοῦ πράττει — ὁ δ' ἐπεικὴς διὰ τὸ καλόν, καὶ ὅσω ἂν βελτίων ἦ, μᾶλλον διὰ τὸ καλόν, καὶ φίλου ἔνεκα, [35] τὸ δ' αὐτοῦ παρήσιν. τοῖς λόγοις δὲ τούτοις τὰ ἔργα διαφωνεῖ, οὐκ ἀλόγως. 1168b [1] φασὶ γὰρ δεῖν φιλεῖν μάλιστα τὸν μάλιστα φίλον, φίλος δὲ μάλιστα ὁ βουλόμενος ὧ βούλεται τάγαθὰ ἐκείνου ἔνεκα, καὶ εἰ μηδεὶς εἴσεται· ταῦτα δ' ὑπάρχει μάλιστ' αὐτῷ πρὸς αὐτόν, καὶ τὰ λοιπὰ δὴ πάνθ' [5] οἷς ὁ φίλος ὀρίζεται· εἴρηται γὰρ ὅτι ἅπ' αὐτοῦ πάντα τὰ φιλικὰ καὶ πρὸς τοὺς ἄλλους διήκει. καὶ αἱ παροιμίαι δὲ πᾶσαι ὁμογνωμονοῦσιν, οἷον τὸ “μία ψυχὴ” καὶ “κοινὰ τὰ φίλων” καὶ “ἰσότης φιλότης” καὶ “γόνυ κνήμης ἔγγιον·” πάντα γὰρ ταῦτα πρὸς αὐτὸν μάλιστ' ἂν ὑπάρχοι· μάλιστα [10] γὰρ φίλος αὐτῷ· καὶ φιλητέον δὴ μάλισθ' ἑαυτόν. ἀπορεῖται δὴ εἰκότως ποτέροις χρεῶν ἔπεσθαι, ἀμφοῖν ἐχόντων τὸ πιστόν. ἴσως οὖν τοὺς τοιούτους δεῖ τῶν λόγων διαιρεῖν καὶ διορίζειν ἐφ' ὅσον ἑκάτεροι καὶ πῇ ἀληθεύουσιν. εἰ δὴ λάβοιμεν τὸ φίλαυτον πῶς ἑκάτεροι λέγουσιν, τάχ' ἂν γένοιτο [15] δῆλον. οἱ μὲν οὖν εἰς ὄνειδος ἄγοντες αὐτὸ φιλαύτους καλοῦσι τοὺς ἑαυτοῖς ἀπονέμοντας τὸ πλεῖον ἐν χρήμασι καὶ τιμαῖς καὶ ἡδοναῖς ταῖς σωματικαῖς· τούτων γὰρ οἱ πολλοὶ ὀρέγονται, καὶ ἐσπουδάκασιν περὶ αὐτὰ ὡς ἄριστα ὄντα, διὸ καὶ περιμάχητά ἐστιν. οἱ δὲ περὶ ταῦτα πλεονέκται χαρίζονται [20] ταῖς ἐπιθυμίαις καὶ ὅλως τοῖς πάθεσι καὶ τῷ ἀλόγῳ τῆς ψυχῆς· τοιοῦτοι δ' εἰσὶν οἱ πολλοί·



διὸ καὶ ἡ προσηγορία γεγένηται ἀπὸ τοῦ πολλοῦ φαύλου ὄντος· δικαίως δὲ τοῖς οὕτω φιλαύτοις ὀνειδίζεται. ὅτι δὲ τοὺς τὰ τοιαῦθ' αὐτοῖς ἀπονέμοντας εἰώθασιν λέγειν οἱ πολλοὶ φιλαύτους, οὐκ ἄδηλον. [25] εἰ γάρ τις ἀεὶ σπουδάζοι τὰ δίκαια πράττειν αὐτὸς μάλιστα πάντων ἢ τὰ σώφρονα ἢ ὅποιοῦν ἄλλα τῶν κατὰ τὰς ἀρετάς, καὶ ὅλως ἀεὶ τὸ καλὸν ἑαυτῷ περιποιοῖτο, οὐδεὶς ἔρεῖ τοῦτον φίλαυτον οὐδὲ ψέξει. δόξειε δ' ἂν ὁ τοιοῦτος μᾶλλον εἶναι φίλαυτος· ἀπονέμει γοῦν ἑαυτῷ τὰ κάλλιστα [30] καὶ μάλιστ' ἀγαθὰ, καὶ χαρίζεται ἑαυτοῦ τῷ κυριωτάτῳ, καὶ πάντα τούτῳ πείθεται· ὥσπερ δὲ καὶ πόλις τὸ κυριώτατον μάλιστ' εἶναι δοκεῖ καὶ πᾶν ἄλλο σύστημα, οὕτω καὶ ἄνθρωπος· καὶ φίλαυτος δὲ μάλιστα ὁ τοῦτο ἀγαπῶν καὶ τούτῳ χαριζόμενος. καὶ ἐγκρατὴς δὲ καὶ ἀκρατὴς λέγεται [35] τῷ κρατεῖν τὸν νοῦν ἢ μή, ὡς τούτου ἐκάστου ὄντος· 1169a [1] καὶ πεπραγέναι δοκοῦσιν αὐτοῖ καὶ ἐκουσίως τὰ μετὰ λόγου μάλιστα. ὅτι μὲν οὖν τοῦθ' ἕκαστός ἐστιν ἢ μάλιστα, οὐκ ἄδηλον, καὶ ὅτι ὁ ἐπαικτικὸς μάλιστα τοῦτ' ἀγαπᾷ. διὸ φίλαυτος μάλιστ' ἂν εἴη, καθ' ἕτερον εἶδος τοῦ ὀνειδιζομένου, καὶ διαφέρων [5] τοσοῦτον ὅσον τὸ κατὰ λόγον ζῆν τοῦ κατὰ πάθος, καὶ ὀρέγεσθαι ἢ τοῦ καλοῦ ἢ τοῦ δοκοῦντος συμφέρειν. τοὺς μὲν οὖν περὶ τὰς καλὰς πράξεις διαφερόντως σπουδάζοντας πάντες ἀποδέχονται καὶ ἐπαινοῦσιν· πάντων δὲ ἀμιλλωμένων πρὸς τὸ καλὸν καὶ διατεινομένων τὰ κάλλιστα πράττειν κοινῇ τ' [10] ἂν πάντ' εἴη τὰ δέοντα καὶ ἰδίᾳ ἐκάστῳ τὰ μέγιστα τῶν ἀγαθῶν, εἴπερ ἡ ἀρετὴ τοιοῦτόν ἐστιν. ὥστε τὸν μὲν ἀγαθὸν δεῖ φίλαυτον εἶναι (καὶ γὰρ αὐτὸς ὀνήσεται τὰ καλὰ πράττων καὶ τοὺς ἄλλους ὠφελήσει), τὸν δὲ μοχθηρὸν οὐ δεῖ· βλάψει γὰρ καὶ ἑαυτὸν καὶ τοὺς πέλας, φαύλοις πάθεσιν [15] ἐπόμενος. τῷ μοχθηρῷ μὲν οὖν διαφωνεῖ ἃ δεῖ πράττειν καὶ ἃ πράττει· ὁ δ' ἐπαικτικὸς, ἃ δεῖ, ταῦτα καὶ πράττει· πᾶς γὰρ νοῦς αἰρεῖται τὸ βέλτιστον ἑαυτῷ, ὁ δ' ἐπαικτικὸς πειθαρχεῖ τῷ νῷ. ἀληθὲς δὲ περὶ τοῦ σπουδαίου καὶ τὸ τῶν φίλων ἔνεκα πολλὰ πράττειν καὶ τῆς πατρίδος, κἂν δέη [20] ὑπεραποθνήσκειν· προήσεται γὰρ καὶ χρήματα καὶ τιμὰς καὶ ὅλως τὰ περιμάχητα ἀγαθὰ, περιποιούμενος ἑαυτῷ τὸ καλόν· ὀλίγον γὰρ χρόνον ἡσθῆναι σφόδρα μᾶλλον ἔλοιτ' ἂν ἢ πολὺν ἡρέμα, καὶ βιώσαι καλῶς ἑνιαυτὸν ἢ πόλλ' ἔτη τυχόντως, καὶ μίαν πρᾶξιν καλὴν καὶ μεγάλην ἢ πολλὰς [25] καὶ μικράς. τοῖς δ' ὑπεραποθνήσκουσι τοῦτ' ἴσως συμβαίνει· αἰροῦνται δὲ μέγα καλὸν ἑαυτοῖς. καὶ χρήματα προοῖντ' ἂν ἐφ' ᾧ πλείονα λήψονται οἱ φίλοι· γίνεται γὰρ τῷ μὲν φίλῳ χρήματα, αὐτῷ δὲ τὸ καλόν· τὸ δὲ μεῖζον ἀγαθὸν ἑαυτῷ ἀπονέμει. καὶ περὶ τιμὰς δὲ καὶ ἀρχὰς ὁ [30] αὐτὸς τρόπος· πάντα γὰρ τῷ φίλῳ ταῦτα προήσεται· καλὸν γὰρ αὐτῷ τοῦτο καὶ ἐπαινετόν. εἰκότως δὲ δοκεῖ σπουδαῖος εἶναι, ἀντὶ πάντων αἰρούμενος τὸ καλόν. ἐνδέχεται δὲ καὶ πράξεις τῷ φίλῳ προῖεσθαι, καὶ εἶναι κάλλιον τοῦ αὐτὸν πρᾶξαι τὸ αἴτιον τῷ φίλῳ γενέσθαι. ἐν πᾶσι δὲ τοῖς [35] ἐπαινετοῖς ὁ σπουδαῖος φαίνεται ἑαυτῷ τοῦ

καλοῦ πλέον νέμων. 1169b [1] οὕτω μὲν οὖν φίλαυτον εἶναι δεῖ, καθάπερ εἴρηται· ὥς δ' οἱ πολλοί, οὐ χρή.

ἀμφισβητεῖται δὲ καὶ περὶ τὸν εὐδαίμονα, εἰ δεήσεται φίλων ἢ μή. οὐθὲν γάρ φασι δεῖν φίλων τοῖς μακαρίοις [5] καὶ αὐτάρκεσιν· ὑπάρχειν γὰρ αὐτοῖς τὰγαθὰ· αὐτάρκεις οὖν ὄντας οὐδενὸς προσδεῖσθαι, τὸν δὲ φίλον, ἕτερον αὐτὸν ὄντα, πορίζειν ἅ δι' αὐτοῦ ἀδυνατεῖ· ὅθεν

ὅταν ὁ δαίμων εὖ διδῶ, τί δεῖ φίλων;1

ἔοικε δ' ἀτόπῳ τὸ πάντ' ἀπονέμοντας τὰγαθὰ τῷ εὐδαίμονι φίλους μὴ ἀποδιδόναι, ὃ [10] δοκεῖ τῶν ἐκτὸς ἀγαθῶν μέγιστον εἶναι. εἴ τε φίλου μᾶλλον ἐστὶ τὸ εὖ ποιεῖν ἢ πάσχειν, καὶ ἔστι τοῦ ἀγαθοῦ καὶ τῆς ἀρετῆς τὸ εὐεργετεῖν, κάλλιον δ' εὖ ποιεῖν φίλους ὀθνεῖων, τῶν εὖ πεισομένων δεήσεται ὁ σπουδαῖος. διὸ καὶ ἐπιζητεῖται πότερον ἐν εὐτυχίαις μᾶλλον δεῖ φίλων ἢ ἐν ἀτυχίαις, [15] ὥς καὶ τοῦ ἀτυχοῦντος δεομένου τῶν εὐεργετησόντων καὶ τῶν εὐτυχούντων οὓς εὖ ποιήσουσιν. ἄτοπον δ' ἴσως καὶ τὸ μονώτην ποιεῖν τὸν μακάριον· οὐδεὶς γὰρ ἔλοιτ' ἂν καθ' αὐτὸν τὰ πάντ' ἔχειν ἀγαθὰ· πολιτικὸν γὰρ ὁ ἄνθρωπος καὶ συζῆν πεφυκός. καὶ τῷ εὐδαίμονι δὴ τοῦθ' ὑπάρχει· τὰ γὰρ [20] τῇ φύσει ἀγαθὰ ἔχει, δῆλον δ' ὥς μετὰ φίλων καὶ ἐπικεικῶν κρεῖττον ἢ μετ' ὀθνεῖων καὶ τῶν τυχόντων συνημερεύειν. δεῖ ἄρα τῷ εὐδαίμονι φίλων. τί οὖν λέγουσιν οἱ πρῶτοι, καὶ πῇ ἀληθεύουσιν; ἢ ὅτι οἱ πολλοὶ φίλους οἴονται τοὺς χρησίμους εἶναι; τῶν τοιούτων μὲν οὖν οὐδὲν δεήσεται ὁ μακάριος, [25] ἐπειδὴ τὰγαθὰ ὑπάρχει αὐτῷ· οὐδὲ δὴ τῶν διὰ τὸ ἡδύ, ἢ ἐπὶ μικρόν (ἡδὺς γὰρ ὁ βίος ὣν οὐδὲν δεῖται ἐπαισάκτου ἡδονῆς)· οὐ δεόμενος δὲ τῶν τοιούτων φίλων οὐ δοκεῖ δεῖσθαι φίλων. τὸ δ' οὐκ ἔστιν ἴσως ἀληθές. ἐν ἀρχῇ γὰρ εἴρηται ὅτι ἡ εὐδαιμονία ἐνέργειά τις ἐστίν, ἢ δ' ἐνέργεια δῆλον ὅτι [30] γίνεται καὶ οὐχ ὑπάρχει ὥσπερ κτῆμά τι. εἰ δὲ τὸ εὐδαιμονεῖν ἐστὶν ἐν τῷ ζῆν καὶ ἐνεργεῖν, τοῦ δ' ἀγαθοῦ ἢ ἐνέργεια σπουδαία καὶ ἡδεῖα καθ' αὐτήν, καθάπερ ἐν ἀρχῇ εἴρηται, ἔστι δὲ καὶ τὸ οἰκεῖον τῶν ἡδέων, θεωρεῖν δὲ μᾶλλον τοὺς πέλας δυνάμεθα ἢ ἑαυτοὺς καὶ τὰς ἐκείνων πράξεις ἢ [35] τὰς οἰκείας, αἱ τῶν σπουδαίων δὲ πράξεις φίλων ὄντων ἡδεῖαι τοῖς ἀγαθοῖς 1170a [1] (ἄμφω γὰρ ἔχουσι τὰ τῇ φύσει ἡδέα)· ὁ μακάριος δὴ φίλων

τοιούτων δεήσεται, εἴπερ θεωρεῖν προαιρεῖται πράξεις ἐπικεῖς καὶ οἰκείας, τοιαῦται δ' αἱ τοῦ ἀγαθοῦ φίλου ὄντος. οἷονταί τε δεῖν ἡδέως ζῆν τὸν εὐδαίμονα. [5] μονώτῃ μὲν οὖν χαλεπὸς ὁ βίος· οὐ γὰρ ῥάδιον καθ' αὐτὸν ἐνεργεῖν συνεχῶς, μεθ' ἑτέρων δὲ καὶ πρὸς ἄλλους ῥᾶον. ἔσται οὖν ἡ ἐνέργεια συνεχεστέρα, ἡδεῖα οὕσα καθ' αὐτήν, ὃ δεῖ περὶ τὸν μακάριον εἶναι· ὁ γὰρ σπουδαῖος, ἢ σπουδαῖος, ταῖς κατ' ἀρετὴν πράξεσι χαίρει, ταῖς δ' ἀπὸ κακίας δυσχεραίνει, [10] καθάπερ ὁ μουσικὸς τοῖς καλοῖς μέλεσιν ἡδεται, ἐπὶ δὲ τοῖς φαύλοις λυπεῖται. γίνοιτο δ' ἂν καὶ ἄσκησις τις τῆς ἀρετῆς ἐκ τοῦ συζῆν τοῖς ἀγαθοῖς, καθάπερ καὶ Θεογνὶς φησιν. φυσικώτερον δ' ἐπισκοποῦσιν ἔοικεν ὁ σπουδαῖος φίλος τῷ σπουδαίῳ τῇ φύσει αἰρετὸς εἶναι. τὸ γὰρ τῇ φύσει [15] ἀγαθὸν εἴρηται ὅτι τῷ σπουδαίῳ ἀγαθὸν καὶ ἡδύ ἐστι καθ' αὐτό. τὸ δὲ ζῆν ὀρίζονται τοῖς ζώοις δυνάμει αἰσθήσεως, ἀνθρώποις δ' αἰσθήσεως ἢ νοήσεως· ἡ δὲ δύναμις εἰς τὴν ἐνέργειαν ἀνάγεται, τὸ δὲ κύριον ἐν τῇ ἐνεργείᾳ· ἔοικε δὴ τὸ ζῆν εἶναι κυρίως τὸ αἰσθάνεσθαι ἢ νοεῖν. τὸ δὲ ζῆν τῶν [20] καθ' αὐτὸ ἀγαθῶν καὶ ἡδέων· ὠρισμένον γάρ, τὸ δ' ὠρισμένον τῆς τάγαθοῦ φύσεως· τὸ δὲ τῇ φύσει ἀγαθὸν καὶ τῷ ἐπικεῖ· διόπερ ἔοικε πᾶσιν ἡδύ εἶναι· οὐ δεῖ δὲ λαμβάνειν μοχθηρὰν ζωὴν καὶ διεφθαρμένην, οὐδ' ἐν λύπαις· ἀόριστος γὰρ ἡ τοιαύτη, καθάπερ τὰ ὑπάρχοντα αὐτῇ. ἐν [25] τοῖς ἐχομένοις δὲ περὶ τῆς λύπης ἔσται φανερώτερον. εἰ δ' αὐτὸ τὸ ζῆν ἀγαθὸν καὶ ἡδύ (ἔοικε δὲ καὶ ἐκ τοῦ πάντας ὀρέγεσθαι αὐτοῦ, καὶ μάλιστα τοὺς ἐπικεῖς καὶ μακαρίους· τούτοις γὰρ ὁ βίος αἰρετώτατος, καὶ ἡ τούτων μακαριωτάτη ζωὴ), ὁ δ' ὁρῶν ὅτι ὁρᾷ αἰσθάνεται καὶ ὁ ἀκούων ὅτι ἀκούει [30] καὶ ὁ βαδίζων ὅτι βαδίζει, καὶ ἐπὶ τῶν ἄλλων ὁμοίως ἔστι τι τὸ αἰσθανόμενον ὅτι ἐνεργοῦμεν, ὥστε ἂν αἰσθανώμεθ', ὅτι αἰσθανόμεθα, κἂν νοῶμεν, ὅτι νοοῦμεν, τὸ δ' ὅτι αἰσθανόμεθα ἢ νοοῦμεν, ὅτι ἐσμέν (τὸ γὰρ εἶναι ἢν αἰσθάνεσθαι ἢ νοεῖν), 1170b [1] τὸ δ' αἰσθάνεσθαι ὅτι ζῆ, τῶν ἡδέων καθ' αὐτό (φύσει γὰρ ἀγαθὸν ζωὴ, τὸ δ' ἀγαθὸν ὑπάρχον ἐν ἑαυτῷ αἰσθάνεσθαι ἡδύ), αἰρετὸν δὲ τὸ ζῆν καὶ μάλιστα τοῖς ἀγαθοῖς, ὅτι τὸ εἶναι ἀγαθόν ἐστιν αὐτοῖς καὶ ἡδύ (συναισθανόμενοι [5] γὰρ τοῦ καθ' αὐτὸ ἀγαθοῦ ἡδονται), ὡς δὲ πρὸς ἑαυτὸν ἔχει ὁ σπουδαῖος, καὶ πρὸς τὸν φίλον (ἕτερος γὰρ αὐτὸς ὁ φίλος ἐστίν)· καθάπερ οὖν τὸ αὐτὸν εἶναι αἰρετόν ἐστιν ἐκάστω, οὕτω καὶ τὸ τὸν φίλον, ἢ παραπλησίως. τὸ δ' εἶναι ἢν αἰρετὸν διὰ τὸ αἰσθάνεσθαι αὐτοῦ ἀγαθοῦ ὄντος, ἡ δὲ τοιαύτη [10] αἴσθησις ἡδεῖα καθ' ἑαυτήν. συναισθάνεσθαι ἄρα δεῖ καὶ τοῦ φίλου ὅτι ἔστιν, τοῦτο δὲ γίνοιτ' ἂν ἐν τῷ συζῆν καὶ κοινωνεῖν λόγων καὶ διανοίας· οὕτω γὰρ ἂν δόξειε τὸ συζῆν ἐπὶ τῶν ἀνθρώπων λέγεσθαι, καὶ οὐχ ὥσπερ ἐπὶ τῶν βοσκημάτων τὸ ἐν τῷ αὐτῷ νέμεσθαι. εἰ δὴ τῷ μακαρίῳ τὸ εἶναι αἰρετόν [15] ἐστὶ καθ' αὐτό, ἀγαθὸν τῇ φύσει ὃν καὶ ἡδύ, παραπλήσιον δὲ καὶ τὸ τοῦ φίλου ἐστίν, κἂν ὁ φίλος τῶν αἰρετῶν εἴη. ὃ δ' ἐστὶν αὐτῷ αἰρετόν, τοῦτο δεῖ ὑπάρχειν αὐτῷ, ἢ

ταύτη ἐνδεὴς ἔσται. δεήσει ἄρα τῷ εὐδαιμονήσοντι φίλων σπουδαίων.

[20] ἄρ' οὖν ὥς πλείστους φίλους ποιητέον, ἢ καθάπερ ἐπὶ τῆς ξενίας ἐμμελῶς εἰρησθαι δοκεῖ μήτε πολύξεινος μήτ' ἄξεινος<sup>2</sup>, καὶ ἐπὶ τῆς φιλίας ἀρμόσει μήτ' ἀφίλον εἶναι μήτ' αὐτὸ πολύφιλον καθ' ὑπερβολήν; τοῖς μὲν δὴ πρὸς χρήσιν καὶ πάνυ δόξειεν ἀρμόζειν τὸ λεχθέν· πολλοῖς γὰρ [25] ἀνθυπηρετεῖν ἐπίπονον, καὶ οὐχ ἱκανὸς ὁ βίος αὐτὸ [τοῦτο] πράττειν. οἱ πλείους δὲ τῶν πρὸς τὸν οἰκεῖον βίον ἱκανῶν περιέργοι καὶ ἐμπόδιοι πρὸς τὸ καλῶς ζῆν· οὐθὲν οὖν δεῖ αὐτῶν. καὶ οἱ πρὸς ἡδονὴν δὲ ἀρκοῦσιν ὀλίγοι, καθάπερ ἐν τῇ τροφῇ τὸ ἥδυσμα. τοὺς δὲ σπουδαίους πότερον πλείστους [30] κατ' ἀριθμόν, ἢ ἔστι τι μέτρον καὶ φιλικὸν πλήθος, ὥσπερ πόλεως; οὔτε γὰρ ἐκ δέκα ἀνθρώπων γένοιτ' ἂν πόλις, οὔτ' ἐκ δέκα μυριάδων ἔτι πόλις ἐστίν. τὸ δὲ ποσὸν οὐκ ἔστιν ἴσως ἓν τι, ἀλλὰ πᾶν τὸ μεταξὺ τινῶν ὠρισμένων. 1171a [1] καὶ φίλων δὲ ἔστι πλῆθος ὠρισμένον, καὶ ἴσως οἱ πλεῖστοι μεθ' ὧν ἂν δύναιτό τις συζῆν· τοῦτο γὰρ ἐδόκει φιλικώτατον εἶναι. ὅτι δ' οὐχ οἷόν τε πολλοῖς συζῆν καὶ διανέμειν ἑαυτόν, οὐκ ἄδηλον. ἔτι δὲ κάκείνους δεῖ ἀλλήλοις φίλους εἶναι, εἰ μέλλουσι [5] πάντες μετ' ἀλλήλων συνημερεύειν· τοῦτο δ' ἐργῶδες ἐν πολλοῖς ὑπάρχειν. χαλεπὸν δὲ γίνεται καὶ τὸ συγχαίρειν καὶ τὸ συναλγεῖν οἰκείως πολλοῖς· εἰκὸς γὰρ συμπίπτειν ἅμα τῷ μὲν συνήδεσθαι τῷ δὲ συνάχθεσθαι. ἴσως οὖν εὖ ἔχει μὴ ζητεῖν ὥς πολυφιλότατον εἶναι, ἀλλὰ τοσούτους ὅσοι εἰς τὸ [10] συζῆν ἱκανοί· οὐδὲ γὰρ ἐνδέχεσθαι δόξειεν ἂν πολλοῖς εἶναι φίλον σφόδρα. διόπερ οὐδ' ἐρᾶν πλειόνων· ὑπερβολὴ γάρ τις εἶναι βούλεται φιλίας, τοῦτο δὲ πρὸς ἓνα· καὶ τὸ σφόδρα δὲ πρὸς ὀλίγους. οὕτω δ' ἔχειν ἔοικε καὶ ἐπὶ τῶν πραγμάτων· οὐ γίνονται γὰρ φίλοι πολλοὶ κατὰ τὴν ἐταιρικὴν [15] φιλίαν, αἱ δ' ὑμνούμεναι ἐν δυσὶ λέγονται. οἱ δὲ πολύφιλοι καὶ πᾶσιν οἰκείως ἐντυγχάνοντες οὐδενὶ δοκοῦσιν εἶναι φίλοι, πλὴν πολιτικῶς, οὐς καὶ καλοῦσιν ἀρέσκους. πολιτικῶς μὲν οὖν ἔστι πολλοῖς εἶναι φίλον καὶ μὴ ἄρεσκον ὄντα, ἀλλ' ὥς ἀληθῶς ἐπεικῇ· δι' ἀρετὴν δὲ καὶ δι' αὐτοὺς οὐκ ἔστι πρὸς [20] πολλούς, ἀγαπητὸν δὲ καὶ ὀλίγους εὐρεῖν τοιούτους.

πότερον δ' ἐν εὐτυχίαις μᾶλλον φίλων δεῖ ἢ ἐν δυστυχίαις; ἐν ἀμφοῖν γὰρ ἐπιζητοῦνται· οἳ τε γὰρ ἀτυχοῦντες δέονται ἐπικουρίας, οἳ τ' εὐτυχοῦντες συμβίων καὶ οὐς εὖ ποιήσουσιν· βούλονται γὰρ εὖ δρᾶν. ἀναγκαιότερον μὲν δὲ [25] ἐν ταῖς ἀτυχίαις, διὸ τῶν χρησίων ἐνταῦθα δεῖ, κάλλιον δ' ἐν ταῖς

εὐτυχίαις, διὸ καὶ τοὺς ἐπικεικίς ζητοῦσιν· τούτους γὰρ αἰρετώτερον εὐεργετεῖν καὶ μετὰ τούτων διάγειν. ἔστι γὰρ καὶ ἡ παρουσία αὐτῇ τῶν φίλων ἡδεῖα καὶ ἐν ταῖς εὐτυχίαις καὶ ἐν ταῖς δυστυχίαις. κουφίζονται γὰρ οἱ λυπούμενοι [30] συναλγούντων τῶν φίλων. διὸ κἂν ἀπορήσειεν τις πότερον ὥσπερ βάρους μεταλαμβάνουσιν, ἢ τοῦτο μὲν οὐ, ἡ παρουσία δ' αὐτῶν ἡδεῖα οὕσα καὶ ἡ ἔννοια τοῦ συναλγεῖν ἐλάττω τὴν λύπην ποιεῖ. εἰ μὲν οὖν διὰ ταῦτα ἢ δι' ἄλλο τι κουφίζονται, ἀφείσθω· συμβαίνειν δ' οὖν φαίνεται τὸ λεχθέν. ἔοικε δ' [35] ἡ παρουσία μικτὴ τις αὐτῶν εἶναι. αὐτὸ μὲν γὰρ τὸ ὁρᾶν τοὺς φίλους ἡδύ, 1171b [1] ἄλλως τε καὶ ἀτυχοῦντι, καὶ γίνεται τις ἐπικουρία πρὸς τὸ μὴ λυπεῖσθαι (παραμυθητικὸν γὰρ ὁ φίλος καὶ τῇ ὄψει καὶ τῷ λόγῳ, ἐὰν ἢ ἐπιδέξιός· οἶδε γὰρ τὸ ἥθος καὶ ἐφ' οἷς ἡδεῖται καὶ λυπεῖται)· τὸ δὲ λυπούμενον αἰσθάνεσθαι [5] ἐπὶ ταῖς αὐτοῦ ἀτυχίαις λυπηρόν· πᾶς γὰρ φεύγει λύπης αἴτιος εἶναι τοῖς φίλοις. διόπερ οἱ μὲν ἀνδρώδεις τὴν φύσιν εὐλαβοῦνται συλλυπεῖν τοὺς φίλους αὐτοῖς, κἂν μὴ ὑπερτείνῃ τῇ ἀλυπίᾳ, τὴν ἐκείνοις γινομένην λύπην οὐχ ὑπομένει, ὅλως τε συνθρήνους οὐ προσίεται διὰ τὸ μὴδ' αὐτὸς [10] εἶναι θρηνητικός· γυναῖα δὲ καὶ οἱ τοιοῦτοι ἄνδρες τοῖς συστένουσι χαίρουσι, καὶ φιλοῦσιν ὡς φίλους καὶ συναλγοῦντας. μιμεῖσθαι δ' ἐν ἅπασι δεῖ δῆλον ὅτι τὸν βελτίῳ. ἢ δ' ἐν ταῖς εὐτυχίαις τῶν φίλων παρουσία τὴν τε διαγωγὴν ἡδεῖαν ἔχει καὶ τὴν ἔννοιαν ὅτι ἡδονται ἐπὶ τοῖς αὐτοῦ ἀγαθοῖς.. [15] διὸ δόξειεν ἂν δεῖν εἰς μὲν τὰς εὐτυχίας καλεῖν τοὺς φίλους προθύμως (εὐεργετικὸν γὰρ εἶναι καλόν), εἰς δὲ τὰς ἀτυχίας ὀκνοῦντα· μεταδιδόναι γὰρ ὡς ἥκιστα δεῖ τῶν κακῶν, ὅθεν τὸ “ἄλις ἐγὼ δυστυχῶν.” μάλιστα δὲ παρακλητέον ὅταν μέλλωσιν ὀλίγα ὀχληθέντες μεγάλ' αὐτὸν ὠφελήσιν. [20] ἰέναι δ' ἀνάπαλιν ἴσως ἀρμόζει πρὸς μὲν τοὺς ἀτυχοῦντας ἄκλητον καὶ προθύμως (φίλου γὰρ εὖ ποιεῖν, καὶ μάλιστα τοὺς ἐν χρεῖα καὶ [τὸ] μὴ ἀξιώσαντας· ἀμφοῖν γὰρ κάλλιον καὶ ἥδιον), εἰς δὲ τὰς εὐτυχίας συνεργοῦντα μὲν προθύμως (καὶ γὰρ εἰς ταῦτα χρεῖα φίλων), πρὸς εὐπάθειαν δὲ σχολαίως· [25] οὐ γὰρ καλὸν τὸ προθυμεῖσθαι ὠφελεῖσθαι. δόξαν δ' ἀηδίας ἐν τῷ διωθεῖσθαι ἴσως εὐλαβητέον· ἐνίστε γὰρ συμβαίνει. ἡ παρουσία δὲ τῶν φίλων ἐν ἅπασιν αἰρετὴ φαίνεται.

ἄρ' οὖν, ὥσπερ τοῖς ἐρῶσι τὸ ὁρᾶν ἀγαπητότατόν ἐστι [30] καὶ μᾶλλον αἰροῦνται ταύτην τὴν αἴσθησιν ἢ τὰς λοιπὰς ὡς κατὰ ταύτην μάλιστα τοῦ ἔρωτος ὄντος καὶ γινομένου, οὕτω καὶ τοῖς φίλοις αἰρετώτατόν ἐστι τὸ συζῆν; κοινωνία γὰρ ἡ φιλία, καὶ ὡς πρὸς ἑαυτὸν ἔχει, οὕτω καὶ πρὸς τὸν φίλον· περὶ αὐτὸν δ' ἡ αἴσθησις ὅτι ἔστιν αἰρετὴ, καὶ περὶ [35] τὸν φίλον δὴ· ἢ δ'

ἐνέργεια γίνεται αὐτῆς ἐν τῷ συζῆν, 1172a [1] ὥστ' εἰκότως τούτου ἐφίενται. καὶ ὅ ποτ' ἐστὶν ἐκάστοις τὸ εἶναι ἢ οὐ χάριν αἰροῦνται τὸ ζῆν, ἐν τούτῳ μετὰ τῶν φίλων βούλονται διάγειν· διόπερ οἱ μὲν συμπίνουσιν, οἱ δὲ συγκυβεύουσιν, ἄλλοι δὲ συγγυμνάζονται καὶ συγκυνηγοῦσιν [5] ἢ συμφιλοσοφοῦσιν, ἕκαστοι ἐν τούτῳ συνημερεύοντες ὅ τι περ μάλιστ' ἀγαπῶσι τῶν ἐν τῷ βίῳ· συζῆν γὰρ βουλόμενοι μετὰ τῶν φίλων, ταῦτα ποιοῦσι καὶ τούτων κοινωνοῦσιν οἷς οἴονται συζῆν. γίνεται οὖν ἢ μὲν τῶν φαύλων φιλία μοχθηρά (κοινωνοῦσι γὰρ φαύλων ἀβέβαιοι ὄντες, καὶ μοχθηροὶ [10] δὲ γίνονται ὁμοιούμενοι ἀλλήλοις), ἢ δὲ τῶν ἐπαικῶν ἐπαικῆς, συναυξανομένη ταῖς ὁμιλίαις· δοκοῦσι δὲ καὶ βελτίους γίνεσθαι ἐνεργοῦντες καὶ διορθοῦντες ἀλλήλους· ἀπομάττονται γὰρ παρ' ἀλλήλων οἷς ἀρέσκονται, ὅθεν “ἐσθλῶν μὲν γὰρ ἅπ' ἐσθλά.” περὶ μὲν οὖν φιλίας ἐπὶ τοσοῦτον [15] εἰρήσθω· ἐπόμενον δ' ἂν εἴη διελθεῖν περὶ ἡδονῆς.

❖ εἶον εἶναι.

❖ θω.

## Βιβλίο 10

μετὰ δὲ ταῦτα περὶ ἡδονῆς ἴσως ἔπεται διελθεῖν. [20] μάλιστα γὰρ δοκεῖ συνωκειῶσθαι τῷ γένει ἡμῶν, διὸ παιδεύουσι τοὺς νέους οἰακίζοντες ἡδονῇ καὶ λύπῃ· δοκεῖ δὲ καὶ πρὸς τὴν τοῦ ἥθους ἀρετὴν μέγιστον εἶναι τὸ χαίρειν οἷς δεῖ καὶ μισεῖν ἃ δεῖ. διατείνει γὰρ ταῦτα διὰ παντός τοῦ βίου, ῥοπήν ἔχοντα καὶ δύναμιν πρὸς ἀρετὴν τε καὶ τὸν εὐδαίμονα [25] βίον· τὰ μὲν γὰρ ἡδέα προαιροῦνται, τὰ δὲ λυπηρὰ φεύγουσιν· ὑπὲρ δὲ τῶν τοιούτων ἥκιστ' ἂν δόξειε παρετέον εἶναι, ἄλλως τε καὶ πολλὴν ἐχόντων ἀμφισβήτησιν. οἳ μὲν γὰρ τἀγαθὸν ἡδονὴν λέγουσιν, οἳ δ' ἐξ ἐναντίας κομιδῇ φαῦλον, οἳ μὲν ἴσως πεπεισμένοι οὕτω καὶ ἔχειν, οἳ δὲ οἰόμενοι βέλτιον [30] εἶναι πρὸς τὸν βίον ἡμῶν ἀποφαίνειν τὴν ἡδονὴν τῶν φαύλων, καὶ εἰ μὴ ἐστίν· ῥέπειν γὰρ τοὺς πολλοὺς πρὸς αὐτὴν καὶ δουλεύειν ταῖς ἡδοναῖς, διὸ δεῖν εἰς τοῦναντίον ἄγειν· ἐλθεῖν γὰρ ἂν οὕτως ἐπὶ τὸ μέσον. μή ποτε δὲ οὐ καλῶς τοῦτο λέγεται. οἱ γὰρ περὶ τῶν ἐν τοῖς πάθεσι καὶ [35] ταῖς πράξεσι λόγοι ἡττόν εἰσι πιστοὶ τῶν ἔργων· ὅταν οὖν διαφωνῶσι τοῖς κατὰ τὴν αἴσθησιν, καταφρονούμενοι καὶ τάληθές προσαναίρουσιν· 1172b [1] ὁ γὰρ ψέγων τὴν ἡδονήν, ὀφθεῖς ποτ' ἐφίεμενος, ἀποκλίνειν δοκεῖ πρὸς αὐτὴν ὡς τοιαύτην οὔσαν ἅπασαν· τὸ διορίζειν γὰρ οὐκ ἔστι τῶν πολλῶν. εἰκόασιν οὖν οἱ ἀληθεῖς τῶν λόγων οὐ μόνον πρὸς τὸ εἰδέναι [5] χρησιμώτατοι εἶναι, ἀλλὰ καὶ πρὸς τὸν βίον· συνωδοὶ γὰρ ὄντες τοῖς ἔργοις πιστεύονται, διὸ προτρέπονται τοὺς συνιέντας ζῆν κατ' αὐτούς. τῶν μὲν οὖν τοιούτων ἄλλης· τὰ δ' εἰρημένα περὶ τῆς ἡδονῆς ἐπέλθωμεν.

εὐδοξος μὲν οὖν τὴν ἡδονὴν τἀγαθὸν ὥετ' εἶναι διὰ τὸ [10] πάνθ' ὁρᾶν ἐφίεμενα αὐτῆς, καὶ ἔλλογα καὶ ἄλογα, ἐν πᾶσι δ' εἶναι τὸ αἰρετὸν τὸ ἐπεικές, καὶ τὸ μάλιστα κράτιστον· τὸ δὲ πάντ' ἐπὶ ταῦτόν φέρεσθαι μηνύειν ὡς πᾶσι τοῦτο ἄριστον ὃν (ἕκαστον γὰρ τὸ αὐτῷ ἀγαθὸν εὐρίσκειν, ὥσπερ καὶ τροφήν), τὸ δὲ πᾶσιν ἀγαθόν, καὶ οὐ πάντ' ἐφίεται, τἀγαθὸν [15] εἶναι. ἐπιστεύοντο δ' οἱ λόγοι διὰ τὴν τοῦ ἥθους ἀρετὴν μᾶλλον ἢ δι' αὐτούς· διαφερόντως γὰρ ἐδόκει σώφρων εἶναι· οὐ δὲ ὡς φίλος τῆς ἡδονῆς ἐδόκει ταῦτα λέγειν, ἀλλ' οὕτως ἔχειν κατ' ἀλήθειαν. οὐχ ἡττον δ' ὥετ' εἶναι φανερόν ἐκ τοῦ ἐναντίου· τὴν γὰρ λύπην καθ' αὐτὸ πᾶσι φευκτὸν εἶναι, [20] ὁμοίως δὲ τοῦναντίον αἰρετόν· μάλιστα δ' εἶναι αἰρετὸν ὃ μὴ δι' ἕτερον μηδ' ἑτέρου χάριν αἰρούμεθα· τοιοῦτο δ' ὁμολογουμένως εἶναι τὴν ἡδονήν· οὐδένα

γὰρ ἐπερωτᾶν τίνος ἔνεκα ἥδεται, ὥς καθ' αὐτὴν οὕσαν αἰρετὴν τὴν ἡδονήν. προστιθεμένην τε ὁπωοῦν τῶν ἀγαθῶν αἰρετώτερον ποιεῖν, οἷον τῷ [25] δικαιοπραγεῖν καὶ σωφρονεῖν, αὕξεσθαι δὲ τὸ ἀγαθὸν αὐτῷ. ἔοικε δὲ οὗτός γε ὁ λόγος τῶν ἀγαθῶν αὐτὴν ἀποφαίνειν, καὶ οὐδὲν μᾶλλον ἑτέρου· πᾶν γὰρ μεθ' ἑτέρου ἀγαθοῦ αἰρετώτερον ἢ μονούμενον. τοιούτῳ δὲ λόγῳ καὶ Πλάτων ἀναιρεῖ ὅτι οὐκ ἔστιν ἡδονὴ τὰγαθόν· αἰρετώτερον γὰρ εἶναι [30] τὸν ἡδὺν βίον μετὰ φρονήσεως ἢ χωρίς, εἰ δὲ τὸ μικτὸν κρεῖττον, οὐκ εἶναι τὴν ἡδονὴν τὰγαθόν· οὐδενὸς γὰρ προστεθέντος αὐτῷ τὰγαθὸν αἰρετώτερον γίνεσθαι. δῆλον δ' ὡς οὐδ' ἄλλο οὐδὲν τὰγαθὸν ἂν εἴη, ὃ μετὰ τίνος τῶν καθ' αὐτὸ ἀγαθῶν αἰρετώτερον γίνεται. τί οὖν ἐστὶ τοιοῦτον, οὗ καὶ [35] ἡμεῖς κοινωνοῦμεν; τοιοῦτον γὰρ ἐπιζητεῖται. οἱ δ' ἐνιστάμενοι ὡς οὐκ ἀγαθὸν οὐ πάντ' ἐφίεται, μὴ οὐθὲν λέγουσιν. 1173a [1] ἂν γὰρ πᾶσι δοκεῖ, ταῦτ' εἶναί φαμεν· ὁ δ' ἀναιρῶν ταύτην τὴν πίστιν οὐ πάνυ πιστότερα ἔρεῖ. εἰ μὲν γὰρ τὰ ἀνόητα ὀρέγεται αὐτῶν, ἣν ἂν τι λεγόμενον, εἰ δὲ καὶ τὰ φρόνιμα, πῶς λέγοιεν ἂν τι; ἴσως δὲ καὶ ἐν τοῖς φαύλοις ἔστι τι φυσικὸν ἀγαθὸν [5] κρεῖττον ἢ καθ' αὐτά, ὃ ἐφίεται τοῦ οἰκείου ἀγαθοῦ. οὐκ ἔοικε δὲ οὐδὲ περὶ τοῦ ἐναντίου καλῶς λέγεσθαι. οὐ γάρ φασιν, εἰ ἡ λύπη κακὸν ἐστὶ, τὴν ἡδονὴν ἀγαθὸν εἶναι· ἀντικεῖσθαι γὰρ καὶ κακὸν κακῷ καὶ ἄμφω τῷ μηδετέρῳ — λέγοντες ταῦτα οὐ κακῶς, οὐ μὴν ἐπὶ γε τῶν εἰρημένων ἀληθεύοντες. [10] ἀμφοῖν γὰρ ὄντοιν <τῶν> κακῶν καὶ φευκτὰ ἔδει ἄμφω εἶναι, τῶν μηδετέρων δὲ μηδέτερον ἢ ὁμοίως· νῦν δὲ φαίνονται τὴν μὲν φεύγοντες ὡς κακόν, τὴν δ' αἰρούμενοι ὡς ἀγαθόν· οὕτω δὲ καὶ ἀντίκειται. οὐ μὴν οὐδ' εἰ μὴ τῶν ποιότητων ἐστὶν ἡ ἡδονή, διὰ τοῦτ' οὐδὲ τῶν ἀγαθῶν· οὐδὲ γὰρ αἱ τῆς [15] ἀρετῆς ἐνέργειαι ποιότητές εἰσιν, οὐδ' ἡ εὐδαιμονία. λέγουσι δὲ τὸ μὲν ἀγαθὸν ὠρίσθαι, τὴν δ' ἡδονὴν ἀόριστον εἶναι, ὅτι δέχεται τὸ μᾶλλον καὶ [τὸ] ἥττον. εἰ μὲν οὖν ἐκ τοῦ ἡδεσθαι τοῦτο κρίνουσι, καὶ περὶ τὴν δικαιοσύνην καὶ τὰς ἄλλας ἀρετάς, καθ' ἃς ἐναργῶς φασὶ μᾶλλον καὶ ἥττον τοὺς ποιοὺς ὑπάρχειν [20] καὶ <πράττειν> κατὰ τὰς ἀρετάς, ἔσται ταῦτά· δίκαιοι γὰρ εἰσι μᾶλλον καὶ ἀνδρεῖοι, ἔστι δὲ καὶ δικαιοπραγεῖν καὶ σωφρονεῖν μᾶλλον καὶ ἥττον. εἰ δὲ ταῖς ἡδοναῖς, μὴ ποτ' οὐ λέγουσι τὸ αἴτιον, ἂν ὧσιν αἱ μὲν ἀμιγεῖς αἱ δὲ μικταί. καὶ τί κωλύει, καθάπερ ὑγίεια ὠρισμένη οὕσα δέχεται τὸ μᾶλλον [25] καὶ [τὸ] ἥττον, οὕτω καὶ τὴν ἡδονήν; οὐ γὰρ ἡ αὐτὴ συμμετρία ἐν πᾶσιν ἐστὶν, οὐδ' ἐν τῷ αὐτῷ μία τις ἀεί, ἀλλ' ἀνιεμένη διαμένει ἕως τινός, καὶ διαφέρει τῷ μᾶλλον καὶ ἥττον. τοιοῦτον δὲ καὶ τὸ περὶ τὴν ἡδονὴν ἐνδέχεται εἶναι. τέλειόν τε τὰγαθὸν τιθέντες, τὰς δὲ κινήσεις καὶ τὰς γενέσεις [30] ἀτελεῖς, τὴν ἡδονὴν κίνησιν καὶ γένεσιν ἀποφαίνειν πειρῶνται. οὐ καλῶς δ' εἰκόασι λέγειν οὐδ' εἶναι κίνησιν. πάσῃ γὰρ οἰκεῖον εἶναι δοκεῖ τάχος καὶ βραδυτής, καὶ εἰ μὴ



καθ' αὐτήν, οἷον τῇ τοῦ κόσμου, πρὸς ἄλλο· τῇ δ' ἡδονῇ τούτων οὐδέτερον ὑπάρχει. ἡσθῆναι μὲν γὰρ ἔστι ταχέως ὥσπερ ὀργισθῆναι, 1173b [1] ἥδεσθαι δ' οὐ, οὐδὲ πρὸς ἕτερον, βαδίζειν δὲ καὶ αὖξασθαι καὶ πάντα τὰ τοιαῦτα. μεταβάλλειν μὲν οὖν εἰς τὴν ἡδονὴν ταχέως καὶ βραδέως ἔστιν, ἐνεργεῖν δὲ κατ' αὐτήν οὐκ ἔστι ταχέως, λέγω δ' ἥδεσθαι. γένεσις τε πῶς ἂν εἴη; [5] δοκεῖ γὰρ οὐκ ἐκ τοῦ τυχόντος τὸ τυχὸν γίνεσθαι, ἀλλ' ἐξ οὗ γίνεται, εἰς τοῦτο διαλύεσθαι· καὶ οὗ γένεσις ἢ ἡδονή, τούτου ἢ λύπη φθορά. καὶ λέγουσι δὲ τὴν μὲν λύπην ἔνδειαν τοῦ κατὰ φύσιν εἶναι, τὴν δ' ἡδονὴν ἀναπλήρωσιν. ταῦτα δὲ σωματικά ἐστὶ τὰ πάθη. εἰ δὲ ἐστὶ τοῦ κατὰ φύσιν ἀναπλήρωσις [10] ἢ ἡδονή, ἐν ᾧ ἢ ἀναπλήρωσις, τοῦτ' ἂν καὶ ἡδοίτο· τὸ σῶμα ἄρα· οὐ δοκεῖ δέ· οὐδ' ἔστιν ἄρα ἢ ἀναπλήρωσις ἡδονή, ἀλλὰ γινομένης μὲν ἀναπληρώσεως ἡδοίτ' ἂν τις, καὶ †τεμνόμενος† λυποῖτο. ἢ δόξα δ' αὕτη δοκεῖ γεγενῆσθαι ἐκ τῶν περὶ τὴν τροφήν λυπῶν καὶ ἡδονῶν· ἐνδεεῖς γὰρ γενομένους [15] καὶ προλυπηθέντας ἥδεσθαι τῇ ἀναπληρώσει. τοῦτο δ' οὐ περὶ πάσας συμβαίνει τὰς ἡδονάς· ἄλυποι γὰρ εἰσιν αἱ τε μαθηματικαὶ καὶ τῶν κατὰ τὰς αἰσθήσεις αἱ διὰ τῆς ὀσφρήσεως, καὶ ἀκροάματα δὲ καὶ ὀράματα πολλὰ καὶ μνημαὶ καὶ ἐλπίδες. τίνας οὖν αὗται γενέσεις ἔσονται; οὐδενὸς [20] γὰρ ἔνδεια γεγένηται, οὗ γένοιτ' ἂν ἀναπλήρωσις. πρὸς δὲ τοὺς προφέροντας τὰς ἐπονειδίστους τῶν ἡδονῶν λέγοι τις ἂν ὅτι οὐκ ἔστι ταῦθ' ἡδέα (οὐ γὰρ εἰ τοῖς κακῶς διακειμένοις ἡδέα ἐστίν, οἷητέον αὐτὰ καὶ ἡδέα εἶναι πλὴν τούτοις, καθάπερ οὐδὲ τὰ τοῖς κάμνουσιν ὑγιεινὰ ἢ γλυκέα ἢ πικρά, οὐδ' αὖ [25] λευκὰ τὰ φαινόμενα τοῖς ὀφθαλμοῖσιν)· ἢ οὕτω λέγοι τις ἂν, ὅτι αἱ μὲν ἡδοναὶ αἰρεταὶ εἰσιν, οὐ μὴν ἀπὸ γε τούτων, ὥσπερ καὶ τὸ πλουτεῖν, προδόντι δ' οὐ, καὶ τὸ ὑγιαίνειν, οὐ μὴν ὅτι οὖν φαγόντι· ἢ τῷ εἶδει διαφέρουσιν αἱ ἡδοναί· ἕτεραι γὰρ αἱ ἀπὸ τῶν καλῶν τῶν ἀπὸ τῶν αἰσχυρῶν, καὶ οὐκ ἔστιν ἡσθῆναι [30] τὴν τοῦ δικαίου μὴ ὄντα δίκαιον οὐδὲ τὴν τοῦ μουσικοῦ μὴ ὄντα μουσικόν, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ἐμφανίζειν δὲ δοκεῖ καὶ ὁ φίλος ἕτερος ὢν τοῦ κόλακος οὐκ οὔσαν ἀγαθὸν τὴν ἡδονὴν ἢ διαφόρους εἶδει· ὁ μὲν γὰρ πρὸς τ' ἀγαθὸν ὁμιλεῖν δοκεῖ, ὁ δὲ πρὸς ἡδονήν, καὶ τῷ μὲν ὀνειδίζεται, τὸν δ' ἐπαινοῦσιν ὡς πρὸς ἕτερα ὁμιλοῦ ❖

1174a [1] οὐδεὶς τ' ἂν ἔλοιτο ζῆν παιδίου διάνοιαν ἔχων διὰ βίου, ἡδόμενος ἐφ' οἷς τὰ παιδία ὡς οἷόν τε μάλιστα, οὐδὲ χαίρειν ποιῶν τι τῶν αἰσχίστων, μηδέποτε μέλλων λυπηθῆναι. περὶ πολλὰ τε σπουδὴν ποιησαίμεθ' [5] ἂν καὶ εἰ μηδεμίαν ἐπιφέρει ἡδονήν, οἷον ὀρᾶν, μνημονεύειν, εἰδέναι, τὰς ἀρετὰς ἔχειν. εἰ δ' ἐξ ἀνάγκης ἔπονται τούτοις ἡδοναί, οὐδὲν διαφέρει· ἐλοίμεθα γὰρ ἂν ταῦτα καὶ εἰ μὴ γίνοιτ' ἀπ' αὐτῶν ἡδονή. ὅτι μὲν οὖν οὔτε τ' ἀγαθὸν ἢ ἡδονή οὔτε πᾶσα αἰρετή, δῆλον ἔοικεν εἶναι, καὶ [10] ὅτι εἰσὶ τινες αἰρεταὶ

καθ' αὐτάς διαφέρουσαι τῷ εἶδει ἢ ἀφ' ὧν. τὰ μὲν οὖν λεγόμενα περὶ τῆς ἡδονῆς καὶ λύπης ἵκα<sup>❖</sup> τί δ' ἐστὶν ἢ ποῖόν τι, καταφανέστερον γένοιτ' ἂν ἀπ' ἀρχῆς ἀναλαβοῦσιν. δοκεῖ γὰρ ἢ μὲν ὄρασις καθ' ὄντινοῦν [15] χρόνον τελεία εἶναι· οὐ γὰρ ἐστὶν ἐνδεῆς οὐδενὸς ὃ εἰς ὕστερον γινόμενον τελειώσει αὐτῆς τὸ εἶδος· τοιούτῳ δ' ἔοικε καὶ ἡ ἡδονή. ὅλον γάρ τι ἐστί, καὶ κατ' οὐδένα χρόνον λάβοι τις ἂν ἡδονὴν ἥς ἐπὶ πλείῳ χρόνον γινομένης τελειωθήσεται τὸ εἶδος. διόπερ οὐδὲ κίνησις ἐστὶν. ἐν χρόνῳ γὰρ πᾶσα κίνησις [20] καὶ τέλους τινός, οἷον ἡ οἰκοδομική, καὶ τελεία ὅταν ποιήσῃ οὐ ἐφίεται. ἢ ἐν ἅπαντι δὴ τῷ χρόνῳ ἢ τούτῳ. ἐν δὲ τοῖς μέρεσι καὶ τῷ χρόνῳ πᾶσαι ἀτελεῖς, καὶ ἕτεραι τῷ εἶδει τῆς ὅλης καὶ ἀλλήλων. ἢ γὰρ τῶν λίθων σύνθεσις ἑτέρα τῆς τοῦ κίνου ραβδώσεως, καὶ αὐταὶ τῆς τοῦ ναοῦ ποιήσεως· καὶ [25] ἢ μὲν τοῦ ναοῦ τελεία (οὐδενὸς γὰρ ἐνδεῆς πρὸς τὸ προκείμενον), ἢ δὲ τῆς κρηπίδος καὶ τοῦ τριγλύφου ἀτελής· μέρους γὰρ ἑκατέρα. τῷ εἶδει οὖν διαφέρουσι, καὶ οὐκ ἐστὶν ἐν ὁπωοῦν χρόνῳ λαβεῖν κίνησιν τελείαν τῷ εἶδει, ἀλλ' εἴπερ, ἐν τῷ ἅπαντι. ὁμοίως δὲ καὶ ἐπὶ βαδίσεως καὶ τῶν λοιπῶν. εἰ [30] γὰρ ἐστὶν ἢ φορὰ κίνησις πόθεν ποῖ, καὶ ταύτης διαφοραὶ κατ' εἶδη, πτῆσις βάδις αἷσις καὶ τὰ τοιαῦτα. οὐ μόνον δ' οὕτως, ἀλλὰ καὶ ἐν αὐτῇ τῇ βαδίσει· τὸ γὰρ πόθεν ποῖ οὐ τὸ αὐτὸ ἐν τῷ σταδίῳ καὶ ἐν τῷ μέρει, καὶ ἐν ἑτέρῳ μέρει καὶ ἐν ἑτέρῳ, οὐδὲ τὸ διεξιέναι τὴν γραμμὴν τήνδε κάκείνην· 1174b [1] οὐ μόνον γὰρ γραμμὴν διαπορεύεται, ἀλλὰ καὶ ἐν τόπῳ οὔσαν, ἐν ἑτέρῳ δ' αὕτη ἐκείνης. δι' ἀκριβείας μὲν οὖν περὶ κινήσεως ἐν ἄλλοις εἴρηται, ἔοικε δ' οὐκ ἐν ἅπαντι χρόνῳ τελεία εἶναι, ἀλλ' αἱ πολλαὶ ἀτελεῖς καὶ διαφέρουσαι τῷ [5] εἶδει, εἴπερ τὸ πόθεν ποῖ εἰδοποιόν. τῆς ἡδονῆς δ' ἐν ὁπωοῦν χρόνῳ τέλειον τὸ εἶδος. δῆλον οὖν ὡς ἕτεραί τ' ἂν εἶεν ἀλλήλων, καὶ τῶν ὅλων τι καὶ τελείων ἢ ἡδονή. δόξειε δ' ἂν τοῦτο καὶ ἐκ τοῦ μὴ ἐνδέχεσθαι κινεῖσθαι μὴ ἐν χρόνῳ, ἥδεσθαι δέ· τὸ γὰρ ἐν τῷ νῦν ὅλον τι. ἐκ τούτων δὲ δῆλον καὶ [10] ὅτι οὐ καλῶς λέγουσι κίνησιν ἢ γένεσιν εἶναι τὴν ἡδονήν. οὐ γὰρ πάντων ταῦτα λέγεται, ἀλλὰ τῶν μεριστῶν καὶ μὴ ὅλων· οὐδὲ γὰρ ὁράσεώς ἐστι γένεσις οὐδὲ στιγμῆς οὐδὲ μονάδος, οὐδὲ τούτων οὐθὲν κίνησις οὐδὲ γένεσις· οὐδὲ δὴ ἡδονῆς· ὅλον γάρ τι. αἰσθήσεως δὲ πάσης πρὸς τὸ αἰσθητὸν ἐνεργούσης, [15] τελείως δὲ τῆς εὖ διακειμένης πρὸς τὸ κάλλιστον τῶν ὑπὸ τὴν αἰσθησὶν τοιοῦτον γὰρ μάλιστ' εἶναι δοκεῖ ἢ τελεία ἐνέργεια· αὐτὴν δὲ λέγειν ἐνεργεῖν, ἢ ἐν ᾧ ἐστί, μὴθὲν διαφερέτω, καθ' ἑκάστην δὴ βελτίστη ἐστὶν ἢ ἐνέργεια τοῦ ἄριστα διακειμένου πρὸς τὸ κράτιστον τῶν ὑπ' αὐτήν. αὕτη δ' ἂν [20] τελειοτάτη εἴη καὶ ἡδίστη. κατὰ πᾶσαν γὰρ αἰσθησὶν ἐστὶν ἡδονή, ὁμοίως δὲ καὶ διάνοιαν καὶ θεωρίαν, ἡδίστη δ' ἢ τελειοτάτη, τελειοτάτη δ' ἢ τοῦ εὖ ἔχοντος πρὸς τὸ σπουδαιότατον τῶν ὑπ' αὐτήν· τελειοῖ δὲ τὴν ἐνέργειαν ἢ ἡδονή. οὐ τὸν αὐτὸν δὲ τρόπον ἢ τε

ἡδονὴ τελειοῖ καὶ τὸ αἰσθητόν τε [25] καὶ ἡ αἴσθησις, σπουδαῖα ὄντα, ὥσπερ οὐδ' ἡ ὑγίεια καὶ ὁ ἰατρὸς ὁμοίως αἰτία ἐστὶ τοῦ ὑγιαίνειν. καθ' ἑκάστην δ' αἴσθησιν ὅτι γίνεται ἡδονή, δῆλον (φαμέν γὰρ ὁράματα καὶ ἀκούσματα εἶναι ἡδέα)· δῆλον δὲ καὶ ὅτι μάλιστα, ἐπειδὴν ἢ τε αἴσθησις ἢ κρατίστη καὶ πρὸς τοιοῦτον ἐνεργῇ· τοιούτων δ' [30] ὄντων τοῦ τε αἰσθητοῦ καὶ τοῦ αἰσθανομένου, ἀεὶ ἔσται ἡδονὴ ὑπάρχοντός γε τοῦ τε ποιήσοντος καὶ τοῦ πεισομένου. τελειοῖ δὲ τὴν ἐνέργειαν ἡ ἡδονὴ οὐχ ὥς ἡ ἔξις ἐνυπάρχουσα, ἀλλ' ὥς ἐπιγινόμενόν τι τέλος, οἷον τοῖς ἀκμαίοις ἡ ὥρα. ἕως ἂν οὖν τό τε νοητὸν ἢ αἰσθητὸν ἢ οἷον δεῖ καὶ τὸ κρῖνον ἢ θεωροῦν, 1175a [1] ἔσται ἐν τῇ ἐνεργείᾳ ἡ ἡδονή· ὁμοίων γὰρ ὄντων καὶ πρὸς ἄλληλα τὸν αὐτὸν τρόπον ἐχόντων τοῦ τε παθητικοῦ καὶ τοῦ ποιητικοῦ ταῦτό πέφυκε γίνεσθαι. πῶς οὖν οὐδεὶς συνεχῶς ἥδεται; ἢ κάμνει; πάντα γὰρ τὰ ἀνθρώπεια ἀδυνατεῖ [5] συνεχῶς ἐνεργεῖν. οὐ γίνεται οὖν οὐδ' ἡδονή· ἔπεται γὰρ τῇ ἐνεργείᾳ. ἔνια δὲ τέρπει καινὰ ὄντα, ὕστερον δὲ οὐχ ὁμοίως διὰ ταῦτό· τὸ μὲν γὰρ πρῶτον παρακέκληται ἡ διάνοια καὶ διατεταμένως περὶ αὐτὰ ἐνεργεῖ, ὥσπερ κατὰ τὴν ὄψιν οἱ ἐμβλέποντες, μετέπειτα δ' οὐ τοιαύτη ἡ ἐνέργεια ἀλλὰ [10] παρημελημένη· διὸ καὶ ἡ ἡδονὴ ἀμαυροῦται. ὀρέγεσθαι δὲ τῆς ἡδονῆς οἰηθεῖ τις ἂν ἅπαντας, ὅτι καὶ τοῦ ζῆν ἅπαντες ἐφίενται· ἡ δὲ ζωὴ ἐνέργειά τις ἐστὶ, καὶ ἕκαστος περὶ ταῦτα καὶ τούτοις ἐνεργεῖ ἃ καὶ μάλιστ' ἀγαπᾷ, οἷον ὁ μὲν μουσικὸς τῇ ἀκοῇ περὶ τὰ μέλη, ὁ δὲ φιλομαθὴς τῇ διανοίᾳ περὶ τὰ [15] θεωρήματα, οὕτω δὲ καὶ τῶν λοιπῶν ἕκαστος· ἡ δ' ἡδονὴ τελειοῖ τὰς ἐνεργείας, καὶ τὸ ζῆν δὴ, οὗ ὀρέγονται. εὐλόγως οὖν καὶ τῆς ἡδονῆς ἐφίενται· τελειοῖ γὰρ ἑκάστῳ τὸ ζῆν, αἰρετὸν ὄν. πότερον δὲ διὰ τὴν ἡδονὴν τὸ ζῆν αἰρούμεθα ἢ διὰ τὸ ζῆν τὴν ἡδονήν, ἀφείσθω ἐν τῷ παρόντι. συνεξεῦχθαι μὲν γὰρ ταῦτα [20] φαίνεται καὶ χωρισμὸν οὐ δέχεσθαι· ἄνευ τε γὰρ ἐνεργείας οὐ γίνεται ἡδονή, πᾶσάν τε ἐνέργειαν τελειοῖ ἡ ἡδονή. ὅθεν δοκοῦσι καὶ τῷ εἶδει διαφέρειν. τὰ γὰρ ἕτερα τῷ εἶδει ὑφ' ἐτέρων οἰόμεθα τελειοῦσθαι (οὕτω γὰρ φαίνεται καὶ τὰ φυσικὰ καὶ τὰ ὑπὸ τέχνης, οἷον ζῶα καὶ δένδρα καὶ γραφή καὶ ἄγαλμα [25] καὶ οἰκία καὶ σκεῦος)· ὁμοίως δὲ καὶ τὰς ἐνεργείας τὰς διαφορούσας τῷ εἶδει ὑπὸ διαφερόντων εἶδει τελειοῦσθαι. διαφέρουσι δ' αἱ τῆς διανοίας τῶν κατὰ τὰς αἰσθήσεις καὶ αὐταὶ ἀλλήλων κατ' εἶδος· καὶ αἱ τελειοῦσαι δὴ ἡδοναί. φανείη δ' ἂν τοῦτο καὶ ἐκ τοῦ συνωκειῶσθαι τῶν ἡδονῶν ἑκάστην [30] τῇ ἐνεργείᾳ ἣν τελειοῖ. συναύξει γὰρ τὴν ἐνέργειαν ἡ οἰκεία ἡδονή. μᾶλλον γὰρ ἕκαστα κρίνουσι καὶ ἐξακριβοῦσιν οἱ μεθ' ἡδονῆς ἐνεργοῦντες, οἷον γεωμετρικοὶ γίνονται οἱ χαίροντες τῷ γεωμετρεῖν, καὶ κατανοοῦσιν ἕκαστα μᾶλλον, ὁμοίως δὲ καὶ οἱ φιλόμουσοι καὶ φιλοικοδόμοι καὶ τῶν ἄλλων [35] ἕκαστοι ἐπιδιδόασιν εἰς τὸ οἰκεῖον ἔργον χαίροντες αὐτῷ· συναύξουσι δὲ αἱ ἡδοναί, τὰ δὲ συναύξοντα οἰκεῖα· 1175b [1] τοῖς ἐτέροις δὲ τῷ εἶδει καὶ τὰ οἰκεῖα ἕτερα τῷ εἶδει. ἔτι δὲ μᾶλλον τοῦτ' ἂν

φανείη ἐκ τοῦ τὰς ἀφ' ἐτέρων ἡδονὰς ἐμποδίου ταῖς ἐνεργείαις εἶναι. οἱ γὰρ φίλαυλοι ἀδυνατοῦσι τοῖς λόγοις προσέχειν, ἐὰν κατακούσωσιν ἀύλοῦντος, μᾶλλον χαίροντες [5] ἀύλητικῇ τῆς παρούσης ἐνεργείας· ἢ κατὰ τὴν ἀύλητικὴν οὖν ἡδονὴν τὴν περὶ τὸν λόγον ἐνεργεῖαν φθείρει. ὁμοίως δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων συμβαίνει, ὅταν ἅμα περὶ δύο ἐνεργῇ· ἢ γὰρ ἡδίων τὴν ἐτέραν ἐκκρούει, κἂν πολὺ διαφέρῃ κατὰ τὴν ἡδονήν, μᾶλλον, ὥστε μὴδ' ἐνεργεῖν κατὰ [10] τὴν ἐτέραν. διὸ χαίροντες ὁτωοῦν σφόδρα οὐ πάνυ δρῶμεν ἕτερον, καὶ ἄλλα ποιοῦμεν ἄλλοις ἡρέμα ἀρεσκόμενοι, οἷον καὶ ἐν τοῖς θεάτροις οἱ τραγηματίζοντες, ὅταν φαῦλοι οἱ ἀγωνιζόμενοι ᾤσι, τότε μάλιστα αὐτὸ δρῶσιν. ἐπεὶ δ' ἢ μὲν οἰκεία ἡδονὴ ἐξακριβοῖ τὰς ἐνεργείας καὶ χρονιωτέρας καὶ [15] βελτίους ποιεῖ, αἱ δ' ἀλλότριαι λυμαίνονται, δῆλον ὡς πολὺ διεστᾶσιν. σχεδὸν γὰρ αἱ ἀλλότριαι ἡδοναὶ ποιοῦσιν ὅπερ αἱ οἰκεῖαι λῦπαι· φθείρουσι γὰρ τὰς ἐνεργείας αἱ οἰκεῖαι λῦπαι, οἷον εἴ τῳ τὸ γράφειν ἀηδὲς καὶ ἐπίλυπον ἢ τὸ λογίζεσθαι· ὃ μὲν γὰρ οὐ γράφει, ὃ δ' οὐ λογίζεται, λυπηρᾶς οὔσης τῆς [20] ἐνεργείας. συμβαίνει δὲ περὶ τῆς ἐνεργείας τοῦναντίον ἀπὸ τῶν οἰκείων ἡδονῶν τε καὶ λυπῶν· οἰκεῖαι δ' εἰσὶν αἱ ἐπὶ τῇ ἐνεργείᾳ καθ' αὐτὴν γινόμεναι. αἱ δ' ἀλλότριαι ἡδοναὶ εἴρηται ὅτι παραπλήσιόν τι τῇ λύπῃ ποιοῦσιν· φθείρουσι γάρ, πλὴν οὐχ ὁμοίως. διαφερουσῶν δὲ τῶν ἐνεργειῶν ἐπεικεῖα [25] καὶ φαυλότητι, καὶ τῶν μὲν αἰρετῶν οὐσῶν τῶν δὲ φευκτῶν τῶν δ' οὐδετέρων, ὁμοίως ἔχουσι καὶ αἱ ἡδοναί· καθ' ἐκάστην γὰρ ἐνεργεῖαν οἰκεία ἡδονὴ ἔστιν. ἢ μὲν οὖν τῇ σπουδαίᾳ οἰκεία ἐπεικὴς, ἢ δὲ τῇ φαύλῃ μοχθηρά· καὶ γὰρ αἱ ἐπιθυμίαι τῶν μὲν καλῶν ἐπαινεταί, τῶν δ' αἰσχυρῶν ψεκταί. [30] οἰκειότεραι δὲ ταῖς ἐνεργείαις αἱ ἐν αὐταῖς ἡδοναὶ τῶν ὀρέξεων· αἱ μὲν γὰρ διωρισμέναι εἰσὶ καὶ τοῖς χρόνοις καὶ τῇ φύσει, αἱ δὲ σύνεγγυς ταῖς ἐνεργείαις, καὶ ἀδιόριστοι οὕτως ὥστ' ἔχειν ἀμφισβήτησιν εἰ ταῦτόν ἐστιν ἡ ἐνεργεῖα τῇ ἡδονῇ. οὐ μὴν ἔοικέ γε ἡ ἡδονὴ διάνοια εἶναι οὐδ' αἴσθησις (ἄτοπον [35] γάρ), ἀλλὰ διὰ τὸ μὴ χωρίζεσθαι φαίνεται τισι ταῦτόν. ὥσπερ οὖν αἱ ἐνεργεῖαι ἕτεραι, καὶ αἱ ἡδοναί. 1176a [1] διαφέρει δὲ ἡ ὄψις ἀφῆς καθαριότητι, καὶ ἀκοὴ καὶ ὁσφρησις γεύσεως· ὁμοίως δὲ διαφέρουσι καὶ αἱ ἡδοναί, καὶ τούτων αἱ περὶ τὴν διάνοιαν, καὶ ἐκάτεραι ἀλλήλων. δοκεῖ δ' εἶναι ἐκάστῳ ζῳῳ καὶ ἡδονὴ οἰκεία, ὥσπερ καὶ ἔργον· ἢ γὰρ κατὰ τὴν ἐνεργεῖαν. [5] καὶ ἐφ' ἐκάστῳ δὲ θεωροῦντι τοῦτ' ἂν φανείη· ἕτερα γὰρ ἵππου ἡδονὴ καὶ κυνὸς καὶ ἀνθρώπου, καθάπερ Ἡράκλειτός φησιν ὄνους σύρματ' ἂν ἐλέσθαι μᾶλλον ἢ χρυσόν· ἥδιον γὰρ χρυσοῦ τροφὴ ὄνοις. αἱ μὲν οὖν τῶν ἐτέρων τῷ εἶδει διαφέρουσιν εἶδει, τὰς δὲ τῶν αὐτῶν ἀδιαφόρους εὐλογον εἶναι. [10] διαλλάττουσι δ' οὐ σμικρὸν ἐπὶ γε τῶν ἀνθρώπων· τὰ γὰρ αὐτὰ τοὺς μὲν τέρπει τοὺς δὲ λυπεῖ, καὶ τοῖς μὲν λυπηρὰ καὶ μισητὰ ἐστὶ τοῖς δὲ ἡδέα καὶ φιλητά. καὶ ἐπὶ

γλυκέων δὲ τοῦτο συμβαίνει· οὐ γὰρ τὰ αὐτὰ δοκεῖ τῷ πυρέττοντι καὶ τῷ ὑγιαίνοντι, οὐδὲ θερμὸν εἶναι τῷ ἀσθενεῖ καὶ τῷ [15] εὐεκτικῷ. ὁμοίως δὲ τοῦτο καὶ ἐφ' ἐτέρων συμβαίνει. δοκεῖ δ' ἐν ἅπασιν τοῖς τοιούτοις εἶναι τὸ φαινόμενον τῷ σπουδαίῳ. εἰ δὲ τοῦτο καλῶς λέγεται, καθάπερ δοκεῖ, καὶ ἔστιν ἐκάστου μέτρον ἡ ἀρετὴ καὶ ἀγαθός, ἢ τοιοῦτος, καὶ ἡδοναὶ εἶεν ἂν αἱ τούτῳ φαινόμεναι καὶ ἡδέα οἷς οὗτος χαίρει. [20] τὰ δὲ τούτῳ δυσχερῇ εἴ τῳ φαίνεται ἡδέα, οὐδὲν θαυμαστόν· πολλὰ γὰρ φθορὰ καὶ λῦμαι ἀνθρώπων γίνονται· ἡδέα δ' οὐκ ἔστιν, ἀλλὰ τούτοις καὶ οὕτω διακειμένοις. τὰς μὲν οὖν ὁμολογουμένως αἰσχροὺς δῆλον ὡς οὐ φατέον ἡδονὰς εἶναι, πλὴν τοῖς διεφθαρμένοις· τῶν δ' ἐπικειμένων εἶναι δοκουσῶν ποίαν ἢ [25] τίνα φατέον τοῦ ἀνθρώπου εἶναι; ἢ ἐκ τῶν ἐνεργειῶν δῆλον; ταύταις γὰρ ἔπονται αἱ ἡδοναί. εἴτ' οὖν μία ἐστὶν εἴτε πλείους αἱ τοῦ τελείου καὶ μακαρίου ἀνδρός, αἱ ταύτας τελειοῦσαι ἡδοναὶ κυρίως λέγοντ' ἂν ἀνθρώπου ἡδοναὶ εἶναι, αἱ δὲ λοιπαὶ δευτέρως καὶ πολλοστῶς, ὥσπερ αἱ ἐνέργειαι.

[30] εἰρημένων δὲ τῶν περὶ τὰς ἀρετὰς τε καὶ φιλίας καὶ ἡδονὰς, λοιπὸν περὶ εὐδαιμονίας τύπῳ διελθεῖν, ἐπειδὴ τέλος αὐτὴν τίθεμεν τῶν ἀνθρωπίνων. ἀναλαβοῦσι δὲ τὰ προειρημένα συντομώτερος ἂν εἴη ὁ λόγος. εἵπομεν δὲ ὅτι οὐκ ἔστιν ἕξις· καὶ γὰρ τῷ καθεύδοντι διὰ βίου ὑπάρχοντι ἂν, φυτῶν [35] ζῶντι βίον, καὶ τῷ δυστυχοῦντι τὰ μέγιστα. 1176b [1] εἰ δὲ ταῦτα μὴ ἀρέσκει, ἀλλὰ μᾶλλον εἰς ἐνέργειάν τινα θετέον, καθάπερ ἐν τοῖς πρότερον εἴρηται, τῶν δ' ἐνεργειῶν αἱ μὲν εἰσιν ἀναγκαῖαι καὶ δι' ἕτερα αἰρεταὶ αἱ δὲ καθ' αὐτάς, δῆλον ὅτι τὴν εὐδαιμονίαν τῶν καθ' αὐτάς αἰρετῶν τινὰ θετέον καὶ [5] οὐ τῶν δι' ἄλλο· οὐδενὸς γὰρ ἐνδεῆς ἡ εὐδαιμονία ἀλλ' αὐτάρκης. καθ' αὐτάς δ' εἰσὶν αἰρεταὶ ἀφ' ὧν μηδὲν ἐπιζητεῖται παρὰ τὴν ἐνέργειαν. τοιαῦται δ' εἶναι δοκοῦσιν αἱ κατ' ἀρετὴν πράξεις· τὰ γὰρ καλὰ καὶ σπουδαῖα πράττειν τῶν δι' αὐτὰ αἰρετῶν. καὶ τῶν παιδιῶν δὲ αἱ ἡδεῖαι· οὐ γὰρ δι' [10] ἕτερα αὐτάς αἰροῦνται· βλάπτονται γὰρ ἀπ' αὐτῶν μᾶλλον ἢ ὠφελοῦνται, ἀμελοῦντες τῶν σωμάτων καὶ τῆς κτήσεως. καταφεύγουσι δ' ἐπὶ τὰς τοιαύτας διαγωγὰς τῶν εὐδαιμονιζομένων οἱ πολλοί, διὸ παρὰ τοῖς τυράννοις εὐδοκιμοῦσιν οἱ ἐν ταῖς τοιαύταις διαγωγαῖς εὐτράπελοι· ὧν γὰρ ἐφίενται, [15] ἐν τούτοις παρέχουσι σφᾶς αὐτοὺς ἡδεῖς, δέονται δὲ τοιούτων. δοκεῖ μὲν οὖν εὐδαιμονικὰ ταῦτα εἶναι διὰ τὸ τοὺς ἐν δυναστείαις ἐν τούτοις ἀποσχολάζειν, οὐδὲν δ' ἴσως σημεῖον οἷ τοιοῦτοῖ εἰσιν· οὐ γὰρ ἐν τῷ δυναστεύειν ἡ ἀρετὴ οὐδ' ὁ νοῦς, ἀφ' ὧν αἱ σπουδαῖαι ἐνέργειαι· οὐδ' εἰ ἄγευστοι οὗτοι ὄντες [20] ἡδονῆς εἰλικρινοῦς καὶ ἐλευθερίου ἐπὶ τὰς σωματικὰς καταφεύγουσιν, διὰ τοῦτο ταύτας οἰητέον αἰρετωτέρας εἶναι· καὶ γὰρ οἱ παῖδες τὰ παρ' αὐτοῖς τιμώμενα κράτιστα οἶονται εἶναι. εὐλογον δὲ,

ὥσπερ παισὶ καὶ ἀνδράσιν ἕτερα φαίνεται τίμια, οὕτω καὶ φαύλοις καὶ ἐπεικέσιν. καθάπερ οὖν [25] πολλάκις εἴρηται, καὶ τίμια καὶ ἡδέα ἐστὶ τὰ τῷ σπουδαίῳ τοιαῦτα ὄντα· ἐκάστω δ' ἡ κατὰ τὴν οἰκείαν ἕξιν αἰρετωτάτη ἐνέργεια, καὶ τῷ σπουδαίῳ δὴ ἡ κατὰ τὴν ἀρετὴν. οὐκ ἐν παιδιᾷ ἄρα ἡ εὐδαιμονία· καὶ γὰρ ἄτοπον τὸ τέλος εἶναι παιδιάν, καὶ πραγματεύεσθαι καὶ κακοπαθεῖν τὸν βίον [30] ἅπαντα τοῦ παίζειν χάριν. ἅπαντα γὰρ ὡς εἰπεῖν ἑτέρου ἔνεκα αἰρούμεθα πλὴν τῆς εὐδαιμονίας· τέλος γὰρ αὕτη. σπουδάζειν δὲ καὶ πονεῖν παιδιᾷς χάριν ἡλίθιον φαίνεται καὶ λίαν παιδικόν. παίζειν δ' ὅπως σπουδάζῃ, κατ' Ἀνάχαρσιν, ὀρθῶς ἔχειν δοκεῖ· ἀναπαύσει γὰρ ἔοικεν ἡ παιδιά, ἀδυνατοῦντες [35] δὲ συνεχῶς πονεῖν ἀναπαύσεως δέονται. οὐ δὴ τέλος ἡ ἀνάπαυσις· 1177a [1] γίνεται γὰρ ἔνεκα τῆς ἐνεργείας. δοκεῖ δ' ὁ εὐδαίμων βίος κατ' ἀρετὴν εἶναι· οὗτος δὲ μετὰ σπουδῆς, ἀλλ' οὐκ ἐν παιδιᾷ. βελτίω τε λέγομεν τὰ σπουδαῖα τῶν γελοίων καὶ μετὰ παιδιᾷς, καὶ τοῦ βελτίονος ἀεὶ καὶ [5] μορίου καὶ ἀνθρώπου σπουδαιοτέραν τὴν ἐνέργειαν· ἡ δὲ τοῦ βελτίονος κρείττων καὶ εὐδαιμονικωτέρα ἤδη. ἀπολαύσειέ τ' ἂν τῶν σωματικῶν ἡδονῶν ὁ τυχὼν καὶ ἀνδράποδον οὐχ ἥττον τοῦ ἀρίστου· εὐδαιμονίας δ' οὐδεὶς ἀνδραπόδῳ μεταδίδωσιν, εἰ μὴ καὶ βίου. οὐ γὰρ ἐν ταῖς τοιαύταις διαγωγαῖς ἡ [10] εὐδαιμονία, ἀλλ' ἐν ταῖς κατ' ἀρετὴν ἐνεργείαις, καθάπερ καὶ πρότερον εἴρηται.

εἰ δ' ἐστὶν ἡ εὐδαιμονία κατ' ἀρετὴν ἐνέργεια, εὐλογον κατὰ τὴν κρατίστην· αὕτη δ' ἂν εἴη τοῦ ἀρίστου. εἴτε δὴ νοῦς τοῦτο εἴτε ἄλλο τι, ὃ δὴ κατὰ φύσιν δοκεῖ ἄρχειν καὶ ἡγεῖσθαι [15] καὶ ἔννοιαν ἔχειν περὶ καλῶν καὶ θείων, εἴτε θεῖον ὃν καὶ αὐτὸ εἴτε τῶν ἐν ἡμῖν τὸ θεϊότατον, ἡ τούτου ἐνέργεια κατὰ τὴν οἰκείαν ἀρετὴν εἴη ἂν ἡ τελεία εὐδαιμονία. ὅτι δ' ἐστὶ θεωρητική, εἴρηται. ὁμολογούμενον δὲ τοῦτ' ἂν δόξειεν εἶναι καὶ τοῖς πρότερον καὶ τῷ ἀληθεῖ. κρατίστη τε γὰρ [20] αὕτη ἐστὶν ἡ ἐνέργεια (καὶ γὰρ ὁ νοῦς τῶν ἐν ἡμῖν, καὶ τῶν γνωστῶν, περὶ ᾧ ὁ νοῦς)· ἔτι δὲ συνεχεστάτη· θεωρεῖν [τε] γὰρ δυνάμεθα συνεχῶς μᾶλλον ἢ πράττειν ὅτιοῦν. οἴομεθά τε δεῖν ἡδονὴν παραμεμῖχθαι τῇ εὐδαιμονίᾳ, ἡδίστη δὲ τῶν κατ' ἀρετὴν ἐνεργειῶν ἡ κατὰ τὴν σοφίαν ὁμολογουμένως [25] ἐστίν· δοκεῖ γοῦν ἡ φιλοσοφία θαυμαστάς ἡδονὰς ἔχειν καθαριότητι καὶ τῷ βεβαίῳ, εὐλογον δὲ τοῖς εἰδόσι τῶν ζητούντων ἡδίω τὴν διαγωγὴν εἶναι. ἢ τε λεγομένη αὐτάρκεια περὶ τὴν θεωρητικὴν μάλιστ' ἂν εἴη· τῶν μὲν γὰρ πρὸς τὸ ζῆν ἀναγκαίων καὶ σοφὸς καὶ δίκαιος καὶ οἱ λοιποὶ δέονται, [30] τοῖς δὲ τοιούτοις ἱκανῶς κεχορηγημένων ὁ μὲν δίκαιος δεῖται πρὸς οὓς δικαιοπραγήσει καὶ μεθ' ὧν, ὁμοίως δὲ καὶ ὁ σώφρων καὶ ὁ

ἀνδρεῖος καὶ τῶν ἄλλων ἕκαστος, ὁ δὲ σοφὸς καὶ καθ' αὐτὸν ὢν δύναται θεωρεῖν, καὶ ὅσω ἂν σοφώτερος ᾖ, μᾶλλον· βέλτιον δ' ἴσως συνεργοὺς ἔχων, ἄλλ' ὅμως αὐταρκέστατος. 1177b [1] δόξαι τ' ἂν αὐτὴ μόνη δι' αὐτὴν ἀγαπᾶσθαι· οὐδὲν γὰρ ἀπ' αὐτῆς γίνεται παρὰ τὸ θεωρῆσαι, ἀπὸ δὲ τῶν πρακτικῶν ἢ πλεῖον ἢ ἔλαττον περιποιούμεθα παρὰ τὴν πράξιν. δοκεῖ τε ἡ εὐδαιμονία ἐν τῇ σχολῇ εἶναι· ἀσχολούμεθα [5] γὰρ ἵνα σχολάζωμεν, καὶ πολεμοῦμεν ἵν' εἰρήνην ἄγωμεν. τῶν μὲν οὖν πρακτικῶν ἀρετῶν ἐν τοῖς πολιτικοῖς ἢ ἐν τοῖς πολεμικοῖς ἡ ἐνέργεια, αἱ δὲ περὶ ταῦτα πράξεις δοκοῦσιν ἀσχολοὶ εἶναι, αἱ μὲν πολεμικαὶ καὶ παντελῶς (οὐδεὶς γὰρ αἰρεῖται τὸ πολεμεῖν τοῦ πολεμεῖν ἕνεκα, οὐδὲ [10] παρασκευάζει πόλεμον· δόξαι γὰρ ἂν παντελῶς μαιφόνος τις εἶναι, εἰ τοὺς φίλους πολεμίους ποιοῖτο, ἵνα μάχαι καὶ φόνοι γίνοντο)· ἔστι δὲ καὶ ἡ τοῦ πολιτικοῦ ἀσχολος, καὶ παρ' αὐτὸ τὸ πολιτεύεσθαι περιποιουμένη δυναστείας καὶ τιμᾶς ἢ τὴν γε εὐδαιμονίαν αὐτῷ καὶ τοῖς πολίταις, ἑτέραν [15] οὕσαν τῆς πολιτικῆς, ἣν καὶ ζητοῦμεν δῆλον ὡς ἑτέραν οὕσαν. εἰ δὴ τῶν μὲν κατὰ τὰς ἀρετὰς πράξεων αἱ πολιτικαὶ καὶ πολεμικαὶ κάλλει καὶ μεγέθει προέχουσιν, αὗται δ' ἀσχολοὶ καὶ τέλους τινὸς ἐφίενται καὶ οὐ δι' αὐτὰς αἰρεταί εἰσιν, ἡ δὲ τοῦ νοῦ ἐνέργεια σπουδῇ τε διαφέρειν δοκεῖ θεωρητικὴ [20] οὕσα, καὶ παρ' αὐτὴν οὐδενὸς ἐφίεσθαι τέλους, καὶ ἔχειν τὴν ἡδονὴν οἰκείαν (αὕτη δὲ συναύξει τὴν ἐνέργειαν), καὶ τὸ αὐταρκές δὴ καὶ σχολαστικὸν καὶ ἄτρυτον ὡς ἀνθρώπῳ, καὶ ὅσα ἄλλα τῷ μακαρίῳ ἀπονέμεται, τὰ κατὰ ταύτην τὴν ἐνέργειαν φαίνεται ὄντα· ἡ τελεία δὴ εὐδαιμονία αὕτη ἂν εἴη ἀνθρώπου, [25] λαβοῦσα μῆκος βίου τέλειον· οὐδὲν γὰρ ἀτελές ἐστὶ τῶν τῆς εὐδαιμονίας. ὁ δὲ τοιοῦτος ἂν εἴη βίος κρείττων ἢ κατ' ἀνθρώπον· οὐ γὰρ ἡ ἀνθρωπὸς ἐστὶν οὕτω βιώσεται, ἄλλ' ἢ θεῖόν τι ἐν αὐτῷ ὑπάρχει· ὅσον δὲ διαφέρει τοῦτο τοῦ συνθέτου, τοσοῦτον καὶ ἡ ἐνέργεια τῆς κατὰ τὴν ἄλλην ἀρετὴν. [30] εἰ δὴ θεῖον ὁ νοῦς πρὸς τὸν ἀνθρώπον, καὶ ὁ κατὰ τοῦτον βίος θεῖος πρὸς τὸν ἀνθρώπινον βίον. οὐ χρὴ δὲ κατὰ τοὺς παραινούντας ἀνθρώπινα φρονεῖν ἀνθρώπον ὄντα οὐδὲ θνητὰ τὸν θνητόν, ἀλλ' ἐφ' ὅσον ἐνδέχεται ἀθανατίζειν καὶ πάντα ποιεῖν πρὸς τὸ ζῆν κατὰ τὸ κράτιστον τῶν ἐν αὐτῷ· εἰ γὰρ καὶ τῷ ὄγκῳ μικρόν ἐστι, 1178a [1] δυνάμει καὶ τιμιότητι πολὺ μᾶλλον πάντων ὑπερέχει. δόξειε δ' ἂν καὶ εἶναι ἕκαστος τοῦτο, εἴπερ τὸ κύριον καὶ ἄμεινον. ἄτοπον οὖν γίνοιτ' ἂν, εἰ μὴ τὸν αὐτοῦ βίον αἰροῖτο ἀλλὰ τινος ἄλλου. τὸ λεχθέν τε πρότερον [5] ἀρμόσει καὶ νῦν· τὸ γὰρ οἰκεῖον ἐκάστῳ τῇ φύσει κράτιστον καὶ ἡδιστόν ἐστιν ἐκάστῳ· καὶ τῷ ἀνθρώπῳ δὴ ὁ κατὰ τὸν νοῦν βίος, εἴπερ τοῦτο μάλιστα ἀνθρώπος. οὗτος ἄρα καὶ εὐδαιμονέστατος.

δευτέρως δ' ὁ κατὰ τὴν ἄλλην ἀρετὴν· αἱ γὰρ κατὰ [10] ταύτην ἐνέργειαι ἀνθρωπικά. δίκαια γὰρ καὶ ἀνδρεῖα καὶ τὰ ἄλλα τὰ κατὰ τὰς ἀρετὰς πρὸς ἀλλήλους πράττομεν ἐν συναλλάγμασι καὶ χρείαις καὶ πράξεσι παντοίαις ἐν τε τοῖς πάθεσι διατηροῦντες τὸ πρέπον ἐκάστω· ταῦτα δ' εἶναι φαίνεται πάντα ἀνθρωπικά. ἔνια δὲ καὶ συμβαίνειν ἀπὸ [15] τοῦ σώματος δοκεῖ, καὶ πολλὰ συνωκειῶσθαι τοῖς πάθεσιν ἢ τοῦ ἥθους ἀρετῇ. συνέζευκται δὲ καὶ ἡ φρόνησις τῇ τοῦ ἥθους ἀρετῇ, καὶ αὕτη τῇ φρονήσει, εἴπερ αἱ μὲν τῆς φρονήσεως ἀρχαὶ κατὰ τὰς ἠθικὰς εἰσὶν ἀρετὰς, τὸ δ' ὀρθὸν τῶν ἠθικῶν κατὰ τὴν φρόνησιν. συνηρτημένοι δ' αὗται καὶ [20] τοῖς πάθεσι περὶ τὸ σύνθετον ἂν εἶεν· αἱ δὲ τοῦ συνθέτου ἀρεταὶ ἀνθρωπικά· καὶ ὁ βίος δὴ ὁ κατὰ ταύτας καὶ ἡ εὐδαιμονία. ἡ δὲ τοῦ νοῦ κεχωρισμένη· τοσοῦτον γὰρ περὶ αὐτῆς εἰρήσθω· διακριβῶσαι γὰρ μείζον τοῦ προκειμένου ἐστίν. δόξειε δ' ἂν καὶ τῆς ἐκτὸς χορηγίας ἐπὶ μικρὸν ἢ ἐπ' ἔλαττον δεῖσθαι [25] τῆς ἠθικῆς. τῶν μὲν γὰρ ἀναγκαίων ἀμφοῖν χρεῖα καὶ ἐξ ἴσου ἔστω, εἰ καὶ μᾶλλον διαπνεῖ περὶ τὸ σῶμα ὁ πολιτικός, καὶ ὅσα τοιαῦτα· μικρὸν γὰρ ἂν τι διαφέροι· πρὸς δὲ τὰς ἐνεργείας πολὺ διοίσει. τῷ μὲν γὰρ ἐλευθερίῳ δεήσει χρημάτων πρὸς τὸ πράττειν τὰ ἐλευθέρια, καὶ τῷ [30] δικαίῳ δὴ εἰς τὰς ἀνταποδόσεις (αἱ γὰρ βουλήσεις ἄδελφοι, προσποιοῦνται δὲ καὶ οἱ μὴ δίκαιοι βούλεσθαι δικαιοπραγεῖν), τῷ ἀνδρεῖῳ δὲ δυνάμεως, εἴπερ ἐπιτελεῖ τι τῶν κατὰ τὴν ἀρετὴν, καὶ τῷ σώφρονι ἐξουσίας· πῶς γὰρ δῆλος ἔσται ἢ οὗτος ἢ τῶν ἄλλων τις; ἀμφισβητεῖται τε πότερον κυριώτερον [35] τῆς ἀρετῆς ἢ προαίρεσις ἢ αἱ πράξεις, ὥς ἐν ἀμφοῖν οὕσης· 1178b [1] τὸ δὲ τέλειον δῆλον ὥς ἐν ἀμφοῖν ἂν εἴη· πρὸς δὲ τὰς πράξεις πολλῶν δεῖται, καὶ ὅσω ἂν μείζους ὥσι καὶ καλλίους, πλείονων. τῷ δὲ θεωροῦντι οὐδενὸς τῶν τοιούτων πρὸς γε τὴν ἐνέργειαν χρεῖα, ἀλλ' ὥς εἰπεῖν καὶ ἐμπόδιά ἐστι [5] πρὸς γε τὴν θεωρίαν· ἡ δ' ἀνθρωπὸς ἐστὶ καὶ πλείοσι συζῆ, αἰρεῖται τὰ κατὰ τὴν ἀρετὴν πράττειν· δεήσει τε οὖν τῶν τοιούτων πρὸς τὸ ἀνθρωπεύεσθαι. ἡ δὲ τελεία εὐδαιμονία ὅτι θεωρητικὴ τις ἐστὶν ἐνέργεια, καὶ ἐντεῦθεν ἂν φανείη. τοὺς θεοὺς γὰρ μάλιστα ὑπειλήφαμεν μακαρίους καὶ εὐδαίμονας εἶναι· [10] πράξεις δὲ ποίας ἀπνεῖμαι χρεῶν αὐτοῖς; πότερα τὰς δικαίας; ἢ γελοῖοι φανοῦνται συναλλάττοντες καὶ παρακαταθήκας ἀποδιδόντες καὶ ὅσα τοιαῦτα; ἀλλὰ τὰς ἀνδρείους . . . ὑπομένοντας τὰ φοβερὰ καὶ κινδυνεύοντας ὅτι καλόν; ἢ τὰς ἐλευθερίους; τίνοι δὲ δώσουσιν; ἄτοπον δ' εἰ καὶ ἔσται [15] αὐτοῖς νόμισμα ἢ τι τοιοῦτον. αἱ δὲ σώφρονες τί ἂν εἶεν; ἢ φορτικός ὁ ἔπαινος, ὅτι οὐκ ἔχουσι φαύλας ἐπιθυμίας; διεξιούσι δὲ πάντα φαίνονται ἂν τὰ περὶ τὰς πράξεις μικρὰ καὶ ἀνάξια θεῶν. ἀλλὰ μὴν ζῆν γε πάντες ὑπειλήφασιν αὐτοὺς καὶ ἐνεργεῖν ἄρα· οὐ γὰρ δὴ καθεύδειν ὥσπερ τὸν [20] Ἐνδυμῖωνα. τῷ δὲ ζῶντι τοῦ πράττειν ἀφαιρουμένου, ἔτι δὲ μᾶλλον τοῦ ποιεῖν, τί λείπεται πλὴν θεωρία; ὥστε ἡ τοῦ θεοῦ ἐνέργεια, μακαριότητι διαφέρουσα, θεωρητικὴ ἂν εἴη· καὶ



τῶν ἀνθρωπίνων δὴ ἡ ταύτη συγγενεστάτη εὐδαιμονικωτάτη. σημείον δὲ καὶ τὸ μὴ μετέχειν τὰ λοιπὰ ζῶα εὐδαιμονίας, [25] τῆς τοιαύτης ἐνεργείας ἐστερημένα τελείως. τοῖς μὲν γὰρ θεοῖς ἅπας ὁ βίος μακάριος, τοῖς δ' ἀνθρώποις, ἐφ' ὅσον ὁμοίωμά τι τῆς τοιαύτης ἐνεργείας ὑπάρχει· τῶν δ' ἄλλων ζώων οὐδὲν εὐδαιμονεῖ, ἐπειδὴ οὐδαμῇ κοινωνεῖ θεωρίας. ἐφ' ὅσον δὴ διατείνει ἡ θεωρία, καὶ ἡ εὐδαιμονία, καὶ οἷς μᾶλλον [30] ὑπάρχει τὸ θεωρεῖν, καὶ εὐδαιμονεῖν, οὐ κατὰ συμβεβηκὸς ἀλλὰ κατὰ τὴν θεωρίαν· αὕτη γὰρ καθ' αὐτὴν τιμία. ὥστ' εἴη ἂν ἡ εὐδαιμονία θεωρία τις.

δεήσει δὲ καὶ τῆς ἐκτὸς εὐημερίας ἀνθρώπῳ ὄντι· οὐ γὰρ αὐτάρκης ἡ φύσις πρὸς τὸ θεωρεῖν, ἀλλὰ δεῖ καὶ τὸ σῶμα [35] ὑγιαίνειν καὶ τροφήν καὶ τὴν λοιπὴν θεραπείαν ὑπάρχειν. 1179a [1] οὐ μὴν οἰητέον γε πολλῶν καὶ μεγάλων δεήσεσθαι τὸν εὐδαιμονήσοντα, εἰ μὴ ἐνδέχεται ἄνευ τῶν ἐκτὸς ἀγαθῶν μακάριον εἶναι· οὐ γὰρ ἐν τῇ ὑπερβολῇ τὸ αὐτάρκες οὐδ' ἡ πρᾶξις, δυνατόν δὲ καὶ μὴ ἄρχοντα γῆς καὶ θαλάττης πράττειν [5] τὰ καλά· καὶ γὰρ ἀπὸ μετρίων δύναται ἂν τις πράττειν κατὰ τὴν ἀρετὴν (τοῦτο δ' ἔστιν ἰδεῖν ἐναργῶς· οἱ γὰρ ἰδιῶται τῶν δυναστῶν οὐχ ἥττον δοκοῦσι τὰ ἐπικτῆ πράττειν, ἀλλὰ καὶ μᾶλλον)· ἱκανὸν δὲ τοσαῦθ' ὑπάρχειν· ἔσται γὰρ ὁ βίος εὐδαίμων τοῦ κατὰ τὴν ἀρετὴν ἐνεργοῦντος. καὶ Σόλων [10] δὲ τοὺς εὐδαίμονας ἴσως ἀπεφαίνετο καλῶς, εἰπὼν μετρίως τοῖς ἐκτὸς κεχορηγημένους, πεπραγότας δὲ τὰ κάλλισθ', ὥς ὤετο, καὶ βεβιωκότας σωφρόνως· ἐνδέχεται γὰρ μέτρια κεκτημένους πράττειν ἃ δεῖ. ἔοικε δὲ καὶ Ἀναξαγόρας οὐ πλούσιον οὐδὲ δυνάστην ὑπολαβεῖν τὸν εὐδαίμονα, εἰπὼν ὅτι [15] οὐκ ἂν θαυμάσειεν εἴ τις ἄτοπος φανείη τοῖς πολλοῖς· οὗτοι γὰρ κρίνουσι τοῖς ἐκτός, τούτων αἰσθανόμενοι μόνον. συμφωνεῖν δὴ τοῖς λόγοις εἰκόασιν αἱ τῶν σοφῶν δόξαι. πίστιν μὲν οὖν καὶ τὰ τοιαῦτα ἔχει τινά, τὸ δ' ἀληθὲς ἐν τοῖς πρακτικοῖς ἐκ τῶν ἔργων καὶ τοῦ βίου κρίνεται· ἐν τούτοις [20] γὰρ τὸ κύριον. σκοπεῖν δὴ τὰ προειρημένα χρὴ ἐπὶ τὰ ἔργα καὶ τὸν βίον φέροντας, καὶ συναδόντων μὲν τοῖς ἔργοις ἀποδεκτέον, διαφωνούντων δὲ λόγους ὑποληπτέον. ὁ δὲ κατὰ νοῦν ἐνεργῶν καὶ τοῦτον θεραπεύων καὶ διακείμενος ἄριστα καὶ θεοφιλέστατος ἔοικεν. εἰ γὰρ τις ἐπιμέλεια τῶν ἀνθρωπίνων [25] ὑπὸ θεῶν γίνεται, ὥσπερ δοκεῖ, καὶ εἴη ἂν εὐλογον χαίρειν τε αὐτοὺς τῷ ἀρίστῳ καὶ συγγενεστάτῳ (τοῦτο δ' ἂν εἴη ὁ νοῦς) καὶ τοὺς ἀγαπῶντας μάλιστα τοῦτο καὶ τιμῶντας ἀντευποιεῖν ὥς τῶν φίλων αὐτοῖς ἐπιμελουμένους καὶ ὀρθῶς τε καὶ καλῶς πράττοντας. ὅτι δὲ πάντα ταῦτα [30] τῷ σοφῷ μάλιστα ὑπάρχει, οὐκ ἄδηλον. θεοφιλέστατος ἄρα. τὸν αὐτὸν δ'

εἰκὸς καὶ εὐδαιμονέστατον· ὥστε κἂν οὕτως εἴη ὁ σοφὸς μάλιστα· εὐδαίμων.

ἄρ' οὖν εἰ περί τε τούτων καὶ τῶν ἀρετῶν, ἔτι δὲ καὶ φιλίας καὶ ἡδονῆς, ἱκανῶς εἴρηται τοῖς τύποις, τέλος ἔχειν [35] οἷητέον τὴν προαίρεσιν; ἢ καθάπερ λέγεται, 1179b [1] οὐκ ἔστιν ἐν τοῖς πρακτοῖς τέλος τὸ θεωρῆσαι ἕκαστα καὶ γινῶναι, ἀλλὰ μᾶλλον τὸ πράττειν αὐτά· οὐδὲ δὴ περὶ ἀρετῆς ἱκανὸν τὸ εἰδέναι, ἀλλ' ἔχειν καὶ χρῆσθαι πειρατέον, ἢ εἴ πως ἄλλως ἀγαθοὶ γινόμεθα; εἰ μὲν οὖν ἦσαν οἱ λόγοι αὐτάρκεις πρὸς [5] τὸ ποιῆσαι ἐπεικεῖς, πολλοὺς ἂν μισθοὺς καὶ μεγάλους δικαίως ἔφερον κατὰ τὸν Θεόγνιν, καὶ ἔδει ἂν τούτους πορίσασθαι· νῦν δὲ φαίνονται προτρέψασθαι μὲν καὶ παρορμῆσαι τῶν νέων τοὺς ἐλευθερίους ἰσχύειν, ἥθός τ' εὐγενεῖς καὶ ὡς ἀληθῶς φιλόκαλον ποιῆσαι ἂν κατοκώχιμον ἐκ τῆς ἀρετῆς, [10] τοὺς δὲ πολλοὺς ἀδυνατεῖν πρὸς καλοκαγαθίαν προτρέψασθαι· οὐ γὰρ πεφύκασιν αἰδοῖ πειθαρχεῖν ἀλλὰ φόβῳ, οὐδ' ἀπέχεσθαι τῶν φαύλων διὰ τὸ αἰσχροὺς ἀλλὰ διὰ τὰς τιμωρίας· πάθει γὰρ ζῶντες τὰς οἰκείας ἡδονὰς διώκουσι καὶ δι' ὧν αὐταὶ ἔσσονται, φεύγουσι δὲ τὰς ἀντικειμένας λύπας, [15] τοῦ δὲ καλοῦ καὶ ὡς ἀληθῶς ἡδέος οὐδ' ἔννοϊαν ἔχουσιν, ἄγευστοι ὄντες. τοὺς δὴ τοιούτους τίς ἂν λόγος μεταρρυθμίσει; οὐ γὰρ οἷόν τε ἢ οὐ ῥάδιον τὰ ἐκ παλαιοῦ τοῖς ἦθεσι κατειλημμένα λόγῳ μεταστῆσαι· ἀγαπητὸν δ' ἴσως ἐστὶν εἰ πάντων ὑπαρχόντων δι' ὧν ἐπεικεῖς δοκοῦμεν γίνεσθαι, μεταλάβοιμεν [20] τῆς ἀρετῆς. γίνεσθαι δ' ἀγαθοὺς οἷονται οἱ μὲν φύσει οἱ δ' ἔθει οἱ δὲ διδαχῇ. τὸ μὲν οὖν τῆς φύσεως δῆλον ὡς οὐκ ἐφ' ἡμῖν ὑπάρχει, ἀλλὰ διὰ τινος θείας αἰτίας τοῖς ὡς ἀληθῶς εὐτυχέσιν ὑπάρχει· ὁ δὲ λόγος καὶ ἡ διδαχὴ μή ποτ' οὐκ ἐν ἅπασιν ἰσχύει, ἀλλὰ δεῖ προδιειργάσθαι τοῖς [25] ἔθεσι τὴν τοῦ ἀκροατοῦ ψυχὴν πρὸς τὸ καλῶς χαίρειν καὶ μισεῖν, ὥσπερ γῆν τὴν θρέψουσιν τὸ σπέρμα. οὐ γὰρ ἂν ἀκούσειε λόγου ἀποτρέποντος οὐδ' αὖ συνείη ὁ κατὰ πάθος ζῶν· τὸν δ' οὕτως ἔχοντα πῶς οἷόν τε μεταπεῖσαι; ὅλως τ' οὐ δοκεῖ λόγῳ ὑπεῖκειν τὸ πάθος ἀλλὰ βίᾳ. δεῖ δὴ τὸ ἦθος [30] προϋπάρχειν πῶς οἰκεῖον τῆς ἀρετῆς, στέργον τὸ καλὸν καὶ δυσχεραῖνον τὸ αἰσχρόν. ἐκ νέου δ' ἀγωγῆς ὀρθῆς τυχεῖν πρὸς ἀρετὴν χαλεπὸν μὴ ὑπὸ τοιούτοις τραφέντα νόμοις· τὸ γὰρ σωφρόνως καὶ καρτερικῶς ζῆν οὐχ ἡδὺ τοῖς πολλοῖς, ἄλλως τε καὶ νέοις. διὸ νόμοις δεῖ τετάχθαι τὴν τροφὴν [35] καὶ τὰ ἐπιτηδεύματα· οὐκ ἔσται γὰρ λυπηρὰ συνήθη γενόμενα. 1180a [1] οὐχ ἱκανὸν δ' ἴσως νέους ὄντας τροφῆς καὶ ἐπιμελείας τυχεῖν ὀρθῆς, ἀλλ' ἐπιεδὴ καὶ ἀνδρωθέντας δεῖ ἐπιτηδεύειν αὐτὰ καὶ ἐθίζεσθαι, καὶ περὶ ταῦτα δεοίμεθ' ἂν νόμων, καὶ ὅλως δὴ περὶ πάντα τὸν βίον· οἱ γὰρ πολλοὶ ἀνάγκη [5] μᾶλλον ἢ λόγῳ πειθαρχοῦσι καὶ ζημίαις ἢ τῷ καλῷ. διόπερ οἷονταί τινες τοὺς

νομοθετοῦντας δεῖν μὲν παρακαλεῖν ἐπὶ τὴν ἀρετὴν καὶ προτρέπεσθαι τοῦ καλοῦ χάριν, ὡς ἐπακουσομένων τῶν ἐπεικῶς τοῖς ἔθεσι προηγμένων, ἀπειθοῦσι δὲ καὶ ἀφυστέροις οὖσι κολάσεις τε καὶ τιμωρίας ἐπιτιθέναι, τοὺς δ' ἀνιάτους [10] ὅλως ἐξορίζειν· τὸν μὲν γὰρ ἐπεικῇ πρὸς τὸ καλὸν ζῶντα τῷ λόγῳ πειθαρχήσιν, τὸν δὲ φαῦλον ἡδονῆς ὀρεγόμενον λύπη κολάζεσθαι ὥσπερ ὑποζύγιον. διὸ καὶ φασὶ δεῖν τοιαύτας γίνεσθαι τὰς λύπας αἱ μάλιστα ἐναντιοῦνται ταῖς ἀγαπωμέναις ἡδοναῖς. εἰ δ' οὖν, καθάπερ εἴρηται, τὸν [15] ἐσόμενον ἀγαθὸν τραφῆναι καλῶς δεῖ καὶ ἐθισθῆναι, εἴθ' οὕτως ἐν ἐπιτηδεύμασιν ἐπεικέσι ζῆν καὶ μήτ' ἄκοντα μήθ' ἐκόντα πράττειν τὰ φαῦλα, ταῦτα δὲ γίνοιτ' ἂν βιουμένοις κατὰ τινὰ νοῦν καὶ τάξιν ὀρθήν, ἔχουσαν ἰσχύν· ἡ μὲν οὖν πατρικὴ πρόσταξις οὐκ ἔχει τὸ ἰσχυρὸν οὐδὲ [δὴ] τὸ ἀναγκαῖον, [20] οὐδὲ δὴ ὅλως ἡ ἐνὸς ἀνδρός, μὴ βασιλέως ὄντος ἢ τινος τοιούτου· ὁ δὲ νόμος ἀναγκαστικὴν ἔχει δύναμιν, λόγος ὢν ἀπὸ τινος φρονήσεως καὶ νοῦ. καὶ τῶν μὲν ἀνθρώπων ἐχθαίρουσι τοὺς ἐναντιουμένους ταῖς ὀρμαῖς, κἂν ὀρθῶς αὐτὸ δρῶσιν· ὁ δὲ νόμος οὐκ ἔστιν ἐπαχθῆς τάττων τὸ ἐπεικές. ἐν μόνῃ δὲ τῇ [25] Λακεδαιμονίῳ πόλει <ἢ> μετ' ὀλίγων ὁ νομοθέτης ἐπιμέλειαν δοκεῖ πεποιῆσθαι τροφῆς τε καὶ ἐπιτηδευμάτων· ἐν δὲ ταῖς πλείσταις τῶν πόλεων ἐξημέλῃται περὶ τῶν τοιούτων, καὶ ζῆ ἕκαστος ὡς βούλεται, κυκλωπικῶς θεμιστεύων παίδων ἢδ' ἀλόχου. κράτιστον μὲν οὖν τὸ γίνεσθαι κοινὴν ἐπιμέλειαν καὶ [30] ὀρθήν [καὶ δρᾶν αὐτὸ δύνασθαι]· κοινῇ δ' ἐξαμελουμένων ἐκάστῳ δόξειεν ἂν προσήκειν τοῖς σφετέροις τέκνοις καὶ φίλοις εἰς ἀρετὴν συμβάλλεσθαι, . . . ἢ προαιρεῖσθαι γε. μᾶλλον δ' ἂν τοῦτο δύνασθαι δόξειεν ἐκ τῶν εἰρημένων νομοθετικὸς γενόμενος. αἱ μὲν γὰρ κοιναὶ ἐπιμέλειαὶ δῆλον ὅτι διὰ νόμων [35] γίνονται, ἐπεικεῖς δ' αἱ διὰ τῶν σπουδαίων· 1180b [1] γεγραμμένων δ' ἢ ἀγράφων, οὐδὲν ἂν δόξειε διαφέρειν, οὐδὲ δι' ὧν εἷς ἢ πολλοὶ παιδευθήσονται, ὥσπερ οὐδ' ἐπὶ μουσικῆς ἢ γυμναστικῆς καὶ τῶν ἄλλων ἐπιτηδευμάτων. ὥσπερ γὰρ ἐν ταῖς πόλεσιν ἐνισχύει τὰ νόμιμα καὶ τὰ ἥθη, οὕτω καὶ ἐν [5] οἰκίαις οἱ πατρικοὶ λόγοι καὶ τὰ ἔθη, καὶ ἔτι μᾶλλον διὰ τὴν συγγένειαν καὶ τὰς εὐεργεσίας· προϋπάρχουσι γὰρ στέργοντες καὶ εὐπειθεῖς τῇ φύσει. ἔτι δὲ καὶ διαφέρουσιν αἱ καθ' ἕκαστον παιδεῖαι τῶν κοινῶν, ὥσπερ ἐπ' ἱατρικῆς· καθόλου μὲν γὰρ τῷ πυρέττοντι συμφέρει ἡσυχία καὶ ἀσιτία, [10] τινὲ δ' ἴσως οὐ, ὅ τε πυκτικὸς ἴσως οὐ πᾶσι τὴν αὐτὴν μάχην περιτίθησιν. ἐξακριβοῦσθαι δὴ δόξειεν ἂν μᾶλλον τὸ καθ' ἕκαστον ἰδίας τῆς ἐπιμελείας γινομένης· μᾶλλον γὰρ τοῦ προσφόρου τυγχάνει ἕκαστος. ἀλλ' ἐπιμεληθεῖ μὲν ἄριστα καθ' ἕνα καὶ ἱατρὸς καὶ γυμναστὴς καὶ πᾶς ἄλλος ὁ καθόλου εἰδώς, τί [15] πᾶσιν ἢ τοῖς τοιοισδί (τοῦ κοινοῦ γὰρ αἱ ἐπιστῆμαι λέγονταί τε καὶ εἰσίν)· οὐ μὴν ἄλλ' ἐνός τινος οὐδὲν ἴσως κωλύει καλῶς ἐπιμεληθῆναι καὶ ἀνεπιστήμονα ὄντα, τεθεαμένον δ' ἀκριβῶς τὰ συμβαίνοντα ἐφ' ἐκάστῳ δι' ἐμπειρίαν, καθάπερ

καὶ ἰατροὶ ἔνιοι δοκοῦσιν ἑαυτῶν ἄριστοι εἶναι, ἐτέρῳ οὐδὲν ἂν δυνάμενοι [20] ἐπαρκέσαι. οὐδὲν δ' ἦττον ἴσως τῷ γε βουλομένῳ τεχνικῷ γενέσθαι καὶ θεωρητικῷ ἐπὶ τὸ καθόλου βαδιστέον εἶναι δόξειεν ἂν, κάκεῖνο γνωριστέον ὡς ἐνδέχεται· εἴρηται γὰρ ὅτι περὶ τοῦθ' αἰ ἐπιστῆμαι. τάχα δὲ καὶ τῷ βουλομένῳ δι' ἐπιμελείας βελτίους ποιεῖν, εἴτε πολλοὺς εἴτ' ὀλίγους, νομοθετικῷ πειρατέον [25] γενέσθαι, εἰ διὰ νόμων ἀγαθοὶ γενοίμεθ' ἂν. ὄντινα γὰρ οὖν καὶ τὸν προτεθέντα διαθεῖναι καλῶς οὐκ ἔστι τοῦ τυχόντος, ἀλλ' εἴπερ τινός, τοῦ εἰδότος, ὥσπερ ἐπ' ἱατρικῆς καὶ τῶν λοιπῶν ὧν ἔστιν ἐπιμέλειά τις καὶ φρόνησις. ἄρ' οὖν μετὰ τοῦτο ἐπισκεπτέον πόθεν ἢ πῶς νομοθετικὸς γένοιτ' ἂν τις; ἢ καθάπερ [30] ἐπὶ τῶν ἄλλων, παρὰ τῶν πολιτικῶν; μῶριον γὰρ ἐδόκει τῆς πολιτικῆς εἶναι. ἢ οὐχ ὅμοιον φαίνεται ἐπὶ τῆς πολιτικῆς καὶ τῶν λοιπῶν ἐπιστημῶν τε καὶ δυνάμεων; ἐν μὲν γὰρ ταῖς ἄλλαις οἱ αὐτοὶ φαίνονται τὰς τε δυνάμεις παραδιδόντες καὶ ἐνεργοῦντες ἅπ' αὐτῶν, οἷον ἰατροὶ γραφεῖς· [35] τὰ δὲ πολιτικὰ ἐπαγγέλλονται μὲν διδάσκειν οἱ σοφισταί, 1181a [1] πράττει δ' αὐτῶν οὐδεὶς, ἀλλ' οἱ πολιτευόμενοι, οἱ δόξαιεν ἂν δυνάμει τινὲ τοῦτο πράττειν καὶ ἐμπειρία μᾶλλον ἢ διανοία· οὔτε γὰρ γράφοντες οὔτε λέγοντες περὶ τῶν τοιούτων φαίνονται (καίτοι κάλλιον ἦν ἴσως ἢ λόγους δικανικούς τε [5] καὶ δημηγορικούς), οὐδ' αὖ πολιτικούς πεποιηκότες τοὺς σφετέρους υἱεῖς ἢ τινὰς ἄλλους τῶν φίλων. εὐλογον δ' ἦν, εἴπερ ἐδύναντο· οὔτε γὰρ ταῖς πόλεσιν ἄμεινον οὐδὲν κατέλιπον ἂν, οὔθ' αὐτοῖς ὑπάρξαι προέλοιנט' ἂν μᾶλλον τῆς τοιαύτης δυνάμεως, οὐδὲ δὴ τοῖς φιλτάτοις. οὐ μὴν μικρόν γε ἔοικεν [10] ἢ ἐμπειρία συμβάλλεσθαι· οὐδὲ γὰρ ἐγίνοντ' ἂν διὰ τῆς πολιτικῆς συνηθείας πολιτικοί· διὸ τοῖς ἐφιεμένοις περὶ πολιτικῆς εἰδέναι προσδεῖν ἔοικεν ἐμπειρίας. τῶν δὲ σοφιστῶν οἱ ἐπαγγελλλόμενοι λίαν φαίνονται πόρρω εἶναι τοῦ διδάξαι. ὅλως γὰρ οὐδὲ ποῖόν τι ἐστὶν ἢ περὶ ποῖα ἴσασιν· οὐ γὰρ ἂν [15] τὴν αὐτὴν τῇ ῥητορικῇ οὐδὲ χεῖρῳ ἐτίθεσαν, οὐδ' ἂν ὥοντο ῥάδιον εἶναι τὸ νομοθετῆσαι συναγαγόντι τοὺς εὐδοκιμοῦντας τῶν νόμων· ἐκλέξασθαι γὰρ εἶναι τοὺς ἀρίστους, ὥσπερ οὐδὲ τὴν ἐκλογὴν οὔσαν συνέσεως καὶ τὸ κρῖναι ὀρθῶς μέγιστον, ὥσπερ ἐν τοῖς κατὰ μουσικὴν. οἱ γὰρ ἔμπειροι περὶ ἕκαστα [20] κρίνουσιν ὀρθῶς τὰ ἔργα, καὶ δι' ὧν ἢ πῶς ἐπιτελεῖται συνιᾶσιν, καὶ ποῖα ποίοις συνάδει· τοῖς δ' ἀπείροις ἀγαπητὸν τὸ μὴ διαλανθάνειν εἰ εὖ ἢ κακῶς πεποιήται τὸ ἔργον, ὥσπερ ἐπὶ γραφικῆς. οἱ δὲ νόμοι τῆς πολιτικῆς ἔργοις ἐοίκασιν· 1181b [1] πῶς οὖν ἐκ τούτων νομοθετικὸς γένοιτ' ἂν τις, ἢ τοὺς ἀρίστους κρίναι; οὐ γὰρ φαίνονται οὐδ' ἱατρικοὶ ἐκ τῶν συγγραμμάτων γίνεσθαι. καίτοι πειρῶνται γε λέγειν οὐ μόνον τὰ θεραπεύματα, ἀλλὰ καὶ ὡς ἰαθεῖεν ἂν καὶ ὡς δεῖ θεραπεύειν [5] ἐκάστους, διελόμενοι τὰς ἔξεις· ταῦτα δὲ τοῖς μὲν ἐμπείροις ὠφέλιμα εἶναι δοκεῖ, τοῖς δ' ἀνεπιστήμοσιν ἀχρεῖα. ἴσως οὖν καὶ τῶν νόμων

καὶ τῶν πολιτειῶν αἱ συναγωγαὶ τοῖς μὲν δυναμένοις θεωρῆσαι καὶ κρίναι τί καλῶς ἢ τοῦναντίον καὶ ποῖα ποίοις ἀρμόττει εὐχρηστ' ἂν εἴη· τοῖς δ' ἄνευ [10] ἔξωθεν τὰ τοιαῦτα διεξιούσι τὸ μὲν κρίναι καλῶς οὐκ ἂν ὑπάρχοι, εἰ μὴ ἄρα αὐτόματον, εὐσυνετώτεροι δ' εἰς ταῦτα τάχ' ἂν γένοιντο. παραλιπόντων οὖν τῶν προτέρων ἀνερεύνητον τὸ περὶ τῆς νομοθεσίας, αὐτοὺς ἐπισκέψασθαι μᾶλλον βέλτιον ἴσως, καὶ ὅλως δὲ περὶ πολιτείας, ὅπως εἰς δύναμιν [15] ἢ περὶ τὰ ἀνθρώπεια φιλοσοφία τελειωθῇ. πρῶτον μὲν οὖν εἴ τι κατὰ μέρος εἴρηται καλῶς ὑπὸ τῶν προγενεστέρων πειραθῶμεν ἐπελθεῖν, εἴτα ἐκ τῶν συνηγμένων πολιτειῶν θεωρῆσαι τὰ ποῖα σώζει καὶ φθείρει τὰς πόλεις καὶ τὰ ποῖα ἐκάστας τῶν πολιτειῶν, καὶ διὰ τίνας αἰτίας αἱ μὲν [20] καλῶς αἱ δὲ τοῦναντίον πολιτεύονται. θεωρηθέντων γὰρ τούτων τάχ' ἂν μᾶλλον συνίδοιμεν καὶ ποία πολιτεία ἀρίστη, καὶ πῶς ἐκάστη ταχθεῖσα, καὶ τίσι νόμοις καὶ ἔθεσι χρωμένη. λέγωμεν οὖν ἀρξάμενοι.

## Ἀριστοτελοῦς Ἠθικῶν (1181a) Magna Moralia



### CONTENTS

#### [I](#)

#### [II](#)

#### I

[1] Ἐπειδὴ προαιρούμεθα λέγειν ὑπὲρ ἠθικῶν, πρῶτον ἂν εἴη σκεπτέον τίνος ἐστὶ μέρος τὸ ἦθος. ὥς μὲν οὖν συντόμως εἰπεῖν, δόξειεν <ἂν> οὐκ ἄλλης ἢ τῆς πολιτικῆς εἶναι μέρος. ἔστι γὰρ οὐθὲν ἐν τοῖς πολιτικοῖς δυνατὸν πρᾶξαι ἄνευ τοῦ ποῖόν τινα εἶναι, λέγω δ' οἷον σπουδαῖον· τὸ δὲ [2] σπουδαῖον εἶναι ἐστὶ τὸ τὰς ἀρετὰς ἔχειν· δεῖ ἄρα, εἴ τις μέλλει ἐν τοῖς πολιτικοῖς πρακτικὸς εἶναι, τὸ [3] ἦθος εἶναι σπουδαῖος· μέρος ἐστὶν ἄρα, ὥς ἔοικε, καὶ ἀρχὴ ἢ περὶ τὰ ἦθη πραγματεία τῆς πολιτικῆς, τὸ δ' ὅλον καὶ τὴν ἐπωνυμίαν δικαίως δοκεῖ ἂν μοι ἔχειν ἢ πραγματεία οὐκ ἠθικὴν ἀλλὰ πολιτικὴν.

[4] Δεῖ ἄρα, ὥς ἔοικε, πρῶτον ὑπὲρ ἀρετῆς εἰπεῖν, τί τέ ἐστὶ καὶ ἐκ τίνων

γίνεται. οὐθὲν γὰρ ἴσως ὄφελος εἰδέναι μὲν τὴν ἀρετὴν, πῶς δὲ ἔσται καὶ ἐκ τίνων μὴ ἐπαῖειν. οὐ γὰρ μόνον ὅπως εἰδήσομεν τί ἐστὶ σκοπεῖσθαι δεῖ, ἀλλὰ καὶ ἐκ τίνων ἔσται σκέψασθαι. ἅμα γὰρ εἰδῆσαι βουλόμεθα καὶ αὐτοὶ εἶναι τοιοῦτοι· τοῦτο δ' οὐ δυνησόμεθα, ἐὰν μὴ εἰδῶμεν καὶ ἐκ τίνων καὶ πῶς ἔσται.

[5] Ἀναγκαῖον μὲν οὖν εἰδῆσαι τί ἐστὶν ἀρετὴ (οὐ γὰρ ῥάδιον εἰδέναι τὸ ἐκ τίνων ἔσται καὶ πῶς ἔσται, ἀγνοοῦντα τὸ τί ἐστίν, ὥσπερ οὐδ' ἐπὶ τῶν ἐπιστημῶν).

Οὐ δεῖ δὲ λανθάνειν οὐδ' εἴ τινες πρότερον ὑπὲρ [6] τούτων εἰρήκασιν. πρῶτος μὲν οὖν ἐνεχείρησεν Πυθαγόρας περὶ ἀρετῆς εἰπεῖν, οὐκ ὀρθῶς δέ· τὰς γὰρ ἀρετὰς εἰς τοὺς ἀριθμοὺς ἀνάγων οὐκ οἰκείαν τῶν ἀρετῶν τὴν θεωρίαν ἐποιεῖτο· οὐ γὰρ ἐστὶν ἡ δικαιοσύνη ἀριθμὸς ἰσάκεις ἴσος.

[7] Μετὰ τοῦτον Σωκράτης ἐπιγενόμενος βέλτιον καὶ ἐπὶ πλεῖον εἶπεν ὑπὲρ τούτων, οὐκ ὀρθῶς δὲ οὐδ' οὗτος. τὰς γὰρ ἀρετὰς ἐπιστήμας ἐποίει· τοῦτο δ' ἐστὶν εἶναι ἀδύνατον. αἱ γὰρ ἐπιστῆμαι πᾶσαι μετὰ λόγου, λόγος δὲ ἐν τῷ διανοητικῷ τῆς ψυχῆς ἐγγίνεται μορίῳ· γίνονται οὖν αἱ ἀρεταὶ πᾶσαι κατ' αὐτὸν ἐν τῷ λογιστικῷ τῆς ψυχῆς μορίῳ· συμβαίνει οὖν αὐτῷ ἐπιστήμας ποιοῦντι τὰς ἀρετὰς ἀναιρεῖν τὸ ἄλογον μέρος τῆς ψυχῆς, τοῦτο δὲ ποιῶν ἀναιρεῖ καὶ πάθος καὶ ἦθος, διὸ οὐκ ὀρθῶς ἥψατο ταύτη τῶν ἀρετῶν.

[8] Μετὰ ταῦτα δὲ Πλάτων διείλετο τὴν ψυχὴν εἷς τε τὸ λόγον ἔχον καὶ εἰς τὸ ἄλογον ὀρθῶς, καὶ ἀπέδωκεν ἑκάστῳ [τὰς] ἀρετὰς τὰς προσηκούσας. μέχρι μὲν οὖν τούτου καλῶς· μετὰ μέντοι τοῦτο οὐκέτι ὀρθῶς. τὴν γὰρ ἀρετὴν κατέμιξεν [καὶ συνέζευξεν] εἰς τὴν πραγματείαν τὴν ὑπὲρ τάγαθοῦ, οὐ δὲ ὀρθῶς· οὐ γὰρ οἰκεῖον· ὑπὲρ γὰρ τῶν ὄντων καὶ ἀληθείας λέγοντα οὐκ ἔδει ὑπὲρ ἀρετῆς φράζειν· οὐδὲν γὰρ τούτῳ κάκείνῳ κοινόν.

[9] Οὗτοι μὲν οὖν ἐπὶ τοσοῦτον ἐφήψαντο καὶ οὕτως· ἐχόμενον δ' ἂν εἴη μετὰ ταῦτα σκέψασθαι τί δεῖ αὐτοὺς λέγειν ὑπὲρ τούτων.

Πρῶτον μὲν οὖν ἰδεῖν δεῖ ὅτι πάσης ἐπιστήμης καὶ δυνάμεως ἐστὶ τι τέλος, καὶ τοῦτ' ἀγαθόν· οὐδεμία γὰρ οὗτ' ἐπιστήμη οὔτε δύναμις ἔνεκεν [10] κακοῦ ἐστίν. εἰ οὖν πασῶν τῶν δυνάμεων ἀγαθὸν τὸ τέλος, δῆλον ὡς καὶ τῆς βελτίστης βέλτιστον ἂν εἴη. ἀλλὰ μὴν ἢ γε πολιτικὴ βελτίστη δύναμις, ὥστε τὸ τέλος αὐτῆς ἂν εἴη ἀγαθόν. ὑπὲρ ἀγαθοῦ ἄρα, ὡς ἔοικεν, ἡμῖν λεκτέον, καὶ ὑπὲρ ἀγαθοῦ οὐ τοῦ ἀπλῶς, ἀλλὰ τοῦ ἡμῖν· οὐ γὰρ τοῦ θεῶν ἀγαθοῦ.

ἀλλ' ὑπὲρ μὲν τούτου καὶ ἄλλος λόγος καὶ ἀλλοτρία ἢ σκέψις. ὑπὲρ τοῦ πολιτικοῦ ἄρα ἡμῖν λεκτέον ἀγαθοῦ.

[11] Πάλιν δὲ καὶ τοῦτο διελεῖν δεῖ. ὑπὲρ ἀγαθοῦ τοῦ πῶς λεγομένου; οὐ γάρ ἐστιν ἀπλοῦν. λέγεται γὰρ ἀγαθὸν ἢ τὸ ἄριστον ἐν ἐκάστω τῶν ὄντων, τοῦτο δ' ἐστὶ τὸ διὰ τὴν αὐτοῦ φύσιν αἰρετόν· ἢ οὐ τᾶλλα μετασχόντα ἀγαθὰ ἐστίν, τοῦτο δὲ ἐστὶν ἡ ἰδέα τἀγαθοῦ.

[12] Πότερον οὖν ὑπὲρ τῆς ἰδέας τοῦ ἀγαθοῦ δεῖ, ἢ οὐ, ἀλλ' ὥς τὸ κοινὸν ἐν ἅπασιν ὑπάρχον ἀγαθόν; ἕτερον γὰρ τῆς ἰδέας τοῦτο δόξειεν ἂν εἶναι. ἡ μὲν γὰρ ἰδέα χωριστὸν καὶ αὐτὸ καθ' αὐτό· τὸ δὲ κοινὸν ἐν ἅπασιν ὑπάρχει, οὐκ ἔστιν δὴ ταῦτόν τῳ χωριστῳ. οὐ γὰρ ἂν ποτε τὸ χωριστὸν καὶ τὸ πεφυκὸς αὐτὸ καθ' αὐτό εἶναι ἐν πᾶσιν ὑπάρχον.

[13] Πότερον οὖν ὑπὲρ τούτου δεῖ λέγειν τἀγαθοῦ τοῦ ἐνυπάρχοντος; ἢ οὐ; διὰ τί; ὅτι τοῦτο ἐστὶ μὲν τὸ κοινόν, ὡς ὁ ὀρισμὸς καὶ ἡ ἐπαγωγή· ὁ δὲ ὀρισμὸς βούλεται τὴν ἐκάστου οὐσίαν λέγειν, ἥτοι ὅτι ἀγαθὸν ἢ ὅτι κακὸν ἢ ὅτι ἄλλο ἢ· λέγει δὲ ὁ ὅρος ὅτι τὸ τοιόνδ' ἀγαθὸν καθόλου, ὃ ἂν ἢ αὐτὸ δι' αὐτὸ αἰρετόν· τὸ δὲ ἐν ἅπασιν ἐνυπάρχον ὅμοιον τῳ ὄρω ἐστίν.

[14] Ὁ δὲ ὅρος λέγει ὅτι ἀγαθόν, ἐπιστήμη δέ γε οὐδὲ δύναμις οὐδεμία λέγει ὑπὲρ τοῦ τέλους τοῦ αὐτῆς ὅτι ἀγαθόν, ἀλλὰ τοῦτο μὲν ἄλλης δυνάμεως ἐστὶ θεωρῆσαι (οὔτε γὰρ ὁ ἰατρὸς οὔτε ὁ οἰκοδόμος λέγει ὅτι ἀγαθὸν ἢ ὑγίεια οὐδὲ ἡ οἰκία, ἀλλ' ὅτι ὃ [15] μὲν ὑγίειαν ποιεῖ, καὶ ὡς ποιεῖ, ὃ δ' οἰκίαν)· δῆλον τοίνυν ὅτι οὐδὲ τῇ πολιτικῇ ὑπὲρ τοῦ ἀγαθοῦ λεκτέον τοῦ κοινοῦ. μία γὰρ ἐστὶν καὶ αὐτὴ τῶν λοιπῶν ἐπιστημῶν· τοῦτο δὲ οὐδεμιᾶς ἢν λέγειν οὔτε δυνάμεως οὔτ' ἐπιστήμης ὡς τέλος· οὐδ' ἄρα τῆς πολιτικῆς ἐστὶν τὸ ὑπὲρ τοῦ κοινοῦ ἀγαθοῦ λέγειν τοῦ κατὰ τὸν ὀρισμόν.

[16] Ἀλλὰ μὴν οὐδὲ τοῦ κατὰ τὴν ἐπαγωγὴν κοινοῦ. διὰ τί; ὅτι ὅταν βουλώμεθα δεῖξαί [καί] τι τῶν μέρους ἀγαθῶν, ἢ τῳ ὀρισμῳ δείκνυμεν ὅτι ὁ αὐτὸς λόγος ἐφαρμόττει ἐπὶ τε τἀγαθόν καὶ ἐπὶ τοῦτο ὃ ἂν βουλώμεθα δεῖξαι ὅτι ἀγαθόν, ἢ τῇ ἐπαγωγῇ, οἷον ὅταν θέλωμεν δεῖξαι ὅτι ἡ μεγαλοψυχία ἐστὶν ἀγαθόν, φαμέν ὅτι ἡ δικαιοσύνη ἀγαθὸν καὶ ἡ ἀνδρεία καὶ ἀπλῶς αἱ ἀρεταί, ἢ δὲ μεγαλοψυχία ἀρετή, ὥστε καὶ ἡ μεγαλοψυχία ἀγαθόν· οὐδὲ δὴ [17] ὑπὲρ τοῦ κατὰ τὴν ἐπαγωγὴν κοινοῦ ἀγαθοῦ λεκτέον τῇ πολιτικῇ, ὅτι τὰ αὐτὰ ἀδύνατα συμβήσεται τούτῳ καὶ τῳ κατὰ τὸν ὅρον κοινῷ ἀγαθῷ. ὅτι γὰρ ἀγαθόν, καὶ ἐνταῦθ' ἐρεῖ.

Δῆλον τοίνυν ὅτι ὑπὲρ τοῦ ἀρίστου ἀγαθοῦ λεκτέον [18] ἐστὶν καὶ ἀρίστου τοῦ ἡμῖν ἀρίστου· τὸ δ' ὅλον ἴδοι ἄν τις ὅτι οὐκ ἔστιν μιᾶς οὔτ' ἐπιστήμης οὔτε δυνάμεως τὸ ὑπὲρ παντὸς ἀγαθοῦ σκοπεῖν.

Διὰ τί; ὅτι τἀγαθὸν ἐν πάσαις ταῖς κατηγορίαις ἐστίν· καὶ γὰρ ἐν τῷ τί καὶ ἐν τῷ ποιῶ καὶ ἐν τῷ ποσῶ καὶ πότε καὶ πρὸς τι [καὶ τινὶ] καὶ ἀπλῶς ἐν [19] ἀπάσαις. ἀλλὰ μὴν τὸ πότε ἀγαθὸν ἐν μὲν ἱατρικῇ ὁ ἱατρὸς οἶδεν, ἐν δὲ κυβερνητικῇ ὁ κυβερνήτης, ἐν ἐκάστη δ' ἕκαστος. πότε μὲν γὰρ δεῖ τεμεῖν ὁ ἱατρὸς οἶδεν, πότε δὲ δεῖ πλεῖν ὁ κυβερνήτης. ἐν ἐκάστη δὲ τὸ πότε ἀγαθὸν ἕκαστος τὸ καθ' ἑαυτὸν εἰδήσει· οὔτε γὰρ ὁ ἱατρὸς τὸ ἐν τῇ κυβερνητικῇ ἀγαθὸν πότε εἰδήσει, οὔτε ὁ κυβερνήτης τὸ ἐν ἱατρικῇ. οὐκ ἄρα οὐδ' οὕτως ὑπὲρ τοῦ κοινοῦ ἀγαθοῦ λεκτέον· τὸ γὰρ πότε ἐν πάσαις κοινόν.

[20] Ὅμοίως δὲ καὶ τὸ πρὸς τι ἀγαθὸν καὶ τὸ κατὰ τὰς ἄλλας κατηγορίας κοινὸν μὲν ἀπάσαις, οὐδεμιᾶς δ' ἐστὶν οὔτε δυνάμεως οὔτ' ἐπιστήμης εἰπεῖν ὑπὲρ τοῦ ἐν ἐκάστη [πότε] ἀγαθοῦ, οὐδ' αὖ τῆς πολιτικῆς ὑπὲρ τοῦ κοινοῦ ἀγαθοῦ λέγειν. ὑπὲρ τοῦ ἀγαθοῦ ἄρα, καὶ ὑπὲρ τοῦ ἀρίστου, καὶ ὑπὲρ τοῦ ἡμῖν ἀρίστου.

[21] Ἴσως δὲ οὐδὲ δεῖ βουλόμενόν τι δεικνύναι, τοῖς μὴ φανεροῖς παραδείγμασι χρῆσθαι, ἀλλ' ὑπὲρ τῶν ἀφανῶν τοῖς φανεροῖς, καὶ ὑπὲρ τῶν νοητῶν τοῖς αἰσθητοῖς. [καὶ] ταῦτα γὰρ φανερώτερα. ὅταν οὖν ὑπὲρ τἀγαθοῦ τις ἐγχειρῇ λέγειν, οὐ λεκτέον [22] ἐστὶν ὑπὲρ τῆς ιδέας. καίτοι οἴονται γε [δεῖν], ὅταν ὑπὲρ τοῦ ἀγαθοῦ λέγωσιν, ὑπὲρ τῆς ιδέας δεῖν λέγειν· ὑπὲρ γὰρ τοῦ μάλιστα ἀγαθοῦ φασὶ δεῖν λέγειν, αὐτὸ δὲ ἕκαστον μάλιστ' ἐστὶν [τὸ] τοιοῦτον, ὥστε μάλιστ' ἂν εἴη ἀγαθὸν ἢ ἰδέα, ὡς οἴονται.

[23] ὁ δὲ τοιοῦτος λόγος ἀληθὴς μὲν ἐστὶν ἴσως· ἀλλ' οὐχ ἡ πολιτικὴ ἐπιστήμη ἢ δύναμις, ὑπὲρ ἧς νῦν ἐστὶν ὁ λόγος, οὐχ ὑπὲρ τούτου σκοπεῖ τἀγαθοῦ, ἀλλὰ τοῦ ἡμῖν ἀγαθοῦ. [οὐδεμία γὰρ οὔτ' ἐπιστήμη οὔτε δύναμις ὑπὲρ τοῦ τέλους λέγει ὅτι ἀγαθόν, ὥστε οὐδ' ἡ πολιτικὴ.] διὸ οὐχ ὑπὲρ τοῦ κατὰ τὴν ιδέαν ἀγαθοῦ τὸν λόγον ποιεῖται.

[24] Ἀλλ' ἴσως [φησὶ] τούτῳ τἀγαθῷ ἀρχῇ χρησάμενος ὑπὲρ τῶν καθ' ἕκαστα, ἐκ τούτου προβάς, ἔρεϊ. οὐδ' οὕτως ὀρθῶς. δεῖ γὰρ τὰς ἀρχὰς οἰκείας λαμβάνειν. ἄτοπον γάρ, εἴ τις βουλόμενος τὸ τρίγωνον ὡς δυσὶν ὀρθαῖς ἴσας ἔχον δεῖξαι, λάβοι ἀρχὴν ὅτι ἡ ψυχὴ ἀθάνατος. οὐ γὰρ οἰκεία, δεῖ δὲ τὴν ἀρχὴν οἰκείαν εἶναι καὶ συνημμένην· νῦν δὲ καὶ ἄνευ τοῦ τὴν ψυχὴν εἶναι ἀθάνατον δείξει τις [25] δυσὶν ὀρθαῖς ἴσας ἔχον τὸ τρίγωνον.



ὁμοίως δὲ καὶ ἐπὶ τῶν ἀγαθῶν ἐστὶ θεάσασθαι τὰ ἄλλα ἄνευ τοῦ κατὰ τὴν ἰδέαν ἀγαθοῦ διὸ οὐκ οἰκείαν ἀρχὴν εἶναι τούτου τάγαθοῦ.

[26] Οὐκ ὀρθῶς δὲ οὐδ' ὁ Σωκράτης ἐπιστήμας ἐποίει τὰς ἀρετάς. ἐκεῖνος γὰρ οὐδὲν ὥετο δεῖν μάτην εἶναι, ἐκ δὲ τοῦ τὰς ἀρετὰς ἐπιστήμας εἶναι συνέβαινεν αὐτῷ τὰς ἀρετάς μάτην εἶναι. διὰ τί; ὅτι ἐπὶ τῶν ἐπιστημῶν συμβαίνει ἅμα εἰδέναι τὴν ἐπιστήμην τί ἐστὶ καὶ εἶναι ἐπιστήμονα (εἰ γὰρ ἰατρικὴν τις οἶδεν τί ἐστίν, καὶ ἰατρὸς οὗτος εὐθέως ἐστίν, ὁμοίως δὲ καὶ τῶν ἄλλων ἐπιστημῶν). ἀλλ' [27] οὐκ ἐπὶ τῶν ἀρετῶν τοῦτο συμβαίνει. οὐ γὰρ εἴ τις οἶδεν τὴν δικαιοσύνην τί ἐστίν, εὐθέως δίκαιος ἐστίν, ὥς δ' αὐτὸς κἀπὶ τῶν ἄλλων. συμβαίνει οὖν καὶ μάτην τὰς ἀρετάς εἶναι καὶ μὴ εἶναι ἐπιστήμας.

[2]

[1] Ἐπεὶ δ' ὑπὲρ τούτων διώρισται, πειραθῶμεν λέγειν τάγαθὸν ποσαχῶς λέγεται.

Ἔστι γὰρ τῶν ἀγαθῶν τὰ μὲν τίμια, τὰ δ' ἐπαινετά, τὰ δὲ δυνάμεις. τὸ δὲ τίμιον λέγω τὸ τοιοῦτον, τὸ θεῖον, τὸ βέλτιον, οἶον ψυχὴ, νοῦς, τὸ ἀρχαιότερον, ἢ ἀρχή, τὰ τοιαῦτα· τίμια γὰρ ἐφ' οἷς ἡ τιμὴ, τοῖς δὲ τοιούτοις πᾶσιν τιμὴ ἀκολουθεῖ. οὐκοῦν καὶ ἡ ἀρετὴ τίμιον, ὅταν γε δὴ ἀπ' αὐτῆς σπουδαῖός τις γένηται· ἤδη γὰρ οὗτος εἰς τὸ τῆς [2] ἀρετῆς σχῆμα ἦκει. τὰ δ' ἐπαινετά, οἶον ἀρεταί· ἀπὸ γὰρ τῶν κατ' αὐτάς πράξεων ὁ ἔπαινος γίνεται. τὰ δὲ δυνάμεις, οἶον ἀρχὴ πλοῦτος ἰσχυρὸς κάλλος· τούτοις γὰρ καὶ ὁ σπουδαῖος εὖ ἂν δύνηται χρήσασθαι καὶ ὁ φαῦλος κακῶς· διὸ δυνάμεις τὰ τοιαῦτα [3] καλοῦνται ἀγαθὰ. ἀγαθὰ μὲν δὴ εἰσὶν (δοκιμάζεται γὰρ τῇ τοῦ σπουδαίου αὐτῶν ἔκαστον χρήσει, οὐ τῇ τοῦ φαύλου)· τοῖς δ' αὐτοῖς τούτοις συμβέβηκεν ἀγαθοῖς καὶ τὴν τύχην τῆς γενέσεως αὐτῶν αἰτίαν εἶναι. ἀπὸ τύχης γὰρ καὶ πλοῦτος γίνεται καὶ ἀρχὴ καὶ ὅλως ὅσα εἰς δυνάμειος τάξιν ἦκει.

[4] λοιπὸν δὲ καὶ τέταρτον τῶν ἀγαθῶν τὸ σωστικὸν καὶ ποιητικὸν ἀγαθοῦ, οἶον γυμνάσια ὑγιείας καὶ εἴ τι ἄλλο τοιοῦτον.

[5] Ἀλλ' ἔτι καὶ ἄλλην ἔχει τάγαθὰ διαίρεσιν· οἷόν ἐστι τῶν ἀγαθῶν τὰ μὲν πάντη καὶ πάντως αἰρετά, τὰ δ' οὔ. οἶον ἢ μὲν δικαιοσύνη καὶ αἱ ἄλλαι ἀρεταὶ καὶ πάντη καὶ πάντως αἰρεταί, ἰσχυρὸς δὲ καὶ πλοῦτος καὶ δυνάμις καὶ τὰ τοιαῦτα οὔτε πάντη οὔτε πάντως.

[6] Ἔτι καὶ ἄλλως· τῶν γὰρ ἀγαθῶν τὰ μὲν ἐστὶν τέλη τὰ δ' οὐ τέλη, οἷον ἡ μὲν ὑγίεια τέλος, τὰ δὲ τῆς ὑγιείας ἕνεκεν οὐ τέλη. καὶ ὅσα οὕτως ἔχει, τούτων ἀεὶ τὸ τέλος βέλτιον, οἷον ἡ ὑγίεια βέλτιον ἢ τὰ ὑγιεινά, καὶ ἀπλῶς ἀεὶ καθόλου τοῦτο βέλτιον οὐ ἕνεκεν καὶ τὰ ἄλλα.

[7] Πάλιν αὐτῶν τῶν τελῶν βέλτιον ἀεὶ τὸ τέλειον τοῦ ἀτελοῦς. τέλειον δὲ ἐστὶν οὐ παραγενομένου μηθενὸς ἔτι προσδεόμεθα, ἀτελὲς δὲ οὐ παραγενομένου προσδεόμεθα τινός, οἷον τῆς δικαιοσύνης μὲν [μόνον] παραγενομένης πολλῶν προσδεόμεθα, τῆς δὲ εὐδαιμονίας παραγενομένης οὐδενὸς ἔτι προσδεόμεθα. τοῦτο ἄρα ἐστὶν τὸ ἄριστον ἡμῖν ὃ ζητοῦμεν, ὃ ἐστὶ τέλος τέλειον· τὸ δὲ δὴ τέλειον τέλος τὰγαθόν ἐστὶ καὶ τέλος τῶν ἀγαθῶν.

[8] Μετὰ ταῦτα τοίνυν πῶς τὸ ἄριστον δεῖ σκοπεῖν; πότερον οὕτως ὥς καὶ αὐτοῦ συναριθμουμένου; ἄλλ' ἄτοπον. τὸ γὰρ ἄριστον ἐπειδὴ ἐστὶ τέλος τέλειον, τὸ δὲ τέλειον τέλος ὥς ἀπλῶς εἰπεῖν οὐθὲν ἂν ἄλλο δόξειεν εἶναι ἢ εὐδαιμονία, τὴν δ' εὐδαιμονίαν ἐκ πολλῶν ἀγαθῶν συντίθεμεν· ἐὰν δὴ τὸ βέλτιστον σκοπῶν καὶ αὐτὸ συναριθμῆς, αὐτὸ αὐτοῦ ἔσται βέλτιον. αὐτὸ γὰρ βέλτιστον ἐστίν. οἷον τὰ ὑγιεινὰ θεὸς καὶ τὴν ὑγίειαν, σκόπει τί τούτων πάντων βέλτιστον· βέλτιστον δὲ ἐστὶν ὑγίεια· εἰ δὲ τοῦτο πάντων βέλτιστον, καὶ αὐτὸ [9] αὐτοῦ βέλτιστον. ἄτοπον δὲ συμβαίνει. οὐ δὲ ἴσως οὕτω γε σκεπτέον τὸ βέλτιστον.

Ἀλλὰ ἄρά γε οὕτω πως, οἷον χωρὶς αὐτοῦ; ἢ καὶ τοῦτο ἄτοπον; ἡ γὰρ εὐδαιμονία ἐστὶν ἐκ τινων ἀγαθῶν συγκεῖμένη· τὸ δ' ἐξ ὧν ἀγαθῶν σύγκειται, σκοπεῖν εἰ τοῦτ' ἐστὶν βέλτιον, ἄτοπον· οὐ γὰρ ἐστὶν ἄλλο τι χωρὶς τούτων ἢ εὐδαιμονία, ἀλλὰ ταῦτα.

[10] Ἀλλ' ἄρά γε οὕτωςί πως ἂν τις ὀρθῶς σκοποῖτο συγκρίνων τὸ ἄριστον; οἷον αὐτὴν τὴν εὐδαιμονίαν τὴν ἐκ τούτων τῶν ἀγαθῶν οὔσαν συγκρίνων πρὸς ἄλλα ἃ μὴ ἐστὶν ἐν αὐτῇ ἐνόητα, οὕτω τὸ ἄριστον [11] σκοπῶν ὀρθῶς ἂν σκοποῖτο; ἄλλ' οὐκ ἔστιν ἀπλοῦν τὸ ἄριστον ὃ ζητοῦμεν νῦν. οἷον λέγοι ἂν τις εἶναι ἄριστον τὴν φρόνησιν ἀπάντων τῶν ἀγαθῶν καθ' ἐν συγκρινομένων. ἄλλ' ἴσως οὐχ οὕτως ζητητέον ἐστὶν τὸ ἄριστον ἀγαθόν. τὸ γὰρ τέλειον ζητοῦμεν ἀγαθόν, ἡ δὲ φρόνησις μόνη οὔσα οὐ τέλειον· οὐκ ἄρα τοῦτο τὸ ἄριστον ὃ ζητοῦμεν, οὐδὲ τὸ οὕτως ἄριστον.

[3]

[1] Μετὰ τοίνυν τοῦτο ἔχει τὰ ἀγαθὰ ἄλλην διαίρεσιν. ἔστι γὰρ τῶν ἀγαθῶν τὰ μὲν ἐν ψυχῇ, οἷον αἱ ἀρεταί, τὰ δὲ ἐν τῷ σώματι, οἷον ὑγίεια κάλλος, τὰ δ' ἐκτός, πλοῦτος ἀρχὴ τιμὴ ἢ εἴ τι ἄλλο τῶν τοιούτων. τούτων δὲ τὰ ἐν ψυχῇ [2] βέλτιστα. τὰ δ' ἐν ψυχῇ διώρισται ἀγαθὰ εἰς τρία, εἰς φρόνησιν εἰς ἀρετὴν καὶ ἡδονήν.

Ἦδη τοίνυν τὸ μετὰ τοῦτο, ὃ καὶ λέγομεν πάντες καὶ δοκεῖ καὶ τέλος τῶν ἀγαθῶν καὶ τελειότατον εἶναι, ἡ εὐδαιμονία, καὶ τοῦτο ταῦτό φαμεν εἶναι [3] τὸ εὖ πράττειν καὶ εὖ ζῆν. τὸ δὲ τέλος ἐστὶν οὐχ ἀπλοῦν ἀλλὰ διπτόν· ἐνίων μὲν γὰρ ἐστὶ τὸ τέλος αὐτὴ ἡ ἐνέργεια καὶ ἡ χρῆσις, οἷον τῆς ὄψεως [ἐστὶν ἡ ὄρασις]· καὶ ἔστιν γε ἡ χρῆσις αἰρετωτέρα τῆς ἕξεως· τέλος γὰρ ἡ χρῆσις· οὐδεὶς γὰρ ἂν βούλοιο ἔχειν τὴν ὄψιν μὴ μέλλων ὁρᾶν ἀλλὰ μύειν.

[4] ὁμοίως δὲ καὶ ἐπ' ἀκοῆς καὶ τῶν τοιούτων. ὦν ἄρα καὶ [ἡ] χρῆσις καὶ ἕξις ἐστίν, ἀεὶ βέλτιον καὶ αἰρετωτέρον ἡ χρῆσις τῆς ἕξεως· ἡ γὰρ χρῆσις καὶ ἡ ἐνέργεια τέλος, ἡ δ' ἕξις τῆς χρήσεως ἔνεκεν.

[5] Μετὰ τοῦτο τοίνυν τοῦτ' ἐάν τις σκοπῇ ἐπὶ τῶν ἐπιστημῶν πασῶν, ὄψεται οὐκ ἄλλην μὲν ποιοῦσαν οἰκίαν, ἄλλην δὲ σπουδαίαν οἰκίαν, ἀλλὰ τὴν οἰκοδομικήν· καὶ οὗ ποιητικὸς ὁ οἰκοδόμος, ἡ τούτου ἀρετὴ τοῦ αὐτοῦ τούτου εὖ ποιητική. ὁμοίως [καὶ] ἐπὶ τῶν ἄλλων ἀπάντων.

[4]

[1] Μετὰ τοίνυν τοῦτο ὁρῶμεν ὅτι οὐθενὶ ἄλλῳ ἢ ψυχῇ ζῶμεν· ἐν ψυχῇ δὲ ἐστὶν ἀρετὴ· τὸ αὐτό γέ τοι φαμεν τὴν τε ψυχὴν ποιεῖν καὶ τὴν τῆς ψυχῆς ἀρετὴν. ἀλλ' ἡ μὲν ἀρετὴ ἐν ἐκάστω τοῦτο ποιεῖ <εὖ> οὗ ἐστὶν ἀρετὴ, ἡ δὲ ψυχὴ καὶ τᾶλλα μὲν, ψυχῇ δὲ ζῶμεν· διὰ τὴν τῆς ψυχῆς ἀρετὴν ἄρα εὖ ζήσομεν.

[2] Τὸ δὲ γε εὖ ζῆν καὶ εὖ πράττειν οὐθὲν ἄλλο ἢ τὸ εὐδαιμονεῖν λέγομεν. τὸ ἄρα εὐδαιμονεῖν καὶ ἡ εὐδαιμονία ἐν τῷ εὖ ζῆν ἐστίν, τὸ δ' εὖ ζῆν ἐν τῷ κατὰ τὰς ἀρετὰς ζῆν. τοῦτ' ἄρ' ἐστὶν τέλος καὶ ἡ εὐδαιμονία καὶ τὸ ἄριστον.

[3] Ἐν χρήσει τοίνυν τινὶ ἂν εἴη καὶ ἐνέργεια ἡ εὐδαιμονία. ὦν γὰρ ἦν ἕξις καὶ χρῆσις, ἡ χρῆσις καὶ ἡ ἐνέργεια τέλος· τῆς δὲ ψυχῆς ἡ ἀρετὴ ἕξις ἐστίν· ἔστιν δὲ καὶ ἐνέργεια καὶ [ἡ] χρῆσις αὐτῆς τῶν ἀρετῶν· ὥστε τέλος ἂν εἴη ἡ ἐνέργεια καὶ ἡ χρῆσις αὐτῆς· ἡ εὐδαιμονία ἄρ' ἂν εἴη ἐν τῷ κατὰ [4] τὰς ἀρετὰς ζῆν. ἐπειδήπερ οὖν τὸ ἄριστον ἀγαθόν ἐστὶν ἡ εὐδαιμονία, καὶ αὕτη τέλος καὶ τέλειον τέλος ἐνέργεια, ζῶντες ἂν κατὰ τὰς ἀρετὰς εὐδαίμονες ἂν

εἶημεν καὶ ἔχοιμεν τὸ ἄριστον ἀγαθόν.

[5] Ἐπεὶ δ' οὖν ἐστὶν ἡ εὐδαιμονία τέλειον ἀγαθὸν καὶ τέλος, οὐδὲ τοῦτο δεῖ λανθάνειν ὅτι καὶ ἐν τελείῳ ἔσται. οὐ γὰρ ἔσται ἐν παιδί (οὐ γὰρ ἐστὶ παῖς εὐδαίμων), ἀλλ' ἐν ἀνδρί· οὗτος γὰρ τέλειος.

Οὐδ' ἐν χρόνῳ γε ἀτελεῖ, ἀλλ' ἐν τελείῳ. τέλειος δ' ἂν εἴη χρόνος, ὅσον ἄνθρωπος βιοῖ. καὶ γὰρ λέγεται ὀρθῶς παρὰ τοῖς πολλοῖς ὅτι δεῖ τὸν εὐδαίμονα ἐν τῷ μεγίστῳ χρόνῳ τοῦ βίου κρίνειν, ὥς δέον τὸ τέλειον εἶναι καὶ ἐν χρόνῳ τελείῳ καὶ ἐν ἀνθρώπῳ.

[6] Ὅτι δὲ ἐνέργεια ἐστίν, ἴδοι ἂν τις καὶ ἐντεῦθεν. ἐν γὰρ τοῖς ὕπνοις, οἷον εἴ τις καθεύδοι διὰ βίου, τὸν τοιοῦτον οὐ πάνυ βουλόμεθα λέγειν εὐδαίμονα εἶναι· τὸ μὲν γὰρ ζῆν αὐτῷ ὑπάρχει, ἀλλὰ τὸ ζῆν αὐτῷ κατὰ τὰς ἀρετὰς οὐχ ὑπάρχει, ὃ ἦν κατὰ τὴν ἐνέργειαν.

[7] Μετὰ τοῦτο τὸ μέλλον λέγεσθαι οὔτε λίαν δόξειεν ἂν οἰκεῖον εἶναι τούτων οὔτε μακρὰν ἀπέχον. οἷον ἐπειδὴ περ ἔστιν, ὥς δοκεῖ, μόνιον τι τῆς ψυχῆς ᾧ τρεφόμεθα, ὃ καλοῦμεν θρεπτικόν (τοῦτο γὰρ εὐλογόν ἐστιν εἶναι· τοὺς γοῦν λίθους ὀρώμεν ἀδυνάτους τρέφεσθαι ὄντας, ὥστε δῆλον ὅτι τῶν ἐμψύχων ἐστὶ τὸ τρέφεσθαι· εἰ δὲ τῶν ἐμψύχων, ἡ [8] ψυχὴ ἂν εἴη αἰτία· τῆς δὲ ψυχῆς τούτων μὲν τῶν μορίων οὐθὲν αἴτιον ἂν εἴη τοῦ τρέφεσθαι, οἷον τὸ λογιστικὸν ἢ τὸ θυμικὸν ἢ τὸ ἐπιθυμητικόν, ἄλλο δέ τι παρὰ ταῦτα, ᾧ οὐθὲν ἔχομεν οἰκειότερον [9] ὄνομα ἐπιθεῖναι ἢ θρεπτικόν). τί οὖν, ἂν τις εἴποι, πότερον καὶ τούτου τοῦ μορίου τῆς ψυχῆς ἔστιν ἀρετὴ; εἰ γὰρ ἔστι, δῆλον ὅτι καὶ ταύτῃ δεήσει ἐνεργεῖν· τῆς γὰρ τελείας ἀρετῆς ἡ ἐνέργεια εὐδαιμονία.

Εἰ μὲν οὖν ἔστιν ἀρετὴ τούτου ἢ μὴ ἔστιν, ἄλλος λόγος· εἰ δ' ἄρα ἔστιν, οὐκ ἔστιν ταύτης ἐνέργεια. ὦν γὰρ μὴ ἔστιν ὁρμή, οὐδ' ἐνέργεια τούτων ἔσται· οὐκ ἔοικεν δὲ εἶναι ὁρμὴ ἐν τῷ μορίῳ τούτῳ, ἀλλ' ὅμοιον ἔοικεν εἶναι τῷ πυρί. καὶ γὰρ ἐκεῖνο ὃ τι ἂν ἐμβάλῃς καταναλώσει, κἂν μὴ ἐμβάλῃς, οὐκ ἔχει ὁρμὴν πρὸς τὸ λαβεῖν. οὕτω καὶ τοῦτο τὸ μόνιον τῆς ψυχῆς ἔχει· ἂν μὲν γὰρ ἐμβάλῃς τροφήν, τρέφει, ἂν δὲ μὴ ἐμβάλῃς τροφήν, οὐκ ἔχει ὁρμὴν τοῦ τρέφειν. διὸ οὐδὲ ἐνέργεια οὐ μηδὲ ὁρμή. ὥστ' οὐδὲν συνεργεῖ τὸ μόνιον τοῦτο πρὸς τὴν εὐδαιμονίαν.

[10]

Μετὰ ταῦτα τοίνυν λεκτέον ἂν εἴη τί ἐστὶν ἡ ἀρετὴ, ἐπεὶ περ ἡ ταύτης ἐνέργειά ἐστὶν ἡ εὐδαιμονία. ὥς μὲν οὖν ἀπλῶς εἶπεῖν, ἐστὶν ἡ ἀρετὴ ἕξις ἢ

βελτίστη· ἀλλ' ἴσως οὐχ ἰκανὸν οὕτως ἀπλῶς εἰπεῖν, ἀλλὰ σαφέστερον διορίσαι δεῖ.

[5]

[1] Πρῶτον μὲν οὖν λεκτέον ὑπὲρ τῆς ψυχῆς ἐν ᾗ ἐγγίνεται, οὐ τί ἐστὶν ἡ ψυχὴ (ὑπὲρ μὲν γὰρ τούτου ἄλλος λόγος), ἀλλ' ὡς τύπῳ διελέσθαι. ἔστιν δ' ἡ ψυχὴ, ὡς φαμέν, εἰς δύο μέρη διηρημένη, εἰς τε τὸ λόγον ἔχον καὶ τὸ ἄλογον. ἐν μὲν δὴ τῷ λόγον ἔχοντι ἐγγίνεται φρόνησις ἀγχίνοια σοφία εὐμάθεια μνήμη καὶ τὰ τοιαῦτα, ἐν δὲ τῷ ἀλόγῳ αὐταὶ αἱ ἀρεταὶ λεγόμεναι, σωφροσύνη δικαιοσύνη ἀνδρεία ὅσαι ἄλλαι τοῦ ἡθους δοκοῦσιν ἐπαινέται [2] εἶναι. κατὰ γὰρ ταύτας ἐπαινετοὶ λεγόμεθα· κατὰ δὲ τὰς τοῦ [τὸν] λόγον ἔχοντος οὐδεὶς ἐπαινέται. οὔτε γὰρ ὅτι σοφός, οὐδεὶς ἐπαινέται, οὔτε ὅτι φρόνιμος, οὐδ' ὅλως κατὰ τι τῶν τοιούτων οὐθέν. οὐδὲ δὴ τὸ ἄλογον, εἰ μὴ ἡ ὑπηρετικὸν ἐστὶν καὶ ὑπηρετεῖ τῷ λόγον ἔχοντι μορίῳ.

[3] Ἔστιν δ' ἡ ἀρετὴ ἡ ἠθικὴ ὑπὸ ἐνδεΐας καὶ ὑπερβολῆς φθειρομένη. ὅτι δὲ ἡ ἐνδεια καὶ ἡ ὑπερβολὴ φθείρει, τοῦτ' ἰδεῖν ἔστιν ἐκ τῶν ἠθικῶν (δεῖ δ' ὑπὲρ τῶν ἀφανῶν τοῖς φανεροῖς μαρτυρίοις χρῆσθαι). εὐθέως γὰρ ἐπὶ γυμνασίων ἴδοι ἂν τις· πολλῶν γὰρ γινομένων φθείρεται ἡ ἰσχὺς, ὀλίγων τε ὡσαύτως. ἐπὶ τε ποτῶν καὶ σιτίων ὡσαύτως· πολλῶν τε γὰρ δὴ γινομένων φθείρεται ἡ ὑγίεια, ὀλίγων τε ὡσαύτως, συμμέτρων δὲ γινομένων σώζεται [4] ἡ ἰσχὺς καὶ ἡ ὑγίεια. ὁμοίως δὲ τούτοις συμβαίνει καὶ ἐπὶ σωφροσύνης καὶ ἐπὶ ἀνδρείας καὶ τῶν ἄλλων ἀρετῶν. ἐὰν μὲν γάρ τινα λίαν ποιήσης ἄφοβον, ὥστε μηδὲ τοὺς θεοὺς φοβεῖσθαι, οὐκ ἀνδρεῖος ἀλλὰ μαινόμενος, ἂν δὲ φοβούμενον πάντα, δειλός· ἀνδρεῖος ἄρα ἔσται οὔτε ὁ φοβούμενος πάντα [5] οὔτε ὁ μηθέν. ταῦτ' ἄρα καὶ αὖξει καὶ φθείρει τὴν ἀρετὴν. καὶ γὰρ οἱ λίαν φόβοι καὶ πάντες φθείρουσι, καὶ οἱ περὶ μηθέν δὲ ὁμοίως. ἔστιν δ' ἡ ἀνδρεία περὶ φόβους, ὥστε οἱ μέτριοι φόβοι αὖξουσιν τὴν ἀνδρείαν. ὑπὸ τῶν αὐτῶν ἄρα καὶ αὖζεται καὶ φθείρεται ἡ ἀνδρεία· ὑπὸ φόβων γὰρ τοῦτο πάσχουσιν. ὁμοίως δὲ καὶ αἱ ἄλλαι ἀρεταί.

[6]

[1] Ἔτι οὐ μόνον τοῖς τοιούτοις τὴν ἀρετὴν ἀφορίσειεν ἂν τις, ἀλλὰ καὶ λύπη καὶ ἡδονή. διὰ μὲν γὰρ τὴν ἡδονὴν τὰ φαῦλα πράττομεν, διὰ δὲ τὴν λύπην τῶν καλῶν ἀπεχόμεθα· ὅλως τε οὐκ ἔστιν λαβεῖν ἀρετὴν καὶ κακίαν ἄνευ λύπης καὶ ἡδονῆς. ἔστιν οὖν ἡ ἀρετὴ περὶ ἡδονὰς καὶ λύπας.

[2] Ἡ δ' ἠθικὴ ἀρετὴ ἐντεῦθεν τὰς ἐπωνυμίας ἔχει, εἰ δεῖ παρὰ γράμμα λέγοντα τὴν ἀλήθειαν ὡς ἔχει σκοπεῖν (δεῖ δ' ἴσως). τὸ γὰρ ἦθος ἀπὸ τοῦ ἔθους ἔχει τὴν ἐπωνυμίαν· ἠθικὴ γὰρ καλεῖται διὰ τὸ [3] ἐθίζεσθαι. ὦ καὶ δῆλον ὅτι οὐδεμία ἡμῖν τῶν ἀρετῶν τῶν τοῦ ἀλόγου μέρους φύσει ἐγγίνεται· οὐθὲν γὰρ τῶν ὄντων φύσει ἔθει ἄλλως γίνεται. οἶον ὁ λίθος καὶ ὅλως τὰ βαρέα πέφυκε κάτω φέρεσθαι· ἂν τις οὖν ἄνω ρίπτῃ πολλάκις καὶ ἐθίζῃ ἄνω φέρεσθαι, ὅμως οὐκ ἂν ποτε ἄνω ἐνεχθεῖη, ἀλλ' ἀεὶ κάτω. ὁμοίως [καὶ] ἐπὶ τῶν ἄλλων τῶν τοιούτων.

[7]

[1] Μετὰ τοίνυν τοῦτο δεῖ βουλομένους εἰπεῖν τὸ τί ἐστὶν ἡ ἀρετὴ, εἰδῆσαι τίνα ἐστὶν τὰ ἐν τῇ ψυχῇ γινόμενα. ἔστιν δ' ἃ γίνεται ταῦτα, πάθη δυνάμεις ἕξεις· ὥστε δῆλον ὅτι τούτων ἂν τι εἴῃ [2] ἀρετὴ. πάθη μὲν οὖν ἐστὶν ὀργὴ φόβος μῖσος πόθος ζῆλος ἔλεος τὰ τοιαῦτα, οἷς εἴωθεν παρακολουθεῖν λύπη καὶ ἡδονή· δυνάμεις δὲ καθ' ἃς παθητικοὶ τούτων λεγόμεθα, οἷον καθ' ἃς δυνατοὶ ἐσμεν ὀργισθῆναι λυπηθῆναι ἐλεῆσαι, [καὶ] τὰ τοιαῦτα· [3] ἕξεις δ' εἰσὶν καθ' ἃς πρὸς ταῦτα ἔχομεν εὖ ἢ κακῶς, οἷον πρὸς τὸ ὀργισθῆναι, εἰ μὲν λίαν ὀργίλως, κακῶς ἔχομεν πρὸς ὀργήν, εἰ δ' ὅλως μὴ ὀργιζόμεθα ἐφ' οἷς δεῖ, καὶ οὕτως κακῶς ἔχομεν πρὸς ὀργήν. τὸ ἄρα μέσως ἔχειν τὸ μήτε λίαν [4] ὑπεραλγεῖν μήτε παντελῶς ἀναλγήτως ἔχειν. ὅταν οὖν οὕτως ἔχωμεν, εὖ διακείμεθα. ὁμοίως δὲ [καὶ] πρὸς τὰ ἄλλα τὰ ὅμοια. τὸ γὰρ εὐὸργητον καὶ τὸ πρᾶον ἐν μεσότητι ἐστὶν ὀργῆς καὶ ἀναλγησίας τῆς πρὸς ὀργήν. ὁμοίως [καὶ] ἐπ' ἀλαζονείας καὶ εἰρωνείας. τὸ μὲν γὰρ πλείω προσποιεῖσθαι τῶν ὑπαρχόντων ἔχειν ἀλαζονείας, τὸ δὲ ἐλάττω εἰρωνείας· ἡ ἄρα μεσότης ἡ τούτων ἡ ἀλήθεια ἐστίν.

[8]

[1] Ὅμοίως καὶ ἐπὶ τῶν ἄλλων πάντων. τοῦτο γὰρ ἐστὶ τῆς ἕξεως, τὸ εὖ ἢ κακῶς πρὸς ταῦτα ἔχειν, τὸ δ' εὖ ἔχειν πρὸς ταῦτ' ἐστὶν τὸ μήτε πρὸς τὴν ὑπερβολὴν ἔχειν μήτε πρὸς τὴν ἔνδειαν· πρὸς μεσότητα ἄρα τῶν τοιούτων καθ' ἃ ἐπαινετοὶ λεγόμεθα ἢ ἕξις ἐστὶ τοῦ εὖ ἔχειν, τοῦ δὲ κακῶς [2] πρὸς ὑπερβολὴν καὶ ἔνδειαν. ἐπεὶ τοίνυν ἐστὶν ἡ ἀρετὴ τῶν παθῶν τούτων μεσότης, τὰ δὲ πάθη ἥτοι λυπαὶ εἰσὶν ἢ ἡδοναὶ ἢ οὐκ ἄνευ λύπης ἢ ἡδονῆς· ἡ ἄρα ἀρετὴ ἐστὶν περὶ λύπας καὶ ἡδονάς, καὶ ἐντεῦθεν ἐστὶ δῆλον.

[3] Ἔστι δὲ καὶ ἄλλα πάθη, ὡς δόξειεν ἂν τινι, ἐφ' ὧν ἡ κακία οὐκ ἔστιν ἐν ὑπερβολῇ καὶ ἐλλείψει τινί, οἷον μοιχεία καὶ ὁ μοιχός· οὐκ ἔστιν οὗτος ὁ

μᾶλλον τὰς ἐλευθέρας διαφθείρων. ἀλλὰ καὶ τοῦτο, καὶ εἴ τι ἄλλο τοιοῦτόν ἐστιν, ὃ περιέχεται ἡδονῇ τῇ κατ' ἀκολασίαν, ἢ καὶ ὃ ἐν ἐλλείψει καὶ ὃ ἐν ὑπερβολῇ τὸ ψεκτὸν ἔχει.

[9]

[1] Μετὰ τοίνυν τοῦτο ἀναγκαῖόν ἐστιν ἴσως ῥηθῆναι τί τῇ μεσότητι ἀντίκειται, πότερον ἢ ὑπερβολὴ ἢ ἡ ἔνδεια. ἐνίαις μὲν γὰρ μεσότησιν ἔνδεια ἐναντίον, ἐνίαις δὲ ὑπερβολῇ, οἷον ἀνδρεία μὲν οὐχ ἡ θρασύτης ὑπερβολὴ οὔσα, ἀλλ' ἡ δειλία ἔνδεια οὔσα, τῇ δὲ σωφροσύνῃ μεσότητι οὔση ἀκολασίας καὶ ἀναισθησίας τῆς περὶ ἡδονᾶς οὐ δοκεῖ ἐναντίον εἶναι ἢ ἀναισθησία ἔνδεια οὔσα, ἀλλ' ἡ ἀκολασία οὔσα ὑπερβολή.

[2] Ἔστι δ' ἀμφοτέρω ἐναντία τῇ μεσότητι, καὶ ἡ ὑπερβολὴ καὶ ἡ ἔνδεια· ἡ γὰρ μεσότης τῆς μὲν ὑπερβολῆς ἐνδεέστερον, τῆς δ' ἐνδείας ὑπερβάλλον. διὸ καὶ οἱ μὲν ἄσωτοι τοὺς ἐλευθερίους ἀνελευθέρους φασὶν εἶναι, οἱ δ' ἀνελευθεροὶ τοὺς ἐλευθερίους ἄσώτους, καὶ οἱ μὲν θρασεῖς καὶ προπετεῖς τοὺς ἀνδρείους καλοῦσι δειλοὺς, οἱ δὲ δειλοὶ τοὺς ἀνδρείους προπετεῖς καὶ μαινομένους.

[3] Διὰ δὲ δύο αἰτίας δόξαιμεν ἂν ἀντιτιθέναι τῇ μεσότητι τὴν ὑπερβολὴν καὶ τὴν ἔνδειαν. ἡ γὰρ ἐξ αὐτοῦ τοῦ πράγματος σκοποῦσιν πότερον ἐγγύτερόν ἐστι τοῦ μέσου ἢ πορρώτερον, οἷον ἐλευθεριότητι πότερον ἄσωτία ἢ ἀνελευθερία πορρώτερον. μᾶλλον γὰρ ἂν δόξειεν ἐλευθεριότης ἢ ἄσωτία ἢ ἡ ἀνελευθερία· πορρώτερον ἄρα ἢ [4] ἀνελευθερία. τὰ δὲ πλεῖον ἀπέχοντα τοῦ μέσου ἐναντιώτερα δόξαιεν ἂν εἶναι. ἐκ μὲν ἄρα αὐτοῦ τοῦ πράγματος ἡ ἔνδεια ἐναντιώτερον φαίνεται.

Ἔστι δὲ καὶ ἄλλως, οἷον πρὸς ἃ μᾶλλον πεφύκαμεν, ταῦτα μᾶλλον ἐναντία τῷ μέσῳ. οἷον πεφύκαμεν μᾶλλον ἀκόλαστοι ἢ κόσμιοι εἶναι· ἢ οὖν ἐπίδοσις γίνεται μᾶλλον πρὸς ἃ πεφύκαμεν· πρὸς ἃ δὲ μᾶλλον ἐπιδίδομεν, ταῦτα καὶ μᾶλλον ἐναντία· ἐπιδίδομεν δὲ πρὸς ἀκολασίαν μᾶλλον ἢ πρὸς κοσμιότητα· ὥστ' ἐναντιώτερον ἂν εἴη ὑπερβολὴ μεσότητος· ἡ γὰρ ἀκολασία ὑπερβολὴ σωφροσύνης.

[5]

Ὅτι μὲν οὖν ἐστιν ἡ ἀρετὴ, ἐπέσκεπται (μεσότης γὰρ δοκεῖ τις εἶναι τῶν παθῶν, ὥστε δέοι ἂν τὸν μέλλοντα κατὰ τὸ ἦθος εὐδοκμήσειν τὴν μεσότητα [6] τῶν παθῶν ἐκάστου διατηρεῖν· διὸ καὶ ἔργον ἐστὶν σπουδαῖον εἶναι· ἐν

ἐκάστω γὰρ τὸ μέσον λαβεῖν ἔργον, οἷον κύκλον μὲν γράψαι παντὸς ἐστί, τὸ δὲ μέσον τὸ ἐν αὐτῷ ἤδη λαβεῖν χαλεπὸν, ὁμοίως δὲ καὶ ὀργισθῆναι μὲν ῥάδιον, καὶ τὸ ἐναντίον δὲ τούτῳ, τὸ δὲ μέσως ἔχειν χαλεπὸν· ἀπλῶς δὲ ἐν ἐκάστω τῶν παθῶν ἔστιν ἰδεῖν ὅτι τὸ ἐμπεριέχον τὸ μέσον ῥάδιον ἐστί, τὸ δὲ μέσον χαλεπὸν, καθ' ὃ ἐπαινούμεθα· διὸ καὶ σπάνιον τὸ σπουδαῖον).

[7] Ἐπεὶ δ' οὖν ὑπὲρ ἀρετῆς εἴρηται, μετὰ τοῦτ' ἂν εἴη σκεπτέον πότερον δυνατὴ παραγενέσθαι ἢ οὐ, ἀλλ' ὥσπερ Σωκράτης ἔφη, οὐκ ἐφ' ἡμῖν γενέσθαι τὸ σπουδαῖον εἶναι ἢ φαύλους. εἰ γὰρ τις, φησὶν, ἐρωτήσῃεν ὄντιναοῦν πότερον ἂν βούλοιο δίκαιος εἶναι ἢ ἀδίκος, οὐθεὶς ἂν ἔλοιτο τὴν ἀδικίαν. ὁμοίως δ' ἐπ' ἀνδρείας καὶ δειλίας καὶ τῶν ἄλλων [8] ἀρετῶν ἀεὶ ὡσαύτως. δῆλον δ' ὡς εἰ φαῦλοί τινες εἰσὶν, οὐκ ἂν ἐκόντες εἴησαν φαῦλοι· ὥστε δῆλον ὅτι οὐδὲ σπουδαῖοι.

[9] Ὁ δὲ τοιοῦτος λόγος οὐκ ἔστιν ἀληθής. διὰ τί γὰρ ὁ νομοθέτης οὐκ ἔῃ τὰ φαῦλα πράττειν, τὰ δὲ καλὰ καὶ σπουδαῖα κελεύει; καὶ ἐπὶ μὲν τοῖς φαύλοις ζημίαν τάττει, ἂν πράττῃ, ἐπὶ δὲ τοῖς καλοῖς, ἂν μὴ πράττῃ; καίτοι ἄτοπος ἂν εἴη ταῦτα [10] νομοθετῶν, ἃ μὴ ἐφ' ἡμῖν ἐστι πράττειν. ἀλλ' ὡς ἔοικεν, ἐφ' ἡμῖν τὸ σπουδαῖον εἶναι καὶ τὸ φαύλον. - ἔτι δὲ μαρτυροῦσιν οἱ τ' ἔπαινοι καὶ οἱ ψόγοι γινόμενοι. ἐπὶ μὲν γὰρ τῇ ἀρετῇ ἔπαινος, ἐπὶ δὲ τῇ κακίᾳ ψόγος· ἔπαινος δὲ καὶ ψόγος οὐκ ἐπὶ τοῖς ἀκουσίοις· ὥστε δῆλον ὅτι ὡσαύτως ἐφ' ἡμῖν καὶ τὰ σπουδαῖα ἐστι πράττειν καὶ τὰ φαῦλα.

[11] Ἐλεγον δὲ καὶ τοιαύτην τινὰ παραβολήν, βουλόμενοι δεικνύναι ὅτι οὐχ ἐκούσιον. διὰ τί γάρ, φασὶν, ὅταν νοσῶμεν ἢ αἰσχροὶ ὦμεν, οὐδεὶς ψέγει τοὺς τοιούτους; τὸ δ' οὐκ ἀληθές· ψέγομεν γὰρ καὶ τοὺς τοιούτους, ὅταν αὐτοὺς οἰηθῶμεν αἰτίους εἶναι τοῦ νοσεῖν ἢ τοῦ κακῶς ἔχειν τὸ σῶμα, ὡς ὅν καὶ ἐνταῦθα τὸ ἐκούσιον. ἔοικεν οὖν ἐν τῷ κατ' ἀρετὴν καὶ κακίαν εἶναι τὸ ἐκούσιον.

[10]

[1] Ἐπεὶ δ' ἂν τις τοῦτο ἐναργέστερον καὶ ἐντεῦθεν ἴδοι. πᾶσα γὰρ φύσις γεννητικὴ ἐστὶν οὐσίας τοιαύτης οἷα ἐστίν, οἷον τὰ φυτὰ καὶ τὰ ζῶα· ἀμφοτέρω γὰρ γεννητικά. γεννητικὰ δὲ ἐκ τῶν ἀρχῶν, οἷον τὸ δένδρον ἐκ τοῦ σπέρματος· αὕτη γάρ τις ἀρχή. τὸ δὲ μετὰ τὰς ἀρχὰς οὕτως ἔχει· ὡς γὰρ ἂν ἔχωσιν αἱ ἀρχαί, οὕτως καὶ τὰ ἐκ τῶν [2] ἀρχῶν ἔχει. ἐναργέστερον δ' ἔστι κατιδεῖν τοῦτο ἐν τοῖς κατὰ γεωμετρίαν. καὶ γὰρ ἐκεῖ ἐπειδὴ τινες λαμβάνονται ἀρχαί, ὡς ἂν αἱ ἀρχαὶ ἔχωσιν, οὕτω καὶ τὰ μετὰ τὰς ἀρχάς,



οἷον εἰ τὸ τρίγωνον δυσὶν ὀρθαῖς ἴσας ἔχει, τὸ δὲ τετράγωνον τέτταρσιν, καὶ ὥς ἂν μεταβάλλῃ τὸ τρίγωνον, οὕτω καὶ τὸ τετράγωνον συµμεταβάλλει (ἀντιστρέφει γάρ), καὶ ἐὰν τὸ τετράγωνον μὴ ἔχῃ τέτταρσιν ὀρθαῖς ἴσας, οὐδὲ τὸ τρίγωνον ἔξει δυσὶν ὀρθαῖς ἴσας.

[11]

[1] Οὕτω τοίνυν καὶ ὁμοίως τούτοις καὶ ἐπ' ἀνθρώπου. ἐπειδὴ γὰρ γεννητικὸν ἐστὶν ἄνθρωπος οὐσίας, ἔκ τινων ἀρχῶν καὶ τῶν πράξεων ὧν πράττει ἄνθρωπος γεννητικὸν ἐστίν. τί γὰρ ἂν ἄλλο; οὔτε γὰρ ἀψύχων οὐθὲν λέγομεν πράττειν οὔτε τῶν ἐμψύχων τῶν ἄλλων ἔξω ἀνθρώπων. δῆλον οὖν [2] ὅτι ὁ ἄνθρωπος τῶν πράξεων ἐστὶ γεννητικός. ἐπεὶ οὖν ὁρῶμεν μεταβαλλούσας τὰς πράξεις καὶ οὐδέποτε τὰ αὐτὰ πράττομεν, εἰσὶν δὲ αἱ πράξεις γεγενημέναι ἔκ τινων ἀρχῶν, δῆλον ὅτι, ἐπειδὴ αἱ πράξεις μεταβάλλουσιν, καὶ αἱ ἀρχαὶ τῶν πράξεων, ἀφ' ὧν εἰσὶ, μεταβάλλουσιν, ὥσπερ ἔφαμεν παραβάλλοντες [3] ἐπὶ τῶν ἐν γεωμετρίᾳ. ἀρχὴ δ' ἐστὶ πράξεως καὶ σπουδαίας καὶ φαύλης προαίρεσις καὶ βούλησις καὶ τὸ κατὰ λόγον πᾶν. δῆλον τοίνυν ὅτι καὶ αὗται μεταβάλλουσιν. μεταβάλλομεν δὲ καὶ ταῖς πράξεσιν ἐκόντες· ὥστε καὶ ἡ ἀρχὴ [καὶ] ἡ προαίρεσις μεταβάλλει [γὰρ] ἐκουσίως. ὥστε δῆλον ὅτι ἐφ' ἡμῖν ἂν εἴη καὶ σπουδαίοις εἶναι καὶ φαύλοις.

[4] Ἴσως οὖν λέγοι ἂν τις, ἐπειδήπερ ἐπ' ἐμοί ἐστὶν τὸ δικαίῳ εἶναι καὶ σπουδαίῳ, ἐὰν βούλωμαι, ἔσομαι πάντων σπουδαιότατος. οὐ δὲ δυνατόν τοῦτο. διὰ τί; ὅτι οὐδ' ἐπὶ τοῦ σώματος γίνεται τοῦτο. οὐ γὰρ ἂν τις βούληται ἐπιμελεῖσθαι τοῦ σώματος, καὶ δὲ πάντων ἄριστον ἔξει τὸ σῶμα. δεῖ γὰρ μὴ μόνον τὴν ἐπιμέλειαν ὑπάρχειν, ἀλλὰ καὶ τῇ φύσει γίνεσθαι τὸ σῶμα καλὸν κάγαθόν. βέλτιον μὲν οὖν ἔξει τὸ σῶμα, ἄριστα μέντοι πάντων [5] οὗ. ὁμοίως δὲ δεῖ ὑπολαμβάνειν καὶ ἐπὶ ψυχῆς· οὐ γὰρ ἔσται ὁ προαιρούμενος εἶναι σπουδαιότατος, ἂν μὴ καὶ ἡ φύσις ὑπάρξῃ, βελτίων μέντοι ἔσται.

[12]

[1] Ἐπεὶ οὖν φαίνεται ἐφ' ἡμῖν ὅν τὸ σπουδαῖον εἶναι, ἀναγκαῖον τὸ μετὰ ταῦτα εἰπεῖν ὑπὲρ ἐκούσιου, τί ἐστὶ τὸ ἐκούσιον· τοῦτο γὰρ ἐστὶ τὸ κυριώτατον πρὸς τὴν ἀρετὴν, τὸ ἐκούσιον. ἐκούσιον δὲ ἀπλῶς μὲν οὕτως ῥηθῆναι ἐστὶν ὃ πράττομεν μὴ ἀναγκαζόμενοι· ἀλλ' ἴσως σαφέστερον λεκτέον ἐστὶν ὑπὲρ αὐτοῦ.

[2] Ἔστιν οὖν καθ' ὃ πράττομεν ὀρεξεις· ὀρέξεως δ' ἐστὶν εἶδη τρία, ἐπιθυμία θυμὸς βούλησις.

Πρῶτον μὲν οὖν τὴν κατ' ἐπιθυμίαν πράξιν ἐπισκεπτέον, πότερον ἐκούσιόν ἐστιν ἢ ἀκούσιον. [οἶον] τὸ μὲν οὖν ἀκούσιον οὐκ ἂν δόξειεν. διὰ τί καὶ πόθεν; ὅτι ὅσα μὴ ἐκόντες πράττομεν, ἀναγκαζόμενοι πράττομεν, ἐπὶ δὲ τοῖς ἐξ ἀνάγκης πραττομένοις πᾶσιν ἔπεται λύπη, τοῖς δὲ δι' ἐπιθυμίαν πραττομένοις ἡδονὴ ἀκολουθεῖ, ὥστε οὕτως γε οὐκ ἂν εἴη τὰ δι' ἐπιθυμίαν πραττόμενα ἀκούσια, ἀλλ' ἐκούσια.

[3] Ἀλλὰ πάλιν ἄλλος λόγος τις τούτῳ ἐναντιοῦται, ὃ ἐπὶ τῇ ἀκρασίᾳ. οὐθεὶς γάρ, φησί, πράττει ἐκὼν τὰ κακά, εἰδὼς ὅτι κακὰ ἐστίν· ἀλλὰ μὴν, φησὶν, ὅ γε ἀκρατὴς εἰδὼς ὅτι ταῦτα φαῦλά ἐστιν ὅμως πράττει, καὶ κατ' ἐπιθυμίαν γε πράττει· οὐκ ἄρα [4] ἐκὼν· ἀναγκαζόμενος ἄρα. ἐνταῦθα πάλιν ὁ αὐτὸς λόγος ἀπαντήσεται. καὶ γὰρ εἰ κατ' ἐπιθυμίαν, οὐκ ἐξ ἀνάγκης· τῇ γὰρ ἐπιθυμίᾳ ἡδονὴ ἀκολουθεῖ, τὰ δὲ δι' ἡδονὴν οὐκ ἐξ ἀνάγκης.

Καὶ ἄλλως τοῦτ' ἂν γένοιτο δῆλον, ὅτι ὁ ἀκρατὴς ἐκὼν πράττει. οἱ μὲν γὰρ ἀδικοῦντες ἐκόντες ἀδικοῦσιν, οἱ δὲ ἀκρατεῖς ἀδικοὶ καὶ ἀδικοῦσιν· ὥστε ὁ ἀκρατὴς ἐκὼν ἂν πράττοι τὰ κατὰ τὴν ἀκρασίαν.

[13]

[1] Ἀλλὰ πάλιν ἄλλος λόγος ἐναντιοῦται, ὅς φησιν οὐχ ἐκούσιον εἶναι. ὁ γὰρ ἐγκρατὴς ἐκὼν πράττει τὰ κατὰ τὴν ἐγκράτειαν· ἐπαινεῖται γάρ, ἐπαινοῦνται δὲ ἐπὶ τοῖς ἐκούσιοις. εἰ δ' ἐστὶν τὸ κατὰ τὴν ἐπιθυμίαν ἐκούσιον, τὸ παρὰ τὴν ἐπιθυμίαν ἀκούσιον· ὁ δ' ἐγκρατὴς παρὰ τὴν ἐπιθυμίαν πράττει· ὥστε ὁ ἐγκρατὴς οὐχ ἐκὼν ἂν εἴη ἐγκρατὴς. ἀλλ' οὐ δοκεῖ· οὐδ' ἄρα τὸ κατ' ἐπιθυμίαν ἐκούσιον ἐστίν.

[2] Πάλιν ἐπὶ τῶν κατὰ τὸν θυμὸν ὁμοίως· οἱ γὰρ αὐτοὶ λόγοι οἵπερ καὶ κατὰ τῆς ἐπιθυμίας ἀρμόττουσιν, ὥστε τὴν ἀπορίαν ποιήσουσιν· ἔστι γὰρ ἀκρατὴ καὶ ἐγκρατὴ ὀργῆς εἶναι.

[3] Ἔτι λοιπὴ ἐστὶν τῶν ὀρέξεων ἣν διειλόμεθα ἡ βούλησις, πρὸς τὸ ἐπισκέπτεσθαι εἴ ἐστὶν ἐκούσιον. ἀλλὰ μὴν οἱ γε ἀκρατεῖς ἐφ' ἃ ὀρμῶσιν, ταῦτα τέως βούλονται· πράττουσιν ἄρα οἱ ἀκρατεῖς τὰ φαῦλα βουλόμενοι. ἐκὼν δέ γε οὐθεὶς τὰ κακὰ εἰδὼς πράττει ὅτι κακὰ ἐστίν· ὁ δὲ ἀκρατὴς, εἰδὼς τὰ κακὰ ὅτι κακά, πράττει βουλόμενος. οὐκ ἄρα ἐκὼν, οὐδ' ἡ βούλησις

ἐκούσιον ἄρα ἐστίν.

[4] Ἀλλ' οὗτος ὁ λόγος ἀναιρεῖ ἀκρασίαν καὶ τὸν ἀκρατῆ. εἰ γὰρ μὴ ἐκὼν, οὐκ ἔστιν ψεκτός· ἀλλ' ἔστιν ὁ ἀκρατῆς ψεκτός· ἐκὼν ἄρα· ἢ ἄρα βούλησις ἐκούσιον.

Ἐπεὶ οὖν λόγοι τινὲς ἐναντίοι φαίνονται, σαφέστερον λεκτέον ὑπὲρ τοῦ ἐκουσίου.

[14]

[1] Πρότερον τοίνυν ἂν εἴη λεκτέον ὑπὲρ βίας καὶ ὑπὲρ ἀνάγκης. ἡ μὲν γὰρ βία ἐστίν καὶ ἐν τοῖς ἀψύχοις. ἐκάστοις γὰρ ἐστὶ τῶν ἀψύχων οἰκεῖος τόπος ἀποδεδομένος, τῷ μὲν πυρὶ ὁ ἄνω, τῇ δὲ γῇ ὁ κάτω· ἐστὶ μέντοι γε βιάσασθαι καὶ τὸν λίθον [2] ἄνω φέρεσθαι καὶ τὸ πῦρ κάτω. ἐστὶ δὲ καὶ τὸ ζῶον βιάσασθαι, οἷον ἵππον ἐπ' ὀρθὸν θέοντα ἀντιλαμβανόμενον ἀποστρέψαι. ὅσοις μὲν οὖν ἐστὶν ἐκτός ἢ αἰτία τοῦ παρὰ φύσιν τι ἢ παρ' ἃ βούλονται ποιεῖν, ἐροῦμεν βιαζόμενοις ἃ ἂν ποιῶσι ποιεῖν· ἐν οἷς δ' ἐν αὐτοῖς ἐστὶν ἡ αἰτία, οὐκέτι τούτους [3] βιάζεσθαι ἐροῦμεν. εἰ δὲ μή, ὁ ἀκρατῆς ἀντερεῖ, οὐ φάσκων φαῦλος εἶναι· βιαζόμενος γὰρ φήσει ὑπὸ τῆς ἐπιθυμίας τὰ φαῦλα πράττειν.

[15]

[1] Τοῦ οὖν βιαίου οὗτος ἡμῖν ἔστω ὁ ὁρισμός, ὧν ἐκτός ἐστὶν ἡ αἰτία, ὑφ' ἧς βιάζονται πράττειν (ὧν δ' ἐντός καὶ ἐν αὐτοῖς ἡ αἰτία, οὐ βία)· πάλιν δ' ὑπὲρ ἀνάγκης καὶ τοῦ ἀναγκαίου λεκτέον. τὸ δὲ ἀναγκαῖον οὐ πάντως οὐδ' ἐν παντὶ λεκτέον ἐστίν, οἷον ὅσα ἡδονῆς ἕνεκεν πράττομεν. εἰ γὰρ τις λέγοι ὅτι ἡναγκάσθην τὴν τοῦ φίλου γυναῖκα διαφθεῖραι [2] ὑπὸ τῆς ἡδονῆς, ἄτοπος ἂν εἴη. τὸ γὰρ ἀναγκαῖον οὐκ ἐν παντί, ἀλλ' ἤδη ἐν τοῖς ἐκτός, οἷον ὃς ἂν καταβλάπτηται ἀντικαταλλαττόμενός τι ἄλλο μείζον ἀναγκαζόμενος ὑπὸ τῶν πραγμάτων. οἷον ἡναγκάσθην συντονώτερον βαδίσαι εἰς ἀγρόν· εἰ γὰρ μή, ἀπολωλὸτ' ἂν εὖρον τὰ ἐν ἀγρῷ. ἐν τοῖς τοιούτοις ἄρα τὸ ἀναγκαῖον.

[16]

[1] Ἐπεὶ δὲ τὸ ἐκούσιον ἐν οὐδεμιᾷ ὁρμῇ ἐστίν, λοιπὸν ἂν εἴη τὸ ἐκ διανοίας γινόμενον. τὸ γὰρ ἀκούσιόν ἐστὶ τό τε κατ' ἀνάγκην καὶ κατὰ βίαν γινόμενον, καὶ τρίτον δὲ μὴ μετὰ διανοίας γίγνεται. δῆλον δ' ἐστὶ τοῦτο ἐκ

τῶν γιγνομένων. ὅταν γάρ τις πατάξῃ τινὰ ἢ ἀποκτείνῃ ἢ τι τῶν τοιούτων ποιήσῃ μηδὲν προδιανοηθεὶς, ἄκοντά φαμεν ποιῆσαι, ὡς τοῦ ἐκούσιου ὄντος ἐν τῷ [2] διανοηθῆναι. οἷόν φασι ποτέ τινα γυναικίκα φίλτρον τινὲ δοῦναι πιεῖν, εἶτα τὸν ἄνθρωπον ἀποθανεῖν ὑπὸ τοῦ φίλτρου, τὴν δ' ἄνθρωπον ἐν Ἀρείῳ πάγῳ ἀποφυγεῖν· οὐ παροῦσαν δι' οὐθὲν ἄλλο ἀπέλυσαν ἢ διότι οὐκ ἐκ προνοίας. ἔδωκε μὲν γὰρ φιλία, διήμαρτεν δὲ τούτου· διὸ οὐχ ἐκούσιον ἐδόκει εἶναι, ὅτι τὴν δόσιν τοῦ φίλτρου οὐ μετὰ διανοίας τοῦ ἀπολέσθαι αὐτὸν ἐδίδου. ἐνταῦθα ἄρα τὸ ἐκούσιον πίπτει εἰς τὸ μετὰ διανοίας.

[17]

[1] Ἔτι δὲ λοιπὸν ἐστὶν ἐπισκέψασθαι τὴν προαίρεσιν, πότερόν ἐστιν ὄρεξις, ἢ οὐ. ὄρεξις μὲν γὰρ καὶ ἐν τοῖς ἄλλοις ζώοις ἐγγίγνεται, προαίρεσις δὲ οὐ· ἢ γὰρ προαίρεσις μετὰ λόγου, λόγος δὲ ἐν οὐδενὶ τῶν ἄλλων ζώων ἐστίν. ὄρεξις μὲν δὴ οὐκ ἂν εἴη· ἀλλ' ἄρά γε βούλησις; ἢ οὐδὲ τοῦτο; [2] βούλησις μὲν γὰρ ἐστὶν καὶ τῶν ἀδυνάτων, οἷον βουλόμεθα μὲν ἀθάνατοι εἶναι, προαιρούμεθα δὲ οὐ. ἔτι δὲ προαίρεσις μὲν οὐκ ἔστιν τοῦ τέλους, ἀλλὰ τῶν πρὸς τὸ τέλος, οἷον οὐθεὶς προαιρεῖται ὑγιαίνειν, ἀλλὰ τὸ πρὸς τὴν ὑγίειαν προαιρούμεθα, περιπατεῖν, τροχάζειν· βουλόμεθα δὲ τὰ τέλη.

[3] ὑγιαίνειν γὰρ βουλόμεθα. ὥστε δῆλον καὶ οὕτως ὅτι οὐ ταῦτόν ἢ βούλησις καὶ ἢ προαίρεσις· ἀλλὰ ἢ προαίρεσις ἔοικεν οὕτως ἔχειν, ὥσπερ καὶ τοῦνομα αὐτῆς ἔχει, οἷον προαιρούμεθα τόδε ἀντὶ τοῦδε, οἷον τὸ βέλτιον ἀντὶ τοῦ χείρονος. ὅταν οὖν ἀντικαταλλαττώμεθα τὸ βέλτιον ἀντὶ τοῦ χείρονος ἐν αἰρέσει ὄντος, ἐνταῦθα τὸ προαιρεῖσθαι δόξειεν ἂν οἰκεῖον εἶναι.

[4] Ἐπεὶ οὖν ἢ προαίρεσις οὐθὲν τούτων ἐστίν, ἄρά γε ἐστὶν τὸ κατὰ διάνοιαν ἐν προαιρέσει; ἢ οὐδὲ τοῦτο; πολλὰ γὰρ διανοούμεθα καὶ δοξάζομεν κατὰ διάνοιαν· ἄρ' οὖν ἃ διανοούμεθα, ταῦτα καὶ προαιρούμεθα; ἢ οὐ; πολλάκις γὰρ διανοούμεθα ὑπὲρ τῶν ἐν Ἰνδοῖς, ἀλλ' οὐτι καὶ προαιρούμεθα. οὐκ ἄρα οὐδὲ διάνοιά ἐστὶν ἢ προαίρεσις.

[5] Ἐπεὶ οὖν καθ' ἕκαστον τούτων οὐθέν ἐστὶν ἢ προαίρεσις, ταῦτα δὲ ἐστὶν τὰ ἐν τῇ ψυχῇ γινόμενα, ἀναγκαῖον [δὴ] συνδυαζομένων τινῶν τούτων εἶναι τὴν προαίρεσιν.

Ἐπεὶ οὖν ἐστίν, ὥσπερ ἔμπροσθεν ἐλέχθη, ἢ προαίρεσις τῶν πρὸς τὸ τέλος ἀγαθῶν καὶ οὐ τοῦ τέλους, καὶ τῶν δυνατῶν ἡμῖν, καὶ τῶν ἀντιλογίαν παραδιδόντων πότερον τοῦτο ἢ τοῦτο αἰρετόν, δῆλον ὅτι δέοι ἂν πρότερον

διανοηθῆναι ὑπὲρ αὐτῶν καὶ βουλευσασθαι, εἴθ' ὅταν ἡμῖν φανῇ κρεῖττον διανοηθεῖσιν, οὕτως ὁρμή τις τοῦ πράττειν ἐστίν, καὶ τοῦτο δὴ πράττοντες κατὰ προαίρεσιν δοκοῦμεν πράττειν.

[6] Εἰ τοίνυν ἡ προαίρεσις ὁρεξίς τις βουλευτικὴ μετὰ διανοίας, οὐκ ἔστιν τὸ ἐκούσιον προαιρετόν. ἐκόντες γὰρ πολλὰ πράττομεν πρὸ τοῦ διανοηθῆναι καὶ βουλευσασθαι, οἷον καθίζομεν καὶ ἀνιστάμεθα καὶ ἄλλα πολλὰ τοιαῦτα ἐκόντες μὲν ἄνευ δὲ τοῦ διανοηθῆναι, τὸ δὲ κατὰ προαίρεσιν πᾶν ἦν μετὰ [7] διανοίας. οὐκ ἄρα τὸ ἐκούσιον προαιρετόν, ἀλλὰ τὸ προαιρετὸν ἐκούσιον· ἄν τι γὰρ προαιρώμεθα πράττειν βουλευσάμενοι, ἐκόντες πράττομεν.

Φαίνονται δέ τινες ὀλίγοι καὶ τῶν νομοθετῶν

διορίζειν τό τε ἐκούσιον καὶ τὸ ἐκ προαιρέσεως ἕτερον ὄν, ἐλάττους τὰς ζημίας ἐπὶ τοῖς ἐκουσίοις ἢ τοῖς κατὰ προαίρεσιν τάττοντες.

[8] Ἔστιν οὖν ἡ προαίρεσις ἐν τοῖς πρακτοῖς, καὶ τούτοις ἐν οἷς ἐφ' ἡμῖν ἐστὶν καὶ πρᾶξαι καὶ μὴ πρᾶξαι, καὶ οὕτως ἢ μὴ οὕτως, καὶ ἐν οἷς ἔστι λαβεῖν τὸ διὰ τί. τὸ δὲ διὰ τί οὐχ ἀπλοῦν ἐστίν.

[9] ἐν μὲν γὰρ γεωμετρίᾳ, ὅταν φῇ τὸ τετράγωνον τέτταρσιν ὀρθαῖς ἴσας ἔχειν, καὶ ἐρωτᾷ διὰ τί, ὅτι, φησὶν, καὶ τὸ τρίγωνον δυσὶν ὀρθαῖς ἴσας ἔχει. ἐν μὲν οὖν τοῖς τοιούτοις ἐκ τῆς ἀρχῆς ὠρισμένης ἔλαβον τὸ διὰ τί· ἐν δὲ γε τοῖς πρακτοῖς, ἐν οἷς ἡ προαίρεσις, οὐχ οὕτως (οὐδεμία γὰρ κεῖται ὠρισμένη), ἀλλ' ἂν ἀπαιτῇ τις, διὰ τί τοῦτο ἔπραξας; ὅτι οὐκ ἐνῆν ἄλλως, ἢ ὅτι βέλτιον οὕτως. ἐξ αὐτῶν τῶν συμβαινόντων, ὅποῖ' ἂν φαίνεται βελτίω εἶναι, [10] ταῦτα προαιρεῖται καὶ διὰ ταῦτα. διὸ δὴ ἐν τοῖς τοιούτοις τὸ βουλευσασθαί ἐστι τὸ πῶς δεῖ, ἐν δὲ ταῖς ἐπιστήμαις οὔ. οὐθεὶς γὰρ βουλεύεται πῶς δεῖ γράψαι τὸ ὄνομα Ἀρχικλέους, ὅτι ἐστὶν ὠρισμένον πῶς δεῖ γράψαι τὸ ὄνομα Ἀρχικλέους. ἡ οὖν ἁμαρτία οὐ γίγνεται ἐν τῇ διανοίᾳ, ἀλλ' ἐν τῇ ἐνεργείᾳ τοῦ γράφειν. ἐν οἷς γὰρ μὴ ἐστὶν ἡ ἁμαρτία ἐν τῇ διανοίᾳ, οὐδὲ βουλεύονται ὑπὲρ τούτων· ἀλλ' ἐν οἷς ἤδη ἀόριστόν ἐστι τὸ ὡς δεῖ, [11] ἐνταῦθα ἡ ἁμαρτία. ἔστιν δ' ἐν τοῖς πρακτοῖς τὸ ἀόριστον, καὶ ἐν οἷς διτταὶ αἱ ἁμαρτίαι. ἁμαρτάνομεν οὖν ἐν τοῖς πρακτοῖς καὶ ἐν τοῖς κατὰ τὰς ἀρετὰς ὁμοίως. τῆς γὰρ ἀρετῆς στοχαζόμενοι ἁμαρτάνομεν ἐπὶ τὰς πεφυκυίας ὁδοῦς. ἔστι γὰρ καὶ ἐν ἐλλείψει καὶ ἐν ὑπερβολῇ ἁμαρτία, ἐφ' ἐκάτερα δὲ τούτων φερόμεθα δι' ἡδονὴν καὶ λύπην· διὰ μὲν γὰρ τὴν ἡδονὴν τὰ φαῦλα πράττομεν, διὰ δὲ τὴν λύπην τὰ καλὰ φεύγομεν.

[18]

[1] Ἔτι δ' ἐστὶν ἡ διάνοια οὐχ ὥσπερ αἴσθησις, οἷον τῇ ὄψει οὐκ ἂν δύναται οὐθὲν ἂν ἄλλο ποιῆσαι ἢ ἰδεῖν, οὐδὲ τῇ ἀκοῇ οὐθὲν ἄλλο ἢ ἀκοῦσαι. ὁμοίως δὲ οὐδὲ βουλευόμεθα πότερον δεῖ ἀκοῦσαι τῇ ἀκοῇ ἢ ἰδεῖν. ἡ δὲ διάνοια οὐ τοιοῦτον, ἀλλὰ καὶ τοῦτο δύναται πράττειν καὶ ἄλλα. διὰ [2] τοῦτο βουλεύεσθαι ἐνταῦθα ἤδη ὑπάρχει. ἔστιν οὖν ἡ ἀμαρτία ἐν τῇ αἰρέσει τῶν ἀγαθῶν οὐ περὶ τὰ τέλη (ταῦτα μὲν γὰρ ἅπαντες ὁμογνωμονοῦσιν, οἷον τὴν ὑγίειαν ὅτι ἀγαθόν), ἀλλ' ἤδη τὰ κατὰ τὸ τέλος, οἷον πότερον ἀγαθὸν πρὸς ὑγίειαν φαγεῖν τοῦτο ἢ οὐ. μάλιστα οὖν ποιεῖ ἐν τούτοις τὸ σφάλλεσθαι ἡδονὴ καὶ λύπη· τὴν μὲν γὰρ φεύγομεν, τὴν δὲ αἰρούμεθα.

[3] Ἐπεὶ οὖν διήρηται ἐν τίνι ἡ ἀμαρτία καὶ πῶς, λοιπὸν ἐστὶ τίνας ἐστὶν ἡ ἀρετὴ στοχαστική, πότερον τοῦ τέλους ἢ τῶν πρὸς τὸ τέλος, οἷον πότερον [4] τοῦ καλοῦ ἢ τῶν πρὸς τὸ καλόν. πῶς οὖν ἡ ἐπιστήμη; πότερον τῆς οἰκοδομικῆς ἐστὶν ἐπιστήμης τὸ τέλος καλῶς προθέσθαι, ἢ τὰ πρὸς τὸ τέλος ἰδεῖν; ἂν γὰρ τοῦτο καλῶς προθῇται, οἷον καλὴν οἰκίαν ποιῆσαι, καὶ τὰ πρὸς τοῦτο οὐκ ἄλλος τις εὐρήσει καὶ ποιεῖ ἢ οἰκοδόμος. ὁμοίως δὲ καὶ [5] ἐπὶ τῶν ἄλλων ἀπασῶν ἐπιστημῶν. ὡσαύτως ἄρα δόξειεν ἂν ἔχειν καὶ ἐπ' ἀρετῆς, μᾶλλον εἶναι αὐτῆς τὸν σκοπὸν [πρὸς] τὸ τέλος, ὃ δεῖ ὀρθῶς προθέσθαι, ἢ τὰ πρὸς τὸ τέλος· καὶ ἐξ ὧν τοῦτ' ἔσται οὐθεὶς ἄλλος ποιεῖ, καὶ εὐρήσει ἃ δεῖ πρὸς τοῦτο. καὶ εὐλογον δὲ τούτου εἶναι προθετικὴν τὴν ἀρετήν· ἐν οἷς γὰρ ἡ ἀρχὴ τοῦ βελτίστου ἐστίν, ἕκαστον καὶ προθετικὸν καὶ ποιητικόν. οὐθὲν οὖν βέλτιον τῆς ἀρετῆς ἐστίν· ταύτης γὰρ ἕνεκα καὶ τᾶλλα ἐστίν, [6] καὶ πρὸς ταύτην ἐστὶν ἡ ἀρχή, [καὶ τούτου ἕνεκεν μᾶλλον τὰ πρὸς τοῦτ' ἐστίν· τὸ δὲ τέλος ἀρχῇ τινι ὅμοιον, καὶ τούτου ἕνεκεν ἐστὶν ἕκαστον. ἀλλὰ κατὰ τρόπον τοῦτο ἔσται.] ὥστε δῆλον ὡς καπὶ τῆς ἀρετῆς, ἐπειδὴ βελτίστη ἐστὶν αἰτία, ὅτι τοῦ τέλους ἐστὶ στοχαστικὴ μᾶλλον ἢ τῶν πρὸς τὸ τέλος.

[19]

[1] Ἀρετῆς δὲ γ' ἐστὶ τέλος τὸ καλόν. τούτου ἄρ' ἐστὶ [ν ἡ ἀρετὴ] στοχαστικὴ μᾶλλον ἢ ἐξ ὧν ἔσται. ἔστι δὲ καὶ ταῦτα ταύτης. ὅλως δὲ δὴ φαίνεται ἄτοπον· ἴσως γὰρ ἂν ἐν γραφικῇ εἴῃ τις ἀγαθὸς μιμητής, ὅμως δὲ οὐκ ἂν ἐπαινεθείη, ἂν μὴ τὸν σκοπὸν θῇ τὰ βέλτιστα μιμεῖσθαι. τῆς ἀρετῆς ἄρα παντελῶς τοῦτ' ἐστίν, τὸ καλὸν προθέσθαι.

[2] Διὰ τί οὖν, ἂν τις εἴποι, πρότερον μὲν ἐλέγομεν τὴν ἐνέργειαν κρεῖττον

εἶναι ἢ τὴν ἕξιν τὴν αὐτήν, νῦν δὲ οὐκ ἔξ οὗ ἡ ἐνέργεια, τοῦτο τῇ ἀρετῇ ἀποδίδομεν ὡς κάλλιον, ἀλλ' ἐν ᾧ οὐκ ἔστιν ἐνέργεια; [3] ναί, ἀλλὰ καὶ νῦν φαμεν τοῦτο ὁμοίως, τὴν ἐνέργειαν τῆς ἕξεως βέλτιον εἶναι. οἱ γὰρ ἄλλοι ἄνθρωποι τὸν σπουδαῖον θεωροῦντες κρίνουσιν ἐκ τοῦ πράττειν, διὰ τὸ μὴ δυνατὸν εἶναι δηλῶσαι τὴν ἐκάστου προαίρεσιν ἣν ἔχει, ἐπεὶ εἰ ἦν εἰδέναι τὴν ἐκάστου γνώμην, ὡς ἔχει πρὸς τὸ καλόν, καὶ ἄνευ τοῦ πράττειν σπουδαῖος ἂν ἐδόκει εἶναι.

[Ἐπεὶ δὲ μεσότητάς τινας τῶν παθῶν κατηριθμησάμεθα, λεκτέον ἂν εἴη περὶ ποῖα τῶν παθῶν εἰσίν.]

[20]

[1] Ἐπεὶ οὖν ἔστιν ἡ ἀνδρεία περὶ θάρρη καὶ φόβους, σκεπτέον ἂν εἴη περὶ ποίους φόβους καὶ θάρρη. ἄρ' οὖν εἰ μὲν τις φοβεῖται μὴ ἀποβάλλῃ τὴν οὐσίαν, οὗτος δειλός, εἰ δέ τις θαρρεῖ περὶ ταῦτα, ἀνδρεῖος; ἢ οὐ; ὁμοίως δ' εἴ τις φοβεῖται νόσον ἢ θαρρεῖ, οὔτε δειλὸν φατέον εἶναι τὸν φοβούμενον οὔτ' ἀνδρεῖον τὸν μὴ φοβούμενον. οὐκ ἄρα ἐν τοῖς τοιούτοις φόβοις καὶ θάρρεσιν ἔστιν [2] ἡ ἀνδρεία. ἀλλὰ μὴν οὐδ' ἐν τοῖς τοιούτοις, οἷον εἰ μή τις φοβεῖται βροντὰς ἢ ἀστραπὰς ἢ ἄλλο τι τῶν ὑπὲρ ἄνθρωπον φοβερῶν, οὐκ ἀνδρεῖος ἀλλὰ μαινόμενός τις. ἐν φόβοις ἄρα καὶ θάρρεσιν ἔστιν ὁ ἀνδρεῖος τοῖς κατ' ἀνθρώπους· λέγω δὲ οἷον ἃ οἱ πολλοὶ φοβοῦνται ἢ οἱ πάντες, ἐν τούτοις ὁ ὢν θαρραλέος, οὗτος ἀνδρεῖος.

[3] Τούτων τοίνυν διωρισμένων σκεπτέον ἂν εἴη, ἐπειδὴ κατὰ πολλά εἰσιν οἱ ἀνδρεῖοι, ὁ ποῖος ἀνδρεῖος. ἔστιν γὰρ καὶ κατ' ἐμπειρίαν τις ἀνδρεῖος, οἷον οἱ στρατιῶται. οὗτοι γὰρ οἶδασι δι' ἐμπειρίαν ὅτι ἐν τοιούτῳ τόπῳ ἢ ἐν τοιούτῳ καιρῷ ἢ οὕτως ἔχοντι ἀδύνατόν τι παθεῖν. ὁ δὲ ταῦτα εἰδὼς καὶ διὰ ταῦτα ὑπομένων τοὺς πολεμίους οὐκ [4] ἀνδρεῖος· ἐὰν γὰρ τούτων μηθὲν ὑπάρχη, οὐχ ὑπομένει. διὸ τοὺς δι' ἐμπειρίαν οὐ φατέον ἀνδρείους.

Οὐδὲ Σωκράτης δὲ ὀρθῶς ἔλεγεν ἐπιστήμην φάσκων εἶναι τὴν ἀνδρείαν. ἡ γὰρ ἐπιστήμη ἐξ ἔθους τὴν ἐμπειρίαν λαβοῦσα ἐπιστήμη γίνεται· τοὺς δὲ δι' ἐμπειρίαν ὑπομένοντας οὐ φαμεν, οὐδ' ἐροῦσιν ἀνδρείους αὐτοὺς εἶναι· οὐκ ἄρα ἡ ἀνδρεία ἐπιστήμη ἂν εἴη.

[5] Πάλιν δ' αὖ εἰσιν ἀνδρεῖοι ἐκ τοῦ ἐναντίου τῆς ἐμπειρίας· οἱ γὰρ ἄπειροι τῶν ἐκβησομένων οὐ φοβοῦνται διὰ τὴν ἀπειρίαν. οὐδὲ δὲ οὐδὲ τούτους φατέον ἀνδρείους.

[6] Εἰσὶν δ' αὖ ἄλλοι δοκοῦντες ἀνδρεῖοι εἶναι διὰ τὰ πάθη, οἷον οἱ ἐρῶντες ἢ οἱ ἐνθουσιάζοντες. οὐδὲ δὴ τούτους φατέον ἀνδρείους εἶναι· ἐὰν γὰρ αὐτῶν τὸ πάθος ἀφαιρεθῇ, οὐκέτι εἰσὶν ἀνδρεῖοι, δεῖ δὲ [7] τὸν ἀνδρεῖον ἀεὶ εἶναι ἀνδρεῖον. διὸ οὐδὲ τὰ θηρία οἷον τοὺς σῦς οὐκ ἂν τις εἴποι ἀνδρείους διὰ τὸ ἀμύνεσθαι, ἐπειδὴν πληγέντες λυπηθῶσιν, οὐδὲ δεῖ τὸν ἀνδρεῖον διὰ [τὸ] πάθος εἶναι ἀνδρεῖον.

[8] Πάλιν ἔστιν ἄλλη ἀνδρεία πολιτικὴ δοκοῦσα εἶναι, οἷον εἰ δι' αἰσχύνην τὴν πρὸς τοὺς πολίτας ὑπομένουσι τοὺς κινδύνους καὶ δοκοῦσιν ἀνδρεῖοι εἶναι. σημεῖον δὲ τούτου· καὶ γὰρ Ὅμηρος πεποίηκε τὸν Ἑκτορα λέγοντα

Πουλυδάμας μοι πρῶτος ἐλεγχείην ἀναθήσει,

διὸ οἶεται δεῖν μάχεσθαι. οὐδὲ δὴ τὴν τοιαύτην φατέον εἶναι· ὁ γὰρ αὐτὸς ἐφ' ἐκάστῳ τούτων διορισμὸς ἀρμόσει. οὗ γὰρ ἀφαιρουμένου μὴ διαμένει ἡ ἀνδρεία, οὐκ ἂν εἴη ἔτι ἀνδρεῖος· ἂν οὖν τὴν αἰσχύνην περιέλῳ δι' ἣν ἦν ἀνδρεῖος, οὐκέτι ἔσται ἀνδρεῖος.

[9] Ἐτι καὶ ἄλλως εἰσὶν ἀνδρεῖοι δοκοῦντες εἶναι οἱ δι' ἐλπίδα καὶ προσδοκίαν ἀγαθοῦ. οὐδὲ δὴ τούτους φατέον εἶναι ἀνδρείους, ἐπειδὴ τοὺς τοιούτους καὶ ἐν τοῖς τοιούτοις ἀνδρείους λέγειν ἄτοπον φαίνεται.

Οὐδένα οὖν τῶν τοιούτων ἀνδρεῖον θετέον εἶναι· τὸν [ὁ] ποῖον οὖν ἀνδρεῖον, καὶ τίς ὁ ἀνδρεῖος [10] σκεπτέον. ὥς ἀπλῶς μὲν εἶπεῖν, ὁ διὰ μηθὲν τῶν προειρημένων ἀνδρεῖος ὢν, ἀλλὰ διὰ τὸ νομίζειν αὐτὸ εἶναι καλόν, καὶ τοῦτο ποιῶν κἂν παρῇ τις κἂν μὴ παρῇ.

Οὐδὲ δὴ παντελῶς ἄνευ πάθους καὶ ὁρμῆς ἐγγίγνεται ἡ ἀνδρεία. δεῖ δὲ τὴν ὁρμὴν γίνεσθαι ἀπὸ τοῦ λόγου διὰ τὸ καλόν. ὁ δὴ ὁρμῶν διὰ λόγον ἔνεκεν τοῦ καλοῦ ἐπὶ τὸ κινδυνεύειν, ἄφοβος ὢν περὶ ταῦτα, οὗτος ἀνδρεῖος, καὶ ἡ ἀνδρεία περὶ [11] ταῦτα. ἄφοβος δὲ οὐχ ὅταν οὕτω συμπέσῃ τῷ ἀνδρεῖῳ ὥστε ὅλως μὴ φοβεῖσθαι. ὁ μὲν γὰρ τοιοῦτος οὐκ ἀνδρεῖος, ὃ ὅλως μηθέν ἐστι φοβερόν· οὕτω μὲν γὰρ <ἂν> ὁ λίθος εἴη καὶ τᾶλλα ἄψυχα ἀνδρεῖα· ἀλλὰ δεῖ φοβεῖσθαι μὲν, ὑπομένειν δέ· εἰ γὰρ αὖ μὴ φοβούμενος ὑπομένει, οὐκ ἂν εἴη ἀνδρεῖος.

[12] - ἔτι δὲ καὶ ὥσπερ ἐπάνω διειλόμεθα, περὶ φόβους καὶ κινδύνους οὐ πάντας ἀλλὰ τοὺς ἀναιρετικοὺς τῆς οὐσίας. - ἔτι δὲ οὐδ' ἐν τῷ τυχόντι καὶ παντὶ χρόνῳ, ἀλλ' ἐν ᾧ οἱ φόβοι καὶ οἱ κίνδυνοι πλησίον εἰσὶν. εἰ γὰρ τις τὸν



εἰς δέκατον ἔτος κίνδυνον μὴ φοβεῖται, οὐπω ἀνδρεῖος· ἔνιοι γὰρ θαρροῦσιν διὰ τὸ μακρὰν ἀπέχειν, ἂν δὲ πλησίον γένωνται, ἀποθνήσκουσιν τῷ δέει.

[21]

[1] Ἡ μὲν οὖν ἀνδρεία καὶ ὁ ἀνδρεῖος τοιοῦτος· σωφροσύνη δ' ἐστὶν μεσότης ἀκολασίας καὶ ἀναισθησίας τῆς περὶ τὰς ἡδονάς. ἔστιν γὰρ ἡ σωφροσύνη καὶ ἀπλῶς ἅπασα ἀρετὴ ἕξις ἢ βελτίστη, ἡ δὲ βελτίστη ἕξις τοῦ βελτίστου ἐστίν, βέλτιστον δὲ τῆς ὑπερβολῆς καὶ τῆς ἐνδείας τὸ μέσον· κατ' ἀμφοτέρα γὰρ εἰσι ψεκτοί, καὶ καθ' ὑπερβολὴν καὶ κατ' ἐνδειαν. ὥστε εἴπερ τὸ μέσον βέλτιστον, ἡ σωφροσύνη μεσότης τις ἂν εἴη ἀκολασίας καὶ ἀναισθησίας.

[2] Μεσότης μὲν οὖν ἂν εἴη τούτων· ἔστιν δὲ ἡ σωφροσύνη περὶ ἡδονὰς καὶ λύπας, οὐ πάσας δὲ οὐδὲ τὰς περὶ πάντα. οὐ γὰρ εἴ τις ἡδεταί θεωρῶν γραφὴν ἢ ἀνδριάντα ἢ τι ἄλλο τῶν τοιούτων, καὶ δὴ οὗτος ἀκόλαστος, ὁμοίως δὲ οὐδὲ περὶ ἀκοῆς οὐδὲ περὶ ὁσφρήσεως· ἀλλ' ἐν ἡδοναῖς ταῖς περὶ [3] ἀφῆν καὶ γεῦσιν. οὐδὲ δὴ περὶ ταύτας ἀνὴρ σώφρων ἔσται· ὁ οὕτως ἔχων ὥστε μὴδ' ὑπὸ μιᾶς τῶν τοιούτων ἡδονῶν μὴθὲν πάσχειν (ὁ μὲν γὰρ τοιοῦτος ἀναίσθητος), ἀλλ' ἤδη ὁ πάσχων καὶ μὴ ἀγόμενος, ὥστε εἰς ὑπερβολὴν αὐτῶν ἀπολαύων πάντα τᾶλλα ποιεῖσθαι πάρεργα, καὶ αὐτόν γε τὸν ἤδη αὐτοῦ τοῦ καλοῦ ἔνεκεν καὶ μὴ ἄλλου πράττοντα [4] σώφρονα. ὅστις γὰρ τῶν τοιούτων ἡδονῶν τῆς ὑπερβολῆς ἀπέχεται ἢ διὰ φόβον ἢ δι' ἄλλο τι τῶν τοιούτων, οὐ σώφρων. οὐδὲ γὰρ τᾶλλα ζῶα λέγομεν εἶναι σώφρονα ἔξω ἀνθρώπου, διὰ τὸ μὴ εἶναι ἐν αὐτοῖς λόγον, ὥς δοκιμάζοντα τὸ καλὸν αἰροῦνται. πᾶσα γὰρ ἀρετὴ τοῦ καλοῦ καὶ πρὸς τὸ καλὸν ἐστίν. ὥστε εἴη ἂν ἡ σωφροσύνη περὶ ἡδονὰς καὶ λύπας, καὶ ταύτας τὰς ἐν ἀφῇ καὶ γεύσει γινομένης.

[22]

[1] Ἐχόμενον δ' ἂν εἴη τούτου λέγειν ὑπὲρ πραότητος, [καὶ] τί ἐστὶ καὶ ἐν τίσιν. ἔστιν [μὲν] οὖν ἡ πραότης ἀνὰ μέσον ὀργιλότητος καὶ ἀοργησίας. καὶ ὅλως δὲ δοκοῦσιν αἱ ἀρεταὶ μεσότητές τινες εἶναι. ὅτι δ' εἰσὶ μεσότητες, καὶ οὕτως ἂν τις εἴποι· εἰ γὰρ ἐστὶν ἐν μεσότητι τὸ βέλτιστον, ἡ δ' ἀρετὴ ἐστὶν ἡ βελτίστη ἕξις, [βέλτιστον δ' [2] ἐστὶ τὸ μέσον,] ἡ ἀρετὴ ἂν εἴη τὸ μέσον. δῆλον δὲ ἔσται μᾶλλον καὶ καθ' ἕκαστον σκοποῦσιν.

Ἐπειδὴ γὰρ ἐστὶν ὀργίλος ὁ παντὶ καὶ πάντως καὶ ἐπὶ πλεῖον ὀργιζόμενος, καὶ ψεκτὸς δὲ ὁ τοιοῦτος (οὔτε γὰρ παντὶ δεῖ ὀργίζεσθαι οὔτ' ἐπὶ πᾶσιν οὔτε

πάντως καὶ αἰεὶ, οὐδ' αὖτε πάλιν οὕτως ἔχειν δεῖ, ὥστε μηθενὶ μηδέποτε· καὶ γὰρ οὗτος [3] ψεκτός, ἀνάληγτός γε ὢν). Ἐπεὶ τοίνυν καὶ ὁ κατὰ τὴν ὑπερβολὴν ψεκτός καὶ ὁ κατὰ τὴν ἔλλειψιν· ὁ μέσος ἂν τούτων εἴη καὶ πρᾶος καὶ ἐπαινετός. οὔτε γὰρ ὁ ἐλλείπων τῇ ὀργῇ οὔτε ὁ ὑπερβάλλων ἐπαινετός, ἀλλ' ὁ μέσως ἔχων πρὸς ταῦτα, οὗτος πρᾶος. καὶ ἡ πραότης δὲ τούτων τῶν παθῶν μεσότης ἂν εἴη.

[23]

[1] Ἐλευθεριότης δὲ ἐστὶν μεσότης ἀσωτίας καὶ ἀνελευθερίας. ἔστιν δὲ περὶ χρήματα τὰ τοιαῦτα πάθη· ὁ τε γὰρ ἄσωτός ἐστιν ὁ ἀναλίσκων εἰς ἃ μὴ δεῖ καὶ πλείω ὢν δεῖ καὶ ὅτε μὴ δεῖ, ὅ τ' ἀνελεύθερος ἐναντίως τούτῳ ὁ μὴ ἀναλίσκων εἰς [2] ἃ δεῖ καὶ ὅσα δεῖ καὶ ὅτε δεῖ. ἀμφοτέρωθεν οὗτοι ψεκτοί. ἔστι δὲ τούτων ὁ μὲν κατ' ἐλλείψιν ὁ δὲ καθ' ὑπερβολήν. ὁ ἄρα ἐλευθέριος, ἐπειδὴ ἐστὶν ἐπαινετός, μέσος τις ἂν εἴη τούτων. τίς οὖν ἐστίν; ὁ ἀναλίσκων εἰς ἃ δεῖ καὶ ὅσα δεῖ καὶ ὅτε δεῖ.

[24]

[1] Ἔστι δὲ καὶ τῆς ἀνελευθεριότητος εἶδη πλείω, οἷον κίμβικας τινὰς καλοῦμεν καὶ κυμινοπρίστας καὶ αἰσχροκερδεῖς καὶ μικρολόγους. πάντες δ' οὗτοι ὑπὸ τὴν ἀνελευθεριότητα πίπτουσιν. τὸ μὲν γὰρ κακὸν πολυειδές, τὸ δ' ἀγαθὸν μονοειδές, οἷον ἡ μὲν ὑγίεια ἀπλοῦν, ἡ δὲ νόσος πολυειδές. ὁμοίως ἡ μὲν ἀρετὴ ἀπλοῦν, ἡ δὲ κακία πολυειδές. πάντες γὰρ οὗτοι περὶ χρήματά εἰσι ψεκτοί.

[2] Πότερον οὖν τοῦ ἐλευθερίου καὶ τὸ κτήσασθαι ἐστὶ καὶ τὸ παρασκευάσασθαι χρήματα; ἢ οὐ; οὐδὲ γὰρ ἄλλης ἀρετῆς οὐδεμιᾶς. οὔτε γὰρ τῆς ἀνδρείας ἐστὶ τὸ ὅπλα ποιῆσαι, ἀλλ' ἄλλης, ταύτης δὲ λαβούσης τούτοις ὀρθῶς χρῆσασθαι, ὁμοίως ἐπὶ σωφροσύνης καὶ τῶν ἄλλων· οὔτε δὲ τῆς ἐλευθεριότητος, ἀλλ' ἤδη χρηματιστικῆς.

[25]

[1] Ἡ δὲ μεγαλοψυχία μεσότης μὲν ἐστὶν χαυνότητος καὶ μικροψυχίας, ἔστι δὲ περὶ τιμὴν καὶ ἀτιμίαν, καὶ περὶ τιμὴν οὐ τὴν παρὰ τῶν πολλῶν ἀλλὰ τὴν παρὰ τῶν σπουδαίων, καὶ μᾶλλον δὲ δὴ περὶ ταύτην. οἱ γὰρ σπουδαῖοι εἰδότες καὶ κρίνοντες ὀρθῶς τιμῆσουσιν· βουλήσεται οὖν μᾶλλον ὑπὸ τῶν συνειδόντων αὐτῷ ὅτι ἄξιός ἐστι τιμῆς τιμᾶσθαι. οὐδὲ γὰρ περὶ πᾶσαν τιμὴν

ἔσται, ἀλλὰ περὶ τὴν βελτίστην, καὶ τὸ τίμιον ἀγαθὸν καὶ ἀρχῆς τάξιν ἔχον.

[2] Οἱ μὲν οὖν εὐκαταφρόνητοι ὄντες καὶ φαῦλοι, μεγάλων δ' αὐτοὺς ἀξιοῦντες καὶ πρὸς τούτοις τιμᾶσθαι οἰόμενοι δεῖν, χαῦνοι· ὅσοι δὲ ἐλαττόνων αὐτοὺς ἀξιοῦσιν ἢ προσῆκον αὐτοῖς, μικρόψυχοι.

[3] ὁ ἄρα μέσος τούτων ἐστὶν ὃς μήτε ἐλάττονος τιμῆς αὐτὸν ἀξιοῖ ἢ προσήκει, μήτε μείζονος ἢ ἄξιος ἐστίν, μήτε πάσης· οὗτος δ' ἐστὶν ὁ μεγαλόψυχος. ὥστε δῆλον ὅτι ἡ μεγαλοψυχία μεσότης ἐστὶ χαυνότητος καὶ μικροψυχίας.

[26]

[1] Μεγαλοπρέπεια δ' ἐστὶν μεσότης σαλακωνείας καὶ μικροπρεπείας. ἔστιν δ' ἡ μεγαλοπρέπεια περὶ δαπάνας ἃς τῷ πρόποντι γίνεσθαι προσήκει. ὅστις μὲν οὖν δαπανᾷ οὐ μὴ δεῖ, σαλάκων, οἷον εἴ τις ἐστιᾷ ἐρανιστὰς ὥς ἂν γάμους τις ἐστιῶν, ὁ τοιοῦτος σαλάκων (ὁ γὰρ σαλάκων τοιοῦτός ἐστιν, ὁ ἐν ᾧ μὴ δεῖ καιρῷ ἐνδεικνύμενος [2] τὴν ἑαυτοῦ εὐπορίαν)· ὁ δὲ μικροπρεπὴς ὁ ἐναντίος τούτῳ, ὃς οὐ δεῖ μὴ μεγαλείως δαπανήσῃ, ἢ τοῦτο μὴ ποιῶν, οἷον εἰς γάμους ἢ χορηγίαν δαπανῶν, μὴ ἀξίως ἀλλ' ἐνδεῶς, ὁ τοιοῦτος μικροπρεπής.

[3] Ἡ δὲ μεγαλοπρέπεια καὶ ἀπὸ τοῦ ὀνόματος φανερά ἐστιν οὕσα τοιαύτη οἷαν λέγομεν· ἐπεὶ γὰρ ἐν τῷ καιρῷ τῷ πρόποντι τὸ μέγα δαπανᾷ, ὀρθῶς τῇ μεγαλοπρεπείᾳ τοῦνομα κεῖται. ἡ μεγαλοπρέπεια ἄρα ἂν εἴη, ἐπειδὴ ἐστὶν ἐπαινετή, μεσότης τις ἐλλείψεως καὶ ὑπερβολῆς τῆς περὶ δαπάνας τὰς προσηκούσας, ἐν οἷς δεῖ.

[4] Εἰσὶ δέ, ὥς οἴονται, καὶ πλείους μεγαλοπρέπειαι, οἷόν φασι μεγαλοπρεπῶς τ' ἐβάδισε, καὶ ἄλλαι δὲ τοιαῦται μεγαλοπρέπειαι μεταφοραῖς λέγονται, οὐ κυρίως· οὐ γάρ ἐστιν ἐν τούτοις μεγαλοπρέπεια, ἀλλ' ἐν οἷς εἰρήκαμεν.

[27]

[1] Νέμεσις δὲ ἐστὶν μεσότης φθονερίας καὶ ἐπικαιρεκακίας· ἀμφότεραι γὰρ αὗται ψεκταὶ εἰσίν, ὁ δὲ νεμεσητικὸς ἐπαινετός. ἔστι δ' ἡ νέμεσις περὶ ἀγαθὰ, ἃ τυγχάνει ὑπάρχοντα ἀναξίῳ ὄντι, λυπῇ τις. νεμεσητικὸς οὖν ὁ ἐπὶ τοῖς τοιούτοις λυπητικός. καὶ ὁ αὐτός γε πάλιν οὗτος λυπήσεται, ἂν τινα ἴδῃ κακῶς πράττοντα ἀνάξιον ὄντα.

[2] Ἡ μὲν οὖν νέμεσις καὶ ὁ νεμεσητικὸς ἴσως τοιοῦτος, ὁ δὲ γε φθονερὸς ἐναντίος τούτῳ. ἀπλῶς γάρ, ἂν τε ἄξιός τις ἢ ἂν τε μὴ τοῦ εὖ πράττειν, λυπήσεται. ὁμοίως τούτῳ ὁ ἐπικαιρέκακος ἡσθήσεται κακῶς πράττοντι καὶ τῷ ἄξιῳ καὶ τῷ ἀναξίῳ. ὁ δὲ γε νεμεσητικὸς οὐ [τοιοῦτος], ἀλλὰ μέσος τίς ἐστι τούτων.

[28]

[1] Σεμνότης δὲ ἐστὶν αὐθαδείας ἀνὰ μέσον τε καὶ ἄρεσκειας, ἔστιν δὲ περὶ τὰς ἐντεύξεις. ὃ τε γὰρ αὐθάδης τοιοῦτός ἐστιν οἷος μηθενὶ ἐντυχεῖν μηδὲ διαλεγῆναι (ἀλλὰ τοῦνομα ἔοικεν ἀπὸ τοῦ τρόπου κεῖσθαι· ὁ γὰρ αὐθάδης αὐτοάδης τις ἐστίν, [2] ἀπὸ τοῦ αὐτὸς αὐτῷ ἀρέσκειν)· ὁ δὲ ἄρεσκος τοιοῦτος οἷος πᾶσιν ὁμιλεῖν καὶ πάντως καὶ πανταχῇ. οὐδέτερος δὲ τούτων ἐπαινετός, ὁ δὲ γε σεμνὸς ἀνὰ μέσον τούτων ὢν ἐπαινετός· οὔτε γὰρ πρὸς πάντας, ἀλλὰ πρὸς τοὺς ἀξίους, οὔτε πρὸς οὐθένα, ἀλλὰ πρὸς τοὺς αὐτοὺς τούτους.

[29]

[1] Αἰδὼς δ' ἐστὶ μεσότης ἀναισχυντίας καὶ καταπλήξεως, ἔστιν δὲ περὶ πράξεις καὶ λόγους. ὁ μὲν γὰρ ἀναίσχυντός ἐστιν ὁ ἐν παντὶ καὶ πρὸς πάντας λέγων καὶ πράττων ὃ ἔτυχεν, ὁ δὲ καταπεπληγμένος ὁ ἐναντίος τούτῳ, ὁ πάντα καὶ [πρὸς] πάντας εὐλαβούμενος καὶ πρᾶξαι καὶ εἰπεῖν (ἄπρακτος γὰρ ὁ τοιοῦτος, ὁ πάντα καταπληττόμενος)· [2] ἡ δὲ αἰδὼς καὶ ὁ αἰδήμων μεσότης τις τούτων. οὔτε γὰρ ἅπαντα καὶ πάντως, ὡς ὁ ἀναίσχυντος, καὶ ἔρεῖ καὶ πράξει, οὔτε ὡς ὁ καταπλήξ, ἐν παντὶ καὶ πάντως εὐλαβηθήσεται, ἀλλὰ πράξει καὶ ἔρεῖ ἐν οἷς δεῖ καὶ ὃ δεῖ καὶ ὅτε δεῖ.

[30]

[1] Εὐτραπελία δ' ἐστὶ μεσότης βωμολοχίας καὶ ἀγροικίας, ἔστιν δὲ περὶ [τὰ] σκώμματα. ὃ τε γὰρ βωμολόχος ἐστὶν ὁ πάντα καὶ πᾶν οἰόμενος δεῖν σκώπτειν, ὃ τε ἄγροικος ὁ μήτε σκώπτειν βουλόμενος δεῖν μήτε σκωφθῆναι, ἀλλ' ὀργιζόμενος· [2] ὁ δ' εὐτράπελος ἀνὰ μέσον τούτων, ὁ μήτε πάντας καὶ πάντως σκώπτων μήτ' αὐ[τὸς] ἄγροικος ὢν. ἔσται δὲ ὁ εὐτράπελος διττῶς πῶς λεγόμενος· καὶ γὰρ ὁ δυνάμενος σκῶψαι ἐμμελῶς, καὶ ὃς ἂν ὑπομείνῃ σκωπτόμενος, εὐτράπελος· καὶ ἡ εὐτραπελία τοιαύτη.

[31]

[1] Φιλία δ' ἐστὶν μεσότης κολακείας καὶ ἔχθρας, ἔστιν δὲ περὶ πράξεις καὶ λόγους· ὁ μὲν γὰρ κόλαξ ἐστὶν ὁ πλείω τῶν προσηκόντων καὶ ὄντων προστιθείς, ὁ δὲ ἀπεχθητικὸς ἐχθρὸς καὶ τῶν ὑπαρχόντων περιαιρῶν. οὐδέτερος οὖν ὀρθῶς [2] ἐπαινετὸς ἐστίν, ὁ δὲ φίλος ἀνὰ μέσον τούτων· οὔτε γὰρ πλείω τῶν ὑπαρχόντων προσθήσει, οὔτ' ἐπαινέσει τὰ μὴ προσήκοντα, οὔτ' αὖ πάλιν ἐλάττω ποιήσει, οὔτε πάντως ἐναντιώσεται παρὰ τὸ δοκοῦν αὐτῷ.

[32]

[1] Ὁ μὲν οὖν φίλος τοιοῦτος· ἀλήθεια δὲ ἐστὶν μεταξὺ εἰρωνείας καὶ ἀλαζονείας. ἔστι δὴ περὶ λόγους, οὐ πάντας δέ. ὁ μὲν γὰρ ἀλαζὼν ἐστὶν ὁ πλείω τῶν ὑπαρχόντων αὐτῷ προσποιούμενος εἶναι, ἢ εἰδέναι ἢ μὴ οἶδεν, ὁ δ' εἰρων ἐναντίος τούτῳ καὶ ἐλάττω τῶν ὑπαρχόντων προσποιούμενος αὐτῷ εἶναι, καὶ ἢ οἶδεν μὴ φάσκων, ἀλλ' ἐπικρυπτόμενος [2] τὸ εἰδέναι. ὁ δὲ ἀληθὴς οὐδέτερον τούτων ποιήσει. οὔτε γὰρ προσποιήσεται πλείω τῶν ὑπαρχόντων οὔτ' ἐλάττω, ἀλλὰ τὰ ὑπάρχοντα αὐτῷ ταῦτα φήσει καὶ εἶναι καὶ εἰδέναι.

Εἰ μὲν οὖν εἰσιν αὗται ἀρεταὶ ἢ μὴ ἀρεταί, ἄλλος ἂν εἶη λόγος· ὅτι δὲ μεσότητές εἰσι τῶν εἰρημένων, δῆλον. οἱ γὰρ κατ' αὐτὰς ζῶντες ἐπαινοῦνται.

[33]

[1] Περὶ δὲ δικαιοσύνης λοιπὸν ἂν εἶη εἰπεῖν, τί ἐστὶ καὶ ἐν τίσιν καὶ περὶ ποῖα.

Πρῶτον μὲν οὖν εἰ λάβοιμεν τί ἐστὶ τὸ δίκαιον, ἔστιν δὴ διττὸν τὸ δίκαιον, ὧν τὸ μὲν ἐστὶ κατὰ [2] νόμον. δίκαια γὰρ φασιν εἶναι ἃ ὁ νόμος προστάττει. ὁ δὲ νόμος κελεύει τὰνδρεῖα πράττειν καὶ τὰ σώφρονα καὶ ἀπλῶς ἅπαντα ὅσα κατὰ τὰς ἀρετὰς λέγεται. διὸ καί, φασίν, δοκεῖ ἡ δικαιοσύνη τελεία τις ἀρετὴ εἶναι· εἰ γὰρ δίκαια μὲν ἐστὶν ἃ ὁ νόμος κελεύει ποιεῖν, ὁ δὲ νόμος τὰ κατὰ πάσας ἀρετὰς ὄντα προστάττει, ὁ ἄρα τοῖς κατὰ νόμον ἐμμένων δικαίοις τελείως σπουδαῖος ἔσται, ὥστε ὁ δίκαιος καὶ ἡ δικαιοσύνη τελεία τις ἀρετὴ ἐστίν.

[3] Ἐν μὲν δὴ τι δίκαιον ἔν τε τούτοις ἐστὶ καὶ περὶ ταῦτα· ἀλλὰ μὴν οὐ τοῦτο τὸ δίκαιον οὐδὲ τὴν περὶ ταῦτα δικαιοσύνην ζητοῦμεν. κατὰ μὲν γὰρ ταῦτα τὰ δίκαια ἔστιν καθ' ἑαυτὸν ὄντα δίκαιον εἶναι (ὁ γὰρ σώφρων καὶ ὁ ἀνδρεῖος καὶ ὁ ἐγκρατὴς καὶ αὐτὸς καθ' ἑαυτόν ἐστὶ τοιοῦτος)· ἀλλὰ τὸ

δίκαιον τὸ πρὸς ἕτερον ἄλλο τοῦ εἰρημένου κατὰ νόμον δικαίου ἐστίν. οὐ γὰρ ἔστιν ἐν τοῖς πρὸς ἕτερον δικαίοις οὕσιν καθ' αὐτὸν εἶναι δίκαιον. τοῦτο δ' ἐστὶν ὃ ζητοῦμεν δίκαιον καὶ τὴν δικαιοσύνην τὴν περὶ ταῦτα.

[4] Τὸ τοίνυν δίκαιόν ἐστιν τὸ πρὸς ἕτερον ὡς ἀπλῶς εἰπεῖν τὸ ἴσον. τὸ γὰρ ἄδικον τὸ ἄνισον ἐστίν· ὅταν γὰρ τῶν μὲν ἀγαθῶν τὰ μείζω αὐτοῖς νέμωσι, τῶν δὲ κακῶν τὰ ἐλάσσονα, ἄνισον τοῦτ' ἐστί, καὶ [5] οὕτως ἀδικεῖν καὶ ἀδικεῖσθαι οἴονται. δῆλον ἄρα ὅτι ἐπειδὴ ἡ ἀδικία ἐν ἀνίσοις, ἡ δικαιοσύνη καὶ τὸ δίκαιον ἐν ἰσότητι συμβολαίων. ὥστε δῆλον ὅτι ἡ δικαιοσύνη μεσότης τις ἂν εἴη ὑπεροχῆς καὶ [6] ἐλλείψεως καὶ πολλοῦ καὶ ὀλίγου. ὃ τε γὰρ ἄδικος τῷ ἀδικεῖν πλεῖον ἔχει, καὶ ὁ ἀδικούμενος δὲ τῷ ἀδικεῖσθαι ἔλαττον· τὸ δέ γε μέσον τούτων δίκαιον ἐστί. τὸ δὲ μέσον ἴσον· ὥστε τὸ ἴσον ἂν πλείονος καὶ ἐλάττονος εἴη δίκαιον, καὶ δίκαιος δὲ ὁ τὸ ἴσον [7] βουλόμενος ἔχειν. τὸ δέ γε ἴσον ἐν ἐλαχίστοις δυσὶν ἐγγίνεται· τὸ ἄρα πρὸς ἕτερον ἴσον εἶναι δίκαιον ἐστί, καὶ δίκαιος ὁ τοιοῦτος ἂν εἴη.

[8] Ἐπεὶ οὖν ἡ δικαιοσύνη ἐν δικαίῳ καὶ ἐν ἴσῳ καὶ ἐν μεσότητι, «καὶ» τὸ μὲν δίκαιόν [ἐν] τισι λέγεται δίκαιον, τὸ δὲ ἴσον ἐν τισιν ἴσον, τὸ δὲ μέσον τισὶ μέσον· ὥστε ἡ δικαιοσύνη καὶ τὸ δίκαιον ἔσται καὶ πρὸς τινὰς καὶ ἐν τισίν.

[9] Ἐπεὶ οὖν ἐστὶ τὸ δίκαιον ἴσον, καὶ τὸ τῷ ἀνάλογον ἴσον δίκαιον ἂν εἴη. τὸ δ' ἀνάλογον ἐν τέτταρσι γίνεται ἐλαχίστοις· ὡς γὰρ τὸ Α πρὸς τὸ Β, τὸ Γ πρὸς τὸ Δ. οἷον ἀνάλογόν ἐστὶν τὸν τὰ πολλὰ κεκτημένον πολλὰ εἰσφέρειν, τὸν δὲ τὰ ὀλίγα κεκτημένον ὀλίγα· πάλιν ὁμοίως τὸν μὲν πολλὰ πεπονηκότα πολλὰ λαμβάνειν, τὸν δὲ ὀλίγα πεπονηκότα ὀλίγα λαμβάνειν. ὡς δὲ ἔχει ὁ πεπονηκὼς πρὸς τὸν μὴ πεπονηκότα, οὕτω τὰ πολλὰ πρὸς τὰ ὀλίγα. ὡς δὲ ὁ πεπονηκὼς πρὸς τὰ πολλὰ, οὕτως ὁ μὴ πεπονηκὼς πρὸς τὰ ὀλίγα.

[10] Ὁμοίως δὲ καὶ Πλάτων τῇ ἀναλογίᾳ ταύτῃ τοῦ δικαίου χρῆσθαι ἐν τῇ πολιτείᾳ. ὁ μὲν γὰρ γεωργός, φησί, σῖτον ποιεῖ, ὁ δ' οἰκοδόμος οἰκίαν, ὁ δὲ ὑφάντης ἱμάτιον, ὁ δὲ σκυτοτόμος ὑπόδημα. ὁ μὲν οὖν γεωργὸς τῷ οἰκοδόμῳ σῖτον δίδωσιν, ὁ δ' οἰκοδόμος τῷ γεωργῷ οἰκίαν· ὁμοίως δὲ οἱ ἄλλοι πάντες οὕτως ἔχουσιν ὥστε τὰ παρ' αὐτοῖς ἀντικαταλλάττεσθαι τῶν παρὰ τοῖς ἄλλοις.

[11] Ἔστιν δ' ἡ ἀναλογία αὕτη· ὡς γὰρ ὁ γεωργὸς τῷ οἰκοδόμῳ, οὕτως ὁ οἰκοδόμος τῷ γεωργῷ· ὁμοίως τῷ σκυτεῖ, τῷ ὑφάντῃ, τοῖς ἄλλοις πᾶσιν ἡ αὕτη ἀναλογία πρὸς ἀλλήλους γίνεται· καὶ συνέχει δὴ αὕτη «ἡ» ἀναλογία τὴν

πολιτείαν. ὥστε τὸ δίκαιον ἔοικεν εἶναι τὸ ἀνάλογον. τὸ γὰρ δίκαιον συνέχει τὰς πολιτείας, τὸ αὐτὸ δ' ἐστὶ τὸ δίκαιον τῷ ἀνάλογον.

[12] Ἐπεὶ δὲ ὁ οἰκοδόμος πλείονος ἄξιον ποιεῖ τὸ αὐτοῦ ἔργον ἢ ὁ σκυτεὺς, καὶ ἦν ἔργον ἀντικαταλλάτεσθαι [καὶ] τῷ σκυτεῖ πρὸς τὸν οἰκοδόμον, ἀνθ' ὑποδημάτων δ' οὐκ ἦν οἰκίαν λαβεῖν, ἐνταῦθα ἤδη ἐνόμισαν, οὗ ταῦτα πάντα ὠνητὰ ἐστίν, ἀργύριον προσαγορεύσαντες νόμισμα, τούτῳ χρῆσθαι, καὶ τὴν ἀξίαν ἕκαστον ἐκάστου διδόντας τὴν ἀλλάξιν ποιεῖσθαι παρ' ἀλλήλων, καὶ τούτῳ τὴν πολιτικὴν κοινωνίαν συνέχειν.

[13] Ἐπεὶ οὖν τὸ δίκαιόν ἐστιν ἐν τούτοις καὶ τοῖς εἰρημένοις ἔμπροσθεν, ἡ περὶ ταῦτα δικαιοσύνη ἂν εἴη τῇ ἔξει ὁρμὴν ἔχουσα μετὰ προαιρέσεως περὶ ταῦτα καὶ ἐν τούτοις.

Ἔστιν δὲ δίκαιον καὶ τὸ ἀντιπεπονθός, οὐ μέντοι γε ὥς οἱ Πυθαγόρειοι ἔλεγον. ἐκεῖνοι μὲν γὰρ ὥοντο δίκαιον εἶναι, ἃ τις ἐποίησεν, ταῦτ' ἀντιπαθεῖν· τὸ δὲ τοιοῦτον οὐκ ἔστιν πρὸς ἅπαντας. [14] οὐ γάρ ἐστι δίκαιον οἰκέτῃ πρὸς ἐλεύθερον ταῦτόν· ὁ οἰκέτης γὰρ ἐὰν πατάξῃ τὸν ἐλεύθερον, οὐκ ἔστιν δίκαιος ἀντιπληγῆναι, ἀλλὰ πολλάκις. καὶ τὸ ἀντιπεπονθός δὲ δίκαιόν ἐστιν ἐν τῷ ἀνάλογον. ὥς γὰρ ὁ ἐλεύθερος ἔχει πρὸς τὸν δοῦλον τῷ βελτίων εἶναι, οὕτως τὸ ἀντιποιῆσαι πρὸς τὸ ποιῆσαι. ὁμοίως δὲ καὶ ἐλευθέρῳ πρὸς ἐλεύθερον ἔξει. οὐ γὰρ δίκαιον, εἴ τις τὸν ὀφθαλμὸν ἐξέκοψεν τινός, ἀντεκκοπῆναι μόνον, ἀλλὰ πλείονα παθεῖν, ἀκολουθήσαντα τῇ ἀναλογίᾳ· καὶ γὰρ ἥρξε πρότερος καὶ ἡδίκησεν, ἀδικεῖ δὲ κατ' ἀμφοτέρας, ὥστε ἀνάλογον καὶ τὰ ἀδικήματα, καὶ τὸ ἀντιπαθεῖν πλείω ὧν ἐποίησεν δίκαιον ἐστίν.

[15] Ἐπεὶ δὲ τὸ δίκαιον πολλαχῶς λέγεται, διοριστέον ἂν εἴη ὑπὲρ ποίου δικαίου ἐστὶν ἡ σκέψις.

Ἔστιν δὲ δίκαιόν τι, ὥς φασίν, οἰκέτῃ πρὸς δεσπότην καὶ υἱῷ πρὸς πατέρα. τὸ δ' ἐν τούτοις δίκαιον ὁμωνύμως ἂν δόξειεν λέγεσθαι τῷ πολιτικῷ δικαίῳ (ἔστιν γὰρ <τὸ> δίκαιον, ὑπὲρ οὗ ἐστὶν ἡ [16] σκέψις, τὸ πολιτικὸν δίκαιον)· τοῦτο γὰρ μάλιστα ἐστὶν ἐν ἰσότητι (κοινωνοὶ γὰρ οἱ πολῖταί τινες, καὶ ὅμοιοι βούλονται εἶναι τῇ φύσει, τῷ δὲ τρόπῳ ἕτεροι), τῷ δὲ υἱῷ πρὸς πατέρα καὶ οἰκέτῃ πρὸς δεσπότην οὐκ ἂν δόξειεν εἶναι δίκαιον οὐθέν. οὔτε γὰρ τῷ ποδὶ τῷ ἐμῷ πρὸς ἐμὲ οὔτε τῇ χειρὶ, ὁμοίως δὲ οὐδ' ἐκάστῳ τῶν μορίων· ὡσαύτως ἂν οὖν δόξειεν ἔχειν καὶ ὁ υἱὸς πρὸς πατέρα· ὡσπερ γὰρ μέρος τί ἐστι τοῦ πατρὸς ὁ υἱός. πλὴν ὅταν ἤδη λάβῃ τὴν τοῦ ἀνδρὸς τάξιν

καὶ χωρισθῇ ἀπ' αὐτοῦ, τότε ἤδη ἐν ἰσότητι καὶ ὁμοιότητι ἐστὶν τῷ πατρί· οἱ δὲ πολῖται τοιοῦτοί τινες ἐθέλουσιν εἶναι.

[17] Ὡς δ' αὐτως οὐδ' οἰκέτη πρὸς δεσπότην ἐστὶ δίκαιον διὰ τὴν αὐτὴν αἰτίαν· τοῦ γὰρ δεσπότης τί ἐστὶν ὁ οἰκέτης. ἀλλὰ δὴ καὶ εἰ ἔστιν αὐτῷ δίκαιον, τὸ οἰκονομικὸν δίκαιον πρὸς αὐτὸν ἐστίν. οὐ τοῦτο δέ γε ἡμεῖς ζητοῦμεν, ἀλλὰ τὸ πολιτικόν· ἐν ἰσότητι γὰρ καὶ ὁμοιότητι τὸ πολιτικὸν δίκαιον ἔοικεν εἶναι.

[18] Ἀλλὰ δὴ τὸ μὲν ἐν γυναικὸς καὶ ἀνδρὸς κοινωνία δίκαιόν ἐστιν ἐγγὺς τοῦ πολιτικοῦ δικαίου· χεῖρον μὲν γάρ ἐστιν ἢ γυνὴ τοῦ ἀνδρός, ἀλλ' οἰκειότερον, καὶ μετέχει ἰσότητός πως μᾶλλον, διότι ἐγγὺς τῆς πολιτικῆς κοινωνίας ὁ βίος αὐτῶν, ὥστε καὶ τὸ δίκαιον τὸ γυναικὶ πρὸς ἄνδρα μάλιστα πως ἤδη τῶν ἄλλων πολιτικὸν ἐστίν.

[19] Ἐπεὶ οὖν ἐστὶ δίκαιον τὸ ἐν πολιτικῇ κοινωνίᾳ ὄν, ἡ δικαιοσύνη καὶ ὁ δίκαιος περὶ τὸ πολιτικὸν δίκαιον ἔσται.

Τῶν δὲ δικαίων ἐστὶ τὰ μὲν φύσει τὰ δὲ νόμῳ. δεῖ δ' οὕτως ὑπολαμβάνειν μὴ ὡς μηδέποτε ἂν μεταπεσόντα· καὶ γὰρ τὰ φύσει ὄντα μεταλαμβάνουσι [20] μεταβολῆς. λέγω δ' οἷον εἰ τῇ ἀριστερᾷ μελετῶμεν πάντες ἀεὶ βάλλειν, γινοίμεθα ἂν ἀμφιδέξιοι· ἀλλὰ φύσει γε ἀριστερὰ ἐστίν, καὶ τὰ δεξιὰ οὐδὲν ἥττον φύσει βελτίω ἐστὶ τῆς ἀριστερᾶς, κἂν πάντα ποιῶμεν τῇ ἀριστερᾷ καθάπερ τῇ δεξιᾷ. οὐδ' ὅτι μεταπίπτουσι, διὰ τοῦτο οὐκ ἔστιν φύσει· ἀλλ' εἰ ὡς ἐπὶ τὸ πολὺ καὶ τὸν πλείω χρόνον οὕτω διαμένει ἡ ἀριστερὰ οὔσα ἀριστερὰ καὶ ἡ δεξιὰ δεξιὰ, τοῦτο φύσει ἐστίν.

[21] Ὡσαύτως ἐπὶ τῶν φύσει δικαίων, μή, εἰ μεταβάλλει διὰ τὴν ἡμετέραν χρῆσιν, διὰ τοῦτ' οὐκ ἔστιν δίκαιον φύσει; ἀλλ' ἔστιν. τὸ γὰρ ὡς ἐπὶ τὸ πολὺ διαμένον, τοῦτο φύσει δίκαιον προφανές. ὃ γὰρ ἂν ἡμεῖς θώμεθα καὶ νομίσωμεν, τοῦτο καὶ ἔστι δίκαιον ἤδη καὶ καλοῦμεν κατὰ νόμον δίκαιον. βέλτιον οὖν δίκαιον τὸ κατὰ φύσιν τοῦ κατὰ νόμον. ἀλλ' ὃ ζητοῦμεν, δίκαιόν ἐστὶ πολιτικόν. τὸ δὲ πολιτικὸν ἐστὶν τὸ νόμῳ, οὐ τὸ φύσει.

[22] Τὸ δ' ἄδικον καὶ τὸ ἀδίκημα δόξειεν ἂν εἶναι οὕτω ταύτόν, οὐκ ἔστι δέ· τὸ μὲν γὰρ ἄδικόν ἐστὶν τὸ νόμῳ ὠρισμένον, οἷον τὸ τὴν παρακαταθήκην ἀποστερῆσαι ἄδικον ἐστί, τὸ δ' ἀδίκημά ἐστὶν τὸ ἤδη ἀδίκως τι πρᾶξαι. ὁμοίως δὲ τὸ δίκαιον καὶ τὸ δικαιοπράγημα οὐ ταύτόν· τὸ μὲν γὰρ δίκαιον τὸ τῷ νόμῳ ὠρισμένον, τὸ δὲ δικαιοπράγημα τὸ τὰ δίκαια πράττειν.



[23] Πότε οὖν τὸ δίκαιον, καὶ πότε οὐ; ὡς ἀπλῶς μὲν εἶπεῖν, ὅταν πράττη κατὰ προαίρεσιν καὶ ἐκουσίως (τὸ δὲ ἐκουσίως ὃ ἦν, εἴρηται ἐν τοῖς ἐπάνω ἡμῖν), καὶ ὅταν εἰδῶς καὶ ὄν καὶ ὦ καὶ οὐ ἔνεκα, οὕτως δίκαιον πράττει. ὁμοίως καὶ ὡσαύτως καὶ ὁ ἄδικος ἔσται ὁ εἰδῶς καὶ ὄν καὶ ὦ καὶ οὐ ἔνεκα. ὅταν δὲ μηθὲν τούτων εἰδῶς πράξῃ τι ἄδικον, ἄδικος μὲν οὐκ ἔστιν, ἀτυχῆς δέ. εἰ γὰρ οἰόμενος τὸν πολέμιον ἀποκτείνειν τὸν πατέρα ἀπέκτεινεν, ἄδικον μὲν τι ἔπραξεν, ἀδικεῖ μέντοι οὐθένα, ἀτυχεῖ δέ.

[24] Ἐπεὶ οὖν τὸ μὴ ἀδικεῖν τὰ ἄδικα πράττοντα ἐν τῷ ἀγνοεῖν ἐστὶ τοῦτο, ὃ καὶ μικρὸν ἐπάνω ἐλέγετο, ὅταν μὴ εἰδῶς μήθ' ὄν βλάπτει μήθ' ὦ μήθ' οὐ ἔνεκεν· ἀλλ' ἤδη καὶ τὴν ἄγνοιαν διοριστέον ἐστίν, πῶς ἂν γινομένης τῆς ἀγνοίας, ὄν βλάπτει, οὐκ [25] ἀδικήσῃ. ἔστω δὴ οὗτος ὁ διορισμός. ὅταν μὲν γὰρ ἡ ἄγνοια αἰτία ἢ τοῦ πράξαι τι, οὐχ ἐκὼν τοῦτο πράττει, ὥστε οὐκ ἀδικεῖ· ὅταν δὲ τῆς ἀγνοίας αὐτὸς ἢ αἴτιος, καὶ πράττῃ τι κατὰ τὴν ἄγνοιαν ἣς αὐτὸς αἴτιος ἐστίν, οὗτος ἤδη ἀδικεῖ, καὶ δικαίως ἄδικος ὁ τοιοῦτος κληθήσεται. οἷον ἐπὶ τῶν μεθύοντων. οἱ γὰρ μεθύοντες καὶ πράξαντές τι κακὸν ἀδικοῦσιν· τῆς γὰρ ἀγνοίας αὐτοὶ εἰσιν αἴτιοι· ἐξῆν γὰρ αὐτοῖς μὴ πίνειν τοσοῦτον, [26] ὥστ' ἀγνοήσαντας τύπτειν τὸν πατέρα. ὁμοίως [καὶ] ἐπὶ τῶν ἄλλων ἀγνοίων ὅσαι μὲν γίνονται δι' αὐτούς, οἱ κατὰ ταύτας ἀδικοῦντες ἄδικοι· ὧν δὲ μὴ αὐτοὶ εἰσιν αἴτιοι, ἀλλ' ἡ ἄγνοια κάκείοις ἐστὶν αἰτία τοῖς πράξασιν τοῦ πράξαι, οὐκ ἄδικοι. ἔστιν δ' ἡ τοιαύτη ἄγνοια ἡ φυσικὴ, οἷον τὰ παιδιά ἀγνοοῦντα τοὺς πατέρας τύπτουσιν, ἀλλ' ἡ ἐν τούτοις ἄγνοια φυσικὴ οὐσα οὐ ποιεῖ διὰ τὴν πράξιν ταύτην τὰ παιδιά λέγεσθαι ἄδικα· ἡ γὰρ ἄγνοια αἰτία τοῦ πράττειν ταῦτα, τῆς δ' ἀγνοίας οὐκ αὐτὰ αἴτια, διὸ οὐδ' ἄδικα λέγονται.

[27] Ὑπὲρ δὲ δὴ τοῦ ἀδικεῖσθαι πῶς; πότερον ἐκόντα ἔστιν ἀδικεῖσθαι; ἢ οὐ; δίκαια μὲν γὰρ καὶ ἄδικα πράττομεν ἐκόντες, ἀδικούμεθα δὲ οὐκέτι ἐκόντες· τὸ γὰρ κολάζεσθαι φεύγομεν, ὥστε δῆλον ὅτι οὐκ ἂν ἀδικοίμεθα ἐκόντες. οὐδεὶς γὰρ ἐκὼν βλάπτεσθαι ὑπομένει· τὸ γὰρ ἀδικεῖσθαι βλάπτεσθαι ἐστίν.

[28] Ναί, ἀλλ' εἰσὶ τινες οἱ δέον αὐτοὺς τὸ ἴσον ἔχειν παραχωροῦσι τισίν, ὥστε εἰ τὸ ἴσον ἔχειν ἦν δίκαιον, τὸ δ' ἔλαττον ἔχειν ἀδικεῖσθαι ἐστίν, ἔλαττον δὲ ἐκὼν ἔχει, ἐκὼν ἄρα, φησίν, ἀδικεῖται.

Ἀλλ' ἐντεῦθεν δῆλον πάλιν ὅτι οὐχ ἐκὼν. πάντες γὰρ οἱ ἔλαττον λαμβάνοντες ἀντικαταλλάττονται ἢ τιμὴν ἢ ἔπαινον ἢ δόξαν ἢ φιλίαν ἢ ἄλλο τι τῶν τοιούτων· ὁ δ' ἀντικαταλλαττόμενός τι ἀνθ' οὗ προΐεται, οὐκέτι ἀδικεῖται· εἰ δὲ μὴ ἀδικεῖται, οὐδὲ ἐκὼν ἄρα.

[29] Ἐτι πάλιν οἱ τὸ ἔλαττον λαμβάνοντες καὶ ἀδικούμενοι, ἧ οὐκ ἴσον λαμβάνουσιν, οὗτοι καλλωπίζονται καὶ σεμνύνονται ἐπὶ τῶν τοιούτων, ὅτι φασὶν “ἐξόν μοι ἴσον λαμβάνειν οὐκ ἐλάμβανον, ἀλλὰ παρῆκα τῷ πρεσβυτέρῳ ἢ τῷ φίλῳ.” ἀδικούμενος δέ γε οὐδεὶς σεμνύνεται. εἰ δ’ ἐπὶ τοῖς ἀδικήμασι μὴ σεμνύνονται, ἐπὶ δὲ τούτοις σεμνύνονται, ὅλως οὐκ ἂν ἀδικοῖντο οὕτως ἐλαττούμενοι. εἰ δὲ μὴ ἀδικοῦνται, οὐδ’ ἂν ἐκόντες ἀδικοῖντο.

[30] Πρὸς δὲ ταῦτα καὶ τοῖς τοιούτοις λόγοις ὁ ἐπὶ τοῦ ἀκρατοῦς λόγος ἐναντιοῦται· ὁ γὰρ ἀκρατὴς βλάπτει αὐτὸς αὐτὸν τὰ φαῦλα πράττων, καὶ ἐκὼν γε ταῦτα πράττει, βλάπτει ἄρα αὐτὸς αὐτὸν εἰδώς, ὥστε ἐκὼν αὐτὸς ὑφ’ αὐτοῦ ἀδικεῖται.

Ἄλλ’ ἐνταῦθα [ὁ] διορισμὸς προστεθεὶς κωλύσει τὸν λόγον τοῦτον. ἔστιν δὲ ὁ διορισμὸς οὗτος, τὸ μηδένα βούλεσθαι ἀδικεῖσθαι. ὁ δέ γε ἀκρατὴς βουλόμενος πράττει τὰ κατὰ τὴν ἀκρασίαν, ὥστε αὐτὸς αὐτὸν ἀδικεῖ· βούλεται ἄρα τὰ φαῦλα πράττειν αὐτῷ. ἀλλ’ οὐδεὶς βούλεται ἀδικεῖσθαι· ὥστ’ οὐδὲ ὁ ἀκρατὴς αὐτὸς αὐτὸν ἐκὼν <ἂν> ἀδικοίη.

[31] Ἄλλ’ ἴσως ἐνταῦθα πάλιν ἀπορήσειεν ἂν τις, ἄρά γε ἐνδέχεται αὐτὸν αὐτὸν ἀδικεῖν; ἐκ μὲν δὴ τοῦ ἀκρατοῦς σκοπούμενῳ ἔοικεν ἐνδέχεσθαι. καὶ πάλιν οὕτως. εἰ γὰρ ἂν ὁ νόμος πράττειν τάττει, ταῦτά ἐστιν δίκαια, ὁ μὴ πράττων ταῦτα ἀδικεῖ· καὶ εἰ πρὸς ὃν κελεύει πράττειν, πρὸς τοῦτον εἰ μὴ πράττει, τοῦτον ἀδικεῖ, ὁ δὲ νόμος κελεύει σῶφρονα εἶναι, οὐσίαν κεκτηῖσθαι, σώματος ἐπιμελεῖσθαι, καὶ τᾶλλα τὰ τοιαῦτα, ὁ ἄρα ταῦτα μὴ πράττων ἀδικεῖ αὐτόν. εἰς οὐθέν· γὰρ ἄλλον τῶν τοιούτων ἀδικημάτων ἢ ἀναφορὰ ἐστίν.

[32] Ἀλλὰ μή ποτε ταῦτα οὐκ ἀληθῆ ἦν, οὐδ’ ἐνδέχεται αὐτὸν ἀδικεῖν αὐτόν. τὸν γὰρ αὐτὸν οὐκ ἐνδέχεται κατὰ τὸν αὐτὸν χρόνον πλεῖον ἔχειν καὶ ἔλαττον, οὐδ’ ἐκόντα ἅμα καὶ ἄκοντα· ἀλλὰ μὴν ὁ ἀδικῶν, ἧ ἀδικεῖ, πλεῖον ἔχει, ὁ δ’ ἀδικούμενος, ἧ ἀδικεῖται, ἔλαττον· εἰ ἄρα αὐτὸς αὐτὸν ἀδικεῖ, ἐνδέχεται τὸν αὐτὸν κατὰ τὸν αὐτὸν χρόνον καὶ πλεῖον ἔχειν καὶ ἔλαττον. ἀλλὰ τοῦτ’ ἀδύνατον· οὐκ ἄρα ἐνδέχεται αὐτὸν αὐτὸν ἀδικεῖν.

[33] Ἐτι ὁ μὲν ἀδικῶν ἐκὼν ἀδικεῖ, ὁ δὲ ἀδικούμενος ἄκων ἀδικεῖται, ὥστε εἰ ἐνδέχεται αὐτὸν αὐτὸν ἀδικεῖν, ἐνδέχοιτ’ ἂν ἅμα καὶ ἀκουσίως καὶ ἐκουσίως πράττειν τι· τοῦτο δὲ ἀδύνατον· οὐκ ἄρα οὐδ’ οὕτως ἐνδέχεται αὐτὸν αὐτὸν ἀδικεῖν.

[34] Ἔτι εἴ τις λαμβάνοι ἐκ τῶν κατὰ μέρος ἀδικημάτων. ἀδικοῦσι γὰρ πάντες ἦτοι παρακαταθήκην ἀποστεροῦντες ἢ μοιχεύοντες ἢ κλέπτοντες ἢ τι ἄλλο τῶν κατὰ μέρος ἀδικημάτων ποιοῦντες· οὐδεὶς δὲ πώποτε αὐτὸς αὐτὸν παρακαταθήκην ἀπεστέρησεν, οὐδ' ἐμοίχευσεν τὴν ἑαυτοῦ γυναῖκα, οὐδ' ἔκλεψεν αὐτὸς τὰ ἑαυτοῦ· ὥστε εἰ τὸ μὲν ἀδικεῖν ἐν τοῖς τοιούτοις ἐστίν, τούτων δὲ μηθὲν ἐνδέχεται πρὸς αὐτὸν ποιεῖν, οὐκ ἂν ἐνδέχοιτο αὐτὸν ἀδικεῖν.

[35] Εἰ δὲ μή, οὐ τό γε πολιτικὸν ἀδίκημα, ἀλλὰ τὸ οἰκονομικόν. ἡ γὰρ ψυχὴ εἰς πλείω μεμερισμένη ἔχει τι αὐτῆς τὸ μὲν χεῖρον τὸ δὲ βέλτιον, ὥστ' εἴ τι ἐγγίνεται τῶν ἐν ψυχῇ ἀδίκημα, τῶν μερῶν ἐστὶ πρὸς ἄλληλα· τὸ οἰκονομικὸν δὲ ἀδίκημα διειλόμεθα τῷ ἐπὶ τὸ χεῖρον καὶ βέλτιον· ὡς γίνεσθαι πρὸς αὐτὸν ἀδικον καὶ δίκαιον. οὐ τοῦτο δ' ἡμεῖς [36] ἐπισκοπούμεθα, ἀλλὰ τὸ πολιτικόν. ὥστ' ἐν τοῖς τοιούτοις ἀδικήμασιν, ἐν οἷς ἡμεῖς ζητοῦμεν, οὐκ ἐνδέχεται αὐτὸν αὐτὸν ἀδικεῖν.

Πότερος δὲ πάλιν ἀδικεῖ, καὶ ἐν ποτέρῳ ἐστὶ τὸ ἀδίκημα, ἐν τῷ ἀδίκως ὀτιοῦν ἔχοντι; ἢ τῷ κρίναντι καὶ τῷ ἀπονείμαντι, ὥσπερ ἐν τοῖς ἀγῶσιν; καὶ γὰρ ὁ λαβὼν τὸν φοῖνικα παρὰ τοῦ ἐφεστῶτος καὶ ταῦτα κρίναντος οὐκ ἀδικεῖ, κἂν ἀδίκως αὐτῷ ἀποδοθῇ· ἀλλ' ἤδη ὁ κρίνας κακῶς καὶ δούς, οὗτος ἀδικεῖ. καὶ οὗτος ἐστὶ μὲν ἢ ἀδικεῖ, ἐστὶ δὲ ἢ οὐκ ἀδικεῖ· ἢ μὲν γὰρ τὸ τῇ ἀληθείᾳ καὶ τῇ φύσει ὄν δίκαιον μὴ ἔκρινεν, ταύτῃ μὲν ἀδικεῖ, ἢ δὲ τὸ αὐτῷ δοκοῦν εἶναι δίκαιον, οὐκ ἀδικεῖ.

[34]

[1] Ἐπειδὴ δ' ὑπὲρ τῶν ἀρετῶν εἴρηται, καὶ τίνες εἰσὶν καὶ ἐν τίσιν καὶ περὶ ποῖα, καὶ περὶ ἐκάστης αὐτῶν, ὅτι εἰ πράττοιμεν κατὰ τὸν ὀρθὸν λόγον τὸ βέλτιστον, τὸ μὲν οὕτως εἰπεῖν, τὸ κατὰ τὸν ὀρθὸν λόγον πράττειν, ὁμοίον ἐστὶν ὥσπερ ἂν εἴ τις εἴποι ὅτι ὑγίεια ἄριστ' ἂν γένοιτο, εἴ τις τὰ ὑγιεινὰ προσφέροιτο. τὸ δὲ τοιοῦτον ἀσαφές· ἀλλ' [2] ἐρεῖ μοι, τὰ ποῖα διασάφησόν ἐστιν ὑγιεινά. οὕτως καὶ ἐπὶ τοῦ λόγου, τί ἐστὶν ὁ λόγος καὶ τίς ὁ ὀρθὸς λόγος;

Ἀναγκαῖον ἴσως ἐστὶν πρῶτον μὲν, ἐν ᾧ ὁ λόγος [3] ἐγγίνεται, ὑπὲρ τούτου διελέσθαι. διωρίσθη μὲν οὖν ὑπὲρ ψυχῆς ὡς τύπῳ καὶ πρότερον, ὅτι τὸ μὲν αὐτῆς ἐστὶ λόγον ἔχον, τὸ δὲ ἄλογον μόνον τῆς ψυχῆς· ἐστὶν δ' εἰς δύο τὴν διαίρεσιν ἔχον τὸ λόγον ἔχον μόνον τῆς ψυχῆς, ὧν ἐστὶ τὸ μὲν βουλευτικὸν τὸ δὲ ἐπιστημονικόν. ὅτι δὲ ἕτερα ἀλλήλων ἐστίν, [4] ἐκ τῶν

ὑποκειμένων ἂν γένοιτο φανερόν. ὥσπερ γὰρ δὴ ἕτερα ἔστιν ἀλλήλων χρῶμά τε καὶ χυμὸς καὶ ψόφος καὶ ὀσμή, ὡσαύτως καὶ τὰς αἰσθήσεις ἑτέρας αὐτῶν ἢ φύσις ἀπέδωκεν (ψόφον μὲν γὰρ ἄκοῃ, χυμὸν δὲ γεύσει γνωρίζομεν, χρῶμα δὲ ὄψει), ὁμοίως δὲ καὶ τὰλλα τὸν αὐτὸν τρόπον δεῖ ὑπολαμβάνειν· ἐπεὶ δὴ ἕτερα τὰ ὑποκείμενα ἐστίν, ἕτερα καὶ τὰ τῆς ψυχῆς εἶναι μέρη οἷς ταῦτα γνωρίζομεν.

[5] ἕτερον δ' ἐστὶ τὸ νοητὸν καὶ τὸ αἰσθητόν· ταῦτα δὲ ψυχῇ γνωρίζομεν· ἕτερον ἄρ' ἂν εἴη τὸ μόνιον τὸ περὶ τὰ αἰσθητὰ καὶ τὰ νοητά. τὸ δὲ βουλευτικὸν καὶ προαιρετικὸν περὶ τὰ αἰσθητὰ καὶ ἐν κινήσει καὶ ἀπλῶς ὅσα ἐν γενέσει τε καὶ φθορᾷ ἐστίν.

[6] βουλευόμεθα γὰρ ὑπὲρ τούτων ἃ ἐφ' ἡμῖν ἐστίν καὶ πρᾶξαι καὶ μὴ πρᾶξαι προελομένοις, περὶ ἃ ἐστίν [καὶ] βουλή καὶ προαίρεσις τοῦ πρᾶξαι ἢ μὴ πρᾶξαι· ταῦτα δ' ἐστὶν αἰσθητὰ καὶ ἐν κινήσει τοῦ μεταβάλλειν· ὥστε τὸ προαιρετικὸν μόνιον τῆς ψυχῆς κατὰ τὸν λόγον τῶν αἰσθητῶν ἐστίν.

[7] Τούτων δὴ διωρισμένων, μετὰ ταῦτα λεκτέον ἂν εἴη, ἐπειδὴ ὑπὲρ τ'ἀληθοῦς ἐστίν ὁ λόγος καὶ τ'ἀληθὲς ὡς ἔχει σκοπούμεθα, ἔστιν δ' ἐπιστήμη φρόνησις νοῦς σοφία ὑπόληψις, περὶ τί δὴ ἕκαστον τούτων ἐστίν.

[8] Ἡ μὲν οὖν ἐπιστήμη ἐστὶ περὶ ἐπιστητόν, καὶ τοῦτο μετ' ἀποδείξεως καὶ λόγου διατεινόμενον.

Ἡ δὲ φρόνησις περὶ τὰ πρακτά, ἐν οἷς αἵρεσις καὶ φυγή καὶ ἐφ' ἡμῖν ἐστίν πρᾶξαι καὶ μὴ πρᾶξαι.

[9] Ἔστιν δὴ τῶν ποιουμένων καὶ πραττομένων οὐ ταύτῃ τὸ ποιητικὸν καὶ πρακτικόν. τῶν μὲν γὰρ ποιητικῶν ἐστὶ τι παρὰ τὴν ποίησιν ἄλλο τέλος, οἷον παρὰ τὴν οἰκοδομικὴν, ἐπειδὴ ἐστὶν ποιητικὴ οἰκίας, οἰκία αὐτῆς τὸ τέλος παρὰ τὴν ποίησιν, ὁμοίως ἐπὶ τεκτονικῆς καὶ τῶν ἄλλων τῶν ποιητικῶν· [10] ἐπὶ δὲ τῶν πρακτικῶν οὐκ ἔστιν ἄλλο οὐθέν· τέλος παρ' αὐτὴν τὴν πρᾶξιν, οἷον παρὰ τὸ κιθαρίζειν οὐκ ἔστιν ἄλλο τέλος οὐθέν, ἀλλ' αὐτὸ τοῦτο τέλος, ἢ ἐνέργεια καὶ ἡ πρᾶξις. περὶ μὲν οὖν τὴν πρᾶξιν καὶ τὰ πρακτὰ ἡ φρόνησις, περὶ δὲ τὴν ποίησιν καὶ τὰ ποιητὰ ἡ τέχνη· ἐν γὰρ τοῖς ποιητοῖς μᾶλλον ἢ ἐν τοῖς πρακτοῖς ἐστὶ τὸ τεχνάζειν.

[11] Ὡστε ἡ φρόνησις ἂν εἴη ἕξις τις προαιρετικὴ καὶ πρακτικὴ τῶν ἐφ' ἡμῖν ὄντων καὶ πρᾶξαι καὶ μὴ πρᾶξαι, ὅσα εἰς τὸ συμφέρον ἤδη συντείνει.

[12] ἔστιν δ' ἡ φρόνησις ἀρετή, ὡς δόξειεν ἄν, οὐκ ἐπιστήμη. ἐπαινετοὶ γὰρ εἰσιν οἱ φρόνιμοι, ὁ δ' ἔπαινος ἀρετῆς· ἔτι δ' ἐπιστήμης μὲν πάσης ἀρετὴ ἐστίν, φρονήσεως δὲ ἀρετὴ οὐκ ἔστιν, ἀλλ' ὡς ἔοικεν, αὐτό τί ἐστίν ἀρετή.

[13] Ὁ δὲ νοῦς ἐστὶ περὶ τὰς ἀρχὰς τῶν νοητῶν καὶ τῶν ὄντων· ἡ μὲν γὰρ ἐπιστήμη τῶν μετ' ἀποδείξεως ὄντων ἐστίν, αἱ δ' ἀρχαὶ ἀναπόδεικτοι, ὥστ' οὐκ ἂν εἴη περὶ τὰς ἀρχὰς ἡ ἐπιστήμη, ἀλλ' ὁ νοῦς.

[14] Ἡ δὲ σοφία ἐστὶν ἐξ ἐπιστήμης καὶ νοῦ συγκειμένη. ἔστιν γὰρ ἡ σοφία καὶ περὶ τὰς ἀρχὰς καὶ τὰ ἐκ τῶν ἀρχῶν ἤδη δεικνύμενα, περὶ ἃ ἡ ἐπιστήμη· ἡ μὲν οὖν περὶ τὰς ἀρχάς, τοῦ νοῦ αὐτὴ μετέχει, ἡ δὲ περὶ τὰ μετὰ τὰς ἀρχὰς μετ' ἀποδείξεως ὄντα, τῆς ἐπιστήμης μετέχει· ὥστε δῆλον ὅτι ἡ σοφία ἐστὶν ἐκ τε νοῦ καὶ ἐπιστήμης συγκειμένη, ὥστ' εἴη ἂν περὶ ταῦτά, περὶ ἃ καὶ ὁ νοῦς καὶ ἡ ἐπιστήμη.

[15] Ἡ δὲ ὑπόληψις ἐστὶν, ἣ ὑπὲρ ἀπάντων ἐπαμφοτερίζομεν, πρὸς τὸ καὶ εἶναι ταῦτα οὕτω καὶ μὴ εἶναι.

[16] Πότερον δ' ἐστὶν ἡ φρόνησις καὶ ἡ σοφία ταυτόν; ἢ οὐ; ἡ μὲν γὰρ σοφία ἐστὶν περὶ τὰ μετ' ἀποδείξεως καὶ ἀεὶ ὡσαύτως ὄντα, ἡ δὲ φρόνησις οὐ περὶ ταῦτα, ἀλλὰ περὶ τὰ ἐν μεταβολῇ ὄντα. λέγω δὲ οἷον εὐθὺ μὲν ἢ καμπύλον καὶ κοῖλον καὶ τὰ τοιαῦτά ἐστὶν ἀεὶ τοιαῦτα, τὰ δὲ συμφέροντα οὐκέτι οὕτως ἔχουσιν τὸ μὴ εἰς ἄλλο τι μεταβάλλειν, ἀλλὰ μεταβάλλουσιν, καὶ νῦν μὲν συμφέρει τοῦτο, αὔριον δ' οὐ, καὶ τῷ μὲν, τῷ δ' οὐ, καὶ οὕτω μὲν συμφέρει, ἐκείνως δὲ οὐ συμφέρει. περὶ δὲ τὰ συμφέροντά ἐστὶν ἡ φρόνησις, ἡ δὲ σοφία οὐ. ἕτερον ἄρα ἡ σοφία καὶ ἡ φρόνησις.

[17] Πότερον δ' ἐστὶν ἡ σοφία ἀρετὴ ἢ οὐ; διὰ τοῦτο δῆλον ἂν γένοιτο, ὅτι ἐστὶν ἀρετὴ, ἐξ αὐτῆς τῆς φρονήσεως. εἰ γὰρ ἡ φρόνησις ἀρετὴ ἐστίν, ὡς φαμέν, τοῦ μορίου τοῦ ἐτέρου τῶν λόγον ἔχόντων, ἔστιν δὲ χεῖρων ἡ φρόνησις τῆς σοφίας (περὶ χεῖρω γὰρ ἐστίν· ἡ μὲν γὰρ σοφία περὶ τὸ αἰδίων καὶ τὸ θεῖον, ὡς φαμέν, ἡ δὲ φρόνησις περὶ τὸ συμφέρον ἀνθρώπῳ), εἰ οὖν τὸ χεῖρον ἀρετὴ ἐστί, τό γε βέλτιον εἰκὸς ἐστὶν ἀρετὴν εἶναι, ὥστε δῆλον ὅτι ἡ σοφία ἀρετὴ ἐστίν.

[18] Ἡ δὲ σύνεσις τί ἐστὶν ἢ περὶ τί; ἔστιν δ' ἡ σύνεσις ἐν οἷσπερ καὶ ἡ φρόνησις, περὶ τὰ πρακτά. ὁ γὰρ συνετός που λέγεται τῷ δυνατὸς βουλευέσθαι «εἶναι» καὶ ἐν τῷ ὀρθῶς τι κρῖναι καὶ ἰδεῖν· περὶ μικρῶν δὲ καὶ ἐν μικροῖς ἡ κρίσις αὐτοῦ. ἔστιν οὖν ἡ σύνεσις καὶ ὁ συνετὸς μέρος τι φρονήσεως καὶ τοῦ

φρονίμου, καὶ οὐκ ἄνευ τούτων· οὐ γὰρ ἂν χωρίσαις τὸν συνετὸν τοῦ φρονίμου.

[19] Ὅμοίως δ' ἂν δόξειεν ἔχειν καὶ τὰ ἐπὶ τῆς δεινότητος. ἡ γὰρ δεινότης καὶ ὁ δεινὸς οὐκ ἔστι μὲν οὔτε φρόνησις οὔτε φρόνιμος, ὁ μέντοι φρόνιμος δεινός, διὸ καὶ συνεργεῖ πως τῇ φρονήσει ἡ δεινότης· [20] ἀλλὰ δεινὸς μὲν καὶ ὁ φαῦλος λέγεται, οἷον Μέντωρ δεινὸς μὲν ἐδόκει εἶναι, ἀλλ' οὐ φρόνιμος ἦν. τοῦ γὰρ φρονίμου καὶ τῆς φρονήσεώς ἐστι τὸ τῶν βελτίστων ἐφίεσθαι καὶ τούτων προαιρετικὸν εἶναι καὶ πρακτικὸν ἀεὶ, τῆς δὲ δεινότητος καὶ τοῦ δεινοῦ σκέψασθαι ἐκ τίνων ἂν ἕκαστον γένοιτο τῶν πρακτῶν, καὶ τὸ ταῦτα πορίσαι.

Δόξειεν ἂν οὖν εἶναι ὁ δεινὸς ἐν τοῖς τοιούτοις τε καὶ περὶ ταῦτα.

[21] Ἀπορήσειε δ' ἂν τις καὶ θαυμάσειε, διὰ τί ὑπὲρ ἡθῶν λέγοντες καὶ πολιτικῆς τινος πραγματείας ὑπὲρ σοφίας λέγομεν. ὅτι ἴσως γε πρῶτον μὲν οὐδ' ἄλλοτρία δόξειεν ἂν εἶναι ἡ σκέψις ἡ ὑπὲρ αὐτῆς, εἴπερ ἐστὶν ἀρετὴ, ὡς φαμέν. ἔτι δ' ἴσως ἐστὶν φιλοσόφου καὶ περὶ τούτων παρεπισκοπεῖν [22] ὅσα ἐν τῷ αὐτῷ τυγχάνουσιν ὄντα. καὶ ἀναγκαῖον δέ, ἐπεὶ περὶ τῶν ἐν ψυχῇ λέγομεν, περὶ πάντων λέγειν· ἔστι δὲ καὶ ἡ σοφία ἐν ψυχῇ· ὥστε οὐκ ἄλλοτρίως ὑπὲρ ψυχῆς ποιούμεθα τοὺς λόγους.

[23] Ὡςπερ δ' ἔχει ἡ δεινότης πρὸς φρόνησιν, οὕτως δόξειεν ἂν ἔχειν ἐπὶ τῶν ἀρετῶν ἀπασῶν. λέγω δὲ οἷον εἰσὶν ἀρεταὶ καὶ φύσει ἐν ἐκάστοις ἐγγινόμεναι, οἷον ὁρμαὶ τινες ἐν ἐκάστῳ ἄνευ λόγου πρὸς τὰ ἀνδρεῖα καὶ τὰ δίκαια καὶ καθ' ἐκάστην πρὸς τὰ [24] τοιαῦτα· εἰσὶ δὲ δὴ καὶ ἔθει καὶ προαιρέσει. αἱ δὲ δὴ μετὰ λόγου οὔσαι τελέως ἀρεταὶ εἰσὶν ἐπαινεται ἐπιγινόμεναι. ἔστιν οὖν ἡ φυσικὴ ἀρετὴ αὕτη ἡ ἄνευ λόγου χωριζομένη μὲν τοῦ λόγου μικρὰ καὶ ἀπολειπομένη τοῦ ἐπαινέσθαι, πρὸς δὲ τὸν λόγον καὶ τὴν προαίρεσιν προστιθεμένη τελείαν ποιεῖ τὴν ἀρετὴν. διὸ καὶ συνεργεῖ τῷ λόγῳ καὶ οὐκ ἔστιν [25] ἄνευ τοῦ λόγου ἡ φυσικὴ ὁρμὴ πρὸς ἀρετὴν. οὐδ' αὖ ὁ λόγος καὶ ἡ προαίρεσις οὐ πάνυ τελειοῦται τῷ εἶναι ἀρετὴν ἄνευ τῆς φυσικῆς ὁρμῆς. διὸ οὐκ ὀρθῶς Σωκράτης ἔλεγεν, φάσκων εἶναι τὴν ἀρετὴν λόγον· οὐδὲν γὰρ ὄφελος εἶναι πράττειν τὰ ἀνδρεῖα καὶ τὰ δίκαια, μὴ εἰδότα καὶ προαιρούμενον τῷ λόγῳ. διὸ τὴν ἀρετὴν ἔφη λόγον εἶναι, οὐκ ὀρθῶς, ἀλλ' οἱ νῦν βέλτιον· τὸ γὰρ κατὰ τὸν ὀρθὸν λόγον [26] πράττειν τὰ καλά, τοῦτό φασι εἶναι ἀρετὴν· ὀρθῶς μὲν οὐδ' οὔτοι. πράξει μὲν γὰρ ἂν τις τὰ δίκαια προαιρέσει μὲν οὐδεμιᾶ, οὐδὲ γνώσει τῶν καλῶν, ἀλλ' ὁρμῇ τινι ἀλόγῳ, ὀρθῶς δὲ ταῦτα καὶ κατὰ τὸν ὀρθὸν λόγον (λέγω δέ, ὡς ἂν ὁ λόγος ὁ

ὀρθὸς κελεύσειεν, οὕτως ἔπραξεν)· ἀλλ' ὅμως ἡ τοιαύτη πρᾶξις οὐκ ἔχει τὸ ἐπαινετόν. ἀλλὰ βέλτιον, ὡς ἡμεῖς ἀφορίζομεν, τὸ μετὰ λόγου εἶναι τὴν ὀρμὴν πρὸς τὸ καλόν· τὸ γὰρ τοιοῦτον καὶ ἀρετὴ καὶ ἐπαινετόν.

[27] Πότερον δ' ἐστὶν ἡ φρόνησις ἀρετὴ ἢ οὐ, ἀπορήσειεν ἄν τις. οὐ μὴν ἀλλ' ἐντεῦθεν ἂν γένοιτο δῆλον ὅτι ἀρετὴ. εἴπερ γὰρ ἡ δικαιοσύνη καὶ ἡ ἀνδρεία καὶ αἱ ἄλλαι ἀρεταί, διότι τῶν καλῶν πρακτικά, καὶ ἐπαινεταὶ εἰσὶν, δῆλον ὡς καὶ ἡ φρόνησις τῶν ἐπαινετῶν ἂν τι εἴη καὶ τῶν ἐν ἀρετῇ τάξει ὄντων. ἐφ' ᾧ γὰρ ἡ ἀνδρεία ὀρμᾷ πράττειν, ἐπὶ ταῦτα καὶ ἡ φρόνησις. τὸ γὰρ ὅλον ὡς ἂν αὕτη προστάτῃ, οὕτω καὶ ἡ ἀνδρεία πράττει, ὥστε εἰ αὕτη ἐπαινετὴ τῷ ποιεῖν ἂν ἡ φρόνησις προστάτῃ, ἢ γε φρόνησις τελείως ἂν εἴη καὶ ἐπαινετὴ καὶ ἀρετὴ.

[28] Πότερον δ' ἐστὶν ἡ φρόνησις πρακτικὴ ἢ οὐ, ἴδοι ἄν τις ἐντεῦθεν, ἐπὶ τὰς ἐπιστήμας ἐπιβλέψας, οἷον ἐπὶ τὴν οἰκοδομικὴν. ἔστιν γάρ, ὡς φαμέν, ἐν οἰκοδομικῇ ὃ μὲν ἀρχιτέκτων τις καλούμενος, ὃ δὲ ὑπηρετῶν τούτῳ οἰκοδόμος· οὗτος δ' ἐστὶν ποιητικὸς οἰκίας. ἐστὶν δὲ καὶ ὁ ἀρχιτέκτων, καθὼς οὗτος ἐποίει οἰκίαν, ποιητικὸς οἰκίας. ὁμοίως δὲ ἐπὶ τῶν ἄλλων τῶν ποιητικῶν ἔχει, ἐν αἷς ἔστιν ἀρχιτέκτων καὶ ὑπρέτης τούτου. ποιητικὸς ἄρα τινὸς καὶ ὁ ἀρχιτέκτων ἔσται, καὶ τοῦ αὐτοῦ τούτου [29] «οὐ» ποιητικὸς καὶ ὁ ὑπηρετικός. εἰ τοίνυν ὁμοίως καὶ ἐπὶ τῶν ἀρετῶν ἔχει, ὅπερ εἰκὸς καὶ εὐλόγον, καὶ ἡ φρόνησις ἂν εἴη πρακτικὴ. αἱ γὰρ ἀρεταὶ πᾶσαι πρακτικαὶ εἰσὶν, ἡ δὲ φρόνησις ὥσπερ ἀρχιτέκτων τις αὐτῶν ἐστίν· ὅπως γὰρ αὕτη προστάζει, οὕτως αἱ ἀρεταὶ καὶ οἱ κατ' αὐτὰς πράττουσιν· ἐπεὶ οὖν αἱ ἀρεταὶ πρακτικά, καὶ ἡ φρόνησις πρακτικὴ ἂν εἴη.

[30] Πότερον δὲ αὕτη πάντων ἄρχει τῶν ἐν τῇ ψυχῇ, ὥσπερ δοκεῖ καὶ ἀπορεῖται; ἢ οὐ; τῶν γὰρ βελτιόνων οὐκ ἂν δόξειεν, οἷον τῆς σοφίας οὐκ ἄρχει. ἀλλὰ, φησὶν, αὕτη ἐπιμελεῖται πάντων, καὶ κυρία ἐστὶ προστάττουσα.

[31] Ἀλλ' ἴσως ἔχει ὥσπερ ἐν οἰκίᾳ ὁ ἐπίτροπος. οὗτος γὰρ πάντων κύριος καὶ πάντα διοικεῖ· ἀλλ' οὕτω οὗτος ἄρχει πάντων, ἀλλὰ παρασκευάζει τῷ δεσπότῃ σχολήν, ὅπως ἂν ἐκεῖνος μὴ κωλυόμενος ὑπὸ τῶν ἀναγκαίων ἐκκλείηται τοῦ τῶν καλῶν τι [32] καὶ προσηκόντων πράττειν. οὕτω καὶ ὁμοίως τούτῳ ἡ φρόνησις ὥσπερ ἐπίτροπος τίς ἐστὶ τῆς σοφίας, καὶ παρασκευάζει ταύτῃ σχολήν καὶ τὸ ποιεῖν τὸ αὐτῆς ἔργον, κατέχουσα τὰ πάθη καὶ ταῦτα σωφρονίζουσα.

❖ ὥς εἰρήσθω.

τα.



## II

[1] Μετὰ δὲ ταῦτα ὑπὲρ ἐπεικείας δέοι ἂν τὴν ἐπίσκεψιν ποιήσασθαι, τί τέ ἐστι καὶ ἐν τίσι καὶ περὶ ποῖα. ἔστιν δὲ ἡ ἐπεικεία καὶ ὁ ἐπαικὴς ὁ ἐλαττωτικὸς τῶν δικαίων τῶν κατὰ νόμον. ἃ γὰρ ὁ νομοθέτης ἐξαδυνατεῖ καθ' ἕκαστα ἀκριβῶς διορίζειν, ἀλλὰ καθόλου λέγει, ὁ ἐν τούτοις παραχωρῶν, καὶ ταῦθ' αἰρούμενος ἃ ὁ νομοθέτης ἐβούλετο μὲν τῷ καθ' ἕκαστα διορίσαι, οὐκ ἠδυνήθη δέ, ὁ τοιοῦτος ἐπαικὴς. οὐκ ἔστιν δὲ ἐλαττωτικὸς τῶν δικαίων ἀπλῶς· τῶν μὲν γὰρ φύσει καὶ ὡς ἀληθῶς ὄντων δικαίων οὐκ ἐλαττοῦται, ἀλλὰ τῶν κατὰ νόμον, ἃ ὁ νομοθέτης ἐξαδυνατῶν ἀπέλιπεν.

[2] Ἡ δὲ εὐγνωμοσύνη καὶ ὁ εὐγνώμων ἐστὶν περὶ ταῦτα περὶ ἃ καὶ ἡ ἐπεικεία, περὶ τὰ δίκαια [καὶ] τὰ ἐλλελειμμένα ὑπὸ τοῦ νομοθέτου τῷ μὴ ἀκριβῶς διορίσθαι, κριτικὸς ὢν τῶν ἐλλελειμμένων ὑπὸ τοῦ νομοθέτου, καὶ γινώσκων ὅτι ὑπὸ μὲν τοῦ νομοθέτου ἐλλέλειπται, ἔστι μέντοι δίκαια, ὁ τοιοῦτος εὐγνώμων.

Ἔστι μὲν οὖν οὐκ ἄνευ ἐπεικείας ἡ εὐγνωμοσύνη· τὸ μὲν γὰρ κρίναι τοῦ εὐγνώμονος, τὸ δὲ δὴ πράττειν [καὶ] κατὰ τὴν κρίσιν τοῦ ἐπεικοῦς.

[3] Ἡ δέ γε εὐβουλία ἐστὶ μὲν περὶ ταῦτα τῇ φρονήσει (περὶ γὰρ τὰ πρακτά ἐστὶ τὰ περὶ αἵρεσιν καὶ φυγὴν ὄντα), ἔστιν δὲ οὐκ ἄνευ φρονήσεως. ἡ μὲν γὰρ φρόνησις πρακτικὴ τούτων ἐστὶ, ἡ δὲ εὐβουλία ἕξις ἢ διάθεσις ἢ τι τοιοῦτον ἢ ἐπιτευκτικὴ τῶν ἐν τοῖς πρακτοῖς βελτίστων καὶ συμφορωτάτων.

[2] διὸ οὐδὲ τὰ τοιαῦτα εὐβουλίας ἂν δόξειεν, τὰ ἀπὸ ταῦτομάτου συμβαίνοντα κατὰ τρόπον· οἷς γὰρ μή ἐστὶν ὁ λόγος ὁ σκοπῶν τὸ βέλτιστον, οὐκέτι ἂν εἴποις, ὥς συνέβη τι κατὰ τρόπον, τοῦτον εὐβουλον, ἀλλ' εὐτυχῇ· τὰ γὰρ ἄνευ τοῦ λόγου τοῦ κρίνοντος γινόμενα κατορθώματα εὐτυχήματα ἐστίν.

[3] Πότερον δὲ ποτε τοῦ δικαίου ἐστὶν τὸ τῇ ἐντεύξει τὸ ἴσον ἐκάστω ἀποδιδόναι (λέγω δὲ οἷον, ὁποῖος ἂν ἦ ἕκαστος, τοιοῦτον γινόμενον ἐντυγχάνειν); ἢ οὐ; τοῦτο μὲν γὰρ καὶ κόλακος καὶ ἀρέσκου δόξειεν ἂν εἶναι· ἀλλὰ τὸ κατ' ἀξίαν ἐκάστω ἀποδιδόναι τὴν ἐντευξιν, τοῦτο καὶ δικαίου καὶ σπουδαίου ἀπλῶς ἂν δόξειεν εἶναι.

[4] Ἀπορήσειε δ' ἂν τις καὶ τοῦτο. εἴπερ ἐστὶ τὸ ἀδικεῖν τὸ βλάπτειν ἐκόντα

καὶ εἰδότα καὶ ὄν καὶ ὥς καὶ οὗ ἔνεκα, ἔστι δ' ἡ βλάβη καὶ ἡ ἀδικία ἐν ἀγαθοῖς, καὶ περὶ ἀγαθὰ, ὁ ἀδικῶν ἄρα καὶ ὁ ἄδικος εἰδείη ἂν ὅποια ἀγαθὰ καὶ ὅποια κακὰ· τὸ δέ γε ὑπὲρ τῶν τοιούτων εἰδέναι ἐστὶν ἴδιον τοῦ φρονίμου καὶ τῆς φρονήσεως· ἄτοπον δὲ συμβαίνει τὸ τῷ ἀδίκῳ συμπαρακολουθεῖν τὸ μέγιστον ἀγαθὸν τὴν φρόνησιν.

[5] Ἡ οὐκ ἂν δόξειεν παρακολουθεῖν τῷ ἀδίκῳ ἡ φρόνησις; οὐ γὰρ σκοπεῖ ὁ ἄδικος οὐδὲ δύναται κρίνειν τὸ ἀπλῶς ἀγαθὸν καὶ τὸ αὐτῷ ἀγαθόν, ἀλλὰ [6] διαμαρτάνει. τῆς δὲ φρονήσεως τοῦτο ἐστὶ, τὸ ὀρθῶς δύνασθαι ταῦτα θεωρεῖν, ὁμοίως ὥσπερ ἐπὶ τῶν κατ' ἰατρικὴν τὸ μὲν ἀπλῶς ὑγιεινὸν καὶ τὸ ὑγιείας ποιητικὸν οἶδαμεν ἅπαντες, ὅτι ἐλλέβορος καὶ τὸ ἐλατήριον καὶ αἱ τομαὶ καὶ αἱ καύσεις ὑγιεινὰ εἰσιν καὶ ὑγιείας ποιητικά, ἀλλ' ὅμως οὐκ ἔχομεν τὴν ἰατρικὴν ἐπιστήμην· οὐ γὰρ ἔτι οἶδαμεν τὸ καθ' ἕκαστον ἀγαθόν, ὥσπερ ὁ ἰατρὸς οἶδεν τίτι ἐστὶ τοῦτ' ἀγαθὸν καὶ πότε καὶ πῶς διακειμένῳ· ἐν τούτῳ γὰρ ἤδη ἡ ἰατρικὴ ἐπιστήμη. τὰ μὲν οὖν ἀπλῶς ὑγιεινὰ εἰδότες ὅμως οὐκ ἔχομεν οὐδὲ παρακολουθεῖ ἡμῖν ἡ ἰατρικὴ ἐπιστήμη.

[7] Ὡς δ' αὐτως ὁ ἄδικος. ὅτι μὲν οὖν ἀπλῶς καὶ ἡ τυραννὶς ἀγαθὸν καὶ ἡ ἀρχὴ καὶ ἡ ἐξουσία, οἶδεν· ἀλλ' εἰ αὐτῷ ἀγαθὸν ἢ μή, ἢ πότε, ἢ πῶς διακειμένῳ, οὐκέτι οἶδεν. τοῦτο δ' ἐστὶν μάλιστα τῆς φρονήσεως, ὥστε τῷ ἀδίκῳ οὐ παρακολουθεῖ ἡ φρόνησις. αἰρεῖται γὰρ τάγαθὰ, ὑπὲρ ὧν ἀδικεῖ, τὰ ἀπλῶς ἀγαθὰ, οὐ τὰ αὐτῷ ἀγαθὰ. ὁ γὰρ πλοῦτος καὶ ἡ ἀρχὴ ἀπλῶς μὲν ἀγαθόν, αὐτῷ μέντοι ἴσως οὐκ ἀγαθόν· εὐπορήσας γὰρ καὶ ἄρξας πολλὰ κακὰ αὐτὸς ἐαυτῷ ποιήσει καὶ τοῖς φίλοις· οὐ γὰρ δυνήσεται ἀρχῇ ὀρθῶς χρήσασθαι.

[8] Ἐχει δὲ καὶ τοῦτο ἀπορίαν καὶ σκέψιν, πότερόν ἐστι πρὸς τὸν φαῦλον ἀδικία, ἢ οὐ. εἰ γὰρ ἡ μὲν ἀδικία ἐστὶν ἐν βλάβῃ, ἡ δὲ βλάβη ἐν στερήσει τῶν ἀγαθῶν, οὐκ ἂν δόξειεν βλάπτειν· τὰ γὰρ ἀγαθὰ ἃ αὐτῷ οἶεται εἶναι ἀγαθὰ, οὐκ ἀγαθὰ εἰσὶν· ἡ γὰρ ἀρχὴ καὶ ὁ πλοῦτος τὸν φαῦλον οὐ δυνάμενον αὐτοῖς χρῆσθαι ὀρθῶς βλάψει· εἰ οὖν αὐτὸν βλάψει παραγενόμενα, ὁ τούτων στερίσκων οὐκ ἂν δόξειεν [9] ἀδικεῖν. ὁ δὲ τοιοῦτος λόγος δόξειεν ἂν εἶναι παράδοξος τοῖς πολλοῖς· πάντες γὰρ οἴονται καὶ ἀρχῇ καὶ δυνάμει καὶ πλούτῳ δυνατοὶ εἶναι χρῆσθαι, [10] οὐκ ὀρθῶς ὑπολαμβάνοντες. δῆλον δὲ τοῦτο καὶ ἐκ τοῦ νομοθέτου· ὁ γὰρ νομοθέτης οὐ πᾶσιν ἐπιτρέπει τὸ ἄρχειν, ἀλλ' ὠρίσται καὶ ἡ ἡλικία καὶ ἡ εὐπορία ἣν δεῖ ὑπάρχειν τῷ μέλλοντι ἄρχειν, ὥς οὐ δυνατὸν ὄν παντὶ ἄρχειν ὑπάρξαι. εἰ δὲ τις ἀγανακτοίῃ ὅτι οὐκ ἄρχει ἢ οὐδεὶς αὐτὸν ἐᾷ κυβερνᾶν, “οὐ γὰρ ἔχεις” εἴποι ἂν τις “οὐδὲν τοιοῦτον ἐν τῇ ψυχῇ ὧς δυνήσῃ καὶ ἄρχειν καὶ [11] κυβερνᾶν.” ἢ ἐπὶ μὲν τοῦ

σώματος ὁρῶμεν οὐ δυναμένους ὑγιαίνειν τοὺς τὰ ἀπλῶς ἀγαθὰ προσφερομένους, ἀλλ' εἰ μέλλει τις ὑγιαίνειν τὸ σῶμα τὸ φαῦλον, ὕδωρ αὐτῷ πρότερον καὶ ὀλίγα σιτία προσενεκτέον· τῷ δὲ τὴν ψυχὴν φαύλην ἔχοντι πρὸς τὸ μὴθὲν κακὸν ἐργάζεσθαι οὐκ ἀφεκτέον καὶ πλούτου καὶ ἀρχῆς καὶ δυνάμεως καὶ ἀπλῶς τῶν τοιούτων, ὅσω εὐκίνητοτερον καὶ εὐμεταβολώτερον ψυχὴ σώματος; ὥσπερ γὰρ ὁ φαῦλος τὸ σῶμα οὕτως ἦν ἐπιτήδειος διαιτᾶσθαι, καὶ ὁ φαῦλος τὴν ψυχὴν οὕτως ἐπιτήδειος διάγειν, μὴθὲν τῶν τοιούτων ἔχων.

[12] Ἐχει δὲ καὶ τὸ τοιοῦτον ἀπορίαν, οἷον ἐπειδὴν μὴ ἢ ἅμα πρᾶξαι τάνδρεϊα καὶ τὰ δίκαια, πότερ' ἂν τις πράξειεν; ἐν μὲν δὲ ταῖς φυσικαῖς ἀρεταῖς ἔφαμεν τὴν ὁρμὴν μόνον [δεῖν] τὴν πρὸς τὸ καλὸν ὑπάρχειν ἄνευ λόγου· ὥ δ' ἐστὶν αἴρεσις, ἐν τῷ λόγῳ καὶ τῷ λόγον ἔχοντι ἐστίν. ὥστε ἅμα τὸ ἐλέσθαι [καὶ] παρέσται καὶ ἡ τελεία ἀρετὴ ὑπάρξει, ἣν ἔφαμεν μετὰ φρονήσεως εἶναι, οὐκ ἄνευ δὲ τῆς [13] φυσικῆς ὁρμῆς τῆς ἐπὶ τὸ καλόν. οὐδ' ἐναντιώσεται ἀρετὴ ἀρετῇ. πέφυκεν γὰρ ὑπείκειν τῷ λόγῳ, [ἢ] ὡς οὗτος προστάττει, ὥστ' ἐφ' ὃ ἂν οὗτος ἄγῃ, ἐπὶ τοῦτο ἀποκλίνει. τὸ γὰρ βέλτιον οὗτός ἐστιν ὁ αἰρούμενος. οὔτε γὰρ ἄνευ τῆς φρονήσεως αἱ ἄλλαι ἀρεταὶ γίνονται, οὔθ' ἡ φρόνησις τελεία ἄνευ τῶν ἄλλων ἀρετῶν, ἀλλὰ συνεργοῦσί πως μετ' ἀλλήλων ἐπακολουθοῦσαι τῇ φρονήσει.

[14] Οὐχ ἦττον δὲ καὶ τὰ τοιαῦτα ἀπορήσεται, πότερόν ποτε καὶ ἐπὶ τῶν ἀρετῶν οὕτως ἔχει ὥσπερ ἐπὶ τῶν ἄλλων ἀγαθῶν τῶν τ' ἐκτὸς καὶ τῶν περὶ σῶμα. ταῦτα γὰρ εἰς ὑπερβολὴν γινόμενα χεῖρους ποιεῖ, οἷον πλοῦτος πολλὺς γενόμενος ὑπερόπτας καὶ ἀηδεῖς ἐποίησεν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων [15] ἀγαθῶν, ἀρχῆς τιμῆς κάλλους μεγέθους. πότερον οὖν καὶ ἐπ' ἀρετῆς οὕτως ἔχει, ὥστε ἐάν τινι δικαιοσύνη ἢ ἀνδρεία εἰς ὑπερβολὴν παραγένηται, χεῖρων ἔσται, ἢ οὐ; <οὐ,> φησίν. ἀλλ' ἀπὸ μὲν τῆς ἀρετῆς τιμὴ γίνεται, ἡ δὲ τιμὴ μεγάλη γινομένη χεῖρους ποιεῖ· ὥστε δῆλον ὅτι, φησίν, ἀρετὴ εἰς ἐπίδοσιν βαδίζουσα μεγέθους χεῖρους ποιήσει· τῆς γὰρ τιμῆς ἡ ἀρετὴ αἰτία, ὥστε καὶ ἡ ἀρετὴ ποιοίη ἂν χεῖρους μείζων γινομένη.

[16] Ἦ τοῦτο οὐκ ἀληθές; τῆς γὰρ ἀρετῆς εἰ καὶ ἄλλα πολλά ἐστὶν ἔργα, ὥσπερ καὶ ἔστιν, καὶ τοῦτο ἐν τοῖς μάλιστα, τὸ τοῖς ἀγαθοῖς τούτοις καὶ τοῖς τοιούτοις δύνασθαι ὀρθῶς παραγενομένοις χρῆσθαι· εἰ δὲ ὁ σπουδαῖος παραγενομένης αὐτῷ ἡ τιμῆς ἢ ἀρχῆς μεγάλης μὴ χρήσεται ὀρθῶς τούτοις, οὐκέτι ἂν εἴη σπουδαῖος· οὔτε δὲ ἡ τιμὴ οὔτε ἡ ἀρχὴ ποιήσει τὸν σπουδαῖον χεῖρω, ὥστε οὐδ' ἡ ἀρετὴ.

[17] τὸ δ' ὅλον ἐπειδήπερ ἡμῖν ἐν ἀρχῇ διώρισται, ὅτι εἰσὶν αἱ ἀρεταὶ μεσότητες, καὶ ἡ μᾶλλον ἀρετὴ μᾶλλον ἐστὶ μεσότης· ὥστ' οὐχ ὅτι χεῖρω ποιήσει εἰς μέγεθος ἡ ἀρετὴ ἰοῦσα, ἀλλὰ βελτίω· ἡ γὰρ μεσότης ἐνδείας καὶ ὑπερβολῆς τῆς τῶν παθῶν ἦν μεσότης.

[4]

[1] Ταῦτα μὲν μέχρι τούτου· μετὰ δὲ ταῦτα ἀναγκαῖόν ἐστιν ἑτέραν ἀρχὴν ποιησαμένοις λέγειν ὑπὲρ ἐγκρατείας καὶ ἀκρασίας. ὥσπερ δὲ [καὶ] ἡ ἀρετὴ καὶ ἡ κακία αὐταὶ εἰσιν ἄτοποι, ὡσαύτως ἀναγκαῖον καὶ τοὺς περὶ τούτων λόγους λεχθησομένους [2] ἀτόπους γίνεσθαι· οὐ γὰρ ὁμοία ἡ ἀρετὴ αὕτη ἐστὶν ταῖς ἄλλαις. ἐν μὲν γὰρ ταῖς ἄλλαις ἐπὶ ταῦτά καὶ ὁ λόγος καὶ τὰ πάθη ὁρμῶσιν καὶ οὐκ ἐναντιοῦνται ἀλλήλοις, ἐπὶ δὲ ταύτης ἐναντιοῦνται ἀλλήλοις ὅ τε λόγος καὶ τὰ πάθη.

[3] Ἔστι δὲ τρία τὰ ἐν τῇ ψυχῇ γινόμενα, καθ' ἃ φαῦλοι λεγόμεθα, κακία ἀκρασία θηριότης. ὑπὲρ μὲν οὖν κακίας καὶ ἀρετῆς τί ἐστὶ καὶ ἐν τίσιν, εἴρηται ἡμῖν ἐν τοῖς ἐπάνω· νῦν δὲ ὑπὲρ ἀκρασίας καὶ θηριότητος λεκτέον ἂν εἴη.

[5]

[1] Ἔστιν δὲ ἡ θηριότης ὑπερβάλλουσά τις κακία. ὅταν γὰρ τινα παντελῶς ἴδωμεν φαῦλον, οὐδ' ἄνθρωπόν φαιμεν εἶναι ἀλλὰ θηρίον, ὡς οὐσαν τινὰ [2] κακίαν θηριότητα. ἡ δὲ ἀντικειμένη ἀρετὴ ταύτη ἐστὶν ἀνώνυμος, ἔστιν δ' ἡ τοιαύτη ὑπὲρ ἄνθρωπον οὔσα, οἷον ἡρώϊκή τις καὶ θεία. ἀνώνυμος δὲ ἐστὶν αὕτη ἡ ἀρετὴ, ὅτι οὐκ ἔστιν θεοῦ ἀρετὴ· ὁ γὰρ θεὸς βελτίων τῆς ἀρετῆς καὶ οὐ κατ' ἀρετὴν ἐστὶ [3] σπουδαῖος· οὕτω μὲν γὰρ βέλτιον ἔσται ἡ ἀρετὴ τοῦ θεοῦ. διὸ ἀνώνυμος ἡ ἀρετὴ ἡ τῇ κακίᾳ τῇ θηριότητι ἀντικειμένη. θέλει δὲ τῇ τοιαύτῃ ἀντικεῖσθαι ἡ θεία καὶ ὑπὲρ ἄνθρωπον· ὥσπερ γὰρ καὶ ἡ κακία ἡ θηριότης ὑπὲρ ἄνθρωπον ἐστίν, οὕτω καὶ ἡ ἀρετὴ ἡ ἀντικειμένη.

[6]

[1] Ὑπὲρ δὲ ἀκρασίας καὶ ἐγκρατείας πρῶτον <ἂν> δέοι εἰπεῖν τὰ ἀπορούμενα καὶ τοὺς ἐναντιούμενους λόγους τοῖς φαινομένοις, ὅπως ἐκ τῶν ἀπορουμένων καὶ ἐναντιουμένων λόγων συνεπισκεψάμενοι καὶ ταῦτα ἐξετάσαντες τὴν ἀλήθειαν ὑπὲρ αὐτῶν εἰς τὸ ἐνδεχόμενον ἴδωμεν· ῥᾶον γὰρ οὕτως ἰδεῖν τάληθές ἐστι.

[2] Σωκράτης μὲν οὖν ὁ πρεσβύτερος ἀνῆρει ὅλως καὶ οὐκ ἔφη ἀκρασίαν εἶναι, λέγων ὅτι οὐθεὶς εἰδὼς τὰ κακὰ ὅτι κακά εἰσιν ἔλοιτ' ἄν· ὁ δὲ ἀκρατὴς δοκεῖ, εἰδὼς ὅτι φαῦλα εἰσίν, αἰρεῖσθαι ὅμως, ἀγόμενος ὑπὸ τοῦ πάθους. διὰ δὲ τὸν τοιοῦτον λόγον οὐκ [3] ὦρετ' εἶναι ἀκρασίαν· οὐ δὲ ὀρθῶς. ἄτοπον γὰρ τῷ λόγῳ τούτῳ πεισθέντας ἀναιρεῖν τὸ πιθανῶς γινόμενον· ἀκρατεῖς γὰρ εἰσὶν ἄνθρωποι, καὶ αὐτοὶ εἰδότες ὅτι φαῦλα ὅμως ταῦτα πράττουσιν.

[4] Ἐπεὶ δ' οὖν ἔστιν ἀκρασία, πότερον ὁ ἀκρατὴς ἐπιστήμην τινὰ ἔχει, ἢ θεωρεῖ καὶ ἐξετάζει τὰ φαῦλα; ἀλλὰ πάλιν οὐκ ἂν δόξειεν. ἄτοπον γὰρ τὸ κράτιστον καὶ βεβαιότατον τῶν ἐν ἡμῖν ἡττᾶσθαι ὑπὸ τινός· ἐπιστήμη γὰρ πάντων τῶν ἐν ἡμῖν μονιμώτατόν ἐστι καὶ βιαστικώτατον· ὥστε πάλιν ὁ λόγος οὗτος ἐναντιοῦται τῷ μὴ εἶναι ἐπιστήμην.

[5] Ἀλλ' ἄρα γε ἐπιστήμη μὲν οὐ, δόξα δέ; ἀλλ' εἰ δόξαν ἔχει ὁ ἀκρατὴς, οὐκ ἂν εἴη ψεκτός. εἰ γὰρ φαῦλόν τι πράττει μὴ ἀκριβῶς εἰδὼς ἀλλὰ δοξάζων, συγγνώμην ἂν τις ἀποδοίη προσθέσθαι τῇ ἡδονῇ καὶ πρᾶξαι τὰ φαῦλα, μὴ ἀκριβῶς εἰδότα ὅτι [οὐ] φαῦλα εἰσίν, ἀλλὰ δοξάζοντα· οἷς δέ γε συγγνώμην ἔχομεν, τούτους οὐ ψέγομεν· ὥστε ὁ ἀκρατὴς, εἴπερ δόξαν ἔχει, οὐκ ἔσται ψεκτός. ἀλλ' ἔστιν ψεκτός.

[6] Οἱ δὲ τοιοῦτοι λόγοι ἀπορεῖν ποιοῦσιν. οἱ μὲν γὰρ οὐκ ἔφασαν εἶναι ἐπιστήμην, ἄτοπόν τι γὰρ συμβαίνειν ἐποιοῦν· οἱ δὲ πάλιν οὐδὲ δόξαν, καὶ γὰρ οὗτοι ἄτοπόν τι πάλιν [ἐποιοῦν] συμβαίνειν.

[7] Ἀλλὰ δὲ καὶ ταῦτ' ἂν τις ἀπορήσειεν· ἐπεὶ γὰρ δοκεῖ ὁ σώφρων καὶ ἐγκρατὴς εἶναι, πότερον τῷ σώφρονι τι ποιήσει σφοδρὰς ἐπιθυμίας; εἰ μὲν οὖν ἔσται ἐγκρατὴς, σφοδρὰς δεήσει αὐτὸν ἔχειν ἐπιθυμίας (οὐ γὰρ ἂν εἴποις ἐγκρατῆ, ὅστις μετρίων ἐπιθυμιῶν κρατεῖ); εἰ δέ γε σφοδρὰς [μὴ] ἔξει ἐπιθυμίας, οὐκέτι ἔσται σώφρων (ὁ γὰρ σώφρων ἐστὶν ὁ μὴ ἐπιθυμῶν μηδὲ πάσχων μηθέν).

[8] Ἔχει δὲ καὶ τὰ τοιαῦτα πάλιν ἀπορίαν. συμβαίνει γὰρ ἐκ τῶν λόγων καὶ τὸν ἀκρατῆ ποτε ἐπαινετὸν εἶναι καὶ τὸν ἐγκρατῆ ψεκτόν. ἔστω γάρ τις, φησὶν, διημαρτηκῶς τῷ λογισμῷ, καὶ δοκείτω αὐτῷ λογιζομένῳ τὰ καλὰ εἶναι φαῦλα, ἢ δ' ἐπιθυμία ἀγέτω ἐπὶ τὰ καλὰ· οὐκοῦν ὁ μὲν λόγος οὐκ ἐάσει πράττειν, ὑπὸ δὲ τῆς ἐπιθυμίας ἀγόμενος πράσσει (τοιοῦτος γὰρ ἦν ὁ ἀκρατὴς)· πράξει ἄρα τὰ καλὰ, ἢ γὰρ ἐπιθυμία ἐπὶ ταῦτα ἀγέτω (ὁ δὲ λόγος κωλύσει· διαμαρτανέτω γὰρ τῷ λογισμῷ τῶν καλῶν)· οὐκοῦν οὗτος ἀκρατὴς μὲν ἔσται, ἐπαινετὸς μέντοι· ἢ γὰρ πράττει τὰ καλὰ, ἐπαινετός. ἄτοπον δὲ τὸ

συμβαῖνον.

[9] Πάλιν δ' αὖ διαμαρτανέτω τῷ λόγῳ, καὶ τὰ καλὰ αὐτῷ μὴ δοκεῖτω καλὰ εἶναι, ἢ δ' ἐπιθυμία ἀγέτω ἐπὶ τὰ καλὰ· ἐγκρατὴς δέ γε ἐστὶν ὁ ἐπιθυμῶν μὲν, μὴ πράττων δὲ ταῦτα διὰ τὸν λόγον· οὐκοῦν ὁ διαμαρτάνων τῷ λόγῳ τῶν καλῶν κωλύσει ὧν ἐπιθυμεῖ πράττειν, κωλύει ἄρα τὰ καλὰ πράττειν (ἐπὶ ταῦτα γὰρ ἢ ἐπιθυμία ἤγαγεν)· ὁ δέ γε τὰ καλὰ μὴ πράττων δέον πράττειν ψεκτός· ὁ ἄρα ἐγκρατὴς ἔσται ποτὲ ψεκτός. ἄτοπον δὲ καὶ οὕτω τὸ συμβαῖνον.

[10] Πότερον δ' ἡ ἀκρασία καὶ ὁ ἀκρατὴς ἐν ἅπασιν ἐστὶν καὶ περὶ πάντα, οἷον περὶ χρήματα καὶ τιμὴν καὶ ὀργὴν καὶ δόξαν (περὶ γὰρ ταῦτα πάντα δοκοῦσιν ἀκρατεῖς εἶναι), ἢ οὐ, ἀλλὰ περὶ τι ἀφωρισμένον ἐστὶν ἡ ἀκρασία, ἀπορήσειεν ἂν τις.

Τὰ μὲν οὖν τὴν ἀπορίαν παρέχοντα ταῦτ' ἐστίν· [11] ἀναγκαῖον δὲ λῦσαι τὰς ἀπορίας. πρῶτον μὲν οὖν τὴν ἐπὶ τῆς ἐπιστήμης· ἄτοπον γὰρ ἐδόκει εἶναι ἐπιστήμην ἔχοντα ταύτην ἀποβάλλειν ἢ μεταπίπτειν.

[12] Ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τῆς δόξης· οὐθὲν γὰρ διαφέρει δόξαν εἶναι ἢ ἐπιστήμην· εἰ γὰρ ἔσται ἡ δόξα σφοδρὰ τῷ βέβαιον εἶναι καὶ ἀμετάπειστον, οὐθὲν διοίσει τῆς ἐπιστήμης, δόξης ἐχούσης τὸ πιστεύειν οὕτως ἔχειν ὡς δοξάζουσιν, οἷον Ἡράκλειτος ὁ Ἐφέσιος τοιαύτην ἔχει δόξαν ὑπὲρ ὧν αὐτῷ ἐδόκει.

[13] Οὐθὲν δὲ ἄτοπον τῷ ἀκρατεῖ, οὔτ' εἰ ἐπιστήμην ἔχει οὔτ' εἰ δόξαν οἷαν λέγομεν, πράττειν τι φαῦλον. ἔστι γὰρ τὸ ἐπίστασθαι διττόν, ὧν τὸ μὲν ἐστὶ τὴν ἐπιστήμην ἔχειν (ἐπίστασθαι γάρ φαμεν τότε, ὅταν τις ἐπιστήμην ἔχῃ), τὸ δ' ἕτερον τὸ ἐνεργεῖν ἤδη τῇ ἐπιστήμῃ. ἀκρατὴς οὖν ἐστὶν ὁ ἔχων τὴν ἐπιστήμην τῶν καλῶν, οὐκ ἐνεργῶν δὲ [14] αὐτῇ· ὅταν οὖν μὴ ἐνεργῇ τῇ ἐπιστήμῃ ταύτῃ, οὐδὲν ἄτοπον αὐτόν ἐστιν πράττειν τὰ φαῦλα ἔχοντα τὴν ἐπιστήμην. ὅμοιον γάρ ἐστὶν ὥσπερ ἐπὶ τῶν καθευδόντων. οὗτοι γὰρ ἔχοντες τὴν ἐπιστήμην ὅμως ἐν τῷ ὕπνῳ πολλὰ δυσχερῆ καὶ πράττουσι καὶ πάσχουσιν. οὐ γὰρ ἐνεργεῖ ἐν αὐτοῖς ἡ ἐπιστήμη. ὡσαύτως δ' ἐπὶ τοῦ ἀκρατοῦς. ὥσπερ γὰρ καθεύδοντι ἔοικεν, καὶ τῇ ἐπιστήμῃ οὐκ [15] ἐνεργεῖ. λύεται δὲ ἀπορία οὕτως. ἡπορεῖτο γὰρ πότερον ὁ ἀκρατὴς ἐκβάλλει τότε τὴν ἐπιστήμην ἢ μεταπίπτει. ἄτοπον γὰρ ἀμφοτέρωτα δοκεῖ εἶναι.

Ἀλλὰ πάλιν ἐντεῦθεν ἂν γένοιτο φανερόν, ὥσπερ ἔφαμεν ἐν τοῖς

ἀναλυτικοῖς, ἐκ δύο προτάσεων γίνεσθαι τὸν συλλογισμόν, καὶ τούτων εἶναι τὴν μὲν πρώτην καθόλου, τὴν δὲ δευτέραν ὑπὸ ταύτην τε καὶ ἐπὶ μέρους. οἷον ἐπίσταμαι πάντ’ ἄνθρωπον πυρέττοντα ὑγιῇ ποιῆσαι· οὕτως δὲ πυρέττει· ἐπίσταμαι ἄρα καὶ τοῦτον ὑγιῇ ποιῆσαι. ἔστιν οὖν ὃ τῇ μὲν καθόλου ἐπιστήμῃ ἐπίσταμαι, τῇ δ’ ἐπὶ [16] μέρους οὐ· γίνεται οὖν ἁμαρτία τῷ τὴν ἐπιστήμην ἔχοντι καὶ ἐνταῦθα, οἷον ἅπαντα μὲν τὸν πυρέττοντα ὑγιῇ ποιῆσαι «ἐπίσταμαι», εἰ μέντοι οὗτος πυρέττει, οὐκ οἶδα. ὡσαύτως τοίνυν ἐπὶ τοῦ ἀκρατοῦς τοῦ τὴν ἐπιστήμην ἔχοντος ἡ αὐτὴ ἁμαρτία συμβήσεται. ἐνδέχεται γὰρ τὸν ἀκρατῆ τὴν μὲν καθόλου ἐπιστήμην ἔχειν, ὅτι τὰ τοιαῦτα φαῦλα καὶ βλαβερά, μὴ μέντοι γε ὅτι ἐστὶν ταῦτα φαῦλα ἐπὶ μέρους εἰδέναι, ὥστε οὕτως ἔχων τὴν ἐπιστήμην ἁμαρτήσεται· ἔχει γὰρ τὴν καθόλου, τὴν δ’ ἐπὶ μέρους οὐ.

[17] Οὐδὲν οὖν ἄτοπον οὐδ’ οὕτω συμβήσεται ἐπὶ τοῦ ἀκρατοῦς, τὸν ἔχοντα τὴν ἐπιστήμην φαῦλόν τι πράττειν. ἔστι γὰρ ὡς ἐπὶ τῶν μεθυόντων. οἱ γὰρ μεθύοντες, ὅταν αὐτοῖς ἡ μέθη ἀπαλλαγῇ, πάλιν οἱ αὐτοὶ εἰσίν· οὐκ ἐξέπεσεν δ’ αὐτῶν ὁ λόγος οὐδ’ ἡ ἐπιστήμη, ἀλλ’ ἐκρατήθη ὑπὸ τῆς μέθης, ἀπαλλαγέντες δὲ τῆς μέθης πάλιν οἱ αὐτοὶ εἰσίν. ὁμοίως οὖν ἔχει ὁ ἀκρατής [πάλιν]. ἐπικρατήσαν γὰρ τὸ πάθος ἡρεμεῖν ἐποίησε τὸν λογισμόν· ὅταν δ’ ἀπαλλαγῇ τὸ πάθος ὥσπερ ἡ μέθη, πάλιν ὁ αὐτὸς ἐστίν.

[18] Ἦν δὲ καὶ ἄλλος τις λόγος ἐπὶ τῆς ἀκρασίας ὃς παρεῖχεν ἀπορίαν, ὡς ἐπαινετοῦ ποτε τοῦ ἀκρατοῦς ἐσομένου καὶ ψεκτοῦ τοῦ ἐγκρατοῦς. οὐ συμβαίνει δὲ τοῦτο. οὐ γὰρ ἐστὶν οὗτ’ ἐγκρατὴς οὗτ’ ἀκρατὴς ὁ τῷ λόγῳ διεψευσμένος, ἀλλὰ ὁ λόγον ἔχων ὀρθὸν καὶ τούτῳ τὰ φαῦλα ὄντα κρίνων καὶ τὰ καλά, καὶ ἀκρατὴς μὲν ὁ τῷ τοιούτῳ λόγῳ ἀπειθῶν, ἐγκρατὴς δὲ ὁ πειθόμενος καὶ μὴ ὑπὸ τῶν ἐπιθυμιῶν ἀγόμενος· οὐδὲ γὰρ ὧς τινι οὐ δοκεῖ τὸν πατέρα τύπτειν αἰσχρὸν εἶναι, ἐπιθυμῶν δὲ τύπτειν, ὁ τούτου [19] ἀπεχόμενος ἐγκρατὴς ἐστὶ· ὥστε εἰ μὴ ἐστὶν ἐπὶ τῶν τοιούτων μήτε ἐγκράτεια μήτε ἀκρασία, οὐδ’ ἂν ἐπαινετὴ εἶη ἡ ἀκρασία οὐδὲ ψεκτὴ ἡ ἐγκράτεια, ὥσπερ ἐδόκει.

[20] Εἰσὶ δὲ τῶν ἀκρασιῶν αἱ μὲν νοσηματικαὶ αἱ δὲ φύσει. οἷον νοσηματικαὶ μὲν αἱ τοιαῦται· εἰσὶ γὰρ τινες οἱ τίλλοντες τρίχας διατρώγουσιν. εἰ οὖν τις ταύτης τῆς ἡδονῆς κρατεῖ, οὐκ ἔστιν ἐπαινετός, οὐδὲ ψεκτός, εἰ μὴ κρατεῖ, ἢ οὐ σφόδρα γε. φύσει δέ, οἷον υἱὸν ποτέ φασι κρινόμενον ἐν δικαστηρίῳ, ὅτι τὸν πατέρα τύπτει, ἀπολογεῖσθαι λέγονθ’ ὅτι “καὶ γὰρ οὗτος τὸν ἑαυτοῦ πατέρα,” καὶ ἀποφυγεῖν δὴ· δοκεῖν γὰρ τοῖς δικασταῖς φυσικὴν εἶναι τὴν ἁμαρτίαν. εἰ δὲ τις τοῦ τὸν πατέρα τύπτειν [21] κρατοίη, οὐκ

ἐπαινετός. οὐ δὴ τὰς τοιαύτας ζητοῦμεν νῦν ἀκρασίας οὐδ' ἐγκρατείας, ἀλλὰ καθ' ἃς ψεκτοὶ ἀπλῶς καὶ ἐπαινετοὶ λεγόμεθα.

Ἔστιν δὲ τῶν ἀγαθῶν τὰ μὲν ἐκτός, οἷον πλοῦτος ἀρχὴ τιμῇ φίλοι δόξα, τὰ δ' ἀναγκαῖα καὶ περὶ σῶμα ἐστίν, οἷον ἀφῆ τε καὶ γεῦσις ὁ οὖν περὶ ταῦτα ἀκρατής, οὗτος ἀπλῶς ἂν [καὶ] ἀκρατής δόξειεν εἶναι, καὶ ἡδοναὶ σωματικά· καὶ ἦν ζητοῦμεν ἀκρασίαν, ἥδη περὶ ταῦτα δόξειεν <ἂν> εἶναι. ἠμπορεῖτο δὲ περὶ τί ποτ' ἐστὶν ἡ ἀκρασία.

[22] Περὶ μὲν οὖν τιμὴν οὐκ ἔστιν ἀπλῶς ἀκρατής· ἐπαινεῖται γάρ πως ὁ περὶ τιμὴν ἀκρατής· φιλότιμος γάρ τις [ἐστίν]. τὸ δ' ὅλον λέγομεν καὶ ἐπὶ τῶν τοιούτων τὸν ἀκρατῆ προστιθέντες, περὶ τιμὴν ἀκρατής ἢ δόξαν ἢ ὀργήν. ἀλλὰ τῷ ἀπλῶς ἀκρατεῖ οὐ προστίθεμεν περὶ ἃ, ὡς ὑπάρχοντος αὐτῷ καὶ φανεροῦ ὄντος ἄνευ τῆς προσθέσεως, περὶ ἃ ἐστίν· ἔστιν γὰρ περὶ ἡδονὰς καὶ λύπας τὰς σωματικὰς ὁ ἀπλῶς ἀκρατής.

[23] Δῆλον δὲ καὶ ἐντεῦθεν, ὅτι περὶ ταῦτα ἡ ἀκρασία· ἐπεὶ γὰρ ψεκτὸς ὁ ἀκρατής, ψεκτὰ εἶναι δεῖ τὰ ὑποκείμενα· τιμὴ μὲν οὖν καὶ δόξα καὶ ἀρχὴ καὶ χρήματα καὶ περὶ ὅσα ἄλλα ἀκρατεῖς λέγονται, οὐκ εἰσὶν ψεκτά, αἱ δ' ἡδοναὶ αἱ σωματικαὶ ψεκταί· διὸ εἰκότως ὁ περὶ ταύτας ὢν μᾶλλον τοῦ δέοντος, οὗτος ἀκρατής τελέως λέγεται.

[24] Ἐπειδὴ δέ ἐστι τῶν περὶ τὰ ἄλλα ἀκρασιῶν λεγομένων ἡ περὶ τὴν ὀργὴν οὕσα ἀκρασία ψεκτοτάτη, πότερον ψεκτοτέρα ἐστὶν ἡ περὶ τὴν ὀργὴν ἢ ἡ περὶ τὰς ἡδονάς;

Ἔστιν οὖν ἡ περὶ τὴν ὀργὴν ἀκρασία ὁμοία τῶν παίδων τοῖς πρὸς τὸ διακονεῖν προθύμως ἔχουσιν· καὶ γὰρ οὗτοι, ὅταν εἴπῃ ὁ δεσπότης “δός μοι,” τῇ προθυμίᾳ ἐξενεχθέντες, πρὸ τοῦ ἀκοῦσαι ὃ δεῖ δοῦναι, ἔδωκαν, καὶ ἐν τῇ δόσει διήμαρτον· πολλάκις γὰρ δέον βιβλίον δοῦναι γραφεῖον ἔδωκαν.

[25] Ὅμοιον δὲ πέπονθε τούτῳ ὁ τῆς ὀργῆς ἀκρατής· ὅταν γὰρ ἀκούσῃ τὸ πρῶτον ῥῆμα ὅτι ἡδίκησεν, ὥρμησεν ὁ θυμὸς πρὸς τὸ τιμωρῆσασθαι, οὐκέτι ἀναμείνας ἀκοῦσαι πότερον δεῖ ἢ οὐ δεῖ, ἢ ὅτι γε [26] οὐχ οὕτω σφόδρα. ἡ μὲν οὖν τοιαύτη ὁρμὴ πρὸς ὀργήν, ἢ δοκεῖ ἀκρασία εἶναι ὀργῆς, οὐ λίαν ἐπιτιμητέα ἐστίν, ἡ δὲ πρὸς [τὴν] ἡδονὴν ὁρμὴ ψεκτὴ γε. ἔστιν γὰρ διαφορὰν ἔχουσα πρὸς ταύτην διὰ τὸν λόγον, ὃς ἀποτρέπει τοῦ μὴ πράττειν, ἀλλ' ὅμως πράττει παρὰ τὸν λόγον· διὸ ψεκτὴ ἐστὶ μᾶλλον τῆς δι' ὀργὴν ἀκρασίας. ἡ μὲν γὰρ δι' ὀργὴν ἀκρασία λύπη ἐστὶν (οὐδεὶς γὰρ ὀργιζόμενος οὐ λυπεῖται),



ἡ δὲ δι' ἐπιθυμίαν μεθ' ἡδονῆς· διὸ μᾶλλον ψεκτή· ἡ γὰρ δι' ἡδονὴν ἀκρασία μεθ' ὕβρεως δοκεῖ εἶναι.

[27] Πότερον δὲ καὶ ἡ ἐγκράτεια καὶ ἡ καρτερία ταῦτόν ἐστιν; ἢ οὐ; ἡ μὲν γὰρ ἐγκράτειά ἐστι περὶ ἡδονὰς καὶ ὁ ἐγκρατὴς ὁ κρατῶν τῶν ἡδονῶν, ἡ δὲ καρτερία περὶ λύπας· ὁ γὰρ καρτερῶν καὶ ὑπομένων τὰς λύπας, οὗτος καρτερικὸς ἐστίν.

[28] Πάλιν ἡ ἀκρασία καὶ ἡ μαλακία οὐκ ἔστιν ταῦτόν· ἡ μὲν γὰρ μαλακία ἐστίν καὶ ὁ μαλακὸς ὁ μὴ ὑπομένων πόνους, οὐχ ἅπαντας δὲ ἀλλ' οὓς ἀναγκαίως ἂν ἄλλος τις ὑπομείνειεν, ὁ δ' ἀκρατὴς ὁ μὴ δυνάμενος ὑπομείνειν ἡδονὰς, ἀλλὰ καταμαλακιζόμενος καὶ ὑπὸ τούτων ἀγόμενος.

[29] Ἔστιν αὖ πάλιν τις καλούμενος ἀκόλαστος· πότερον οὖν ὁ ἀκόλαστος [ἀκρατὴς] καὶ ὁ ἀκρατὴς ὁ αὐτός; ἢ οὐ; ὁ μὲν γὰρ ἀκόλαστος τοιοῦτός τις οἷος οἷεσθαι, ἃ πράττει, ταῦτα καὶ βέλτιστα εἶναι αὐτῷ καὶ συμφορώτατα, καὶ λόγον οὐδένα ἔχει ἐναντιούμενον τοῖς αὐτῷ φαινομένοις ἡδέσιν· ὁ δὲ ἀκρατὴς λόγον ἔχει ὃς ἐναντιοῦται αὐτῷ, ἐφ' ἃ ἡ ἐπιθυμία ἄγει.

[30] Πότερος δὲ εὐιατότερος, ὁ ἀκόλαστος ἢ ὁ ἀκρατὴς; οὕτω μὲν οὖν δόξειεν ἂν ἴσως οὐχ ὁ ἀκρατὴς· ὁ γὰρ ἀκόλαστος εὐιατότερος· εἰ γὰρ αὐτῷ λόγος ἐγγένοιτο ὁ διδάξων ὅτι φαῦλα, οὐκέτι πράξει· τῷ δέ γε ἀκρατεῖ ὑπάρχει ὁ λόγος, καὶ ὅμως πράττει, ὥστε ἂν ὁ τοιοῦτος δόξειεν ἀνίατος εἶναι.

[31] Ἀλλὰ πότερος διάκειται χεῖρον, ὃ μὴδὲν ἀγαθὸν τι ὑπάρχει, <ἢ ὃ ἀγαθὸν τέ τι ὑπάρχει> καὶ τὰ κακὰ ταῦτα; ἢ δῆλον ὅτι ἐκεῖνος, καὶ ὅσω γε ὁ τιμιώτερον κακῶς διάκειται. ἔστι τοίνυν ὁ μὲν ἀκρατὴς ἀγαθὸν ἔχων τὸν λόγον ὀρθὸν ὄντα· ὁ δὲ [32] ἀκόλαστος οὐκ ἔχει. ἔτι ἐστὶν ὁ λόγος ἐκάστου ἀρχή· τοῦ μὲν οὖν ἀκρατοῦς ἡ ἀρχὴ τιμιώτατον ὂν εὖ διάκειται, τοῦ δὲ ἀκολάστου κακῶς· ὥστε χείρων ἂν εἴη ὁ ἀκόλαστος τοῦ ἀκρατοῦς.

[33] Ἔτι ὥσπερ καὶ ἐπὶ τῆς θηριότητος ἥς ἐλέγομεν κακίας οὐκ ἔστιν ἰδεῖν ἐν θηρίῳ οὔσαν, ἀλλ' ἐν ἀνθρώπῳ· ἡ γὰρ θηριότης ὄνομά ἐστιν τῇ ὑπερβαλλούσῃ κακίᾳ - διὰ τί; δι' οὐδὲν ἢ ὅτι ἀρχὴ φαύλη ἐν θηρίῳ οὐκ ἔστιν· ἔστιν δὲ ἡ ἀρχὴ ὁ λόγος. ἐπεὶ πότερος ἂν πλείω κακὰ ποιήσειεν, λέων, ἢ Διονύσιος ἢ Φάλαρις ἢ Κλέαρχος ἢ τις τούτων τῶν μοχθηρῶν; ἢ δῆλον ὅτι οὗτοι; ἡ γὰρ ἀρχὴ ἐνοῦσα φαύλη μέγала συμβάλλεται, ἐν δὲ θηρίῳ [34] ὅλως οὐκ ἔστιν ἀρχή. ἐν μὲν οὖν τῷ ἀκολάστῳ ἔνεστιν ἀρχὴ φαύλη. ἡ γὰρ πράττει φαῦλα ὄντα καὶ ὁ λόγος σύμφησιν ταῦτα καὶ δοκεῖ αὐτῷ ταῦτα δεῖν

πράττειν, ἐν αὐτῷ ἢ ἀρχὴ ἔνεστιν οὐχ ὑγιής. διὸ βελτίων ἂν δόξειεν εἶναι ὁ ἀκρατὴς τοῦ ἀκολάστου.

[35]

Ἔστι δὲ καὶ τῆς ἀκρασίας δύο εἶδη, ἡ μὲν προπετική τις καὶ ἀπρονόητος καὶ ἐξαίφνης γινομένη (οἷον ὅταν ἴδωμεν καλὴν γυναῖκα, εὐθέως τι ἐπάθομεν, καὶ ἀπὸ τοῦ πάθους ὁρμὴ ἐγένετο πρὸς τὸ πρᾶξαι τι ὧν ἴσως οὐ δεῖ), ἡ δ' ἑτέρα οἷον ἀσθενική τις, ἡ μετὰ τοῦ λόγου οὕσα τοῦ ἀποτρέποντος.

Ἐκείνη μὲν οὖν οὐδ' ἂν λίαν δόξειεν εἶναι ψεκτή· καὶ γὰρ ἐν τοῖς σπουδαίοις ἡ τοιαύτη ἐγγίνεται, ἐν τοῖς θερμοῖς καὶ εὐφυέσιν· ἡ δὲ ἐν τοῖς ψυχροῖς καὶ [36] μελαγχολικοῖς, οἱ δὲ τοιοῦτοι ψεκτοί. ἔτι τέ ἐστιν τῷ λόγῳ προλαβόντα μηθὲν παθεῖν, ὅτι ἤξει γυνὴ εὐπρόσωπος, δεῖ οὖν κατασχεῖν αὐτόν. τῷ δὴ τοιούτῳ λόγῳ προκαταλαβὼν ὁ ἐκ τῆς προσφάτου φαντασίας ἀκρατὴς οὐδὲν πείσεται οὐδὲ πράξει οὐδὲν αἰσχρόν. ὁ δὲ τῷ λόγῳ μὲν εἰδὼς ὅτι οὐ δεῖ, πρὸς δὲ τὴν ἡδονὴν ἐνδιδοὺς καὶ καταμαλακιζόμενος, ὁ τοιοῦτος ψεκτότερος. οὕτε γὰρ ὁ σπουδαῖος οὐδέποτε οὕτω γένοιτ' ἂν ἀκρατής, ὅ τε λόγος προκαταλαβὼν οὐκ ἂν ἰάσαιτο. ἡγεμῶν γὰρ οὗτος ἐν αὐτῷ ὑπάρχει, ὧ οὗτι πειθαρχεῖ, ἀλλὰ τῇ ἡδονῇ ἐνδίδωσιν, καὶ καταμαλακίζεται καὶ ἐξασθενεῖ πῶς.

[37] Πότερον δ' ὁ σώφρων ἐγκρατὴς ἐστίν, ἡπορήθη μὲν ἐν τοῖς ἐπάνω, νῦν δὲ λέγωμεν. ἔστιν γὰρ ὁ σώφρων καὶ ἐγκρατής· ὁ γὰρ ἐγκρατής ἐστιν οὐ μόνον ὁ ἐπιθυμιῶν ἐνουσῶν ταύτας κατέχων διὰ τὸν λόγον, ἀλλὰ καὶ ὁ τοιοῦτος ὧν οἷος καὶ μὴ ἐνουσῶν ἐπιθυμιῶν τοιοῦτος εἶναι οἷος εἰ ἐγγένοιτο [38] κατέχειν. ἔστιν δὲ σώφρων ὁ μὴ ἔχων ἐπιθυμίας φαύλας τὸν τε λόγον τὸν περὶ ταῦτα ὀρθόν, ὁ δ' ἐγκρατής ὁ ἐπιθυμίας ἔχων φαύλας τὸν τε λόγον τὸν περὶ ταῦτα ὀρθόν· ὥστ' ἀκολουθήσει τῷ σώφρονι ὁ ἐγκρατής, καὶ ἔσται <ὁ> σώφρων <ἐγκρατής, ἀλλ' οὐχ ὁ ἐγκρατής σώφρων>. ὁ μὲν γὰρ σώφρων ὁ μὴ πάσχων, ὁ δ' ἐγκρατής ὁ πάσχων καὶ τούτων κρατῶν ἡ οἷός τε ὧν πάσχειν· οὐδέτερον δὲ τούτων τῷ σώφρονι ὑπάρχει· διὸ οὐκ ἔστιν ὁ ἐγκρατής σώφρων.

[39] Πότερον δὲ ὁ ἀκόλαστος ἀκρατὴς ἐστίν, ἡ ὁ ἀκρατὴς ἀκόλαστος; ἡ οὐδετέρῳ ἕτερος ἀκολουθεῖ; ὁ μὲν γὰρ ἀκρατής ἐστιν οὐ ὁ λόγος τοῖς πάθεσι μάχεται, ὁ δ' ἀκόλαστος οὐ τοιοῦτος, ἀλλ' ὁ τῷ πράττειν τὰ φαῦλα ἅμα τὸν λόγον σύμψηφον ἔχων· οὕτε δὴ ὁ ἀκόλαστος οἷος ὁ ἀκρατὴς οὐθ' ὁ [40] ἀκρατὴς οἷος ὁ ἀκόλαστος. ἔτι δὲ καὶ φαυλότερος ὁ ἀκόλαστος τοῦ

ἀκρατοῦς. δυσιατότερα γὰρ τὰ φυσικὰ τῶν ἐξ ἔθους γενομένων (καὶ γὰρ τὸ ἔθος διὰ τοῦτο δοκεῖ ἰσχυρὸν εἶναι, ὅτι εἰς φύσιν καθίστησιν). [41] ὁ μὲν οὖν ἀκόλαστος αὐτὸς τοιοῦτός ἐστιν οἷος φαῦλός τις τῇ φύσει εἶναι, διὰ τοῦτο καὶ ἀπὸ τούτου ὁ λόγος φαῦλος ἐν αὐτῷ ἐστί· ἀλλ' οὐχ ὁ ἀκρατὴς οὕτως· οὐ γὰρ ὅτι αὐτὸς τοιοῦτος ἐστίν, ὁ λόγος οὐ σπουδαῖος (φαῦλον γὰρ αὐτὸν ἔδει εἶναι, [42] εἰ αὐτὸς τῇ φύσει τοιοῦτος ἦν οἷος ὁ φαῦλος). ὁ μὲν [οὖν] ἄρα ἀκρατὴς ἔθει ἔοικε φαῦλος εἶναι, ὁ δὲ ἀκόλαστος φύσει· δυσιατότερος δὴ ὁ ἀκόλαστος. τὸ μὲν γὰρ ἔθος ἄλλω ἔθει ἐκκρούεται, ἡ δὲ φύσις οὐδενὶ ἐκκρούεται.

[43] Πότερον δὲ ἐπεὶ ἐστὶν ὁ ἀκρατὴς τοιοῦτος [τις] οἷος εἰδέναι καὶ μὴ διεψεῦσθαι τῷ λόγῳ, ἔστιν δὲ καὶ ὁ φρόνιμος τοιοῦτος ὁ τῷ λόγῳ τῷ ὀρθῷ ἕκαστα θεωρῶν, πότερον [δ'] ἐνδέχεται τὸν φρόνιμον ἀκρατῇ εἶναι, ἢ οὐ; ἀπορήσειε γὰρ ἂν τις τὰ εἰρημένα· ἐὰν δὲ παρακολουθήσωμεν τοῖς ἔμπροσθεν εἰρημένοις, οὐκ ἔσται ὁ φρόνιμος ἀκρατὴς. ἔφαμεν γὰρ τὸν φρόνιμον εἶναι οὐχ ὥς ὁ ὀρθὸς λόγος μόνον ὑπάρχει, ἀλλ' ὥς καὶ τὸ πράττειν τὰ κατὰ τὸν λόγον φαινόμενα βέλτιστα· εἰ δὲ πράττει τὰ βέλτιστα ὁ φρόνιμος, οὐδ' ἂν ἀκρατὴς εἴη ὁ φρόνιμος, [44] ἀλλ' ὁ τοιοῦτος δεινὸς μὲν ἐστίν. διηγήμεθα γὰρ ἐν τοῖς ἐπάνω τὸν τε δεινὸν καὶ τὸν φρόνιμον ὡς ἐτέρων ὄντων. περὶ μὲν γὰρ ταῦτά· ἀλλ' ὁ μὲν πρακτικὸς περὶ ἃ δεῖ, ὁ δ' οὐ πρακτικὸς. τὸν οὖν δεινὸν ἀκρατῇ ἐνδέχεται εἶναι (οὐ γὰρ πρακτικὸς περὶ ἃ καὶ δεῖ), τὸν φρόνιμον δ' οὐκ ἐνδέχεται ἀκρατῇ εἶναι.

[7]

[1] Μετὰ δὲ ταῦτα λεκτέον ἂν εἴη περὶ ἡδονῆς, ἐπειδήπερ ὑπὲρ εὐδαιμονίας ἐστὶν ὁ λόγος, τὴν δ' εὐδαιμονίαν οἶονται πάντες ἥτοι ἡδονὴν εἶναι καὶ τὸ ἡδέως ζῆν, ἢ οὐκ ἄνευ γε ἡδονῆς. οἱ δὲ καὶ τῇ ἡδονῇ δυσχεραίνοντες καὶ οὐκ οἰόμενοι δεῖν τὴν ἡδονὴν ἐναριθμεῖσθαι τοῖς ἀγαθοῖς, ἀλλὰ τό γε ἄλυπον προστιθέασιν· ἐγγὺς οὖν τὸ ἀλύπως τῆς ἡδονῆς ἐστίν.

[2] Διόπερ λεκτέον ὑπὲρ ἡδονῆς, οὐ μόνον δὲ διότι καὶ οἱ ἄλλοι οἶονται δεῖν, ἀλλὰ δὴ ἀναγκαῖον ἡμῖν ἐστὶν λέγειν ὑπὲρ ἡδονῆς. ἐπειδὴ γὰρ ὑπὲρ εὐδαιμονίας ἡμῖν ἐστὶν ὁ λόγος, τὴν δ' εὐδαιμονίαν διωρίκαμεν καὶ φαμέν εἶναι ἀρετῆς ἐνέργειαν ἐν βίῳ τελείῳ, ἡ δ' ἀρετὴ ἐστὶ περὶ ἡδονὴν καὶ λύπην· ὑπὲρ ἡδονῆς ἂν εἴη ἀναγκαῖον εἰπεῖν, ἐπειδήπερ οὐκ ἔστιν ἡ εὐδαιμονία ἄνευ ἡδονῆς.

[3] Πρῶτον μὲν οὖν εἴπωμεν ἃ τινες λέγοντες οὐκ οἶονται δεῖν τὴν ἡδονὴν

ὥς ἐν ἀγαθοῦ μέρει λαμβάνειν.

Πρῶτον μὲν γάρ φασιν εἶναι τὴν ἡδονὴν γένεσιν, τὴν δὲ γένεσιν ἀτελές τι, τὸ δὲ ἀγαθὸν οὐδέποτε τὴν τοῦ ἀτελοῦς χώραν ἔχειν.

Δεύτερον δ' ὅτι εἰσὶ τινες φαῦλαι ἡδοναί, τὸ δ' ἀγαθὸν οὐδέποτε ἐν φαυλότητι εἶναι.

Πάλιν ὅτι ἐν πᾶσιν ἐγγίγνεται· καὶ γὰρ ἐν τῷ φαύλῳ καὶ ἐν τῷ σπουδαίῳ καὶ ἐν θηρίῳ καὶ ἐν βοσκήματι· τὸ δ' ἀγαθὸν ἀμιγές ἐστι τοῖς φαύλοις καὶ οὐ πολὺκοινον .

Καὶ ὅτι οὐ κράτιστον ἡδονή, τὸ δ' ἀγαθὸν κράτιστον.

Καὶ ὅτι ἐμπόδιον τοῦ πράττειν τὰ καλὰ, τὸ δὲ κωλυτικὸν τῶν καλῶν οὐκ ἂν εἴη ἀγαθόν.

[4] Πρῶτον μὲν οὖν πρὸς τὸ πρῶτον ἂν εἴη λεκτέον, πρὸς τὴν γένεσιν, καὶ πειρατέον τὸν λόγον τοῦτον λύειν διὰ τὸ μὴ ἀληθῆ εἶναι. ἔστι γὰρ πρῶτον μὲν οὐ πᾶσα ἡδονὴ γένεσις. ἢ γὰρ ἀπὸ τοῦ θεωρεῖν ἡδονὴ γινομένη οὐκ ἔστιν γένεσις, οὐδ' ἢ ἀπὸ τοῦ ἀκοῦσαι καὶ <ἰδεῖν καὶ> ὀσφρανθῆναι. οὐ γὰρ ἐξ ἐνδεΐας γινομένη, ὥσπερ ἐπὶ τῶν ἄλλων, οἷον ἐκ τοῦ φαγεῖν ἢ πιεῖν. αὗται μὲν γὰρ ἐξ ἐνδεΐας καὶ ὑπερβολῆς γίνονται, τῷ ἢ τὴν ἐνδειαν ἀναπληροῦσθαι ἢ τῆς ὑπερβολῆς ἀφαιρεῖσθαι· διὸ γένεσις [5] δοκεῖ εἶναι. ἢ δ' ἐνδεια καὶ ὑπερβολὴ λύπη. λύπη οὖν ἐνταῦθα ἔνθα ἡδονῆς γένεσις. ἐπὶ δέ γε τοῦ ἰδεῖν καὶ ἀκοῦσαι καὶ ὀσφρανθῆναι οὐκ ἔστιν προλυπηθῆναι· οὐδεὶς γὰρ ἡδόμενος τῷ ὁρᾶν ἢ τῷ [6] ὀσφραίνεσθαι προελυπήθη. ὁμοίως δὲ καὶ ἐπὶ τῆς διανοίας ἔστι θεωροῦντά τι ἡδεσθαι ἄνευ τοῦ προλυπηθῆναι. ὥστ' εἴη ἂν τις ἡδονὴ ἢ οὐκ ἔστι γένεσις.

Εἰ οὖν ἡ μὲν ἡδονή, ὥς ὁ λόγος αὐτῶν ἔφη, διὰ τοῦτο οὐκ ἀγαθόν, ὅτι γένεσις, ἔστι δέ τις ἡδονή, ἢ οὐκ ἐστιν γένεσις, αὕτη ἂν εἴη ἀγαθόν.

[7] Τὸ δ' ὅλον οὐκ ἔστιν οὐδεμία ἡδονὴ γένεσις· οὐδὲ γὰρ αὗται αἱ ἀπὸ τοῦ φαγεῖν καὶ πιεῖν ἡδοναὶ οὐκ εἰσὶ γενέσεις, ἀλλὰ διαμαρτάνουσιν οἱ ταύτας φάσκοντες εἶναι τὰς ἡδονὰς γενέσεις. οἷονται γάρ, ἐπειδὴ τῆς προσφορᾶς γινομένης γίνεται ἡδονή, διὰ [8] τοῦτο γένεσιν εἶναι· ἔστι δ' οὐ. ἐπειδὴ γὰρ ἐστι τῆς ψυχῆς τι μέρος ὃ ἡδόμεθα ἅμα τῇ προσφορᾷ ὧν ἐσμεν ἐνδεεῖς, τοῦτο τὸ μόριον τῆς ψυχῆς ἐνεργεῖ καὶ κινεῖται, ἢ δὲ κίνησις αὐτοῦ καὶ ἡ ἐνέργειά ἐστιν ἡδονή· διὰ δὲ τὸ ἅμα τῇ προσφορᾷ ἐκεῖνο τὸ μόριον τὸ τῆς

ψυχῆς ἐνεργεῖν, ἢ διὰ τὴν αὐτοῦ ἐνέργειαν, οἷονται γένεσιν εἶναι τὴν ἡδονὴν τῷ τὴν προσφορὰν δὴλην εἶναι, τὸ δὲ τῆς ψυχῆς [9] μόνιον ἄδηλον. ὅμοιον οὖν εἴ τις τὸν ἄνθρωπον οἶεται εἶναι σῶμα, ὅτι τοῦτο μὲν αἰσθητὸν ἐστίν, ἡ δὲ ψυχὴ οὐ· ἔστι δέ γε καὶ [ἡ] ψυχὴ. ὁμοίως δὲ καὶ ἐπὶ τούτου· ἔστιν γὰρ μόνιον τι τῆς ψυχῆς ὡς ἡδόμεθα, ὃ ἅμα τῇ προσφορᾷ ἐνεργεῖ. διὸ οὐκ ἔστιν οὐδεμία ἡδονὴ γένεσις.

[10] Καὶ ἀποκατάστασις δέ, φασίν, εἰς φύσιν αἰσθητή. καὶ γὰρ μὴ ἀποκαθισταμένοις εἰς φύσιν ἐστὶν ἡδονή· τὸ γὰρ ἀποκαθίστασθαι ἐστὶ τὸ τοῦ ἐνδεοῦς τῇ φύσει, τούτου τὴν ἀναπλήρωσιν γενέσθαι, ἔστιν δέ, ὡς φαμέν, μὴ ὄντα ἐνδεᾶ ἡδεσθαι· ἡ μὲν γὰρ ἔνδεια λύπη, ἄνευ δὲ λύπης καὶ πρὸ λύπης φαμέν ἡδεσθαι· ὥστ' οὐκ ἂν εἴη ἡ ἡδονὴ ἀποκατάστασις τοῦ ἐνδεοῦς· ἐνδεὲς γὰρ ἐπὶ τῶν τοιούτων ἡδονῶν οὐδέν.

Ὡστε εἰ διότι μὲν γένεσις ἡ ἡδονὴ οὐκ ἀγαθὸν ἐδόκει εἶναι, οὐκ ἔστιν δὲ οὐδεμία ἡδονὴ γένεσις, ἀγαθὸν ἂν εἴη ἡ ἡδονή.

[11] Ἀλλὰ μετὰ τοῦτο οὐ πᾶσα, φασίν, ἡδονὴ ἀγαθόν. συνίδοι δ' ἂν τις καὶ ὑπὲρ τούτου οὕτως. ἐπεὶ γὰρ τἀγαθὸν φαμεν ἐν πάσαις ταῖς κατηγορίαις λέγεσθαι (καὶ γὰρ ἐν οὐσίᾳ καὶ ἐν τῷ πρὸς τι καὶ ποσῷ καὶ πότε καὶ ὅλως ἐν ἀπάσαις), ἥδη γ' ἐκεῖνο φανερόν. κατὰ πάσας γὰρ ἀγαθοῦ ἐνεργείας ἡδονὴ τις ἀκολουθεῖ, ὥστ' ἐπειδὴ τὸ ἀγαθὸν ἐν πάσαις ταῖς κατηγορίαις, καὶ ἡδονὴ ἂν εἴη ἀγαθόν· ὥστ' ἐπειδὴ ἐν τούτοις μὲν τἀγαθὰ καὶ ἡδονή, ἡ δ' ἀπὸ τῶν ἀγαθῶν ἡδονὴ ἡδονή, ἀγαθὸν ἂν εἴη πᾶσα ἡδονή.

[12] Ἄμα δὲ δῆλον ἐκ τούτου ὅτι καὶ διάφοροι τῷ εἶδει αἱ ἡδοναὶ εἰσίν. διάφοροι γὰρ καὶ αἱ κατηγορίαι, ἐν αἷς ἐστὶν ἡδονή. οὐ γὰρ ὥσπερ ἐπὶ τῶν ἐπιστημῶν ἔχει, οἷον τῆς γραμματικῆς ἢ ἄλλης ἡστινosoῦν. ἐὰν ἔχη γὰρ Λάμπρος τὴν γραμματικὴν, ὁμοίως [δὲ] διακρίσεται ὑπὸ τῆς γραμματικῆς ταύτης ὁ γραμματικὸς ἄλλω ὁτῶοῦν ἔχοντι γραμματικὴν, οὐ<δὲ> δύο εἰσὶν διάφοροι αἱ γραμματικαί, ἢ τ' ἐν Λάμπρῳ καὶ ἐν Ἰλεῖ. ἀλλ' ἐπὶ τῆς ἡδονῆς οὐχ' οὕτως. ἡ γὰρ ἀπὸ τῆς μέθης ἡδονὴ καὶ ἡ ἀπὸ τοῦ συγγίνεσθαι οὐχ' ὁμοίως διατιθέασιν. διὸ διάφοροι τῷ εἶδει δόξαιεν ἂν εἶναι αἱ ἡδοναί.

[13] Ἀλλὰ δὴ καὶ διότι φαῦλαί εἰσιν ἡδοναί τινες, καὶ διὰ τοῦτο οὐκ ἐδόκει ἡ ἡδονὴ αὐτοῖς ἀγαθὸν εἶναι. τὸ δὲ τοιοῦτον καὶ ἡ τοιαύτη κρίσις οὐκ ἰδίως ἐστὶν ἡδονῆς, ἀλλὰ καὶ ἐπὶ φύσεως καὶ ἐπιστήμης. ἔστι γὰρ καὶ φύσις φαύλη, οἷον ἡ τῶν σκωλήκων καὶ ἡ τῶν κανθάρων καὶ ὅλως ἡ τῶν ἀτίμων ζώων, ἀλλ' [14] οὐ διὰ τοῦτο ἡ φύσις τῶν φαύλων· ὁμοίως δ' εἰσὶ καὶ

ἐπιστῆμαι φαῦλαι, οἶον αἱ βάνανσοι, ἀλλ' ὅμως οὐ διὰ τοῦτο φαῦλον ἡ ἐπιστήμη, ἀλλ' ἀγαθὸν τῷ γένει καὶ ἐπιστήμη καὶ φύσις. ὥσπερ γὰρ οὐδ' ἀνδριαντοποιὸν θεωρεῖν δεῖ ποῖός τις ἐστὶν ἐξ ὧν ἀπέτυχε καὶ κακῶς εἰργάσατο, ἀλλ' ἐξ ὧν εὖ, οὕτως οὐδ' ἐπιστήμην οὐδὲ φύσιν οὐδὲ ἄλλο οὐδὲν ποῖόν τι ἐστὶν ἐκ τῶν φαύλων, ἀλλ' ἐκ τῶν σπουδαίων.

[15] Ὅμοίως δὲ καὶ ἡ ἡδονὴ τῷ γένει ἀγαθὸν ἐστίν, ἐπεὶ ὅτι γέ εἰσιν φαῦλαι ἡδοναί, οὐδὲ ἡμᾶς λανθάνει. ἐπεὶ γὰρ καὶ φύσεις τῶν ζώων εἰσὶν διάφοροι, οἶον καὶ φαύλη καὶ σπουδαία, οἶον ἡ μὲν ἀνθρώπου σπουδαία ἡ δὲ λύκου ἢ τινος ἄλλου θηρίου φαύλη, ὁμοίως δ' ἑτέρα φύσις ἵππου καὶ ἀνθρώπου καὶ [16] ὄνου καὶ κυνός, ἡ δὲ ἡδονὴ ἐστὶ κατάστασις ἐκ τοῦ παρὰ φύσιν εἰς φύσιν ἐκάστω τὴν αὐτοῦ· ὥστε τοῦτ' ἂν εἴη ἴδιον, τῇ γε φαύλῃ φύσει ἡ φαύλη ἡδονή. οὐ γὰρ ἐστὶ ταῦτόν καὶ ἵππῳ καὶ ἀνθρώπῳ, ὁμοίως οὐδὲ τοῖς ἄλλοις· ἀλλ' ἐπεὶ αἱ φύσεις διάφοροι, καὶ αἱ ἡδοναὶ διάφοροι. ἡ γὰρ ἡδονὴ ἦν ἀποκατάστασις, καὶ ἡ ἀποκατάστασις, φασίν, εἰς φύσιν καθίστη, ὥστε τῆς μὲν φαύλης φύσεως ἡ κατάστασις φαύλη, τῆς δὲ σπουδαίας σπουδαία.

[17] Ἀλλ' οἱ φάσκοντες εἶναι τὴν ἡδονὴν οὐ σπουδαίαν πεπόνθασιν οἶον οἱ μὴ εἰδότες τὸ νέκταρ οἶονται τοὺς θεοὺς οἶνον πίνειν καὶ οὐκ εἶναι τούτου ἥδιον οὐδέν. τοῦτο δὲ πάσχουσι διὰ τὴν ἄγνοιαν. οἷς ὅμοιον πεπόνθασιν οἱ πάσας τὰς ἡδονὰς γενέσεις φάσκοντες εἶναι καὶ οὐκ ἀγαθόν· διὰ γὰρ τὸ μὴ εἰδέναι ἄλλας ἡδονὰς ἀλλ' ἢ τὰς σωματικὰς, ταύτας τε ὀρᾶν γενέσεις τε οὔσας καὶ μὴ σπουδαίας, ὅλως οὐκ οἶονται εἶναι τὴν ἡδονὴν ἀγαθόν.

[18] Ἐπεὶ δ' οὖν ἐστὶν ἡ ἡδονὴ καὶ καθισταμένης τῆς φύσεως καὶ καθεστηκυίας, οἶον καθισταμένης μὲν αἱ ἐξ ἐνδείας ἀναπληρώσεις, καθεστηκυίας δὲ αἱ ἀπὸ τῆς ὀψεως καὶ τῆς ἀκοῆς καὶ τῶν τοιούτων οὔσαι, βελτίους ἂν εἴησαν αἱ καθεστηκυίας τῆς φύσεως ἐνέργειαι· αἱ γὰρ ἡδοναὶ κατ' ἀμφοτέρους λεγόμεναι τοὺς τρόπους ἐνέργειαι εἰσὶν· ὥστε δῆλον ὅτι αἱ ἀπὸ τῆς ὀψεως ἡδοναὶ καὶ τῆς ἀκοῆς καὶ τοῦ διανοεῖσθαι βέλτισται ἂν εἴησαν, ἐπεὶ αἱ γε σωματικαὶ ἐξ ἀναπληρώσεως.

[19] Ἔτι καὶ τοῦτο ἐλέγετο, ὅτι οὐκ ἀγαθόν· τὸ γὰρ ἐν πᾶσιν εἶναι καὶ πᾶσι κοινὸν οὐκ ἀγαθόν. τὸ δὲ τοιοῦτον ἐπὶ φιλοτίμου μᾶλλον καὶ φιλοτιμίας οἰκεῖον ἐστίν. ὁ γὰρ φιλότιμός ἐστὶν ὁ μόνος βουλόμενος ἔχειν καὶ τῷ τοιούτῳ τῶν ἄλλων ὑπερέχειν· καὶ τὴν ἡδονὴν οὖν, εἰ μέλλει ἀγαθὸν εἶναι, τοιοῦτον δεῖν εἶναι.

[20] Ἡ οὖν, ἀλλὰ καὶ τούναντίον διὰ τοῦτο ἂν δόξειεν ἀγαθὸν εἶναι, ὅτι

πάντα τούτου ἐφίεται; τοῦ γὰρ ἀγαθοῦ πάντα πέφυκεν ἐφίεσθαι, ὥστ' εἰ τῆς ἡδονῆς πάντ' ἐφίεται, ἀγαθὸν ἂν εἴη τῷ γένει ἡ ἡδονή.

[21] Πάλιν καὶ ὅτι ἐστὶν ἐμπόδιον ἡ ἡδονή, οὐκ ἔφασαν αὐτὴν ἀγαθὸν εἶναι. τὸ δ' ἐμπόδιον φάσκειν εἶναι διὰ τὸ μὴ ὀρθῶς σκοπεῖν φαίνεται αὐτοῖς. οὐ γάρ ἐστὶν ἐμπόδιον ἡ ἀπὸ τοῦ πράγματος τοῦ πραττομένου ἡδονή. ἐὰν μέντοι ἄλλη, ἐμπόδιον, [22] οἷον ἡ ἀπὸ τῆς μέθης ἡδονὴ ἐμπόδιόν ἐστι τοῦ πράττειν, ἄλλ' οὕτω μὲν καὶ ἐπιστήμη ἐπιστήμης ἐμπόδιον ἔσται· οὐ γάρ ἐστὶν ἅμα ἀμφοτέραις ἐνεργεῖν. ἀλλὰ διὰ τί οὐκ ἀγαθὸν ἡ ἐπιστήμη, ἂν ποιῇ τὴν ἀπὸ τῆς ἐπιστήμης ἡδονήν; καὶ πότερον [23] ἐμπόδιον ἔσται; ἢ οὐ, ἀλλὰ μᾶλλον πράξει; ἡ γὰρ ἡδονὴ παρορμᾷ πρὸς τὸ μᾶλλον πράττειν ἀπ' αὐτοῦ γινομένη, ἐπεὶ τὸν σπουδαῖον ποιήσον πράττειν τὰ κατ' ἀρετὴν, καὶ ἡδέως ταῦτα πράττειν· ἄρα οὐ πολλῷ μᾶλλον ἐνεργήσει κατὰ τὴν πρᾶξιν; καὶ ἐὰν μὲν γε ἡδόμενος πράττη, σπουδαῖος ἔσται, ἂν δὲ λυπούμενος τὰ καλὰ πράττη, οὐ σπουδαῖος. ἡ γὰρ λύπη ἐπὶ τοῖς δι' ἀνάγκην ἐστίν, ὥστ' εἰ λυπεῖται τις τὰ καλὰ πράττων, ἀναγκαζόμενος πράττει· ὁ δ' ἐξ ἀνάγκης πράττων οὐ σπουδαῖος.

[24] Ἀλλὰ μὴν οὐκ ἔστιν γε μὴ λυπούμενον ἢ ἡδόμενον τὰ κατ' ἀρετὴν πράττειν· τὸ δ' ἀνὰ μέσον οὐκ ἔστιν. διὰ τί; ὅτι ἡ ἀρετὴ ἐν πάθει, τὸ δὲ πάθος ἐν λύπῃ καὶ ἡδονῇ, ἐν δὲ τῷ ἀνὰ μέσον οὐκ ἔστιν· δῆλον οὖν ὡς καὶ ἡ ἀρετὴ μετὰ λύπης ἢ ἡδονῆς. εἰ μὲν οὖν λυπούμενός τις τὰ καλὰ πράττει, οὐ σπουδαῖος. ὥστε οὐκ ἂν εἴη ἡ ἀρετὴ [25] μετὰ λύπης· μεθ' ἡδονῆς ἄρα. οὐ μόνον ἄρα οὐκ ἐμπόδιόν ἐστιν ἡ ἡδονή, ἀλλὰ καὶ προτρεπτικὸν πρὸς τὸ πράττειν, καὶ τὸ ὅλον δὲ οὐκ ἐνδέχεται ἄνευ ἡδονῆς εἶναι τῆς ἀπ' αὐτῆς γινομένης.

[26] Ἄλλος ἦν λόγος ὅτι οὐδεμία ποιεῖ ἐπιστήμη ἡδονήν. ἔστιν δὲ οὐδὲ τοῦτο ἀληθές. οἱ γὰρ δειπνοποιοὶ καὶ στεφανοποιοὶ καὶ [οἱ] μυρεψοὶ ἡδονῆς εἰσιν ποιητικοί. ἀλλὰ δὴ ταῖς ἄλλαις ἐπιστήμαις οὐκ ἔστιν ἡ ἡδονὴ ὡς τέλος, ἀλλὰ μεθ' ἡδονῆς τε καὶ οὐκ ἄνευ ἡδονῆς. ἔστιν οὖν καὶ ἐπιστήμη ποιητικὴ ἡδονῆς.

[27] Ἔτι δὲ καὶ ἄλλος ἐλέγετο, ὅτι οὐκ ἄριστον. ἀλλ' οὕτως μὲν καὶ τῷ τοιούτῳ λόγῳ ἀναιρήσεις καὶ τὰς καθ' ἕκαστα λεγομένας ἀρετάς. ἡ γὰρ ἀνδρεία οὐκ ἔστιν ἄριστον· ἄρ' οὖν διὰ τοῦτ' οὐκ ἀγαθόν; ἢ τοῦτ' ἄτοπον; ὁμοίως καὶ ἐπὶ τῶν ἄλλων. οὐδὲ ἡδονὴ διὰ τοῦτ' οὐκ ἀγαθόν, ὅτι οὐκ ἄριστον.

[28] Ἀπορήσειε δ' ἂν τις μεταβάς καὶ ἐπὶ τῶν ἀρετῶν τὸ τοιοῦτον. οἷον ἐπειδὴ ὁ λόγος κρατεῖ ποτε τῶν παθῶν (φαμέν γὰρ ἐπὶ τοῦ ἐγκρατοῦς), καὶ τὰ πάθη δὲ πάλιν ἀντεστραμμένως τοῦ λόγου κρατεῖ (οἷον ἐπὶ τῶν ἀκρατῶν συμβαίνει), ἐπεὶ οὖν τὸ ἄλογον μέρος τῆς ψυχῆς ἔχον τὴν κακίαν κρατεῖ τοῦ λόγου εὖ διακειμένου (ὁ γὰρ ἀκρατὴς τοιοῦτος), καὶ ὁ λόγος ὁμοίως φαύλως διακείμενος κρατήσῃ τῶν παθῶν εὖ διακειμένων καὶ ἐχόντων τὴν οἰκείαν ἀρετήν, εἰ δὲ τοῦτ' ἔσται, συμβήσεται τῇ ἀρετῇ κακῶς χρῆσθαι (ὁ γὰρ λόγος φαύλως διακείμενος καὶ χρώμενος τῇ ἀρετῇ κακῶς αὐτῇ χρήσεται). τὸ δὲ τοιοῦτον ἄτοπον ἂν συμβαίνειν δόξειεν.

[29] Πρὸς δὲ τὴν τοιαύτην ἀπορίαν ῥάδιον ἀντειπεῖν καὶ λῦσαι ἐκ τῶν ἔμπροσθεν ἡμῖν εἰρημένων ὑπὲρ ἀρετῆς. τότε γὰρ φαμεν εἶναι ἀρετήν, ὅταν ὁ λόγος εὖ διακείμενος τοῖς πάθεσιν ἔχουσι τὴν οἰκείαν ἀρετήν σύμμετρος ᾗ, καὶ τὰ πάθη τῷ λόγῳ· οὕτω γὰρ διακείμενα συμφωνήσουσι πρὸς ἄλληλα, ὥστε τὸν μὲν λόγον προστάττειν ἀεὶ τὸ βέλτιστον, τὰ δὲ πάθη ῥαδίως εὖ διακείμενα ποιεῖν ὃ ἂν ὁ λόγος [30] προστάττῃ· ἂν οὖν ὁ λόγος φαύλως ᾗ διακείμενος, τὰ δὲ πάθη εὖ, οὐκ ἔσται ἀρετὴ ἐκλείποντος τοῦ λόγου (ἐξ ἀμφοτέρων γὰρ ἡ ἀρετή). ὥστ' οὐδὲ κακῶς χρῆσθαι ἐνδέχεται ἀρετῇ. ἀπλῶς δ' οὐχ, ὥσπερ οἴονται οἱ ἄλλοι, τῆς ἀρετῆς ἀρχὴ καὶ ἡγεμών ἐστὶν ὁ λόγος, ἀλλὰ μᾶλλον τὰ πάθη. δεῖ γὰρ πρὸς τὸ καλὸν ὁρμὴν ἄλογόν τινα πρῶτον ἐγγίνεσθαι (ὃ καὶ γίνεται), εἴθ' οὕτως τὸν λόγον ὕστερον ἐπιψηφίζοντα εἶναι καὶ διακρίνοντα.

[31] ἴδοι δ' ἂν τις τοῦτο ἐκ τῶν παιδίων καὶ τῶν ἄνευ λόγου ζώντων· ἐν γὰρ τούτοις ἄνευ τοῦ λόγου ἐγγίνονται ὁρμαὶ τῶν παθῶν πρὸς τὸ καλὸν πρότερον, ὁ δὲ λόγος ὕστερος ἐπιγινόμενος καὶ σύμψηφος ὢν ποιεῖ πράττειν τὰ καλά. ἀλλ' οὐκ ἐὰν ἀπὸ τοῦ λόγου τὴν ἀρχὴν λάβῃ πρὸς τὰ καλά, οὐκ ἀκολουθεῖ τὰ πάθη ὁμογνωμονοῦντα, ἀλλὰ πολλάκις ἐναντιοῦται· διὸ μᾶλλον ἀρχὴ ἔοικεν πρὸς τὴν ἀρετὴν τὸ πάθος εὖ διακείμενον ἢ ὁ λόγος.

[8]

[1] Ἐχόμενον δ' ἂν εἴη τούτων εἰπεῖν, ἐπειδὴ περὶ εὐδαιμονίας ἐστὶν ὁ λόγος, περὶ εὐτυχίας. οἴονται γὰρ οἱ πολλοὶ τὸν εὐδαίμονα βίον τὸν εὐτυχῇ εἶναι ἢ οὐκ ἄνευ γε εὐτυχίας, καὶ ὁρθῶς ἴσως· ἄνευ γὰρ τῶν ἐκτὸς ἀγαθῶν, ὧν ἡ τύχη ἐστὶ κυρία, οὐκ ἐνδέχεται εὐδαίμονα εἶναι. διὸ ῥητέον ἐστὶν ὑπὲρ εὐτυχίας, καὶ ἀπλῶς ὁ εὐτυχῆς τίς ἐστὶ καὶ ἐν τίσι καὶ περὶ τί.

[2] Πρῶτον μὲν οὖν ἐπὶ ταῦτ' ἂν τις ἐλθὼν καὶ ἐπιβλέψας ἀπορήσειεν. οὔτε



γὰρ ἂν εἴποι τις τὴν τύχην ὥς ἐστι φύσις. ἡ γὰρ φύσις [ἀεὶ] οὐκ ἐστὶν αἰτία, τούτου ὥς ἐπὶ τὸ πολὺ ἢ ὡσαύτως ποιητικὴ ἐστίν, ἡ δέ γε τύχη οὐδέποτε, ἀλλ' ἀτάκτως καὶ ὥς ἔτυχεν· διὸ ἡ τύχη ἐν τοῖς τοιούτοις λέγεται. οὔτε δὲ νοῦν γέ τινα ἢ λόγον ὀρθόν· καὶ γὰρ ἐνταῦθα οὐχ ἥττον ἐστὶ τὸ τεταγμένον καὶ τὸ ἀεὶ ὡσαύτως, ἡ δὲ τύχη οὐ. διὸ καὶ οὐ πλείστος νοῦς καὶ λόγος, ἐνταῦθα ἐλαχίστη [καὶ] τύχη, οὐ δὲ πλείστη τύχη, ἐνταῦθ' ἐλάχιστος νοῦς.

[3] Ἀλλ' ἄρα γε ἡ εὐτυχία ἐστὶν ὥς ἐπιμέλειά τις θεῶν; ἢ τοῦτ' οὐκ ἂν δόξειεν; τὸν γὰρ θεὸν ἀξιοῦμεν κύριον ὄντα τῶν τοιούτων τοῖς ἀξίοις ἀπονέμειν καὶ τὰγαθὰ καὶ τὰ κακά, ἡ δὲ τύχη καὶ τὰ ἀπὸ τῆς τύχης ὥς ἀληθῶς ὥς ἂν τύχη γίνεται. εἰ δέ γε τῷ θεῷ τὸ τοιοῦτον ἀπονέμομεν, φαῦλον αὐτὸν κριτὴν ποιήσομεν ἢ οὐ δίκαιον· τοῦτο δ' οὐ προσῆκόν ἐστι [4] [τῷ] θεῷ. ἀλλὰ μὴν ἔξω γε τούτων εἰς οὐδὲν ἄλλο τὴν τύχην ἂν τις τάξειεν, ὥστε δῆλον ὅτι τούτων ἂν τι εἴη. νοῦς μὲν δὲ καὶ λόγος καὶ ἐπιστήμη παντελῶς ἀλλότριόν τι ἔοικεν εἶναι. ἀλλὰ μὴν οὐδ' ἡ ἐπιμέλεια καὶ ἡ εὐνοια παρὰ τοῦ θεοῦ δόξειεν ἂν εἶναι εὐτυχία διὰ τὸ καὶ ἐν τοῖς φαύλοις ἐγγίγνεσθαι· τὸν δὲ θεὸν τῶν φαύλων οὐκ εἰκὸς ἐπιμελεῖσθαι.

[5] λοιπὸν τοίνυν καὶ οἰκειότατον τῆς εὐτυχίας ἐστὶν ἡ φύσις.

Ἔστιν δ' ἡ εὐτυχία καὶ ἡ τύχη ἐν τοῖς μὴ ἐφ' ἡμῖν οὖσιν, μηδ' ὧν αὐτοὶ κύριοι ἐσμεν καὶ δυνατοὶ πράττειν. διὸ τὸν δίκαιον, ἢ δίκαιος, οὐθεὶς λέγει εὐτυχῇ οὐδὲ τὸν ἀνδρεῖον οὐδ' ὅλως τῶν κατ' ἀρετὴν οὐδένα· ἐφ' ἡμῖν γὰρ ἐστὶ ταῦτα καὶ ἔχειν καὶ μὴ ἔχειν. ἀλλ' ἤδη ἐπὶ τοῖς τοιούτοις οἰκειότερον τὴν εὐτυχίαν ἐροῦμεν· τὸν γὰρ εὐγενῆ εὐτυχῇ λέγομεν, καὶ ὅλως ὧς τὰ τοιαῦτα τῶν ἀγαθῶν ὑπάρχει, ὧν μὴ αὐτὸς κύριος ἐστίν.

[6] Ἀλλ' ὅμως οὐδ' ἐνταῦθα κυρίως ἂν ἡ εὐτυχία λέγοιτο. ἔστιν δὲ πολλαχῶς ὁ εὐτυχῆς λεγόμενος· καὶ γὰρ ὧς παρὰ τὸν λογισμὸν τὸν αὐτοῦ συνέβη τι ἀγαθὸν πράττειν, εὐτυχῇ φασί, καὶ ὧς κατὰ λόγον ζημίαν ἦν λαβεῖν, τὸν τοιοῦτον κερδάναντα εὐτυχῇ [7] φασί. ἔστιν οὖν ἡ εὐτυχία ἐν τῷ ἀγαθόν τι ὑπάρχει παρὰ λόγον καὶ ἐν τῷ κακὸν μὴ λαβεῖν εὐλογον. ἀλλὰ μᾶλλον καὶ οἰκειότερον ἡ εὐτυχία ἂν δόξειεν εἶναι ἐν τῷ ἀγαθόν λαβεῖν· τὸ μὲν γὰρ ἀγαθὸν λαβεῖν καθ' αὐτὸ δόξειεν ἂν εὐτύχημα εἶναι, τὸ δὲ κακὸν μὴ λαβεῖν κατὰ συμβεβηκὸς εὐτύχημα.

[8] Ἔστιν οὖν ἡ εὐτυχία ἄλογος φύσις· ὁ γὰρ εὐτυχῆς ἐστὶν ὁ ἄνευ λόγου ἔχων ὁρμὴν πρὸς τὰγαθὰ, καὶ τούτων ἐπιτυχάνων, τοῦτο δ' ἐστὶ φύσεως· ἐν γὰρ τῇ ψυχῇ ἐνεστὶν τῇ φύσει τοιοῦτον ὧς ὁρμῶμεν [9] ἀλόγως πρὸς ἃ ἂν εὖ

ἔχωμεν. καὶ εἴ τις ἐρωτήσῃ τὸν οὕτως ἔχοντα, διὰ τί τοῦτο ἀρέσκει σοι οὕτω πράττειν; οὐκ οἶδα, φησὶν, ἀλλ' ἀρέσκει μοι, ὅμοιον πάσχων τοῖς ἐνθουσιάζουσιν· καὶ γὰρ οἱ ἐνθουσιάζοντες ἄνευ λόγου ὁρμὴν ἔχουσι πρὸς τὸ πράττειν τι.

[10] Τὴν δ' εὐτυχίαν οὐκ ἔχομεν οἰκείῳ καὶ ἰδίῳ ὀνόματι προσαγορεύειν, ἀλλ' αἰτίαν πολλάκις φραμὲν εἶναι αὐτήν· ἢ δ' αἰτία ἀλλότριον τοῦ ὀνόματος. ἢ γὰρ αἰτία καὶ οὗ ἐστὶν αἰτία ἄλλο ἐστίν, καὶ ἄνευ ὁρμῆς τῆς ἐπιτυχανούσης τῶν ἀγαθῶν αἰτία λεγομένη, οἷον ἢ τοῦ κακὸν μὴ λαβεῖν ἢ πάλιν τοῦ [11] μὴ οἰόμενον ἀγαθὸν λήψεσθαι ἀγαθὸν λαβεῖν. ἔστιν οὖν ἢ τοιαύτη εὐτυχία διάφορος ἐκείνης, καὶ ἔοικεν αὕτη ἐκ τῶν πραγμάτων τῆς μεταπτώσεως γίνεσθαι, καὶ κατὰ συμβεβηκὸς εὐτυχία. ὥστ' εἰ καὶ ἡ τοιαύτη ἐστὶν εὐτυχία, ἀλλ' οὖν πρὸς γε τὴν εὐδαιμονίαν ἢ τοιαύτη ἂν εἴη εὐτυχία οἰκειότερα, ἥς ἐν αὐτῷ ἢ ἀρχὴ τῆς ὁρμῆς τῶν ἀγαθῶν ἐστὶ τῆς ἐπιτεύξεως.

[12] Ἐπεὶ οὖν ἐστὶν ἡ εὐδαιμονία οὐκ ἄνευ τῶν ἐκτὸς ἀγαθῶν, ταῦτα δὲ γίνεται ἀπὸ τῆς εὐτυχίας, οἷον ἀρτίως ἔφαμεν, συνεργὸς ἂν εἴη τῇ εὐδαιμονίᾳ.

[9]

[1] Περὶ μὲν οὖν εὐτυχίας τοσαῦτα· ἐπειδὴ δὲ ὑπὲρ ἐκάστης τῶν ἀρετῶν κατὰ μέρος εἰρήκαμεν, λοιπὸν ἂν εἴη καθόλου συνθέντας τὰ καθ' ἕκαστα κεφαλαιωσαμένους εἰπεῖν.

[2] Ἔστι μὲν οὖν οὐ κακῶς λεγόμενον τοῦνομα ἐπὶ τοῦ τελέως σπουδαίου, ἢ καλοκάγαθία. καλὸς κάγαθος γάρ, φασὶν, ὅταν τελέως σπουδαῖος ᾖ. ἐπὶ γὰρ τῆς ἀρετῆς τὸν καλὸν κάγαθον λέγουσιν, οἷον τὸν δίκαιον καλὸν κάγαθον φασί, τὸν ἀνδρεῖον, τὸν σώφρονα, ὅλως ἐπὶ τῶν ἀρετῶν.

[3] Ἐπειδὴ οὖν εἰς δύο διαιροῦμεν, καὶ τὰ μὲν φαμεν εἶναι καλὰ τὰ δὲ [καὶ] ἀγαθὰ, καὶ τῶν ἀγαθῶν τὰ μὲν ἀπλῶς ἀγαθὰ τὰ δὲ οὗ, καὶ καλὰ μὲν οἷον τὰς ἀρετὰς καὶ τὰς ἀπ' ἀρετῆς πράξεις, ἀγαθὰ δὲ [οἷον] ἀρχὴν πλοῦτον δόξαν τιμὴν τὰ τοιαῦτα· ἔστιν οὖν ὁ καλὸς κάγαθος ὡς τὰ ἀπλῶς ἀγαθὰ ἐστὶν ἀγαθὰ καὶ τὰ ἀπλῶς καλὰ καλὰ ἐστίν. ὁ τοιοῦτος γὰρ [4] καλὸς καὶ ἀγαθός. ὡς δὲ τὰ ἀπλῶς ἀγαθὰ μὴ ἐστὶν ἀγαθὰ, οὐκ ἔστι καλὸς καὶ ἀγαθός, ὥσπερ οὐδὲ ὑγιαίνειν ἂν δόξειεν ὡς τὰ ἀπλῶς ὑγιεινὰ μὴ ὑγιεινὰ ἐστίν. εἰ γὰρ ὁ πλοῦτος καὶ ἡ ἀρχὴ παραγινόμενά τινα βλάπτοιεν, οὐκ ἂν αἰρετὰ εἴη, ἀλλὰ τὰ τοιαῦτα [5] ὅσα αὐτὸν μὴ βλάψει, βουλήσεται αὐτῷ εἶναι. ὁ δὲ

τοιοῦτος ὢν οἷος ὑποστελλόμενός τι τῶν ἀγαθῶν πρὸς τὸ μὴ εἶναι αὐτῷ, οὐκ ἂν δόξειεν καλὸς κἀγαθὸς εἶναι· ἀλλ' ὥς τἀγαθὰ πάντα ὄντα ἀγαθὰ ἐστὶν καὶ ὑπὸ τούτων μὴ διαφθείρεται, οἷον ὑπὸ πλούτου καὶ ἀρχῆς, ὁ τοιοῦτος καλὸς κἀγαθός.

[10]

[1] Ὑπὲρ δὲ τοῦ κατὰ τὰς ἀρετὰς ὀρθῶς πράττειν εἴρηται μὲν, οὐχ ἱκανῶς δέ. ἔφαμεν γὰρ τὸ κατὰ τὸν ὀρθὸν λόγον πράττειν· ἀλλ' ἴσως ἄν τις αὐτὸ τοῦτο ἀγνοῶν ἐρωτήσῃ, τὸ κατὰ τὸν ὀρθὸν λόγον τί ποτ' ἐστί, καὶ ποῦ ἐστὶν ὁ ὀρθὸς λόγος; [2] ἐστὶν οὖν κατὰ τὸν ὀρθὸν λόγον πράττειν, ὅταν τὸ ἄλογον μέρος τῆς ψυχῆς μὴ κωλύῃ τὸ λογιστικὸν ἐνεργεῖν τὴν αὐτοῦ ἐνέργειαν. τότε γὰρ ἢ πρᾶξις ἐστὶ κατὰ τὸν ὀρθὸν λόγον.

Ἐπειδὴ γὰρ τι τῆς ψυχῆς τὸ μὲν χεῖρον ἔχομεν τὸ δὲ βέλτιον, ἀεὶ δὲ τὸ χεῖρον τοῦ βελτίονος ἔνεκεν ἐστίν, ὥσπερ ἐπὶ σώματος καὶ ψυχῆς τὸ σῶμα τῆς ψυχῆς ἔνεκεν, καὶ τότε' ἐροῦμεν ἔχειν τὸ σῶμα καλῶς, ὅταν οὕτως ἔχῃ ὥστε μὴ κωλύειν, ἀλλὰ καὶ συμβάλλεσθαι καὶ συμπαραορμᾶν πρὸς τὴν ψυχὴν ἐπιτελεῖν τὸ αὐτῆς ἔργον (τὸ γὰρ χεῖρον τοῦ βελτίονος ἔνεκεν, πρὸς τὸ συνεργεῖν τῷ βελτίονι). [3] ὅταν οὖν τὰ πάθη μὴ κωλύωσι τὸν νοῦν τὸ αὐτοῦ ἔργον ἐνεργεῖν, τότε' ἐστὶ κατὰ τὸν ὀρθὸν λόγον γινόμενον.

Ναί, ἀλλ' ἴσως εἴποι τις ἄν, ὅταν πῶς ἔχωσι τὰ πάθη, οὐ κωλύουσι, καὶ πότε οὕτως ἔχουσιν; οὐ [4] γὰρ οἶδα. τὸ δὲ τοιοῦτον οὐκ ἐστὶν εἰπεῖν ῥᾶδιον. οὐδὲ γὰρ ὁ ἰατρός· ἀλλ' ὅταν εἴπῃ τῷ πυρέττοντι πτισάνην προσφέρεσθαι, τοῦ δὲ πυρέττειν πῶς αἰσθάνομαι; ὅταν, φησὶν, ὀρᾷς ὠχρὸν ὄντα· τὸ δ' ὠχρὸν πῶς εἰδήσω; ἐνταῦθα δὲ συνιέτω ὁ ἰατρός· εἰ γὰρ μὴ ἔχεις παρὰ σαυτῷ, φησί, τῶν γε τοιούτων αἴσθησιν, οὐκ ἔτι. ὡσαύτως ὑπὲρ τῶν [5] ἄλλων κοινός ἐστι τῶν τοιούτων ὁ λόγος. ὁμοίως δ' ἔχει καὶ ἐπὶ τῶν παθῶν τοῦ γνωρίζειν· δεῖ γὰρ αὐτὸν συμβάλλεσθαι πρὸς αἴσθησίν τι.

[6] Ἐπιζητήσῃ δ' ἄν τις ἴσως καὶ τὸ τοιοῦτον· ἄρα γε ἔργῳ εἰδήσας ταῦτα καὶ δὴ εὐδαίμων ἔσομαι; οἶονταί γάρ. τὸ δ' ἐστὶν οὐ τοιοῦτον. οὐδεμία γὰρ οὐδὲ τῶν ἄλλων ἐπιστημῶν παραδίδωσι τῷ μανθάνοντι τὴν χρῆσιν καὶ τὴν ἐνέργειαν, ἀλλὰ τὴν ἕξιν μόνον· οὕτως οὐδ' ἐνταῦθα παραδίδωσιν τὸ εἰδῆσαι ταῦτα τὴν χρῆσιν (ἢ γὰρ εὐδαιμονία ἐστὶν ἐνέργεια, ὡς φαμέν), ἀλλὰ τὴν ἕξιν, οὐδ' ἐν τῷ εἰδέναι ἐξ ὧν ἐστὶν ἡ εὐδαιμονία, ἀλλ' ἐκ τοῦ τούτοις [7] χρήσασθαι. τὴν δὲ χρῆσιν καὶ τὴν ἐνέργειαν τούτων οὐκ ἐστὶ ταύτης τῆς πραγματείας τὸ παραδιδόναι· οὐδὲ γὰρ ἄλλη ἐπιστήμη οὐδεμία τὴν χρῆσιν

παραδίδωσιν, ἀλλὰ τὴν ἕξιν.

[11]

[1] Ἐφ’ ἅπασιν δὲ τούτοις ὑπὲρ φιλίας ἀναγκαῖόν ἐστιν εἰπεῖν, τί ἐστιν καὶ ἐν τίσι καὶ περὶ τί· ἐπειδὴ γὰρ ὁρῶμεν παρὰ πάντα τὸν βίον παρατείνουσιν καὶ ἐν παντὶ καιρῷ, καὶ οὐσαν ἀγαθόν, συμπαραληπτέα ἂν εἴη πρὸς τὴν εὐδαιμονίαν.

[2] Πρῶτον μὲν οὖν ἴσως ἂν ἀπορεῖται καὶ ζητεῖται, βέλτιον διελθεῖν. πότερον γάρ ἐστιν ἢ φιλία ἐν τοῖς ὁμοίοις, ὥσπερ δοκεῖ καὶ λέγεται; καὶ γὰρ “κολιός” φασὶ “παρὰ κολιὸν ἰζάνει,” καὶ

αἰεὶ τοι τὸν ὅμοιον ἄγει θεὸς ὡς τὸν ὅμοιον.

φασὶν δὲ καὶ κυνός ποτε ἀεὶ καθευδούσης ἐπὶ τῆς αὐτῆς κεραμίδος, ἐρωτηθέντα τὸν Ἐμπεδοκλέα, διὰ τί ποτε ἢ κύων ἐπὶ τῆς αὐτῆς κεραμίδος καθεύδει, εἰπεῖν ὅτι ἔχει τι τῇ κεραμίδι ὅμοιον ἢ κύων, ὡς [3] διὰ τὸ ὅμοιον τὴν κύνα φοιτῶσαν. πάλιν δ’ αὖ δοκεῖ ἄλλοις τισὶν ἐν τοῖς ἐναντίοις μᾶλλον ἐγγίνεσθαι ἢ φιλία. “ἔρᾱ μὲν” γάρ, φασὶν, “ὄμβρου γαῖα, ὅταν ξηρὸν πέδον.” τὸ δὲ ἐναντίον, φασὶν, τῷ ἐναντίῳ βούλεσθαι φίλον εἶναι. ἐν μὲν γὰρ τοῖς ὁμοίοις οὐδὲ ἐνδέχεσθαι γίνεσθαι. τὸ γὰρ ὅμοιον, φασὶν, τοῦ ὁμοίου οὐδὲν προσδεῖται, καὶ τὰ τοιαῦτα δῆ.

[4] Ἐτι δὲ πότερον ἔργον ἐστὶ φίλον γενέσθαι ἢ ῥάδιον γενέσθαι; οἱ γοῦν κόλακες ταχέως προσεδρεύσαντες φίλοι μὲν οὐκ εἰσίν, φαίνονται δὲ φίλοι εἶναι.

[5] Ἐτι δὲ καὶ τὰ τοιαῦτα ἀπορεῖται, πότερον ἔσται ὁ σπουδαῖος τῷ φαύλῳ φίλος; ἢ οὐ; ἢ μὲν γὰρ φιλία ἐν πίστει καὶ βεβαιότητι, ὁ δὲ φαῦλος ἥκιστα τοιοῦτος· καὶ ὁ φαῦλος τῷ φαύλῳ, ἢ οὐδὲ τοῦτο;

[6] Πρῶτον μὲν οὖν διοριστέον ἂν εἴη ὑπὲρ φιλίας ποίας σκοποῦμεν. ἔστι γάρ, ὡς οἶονται, φιλία καὶ πρὸς θεὸν καὶ τὰ ἄψυχα, οὐκ ὁρθῶς. τὴν γὰρ φιλίαν ἐνταῦθά φαμεν εἶναι οὗ ἐστὶ τὸ ἀντιφιλεῖσθαι, ἢ δὲ πρὸς θεὸν φιλία οὔτε ἀντιφιλεῖσθαι δέχεται, οὐθ’ ὅλως τὸ φιλεῖν· ἄτοπον γὰρ ἂν εἴη εἶ [7] τις φαίη φιλεῖν τὸν Δία· οὐδὲ δὴ παρὰ τῶν ἀψύχων ἐνδέχεται ἀντιφιλεῖσθαι. φιλία μέντοι καὶ πρὸς τὰ ἄψυχα ἐστίν, οἶον οἶνον ἢ ἄλλο δὴ τῶν τοιούτων.

Διὸ δὴ οὔτε τὴν πρὸς τὸν θεὸν φιλίαν ἐπιζητοῦμεν οὔτε τὴν πρὸς τὰ

ἄψυχα, ἀλλὰ τὴν πρὸς τὰ ἔμψυχα, καὶ πρὸς ταῦτα ἐν οἷς ἐστὶ τὸ ἀντιφιλεῖν.

[8] Εἰ δὴ τις μετὰ τοῦτο ἐπισκέψαιτο τί ἐστὶ τὸ φιλητόν, ἔστιν οὖν οὐκ ἄλλο τι ἢ τ'ἀγαθόν. ἕτερον μὲν οὖν ἐστὶ τὸ φιλητὸν καὶ τὸ φιλητέον, ὥσπερ καὶ [9] τὸ βουλητὸν καὶ τὸ βουλητέον. βουλητὸν μὲν γὰρ τὸ ἀπλῶς ἀγαθόν, βουλητέον δὲ τὸ ἐκάστω ἀγαθόν· οὕτω καὶ φιλητὸν μὲν τὸ ἀπλῶς ἀγαθόν, φιλητέον δὲ τὸ αὐτῷ ἀγαθόν, ὥστε τὸ μὲν φιλητέον καὶ φιλητόν, τὸ δὲ φιλητὸν οὐκ ἔστι φιλητέον.

[10] Ἐνταῦθα οὖν ἐστὶν καὶ διὰ τὸ τοιοῦτον ἡ ἀπορία, πότερόν ἐστιν ὁ σπουδαῖος τῷ φαύλῳ φίλος ἢ οὐ. συνῆπται γὰρ πως τ'ἀγαθῷ τὸ αὐτῷ ἀγαθόν καὶ τὸ φιλητέον τῷ φιλητῷ, ἔχεται δὲ καὶ ἀκολουθεῖ τῷ [11] ἀγαθῷ καὶ τὸ ἡδὺ εἶναι καὶ τὸ συμφέρον. ἡ μὲν οὖν τῶν σπουδαίων φιλία ἐστίν, ὅταν ἀντιφιλωσιν ἀλλήλους· φιλοῦσι δὲ ἀλλήλους, ἢ φιλητοί· φιλητοὶ [12] δέ, ἢ ἀγαθοί. οὐκοῦν ὁ σπουδαῖος, φησίν, τῷ φαύλῳ οὐκ ἔσται φίλος; ἔσται μὲν οὖν. ἐπειδὴ γὰρ τ'ἀγαθῷ ἡκολουθεῖ τὸ συμφέρον καὶ τὸ ἡδύ, ἢ ἐστὶν φαῦλος ὢν ἡδύς, ταύτῃ φίλος· πάλιν αὖ [13] συμφέρων, ἢ συμφέρων, ταύτῃ φίλος. ἀλλ' οὐκ ἔσται γε κατὰ τὸ φιλητὸν ἢ τοιαύτη φιλία. φιλητὸν γὰρ ἦν τ'ἀγαθόν, ὁ δὲ φαῦλος οὐ φιλητός· οὐ γὰρ ἀλλὰ κατὰ τὸ φιλητέον· εἰσὶν γὰρ ἀπὸ τῆς παντελοῦς φιλίας, τῆς ἐν τοῖς σπουδαίοις, καὶ αὗται αἱ φιλίαι, ἢ τε κατὰ τὸ ἡδὺ καὶ ἢ κατὰ τὸ συμφέρον.

[14] Ὁ οὖν κατὰ τὸ ἡδὺ φιλῶν οὐ φιλεῖ τὴν κατὰ τὸ [15] ἀγαθὸν φιλίαν, οὐδὲ ὁ κατὰ τὸ συμφέρον· εἰσὶν δὲ καὶ αἱ φιλίαι αὗται, ἢ τε κατὰ τὸ ἀγαθόν καὶ ἢ κατὰ τὸ ἡδὺ καὶ ἢ κατὰ τὸ συμφέρον, οὐχ αἱ αὗται μὲν, οὐ παντελῶς δὲ οὐδὲ ἀλλότριαι ἀλλήλων, ἀλλ' ἀπὸ ταύτου πως ἡρτημέναι εἰσίν. οἷον φαρμέν ἱατρικὸν τὸ μαχαίριον, ἱατρικὸν τὸν ἄνθρωπον, καὶ ἱατρικὴν τὴν ἐπιστήμην· ταῦτα οὐχ ὁμοίως λέγονται, ἀλλὰ τὸ μὲν μαχαίριον τῷ χρήσιμον εἶναι πρὸς ἱατρικὴν ἱατρικὸν λέγεται, ὁ δ' ἄνθρωπος τῷ ποιητικῶς εἶναι ὑγιείας, ἢ δ' ἐπιστήμη τῷ αἰτία εἶναι [16] καὶ ἀρχή. ὁμοίως δὲ καὶ αἱ φιλίαι οὐχ ὡσαύτως, ἢ τε τῶν σπουδαίων ἢ διὰ τὸ ἀγαθόν καὶ ἢ κατὰ τὸ ἡδὺ καὶ ἢ κατὰ τὸ συμφέρον. οὐδὲ δὴ ὁμωνύμως λέγονται, ἀλλ' οὐκ εἰσὶν μὲν αἱ αὗται, περὶ ταῦτα [17] δέ πως καὶ ἐκ τῶν αὐτῶν εἰσίν. εἰ δὴ τις λέγοι “ὁ κατὰ τὸ ἡδὺ φιλῶν οὐκ ἔστιν φίλος τούτῳ· οὐ γὰρ κατὰ τὸ ἀγαθὸν φίλος ἐστίν,” βαδίζει ὁ τοιοῦτος ἐπὶ τὴν τῶν σπουδαίων φιλίαν, τὴν ἐξ ἀπάντων τούτων οὔσαν, καὶ ἐκ τοῦ ἀγαθοῦ καὶ ἐκ τοῦ ἡδέος καὶ ἐκ τοῦ συμφέροντος, ὥστ' ἀληθῶς οὐκ ἔστιν [κατ'] ἐκείνην γε τὴν φιλίαν φίλος, ἀλλὰ τὴν κατὰ τὸ ἡδὺ ἢ κατὰ τὸ συμφέρον.

[18] Πότερον οὖν ἔσται ὁ σπουδαῖος τῷ σπουδαίῳ φίλος, ἢ οὐ; οὐδὲν γὰρ προσδεῖται, φησὶν, ὁ ὅμοιος τοῦ ὁμοίου. ὁ δὲ τοιοῦτος λόγος ζητεῖ τὴν κατὰ τὸ συμφέρον φιλίαν· ἢ γὰρ προσδεῖται ὁ ἕτερος τοῦ ἑτέρου, ταύτη ὄντες φίλοι ἐν τῇ κατὰ τὸ συμφέρον [19] φιλίᾳ εἰσὶν. ἀλλὰ ἕτερα διώρισται ἢ κατὰ τὸ συμφέρον φιλία καὶ ἢ κατ' ἀρετὴν καὶ ἡδονήν. εἰκὸς δὲ καὶ πολὺ μᾶλλον τούτους· πάντα γὰρ αὐτοῖς ὑπάρχει, τάγαθὸν καὶ τὸ ἡδὺ καὶ τὸ συμφέρον. ἀλλὰ καὶ ὁ σπουδαῖος τῷ φαύλῳ· ἢ γὰρ ἴσως [20] ἡδύς, ταύτη καὶ φίλος. καὶ ὁ φαῦλός γε τῷ φαύλῳ· ἢ γὰρ ἴσως τὸ αὐτὸ αὐτοῖς συμφέρει, ταύτη φίλοι. ὁρῶμεν γὰρ τοῦτο γινόμενον, ὅταν τὸ αὐτὸ ἢ τὸ συμφέρον, φίλους τούτους διὰ τὸ συμφέρον, ὥστ' οὐδὲν κωλύσει καὶ φαύλοις οὖσιν ταύτόν τι συμφέρειν.

[21] Βεβαιωτάτη μὲν οὖν καὶ μονιμωτάτη καὶ καλλίστη ἢ ἐν τοῖς σπουδαίοις φιλία, ἢ κατ' ἀρετὴν καὶ τάγαθὸν οὔσα, εἰκότως. ἢ μὲν γὰρ ἀρετὴ ἀμετάπτωτον, δι' ἣν ἡ φιλία, ὥστε εἰκὸς τὴν φιλίαν τὴν τοιαύτην ἀμετάπτωτον εἶναι, τὸ δὲ συμφέρον οὐδέποτε ταύτόν· διὸ ἢ διὰ τὸ συμφέρον φιλία οὐ [22] βεβαία, ἀλλὰ τῷ συμφέροντι συμμεταπίπτει· ὁμοίως καὶ ἢ κατὰ τὴν ἡδονήν.

Ἡ μὲν οὖν τῶν βελτίστων φιλία ἢ κατ' ἀρετὴν γινομένη ἐστίν, ἢ δὲ τῶν πολλῶν ἢ κατὰ τὸ συμφέρον, ἢ δὲ κατὰ τὴν ἡδονήν ἐν τοῖς φορτικοῖς καὶ τυχοῦσιν.

[23] Συμβαίνει δὲ καὶ ἀγανακτεῖν, ὅταν φαύλοις ἐντύχωσιν τοῖς φίλοις, καὶ θαυμάζειν· ἔστι δὲ οὐδὲν ἄτοπον. ὅταν γὰρ ἡ φιλία λάβῃ τὴν ἡδονὴν ἀρχήν, δι' ἣν φίλοι εἰσὶν, ἢ τὸ συμφέρον, ἅμα ταῦτ' [24] ἀπολείπει καὶ ἡ φιλία οὐ διαμένει. πολλάκις δὲ μένει μὲν ἡ φιλία, κακῶς δ' ἐχρήσατο τῷ φίλῳ, διὸ ἀγανακτοῦσιν· ἔστι δὲ οὐδὲ τοῦτο ἄλογον. οὐ γὰρ δι' ἀρετὴν ἢ φιλία σοι πρὸς τοῦτον ὑπῆρχεν, διὸ οὐδ' ἄτοπον μηδὲν ποιεῖν αὐτὸν τῶν κατ' ἀρετὴν. ἀγανακτοῦσιν οὖν οὐκ ὀρθῶς. δι' ἡδονὴν γὰρ ποιησάμενοι τὴν φιλίαν, τὴν δι' ἀρετὴν οἶονται δεῖν αὐτοῖς ὑπάρχειν· τὸ δ' οὐ δυνατόν· οὐ γὰρ ἐστὶν ἢ δι' ἡδονὴν καὶ τὸ συμφέρον ἀρετῆς ἐχομένη.

[25] κοινωσάμενοι οὖν ἡδονῇ ἀρετὴν ζητοῦσιν, οὐκ ὀρθῶς· οὐ γὰρ ἀκολουθεῖ τῇ ἡδονῇ καὶ τῷ συμφέροντι ἢ ἀρετῇ, ἀλλὰ τῇ ἀρετῇ ἀμφοτέρω ταῦτα ἀκολουθεῖ. ἄτοπον γὰρ εἰ μή τις οἰήσεται τοὺς σπουδαίους αὐτοὺς αὐτοῖς ἡδίστους εἶναι· καὶ γὰρ οἱ φαῦλοι, ὥς φησιν Εὐριπίδης, αὐτοὶ ἑαυτοῖς ἡδεῖς εἰσὶν· “κακὸς κακῷ” γὰρ “συντέττηκεν.” οὐ γὰρ ἀκολουθεῖ τῇ ἡδονῇ ἢ ἀρετῇ, ἀλλὰ τῇ ἀρετῇ ἢ ἡδονῇ ἀκολουθεῖ.

[26] Πότερον δὲ καὶ δεῖ ἐν τῇ τῶν σπουδαίων φιλίᾳ τὴν ἡδονὴν εἶναι, ἢ οὐ δεῖ; ἄτοπον γὰρ τὸ μὴ φάναι δεῖν. εἰ γὰρ ἀφελεῖς αὐτῶν τὸ ἡδεῖς εἶναι ἀλλήλοις, ἄλλους ποριοῦνται φίλους εἰς τὸ συζῆν, τοὺς ἡδεῖς· εἰς γὰρ τὸ συζῆν οὐδὲν μεῖζόν ἐστι τοῦ [27] ἡδεῖς εἶναι· ἄτοπον οὖν τὸ μὴ οἶσθαι δεῖν τοὺς σπουδαίους μάλιστα ἀλλήλοις συζῆν· τοῦτο δ' οὐκ ἔστιν ἄνευ τοῦ ἡδέος· δέοι ἂν ἄρα, ὡς ἔοικεν, μάλιστα τούτοις ὑπάρχειν τὸ ἡδέσιν εἶναι.

[28] Ἐπεὶ δὲ διήρηνται αἱ φιλῖαι εἰς τρία εἶδη, καὶ ἐν ταύταις ἡπορεῖτο, πότερον ἐν ἰσότητι ἢ φιλία ἐγγίνεται ἢ ἐν ἀνισότητι· ἔστιν οὖν κατ' ἀμφοτέρω. ἢ μὲν γὰρ καθ' ὁμοιότητα ἢ τῶν σπουδαίων καὶ ἡ τελεία φιλία· ἢ δὲ κατ' ἀνομοιότητα ἢ κατὰ τὸ συμφέρον. τῷ γὰρ εὐπόρῳ ὁ πένης διὰ τὴν ἔνδειαν ὧν ὁ πλούσιος εὐπορεῖ φίλος ἐστί, καὶ τῷ σπουδαίῳ ὁ φαῦλος διὰ ταῦτό· διὰ γὰρ τὴν ἔνδειαν τὴν τῆς ἀρετῆς, παρ' οὗ οἶται αὐτῷ ἔσεσθαι, διὰ τοῦτο [29] τούτῳ φίλος. γίνεται οὖν ἐν τοῖς ἀνομοίοις φιλία κατὰ τὸ συμφέρον· διὸ καὶ Εὐριπίδης

ἐρᾷ μὲν ὄμβρου γαῖ', ὅταν ξηρὸν πέδον·

ὡς ἐναντίοις οὖσιν τούτοις ἐγγίνεται φιλία ἢ διὰ τὸ συμφέρον. καὶ γὰρ εἰ θέλεις τὰ ἐναντιώτατα ποιῆσαι πῦρ καὶ ὕδωρ, ταῦτα ἀλλήλοις χρήσιμα [30] εἰσίν. τὸ γὰρ πῦρ φασίν, ἐὰν μὴ ἔχη ὑγρόν, φθείρεσθαι, ὡς τοῦτ' αὐτῷ παρασκευάζον ὥσπερ τροφήν τινά, ταύτην δὲ τοσαύτην, ὅσης κρατήσκειν <ἂν>· ἂν μὲν γὰρ πλεῖον ποιήσης τὸ ὑγρόν, ἐπικρατήσαν <ποιήσῃ> φθείρεσθαι τὸ πῦρ, ἐὰν δὲ σύμμετρον, συνοίσει. δῆλον οὖν ὅτι καὶ ἐν τοῖς ἐναντιωτάτοις φιλία ἐγγίνεται διὰ τὸ συμφέρον.

[31] Ἀνάγονται δὲ πᾶσαι αἱ φιλῖαι, καὶ αἱ ἐν ἰσότητι καὶ αἱ ἐν ἀνισότητι, εἰς τὰς διηρημένας τρεῖς.

Ἔστιν δ' ἐν ἀπάσαις ταῖς φιλίαις διαφορὰ γινομένη πρὸς ἀλλήλους, ὅταν μὴ ὁμοίως φιλωσιν ἢ εὖ ποιῶσιν ἢ ὑπηρετῶσιν ἢ ὅ τι ἂν τῶν τοιούτων· ὅταν μὲν γὰρ ὁ μὲν ἐκτενῶς ποιῇ ὁ δ' ἐλλείπῃ, κατὰ τὴν [32] ἔλλειψιν τὸ ἔγκλημα καὶ ἡ μέμψις. οὐ μὴν ἀλλ' ἐπὶ μὲν τῶν τοιούτων ὧν τὸ αὐτό ἐστι τέλος τῆς φιλίας, οἷον εἰ ἀμφοτέροι κατὰ τὸ συμφέρον ἀλλήλοις φίλοι ἢ κατὰ τὸ ἡδὺ ἢ κατ' ἀρετήν, εὐδηλος ἢ ἔλλειψις ἢ παρὰ τοῦ ἑτέρου, ἐὰν οὖν πλείω ἀγαθὰ σύ μοι ποιῆς ἢ ἐγὼ σοί, οὐδ' ἀμφισβητῶ ἔτι μὴ οὐ [33] δεῖν σε μᾶλλον ὑπ' ἐμοῦ φιλεῖσθαι· ἐν ἣ δὲ φιλίᾳ μὴ διὰ ταῦτό φίλοι ἐσμέν, μᾶλλον αἱ διαφοραί. ἀδηλος γὰρ ἡ ἔλλειψις παρ' ἑκατέρου. οἷον εἰ ὁ μὲν δι' ἡδονὴν φίλος ἐστὶν ὁ δὲ διὰ τὸ συμφέρον, ἐνταῦθα ἡ ἀμφισβήτησις· οὔτε γὰρ ὁ τῷ συμφέροντι

ὑπερέχων ἀξίαν οἶται τὴν ἡδονὴν ἀντικαταλλάττεσθαι τοῦ συμφέροντος, οὔτε ὁ τῇ ἡδονῇ ὑπερέχων ἀξίαν τῆς ἡδονῆς ἐν τῷ συμφέροντι χάριν ἀπολαμβάνειν. διὸ μᾶλλον αἱ διαφοραὶ ἐν ταῖς τοιαύταις φιλίαις γίνονται.

[34] Οἱ δ' ἐν ἀνισότητι φίλοι ὄντες, οἱ μὲν ὑπερέχοντες πλούτῳ ἢ ἄλλῳ τινὶ τοιούτῳ οὐκ οἶονται δεῖν αὐτοὶ φιλεῖν, ἀλλ' ὑπὸ τῶν ἐνδεεστέρων οἶονται δεῖν αὐτοὶ φιλεῖσθαι· ἔστιν δὲ βέλτιον τὸ φιλεῖν ἢ τὸ φιλεῖσθαι.

[35] - τὸ μὲν γὰρ φιλεῖν ἐνέργειά τις ἡδονῆς καὶ ἀγαθόν, ἀπὸ δὲ τοῦ φιλεῖσθαι οὐδεμία τῷ φιλουμένῳ ἐνέργεια [36] γίνεται. - ἔτι δὲ βέλτιον τὸ γνωρίζειν ἢ τὸ γνωρίζεσθαι· τὸ μὲν γὰρ γνωρίζεσθαι καὶ τὸ φιλεῖσθαι καὶ τοῖς ἀψύχοις ὑπάρχει, τὸ δὲ γνωρίζειν [37] καὶ τὸ φιλεῖν τοῖς ἐμψύχοις. - ἔτι τὸ εὐποιοτικὸν εἶναι βέλτιον ἢ τὸ μή· ὁ μὲν οὖν φιλῶν εὐποιοτικός, [38] ἢ φιλεῖ, ὁ δὲ φιλούμενος, ἢ φιλεῖται, οὐ. - ἀλλ' οἱ ἄνθρωποι διὰ φιλοτιμίαν φιλεῖσθαι μᾶλλον βούλονται ἢ φιλεῖν, διὰ τὸ ἐν τῷ φιλεῖσθαι ὑπεροχὴν τινα εἶναι· ἀεὶ γὰρ ὁ φιλούμενος ὑπερέχει ἡδονῇ ἢ εὐπορίᾳ ἢ ἀρετῇ, ὁ δὲ φιλότιμος τῆς ὑπεροχῆς [39] ὀρέγεται. καὶ οὐκ οἶονται δεῖν αὐτοὶ φιλεῖν οἱ ἐν ὑπεροχῇ ὄντες· ἀντιδιδόναι γὰρ ἐν οἷς ὑπερέχουσιν τοῖς φιλοῦσιν αὐτούς. ἔτι δὲ καὶ ἥττους αὐτῶν εἰσὶν· διὸ οὐκ οἶονται δεῖν φιλεῖν ἀλλὰ φιλεῖσθαι. ὁ δ' ἐνδεὴς χρημάτων ἢ ἡδονῶν ἢ ἀρετῆς θαυμάζε τὸν ὑπερέχοντα τούτοις, καὶ φιλεῖ διὰ τὸ τούτων ἢ τυγχάνειν ἢ οἶεσθαι τεύξεσθαι.

[40] Εἰσὶν δὲ καὶ τοιαῦται φιλίας ἐξ ὁμοιοπαθείας, ἐκ τοῦ τἀγαθὸν βούλεσθαι τινὶ εἶναι. οὐκ ἔστιν δὲ ἡ ἐπὶ τούτων γινομένη φιλία πάντα ταῦτα ἔχουσα· πολλάκις γὰρ ἄλλῳ μὲν εἶναι βουλόμεθα τἀγαθὰ, [41] συζῆν μέντοι μετ' ἄλλου. ἀλλὰ ταῦτα πότερον φιλίας δεῖ εἶπεῖν, ἢ τῆς τελείας φιλίας τῆς κατ' ἀρετὴν πάθη; ἐν ἐκείνῃ γὰρ τῇ φιλίᾳ πάντα ταῦτα ἐνυπάρχει· καὶ γὰρ συζῆν μετ' οὐδενὸς ἄλλου ἂν θέλοιμεν (καὶ γὰρ τὸ ἡδὺ καὶ τὸ συμφέρον, καὶ ἡ ἀρετὴ τῷ σπουδαίῳ ὑπάρχει) καὶ τἀγαθὰ τούτῳ μάλιστα βουλοίμεθ' ἂν, καὶ τὸ ζῆν καὶ τὸ εὖ ζῆν οὐκ ἄλλῳ τινὶ ἢ τούτῳ.

[42] Πότερον δ' ἐστὶν αὐτῷ [φιλία] καὶ πρὸς αὐτὸν φιλία, ἢ οὐ, νῦν μὲν ἀφείσθω, ὕστερον δ' ἐροῦμεν. πάντα δὲ βουλόμεθα ἡμῖν αὐτοῖς· καὶ γὰρ συζῆν μεθ' ἡμῶν αὐτῶν βουλόμεθα (ἴσως δὲ τοῦτο καὶ ἀναγκαῖον) καὶ τὸ εὖ ζῆν καὶ τὸ ζῆν καὶ τὸ βούλεσθαι [43] τἀγαθόν, οὐκ ἄλλῳ τινί. ἔτι ὁμοιοπαθεῖς ἡμῖν αὐτοῖς μάλιστα ἐσμέν· ἂν γὰρ προσπταίσωμεν ἢ ἄλλῳ τινὶ περιπέσωμεν τῶν τοιούτων, εὐθὺς λυπούμεθα. διὸ δόξειεν ἂν οὕτως εἶναι αὐτῷ πρὸς αὐτὸν φιλία.



[44] Τὰ δὲ τοιαῦτα, οἷον τὴν ὁμοιοπάθειαν καὶ τὸ εὖ ζῆν καὶ τὰ ἄλλα, ἥτοι εἰς τὴν πρὸς ἡμᾶς αὐτοὺς φιλίαν ἀναφέροντες λέγομεν ἢ εἰς τὴν τελείαν· ἐν ἀμφοτέραις γὰρ πάντα ταῦτα ὑπάρχει· καὶ γὰρ [καὶ] τὸ συζῆν καὶ τὸ εἶναι βούλεσθαι καὶ τὸ εὖ εἶναι καὶ τὰλλα πάντα ἐν ταύταις ἐστίν.

[45] Ἐπεὶ δὲ ἴσως ἂν δόξειεν, ἐν οἷς ἐστὶ δίκαιον, ἐν τούτοις καὶ φιλίαν εἶναι· διὸ καὶ ὅσα περ δικαίων εἶδη, τοσαῦτα καὶ φιλιῶν. τὸ δὲ δίκαιόν ἐστιν καὶ ξένῳ πρὸς πολίτην καὶ δούλῳ πρὸς δεσπότην καὶ πολίτῃ πρὸς πολίτην καὶ υἱῷ πρὸς πατέρα καὶ γυναικὶ πρὸς ἄνδρα, καὶ ὅσαι ἀπλῶς ἄλλαι κοινωνίαι [46] καὶ φιλίας ἐνείσιν ἐν ἑκάστοις τούτων. βεβαιωτάτη δ' ἂν δόξειεν εἶναι τῶν φιλιῶν ἡ ξενική· οὐ γὰρ ἐστὶν οὐδὲν αὐτοῖς τέλος κοινὸν ὑπὲρ οὗ ἀμφισβητοῦσιν, οἷον ἐν τοῖς πολίταις· διαμφισβητοῦντες γὰρ πρὸς ἀλλήλους κατὰ τὴν ὑπεροχὴν οὐ μένουσιν φίλοι ὄντες.

[47] Ἐχόμενον δ' ἂν εἴη νῦν τοῦτ' εἰπεῖν, πότερόν ἐστι πρὸς αὐτὸν φιλία, ἢ οὐ. ἐπεὶ δ' οὖν ὁρῶμεν, ὥσπερ καὶ μικρὸν ἐπάνω ἐλέγομεν, ὅτι ἐκ μὲν τῶν καθ' ἕκαστα τὸ φιλεῖν γνωρίζεται τὰ δὲ καθ' ἕκαστα αὐτοὶ αὐτοῖς ἂν μάλιστα βουλοίμεθα (καὶ γὰρ τὰγαθὰ καὶ τὸ εἶναι καὶ τὸ εὖ εἶναι· ὁμοιοπαθέστατοι δ' αὐτοῖς ἡμῖν ἐσμέν· καὶ συζῆν δὲ μεθ' ἑαυτῶν μάλιστα βουλόμεθα)· ὥστ' εἰ μὲν ἐκ τῶν καθ' ἕκαστα γνωρίζεται ἡ φιλία, τὰ δὲ καθ' ἕκαστα ἡμῖν αὐτοῖς ἂν βουλοίμεθα ὑπάρχειν, δῆλόν ἐστιν ὥς ἔστι πρὸς αὐτοὺς φιλία, ὥσπερ καὶ τὴν ἀδικίαν [48] ἔφαμεν πρὸς αὐτὸν εἶναι. ἐπειδὴ γὰρ ἕτερος μὲν ὁ ἀδικῶν ἕτερος δὲ ὁ ἀδικούμενος, ὁ αὐτὸς δ' εἷς ἐστὶν ἕκαστος, διὰ τὸ τοιοῦτον οὐκ ἐδόκει εἶναι πρὸς αὐτὸν ἀδικία· ἔστι μέντοι, ὥς ἔφαμεν σκοποῦντες ἐπὶ τῶν τῆς ψυχῆς μερῶν, ἐπειδὴ ἐστὶ πλείω, ὅταν ταῦτα μὴ ὁμονοῶσιν, τότε εἶναι πρὸς [49] αὐτὸν τὴν ἀδικίαν. ὁμοίως οὖν τούτῳ καὶ ἡ φιλία δόξειεν ἂν εἶναι πρὸς αὐτόν. ἐπειδὴ γὰρ ὁ φίλος ἐστίν, ὥς φαμέν, ὅταν βουλώμεθα σφόδρα φίλον εἰπεῖν, μία φαμέν ψυχὴ ἢ ἐμὴ καὶ ἡ τούτου· ἐπεὶ οὖν ἐστὶ τῆς ψυχῆς πλείω μέρη, τότε ἔσται μία ψυχὴ, ὅταν συμφωνῶσι πρὸς ἀλλήλα ὅ τε λόγος καὶ τὰ πάθη (οὕτω γὰρ μία ἔσται)· ὥστε μιᾶς γενομένης ἔσται πρὸς αὐτὸν φιλία.

[50] Αὕτη δ' ἔσται ἡ πρὸς αὐτὸν φιλία ἐν τῷ σπουδαίῳ· τούτῳ γὰρ μόνῳ τὰ τῆς ψυχῆς εὖ ἔχουσιν μέρη πρὸς ἀλλήλα τῷ μὴ διαφέρεισθαι, ἐπεὶ ὁ γε φαῦλος οὐδέποτε ἔστιν αὐτὸς αὐτῷ φίλος, μάχεται γὰρ ἀεὶ ἑαυτῷ. ὁ γοῦν ἀκρατής, ὅταν πράξῃ τι τῶν καθ' ἡδονήν, μετ' οὐ πολὺ μεταμελεῖται καὶ κακίζει αὐτὸς αὐτόν· ὁμοίως ἐπὶ τῶν ἄλλων κακιῶν ὁ φαῦλος ἔχει. διατελεῖ γὰρ αὐτὸς αὐτῷ μαχόμενος καὶ ἐναντιούμενος.

[51] Ἔστιν δὲ φιλία καὶ ἐν ἰσότητι, οἷον ἢ μὲν τῶν ἐταίρων ἐν ἰσότητι ἀριθμῶ καὶ δυνάμει ἀγαθοῦ (οὐδέτερος γὰρ αὐτῶν ἐστὶν ἄξιος θατέρου πλεον ἔχειν οὔτε κατ' ἀριθμὸν ἀγαθῶν οὔτε κατὰ δύναμιν οὔτε κατὰ μέγεθος, ἀλλὰ τὸ ἴσον· ἴσοι γάρ τινες [52] ἐθέλουσιν εἶναι οἱ ἐταῖροι)· ἐν ἀνισότητι δὲ ἢ πατρὸς πρὸς υἱόν, καὶ ἀρχομένου καὶ ἀρχοντος, καὶ κρείττονος καὶ χείρονος, καὶ γυναικὸς καὶ ἀνδρός, καὶ ἀπλῶς ἐν οἷς ἐστὶν ὁ τὴν τοῦ χείρονος καὶ [53] κρείττονος τάξιν ἔχων ἐν τῇ φιλίᾳ. αὕτη γὰρ ἐστὶν ἢ ἐν ἀνισότητι φιλία κατὰ λόγον. οὐδέποτε γὰρ ἐπ' ἀγαθοῦ δόσει οὐδεὶς ἴσον ἂν δοίῃ τῷ βελτίονι καὶ τῷ χείρονι, ἀλλὰ μεῖζον τῷ καθ' ὑπεροχὴν ὄντι αἰεί. τοῦτο δ' ἴσον ἐστὶν τῷ λόγῳ· ἴσον γὰρ πῶς ἐστὶν ὁ τὸ ἔλαττον ἔχων ἀγαθὸν χείρων ὢν τῷ μεῖζον ἔχοντι κρείττονι ὄντι.

[12]

[1] Τῶν δὲ φιλιῶν ἀπασῶν τῶν εἰρημένων τούτων μάλιστα πῶς ἐγγίνεται τὸ φιλεῖν ἐν τῇ συγγενικῇ, καὶ ταῦτα ἐν τῇ πατρὶ πρὸς υἱόν. καὶ διὰ τί ποτε ὁ πατήρ τὸν υἱὸν μᾶλλον φιλεῖ ἢ ὁ υἱὸς τὸν πατέρα; πότερον οὖν, ὡς ἔνιοι λέγοντες ὀρθῶς πρὸς γε τοὺς πολλούς, ὅτι ὁ μὲν πατήρ εὐεργέτηκέν πῶς τὸν υἱόν, ὁ δ' υἱὸς χάριν ὀφείλει τῆς εὐεργεσίας; [2] αὕτη μὲν οὖν ἡ αἰτία [καὶ] ἐν τῇ κατὰ τὸ συμφέρον φιλίᾳ δόξειεν ἂν ὑπάρχειν· ὥσπερ δὲ καὶ κατὰ τὰς ἐπιστήμας ὁρῶμεν ἔχον, οὕτω πῶς ἔχει [3] καὶ ἐνταῦθα. λέγω δ' οἷον [ἐστὶν] ἔστι μὲν ὢν τὸ αὐτὸ τέλος τε καὶ ἐνέργεια, καὶ οὐκ ἄλλο τι παρὰ τὴν ἐνέργειαν τέλος, οἷον τῷ αὐλητῇ ἢ αὐτῇ ἐνέργεια καὶ τέλος (τὸ γὰρ αὐλεῖν καὶ τέλος αὐτῷ ἐστὶ καὶ ἐνέργεια), ἀλλ' οὐ τῇ οἰκοδομικῇ (καὶ γὰρ [4] ἕτερον τέλος παρὰ τὴν ἐνέργειαν)· ἔστιν οὖν ἡ φιλία ἐνέργειά τις, οὐδὲν δὲ ἐστὶν ἄλλο τέλος παρὰ τὴν ἐνέργειαν τοῦ φιλεῖν, ἀλλὰ τοῦτο αὐτό. ὁ μὲν οὖν πατήρ ἐνεργεῖ πῶς αἰεί μᾶλλον παρὰ τὸ αὐτοῦ τι εἶναι ποίημα τὸν υἱόν. τοῦτο δ' ὁρῶμεν καὶ ἐπὶ τῶν ἄλλων ὄν· πάντες γὰρ πρὸς ὃ ἂν αὐτοὶ ποιήσωσιν, [5] πρὸς τοῦτό πῶς καὶ εὖνοι εἰσίν. ὁ οὖν πατήρ εὖνοεῖ πῶς πρὸς τὸν υἱὸν αὐτοῦ ὄντα ποίημα, τῇ μνήμῃ καὶ τῇ ἐλπίδι ἀγόμενος· διὸ μᾶλλον φιλεῖ ὁ πατήρ τὸν υἱὸν ἢ ὁ υἱὸς τὸν πατέρα.

[6] Δεῖ δὲ καὶ ὑπὲρ τῶν ἄλλων φιλιῶν τῶν λεγομένων καὶ δοκουσῶν ἐπισκέψασθαι εἰ εἰσὶν φιλίαι.

[7] οἷον ἢ εὖνοια φιλία δοκεῖ. ἀπλῶς μὲν οὖν οὐκ ἂν δόξειεν εἶναι ἡ εὖνοια φιλία (πολλοῖς γὰρ πολλάκις ἢ ἀπὸ τοῦ ἰδεῖν ἢ ἀπὸ τοῦ ἀκοῦσαί τι ὑπὲρ τινος ἀγαθὸν εὖνοι γινόμεθα· ἄρ' οὖν ἤδη καὶ φίλοι; ἢ οὐ; οὐ γὰρ εἴ τις ἦν Δαρείῳ εὖνους ἐν Πέρσῃς ὄντι, ὥσπερ ἴσως ἦν, εὐθέως καὶ φιλία ἦν αὐτῷ

[8] πρὸς Δαρεῖον)· ἀλλ' ἀρχὴ μὲν ἂν ποτε φιλίας ἢ εὖνοια δόξειεν εἶναι, γένοιτο δ' ἂν ἢ εὖνοια φιλία, εἰ προσλάβοι βούλησιν τοῦ τάγαθὰ δυνατοῦς ὦν πρᾶξαι πράττειν ἐκείνου ἔνεκεν ὧς ἐστὶν εὖνους. - [9] ἔστιν δ' ἢ εὖνοια τοῦ ἡθους καὶ πρὸς τὸ ἡθος· οὐδεὶς γὰρ λέγεται εὖνους οἴνω ἢ ἄλλῳ τινὶ τῶν ἀψύχων ἀγαθῶν ἢ ἡδέων, ἀλλ' ἂν τις ἢ τὸ ἡθος [10] σπουδαῖος, πρὸς τοῦτον ἢ εὖνοια. - οὐκ ἔστιν δὲ χωρὶς τῆς φιλίας ἢ εὖνοια, ἀλλ' ἐν τῷ αὐτῷ· διὸ δοκεῖ φιλία εἶναι.

[11] Ἡ δ' ὁμόνοιά ἐστιν μὲν σύνεγγυς τῇ φιλίᾳ, ἐὰν τὴν ὁμόνοιαν λάβῃς τὴν κυρίως λεγομένην. εἰ γὰρ τις Ἐμπεδοκλεῖ ὁμοίως ὑπολαμβάνει καὶ δοκεῖ αὐτῷ τὰ στοιχεῖα εἶναι ἃ κἀκείνῳ, ἄρα γε οὗτος Ἐμπεδοκλεῖ ὁμονοεῖ; ἢ οὐ; ἐπεὶ περὶ τι ἄλλο [12] τοιοῦτον. πρῶτον μὲν γὰρ οὐκ ἔστιν ἢ ὁμόνοια ἐν τοῖς νοητοῖς ἀλλ' ἐν τοῖς πρακτοῖς, καὶ ἐν τούτοις οὐχ ἢ νοοῦσι ταύτῳ, ἀλλ' ἢ ἅμα τῷ ταύτῳ νοεῖν προαίρεσιν ἔχουσιν περὶ ἃ νοοῦσιν ἐπὶ ταύτῃ. εἰ γὰρ ἐννοοῦσιν ἀμφοτέρω ἀρχεῖν, ἀλλ' ὁ μὲν αὐτὸν ὁ δ' αὐτόν, ἄρα γε ἤδη ὁμονοοῦσιν; ἢ οὐ; ἀλλ' εἰ κἀγὼ ἐμαυτὸν βούλομαι ἀρχεῖν κἀκεῖνος ἐμέ, [13] οὕτως ἤδη ὁμονοοῦμεν. ἔστι δὲ ὁμονοεῖν ἐν τοῖς πρακτοῖς μετὰ βουλήσεως ταύτου. περὶ ἀρχοντος ἄρα κατάστασιν ἐν πρακτοῖς τοῦ αὐτοῦ ἐστὶν ἢ ὁμόνοια ἢ κυρίως λεγομένη.

[13]

[1] Ἐπεὶ δ' ἐστίν, ὡς φαμέν, αὐτῷ πρὸς αὐτὸν φιλία, πότερον ὁ σπουδαῖος ἔσται φίλαυτος ἢ οὐ; ἔστιν δὲ φίλαυτος ὁ αὐτοῦ ἔνεκεν πάντα πράττων ἐν τοῖς κατὰ τὸ λυσιτελές. ὁ μὲν οὖν φαῦλος φίλαυτος ἐστίν (αὐτὸς αὐτοῦ γὰρ ἔνεκεν πάντα πράττει)· ἀλλ' οὐχ ὁ σπουδαῖος. διὰ τοῦτο γὰρ ἐστὶ σπουδαῖος, ὅτι ἄλλου ἔνεκεν τοῦτο πράττει· [2] διὸ οὐκ ἔστιν φίλαυτος. ἀλλ' ὁρμῶσι μὲν ἅπαντες ἐπὶ τάγαθᾶ, καὶ οἴονται αὐτοῖς δεῖν μάλιστα ὑπάρχειν. τοῦτο δὲ ἐστὶ μάλιστα φανερόν ἐπὶ πλούτου καὶ ἀρχῆς. ὁ μὲν οὖν σπουδαῖος ἐκστήσεται τούτων ἄλλῳ, οὐχ ὡς οὐ προσῆκον αὐτῷ μάλιστα, ἀλλ' ἂν ὁρᾷ ἄλλον δυνησόμενον μᾶλλον τούτοις αὐτοῦ χρῆσθαι· οἱ δ' ἄλλοι τοῦτο οὐ ποιήσουσι δι' ἄγνοιαν (οὐ γὰρ οἴονται κακῶς ἂν χρήσασθαι τοῖς τοιούτοις [3] ἀγαθοῖς) ἢ διὰ φιλοτιμίαν τοῦ ἀρχεῖν. ὁ δὲ σπουδαῖος οὐδέτερον τούτων πείσεται· διὸ οὐδὲ φίλαυτος κατὰ γε τὰ τοιαῦτα ἀγαθὰ. ἀλλ' εἰ ἄρα, κατὰ τὸ καλόν. τούτου γὰρ μόνον ἄλλῳ οὐκ ἂν ἐκσταίῃ, τὰ [4] δὲ συμφέροντα καὶ ἡδέα ἐκστήσεται. τὴν μὲν οὖν κατὰ τὸ καλὸν αἴρεσιν φίλαυτος ἔσται· τὴν δὲ κατὰ τὸ συμφέρον καὶ καθ' ἡδονὴν λεγομένην οὐκ ἔσται ὁ σπουδαῖος, ἀλλὰ ὁ φαῦλος.

[14]

[1] Πότερον δέ ποτε ὁ σπουδαῖος φιλήσει αὐτὸς ἑαυτὸν μάλιστα ἢ οὐ; ἔστι μὲν οὖν αὐτὸς αὐτὸν μάλιστα ὡς φιλήσει, ἔστι δ' ὡς οὐ. Ἐπειδὴ γάρ φαμεν τὸν σπουδαῖον ἐκστήσεσθαι τῶν ἀγαθῶν τῶν κατὰ τὸ συμφέρον τῷ φίλῳ, τὸν φίλον μᾶλλον [2] αὐτοῦ φιλήσει. ναί, ἀλλ' ἢ τούτων ἐξιστάμενος τῷ φίλῳ αὐτῷ τὸ καλὸν περιποιεῖται, ταύτῃ ἐξίσταται τῶν τοιούτων. ἔστι μὲν οὖν ὡς τὸν φίλον αὐτὸς αὐτοῦ μᾶλλον φιλεῖ, ἔστι δὲ ὡς αὐτὸς αὐτὸν μάλιστα· κατὰ μὲν γὰρ τὸ συμφέρον τὸν φίλον, κατὰ δὲ τὸ καλὸν καὶ ἀγαθὸν αὐτὸς αὐτὸν μάλιστα· αὐτῷ [3] γὰρ ταῦτα περιποιεῖται κάλλιστα ὄντα. ἔστι μὲν οὖν καὶ φιλάγαθος, οὐ φίλαυτος· μόνον γάρ, εἴπερ φιλεῖ αὐτὸς ἑαυτόν, ὅτι ἀγαθός. ὁ δὲ φαῦλος φίλαυτος· οὐδὲν γὰρ ἔχει δι' ὃ φιλήσει αὐτὸς ἑαυτὸν οἷον καλόν τι, ἀλλ' ἄνευ τούτων αὐτὸς ἑαυτὸν φιλήσει, ἢ αὐτός. διὸ καὶ οὗτος ἂν κυρίως λέγοιτο φίλαυτος.

[15]

[1] Ἐχόμενον δ' ἂν εἴη ὑπὲρ αὐταρκειᾶς εἰπεῖν καὶ τοῦ αὐτάρκους, πότερον ὁ αὐτάρκης προσδεήσεται φιλίας, ἢ οὐ, ἀλλ' αὐτὸς ἑαυτῷ αὐτάρκης ἔσται καὶ κατὰ τοῦτο. λέγουσι γὰρ τοιαῦτα καὶ οἱ ποιηταί·

ὅταν δ' ὁ δαίμων εὖ διδῷ, τί δεῖ φίλων;

ὅθεν καὶ ἡ ἀπορία γίγνεται, πότερον ὁ πάντα τὰγαθὰ ἔχων καὶ ὢν αὐτάρκης προσδεήσεται φίλου; ἢ τότε καὶ μάλιστα; τίνα γὰρ εὖ ποιήσει, ἢ μετὰ [2] τοῦ συμβιώσεται; οὐ γὰρ δὴ μόνος γε διάξει. εἰ τοίνυν τούτων δεήσεται, ταῦτα δὲ μὴ ἐνδέχεται ἄνευ φιλίας, προσδέοιτ' ἂν ὁ αὐτάρκης φιλίας.

[3] Ἡ μὲν οὖν ἐν τοῖς λόγοις εἰωθυῖα ὁμοιότης λαμβάνεσθαι ἐκ τοῦ θεοῦ οὔτ' ἐκεῖ ὀρθῶς οὔτ' ἂν ἐνταῦθα εἴη χρήσιμος· οὐ γὰρ εἰ ὁ θεός ἐστιν αὐτάρκης καὶ μηδενὸς δεῖται, διὰ τοῦτ' οὐδ' ἡμεῖς [4] οὐδενὸς δεησόμεθα. ἔστι γὰρ καὶ τοιοῦτός τις λόγος ἐπὶ τοῦ θεοῦ λεγόμενος. ἐπεὶ γάρ, φησί, πάντα ἔχει τὰγαθὰ ὁ θεὸς καὶ ἐστιν αὐτάρκης, τί ποιήσει; οὐ γὰρ καθευδήσει. θεάσεται δὴ τι, φησίν· τοῦτο γὰρ κάλλιστον καὶ οἰκειότατον. τί οὖν θεάσεται; εἰ μὲν γὰρ ἄλλο τι θεάσεται, βέλτιον θεάσεται τι αὐτοῦ. ἀλλὰ τοῦτ' ἄτοπον, τὸ τοῦ θεοῦ ἄλλο τι εἶναι βέλτιον. αὐτὸς ἑαυτὸν ἄρα θεάσεται. ἀλλ' ἄτοπον· καὶ γὰρ ὁ ἄνθρωπος [ὅς] ἂν αὐτὸς ἑαυτὸν κατασκοπῇται, ὡς ἀναισθήτῳ ἐπιτιμῶμεν. ἄτοπος οὖν, φησίν, ὁ θεὸς ἔσται αὐτὸς ἑαυτὸν θεώμενος.

[5] Τί μὲν οὖν ὁ θεὸς θεάσεται, ἀφείσθω· ὑπὲρ δὲ τῆς αὐταρκειᾶς οὐ τῆς τοῦ θεοῦ τὴν σκέψιν ποιούμεθα, ἀλλ' ἀνθρωπίνης, πότερον ὁ αὐτάρκης δεήσεται

φιλίας ἢ οὐ; εἰ δὴ τις ἐπὶ τὸν φίλον ἐπιβλέψας ἴδοι τί ἐστὶ καὶ ὁποῖός τις ὁ φίλος, τοιοῦτος οἷος ἕτερος εἶναι ἐγώ, ἅν γε καὶ σφόδρα φίλον ποιήσης, ὥσπερ τὸ λεγόμενον “ἄλλος οὗτος [6] Ἡρακλῆς, ἄλλος φίλος ἐγώ.” ἐπεὶ οὖν ἐστὶ καὶ χαλεπώτατον, ὥσπερ καὶ τῶν σοφῶν τινες εἰρήκασιν, τὸ γνῶναι αὐτόν, καὶ ἥδιστον (τὸ γὰρ αὐτὸν εἰδέναι ἡδύ), αὐτοὶ μὲν οὖν αὐτοὺς ἐξ αὐτῶν οὐ δυνάμεθα θεάσασθαι (ὅτι δ’ αὐτοὶ αὐτοὺς οὐ δυνάμεθα, δῆλον ἐξ ὧν ἄλλοις ἐπιτιμῶμεν, αὐτοὶ δὲ [7] λανθάνομεν ταῦτ’ ἀποιῶντες· τοῦτο δὲ γίνεται δι’ εὐνοίαν ἢ διὰ πάθος· πολλοῖς δὲ ἡμῶν ταῦτα ἐπισκοτεῖ πρὸς τὸ κρίνειν ὀρθῶς)· ὥσπερ οὖν ὅταν θέλωμεν αὐτοὶ αὐτῶν τὸ πρόσωπον ἰδεῖν, εἰς τὸ κάτοπτρον ἐμβλέψαντες εἶδομεν, ὁμοίως καὶ ὅταν αὐτοὶ αὐτοὺς βουλευθῶμεν γνῶναι, εἰς τὸν φίλον ἰδόντες γνωρίσαιμεν ἅν· ἔστι γάρ, ὡς φαμέν, ὁ [8] φίλος ἕτερος ἐγώ. εἰ οὖν ἡδὺ μὲν τὸ αὐτὸν εἰδέναι, τοῦτο δ’ οὐκ ἔστιν εἰδέναι ἄνευ ἄλλου φίλου, δέοιτ’ ἅν ὁ αὐτάρκης φιλίας πρὸς τὸ αὐτὸς αὐτὸν γνωρίζειν.

[9] Ἔτι δὲ καὶ εἴπερ ἐστὶν καλόν, ὥσπερ ἐστίν, τὸ εὖ ποιεῖν ἔχοντα τὰ παρὰ τῆς τύχης ἀγαθὰ, τίνα εὖ ποιήσει; μετὰ τίνος δὲ συμβιώσεται; οὐ γὰρ δὴ μόνος γε διάξει· τὸ γὰρ συμβιοῦν ἡδὺ καὶ ἀναγκαῖον. εἰ τοίνυν ταῦτα καλὰ καὶ ἡδέα καὶ ἀναγκαῖα, ταῦτα δὲ μὴ ἐνδέχεται εἶναι ἄνευ φιλίας, προσδέοιτ’ ἅν ὁ αὐτάρκης φιλίας.

[16]

[1] Πότερον δὲ πολλοὺς κτητέον φίλους ἢ ὀλίγους; οὔτε δὴ πολλούς, ὡς ἀπλῶς εἶπεῖν, οὔτ’ ὀλίγους δεῖ [ἀεὶ]. πολλῶν μὲν γὰρ ὄντων ἔργον ἐφ’ ἕκαστον μερίσαι τὸ φιλεῖν. ἐφ’ ἀπάντων γὰρ καὶ τῶν ἄλλων ἐξαδυνατεῖ ἡμῶν ἡ φύσις ἀσθενῆς οὕσα πρὸς τὸ ἐπὶ πολὺ ἀφικνεῖσθαι. οὔτε γὰρ τῇ ὄψει ἐπὶ πολὺ ὀρῶμεν, ἀλλ’ ἐὰν πλεον ἀποστήσης τοῦ συμμέτρου, ἐλλείπει διὰ τὴν ἀσθένειαν τῆς φύσεως, οὔτ’ ἐπ’ ἀκοῆς, οὔτ’ ἐπὶ τῶν ἄλλων ὁμοίως ἀπάντων.

[2] ἐλλείπων οὖν τῷ φιλεῖν δι’ ἀδυναμίαν καὶ ἐγκλήματ’ ἅν τις ἔχοι δικαίως, καὶ οὐκ ἅν εἴη φίλος, μὴ φιλῶν γε ἀλλ’ ἢ τῷ γε λόγῳ· ἡ δὲ [3] φιλία οὐ τοῦτο βούλεται. ἔτι ἅν ὣσιν πολλοί, οὐκ ἔστιν παύσασθαι λυπούμενον· πολλῶν γὰρ ὄντων εἰκὸς ἀεὶ περὶ ἓνα γέ τίνα συμβαίνειν τι ἀτύχημα, ὧν γινομένων ἀναγκαῖον λυπεῖσθαι. οὔτ’ αὖ πάλιν ὀλίγους, ἓνα ἢ δύο, ἀλλὰ συμμέτρους τῷ καιρῷ καὶ τῇ αὐτοῦ ὁρμῇ πρὸς τὸ φιλεῖν.

[17]

[1] Μετὰ δὲ ταῦτα σκεπτέον ἂν εἴη πῶς δεῖ φίλῳ χρῆσθαι. ἔστι δ' οὐκ ἐν ἀπάσῃ φιλίᾳ ἡ σκέψις, ἀλλ' ἐν ἣ μάλιστ' ἐγκαλοῦσιν ἀλλήλοις οἱ φίλοι. οὐκ ἐγκαλοῦσι δὲ ἐν ταῖς ἄλλαις ὁμοίως, οἷον ἐν τῇ πατρὸς πρὸς υἱὸν οὐκ ἔστιν ἔγκλημα τοιοῦτον οἷον ἀξιοῦσιν ἐν ἐνίαις, ὥσπερ ἐγὼ σοί, οὕτως καὶ σὺ ἐμοί, εἰ δὲ μή, ἐνταῦθα τὸ σφοδρὸν [2] ἔγκλημα· ἐν δὲ ἀνίσοις φίλοις οὐκ ἔστι τὸ ἴσον, ἔστι δὲ ἡ πατρὸς πρὸς υἱὸν φιλία ἐν ἀνίσῳ, ὁμοίως ἡ γυναικὸς πρὸς ἄνδρα ἢ οἰκέτου πρὸς δεσπότην, καὶ ὅλως δὲ χείρονος καὶ βελτίονος. οὐχ ἔξουσιν δὴ τὰ τοιαῦτα ἐγκλήματα. ἀλλ' ἐν τοῖς ἴσοις φίλοις καὶ ἐν τῇ <τοι>αύτῃ φιλίᾳ τὸ τοιοῦτον ἔγκλημα. ὥστε σκεπτέον ἂν εἴη τὸ πῶς δεῖ χρῆσθαι φίλῳ ἐν τῇ ἐν ἴσοις φίλοις φιλίᾳ.\* \* .

## Ἠθικῶν Εὐδημιῶν (1214a) Eudemian Ethics



### CONTENTS

[Βιβλίο 1](#)

[Βιβλίο 2](#)

[Βιβλίο 3](#)

[Βιβλίο 7](#)

[Βιβλίο 8](#)

**Please note** : for βιβλία 4, 5 and 6, please refer to βιβλία 5, 6 and 7 of Ἠθικά Νικομάχεια.

### Βιβλίο 1

[1214a] Ὁ μὲν ἐν Δήλῳ παρὰ τῷ θεῷ τὴν αὐτοῦ γνώμην ἀποφηνάμενος συνέγραψεν ἐπὶ τὸ προπύλαιον τοῦ Λητώου, διελὼν οὐχ ὑπάρχοντα πάντα τῷ αὐτῷ, τό τε ἀγαθὸν καὶ τὸ καλὸν καὶ τὸ ἡδύ, ποιήσας

κάλλιστον τὸ δικαιότατον, λῶστον δ' ὑγιαίνειν·

πάντων ἥδιστον δ' οὐ τις ἐρᾷ τὸ τυχεῖν·

ἡμεῖς δ' αὐτῷ μὴ συγχωρῶμεν. ἡ γὰρ εὐδαιμονία κάλλιστον καὶ ἄριστον ἀπάντων οὕσα ἥδιστον ἐστίν.

πολλῶν δ' ὄντων θεωρημάτων ἃ περὶ ἕκαστον πρᾶγμα καὶ περὶ ἑκάστην φύσιν ἀπορίαν ἔχει καὶ δεῖται σκέψεως, τὰ μὲν αὐτῶν συντείνει πρὸς τὸ γινῶναι μόνον, τὰ δὲ καὶ περὶ τὰς κτήσεις καὶ περὶ τὰς πράξεις τοῦ πράγματος. ὅσα μὲν οὖν ἔχει φιλοσοφίαν μόνον θεωρητικὴν, λεκτέον κατὰ τὸν ἐπιβάλλοντα καιρὸν, ὃ τι περ οἴκεῖον ἦν τῇ μεθόδῳ· πρῶτον δὲ σκεπτέον ἐν τίνι τὸ εὖ ζῆν καὶ πῶς κτητόν, πότερον φύσει γίνονται πάντες εὐδαίμονες οἱ τυγχάνοντες ταύτης τῆς προσηγορίας, ὥσπερ μεγάλοι καὶ μικροὶ καὶ τὴν χροιάν διαφέροντες, ἢ διὰ μαθήσεως, ὡς οὔσης ἐπιστήμης τινὸς τῆς εὐδαιμονίας, ἢ διὰ τινος ἀσκήσεως (πολλὰ γὰρ οὔτε κατὰ φύσιν οὔτε μαθοῦσιν ἄλλ' ἐθισθεῖσιν ὑπάρχει τοῖς ἀνθρώποις, φαῦλα μὲν τοῖς φαύλως ἐθισθεῖσι, χρηστὰ δὲ τοῖς χρηστῶς), ἢ τούτων μὲν κατ' οὐδένα τῶν τρόπων, δυοῖν δὲ θάτερον, ἥτοι καθάπερ οἱ νυμφόληπτοι καὶ θεόληπτοι τῶν ἀνθρώπων, ἐπιπνοία δαιμονίου τινὸς ὥσπερ ἐνθουσιάζοντες, ἢ διὰ τὴν τύχην (πολλοὶ γὰρ ταῦτόν φασιν εἶναι τὴν εὐδαιμονίαν καὶ τὴν εὐτυχίαν).

ὅτι μὲν οὖν ἡ παρουσία διὰ τούτων ἀπάντων ἢ τινῶν ἢ τινὸς ὑπάρχει τοῖς ἀνθρώποις, οὐκ ἄδηλον (ἅπασαι γὰρ αἱ γενέσεις σχεδὸν πίπτουσιν εἰς ταύτας τὰς ἀρχάς· καὶ γὰρ <τὰς> ἀπὸ τῆς διανοίας ἀπάσας πρὸς τὰς ἀπὸ ἐπιστήμης ἂν τις συναγάγοι πράξεις)· τὸ δ' εὐδαιμονεῖν καὶ τὸ ζῆν μακαρίως καὶ καλῶς εἶη ἂν ἐν τρισὶ μάλιστα, τοῖς εἶναι δοκοῦσιν αἰρετωτάτοις. οἱ μὲν γὰρ τὴν φρόνησιν μέγιστον εἶναί φασιν ἀγαθόν, οἱ δὲ τὴν ἀρετήν, οἱ δὲ τὴν ἡδονήν. καὶ πρὸς τὴν εὐδαιμονίαν ἔνιοι περὶ τοῦ μεγέθους αὐτῶν [1214b] διαμφοισθητοῦσι, συμβάλλεσθαι φάσκοντες θάτερον θατέρου μᾶλλον εἰς αὐτήν, οἱ μὲν ὡς οὔσαν μεῖζον ἀγαθὸν τὴν φρόνησιν τῆς ἀρετῆς, οἱ δὲ ταύτης τὴν ἀρετήν, οἱ δ' ἀμφοτέρων τούτων τὴν ἡδονήν. καὶ τοῖς μὲν ἐκ πάντων δοκεῖ τούτων, τοῖς δ' ἐκ δυοῖν, τοῖς δ' ἐν ἐνί τινι τούτων εἶναι τὸ ζῆν εὐδαιμόνως.

περὶ δὲ τούτων ἐπιστήσαντας, ἅπαντα τὸν δυνάμενον ζῆν κατὰ τὴν αὐτοῦ προαίρεσιν θέσθαι τινὰ σκοπὸν τοῦ καλῶς ζῆν, ἥτοι τιμὴν ἢ δόξαν ἢ πλοῦτον ἢ παιδείαν, πρὸς ὃν ἀποβλέπων ποιήσεται πάσας τὰς πράξεις (ὡς τό γε μὴ συντετάχθαι τὸν βίον πρὸς τι τέλος ἀφροσύνης πολλῆς σημεῖον ἐστίν), μάλιστα δὲ δεῖ πρῶτον ἐν αὐτῷ διορίσασθαι μήτε προπετῶς μήτε ῥαθύμως, ἐν τίνι τῶν ἡμετέρων τὸ ζῆν εὖ, καὶ τίνων ἄνευ τοῖς ἀνθρώποις οὐκ ἐνδέχεται τοῦθ' ὑπάρχειν. οὐ γὰρ ταῦτόν, ὧν τ' ἄνευ οὐχ οἷόν τε ὑγιαίνειν, καὶ τὸ ὑγιαίνειν·

ὁμοίως δ' ἔχει τοῦτο καὶ ἐφ' ἐτέρων πολλῶν, ὥστ' οὐδὲ τὸ ζῆν καλῶς καὶ ὦν ἄνευ οὐ δυνατὸν ζῆν καλῶς (ἔστι δὲ τῶν τοιούτων τὰ μὲν οὐκ ἴδια τῆς ὑγιείας οὐδὲ τῆς ζωῆς ἀλλὰ κοινὰ πάντων ὡς εἶπεν, καὶ τῶν ἕξεων καὶ τῶν πράξεων, οἷον ἄνευ τοῦ ἀναπνεῖν ἢ ἐγρηγορέναι ἢ κινήσεως μετέχειν οὐθὲν ἂν ὑπάρξειεν ἡμῖν οὔτ' ἀγαθὸν οὔτε κακόν, τὰ δ' ἴδια μᾶλλον περὶ ἐκάστην φύσιν· ἃ δεῖ μὴ λανθάνειν· οὐ γὰρ ὁμοίως οἰκεῖον πρὸς εὐεξίαν τοῖς εἰρημένοις κρεωφαγία καὶ τῶν περιπάτων οἱ μετὰ δεῖπνον). ἔστι γὰρ ταῦτ' αἷτια τῆς ἀμφισβητήσεως περὶ τοῦ εὐδαιμονεῖν, τί ἐστι καὶ γίνεται διὰ τίνων· ὦν ἄνευ γὰρ οὐχ οἷόν τε εὐδαιμονεῖν, ἔνιοι μέρη τῆς εὐδαιμονίας εἶναι νομίζουσι.

πάσας μὲν οὖν τὰς δόξας ἐπισκοπεῖν, ὅσας ἔχουσί τινες περὶ αὐτῆς, περίεργον (πολλὰ γὰρ φαίνεται καὶ τοῖς παιδαρίοις καὶ τοῖς κάμνουσι καὶ παραφρονοῦσι, περὶ ὧν ἂν οὐθεὶς νοῦν ἔχων διαπορήσειεν· δέονται γὰρ οὐ λόγων, ἀλλ' οἱ μὲν ἡλικίας ἐν ἣ μεταβαλοῦσιν, οἱ δὲ κολάσεως ἱατρικῆς ἢ πολιτικῆς· κόλασις γὰρ ἢ φαρμακεία τῶν πληγῶν οὐκ ἐλάττων ἐστίν), ὁμοίως δὲ ταύταις οὐδὲ τὰς τῶν πολλῶν [1215a] «ἐπισκεπτέον» (εἰκῇ γὰρ λέγουσι σχεδὸν περὶ ἀπάντων, καὶ μάλιστα περὶ [ἐπισκεπτέον] «εὐδαιμονίας· ἄτοπον γὰρ προσφέρειν λόγον τοῖς λόγου μηθὲν δεομένοις, ἀλλὰ πάθους)· ἐπεὶ δ' εἰσὶν ἀπορίαι περὶ ἐκάστην πραγματείαν οἰκεῖαι, δῆλον ὅτι καὶ περὶ βίου τοῦ κρατίστου καὶ ζωῆς τῆς ἀρίστης εἰσίν. ταύτας οὖν καλῶς ἔχει τὰς δόξας ἐξετάζειν· οἱ γὰρ τῶν ἀμφισβητούμενων ἔλεγχοι τῶν ἐναντιουμένων αὐτοῖς λόγων ἀποδείξεις εἰσίν. - ἔτι δὲ πρὸ ἔργου τὸ τὰ τοιαῦτα μὴ λανθάνειν, μάλιστα πρὸς ἃ δεῖ συντείνειν πᾶσαν σκέψιν, ἐκ τίνων ἐνδέχεται μετασχεῖν τοῦ εὖ καὶ καλῶς ζῆν, εἴ τω μακαρίως ἐπιφθονώτερον εἶπεν, καὶ πρὸς τὴν ἐλπίδα τὴν περὶ ἕκαστα γενομένην ἂν τῶν ἐπεικῶν. εἰ μὲν γὰρ ἐν τοῖς διὰ τύχην γινομένοις ἢ τοῖς διὰ φύσιν τὸ καλῶς ζῆν ἐστίν, ἀνέλπιστον ἂν εἴη πολλοῖς (οὐ γὰρ ἐστι δι' ἐπιμελείας ἢ κτῆσις [οὐδὲ] ἐπ' αὐτοῖς οὐδὲ τῆς αὐτῶν πραγματείας)· εἰ δ' ἐν τῷ αὐτὸν ποιόν τινα εἶναι καὶ τὰς κατ' αὐτὸν πράξεις, κοινότερον ἂν εἴη τὸ ἀγαθὸν καὶ θειότερον, κοινότερον μὲν τῷ πλείοσιν ἐνδέχεσθαι μετασχεῖν, θειότερον δὲ τῷ κεῖσθαι τὴν εὐδαιμονίαν τοῖς αὐτοῖς παρασκευάζουσι ποιούς τινας καὶ τὰς πράξεις.

ἔσται δὲ φανερὰ τὰ πλεῖστα τῶν ἀμφισβητουμένων καὶ διαπορουμένων, ἂν καλῶς ὀρισθῇ τί χρὴ νομίζειν εἶναι τὴν εὐδαιμονίαν, πότερον ἐν τῷ ποιόν τινα μόνον εἶναι τὴν ψυχὴν, καθάπερ τινὲς ὥήθησαν τῶν σοφῶν καὶ πρεσβυτέρων, ἢ δεῖ μὲν καὶ ποιόν τινα ὑπάρχειν αὐτόν, μᾶλλον δὲ δεῖ τὰς πράξεις εἶναι ποιᾶς τινάς.



διηρημένων δὲ τῶν βίων, καὶ τῶν μὲν <οὐδ'> ἀμφισβητούντων τῆς τοιαύτης εὐημερίας, ἀλλ' ὡς τῶν ἀναγκαίων χάριν σπουδαζομένων, οἷον τῶν περὶ τὰς τέχνας τὰς φορτικὰς καὶ τῶν περὶ χρηματισμὸν καὶ τὰς βαναύσους (λέγω δὲ φορτικὰς μὲν τὰς πρὸς δόξαν πραγματευομένας μόνον, βαναύσους δὲ τὰς ἐδραίας καὶ μισθαρνικάς, χρηματιστικὰς δὲ τὰς πρὸς ἀγορὰς μὲν καὶ πράξεις καπηλικὰς), τῶν δ' εἰς ἀγωγὴν εὐδαιμονικὴν ταττομένων τριῶν ὄντων, τῶν καὶ πρότερον ῥηθέντων ἀγαθῶν ὡς μεγίστων τοῖς ἀνθρώποις, ἀρετῆς καὶ φρονήσεως καὶ ἡδονῆς, τρεῖς ὁρῶμεν καὶ βίους ὄντας, οὓς οἱ ἐπ' ἐξουσίας τυγχάνοντες προαιροῦνται ζῆν ἅπαντες, πολιτικὸν φιλόσοφον [1215b] ἀπολαυστικόν. τούτων γὰρ ὁ μὲν φιλόσοφος βούλεται περὶ φρόνησιν εἶναι καὶ τὴν θεωρίαν τὴν περὶ τὴν ἀλήθειαν, ὁ δὲ πολιτικὸς περὶ τὰς πράξεις τὰς καλὰς (αὗται δ' εἰσὶν αἱ ἀπὸ τῆς ἀρετῆς), ὁ δ' ἀπολαυστικὸς περὶ τὰς ἡδονὰς τὰς σωματικάς. διόπερ <ἕτερος> ἕτερον τὸν εὐδαίμονα προσαγορεύει, καθάπερ ἐλέχθη καὶ πρότερον. Ἀναξαγόρας μὲν ὁ Κλαζομένιος ἐρωτηθεὶς τίς ὁ εὐδαιμονέστατος, “οὐθεὶς”, εἶπεν, “ὦν σὺ νομίζεις· ἀλλ' ἄτοπος ἂν τίς σοι φανείη”. τοῦτον δ' ἀπεκρίνατο τὸν τρόπον ἐκεῖνος, ὁρῶν τὸν ἐρόμενον ἀδύνατον ὑπολαμβάνοντα μὴ μέγαν ὄντα καὶ καλὸν ἢ πλούσιον ταύτης τυγχάνειν τῆς προσηγορίας, αὐτὸς δ' ἴσως ᾤετο τὸν ζῶντα ἀλύπως καὶ καθαρῶς πρὸς τὸ δίκαιον ἢ τινος θεωρίας κοινωνοῦντα θείας, τοῦτον ὡς ἄνθρωπον εἰπεῖν μακάριον εἶναι.

περὶ πολλῶν μὲν οὖν καὶ ἐτέρων οὐ ῥᾶδιον τὸ κρῖναι καλῶς, μάλιστα δὲ περὶ οὐ πᾶσι ῥᾶστον εἶναι δοκεῖ, καὶ παντὸς ἀνδρὸς τὸ γινῶναι, τί τῶν ἐν τῷ ζῆν αἰρετόν, καὶ λαβὼν ἂν τις ἔχοι πλήρη τὴν ἐπιθυμίαν. πολλὰ γάρ ἐστι τοιαῦτα τῶν ἀποβαινόντων, <δι' ἃ> προῖενται τὸ ζῆν, οἷον νόσους περιωδυνίας χειμῶνας· ὥστε δῆλον ὅτι κἂν ἐξ ἀρχῆς αἰρετόν ἦν, εἴ τις αἵρεσιν ἐδίδου, διὰ γε ταῦτα τὸ μὴ γενέσθαι. πρὸς δὲ τούτοις <τίς> ὁ βίος, ὃν ζῶσιν ἔτι παῖδες ὄντες; καὶ γὰρ ἐπὶ τοῦτον ἀνακάμψαι πάλιν οὐδεὶς ἂν ὑπομείνειεν εὐφρονῶν. ἔτι δὲ πολλὰ τῶν τε μηδεμίαν ἔχόντων [μὲν] ἡδονὴν ἢ λύπην, καὶ τῶν ἔχόντων μὲν ἡδονὴν μὴ καλὴν δέ, τοιαῦτ' ἐστὶν ὥστε τὸ μὴ εἶναι κρεῖττον εἶναι τοῦ ζῆν. ὅλως δ' εἴ τις ἅπαντα συναγάγοι ὅσα πράττουσι μὲν καὶ πάσχουσιν ἅπαντες, ἐκόντες μέντοι μηθὲν αὐτῶν διὰ τὸ μηδ' αὐτοῦ χάριν, καὶ προσθεῖη χρόνου πλῆθος ἀπέραντόν τι, οὐ μᾶλλον ἔνεκ' ἂν τις τούτων ἔλοιτο ζῆν ἢ μὴ ζῆν. ἀλλὰ μὴν οὐδὲ διὰ τὴν τῆς τροφῆς μόνον ἡδονὴν ἢ τὴν τῶν ἀφροδισίων, ἀφαιρεθεισῶν τῶν ἄλλων ἡδονῶν, ἃς τὸ γινώσκειν ἢ βλέπειν ἢ τῶν ἄλλων τις αἰσθήσεων πορίζει τοῖς ἀνθρώποις, οὐδ' ἂν εἰς προτιμήσειε τὸ ζῆν, μὴ παντελῶς ὦν ἀνδράποδον. δῆλον γὰρ ὅτι τῷ ταύτην ποιουμένῳ τὴν αἵρεσιν οὐθὲν ἂν διενέγκειε γενέσθαι θηρίον ἢ ἄνθρωπον· ὁ γοῦν ἐν [1216a] Αἰγύπτῳ βοῦς, ὃν ὡς Ἄπιν τιμῶσιν, ἐν πλείοσι

τῶν τοιούτων ἐξουσιάζει πολλῶν μοναρχῶν. ὁμοίως δὲ οὐδὲ διὰ τὴν τοῦ καθεύδειν ἡδονήν· τί γὰρ διαφέρει καθεύδειν ἀνέγερτον ὕπνον ἀπὸ τῆς πρώτης ἡμέρας μέχρι τῆς τελευταίας ἐτῶν ἀριθμὸν χιλίων ἢ ὀποσωνοῦν, ἢ ζῆν ὄντα φυτόν; τὰ γοῦν φυτὰ τοιαύτης τινὸς ἔοικε μετέχειν ζωῆς, ὥσπερ καὶ τὰ παιδιά. καὶ γὰρ ταῦτα κατὰ τὴν πρώτην ἐν τῇ μητρὶ γένεσιν πεφυκότα μὲν διατελεῖ, καθεύδοντα δὲ τὸν πάντα χρόνον. ὥστε φανερὸν ἐκ τῶν τοιούτων ὅτι διαφεύγει σκοπομένους, τί τὸ εὖ καὶ τί τὸ ἀγαθὸν τὸ ἐν τῷ ζῆν.

τὸν μὲν οὖν Ἀναξαγόραν φασὶν ἀποκρίνασθαι πρὸς τινὰ διαποροῦντα τοιαῦτ' ἅττα καὶ διερωτῶντα τίνας ἔνεκ' ἂν τις ἔλοιτο γενέσθαι μᾶλλον ἢ μὴ γενέσθαι “τοῦ” φάναι “θεωρῆσαι τὸν οὐρανὸν καὶ τὴν περὶ τὸν ὅλον κόσμον τάξιν”. οὗτος μὲν οὖν ἐπιστήμης τινὸς ἔνεκεν τὴν αἵρεσιν ὥετο τιμίαν εἶναι τοῦ ζῆν· οἱ δὲ Σαρδανάπαλλον μακαρίζοντες ἢ Σμινδυρίδην τὸν Συβαρίτην ἢ τῶν ἄλλων τινὰς τῶν ζώντων τὸν ἀπολαυστικὸν βίον, οὗτοι δὲ πάντες ἐν τῷ χαίρειν φαίνονται τάττειν τὴν εὐδαιμονίαν· ἕτεροι δὲ τινες οὗτ' ἂν φρόνησιν οὐδεμίαν οὔτε τὰς σωματικὰς ἡδονὰς ἔλαιντο μᾶλλον ἢ τὰς πράξεις τὰς ἀπ' ἀρετῆς. αἰροῦνται γοῦν οὐ μόνον ἔνιοι δόξης χάριν αὐτάς, ἀλλὰ καὶ μὴ μέλλοντες εὐδοκιμήσειν. ἀλλ' οἱ πολλοὶ τῶν πολιτικῶν οὐκ ἀληθῶς τυγχάνουσι τῆς προσηγορίας· οὐ γάρ εἰσι πολιτικοὶ κατὰ τὴν ἀλήθειαν· ὁ μὲν γὰρ πολιτικὸς τῶν καλῶν ἐστὶ πράξεων προαιρετικὸς αὐτῶν χάριν, οἱ δὲ πολλοὶ χρημάτων καὶ πλεονεξίας ἔνεκεν ἄπτονται τοῦ ζῆν οὕτως.

ἐκ μὲν οὖν τῶν εἰρημένων φανερὸν ὅτι πάντες ἐπὶ τρεῖς βίους φέρουσι τὴν εὐδαιμονίαν, πολιτικὸν φιλόσοφον ἀπολαυστικόν· τούτων δ' ἡ μὲν περὶ τὰ σώματα καὶ τὰς ἀπολαύσεις ἡδονή, καὶ τίς καὶ ποία τις γίνεται καὶ διὰ τίνων, οὐκ ἄδηλον, ὥστ' οὐ τίνες εἰσὶ δεῖ ζητεῖν αὐτάς, ἀλλ' εἰ συντείνουσί τι πρὸς εὐδαιμονίαν ἢ μή, καὶ πῶς συντείνουσι, καὶ πότερον εἰ δεῖ προσάπτειν τῷ ζῆν καλῶς ἡδονὰς τινὰς, ταύτας δεῖ προσάπτειν, ἢ τούτων μὲν ἄλλον τινὰ τρόπον ἀνάγκη κοινωνεῖν, ἕτεροι δ' εἰσὶν ἡδοναὶ δι' ἃς εὐλόγως οἴονται τὸν εὐδαίμονα ζῆν ἡδέως καὶ μὴ μόνον ἀλύπως.

ἀλλὰ περὶ μὲν τούτων ὕστερον ἐπισκεπτέον· περὶ δ' ἀρετῆς καὶ φρονήσεως πρῶτον θεωρήσωμεν, τὴν τε φύσιν αὐτῶν ἑκατέρου τίς ἐστὶ, καὶ πότερον μόρια ταῦτα τῆς ἀγαθῆς ζωῆς ἐστίν, ἢ αὐτὰ ἢ αἱ πράξεις αἱ ἀπ' αὐτῶν, ἐπειδὴ [1216b] προσάπτουσιν αὐτὰ κἂν εἰ μὴ πάντες εἰς τὴν εὐδαιμονίαν, ἀλλ' οὖν οἱ λόγου ἄξιοι τῶν ἀνθρώπων πάντες.

Σωκράτης μὲν οὖν ὁ πρεσβύτερος ὥετ' εἶναι τέλος τὸ γινώσκειν τὴν ἀρετήν, καὶ ἐπεζήτει τί ἐστὶν ἡ δικαιοσύνη καὶ τί ἡ ἀνδρεία καὶ ἕκαστον τῶν μορίων

αὐτῆς. ἐποίει γὰρ ταῦτ' εὐλόγως. ἐπιστήμας γὰρ ᾧ εἶναι πάσας τὰς ἀρετάς, ὥσθ' ἅμα συμβαίνειν εἰδέναι τε τὴν δικαιοσύνην καὶ εἶναι δίκαιον. ἅμα μὲν γὰρ μεμαθήκαμεν τὴν γεωμετρίαν καὶ οἰκοδομίαν καὶ ἐσμὲν οἰκοδόμοι καὶ γεωμέτραι. διόπερ ἐζήτει τί ἐστὶν ἀρετὴ, ἀλλ' οὐ πῶς γίνεται καὶ ἐκ τίνων. τοῦτο δὲ ἐπὶ μὲν τῶν ἐπιστημῶν συμβαίνει τῶν θεωρητικῶν (οὐθὲν γὰρ ἕτερόν ἐστι τῆς ἀστρολογίας οὐδὲ τῆς περὶ φύσεως ἐπιστήμης οὐδὲ γεωμετρίας πλὴν τὸ γνωρίσαι καὶ θεωρῆσαι τὴν φύσιν τῶν πραγμάτων τῶν ὑποκειμένων ταῖς ἐπιστήμαις· οὐ μὴν ἀλλὰ κατὰ συμβεβηκὸς οὐθὲν κωλύει πρὸς πολλὰ τῶν ἀναγκαίων εἶναι χρησίμους αὐτὰς ἡμῖν)· τῶν δὲ ποιητικῶν ἐπιστημῶν ἕτερον τὸ τέλος τῆς ἐπιστήμης καὶ γνώσεως, οἷον ὑγίεια μὲν ἰατρικῆς, εὐνομία δὲ ἥ τι τοιοῦθ' ἕτερον τῆς πολιτικῆς. καλὸν μὲν οὖν καὶ τὸ γνωρίζειν ἕκαστον τῶν καλῶν· οὐ μὴν ἀλλὰ γε περὶ ἀρετῆς οὐ τὸ εἰδέναι τιμωτάτον τί ἐστίν, ἀλλὰ τὸ γινώσκειν ἐκ τίνων ἐστίν. οὐ γὰρ εἰδέναι βουλόμεθα τί ἐστὶν ἀνδρεία, ἀλλ' εἶναι ἀνδρεῖοι, οὐδέ τί ἐστὶ δικαιοσύνη, ἀλλ' εἶναι δίκαιοι, καθάπερ καὶ ὑγιαίνειν μᾶλλον ἢ γινώσκειν τί ἐστὶ τὸ ὑγιαίνειν καὶ εὖ ἔχειν τὴν ἕξιν μᾶλλον ἢ γινώσκειν τί ἐστὶ τὸ εὖ ἔχειν.

πειρατέον δὲ περὶ πάντων τούτων ζητεῖν τὴν πίστιν διὰ τῶν λόγων, μαρτυρίαις καὶ παραδείγμασι χρώμενον τοῖς φαινομένοις. κράτιστον μὲν γὰρ πάντας ἀνθρώπους φαίνεσθαι συνομολογοῦντας τοῖς ῥηθησομένοις, εἰ δὲ μή, τρόπον γέ τινα πάντας, ὅπερ μεταβιβαζόμενοι ποιήσουσιν· ἔχει γὰρ ἕκαστος οἰκεῖόν τι πρὸς τὴν ἀλήθειαν, ἐξ ὧν ἀναγκαῖον δεικνύναι πως περὶ αὐτῶν· ἐκ γὰρ τῶν ἀληθῶς μὲν λεγομένων οὐ σαφῶς δέ, προῖοῦσιν ἔσται καὶ τὸ σαφῶς, μεταλαμβάνουσιν αἰετὰ γνωριμώτερα τῶν εἰωθότων λέγεσθαι συγκεχυμένως. διαφέρουσι δ' οἱ λόγοι περὶ ἑκάστην μέθοδον, οἳ τε φιλοσόφως λεγόμενοι καὶ μὴ φιλοσόφως. διόπερ καὶ τῶν πολιτικῶν οὐ χρὴ νομίζειν περίεργον εἶναι τὴν τοιαύτην θεωρίαν, δι' ἧς οὐ μόνον τὸ τί φανερόν, ἀλλὰ καὶ τὸ διὰ τί. φιλόσοφον γὰρ τὸ τοιοῦτον περὶ ἑκάστην μέθοδον. δεῖται μέντοι τοῦτο πολλῆς εὐλαβείας. εἰσὶ γάρ τινες οἱ [1217a] διὰ τὸ δοκεῖν φιλοσόφου εἶναι τὸ μηθὲν εἰκῇ λέγειν ἀλλὰ μετὰ λόγου, πολλάκις λανθάνουσι λέγοντες ἄλλοτρίους λόγους τῆς πραγματείας καὶ κενούς. τοῦτο δὲ ποιοῦσιν ὅτε μὲν δι' ἄγνοίαν, ὅτε δὲ δι' ἀλαζονείαν, ὑφ' ὧν ἀλίσκεσθαι συμβαίνει καὶ τοὺς ἐμπείρους καὶ δυναμένους πράττειν ὑπὸ τούτων τῶν μήτ' ἐχόντων μήτε δυναμένων διάνοιαν ἀρχιτεκτονικὴν ἢ πρακτικὴν. πάσχουσι δὲ τοῦτο δι' ἀπαιδευσίαν· ἀπαιδευσία γάρ ἐστι περὶ ἕκαστον πρᾶγμα τὸ μὴ δύνασθαι κρίνειν τοὺς τ' οἰκείους λόγους τοῦ πράγματος καὶ τοὺς ἄλλοτρίους. καλῶς δ' ἔχει καὶ τὸ χωρὶς κρίνειν τὸν τῆς αἰτίας λόγον καὶ τὸ δεικνύμενον, διὰ τε τὸ ῥηθὲν ἀρτίως, ὅτι προσέχειν οὐ δεῖ πάντα τοῖς διὰ τῶν λόγων, ἀλλὰ πολλάκις μᾶλλον τοῖς φαινομένοις (νῦν δ' ὁπότε ἂν λύειν μὴ ἔχωσιν, ἀναγκάζονται

πιστεύειν τοῖς εἰρημένοις), καὶ διότι πολλάκις τὸ μὲν ὑπὸ τοῦ λόγου δεδειχθαι δοκοῦν ἀληθὲς μὲν ἐστίν, οὐ μέντοι διὰ ταύτην τὴν αἰτίαν δι' ἣν φησιν ὁ λόγος. ἔστι γὰρ διὰ ψεύδους ἀληθὲς δεῖξαι· δῆλον δ' ἐκ τῶν ἀναλυτικῶν.

πεπροοιμασμένων δὲ [καὶ] τούτων, λέγωμεν ἀρξάμενοι πρῶτον ἀπὸ τῶν πρώτων, ὥσπερ εἴρηται, οὐ σαφῶς λεγομένων, ζητοῦντες ἐπὶ τὸ σαφῶς εὑρεῖν τί ἐστὶν ἡ εὐδαιμονία. ὁμολογεῖται δὴ μέγιστον εἶναι καὶ ἄριστον τοῦτο τῶν ἀγαθῶν τῶν ἀνθρωπίνων. ἀνθρώπινον δὲ λέγομεν, ὅτι τάχ' ἂν εἴη καὶ βελτιόνος τινος ἄλλου τῶν ὄντων εὐδαιμονία, οἷον θεοῦ. τῶν μὲν γὰρ ἄλλων ζώων, ὅσα χεῖρω τὴν φύσιν τῶν ἀνθρώπων ἐστίν, οὐθὲν κοινωνεῖ ταύτης τῆς προσηγορίας· οὐ γὰρ ἐστὶν εὐδαίμων ἵππος οὐδ' ὄρνις οὐδ' ἰχθύς οὐδ' ἄλλο τῶν ὄντων οὐθὲν, ὃ μὴ κατὰ τὴν ἐπωνυμίαν ἐν τῇ φύσει μετέχει θεοῦ τινός, ἀλλὰ κατ' ἄλλην τινὰ τῶν ἀγαθῶν μετοχὴν τὸ μὲν βέλτιον ζῆ τὸ δὲ χεῖρον αὐτῶν.

ἀλλ' ὅτι τοῦτον ἔχει τὸν τρόπον, ὕστερον ἐπισκεπτέον· νῦν δὲ λέγομεν ὅτι τῶν ἀγαθῶν τὰ μὲν ἐστὶν ἀνθρώπῳ πρακτὰ τὰ δ' οὐ πρακτὰ. τοῦτο δὲ λέγομεν οὕτως, διότι ἔνια τῶν ὄντων οὐθὲν μετέχει κινήσεως, ὥστ' οὐδὲ τῶν ἀγαθῶν· καὶ ταῦτ' ἴσως ἄριστα τὴν φύσιν ἐστίν. ἔνια δὲ πρακτὰ μὲν, ἀλλὰ πρακτὰ κρείττοσιν ἡμῶν. ἐπειδὴ δὲ διχῶς λέγεται τὸ πρακτόν (καὶ γὰρ ὧν ἔνεκα πράττομεν καὶ ἃ τούτων ἔνεκα μετέχει πράξεως, οἷον καὶ τὴν ὑγίειαν καὶ τὸν πλοῦτον τίθεμεν τῶν πρακτῶν, καὶ τὰ τούτων πραττόμενα χάριν, τὰ θ' ὑγιεινὰ καὶ τὰ χρηματιστικά), δῆλον ὅτι καὶ τὴν εὐδαιμονίαν τῶν ἀνθρώπων πρακτῶν ἄριστον θετέον.

[1217b] σκεπτέον τοίνυν τί τὸ ἄριστον, καὶ λέγεται ποσαχῶς. ἐν τρισὶ δὴ μάλιστα φαίνεται δόξαις εἶναι τοῦτο. φασὶ γὰρ ἄριστον μὲν εἶναι πάντων αὐτὸ τὸ ἀγαθόν, αὐτὸ δ' εἶναι τὸ ἀγαθὸν ὧ ὑπάρχει τό τε πρῶτῳ εἶναι τῶν ἀγαθῶν καὶ τὸ αἰτίῳ τῇ παρουσίᾳ τοῖς ἄλλοις τοῦ ἀγαθοῦ εἶναι. ταῦτα δ' ὑπάρχειν ἀμφοτέρω τῇ ιδέᾳ τοῦ ἀγαθοῦ. λέγω δὲ ἀμφοτέρω τό τε πρῶτον τῶν ἀγαθῶν καὶ τὸ τοῖς ἄλλοις αἴτιον ἀγαθοῖς τῇ παρουσίᾳ τοῦ ἀγαθοῦ εἶναι. μάλιστα τε γὰρ τὸ ἀγαθὸν λέγεσθαι κατ' ἐκείνης ἀληθῶς (κατὰ μετοχὴν γὰρ καὶ ὁμοιότητα τὰ ἄλλα ἀγαθὰ ἐκείνης εἶναι), καὶ πρῶτον τῶν ἀγαθῶν· ἀναιρουμένου γὰρ τοῦ μετεχομένου ἀναιρεῖσθαι καὶ τὰ μετέχοντα τῆς ιδέας, ἃ λέγεται τῷ μετέχειν ἐκείνης, τὸ δὲ πρῶτον τοῦτον ἔχειν τὸν τρόπον πρὸς τὸ ὕστερον. ὥστ' εἶναι αὐτὸ τὸ ἀγαθὸν τὴν ιδέαν τοῦ ἀγαθοῦ· καὶ γὰρ χωριστὴν εἶναι τῶν μετεχόντων, ὥσπερ καὶ τὰς ἄλλας ιδέας.

ἔστι μὲν οὖν τὸ διασκοπεῖν περὶ ταύτης τῆς δόξης ἑτέρας τε διατριβῆς καὶ

τὰ πολλὰ λογικώτερας ἐξ ἀνάγκης (οἱ γὰρ ἅμα ἀναιρετικοί τε καὶ κοινοὶ λόγοι κατ' οὐδεμίαν εἰσὶν ἄλλην ἐπιστήμην)· εἰ δὲ δεῖ συντόμως εἰπεῖν περὶ αὐτῶν, λέγομεν ὅτι πρῶτον μὲν τὸ εἶναι ἰδέαν μὴ μόνον ἀγαθοῦ ἀλλὰ καὶ ἄλλου ὁτιοῦν λέγεται λογικῶς καὶ κενῶς. ἐπέσκεπται δὲ πολλοῖς περὶ αὐτοῦ τρόποις καὶ ἐν τοῖς ἐξωτερικοῖς λόγοις καὶ ἐν τοῖς κατὰ φιλοσοφίαν. - ἔπειτ' εἰ καὶ ὅτι μάλιστ' εἰσὶν αἱ ἰδέαι καὶ ἀγαθοῦ ἰδέα, μὴ ποτ' οὐδὲ χρήσιμος πρὸς ζωὴν ἀγαθὴν οὐδὲ πρὸς τὰς πράξεις. - πολλαχῶς γὰρ λέγεται καὶ ἰσαχῶς τῷ ὄντι τὸ ἀγαθόν. τό τε γὰρ ὄν, ὥσπερ ἐν ἄλλοις διήρηται, σημαίνει τὸ μὲν τί ἐστί, τὸ δὲ ποιόν, τὸ δὲ ποσόν, τὸ δὲ πότε, καὶ πρὸς τούτοις τὸ μὲν ἐν τῷ κινεῖσθαι τὸ δὲ ἐν τῷ κινεῖν, καὶ τὸ ἀγαθὸν ἐν ἐκάστη τῶν πτώσεών ἐστι τούτων, ἐν οὐσίᾳ μὲν ὁ νοῦς καὶ ὁ θεός, ἐν δὲ τῷ ποιῶ τὸ δίκαιον, ἐν δὲ τῷ ποσῷ τὸ μέτριον, ἐν δὲ τῷ πότε ὁ καιρός, τὸ δὲ διδάσκον καὶ τὸ διδασκόμενον περὶ κίνησιν. ὥσπερ οὖν οὐδὲ τὸ ὄν ἐν τί ἐστι περὶ τὰ εἰρημένα, οὕτως οὐδὲ τὸ ἀγαθόν, οὐδὲ ἐπιστήμη ἐστὶ μία οὔτε τοῦ ὄντος οὔτε τοῦ ἀγαθοῦ. ἀλλ' οὐδὲ τὰ ὁμοιοσημόνως λεγόμενα ἀγαθὰ μιᾶς ἐστὶ θεωρῆσαι, οἷον τὸν καιρὸν ἢ τὸ μέτριον, ἀλλ' ἑτέρα ἕτερον καιρὸν θεωρεῖ καὶ ἑτέρα ἕτερον μέτριον, οἷον περὶ τροφήν μὲν τὸν καιρὸν καὶ τὸ μέτριον ἱατρικὴ καὶ γυμναστική, περὶ δὲ τὰς πολεμικὰς πράξεις στρατηγία, καὶ οὕτως ἑτέρα περὶ ἑτέραν πράξεις, ὥστε [1218a] σχολῇ αὐτό γε τὸ ἀγαθὸν θεωρῆσαι μιᾶς. - ἔτι ἐν ὅσοις ὑπάρχει τὸ πρότερον καὶ ὕστερον, οὐκ ἔστι κοινόν τι παρὰ ταῦτα, καὶ τοῦτο χωριστόν. εἴη γὰρ ἂν τι τοῦ πρώτου πρότερον· πρότερον γὰρ τὸ κοινὸν καὶ χωριστὸν διὰ τὸ ἀναιρουμένου τοῦ κοινοῦ ἀναιρεῖσθαι τὸ πρῶτον. οἷον εἰ τὸ διπλάσιον πρῶτον τῶν πολλαπλασίων, οὐκ ἐνδέχεται τὸ πολλαπλάσιον τὸ κοινῇ κατηγορούμενον εἶναι χωριστόν· ἔσται γὰρ τοῦ διπλασίου πρότερον. . - εἰ συμβαίνει τὸ κοινὸν εἶναι τὴν ἰδέαν, οἷον εἰ χωριστὸν ποιήσειέ τις τὸ κοινόν. εἰ γὰρ ἐστὶ δικαιοσύνη ἀγαθόν, καὶ ἀνδρεία. ἔστι τοίνυν, φασίν, αὐτό τι ἀγαθόν. τὸ οὖν αὐτὸ πρόσκειται πρὸς τὸν λόγον τὸν κοινόν. τοῦτο δὲ τί ἂν εἴη πλην ὅτι αἰδίων καὶ χωριστόν; ἀλλ' οὐθὲν μᾶλλον λευκὸν τὸ πολλὰς ἡμέρας λευκὸν τοῦ μίαν ἡμέραν· ὥστ' οὐδὲ «τὸ ἀγαθὸν μᾶλλον ἀγαθὸν τῷ αἰδίῳ εἶναι· οὐδὲ» δὴ τὸ κοινὸν ἀγαθὸν ταῦτο τῇ ἰδέᾳ· πᾶσι γὰρ ὑπάρχει «τὸ» κοινόν. - ἀνάπαλιν δὲ καὶ δεικτέον ἢ ὡς νῦν δεικνύουσι τὸ ἀγαθὸν αὐτό. νῦν μὲν γὰρ ἐκ τῶν ἀνομολογουμένων ἔχειν τὸ ἀγαθόν, ἐξ ἐκείνων τὰ ὁμολογούμενα εἶναι ἀγαθὰ δεικνύουσιν, ἐξ ἀριθμῶν, ὅτι ἡ δικαιοσύνη καὶ ἡ ὑγίεια ἀγαθόν· τάξεις γὰρ καὶ ἀριθμοί, ὡς τοῖς ἀριθμοῖς καὶ ταῖς μονάσιν ἀγαθὸν ὑπάρχον διὰ τὸ εἶναι τὸ ἐν αὐτὸ ἀγαθόν. δεῖ δ' ἐκ τῶν ὁμολογουμένων, οἷον ὑγείας ἰσχύος σωφροσύνης, ὅτι καὶ ἐν τοῖς ἀκινήτοις μᾶλλον τὸ καλόν. πάντα γὰρ τάδε τάξις καὶ ἡρεμία· εἰ ἄρα, ἐκεῖνα μᾶλλον· ἐκείνοις γὰρ ὑπάρχει ταῦτα μᾶλλον. - παράβολος δὲ καὶ ἡ ἀπόδειξις ὅτι τὸ ἐν αὐτὸ τὸ ἀγαθόν, ὅτι οἱ ἀριθμοὶ ἐφίενται· οὔτε γὰρ ὡς

ἐφίενται λέγονται φανερώς, ἀλλὰ λίαν ἀπλῶς τοῦτο φασί, καὶ ὄρεξιν εἶναι πῶς ἂν τις ὑπολάβοι ἐν οἷς ζωὴ μὴ ὑπάρχει; δεῖ δὲ περὶ τούτου πραγματευθῆται, καὶ μὴ ἀξιοῦν μηθὲν ἀλόγως, ἃ καὶ μετὰ λόγου πιστεῦσαι οὐ ῥάδιον. - τό τε φάναι πάντα τὰ ὄντα ἐφίεσθαι ἐνός τινος ἀγαθοῦ οὐκ ἀληθές· ἕκαστον γὰρ ἰδίου ἀγαθοῦ ὀρέγεται, ὀφθαλμὸς ὄψεως, σῶμα ὑγείας, οὕτως ἄλλο ἄλλου.

ὅτι μὲν οὖν οὐκ ἔστιν αὐτό τι ἀγαθόν, ἔχει ἀπορίας τοιαύτας, καὶ ὅτι οὐ χρήσιμον τῇ πολιτικῇ, ἀλλ' ἰδίον τι ἀγαθόν, ὥσπερ καὶ ταῖς ἄλλαις, οἷον γυμναστικῇ εὐεξία [ἔτι καὶ τὸ ἐν τῷ λόγῳ γεγραμμένον· ἢ γὰρ οὐδεμιᾷ χρήσιμον αὐτὸ τὸ τοῦ ἀγαθοῦ εἶδος ἢ πάσαις ὁμοίως· ἔτι οὐ πρακτόν]· ὁμοίως δ' οὐδὲ τὸ κοινὸν ἀγαθὸν οὔτε αὐτὸ ἀγαθόν [1218b] ἔστι (καὶ γὰρ ἂν μικρῷ ὑπάρξαι ἀγαθῷ) οὔτε πρακτόν. οὐ γὰρ ὅπως ὑπάρξει τὸ ὁτῶοῦν ὑπάρχον ἢ ἰατρικὴ πραγματεύεται, ἀλλ' ὅπως ὑγίεια. ὁμοίως δὲ καὶ τῶν ἄλλων τεχνῶν ἐκάστη. ἀλλὰ πολλαχῶς τὸ ἀγαθόν, καὶ ἔστι τι αὐτοῦ καλόν, καὶ τὸ μὲν πρακτόν τὸ δ' οὐ πρακτόν. πρακτόν δὲ τὸ τοιοῦτον ἀγαθόν, τὸ οὐ ἔνεκα. οὐκ ἔστι δὲ τὸ ἐν τοῖς ἀκινήτοις.

φανερόν ὅτι οὔτε ἡ ἰδέα τἀγαθοῦ τὸ ζητούμενον αὐτὸ τὸ ἀγαθὸν ἐστίν, οὔτε τὸ κοινόν (τὸ μὲν γὰρ ἀκίνητον καὶ οὐ πρακτόν, τὸ δὲ κινητὸν μὲν ἀλλ' οὐ πρακτόν)· τὸ δ' οὐ ἔνεκα ὡς τέλος ἄριστον καὶ αἷτιον τῶν ὑφ' αὐτὸ καὶ πρῶτον πάντων. ὥστε τοῦτ' ἂν εἴη αὐτὸ τὸ ἀγαθὸν τὸ τέλος τῶν ἀνθρώπων πρακτῶν. τοῦτο δ' ἐστὶ τὸ ὑπὸ τὴν κυρίαν πασῶν. αὕτη δ' ἐστὶ πολιτικὴ καὶ οἰκονομικὴ καὶ φρόνησις. διαφέρουσι γὰρ αὗται αἰ ἕξεις πρὸς τὰς ἄλλας τῷ τοιαῦται εἶναι· πρὸς δ' ἀλλήλας εἴ τι διαφέρουσιν, ὕστερον λεκτέον. ὅτι δ' αἷτιον τὸ τέλος τοῖς ὑφ' αὐτό, δηλοῖ ἡ διδασκαλία. ὀρισάμενοι γὰρ τὸ τέλος τᾶλλα δεικνύουσιν, ὅτι ἕκαστον αὐτῶν ἀγαθόν· αἷτιον γὰρ τὸ οὐ ἔνεκα. οἷον ἐπειδὴ τὸ ὑγιαίνειν τοδί, ἀνάγκη τόδε εἶναι τὸ συμφέρον πρὸς αὐτήν· τὸ δ' ὑγιεινὸν τῆς ὑγείας αἷτιον ὡς κινήσαν, καὶ τότε τοῦ εἶναι ἀλλ' οὐ τοῦ ἀγαθὸν εἶναι τὴν ὑγίειαν. ἔτι οὐδὲ δείκνυσιν οὐθεὶς ὅτι ἀγαθὸν ἢ ὑγίεια, ἂν μὴ σοφιστὴς ἢ καὶ μὴ ἰατρός (οὔτοι γὰρ τοῖς ἀλλοτρίοις λόγοις σοφίζονται), ὥσπερ οὐδ' ἄλλην ἀρχὴν οὐδεμίαν.

τὸ δ' ὡς τέλος ἀγαθὸν ἀνθρώπῳ καὶ τὸ ἄριστον τῶν πρακτῶν, σκεπτέον ποσαχῶς τὸ ἄριστον πάντων, ἐπειδὴ τοῦτο ἄριστον, μετὰ ταῦτα ἄλλην λαβοῦσιν ἀρχήν.

## Βιβλίο 2

μετὰ δὲ ταῦτ' ἄλλην λαβοῦσιν ἀρχὴν περὶ τῶν ἐπομένων λεκτέον. πάντα δὴ τὰ ἀγαθὰ ἢ ἐκτὸς ἢ «ἐν» ψυχῇ, καὶ τούτων αἰρετώτερα τὰ ἐν τῇ ψυχῇ, καθάπερ διαιρούμεθα καὶ ἐν τοῖς ἐξωτερικοῖς λόγοις· φρόνησις γὰρ καὶ ἀρετὴ καὶ ἡδονὴ ἐν ψυχῇ, ὧν ἢ ἓν ἢ πάντα τέλος εἶναι δοκεῖ πᾶσιν. τῶν δὲ ἐν ψυχῇ τὰ μὲν ἕξεις ἢ δυνάμεις εἰσὶ, τὰ δ' ἐνέργειαι καὶ κινήσεις.

ταῦτα δὴ οὕτως ὑποκείσθω καὶ περὶ ἀρετῆς, ὅτι ἐστὶν ἡ βελτίστη διάθεσις ἢ ἕξις ἢ δύναμις ἐκάστων, ὧν ἐστὶ [1219a] τις χρῆσις ἢ ἔργον. δῆλον δ' ἐκ τῆς ἐπαγωγῆς. ἐπὶ πάντων γὰρ οὕτω τίθεμεν. οἷον ἱματίου ἀρετὴ ἐστίν· καὶ γὰρ ἔργον τι καὶ χρῆσις ἐστίν· καὶ ἡ βελτίστη ἕξις τοῦ ἱματίου ἀρετὴ ἐστίν. ὁμοίως δὲ καὶ πλοίου καὶ οἰκίας καὶ τῶν ἄλλων. ὥστε καὶ ψυχῆς· ἔστι γάρ τι ἔργον αὐτῆς. καὶ τῆς βελτίονος δὴ ἕξεως ἔστω βέλτιον τὸ ἔργον· καὶ ὡς ἔχουσιν. αἱ ἕξεις πρὸς ἀλλήλας, οὕτω καὶ τὰ ἔργα τὰ ἀπὸ τούτων πρὸς ἀλλήλα ἐχέτω. καὶ τέλος ἐκάστου τὸ ἔργον. - φανερόν τοίνυν ἐκ τούτων ὅτι βέλτιον τὸ ἔργον τῆς ἕξεως· τὸ γὰρ τέλος ἄριστον ὡς τέλος· ὑπόκειται γὰρ τέλος τὸ βέλτιστον καὶ τὸ ἔσχατον, οὗ ἕνεκα τᾶλλα πάντα. ὅτι μὲν τοίνυν τὸ ἔργον βέλτιον τῆς ἕξεως καὶ τῆς διαθέσεως, δῆλον· ἀλλὰ τὸ ἔργον λέγεται διχῶς. τῶν μὲν γὰρ ἐστὶν ἕτερόν τι τὸ ἔργον παρὰ τὴν χρῆσιν, οἷον οἰκοδομικῆς οἰκία ἀλλ' οὐκ οἰκοδόμησις καὶ ἱατρικῆς ὑγίεια ἀλλ' οὐχ ὑγίανσις οὐδ' ἰατρευσις, τῶν δ' ἡ χρῆσις ἔργον, οἷον ὄψεως ὄρασις καὶ μαθηματικῆς ἐπιστήμης θεωρία. ὥστ' ἀνάγκη, ὧν ἔργον ἢ χρῆσις, τὴν χρῆσιν βέλτιον εἶναι τῆς ἕξεως. - τούτων δὲ τοῦτον τὸν τρόπον διωρισμένων, λέγομεν ὅτι «ταῦτό» τὸ ἔργον τοῦ πράγματος καὶ τῆς ἀρετῆς, ἀλλ' οὐχ ὡσαύτως. οἷον σκυτοτομικῆς καὶ σκυτεύσεως ὑπόδημα· εἰ δὴ τίς ἐστὶν ἀρετὴ σκυτικῆς καὶ σπουδαίου σκυτέως, τὸ ἔργον ἐστὶ σπουδαῖον ὑπόδημα. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων. - ἔτι ἔστω ψυχῆς ἔργον τὸ ζῆν ποιεῖν, τοῦ δὲ χρῆσις καὶ ἐγρήγορις· ὁ γὰρ ὕπνος ἀργία τις καὶ ἡσυχία. ὥστ' ἐπεὶ τὸ ἔργον ἀνάγκη ἐν καὶ ταῦτό εἶναι τῆς ψυχῆς καὶ τῆς ἀρετῆς, ἔργον ἂν εἴη τῆς ἀρετῆς ζωὴ σπουδαία. τοῦτ' ἄρα ἐστὶ τὸ τέλεον ἀγαθόν, ὅπερ ἦν ἡ εὐδαιμονία. δῆλον δὲ ἐκ τῶν ὑποκειμένων (ἦν μὲν γὰρ ἡ εὐδαιμονία τὸ ἄριστον, τὰ δὲ τέλη ἐν ψυχῇ καὶ τὰ ἄριστα τῶν ἀγαθῶν, αὐτὴ δὲ ἡ ἕξις ἢ ἐνέργεια), ἐπεὶ βέλτιον ἢ ἐνέργεια τῆς διαθέσεως καὶ τῆς βελτίστης ἕξεως ἢ βελτίστη ἐνέργεια, ἢ δ' ἀρετὴ βελτίστη ἕξις, τῆς ἀρετῆς ἐνέργειαν τῆς ψυχῆς ἄριστον εἶναι. ἦν δὲ καὶ ἡ εὐδαιμονία τὸ ἄριστον. ἔστιν ἄρα ἡ εὐδαιμονία ψυχῆς ἀγαθῆς ἐνέργεια. ἐπεὶ δὲ ἦν ἡ εὐδαιμονία τέλεόν τι, καὶ ἔστι ζωὴ καὶ τελέα καὶ ἀτελής, καὶ ἀρετὴ ὡσαύτως (ἡ μὲν γὰρ ὅλη, ἡ δὲ μόνον), ἡ δὲ τῶν ἀτελῶν ἐνέργεια

ἀτελής, εἴη ἂν ἡ εὐδαιμονία ζωῆς τελείας ἐνέργεια κατ' ἀρετὴν τελείαν.

ὅτι δὲ τὸ γένος καὶ τὸν ὅρον αὐτῆς λέγομεν καλῶς, μαρτύρια [1219b] τὰ δοκοῦντα πᾶσιν ἡμῖν. τό τε γὰρ εὖ πράττειν καὶ τὸ εὖ ζῆν τὸ αὐτὸ τῷ εὐδαιμονεῖν, ὡς ἕκαστον χρῆσις ἐστὶ καὶ ἐνέργεια, καὶ ἡ ζωὴ καὶ ἡ πρᾶξις (καὶ γὰρ ἡ πρακτικὴ χρηστικὴ ἐστίν· ὁ μὲν γὰρ χαλκεὺς ποιεῖ χαλινόν, χρῆται δ' ὁ ἵππικός) καὶ τὸ μήτε μίαν ἡμέραν εἶναι εὐδαίμονα μήτε παῖδα μήθ' ἡλικίαν πᾶσαν (διὸ καὶ τὸ Σόλωνος ἔχει καλῶς, τὸ μὴ ζῶντ' εὐδαιμονίζειν, ἀλλ' ὅταν λάβῃ τέλος· οὐθὲν γὰρ ἀτελεὲς εὐδαιμον· οὐ γὰρ ὅλον). ἔτι δ' οἱ ἔπαινοι τῆς ἀρετῆς διὰ τὰ ἔργα, καὶ τὰ ἐγκώμια τῶν ἔργων· καὶ στεφανοῦνται οἱ νικῶντες, ἀλλ' οὐχ οἱ δυνάμενοι νικᾶν, μὴ νικῶντες δέ· καὶ τὸ κρίνειν ἐκ τῶν ἔργων ὁποῖός τις ἐστίν· ἔτι διὰ τί ἡ εὐδαιμονία οὐκ ἐπαινεῖται; ὅτι διὰ ταύτην τᾶλλα, ἢ τῷ εἰς ταύτην ἀναφέρεσθαι ἢ τῷ μόρια εἶναι αὐτῆς. διὸ ἕτερον εὐδαιμονισμὸς καὶ ἔπαινος καὶ ἐγκώμιον. τὸ μὲν γὰρ ἐγκώμιον λόγος τοῦ καθ' ἕκαστον ἔργου· ὁ δ' ἔπαινος τοιοῦτον εἶναι καθόλου· ὁ δ' εὐδαιμονισμὸς τέλους. - καὶ τὸ ἀπορούμενον δ' ἐνίστε δῆλον ἐκ τούτων, διὰ τί ποτ' οὐθὲν βελτίους οἱ σπουδαῖοι τῶν φαύλων τὸν ἡμισυν τοῦ βίου· ὅμοιοι γὰρ καθεύδοντες πάντες. αἴτιον δ' ὅτι ἀργία ψυχῆς ὁ ὕπνος, ἀλλ' οὐκ ἐνέργεια. διὸ καὶ ἄλλο εἴ τι μόριον ἐστὶ ψυχῆς, οἷον τὸ θρεπτικόν, ἢ τούτου ἀρετὴ οὐκ ἔστι μόριον τῆς ὅλης ἀρετῆς, ὥσπερ οὐδ' ἡ τοῦ σώματος· ἐν τῷ ὕπνῳ γὰρ μᾶλλον ἐνεργεῖ τὸ θρεπτικόν, τὸ δ' αἰσθητικὸν καὶ ὀρεκτικὸν ἀτελεῖ ἐν τῷ ὕπνῳ. ὅσον δὲ τοῦ πη κινεῖσθαι μετέχουσι, καὶ αἱ φαντασίαι βελτίους αἱ τῶν σπουδαίων, ἐὰν μὴ διὰ νόσον ἢ πῆρωσιν.

μετὰ ταῦτα περὶ ψυχῆς θεωρητέον· ἡ γὰρ ἀρετὴ ψυχῆς, οὐ κατὰ συμβεβηκός. ἐπεὶ δ' ἀνθρωπίνην ἀρετὴν ζητοῦμεν, ὑποκείσθω δύο μέρη ψυχῆς τὰ λόγου μετέχοντα, οὐ τὸν αὐτὸν δὲ τρόπον μετέχειν λόγου ἅμφω, ἀλλὰ τὸ μὲν τῷ ἐπιτάττειν, τὸ δὲ τῷ πείθεσθαι καὶ ἀκούειν πεφυκέναι· εἰ δὲ τί ἐστὶν ἑτέρως ἄλογον, ἀφείσθω τοῦτο τὸ μόριον. διαφέρει δ' οὐδὲν οὔτ' εἰ μεριστὴ ἡ ψυχὴ οὔτ' εἰ ἀμερῆς, ἔχει μέντοι δυνάμεις διαφόρους καὶ τὰς εἰρημένους, ὥσπερ ἐν τῷ καμπύλῳ τὸ κοῖλον καὶ τὸ κυρτὸν ἀδιαχώριστον, καὶ τὸ εὐθὺ καὶ τὸ λευκόν· καίτοι τὸ εὐθὺ οὐ λευκόν, ἀλλὰ κατὰ συμβεβηκός καὶ οὐκ οὐσία τοῦ αὐτοῦ. - ἀφήρηται δὲ καὶ εἴ τι ἄλλο ἐστὶ μέρος ψυχῆς, οἷον τὸ φυτικόν. ἀνθρωπίνης γὰρ ψυχῆς τὰ εἰρημένα μόρια ἴδια· διὸ οὐδ' αἱ ἀρεταὶ αἱ τοῦ θρεπτικοῦ καὶ αὐξητικοῦ ἀνθρώπου· δεῖ γὰρ, εἰ ἡ ἄνθρωπος, λογισμὸν ἐνεῖναι [καὶ] ἀρχὴν καὶ πρᾶξιν, [1220a] ἄρχει δ' ὁ λογισμὸς οὐ λογισμοῦ ἀλλ' ὀρέξεως καὶ παθημάτων, ἀνάγκη ἄρα ταῦτ' ἔχειν τὰ μέρη. καὶ ὥσπερ ἡ εὐεξία σύγκειται ἐκ τῶν κατὰ μόριον ἀρετῶν, οὕτω καὶ ἡ τῆς ψυχῆς ἀρετὴ ἢ τέλος.



ἀρετῆς δ' εἶδη δύο, ἡ μὲν ἠθικὴ ἡ δὲ διανοητικὴ. ἐπαινοῦμεν γὰρ οὐ μόνον τοὺς δικαίους ἀλλὰ καὶ τοὺς συνετοὺς καὶ τοὺς σοφοὺς· ἐπαινετὸν γὰρ ὑπέκειτο ἡ ἀρετὴ ἢ τὸ ἔργον, ταῦτα δ' οὐκ ἐνεργεῖ, ἀλλ' εἰσὶν αὐτῶν ἐνέργειαι. ἐπεὶ δ' αἱ διανοητικαὶ μετὰ λόγου, αἱ μὲν τοιαῦται τοῦ λόγον ἔχοντος, ὃ ἐπιτακτικὸν ἐστὶ τῆς ψυχῆς ἢ λόγον ἔχει, αἱ δ' ἠθικαὶ τοῦ ἀλόγου μὲν, ἀκολουθητικοῦ δὲ κατὰ φύσιν τῷ λόγον ἔχοντι· οὐ γὰρ λέγομεν ποῖός τις τὸ ἦθος, ὅτι σοφὸς ἢ δεινός, ἀλλ' ὅτι πρᾶος ἢ θρασύς.

μετὰ ταῦτα σκεπτέον πρῶτον περὶ ἀρετῆς ἠθικῆς, τί ἐστὶ, καὶ ποῖα μέρη αὐτῆς (εἰς τοῦτο γὰρ ἀνῆκται), καὶ γίνεται διὰ τίνων. δεῖ δὲ ζητεῖν ὥσπερ ἐν τοῖς ἄλλοις ἔχοντές τι ζητοῦσι πάντες, ὥστε ἀεὶ διὰ τῶν ἀληθῶς μὲν λεγομένων οὐ σαφῶς δὲ πειρᾶσθαι λαβεῖν καὶ τὸ ἀληθῶς καὶ σαφῶς. νῦν γὰρ ὁμοίως ἔχομεν ὥσπερ ἂν εἰ καὶ ὑγίειαν, ὅτι ἡ ἀρίστη διάθεσις τοῦ σώματος, καὶ Κορίσκος ὁ τῶν ἐν τῇ ἀγορᾷ μελάντατος· τί μὲν γὰρ ἐκάτερον τούτων οὐκ ἴσμεν, πρὸς μέντοι τὸ εἰδέναι τί ἐκάτερον αὐτῆς πρὸ ἔργου τὸ οὕτως ἔχειν. - ὑποκείσθω δὲ πρῶτον ἡ βελτίστη διάθεσις ὑπὸ τῶν βελτίστων γίνεσθαι, καὶ πράττεσθαι ἄριστα περὶ ἕκαστον ἀπὸ τῆς ἐκάστου ἀρετῆς, οἷον πόνοι τε ἄριστοι καὶ τροφὴ ἀφ' ὧν γίνεται εὐεξία, καὶ ἀπὸ τῆς εὐεξίας πονοῦσιν ἄριστα· ἔτι πᾶσαν διάθεσιν ὑπὸ τῶν αὐτῶν γίνεσθαι καὶ φθειρεσθαι πῶς προσφερομένων, ὥσπερ ὑγίεια ὑπὸ τροφῆς καὶ πόνων καὶ ὥρας. ταῦτα δὲ δῆλα ἐκ τῆς ἐπαγωγῆς. καὶ ἡ ἀρετὴ ἄρα ἡ τοιαύτη διάθεσις ἐστίν, ἡ γίνεται τε ὑπὸ τῶν ἀρίστων περὶ ψυχὴν κινήσεων καὶ ἀφ' ἧς πράττεται τὰ ἄριστα τῆς ψυχῆς ἔργα καὶ πάθη, καὶ ὑπὸ τῶν αὐτῶν πῶς μὲν γίνεται, πῶς δὲ φθείρεται, καὶ πρὸς ταῦτα ἡ χρῆσις αὐτῆς ὑφ' ὧν καὶ αὖξεται καὶ φθείρεται, πρὸς ἃ βέλτιστα διατίθησιν. σημεῖον δ' ὅτι περὶ ἡδέα καὶ λυπηρά καὶ ἡ ἀρετὴ καὶ ἡ κακία· αἱ γὰρ κολάσεις ἰατρεῖαι οὐσαι καὶ γινόμεναι διὰ τῶν ἐναντίων, καθάπερ ἐπὶ τῶν ἄλλων, διὰ τούτων εἰσίν.

ὅτι μὲν τοίνυν ἡ ἠθικὴ ἀρετὴ περὶ ἡδέα καὶ λυπηρά ἐστὶ, δῆλον· ἐπεὶ δ' ἐστὶ τὸ ἦθος, ὥσπερ καὶ τὸ ὄνομα σημαίνει [1220b] ὅτι ἀπὸ ἔθους ἔχει τὴν ἐπίδοσιν, ἐθίζεται δὲ τὸ ὑπ' ἀγωγῆς μὴ ἐμφύτου τῷ πολλάκις κινεῖσθαι πῶς, οὕτως ἤδη τὸ ἐνεργητικόν, ὃ ἐν τοῖς ἀψύχοις οὐχ ὁρῶμεν (οὐδὲ γὰρ ἂν μυριάκις ῥίψης ἄνω τὸν λίθον, οὐδέποτε ποιήσει τοῦτο μὴ βία), διὸ ἔστω <τὸ> ἦθος τοῦτο ψυχῆς κατὰ ἐπιτακτικὸν λόγον <τοῦ ἀλόγου μὲν,> δυναμένου δ' ἀκολουθεῖν τῷ λόγῳ ποιότης. λεκτέον δὲ κατὰ τί τῆς ψυχῆς ποιότης τὰ ἦθη. ἔστι δὲ κατὰ τε τὰς δυνάμεις τῶν παθημάτων, καθ' ἃς ὡς παθητικοὶ λέγονται, καὶ κατὰ τὰς ἕξεις, καθ' ἃς πρὸς τὰ πάθη ταῦτα λέγονται τῷ πάσχειν πῶς ἢ ἀπαθεῖς εἶναι. μετὰ ταῦτα ἡ διαίρεσις ἐν τοῖς ἀπηλλαγμένοις τῶν παθημάτων καὶ τῶν δυνάμεων καὶ τῶν ἕξεων. λέγω δὲ πάθη μὲν τὰ τοιαῦτα, θυμὸν φόβον

αἰδῶ ἐπιθυμίαν, ὅλως οἷς ἔπεται ὡς ἐπὶ τὸ πολὺ ἢ αἰσθητικὴ ἡδονὴ ἢ λύπη καθ' αὐτά. καὶ κατὰ μὲν ταῦτα οὐκ ἔστι ποιότης, ἀλλὰ πάσχει, κατὰ δὲ τὰς δυνάμεις ποιότης. λέγω δὲ [τὰς] δυνάμεις καθ' ἃς λέγονται κατὰ τὰ πάθη οἱ ἐνεργοῦντες, οἷον ὀργίλος ἀνάλγητος ἐρωτικὸς αἰσχυνηλὸς ἀναίσχυντος. ἔξεις δὲ εἰσιν ὅσαι αἵτιαι εἰσι τοῦ ταῦτα ἢ κατὰ λόγον ὑπάρχειν ἢ ἐναντίως, οἷον ἀνδρεία σωφροσύνη δειλία ἀκολασία.

διωρισμένων δὲ τούτων, ληπτέον ὅτι ἐν ἅπαντι συνεχεῖ καὶ διαιρετῶ ἐστὶν ὑπεροχὴ καὶ ἔλλειψις καὶ μέσον, καὶ ταῦτα ἢ πρὸς ἄλληλα ἢ πρὸς ἡμᾶς, οἷον ἐν γυμναστικῇ, ἐν ἱατρικῇ, ἐν οἰκοδομικῇ, ἐν κυβερνητικῇ, καὶ ἐν ὁποιοῦν πράξει, καὶ ἐπιστημονικῇ καὶ ἀνεπιστημονικῇ, καὶ τεχνικῇ καὶ ἀτέχνῳ. ἡ μὲν γὰρ κίνησις συνεχὴς, ἡ δὲ πρᾶξις κίνησις. ἐν πᾶσι δὲ τὸ μέσον τὸ πρὸς ἡμᾶς βέλτιστον· τοῦτο γὰρ ἐστὶν ὡς ἡ ἐπιστήμη κελεύει καὶ ὁ λόγος. πανταχοῦ δὲ τοῦτο καὶ ποιεῖ τὴν βελτίστην ἔξιν. καὶ τοῦτο δῆλον διὰ τῆς ἐπαγωγῆς καὶ τοῦ λόγου. τὰ γὰρ ἐναντία φθείρει ἄλληλα· τὰ δ' ἄκρα καὶ ἀλλήλοις καὶ τῷ μέσῳ ἐναντία. τὸ γὰρ μέσον ἐκάτερον πρὸς ἐκάτερον ἐστίν, οἷον τὸ ἴσον τοῦ μὲν ἐλάττονος μεῖζον, τοῦ μεῖζονος δὲ ἔλαττον. ὥστ' ἀνάγκη τὴν ἠθικὴν ἀρετὴν περὶ μέσ' ἅττα εἶναι καὶ μεσότητες τινά. ληπτέον ἄρα ἢ ποία μεσότης ἀρετή, καὶ περὶ ποῖα μέσα. εἰλήφθω δὲ παραδείγματος χάριν, καὶ θεωρείσθω ἕκαστον ἐκ τῆς ὑπογραφῆς.

ὀργιλότης	ἀναλγησία	πραότης.
θρασύτης	δειλία	ἀνδρεία.

[1221a]

ἀναισχυντία	κατάπληξις	αἰδώς.
ἀκολασία	ἀναισθησία	σωφροσύνη.
φθόνος	ἀνώνυμον	νέμεσις.
κέρδος	ζημία	δίκαιον.
ἄσωτία	ἀνελευθερία	ἐλευθεριότης.
ἀλαζονεία	εἰρωνεία	ἀλήθεια.
κολακεία	ἀπέχθεια	φιλία.

ἀρέσκεια	αὐθάδεια	σεμνότης.
[τρυφερότης	κακοπάθεια	καρτερία.]
χαυνότης	μικροψυχία	μεγαλοψυχία.
δαπανηρία	μικροπρέπεια	μεγαλοπρέπεια.
[πανουργία	εὐήθεια	φρόνησις].

τὰ μὲν πάθη ταῦτα καὶ τοιαῦτα συμβαίνει ταῖς ψυχαῖς, πάντα δὲ λέγεται τὰ μὲν τῷ ὑπερβάλλειν τὰ δὲ τῷ ἐλλείπειν. ὀργίλος μὲν γάρ ἐστιν ὁ μᾶλλον ἢ δεῖ ὀργιζόμενος καὶ θᾶττον καὶ πλείοσιν ἢ οἷς δεῖ, ἀνάλγητος δὲ ὁ ἐλλείπων καὶ οἷς καὶ ὅτε καὶ ὥς· καὶ θρασὺς μὲν ὁ μήτε ἅ χρὴ φοβούμενος μήθ' ὅτε μήθ' ὥς, δειλὸς δὲ ὁ καὶ ἅ μὴ δεῖ καὶ ὅτ' οὐ δεῖ καὶ ὥς οὐ δεῖ· ὁμοίως δὲ καὶ [ὁ] ἀκόλαστος καὶ ὁ ἐπιθυμητικὸς καὶ ὁ ὑπερβάλλον παῖσιν ὅσοις ἐνδέχεται, ἀναίσθητος δὲ ὁ ἐλλείπων καὶ μηδ' ὅσον βέλτιον καὶ κατὰ τὴν φύσιν ἐπιθυμῶν, ἀλλ' ἀπαθὴς ὥσπερ λίθος· κερδαλέος δὲ ὁ πανταχόθεν πλεονεκτικός, ζημιώδης δὲ ὁ μηδαμόθεν, ἀλλ' ὀλιγαχόθεν· ἀλαζῶν δὲ ὁ πλείω τῶν ὑπαρχόντων προσποιούμενος, εἴρων δὲ ὁ ἐλάττω· καὶ κόλαξ μὲν ὁ πλείω συνεπαινῶν ἢ καλῶς ἔχει, ἀπεχθητικὸς δὲ ὁ ἐλάττω· καὶ τὸ μὲν λίαν πρὸς ἡδονὴν ἀρέσκεια, τὸ δ' ὀλίγα καὶ μόγις εὐθάδεια· [ἔτι δ' ὁ μὲν μηδεμίαν ὑπομένων λύπην, μηδ' εἰ βέλτιον, τρυφερός, ὁ δὲ πᾶσαν ὁμοίως ὥς μὲν ἀπλῶς εἰπεῖν ἀνώνυμος, μεταφορᾷ δὲ λέγεται σκληρὸς καὶ ταλαίπωρος καὶ κακοπαθητικός·] χαῦνος δ' ὁ μειζόνων ἀξιῶν αὐτόν, μικρόψυχος δ' ὁ ἐλαττόνων· ἔτι δ' ἄσωτος ὁ πρὸς ἅπασαν δαπάνην ὑπερβάλλον, ἀνελεύθερος δὲ ὁ πρὸς ἅπασαν ἐλλείπων· ὁμοίως δὲ καὶ ὁ μικροπρεπὴς καὶ ὁ σαλάκων, ὁ μὲν γὰρ ὑπερβάλλει τὸ πρέπον, ὁ δ' ἐλλείπει τοῦ πρέποντος· [καὶ ὁ μὲν πανοῦργος πάντως καὶ πάντοθεν πλεονεκτικός, ὁ δ' εὐήθης οὐδ' ὅθεν δεῖ·] φθονερὸς δὲ τῷ λυπεῖσθαι ἐπὶ πλείοσιν εὐπραγίαις ἢ δεῖ (καὶ γὰρ οἱ ἄξιοι εὖ πράττειν λυποῦσι τοὺς φθονεροὺς εὖ πράττοντες), ὁ δ' ἐναντίος ἀνώνυμώτερος, ἔστι [1221b] δ' ὁ ὑπερβάλλον [ἐπὶ] τῷ μὴ λυπεῖσθαι μηδ' ἐπὶ τοῖς ἀναξίοις εὖ πράττουσιν, ἀλλ' εὐχερὴς ὥσπερ οἱ γαστρίμαργοι πρὸς τροφήν, ὃ δὲ δυσχερὴς κατὰ τὸν φθόνον ἐστίν. - τὸ δὲ πρὸς ἕκαστον μὴ κατὰ συμβεβηκὸς οὕτως ἔχειν περίεργον διορίζειν· οὐδεμία γὰρ ἐπιστήμη, οὔτε θεωρητικὴ οὔτε ποιητικὴ, οὔτε λέγει οὔτε πράττει τοῦτο προσδιορίζουσα, ἀλλὰ τοῦτ' ἐστὶ πρὸς τὰς συκοφαντίας τῶν τεχνῶν τὰς λογικάς. ἀπλῶς μὲν οὖν διωρίσθω τὸν τρόπον τοῦτον, ἀκριβέστερον δ', ὅταν περὶ τῶν ἔξεων λέγωμεν τῶν ἀντικειμένων.

αὐτῶν δὲ τούτων τῶν παθημάτων εἶδη κατονομάζεται τῷ διαφέρειν κατὰ τὴν ὑπερβολὴν ἢ χρόνου ἢ τοῦ μᾶλλον ἢ πρὸς τι τῶν ποιούντων τὰ πάθη. λέγω δ' οἷον ὀξύθυμος μὲν τῷ θᾶπτον πάσχειν ἢ δεῖ, χαλεπὸς δὲ καὶ θυμώδης τῷ μᾶλλον, πικρὸς δὲ τῷ φυλακτικὸς εἶναι τῆς ὀργῆς, πλήκτης δὲ καὶ λοιδορητικὸς ταῖς κολάσεσι ταῖς ἀπὸ τῆς ὀργῆς. ὀψοφάγοι δὲ καὶ γαστρίμαργοι καὶ οἰνόφλυγες τῷ πρὸς ὁποτέρας τροφῆς ἀπόλαυσιν ἔχειν τὴν δύναμιν παθητικὴν παρὰ τὸν λόγον.

οὐ δεῖ δὲ ἀγνοεῖν ὅτι ἔνια τῶν λεγομένων οὐκ ἔστιν ἐν τῷ πῶς λαμβάνειν, ἂν πῶς λαμβάνηται τῷ μᾶλλον πάσχειν. οἷον μοιχὸς οὐ τῷ μᾶλλον ἢ δεῖ πρὸς τὰς γαμετάς πλησιάζειν (οὐ γὰρ ἐστίν), ἀλλὰ μοχθηρία τις αὐτῇ δὴ ἐστίν. συνειλημμένον γὰρ τό τε πάθος λέγεται καὶ τὸ τοιόνδε εἶναι. ὁμοίως δὲ καὶ ἡ ὕβρις. διὸ καὶ ἀμφισβητοῦσι, συγγενέσθαι μὲν φάσκοντες, ἀλλ' οὐ μοιχεῦσαι· ἀγνοοῦντες γὰρ ἢ ἀναγκαζόμενοι καὶ πατάξαι μὲν, ἀλλ' οὐχ' ὑβρίσαι· ὁμοίως δὲ καὶ ἐπὶ τὰ ἄλλα τὰ τοιαῦτα.

εἰλημμένων δὲ τούτων, μετὰ ταῦτα λεκτέον ὅτι ἐπειδὴ δύο μέρη τῆς ψυχῆς, καὶ αἱ ἀρεταὶ κατὰ ταῦτα διήρηνται, καὶ αἱ μὲν τοῦ λόγον ἔχοντος διανοητικάι, ὧν ἔργον ἀλήθεια, ἢ περὶ τοῦ πῶς ἔχει ἢ περὶ γενέσεως, αἱ δὲ τοῦ ἀλόγου, ἔχοντος δ' ὄρεξιν (οὐ γὰρ ὁτιοῦν μέρος ἔχει τῆς ψυχῆς ὄρεξιν, εἰ μεριστὴ ἐστίν), ἀνάγκη δὴ φαῦλον τὸ ἦθος καὶ σπουδαῖον εἶναι τῷ διώκειν καὶ φεύγειν ἡδονὰς τινὰς καὶ λύπας. δῆλον δὲ τοῦτο ἐκ τῶν διαιρέσεων τῶν περὶ τὰ πάθη καὶ τὰς δυνάμεις καὶ τὰς ἕξεις. αἱ μὲν γὰρ δυνάμεις καὶ αἱ ἕξεις τῶν παθημάτων, τὰ δὲ πάθη λύπη καὶ ἡδονὴ διώριστα· ὥστε διὰ τε ταῦτα καὶ διὰ τὰς ἔμπροσθεν θέσεις συμβαίνει πᾶσαν ἠθικὴν ἀρετὴν περὶ ἡδονὰς εἶναι καὶ λύπας. πᾶσα γὰρ ψυχὴ ὑφ' οἷων πέφυκε γίνεσθαι χείρων καὶ βελτίων, πρὸς ταῦτα καὶ περὶ ταῦτά ἐστιν ἡ [1222a] ἡδονή. δι' ἡδονὰς δὲ καὶ λύπας φαύλους εἶναι φανέν, τῷ διώκειν καὶ φεύγειν ἢ ὡς μὴ δεῖ ἢ ἅς μὴ δεῖ. διὸ καὶ διορίζονται πάντες προχείρως ἀπάθειαν καὶ ἡρεμίαν περὶ ἡδονὰς καὶ λύπας εἶναι τὰς ἀρετάς, τὰς δὲ κακίας ἐκ τῶν ἐναντίων.

ἐπεὶ δ' ὑπόκειται ἀρετὴ εἶναι ἡ τοιαύτη ἕξις ἀφ' ἧς πρακτικοὶ τῶν βελτίστων καὶ καθ' ἣν ἄριστα διάκεινται περὶ τὸ βέλτιστον, βέλτιστον δὲ καὶ ἄριστον τὸ κατὰ τὸν ὀρθὸν λόγον, τοῦτο δ' ἐστὶ τὸ μέσον ὑπερβολῆς καὶ ἐλλείψεως τῆς πρὸς ἡμᾶς· ἀναγκαῖον ἂν εἴη τὴν ἠθικὴν ἀρετὴν καθ' αὐτὸν ἕκαστον μεσότητα εἶναι καὶ περὶ μέσ' ἅττα ἐν ἡδοναῖς καὶ λύπαις καὶ ἡδέσι καὶ λυπηροῖς. ἔσται δ' ἡ μεσότης ὅτε μὲν ἐν ἡδοναῖς (καὶ γὰρ ὑπερβολὴ καὶ ἔλλειψις), ὅτε δ' ἐν λύπαις, ὅτε δ' ἐν ἀμφοτέραις. ὁ γὰρ ὑπερβάλλων τῷ χαίρειν τῷ ἡδεῖ ὑπερβάλλει καὶ ὁ τῷ λυπεῖσθαι τῷ ἐναντίῳ, καὶ ταῦτα ἢ

ἀπλῶς ἢ πρὸς τινὰ ὅρον, οἷον ὅταν μὴ ὡς οἱ πολλοί· ὁ δ' ἀγαθὸς ὡς δεῖ. - ἐπεὶ δ' ἐστὶ τις ἕξις ἀφ' ἧς τοιοῦτος ἔσται ὁ ἔχων αὐτὴν ὥστε τοῦ αὐτοῦ πράγματος ὃ μὲν ἀποδέχεσθαι τὴν ὑπερβολὴν ὃ δὲ τὴν ἔλλειψιν, ἀνάγκη, ὡς ταῦτ' ἀλλήλοις ἐναντία καὶ τῷ μέσῳ, οὕτω καὶ τὰς ἕξεις ἀλλήλαις ἐναντίας εἶναι καὶ τῇ ἀρετῇ. - συμβαίνει μέντοι τὰς ἀντιθέσεις ἔνθα μὲν φανερωτέρας εἶναι πάσας, ἔνθα δὲ τὰς ἐπὶ τὴν ὑπερβολήν, ἐνιαχοῦ δὲ τὰς ἐπὶ τὴν ἔλλειψιν. αἴτιον δὲ τῆς ἐναντιώσεως, ὅτι οὐκ ἀεὶ ἐπὶ ταῦτά τῆς ἀνισότητος ἢ ὁμοιότητος πρὸς τὸ μέσον, ἀλλ' ὅτε μὲν θᾶπτον ἂν μεταβαίῃ ἀπὸ τῆς ὑπερβολῆς ἐπὶ τὴν μέσῃν ἕξιν, ὅτε δ' ἀπὸ τῆς ἐλλείψεως, ἧς <ὁς> πλεόν ἀπέχει, οὗτος δοκεῖ ἐναντιώτερος εἶναι, οἷον καὶ περὶ τὸ σῶμα ἐν μὲν τοῖς πόνοις ὑγιεινότερον ἢ ὑπερβολὴ τῆς ἐλλείψεως καὶ ἐγγύτερον τοῦ μέσου, ἐν δὲ τῇ τροφῇ ἢ ἔλλειψις ὑπερβολῆς. ὥστε καὶ αἱ προαιρετικαὶ ἕξεις αἱ φιλογυμναστικαὶ φιλοϋγιεῖς μᾶλλον ἔσονται καθ' ἑκατέραν τὴν αἵρεσιν, ἔνθα μὲν αἱ πολυπονώτεραι, ἔνθα δ' αἱ ὑποστατικώτεραι, καὶ ἐναντίος τῷ μετρίῳ καὶ τῷ ὡς ὁ λόγος ἔνθα μὲν ὁ ἄπονος καὶ οὐκ ἄμφω, ἔνθα δὲ [καὶ] ὁ ἀπολαυστικὸς καὶ οὐχ ὁ πεινητικός. συμβαίνει δὲ τοῦτο, διότι ἡ φύσις εὐθὺς οὐ πρὸς ἅπαντα ὁμοίως ἀφέστηκε τοῦ μέσου, ἀλλ' ἦττον μὲν φιλόπονοι ἐσμέν, μᾶλλον δ' ἀπολαυστικοί. ὁμοίως δὲ ταῦτ' ἔχει καὶ περὶ ψυχῆς. ἐναντίαν δὲ τίθεμεν τὴν ἕξιν ἐφ' ἣν τε ἀμαρτάνομεν μᾶλλον καὶ ἐφ' ἣν οἱ πολλοί (ἢ δ' ἑτέρα ὥσπερ οὐκ οὕσα λανθάνει· διὰ γὰρ τὸ ὀλίγον ἀναίσθητος ἐστίν), οἷον ὀργὴν πραότητι καὶ τὸν ὀργίλον [1222b] τῷ πράῳ. καίτοι ἐστὶν ὑπερβολὴ καὶ ἐπὶ τὸ ἴλεων εἶναι καὶ τὸ καταλλακτικὸν εἶναι καὶ μὴ ὀργίζεσθαι ῥαπιζόμενον. ἀλλ' ὀλίγοι οἱ τοιοῦτοι, ἐπ' ἐκεῖνο δὲ πάντες ῥέπουσι μᾶλλον. διὸ καὶ οὐ κολακικὸν ὁ θυμός.

ἐπεὶ δ' εἴληπται ἡ διαλογὴ τῶν ἕξεων καθ' ἕκαστα τὰ πάθη, καὶ αἱ ὑπερβολαὶ καὶ ἐλλείψεις, καὶ τῶν ἐναντίων ἕξεων, καθ' ἃς ἔχουσι κατὰ τὸν ὀρθὸν λόγον (τίς δ' ὁ ὀρθὸς λόγος, καὶ πρὸς τίνα δεῖ ὅρον ἀποβλέποντας λέγειν τὸ μέσον, ὕστερον ἐπισκεπτέον), φανερὸν ὅτι πᾶσαι αἱ ἠθικαὶ ἀρεταὶ καὶ κακίαι περὶ ἡδονῶν καὶ λυπῶν ὑπερβολὰς καὶ ἐλλείψεις εἰσὶ, καὶ ἡδοναὶ καὶ λυπᾶι ἀπὸ τῶν εἰρημένων ἕξεων καὶ παθημάτων γίνονται. ἀλλὰ μὴν ἢ γε βελτίστη ἕξις ἡ περὶ ἕκαστα μέση ἐστίν. δῆλον τοίνυν ὅτι αἱ ἀρεταὶ ἢ πᾶσαι ἢ τούτων τινὲς ἔσονται τῶν μεσοτήτων.

λάβωμεν οὖν ἄλλην ἀρχὴν τῆς ἐπιούσης σκέψεως. εἰσὶ δὲ πᾶσαι μὲν αἱ οὐσίαι κατὰ φύσιν τινὲς ἀρχαί, διὸ καὶ ἐκάστη πολλὰ δύναται τοιαῦτα γεννᾶν, οἷον ἄνθρωπος ἄνθρώπους καὶ ζῶον ὃν ὅλως ζῶα καὶ φυτὸν φυτά. πρὸς δὲ τούτοις ὃ γ' ἄνθρωπος καὶ πράξεων τινῶν ἐστὶν ἀρχὴ μόνον τῶν ζώων· τῶν γὰρ ἄλλων οὐθὲν εἵπομεν ἂν πράττειν. τῶν δ' ἀρχῶν ὅσαι

τοιαῦται, ὅθεν πρῶτον αἱ κινήσεις, κύριαι λέγονται, μάλιστα δὲ δικαίως ἀφ' ὧν μὴ ἐνδέχεται ἄλλως, ἢν ἴσως ὁ θεὸς ἄρχει. ἐν δὲ ταῖς ἀκινήτοις ἀρχαῖς, οἷον ἐν ταῖς μαθηματικαῖς, οὐκ ἔστι τὸ κύριον, καίτοι λέγεται γε καθ' ὁμοιότητα· καὶ γὰρ ἐνταῦθα κινουμένης τῆς ἀρχῆς πάντα μάλιστ' ἂν τὰ δεικνύμενα μεταβάλλοι, αὐτὰ δ' αὐτὰ οὐ μεταβάλλει ἀναιρουμένου θατέρου ὑπὸ θατέρου, ἂν μὴ τῷ τὴν ὑπόθεσιν ἀνελεῖν καὶ δι' ἐκείνης δεῖξαι. ὁ δ' ἄνθρωπος ἀρχὴ κινήσεως τινός· ἢ γὰρ πρᾶξις κινήσις. ἐπεὶ δ' ὥσπερ ἐν τοῖς ἄλλοις ἡ ἀρχὴ αἰτία ἐστὶ τῶν δι' αὐτὴν ὄντων ἢ γινομένων, δεῖ νοῆσαι καθάπερ ἐπὶ τῶν ἀποδείξεων. εἰ γὰρ ἔχοντος τοῦ τριγώνου δύο ὀρθὰς ἀνάγκη τὸ τετράγωνον ἔχειν τέτταρας ὀρθὰς, φανερόν ὡς αἴτιον τούτου τὸ δύο ὀρθὰς ἔχειν τὸ τρίγωνον. εἰ δέ γε μεταβάλλει τὸ τρίγωνον, ἀνάγκη καὶ τὸ τετράγωνον μεταβάλλειν, οἷον εἰ τρεῖς, ἕξ, εἰ δὲ τέτταρες, ὀκτώ. καὶ εἰ μὴ μεταβάλλοι, τοιοῦτον δ' ἐστί, κακεῖνο τοιοῦτον ἀναγκαῖον εἶναι. δῆλον δ' ὅτι ἐπιχειροῦμεν ὅτι ἀναγκαῖον, ἐκ τῶν ἀναλυτικῶν· νῦν δ' οὔτε μὴ λέγειν οὔτε λέγειν ἀκριβῶς οἷόν τε, πλὴν τοσοῦτον. εἰ γὰρ μηθὲν ἄλλο αἴτιον τοῦ τριγώνου οὕτως ἔχειν, ἀρχὴ τις ἂν εἴη τοῦτο καὶ αἴτιον τῶν ὕστερον. ὥστ' εἴπερ ἐστὶν ἔνια τῶν ὄντων ἐνδεχόμενα ἐναντίως ἔχειν, ἀνάγκη καὶ τὰς ἀρχὰς αὐτῶν εἶναι τοιαύτας.

[1223a] ἐκ γὰρ τῶν ἐξ ἀνάγκης ἀναγκαῖον τὸ συμβαῖνον ἐστί, τὰ δέ γε ἐντεῦθεν ἐνδέχεται γενέσθαι τάναντία, καὶ ὁ ἐφ' αὐτοῖς ἐστὶ τοῖς ἀνθρώποις, πολλὰ τῶν τοιούτων, καὶ ἀρχαὶ τῶν τοιούτων εἰσὶν αὐτοί. ὥστε ὅσων πράξεων ὁ ἄνθρωπός ἐστιν ἀρχὴ καὶ κύριος, φανερόν ὅτι ἐνδέχεται καὶ γίνεσθαι καὶ μὴ, καὶ ὅτι ἐφ' αὐτῷ ταῦτ' ἐστὶ γίνεσθαι καὶ μὴ, ὧν γε κύριός ἐστι τοῦ εἶναι καὶ τοῦ μὴ εἶναι. ὅσα δ' ἐφ' αὐτῷ ἐστὶ ποιεῖν ἢ μὴ ποιεῖν, αἴτιος τούτων αὐτὸς ἐστίν· καὶ ὅσων αἴτιος, ἐφ' αὐτῷ. ἐπεὶ δ' ἢ τε ἀρετὴ καὶ ἢ κακία καὶ τὰ ἀπ' αὐτῶν ἔργα τὰ μὲν ἐπαινετὰ τὰ δὲ ψεκτά (ψέγεται γὰρ καὶ ἐπαινεῖται οὐ διὰ τὰ ἐξ ἀνάγκης ἢ τύχης ἢ φύσεως ὑπάρχοντα, ἀλλ' ὅσων αὐτοὶ αἴτιοι ἐσμέν· ὅσων γὰρ ἄλλος αἴτιος, ἐκεῖνος καὶ τὸν ψόγον καὶ τὸν ἔπαινον ἔχει), δῆλον ὅτι καὶ ἡ ἀρετὴ καὶ ἡ κακία περὶ ταῦτ' ἐστὶν ὧν αὐτὸς αἴτιος καὶ ἀρχὴ πράξεων. ληπτέον ἄρα ποίων αὐτὸς αἴτιος καὶ ἀρχὴ πράξεων. πάντες μὲν δὴ ὁμολογοῦμεν, ὅσα μὲν ἐκούσια καὶ κατὰ προαίρεσιν τὴν ἐκάστου, ἐκεῖνον αἴτιον εἶναι, ὅσα δ' ἀκούσια, οὐκ αὐτὸν αἴτιον. πάντα δ' ὅσα προελόμενος, καὶ ἐκὼν δῆλον ὅτι. δῆλον τοίνυν ὅτι καὶ ἡ ἀρετὴ καὶ ἡ κακία τῶν ἐκουσίων ἂν εἴησαν.

ληπτέον ἄρα τί τὸ ἐκούσιον καὶ τί τὸ ἀκούσιον, καὶ τί ἐστὶν ἡ προαίρεσις, ἐπειδὴ ἡ ἀρετὴ καὶ ἡ κακία ὀρίζεται τούτοις. πρῶτον σκεπτέον τὸ ἐκούσιον καὶ τὸ ἀκούσιον. τριῶν δὲ τούτων ἔν τι δόξειεν <ἂν> εἶναι, ἥτοι κατ' ὄρεξιν ἢ

κατὰ προαίρεσιν ἢ κατὰ διάνοιαν, τὸ μὲν ἐκούσιον κατὰ τούτων τι, τὸ δ' ἀκούσιον παρὰ τούτων τι. ἀλλὰ μὴν ἡ ὀρεξις εἰς τρία διαιρεῖται, εἰς βούλησιν καὶ θυμὸν καὶ ἐπιθυμίαν· ὥστε ταῦτα διαιρετέον, καὶ πρῶτον κατ' ἐπιθυμίαν.

δόξειε δ' ἂν πᾶν τὸ κατ' ἐπιθυμίαν ἐκούσιον εἶναι. τὸ γὰρ ἀκούσιον πᾶν δοκεῖ εἶναι βίαιον, τὸ δὲ βίαιον λυπηρόν, καὶ πᾶν ὃ ἀναγκαζόμενοι ποιοῦσιν ἢ πάσχουσιν, ὥσπερ καὶ Εὐήνης φησί

“πᾶν γὰρ ἀναγκαῖον πρᾶγμ' ἀνιαρὸν ἔφυ.” ὥστ' εἴ τι λυπηρόν, βίαιον, καὶ εἰ βίαιον, λυπηρόν. τὸ δὲ παρὰ τὴν ἐπιθυμίαν πᾶν λυπηρόν (ἡ γὰρ ἐπιθυμία τοῦ ἡδέος), ὥστε βίαιον καὶ ἀκούσιον. τὸ ἄρα κατ' ἐπιθυμίαν ἐκούσιον· ἐναντία γὰρ ταῦτ' ἀλλήλοις. ἔτι ἡ μοχθηρία ἀδικώτερον πᾶσα ποιεῖ, ἡ δ' ἀκρασία μοχθηρία δοκεῖ εἶναι, ὃ δ' ἀκρατὴς ὁ κατὰ τὴν ἐπιθυμίαν παρὰ τὸν λογισμὸν οἷος πράττειν, ἀκρατεύεται δ' ὅταν ἐνεργῇ κατ' αὐτήν, τὸ δ' ἀδικεῖν ἐκούσιον, ὥσθ' ὁ [1223b] ἀκρατὴς ἀδικήσει τῷ πράττειν κατ' ἐπιθυμίαν· ἐκὼν ἄρα πράξει, καὶ ἐκούσιον τὸ κατ' ἐπιθυμίαν· καὶ γὰρ ἄτοπον εἰ δικαιότεροι ἔσονται οἱ ἀκρατεῖς γινόμενοι. - ἐκ μὲν τοίνυν τούτων δόξειεν ἂν τὸ κατ' ἐπιθυμίαν ἐκούσιον εἶναι, ἐκ δὲ τῶνδε τοῦναντίον. ἅπαν γὰρ ὃ ἐκὼν τις πράττει, βουλόμενος πράττει, καὶ ὃ βούλεται, ἐκὼν. βούλεται δ' οὐθεὶς ὃ οἶεται εἶναι κακόν. ἀλλὰ μὴν ὁ ἀκρατευόμενος οὐχ ἂ βούλεται ποιεῖ· τὸ γὰρ παρ' ὃ οἶεται βέλτιστον εἶναι πράττειν δι' ἐπιθυμίαν ἀκρατεύεσθαι ἐστίν. ὥστε ἅμα συμβήσεται τὸν αὐτὸν ἐκόντα καὶ ἄκοντα πράττειν· τοῦτο δ' ἀδύνατον. ἔτι δ' ὁ ἐγκρατὴς δικαιοπραγήσει, καὶ μᾶλλον τῆς ἀκρασίας. ἡ γὰρ ἐγκράτεια ἀρετή, ἡ δ' ἀρετὴ δικαιότερους ποιεῖ. ἐγκρατεύεται δ' ὅταν πράττῃ παρὰ τὴν ἐπιθυμίαν κατὰ τὸν λογισμόν. ὥστ' εἰ τὸ μὲν δικαιοπραγεῖν ἐκούσιον, ὥσπερ καὶ τὸ ἀδικεῖν (ἅμφω γὰρ δοκεῖ ταῦτα ἐκούσια εἶναι, καὶ ἀνάγκη, εἰ θάτερον ἐκούσιον, καὶ θάτερον), τὸ δὲ παρὰ τὴν ἐπιθυμίαν ἀκούσιον, ἅμα ἄρα ὁ αὐτὸς τὸ αὐτὸ πράξει ἐκὼν καὶ ἄκων.

ὁ δ' αὐτὸς λόγος καὶ περὶ θυμοῦ. ἀκρασία γὰρ καὶ ἐγκράτεια καὶ θυμοῦ δοκεῖ εἶναι, ὥσπερ καὶ ἐπιθυμίας· καὶ τὸ παρὰ τὸν θυμὸν λυπηρόν, καὶ βίαιον ἢ κάθεξις, ὥστ' εἰ τὸ βίαιον ἀκούσιον, τὸ κατὰ τὸν θυμὸν ἐκούσιον ἂν εἴη πᾶν. ἔοικε δὲ καὶ Ἡράκλειτος λέγειν εἰς τὴν ἰσχὺν τοῦ θυμοῦ βλέψας ὅτι λυπηρὰ ἡ κώλυσις αὐτοῦ· “χαλεπὸν γάρ” φησι “θυμῷ μάχεσθαι· ψυχῆς γὰρ ὠνεῖται.” εἰ δ' ἀδύνατον τὸ αὐτὸν ἐκόντα καὶ ἄκοντα πράττειν ἅμα τὸ κατὰ τὸ αὐτὸ τοῦ πράγματος, μᾶλλον ἐκούσιον τὸ κατὰ βούλησιν τοῦ κατ' ἐπιθυμίαν καὶ θυμόν. τεκμήριον δέ· πολλὰ γὰρ πράττομεν ἐκόντες ἄνευ ὀργῆς καὶ ἐπιθυμίας.

λείπεται ἄρα, εἰ τὸ βουλόμενον καὶ ἐκούσιον ταῦτό, σκέψασθαι. φαίνεται δὲ καὶ τοῦτο ἀδύνατον. ὑπόκειται γὰρ ἡμῖν καὶ δοκεῖ ἡ μοχθηρία ἀδικωτέρους ποιεῖν, ἢ δ' ἀκρασία μοχθηρία τις φαίνεται· συμβήσεται δὲ τούναντίον. βούλεται μὲν γὰρ οὐθεὶς ἃ οἶεται εἶναι κακά, πράττει δ' ὅταν γίνηται ἀκρατής· εἰ οὖν τὸ μὲν ἀδικεῖν ἐκούσιον, τὸ δ' ἐκούσιον τὸ κατὰ βούλησιν, ὅταν ἀκρατὴς γένηται, οὐκέτι ἀδικήσει, ἀλλ' ἔσται δικαιότερος ἢ πρὶν γενέσθαι ἀκρατής. τοῦτο δ' ἀδύνατον.

ὅτι μὲν τοίνυν οὐκ ἔστι τὸ ἐκούσιον τὸ κατὰ ὄρεξιν πράττειν, οὐδ' ἀκούσιον τὸ παρὰ τὴν ὄρεξιν, φανερόν· ὅτι δ' οὐδὲ κατὰ προαίρεσιν, πάλιν ἐκ τῶνδε δῆλον. τὸ μὲν γὰρ κατὰ βούλησιν ὡς [1224a] οὐκ ἀκούσιον ἀπεδείχθη, ἀλλὰ μᾶλλον πᾶν ὃ βούλεται καὶ ἐκούσιον (ἀλλ' ὅτι καὶ μὴ βουλόμενον ἐνδέχεται πράττειν ἐκόντα, τοῦτο δέδεικται μόνον)· πολλὰ δὲ βουλόμενοι πράττομεν ἐξαίφνης, προαιρεῖται δ' οὐδεὶς οὐδὲν ἐξαίφνης.

εἰ δὲ ἀνάγκη μὲν ἦν τριῶν τούτων ἓν τι εἶναι τὸ ἐκούσιον, ἢ κατ' ὄρεξιν ἢ κατὰ προαίρεσιν ἢ κατὰ διάνοιαν, τούτων δὲ τὰ δύο μὴ ἐστί, λείπεται ἐν τῷ διανοούμενόν πως πράττειν εἶναι τὸ ἐκούσιον. ἔτι δὲ μικρὸν προαγαγόντες τὸν λόγον, ἐπιθῶμεν τέλος τῷ περὶ τοῦ ἐκουσίου καὶ ἀκουσίου διορισμῷ. δοκεῖ γὰρ τὸ βίᾳ καὶ μὴ βίᾳ τι ποιεῖν οἰκεῖα τοῖς εἰρημένοις εἶναι· τό τε γὰρ βίαιον ἀκούσιον, καὶ τὸ ἀκούσιον πᾶν βίαιον εἶναι φαμέν. ὥστε περὶ τοῦ βίᾳ σκεπτέον πρῶτον, τί ἐστί καὶ πῶς ἔχει πρὸς τὸ ἐκούσιον καὶ ἀκούσιον. δοκεῖ δὴ τὸ βίαιον καὶ τὸ ἀναγκαῖον ἀντικεῖσθαι, καὶ ἡ βία καὶ ἡ ἀνάγκη, τῷ ἐκουσίῳ καὶ τῇ πειθοῖ ἐπὶ τῶν πραττομένων. καθόλου δὲ τὸ βίαιον καὶ τὴν ἀνάγκην καὶ ἐπὶ τῶν ἀψύχων λέγομεν· καὶ γὰρ τὸν λίθον ἄνω καὶ τὸ πῦρ κάτω βίᾳ καὶ ἀναγκαζόμενα φέρεσθαι φαμέν. ταῦτα δ' ὅταν κατὰ τὴν φύσει καὶ τὴν καθ' αὐτὰ ὁρμὴν φέρηται, οὐ βίᾳ, οὐ μὴν οὐδ' ἐκούσια λέγεται, ἀλλ' ἀνώνυμος ἢ ἀντίθεσις. ὅταν δὲ παρὰ ταύτην, βίᾳ φαμέν. ὁμοίως δὲ καὶ ἐπὶ ἐμψύχων καὶ ἐπὶ τῶν ζώων ὁρῶμεν βίᾳ πολλὰ καὶ πάσχοντα καὶ ποιοῦντα, ὅταν παρὰ τὴν ἐν αὐτῷ ὁρμὴν ἔξωθέν τι κινή. ἐν μὲν τοῖς ἀψύχοις ἀπλῇ ἡ ἀρχή, ἐν δὲ τοῖς ἐμψύχοις πλεονάζει· οὐ γὰρ αἰὲς ἡ ὄρεξις καὶ ὁ λόγος συμφωνεῖ. ὥστ' ἐπὶ μὲν τῶν ἄλλων ζώων ἀπλοῦν τὸ βίαιον, ὡς περ ἐπὶ τῶν ἀψύχων (οὐ γὰρ ἔχει λόγον καὶ ὄρεξιν ἐναντίαν, ἀλλὰ τῇ ὀρέξει ζῆν)· ἐν δ' ἀνθρώπῳ ἔνεστιν ἄμφω, καὶ ἐν τινὶ ἡλικίᾳ, ἢ καὶ τὸ πράττειν ἀποδίδομεν. οὐ γὰρ φαμεν τὸ παιδίον πράττειν, οὐδὲ τὸ θηρίον, ἀλλὰ τὸν ἤδη διὰ λογισμὸν πράττοντα. - δοκεῖ δὴ τὸ βίαιον ἅπαν λυπηρὸν εἶναι, καὶ οὐθεὶς βίᾳ μὲν ποιεῖ, χαίρων δέ. διὸ περὶ τὸν ἐγκρατῆ καὶ τὸν ἀκρατῆ πλείστη ἀμφισβήτησις ἐστίν. ἐναντίας γὰρ ὁρμᾶς ἔχων αὐτὸς ἕκαστος αὐτῷ πράττει, ὥσθ' ὁ τ' ἐγκρατὴς βίᾳ, φασίν, ἀφέλκει αὐτὸν ἀπὸ τῶν ἡδέων ἐπιθυμιῶν (ἀλγεῖ γὰρ ἀφέλκων



πρὸς ἀντιτείνουσιν τὴν ὄρεξιν), ὃ τ' ἀκρατὴς βία παρὰ τὸν λογισμόν. ἦττον δὲ δοκεῖ λυπεῖσθαι· ἡ γὰρ ἐπιθυμία τοῦ ἡδέος, ἡ ἀκολουθεῖ χαίρων, ὥστε ὁ ἀκρατὴς μᾶλλον ἐκὼν καὶ οὐ βία, ὅτι οὐ λυπηρῶς. ἡ δὲ πειθὼ τῇ βίᾳ καὶ ἀνάγκῃ ἀντιτίθεται. ὁ δ' ἐγκρατὴς [1224b] ἐφ' ᾧ πέπεισται ἄγει, καὶ πορεύεται οὐ βία, ἀλλ' ἐκὼν. ἡ δὲ ἐπιθυμία οὐ πείσασα ἄγει· οὐ γὰρ μετέχει λόγου. ὅτι μὲν οὖν δοκοῦσιν οὗτοι μόνοι βία καὶ ἄκοντες ποιεῖν, καὶ διὰ τίν' αἰτίαν, ὅτι καθ' ὁμοιότητά τινα τοῦ βία, καθ' ἣν καὶ ἐπὶ τῶν ἀψύχων λέγομεν, εἴρηται· οὐ μὴν ἀλλ' εἴ τις προσθῇ τὸ ἐν τῷ διορισμῷ προσκείμενον, κάκεῖ λύεται τὸ λεχθέν. ὅταν μὲν γάρ τι τῶν ἔξωθεν παρὰ τὴν ἐν αὐτῷ ὁρμὴν κινῇ ἢ ἡρεμίζῃ, βία φαμέν, ὅταν δὲ μή, οὐ βία· ἐν δὲ τῷ ἀκρατεῖ καὶ ἐγκρατεῖ ἡ καθ' αὐτὸν ὁρμὴ ἐνοῦσα ἄγει (ἄμφω γὰρ ἔχει)· ὥστ' οὐ βία οὐδέτερος, ἀλλ' ἐκὼν διὰ γε ταῦτα πράττει ἄν, οὐδ' ἀναγκαζόμενος. τὴν γὰρ ἔξωθεν ἀρχήν, τὴν παρὰ τὴν ὁρμὴν ἢ ἐμποδίζουσιν ἢ κινοῦσιν, ἀνάγκην λέγομεν, ὥσπερ εἴ τις λαβὼν τὴν χεῖρα τύποι τινὰ ἀντιτείνοντος καὶ τῷ βούλεσθαι καὶ τῷ ἐπιθυμεῖν· ὅταν δ' ἔσωθεν ἡ ἀρχή, οὐ βία. ἔτι καὶ ἡδονὴ καὶ λύπη ἐν ἀμφοτέροις ἔνεστι. καὶ γὰρ ὁ ἐγκρατευόμενος λυπεῖται παρὰ τὴν ἐπιθυμίαν πράττων ἤδη, καὶ χαίρει τὴν ἀπ' ἐλπίδος ἡδονήν, ὅτι ὕστερον ὠφελήθησεται, ἢ καὶ ἤδη ὠφελεῖται ὑγιαίνων· καὶ ὁ ἀκρατὴς χαίρει μὲν τυγχάνων ἀκρατευόμενος οὐ ἐπιθυμεῖ, λυπεῖται δὲ τὴν ἀπ' ἐλπίδος λύπην, οἷεται γὰρ κακὸν πράττειν. ὥστε τὸ μὲν βία ἐκότερον φάναι ποιεῖν ἔχει λόγον, καὶ διὰ τὴν ὄρεξιν καὶ διὰ τὸν λογισμόν ἐκότερον ἄκοντα ποτε πράττειν· κεχωρισμένα γὰρ ὄντα ἐκάτερα ἐκκρούεται ὑπ' ἀλλήλων. ὅθεν καὶ ἐπὶ τὴν ὅλην μεταφέρουσι ψυχὴν, ὅτι τῶν ἐν ψυχῇ τι τοιοῦτον ὁρῶσιν. ἐπὶ μὲν οὖν τῶν μορίων ἐνδέχεται τοῦτο λέγειν· ἡ δ' ὅλη ἐκοῦσα ψυχὴ καὶ τοῦ ἀκρατοῦς καὶ τοῦ ἐγκρατοῦς πράττει, βία δ' οὐδέτερος, ἀλλὰ τῶν ἐν ἐκείνοις τι, ἐπεὶ καὶ φύσει ἀμφοτέρα ἔχομεν. καὶ γὰρ ὁ λόγος φύσει ὑπάρχει, ὅτι ἐωμένης τῆς γενέσεως καὶ μὴ πηρωθείσης ἐνέσται, καὶ ἡ ἐπιθυμία, ὅτι εὐθὺς ἐκ γενετῆς ἀκολουθεῖ καὶ ἔνεστιν. σχεδὸν δὲ τούτοις δυσὶ τὸ φύσει διορίζομεν, τῷ τε ὅσα εὐθὺς γιγνομένοις ἀκολουθεῖ πᾶσι, καὶ ὅσα ἐωμένης τῆς γενέσεως εὐθυπορεῖν γίγνεται ἡμῖν, οἷον πολιὰ καὶ γῆρας καὶ τᾶλλα τὰ τοιαῦτα. ὥστε μὴ κατὰ φύσιν ἐκάτερος πράττει, ἀπλῶς δὲ κατὰ φύσιν ἐκάτερος, οὐ τὴν αὐτήν. αἱ μὲν οὖν περὶ τὸν ἀκρατὴ καὶ ἐγκρατὴ ἀπορίαι «αὗται» περὶ τοῦ βία πράττειν ἢ ἀμφοτέρους ἢ τὸν ἕτερον, ὥστε ἢ μὴ ἐκόντας ἢ ἅμα βία καὶ ἐκόντας, εἰ δὲ τὸ βία ἀκούσιον, ἅμα ἐκόντας καὶ ἄκοντας πράττειν· [1225a] σχεδὸν δὲ ἐκ τῶν εἰρημένων δῆλον ἡμῖν ὡς ἀπαντητ

λέγονται δὲ κατ' ἄλλον τρόπον βία καὶ ἀναγκασθέντες πράττειν, οὐ διαφωνοῦντος τοῦ λόγου καὶ τῆς ὁρέξεως, ὅταν πράττωσιν ὁ καὶ λυπηρὸν καὶ φαῦλον ὑπολαμβάνουσιν, ἀλλ' ἂν μὴ τοῦτο πράττωσι, πληγαὶ ἢ δεσμοὶ ἢ

θάνατοι ὧσιν. ταῦτα γάρ φασιν ἀναγκασθέντες πράττειν. ἢ οὐ, ἀλλὰ πάντες ἐκόντες ποιοῦσιν αὐτὸ τοῦτο; ἔξεστι γὰρ μὴ ποιεῖν, ἀλλ' ἐκεῖνο ὑπομεῖναι τὸ πάθος. ἔτι ἴσως τούτων τὰ μὲν φαίη τις ἂν τὰ δ' οὐ. ὅσα μὲν γὰρ ἐφ' αὐτῷ τῶν τοιούτων μὴ ὑπάρξαι ἢ ὑπάρξαι, ἀεὶ ὅσα πράττει ἂ μὴ βούλεται, ἐκὼν πράττει, καὶ οὐ βίᾳ. ὅσα δὲ μὴ ἐφ' αὐτῷ τῶν τοιούτων, βίᾳ πῶς, οὐ μέντοι γ' ἀπλῶς, ὅτι οὐκ αὐτὸ τοῦτο προαιρεῖται ὃ πράττει, ἀλλ' οὗ ἕνεκα, ἐπεὶ καὶ ἐν τούτοις ἐστὶ τις διαφορά. εἰ γὰρ ἵνα μὴ λάβῃ ψηλαφῶν ἀποκτεῖνοι, γελοῖος ἂν εἴη, εἰ λέγοι ὅτι βίᾳ καὶ ἀναγκαζόμενος, ἀλλὰ δεῖ μεῖζον κακὸν καὶ λυπηρότερον εἶναι, ὃ πείσεται μὴ ποιήσας. οὕτω γὰρ ἀναγκαζόμενος καὶ [μὴ] βίᾳ πράξει, ἢ οὐ φύσει, ὅταν κακὸν ἀγαθοῦ ἕνεκα ἢ μεῖζονος κακοῦ ἀπολύσεως πράττῃ, καὶ ἄκων γε. οὐ γὰρ ἐφ' αὐτῷ ταῦτα. διὸ καὶ τὸν ἔρωτα πολλοὶ ἀκούσιον τιθέασιν, καὶ θυμοὺς ἐνίους καὶ τὰ φυσικά, ὅτι ἰσχυρὰ καὶ ὑπὲρ τὴν φύσιν. καὶ συγγνώμην ἔχομεν ὡς πεφυκότα βιάζεσθαι τὴν φύσιν. καὶ μᾶλλον ἂν δόξειε βίᾳ καὶ ἄκων πράττειν, ἵνα μὴ ἀλγῇ ἰσχυρῶς, ἢ ἵνα μὴ ἡρέμα, καὶ ὅλως ἵνα μὴ ἀλγῇ ἢ ἵνα [μὴ] χαίρῃ. τὸ γὰρ ἐφ' αὐτῷ, εἰς ὃ ἀνάγεται ὅλον, τοῦτ' ἐστὶν ὃ ἡ αὐτοῦ φύσις οἷα τε φέρειν. ὃ δὲ μὴ οἷα τε, μήδ' ἐστὶ τῆς ἐκείνου φύσει ὀρέξεως ἢ λογισμοῦ, οὐκ ἐφ' αὐτῷ. διὸ καὶ τοὺς ἐνθουσιῶντας καὶ προλέγοντας, καίπερ διανοίας ἔργον ποιοῦντας, ὅμως οὗ φαμεν ἐφ' αὐτοῖς εἶναι, οὔτ' εἰπεῖν ἂ εἴπον, οὔτε πράττειν ἂ ἔπραξαν. ἀλλὰ μὴν οὐδὲ δι' ἐπιθυμίαν. ὥστε καὶ διάνοιαι τινες καὶ πάθη οὐκ ἐφ' ἡμῖν εἰσίν, ἢ πράξεις αἱ κατὰ τὰς τοιαύτας διανοίας καὶ λογισμούς, ἀλλ' ὥσπερ Φιλόλαος ἔφη εἶναι τινὰς λόγους κρείττους ἡμῶν.

ὥστ' εἰ τὸ ἐκούσιον καὶ ἀκούσιον καὶ πρὸς τὸ βίᾳ ἔδει σκέψασθαι, τοῦτο μὲν οὕτω διηρήσθω (οἱ γὰρ μάλιστ' ἐμποδίζοντες τὸ ἐκούσιον ὡς βίᾳ πράττοντες, ἀλλ' ἐκόντες). ἐπεὶ δὲ τοῦτ' ἔχει τέλος, καὶ οὔτε τῇ ὀρέξει οὔτε τῇ προαιρέσει τὸ ἐκούσιον ὠρίσται, λοιπὸν [1225b] δὴ ὀρίσασθαι τὸ κατὰ τὴν διάνοιαν. δοκεῖ δὴ ἐναντίον εἶναι τὸ ἐκούσιον τῷ ἀκουσίῳ, καὶ τὸ εἰδότα ἢ ὄν ἢ ὧ ἢ οὗ ἕνεκα (ἐνίστε γὰρ οἶδε μὲν ὅτι πατήρ, ἀλλ' οὐχ ἵνα ἀποκτείνῃ, ἀλλ' ἵνα σώσῃ, ὥσπερ αἱ Πελιάδες, ἥτοι ὡς τοδὶ μὲν πόμα, ἀλλ' ὡς φίλτρον καὶ οἶνον, τὸ δ' ἦν κώνειον) τῷ ἀγνοοῦντα καὶ ὄν καὶ ὧ καὶ ὃ δι' ἀγνοίαν, μὴ κατὰ συμβεβηκός. τὸ δὲ δι' ἀγνοίαν, καὶ ὃ καὶ ὧ καὶ ὄν, ἀκούσιον. τὸ ἐναντίον ἄρ' ἐκούσιον. ὅσα μὲν οὖν ἐφ' ἑαυτῷ ὄν μὴ πράττειν πράττει μὴ ἀγνοῶν καὶ δι' αὐτόν, ἐκούσια ταῦτ' ἀνάγκη εἶναι, καὶ τὸ ἐκούσιον τοῦτ' ἐστίν. ὅσα δ' ἀγνοῶν καὶ διὰ τὸ ἀγνοεῖν, ἄκων. ἐπεὶ δὲ τὸ ἐπίστασθαι καὶ τὸ εἶδέναι διττόν, ἓν μὲν τὸ ἔχειν, ἓν δὲ τὸ χρῆσθαι τῇ ἐπιστήμῃ, ὃ ἔχων μὴ χρώμενος δὲ ἔστι μὲν ὡς δικαίως <ἂν> ἀγνοῶν λέγοιτο, ἔστι δὲ ὡς οὐ δικαίως, οἷον εἰ δι' ἀμέλειαν μὴ ἐχρῆτο. ὁμοίως δὲ καὶ μὴ ἔχων τις ψέγοιτο ἂν, εἰ ὃ ῥάδιον ἢ ἀναγκαῖον ἦν, μὴ ἔχει δι' ἀμέλειαν ἢ ἡδονὴν ἢ λύπην.

ταῦτ' οὖν προσδιοριστέον.

περὶ μὲν οὖν τοῦ ἐκούσιου καὶ ἀκούσιου διωρίσθω τοῦτον τὸν τρόπον· περὶ δὲ προαιρέσεως μετὰ τοῦτο λέγωμεν, διαπορήσαντες πρῶτον τῷ λόγῳ περὶ αὐτῆς. διστάσειε γὰρ ἂν τις ἐν τῷ γένει πέφυκε καὶ ἐν ποίῳ θεῖναι αὐτὴν χρή, καὶ πότερον οὐ ταῦτόν τὸ ἐκούσιον καὶ τὸ προαιρετὸν ἢ ταῦτόν ἐστίν. μάλιστα δὲ λέγεται παρὰ τινων, καὶ ζητοῦντι δόξειε δ' ἂν δυοῖν εἶναι θάτερον ἢ προαίρεσις, ἥτοι δόξα ἢ ὄρεξις· ἀμφοτέρω γὰρ φαίνεται παρακολουθοῦντα. ὅτι μὲν οὖν οὐκ ἔστιν ὄρεξις φανερόν. ἡ γὰρ βούλησις ἂν εἴη ἢ ἐπιθυμία ἢ θυμός· οὐθεὶς γὰρ ὀρέγεται μηδὲν πεπονθῶς τούτων. θυμὸς μὲν οὖν καὶ ἐπιθυμία καὶ τοῖς θηρίοις ὑπάρχει, προαίρεσις δ' οὐ. ἔτι δὲ καὶ οἷς ὑπάρχει ἄμφω ταῦτα, πολλὰ καὶ ἄνευ θυμοῦ καὶ ἐπιθυμίας προαιροῦνται· καὶ ἐν τοῖς πάθεσιν ὄντες οὐ προαιροῦνται, ἀλλὰ καρτεροῦσιν. ἔτι ἐπιθυμία μὲν καὶ θυμὸς ἀεὶ μετὰ λύπης, προαιρούμεθα δὲ πολλὰ καὶ ἄνευ λύπης. ἀλλὰ μὴν οὐδὲ βούλησις καὶ προαίρεσις ταῦτόν. βούλονται μὲν γὰρ ἔνια [ταῦτόν] καὶ τῶν ἀδυνάτων εἰδότες, οἷον βασιλεύειν τε πάντων ἀνθρώπων καὶ ἀθάνατοι εἶναι, προαιρεῖται δ' οὐθεὶς μὴ ἀγνοῶν ὅτι ἀδύνατον, οὐδ' ὅλως ἂν δυνατόν μὲν, μὴ ἐφ' αὐτῷ δ' οἶται πρᾶξαι ἢ μὴ πρᾶξαι. ὥστε τοῦτο μὲν φανερόν, ὅτι ἀνάγκη τὸ προαιρετὸν τῶν ἐφ' αὐτῷ τι εἶναι.

[1226a] ὁμοίως δὲ δῆλον ὅτι οὐδὲ δόξα, οὐδ' ἀπλῶς εἴ τις οἶται τι. τῶν γὰρ ἐφ' αὐτῷ τι ἦν τὸ προαιρετόν, δοξάζομεν δὲ πολλὰ καὶ τῶν οὐκ ὄντων ἐφ' ἡμῖν, οἷον τὴν διάμετρον σύμμετρον. ἔτι οὐκ ἔστι προαίρεσις ἀληθῆς ἢ ψευδῆς. οὐδὲ δὴ ἡ τῶν ἐφ' αὐτῷ ὄντων πρακτῶν δόξα, ἢ τυγχάνομεν οἰόμενοι δεῖν τι πράττειν ἢ οὐ πράττειν. κοινὸν δὲ περὶ δόξης τοῦτο καὶ βουλήσεως· οὐθεὶς γὰρ τέλος οὐδὲν προαιρεῖται, ἀλλὰ τὰ πρὸς τὸ τέλος· λέγω δ' οἷον οὐθεὶς ὑγιαίνειν προαιρεῖται, ἀλλὰ περιπατεῖν ἢ καθῆσθαι τοῦ ὑγιαίνειν ἔνεκεν, οὐδ' εὐδαιμονεῖν, ἀλλὰ χρηματίζεσθαι ἢ κινδυνεύειν τοῦ εὐδαιμονεῖν ἔνεκα· καὶ ὅλως δηλοῖ ἀεὶ προαιρούμενος τί τε καὶ τίνος ἔνεκα προαιρεῖται, ἔστι δὲ τὸ μὲν τίνος, οὗ ἔνεκα προαιρεῖται ἄλλο, τὸ δὲ τί, ὃ προαιρεῖται ἔνεκα ἄλλου. βούλεται δέ γε μάλιστα τὸ τέλος, καὶ δοξάζει δεῖν καὶ ὑγιαίνειν καὶ εὖ πράττειν. ὥστε φανερόν διὰ τούτων ὅτι ἄλλο καὶ δόξης καὶ βουλήσεως. βούλεσθαι μὲν <γὰρ> καὶ δόξα μάλιστα τοῦ τέλους, προαίρεσις δ' οὐκ ἔστιν.

ὅτι μὲν οὖν οὐκ ἔστιν οὔτε βούλησις οὔτε δόξα οὔθ' ὑπόληψις ἀπλῶς ἢ προαίρεσις, δῆλον· τί δὲ διαφέρει τούτων, καὶ πῶς ἔχει πρὸς τὸ ἐκούσιον; ἅμα δὲ δῆλον ἔσται, καὶ τί ἐστὶ προαίρεσις. ἔστι δὴ τῶν δυνατῶν καὶ εἶναι καὶ μὴ τὰ μὲν τοιαῦτα ὥστε ἐνδέχεσθαι βουλεύσασθαι περὶ αὐτῶν· περὶ ἐνίων δ'

οὐκ ἐνδέχεται. τὰ μὲν γὰρ δυνατὰ μὲν ἐστὶ καὶ εἶναι καὶ μὴ εἶναι, ἀλλ' οὐκ ἐφ' ἡμῖν αὐτῶν ἢ γένεσις ἐστίν, ἀλλὰ τὰ μὲν διὰ φύσιν τὰ δὲ δι' ἄλλας αἰτίας γίνεται, περὶ ὧν οὐδεὶς ἂν ἐγχειρήσειε βουλευέσθαι μὴ ἀγνοῶν· περὶ ὧν δ' ἐνδέχεται μὴ μόνον τὸ εἶναι καὶ μὴ, ἀλλὰ καὶ τὸ βουλευέσασθαι τοῖς ἀνθρώποις, ταῦτα δ' ἐστὶν ὅσα ἐφ' ἡμῖν ἐστὶ πράξαι ἢ μὴ πράξαι. διὸ οὐ βουλευόμεθα περὶ τῶν ἐν Ἰνδοῖς, οὐδὲ πῶς ἂν ὁ κύκλος τετραγωνισθεῖ. τὰ μὲν γὰρ οὐκ ἐφ' ἡμῖν· τὸ δ' ὅλως οὐ πρακτόν· ἀλλ' οὐδὲ περὶ τῶν ἐφ' ἡμῖν πρακτῶν περὶ ἀπάντων. (ἢ καὶ δῆλον ὅτι οὐδὲ δόξα ἀπλῶς ἢ προαίρεσις ἐστίν)· , τὰ δὲ προαιρετὰ καὶ πρακτὰ τῶν ἐφ' ἡμῖν ὄντων ἐστίν. διὸ καὶ ἀπορήσειεν ἂν τις, τί δὴ ποθ' οἱ μὲν ἰατροὶ βουλεύονται περὶ ὧν ἔχουσι τὴν ἐπιστήμην, οἱ δὲ γραμματικοὶ οὐ; αἴτιον δ' ὅτι διχῇ γινομένης τῆς ἀμαρτίας (ἢ γὰρ λογιζόμενοι ἀμαρτάνομεν ἢ κατὰ τὴν αἴσθησιν αὐτὸ δρῶντες) ἐν μὲν τῇ ἰατρικῇ ἀμφοτέρως ἐνδέχεται ἀμαρτεῖν, ἐν δὲ τῇ γραμματικῇ κατὰ [1226b] τὴν αἴσθησιν καὶ πράξιν, περὶ ἧς ἂν σκοπῶσιν, εἰς ἄπειρον ἥξουσιν. - ἐπειδὴ οὖν οὔτε δόξα οὔτε βούλησις ἐστὶ προαίρεσις ἐστὶν ὡς ἐκάτερον, οὐδ' ἄμφω (ἐξαίφνης γὰρ προαιρεῖται μὲν οὐθεὶς, δοκεῖ δὲ πράττειν καὶ βούλονται)· ὡς ἐξ ἀμφοῖν ἄρα. ἄμφω γὰρ ὑπάρχει τῷ προαιρουμένῳ ταῦτα. - ἀλλὰ πῶς ἐκ τούτων σκεπτέον; δηλοῖ δὲ πως καὶ τὸ ὄνομα αὐτό. ἢ γὰρ προαίρεσις αἴρεσις μὲν ἐστίν, οὐχ ἀπλῶς δέ, ἀλλ' ἐτέρου πρὸ ἐτέρου· τοῦτο δὲ οὐχ οἷόν τε ἄνευ σκέψεως καὶ βουλῆς. διὸ ἐκ δόξης βουλευτικῆς ἐστὶν ἡ προαίρεσις.

περὶ μὲν δὴ τοῦ τέλους οὐδεὶς βουλεύεται, ἀλλὰ τοῦτο κεῖται πᾶσι, περὶ δὲ τῶν εἰς τοῦτο τεινόντων, πότερον τόδε ἢ τόδε συντείνει, ἢ δεδογμένου τοῦτο πῶς ἔσται. βουλευόμεθα δὲ τοῦτο πάντες, ἕως ἂν εἰς ἡμᾶς ἀναγάγωμεν τῆς γενέσεως τὴν ἀρχήν. εἰ δὴ προαιρεῖται μὲν μηθεὶς μὴ παρασκευασάμενος μηδὲ βουλευσάμενος, εἰ χειρόν ἢ βέλτιον, βουλεύεται δὲ ὅσα ἐφ' ἡμῖν ἐστὶ τῶν δυνατῶν καὶ εἶναι καὶ μὴ τῶν πρὸς τὸ τέλος, δῆλον ὅτι ἡ προαίρεσις μὲν ἐστὶν ὄρεξις τῶν ἐφ' αὐτῷ βουλευτικῇ. ἅπαντες γὰρ βουλευόμεθα ἃ καὶ προαιρούμεθα, οὐ μέντοι γε ἃ βουλευόμεθα, πάντα προαιρούμεθα. λέγω δὲ βουλευτικὴν, ἧς ἀρχὴ καὶ αἰτία βούλευσις ἐστὶ, καὶ ὀρέγεται διὰ τὸ βουλευέσασθαι. διὸ οὔτε ἐν τοῖς ἄλλοις ζώοις ἐστὶν ἡ προαίρεσις, οὔτε ἐν πάσῃ ἡλικίᾳ, οὔτε πάντως ἔχοντος ἀνθρώπου. οὐδὲ γὰρ τὸ βουλευέσασθαι, οὐδ' ὑπόληψις τοῦ διὰ τί· ἀλλὰ δοξάσαι μὲν εἰ ποιητέον ἢ μὴ ποιητέον οὐθὲν κωλύει πολλοῖς ὑπάρχειν, τὸ δὲ διὰ λογισμοῦ οὐκέτι. ἔστι γὰρ βουλευτικὸν τῆς ψυχῆς τὸ θεωρητικὸν αἰτίας τινός. ἢ γὰρ οὐ ἕνεκα μία τῶν αἰτιῶν ἐστίν· τὸ μὲν γὰρ διὰ τί αἰτία· οὐ δ' ἕνεκά ἐστὶν ἢ γίγνεται τι, τοῦτ' αἰτίον φαμεν εἶναι, οἷον τοῦ βαδίζειν ἢ κοιμῆσαι τῶν χρημάτων, εἰ τούτου ἕνεκα βαδίζει. διὸ οἷς μηθεὶς κεῖται σκοπός, οὐ βουλευτικοί. ὥστ' ἐπεὶ τὸ μὲν ἐφ' αὐτῷ ὃν ἢ πράττειν ἢ μὴ πράττειν, ἐάν τις πράττῃ ἢ ἀπρακτῇ δι' αὐτὸν καὶ μὴ δι'

ἄγνοιαν, ἐκὼν πράττει ἢ ἀπρακτεῖ, πολλὰ δὲ τῶν τοιούτων πράττομεν οὐ βουλευσάμενοι οὐδὲ προνοήσαντες, ἀνάγκη τὸ μὲν προαιρετὸν ἅπαν ἐκούσιον εἶναι, τὸ δ' ἐκούσιον μὴ προαιρετόν, καὶ τὰ μὲν κατὰ προαίρεσιν πάντα ἐκούσια εἶναι, τὰ δ' ἀκούσια μὴ πάντα κατὰ προαίρεσιν. ἅμα δ' ἐκ τούτων φανερόν καὶ ὅτι καλῶς διορίζονται οἱ τῶν παθημάτων τὰ μὲν ἐκούσια τὰ δ' ἀκούσια τὰ δ' ἐκ προνοίας νομοθετοῦσιν· [1227a] εἰ γὰρ καὶ μὴ διακριβοῦσιν, ἀλλ' ἄπτονται γέ πη τῆς ἀληθείας. ἀλλὰ περὶ μὲν τούτων ἐροῦμεν ἐν τῇ περὶ τῶν δικαίων ἐπισκέψει· ἡ δὲ προαίρεσις ὅτι οὔτε ἀπλῶς βούλησις οὔτε δόξα ἐστί, δῆλον, ἀλλὰ δόξα τε καὶ ὄρεξις, ὅταν ἐκ τοῦ βουλευσασθαι συμπερανθῶσιν.

ἐπεὶ δὲ βουλεύεται ἀεὶ ὁ βουλευόμενος ἔνεκα τινός, καὶ ἐστὶ σκοπὸς τις ἀεὶ τῷ βουλευομένῳ πρὸς ὃν σκοπεῖ τὸ συμφέρον, περὶ μὲν τοῦ τέλους οὐθεὶς βουλεύεται, ἀλλὰ τοῦτ' ἐστὶν ἀρχὴ καὶ ὑπόθεσις, ὥσπερ ἐν ταῖς θεωρητικαῖς ἐπιστήμαις ὑποθέσεις (εἴρηται δὲ περὶ αὐτῶν ἐν μὲν τοῖς ἐν ἀρχῇ βραχέως, ἐν δὲ τοῖς ἀναλυτικοῖς δι' ἀκριβείας), περὶ δὲ τῶν πρὸς τὸ τέλος φερόντων ἡ σκέψις καὶ μετὰ τέχνης καὶ ἄνευ τέχνης πᾶσιν ἐστίν, οἷον εἰ πολεμῶσιν ἢ μὴ πολεμῶσιν τοῦτο βουλευομένοις. ἐκ προτέρου δὲ μᾶλλον ἔσται τὸ δι' ὅ, τοῦτ' ἐστὶ τὸ οὗ ἔνεκα, οἷον πλοῦτος ἢ ἡδονὴ ἢ τι ἄλλο τοιοῦτον ὃ τυγχάνει οὗ ἔνεκα. βουλεύεται γὰρ ὁ βουλευόμενος, εἰ ἀπὸ τοῦ τέλους ἔσκεπται, <ἦ> ὅ τι ἐκεῖ συντείνει ὅπως εἰς αὐτὸν ἀγάγη, ἢ αὐτὸς δύναται πρὸς τὸ τέλος. τὸ δὲ τέλος ἐστὶ φύσει μὲν ἀεὶ ἀγαθόν, καὶ περὶ οὗ κατὰ μέρος βουλεύονται, οἷον ἰατρὸς βουλεύσασθαι ἂν εἰ δῶν φάρμακον, καὶ στρατηγὸς ποῦ στρατοπεδεύσῃται, οἷς ἀγαθὸν τὸ τέλος τὸ ἀπλῶς ἄριστον ἐστίν· παρὰ φύσιν δὲ καὶ διαστροφὴν οὐ τὸ ἀγαθόν, ἀλλὰ τὸ φαινόμενον ἀγαθόν. αἴτιον δ' ὅτι τῶν ὄντων τὰ μὲν οὐκ ἔστιν ἐπ' ἄλλῳ χρήσασθαι ἢ πρὸς ἃ πέφυκεν, οἷον ὄψει· οὐ γὰρ οἷόν τ' ἰδεῖν οὐ μὴ ἐστὶν ὄψις, οὐδ' ἀκοῦσαι οὐ μὴ ἐστὶν ἀκοή· ἀλλ' ἀπὸ ἐπιστήμης ποιῆσαι καὶ οὐ μὴ ἐστὶν ἢ ἐπιστήμη. οὐ γὰρ ὁμοίως τῆς ὑγιείας ἢ αὐτὴ ἐπιστήμη καὶ νόσου, ἀλλὰ τῆς μὲν κατὰ φύσιν τῆς δὲ παρὰ φύσιν. ὁμοίως δὲ καὶ ἡ βούλησις φύσει μὲν τοῦ ἀγαθοῦ ἐστί, παρὰ φύσιν δὲ καὶ τοῦ κακοῦ, καὶ βούλεται φύσει μὲν τὸ ἀγαθόν, παρὰ φύσιν δὲ καὶ διαστροφὴν καὶ τὸ κακόν.

ἀλλὰ μὴν ἐκάστου γε φθορὰ καὶ διαστροφή οὐκ εἰς τὸ τυχόν, ἀλλ' εἰς τὰ ἐναντία καὶ τὰ μεταξύ. οὐ γὰρ ἔστιν ἐκβῆναι ἐκ τούτων, ἐπεὶ καὶ ἡ ἀπάτη οὐκ εἰς τὰ τυχόντα γίνεται, ἀλλ' εἰς τὰ ἐναντία ὅσοις ἐστὶν ἐναντία, καὶ εἰς ταῦτα τῶν ἐναντίων ἃ κατὰ τὴν ἐπιστήμην ἐναντία ἐστίν. ἀνάγκη ἄρα καὶ τὴν ἀπάτην καὶ τὴν προαίρεσιν ἀπὸ τοῦ μέσου ἐπὶ τὰ ἐναντία γίνεσθαι (ἐναντία δὲ τῷ μέσῳ [καὶ] τὸ πλεον καὶ τὸ ἔλαττον). - αἴτιον δὲ τὸ ἡδὺ καὶ

τὸ λυπηρόν· οὕτω γὰρ ἔχει ὥστε τῇ ψυχῇ φαίνεσθαι τὸ μὲν ἡδὺ ἀγαθὸν καὶ τὸ ἡδίων ἄμεινον, καὶ τὸ λυπηρὸν κακὸν καὶ τὸ λυπηρότερον [1227b] χεῖρον. ὥστε καὶ ἐκ τούτων δῆλον ὅτι περὶ ἡδονὰς καὶ λύπας ἡ ἀρετὴ καὶ ἡ κακία. περὶ μὲν γὰρ τὰ προαιρετὰ τυγχάνουσιν οὕσαι, ἡ δὲ προαίρεσις περὶ τὸ ἀγαθὸν καὶ κακὸν καὶ τὰ φαινόμενα, τοιαῦτα δὲ φύσει ἡδονὴ καὶ λύπη.

ἀνάγκη τοίνυν, ἐπειδὴ ἡ ἀρετὴ μὲν ἡ ἠθικὴ αὐτὴ τε μεσότης τίς ἐστὶ καὶ περὶ ἡδονὰς καὶ λύπας πᾶσα, ἡ δὲ κακία ἐν ὑπερβολῇ καὶ ἐλλείψει καὶ περὶ ταῦτα τῇ ἀρετῇ, τὴν ἀρετὴν εἶναι τὴν ἠθικὴν ἕξιν προαιρετικὴν μεσότητος τῆς πρὸς ἡμᾶς ἐν ἡδέσι καὶ λυπηροῖς, καθ' ὅσα ποῖός τις λέγεται τὸ ἦθος, ἡ χαίρων ἢ λυπούμενος· ὁ γὰρ φιλόγλυκος ἢ φιλόπικρος οὐ λέγεται ποῖός τις τὸ ἦθος.

τούτων δὲ διωρισμένων, λέγωμεν πότερον ἡ ἀρετὴ ἀναμάρτητον ποιεῖ τὴν προαίρεσιν καὶ τὸ τέλος ὀρθόν, οὕτως ὥστε οὐ ἔνεκα δεῖ προαιρεῖσθαι, ἢ ὥσπερ δοκεῖ τισί, τὸν λόγον. ἔστι δὲ τοῦτο ἐγκράτεια· αὕτη γὰρ οὐ διαφθείρει τὸν λόγον. ἔστι δ' ἀρετὴ καὶ ἐγκράτεια ἕτερον. λεκτέον δ' ὕστερον περὶ αὐτῶν, ἐπεὶ ὅσοις γε δοκεῖ τὸν λόγον ὀρθὸν παρέχειν ἡ ἀρετὴ, τοῦτο αἴτιον. ἡ μὲν «γὰρ» ἐγκράτεια τοιοῦτον, τῶν ἐπαινετῶν δ' ἡ ἐγκράτεια. λέγομεν δὲ προαπορήσαντες. ἔστι γὰρ τὸν μὲν σκοπὸν ὀρθὸν εἶναι, ἐν δὲ τοῖς πρὸς τὸν σκοπὸν διαμαρτάνειν· ἔστι δὲ τὸν μὲν σκοπὸν ἡμαρτῆσθαι, τὰ δὲ πρὸς ἐκεῖνον περαίνοντα ὀρθῶς ἔχειν, καὶ μηδέτερον. πότερον δ' ἡ ἀρετὴ ποιεῖ τὸν σκοπὸν ἢ τὰ πρὸς τὸν σκοπόν; τιθέμεθα δὴ ὅτι τὸν σκοπόν, διότι τούτου οὐκ ἔστι συλλογισμὸς οὐδὲ λόγος. ἀλλὰ δὴ ὥσπερ ἀρχὴ τοῦτο ὑποκείσθω. οὔτε γὰρ ἰατρὸς σκοπεῖ εἰ δεῖ ὑγιαίνειν ἢ μή, ἀλλ' εἰ περιπατεῖν ἢ μή, οὔτε ὁ γυμναστικὸς εἰ δεῖ εὖ ἔχειν ἢ μή, ἀλλ' εἰ παλαῖσαι ἢ μή. ὁμοίως δ' οὐδ' ἄλλη οὐδεμία περὶ τοῦ τέλους· ὥσπερ γὰρ ταῖς θεωρητικαῖς αἰ ὑποθέσεις ἀρχαί, οὕτω καὶ ταῖς ποιητικαῖς τὸ τέλος ἀρχὴ καὶ ὑπόθεσις. ἐπειδὴ δεῖ τόδε ὑγιαίνειν, ἀνάγκη τοδὶ ὑπάρξαι, εἰ ἔσται ἐκεῖνο, ὥσπερ ἐκεῖ, εἰ ἔστι τὸ τρίγωνον δύο ὀρθαί, ἀνάγκη τοδὶ εἶναι. τῆς μὲν οὖν νοήσεως ἀρχὴ τὸ τέλος, τῆς δὲ πράξεως ἡ τῆς νοήσεως τελευτή. εἰ οὖν πάσης ὀρθότητος ἢ ὁ λόγος ἢ ἡ ἀρετὴ αἰτία, εἰ μὴ ὁ λόγος, διὰ τὴν ἀρετὴν ἂν ὀρθὸν εἴη τὸ τέλος, ἀλλ' οὐ τὰ πρὸς τὸ τέλος. τέλος δ' ἐστὶ τὸ οὐ ἔνεκα. ἔστι γὰρ πᾶσα προαίρεσις τινὸς καὶ ἔνεκα τινός. οὐ μὲν οὖν ἔνεκα τὸ μέσον ἐστίν, οὐ αἰτία ἡ ἀρετὴ τῷ προαιρεῖσθαι οὐ ἔνεκα. ἔστι μέντοι ἡ προαίρεσις οὐ τούτου, ἀλλὰ τῶν τούτου ἔνεκα. τὸ μὲν οὖν τυγχάνειν τούτων ἄλλης δυνάμεως, ὅσα ἔνεκα τοῦ τέλους δεῖ [1228a] πράττειν· τοῦ δὲ τὸ τέλος ὀρθὸν εἶναι τῆς προαιρέσεως [οὔ] ἡ ἀρετὴ αἰτία. καὶ διὰ τοῦτο ἐκ τῆς προαιρέσεως κρίνομεν ποῖός τις· τοῦτο δ' ἐστὶ τὸ τίνος ἔνεκα πράττει, ἀλλ' οὐ τί πράττει. ὁμοίως δὲ καὶ ἡ κακία τῶν

έναντίων ἔνεκα ποιεῖ τὴν προαίρεσιν. εἰ δὴ τις, ἐφ' αὐτῷ ὄν πράττειν μὲν τὰ καλὰ ἀπρακτεῖν δὲ τὰ αἰσχροῦ, τοῦναντίον ποιεῖ, δῆλον ὅτι οὐ σπουδαῖός ἐστιν οὗτος ὁ ἄνθρωπος. ὥστ' ἀνάγκη τὴν τε κακίαν ἐκούσιον εἶναι καὶ τὴν ἀρετὴν· οὐδεμία γὰρ ἀνάγκη τὰ μοχθηρὰ πράττειν. διὰ ταῦτα καὶ ψεκτὸν ἢ κακία καὶ ἢ ἀρετὴ ἐπαινετόν· τὰ γὰρ ἀκούσια αἰσχροῦ καὶ κακὰ οὐ ψέγεται οὐδὲ τὰ ἀγαθὰ ἐπαινεῖται, ἀλλὰ τὰ ἐκούσια. ἔτι πάντας ἐπαινοῦμεν καὶ ψέγομεν εἰς τὴν προαίρεσιν βλέποντες μᾶλλον ἢ εἰς τὰ ἔργα· καίτοι αἰρετώτερον ἢ ἐνέργεια τῆς ἀρετῆς, ὅτι πράττουσι μὲν φαῦλα καὶ ἀναγκαζόμενοι, προαιρεῖται δ' οὐδεὶς. ἔτι διὰ τὸ μὴ ῥάδιον εἶναι ἰδεῖν τὴν προαίρεσιν ὅποια τις, διὰ ταῦτα ἐκ τῶν ἔργων ἀναγκαζόμεθα κρίνειν ποῖός τις. αἰρετώτερον μὲν οὖν ἢ ἐνέργεια, ἐπαινετώτερον δ' ἢ προαίρεσις. ἔκ τε τῶν κειμένων οὖν συμβαίνει ταῦτα, καὶ ἔτι ὁμολογεῖται τοῖς φαινομένοις.

### Βιβλίο 3

ὅτι μὲν οὖν μεσότητές εἰσὶ τε ἐν ταῖς ἀρεταῖς, καὶ αὗται προαιρετικά, καὶ αἱ ἐναντίαι κακίαι, καὶ τίνες εἰσὶν αὗται, καθόλου εἴρηται· καθ' ἑκάστην δὲ λαμβάνοντες λέγωμεν ἐφεξῆς, καὶ πρῶτον εἴπωμεν περὶ ἀνδρείας. - σχεδὸν δὴ δοκεῖ πᾶσιν ὅ τ' ἀνδρεῖος εἶναι περὶ φόβους καὶ ἢ ἀνδρεία μία τῶν ἀρετῶν. διείλομεν δ' ἐν τῇ διαγραφῇ πρότερον καὶ θράσος καὶ φόβον ἐναντία· καὶ γὰρ ἐστὶ πῶς ἀντικείμενα ἀλλήλοις. δῆλον οὖν ὅτι καὶ οἱ κατὰ τὰς ἑξῆς ταύτας λεγόμενοι ὁμοίως ἀντικείμενοι σφίσιν αὐτοῖς, οἷον ὁ δειλὸς (οὗτος γὰρ λέγεται κατὰ τὸ φοβεῖσθαι μᾶλλον ἢ δεῖ καὶ θαρρεῖν ἥττον ἢ δεῖ) καὶ ὁ θρασὺς· καὶ γὰρ οὗτος κατὰ τὸ τοιοῦτος εἶναι οἷος φοβεῖσθαι μὲν ἥττον ἢ δεῖ, θαρρεῖν δὲ μᾶλλον ἢ δεῖ. διὸ καὶ παρωνυμιάζεται· ὁ γὰρ θρασὺς παρὰ τὸ θράσος λέγεται παρωνύμως. ὥστ' ἐπεὶ ἢ ἀνδρεία ἐστὶν ἢ βελτίστη ἕξις περὶ φόβους καὶ θάρρη, δεῖ δὲ μήθ' οὕτως ὥς οἱ θρασεῖς (τὰ μὲν γὰρ ἐλλείπουσι, τὰ δ' ὑπερβάλλουσι) μήθ' οὕτως ὥς οἱ δειλοί (καὶ γὰρ οὗτοι ταὐτὸ ποιοῦσι, [1228b] πλὴν οὐ περὶ ταῦτα ἀλλ' ἐξ ἐναντίας· τῷ μὲν γὰρ θαρρεῖν ἐλλείπουσι, τῷ δὲ φοβεῖσθαι ὑπερβάλλουσι), δῆλον ὥς ἡ μέση διάθεσις θρασυτήτος καὶ δειλίας ἐστὶν ἀνδρεία· αὕτη γὰρ βελτίστη.

δοκεῖ δ' ὁ ἀνδρεῖος ἄφοβος εἶναι ὥς ἐπὶ τὸ πολὺ, ὁ δὲ δειλὸς φοβητικός, καὶ ὁ μὲν καὶ πολλὰ καὶ ὀλίγα καὶ μεγάλα καὶ μικρὰ φοβεῖσθαι, καὶ σφόδρα καὶ ταχύ, ὁ δὲ τὸ ἐναντίον ἢ οὐ φοβεῖσθαι ἢ ἡρέμα καὶ μόλις καὶ ὀλιγάκις καὶ μεγάλα, καὶ ὁ μὲν ὑπομένει τὰ φοβερά σφόδρα, ὁ δὲ οὐδὲ τὰ ἡρέμα. ποῖα οὖν ὑπομένει ὁ ἀνδρεῖος; πρῶτον πότερον τὰ ἑαυτῷ φοβερά ἢ τὰ ἑτέρω; εἰ μὲν δὴ τὰ ἑτέρω φοβερά, οὐθὲν σεμνὸν φαίη ἂν τις εἶναι· εἰ δὲ τὰ αὐτῷ, εἴη ἂν αὐτῷ μεγάλα καὶ πολλὰ φοβερά. φόβου ποιητικὰ ἑκάστῳ ὡς φοβερά, οἷον

εἰ μὲν σφόδρα φοβερά, εἴη ἂν ἰσχυρὸς ὁ φόβος, εἰ δ' ἡρέμα, ἀσθενής. ὥστε συμβαίνει τὸν ἀνδρεῖον μεγάλους φόβους καὶ πολλοὺς ποιεῖσθαι. ἐδόκει δὲ τοῦναντίον ἢ ἀνδρεία ἄφοβον παρασκευάζειν, τοῦτο δ' εἶναι ἐν τῷ ἢ μηθὲν ἢ ὀλίγα φοβεῖσθαι, καὶ ἡρέμα καὶ μόλις. ἀλλ' ἴσως τὸ φοβερὸν λέγεται, ὥσπερ καὶ τὸ ἡδὺ καὶ τὸ ἀγαθόν, διχῶς. τὰ μὲν γὰρ ἀπλῶς, τὰ δὲ τινὶ μὲν καὶ ἡδέα καὶ ἀγαθὰ ἐστίν, ἀπλῶς δ' οὐ, ἀλλὰ τοῦναντίον φαῦλα καὶ οὐχ ἡδέα, ὅσα τοῖς πονηροῖς ὠφέλιμα καὶ ὅσα ἡδέα τοῖς παιδίοις ἢ παιδία. ὁμοίως δὲ καὶ τὰ φοβερά τὰ μὲν ἀπλῶς ἐστί, τὰ δὲ τινί. ἃ μὲν δὴ δειλὸς φοβεῖται ἢ δειλός, τὰ μὲν οὐδενὶ ἐστὶ φοβερά, τὰ δ' ἡρέμα· τὰ δὲ τοῖς πλείστοις φοβερά, καὶ ὅσα τῇ ἀνθρωπίνῃ φύσει, ταῦθ' ἀπλῶς φοβερά λέγομεν. ὁ δ' ἀνδρεῖος πρὸς ταῦτ' ἔχει ἀφόβως, καὶ ὑπομένει τὰ τοιαῦτα φοβερά, ἃ ἔστι μὲν ὡς φοβερά αὐτῷ, ἔστι δ' ὡς οὐ, ἢ μὲν ἄνθρωπος, φοβερά, ἢ δ' ἀνδρεῖος, οὐ φοβερά ἀλλ' ἢ ἡρέμα ἢ οὐδαμῶς. ἔστι μέντοι φοβερά ταῦτα· τοῖς γὰρ πλείστοις φοβερά. διὸ καὶ ἐπαινεῖται ἢ ἕξις· ὥσπερ γὰρ ὁ ἰσχυρὸς καὶ ὑγιεινὸς ἔχει. καὶ γὰρ οὗτοι οὐ τῷ ὑπὸ μηθενὸς ὃ μὲν πόνου τρίβεσθαι, ὃ δ' ὑπὸ μηδεμιᾶς ὑπερβολῆς, τοιοῦτοι εἰσίν, ἀλλὰ τῷ ὑπὸ τούτων ἀπαθεῖς εἶναι, ἢ ἀπλῶς ἢ ἡρέμα, ὑφ' ὧν οἱ πολλοὶ καὶ οἱ πλείστοι. οἱ μὲν οὖν νοσῶδεις καὶ ἀσθενεῖς καὶ δειλοὶ καὶ ὑπὸ τῶν κοινῶν παθημάτων πάσχουσί τι, πλὴν θᾶττον τε καὶ μᾶλλον ἢ οἱ πολλοί, καὶ ἔτι ὑφ' ὧν οἱ πολλοὶ πάσχουσιν, ὑπὸ τούτων ἀπαθεῖς ἢ ὅλως ἢ ἡρέμα.

ἀπορεῖται δ' εἰ τῷ ἀνδρεῖῳ οὐθέν ἐστὶ φοβερόν, οὐδ' ἂν φοβηθεῖη. [1229a] ἢ οὐθέν κωλύει τὸν εἰρημένον τρόπον; ἢ γὰρ ἀνδρεία ἀκολούθησις τῷ λόγῳ ἐστίν, ὁ δὲ λόγος τὸ καλὸν αἰρεῖσθαι κελεύει. διὸ καὶ ὁ μὴ διὰ τοῦτο ὑπομένων αὐτά, οὗτος ἦτοι ἐξέστηκεν ἢ θρασύς· ὁ δὲ διὰ τὸ καλὸν ἄφοβος καὶ ἀνδρεῖος μόνος. ὁ μὲν οὖν δειλὸς καὶ ἃ μὴ δεῖ φοβεῖται, ὁ δὲ θρασὺς καὶ ἃ μὴ δεῖ θαρρεῖ· ὁ δ' ἀνδρεῖος ἄμφω ἃ δεῖ, καὶ ταύτῃ μέσος ἐστίν. ἃ γὰρ ἂν ὁ λόγος κελεύῃ, ταῦτα καὶ θαρρεῖ καὶ φοβεῖται. ὁ δὲ λόγος τὰ μεγάλα λυπηρὰ καὶ φθαρτικὰ οὐ κελεύει ὑπομένειν, ἂν μὴ καλὰ ἦ. ὁ μὲν οὖν θρασύς, καὶ εἰ μὴ κελεύει, ταῦτα θαρρεῖ, ὁ δὲ δειλὸς οὐδ' ἂν κελεύῃ· ὁ δὲ ἀνδρεῖος μόνος, ἐὰν κελεύῃ.

ἔστι δ' εἶδη ἀνδρείας πέντε λεγόμενα καθ' ὁμοιότητα· <τὰ> αὐτὰ γὰρ ὑπομένουσιν, ἀλλ' οὐ διὰ τὰ αὐτά. μία μὲν πολιτική· αὕτη δ' ἐστὶν ἢ δι' αἰδῶ οὕσα. δευτέρα ἢ στρατιωτική· αὕτη δὲ δι' ἐμπειρίαν καὶ τὸ εἰδέναι, οὐχ ὥσπερ Σωκράτης ἔφη τὰ δεινὰ, ἀλλ' ὅτι τὰς βοηθείας τῶν δεινῶν. τρίτη δ' ἢ δι' ἀπειρίαν καὶ ἄγνοιαν, δι' ἣν τὰ παιδία καὶ οἱ μαινόμενοι οἱ μὲν ὑπομένουσι τὰ φερόμενα, οἱ δὲ λαμβάνουσι τοὺς ὄφεις. ἄλλη δ' ἢ κατ' ἐλπίδα, καθ' ἣν οἱ τε κατευτυχηκότες πολλάκις ὑπομένουσι τοὺς κινδύνους καὶ



οἱ μεθύοντες· εὐέλπιδας γὰρ ποιεῖ ὁ οἶνος. ἄλλη δὲ διὰ πάθος ἀλόγιστον, οἶον δι' ἔρωτα καὶ θυμόν. ἅν τε γὰρ ἐρᾷ, θρασὺς μᾶλλον ἢ δειλός, καὶ ὑπομένει πολλοὺς κινδύνους, ὥσπερ ὁ ἐν Μεταποντίῳ τὸν τύραννον ἀποκτείνας καὶ ὁ ἐν Κρήτῃ μυθολογούμενος· καὶ δι' ὀργὴν καὶ θυμόν ὥσαύτως. ἐκστατικὸν γὰρ ὁ θυμός. διὸ καὶ οἱ ἄγριοι σύες ἀνδρεῖοι δοκοῦσιν εἶναι, οὐκ ὄντες· ὅταν γὰρ ἐκστῶσι, τοιοῦτοι εἰσίν, εἰ δὲ μὴ, ἀνώμαλοι, ὥσπερ οἱ θρασεῖς. ὅμως δὲ μάλιστα φυσικὴ ἢ τοῦ θυμοῦ· ἀήττητον γὰρ ὁ θυμός, διὸ καὶ οἱ παῖδες ἄριστα μάχονται. διὰ νόμον δὲ ἡ πολιτικὴ ἀνδρεία. κατ' ἀλήθειαν δὲ οὐδεμία τούτων, ἀλλὰ πρὸς τὰς παρακελεύσεις τὰς ἐν τοῖς κινδύνοις χρήσιμα ταῦτα πάντα.

περὶ δὲ τῶν φοβερῶν νῦν μὲν ἀπλῶς εἰρήκαμεν, βέλτιον δὲ διορίσασθαι μᾶλλον. ὅλως μὲν οὖν φοβερὰ λέγεται τὰ ποιητικὰ φόβου. τοιαῦτα δ' ἐστὶν ὅσα φαίνεται ποιητικὰ λύπης φθαρτικῆς· τοῖς γὰρ ἄλλην τινὰ προσδεχομένοις λύπην ἑτέρα μὲν ἂν τις ἴσως λύπη γένοιτο καὶ πάθος ἕτερον, φόβος δ' οὐκ ἔσται, οἶον εἴ τις προορῶτο ὅτι λυπήσεται λύπην ἣν οἱ φθονοῦντες λυποῦνται, ἢ τοιαύτην οἶαν οἱ ζηλοῦντες ἢ οἱ αἰσχυρόμενοι. ἀλλ' ἐπὶ μόναίς ταῖς τοιαύταις φαινομέναις ἔσεσθαι λύπαις φόβος γίνεται, ὅσων ἡ φύσις ἀναιρετικὴ τοῦ [1229b] ζῆν. διὸ καὶ σφόδρα τινὲς ὄντες μαλακοὶ περὶ ἕνια ἀνδρεῖοι εἰσὶ, καὶ ἔνιοι σκληροὶ καὶ καρτερικοὶ [καὶ] δειλοί. καὶ δὴ καὶ δοκεῖ σχεδὸν ἴδιον τῆς ἀνδρείας εἶναι τὸ περὶ τὸν θάνατον καὶ τὴν περὶ τούτου λύπην ἔχειν πῶς. εἰ γὰρ τις εἴη τοιοῦτος οἶος πρὸς ἀλέας καὶ ψύχη καὶ τὰς τοιαύτας λύπας ὑπομενετικός, ὡς ὁ λόγος, ἀκινδύνους οὔσας, πρὸς δὲ τὸν θάνατον καὶ μαλακὸς καὶ περίφοβος, μὴ δι' ἄλλο τι πάθος ἀλλὰ δι' αὐτὴν τὴν φθοράν, ἄλλος δὲ πρὸς μὲν ἐκείνας μαλακός, πρὸς δὲ τὸν θάνατον ἀπαθής· ἐκεῖνος μὲν ἂν εἶναι δόξειε δειλός, οὗτος δ' ἀνδρεῖος. καὶ γὰρ κίνδυνος ἐπὶ τοῖς τοιούτοις λέγεται μόνοις τῶν φοβερῶν, ὅταν πλησίον ἢ τὸ τῆς τοιαύτης φθορᾶς ποιητικόν. φαίνεται δὲ κίνδυνος, ὅταν πλησίον φαίνεται.

τὰ μὲν οὖν φοβερὰ, περὶ ὅσα φημὲν εἶναι τὸν ἀνδρεῖον, εἴρηται δὴ ὅτι τὰ φαινόμενα ποιητικὰ λύπης τῆς φθαρτικῆς· ταῦτα μέντοι πλησίον τε φαινόμενα καὶ μὴ πόρρω, καὶ τοσαῦτα τῷ μεγέθει ὄντα ἢ φαινόμενα ὥστ' εἶναι σύμμετρα πρὸς ἄνθρωπον. ἕνια γὰρ ἀνάγκη παντὶ φαίνεσθαι ἀνθρώπῳ φοβερὰ καὶ διαταράττειν. οὐθὲν γὰρ κωλύει, ὥσπερ θερμὰ καὶ ψυχρά, καὶ τῶν ἄλλων δυνάμεων ἐνίας ὑπὲρ ἡμᾶς εἶναι καὶ τὰς τοῦ ἀνθρωπίνου σώματος ἕξεις· οὕτω καὶ τῶν περὶ τὴν ψυχὴν παθημάτων.

οἱ μὲν <οὖν> δειλοὶ καὶ θρασεῖς ἐπιψεύδονται διὰ τὰς ἕξεις· τῷ μὲν γὰρ δειλῷ τὰ τε μὴ φοβερὰ δοκεῖ φοβερὰ εἶναι καὶ τὰ ἡρέμα σφόδρα, τῷ δὲ θρασεῖ τὸ ἐναντίον τὰ τε φοβερὰ θαρραλέα καὶ τὰ σφόδρα ἡρέμα, τῷ δ'

ἀνδρείῳ τάληθῃ μάλιστα. διόπερ οὗτ' εἴ τις ὑπομένοι τὰ φοβερὰ δι' ἄγνοιαν, ἀνδρεῖος, οἷον εἴ τις τοὺς κεραυνοὺς ὑπομένοι φερομένους διὰ μανίαν, οὗτ' εἰ γινώσκων ὅσος ὁ κίνδυνος, διὰ θυμόν, οἷον οἱ Κελτοὶ πρὸς τὰ κύματα ὅπλα ἀπαντῶσι λαβόντες, καὶ ὅλως ἡ βαρβαρικὴ ἀνδρεία μετὰ θυμοῦ ἐστίν. ἔνιοι δὲ καὶ δι' ἄλλας ἡδονὰς ὑπομένουσιν. καὶ γὰρ ὁ θυμὸς ἡδονὴν ἔχει τινά· μετ' ἐλπίδος γάρ ἐστι τιμωρίας. ἀλλ' ὅμως οὗτ' εἰ διὰ ταύτην οὗτ' εἰ δι' ἄλλην ἡδονὴν ὑπομένει τις τὸν θάνατον ἢ φυγὴν μειζόνων λυπῶν, οὐδεὶς δικαίως <ἄν> ἀνδρεῖος λέγοιτο τούτων. εἰ γὰρ ἦν ἡδὺ τὸ ἀποθνήσκειν, πολλάκις ἂν δι' ἀκрасίαν ἀπέθνησκον οἱ ἀκόλαστοι, ὥσπερ καὶ νῦν αὐτοῦ μὲν τοῦ ἀποθνήσκειν οὐκ ὄντος ἡδέος, τῶν ποιητικῶν δ' αὐτοῦ, πολλοὶ δι' ἀκрасίαν περιπίπτουσιν εἰδότες, ὧν οὐθεὶς <ἄν> ἀνδρεῖος εἶναι δόξειεν, εἰ καὶ πάνυ ἐτοίμως ἀποθνήσκειν. οὗτ' εἰ φεύγοντες τὸ πονεῖν, ὅπερ πολλοὶ ποιοῦσιν, οὐδὲ τῶν τοιούτων οὐδεὶς ἀνδρεῖος, καθάπερ καὶ Ἀγάθων φησὶ

[1230a] “φαῦλοι βροτῶν γὰρ τοῦ πονεῖν ἡσώμενοι,

θανεῖν ἐρῶσιν.”

ὥσπερ καὶ τὸν Χείρωνα μυθολογοῦσιν οἱ ποιηταὶ διὰ τὴν ἀπὸ τοῦ ἔλκουσ ὀδύνην εὗξασθαι ἀποθανεῖν ἀθάνατον ὄντα. παραπλησίως δὲ τούτοις καὶ ὅσοι δι' ἐμπειρίαν ὑπομένουσι τοὺς κινδύνους, ὥνπερ τρόπον σχεδὸν οἱ πλεῖστοι τῶν στρατιωτικῶν ἀνθρώπων ὑπομένουσιν. αὐτὸ γὰρ τὸ ὑναντίον ἔχει ἢ ὡς ὤετο Σωκράτης, ἐπιστήμην οἰόμενος εἶναι τὴν ἀνδρείαν. οὕτε γὰρ διὰ τὸ εἰδέναι τὰ φοβερὰ θαρροῦσιν οἱ ἐπὶ τοὺς ἰστοὺς ἀναβαίνειν ἐπιστάμενοι, ἀλλ' ὅτι ἴσασι τὰς βοηθείας τῶν δεινῶν· οὕτε δι' ὃ θαρραλεώτερον ἀγωνίζονται, τοῦτο ἀνδρεία. καὶ γὰρ ἂν ἡ ἰσχὺς καὶ ὁ πλοῦτος κατὰ Θεόγνιν ἀνδρεία εἴεν·

“πᾶς γὰρ ἀνὴρ πενίῃ δεδμημένος.” φανερώς <δ> ἔνιοι δειλοὶ ὄντες ὅμως ὑπομένουσι δι' ἐμπειρίαν· τοῦτο δέ, ὅτι οὐκ οἶονται κίνδυνον εἶναι· ἴσασι γὰρ τὰς βοηθείας. σημεῖον δέ· ὅταν γὰρ μὴ ἔχειν οἶωνται βοήθειαν, ἀλλ' ἤδη πλησίον ἢ τὸ δεινόν, οὐχ ὑπομένουσιν. ἀλλὰ πάντων τῶν τοιούτων ἀνδρείων οἱ διὰ τὴν αἰδῶ ὑπομένοντες μάλιστα φανεῖεν <ἄν> ἀνδρεῖοι, καθάπερ καὶ Ὅμηρος τὸν Ἑκτορά φησιν ὑπομεῖναι τὸν κίνδυνον τὸν πρὸς τὸν Ἀχιλλέα·

“Ἑκτορα δ' αἰδῶς εἶλε·”

<καὶ>

“Πουλυδάμας μοι πρῶτος ἐλεγχείην ἀναθήσει.”

καὶ ἐστὶν ἡ πολιτικὴ ἀνδρεία αὕτη. ἡ δ' ἀληθὴς οὔτε αὕτη οὔτ' ἐκείνων οὐδεμία, ἀλλὰ ὁμοία μὲν, ὥσπερ καὶ ἡ τῶν θηρίων, ἃ διὰ τὸν θυμὸν ὁμόσε τῇ πληγῇ φέρεται. οὔτε γὰρ ὅτι ἀδοξήσει, δεῖ μένειν φοβουμένους, οὔτε δι' ὀργήν, οὔτε διὰ τὸ μὴ νομίζειν ἀποθανεῖσθαι, ἢ διὰ τὸ δυνάμεις ἔχειν φυλακτικὰς· οὐδὲ γὰρ οἰήσεται οὕτω γε φοβερὸν εἶναι οὐθέν. ἀλλ' ἐπειδὴ πᾶσα ἀρετὴ προαιρετικὴ (τοῦτο δὲ πῶς λέγομεν, εἴρηται πρότερον, ὅτι ἔνεκά τινος πάντα αἰρεῖσθαι ποιεῖ, καὶ τοῦτό ἐστὶ τὸ οὐ ἔνεκα, τὸ καλόν), δῆλον ὅτι καὶ ἡ ἀνδρεία ἀρετὴ τις οὔσα ἔνεκά τινος ποιήσει τὰ φοβερά ὑπομένειν, ὥστ' οὔτε δι' ἄγνοιαν (ὀρθῶς γὰρ μᾶλλον ποιεῖ κρίνειν) οὔτε δι' ἡδονήν, ἀλλ' ὅτι καλόν, ἐπεὶ, ἂν γε μὴ καλὸν ἢ ἀλλὰ μανικόν, οὐχ ὑπομένει· αἰσχροὺς γάρ.

περὶ ποῖα μὲν οὖν ἐστὶν ἡ ἀνδρεία μεσότης καὶ τίνων καὶ διὰ τί, καὶ τὰ φοβερά τίνα δυνάμιν ἔχει, σχεδὸν εἴρηται κατὰ τὴν παροῦσαν ἔφοδον ἱκανῶς· περὶ δὲ σωφροσύνης καὶ ἀκολασίας μετὰ ταῦτα διελέσθαι πειρατέον. λέγεται δ' ὁ ἀκόλαστος πολλαχῶς. ὅ τε γὰρ μὴ κεκολασμένος πως μὴδ' ἰατρευμένος, ὥσπερ ἄτμητος ὁ μὴ [1230b] τετμημένος, καὶ τούτων ὁ μὲν δυνατός, ὁ δ' ἀδύνατος· ἄτμητον γὰρ τό τε μὴ δυνάμενον τμηθῆναι καὶ τὸ δυνατόν μὲν μὴ τετμημένον δέ. τὸν αὐτὸν δὲ τρόπον καὶ τὸ ἀκόλαστον. καὶ γὰρ τὸ μὴ πεφυκὸς δέχεσθαι κόλασιν, καὶ τὸ πεφυκὸς μὲν μὴ κεκολασμένον δὲ περὶ ἀμαρτίας, περὶ ἃς ὀρθοπραγεῖ ὁ σώφρων, ὥσπερ οἱ παῖδες· κατὰ ταύτην γὰρ ἀκόλαστοι λέγονται τὴν ἀκοκασίαν. ἔτι δ' ἄλλον τρόπον οἱ δυσίατοι καὶ οἱ ἀνίατοι πάμπαν διὰ κολάσεως. πλεοναχῶς δὲ λεγομένης τῆς ἀκολασίας, ὅτι μὲν περὶ ἡδονὰς τινὰς καὶ λύπας εἰσὶ, φανερόν, καὶ ὅτι ἐν τῷ περὶ ταύτας διακεῖσθαι πως καὶ ἀλλήλων διαφέρουσι καὶ τῶν ἄλλων· διεγράψαμεν δὲ πρότερον πῶς τὴν ἀκολασίαν ὀνομάζοντες μεταφέρομεν. τοὺς δὲ ἀκινήτως ἔχοντας δι' ἀναισθησίαν πρὸς τὰς αὐτὰς ἡδονὰς οἱ μὲν καλοῦσιν ἀναισθήτους, οἱ δὲ ἄλλοις ὀνόμασι τοιούτους προσαγορεύουσιν. ἔστι δ' οὐ πάνυ γνῶριμον τὸ πάθος οὐδ' ἐπιπόλαιον διὰ τὸ πάντας ἐπὶ θάτερον ἀμαρτάνειν μᾶλλον καὶ πᾶσιν εἶναι σύμφυτον τὴν τῶν τοιούτων ἡδέων ἥτταν καὶ αἴσθησιν. μάλιστα δ' εἰσὶ τοιοῦτοι, οἷους οἱ κωμωδοδιδάσκαλοι παράγουσιν ἀγροίκους, οἱ οὐδὲ τὰ μέτρια καὶ τὰ ἀναγκαῖα πλησιάζουσι τοῖς ἡδέσιν.

ἐπεὶ δ' ὁ σώφρων ἐστὶ περὶ ἡδονὰς, ἀνάγκη καὶ περὶ ἐπιθυμίας τινὰς αὐτὸν εἶναι. δεῖ δὲ λαβεῖν περὶ τίνος. οὐ γὰρ περὶ πάσας οὐδὲ περὶ ἅπαντα τὰ ἡδέα ὁ σώφρων σώφρων ἐστίν, ἀλλὰ τῇ μὲν δόξῃ περὶ δύο τῶν αἰσθητῶν, περί τε τὸ γευστὸν καὶ τὸ ἀπτόν, τῇ δ' ἀληθείᾳ περὶ τὸ ἀπτόν· περὶ γὰρ τὴν διὰ τῆς ὄψεως ἡδονὴν τῶν καλῶν ἄνευ ἐπιθυμίας ἀφροδισίων, ἢ λύπην τῶν αἰσχυρῶν, καὶ περὶ τὴν διὰ τῆς ἀκοῆς τῶν εὐαρμόστων ἢ ἀναρμόστων, ἔτι δὲ

πρὸς τὰς δι' ὀσφρήσεως, τὰς τε ἀπὸ εὐωδίας καὶ τὰς ἀπὸ δυσωδίας, οὐκ ἔστιν ὁ σῶφρων. οὐδὲ γὰρ ἀκόλαστος οὐδεὶς λέγεται τῷ πάσχειν ἢ μὴ πάσχειν. εἰ γοῦν τις ἢ καλὸν ἀνδριάντα θεώμενος ἢ ἵππον ἢ ἄνθρωπον, ἢ ἀκροώμενος ἄδοντος, μὴ βούλοιο μήτε ἐσθίειν μήτε πίνειν μήτε ἀφροδισιάζειν, ἀλλὰ τὰ μὲν καλὰ θεωρεῖν τῶν δ' ἁδόντων ἀκούειν, οὐκ ἂν δόξειεν ἀκόλαστος εἶναι, ὥσπερ οὐδ' οἱ κηλούμενοι παρὰ ταῖς Σειρήσιν. ἀλλὰ περὶ τὰ δύο τῶν αἰσθητῶν ταῦτα, περὶ ἅπερ καὶ τᾶλλα θηρία μόνον τυγχάνει αἰσθητικῶς ἔχοντα, καὶ χαίροντα καὶ λυπούμενα, περὶ τὰ γευστὰ καὶ ἄπτά. περὶ δὲ τὰ τῶν ἄλλων αἰσθητῶν ἡδέα σχεδὸν ὁμοίως ἅπαντα [1231a] φαίνεται ἀναισθητῶς διακείμενα, οἷον περὶ εὐαρμοστίαν ἢ κάλλος. οὐθὲν γάρ, ὅ τι καὶ ἄξιον λόγου, φαίνεται πάσχοντα αὐτῇ τῇ θεωρίᾳ τῶν καλῶν ἢ τῇ ἀκροάσει τῶν εὐαρμόστων, εἰ μὴ τί που συμβέβηκε τερατῶδες· ἀλλ' οὐδὲ πρὸς τὰ εὐώδη ἢ δυσώδη· καίτοι τὰς γε αἰσθήσεις ὀξυτέρας ἔχουσι πάσας. ἀλλὰ καὶ τῶν ὁσμῶν ταύταις χαίρουσιν ὅσαι κατὰ συμβεβηκὸς εὐφραίνουσιν, ἀλλὰ μὴ καθ' αὐτάς. λέγω δὲ «μὴ» καθ' αὐτάς, αἷς ἢ ἐλπίζοντες χαίρομεν ἢ μεμνημένοι, οἷον ὄψων καὶ ποτῶν (δι' ἑτέραν γὰρ ἡδονὴν ταύταις χαίρομεν, τὴν τοῦ φαγεῖν ἢ πιεῖν), καθ' αὐτάς δὲ οἷον αἱ τῶν ἀνθῶν εἰσίν. διὸ ἐμμελῶς ἔφη Στρατόνικος τὰς μὲν καλὸν ὄζειν τὰς δὲ ἡδύ. ἐπεὶ καὶ τῶν περὶ τὸ γευστὸν οὐ περὶ πᾶσαν ἡδονὴν ἐπτόηται τὰ θηρία, οὐδ' ὅσων τῷ ἄκρῳ τῆς γλώττης ἢ αἰσθησις, ἀλλ' ὅσων τῷ φάρυγγι, καὶ ἔοικεν ἀφῇ μᾶλλον ἢ γεύσει τὸ πάθος. διὸ οἱ ὀψοφάγοι οὐκ εὐχονται τὴν γλῶτταν ἔχειν μακρὰν ἀλλὰ τὸν φάρυγγα γεράνου, ὥσπερ Φιλόξενος ὁ Ἐρύξιδος. ὥστε περὶ τὰ ἀπτόμενα, ὡς ἀπλῶς εἶπεῖν, θετέον τὴν ἀκολασίαν. ὁμοίως δὲ καὶ ὁ ἀκόλαστος περὶ τὰς τοιαύτας ἐστίν. οἰνοφλυγία γὰρ καὶ γαστριμαργία καὶ λαγνεία καὶ ὀψοφαγία καὶ πάντα τὰ τοιαῦτα περὶ τὰς εἰρημένας ἐστὶν αἰσθήσεις, εἰς ἅπερ μόρια ἢ ἀκολασία διαιρεῖται. περὶ δὲ τὰς δι' ὀψεως ἢ ἀκοῆς ἢ ὀσφρήσεως ἡδονὰς οὐθεὶς λέγεται ἀκόλαστος, ἐὰν ὑπερβάλλῃ, ἀλλ' ἄνευ ὀνειδούς τὰς ἀμαρτίας ψέγομεν ταύτας, καὶ ὅλως περὶ ὅσα μὴ λέγονται ἐγκρατεῖς· οἱ δ' ἀκρατεῖς οὐκ εἰσὶν ἀκόλαστοι οὐδὲ σῶφρονες.


ἀναίσθητος μὲν οὖν, ἢ ὅπως δεῖ ὀνομάζειν, ὁ οὕτως ἔχων ὥστε καὶ ἐλλείπειν ὅσων ἀνάγκη κοινωνεῖν ὡς ἐπὶ τὸ πολὺ πάντας καὶ χαίρειν· ὁ δ' ὑπερβάλλων ἀκόλαστος. πάντες γὰρ τούτοις φύσει τε χαίρουσι, καὶ ἐπιθυμίας λαμβάνουσι, καὶ οὐκ εἰσὶν οὐδὲ λέγονται ἀκόλαστοι (οὐ γὰρ ὑπερβάλλουσι τῷ χαίρειν μᾶλλον ἢ δεῖ τυγχάνοντες καὶ λυπεῖσθαι μᾶλλον ἢ δεῖ μὴ τυγχάνοντες), οὐδ' ἀνάληγοι (οὐ γὰρ ἐλλείπουσι τῷ χαίρειν ἢ λυπεῖσθαι, ἀλλὰ μᾶλλον ὑπερβάλλουσιν).

ἐπεὶ δ' ἔστιν ὑπερβολὴ καὶ ἔλλειψις περὶ αὐτά, δῆλον ὅτι καὶ μεσότης,

καὶ βελτίστη αὕτη ἢ ἕξις, καὶ ἀμφοῖν ἐναντία. ὥστ' εἰ σωφροσύνη ἢ βελτίστη ἕξις, περὶ ἧς ὁ ἀκόλαστος, ἢ περὶ τὰ ἡδέα τὰ εἰρημένα τῶν αἰσθητῶν μεσότης σωφροσύνη ἂν εἴη, μεσότης οὕσα ἀκολασίας καὶ ἀναισθησίας· ἢ δ' ὑπερβολὴ ἀκολασία· [1231b] ἢ δ' ἔλλειψις ἦτοι ἀνώνυμος ἢ τοῖς εἰρημένοις ὀνόμασι προσαγορευομένη. ἀκριβέστερον δὲ περὶ τοῦ γένους τῶν ἡδονῶν ἔσται διαιρετέον ἐν τοῖς λεγομένοις ὕστερον περὶ ἐγκρατείας καὶ ἀκρασίας.

τὸν αὐτὸν δὲ τρόπον ληπτέον καὶ περὶ πραότητος καὶ χαλεπότητος· καὶ γὰρ τὸν πρῶτον περὶ λύπην τὴν ἀπὸ θυμοῦ γιγνομένην ὀρώμεν ὄντα, τῷ πρὸς ταύτην ἔχειν πῶς. διεγράψαμεν δὲ καὶ ἀντεθήκαμεν τῷ ὀργίλῳ καὶ χαλεπῷ καὶ ἀγρίῳ (πάντα γὰρ τὰ τοιαῦτα τῆς αὐτῆς ἐστὶ διαθέσεως) τὸν ἀνδραποδώδη καὶ τὸν ἀνόητον. σχεδὸν γὰρ ταῦτα μάλιστα καλοῦσι τοὺς μηδ' ἐφ' ὅσοις δεῖ κινουμένους τὸν θυμόν, ἀλλὰ προπηλακιζομένους εὐχερῶς καὶ ταπεινοὺς πρὸς τὰς ὀλιγωρίας. ἔστι γὰρ ἀντικείμενον τῷ μὲν ταχὺ τὸ μόλις, τῷ δ' ἡρέμα τὸ σφόδρα, τῷ δὲ πολὺν χρόνον τὸ ὀλίγον λυπεῖσθαι ταύτην τὴν λύπην ἣν καλοῦμεν θυμόν. ἐπεὶ δ' ὥσπερ καὶ ἐπὶ τῶν ἄλλων εἵπομεν, καὶ ἐνταῦθα ἔστιν ὑπερβολὴ καὶ ἔλλειψις (ὁ μὲν γὰρ χαλεπὸς τοιοῦτος ἐστίν, ὁ καὶ θᾶπτον καὶ μᾶλλον πάσχων καὶ πλείω χρόνον καὶ ὅτ' οὐ δεῖ καὶ ὁποίοις οὐ δεῖ καὶ ἐπὶ πολλοῖς, ὁ δ' ἀνδραποδώδης τοῦναντίον), δῆλον ὅτι ἔστι τις καὶ ὁ μέσος τῆς ἀνισότητος. ἐπεὶ οὖν ἡμαρτημένοι ἀμφοτέραι αἱ ἕξεις ἐκεῖναι, φανερὸν ὅτι ἐπιεικῆς ἡ μέση τούτων ἕξις· οὔτε γὰρ προτερεῖ οὔθ' ὕστερίζει οὔτε οἷς οὐ δεῖ ὀργίζεται οὔτε οἷς δεῖ οὐκ ὀργίζεται. ὥστ' ἐπεὶ καὶ πραότης ἢ βελτίστη ἕξις περὶ ταῦτα τὰ πάθη ἐστίν, εἴη καὶ ἡ πραότης μεσότης τις, καὶ ὁ πρῶτος μέσος τοῦ χαλεποῦ καὶ τοῦ ἀνδραποδώδους.

ἔστι δὲ καὶ ἡ μεγαλοψυχία καὶ ἡ μεγαλοπρέπεια καὶ ἡ ἐλευθεριότης μεσότητες. ἡ μὲν ἐλευθεριότης περὶ χρημάτων κτήσιν καὶ ἀποβολήν. ὁ μὲν γὰρ κτήσῃ μὲν πάσῃ μᾶλλον χαίρων ἢ δεῖ, ἀποβολῇ δὲ πάσῃ λυπούμενος μᾶλλον ἢ δεῖ ἀνελεύθερος, ὁ δ' ἀμφοτέρω ἦττον ἢ δεῖ ἄσωτος, ὁ δ' ἄμφω ὡς δεῖ ἐλευθέριος. τοῦτο δὲ λέγω τὸ ὡς δεῖ, καὶ ἐπὶ τούτων καὶ ἐπὶ τῶν ἄλλων, τὸ ὡς ὁ λόγος ὁ ὀρθός. ἐπεὶ δ' ἐκεῖνοι μὲν εἰσιν ἐν ὑπερβολῇ καὶ ἐλλείψει, ὅπου δὲ ἔσχατα εἰσὶ, καὶ μέσον, καὶ τοῦτο βέλτιστον, ἐν δὲ περὶ ἕκαστον τῷ εἶδει τὸ βέλτιστον· ἀνάγκη καὶ τὴν ἐλευθεριότητα μεσότητα εἶναι ἀσωτίας καὶ ἀνελευθερίας περὶ χρημάτων κτήσιν καὶ ἀποβολήν. διχῶς δὲ τὰ χρήματα λέγομεν καὶ τὴν χρηματιστικὴν. ἡ μὲν γὰρ καθ' αὐτὸ χρῆσις τοῦ κτήματος ἐστίν, [1232a] οἷον ὑποδήματος ἢ ἱματίου, ἡ δὲ κατὰ συμβεβηκὸς μὲν, οὐ μέντοι οὕτως ὡς ἂν εἴ τις σταθμῶ χρήσαιο τῷ ὑποδήματι, ἀλλ' οἷον ἡ πώλησις καὶ ἡ μίσθωσις· χρῆται γὰρ ὑποδήματι. ὁ δὲ φιλάργυρος ὁ περὶ τὸ νόμισμά ἐστιν ἐσπουδακώς, τὸ δὲ νόμισμα τῆς κτήσεως ἀντὶ τῆς κατὰ

συμβεβηκὸς χρήσεως ἐστίν· ὁ δ' ἀνελεύθερος ἂν εἴη καὶ ἄσωτος περὶ τὸν κατὰ συμβεβηκὸς τρόπον τοῦ χρηματισμοῦ, καὶ γὰρ ἐπὶ τοῦ κατὰ φύσιν χρηματισμοῦ τὴν αὐξήσιν διώκει· ὁ δ' ἄσωτος ἐλλείπει τῶν ἀναγκαίων· ὁ δ' ἐλευθέριος τὴν περιουσίαν δίδωσιν. αὐτῶν δὲ τούτων εἶδη λέγονται διαφέροντα τῷ μᾶλλον καὶ ἥττον περὶ μόρια, οἷον ἀνελεύθερος φειδωλὸς καὶ κίμβιξ καὶ αἰσχροκερδής, φειδωλὸς μὲν ἐν τῷ μὴ προῖεσθαι, αἰσχροκερδής δ' ἐν τῷ ὅτιοῦν προσίεσθαι, κίμβιξ δὲ ὁ σφόδρα περὶ μικρὰ διατεινόμενος, παραλογιστῆς δὲ καὶ ἀποστερητῆς ὁ ἄδικος κατ' ἀνελευθερίαν. καὶ τοῦ ἄσωτου ὡσαύτως λαφύκτης μὲν ὁ ἐν τῷ ἀτάκτως ἀναλίσκειν, ἀλόγιστος δὲ ὁ ἐν τῷ μὴ ὑπομένειν τὴν  περὶ δὲ μεγαλοψυχίας ἐκ τῶν τοῖς μεγαλοψύχοις ἀποδιδομένων δεῖ διορίσαι τὸ ἴδιον. ὥσπερ γὰρ καὶ τὰ ἄλλα <ἅ> κατὰ τὴν γειτνίασιν καὶ ὁμοιότητα μέχρι τοῦ λανθάνει πόρρω προϊόντα, καὶ περὶ τὴν μεγαλοψυχίαν ταῦτ' οὐ συμβέβηκεν. διὸ ἐνίοτε οἱ ἐναντίοι τοῦ αὐτοῦ ἀντιπιοῦνται, οἷον ὁ ἄσωτος τῷ ἐλευθερίῳ καὶ ὁ αὐθάδης τῷ σεμνῷ καὶ ὁ θρασὺς τῷ ἀνδρείῳ· εἰσὶ γὰρ καὶ περὶ ταῦτα καὶ ὁμοιοί μέχρι τινός, ὥσπερ ὁ ἀνδρεῖος ὑπομενετικὸς κινδύνων καὶ ὁ θρασὺς, ἀλλ' ὁ μὲν ὧδε ὁ δ' ὧδε· ταῦτα δὲ διαφέρει πλεῖστον. λέγομεν δὲ τὸν μεγαλόψυχον κατὰ τὴν τοῦ ὀνόματος προσηγορίαν, ὥσπερ ἐν μεγέθει τινὲ ψυχῆς καὶ δυνάμεως. ὥστε καὶ τῷ σεμνῷ καὶ τῷ μεγαλοπρεπεῖ ὁμοίος εἶναι δοκεῖ, ὅτε καὶ πάσαις ταῖς ἀρεταῖς ἀκολουθεῖν φαίνεται. καὶ γὰρ τὸ ὀρθῶς κρίναι τὰ μεγάλα καὶ μικρὰ τῶν ἀγαθῶν ἐπαινετόν. δοκεῖ δὲ ταῦτ' εἶναι μεγάλα, ἃ δίδωκε ὁ τὴν κρατίστην ἔχων ἕξιν περὶ τὰ τοιαῦτα εἶναι ἡδέα. ἡ δὲ μεγαλοψυχία κρατίστη· κρίνει δ' ἡ περὶ ἕκαστον ἀρετὴ τὸ μείζον καὶ τὸ ἕλαττον ὀρθῶς, ἅπερ ὁ φρόνιμος ἂν κελεύσειε καὶ ἡ ἀρετὴ, ὥστε ἔπεσθαι αὐτῇ πάσας τὰς ἀρετάς, ἢ αὐτὴν ἔπεσθαι πάσαις. - ἔτι δοκεῖ μεγαλοψύχου εἶναι τὸ καταφρονητικὸν εἶναι. ἐκάστη δ' ἀρετὴ καταφρονητικοὺς ποιεῖ [1232b] τῶν παρὰ τὸν λόγον μεγάλων, οἷον ἀνδρεία κινδύνων (μέγα γὰρ οἴεται εἶναι τῶν αἰσχυρῶν, καὶ πλῆθος οὐ πᾶν φοβερόν), καὶ σώφρων ἡδονῶν μεγάλων καὶ πολλῶν, καὶ ἐλευθέριος χρημάτων. μεγαλοψύχου δὲ δοκεῖ τοῦτο διὰ τὸ περὶ ὀλίγα σπουδάζειν, καὶ ταῦτα μεγάλα, καὶ οὐχ ὅτι δοκεῖ ἑτέρῳ τινί, καὶ μᾶλλον ἂν φροντίσειεν ἄνθρωπος μεγαλόψυχος, τί δοκεῖ ἐνὶ σπουδαίῳ ἢ πολλοῖς τοῖς τυγχάνουσιν, ὥσπερ Ἀντιφῶν ἔφη πρὸς Ἀγάθωνα κατεψηφισμένος τὴν ἀπολογίαν ἐπαινέσαντα. καὶ τὸ ὀλίγων τοῦ μεγαλοψύχου μάλιστ' εἶναι πάθος ἴδιον. πάλιν περὶ τιμῆς καὶ τοῦ ζῆν καὶ πλούτου, περὶ ὧν σπουδάζειν δοκοῦσιν οἱ ἄνθρωποι, οὐθὲν φροντίζειν περὶ τῶν ἄλλων πλὴν περὶ τιμῆς. καὶ λυπηθήσονται ἂν ἀτιμαζόμενος καὶ ἀρχόμενος ὑπὸ ἀναξίου. καὶ χαίρει μάλιστα τυγχάνων. - οὕτω μὲν οὖν δόξειεν ἂν ἐναντίως ἔχειν· τῷ γὰρ εἶναί τε μάλιστα περὶ τιμὴν καὶ καταφρονητικὸν εἶναι τῶν πολλῶν [καὶ] δόξης οὐχ ὁμολογεῖσθαι. δεῖ δὲ τοῦτο διορίσαντας εἰπεῖν. ἔστι γὰρ τιμὴ καὶ μικρὰ καὶ

μεγάλη διχῶς. ἢ γὰρ τῷ ὑπὸ πολλῶν τῶν τυχόντων ἢ τῷ ὑπὸ τῶν ἀξίων λόγου, καὶ πάλιν τῷ ἐπὶ τίνι ἢ τιμῇ διαφέρει. μεγάλη γὰρ οὐ τῷ πλήθει τῶν τιμώντων οὐδὲ τῷ ποιῶ μόνον, ἀλλὰ καὶ τῷ τιμίαν εἶναι· τῇ ἀληθείᾳ δὲ καὶ ἀρχαὶ καὶ τᾶλλα ἀγαθὰ τίμια καὶ ἄξια σπουδῆς ταῦτα ὅσα μεγάλα ἀληθῶς ἐστίν, ὥστε καὶ ἀρετὴ οὐδεμία ἄνευ μεγέθους· διὸ δοκοῦσι μεγαλοψύχους ποιεῖν ἐκάστη, περὶ ὃ ἐστὶν ἐκάστη αὐτῶν, ὥσπερ εἵπομεν. - ἀλλ' ὅμως ἐστὶ τις παρὰ τὰς ἄλλας ἀρετὰς μία μεγαλοψυχία, ὥσπερ καὶ ἰδίᾳ μεγαλόψυχον τοῦτον λεκτέον τὸν ἔχοντα ταύτην. ἐπεὶ δ' ἐστὶν ἓν τῶν ἀγαθῶν τὰ μὲν τίμια τὰ δ' ὡς διωρίσθη πρότερον, τῶν τοιούτων ἀγαθῶν δὲ τὰ μὲν μεγάλα κατ' ἀλήθειαν τὰ δὲ μικρά, καὶ τούτων ἔνιοι ἄξιοι καὶ ἀξιοῦσιν αὐτούς, ἐν τούτοις ζητητέος ὁ μεγαλόψυχος. τετραχῶς δ' ἀνάγκη διαφέρειν. ἔστι μὲν γὰρ ἄξιον εἶναι μεγάλων καὶ ἀξιοῦν ἑαυτὸν τούτων, ἔστι δὲ μικρὰ καὶ ἄξιόν τινα τηλικούτων καὶ ἀξιοῦν ἑαυτὸν τούτων, ἔστι δ' ἀνάπαλιν πρὸς ἐκάτερα αὐτῶν· ὁ μὲν γὰρ ἂν εἴη τοιοῦτος οἷος ἄξιος ὢν μικρῶν μεγάλων ἀξιοῦν ἑαυτὸν τῶν ἐντίμων ἀγαθῶν, ὁ δὲ ἄξιος ὢν μεγάλων ἀξιοῖ ἂν μικρῶν ἑαυτόν. ὁ μὲν οὖν ἄξιος μικρῶν, μεγάλων δ' ἄξιῶν ἑαυτὸν ψεκτός (ἀνόητον γὰρ καὶ οὐ καλὸν τὸ παρὰ τὴν ἀξίαν τυγχάνειν), ψεκτὸς δὲ καὶ ὅστις ἄξιος ὢν ὑπαρχόντων αὐτῷ τῶν τοιούτων μετέχει μὴ ἀξιοῖ ἑαυτόν. [1233a] λείπεται δὲ ἐνταῦθα ἐναντίος τούτοις ἀμφοτέροις, ὅστις ὢν ἄξιος μεγάλων ἀξιοῖ αὐτὸς ἑαυτὸν τούτων, καὶ τοιοῦτός ἐστιν οἷος ἀξιοῦν ἑαυτόν. οὗτος ἐπαινετὸς καὶ μέσος τούτων. ἐπεὶ οὖν περὶ τιμῆς αἵρεσιν καὶ χρῆσιν καὶ τῶν ἄλλων ἀγαθῶν τῶν ἐντίμων ἀρίστη ἐστὶ διάθεσις ἢ μεγαλοψυχία, καὶ τοῦτ' ἀποδίδομεν, καὶ οὐ περὶ τὰ χρήσιμα, τῷ μεγαλοψύχῳ, ἅμα δὲ καὶ ἡ μεσότης αὕτη ἐπαινετωτάτη· δῆλον ὅτι καὶ ἡ μεγαλοψυχία μεσότης ἂν εἴη, τῶν δ' ἐναντίων, ὥσπερ διεγράψαμεν, ἢ μὲν ἐπὶ τὸ ἀξιοῦν ἑαυτὸν ἀγαθῶν μεγάλων ἀνάξιον ὄντα χαυνότης (τοὺς τοιούτους γὰρ χαυνούς λέγομεν, ὅσοι μεγάλων οἷονται ἄξιοι εἶναι οὐκ ὄντες), ἢ δὲ περὶ τὸ ἄξιον ὄντα μὴ ἀξιοῦν ἑαυτὸν μεγάλων μικροψυχία (μικροψύχου γὰρ εἶναι δοκεῖ, ὅστις ὑπαρχόντων δι' ἃ δικαίως ἂν ἡξιοῦτο, μὴ ἀξιοῖ μηθενὸς μεγάλου ἑαυτόν), ὥστ' ἀνάγκη καὶ τὴν μεγαλοψυχίαν εἶναι μεσότητα χαυνότητος καὶ μικροψυχίας. ὁ δὲ τέταρτος τῶν διορισθέντων οὔτε πάμπαν ψεκτὸς οὔτε μεγαλόψυχος, περὶ οὐδὲν ἔχον ὢν μέγεθος· οὔτε γὰρ ἄξιος οὔτε ἀξιοῖ μεγάλων, διὸ οὐκ ἐναντίος. καίτοι δόξειεν ἂν ἐναντίον εἶναι τῷ μεγάλων ἀξίῳ ὄντι μεγάλων τὸ μικρῶν ὄντα ἄξιον «μικρῶν» ἀξιοῦν ἑαυτόν. οὐκ ἔστι δ' ἐναντίος οὔτε τῷ μὴ μεμπτὸς εἶναι (ὡς γὰρ ὁ λόγος κελεύει, ἔχει)· καὶ ὁ αὐτός ἐστι τῇ φύσει τῷ μεγαλοψύχῳ (ὢν γὰρ ἄξιοι, τούτων ἀξιοῦσιν αὐτοὺς ἅμφω)· καὶ ὁ μὲν γένοιτ' ἂν μεγαλόψυχος (ἀξιώσει γὰρ ὢν ἐστὶν ἄξιος), ὁ δὲ μικρόψυχος, ὃς ὑπαρχόντων αὐτῷ μεγάλων κατὰ τιμὴν ἀγαθῶν οὐκ ἀξιοῖ, τί ἂν ἐποίει, εἰ μικρῶν ἄξιος ἦν; εἰ γὰρ [ἂν] μεγάλων ἀξιῶν χαῦνος ἦν, ἢ ἐλαττόνων ἔτι. διὸ καὶ οὐθεὶς ἂν εἴποι

μικρόψυχον, εἴ τις μέτοικος ὢν ἄρχειν μὴ ἀξιοῖ ἑαυτόν, ἀλλ' ὑπέικει· ἀλλ' εἴ τις εὐγενὴς ὢν καὶ ἡγούμενος μέγα εἶναι τὸ ἄρχειν.

ἔστι δὲ καὶ ὁ μεγαλοπρεπὴς οὐ περὶ τὴν τυχοῦσαν πρᾶξιν καὶ προαίρεσιν, ἀλλὰ τὴν δαπάνην, εἰ μὴ που κατὰ μεταφορὰν λέγομεν· ἄνευ δὲ δαπάνης μεγαλοπρέπεια οὐκ ἔστιν. τὸ μὲν γὰρ πρέπον ἐν κόσμῳ ἐστίν, ὁ δὲ κόσμος οὐκ ἐκ τῶν τυχόντων ἀναλωμάτων, ἀλλ' ἐν ὑπερβολῇ τῶν ἀναγκαίων ἐστίν. ὁ δὴ ἐν μεγάλῃ δαπάνῃ τοῦ πρέποντος μεγέθους προαιρετικός, καὶ τῆς τοιαύτης μεσότητος καὶ ἐπὶ τῇ τοιαύτῃ ἡδονῇ ὀρεκτικός, μεγαλοπρεπής. ὁ δ' ἐπὶ τὸ μεῖζον καὶ παρὰ μέλος, ἀνώνυμος· οὐ μὴν ἀλλ' ἔχει τινὰ [1233b] γεινῖασιν, οὓς καλοῦσιν τινες ἀπειροκάλους καὶ σαλάκωνας. οἷον εἰ εἰς γάμον δαπανῶν τις τοῦ ἀγαπητοῦ, πλούσιος ὢν, δοκεῖ πρέπειν ἑαυτῷ τοιαύτην κατασκευὴν οἷον ἀγαθοδαιμονιστὰς ἐστιῶντι, οὗτος μὲν μικροπρεπής, ὁ δὲ τοιούτους δεχόμενος ἐκείνως μὴ δόξης χάριν μηδὲ δι' ἐξουσίαν ὅμοιος τῷ σαλάκωνι, ὁ δὲ κατ' ἀξίαν καὶ ὡς ὁ λόγος, μεγαλοπρεπής· τὸ γὰρ πρέπον κατ' ἀξίαν ἐστίν· οὐθὲν γὰρ πρέπει τῶν παρὰ τὴν ἀξίαν. δεῖ δὲ πρέπον εἶναι (καὶ γὰρ τοῦ πρέποντος κατ' ἀξίαν καὶ πρέπον) καὶ περὶ ὃ (οἷον περὶ οἰκέτου γάμον ἕτερον τὸ πρέπον καὶ περὶ ἐρωμένου) καὶ αὐτῷ, εἴπερ ἐπὶ τοσοῦτον ἢ τοιοῦτον, οἷον τὴν θεωρίαν οὐκ ὥτετο Θεμιστοκλεῖ πρέπειν, ἣν ἐποιήσατο Ὀλυμπίαζε, διὰ τὴν προϋπάρξασαν ταπεινότητα, ἀλλὰ Κίμωνι. ὁ δ' ὅπως ἔτυχεν ἔχων πρὸς τὴν ἀξίαν [ὃ] οὐθεὶς τούτων. καὶ ἐπ' ἐλευθεριότητος ὡσαύτως· ἔστι γὰρ τις οὗτ' ἐλευθέριος οὗτ' ἀνελεύθερος.

σχεδὸν δὲ καὶ τῶν ἄλλων ἕκαστα τῶν περὶ τὸ ἥθος ἐπαινετῶν καὶ ψεκτῶν τὰ μὲν ὑπερβολαὶ τὰ δ' ἐλλείψεις τὰ δὲ μεσότητές εἰσι παθητικάι. - οἷον ὁ φθονερός καὶ ἐπικαιρέκακος. καθ' ἃς γὰρ ἕξεις λέγονται, ὁ μὲν φθόνος τὸ λυπεῖσθαι ἐπὶ τοῖς κατ' ἀξίαν εὖ πράττουσιν ἐστίν, τὸ δὲ τοῦ ἐπικαιρεκάκου πάθος ἐπὶ τὸ αὐτὸ ἀνώνυμον, ἀλλ' ὁ ἔχων δῆλος, ἐπὶ τὸ χαίρειν ταῖς παρὰ τὴν ἀξίαν κακοπραγίαις. μέσος δὲ τούτων ὁ νεμεσητικός, καὶ ὁ ἐκάλουν οἱ ἀρχαῖοι τὴν νέμεσιν, τὸ λυπεῖσθαι μὲν ἐπὶ ταῖς παρὰ τὴν ἀξίαν κακοπραγίαις καὶ εὐπραγίαις, χαίρειν δ' ἐπὶ ταῖς ἀξίαις· διὸ καὶ θεὸν οἶοντα εἶναι τὴν νέμεσιν. - αἰδῶς δὲ μεσότης ἀναισχυντίας καὶ καταπλήξεως· ὁ μὲν γὰρ μηδεμιᾶς φροντίζων δόξης ἀναισχυντος, ὁ δὲ πάσης ὁμοίως καταπλήξ, ὁ δὲ τῆς τῶν φαινομένων ἐπικρῶν αἰδήμων. - φιλία δὲ μεσότης ἔχθρας καὶ κολακείας· ὁ μὲν γὰρ εὐχερῶς ἅπαντα πρὸς τὰς ἐπιθυμίας ὁμιλῶν κόλαξ, ὁ δὲ πρὸς ἀπάσας ἀντικρούων ἀπεχθητικός, ὁ δὲ μὴ [τε] πρὸς ἅπασαν ἡδονὴν μὴτ' ἀκολουθῶν μὴτ' ἀντιτείνων, ἀλλὰ πρὸς τὸ φαινόμενον βέλτιστον, φίλος. - σεμνότης δὲ μεσότης αὐθαδείας καὶ ἀρεσκείας· ὁ μὲν γὰρ μηδὲν πρὸς ἕτερον ζῶν καταφρονητικὸς αὐθάδης, ὁ δὲ πάντα πρὸς ἄλλον ἢ



καὶ πάντων ἐλάττων ἄρεσκος, ὁ δὲ τὰ μὲν τὰ δὲ μή, καὶ πρὸς τοὺς ἀξίους οὕτως ἔχων σεμνός. - ὁ δὲ ἀληθὴς καὶ ἀπλοῦς, ὃν καλοῦσιν αὐθέκαστον, μέσος τοῦ εἴρωνος καὶ ἀλαζόνος. ὁ μὲν γὰρ ἐπὶ τὰ [1234a] χεῖρω καθ' αὐτοῦ ψευδόμενος μὴ ἀγνοῶν εἴρων, ὁ δ' ἐπὶ τὰ βελτίω ἀλαζών, ὁ δ' ὥς ἔχει, ἀληθὴς καὶ καθ' Ὅμηρον πεπνυμένος· καὶ ὅλως ὁ μὲν φιλαλήθης, ὁ δὲ φιλοψευδής. - ἔστι δὲ καὶ ἡ εὐτραπελία μεσότης, καὶ ὁ εὐτράπελος μέσος τοῦ ἀγροίκου καὶ δυστραπέλου καὶ τοῦ βωμολόχου. ὥσπερ γὰρ περὶ τροφήν ὁ σικχὸς τοῦ παμφάγου διαφέρει τῷ ὁ μὲν μηθὲν ἢ ὀλίγα καὶ χαλεπῶς προσίεσθαι, ὁ δὲ πάντα εὐχερῶς, οὕτω καὶ ὁ ἄγροικος ἔχει πρὸς τὸν φορτικὸν καὶ βωμολόχον· ὁ μὲν γὰρ οὐθὲν γελοῖον ἀλλὰ χαλεπῶς προσίεται, ὁ δὲ πάντα εὐχερῶς καὶ ἡδέως. δεῖ δ' οὐδέτερον, ἀλλὰ τὰ μὲν τὰ δὲ μή, καὶ κατὰ τὸν λόγον· οὗτος δ' εὐτράπελος. ἡ δ' ἀπόδειξις ἡ αὐτή· ἡ τε γὰρ εὐτραπελία ἡ τοιαύτη, καὶ μὴ ἦν μεταφέροντες λέγομεν, ἐπεικεστάτη ἔξις, καὶ ἡ μεσότης ἐπαινετή, τὰ δ' ἄκρα ψεκτά. οὔσης δὲ διττῆς τῆς εὐτραπελίας (ἡ μὲν γὰρ ἐν τῷ χαίρειν ἔστι τῷ γελοίῳ καὶ τῷ εἰς αὐτόν, ἔαν ἡ τοιονδί, ὣν ἐν καὶ τὸ σκῶμμα ἐστίν, ἡ δ' ἐν τῷ δύνασθαι τοιαῦτα πορίζεσθαι), ἕτεραι μὲν εἰσιν ἀλλήλων, ἀμφοτέραι μέντοι μεσότητες. καὶ γὰρ τὸν δυνάμενον τοιαῦτα πορίζεσθαι ἐφ' ὅσοις ἡσθήσεται <ὁ> εὖ κρίνων, κἂν εἰς αὐτόν ἢ τὸ γελοῖον, μέσος ἔσται τοῦ φορτικοῦ καὶ τοῦ ψυχροῦ. ὁ δ' ὅρος οὗτος βελτίων ἢ τὸ <μὴ> λυπηρὸν εἶναι τὸ λεχθὲν τῷ σκωπτομένῳ ὄντι ὁποιοῦν· μᾶλλον γὰρ δεῖ τῷ ἐν μεσότητι ὄντι ἀρέσκειν· οὗτος γὰρ κρίνει εὖ.

πᾶσαι δ' αὖται αἱ μεσότητες ἐπαινεταὶ μὲν, οὐκ εἰσὶ δ' ἀρεταί, οὐδ' αἱ ἐναντία κακία· ἄνευ προαιρέσεως γάρ. ταῦτα δὲ πάντ' ἐστὶν ἐν ταῖς τῶν παθημάτων διαιρέσεσιν· ἕκαστον γὰρ αὐτῶν πάθος τι ἐστίν. διὰ δὲ τὸ φυσικὰ εἶναι εἰς τὰς φυσικὰς συμβάλλεται ἀρετάς· ἔστι γάρ, ὥσπερ λεχθήσεται ἐν τοῖς ὕστερον, ἐκάστη πως ἀρετὴ καὶ φύσει καὶ ἄλλως μετὰ φρονήσεως. ὁ μὲν οὖν φθόνος εἰς ἀδικίαν συμβάλλεται (πρὸς γὰρ ἄλλον αἱ πράξεις αἱ ἀπ' αὐτοῦ) καὶ ἡ νέμεσις εἰς δικαιοσύνην, ἡ αἰδὼς εἰς σωφροσύνην, διὸ καὶ ὀρίζονται ἐν τῷ γένει τούτῳ τὴν σωφροσύνην· ὁ δ' ἀληθὴς καὶ ψευδὴς ὁ μὲν ἔμφρων, ὁ δ' ἄφρων.

ἔστι δ' ἐναντιώτερον τοῖς ἄκροις τὸ μέσον ἢ ἐκεῖνα [1234b] ἀλλήλοις, διότι τὸ μὲν μετ' οὐδετέρου γίνεται αὐτῶν, τὰ δὲ πολλάκις μετ' ἀλλήλων καὶ εἰσιν ἐνίοτε οἱ αὐτοὶ θρασύδειλοι, καὶ τὰ μὲν ἄσωτοι τὰ δὲ ἀνελεύθεροι, καὶ ὅλως ἀνώμαλοι κακῶς. ὅταν μὲν γὰρ καλῶς ἀνώμαλοι ὦσιν, οἱ μέσοι γίνονται· ἐν τῷ μέσῳ γὰρ ἐστὶ πῶς τὰ ἄκρα.

αἱ δὲ ἐναντιώσεις οὐ δοκοῦσιν ὑπάρχειν τοῖς ἄκροις πρὸς τὸ μέσον

ὁμοίως ἀμφοτέραι, ἀλλ' ὅτε μὲν καθ' ὑπερβολὴν ὅτε δὲ κατ' ἔλλειπιν. αἴτια δὲ τὰ τε πρῶτα ῥηθέντα δύο, ὀλιγότης τε, οἷον τῶν πρὸς τὰ ἡδέα ἀναισθήτων, καὶ ὅτι ἐφ' ὃ ἀμαρτάνομεν μᾶλλον, τοῦτο ἐναντιώτερον εἶναι δοκεῖ· τὸ δὲ τρίτον, ὅτι τὸ ὁμοιότερον ἦττον ἐναντίον φαίνεται, οἷον πέπονθε τὸ θράσος πρὸς τὸ θάρσος καὶ ἀσωτία πρὸς ἐλευθεριότητα.

περὶ μὲν οὖν τῶν ἄλλων ἀρετῶν τῶν ἐπαινετῶν εἴρηται σχεδόν· περὶ δὲ δικαιοσύνης ἥδη λεκτέον.

## Βιβλίο 7

περὶ φιλίας, τί ἐστὶ καὶ ποῖόν τι, καὶ τίς ὁ φίλος, καὶ πότερον ἢ φιλία μοναχῶς λέγεται ἢ πλεοναχῶς, καὶ εἰ πλεοναχῶς, πόσα ἐστίν, ἔτι δὲ πῶς χρηστέον τῷ φίλῳ καὶ τί τὸ δίκαιον τὸ φιλικόν, ἐπισκεπτέον οὐθενὸς ἦττον τῶν περὶ τὰ ἡθὴ καλῶν καὶ αἰρετῶν. τῆς τε γὰρ πολιτικῆς ἔργον εἶναι δοκεῖ μάλιστα ποιῆσαι φιλίαν, καὶ τὴν ἀρετὴν διὰ τοῦτό φασιν εἶναι χρήσιμον· οὐ γὰρ ἐνδέχεσθαι φίλους ἑαυτοῖς εἶναι τοὺς ἀδικουμένους ὑπ' ἀλλήλων. ἔτι τὸ δίκαιον καὶ τὸ ἀδικον περὶ τοὺς φίλους εἶναι μάλιστα πάντες φαμέν, καὶ ὁ αὐτὸς δοκεῖ ἀνὴρ εἶναι καὶ ἀγαθὸς καὶ φίλος, καὶ φιλία ἠθικὴ τις εἶναι ἕξις, καὶ ἐάν τις βούληται ποιῆσαι ὥστε μὴ ἀδικεῖν, ἀλλ' εἰς φίλους ποιῆσαι· οἱ γὰρ ἀληθινοὶ φίλοι οὐκ ἀδικοῦσιν. ἀλλὰ μὴν καὶ ἐάν δίκαιοι ὦσιν, οὐκ ἀδικήσουσιν· ἢ ταῦτόν ἄρα ἢ ἐγγὺς τι ἢ δικαιοσύνη καὶ ἢ φιλία. πρὸς δὲ τούτοις τῶν μεγίστων ἀγαθῶν τὸν φίλον εἶναι ὑπολαμβάνομεν, τὴν δὲ ἀφιλίαν καὶ τὴν ἐρημίαν δεινότατον, ὅτι ὁ βίος ἅπας καὶ ἡ ἐκούσιος ὁμιλία μετὰ τούτων· μετ' οἰκείων γὰρ ἢ μετὰ συγγενῶν [1235a] ἢ μεθ' ἐταίρων συνδιημερεύομεν, ἢ τέκνων ἢ γονέων ἢ γυναικός. καὶ τὰ ἴδια δίκαια τὰ πρὸς τοὺς φίλους ἐστὶν ἐφ' ἡμῖν μόνον, τὰ δὲ πρὸς τοὺς ἄλλους νενομοθέτηται, καὶ οὐκ ἐφ' ἡμῖν.

ἀπορεῖται δὲ πολλὰ περὶ τῆς φιλίας, πρῶτον μὲν ὡς οἱ ἕξωθεν παραλαμβάνοντες καὶ ἐπὶ πλεόν λέγοντες· δοκεῖ γὰρ τοῖς μὲν τὸ ὅμοιον τῷ ὁμοίῳ εἶναι φίλον, ὅθεν εἴρηται

“ὥς αἰεὶ τὸν ὅμοιον ἄγει θεὸς ὡς τὸν ὅμοιον·”

“καὶ γὰρ κολοιδὸς παρὰ κολιόν·”

“Ἔγνω δὲ φῶρ τε φῶρα, καὶ λύκος λύκον.” οἱ δὲ φυσιολόγοι καὶ τὴν ὅλην φύσιν διακοσμοῦσιν ἀρχὴν λαβόντες τὸ τὸ ὅμοιον ἵέναι πρὸς τὸ ὅμοιον, διὸ

Ἐμπεδοκλῆς καὶ τὴν κύν' ἔφη καθῆσθαι ἐπὶ τῆς κεραμίδος διὰ τὸ ἔχειν πλεῖστον ὅμοιον· οἱ μὲν οὖν οὕτω τὸ φίλον λέγουσιν· οἱ δὲ τὸ ἐναντίον τῷ ἐναντίῳ φασὶν εἶναι φίλον. τὸ μὲν γὰρ ἐρώμενον καὶ ἐπιθυμητὸν πᾶσιν εἶναι φίλον, ἐπιθυμεῖ δὲ οὐ τὸ ξηρὸν τοῦ ξηροῦ, ἀλλ' ὑγροῦ, ὅθεν εἴρηται

“ἐρᾷ μὲν ὄμβρου γαῖα” καὶ τὸ

“μεταβολὴ πάντων γλυκύ.”

ἡ δὲ μεταβολὴ εἰς τοῦναντίον. τὸ δ' ὅμοιον ἐχθρὸν τῷ ὁμοίῳ· καὶ γὰρ

“κεραμεὺς κεραμεῖ κοτέει”, καὶ τὰ ἀπὸ τῶν αὐτῶν τρεφόμενα πολέμια ἀλλήλοις ζῶα. αὐταὶ μὲν οὖν αἱ ὑπολήψεις τοσοῦτον διεστᾶσιν. αἱ μὲν γὰρ τὸ ὅμοιον φίλον, τὸ δ' ἐναντίον πολέμιον,

“τῷ πλέονι δ' αἰεὶ πολέμιον καθίσταται

τοῦλασσον, ἐχθρᾶς θ' ἡμέρας κατάρχεται”, ἔτι δὲ καὶ οἱ τόποι κεχωρισμένοι τῶν ἐναντίων, ἡ δὲ φιλία δοκεῖ συνάγειν· οἱ δὲ τὰ ἐναντία φίλα, καὶ Ἡράκλειτος ἐπιτιμᾷ τῷ ποιήσαντι

“ὥς ἔρις ἔκ τε θεῶν καὶ ἀνθρώπων ἀπόλοιτο,” οὐ γὰρ ἂν εἶναι ἁρμονίαν μὴ ὄντος ὀξέος καὶ βαρέος, οὐδὲ τὰ ζῶα ἄνευ θήλεως καὶ ἄρρενος ἐναντίων ὄντων. - δύο μὲν αὐταὶ δόξαι περὶ φιλίας εἰσὶ, λίαν τε καθόλου «καὶ» κεχωρισμένα τοσοῦτον· ἄλλαι δὲ ἤδη ἐγγυτέρω καὶ οἰκεῖται τῶν φαινομένων. τοῖς μὲν γὰρ οὐκ ἐνδέχεσθαι δοκεῖ τοὺς φαύλους εἶναι φίλους, ἀλλὰ μόνον τοὺς ἀγαθοὺς· τοῖς δ' ἄτοπον εἰ μὴ φιλοῦσιν αἱ μητέρες τὰ τέκνα (φαίνεται δὲ καὶ ἐν τοῖς θηρίοις ἐνοῦσα φιλία· προαποθνήσκειν γοῦν αἰροῦνται τῶν τέκνων)· τοῖς δὲ τὸ χρήσιμον δοκεῖ φίλον εἶναι μόνον. σημείον δ' ὅτι καὶ διώκουσι ταῦτα πάντες, τὰ δὲ ἄχρηστα καὶ αὐτοὶ αὐτῶν ἀποβάλλουσιν· ὥσπερ Σωκράτης ὁ γέρων ἔλεγε τὸν πτύελον καὶ τὰς τρίχας καὶ τοὺς ὄνυχας παραβάλλων, καὶ τὰ μόρια ὅτι ρίπτοῦμεν τὰ ἄχρηστα, καὶ τέλος [1235b] τὸ σῶμα, ὅταν ἀποθάνῃ· ἄχρηστος γὰρ ὁ νεκρός. οἷς δὲ χρήσιμον, φυλάττουσιν, ὥσπερ ἐν Αἰγύπτῳ. - ταῦτα δὴ πάντα δοκεῖ μὲν ὑπεναντία ἀλλήλοις εἶναι. τό τε γὰρ «ὅμοιον» ἄχρηστον τῷ ὁμοίῳ, καὶ ἐναντιότης ὁμοιότητος ἀπέχει πλεῖστον, καὶ τὸ ἐναντίον ἀχρηστότατον τῷ ἐναντίῳ· φθαρτικὸν γὰρ τοῦ ἐναντίου τὸ ἐναντίον. - ἔτι δοκεῖ τοῖς μὲν ῥάδιον τὸ κτήσασθαι φίλον· τοῖς δὲ σπανιώτατον γινῶναι, καὶ οὐκ ἐνδέχεσθαι ἄνευ ἀτυχίας (τοῖς γὰρ εὖ πράττουσι βούλονται πάντες δοκεῖν φίλοι εἶναι)· οἱ δ' οὐδὲ τοῖς συνδιαμένουσιν ἐν ταῖς ἀτυχίαις ἀξιοῦσι πιστεῦειν, ὥς ἐξαπατῶντας καὶ

προσποιουμένους, ἵνα κτήσωνται διὰ τῆς τῶν ἀτυχούντων ὁμιλίας πάλιν εὐτυχούντων φιλίαν.

ληπτέος δὴ τρόπος ὅστις ἡμῖν ἅμα τὰ τε δοκοῦντα περὶ τούτων μάλιστα ἀποδώσει, καὶ τὰς ἀπορίας λύσει καὶ τὰς ἐναντιώσεις. τοῦτο δ' ἔσται, ἐὰν εὐλόγως φαίνεται τὰ ἐναντία δοκοῦντα· μάλιστα γὰρ ὁμολογούμενος ὁ τοιοῦτος ἔσται λόγος τοῖς φαινομένοις. συμβαίνει δὲ μένειν τὰς ἐναντιώσεις, ἐὰν ἔστι «μὲν» ὡς ἀληθὲς ἢ τὸ λεγόμενον, ἔστι δ' ὡς οὐ. - ἔχει δ' ἀπορίαν καὶ πότερον τὸ ἡδὺ ἢ τὸ ἀγαθὸν ἔστι τὸ φιλούμενον. εἰ μὲν γὰρ φιλοῦμεν οὐ ἐπιθυμοῦμεν, καὶ μάλιστα ὁ ἔρως τοιοῦτον (οὐθεὶς γὰρ

“ἐραστὴς ὅστις οὐκ ἀεὶ φιλεῖ”), ἡ δὲ ἐπιθυμία τοῦ ἡδέος, ταύτη μὲν τὸ φιλούμενον τὸ ἡδὺ, εἰ δὲ ὁ βουλόμεθα, τὸ ἀγαθόν· ἔστι δ' ἕτερον τὸ ἡδὺ καὶ τὸ ἀγαθόν.

περὶ δὴ τούτων καὶ τῶν ἄλλων τῶν συγγενῶν τούτοις πειρατέον διορίσαι, λαβοῦσιν ἀρχὴν τήνδε. τὸ γὰρ ὀρεκτὸν καὶ βουλευτὸν ἢ τὸ ἀγαθόν ἢ τὸ φαινόμενον ἀγαθόν. διὸ καὶ τὸ ἡδὺ ὀρεκτόν· φαινόμενον γάρ τι ἀγαθόν. τοῖς μὲν γὰρ δοκεῖ, τοῖς δὲ φαίνεται κἂν μὴ δοκῇ. οὐ γὰρ ἐν ταύτῳ τῆς ψυχῆς ἡ φαντασία καὶ ἡ δόξα. ὅτι μέντοι φίλον καὶ τὸ ἀγαθόν καὶ τὸ ἡδύ, δῆλον. τούτου δὲ διωρισμένου ληπτέον ὑπόθεσιν ἑτέραν. τῶν γὰρ ἀγαθῶν τὰ μὲν ἀπλῶς ἔστιν ἀγαθὰ, τὰ δὲ τινί, ἀπλῶς δὲ οὐ. καὶ τὰ αὐτὰ ἀπλῶς ἀγαθὰ καὶ ἀπλῶς ἡδέα. τὰ μὲν γὰρ τῷ ὑγιαίνοντί φαμεν σώματι συμφέροντα ἀπλῶς εἶναι σώματι ἀγαθὰ, τὰ δὲ τῷ κάμνοντι οὐ, οἷον φαρμακείας καὶ τομάς. ὁμοίως δὲ καὶ ἡδέα ἀπλῶς σώματι τὰ τῷ ὑγιαίνοντι καὶ ὀλοκλήρῳ, οἷον τὸ ἐν τῷ φωτὶ ὄρᾶν καὶ οὐ τὸ ἐν τῷ σκότει· καίτοι τῷ ὀφθαλμιῶντι ἐναντίως. καὶ οἶνος ἡδίων οὐχ ὁ τῷ διεφθαρμένῳ τὴν γλῶτταν ὑπὸ οἶνοφλυγίας, ἐπεὶ οὔτε ὄξος παρεγγέουσιν, ἀλλὰ τῇ [1236a] ἀδιαφθόρῳ αἰσθήσει. ὁμοίως δὲ καὶ ἐπὶ ψυχῆς, καὶ οὐχ ἅ τοῖς παιδίοις καὶ τοῖς θηρίοις, ἀλλ' ἅ τοῖς καθεστῶσιν. ἀμφοτέρων γοῦν μεμνημένοι ταῦθ' αἰρούμεθα. ὡς δ' ἔχει παιδίον καὶ θηρίον πρὸς ἄνθρωπον καθεστῶτα, οὕτως ἔχει ὁ φαῦλος καὶ ἄφρων πρὸς τὸν ἐπικτῆ καὶ φρόνιμον. τούτοις δὲ ἡδέα τὰ κατὰ τὰς ἑξεις· ταῦτα δ' ἔστι τὰ ἀγαθὰ καὶ τὰ καλά.

ἐπεὶ οὖν τὰ ἀγαθὰ πλεοναχῶς (τὸ μὲν γὰρ τῷ τοιόνδ' εἶναι λέγομεν ἀγαθόν, τὸ δὲ τῷ ὠφέλιμον καὶ χρήσιμον), ἔτι δὲ τὸ ἡδὺ τὸ μὲν ἀπλῶς καὶ ἀγαθὸν ἀπλῶς, τὸ δὲ τινὶ καὶ φαινόμενον ἀγαθόν· ὥσπερ καὶ ἐπὶ τῶν ἀψύχων δι' ἕκαστον τούτων ἐνδέχεται ἡμᾶς αἰρεῖσθαι τι καὶ φιλεῖν, οὕτω καὶ ἄνθρωπον. τὸν μὲν γὰρ «τῷ» τοιόνδε καὶ δι' ἀρετὴν, τὸν δ' ὅτι ὠφέλιμος καὶ

χρήσιμος, τὸν δ' ὅτι ἡδὺς καὶ δι' ἡδονήν. φίλος δὲ γίνεται ὅταν φιλούμενος ἀντιφιλή, καὶ τοῦτο μὴ λανθάνῃ πως αὐτούς.

ἀνάγκη ἄρα τρία φιλίας εἶδη εἶναι, καὶ μήτε καθ' ἓν ἀπάσας μὴδ' ὡς εἶδη ἑνὸς γένους, μήτε πάμπαν λέγεσθαι ὁμωνύμως. πρὸς μίαν γάρ τινα λέγονται καὶ πρώτην, ὥσπερ τὸ ἱατρικόν. καὶ <γὰρ> ψυχὴν ἱατρικὴν καὶ σῶμα λέγομεν καὶ ὄργανον καὶ ἔργον, ἀλλὰ κυρίως τὸ πρῶτον. πρῶτον δ' οὗ λόγος ἐν ἡμῖν ὑπάρχει. οἷον ὄργανον ἱατρικόν, ὃ ἂν ὁ ἱατρὸς χρήσαιτο· ἐν δὲ τῷ τοῦ ἱατροῦ λόγῳ οὐκ ἔστιν ὁ τοῦ ὀργάνου. ζητεῖται μὲν οὖν πανταχοῦ τὸ πρῶτον· διὰ δὲ τὸ καθόλου εἶναι [τὸ] πρῶτον λαμβάνουσιν καὶ πρῶτον καθόλου, τοῦτο δ' ἐστὶ ψεῦδος. ὥστε καὶ περὶ τῆς φιλίας οὐ δύνανται πάντ' ἀποδιδόναι τὰ φαινόμενα. οὐ γὰρ ἐφαρμόττοντος ἑνὸς λόγου οὐκ οἴονται <τὰς> ἄλλας φιλίας εἶναι· αἱ δ' εἰσὶ μὲν, ἀλλ' οὐχ ὁμοίως εἰσίν· οἱ δ' ὅταν ἡ πρώτη μὴ ἐφαρμόττῃ, ὡς οὕσαν καθόλου ἂν, εἴπερ ἦν πρώτη, οὐδ' εἶναι φιλίας τὰς ἄλλας φασίν· ἔστι δὲ πολλὰ εἶδη φιλίας. τῶν γὰρ ῥηθέντων ἦν ἥδη, ἐπειδὴ διώριστα τριχῶς λέγεσθαι τὴν φιλίαν. ἡ μὲν γὰρ διώριστα δι' ἀρετήν, ἡ δὲ διὰ τὸ χρήσιμον, ἡ δὲ διὰ τὸ ἡδύ.

τούτων ἡ μὲν διὰ τὸ χρησιμὸν ἐστὶν ἡ [διὰ] τῶν πλείστων φιλία (διὰ γὰρ τὸ χρήσιμοι εἶναι φιλοῦσιν ἀλλήλους, καὶ μέχρι τούτου, ὥσπερ ἡ παροιμία

“Γλαῦκ' ἐπίκουρος ἀνὴρ τὸν σοφὸν φίλον ἔσκε μάχηται,” καὶ

“οὐκέτι γινώσκουσιν Ἀθηναῖοι Μεγαρήας”), ἡ δὲ δι' ἡδονὴν τῶν νέων (τούτου γὰρ αἴσθησιν ἔχουσιν· διὸ εὐμετάβολος φιλία ἡ τῶν νέων· μεταβαλλόντων γὰρ τὰ ἦθη κατὰ τὰς [1236b] ἡλικίας μεταβάλλει καὶ τὸ ἡδύ), ἡ δὲ κατ' ἀρετήν τῶν βελτίστων.

φανερὸν δ' ἐκ τούτων ὅτι ἡ πρώτη φιλία ἡ τῶν ἀγαθῶν ἐστὶν ἀντιφιλία καὶ ἀντιπροαίρεσις πρὸς ἀλλήλους. φίλον μὲν γὰρ τὸ φιλούμενον τῷ φιλοῦντι, φίλος δὲ τῷ φιλουμένῳ καὶ ἀντιφιλῶν. αὕτη μὲν οὖν ἐν ἀνθρώποις μόνον ὑπάρχει φιλία (μόνον γὰρ αἰσθάνεται προαιρέσεως)· αἱ δ' ἄλλαι καὶ ἐν τοῖς θηρίοις, καὶ τὸ χρήσιμον ἐπὶ μικρόν τι φαίνεται ἐνυπάρχον καὶ πρὸς ἄνθρωπον τοῖς ἡμέροις καὶ πρὸς ἄλληλα, οἷον τὸν τροχίλον φησὶν Ἡρόδοτος τῷ κροκοδείλῳ, καὶ ὡς οἱ μάντις τὰς συνεδρείας καὶ διεδρείας λέγουσιν. καὶ οἱ φαῦλοι ἂν εἶεν φίλοι ἀλλήλοις καὶ διὰ τὸ χρήσιμον καὶ διὰ τὸ ἡδύ. οἱ δ' ὅτι ἡ πρώτη οὐχ ὑπάρχει αὐτοῖς, οὗ φασὶ φίλους εἶναι· ἀδικήσῃ γὰρ ὁ γε φαῦλος τὸν φαῦλον, οἱ δ' ἀδικούμενοι οὐ φιλοῦσι σφᾶς αὐτούς. οἱ δὲ φιλοῦσι μὲν, ἀλλ' οὐ τὴν πρώτην φιλίαν, ἐπεὶ τὰς γε ἑτέρας οὐθὲν κωλύει. δι'

ἡδονὴν γὰρ ὑπομένουσιν ἀλλήλους βλαπτόμενοι, ὥς ἂν ὧσιν ἀκρατεῖς· οὐ δοκοῦσι δ' οὐδ' οἱ δι' ἡδονὴν φιλοῦντες ἀλλήλους φίλοι εἶναι, ὅταν κατ' ἀκρίβειαν ζητῶσιν, ὅτι οὐχ ἡ πρώτη. ἐκείνη μὲν γὰρ βέβαιος, αὕτη δὲ ἀβέβαιος. ἡ δ' ἐστὶ μὲν, ὥσπερ εἴρηται, φιλία, οὐκ ἐκείνη δέ, ἀλλ' ἀπ' ἐκείνης. τὸ μὲν οὖν ἐκείνως μόνον λέγειν τὸν φίλον βιάζεσθαι τὰ φαινόμενα ἐστί, καὶ παράδοξα λέγειν ἀναγκαῖον· καθ' ἓνα δὲ λόγον πάσας ἀδύνατον. λείπεται τοίνυν οὕτως, ὅτι ἔστι μὲν ὡς μόνη <ἡ> πρώτη φιλία, ἔστι δὲ ὡς πᾶσαι, οὔτε ὡς ὁμώνυμοι καὶ ὡς ἔτυχον ἔχουσιν πρὸς ἑαυτάς, οὔτε καθ' ἓν εἶδος, ἀλλὰ μᾶλλον πρὸς ἓν.

ἐπεὶ δ' ἀπλῶς ἀγαθὸν καὶ ἀπλῶς ἡδὺ τὸ αὐτὸ καὶ ἅμα, ἂν μὴ τι ἐμποδίζῃ, ὃ δ' ἀληθινὸς φίλος καὶ ἀπλῶς ὁ πρῶτος ἐστίν, ἔστι δὲ τοιοῦτος ὁ δι' αὐτὸν αὐτὸς αἰρετός (ἀνάγκη δ' εἶναι τοιοῦτον· ὡς γὰρ βούλεται τις δι' αὐτὸν εἶναι τἀγαθὰ, ἀνάγκη καὶ αὐτὸν αἰρεῖσθαι εἶναι), ὃ δ' ἀληθινὸς φίλος καὶ ἡδύς ἐστίν ἀπλῶς· διὸ δοκεῖ καὶ ὁ ὁπωσοῦν φίλος ἡδύς. - ἔτι δὲ διοριστέον περὶ τούτου μᾶλλον· ἔχει ἐπίστασιν, πότερον γὰρ τὸ αὐτῷ ἀγαθὸν ἢ τὸ ἀπλῶς ἀγαθὸν φίλον, καὶ πότερον τὸ κατ' ἐνέργειαν φιλεῖν μεθ' ἡδονῆς, ὥστε καὶ τὸ φιλητὸν ἡδύ, ἢ οὐ. ἅμφω γὰρ εἰς ταῦτ' οὐ συνακτέον· τὰ τε γὰρ μὴ ἀπλῶς ἀγαθὰ ἀλλὰ κακὰ ἀπλῶς τύχῃ φευκτά· καὶ τὸ μὴ αὐτῷ ἀγαθὸν οὐθὲν πρὸς αὐτόν, ἀλλὰ τοῦτ' ἐστίν ὃ ζητεῖται, τὰ ἀπλῶς ἀγαθὰ οὕτως εἶναι ἀγαθὰ. ἔστι γὰρ [1237a] αἰρετὸν μὲν τὸ ἀπλῶς ἀγαθόν, αὐτῷ δὲ τὸ αὐτῷ ἀγαθόν· ἃ δεῖ συμφωνῆσαι. καὶ τοῦτο ἡ ἀρετὴ ποιεῖ· καὶ ἡ πολιτικὴ ἐπὶ τούτῳ, ὅπως οἷς μήπω ἐστὶ γένηται. εὐθέτως δὲ καὶ πρὸ ὁδοῦ ἄνθρωπος ὢν (φύσει γὰρ αὐτῷ ἀγαθὰ τὰ ἀπλῶς ἀγαθὰ), ὁμοίως δὲ καὶ ἀνὴρ ἀντὶ γυναικὸς καὶ εὐφυῆς ἀφυοῦς, διὰ τοῦ ἡδέος δὲ ἡ ὁδός· ἀνάγκη εἶναι τὰ καλὰ ἡδέα. ὅταν δὲ τοῦτο διαφωνῇ, οὕτω σπουδαῖον τελέως· ἐνδέχεται γὰρ ἐγγενέσθαι ἀκρασίαν· τῷ γὰρ διαφωνεῖν τἀγαθὸν τῷ ἡδεῖ ἐν τοῖς πάθεσιν ἀκρασία ἐστίν.

ὥστ' ἐπειδὴ ἡ πρώτη φιλία κατ' ἀρετὴν, ἔσονται καὶ αὐτοὶ ἀπλῶς ἀγαθοί. τοῦτο δ' οὐχ ὅτι χρήσιμοι, ἀλλ' ἄλλον τρόπον· διχῶς γὰρ ἔχει τὸ τωδὶ ἀγαθὸν καὶ ἀπλῶς ἀγαθόν. καὶ ὁμοίως ὥσπερ ἐπὶ τοῦ ὠφελίμου, καὶ ἐπὶ τῶν ἔξεων. ἄλλο γὰρ τὸ ἀπλῶς ὠφέλιμον καὶ τὸ καλὸν τοιοῦτον γυμνάζεσθαι πρὸς τὸ φαρμακεύεσθαι. ὥστε καὶ ἡ ἕξις ἡ ἀνθρώπου ἀρετὴ. ἔστω γὰρ ὁ ἄνθρωπος τῶν φύσει σπουδαίων· ἡ γὰρ τοῦ φύσει σπουδαίου ἀρετὴ ἀπλῶς ἀγαθόν, ἡ δὲ τοῦ μὴ ἐκείνῳ. ὁμοίως δὲ ἔχει καὶ τὸ ἡδύ. ἐνταῦθα γὰρ ἐπιστατέον, καὶ σκεπτέον πότερόν ἐστιν ἄνευ ἡδονῆς φιλία, καὶ τί διαφέρει, καὶ ἐν ποτέρῳ ποτ' ἐστὶ τὸ φιλεῖν, [καὶ] πότερον ὅτι ἀγαθός, κἂν εἰ μὴ ἡδύς, ἀλλ' οὐ διὰ τοῦτο, διχῶς δὲ λεγομένου τοῦ φιλεῖν, πότερον ὅτι

ἀγαθὸν τὸ κατ' ἐνέργειαν οὐκ ἄνευ ἡδονῆς φαίνεται. δῆλον δ' ὅτι ὥσπερ ἐπὶ τῆς ἐπιστήμης αἱ πρόσφατοι θεωρίαι καὶ μαθήσεις αἰσθηταὶ μάλιστα τῷ ἡδεῖ, οὕτω καὶ αἱ τῶν συνήθων ἀναγνωρίσεις, καὶ ὁ λόγος ὁ αὐτὸς ἐπ' ἀμφοῖν. φύσει γοῦν τὸ ἀπλῶς ἀγαθὸν ἡδὺ ἀπλῶς, καὶ οἷς ἀγαθόν, τούτοις ἡδύ. διὸ εὐθὺς τὰ ὅμοια ἀλλήλοις χαίρει, καὶ ἀνθρώπῳ ἡδιστον ἄνθρωπος. ὥστ' ἐπεὶ καὶ ἀτελεῖ, δῆλον ὅτι καὶ τελειωθέντι· ὁ δὲ σπουδαῖος τέλειος. εἰ δὲ τὸ κατ' ἐνέργειαν φιλεῖν μεθ' ἡδονῆς ἀντιπροαίρεσις τῆς ἀλλήλων γνωρίσεως, δῆλον ὅτι καὶ ὅλως ἡ φιλία ἡ πρώτη ἀντιπροαίρεσις τῶν ἀπλῶς ἀγαθῶν καὶ ἡδέων, ὅτι ἀγαθὰ καὶ ἡδέα. ἔστι δ' αὕτη ἡ φιλία ἕξις ἀφ' ἧς ἡ τοιαύτη προαίρεσις. τὸ γὰρ ἔργον αὐτῆς ἐνέργεια, αὕτη δ' οὐκ ἔξω, ἀλλ' ἐν αὐτῷ τῷ φιλοῦντι, δυνάμεως δὲ πάσης ἔξω· ἡ γὰρ ἐν ἐτέρῳ ἢ <ἡ> ἕτερον. διὸ τὸ φιλεῖν χαίρειν, ἀλλ' οὐ τὸ φιλεῖσθαι ἐστίν. τὸ μὲν γὰρ φιλεῖσθαι φιλητοῦ ἐνέργεια, τὸ δὲ καὶ φιλίας, καὶ τὸ μὲν ἐν ἐμψύχῳ, τὸ δὲ καὶ ἐν ἀψύχῳ· φιλεῖται γὰρ καὶ τὰ ἄψυχα. ἐπεὶ δὲ τὸ φιλεῖν τὸ κατ' ἐνέργειαν τὸ φιλούμενον [1237b] [ὅ] ἐστὶ χρῆσθαι ἢ φιλούμενον, ὁ δὲ φίλος φιλούμενον τῷ φίλῳ ἢ φίλος, ἀλλὰ μὴ ἢ μουσικὸς ἢ ἢ ἰατρικὸς· ἡδονὴ τοίνυν ἢ ἀπ' αὐτοῦ, ἢ αὐτός, αὕτη φιλική. αὐτὸν γὰρ φιλεῖ, οὐχ ὅτι ἄλλος. ὥστ' ἂν μὴ χαίρη ἢ ἀγαθός, οὐχ ἡ πρώτη φιλία. οὐδὲ δεῖ ἐμποδίζειν οὐθὲν τῶν συμβεβηκότων μᾶλλον ἢ τὸ ἀγαθὸν εὐφραίνειν. τί γὰρ σφόδρα δυσώδης λείπεται; ἀγαπᾶται γὰρ τῷ εὐνοεῖν, συζῆ δὲ μή.

αὕτη μὲν οὖν ἡ πρώτη φιλία, ἣν πάντες ὁμολογοῦσιν· αἱ δ' ἄλλαι δι' αὐτὴν καὶ δοκοῦσι καὶ ἀμφισβητοῦνται. βέβαιον γάρ τι δοκεῖ ἡ φιλία· μόνη δ' αὕτη βέβαιος. τὸ γὰρ κεκριμένον βέβαιον, τὰ δὲ μὴ ταχὺ γινόμενα μηδὲ ῥαδίως [οὐ] ποιεῖ τὴν κρίσιν ὀρθήν. οὐκ ἔστι δ' ἄνευ πίστεως φιλία βέβαιος· ἡ δὲ πίστις οὐκ ἄνευ χρόνου. δεῖ γὰρ πείραν λαβεῖν, ὥσπερ λέγει καὶ Θεόγνης·

οὐ γὰρ ἂν εἰδείης ἀνδρὸς νόον οὐδὲ γυναικός,

πρὶν πειραθείης ὥσπερ ὑποζυγίου.

οὐδ' ἄνευ χρόνου φίλος, ἀλλὰ βούλονται φίλοι, καὶ μάλιστα λανθάνει ἡ τοιαύτη ἕξις ὡς φιλία. ὅταν γὰρ προθύμως ἔχωσι φίλοι εἶναι, διὰ τὸ πάνθ' ὑπηρετεῖν τὰ φιλικὰ ἀλλήλοις, οἴονται οὐ βούλεσθαι φίλοι, ἀλλ' εἶναι φίλοι. τὸ δ' ὥσπερ ἐπὶ τῶν ἄλλων συμβαίνει καὶ ἐπὶ τῆς φιλίας· οὐ γὰρ εἰ βούλονται ὑγιαίνειν, ὑγιαίνουσιν, ὥστ' οὐδ' εἰ φίλοι βούλονται, ἤδη καὶ φίλοι εἰσίν. σημεῖον δέ· εὐδιάβλητοι γὰρ οἱ διακείμενοι ἄνευ πείρας τοῦτον τὸν τρόπον· περὶ ὧν μὲν γὰρ πείραν δεδώκασιν ἀλλήλοις, οὐκ εὐδιάβλητοι, περὶ ὧν δὲ μή, πεισθεῖεν ἂν ὅταν σύμβολα λέγωσιν οἱ διαβάλλοντες. ἅμα δὲ

φανερὸν ὅτι οὐδ' ἐν τοῖς φαύλοις αὕτη ἡ φιλία· ἄπιστος γὰρ ὁ φαῦλος καὶ κακοήθης πρὸς πάντας· αὐτῷ γὰρ μετρεῖ τοὺς ἄλλους. διὸ εὐεξαπατητότεροί εἰσιν οἱ ἀγαθοί, ἂν μὴ διὰ πείραν ἀπιστῶσιν. οἱ δὲ φαῦλοι αἰροῦνται τὰ φύσει ἀγαθὰ ἀντὶ τοῦ φίλου, καὶ οὐθεὶς φιλεῖ μᾶλλον ἄνθρωπον ἢ πράγματα. ὥστ' οὐ φίλοι. οὐ γὰρ γίνεται οὕτω κοινὰ τὰ φίλων· προσνέμεται γὰρ ὁ φίλος τοῖς πράγμασιν, οὐ τὰ πράγματα τοῖς φίλοις. οὐ γίνεται ἄρ' ἡ φιλία ἡ πρώτη ἐν πολλοῖς, ὅτι χαλεπὸν πολλῶν πείραν λαβεῖν· ἐκάστῳ γὰρ ἂν ἔδει συζῆσαι. οὐδὲ δὴ αἰρετέον ὁμοίως περὶ ἱματίου καὶ φίλου· καίτοι ἐν πᾶσι δοκεῖ τοῦ νοῦν ἔχοντος δυοῖν τὸ βέλτιον αἰρεῖσθαι, καὶ εἰ μὲν τῷ χείρονι πάλαι ἐχρῆτο, τῷ βελτίονι δὲ μηδέπω, τοῦθ' αἰρετέον, ἀλλ' οὐκ ἀντὶ τοῦ πάλαι φίλου τὸν ἀγνώτα εἰ βελτίων· [1238a] οὐ γάρ ἐστιν ἄνευ πείρας οὐδὲ μιᾶς ἡμέρας ὁ φίλος, ἀλλὰ χρόνου δεῖ. διὸ εἰς παροιμίαν ἐλήλυθεν ὁ μέδιμνος τῶν ἁλῶν· ἅμα δὲ δεῖ μὴ μόνον ἀπλῶς ἀγαθὸν εἶναι, ἀλλὰ καὶ σοί, εἰ δὴ φίλος ἔσται σοὶ φίλος. ἀγαθὸς μὲν γὰρ ἀπλῶς ἐστὶ τῷ ἀγαθὸς εἶναι, φίλος δὲ τῷ ἄλλῳ ἀγαθός, ἀπλῶς <δ> ἀγαθὸς καὶ φίλος, ὅταν συμφωνήσῃ ταῦτ' ἄμφω, ὥστε ὁ ἐστὶν ἀπλῶς ἀγαθόν, τὸ τούτου ἄλλω, εἰ καὶ μὴ ἀπλῶς μὲν σπουδαίῳ, ἄλλω δ' ἀγαθός, ὅτι χρήσιμος. τὸ δὲ πολλοῖς ἅμα εἶναι φίλον καὶ τὸ φιλεῖν κωλύει· οὐ γὰρ οἶόν τε ἅμα πρὸς πολλοὺς ἐνεργεῖν.

ἐκ δὴ τούτων φανερὸν ὅτι ὀρθῶς λέγεται ὅτι ἡ φιλία τῶν βεβαίων, ὥσπερ ἡ εὐδαιμονία τῶν αὐτάρκων. καὶ ὀρθῶς εἴρηται

“ἡ γὰρ φύσις βέβαιον, οὐ τὰ χρήματα.”

πολὺ δὲ κάλλιον εἰπεῖν ὅτι ἡ ἀρετὴ τῆς φύσεως, καὶ ὅτι χρόνος λέγεται δεικνύναι τὸν φιλούμενον, καὶ αἱ ἀτυχίαι μᾶλλον τῶν εὐτυχιῶν. τότε γὰρ δῆλον ὅτι κοινὰ <τὰ> τῶν φίλων (οὗτοι γὰρ μόνοι ἀντὶ τῶν φύσει ἀγαθῶν καὶ φύσει κακῶν, περὶ ἃ αἱ εὐτυχίαι καὶ αἱ δυστυχίαι, αἰροῦνται μᾶλλον ἄνθρωπον ἢ τούτων τὰ μὲν εἶναι τὰ δὲ μὴ εἶναι)· ἡ δ' ἀτυχία δηλοῖ τοὺς μὴ ὄντως ὄντας φίλους, ἀλλὰ διὰ τὸ χρήσιμον τυχόντας. ὁ δὲ χρόνος δηλοῖ ἀμφοτέρους· οὐδὲ γὰρ ὁ χρήσιμος ταχὺ δῆλος, ἀλλ' ὁ ἡδὺς μᾶλλον. πλὴν οὐδ' ὁ ἀπλῶς ἡδὺς ταχύ. ὅμοιοι γὰρ οἱ ἄνθρωποι τοῖς οἴνοις καὶ ἐδέσμασιν· ἐκείνων τε γὰρ τὸ μὲν ἡδὺ ταχὺ δηλοῖ, πλείω δὲ χρόνον γινόμενον ἀηδὲς καὶ οὐ γλυκύ, καὶ ἐπὶ τῶν ἀνθρώπων ὁμοίως. ἔστι γὰρ καὶ τὸ ἀπλῶς ἡδὺ τῷ τέλει ὀριστέον καὶ τῷ χρόνῳ. ὁμολογήσαιεν δ' ἂν καὶ οἱ πολλοί, ὅτι ἐκ τῶν ἀποβαινόντων μόνον, ἀλλ' ὥσπερ ἐπὶ τοῦ πόματος καλοῦσι γλύκιον· τοῦτο γὰρ διὰ τὸ ἀποβαῖνον οὐχ ἡδύ, ἀλλὰ διὰ τὸ μὴ συνεχές, ἀλλὰ τὸ πρῶτον ἐξαπατᾷ.



ἡ μὲν οὖν πρώτη φιλία, καὶ δι' ἣν αἱ ἄλλαι λέγονται, ἡ κατ' ἀρετὴν ἐστί, καὶ δι' ἣν ἡδονὴν τὴν ἀρετῆς, ὥσπερ εἴρηται πρότερον· αἱ δ' ἄλλαι ἐγγίνονται φιλίαι καὶ ἐν παισὶ καὶ θηρίοις καὶ τοῖς φαύλοις. ὅθεν λέγεται, “ἥλιξ ἥλικα τέρπει” καὶ

“κακὸς κακῷ <δὲ> συντέτηκεν ἡδονῇ.”

ἐνδέχεται γὰρ καὶ ἡδεῖς ἀλλήλοις εἶναι τοὺς φαύλους, οὐχ ἢ φαῦλοι ἢ μηδέτεροι, ἀλλ' οἷον ὠδικοὶ ἄμφω, ἢ ὁ μὲν φιλωδὸς ὁ δ' ὠδικὸς ἐστίν, καὶ ἢ πάντες ἔχουσιν ἀγαθὸν καὶ ταύτῃ συναρμόττουσιν ἀλλήλοις· ἔτι χρήσιμοι ἂν εἶεν ἀλλήλοις καὶ ὠφέλιμοι, οὐχ ἀπλῶς ἀλλὰ πρὸς τὴν [1238b] προαίρεσιν, ἢ <ἢ> οὐδέτεροι. ἐνδέχεται δὲ καὶ τὸν ἐπικτικῇ φαύλῳ εἶναι φίλον. καὶ γὰρ χρήσιμος ἂν εἴη πρὸς τὴν προαίρεσιν, ὁ μὲν φαῦλος πρὸς τὴν ὑπάρχουσαν τῷ σπουδαίῳ, ὁ δὲ τῷ μὲν ἀκρατεῖ πρὸς τὴν ὑπάρχουσαν, τῷ δὲ φαύλῳ πρὸς τὴν κατὰ φύσιν· καὶ βουλήσεται τὰ ἀγαθὰ, ἀπλῶς μὲν τὰ ἀπλῶς, τὰ δ' ἐκείνῳ ἐξ ὑποθέσεως, ἢ πενία συμφέρει ἢ νόσος, <καὶ> ταῦτα τῶν ἀπλῶς ἀγαθῶν ἔνεκα, ὥσπερ καὶ αὐτὸ τὸ φάρμακον πεῖν· οὐ γὰρ βούλεται, ἀλλὰ τοῦδ' ἔνεκα βούλεται. ἔτι καθ' οὓς τρόπους καὶ ἀλλήλοις οἱ μὴ σπουδαῖοι εἶεν ἂν φίλοι. εἴη γὰρ ἂν ἡδὺς οὐχ ἢ φαῦλος, ἀλλ' ἢ τῶν κοινῶν τινος μετέχει, οἷον εἰ μουσικός. ἔτι ἢ ἐνὶ τι πᾶσιν ἐπικτικές· διὸ ἐνιοὶ ὁμιλητικοὶ εἶεν ἂν καὶ σπουδαῖω. ἢ ἢ προσαρμόττουσιν ἐκάστω· ἔχουσι γὰρ τι πάντες τοῦ ἀγαθοῦ.

τρία μὲν οὖν εἶδη ταῦτα φιλίας· ἐν πᾶσι δὲ τούτοις κατ' ἰσότητά πως λέγεται ἡ φιλία. καὶ γὰρ οἱ κατ' ἀρετὴν φίλοι ἐν ἰσότητί πως εἰσιν ἀρετῆς φίλοι ἀλλήλοις. ἄλλη δὲ διαφορὰ τούτων ἢ καθ' ὑπερβολήν, ὥσπερ θεοῦ ἀρετὴ πρὸς ἄνθρωπον. τοῦτο γὰρ ἕτερον εἶδος φιλίας, καὶ ὅλως ἄρχοντος καὶ ἀρχομένου, καθάπερ καὶ τὸ δίκαιον ἕτερον· κατ' ἀναλογίαν γὰρ ἴσον, κατ' ἀριθμὸν δ' οὐκ ἴσον. ἐν τούτῳ τῷ γένει πατὴρ πρὸς υἱὸν καὶ ὁ εὐεργέτης πρὸς τὸν εὐεργετηθέντα. αὐτῶν δὲ τούτων διαφοραὶ εἰσίν· ἄλλη πατρὸς πρὸς υἱὸν καὶ ἀνδρὸς πρὸς γυναῖκα, αὕτη μὲν ὡς ἄρχοντος καὶ ἀρχομένου, ἢ δὲ εὐεργέτου πρὸς εὐεργετηθέντα. ἐν ταύταις δὲ ἢ οὐκ ἔνεστιν ἢ οὐχ ὁμοίως τὸ ἀντιφιλεῖσθαι. γελοῖον γάρ, εἴ τις ἐγκαλοῖται τῷ θεῷ, ὅτι οὐχ ὁμοίως τὸ ἀντιφιλεῖσθαι ὡς φιλεῖται, ἢ τῷ ἄρχοντι καὶ ἀρχομένῳ. φιλεῖσθαι γάρ, οὐ φιλεῖν, τοῦ ἄρχοντος, ἢ φιλεῖν ἄλλον τρόπον. καὶ ἡδονὴ διαφέρει οὐδὲν ἢ τε τοῦ αὐτάρκους ἐπὶ τῷ αὐτοῦ κτήματι ἢ παιδί, καὶ τοῦ ἐνδεοῦς ἐπὶ τῷ γινομένῳ. ὡς δ' αὐτως καὶ ἐπὶ τῶν διὰ τὴν χρῆσιν φίλων καὶ ἐπὶ τῶν δι' ἡδονὴν οἱ μὲν κατ' ἰσότητά εἰσιν, οἱ δὲ καθ' ὑπεροχήν. διὸ καὶ οἱ ἐκείνως οἰόμενοι ἐγκαλοῦσιν, ἐὰν μὴ ὁμοίως χρήσιμοι καὶ εὖ ποιῶσιν, καὶ ἐπὶ τῆς

ἡδονῆς. δῆλον δ' ἐν τοῖς ἐρωτικοῖς· τοῦτο γὰρ αἴτιον τοῦ μάχεσθαι ἀλλήλοις πολλάκις. ἀγνοεῖ γὰρ ὁ ἐρῶν ὅτι οὐχ ὁ αὐτὸς λόγος αὐτοῖς ἐπὶ τὴν προθυμίαν. διὸ εὐρηκέναι νεῖκος ὁ ἐρώμενος· τοιαῦτ' ἂν οὐκ ἐρῶν λέγοι. οἱ δὲ νομίζουσι τὸν αὐτὸν εἶναι λόγον.

[1239a] ὥσπερ οὖν εἴρηται, τριῶν ὄντων εἰδῶν φιλίας, κατ' ἀρετὴν κατὰ τὸ χρήσιμον καὶ κατὰ τὸ ἡδύ, αὐταὶ πάλιν διήρηνται εἰς δύο· αἱ μὲν γὰρ κατὰ τὸ ἴσον αἱ δὲ καθ' ὑπεροχὴν εἰσίν. φιλία μὲν οὖν ἀμφοτέραι, φίλοι δ' οἱ κατὰ τὴν ἰσότητά· ἄτοπον γὰρ ἂν εἴη εἰ ἀνὴρ παιδίῳ φίλος, φιλεῖ δέ γε καὶ φιλεῖται. ἐνιαχοῦ δὲ φιλεῖσθαι μὲν δεῖ τὸν ὑπερέχοντα, ἐὰν δὲ φιλή, ὀνειδίζεται ὡς ἀνάξιον φιλῶν. τῇ γὰρ ἀξία τῶν φίλων μετρεῖται καὶ τι νῖσω. τὰ μὲν οὖν δι' ἡλικίας ἔλλειψιν ἀνάξια ὁμοίως φιλεῖσθαι, τὰ δὲ κατ' ἀρετὴν ἢ γένος ἢ κατὰ ἄλλην τοιαύτην ὑπεροχὴν. ἀεὶ δὲ τὸν ὑπερέχοντα ἢ ἥττον ἢ μὴ φιλεῖν ἀξιοῦν, καὶ ἐν τῷ χρησίμῳ καὶ ἐν τῷ ἡδεῖ καὶ κατ' ἀρετὴν. ἐν μὲν οὖν ταῖς μικραῖς ὑπεροχαῖς εἰκότως γίνονται ἀμφισβητήσεις (τὸ γὰρ μικρὸν ἐνιαχοῦ οὐδὲν ἰσχύει, ὥσπερ ἐν ξύλου σταθμῷ, ἀλλ' ἐν χρυσίῳ· ἀλλὰ τὸ μικρὸν κακῶς κρίνουσιν· φαίνεται γὰρ τὸ μὲν οἰκεῖον ἀγαθὸν διὰ τὸ ἐγγὺς μέγα, τὸ δ' ἀλλότριον διὰ τὸ πόρρω μικρόν)· ὅταν δὲ ὑπερβολὴ ᾖ, οὐδ' αὐτοὶ ἐπιζητοῦσιν ὡς δεῖ ἢ ἀντιφιλεῖσθαι ἢ ὁμοίως ἀντιφιλεῖσθαι, οἷον εἴ τις ἀξιοῖ τὸν θεόν. φανερόν γ' ὅτι φίλοι μὲν, ὅταν ἐν τῷ ἴσῳ, τὸ ἀντιφιλεῖν δ' ἔστιν ἄνευ τοῦ φίλους εἶναι. - δῆλον δὲ καὶ διὰ τί ζητοῦσι μᾶλλον οἱ ἄνθρωποι τὴν καθ' ὑπεροχὴν φιλίαν τῆς κατ' ἰσότητά· ἅμα γὰρ ὑπάρχει οὕτως αὐτοῖς τό τε φιλεῖσθαι καὶ ἡ ὑπεροχή. διὸ ὁ κόλαξ παρ' ἐνίοις ἐντιμότερος τοῦ φίλου· ἄμφω γὰρ φαίνεσθαι ποιεῖ ὑπάρχειν τῷ κολακευομένῳ. μάλιστα δ' οἱ φιλότιμοι τοιοῦτοι· τὸ γὰρ θαυμάζεσθαι ἐν ὑπεροχῇ. φύσει δὲ γίνονται οἱ μὲν φιλητικοὶ οἱ δὲ φιλότιμοι. φιλητικὸς δὲ ὁ τῷ φιλεῖν χαίρων μᾶλλον ἢ τῷ φιλεῖσθαι· ἐκεῖνος δὲ φιλότιμος μᾶλλον. ὁ μὲν οὖν χαίρων τῷ θαυμάζεσθαι καὶ φιλεῖσθαι τῆς ὑπεροχῆς φίλος· ὁ δὲ τῇ ἐν τῷ φιλεῖν ἡδονῇ ὁ φιλητικός. ἔνεστι γὰρ ἀνάγκη ἐνεργοῦντα· τὸ μὲν γὰρ φιλεῖσθαι συμβεβηκός· ἔστι γὰρ λανθάνειν φιλούμενον, φιλοῦντα δ' οὐ. ἔστι δὲ καὶ κατὰ τὴν φιλίαν τὸ φιλεῖν μᾶλλον ἢ τὸ φιλεῖσθαι, τὸ δὲ φιλεῖσθαι κατὰ τὸ φιλητόν. σημεῖον δέ· ἔλοιτ' ἂν ὁ φίλος μᾶλλον, εἰ μὴ ἐνδέχοιτ' ἄμφω, γινώσκειν ἢ γινώσκεσθαι, οἷον ἐν ταῖς ὑποβολαῖς αἱ γυναῖκες ποιοῦσι, καὶ ἡ Ἀνδρομάχη ἢ Ἀντιφῶντος. καὶ γὰρ ἔοικε τὸ μὲν ἐθέλειν γινώσκεσθαι αὐτοῦ ἔνεκα, καὶ τοῦ πάσχειν τι ἀγαθὸν ἀλλὰ μὴ ποιεῖν, τὸ δὲ γινώσκειν τοῦ ποιεῖν καὶ τοῦ φιλεῖν ἔνεκα. διὸ καὶ [1239b] τοὺς ἐμμένοντας τῷ φιλεῖν πρὸς τοὺς τεθνεῶτας ἐπαινοῦμεν· γινώσκουσι γάρ, ἀλλ' οὐ γινώσκονται.

ὅτι μὲν οὖν πλείονες τρόποι φιλίας, καὶ πόσοι τρόποι, ὅτι τρεῖς, καὶ ὅτι τὸ

φιλεῖσθαι καὶ ἀντιφιλεῖσθαι καὶ οἱ φίλοι διαφέρουσιν, οἷ τε κατ' ἰσότητα καὶ οἱ καθ' ὑπεροχὴν, εἴρηται· ἐπεὶ δὲ τὸ φίλον λέγεται καὶ καθόλου μᾶλλον, ὥσπερ καὶ κατ' ἀρχὰς ἐλέχθη, ὑπὸ τῶν ἔξωθεν συμπαραλαμβανόντων (οἱ μὲν γὰρ τὸ ὅμοιον φασιν εἶναι φίλον, οἱ δὲ τὸ ἐναντίον), λεκτέον καὶ περὶ τούτων πῶς εἰσι πρὸς τὰς εἰρημένας φιλίας. ἀνάγεται δὲ τὸ μὲν ὅμοιον καὶ εἰς τὸ ἡδὺ καὶ εἰς τὸ ἀγαθόν. τό τε γὰρ ἀγαθὸν ἀπλοῦν, τὸ δὲ κακὸν πολύμορφον· καὶ ὁ ἀγαθὸς μὲν ὅμοιος ἀεὶ καὶ οὐ μεταβάλλεται τὸ ἦθος, ὁ δὲ φαῦλος καὶ ὁ ἄφρων οὐθὲν ἔοικεν ἔωθεν καὶ ἐσπέρας. διὸ ἐὰν μὴ συμβάλλωσιν οἱ φαῦλοι, οὐ φίλοι ἐαυτοῖς, ἀλλὰ δίστανται· ἢ δ' οὐ βέβαιος φιλία οὐ φιλία. ὥστε οὕτως μὲν τὸ ὅμοιον φίλον, ὅτι «τὸ» ἀγαθὸν ὅμοιον, ἔστι δὲ ὡς καὶ κατὰ τὸ ἡδύ· τοῖς γὰρ ὁμοίοις ταῦθ' ἡδέα, καὶ ἕκαστον δὲ φύσει αὐτὸ αὐτῷ ἡδύ. διὸ καὶ φωναὶ καὶ αἱ ἔξεις καὶ συνημερεύσεις τοῖς ὁμογενέσιν ἤδιστα ἀλλήλοις, καὶ τοῖς ἄλλοις ζώοις· καὶ ταύτῃ ἐνδέχεται καὶ τοὺς φαύλους ἀλλήλους φιλεῖν.

κακὸς κακῷ δὲ συντέτηκεν ἡδονῇ. τὸ δ' ἐναντίον τῷ ἐναντίῳ φίλον ὡς τὸ χρήσιμον· αὐτὸ γὰρ αὐτῷ τὸ ὅμοιον ἄχρηστον. διὸ δεσπότης δούλου δεῖται καὶ δοῦλος δεσπότου, καὶ γυνὴ καὶ ἀνὴρ ἀλλήλων, καὶ ἡδὺ καὶ ἐπιθυμητὸν τὸ ἐναντίον ὡς χρήσιμον, καὶ οὐχ ὡς ἐν τέλει ἀλλ' ὡς πρὸς τὸ τέλος. ὅταν γὰρ τύχη οὗ ἐπιθυμεῖ, ἐν τῷ τέλει μὲν ἐστίν, οὐκ ὀρέγεται δὲ τοῦ ἐναντίου, οἷον τὸ θερμὸν τοῦ ψυχροῦ καὶ τὸ ξηρὸν τοῦ ὑγροῦ. ἔστι δέ πως καὶ ἡ τοῦ ἐναντίου φιλία τοῦ ἀγαθοῦ. ὀρέγεται γὰρ ἀλλήλων διὰ τὸ μέσον· ὡς σύμβολα γὰρ ὀρέγεται ἀλλήλων διὰ τὸ οὕτω γίνεσθαι ἐξ ἀμφοῖν ἐν μέσον. ἔτι κατὰ συμβεβηκὸς ἐστὶ τοῦ ἐναντίου, καθ' αὐτὸ δὲ τῆς μεσότητος. ὀρέγονται γὰρ οὐκ ἀλλήλων τ' ἀναντία, ἀλλὰ τοῦ μέσου. ὑπερψυχθέντες γάρ, ἐὰν θερμανθῶσιν, εἰς τὸ μέσον καθίστανται, καὶ ὑπερθερμανθέντες, ἐὰν ψυχθῶσιν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. εἰ δὲ μή, ἀεὶ ἐν ἐπιθυμίᾳ, οὐκ ἐν τοῖς μέσοις. ἀλλὰ χαίρει ὁ ἐν τῷ μέσῳ ἄνευ ἐπιθυμίας τοῖς φύσει ἡδέσι, οἱ δὲ πᾶσι τοῖς ἐξιστάσι τῆς φύσει ἔξεως. τοῦτο μὲν οὖν τὸ εἶδος καὶ ἐπὶ τῶν ἀψύχων ἐστίν· τὸ φιλεῖν δὲ γίνεται, [1240a] ὅταν ἢ ἐπὶ τῶν ἐμψύχων. διὸ ἐνίοτε ἀνομοίοις χαίρουσιν, οἷον αὐστηροὶ εὐτραπέλοις καὶ ὀξεῖς ῥαθύμοις. εἰς τὸ μέσον γὰρ καθίστανται ὑπ' ἀλλήλων. κατὰ συμβεβηκὸς οὖν, ὥσπερ ἐλέχθη, τὰ ἐναντία φίλα, καὶ διὰ τὸ ἀγαθόν.

πόσα μὲν οὖν εἶδη φιλίας, καὶ τίνες διαφοραὶ καθ' ἃς λέγονται οἱ τε φίλοι καὶ οἱ φιλοῦντες καὶ οἱ φιλούμενοι, καὶ οὕτως ὥστε φίλοι εἶναι καὶ ἄνευ τούτου, εἴρηται· περὶ δὲ αὐτὸν αὐτῷ φίλον εἶναι ἢ μή, πολλὴν ἔχει ἐπίσκεψιν. δοκεῖ γὰρ ἐνίοις μάλιστα ἕκαστος αὐτὸς αὐτῷ φίλος εἶναι, καὶ τούτῳ χρώμενοι κανόνι κρίνουσι τὴν πρὸς τοὺς ἄλλους φίλους φιλίαν· κατὰ δὲ τοὺς

λόγους καὶ τὰ δοκοῦνθ' ὑπάρχειν τοῖς φίλοις τὰ μὲν ὑπεναντιοῦνται, τὰ δ' ὅμοια φαίνεται ὄντα. ἔστι γάρ πως κατὰ ἀναλογίαν αὕτη ἡ φιλία, ἀπλῶς δ' οὐ. ἐν δυσὶ γὰρ διηρημένοις τὸ φιλεῖσθαι καὶ φιλεῖν· δι' ἃ μᾶλλον οὕτως αὐτὸς αὐτῷ φίλος, <ὥς> ἐπὶ τοῦ ἀκρατοῦς καὶ ἐγκρατοῦς εἴρηται πῶς ἐκὼν ἢ ἄκων, τῷ τὰ μέρη ἔχειν πως πρὸς ἄλληλα τὰ τῆς ψυχῆς, καὶ ὅμοιον τὰ τοιαῦτα πάντα, εἰ φίλος αὐτὸς αὐτῷ καὶ ἐχθρός, καὶ εἰ ἀδικοῖ τις αὐτὸς αὐτόν. πάντα γὰρ ἐν δυσὶ ταῦτα καὶ διηρημένοις· ἢ δὴ δύο πως καὶ ἡ ψυχὴ, ὑπάρχει πως ταῦτα, ἢ δ' οὐ διηρημένα, οὐχ ὑπάρχει.

ἀπὸ δὲ τῆς πρὸς αὐτόν ἔξεως [ὥς] οἱ λοιποὶ τρόποι τοῦ φιλεῖν διωρισμένοι, καθ' οὓς ἐν τοῖς λόγοις ἐπισκοπεῖν εἰώθαμεν. δοκεῖ γὰρ φίλος εἶναι ὁ βουλόμενός τινι τάγαθὰ ἢ οἷα οἶεται ἀγαθὰ, μὴ δι' αὐτόν, ἀλλ' ἐκείνου ἕνεκα· ἄλλον δὲ τρόπον ὧς τὸ εἶναι βούλεται δι' ἐκεῖνον καὶ μὴ δι' αὐτόν, κἂν εἰ μὴ διανέμων τάγαθὰ, μὴ τῷ τὸ εἶναι τούτῳ ἂν δόξειε μάλιστα φιλεῖν· ἄλλον δὲ τρόπον ὧς συζῆν αἰρεῖται δι' αὐτὴν τὴν ὁμιλίαν καὶ μὴ δι' ἕτερόν τι, οἷον οἱ πατέρες τὸ μὲν εἶναι τοῖς τέκνοις, συζῶσι δ' ἑτέροις. μάχεται δὴ ταῦτα πάντα πρὸς ἄλληλα. οἱ μὲν γὰρ ἂν μὴ τὸ ἑαυτοῖς, οἱ δὲ ἂν μὴ τὸ εἶναι, οἱ δὲ τὸ συζῆν, οὐκ οἶονται φιλεῖσθαι. ἔτι τὸ ἀλγοῦντι συναλγεῖν μὴ δι' ἕτερόν τι ἀγαπᾶν θήσομεν, οἷον οἱ δοῦλοι πρὸς τοὺς δεσπότας, ὅτι χαλεποὶ ἀλγοῦντες, ἀλλ' οὐ δι' αὐτούς, ὥσπερ αἱ μητέρες τοῖς τέκνοις καὶ οἱ συνωδίνοντες ὄρνιθες. βούλεται γὰρ μάλιστα γε οὐ μόνον συλλυπεῖσθαι ὁ φίλος τῷ φίλῳ, ἀλλὰ καὶ τὴν αὐτὴν λύπην, οἷον διψῶντι συνδιψῆν, εἰ ἐνεδέχετο, ὅτι [μὴ] ἐγγύτατα. ὁ δ' αὐτὸς λόγος καὶ ἐπὶ τοῦ χαίρειν· <τὸ γὰρ [1240b] χαίρειν> μὴ δι' ἕτερόν τι, ἀλλὰ δι' ἐκεῖνον, ὅτι χαίρει, φιλικόν. ἔτι τὰ τοιάδε λέγεται περὶ τῆς φιλίας, ὡς ἰσότης φιλότης, καὶ [μὴ] μίαν ψυχὴν εἶναι τοὺς ἀληθῶς φίλους. ἅπαντα ταῦτα ἐπαναφέρεται πρὸς τὸν ἕνα. καὶ γὰρ βούλεται τάγαθὰ αὐτῷ τοῦτον τὸν τρόπον. οὐθεὶς γὰρ αὐτὸς αὐτόν εὖ ποιεῖ διὰ τι ἕτερον, οὐδὲ χάριτος. οὐ δὲ λέγει ὅτι ἐποίησεν ἢ εἷς· δοκεῖ γὰρ φιλεῖσθαι βούλεσθαι ὁ δῆλον ποιῶν ὅτι φιλεῖ, ἀλλ' οὐ φιλεῖν. καὶ τὸ εἶναι μάλιστα καὶ τὸ συζῆν καὶ τὸ συγχαίρειν καὶ τὸ συναλγεῖν, καὶ μία δὴ ψυχὴ, καὶ τὸ μὴ δύνασθαι ἄνευ ἀλλήλων μηδὲ ζῆν, ἀλλὰ συναποθνήσκειν. οὕτω γὰρ ἔχει ὁ εἷς, καὶ ἴσως ὁμιλεῖ αὐτὸς αὐτῷ. - πάντα δὲ ταῦτα τῷ ἀγαθῷ ὑπάρχει πρὸς αὐτόν. ἐν γὰρ τῷ πονηρῷ διαφωνεῖ, οἷον ἐν τῷ ἀκρατεῖ. καὶ διὰ τοῦτο δοκεῖ καὶ ἐχθρὸν ἐνδέχεσθαι αὐτόν αὐτῷ εἶναι· ἢ δ' εἷς καὶ ἀδιαίρετος, ὀρεκτὸς αὐτὸς αὐτοῦ. τοιοῦτος ὁ ἀγαθὸς καὶ ὁ κατ' ἀρετὴν φίλος, ἐπεὶ ὅ γε μοχθηρὸς οὐχ εἷς ἀλλὰ πολλοί, καὶ τῆς αὐτῆς ἡμέρας ἕτερος καὶ ἔμπληκτος. ὥστε καὶ ἡ αὐτοῦ πρὸς αὐτόν φιλία ἀνάγεται πρὸς τὴν τοῦ ἀγαθοῦ. ὅτι γὰρ πῃ ὁμοιοῖ καὶ εἷς καὶ αὐτὸς αὐτῷ ἀγαθός, ταύτῃ αὐτὸς αὐτῷ φίλος καὶ ὀρεκτός· φύσει δὲ τοιοῦτος, ἀλλ' ὁ πονηρὸς παρὰ φύσιν. ὁ δ'

ἀγαθὸς οὐθ' ἅμα λαιδορεῖται ἑαυτῷ, ὥσπερ ὁ ἀκράτης, οὔτε ὁ ὕστερος τῷ πρότερον, ὥσπερ ὁ μεταμελητικός, οὔτε ὁ ἔμπροσθεν τῷ ὕστερον, ὥσπερ ὁ ψεύστης. ὅλως τε εἰ δεῖ ὥσπερ οἱ σοφισταὶ διορίζουσιν, ὥσπερ τὸ Κορίσκος καὶ Κορίσκος σπουδαῖος. δῆλον γὰρ ὡς τὸ αὐτὸ πόσον σπουδαῖον αὐτῶν, ἐπεὶ ὅταν ἐγκαλέσωσιν αὐτοῖς, ἀποκτινύουσιν αὐτούς· ἀλλὰ δοκεῖ πᾶς αὐτὸς αὐτῷ ἀγαθός. ζητεῖ δὲ ὁ ἀπλῶς ὢν ἀγαθὸς εἶναι καὶ αὐτὸς αὐτῷ φίλος, ὥσπερ εἴρηται, ὅτι δύ' ἔχει ἐν αὐτῷ ἃ φύσει βούλεται εἶναι φίλα καὶ διασπᾶσαι ἀδύνατον. διὸ ἐπ' ἀνθρώπου μὲν δοκεῖ ἕκαστος αὐτὸς αὐτῷ φίλος, ἐπὶ δὲ τῶν ἄλλων ζώων «οὐ», οἷον ἵππος αὐτὸς αὐτῷ, οὐκ ἄρα φίλος. ἀλλ' οὐδὲ τὰ παιδιά, ἀλλ' ὅταν ἤδη ἔχη προαίρεσιν· ἤδη γὰρ τότε διαφωνεῖ ὁ νοῦς πρὸς τὴν ἐπιθυμίαν. - ἔοικε δ' ἡ φιλία ἢ πρὸς αὐτὸν τῇ κατὰ συγγένειαν· οὐθέτερον γὰρ ἐφ' αὐτοῖς λῦσαι, ἀλλὰ κἂν διαφέρωνται, ὅμως οὗτοι μὲν ἔτι συγγενεῖς, ὃ δὲ ἔτι εἷς, ἕως ἂν ζῇ.

ποσαχῶς μὲν οὖν τὸ φιλεῖν λέγεται, καὶ ὅτι πᾶσαι αἱ φιλίαι ἀνάγονται πρὸς τὴν πρώτην, δῆλον ἐκ τῶν εἰρημένων· [1241a] οἰκεῖον δὲ τῇ σκέψει θεωρῆσαι καὶ περὶ ὁμονοίας καὶ εὐνοίας. δοκεῖ γὰρ τοῖς μὲν εἶναι ταῦτά, τοῖς δ' οὐκ ἄνευ ἀλλήλων. ἔστι δ' ἡ εὐνοια τῆς φιλίας οὔτε πάμπαν ἕτερον οὔτε ταῦτόν. διηρημένης γὰρ τῆς φιλίας κατὰ τρεῖς τρόπους, οὔτ' ἐν τῇ χρησίμῃ οὔτ' ἐν τῇ καθ' ἡδονὴν ἐστίν. εἴτε γὰρ ὅτι χρήσιμον, βούλεται αὐτῷ τἀγαθόν, οὐ δι' ἐκεῖνον ἀλλὰ δι' αὐτὸν βούλοισ' ἄν, δοκεῖ δὲ ὥσπερ καὶ ἡ εὐνοια οὐκ αὐτοῦ εὐνοια τοῦ εὐνοιοῦμένου εἶναι, ἀλλὰ τοῦ ὧ εὐνοεῖ· εἰ δὲ ἦν ἐν τῇ τοῦ ἡδέος φιλίᾳ, κἂν τοῖς ἀψύχοις εὐνόουν. ὥστε δῆλον ὅτι περὶ τὴν ἠθικὴν φιλίαν ἡ εὐνοια ἐστίν. ἀλλὰ τοῦ μὲν εὐνοοῦντος βούλεσθαι μόνον ἐστί, τοῦ δὲ φίλου καὶ πράττειν ἃ βούλεται. ἔστι γὰρ ἡ εὐνοια ἀρχὴ φιλίας· ὁ μὲν γὰρ φίλος πᾶς εὐνους, ὁ δ' εὐνους οὐ πᾶς φίλος. ἀρχομένῳ γὰρ ἔοικεν ὁ εὐνοῶν μόνον, διὸ ἀρχὴ φιλίας, ἀλλ' οὐ φιλία.

δοκοῦσι γὰρ οἱ τε φίλοι ὁμονοεῖν καὶ οἱ ὁμονοοῦντες φίλοι εἶναι. ἔστι δ' οὐ περὶ πάντα ἡ ὁμόνοια ἢ φιλική, ἀλλὰ περὶ τὰ πρακτὰ τοῖς ὁμονοοῦσι, καὶ ὅσα εἰς τὸ συζῆν συντείνει, οὔτε μόνον κατὰ διάνοιαν ἢ κατὰ ὄρεξιν (ἔστι γὰρ τάναντία τὸ κινεῖν ἐπιθυμεῖν, ὥσπερ ἐν τῷ ἀκρατεῖ διαφωνεῖ τοῦτο), οὐ δεῖ κατὰ τὴν προαίρεσιν ὁμονοεῖν καὶ κατὰ τὴν ἐπιθυμίαν. ἐπὶ δὲ τῶν ἀγαθῶν ἡ ὁμόνοια· οἱ γε φαῦλοι ταῦτα προαιρούμενοι καὶ ἐπιθυμοῦντες βλάπτουσιν ἀλλήλους. ἔοικε δὲ καὶ ἡ ὁμόνοια οὐχ ἀπλῶς λέγεσθαι, ὥσπερ οὐδ' ἡ φιλία· ἀλλ' ἡ μὲν πρώτη καὶ φύσει σπουδαία, διὸ οὐκ ἔστι τοὺς φαύλους ὁμονοεῖν, ἑτέρα δὲ καθ' ἣν καὶ οἱ φαῦλοι ὁμονοοῦσιν, ὅταν τῶν αὐτῶν τὴν προαίρεσιν καὶ τὴν ἐπιθυμίαν ἔχωσιν. οὕτω δὲ δεῖ τῶν αὐτῶν ὀρέγεσθαι, ὥστε ἐνδέχεσθαι ἀμφοτέροις ὑπάρχειν οὗ ὀρέγονται. ἂν γὰρ

τοιούτου ὀρέγωνται, ὃ μὴ ἐνδέχεται ἀμφοῖν, μαχοῦνται· οἱ ὁμονοοῦντες δ' οὐ μαχοῦνται. ἔστι δ' ἡ ὁμόνοια, ὅταν περὶ τοῦ ἄρχειν καὶ ἄρχεσθαι ἡ αὐτὴ προαίρεσις ᾖ, μὴ τοῦ ἐκάτερον, ἀλλὰ τοῦ τὸν αὐτόν. καὶ ἔστιν ἡ ὁμόνοια φιλία πολιτική.

περὶ μὲν οὖν ὁμονοίας καὶ εὐνοίας εἰρήσθω τοσαῦτα· ἀπορεῖται δὲ διὰ τί μᾶλλον φιλοῦσιν οἱ ποιήσαντες εὖ τοὺς παθόντας ἢ οἱ παθόντες εὖ τοὺς ποιήσαντας. δοκεῖ δὲ δίκαιον εἶναι τούναντίον. τοῦτο δ' ὑπολάβοι μὲν ἄν τις διὰ τὸ χρήσιμον καὶ τὸ αὐτῷ ὠφέλιμον συμβαίνειν· τῷ μὲν γὰρ ὀφείλεται, τὸν δ' ἀποδοῦναι δεῖ. οὐκ ἔστι δὲ τοῦτο μόνον, ἀλλὰ καὶ φυσικόν. ἡ γὰρ ἐνέργεια αἰρετώτερον, [1241b] τὸν αὐτὸν δὲ λόγον ἔχει τὸ ἔργον καὶ ἡ ἐνέργεια, ὃ δ' εὖ παθὼν ὥσπερ ἔργον τοῦ εὖ ποιήσαντος. διὸ καὶ ἐν τοῖς ζώοις ἡ περὶ τὰ τέκνα σπουδὴ ἐστὶ, καὶ τοῦ γεννῆσαι καὶ <τὰ> γεννώμενα σώζειν. καὶ φιλοῦσι δὴ μᾶλλον οἱ πατέρες τὰ τέκνα (καὶ αἱ μητέρες τῶν πατέρων) ἢ φιλοῦνται· καὶ οὗτοι πάλιν τὰ αὐτῶν ἢ τοὺς γεννήσαντας, διὰ τὸ τὴν ἐνέργειαν εἶναι τὸ ἄριστον· καὶ αἱ μητέρες τῶν πατέρων, ὅτι μᾶλλον οἶονται αὐτῶν εἶναι ἔργον τὰ τέκνα· τὸ γὰρ ἔργον τῷ χαλεπῷ διορίζουσι, πλείω δὲ λυπεῖται περὶ τὴν γένεσιν μήτηρ.

καὶ περὶ μὲν φιλίας τῆς πρὸς αὐτὸν καὶ τῆς ἐν πλείοσι διωρίσθω τὸν τρόπον τοῦτον· δοκεῖ δὲ τό τε δίκαιον εἶναι ἴσον τι καὶ ἡ φιλία ἐν ἰσότητι, εἰ μὴ μάτην λέγεται ἰσότης [ἢ] φιλότης. αἱ δὲ πολιτεῖαι πᾶσαι δικαίου τι εἶδος· κοινωνία γάρ, τὸ δὲ κοινὸν πᾶν διὰ τοῦ δικαίου συνέστηκεν, ὥστε ὅσα εἶδη φιλίας, καὶ δικαίου καὶ κοινωνίας, καὶ πάντα ταῦτα σύνορα ἀλλήλοις, καὶ ἐγγὺς ἔχει τὰς διαφοράς. ἐπεὶ δ' ὁμοίως ἔχει ψυχὴ πρὸς σῶμα καὶ τεχνίτης πρὸς ὄργανον καὶ δεσπότης πρὸς δοῦλον, τούτων μὲν οὐκ ἔστι κοινωνία. οὐ γὰρ δύο· ἐστὶν, ἀλλὰ τὸ μὲν ἓν, τὸ δὲ τοῦ ἐνός [οὐδέν]. οὐδὲ διαιρετὸν τὸ ἀγαθὸν ἐκατέρω, ἀλλὰ τὸ ἀμφοτέρων τοῦ ἐνός οὗ ἕνεκα ἐστὶν. τό τε γὰρ σῶμά ἐστιν ὄργανον σύμφυτον, καὶ τοῦ δεσπότου ὁ δοῦλος ὥσπερ μόνιον καὶ ὄργανον ἀφαιρετόν, τὸ δ' ὄργανον ὥσπερ δοῦλος ἄψυχος. αἱ δ' ἄλλαι κοινωνίαι εἰσὶν [ἢ] μόνιον τῶν τῆς πόλεως κοινωνιῶν, οἷον ἡ τῶν φρατέρων ἢ τῶν ὀργίων, ἢ αἱ χρηματιστικαὶ ἔτι πολιτεῖαι. αἱ δὲ πολιτεῖαι πᾶσαι ἐν οἰκείοις συνυπάρχουσι, καὶ αἱ ὀρθαὶ καὶ αἱ παρεκβάσεις (ἔστι γὰρ τὸ αὐτὸ ὥσπερ καὶ ἐπὶ τῶν ἁρμονιῶν καὶ τῶν ἐν ταῖς πολιτείαις)· βασιλικὴ μὲν ἡ τοῦ γεννήσαντος, ἀριστοκρατικὴ δ' ἡ ἀνδρὸς καὶ γυναικός, πολιτεία δ' ἡ τῶν ἀδελφῶν· παρέκβασις δὲ τούτων τυραννὶς ὀλιγαρχία δῆμος. καὶ τὰ δίκαια δὴ τοσαῦτα.

ἐπεὶ δὲ τὸ ἴσον τὸ μὲν κατ' ἀριθμὸν τὸ δὲ κατ' ἀναλογίαν, καὶ τοῦ

δικαίου εἶδη ἔσται καὶ τῆς φιλίας καὶ τῆς κοινωνίας. κατ' ἀριθμὸν μὲν γὰρ ἡ «δημοκρατικὴ» κοινωνία καὶ ἡ ἑταιρικὴ φιλία, τῷ γὰρ αὐτῷ ὄρω μετρεῖται· κατ' ἀναλογίαν δὲ ἡ ἀριστοκρατικὴ ἀρίστη καὶ βασιλική. οὐ γὰρ ταῦτόν δίκαιον τῷ ὑπερέχοντι καὶ ὑπερεχομένῳ, ἀλλὰ τὸ ἀνάλογον. καὶ ἡ φιλία δὲ ὁμοίως πατρὸς καὶ παιδός, καὶ ἐν ταῖς κοινωνίαις ὁ αὐτὸς τρόπος.

[1242a] λέγονται δὲ φιλίαι συγγενικὴ ἑταιρικὴ κοινωνικὴ ἢ λεγομένη πολιτική. ἔστι μὲν συγγενικὴ πολλὰ ἔχουσα εἶδη, ἢ μὲν ὡς ἀδελφῶν, ἢ δ' ὡς πατρὸς καὶ υἱῶν (καὶ γὰρ κατ' ἀναλογίαν, οἷον ἡ πατρική, καὶ κατ' ἀριθμόν, οἷον ἡ τῶν ἀδελφῶν· ἐγγὺς γὰρ αὕτη τῆς ἑταιρικῆς· ἐπιλαμβάνουσι γὰρ καὶ ἐνταῦθα πρέσβειον)· ἢ δὲ πολιτικὴ συνέστηκε μὲν κατὰ τὸ χρήσιμον καὶ μάλιστα. διὰ γὰρ τὸ μὴ αὐταρκεῖν δοκοῦσι συνελθεῖν, ἐπεὶ συνῆλθόν γ' ἂν καὶ τοῦ συζῆν χάριν. μόνη δ' ἡ πολιτικὴ καὶ ἡ παρ' αὐτὴν παρέκβασις οὐ μόνον φιλία, ἀλλὰ καὶ ὡς φίλοι κοινωνοῦσιν· αἱ δ' ἄλλαι καθ' ὑπεροχήν. μάλιστα δὲ δίκαιον τὸ ἐν τῇ τῶν χρησίμων φιλίᾳ, διὰ τὸ τοῦτ' εἶναι τὸ πολιτικὸν δίκαιον. ἄλλον γὰρ τρόπον συνῆλθον πρίων καὶ τέχνη, οὐχ ἕνεκα κοινοῦ τινος (οἷον γὰρ ὄργανον καὶ ψυχὴ) ἀλλὰ τοῦ χρωμένου ἕνεκεν. συμβαίνει δὲ καὶ τοῦτο ὄργανον ἐπιμελείας τυγχάνειν, ἥς δίκαιον πρὸς τὸ ἔργον· ἐκείνου γὰρ ἕνεκεν ἐστίν. καὶ τὸ τρυπάνῳ εἶναι διττόν, ὧν τὸ κυριώτερον ἡ ἐνέργεια, ἡ τρύπησις. καὶ ἐν τούτῳ τῷ εἶδει σῶμα καὶ δοῦλος, ὥσπερ εἴρηται πρότερον.

τὸ δὲ ζητεῖν πῶς δεῖ τῷ φίλῳ ὁμιλεῖν, τὸ ζητεῖν δίκαιόν τι ἐστίν. καὶ γὰρ ὅλως τὸ δίκαιον ἅπαν πρὸς φίλον. τό τε γὰρ δίκαιόν τι καὶ κοινωνοῖς, καὶ ὁ φίλος κοινωνός, ὃ μὲν γένους, ὃ δὲ βίου. ὁ γὰρ ἄνθρωπος οὐ μόνον πολιτικὸν ἀλλὰ καὶ οἰκονομικὸν ζῶν, καὶ οὐχ ὥσπερ τᾶλλά ποτε συνδυάζεται καὶ τῷ τυχόντι [καὶ] θήλει καὶ ἄρρενι ἀλλ' αἱ διὰ δύμον αὐλικόν, ἀλλὰ κοινωνικὸν ἄνθρωπος ζῶν πρὸς οὓς φύσει συγγένεια ἐστίν· καὶ κοινωνία τοίνυν καὶ δίκαιόν τι, καὶ εἰ μὴ πόλις εἴη· οἰκία δ' ἐστὶ τις φιλία. δεσπότου μὲν οὖν καὶ δούλου ἥπερ καὶ τέχνης καὶ ὀργάνων καὶ ψυχῆς καὶ σώματος, αἱ δὲ τοιαῦται οὔτε φιλία οὔτε δικαιοσύνη, ἀλλ' ἀνάλογον, ὥσπερ καὶ τὸ ὑγιεινὸν οὐ δίκαιον, ἀλλ' ἀνάλογον· γυναικὸς δὲ καὶ ἀνδρὸς φιλία ὡς χρήσιμον καὶ κοινωνία· πατρὸς δὲ καὶ υἱοῦ ἢ αὐτὴ ἥπερ θεοῦ πρὸς ἄνθρωπον καὶ τοῦ εὖ ποιήσαντος πρὸς τὸν παθόντα καὶ ὅλως τοῦ φύσει ἄρχοντος πρὸς τὸν φύσει ἀρχόμενον· ἢ δὲ τῶν ἀδελφῶν πρὸς ἀλλήλους ἑταιρικὴ μάλιστα ἢ κατ' ἰσότητα.

“οὐ γάρ τι νόθος τῷδ' ἀπεδείχθην·

ἀμφοῖν δὲ πατὴρ αὐτὸς ἐκλήθη

Ζεὺς ἐμὸς ἄρχων.” ταῦτα γὰρ ὡς τὸ ἴσον ζητούντων λέγεται. διὸ ἐν οἰκίᾳ [1242b] πρῶτον ἀρχαὶ καὶ πηγαὶ φιλίας καὶ πολιτείας καὶ δικαίου.

ἐπεὶ δὲ φιλίαί τρεῖς, κατ’ ἀρετήν, κατὰ τὸ χρήσιμον, κατὰ τὸ ἡδύ, τούτων δὲ ἐκάστης δύο διαφοραὶ (ἢ μὲν γὰρ καθ’ ὑπεροχὴν ἢ δὲ κατ’ ἰσότητά ἐστιν ἐκάστη αὐτῶν, τὸ δὲ δίκαιον τὸ περὶ αὐτάς ἐκ τῶν ἀμφισβητησάντων δῆλον), ἐν μὲν τῇ καθ’ ὑπεροχὴν ἀξιοῦται τὸ ἀνάλογον, ἀλλ’ οὐχ ὡσαύτως, ἀλλ’ ὁ μὲν ὑπερέχων ἀνεστραμμένως τὸ ἀνάλογον, ὡς αὐτὸς πρὸς τὸν ἐλάττω, οὕτω τὸ παρὰ τοῦ ἐλάττονος γινόμενον πρὸς τὸ παρ’ αὐτοῦ, διακείμενος ὥσπερ ἄρχων πρὸς ἀρχόμενον· εἰ δὲ μὴ τοῦτο, ἀλλὰ τὸ ἴσον κατ’ ἀριθμὸν ἀξιοῖ. καὶ γὰρ δὴ καὶ ἐπὶ τῶν ἄλλων κοινωνιῶν οὕτω συμβαίνει. ὅτε μὲν γὰρ ἀριθμῷ τοῦ ἴσου μετέχουσιν, ὅτε δὲ λόγῳ. εἰ μὲν γὰρ ἴσον ἀριθμῷ εἰσήνεγκον ἀργύριον, ἴσον καὶ τῷ ἴσῳ ἀριθμῷ διαλαμβάνουσιν, εἰ δὲ μὴ ἴσον, ἀνάλογον. ὁ δ’ ὑπερεχόμενος τοῦναντίον στρέφει τὸ ἀνάλογον, καὶ κατὰ διάμετρον συζεύγνυσιν. δόξειε δ’ ἂν οὕτως ἐλαττοῦσθαι ὁ ὑπερέχων καὶ λειτουργία ἢ φιλία καὶ ἡ κοινωνία. δεῖ ἄρα τινὲς ἐτέρῳ ἀνισάσαι καὶ ποιῆσαι ἀνάλογον. τοῦτο δ’ ἐστὶν ἡ τιμὴ, ὅπερ καὶ τῷ ἄρχοντι φύσει καὶ θεῷ πρὸς τὸ ἀρχόμενον. δεῖ δὲ ἴσασθῆναι τὸ κέρδος πρὸς τὴν τιμὴν.

ἡ δὲ κατ’ ἴσα φιλία ἐστὶν ἡ πολιτική. ἡ δὲ πολιτική ἐστὶ μὲν κατὰ τὸ χρήσιμον, καὶ ὥσπερ αἱ πόλεις ἀλλήλαις φίλαι, οὕτω καὶ οἱ πολῖται, καὶ ὁμοίως

“οὐκέτι γινώσκουσιν Ἀθηναῖοι Μεγαρήας”, καὶ οἱ πολῖται, ὅταν μὴ χρήσιμοι ἀλλήλοις, ἀλλ’ ἐκ χειρὸς εἰς χεῖρα ἢ φιλία· ἔστι δὲ ἐνταῦθα καὶ ἄρχον καὶ ἀρχόμενον οὔτε τὸ φυσικὸν οὔτε τὸ βασιλικόν, ἀλλὰ τὸ ἐν τῷ μέρει, οὐδὲ τούτου ἔνεκα ὅπως εὖ ποιῇ ὁ θεός, ἀλλ’ ἵνα ἴσον ᾗ τοῦ ἀγαθοῦ καὶ τῆς λειτουργίας. κατ’ ἰσότητά δὲ βούλεται εἶναι ἡ πολιτικὴ φιλία. ἔστι δὲ τῆς χρησίμου φιλίας εἶδη δύο, ἢ μὲν νομικὴ ἢ δ’ ἠθικὴ. βλέπει δ’ ἡ μὲν πολιτικὴ εἰς τὸ ἴσον καὶ εἰς τὸ πρᾶγμα, ὥσπερ οἱ πωλοῦντες καὶ οἱ ὠνούμενοι. διὸ εἴρηται

“μισθὸς ἀνδρὶ φίλῳ.”

ὅταν μὲν οὖν καθ’ ὁμολογίαν <ἢ> ἡ πολιτικὴ αὕτη φιλία, [καὶ] νομικὴ· ὅταν δ’ ἐπιτρέπωσιν αὐτοῖς, ἠθικὴ βούλεται εἶναι φιλία καὶ ἐταιρική. διὸ μάλιστα



ἔγκλημα ἐν ταύτῃ τῇ φιλίᾳ· αἴτιον δ' ὅτι παρὰ φύσιν. ἕτεραι γὰρ φιλίαι ἢ κατὰ τὸ χρήσιμον καὶ ἢ κατὰ τὴν ἀρετὴν· οἱ δ' ἀμφοτέρωθεν βούλονται ἅμα ἔχειν, καὶ ὁμιλοῦσι μὲν τοῦ χρησίμου [1243a] ἕνεκα, ἠθικὴν δὲ ποιοῦσιν ὡς ἐπεικεῖς, διὸ ὡς πιστεύοντες οὐ νομικὴν ποιοῦσιν. ὅλως μὲν γὰρ ἐν τῇ χρησίμῃ τῶν τριῶν πλεῖστα ἐγκλήματα (ἢ μὲν γὰρ ἀρετὴ ἀνέγκλητον, οἱ δ' ἡδεῖς ἔχοντες καὶ δόντες ἀπαλλάττονται· οἱ δὲ χρήσιμοι οὐκ εὐθὺς διαλύονται, ἂν μὴ νομικῶς καὶ ἑταιρικῶς προσφέρωνται)· ὅμως δὲ τῆς χρησίμου ἢ νομικῆς ἀνέγκλητος. ἔστι δ' ἢ μὲν νομικὴ διάλυσις πρὸς νόμισμα (μετρεῖται γὰρ τούτῳ τὸ ἴσον), ἢ δ' ἠθικὴ ἐκούσιος. διὸ ἐνιαχοῦ νόμος ἐστὶ τοῖς οὕτως ὁμιλοῦσι φιλικῶς μὴ εἶναι δίκας τῶν ἐκουσίων συναλλαγμάτων, ὀρθῶς· τοῖς γὰρ ἀγαθοῖς οὐ πέφυκε δίκαιον εἶναι, οἱ δ' ὡς ἀγαθοὶ καὶ πιστοὶ συναλλάττουσιν. ἔστι δὲ ἐν ταύτῃ τῇ φιλίᾳ τὰ ἐγκλήματα ἀμφιβάλλοντα αὐτοῖς ἀμφοτέρωθεν, πῶς ἑκάτερος ἐγκαλεῖ, ὅταν ἠθικῶς ἀλλὰ μὴ νομικῶς πιστεύσωσιν. καὶ ἔχει δὴ ἀπορίαν ποτέρως δεῖ κρίνειν τὸ δίκαιον, πότερον πρὸς τὸ πρᾶγμα βλέποντα τὸ ὑπηρετηθὲν, πόσον, ἢ ποῖον ἦν τῷ πεπονθότι. ἐνδέχεται γὰρ ὅπερ λέγει Θεόγνης·

“σοὶ μὲν τοῦτο, θεά, σμικρόν, ἐμοὶ δὲ μέγα.” ἐνδέχεται δὲ καὶ τοῦναντίον γενέσθαι, ὥσπερ ἐν τῷ λόγῳ, σοὶ μὲν παιδιὰν τοῦτ' εἶναι, ἐμοὶ δὲ θάνατον. ἐντεῦθεν δ' εἴρηται τὰ ἐγκλήματα. ὁ μὲν γὰρ ἀξιοῖ ἀντιπαθεῖν ὡς μέγα ὑπηρετήσας, ὅτι δεομένῳ ἐποίησιν, ἢ τι ἄλλο τοιοῦτο, λέγων πρὸς τὴν ἐκείνου ὠφέλειαν πόσον ἠδύνατο, ἀλλ' οὐ τί ἦν αὐτῷ· ὁ δὲ τοῦναντίον ὅσον ἐκείνῳ, ἀλλ' οὐχ ὅσον αὐτῷ. ὅτε δὲ καὶ μεταλαμβάνων καὶ ἀμφιβάλλει. ὁ μὲν γὰρ ὅσον αὐτῷ μικρὸν ἀπέβη, ὁ δ' ὅσον αὐτῷ μέγα ἐδύνατο, οἶον εἰ κινδυνεύσας δραχμῆς ἄξιον ὠφέλησεν, ὁ μὲν τὸ τοῦ κινδύνου μέγεθος ὁ δὲ τὸ τοῦ ἀργυρίου, ὥσπερ ἐν τῇ τῶν νομισμάτων ἀποδόσει. καὶ γὰρ ἐνταῦθα περὶ τούτων ἢ ἀμφισβήτησις· ὁ μὲν γὰρ ἀξιοῖ πῶς τότε ἦν, ὁ δὲ πῶς νῦν, ἂν μὴ διείπωνται. ἢ μὲν οὖν πολιτικὴ βλέπει εἰς τὴν ὁμολογίαν καὶ εἰς τὸ πρᾶγμα, ἢ δ' ἠθικὴ εἰς τὴν προαίρεσιν. ὥστε καὶ δίκαιον τοῦτο μᾶλλον ἐστὶ, καὶ δικαιοσύνη φιλική. αἴτιον δὲ τοῦ μάχεσθαι, διότι καλλίων μὲν ἢ ἠθικὴ φιλία, ἀναγκαιοτέρα δὲ ἢ χρησίμη. οἱ δ' ἄρχονται μὲν ὡς οἱ ἠθικοὶ φίλοι καὶ δι' ἀρετὴν ὄντες· ὅταν δ' ἀντικρυς ἢ τι τῶν ἰδίων, δῆλοι γίνονται ὅτι ἕτεροι ἦσαν. ἐκ περιουσίας γὰρ διώκουσιν οἱ πολλοὶ τὰ καλόν· διὸ καὶ [1243b] τὴν καλλίω φιλίαν. ὥστε φανερόν πῶς διαιρετέον περὶ τούτων. εἰ μὲν γὰρ ἠθικοὶ φίλοι, εἰς τὴν προαίρεσιν βλέπτοντες εἰ ἴση, καὶ οὐθὲν ἄλλο ἀξιοτέον θατέρῳ παρὰ θατέρου· εἰ δ' ὡς χρήσιμοι καὶ πολιτικοί, ὡς ἂν ἐλυσιτέλει ὁμολογοῦσιν· ἂν δ' ὁ μὲν φῇ ὡδε ὁ δὲ ἐκείνως, οὐ καλὸν μὲν ἀντιποιῆσαι, δέον τοὺς καλοὺς λέγειν λόγους, ὁμοίως δὲ καὶ ἐπὶ θατέρου, ἀλλ' ἐπεὶ οὐ διείποντο ὡς ἠθικῶς, δεῖ κρίνειν τίνα, μὴδ' ὑποκρινόμενον μηδέτερον αὐτῶν

ἐξαπατᾶν. ὥστε δεῖ στέργειν αὐτὸν τὴν τύχην. ὅτι δ' ἐστὶν ἡ ἠθικὴ κατὰ προαίρεσιν, δῆλον, ἐπεὶ κἂν εἰ μεγάλα παθὼν μὴ ἀποδῶη δι' ἀδυναμίαν, ἀλλ' ὡς ἡδύνατο, καλῶς· καὶ ὁ θεὸς ἀνέχεται κατὰ δύναμιν λαμβάνων τὰς θυσίας. ἀλλὰ τῷ πωλοῦντι οὐχ ἱκανῶς ἔξει, ἂν μὴ φήσῃ δύνασθαι πλέον δοῦναι, οὐδὲ τῷ δανείσαντι.

πολλὰ ἐγκλήματα γίνεται ἐν ταῖς φιλίαις τοῖς μὴ κατ' εὐθυωρίαν, καὶ τὸ δίκαιον ἰδεῖν οὐ ῥάδιον. χαλεπὸν γὰρ μετρηῆσαι ἐνὶ τῷδε τὸ μὴ κατ' εὐθυωρίαν, οἷον συμβαίνει ἐπὶ τῶν ἐρωτικῶν. ὁ μὲν γὰρ διώκει ὡς [τὸν] ἡδὺν ἐπὶ τὸ συζῆν, ὁ δ' ἐκείνον ἐνίοτε ὡς χρήσιμον· ὅταν δὲ παύσῃται τοῦ ἐρᾶν, ἄλλου γινομένου ἄλλος γίνεται, καὶ τότε λογίζονται παντί τινας, καὶ ὡς Πύθων καὶ Παμμένης διεφέροντο καὶ ὡς διδάσκαλος καὶ μαθητής (ἐπιστήμη γὰρ καὶ χρήματα οὐχ ἐνὶ μετρεῖται), καὶ ὡς Ἡρόδικος ὁ ἰατρός πρὸς τὸν ἀποδιδόντα μικρὸν τὸν μισθόν, καὶ ὡς ὁ κιθαρωδὸς καὶ ὁ βασιλεύς. ὁ μὲν γὰρ ὡς ἡδεῖ, ὁ δ' ὡς χρησίμῳ ὠμίλει· ὁ δ' ἐπεὶ ἔδει ἀποδιδόναι, αὐτὸν αὐτὸν ὡς ἡδὺν ἐποίησεν, καὶ ἔφη, ὥσπερ ἐκείνον ἄσαντα εὐφραῖναι, οὕτω καὶ αὐτὸς ὑποσχόμενος ἐκείνῳ. ὅμως δὲ φανερόν καὶ ἐνταῦθα πῶς γνωριστέον· ἐνὶ μὲν γὰρ μετρητέον καὶ ἐνταῦθ', ἀλλ' οὐχ ὅρῳ, ἀλλὰ λόγῳ· τῷ ἀνάλογον γὰρ μετρητέον, ὥσπερ καὶ ἡ πολιτικὴ μετρεῖται κοινωνία. πῶς γὰρ κοινωνήσῃ γεωργῷ σκυτοτόμος, εἰ μὴ τῷ ἀνάλογον ἴσασθῆσεται τὰ ἔργα; τοῖς δὲ μὴ κατ' εὐθυωρίαν τὸ ἀνάλογον μέτρον, οἷον εἰ ὁ μὲν σοφίαν δοῦναι ἐγκαλεῖ, ὁ δ' ἐκείνῳ ἀργύριον, τῇ σοφίᾳ πρὸς τὸ πλούσιον, εἴτα τί δοθὲν πρὸς ἐκάτερον. εἰ γὰρ ὁ μὲν τοῦ ἐλάττονος ἡμισυ ἔδωκεν, ὁ δὲ τοῦ μείζονος μὴ πολλοστὸν μέρος, δῆλον ὅτι οὗτος ἀδικεῖ. ἔστι δὲ κἀνταῦθα ἐν ἀρχῇ ἀμφισβήτησις, ἂν φῇ ὁ μὲν ὡς χρησίμους συνελθεῖν αὐτούς, ὁ δὲ μή, ἀλλ' ὡς κατ' ἄλλην τινὰ φιλίαν.

[1244a] περὶ δὲ τοῦ ἀγαθοῦ καὶ κατ' ἀρετὴν φίλου, σκεπτέον πότερον δεῖ ἐκείνῳ τὰ χρήσιμα ὑπηρετεῖν καὶ βοηθεῖν ἢ τῷ ἀντιποιοῦντι καὶ δυναμένῳ. τοῦτο δὲ τὸ αὐτὸ πρόβλημα ἐστὶ, πότερον τὸν φίλον ἢ τὸν σπουδαῖον εὖ ποιητέον μᾶλλον. ἂν μὲν γὰρ <ὁ> φίλος καὶ σπουδαῖος, ἴσως οὐ λίαν χαλεπὸν, ἂν μή τις τὸ μὲν αὐξήσῃ τὸ δὲ ταπεινώσῃ, φίλον μὲν σφόδρα ποιῶν, ἐπικεκῆ δὲ ἡρέμα· εἰ δὲ μή, πολλὰ προβλήματα γίνεται, οἷον εἰ ὁ μὲν ἦν, οὐκ ἔσται δέ, ὁ δὲ ἔσται, οὐπω δέ, ἢ ὁ μὲν ἐγένετο, ἔστι δ' οὐ, ὁ δὲ ἔστιν, οὐκ ἦν δὲ οὐδὲ ἔσται, ἀλλ' ἐκεῖνο ἐργωδέστερον. μὴ γάρ τι λέγει Εὐριπίδης, ποιήσας

“λόγων δίκαιον μισθὸν ἂν λόγους φέροις,

ἔργον δ' ἐκεῖνος ἔργον <ὅς> παρέσχετο.”

καὶ οὐ πάντα δεῖ τῷ πατρί, ἀλλ' ἔστιν ἄλλ' ἃ δεῖ τῇ μητρί· καίτοι βελτίων ὁ πατήρ. οὐδὲ γὰρ τῷ Διὶ πάντα θύεται, οὐδ' ἔχει πάσας τὰς τιμὰς ἀλλὰ τινάς· ἴσως οὖν ἔστιν ἃ δεῖ τῷ χρησίμῳ, ἄλλα δὲ τῷ ἀγαθῷ. οἶον οὐχ εἰ σῖτον δίδωσι καὶ τὰ ἀναγκαῖα, καὶ συζῆν τούτῳ δεῖ· οὐδ' ὧ τοίνυν τὸ συζῆν, τούτῳ ἃ μὴ οὗτος δίδωσιν, ἀλλὰ χρήσιμος. ἀλλ' οἱ τοῦτο ποιοῦντες τούτῳ πάντα τῷ ἐρωμένῳ διδόασιν οὐ δέον, οὐδενός εἰσιν ἄξιοι.

καὶ οἱ ἐν τοῖς λόγοις ὅροι τῆς φιλίας πάντες μὲν πῶς εἰσι φιλίας, ἀλλ' οὐ τῆς αὐτῆς. τῷ μὲν γὰρ χρησίμῳ τὸ βούλεσθαι τὰ κείνῳ ἀγαθὰ καὶ τῷ εὖ ποιήσαντι καὶ τῷ ὁποῖος δεῖ (οὐ γὰρ ἐπισημαίνει οὗτος ὁ ὀρισμὸς τῆς φιλίας), ἄλλῳ δὲ τὸ εἶναι καὶ ἄλλῳ τὸ συζῆν, τῷ δὲ καθ' ἡδονὴν τὸ συναλγεῖν καὶ συγχαίρειν· πάντες δ' οὗτοι οἱ ὅροι κατὰ φιλίαν μὲν λέγονται τινά, οὐ πρὸς μίαν δ' οὐδεῖς. διὸ πολλοὶ εἰσὶ, καὶ ἕκαστος μιᾶς εἶναι δοκεῖ φιλίας, οὐκ ὦν, οἶον ἢ τοῦ εἶναι προαίρεσις. καὶ γὰρ ὁ καθ' ὑπεροχὴν καὶ ποιήσας εὖ βούλεται τῷ ἔργῳ τῷ αὐτοῦ ὑπάρχειν, καὶ τῷ δόντι τὸ εἶναι δεῖ καὶ ἀνταποδιδόναι, ἀλλὰ συζῆν οὐ τούτῳ, ἀλλὰ τῷ ἡδεῖ.

ἀδικοῦσιν οἱ φίλοι ἀλλήλους ἔνιοι· τὰ γὰρ πράγματα μᾶλλον, ἀλλ' οὐ φιλοῦσι τὸν ἔχοντα· διὸ φιλεῖ κάκεινους οἶον διότι ἡδὺς τὸν οἶνον εἴλετο, καὶ ὅτι χρήσιμος τὸν πλοῦτον εἴλετο· χρησιμώτερος γάρ. διὸ <οὐ> δεῖ ἀγανακτεῖν, ὥσπερ ἂν εἰ μᾶλλον εἴλετο ἀντὶ ἥττονος. οἱ δ' ἐγκαλοῦσιν· ἐκείνον γὰρ νῦν ζητοῦσι τὸν ἀγαθόν, πρότερον ζητήσαντες τὸν ἡδὺν ἢ τὸν χρήσιμον.

[1244b] σκεπτέον δὲ καὶ περὶ αὐτάρκειας καὶ φιλίας, πῶς ἔχουσι πρὸς τὰς ἀλλήλων δυνάμεις. ἀπορήσειε γὰρ ἂν τις πότερον, εἴ τις εἴη κατὰ πάντα αὐτάρκης, ἔσται τούτῳ φίλος. εἰ κατ' ἔνδειαν ζητεῖται φίλος καὶ ἔσται ἀγαθὸς αὐταρκέστατος, εἰ ὁ μετ' ἀρετῆς εὐδαίμων, τί ἂν δέοι φίλου; οὔτε γὰρ τῶν χρησίμων δεῖσθαι αὐτάρκους οὔτε τῶν εὐφρανούντων οὔτε τοῦ συζῆν· αὐτὸς γὰρ αὐτῷ ἱκανὸς συνεῖναι. μάλιστα δὲ τοῦτο φανερόν ἐπὶ θεοῦ· δῆλον γὰρ ὡς οὐδενὸς προσδεόμενος οὐδὲ φίλου δεήσεται, οὐδ' ἔσται αὐτῷ οὔτε μηθὲν δεσπότου. ὥστε καὶ ἄνθρωπος ὁ εὐδαιμονέστατος ἥκιστα δεήσεται φίλου, ἀλλ' ἢ καθ' ὅσον ἀδύνατον εἶναι αὐτάρκη. ἀνάγκη ἄρα ἐλαχίστους εἶναι φίλους τῷ ἄριστα ζῶντι, καὶ ἀεὶ ἐλάττους γίνεσθαι, καὶ μὴ σπουδάζειν ὅπως ὦσι φίλοι, ἀλλ' ὀλιγωρεῖν μὴ μόνον τῶν χρησίμων, ἀλλὰ καὶ εἰς τὸ συζῆν αἰρετῶν. ἀλλὰ μὴν καὶ τότε φανερόν ἂν εἶναι δόξειεν ὡς οὐ χρήσεως ἕνεκα ὁ φίλος οὐδ' ὠφελείας, ἀλλὰ δι' ἀρετὴν φίλος μόνος. ὅταν γὰρ μηθενὸς ἐνδεεῖς ὦμεν, τότε τοὺς συναπλαυσομένους ζητοῦσι πάντες, καὶ τοὺς εὖ πεισομένους μᾶλλον ἢ τοὺς ποιήσοντας. ἀμείνω δ' ἔχομεν κρίσιν αὐτάρκεις ὄντες ἢ μετ' ἐνδείας, ὅτε μάλιστα τῶν συζῆν ἀξίων δεόμεθα φίλων. περὶ δὲ

τῆς ἀπορίας ταύτης σκεπτέον, μή ποτε τὸ μὲν τι λέγεται καλῶς, τὸ δὲ λανθάνει διὰ τὴν παραβολήν. δῆλον δὲ λαβοῦσι τί τὸ ζῆν τὸ κατ' ἐνέργειαν, καὶ ὡς τέλος. φανερόν οὖν ὅτι τὸ αἰσθάνεσθαι καὶ τὸ γνωρίζειν, ὥστε καὶ τὸ συζῆν τὸ συναισθάνεσθαι καὶ τὸ συγγνωρίζειν ἐστίν. ἔστι δὲ τὸ αὐτοῦ αἰσθάνεσθαι καὶ τὸ αὐτὸν γνωρίζειν αἰρετώτατον ἐκάστω, καὶ διὰ τοῦτο τοῦ ζῆν πᾶσιν ἔμφυτος ἢ ὄρεξις· τὸ γὰρ ζῆν δεῖ τιθέναι γνώσιν τινά. εἰ οὖν τις ἀποτέμοι καὶ ποιήσῃ τὸ γινώσκειν αὐτὸ καθ' αὐτὸ καὶ μὴ (ἀλλὰ τοῦτο μὲν λανθάνει, ὥσπερ ἐν τῷ λόγῳ γέγραπται, τῷ μέντοι πράγματι ἔστι μὴ λανθάνειν), οὐθὲν ἂν διαφέροι ἢ τὸ γινώσκειν ἄλλον ἀνθ' αὐτοῦ· τὸ δ' ὅμοιον τοῦ ζῆν ἀνθ' αὐτοῦ ἄλλον. εὐλόγως δὲ τὸ ἑαυτοῦ αἰσθάνεσθαι καὶ γνωρίζειν αἰρετώτερον. δεῖ γὰρ ἅμα συνθεῖναι δύο ἐν τῷ λόγῳ, ὅτι τε τὸ ζῆν [καὶ] αἰρετόν, καὶ ὅτι τὸ ἀγαθόν, καὶ ἐκ τούτων ὅτι τὸ αὐτὸ τοῖς ὑπάρχειν τὴν [1245a] τοιαύτην φύσιν. εἰ οὖν ἐστὶν ἀεὶ τῆς τοιαύτης συστοιχίας ἢ ἑτέρα ἐν τῇ τοῦ αἰρετοῦ τάξει, καὶ τὸ γνωστόν καὶ τὸ αἰσθητόν ἐστὶν ὡς ὅλως εἰπεῖν τῷ κοινωνεῖν τῆς ὠρισμένης φύσεως· ὥστε τὸ αὐτοῦ βούλεσθαι αἰσθάνεσθαι τὸ αὐτὸν εἶναι τοιονδὶ βούλεσθαι ἐστίν. ἐπεὶ οὖν οὐ κατ' αὐτούς ἐσμεν ἕκαστον τούτων, ἀλλὰ κατὰ μετάληψιν τῶν δυνάμεων ἐν τῷ αἰσθάνεσθαι ἢ γνωρίζειν (αἰσθανόμενος μὲν γὰρ αἰσθητὸς γίνεται ταύτῃ καὶ κατὰ τοῦτο, καθὰ πρότερον αἰσθάνεται, καὶ ἢ καὶ οὐ, γνωστὸς δὲ γινώσκων)· ὥστε διὰ τοῦτο καὶ ζῆν ἀεὶ βούλεται, ὅτι βούλεται ἀεὶ γνωρίζειν, τοῦτο δὲ ὅτι αὐτὸς εἶναι τὸ γνωστόν. τὸ δὲ συζῆν αἰρεῖσθαι δόξειε μὲν ἂν εἶναι σκοπούμενοις πως εὐηθες (ἐπὶ τῶν κοινῶν πρῶτον καὶ τοῖς ἄλλοις ζώοις, οἷον τοῦ συνεσθίειν ἢ τοῦ συμπίνειν· τί γὰρ διαφέρει τὸ πλησίον οὔσι ταῦτα συμβαίνειν ἢ χωρίς, ἂν ἀφέλῃς τὸν λόγον; ἀλλὰ μὴν καὶ τοῦ λόγου κοινωνεῖν τοῦ τυχόντος ἕτερον τοιοῦτον· ἅμα τε οὔτε διδάσκειν οὔτε μανθάνειν τοῖς ἀνταρκέσι φίλοις οἷόν τε· μανθάνων μὲν γὰρ αὐτὸς οὐκ ἔχει ὡς δεῖ, διδάσκοντος δ' ὁ φίλος, ἢ δ' ὁμοιότης φιλία)· ἀλλὰ μὴν φαίνεται γε, καὶ πάντες ἡδὶον τῶν ἀγαθῶν μετὰ τῶν φίλων κοινωνοῦμεν, καθ' ὅσον ἐπιβάλλει ἕκαστον καὶ οὐ δύναται ἀρίστου, ἀλλὰ τούτων τῷ μὲν ἡδονῆς σωματικῆς, τῷ δὲ θεωρίας μουσικῆς, τῷ δὲ φιλοσοφίας. καὶ τὸ ἅμα δεῖ εἶναι τῷ φίλῳ. διό φησι “μόχθος οἱ τηλοῦ φίλοι”, ὥστ' οὐ δεῖ γενέσθαι ἀπ' ἀλλήλων τούτου γινομένου. ὅθεν καὶ ὁ ἔρως δοκεῖ φιλία ὅμοιον εἶναι· τοῦ γὰρ συζῆν ὀρέγεται ὁ ἐρῶν, ἀλλ' οὐχ ἢ μάλιστα δεῖ, ἀλλὰ κατ' αἴσθησιν. - ὁ μὲν τοίνυν λόγος ἐκεῖνά φησι διαπορῶν, τὸ δ' ἔργον οὕτω φαίνεται γινόμενον, ὥστε δῆλον ὅτι παρακρούεται πως ἡμᾶς ὁ διαπορῶν. σκεπτέον ἔνθεν τάληθές. ὁ γὰρ φίλος βούλεται εἶναι, ὥσπερ ἢ παροιμία φησὶν, ἄλλος Ἡρακλῆς, ἄλλος αὐτός. διέσπασται δὲ καὶ χαλεπὸν τὰ ἐφ' ἐνὸς γενέσθαι· ἀλλὰ κατὰ μὲν τὴν φύσιν τὸ συγγενέστατον, κατὰ δὲ τὸ σῶμα ὅμοιος ἕτερος, ἄλλος δὲ κατὰ τὴν ψυχὴν, καὶ τούτων κατὰ μῶριον ἕτερος ἕτερον. ἀλλ' οὐθὲν τε ἦττον βούλεται ὥσπερ αὐτὸς διαιρετὸς εἶναι ὁ

φίλος. τὸ οὖν τοῦ φίλου αἰσθάνεσθαι τὸ αὐτοῦ πως ἀνάγκη αἰσθάνεσθαι εἶναι, καὶ τὸ <τὸν φίλον γνωρίζειν τὸ> αὐτόν πως γνωρίζειν. ὥστε καὶ τὰ φορτικὰ μὲν συνήδεσθαι καὶ συζῆν τῷ φίλῳ ἡδὺ εὐλόγως (συμβαίνει γὰρ ἐκείνου ἅμα αἴσθησις αἰεῖ), μᾶλλον δὲ τὰς θειοτέρας ἡδονάς. αἴτιον [1245b] δ' ὅτι αἰεὶ ἡδίων ἑαυτὸν θεωρεῖν ἐν τῷ βελτίονι ἀγαθῷ. τοῦτο δ' ἐστὶν ὅτε μὲν πάθος, ὅτε δὲ πρᾶξις, ὅτε δὲ ἕτερόν τι. εἰ δ' αὐτὸν εὖ ζῆν, καὶ οὕτω καὶ τὸν φίλον, ἐν δὲ τῷ συζῆν συνεργεῖν, ἡ κοινωνία τῶν ἐν τέλει μάλιστα γε. διὸ <δεῖ> συνθεωρεῖν καὶ συνευχεῖσθαι, οὐ τὰ διὰ τροφήν καὶ τὰ ἀναγκαῖα· αἰ τοιαῦται ὁμιλίας δοκοῦσιν εἶναι, ἀλλὰ ἀπολαύσεις. ἀλλ' ἕκαστος οὐ δύναται τυγχάνειν τέλους, ἐν τούτῳ βούλεται συζῆν· εἰ δὲ μή, καὶ ποιεῖν εὖ καὶ πάσχειν ὑπὸ τῶν φίλων αἰροῦνται μάλιστα. - ὅτι μὲν τοίνυν καὶ δεῖ συζῆν, καὶ ὅτι μάλιστα βούλονται πάντες, καὶ ὅτι ὁ εὐδαιμονέστατος καὶ ἄριστος μάλιστα τοιοῦτος, φανερόν· ὅτι δὲ κατὰ τὸν λόγον οὐκ ἐφαίνετο, καὶ τοῦτ' εὐλόγως συνέβαινε λέγοντος ἀληθῆ. κατὰ τὴν σύνθεσιν γὰρ τῆς παραβολῆς ἀληθοῦς οὔσης ἢ λύσις <οὐκ> ἔστιν. ὅτι γὰρ ὁ θεὸς οὐ τοιοῦτος οἷος δεῖσθαι φίλου, καὶ τὸν ὅμοιον ἀξιοῦμεν. καίτοι κατὰ τοῦτον τὸν λόγον οὐδὲ νοήσει ὁ σπουδαῖος· οὐ γὰρ οὕτως ὁ θεὸς εὖ ἔχει, ἀλλὰ βέλτιον ἢ ὥστε ἄλλο τι νοεῖν παρ' αὐτὸς αὐτόν. αἴτιον δ' ὅτι ἡμῖν μὲν τὸ εὖ καθ' ἕτερον, ἐκείνῳ δὲ αὐτὸς αὐτοῦ τὸ εὖ ἐστίν.

καὶ τὸ ζητεῖν ἡμῖν καὶ εὐχεσθαι πολλοὺς φίλους, ἅμα δὲ λέγειν ὡς οὐθεὶς φίλος ὧ πολλοὶ φίλοι, ἅμφω λέγεται ὀρθῶς. ἐνδεχομένου γὰρ πολλοῖς συζῆν ἅμα καὶ συναισθάνεσθαι ὡς πλείστοις αἰρετώτατον· ἐπεὶ δὲ χαλεπώτατον, ἐν ἐλάττωσιν ἀνάγκη τὴν ἐνέργειαν τῆς συναισθήσεως εἶναι, ὥστ' οὐ μόνον χαλεπὸν τὸ πολλοὺς κτήσασθαι (πεῖρας γὰρ δεῖ), ἀλλὰ καὶ οὖσι χρήσασθαι.

καὶ ὅτε μὲν ἀπεῖναι εὖ πράττοντα τὸν φιλούμενον βουλόμεθα, ὅτε δὲ μετέχειν τῶν αὐτῶν, καὶ τὸ ἅμα βούλεσθαι εἶναι φιλικόν. ἐνδεχομένου μὲν γὰρ ἅμα καὶ εὖ, τοῦτο πάντες αἰροῦνται· μὴ ἐνδεχομένου δέ, ἀλλ' ὥσπερ τὸν Ἡρακλῆ ἴσως ἂν ἡ μήτηρ εἴλετο θεὸν εἶναι μᾶλλον ἢ μετ' αὐτῆς ὄντα τῷ Εὐρύσθεϊ θητεύειν. ὁμοίως γὰρ ἂν εἴπειεν καὶ ὃν ὁ Λάκων ἔσκωψεν, ἐπεὶ τις ἐκέλευσεν αὐτὸν χειμαζόμενον ἐπικαλέσασθαι τοὺς Διοσκόρους. δοκεῖ δὲ τοῦ μὲν φιλοῦντος τὸ ἀπείργειν εἶναι τῆς συμμεθέξεως τῶν χαλεπῶν, τοῦ δὲ φιλουμένου τὸ βούλεσθαι συμμετέχειν, καὶ ταῦτα ἀμφοτέρω συμβαίνει εὐλόγως. δεῖ γὰρ τῷ φίλῳ μηθὲν εἶναι οὕτω λυπηρὸν ὡς <μὴ> ἰδεῖν τὸν φίλον· δοκεῖ δὲ δεῖν αἰρεῖσθαι μὴ τὸ αὐτοῦ. διὸ κωλύουσι συμμετέχειν· ἱκανοὶ γὰρ αὐτοὶ κακοπαθοῦντες, ἵνα μὴ φαίνωνται τὰ αὐτῶν [1246a] σκοποῦντες καὶ αἰρεῖσθαι τὸ χαίρειν λυπούμενου τοῦ φίλου. ἔτι δὲ τὸ κουφότεροι εἶναι μὴ μόνοι φέροντες τὰ κακά. ἐπεὶ δ' αἰρετὸν τό τ' εὖ καὶ τὸ

ἅμα, δῆλον ὅτι τὸ ἅμα εἶναι μετ' ἐλάττονος ἀγαθοῦ αἰρετώτερόν πως ἢ χωρὶς μετὰ μείζονος. ἐπεὶ δὲ ἄδηλον τὸ πόσον δύναται τὸ ἅμα, ἤδη διαφέρονται καὶ οἷονται τὸ μετέχειν ἅμα πάντων φιλικόν, [καὶ] ὥσπερ συνδειπνεῖν ἅμα φασὶν ἥδιον ταῦτ' ἔχοντας· οἱ δ' ἂν μέντοι οὐ βούλονται. ἐπεὶ δ' εἴ γέ τις ὑπερβολὰς ποιήσει, ὁμολογῶσιν ἅμα κακῶς πράττοντας σφόδρα ἢ εὖ σφόδρα χωρὶς. παραπλήσιον δὲ τούτῳ καὶ περὶ τὰς ἀτυχίας. ὅτε μὲν γὰρ βουλόμεθα τοὺς φίλους ἀπεῖναι οὐδὲ λυπεῖν, ὅταν μηθὲν μέλλωσι ποιήσιν πλεον· ὅτε δὲ αὐτοὺς ἥδιστον παρεῖναι. τὸ δὲ τῆς ὑπεναντιώσεως ταύτης καὶ μάλ' εὐλογον. διὰ γὰρ τὰ προειρημένα τοῦτο συμβαίνει, καὶ ὅτι μὲν τὸ λυπούμενον ἢ ἐν φαύλῃ ὄντα ἔξει τὸν φίλον θεωρεῖν φεύγομεν ἀπλῶς, ὥσπερ καὶ ἡμᾶς αὐτούς, τὸ δ' ὅρᾳν τὸν φίλον ἡδύ, ὥσπερ ἄλλο τι τῶν ἡδίστων, διὰ τὴν εἰρημένην αἰτίαν, καὶ μὴ κάμνοντα, εἰ αὐτός· ὥστε ὁπότερον ἂν τούτων ἢ μᾶλλον ἡδύ, ποιεῖ τὴν ῥοπὴν τοῦ βούλεσθαι παρεῖναι ἢ μή. καὶ τοῦτο ἐπὶ τῶν χειρόνων συμβαίνει καὶ διὰ τὴν αὐτὴν αἰτίαν γίνεσθαι· μάλιστα γὰρ φιλοτιμοῦνται τοὺς φίλους μὴ πράττειν εὖ μηδ' εἶναι ἀνάγκαι αὐτοῖς κακῶς. διὸ ἐνίοτε τοὺς ἐρωμένους συναποτιννύασι. μᾶλλον γὰρ τοῦ οἰκείου αἰσθάνεσθαι κακοῦ, ὥσπερ ἂν εἰ καὶ μεμνημένος ὅτι ποτὲ εὖ ἔπραττε μᾶλλον, ἢ εἰ ὤετο ἀεὶ κακῶς πράττειν.

❖❖ πὸ λογισμοῦ λύπην.

❖ ον.

## Βιβλίο 8

ἀπορήσειε δ' ἂν τις, εἰ ἔστιν ἐκάστω [φίλῳ] χρήσασθαι καὶ ἐφ' ᾧ πέφυκε καὶ ἄλλως, καὶ τοῦτο ἢ «καθ'» αὐτὸ ἢ κατὰ συμβεβηκός, οἷον εἰ ὀφθαλμός ἰδεῖν ἢ καὶ ἄλλως παριδεῖν διαστρέψαντα, ὥστε δύο τὸ ἐν φανῆναι. αὐταὶ μὲν δὴ ἄμφω ὅτι μὲν ὀφθαλμός· ὅτι ἦν δ' ὀφθαλμῷ, ἄλλη δὲ κατὰ συμβεβηκός, οἷον εἰ ἦν ἀποδόσθαι ἢ φαγεῖν. ὁμοίως δὴ καὶ ἐπιστήμη· καὶ γὰρ ἀληθῶς καὶ ἁμαρτεῖν, οἷον ὅταν ἐκὼν μὴ ὀρθῶς γράψῃ, ὡς ἀγνοία δὴ νῦν χρῆσθαι, ὥσπερ μεταστρέψας τὴν χεῖρα· καὶ τῷ ποδὶ ποτε ὡς χειρὶ καὶ ταύτῃ ὡς ποδὶ χρῶνται «αἱ» ὀρχηστρίδες. εἰ δὴ πᾶσαι αἱ ἀρεταὶ ἐπιστῆμαι, εἴη ἂν καὶ τῇ δικαιοσύνῃ ὡς ἀδικία χρῆσθαι, ἀδικήσῃ ἄρα ἀπὸ δικαιοσύνης τὰ ἄδικα πράττων, ὥσπερ καὶ τὰ ἀγνοητικά ἀπὸ ἐπιστήμης· εἰ δὲ τοῦτ' ἀδύνατον, φανερόν [1246b] ὅτι οὐκ ἂν εἴεν ἐπιστῆμαι αἱ ἀρεταί. οὐδ' εἰ μὴ ἔστιν ἀγνοεῖν ἀπὸ ἐπιστήμης, ἀλλ' ἁμαρτάνειν μόνον, καὶ τὰ αὐτὰ «ἄ» καὶ ἀπὸ ἀγνοίας ποιεῖν, οὗ τι ἀπὸ δικαιοσύνης γε ὡς ἀπὸ ἀδικίας πράξει· ἀλλ' ἐπεὶ φρόνησις ἐπιστήμη καὶ ἀληθές τι, τὸ αὐτὸ ποιήσῃ κἀκείνη· ἐνδέχοιτο γὰρ ἂν ἀφρόνως ἀπὸ φρονήσεως, καὶ ἁμαρτάνειν ταῦτά ἅπερ ὁ ἄφρων. εἰ δὲ ἀπλή ἦν ἐκάστου χρεία ἢ ἕκαστον, κἂν φρονίμως ἔπραττον οὕτω πράττοντες. ἐπὶ μὲν οὖν ταῖς ἄλλαις ἐπιστήμαις ἄλλη κυρία ποιεῖ τὴν στροφὴν· αὐτῆς δὲ τῆς πασῶν κυρίας τίς; οὐ γὰρ ἔτι ἐπιστήμη γε [ἢ νοῦς]. ἀλλὰ μὴν οὐδ' ἀρετὴ· χρῆται γὰρ αὐτῇ. ἢ γὰρ τοῦ ἄρχοντος ἀρετὴ τῇ τοῦ ἀρχομένου χρῆται. τίς οὖν ἐστίν; ἢ ὥσπερ λέγεται ἀκρασία κακία τοῦ ἀλόγου τῆς ψυχῆς, καὶ ὡς ἀκόλαστος ὁ ἀκρατὴς ἔχων νοῦν; ἀλλ' εἰ δὴ, ἂν ἰσχυρὰ ἢ ἡ ἐπιθυμία, στρέψει καὶ λογιεῖται τάναντία ἢ σφί, δῆλον ὅτι, κἂν ἐν μὲν τούτῳ ἀρετὴ, ἐν δὲ τῷ λόγῳ ἄγνοια ἢ, ἕτεραι μεταποιοῦνται. ὥστε ἔσται δικαιοσύνη τὸ δικαίως χρῆσθαι καὶ κακῶς καὶ φρονήσῃ ἀφρόνως· ὥστε καὶ τάναντία. ἄτοπον γὰρ εἰ τὴν μὲν ἐν τῷ λογιστικῷ ἀρετὴν μοχθηρία ποτὲ ἐγγενομένη ἐν τῷ ἀλόγῳ στρέψει καὶ ποιήσῃ ἀγνοεῖν, ἢ δ' ἀρετὴ ἐν τῷ ἀλόγῳ ἀγνοίας ἐνούσης οὐ στρέψει ταύτην, καὶ ποιήσῃ φρονίμως κρίνειν καὶ τὰ δέοντα, καὶ πάλιν ἢ φρόνησις ἢ ἐν τῷ λογιστικῷ τὴν ἐν τῷ ἀλόγῳ ἀκολασίαν σωφρόνως πράττειν· ὅπερ δοκεῖ ἢ ἐγκράτεια. ὥστ' ἔσται καὶ [ἡ] ἀπὸ ἀγνοίας φρονίμως. ἔστι δὲ ταῦτα ἄτοπα, ἄλλως τε καὶ ἀπὸ ἀγνοίας χρῆσθαι φρονίμως, τοῦτο γὰρ ἐπὶ τῶν ἄλλων οὐδεμιᾶς ὁρῶμεν, ὥσπερ τὴν ἱατρικὴν ἢ γραμματικὴν «οὐ» στρέφει ἀκολασία. ἀλλ' οὖν ὁ τὴν ἄγνοιαν, ἐὰν ἢ ἐναντία, διὸ τὸ μὴ ἐνεῖναι τὴν ὑπεροχὴν ἀλλὰ τὴν ἀρετὴν, ὅλως μᾶλλον εἶναι πρὸς τὴν κακίαν οὕτως ἔχουσιν. καὶ γὰρ ὁ ἄδικος πάντα «ἄ» ὁ δίκαιος δύναται, καὶ ὅλως ἔνεστιν ἐν τῇ δυνάμει ἢ ἀδυναμία. ὥστε δῆλον ὅτι ἅμα φρόνιμοι καὶ ἀγαθαὶ ἐκείναι αἱ ἄλλου ἕξεις, καὶ ὀρθῶς τὸ Σωκρατικόν, ὅτι οὐδὲν ἰσχυρότερον

φρονήσεως. ἀλλ' ὅτι ἐπιστήμην ἔφη, οὐκ ὀρθόν· ἀρετὴ γάρ ἐστι καὶ οὐκ ἐπιστήμη, ἀλλὰ γένος ἄλλο γνῶσκειν .

ἐπεὶ δ' οὐ μόνον ἡ φρόνησις ποιεῖ τὴν εὐπραγίαν καὶ

ἀρετὴ, ἀλλὰ φαμέν καὶ τοὺς εὐτυχεῖς εὖ πράττειν ὡς καὶ [1247a] τῆς εὐτυχίας [εὖ] ποιούσης εὐπραγίαν καὶ τὰ αὐτὰ τῆς ἐπιστήμης, σκεπτέον ἄρ' ἐστὶ φύσει ὃ μὲν εὐτυχὴς ὃ δ' ἀτυχής, ἢ οὐ, καὶ πῶς ἔχει περὶ τούτων. ὅτι μὲν γὰρ εἰσὶ τινες εὐτυχεῖς ὁρῶμεν. ἄφρονες γὰρ ὄντες κατορθοῦσι πολλά, ἐν οἷς ἡ τύχη κυρία· ἔτι δὲ καὶ ἐν οἷς τέχνη ἐστί, πολὺ μέντοι καὶ τύχης ἐνυπάρχει, οἷον ἐν στρατηγίᾳ καὶ κυβερνητικῇ. πότερον οὖν ἀπὸ τίνος ἕξεως οὗτοί εἰσιν, ἢ οὐ τῷ αὐτοῖ ποιοῖ τινες εἶναι πρακτικοί εἰσι τῶν εὐτυχημάτων; νῦν μὲν γὰρ οὕτως οἴονται ὡς φύσει τινῶν ὄντων· ἡ δὲ φύσις ποιούς τινας ποιεῖ, καὶ εὐθὺς ἐκ γενετῆς διαφέρουσιν, ὥσπερ οἱ μὲν γλαυκοὶ οἱ δὲ μελανόμαστοι τῷ τὸ δεῖν τοιονδὶ «κατὰ τὸ εἶναι τοιονδὶ» ἔχειν, οὕτω καὶ οἱ εὐτυχεῖς καὶ ἀτυχεῖς. ὅτι μὲν γὰρ οὐ φρονήσει κατορθοῦσι, δῆλον. οὐ γὰρ ἄλογος [ἡ] φρόνησις, ἀλλ' ἔχει λόγον διὰ τί οὕτως πράττει, οἱ δ' οὐκ ἂν ἔχοιεν εἰπεῖν διὰ τί κατορθοῦσι (τέχνη γὰρ ἂν ἦν)· ἔτι δὲ φανερόν «ὅτι» ὄντες ἄφρονες, οὐχ ὅτι περὶ ἄλλα (τοῦτο μὲν γὰρ οὐθὲν ἄτοπον· οἷον Ἱπποκράτης γεωμετρικὸς ὢν, ἀλλὰ περὶ τὰ ἄλλα ἐδόκει βλάξ καὶ ἄφρων εἶναι, καὶ πολὺ χρυσίον πλέων ἀπώλεσεν ὑπὸ τῶν ἐν Βυζαντίῳ πεντηκοστολόγων δι' εὐήθειαν, ὡς λέγουσιν) ἀλλ' ὅτι καὶ ἐν οἷς εὐτυχοῦσιν ἄφρονες. περὶ γὰρ ναυκληρίαν οὐχ οἱ δεινότατοι εὐτυχεῖς, ἀλλ' ὥσπερ ἐν κύβων πτώσει ὃ μὲν οὐδέν, ἄλλος δὲ βάλλει «πολὺ» καθ' ἣν φύσει ἐστὶν εὐτυχής, ἢ τῷ φιλεῖσθαι, ὥσπερ φασίν, ὑπὸ θεοῦ, καὶ ἕξωθέν τι εἶναι τὸ κατορθοῦν. οἷον πλοῖον κακῶς νευαυπηγημένον ἄμεινον πολλάκις [δὲ] πλεῖ, ἀλλ' οὐ δι' αὐτό, ἀλλ' ὅτι ἔχει κυβερνήτην ἀγαθόν, [ἀλλ'] οὗτος εὐτυχὴς τὸν δαίμον' ἔχει κυβερνήτην ἀγαθόν. ἀλλ' ἄτοπον θεὸν ἢ δαίμονα φιλεῖν τὸν τοιοῦτον, ἀλλὰ μὴ τὸν βέλτιστον καὶ τὸν φρονιμώτατον. εἰ δὲ ἀνάγκη ἢ φύσει ἢ νόῳ ἢ ἐπιτροπίᾳ τινὶ κατορθοῦν, τὰ δὲ δύο μὴ ἐστί, φύσει ἂν εἶεν οἱ εὐτυχεῖς. ἀλλὰ μὴν ἢ γε φύσις αἰτία ἢ τοῦ ἀεὶ ὡσαύτως ἢ τοῦ ὡς ἐπὶ τὸ πολὺ, ἢ δὲ τύχη τούναντίον. εἰ μὲν οὖν τὸ παραλόγως ἐπιτυγχάνειν τύχης δοκεῖ εἶναι, ἀλλ' εἶπερ διὰ τύχην εὐτυχής, οὐκ ἂν τοιοῦτον εἶναι τὸ αἴτιον, οἷον ἀεὶ τοῦ αὐτοῦ ἢ ὡς ἐπὶ τὸ πολὺ. ἔτι εἰ, ὅτι τοιοσδί, ἐπιτυγχάνει ἢ ἀποτυγχάνει, ὥσπερ, ὅτι [ὁ] γλαυκός, οὐκ ὁξὺ ὀρθῶ, οὐ τύχη αἰτία ἀλλὰ φύσις· οὐκ ἄρα ἐστὶν εὐτυχὴς ἀλλ' οἷον εὐφυής. ὥστε τοῦτ' ἂν εἴη λεκτέον, ὅτι οὐς λέγομεν εὐτυχεῖς, οὐ διὰ τύχην εἰσίν. οὐκ ἄρα εἰσὶν εὐτυχεῖς· [1247b] τύχης γάρ, ὅσων αἰτία τύχη ἀγαθὴ ἀγαθῶν.



εἰ δ' οὕτως, πότερον οὐκ ἔσται τύχη ὅλως, ἢ ἔσται μὲν, ἀλλ' οὐκ αἰτία; ἀλλ' ἀνάγκη καὶ εἶναι καὶ αἰτίαν εἶναι. ἔσται ἄρα καὶ ἀγαθῶν τισιν αἰτία ἢ κακῶν. εἰ δ' ὅλως ἐξαιρετέον καὶ οὐδὲν ἀπὸ τύχης φατέον γίνεσθαι, ἀλλ' ἡμεῖς ἄλλης οὕσης αἰτίας διὰ τὸ μὴ ὁρᾶν τύχην εἶναί φαμεν αἰτίαν (διὸ καὶ ὀριζόμενοι τὴν τύχην τιθέασιν αἰτίαν ἄλογον ἀνθρωπίνῳ λογισμῷ, ὡς οὕσης τινὸς φύσεως). τοῦτο μὲν οὖν ἄλλο πρόβλημ' ἂν εἴη, ἐπεὶ δὲ ὁρῶμεν τινὰς ἅπαξ εὐτυχήσαντας, διὰ τί οὐ καὶ πάλιν ἄν; ἀλλὰ διὰ τὸ ἀποκατορθῶσαι ἔν, καὶ πάλιν. τὸ γὰρ αὐτὸ τοῦτ' αἴτιον. οὐκ ἄρα ἔσται τύχης τοῦτο, ἀλλ' ὅταν τὸ αὐτὸ ἀποβαίνει, ἀπείρων καὶ ἀορίστων, ἔσται μὲν τὸ ἀγαθὸν ἢ κακόν, ἐπιστήμη δ' οὐκ ἔσται αὐτοῦ [ἢ] δι' ἀπειρίαν, ἐπεὶ ἐμάνθανον ἂν τινες εὐτυχεῖν, ἢ καὶ πᾶσαι ἂν αἰ ἐπιστήμαι, ὥσπερ ἔφη Σωκράτης, εὐτυχίαι ἦσαν. τί οὖν κωλύει συμβῆναί τινι ἐφεξῆς τὰ τοιαῦτα πολλάκις, οὐχ ὅτι οὕτως δεῖ, ἀλλ' οἷον ἂν εἴη τὸ κύβους ἀεὶ μακαρίαν βάλλειν; τί δὲ δῆ; ἄρ' οὐκ ἔννευσιν ὁρμαὶ ἐν τῇ ψυχῇ αἰ μὲν ἀπὸ λογισμοῦ, αἰ δὲ ἀπὸ ὀρέξεως ἀλόγου, καὶ πρότεροι αὗται; εἰ γὰρ ἔστι φύσει ἢ δι' ἐπιθυμίαν ἡδέος [καὶ ἢ] ὄρεξις, φύσει γε ἐπὶ τὸ ἀγαθὸν βαδίζοι ἂν πᾶν. εἰ δὲ τινὲς εἰσιν εὐφυεῖς ὥσπερ οἱ ἄδικοι οὐκ ἐπιστάμενοι ἄδειν, οὕτως εὖ πεφύκασιν καὶ ἄνευ λόγου ὀρμῶσιν, ἢ φύσις πέφυκε, καὶ ἐπιθυμοῦσιν καὶ τούτου καὶ τότε καὶ οὕτως ὡς δεῖ καὶ οὐ δεῖ καὶ ὅτε, οὗτοι κατορθώσουσι, κἂν τύχῳσιν ἄφρονες ὄντες καὶ ἄλογοι, ὥσπερ καὶ εὖ ἔσονται οὐ διδασκαλικοὶ ὄντες. οἱ δὲ γε τοιοῦτοι εὐτυχεῖς, ὅσοι ἄνευ λόγου κατορθοῦσιν ὡς ἐπὶ τὸ πολὺ. φύσει ἄρα οἱ εὐτυχεῖς εἶεν ἄν. - ἢ πλεοναχῶς λέγεται ἡ εὐτυχία; τὰ μὲν γὰρ πράττεται ἀπὸ τῆς ὀρμῆς καὶ προελομένων πρᾶξαι, τὰ δ' οὐ, ἀλλὰ τὸναντίον. καὶ ἐν ἐκείνοις, «ἐν οἷς» κακῶς λογίσασθαι δοκοῦσι, κατορθοῦντας καὶ εὐτυχῆσαι φαμέν· καὶ πάλιν ἐν τούτοις, εἰ ἐβουλεύοντο ἂν ἢ ἔλαττον ἔλαβον τάγαθόν. ἐκείνους μὲν τοίνυν εὐτυχεῖν διὰ φύσιν ἐνδέχεται (ἢ γὰρ ὀρμὴ καὶ ὄρεξις οὕσα οὐ ἔδει κατάρθωσεν, ὃ δὲ λογισμὸς ἦν ἡλίθιος· καὶ τοὺς μὲν ἐνταῦθα, ὅταν μὲν λογισμὸς μὴ δοκῶν ὀρθὸς εἶναι, τύχη δ' αὐτοῦ αἰτία οὕσα, αὐτὴ [δ'] ὀρθὴ οὕσα ἔσωσεν, ἀλλ' ἐνίστε δι' ἐπιθυμίαν ἐλογίσαστο πάλιν οὕτω καὶ ἡτύχησεν). ἐν δὲ δὴ τοῖς ἑτέροις πῶς ἔσται ἡ εὐτυχία κατ' εὐφυῖαν ὀρέξεως καὶ [1248a] ἐπιθυμίας; ἀλλὰ μὴν ἡ ἐνταῦθα εὐτυχία καὶ τύχη διττή, κάκεῖ ἡ αὐτή, ἢ πλείους αἰ εὐτυχίαι. ἐπεὶ δ' ὁρῶμεν παρὰ πάσας τὰς ἐπιστήμας καὶ τοὺς λογισμοὺς τοὺς ὀρθοὺς εὐτυχοῦντας τινὰς, δῆλον ὅτι ἕτερον ἂν τι εἴη τὸ αἴτιον τῆς εὐτυχίας. ἐκείνη δὲ πότερον [ἢ] εὐτυχία ἢ οὐκ ἔστιν, ἢ ἐπεθύμησεν ὧν ἔδει καὶ ὅτε ἔδειτο λογισμὸς ἀνθρώπινος οὐκ ἂν τούτου εἴη. οὐ γὰρ δὴ πάμπαν ἀλόγιστον τοῦτο, οὐδὲ φυσικὴ ἔστιν ἡ ἐπιθυμία, ἀλλὰ διαφθείρεται ὑπὸ τινός. εὐτυχεῖν μὲν οὖν δοκεῖ, ὅτι ἡ τύχη τῶν παρὰ λόγον αἰτία, τοῦτο δὲ παρὰ λόγον (παρὰ γὰρ τὴν ἐπιστήμην καὶ τὸ καθόλου). ἀλλ', ὡς ἔοικεν, οὐκ ἀπὸ τύχης, ἀλλὰ δοκεῖ διὰ τοῦτο. ὥσθ' οὗτος μὲν ὁ λόγος οὐ δείκνυσιν ὅτι

φύσει εὐτυχεῖν, ἀλλ' ὅτι οὐ πάντες οἱ δοκοῦντες εὐτυχεῖν διὰ τύχην κατορθοῦσιν, ἀλλὰ διὰ φύσιν· οὐδ' ὅτι οὐδέν ἐστι τύχη αἰτία οὐθενὸς δείκνυσιν, ἀλλ' οὐ τῶν πάντων ὧν δοκεῖ. τοῦτο μέντ' ἂν ἀπορήσειέ τις, ἄρ' αὐτοῦ τούτου τύχη αἰτία, τοῦ ἐπιθυμῆσαι οὐδεὶς καὶ ὅτε δεῖ. ἢ οὕτως γε πάντων ἔσται; καὶ γὰρ τοῦ νοῆσαι καὶ βουλευσάσθαι· οὐ γὰρ δὴ ἐβουλευσατο βουλευσάμενος, καὶ τοῦτ' ἐβουλευσατο, ἀλλ' ἔστιν ἀρχὴ τις, οὐδ' ἐνόησε νοήσας πρότερον <ἢ> νοῆσαι, καὶ τοῦτο εἰς ἄπειρον. οὐκ ἄρα τοῦ νοῆσαι ὁ νοῦς ἀρχή, οὐδὲ τοῦ βουλευσάσθαι βουλή. τί οὖν ἄλλο πλὴν τύχης; ὥστ' ἀπὸ τύχης ἅπαντα ἔσται. ἢ ἔστι τις ἀρχὴ ἧς οὐκ ἔστιν ἄλλη ἔξω, αὕτη δὲ [διὰ τί] τοιαύτη τῷ εἶναι τὸ τοιοῦτο δύναται ποιεῖν; τὸ δὲ ζητούμενον τοῦτ' ἐστί, τίς ἡ τῆς κινήσεως ἀρχὴ ἐν τῇ ψυχῇ. δῆλον δὴ ὥσπερ ἐν τῷ ὅλῳ θεός, [καὶ] κἂν ἐκείνῳ. κινεῖ γὰρ πῶς πάντα τὸ ἐν ἡμῖν θεῖον· λόγου δ' ἀρχὴ οὐ λόγος, ἀλλὰ τι κρεῖττον· τί οὖν ἂν κρεῖττον καὶ ἐπιστήμης εἴη καὶ νοῦ πλὴν θεός; ἢ γὰρ ἀρετὴ τοῦ νοῦ ὄργανον· καὶ διὰ τοῦτο, ὃ οἱ πάλαι ἔλεγον, εὐτυχεῖς καλοῦνται οἱ ἂν ὁρμήσωσι, κατορθοῦσιν ἄλογοι ὄντες, καὶ βουλευέσθαι οὐ συμφέρει αὐτοῖς. ἔχουσι γὰρ ἀρχὴν τοιαύτην ἢ κρεῖττων τοῦ νοῦ καὶ τῆς βουλεύσεως (οἱ δὲ τὸν λόγον· τοῦτο δ' οὐκ ἔχουσι) καὶ ἐνθουσιασμόν, τοῦτο δ' οὐ δύνανται. ἄλογοι γὰρ ὄντες ἐπιτυγχάνουσι· καὶ τούτων φρονίμων καὶ σοφῶν ταχεῖαν εἶναι τὴν μαντικήν, καὶ μόνον οὐ τὴν ἀπὸ τοῦ λόγου δεῖ ἀπολαβεῖν, ἀλλ' οἱ μὲν δι' ἐμπειρίαν, οἱ δὲ διὰ συνήθειάν τε ἐν τῷ σκοπεῖν χρῆσθαι· τῷ θεῷ δὲ αὐταί. τοῦτο καὶ εὐ ὀρθῶς καὶ τὸ μέλλον καὶ τὸ ὄν, καὶ ὧν ἀπολύεται ὁ λόγος οὗτος. διὸ οἱ μελαγχολικοὶ καὶ εὐθυόνηροι. ἔοικε γὰρ ἡ ἀρχὴ ἀπολυομένου τοῦ [1248b] λόγου ἰσχύειν μᾶλλον· καὶ ὥσπερ οἱ τυφλοὶ μνημονεύουσι μᾶλλον ἀπολυθέντες τοῦ πρὸς τοῖς ὁρατοῖς, τῷ ἐρρωμενέστερον εἶναι τὸ μνημονεῦον. φανερόν δὴ ὅτι δύο εἶδη εὐτυχίας, ἡ μὲν θεία (διὸ καὶ δοκεῖ ὁ εὐτυχῆς διὰ θεὸν κατορθοῦν) <ἢ δὲ φύσει>. οὗτος δὲ ἐστὶν ὁ κατὰ τὴν ὁρμὴν διορθωτικός, ὁ δ' ἕτερος ὁ παρὰ τὴν ὁρμὴν· ἄλογοι δ' ἀμφοτέρω. καὶ ἡ μὲν συνεχὴς εὐτυχία μᾶλλον, αὕτη δὲ οὐ συνε

κατὰ μέρος μὲν οὖν περὶ ἐκάστης ἀρετῆς εἴρηται πρότερον· ἐπεὶ δὲ χωρὶς διείλομεν τὴν δύναμιν αὐτῶν, καὶ περὶ τῆς ἀρετῆς διαρθρωτέον τῆς ἐκ τούτων, ἣν ἐκαλοῦμεν ἤδη καλοκάγαθίαν. ὅτι μὲν οὖν ἀνάγκη τὸν ταύτης ἀληθῶς τευξόμενον τῆς προσηγορίας ἔχειν τὰς κατὰ μέρος ἀρετάς, φανερόν. οὐδὲ γὰρ ἐπὶ τῶν ἄλλων οὐθενὸς οἶόν τ' ἄλλως ἔχειν. οὐθεὶς γὰρ ὅλον μὲν τὸ σῶμα ὑγιαίνει, μέρος δ' οὐθέν, ἀλλ' ἀναγκαῖον πάντα ἢ τὰ πλεῖστα καὶ κυριώτατα τὸν αὐτὸν ἔχειν τρόπον τῷ ὅλῳ. ἔστι δὴ τὸ ἀγαθὸν εἶναι καὶ τὸ καλὸν κάγαθον οὐ μόνον κατὰ τὰ ὀνόματα, ἀλλὰ καθ' αὐτὰ ἔχοντα διαφοράν. τῶν γὰρ ἀγαθῶν πάντων τέλη ἐστίν, ἃ αὐτὰ αὐτῶν ἕνεκά ἐστιν αἰρετά. τούτων δὲ καλὰ, ὅσα δι' αὐτὰ ὄντα πάντα ἐπαινετὰ ἐστίν. ταῦτα γὰρ

ἐστὶν ἀφ' ὧν αἱ τε πράξεις εἰσὶν ἐπαινεταὶ καὶ αὐτὰ ἐπαινετά, δικαιοσύνη καὶ αὐτὴ καὶ αἱ πράξεις, καὶ οἱ σώφρονες· ἐπαινετὴ γὰρ καὶ ἡ σωφροσύνη. ἄλλ' οὐχ ὑγίεια ἐπαινετόν· οὐδὲ γὰρ τὸ ἔργον· οὐδὲ τὸ ἰσχυρῶς· οὐδὲ γὰρ ἡ ἰσχύς. ἄλλ' ἀγαθὰ μὲν, ἐπαινετὰ δ' οὐ. ὁμοίως δὲ τοῦτο δῆλον καὶ ἐπὶ τῶν ἄλλων διὰ τῆς ἐπαγωγῆς. ἀγαθὸς μὲν οὖν ἐστὶν ὃ τὰ φύσει ἀγαθὰ ἐστὶν ἀγαθὰ. τὰ γὰρ περιμάχητα καὶ μέγιστα εἶναι δοκοῦντα ἀγαθὰ, τιμὴ καὶ πλοῦτος καὶ σώματος ἀρεταὶ καὶ εὐτυχίαι καὶ δυνάμεις, ἀγαθὰ μὲν φύσει ἐστίν, ἐνδέχεται δ' εἶναι βλαβερά τισι διὰ τὰς ἑξεις. οὔτε γὰρ ἄφρων οὔτ' ἄδικος ἢ ἀκόλαστος ὧν οὐδὲν ἂν ὀνήσειε χρώμενος αὐτοῖς, ὥσπερ οὐδ' ὁ κάμνων τῇ τοῦ ὑγιαίνοντος τροφῇ χρώμενος οὐδ' ὁ ἀσθενὴς καὶ ἀνάπηρος τοῖς τοῦ ὑγιοῦς καὶ τοῖς τοῦ ὀλοκλήρου κόσμοις. καλὸς δὲ καὶ ἀγαθὸς τῷ τῶν ἀγαθῶν τὰ καλὰ ὑπάρχειν αὐτῷ δι' αὐτὰ καὶ τῷ πρακτικῶς εἶναι τῶν καλῶν καὶ αὐτῶν ἕνεκα. καλὰ δ' ἐστὶν αἱ τε ἀρεταὶ καὶ τὰ ἔργα τὰ ἀπὸ τῆς ἀρετῆς. - ἔστι δὲ τις ἑξὶς πολιτικὴ, οἷαν οἱ Λάκωνες ἔχουσιν ἢ ἄλλοι τοιοῦτοι ἔχοιεν ἄν. αὕτη δ' ἐστὶν ἑξὶς τοιαύτη. εἰσὶ γὰρ οἱ οἷονται τὴν ἀρετὴν δεῖν μὲν ἔχειν, ἀλλὰ τῶν φύσει ἀγαθῶν ἕνεκεν. [1249a] διὸ ἀγαθοὶ μὲν ἄνδρες εἰσὶ (τὰ γὰρ φύσει μὲν ἀγαθὰ αὐτοῖς ἐστίν), καλοκάγαθίαν δὲ οὐκ ἔχουσιν. οὐ γὰρ ὑπάρχει αὐτοῖς τὰ καλὰ δι' αὐτά, καὶ προαιροῦνται καλοὶ καὶ ἀγαθοὶ, καὶ οὐ μόνον ταῦτα, ἀλλὰ καὶ τὰ μὴ καλὰ μὲν φύσει ὄντα, ἀγαθὰ δὲ φύσει ὄντα τούτοις καλά. καλὰ γάρ ἐστὶν ὅταν, οὐ ἕνεκα πράττουσι καὶ αἰροῦνται, καλὰ ἦ, διότι τῷ καλῷ καὶ ἀγαθῷ καλά ἐστὶ τὰ φύσει ἀγαθὰ. καλὸν γὰρ τὸ δίκαιον· τοῦτο δὲ τὸ κατ' ἀξίαν· ἀξίος δ' οὗτος τούτων. καὶ τὸ πρέπον καλόν· πρέπει δὲ ταῦτα τούτῳ, πλοῦτος εὐγένεια δύναμις. ὥστε τῷ καλῷ καὶ ἀγαθῷ καὶ αὐτὰ τὰ συμφέροντα καὶ καλά ἐστὶ· τοῖς δὲ πολλοῖς διαφωνεῖ τοῦτο. οὐ γὰρ τὰ ἀπλῶς ἀγαθὰ καὶ κείνοις ἀγαθὰ ἐστί, τῷ δ' ἀγαθῷ ἀγαθὰ. τῷ δὲ «καλῷ» καὶ ἀγαθῷ καὶ καλά. πολλὰς γὰρ καὶ καλὰς πράξεις δι' αὐτάς ἔπραξεν. ὁ δ' οἰόμενος τὰς ἀρετάς ἔχειν δεῖν ἕνεκα τῶν ἐκτὸς ἀγαθῶν, κατὰ τὸ συμβεβηκὸς τὰ καλὰ πράττει. ἔστιν οὖν καλοκάγαθία ἀρετὴ τέλειος.

καὶ περὶ ἡδονῆς δ' εἴρηται ποῖόν τι καὶ πῶς ἀγαθόν, καὶ ὅτι τὰ τε ἀπλῶς ἡδέα καὶ καλὰ καὶ τὰ [τε] ἀπλῶς ἀγαθὰ ἡδέα. οὐ γίνεται δὲ ἡδονὴ μὴ ἐν πράξει· διὰ τοῦτο ὁ ἀληθῶς εὐδαίμων καὶ ἡδιστα ζήσει, καὶ τοῦτο οὐ μάτην οἱ ἄνθρωποι ἀξιοῦσιν.

ἐπεὶ δ' ἐστὶ τις ὁρος καὶ τῷ ἰατρῷ, πρὸς ὃν ἀναφέρων κρίνει τὸ ὑγιεινὸν σῶματι καὶ μή, καὶ πρὸς ὃν μέχρι ποσοῦ ποιητέον ἕκαστον καὶ εὖ ὑγιαῖνον, εἰ δὲ ἔλαττον ἢ πλεον, οὐκέτι· οὕτω καὶ τῷ σπουδαίῳ περὶ τὰς πράξεις καὶ αἰρέσεις τῶν φύσει μὲν ἀγαθῶν οὐκ ἐπαινετῶν δὲ δεῖ τινα εἶναι [1249b] ὅρον καὶ τῆς ἑξέως καὶ τῆς αἰρέσεως καὶ [περὶ] φυγῆς «καὶ περὶ» χρημάτων

πλήθους καὶ ὀλιγότητος καὶ τῶν εὐτυχημάτων. ἐν μὲν οὖν τοῖς πρότερον ἐλέγχθη τὸ ὡς ὁ λόγος· τοῦτο δ' ἐστὶν ὥσπερ ἂν εἴ τις ἐν τοῖς περὶ τὴν τροφήν εἴπειεν ὡς ἡ ἰατρικὴ καὶ ὁ λόγος ταύτης. τοῦτο δ' ἀληθὲς μὲν, οὐ σαφὲς δέ. δεῖ δὴ ὥσπερ καὶ ἐν τοῖς ἄλλοις πρὸς τὸ ἄρχον ζῆν, καὶ πρὸς τὴν ἕξιν κατὰ τὴν ἐνέργειαν τὴν τοῦ ἄρχοντος, οἷον δοῦλον πρὸς δεσπότου καὶ ἕκαστον πρὸς τὴν ἐκάστου καθήκουσαν ἀρχήν. ἐπεὶ δὲ καὶ ἄνθρωπος φύσει συνέστηκεν ἐξ ἄρχοντος καὶ ἀρχομένου, καὶ ἕκαστον ἂν δέοι πρὸς τὴν ἐαυτῶν ἀρχὴν ζῆν (αὕτη δὲ διττὴ· ἄλλως γὰρ ἡ ἰατρικὴ ἀρχὴ καὶ ἄλλως ἡ ὑγίεια· ταύτης δὲ ἔνεκα ἐκείνη)· οὕτω δ' ἔχει κατὰ τὸ θεωρητικόν. οὐ γὰρ ἐπιτακτικῶς ἄρχων ὁ θεός, ἀλλ' οὗ ἔνεκα ἡ φρόνησις ἐπιτάττει (διττὸν δὲ τὸ οὗ ἔνεκα· διώρισται δ' ἐν ἄλλοις), ἐπεὶ κεῖνός γε οὐθενὸς δεῖται. ἦτις οὖν αἵρεσις καὶ κτῆσις τῶν φύσει ἀγαθῶν ποιήσει μάλιστα τὴν τοῦ θεοῦ θεωρίαν, ἢ σώματος ἢ χρημάτων ἢ φίλων ἢ τῶν ἄλλων ἀγαθῶν, αὕτη ἀρίστη, καὶ οὗτος ὁ ὅρος κάλλιστος· ἦτις δ' ἢ δι' ἔνδειαν ἢ δι' ὑπερβολὴν κωλύει τὸν θεὸν θεραπεύειν καὶ θεωρεῖν, αὕτη δὲ φαύλη. ἔχει δὲ τοῦτο τῇ ψυχῇ, καὶ οὗτος τῆς ψυχῆς ὅρος ἄριστος, τὸ ἥκιστα αἰσθάνεσθαι τοῦ ἀλόγου μέρους τῆς ψυχῆς, ἢ τοιοῦτον.

τις μὲν οὖν ὅρος τῆς καλοκάγαθίας, καὶ τίς ὁ σκοπὸς τῶν ἀπλῶς ἀγαθῶν, ἔστω εἰρημένον· \* .

## Περὶ Αρετῶν καὶ Κακιῶν (1249a) On Virtues and Vices



[1249a] Ἐπαινετὰ μὲν ἐστὶ τὰ καλὰ, ψεκτὰ δὲ τὰ αἰσχρά. καὶ τῶν μὲν καλῶν ἡγοῦνται αἱ ἀρεταί, τῶν δ' αἰσχυρῶν αἱ κακίαι. ἐπαινετὰ δ' ἐστὶ καὶ τὰ αἵτια τῶν ἀρετῶν καὶ τὰ παρεπόμενα ταῖς ἀρεταῖς καὶ τὰ γινόμενα ἀπ' αὐτῶν καὶ τὰ ἔργα αὐτῶν, ψεκτὰ δὲ τὰ ἐναντία. τριμεροῦς δὲ τῆς ψυχῆς λαμβανομένης κατὰ Πλάτωνα, τοῦ μὲν λογιστικοῦ [1249b] ἀρετὴ ἐστὶν ἡ φρόνησις, τοῦ δὲ θυμοειδοῦς ἢ τε πραότης καὶ ἡ ἀνδρεία, τοῦ δὲ ἐπιθυμητικοῦ ἢ τε σωφροσύνη καὶ ἡ ἐγκράτεια, ὅλης δὲ τῆς ψυχῆς ἢ τε δικαιοσύνη καὶ ἡ ἐλευθεριότης καὶ ἡ μεγαλοψυχία. κακία δ' ἐστὶ τοῦ μὲν λογιστικοῦ ἡ ἀφροσύνη, τοῦ δὲ θυμοειδοῦς ἢ τε ὀργιλότης καὶ ἡ δειλία, τοῦ δὲ ἐπιθυμητικοῦ ἢ τε ἀκολασία καὶ ἡ [1250a] ἀκράτεια, ὅλης δὲ τῆς ψυχῆς ἢ τε ἀδικία καὶ ἀνελευθεριότης καὶ μικροψυχία.

Ἔστι δὲ φρόνησις μὲν ἀρετὴ τοῦ λογιστικοῦ, παρασκευαστικὴ τῶν πρὸς

εὐδαιμονίαν συντεινόντων. πραότης δ' ἐστὶν ἀρετὴ τοῦ θυμοειδοῦς, καθ' ἣν ὑπὸ ὀργῆς γίνονται δυσκίνητοι. ἀνδρεία δ' ἐστὶν ἀρετὴ τοῦ θυμοειδοῦς, καθ' ἣν δυσέκπληκτοί εἰσιν ὑπὸ φόβων τῶν περὶ θάνατον. σωφροσύνη δ' ἐστὶν ἀρετὴ τοῦ ἐπιθυμητικοῦ, καθ' ἣν ἀνόρεκτοι γίνονται περὶ τὰς ἀπολαύσεις τῶν φαύλων ἡδονῶν. ἐγκράτεια δ' ἐστὶν ἀρετὴ τοῦ ἐπιθυμητικοῦ, καθ' ἣν κατέχουσι τῷ λογισμῷ τὴν ἐπιθυμίαν ὁρμῶσαν ἐπὶ τὰς φαύλας ἡδονάς. δικαιοσύνη δ' ἐστὶν ἀρετὴ ψυχῆς διανεμητικὴ τοῦ κατ' ἀξίαν. ἐλευθεριότης δ' ἐστὶν ἀρετὴ ψυχῆς εὐδάπανος εἰς τὰ καλά. μεγαλοψυχία δ' ἐστὶν ἀρετὴ ψυχῆς, καθ' ἣν δύναται φέρειν εὐτυχίαν καὶ ἀτυχίαν καὶ τιμὴν καὶ ἀτιμίαν.

Ἀφροσύνη δ' ἐστὶ κακία τοῦ λογιστικοῦ, αἰτία τοῦ ζῆν κακῶς. ὀργιλότης δ' ἐστὶ κακία τοῦ θυμοειδοῦς, καθ' ἣν εὐκίνητοι γίνονται πρὸς ὀργήν. δειλία δ' ἐστὶ κακία τοῦ θυμοειδοῦς, καθ' ἣν ἐκπλήττονται ὑπὸ φόβων, καὶ μάλιστα τῶν περὶ θάνατον. ἀκολασία δ' ἐστὶ κακία τοῦ ἐπιθυμητικοῦ, καθ' ἣν αἰροῦνται τὰς φαύλας ἡδονάς. [περὶ μὲν τῆς ἀκρατείας οὐδέν· οὕτω δὲ σὺ δύνασαι ὀρίζειν.] ἀκράτεια δ' ἐστὶ κακία τοῦ ἐπιθυμητικοῦ, καθ' ἣν παρασύρουσι τῇ ἀλογίᾳ τὴν ἐπιθυμίαν ὠθοῦσαν ἐπὶ τὰς τῶν φαύλων ἡδονῶν ἀπολαύσεις. ἀδικία δ' ἐστὶ κακία ψυχῆς, καθ' ἣν πλεονεκτικοὶ γίνονται παρὰ τὴν ἀξίαν. ἀνελευθερία δ' ἐστὶ κακία ψυχῆς, καθ' ἣν ὀρέγονται τοῦ πανταχόθεν κέρδους. μικροψυχία δ' ἐστὶ κακία ψυχῆς, καθ' ἣν ἀδύνατοί εἰσι φέρειν εὐτυχίαν καὶ ἀτυχίαν καὶ τιμὴν καὶ ἀτιμίαν.

Τῆς δὲ φρονήσεως ἐστὶ τὸ βουλεύσασθαι, τὸ κρῖναι τὰ ἀγαθὰ καὶ τὰ κακὰ καὶ πάντα τὰ ἐν τῷ βίῳ αἰρετὰ καὶ φευκτά, τὸ χρῆσθαι πᾶσι καλῶς τοῖς ὑπάρχουσιν ἀγαθοῖς, τὸ ὁμιλῆσαι ὀρθῶς, τὸ συνιδεῖν τοὺς καιροὺς, τὸ ἀγχίνως χρήσασθαι καὶ λόγῳ καὶ ἔργῳ, τὸ τὴν ἐμπειρίαν ἔχειν τῶν χρησίμων πάντων. ἡ μνήμη δὲ καὶ ἐμπειρία καὶ ἀγχίνοια ἦτοι ἀπὸ τῆς φρονήσεως ἐκάστη αὐτῶν ἐστίν, ἡ παρέπεται τῇ φρονήσει· ἡ τὰ μὲν αὐτῶν οἷον συναίτια τῆς φρονήσεως ἐστὶ, καθάπερ ἐμπειρία καὶ ἡ μνήμη, τὰ δὲ οἷον μέρη αὐτῆς, οἷον εὐβουλία καὶ ἀγχίνοια. πραότητος δ' ἐστὶ τὸ δύνασθαι φέρειν μετρίως ἐγκλήματα καὶ ὀλιγωρίας, καὶ τὸ μὴ ταχέως ὁρμᾶν ἐπὶ τὰς τιμωρίας, καὶ τὸ μὴ εὐκίνητον εἶναι πρὸς τὰς ὀργάς, ἅπικρον δὲ τῷ ἡθελῆ καὶ ἀφιλόνηκον, ἔχοντα τὸ ἡρεμαῖον ἐν τῇ ψυχῇ καὶ στάσιμον. ἀνδρείας δ' ἐστὶ τὸ δυσέκπληκτον ὑπὸ φόβων τῶν περὶ θάνατον, καὶ τὸ εὐθαρσῆ ἐν τοῖς δεινοῖς, καὶ τὸ [1250b] εὐτολμον πρὸς τοὺς κινδύνους, καὶ τὸ μᾶλλον αἰρεῖσθαι τεθνάναι καλῶς ἢ αἰσchrῶς σωθῆναι, καὶ τὸ νίκης αἵτιον εἶναι. ἔτι δὲ ἀνδρείας ἐστὶ καὶ τὸ πονεῖν καὶ καρτερεῖν καὶ αἰρεῖσθαι ἀνδραγαθίζεσθαι. παρέπεται δὲ τῇ ἀνδρείᾳ καὶ ἡ εὐτολμία καὶ ἡ εὐψυχία καὶ τὸ θάρσος καὶ τὸ θράσος, ἔτι δὲ καὶ ἡ φιλοπονία καὶ ἡ καρτερία. σωφροσύνης δ' ἐστὶ τὸ μὴ

θαυμάζειν τὰς ἀπολαύσεις τῶν σωματικῶν ἡδονῶν, καὶ τὸ εἶναι πάσης ἀπολαύσεως αἰσχροῦς ἡδονῆς ἀνόρεκτον, καὶ τὸ φοβεῖσθαι καὶ τὴν δικαίαν ἄδειαν, καὶ τὸ τετάσθαι περὶ τὸν βίον ὁμοίως ἔν τε μικροῖς καὶ μεγάλοις. παρέπεται δὲ τῇ σωφροσύνῃ εὐταξία, κοσμιότης, αἰδώς, εὐλάβεια. ἔγκρατείας δ' ἐστὶ τὸ δύνασθαι κατασχεῖν τῷ λογισμῷ τὴν ἐπιθυμίαν ὁρμῶσαν ἐπὶ φαύλας ἀπολαύσεις καὶ ἡδονάς, καὶ τὸ καρτερεῖν, καὶ τὸ ὑπομονητικὸν εἶναι τῆς κατὰ φύσιν ἐνδείας καὶ λύπης. δικαιοσύνης δ' ἐστὶ τὸ διανεμητικὸν εἶναι τοῦ κατ' ἀξίαν, καὶ σώζειν τὰ πάτρια ἔθνη καὶ τὰ νόμιμα, καὶ τὸ σώζειν τοὺς γεγραμμένους νόμους, καὶ τὸ ἀληθεύειν ἐν τῷ διαφέροντι, καὶ τὸ διαφυλάττειν τὰς ὁμολογίας. ἔστι δὲ πρώτη τῶν δικαιοσυνῶν πρὸς τοὺς θεοὺς, εἴτα πρὸς δαίμονας, εἴτα πρὸς πατρίδα καὶ γονεῖς, εἴτα πρὸς τοὺς κατοικομένους· ἐν οἷς ἐστὶν ἡ εὐσέβεια, ἥτοι μέρος οὕσα δικαιοσύνης ἢ παρακολουθοῦσα. ἀκολουθεῖ δὲ τῇ δικαιοσύνῃ καὶ ὁσιότης καὶ ἀλήθεια καὶ ἡ πίστις καὶ ἡ μισοπονηρία. ἐλευθεριότητος δ' ἐστὶ τὸ προετικὸν εἶναι χρημάτων εἰς τὰ ἐπαινετά, καὶ δαψιλῇ ἐπὶ τῷ εἰς τὰ δέοντα ἀναλωθῆναι, καὶ τὸ βοηθητικὸν εἶναι ἐν τῷ διαφόρῳ, καὶ τὸ μὴ λαβεῖν ὅθεν μὴ δεῖ. ἔστι δὲ ὁ ἐλευθέριος καὶ περὶ ἐσθῆτα καθαρὸς καὶ περὶ οἴκησιν, καὶ κατασκευαστικὸς τῶν περιττῶν καὶ καλῶν καὶ διαγωγὴν ἐχόντων ἡδεῖαν ἄνευ τοῦ λυσιτελοῦντος, καὶ θρεπτικὸς τῶν ζώων τῶν ἴδιον ἐχόντων τι ἢ θαυμαστόν. ἀκολουθεῖ δὲ τῇ ἐλευθεριότητι τοῦ ἥθους ὑγρότης καὶ εὐαγωγία καὶ φιланθρωπία καὶ τὸ εἶναι ἐλεητικὸν καὶ φιλόφιλον καὶ φιλόξενον καὶ φιλόκαλον. μεγαλοψυχίας δ' ἐστὶ τὸ καλῶς ἐνεγκεῖν καὶ εὐτυχίαν καὶ ἀτυχίαν καὶ τιμὴν καὶ ἀτιμίαν, καὶ τὸ θαυμάζειν μήτε τρυφὴν μήτε θεραπείαν μήτε ἐξουσίαν μήτε τὰς νίκας τὰς ἐναγωνίους, ἔχειν δὲ τι βάθος τῆς ψυχῆς καὶ μέγεθος. ἔστι δὲ μεγαλόψυχος οὗθ' ὁ τὸ ζῆν περὶ πολλοῦ ποιούμενος οὗθ' ὁ φιλόζωος. ἀπλοῦς δὲ τῷ ἥθει καὶ γενναῖος, ἀδικεῖσθαι δυνάμενος, καὶ οὐ τιμωρητικός. ἀκολουθεῖ δὲ τῇ μεγαλοψυχίᾳ ἀπλότης καὶ ἀλήθεια.

Ἀφροσύνης δ' ἐστὶ τὸ κρίνειν κακῶς τὰ πράγματα, τὸ βουλευσασθαι κακῶς, τὸ ὁμιλῆσαι κακῶς, τὸ χρήσασθαι κακῶς τοῖς παροῦσιν ἀγαθοῖς, τὸ ψευδῶς δοξάζειν [1251a] περὶ τῶν εἰς τὸν βίον καλῶν καὶ ἀγαθῶν. παρακολουθεῖ δὲ τῇ ἀφροσύνῃ ἀπειρία, ἀμαθία, ἀκρασία, ἐπαριστερότης, ἀμνημοσύνη. ὀργιλότητος δ' ἐστὶν εἶδη τρία, ἀκροχολία πικρία βαρυθυμία. ἔστι δὲ τοῦ ὀργίλου μὴ δύνασθαι φέρειν μήτε τὰς μικρὰς ὀλιγορῆσεις μήτε ἐλαττώσεις, εἶναι δὲ κολαστικὸν καὶ τιμωρητικὸν καὶ εὐκίνητον πρὸς ὀργὴν καὶ ὑπὸ ἔργου καὶ ὑπὸ λόγου τοῦ τυχόντος. ἀκολουθεῖ δὲ τῇ ὀργιλότῃ τὸ παροξυντικὸν τοῦ ἥθους καὶ εὐμετάβολον, καὶ ἡ πικρολογία, καὶ τὸ ἐπὶ μικροῖς λυπεῖσθαι, καὶ τὸ ταῦτα πάσχειν ταχέως καὶ παρὰ βραχὺν καιρόν. δειλίας δ' ἐστὶ τὸ ὑπὸ τῶν τυχόντων φόβων εὐκίνητον εἶναι, καὶ μάλιστα τῶν

περὶ θάνατον καὶ τὰς σωματικὰς πηρώσεις, καὶ τὸ ὑπολαμβάνειν κρεῖττον εἶναι ὁπωσοῦν σωθῆναι ἢ τελευτῆσαι καλῶς. ἀκολουθεῖ δὲ τῇ δειλίᾳ μαλακία, ἀνανδρία, ἀπονία, φιλοψυχία. ὕπεστι δέ τις εὐλάβεια καὶ τὸ ἀφιλόνεικον τοῦ ἥθους. ἀκολασίας δ' ἐστὶ τὸ αἰρεῖσθαι τὰς ἀπολαύσεις τῶν ἡδονῶν τῶν βλαβερῶν καὶ αἰσchrῶν, καὶ τὸ ὑπολαμβάνειν εὐδαιμονεῖν μάλιστα τοὺς ἐν ταῖς τοιαύταις ἡδοναῖς ὄντας, καὶ τὸ φιλογέλοιον εἶναι καὶ τὸ φιλοσκώπτην καὶ φιλευτράπελον, καὶ τὸ ῥαδιουργὸν εἶναι ἐν τοῖς λόγοις καὶ ἐν τοῖς ἔργοις. ἀκολουθεῖ δὲ τῇ ἀκολασίᾳ ἀταξία, ἀναίδεια, ἀκοσμία, τρυφή, ῥαθυμία, ἀμέλεια, ὀλιγωρία, ἔκλυσις. ἀκρασίας δ' ἐστὶ τὸ κωλύοντος τοῦ λογισμοῦ τὰς ἀπολαύσεις τῶν ἡδονῶν αἰρεῖσθαι, καὶ τὸ ὑπολαμβάνοντα κρεῖττον εἶναι μὴ μετασχεῖν μὲν αὐτῶν, μετέχειν δὲ μηδὲν ἥττον, καὶ τὸ οἶεσθαι μὲν δεῖν πράττειν καὶ τὰ καλὰ καὶ τὰ συμφέροντα, ἀφίστασθαι δὲ αὐτῶν διὰ τὰς ἡδονάς. ἀκολουθεῖ δὲ τῇ ἀκρασίᾳ μαλακία καὶ μεταμέλεια καὶ τὰ πλεῖστα ταῦτά ᾧ καὶ τῇ ἀκολασίᾳ.

ἀδικίας δ' ἐστὶν εἶδη τρία, ἀσέβεια πλεονεξία ὕβρις. ἀσέβεια μὲν ἡ περὶ θεοὺς πλημμέλεια καὶ περὶ δαίμονας ἢ καὶ περὶ τοὺς κατοικομένους, καὶ περὶ γονεῖς καὶ περὶ πατρίδα· πλεονεξία δὲ περὶ τὰ συμβόλαια, παρὰ τὴν ἀξίαν αἰρουμένη τὸ διάφορον· ὕβρις δέ, καθ' ἣν τὰς ἡδονὰς αὐτοῖς παρασκευάζουσιν, εἰς ὄνειδος ἀγαγόντες ἑτέρους, ὅθεν Εὐήνος περὶ αὐτῆς λέγει “ἦτις κερδαίνουσ’ οὐδὲν ὅμως ἀδικεῖ.” ἔστι δὲ τῆς ἀδικίας τὸ παραβαίνειν τὰ πάτρια ἔθνη καὶ τὰ νόμιμα, καὶ τὸ ἀπειθεῖν τοῖς νόμοις καὶ τοῖς ἄρχουσι, τὸ [1251b] ψεύδεσθαι, τὸ ἐπιорκεῖν, τὸ παραβαίνειν τὰς ὁμολογίας καὶ τὰς πίστεις. ἀκολουθεῖ δὲ τῇ ἀδικίᾳ συκοφαντία, ἀλαζονεία, φιланθρωπία προσποιήτος, κακοήθεια, πανουργία. ἀνελευθερίας δ' ἐστὶν εἶδη τρία, αἰσχροκερδία φειδωλία κιμβεία. αἰσχροκερδία μὲν, καθ' ἣν κερδαίνειν ζητοῦσι πανταχόθεν, καὶ τὸ κέρδος τῆς αἰσχύνης περὶ πλείονος ποιοῦνται· φειδωλία δ' ἐστὶ καθ' ἣν ἀδάπανοι γίνονται τῶν χρημάτων εἰς τὸ δέον· κιμβεία δ' ἐστὶ καθ' ἣν δαπανῶσι μὲν, κατὰ μικρὸν δὲ καὶ κακῶς, καὶ πλέον βλάπτονται τῷ μὴ κατὰ καιρὸν ποιεῖσθαι τὸ διάφορον. ἔστι δὲ τῆς ἀνελευθερίας τὸ περὶ πλείστου ποιεῖσθαι χρήματα, καὶ τὸ μηδὲν ὄνειδος ἡγεῖσθαι τῶν ποιούντων τὸ κέρδος, βίος θητικὸς καὶ δουλοπρεπὴς καὶ ῥυπαρός, φιλοτιμίας καὶ ἐλευθερίας ἀλλότριος. ἀκολουθεῖ δὲ τῇ ἀνελευθεριότητι μικρολογία, βαρυθυμία καὶ μικροψυχία, ταπεινότης, ἀμετρία, ἀγένεις, μισανθρωπία. μικροψυχίας δ' ἐστὶ τὸ μήτε τιμὴν μήτε ἀτιμίαν μήτε εὐτυχίαν μήτε ἀτυχίαν δύνασθαι φέρειν, ἀλλὰ τιμώμενον μὲν χαυνοῦσθαι, μικρὰ δὲ εὐτυχήσαντα ὑπεξαίρεσθαι, ἀτιμίαν δὲ μηδὲ τὴν ἐλαχίστην ἐνεγκεῖν δύνασθαι, ἀπότευγμα δ' ἄτην καὶ ἀτυχίαν κρίνειν μεγάλην, ὀδύρεσθαι δ' ἐπὶ πᾶσι καὶ δυσφορεῖν. ἔτι δὲ τοιοῦτός ἐστὶν ὁ μικρόψυχος οἷος πάντα τὰ

ὀλιγωρήματα καλεῖν ὕβριν καὶ ἀτιμίαν, καὶ τὰ δι' ἄγνοιαν ἢ λήθην γιγνόμενα. ἀκολουθεῖ δὲ τῇ μικροψυχίᾳ μικρολογία, μεμψιμοιρία, δυσελπιστία, ταπεινότης.

Καθόλου δὲ τῆς μὲν ἀρετῆς ἐστὶ τὸ ποιεῖν σπουδαίαν τὴν διάθεσιν περὶ τὴν ψυχὴν, ἡρεμαίαις καὶ τεταγμέναις κινήσεσι χρωμένῃ, συμφωνοῦσαν κατὰ πάντα τὰ μέρη· διὸ καὶ δοκεῖ παράδειγμα πολιτείας ἀγαθῆς εἶναι ψυχῆς σπουδαία διάθεσις. ἔστι δὲ ἀρετῆς καὶ τὸ εὐεργετεῖν τοὺς ἀξίους, καὶ τὸ φιλεῖν τοὺς ἀγαθοὺς, καὶ τὸ μήτε κολαστικὸν εἶναι μήτε τιμωρητικόν, ἀλλὰ ἴλεων καὶ εὐμενικὸν καὶ συγγνωμονικόν. ἀκολουθεῖ δὲ τῇ ἀρετῇ χρηστότης, ἐπιείκεια, εὐγνωμοσύνη, ἐλπίς ἀγαθή. ἔτι δὲ καὶ τὰ τοιαῦτα οἷον φίλοικον εἶναι καὶ φιλόφιλον, φιλέταιρον, φιλόξενον, φιλόανθρωπον καὶ φιλόκαλον· ἃ δὲ πάντα τῶν ἐπαινουμένων ἐστίν. τῆς δὲ κακίας ἐστὶ τὰ ἐναντία.

### Πολιτικων (1252a) Politics





# CONTENTS

[Α](#)

[Β](#)

[Γ](#)

[Δ](#)

[Ε](#)

[Ζ](#)

[Η](#)

[Θ](#)

## A

[1252a] Ἐπειδὴ πᾶσαν πόλιν ὁρῶμεν κοινωνίαν τινὰ οὕσαν καὶ πᾶσαν κοινωνίαν ἀγαθοῦ τινος ἕνεκεν συνεστηκυῖαν (τοῦ γὰρ εἶναι δοκοῦντος ἀγαθοῦ χάριν πάντα πράττουσι πάντες), δῆλον ὡς πᾶσαι μὲν ἀγαθοῦ τινος στοχάζονται, μάλιστα δὲ καὶ τοῦ κυριωτάτου πάντων ἢ πασῶν κυριωτάτη καὶ πάσας περιέχουσα τὰς ἄλλας. αὕτη δ' ἐστὶν ἡ καλουμένη πόλις καὶ ἡ κοινωνία ἢ πολιτική. ὅσοι μὲν οὖν οἴονται πολιτικὸν καὶ βασιλικὸν καὶ οἰκονομικὸν καὶ δεσποτικὸν εἶναι τὸν αὐτὸν οὐ καλῶς λέγουσιν (πλήθει γὰρ καὶ ὀλιγότητι νομίζουσι διαφέρειν ἄλλ' οὐκ εἶδει τούτων ἕκαστον, οἷον ἂν μὲν ὀλίγων, δεσπότην, ἂν δὲ πλειόνων, οἰκονόμον, ἂν δ' ἔτι πλειόνων, πολιτικὸν ἢ βασιλικόν, ὡς οὐδὲν διαφέρουσιν μεγάλην οἰκίαν ἢ μικρὰν πόλιν· καὶ πολιτικὸν δὲ καὶ βασιλικόν, ὅταν μὲν αὐτὸς ἐφεστήκη, βασιλικόν, ὅταν δὲ κατὰ τοὺς λόγους τῆς ἐπιστήμης τῆς τοιαύτης κατὰ μέρος ἄρχων καὶ ἀρχόμενος, πολιτικόν· ταῦτα δ' οὐκ ἔστιν ἀληθῆ). δῆλον δ' ἔσται τὸ λεγόμενον ἐπισκοποῦσι κατὰ τὴν ὑφηγημένην μέθοδον. ὥσπερ γὰρ ἐν τοῖς ἄλλοις τὸ σύνθετον μέχρι τῶν ἀσυνθέτων ἀνάγκη διαιρεῖν (ταῦτα γὰρ ἐλάχιστα μόρια τοῦ παντός), οὕτω καὶ πόλιν ἐξ ὧν σύγκειται σκοποῦντες

ὁψόμεθα καὶ περὶ τούτων μᾶλλον, τί τε διαφέρουσιν ἀλλήλων καὶ εἴ τι τεχνικὸν ἐνδέχεται λαβεῖν περὶ ἕκαστον τῶν ῥηθέντων.

Εἰ δὴ τις ἐξ ἀρχῆς τὰ πράγματα φυόμενα βλέψειεν, ὥσπερ ἐν τοῖς ἄλλοις, καὶ ἐν τούτοις κάλλιστ' ἂν οὕτω θεωρήσειεν. ἀνάγκη δὴ πρῶτον συνδυάζεσθαι τοὺς ἄνευ ἀλλήλων μὴ δυναμένους εἶναι, οἷον θῆλυ μὲν καὶ ἄρρεν τῆς γεννήσεως ἔνεκεν (καὶ τοῦτο οὐκ ἐκ προαιρέσεως, ἀλλ' ὥσπερ καὶ ἐν τοῖς ἄλλοις ζώοις καὶ φυτοῖς φυσικὸν τὸ ἐφίεσθαι, οἷον αὐτό, τοιοῦτον καταλιπεῖν ἕτερον), ἄρχον δὲ φύσει καὶ ἀρχόμενον διὰ τὴν σωτηρίαν. τὸ μὲν γὰρ δυνάμενον τῇ διανοίᾳ προορᾶν ἄρχον φύσει καὶ δεσπόζον φύσει, τὸ δὲ δυνάμενον [ταῦτα] τῷ σώματι πονεῖν ἀρχόμενον καὶ φύσει δοῦλον· διὸ δεσπότη καὶ δούλῳ ταῦτόν συμφέρει. φύσει μὲν [1252b] οὖν διώριστα τὸ θῆλυ καὶ τὸ δοῦλον (οὐθὲν γὰρ ἢ φύσις ποιεῖ τοιοῦτον οἷον οἱ χαλκοτύποι τὴν Δελφικὴν μάχαιραν, πενιχρῶς, ἀλλ' ἐν πρὸς ἑν· οὕτω γὰρ ἂν ἀποτελοῖτο κάλλιστα τῶν ὀργάνων ἕκαστον, μὴ πολλοῖς ἔργοις ἀλλ' ἐνὶ δουλεῦον). ἐν δὲ τοῖς βαρβάροις τὸ θῆλυ καὶ τὸ δοῦλον τὴν αὐτὴν ἔχει τάξιν. αἴτιον δ' ὅτι τὸ φύσει ἄρχον οὐκ ἔχουσιν, ἀλλὰ γίνεται ἡ κοινωνία αὐτῶν δούλης καὶ δούλου. διό φασιν οἱ ποιηταὶ “βαρβάρων δ' Ἑλλήνας ἄρχειν εἰκός”, ὥς ταῦτόν φύσει βάρβαρον καὶ δοῦλον ὄν. ἐκ μὲν οὖν τούτων τῶν δύο κοινωνιῶν οἰκία πρώτη, καὶ ὀρθῶς Ἡσίοδος εἶπε ποιήσας “οἶκον μὲν πρῶτιστα γυναῖκά τε βοῦν τ' ἄροτῆρα”. ὁ γὰρ βοῦς ἀντ' οἰκέτου τοῖς πένησιν ἐστίν. ἡ μὲν οὖν εἰς πᾶσαν ἡμέραν συνεστηκυῖα κοινωνία κατὰ φύσιν οἶκός ἐστιν, οὓς Χαρώνδας μὲν καλεῖ ὁμοσιπύους, Ἐπιμενίδης δὲ ὁ Κρής ὁμοκάπους· ἡ δ' ἐκ πλειόνων οἰκιῶν κοινωνία πρώτη χρήσεως ἔνεκεν μὴ ἐφημέρου κώμη. μάλιστα δὲ κατὰ φύσιν ἔοικεν ἡ κώμη ἀποικία οἰκίας εἶναι, οὓς καλοῦσιν τινες ὁμογάλακτας, παῖδάς τε καὶ παίδων παῖδας. διὸ καὶ τὸ πρῶτον ἐβασιλεύοντο αἱ πόλεις, καὶ νῦν ἔτι τὰ ἔθνη· ἐκ βασιλευσμένων γὰρ συνῆλθον· πᾶσα γὰρ οἰκία βασιλεύεται ὑπὸ τοῦ πρεσβυτάτου, ὥστε καὶ αἱ ἀποικίαι, διὰ τὴν συγγένειαν. καὶ τοῦτ' ἐστὶν ὃ λέγει Ὅμηρος “θεμιστεύει δὲ ἕκαστος παίδων ἡδ' ἀλόχων”. σποράδες γάρ· καὶ οὕτω τὸ ἀρχαῖον ὥκουν. καὶ τοὺς θεοὺς δὲ διὰ τοῦτο πάντες φασὶ βασιλεύεσθαι, ὅτι καὶ αὐτοὶ οἱ μὲν ἔτι καὶ νῦν οἱ δὲ τὸ ἀρχαῖον ἐβασιλεύοντο, ὥσπερ δὲ καὶ τὰ εἶδη ἑαυτοῖς ἀφομοιοῦσιν οἱ ἄνθρωποι, οὕτω καὶ τοὺς βίους τῶν θεῶν.

ἡ δ' ἐκ πλειόνων κωμῶν κοινωνία τέλειος πόλις, ἥδη πάσης ἔχουσα πέρας τῆς αὐταρκειᾶς ὥς ἔπος εἰπεῖν, γινομένη μὲν τοῦ ζῆν ἔνεκεν, οὕσα δὲ τοῦ εὖ ζῆν. διὸ πᾶσα πόλις φύσει ἐστίν, εἴπερ καὶ αἱ πρῶται κοινωνίαι. τέλος γὰρ αὕτη ἐκείνων, ἡ δὲ φύσις τέλος ἐστίν· οἷον γὰρ ἕκαστόν ἐστι τῆς γενέσεως τελεσθείσης, ταύτην φαμὲν τὴν φύσιν εἶναι ἐκάστου, ὥσπερ ἀνθρώπου ἵππου

οἰκίας. ἔτι τὸ οὐ ἔνεκα καὶ τὸ τέλος βέλτιστον· [1253a] ἡ δ' αὐτάρκεια καὶ τέλος καὶ βέλτιστον. ἐκ τούτων οὖν φανερόν ὅτι τῶν φύσει ἡ πόλις ἐστὶ, καὶ ὅτι ὁ ἄνθρωπος φύσει πολιτικὸν ζῷον, καὶ ὁ ἄπολις διὰ φύσιν καὶ οὐ διὰ τύχην ἦτοι φαῦλός ἐστιν, ἢ κρείττων ἢ ἄνθρωπος· ὥσπερ καὶ ὁ ὑφ' Ὀμήρου λοιδορηθεὶς “ἀφρήτωρ ἀθέμιστος ἀνέστιος”. ἅμα γὰρ φύσει τοιοῦτος καὶ πολέμου ἐπιθυμητής, ἅτε περ ἄζυξ ὢν ὥσπερ ἐν πεττοῖς. διότι δὲ πολιτικὸν ὁ ἄνθρωπος ζῷον πάσης μελίττης καὶ παντὸς ἀγελαίου ζώου μᾶλλον, δῆλον. οὐθὲν γάρ, ὡς φασί, μάτην ἡ φύσις ποιεῖ· λόγον δὲ μόνον ἄνθρωπος ἔχει τῶν ζώων· ἡ μὲν οὖν φωνὴ τοῦ λυπηροῦ καὶ ἡδέος ἐστὶ σημεῖον, διὸ καὶ τοῖς ἄλλοις ὑπάρχει ζώοις (μέχρι γὰρ τούτου ἡ φύσις αὐτῶν ἐλήλυθε, τοῦ ἔχειν αἴσθησιν λυπηροῦ καὶ ἡδέος καὶ ταῦτα σημαίνειν ἀλλήλοις), ὁ δὲ λόγος ἐπὶ τῷ δηλοῦν ἐστὶ τὸ συμφέρον καὶ τὸ βλαβερόν, ὥστε καὶ τὸ δίκαιον καὶ τὸ ἀδίκον· τοῦτο γὰρ πρὸς τὰ ἄλλα ζῶα τοῖς ἀνθρώποις ἴδιον, τὸ μόνον ἀγαθοῦ καὶ κακοῦ καὶ δικαίου καὶ ἀδίκου καὶ τῶν ἄλλων αἴσθησιν ἔχειν· ἡ δὲ τούτων κοινωνία ποιεῖ οἰκίαν καὶ πόλιν. καὶ πρότερον δὲ τῇ φύσει πόλις ἢ οἰκία καὶ ἕκαστος ἡμῶν ἐστίν. τὸ γὰρ ὅλον πρότερον ἀναγκαῖον εἶναι τοῦ μέρους· ἀναιρουμένου γὰρ τοῦ ὅλου οὐκ ἔσται πούς οὐδὲ χεῖρ, εἰ μὴ ὁμωνύμως, ὥσπερ εἴ τις λέγοι τὴν λιθίνην (διαφθαρεῖσα γὰρ ἔσται τοιαύτη), πάντα δὲ τῷ ἔργῳ ὥριστα καὶ τῇ δυνάμει, ὥστε μηκέτι τοιαῦτα ὄντα οὐ λεκτέον τὰ αὐτὰ εἶναι ἄλλ' ὁμώνυμα. ὅτι μὲν οὖν ἡ πόλις καὶ φύσει καὶ πρότερον ἢ ἕκαστος, δῆλον· εἰ γὰρ μὴ αὐτάρκης ἕκαστος χωρισθεὶς, ὁμοίως τοῖς ἄλλοις μέρεσιν ἔξει πρὸς τὸ ὅλον, ὁ δὲ μὴ δυνάμενος κοινωνεῖν ἢ μηδὲν δεόμενος δι' αὐτάρκειαν οὐθὲν μέρος πόλεως, ὥστε ἢ θηρίον ἢ θεός.

φύσει μὲν οὖν ἡ ὁρμὴ ἐν πᾶσιν ἐπὶ τὴν τοιαύτην κοινωνίαν· ὁ δὲ πρῶτος συστήσας μεγίστων ἀγαθῶν αἴτιος. ὥσπερ γὰρ καὶ τελεωθεὶς βέλτιστον τῶν ζώων ἄνθρωπός ἐστιν, οὕτω καὶ χωρισθεὶς νόμου καὶ δίκης χεῖριστον πάντων. χαλεπωτάτη γὰρ ἀδικία ἔχουσα ὅπλα· ὁ δὲ ἄνθρωπος ὅπλα ἔχων φύεται φρονήσει καὶ ἀρετῇ, οἷς ἐπὶ τὰναντία ἔστι χρῆσθαι μάλιστα. διὸ ἀνοσιώτατον καὶ ἀγριώτατον ἄνευ ἀρετῆς, καὶ πρὸς ἀφροδίσια καὶ ἐδωδὴν χεῖριστον. ἡ δὲ δικαιοσύνη πολιτικόν· ἡ γὰρ δίκη πολιτικῆς κοινωνίας τάξις ἐστίν, ἡ δὲ δικαιοσύνη τοῦ δικαίου κρίσις.

[1253b] Ἐπεὶ δὲ φανερόν ἐξ ὧν μορίων ἡ πόλις συνέστηκεν, ἀναγκαῖον πρῶτον περὶ οἰκονομίας εἰπεῖν· πᾶσα γὰρ σύγκειται πόλις ἐξ οἰκιῶν. οἰκονομίας δὲ μέρη ἐξ ὧν πάλιν οἰκία συνέστηκεν· οἰκία δὲ τέλειος ἐκ δούλων καὶ ἐλευθέρων. ἐπεὶ δ' ἐν τοῖς ἐλαχίστοις πρῶτον ἕκαστον ζητητέον, πρῶτα δὲ καὶ ἐλάχιστα μέρη οἰκίας δεσπότης καὶ δοῦλος, καὶ πόσις καὶ ἄλοχος, καὶ πατὴρ καὶ τέκνα, περὶ τριῶν ἂν τούτων σκεπτέον εἴη τί ἕκαστον καὶ ποῖον δεῖ

εἶναι. ταῦτα δ' ἐστὶ δεσποτικὴ καὶ γαμικὴ (ἀνώνυμον γὰρ ἡ γυναικὸς καὶ ἀνδρὸς σύζευξις) καὶ τρίτον τεκνοποιητικὴ (καὶ γὰρ αὕτη οὐκ ὠνόμασται ἰδίῳ ὀνόματι). ἔστωσαν δὴ αὗται <αἱ> τρεῖς ἃς εἶπομεν. ἔστι δέ τι μέρος ὃ δοκεῖ τοῖς μὲν εἶναι οἰκονομία, τοῖς δὲ μέγιστον μέρος αὐτῆς· ὅπως δ' ἔχει, θεωρητέον· λέγω δὲ περὶ τῆς καλουμένης χρηματιστικῆς. πρῶτον δὲ περὶ δεσπότου καὶ δούλου εἶπωμεν, ἵνα τὰ τε πρὸς τὴν ἀναγκαίαν χρεῖαν ἴδωμεν, καὶ εἴ τι πρὸς τὸ εἰδέναι περὶ αὐτῶν δυνάμεθα λαβεῖν βέλτιον τῶν νῦν ὑπολαμβανομένων. τοῖς μὲν γὰρ δοκεῖ ἐπιστήμη τέ τις εἶναι ἡ δεσποτεία, καὶ ἡ αὐτὴ οἰκονομία καὶ δεσποτεία καὶ πολιτικὴ καὶ βασιλική, καθάπερ εἶπομεν ἀρχόμενοι· τοῖς δὲ παρὰ φύσιν τὸ δεσπόζειν (νόμῳ γὰρ τὸν μὲν δοῦλον εἶναι τὸν δ' ἐλεύθερον, φύσει δ' οὐθὲν διαφέρειν)· διόπερ οὐδὲ δίκαιον· βίαιον γάρ.

Ἐπεὶ οὖν ἡ κτῆσις μέρος τῆς οἰκίας ἐστὶ καὶ ἡ κτητικὴ μέρος τῆς οἰκονομίας (ἄνευ γὰρ τῶν ἀναγκαίων ἀδύνατον καὶ ζῆν καὶ εὖ ζῆν), ὥσπερ δὴ ταῖς ὠρισμέναις τέχναις ἀναγκαῖον ἂν εἴη ὑπάρχειν τὰ οἰκεῖα ὄργανα, εἰ μέλλει ἀποτελεσθῆσθαι τὸ ἔργον, οὕτω καὶ τῷ οἰκονομικῷ. τῶν δ' ὀργάνων τὰ μὲν ἄψυχα τὰ δὲ ἔμψυχα (οἷον τῷ κυβερνήτῃ ὁ μὲν οἷαξ ἄψυχον ὁ δὲ πρῶρεὺς ἔμψυχον· ὁ γὰρ ὑπηρέτης ἐν ὀργάνου εἶδει ταῖς τέχναις ἐστίν)· οὕτω καὶ τὸ κτῆμα ὄργανον πρὸς ζωὴν ἐστὶ, καὶ ἡ κτῆσις πλῆθος ὀργάνων ἐστί, καὶ ὁ δοῦλος κτῆμά τι ἔμψυχον, καὶ ὥσπερ ὄργανον πρὸ ὀργάνων πᾶς ὑπηρέτης. εἰ γὰρ ἡδύνατο ἕκαστον τῶν ὀργάνων κελευσθὲν ἢ προαισθανόμενον ἀποτελεῖν τὸ αὐτοῦ ἔργον, <καὶ> ὥσπερ τὰ Δαιδάλου φασὶν ἢ τοὺς τοῦ Ἡφαίστου τρίποδας, οὓς φησιν ὁ ποιητὴς αὐτομάτους θεῖον δύεσθαι ἀγῶνα, οὕτως αἱ κερκίδες ἐκέρκιζον αὐταῖ καὶ τὰ πλῆκτρα ἐκιθάριζεν, οὐδὲν ἂν ἔδει οὔτε τοῖς ἀρχιτέκτοσιν [1254a] ὑπηρετῶν οὔτε τοῖς δεσπόταις δούλων. τὰ μὲν οὖν λεγόμενα ὄργανα ποιητικὰ ὄργανά ἐστι, τὸ δὲ κτῆμα πρακτικόν· ἀπὸ μὲν γὰρ τῆς κερκίδος ἕτερόν τι γίνεται παρὰ τὴν χρῆσιν αὐτῆς, ἀπὸ δὲ τῆς ἐσθῆτος καὶ τῆς κλίνης ἡ χρῆσις μόνον. ἔτι δ' ἐπεὶ διαφέρει ἡ ποίησις εἶδει καὶ ἡ πρᾶξις, καὶ δέονται ἀμφοτέραι ὀργάνων, ἀνάγκη καὶ ταῦτα τὴν αὐτὴν ἔχειν διαφοράν. ὁ δὲ βίος πρᾶξις, οὐ ποίησις, ἐστίν· διὸ καὶ ὁ δοῦλος ὑπηρέτης τῶν πρὸς τὴν πρᾶξιν. τὸ δὲ κτῆμα λέγεται ὥσπερ καὶ τὸ μόριον. τό τε γὰρ μόριον οὐ μόνον ἄλλου ἐστὶ μόριον, ἀλλὰ καὶ ὅλως ἄλλου· ὁμοίως δὲ καὶ τὸ κτῆμα. διὸ ὁ μὲν δεσπότης τοῦ δούλου δεσπότης μόνον, ἐκείνου δ' οὐκ ἔστιν· ὁ δὲ δοῦλος οὐ μόνον δεσπότου δοῦλος ἐστίν, ἀλλὰ καὶ ὅλως ἐκείνου.

τίς μὲν οὖν ἡ φύσις τοῦ δούλου καὶ τίς ἡ δύναμις, ἐκ τούτων δῆλον· ὁ γὰρ μὴ αὐτοῦ φύσει ἄλλ' ἄλλου ἄνθρωπος ὢν, οὗτος φύσει δοῦλός ἐστιν, ἄλλου δ' ἐστὶν ἄνθρωπος ὃς ἂν κτῆμα ἢ ἄνθρωπος ὢν, κτῆμα δὲ ὄργανον

πρακτικὸν καὶ χωριστόν.

Πότερον δ' ἔστι τις φύσει τοιοῦτος ἢ οὐ, καὶ πότερον βέλτιον καὶ δίκαιόν τι διδουλεύειν ἢ οὐ, ἀλλὰ πᾶσα δουλεία παρὰ φύσιν ἐστὶ, μετὰ ταῦτα σκεπτέον. οὐ χαλεπὸν δὲ καὶ τῷ λόγῳ θεωρῆσαι καὶ ἐκ τῶν γινομένων καταμαθεῖν. τὸ γὰρ ἄρχειν καὶ ἄρχεσθαι οὐ μόνον τῶν ἀναγκαίων ἀλλὰ καὶ τῶν συμφερόντων ἐστὶ, καὶ εὐθύς ἐκ γενετῆς ἕνια διέστηκε τὰ μὲν ἐπὶ τὸ ἄρχεσθαι τὰ δ' ἐπὶ τὸ ἄρχειν. καὶ εἶδη πολλὰ καὶ ἀρχόντων καὶ ἀρχομένων ἔστιν (καὶ ἀεὶ βελτίων ἢ ἀρχὴ ἢ τῶν βελτιόνων ἀρχομένων, οἷον ἀνθρώπου ἢ θηρίου· τὸ γὰρ ἀποτελούμενον ὑπὸ τῶν βελτιόνων βέλτιον ἔργον· ὅπου δὲ τὸ μὲν ἄρχει τὸ δ' ἄρχεται, ἔστι τι τούτων ἔργον). ὅσα γὰρ ἐκ πλειόνων συνέστηκε καὶ γίνεται ἕν τι κοινόν, εἴτε ἐκ συνεχῶν εἴτε ἐκ διηρημένων, ἐν ἅπασιν ἐμφαίνεται τὸ ἄρχον καὶ τὸ ἀρχόμενον, καὶ τοῦτο ἐκ τῆς ἀπάσης φύσεως ἐνυπάρχει τοῖς ἐμψύχοις· καὶ γὰρ ἐν τοῖς μὴ μετέχουσι ζωῆς ἔστι τις ἀρχή, οἷον ἀρμονίας. ἀλλὰ ταῦτα μὲν ἴσως ἐξωτερικωτέρας ἐστὶ σκέψεως· τὸ δὲ ζῶον πρῶτον συνέστηκεν ἐκ ψυχῆς καὶ σώματος, ὧν τὸ μὲν ἄρχον ἐστὶ φύσει τὸ δ' ἀρχόμενον. δεῖ δὲ σκοπεῖν ἐν τοῖς κατὰ φύσιν ἔχουσι μᾶλλον τὸ φύσει, καὶ μὴ ἐν τοῖς διεφθαρμένοις· διὸ καὶ τὸν βέλτιστα διακείμενον καὶ κατὰ σῶμα καὶ κατὰ ψυχὴν ἄνθρωπον θεωρητέον, ἐν ᾧ τοῦτο δῆλον· τῶν γὰρ μοχθηρῶν ἢ [1254b] μοχθηρῶς ἐχόντων δόξειεν ἂν ἄρχειν πολλάκις τὸ σῶμα τῆς ψυχῆς διὰ τὸ φαύλως καὶ παρὰ φύσιν ἔχειν.

ἔστι δ' οὖν, ὥσπερ λέγομεν, πρῶτον ἐν ζῳῳ θεωρῆσαι καὶ δεσποτικὴν ἀρχὴν καὶ πολιτικὴν· ἢ μὲν γὰρ ψυχὴ τοῦ σώματος ἄρχει δεσποτικὴν ἀρχήν, ὃ δὲ νοῦς τῆς ὀρέξεως πολιτικὴν ἢ βασιλικήν· ἐν οἷς φανερόν ἐστιν ὅτι κατὰ φύσιν καὶ συμφέρον τὸ ἄρχεσθαι τῷ σώματι ὑπὸ τῆς ψυχῆς, καὶ τῷ παθητικῷ μορίῳ ὑπὸ τοῦ νοῦ καὶ τοῦ μορίου τοῦ λόγον ἔχοντος, τὸ δ' ἐξ ἴσου ἢ ἀνάπαλιν βλαβερὸν πᾶσιν. πάλιν ἐν ἀνθρώπῳ καὶ τοῖς ἄλλοις ζώοις ὡσαύτως· τὰ μὲν γὰρ ἡμεῖς τῶν ἀγρίων βελτίῳ τὴν φύσιν, τούτοις δὲ πᾶσι βέλτιον ἄρχεσθαι ὑπ' ἀνθρώπου· τυγχάνει γὰρ σωτηρίας οὕτως. ἔτι δὲ τὸ ἄρρεν πρὸς τὸ θῆλυ φύσει τὸ μὲν κρεῖττον τὸ δὲ χεῖρον, καὶ τὸ μὲν ἄρχον τὸ δ' ἀρχόμενον. τὸν αὐτὸν δὲ τρόπον ἀναγκαῖον εἶναι καὶ ἐπὶ πάντων ἀνθρώπων. ὅσοι μὲν οὖν τοσοῦτον διεστᾶσιν ὅσον ψυχὴ σώματος καὶ ἄνθρωπος θηρίου (διάκεινται δὲ τοῦτον τὸν τρόπον ὅσων ἐστὶν ἔργον ἢ τοῦ σώματος χρήσις, καὶ τοῦτ' ἐστ' ἀπ' αὐτῶν βέλτιστον), οὗτοι μὲν εἰσι φύσει δοῦλοι, οἷς βελτιόν ἐστιν ἄρχεσθαι ταύτην τὴν ἀρχήν, εἴπερ καὶ τοῖς εἰρημένοις. ἔστι γὰρ φύσει δοῦλος ὁ δυνάμενος ἄλλου εἶναι (διὸ καὶ ἄλλου ἐστίν), καὶ ὁ κοινωνῶν λόγου τοσοῦτον ὅσον αἰσθάνεσθαι ἀλλὰ μὴ ἔχειν. τὰ γὰρ ἄλλα ζῶα οὐ λόγῳ [αἰσθανόμενα] ἀλλὰ παθήμασιν ὑπηρετεῖ. καὶ ἡ χρεια

δὲ παραλλάττει μικρόν· ἡ γὰρ πρὸς τὰναγκαῖα τῷ σώματι βοήθεια γίνεται παρ' ἄμφοϊν, παρά τε τῶν δούλων καὶ παρὰ τῶν ἡμέρων ζώων. βούλεται μὲν οὖν ἡ φύσις καὶ τὰ σώματα διαφέροντα ποιεῖν τὰ τῶν ἐλευθέρων καὶ τῶν δούλων, τὰ μὲν ἰσχυρὰ πρὸς τὴν ἀναγκαίαν χρῆσιν, τὰ δ' ὀρθὰ καὶ ἄχρηστα πρὸς τὰς τοιαύτας ἐργασίας, ἀλλὰ χρήσιμα πρὸς πολιτικὸν βίον (οὗτος δὲ καὶ γίνεται διηρημένος εἰς τε τὴν πολεμικὴν χρεῖαν καὶ τὴν εἰρηνικὴν), συμβαίνει δὲ πολλάκις καὶ τοῦναντίον, τοὺς μὲν τὰ σώματα ἔχειν ἐλευθέρων τοὺς δὲ τὰς ψυχάς· ἐπεὶ τοῦτό γε φανερόν, ὥς εἰ τοσοῦτον γένοιτο διάφοροι τὸ σῶμα μόνον ὅσον αἱ τῶν θεῶν εἰκόνες, τοὺς ὑπολειπομένους πάντες φαῖεν ἂν ἀξιούς εἶναι τούτοις δουλεύειν. εἰ δ' ἐπὶ τοῦ σώματος τοῦτ' ἀληθές, πολὺ δικαιότερον ἐπὶ τῆς ψυχῆς τοῦτο διωρίσθαι· ἀλλ' οὐχ ὁμοίως ῥᾶδιον ἰδεῖν τό τε τῆς ψυχῆς κάλλος καὶ τὸ τοῦ σώματος· ὅτι μὲν [1255a] τοίνυν εἰσὶ φύσει τινὲς οἱ μὲν ἐλεύθεροι οἱ δὲ δοῦλοι, φανερόν, οἷς καὶ συμφέρει τὸ δουλεύειν καὶ δίκαιόν ἐστιν.

Ὅτι δὲ καὶ οἱ τὰναντία φάσκοντες τρόπον τινὰ λέγουσιν ὀρθῶς, οὐ χαλεπὸν ἰδεῖν. διχῶς γὰρ λέγεται τὸ δουλεύειν καὶ ὁ δοῦλος. ἔστι γάρ τις καὶ κατὰ νόμον δοῦλος καὶ δουλεύων· ὁ γὰρ νόμος ὁμολογία τίς ἐστίν ἐν ἡ τὰ κατὰ πόλεμον κρατούμενα τῶν κρατούντων εἶναί φασιν. τοῦτο δὲ τὸ δίκαιον πολλοὶ τῶν ἐν τοῖς νόμοις ὥσπερ ῥήτορα γράφονται παρανόμων, ὥς δεινὸν <ὸν> εἰ τοῦ βιάσασθαι δυναμένου καὶ κατὰ δύναμιν κρείττονος ἔσται δοῦλον καὶ ἀρχόμενον τὸ βιασθέν. καὶ τοῖς μὲν οὕτως δοκεῖ τοῖς δ' ἐκείνως, καὶ τῶν σοφῶν. αἴτιον δὲ ταύτης τῆς ἀμφισβητήσεως, καὶ ὃ ποιεῖ τοὺς λόγους ἐπαλλάττειν, ὅτι τρόπον τινὰ ἀρετὴ τυγχάνουσα χορηγίας καὶ βιάζεσθαι δύναται μάλιστα, καὶ ἔστιν ἀεὶ τὸ κρατοῦν ἐν ὑπεροχῇ ἀγαθοῦ τινος, ὥστε δοκεῖν μὴ ἄνευ ἀρετῆς εἶναι τὴν βίαν, ἀλλὰ περὶ τοῦ δικαίου μόνον εἶναι τὴν ἀμφισβήτησιν (διὰ γὰρ τοῦτο τοῖς μὲν ἄνοια δοκεῖ τὸ δίκαιον εἶναι, τοῖς δ' αὐτὸ τοῦτο δίκαιον, τὸ τὸν κρείττονα ἄρχειν)· ἐπεὶ διαστάντων γε χωρὶς τούτων τῶν λόγων οὔτε ἰσχυρὸν οὐθὲν ἔχουσιν οὔτε πιθανὸν ἄτεροι λόγοι, ὥς οὐ δεῖ τὸ βέλτιον κατ' ἀρετὴν ἄρχειν καὶ δεσπόζειν. ὅλως δ' ἀντεχόμενοί τινες, ὥς οἴονται, δικαίου τινός (ὁ γὰρ νόμος δίκαιόν τι) τὴν κατὰ πόλεμον δουλείαν τιθέασι δικαίαν, ἅμα δ' οὗ φασιν· τὴν τε γὰρ ἀρχὴν ἐνδέχεται μὴ δικαίαν εἶναι τῶν πολέμων, καὶ τὸν ἀνάξιον δουλεύειν οὐδαμῶς ἂν φαίη τις δοῦλον εἶναι· εἰ δὲ μή, συμβήσεται τοὺς εὐγενεστάτους εἶναι δοκοῦντας δούλους εἶναι καὶ ἐκ δούλων, ἐὰν συμβῇ πραθῆναι ληφθέντας. διόπερ αὐτοὺς οὐ βούλονται λέγειν δούλους, ἀλλὰ τοὺς βαρβάρους. καίτοι ὅταν τοῦτο λέγωσιν, οὐθὲν ἄλλο ζητοῦσιν ἢ τὸ φύσει δοῦλον ὅπερ ἐξ ἀρχῆς εἴπομεν· ἀνάγκη γὰρ εἶναί τινας φάναι τοὺς μὲν πανταχοῦ δούλους τοὺς δ' οὐδαμοῦ. τὸν αὐτὸν δὲ τρόπον καὶ περὶ εὐγενείας· αὐτοὺς μὲν γὰρ οὐ μόνον παρ'

αὐτοῖς εὐγενεῖς ἀλλὰ πανταχοῦ νομίζουσιν, τοὺς δὲ βαρβάρους οἴκοι μόνον, ὡς ὅν τι τὸ μὲν ἀπλῶς εὐγενὲς καὶ ἐλεύθερον τὸ δ' οὐχ ἀπλῶς, ὥσπερ καὶ ἡ Θεοδέκτου Ἑλένη φησὶ

“θείων δ' ἅπ' ἀμφοῖν ἔκγονον ῥιζωμάτων

τίς ἂν προσειπεῖν ἀξιώσκειν λάτριν;”

ὅταν δὲ τοῦτο λέγωσιν, οὐθενὶ ἀλλ' ἢ ἀρετῇ καὶ κακίᾳ διορίζουσι τὸ δοῦλον καὶ ἐλεύθερον, καὶ τοὺς εὐγενεῖς καὶ τοὺς [1255b] δυσγενεῖς. ἀξιοῦσι γάρ, ὥσπερ ἐξ ἀνθρώπου ἄνθρωπον καὶ ἐκ θηρίων γίνεσθαι θηρίον, οὕτω καὶ ἐξ ἀγαθῶν ἀγαθόν. ἡ δὲ φύσις βούλεται μὲν τοῦτο ποιεῖν πολλάκις, οὐ μέντοι δύναται.

ὅτι μὲν οὖν ἔχει τινὰ λόγον ἡ ἀμφισβήτησις, καὶ οὐκ ἀείεισιν οἱ μὲν φύσει δοῦλοι οἱ δ' ἐλεύθεροι, δῆλον, καὶ ὅτι ἔν τισι διώριστα τὸ τοιοῦτον, ὧν συμφέρει τῷ μὲν τὸ δουλεύειν τῷ δὲ τὸ δεσπόζειν [καὶ δίκαιον], καὶ δεῖ τὸ μὲν ἄρχεσθαι τὸ δ' ἄρχειν ἢν πεφύκασιν ἀρχὴν ἄρχειν, ὥστε καὶ δεσπόζειν, τὸ δὲ κακῶς ἀσυμφόρως ἐστὶν ἀμφοῖν (τὸ γὰρ αὐτὸ συμφέρει τῷ μέρει καὶ τῷ ὅλῳ, καὶ σώματι καὶ ψυχῇ, ὃ δὲ δοῦλος μέρος τι τοῦ δεσπότου, οἶον ἔμψυχόν τι τοῦ σώματος κεχωρισμένον δὲ μέρος· διὸ καὶ συμφέρον ἐστὶ τι καὶ φιλία δούλῳ καὶ δεσπότη πρὸς ἀλλήλους τοῖς φύσει τούτων ἡξιωμένοις, τοῖς δὲ μὴ τοῦτον τὸν τρόπον, ἀλλὰ κατὰ νόμον καὶ βιασθεῖσι, τούναντίον).

Φανερόν δὲ καὶ ἐκ τούτων ὅτι οὐ ταυτόν ἐστι δεσποτεία καὶ πολιτική, οὐδὲ πᾶσαι ἀλλήλαις αἱ ἀρχαί, ὥσπερ τινὲς φασιν. ἡ μὲν γὰρ ἐλευθέρων φύσει ἡ δὲ δούλων ἐστίν, καὶ ἡ μὲν οἰκονομικὴ μοναρχία (μοναρχεῖται γὰρ πᾶς οἶκος), ἡ δὲ πολιτικὴ ἐλευθέρων καὶ ἴσων ἀρχή. ὁ μὲν οὖν δεσπότης οὐ λέγεται κατ' ἐπιστήμην, ἀλλὰ τῷ τοιόσδ' εἶναι, ὁμοίως δὲ καὶ ὁ δοῦλος καὶ ὁ ἐλεύθερος. ἐπιστήμη δ' ἂν εἴη καὶ δεσποτικὴ καὶ δουλική, δουλικὴ μὲν οἶαν περ ὁ ἐν Συρακούσαις ἐπαίδευεν· ἐκεῖ γὰρ λαμβάνων τις μισθὸν ἐδίδασκε τὰ ἐγκύκλια διακονήματα τοὺς παῖδας· εἴη δ' ἂν καὶ ἐπὶ πλεῖον τῶν τοιούτων μάθησις, οἶον ὁψοποικὴ καὶ τᾶλλα τὰ τοιαῦτα γένη τῆς διακονίας. ἔστι γὰρ ἕτερα ἐτέρων τὰ μὲν ἐντιμότερα ἔργα τὰ δ' ἀναγκαιότερα, καὶ κατὰ τὴν παροιμίαν “δοῦλος πρὸ δούλου, δεσπότης πρὸ δεσπότου”. αἱ μὲν οὖν τοιαῦται πᾶσαι δουλικαὶ ἐπιστήμαί εἰσι· δεσποτικὴ δ' ἐπιστήμη ἐστὶν ἡ χρηστικὴ δούλων. ὁ γὰρ δεσπότης οὐκ ἐν τῷ κτᾶσθαι τοὺς δούλους, ἀλλ' ἐν τῷ χρῆσθαι δούλοις. ἔστι δ' αὕτη ἡ ἐπιστήμη οὐδὲν μέγα ἔχουσα οὐδὲ σεμνόν· ἃ γὰρ τὸν δοῦλον ἐπίστασθαι δεῖ ποιεῖν, ἐκεῖνον δεῖ ταῦτα ἐπίστασθαι

ἐπιτάττειν. διὸ ὅσοις ἐξουσία μὴ αὐτοὺς κακοπαθεῖν, ἐπίτροπός <τις> λαμβάνει ταύτην τὴν τιμὴν, αὐτοὶ δὲ πολιτεύονται ἢ φιλοσοφοῦσιν. ἡ δὲ κτητικὴ ἑτέρα ἀμφοτέρων τούτων, οἷον ἡ δικαία, πολεμικὴ τις οὕσα ἢ θηρευτικὴ. περὶ μὲν οὖν δούλου καὶ δεσπότου τοῦτον διωρίσθω τὸν τρόπον.

[1256a] Ὅλως δὲ περὶ πάσης κτήσεως καὶ χρηματιστικῆς θεωρήσωμεν κατὰ τὸν ὑφηγημένον τρόπον, ἐπεὶ καὶ ὁ δοῦλος τῆς κτήσεως μέρος τι ἦν. πρῶτον μὲν οὖν ἀπορήσειεν ἄν τις πότερον ἡ χρηματιστικὴ ἢ αὐτὴ τῇ οἰκονομικῇ ἐστὶν ἢ μέρος τι, ἢ ὑπηρετικὴ, καὶ εἰ ὑπηρετικὴ, πότερον ὡς ἡ κερκιδοποικὴ τῇ ὑφαντικῇ ἢ ὡς ἡ χαλκουργικὴ τῇ ἀνδριαντοποιίᾳ (οὐ γὰρ ὡσαύτως ὑπηρετοῦσιν, ἀλλ' ἡ μὲν ὄργανα παρέχει, ἡ δὲ τὴν ὕλην· λέγω δὲ ὕλην τὸ ὑποκείμενον ἐξ οὗ τι ἀποτελεῖται ἔργον, οἷον ὑφάντη μὲν ἔρια ἀνδριαντοποιῶ δὲ χαλκόν). ὅτι μὲν οὖν οὐχ ἡ αὐτὴ ἢ οἰκονομικὴ τῇ χρηματιστικῇ, δῆλον (τῆς μὲν γὰρ τὸ πορίσασθαι, τῆς δὲ τὸ χρήσασθαι· τίς γὰρ ἔσται ἡ χρησομένη τοῖς κατὰ τὴν οἰκίαν παρὰ τὴν οἰκονομικήν;)- πότερον δὲ μέρος αὐτῆς ἐστὶ τι ἢ ἕτερον εἶδος, ἔχει διαμφισβήτησιν· εἰ γὰρ ἐστὶ τοῦ χρηματιστικοῦ θεωρῆσαι πόθεν χρήματα καὶ κτῆσις ἔσται, ἢ γε κτῆσις πολλὰ περιείληφε μέρη καὶ ὁ πλοῦτος, ὥστε πρῶτον ἡ γεωργικὴ πότερον μέρος τι τῆς χρηματιστικῆς ἢ ἕτερόν τι γένος, καὶ καθόλου ἢ περὶ τὴν τροφήν ἐπιμέλεια καὶ κτῆσις; ἀλλὰ μὴν εἶδη γε πολλὰ τροφῆς, διὸ καὶ βίοι πολλοὶ καὶ τῶν ζώων καὶ τῶν ἀνθρώπων εἰσὶν· οὐ γὰρ οἷόν τε ζῆν ἄνευ τροφῆς, ὥστε αἱ διαφοραὶ τῆς τροφῆς τοὺς βίους πεποιήκασιν διαφέροντας τῶν ζώων. τῶν τε γὰρ θηρίων τὰ μὲν ἀγελαῖα τὰ δὲ σποραδικὰ ἐστὶν, ὁποτέρως συμφέρει πρὸς τὴν τροφήν αὐτοῖς διὰ τὸ τὰ μὲν ζωοφάγα τὰ δὲ καρποφάγα τὰ δὲ παμφάγα αὐτῶν εἶναι, ὥστε πρὸς τὰς ῥαστώνας καὶ τὴν αἵρεσιν τὴν τούτων ἢ φύσιν τοὺς βίους αὐτῶν διώρισεν, ἐπεὶ δ' οὐ ταὐτὸ ἐκάστω ἡδὺ κατὰ φύσιν ἀλλὰ ἕτερα ἑτέροις, καὶ αὐτῶν τῶν ζωοφάγων καὶ τῶν καρποφάγων οἱ βίοι πρὸς ἄλληλα διεστᾶσιν· ὁμοίως δὲ καὶ τῶν ἀνθρώπων. πολὺ γὰρ διαφέρουσιν οἱ τούτων βίοι. οἱ μὲν οὖν ἀργότατοι νομάδες εἰσὶν (ἡ γὰρ ἀπὸ τῶν ἡμέρων τροφή ζώων ἄνευ πόνου γίνεται σχολάζουσιν· ἀναγκαίου δ' ὄντος μεταβάλλειν τοῖς κτήγεσι διὰ τὰς νομὰς καὶ αὐτοὶ ἀναγκάζονται συνακολουθεῖν, ὥσπερ γεωργίαν ζῶσαν γεωργοῦντες)- οἱ δ' ἀπὸ θήρας ζῶσι, καὶ θήρας ἕτεροι ἑτέρας, οἷον οἱ μὲν ἀπὸ ληστείας, οἱ δ' ἀφ' ἀλιείας, ὅσοι λίμνας καὶ ἔλη καὶ ποταμοὺς ἢ θάλατταν τοιαύτην προσοικοῦσιν, οἱ δ' ἀπ' ὀρνίθων ἢ θηρίων ἀγρίων· τὸ δὲ πλεῖστον γένος τῶν ἀνθρώπων ἀπὸ τῆς γῆς ζῆ καὶ τῶν ἡμέρων καρπῶν.

οἱ μὲν οὖν βίοι τοσοῦτοι σχεδόν εἰσιν, ὅσοι γε αὐτόφυτον ἔχουσι τὴν ἐργασίαν καὶ μὴ δι' ἀλλαγῆς καὶ καπηλείας [1256b] πορίζονται τὴν τροφήν,



νομαδικὸς ληστικὸς ἀλιευτικὸς θηρευτικὸς γεωργικός. οἱ δὲ καὶ μὴ γινόντες ἐκ τούτων ἡδέως ζῶσι, προσαναπληροῦντες τὸν ἐνδεέστερον βίον, ἢ τυγχάνει ἐλλείπων πρὸς τὸ αὐτάρκης εἶναι, οἷον οἱ μὲν νομαδικὸν ἅμα καὶ ληστικόν, οἱ δὲ γεωργικὸν καὶ θηρευτικόν· ὁμοίως δὲ καὶ περὶ τοὺς ἄλλους· ὥς ἂν ἡ χρεία συναναγκάζῃ, τοῦτον τὸν τρόπον διάγουσιν. ἡ μὲν οὖν τοιαύτη κτήσις ὑπ’ αὐτῆς φαίνεται τῆς φύσεως διδομένη πᾶσιν, ὥσπερ κατὰ τὴν πρώτην γένεσιν εὐθύς, οὕτω καὶ τελειωθεῖσιν. καὶ γὰρ κατὰ τὴν ἐξ ἀρχῆς γένεσιν τὰ μὲν συνεκτίκει τῶν ζώων τοσαύτην τροφήν ὥσθ’ ἱκανὴν εἶναι μέχρις οὗ ἂν δύνηται αὐτὸ αὐτῷ πορίζειν τὸ γεννηθέν, οἷον ὅσα σκωληκοτοκεῖ ἢ ὠοτοκεῖ· ὅσα δὲ ζωοτοκεῖ, τοῖς γεννωμένοις ἔχει τροφήν ἐν αὐτοῖς μέχρι τινός, τὴν τοῦ καλουμένου γάλακτος φύσιν. ὥστε ὁμοίως δῆλον ὅτι καὶ γενομένοις οἰητέον τὰ τε φυτὰ τῶν ζώων ἔνεκεν εἶναι καὶ τὰ ἄλλα ζῶα τῶν ἀνθρώπων χάριν, τὰ μὲν ἡμερα καὶ διὰ τὴν χρῆσιν καὶ διὰ τὴν τροφήν, τῶν δ’ ἀγρίων, εἰ μὴ πάντα, ἀλλὰ τὰ γε πλεῖστα τῆς τροφῆς καὶ ἄλλης βοηθείας ἔνεκεν, ἵνα καὶ ἐσθῆς καὶ ἄλλα ὄργανα γίνηται ἐξ αὐτῶν. εἰ οὖν ἡ φύσις μὴθὲν μήτε ἀτελὲς ποιεῖ μήτε μάτην, ἀναγκαῖον τῶν ἀνθρώπων ἔνεκεν αὐτὰ πάντα πεποιηκέναι τὴν φύσιν. διὸ καὶ ἡ πολεμικὴ φύσει κτητικὴ πως ἔσται (ἡ γὰρ θηρευτικὴ μέρος αὐτῆς), ἢ δεῖ χρῆσθαι πρὸς τε τὰ θηρία καὶ τῶν ἀνθρώπων ὅσοι πεφυκότες ἄρχεσθαι μὴ θέλουσιν, ὥς φύσει δίκαιον τοῦτον ὄντα τὸν πόλεμον.

Ἐν μὲν οὖν εἶδος κτητικῆς κατὰ φύσιν τῆς οἰκονομικῆς μέρος ἐστίν, ὅτι δεῖ ἥτοι ὑπάρχειν ἢ πορίζειν αὐτὴν ὅπως ὑπάρχη ὧν ἐστὶ θησαυρισμὸς χρημάτων πρὸς ζωὴν ἀναγκαίων, καὶ χρησίμων εἰς κοινωνίαν πόλεως ἢ οἰκίας. καὶ ἔοικεν ὁ γ’ ἀληθινὸς πλοῦτος ἐκ τούτων εἶναι. ἡ γὰρ τῆς τοιαύτης κτήσεως αὐτάρκεια πρὸς ἀγαθὴν ζωὴν οὐκ ἄπειρός ἐστιν, ὥσπερ Σόλων φησὶ ποιήσας “πλούτου δ’ οὐθὲν τέρμα πεφασμένον ἀνδράσι κεῖται”. κεῖται γὰρ ὥσπερ καὶ ταῖς ἄλλαις τέχναις· οὐδὲν γὰρ ὄργανον ἄπειρον οὐδεμιᾶς ἐστὶ τέχνης οὔτε πλήθει οὔτε μεγέθει, ὁ δὲ πλοῦτος ὀργάνων πλῆθός ἐστιν οἰκονομικῶν καὶ πολιτικῶν. ὅτι μὲν τοίνυν ἔστι τις κτητικὴ κατὰ φύσιν τοῖς οἰκονόμοις καὶ τοῖς πολιτικοῖς, καὶ δι’ ἣν αἰτίαν, δῆλον.

Ἔστι δὲ γένος ἄλλο κτητικῆς, ἣν μάλιστα καλοῦσι, καὶ δίκαιον αὐτὸ καλεῖν, χρηματιστικὴν, δι’ ἣν οὐδὲν δοκεῖ [1257a] πέρας εἶναι πλούτου καὶ κτήσεως· ἦν ὥς μίαν καὶ τὴν αὐτὴν τῇ λεχθείσῃ πολλοὶ νομίζουσι διὰ τὴν γειννάσιν· ἔστι δ’ οὔτε ἡ αὐτὴ τῇ εἰρημένῃ οὔτε πόρρω ἐκείνης. ἔστι δ’ ἡ μὲν φύσει ἡ δ’ οὐ φύσει αὐτῶν, ἀλλὰ δι’ ἐμπειρίας τινὸς καὶ τέχνης γίνεται μᾶλλον. λάβωμεν δὲ περὶ αὐτῆς τὴν ἀρχὴν ἐντεῦθεν. ἐκάστου γὰρ κτήματος διττὴ ἡ χρῆσις ἐστίν, ἀμφοτέραι δὲ καθ’ αὐτὸ μὲν ἄλλ’ οὐχ ὁμοίως καθ’ αὐτό, ἄλλ’ ἡ μὲν οἰκεία ἡ δ’ οὐκ οἰκεία τοῦ πράγματος, οἷον ὑποδήματος ἢ τε

ὑπόδεσις καὶ ἡ μεταβλητική. ἀμφότεραι γὰρ ὑποδήματος χρήσεις· καὶ γὰρ ὁ ἀλλαττόμενος τῷ δεομένῳ ὑποδήματος ἀντὶ νομίματος ἢ τροφῆς χρήται τῷ ὑποδήματι ἢ ὑπόδημα, ἀλλ' οὐ τὴν οἰκείαν χρήσιν· οὐ γὰρ ἀλλαγῆς ἔνεκεν γέγονε. τὸν αὐτὸν δὲ τρόπον ἔχει καὶ περὶ τῶν ἄλλων κτημάτων. ἔστι γὰρ ἡ μεταβλητικὴ πάντων, ἀρξαμένη τὸ μὲν πρῶτον ἐκ τοῦ κατὰ φύσιν, τῷ τὰ μὲν πλείω τὰ δὲ ἐλάττω τῶν ἱκανῶν ἔχειν τοὺς ἀνθρώπους (ἢ καὶ δῆλον ὅτι οὐκ ἔστι φύσει τῆς χρηματιστικῆς ἢ καπηλικῆς ὅσον γὰρ ἱκανὸν αὐτοῖς, ἀναγκαῖον ἦν ποιεῖσθαι τὴν ἀλλαγὴν). ἐν μὲν οὖν τῇ πρώτῃ κοινωνίᾳ (τοῦτο δ' ἐστὶν οἰκία) φανερόν ὅτι οὐδὲν ἔστιν ἔργον αὐτῆς, ἀλλ' ἤδη πλειόνων τῆς κοινωνίας οὔσης. οἱ μὲν γὰρ τῶν αὐτῶν ἐκοινωνοῦν πάντων, οἱ δὲ κεχωρισμένοι πολλῶν πάλιν καὶ ἑτέρων· ὧν κατὰ τὰς δεήσεις ἀναγκαῖον ποιεῖσθαι τὰς μεταδόσεις, καθάπερ ἔτι πολλὰ ποιεῖ καὶ τῶν βαρβαρικῶν ἔθνων, κατὰ τὴν ἀλλαγὴν. αὐτὰ γὰρ τὰ χρήσιμα πρὸς αὐτὰ καταλλάττονται, ἐπὶ πλέον δ' οὐθέν, οἶον οἶνον πρὸς σῖτον διδόντες καὶ λαμβάνοντες, καὶ τῶν ἄλλων τῶν τοιούτων ἕκαστον. ἡ μὲν οὖν τοιαύτη μεταβλητικὴ οὔτε παρὰ φύσιν οὔτε χρηματιστικῆς ἐστὶν εἶδος οὐδὲν (εἰς ἀναπλήρωσιν γὰρ τῆς κατὰ φύσιν αὐταρκείας ἦν)· ἐκ μέντοι ταύτης ἐγένετ' ἐκείνη κατὰ λόγον. ξενικωτέρας γὰρ γενομένης τῆς βοηθείας τῷ εἰσάγεσθαι ὧν ἐνδεεῖς «ἦσαν» καὶ ἐκπέμπειν ὧν ἐπλεόναζον, ἐξ ἀνάγκης ἢ τοῦ νομίματος ἐπορίσθη χρήσις. οὐ γὰρ εὐβάστακτον ἕκαστον τῶν κατὰ φύσιν ἀναγκαίων· διὸ πρὸς τὰς ἀλλαγὰς τοιοῦτόν τι συνέθεντο πρὸς σφᾶς αὐτοὺς διδόναι καὶ λαμβάνειν, ὃ τῶν χρησίμων αὐτὸ ὃν εἶχε τὴν χρεῖαν εὐμεταχείριστον πρὸς τὸ ζῆν, οἶον σίδηρος καὶ ἄργυρος κἂν εἴ τι τοιοῦτον ἕτερον, τὸ μὲν πρῶτον ἀπλῶς ὀρισθὲν μεγέθει καὶ σταθμῷ, τὸ δὲ τελευταῖον καὶ χαρακτῆρα ἐπιβαλλόντων, ἵνα ἀπολύσῃ τῆς μετρήσεως αὐτούς· ὁ γὰρ χαρακτῆρ ἐτέθη τοῦ ποσοῦ σημεῖον.

πορισθέντος [1257b] οὖν ἤδη νομίματος ἐκ τῆς ἀναγκαίας ἀλλαγῆς θάτερον εἶδος τῆς χρηματιστικῆς ἐγένετο, τὸ καπηλικόν, τὸ μὲν πρῶτον ἀπλῶς ἴσως γινόμενον, εἴτα δι' ἐμπειρίας ἤδη τεχνικώτερον, πόθεν καὶ πῶς μεταβαλλόμενον πλεῖστον ποιήσει κέρδος. διὸ δοκεῖ ἡ χρηματιστικὴ μάλιστα περὶ τὸ νόμισμα εἶναι, καὶ ἔργον αὐτῆς τὸ δύνασθαι θεωρῆσαι πόθεν ἔσται πλῆθος χρημάτων· ποιητικὴ γὰρ ἐστὶ πλούτου καὶ χρημάτων. καὶ γὰρ τὸν πλοῦτον πολλάκις τιθέασιν νομίματος πλῆθος, διὰ τὸ περὶ τοῦτ' εἶναι τὴν χρηματιστικὴν καὶ τὴν καπηλικήν. ὅτε δὲ πάλιν λῆρος εἶναι δοκεῖ τὸ νόμισμα καὶ νόμος παντάπασι, φύσει δ' οὐθέν, ὅτι μεταθεμένων τε τῶν χρωμένων οὐθενδὸς ἄξιον οὐδὲ χρήσιμον πρὸς οὐδὲν τῶν ἀναγκαίων ἐστί, καὶ νομίματος πλουτῶν πολλάκις ἀπορήσει τῆς ἀναγκαίας τροφῆς· καίτοι ἄτοπον τοιοῦτον εἶναι πλοῦτον οὐ εὐπορῶν λιμῷ ἀπολεῖται, καθάπερ καὶ τὸν Μίδαν

ἐκεῖνον μυθολογοῦσι διὰ τὴν ἀπληστίαν τῆς εὐχῆς πάντων αὐτῶ γιγνομένων τῶν παρατιθεμένων χρυσῶν. διὸ ζητοῦσιν ἕτερόν τι τὸν πλοῦτον καὶ τὴν χρηματιστικήν, ὀρθῶς ζητοῦντες. ἔστι γὰρ ἑτέρα ἢ χρηματιστική καὶ ὁ πλοῦτος ὁ κατὰ φύσιν, καὶ αὕτη μὲν οἰκονομική, ἡ δὲ καπηλικὴ ποιητικὴ χρημάτων οὐ πάντως, ἀλλὰ διὰ χρημάτων μεταβολῆς. καὶ δοκεῖ περὶ τὸ νόμισμα αὕτη εἶναι· τὸ γὰρ νόμισμα στοιχεῖον καὶ πέρας τῆς ἀλλαγῆς ἐστίν. καὶ ἄπειρος δὴ οὗτος ὁ πλοῦτος, ὁ ἀπὸ ταύτης τῆς χρηματιστικῆς. ὥσπερ γὰρ ἡ ἰατρικὴ τοῦ ὑγιαίνειν εἰς ἄπειρόν ἐστι, καὶ ἐκάστη τῶν τεχνῶν τοῦ τέλους εἰς ἄπειρον (ὅτι μάλιστα γὰρ ἐκεῖνο βούλονται ποιεῖν), τῶν δὲ πρὸς τὸ τέλος οὐκ εἰς ἄπειρον (πέρας γὰρ τὸ τέλος πάσαις), οὕτω καὶ ταύτης τῆς χρηματιστικῆς οὐκ ἔστι τοῦ τέλους πέρας, τέλος δὲ ὁ τοιοῦτος πλοῦτος καὶ χρημάτων κτήσις. τῆς δ' οἰκονομικῆς αὐτῆς χρηματιστικῆς ἔστι πέρας· οὐ γὰρ τοῦτο τῆς οἰκονομικῆς ἔργον. διὸ τῇ μὲν φαίνεται ἀναγκαῖον εἶναι παντὸς πλούτου πέρας, ἐπὶ δὲ τῶν γινομένων ὀρῶμεν συμβαῖνον τοῦναντίον· πάντες γὰρ εἰς ἄπειρον αὐξοῦσιν οἱ χρηματιζόμενοι τὸ νόμισμα. αἴτιον δὲ τὸ σύνεγγυς αὐτῶν. ἐπαλλάττει γὰρ ἡ χρῆσις, τοῦ αὐτοῦ οὕσα, ἐκατέρας τῆς χρηματιστικῆς. τῆς γὰρ αὐτῆς ἐστὶ κτήσεως χρῆσις, ἀλλ' οὐ κατὰ ταῦτόν, ἀλλὰ τῆς μὲν ἕτερον τέλος, τῆς δ' ἡ αὕξησις. ὥστε δοκεῖ τισι τοῦτ' εἶναι τῆς οἰκονομικῆς ἔργον, καὶ διατελοῦσιν ἢ σῶζιν οἰόμενοι δεῖν ἢ αὐξεῖν τὴν τοῦ νομίματος οὐσίαν εἰς ἄπειρον. αἴτιον δὲ ταύτης τῆς διαθέσεως τὸ σπουδάζειν περὶ τὸ ζῆν, ἀλλὰ [1258a] μὴ τὸ εὖ ζῆν· εἰς ἄπειρον οὖν ἐκείνης τῆς ἐπιθυμίας οὔσης, καὶ τῶν ποιητικῶν ἀπείρων ἐπιθυμοῦσιν. ὅσοι δὲ καὶ τοῦ εὖ ζῆν ἐπιβάλλονται τὸ πρὸς τὰς ἀπολαύσεις τὰς σωματικὰς ζητοῦσιν, ὥστ' ἐπεὶ καὶ τοῦτ' ἐν τῇ κτήσει φαίνεται ὑπάρχειν, πᾶσα ἢ διατριβὴ περὶ τὸν χρηματισμόν ἐστι, καὶ τὸ ἕτερον εἶδος τῆς χρηματιστικῆς διὰ τοῦτ' ἐλήλυθεν. ἐν ὑπερβολῇ γὰρ οὔσης τῆς ἀπολαύσεως, τὴν τῆς ἀπολαυστικῆς ὑπερβολῆς ποιητικὴν ζητοῦσιν· κἂν μὴ διὰ τῆς χρηματιστικῆς δύνωνται πορίζειν, δι' ἄλλης αἰτίας τοῦτο πειρῶνται, ἐκάστη χρώμενοι τῶν δυνάμεων οὐ κατὰ φύσιν. ἀνδρείας γὰρ οὐ χρήματα ποιεῖν ἐστὶν ἀλλὰ θάρσος, οὐδὲ στρατηγικῆς καὶ ἰατρικῆς, ἀλλὰ τῆς μὲν νίκην τῆς δ' ὑγίειαν. οἱ δὲ πάσας ποιοῦσι χρηματιστικάς, ὡς τοῦτο τέλος ὄν, πρὸς δὲ τὸ τέλος ἅπαντα δέον ἀπαντᾶν.

περὶ μὲν οὖν τῆς τε μὴ ἀναγκαίας χρηματιστικῆς, καὶ τίς, καὶ δι' αἰτίαν τίνα ἐν χρεΐᾳ ἐσμέν αὐτῆς, εἴρηται, καὶ περὶ τῆς ἀναγκαίας, ὅτι ἑτέρα μὲν αὐτῆς οἰκονομικὴ δὲ κατὰ φύσιν ἢ περὶ τὴν τροφήν, οὐχ ὥσπερ αὕτη ἄπειρος ἀλλὰ ἔχουσα ὅρον.

Δῆλον δὲ καὶ τὸ ἀπορούμενον ἐξ ἀρχῆς, πότερον τοῦ οἰκονομικοῦ καὶ πολιτικοῦ ἐστὶν ἢ χρηματιστικὴ ἢ οὐ, ἀλλὰ δεῖ τοῦτο μὲν ὑπάρχειν (ὥσπερ

γὰρ καὶ ἄνθρωπους οὐ ποιεῖ ἢ πολιτική, ἀλλὰ λαβοῦσα παρὰ τῆς φύσεως χρήται αὐτοῖς, οὕτω καὶ <πρὸς> τροφήν τὴν φύσιν δεῖ παραδοῦναι γῆν ἢ θάλατταν ἢ ἄλλο τι), ἐκ δὲ τούτων, ὡς δεῖ ταῦτα διαθεῖναι προσήκει τὸν οἰκονόμον. οὐ γὰρ τῆς ὑφαντικῆς ἔρια ποιῆσαι, ἀλλὰ χρήσασθαι αὐτοῖς, καὶ γνῶναι δὲ τὸ ποῖον χρηστὸν καὶ ἐπιτήδειον, ἢ φαῦλον καὶ ἀνεπιτήδειον. καὶ γὰρ ἀπορήσειεν ἂν τις διὰ τί ἡ μὲν χρηματιστικὴ μόνον τῆς οἰκονομίας, ἡ δ' ἰατρικὴ οὐ μόνον· καίτοι δεῖ ὑγιαίνειν τοὺς κατὰ τὴν οἰκίαν, ὥσπερ ζῆν ἢ ἄλλο τι τῶν ἀναγκαίων. ἐπεὶ δὲ ἔστι μὲν ὡς τοῦ οἰκονόμου καὶ τοῦ ἄρχοντος καὶ περὶ ὑγείας ἰδεῖν, ἔστι δ' ὡς οὗ, ἀλλὰ τοῦ ἱατροῦ, οὕτω καὶ περὶ τῶν χρημάτων ἔστι μὲν ὡς τοῦ οἰκονόμου, ἔστι δ' ὡς οὗ, ἀλλὰ τῆς ὑπηρετικῆς· μάλιστα δέ, καθάπερ εἴρηται πρότερον, δεῖ φύσει τοῦτο ὑπάρχειν. φύσεως γὰρ ἔστιν ἔργον τροφήν τῷ γεννηθέντι παρέχειν· παντὶ γάρ, ἐξ οὗ γίνεται, τροφή τὸ λειπόμενόν ἐστι. διὸ κατὰ φύσιν ἐστὶν ἡ χρηματιστικὴ πᾶσιν ἀπὸ τῶν καρπῶν καὶ τῶν ζώων. διπλῆς δ' οὔσης αὐτῆς, ὥσπερ εἵπομεν, καὶ τῆς μὲν καπηλικῆς τῆς δ' οἰκονομικῆς, καὶ ταύτης μὲν ἀναγκαίας καὶ ἐπαινουμένης, τῆς [1258b] δὲ μεταβλητικῆς ψεγομένης δικαίως (οὐ γὰρ κατὰ φύσιν ἄλλ' ἀπ' ἀλλήλων ἐστίν), εὐλογώτατα μισεῖται ἢ ὀβολοστατικὴ διὰ τὸ ἀπ' αὐτοῦ τοῦ νομίσματος εἶναι τὴν κτῆσιν καὶ οὐκ ἐφ' ὅπερ ἐπορίσθη. μεταβολῆς γὰρ ἐγένετο χάριν, ὃ δὲ τόκος αὐτὸ ποιεῖ πλέον (ὄθεν καὶ τοῦνομα τοῦτ' εἴληφεν· ὅμοια γὰρ τὰ τικτόμενα τοῖς γεννώσιν αὐτὰ ἐστίν, ὃ δὲ τόκος γίνεται νόμισμα ἐκ νομίσματος)· ὥστε καὶ μάλιστα παρὰ φύσιν οὗτος τῶν χρηματισμῶν ἐστίν.

Ἐπεὶ δὲ τὰ πρὸς τὴν γνῶσιν διωρίκαμεν ἱκανῶς, τὰ πρὸς τὴν χρῆσιν δεῖ διελθεῖν. πάντα δὲ τὰ τοιαῦτα τὴν μὲν θεωρίαν ἐλευθέραν ἔχει, τὴν δ' ἐμπειρίαν ἀναγκαίαν. ἔστι δὲ χρηματιστικῆς μέρη χρήσιμα· τὸ περὶ τὰ κτήματα ἔμπειρον εἶναι, ποῖα λυσιτελέστατα καὶ ποῦ καὶ πῶς, οἷον ἵππων κτῆσις ποῖα τις ἢ βοῶν ἢ προβάτων, ὁμοίως δὲ καὶ τῶν λοιπῶν ζώων (δεῖ γὰρ ἔμπειρον εἶναι πρὸς ἀλληλά τε τούτων τίνα λυσιτελέστατα, καὶ ποῖα ἐν ποίοις τόποις· ἄλλα γὰρ ἐν ἄλλαις εὐθηνεῖ χώραις), εἴτα περὶ γεωργίας, καὶ ταύτης ἤδη ψιλῆς τε καὶ πεφυτευμένης, καὶ μελιττουργίας, καὶ τῶν ἄλλων ζώων τῶν πλωτῶν ἢ πτηνῶν, ἀφ' ὧν ἔστι τυγχάνειν βοηθείας. τῆς μὲν οὖν οἰκαιοτάτης χρηματιστικῆς ταῦτα μόνον καὶ πρώτης, τῆς δὲ μεταβλητικῆς μέγιστον μὲν ἐμπορία (καὶ ταύτης μέρη τρία, ναυκληρία φορτηγία παράστασις· διαφέρει δὲ τούτων ἕτερα ἐτέρων τῷ τὰ μὲν ἀσφαλέστερα εἶναι, τὰ δὲ πλείω πορίζειν τὴν ἐπικαρπίαν), δεύτερον δὲ τοκισμός, τρίτον δὲ μισθαρνία (ταύτης δ' ἡ μὲν τῶν βαναύσων τεχνιτῶν, ἡ δὲ τῶν ἀτέχνων καὶ τῷ σώματι μόνῳ χρησίμων)· τρίτον δὲ εἶδος χρηματιστικῆς μεταξὺ ταύτης καὶ τῆς πρώτης (ἔχει γὰρ καὶ τῆς κατὰ φύσιν τι μέρος καὶ τῆς μεταβλητικῆς), ὅσα ἀπὸ γῆς καὶ τῶν ἀπὸ γῆς γιγνομένων, ἀκάρπων μὲν χρησίμων δέ, οἷον ὑλοτομία τε καὶ πᾶσα

μεταλλευτική. αὕτη δὲ πολλὰ ἤδη περιείληφε γένη· πολλὰ γὰρ εἶδη τῶν ἐκ γῆς μεταλλευομένων ἔστιν. περὶ ἐκάστου δὲ τούτων καθόλου μὲν εἴρηται καὶ νῦν, τὸ δὲ κατὰ μέρος ἀκριβολογεῖσθαι χρήσιμον μὲν πρὸς τὰς ἐργασίας, φορτικὸν δὲ τὸ ἐνδιατρίβειν. εἰσὶ δὲ τεχνικώταται μὲν τῶν ἐργασιῶν ὅπου ἐλάχιστον τύχης, βαναυσόταται δ' ἐν αἷς τὰ σώματα λωβῶνται μάλιστα, δουλικώταται δὲ ὅπου τοῦ σώματος πλεῖσται χρήσεις, ἀγεννέσταται δὲ ὅπου ἐλάχιστον προσδεῖ ἀρετῆς.

ἐπεὶ δ' ἔστιν ἐνίοις γεγραμμένα περὶ τούτων, οἷον Χαρητίδῃ τῷ Παρίῳ καὶ [1259a] Ἀπολλοδώρῳ τῷ Λημνίῳ περὶ γεωργίας καὶ ψιλῆς καὶ πεφυτευμένης, ὁμοίως δὲ καὶ ἄλλοις περὶ ἄλλων, ταῦτα μὲν ἐκ τούτων θεωρεῖτω ὅτῳ ἐπιμελές· ἔτι δὲ καὶ τὰ λεγόμενα σποράδην, δι' ὧν ἐπιτετυχήκασιν ἔνιοι χρηματιζόμενοι, δεῖ συλλέγειν. πάντα γὰρ ὠφέλιμα ταῦτ' ἐστὶ τοῖς τιμῷσι τὴν χρηματιστικήν, οἷον καὶ τὸ Θάλεω τοῦ Μιλησίου· τοῦτο γὰρ ἐστὶ κατανόημά τι χρηματιστικόν, ἀλλ' ἐκείνῳ μὲν διὰ τὴν σοφίαν προσάπτουσι, τυγχάνει δὲ καθόλου τι ὄν. ὀνειδιζόντων γὰρ αὐτῷ διὰ τὴν πενίαν ὡς ἀνωφελοῦς τῆς φιλοσοφίας οὔσης, κατανοήσαντά φασιν αὐτὸν ἐλαιῶν φορὰν ἐσομένην ἐκ τῆς ἀστρολογίας, ἔτι χειμῶνος ὄντος εὐπορήσαντα χρημάτων ὀλίγων ἀρραβῶνας διαδοῦναι τῶν ἐλαιουργίων τῶν τ' ἐν Μιλήτῳ καὶ Χίῳ πάντων, ὀλίγου μισθωσάμενον ἅτ' οὐθενὸς ἐπιβάλλοντος· ἐπειδὴ δ' ὁ καιρὸς ἦκε, πολλῶν ζητουμένων ἅμα καὶ ἐξαίφνης, ἐκμισθοῦντα ὃν τρόπον ἠβούλετο, πολλὰ χρήματα συλλέξαντα ἐπιδείξει ὅτι ῥάδιόν ἐστι πλουτεῖν τοῖς φιλοσόφοις, ἂν βούλωνται, ἀλλ' οὐ τοῦτ' ἐστὶ περὶ ὃ σπουδάζουσιν. Θαλῆς μὲν οὖν λέγεται τοῦτον τὸν τρόπον ἐπιδείξιν ποιήσασθαι τῆς σοφίας· ἔστι δ', ὥσπερ εἵπομεν, καθόλου τὸ τοιοῦτον χρηματιστικόν, ἐάν τις δύνηται μονοπωλίαν αὐτῷ κατασκευάζειν. διὸ καὶ τῶν πόλεων ἔνιοι τοῦτον ποιοῦνται τὸν πόρον, ὅταν ἀπορῶσι χρημάτων· μονοπωλίαν γὰρ τῶν ὠνίων ποιοῦσιν. ἐν Σικελίᾳ δέ τις τεθέντος παρ' αὐτῷ νομίσματος συνεπρίατο πάντα τὸν σίδηρον ἐκ τῶν σιδηρείων, μετὰ δὲ ταῦτα ὡς ἀφίκοντο ἐκ τῶν ἐμπορίων οἱ ἔμποροι, ἐπώλει μόνος, οὐ πολλὴν ποιήσας ὑπερβολὴν τῆς τιμῆς· ἀλλ' ὅμως ἐπὶ τοῖς πεντήκοντα ταλάντοις ἐπέλαβεν ἑκατόν. τοῦτο μὲν οὖν Διονύσιος αἰσθόμενος τὰ μὲν χρήματα ἐκέλευσεν ἐκκομίσασθαι, μὴ μέντοι γε ἔτι μένειν ἐν Συρακούσαις, ὡς πόρους εὐρίσκοντα τοῖς αὐτοῦ πράγμασιν ἀσυμφόρους· τὸ μέντοι ὄραμα Θάλεω καὶ τοῦτο ταῦτόν ἐστιν· ἀμφοτέρω γὰρ ἐαυτοῖς ἐτέχνασαν γενέσθαι μονοπωλίαν. χρήσιμον δὲ γνωρίζειν ταῦτα καὶ τοῖς πολιτικοῖς. πολλὰ γὰρ πόλεσι δεῖ χρηματισμοῦ καὶ τοιούτων πόρων, ὥσπερ οἰκία, μᾶλλον δέ· διόπερ τινὲς καὶ πολιτεύονται τῶν πολιτευομένων ταῦτα μόνον.

Ἐπεὶ δὲ τρία μέρη τῆς οἰκονομικῆς ἦν, ἓν μὲν δεσποτική, περὶ ἧς εἴρηται πρότερον, ἓν δὲ πατρική, τρίτον δὲ γαμική (καὶ γὰρ γυναικὸς ἄρχει καὶ τέκνων, ὡς ἐλευθέρων μὲν ἀμφοῖν, οὐ τὸν αὐτὸν δὲ τρόπον τῆς ἀρχῆς, ἀλλὰ [1259b] γυναικὸς μὲν πολιτικῶς τέκνων δὲ βασιλικῶς· τό τε γὰρ ἄρρεν φύσει τοῦ θήλεος ἡγεμονικώτερον, εἰ μὴ που συνέστηκε παρὰ φύσιν, καὶ τὸ πρεσβύτερον καὶ τέλειον τοῦ νεωτέρου καὶ ἀτελοῦς) - ἓν μὲν οὖν ταῖς πολιτικαῖς ἀρχαῖς ταῖς πλείσταις μεταβάλλει τὸ ἄρχον καὶ τὸ ἀρχόμενον (ἐξ ἴσου γὰρ εἶναι βούλεται τὴν φύσιν καὶ διαφέρειν μηδέν), ὅμως δέ, ὅταν τὸ μὲν ἄρχη τὸ δ' ἄρχηται, ζητεῖ διαφορὰν εἶναι καὶ σχήμασι καὶ λόγοις καὶ τιμαῖς, ὥσπερ καὶ Ἄμασις εἶπε τὸν περὶ τοῦ ποδανιπτῆρος λόγον· τὸ δ' ἄρρεν ἀεὶ πρὸς τὸ θῆλυ τοῦτον ἔχει τὸν τρόπον. ἡ δὲ τῶν τέκνων ἀρχὴ βασιλική· τὸ γὰρ γεννῆσαν καὶ κατὰ φιλίαν ἄρχον καὶ κατὰ πρεσβείαν ἐστίν, ὅπερ ἐστὶ βασιλικῆς εἶδος ἀρχῆς. διὸ καλῶς Ὅμηρος τὸν Δία προσηγόρευσε εἰπὼν “πατὴρ ἀνδρῶν τε θεῶν τε” τὸν βασιλέα τούτων ἀπάντων. φύσει γὰρ τὸν βασιλέα διαφέρειν μὲν δεῖ, τῷ γένει δ' εἶναι τὸν αὐτόν· ὅπερ πέπονθε τὸ πρεσβύτερον πρὸς τὸ νεώτερον καὶ ὁ γεννήσας πρὸς τὸ τέκνον.

Φανερόν τοίνυν ὅτι πλείων ἡ σπουδὴ τῆς οἰκονομίας περὶ τοὺς ἀνθρώπους ἢ περὶ τὴν τῶν ἀψύχων κτῆσιν, καὶ περὶ τὴν ἀρετὴν τούτων ἢ περὶ τὴν τῆς κτήσεως, ὃν καλοῦμεν πλοῦτον, καὶ τῶν ἐλευθέρων μᾶλλον ἢ δούλων. πρῶτον μὲν οὖν περὶ δούλων ἀπορήσειεν ἂν τις, πότερον ἔστιν ἀρετὴ τις δούλου παρὰ τὰς ὀργανικὰς καὶ διακονικὰς ἄλλη τιμιωτέρα τούτων, οἷον σωφροσύνη καὶ ἀνδρεία καὶ δικαιοσύνη καὶ <ἐκάστη> τῶν ἄλλων τῶν τοιούτων ἕξεων, ἢ οὐκ ἔστιν οὐδεμία παρὰ τὰς σωματικὰς ὑπηρεσίας (ἔχει γὰρ ἀπορίαν ἀμφοτέρως· εἴτε γὰρ ἔστιν, τί διοίσουσι τῶν ἐλευθέρων; εἴτε μὴ ἔστιν, ὄντων ἀνθρώπων καὶ λόγου κοινωνούντων ἄτοπον). σχεδὸν δὲ ταῦτόν ἐστι τὸ ζητούμενον καὶ περὶ γυναικὸς καὶ παιδός, πότερα καὶ τούτων εἰσὶν ἀρεταί, καὶ δεῖ τὴν γυναῖκα εἶναι σώφρονα καὶ ἀνδρείαν καὶ δικαίαν, καὶ παῖς ἔστι καὶ ἀκόλαστος καὶ σώφρων, ἢ οὐ; καθόλου δὲ τοῦτ' ἐστὶν ἐπισκεπτέον περὶ ἀρχομένου φύσει καὶ ἄρχοντος, πότερον ἢ αὐτὴ ἀρετὴ ἢ ἕτερα. εἰ μὲν γὰρ δεῖ ἀμφοτέρους μετέχειν καλοκαγαθίας, διὰ τί τὸν μὲν ἄρχειν δεοί ἂν τὸν δὲ ἄρχεσθαι καθάπαξ; οὐδὲ γὰρ τῷ μᾶλλον καὶ ἥττον οἷόν τε διαφέρειν· τὸ μὲν γὰρ ἄρχεσθαι καὶ ἄρχειν εἶδει διαφέρει, τὸ δὲ μᾶλλον καὶ ἥττον οὐδέν. εἰ δὲ τὸν μὲν δεῖ τὸν δὲ μὴ, θαυμαστόν. εἴτε γὰρ ὁ ἄρχων μὴ ἔσται σώφρων καὶ δίκαιος, πῶς ἄρξει καλῶς; εἴθ' ὁ ἀρχόμενος, πῶς ἀρχθήσεται [1260a] καλῶς; ἀκόλαστος γὰρ ὢν καὶ δειλὸς οὐδὲν ποιήσει τῶν προσηκόντων. φανερόν τοίνυν ὅτι ἀνάγκη μὲν μετέχειν ἀμφοτέρους ἀρετῆς, ταύτης δ' εἶναι διαφοράς, ὥσπερ καὶ τῶν φύσει ἀρχόντων. καὶ τοῦτο εὐθὺς ὑφήγηται <τὰ> περὶ τὴν ψυχὴν· ἓν ταύτῃ γὰρ ἐστὶ φύσει τὸ μὲν ἄρχον τὸ δ' ἀρχόμενον, ὡν

ἑτέραν φαμέν εἶναι ἀρετὴν, οἷον τοῦ λόγον ἔχοντος καὶ τοῦ ἀλόγου. δῆλον τοίνυν ὅτι τὸν αὐτὸν τρόπον ἔχει καὶ ἐπὶ τῶν ἄλλων, ὥστε φύσει τὰ πλείω ἄρχοντα καὶ ἀρχόμενα. ἄλλον γὰρ τρόπον τὸ ἐλεύθερον τοῦ δούλου ἄρχει καὶ τὸ ἄρρεν τοῦ θήλεος καὶ ἀνὴρ παῖδος, καὶ πᾶσιν ἐνυπάρχει μὲν τὰ μόρια τῆς ψυχῆς, ἀλλ' ἐνυπάρχει διαφερόντως. ὁ μὲν γὰρ δοῦλος ὅλως οὐκ ἔχει τὸ βουλευτικόν, τὸ δὲ θῆλυ ἔχει μὲν, ἀλλ' ἄκυρον, ὁ δὲ παῖς ἔχει μὲν, ἀλλ' ἀτελής. ὁμοίως τοίνυν ἀναγκαίως ἔχειν καὶ περὶ τὰς ἠθικὰς ἀρετὰς ὑποληπτέον, δεῖν μὲν μετέχειν πάντας, ἀλλ' οὐ τὸν αὐτὸν τρόπον, ἀλλ' ὅσον «ἰκανὸν» ἐκάστω πρὸς τὸ αὐτοῦ ἔργον· διὸ τὸν μὲν ἄρχοντα τελέαν ἔχειν δεῖ τὴν ἠθικὴν ἀρετὴν (τὸ γὰρ ἔργον ἐστὶν ἀπλῶς τοῦ ἀρχιτέκτονος, ὁ δὲ λόγος ἀρχιτέκτων), τῶν δ' ἄλλων ἕκαστον ὅσον ἐπιβάλλει αὐτοῖς. ὥστε φανερόν ὅτι ἔστιν ἠθικὴ ἀρετὴ τῶν εἰρημένων πάντων, καὶ οὐχ ἡ αὐτὴ σωφροσύνη γυναικὸς καὶ ἀνδρός, οὐδ' ἀνδρεία καὶ δικαιοσύνη, καθάπερ ὤετο Σωκράτης, ἀλλ' ἡ μὲν ἀρχικὴ ἀνδρεία ἢ δ' ὑπηρετικὴ, ὁμοίως δ' ἔχει καὶ περὶ τὰς ἄλλας.

δῆλον δὲ τοῦτο καὶ κατὰ μέρος μᾶλλον ἐπισκοποῦσιν· καθόλου γὰρ οἱ λέγοντες ἐξαπατῶσιν ἑαυτοὺς ὅτι τὸ εὖ ἔχειν τὴν ψυχὴν ἀρετὴ, ἢ τὸ ὀρθοπραγεῖν, ἢ τι τῶν τοιούτων· πολὺ γὰρ ἄμεινον λέγουσιν οἱ ἐξαριθμοῦντες τὰς ἀρετὰς, ὥσπερ Γοργίας, τῶν οὕτως ὀριζομένων. διὸ δεῖ, ὥσπερ ὁ ποιητὴς εἶρηκε περὶ γυναικός, οὕτω νομίζειν ἔχειν περὶ πάντων· “γυναικὶ κόσμον ἢ σιγὴν φέρει”, ἀλλ' ἀνδρὶ οὐκέτι τοῦτο. ἐπεὶ δ' ὁ παῖς ἀτελής, δῆλον ὅτι τούτου μὲν καὶ ἡ ἀρετὴ οὐκ αὐτοῦ πρὸς αὐτόν ἐστιν, ἀλλὰ πρὸς τὸ τέλος καὶ τὸν ἡγούμενον· ὁμοίως δὲ καὶ δούλου πρὸς δεσπότην. ἔθεμεν δὲ πρὸς τὰναγκαῖα χρήσιμον εἶναι τὸν δοῦλον, ὥστε δῆλον ὅτι καὶ ἀρετῆς δεῖται μικρᾶς, καὶ τοσαύτης ὅπως μήτε δι' ἀκολασίαν μήτε διὰ δειλίαν ἐλλείψει τῶν ἔργων. ἀπορήσειε δ' ἂν τις, τὸ νῦν εἰρημένον εἰ ἀληθές, ἄρα καὶ τοὺς τεχνίτας δεήσει ἔχειν ἀρετὴν· πολλάκις γὰρ δι' ἀκολασίαν ἐλλείπουσι τῶν ἔργων. ἢ διαφέρει τοῦτο πλεῖστον; ὁ μὲν γὰρ δοῦλος κοινωνὸς ζωῆς, ὁ δὲ πορρώτερον, καὶ τοσοῦτον ἐπιβάλλει ἀρετῆς ὅσον περ καὶ δουλείας· ὁ γὰρ βάνανυσος τεχνίτης [1260b] ἀφωρισμένην τινὰ ἔχει δουλείαν, καὶ ὁ μὲν δοῦλος τῶν φύσει, σκυτοτόμος δ' οὐθείς, οὐδὲ τῶν ἄλλων τεχνιτῶν. φανερόν τοίνυν ὅτι τῆς τοιαύτης ἀρετῆς αἴτιον εἶναι δεῖ τῷ δούλῳ τὸν δεσπότην, ἀλλ' οὐ «τὸν» τὴν διδασκαλικὴν ἔχοντα τῶν ἔργων [δεσποτικὴν]. διὸ λέγουσιν οὐ καλῶς οἱ λόγου τοὺς δούλους ἀποστεροῦντες καὶ φάσκοντες ἐπιτάξει χρῆσθαι μόνον· νουθετητέον γὰρ μᾶλλον τοὺς δούλους ἢ τοὺς παῖδας.

## B

Ἐπεὶ δὲ προαιρούμεθα θεωρῆσαι περὶ τῆς κοινωνίας τῆς πολιτικῆς, τίς κρατίστη πασῶν τοῖς δυναμένοις ζῆν ὅτι μάλιστα κατ' εὐχὴν, δεῖ καὶ τὰς ἄλλας ἐπισκέψασθαι πολιτείας, αἷς τε χρῶνται τινες τῶν πόλεων τῶν εὐνομεῖσθαι λεγομένων, κἂν εἴ τινες ἕτεροι τυγχάνουσιν ὑπὸ τινῶν εἰρημέναι καὶ δοκοῦσαι καλῶς ἔχειν, ἵνα τό τ' ὀρθῶς ἔχον ὀφθῇ καὶ τὸ χρήσιμον, ἔτι δὲ τὸ ζητεῖν τι παρ' αὐτὰς ἕτερον μὴ δοκῇ πάντως εἶναι σοφίζεσθαι βουλομένων, ἀλλὰ διὰ τὸ μὴ καλῶς ἔχειν ταύτας τὰς νῦν ὑπαρχούσας, διὰ τοῦτο ταύτην δοκῶμεν ἐπιβαλέσθαι τὴν μέθοδον. ἀρχὴν δὲ πρῶτον ποιητέον ἥπερ πέφυκεν ἀρχὴ ταύτης τῆς σκέψεως. ἀνάγκη γὰρ ἦτοι πάντας πάντων κοινωνεῖν τοὺς πολίτας, ἢ μηδενός, ἢ τινῶν μὲν τινῶν δὲ μή. τὸ μὲν οὖν μηδενὸς κοινωνεῖν φανερόν ὡς ἀδύνατον (ἢ γὰρ πολιτεία κοινωνία τίς ἐστὶ, καὶ πρῶτον ἀνάγκη τοῦ τόπου κοινωνεῖν· ὁ μὲν γὰρ τόπος εἷς ὁ τῆς [1261a] μιᾶς πόλεως, οἱ δὲ πολῖται κοινωνοὶ τῆς μιᾶς πόλεως)· ἀλλὰ πότερον ὅσων ἐνδέχεται κοινωνῆσαι, πάντων βέλτιον κοινωνεῖν τὴν μέλλουσαν οἰκῆσεσθαι πόλιν καλῶς, ἢ τινῶν μὲν τινῶν δ' οὐ βέλτιον; ἐνδέχεται γὰρ καὶ τέκνων καὶ γυναικῶν καὶ κτημάτων κοινωνεῖν τοὺς πολίτας ἀλλήλοις, ὥσπερ ἐν τῇ Πολιτείᾳ τῇ Πλάτωνος· ἐκεῖ γὰρ ὁ Σωκράτης φησὶ δεῖν κοινὰ τὰ τέκνα καὶ τὰς γυναῖκας εἶναι καὶ τὰς κτήσεις. τοῦτο δὲ πότερον ὡς νῦν οὕτω βέλτιον ἔχειν, ἢ κατὰ τὸν ἐν τῇ Πολιτείᾳ γεγραμμένον νόμον;

Ἐχει δὲ δυσχερείας ἄλλας τε πολλὰς τὸ πάντων εἶναι τὰς γυναῖκας κοινὰς, καὶ δι' ἣν αἰτίαν φησὶ δεῖν νενομοθετῆσθαι τὸν τρόπον τοῦτον ὁ Σωκράτης, οὐ φαίνεται συμβαῖνον ἐκ τῶν λόγων. ἔτι δὲ πρὸς, τὸ τέλος ὃ φησὶ τῇ πόλει δεῖν ὑπάρχειν, ὡς μὲν εἴρηται νῦν, ἀδύνατον, πῶς δὲ δεῖ διελεῖν, οὐδὲν διώριται. λέγω δὲ τὸ μίαν εἶναι τὴν πόλιν ὡς ἄριστον ὃν ὅτι μάλιστα πᾶσαν· λαμβάνει γὰρ ταύτην <τὴν> ὑπόθεσιν ὁ Σωκράτης. καίτοι φανερόν ἐστιν ὡς προῖοῦσα καὶ γινομένη μία μᾶλλον οὐδὲ πόλις ἔσται· πλῆθος γάρ τι τὴν φύσιν ἐστὶν ἡ πόλις, γινομένη τε μία μᾶλλον οἰκία μὲν ἐκ πόλεως ἄνθρωπος δ' ἐξ οἰκίας ἔσται· μᾶλλον γὰρ μίαν τὴν οἰκίαν τῆς πόλεως φαίμεν ἄν, καὶ τὸν ἕνα τῆς οἰκίας· ὥστ' εἰ καὶ δυνατός τις εἴη τοῦτο δρᾶν, οὐ ποιητέον· ἀναιρήσει γὰρ τὴν πόλιν.

οὐ μόνον δ' ἐκ πλειόνων ἀνθρώπων ἐστὶν ἡ πόλις, ἀλλὰ καὶ ἐξ εἴδει διαφερόντων. οὐ γὰρ γίνεται πόλις ἐξ ὁμοίων. ἕτερον γὰρ συμμαχία καὶ πόλις· τὸ μὲν γὰρ τῷ ποσῷ χρήσιμον, κἂν ἢ τὸ αὐτὸ τῷ εἶδει (βοηθείας γὰρ χάριν ἢ συμμαχία πέφυκεν), ὥσπερ ἂν εἰ σταθμὸς πλεῖον ἐλκύσειε (διοίσει δὲ τῷ



τοιούτῳ καὶ πόλις ἔθνους, ὅταν μὴ κατὰ κόμας ὥσι κεχωρισμένοι τὸ πλῆθος, ἄλλ' οἷον Ἀρκάδες). ἐξ ὧν δὲ δεῖ ἐν γενέσθαι, εἶδει διαφέρει. διόπερ τὸ ἴσον τὸ ἀντιπεπονθὸς σώζει τὰς πόλεις, ὥσπερ ἐν τοῖς Ἡθικοῖς εἴρηται πρότερον· ἐπεὶ καὶ ἐν τοῖς ἐλευθέροις καὶ ἴσοις ἀνάγκη τοῦτ' εἶναι· ἅμα γὰρ οὐχ οἷόν τε πάντας ἄρχειν, ἀλλ' ἢ κατ' ἐνιαυτὸν ἢ κατὰ τινα ἄλλην τάξιν [ἢ] χρόνου. καὶ συμβαίνει δὴ τὸν τρόπον τοῦτον ὥστε πάντας ἄρχειν, ὥσπερ ἂν εἰ μετέβαλλον οἱ σκυτεῖς καὶ οἱ τέκτονες καὶ μὴ ἀεὶ οἱ αὐτοὶ σκυτοτόμοι καὶ τέκτονες ἦσαν. ἐπεὶ δὲ βέλτιον οὕτως ἔχει καὶ τὰ περὶ τὴν κοινωνίαν τὴν πολιτικὴν, δῆλον ὡς τοὺς αὐτοὺς ἀεὶ βέλτιον ἄρχειν, εἰ δυνατόν, ἐν οἷς δὲ μὴ δυνατόν διὰ τὸ τὴν [1261b] φύσιν ἴσους εἶναι πάντας, ἅμα δὲ καὶ δίκαιον, εἴτ' ἀγαθὸν εἴτε φαῦλον τὸ ἄρχειν. πάντας αὐτοῦ μετέχειν, τοῦτό γε μιμεῖται τὸ ἐν μέρει τοὺς ἴσους εἶκειν τό θ' ὁμοίους εἶναι ἔξω ἀρχῆς· οἱ μὲν γὰρ ἄρχουσιν οἱ δ' ἄρχονται κατὰ μέρος ὥσπερ ἂν ἄλλοι γενόμενοι. τὸν αὐτὸν δὴ τρόπον ἀρχόντων ἕτεροι ἑτέρας ἄρχουσιν ἀρχάς. φανερόν τοίνυν ἐκ τούτων ὡς οὔτε πέφυκε μίαν οὕτως εἶναι τὴν πόλιν ὥσπερ λέγουσί τινες, καὶ τὸ λεχθὲν ὡς μέγιστον ἀγαθὸν ἐν ταῖς πόλεσιν ὅτι τὰς πόλεις ἀναιρεῖ· καίτοι τό γε ἐκάστου ἀγαθὸν σώζει ἕκαστον. ἔστι δὲ καὶ κατ' ἄλλον τρόπον φανερόν ὅτι τὸ λίαν ἐνοῦν ζητεῖν τὴν πόλιν οὐκ ἔστιν ἄμεινον. οἰκία μὲν γὰρ αὐταρκέστερον ἐνός, πόλις δ' οἰκίας, καὶ βούλεται γ' ἤδη τότε εἶναι πόλις ὅταν αὐτάρκη συμβαίῃ τὴν κοινωνίαν εἶναι τοῦ πλήθους· εἴπερ οὖν αἰρετώτερον τὸ αὐταρκέστερον, καὶ τὸ ἥττον ἐν τοῦ μᾶλλον αἰρετώτερον.

Ἀλλὰ μὴν οὐδ' εἰ τοῦτο ἄριστόν ἐστι, τὸ μίαν ὅτι μάλιστ' εἶναι τὴν κοινωνίαν, οὐδὲ τοῦτο ἀποδείκνυσθαι φαίνεται κατὰ τὸν λόγον, ἐὰν πάντες ἅμα λέγωσι τὸ ἐμὸν καὶ τὸ μὴ ἐμόν· τοῦτο γὰρ οἶεται ὁ Σωκράτης σημεῖον εἶναι τοῦ τὴν πόλιν τελέως εἶναι μίαν. τὸ γὰρ πάντες διττόν. εἰ μὲν οὖν ὡς ἕκαστος, τάχ' ἂν εἴη μᾶλλον ὃ βούλεται ποιεῖν ὁ Σωκράτης (ἕκαστος γὰρ υἱὸν ἑαυτοῦ φήσει τὸν αὐτὸν καὶ γυναῖκα δὴ τὴν αὐτήν, καὶ περὶ τῆς οὐσίας καὶ περὶ ἐκάστου δὴ τῶν συμβαινόντων ὡσαύτως). νῦν δ' οὐχ οὕτως φήσουσιν οἱ κοιναῖς χρώμενοι ταῖς γυναῖξιν καὶ τοῖς τέκνοις, ἀλλὰ πάντες μὲν, οὐχ ὡς ἕκαστος δ' αὐτῶν, ὁμοίως δὲ καὶ τὴν οὐσίαν πάντες μὲν, οὐχ ὡς ἕκαστος δ' αὐτῶν. ὅτι μὲν τοίνυν παραλογισμὸς τίς ἐστι τὸ λέγειν πάντας, φανερόν (τὸ γὰρ πάντες καὶ ἀμφοτέρω, καὶ περιττὰ καὶ ἄρτια, διὰ τὸ διττόν καὶ ἐν τοῖς λόγοις ἐριστικούς ποιεῖ συλλογισμούς· διό ἐστι τὸ πάντας τὸ αὐτὸ λέγειν ὡδὶ μὲν καλὸν ἀλλ' οὐ δυνατόν, ὡδὶ δ' οὐδὲν ὁμονοητικόν). πρὸς δὲ τούτοις ἑτέραν ἔχει βλάβην τὸ λεγόμενον. ἥκιστα γὰρ ἐπιμελείας τυγχάνει τὸ πλείστων κοινόν· τῶν γὰρ ἰδίων μάλιστα φροντίζουσιν, τῶν δὲ κοινῶν ἥττον, ἢ ὅσον ἐκάστῳ ἐπιβάλλει· πρὸς γὰρ τοῖς ἄλλοις ὡς ἑτέρου φροντίζοντος ὀλιγωροῦσι μᾶλλον, ὥσπερ ἐν ταῖς οἰκετικαῖς διακονίαις οἱ πολλοὶ

θεράποντες ἐνίοτε χεῖρον ὑπηρετοῦσι τῶν ἐλαττόνων. γίνονται δ' ἐκάστῳ χίλιοι τῶν πολιτῶν υἱοί, καὶ οὗτοι οὐχ ὥς ἐκάστου, ἀλλὰ τοῦ τυχόντος ὁ τυχὼν ὁμοίως ἐστὶν υἱός· ὥστε πάντες ὁμοίως ὀλιγωρήσουσιν.

[1262a] ἔτι οὕτως ἕκαστος “ἐμός” λέγει τὸν εὖ πράττοντα τῶν πολιτῶν ἢ κακῶς, ὅποστος τυγχάνει τὸν ἀριθμὸν ὧν, οἷον ἐμός ἢ τοῦ δεῖνος, τοῦτον τὸν τρόπον λέγων καθ' ἕκαστον τῶν χιλίων, ἢ ὅσων ἡ πόλις ἐστί, καὶ τοῦτο διστάζων· ἄδηλον γὰρ ὧ συνέβη γενέσθαι τέκνον καὶ σωθῆναι γενόμενον. καίτοι πότερον οὕτω κρεῖττον τὸ ἐμὸν λέγειν ἕκαστον, τὸ αὐτὸ [μὲν] προσαγορεύοντας δισχιλίῳ καὶ μυρίῳ, ἢ μᾶλλον ὥς νῦν ἐν ταῖς πόλεσι τὸ ἐμὸν λέγουσιν; ὁ μὲν γὰρ υἱὸν αὐτοῦ ὁ δὲ ἀδελφὸν αὐτοῦ προσαγορεύει τὸν αὐτόν, ὁ δ' ἀνεψιόν, ἢ κατ' ἄλλην τινὰ συγγένειαν [ἢ] πρὸς αἵματος ἢ κατ' οἰκειότητα καὶ κηδεῖαν αὐτοῦ πρῶτον ἢ τῶν αὐτοῦ, πρὸς δὲ τούτοις ἕτερος φράτορα φυλέτην. κρεῖττον γὰρ ἴδιον ἀνεψιὸν εἶναι ἢ τὸν τρόπον τοῦτον υἱόν. οὐ μὴν ἀλλ' οὐδὲ διαφυγεῖν δυνατὸν τὸ μή τινος ὑπολαμβάνειν ἑαυτῶν ἀδελφούς τε καὶ παῖδας καὶ πατέρας καὶ μητέρας· κατὰ γὰρ τὰς ὁμοιότητας αἱ γίνονται τοῖς τέκνοις πρὸς τοὺς γεννήσαντας ἀναγκαῖον λαμβάνειν περὶ ἀλλήλων τὰς πίστεις. ὅπερ φασὶ καὶ συμβαίνειν τινὲς τῶν τὰς τῆς γῆς περιόδους πραγματευομένων· εἶναι γάρ τισι τῶν ἄνω Λιβύων κοινὰς τὰς γυναῖκας, τὰ μέντοι γινόμενα τέκνα διαιρεῖσθαι κατὰ τὰς ὁμοιότητας. εἰσὶ δὲ τινες καὶ γυναῖκες καὶ τῶν ἄλλων ζώων, οἷον ἵπποι καὶ βόες, αἱ σφόδρα πεφύκασιν ὅμοια ἀποδιδόναι τὰ τέκνα τοῖς γονεῦσιν, ὥσπερ ἡ ἐν Φαρσάλῳ κληθεῖσα Δικαία ἵππος.

Ἔτι δὲ καὶ τὰς τοιαύτας δυσχερείας οὐ ῥάδιον εὐλαβηθῆναι τοῖς ταύτην κατασκευάζουσι τὴν κοινωνίαν, οἷον αἰκίας καὶ φόνους ἀκουσίους τοὺς δὲ ἐκούσιους, καὶ μάχας καὶ λοιδορίας· ὧν οὐδὲν ὀσιόν ἐστι γίνεσθαι πρὸς πατέρας καὶ μητέρας καὶ τοὺς μὴ πόρρῳ τῆς συγγενείας ὄντας, ὥσπερ πρὸς τοὺς ἄπωθεν· ἃ καὶ πλεῖον συμβαίνειν ἀναγκαῖον ἀγνοούντων ἢ γνωριζόντων, καὶ γενομένων τῶν μὲν γνωριζομένων ἐνδέχεται τὰς νομιζόμενας γίνεσθαι λύσεις, τῶν δὲ μὴ, οὐδεμίαν. ἄτοπον δὲ καὶ τὸ κοινὸς ποιήσαντα τοὺς υἱοὺς τὸ συνεῖναι μόνον ἀφελεῖν τῶν ἐρώντων, τὸ δ' ἐρᾶν μὴ κωλύσαι, μηδὲ τὰς χρήσεις τὰς ἄλλας ἃς πατρὶ πρὸς υἱὸν εἶναι πάντων ἐστὶν ἀπρεπέστατον καὶ ἀδελφῶ πρὸς ἀδελφόν, ἐπεὶ καὶ τὸ ἐρᾶν μόνον. ἄτοπον δὲ καὶ τὸ τὴν συνουσίαν ἀφελεῖν δι' ἄλλην μὲν αἰτίαν μηδεμίαν, ὥς λίαν δὲ ἰσχυρᾶς τῆς ἡδονῆς γινομένης, ὅτι δ' ὁ μὲν πατὴρ ἢ υἱός, οἱ δ' ἀδελφοὶ ἀλλήλων, μηδὲν οἴεσθαι διαφέρειν.

ἔοικε δὲ μᾶλλον τοῖς γεωργοῖς εἶναι χρήσιμον τὸ κοινὰς εἶναι τὰς

γυναῖκας καὶ τοὺς παῖδας [1262b] ἢ τοῖς φύλαξιν· ἥττον γὰρ ἔσται φιλία κοινῶν ὄντων τῶν τέκνων καὶ τῶν γυναικῶν, δεῖ δὲ τοιούτους εἶναι τοὺς ἀρχομένους πρὸς τὸ πειθαρχεῖν καὶ μὴ νεωτερίζειν. ὅλως δὲ συμβαίνειν ἀνάγκη τοῦναντίον διὰ τὸν τοιοῦτον νόμον ὧν προσήκει τοὺς ὀρθῶς κειμένους νόμους αἰτίους γίνεσθαι, καὶ δι' ἣν αἰτίαν ὁ Σωκράτης οὕτως οἶεται δεῖν τάττειν τὰ περὶ τὰ τέκνα καὶ τὰς γυναῖκας. φιλίαν τε γὰρ οἴομεθα μέγιστον εἶναι τῶν ἀγαθῶν ταῖς πόλεσιν (οὕτως γὰρ ἂν ἦκιστα στασιάζοιεν), καὶ τὸ μίαν εἶναι τὴν πόλιν ἐπαινεῖ μάλιστα ὁ Σωκράτης, ὃ καὶ δοκεῖ κάκεῖνος εἶναί φησι τῆς φιλίας ἔργον, καθάπερ ἐν τοῖς ἐρωτικοῖς λόγοις ἴσμεν λέγοντα τὸν Ἀριστοφάνην ὡς τῶν ἐρώντων διὰ τὸ σφόδρα φιλεῖν ἐπιθυμούντων συμφῦναι καὶ γενέσθαι ἐκ δύο ὄντων ἀμφοτέρους ἓνα· ἐνταῦθα μὲν οὖν ἀνάγκη ἀμφοτέρους ἐφθάρθαι ἢ τὸν ἓνα, ἐν δὲ τῇ πόλει τὴν φιλίαν ἀναγκαῖον ὑδαρῇ γίνεσθαι διὰ τὴν κοινωνίαν τὴν τοιαύτην, καὶ ἦκιστα λέγειν τὸν ἐμὸν ἢ υἱὸν πατέρα ἢ πατέρα υἱόν. ὥσπερ γὰρ μικρὸν γλυκὺ εἰς πολὺ ὕδωρ μειχθὲν ἀναίσθητον ποιεῖ τὴν κρᾶσιν, οὕτω συμβαίνει καὶ τὴν οἰκειότητα τὴν πρὸς ἀλλήλους τὴν ἀπὸ τῶν ὀνομάτων τούτων, διαφροντίζειν ἦκιστα ἀναγκαῖον ὅν ἐν τῇ πολιτείᾳ τῇ τοιαύτῃ ἢ πατέρα ὡς υἱῶν ἢ υἱὸν ὡς πατρός, ἢ ὡς ἀδελφοὺς ἀλλήλων. δύο γάρ ἐστιν ἃ μάλιστα ποιεῖ κήδεσθαι τοὺς ἀνθρώπους καὶ φιλεῖν, τό τε ἴδιον καὶ τὸ ἀγαπητόν· ὧν οὐδέτερον οἶόν τε ὑπάρχειν τοῖς οὕτω πολιτευομένοις. ἀλλὰ μὴν καὶ περὶ τοῦ μεταφέρειν τὰ γινόμενα τέκνα, τὰ μὲν ἐκ τῶν γεωργῶν καὶ τεχνιτῶν εἰς τοὺς φύλακας, τὰ δ' ἐκ τούτων εἰς ἐκείνους, πολλὴν ἔχει ταραχὴν τίνα ἔσται τρόπον· καὶ γινώσκειν ἀναγκαῖον τοὺς διδόντας καὶ μεταφέροντας τίσι τίνας διδόασιν. ἔτι δὲ καὶ τὰ πάλαι λεχθέντα μᾶλλον ἐπὶ τούτων ἀναγκαῖον συμβαίνειν, οἷον αἰκίας ἔρωτας φόνους· οὐ γὰρ ἔτι προσαγορεύουσιν ἀδελφοὺς καὶ τέκνα καὶ πατέρας καὶ μητέρας τοὺς φύλακας οἳ τε εἰς τοὺς ἄλλους πολίτας δοθέντες καὶ πάλιν οἱ παρὰ τοῖς φύλαξι τοὺς ἄλλους πολίτας, ὥστ' εὐλαβεῖσθαι τῶν τοιούτων τι πράττειν διὰ τὴν συγγένειαν.

περὶ μὲν οὖν τῆς περὶ τὰ τέκνα καὶ τὰς γυναῖκας κοινωνίας διωρίσθω τὸν τρόπον τοῦτον.

Ἐχόμενον δὲ τούτων ἐστὶν ἐπισκέψασθαι περὶ τῆς κτήσεως, τίνα τρόπον δεῖ κατασκευάζεσθαι τοῖς μέλλουσι πολιτεύεσθαι τὴν ἀρίστην πολιτείαν, πότερον κοινὴν ἢ μὴ κοινὴν εἶναι τὴν κτῆσιν. τοῦτο δ' ἂν τις καὶ χωρὶς σκέψαιτο ἀπὸ τῶν περὶ τὰ τέκνα καὶ τὰς γυναῖκας νενομοθετημένων, λέγω [1263a] δὲ τὰ περὶ τὴν κτῆσιν πότερον (κἂν ἢ ἐκεῖνα χωρὶς, καθ' ὃν νῦν τρόπον ἔχει πᾶσι) τὰς γε κτήσεις κοινὰς εἶναι βέλτιον, ἢ τὰς χρήσεις, οἷον τὰ μὲν γήπεδα χωρὶς, τοὺς δὲ καρποὺς εἰς τὸ κοινὸν φέροντας ἀναλίσκειν (ὅπερ

ἔνια ποιεῖ τῶν ἐθνῶν), ἢ τοῦναντίον τὴν μὲν γῆν κοινὴν εἶναι καὶ γεωργεῖν κοινῇ, τοὺς δὲ καρποὺς διαιρεῖσθαι πρὸς τὰς ἰδίας χρήσεις (λέγονται δέ τινες καὶ τοῦτον τὸν τρόπον κοινωνεῖν τῶν βαρβάρων), ἢ καὶ τὰ γήπεδα καὶ τοὺς καρποὺς κοινούς. ἑτέρων μὲν οὖν ὄντων τῶν γεωργούντων ἄλλος ἂν εἴη τρόπος καὶ ῥάων, αὐτῶν δ' αὐτοῖς διαπονούντων τὰ περὶ τὰς κτήσεις πλείους ἂν παρέχοι δυσκολίας. καὶ γὰρ ἐν ταῖς ἀπολαύσεσι καὶ ἐν τοῖς ἔργοις μὴ γινομένων ἴσων ἄλλ' ἀνίσων ἀναγκαῖον ἐγκλήματα γίνεσθαι πρὸς τοὺς ἀπολαύοντας μὲν ἢ λαμβάνοντας πολλά, ὀλίγα δὲ πονοῦντας, τοῖς ἐλάττω μὲν λαμβάνουσι, πλείω δὲ πονοῦσιν. ὅλως δὲ τὸ συζῆν καὶ κοινωνεῖν τῶν ἀνθρωπικῶν πάντων χαλεπόν, καὶ μάλιστα τῶν τοιούτων. δηλοῦσι δ' αἱ τῶν συναποδήμων κοινωνίαι· σχεδὸν γὰρ οἱ πλεῖστοι διαφέρονται, ἐκ τῶν ἐν ποσὶ καὶ ἐκ μικρῶν προσκρούοντες ἀλλήλοις. ἔτι δὲ τῶν θεραπόντων τούτοις μάλιστα προσκρούομεν οἷς πλεῖστα προσχρώμεθα πρὸς τὰς διακονίας τὰς ἐγκυκλίους.

τὸ μὲν οὖν κοινὰς εἶναι τὰς κτήσεις ταύτας τε καὶ ἄλλας τοιαύτας ἔχει δυσχερείας· ὃν δὲ νῦν τρόπον ἔχει, ἐπικοσμηθὲν ἔθεσι καὶ τάξει νόμων ὀρθῶν, οὐ μικρὸν ἂν διενέγκαι. ἔξει γὰρ τὸ ἐξ ἀμφοτέρων ἀγαθόν· λέγω δὲ τὸ ἐξ ἀμφοτέρων τὸ ἐκ τοῦ κοινὰς εἶναι τὰς κτήσεις καὶ τὸ ἐκ τοῦ ἰδίας. δεῖ γὰρ πῶς μὲν εἶναι κοινὰς, ὅλως δ' ἰδίας. αἱ μὲν γὰρ ἐπιμέλεια διηρημέναι τὰ ἐγκλήματα πρὸς ἀλλήλους οὐ ποιήσουσιν, μᾶλλον δ' ἐπιδώσουσιν ὥς πρὸς ἴδιον ἐκάστου προσεδρεύοντος· δι' ἀρετὴν δ' ἔσται πρὸς τὸ χρῆσθαι, κατὰ τὴν παροιμίαν, κοινὰ τὰ φίλων. ἔστι δὲ καὶ νῦν τὸν τρόπον τοῦτον ἐν ἐνίαις πόλεσιν οὕτως ὑπογεγραμμένον, ὥς οὐκ ὄν ἀδύνατον, καὶ μάλιστα ἐν ταῖς καλῶς οἰκουμέναις τὰ μὲν ἔστι τὰ δὲ γένοιτ' ἂν· ἰδίαν γὰρ ἕκαστος τὴν κτῆσιν ἔχων τὰ μὲν χρήσιμα ποιεῖ τοῖς φίλοις, τοῖς δὲ χρήται κοινοῖς, οἷον καὶ ἐν Λακεδαίμονι τοῖς τε δούλοις χρῶνται τοῖς ἀλλήλων ὥς εἰπεῖν ἰδίους, ἔτι δ' ἵπποις καὶ κυσίν, κἂν δεηθῶσιν ἐφοδίων, [ἐν] τοῖς ἀγροῖς κατὰ τὴν χώραν. φανερόν τοίνυν ὅτι βέλτιον εἶναι μὲν ἰδίας τὰς κτήσεις, τῇ δὲ χρήσει ποιεῖν κοινὰς· ὅπως δὲ γίνονται τοιοῦτοι, τοῦ νομοθέτου τοῦτ' ἔργον ἰδίον ἔστιν. ἔτι δὲ καὶ πρὸς ἡδονὴν ἀμύθητον ὅσον διαφέρει τὸ νομίζειν ἰδίον τι. μὴ γὰρ οὐ μάτην τὴν πρὸς [1263b] αὐτὸν αὐτὸς ἔχει φιλίαν ἕκαστος, ἀλλ' ἔστι τοῦτο φυσικόν. τὸ δὲ φίλαυτον εἶναι ψέγεται δικαίως· οὐκ ἔστι δὲ τοῦτο τὸ φιλεῖν ἑαυτόν, ἀλλὰ τὸ μᾶλλον ἢ δεῖ φιλεῖν, καθάπερ καὶ τὸ φιλοχρήματον, ἐπεὶ φιλοῦσιν γε πάντες ὥς εἰπεῖν ἕκαστον τῶν τοιούτων. ἀλλὰ μὴν καὶ τὸ χαρίσασθαι καὶ βοηθῆσαι φίλοις ἢ ξένοις ἢ ἐταίροις ἡδιστον· ὃ γίνεται τῆς κτήσεως ἰδίας οὔσης. ταῦτά τε δὴ οὐ συμβαίνει τοῖς λίαν ἐν ποιοῦσι τὴν πόλιν, καὶ πρὸς τούτοις ἀναιροῦσιν ἔργα δυοῖν ἀρεταῖν φανερώς, σωφροσύνης μὲν τὸ περὶ τὰς γυναῖκας (ἔργον γὰρ καλὸν ἀλλοτρίας οὔσης

ἀπέχεσθαι διὰ σωφροσύνην), ἐλευθεριότητος δὲ τὸ περὶ τὰς κτήσεις· οὔτε γὰρ ἔσται φανερός ἐλευθέριος ὢν, οὔτε πράξει πράξιν ἐλευθέριον οὐδεμίαν· ἐν τῇ γὰρ χρήσει τῶν κτημάτων τὸ τῆς ἐλευθεριότητος ἔργον ἐστίν.

εὐπρόσωπος μὲν οὖν ἡ τοιαύτη νομοθεσία καὶ φιλόανθρωπος ἂν εἶναι δόξειεν· ὁ γὰρ ἀκροώμενος ἄσμενος ἀποδέχεται, νομίζων ἔσεσθαι φιλίαν τινὰ θαυμαστὴν πᾶσι πρὸς ἅπαντας, ἄλλως τε καὶ ὅταν κατηγορῇ τις τῶν νῦν ὑπαρχόντων ἐν ταῖς πολιτείαις κακῶν ὡς γινομένων διὰ τὸ μὴ κοινὴν εἶναι τὴν οὐσίαν, λέγω δὲ δίκας τε πρὸς ἀλλήλους περὶ συμβολαίων καὶ ψευδομαρτυριῶν κρίσεις καὶ πλουσιῶν κολακείας· ὧν οὐδὲν γίνεται διὰ τὴν ἀκοινωνησίαν ἀλλὰ διὰ τὴν μοχθηρίαν, ἐπεὶ καὶ τοὺς κοινὰ κεκτημένους καὶ κοινωνοῦντας πολλῷ διαφορομένους μᾶλλον ὀρώμεν ἢ τοὺς χωρὶς τὰς οὐσίας ἔχοντας· ἀλλὰ θεωροῦμεν ὀλίγους τοὺς ἐκ τῶν κοινωνιῶν διαφορομένους, πρὸς πολλοὺς συμβάλλοντες τοὺς κεκτημένους ἰδίᾳ τὰς κτήσεις. ἔτι δὲ δίκαιοι μὴ μόνον λέγειν ὅσων στερήσονται κακῶν κοινωνήσαντες, ἀλλὰ καὶ ὅσων ἀγαθῶν φαίνεται δ' εἶναι ἀάμπαν ἀδύνατος ὁ βίος.

αἴτιον δὲ τῷ Σωκράτει τῆς παρακρούσεως χρὴ νομίζειν τὴν ὑπόθεσιν οὐκ οὔσαν ὀρθήν. δεῖ μὲν γὰρ εἶναι πῶς μίαν καὶ τὴν οἰκίαν καὶ τὴν πόλιν, ἀλλ' οὐ πάντως. ἔστι μὲν γὰρ ὡς οὐκ ἔσται προϊοῦσα πόλις, ἔστι δ' ὡς ἔσται μὲν, ἐγγὺς δ' οὔσα τοῦ μὴ πόλις εἶναι χείρων πόλις, ὥσπερ κἂν εἴ τις τὴν συμφωνίαν ποιήσειεν ὁμοφωνίαν ἢ τὸν ῥυθμὸν βάσιν μίαν. ἀλλὰ δεῖ πλῆθος ὄν, ὥσπερ εἴρηται πρότερον, διὰ τὴν παιδείαν κοινὴν καὶ μίαν ποιεῖν· καὶ τὸν γε μέλλοντα παιδείαν εἰσάγειν καὶ νομίζοντα διὰ ταύτης ἔσεσθαι τὴν πόλιν σπουδαίαν ἄτοπον τοῖς τοιοῦτοις οἶεσθαι διορθοῦν, ἀλλὰ μὴ τοῖς ἔθεσι καὶ τῇ φιλοσοφίᾳ καὶ τοῖς νόμοις, ὥσπερ τὰ περὶ τὰς κτήσεις ἐν Λακεδαιμόνι καὶ Κρήτῃ τοῖς συσσιτίοις ὁ [1264a] νομοθέτης ἐκοίνωσε. δεῖ δὲ μηδὲ τοῦτο αὐτὸ ἀγνοεῖν, ὅτι χρὴ προσέχειν τῷ πολλῷ χρόνῳ καὶ τοῖς πολλοῖς ἔτεσιν, ἐν οἷς οὐκ ἂν ἔλαθεν, εἰ ταῦτα καλῶς εἶχεν· πάντα γὰρ σχεδὸν εὔρηται μὲν, ἀλλὰ τὰ μὲν οὐ συνῆκται, τοῖς δ' οὐ χρῶνται γινώσκοντες. μάλιστα δ' ἂν γένοιτο φανερόν εἴ τις τοῖς ἔργοις ἴδοι τὴν τοιαύτην πολιτείαν κατασκευαζομένην· οὐ γὰρ δυνήσεται μὴ μερίζων αὐτὰ καὶ χωρίζων ποιῆσαι τὴν πόλιν, τὰ μὲν εἰς συσσίτια τὰ δὲ εἰς φατρία καὶ φυλάς. ὥστε οὐδὲν ἄλλο συμβήσεται νενομοθετημένον πλὴν μὴ γεωργεῖν τοὺς φύλακας· ὅπερ καὶ νῦν Λακεδαιμόνιοι ποιεῖν ἐπιχειροῦσιν.

οὐ μὴν ἀλλ' οὐδὲ ὁ τρόπος τῆς ὅλης πολιτείας τίς ἔσται τοῖς κοινωνοῦσιν, οὔτ' εἴρηκεν ὁ Σωκράτης οὔτε ῥάδιον εἶπεῖν. καίτοι σχεδὸν τό γε πλῆθος τῆς πόλεως τὸ τῶν ἄλλων πολιτῶν γίνεται πλῆθος, περὶ ὧν οὐδὲν διώριται,

πότερον καὶ τοῖς γεωργοῖς κοινὰς εἶναι δεῖ τὰς κτήσεις ἢ καθ' ἕκαστον ἰδίας, ἔτι δὲ καὶ γυναῖκας καὶ παῖδας ἰδίους ἢ κοινούς. εἰ μὲν γὰρ τὸν αὐτὸν τρόπον κοινὰ πάντα πάντων, τί διοίσουσιν οὗτοι ἐκείνων τῶν φυλάκων; ἢ τί πλεῖον τοῖς ὑπομένουσι τὴν ἀρχὴν αὐτῶν, ἢ τί μαθόντες ὑπομενοῦσι τὴν ἀρχήν, ἐὰν μή τι σοφίζονται τοιοῦτον οἶον Κρῆτες; ἐκεῖνοι γὰρ τᾶλλα ταῦτά τοῖς δούλοις ἐφέντες μόνον ἀπειρήκασι τὰ γυμνάσια καὶ τὴν τῶν ὅπλων κτῆσιν. εἰ δέ, καθάπερ ἐν ταῖς ἄλλαις πόλεσι, καὶ παρ' ἐκείνοις ἔσται τὰ τοιαῦτα, τίς ὁ τρόπος ἔσται τῆς κοινωνίας; ἐν μιᾷ γὰρ πόλει δύο πόλεις ἀναγκαῖον εἶναι, καὶ ταύτας ὑπεναντίας ἀλλήλαις. ποιεῖ γὰρ τοὺς μὲν φύλακας οἶον φρουρούς, τοὺς δὲ γεωργοὺς καὶ τοὺς τεχνίτας καὶ τοὺς ἄλλους πολίτας· ἐγκλήματα δὲ καὶ δίκαι, καὶ ὅσα ἄλλα ταῖς πόλεσιν ὑπάρχειν φησὶ κακά, πάνθ' ὑπάρξει καὶ τούτοις. καίτοι λέγει ὁ Σωκράτης ὡς οὐ πολλῶν δεήσονται νομίμων διὰ τὴν παιδείαν, οἶον ἀστυνομικῶν καὶ ἀγορανομικῶν καὶ τῶν ἄλλων τῶν τοιούτων, ἀποδιδούς μόνον τὴν παιδείαν τοῖς φύλαξιν. ἔτι δὲ κυρίου ποιεῖ τῶν κτημάτων τοὺς γεωργοὺς <τοὺς> ἀποφορὰν φέροντας· ἀλλὰ πολὺ μᾶλλον εἰκὸς εἶναι χαλεποὺς καὶ φρονημάτων πλήρεις, ἢ τὰς παρ' ἐνόις εἰλωτείας τε καὶ πενεστείας καὶ δουλείας. ἀλλὰ γὰρ εἴτ' ἀναγκαῖα ταῦθ' ὁμοίως εἴτε μή, νῦν γε οὐδὲν διώρισται. καὶ περὶ τῶν ἐχομένων τίς ἢ τούτων τε πολιτεία καὶ παιδεία καὶ νόμοι τίνες. ἔστι δ' οὐθ' εὐρεῖν ῥάδιον, οὔτε τὸ διαφέρον μικρὸν τὸ ποιούς τινας εἶναι τούτους πρὸς τὸ σῶζεσθαι τὴν τῶν φυλάκων κοινωνίαν. ἀλλὰ [1264b] μὴν εἴ γε τὰς μὲν γυναῖκας ποιήσει κοινὰς τὰς δὲ κτήσεις ἰδίας, τίς οἰκονομήσει ὥσπερ τὰ ἐπὶ τῶν ἀγρῶν οἱ ἄνδρες αὐτῶν - κἂν εἰ κοιναὶ αἱ κτήσεις καὶ αἱ τῶν γεωργῶν γυναῖκες; ἄτοπον δὲ καὶ τὸ ἐκ τῶν θηρίων ποιεῖσθαι τὴν παραβολήν, ὅτι δεῖ τὰ αὐτὰ ἐπιτηδεύειν τὰς γυναῖκας τοῖς ἀνδράσιν, οἷς οἰκονομίας οὐδὲν μέτεστιν.

ἐπισφαλὲς δὲ καὶ τοὺς ἄρχοντας ὡς καθίστησιν ὁ Σωκράτης. ἀεὶ γὰρ ποιεῖ τοὺς αὐτοὺς ἄρχοντας· τοῦτο δὲ στάσεως αἴτιον γίνεται καὶ παρὰ τοῖς μηδὲν ἀξίωμα κεκτημένοις, ἢ που δῆθεν παρὰ γε θυμοειδέσι καὶ πολεμικοῖς ἀνδράσιν. ὅτι δ' ἀναγκαῖον αὐτῷ ποιεῖν τοὺς αὐτοὺς ἄρχοντας, φανερόν· οὐ γὰρ ὅτε μὲν ἄλλοις ὅτε δὲ ἄλλοις μέμεικται ταῖς ψυχαῖς ὁ παρὰ τοῦ θεοῦ χρυσός, ἀλλ' ἀεὶ τοῖς αὐτοῖς. φησὶ δὲ τοῖς μὲν εὐθύς γινομένοις μεῖξαι χρυσόν, τοῖς δ' ἄργυρον, χαλκὸν δὲ καὶ σίδηρον τοῖς τεχνίταις μέλλουσιν ἔσσεσθαι καὶ γεωργοῖς. ἔτι δὲ καὶ τὴν εὐδαιμονίαν ἀφαιρούμενος τῶν φυλάκων, ὅλην φησὶ δεῖν εὐδαίμονα ποιεῖν τὴν πόλιν τὸν νομοθέτην. ἀδύνατον δὲ εὐδαιμονεῖν ὅλην, μὴ πάντων ἢ μὴ τῶν πλείστων μερῶν ἢ τινῶν ἐχόντων τὴν εὐδαιμονίαν. οὐ γὰρ τῶν αὐτῶν τὸ εὐδαιμονεῖν ὥνπερ τὸ ἄρτιον· τοῦτο μὲν γὰρ ἐνδέχεται τῷ ὅλῳ ὑπάρχειν, τῶν δὲ μερῶν μηδετέρῳ, τὸ δὲ εὐδαιμονεῖν ἀδύνατον. ἀλλὰ μὴν εἰ οἱ φύλακες μὴ εὐδαίμονες, τίνες

ἕτεροι; οὐ γὰρ δὴ οἷ γε τεχνῖται καὶ τὸ πλῆθος τὸ τῶν βαναύσων. ἡ μὲν οὖν πολιτεία περὶ ἧς ὁ Σωκράτης εἴρηκεν ταύτας τε τὰς ἀπορίας ἔχει καὶ τούτων οὐκ ἐλάττους ἑτέρας.

Σχεδὸν δὲ παραπλησίως καὶ τὰ περὶ τοὺς Νόμους ἔχει τοὺς ὕστερον γραφέντας, διὸ καὶ περὶ τῆς ἐνταῦθα πολιτείας ἐπισκέψασθαι μικρὰ βέλτιον. καὶ γὰρ ἐν τῇ Πολιτείᾳ περὶ ὀλίγων πάνπαν διώρικεν ὁ Σωκράτης, περί τε γυναικῶν καὶ τέκνων κοινωνίας, πῶς ἔχειν δεῖ, καὶ περὶ κτήσεως, καὶ τῆς πολιτείας τὴν τάξιν (διαιρεῖται γὰρ εἰς δύο μέρη τὸ πλῆθος τῶν οἰκούντων, τὸ μὲν εἰς τοὺς γεωργούς, τὸ δὲ εἰς τὸ προπολεμοῦν μέρος· τρίτον δ' ἐκ τούτων τὸ βουλευόμενον καὶ κύριον τῆς πόλεως), περὶ δὲ τῶν γεωργῶν καὶ τῶν τεχνιτῶν, πότερον οὐδεμιᾶς μεθέξουσιν ἢ τινος ἀρχῆς, καὶ πότερον ὅπλα δεῖ κεκτῆσθαι καὶ τούτους καὶ συμπολεμεῖν ἢ μή, περὶ τούτων οὐδὲν διώρικεν ὁ Σωκράτης, ἀλλὰ τὰς μὲν γυναικας οἶεται δεῖν συμπολεμεῖν καὶ παιδείας μετέχειν τῆς αὐτῆς τοῖς φύλαξιν, τὰ δ' ἄλλα τοῖς ἔξωθεν πεπλήρωκε τὸν λόγον καὶ περὶ τῆς παιδείας, ποίαν τινὰ δεῖ γίνεσθαι [1265a] τῶν φυλάκων. τῶν δὲ Νόμων τὸ μὲν πλεῖστον μέρος νόμοι τυγχάνουσιν ὄντες, ὀλίγα δὲ περὶ τῆς πολιτείας εἴρηκεν, καὶ ταύτην βουλόμενος κοινοτέραν ποιεῖν ταῖς πόλεσι κατὰ μικρὸν περιάγει πάλιν πρὸς τὴν ἑτέραν πολιτείαν. ἔξω γὰρ τῆς τῶν γυναικῶν κοινωνίας καὶ τῆς κτήσεως, τὰ ἄλλα ταῦτ' ἀποδίδωσιν ἀμφοτέραις ταῖς πολιτείαις· καὶ γὰρ παιδείαν τὴν αὐτὴν, καὶ τὸ τῶν ἔργων τῶν ἀναγκαίων ἀπεχομένους ζῆν, καὶ περὶ συσσιτίων ὡσαύτως· πλὴν ἐν ταύτῃ φησὶ δεῖν εἶναι συσσίτια καὶ γυναικῶν, καὶ τὴν μὲν χιλίων τῶν ὅπλα κεκτημένων, ταύτην δὲ πεντακισχιλίων.

τὸ μὲν οὖν περιττὸν ἔχουσι πάντες οἱ τοῦ Σωκράτους λόγοι καὶ τὸ κομψὸν καὶ τὸ καινοτόμον καὶ τὸ ζητητικόν, καλῶς δὲ πάντα ἴσως χαλεπόν, ἐπεὶ καὶ τὸ νῦν εἰρημένον πλῆθος δεῖ μὴ λανθάνειν ὅτι χώρας δεήσει τοῖς τοσούτοις Βαβυλωνίας ἢ τινος ἄλλης ἀπεράντου τὸ πλῆθος, ἐξ ἧς ἀργοὶ πεντακισχίλιοι θρέψονται, καὶ περὶ τούτους γυναικῶν καὶ θεραπόντων ἕτερος ὄχλος πολλαπλάσιος. δεῖ μὲν οὖν ὑποτίθεσθαι κατ' εὐχὴν, μηδὲν μέντοι ἀδύνατον. λέγεται δ' ὥς δεῖ τὸν νομοθέτην πρὸς δύο βλέποντα τιθέναι τοὺς νόμους, πρὸς τε τὴν χώραν καὶ τοὺς ἀνθρώπους. ἔτι δὲ καλῶς ἔχει προσθεῖναι καὶ πρὸς τοὺς γειτνιῶντας τόπους, πρῶτον μὲν εἰ δεῖ τὴν πόλιν ζῆν βίον πολιτικόν, μὴ μονωτικόν (οὐ γὰρ μόνον ἀναγκαῖόν ἐστιν αὐτὴν τοιούτοις χρῆσθαι πρὸς τὸν πόλεμον ὅπλοις ἃ χρήσιμα κατὰ τὴν οἰκείαν χώραν ἐστίν, ἀλλὰ καὶ πρὸς τοὺς ἔξω τόπους)· εἰ δέ τις μὴ τοιοῦτον ἀποδέχεται βίον, μήτε τὸν ἴδιον μήτε τὸν κοινὸν τῆς πόλεως, ὅμως οὐδὲν ἦττον δεῖ φοβεροὺς εἶναι τοῖς πολεμίοις, μὴ μόνον ἐλθοῦσιν εἰς τὴν χώραν ἀλλὰ καὶ ἀπελθοῦσιν.

καὶ τὸ πλῆθος δὲ τῆς κτήσεως ὁρᾶν δεῖ, μή ποτε βέλτιον ἑτέρως διορίσαι τῷ σαφῶς μᾶλλον. τοσαύτην γὰρ εἶναί φησι δεῖν ὥστε ζῆν σωφρόνως, ὥσπερ ἂν εἴ τις εἶπεν ὥστε ζῆν εὖ. τοῦτο γὰρ ἐστὶ καθόλου μᾶλλον. ἔτι δ' ἐστὶ σωφρόνως μὲν ταλαιπώρως δὲ ζῆν, ἀλλὰ βελτίων ὅρος τὸ σωφρόνως καὶ ἐλευθερίως (χωρὶς γὰρ ἐκατέρω τῷ μὲν τὸ τρυφᾶν ἀκολουθήσει, τῷ δὲ τὸ ἐπιπόνως), ἐπεὶ μόναι γ' εἰσὶν ἔξεις αἰρεταὶ περὶ τὴν τῆς οὐσίας χρῆσιν αὗται, οἷον οὐσίᾳ πράως μὲν ἢ ἀνδρείως χρῆσθαι οὐκ ἔστιν, σωφρόνως δὲ καὶ ἐλευθερίως ἔστιν, ὥστε καὶ τὰς ἔξεις ἀναγκαῖον περὶ αὐτὴν εἶναι ταύτας. ἄτοπον δὲ καὶ τὸ τὰς κτήσεις ἰσάζοντα τὸ περὶ τὸ πλῆθος τῶν πολιτῶν μὴ κατασκευάζειν, ἀλλ' ἀφεῖναι τὴν τεκνοποιίαν ἀόριστον ὡς ἱκανῶς ἀνομαλισθησομένην εἰς τὸ αὐτὸ πλῆθος διὰ τὰς ἀτεκνίας ὁσωνοῦν γεννωμένων, [1265b] ὅτι δοκεῖ τοῦτο καὶ νῦν συμβαίνειν περὶ τὰς πόλεις. δεῖ δὲ τοῦτ' οὐχ ὁμοίως ἀκριβῶς ἔχειν περὶ τὰς πόλεις τότε καὶ νῦν· νῦν μὲν γὰρ οὐδεὶς ἀπορεῖ, διὰ τὸ μερίζεσθαι τὰς οὐσίας εἰς ὅποσονοῦν πλῆθος, τότε δὲ ἀδιαιρέτων οὐσῶν ἀνάγκη τοὺς παράζυγας μηδὲν ἔχειν, ἐάν τ' ἐλάττους ᾖσι τὸ πλῆθος ἐάν τε πλείους. μᾶλλον δὲ δεῖν ὑπολάβοι τις ἂν ὠρίσθαι τῆς οὐσίας τὴν τεκνοποιίαν, ὥστε ἀριθμοῦ τινὸς μὴ πλείονα γεννᾶν, τοῦτο δὲ τιθέναι τὸ πλῆθος ἀποβλέποντα πρὸς τὰς τύχας, ἂν συμβαίνειν τελευτᾶν τινὰς τῶν γεννηθέντων, καὶ πρὸς τὴν τῶν ἄλλων ἀτεκνίαν. τὸ δ' ἀφεῖσθαι, καθάπερ ἐν ταῖς πλείσταις πόλεσι, πενίας ἀναγκαῖον αἴτιον γίνεσθαι τοῖς πολίταις, ἢ δὲ πενία στάσιν ἐμποιεῖ καὶ κακουργίαν. Φείδων μὲν οὖν ὁ Κορίνθιος, ὢν νομοθέτης τῶν ἀρχαιοτάτων, τοὺς οἴκους ἴσους ὠήθη δεῖν διαμέγειν καὶ τὸ πλῆθος τῶν πολιτῶν, καὶ εἰ τὸ πρῶτον τοὺς κλήρους ἀνίσους εἶχον πάντες κατὰ μέγεθος· ἐν δὲ τοῖς νόμοις τούτοις τοῦναντίον ἐστίν. ἀλλὰ περὶ μὲν τούτων πῶς οἰόμεθα βέλτιον ἂν ἔχειν, λεκτέον ὕστερον· ἐλλέλειπται δ' ἐν τοῖς νόμοις τούτοις καὶ τὰ περὶ τοὺς ἄρχοντας πῶς ἔσσονται διαφέροντες τῶν ἀρχομένων. φησὶ γὰρ δεῖν, ὥσπερ ἐξ ἑτέρου τὸ στημόνιον ἐρίου γίνεται τῆς κρόκης, οὕτω καὶ τοὺς ἄρχοντας ἔχειν δεῖν πρὸς τοὺς ἀρχομένους. ἐπεὶ δὲ τὴν πᾶσαν οὐσίαν ἐφίησι γίνεσθαι μείζονα μέχρι πενταπλασίας, διὰ τί τοῦτ' οὐκ ἂν εἴη ἐπὶ τῆς γῆς μέχρι τινός; καὶ τὴν τῶν οἰκοπέδων δὲ διαίρεσιν δεῖ σκοπεῖν, μή ποτ' οὐ συμφέρει πρὸς οἰκονομίαν· δύο γὰρ οἰκόπεδα ἐκάστῳ ἔνειμε διελὼν χωρὶς, χαλεπὸν δὲ οἰκίας δύο οἰκεῖν.

ἡ δὲ σύνταξις ὅλη βούλεται μὲν εἶναι μήτε δημοκρατία μήτε ὀλιγαρχία, μέση δὲ τούτων, ἣν καλοῦσι πολιτείαν· ἐκ γὰρ τῶν ὀλιτευόντων ἐστίν. εἰ μὲν οὖν ὡς κοινοτάτην ταύτην κατασκευάζει ταῖς πόλεσι τῶν ἄλλων πολιτειῶν, καλῶς εἴρηκεν ἴσως· εἰ δ' ὡς ἀρίστην μετὰ τὴν πρώτην πολιτείαν, οὐ καλῶς. τάχα γὰρ τὴν τῶν Λακῶνων ἂν τις ἐπαινέσειε μᾶλλον, ἢ καὶ ἄλλην τινὰ ἀριστοκρατικωτέραν. ἔνιοι μὲν οὖν λέγουσιν ὡς δεῖ τὴν ἀρίστην πολιτείαν ἐξ



ἀπασῶν εἶναι τῶν πολιτειῶν μεμειγμένην, διὸ καὶ τὴν τῶν Λακεδαιμονίων ἐπαινοῦσιν (εἶναι γὰρ αὐτὴν οἱ μὲν ἐξ ὀλιγαρχίας καὶ μοναρχίας καὶ δημοκρατίας φασίν, λέγοντες τὴν μὲν βασιλείαν μοναρχίαν, τὴν δὲ τῶν γερόντων ἀρχὴν ὀλιγαρχίαν, δημοκρατεῖσθαι δὲ κατὰ τὴν τῶν ἐφόρων ἀρχὴν διὰ τὸ ἐκ τοῦ δήμου εἶναι τοὺς ἐφόρους· οἱ δὲ τὴν μὲν ἐφορείαν εἶναι τυραννίδα, δημοκρατεῖσθαι δὲ κατὰ τε τὰ συσσίτια καὶ τὸν ἄλλον βίον τὸν [1266a] καθ' ἡμέραν)· ἐν δὲ τοῖς νόμοις εἴρηται τούτοις ὥς δέον συγκεῖσθαι τὴν ἀρίστην πολιτείαν ἐκ δημοκρατίας καὶ τυραννίδος, ἅς ἡ τὸ παράπαν οὐκ ἂν τις θεῖη πολιτείας ἢ χειρίστας πασῶν. βέλτιον οὖν λέγουσιν οἱ πλείους μιγνύντες· ἡ γὰρ ἐκ πλειόνων συγκειμένη πολιτεία βελτίων. ἔπειτ' οὐδ' ἔχουσα φαίνεται μοναρχικὸν οὐδέν, ἀλλ' ὀλιγαρχικὰ καὶ δημοκρατικά· μᾶλλον δ' ἐγκλίνειν βούλεται πρὸς τὴν ὀλιγαρχίαν. δῆλον δὲ ἐκ τῆς τῶν ἀρχόντων καταστάσεως· τὸ μὲν γὰρ ἐξ αἵρετῶν κληρωτοὺς κοινὸν ἀμφοῖν, τὸ δὲ τοῖς μὲν εὐπορωτέροις ἐπάναγκες ἐκκλησιάζειν εἶναι καὶ φέρειν ἄρχοντας ἢ τι ποιεῖν ἄλλο τῶν πολιτικῶν, τοὺς δ' ἀφεῖσθαι, τοῦτο δ' ὀλιγαρχικόν, καὶ τὸ πειρᾶσθαι πλείους ἐκ τῶν εὐπόρων εἶναι τοὺς ἄρχοντας, καὶ τὰς μεγίστας ἐκ τῶν μεγίστων τιμημάτων. ὀλιγαρχικὴν δὲ ποιεῖ καὶ τὴν τῆς βουλῆς αἵρεσιν. αἱροῦνται μὲν γὰρ πάντες ἐπάναγκες ἀλλ' ἐκ τοῦ πρώτου τιμήματος, εἴτα πάλιν ἴσους ἐκ τοῦ δευτέρου· εἴτ' ἐκ τῶν τρίτων, πλὴν οὐ πᾶσιν ἐπάναγκες ἦν τοῖς ἐκ τῶν τρίτων ἢ τετάρτων, ἐκ δὲ [τοῦ τετάρτου] τῶν τετάρτων μόνοις ἐπάναγκες τοῖς πρώτοις καὶ τοῖς δευτέροις· εἴτ' ἐκ τούτων ἴσον ἅφ' ἐκάστου τιμήματος ἀποδείξαι φησι δεῖν ἀριθμόν. ἔσονται δὲ πλείους οἱ ἐκ τῶν μεγίστων τιμημάτων καὶ βελτίους διὰ τὸ ἐνίους μὴ αἰρεῖσθαι τῶν δημοτικῶν διὰ τὸ μὴ ἐπάναγκες. ὥς μὲν οὖν οὐκ ἐκ δημοκρατίας καὶ μοναρχίας δεῖ συνιστάναι τὴν τοιαύτην πολιτείαν, ἐκ τούτων φανερόν καὶ τῶν ὕστερον ῥηθησομένων, ὅταν ἐπιβάλλῃ περὶ τῆς τοιαύτης πολιτείας ἡ σκέψις· ἔχει δὲ καὶ περὶ τὴν αἵρεσιν τῶν ἀρχόντων τὸ ἐξ αἵρετῶν αἵρετοὺς ἐπικίνδυνον. εἰ γὰρ τινες συστήναι θέλουσι καὶ μέτριοι τὸ πλῆθος, αἰεὶ κατὰ τὴν τούτων αἵρεθήσονται βούλησιν. τὰ μὲν οὖν περὶ τὴν πολιτείαν τὴν ἐν τοῖς Νόμοις τοῦτον ἔχει τὸν τρόπον.

Εἰσὶ δὲ τινες πολιτεῖαι καὶ ἄλλαι, αἱ μὲν ἰδιωτῶν αἱ δὲ φιλοσόφων καὶ πολιτικῶν, πᾶσαι δὲ τῶν καθεστηκυῶν καὶ καθ' ἃς πολιτεύονται νῦν ἐγγύτερόν εἰσι τούτων ἀμφοτέρων. οὐδεὶς γὰρ οὔτε τὴν περὶ τὰ τέκνα κοινότητα καὶ τὰς γυναῖκας ἄλλος κεκαινοτόμηκεν, οὔτε περὶ τὰ συσσίτια τῶν γυναικῶν, ἀλλ' ἀπὸ τῶν ἀναγκαίων ἄρχονται μᾶλλον. δοκεῖ γάρ τισι τὸ περὶ τὰς οὐσίας εἶναι μέγιστον τετάχθαι καλῶς· περὶ γὰρ τούτων ποιεῖσθαι φασὶ τὰς στάσεις πάντας, διὸ Φαλέας ὁ Χαλκηδόνιος τοῦτ' εἰσήνεγκε πρῶτος· φησὶ γὰρ δεῖν ἴσας εἶναι τὰς κτήσεις τῶν πολιτῶν. τοῦτο [1266b] δὲ

κατοικιζομέναις μὲν εὐθὺς οὐ χαλεπὸν ὤετο ποιεῖν, τὰς δ' ἤδη κατοικουμένας ἐργωδέστερον μὲν, ὅμως δὲ τάχιστ' ἂν ὁμαλισθῆναι τῷ τὰς προῖκας τοὺς μὲν πλουσίους διδόναι μὲν λαμβάνειν δὲ μὴ, τοὺς δὲ πένητας μὴ διδόναι μὲν λαμβάνειν δέ. Πλάτων δὲ τοὺς Νόμους γράφων μέχρι μὲν τινος ὤετο δεῖν ἔαν, πλεῖον δὲ τοῦ πενταπλασίαν εἶναι τῆς ἐλαχίστης μηδενὶ τῶν πολιτῶν ἐξουσίαν εἶναι κτήσασθαι, καθάπερ εἴρηται καὶ πρότερον. δεῖ δὲ μηδὲ τοῦτο λανθάνειν τοὺς οὕτω νομοθετοῦντας, ὃ λανθάνει νῦν, ὅτι τὸ τῆς οὐσίας τάττοντας πλῆθος προσήκει καὶ τῶν τέκνων τὸ πλῆθος τάττειν· ἔαν γὰρ ὑπεραίρη τῆς οὐσίας τὸ μέγεθος ὁ τῶν τέκνων ἀριθμός, ἀνάγκη τὸν γε νόμον λύεσθαι, καὶ χωρὶς τῆς λύσεως φαῦλον τὸ πολλοὺς ἐκ πλουσιῶν γίνεσθαι πένητας· ἔργον γὰρ μὴ νεωτεροποιεῖν εἶναι τοὺς τοιοῦτους. διότι μὲν οὖν ἔχει τινὰ δύναμιν εἰς τὴν πολιτικὴν κοινωνίαν ἢ τῆς οὐσίας ὁμαλότης, καὶ τῶν πάλαι τινὲς φαίνονται διεγνωκότες, οἷον καὶ Σόλων ἐνομοθέτησεν, καὶ παρ' ἄλλοις ἔστι νόμος ὃς κωλύει κτᾶσθαι γῆν ὀπόσῃ ἂν βούληται τις, ὁμοίως δὲ καὶ τὴν οὐσίαν πωλεῖν οἱ νόμοι κωλύουσιν, ὥσπερ ἐν Λοκροῖς νόμος ἔστι μὴ πωλεῖν ἔαν μὴ φανεράν ἀτυχίαν δείξῃ συμβεβηκυῖαν, ἔτι δὲ τοὺς παλαιοὺς κληρῶν διασώζειν (τοῦτο δὲ λυθὲν καὶ περὶ Λευκάδα δημοτικὴν ἐποίησε λίαν τὴν πολιτείαν αὐτῶν· οὐ γὰρ ἔτι συνέβαινε ἀπὸ τῶν ὠρισμένων τιμημάτων εἰς τὰς ἀρχὰς βαδίζειν)· ἀλλ' ἔστι τὴν ἰσότητά μὲν ὑπάρχειν τῆς οὐσίας, ταύτην δ' ἢ λίαν εἶναι πολλήν, ὥστε τρυφᾶν, ἢ λίαν ὀλίγην, ὥστε ζῆν γλίσχρως. δῆλον οὖν ὡς οὐχ ἱκανὸν τὸ τὰς οὐσίας ἴσας ποιῆσαι τὸν νομοθέτην, ἀλλὰ τοῦ μέσου στοχαστέον. ἔτι δ' εἴ τις καὶ τὴν μετρίαν τάξειεν οὐσίαν πᾶσιν, οὐδὲν ὄφελος· μᾶλλον γὰρ δεῖ τὰς ἐπιθυμίας ὁμαλίζειν ἢ τὰς οὐσίας, τοῦτο δ' οὐκ ἔστι μὴ παιδευομένοις ἱκανῶς ὑπὸ τῶν νόμων. ἀλλ' ἴσως ἂν εἴπειεν ὁ Φαλέας ὅτι ταῦτα τυγχάνει λέγων αὐτός· οἴεται γὰρ δυοῖν τούτοις ἰσότητά δεῖν ὑπάρχειν ταῖς πόλεσιν, κτήσεως καὶ παιδείας. ἀλλὰ τὴν τε παιδείαν ἣτις ἔσται δεῖ λέγειν, καὶ τὸ μίαν εἶναι καὶ τὴν αὐτὴν οὐδὲν ὄφελος· ἔστι γὰρ τὴν αὐτὴν μὲν εἶναι καὶ μίαν, ἀλλὰ ταύτην εἶναι τοιαύτην ἐξ ἧς ἔσσονται προαιρετικοὶ τοῦ πλεονεκτεῖν ἢ χρημάτων ἢ τιμῆς ἢ συναμφοτέρων.

ἔτι στασιάζουσιν οὐ μόνον διὰ τὴν ἀνισότητά τῆς κτήσεως, ἀλλὰ καὶ διὰ τὴν τῶν τιμῶν, τοῦναντίον δὲ περὶ ἐκάτερον· οἱ μὲν γὰρ πολλοὶ διὰ τὸ περὶ τὰς κτήσεις ἄνισον, [1267a] οἱ δὲ χαρίεντες περὶ τῶν τιμῶν, ἔαν ἴσαι· ὅθεν καὶ “ἐν δὲ ἱῇ τιμῇ ἡμὲν κακὸς ἡδὲ καὶ ἐσθλός”. οὐ μόνον δ' οἱ ἄνθρωποι διὰ τὰναγκαῖα ἀδικοῦσιν, ὧν ἅκος εἶναι νομίζει τὴν ἰσότητά τῆς οὐσίας, ὥστε μὴ λωποδυτεῖν διὰ τὸ ῥίγοῦν ἢ πεινῆν, ἀλλὰ καὶ ὅπως χαίρωσι καὶ μὴ ἐπιθυμῶσιν· ἔαν γὰρ μείζω ἔχωσιν ἐπιθυμίαν τῶν ἀναγκαίων, διὰ τὴν ταύτης ἰατροίαν ἀδικήσουσιν· οὐ τοίνυν διὰ ταύτην μόνον, ἀλλὰ καὶ ἄνευ ἐπιθυμιῶν,

ἵνα χαίρωσι ταῖς ἄνευ λυπῶν ἡδοναῖς. τί οὖν ἄκος τῶν τριῶν τούτων; τοῖς μὲν οὐσία βραχεῖα καὶ ἐργασία, τοῖς δὲ σωφροσύνη· τρίτον δ', εἴ τινες βούλονται δι' αὐτῶν χαίρειν, οὐκ ἂν ἐπιζητοῖεν εἰ μὴ παρὰ φιλοσοφίας ἄκος. αἱ γὰρ ἄλλαι ἀνθρώπων δέονται· ἐπεὶ ἀδικουσί γε τὰ μέγιστα διὰ τὰς ὑπερβολάς, ἀλλ' οὐ διὰ τὰ ἀναγκαῖα (οἷον τυραννοῦσιν οὐχ ἵνα μὴ ῥιγῶσιν· διὸ καὶ αἱ τιμαὶ μεγάλαι, ἂν ἀποκτείνῃ τις οὐ κλέπτην ἀλλὰ τύραννον)· ὥστε πρὸς τὰς μικρὰς ἀδικίας βοηθητικὸς μόνον ὁ τρόπος τῆς Φαλέου πολιτείας. ἔτι τὰ πολλὰ βούλεται κατασκευάζειν ἐξ ὧν τὰ πρὸς αὐτοὺς πολιτεύονται καλῶς, δεῖ δὲ καὶ πρὸς τοὺς γειτνιῶντας καὶ τοὺς ἔξωθεν πάντας. ἀναγκαῖον ἄρα τὴν πολιτείαν συντετάχθαι πρὸς τὴν πολεμικὴν ἰσχύν, περὶ ἧς ἐκεῖνος οὐδὲν εἶρηκεν. ὁμοίως δὲ καὶ περὶ τῆς κτήσεως. δεῖ γὰρ οὐ μόνον πρὸς τὰς πολιτικὰς χρήσεις ἱκανὴν ὑπάρχειν, ἀλλὰ καὶ πρὸς τοὺς ἔξωθεν κινδύνους· διόπερ οὔτε τοσοῦτον δεῖ πλῆθος ὑπάρχειν ὅσου οἱ πλησίον καὶ κρείττους ἐπιθυμήσουσιν, οἱ δὲ ἔχοντες ἀμύνειν οὐ δυνήσονται τοὺς ἐπιόντας, οὔθ' οὕτως ὀλίγην ὥστε μὴ δύνασθαι πόλεμον ὑπενεγκεῖν μηδὲ τῶν ἴσων καὶ τῶν ὁμοίων. ἐκεῖνος μὲν οὖν οὐδὲν διώρικεν, δεῖ δὲ τοῦτο μὴ λανθάνειν, ὅ τι συμφέρει πλῆθος οὐσίας. ἴσως οὖν ἄριστος ὅρος τὸ μὴ λυσιτελεῖν τοῖς κρείττοσι διὰ τὴν ὑπερβολὴν πολεμεῖν, ἀλλ' οὕτως ὡς ἂν καὶ μὴ ἐχόντων τοσαύτην οὐσίαν. οἷον Εὐβουλος Αὐτοφραδάτου μέλλοντος Ἀταρνέα πολιορκεῖν ἐκέλευσεν αὐτόν, σκεψάμενον ἐν πόσῳ χρόνῳ λήψεται τὸ χωρίον, λογίσασθαι τοῦ χρόνου τούτου τὴν δαπάνην· ἐθέλειν γὰρ ἔλαττον τούτου λαβὼν ἐκλιπεῖν ἤδη τὸν Ἀταρνέα· ταῦτα δ' εἰπὼν ἐποίησε τὸν Αὐτοφραδάτην σύννουν γενόμενον παύσασθαι τῆς πολιορκίας.

ἔστι μὲν οὖν τι τῶν συμφερόντων τὸ τὰς οὐσίας ἴσας εἶναι τοῖς πολίταις πρὸς τὸ μὴ στασιάζειν πρὸς ἀλλήλους, οὐ μὴν μέγα οὐδὲν ὡς εἰπεῖν. καὶ γὰρ [ἂν] οἱ χαρίεντες ἀγανακτοῖεν ἂν ὡς οὐκ ἴσων ὄντες ἄξιοι, διὸ καὶ φαίνονται πολλάκις ἐπιτιθέμενοι καὶ στασιάζοντες· ἔτι δ' [1267b] ἡ πονηρία τῶν ἀνθρώπων ἀπληστον, καὶ τὸ πρῶτον μὲν ἱκανὸν διωβελία μόνον, ὅταν δ' ἤδη τοῦτ' ἢ πάτριον, ἀεὶ δέονται τοῦ πλείονος, ἕως εἰς ἄπειρον ἔλθωσιν. ἄπειρος γὰρ ἡ τῆς ἐπιθυμίας φύσις, ἧς πρὸς τὴν ἀναπλήρωσιν οἱ πολλοὶ ζῶσιν. τῶν οὖν τοιούτων ἀρχή, μᾶλλον τοῦ τὰς οὐσίας ὁμαλίζειν, τὸ τοὺς μὲν ἐπικεῖς τῇ φύσει τοιούτους παρασκευάζειν ὥστε μὴ βούλεσθαι πλεονεκτεῖν, τοὺς δὲ φαύλους ὥστε μὴ δύνασθαι· τοῦτο δ' ἐστίν, ἂν ἦττους τε ὦσι καὶ μὴ ἀδικῶνται. οὐ καλῶς δὲ οὐδὲ τὴν ἰσότητά τῆς οὐσίας εἶρηκεν. περὶ γὰρ τὴν τῆς γῆς κτῆσιν ἰσάζει μόνον, ἔστι δὲ καὶ δούλων καὶ βοσκημάτων πλοῦτος καὶ νομίσματος, καὶ κατασκευὴ πολλὴ τῶν καλουμένων ἐπίπλων· ἢ πάντων οὖν τούτων ἰσότητά ζητητέον ἢ τάξιν τινὰ μετρίαν, ἢ πάντα ἐατέον. φαίνεται δ' ἐκ τῆς νομοθεσίας κατασκευάζων τὴν πόλιν μικράν, εἴ γ' οἱ τεχνῖται πάντες

δημόσιοι ἔσονται καὶ μὴ πλήρωμά τι παρέξονται τῆς πόλεως. ἀλλ' εἴπερ δεῖ δημοσίους εἶναι τοὺς τὰ κοινὰ ἐργαζομένους, δεῖ (καθάπερ ἐν Ἐπιδάμνῳ τε, καὶ Διόφαντός ποτε κατεσκεύαζεν Ἀθήνησι) τοῦτον ἔχειν τὸν τρόπον. περὶ μὲν οὖν τῆς Φαλέου πολιτείας σχεδὸν ἐκ τούτων ἂν τις θεωρήσειεν, εἴ τι τυγχάνει καλῶς εἰρηκῶς ἢ μὴ καλῶς.

Ἴππόδαμος δὲ Εὐρυφῶντος Μιλήσιος (ὃς καὶ τὴν τῶν πόλεων διαίρεσιν εὔρε καὶ τὸν Πειραιᾶ κατέτεμεν, γενόμενος καὶ περὶ τὸν ἄλλον βίον περιττότερος διὰ φιλοτιμίαν οὕτως ὥστε δοκεῖν ἐνίοις ζῆν περιεργότερον τριχῶν τε πλήθει καὶ κόσμῳ πολυτελεῖ, ἔτι δὲ ἐσθῆτος εὐτελοῦς μὲν ἁλυσσίνης δέ, οὐκ ἐν τῷ χειμῶνι μόνον ἀλλὰ καὶ περὶ τοὺς θερινοὺς χρόνους, λόγιος δὲ καὶ περὶ τὴν ὅλην φύσιν εἶναι βουλόμενος) πρῶτος τῶν μὴ πολιτευομένων ἐνεχείρησέ τι περὶ πολιτείας εἰπεῖν τῆς ἀρίστης. κατεσκεύαζε δὲ τὴν πόλιν τῷ πλήθει μὲν μυριάνδρον, εἰς τρία δὲ μέρη διηρημένην· ἐποίει γὰρ ἐν μὲν μέρος τεχνίτας, ἐν δὲ γεωργούς, τρίτον δὲ τὸ προπολεμοῦν καὶ τὰ ὅπλα ἔχον. διήρει δ' εἰς τρία μέρη τὴν χώραν, τὴν μὲν ἱεράν τὴν δὲ δημοσίαν τὴν δ' ἰδίαν· ὅθεν μὲν τὰ νομιζόμενα ποιήσουσι πρὸς τοὺς θεοὺς, ἱεράν, ἀφ' ὧν δ' οἱ προπολεμοῦντες βιώσονται, κοινήν, τὴν δὲ τῶν γεωργῶν ἰδίαν. ὥετο δ' εἶδη καὶ τῶν νόμων εἶναι τρία μόνον· περὶ ὧν γὰρ αἱ δίκαι γίνονται, τρία ταῦτ' εἶναι τὸν ἀριθμόν, ὕβριν βλάβην θάνατον. ἐνομοθέτει δὲ καὶ δικαστήριον ἐν τῷ κύριον, εἰς ὃ πάσας ἀνάγεσθαι δεῖν τὰς μὴ καλῶς κεκρίσθαι δοκούσας δίκας· τοῦτο δὲ κατεσκεύαζεν ἐκ τινῶν γερόντων [1268a] αἰρετῶν. τὰς δὲ κρίσεις ἐν τοῖς δικαστηρίοις οὐ διὰ ψηφοφορίας ὥετο γίνεσθαι δεῖν, ἀλλὰ φέρειν ἕκαστον πινάκιον, ἐν ᾧ γράφειν, εἰ καταδικάζοι ἀπλῶς, τὴν δίκην, εἰ δ' ἀπολύοι ἀπλῶς, κενόν, εἰ δὲ τὸ μὲν τὸ δὲ μή, τοῦτο διορίζειν. νῦν γὰρ οὐκ ὥετο νενομοθετῆσθαι καλῶς· ἀναγκάζειν γὰρ ἐπιорκεῖν ἢ ταῦτα ἢ ταῦτα δικάζοντας. ἔτι δὲ νόμον ἐτίθει περὶ τῶν εὕρισκόντων τι τῇ πόλει συμφέρον, ὅπως τυγχάνωσι τιμῆς, καὶ τοῖς παισὶ τῶν ἐν τῷ πολέμῳ τελευτῶντων ἐκ δημοσίου γίνεσθαι τὴν τροφήν, ὡς οὐπω τοῦτο παρ' ἄλλοις νενομοθετημένον (ἔστι δὲ καὶ ἐν Ἀθήναις οὗτος ὁ νόμος νῦν καὶ ἐν ἑτέραις τῶν πόλεων)· τοὺς δ' ἄρχοντας αἰρετοὺς ὑπὸ τοῦ δήμου εἶναι πάντας. δῆμον δ' ἐποίει τὰ τρία μέρη τῆς πόλεως· τοὺς δ' αἰρεθέντας ἐπιμελεῖσθαι κοινῶν καὶ ξενικῶν καὶ ὀρφανικῶν.

τὰ μὲν οὖν πλεῖστα καὶ τὰ μάλιστα ἀξιόλογα τῆς Ἴπποδάμου τάξεως ταῦτ' ἐστίν· ἀπορήσειε δ' ἂν τις πρῶτον μὲν τὴν διαίρεσιν τοῦ πλήθους τῶν πολιτῶν. οἳ τε γὰρ τεχνῖται καὶ οἱ γεωργοὶ καὶ οἱ τὰ ὅπλα ἔχοντες κοινωνοῦσι τῆς πολιτείας πάντες, οἱ μὲν γεωργοὶ οὐκ ἔχοντες ὅπλα, οἱ δὲ τεχνῖται οὔτε γῆν οὔτε ὅπλα, ὥστε γίνονται σχεδὸν δοῦλοι τῶν τὰ ὅπλα

κεκτημένων. μετέχειν μὲν οὖν πασῶν τῶν τιμῶν ἀδύνατον (ἀνάγκη γὰρ ἐκ τῶν τὰ ὄπλα ἔχόντων καθίστασθαι καὶ στρατηγοὺς καὶ πολιτοφύλακας καὶ τὰς κυριωτάτας ἀρχὰς ὡς εἶπεῖν)· μὴ μετέχοντας δὲ τῆς πολιτείας πῶς οἶόν τε φιλικῶς ἔχειν πρὸς τὴν πολιτείαν; “ἀλλὰ δεῖ καὶ κρείττους εἶναι τοὺς τὰ ὄπλα γε κεκτημένους ἀμφοτέρων τῶν μερῶν”. τοῦτο δ’ οὐ ῥάδιον μὴ πολλοὺς ὄντας· εἰ δὲ τοῦτ’ ἔσται, τί δεῖ τοὺς ἄλλους μετέχειν τῆς πολιτείας καὶ κυρίους εἶναι τῆς τῶν ἀρχόντων καταστάσεως; ἔτι οἱ γεωργοὶ τί χρήσιμοι τῇ πόλει; τεχνίτας μὲν γὰρ ἀναγκαῖον εἶναι (πᾶσα γὰρ δεῖται πόλις τεχνιτῶν), καὶ δύνανται διαγίγνεσθαι καθάπερ ἐν ταῖς ἄλλαις πόλεσιν ἀπὸ τῆς τέχνης· οἱ δὲ γεωργοὶ πορίζοντες μὲν τοῖς τὰ ὄπλα κεκτημένοις τὴν τροφήν εὐλόγως ἂν ἦσαν τι τῆς πόλεως μέρος, νῦν δ’ ἰδίαν ἔχουσιν καὶ ταύτην ἰδίᾳ γεωργήσουσιν. ἔτι δὲ τὴν κοινήν, ἀφ’ ἧς οἱ προπολεμοῦντες ἔξουσιν τὴν τροφήν, εἰ μὲν αὐτοὶ γεωργήσουσιν, οὐκ ἂν εἴη τὸ μάχιμον ἕτερον καὶ τὸ γεωργοῦν, βούλεται δ’ ὁ νομοθέτης· εἰ δ’ ἕτεροὶ τινες ἔσονται τῶν τε τὰ ἴδια γεωργούντων καὶ τῶν μαχίμων, τέταρτον αὐτὸ μῦρον ἔσται τοῦτο τῆς πόλεως, οὐδενὸς μετέχον, ἀλλὰ ἀλλότριον τῆς πολιτείας· ἀλλὰ μὴν εἴ τις τοὺς αὐτοὺς θήσει τοὺς τε τὴν ἰδίαν καὶ τοὺς τὴν κοινήν γεωργοῦντας, τό τε πλῆθος ἄπορον ἔσται τῶν καρπῶν ἐξ ὧν [1268b] ἕκαστος γεωργήσει δύο οἰκίας, καὶ τίνος ἕνεκεν οὐκ εὐθύς ἀπὸ τῆς «αὐτῆς» γῆς καὶ τῶν αὐτῶν κλήρων αὐτοῖς τε τὴν τροφήν λήψονται καὶ τοῖς μαχίμοις παρέξουσιν; ταῦτα δὴ πάντα πολλὴν ἔχει ταραχήν. οὐ καλῶς δ’ οὐδ’ ὁ περὶ τῆς κρίσεως ἔχει νόμος, τὸ κρίνειν ἀξιοῦν διαιροῦντα, τῆς δίκης ἀπλῶς γεγραμμένης, καὶ γίνεσθαι τὸν δικαστὴν διαιτητὴν. τοῦτο δὲ ἐν μὲν τῇ διαίτῃ καὶ πλείοσιν ἐνδέχεται (κοινολογοῦνται γὰρ ἀλλήλοις περὶ τῆς κρίσεως), ἐν δὲ τοῖς δικαστηρίοις οὐκ ἔστιν, ἀλλὰ καὶ τοῦναντίον τούτου τῶν νομοθετῶν οἱ πολλοὶ παρασκευάζουσιν ὅπως οἱ δικασταὶ μὴ κοινολογῶνται πρὸς ἀλλήλους. ἔπειτα πῶς οὐκ ἔσται ταραχώδης ἡ κρίσις, ὅταν ὀφείλῃ μὲν ὁ δικαστὴς οἶηται, μὴ τοσοῦτον δ’ ὅσον ὁ δικαζόμενος; ὁ μὲν γὰρ εἴκοσι μνᾶς, ὁ δὲ δικαστὴς κρινεῖ δέκα μνᾶς (ἢ ὁ μὲν πλέον ὁ δ’ ἔλασσον), ἄλλος δὲ πέντε, ὁ δὲ τέτταρας, καὶ τοῦτον δὴ τὸν τρόπον δῆλον ὅτι μεριοῦσιν· οἱ δὲ πάντα καταδικάσουσιν, οἱ δ’ οὐδέν. τίς οὖν ὁ τρόπος ἔσται τῆς διαλογῆς τῶν ψήφων; ἔτι δ’ οὐδὲν ἐπιорκεῖν ἀναγκάζει τὸν ἀπλῶς ἀποδικάσαντα ἢ καταδικάσαντα, εἴπερ ἀπλῶς τὸ ἔγκλημα γέγραπται, δικαίως· οὐ γὰρ μηδὲν ὀφείλῃν ὁ ἀποδικάσας κρίνει, ἀλλὰ τὰς εἴκοσι μνᾶς· ἀλλ’ ἐκεῖνος ἥδη ἐπιорκεῖ, ὁ καταδικάσας, μὴ νομίζων ὀφείλῃν τὰς εἴκοσι μνᾶς.

περὶ δὲ τοῦ τοῖς εὐρίσκουσί τι τῇ πόλει συμφέρον ὡς δεῖ γίνεσθαι τινα τιμὴν, οὐκ ἔστιν ἀσφαλὲς τὸ νομοθετεῖν, ἀλλ’ εὐόφθαλμον ἀκοῦσαι μόνον· ἔχει γὰρ συκοφαντίας καὶ κινήσεις, ἂν τύχῃ, πολιτείας. ἐμπίπτει δ’ εἰς ἄλλο πρόβλημα καὶ σκέψιν ἑτέραν· ἀποροῦσι γὰρ τινες πότερον βλαβερόν ἢ

συμφέρον ταῖς πόλεσι τὸ κινεῖν τοὺς πατρίους νόμους, ἂν ἢ τις ἄλλος βελτίων. διόπερ οὐ ῥάδιον τῷ λεχθέντι ταχὺ συγχωρεῖν, εἴπερ μὴ συμφέρει κινεῖν, ἐνδέχεται δ' εἰσηγεῖσθαι τινας νόμων λύσιν ἢ πολιτείας ὡς κοινὸν ἀγαθόν. ἐπεὶ δὲ πεποiehμεθα μνειαν, ἔτι μικρὰ περὶ αὐτοῦ διαστειλασθαι βέλτιον. ἔχει γάρ, ὥσπερ εἵπομεν, ἀπορίαν, καὶ δόξειεν ἂν βέλτιον εἶναι τὸ κινεῖν. ἐπὶ γοῦν τῶν ἄλλων ἐπιστημῶν τοῦτο συνενήνοχεν, οἷον ἰατρικὴ κινηθεῖσα παρὰ τὰ πάτρια καὶ γυμναστικὴ καὶ ὅλως αἱ τέχναι πᾶσαι καὶ αἱ δυνάμεις, ὥστ' ἐπεὶ μίαν τούτων θετέον καὶ τὴν πολιτικὴν, δῆλον ὅτι καὶ περὶ ταύτην ἀναγκαῖον ὁμοίως ἔχειν. σημεῖον δ' ἂν γεγονέναι φαίη τις ἐπ' αὐτῶν τῶν ἔργων· τοὺς γὰρ ἀρχαίους νόμους λίαν ἀπλοῦς εἶναι καὶ βαρβαρικοὺς. ἐσιδηροφοροῦντό τε γὰρ οἱ Ἕλληνες, καὶ τὰς γυναῖκας ἐωνοῦντο παρ' ἀλλήλων, ὅσα τε λοιπὰ τῶν ἀρχαίων ἐστὶ που νομίμων εὐήθη πάμπαν ἐστίν, [1269a] οἷον ἐν Κύμῃ περὶ τὰ φονικὰ νόμος ἔστιν, ἂν πληθὸς τι παράσχηται μαρτύρων ὁ διώκων τὸν φόνον τῶν αὐτοῦ συγγενῶν, ἔνοχον εἶναι τῷ φόνῳ τὸν φεύγοντα. ζητοῦσι δ' ὅλως οὐ τὸ πατριον ἀλλὰ τὰγαθὸν πάντες· εἰκὸς τε τοὺς πρώτους, εἴτε γηγενεῖς ἦσαν εἴτ' ἐκ φθορᾶς τινος ἐσώθησαν, ὁμοίους εἶναι καὶ τοὺς τυχόντας καὶ τοὺς ἀνοήτους, ὥσπερ καὶ λέγεται κατὰ τῶν γηγενῶν, ὥστε ἄτοπον τὸ μένειν ἐν τοῖς τούτων δόγμασιν. πρὸς δὲ τούτοις οὐδὲ τοὺς γεγραμμένους ἔαν ἀκινήτους βέλτιον. ὥσπερ γὰρ καὶ περὶ τὰς ἄλλας τέχνας, καὶ τὴν πολιτικὴν τάξιν ἀδύνατον ἀκριβῶς πάντα γραφῆναι· καθόλου γὰρ ἀναγκαῖον γράφειν, αἱ δὲ πράξεις περὶ τῶν καθ' ἕκαστόν εἰσιν.

ἐκ μὲν οὖν τούτων φανερόν ὅτι κινήτεοι καὶ τινὲς καὶ ποτὲ τῶν νόμων εἰσίν· ἄλλον δὲ τρόπον ἐπισκοποῦσιν εὐλαβείας ἂν δόξειεν εἶναι πολλῆς. ὅταν γὰρ ἢ τὸ μὲν βέλτιον μικρόν, τὸ δ' ἐθίζειν εὐχερῶς λύειν τοὺς νόμους φαῦλον, φανερόν ὡς ἐατέον ἐνίας ἀμαρτίας καὶ τῶν νομοθετῶν καὶ τῶν ἀρχόντων· οὐ γὰρ τοσοῦτον ὠφελήσεται κινήσας ὅσον βλαβήσεται τοῖς ἀρχουσιν ἀπειθεῖν ἐθισθεῖς. ψεῦδος δὲ καὶ τὸ παράδειγμα τὸ περὶ τῶν τεχνῶν· οὐ γὰρ ὅμοιον τὸ κινεῖν τέχνην καὶ νόμον· ὁ γὰρ νόμος ἰσχὺν οὐδεμίαν ἔχει πρὸς τὸ πείθεσθαι παρὰ τὸ ἔθος, τοῦτο δ' οὐ γίνεται εἰ μὴ διὰ χρόνου πληθός, ὥστε τὸ ῥαδίως μεταβάλλειν ἐκ τῶν ὑπαρχόντων νόμων εἰς ἑτέρους νόμους καινοὺς ἀσθενῆ ποιεῖν ἐστὶ τὴν τοῦ νόμου δύναμιν. ἔτι δ' εἰ καὶ κινήτεοι, πότερον πάντες καὶ ἐν πάσῃ πολιτείᾳ, ἢ οὐ; καὶ πότερον τῷ τυχόντι ἢ τισίν; ταῦτα γὰρ ἔχει μεγάλην διαφοράν. διὸ νῦν μὲν ἀφῶμεν ταύτην τὴν σκέψιν· ἄλλων γὰρ ἐστὶ καιρῶν.

Περὶ δὲ τῆς Λακεδαιμονίων πολιτείας καὶ τῆς Κρητικῆς, σχεδὸν δὲ καὶ περὶ τῶν ἄλλων πολιτειῶν, δύο εἰσὶν αἱ σκέψεις, μία μὲν εἴ τι καλῶς ἢ μὴ καλῶς πρὸς τὴν ἀρίστην νενομοθέτηται τάξιν, ἑτέρα δ' εἴ τι πρὸς τὴν

ὑπόθεσιν καὶ τὸν τρόπον ὑπεναντίως τῆς προκειμένης αὐτοῖς πολιτείας. ὅτι μὲν οὖν δεῖ τῇ μελλούσῃ καλῶς πολιτεύεσθαι τὴν τῶν ἀναγκαίων ὑπάρχειν σχολήν, ὁμολογούμενόν ἐστιν· τίνα δὲ τρόπον ὑπάρχειν, οὐ ῥάδιον λαβεῖν. ἢ τε γὰρ Θετταλῶν πενεστεία πολλάκις ἐπέθετο τοῖς Θετταλοῖς, ὁμοίως δὲ καὶ τοῖς Λάκωσιν οἱ εἰλωτες (ὥσπερ γὰρ ἐφεδρεύοντες τοῖς ἀτυχήμασι διατελοῦσιν)· περὶ δὲ τοὺς Κρῆτας οὐδέν πω τοιοῦτον συμβέβηκεν. αἴτιον δ' ἴσως τὸ τὰς γειτνιώσας [1269b] πόλεις, καίπερ πολεμούσας ἀλλήλαις, μηδεμίαν εἶναι σύμμαχον τοῖς ἀφισταμένοις διὰ τὸ μὴ συμφέρειν <ταῖς> καὶ αὐταῖς κεκτημέναις περιοίκους, τοῖς δὲ Λάκωσιν οἱ γειτνιῶντες ἐχθροὶ πάντες ἦσαν, Ἀργεῖοι καὶ Μεσῆνιοι καὶ Ἀρκάδες· ἐπεὶ καὶ τοῖς Θετταλοῖς κατ' ἀρχὰς ἀφίσταντο διὰ τὸ πολεμεῖν ἔτι τοῖς προσχώροις, Ἀχαιοῖς καὶ Περραιβοῖς καὶ Μάγνησιν. ἔοικε δὲ καὶ εἰ μηδὲν ἕτερον, ἀλλὰ τό γε τῆς ἐπιμελείας ἐργῶδες εἶναι, τίνα δεῖ πρὸς αὐτοὺς ὁμιλῆσαι τρόπον· ἀνιέμενοί τε γὰρ ὑβρίζουσι καὶ τῶν ἴσων ἀξιοῦσιν ἑαυτοὺς τοῖς κυρίοις, καὶ κακοπαθῶς ζῶντες ἐπιβουλεύουσι καὶ μισοῦσιν. δῆλον οὖν ὥς οὐκ ἐξευρίσκουσι τὸν βέλτιστον τρόπον οἷς τοῦτο συμβαίνει περὶ τὴν εἰλωτείαν.

ἔτι δ' ἡ περὶ τὰς γυναῖκας ἄνεσις καὶ πρὸς τὴν προαίρεσιν τῆς πολιτείας βλαβερὰ καὶ πρὸς εὐδαιμονίαν πόλεως. ὥσπερ γὰρ οἰκίας μέρος ἀνὴρ καὶ γυνή, δῆλον ὅτι καὶ πόλιν ἐγγὺς τοῦ δίχα διηρῆσθαι δεῖ νομίζειν εἷς τε τὸ τῶν ἀνδρῶν πλῆθος καὶ τὸ τῶν γυναικῶν, ὥστ' ἐν ὅσαις πολιτείαις φαύλως ἔχει τὸ περὶ τὰς γυναῖκας, τὸ ἥμισυ τῆς πόλεως εἶναι δεῖ νομίζειν ἀνομοθέτητον. ὅπερ ἐκεῖ συμβέβηκεν· ὅλην γὰρ τὴν πόλιν ὁ νομοθέτης εἶναι βουλόμενος καρτερικήν, κατὰ μὲν τοὺς ἄνδρας φανερός ἐστι τοιοῦτος ὢν, ἐπὶ δὲ τῶν γυναικῶν ἐξημέληκεν· ζῶσι γὰρ ἀκολάστως πρὸς ἅπασαν ἀκολασίαν καὶ τρυφερῶς. ὥστ' ἀναγκαῖον ἐν τῇ τοιαύτῃ πολιτείᾳ τιμᾶσθαι τὸν πλοῦτον, ἄλλως τε κἂν τύχῃσι γυναικοκρατούμενοι, καθάπερ τὰ πολλὰ τῶν στρατιωτικῶν καὶ πολεμικῶν γενῶν, ἔξω Κελτῶν ἢ κἂν εἴ τινες ἕτεροι φανερώς τετιμήκασιν τὴν πρὸς τοὺς ἄρρενας συνουσίαν. ἔοικε γὰρ ὁ μυθολογήσας πρῶτος οὐκ ἀλόγως συζεῦξαι τὸν Ἄρην πρὸς τὴν Ἀφροδίτην· ἢ γὰρ πρὸς τὴν τῶν ἀρρένων ὁμιλίαν ἢ πρὸς τὴν τῶν γυναικῶν φαίνονται κατοκώχιμοι πάντες οἱ τοιοῦτοι. διὸ παρὰ τοῖς Λάκωσι τοῦθ' ὑπῆρχεν, καὶ πολλὰ διωκεῖτο ὑπὸ τῶν γυναικῶν ἐπὶ τῆς ἀρχῆς αὐτῶν. καίτοι τί διαφέρει γυναῖκας ἄρχειν ἢ τοὺς ἄρχοντας ὑπὸ τῶν γυναικῶν ἄρχεσθαι; ταῦτό γὰρ συμβαίνει. χρησίμου δ' οὔσης τῆς θρασύτητος πρὸς οὐδέν τῶν ἐγκυκλίων, ἀλλ' εἴπερ, πρὸς τὸν πόλεμον, βλαβερώταται καὶ πρὸς ταῦθ' αἱ τῶν Λακῶνων ἦσαν. ἐδήλωσαν δ' ἐπὶ τῆς Θηβαίων ἐμβολῆς· χρησιμοὶ μὲν γὰρ οὐδέν ἦσαν, ὥσπερ ἐν ἑτέραις πόλεσιν, θόρυβον δὲ παρεῖχον πλείω τῶν πολεμίων. ἐξ ἀρχῆς μὲν οὖν ἔοικε συμβεβηκέναι τοῖς Λάκωσιν εὐλόγως ἢ τῶν γυναικῶν

[1270a] ἄνεσις. ἔξω γὰρ τῆς οἰκείας διὰ τὰς στρατείας ἀπεξενούντο πολὺν χρόνον, πολεμοῦντες τὸν τε πρὸς Ἀργεῖους πόλεμον καὶ πάλιν τὸν πρὸς Ἀρκάδας καὶ Μεσσηνίους· σχολάσαντες δὲ αὐτοὺς μὲν παρῆχον τῷ νομοθέτῃ προωδοπεποιημένους διὰ τὸν στρατιωτικὸν βίον (πολλὰ γὰρ ἔχει μέρη τῆς ἀρετῆς), τὰς δὲ γυναῖκας φασὶ μὲν ἄγειν ἐπιχειρῆσαι τὸν Λυκοῦργον ὑπὸ τοὺς νόμους, ὥς δ' ἀντέκρουον, ἀποστῆναι πάλιν. αἰτίαι μὲν οὖν εἰσιν αὗται τῶν γενομένων, ὥστε δῆλον ὅτι καὶ ταύτης τῆς ἀμαρτίας· ἀλλ' ἡμεῖς οὐ τοῦτο σκοποῦμεν, τίτις δεῖ συγγνώμην ἔχειν ἢ μὴ ἔχειν, ἀλλὰ περὶ τοῦ ὀρθῶς καὶ μὴ ὀρθῶς. τὰ δὲ περὶ τὰς γυναῖκας ἔχοντα μὴ καλῶς ἔοικεν, ὥσπερ ἐλέχθη καὶ πρότερον, οὐ μόνον ἀπρέπειάν τινα ποιεῖν τῆς πολιτείας αὐτῆς καθ' αὐτήν, ἀλλὰ συμβάλλεσθαι τι πρὸς τὴν φιλοχρηματίαν. μετὰ γὰρ τὰ νῦν ῥηθέντα τοῖς περὶ τὴν ἀνωμαλίαν τῆς κτήσεως ἐπιτιμήσειεν ἂν τις. τοῖς μὲν γὰρ αὐτῶν συμβέβηκε κεκτῆσθαι πολλὴν λῖαν οὐσίαν, τοῖς δὲ πάμπαν μικράν· διόπερ εἰς ὀλίγους ἦκεν ἡ χώρα. τοῦτο δὲ καὶ διὰ τῶν νόμων τέτακται φαύλως· ὠνεῖσθαι μὲν γάρ, ἢ πωλεῖν τὴν ὑπάρχουσαν, ἐποίησεν οὐ καλόν, ὀρθῶς ποιήσας, δίδοναι δὲ καὶ καταλείπειν ἔξουσίαν ἔδωκε τοῖς βουλομένοις· καίτοι ταῦτόν τι συμβαίνειν ἀναγκαῖον ἐκείνως τε καὶ οὕτως. ἔστι δὲ καὶ τῶν γυναικῶν σχεδὸν τῆς πάσης χώρας τῶν πέντε μερῶν τὰ δύο, τῶν τ' ἐπικλήρων πολλῶν γινομένων, καὶ διὰ τὸ προῖκας δίδοναι μεγάλας. καίτοι βέλτιον ἦν μηδεμίαν ἢ ὀλίγην ἢ καὶ μετρίαν τετάχθαι. νῦν δ' ἔξεστι δοῦναί τε τὴν ἐπικληρον ὅτῳ ἂν βούληται, κἂν ἀποθάνῃ μὴ διαθέμενος, ὃν ἂν καταλίπη κληρονόμον, οὗτος ὧ ἂν θέλῃ δίδωσιν. τοιγαροῦν δυναμένης τῆς χώρας χιλίους ἵππεῖς τρέφειν καὶ πεντακοσίους, καὶ ὀπλίτας τρισμυρίους, οὐδὲ χίλιοι τὸ πλῆθος ἦσαν. γέγονε δὲ διὰ τῶν ἔργων αὐτῶν δῆλον ὅτι φαύλως αὐτοῖς εἶχε τὰ περὶ τὴν τάξιν ταύτην· μίαν γὰρ πληγὴν οὐχ ὑπήνεγκεν ἡ πόλις, ἀλλ' ἀπώλετο διὰ τὴν ὀλιγανθρωπίαν. λέγουσι δ' ὥς ἐπὶ μὲν τῶν προτέρων βασιλέων μετεδίδουσαν τῆς πολιτείας, ὥστ' οὐ γίνεσθαι τότε ὀλιγανθρωπίαν, πολεμοῦντων πολὺν χρόνον, καὶ φασιν εἶναί ποτε τοῖς Σπαρτιάταις καὶ μυρίους· οὐ μὴν ἀλλ', εἴτ' ἐστὶν ἀληθῆ ταῦτα εἴτε μή, βέλτιον τὸ διὰ τῆς κτήσεως ὠμαλισμένης πληθύνειν ἀνδρῶν τὴν πόλιν. ὑπεναντίος δὲ καὶ ὁ περὶ τὴν τεκνοποιίαν νόμος πρὸς ταύτην τὴν διόρθωσιν.

[1270b] βουλόμενος γὰρ ὁ νομοθέτης ὥς πλείστους εἶναι τοὺς Σπαρτιάτας, προάγεται τοὺς πολίτας ὅτι πλείστους ποιεῖσθαι παῖδας· ἔστι γὰρ αὐτοῖς νόμος τὸν μὲν γεννήσαντα τρεῖς υἱοὺς ἄφρουρον εἶναι, τὸν δὲ τέτταρας ἀτελῆ πάντων. καίτοι φανερόν ὅτι πολλῶν γινομένων, τῆς δὲ χώρας οὕτω διηρημένης, ἀναγκαῖον πολλοὺς γίνεσθαι πένητας.

ἀλλὰ μὴν καὶ τὰ περὶ τὴν ἐφορείαν ἔχει φαύλως. ἡ γὰρ ἀρχὴ κυρία μὲν



αὐτὴ τῶν μεγίστων αὐτοῖς ἐστίν, γίνονται δ' ἐκ τοῦ δήμου παντός, ὥστε πολλάκις ἐμπίπτουσιν ἄνθρωποι σφόδρα πένητες εἰς τὸ ἀρχεῖον, οἳ διὰ τὴν ἀπορίαν ὦνιοι ἦσαν. ἐδήλωσαν δὲ πολλάκις μὲν καὶ πρότερον, καὶ νῦν δὲ ἐν τοῖς Ἀνδρίοις· διαφθαρέντες γὰρ ἀργυρίῳ τινές, ὅσον ἐφ' ἑαυτοῖς, ὅλην τὴν πόλιν ἀπώλεσαν, καὶ διὰ τὸ τὴν ἀρχὴν εἶναι λίαν μεγάλην καὶ ἰσοτύραννον δημαγωγεῖν αὐτοὺς ἠναγκάζοντο καὶ οἱ βασιλεῖς, ὥστε καὶ ταύτη συνεπιβλάπτεσθαι τὴν πολιτείαν· δημοκρατία γὰρ ἐξ ἀριστοκρατίας συνέβαινεν. συνέχει μὲν οὖν τὴν πολιτείαν τὸ ἀρχεῖον τοῦτο - ἡσυχάζει γὰρ ὁ δῆμος διὰ τὸ μετέχειν τῆς μεγίστης ἀρχῆς, ὥστ' εἴτε διὰ τὸν νομοθέτην εἴτε διὰ τύχην τοῦτο συμπέπτωκεν, συμφερόντως ἔχει τοῖς πράγμασιν· δεῖ γὰρ τὴν πολιτείαν τὴν μέλλουσαν σώζεσθαι πάντα βούλεσθαι τὰ μέρη τῆς πόλεως εἶναι καὶ διαμένειν ταύτά· οἱ μὲν οὖν βασιλεῖς διὰ τὴν αὐτῶν τιμὴν οὕτως ἔχουσιν, οἱ δὲ καλοὶ κάγαθοι διὰ τὴν γερουσίαν (ἄθλον γὰρ ἡ ἀρχὴ αὕτη τῆς ἀρετῆς ἐστίν), ὁ δὲ δῆμος διὰ τὴν ἐφορείαν (καθίσταται γὰρ ἐξ ἀπάντων) - ἀλλ' αἵρετὴν ἔδει τὴν ἀρχὴν εἶναι ταύτην ἐξ ἀπάντων μὲν, μὴ τὸν τρόπον δὲ τοῦτον ὃν νῦν (παιδαριώδης γὰρ ἐστὶ λίαν). ἔτι δὲ καὶ κρίσεων εἰσι μεγάλων κύριοι, ὄντες οἱ τυχόντες, διόπερ οὐκ αὐτογνώμονας βέλτιον κρίνειν ἀλλὰ κατὰ γράμματα καὶ τοὺς νόμους. ἔστι δὲ καὶ ἡ δίατα τῶν ἐφόρων οὐχ ὁμολογουμένη τῷ βουλήματι τῆς πόλεως· αὐτὴ μὲν γὰρ ἀνειμένη λίαν ἐστίν, ἐν δὲ τοῖς ἄλλοις μᾶλλον ὑπερβάλλει ἐπὶ τὸ σκληρόν, ὥστε μὴ δύνασθαι καρτερεῖν ἀλλὰ λάθρα τὸν νόμον ἀποδιδράσκοντας ἀπολαύειν τῶν σωματικῶν ἡδονῶν.

ἔχει δὲ καὶ τὰ περὶ τὴν τῶν γερόντων ἀρχὴν οὐ καλῶς αὐτοῖς. ἐπεικῶν μὲν γὰρ ὄντων καὶ πεπαιδευμένων ἱκανῶς πρὸς ἀνδραγαθίαν τάχ' ἂν εἴπειέ τις συμφέρειν τῇ πόλει, καίτοι τό γε διὰ βίου κυρίους εἶναι κρίσεων μεγάλων ἀμφισβητήσιμον (ἔστι γὰρ, ὥσπερ καὶ σώματος, καὶ διανοίας [1271a] γῆρας)· τὸν τρόπον δὲ τοῦτον πεπαιδευμένων ὥστε καὶ τὸν νομοθέτην αὐτὸν ἀπιστεῖν ὥς οὐκ ἀγαθοῖς ἀνδράσιν, οὐκ ἀσφαλές. φαίνονται δὲ καὶ καταδωροδοκούμενοι καὶ καταχαριζόμενοι πολλὰ τῶν κοινῶν οἱ κεκοινωνηκότες τῆς ἀρχῆς ταύτης. διόπερ βέλτιον αὐτοὺς μὴ ἀνευθύνους εἶναι· νῦν δ' εἰσὶν. δόξειε δ' ἂν ἡ τῶν ἐφόρων ἀρχὴ πάσας εὐθύνει τὰς ἀρχάς· τοῦτο δὲ τῇ ἐφορείᾳ μέγα λίαν τὸ δῶρον, καὶ τὸν τρόπον οὐ τοῦτον λέγομεν διδόναι δεῖν τὰς εὐθύνας. ἔτι δὲ καὶ τὴν αἵρεσιν ἣν ποιοῦνται τῶν γερόντων κατὰ τε τὴν κρίσιν ἐστὶ παιδαριώδης, καὶ τὸ αὐτὸν αἰτεῖσθαι τὸν ἀξιωθησόμενον τῆς ἀρχῆς οὐκ ὀρθῶς ἔχει· δεῖ γὰρ καὶ βουλόμενον καὶ μὴ βουλόμενον ἄρχειν τὸν ἄξιον τῆς ἀρχῆς. νῦν δ' ὅπερ καὶ περὶ τὴν ἄλλην πολιτείαν ὁ νομοθέτης φαίνεται ποιῶν· φιλοτίμους γὰρ κατασκευάζων τοὺς πολίτας τούτῳ κέχρηται πρὸς τὴν αἵρεσιν τῶν γερόντων· οὐδεὶς γὰρ ἂν

ἄρχειν αἰτήσαιτο μὴ φιλότιμος ὢν. καίτοι τῶν γ' ἀδικημάτων τῶν ἔκουσίων τὰ πλεῖστα συμβαίνει σχεδὸν διὰ φιλοτιμίαν καὶ διὰ φιλοχρηματίαν τοῖς ἀνθρώποις.

περὶ δὲ βασιλείας, εἰ μὲν βέλτιόν ἐστιν ὑπάρχειν ταῖς πόλεσιν ἢ μὴ βέλτιον, ἄλλος ἔστω λόγος· ἀλλὰ μὴν βέλτιόν γε μὴ καθάπερ νῦν, ἀλλὰ κατὰ τὸν αὐτοῦ βίον ἕκαστον κρίνεσθαι τῶν βασιλέων. ὅτι δ' ὁ νομοθέτης οὐδ' αὐτὸς οἶται δύνασθαι ποιεῖν καλοὺς κάγαθούς, δῆλον· ἀπιστεῖ γοῦν ὡς οὐκ οὔσιν ἱκανῶς ἀγαθοῖς ἀνδράσιν· διόπερ ἐξέπεμπον συμπρεσβευτὰς τοὺς ἐχθρούς, καὶ σωτηρίαν ἐνόμιζον τῇ πόλει εἶναι τὸ στασιάζειν τοὺς βασιλεῖς. οὐ καλῶς δ' οὐδὲ περὶ τὰ συσσίτια τὰ καλούμενα φιδίτια νενομοθέτηται τῷ καταστήσαντι πρῶτον. ἔδει γὰρ ἀπὸ κοινοῦ μᾶλλον εἶναι τὴν σύνοδον, καθάπερ ἐν Κρήτῃ· παρὰ δὲ τοῖς Λάκωσιν ἕκαστον δεῖ φέρειν, καὶ σφόδρα πενήτων ἐνίων ὄντων καὶ τοῦτο τὸ ἀνάλωμα οὐ δυναμένων δαπανᾶν, ὥστε συμβαίνει τοῦναντίον τῷ νομοθέτῃ τῆς προαιρέσεως. βούλεται μὲν γὰρ δημοκρατικὸν εἶναι τὸ κατασκευάσμα τῶν συσσιτίων, γίνεται δ' ἥκιστα δημοκρατικὸν οὕτω νενομοθετημένον. μετέχειν μὲν γὰρ οὐ ῥάδιον τοῖς λίαν πένησιν, ὅρος δὲ τῆς πολιτείας οὗτός ἐστιν αὐτοῖς ὁ πάτριος, τὸν μὴ δυνάμενον τοῦτο τὸ τέλος φέρειν μὴ μετέχειν αὐτῆς· τῷ δὲ περὶ τοὺς ναυάρχους νόμῳ καὶ ἕτεροί τινες ἐπιτετιμήκασιν, ὀρθῶς ἐπιτιμῶντες. στάσεως γὰρ γίνεται αἷτιος· ἐπὶ γὰρ τοῖς βασιλεῦσιν, οὔσι στρατηγοῖς αἰδίοις, ἢ ναυαρχία σχεδὸν ἑτέρα βασιλεία καθέστηκεν. καὶ ὡδὶ δὲ τῇ ὑποθέσει τοῦ νομοθέτου ἐπιτιμήσειεν [1271b] ἂν τις, ὅπερ καὶ Πλάτων ἐν τοῖς Νόμοις ἐπιτετίμηκεν· πρὸς γὰρ μέρος ἀρετῆς ἢ πᾶσα σύνταξις τῶν νόμων ἐστί, τὴν πολεμικὴν· αὕτη γὰρ χρησίμη πρὸς τὸ κρατεῖν. τοιγαροῦν ἐσώζοντο μὲν πολεμοῦντες, ἀπώλλυντο δὲ ἄρξαντες διὰ τὸ μὴ ἐπίστασθαι σχολάζειν μηδὲ ἡσκηκεῖν μηδεμίαν ἄσκησιν ἑτέραν κυριωτέραν τῆς πολεμικῆς. τούτου δὲ ἀμάρτημα οὐκ ἔλαττον· νομίζουσι μὲν γὰρ γίνεσθαι τάγαθὰ τὰ περιμάχητα δι' ἀρετῆς μᾶλλον ἢ κακίας, καὶ τοῦτο μὲν καλῶς, ὅτι μέντοι ταῦτα κρείττω τῆς ἀρετῆς ὑπολαμβάνουσιν, οὐ καλῶς. φαύλως δ' ἔχει καὶ περὶ τὰ κοινὰ χρήματα τοῖς Σπαρτιάταις. οὔτε γὰρ ἐν τῷ κοινῷ τῆς πόλεως ἐστιν οὐδὲν πολέμους μεγάλους ἀναγκαζομένοις πολεμεῖν, εἰσφέρουσί τε κακῶς· διὰ γὰρ τὸ τῶν Σπαρτιατῶν εἶναι τὴν πλείστην γῆν οὐκ ἐξετάζουσιν ἀλλήλων τὰς εἰσφοράς. ἀποβέβηκε τε τοῦναντίον τῷ νομοθέτῃ τοῦ συμφέροντος· τὴν μὲν γὰρ πόλιν πεποίηκεν ἀχρήματον, τοὺς δ' ἰδιώτας φιλοχρημάτους. περὶ μὲν οὖν τῆς Λακεδαιμονίων πολιτείας ἐπὶ τοσοῦτον εἰρήσθω· ταῦτα γὰρ ἐστιν ἃ μάλιστ' ἂν τις ἐπιτιμήσειεν.

Ἡ δὲ Κρητικὴ πολιτεία πάρεγγυς μὲν ἐστί ταύτης, ἔχει δὲ μικρὰ μὲν οὐ

χειρόν, τὸ δὲ πλεῖον ἥττον γλαφυρῶς. καὶ γὰρ ἔοικε καὶ λέγεται γε τὰ πλεῖστα μεμιμῆσθαι τὴν Κρητικὴν πολιτείαν ἢ τῶν Λακῶνων· τὰ δὲ πλεῖστα τῶν ἀρχαίων ἥττον διήρθρωται τῶν νεωτέρων. φασὶ γὰρ τὸν Λυκοῦργον, ὅτε τὴν ἐπιτροπείαν τὴν Χαρίλλου τοῦ βασιλέως καταλιπὼν ἀπεδήμησεν, τότε τὸν πλεῖστον διατρίψαι χρόνον περὶ Κρήτην διὰ τὴν συγγένειαν· ἄποικοι γὰρ οἱ Λύκτιοι τῶν Λακῶνων ἦσαν, κατέλαβον δ' οἱ πρὸς τὴν ἀποικίαν ἐλθόντες τὴν τάξιν τῶν νόμων ὑπάρχουσιν ἐν τοῖς τότε κατοικοῦσιν. διὸ καὶ νῦν οἱ περίοικοι τὸν αὐτὸν τρόπον χρῶνται αὐτοῖς, ὡς κατασκευάσαντος Μίνω πρώτου τὴν τάξιν τῶν νόμων. δοκεῖ δ' ἡ νῆσος καὶ πρὸς τὴν ἀρχὴν τὴν Ἑλληνικὴν πεφυκέναι καὶ κεῖσθαι καλῶς· πάσῃ γὰρ ἐπικείται τῇ θαλάττῃ, σχεδὸν τῶν Ἑλλήνων ἰδρυμένων περὶ τὴν θάλατταν πάντων· ἀπέχει γὰρ τῇ μὲν τῆς Πελοποννήσου μικρόν, τῇ δὲ τῆς Ἀσίας τοῦ περὶ Τριόπιον τόπου καὶ Ῥόδου. διὸ καὶ τὴν τῆς θαλάττης ἀρχὴν κατέσχεν ὁ Μίνως, καὶ τὰς νήσους τὰς μὲν ἐχειρώσατο τὰς δ' ὤκισεν, τέλος δὲ ἐπιθέμενος τῇ Σικελίᾳ τὸν βίον ἐτελεύτησεν ἐκεῖ περὶ Καμικόν.

ἔχει δ' ἀνάλογον ἡ Κρητικὴ τάξις πρὸς τὴν Λακωνικὴν. γεωργοῦσί τε γὰρ τοῖς μὲν εἴλωτες [1272a] τοῖς δὲ Κρησὶν οἱ περίοικοι, καὶ συσσίτια παρ' ἀμφοτέροις ἔστιν, καὶ τό γε ἀρχαῖον ἐκάλουν οἱ Λάκωνες οὐ φιδίτια ἀλλὰ ἀνδρεῖα, καθάπερ οἱ Κρηῖτες, ἢ καὶ δῆλον ὅτι ἐκεῖθεν ἐλήλυθεν. ἔτι δὲ τῆς πολιτείας ἡ τάξις. οἱ μὲν γὰρ ἔφοροι τὴν αὐτὴν ἔχουσι δύναμιν τοῖς ἐν τῇ Κρήτῃ καλουμένοις κόσμοις, πλὴν οἱ μὲν ἔφοροι πέντε τὸν ἀριθμὸν οἱ δὲ κόσμοι δέκα εἰσίν· οἱ δὲ γέροντες τοῖς γέρουσιν, οὓς καλοῦσιν οἱ Κρηῖτες βουλήν, ἴσοι· βασιλεία δὲ πρότερον μὲν ἦν, εἴτα κατέλυσαν οἱ Κρηῖτες, καὶ τὴν ἡγεμονίαν οἱ κόσμοι τὴν κατὰ πόλεμον ἔχουσιν· ἐκκλησίας δὲ μετέχουσι πάντες, κυρία δ' οὐδενός ἐστιν ἀλλ' ἢ συνεπιψηφίσαι τὰ δόξαντα τοῖς γέρουσι καὶ τοῖς κόσμοις.

τὰ μὲν οὖν τῶν συσσιτίων ἔχει βέλτιον τοῖς Κρησὶν ἢ τοῖς Λάκωσιν. ἐν μὲν γὰρ Λακεδαίμονι κατὰ κεφαλὴν ἕκαστος εἰσφέρει τὸ τεταγμένον, εἰ δὲ μή, μετέχειν νόμος κωλύει τῆς πολιτείας, καθάπερ εἴρηται καὶ πρότερον, ἐν δὲ Κρήτῃ κοινοτέρως· ἀπὸ πάντων γὰρ τῶν γινομένων καρπῶν τε καὶ βοσκημάτων δημοσίων, καὶ ἐκ τῶν φόρων οὓς φέρουσιν οἱ περίοικοι, τέτακται μέρος τὸ μὲν πρὸς τοὺς θεοὺς καὶ τὰς κοινὰς λειτουργίας, τὸ δὲ τοῖς συσσιτίοις, ὥστ' ἐκ κοινοῦ τρέφεσθαι πάντας, καὶ γυναῖκας καὶ παῖδας καὶ ἄνδρας· πρὸς δὲ τὴν ὀλιγοσιτίαν ὡς ὠφέλιμον πολλὰ πεφίλοσόφηκεν ὁ νομοθέτης, καὶ πρὸς τὴν διάζευξιν τῶν γυναικῶν, ἵνα μὴ πολυτεκνῶσι, τὴν πρὸς τοὺς ἄρρενας ποιήσας ὁμιλίαν, περὶ ἧς εἰ φαύλως ἢ μὴ φαύλως, ἕτερος ἔσται τοῦ διασκέψασθαι καιρός. ὅτι δὴ τὰ περὶ τὰ συσσίτια βέλτιον τέτακται

τοῖς Κρησὶν ἢ τοῖς Λάκωσι, φανερόν· τὰ δὲ περὶ τοὺς κόσμους ἔτι χειρόν τῶν ἐφόρων. ὁ μὲν γὰρ ἔχει κακὸν τὸ τῶν ἐφόρων ἀρχεῖον, ὑπάρχει καὶ τούτοις (γίνονται γὰρ οἱ τυχόντες), ὁ δ' ἐκεῖ συμφέρει πρὸς τὴν πολιτείαν, ἐνταῦθ' οὐκ ἔστιν. ἐκεῖ μὲν γάρ, διὰ τὸ τὴν αἵρεσιν ἐκ πάντων εἶναι, μετέχων ὁ δῆμος τῆς μεγίστης ἀρχῆς βούλεται μένειν τὴν πολιτείαν· ἐνταῦθα δ' οὐκ ἐξ ἀπάντων αἰροῦνται τοὺς κόσμους ἀλλ' ἐκ τινῶν γενῶν, καὶ τοὺς γέροντας ἐκ τῶν κεκοσμηκότων, περὶ ὧν τοὺς αὐτοὺς ἂν τις εἴπειε λόγους καὶ περὶ τῶν ἐν Λακεδαιμόνι γινομένων (τὸ γὰρ ἀνυπεύθυνον καὶ τὸ διὰ βίου μεῖζόν ἐστι γέρας τῆς ἀξίας αὐτοῖς, καὶ τὸ μὴ κατὰ γράμματα ἄρχειν ἀλλ' αὐτογνώμονας ἐπισφαλές). τὸ δ' ἡσυχάζειν μὴ μετέχοντα τὸν δῆμον οὐδὲν σημεῖον τοῦ τετάχθαι καλῶς. οὐδὲν γὰρ λῆμμα ἔστι τοῖς κόσμοις ὥσπερ τοῖς ἐφόροις, πόρρω γ' [1272b] ἀποικοῦσιν ἐν νήσῳ τῶν διαφθερούντων.

ἦν δὲ ποιοῦνται τῆς ἀμαρτίας ταύτης ἰατροίαν, ἄτοπος καὶ οὐ πολιτικὴ ἀλλὰ δυναστευτικὴ. πολλάκις γὰρ ἐκβάλλουσι συστάντες τινὲς τοὺς κόσμους ἢ τῶν συναρχόντων αὐτῶν ἢ τῶν ἰδιωτῶν· ἔξεστι δὲ καὶ μεταξὺ τοῖς κόσμοις ἀπειπεῖν τὴν ἀρχήν. ταῦτα δὴ πάντα βέλτιον γίνεσθαι κατὰ νόμον ἢ κατ' ἀνθρώπων βούλησιν· οὐ γὰρ ἀσφαλὲς ὁ κανὼν. πάντων δὲ φαυλότατον τὸ τῆς ἀκοσμίας τῶν δυνατῶν, ἦν καθιστᾷσι πολλάκις ὅταν μὴ δίκας βούλωνται δοῦναι· ἢ καὶ δῆλον ὡς ἔχει τι πολιτείας ἢ τάξης, ἀλλ' οὐ πολιτεία ἐστὶν ἀλλὰ δυναστεία μᾶλλον. εἰώθασι δὲ διαλαμβάνοντες τὸν δῆμον καὶ τοὺς φίλους ἀναρχίαν ποιεῖν καὶ στασιάζειν καὶ μάχεσθαι πρὸς ἀλλήλους· καίτοι τί διαφέρει τὸ τοιοῦτον ἢ διὰ τινος χρόνου μηκέτι πόλιν εἶναι τὴν τοιαύτην, ἀλλὰ λύεσθαι τὴν πολιτικὴν κοινωνίαν; ἔστι δ' ἐπικίνδυνος οὕτως ἔχουσα πόλις, τῶν βουλομένων ἐπιτίθεσθαι καὶ δυναμένων. ἀλλά, καθάπερ εἴρηται, σῶζεται διὰ τὸν τόπον· ξενηλασίας γὰρ τὸ πόρρω πεποίηκεν. διὸ καὶ τὸ τῶν περιοίκων μένει τοῖς Κρησίν, οἱ δ' εἴλωτες ἀφίστανται πολλάκις. οὔτε γὰρ ἐξωτερικῆς ἀρχῆς κοινωνοῦσιν οἱ Κρηῖτες, νεωστὶ τε πόλεμος ξενικὸς διαβέβηκεν εἰς τὴν νῆσον, ὅς πεποίηκε φανεράν τὴν ἀσθένειαν τῶν ἐκεῖ νόμων. περὶ μὲν οὖν ταύτης εἰρήσθω τοσαῦθ' ἡμῖν τῆς πολιτείας.

Πολιτεύεσθαι δὲ δοκοῦσι καὶ Καρχηδόνιοι καλῶς καὶ πολλὰ περιττῶς πρὸς τοὺς ἄλλους, μάλιστα δ' ἔνια παραπλησίως τοῖς Λάκωσιν. αὗται γὰρ αἱ τρεῖς πολιτεῖαι ἀλλήλαις τε σύνεγγύς πῶς εἰσι καὶ τῶν ἄλλων πολὺ διαφέρουσιν, ἢ τε Κρητικὴ καὶ ἡ Λακωνικὴ καὶ τρίτη τούτων ἡ τῶν Καρχηδονίων. καὶ πολλὰ τῶν τεταγμένων ἔχει παρ' αὐτοῖς καλῶς· σημεῖον δὲ πολιτείας συντεταγμένης τὸ τὸν δῆμον διαμένειν ἐν τῇ τάξει τῆς πολιτείας, καὶ μήτε στάσιν, ὅ τι καὶ ἄξιον εἰπεῖν, γεγενῆσθαι μήτε τύραννον. ἔχει δὲ παραπλήσια τῇ Λακωνικῇ πολιτεία τὰ μὲν συσσίτια τῶν ἐταιριῶν τοῖς

φιδιτίοις, τὴν δὲ τῶν ἑκατὸν καὶ τεττάρων ἀρχὴν τοῖς ἐφόροις (πλὴν οὐ χεῖρον· οἱ μὲν γὰρ ἐκ τῶν τυχόντων εἰσὶ, ταύτην δ' αἰροῦνται τὴν ἀρχὴν ἀριστίνδην), τοὺς δὲ βασιλεῖς καὶ τὴν γερουσίαν ἀνάλογον τοῖς ἐκεῖ βασιλεῦσι καὶ γέρουσιν· καὶ βέλτιον δὲ τοὺς βασιλεῖς μήτε καθ' αὐτὸ εἶναι γένος μήτε τοῦτο τὸ τυχόν, εἰ δέ τι διαφέρει, ἐκ τούτων αἰρετοὺς μᾶλλον ἢ καθ' ἡλικίαν. μεγάλων γὰρ κύριοι καθεστῶτες, ἂν εὐτελεῖς ὦσι [1273a] μεγάλα βλάπτουσι, καὶ ἔβλαψαν ἤδη τὴν πόλιν τὴν τῶν Λακεδαιμονίων.

τὰ μὲν οὖν πλεῖστα τῶν ἐπιτιμηθέντων ἂν διὰ τὰς παρεκβάσεις κοινὰ τυγχάνει πάσαις ὄντα ταῖς εἰρημέναις πολιτείαις· τῶν δὲ παρὰ τὴν ὑπόθεσιν τῆς ἀριστοκρατίας καὶ τῆς πολιτείας τὰ μὲν εἰς δῆμον ἐκκλίνει μᾶλλον, τὰ δ' εἰς ὀλιγαρχίαν. τοῦ μὲν γὰρ τὰ μὲν προσάγειν τὰ δὲ μὴ προσάγειν πρὸς τὸν δῆμον οἱ βασιλεῖς κύριοι μετὰ τῶν γερόντων, ἂν ὁμογνωμονῶσι πάντες, εἰ δὲ μή, καὶ τούτων ὁ δῆμος. ἃ δ' ἂν εἰσφέρωσιν οὗτοι, οὐ διακοῦσαι μόνον ἀποδιδόασιν τῷ δήμῳ τὰ δόξαντα τοῖς ἄρχουσιν, ἀλλὰ κύριοι κρίνειν εἰσὶ καὶ τῷ βουλομένῳ τοῖς εἰσφερομένοις ἀντειπεῖν ἔξεστιν, ὅπερ ἐν ταῖς ἑτέραις πολιτείαις οὐκ ἔστιν. τὸ δὲ τὰς πενταρχίας κυρίας οὖσας πολλῶν καὶ μεγάλων ὑφ' αὐτῶν αἰρετὰς εἶναι, καὶ τὴν τῶν ἑκατὸν ταύτας αἰρεῖσθαι, τὴν μεγίστην ἀρχὴν, ἔτι δὲ ταύτας πλείονα ἄρχειν χρόνον τῶν ἄλλων (καὶ γὰρ ἐξεληλυθότες ἄρχουσι καὶ μέλλοντες) ὀλιγαρχικόν, τὸ δὲ ἀμίσθους καὶ μὴ κληρωτὰς ἀριστοκρατικὸν θετέον, καὶ εἴ τι τοιοῦτον ἕτερον, καὶ τὸ τὰς δίκας ὑπὸ τῶν ἀρχείων δικάζεσθαι πάσας (καὶ μὴ ἄλλας ὑπ' ἄλλων, καθάπερ ἐν Λακεδαίμονι). παρεκβαίνει δὲ τῆς ἀριστοκρατίας ἡ τάξις τῶν Καρχηδονίων μάλιστα πρὸς τὴν ὀλιγαρχίαν κατὰ τινα διάνοιαν ἢ συνδοκεῖ τοῖς πολλοῖς· οὐ γὰρ μόνον ἀριστίνδην ἀλλὰ καὶ πλουτίνδην οἶονται δεῖν αἰρεῖσθαι τοὺς ἄρχοντας· ἀδύνατον γὰρ τὸν ἀποροῦντα καλῶς ἄρχειν καὶ σχολάζειν. εἴπερ οὖν τὸ μὲν αἰρεῖσθαι πλουτίνδην ὀλιγαρχικόν, τὸ δὲ κατ' ἀρετὴν ἀριστοκρατικόν, αὕτη τις ἂν εἴη τάξις τρίτη, καθ' ἣν περ συντέτακται [καὶ] τοῖς Καρχηδονίοις τὰ περὶ τὴν πολιτείαν· αἰροῦνται γὰρ εἰς δύο ταῦτα βλέποντες, καὶ μάλιστα τὰς μεγίστας, τοὺς τε βασιλεῖς καὶ τοὺς στρατηγούς.

δεῖ δὲ νομίζειν ἀμάρτημα νομοθέτου τὴν παρέκβασιν εἶναι τῆς ἀριστοκρατίας ταύτην. ἐξ ἀρχῆς γὰρ τοῦθ' ὅρᾳν ἔστι τῶν ἀναγκαιοτάτων, ὅπως οἱ βέλτιστοι δύνωνται σχολάζειν καὶ μηδὲν ἀσχημονεῖν, μὴ μόνον ἄρχοντες ἀλλὰ μηδ' ἰδιωτεύοντες. εἰ δὲ δεῖ βλέπειν καὶ πρὸς εὐπορίαν χάριν σχολῆς, φαῦλον τὸ τὰς μεγίστας ὠνητὰς εἶναι τῶν ἀρχῶν, τὴν τε βασιλείαν καὶ τὴν στρατηγίαν. ἔντιμον γὰρ ὁ νόμος οὗτος ποιεῖ τὸν πλοῦτον μᾶλλον τῆς ἀρετῆς, καὶ τὴν πόλιν ὅλην φιλοχρήματον. ὅ τι δ' ἂν ὑπολάβῃ τίμιον εἶναι τὸ κύριον, ἀνάγκη καὶ τὴν τῶν ἄλλων πολιτῶν δόξαν ἀκολουθεῖν τούτοις. ὅπου

δὲ μὴ μάλιστα ἀρετὴ τιμᾶται, ταύτην [1273b] οὐχ οἷόν τε βεβαίως ἀριστοκρατεῖσθαι τὴν πολιτείαν. ἐθίζεσθαι δ' εὖλογον κερδαίνειν τοὺς ὠνουμένους, ὅταν δαπανήσαντες ἄρχωσιν· ἄτοπον γὰρ εἰ πένης μὲν ὦν ἐπεικῆς δὲ βουλήσεται κερδαίνειν, φαυλότερος δ' ὦν οὐ βουλήσεται δαπανήσας. διὸ δεῖ τοὺς δυναμένους ἄριστ' ἀργεῖν, τούτους ἄρχειν. βέλτιον δ', εἰ καὶ προεῖτο τὴν εὐπορίαν τῶν ἐπεικῶν ὁ νομοθέτης, ἀλλὰ ἀρχόντων γε ἐπιμελεῖσθαι τῆς σχολῆς. φαῦλον δ' ἂν δόξειεν εἶναι καὶ τὸ πλείους ἀρχὰς τὸν αὐτὸν ἄρχειν· ὅπερ εὐδοκιμεῖ παρὰ τοῖς Καρχηδονίοις· ἔν γὰρ ὑφ' ἐνὸς ἔργον ἄριστ' ἀποτελεῖται. δεῖ δ' ὅπως γίνηται τοῦθ' ὅρᾶν τὸν νομοθέτην, καὶ μὴ προστάττειν τὸν αὐτὸν αὐλεῖν καὶ σκυτοτομεῖν. ὥσθ' ὅπου μὴ μικρὰ <ῆ> πόλις, πολιτικώτερον πλείονας μετέχειν τῶν ἀρχῶν, καὶ δημοτικώτερον· κοινότερόν τε γὰρ καθάπερ εἴπομεν καὶ κάλλιον ἕκαστον ἀποτελεῖται τῶν αὐτῶν καὶ θᾶττον. δῆλον δὲ τοῦτο ἐπὶ τῶν πολεμικῶν καὶ τῶν ναυτικῶν· ἐν τούτοις γὰρ ἀμφοτέροις διὰ πάντων ὡς εἰπεῖν διελήλυθε τὸ ἄρχειν καὶ τὸ ἄρχεσθαι. ὀλιγαρχικῆς δ' οὕσης τῆς πολιτείας ἄριστα <στάσιν> ἐκφεύγουσι τῷ πλουτεῖν αἰεὶ τι τοῦ δήμου μέρος, ἐκπέμποντες ἐπὶ τὰς πόλεις. τούτῳ γὰρ ἰῶνται καὶ ποιοῦσι μόνιμον τὴν πολιτείαν. ἀλλὰ τουτί ἐστι τύχης ἔργον, δεῖ δὲ ἀστασιάστους εἶναι διὰ τὸν νομοθέτην. νῦν δέ, ἂν ἀτυχία γένηται τις καὶ τὸ πλῆθος ἀποστῇ τῶν ἀρχομένων, οὐδὲν ἔστι φάρμακον διὰ τῶν νόμων τῆς ἡσυχίας. περὶ μὲν οὖν τῆς Λακεδαιμονίων πολιτείας καὶ Κρητικῆς καὶ τῆς Καρχηδονίων, αἵπερ δικαίως εὐδοκιμοῦσι, τοῦτον ἔχει τὸν τρόπον.

Τῶν δὲ ἀποφνηαμένων τι περὶ πολιτείας ἔνιοι μὲν οὐκ ἐκοινώνησαν πράξεων πολιτικῶν οὐδ' ὠντινωνοῦν, ἀλλὰ διετέλεσαν ἰδιωτεύοντες τὸν βίον, περὶ ὧν εἴ τι ἀξιόλογον, εἴρηται σχεδὸν περὶ πάντων, ἔνιοι δὲ νομοθέται γεγόνασιν, οἱ μὲν ταῖς οἰκείαις πόλεσιν οἱ δὲ καὶ τῶν ὀθνείων τισί, πολιτευθέντες αὐτοί· καὶ τούτων οἱ μὲν νόμων ἐγένοντο δημιουργοὶ μόνον, οἱ δὲ καὶ πολιτείας, οἷον καὶ Λυκοῦργος καὶ Σόλων· οὗτοι γὰρ καὶ νόμους καὶ πολιτείας κατέστησαν. περὶ μὲν οὖν τῆς Λακεδαιμονίων εἴρηται, Σόλωνα δ' ἔνιοι μὲν οἷονται νομοθέτην γενέσθαι σπουδαῖον· ὀλιγαρχίαν τε γὰρ καταλῦσαι λίαν ἄκρατον οὕσαν, καὶ δουλεύοντα τὸν δῆμον παῦσαι, καὶ δημοκρατίαν καταστῆσαι τὴν πάτριον, μείζαντα καλῶς τὴν πολιτείαν· εἶναι γὰρ τὴν μὲν ἐν Ἀρείῳ πάγῳ βουλὴν ὀλιγαρχικόν, τὸ δὲ τὰς ἀρχὰς αἰρετὰς ἀριστοκρατικόν, τὰ δὲ δικαστήρια δημοτικόν. ἔοικε δὲ Σόλων [1274a] ἐκεῖνα μὲν ὑπάρχοντα πρότερον οὐ καταλῦσαι, τὴν τε βουλὴν καὶ τὴν τῶν ἀρχῶν αἵρεσιν, τὸν δὲ δῆμον καταστῆσαι, τὰ δικαστήρια ποιήσας ἐκ πάντων. διὸ καὶ μέμφονταί τινες αὐτῷ· λῦσαι γὰρ θάτερα, κύριον ποιήσαντα τὸ δικαστήριον πάντων, κληρωτὸν ὄν. ἐπεὶ γὰρ τοῦτ' ἴσχυσεν, ὥσπερ τυράννῳ τῷ δήμῳ χαριζόμενοι τὴν πολιτείαν εἰς τὴν νῦν δημοκρατίαν μετέστησαν· καὶ τὴν μὲν

ἐν Ἀρείῳ πάγῳ βουλὴν Ἐφιάλτης ἐκόλουσε καὶ Περικλῆς, τὰ δὲ δικαστήρια μισθοφόρα κατέστησε Περικλῆς, καὶ τοῦτον δὴ τὸν τρόπον ἕκαστος τῶν δημαγωγῶν προήγαγεν αὖξων εἰς τὴν νῦν δημοκρατίαν. φαίνεται δ' οὐ κατὰ τὴν Σόλωνος γενέσθαι τοῦτο προαίρεσιν, ἀλλὰ μᾶλλον ἀπὸ συμπτώματος (τῆς ναυαρχίας γὰρ ἐν τοῖς Μηδικοῖς ὁ δῆμος αἴτιος γενόμενος ἐφρονηματίσθη καὶ δημαγωγοὺς ἔλαβε φαύλους ἀντιπολιτευομένων τῶν ἐπεικῶν), ἐπεὶ Σόλων γε ἔοικε τὴν ἀναγκαιοτάτην ἀποδιδόναι τῷ δήμῳ δύναμιν, τὸ τὰς ἀρχὰς αἰρεῖσθαι καὶ εὐθύνειν (μηδὲ γὰρ τούτου κύριος ὢν ὁ δῆμος δοῦλος ἂν εἴη καὶ πολέμιος), τὰς δ' ἀρχὰς ἐκ τῶν γνωρίμων καὶ τῶν εὐπόρων κατέστησε πάσας, ἐκ τῶν πεντακοσιομεδίμων καὶ ζευγιτῶν καὶ τρίτου τέλους τῆς καλουμένης ἱππάδος· τὸ δὲ τέταρτον τὸ θητικόν, οἷς οὐδεμιᾶς ἀρχῆς μετῆν.

νομοθέται δ' ἐγένοντο Ζάλευκός τε Λοκροῖς τοῖς ἐπιζεφυρίοις, καὶ Χαρώνδας ὁ Καταναῖος τοῖς αὐτοῦ πολίταις καὶ ταῖς ἄλλαις ταῖς Χαλκιδικαῖς πόλεσι ταῖς περὶ Ἰταλίαν καὶ Σικελίαν. πειρῶνται δέ τινες καὶ συνάγειν ὡς Ὀνομακρίτου μὲν γενομένου πρώτου δεινοῦ περὶ νομοθεσίαν, γυμνασθῆναι δ' αὐτὸν ἐν Κρήτῃ, Λοκρὸν ὄντα καὶ ἐπιδημοῦντα, κατὰ τέχνην μαντικήν· τούτου δὲ γενέσθαι Θάλητα ἐταῖρον, Θάλητος δ' ἀκροατὴν Λυκοῦργον καὶ Ζάλευκον, Ζαλεύκου δὲ Χαρώνδαν. ἀλλὰ ταῦτα μὲν λέγουσιν ἀσκεπτότερον τῶν χρόνων λέγοντες. ἐγένετο δὲ καὶ Φιλόλαος ὁ Κορίνθιος νομοθέτης Θηβαίοις. ἦν δ' ὁ Φιλόλαος τὸ μὲν γένος τῶν Βακχιαδῶν, ἐραστῆς δὲ γενόμενος Διοκλέους τοῦ νικήσαντος Ὀλυμπίασιν, ὡς ἐκεῖνος τὴν πόλιν ἔλιπε διαμισήσας τὸν ἔρωτα τὸν τῆς μητρὸς Ἀλκυόνης, ἀπῆλθεν εἰς Θήβας· κάκεῖ τὸν βίον ἐτελεύτησαν ἀμφότεροι. καὶ νῦν ἔτι δεικνύουσι τοὺς τάφους αὐτῶν ἀλλήλοις μὲν εὐσυνόπτους ὄντας, πρὸς δὲ τὴν τῶν Κορινθίων χώραν τὸν μὲν σύνοπτον τὸν δ' οὐ σύνοπτον· μυθολογοῦσι γὰρ αὐτοὺς οὕτω τάξασθαι τὴν ταφήν, τὸν μὲν Διοκλέα διὰ τὴν ἀπέχθειαν τοῦ πάθους, ὅπως μὴ ἄποπτος ἔσται ἢ Κορινθία ἀπὸ τοῦ χώματος, τὸν δὲ Φιλόλαον ὅπως [1274b] ἄποπτος. ὥκησαν μὲν οὖν διὰ τὴν τοιαύτην αἰτίαν παρὰ τοῖς Θηβαίοις, νομοθέτης δ' αὐτοῖς ἐγένετο Φιλόλαος περὶ τ' ἄλλων τινῶν καὶ περὶ τῆς παιδοποιίας, οὓς καλοῦσιν ἐκεῖνοι νόμους θετικούς· καὶ τοῦτ' ἐστὶν ἰδίως ὑπ' ἐκείνου νενομοθετημένον, ὅπως ὁ ἀριθμὸς σώζεται τῶν κλήρων. Χαρώνδου δ' ἴδιον μὲν οὐδέν ἐστι πλὴν αἱ δίκαι τῶν ψευδομαρτυριῶν (πρῶτος γὰρ ἐποίησε τὴν ἐπίσκηψιν), τῇ δ' ἀκριβεῖα τῶν νόμων ἐστὶ γλαφυρώτερος καὶ τῶν νῦν νομοθετῶν.

Φαλέου δ' ἴδιον ἢ τῶν οὐσιῶν ἀνομάλωσις, Πλάτωνος δ' ἢ τε τῶν γυναικῶν καὶ παίδων καὶ τῆς οὐσίας κοινότης καὶ τὰ συσσίτια τῶν γυναικῶν, ἔτι δ' ὁ περὶ τὴν μέθην νόμος, τὸ τοὺς νήφοντας συμποσιαρχεῖν, καὶ τὴν ἐν

τοῖς πολεμικοῖς ἄσκησιν ὅπως ἀμφιδέξιοι γίνωνται κατὰ τὴν μελέτην, ὥς δέον μὴ τὴν μὲν χρήσιμον εἶναι τοῖν χεροῖν τὴν δὲ ἄχρηστον. Δράκοντος δὲ νόμοι μὲν εἰσὶ, πολιτεία δ' ὑπαρχούσῃ τοὺς νόμους ἔθηκεν· ἴδιον δ' ἐν τοῖς νόμοις οὐδὲν ἔστιν ὅ τι καὶ μνείας ἄξιον, πλὴν ἡ χαλεπότης διὰ τὸ τῆς ζημίας μέγεθος. Ἐγένετο δὲ καὶ Πιπτακὸς νόμων δημιουργὸς ἄλλ' οὐ πολιτείας· νόμος δ' ἴδιος αὐτοῦ τὸ τοὺς μεθύοντας, ἅν τι πταίσωσι, πλείω ζημίαν ἀποτίνειν τῶν νηφόντων· διὰ γὰρ τὸ πλείους ὑβρίζειν μεθύοντας ἢ νήφοντας οὐ πρὸς τὴν συγγνώμην ἀπέβλεψεν, ὅτι δεῖ μεθύουσιν ἔχειν μᾶλλον, ἀλλὰ πρὸς τὸ συμφέρον. Ἐγένετο δὲ καὶ Ἀνδροδάμας Ῥηγῖνος νομοθέτης Χαλκιδεῦσι τοῖς ἐπὶ Θράκης, οὐ τὰ περί τε τὰ φονικὰ καὶ τὰς ἐπικλήρους ἐστίν· οὐ μὴν ἀλλὰ ἴδιον γε οὐδὲν αὐτοῦ λέγειν ἔχοι τις ἄν. τὰ μὲν οὖν περὶ τὰς πολιτείας, τὰς τε κυρίας καὶ τὰς ὑπὸ τινῶν εἰρημένας, ἔστω τεθεωρημένα τὸν τρόπον τοῦτον.

## Γ

Τῷ περὶ πολιτείας ἐπισκοποῦντι, καὶ τίς ἐκάστη καὶ ποία τις, σχεδὸν πρώτη σκέψις περὶ πόλεως ἰδεῖν, τί ποτέ ἐστιν ἡ πόλις. νῦν γὰρ ἀμφισβητοῦσιν, οἱ μὲν φάσκοντες τὴν πόλιν πεπραχέναι τὴν πρᾶξιν, οἱ δ' οὐ τὴν πόλιν ἀλλὰ τὴν ὀλιγαρχίαν ἢ τὸν τύραννον· τοῦ δὲ πολιτικοῦ καὶ τοῦ νομοθέτου πᾶσαν ὁρῶμεν τὴν πραγματείαν οὔσαν περὶ πόλιν, ἡ δὲ πολιτεία τῶν τὴν πόλιν οἰκούντων ἐστὶ τάξις τις. Ἐπεὶ δ' ἡ πόλις τῶν συγκειμένων, καθάπερ ἄλλο τι τῶν ὅλων μὲν συνεστώτων δ' ἐκ πολλῶν μορίων, δῆλον ὅτι πρότερον ὁ πολίτης ζητητέος· ἡ γὰρ πόλις πολιτῶν τι πλῆθός ἐστιν.

[1275a] ὥστε τίνα χρὴ καλεῖν πολίτην καὶ τίς ὁ πολίτης ἐστὶ σκεπτέον. καὶ γὰρ ὁ πολίτης ἀμφισβητεῖται πολλάκις· οὐ γὰρ τὸν αὐτὸν ὁμολογοῦσι πάντες εἶναι πολίτην· ἔστι γὰρ τις ὃς ἐν δημοκρατίᾳ πολίτης ὢν ἐν ὀλιγαρχίᾳ πολλάκις οὐκ ἔστι πολίτης. τοὺς μὲν οὖν ἄλλως πως τυγχάνοντας ταύτης τῆς προσηγορίας, οἷον τοὺς ποιητοὺς πολίτας, ἀφετέον· ὁ δὲ πολίτης οὐ τῷ οἰκεῖν που πολίτης ἐστίν (καὶ γὰρ μέτοικοι καὶ δοῦλοι κοινωνοῦσι τῆς οἰκήσεως), οὐδ' οἱ τῶν δικαίων μετέχοντες οὕτως ὥστε καὶ δίκην ὑπέχειν καὶ δικάζεσθαι (τοῦτο γὰρ ὑπάρχει καὶ τοῖς ἀπὸ συμβόλων κοινωνοῦσιν [καὶ γὰρ ταῦτα τούτοις ὑπάρχει]· πολλαχοῦ μὲν οὖν οὐδὲ τούτων τελέως οἱ μέτοικοι μετέχουσιν, ἀλλὰ νέμειν ἀνάγκη προστάτην, ὥστε ἀτελῶς πως μετέχουσι τῆς τοιαύτης κοινωνίας), ἀλλὰ καθάπερ καὶ παῖδας τοὺς μήπω δι' ἡλικίαν ἐγγεγραμμένους καὶ τοὺς γέροντας τοὺς ἀφειμένους φατέον εἶναι μὲν πως πολίτας, οὐχ ἀπλῶς δὲ λίαν ἀλλὰ προστιθέντας τοὺς μὲν ἀτελεῖς τοὺς δὲ παρηκμακότας ἢ τι τοιοῦτον ἕτερον (οὐδὲν γὰρ διαφέρει· δῆλον γὰρ τὸ λεγόμενον). ζητοῦμεν γὰρ τὸν ἀπλῶς πολίτην καὶ μηδὲν ἔχοντα τοιοῦτον



ἔγκλημα διορθώσεως δεόμενον, ἐπεὶ καὶ περὶ τῶν ἀτίμων καὶ φυγάδων ἔστι τὰ τοιαῦτα καὶ διαπορεῖν καὶ λύειν. πολίτης δ' ἀπλῶς οὐδενὶ τῶν ἄλλων ὀρίζεται μᾶλλον ἢ τῷ μετέχειν κρίσεως καὶ ἀρχῆς. τῶν δ' ἀρχῶν αἱ μὲν εἰσι διηρημένοι κατὰ χρόνον, ὥστ' ἐνίας μὲν ὅλως δις τὸν αὐτὸν οὐκ ἔξεστιν ἄρχειν, ἢ διὰ τινῶν ὠρισμένων χρόνων· ὁ δ' ἀόριστος, οἷον ὁ δικαστῆς καὶ «ὁ» ἐκκλησιαστής. τάχα μὲν οὖν ἂν φαίη τις οὐδ' ἄρχοντας εἶναι τοὺς τοιούτους, οὐδὲ μετέχειν διὰ ταῦτ' ἀρχῆς· καίτοι γελοῖον τοὺς κυριωτάτους ἀποστερεῖν ἀρχῆς. ἀλλὰ διαφερέτω μηδέν· περὶ ὀνόματος γὰρ ὁ λόγος· ἀνώνυμον γὰρ τὸ κοινὸν ἐπὶ δικαστοῦ καὶ ἐκκλησιαστοῦ, τί δεῖ ταῦτ' ἄμφω καλεῖν. ἔστω δὲ διορισμοῦ χάριν ἀόριστος ἀρχή. τίθεμεν δὲ πολίτας τοὺς οὕτω μετέχοντας.

ὁ μὲν οὖν μάλιστ' ἂν ἐφαρμόσας ὀρισμὸς ἐπὶ πάντας τοὺς λεγομένους πολίτας σχεδὸν τοιοῦτός ἐστιν· δεῖ δὲ μὴ λανθάνειν ὅτι τῶν πραγμάτων ἐν οἷς τὰ ὑποκείμενα διαφέρει τῷ εἶδει, καὶ τὸ μὲν αὐτῶν ἐστὶ πρῶτον τὸ δὲ δεύτερον τὸ δ' ἐχόμενον, ἢ τὸ παράπαν οὐδὲν ἔστιν, ἢ τοιαῦτα, τὸ κοινόν, ἢ γλίσχρως. τὰς δὲ πολιτείας ὀρῶμεν εἶδει διαφερούσας ἀλλήλων, καὶ τὰς μὲν ὑστέρας τὰς δὲ [1275b] προτέρας οὖσας· τὰς γὰρ ἡμαρτημένας καὶ παρεκβεβηκυίας ἀναγκαῖον ὑστέρας εἶναι τῶν ἀναμαρτήτων (τὰς δὲ παρεκβεβηκυίας πῶς λέγομεν, ὕστερον ἔσται φανερόν). ὥστε καὶ τὸν πολίτην ἕτερον ἀναγκαῖον εἶναι τὸν καθ' ἐκάστην πολιτείαν. διόπερ ὁ λεχθεὶς ἐν μὲν δημοκρατίᾳ μάλιστ' ἐστὶ πολίτης, ἐν δὲ ταῖς ἄλλαις ἐνδέχεται μὲν, οὐ μὴν ἀναγκαῖον. «ἐν» ἐνίαις γὰρ οὐκ ἔστι δῆμος, οὐδ' ἐκκλησίαν νομίζουσιν ἀλλὰ συγκλήτους, καὶ τὰς δίκας δικάζουσι κατὰ μέρος, οἷον ἐν Λακεδαιμόνι τὰς τῶν συμβολαίων δικάζει τῶν ἐφόρων ἄλλος ἄλλας, οἱ δὲ γέροντες τὰς φονικάς, ἑτέρα δ' ἴσως ἀρχή τις ἑτέρας. τὸν αὐτὸν δὲ τρόπον καὶ περὶ Καρχηδόνα· πάσας γὰρ ἀρχαί τινες κρίνουσι τὰς δίκας. ἀλλ' ἔχει διόρθωσιν ὁ τοῦ πολίτου διορισμός. ἐν γὰρ ταῖς ἄλλαις πολιτείαις οὐχ ὁ ἀόριστος ἄρχων ἐκκλησιαστής ἐστὶ καὶ δικαστής, ἀλλὰ ὁ κατὰ τὴν ἀρχὴν ὠρισμένος· τούτων γὰρ ἢ πᾶσιν ἢ τισὶν ἀποδέδοται τὸ βουλευέσθαι καὶ δικάζειν ἢ περὶ πάντων ἢ περὶ τινῶν. τίς μὲν οὖν ἐστὶν ὁ πολίτης, ἐκ τούτων φανερόν· ὥ γὰρ ἐξουσία κοινωνεῖν ἀρχῆς βουλευτικῆς καὶ κριτικῆς, πολίτην ἤδη λέγομεν εἶναι ταύτης τῆς πόλεως, πόλιν δὲ τὸ τῶν τοιούτων πλῆθος ἱκανὸν πρὸς αὐτάρκειαν ζωῆς, ὥς ἀπλῶς εἰπεῖν.

Ὅρίζονται δὲ πρὸς τὴν χρῆσιν πολίτην τὸν ἐξ ἀμφοτέρων πολιτῶν καὶ μὴ θατέρου μόνον, οἷον πατρὸς ἢ μητρός, οἱ δὲ καὶ τοῦτ' ἐπὶ πλεόν ζητοῦσιν, οἷον ἐπὶ πάππους δύο ἢ τρεῖς ἢ πλείους. οὕτω δὲ ὀριζομένων πολιτικῶς καὶ παχέως, ἀποροῦσιν οἱ τινες τὸν τρίτον ἐκεῖνον ἢ τέταρτον, πῶς ἔσται πολίτης.

Γοργίας μὲν οὖν ὁ Λεοντῖνος, τὰ μὲν ἴσως ἀπορῶν τὰ δ' εἰρωνευόμενος, ἔφη, καθάπερ ὄλμους εἶναι τοὺς ὑπὸ τῶν ὀλμοποιῶν πεποιημένους, οὕτω καὶ Λαρισαίους τοὺς ὑπὸ τῶν δημιουργῶν πεποιημένους· εἶναι γὰρ τινὰς λαρισσοποιούς. ἔστι δ' ἀπλοῦν. εἰ γὰρ μετεῖχον κατὰ τὸν ῥηθέντα διορισμὸν τῆς πολιτείας, ἦσαν πολῖται· καὶ γὰρ οὐδὲ δυνατόν ἐφαρμόττειν τὸ ἐκ πολίτου ἢ ἐκ πολίτιδος ἐπὶ τῶν πρώτων οἰκησάντων ἢ κτισάντων.

ἀλλ' ἴσως ἐκεῖνο μᾶλλον ἔχει ἀπορίαν, ὅσοι μετέσχον μεταβολῆς γενομένης πολιτείας, οἷον <ἃ> Ἀθήνησιν ἐποίησε Κλεισθένης μετὰ τὴν τῶν τυράννων ἐκβολήν· πολλοὺς γὰρ ἐφυλέτευσε ξένους καὶ δούλους μετοίκους. τὸ δ' ἀμφισβήτημα πρὸς τοὺτους ἐστὶν οὐ τίς πολίτης, ἀλλὰ πότερον ἀδίκως ἢ δικαίως. καίτοι κἂν τοῦτό τις ἔτι προσαπορήσειεν, [1276a] ἄρ' εἰ μὴ δικαίως πολίτης, οὐ πολίτης, ὥς ταῦτ' οὐ δυναμένου τοῦ τ' ἀδίκου καὶ τοῦ ψευδοῦς. ἐπεὶ δ' ὀρώμεν καὶ ἄρχοντάς τινὰς ἀδίκως, οὓς ἄρχειν μὲν φήσομεν ἀλλ' οὐ δικαίως, ὁ δὲ πολίτης ἀρχῇ τινὶ διωρισμένος ἐστίν (ὁ γὰρ κοινωνῶν τῆς τοιαύτης ἀρχῆς πολίτης ἐστίν, ὥς ἔφαμεν), δῆλον ὅτι πολίτας μὲν εἶναι φατέον καὶ τοὺτους· περὶ δὲ τοῦ δικαίως ἢ μὴ δικαίως συνάπτει πρὸς τὴν εἰρημένην πρότερον ἀμφισβήτησιν. ἀποροῦσι γὰρ τινες πόθ' ἢ πόλις ἔπραξε καὶ πότε οὐχ ἢ πόλις, οἷον ὅταν ἐξ ὀλιγαρχίας ἢ τυραννίδος γένηται δημοκρατία (τότε γὰρ οὔτε τὰ συμβόλαια ἔνιοι βούλονται διαλύειν, ὥς οὐ τῆς πόλεως ἀλλὰ τοῦ τυράννου λαβόντος, οὗτ' ἄλλα πολλὰ τῶν τοιούτων, ὥς ἐνίας τῶν πολιτειῶν τῷ κρατεῖν οὔσας, ἀλλὰ οὐ διὰ τὸ κοινῇ συμφέρον)· εἴπερ οὖν καὶ δημοκρατοῦνται τινες κατὰ τὸν τρόπον τοῦτον, ὁμοίως τῆς πόλεως φατέον εἶναι ταύτης τὰς τῆς πολιτείας ταύτης πράξεις καὶ τὰς ἐκ τῆς ὀλιγαρχίας καὶ τῆς τυραννίδος. ἔοικε δ' οἰκεῖος ὁ λόγος εἶναι τῆς ἀπορίας ταύτης πως, πότε χρὴ λέγειν τὴν πόλιν εἶναι τὴν αὐτὴν ἢ μὴ τὴν αὐτὴν ἀλλ' ἑτέραν. ἢ μὲν οὖν ἐπιπολαιοτάτη τῆς ἀπορίας ζήτησις περὶ τὸν τόπον καὶ τοὺς ἀνθρώπους ἐστίν· ἐνδέχεται γὰρ διαζευχθῆναι τὸν τόπον καὶ τοὺς ἀνθρώπους, καὶ τοὺς μὲν ἕτερον τοὺς δ' ἕτερον οἰκῆσαι τόπον.

ταύτην μὲν οὖν πραοτέραν θετέον τὴν ἀπορίαν (πολλαχῶς γὰρ τῆς πόλεως λεγομένης, ἐστὶ πως εὐμάρεια τῆς τοιαύτης ζητήσεως)· ὁμοίως δὲ καὶ τῶν τὸν αὐτὸν κατοικούντων ἀνθρώπων πότε δεῖ νομίζειν μίαν εἶναι τὴν πόλιν; οὐ γὰρ δὴ τοῖς τείχεσιν· εἴη γὰρ ἂν Πελοποννήσῳ περιβαλεῖν ἐν τείχῳ. τοιαύτη δ' ἴσως ἐστὶ καὶ Βαβυλῶν καὶ πᾶσα ἥτις ἔχει περιγραφὴν μᾶλλον ἔθνους ἢ πόλεως· ἥς γέ φασιν ἐαλωκυίας τρίτην ἡμέραν οὐκ αἰσθέσθαι τι μέρος τῆς πόλεως.

ἀλλὰ περὶ μὲν ταύτης τῆς ἀπορίας εἰς ἄλλον καιρὸν χρήσιμος ἢ σκέψις

(περὶ γὰρ μεγέθους τῆς πόλεως, τό τε πόσον καὶ πότερον ἔθνος ἐν ἧ πλείω συμφέρει, δεῖ μὴ λανθάνειν τὸν πολιτικόν)· ἀλλὰ τῶν αὐτῶν κατοικούντων τὸν αὐτὸν τόπον, πότερον ἕως ἄν ἡ τὸ γένος ταῦτὸ τῶν κατοικούντων, τὴν αὐτὴν εἶναι φατέον πόλιν, καίπερ αἰεὶ τῶν μὲν φθειρομένων τῶν δὲ γινομένων, ὥσπερ καὶ ποταμοὺς εἰώθαμεν λέγειν τοὺς αὐτοὺς καὶ κρήνας τὰς αὐτάς, καίπερ αἰεὶ τοῦ μὲν ἐπιγινομένου νάματος τοῦ δ' ὑπεξιόντος, ἢ τοὺς μὲν ἀνθρώπους φατέον εἶναι τοὺς αὐτοὺς διὰ τὴν τοιαύτην αἰτίαν, τὴν δὲ [1276b] πόλιν ἑτέραν; εἴπερ γὰρ ἐστὶ κοινωνία τις ἢ πόλις, ἔστι δὲ κοινωνία πολιτῶν πολιτείας, γινομένης ἑτέρας τῷ εἶδει καὶ διαφερούσης τῆς πολιτείας ἀναγκαῖον εἶναι δόξειεν ἄν καὶ τὴν πόλιν εἶναι μὴ τὴν αὐτήν, ὥσπερ γε καὶ χορὸν ὅτε μὲν κωμικὸν ὅτε δὲ τραγικὸν ἕτερον εἶναι φαμεν, τῶν αὐτῶν πολλάκις ἀνθρώπων ὄντων, ὁμοίως δὲ καὶ πᾶσαν ἄλλην κοινωνίαν καὶ σύνθεσιν ἑτέραν, ἄν εἶδος ἕτερον ἢ τῆς συνθέσεως, οἷον ἁρμονίαν τῶν αὐτῶν φθόγγων ἑτέραν εἶναι λέγομεν, ἄν ὅτε μὲν ἡ Δωριος ὅτε δὲ Φρύγιος. εἰ δὲ τοῦτον ἔχει τὸν τρόπον, φανερόν ὅτι μάλιστα λεκτέον τὴν αὐτὴν πόλιν εἰς τὴν πολιτείαν βλέποντας· ὄνομα δὲ καλεῖν ἕτερον ἢ ταῦτὸν ἕξεστι καὶ τῶν αὐτῶν κατοικούντων αὐτὴν καὶ πάμπαν ἑτέρων ἀνθρώπων. εἰ δὲ δίκαιον διαλύειν ἢ μὴ διαλύειν, ὅταν εἰς ἑτέραν μεταβάλη πολιτείαν ἢ πόλιν, λόγος ἕτερος.

Τῶν δὲ νῦν εἰρημένων ἐχόμενόν ἐστιν ἐπισκέψασθαι πότερον τὴν αὐτὴν ἀρετὴν ἀνδρὸς ἀγαθοῦ καὶ πολίτου σπουδαίου θετέον, ἢ μὴ τὴν αὐτήν. ἀλλὰ μὴν εἴ γε τοῦτο τυχεῖν δεῖ ζητήσεως, τὴν τοῦ πολίτου τύπῳ τινὶ πρῶτον ληπτέον. ὥσπερ οὖν ὁ πλωτὴρ εἰς τις τῶν κοινωνῶν ἐστίν, οὕτω καὶ τὸν πολίτην φαμέν. τῶν δὲ πλωτῆρων καίπερ ἀνομοίων ὄντων τὴν δύναμιν (ὁ μὲν γὰρ ἐστὶν ἐρέτης, ὁ δὲ κυβερνήτης, ὁ δὲ πρωρεύς, ὁ δ' ἄλλην τιν' ἔχων τοιαύτην ἐπωνυμίαν) δῆλον ὡς ὁ μὲν ἀκριβέστατος ἐκάστου λόγος ἴδιος ἔσται τῆς ἀρετῆς, ὁμοίως δὲ καὶ κοινός τις ἐφαρμόσει πᾶσιν. ἡ γὰρ σωτηρία τῆς ναυτιλίας ἔργον ἐστὶν αὐτῶν πάντων· τούτου γὰρ ἕκαστος ὀρέγεται τῶν πλωτῆρων. ὁμοίως τοίνυν καὶ τῶν πολιτῶν, καίπερ ἀνομοίων ὄντων, ἡ σωτηρία τῆς κοινωνίας ἔργον ἐστί, κοινωνία δ' ἐστὶν ἡ πολιτεία· διὸ τὴν ἀρετὴν ἀναγκαῖον εἶναι τοῦ πολίτου πρὸς τὴν πολιτείαν. εἴπερ οὖν ἔστι πλείω πολιτείας εἶδη, δῆλον ὡς οὐκ ἐνδέχεται τοῦ σπουδαίου πολίτου μίαν ἀρετὴν εἶναι, τὴν τελείαν· τὸν δ' ἀγαθὸν ἄνδρα φαμέν κατὰ μίαν ἀρετὴν εἶναι, τὴν τελείαν.

Ὅτι μὲν οὖν ἐνδέχεται πολίτην ὄντα σπουδαῖον μὴ κεκτῆσθαι τὴν ἀρετὴν καθ' ἣν σπουδαῖος ἀνὴρ, φανερόν· οὐ μὴν ἀλλὰ καὶ κατ' ἄλλον τρόπον ἔστι διαποροῦντας ἐπελθεῖν τὸν αὐτὸν λόγον περὶ τῆς ἀρίστης πολιτείας. εἰ γὰρ ἀδύνατον ἐξ ἀπάντων σπουδαίων ὄντων εἶναι πόλιν, δεῖ γ' ἕκαστον τὸ καθ'

αὐτὸν ἔργον εὖ ποιεῖν, τοῦτο δὲ ἀπ’ ἀρετῆς· ἐπεὶ δὲ ἀδύνατον ὁμοίους εἶναι πάντας τοὺς πολίτας, οὐκ ἂν [1277a] εἴη μία ἀρετὴ πολίτου καὶ ἀνδρὸς ἀγαθοῦ. τὴν μὲν γὰρ τοῦ σπουδαίου πολίτου δεῖ πᾶσιν ὑπάρχειν (οὕτω γὰρ ἀρίστην ἀναγκαῖον εἶναι τὴν πόλιν), τὴν δὲ τοῦ ἀνδρὸς τοῦ ἀγαθοῦ ἀδύνατον, εἰ μὴ πάντας ἀναγκαῖον ἀγαθοὺς εἶναι τοὺς ἐν τῇ σπουδαίᾳ πόλει πολίτας. ἔτι ἐπεὶ ἐξ ἀνομοίων ἡ πόλις, ὥσπερ ζῶον εὐθύς ἐκ ψυχῆς καὶ σώματος, καὶ ψυχῇ ἐκ λόγου καὶ ὀρέξεως, καὶ οἰκίᾳ ἐξ ἀνδρὸς καὶ γυναικός, καὶ κτῆσις ἐκ δεσπότου καὶ δούλου, τὸν αὐτὸν τρόπον καὶ πόλις ἐξ ἀπάντων τε τούτων καὶ πρὸς τούτοις ἐξ ἄλλων ἀνομοίων συνέστηκεν εἰδὼν, ἀνάγκη μὴ μίαν εἶναι τὴν τῶν πολιτῶν πάντων ἀρετὴν, ὥσπερ οὐδὲ τῶν χορευτῶν κορυφαίου καὶ παραστάτου.

διότι μὲν τοίνυν ἀπλῶς οὐχ ἡ αὕτη, φανερόν ἐκ τούτων· ἀλλ’ ἄρα ἔσται τινὸς ἡ αὕτη ἀρετὴ πολίτου τε σπουδαίου καὶ ἀνδρὸς σπουδαίου; φαμὲν δὴ τὸν ἄρχοντα τὸν σπουδαῖον ἀγαθὸν εἶναι καὶ φρόνιμον, τὸν δὲ πολίτην οὐκ ἀναγκαῖον εἶναι φρόνιμον. καὶ τὴν παιδείαν δ’ εὐθύς ἑτέραν εἶναι λέγουσί τινες ἄρχοντος, ὥσπερ καὶ φαίνονται οἱ τῶν βασιλέων υἱεῖς ἱππικὴν καὶ πολεμικὴν παιδευόμενοι, καὶ Εὐριπίδης φησὶ “μή μοι τὰ κόμπς’ ... ἀλλ’ ὦν πόλει δεῖ”, ὡς οὕσαν τινα ἄρχοντος παιδείαν. εἰ δὲ ἡ αὕτη ἀρετὴ ἄρχοντός τε ἀγαθοῦ καὶ ἀνδρὸς ἀγαθοῦ, πολίτης δ’ ἐστὶ καὶ ὁ ἀρχόμενος, οὐχ ἡ αὕτη ἀπλῶς ἂν εἴη πολίτου καὶ ἀνδρός, τινὸς μέντοι πολίτου· οὐ γὰρ ἡ αὕτη ἄρχοντος καὶ πολίτου, καὶ διὰ τοῦτ’ ἴσως Ἰάσων ἔφη πεινῆν ὅτε μὴ τυραννοῖ, ὡς οὐκ ἐπιστάμενος ἰδιώτης εἶναι.

ἀλλὰ μὴν ἐπαινεῖται γε τὸ δύνασθαι ἄρχειν καὶ ἄρχεσθαι, καὶ πολίτου <δοκεῖ> δοκίμου ἡ ἀρετὴ εἶναι τὸ δύνασθαι καὶ ἄρχειν καὶ ἄρχεσθαι καλῶς. εἰ οὖν τὴν μὲν τοῦ ἀγαθοῦ ἀνδρὸς τίθεμεν ἀρχικὴν, τὴν δὲ τοῦ πολίτου ἄμφω, οὐκ ἂν εἴη ἄμφω ἐπαινετὰ ὁμοίως. ἐπεὶ οὖν ποτε δοκεῖ ἕτερα, καὶ οὐ ταύτᾳ δεῖν τὸν ἄρχοντα μανθάνειν καὶ τὸν ἀρχόμενον, τὸν δὲ πολίτην ἀμφοτέρ’ ἐπίστασθαι καὶ μετέχειν ἀμφοῖν, τούντεϋθεν ἂν κατίδοι τις. ἔστι γὰρ ἀρχὴ δεσποτική· ταύτην δὲ τὴν περὶ τὰ ἀναγκαῖα λέγομεν, ἃ ποιεῖν ἐπίστασθαι τὸν ἄρχοντα οὐκ ἀναγκαῖον, ἀλλὰ χρῆσθαι μᾶλλον· θάτερον δὲ καὶ ἀνδραποδῶδες. λέγω δὲ θάτερον τὸ δύνασθαι καὶ ὑπηρετεῖν τὰς διακονικὰς πράξεις. δούλου δ’ εἶδη πλείω λέγομεν· αἱ γὰρ ἐργασίαι πλείους. ὦν ἓν μέρος κατέχουσιν οἱ χερνήτες· οὗτοι δ’ εἰσὶν, ὥσπερ σημαίνει καὶ τοῦνομ’ αὐτό, οἱ ζῶντες ἀπὸ [1277b] τῶν χειρῶν, ἐν οἷς ὁ βάνασος τεχνίτης ἐστίν. διὸ παρ’ ἐνίοις οὐ μετεῖχον οἱ δημιουργοὶ τὸ παλαιὸν ἀρχῶν, πρὶν δῆμον γενέσθαι τὸν ἔσχατον. τὰ μὲν οὖν ἔργα τῶν ἀρχομένων οὕτως οὐ δεῖ τὸν ἀγαθὸν [οὐδὲ τὸν] πολιτικὸν οὐδὲ τὸν πολίτην τὸν ἀγαθὸν μανθάνειν, εἰ μὴ ποτε χρεῖας

χάριν αὐτῷ πρὸς αὐτόν· οὐ γὰρ ἔτι συμβαίνει γίνεσθαι τὸν μὲν δεσπότην τὸν δὲ δοῦλον.

ἀλλ' ἔστι τις ἀρχὴ καθ' ἣν ἄρχει τῶν ὁμοίων τῷ γένει καὶ τῶν ἐλευθέρων. ταύτην γὰρ λέγομεν εἶναι τὴν πολιτικὴν ἀρχήν, ἣν δεῖ τὸν ἄρχοντα ἀρχόμενον μαθεῖν, οἷον ἱππαρχεῖν ἱππαρχηθέντα, στρατηγεῖν στρατηγηθέντα καὶ ταξιαρχήσαντα καὶ λοχαγήσαντα. διὸ λέγεται καὶ τοῦτο καλῶς, ὡς οὐκ ἔστιν εὖ ἄρξαι μὴ ἀρχθέντα. τούτων δὲ ἀρετὴ μὲν ἑτέρα, δεῖ δὲ τὸν πολίτην τὸν ἀγαθὸν ἐπίστασθαι καὶ δύνασθαι καὶ ἄρχεσθαι καὶ ἄρχειν, καὶ αὕτη ἀρετὴ πολίτου, τὸ τὴν τῶν ἐλευθέρων ἀρχὴν ἐπίστασθαι ἐπ' ἀμφοτέρα. καὶ ἀνδρὸς δὴ ἀγαθοῦ ἅμω, καὶ εἰ ἕτερον εἶδος σωφροσύνης καὶ δικαιοσύνης ἀρχικῆς. καὶ γὰρ ἀρχομένου μὲν ἐλευθέρου δὲ δῆλον ὅτι οὐ μία ἂν εἴη τοῦ ἀγαθοῦ ἀρετὴ, οἷον δικαιοσύνη, ἀλλ' εἶδη ἔχουσα καθ' ἃ ἄρξει καὶ ἄρζεται, ὥσπερ ἀνδρὸς καὶ γυναικὸς ἑτέρα σωφροσύνη καὶ ἀνδρεία (δόξαί γὰρ ἂν εἶναι δειλὸς ἀνὴρ, εἰ οὕτως ἀνδρεῖος εἴη ὥσπερ γυνὴ ἀνδρεία, καὶ γυνὴ λάλος, εἰ οὕτω κοσμία εἴη ὥσπερ ὁ ἀνὴρ ὁ ἀγαθός· ἐπεὶ καὶ οἰκονομία ἑτέρα ἀνδρὸς καὶ γυναικός· τοῦ μὲν γὰρ κτᾶσθαι τῆς δὲ φυλάττειν ἔργον ἐστίν). ἡ δὲ φρόνησις ἄρχοντος ἴδιος ἀρετὴ μόνη. τὰς γὰρ ἄλλας ἔοικεν ἀναγκαῖον εἶναι κοινὰς καὶ τῶν ἀρχομένων καὶ τῶν ἀρχόντων, ἀρχομένου δέ γε οὐκ ἔστιν ἀρετὴ φρόνησις, ἀλλὰ δόξα ἀληθής· ὥσπερ αὐλοποιὸς γὰρ ὁ ἀρχόμενος, ὁ δ' ἄρχων αὐλητῆς ὁ χρώμενος. πότερον μὲν οὖν ἡ αὐτὴ ἀρετὴ ἀνδρὸς ἀγαθοῦ καὶ πολίτου σπουδαίου ἢ ἑτέρα, καὶ πῶς ἡ αὐτὴ καὶ πῶς ἑτέρα, φανερόν ἐκ τούτων.

Περὶ δὲ τὸν πολίτην ἔτι λείπεται τις τῶν ἀποριῶν. ὡς ἀληθῶς γὰρ πότερον πολίτης ἐστὶν ὃ κοινωνεῖν ἔξεστιν ἀρχῆς, ἢ καὶ τοὺς βαναύσους πολίτας θετέον; εἰ μὲν οὖν καὶ τούτους θετέον οἷς μὴ μέτεστιν ἀρχῶν, οὐχ οἷόν τε παντὸς εἶναι πολίτου τὴν τοιαύτην ἀρετὴν (οὗτος γὰρ πολίτης)· εἰ δὲ μηδεὶς τῶν τοιούτων πολίτης, ἐν τίνι μέρει θετέος ἕκαστος; οὐδὲ γὰρ μέτοικος οὐδὲ ξένος. ἢ διὰ γε τοῦτον τὸν λόγον [1278a] οὐδὲν φήσομεν συμβαίνειν ἄτοπον; οὐδὲ γὰρ οἱ δοῦλοι τῶν εἰρημένων οὐδέν, οὐδ' οἱ ἀπελεύθεροι. τοῦτο γὰρ ἀληθές, ὡς οὐ πάντας θετέον πολίτας ὧν ἄνευ οὐκ ἂν εἴη πόλις, ἐπεὶ οὐδ' οἱ παῖδες ὡσαύτως πολῖται καὶ οἱ ἄνδρες, ἀλλ' οἱ μὲν ἀπλῶς οἱ δ' ἐξ ὑποθέσεως· πολῖται μὲν γὰρ εἰσιν, ἀλλ' ἀτελεῖς. ἐν μὲν οὖν τοῖς ἀρχαίοις χρόνοις παρ' ἐνίοις ἦν δοῦλον τὸ βάνανυσον ἢ ξενικόν, διόπερ οἱ πολλοὶ τοιοῦτοι καὶ νῦν· ἡ δὲ βελτίστη πόλις οὐ ποιήσει βάνανυσον πολίτην. εἰ δὲ καὶ οὗτος πολίτης, ἀλλὰ πολίτου ἀρετὴν ἣν εἵπομεν λεκτέον οὐ παντός, οὐδ' ἐλευθέρου μόνον, ἀλλ' ὅσοι τῶν ἔργων εἰσὶν ἀφειμένοι τῶν ἀναγκαίων. τῶν δ' ἀναγκαίων οἱ μὲν ἐνὶ λειτουργοῦντες τὰ τοιαῦτα δοῦλοι, οἱ δὲ κοινοὶ

βάνουσοι καὶ θῆτες. φανερόν δ' ἐντεῦθεν μικρόν ἐπισκεψαμένοις πῶς ἔχει περὶ αὐτῶν· αὐτὸ γὰρ [φανέν] τὸ λεχθὲν ποιεῖ δῆλον. Ἐπεὶ γὰρ πλείους εἰσὶν αἱ πολιτεῖαι, καὶ εἶδη πολίτου ἀναγκαῖον εἶναι πλείω, καὶ μάλιστα τοῦ ἀρχομένου πολίτου, ὥστ' ἐν μὲν τινὶ πολιτείᾳ τὸν βάνουσον ἀναγκαῖον εἶναι καὶ τὸν θῆτα πολίτας, ἐν τισὶ δ' ἀδύνατον, οἷον εἴ τις ἐστὶν ἣν καλοῦσιν ἀριστοκρατικὴν καὶ ἐν ἣ κατ' ἀρετὴν αἱ τιμαὶ δίδονται καὶ κατ' ἀξίαν· οὐ γὰρ οἷόν τ' ἐπιτηδεῦσαι τὰ τῆς ἀρετῆς ζῶντα βίον βάνουσον ἢ θητικόν. ἐν δὲ ταῖς ὀλιγαρχίαις θῆτα μὲν οὐκ ἐνδέχεται εἶναι πολίτην (ἀπὸ τιμημάτων γὰρ μακρῶν αἱ μεθέξεις τῶν ἀρχῶν), βάνουσον δὲ ἐνδέχεται· πλουτοῦσι γὰρ καὶ οἱ πολλοὶ τῶν τεχνιτῶν. ἐν Θήβαις δὲ νόμος ἦν τὸν δέκα ἐτῶν μὴ ἀπεσχημένον τῆς ἀγορᾶς μὴ μετέχειν ἀρχῆς. ἐν πολλαῖς δὲ πολιτείαις προσεφέλκει τινὰς καὶ τῶν ξένων ὁ νόμος· ὁ γὰρ ἐκ πολίτιδος ἐν τισὶ δημοκρατίαις πολίτης ἐστίν, τὸν αὐτὸν δὲ τρόπον ἔχει καὶ τὰ περὶ τοῦς νόθους παρὰ πολλοῖς. οὐ μὲν ἄλλ' ἐπεὶ δι' ἔνδειαν τῶν γνησίων πολιτῶν ποιοῦνται πολίτας τοῦς τοιούτους (διὰ γὰρ ὀλιγανθρωπίαν οὕτω χρῶνται τοῖς νόμοις), εὐποροῦντες δὴ ὄχλου κατὰ μικρόν παραιροῦνται τοῦς ἐκ δούλου πρῶτον ἢ δούλης, εἴτα τοῦς ἀπὸ γυναικῶν, τέλος δὲ μόνον τοῦς ἐξ ἀμφοῖν ἀστῶν πολίτας ποιοῦσιν.

Ὅτι μὲν οὖν εἶδη πλείω πολίτου, φανερόν ἐκ τούτων, καὶ ὅτι λέγεται μάλιστα πολίτης ὁ μετέχων τῶν τιμῶν, ὥσπερ καὶ Ὅμηρος ἐποίησεν “ὥς εἴ τιν' ἀτίμητον μετανάστην”· ὥσπερ μέτοικος γὰρ ἐστὶν ὁ τῶν τιμῶν μὴ μετέχων. ἄλλ' ὅπου τὸ τοιοῦτον ἐπικεκρυμμένον ἐστίν, ἀπάτης χάριν τῶν συνοικούντων ἐστίν. πότερον μὲν οὖν ἑτέραν ἢ τὴν αὐτὴν θετέον, [1278b] καθ' ἣν ἀνὴρ ἀγαθὸς ἐστὶ καὶ πολίτης σπουδαῖος, δῆλον ἐκ τῶν εἰρημένων, ὅτι τινὸς μὲν πόλεως ὁ αὐτὸς τινὸς δ' ἕτερος, κάκεῖνος οὐ πᾶς ἄλλ' ὁ πολιτικὸς καὶ κύριος ἢ δυνάμενος εἶναι κύριος, ἢ καθ' αὐτὸν ἢ μετ' ἄλλων, τῆς τῶν κοινῶν ἐπιμελείας.

Ἐπεὶ δὲ ταῦτα διώρισται, τὸ μετὰ ταῦτα σκεπτέον, πότερον μίαν θετέον πολιτείαν ἢ πλείους, κἂν εἰ πλείους, τίνες καὶ πόσαι, καὶ διαφοραὶ τίνες αὐτῶν εἰσιν. ἔστι δὲ πολιτεία πόλεως τάξις τῶν τε ἄλλων ἀρχῶν καὶ μάλιστα τῆς κυρίας πάντων. κύριον μὲν γὰρ πανταχοῦ τὸ πολίτευμα τῆς πόλεως, πολίτευμα δ' ἐστὶν ἡ πολιτεία. λέγω δ' οἷον ἐν μὲν ταῖς δημοκρατίαις κύριος ὁ δῆμος, οἱ δ' ὀλίγοι τοῦναντίον ἐν ταῖς ὀλιγαρχίαις, φανερὸν δὲ καὶ πολιτείαν ἑτέραν εἶναι τούτων. τὸν αὐτὸν δὲ τοῦτον ἐροῦμεν λόγον καὶ περὶ τῶν ἄλλων. ὑποθετέον δὴ πρῶτον τίνος χάριν συνέστηκε πόλις, καὶ τῆς ἀρχῆς εἶδη πόσα τῆς περὶ ἄνθρωπον καὶ τὴν κοινωνίαν τῆς ζωῆς. εἴρηται δὴ κατὰ τοὺς πρώτους λόγους, ἐν οἷς περὶ οἰκονομίας διωρίσθη καὶ δεσποτείας, καὶ ὅτι φύσει μὲν ἐστὶν

ἄνθρωπος ζῶον πολιτικόν. διὸ καὶ μηδὲν δεόμενοι τῆς παρὰ ἀλλήλων βοήθειας οὐκ ἔλαττον ὀρέγονται τοῦ συζῆν· οὐ μὴν ἀλλὰ καὶ τὸ κοινῇ συμφέρον συνάγει, καθ' ὅσον ἐπιβάλλει μέρος ἐκάστω τοῦ ζῆν καλῶς. μάλιστα μὲν οὖν τοῦτ' ἐστὶ τέλος, καὶ κοινῇ πᾶσι καὶ χωρὶς· συνέρχονται δὲ καὶ τοῦ ζῆν ἕνεκεν αὐτοῦ καὶ συνέχουσι τὴν πολιτικὴν κοινωνίαν. ἴσως γὰρ ἔνεστί τι τοῦ καλοῦ μόνον καὶ κατὰ τὸ ζῆν αὐτὸ μόνον, ἂν μὴ τοῖς χαλεποῖς κατὰ τὸν βίον ὑπερβάλῃ λίαν. δῆλον δ' ὡς καρτεροῦσι πολλὴν κακοπάθειαν οἱ πολλοὶ τῶν ἀνθρώπων γλιχόμενοι τοῦ ζῆν, ὡς ἐνούσης τινὸς εὐημερίας ἐν αὐτῷ καὶ γλυκύτητος φυσικῆς.

ἀλλὰ μὴν καὶ τῆς ἀρχῆς γε τοὺς λεγομένους τρόπους ῥᾶδιον διελεῖν· καὶ γὰρ ἐν τοῖς ἐξωτερικοῖς λόγοις διοριζόμεθα περὶ αὐτῶν πολλάκις. ἡ μὲν γὰρ δεσποτεία, καίπερ ὄντος κατ' ἀλήθειαν τῷ τε φύσει δούλῳ καὶ τῷ φύσει δεσπότη ταύτοῦ συμφέροντος, ὅμως ἄρχει πρὸς τὸ τοῦ δεσπότου συμφέρον οὐδὲν ἥττον, πρὸς δὲ τὸ τοῦ δούλου κατὰ συμβεβηκός (οὐ γὰρ ἐνδέχεται φθειρομένου τοῦ δούλου σῶζεσθαι τὴν δεσποτείαν)· ἡ δὲ τέκνων ἀρχὴ καὶ γυναικὸς καὶ τῆς οἰκίας πάσης, ἣν δὴ καλοῦμεν οἰκονομικήν, ἥτοι τῶν ἀρχομένων χάριν ἐστὶν ἡ κοινοῦ τινὸς ἀμφοῖν, καθ' αὐτὸ μὲν τῶν ἀρχομένων, ὥσπερ ὀρῶμεν καὶ τὰς ἄλλας [1279a] τέχνας, οἷον ἰατρικὴν καὶ γυμναστικήν, κατὰ συμβεβηκός δὲ καὶ αὐτῶν εἶναι. οὐδὲν γὰρ κωλύει τὸν παιδοτρίβην ἕνα τῶν γυμναζομένων ἐνίῳτ' εἶναι καὶ αὐτόν, ὥσπερ ὁ κυβερνήτης εἰς ἐστὶν ἀεὶ τῶν πλωτήρων· ὁ μὲν οὖν παιδοτρίβης ἡ κυβερνήτης σκοπεῖ τὸ τῶν ἀρχομένων ἀγαθόν, ὅταν δὲ τούτων εἰς γένηται καὶ αὐτός, κατὰ συμβεβηκός μετέχει τῆς ὠφελείας. ὁ μὲν γὰρ πλωτήρ, ὁ δὲ τῶν γυμναζομένων εἰς γίνεται, παιδοτρίβης ὢν. διὸ καὶ τὰς πολιτικὰς ἀρχάς, ὅταν ἡ κατ' ἰσότητά τῶν πολιτῶν συνεστηκυῖα καὶ καθ' ὁμοιότητα, κατὰ μέρος ἀξιοῦσιν ἄρχειν, πρότερον μὲν, ἢ πέφυκεν, ἀξιοῦντες ἐν μέρει λειτουργεῖν, καὶ σκοπεῖν τινα πάλιν τὸ αὐτοῦ ἀγαθόν, ὥσπερ πρότερον αὐτὸς ἄρχων ἐσκόπει τὸ ἐκείνου συμφέρον· νῦν δὲ διὰ τὰς ὠφελείας τὰς ἀπὸ τῶν κοινῶν καὶ τὰς ἐκ τῆς ἀρχῆς βούλονται συνεχῶς ἄρχειν, οἷον εἰ συνέβαινεν ὑγιαίνειν ἀεὶ τοῖς ἄρχουσι νοσακεροῖς οὖσιν. καὶ γὰρ ἂν οὕτως ἴσως ἐδίωκον τὰς ἀρχάς. φανερόν τοίνυν ὡς ὅσαι μὲν πολιτεῖαι τὸ κοινῇ συμφέρον σκοποῦσιν, αὗται μὲν ὀρθαὶ τυγχάνουσιν οὖσαι κατὰ τὸ ἀπλῶς δίκαιον, ὅσαι δὲ τὸ σφέτερον μόνον τῶν ἀρχόντων, ἡμαρτημέναί πᾶσαι καὶ παρεκβάσεις τῶν ὀρθῶν πολιτειῶν· δεσποτικά γάρ, ἡ δὲ πόλις κοινωνία τῶν ἐλευθέρων ἐστίν.

Διωρισμένων δὲ τούτων ἐχόμενόν ἐστὶ τὰς πολιτείας ἐπισκέψασθαι, πόσαι τὸν ἀριθμὸν καὶ τίνες εἰσὶ, καὶ πρῶτον τὰς ὀρθὰς αὐτῶν· καὶ γὰρ αἱ παρεκβάσεις ἔσσονται φανεραὶ τούτων διορισθεισῶν. ἐπεὶ δὲ πολιτεία μὲν καὶ

πολίτευμα σημαίνει ταύτόν, πολίτευμα δ' ἐστὶ τὸ κύριον τῶν πόλεων, ἀνάγκη δ' εἶναι κύριον ἢ ἓνα ἢ ὀλίγους ἢ τοὺς πολλούς, ὅταν μὲν ὁ εἷς ἢ οἱ ὀλίγοι ἢ οἱ πολλοὶ πρὸς τὸ κοινὸν συμφέρον ἄρχωσι, ταύτας μὲν ὀρθὰς ἀναγκαῖον εἶναι τὰς πολιτείας, τὰς δὲ πρὸς τὸ ἴδιον ἢ τοῦ ἐνὸς ἢ τῶν ὀλίγων ἢ τοῦ πλήθους παρεκβάσεις. ἢ γὰρ οὐ πολίτας φατέον εἶναι τοὺς <μὴ> μετέχοντας, ἢ δεῖ κοινωνεῖν τοῦ συμφέροντος. καλεῖν δ' εἰώθαμεν τῶν μὲν μοναρχιῶν τὴν πρὸς τὸ κοινὸν ἀποβλέπουσαν συμφέρον βασιλείαν, τὴν δὲ τῶν ὀλίγων μὲν πλειόνων δ' ἐνὸς ἀριστοκρατίαν (ἢ διὰ τὸ τοὺς ἀρίστους ἄρχειν, ἢ διὰ τὸ πρὸς τὸ ἄριστον τῇ πόλει καὶ τοῖς κοινωνοῦσιν αὐτῆς), ὅταν δὲ τὸ πλῆθος πρὸς τὸ κοινὸν πολιτεύηται συμφέρον, καλεῖται τὸ κοινὸν ὄνομα πασῶν τῶν πολιτειῶν, πολιτεία. (συμβαίνει δ' εὐλόγως· ἓνα μὲν γὰρ διαφέρειν κατ' ἀρετὴν ἢ ὀλίγους ἐνδέχεται, πλείους δ' ἤδη χαλεπὸν [1279b] ἠκριβῶσθαι πρὸς πᾶσαν ἀρετὴν, ἀλλὰ μάλιστα τὴν πολεμικὴν· αὕτη γὰρ ἐν πλήθει γίγνεται· διόπερ κατὰ ταύτην τὴν πολιτείαν κυριώτατον τὸ προπολεμοῦν καὶ μετέχουσιν αὐτῆς οἱ κεκτημένοι τὰ ὄπλα.) παρεκβάσεις δὲ τῶν εἰρημένων τυραννὶς μὲν βασιλείας, ὀλιγαρχία δὲ ἀριστοκρατίας, δημοκρατία δὲ πολιτείας. ἢ μὲν γὰρ τυραννὶς ἐστὶ μοναρχία πρὸς τὸ συμφέρον τὸ τοῦ μοναρχοῦντος, ἢ δ' ὀλιγαρχία πρὸς τὸ τῶν εὐπόρων, ἢ δὲ δημοκρατία πρὸς τὸ συμφέρον τὸ τῶν ἀπόρων· πρὸς δὲ τὸ τῷ κοινῷ λυσιτελοῦν οὐδεμία αὐτῶν.

Δεῖ δὲ μικρῷ διὰ μακροτέρων εἰπεῖν τίς ἐκάστη τούτων τῶν πολιτειῶν ἐστίν· καὶ γὰρ ἔχει τινὰς ἀπορίας, τῷ δὲ περὶ ἐκάστην μέθοδον φιλοσοφοῦντι καὶ μὴ μόνον ἀποβλέποντι πρὸς τὸ πράττειν οἰκεῖόν ἐστὶ τὸ μὴ παρορᾶν μηδέ τι καταλείπειν, ἀλλὰ δηλοῦν τὴν περὶ ἕκαστον ἀλήθειαν. ἔστι δὲ τυραννὶς μὲν μοναρχία, καθάπερ εἴρηται, δεσποτικὴ τῆς πολιτικῆς κοινωνίας, ὀλιγαρχία δ' ὅταν ὥσι κύριοι τῆς πολιτείας οἱ τὰς οὐσίας ἔχοντες, δημοκρατία δὲ τοῦναντίον ὅταν οἱ μὴ κεκτημένοι πλῆθος οὐσίας ἀλλ' ἄποροι. πρώτη δ' ἀπορία πρὸς τὸν διορισμὸν ἐστίν. εἰ γὰρ εἶεν οἱ πλείους, ὄντες εὐποροι, κύριοι τῆς πόλεως, δημοκρατία δ' ἐστὶν ὅταν ἢ κύριον τὸ πλῆθος - ὁμοίως δὲ πάλιν κἂν εἴ που συμβαίνει τοὺς ἀπόρους ἐλάττους μὲν εἶναι τῶν εὐπόρων, κρείττους δ' ὄντας κυρίους εἶναι τῆς πολιτείας, ὅπου δ' ὀλίγον κύριον πλῆθος, ὀλιγαρχίαν εἶναί φασιν - οὐκ ἂν καλῶς δόξειεν διωρίσθαι περὶ τῶν πολιτειῶν.

ἀλλὰ μὴν κἂν τις συνθεῖς τῇ μὲν εὐπορίᾳ τὴν ὀλιγότητα τῇ δ' ἀπορίᾳ τὸ πλῆθος οὕτω προσαγορεύῃ τὰς πολιτείας, ὀλιγαρχίαν μὲν ἐν ἣ τὰς ἀρχὰς ἔχουσιν οἱ εὐποροι, ὀλίγοι τὸ πλῆθος ὄντες, δημοκρατίαν δὲ ἐν ἣ οἱ ἄποροι, πολλοὶ τὸ πλῆθος ὄντες, ἄλλην ἀπορίαν ἔχει. τίνας γὰρ ἐροῦμεν τὰς ἄρτι λεχθεῖσας πολιτείας, τὴν ἐν ἣ πλείους <οἱ> εὐποροι καὶ ἐν ἣ ἐλάττους οἱ ἄποροι, κύριοι δ' ἐκάτεροι τῶν πολιτειῶν, εἴπερ μηδεμία ἄλλη πολιτεία παρὰ



τὰς εἰρημένους ἔστιν; ἔοικε τοίνυν ὁ λόγος ποιεῖν δῆλον ὅτι τὸ μὲν ὀλίγους ἢ πολλοὺς εἶναι κυρίους συμβεβηκός ἐστιν, τὸ μὲν ταῖς ὀλιγαρχίαις τὸ δὲ ταῖς δημοκρατίαις, διὰ τὸ τοὺς μὲν εὐπόρους ὀλίγους, πολλοὺς δ' εἶναι τοὺς ἀπόρους πανταχοῦ (διὸ καὶ οὐ συμβαίνει τὰς ῥηθείσας αἰτίας «αἰτίας» γίνεσθαι διαφορᾶς), ὥ δὲ διαφέρουσιν ἢ τε δημοκρατία καὶ ἡ ὀλιγαρχία ἀλλήλων πενία καὶ πλοῦτός [1280a] ἐστιν, καὶ ἀναγκαῖον μὲν, ὅπου ἂν ἄρχωσι διὰ πλοῦτον, ἂν τ' ἐλάττους ἂν τε πλείους, εἶναι ταύτην ὀλιγαρχίαν, ὅπου δ' οἱ ἄποροι, δημοκρατίαν, ἀλλὰ συμβαίνει, καθάπερ εἵπομεν, τοὺς μὲν ὀλίγους εἶναι τοὺς δὲ πολλούς. εὐποροῦσι μὲν γὰρ ὀλίγοι, τῆς δὲ ἐλευθερίας μετέχουσι πάντες· δι' ἃς αἰτίας ἀμφισβητοῦσιν ἀμφότεροι τῆς πολιτείας.

Ληπτέον δὲ πρῶτον τίνες ὅρους λέγουσι τῆς ὀλιγαρχίας καὶ δημοκρατίας, καὶ τί τὸ δίκαιον τό τε ὀλιγαρχικὸν καὶ δημοκρατικόν. πάντες γὰρ ἄπτονται δικαίου τινός, ἀλλὰ μέχρι τινὸς προέρχονται, καὶ λέγουσιν οὐ πᾶν τὸ κυρίως δίκαιον. οἷον δοκεῖ ἴσον τὸ δίκαιον εἶναι, καὶ ἔστιν, ἀλλ' οὐ πᾶσιν ἀλλὰ τοῖς ἴσοις· καὶ τὸ ἄνισον δοκεῖ δίκαιον εἶναι, καὶ γὰρ ἔστιν, ἀλλ' οὐ πᾶσιν ἀλλὰ τοῖς ἀνίστοις· οἱ δὲ τοῦτ' ἀφαιροῦσι, τὸ οἷς, καὶ κρίνουσι κακῶς. τὸ δ' αἴτιον ὅτι περὶ αὐτῶν ἡ κρίσις· σχεδὸν δ' οἱ πλεῖστοι φαῦλοι κριταὶ περὶ τῶν οἰκείων. ὥστ' ἐπεὶ τὸ δίκαιον τισίν, καὶ διήρηται τὸν αὐτὸν τρόπον ἐπὶ τε τῶν πραγμάτων καὶ οἷς, καθάπερ εἴρηται πρότερον ἐν τοῖς Ἠθικοῖς, τὴν μὲν τοῦ πράγματος ἰσότητα ὁμολογοῦσι, τὴν δὲ οἷς ἀμφισβητοῦσι, μάλιστα μὲν διὰ τὸ λεχθὲν ἄρτι, διότι κρίνουσι τὰ περὶ αὐτοὺς κακῶς, ἔπειτα δὲ καὶ διὰ τὸ λέγειν μέχρι τινὸς ἑκατέρους δίκαιόν τι νομίζουσι δίκαιον λέγειν ἀπλῶς. οἱ μὲν γὰρ ἂν κατὰ τι ἄνισοι ὦσιν, οἷον χρήμασιν, ὅλως οἷονται ἄνισοι εἶναι, οἱ δ' ἂν κατὰ τι ἴσοι, οἷον ἐλευθερία, ὅλως ἴσοι.

τὸ δὲ κυριώτατον οὐ λέγουσιν. εἰ μὲν γὰρ τῶν κτημάτων χάριν ἐκοινωνήσαν καὶ συνῆλθον, τοσοῦτον μετέχουσι τῆς πόλεως ὅσον περ καὶ τῆς κτήσεως, ὥσθ' ὁ τῶν ὀλιγαρχικῶν λόγος δόξειεν ἂν ἰσχύειν (οὐ γὰρ εἶναι δίκαιον ἴσον μετέχειν τῶν ἑκατὸν μνῶν τὸν εἰσενέγκαντα μίαν μνᾶν τῷ δόντι τὸ λοιπὸν πᾶν, οὔτε τῶν ἐξ ἀρχῆς οὔτε τῶν ἐπιγινομένων). εἰ δὲ μήτε τοῦ ζῆν μόνον ἔνεκεν ἀλλὰ μᾶλλον τοῦ εὖ ζῆν (καὶ γὰρ ἂν δούλων καὶ τῶν ἄλλων ζώων ἦν πόλις· νῦν δ' οὐκ ἔστι, διὰ τὸ μὴ μετέχειν εὐδαιμονίας μηδὲ τοῦ ζῆν κατὰ προαίρεσιν), μήτε συμμαχίας ἔνεκεν, ὅπως ὑπὸ μηδενὸς ἀδικῶνται, μήτε διὰ τὰς ἀλλαγὰς καὶ τὴν χρῆσιν τὴν πρὸς ἀλλήλους - καὶ γὰρ ἂν Τυρρηνοὶ καὶ Καρχηδόνιοι, καὶ πάντες οἷς ἔστι σύμβολα πρὸς ἀλλήλους, ὥς μιᾶς ἂν πολῖται πόλεως ἦσαν· εἰσὶ γοῦν αὐτοῖς συνθῆκαι περὶ τῶν εἰσαγωγίμων καὶ σύμβολα περὶ τοῦ μὴ ἀδικεῖν καὶ γραφαὶ περὶ συμμαχίας. ἀλλ' οὔτ' ἀρχαὶ πᾶσιν ἐπὶ [1280b] τούτοις κοινὰ καθεστᾶσιν,

ἀλλ' ἕτεροι παρ' ἑκατέροις, οὔτε τοῦ ποίους τινὰς εἶναι δεῖ φροντίζουσιν ἄτεροι τοὺς ἑτέρους, οὐδ' ὅπως μηδεὶς ἄδικος ἔσται τῶν ὑπὸ τὰς συνθήκας μηδὲ μοχθηρίαν ἔξει μηδεμίαν, ἀλλὰ μόνον ὅπως μηδὲν ἀδικήσουσιν ἀλλήλους. περὶ δ' ἀρετῆς καὶ κακίας πολιτικῆς διασκοποῦσιν ὅσοι φροντίζουσιν εὐνομίας. ἢ καὶ φανερόν ὅτι δεῖ περὶ ἀρετῆς ἐπιμελὲς εἶναι τῇ γ' ὡς ἀληθῶς ὀνομαζομένη πόλει, μὴ λόγου χάριν. γίνεται γὰρ ἡ κοινωνία συμμαχία τῶν ἄλλων τόπῳ διαφέρουσα μόνον, τῶν ἄπωθεν συμμαχιῶν, καὶ ὁ νόμος συνθήκη καί, καθάπερ ἔφη Λυκόφρων ὁ σοφιστής, ἐγγυητὴς ἀλλήλοις τῶν δικαίων, ἀλλ' οὐχ οἷος ποιεῖν ἀγαθοὺς καὶ δικαίους τοὺς πολίτας. ὅτι δὲ τοῦτον ἔχει τὸν τρόπον, φανερόν. εἰ γὰρ τις καὶ συναγάγοι τοὺς τόπους εἰς ἓν, ὥστε ἄπτεσθαι τὴν Μεγαρέων πόλιν καὶ Κορινθίων τοῖς τείχεσιν, ὅμως οὐ μία πόλις· οὐδ' εἰ πρὸς ἀλλήλους ἐπιγαμίας ποιήσαιντο· καίτοι τοῦτο τῶν ἰδίων ταῖς πόλεσι κοινωνημάτων ἐστίν. ὁμοίως δ' οὐδ' εἴ τινες οἰκοῖεν χωρὶς μὲν, μὴ μέντοι τοσοῦτον ἄπωθεν ὥστε μὴ κοινωνεῖν, ἀλλ' εἴησαν αὐτοῖς νόμοι τοῦ μὴ σφᾶς αὐτοὺς ἀδικεῖν περὶ τὰς μεταδόσεις, οἷον εἰ ὁ μὲν εἴη τέκτων ὁ δὲ γεωργὸς ὁ δὲ σκυτοτόμος ὁ δ' ἄλλο τι τοιοῦτον, καὶ τὸ πλῆθος εἶεν μύριοι, μὴ μέντοι κοινωνοῖεν ἄλλου μηδενὸς ἢ τῶν τοιούτων, οἷον ἀλλαγῆς καὶ συμμαχίας, οὐδ' οὕτω πω πόλις.

διὰ τίνα δὴ ποτ' αἰτίαν; οὐ γὰρ δὴ διὰ τὸ μὴ σύνεγγυς τῆς κοινωνίας. εἰ γὰρ καὶ συνέλθοιεν οὕτω κοινωνοῦντες (ἕκαστος μέντοι χρῶτο τῇ ἰδίᾳ οἰκίᾳ ὥσπερ πόλει) καὶ σφίσιν αὐτοῖς ὡς ἐπιμαχίας οὔσης βοηθοῦντες ἐπὶ τοὺς ἀδικοῦντας μόνον, οὐδ' οὕτως ἂν εἶναι δόξειεν πόλις τοῖς ἀκριβῶς θεωροῦσιν, εἴπερ ὁμοίως ὁμιλοῖεν συνελθόντες καὶ χωρὶς. φανερόν τοίνυν ὅτι ἡ πόλις οὐκ ἔστι κοινωνία τόπου, καὶ τοῦ μὴ ἀδικεῖν σφᾶς αὐτοὺς καὶ τῆς μεταδόσεως χάριν· ἀλλὰ ταῦτα μὲν ἀναγκαῖον ὑπάρχειν, εἴπερ ἔσται πόλις, οὐ μὴν οὐδ' ὑπαρχόντων τούτων ἀπάντων ἤδη πόλις, ἀλλ' ἡ τοῦ εὖ ζῆν κοινωνία καὶ ταῖς οἰκίαις καὶ τοῖς γένεσι, ζωῆς τελείας χάριν καὶ αὐτάρκους. οὐκ ἔσται μέντοι τοῦτο μὴ τὸν αὐτὸν καὶ ἓνα κατοικούντων τόπον καὶ χρωμένων ἐπιγαμίαις. διὸ κηδεῖαί τ' ἐγένοντο κατὰ τὰς πόλεις καὶ φατρίαι καὶ θυσῖαι καὶ διαγωγαὶ τοῦ συζῆν. τὸ δὲ τοιοῦτον φιλίας ἔργον· ἡ γὰρ τοῦ συζῆν προαίρεσις φιλία. τέλος μὲν οὖν πόλεως τὸ εὖ ζῆν, ταῦτα δὲ τοῦ τέλους χάριν. πόλις δὲ ἡ γενῶν καὶ κωμῶν [1281a] κοινωνία ζωῆς τελείας καὶ αὐτάρκους. τοῦτο δ' ἐστίν, ὡς φαμέν, τὸ ζῆν εὐδαιμόνως καὶ καλῶς. τῶν καλῶν ἅρα πράξεων χάριν θετέον εἶναι τὴν πολιτικὴν κοινωνίαν ἀλλ' οὐ τοῦ συζῆν. διόπερ ὅσοι συμβάλλονται πλεῖστον εἰς τὴν τοιαύτην κοινωνίαν, τούτοις τῆς πόλεως μέτεστι πλεῖον ἢ τοῖς κατὰ μὲν ἐλευθερίαν καὶ γένος ἴσοις ἢ μείζοσι κατὰ δὲ τὴν πολιτικὴν ἀρετὴν ἀνίσοις, ἢ τοῖς κατὰ πλοῦτον ὑπερέχουσι κατ' ἀρετὴν δ' ὑπερεχομένοις. ὅτι μὲν οὖν πάντες οἱ περὶ τῶν πολιτειῶν

ἀμφισβητοῦντες μέρος τι τοῦ δικαίου λέγουσι, φανερόν ἐκ τῶν εἰρημένων.

Ἐχει δ' ἀπορίαν τί δεῖ τὸ κύριον εἶναι τῆς πόλεως. ἢ γάρ τοι τὸ πλῆθος, ἢ τοὺς πλουσίους, ἢ τοὺς ἐπικεικῆς, ἢ τὸν βέλτιστον ἓνα πάντων, ἢ τύραννον. ἀλλὰ ταῦτα πάντα ἔχειν φαίνεται δυσκολίαν. τί γάρ; ἂν οἱ πένητες διὰ τὸ πλείους εἶναι διανέμονται τὰ τῶν πλουσίων, τοῦτ' οὐκ ἄδικόν ἐστιν; “ἔδοξε γὰρ νῆ Δία τῷ κυρίῳ δικαίως.” τὴν οὖν ἀδικίαν τί χρὴ λέγειν τὴν ἐσχάτην; πάλιν τε πάντων ληφθέντων, οἱ πλείους τὰ τῶν ἐλαττόνων ἂν διανέμονται, φανερόν ὅτι φθείρουσι τὴν πόλιν. ἀλλὰ μὴν οὐχ ἢ γ' ἀρετὴ φθείρει τὸ ἔχον αὐτήν, οὐδὲ τὸ δίκαιον πόλεως φθαρτικόν· ὥστε δῆλον ὅτι καὶ τὸν νόμον τοῦτον οὐχ οἷόν τ' εἶναι δίκαιον. ἔτι καὶ τὰς πράξεις ὅσας ὁ τύραννος ἔπραξεν ἀναγκαῖον εἶναι πάσας δικαίας· βιάζεται γὰρ ὧν κρείττων, ὥσπερ καὶ τὸ πλῆθος τοὺς πλουσίους. ἀλλ' ἄρα τοὺς ἐλάττους δίκαιον ἄρχειν καὶ τοὺς πλουσίους; ἂν οὖν κἀκεῖνοι ταῦτα ποιῶσι καὶ διαρπάζωσι καὶ τὰ κτήματα ἀφαιρῶνται τοῦ πλήθους, τοῦτ' ἐστὶ δίκαιον· καὶ θάτερον ἄρα. ταῦτα μὲν τοίνυν ὅτι πάντα φαῦλα καὶ οὐ δίκαια, φανερόν· ἀλλὰ τοὺς ἐπικεικῆς ἄρχειν δεῖ καὶ κυρίους εἶναι πάντων; οὐκοῦν ἀνάγκη τοὺς ἄλλους ἀτίμους εἶναι πάντας, μὴ τιμωμένους ταῖς πολιτικαῖς ἀρχαῖς· τιμὰς γὰρ λέγομεν εἶναι τὰς ἀρχάς, ἀρχόντων δ' αἰεὶ τῶν αὐτῶν ἀναγκαῖον εἶναι τοὺς ἄλλους ἀτίμους. ἀλλ' ἓνα τὸν σπουδαιότατον ἄρχειν βέλτιον; ἀλλ' ἔτι τοῦτο ὀλιγαρχικώτερον· οἱ γὰρ ἄτιμοι πλείους. ἀλλ' ἴσως φαίη τις ἂν τὸ κύριον ὅλως ἄνθρωπον εἶναι ἀλλὰ μὴ νόμον φαῦλον, ἔχοντά γε τὰ συμβαίνοντα πάθη περὶ τὴν ψυχὴν. ἂν οὖν ἢ νόμος μὲν ὀλιγαρχικὸς δὲ ἢ δημοκρατικός, τί διοίσει περὶ τῶν ἡπορημένων; συμβήσεται γὰρ ὁμοίως τὰ λεχθέντα πρότερον. Περὶ μὲν οὖν τῶν ἄλλων ἔστω τις ἕτερος λόγος· ὅτι δὲ δεῖ κύριον εἶναι μᾶλλον τὸ πλῆθος ἢ τοὺς ἀρίστους μὲν ὀλίγους δὲ, δόξειεν ἂν λέγεσθαι καὶ τιν' ἔχειν ἀπορίαν τάχα δὲ κἂν ἀλήθειαν. τοὺς γὰρ πολλούς, ὧν ἕκαστός ἐστιν [1281b] οὐ σπουδαῖος ἀνὴρ, ὅμως ἐνδέχεται συνελθόντας εἶναι βελτίους ἐκείνων, οὐχ ὥς ἕκαστον ἀλλ' ὥς σύμπαντας, οἷον τὰ συμφορητὰ δεῖπνα τῶν ἐκ μιᾶς δαπάνης χορηγηθέντων· πολλῶν γὰρ ὄντων ἕκαστον μόνον ἔχειν ἀρετῆς καὶ φρονήσεως, καὶ γίνεσθαι συνελθόντων, ὥσπερ ἓνα ἄνθρωπον τὸ πλῆθος, πολύποδα καὶ πολύχειρα καὶ πολλὰς ἔχοντ' αἰσθήσεις, οὕτω καὶ περὶ τὰ ἦθη καὶ τὴν διάνοιαν. διὸ καὶ κρίνουσιν ἄμεινον οἱ πολλοὶ καὶ τὰ τῆς μουσικῆς ἔργα καὶ τὰ τῶν ποιητῶν· ἄλλοι γὰρ ἄλλο τι μόνον, πάντα δὲ πάντες. ἀλλὰ τούτῳ διαφέρουσιν οἱ σπουδαῖοι τῶν ἀνδρῶν ἐκάστου τῶν πολλῶν, ὥσπερ καὶ τῶν μὴ καλῶν τοὺς καλοὺς φασι, καὶ τὰ γεγραμμένα διὰ τέχνης τῶν ἀληθινῶν, τῷ συνῆχθαι τὰ διεσπαρμένα χωρὶς εἰς ἓν, ἐπεὶ κεχωρισμένων γε κάλλιον ἔχειν τοῦ γεγραμμένου τουδὶ μὲν τὸν ὀφθαλμὸν ἑτέρου δὲ τινος ἕτερον μόνον.

εἰ μὲν οὖν περὶ πάντα δῆμον καὶ περὶ πᾶν πλῆθος ἐνδέχεται ταύτην εἶναι τὴν διαφορὰν τῶν πολλῶν πρὸς τοὺς ὀλίγους σπουδαίους, ἄδηλον, ἴσως δὲ νῆ Δία δῆλον ὅτι περὶ ἐνίων ἀδύνατον (ὁ γὰρ αὐτὸς κἂν ἐπὶ τῶν θηρίων ἀρμόσειε λόγος· καίτοι τί διαφέρουσιν ἔνιοι τῶν θηρίων ὡς ἔπος εἶπεῖν;)· ἀλλὰ περὶ τὸ πλῆθος οὐδὲν εἶναι κωλύει τὸ λεχθὲν ἀληθές. διὸ καὶ τὴν πρότερον εἰρημένην ἀπορίαν λύσειεν ἂν τις διὰ τούτων καὶ τὴν ἐχομένην αὐτῆς, τίνων δεῖ κυρίους εἶναι τοὺς ἐλευθέρους καὶ τὸ πλῆθος τῶν πολιτῶν. τοιοῦτοι δ' εἰσὶν ὅσοι μήτε πλούσιοι μήτε ἀξίωμα ἔχουσιν ἀρετῆς μηδὲ ἔν. τὸ μὲν γὰρ μετέχειν αὐτοὺς τῶν ἀρχῶν τῶν μεγίστων οὐκ ἀσφαλές (διὰ τε γὰρ ἀδικίαν καὶ δι' ἀφροσύνην τὰ μὲν ἀδικεῖν ἀνάγκη τὰ δ' ἀμαρτάνειν αὐτούς)· τὸ δὲ μὴ μεταδιδόναι μηδὲ μετέχειν φοβερόν (ὅταν γὰρ ἄτιμοι πολλοὶ καὶ πένητες ὑπάρχωσι, πολεμίων ἀναγκαῖον εἶναι πλήρη τὴν πόλιν ταύτην). λείπεται δὴ τοῦ βουλευέσθαι καὶ κρίνειν μετέχειν αὐτούς. διόπερ καὶ Σόλων καὶ τῶν ἄλλων τινὲς νομοθετῶν τάττουσιν ἐπὶ τε τὰς ἀρχαιρεσίας καὶ τὰς εὐθύνας τῶν ἀρχόντων, ἄρχειν δὲ κατὰ μόνας οὐκ ἐῷσιν. πάντες μὲν γὰρ ἔχουσι συνελθόντες ἱκανὴν αἴσθησιν, καὶ μιγνύμενοι τοῖς βελτίοσι τὰς πόλεις ὠφελοῦσιν, καθάπερ ἢ μὴ καθαρὰ τροφή μετὰ τῆς καθαρᾶς τὴν πᾶσαν ποιεῖ χρησιμωτέραν τῆς ὀλίγης· χωρὶς δ' ἕκαστος ἀτελής περὶ τὸ κρίνειν ἐστίν.

ἔχει δ' ἡ τάξις αὕτη τῆς πολιτείας ἀπορίαν πρώτην μὲν ὅτι δόξειεν ἂν τοῦ αὐτοῦ εἶναι τὸ κρίναι τίς ὀρθῶς ἰατρευκεν, οὐπερ καὶ τὸ ἰατρεῦσαι καὶ ποιῆσαι ὑγιᾶ τὸν κάμνοντα τῆς νόσου τῆς παρούσης· οὗτος δ' ἐστὶν ὁ ἰατρός. ὁμοίως δὲ τοῦτο καὶ [1282a] περὶ τὰς ἄλλας ἐμπειρίας καὶ τέχνας. ὥσπερ οὖν ἰατρὸν δεῖ διδόναι τὰς εὐθύνας ἐν ἰατροῖς, οὕτω καὶ τοὺς ἄλλους ἐν τοῖς ὁμοίοις. ἰατρὸς δ' ὅ τε δημιουργὰς καὶ ὁ ἀρχιτεκτονικὸς καὶ τρίτος ὁ πεπαιδευμένος περὶ τὴν τέχνην (εἰσὶ γὰρ τινες τοιοῦτοι καὶ περὶ πάσας ὡς εἶπεῖν τὰς τέχνας)· ἀποδίδομεν δὲ τὸ κρίνειν οὐδὲν ἥττον τοῖς πεπαιδευμένοις ἢ τοῖς εἰδόσιν. ἔπειτα καὶ περὶ τὴν αἵρεσιν τὸν αὐτὸν ἂν δόξειεν ἔχειν τρόπον. καὶ γὰρ τὸ ἐλέσθαι ὀρθῶς τῶν εἰδότεων ἔργον ἐστίν, οἷον γεωμέτρην τε τῶν γεωμετρικῶν καὶ κυβερνήτην τῶν κυβερνητικῶν. εἰ γὰρ καὶ περὶ ἐνίων ἔργων καὶ τεχνῶν μετέχουσι καὶ τῶν ἰδιωτῶν τινες, ἀλλ' οὐ τι τῶν εἰδότεων γε μᾶλλον. ὥστε κατὰ μὲν τοῦτον τὸν λόγον οὐκ ἂν εἴη τὸ πλῆθος ποιητέον κύριον οὔτε τῶν ἀρχαιρεσιῶν οὔτε τῶν εὐθυνῶν. ἀλλ' ἴσως οὐ πάντα ταῦτα λέγεται καλῶς διὰ τε τὸν πάλαι λόγον, ἂν ἢ τὸ πλῆθος μὴ λίαν ἀνδραποδῶδες (ἔσται γὰρ ἕκαστος μὲν χείρων κριτῆς τῶν εἰδότεων, ἅπαντες δὲ συνελθόντες ἢ βελτίους ἢ οὐ χείρους), καὶ ὅτι περὶ ἐνίων οὔτε μόνον ὁ ποιήσας οὔτ' ἄριστ' ἂν κρίνειεν, ὅσων τὰργα γινώσκουσι καὶ οἱ μὴ ἔχοντες τὴν τέχνην, οἷον οἰκίαν οὐ μόνον ἐστὶ γινῶναι τοῦ ποιήσαντος, ἀλλὰ καὶ βέλτιον ὁ χρώμενος αὐτῇ κρινεῖ (χρηῖται δ' ὁ οἰκονόμος), καὶ πηδάλιον

κυβερνήτης τέκτονος, καὶ θοίνην ὁ δαιτυμὼν ἄλλ' οὐχ ὁ μάγειρος.

ταύτην μὲν οὖν τὴν ἀπορίαν τάχα δόξειέ τις ἂν οὕτω λύειν ἱκανῶς· ἄλλη δ' ἐστὶν ἐχομένη ταύτης. δοκεῖ γὰρ ἄτοπον εἶναι τὸ μειζόνων εἶναι κυρίους τοὺς φαύλους τῶν ἐπικειμένων, αἱ δ' εὐθυναὶ καὶ αἱ τῶν ἀρχῶν αἰρέσεις εἰσὶ μέγιστον· ἃς ἐν ἐνίαις πολιτείαις, ὥσπερ εἴρηται, τοῖς δήμοις ἀποδιδόασιν· ἡ γὰρ ἐκκλησία κυρία πάντων τῶν τοιούτων ἐστίν. καίτοι τῆς μὲν ἐκκλησίας μετέχουσι καὶ βουλευοῦσι καὶ δικάζουσιν ἀπὸ μικρῶν τιμημάτων καὶ τῆς τυχούσης ἡλικίας, ταμιεύουσι δὲ καὶ στρατηγοῦσι καὶ τὰς μεγίστας ἀρχὰς ἄρχουσιν ἀπὸ μεγάλων. ὁμοίως δὲ τις ἂν λύσειε καὶ ταύτην τὴν ἀπορίαν. ἴσως γὰρ ἔχει καὶ ταῦτ' ὀρθῶς. οὐ γὰρ ὁ δικαστὴς οὐδ' ὁ βουλευτὴς οὐδ' ὁ ἐκκλησιαστὴς ἄρχων ἐστίν, ἀλλὰ τὸ δικαστήριον καὶ ἡ βουλὴ καὶ ὁ δῆμος· τῶν δὲ ῥηθέντων ἕκαστος μῦθον ἐστὶ τούτων (λέγω δὲ [μῦθον] τὸν βουλευτὴν καὶ τὸν ἐκκλησιαστὴν καὶ τὸν δικαστήν)· ὥστε δικαίως κύριον μειζόνων τὸ πλῆθος· ἐκ γὰρ πολλῶν ὁ δῆμος καὶ ἡ βουλὴ καὶ τὸ δικαστήριον. καὶ τὸ τίμημα δὲ πλεῖον τὸ πάντων τούτων ἢ τὸ τῶν καθ' ἓνα καὶ κατ' ὀλίγους μεγάλας ἀρχὰς ἀρχόντων. ταῦτα μὲν οὖν διωρίσθω [1282b] τοῦτον τὸν τρόπον· ἡ δὲ πρώτη λεχθεῖσα ἀπορία ποιεῖ φανερόν οὐδέν οὕτως ἕτερον ὥς ὅτι δεῖ τοὺς νόμους εἶναι κυρίους κειμένους ὀρθῶς, τὸν ἄρχοντα δέ, ἂν τε εἷς ἂν τε πλείους ᾖσι, περὶ τούτων εἶναι κυρίους περὶ ὧν ἐξαδυνατοῦσιν οἱ νόμοι λέγειν ἀκριβῶς διὰ τὸ μὴ ῥᾶδιον εἶναι καθόλου διορίσαι περὶ πάντων. ὁποῖους μέντοι τινὰς εἶναι δεῖ τοὺς ὀρθῶς κειμένους νόμους, οὐδέν πω δῆλον, ἀλλ' ἔτι μένει τὸ πάλαι διαπορηθέν. ἅμα γὰρ καὶ ὁμοίως ταῖς πολιτείαις ἀνάγκη καὶ τοὺς νόμους φαύλους ἢ σπουδαίους εἶναι, καὶ δικαίους ἢ ἀδίκους. πλὴν τοῦτο γε φανερόν, ὅτι δεῖ πρὸς τὴν πολιτείαν κεῖσθαι τοὺς νόμους. ἀλλὰ μὴν εἰ τοῦτο, δῆλον ὅτι τοὺς μὲν κατὰ τὰς ὀρθὰς πολιτείας ἀναγκαῖον εἶναι δικαίους τοὺς δὲ κατὰ τὰς παρεκβεβηκυίας οὐ δικαίους.

Ἐπεὶ δ' ἐν πάσαις μὲν ταῖς ἐπιστήμαις καὶ τέχναις ἀγαθὸν τὸ τέλος, μέγιστον δὲ καὶ μάλιστα ἐν τῇ κυριωτάτῃ πασῶν, αὕτη δ' ἐστὶν ἡ πολιτικὴ δύναμις, ἔστι δὲ πολιτικὸν ἀγαθὸν τὸ δίκαιον, τοῦτο δ' ἐστὶ τὸ κοινῇ συμφέρον, δοκεῖ δὲ πᾶσιν ἴσον τι τὸ δίκαιον εἶναι, καὶ μέχρι γέ τινος ὁμολογοῦσι τοῖς κατὰ φιλοσοφίαν λόγοις, ἐν οἷς διώρισται περὶ τῶν ἠθικῶν (τὶ γὰρ καὶ πρὸς τὸ δίκαιον, καὶ δεῖν τοῖς ἴσοις ἴσον εἶναι φασιν), ποίων δὲ ἰσότης ἐστὶ καὶ ποίων ἀνισότης, δεῖ μὴ λανθάνειν. ἔχει γὰρ τοῦτ' ἀπορίαν καὶ φιλοσοφίαν πολιτικὴν. ἴσως γὰρ ἂν φαίη τις κατὰ παντὸς ὑπεροχὴν ἀγαθοῦ δεῖν ἀνίσως νενεμῆσθαι τὰς ἀρχάς, εἰ πάντα τὰ λοιπὰ μηδὲν διαφέρουσιν ἄλλ' ὅμοιοι τυγχάνουσιν ὄντες· τοῖς γὰρ διαφέρουσιν ἕτερον εἶναι τὸ δίκαιον καὶ τὸ κατ' ἀξίαν. ἀλλὰ μὴν εἰ τοῦτ' ἀληθές, ἔσται καὶ κατὰ

χρῶμα καὶ κατὰ μέγεθος καὶ καθ' ὅτιοῦν τῶν ἀγαθῶν πλεονεξία τις τῶν πολιτικῶν δικαίων τοῖς ὑπερέχουσιν. ἢ τοῦτο ἐπιπόλαιον τὸ ψεῦδος; φανερόν δ' ἐπὶ τῶν ἄλλων ἐπιστημῶν καὶ δυνάμεων· τῶν γὰρ ὁμοίων ἀύλητῶν τὴν τέχνην οὐ δοτέον πλεονεξίαν τῶν αὐλῶν τοῖς εὐγενεστέροις (οὐδὲν γὰρ ἀύλησους βέλτιον), δεῖ δὲ τῷ κατὰ τὸ ἔργον ὑπερέχοντι διδόναι καὶ τῶν ὀργάνων τὴν ὑπεροχὴν. εἰ δὲ μήπω δῆλον τὸ λεγόμενον, ἔτι μᾶλλον αὐτὸ προαγαγοῦσιν ἔσται φανερόν. εἰ γὰρ εἴη τις ὑπερέχων μὲν κατὰ τὴν ἀύλητικὴν, πολὺ δ' ἐλλείπων κατ' εὐγένειαν ἢ κάλλος, εἰ καὶ μείζον ἕκαστον ἐκείνων ἀγαθὸν ἐστὶ τῆς ἀύλητικῆς (λέγω δὲ τὴν τ' εὐγένειαν καὶ τὸ κάλλος), καὶ κατὰ τὴν ἀναλογίαν ὑπερέχουσι πλεον τῆς ἀύλητικῆς ἢ ἐκεῖνος κατὰ τὴν ἀύλητικὴν, ὅμως τούτῳ δοτέον τοὺς διαφέροντας [1283a] τῶν αὐλῶν. δεῖ γὰρ εἰς τὸ ἔργον συμβάλλεσθαι τὴν ὑπεροχὴν καὶ τοῦ πλούτου καὶ τῆς εὐγενείας, συμβάλλονται δ' οὐδέν.

ἔτι κατὰ γε τοῦτον τὸν λόγον πᾶν ἀγαθὸν πρὸς πᾶν ἂν εἴη συμβλητόν. εἰ γὰρ ἐνάμιλλον τὸ τί μέγεθος, καὶ ὅλως ἂν τὸ μέγεθος ἐνάμιλλον εἴη καὶ πρὸς πλοῦτον καὶ πρὸς ἐλευθερίαν· ὥστ' εἰ πλεῖον ὁδὶ διαφέρει κατὰ μέγεθος ἢ ὁδὶ κατ' ἀρετὴν, «εἰ» καὶ [πλεῖον] ὑπερέχει ὅλως ἀρετὴ μεγέθους, εἴη ἂν συμβλητὰ πάντα. τοσόνδε γὰρ [μέγεθος] εἰ κρεῖττον τοσοῦδε, τοσόνδε δῆλον ὡς ἴσον. ἐπεὶ δὲ τοῦτ' ἀδύνατον, δῆλον ὡς καὶ ἐπὶ τῶν πολιτικῶν εὐλόγως οὐ κατὰ πᾶσαν ἀνισότητ' ἀμφισβητοῦσι τῶν ἀρχῶν (εἰ γὰρ οἱ μὲν βραδεῖς οἱ δὲ ταχεῖς, οὐδὲν διὰ τοῦτο δεῖ τοὺς μὲν πλεῖον τοὺς δ' ἔλαττον ἔχειν, ἀλλ' ἐν τοῖς γυμνικοῖς ἀγῶσιν ἢ τούτων διαφορὰ λαμβάνει τὴν τιμὴν)· ἀλλ' ἐξ ὧν πόλις συνέστηκεν, ἐν τούτοις ἀναγκαῖον ποιεῖσθαι τὴν ἀμφισβήτησιν. διόπερ εὐλόγως ἀντιποιοῦνται τῆς τιμῆς οἱ εὐγενεῖς καὶ ἐλεύθεροι καὶ πλούσιοι. δεῖ γὰρ ἐλευθέρους τ' εἶναι καὶ τίμημα φέροντας (οὐ γὰρ ἂν εἴη πόλις ἐξ ἀπόρων πάντων, ὥσπερ οὐδ' ἐκ δούλων)· ἀλλὰ μὴν εἰ δεῖ τούτων, δῆλον ὅτι καὶ δικαιοσύνης καὶ τῆς πολιτικῆς ἀρετῆς. οὐδὲ γὰρ ἄνευ τούτων οἰκεῖσθαι πόλιν δυνατόν· πλὴν ἄνευ μὲν τῶν προτέρων ἀδύνατον εἶναι πόλιν, ἄνευ δὲ τούτων οἰκεῖσθαι καλῶς.

Πρὸς μὲν οὖν τὸ πόλιν εἶναι δόξειεν ἂν ἢ πάντα ἢ ἑνὶ γε τούτων ὀρθῶς ἀμφισβητεῖν, πρὸς μέντοι ζωὴν ἀγαθὴν ἢ παιδείαν καὶ ἢ ἀρετὴν μάλιστα δικαίως ἂν ἀμφισβητοίησαν, καθάπερ εἴρηται καὶ πρότερον. ἐπεὶ δ' οὔτε πάντων ἴσον ἔχειν δεῖ τοὺς ἴσους ἔν τι μόνον ὄντας, οὔτε ἄνισον τοὺς ἀνίσους καθ' ἓν, ἀνάγκη πάσας εἶναι τὰς τοιαύτας πολιτείας περεκβάσεις. εἴρηται μὲν οὖν καὶ πρότερον ὅτι διαμφισβητοῦσι τρόπον τινὰ δικαίως πάντες, ἀπλῶς δ' οὐ πάντες δικαίως· οἱ πλούσιοι μὲν ὅτι πλεῖον μέτεστι τῆς χώρας αὐτοῖς, ἢ δὲ χώρα κοινόν, ἔτι πρὸς τὰ συμβόλαια πιστοὶ μᾶλλον ὡς ἐπὶ τὸ

πλέον· οἱ δὲ ἐλεύθεροι καὶ εὐγενεῖς ὡς ἐγγὺς ἀλλήλων (πολιῖται γὰρ μᾶλλον οἱ γενναιότεροι τῶν ἀγεννῶν, ἢ δ' εὐγένεια παρ' ἐκάστοις οἴκοι τίμιος)· ἔτι διότι βελτίους εἶκος τοὺς ἐκ βελτιόνων, εὐγένεια γὰρ ἐστὶν ἀρετὴ γένους· ὁμοίως δὴ φήσομεν δικαίως καὶ τὴν ἀρετὴν ἀμφισβητεῖν, κοινωνικὴν γὰρ ἀρετὴν εἶναί φαμεν τὴν δικαιοσύνην, ἢ πάσας ἀναγκαῖον ἀκολουθεῖν τὰς ἄλλας· ἀλλὰ μὴν καὶ οἱ πλείους πρὸς τοὺς ἐλάττους, καὶ γὰρ κρείττους καὶ πλουσιώτεροι καὶ βελτίους εἰσὶν, ὡς λαμβανομένων τῶν πλειόνων πρὸς τοὺς ἐλάττους.

ἄρ' οὖν [1283b] εἰ πάντες εἶεν ἐν μιᾷ πόλει, λέγω δ' οἷον οἱ τ' ἀγαθοὶ καὶ οἱ πλούσιοι καὶ <οἱ> εὐγενεῖς, ἔτι δὲ πλῆθος ἄλλο τι πολιτικόν, πότερον ἀμφισβήτησις ἔσται τίνας ἄρχειν δεῖ, ἢ οὐκ ἔσται; καθ' ἐκάστην μὲν οὖν πολιτείαν τῶν εἰρημένων ἀναμφισβήτητος ἡ κρίσις τίνας ἄρχειν δεῖ (τοῖς γὰρ κυρίως διαφέρουσιν ἀλλήλων, οἷον ἢ μὲν τῷ διὰ πλουσίων ἢ δὲ τῷ διὰ τῶν σπουδαίων ἀνδρῶν εἶναι, καὶ τῶν ἄλλων ἐκάστη τὸν αὐτὸν τρόπον)· ἀλλ' ὅμως σκοπῶμεν, ὅταν περὶ τὸν αὐτὸν ταῦθ' ὑπάρχη χρόνον, πῶς διοριστέον. εἰ δὴ τὸν ἀριθμὸν εἶεν ὀλίγοι πάνπαν οἱ τὴν ἀρετὴν ἔχοντες, τίνα δεῖ διελεῖν τρόπον; ἢ τὸ 'ὀλίγοι' πρὸς τὸ ἔργον δεῖ σκοπεῖν, εἰ δυνατοὶ διοικεῖν τὴν πόλιν ἢ τοσοῦτοι τὸ πλῆθος ὥστ' εἶναι πόλιν ἐξ αὐτῶν; ἔστι δὲ ἀπορία τις πρὸς ἅπαντας τοὺς διαμφισβητοῦντας περὶ τῶν πολιτικῶν τιμῶν. δόξαιεν γὰρ <ἂν> οὐδὲν λέγειν δίκαιον οἱ διὰ τὸν πλοῦτον ἀξιοῦντες ἄρχειν, ὁμοίως δὲ καὶ οἱ κατὰ γένος· δηλὸν γὰρ ὡς εἴ τις πάλιν εἰς πλουσιώτερος ἀπάντων ἐστί, δηλονότι κατὰ τὸ αὐτὸ δίκαιον τοῦτον ἄρχειν τὸν ἕνα ἀπάντων δεήσει, ὁμοίως δὲ καὶ τὸν εὐγενεῖα διαφέροντα τῶν ἀμφισβητούντων δι' ἐλευθερίαν. ταῦτ' οὖν τοῦτο ἴσως συμβήσεται καὶ περὶ τὰς ἀριστοκρατίας ἐπὶ τῆς ἀρετῆς· εἰ γὰρ τις εἰς ἀμείνων ἀνὴρ εἴη τῶν ἄλλων τῶν ἐν τῷ πολιτεύματι σπουδαίων ὄντων, τοῦτον εἶναι δεῖ κύριον κατὰ ταῦτ' οὐδὲν δεῖ καὶ τὸ πλῆθος εἶναι γε δεῖ κύριον διότι κρείττους εἰσὶ τῶν ὀλίγων, κἂν εἰς ἢ πλείους μὲν τοῦ ἐνὸς ἐλάττους δὲ τῶν πολλῶν κρείττους ὥσι τῶν ἄλλων, τούτους ἂν δέοι κυρίους εἶναι μᾶλλον ἢ τὸ πλῆθος. πάντα δὴ ταῦτ' ἔοικε φανερόν ποιεῖν ὅτι τούτων τῶν ὄρων οὐδεὶς ὀρθὸς ἐστί, καθ' ὃν ἀξιοῦσιν αὐτοὶ μὲν ἄρχειν τοὺς δ' ἄλλους ὑπὸ σφῶν ἄρχεσθαι πάντας. καὶ γὰρ δὴ καὶ πρὸς τοὺς κατ' ἀρετὴν ἀξιοῦντας κυρίους εἶναι τοῦ πολιτεύματος, ὁμοίως δὲ καὶ τοὺς κατὰ πλοῦτον, ἔχοιεν ἂν λέγειν τὰ πλήθη λόγον τινὰ δίκαιον· οὐδὲν γὰρ κωλύει ποτὲ τὸ πλῆθος εἶναι βέλτιον· τῶν ὀλίγων καὶ πλουσιώτερον, οὐχ ὡς καθ' ἕκαστον ἀλλ' ὡς ἀθρόους. διὸ καὶ πρὸς τὴν ἀπορίαν ἣν ζητοῦσι καὶ προβάλλουσί τινες ἐνδέχεται τοῦτον τὸν τρόπον ἀπαντᾶν. ἀποροῦσι γὰρ τινες πότερον τῷ νομοθέτῃ νομοθετητέον, βουλομένῳ τίθεσθαι τοὺς ὀρθοτάτους νόμους, πρὸς τὸ τῶν βελτιόνων συμφέρον ἢ πρὸς τὸ τῶν πλειόνων, ὅταν συμβαίνει τὸ

λεχθέν· τὸ δ' ὀρθὸν ληπτέον ἴσως· τὸ δ' ἴσως ὀρθὸν πρὸς τὸ τῆς πόλεως ὅλης συμφέρον καὶ πρὸς τὸ κοινὸν τὸ τῶν πολιτῶν· πολίτης δὲ κοινῇ μὲν ὁ μετέχων τοῦ ἄρχειν καὶ ἄρχεσθαι [1284a] ἐστὶ, καθ' ἑκάστην δὲ πολιτείαν ἕτερος, πρὸς δὲ τὴν ἀρίστην ὁ δυνάμενος καὶ προαιρούμενος ἄρχεσθαι καὶ ἄρχειν πρὸς τὸν βίον τὸν κατ' ἀρετὴν.

εἰ δέ τις ἔστιν εἷς τοσοῦτον διαφέρων κατ' ἀρετῆς ὑπερβολήν, ἢ πλείους μὲν ἑνὸς μὴ μέντοι δυνατοὶ πλήρωμα παρασχέσθαι πόλεως, ὥστε μὴ συμβλητὴν εἶναι τὴν τῶν ἄλλων ἀρετὴν πάντων μηδὲ τὴν δύναμιν αὐτῶν τὴν πολιτικὴν πρὸς τὴν ἐκείνων, εἰ πλείους, εἰ δ' εἷς, τὴν ἐκείνου μόνον, οὐκέτι θετέον τούτους μέρος πόλεως· ἀδικήσονται γὰρ ἀξιούμενοι τῶν ἴσων, ἄνισοι τοσοῦτον κατ' ἀρετὴν ὄντες καὶ τὴν πολιτικὴν δύναμιν· ὥσπερ γὰρ θεὸν ἐν ἀνθρώποις εἰκὸς εἶναι τὸν τοιοῦτον. ὅθεν δῆλον ὅτι καὶ τὴν νομοθεσίαν ἀναγκαῖον εἶναι περὶ τοὺς ἴσους καὶ τῷ γένει καὶ τῇ δυνάμει, κατὰ δὲ τῶν τοιούτων οὐκ ἔστι νόμος· αὐτοὶ γὰρ εἰσὶ νόμος. καὶ γὰρ γελοῖος ἂν εἴη νομοθετεῖν τις πειρώμενος κατ' αὐτῶν. λέγοιεν γὰρ ἂν ἴσως ἅπερ Ἀντισθένης ἔφη τοὺς λέοντας δημηγορούντων τῶν δασυπόδων καὶ τὸ ἴσον ἀξιούντων πάντας ἔχειν. διὸ καὶ τίθενται τὸν ὀστρακισμὸν αἱ δημοκρατούμεναι πόλεις, διὰ τὴν τοιαύτην αἰτίαν· αὗται γὰρ δὴ δοκοῦσι διώκειν τὴν ἰσότητά μάλιστα πάντων, ὥστε τοὺς δοκοῦντας ὑπερέχειν δυνάμει διὰ πλοῦτον ἢ πολυφιλίαν ἢ τινα ἄλλην πολιτικὴν ἰσχὺν ὡστράκιζον καὶ μεθίστασαν ἐκ τῆς πόλεως χρόνους ὠρισμένους. μυθολογεῖται δὲ καὶ τοὺς Ἀργοναύτας τὸν Ἡρακλέα καταλιπεῖν διὰ τοιαύτην αἰτίαν· οὐ γὰρ ἐθέλειν αὐτὸν ἄγειν τὴν Ἀργὴ μετὰ τῶν ἄλλων, ὡς ὑπερβάλλοντα πολὺ τῶν πλωτῆρων. διὸ καὶ τοὺς ψέγοντας τὴν τυραννίδα καὶ τὴν Περιάνδρου Θρασυβούλῳ συμβουλίαν οὐχ ἀπλῶς οἰητέον ὀρθῶς ἐπιτιμᾶν (φασὶ γὰρ τὸν Περιάνδρον εἰπεῖν μὲν οὐδὲν πρὸς τὸν πεμφθέντα κήρυκα περὶ τῆς συμβουλίας, ἀφαιροῦντα δὲ τοὺς ὑπερέχοντας τῶν σταχύων ὁμαλῦναι τὴν ἄρουραν· ὅθεν ἀγνοοῦντος μὲν τοῦ κήρυκος τοῦ γιγνομένου τὴν αἰτίαν, ἀπαγγείλαντος δὲ τὸ συμπεσόν, συννοῆσαι τὸν Θρασύβουλον ὅτι δεῖ τοὺς ὑπερέχοντας ἄνδρας ἀναιρεῖν). τοῦτο γὰρ οὐ μόνον συμφέρει τοῖς τυράννοις, οὐδὲ μόνον οἱ τύραννοι ποιοῦσιν, ἀλλ' ὁμοίως ἔχει καὶ περὶ τὰς ὀλιγαρχίας καὶ τὰς δημοκρατίας· ὁ γὰρ ὀστρακισμὸς τὴν αὐτὴν ἔχει δύναμιν τρόπον τινὰ τῷ κολοῦειν τοὺς ὑπερέχοντας καὶ φυγαδεύειν. τὸ δ' αὐτὸ καὶ περὶ τὰς πόλεις καὶ τὰ ἔθνη ποιοῦσιν οἱ κύριοι τῆς δυνάμεως, οἷον Ἀθηναῖοι μὲν περὶ Σαμίους καὶ Χίους καὶ Λεσβίους (ἐπεὶ γὰρ θᾶπτον ἐγκρατῶς ἔσχον τὴν ἀρχήν, ἐταπείνωσαν αὐτοὺς παρὰ τὰς συνθήκας), ὁ δὲ Περσῶν [1284b] βασιλεὺς Μήδους καὶ Βαβυλωνίους καὶ τῶν ἄλλων τοὺς πεφρονηματισμένους διὰ τὸ γενέσθαι ποτ' ἐπ' ἀρχῆς ἐπέκοπτε πολλάκις.



τὸ δὲ πρόβλημα καθόλου περὶ πάσας ἐστὶ τὰς πολιτείας, καὶ τὰς ὀρθάς· αἱ μὲν γὰρ παρεκβεβηκυῖαι πρὸς τὸ ἴδιον ἀποσκοποῦσαι τοῦτο δρῶσιν, οὐ μὴν ἀλλὰ περὶ τὰς τὸ κοινὸν ἀγαθὸν ἐπισκοπούσας τὸν αὐτὸν ἔχει τρόπον. δῆλον δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων τεχνῶν καὶ ἐπιστημῶν· οὔτε γὰρ γραφεὺς ἐάσειεν ἂν τὸν ὑπερβάλλοντα πόδα τῆς συμμετρίας ἔχειν τὸ ζῶον, οὐδ' εἰ διαφέρει τὸ κάλλος, οὔτε ναυπηγὸς πρύμναν ἢ τῶν ἄλλων τι μορίων τῶν τῆς νεώς, οὐδὲ δὴ χοροδιδάσκαλος τὸν μεῖζον καὶ κάλλιον τοῦ παντὸς χοροῦ φθεγγόμενον ἐάσει συγχορεύειν. ὥστε διὰ τοῦτο μὲν οὐδὲν κωλύει τοὺς μονάρχους συμφωνεῖν ταῖς πόλεσιν, εἰ τῆς οἰκείας ἀρχῆς ὠφελίμου ταῖς πόλεσιν οὔσης τοῦτο δρῶσιν. διὸ κατὰ τὰς ὁμολογουμένας ὑπεροχὰς ἔχει τι δίκαιον πολιτικὸν ὁ λόγος ὁ περὶ τὸν ὀστρακισμόν. βέλτιον μὲν οὖν τὸν νομοθέτην ἐξ ἀρχῆς οὕτω συστήσαι τὴν πολιτείαν ὥστε μὴ δεῖσθαι τοιαύτης ἱατρείας· δεύτερος δὲ πλοῦς, ἂν συμβῇ, πειρᾶσθαι τοιούτῳ τινὶ διορθώματι διορθοῦν. ὅπερ οὐκ ἐγίγνετο περὶ τὰς πόλεις· οὐ γὰρ ἔβλεπον πρὸς τὸ τῆς πολιτείας τῆς οἰκείας συμφέρον, ἀλλὰ στασιαστικῶς ἐχρῶντο τοῖς ὀστρακισμοῖς. ἐν μὲν οὖν ταῖς παρεκβεβηκυαῖς πολιτείαις ὅτι μὲν ἰδίᾳ συμφέρει καὶ δίκαιόν ἐστι, φανερόν, ἴσως δὲ καὶ ὅτι οὐχ ἀπλῶς δίκαιον, καὶ τοῦτο φανερόν· ἀλλ' ἐπὶ τῆς ἀρίστης πολιτείας ἔχει πολλὴν ἀπορίαν, οὐ κατὰ τῶν ἄλλων ἀγαθῶν τὴν ὑπεροχὴν, οἷον ἰσχύος καὶ πλούτου καὶ πολυφιλίας, ἀλλὰ ἂν τις γένηται διαφέρων κατ' ἀρετὴν, τί χρὴ ποιεῖν; οὐ γὰρ δὴ φαῖεν ἂν δεῖν ἐκβάλλειν καὶ μεθιστάναι τὸν τοιοῦτον· ἀλλὰ μὴν οὐδ' ἄρχειν γε τοῦ τοιούτου· παραπλήσιον γὰρ κἂν εἰ τοῦ Διὸς ἄρχειν ἀξιοῖεν, μερίζοντες τὰς ἀρχάς. λείπεται τοίνυν, ὅπερ ἔοικε πεφυκέναι, πείθεσθαι τῷ τοιούτῳ πάντας ἀσμένως, ὥστε βασιλέας εἶναι τοὺς τοιούτους αἰδίου ἐν ταῖς πόλεσιν.

Ἴσως δὲ καλῶς ἔχει μετὰ τοὺς εἰρημένους λόγους μεταβῆναι καὶ σκέψασθαι περὶ βασιλείας· φανερὸν γὰρ τῶν ὀρθῶν πολιτειῶν μίαν εἶναι ταύτην. σκεπτέον δὲ πότερον συμφέρει τῇ μελλούσῃ καλῶς οἰκήσεσθαι καὶ πόλει καὶ χώρᾳ βασιλεύεσθαι, ἢ οὐ, ἀλλ' ἄλλη τις πολιτεία μᾶλλον, ἢ τισὶ μὲν συμφέρει τισὶ δ' οὐ συμφέρει. δεῖ δὴ πρῶτον διελέσθαι πότερον ἐν τι γένος ἔστιν αὐτῆς ἢ πλείους [1285a] ἔχει διαφοράς. ῥᾷδιον δὲ τοῦτό γε καταμαθεῖν, ὅτι πλείω τε γένη περιέχει καὶ τῆς ἀρχῆς ὁ τρόπος ἐστὶν οὐχ εἷς πασῶν. ἢ γὰρ ἐν τῇ Λακωνικῇ πολιτείᾳ δοκεῖ μὲν εἶναι βασιλεία μάλιστα τῶν κατὰ νόμον, οὐκ ἔστι δὲ κυρία πάντων, ἀλλ' ὅταν ἐξέλθῃ τὴν χώραν ἡγεμὼν ἐστὶ τῶν πρὸς τὸν πόλεμον· ἔτι δὲ τὰ πρὸς τοὺς θεοὺς ἀποδέδοται τοῖς βασιλεῦσιν. αὕτη μὲν οὖν ἡ βασιλεία οἷον στρατηγία τις αὐτοκρατόρων καὶ αἰδιδός ἐστιν· κτεῖναι γὰρ οὐ κύριος, εἰ μὴ ἔνεκα δειλίας, καθάπερ ἐπὶ τῶν ἀρχαίων ἐν ταῖς πολεμικαῖς ἐξόδοις, ἐν χειρὸς νόμῳ. δηλοῖ δ' Ὅμηρος· ὁ γὰρ Ἀγαμέμνων κακῶς μὲν ἀκούων ἠνείχετο ἐν ταῖς ἐκκλησίαις, ἐξελθόντων δὲ καὶ κτεῖναι

κύριος ἦν· λέγει γοῦν “ὃν δέ κ’ ἐγὼν ἀπάνευθε μάχης .., οὗ οἱ ἄρκιον ἐσσεῖται φυγῆιν κύνας ἢ δ’ οἰωνούς· παρ γὰρ ἐμοὶ θάνατος”.

Ἐν μὲν οὖν τοῦτ’ εἶδος βασιλείας, στρατηγία διὰ βίου, τούτων δ’ αἱ μὲν κατὰ γένος εἰσὶν αἱ δ’ αἰρεταί· παρὰ ταύτην δ’ ἄλλο μοναρχίας εἶδος, οἷαι παρ’ ἐνίοις εἰσὶ βασιλεῖαι τῶν βαρβάρων. ἔχουσι δ’ αὗται τὴν δύναμιν πᾶσαι παραπλησίαν τυραννίσιν, εἰσὶ δὲ κατὰ νόμον καὶ πάτριαι· διὰ γὰρ τὸ δουλικώτεροι εἶναι τὰ ἦθη φύσει οἱ μὲν βάρβαροι τῶν Ἑλλήνων, οἱ δὲ περὶ τὴν Ἀσίαν τῶν περὶ τὴν Εὐρώπην, ὑπομένουσι τὴν δεσποτικὴν ἀρχὴν οὐδὲν δυσχεραίνοντες. τυραννικαὶ μὲν οὖν διὰ τὸ τοιοῦτόν εἰσιν, ἀσφαλεῖς δὲ διὰ τὸ πάτριαι καὶ κατὰ νόμον εἶναι. καὶ ἡ φυλακὴ δὲ βασιλικὴ καὶ οὐ τυραννικὴ διὰ τὴν αὐτὴν αἰτίαν. οἱ γὰρ πολῖται φυλάττουσιν ὅπλοις τοὺς βασιλεῖς, τοὺς δὲ τυράννους ξενικόν· οἱ μὲν γὰρ κατὰ νόμον καὶ ἐκόντων οἱ δ’ ἀκόντων ἄρχουσιν, ὥσθ’ οἱ μὲν παρὰ τῶν πολιτῶν οἱ δ’ ἐπὶ τοὺς πολίτας ἔχουσι τὴν φυλακὴν.

δύο μὲν οὖν εἶδη ταῦτα μοναρχίας, ἕτερον δ’ ὅπερ ἦν ἐν τοῖς ἀρχαίοις Ἑλλήσιν, οὓς καλοῦσιν αἰσυμνήτας. ἔστι δὲ τοῦθ’ ὡς ἀπλῶς εἰπεῖν αἰρετὴ τυραννίς, διαφέρουσα δὲ τῆς βαρβαρικῆς οὐ τῷ μὴ κατὰ νόμον ἀλλὰ τῷ μὴ πάτριος εἶναι μόνον. ἦρχον δ’ οἱ μὲν διὰ βίου τὴν ἀρχὴν ταύτην, οἱ δὲ μέχρι τινῶν ὠρισμένων χρόνων ἢ πράξεων, οἷον εἶλοντό ποτε Μυτιληναῖοι Πιπτακὸν πρὸς τοὺς φυγάδας ὧν προειστήκεσαν Ἀντιμενίδης καὶ Ἀλκαῖος ὁ ποιητής. δηλοῖ δ’ Ἀλκαῖος ὅτι τύραννον εἶλοντο τὸν Πιπτακὸν ἔν τινι τῶν σκολιῶν μελῶν· ἐπιτιμᾷ γὰρ ὅτι “τὸν κακοπάτριδα Πίπτακον πόλιος τᾶς ἀχόλῳ καὶ [1285b] βαρυδαίμονος ἐστάσαντο τύραννον μέγ’ ἐπαινέοντες ἀόλλεες”.

αὗται μὲν οὖν εἰσὶ τε καὶ ἦσαν διὰ μὲν τὸ δεσποτικαὶ εἶναι τυραννικαί, διὰ δὲ τὸ αἰρεταὶ καὶ ἐκόντων βασιλικαί· τέταρτον δ’ εἶδος μοναρχίας βασιλικῆς αἱ κατὰ τοὺς ἡρωικοὺς χρόνους ἐκούσiai τε καὶ πάτριαι γιγνόμεναι κατὰ νόμον. διὰ γὰρ τὸ τοὺς πρώτους γενέσθαι τοῦ πλήθους εὐεργέτας κατὰ τέχνας ἢ πόλεμον, ἢ διὰ τὸ συναγαγεῖν ἢ πορίσαι χώραν, ἐγίγνοντο βασιλεῖς ἐκόντων καὶ τοῖς παραλαμβάνουσι πάτριαι. κύριοι δ’ ἦσαν τῆς τε κατὰ πόλεμον ἡγεμονίας καὶ τῶν θυσιῶν, ὅσαι μὴ ἱερατικά, καὶ πρὸς τούτοις τὰς δίκας ἔκρινον. τοῦτο δ’ ἐποιοῦν οἱ μὲν οὐκ ὁμνύοντες οἱ δ’ ὁμνύοντες· ὁ δ’ ὅρκος ἦν τοῦ σκήπτρου ἐπανάτασις. οἱ μὲν οὖν ἐπὶ τῶν ἀρχαίων χρόνων καὶ τὰ κατὰ πόλιν καὶ τὰ ἔνδημα καὶ τὰ ὑπερόρια συνεχῶς ἦρχον· ὕστερον δὲ τὰ μὲν αὐτῶν παριέντων τῶν βασιλέων, τὰ δὲ τῶν ὀχλῶν παραιρουμένων, ἐν μὲν ταῖς ἄλλαις πόλεσιν αἱ θυσίαι κατελείφθησαν τοῖς βασιλεῦσι μόνον, ὅπου

δ' ἄξιον εἰπεῖν εἶναι βασιλείαν, ἐν τοῖς ὑπερορίοις τῶν πολεμικῶν τὴν ἡγεμονίαν μόνον εἶχον.

βασιλείας μὲν οὖν εἶδη ταῦτα, τέτταρα τὸν ἀριθμόν, μία μὲν ἡ περὶ τοὺς ἡρωικοὺς χρόνους (αὕτη δ' ἦν ἐκόντων μὲν, ἐπὶ τοῖς δ' ὠρισμένοις· στρατηγός τε γὰρ ἦν καὶ δικαστὴς ὁ βασιλεύς, καὶ τῶν πρὸς τοὺς θεοὺς κύριος), δευτέρα δ' ἡ βαρβαρική (αὕτη δ' ἐστὶν ἐκ γένους ἀρχὴ δεσποτική κατὰ νόμον), τρίτη δὲ ἦν αἰσυμνητεία προσαγορεύουσιν (αὕτη δ' ἐστὶν αἰρετὴ τυραννίς), τετάρτη δ' ἡ Λακωνικὴ τούτων (αὕτη δ' ἐστὶν ὡς εἰπεῖν ἀπλῶς στρατηγία κατὰ γένος αἰδίδιος). αὗται μὲν οὖν τοῦτον τὸν τρόπον διαφέρουσιν ἀλλήλων· πέμπτον δ' εἶδος βασιλείας, ὅταν ἡ πάντων κύριος εἷς ὢν, ὥσπερ ἕκαστον ἔθνος καὶ πόλις ἐκάστη τῶν κοινῶν, τεταγμένη κατὰ τὴν οἰκονομικήν. ὥσπερ γὰρ ἡ οἰκονομικὴ βασιλεία τις οἰκίας ἐστίν, οὕτως ἡ βασιλεία πόλεως καὶ ἔθνους ἐνὸς ἢ πλειόνων οἰκονομία. Σχεδὸν δὲ δύο ἐστὶν ὡς εἰπεῖν εἶδη βασιλείας περὶ ὧν σκεπτέον, αὕτη τε καὶ ἡ Λακωνική· τῶν γὰρ ἄλλων αἱ πολλαὶ μεταξὺ τούτων εἰσὶν· ἐλαττόνων μὲν γὰρ κύριοι τῆς παμβασιλείας, πλειόνων δ' εἰσὶ τῆς Λακωνικῆς. ὥστε τὸ σκέμμα σχεδὸν περὶ δυοῖν ἐστίν, ἐν μὲν πότερον συμφέρει ταῖς πόλεσι στρατηγὸν αἰδίδιον εἶναι, καὶ τοῦτον ἢ κατὰ γένος ἢ κατὰ μέρος, [1286a] ἢ οὐ συμφέρει, ἐν δὲ πότερον ἓνα συμφέρει κύριον εἶναι πάντων, ἢ οὐ συμφέρει. τὸ μὲν οὖν περὶ τῆς τοιαύτης στρατηγίας ἐπισκοπεῖν νόμων ἔχει μᾶλλον εἶδος ἢ πολιτείας (ἐν ἀπάσαις γὰρ ἐνδέχεται γίνεσθαι τοῦτο ταῖς πολιτείαις), ὥστ' ἀφείσθω τὴν πρώτην· ὁ δὲ λοιπὸς τρόπος τῆς βασιλείας πολιτείας εἰδός ἐστίν, ὥστε περὶ τούτου δεῖ θεωρῆσαι καὶ τὰς ἀπορίας ἐπιδραμεῖν τὰς ἐνούσας. ἀρχὴ δ' ἐστὶ τῆς ζητήσεως αὕτη, πότερον συμφέρει μᾶλλον ὑπὸ τοῦ ἀρίστου ἀνδρὸς ἄρχεσθαι ἢ ὑπὸ τῶν ἀρίστων νόμων.

δοκοῦσι δὲ τοῖς νομίζουσι συμφέρειν βασιλεύεσθαι τὸ καθόλου μόνον οἱ νόμοι λέγειν, ἄλλ' οὐ πρὸς τὰ προσπίπτοντα ἐπιτάττειν, ὥστ' ἐν ὁποιοῦν τέχνῃ τὸ κατὰ γράμματ' ἄρχειν ἡλίθιον· καὶ «εὖ» πως ἐν Αἰγύπτῳ μετὰ τὴν τετρήμερον κινεῖν ἔξεστι τοῖς ἰατροῖς (ἐὰν δὲ πρότερον, ἐπὶ τῷ αὐτοῦ κινδύνῳ). φανερόν τοίνυν ὡς οὐκ ἐστὶν ἡ κατὰ γράμματα καὶ νόμους ἀρίστη πολιτεία, διὰ τὴν αὐτὴν αἰτίαν. ἀλλὰ μὴν κάκεῖνον δεῖ ὑπάρχειν τὸν λόγον, τὸν καθόλου, τοῖς ἄρχουσιν. κρεῖττον δ' ὧ μὴ πρόσσεστι τὸ παθητικὸν ὅλως ἢ ὧ συμφυές· τῷ μὲν οὖν νόμῳ τοῦτο οὐχ ὑπάρχει, ψυχὴν δ' ἀνθρωπίνην ἀνάγκη τοῦτ' ἔχειν πᾶσαν. ἀλλ' ἴσως ἂν φαίη τις ὡς ἀντὶ τούτου βουλευσεται περὶ τῶν καθ' ἕκαστα κάλλιον. ὅτι μὲν τοίνυν ἀνάγκη νομοθέτην αὐτὸν εἶναι, δῆλον, καὶ κεῖσθαι νόμους, ἀλλὰ μὴ κυρίους ἢ παρεκβαίνουσιν, ἐπεὶ περὶ τῶν γ' ἄλλων εἶναι δεῖ κυρίους· ὅσα δὲ μὴ δυνατὸν τὸν νόμον κρίνειν ἢ ὅλως ἢ

εὔ, πότερον ἓνα τὸν ἄριστον δεῖ ἄρχειν ἢ πάντας; καὶ γὰρ νῦν συνιόντες δικάζουσι καὶ βουλευόνται καὶ κρίνουσιν, αὐταὶ δ' αἱ κρίσεις εἰσὶ πᾶσαι περὶ τῶν καθ' ἕκαστον. καθ' ἓνα μὲν οὖν συμβαλλόμενος ὅστισοῦν ἴσως χείρων· ἄλλ' ἐστὶν ἡ πόλις ἐκ πολλῶν, ὥσπερ ἐστίασις συμφορητὸς καλλίων μιᾶς καὶ ἀπλῆς· διὰ τοῦτο καὶ κρίνει ἄμεινον ὄχλος πολλὰ ἢ εἷς ὅστισοῦν.

ἔτι μᾶλλον ἀδιάφθορον τὸ πολὺ - καθάπερ ὕδωρ τὸ πλεῖον, οὕτω καὶ τὸ πλῆθος τῶν ὀλίγων ἀδιαφθορώτερον· τοῦ δ' ἐνὸς ὑπ' ὀργῆς κρατηθέντος ἢ τινος ἑτέρου πάθους τοιοῦτου ἀναγκαῖον διεφθάρθαι τὴν κρίσιν, ἐκεῖ δ' ἔργον ἅμα πάντας ὀργισθῆναι καὶ ἁμαρτεῖν. ἔστω δὲ τὸ πλῆθος οἱ ἐλεύθεροι, μηδὲν παρὰ τὸν νόμον πράττοντες ἄλλ' ἢ περὶ ὧν ἐκλείπειν ἀναγκαῖον αὐτόν. εἰ δὲ δὴ τοῦτο μὴ ῥᾶδιον ἐν πολλοῖς, ἀλλ' εἰ πλείους εἶεν ἀγαθοὶ καὶ ἄνδρες καὶ πολῖται, πότερον ὁ εἷς ἀδιαφθορώτερος ἄρχων, ἢ μᾶλλον οἱ πλείους μὲν τὸν ἀριθμὸν ἀγαθοὶ [1286b] δὲ πάντες; ἢ δῆλον ὡς οἱ πλείους; “ἀλλ' οἱ μὲν στασιάσουσιν ὁ δὲ εἷς ἀστασίαστος.” ἀλλὰ πρὸς τοῦτ' ἀντιθετέον ἴσως ὅτι σπουδαῖοι τὴν ψυχὴν, ὥσπερ κἀκεῖνος ὁ εἷς. εἰ δὴ τὴν μὲν τῶν πλειόνων ἀρχὴν ἀγαθῶν δ' ἀνδρῶν πάντων ἀριστοκρατίαν θετέον, τὴν δὲ τοῦ ἐνὸς βασιλείαν, αἰρετώτερον ἂν εἴη ταῖς πόλεσιν ἀριστοκρατία βασιλείας, καὶ μετὰ δυνάμεως καὶ χωρὶς δυνάμεως οὔσης τῆς ἀρχῆς, ἂν ἢ λαβεῖν πλείους ὁμοίους. καὶ διὰ τοῦτ' ἴσως ἐβασιλεύοντο πρότερον, ὅτι σπάνιον ἦν εὑρεῖν ἄνδρας πολὺ διαφέροντας κατ' ἀρετὴν, ἄλλως τε καὶ τότε μικρὰς οἰκοῦντας πόλεις. ἔτι δ' ἀπ' εὐεργεσίας καθίστασαν τοὺς βασιλεῖς, ὅπερ ἐστὶν ἔργον τῶν ἀγαθῶν ἀνδρῶν. ἐπεὶ δὲ συνέβαινε γίνεσθαι πολλοὺς ὁμοίους πρὸς ἀρετὴν, οὐκέτι ὑπέμενον ἄλλ' ἐζήτουν κοινόν τι καὶ πολιτείαν καθίστασαν. ἐπεὶ δὲ χείρους γιγνόμενοι ἐχρηματίζοντο ἀπὸ τῶν κοινῶν, ἐντεῦθεν ποθεν εὐλογον γενέσθαι τὰς ὀλιγαρχίας· ἔντιμον γὰρ ἐποίησαν τὸν πλοῦτον. ἐκ δὲ τούτων πρῶτον εἰς τυραννίδας μετέβαλλον, ἐκ δὲ τῶν τυραννίδων εἰς δημοκρατίαν· αἰεὶ γὰρ εἰς ἐλάττους ἄγοντες δι' αἰσχροκέρδειαν ἰσχυρότερον τὸ πλῆθος κατέστησαν, ὥστ' ἐπιθέσθαι καὶ γενέσθαι δημοκρατίας. ἐπεὶ δὲ καὶ μείζους εἶναι συμβέβηκε τὰς πόλεις, ἴσως οὐδὲ ῥᾶδιον ἔτι γίνεσθαι πολιτείαν ἑτέραν παρὰ δημοκρατίαν.

εἰ δὲ δὴ τις ἄριστον θεῖη τὸ βασιλεύεσθαι ταῖς πόλεσιν, πῶς ἔξει τὰ περὶ τῶν τέκνων; πότερον καὶ τὸ γένος δεῖ βασιλεύειν; ἀλλὰ γιγνομένων ὁποῖοί τινες ἔτυχον, βλαβερόν. “ἀλλ' οὐ παραδώσει κύριος ὧν τοῖς τέκνοις.” ἀλλ' οὐκ ἔτι τοῦτο ῥᾶδιον πιστεῦσαι· χαλεπὸν γάρ, καὶ μείζονος ἀρετῆς ἢ κατ' ἀνθρωπίνην φύσιν. ἔχει δ' ἀπορίαν καὶ περὶ τῆς δυνάμεως, πότερον ἔχειν δεῖ τὸν μέλλοντα βασιλεύειν ἰσχύν τινα περὶ αὐτόν, ἢ δυνήσεται βιάζεσθαι τοὺς μὴ βουλομένους πειθαρχεῖν, ἢ πῶς ἐνδέχεται τὴν ἀρχὴν διοικεῖν; εἰ γὰρ καὶ

κατὰ νόμον εἶη κύριος, μηδὲν πράττων κατὰ τὴν αὐτοῦ βούλησιν παρὰ τὸν νόμον, ὅμως ἀναγκαῖον ὑπάρχειν αὐτῷ δύναμιν ἢ φυλάξει τοὺς νόμους. τάχα μὲν οὖν τὰ περὶ τὸν βασιλέα τὸν τοιοῦτον οὐ χαλεπὸν διορίσαι· δεῖ γὰρ αὐτὸν μὲν ἔχειν ἰσχύν, εἶναι δὲ τοσαύτην τὴν ἰσχὺν ὥστε ἐκάστου μὲν καὶ ἑνὸς καὶ συμπλειόνων κρείττω τοῦ δὲ πλήθους ἦττω «καθεστάναι», καθάπερ οἱ τ' ἀρχαῖοι τὰς φυλακὰς ἐδίδουσιν, ὅτε καθισταῖεν τινα τῆς πόλεως ὃν ἐκάλουν αἰσυμνήτην ἢ τύραννον, καὶ Διονυσίῳ τις, ὅτ' ἦται τοὺς φύλακας, συνεβούλευε τοῖς Συρακουσίοις δίδοναι τοσούτους τοὺς φύλακας.

[1287a] Περὶ δὲ τοῦ βασιλέως τοῦ κατὰ τὴν αὐτοῦ βούλησιν πάντα πράττοντος ὅ τε λόγος ἐφέστηκε νῦν καὶ ποιητέον τὴν σκέψιν. ὁ μὲν γὰρ κατὰ νόμον λεγόμενος βασιλεὺς οὐκ ἔστιν εἶδος, καθάπερ εἵπομεν, πολιτείας (ἐν πάσαις γὰρ ὑπάρχειν ἐνδέχεται στρατηγίαν αἰδίων, οἷον ἐν δημοκρατίᾳ καὶ ἀριστοκρατίᾳ, καὶ πολλοὶ ποιοῦσιν ἓνα κύριον τῆς διοικήσεως· τοιαύτη γὰρ ἀρχή τις ἔστι καὶ περὶ Ἐπίδαμνον, καὶ περὶ Ὀποῦντα δὲ κατὰ τι μέρος ἔλαττον)· περὶ δὲ τῆς παμβασιλείας καλουμένης (αὕτη δ' ἐστὶ καθ' ἣν ἄρχει πάντα κατὰ τὴν ἑαυτοῦ βούλησιν ὁ βασιλεὺς) δοκεῖ [δέ] τισιν οὐδὲ κατὰ φύσιν εἶναι τὸ κύριον ἓνα πάντων εἶναι τῶν πολιτῶν, ὅπου συνέστηκεν ἐξ ὁμοίων ἢ πόλις· τοῖς γὰρ ὁμοίοις φύσει τὸ αὐτὸ δίκαιον ἀναγκαῖον καὶ τὴν αὐτὴν ἀξίαν κατὰ φύσιν εἶναι, ὥστ' εἴπερ καὶ τὸ ἴσην ἔχειν τοὺς ἀνίσους τροφήν ἢ ἐσθῆτα βλαβερὸν τοῖς σώμασιν, οὕτως ἔχει καὶ τὰ περὶ τὰς τιμὰς· ὁμοίως τοίνυν καὶ τὸ ἀνίσον τοὺς ἴσους· διόπερ οὐδὲν μᾶλλον ἄρχειν ἢ ἄρχεσθαι δίκαιον, καὶ τὸ ἀνὰ μέρος τοίνυν ὡσαύτως. τοῦτο δ' ἤδη νόμος· ἢ γὰρ τάξις νόμος. τὸν ἄρα νόμον ἄρχειν αἰρετώτερον μᾶλλον ἢ τῶν πολιτῶν ἓνα τινά, κατὰ τὸν αὐτὸν δὲ λόγον τοῦτον, κἂν εἴ τις ἄρχειν βέλτιον, τούτους καταστατέον νομοφύλακας καὶ ὑπηρετάς τοῖς νόμοις· ἀναγκαῖον γὰρ εἶναί τινας ἀρχάς, ἀλλ' οὐχ ἓνα τοῦτον εἶναί φασι δίκαιον, ὁμοίων γε ὄντων πάντων. ἀλλὰ μὴν ὅσα γε μὴ δοκεῖ δύνασθαι διορίζειν ὁ νόμος, οὐδ' ἄνθρωπος ἂν δύναιτο γνωρίζειν. ἀλλ' ἐπίτηδες παιδεύσας ὁ νόμος ἐφίστησι τὰ λοιπὰ τῇ δικαιοτάτῃ γνώμῃ κρίνειν καὶ διοικεῖν τοὺς ἄρχοντας. ἔτι δ' ἐπανορθοῦσθαι δίδωσιν ὅ τι ἂν δόξῃ πειρωμένοις ἄμεινον εἶναι τῶν κειμένων. ὁ μὲν οὖν τὸν νόμον κελεύων ἄρχειν δοκεῖ κελεύειν ἄρχειν τὸν θεὸν καὶ τὸν νοῦν μόνους, ὁ δ' ἄνθρωπον κελεύων προστίθησι καὶ θηρίον· ἢ τε γὰρ ἐπιθυμία τοιοῦτον, καὶ ὁ θυμὸς ἄρχοντας διαστρέφει καὶ τοὺς ἀρίστους ἄνδρας. διόπερ ἄνευ ὀρέξεως νοῦς ὁ νόμος ἐστίν. τὸ δὲ τῶν τεχνῶν εἶναι δοκεῖ παράδειγμα ψεῦδος, ὅτι τὸ κατὰ γράμματα ἰατρεύεσθαι φαῦλον, ἀλλὰ αἰρετώτερον χρῆσθαι τοῖς ἔχουσι τὰς τέχνας. οἱ μὲν γὰρ οὐδὲν διὰ φιλίαν παρὰ τὸν λόγον ποιοῦσιν, ἀλλ' ἄρνηνται τὸν μισθὸν τοὺς κάμνοντας ὑγιάσαντες· οἱ δ' ἐν ταῖς πολιτικαῖς ἀρχαῖς πολλὰ πρὸς ἐπήρειαν καὶ χάριν

εἰώθασι πράττειν, ἐπεὶ καὶ τοὺς ἰατροὺς ὅταν ὑποπτεύωσι πεισθέντας τοῖς ἐχθροῖς διαφθεῖρουν διὰ κέρδος, τότε τὴν ἐκ τῶν γραμμάτων θεραπείαν ζητήσασιν ἂν μᾶλλον. ἀλλὰ μὴν εἰσάγονται γ' ἐφ' ἑαυτοὺς [1287b] οἱ ἰατροὶ κάμνοντες ἄλλους ἰατροὺς καὶ οἱ παιδοτρίβαι γυμναζόμενοι παιδοτρίβας, ὡς οὐ δύναμενοι κρίνουν τὸ ἀληθὲς διὰ τὸ κρίνουν περὶ τε οἰκείων καὶ ἐν πάθει ὄντες. ὥστε δῆλον ὅτι τὸ δίκαιον ζητοῦντες τὸ μέσον ζητοῦσιν· ὁ γὰρ νόμος τὸ μέσον. ἔτι κυριώτεροι καὶ περὶ κυριωτέρων τῶν κατὰ γράμματα νόμων οἱ κατὰ τὰ ἔθνη εἰσὶν, ὥστ' εἰ τῶν κατὰ γράμματα ἄνθρωπος ἄρχων ἀσφαλέστερος, ἀλλ' οὐ τῶν κατὰ τὸ ἔθος.

ἀλλὰ μὴν οὐδὲ ῥάδιον ἐφορᾶν πολλὰ τὸν ἕνα· δεήσει ἄρα πλείονας εἶναι τοὺς ὑπ' αὐτοῦ καθισταμένους ἄρχοντας, ὥστε τί διαφέρει τοῦτο ἐξ ἀρχῆς εὐθὺς ὑπάρχειν ἢ τὸν ἕνα καταστήσαι τοῦτον τὸν τρόπον; ἔτι, ὃ καὶ πρότερον εἰρημένον ἐστίν, εἴπερ ὁ ἀνὴρ ὁ σπουδαῖος, διότι βελτίων, ἄρχειν δίκαιος, τοῦ γε ἐνὸς οἱ δύο ἀγαθοὶ βελτίους· τοῦτο γὰρ ἐστὶ τὸ “σύν τε δύο ἐρχομένω” καὶ ἡ εὐχὴ τοῦ Ἀγαμέμνονος “τοιοῦτοι δέκα μοι συμφράδμονες”. εἰσὶ δὲ καὶ νῦν περὶ ἐνίων αἱ ἀρχαὶ κύρια κρίνουν, ὥσπερ ὁ δικαστής, περὶ ὧν ὁ νόμος ἀδυνατεῖ διορίζειν, ἐπεὶ περὶ ὧν γε δυνατός, οὐδεὶς ἀμφισβητεῖ περὶ τούτων ὡς οὐκ ἂν ἄριστα ὁ νόμος ἄρξειε καὶ κρίνειεν. ἀλλ' ἐπειδὴ τὰ μὲν ἐνδέχεται περιληφθῆναι τοῖς νόμοις τὰ δὲ ἀδύνατα, ταῦτ' ἐστὶν ἃ ποιεῖ διαπορεῖν καὶ ζητεῖν πότερον τὸν ἄριστον νόμον ἄρχειν αἰρετώτερον ἢ τὸν ἄνδρα τὸν ἄριστον· περὶ ὧν γὰρ βουλευόνται νομοθετῆσαι τῶν ἀδυνάτων ἐστίν. οὐ τοίνυν τοῦτό γ' ἀντιλέγουσιν, ὡς οὐκ ἀναγκαῖον ἄνθρωπον εἶναι τὸν κρινοῦντα περὶ τῶν τοιούτων, ἀλλ' ὅτι οὐχ ἕνα μόνον ἀλλὰ πολλούς.

κρίνει γὰρ ἕκαστος ἄρχων πεπαιδευμένος ὑπὸ τοῦ νόμου καλῶς, ἅτοπον τ' ἴσως ἂν εἶναι δόξειεν εἰ βέλτιον ἴδοι τις δυοῖν ὄμμασι καὶ δυσὶν ἀκοαῖς κρίνων, καὶ πράττων δυσὶ ποσὶ καὶ χερσίν, ἢ πολλοὶ πολλοῖς. ἐπεὶ καὶ νῦν ὀφθαλμοὺς πολλοὺς οἱ μόναρχοι ποιοῦσιν αὐτῶν καὶ ὦτα καὶ χεῖρας καὶ πόδας· τοὺς γὰρ τῇ ἀρχῇ καὶ αὐτοῖς φίλους ποιοῦνται συνάρχους. μὴ φίλοι μὲν οὖν ὄντες οὐ ποιήσουσι κατὰ τὴν τοῦ μονάρχου προαίρεσιν· εἰ δὲ φίλοι κἀκείνου καὶ τῆς ἀρχῆς, ὃ γε φίλος ἴσος καὶ ὅμοιος, ὥστ' εἰ τούτους οἶεται δεῖν ἄρχειν, τοὺς ἴσους καὶ ὁμοίους ἄρχειν οἶεται δεῖν ὁμοίως. ἃ μὲν οὖν οἱ διαμφισβητοῦντες πρὸς τὴν βασιλείαν λέγουσι, σχεδὸν ταῦτ' ἐστίν. Ἀλλ' ἴσως ταῦτ' ἐπὶ μὲν τινῶν ἔχει τὸν τρόπον τοῦτον, ἐπὶ δὲ τινῶν οὐχ οὕτως. ἔστι γὰρ τι φύσει δεσποτικὸν καὶ ἄλλο βασιλευτικὸν καὶ ἄλλο πολιτικὸν καὶ δίκαιον καὶ συμφέρον· τυραννικὸν δ' οὐκ ἔστι κατὰ φύσιν, οὐδὲ τῶν ἄλλων πολιτειῶν ὅσαι παρεκβάσεις εἰσὶ· ταῦτα γὰρ γίνεται παρὰ φύσιν. ἀλλ' ἐκ τῶν εἰρημένων [1288a] γε φανερόν ὡς ἐν μὲν τοῖς ὁμοίοις καὶ ἴσοις οὔτε

συμφέρον ἐστὶν οὔτε δίκαιον ἓνα κύριον εἶναι πάντων, οὔτε μὴ νόμων ὄντων, ἀλλ' ὡς αὐτὸν ὄντα νόμον, οὔτε νόμων ὄντων, οὔτε ἀγαθὸν ἀγαθῶν οὔτε μὴ ἀγαθῶν μὴ ἀγαθόν, οὐδ' ἂν κατ' ἀρετὴν ἀμείνων ἦ, εἰ μὴ τρόπον τινά. τίς δ' ὁ τρόπος, λεκτέον· εἴρηται δέ πως ἤδη καὶ πρότερον.

πρῶτον δὲ διοριστέον τί τὸ βασιλευτὸν καὶ τί τὸ ἀριστοκρατικὸν καὶ τί τὸ πολιτικόν. βασιλευτὸν μὲν οὖν τὸ τοιοῦτόν ἐστι πλῆθος ὃ πέφυκε φέρειν γένος ὑπερέχον κατ' ἀρετὴν πρὸς ἡγεμονίαν πολιτικὴν, ἀριστοκρατικὸν δὲ πλῆθος ὃ πέφυκε φέρειν γένος ἄρχεσθαι δυνάμενον τὴν τῶν ἐλευθέρων ἀρχὴν ὑπὸ τῶν κατ' ἀρετὴν ἡγεμονικῶν πρὸς πολιτικὴν ἀρχήν, πολιτικὸν δὲ πλῆθος ἐν ᾧ πέφυκε ἐγγίνεσθαι γένος πολιτικὸν δυνάμενον ἄρχεσθαι καὶ ἄρχειν κατὰ νόμον τὸν κατ' ἀξίαν διανέμοντα τοῖς εὐπόροις τὰς ἀρχάς. ὅταν οὖν ἡ γένος ὅλον ἢ καὶ τῶν ἄλλων ἓνα τινὰ συμβῇ διαφέροντα γενέσθαι κατ' ἀρετὴν τοσοῦτον ὥσθ' ὑπερέχειν τὴν ἐκείνου τῆς τῶν ἄλλων πάντων, τότε δίκαιον τὸ γένος εἶναι τοῦτο βασιλικὸν καὶ κύριον πάντων, καὶ βασιλέα τὸν ἓνα τοῦτον. καθάπερ γὰρ εἴρηται πρότερον, οὐ μόνον οὕτως ἔχει κατὰ τὸ δίκαιον ὃ προφέρειν εἰώθασιν οἱ τὰς πολιτείας καθιστάντες, οἳ τε τὰς ἀριστοκρατικάς καὶ οἱ τὰς ὀλιγαρχικάς καὶ πάλιν οἱ τὰς δημοκρατικάς (πάντες γὰρ καθ' ὑπεροχὴν ἀξιοῦσιν, ἀλλὰ ὑπεροχὴν οὐ τὴν αὐτήν), ἀλλὰ καὶ κατὰ τὸ πρότερον λεχθέν. οὔτε γὰρ κτείνειν ἢ φυγαδεύειν οὐδ' ὀστρακίζειν δὴ που τὸν τοιοῦτον πρέπον ἐστίν, οὔτ' ἀξιοῦν ἄρχεσθαι κατὰ μέρος· οὐ γὰρ πέφυκε τὸ μέρος ὑπερέχειν τοῦ παντός, τῷ δὲ τὴν τηλικαύτην ὑπερβολὴν ἔχοντι τοῦτο συμβέβηκεν. ὥστε λείπεται μόνον τὸ πείθεσθαι τῷ τοιούτῳ καὶ κύριον εἶναι μὴ κατὰ μέρος τοῦτον ἀλλ' ἀπλῶς. περὶ μὲν οὖν βασιλείας, τίνας ἔχει διαφοράς, καὶ πότερον οὐ συμφέρει ταῖς πόλεσιν ἢ συμφέρει, καὶ τίσι, καὶ πῶς, διωρίσθω τὸν τρόπον τοῦτον. Ἐπεὶ δὲ τρεῖς φαμεν εἶναι τὰς ὀρθὰς πολιτείας, τούτων δ' ἀναγκαῖον ἀρίστην εἶναι τὴν ὑπὸ τῶν ἀρίστων οἰκονομουμένην, τοιαύτη δ' ἐστὶν ἐν ᾗ συμβέβηκεν ἢ ἓνα τινὰ συμπάντων ἢ γένος ὅλον ἢ πλῆθος ὑπερέχον εἶναι κατ' ἀρετὴν, τῶν μὲν ἄρχεσθαι δυναμένων τῶν δ' ἄρχειν πρὸς τὴν αἰρετωτάτην ζωὴν, ἐν δὲ τοῖς πρώτοις ἐδείχθη λόγοις ὅτι τὴν αὐτὴν ἀναγκαῖον ἀνδρὸς ἀρετὴν εἶναι καὶ πολίτου τῆς πόλεως τῆς ἀρίστης, φανερόν ὅτι τὸν αὐτὸν τρόπον καὶ διὰ τῶν αὐτῶν ἀνὴρ τε γίνεται σπουδαῖος καὶ πόλιν συστήσειεν ἂν τις ἀριστοκρατουμένην ἢ βασιλευομένην, ὥστ' ἔσται [1288b] καὶ παιδεία καὶ ἔθνη ταῦτά σχεδὸν τὰ ποιοῦντα ἄνδρα καὶ τὰ ποιοῦντα πολιτικὸν καὶ βασιλικόν. διωρισμένων δὲ τούτων περὶ τῆς πολιτείας ἤδη πειρατέον λέγειν τῆς ἀρίστης, τίνα πέφυκε γίνεσθαι τρόπον καὶ καθίστασθαι πῶς. [ἀνάγκη δὲ τὸν μέλλοντα περὶ αὐτῆς ποιήσασθαι τὴν προσήκουσαν σκέψιν.]

## Δ

Ἐν ἀπάσαις ταῖς τέχναις καὶ ταῖς ἐπιστήμαις ταῖς μὴ κατὰ μόριον γινομέναις, ἀλλὰ περὶ γένος ἓν τι τελείαις οὐσαις, μιᾶς ἐστὶ θεωρῆσαι τὸ περὶ ἕκαστον γένος ἀρμόττον, οἷον ἄσκησις σώματι ποία τε ποίῳ συμφέρει, καὶ τίς ἀρίστη (τῷ γὰρ κάλλιστα πεφυκότι καὶ κεχορηγημένῳ τὴν ἀρίστην ἀναγκαῖον ἀρμόττειν), καὶ τίς τοῖς πλείστοις μία πᾶσιν (καὶ γὰρ τοῦτο τῆς γυμναστικῆς ἔργον ἐστίν), ἔτι δ' ἐάν τις μὴ τῆς ἱκνουμένης ἐπιθυμῇ μήθ' ἔξωθεν μήτ' ἐπιστήμης τῶν περὶ τὴν ἀγωνίαν, οὐθὲν ἦττον τοῦ παιδοτρίβου καὶ τοῦ γυμναστικοῦ παρασκευάσαι γε καὶ ταύτην ἐστὶ τὴν δύναμιν. ὁμοίως δὲ τοῦτο καὶ περὶ ἰατρικὴν καὶ περὶ ναυπηγίαν καὶ ἐσθῆτα καὶ περὶ πᾶσαν ἄλλην τέχνην ὁρῶμεν συμβαῖνον. ὥστε δῆλον ὅτι καὶ πολιτείαν τῆς αὐτῆς ἐστὶν ἐπιστήμης τὴν ἀρίστην θεωρῆσαι τίς ἐστὶ καὶ ποία τις ἂν οὐσα μάλιστ' εἴη κατ' εὐχὴν μηδενὸς ἐμποδίζοντος τῶν ἐκτός, καὶ τίς τίσιν ἀρμόττουσα (πολλοῖς γὰρ τῆς ἀρίστης τυχεῖν ἴσως ἀδύνατον, ὥστε τὴν κρατίστην τε ἀπλῶς καὶ τὴν ἐκ τῶν ὑποκειμένων ἀρίστην οὐ δεῖ λεληθῆναι τὸν ἀγαθὸν νομοθέτην καὶ τὸν ὡς ἀληθῶς πολιτικόν), ἔτι δὲ τρίτην τὴν ἐξ ὑποθέσεως (δεῖ γὰρ καὶ τὴν δοθεῖσαν δύνασθαι θεωρεῖν, ἐξ ἀρχῆς τε πῶς ἂν γένοιτο, καὶ γενομένη τίνα τρόπον ἂν σώζοιτο πλεῖστον χρόνον· λέγω δὲ οἷον εἴ τιτι πόλει συμβέβηκε μήτε τὴν ἀρίστην πολιτεύεσθαι πολιτείαν, ἀχορήγητον δὲ εἶναι καὶ τῶν ἀναγκαίων, μήτε τὴν ἐνδεχομένην ἐκ τῶν ὑπαρχόντων, ἀλλὰ τίνα φαυλοτέραν), παρὰ πάντα δὲ ταῦτα τὴν μάλιστα πάσαις ταῖς πόλεσιν ἀρμόττουσαν δεῖ γνωρίζειν, ὥσθ' οἱ πλεῖστοι τῶν ἀποφαινομένων περὶ πολιτείας, καὶ εἰ τᾶλλα λέγουσι καλῶς, τῶν γε χρησίων διαμαρτάνουσιν. οὐ γὰρ μόνον τὴν ἀρίστην δεῖ θεωρεῖν, ἀλλὰ καὶ τὴν δυνατὴν, ὁμοίως δὲ καὶ τὴν ῥᾶω καὶ κοινοτέραν ἀπάσαις· νῦν δ' οἱ μὲν τὴν ἀκροτάτην καὶ δεομένην πολλῆς χορηγίας ζητοῦσι μόνον, οἱ δὲ μᾶλλον κοινὴν τίνα λέγοντες, τὰς ὑπαρχούσας ἀναιροῦντες πολιτείας, τὴν Λακωνικὴν [1289a] ἢ τίνα ἄλλην ἐπαινοῦσι· χρὴ δὲ τοιαύτην εἰσηγεῖσθαι τάξιν ἣν ῥαδίως ἐκ τῶν ὑπαρχουσῶν καὶ πεισθήσονται καὶ δυνήσονται καινίζειν, ὥστ' ἐστὶν οὐκ ἔλαττον ἔργον τὸ ἐπανορθῶσαι πολιτείαν ἢ κατασκευάζειν ἐξ ἀρχῆς, ὥσπερ καὶ τὸ μεταμανθάνειν ἢ μανθάνειν ἐξ ἀρχῆς· διὸ πρὸς τοῖς εἰρημένοις καὶ ταῖς ὑπαρχούσαις πολιτείαις δεῖ δύνασθαι βοηθεῖν τὸν πολιτικόν, καθάπερ ἐλέχθη καὶ πρότερον. τοῦτο δὲ ἀδύνατον ἀγνοοῦντα πόσα πολιτείας ἐστὶν εἶδη. νῦν δὲ μίαν δημοκρατίαν οἶονταί τινες εἶναι καὶ μίαν ὀλιγαρχίαν· οὐκ ἔστι δὲ τοῦτ' ἀληθές. ὥστε δεῖ τὰς διαφορὰς μὴ λανθάνειν τὰς τῶν πολιτειῶν, πόσαι, καὶ συντίθενται ποσαχῶς, ἔστι δὲ τῆς αὐτῆς φρονήσεως ταύτης καὶ νόμους τοὺς ἀρίστους ἰδεῖν καὶ τοὺς ἐκάστη τῶν πολιτειῶν ἀρμόττοντας. πρὸς γὰρ



τὰς πολιτείας τοὺς νόμους δεῖ τίθεσθαι καὶ τίθενται πάντες, ἀλλ' οὐ τὰς πολιτείας πρὸς τοὺς νόμους. πολιτεία μὲν γὰρ ἐστὶ τάξις ταῖς πόλεσιν ἢ περὶ τὰς ἀρχάς, τίνα τρόπον νενέμηνται, καὶ τί τὸ κύριον τῆς πολιτείας καὶ τί τὸ τέλος ἐκάστης τῆς κοινωνίας ἐστίν· νόμοι δ' οἱ κεχωρισμένοι τῶν δηλούντων τὴν πολιτείαν, καθ' οὓς δεῖ τοὺς ἄρχοντας ἄρχειν καὶ φυλάττειν τοὺς παραβαίνοντας αὐτούς. ὥστε δῆλον ὅτι τὰς διαφορὰς ἀναγκαῖον καὶ τὸν ὀρισμὸν ἔχειν τῆς πολιτείας ἐκάστης καὶ πρὸς τὰς τῶν νόμων θέσεις· οὐ γὰρ οἷόν τε τοὺς αὐτοὺς νόμους συμφέρειν ταῖς ὀλιγαρχίαις οὐδὲ ταῖς δημοκρατίαις πάσαις, εἴπερ δὴ πλείους καὶ μὴ μία δημοκρατία μηδὲ ὀλιγαρχία μόνον ἔστιν.

Ἐπεὶ δ' ἐν τῇ πρώτῃ μεθόδῳ περὶ τῶν πολιτειῶν διειλόμεθα τρεῖς μὲν τὰς ὀρθὰς πολιτείας, βασιλείαν ἀριστοκρατίαν πολιτείαν, τρεῖς δὲ τὰς τούτων παρεκβάσεις, τυραννίδα μὲν βασιλείας ὀλιγαρχίαν δὲ ἀριστοκρατίας δημοκρατίαν δὲ πολιτείας, καὶ περὶ μὲν ἀριστοκρατίας καὶ βασιλείας εἴρηται (τὸ γὰρ περὶ τῆς ἀρίστης πολιτείας θεωρῆσαι ταῦτό καὶ περὶ τούτων ἐστὶν εἰπεῖν τῶν ὀνομάτων· βούλεται γὰρ ἐκάτερα κατ' ἀρετὴν συνεστάναι κεχωρηγημένην), ἔτι δὲ τί διαφέρουσιν ἀλλήλων ἀριστοκρατία καὶ βασιλεία, καὶ πότε δεῖ βασιλείαν νομίζειν, διώριστα πρότερον, λοιπὸν περὶ πολιτείας διελθεῖν τῆς τῷ κοινῷ προσαγορευομένης ὀνόματι, καὶ περὶ τῶν ἄλλων πολιτειῶν, ὀλιγαρχίας τε καὶ δημοκρατίας καὶ τυραννίδος. φανερόν μὲν οὖν καὶ τούτων τῶν παρεκβάσεων τίς χειρίστη καὶ δευτέρα τίς. ἀνάγκη γὰρ τὴν μὲν τῆς πρώτης καὶ θειοτάτης παρέκβασιν εἶναι χειρίστην, τὴν δὲ βασιλείαν ἀναγκαῖον ἢ τοῦνομα μόνον ἔχειν οὐκ [1289b] οὔσαν, ἢ διὰ πολλὴν ὑπεροχὴν εἶναι τὴν τοῦ βασιλεύοντος· ὥστε τὴν τυραννίδα χειρίστην οὔσαν πλεῖστον ἀπέχειν πολιτείας, δευτέρον δὲ τὴν ὀλιγαρχίαν (ἢ γὰρ ἀριστοκρατία διέστηκεν ἀπὸ ταύτης πολὺ τῆς πολιτείας), μετριωτάτην δὲ τὴν δημοκρατίαν. ἤδη μὲν οὖν τις ἀπεφάνητο καὶ τῶν πρότερον οὕτως, οὐ μὴν εἰς ταῦτό βλέψας ἡμῖν. ἐκεῖνος μὲν γὰρ ἔκρινε πασῶν μὲν οὐσῶν ἐπιεικῶν, οἷον ὀλιγαρχίας τε χρηστῆς καὶ τῶν ἄλλων, χειρίστην δημοκρατίαν, φαύλων δὲ ἀρίστην· ἡμεῖς δὲ ὅλως ταύτας ἐξημαρτημένας εἶναί φαμεν, καὶ βελτίω μὲν ὀλιγαρχίαν ἄλλην ἄλλης οὐ καλῶς ἔχειν λέγειν, ἥττον δὲ φαύλην. ἀλλὰ περὶ μὲν τῆς τοιαύτης κρίσεως ἀφείσθω τὰ νῦν· ἡμῖν δὲ πρῶτον μὲν διαιρετέον πόσαι διαφοραὶ τῶν πολιτειῶν, εἴπερ ἔστιν εἶδη πλείονα τῆς τε δημοκρατίας καὶ τῆς ὀλιγαρχίας, ἔπειτα τίς κοινοτάτη καὶ τίς αἰρετωτάτη μετὰ τὴν ἀρίστην πολιτείαν, κἂν εἴ τις ἄλλη τετύχηκεν ἀριστοκρατικὴ καὶ συνεστῶσα καλῶς, ἅμα δὲ ταῖς πλείσταις ἀρμόττουσα πόλεσι, τίς ἐστίν, ἔπειτα καὶ τῶν ἄλλων τίς τίσιν αἰρετή (τάχα γὰρ τοῖς μὲν ἀναγκαῖα δημοκρατία μᾶλλον ὀλιγαρχίας, τοῖς δ' αὖτῃ μᾶλλον ἐκείνης), μετὰ δὲ ταῦτα τίνα τρόπον δεῖ καθιστάναι τὸν

βουλόμενον ταύτας τὰς πολιτείας, λέγω δὲ δημοκρατίας τε καθ' ἕκαστον εἶδος καὶ πάλιν ὀλιγαρχίας· τέλος δέ, πάντων τούτων ὅταν ποιησώμεθα συντόμως τὴν ἐνδεχομένην μνείαν, πειρατέον ἐπελθεῖν τίνες φθοραὶ καὶ τίνες σωτηρίαι τῶν πολιτειῶν καὶ κοινῇ καὶ χωρὶς ἑκάστης, καὶ διὰ τίνας αἰτίας ταῦτα μάλιστα γίνεσθαι πέφυκεν.

Τοῦ μὲν οὖν εἶναι πλείους πολιτείας αἴτιον ὅτι πάσης ἔστι μέρη πλείω πόλεως τὸν ἀριθμόν. πρῶτον μὲν γὰρ ἐξ οἰκιῶν συγκειμένας πάσας ὁρῶμεν τὰς πόλεις, ἔπειτα πάλιν τούτου τοῦ πλήθους τοὺς μὲν εὐπόρους ἀναγκαῖον εἶναι τοὺς δ' ἀπόρους τοὺς δὲ μέσους, καὶ τῶν εὐπόρων δὲ καὶ τῶν ἀπόρων τὸ μὲν ὀπλιτικὸν τὸ δὲ ἄνοπλον. καὶ τὸν μὲν γεωργικὸν δῆμον ὁρῶμεν ὄντα, τὸν δ' ἀγοραῖον, τὸν δὲ βάνουσον. καὶ τῶν γνωρίμων εἰσὶ διαφοραὶ καὶ κατὰ τὸν πλοῦτον καὶ τὰ μεγέθη τῆς οὐσίας, οἷον ἵπποτροφίας (τοῦτο γὰρ οὐ ῥάδιον μὴ πλουτοῦντας ποιεῖν· διόπερ ἐπὶ τῶν ἀρχαίων χρόνων ὅσαις πόλεσιν ἐν τοῖς ἵπποις ἡ δύναμις ἦν, ὀλιγαρχίαι παρὰ τούτοις ἦσαν· ἐχρῶντο δὲ πρὸς τοὺς πολέμους ἵπποις πρὸς τοὺς ἀστυγείτονας, οἷον Ἑρετριεῖς καὶ Χαλκιδεῖς καὶ Μάγνητες οἱ ἐπὶ Μαιάνδρῳ καὶ τῶν ἄλλων πολλοὶ περὶ τὴν Ἀσίαν)· ἔτι πρὸς ταῖς κατὰ πλοῦτον διαφοραῖς ἐστὶν ἡ μὲν κατὰ γένος ἡ δὲ [1290a] κατ' ἀρετὴν, κἂν εἴ τι δὴ τοιοῦτον ἕτερον εἴρηται πόλεως εἶναι μέρος ἐν τοῖς περὶ τὴν ἀριστοκρατίαν· ἐκεῖ γὰρ διείλομεν ἐκ πόσων μερῶν ἀναγκαίων ἐστὶ πᾶσα πόλις· τούτων γὰρ τῶν μερῶν ὅτε μὲν πάντα μετέχει τῆς πολιτείας ὅτε δ' ἐλάττω ὅτε δὲ πλείω. φανερόν τοίνυν ὅτι πλείους ἀναγκαῖον εἶναι πολιτείας, εἶδει διαφερούσας ἀλλήλων· καὶ γὰρ ταῦτ' εἶδει διαφέρει τὰ μέρη σφῶν αὐτῶν. πολιτεία μὲν γὰρ ἡ τῶν ἀρχῶν τάξις ἐστὶ, ταύτας δὲ διανέμονται πάντες ἢ κατὰ τὴν δύναμιν τῶν μετεχόντων ἢ κατὰ τιν' αὐτῶν ἰσότητά κοινήν, λέγω δ' οἷον τῶν ἀπόρων ἢ τῶν εὐπόρων ἢ κοινήν τιν' ἀμφοῖν. ἀναγκαῖον ἄρα πολιτείας εἶναι τοσαύτας ὅσαι περ τάξεις κατὰ τὰς ὑπεροχὰς εἰσὶ καὶ κατὰ τὰς διαφορὰς τῶν μορίων.

μάλιστα δὲ δοκοῦσιν εἶναι δύο, καθάπερ ἐπὶ τῶν πνευμάτων λέγεται τὰ μὲν βόρεια τὰ δὲ νότια, τὰ δ' ἄλλα τούτων παρεκβάσεις, οὕτω καὶ τῶν πολιτειῶν δύο, δῆμος καὶ ὀλιγαρχία. τὴν γὰρ ἀριστοκρατίαν τῆς ὀλιγαρχίας εἶδος τιθέασιν ὡς οὕσαν ὀλιγαρχίαν τινά, καὶ τὴν καλουμένην πολιτείαν δημοκρατίας, ὥσπερ ἐν τοῖς πνεύμασι τὸν μὲν ζέφυρον τοῦ βορέου, τοῦ δὲ νότου τὸν εὐρον. ὁμοίως δ' ἔχει καὶ περὶ τὰς ἀρμονίας, ὡς φασὶ τινες· καὶ γὰρ ἐκεῖ τίθενται εἶδη δύο, τὴν δωριστὶ καὶ τὴν φρυγιστὶ, τὰ δ' ἄλλα συντάγματα τὰ μὲν Δώρια τὰ δὲ Φρύγια καλοῦσιν. μάλιστα μὲν οὖν εἰώθασιν οὕτως ὑπολαμβάνειν περὶ τῶν πολιτειῶν· ἀληθέστερον δὲ καὶ βέλτιον ὡς ἡμεῖς διείλομεν, δυοῖν ἢ μιᾶς οὐσης τῆς καλῶς συνεστηκυίας τὰς ἄλλας εἶναι

παρεκβάσεις, τὰς μὲν τῆς εὖ κεκραμένης ἁρμονίας τὰς δὲ τῆς ἀρίστης πολιτείας, ὀλιγαρχικὰς μὲν τὰς συντονωτέρας καὶ δεσποτικωτέρας, τὰς δ' ἀνειμένας καὶ μαλακὰς δημοτικάς.

Οὐ δεῖ δὲ τιθέναι δημοκρατίαν, καθάπερ εἰώθασί τινες νῦν, ἀπλῶς οὕτως, ὅπου κύριον τὸ πλῆθος (καὶ γὰρ ἐν ταῖς ὀλιγαρχίαις καὶ πανταχοῦ τὸ πλεον μέρος κύριον), οὐδ' ὀλιγαρχίαν, ὅπου κύριοι ὀλίγοι τῆς πολιτείας. εἰ γὰρ εἴησαν οἱ πάντες χίλιοι καὶ τριακόσιοι, καὶ τούτων οἱ χίλιοι πλούσιοι, καὶ μὴ μεταδιδοῖεν ἀρχῆς τοῖς τριακοσίοις καὶ πένησιν ἐλευθέροις οὔσι καὶ ἄλλα ὁμοίοις, οὐθεὶς ἂν φαίη δημοκρατεῖσθαι τούτους· ὁμοίως δὲ καὶ εἰ πένητες ὀλίγοι μὲν εἶεν, κρείττους δὲ τῶν εὐπόρων πλειόνων ὄντων, οὐδεὶς ἂν ὀλιγαρχίαν προσαγορεύσειεν οὐδὲ τὴν τοιαύτην, εἰ τοῖς ἄλλοις οὔσι πλουσίοις μὴ μετείη τῶν τιμῶν. μᾶλλον τοίνυν λεκτέον ὅτι [1290b] δῆμος μὲν ἐστὶν ὅταν οἱ ἐλεύθεροι κύριοι ᾖσιν, ὀλιγαρχία δ' ὅταν οἱ πλούσιοι, ἀλλὰ συμβαίνει τοὺς μὲν πολλοὺς εἶναι τοὺς δ' ὀλίγους· ἐλεύθεροι μὲν γὰρ πολλοί, πλούσιοι δ' ὀλίγοι. καὶ γὰρ ἂν εἰ κατὰ μέγεθος διενέμοντο τὰς ἀρχάς, ὥσπερ ἐν Αἰθιοπία φασί τινες, ἢ κατὰ κάλλος, ὀλιγαρχία ἦν ἂν· ὀλίγον γὰρ τὸ πλῆθος καὶ τὸ τῶν καλῶν καὶ τὸ τῶν μεγάλων. οὐ μὴν ἄλλ' οὐδὲ τούτοις μόνον ἱκανῶς ἔχει διωρίσθαι τὰς πολιτείας ταύτας· ἀλλ' ἐπεὶ πλείονα μόρια καὶ τοῦ δήμου καὶ τῆς ὀλιγαρχίας εἰσὶν, ἔτι διαληπτέον ὥς οὗτ' ἂν οἱ ἐλεύθεροι ὀλίγοι ὄντες πλειόνων καὶ μὴ ἐλευθέρων ἄρχωσι, δῆμος, οἷον ἐν Ἀπολλωνία τῇ ἐν τῷ Ἰονίῳ καὶ ἐν Θήρᾳ (ἐν τούτων γὰρ ἑκατέρᾳ τῶν πόλεων ἐν ταῖς τιμαῖς ἦσαν οἱ διαφέροντες κατ' εὐγένειαν καὶ πρῶτοι κατασχόντες τὰς ἀποικίας, ὀλίγοι ὄντες, πολλῶν), οὔτε ἂν οἱ πλούσιοι διὰ τὸ κατὰ πλῆθος ὑπερέχειν, ὀλιγαρχία, οἷον ἐν Κολοφῶνι τὸ παλαιόν (ἐκεῖ γὰρ ἐκέκτηντο μακρὰν οὐσίαν οἱ πλείους πρὶν γενέσθαι τὸν πόλεμον τὸν πρὸς Λυδοὺς), ἀλλ' ἔστι δημοκρατία μὲν ὅταν οἱ ἐλεύθεροι καὶ ἄποροι πλείους ὄντες κύριοι τῆς ἀρχῆς ᾖσιν, ὀλιγαρχία δ' ὅταν οἱ πλούσιοι καὶ εὐγενέστεροι ὀλίγοι ὄντες.

ὅτι μὲν οὖν πολιτεῖαι πλείους, καὶ δι' ἣν αἰτίαν, εἴρηται· διότι δὲ πλείους τῶν εἰρημένων, καὶ τίνες καὶ διὰ τί, λέγωμεν ἀρχὴν λαβόντες τὴν εἰρημένην πρότερον. ὁμολογοῦμεν γὰρ οὐχ ἐν μέρος ἀλλὰ πλείῳ πᾶσαν ἔχειν πόλιν. ὥσπερ οὖν εἰ ζώου προηρούμεθα λαβεῖν εἶδη, πρῶτον ἂν ἀποδιωρίζομεν ἅπερ ἀναγκαῖον πᾶν ἔχειν ζῶον (οἷον ἕνιά τε τῶν αἰσθητηρίων καὶ τὸ τῆς τροφῆς ἐργαστικὸν καὶ δεκτικόν, οἷον στόμα καὶ κοιλίαν, πρὸς δὲ τούτοις, οἷς κινεῖται μορίοις ἕκαστον αὐτῶν)· εἰ δὲ τοσαῦτα εἴη μόνον, τούτων δ' εἶεν διαφοραὶ (λέγω δ' οἷον στόματός τινα πλείῳ γένη καὶ κοιλίας καὶ τῶν αἰσθητηρίων, ἔτι δὲ καὶ τῶν κινητικῶν μορίων), ὁ τῆς συζεύξεως τῆς τούτων ἀριθμὸς ἐξ ἀνάγκης ποιήσει πλείῳ γένη ζώων (οὐ γὰρ οἷον τε ταῦτὸν ζῶον

ἔχειν πλείους στόματος διαφοράς, ὁμοίως δὲ οὐδ' ὤτων), ὥσθ' ὅταν ληφθῶσι τούτων πάντες οἱ ἐνδεχόμενοι συνδυασμοί, ποιήσουσιν εἴδη ζώου, καὶ τοσαῦτ' εἴδη τοῦ ζώου ὅσαι περ αἱ συζεύξεις τῶν ἀναγκαίων μορίων εἰσὶν - τὸν αὐτὸν δὴ τρόπον καὶ τῶν εἰρημένων πολιτειῶν. καὶ γὰρ αἱ πόλεις οὐκ ἐξ ἑνὸς ἀλλ' ἐκ πολλῶν σύγκεινται μερῶν, ὥσπερ εἴρηται πολλάκις. Ἐν μὲν οὖν ἐστὶ τὸ περὶ τὴν τροφήν πλῆθος, οἱ καλούμενοι γεωργοί, [1291a] δεύτερον δὲ τὸ καλούμενον βάνανυσον (ἐστὶ δὲ τοῦτο τὸ περὶ τὰς τέχνας ὧν ἄνευ πόλιν ἀδύνατον οἰκεῖσθαι· τούτων δὲ τῶν τεχνῶν τὰς μὲν ἐξ ἀνάγκης ὑπάρχειν δεῖ, τὰς δὲ εἰς τρυφήν ἢ τὸ καλῶς ζῆν), τρίτον δὲ <τὸ> ἀγοραῖον (λέγω δ' ἀγοραῖον τὸ περὶ τὰς πράξεις καὶ τὰς ὠνάς καὶ τὰς ἐμπορίας καὶ καπηλείας διατρίβον), τέταρτον δὲ τὸ θητικόν, πέμπτον δὲ γένος τὸ προπολεμῆσον, ὃ τούτων οὐθὲν ἥττον ἐστὶν ἀναγκαῖον ὑπάρχειν, εἰ μέλλουσι μὴ δουλεύσειν τοῖς ἐπιοῦσιν. μὴ γὰρ ἔν τῶν ἀδυνάτων ἢ πόλιν ἄξιον εἶναι καλεῖν τὴν φύσει δούλην· αὐτάρκης γὰρ ἢ πόλις, τὸ δὲ δοῦλον οὐκ αὐτάρκες. διόπερ ἐν τῇ Πολιτείᾳ κομψῶς τοῦτο, οὐχ ἱκανῶς δὲ εἴρηται. φησὶ γὰρ ὁ Σωκράτης ἐκ τεττάρων τῶν ἀναγκαιοτάτων πόλιν συγκεῖσθαι, λέγει δὲ τούτους ὑφάντην καὶ γεωργὸν καὶ σκυτοτόμον καὶ οἰκοδόμον· πάλιν δὲ προστίθῃσιν, ὥς οὐκ αὐτάρκων τούτων, χαλκέα καὶ τοὺς ἐπὶ τοῖς ἀναγκαίοις βοσκήμασιν, ἔτι δ' ἔμπορόν τε καὶ κάπηλον· καὶ ταῦτα πάντα γίνεται πλήρωμα τῆς πρώτης πόλεως, ὥς τῶν ἀναγκαίων τε χάριν πᾶσαν πόλιν συνεστηκυῖαν, ἀλλ' οὐ τοῦ καλοῦ μᾶλλον, ἴσον τε δεομένην σκυτέων τε καὶ γεωργῶν. τὸ δὲ προπολεμοῦν οὐ πρότερον ἀποδίδωσι μέρος πρὶν ἢ τῆς χώρας ἀυξομένης καὶ τῆς τῶν πλησίων ἀπτομένης εἰς πόλεμον καταστῶσιν. ἀλλὰ μὴν καὶ ἐν τοῖς τέτταρσι καὶ τοῖς ὁποσοιοῦν κοινωνοῖς ἀναγκαῖον εἶναι τινα τὸν ἀποδώσοντα καὶ κρινοῦντα τὸ δίκαιον. εἴπερ οὖν καὶ ψυχὴν ἂν τις θεῖη ζώου μόριον μᾶλλον ἢ σῶμα, καὶ πόλεων τὰ τοιαῦτα μᾶλλον θετέον τῶν εἰς τὴν ἀναγκαίαν χρῆσιν συντεινόντων, τὸ πολεμικὸν καὶ τὸ μετέχον δικαιοσύνης δικαστικῆς, πρὸς δὲ τούτοις τὸ βουλευόμενον, ὅπερ ἐστὶ συνέσεως πολιτικῆς ἔργον. καὶ ταῦτ' εἴτε κεχωρισμένως ὑπάρχει τισὶν εἴτε τοῖς αὐτοῖς, οὐθὲν διαφέρει πρὸς τὸν λόγον· καὶ γὰρ ὀπλιτεύειν καὶ γεωργεῖν συμβαίνει τοῖς αὐτοῖς πολλάκις. ὥστε εἴπερ καὶ ταῦτα καὶ ἐκεῖνα θετέα μόρια τῆς πόλεως, φανερόν ὅτι τό γε ὀπλιτικὸν ἀναγκαῖόν ἐστι μόριον τῆς πόλεως.

ἔβδομον δὲ τὸ ταῖς οὐσίαις λειτουργοῦν, ὃ καλοῦμεν εὐπόρους. ὄγδοον δὲ τὸ δημιουργικὸν καὶ τὸ περὶ τὰς ἀρχὰς λειτουργοῦν, εἴπερ ἄνευ ἀρχόντων ἀδύνατον εἶναι πόλιν. ἀναγκαῖον οὖν εἶναί τινας τοὺς δυναμένους ἄρχειν καὶ λειτουργοῦντας ἢ συνεχῶς ἢ κατὰ μέρος τῇ πόλει ταύτην τὴν λειτουργίαν. λοιπὰ δὲ περὶ ὧν τυγχάνομεν διωρικότες ἀρτίως, τὸ βουλευόμενον καὶ κρῖνον περὶ τῶν δικαίων τοῖς ἀμφισβητοῦσιν. εἴπερ οὖν ταῦτα δεῖ γενέσθαι ταῖς

πόλεσι, καὶ καλῶς γενέσθαι καὶ δικαίως, [1291b] ἀναγκαῖον καὶ μετέχοντας εἶναι τινὰς ἀρετῆς τῶν πολιτῶν. τὰς μὲν οὖν ἄλλας δυνάμεις τοῖς αὐτοῖς ὑπάρχειν ἐνδέχεσθαι δοκεῖ πολλοῖς, οἷον τοὺς αὐτοὺς εἶναι τοὺς προπολεμοῦντας καὶ γεωργοῦντας καὶ τεχνίτας, ἔτι δὲ τοὺς βουλευομένους τε καὶ κρίνοντας· ἀντιποιοῦνται δὲ καὶ τῆς ἀρετῆς πάντες, καὶ τὰς πλείστας ἀρχὰς ἄρχειν οἷονται δύνασθαι· ἀλλὰ πένεσθαι καὶ πλουτεῖν τοὺς αὐτοὺς ἀδύνατον. διὸ ταῦτα μέρη μάλιστα εἶναι δοκεῖ πόλεως, οἱ εὐποροὶ καὶ οἱ ἄποροι. ἔτι δὲ διὰ τὸ ὥς ἐπὶ τὸ πολὺ τοὺς μὲν ὀλίγους εἶναι τοὺς δὲ πολλοὺς ταῦτα ἐναντία μέρη φαίνεται τῶν τῆς πόλεως μορίων. ὥστε καὶ τὰς πολιτείας κατὰ τὰς ὑπεροχὰς τούτων καθιστᾶσι, καὶ δύο πολιτεῖαι δοκοῦσιν εἶναι, δημοκρατία καὶ ὀλιγαρχία.

ὅτι μὲν οὖν εἰσι πολιτεῖαι πλείους, καὶ διὰ τινὰς αἰτίας, εἴρηται πρότερον· ὅτι δὲ ἔστι καὶ δημοκρατίας εἶδη πλείω καὶ ὀλιγαρχίας, λέγωμεν. φανερόν δὲ τοῦτο καὶ ἐκ τῶν εἰρημένων. εἶδη γὰρ πλείω τοῦ τε δήμου καὶ τῶν λεγομένων γνωρίμων ἔστιν, οἷον δήμου μὲν εἶδη ἓν μὲν οἱ γεωργοί, ἕτερον δὲ τὸ περὶ τὰς τέχνας, ἄλλο δὲ τὸ ἀγοραῖον τὸ περὶ ὠνὴν καὶ πρᾶσιν διατρίβον, ἄλλο δὲ τὸ περὶ τὴν θάλατταν, καὶ τούτου τὸ μὲν πολεμικὸν τὸ δὲ χρηματιστικὸν τὸ δὲ πορθμευτικὸν τὸ δ' ἀλιευτικόν (πολλαχοῦ γὰρ ἕκαστα τούτων πολύοχλα, οἷον ἀλιεῖς μὲν ἐν Τάραντι καὶ Βυζαντίῳ, τριηρικὸν δὲ Ἀθήνησιν, ἐμπορικὸν δὲ ἐν Αἰγίνῃ καὶ Χίῳ, πορθμικὸν <δ> ἐν Τενέδῳ), πρὸς δὲ τούτοις τὸ χερνητικὸν καὶ τὸ μικρὰν ἔχον οὐσίαν ὥστε μὴ δύνασθαι σχολάζειν, ἔτι τὸ μὴ ἐξ ἀμφοτέρων [πολιτῶν] ἐλεύθερον, κἂν εἴ τι τοιοῦτον ἕτερον πλήθους εἶδος· τῶν δὲ γνωρίμων πλοῦτος εὐγένεια ἀρετὴ παιδεία καὶ τὰ τούτοις λεγόμενα κατὰ τὴν αὐτὴν διαφοράν.

δημοκρατία μὲν οὖν ἔστι πρώτη μὲν ἢ λεγομένη μάλιστα κατὰ τὸ ἴσον. ἴσον γὰρ φησιν ὁ νόμος ὁ τῆς τοιαύτης δημοκρατίας τὸ μηδὲν μᾶλλον ὑπερέχειν τοὺς ἀπόρους ἢ τοὺς εὐπόρους, μηδὲ κυρίους εἶναι ὀποτερουσοῦν, ἀλλ' ὁμοίους ἀμφοτέρους. εἴπερ γὰρ ἐλευθερία μάλιστ' ἔστιν ἐν δημοκρατίᾳ, καθάπερ ὑπολαμβάνουσί τινες, καὶ ἰσότης, οὕτως ἂν εἴη μάλιστα, κοινωνούτων ἀπάντων μάλιστα τῆς πολιτείας ὁμοίως. ἐπεὶ δὲ πλείων ὁ δῆμος, κύριον δὲ τὸ δόξαν τοῖς πλείοσιν, ἀνάγκη δημοκρατίαν εἶναι ταύτην. ἐν μὲν οὖν εἶδος δημοκρατίας τοῦτο· ἄλλο δὲ τὸ τὰς ἀρχὰς ἀπὸ τιμημάτων εἶναι, βραχέων δὲ τούτων ὄντων· δεῖ δὲ τῷ κτωμένῳ ἐξουσίαν εἶναι μετέχειν καὶ τὸν ἀποβάλλοντα μὴ μετέχειν· [1292a] ἕτερον εἶδος δημοκρατίας τὸ μετέχειν ἅπαντας τοὺς πολίτας ὅσοι ἀνυπεύθυνοι, ἄρχειν δὲ τὸν νόμον· ἕτερον δὲ εἶδος δημοκρατίας τὸ παντὶ μετεῖναι τῶν ἀρχῶν, ἐὰν μόνον ἢ πολίτης, ἄρχειν δὲ τὸν νόμον· ἕτερον δὲ εἶδος δημοκρατίας τᾶλλα μὲν εἶναι ταῦτά, κύριον δ'

εἶναι τὸ πλῆθος καὶ μὴ τὸν νόμον. τοῦτο δὲ γίνεται ὅταν τὰ ψηφίσματα κύρια ἢ ἄλλὰ μὴ ὁ νόμος· συμβαίνει δὲ τοῦτο διὰ τοὺς δημαγωγούς. ἐν μὲν γὰρ ταῖς κατὰ νόμον δημοκρατουμέναις οὐ γίνεται δημαγωγός, ἀλλ' οἱ βέλτιστοι τῶν πολιτῶν εἰσιν ἐν προεδρίᾳ· ὅπου δ' οἱ νόμοι μὴ εἰσι κύριοι, ἐνταῦθα γίνονται δημαγωγοί. μόναρχος γὰρ ὁ δῆμος γίνεται, σύνθετος εἰς ἕκ πολλῶν· οἱ γὰρ πολλοὶ κύριοί εἰσιν οὐχ ὡς ἕκαστος ἀλλὰ πάντες. Ὅμηρος δὲ ποίαν λέγει οὐκ ἀγαθὸν εἶναι πολυκοιρανίην, πότερον ταύτην ἢ ὅταν πλείους ὦσιν οἱ ἄρχοντες ὡς ἕκαστος, ἄδηλον. ὁ δ' οὖν τοιοῦτος δῆμος, ἅτε μόναρχος ὢν, ζητεῖ μοναρχεῖν διὰ τὸ μὴ ἄρχεσθαι ὑπὸ νόμου, καὶ γίνεται δεσποτικός, ὥστε οἱ κόλακες ἔντιμοι, καὶ ἔστιν ὁ τοιοῦτος δῆμος ἀνάλογον τῶν μοναρχιῶν τῇ τυραννίδι. διὸ καὶ τὸ ἧθος τὸ αὐτό, καὶ ἄμφω δεσποτικὰ τῶν βελτιόνων, καὶ τὰ ψηφίσματα ὥσπερ ἐκεῖ τὰ ἐπιτάγματα, καὶ ὁ δημαγωγὸς καὶ ὁ κόλαξ οἱ αὐτοὶ καὶ ἀνάλογον. καὶ μάλιστα δ' ἑκάτεροι παρ' ἑκατέρους ἰσχύουσιν, οἱ μὲν κόλακες παρὰ τοῖς τυράννοις, οἱ δὲ δημαγωγοὶ παρὰ τοῖς δῆμοις τοῖς τοιούτοις. αἵτιοι δὲ εἰσι τοῦ εἶναι τὰ ψηφίσματα κύρια ἀλλὰ μὴ τοὺς νόμους οὗτοι, πάντα ἀνάγοντες εἰς τὸν δῆμον· συμβαίνει γὰρ αὐτοῖς γίνεσθαι μεγάλοις διὰ τὸ τὸν μὲν δῆμον πάντων εἶναι κύριον, τῆς δὲ τοῦ δήμου δόξης τούτους· πείθεται γὰρ τὸ πλῆθος τούτοις. ἔτι δ' οἱ ταῖς ἀρχαῖς ἐγκαλοῦντες τὸν δῆμόν φασι δεῖν κρίνειν, ὁ δὲ ἀσμένως δέχεται τὴν πρόκλησιν· ὥστε καταλύονται πᾶσαι αἱ ἀρχαί. εὐλόγως δὲ ἂν δόξειεν ἐπιτιμᾶν ὁ φάσκων τὴν τοιαύτην εἶναι δημοκρατίαν οὐ πολιτείαν. ὅπου γὰρ μὴ νόμοι ἄρχουσιν, οὐκ ἔστι πολιτεία. δεῖ γὰρ τὸν μὲν νόμον ἄρχειν πάντων «τῶν καθόλου», τῶν δὲ καθ' ἕκαστα τὰς ἀρχάς, καὶ ταύτην πολιτείαν κρίνειν. ὥστ' εἴπερ ἐστὶ δημοκρατία μία τῶν πολιτειῶν, φανερόν ὡς ἡ τοιαύτη κατάστασις, ἐν ἣ ψηφίσμασι πάντα διοικεῖται, οὐδὲ δημοκρατία κυρίως· οὐθὲν γὰρ ἐνδέχεται ψήφισμα εἶναι καθόλου. τὰ μὲν οὖν τῆς δημοκρατίας εἶδη διωρίσθω τὸν τρόπον τοῦτον.

Ὀλιγαρχίας δὲ εἶδη ἐν μὲν τὸ ἀπὸ τιμημάτων εἶναι τὰς ἀρχὰς τηλικούτων ὥστε τοὺς ἀπόρους μὴ μετέχειν, πλείους ὄντας, ἐξεῖναι δὲ τῷ κτωμένῳ μετέχειν τῆς πολιτείας, ἄλλο [1292b] δέ, ὅταν ἀπὸ τιμημάτων μακρῶν ὦσιν αἱ ἀρχαὶ καὶ αἰρῶνται αὐτοὶ τοὺς ἐλλείποντας (ἂν μὲν οὖν ἐκ πάντων τούτων τοῦτο ποιῶσι, δοκεῖ τοῦτ' εἶναι μᾶλλον ἀριστοκρατικόν, ἐὰν δὲ ἐκ τινῶν ἀφωρισμένων, ὀλιγαρχικόν)· ἕτερον εἶδος ὀλιγαρχίας, ὅταν παῖς ἀντὶ πατρὸς εἰσὶν, τέταρτον δ', ὅταν ὑπάρχη τε τὸ νῦν λεχθὲν καὶ ἀρχὴ μὴ ὁ νόμος ἀλλ' οἱ ἄρχοντες. καὶ ἔστιν ἀντίστροφος αὕτη ἐν ταῖς ὀλιγαρχίαις ὥσπερ ἡ τυραννὶς ἐν ταῖς μοναρχίαις, καὶ περὶ ἧς τελευταίας εἵπαμεν δημοκρατίας ἐν ταῖς δημοκρατίαις· καὶ καλοῦσι δὴ τὴν τοιαύτην ὀλιγαρχίαν δυναστείαν.

ὀλιγαρχίας μὲν οὖν εἶδη τοσαῦτα καὶ δημοκρατίας· οὐ δεῖ δὲ λανθάνειν ὅτι πολλαχοῦ συμβέβηκεν ὥστε τὴν μὲν πολιτείαν τὴν κατὰ τοὺς νόμους μὴ δημοτικὴν εἶναι, διὰ δὲ τὸ ἔθος καὶ τὴν ἀγωγὴν πολιτεύεσθαι δημοτικῶς, ὁμοίως δὲ πάλιν παρ' ἄλλοις τὴν μὲν κατὰ τοὺς νόμους εἶναι πολιτείαν δημοτικωτέραν, τῇ δ' ἀγωγῇ καὶ τοῖς ἔθεσιν ὀλιγαρχεῖσθαι μᾶλλον. συμβαίνει δὲ τοῦτο μάλιστα μετὰ τὰς μεταβολὰς τῶν πολιτειῶν· οὐ γὰρ εὐθὺς μεταβαίνουνσιν, ἀλλὰ ἀγαπῶσι τὰ πρῶτα μικρὰ πλεονεκτοῦντες παρ' ἀλλήλων, ὥσθ' οἱ μὲν νόμοι διαμένουσιν οἱ προϋπάρχοντες, κρατοῦσι δ' οἱ μεταβαλόντες τὴν πολιτείαν.

Ὅτι δ' ἔστι τοσαῦτα εἶδη δημοκρατίας καὶ ὀλιγαρχίας, ἐξ αὐτῶν τῶν εἰρημένων φανερόν ἐστιν. ἀνάγκη γὰρ ἢ πάντα τὰ εἰρημένα μέρη τοῦ δήμου κοινωνεῖν τῆς πολιτείας, ἢ τὰ μὲν τὰ δὲ μὴ. ὅταν μὲν οὖν τὸ γεωργικὸν καὶ τὸ κεκτημένον μετρίαν οὐσίαν κύριον ἢ τῆς πολιτείας, πολιτεύονται κατὰ νόμους (ἔχουσι γὰρ ἐργαζόμενοι ζῆν, οὐ δύνανται δὲ σχολάζειν, ὥστε τὸν νόμον ἐπιστήσαντες ἐκκλησιάζουσι τὰς ἀναγκαίας ἐκκλησίας), τοῖς δὲ ἄλλοις μετέχειν ἔξεστιν ὅταν κτήσωνται τὸ τίμημα τὸ διωρισμένον ὑπὸ τῶν νόμων· διὸ πᾶσι τοῖς κτησαμένοις ἔξεστι μετέχειν· ὅλως μὲν γὰρ τὸ μὲν μὴ ἐξεῖναι πᾶσιν ὀλιγαρχικόν, τὸ δὲ δὴ ἐξεῖναι σχολάζειν ἀδύνατον μὴ προσόδων οὐσῶν. τούτου μὲν οὖν εἶδος ἐν δημοκρατίας διὰ ταύτας τὰς αἰτίας· ἕτερον δὲ εἶδος διὰ τὴν ἐχομένην διαίρεσιν· ἔστι γὰρ καὶ πᾶσιν ἐξεῖναι τοῖς ἀνυπευθύνοις κατὰ τὸ γένος, μετέχειν μέντοι <τοὺς> δυναμένους σχολάζειν· διόπερ ἐν τῇ τοιαύτῃ δημοκρατίᾳ οἱ νόμοι ἄρχουσι, διὰ τὸ μὴ εἶναι πρόσοδον. τρίτον δ' εἶδος τὸ πᾶσιν ἐξεῖναι, ὅσοι ἂν ἐλεύθεροι ὦσι, μετέχειν τῆς πολιτείας, μὴ μέντοι μετέχειν διὰ τὴν προειρημένην αἰτίαν, ὥστ' ἀναγκαῖον καὶ ἐν ταύτῃ ἄρχειν τὸν νόμον. τέταρτον δὲ εἶδος δημοκρατίας [1293a] ἡ τελευταία τοῖς χρόνοις ἐν ταῖς πόλεσι γεγεννημένη. διὰ γὰρ τὸ μείζους γεγονέναι πολὺ τὰς πόλεις τῶν ἐξ ὑπαρχῆς καὶ προσόδων ὑπάρχειν εὐπορίας, μετέχουσι μὲν πάντες τῆς πολιτείας διὰ τὴν ὑπεροχὴν τοῦ πλήθους, κοινωνοῦσι δὲ καὶ πολιτεύονται διὰ τὸ δύνασθαι σχολάζειν καὶ τοὺς ἀπόρους, λαμβάνοντας μισθόν. καὶ μάλιστα δὲ σχολάζει τὸ τοιοῦτον πλῆθος· οὐ γὰρ ἐμποδίζει αὐτοὺς οὐθέν ἢ τῶν ἰδίων ἐπιμέλεια, τοὺς δὲ πλουσίους ἐμποδίζει, ὥστε πολλάκις οὐ κοινωνοῦσι τῆς ἐκκλησίας οὐδὲ τοῦ δικάζειν. διὸ γίνεται τὸ τῶν ἀπόρων πλῆθος κύριον τῆς πολιτείας, ἀλλ' οὐχ οἱ νόμοι.

τὰ μὲν οὖν τῆς δημοκρατίας εἶδη τοσαῦτα καὶ τοιαῦτα διὰ ταύτας τὰς ἀνάγκας ἐστίν, τάδε δὲ τῆς ὀλιγαρχίας· ὅταν μὲν πλείους ἔχωσιν οὐσίαν, ἐλάττω δὲ καὶ μὴ πολλὴν λίαν, τὸ τῆς πρώτης ὀλιγαρχίας εἶδός ἐστιν· ποιοῦσι γὰρ ἐξουσίαν μετέχειν τῷ κτωμένῳ, καὶ διὰ τὸ πλῆθος εἶναι τῶν μετεχόντων

τοῦ πολιτεύματος ἀνάγκη μὴ τοὺς ἀνθρώπους ἀλλὰ τὸν νόμον εἶναι κύριον (ὅσω γὰρ ἂν πλεῖον ἀπέχωσι τῆς μοναρχίας, καὶ μήτε τοσαύτην ἔχωσιν οὐσίαν ὥστε σχολάζειν ἀμελοῦντες, μήθ' οὕτως ὀλίγην ὥστε τρέφεσθαι ἀπὸ τῆς πόλεως, ἀνάγκη τὸν νόμον ἀξιοῦν αὐτοῖς ἄρχειν, ἀλλὰ μὴ αὐτούς). ἔαν δὲ δὴ ἐλάττους ὦσιν οἱ τὰς οὐσίας ἔχοντες ἢ οἱ τὸ πρότερον, πλείω δέ, τὸ τῆς δευτέρας ὀλιγαρχίας γίνεται εἶδος· μᾶλλον γὰρ ἰσχύοντες πλεονεκτεῖν ἀξιοῦσιν, διὸ αὐτοὶ μὲν αἰροῦνται ἐκ τῶν ἄλλων τοὺς εἰς τὸ πολίτευμα βαδίζοντας, διὰ δὲ τὸ μήπω οὕτως ἰσχυροὶ εἶναι ὥστ' ἄνευ νόμου ἄρχειν τὸν νόμον τίθενται τοιοῦτον. ἔαν δ' ἐπιτείνωσι τῷ ἐλάττονες ὄντες μείζονας οὐσίας ἔχειν, ἢ τρίτη ἐπίδοσις γίνεται τῆς ὀλιγαρχίας, τὸ δι' αὐτῶν μὲν τὰς ἀρχὰς ἔχειν, κατὰ νόμον δὲ τὸν κελεύοντα τῶν τελευτώντων διαδέχεσθαι τοὺς υἱεῖς. ὅταν δὲ ἤδη πολὺ ὑπερτείνωσι ταῖς οὐσίαις καὶ ταῖς πολυφιλίαις, ἐγγὺς ἢ τοιαύτη δυναστεία μοναρχίας ἐστίν, καὶ κύριοι γίνονται οἱ ἄνθρωποι, ἀλλ' οὐχ ὁ νόμος· καὶ τὸ τέταρτον εἶδος τῆς ὀλιγαρχίας τοῦτ' ἐστίν, ἀντίστροφον τῷ τελευταίῳ τῆς δημοκρατίας.

Ἔτι δ' εἰσὶ δύο πολιτεῖαι παρὰ δημοκρατίαν τε καὶ ὀλιγαρχίαν, ὧν τὴν μὲν ἑτέραν λέγουσιν τε πάντες καὶ εἴρηται τῶν τεττάρων πολιτειῶν εἶδος ἓν (λέγουσι δὲ τέτταρας μοναρχίαν ὀλιγαρχίαν δημοκρατίαν, τέταρτον δὲ τὴν καλουμένην ἀριστοκρατίαν). πέμπτη δ' ἐστὶν ἢ προσαγορεύεται τὸ κοινὸν ὄνομα πασῶν (πολιτείαν γὰρ καλοῦσιν), ἀλλὰ διὰ τὸ μὴ πολλάκις γίνεσθαι λανθάνει τοὺς πειρωμένους ἀριθμεῖν τὰ τῶν πολιτειῶν εἶδη, καὶ χρῶνται ταῖς τέτταρσι μόνον [1293b] (ὥσπερ Πλάτων) ἐν ταῖς πολιτείαις. ἀριστοκρατίαν μὲν οὖν καλῶς ἔχει καλεῖν περὶ ἧς διήλθομεν ἐν τοῖς πρώτοις λόγοις (τὴν γὰρ ἐκ τῶν ἀρίστων ἀπλῶς κατ' ἀρετὴν πολιτείαν καὶ μὴ πρὸς ὑπόθεσιν τινα ἀγαθῶν ἀνδρῶν μόνην δίκαιον προσαγορεύειν ἀριστοκρατίαν· ἐν μόνῃ γὰρ ἀπλῶς ὁ αὐτὸς ἀνὴρ καὶ πολίτης ἀγαθὸς ἐστίν, οἱ δ' ἐν ταῖς ἄλλαις ἀγαθοὶ πρὸς τὴν πολιτείαν εἰσὶ τὴν αὐτῶν). οὐ μὴν ἀλλ' εἰσὶ τινες αἱ πρὸς τε τὰς ὀλιγαρχουμένας ἔχουσι διαφορὰς καὶ καλοῦνται ἀριστοκραταὶ καὶ πρὸς τὴν καλουμένην πολιτείαν. ὅπου γὰρ μὴ μόνον πλουτίνδην ἀλλὰ καὶ ἀριστίνδην αἰροῦνται τὰς ἀρχάς, αὕτη ἡ πολιτεία διαφέρει τε ἀμφοῖν καὶ ἀριστοκρατικὴ καλεῖται. καὶ γὰρ ἐν ταῖς μὴ ποιουμέναις κοινὴν ἐπιμέλειαν ἀρετῆς εἰσὶν ὅμως τινὲς οἱ εὐδοκιμοῦντες καὶ δοκοῦντες εἶναι ἐπικεῖς. ὅπου οὖν ἡ πολιτεία βλέπει εἰς τε πλοῦτον καὶ ἀρετὴν καὶ δῆμον, οἷον ἐν Καρχηδόνι, αὕτη ἀριστοκρατικὴ ἐστίν, καὶ ἐν αἷς εἰς τὰ δύο μόνον, οἷον ἡ Λακεδαιμονίων, εἰς τε ἀρετὴν καὶ δῆμον, καὶ ἔστι μίξις τῶν δύο τούτων, δημοκρατίας τε καὶ ἀρετῆς. ἀριστοκρατίας μὲν οὖν παρὰ τὴν πρώτην τὴν ἀρίστην πολιτείαν ταῦτα δύο εἶδη, καὶ τρίτον ὅσαι τῆς καλουμένης πολιτείας ῥέπουσι πρὸς τὴν ὀλιγαρχίαν μᾶλλον.



Λοιπὸν δ' ἐστὶν ἡμῖν περὶ τε τῆς ὀνομαζομένης πολιτείας εἰπεῖν καὶ περὶ τυραννίδος. ἑτάξαμεν δ' οὕτως οὐκ οὔσαν οὔτε ταύτην παρέκβασιν οὔτε τὰς ἄρτι ῥηθείσας ἀριστοκρατίας, ὅτι τὸ μὲν ἀληθὲς πᾶσαι διημαρτήκασι τῆς ὀρθοτάτης πολιτείας, ἔπειτα καταριθμοῦνται μετὰ τούτων εἰσὶ τ' αὐτῶν αὗται παρεκβάσεις ἄσπερ ἐν τοῖς κατ' ἀρχὴν εἵπομεν. τελευταῖον δὲ περὶ τυραννίδος εὐλογὸν ἐστὶ ποιήσασθαι μνεῖαν διὰ τὸ πασῶν ἡκιστα ταύτην εἶναι πολιτείαν, ἡμῖν δὲ τὴν μέθοδον εἶναι περὶ πολιτείας. δι' ἣν μὲν οὖν αἰτίαν τέτακται τὸν τρόπον τοῦτον, εἴρηται· νῦν δὲ δεικτέον ἡμῖν περὶ πολιτείας. φανερωτέρα γὰρ ἡ δύναμις αὐτῆς διωρισμένων τῶν περὶ ὀλιγαρχίας καὶ δημοκρατίας. ἔστι γὰρ ἡ πολιτεία ὡς ἀπλῶς εἰπεῖν μίξις ὀλιγαρχίας καὶ δημοκρατίας. εἰώθασι δὲ καλεῖν τὰς μὲν ἀποκλινούσας [ὡς] πρὸς τὴν δημοκρατίαν πολιτείας, τὰς δὲ πρὸς τὴν ὀλιγαρχίαν μᾶλλον ἀριστοκρατίας διὰ τὸ μᾶλλον ἀκολουθεῖν παιδείαν καὶ εὐγένειαν τοῖς εὐπορωτέροις. ἔτι δὲ δοκοῦσιν ἔχειν οἱ εὐποροὶ ὧν ἔνεκεν οἱ ἀδικοῦντες ἀδικοῦσιν· ὅθεν καὶ καλοὺς κἀγαθοὺς καὶ γνωρίμους τούτους προσαγορεύουσιν. ἐπεὶ οὖν ἡ ἀριστοκρατία βούλεται τὴν ὑπεροχὴν ἀπονέμειν τοῖς ἀρίστοις τῶν πολιτῶν, καὶ τὰς ὀλιγαρχίας εἶναί φασιν ἐκ τῶν καλῶν κἀγαθῶν μᾶλλον. δοκεῖ [1294a] δ' εἶναι τῶν ἀδυνάτων τὸ εὐνομεῖσθαι τὴν μὴ ἀριστοκρατουμένην πόλιν ἀλλὰ πονηροκρατουμένην, ὁμοίως δὲ καὶ ἀριστοκρατεῖσθαι τὴν μὴ εὐνομουμένην. οὐκ ἔστι δὲ εὐνομία τὸ εὖ κεῖσθαι τοὺς νόμους, μὴ πείθεσθαι δέ. διὸ μίαν μὲν εὐνομίαν ὑποληπτέον εἶναι τὸ πείθεσθαι τοῖς κειμένοις νόμοις, ἑτέραν δὲ τὸ καλῶς κεῖσθαι τοὺς νόμους οἷς ἐμμένουσιν (ἔστι γὰρ πείθεσθαι καὶ κακῶς κειμένοις). τοῦτο δὲ ἐνδέχεται διχῶς· ἢ γὰρ τοῖς ἀρίστοις τῶν ἐνδεχομένων αὐτοῖς, ἢ τοῖς ἀπλῶς ἀρίστοις.

δοκεῖ δὲ ἀριστοκρατία μὲν εἶναι μάλιστα τὸ τὰς τιμὰς νενεμῆσθαι κατ' ἀρετὴν (ἀριστοκρατίας μὲν γὰρ ὅρος ἀρετῆς, ὀλιγαρχίας δὲ πλοῦτος, δήμου δ' ἐλευθερία)· τὸ δ' ὅ τι ἂν δόξη τοῖς πλείοσιν, ἐν πάσαις ὑπάρχει· καὶ γὰρ ἐν ὀλιγαρχίᾳ καὶ ἐν ἀριστοκρατίᾳ καὶ ἐν δήμοις, ὅ τι ἂν δόξη τῷ πλείονι μέρει τῶν μετεχόντων τῆς πολιτείας, τοῦτ' ἐστὶ κύριον. ἐν μὲν οὖν ταῖς πλείστοις πόλεσι τὸ τῆς πολιτείας εἶδος «κακῶς» καλεῖται· μόνον γὰρ ἡ μίξις στοχάζεται τῶν εὐπόρων καὶ τῶν ἀπόρων, πλούτου καὶ ἐλευθερίας· σχεδὸν γὰρ παρὰ τοῖς πλείστοις οἱ εὐποροὶ τῶν καλῶν κἀγαθῶν δοκοῦσι κατέχειν χώραν· ἐπεὶ δὲ τρία ἐστὶ τὰ ἀμφισβητοῦντα τῆς ἰσότητος τῆς πολιτείας, ἐλευθερία πλοῦτος ἀρετῆς (τὸ γὰρ τέταρτον, ὃ καλοῦσιν εὐγένειαν, ἀκολουθεῖ τοῖς δυσὶν· ἢ γὰρ εὐγένειά ἐστιν ἀρχαῖος πλοῦτος καὶ ἀρετῆς), φανερόν ὅτι τὴν μὲν τοῖν δυοῖν μίξιν, τῶν εὐπόρων καὶ τῶν ἀπόρων, πολιτείαν λεκτέον, τὴν δὲ τῶν τριῶν ἀριστοκρατίαν μάλιστα τῶν ἄλλων παρὰ τὴν ἀληθινὴν καὶ πρώτην. ὅτι μὲν οὖν ἔστι καὶ ἕτερα πολιτείας εἶδη παρὰ μοναρχίαν τε καὶ

δημοκρατίαν καὶ ὀλιγαρχίαν, εἴρηται, καὶ ποῖα ταῦτα, καὶ τί διαφέρουσιν ἀλλήλων αἵ τ' ἀριστοκραταὶ καὶ αἱ πολιτεῖαι τῆς ἀριστοκρατίας, καὶ ὅτι οὐ πόρρω αὐταὶ ἀλλήλων, φανερόν.

Τίνα δὲ τρόπον γίνεται παρὰ δημοκρατίαν καὶ ὀλιγαρχίαν ἡ καλουμένη πολιτεία, καὶ πῶς αὐτὴν δεῖ καθιστάναί, λέγωμεν ἐφεξῆς τοῖς εἰρημένοις. ἅμα δὲ δῆλον ἔσται καὶ οἷς ὀρίζονται τὴν δημοκρατίαν καὶ τὴν ὀλιγαρχίαν· ληπτέον γὰρ τὴν τούτων διαίρεσιν, εἴτα ἐκ τούτων ἄφ' ἑκατέρας ὥσπερ σύμβολον λαμβάνοντας συνθετέον. εἰσὶ δὲ ὅροι τρεῖς τῆς συνθέσεως καὶ μίξεως. ἡ γὰρ ἀμφοτέρα ληπτέον ἃ ἑκάτεροι νομοθετοῦσιν, οἷον περὶ τοῦ δικάζειν (ἐν μὲν γὰρ ταῖς ὀλιγαρχίαις τοῖς εὐπόροις ζημίαν τάττουσιν ἂν μὴ δικάζωσι, τοῖς δ' ἀπόροις οὐδένα μισθόν, ἐν δὲ ταῖς δημοκρατίαις τοῖς μὲν ἀπόροις μισθόν, τοῖς δ' εὐπόροις οὐδεμίαν ζημίαν· κοινὸν δὲ καὶ μέσον τούτων ἀμφοτέρα ταῦτα, διὸ καὶ [1294b] πολιτικόν, μέμικται γὰρ ἐξ ἀμφοῖν)· εἷς μὲν οὖν οὗτος τοῦ συνδυασμοῦ τρόπος, ἕτερος δὲ τὸ <τὸ> μέσον λαμβάνειν ὧν ἑκάτεροι τάττουσιν, οἷον ἐκκλησιάζειν οἱ μὲν ἀπὸ τιμήματος οὐθενὸς ἢ μικροῦ πάμπαν, οἱ δ' ἀπὸ μακροῦ τιμήματος, κοινὸν δέ γε οὐδέτερον, ἀλλὰ τὸ μέσον ἑκατέρου τίμημα τούτων. τρίτον δ' ἐκ δυοῖν ταγμάτοι, τὰ μὲν ἐκ τοῦ ὀλιγαρχικοῦ νόμου τὰ δ' ἐκ τοῦ δημοκρατικοῦ. λέγω δ' οἷον δοκεῖ δημοκρατικὸν μὲν εἶναι τὸ κληρωτὰς εἶναι τὰς ἀρχάς, τὸ δ' αἵρετὰς ὀλιγαρχικόν, καὶ δημοκρατικὸν μὲν τὸ μὴ ἀπὸ τιμήματος, ὀλιγαρχικὸν δὲ τὸ ἀπὸ τιμήματος· ἀριστοκρατικὸν τοίνυν καὶ πολιτικὸν τὸ ἐξ ἑκατέρας ἑκάτερον λαβεῖν, ἐκ μὲν τῆς ὀλιγαρχίας τὸ αἵρετὰς ποιεῖν τὰς ἀρχάς, ἐκ δὲ τῆς δημοκρατίας τὸ μὴ ἀπὸ τιμήματος.

Ὁ μὲν οὖν τρόπος τῆς μίξεως οὗτος· τοῦ δ' εὖ μεμεῖχθαι δημοκρατίαν καὶ ὀλιγαρχίαν ὅρος, ὅταν ἐνδέχεται λέγειν τὴν αὐτὴν πολιτείαν δημοκρατίαν καὶ ὀλιγαρχίαν. δῆλον γὰρ ὅτι τοῦτο πάσχουσιν οἱ λέγοντες διὰ τὸ μεμεῖχθαι καλῶς· πέπονθε δὲ τοῦτο καὶ τὸ μέσον, ἐμφαίνεται γὰρ ἑκάτερον ἐν αὐτῶ τῶν ἄκρων· ὅπερ συμβαίνει περὶ τὴν Λακεδαιμονίων πολιτείαν. πολλοὶ γὰρ ἐγχειροῦσι λέγειν ὡς δημοκρατίας οὔσης διὰ τὸ δημοκρατικὰ πολλὰ τὴν τάξιν ἔχειν, οἷον πρῶτον τὸ περὶ τὴν τροφὴν τῶν παίδων (ὁμοίως γὰρ οἱ τῶν πλουσίων τρέφονται τοῖς τῶν πενήτων, καὶ παιδεύονται τὸν τρόπον τοῦτον ὃν ἂν δύναιντο καὶ τῶν πενήτων οἱ παῖδες), ὁμοίως δὲ καὶ ἐπὶ τῆς ἐχομένης ἡλικίας, καὶ ὅταν ἄνδρες γένωνται, τὸν αὐτὸν τρόπον (οὐθὲν γὰρ διάδηλος ὁ πλούσιος καὶ ὁ πένης οὕτω) τὰ περὶ τὴν τροφὴν ταῦτα πᾶσιν ἐν τοῖς συσσιτίοις, καὶ τὴν ἐσθῆτα οἱ πλούσιοι τοιαύτην οἷαν ἂν τις παρασκευάσαι δύναίτο καὶ τῶν πενήτων ὅστισοῦν· ἔτι τὸ δύο τὰς μεγίστας ἀρχάς τὴν μὲν αἵρεῖσθαι τὸν δῆμον, τῆς δὲ μετέχειν (τοὺς μὲν γὰρ γέροντας αἰροῦνται, τῆς

δ' ἐφορείας μετέχουσιν)· οἱ δ' ὀλιγαρχίαν διὰ τὸ πολλὰ ἔχειν ὀλιγαρχικά, οἷον τὸ πάσας αἰρετὰς εἶναι καὶ μηδεμίαν κληρωτήν, καὶ ὀλίγους εἶναι κυρίου θανάτου καὶ φυγῆς, καὶ ἄλλα τοιαῦτα πολλά. δεῖ δ' ἐν τῇ πολιτείᾳ τῇ μεμειγμένῃ καλῶς ἀμφοτέρω δοκεῖν εἶναι καὶ μηδέτερον, καὶ σώζεσθαι δι' αὐτῆς καὶ μὴ ἔξωθεν, καὶ δι' αὐτῆς μὴ τῷ πλείους [ἔξωθεν] εἶναι τοὺς βουλομένους (εἴη γὰρ ἂν καὶ πονηρᾷ πολιτείᾳ τοῦθ' ὑπάρχον) ἀλλὰ τῷ μὴ ἂν βούλεσθαι πολιτείαν ἑτέραν μὴτὲν τῶν τῆς πόλεως μορίων ὅλως. τίνα μὲν οὖν τρόπον δεῖ καθιστάναι πολιτείαν, ὁμοίως δὲ καὶ τὰς ὀνομαζομένας ἀριστοκρατίας, νῦν εἴρηται.

[1295a] Περὶ δὲ τυραννίδος ἦν ἡμῖν λοιπὸν εἰπεῖν, οὐχ ὥς ἐνούσης πολυλογίας περὶ αὐτήν, ἀλλ' ὅπως λάβῃ τῆς μεθόδου τὸ μέρος, ἐπειδὴ καὶ ταύτην τίθεμεν τῶν πολιτειῶν τι μέρος. περὶ μὲν οὖν βασιλείας διωρίσαμεν ἐν τοῖς πρώτοις λόγοις, ἐν οἷς περὶ τῆς μάλιστα λεγομένης βασιλείας ἐποιοῦμεθα τὴν σκέψιν, πότερον ἀσύμφορος ἢ συμφέρει ταῖς πόλεσιν, καὶ τίνα καὶ πόθεν δεῖ καθιστάναι, καὶ πῶς· τυραννίδος δ' εἶδη δύο μὲν διείλομεν ἐν οἷς περὶ βασιλείας ἐπεσκοποῦμεν, διὰ τὸ τὴν δύναμιν ἐπαλλάττειν πῶς αὐτῶν καὶ πρὸς τὴν βασιλείαν, διὰ τὸ κατὰ νόμον εἶναι ἀμφοτέρας ταύτας τὰς ἀρχάς (ἐν τε γὰρ τῶν βαρβάρων τισὶν αἰροῦνται αὐτοκράτορας μονάρχους, καὶ τὸ παλαιὸν ἐν τοῖς ἀρχαίοις Ἑλλήσιν ἐγίνοντο τινες μονάρχοι τὸν τρόπον τοῦτον, οὓς ἐκάλουν αἰσυμνήτας), ἔχουσι δὲ τινες πρὸς ἀλλήλας αὗται διαφοράς, ἦσαν δὲ διὰ μὲν τὸ κατὰ νόμον βασιλικά καὶ διὰ τὸ μοναρχεῖν ἐκόντων, τυραννικά δὲ διὰ τὸ δεσποτικῶς ἄρχειν κατὰ τὴν αὐτῶν γνώμην· τρίτον δὲ εἶδος τυραννίδος, ἥπερ μάλιστ' εἶναι δοκεῖ τυραννίς, ἀντίστροφος οὕσα τῇ παμβασιλείᾳ. τοιαύτην δ' ἀναγκαῖον εἶναι τυραννίδα τὴν μοναρχίαν ἣτις ἀνυπεύθυνος ἄρχει τῶν ὁμοίων καὶ βελτιόνων πάντων πρὸς τὸ σφέτερον αὐτῆς συμφέρον, ἀλλὰ μὴ πρὸς τὸ τῶν ἀρχομένων. διόπερ ἀκούσιος· οὐθεὶς γὰρ ἐκὼν ὑπομένει τῶν ἐλευθέρων τὴν τοιαύτην ἀρχήν. τυραννίδος μὲν οὖν εἶδη ταῦτα καὶ τοσαῦτα διὰ τὰς εἰρημένας αἰτίας.

Τίς δ' ἀρίστη πολιτεία καὶ τίς ἀριστος βίος ταῖς πλείσταις πόλεσι καὶ τοῖς πλείστοις τῶν ἀνθρώπων, μήτε πρὸς ἀρετὴν συγκρίνουσι τὴν ὑπὲρ τοὺς ἰδιώτας, μήτε πρὸς παιδείαν ἢ φύσεως δεῖται καὶ χορηγίας τυχερᾶς, μήτε πρὸς πολιτείαν τὴν κατ' εὐχὴν γινομένην, ἀλλὰ βίον τε τὸν τοῖς πλείστοις κοινωνῆσαι δυνατόν καὶ πολιτείαν ἣς τὰς πλείστας πόλεις ἐνδέχεται μετασχεῖν; καὶ γὰρ ἃς καλοῦσιν ἀριστοκρατίας, περὶ ὧν νῦν εἵπομεν, τὰ μὲν ἐξωτέρω πίπτουσι ταῖς πλείσταις τῶν πόλεων, τὰ δὲ γειννῶσι τῇ καλουμένῃ πολιτείᾳ (διὸ περὶ ἀμφοῖν ὥς μιᾶς λεκτέον). ἡ δὲ δὴ κρίσις περὶ ἀπάντων τούτων ἐκ τῶν αὐτῶν στοιχείων ἐστίν. εἰ γὰρ καλῶς ἐν τοῖς ἠθικοῖς εἴρηται

τὸ τὸν εὐδαίμονα βίον εἶναι τὸν κατ' ἀρετὴν ἀνεμπόδιστον, μεσότητα δὲ τὴν ἀρετὴν, τὸν μέσον ἀναγκαῖον εἶναι βίον βέλτιστον, <τὸ> τῆς ἐκάστοις ἐνδεχομένης τυχεῖν μεσότητος· τοὺς δὲ αὐτοὺς τούτους ὅρους ἀναγκαῖον εἶναι καὶ πόλεως ἀρετῆς καὶ κακίας καὶ πολιτείας· ἡ γὰρ πολιτεία [1295b] βίος τίς ἐστι πόλεως. ἐν ἀπάσαις δὴ ταῖς πόλεσιν ἔστι τρία μέρη τῆς πόλεως, οἱ μὲν εὖποροι σφόδρα, οἱ δὲ ἄποροι σφόδρα, οἱ δὲ τρίτοι οἱ μέσοι τούτων. ἐπεὶ τοίνυν ὁμολογεῖται τὸ μέτριον ἄριστον καὶ τὸ μέσον, φανερόν ὅτι καὶ τῶν εὐτυχημάτων ἡ κτῆσις ἡ μέση βελτίστη πάντων. ῥάστη γὰρ τῷ λόγῳ πειθαρχεῖν, ὑπέρκαλον δὲ ἢ ὑπερίσχυρον ἢ ὑπερευγενῆ ἢ ὑπερπλούσιον <ὄντα>, ἢ τάναντία τούτοις, ὑπέρπτωχον ἢ ὑπερασθενῆ ἢ σφόδρα ἄτιμον, χαλεπὸν τῷ λόγῳ ἀκολουθεῖν· γίνονται γὰρ οἱ μὲν ὑβρισταὶ καὶ μεγαλοπόνηροι μᾶλλον, οἱ δὲ κακοῦργοι καὶ μικροπόνηροι λίαν, τῶν δ' ἀδικημάτων τὰ μὲν γίνεται δι' ὑβριν τὰ δὲ διὰ κακουργίαν. ἔτι δὲ ἥκισθ' οὗτοι φυγαρχοῦσι καὶ σπουδαρχιῶσι· ταῦτα δ' ἀμφοτέρω βλαβερά ταῖς πόλεσιν. πρὸς δὲ τούτοις οἱ μὲν ἐν ὑπεροχαῖς εὐτυχημάτων ὄντες, ἰσχύος καὶ πλούτου καὶ φίλων καὶ τῶν ἄλλων τῶν τοιούτων, ἄρχεσθαι οὔτε βούλονται οὔτε ἐπίστανται (καὶ τοῦτ' εὐθὺς οἴκοθεν ὑπάρχει παισὶν οὖσιν· διὰ γὰρ τὴν τρυφὴν οὐδ' ἐν τοῖς διδασκαλείοις ἄρχεσθαι σύνηθες αὐτοῖς), οἱ δὲ καθ' ὑπερβολὴν ἐν ἐνδείᾳ τούτων ταπεινοὶ λίαν. ὥσθ' οἱ μὲν ἄρχειν οὐκ ἐπίστανται, ἀλλ' ἄρχεσθαι δουλικὴν ἀρχήν, οἱ δ' ἄρχεσθαι μὲν οὐδεμίαν ἀρχήν, ἄρχειν δὲ δεσποτικὴν ἀρχήν. γίνεται οὖν δούλων καὶ δεσποτῶν πόλις, ἀλλ' οὐκ ἐλευθέρων, καὶ τῶν μὲν φθονούντων τῶν δὲ καταφρονούντων· ἃ πλεῖστον ἀπέχει φιλίας καὶ κοινωνίας πολιτικῆς· ἡ γὰρ κοινωνία φιλικόν· οὐδὲ γὰρ ὁδοῦ βούλονται κοινωνεῖν τοῖς ἐχθροῖς. βούλεται δέ γε ἡ πόλις ἐξ ἴσων εἶναι καὶ ὁμοίων ὅτι μάλιστα, τοῦτο δ' ὑπάρχει μάλιστα τοῖς μέσοις. ὥστ' ἀναγκαῖον ἄριστα πολιτεύεσθαι ταύτην τὴν πόλιν <ἥ> ἐστὶν ἐξ ὧν φαμεν φύσει τὴν σύστασιν εἶναι τῆς πόλεως. καὶ σώζονται δ' ἐν ταῖς πόλεσιν οὗτοι μάλιστα τῶν πολιτῶν. οὔτε γὰρ αὐτοὶ τῶν ἄλλοτρίων, ὥσπερ οἱ πένητες, ἐπιθυμοῦσιν, οὔτε τῆς τούτων ἕτεροι, καθάπερ τῆς τῶν πλουσίων οἱ πένητες ἐπιθυμοῦσιν· καὶ διὰ τὸ μήτ' ἐπιβουλεύεσθαι μήτ' ἐπιβουλεύειν ἀκινδύνως διάγουσιν. διὰ τοῦτο καλῶς ἠΰξατο Φωκυλίδης “πολλὰ μέσοισιν ἄριστα· μέσος θέλω ἐν πόλει εἶναι.”

δῆλον ἄρα ὅτι καὶ ἡ κοινωνία ἡ πολιτικὴ ἀρίστη ἡ διὰ τῶν μέσων, καὶ τὰς τοιαύτας ἐνδέχεται εὖ πολιτεύεσθαι πόλεις ἐν αἷς δὴ πολὺ τὸ μέσον καὶ κρεῖττον, μάλιστα μὲν ἀμφοῖν, εἰ δὲ μή, θατέρου μέρους· προστιθέμενον γὰρ ποιεῖ ῥοπὴν καὶ κωλύει γίνεσθαι τὰς ἐναντίας ὑπερβολάς. διόπερ εὐτυχία μεγίστη τοὺς πολιτευομένους οὐσίαν ἔχειν μέσην καὶ ἱκανήν, [1296a] ὥς ὅπου οἱ μὲν πολλὰ σφόδρα κέκτηνται οἱ δὲ μηθέν, ἢ δῆμος ἔσχατος γίνεται ἢ

ὀλιγαρχία ἄκρατος, ἢ τυραννὶς δι' ἀμφοτέρας τὰς ὑπερβολάς· καὶ γὰρ ἐκ δημοκρατίας τῆς νεανικωτάτης καὶ ἐξ ὀλιγαρχίας γίγνεται τυραννὶς, ἐκ δὲ τῶν μέσων καὶ τῶν σύνεγγυς πολὺ ἦττον. τὴν δ' αἰτίαν ὕστερον ἐν τοῖς περὶ τὰς μεταβολὰς τῶν πολιτειῶν ἐροῦμεν. ὅτι δ' ἡ μέση βελτίστη, φανερόν· μόνη γὰρ ἀστασίαστος· ὅπου γὰρ πολὺ τὸ διὰ μέσου, ἥκιστα στάσεις καὶ διαστάσεις γίνονται τῶν πολιτῶν. καὶ αἱ μεγάλαι πόλεις ἀστασιαστότεραι διὰ τὴν αὐτὴν αἰτίαν, ὅτι πολὺ τὸ μέσον· ἐν δὲ ταῖς μικραῖς ῥᾶδιόν τε διαλαβεῖν εἰς δύο πάντας, ὥστε μὴ ἐν καταλιπεῖν μέσον, καὶ πάντες σχεδὸν ἄποροι ἢ εὐποροὶ εἰσι. καὶ αἱ δημοκρατίαι δὲ ἀσφαλέστεραι τῶν ὀλιγαρχιῶν εἰσι καὶ πολυχρονιώτεραι διὰ τοὺς μέσους (πλείους τε γὰρ εἰσι καὶ μᾶλλον μετέχουσι τῶν τιμῶν ἐν ταῖς δημοκρατίαις ἢ ταῖς ὀλιγαρχίαις), ἐπεὶ ὅταν ἄνευ τούτων τῷ πλήθει ὑπερτείνωσιν οἱ ἄποροι, κακοπραγία γίνεται καὶ ἀπόλλυνται ταχέως. σημεῖον δὲ δεῖ νομίζειν καὶ τὸ τοὺς βελτίστους νομοθέτας εἶναι τῶν μέσων πολιτῶν· Σόλων τε γὰρ ἦν τούτων (δηλοῖ δ' ἐκ τῆς ποιήσεως) καὶ Λυκοῦργος (οὐ γὰρ ἦν βασιλεύς) καὶ Χαρώνδας καὶ σχεδὸν οἱ πλεῖστοι τῶν ἄλλων.

φανερόν δ' ἐκ τούτων καὶ διότι αἱ πλεῖσται πολιτεῖαι αἱ μὲν δημοκρατικαὶ εἰσιν αἱ δ' ὀλιγαρχικαί. διὰ γὰρ τὸ ἐν ταύταις πολλάκις ὀλίγον εἶναι τὸ μέσον, αἰεὶ ὁπότεροι ἂν ὑπερέχωσιν, εἴθ' οἱ τὰς οὐσίας ἔχοντες εἴθ' ὁ δῆμος, οἱ τὸ μέσον ἐκβαίνοντες κατ' αὐτοὺς ἄγουσι τὴν πολιτείαν, ὥστε ἢ δῆμος γίγνεται ἢ ὀλιγαρχία. πρὸς δὲ τούτοις διὰ τὸ στάσεις γίνεσθαι καὶ μάχας πρὸς ἀλλήλους τῷ δήμῳ καὶ τοῖς εὐπόροις, ὁποτέρους ἂν μᾶλλον συμβῇ κρατῆσαι τῶν ἐναντίων, οὐ καθιστᾷσι κοινὴν πολιτείαν οὐδ' ἴσην, ἀλλὰ τῆς νίκης ἄθλον τὴν ὑπεροχὴν τῆς πολιτείας λαμβάνουσιν, καὶ οἱ μὲν δημοκρατίαν οἱ δ' ὀλιγαρχίαν ποιοῦσιν. ἔτι δὲ καὶ τῶν ἐν ἡγεμονίᾳ γενομένων τῆς Ἑλλάδος πρὸς τὴν παρ' αὐτοῖς ἐκάτεροι πολιτείαν ἀποβλέποντες οἱ μὲν δημοκρατίας ἐν ταῖς πόλεσι καθίστασαν οἱ δ' ὀλιγαρχίας, οὐ πρὸς τὸ τῶν πόλεων συμφέρον σκοποῦντες ἀλλὰ πρὸς τὸ σφέτερον αὐτῶν, ὥστε διὰ ταύτας τὰς αἰτίας ἢ μὴδέποτε τὴν μέσην γίνεσθαι πολιτείαν ἢ ὀλιγάκις καὶ παρ' ὀλίγοις· εἰς γὰρ ἄνθρωπος συνεπίσθη μόνος τῶν πρότερον ἐφ' ἡγεμονίᾳ γενομένων ταύτην ἀποδοῦναι τὴν τάξιν, ἥδη δὲ καὶ τοῖς ἐν ταῖς πόλεσιν ἔθος [1296b] κατέστηκε μὴδὲ βούλεσθαι τὸ ἴσον, ἀλλ' ἢ ἄρχειν ζητεῖν ἢ κρατουμένους ὑπομένειν. τίς μὲν οὖν ἀρίστη πολιτεία, καὶ διὰ τίν' αἰτίαν, ἐκ τούτων φανερόν· τῶν δ' ἄλλων πολιτειῶν, ἐπειδὴ πλείους δημοκρατίας καὶ πλείους ὀλιγαρχίας φανερὸν εἶναι, ποίαν πρώτην θετέον καὶ δευτέραν καὶ τοῦτον δὲ τὸν τρόπον ἐχομένην τῷ τὴν μὲν εἶναι βελτίω τὴν δὲ χείρω, διωρισμένης τῆς ἀρίστης οὐ χαλεπὸν ἰδεῖν. ἀεὶ γὰρ ἀναγκαῖον εἶναι βελτίω τὴν ἐγγύτατα ταύτης, χείρω δὲ τὴν ἀφεστηκυῖαν τοῦ μέσου πλεῖον, ἂν μὴ πρὸς ὑπόθεσιν κρίνη τις. λέγω δὲ τὸ

πρὸς ὑπόθεσιν, ὅτι πολλάκις, οὔσης ἄλλης πολιτείας αἰρετωτέρας, ἐνίοις οὐδὲν κωλύει συμφέρειν ἑτέραν μᾶλλον εἶναι πολιτείαν.

Τίς δὲ πολιτεία τίσι καὶ ποία συμφέρει ποίοις, ἐχόμενόν ἐστι τῶν εἰρημένων διελθεῖν. ληπτέον δὴ πρῶτον περὶ πασῶν καθόλου ταῦτόν· δεῖ γὰρ κρεῖττον εἶναι τὸ βουλούμενον μέρος τῆς πόλεως τοῦ μὴ βουλομένου μένειν τὴν πολιτείαν. ἔστι δὲ πᾶσα πόλις ἔκ τε τοῦ ποιοῦ καὶ ποσοῦ. λέγω δὲ ποιὸν μὲν ἐλευθερίαν πλοῦτον παιδείαν εὐγένειαν, ποσὸν δὲ τὴν τοῦ πλήθους ὑπεροχήν. ἐνδέχεται δὲ τὸ μὲν ποιὸν ὑπάρχειν ἑτέρῳ μέρει τῆς πόλεως, ἐξ ὧν συνέστηκε μερῶν ἢ πόλις, ἄλλῳ δὲ μέρει τὸ ποσόν, οἷον πλείους τὸν ἀριθμὸν εἶναι τῶν γενναίων τοὺς ἀγεννεῖς ἢ τῶν πλουσίων τοὺς ἀπόρους, μὴ μέντοι τοσοῦτον ὑπερέχειν τῷ ποσῷ ὅσον λείπεται τῷ ποιῷ. διὸ ταῦτα πρὸς ἄλληλα συγκριτέον. ὅπου μὲν οὖν ὑπερέχει τὸ τῶν ἀπόρων πλήθος τὴν εἰρημένην ἀναλογίαν, ἐνταῦθα πέφυκεν εἶναι δημοκρατίαν, καὶ ἕκαστον εἶδος δημοκρατίας κατὰ τὴν ὑπεροχὴν τοῦ δήμου ἑκάστου, οἷον ἐὰν μὲν τὸ τῶν γεωργῶν ὑπερτείνῃ πλήθος, τὴν πρώτην δημοκρατίαν, ἐὰν δὲ τὸ τῶν βαναύσων καὶ μισθαρνούντων, τὴν τελευταίαν, ὁμοίως δὲ καὶ τὰς ἄλλας τὰς μεταξὺ τούτων· ὅπου δὲ τὸ τῶν εὐπόρων καὶ γνωρίμων μᾶλλον ὑπερτείνει τῷ ποιῷ ἢ λείπεται τῷ ποσῷ, ἐνταῦθα ὀλιγαρχίαν, καὶ τῆς ὀλιγαρχίας τὸν αὐτὸν τρόπον ἕκαστον εἶδος κατὰ τὴν ὑπεροχὴν τοῦ ὀλιγαρχικοῦ πλήθους.

δεῖ δ' αἰεὶ τὸν νομοθέτην ἐν τῇ πολιτείᾳ προσλαμβάνειν τοὺς μέσους· ἂν τε γὰρ ὀλιγαρχικοὺς τοὺς νόμους τιθῇ, στοχάζεσθαι χρὴ τῶν μέσων, ἐὰν τε δημοκρατικούς, προσάγεσθαι τοῖς νόμοις τούτους. ὅπου δὲ τὸ τῶν μέσων ὑπερτείνει πλήθος ἢ συναμφοτέρων τῶν ἄκρων ἢ καὶ θατέρου μόνον, ἐνταῦθα ἐνδέχεται πολιτείαν εἶναι μόνιμον. οὐθὲν γὰρ φοβερὸν μή [1297a] ποτε συμφωνήσωσιν οἱ πλούσιοι τοῖς πένησιν ἐπὶ τούτους· οὐδέποτε γὰρ ἄτεροι βουλήσονται δουλεύειν τοῖς ἑτέροις, κοινοτέραν δ', ἂν ζητῶσιν, οὐδεμίαν εὐρήσουσιν ἄλλην ταύτης. ἐν μέρει γὰρ ἄρχειν οὐκ ἂν ὑπομείνειαν διὰ τὴν ἀπιστίαν τὴν πρὸς ἀλλήλους· πανταχοῦ δὲ πιστότατος ὁ διαιτητής, διαιτητὴς δ' ὁ μέσος. ὅσω δ' ἂν ἄμεινον ἢ πολιτεία μειχθῇ, τοσοῦτω μονιμωτέρα. διαμαρτάνουσι δὲ πολλοὶ καὶ τῶν τὰς ἀριστοκρατικὰς βουλομένων ποιεῖν πολιτείας, οὐ μόνον ἐν τῷ πλεῖον νέμειν τοῖς εὐπόροις, ἀλλὰ καὶ ἐν τῷ παρακρούεσθαι τὸν δῆμον. ἀνάγκη γὰρ χρόνῳ ποτὲ ἐκ τῶν ψευδῶν ἀγαθῶν ἀληθὲς συμβῆναι κακόν· αἱ γὰρ πλεονεξίαι τῶν πλουσίων ἀπολλύουσι μᾶλλον τὴν πολιτείαν ἢ αἱ τοῦ δήμου.

Ἔστι δ' ὅσα προφάσεως χάριν ἐν ταῖς πολιτείαις σοφίζονται πρὸς τὸν δῆμον πέντε τὸν ἀριθμόν, περὶ ἐκκλησίαν, περὶ τὰς ἀρχάς, περὶ δικαστήρια,

περὶ ὅπλισιν, περὶ γυμνασίαν· περὶ ἐκκλησίαν μὲν τὸ ἐξεῖναι ἐκκλησιάζειν πᾶσι, ζημίαν δὲ ἐπικεῖσθαι τοῖς εὐπόροις ἔαν μὴ ἐκκλησιάζωσιν, ἢ μόνοις ἢ μείζω πολλῶ, περὶ δὲ τὰς ἀρχὰς τὸ τοῖς μὲν ἔχουσι τίμημα μὴ ἐξεῖναι ἐξόμνυσθαι, τοῖς δ' ἀπόροις ἐξεῖναι, καὶ περὶ τὰ δικαστήρια τοῖς μὲν εὐπόροις εἶναι ζημίαν ἂν μὴ δικάζωσι, τοῖς δ' ἀπόροις ἄδειαν, ἢ τοῖς μὲν μεγάλην τοῖς δὲ μικράν, ὥσπερ ἐν τοῖς Χαρώνδου νόμοις. ἑνιαχοῦ δ' ἔξεστι μὲν πᾶσιν ἀπογραψάμενοις ἐκκλησιάζειν καὶ δικάζειν, ἔαν δὲ ἀπογραψάμενοι μὴτ' ἐκκλησιάζωσι μῆτε δικάζωσιν, ἐπικεῖνται μεγάλαι ζημίαι τούτοις, ἵνα διὰ μὲν τὴν ζημίαν φεύγωσι τὸ ἀπογράφεσθαι, διὰ δὲ τὸ μὴ ἀπογράφεσθαι μὴ δικάζωσι μηδ' ἐκκλησιάζωσιν. τὸν αὐτὸν δὲ τρόπον καὶ περὶ τοῦ ὅπλα κεκτηῖσθαι καὶ τοῦ γυμνάζεσθαι νομοθετοῦσιν. τοῖς μὲν γὰρ ἀπόροις ἔξεστι μὴ κεκτηῖσθαι, τοῖς δ' εὐπόροις ἐπιζήμιον μὴ κεκτημένοις, κἂν μὴ γυμνάζωνται, τοῖς μὲν οὐδεμίαν ζημίαν, τοῖς δ' εὐπόροις ἐπιζήμιον, ὅπως οἱ μὲν διὰ τὴν ζημίαν μετέχωσιν, οἱ δὲ διὰ τὸ μὴ φοβεῖσθαι μὴ μετέχωσιν. ταῦτα μὲν οὖν ὀλιγαρχικὰ σοφίσματα τῆς νομοθεσίας· ἐν δὲ ταῖς δημοκρατίαις πρὸς ταῦτ' ἀντισοφίζονται. τοῖς μὲν γὰρ ἀπόροις μισθὸν πορίζουσιν ἐκκλησιάζουσι καὶ δικάζουσιν, τοῖς δ' εὐπόροις οὐδεμίαν τάττουσι ζημίαν. ὥστε φανερὸν ὅτι εἴ τις βούλεται μιγνύναι δικαίως, δεῖ τὰ παρ' ἑκατέροις συνάγειν καὶ τοῖς μὲν μισθὸν πορίζειν τοῖς δὲ ζημίαν· οὕτω γὰρ ἂν κοιωνοῖεν ἅπαντες, ἐκείνως δ' ἡ πολιτεία γίγνεται [1297b] τῶν ἑτέρων μόνον. δεῖ δὲ τὴν πολιτείαν εἶναι μὲν ἐκ τῶν τὰ ὅπλα ἐχόντων μόνον· τοῦ δὲ τιμήματος τὸ πλῆθος ἀπλῶς μὲν ὀρισσάμενους οὐκ ἔστιν εἰπεῖν τοσοῦτον <δεῖν> ὑπάρχειν, ἀλλὰ σκεψαμένους τὸ πόσον ἐπιβάλλει μακρότατον ὥστε τοὺς μετέχοντας τῆς πολιτείας εἶναι πλείους τῶν μὴ μετεχόντων, τοῦτο τάττειν. ἐθέλουσι γὰρ οἱ πένητες καὶ μὴ μετέχοντες τῶν τιμῶν ἡσυχίαν ἔχειν, ἔαν μῆτε ὑβρίζῃ τις αὐτοὺς μῆτε ἀφαιρῇται μὴθὲν τῆς οὐσίας. ἀλλὰ τοῦτο οὐ ῥάδιον· οὐ γὰρ ἀεὶ συμβαίνει χαρίεντας εἶναι τοὺς μετέχοντας τοῦ πολιτεύματος. καὶ εἰώθασι δέ, ὅταν πόλεμος ἦ, ὀκνεῖν, ἂν μὴ λαμβάνωσι τροφήν, ἀποροι δὲ ὦσιν· ἔαν δὲ πορίζῃ τις τροφήν, βούλονται πολεμεῖν.

ἔστι δὲ ἡ πολιτεία παρ' ἐνίοις οὐ μόνον ἐκ τῶν ὀπλιτευόντων ἀλλὰ καὶ ἐκ τῶν ὠπλιτευκόντων· ἐν Μαλιεῦσι δὲ ἡ μὲν πολιτεία ἦν ἐκ τούτων, τὰς δὲ ἀρχὰς ἡροῦντο ἐκ τῶν στρατευομένων. καὶ ἡ πρώτη δὲ πολιτεία ἐν τοῖς Ἑλλήσιν ἐγένετο μετὰ τὰς βασιλείας ἐκ τῶν πολεμούντων, ἡ μὲν ἐξ ἀρχῆς ἐκ τῶν ἱππέων (τὴν γὰρ ἰσχὺν καὶ τὴν ὑπεροχὴν ἐν τοῖς ἱππεῦσιν ὁ πόλεμος εἶχεν· ἄνευ μὲν γὰρ συντάξεως ἄχρηστον τὸ ὀπλιτικόν, αἱ δὲ περὶ τῶν τοιούτων ἐμπειρίαι καὶ τάξεις ἐν τοῖς ἀρχαίοις οὐχ ὑπῆρχον, ὥστ' ἐν τοῖς ἱππεῦσιν εἶναι τὴν ἰσχύον), αὐξανομένων δὲ τῶν πόλεων καὶ τῶν ἐν τοῖς ὅπλοις ἰσχυσάντων μᾶλλον πλείους μετεῖχον τῆς πολιτείας· διόπερ ἅς νῦν

καλοῦμεν πολιτείας, οἱ πρότερον ἐκάλουν δημοκρατίας· ἦσαν δὲ αἱ ἀρχαῖαι πολιτεῖαι εὐλόγως ὀλιγαρχικαὶ καὶ βασιλικαί. δι' ὀλιγανθρωπίαν γὰρ οὐκ εἶχον πολὺ τὸ μέσον, ὥστ' ὀλίγοι τε ὄντες τὸ πλῆθος καὶ κατὰ τὴν σύνταξιν φαῦλοι ὑπέμενον τὸ ἄρχεσθαι. διὰ τίνα μὲν οὖν εἰσιν αἰτίαν αἱ πολιτεῖαι πλείους, καὶ διὰ τί παρὰ τὰς λεγομένας ἕτεροι (δημοκρατία τε γὰρ οὐ μία τὸν ἀριθμὸν ἐστὶ, καὶ τῶν ἄλλων ὁμοίως), ἔτι δὲ τίνες αἱ διαφοραὶ καὶ διὰ τίνα αἰτίαν συμβαίνει, πρὸς δὲ τούτοις τίς ἀρίστη τῶν πολιτειῶν ὡς ἐπὶ τὸ πλεῖστον εἶπεῖν, καὶ τῶν ἄλλων ποία ποίοις ἀρμόττει τῶν πολιτειῶν, εἴρηται.

Πάλιν δὲ καὶ κοινῇ καὶ χωρὶς περὶ ἐκάστης λέγωμεν περὶ τῶν ἐφεξῆς, λαβόντες ἀρχὴν τὴν προσήκουσαν αὐτῶν. ἔστι δὴ τρία μόρια τῶν πολιτειῶν πασῶν, περὶ ὧν δεῖ θεωρεῖν τὸν σπουδαῖον νομοθέτην ἐκάστη τὸ συμφέρον· ὧν ἐχόντων καλῶς ἀνάγκη τὴν πολιτείαν ἔχειν καλῶς, καὶ τὰς πολιτείας ἀλλήλων διαφέρειν ἐν τῷ διαφέρειν ἕκαστον τούτων. ἔστι δὲ τῶν τριῶν τούτων ἓν μὲν τί τὸ βουλευόμενον [1298a] περὶ τῶν κοινῶν, δεύτερον δὲ τὸ περὶ τὰς ἀρχάς (τοῦτο δ' ἐστὶ τίνας δεῖ καὶ τίνων εἶναι κυρίας, καὶ ποίαν τινὰ δεῖ γίνεσθαι τὴν αἵρεσιν αὐτῶν), τρίτον δὲ τί τὸ δικάζον. κύριον δ' ἐστὶ τὸ βουλευόμενον περὶ πολέμου καὶ εἰρήνης, καὶ συμμαχίας καὶ διαλύσεως, καὶ περὶ νόμων, καὶ περὶ θανάτου καὶ φυγῆς καὶ δημεύσεως, καὶ περὶ ἀρχῶν αἵρέσεως καὶ τῶν εὐθυνῶν. ἀναγκαῖον δ' ἦτοι πᾶσι τοῖς πολίταις ἀποδίδοσθαι πάσας ταύτας τὰς κρίσεις ἢ τισὶ πάσας (οἷον ἀρχῇ τινὶ μιᾷ ἢ πλείοσιν, ἢ ἑτέραις ἑτέρας) ἢ τινὰς μὲν αὐτῶν πᾶσι τινὰς δὲ τισίν.

τὸ μὲν οὖν πάντας καὶ περὶ ἀπάντων δημοτικόν· τὴν τοιαύτην γὰρ ἰσότητα ζητεῖ ὁ δῆμος. εἰσὶ δὲ οἱ τρόποι τοῦ πάντας πλείους, εἷς μὲν τὸ κατὰ μέρος ἀλλὰ μὴ πάντας ἀθρόους (ὥσπερ ἐν τῇ πολιτείᾳ τῇ Τηλεκλέους ἐστὶ τοῦ Μιλησίου· καὶ ἐν ἄλλαις δὲ πολιτείαις βουλεύονται αἱ συναρχαὶ συνιοῦσαι, εἷς δὲ τὰς ἀρχὰς βαδίζουσι πάντες κατὰ μέρος ἐκ τῶν φυλῶν καὶ τῶν μορίων τῶν ἐλαχίστων παντελῶς, ἕως ἂν διεξέλθῃ διὰ πάντων), συνιέναι δὲ μόνον περὶ τε νόμων θέσεως καὶ τῶν περὶ τῆς πολιτείας, καὶ τὰ παραγγελλόμενα ἀκουσομένους ὑπὸ τῶν ἀρχόντων· ἄλλος δὲ τρόπος τὸ πάντας ἀθρόους, συνιέναι δὲ μόνον πρὸς τε τὰς ἀρχαιρεσίας [αἵρησομένους] καὶ πρὸς τὰς νομοθεσίας καὶ περὶ πολέμου καὶ εἰρήνης καὶ πρὸς εὐθύνας, τὰ δ' ἄλλα τὰς ἀρχὰς βουλεύεσθαι τὰς ἐφ' ἐκάστοις τεταγμένας, αἵρετὰς οὔσας ἐξ ἀπάντων ἢ κληρωτάς· ἄλλος δὲ τρόπος τὸ περὶ τὰς ἀρχὰς καὶ τὰς εὐθύνας ἀπαντᾶν τοὺς πολίτας, καὶ περὶ πολέμου βουλευσομένους καὶ συμμαχίας, τὰ δ' ἄλλα τὰς ἀρχὰς διοικεῖν αἵρετὰς οὔσας, ὅσας ἐνδέχεται, τοιαῦται δ' εἰσὶν ὅσας ἄρχειν ἀναγκαῖον τοὺς ἐπισταμένους· τέταρτος δὲ τρόπος τὸ πάντας περὶ πάντων βουλεύεσθαι συνιόντας, τὰς δ' ἀρχὰς περὶ μηθενὸς κρίνειν ἀλλὰ



μόνον προανακρίνειν, ὥνπερ ἡ τελευταία δημοκρατία νῦν διοικεῖται τρόπον, ἣν ἀνάλογόν φαμεν εἶναι ὀλιγαρχία τε δυναστευτικῇ καὶ μοναρχία τυραννικῇ. οὗτοι μὲν οὖν οἱ τρόποι δημοκρατικοὶ πάντες, τὸ δὲ τινὰς περὶ πάντων ὀλιγαρχικόν. ἔχει δὲ καὶ τοῦτο διαφορὰς πλείους. ὅταν μὲν γὰρ ἀπὸ τιμημάτων μετριωτέρων αἵρετοί τε ὥσι καὶ πλείους διὰ τὴν μετριότητα τοῦ τιμήματος, καὶ περὶ ὧν ὁ νόμος ἀπαγορεύει μὴ κινῶσιν ἀλλ' ἀκολουθῶσι, καὶ ἐξῇ κτωμένῳ τὸ τίμημα μετέχειν, ὀλιγαρχία μὲν πολιτικὴ δὲ ἐστὶν ἡ τοιαύτη διὰ τὸ μετριάζειν· ὅταν δὲ μὴ πάντες τοῦ βουλευέσθαι [1298b] μετέχωσιν ἀλλ' αἵρετοί, κατὰ νόμον δ' ἄρχωσιν ὥσπερ καὶ πρότερον, ὀλιγαρχικόν· ὅταν δὲ καὶ αἵρῶνται αὐτοὶ αὐτοὺς οἱ κύριοι τοῦ βουλευέσθαι, καὶ ὅταν παῖς ἀντὶ πατρὸς εἰσὶ καὶ κύριοι τῶν νόμων ὥσιν, ὀλιγαρχικωτάτην ἀναγκαῖον εἶναι τὴν τάξιν ταύτην. ὅταν δὲ τινῶν τινές, οἷον πολέμου μὲν καὶ εἰρήνης καὶ εὐθυνῶν πάντες, τῶν δὲ ἄλλων ἄρχοντες, καὶ οὗτοι αἵρετοί, μὴ κληρωτοί, ἀριστοκρατία ἢ πολιτεία. ἐὰν δ' ἐνίων μὲν αἵρετοὶ ἐνίων δὲ κληρωτοί, καὶ κληρωτοὶ ἢ ἀπλῶς ἢ ἐκ προκρίτων, ἢ κοινῇ αἵρετοὶ καὶ κληρωτοί, τὰ μὲν πολιτείας ἀριστοκρατικῆς ἐστὶ τούτων, τὰ δὲ πολιτείας αὐτῆς.

διήρηται μὲν οὖν τὸ βουλευόμενον πρὸς τὰς πολιτείας τοῦτον τὸν τρόπον, καὶ διοικεῖ ἑκάστη πολιτεία κατὰ τὸν εἰρημένον διορισμόν· συμφέρει δὲ δημοκρατία [τε] τῇ μάλιστ' εἶναι δοκούσῃ δημοκρατία νῦν (λέγω δὲ τοιαύτην ἐν ἣ ὁ κύριος ὁ δῆμος καὶ τῶν νόμων ἐστίν) πρὸς τὸ βουλευέσθαι βέλτιον τὸ αὐτὸ ποιεῖν ὅπερ ἐπὶ τῶν δικαστηρίων ἐν ταῖς ὀλιγαρχίαις (τάπτουσι γὰρ ζημίαν τούτοις οὓς βούλονται δικάζειν, ἵνα δικάζωσιν, οἱ δὲ δημοτικοὶ μισθὸν τοῖς ἀπόροις), τοῦτο δὲ καὶ περὶ τὰς ἐκκλησίας ποιεῖν (βουλευσονται γὰρ βέλτιον κοινῇ βουλευόμενοι πάντες, ὁ μὲν δῆμος μετὰ τῶν γνωρίμων, οὗτοι δὲ μετὰ τοῦ πλήθους), συμφέρει δὲ καὶ τὸ αἵρετοὺς εἶναι τοὺς βουλευομένους, ἢ κληρωτοὺς ἴσους ἐκ τῶν μορίων, συμφέρει δέ, κἂν ὑπερβάλλωσι πολὺ κατὰ τὸ πλῆθος οἱ δημοτικοὶ τῶν πολιτῶν, ἢ μὴ πᾶσι δίδοναι μισθόν, ἀλλ' ὅσοι σύμμετροι πρὸς τὸ τῶν γνωρίμων πλῆθος, ἢ ἀποκληροῦν τοὺς πλείους· ἐν δὲ ταῖς ὀλιγαρχίαις ἢ προσαιρεῖσθαι τινὰς ἐκ τοῦ πλήθους, ἢ κατασκευάσαντας ἀρχεῖον οἷον ἐν ἐνίαις πολιτείαις ἐστὶν οὓς καλοῦσι προβούλους καὶ νομοφύλακας, [καὶ] περὶ τούτων χρηματίζειν περὶ ὧν ἂν οὗτοι προβουλευσώσιν (οὕτω γὰρ μεθέξει ὁ δῆμος τοῦ βουλευέσθαι, καὶ λύειν οὐθὲν δυνήσεται τῶν περὶ τὴν πολιτείαν), ἔτι ἢ ταῦτ' ἀψηφίζεσθαι τὸν δῆμον ἢ μηθὲν ἐναντίον τοῖς εἰσφερομένοις, ἢ τῆς συμβουλῆς μὲν μεταδίδοναι πᾶσι, βουλευέσθαι δὲ τοὺς ἄρχοντας. καὶ τὸ ἀντικείμενον δὲ τοῦ ἐν ταῖς πολιτείαις γιγνομένου δεῖ ποιεῖν. ἀποψηφιζόμενον μὲν γὰρ κύριον δεῖ ποιεῖν τὸ πλῆθος, καταψηφιζόμενον δὲ μὴ κύριον, ἀλλ' ἐπαναγέσθω πάλιν ἐπὶ τοὺς ἄρχοντας.

ἐν γὰρ ταῖς πολιτείαις ἀνεστραμμένως ποιοῦσιν· οἱ γὰρ ὀλίγοι ἀποψηφισάμενοι μὲν κύριοι, καταψηφισάμενοι δὲ οὐ κύριοι, ἀλλ' ἐπανάγεται εἰς τοὺς πλείους [1299a] αἰεὶ. περὶ μὲν οὖν τοῦ βουλευομένου καὶ τοῦ κυρίου [δεῖ] τῆς πολιτείας τοῦτον διωρίσθω τὸν τρόπον.

Ἐχομένη δὲ τούτων ἐστὶν ἡ περὶ τὰς ἀρχὰς διαίρεσις. ἔχει γὰρ καὶ τοῦτο τὸ μόνιον τῆς πολιτείας πολλὰς διαφοράς, πόσαι τε ἀρχαί, καὶ κύριαι τίνων, καὶ περὶ χρόνου, πόσος ἐκάστης ἀρχῆς (οἱ μὲν γὰρ ἐξαμήνους, οἱ δὲ δι' ἐλάττονος, οἱ δ' ἐνιαυσίας, οἱ δὲ πολυχρονιωτέρας ποιοῦσι τὰς ἀρχάς), καὶ πότερον εἶναι δεῖ τὰς ἀρχὰς αἰδίους ἢ πολυχρονίους ἢ μηδέτερον ἀλλὰ πλεονάκεις τοὺς αὐτούς, ἢ μὴ τὸν αὐτὸν δις ἀλλ' ἅπαξ μόνον, ἔτι δὲ περὶ τὴν κατάστασιν τῶν ἀρχῶν, ἐκ τίνων δεῖ γίνεσθαι καὶ ὑπὸ τίνων καὶ πῶς. περὶ πάντων γὰρ τούτων δεῖ δύνασθαι διελεῖν κατὰ πόσους ἐνδέχεται γενέσθαι τρόπους, κἄπειτα προσαρμόσαι ὁποῖαις <αἱ> ποιαὶ πολιτεῖαις συμφέρουσιν. ἔστι δὲ οὐδὲ τοῦτο διορίσαι ῥάδιον, ποίας δεῖ καλεῖν ἀρχάς· πολλῶν γὰρ ἐπιστατῶν ἢ πολιτικῇ κοινωνίᾳ δεῖται, διόπερ <οὐ> πάντας οὔτε τοὺς αἰρετοὺς οὔτε τοὺς κληρωτοὺς ἄρχοντας θετέον, οἷον τοὺς ἱερεῖς πρῶτον (τοῦτο γὰρ ἕτερόν τι παρὰ τὰς πολιτικὰς ἀρχὰς θετέον). ἔτι δὲ καὶ χορηγοὶ καὶ κήρυκες [δ'] αἰροῦνται καὶ πρεσβευταί. εἰσὶ δὲ αἱ μὲν πολιτικαὶ τῶν ἐπιμελειῶν, ἢ πάντων τῶν πολιτῶν πρὸς τινα πρᾶξιν, οἷον στρατηγὸς στρατευομένων, ἢ κατὰ μέρος, οἷον ὁ γυναικονόμος ἢ παιδονόμος· αἱ δ' οἰκονομικαὶ (πολλάκις γὰρ αἰροῦνται σιτομέτρας)· αἱ δ' ὑπηρετικαὶ καὶ πρὸς ἅς, ἂν εὐπορῶσι, τάττουσι δούλους. μάλιστα δ' ὥς ἀπλῶς εἰπεῖν ἀρχὰς λεκτέον ταύτας ὅσαις ἀποδέδοται βουλευσασθαί τε περὶ τινῶν καὶ κρῖναι καὶ ἐπιτάξαι, καὶ μάλιστα τοῦτο· τὸ γὰρ ἐπιτάττειν ἀρχικώτερόν ἐστιν. ἀλλὰ ταῦτα διαφέρει πρὸς μὲν τὰς χρήσεις οὐδὲν ὥς εἰπεῖν (οὐ γάρ πω κρίσις γέγονεν ἀμφισβητούντων περὶ τοῦ ὀνόματος), ἔχει δέ τιν' ἄλλην διανοητικὴν πραγματείαν.

ποῖαι δ' ἀρχαὶ καὶ πόσαι ἀναγκαῖαι εἰ ἔσται πόλις, καὶ ποῖαι ἀναγκαῖαι μὲν οὐ, χρήσιμοι δὲ πρὸς σπουδαίαν πολιτείαν, μᾶλλον ἢ τις ἀπορήσειε πρὸς ἅπασάν τε δὴ πολιτείαν καὶ δὴ καὶ τὰς μικρὰς πόλεις. ἐν μὲν γὰρ δὴ ταῖς μεγάλαις ἐνδέχεται τε καὶ δεῖ μίαν τετάχθαι πρὸς ἓν ἔργον (πολλοὺς τε γὰρ εἰς τὰ ἀρχεῖα ἐνδέχεται βαδίζειν διὰ τὸ πολλοὺς εἶναι τοὺς πολίτας, ὥστε τὰς μὲν διαλείπειν πολὺν χρόνον τὰς δ' ἅπαξ ἄρχειν, καὶ βέλτιον ἕκαστον ἔργον τυγχάνει τῆς ἐπιμελείας μονοπαραματούσης [1299b] ἢ πολυπραγματούσης). ἐν δὲ ταῖς μικραῖς ἀνάγκη συνάγειν εἰς ὀλίγους πολλὰς ἀρχὰς (διὰ γὰρ ὀλιγανθρωπίαν οὐ ῥάδιόν ἐστι πολλοὺς ἐν ταῖς ἀρχαῖς εἶναι· τίνες γὰρ οἱ τούτοις ἔσσονται διαδεξόμενοι πάλιν;). δέονται δ' ἐνίοτε τῶν αὐτῶν ἀρχῶν καὶ νόμων αἱ μικραὶ ταῖς μεγάλαις· πλὴν αἱ μὲν δέονται πολλάκις τῶν αὐτῶν, ταῖς

δ' ἐν πολλῷ χρόνῳ τοῦτο συμβαίνει, διόπερ οὐθὲν κωλύει πολλὰς ἐπιμελείας ἅμα προστάττειν (οὐ γὰρ ἐμποδιοῦσιν ἀλλήλαις), καὶ πρὸς τὴν ὀλιγανθρωπίαν ἀναγκαῖον τὰ ἀρχεῖα οἷον ὀβελισκολύχνια ποιεῖν. ἔάν οὖν ἔχωμεν λέγειν πόσας ἀναγκαῖον ὑπάρχειν πάσῃ πόλει, καὶ πόσας οὐκ ἀναγκαῖον μὲν δεῖ δ' ὑπάρχειν, ῥᾶον ἂν τις εἰδὼς ταῦτα συνάγοι ποίας ἀρμόττει συνάγειν ἀρχὰς εἰς μίαν ἀρχήν. ἀρμόττει δὲ καὶ τοῦτο μὴ λεληθέναι, ποίων δεῖ κατὰ τόπον ἀρχεῖα πολλὰ ἐπιμελεῖσθαι καὶ ποίων πανταχοῦ μίαν ἀρχὴν εἶναι κυρίαν, οἷον εὐκοσμίας πότερον ἐν ἀγορᾷ μὲν ἀγορανόμον, ἄλλον δὲ κατ' ἄλλον τόπον, ἢ πανταχοῦ τὸν αὐτόν· καὶ πότερον κατὰ τὸ πρᾶγμα δεῖ διαιρεῖν ἢ κατὰ τοὺς ἀνθρώπους, λέγω δ' οἷον ἓνα τῆς εὐκοσμίας, ἢ παίδων ἄλλον καὶ γυναικῶν· καὶ κατὰ τὰς πολιτείας δέ, πότερον διαφέρει καθ' ἑκάστην καὶ τὸ τῶν ἀρχῶν γένος ἢ οὐθέν, οἷον ἐν δημοκρατίᾳ καὶ ὀλιγαρχίᾳ καὶ ἀριστοκρατίᾳ καὶ μοναρχίᾳ πότερον αἱ αὐταὶ μὲν εἰσιν ἀρχαὶ κύριαι, οὐκ ἐξ ἴσων δ' οὐδ' ἐξ ὁμοίων, ἀλλ' ἐτέρων ἐν ἐτέραις, οἷον ἐν μὲν ταῖς ἀριστοκρατίαις ἐκ πεπαιδευμένων, ἐν δὲ ταῖς ὀλιγαρχίαις ἐκ τῶν πλουσίων, ἐν δὲ ταῖς δημοκρατίαις ἐκ τῶν ἐλευθέρων, ἢ τυγχάνουσι μὲν τινες οὔσαι καὶ κατ' αὐτὰς τὰς διαφορὰς τῶν ἀρχῶν, ἔστι δ' ὅπου συμφέρουσιν αἱ αὐταὶ καὶ ὅπου διαφέρουσιν (ἔνθα μὲν γὰρ ἀρμόττει μεγάλας ἔνθα δ' εἶναι μικρὰς τὰς αὐτάς).

οὐ μὴν ἀλλὰ καὶ ἰδιαί τινες εἰσίν, οἷον ἡ τῶν προβούλων· αὕτη γὰρ οὐ δημοκρατική. βουλὴ δὲ δημοτικόν· δεῖ μὲν γὰρ εἶναι τι τοιοῦτον ᾧ ἐπιμελὲς ἔσται τοῦ δήμου προβουλεύειν, ὅπως ἀσχολῶν ἔσται, τοῦτο δ', ἔάν ὀλίγοι τὸν ἀριθμὸν ὦσιν, ὀλιγαρχικόν· τοὺς δὲ προβούλους ὀλίγους ἀναγκαῖον εἶναι τὸ πλῆθος, ὥστ' ὀλιγαρχικόν. ἀλλ' ὅπου ἄμφω αὗται αἱ ἀρχαί, οἱ πρόβουλοι καθεστᾶσιν ἐπὶ τοῖς βουλευταῖς· ὁ μὲν γὰρ βουλευτῆς δημοτικόν, ὁ δὲ πρόβουλος ὀλιγαρχικόν. καταλύεται δὲ καὶ τῆς βουλῆς ἡ δύναμις ἐν ταῖς τοιαύταις δημοκρατίαις ἐν [1300a] αἷς αὐτὸς συνιὼν ὁ δῆμος χρηματίζει περὶ πάντων. τοῦτο δὲ συμβαίνειν εἶωθεν ὅταν εὐπορία τις ἢ [ἢ] μισθοῦ τοῖς ἐκκλησιάζουσιν· σχολάζοντες γὰρ συλλέγονται τε πολλάκις καὶ ἅπαντα αὐτοὶ κρίνουσιν. παιδονόμος δὲ καὶ γυναικονόμος, καὶ εἴ τις ἄλλος ἀρχὼν κύριός ἐστι τοιαύτης ἐπιμελείας, ἀριστοκρατικόν, δημοκρατικὸν δ' οὗ (πῶς γὰρ οἷόν τε κωλύειν ἐξιέναι τὰς τῶν ἀπόρων;), οὐδ' ὀλιγαρχικόν (τρυφῶσι γὰρ αἱ τῶν ὀλιγαρχούντων).

ἀλλὰ περὶ μὲν τούτων ἐπὶ τοσοῦτον εἰρήσθω νῦν, περὶ δὲ τὰς τῶν ἀρχῶν καταστάσεις πειρατέον ἐξ ἀρχῆς διελθεῖν. εἰσὶ δ' αἱ διαφοραὶ ἐν τρισὶν ὅροις, ὧν συντιθεμένων ἀναγκαῖον πάντας εἰλῆφθαι τοὺς τρόπους. ἔστι δὲ τῶν τριῶν τούτων ἓν μὲν τινες οἱ καθιστάντες τὰς ἀρχάς, δεύτερον δὲ ἐκ

τίνων, λοιπὸν δὲ τίνα τρόπον. ἑκάστου δὲ τῶν τριῶν τούτων διαφοραὶ τρεῖς εἰσιν. ἢ γὰρ πάντες οἱ πολῖται καθιστᾷσιν ἢ τινές, καὶ ἢ ἐκ πάντων ἢ ἐκ τινῶν ἀφωρισμένων (οἷον ἢ τιμήματι ἢ γένει ἢ ἀρετῇ ἢ τινι τοιούτῳ ἄλλῳ, ὥσπερ ἐν Μεγάροις ἐκ τῶν συγκατελθόντων καὶ συμμαχεσασμένων πρὸς τὸν δῆμον)· καὶ ταῦτα ἢ αἰρέσει ἢ κλήρῳ (πάλιν ταῦτα συνδυαζόμενα, λέγω δὲ τὰς μὲν τινές τὰς δὲ πάντες, καὶ τὰς μὲν ἐκ πάντων τὰς δ' ἐκ τινῶν, καὶ τὰς μὲν αἰρέσει τὰς δὲ κλήρῳ).

τούτων δ' ἑκάστης ἔσονται τῆς διαφορᾶς τρόποι ἕξ. ἢ γὰρ πάντες ἐκ πάντων αἰρέσει, ἢ πάντες ἐκ πάντων κλήρῳ <ἢ πάντες ἐκ τινῶν αἰρέσει ἢ πάντες ἐκ τινῶν κλήρῳ> (καί, εἰ ἕξ ἀπάντων, ἢ ὡς ἀνὰ μέρος, οἷον κατὰ φυλὰς καὶ δήμους καὶ φατρίας, ἕως ἂν διέλθῃ διὰ πάντων τῶν πολιτῶν, ἢ ἀεὶ ἕξ ἀπάντων), ἢ καὶ τὰ μὲν οὕτως τὰ δὲ ἐκείνως· πάλιν εἰ τινές οἱ καθιστάντες, ἢ ἐκ πάντων αἰρέσει ἢ ἐκ πάντων κλήρῳ, ἢ ἐκ τινῶν αἰρέσει ἢ ἐκ τινῶν κλήρῳ, ἢ τὰ μὲν οὕτως τὰ δὲ ἐκείνως, λέγω δὲ τὰ μὲν ἐκ πάντων αἰρέσει τὰ δὲ κληρῷ <καὶ τὰ μὲν ἐκ τινῶν αἰρέσει τὰ δὲ κληρῷ>· ὥστε δώδεκα οἱ τρόποι γίνονται χωρὶς τῶν δύο συνδυασμῶν. τούτων δ' αἱ μὲν τρεῖς καταστάσεις δημοτικαί, τὸ πάντας ἐκ πάντων αἰρέσει ἢ κλήρῳ [γίνεσθαι] ἢ ἀμφοῖν, τὰς μὲν κλήρῳ τὰς δ' αἰρέσει τῶν ἀρχῶν· τὸ δὲ μὴ πάντας ἅμα μὲν καθιστάναι, ἕξ ἀπάντων δ' ἢ ἐκ τινῶν ἢ κλήρῳ ἢ αἰρέσει ἢ ἀμφοῖν, ἢ τὰς μὲν ἐκ πάντων τὰς δ' ἐκ τινῶν, <ἢ κληρῷ ἢ αἰρέσει ἢ> ἀμφοῖν (τὸ δὲ ἀμφοῖν λέγω τὰς μὲν κλήρῳ τὰς δ' αἰρέσει) πολιτικόν, καὶ τὸ τινὰς ἐκ πάντων ἢ αἰρέσει καθιστάναι ἢ κλήρῳ ἢ ἀμφοῖν) τὰς μὲν κλήρῳ τὰς δ' αἰρέσει ὀλιγαρχικόν (ὀλιγαρχικώτερον δὲ [καὶ] τὸ ἕξ ἀμφοῖν). τὸ δὲ τὰς μὲν ἐκ πάντων τὰς δ' ἐκ τινῶν πολιτικὸν ἀριστοκρατικῶς, [1300b] ἢ τὰς μὲν αἰρέσει τὰς δὲ κληρῷ, τὸ δὲ τινὰς ἐκ τινῶν <αἰρέσει> ὀλιγαρχικόν καὶ τὸ τινὰς ἐκ τινῶν κλήρῳ (μὴ γινομένου δ', ὁμοίως), καὶ τὸ τινὰς ἐκ τινῶν ἀμφοῖν. τὸ δὲ τινὰς ἕξ ἀπάντων τό τε ἐκ τινῶν αἰρέσει πάντας ἀριστοκρατικόν. οἱ μὲν οὖν τρόποι τῶν περὶ τὰς ἀρχὰς τοσοῦτοι τὸν ἀριθμὸν εἰσι, καὶ διήρηνται κατὰ τὰς πολιτείας οὕτως· τίνα δὲ τίσι συμφέρεи καὶ πῶς δεῖ γίνεσθαι τὰς καταστάσεις, ἅμα ταῖς δυνάμεσι τῶν ἀρχῶν καὶ τίνες εἰσὶν ἔσται φανερόν. λέγω δὲ δύνάμιν ἀρχῆς οἷον τὴν κυρίαν τῶν προσόδων καὶ τὴν κυρίαν τῆς φυλακῆς· ἄλλο γὰρ εἶδος δυνάμεως οἷον στρατηγίας καὶ τῆς τῶν περὶ τὴν ἀγορὰν συμβολαίων κυρίας.

Λοιπὸν δὲ τῶν τριῶν τὸ δικαστικὸν εἰπεῖν. ληπτέον δὲ καὶ τούτων τοὺς τρόπους κατὰ τὴν αὐτὴν ὑπόθεσιν. ἔστι δὲ διαφορὰ τῶν δικαστηρίων ἐν τρισὶν ὅροις, ἕξ ὧν τε καὶ περὶ ὧν καὶ πῶς. λέγω δὲ ἕξ ὧν μὲν, πότερον ἐκ πάντων ἢ ἐκ τινῶν· περὶ ὧν δέ, πόσα εἶδη δικαστηρίων· τὸ δὲ πῶς, πότερον

κλήρω ἢ αἰρέσει. πρῶτον οὖν διαιρείσθω πόσα εἶδη δικαστηρίων. ἔστι δὲ τὸν ἀριθμὸν ὀκτώ, ἐν μὲν εὐθυντικόν, ἄλλο δὲ εἴ τίς τι τῶν κοινῶν ἀδικεῖ, ἕτερον ὅσα εἰς τὴν πολιτείαν φέρει, τέταρτον καὶ ἄρχουσι καὶ ἰδιώταις ὅσα περὶ ζημιώσεων ἀμφισβητοῦσιν, πέμπτον τὸ περὶ τῶν ἰδίων συναλλαγμάτων καὶ ἐχόντων μέγεθος, καὶ παρὰ ταῦτα τό τε φονικὸν καὶ τὸ ξενικόν (φονικοῦ μὲν οὖν εἶδη, ἂν τ' ἐν τοῖς αὐτοῖς δικασταῖς ἂν τ' ἐν ἄλλοις, περί τε τῶν ἐκ προνοίας καὶ περὶ τῶν ἀκουσίων, καὶ ὅσα ὁμολογεῖται μὲν, ἀμφισβητεῖται δὲ περὶ τοῦ δικαίου, τέταρτον δὲ ὅσα τοῖς φεύγουσι φόνου ἐπὶ καθόδῳ ἐπιφέρεται, οἷον Ἀθήνησι λέγεται καὶ τὸ ἐν Φρεαττοῖ δικαστήριον· συμβαίνει δὲ τὰ τοιαῦτα ἐν τῷ παντὶ χρόνῳ ὀλίγα καὶ ἐν ταῖς μεγάλαις πόλεσιν· τοῦ δὲ ξενικοῦ ἐν μὲν ξένοις πρὸς ξένους, ἄλλο <δὲ> ξένοις πρὸς ἀστούς), ἔτι δὲ παρὰ πάντα ταῦτα περὶ τῶν μικρῶν συναλλαγμάτων, ὅσα δραχμιαῖα καὶ πεντάδραχμα καὶ μικρῷ πλείονος. δεῖ μὲν γὰρ καὶ περὶ τούτων γίνεσθαι κρίσιν, οὐκ ἐμπίπτει δὲ εἰς δικαστῶν πλῆθος.

## Ε

Περὶ μὲν οὖν τῶν ἄλλων ὧν προειλόμεθα σχεδὸν εἴρηται περὶ πάντων· ἐκ τίνων δὲ μεταβάλλουσιν αἱ πολιτεῖαι καὶ πόσων καὶ ποίων, καὶ τίνες ἐκάστης πολιτείας φθοραί, καὶ ἐκ ποίων εἰς ποίας μάλιστα μεθίστανται, ἔτι δὲ σωτηρίαί τινες καὶ κοινῇ καὶ χωρὶς ἐκάστης εἰσίν, ἔτι δὲ διὰ τίνων ἂν μάλιστα σώζοιτο τῶν πολιτειῶν ἐκάστη, σκεπτέον ἐφεξῆς τοῖς εἰρημένοις.

δεῖ δὲ πρῶτον ὑπολαβεῖν τὴν ἀρχήν, ὅτι πολλὰ γεγένηνται πολιτεῖαι πάντων μὲν ὁμολογούντων τὸ δίκαιον καὶ τὸ κατ' ἀναλογίαν ἴσον, τούτου δ' ἁμαρτανόντων, ὥσπερ εἴρηται καὶ πρότερον. δῆμος μὲν γὰρ ἐγένετο ἐκ τοῦ ἴσους ὅτιοῦν ὄντας οἷεσθαι ἀπλῶς ἴσους εἶναι (ὅτι γὰρ ἐλεύθεροι πάντες ὁμοίως, ἀπλῶς ἴσοι εἶναι νομίζουσιν), ὀλιγαρχία δὲ ἐκ τοῦ ἀνίσους ἔν τι ὄντας ὅλως εἶναι ἀνίσους ὑπολαμβάνειν (κατ' οὐσίαν γὰρ ἄνισοι ὄντες ἀπλῶς ἄνισοι ὑπολαμβάνουσιν εἶναι). εἴτα οἱ μὲν ὡς ἴσοι ὄντες πάντων τῶν ἴσων ἀξιοῦσι μετέχειν· οἱ δ' ὡς ἄνισοι ὄντες πλεονεκτεῖν ζητοῦσιν, τὸ γὰρ πλεῖον ἄνισον. ἔχουσι μὲν οὖν τι πᾶσαι δίκαιον, ἡμαρτημένοι δ' ἀπλῶς εἰσιν. καὶ διὰ ταύτην τὴν αἰτίαν, ὅταν μὴ κατὰ τὴν ὑπόληψιν ἦν ἐκάτεροι τυγχάνουσιν ἔχοντες μετέχωσι τῆς πολιτείας, στασιάζουσιν. πάντων δὲ δικαιοτάτα μὲν ἂν στασιάζοιεν, ἥκιστα δὲ τοῦτο πράττουσιν, οἱ κατ' ἀρετὴν διαφέροντες· μάλιστα [1301b] γὰρ εὖλογον ἀνίσους ἀπλῶς εἶναι τούτους μόνον. εἰσὶ δέ τινες οἱ κατὰ γένος ὑπερέχοντες οὐκ ἀξιοῦσι τῶν ἴσων αὐτοὺς διὰ τὴν ἀνισότητα ταύτην· εὐγενεῖς γὰρ εἶναι δοκοῦσιν οἷς ὑπάρχει προγόνων ἀρετὴ καὶ πλοῦτος.

ἀρχαὶ μὲν οὖν ὡς εἶπεῖν αὐταὶ καὶ πηγαὶ τῶν στάσεών εἰσιν, ὅθεν στασιάζουσιν· διὸ καὶ αἱ μεταβολαὶ γίνονται διχῶς· ὅτε μὲν γὰρ πρὸς τὴν πολιτείαν, ὅπως ἐκ τῆς καθεστηκυίας ἄλλην μεταστήσωσιν, οἷον ἐκ δημοκρατίας ὀλιγαρχίαν ἢ δημοκρατίαν ἐξ ὀλιγαρχίας, ἢ πολιτείαν καὶ ἀριστοκρατίαν ἐκ τούτων, ἢ ταύτας ἐξ ἐκείνων, ὅτε δ' οὐ πρὸς τὴν καθεστηκυῖαν πολιτείαν, ἀλλὰ τὴν μὲν κατάστασιν προαιροῦνται τὴν αὐτήν, δι' αὐτῶν δ' εἶναι βούλονται ταύτην, οἷον τὴν ὀλιγαρχίαν ἢ τὴν μοναρχίαν· ἔτι περὶ τοῦ μᾶλλον καὶ ἥττον, οἷον ἢ ὀλιγαρχίαν οὔσαν εἰς τὸ μᾶλλον ὀλιγαρχεῖσθαι ἢ εἰς τὸ ἥττον, ἢ δημοκρατίαν οὔσαν εἰς τὸ μᾶλλον δημοκρατεῖσθαι ἢ εἰς τὸ ἥττον, ὁμοίως δὲ καὶ ἐπὶ τῶν λοιπῶν πολιτειῶν, ἢ ἵνα ἐπιταθῶσιν ἢ ἀνεθῶσιν· ἔτι πρὸς τὸ μέρος τι κινῆσαι τῆς πολιτείας, οἷον ἀρχὴν τινα καταστήσαι ἢ ἀνελεῖν, ὥσπερ ἐν Λακεδαιμόνι φασι Λύσανδρόν τινες ἐπιχειρῆσαι καταλῦσαι τὴν βασιλείαν καὶ Πausανίαν τὸν βασιλέα τὴν

ἐφορείαν, καὶ ἐν Ἐπιδάμνῳ δὲ μετέβαλεν ἡ πολιτεία κατὰ μόριον (ἀντὶ γὰρ τῶν φυλάρχων βουλὴν ἐποίησαν, εἰς δὲ τὴν ἡλιαίαν ἐπάνανγκές ἐστιν ἔτι τῶν ἐν τῷ πολιτεύματι βαδίζειν τὰς ἀρχάς, ὅταν ἐπιψηφίζεται ἀρχὴ τις, ὀλιγαρχικὸν δὲ καὶ ὁ ἀρχὼν ὁ εἰς ἣν ἐν τῇ πολιτείᾳ ταύτῃ). πανταχοῦ γὰρ διὰ τὸ ἄνισον ἢ στάσις, οὐ μὴν εἰ τοῖς ἀνίσοις ὑπάρχει ἀνάλογον (αἰδίδιος γὰρ βασιλεία ἄνισος, ἐὰν ἢ ἐν ἴσοις). ὅλως γὰρ τὸ ἴσον ζητοῦντες στασιάζουσιν. ἔστι δὲ διττὸν τὸ ἴσον· τὸ μὲν γὰρ ἀριθμῶ τὸ δὲ κατ' ἀξίαν ἐστίν. λέγω δὲ ἀριθμῶ μὲν τὸ πλήθει ἢ μεγέθει ταῦτ' ὅσον, κατ' ἀξίαν δὲ τὸ τῷ λόγῳ, οἷον ὑπερέχει κατ' ἀριθμὸν μὲν ἴσῳ τὰ τρία τοῖν δυοῖν καὶ ταῦτα τοῦ ἐνός, λόγῳ δὲ τὰ τέτταρα τοῖν δυοῖν καὶ ταῦτα τοῦ ἐνός· ἴσον γὰρ μέρος τὰ δύο τῶν τεττάρων καὶ τὸ ἐν τοῖν δυοῖν· ἄμφω γὰρ ἡμίση. ὁμολογοῦντες δὲ τὸ ἀπλῶς εἶναι δίκαιον τὸ κατ' ἀξίαν, διαφέρονται, καθάπερ ἐλέχθη πρότερον, οἱ μὲν ὅτι, ἐὰν κατὰ τὴν ἴσιν ὥσιν, ὅλως ἴσοι νομίζουσιν εἶναι, οἱ δ' ὅτι, ἐὰν κατὰ τὴν ἄνισον, πάντων ἀνίσων ἀξιοῦσιν ἑαυτούς. διὸ καὶ μάλιστα δύο γίνονται πολιτεῖαι, δῆμος καὶ ὀλιγαρχία· εὐγένεια γὰρ καὶ ἀρετὴ [1302a] ἐν ὀλίγοις, ταῦτα δ' ἐν πλείοσιν· εὐγενεῖς γὰρ καὶ ἀγαθοὶ οὐδαμοῦ ἑκατόν, εὐποροὶ δὲ «καὶ ἄποροι» πολλοὶ πολλαχοῦ. τὸ δὲ ἀπλῶς πάντῃ καθ' ἑκατέραν τετάχθαι τὴν ἰσότητά φαῦλον. φανερόν δ' ἐκ τοῦ συμβαίνοντος· οὐδεμία γὰρ μόνιμος ἐκ τῶν τοιούτων πολιτειῶν. τούτου δ' αἴτιον ὅτι ἀδύνατον ἀπὸ τοῦ πρώτου καὶ τοῦ ἐν ἀρχῇ ἡμαρτημένου μὴ ἀπαντᾶν εἰς τὸ τέλος κακόν τι. διὸ δεῖ τὰ μὲν ἀριθμητικὴν ἰσότητι χρῆσθαι, τὰ δὲ τῇ κατ' ἀξίαν.

ὅμως δὲ ἀσφαλεστέρα καὶ ἀστασίαστος μᾶλλον ἢ δημοκρατία τῆς ὀλιγαρχίας. ἐν μὲν γὰρ ταῖς ὀλιγαρχίαις ἐγγίνονται δύο, ἢ τε πρὸς ἀλλήλους στάσις καὶ ἔτι ἢ πρὸς τὸν δῆμον, ἐν δὲ ταῖς δημοκρατίαις ἢ πρὸς τὴν ὀλιγαρχίαν μόνον, αὐτῷ δὲ πρὸς αὐτόν, ὅ τι καὶ ἄξιον εἰπεῖν, οὐκ ἐγγίνεται τῷ δήμῳ στάσις· ἔτι δὲ ἢ ἐκ τῶν μέσων πολιτεία ἐγγυτέρω τοῦ δήμου ἢ ἢ τῶν ὀλίγων· ἥπερ ἐστὶν ἀσφαλεστάτη τῶν τοιούτων πολιτειῶν.

Ἐπεὶ δὲ σκοποῦμεν ἐκ τίνων αἱ τε στάσεις γίνονται καὶ αἱ μεταβολαὶ περὶ τὰς πολιτείας, ληπτέον καθόλου πρῶτον τὰς ἀρχάς καὶ τὰς αἰτίας αὐτῶν. εἰσὶ δὲ σχεδὸν ὥς εἰπεῖν τρεῖς τὸν ἀριθμόν, ἃς διοριστέον καθ' αὐτὰς τύπῳ πρῶτον. δεῖ γὰρ λαβεῖν πῶς τε ἔχοντες στασιάζουσι καὶ τίνων ἕνεκεν, καὶ τρίτον τίνες ἀρχαὶ γίνονται τῶν πολιτικῶν ταραχῶν καὶ τῶν πρὸς ἀλλήλους στάσεων. τοῦ μὲν οὖν αὐτοῦς ἔχειν πῶς πρὸς τὴν μεταβολὴν αἰτίαν καθόλου μάλιστα θετέον περὶ ἧς ἤδη τυγχάνομεν εἰρηκότες. οἱ μὲν γὰρ ἰσότητος ἐφίεμενοι στασιάζουσιν ἂν νομίζωσιν ἔλαττον ἔχειν ὄντες ἴσοι τοῖς πλεονεκτοῦσιν, οἱ δὲ τῆς ἀνισότητος καὶ τῆς ὑπεροχῆς ἂν ὑπολαμβάνωσιν ὄντες ἄνισοι μὴ πλέον ἔχειν ἀλλ' ἴσον ἢ ἔλαττον (τούτων δ' ἔστι μὲν

ὀρέγεσθαι δικαίως, ἔστι δὲ καὶ ἀδίκως)· ἐλάττους τε γὰρ ὄντες ὅπως ἴσοι ὥσι στασιάζουσι, καὶ ἴσοι ὄντες ὅπως μείζους. πῶς μὲν οὖν ἔχοντες στασιάζουσιν, εἴρηται· περὶ ὧν δὲ στασιάζουσιν ἐστὶ κέρδος καὶ τιμὴ καὶ τάναντία τούτοις. καὶ γὰρ ἀτιμίαν φεύγοντες καὶ ζημίαν, ἢ ὑπὲρ αὐτῶν ἢ τῶν φίλων, στασιάζουσιν ἐν ταῖς πόλεσιν. αἱ δ' αἰτίαι καὶ ἀρχαὶ τῶν κινήσεων, ὅθεν αὐτοὶ τε διατίθενται τὸν εἰρημένον τρόπον καὶ περὶ τῶν λεχθέντων, ἔστι μὲν ὥς τὸν ἀριθμὸν ἐπτά τυγχάνουσιν οὕσαι, ἔστι δ' ὥς πλείους. ὧν δύο μὲν ἐστὶ ταῦτά τοις εἰρημένοις, ἀλλ' οὐχ ὡσαύτως· διὰ κέρδος γὰρ καὶ διὰ τιμὴν παροξύνονται πρὸς ἀλλήλους οὐχ ἵνα κτήσωνται σφίσιν αὐτοῖς, ὥσπερ εἴρηται πρότερον, ἀλλ' ἑτέρους [1302b] ὀρώντες τοὺς μὲν δικαίως τοὺς δ' ἀδίκως πλεονεκτοῦντας τούτων· ἔτι διὰ ὕβριν, διὰ φόβον, διὰ ὑπεροχὴν, διὰ καταφρόνησιν, διὰ αὔξησιν τὴν παρὰ τὸ ἀνάλογον· ἔτι δὲ ἄλλον τρόπον δι' ἐριθείαν, δι' ὀλιγωρίαν, διὰ μικρότητα, διὰ ἀνομοιότητα. Τούτων δὲ ὕβρις μὲν καὶ κέρδος τίνα ἔχουσι δύναμιν καὶ πῶς αἴτια, σχεδόν ἐστι φανερόν· ὑβρίζοντων τε γὰρ τῶν ἐν ταῖς ἀρχαῖς καὶ πλεονεκτούντων στασιάζουσι καὶ πρὸς ἀλλήλους καὶ πρὸς τὰς πολιτείας τὰς διδούσας τὴν ἐξουσίαν· ἡ δὲ πλεονεξία γίνεται ὅτε μὲν ἀπὸ τῶν ἰδίων ὅτε δὲ ἀπὸ τῶν κοινῶν. - δῆλον δὲ καὶ ἡ τιμὴ, καὶ τί δύναται καὶ πῶς αἴτια στάσεως· καὶ γὰρ αὐτοὶ ἀτιμαζόμενοι καὶ ἄλλους ὀρώντες τιμωμένους στασιάζουσιν· ταῦτα δὲ ἀδίκως μὲν γίνεται ὅταν παρὰ τὴν ἀξίαν ἢ τιμῶνται τινες ἢ ἀτιμάζονται, δικαίως δὲ ὅταν κατὰ τὴν ἀξίαν. - δι' ὑπεροχὴν δέ, ὅταν τις ἢ τῇ δυνάμει μείζων (ἢ εἰς ἢ πλείους) ἢ κατὰ τὴν πόλιν καὶ τὴν δύναμιν τοῦ πολιτεύματος· γίνεσθαι γὰρ εἴωθεν ἐκ τῶν τοιούτων μοναρχία ἢ δυναστεία· διὸ ἐνιαχοῦ εἰώθασιν ὀστρακίζειν, οἷον ἐν Ἀργεὶ καὶ Ἀθήνησιν· καίτοι βέλτιον ἐξ ἀρχῆς ὀρᾶν ὅπως μὴ ἐνέσσονται τοσοῦτον ὑπερέχοντες, ἢ ἐάσαντας γενέσθαι ἰᾶσθαι ὕστερον. - διὰ δὲ φόβον στασιάζουσιν οἱ τε ἡδίκηκότες, δεδιότες μὴ δῶσι δίκην, καὶ οἱ μέλλοντες ἀδικεῖσθαι, βουλόμενοι φθάσαι πρὶν ἀδικηθῆναι, ὥσπερ ἐν Ῥόδῳ συνέστησαν οἱ γνώριμοι ἐπὶ τὸν δῆμον διὰ τὰς ἐπιφερομένας δίκας. - διὰ καταφρόνησιν δὲ καὶ στασιάζουσι καὶ ἐπιτίθενται, οἷον ἐν τε ταῖς ὀλιγαρχίαις, ὅταν πλείους ὦσιν οἱ μὴ μετέχοντες τῆς πολιτείας (κρείττους γὰρ οἶονται εἶναι), καὶ ἐν ταῖς δημοκρατίαις οἱ εὐποροὶ καταφρονήσαντες τῆς ἀταξίας καὶ ἀναρχίας, οἷον καὶ ἐν Θήβαις μετὰ τὴν ἐν Οἰνοφύτοις μάχην κακῶς πολιτευομένων ἡ δημοκρατία διεφθάρη, καὶ ἡ Μεγαρέων δι' ἀταξίαν καὶ ἀναρχίαν ἡττηθέντων, καὶ ἐν Συρακούσαις πρὸ τῆς Γέλωνος τυραννίδος, καὶ ἐν Ῥόδῳ ὁ δῆμος πρὸ τῆς ἐπαναστάσεως.

γίνονται δὲ καὶ δι' αὔξησιν τὴν παρὰ τὸ ἀνάλογον μεταβολὰς τῶν πολιτειῶν. ὥσπερ γὰρ σῶμα ἐκ μερῶν σύγκειται καὶ δεῖ αὐξάνεσθαι ἀνάλογον ἵνα μένη ἢ συμμετρία, εἰ δὲ μή, φθείρεται, ὅταν ὁ μὲν ποὺς



τεττάρων πηχῶν ἢ τὸ δ' ἄλλο σῶμα δυοῖν σπιθαμαῖν, ἐνίστε δὲ κἂν εἰς ἄλλου ζώου μεταβάλαι μορφήν, εἰ μὴ μόνον κατὰ τὸ ποσὸν ἀλλὰ καὶ κατὰ τὸ ποιὸν αὐξάνοιτο παρὰ τὸ ἀνάλογον, οὕτω καὶ πόλις σύγκειται [1303a] ἐκ μερῶν, ὧν πολλάκις λανθάνει τι αὐξανόμενον, οἷον τὸ τῶν ἀπόρων πλῆθος ἐν ταῖς δημοκρατίαις καὶ πολιτείαις. συμβαίνει δ' ἐνίστε τοῦτο καὶ διὰ τύχας, οἷον ἐν Τάραντι ἡττηθέντων καὶ ἀπολομένων πολλῶν γνωρίμων ὑπὸ τῶν Ἰαπύγων μικρὸν ὕστερον τῶν Μηδικῶν δημοκρατία ἐγένετο ἐκ πολιτείας, καὶ ἐν Ἀργεὶ τῶν ἐν τῇ ἐβδόμῃ ἀπολομένων ὑπὸ Κλεομένους τοῦ Λάκωνος ἠναγκάσθησαν παραδέξασθαι τῶν περιοίκων τινάς, καὶ ἐν Ἀθήναις ἀτυχούντων πεζῇ οἱ γνώριμοι ἐλάττους ἐγένοντο διὰ τὸ ἐκ καταλόγου στρατεύεσθαι ὑπὸ τὸν Λακωνικὸν πόλεμον. συμβαίνει δὲ τοῦτο καὶ ἐν ταῖς δημοκρατίαις, ἥττον δέ· πλειόνων γὰρ τῶν εὐπόρων γινομένων ἢ τῶν οὐσιῶν αὐξανόμενων μεταβάλλουσι εἰς ὀλιγαρχίας καὶ δυναστείας. - μεταβάλλουσι δ' αἱ πολιτεῖαι καὶ ἄνευ στάσεως διὰ τε τὰς ἐριθείας, ὥσπερ ἐν Ἡραίᾳ (ἐξ αἰρετῶν γὰρ διὰ τοῦτο ἐποίησαν κληρωτάς, ὅτι ἤροῦντο τοὺς ἐριθευομένους), καὶ δι' ὀλιγορίαν, ὅταν ἐάσωσιν εἰς τὰς ἀρχὰς τὰς κυρίας παρίεναι τοὺς μὴ τῇ πολιτείᾳ φίλους, ὥσπερ ἐν Ὠρεῶ κατελύθη ἡ ὀλιγαρχία τῶν ἀρχόντων γενομένου Ἡρακλεοδώρου, ὃς ἐξ ὀλιγαρχίας πολιτείαν καὶ δημοκρατίαν κατεσκεύασεν. - ἔτι διὰ τὸ παρὰ μικρόν. λέγω δὲ παρὰ μικρόν, ὅτι πολλάκις λανθάνει μεγάλη γινομένη μετάβασις τῶν νομίμων, ὅταν παρορῶσι τὸ μικρόν, ὥσπερ ἐν Ἀμβρακίᾳ μικρὸν ἦν τὸ τίμημα, τέλος δ' <ἀπ'> οὐθενὸς ἦρχον, ὡς ἐγγίζον ἢ μηθὲν διαφέρον τοῦ μηθὲν τὸ μικρόν.

στασιωτικὸν δὲ καὶ τὸ μὴ ὁμόφυλον, ἕως ἂν συμπνεύσῃ· ὥσπερ γὰρ οὐδ' ἐκ τοῦ τυχόντος πλῆθους πόλις γίνεταί, οὕτως οὐδ' ἐν τῷ τυχόντι χρόνῳ· διὸ ὅσοι ἤδη συνοίκους ἐδέξαντο ἢ ἐποίκους, οἱ πλεῖστοι διεστασίασαν· οἷον Τροιζηνίοις Ἀχαιοὶ συνώκησαν Σύβαριν, εἴτα πλείους οἱ Ἀχαιοὶ γενομένοι ἐξέβαλον τοὺς Τροιζηνίους, ὅθεν τὸ ἄγος συνέβη τοῖς Συβαρίταις· καὶ ἐν Θουρίοις Συβαρίταις τοῖς συνοικήσασιν (πλεονεκτεῖν γὰρ ἀξιοῦντες ὡς σφετέρας τῆς χώρας ἐξέπεσον)· καὶ Βυζαντίοις οἱ ἔποικοι ἐπιβουλεύοντες φωραθέντες ἐξέπεσον διὰ μάχης· καὶ Ἀντισσαῖοι τοὺς Χίων φυγάδας εἰσδεξάμενοι διὰ μάχης ἐξέβαλον· Ζαγκλαῖοι δὲ Σαμίους ὑποδεξάμενοι ἐξέπεσον αὐτοί· καὶ Ἀπολλωνιάται οἱ ἐν τῷ Εὐξείνῳ πόντῳ ἐποίκους ἐπαγαγόμενοι ἐστασίασαν· καὶ Συρακούσιοι μετὰ τὰ τυραννικὰ τοὺς ξένους [1303b] καὶ τοὺς μισθοφόρους πολίτας ποιησάμενοι ἐστασίασαν καὶ εἰς μάχην ἦλθον· καὶ Ἀμφιπολίται δεξάμενοι Χαλκιδέων ἐποίκους ἐξέπεσον ὑπὸ τούτων οἱ πλεῖστοι αὐτῶν. στασιάζουσι δ' ἐν μὲν ταῖς ὀλιγαρχίαις οἱ πολλοὶ ὡς ἀδικούμενοι, ὅτι οὐ μετέχουσι τῶν ἴσων, καθάπερ εἴρηται πρότερον, ἴσοι ὄντες, ἐν δὲ ταῖς δημοκρατίαις οἱ γνώριμοι, ὅτι μετέχουσι τῶν ἴσων οὐκ ἴσοι

ὄντες. στασιάζουσι δὲ ἐνίοτε αἱ πόλεις καὶ διὰ τοὺς τόπους, ὅταν μὴ εὐφυῶς ἔχῃ ἡ χώρα πρὸς τὸ μίαν εἶναι πόλιν, οἷον ἐν Κλαζομεναῖς οἱ ἐπὶ Χυτῶ πρὸς τοὺς ἐν νήσῳ, καὶ Κολοφώνιοι καὶ Νοτιεῖς· καὶ Ἀθήνησιν οὐχ ὁμοίως εἰσὶν ἀλλὰ μᾶλλον δημοτικοὶ οἱ τὸν Πειραιᾶ οἰκοῦντες τῶν τὸ ἄστν. ὥσπερ γὰρ ἐν τοῖς πολέμοις αἱ διαβάσεις τῶν ὀχετῶν, καὶ τῶν πάνυ σμικρῶν, διασπῶσι τὰς φάλαγγας, οὕτως ἔοικε πᾶσα διαφορὰ ποιεῖν διάστασιν. μεγίστη μὲν οὖν ἴσως διάστασις ἀρετὴ καὶ μοχθηρία, εἴτα πλοῦτος καὶ πενία, καὶ οὕτως δὴ ἑτέρα ἑτέρας μᾶλλον, ὧν μία καὶ ἡ εἰρημένη ἐστί. Γίνονται μὲν οὖν αἱ στάσεις οὐ περὶ μικρῶν ἀλλ' ἐκ μικρῶν, στασιάζουσι δὲ περὶ μεγάλων. μάλιστα δὲ καὶ αἱ μικραὶ ἰσχύουσιν, ὅταν ἐν τοῖς κυρίοις γένωνται, οἷον συνέβη καὶ ἐν Συρακούσαις ἐν τοῖς ἀρχαίοις χρόνοις. μετέβαλε γὰρ ἡ πολιτεία ἐκ δύο νεανίσκων στασιασάντων «τῶν» ἐν ταῖς ἀρχαῖς ὄντων, περὶ ἐρωτικὴν αἰτίαν. θατέρου γὰρ ἀποδημοῦντος ἑταῖρος ὧν τις τὸν ἐρώμενον αὐτοῦ ὑπεποιήσατο, πάλιν δ' ἐκεῖνος τούτῳ χαλεπήνας τὴν γυναῖκα αὐτοῦ ἀνέπεισεν ὥς αὐτὸν ἐλθεῖν· ὅθεν προσλαμβάνοντες τοὺς ἐν τῷ πολιτεύματι διεστασίασαν πάντας. διόπερ ἀρχομένων εὐλαβεῖσθαι δεῖ τῶν τοιούτων, καὶ διαλύειν τὰς τῶν ἡγεμόνων καὶ δυναμένων στάσεις· ἐν ἀρχῇ γὰρ γίνεται τὸ ἀμάρτημα, ἢ δ' ἀρχὴ λέγεται ἡμισυ εἶναι παντός, ὥστε καὶ τὸ ἐν αὐτῇ μικρὸν ἀμάρτημα ἀνάλογόν ἐστι πρὸς τὰ ἐν τοῖς ἄλλοις μέρεσιν. ὅλως δὲ αἱ τῶν γνωρίμων στάσεις συναπολαύειν ποιοῦσι καὶ τὴν ὅλην πόλιν, οἷον ἐν Ἑστιάᾳ συνέβη μετὰ τὰ Μηδικά, δύο ἀδελφῶν περὶ τῆς πατρῴας νομῆς διενεχθέντων· ὁ μὲν γὰρ ἀπορώτερος, ὥς οὐκ ἀποφαίνοντος τὴν οὐσίαν οὐδὲ τὸν θησαυρὸν ὃν εὔρεν ὁ πατήρ, προσήγετο τοὺς δημοτικούς, ὁ δ' ἕτερος ἔχων οὐσίαν πολλὴν τοὺς εὐπόρους. καὶ ἐν Δελφοῖς ἐκ κηδείας γενομένης διαφορᾶς ἀρχὴ πασῶν ἐγένετο τῶν στάσεων τῶν [1304a] ὕστερον· ὁ μὲν γὰρ οἰωνισάμενός τι σύμπτωμα, ὥς ἦλθεν ἐπὶ τὴν νύμφην, οὐ λαβὼν ἀπῆλθεν, οἱ δ' ὥς ὑβρισθέντες ἐνέβαλον τῶν ἱερῶν χρημάτων θύοντος, κᾶπειτα ὥς ἱερόσυλον ἀπέκτειναν. καὶ περὶ Μυτιλήνην δὲ ἐξ ἐπικλήρων στάσεως γενομένης πολλῶν ἐγένετο ἀρχὴ κακῶν καὶ τοῦ πολέμου τοῦ πρὸς Ἀθηναίους, ἐν ᾧ Πάχης ἔλαβε τὴν πόλιν αὐτῶν· Τιμοφάνους γὰρ τῶν εὐπόρων τινὸς καταλιπόντος δύο θυγατέρας, ὁ περιωσθεὶς καὶ οὐ λαβὼν τοῖς υἱέσιν αὐτοῦ Δέξανδρος ἤρξε τῆς στάσεως καὶ τοὺς Ἀθηναίους παρώξυνε, πρόξενος ὢν τῆς πόλεως. καὶ ἐν Φωκεῦσιν ἐξ ἐπικλήρου στάσεως γενομένης περὶ Μνασέαν τὸν Μνάσωνος πατέρα καὶ Εὐθυκράτη τὸν Ὀνομάρχου, ἡ στάσις αὕτη ἀρχὴ τοῦ ἱεροῦ πολέμου κατέστη τοῖς Φωκεῦσιν. μετέβαλε δὲ καὶ ἐν Ἐπιδάμνῳ ἡ πολιτεία ἐκ γαμικῶν· ὑπομνηστευσάμενος γάρ τις, ὥς ἐζημίωσεν αὐτὸν ὁ τοῦ ὑπομνηστευθέντος πατήρ, γενόμενος τῶν ἀρχόντων, ἄτερος συμπάρελαβε τοὺς ἐκτὸς τῆς πολιτείας ὥς ἐπηρεασθεῖς.

μεταβάλλουσι δὲ καὶ εἰς ὀλιγαρχίαν καὶ εἰς δῆμον καὶ εἰς πολιτείαν ἐκ τοῦ εὐδοκιμῆσαι τι ἢ αὐξηθῆναι ἢ ἀρχεῖον ἢ μόριον τῆς πόλεως, οἷον ἢ ἐν Ἀρείῳ πάγω βουλὴ εὐδοκιμήσασα ἐν τοῖς Μηδικοῖς ἔδοξε συντονωτέραν ποιῆσαι τὴν πολιτείαν, καὶ πάλιν ὁ ναυτικὸς ὄχλος γενόμενος αἴτιος τῆς περὶ Σαλαμῖνα νίκης καὶ διὰ ταύτης τῆς ἡγεμονίας διὰ τὴν κατὰ θάλατταν δύναμιν τὴν δημοκρατίαν ἰσχυροτέραν ἐποίησεν, καὶ ἐν Ἄργει οἱ γνώριμοι εὐδοκιμήσαντες περὶ τὴν ἐν Μαντινείᾳ μάχην τὴν πρὸς Λακεδαιμονίους ἐπεχείρησαν καταλύειν τὸν δῆμον, καὶ ἐν Συρακούσαις ὁ δῆμος αἴτιος γενόμενος τῆς νίκης τοῦ πολέμου τοῦ πρὸς Ἀθηναίους ἐκ πολιτείας εἰς δημοκρατίαν μετέβαλεν, καὶ ἐν Χαλκίδι Φόξον τὸν τύραννον μετὰ τῶν γνωρίμων ὁ δῆμος ἀνελὼν εὐθὺς εἶχετο τῆς πολιτείας, καὶ ἐν Ἀμβρακίᾳ πάλιν ὡσαύτως Περίανδρον συνεκβαλὼν τοῖς ἐπιθεμένοις ὁ δῆμος τὸν τύραννον εἰς ἑαυτὸν περιέστησε τὴν πολιτείαν. καὶ ὅλως δὴ δεῖ τοῦτο μὴ λανθάνειν, ὥς οἱ δυνάμεως αἴτιοι γενόμενοι, καὶ ἰδιῶται καὶ ἀρχαὶ καὶ φυλαὶ καὶ ὅλως μέρος καὶ πλῆθος ὁποιοῦν, στάσιν κινουῦσιν· ἢ γὰρ οἱ τούτοις φθονοῦντες τιμωμένοις ἄρχουσι τῆς στάσεως, ἢ οὗτοι διὰ τὴν ὑπεροχὴν οὐ θέλουσι μένειν ἐπὶ τῶν ἴσων. κινουῦνται δ' αἱ πολιτεῖαι καὶ ὅταν τάναντία εἶναι δοκοῦντα μέρη τῆς πόλεως ἰσάζῃ [1304b] ἀλλήλοις, οἷον οἱ πλούσιοι καὶ ὁ δῆμος, μέσον δ' ἢ μηθὲν ἢ μικρὸν πάμπαν· ἂν γὰρ πολὺ ὑπερέχῃ ὁποτερονοῦν τῶν μερῶν, πρὸς τὸ φανερώς κρεῖττον τὸ λοιπὸν οὐ θέλει κινδυνεύειν. διὸ καὶ οἱ κατ' ἀρετὴν διαφέροντες οὐ ποιοῦσι στάσιν ὥς εἰπεῖν· ὀλίγοι γὰρ γίνονται πρὸς πολλούς, καθόλου μὲν οὖν περὶ πάσας τὰς πολιτείας αἱ ἀρχαὶ καὶ αἰτίαι τῶν στάσεων καὶ τῶν μεταβολῶν τοῦτον ἔχουσι τὸν τρόπον· κινουῦσι δὲ τὰς πολιτείας ὅτε μὲν διὰ βίας ὅτε δὲ δι' ἀπάτης, διὰ βίας μὲν ἢ εὐθὺς ἐξ ἀρχῆς ἢ ὕστερον ἀναγκάζοντες. καὶ γὰρ ἡ ἀπάτη διττή. ὅτε μὲν γὰρ ἐξαπατήσαντες τὸ πρῶτον ἐκόντων μεταβάλλουσι τὴν πολιτείαν, εἴθ' ὕστερον βίᾳ κατέχουσιν ἀκόντων, οἷον ἐπὶ τῶν Τετρακοσίων τὸν δῆμον ἐξηπάτησαν φάσκοντες τὸν βασιλέα χρήματα παρέξειν πρὸς τὸν πόλεμον τὸν πρὸς Λακεδαιμονίους, ψευδάμενοι δὲ κατέχειν ἐπειρῶντο τὴν πολιτείαν· ὅτε δὲ ἐξ ἀρχῆς τε πείσαντες καὶ ὕστερον πάλιν πεισθέντων ἐκόντων ἄρχουσιν αὐτῶν. ἀπλῶς μὲν οὖν περὶ πάσας τὰς πολιτείας ἐκ τῶν εἰρημένων συμβέβηκε γίνεσθαι τὰς μεταβολάς.

Καθ' ἕκαστον δ' εἶδος πολιτείας ἐκ τούτων μερίζοντας τὰ συμβαίνοντα δεῖ θεωρεῖν. αἱ μὲν οὖν δημοκρατίαι μάλιστα μεταβάλλουσι διὰ τὴν τῶν δημαγωγῶν ἀσέλγειαν· τὰ μὲν γὰρ ἰδίᾳ συκοφαντοῦντες τοὺς τὰς οὐσίας ἔχοντας συστρέφουσιν αὐτούς (συνάγει γὰρ καὶ τοὺς ἐχθίστους ὁ κοινὸς φόβος), τὰ δὲ κοινῇ τὸ πλῆθος ἐπάγοντες. καὶ τοῦτο ἐπὶ πολλῶν ἂν τις ἴδοι γινόμενον οὕτω. καὶ γὰρ ἐν Κῶ ἡ δημοκρατία μετέβαλε πονηρῶν

ἐγγενομένων δημαγωγῶν (οἱ γὰρ γνώριμοι συνέστησαν)· καὶ ἐν Ῥόδῳ· μισθοφορὰν τε γὰρ οἱ δημαγωγοὶ ἐπόριζον, καὶ ἐκώλυον ἀποδιδόναι τὰ ὀφειλόμενα τοῖς τριηράρχοις, οἱ δὲ διὰ τὰς ἐπιφερομένας δίκας ἠναγκάσθησαν συστάντες καταλῦσαι τὸν δῆμον. κατελύθη δὲ καὶ ἐν Ἡρακλείᾳ ὁ δῆμος μετὰ τὸν ἀποικισμὸν εὐθὺς διὰ τοὺς δημαγωγούς· ἀδικοῦμενοι γὰρ ὑπ' αὐτῶν οἱ γνώριμοι ἐξέπιπτον, ἔπειτα ἀθροισθέντες οἱ ἐκπίπτοντες καὶ κατελθόντες κατέλυσαν τὸν δῆμον. παραπλησίως δὲ καὶ ἡ ἐν Μεγάροις κατελύθη δημοκρατία· οἱ γὰρ δημαγωγοί, ἵνα χρήματα ἔχωσι δημεύειν, ἐξέβαλον πολλοὺς τῶν γνωρίμων, ἕως πολλοὺς ἐποίησαν τοὺς φεύγοντας, οἱ δὲ κατιόντες ἐνίκησαν μαχόμενοι τὸν δῆμον καὶ κατέστησαν τὴν ὀλιγαρχίαν. συνέβη δὲ ταῦτόν καὶ περὶ [1305a] Κύμην ἐπὶ τῆς δημοκρατίας ἣν κατέλυσε Θρασύμαχος. σχεδὸν δὲ καὶ ἐπὶ τῶν ἄλλων ἂν τις ἴδοι θεωρῶν τὰς μεταβολὰς τοῦτον ἐχούσας τὸν τρόπον. ὅτε μὲν γάρ, ἵνα χαρίζονται, ἀδικοῦντες τοὺς γνωρίμους συνιστᾷσιν, ἢ τὰς οὐσίας ἀναδάστους ποιοῦντες ἢ τὰς προσόδους ταῖς λειτουργίαις, ὅτε δὲ διαβάλλοντες, ἵν' ἔχωσι δημεύειν τὰ κτήματα τῶν πλουσίων.

ἐπὶ δὲ τῶν ἀρχαίων, ὅτε γένοιτο ὁ αὐτὸς δημαγωγὸς καὶ στρατηγός, εἰς τυραννίδα μετέβαλλον· σχεδὸν γὰρ οἱ πλεῖστοι τῶν ἀρχαίων τυράννων ἐκ δημαγωγῶν γεγόνασιν. αἴτιον δὲ τοῦ τότε μὲν γίνεσθαι νῦν δὲ μὴ, ὅτι τότε μὲν οἱ δημαγωγοὶ ἦσαν ἐκ τῶν στρατηγούντων (οὐ γὰρ πῶ δεινοὶ ἦσαν λέγειν), νῦν δὲ τῆς ῥητορικῆς ἠϋξημένης οἱ δυνάμενοι λέγειν δημαγωγοῦσι μὲν, δι' ἀπειρίαν δὲ τῶν πολεμικῶν οὐκ ἐπιτίθενται, πλὴν εἴ που βραχύ τι γέγονε τοιοῦτον. ἐγίνοντο δὲ τυραννίδες πρότερον μᾶλλον ἢ νῦν καὶ διὰ τὸ μεγάλας ἀρχὰς ἐγχειρίζεσθαί τισιν, ὥσπερ ἐν Μιλήτῳ ἐκ τῆς πρυτανείας (πολλῶν γὰρ ἦν καὶ μεγάλων κύριος ὁ πρύτανις). ἔτι δὲ διὰ τὸ μὴ μεγάλας εἶναι τότε τὰς πόλεις, ἀλλ' ἐπὶ τῶν ἀγρῶν οἰκεῖν τὸν δῆμον ἄσχολον ὄντα πρὸς τοῖς ἔργοις, οἱ προστάται τοῦ δήμου, ὅτε πολεμικοὶ γένοιτο, τυραννίδι ἐπετίθεντο. πάντες δὲ τοῦτο ἔδρων ὑπὸ τοῦ δήμου πιστευθέντες, ἡ δὲ πίστις ἦν ἢ ἀπέχθεια ἢ πρὸς τοὺς πλουσίους, οἷον Ἀθήνησί τε Πεισίστρατος στασιάσας πρὸς τοὺς πεδιακοὺς, καὶ Θεαγένης ἐν Μεγάροις τῶν εὐπόρων τὰ κτήνη ἀποσφάξας, λαβὼν παρὰ τὸν ποταμὸν ἐπινέμοντας, καὶ Διονύσιος κατηγορῶν Δαφναίου καὶ τῶν πλουσίων ἠξιώθη τῆς τυραννίδος, διὰ τὴν ἔχθραν πιστευθεὶς ὡς δημοτικὸς ὢν. μεταβάλλουσι δὲ καὶ ἐκ τῆς πατρίας δημοκρατίας εἰς τὴν νεωτάτην· ὅπου γὰρ αἵρεται μὲν αἱ ἀρχαί, μὴ ἀπὸ τιμημάτων δέ, αἵρεῖται δὲ ὁ δῆμος, δημαγωγοῦντες οἱ σπουδαρχιῶντες εἰς τοῦτο καθιστᾷσιν ὥστε κύριον εἶναι τὸν δῆμον καὶ τῶν νόμων. ἄκος δὲ τοῦ μὴ γίνεσθαι ἢ τοῦ γίνεσθαι ἦττον τὸ τὰς φυλὰς φέρειν τοὺς ἄρχοντας, ἀλλὰ μὴ πάντα τὸν δῆμον. τῶν μὲν οὖν δημοκρατιῶν αἱ μεταβολαὶ γίνονται πᾶσαι

σχεδὸν διὰ ταύτας τὰς αἰτίας.

Αἱ δ' ὀλιγαρχίαι μεταβάλλουσι [διὰ] δύο μάλιστα τρόπους τοὺς φανερωτάτους. ἓνα μὲν ἔαν ἀδικῶσι τὸ πλῆθος· πᾶς γὰρ ἱκανὸς γίνεται προστάτης, μάλιστα δ' ὅταν ἐξ αὐτῆς συμβῇ τῆς ὀλιγαρχίας γίνεσθαι τὸν ἡγεμόνα, καθάπερ ἐν Νάξῳ Λύγδαμις, ὃς καὶ ἐτυράννησεν ὕστερον τῶν [1305b] Ναξίων. ἔχει δὲ καὶ ἡ ἐξ ἄλλων ἀρχὴ στάσεως διαφοράς. ὅτε μὲν γὰρ ἐξ αὐτῶν τῶν εὐπόρων, οὐ τῶν ὄντων δ' ἐν ταῖς ἀρχαῖς, γίνεσθαι κατάλυσις, ὅταν ὀλίγοι σφόδρα ὦσιν οἱ ἐν ταῖς τιμαῖς, οἷον ἐν Μασσαλίας καὶ ἐν Ἰστρῳ καὶ ἐν Ἡρακλείᾳ καὶ ἐν ἄλλαις πόλεσι συμβέβηκεν· οἱ γὰρ μὴ μετέχοντες τῶν ἀρχῶν ἐκίνουν, ἕως μετέλαβον οἱ πρεσβύτεροι πρότερον τῶν ἀδελφῶν, ὕστερον δ' οἱ νεώτεροι πάλιν· οὐ γὰρ ἄρχουσιν ἐνιαχοῦ μὲν ἅμα πατήρ τε καὶ υἱός, ἐνιαχοῦ δὲ ὁ πρεσβύτερος καὶ ὁ νεώτερος ἀδελφός· καὶ ἔνθα μὲν πολιτικώτερα ἐγένετο ἡ ὀλιγαρχία, ἐν Ἰστρῳ δ' εἰς δῆμον ἀπετελεύτησεν, ἐν Ἡρακλείᾳ δ' ἐξ ἐλαττόνων εἰς ἑξακοσίους ἦλθεν· μετέβαλε δὲ καὶ ἐν Κνίδῳ ἡ ὀλιγαρχία στασιασάντων τῶν γνωρίμων αὐτῶν πρὸς αὐτοὺς διὰ τὸ ὀλίγους μετέχειν καί, καθάπερ εἴρηται, εἰ πατήρ, υἱὸν μὴ μετέχειν, μηδ' εἰ πλείους ἀδελφοί, ἄλλ' ἢ τὸν πρεσβύτατον· ἐπιλαβόμενος γὰρ στασιαζόντων ὁ δῆμος, καὶ λαβὼν προστάτην ἐκ τῶν γνωρίμων, ἐπιθέμενος ἐκράτησεν, ἀσθενὲς γὰρ τὸ στασιάζον· καὶ ἐν Ἐρυθραῖς δὲ ἐπὶ τῆς τῶν Βασιλιδῶν ὀλιγαρχίας ἐν τοῖς ἀρχαίοις χρόνοις, καίπερ καλῶς ἐπιμελομένων τῶν ἐν τῇ πολιτείᾳ, ὅμως διὰ τὸ ὑπ' ὀλίγων ἄρχεσθαι ἀγανακτῶν ὁ δῆμος μετέβαλε τὴν πολιτείαν.

κινεῦνται δ' αἱ ὀλιγαρχίαι ἐξ αὐτῶν καὶ διὰ φιλονεικίαν δημαγωγούντων (ἡ δημαγωγία δὲ διττή, ἡ μὲν ἐν αὐτοῖς τοῖς ὀλίγοις - ἐγγίγνεται γὰρ δημαγωγὸς κἂν πάνυ ὀλίγοι ὦσιν, οἷον ἐν τοῖς Τριάκοντα Ἀθήνησιν οἱ περὶ Χαρικλέα ἴσχυσαν τοὺς Τριάκοντα δημαγωγοῦντες, καὶ ἐν τοῖς Τετρακοσίοις οἱ περὶ Φρύνιχον τὸν αὐτὸν τρόπον - ἢ ὅταν τὸν ὄχλον δημαγωγῶσιν οἱ ἐν τῇ ὀλιγαρχίᾳ ὄντες, οἷον ἐν Λαρίσῃ οἱ πολιτοφύλακες διὰ τὸ αἰρεῖσθαι αὐτοὺς τὸν ὄχλον ἐδημαγωγούν, καὶ ἐν ὅσαις ὀλιγαρχίαις οὐχ οὗτοι αἰροῦνται τὰς ἀρχὰς ἐξ ὧν οἱ ἄρχοντές εἰσιν, ἀλλ' αἱ μὲν ἀρχαὶ ἐκ τιμημάτων μεγάλων εἰσὶν ἢ ἐταιριῶν, αἰροῦνται δ' οἱ ὀπλῖται ἢ ὁ δῆμος, ὅπερ ἐν Ἀβύδῳ συνέβαινεν, καὶ ὅπου τὰ δικαστήρια μὴ ἐκ τοῦ πολιτεύματός ἐστι - δημαγωγοῦντες γὰρ πρὸς τὰς κρίσεις μεταβάλλουσι τὴν πολιτείαν, ὅπερ καὶ ἐν Ἡρακλείᾳ ἐγένετο τῇ ἐν τῷ Πόντῳ - ἔτι δ' ὅταν ἔνιοι εἰς ἐλάττους ἑλκῶσι τὴν ὀλιγαρχίαν· οἱ γὰρ τὸ ἴσον ζητοῦντες ἀναγκάζονται βοηθὸν ἐπαγαγέσθαι τὸν δῆμον). γίνονται δὲ μεταβολαὶ τῆς ὀλιγαρχίας καὶ ὅταν ἀναλώσωσι τὰ ἴδια ζῶντες ἀσελγῶς· καὶ γὰρ οἱ τοιοῦτοι καινοτομεῖν ζητοῦσι, καὶ ἡ

τυραννίδι ἐπιτίθενται αὐτοὶ ἢ [1306a] κατασκευάζουσιν ἕτερον (ὥσπερ Ἴππαρχος Διονύσιον ἐν Συρακούσαις, καὶ ἐν Ἀμφιπόλει ὧ ὄνομα ἦν Κλεότιμος τοὺς ἐποίκους τοὺς Χαλκιδέων ἤγαγε, καὶ ἐλθόντων διεστασίασεν αὐτοὺς πρὸς τοὺς εὐπόρους, καὶ ἐν Αἰγίνῃ ὁ τὴν πρᾶξιν τὴν πρὸς Χάρητα πρᾶξας ἐνεχείρησε μεταβαλεῖν τὴν πολιτείαν διὰ τοιαύτην αἰτίαν). ὅτε μὲν οὖν εὐθὺς ἐπιχειροῦσιν τι κινεῖν, ὅτε δὲ κλέπτουσι τὰ κοινά, ὅθεν στασιάζουσιν ἢ οὗτοι πρὸς αὐτοὺς ἢ οἱ πρὸς τούτους μαχόμενοι κλέπτοντας, ὅπερ ἐν Ἀπολλωνίᾳ συνέβη τῇ ἐν τῷ Πόντῳ. ὁμοιοῦσα δὲ ὀλιγαρχία οὐκ εὐδιάφθορος ἐξ αὐτῆς. σημεῖον δὲ ἢ ἐν Φαρσάλῳ πολιτεία· ἐκεῖνοι γὰρ ὀλίγοι ὄντες πολλῶν κύριοι εἰσι διὰ τὸ χρῆσθαι σφίσιν αὐτοῖς καλῶς.

καταλύονται δὲ καὶ ὅταν ἐν τῇ ὀλιγαρχίᾳ ἑτέραν ὀλιγαρχίαν ἐμποιῶσιν. τοῦτο δ' ἐστὶν ὅταν τοῦ παντὸς πολιτεύματος ὀλίγου ὄντος τῶν μεγίστων ἀρχῶν μὴ μετέχωσιν οἱ ὀλίγοι πάντες, ὅπερ ἐν Ἡλίδι συνέβη ποτὲ· τῆς πολιτείας γὰρ δι' ὀλίγων οὔσης τῶν γερόντων ὀλίγοι πάμπαν ἐγίνοντο διὰ τὸ αἰδίου εἶναι ἐνεθήκοντα ὄντας, τὴν δ' αἵρεσιν δυναστευτικὴν εἶναι καὶ ὁμοίαν τῇ τῶν ἐν Λακεδαιμόνι γερόντων. γίνεται δὲ μεταβολὴ τῶν ὀλιγαρχιῶν καὶ ἐν πολέμῳ καὶ ἐν εἰρήνῃ, ἐν μὲν πολέμῳ διὰ τὴν πρὸς τὸν δῆμον ἀπιστίαν στρατιώταις ἀναγκαζομένων χρῆσθαι (ὧ γὰρ ἂν ἐγχειρίσωσιν, οὗτος πολλάκις γίνεται τύραννος, ὥσπερ ἐν Κορίνθῳ Τιμοφάνης· ἂν δὲ πλείους, οὗτοι αὐτοῖς περιποιῶνται δυναστείαν· ὅτε δὲ ταῦτα δεδιότες μεταδιδόασιν τῷ πλήθει τῆς πολιτείας διὰ τὸ ἀναγκάζεσθαι τῷ δήμῳ χρῆσθαι). ἐν δὲ τῇ εἰρήνῃ διὰ τὴν ἀπιστίαν τὴν πρὸς ἀλλήλους ἐγχειρίζουσι τὴν φυλακὴν στρατιώταις καὶ ἄρχοντι μεσιδίῳ, ὃς ἐνίστε γίνεται κύριος ἀμφοτέρων, ὅπερ συνέβη ἐν Λαρίσῃ ἐπὶ τῆς τῶν Ἀλευαδῶν ἀρχῆς τῶν περὶ Σῆμον, καὶ ἐν Ἀβύδῳ ἐπὶ τῶν ἑταυριῶν ὧν ἦν μία ἡ Ἰφιάδου.

γίνονται δὲ στάσεις καὶ ἐκ τοῦ περιωθεῖσθαι ἑτέρους ὑφ' ἑτέρων τῶν ἐν τῇ ὀλιγαρχίᾳ αὐτῶν καὶ καταστασιάζεσθαι κατὰ γάμους ἢ δίκας, οἷον ἐκ γαμικῆς μὲν αἰτίας αἱ εἰρημέναι πρότερον (καὶ τὴν ἐν Ἐρετρίᾳ δ' ὀλιγαρχίαν τὴν τῶν ἱππέων Διαγόρας κατέλυσεν ἀδικηθεὶς περὶ γάμον), ἐκ δὲ δικαστηρίου κρίσεως ἢ ἐν Ἡρακλείᾳ στάσις ἐγένετο καὶ <ἡ> ἐν Θήβαις, ἐπ' αἰτίᾳ μοιχείας δικαίως μὲν στασιαστικῶς δὲ ποιησαμένων τὴν κόλασιν τῶν μὲν ἐν Ἡρακλείᾳ κατ' Εὐρυτίωνος, [1306b] τῶν δ' ἐν Θήβαις κατ' Ἀρχίου (ἐφιλονείκησαν γὰρ αὐτοῖς οἱ ἐχθροὶ ὥστε δεθῆναι ἐν ἀγορᾷ ἐν τῷ κύφῳ). πολλὰ δὲ καὶ διὰ τὸ ἄγαν δεσποτικὰς εἶναι τὰς ὀλιγαρχίας ὑπὸ τῶν ἐν τῇ πολιτείᾳ τινῶν δυσχερανάντων κατελύθησαν, ὥσπερ ἢ ἐν Κνίδῳ καὶ ἢ ἐν Χίῳ ὀλιγαρχία. γίνονται δὲ καὶ ἀπὸ συμπτώματος μεταβολαὶ καὶ τῆς καλουμένης πολιτείας καὶ τῶν ὀλιγαρχιῶν ἐν ὅσαις ἀπὸ τιμήματος βουλευοῦσι καὶ

δικάζουσι καὶ τὰς ἄλλας ἀρχὰς ἄρχουσιν. πολλάκις γὰρ ὅταν ταχθῇ πρῶτον τίμημα πρὸς τοὺς παρόντας καιρούς, ὥστε μετέχειν ἓν μὲν τῇ ὀλιγαρχίᾳ ὀλίγους ἓν δὲ τῇ πολιτείᾳ τοὺς μέσους, εὐετηρίας γιγνομένης δι' εἰρήνην ἢ δι' ἄλλην τιν' εὐτυχίαν συμβαίνει πολλαπλασίου γίνεσθαι τιμήματος ἀξίας τὰς αὐτὰς κτήσεις, ὥστε πάντας πάντων μετέχειν, ὅτε μὲν ἐκ προσαγωγῆς καὶ κατὰ μικρὸν γινομένης τῆς μεταβολῆς καὶ λανθανούσης, ὅτε δὲ καὶ θᾶπτον. αἱ μὲν οὖν ὀλιγαρχίαι μεταβάλλουσι καὶ στασιάζουσι διὰ τοιαύτας αἰτίας (ὅλως δὲ καὶ αἱ δημοκρατίαι καὶ αἱ ὀλιγαρχίαι ἐξίστανται ἐνίοτε οὐκ εἰς τὰς ἐναντίας πολιτείας ἀλλ' εἰς τὰς ἐν τῷ αὐτῷ γένει, οἷον ἐκ τῶν ἐννόμων δημοκρατιῶν καὶ ὀλιγαρχιῶν εἰς τὰς κυρίους καὶ ἐκ τούτων εἰς ἐκείνας).

Ἐν δὲ ταῖς ἀριστοκρατίαις γίνονται αἱ στάσεις αἱ μὲν διὰ τὸ ὀλίγους τῶν τιμῶν μετέχειν, ὅπερ εἴρηται κινεῖν καὶ τὰς ὀλιγαρχίας, διὰ τὸ καὶ τὴν ἀριστοκρατίαν ὀλιγαρχίαν εἶναι πῶς (ἐν ἀμφοτέραις γὰρ ὀλίγοι οἱ ἄρχοντες, οὐ μέντοι διὰ ταῦτόν ὀλίγοι). ἐπεὶ δοκεῖ γε διὰ ταῦτα καὶ ἡ ἀριστοκρατία ὀλιγαρχία εἶναι. μάλιστα δὲ τοῦτο συμβαίνειν ἀναγκαῖον ὅταν ἢ τι πλῆθος τῶν πεφρονηματισμένων ὡς ὁμοίων κατ' ἀρετὴν, οἷον ἐν Λακεδαιμόνι οἱ λεγόμενοι Παρθενῖαι (ἐκ τῶν ὁμοίων γὰρ ἦσαν), οὓς φωράσαντες ἐπιβουλεύσαντας ἀπέστειλαν Τάραντος οἰκιστάς, ἢ ὅταν τινὲς ἀτιμάζωνται μεγάλοι ὄντες καὶ μηθενὸς ἦττους κατ' ἀρετὴν ὑπὸ τινων ἐντιμοτέρων, οἷον Λύσανδρος ὑπὸ τῶν βασιλέων, ἢ ὅταν ἀνδρώδης τις ὢν μὴ μετέχη τῶν τιμῶν, οἷον Κινάδων ὁ τὴν ἐπ' Ἀγησιλάου συστήσας ἐπίθεσιν ἐπὶ τοὺς Σπαρτιάτας· ἔτι ὅταν οἱ μὲν ἀπορῶσι λίαν οἱ δ' εὐπορῶσιν (καὶ μάλιστα ἐν τοῖς πολέμοις τοῦτο γίνεται· συνέβη δὲ καὶ τοῦτο ἐν Λακεδαιμόνι ὑπὸ τὸν Μεσσηνιακὸν πόλεμον· δῆλον δὲ [καὶ] τοῦτο ἐκ τῆς Τυρταίου ποιήσεως τῆς καλουμένης [1307a] Εὐνομίας· θλιβόμενοι γὰρ τινες διὰ τὸν πόλεμον ἡξίουσαν ἀνάδαστον ποιεῖν τὴν χώραν)· ἔτι ἐάν τις μέγας ἢ καὶ δυνάμενος ἔτι μείζων εἶναι, ἵνα μοναρχῇ, ὥσπερ ἐν Λακεδαιμόνι δοκεῖ Πausanίας ὁ στρατηγήσας κατὰ τὸν Μηδικὸν πόλεμον, καὶ ἐν Καρχηδόνι Ἄνων.

λύονται δὲ μάλιστα αἱ τε πολιτεῖαι καὶ αἱ ἀριστοκρατίαι διὰ τὴν ἐν αὐτῇ τῇ πολιτείᾳ τοῦ δικαίου παρέκβασιν. ἀρχὴ γὰρ τὸ μὴ μεμεῖχθαι καλῶς ἓν μὲν τῇ πολιτείᾳ δημοκρατίαν καὶ ὀλιγαρχίαν, ἓν δὲ τῇ ἀριστοκρατίᾳ ταῦτά τε καὶ τὴν ἀρετὴν, μάλιστα δὲ τὰ δύο· λέγω δὲ τὰ δύο δῆμον καὶ ὀλιγαρχίαν. ταῦτα γὰρ αἱ πολιτεῖαι τε πειρῶνται μιγνύναι καὶ αἱ πολλὰ τῶν καλουμένων ἀριστοκρατιῶν. διαφέρουσι γὰρ τῶν ὀνομαζομένων πολιτειῶν αἱ ἀριστοκρατίαι τούτῳ, καὶ διὰ τοῦτ' εἰσὶν αἱ μὲν ἦττον αἱ δὲ μᾶλλον μόνιμοι αὐτῶν· τὰς γὰρ ἀποκλινούσας μᾶλλον πρὸς τὴν ὀλιγαρχίαν ἀριστοκρατίας καλοῦσιν, τὰς δὲ πρὸς τὸ πλῆθος πολιτείας· διόπερ ἀσφαλέστεραι αἱ τοιαῦται

τῶν ἐτέρων εἰσὶν· κρεῖττον τε γὰρ τὸ πλεῖον, καὶ μᾶλλον ἀγαπῶσιν ἴσον ἔχοντες, οἱ δ' ἐν ταῖς εὐπορίαις, ἃν ἡ πολιτεία διδῷ τὴν ὑπεροχὴν, ὑβρίζειν ζητοῦσι καὶ πλεονεκτεῖν. ὅλως δ' ἐφ' ὁπότερον ἂν ἐγκλίνη ἡ πολιτεία, ἐπὶ ταῦτα μεθίσταται ἑκατέρων τὸ σφέτερον αὐξανόντων, οἷον ἡ μὲν πολιτεία εἰς δῆμον, ἀριστοκρατία δ' εἰς ὀλιγαρχίαν· ἢ εἰς τάναντία, οἷον ἡ μὲν ἀριστοκρατία εἰς δῆμον (ὥς ἀδικούμενοι γὰρ περισπῶσιν εἰς τοῦναντίον οἱ ἀπορώτεροι), αἱ δὲ πολιτεῖαι εἰς ὀλιγαρχίαν (μόνον γὰρ μόνιμον τὸ κατ' ἀξίαν ἴσον καὶ τὸ ἔχειν τὰ αὐτῶν)· συνέβη δὲ τὸ εἰρημένον ἐν Θουρίοις. διὰ μὲν γὰρ τὸ ἀπὸ πλείονος τιμήματος εἶναι τὰς ἀρχὰς εἰς ἔλαττον μετέβη καὶ εἰς ἀρχεῖα πλείω, διὰ δὲ τὸ τὴν χώραν ὅλην τοὺς γνωρίμους συγκτήσασθαι παρὰ τὸν νόμον (ἡ γὰρ πολιτεία ὀλιγαρχικωτέρα ἦν, ὥστε ἐδύναντο πλεονεκτεῖν) ὁ [δὲ] δῆμος γυμνασθεὶς ἐν τῷ πολέμῳ τῶν φρουρῶν ἐγένετο κρείττων, ἕως ἀφεῖσαν τῆς χώρας ὅσοι πλείω ἦσαν ἔχοντες.

ἔτι διὰ τὸ πάσας τὰς ἀριστοκρατικὰς πολιτείας ὀλιγαρχικὰς εἶναι μᾶλλον πλεονεκτοῦσιν οἱ γνώριμοι, οἷον καὶ ἐν Λακεδαιμόνι εἰς ὀλίγους αἱ οὐσίαι ἔρχονται· καὶ ἔξεστι ποιεῖν ὅ τι ἂν θέλωσι τοῖς γνωρίμοις μᾶλλον, καὶ κηδεύειν ὅτῳ θέλουσιν, διὸ καὶ ἡ Λοκρῶν πόλις ἀπώλετο ἐκ τῆς πρὸς Διονύσιον κηδεῖας, ὃ ἐν δημοκρατίᾳ οὐκ ἂν ἐγένετο, οὐδ' ἂν ἐν ἀριστοκρατίᾳ εὖ μεμειγμένη. μάλιστα δὲ λανθάνουσιν αἱ [1307b] ἀριστοκραταὶ μεταβάλλουσαι τῷ λυέσθαι κατὰ μικρόν, ὅπερ εἴρηται ἐν τοῖς πρότερον καθόλου κατὰ πασῶν τῶν πολιτειῶν, ὅτι αἴτιον τῶν μεταβολῶν καὶ τὸ μικρόν ἐστίν· ὅταν γάρ τι προῶνται τῶν πρὸς τὴν πολιτείαν, μετὰ τοῦτο καὶ ἄλλο μικρῷ μείζον εὐχερέστερον κινουῖσιν, ἕως ἂν πάντα κινήσωσι τὸν κόσμον. συνέβη δὲ τοῦτο καὶ ἐπὶ τῆς Θουρίων πολιτείας. νόμου γὰρ ὄντος διὰ πέντε ἐτῶν στρατηγεῖν, γενόμενοί τινες πολεμικοὶ τῶν νεωτέρων καὶ παρὰ τῷ πλήθει τῶν φρουρῶν εὐδοκιμοῦντες, καταφρονήσαντες τῶν ἐν τοῖς πράγμασι καὶ νομίζοντες ῥαδίως κατασχῆσιν, τοῦτον τὸν νόμον λύειν ἐπεχείρησαν πρῶτον, ὥστ' ἐξεῖναι τοὺς αὐτοὺς συνεχῶς στρατηγεῖν, ὀρῶντες τὸν δῆμον αὐτοὺς χειροτονήσοντα προθύμως. οἱ δ' ἐπὶ τούτῳ τεταγμένοι τῶν ἀρχόντων, οἱ καλούμενοι σύμβουλοι, ὀρμήσαντες τὸ πρῶτον ἐναντιοῦσθαι συνεπίσθησαν, ὑπολαμβάνοντες τοῦτον κινήσαντας τὸν νόμον ἑάσειν τὴν ἄλλην πολιτείαν, ὕστερον δὲ βουλόμενοι κωλύειν ἄλλων κινουμένων οὐκέτι πλέον ἐποιοῦν οὐθέν, ἀλλὰ μετέβαλεν ἡ τάξις πᾶσα τῆς πολιτείας εἰς δυναστείαν τῶν ἐπιχειρησάντων νεωτερίζειν.

πᾶσαι δ' αἱ πολιτεῖαι λύονται ὅτῃ μὲν ἐξ αὐτῶν ὅτῃ δ' ἕξωθεν, ὅταν ἐναντία πολιτεία ἢ ἢ πλησίον ἢ πόρρω μὲν ἔχουσα δὲ δύναμιν. ὅπερ συνέβαιεν ἐπ' Ἀθηναίων καὶ Λακεδαιμονίων· οἱ μὲν γὰρ Ἀθηναῖοι πανταχοῦ



τὰς ὀλιγαρχίας, οἱ δὲ Λάκωνες τοὺς δήμους κατέλυον. ὅθεν μὲν οὖν αἱ μεταβολαὶ γίνονται τῶν πολιτειῶν καὶ αἱ στάσεις, εἴρηται σχεδόν.

Περὶ δὲ σωτηρίας καὶ κοινῇ καὶ χωρὶς ἐκάστης πολιτείας ἐχόμενόν ἐστιν εἰπεῖν. πρῶτον μὲν οὖν δῆλον ὅτι, εἴπερ ἔχομεν δι' ὧν φθείρονται αἱ πολιτεῖαι, ἔχομεν καὶ δι' ὧν σώζονται· τῶν γὰρ ἐναντίων τάναντία ποιητικά, φθορὰ δὲ σωτηρία ἐναντίον. ἐν μὲν οὖν ταῖς εὖ κεκραμέναις πολιτείαις ὥσπερ ἄλλο τι δεῖ τηρεῖν ὅπως μηθὲν παρανομῶσι, καὶ μάλιστα τὸ μικρὸν φυλάττειν· λανθάνει γὰρ παραδυομένη ἢ παρανομία, ὥσπερ τὰς οὐσίας τὸ μικρὸν δαπάνημα ἀναιρεῖ πολλάκις γινόμενον. λανθάνει δὲ ἡ δαπάνη διὰ τὸ μὴ ἄθροα γίνεσθαι· παραλογίζεται γὰρ ἡ διάνοια ὑπ' αὐτῶν, ὥσπερ ὁ σοφιστικὸς λόγος “εἰ ἕκαστον μικρόν, καὶ πάντα”· τοῦτο δ' ἔστι μὲν ὥς, ἔστι δ' ὡς οὐ· τὸ γὰρ ὅλον καὶ τὰ πάντα οὐ μικρόν, ἀλλὰ σύγκειται ἐκ μικρῶν.

μίαν μὲν οὖν φυλακὴν ταύτην πρὸς τὴν ἀρχὴν δεῖ ποιεῖσθαι· ἔπειτα μὴ πιστεύειν τοῖς σοφίσματος χάριν [1308a] πρὸς τὸ πλῆθος συγκειμένοις, ἐξελέγχεται γὰρ ὑπὸ τῶν ἔργων (ποῖα δὲ λέγομεν τῶν πολιτειῶν σοφίσματα, πρότερον εἴρηται). ἔτι δ' ὁρᾷν ὅτι ἔναι μένουσιν οὐ μόνον ἀριστοκρατίαι ἀλλὰ καὶ ὀλιγαρχίαι οὐ διὰ τὸ ἀσφαλεῖς εἶναι τὰς πολιτείας, ἀλλὰ διὰ τὸ εὖ χρῆσθαι τοὺς ἐν ταῖς ἀρχαῖς γινομένους καὶ τοῖς ἔξω τῆς πολιτείας καὶ τοῖς ἐν τῷ πολιτεύματι, τοὺς μὲν μὴ μετέχοντας τῷ μὴ ἀδικεῖν καὶ τῷ τοὺς ἡγεμονικοὺς αὐτῶν εἰσάγειν εἰς τὴν πολιτείαν καὶ τοὺς μὲν φιλοτίμους μὴ ἀδικεῖν εἰς ἀτιμίαν τοὺς δὲ πολλοὺς εἰς κέρδος, πρὸς αὐτοὺς δὲ καὶ τοὺς μετέχοντας τῷ χρῆσθαι ἀλλήλοις δημοτικῶς. ὁ γὰρ ἐπὶ τοῦ πλήθους ζητοῦσιν οἱ δημοτικοί, τὸ ἴσον, τοῦτ' ἐπὶ τῶν ὁμοίων οὐ μόνον δίκαιον ἀλλὰ καὶ συμφέρον ἐστίν. διὸ ἐὰν πλείους ὦσιν ἐν τῷ πολιτεύματι, πολλὰ συμφέρει τῶν δημοτικῶν νομοθετημάτων, οἷον τὸ ἐξαμήνους τὰς ἀρχὰς εἶναι, ἵνα πάντες οἱ ὅμοιοι μετέχωσιν· ἔστι γὰρ ὥσπερ δῆμος ἤδη οἱ ὅμοιοι (διὸ καὶ ἐν τούτοις ἐγγίγνονται δημαγωγοὶ πολλάκις, ὥσπερ εἴρηται πρότερον), ἔπειθ' ἦττον εἰς δυναστείας ἐμπίπτουσιν αἱ ὀλιγαρχίαι καὶ ἀριστοκρατίαι (οὐ γὰρ ὁμοίως ῥάδιον κακουργῆσαι ὀλίγον χρόνον ἄρχοντας καὶ πολὺν, ἐπεὶ διὰ τοῦτο ἐν ταῖς ὀλιγαρχίαις καὶ δημοκρατίαις γίνονται τυραννίδες· ἢ γὰρ οἱ μέγιστοι ἐν ἑκατέρᾳ ἐπιτίθενται τυραννίδι, ἔνθα μὲν οἱ δημαγωγοὶ ἔνθα δ' οἱ δυνάσται, ἢ οἱ τὰς μεγίστας ἔχοντες ἀρχάς, ὅταν πολὺν χρόνον ἄρχωσιν).

σώζονται δ' αἱ πολιτεῖαι οὐ μόνον διὰ τὸ πόρρω εἶναι τῶν διαφθειρόντων, ἀλλ' ἐνίοτε καὶ διὰ τὸ ἐγγύς· φοβούμενοι γὰρ διὰ χειρῶν ἔχουσι μᾶλλον τὴν πολιτείαν. ὥστε δεῖ τοὺς τῆς πολιτείας φροντίζοντας φόβους παρασκευάζειν, ἵνα φυλάττωσι καὶ μὴ καταλύωσιν ὥσπερ νυκτερινὴν φυλακὴν τὴν τῆς

πολιτείας τήρησιν, καὶ τὸ πόρρω ἐγγὺς ποιεῖν. ἔτι τὰς τῶν γνωρίμων φιλονεικίας καὶ στάσεις καὶ διὰ τῶν νόμων πειρᾶσθαι δεῖ φυλάττειν, καὶ τοὺς ἔξω τῆς φιλονεικίας ὄντας πρὶν παρειληφέναι καὶ αὐτούς, ὥς τὸ ἐν ἀρχῇ γινόμενον κακὸν γινῶναι οὐ τοῦ τυχόντος ἀλλὰ πολιτικοῦ ἀνδρός. πρὸς δὲ τὴν διὰ τὰ τιμήματα γιγνομένην μεταβολὴν ἐξ ὀλιγαρχίας καὶ πολιτείας, ὅταν συμβαίνει τοῦτο μενόντων μὲν τῶν αὐτῶν τιμημάτων εὐπορίας δὲ νομίσματος γιγνομένης, συμφέρει τοῦ τιμήματος ἐπισκοπεῖν τοῦ κοινοῦ τὸ πλῆθος πρὸς τὸ παρελθόν, ἐν ὅσαις μὲν πόλεσι τιμῶνται κατ' ἐνιαυτόν, κατὰ τοῦτον τὸν χρόνον, [1308b] ἐν δὲ ταῖς μείζουσι διὰ τριετηρίδος ἢ πενταετηρίδος, κἂν ἢ πολλαπλάσιον ἢ πολλοστημόριον τοῦ πρότερον, ἐν ᾧ αἱ τιμήσεις κατέστησαν τῆς πολιτείας, νόμον εἶναι καὶ τὰ τιμήματα ἐπιτείνειν ἢ ἀνιέναι, ἐὰν μὲν ὑπερβάλλῃ, ἐπιτείνοντας κατὰ τὴν πολλαπλασίωσιν, ἐὰν δ' ἐλλείπῃ, ἀνιέντας καὶ ἐλάττω ποιοῦντας τὴν τίμησιν. ἐν μὲν γὰρ ταῖς ὀλιγαρχίαις καὶ ταῖς πολιτείαις, μὴ ποιούντων [μὲν] οὕτως ἔνθα μὲν ὀλιγαρχίαν ἔνθα δὲ δυναστείαν γίνεσθαι συμβαίνει, ἐκείνως δὲ ἐκ μὲν πολιτείας δημοκρατίαν, ἐκ δ' ὀλιγαρχίας πολιτείαν ἢ δῆμον.

κοινὸν δὲ καὶ ἐν δήμῳ καὶ ὀλιγαρχίᾳ καὶ ἐν μοναρχίᾳ καὶ πάσῃ πολιτείᾳ μήτ' αὐξάνειν λίαν μηθέναι παρὰ τὴν συμμετρίαν, ἀλλὰ μᾶλλον πειρᾶσθαι μικρὰς καὶ πολυχρονίους διδόναι τιμὰς ἢ βραχὺ μεγάλας (διαφθείρονται γάρ, καὶ φέρειν οὐ παντὸς ἀνδρὸς εὐτυχίαν), εἰ δὲ μή, μή τοί γ' ἀθρόας δόντας ἀφαιρεῖσθαι πάλιν ἀθρόας, ἀλλ' ἐκ προσαγωγῆς· καὶ μάλιστα μὲν πειρᾶσθαι τοῖς νόμοις οὕτω ῥυθμίζειν ὥστε μηδένα ἐγγίγνεσθαι πολὺ ὑπερέχοντα δυνάμει μήτε φίλων μήτε χρημάτων, εἰ δὲ μή, ἀποδημητικὰς ποιεῖσθαι τὰς παραστάσεις αὐτῶν. ἐπεὶ δὲ καὶ διὰ τοὺς ἰδίους βίους νεωτερίζουσιν, δεῖ ἐμποιεῖν ἀρχὴν τινα τὴν ἐποψομένην τοὺς ζῶντας ἀσυμφόρως πρὸς τὴν πολιτείαν, ἐν μὲν δημοκρατίᾳ πρὸς τὴν δημοκρατίαν, ἐν δὲ ὀλιγαρχίᾳ πρὸς τὴν ὀλιγαρχίαν, ὁμοίως δὲ καὶ τῶν ἄλλων πολιτειῶν ἐκάστη· καὶ τὸ εὐημεροῦν δὲ τῆς πόλεως ἀνὰ μέρος φυλάττεσθαι διὰ τὰς αὐτὰς αἰτίας· τούτου δ' ἄκος τὸ αἰεὶ τοῖς ἀντικειμένοις μορίοις ἐγχειρίζειν τὰς πράξεις καὶ τὰς ἀρχάς (λέγω δ' ἀντικεῖσθαι τοὺς ἐπικεῖς τῷ πλήθει, καὶ τοὺς ἀπόρους τοῖς εὐπόροις), καὶ τὸ πειρᾶσθαι ἢ συμμιγνύναι τὸ τῶν ἀπόρων πλῆθος καὶ τὸ τῶν εὐπόρων ἢ τὸ μέσον αὔξειν (τοῦτο γὰρ διαλύει τὰς διὰ τὴν ἀνισότητάς τας). μέγιστον δὲ ἐν πάσῃ πολιτείᾳ τὸ καὶ τοῖς νόμοις καὶ τῇ ἄλλῃ οἰκονομίᾳ οὕτω τετάχθαι ὥστε μὴ εἶναι τὰς ἀρχὰς κερδαίνειν.

τοῦτο δὲ μάλιστα ἐν ταῖς ὀλιγαρχικαῖς δεῖ τηρεῖν. οὐ γὰρ οὕτως ἀγανακτοῦσιν εἰργόμενοι τοῦ ἄρχειν οἱ πολλοί, ἀλλὰ καὶ χαίρουσιν ἐὰν τις ἐᾷ πρὸς τοῖς ἰδίους σχολάζειν, ὥστ' ἐὰν οἴωνται τὰ κοινὰ κλέπτειν τοὺς

ἄρχοντας, τότε γ' ἀμφοτέρω λυπεῖ, τό τε τῶν τιμῶν μὴ μετέχειν καὶ τὸ τῶν κερδῶν· μοναχῶς δὲ καὶ ἐνδέχεται ἅμα εἶναι δημοκρατίαν καὶ ἀριστοκρατίαν, εἰ τοῦτο κατασκευάσειέ τις. ἐνδέχοιτο γὰρ ἂν καὶ τοὺς [1309a] γνωρίμους καὶ τὸ πλῆθος ἔχειν ἃ βούλονται ἀμφοτέρους. τὸ μὲν γὰρ ἐξεῖναι πᾶσιν ἄρχειν δημοκρατικόν, τὸ δὲ τοὺς γνωρίμους εἶναι ἐν ταῖς ἀρχαῖς ἀριστοκρατικόν, τοῦτο δ' ἔσται ὅταν μὴ ἢ κερδαίνειν ἀπὸ τῶν ἀρχῶν· οἱ γὰρ ἄποροι οὐ βουλήσονται ἄρχειν τῷ μηδὲν κερδαίνειν, ἀλλὰ πρὸς τοῖς ἰδίοις εἶναι μᾶλλον, οἱ δὲ εὖποροι δυνήσονται διὰ τὸ μηδενὸς προσδεῖσθαι τῶν κοινῶν· ὥστε συμβήσεται τοῖς μὲν ἀπόροις γίνεσθαι εὐπόροις διὰ τὸ διατρίβειν πρὸς τοῖς ἔργοις, τοῖς δὲ γνωρίμοις μὴ ἄρχεσθαι ὑπὸ τῶν τυχόντων. τοῦ μὲν οὖν μὴ κλέπτεσθαι τὰ κοινὰ ἢ παράδοσις γινέσθω τῶν χρημάτων παρόντων πάντων τῶν πολιτῶν, καὶ ἀντίγραφα κατὰ φατρίας καὶ λόχους καὶ φυλὰς τιθέσθωσαν· τοῦ δὲ ἀκερδῶς ἄρχειν τιμὰς εἶναι δεῖ νενομοθετημένας τοῖς εὐδοκιμοῦσιν. δεῖ δ' ἐν μὲν ταῖς δημοκρατίαις τῶν εὐπόρων φεῖδεσθαι, μὴ μόνον τῷ τὰς κτήσεις μὴ ποιεῖν ἀναδάστους, ἀλλὰ μηδὲ τοὺς καρπούς, ὃ ἐν ἐνίαις τῶν πολιτειῶν λανθάνει γιγνόμενον, βέλτιον δὲ καὶ βουλομένους κωλύειν λειτουργεῖν τὰς δαπανηρὰς μὲν μὴ χρησίμους δὲ λειτουργίας, οἷον χορηγίας καὶ λαμπαδαρχίας καὶ ὅσαι ἄλλαι τοιαῦται· ἐν δ' ὀλιγαρχίᾳ τῶν ἀπόρων ἐπιμέλειαν ποιεῖσθαι πολλήν, καὶ τὰς ἀρχὰς ἀφ' ὧν λήμματα <ἔστι> τούτοις ἀπονέμειν, κἂν τις ὑβρίσῃ τῶν εὐπόρων εἰς τούτους, μείζω τὰ ἐπιτίμια εἶναι ἢ ἂν σφῶν αὐτῶν, καὶ τὰς κληρονομίας μὴ κατὰ δόσιν εἶναι ἀλλὰ κατὰ γένος, μηδὲ πλειόνων ἢ μιᾶς τὸν αὐτὸν κληρονομεῖν. οὕτω γὰρ ἂν ὁμαλώτεραι αἱ οὐσίαι εἶεν καὶ τῶν ἀπόρων εἰς εὐπορίαν ἂν καθίσταντο πλείους. συμφέρει δὲ καὶ ἐν δημοκρατίᾳ καὶ ἐν ὀλιγαρχίᾳ τῶν ἄλλων ἢ ἰσότητα ἢ προεδρίαν νέμειν τοῖς ἥττον κοινωνοῦσι τῆς πολιτείας, ἐν μὲν δήμῳ τοῖς εὐπόροις, ἐν δ' ὀλιγαρχίᾳ τοῖς ἀπόροις, πλὴν ὅσαι ἀρχαὶ κύριαι τῆς πολιτείας, ταύτας δὲ τοῖς ἐκ τῆς πολιτείας ἐγχειρίζειν μόνοις ἢ πλείοσιν.

Τρία δέ τινα χρὴ ἔχειν τοὺς μέλλοντας ἄρξειν τὰς κυρίας ἀρχάς, πρῶτον μὲν φιλίαν πρὸς τὴν καθεστῶσαν πολιτείαν, ἔπειτα δύναμιν μεγίστην τῶν ἔργων τῆς ἀρχῆς, τρίτον δ' ἀρετὴν καὶ δικαιοσύνην ἐν ἐκάστη πολιτείᾳ τὴν πρὸς τὴν πολιτείαν (εἰ γὰρ μὴ ταῦτόν τὸ δίκαιον κατὰ πάσας τὰς πολιτείας, ἀνάγκη καὶ τῆς δικαιοσύνης εἶναι διαφοράς). ἔχει δ' ἀπορίαν, ὅταν μὴ συμβαίῃ ταῦτα πάντα περὶ τὸν αὐτόν, πῶς χρὴ ποιεῖσθαι τὴν αἵρεσιν· [1309b] οἷον εἰ στρατηγικὸς μὲν τις εἴη, πονηρὸς δὲ καὶ μὴ τῇ πολιτείᾳ φίλος, ὁ δὲ δίκαιος καὶ φίλος, πῶς δεῖ ποιεῖσθαι τὴν αἵρεσιν; ἔοικε δὲ δεῖν βλέπειν εἰς δύο, τίνος πλεῖον μετέχουσι πάντες καὶ τίνος ἔλαττον· διὸ ἐν στρατηγίᾳ μὲν εἰς τὴν ἐμπειρίαν μᾶλλον τῆς ἀρετῆς (ἔλαττον γὰρ στρατηγίας μετέχουσι, τῆς δ' ἐπικείας πλεῖον), ἐν δὲ φυλακῇ καὶ ταμείᾳ τᾶναντία (πλείονος γὰρ

ἀρετῆς δεῖται ἢ ὅσῃν οἱ πολλοὶ ἔχουσιν, ἢ δὲ ἐπιστήμη κοινὴ πᾶσιν).

ἀπορήσειε δ' ἂν τις, ἂν δύναμις ὑπάρχη καὶ τῇ πολιτείᾳ φιλία, τί δεῖ τῆς ἀρετῆς; ποιήσει γὰρ τὰ συμφέροντα καὶ τὰ δύο. ἢ ὅτι ἐνδέχεται τοὺς τὰ δύο ταῦτα ἔχοντας ἀκρατεῖς εἶναι, ὥστε καθάπερ καὶ αὐτοῖς οὐχ ὑπηρετοῦσιν εἰδότες καὶ φιλοῦντες αὐτούς, οὕτω καὶ πρὸς τὸ κοινὸν οὐθὲν κωλύει ἔχειν ἐνίους; ἀπλῶς δέ, ὅσα ἐν τοῖς νόμοις ὡς συμφέροντα λέγομεν ταῖς πολιτείαις, ἅπαντα ταῦτα σώζει τὰς πολιτείας, καὶ τὸ πολλάκις εἰρημένον μέγιστον στοιχεῖον, τὸ τηρεῖν ὅπως κρεῖττον ἔσται τὸ βουλούμενον τὴν πολιτείαν πλήθος τοῦ μὴ βουλομένου. παρὰ πάντα δὲ ταῦτα δεῖ μὴ λανθάνειν, ὃ νῦν λανθάνει τὰς παρεκβεβηκυίας πολιτείας, τὸ μέσον· πολλὰ γὰρ τῶν δοκούντων δημοτικῶν λύει τὰς δημοκρατίας καὶ τῶν ὀλιγαρχικῶν τὰς ὀλιγαρχίας. οἱ δ' οἰόμενοι ταύτην εἶναι μίαν ἀρετὴν ἔλκουσιν εἰς τὴν ὑπερβολήν, ἀγνοοῦντες ὅτι, καθάπερ ῥίς ἔστι παρεκβεβηκυῖα μὲν τὴν εὐθύτητα τὴν καλλίστην πρὸς τὸ γρυπὸν ἢ τὸ σιμόν, ἀλλ' ὅμως ἔτι καλὴ καὶ χάριν ἔχουσα πρὸς τὴν ὄψιν, οὐ μὴν ἀλλ' ἐὰν ἐπιτείνῃ τις ἔτι μᾶλλον εἰς τὴν ὑπερβολήν, πρῶτον μὲν ἀποβαλεῖ τὴν μετριότητα τοῦ μορίου, τέλος δ' οὕτως ὥστε μηδὲ ῥῖνα ποιήσει φαίνεσθαι διὰ τὴν ὑπεροχὴν καὶ τὴν ἔλλειψιν τῶν ἐναντίων, τὸν αὐτὸν δὲ τρόπον ἔχει καὶ περὶ τῶν ἄλλων μορίων, συμβαίνει δὲ τοῦτο καὶ περὶ τὰς [ἄλλας] πολιτείας. καὶ γὰρ ὀλιγαρχίαν καὶ δημοκρατίαν ἔστιν ὥστ' ἔχειν ἱκανῶς, καίπερ ἐξεστηκυίας τῆς βελτίστης τάξεως· ἐὰν δέ τις ἐπιτείνῃ μᾶλλον ἑκατέραν αὐτῶν, πρῶτον μὲν χεῖρω ποιήσει τὴν πολιτείαν, τέλος δ' οὐδὲ πολιτείαν. διὸ δεῖ τοῦτο μὴ ἀγνοεῖν τὸν νομοθέτην καὶ τὸν πολιτικόν, ποῖα σώζει τῶν δημοτικῶν καὶ ποῖα φθείρει τὴν δημοκρατίαν, καὶ ποῖα τῶν ὀλιγαρχικῶν τὴν ὀλιγαρχίαν. οὐδετέραν μὲν γὰρ ἐνδέχεται αὐτῶν εἶναι καὶ διαμένειν ἄνευ τῶν εὐπόρων καὶ τοῦ πλήθους, ἀλλ' ὅταν ὁμαλότης γένηται τῆς οὐσίας ἄλλην ἀνάγκη εἶναι ταύτην τὴν πολιτείαν, [1310a] ὥστε φθείροντες τοῖς καθ' ὑπεροχὴν νόμοις φθεύρουσι τὰς πολιτείας.

ἀμαρτάνουσι δὲ καὶ ἐν ταῖς δημοκρατίαις καὶ ἐν ταῖς ὀλιγαρχίαις, ἐν μὲν ταῖς δημοκρατίαις οἱ δημαγωγοί, ὅπου τὸ πλήθος κύριον τῶν νόμων (δύο γὰρ ποιοῦσιν ἀεὶ τὴν πόλιν, μαχόμενοι τοῖς εὐπόροις, δεῖ δὲ τὸ ὑναντίον αἰεὶ δοκεῖν λέγειν ὑπὲρ τῶν εὐπόρων), ἐν δὲ ταῖς ὀλιγαρχίαις ὑπὲρ τοῦ δήμου τοὺς ὀλιγαρχικούς, καὶ τοὺς ὄρκους ἐναντίους ἢ νῦν ὁμνῦναι τοὺς ὀλιγαρχικούς· νῦν μὲν γὰρ ἐν ἐνίαις ὁμνύουσι “καὶ τῷ δήμῳ κακόνους ἔσομαι καὶ βουλευσώ ὅ τι ἂν ἔχω κακόν”, χρηρὴ δὲ καὶ ὑπολαμβάνειν καὶ ὑποκρίνεσθαι τὸ ὑναντίον, ἐπισημανομένους ἐν τοῖς ὄρκοις ὅτι “οὐκ ἀδικήσω τὸν δῆμον”.

μέγιστον δὲ πάντων τῶν εἰρημένων πρὸς τὸ διαμένειν τὰς πολιτείας, οὗ νῦν ὀλιγωροῦσι πάντες, τὸ παιδεύεσθαι πρὸς τὰς πολιτείας. ὄφελος γὰρ οὐθὲν τῶν ὠφελιμωτάτων νόμων καὶ συνδεδοξασμένων ὑπὸ πάντων τῶν πολιτευομένων, εἰ μὴ ἔσονται εἰθισμένοι καὶ πεπαιδευμένοι ἐν τῇ πολιτείᾳ, εἰ μὲν οἱ νόμοι δημοτικοί, δημοτικῶς, εἰ δ' ὀλιγαρχικοί, ὀλιγαρχικῶς. εἴπερ γὰρ ἔστιν ἐφ' ἐνὸς ἀκрасία, ἔστι καὶ ἐπὶ πόλεως. ἔστι δὲ τὸ πεπαιδεῦσθαι πρὸς τὴν πολιτείαν οὐ τοῦτο, τὸ ποιεῖν οἷς χαίρουσιν οἱ ὀλιγαρχοῦντες ἢ οἱ δημοκρατίαν βουλόμενοι, ἀλλ' οἷς δυνήσονται οἱ μὲν ὀλιγαρχεῖν οἱ δὲ δημοκρατεῖσθαι. νῦν δ' ἐν μὲν ταῖς ὀλιγαρχίαις οἱ τῶν ἀρχόντων υἱοὶ τρυφῶσιν, οἱ δὲ τῶν ἀπόρων γίνονται γεγυμνασμένοι καὶ πεπονηκότες, ὥστε καὶ βούλονται μᾶλλον καὶ δύνανται νεωτερίζειν. ἐν δὲ ταῖς δημοκρατίαις ταῖς μάλιστα εἶναι δοκούσαις δημοκρατικαῖς τοῦναντίον τοῦ συμφέροντος καθέστηκεν, αἴτιον δὲ τούτου ὅτι κακῶς ὀρίζονται τὸ ἐλεύθερον. δύο γὰρ ἔστιν οἷς ἡ δημοκρατία δοκεῖ ὠρίσθαι, τῷ τὸ πλεῖον εἶναι κύριον καὶ τῇ ἐλευθερίᾳ. τὸ μὲν γὰρ ἴσον δίκαιον δοκεῖ εἶναι, ἴσον δ' ὅ τι ἂν δόξη τῷ πλήθει, τοῦτ' εἶναι κύριον, ἐλεύθερον δὲ [καὶ ἴσον] τὸ ὅ τι ἂν βούληται τις ποιεῖν. ὥστε ζῆ ἐν ταῖς τοιαύταις δημοκρατίαις ἕκαστος ὡς βούλεται, καὶ εἰς ὃ χρήζων, ὡς φησὶν Εὐριπίδης. τοῦτο δ' ἐστὶ φαῦλον. οὐ γὰρ δεῖ οἷσθαι δουλείαν εἶναι τὸ ζῆν πρὸς τὴν πολιτείαν, ἀλλὰ σωτηρίαν. ἐξ ὧν μὲν οὖν αἱ πολιτεῖαι μεταβάλλουσι καὶ φθείρονται, καὶ διὰ τίνων σώζονται καὶ διαμένουσιν, ὡς ἀπλῶς εἰπεῖν τοσαῦτά ἐστιν.

Λείπεται δ' ἐπελθεῖν καὶ περὶ μοναρχίας, ἐξ ὧν τε φθείρεται καὶ δι' ὧν σώζεσθαι πέφυκεν. σχεδὸν δὲ παραπλήσια [1310b] τοῖς εἰρημένοις περὶ τὰς πολιτείας ἐστὶ καὶ τὰ συμβαίνοντα περὶ τὰς βασιλείας καὶ τὰς τυραννίδας. ἡ μὲν γὰρ βασιλεία κατὰ τὴν ἀριστοκρατίαν ἐστίν, ἡ δὲ τυραννὶς ἐξ ὀλιγαρχίας τῆς ὑστάτης σύγκειται καὶ δημοκρατίας. διὸ δὴ καὶ βλαβερωτάτη τοῖς ἀρχομένοις ἐστίν, ἅτε ἐκ δυοῖν συγκειμένη κακῶν καὶ τὰς παρεκβάσεις καὶ τὰς ἀμαρτίας ἔχουσα τὰς παρ' ἀμφοτέρων τῶν πολιτειῶν. ὑπάρχει δ' ἡ γένεσις εὐθὺς ἐξ ἐναντίων ἐκατέρᾳ τῶν μοναρχιῶν. ἡ μὲν γὰρ βασιλεία πρὸς βοήθειαν τὴν ἐπὶ τὸν δῆμον τοῖς ἐπεικέσι γέγονεν, καὶ καθίσταται βασιλεὺς ἐκ τῶν ἐπεικῶν καθ' ὑπεροχὴν ἀρετῆς ἢ πράξεων τῶν ἀπὸ τῆς ἀρετῆς, ἢ καθ' ὑπεροχὴν τοιούτου γένους, ὃ δὲ τύραννος ἐκ τοῦ δήμου καὶ τοῦ πλήθους ἐπὶ τοὺς γνωρίμους, ὅπως ὁ δῆμος ἀδικῆται μηδὲν ὑπ' αὐτῶν. φανερόν δ' ἐκ τῶν συμβεβηκότων. σχεδὸν γὰρ οἱ πλεῖστοι τῶν τυράννων γεγόνασιν ἐκ δημαγωγῶν ὡς εἰπεῖν, πιστευθέντες ἐκ τοῦ διαβάλλειν τοὺς γνωρίμους. αἱ μὲν γὰρ τοῦτον τὸν τρόπον κατέστησαν τῶν τυραννίδων, ἥδη τῶν πόλεων ηὔξημένων, αἱ δὲ πρὸ τούτων ἐκ τῶν βασιλέων παρεκβαινόντων τὰ πάτρια καὶ δεσποτικωτέρας ἀρχῆς ὀρεγομένων, αἱ δὲ ἐκ τῶν αἰρετῶν ἐπὶ τὰς κυρίας

ἀρχάς (τὸ γὰρ ἀρχαῖον οἱ δῆμοι καθίστασαν πολυχρονίους τὰς δημιουργίας καὶ τὰς θεωρίας), αἱ δ' ἐκ τῶν ὀλιγαρχιῶν, αἵρουμένων ἓνα τινὰ κύριον ἐπὶ τὰς μεγίστας ἀρχάς. πᾶσι γὰρ ὑπῆρχε τοῖς τρόποις τούτοις τὸ κατεργάζεσθαι ῥαδίως, εἰ μόνον βουλευθεῖεν, διὰ τὸ δύναμιν προϋπάρχειν τοῖς μὲν βασιλικῆς ἀρχῆς τοῖς δὲ τὴν τῆς τιμῆς· οἷον Φεῖδων μὲν περὶ Ἄργος καὶ ἕτεροι τύραννοι κατέστησαν βασιλείας ὑπαρχούσης, οἱ δὲ περὶ τὴν Ἰωνίαν καὶ Φάλαρις ἐκ τῶν τιμῶν, Παναίτιος δ' ἐν Λεοντίνοις καὶ Κύψελος ἐν Κορίνθῳ καὶ Πεισίστρατος Ἀθήνησι καὶ Διονύσιος ἐν Συρακούσαις καὶ ἕτεροι τὸν αὐτὸν τρόπον ἐκ δημαγωγίας. καθάπερ οὖν εἵπομεν, ἡ βασιλεία τέτακται κατὰ τὴν ἀριστοκρατίαν. κατ' ἀξίαν γάρ ἐστιν, ἢ κατ' ἰδίαν ἀρετὴν ἢ κατὰ γένος, ἢ κατ' εὐεργεσίας, ἢ κατὰ ταῦτά τε καὶ δύναμιν. ἅπαντες γὰρ εὐεργετήσαντες ἢ δυνάμενοι τὰς πόλεις ἢ τὰ ἔθνη εὐεργετεῖν ἐτύγχανον τῆς τιμῆς ταύτης, οἱ μὲν κατὰ πόλεμον κωλύσαντες δουλεύειν, ὥσπερ Κόδρος, οἱ δ' ἐλευθερώσαντες, ὥσπερ Κῦρος, ἢ κτίσαντες ἢ κτησάμενοι χώραν, ὥσπερ οἱ Λακεδαιμονίων βασιλεῖς καὶ Μακεδόνων καὶ Μολοττῶν. βούλεται δ' ὁ βασιλεὺς εἶναι φύλαξ, ὅπως οἱ [1311a] μὲν κεκτημένοι τὰς οὐσίας μηθὲν ἄδικον πάσχωσιν, ὁ δὲ δῆμος μὴ ὑβρίζηται μηθέν· ἡ δὲ τυραννὶς, ὥσπερ εἴρηται πολλάκις, πρὸς οὐδὲν ἀποβλέπει κοινόν, εἰ μὴ τῆς ἰδίας ὠφελείας χάριν. ἔστι δὲ σκοπὸς τυραννικὸς μὲν τὸ ἡδύ, βασιλικὸς δὲ τὸ καλόν. διὸ καὶ τῶν πλεονεκτημάτων τὰ μὲν χρημάτων τυραννικά, τὰ δ' εἰς τιμὴν βασιλικά μᾶλλον· καὶ φυλακὴ βασιλικὴ μὲν πολιτικὴ, τυραννικὴ δὲ διὰ ξένων.

ὅτι δ' ἡ τυραννὶς ἔχει κακὰ καὶ τὰ τῆς δημοκρατίας καὶ τὰ τῆς ὀλιγαρχίας, φανερόν· ἐκ μὲν ὀλιγαρχίας τὸ τὸ τέλος εἶναι πλοῦτον (οὕτω γὰρ καὶ διαμένειν ἀναγκαῖον μόνως τὴν τε φυλακὴν καὶ τὴν τρυφήν), καὶ τὸ τῷ πλήθει μηδὲν πιστεύειν (διὸ καὶ τὴν παραίρεσιν ποιοῦνται τῶν ὅπλων), καὶ τὸ κακοῦν τὸν ὄχλον καὶ τὸ ἐκ τοῦ ἄστεως ἀπελαύνειν καὶ διοικίζειν ἀμφοτέρων κοινόν, καὶ τῆς ὀλιγαρχίας καὶ τῆς τυραννίδος· ἐκ δημοκρατίας δὲ τὸ πολεμεῖν τοῖς γνωρίμοις καὶ διαφθείρειν λάθρᾳ καὶ φανερώς καὶ φυγαδεύειν ὡς ἀντιτέχνους καὶ πρὸς τὴν ἀρχὴν ἐμποδίους. ἐκ γὰρ τούτων συμβαίνει γίνεσθαι καὶ τὰς ἐπιβουλὰς, τῶν μὲν ἄρχειν αὐτῶν βουλομένων, τῶν δὲ μὴ δουλεύειν. ὅθεν καὶ τὸ Περιάνδρου πρὸς Θρασύβουλον συμβούλευμά ἐστιν, ἡ τῶν ὑπερεχόντων σταχύων κόλουσις, ὡς δέον αἰεὶ τοὺς ὑπερέχοντας τῶν πολιτῶν ἀναιρεῖν. καθάπερ οὖν σχεδὸν ἐλέγχθη, τὰς αὐτὰς ἀρχάς δεῖ νομίζειν περὶ τε τὰς πολιτείας εἶναι τῶν μεταβολῶν καὶ περὶ τὰς μοναρχίας· διὰ τε γὰρ ἀδικίαν καὶ διὰ φόβον καὶ διὰ καταφρόνησιν ἐπιτίθενται πολλοὶ τῶν ἀρχομένων ταῖς μοναρχίαις (τῆς δὲ ἀδικίας μάλιστα δι' ὕβριν), ἐνίοτε δὲ καὶ διὰ τὴν τῶν ἰδίων στέρησιν.

ἔστι δὲ καὶ τὰ τέλη ταῦτά, καθάπερ κάκεϊ, καὶ περὶ τὰς τυραννίδας καὶ τὰς βασιλείας· μέγεθος γὰρ ὑπάρχει πλούτου καὶ τιμῆς τοῖς μονάρχοις, ὧν ἐφίενται πάντες. τῶν δ' ἐπιθέσεων αἱ μὲν ἐπὶ τὸ σῶμα γίνονται τῶν ἀρχόντων, αἱ δ' ἐπὶ τὴν ἀρχήν. αἱ μὲν οὖν δι' ὕβριν ἐπὶ τὸ σῶμα. τῆς δ' ὕβρεως οὕσης πολυμεροῦς, ἕκαστον αὐτῶν αἴτιον γίνεταί τῆς ὀργῆς· τῶν δ' ὀργιζομένων σχεδὸν οἱ πλεῖστοι τιμωρίας χάριν ἐπιτίθενται, ἀλλ' οὐχ ὑπεροχῆς. οἷον ἡ μὲν τῶν Πεισιστρατιδῶν διὰ τὸ προπηλακίσαι μὲν τὴν Ἀρμοδίου ἀδελφὴν ἐπηρεάσαι δ' Ἀρμόδιον (ὁ μὲν γὰρ Ἀρμόδιος διὰ τὴν ἀδελφήν, ὁ δὲ Ἀριστογείτων διὰ τὸν Ἀρμόδιον), ἐπεβούλευσαν δὲ καὶ Περιάνδρῳ τῷ ἐν Ἀμβρακίᾳ τυράννῳ διὰ τὸ συμπίνοντα μετὰ [1311b] τῶν παιδικῶν ἐρωτῆσαι αὐτὸν εἰ ἤδη ἐξ αὐτοῦ κύει· ἡ δὲ Φιλίππου ὑπὸ Πausανίου διὰ τὸ ἐᾶσαι ὑβρισθῆναι αὐτὸν ὑπὸ τῶν περὶ Ἄτταλον, καὶ ἡ Ἀμύντου τοῦ μικροῦ ὑπὸ Δέρδα διὰ τὸ καυχῆσασθαι εἰς τὴν ἡλικίαν αὐτοῦ, καὶ ἡ τοῦ εὐνούχου Εὐαγόρα τῷ Κυπρίῳ· διὰ γὰρ τὸ τὴν γυναῖκα παρελέσθαι τὸν υἱὸν αὐτοῦ ἀπέκτεινεν ὡς ὑβρισμένος. πολλὰ δ' ἐπιθέσεις γεγέννηται καὶ διὰ τὸ εἰς τὸ σῶμα αἰσχῦναι τῶν μονάρχων τινάς. οἷον καὶ ἡ Κραταίου εἰς Ἀρχέλαον· αἰεὶ γὰρ βαρέως εἶχε πρὸς τὴν ὀμιλίαν, ὥστε ἱκανὴ καὶ ἐλάττων <ἂν> ἐγένετο πρόφασις - ἢ διότι τῶν θυγατέρων οὐδεμίαν ἔδωκεν ὁμολογήσας αὐτῷ, ἀλλὰ τὴν μὲν προτέραν, κατεχόμενος ὑπὸ πολέμου πρὸς Σίρραν καὶ Ἀρράβαιον, ἔδωκε τῷ βασιλεῖ τῷ τῆς Ἑλιμείας, τὴν δὲ νεωτέραν τῷ υἱεῖ Ἀμύντῳ, οἴόμενος οὕτως ἂν ἐκείνον ἡκιστα διαφέρεσθαι καὶ τὸν ἐκ τῆς Κλεοπάτρας· ἀλλὰ τῆς γε ἀλλοτριότητος ὑπῆρχεν ἀρχὴ τὸ βαρέως φέρειν πρὸς τὴν ἀφροδισιαστικὴν χάριν. συνεπέθετο δὲ καὶ Ἑλλανοκράτης ὁ Λαρισαῖος διὰ τὴν αὐτὴν αἰτίαν· ὡς γὰρ χρώμενος αὐτοῦ τῇ ἡλικίᾳ οὐ κατῆγεν ὑποσχόμενος, δι' ὕβριν καὶ οὐ δι' ἐρωτικὴν ἐπιθυμίαν ὥετο εἶναι τὴν γεγεννημένην ὀμιλίαν. Πύθων δὲ καὶ Ἡρακλείδης οἱ Αἴνιοι Κότυν διέφθειραν τῷ πατρὶ τιμωροῦντες, Ἀδάμας δ' ἀπέστη Κότυος διὰ τὸ ἐκτμηθῆναι παῖς ὧν ὑπ' αὐτοῦ, ὡς ὑβρισμένος.

πολλοὶ δὲ καὶ διὰ τὸ εἰς τὸ σῶμα αἰκισθῆναι πληγαῖς ὀργισθέντες οἱ μὲν διέφθειραν, οἱ δ' ἐνεχείρησαν ὡς ὑβρισθέντες, καὶ τῶν περὶ τὰς ἀρχὰς καὶ βασιλικὰς δυναστείας. οἷον ἐν Μυτιλήνῃ τοὺς Πενθιλίδας Μεγακλῆς περιόντας καὶ τύποντας ταῖς κορύναις ἐπιθέμενος μετὰ τῶν φίλων ἀνεῖλεν, καὶ ὕστερον Σμέρδης Πενθίλον πληγὰς λαβὼν καὶ παρὰ τῆς γυναικὸς ἐξελकुσθεὶς διέφθειρεν. καὶ τῆς Ἀρχελάου δ' ἐπιθέσεως Δεκάμνιχος ἡγεμῶν ἐγένετο, παροξύνων τοὺς ἐπιθεμένους πρῶτος· αἴτιον δὲ τῆς ὀργῆς ὅτι αὐτὸν ἐξέδωκε μαστιγῶσαι Εὐριπίδῃ τῷ ποιητῇ· ὁ δ' Εὐριπίδης ἐχαλέπαινε εἰπόντος τι αὐτοῦ εἰς δυσωδίαν τοῦ στόματος. καὶ ἄλλοι δὲ πολλοὶ διὰ τοιαύτας αἰτίας οἱ μὲν ἀνῆρέθησαν οἱ δ' ἐπεβουλεύθησαν. ὁμοίως δὲ καὶ διὰ

φόβον· ἔν γάρ τι τοῦτο τῶν αἰτίων ἦν, ὥσπερ καὶ περὶ τὰς πολιτείας καὶ τὰς μοναρχίας· οἷον Ξέρξην Ἀρταπάνης φοβούμενος τὴν διαβολὴν τὴν περὶ Δαρεῖον, ὅτι ἐκρέμασεν οὐ κελεύσαντος Ξέρξου, ἀλλ' οἰόμενος συγγνώσεσθαι ὥς ἀμνημονοῦντα διὰ τὸ δειπνεῖν. αἱ δὲ διὰ [1312a] καταφρόνησιν, ὥσπερ Σαρδανάπαλλον ἰδὼν τις ξαίνοντα μετὰ τῶν γυναικῶν (εἰ ἀληθῆ ταῦτα οἱ μυθολογοῦντες λέγουσιν· εἰ δὲ μὴ ἐπ' ἐκείνου, ἀλλ' ἐπ' ἄλλου γε ἂν γένοιτο τοῦτο ἀληθές), καὶ Διονυσίῳ τῷ ὑστέρω Δίων ἐπέθετο διὰ τὸ καταφρονεῖν, ὁρῶν τοὺς τε πολίτας οὕτως ἔχοντας καὶ αὐτὸν ἀεὶ μεθύοντα. καὶ τῶν φίλων δέ τινες ἐπιτίθενται διὰ καταφρόνησιν· διὰ γὰρ τὸ πιστεύεσθαι καταφρονοῦσιν ὥς λήσοντες. καὶ οἱ οἰόμενοι δύνασθαι κατασχεῖν τὴν ἀρχὴν τρόπον τινὰ διὰ τὸ καταφρονεῖν ἐπιτίθενται· ὥς δυνάμενοι γὰρ καὶ καταφρονοῦντες τοῦ κινδύνου διὰ τὴν δύναμιν ἐπιχειροῦσι ῥαδίως, ὥσπερ οἱ στρατηγοῦντες τοῖς μονάρχοις, οἷον Κῦρος Ἀστυάγει καὶ τοῦ βίου καταφρονῶν καὶ τῆς δυνάμεως διὰ τὸ τὴν μὲν δύναμιν ἐξηγηκέναι αὐτὸν δὲ τρυφᾶν, καὶ Σεύθης ὁ Θρᾷξ Ἀμαδόκῳ στρατηγὸς ὢν. οἱ δὲ καὶ διὰ πλείω τούτων ἐπιτίθενται, οἷον καὶ καταφρονοῦντες καὶ διὰ κέρδος, ὥσπερ Ἀριοβαρζάνη Μιθριδάτης (μάλιστα δὲ διὰ ταύτην τὴν αἰτίαν ἐγχειροῦσιν οἱ τὴν φύσιν μὲν θρασεῖς, τιμὴν δ' ἔχοντες πολεμικὴν παρὰ τοῖς μονάρχοις· ἀνδρεία γὰρ δύναμιν ἔχουσα θράσος ἐστίν), δι' ἃς ἀμφοτέρας, ὥς ῥαδίως κρατήσοντες, ποιοῦνται τὰς ἐπιθέσεις.

τῶν δὲ διὰ φιλοτιμίαν ἐπιτιθεμένων ἕτερος τρόπος ἔστι τῆς αἰτίας παρὰ τοὺς εἰρημένους πρότερον. οὐ γὰρ ὥσπερ ἔνιοι τοῖς τυράννοις ἐπιχειροῦσιν ὁρῶντες κέρδη τε μεγάλα καὶ τιμὰς μεγάλας οὕσας αὐτοῖς, οὕτω καὶ τῶν διὰ φιλοτιμίαν ἐπιτιθεμένων ἕκαστος προαιρεῖται κινδυνεύειν· ἀλλ' ἐκεῖνοι μὲν διὰ τὴν εἰρημένην αἰτίαν, οὗτοι δ' ὥσπερ καὶ ἄλλης τινὸς γενομένης πράξεως περιττῆς καὶ δι' ἣν ὀνομαστοὶ γίνονται καὶ γνώριμοι τοῖς ἄλλοις, οὕτω καὶ τοῖς μονάρχοις ἐγχειροῦσιν, οὐ κτήσασθαι βουλόμενοι μοναρχίαν ἀλλὰ δόξαν. οὐ μὴν ἀλλ' ἐλάχιστοί γε τὸν ἀριθμὸν εἰσιν οἱ διὰ ταύτην τὴν αἰτίαν ὁρμῶντες· ὑποκεῖσθαι γὰρ δεῖ τὸ τοῦ σωθῆναι μηδὲν φροντίζειν, ἂν μὴ μέλλῃ κατασχήσειν τὴν πρᾶξιν. οἷς ἀκολουθεῖν μὲν δεῖ τὴν Δίωνος ὑπόληψιν, οὐ ῥάδιον δ' αὐτὴν ἐγγενέσθαι πολλοῖς· ἐκεῖνος γὰρ μετ' ὀλίγων ἐστράτευσεν ἐπὶ Διονύσιον οὕτως ἔχειν φάσκων ὥς, ὅποι περ ἂν δύνηται προελθεῖν, ἱκανὸν αὐτῷ τοσοῦτον μετασχεῖν τῆς πράξεως, οἷον εἰ μικρὸν ἐπιβάντα τῆς γῆς εὐθύς συμβαίῃ τελευτῆσαι, τοῦτον καλῶς ἔχειν αὐτῷ τὸν θάνατον.

φθείρεται δὲ τυραννὶς ἓνα μὲν τρόπον, ὥσπερ καὶ τῶν ἄλλων ἐκάστη πολιτειῶν, ἔξωθεν, [1312b] ἔαν ἐναντία τις ἢ πολιτεία κρείττων (τὸ μὲν γὰρ βούλεσθαι δῆλον ὥς ὑπάρξει διὰ τὴν ἐναντιότητα τῆς προαιρέσεως· ἃ δὲ



βούλονται, δυνάμενοι πράττουσι πάντες), ἐναντία δ' αἱ πολιτεῖαι, δῆμος μὲν τυραννίδι καθ' Ἡσίοδον ὡς κεραμεὺς κεραμεῖ (καὶ γὰρ ἡ δημοκρατία ἡ τελευταία τυραννὶς ἐστίν), βασιλεία δὲ καὶ ἀριστοκρατία διὰ τὴν ἐναντιότητα τῆς πολιτείας (διὸ Λακεδαιμόνιοι πλείστας κατέλυσαν τυραννίδας καὶ Συρακούσιοι κατὰ τὸν χρόνον ὃν ἐπολιτεύοντο καλῶς). ἓνα δ' ἐξ αὐτῆς, ὅταν οἱ μετέχοντες στασιάζωσιν, ὥσπερ ἡ τῶν περὶ Γέλωνα καὶ νῦν ἡ τῶν περὶ Διονύσιον, ἡ μὲν Γέλωνος Θρασυβούλου τοῦ Ἰέρωνος ἀδελφοῦ τὸν υἱὸν τοῦ Γέλωνος δημαγωγοῦντος καὶ πρὸς ἡδονὰς ὁρμῶντος, ἴν' αὐτὸς ἄρχῃ, τῶν δὲ οἰκείων συστάντων, ἵνα μὴ τυραννὶς ὅλως καταλυθῇ ἀλλὰ Θρασύβουλος - οἱ δὲ συστάντες αὐτῶν, ὡς καιρὸν ἔχοντες, ἐξέβαλον ἅπαντας αὐτούς. Διονύσιον δὲ Δίων στρατεύσας, κηδεστῆς ὢν καὶ προσλαβὼν τὸν δῆμον, ἐκεῖνον ἐκβαλὼν διεφθάρη. δύο δὲ οὐσῶν αἰτιῶν δι' ἃς μάλιστα ἐπιτίθενται ταῖς τυραννίσιν, μίσους καὶ καταφρονήσεως, θάτερον μὲν αἰεὶ τούτων ὑπάρχει τοῖς τυράννοις, τὸ μῖσος, ἐκ δὲ τοῦ καταφρονεῖσθαι πολλὰ γίνονται τῶν καταλύσεων. σημεῖον δέ· τῶν μὲν γὰρ κτησαμένων οἱ πλείστοι καὶ διεφύλαξαν τὰς ἀρχάς, οἱ δὲ παραλαβόντες εὐθὺς ὡς εἰπεῖν ἀπολλύουσι πάντες. ἀπολαυστικῶς γὰρ ζῶντες εὐκαταφρόνητοί τε γίνονται καὶ πολλοὺς καιροὺς παραδιδόουσι τοῖς ἐπιτιθεμένοις. μόριον δέ τι τοῦ μίσους καὶ τὴν ὀργὴν δεῖ τιθέναι· τρόπον γὰρ τινα τῶν αὐτῶν αἰτία γίνεται πράξεων. πολλάκις δὲ καὶ πρακτικώτερον τοῦ μίσους· συντονώτερον γὰρ ἐπιτίθενται διὰ τὸ μὴ χρῆσθαι λογισμῷ τὸ πάθος (μάλιστα δὲ συμβαίνει τοῖς θυμοῖς ἀκολουθεῖν διὰ τὴν ὕβριν, δι' ἣν αἰτίαν ἢ τε τῶν Πεισιστρατιδῶν κατελύθη τυραννὶς καὶ πολλὰ τῶν ἄλλων), ἀλλὰ μᾶλλον τὸ μῖσος· ἡ μὲν γὰρ ὀργὴ μετὰ λύπης πάρεστιν, ὥστε οὐ ῥάδιον λογίζεσθαι, ἡ δ' ἔχθρα ἄνευ λύπης.

ὥς δὲ ἐν κεφαλαίοις εἰπεῖν, ὅσας αἰτίας εἰρήκαμεν τῆς τε ὀλιγαρχίας τῆς ἀκράτου καὶ τελευταίας καὶ τῆς δημοκρατίας τῆς ἐσχάτης, τοσαύτας καὶ τῆς τυραννίδος θετέον· καὶ γὰρ αὗται τυγχάνουσιν οὔσαι διαιρεταὶ τυραννίδες. βασιλεία δ' ὑπὸ μὲν τῶν ἔξωθεν ἤκιστα φθείρεται, διὸ καὶ πολυχρόνιος ἐστίν· ἐξ αὐτῆς δ' αἱ πλείσται φθοραὶ συμβαίνουσιν. φθείρεται δὲ κατὰ δύο τρόπους, ἓνα μὲν [1313a] στασιασάντων τῶν μετεχόντων τῆς βασιλείας, ἄλλον δὲ τρόπον τυραννικώτερον πειρωμένων διοικεῖν, ὅταν εἶναι κύριοι πλειόνων ἀξιώσι καὶ παρὰ τὸν νόμον. οὐ γίνονται δ' ἔτι βασιλεῖαι νῦν, ἀλλ' ἂν περ γίνωνται, μογαρχαί καὶ τυραννίδες μᾶλλον, διὰ τὸ τὴν βασιλείαν ἐκούσιον μὲν ἀρχὴν εἶναι, μειζόνων δὲ κυρίαν, πολλοὺς δ' εἶναι τοὺς ὁμοίους, καὶ μηδένα διαφέροντα τοσοῦτον ὥστε ἀπαρτίζειν πρὸς τὸ μέγεθος καὶ τὸ ἀξίωμα τῆς ἀρχῆς. ὥστε διὰ μὲν τοῦτο ἐκόντες οὐχ ὑπομένουσιν· ἂν δὲ δι' ἀπάτης ἄρξῃ τις ἢ βίας, ἥδη δοκεῖ τοῦτο εἶναι τυραννὶς. ἐν δὲ ταῖς κατὰ γένος βασιλείαις τιθέναι δεῖ τῆς φθορᾶς αἰτίαν πρὸς ταῖς εἰρημέναις καὶ τὸ γίνεσθαι

πολλοὺς εὐκαταφρονήτους, καὶ τὸ δύναμιν μὴ κεκτημένους τυραννικὴν ἀλλὰ βασιλικὴν τιμὴν ὑβρίζειν· ῥαδία γὰρ ἐγίνετο ἡ κατάλυσις· μὴ βουλομένων γὰρ εὐθὺς οὐκ ἔσται βασιλεύς, ἀλλὰ τύραννος καὶ μὴ βουλομένων. φθείρονται μὲν οὖν αἱ μοναρχίαι διὰ ταύτας καὶ τοιαύτας ἑτέρας αἰτίας.

Σώζονται δὲ δηλονότι ὡς ἀπλῶς μὲν εἰπεῖν ἐκ τῶν ἐναντίων, ὡς δὲ καθ' ἕκαστον τῶν τὰς μὲν βασιλείας ἄγειν ἐπὶ τὸ μετριώτερον. ὅσω γὰρ ἂν ἐλαττόνων ὡσι κύριοι, πλείω χρόνον ἀναγκαῖον μένειν πᾶσαν τὴν ἀρχήν· αὐτοὶ τε γὰρ ἦττον γίνονται δεσποτικοὶ καὶ τοῖς ἡθεσιν ἴσοι μᾶλλον, καὶ ὑπὸ τῶν ἀρχομένων φθονοῦνται ἦττον. διὰ γὰρ τοῦτο καὶ ἡ περὶ Μολοττοὺς πολλὸν χρόνον βασιλεία διέμεινεν, καὶ ἡ Λακεδαιμονίων διὰ τὸ ἐξ ἀρχῆς τε εἰς δύο μέρη διαιρεθῆναι τὴν ἀρχήν, καὶ πάλιν Θεοπόμπου μετριάσαντος τοῖς τε ἄλλοις καὶ τὴν τῶν ἐφόρων ἀρχὴν ἐπικαταστήσαντος· τῆς γὰρ δυνάμεως ἀφελὼν ἠϋξήσε τῶ χρόνῳ τὴν βασιλείαν, ὥστε τρόπον τινὰ ἐποίησεν οὐκ ἐλάττον' ἀλλὰ μείζον' αὐτήν. ὅπερ καὶ πρὸς τὴν γυναῖκα ἀποκρίνασθαί φασιν αὐτόν, εἰποῦσαν εἰ μηδὲν αἰσχύνεται τὴν βασιλείαν ἐλάττω παραδιδούς τοῖς υἱέσιν ἢ παρὰ τοῦ πατρὸς παρέλαβεν· “οὐ δῆτα” φάναι· “παραδίδωμι γὰρ πολυχρονιωτέραν.”

αἱ δὲ τυραννίδες σώζονται κατὰ δύο τρόπους τοὺς ἐναντιωτάτους, ὧν ἕτερός ἐστιν ὁ παραδεδομένος καὶ καθ' ὃν διοικοῦσιν οἱ πλεῖστοι τῶν τυράννων τὴν ἀρχήν. τούτων δὲ τὰ πολλά φασι καταστήσαι Περίανδρον τὸν Κορίνθιον· πολλὰ δὲ καὶ παρὰ τῆς Περσῶν ἀρχῆς ἔστι τοιαῦτα λαβεῖν. ἔστι δὲ τὰ τε πάλαι λεχθέντα πρὸς σωτηρίαν, ὡς οἶόν τε, τῆς τυραννίδος, τὸ τοὺς ὑπερέχοντας κολοῦειν καὶ τοὺς φρονηματίας ἀναιρεῖν, καὶ μήτε συσσίτια ἔαν μήτε ἑταιρίαν [1313b] μήτε παιδείαν μήτε ἄλλο μηθὲν τοιοῦτον, ἀλλὰ πάντα φυλάττειν ὅθεν εἴωθε γίγνεσθαι δύο, φρόνημά τε καὶ πίστις, καὶ μήτε σχολὰς μήτε ἄλλους συλλόγους ἐπιτρέπειν γίγνεσθαι σχολαστικούς, καὶ πάντα ποιεῖν ἐξ ὧν ὅτι μάλιστα ἀγνώτες ἀλλήλοις ἔσονται πάντες (ἡ γὰρ γνώσις πίστιν ποιεῖ μᾶλλον πρὸς ἀλλήλους)· καὶ τὸ τοὺς ἐπιδημοῦντας αἰεὶ φανεροὺς εἶναι καὶ διατρίβειν περὶ θύρας (οὕτω γὰρ ἂν ἥκιστα λανθάνοιεν τί πράττουσι, καὶ φρονεῖν ἂν ἐθίζοιντο μικρὸν αἰεὶ δουλεύοντες)· καὶ τᾶλλα ὅσα τοιαῦτα Περσικὰ καὶ βάρβαρα τυραννικά ἐστιν (πάντα γὰρ ταῦτόν δύναται)· καὶ τὸ μὴ λανθάνειν πειρᾶσθαι ὅσα τυγχάνει τις λέγων ἢ πράττων τῶν ἀρχομένων, ἀλλ' εἶναι κατασκόπους, οἷον περὶ Συρακούσας αἱ ποταγωγίδες καλούμεναι, καὶ οὖς ὠτακουστὰς ἐξέπεμπεν Ἰέρων, ὅπου τις εἴη συνουσία καὶ σύλλογος (παρρησιάζονται τε γὰρ ἦττον, φοβούμενοι τοὺς τοιούτους, κἂν παρρησιάζωνται, λανθάνουσιν ἦττον)· καὶ τὸ διαβάλλειν ἀλλήλοις καὶ συγκρούειν καὶ φίλους φίλοις καὶ τὸν δῆμον τοῖς γνωρίμοις καὶ τοὺς

πλουσίους ἑαυτοῖς, καὶ τὸ πένητας ποιεῖν τοὺς ἀρχομένους τυραννικόν, ὅπως ἢ τε φυλακὴ τρέφεται καὶ πρὸς τῷ καθ' ἡμέραν ὄντες ἄσχολοι ὥσιν ἐπιβουλεύειν. παράδειγμα δὲ τούτου αἴ τε πυραμίδες αἱ περὶ Αἴγυπτον καὶ τὰ ἀναθήματα τῶν Κυψελιδῶν καὶ τοῦ Ὀλυμπίου ἢ οἰκοδόμησις ὑπὸ τῶν Πεισιστρατιδῶν, καὶ τῶν περὶ Σάμον ἔργων τὰ Πολυκράτεια (πάντα γὰρ ταῦτα δύναται ταῦτόν, ἀσχολίαν καὶ πενίαν τῶν ἀρχομένων). καὶ ἡ εἰσφορὰ τῶν τελῶν, οἷον ἐν Συρακούσαις (ἐν πέντε γὰρ ἔτεσιν ἐπὶ Διονυσίου τὴν οὐσίαν ἅπασαν εἰσενηνοχέναι συνέβαινεν). ἔστι δὲ καὶ πολεμοποιὸς ὁ τύραννος, ὅπως δὴ ἄσχολοί τε ὥσι καὶ ἡγεμόνος ἐν χρειᾷ διατελῶσιν ὄντες. καὶ ἡ μὲν βασιλεία σώζεται διὰ τῶν φίλων, τυραννικὸν δὲ τὸ μάλιστ' ἀπιστεῖν τοῖς φίλοις, ὡς βουλομένων μὲν πάντων, δυναμένων δὲ μάλιστα τούτων.

καὶ τὰ περὶ τὴν δημοκρατίαν δὲ γιγνόμενα τὴν τελευταίαν τυραννικὰ πάντα, γυναικοκρατία τε περὶ τὰς οἰκίας, ἵν' ἐξαγγέλλωσι κατὰ τῶν ἀνδρῶν, καὶ δούλων ἄνεσις διὰ τὴν αὐτὴν αἰτίαν· οὔτε γὰρ ἐπιβουλεύουσιν οἱ δοῦλοι καὶ αἱ γυναῖκες τοῖς τυράννοις, εὐημεροῦντάς τε ἀναγκαῖον εὖνους εἶναι καὶ ταῖς τυραννίσιν καὶ ταῖς δημοκρατίαις· καὶ γὰρ ὁ δῆμος εἶναι βούλεται μόναρχος. διὸ καὶ ὁ κόλαξ παρ' ἀμφοτέροις ἔντιμος, παρὰ μὲν τοῖς δήμοις ὁ δημαγωγός (ἔστι γὰρ ὁ δημαγωγὸς τοῦ δήμου κόλαξ), παρὰ δὲ τοῖς τυράννοις οἱ ταπεινῶς ὁμιλοῦντες, [1314a] ὅπερ ἐστὶν ἔργον κολακείας. καὶ γὰρ διὰ τοῦτο πονηρόφιλον ἡ τυραννὶς· κολακευόμενοι γὰρ χαίρουσιν, τοῦτο δ' οὐδ' ἂν εἷς ποιήσῃε φρόνημα ἔχων ἐλεύθερον, ἀλλὰ φιλοῦσιν οἱ ἐπικεῖς, ἢ οὐ κολακεύουσιν. καὶ χρήσιμοι οἱ πονηροὶ εἰς τὰ πονηρά· ἤλω γὰρ ὁ ἥλος, ὥσπερ ἡ παροιμία. καὶ τὸ μηδενὶ χαίρειν σεμνῶ μηδ' ἐλευθέρῳ τυραννικόν (αὐτὸν γὰρ εἶναι μόνον ἀξιοῖ τοιοῦτον ὁ τύραννος, ὁ δ' ἀντισεμνυνόμενος καὶ ἐλευθεριάζων ἀφαιρεῖται τὴν ὑπεροχὴν καὶ τὸ δεσποτικὸν τῆς τυραννίδος· μισοῦσιν οὖν ὥσπερ καταλύοντας τὴν ἀρχήν). καὶ τὸ χρῆσθαι συσσίτοις καὶ συνημερευταῖς ξενικοῖς μᾶλλον ἢ πολιτικοῖς τυραννικόν, ὡς τοὺς μὲν πολεμίους τοὺς δ' οὐκ ἀντιποιοιμένους - ταῦτα καὶ τὰ τοιαῦτα τυραννικὰ μὲν καὶ σωτήρια τῆς ἀρχῆς, οὐθὲν δ' ἐλλείπει μοχθηρίας. ἔστι δ' ὡς εἶπεῖν πάντα ταῦτα περιειλημμένα τρισὶν εἵδεσιν. στοχάζεται γὰρ ἡ τυραννὶς τριῶν, ἐνὸς μὲν τοῦ μικρὰ φρονεῖν τοὺς ἀρχομένους (οὐθενὶ γὰρ ἂν μικρόψυχος ἐπιβουλεύσειεν), δευτέρου δὲ τοῦ διαπιστεῖν ἀλλήλοις (οὐ καταλύεται γὰρ πρότερον τυραννὶς πρὶν ἢ πιστεύσωσί τινες ἑαυτοῖς· διὸ καὶ τοῖς ἐπικεῖσι πολεμοῦσιν ὡς βλαβεροῖς πρὸς τὴν ἀρχὴν οὐ μόνον διὰ τὸ μὴ ἀξιοῦν ἄρχεσθαι δεσποτικῶς, ἀλλὰ καὶ διὰ τὸ πιστοὺς καὶ ἑαυτοῖς καὶ τοῖς ἄλλοις εἶναι καὶ μὴ καταγορεύειν μήτε ἑαυτῶν μήτε τῶν ἄλλων). τρίτον δ' ἀδυναμία τῶν πραγμάτων (οὐθεὶς γὰρ ἐπιχειρεῖ τοῖς ἀδυνάτοις, ὥστε οὐδὲ

τυραννίδα καταλύειν μὴ δυνάμεως ὑπαρχούσης). εἰς οὓς μὲν οὖν ὅρους ἀνάγεται τὰ βουλευματα τῶν τυράννων, οὗτοι τρεῖς τυγχάνουσιν ὄντες· πάντα γὰρ ἀναγάγοι τις ἂν τὰ τυραννικὰ πρὸς ταύτας τὰς ὑποθέσεις, τὰ μὲν ὅπως μὴ πιστεύωσιν ἀλλήλοις, τὰ δ' ὅπως μὴ δύνωνται, τὰ δ' ὅπως μικρὸν φρονῶσιν.

ὁ μὲν οὖν εἷς τρόπος δι' οὗ γίνεται σωτηρία ταῖς τυραννίσι τοιοῦτός ἐστιν· ὁ δ' ἕτερος σχεδὸν ἐξ ἐναντίας ἔχει τοῖς εἰρημένοις τὴν ἐπιμέλειαν. ἔστι δὲ λαβεῖν αὐτὸν ἐκ τῆς φθορᾶς τῆς τῶν βασιλειῶν. ὥσπερ γὰρ τῆς βασιλείας εἷς τρόπος τῆς φθορᾶς τὸ ποιεῖν τὴν ἀρχὴν τυραννικωτέραν, οὕτω τῆς τυραννίδος σωτηρία τὸ ποιεῖν αὐτὴν βασιλικωτέραν, ἐν φυλάττοντα μόνον, τὴν δύναμιν, ὅπως ἄρχῃ μὴ μόνον βουλομένων ἀλλὰ καὶ μὴ βουλομένων. προϊέμενος γὰρ καὶ τοῦτο προῖται καὶ τὸ τυραννεῖν. ἀλλὰ τοῦτο μὲν ὥσπερ ὑπόθεσιν δεῖ μένειν, τὰ δ' ἄλλα τὰ μὲν ποιεῖν τὰ δὲ δοκεῖν ὑποκρινόμενον τὸν βασιλικὸν καλῶς, πρῶτον μὲν δοκεῖν [1314b] φροντίζειν τῶν κοινῶν, μήτε δαπανῶντα «εἰς» δωρεὰς τοιαύτας ἐφ' αἷς τὰ πλήθη χαλεπαίνουσιν, ὅταν ἀπ' αὐτῶν μὲν λαμβάνωσιν ἐργαζομένων καὶ πονούντων γλίσχρως, διδῶσι δ' ἐταίραις καὶ ξένοις καὶ τεχνίταις ἀφθόνως, λόγον τε ἀποδιδόντα τῶν λαμβανομένων καὶ δαπανωμένων, ὅπερ ἤδη πεποιήκασιν τινες τῶν τυράννων (οὕτω γὰρ ἂν τις διοικῶν οἰκονόμος ἀλλ' οὐ τύραννος εἶναι δόξειεν· οὐ δεῖ δὲ φοβεῖσθαι μή ποτε ἀπορήσῃ χρημάτων κύριος ὢν τῆς πόλεως· ἀλλὰ τοῖς γ' ἐκτοπίζουσι τυράννοις ἀπὸ τῆς οἰκείας καὶ συμφέρει τοῦτο μᾶλλον ἢ καταλιπεῖν ἀθροίσαντας· ἦττον γὰρ ἂν οἱ φυλάττοντες ἐπιτιθεῖντο τοῖς πράγμασιν, εἰσὶ δὲ φοβερώτεροι τῶν τυράννων τοῖς ἀποδημοῦσιν οἱ φυλάττοντες τῶν πολιτῶν· οἱ μὲν γὰρ συναποδημοῦσιν, οἱ δὲ ὑπομένουσιν)· ἔπειτα τὰς εἰσφορὰς καὶ τὰς λειτουργίας δεῖ φαίνεσθαι τῆς τε οἰκονομίας ἔνεκα συνάγοντα, κἂν ποτε δεηθῇ χρῆσθαι πρὸς τοὺς πολεμικοὺς καιροὺς, ὅλως τε αὐτὸν παρασκευάζειν φύλακα καὶ ταμίαν ὡς κοινῶν ἀλλὰ μὴ ὡς ἰδίων· καὶ φαίνεσθαι μὴ χαλεπὸν ἀλλὰ σεμνόν, ἔτι δὲ τοιοῦτον ὥστε μὴ φοβεῖσθαι τοὺς ἐντυγχάνοντας ἀλλὰ μᾶλλον αἰδεῖσθαι· τούτου μέντοι τυγχάνειν οὐ ῥάδιον ὄντα εὐκαταφρόνητον, διὸ δεῖ κἂν μὴ τῶν ἄλλων ἀρετῶν ἐπιμέλειαν ποιῆται, ἀλλὰ τῆς πολεμικῆς, καὶ δόξαν ἐμποιεῖν περὶ αὐτοῦ τοιαύτην· ἔτι δὲ μὴ μόνον αὐτὸν φαίνεσθαι μηδένα τῶν ἀρχομένων ὑβρίζοντα, μήτε νέον μήτε νέαν, ἀλλὰ μηδ' ἄλλον μηδένα τῶν περὶ αὐτόν, ὁμοίως δὲ καὶ τὰς οἰκείας ἔχειν γυναῖκας πρὸς τὰς ἄλλας, ὡς καὶ διὰ γυναικῶν ὕβρεις πολλαὶ τυραννίδες ἀπολώλασιν· περὶ τε τὰς ἀπολαύσεις τὰς σωματικὰς τούναντίον ποιεῖν ἢ νῦν τινες τῶν τυράννων ποιοῦσιν (οὐ γὰρ μόνον εὐθύς ἔωθεν τοῦτο δρῶσιν, καὶ συνεχῶς πολλὰς ἡμέρας, ἀλλὰ καὶ φαίνεσθαι τοῖς ἄλλοις βούλονται τοῦτο πράττοντες, ἵν' ὡς εὐδαίμονας καὶ

μακαρίους θαυμάσωσιν), ἀλλὰ μάλιστα μὲν μετριάζειν τοῖς τοιούτοις, εἰ δὲ μή, τό γε φαίνεσθαι τοῖς ἄλλοις διαφεύγειν (οὔτε γὰρ εὐεπίθετος οὔτ' εὐκαταφρόνητος ὁ νήφων, ἀλλ' ὁ μεθύων, οὐδ' ὁ ἄγρυπνος, ἀλλ' ὁ καθεύδων). τοῦναντίον τε ποιητέον τῶν πάλαι λεχθέντων σχεδὸν πάντων (κατασκευάζειν γὰρ δεῖ καὶ κοσμεῖν τὴν πόλιν ὡς ἐπίτροπον ὄντα καὶ μὴ τύραννον). ἔτι δὲ τὰ πρὸς τοὺς θεοὺς φαίνεσθαι ἀεὶ σπουδάζοντα διαφερόντως (ἥττον τε γὰρ φοβοῦνται τὸ παθεῖν τι παράνομον ὑπὸ τῶν τοιούτων, [1315a] ἔαν δεισιδαίμονα νομίζωσιν εἶναι τὸν ἄρχοντα καὶ φροντίζειν τῶν θεῶν, καὶ ἐπιβουλεύουσιν ἥττον ὡς συμμάχους ἔχοντι καὶ τοὺς θεοὺς), δεῖ δὲ ἄνευ ἀβελτερίας φαίνεσθαι τοιοῦτον· τοὺς τε ἀγαθοὺς περὶ τι γιγνομένους τιμᾶν οὕτως ὥστε μὴ νομίζειν ἂν ποτε τιμηθῆναι μᾶλλον ὑπὸ τῶν πολιτῶν αὐτονόμων ὄντων, καὶ τὰς μὲν τοιαύτας τιμὰς ἀπονέμειν αὐτόν, τὰς δὲ κολάσεις δι' ἐτέρων ἀρχόντων καὶ δικαστηρίων. κοινὴ δὲ φυλακὴ πάσης μοναρχίας τὸ μηθένα ποιεῖν ἓνα μέγαν, ἀλλ' εἴπερ, πλείους (τηρήσουσι γὰρ ἀλλήλους), ἔαν δ' ἄρα τινὰ δέῃ ποιῆσαι μέγαν, μή τοι τό γε ἦθος θρασύν (ἐπιθετικώτατον γὰρ τὸ τοιοῦτον ἦθος περὶ πάσας τὰς πράξεις), κἂν τῆς δυνάμεώς τινα δοκῇ παραλύειν, ἐκ προσαγωγῆς τοῦτο δρᾶν καὶ μὴ πᾶσαν ἀθρόον ἀφαιρεῖσθαι τὴν ἐξουσίαν. ἔτι δὲ πάσης μὲν ὕβρεως εἵργεσθαι, παρὰ πάσας δὲ дуεῖν, τῆς τε εἰς τὰ σώματα [κολάσεως] καὶ τῆς εἰς τὴν ἡλικίαν. μάλιστα δὲ ταύτην ποιητέον τὴν εὐλάβειαν περὶ τοὺς φιλοτίμους· τὴν μὲν γὰρ εἰς τὰ χρήματα ὀλιγωρίαν οἱ φιλοχρήματοι φέρουσι βαρέως, τὴν δ' [εἰς] ἀτιμίαν οἱ τε φιλότιμοι καὶ οἱ ἐπεικεῖς τῶν ἀνθρώπων. διόπερ ἢ μὴ χρῆσθαι δεῖ τοῖς τοιούτοις, ἢ τὰς μὲν κολάσεις πατρικῶς φαίνεσθαι ποιούμενον καὶ μὴ δι' ὀλιγωρίαν, τὰς δὲ πρὸς τὴν ἡλικίαν ὀμιλίας δι' ἐρωτικὰς αἰτίας ἀλλὰ μὴ δι' ἐξουσίαν, ὅλως δὲ τὰς δοκούσας ἀτιμίας ἐξωνεῖσθαι μείζοσι τιμαῖς. τῶν δ' ἐπιχειρούντων ἐπὶ τὴν τοῦ σώματος διαφθοράν οὗτοι φοβερώτατοι καὶ δέονται πλείστης φυλακῆς ὅσοι μὴ προαιροῦνται περιποιεῖσθαι τὸ ζῆν διαφθείραντες. διὸ μάλιστα εὐλαβεῖσθαι δεῖ τοὺς ὑβρίζεσθαι νομίζοντας ἢ αὐτοὺς ἢ ὧν κηδόμενοι τυγχάνουσιν· ἀφειδῶς γὰρ ἐαυτῶν ἔχουσιν οἱ διὰ θυμὸν ἐπιχειροῦντες, καθάπερ καὶ Ἡράκλειτος εἶπε, χαλεπὸν φάσκων εἶναι θυμῷ μάχεσθαι, ψυχῇς γὰρ ὠνεῖσθαι

ἐπεὶ δ' αἱ πόλεις ἐκ δύο συνεστήκασιν μορίων, ἔκ τε τῶν ἀπόρων ἀνθρώπων καὶ τῶν εὐπόρων, μάλιστα μὲν ἀμφοτέρους ὑπολαμβάνειν δεῖ σῶζεσθαι διὰ τὴν ἀρχήν, καὶ τοὺς ἐτέρους ὑπὸ τῶν ἐτέρων ἀδικεῖσθαι μηδέν, ὁπότεροι δ' ἂν ὦσι κρείττους, τούτους ἰδίους μάλιστα ποιεῖσθαι τῆς ἀρχῆς, ὡς, ἂν ὑπάρξη τοῦτο τοῖς πράγμασιν, οὔτε δούλων ἐλευθέρωσιν ἀνάγκη ποιεῖσθαι τὸν τύραννον οὔτε ὅπλων παραίρεσιν· ἱκανὸν γὰρ θάτερον μέρος πρὸς τῇ δυνάμει προστιθέμενον ὥστε κρείττους εἶναι τῶν ἐπιτιθεμένων.

περίεργον δὲ τὸ λέγειν καθ' ἕκαστον τῶν τοιούτων· ὁ γὰρ σκοπὸς φανερός, ὅτι δεῖ μὴ τυραννικὸν [1315b] ἀλλ' οἰκονόμον καὶ βασιλικὸν εἶναι φαίνεσθαι τοῖς ἀρχομένοις καὶ μὴ σφετεριστὴν ἀλλ' ἐπίτροπον, καὶ τὰς μετριότητος τοῦ βίου διώκειν, μὴ τὰς ὑπερβολάς, ἔτι δὲ τοὺς μὲν γνωρίμους καθομιλεῖν, τοὺς δὲ πολλοὺς δημαγωγεῖν. ἐκ γὰρ τούτων ἀναγκαῖον οὐ μόνον τὴν ἀρχὴν εἶναι καλλίω καὶ ζηλωτοτέραν τῷ βελτιόνων ἄρχειν καὶ μὴ τεταπεινωμένων μηδὲ μισούμενον καὶ φοβούμενον διατελεῖν, ἀλλὰ καὶ τὴν ἀρχὴν εἶναι πολυχρονιωτέραν, ἔτι δ' αὐτὸν διακεῖσθαι κατὰ τὸ ἦθος ἥτοι καλῶς πρὸς ἀρετὴν ἢ ἡμίχρηστον ὄντα, καὶ μὴ πονηρὸν ἀλλ' ἡμιπόνηρον.

Καίτοι πασῶν ὀλιγοχρονιώταται τῶν πολιτειῶν εἰσιν ὀλιγαρχία καὶ τυραννίς. πλεῖστον γὰρ ἐγένετο χρόνον ἢ περὶ Σικυῶνα τυραννίς, ἢ τῶν Ὀρθαγόρου παίδων καὶ αὐτοῦ Ὀρθαγόρου· ἔτη δ' αὕτη διέμεινεν ἑκατόν. τούτου δ' αἴτιον ὅτι τοῖς ἀρχομένοις ἐχρῶντο μετρίως καὶ πολλὰ τοῖς νόμοις ἐδούλευον, καὶ διὰ τὸ πολεμικὸς γενέσθαι Κλεισθένης οὐκ ἦν εὐκαταφρόνητος, καὶ τὰ πολλὰ ταῖς ἐπιμελείαις ἐδημαγῶγουν. λέγεται γοῦν Κλεισθένης τὸν ἀποκρίναντα τῆς νίκης αὐτὸν ὡς ἐστεφάνωσεν· ἔνιοι δ' εἰκόνα φασὶν εἶναι τοῦ κρίναντος οὕτως τὸν ἀνδριάντα τὸν ἐν τῇ ἀγορᾷ καθήμενον. φασὶ δὲ καὶ Πεισίστρατον ὑπομεῖναι ποτε προσκληθέντα δίκην εἰς Ἄρειον πάγον. δευτέρα δὲ περὶ Κόρινθον ἢ τῶν Κυψελιδῶν· καὶ γὰρ αὕτη διετέλεσεν ἔτη τρία καὶ ἑβδομήκοντα καὶ ἕξ μῆνας· Κύψελος μὲν γὰρ ἐτυράνησεν ἔτη τριάκοντα, Περίανδρος δὲ τετταράκοντα καὶ ἥμισυ, Ψαμμίτιχος δ' ὁ Γόργου τρία ἔτη. τὰ δ' αἴτια ταῦτα καὶ ταύτης· ὁ μὲν γὰρ Κύψελος δημαγωγὸς ἦν καὶ κατὰ τὴν ἀρχὴν διετέλεσεν ἀδορυφόρητος, Περίανδρος δ' ἐγένετο μὲν τυραννικός, ἀλλὰ πολεμικός. τρίτη δ' ἡ τῶν Πεισιστρατιδῶν Ἀθήνησιν. οὐκ ἐγένετο δὲ συνεχής· δις γὰρ ἔφυγε Πεισίστρατος τυραννῶν· ὥστ' ἐν ἔτεσι τριάκοντα καὶ τρισὶν ἑπτακαίδεκα ἔτη τούτων ἐτυράνησεν, ὀκτωκαίδεκα δὲ οἱ παῖδες, ὥστε τὰ πάντα ἐγένετο ἔτη τριάκοντα καὶ πέντε. τῶν δὲ λοιπῶν ἢ περὶ Ἰέρωνα καὶ Γέλωνα περὶ Συρακούσας. ἔτη δ' οὐδ' αὕτη πολλὰ διέμεινεν, ἀλλὰ τὰ σύμπαντα δυεῖν δέοντα εἴκοσι· Γέλων μὲν γὰρ ἑπτὰ τυραννήσας τῷ ὀγδόῳ τὸν βίον ἐτελεύτησεν, δέκα δ' Ἰέρων, Θρασύβουλος δὲ τῷ ἑνδεκάτῳ μηνὶ ἐξέπεσεν. αἱ δὲ πολλαὶ τῶν τυραννίδων ὀλιγοχρόνιαι πᾶσαι γεγόνασιν παντελῶς.

τὰ μὲν οὖν περὶ τὰς πολιτείας καὶ τὰ περὶ τὰς μοναρχίας, ἐξ ὧν τε φθείρονται καὶ πάλιν σώζονται, σχεδὸν [1316a] εἴρηται περὶ πάντων. ἐν δὲ τῇ Πολιτείᾳ λέγεται μὲν περὶ τῶν μεταβολῶν ὑπὸ τοῦ Σωκράτους, οὐ μέντοι λέγεται καλῶς. τῆς τε γὰρ ἀρίστης πολιτείας καὶ πρώτης οὐσίας οὐ λέγει τὴν μεταβολὴν ἰδίως. φησὶ γὰρ αἴτιον εἶναι τὸ μὴ μένειν μηθὲν ἀλλ' ἐν τινι

περιόδω μεταβάλλειν, ἀρχὴν δ' εἶναι τούτων “ὧν ἐπίτριτος πυθμὴν πεμπάδι συζυγεῖς δύο ἀρμονίας παρέχεται”, λέγων ὅταν ὁ τοῦ διαγράμματος ἀριθμὸς τούτου γένηται στερεός, ὥς τῆς φύσεώς ποτε φυοῦσης φαύλους καὶ κρείττους τῆς παιδείας, τοῦτο μὲν οὖν αὐτὸ λέγων ἴσως οὐ κακῶς (ἐνδέχεται γὰρ εἶναι τινὰς οὓς παιδευθῆναι καὶ γενέσθαι σπουδαίους ἄνδρας ἀδύνατον), ἀλλ' αὕτη τί ἂν ἴδιος εἴη μεταβολὴ τῆς ὑπ' ἐκείνου λεγομένης ἀρίστης πολιτείας μᾶλλον ἢ τῶν ἄλλων πασῶν καὶ τῶν γιγνομένων πάντων; καὶ διὰ γε τὸν χρόνον, δι' ὃν λέγει πάντα μεταβάλλειν, καὶ τὰ μὴ ἅμα ἀρξάμενα γίνεσθαι ἅμα μεταβάλλει, οἷον εἰ τῇ προτέρᾳ ἡμέρᾳ ἐγένετο τῆς τροπῆς, ἅμα ἄρα μεταβάλλει; πρὸς δὲ τούτοις διὰ τίν' αἰτίαν ἐκ ταύτης εἰς τὴν Λακωνικὴν μεταβάλλει; πλεονάκις γὰρ εἰς τὴν ἐναντίαν μεταβάλλουσι πᾶσαι αἱ πολιτεῖαι ἢ τὴν σύνεγγυς. ὁ δ' αὐτὸς λόγος καὶ περὶ τῶν ἄλλων μεταβολῶν. ἐκ γὰρ τῆς Λακωνικῆς, φησί, μεταβάλλει εἰς τὴν ὀλιγαρχίαν, ἐκ δὲ ταύτης εἰς δημοκρατίαν, εἰς τυραννίδα δὲ ἐκ δημοκρατίας. καίτοι καὶ ἀνάπαλιν μεταβάλλουσιν, οἷον ἐκ δήμου εἰς ὀλιγαρχίαν, καὶ μᾶλλον ἢ εἰς μοναρχίαν.

ἔτι δὲ τυραννίδος οὐ λέγει οὕτ' εἰ ἔσται μεταβολὴ οὕτ', εἰ [μὴ] ἔσται, διὰ τίν' αἰτίαν καὶ εἰς ποίαν πολιτείαν, τούτου δ' αἴτιον ὅτι οὐ ῥαδίως ἂν εἶχε λέγειν· ἀόριστον γάρ, ἐπεὶ κατ' ἐκεῖνον δεῖ εἰς τὴν πρώτην καὶ τὴν ἀρίστην· οὕτω γὰρ ἂν ἐγίγνετο συνεχὲς καὶ κύκλος. ἀλλὰ μεταβάλλει καὶ εἰς τυραννίδα τυραννίς, ὥσπερ ἡ Σικυῶνος ἐκ τῆς Μύρωνος εἰς τὴν Κλεισθένους, καὶ εἰς ὀλιγαρχίαν, ὥσπερ ἡ ἐν Χαλκίδι ἡ Ἀντιλέοντος, καὶ εἰς δημοκρατίαν, ὥσπερ ἡ τῶν Γέλωνος ἐν Συρακούσαις, καὶ εἰς ἀριστοκρατίαν, ὥσπερ ἡ Χαρίλλου ἐν Λακεδαιμόνι, καὶ <ἡ> ἐν Καρχηδόνι. καὶ εἰς τυραννίδα μεταβάλλει ἐξ ὀλιγαρχίας, ὥσπερ ἐν Σικελίᾳ σχεδὸν αἱ πλεῖσται τῶν ἀρχαίων, ἐν Λεοντίνοις εἰς τὴν Παναιτίου τυραννίδα καὶ ἐν Γέλᾳ εἰς τὴν Κλεάνδρου καὶ ἐν Ῥηγίῳ εἰς τὴν Ἀναξιλάου καὶ ἐν ἄλλαις πολλαῖς πόλεσιν ὡσαύτως. ἄτοπον δὲ καὶ τὸ οἴεσθαι εἰς ὀλιγαρχίαν διὰ τοῦτο μεταβάλλειν ὅτι φιλοχρήματοι καὶ χρηματισταὶ οἱ [1316b] ἐν ταῖς ἀρχαῖς, ἀλλ' οὐχ ὅτι οἱ πολὺ ὑπερέχοντες ταῖς οὐσίαις οὐ δίκαιον οἴονται εἶναι ἴσον μετέχειν τῆς πόλεως τοὺς κεκτημένους μὴθὲν τοῖς κεκτημένοις· ἐν πολλαῖς τε ὀλιγαρχίαις οὐκ ἔξεστι χρηματίζεσθαι, ἀλλὰ νόμοι εἰσὶν οἱ κωλύοντες, ἐν Καρχηδόνι δὲ δημοκρατουμένη χρηματίζονται καὶ οὕτω μεταβεβλήκασιν.

ἄτοπον δὲ καὶ τὸ φάναι δύο πόλεις εἶναι τὴν ὀλιγαρχικὴν, πλουσίων καὶ πενήτων. τί γὰρ αὕτη μᾶλλον τῆς Λακωνικῆς πέπονθεν ἢ ὅποιασοῦν ἄλλης, οὐ μὴ πάντες κέκτηνται ἴσα ἢ μὴ πάντες ὁμοίως εἰσὶν ἀγαθοὶ ἄνδρες; οὐδενὸς δὲ πενεστέρου γενομένου ἢ πρότερον οὐδὲν ἦττον μεταβάλλουσιν εἰς δῆμον ἐξ ὀλιγαρχίας, ἂν γένωνται πλείους οἱ ἄποροι, καὶ ἐκ δήμου εἰς

ὀλιγαρχίαν, ἔαν κρεῖττον ἢ τοῦ πλήθους τὸ εὖπορον καὶ οἱ μὲν ἀμελῶσιν οἱ δὲ προσέχωσι τὸν νοῦν. πολλῶν τε οὐσῶν αἰτιῶν δι' ὧν γίνονται αἱ μεταβολαί, οὐ λέγει ἄλλ' «ἦ» μίαν, ὅτι ἀσωτευόμενοι «καὶ» κατατοκιζόμενοι γίνονται πένητες, ὡς ἐξ ἀρχῆς πλουσίων ὄντων πάντων ἢ τῶν πλείστων. τοῦτο δ' ἐστὶ ψεῦδος· ἄλλ' ὅταν μὲν τῶν ἡγεμόνων τινὲς ἀπολέσωσι τὰς οὐσίας, καινοτομοῦσιν, ὅταν δὲ τῶν ἄλλων, οὐθὲν γίνεταί δεινόν, καὶ μεταβάλλουσιν οὐθὲν μᾶλλον οὐδὲ τότε εἰς δῆμον ἢ εἰς ἄλλην πολιτείαν. ἔτι δὲ κἂν τιμῶν μὴ μετέχωσιν, κἂν ἀδικῶνται ἢ ὑβρίζωνται, στασιάζουσι καὶ μεταβάλλουσι τὰς πολιτείας, κἂν μὴ καταδαπανήσωσι τὴν οὐσίαν, διὰ τὸ ἐξεῖναι ὅ τι ἂν βούλωνται ποιεῖν· οὐ αἰτίαν τὴν ἄγαν ἐλευθερίαν εἶναί φησιν. πλειόνων δ' οὐσῶν ὀλιγαρχιῶν καὶ δημοκρατιῶν, ὡς μιᾶς οὔσης ἑκατέρας λέγει τὰς μεταβολὰς ὁ Σωκράτης.

## Z

Πόσαι μὲν οὖν διαφοραὶ καὶ τίνες τοῦ τε βουλευτικοῦ καὶ κυρίου τῆς πολιτείας καὶ τῆς περὶ τὰς ἀρχὰς τάξεως καὶ περὶ δικαστηρίων, καὶ ποία πρὸς ποίαν συντέτακται πολιτείαν, ἔτι δὲ περὶ φθορᾶς τε καὶ σωτηρίας τῶν πολιτειῶν, ἐκ ποίων τε γίνεται καὶ διὰ τίνας αἰτίας, εἴρηται πρότερον· ἐπεὶ δὲ τετύχηκεν εἶδη πλείω δημοκρατίας ὄντα καὶ τῶν ἄλλων ὁμοίως πολιτειῶν, ἅμα τε περὶ ἐκείνων εἴ τι λοιπόν, οὐ χεῖρον ἐπισκέψασθαι, καὶ τὸν οἰκεῖον καὶ τὸν συμφέροντα τρόπον ἀποδοῦναι πρὸς ἑκάστην. ἔτι δὲ καὶ τὰς συναγωγὰς αὐτῶν τῶν εἰρημένων ἐπισκεπτέον πάντων [1317a] τῶν τρόπων· ταῦτα γὰρ συνδυαζόμενα ποιεῖ τὰς πολιτείας ἐπαλλάττειν, ὥστε ἀριστοκρατίας τε ὀλιγαρχικᾶς εἶναι καὶ πολιτείας δημοκρατικωτέρας. λέγω δὲ τοὺς συνδυασμοὺς οὓς δεῖ μὲν ἐπισκοπεῖν, οὐκ ἐσκεμμένοι δ' εἰσὶ νῦν, οἷον ἂν τὸ μὲν βουλευόμενον καὶ τὸ περὶ τὰς ἀρχαιρεσίας ὀλιγαρχικῶς ἢ συντεταγμένον, τὰ δὲ περὶ τὰ δικαστήρια ἀριστοκρατικῶς, ἢ ταῦτα μὲν καὶ τὸ περὶ τὸ βουλευόμενον ὀλιγαρχικῶς, ἀριστοκρατικῶς δὲ τὸ περὶ τὰς ἀρχαιρεσίας, ἢ κατ' ἄλλον τινὰ τρόπον μὴ πάντα συντεθῇ τὰ τῆς πολιτείας οἰκεῖα.

ποία μὲν οὖν δημοκρατία πρὸς ποίαν ἀρμόττει πόλιν, ὡσαύτως δὲ καὶ ποία τῶν ὀλιγαρχιῶν ποίῳ πλήθει, καὶ τῶν λοιπῶν δὲ πολιτειῶν τίς συμφέρει τίσιν, εἴρηται πρότερον· ὅμως δ' «ἐπεὶ» δεῖ γενέσθαι δῆλον μὴ μόνον ποία τούτων τῶν πολιτειῶν ἀρίστη ταῖς πόλεσιν, ἀλλὰ καὶ πῶς δεῖ κατασκευάζειν καὶ ταύτας καὶ τὰς ἄλλας, ἐπέλθωμεν συντόμως. καὶ πρῶτον περὶ δημοκρατίας εἵπωμεν· ἅμα γὰρ καὶ περὶ τῆς ἀντικειμένης πολιτείας φανερόν, αὕτη δ' ἐστὶν ἣν καλοῦσιν τινες ὀλιγαρχίαν. ληπτέον δὲ πρὸς ταύτην τὴν μέθοδον πάντα τὰ



δημοτικὰ καὶ τὰ δοκοῦντα ταῖς δημοκρατίαις ἀκολουθεῖν· ἐκ γὰρ τούτων συντιθεμένων τὰ τῆς δημοκρατίας εἶδη γίνεσθαι συμβαίνει, καὶ πλείους δημοκρατίας μιᾷς εἶναι καὶ διαφόρους. δύο γάρ εἰσιν αἰτίαι δι' ἃσπερ αἱ δημοκρατίαι πλείους εἰσὶ, πρῶτον μὲν ἡ λεχθεῖσα πρότερον, ὅτι διάφοροι οἱ δῆμοι (γίνεται γὰρ τὸ μὲν γεωργικὸν πλῆθος, τὸ δὲ βάνανυσον καὶ θητικόν· ὧν τοῦ πρώτου τῷ δευτέρῳ προσλαμβάνομένου, καὶ τοῦ τρίτου πάλιν τοῖς ἀμφοτέροις, οὐ μόνον διαφέρει τῷ βελτίῳ καὶ χείρῳ γίνεσθαι τὴν δημοκρατίαν, ἀλλὰ καὶ τῷ μὴ τὴν αὐτήν), δευτέρα δὲ περὶ ἧς νῦν λέγομεν. τὰ γὰρ ταῖς δημοκρατίαις ἀκολουθοῦντα καὶ δοκοῦντ' εἶναι τῆς πολιτείας οἰκεῖα ταύτης ποιεῖ συντιθέμενα τὰς δημοκρατίας ἑτέρας· τῇ μὲν γὰρ ἐλάττω, τῇ δ' ἀκολουθήσει πλείονα, τῇ δ' ἅπαντα ταῦτα. χρήσιμον δ' ἕκαστον αὐτῶν γνωρίζειν πρὸς τε τὸ κατασκευάζειν ἢν ἂν τις αὐτῶν τύχῃ βουλόμενος, καὶ πρὸς τὰς διορθώσεις. ζητοῦσι μὲν γὰρ οἱ τὰς πολιτείας καθιστάντες ἅπαντα τὰ οἰκεῖα συναγαγεῖν πρὸς τὴν ὑπόθεσιν, ἀμαρτάνουσι δὲ τοῦτο ποιοῦντες, καθάπερ ἐν τοῖς περὶ τὰς φθορὰς καὶ τὰς σωτηρίας τῶν πολιτειῶν εἴρηται πρότερον. νυνὶ δὲ τὰ ἀξιώματα καὶ τὰ ἦθη καὶ ὧν ἐφίενται λέγωμεν.

Ὑπόθεσις μὲν οὖν τῆς δημοκρατικῆς πολιτείας ἐλευθερία (τοῦτο γὰρ λέγειν εἰώθασιν, ὡς ἐν μόνῃ τῇ πολιτείᾳ [1317b] ταύτῃ μετέχοντας ἐλευθερίας· τούτου γὰρ στοχάζεσθαί φασι πᾶσαν δημοκρατίαν)· ἐλευθερίας δὲ ἐν μὲν τὸ ἐν μέρει ἄρχεσθαι καὶ ἄρχειν. καὶ γὰρ τὸ δίκαιον τὸ δημοτικὸν τὸ ἴσον ἔχειν ἐστὶ κατὰ ἀριθμὸν ἀλλὰ μὴ κατ' ἀξίαν, τούτου δ' ὄντος τοῦ δικαίου τὸ πλῆθος ἀναγκαῖον εἶναι κύριον, καὶ ὅ τι ἂν δόξῃ τοῖς πλείοσι, τοῦτ' εἶναι τέλος καὶ τοῦτ' εἶναι τὸ δίκαιον· φασὶ γὰρ δεῖν ἴσον ἔχειν ἕκαστον τῶν πολιτῶν· ὥστε ἐν ταῖς δημοκρατίαις συμβαίνει κυριωτέρους εἶναι τοὺς ἀπόρους τῶν εὐπόρων· πλείους γὰρ εἰσι, κύριον δὲ τὸ τοῖς πλείοσι δόξαν. ἐν μὲν οὖν τῆς ἐλευθερίας σημεῖον τοῦτο, ὃν τίθενται πάντες οἱ δημοτικοὶ τῆς πολιτείας ὅρον· ἐν δὲ τὸ ζῆν ὡς βούλεται τις. τοῦτο γὰρ τῆς ἐλευθερίας ἔργον εἶναί φασιν, εἴπερ τοῦ δουλεύοντος τὸ ζῆν μὴ ὡς βούλεται. τῆς μὲν οὖν δημοκρατίας ὅρος οὗτος δεύτερος· ἐντεῦθεν δ' ἐλήλυθε τὸ μὴ ἄρχεσθαι, μάλιστα μὲν ὑπὸ μηθενός, εἰ δὲ μὴ, κατὰ μέρος, καὶ συμβάλλεται ταύτῃ πρὸς τὴν ἐλευθερίαν τὴν κατὰ τὸ ἴσον.

τούτων δ' ὑποκειμένων καὶ τοιαύτης οὔσης τῆς ἀρχῆς τὰ τοιαῦτα δημοτικά· τὸ αἰρεῖσθαι τὰς ἀρχὰς πάντας ἐκ πάντων, τὸ ἄρχειν πάντας μὲν ἑκάστου ἕκαστον δ' ἐν μέρει πάντων, τὸ κληρωτὰς εἶναι τὰς ἀρχὰς ἢ πάσας ἢ ὅσαι μὴ ἐμπειρίας δέονται καὶ τέχνης, τὸ μὴ ἀπὸ τιμήματος μηθενὸς εἶναι τὰς ἀρχὰς ἢ ὅτι μικροτάτου, τὸ μὴ δις τὸν αὐτὸν ἄρχειν μηδεμίαν ἢ ὀλιγάκις ἢ ὀλίγας ἔξω τῶν κατὰ πόλεμον, τὸ ὀλιγοχρονίους εἶναι τὰς ἀρχὰς ἢ πάσας ἢ

ὅσας ἐνδέχεται, τὸ δικάζειν πάντας καὶ ἐκ πάντων καὶ περὶ πάντων, ἢ περὶ τῶν πλείστων καὶ τῶν μεγίστων καὶ τῶν κυριωτάτων, οἷον περὶ εὐθυνῶν καὶ πολιτείας καὶ τῶν ἰδίων συναλλαγμάτων, τὸ τὴν ἐκκλησίαν κυρίαν εἶναι πάντων ἢ τῶν μεγίστων, ἀρχὴν δὲ μηδεμίαν μηθενὸς ἢ ὅτι ὀλιγίστων κυρίαν (τῶν δ' ἀρχῶν δημοτικώτατον βουλή, ὅπου μὴ μισθοῦ εὐπορία πᾶσιν· ἐνταῦθα γὰρ ἀφαιροῦνται καὶ ταύτης τῆς ἀρχῆς τὴν δύναμιν· εἰς αὐτὸν γὰρ ἀνάγει τὰς κρίσεις πάσας ὁ δῆμος εὐπορῶν μισθοῦ, καθάπερ εἴρηται πρότερον ἐν τῇ μεθόδῳ τῇ πρὸ ταύτης), ἔπειτα τὸ μισθοφορεῖν μάλιστα μὲν πάντας, ἐκκλησίαν δικαστήρια ἀρχάς, εἰ δὲ μή, τὰς ἀρχάς καὶ τὰ δικαστήρια καὶ «τὴν» βουλήν καὶ τὰς ἐκκλησίας τὰς κυρίας, ἢ τῶν ἀρχῶν ἃς ἀνάγκη συσσιτεῖν μετ' ἀλλήλων. ἔτι ἐπειδὴ ὀλιγαρχία καὶ γένει καὶ πλούτῳ καὶ παιδείᾳ ὀρίζεται, τὰ δημοτικὰ δοκεῖ τάναντία τούτων εἶναι, ἀγένεια πενία βαναυσία· ἔτι δὲ τῶν ἀρχῶν τὸ μηδεμίαν αἰδίων εἶναι, [1318a] ἐὰν δέ τις καταλειφθῇ ἐξ ἀρχαίας μεταβολῆς, τό γε περιαιρεῖσθαι τὴν δύναμιν αὐτῆς καὶ ἐξ αἰρετῶν κληρωτοὺς ποιεῖν. τὰ μὲν οὖν κοινὰ ταῖς δημοκρατίαις ταῦτ' ἐστὶ· συμβαίνει δ' ἐκ τοῦ δικαίου τοῦ ὁμολογουμένου εἶναι δημοκρατικοῦ (τοῦτο δ' ἐστὶ τὸ ἴσον ἔχειν ἅπαντας κατ' ἀριθμόν) ἢ μάλιστ' εἶναι δοκοῦσα δημοκρατία καὶ δῆμος. ἴσον γὰρ τὸ μηθὲν μᾶλλον ἄρχειν τοὺς ἀπόρους ἢ τοὺς εὐπόρους, μηδὲ κυρίου εἶναι μόνους ἀλλὰ πάντας ἐξ ἴσου κατ' ἀριθμόν· οὕτω γὰρ ἂν ὑπάρχειν νομίζοιεν τὴν τ' ἰσότητα τῇ πολιτείᾳ καὶ τὴν ἐλευθερίαν.

Τὸ δὲ μετὰ τοῦτο ἀπορεῖται πῶς ἔξουσι τὸ ἴσον, πότερον δεῖ τὰ τιμήματα διελεῖν, χιλίοις τὰ τῶν πεντακοσίων, καὶ τοὺς χιλίους ἴσον δύνασθαι τοῖς πεντακοσίοις, ἢ οὐχ οὕτω δεῖ τιθέναι τὴν κατὰ τοῦτο ἰσότητα, ἀλλὰ διελεῖν μὲν οὕτως, ἔπειτα ἐκ τῶν πεντακοσίων ἴσους λαβόντα καὶ ἐκ τῶν χιλίων, τούτους κυρίους εἶναι τῶν αἰρέσεων καὶ τῶν δικαστηρίων. πότερον οὖν αὕτη ἢ πολιτεία δικαιοσύνη κατὰ τὸ δημοτικὸν δίκαιον, ἢ μᾶλλον ἢ κατὰ τὸ πλῆθος; φασὶ γὰρ οἱ δημοτικοὶ τοῦτο δίκαιον ὅτι ἂν δόξη τοῖς πλείοσιν, οἱ δ' ὀλιγαρχικοὶ ὅτι ἂν δόξη τῇ πλείονι οὐσίᾳ· κατὰ πλῆθος γὰρ οὐσίας φασὶ κρίνεσθαι δεῖν. ἔχει δ' ἀμφοτέρω ἀνισότητα καὶ ἀδικίαν· εἰ μὲν γὰρ ὅτι ἂν οἱ ὀλίγοι, τυραννίς (καὶ γὰρ ἐὰν εἷς ἔχη πλείω τῶν ἄλλων εὐπόρων, κατὰ τὸ ὀλιγαρχικὸν δίκαιον ἄρχειν δίκαιος μόνος), εἰ δ' ὅτι ἂν οἱ πλείους κατ' ἀριθμόν, ἀδικήσουσι δημεύοντες τὰ τῶν πλουσίων καὶ ἐλαττόνων, καθάπερ εἴρηται πρότερον.

τίς ἂν οὖν εἴη ἰσότης ἣν ὁμολογήσουσιν ἀμφοτέροι, σκεπτέον ἐξ ὧν ὀρίζονται δικαίων ἀμφοτέροι. λέγουσι γὰρ ὡς ὅτι ἂν δόξη τοῖς πλείοσι τῶν πολιτῶν, τοῦτ' εἶναι δεῖ κύριον· ἔστω δὲ τοῦτο, μὴ μέντοι πάντως, ἀλλ' ἐπειδὴ δύο μέρη τετύχηκεν ἐξ ὧν ἡ πόλις, πλούσιοι καὶ πένητες, ὅτι ἂν

ἀμφοτέροις δόξη ἢ τοῖς πλείοσι, τοῦτο κύριον ἔστω, ἐὰν δὲ τάναντία δόξη, ὅτι ἂν οἱ πλείους καὶ ὧν τὸ τίμημα πλεῖον· οἶον, εἰ οἱ μὲν δέκα οἱ δὲ εἴκοσιν, ἔδοξε δὲ τῶν μὲν πλουσίων τοῖς ἑξ τῶν δ' ἀπορωτέρων τοῖς πεντεκαίδεκα, προσγεγέννηται τοῖς μὲν πένησι τέτταρες τῶν πλουσίων, τοῖς δὲ πλουσίοις πέντε τῶν πενήτων· ὁποτέρων οὖν τὸ τίμημα ὑπερτείνει συναριθμουμένων ἀμφοτέρων ἑκατέροις, τοῦτο κύριον. ἐὰν δὲ ἴσοι συμπέσωσι, κοινὴν εἶναι ταύτην νομιστέον ἀπορίαν ὥσπερ νῦν ἐὰν δίχα ἡ ἐκκλησία γένηται ἢ τὸ δικαστήριον· ἢ [1318b] γὰρ ἀποκληρωτέον ἢ ἄλλο τι τοιοῦτον ποιητέον. ἀλλὰ περὶ μὲν τοῦ ἴσου καὶ τοῦ δικαίου, κἂν ἢ πάνυ χαλεπὸν εὐρεῖν τὴν ἀλήθειαν περὶ αὐτῶν, ὅμως ῥᾶον τυχεῖν ἢ συμπεῖσαι τοὺς δυναμένους πλεονεκτεῖν· αἰεὶ γὰρ ζητοῦσι τὸ ἴσον καὶ τὸ δίκαιον οἱ ἥττους, οἱ δὲ κρατοῦντες οὐδὲν φροντίζουν

Δημοκρατιῶν δ' οὐσῶν τεττάρων βελτίστη μὲν ἡ πρώτη τάξει, καθάπερ ἐν τοῖς πρὸ τούτων ἐλέχθη λόγοις· ἔστι δὲ καὶ ἀρχαιοτάτη πασῶν αὕτη. λέγω δὲ πρώτην ὥσπερ ἂν τις διέλοι τοὺς δήμους. βέλτιστος γὰρ δῆμος ὁ γεωργικός ἐστιν, ὥστε καὶ ποιεῖν ἐνδέχεται δημοκρατίαν ὅπου ζῇ τὸ πλῆθος ἀπὸ γεωργίας ἢ νομῆς. διὰ μὲν γὰρ τὸ μὴ πολλὴν οὐσίαν ἔχειν ἄσχυρος, ὥστε μὴ πολλάκις ἐκκλησιάζειν διὰ δὲ τὸ [μὴ] ἔχειν τάνανακαῖα πρὸς τοῖς ἔργοις διατρίβουσι καὶ τῶν ἀλλοτρίων οὐκ ἐπιθυμοῦσιν, ἀλλ' ἥδιον αὐτοῖς τὸ ἐργάζεσθαι τοῦ πολιτεύεσθαι καὶ ἄρχειν, ὅπου ἂν μὴ ἢ λήμματα μεγάλα ἀπὸ τῶν ἀρχῶν. οἱ γὰρ πολλοὶ μᾶλλον ὀρέγονται τοῦ κέρδους ἢ τῆς τιμῆς. σημείον δέ· καὶ γὰρ τὰς ἀρχαίας τυραννίδας ὑπέμενον καὶ τὰς ὀλιγαρχίας ὑπομένουσιν, ἐὰν τις αὐτοὺς ἐργάζεσθαι μὴ κωλύῃ μηδ' ἀφαιρῇται μηθέν· ταχέως γὰρ οἱ μὲν πλουτοῦσιν αὐτῶν οἱ δ' οὐκ ἀποροῦσιν. ἔτι δὲ τὸ κυρίους εἶναι τοῦ ἐλέσθαι καὶ εὐθύνειν ἀναπληροῖ τὴν ἔνδειαν, εἴ τι φιλοτιμίας ἔχουσιν, ἐπεὶ παρ' ἐνίοις δήμοις, κἂν μὴ μετέχωσι τῆς αἰρέσεως τῶν ἀρχῶν ἀλλὰ τινες αἰρετοὶ κατὰ μέρος ἐκ πάντων, ὥσπερ ἐν Μαντινείᾳ, τοῦ δὲ βουλευέσθαι κύριοι ὦσιν, ἱκανῶς ἔχει τοῖς πολλοῖς· καὶ δεῖ νομίζειν καὶ τοῦτ' εἶναι σχῆμά τι δημοκρατίας, ὥσπερ ἐν Μαντινείᾳ ποτ' ἦν. διὸ δὴ καὶ συμφέρον ἐστὶ τῇ πρότερον ῥηθείᾳ δημοκρατίᾳ καὶ ὑπάρχειν εἶωθεν, αἰρεῖσθαι μὲν τὰς ἀρχὰς καὶ εὐθύνειν καὶ δικάζειν πάντας, ἄρχειν δὲ τὰς μεγίστας αἰρετοὺς καὶ ἀπὸ τιμημάτων, τὰς μείζους ἀπὸ μειζόνων, ἢ καὶ ἀπὸ τιμημάτων μὲν μηδεμίαν, ἀλλὰ τοὺς δυναμένους. ἀνάγκη δὲ πολιτευομένους οὕτω πολιτεύεσθαι τε καλῶς (αἱ γὰρ ἀρχαὶ αἰεὶ διὰ τῶν βελτίστων ἔσονται, τοῦ δήμου βουλομένου καὶ τοῖς ἐπεικέσιν οὐ φθονοῦντος), καὶ τοῖς ἐπεικέσι καὶ γνωρίμοις ἀρκοῦσαν εἶναι ταύτην τὴν τάξιν· ἄρξονται γὰρ οὐχ ὑπ' ἄλλων χειρόνων, καὶ ἄρξουσι δικαίως διὰ τὸ τῶν εὐθυνῶν εἶναι κυρίους ἑτέρους. τὸ γὰρ ἐπανακρέμασθαι, καὶ μὴ πᾶν ἐξεῖναι ποιεῖν ὅτι ἂν δόξη, συμφέρον

ἐστίν· ἡ γὰρ ἐξουσία τοῦ πράττειν ὅ τι ἂν ἐθέλῃ τις οὐ δύναται φυλάττειν τὸ ἐν [1319a] ἐκάστω τῶν ἀνθρώπων φαῦλον. ὥστε ἀναγκαῖον συμβαίνειν ὅπερ ἐστὶν ὠφελιμώτατον ἐν ταῖς πολιτείαις, ἄρχειν τοὺς ἐπεικεῖς ἀναμαρτήτους ὄντας, μηδὲν ἐλαττουμένου τοῦ πλήθους.

ὅτι μὲν οὖν αὕτη τῶν δημοκρατιῶν ἀρίστη, φανερόν, καὶ διὰ τίν' αἰτίαν, ὅτι διὰ τὸ ποιόν τινα εἶναι τὸν δῆμον· πρὸς δὲ τὸ κατασκευάζειν γεωργικὸν τὸν δῆμον τῶν τε νόμων τινὲς τῶν παρὰ τοῖς πολλοῖς κειμένων τὸ ἀρχαῖον χρήσιμοι πάντως, ἢ τὸ ὅλως μὴ ἐξεῖναι κεκτηῖσθαι πλείω γῆν μέτρου τινὸς ἢ ἀπὸ τινος τόπου πρὸς τὸ ἄστυ καὶ τὴν πόλιν (ἦν δὲ τό γε ἀρχαῖον ἐν πολλαῖς πόλεσι νενομοθετημένον μηδὲ πωλεῖν ἐξεῖναι τοὺς πρώτους κλήρους· ἔστι δὲ καὶ ὃν λέγουσιν Ὁξύλου νόμον εἶναι τοιοῦτόν τι δυνάμενος, τὸ μὴ δανείζειν εἷς τι μέρος τῆς ὑπαρχούσης ἐκάστω γῆς), νῦν δὲ δεῖ διορθοῦν καὶ τῷ Ἀφυταίων νόμῳ, πρὸς γὰρ ὃ λέγομέν ἐστι χρήσιμος· ἐκεῖνοι γάρ, καίπερ ὄντες πολλοὶ κεκτημένοι δὲ γῆν ὀλίγην, ὅμως πάντες γεωργοῦσιν· τιμῶνται γὰρ οὐχ ὅλας τὰς κτήσεις, ἀλλὰ κατὰ τηλικάῦτα μόρια διαιροῦντες ὥστ' ἔχειν ὑπερβάλλειν ταῖς τιμήσεσι καὶ τοὺς πένητας.

μετὰ δὲ τὸ γεωργικὸν πλήθος βέλτιστος δῆμός ἐστιν ὅπου νομεῖς εἰσι καὶ ζῶσιν ἀπὸ βοσκημάτων· πολλὰ γὰρ ἔχει τῇ γεωργίᾳ παραπλησίως, καὶ τὰ πρὸς τὰς πολεμικὰς πράξεις μάλισθ' οὗτοι γεγυμνασμένοι τὰς ἔξεις καὶ χρήσιμοι τὰ σώματα καὶ δυνάμενοι θυραυλεῖν. τὰ δ' ἄλλα πλήθη πάντα σχεδόν, ἐξ ὧν αἱ λοιπαὶ δημοκρατίαι συνεστᾶσι, πολλῶ φαυλότερα τούτων· ὁ γὰρ βίος φαῦλος, καὶ οὐθὲν ἔργον μετ' ἀρετῆς ὧν μεταχειρίζεται τὸ πλήθος τό τε τῶν βαναύσων καὶ τὸ τῶν ἀγοραίων ἀνθρώπων καὶ τὸ θητικόν, ἔτι δὲ διὰ τὸ περὶ τὴν ἀγορὰν καὶ τὸ ἄστυ κυλίεσθαι πᾶν τὸ τοιοῦτον γένος ὡς εἰπεῖν ῥαδίως ἐκκλησιάζει· οἱ δὲ γεωργοῦντες διὰ τὸ διεσπάρθαι κατὰ τὴν χώραν οὗτ' ἀπαντῶσιν οὐθ' ὁμοίως δέονται τῆς συνόδου ταύτης. ὅπου δὲ καὶ συμβαίνει τὴν χώραν τὴν θέσιν ἔχειν τοιαύτην ὥστε [τὴν χώραν] πολὺ τῆς πόλεως ἀπηρτῆσθαι, ῥάδιον καὶ δημοκρατίαν ποιεῖσθαι χρηστὴν καὶ πολιτείαν· ἀναγκάζεται γὰρ τὸ πλήθος ἐπὶ τῶν ἀγρῶν ποιεῖσθαι τὰς ἀποικίας, ὥστε δεῖ, κἂν ἀγοραῖος ὄχλος ἦ, μὴ ποιεῖν ἐν ταῖς δημοκρατίαις ἐκκλησίας ἄνευ τοῦ κατὰ τὴν χώραν πλήθους. πῶς μὲν οὖν δεῖ κατασκευάζειν τὴν βελτίστην καὶ πρώτην δημοκρατίαν, εἴρηται· φανερόν δὲ καὶ πῶς τὰς ἄλλας. ἐπομένως γὰρ δεῖ παρεκβαίνειν [1319b] καὶ τὸ χεῖρον ἀεὶ πλήθος χωρίζειν. τὴν δὲ τελευταίαν, διὰ τὸ πάντας κοινωνεῖν, οὔτε πάσης ἐστὶ πόλεως φέρειν, οὔτε ῥάδιον διαμένειν μὴ τοῖς νόμοις καὶ τοῖς ἔθεσιν εὖ συγκειμένην (ἃ δὲ φθεῖρειν συμβαίνει καὶ ταύτην καὶ τὰς ἄλλας πολιτείας, εἴρηται πρότερον τὰ πλεῖστα σχεδόν). πρὸς δὲ τὸ καθιστάναι ταύτην τὴν δημοκρατίαν

καὶ τὸν δῆμον ποιεῖν ἰσχυρὸν εἰώθασιν οἱ προεστῶτες προσλαμβάνειν ὡς πλείστους καὶ ποιεῖν πολίτας μὴ μόνον τοὺς γνησίους ἀλλὰ καὶ τοὺς νόθους καὶ τοὺς ἐξ ὁποτέρου ὦν πολίτου, λέγω δὲ οἶον πατρὸς ἢ μητρός· ἅπαν γὰρ οἰκεῖον τοῦτο τῷ τοιούτῳ δήμῳ μᾶλλον. εἰώθασι μὲν οὖν οἱ δημαγωγοὶ κατασκευάζειν οὕτω, δεῖ μέντοι προσλαμβάνειν μέχρι ἂν ὑπερτείνῃ τὸ πλῆθος τῶν γνωρίμων καὶ τῶν μέσων, καὶ τούτου μὴ πέρα προβαίνειν· ὑπερβάλλοντες γὰρ ἀτακτοτέραν τε ποιοῦσι τὴν πολιτείαν, καὶ τοὺς γνωρίμους πρὸς τὸ χαλεπῶς ὑπομένειν τὴν δημοκρατίαν παροξύνουσι μᾶλλον, ὅπερ συνέβη τῆς στάσεως αἴτιον γενέσθαι περὶ Κυρήνην· ὀλίγον μὲν γὰρ πονηρὸν παρορᾶται, πολὺ δὲ γινόμενον ἐν ὀφθαλμοῖς μᾶλλον ἔστιν. ἔτι δὲ καὶ τὰ τοιαῦτα κατασκευάσματα χρήσιμα πρὸς τὴν δημοκρατίαν τὴν τοιαύτην, οἷς Κλεισθένης τε Ἀθήνησιν ἐχρήσατο βουλόμενος ἀυξῆσαι τὴν δημοκρατίαν, καὶ περὶ Κυρήνην οἱ τὸν δῆμον καθιστάντες. φυλαί τε γὰρ ἕτεραι ποιηταὶ πλείους καὶ φατρίαί, καὶ τὰ τῶν ἰδίων ἱερῶν συνακτέον εἰς ὀλίγα καὶ κοινά, καὶ πάντα σοφιστέον ὅπως ἂν ὅτι μάλιστα ἀναμειχθῶσι πάντες ἀλλήλοις, αἱ δὲ συνήθειαι διαζευχθῶσιν αἱ πρότερον. ἔτι δὲ καὶ τὰ τυραννικὰ κατασκευάσματα δημοτικὰ δοκεῖ πάντα, λέγω δ' οἶον ἀναρχία τε δούλων (αὕτη δ' ἂν εἴη μέχρι τοῦ συμφέρουσα) καὶ γυναικῶν καὶ παίδων, καὶ τὸ ζῆν ὅπως τις βούλεται παρορᾶν· πολὺ γὰρ ἔσται τὸ τῇ τοιαύτῃ πολιτείᾳ βοηθοῦν· ἥδιον γὰρ τοῖς πολλοῖς τὸ ζῆν ἀτάκτως ἢ τὸ σωφρόνως.

Ἔστι δ' [ἔργον] τοῦ νομοθέτου καὶ τῶν βουλομένων συνιστάναι τινὰ τοιαύτην πολιτείαν οὐ τὸ καταστῆσαι μέγιστον ἔργον οὐδὲ μόνον, ἀλλ' ὅπως σώζεται μᾶλλον· μίαν γὰρ ἢ δύο ἢ τρεῖς ἡμέρας οὐ χαλεπὸν μεῖναι πολιτευομένους ὁπωσοῦν. διὸ δεῖ, περὶ ὧν τεθεώρηται πρότερον, τίνες σωτηρίαί καὶ φθοραὶ τῶν πολιτειῶν, ἐκ τούτων πειρᾶσθαι κατασκευάζειν τὴν ἀσφάλειαν, εὐλαβουμένους μὲν τὰ φθείροντα, τιθεμένους δὲ τοιούτους νόμους, καὶ τοὺς ἀγράφους καὶ τοὺς γεγραμμένους, [1320a] οἱ περιλήψονται μάλιστα τὰ σώζοντα τὰς πολιτείας, καὶ μὴ νομίζειν τοῦτ' εἶναι δημοτικὸν μηδ' ὀλιγαρχικὸν ὃ ποιήσει τὴν πόλιν ὅτι μάλιστα δημοκρατεῖσθαι ἢ ὀλιγαρχεῖσθαι, ἀλλ' ὃ πλεῖστον χρόνον. οἱ δὲ νῦν δημαγωγοὶ χαριζόμενοι τοῖς δήμοις πολλὰ δημεύουσι διὰ τῶν δικαστηρίων. διὸ δεῖ πρὸς ταῦτα ἀντιπράττειν τοὺς κηδομένους τῆς πολιτείας, νομοθετοῦντας μηδὲν εἶναι δημόσιον τῶν καταδικαζομένων καὶ φερόμενον πρὸς τὸ κοινόν, ἀλλ' ἱερόν· οἱ μὲν γὰρ ἀδικοῦντες οὐθὲν ἤττον εὐλαβεῖς ἔσονται (ζημιώσονται γὰρ ὁμοίως), ὁ δ' ὄχλος ἤττον καταψηφιεῖται τῶν κρινομένων, λήψεσθαι μηδὲν μέλλων. ἔτι δὲ τὰς γινομένας δημοσίας δίκας ὡς ὀλιγίστας αἰεὶ ποιεῖν, μεγάλοις ἐπιτιμίαις τοὺς εἰκῇ γραφομένους κωλύοντας· οὐ γὰρ τοὺς δημοτικούς ἀλλὰ τοὺς γνωρίμους εἰώθασιν εἰσάγειν, δεῖ δὲ τῇ πολιτείᾳ πάντας μάλιστα μὲν εὖνους

εἶναι τοὺς πολίτας, εἰ δὲ μή, μή τοί γε ὥς πολεμίους νομίζειν τοὺς κυρίους.

ἐπεὶ δ' αἱ τελευταῖαι δημοκρατίαι πολυάνθρωποί τέ εἰσι καὶ χαλεπὸν ἐκκλησιάζειν ἀμίσθους, τοῦτο δ' ὅπου πρόσοδοι μὴ τυγχάνουσιν οὕσαι πολέμιον τοῖς γνωρίμοις (ἀπὸ τε γὰρ εἰσφορᾶς καὶ δημεύσεως ἀναγκαῖον γίνεσθαι καὶ δικαστηρίων φαύλων, ἃ πολλὰς ἤδη δημοκρατίας ἀνέτρεψεν), ὅπου μὲν οὖν πρόσοδοι μὴ τυγχάνουσιν οὕσαι, δεῖ ποιεῖν ὀλίγας ἐκκλησίας, καὶ δικαστήρια πολλῶν μὲν ὀλίγας δ' ἡμέρας (τοῦτο γὰρ φέρει μὲν καὶ πρὸς τὸ μὴ φοβεῖσθαι τοὺς πλουσίους τὰς δαπάνας, ἐὰν οἱ μὲν εὖποροι μὴ λαμβάνωσι δικαστικόν, οἱ δ' ἄποροι, φέρει δὲ καὶ πρὸς τὸ κρίνεσθαι τὰς δίκας πολὺ βέλτιον· οἱ γὰρ εὖποροι πολλὰς μὲν ἡμέρας οὐκ ἐθέλουσιν ἀπὸ τῶν ἰδίων ἀπεῖναι, βραχὺν δὲ χρόνον ἐθέλουσιν), ὅπου δ' εἰσὶ πρόσοδοι, μὴ ποιεῖν ὃ νῦν οἱ δημαγωγοὶ ποιοῦσιν (τὰ γὰρ περιόντα νέμουσιν· λαμβάνουσι δὲ ἅμα καὶ πάλιν δέονται τῶν αὐτῶν· ὁ τετρημένος γάρ ἐστι πίθος ἢ τοιαύτη βοήθεια τοῖς ἀπόροις). ἀλλὰ δεῖ τὸν ἀληθινῶς δημοτικὸν ὄρᾶν ὅπως τὸ πλῆθος μὴ λίαν ἄπορον ᾗ· τοῦτο γὰρ αἴτιον τοῦ μοχθηρὰν εἶναι τὴν δημοκρατίαν. τεχναστὲον οὖν ὅπως ἂν εὖπορία γένοιτο χρόνιος. ἐπεὶ δὲ συμφέρει τοῦτο καὶ τοῖς εὐπόροις, τὰ μὲν ἀπὸ τῶν προσόδων γινόμενα συναθροίζοντας ἀθρόα χρῆ διανέμειν τοῖς ἀπόροις, μάλιστα μὲν εἴ τις δύναται τοσοῦτον ἀθροίζειν ὅσον εἰς γηδίου κτῆσιν, εἰ δὲ μή, πρὸς ἀφορμὴν ἐμπορίας καὶ [1320b] γεωργίας, καί, εἰ μὴ πᾶσι δυνατόν, ἀλλὰ κατὰ φυλὰς ἢ τι μέρος ἕτερον ἐν μέρει διανέμειν, ἐν δὲ τούτῳ πρὸς τὰς ἀναγκαίας συνόδους τοὺς εὐπόρους εἰσφέρειν τὸν μισθόν, ἀφειμένους τῶν ματαίων λειτουργιῶν. τοιοῦτον δὲ τινα τρόπον Καρχηδόνιοι πολιτευόμενοι φίλον κέκτηνται τὸν δῆμον· αἰεὶ γάρ τινες ἐκπέμποντες τοῦ δήμου πρὸς τὰς περιοικίδας ποιοῦσιν εὐπόρους. χαριέντων δ' ἐστὶ καὶ νοῦν ἔχόντων γνωρίμων καὶ διαλαμβάνοντας τοὺς ἀπόρους ἀφορμὰς διδόντας τρέπειν ἐπ' ἐργασίας, καλῶς δ' ἔχει μιμεῖσθαι καὶ τὰ Ταραντίνων. ἐκεῖνοι γὰρ κοινὰ ποιοῦντες τὰ κτήματα τοῖς ἀπόροις ἐπὶ τὴν χρῆσιν εὖνουν παρασκευάζουσι τὸ πλῆθος· ἔτι δὲ τὰς ἀρχὰς πάσας ἐποίησαν διττάς, τὰς μὲν αἰρετάς τὰς δὲ κληρωτάς, τὰς μὲν κληρωτάς ὅπως ὁ δῆμος αὐτῶν μετέχη, τὰς δ' αἰρετάς ἵνα πολιτεύωνται βέλτιον. ἔστι δὲ τοῦτο ποιῆσαι. καὶ τῆς αὐτῆς ἀρχῆς μερίζοντας τοὺς μὲν κληρωτοὺς τοὺς δ' αἰρετούς. πῶς μὲν οὖν δεῖ τὰς δημοκρατίας κατασκευάζειν, εἴρηται.

Σχεδὸν δὲ καὶ περὶ τὰς ὀλιγαρχίας πῶς δεῖ φανερὸν ἐκ τούτων. ἐκ τῶν ἐναντίων γὰρ δεῖ συνάγειν ἐκάστην ὀλιγαρχίαν, πρὸς τὴν ἐναντίαν δημοκρατίαν ἀναλογιζόμενον, τὴν μὲν εὐκρατον μάλιστα τῶν ὀλιγαρχιῶν καὶ πρώτην - αὕτη δ' ἐστὶν ἡ σύνεγγυς τῇ καλουμένῃ πολιτεία, «ἐν» ἢ δεῖ τὰ τιμήματα διαιρεῖν, τὰ μὲν ἐλάττω τὰ δὲ μείζω ποιοῦντας, ἐλάττω μὲν ἅφ' ὧν

τῶν ἀναγκαίων μεθέξουσιν ἀρχῶν, μείζω δ' ἅφ' ὧν τῶν κυριωτέρων· τῷ τε κτωμένῳ τὸ τίμημα μετέχειν ἐξεῖναι τῆς πολιτείας, τοσούτου εἰσαγομένου τοῦ δήμου πλήθους διὰ τοῦ τιμήματος μεθ' οὗ κρείττονες ἔσονται τῶν μὴ μετεχόντων· ἀεὶ δὲ δεῖ παραλαμβάνειν ἐκ τοῦ βελτίονος δήμου τοὺς κοινωνούς. ὁμοίως δὲ καὶ τὴν ἐχομένην ὀλιγαρχίαν ἐπιτείνοντας δεῖ μικρὸν κατασκευάζειν. τῇ δ' ἀντικειμένη τῇ τελευταίᾳ δημοκρατίᾳ, τῇ δυναστικωτάτῃ καὶ τυραννικωτάτῃ τῶν ὀλιγαρχιῶν, ὅσω περ χειρίστη, τοσούτῳ δεῖ πλείονος φυλακῆς. ὥσπερ γὰρ τὰ μὲν εὖ σώματα διακείμενα πρὸς ὑγίειαν καὶ πλοῖα τὰ πρὸς ναυτιλίαν καλῶς ἔχοντα τοῖς πλωτῆρσιν ἐπιδέχεται πλείους ἁμαρτίας ὥστε μὴ φθείρεσθαι δι' αὐτάς, τὰ δὲ νοσερῶς ἔχοντα τῶν σωμάτων καὶ τὰ τῶν πλοίων ἐκκελυμένα καὶ πλωτῆρων τετυχηκότα φαύλων οὐδὲ τὰς μικρὰς δύναται φέρειν ἁμαρτίας, οὕτω καὶ τῶν πολιτειῶν αἱ χειρίσται πλείστης δέονται [1321a] φυλακῆς. τὰς μὲν οὖν δημοκρατίας ὅλως ἢ πολυανθρωπία σώζει (τοῦτο γὰρ ἀντίκειται πρὸς τὸ δίκαιον τὸ κατὰ τὴν ἀξίαν)· τὴν δ' ὀλιγαρχίαν δῆλον ὅτι τοῦναντίον ἀπὸ τῆς εὐταξίας δεῖ τυγχάνειν τῆς σωτηρίας.

Ἐπεὶ δὲ τέτταρα μὲν ἔστι μέρη μάλιστα τοῦ πλήθους, γεωργικὸν βαναυσικὸν ἀγοραῖον θητικόν, τέτταρα δὲ τὰ χρήσιμα πρὸς πόλεμον, ἵππικὸν ὀπλιτικὸν ψιλὸν ναυτικόν, ὅπου μὲν συμβέβηκε τὴν χώραν εἶναι ἱππάσιμον, ἐνταῦθα μὲν εὐφυῶς ἔχει κατασκευάζειν τὴν ὀλιγαρχίαν ἰσχυράν (ἡ γὰρ σωτηρία τοῖς οἰκοῦσι διὰ ταύτης ἐστὶ τῆς δυνάμεως, αἱ δ' ἵπποτροφίαι τῶν μακρὰς οὐσίας κεκτημένων εἰσίν), ὅπου δ' ὀπλιτικὴν, τὴν ἐχομένην ὀλιγαρχίαν (τὸ γὰρ ὀπλιτικὸν τῶν εὐπόρων ἐστὶ μᾶλλον ἢ τῶν ἀπόρων), ἡ δὲ ψιλὴ δύναμις καὶ ναυτικὴ δημοτικὴ πάμπαν. νῦν μὲν οὖν ὅπου τοιοῦτον πολὺ πλῆθος ἔστιν, ὅταν διαστῶσι, πολλάκις ἀγωνίζονται χεῖρον· δεῖ δὲ πρὸς τοῦτο φάρμακον παρὰ τῶν πολεμικῶν λαμβάνειν στρατηγῶν, οἱ συνδυάζουσι πρὸς τὴν ἵππικὴν δύναμιν καὶ τὴν ὀπλιτικὴν τὴν ἀρμόττουσαν τῶν ψιλῶν. ταύτῃ δ' ἐπικρατοῦσιν ἐν ταῖς διαστάσεσιν οἱ δῆμοι τῶν εὐπόρων· ψιλοὶ γὰρ ὄντες πρὸς ἵππικὴν καὶ ὀπλιτικὴν ἀγωνίζονται ῥαδίως.

τὸ μὲν οὖν ἐκ τούτων καθιστάναι ταύτην τὴν δύναμιν ἔφ' ἑαυτοὺς ἐστὶ καθιστάναι, δεῖ δὲ διηρημένης τῆς ἡλικίας, καὶ τῶν μὲν ὄντων πρεσβυτέρων τῶν δὲ νέων, ἔτι μὲν ὄντας νέους τοὺς αὐτῶν υἱεῖς διδάσκεσθαι τὰς κούφας καὶ τὰς ψιλὰς ἐργασίας, ἐκκεκριμένους δὲ ἐκ παίδων ἀθλητὰς εἶναι αὐτοὺς τῶν ἔργων· τὴν δὲ μετάδοσιν γίνεσθαι τῷ πλήθει τοῦ πολιτεύματος ἥτοι καθάπερ εἴρηται πρότερον, τοῖς τὸ τίμημα κτωμένοις, ἢ καθάπερ Θηβαίοις, ἀποσχομένοις χρόνον τινὰ τῶν βαναύσων ἔργων, ἢ καθάπερ ἐν Μασσαλίᾳ κρίσιν ποιουμένους τῶν ἀξίων τῶν ἐν τῷ πολιτεύματι καὶ τῶν ἔξωθεν. ἔτι δὲ

καὶ ταῖς ἀρχαῖς ταῖς κυριωτάταις, ἃς δεῖ τοὺς ἐν τῇ πολιτείᾳ κατέχειν, δεῖ προσκεῖσθαι λειτουργίας, ἵν' ἐκὼν ὁ δῆμος μὴ μετέχη καὶ συγγνώμην ἔχη τοῖς ἀρχουσιν ὡς μισθὸν πολὺν διδοῦσι τῆς ἀρχῆς. ἀρμόττει δὲ θυσίας τε εἰσιόντας ποιεῖσθαι μεγαλοπρεπεῖς καὶ κατασκευάζειν τι τῶν κοινῶν, ἵνα τῶν περὶ τὰς ἐστιάσεις μετέχων ὁ δῆμος καὶ τὴν πόλιν ὁρῶν κοσμουμένην τὰ μὲν ἀναθήμασι τὰ δὲ οἰκοδομήμασιν ἄσμενος ὁρᾷ μένουσαν τὴν πολιτείαν· συμβήσεται δὲ καὶ τοῖς γνωρίμοις εἶναι μνημεῖα τῆς δαπάνης. ἀλλὰ τοῦτο νῦν οἱ περὶ τὰς ὀλιγαρχίας οὐ ποιοῦσιν, ἀλλὰ τούναντίον· τὰ λήμματα γὰρ ζητοῦσιν οὐχ ἥττον ἢ τὴν τιμὴν. διόπερ εὖ ἔχει λέγειν [1321b] ταύτας εἶναι δημοκρατίας μικράς. πῶς μὲν οὖν χρὴ καθιστάναι τὰς δημοκρατίας καὶ τὰς ὀλιγαρχίας, διωρίσθω τὸν τρόπον τοῦτον.

Ἀκόλουθον δὲ τοῖς εἰρημένοις ἐστὶ τὸ διηρῆσθαι καλῶς τὰ περὶ τὰς ἀρχάς, πόσαι καὶ τίνες καὶ τίνων, καθάπερ εἴρηται καὶ πρότερον. τῶν μὲν γὰρ ἀναγκαίων ἀρχῶν χωρὶς ἀδύνατον εἶναι πόλιν, τῶν δὲ πρὸς εὐταξίαν καὶ κόσμον ἀδύνατον οἰκεῖσθαι καλῶς. ἔτι δ' ἀναγκαῖον ἐν μὲν ταῖς μικραῖς ἐλάττους εἶναι τὰς ἀρχάς, ἐν δὲ ταῖς μεγάλαις πλείους, ὥσπερ τυγχάνει πρότερον εἰρημένον· ποίας οὖν ἀρμόττει συνάγειν καὶ ποίας χωρίζειν, δεῖ μὴ λανθάνειν. πρώτη μὲν οὖν ἐπιμέλεια τῶν ἀναγκαίων ἢ περὶ τὴν ἀγοράν, ἐφ' ἣ δεῖ τινα ἀρχὴν εἶναι τὴν ἐφορῶσαν περί τε τὰ συμβόλαια καὶ τὴν εὐκοσμίαν· σχεδὸν γὰρ ἀναγκαῖον πάσαις ταῖς πόλεσι τὰ μὲν ὠνεῖσθαι τὰ δὲ πωλεῖν πρὸς τὴν ἀλλήλων ἀναγκαίαν χρεῖαν, καὶ τοῦτ' ἐστὶν ὑπογυιότατον πρὸς αὐτάρκειαν, δι' ἣν δοκοῦσιν εἰς μίαν πολιτείαν συνελθεῖν. ἑτέρα δὲ ἐπιμέλεια ταύτης ἐχομένη καὶ σύνεγγυς ἢ τῶν περὶ τὸ ἄστυ δημοσίων καὶ ιδίων, ὅπως εὐκοσμία ἦ, καὶ τῶν πιπτόντων οἰκοδομημάτων καὶ ὁδῶν σωτηρία καὶ διόρθωσις, καὶ τῶν ὀρίων τῶν πρὸς ἀλλήλους, ὅπως ἀνεγκλήτως ἔχωσιν, καὶ ὅσα τούτοις ἄλλα τῆς ἐπιμελείας ὁμοιότροπα. καλοῦσι δ' ἀστυνομίαν οἱ πλεῖστοι τὴν τοιαύτην ἀρχήν, ἔχει δὲ μόρια πλείω τὸν ἀριθμὸν, ὧν ἑτέρους ἐφ' ἑτέρα καθιστᾷσιν ἐν ταῖς πολυανθρωποτέραις πόλεσιν, οἷον τειχοποιοὺς καὶ κρηνῶν ἐπιμελητὰς καὶ λιμένων φύλακας. ἄλλη δ' ἀναγκαία τε καὶ παραπλησία ταύτῃ· περὶ τῶν αὐτῶν μὲν γάρ, ἀλλὰ περὶ τὴν χώραν ἐστὶ καὶ [τὰ] περὶ τὰ ἔξω τοῦ ἄστεως· καλοῦσι δὲ τοὺς ἀρχοντας τούτους οἱ μὲν ἄγρονόμους οἱ δ' ὑλωρούς. αὗται μὲν οὖν ἐπιμέλειαί εἰσι τούτων τρεῖς, ἄλλη δ' ἀρχὴ πρὸς ἣν αἱ πρόσοδοι τῶν κοινῶν ἀναφέρονται, παρ' ὧν φυλαττόντων μερίζονται πρὸς ἐκάστην διοίκησιν· καλοῦσι δ' ἀποδέκτας τούτους καὶ ταμίας. ἑτέρα δ' ἀρχὴ πρὸς ἣν ἀναγράφεσθαι δεῖ τὰ τε ἴδια συμβόλαια καὶ τὰς κρίσεις [ἐκ] τῶν δικαστηρίων· παρὰ δὲ τοῖς αὐτοῖς τούτοις καὶ τὰς γραφὰς τῶν δικῶν γίνεσθαι δεῖ καὶ τὰς εἰσαγωγάς. ἐνιαχοῦ μὲν οὖν μερίζουσι καὶ ταύτην εἰς πλείους, ἔστι δ' «οὗ» μία κυρία τούτων πάντων· καλοῦνται δὲ ἱερομνήμονες



καὶ ἐπιστάται καὶ μνήμονες καὶ τούτοις ἄλλα ὀνόματα σύνεγγυς.

μετὰ δὲ ταύτην ἐχομένη μὲν ἀναγκαιοτάτη δὲ σχεδὸν καὶ χαλεπωτάτη τῶν ἀρχῶν ἐστὶν ἡ περὶ τὰς πράξεις τῶν καταδικασθέντων καὶ τῶν προτιθεμένων [1322a] κατὰ τὰς ἐγγραφὰς καὶ περὶ τὰς φυλακὰς τῶν σωμάτων. χαλεπὴ μὲν οὖν ἐστὶ διὰ τὸ πολλὴν ἔχειν ἀπέχθειαν, ὥστε ὅπου μὴ μεγάλα ἐστὶ κερδαίνειν, οὗτ' ἄρχειν ὑπομένουσιν αὐτὴν οὕθ' ὑπομείναντες ἐθέλουσι πράττειν κατὰ τοὺς νόμους· ἀναγκαία δ' ἐστίν, ὅτι οὐδὲν ὄφελος γίνεσθαι μὲν δίκας περὶ τῶν δικαίων, ταύτας δὲ μὴ λαμβάνειν τέλος, ὥστ' εἰ μὴ γιγνομένων κοινωνεῖν ἀδύνατον ἀλλήλοις, καὶ πράξεων μὴ γιγνομένων. διὸ βέλτιον μὴ μίαν εἶναι ταύτην τὴν ἀρχήν, ἀλλ' ἄλλους ἐξ ἄλλων δικαστηρίων, καὶ περὶ τὰς προθέσεις τῶν ἀναγεγραμμένων ὡσαύτως πειρᾶσθαι διαιρεῖν, ἔτι δ' ἔνια πράττεσθαι καὶ τὰς ἀρχὰς τὰς τε ἄλλας καὶ τὰς τῶν ἔνων μᾶλλον τὰς νέας, καὶ τὰς τῶν ἐνεστώτων ἐτέρας καταδικασάσης ἐτέραν εἶναι τὴν πραττομένην, οἷον ἀστυνόμους τὰς παρὰ τῶν ἀγορανόμων, τὰς δὲ παρὰ τούτων ἐτέρους. ὅσω γὰρ ἂν ἐλάττων ἀπέχθεια ἐνῇ τοῖς πραττομένοις, τοσούτω μᾶλλον λήψονται τέλος αἱ πράξεις· τὸ μὲν οὖν τοὺς αὐτοὺς εἶναι τοὺς καταδικάσαντας καὶ πραττομένους ἀπέχθειαν ἔχει διπλὴν, τὸ δὲ περὶ πάντων τοὺς αὐτοὺς «ποιεῖ αὐτοὺς» πολεμίους πᾶσιν. πολλαχοῦ δὲ δὴ διήρηται καὶ ἡ φυλάττουσα πρὸς τὴν πραττομένην, οἷον Ἀθήνησιν «ἡ» τῶν Ἑνδεκα καλουμένων. διὸ βέλτιον καὶ ταύτην χωρίζειν, καὶ τὸ «αὐτὸ» σόφισμα ζητεῖν καὶ περὶ ταύτην. ἀναγκαία μὲν γάρ ἐστὶν οὐχ ἦττον τῆς εἰρημένης, συμβαίνει δὲ τοὺς μὲν ἐπεικεῖς φεύγειν μάλιστα ταύτην τὴν ἀρχήν, τοὺς δὲ μοχθηροὺς οὐκ ἀσφαλὲς ποιεῖν κυρίους· αὐτοὶ γὰρ δέονται φυλακῆς μᾶλλον ἢ φυλάττειν ἄλλους δύνανται. διὸ δεῖ μὴ μίαν ἀποτεταγμένην ἀρχὴν εἶναι πρὸς αὐτούς, μηδὲ συνεχῶς τὴν αὐτὴν, ἀλλὰ τῶν τε νέων, ὅπου τις ἐφήβων ἢ φρουρῶν ἐστὶ τάξις, καὶ τῶν ἀρχῶν δεῖ κατὰ μέρη ποιεῖσθαι τὴν ἐπιμέλειαν ἐτέρους.

ταύτας μὲν οὖν τὰς ἀρχὰς ὡς ἀναγκαιοτάτας θετέον εἶναι πρώτας, μετὰ δὲ ταύτας τὰς ἀναγκαίας μὲν οὐθὲν ἦττον, ἐν σχήματι δὲ μείζονι τεταγμένας· καὶ γὰρ ἐμπειρίας καὶ πίστεως δέονται πολλῆς. τοιαῦται δ' εἶεν ἂν αἱ τε περὶ τὴν φυλακὴν τῆς πόλεως, καὶ ὅσαι τάττονται πρὸς τὰς πολεμικὰς χρείας. δεῖ δὲ καὶ ἐν εἰρήνῃ καὶ ἐν πολέμῳ πυλῶν τε καὶ τειχῶν φυλακῆς ὁμοίως ἐπιμελητὰς εἶναι καὶ ἐξετάσεως καὶ συντάξεως τῶν πολιτῶν. ἔνθα μὲν οὖν ἐπὶ πᾶσι τούτοις ἀρχαὶ πλείους εἰσὶν, ἔνθα δ' ἐλάττους, οἷον ἐν ταῖς μικραῖς πόλεσι μία περὶ πάντων. καλοῦσι δὲ στρατηγοὺς καὶ πολεμάρχους [1322b] τοὺς τοιούτους. ἔτι δὲ κἄν ὥσιν ἱππεῖς ἢ ψιλοὶ ἢ τοξόται ἢ ναυτικόν, καὶ ἐπὶ τούτων ἐκάστων ἐνίοτε καθίσταται ἀρχή, αἱ καλοῦνται ναυαρχίαι καὶ ἱππαρχίαι καὶ ταξιαρχίαι, καὶ κατὰ μέρος δὲ αἱ ὑπὸ ταύτας τριηραρχίαι καὶ

λοχαγαίαι καὶ φυλαρχαίαι καὶ ὅσα τούτων μόρια. τὸ δὲ πᾶν ἔν τι τούτου ἐστὶν εἶδος, ἐπιμελείας πολεμικῶν.

περὶ μὲν οὖν ταύτην τὴν ἀρχὴν ἔχει τὸν τρόπον τοῦτον· ἐπεὶ δὲ ἔνιαι τῶν ἀρχῶν, εἰ καὶ μὴ πᾶσαι, διαχειρίζουσι πολλὰ τῶν κοινῶν, ἀναγκαῖον ἑτέραν εἶναι τὴν ληψομένην λογισμὸν καὶ προσευθυνοῦσαν, αὐτὴν μὴθὲν διαχειρίζουσιν ἕτερον· καλοῦσι δὲ τούτους οἱ μὲν εὐθύνους οἱ δὲ λογιστὰς οἱ δ' ἐξεταστὰς οἱ δὲ συνηγόρους. παρὰ πάσας δὲ ταύτας τὰς ἀρχὰς ἡ μάλιστα κυρία πάντων ἐστίν· ἡ γὰρ αὐτὴ πολλάκις ἔχει τὸ τέλος καὶ τὴν εἰσφορὰν ἢ προκάθηται τοῦ πλήθους, ὅπου κύριός ἐστιν ὁ δῆμος· δεῖ γὰρ εἶναι τὸ συνάγον τὸ κύριον τῆς πολιτείας. καλεῖται δὲ ἔνθα μὲν πρόβουλοι διὰ τὸ προβουλεύειν, ὅπου δὲ πλῆθός ἐστι, βουλὴ μᾶλλον. αἱ μὲν οὖν πολιτικαὶ τῶν ἀρχῶν σχεδὸν τοσαῦταί τινες εἰσιν· ἄλλο δ' εἶδος ἐπιμελείας ἢ περὶ τοὺς θεούς, οἷον ἱερεῖς τε καὶ ἐπιμεληταὶ τῶν περὶ τὰ ἱερὰ τοῦ σώζεσθαι τε τὰ ὑπάρχοντα καὶ ἀνορθοῦσθαι τὰ πίπτοντα τῶν οἰκοδομημάτων καὶ τῶν ἄλλων ὅσα τέτακται πρὸς τοὺς θεούς. συμβαίνει δὲ τὴν ἐπιμέλειαν ταύτην ἑνιαχοῦ μὲν εἶναι μίαν, οἷον ἐν ταῖς μικραῖς πόλεσιν, ἑνιαχοῦ δὲ πολλὰς καὶ κεχωρισμένας τῆς ἱερωσύνης, οἷον ἱεροποιοὺς καὶ ναοφύλακας καὶ ταμίας τῶν ἱερῶν χρημάτων. ἔχομένη δὲ ταύτης ἢ πρὸς τὰς θυσίας ἀφωρισμένη τὰς κοινὰς πάσας, ὅσας μὴ τοῖς ἱερεῦσιν ἀποδίδωσιν ὁ νόμος, ἀλλ' ἀπὸ τῆς κοινῆς ἐστίας ἔχουσι τὴν τιμὴν· καλοῦσι δ' οἱ μὲν ἄρχοντας τούτους οἱ δὲ βασιλεῖς οἱ δὲ πρυτάνεις.

αἱ μὲν οὖν ἀναγκαῖαι ἐπιμέλειαί εἰσι περὶ τούτων, ὥς εἶπεῖν συγκεφαλαιωσαμένους, περὶ τε τὰ δαιμόνια καὶ τὰ πολεμικὰ καὶ περὶ τὰς προσόδους καὶ τὰ ἀναλισκόμενα, καὶ περὶ ἀγορὰν καὶ περὶ τὸ ἄστυ καὶ λιμένας καὶ τὴν χώραν, ἔτι περὶ τὰ δικαστήρια, καὶ συναλλαγμάτων ἀναγραφὰς καὶ πράξεις καὶ φυλακὰς καὶ ἐπιλογισμούς τε καὶ ἐξετάσεις καὶ προσευθύνας τῶν ἀρχόντων, καὶ τέλος αἱ περὶ τὸ βουλευόμενόν εἰσι «περὶ» τῶν κοινῶν· ἴδιαι δὲ ταῖς σχολαστικώτεραις καὶ μᾶλλον εὐημερούσαις πόλεσιν, ἔτι δὲ φροντιζούσαις εὐκοσμίας, γυναικονομία νομοφυλακία παιδονομία [1323a] γυμνασιαρχία, πρὸς δὲ τούτοις περὶ ἀγῶνας ἐπιμέλεια γυμνικοῦς καὶ Διονυσιακοῦς, κἂν εἴ τις ἑτέρας συμβαίνει τοιαύτας γίνεσθαι θεωρίας. τούτων δ' ἔνιαι φανερώς εἰσιν οὐ δημοτικαὶ τῶν ἀρχῶν, οἷον γυναικονομία καὶ παιδονομία· τοῖς γὰρ ἀπόροις ἀνάγκη χρῆσθαι καὶ γυναιξὶ καὶ παισὶν ὥσπερ ἀκολούθοις διὰ τὴν ἀδουλίαν. τριῶν δ' οὐσῶν ἀρχῶν καθ' ἃς αἰροῦνται τινες ἀρχὰς τὰς κυρίους, νομοφυλάκων προβούλων βουλῆς, οἱ μὲν νομοφύλακες ἀριστοκρατικόν, ὀλιγαρχικόν δ' οἱ πρόβουλοι, βουλὴ δὲ δημοτικόν. περὶ μὲν οὖν τῶν ἀρχῶν, ὥς ἐν τύπῳ, σχεδὸν εἴρηται περὶ

πασῶν.

❖ αἱ.

## Η

Περὶ δὲ πολιτείας ἀρίστης τὸν μέλλοντα ποιήσασθαι τὴν προσήκουσαν ζήτησιν ἀνάγκη διορίσασθαι πρῶτον τίς αἰρετώτατος βίος. ἀδήλου γὰρ ὄντος τούτου καὶ τὴν ἀρίστην ἀναγκαῖον ἄδηλον εἶναι πολιτείαν· ἄριστα γὰρ πράττειν προσήκει τοὺς ἄριστα πολιτευομένους ἐκ τῶν ὑπαρχόντων αὐτοῖς, ἔαν μὴ τι γίγνηται παράλογον. διὸ δεῖ πρῶτον ὁμολογεῖσθαι τίς ὁ πᾶσιν ὡς εἰπεῖν αἰρετώτατος βίος, μετὰ δὲ τοῦτο πότερον κοινῇ καὶ χωρὶς ὁ αὐτὸς ἢ ἕτερος, νομίσαντας οὖν ἱκανῶς πολλὰ λέγεσθαι καὶ τῶν ἐν τοῖς ἐξωτερικοῖς λόγοις περὶ τῆς ἀρίστης ζωῆς, καὶ νῦν χρηστέον αὐτοῖς. ὡς ἀληθῶς γὰρ πρὸς γε μίαν διαίρεσιν οὐδεὶς ἀμφισβητήσειεν ἂν ὡς οὐ, τριῶν οὐσῶν μερίδων, τῶν τε ἐκτὸς καὶ τῶν ἐν τῷ σώματι καὶ τῶν ἐν τῇ ψυχῇ, πάντα ταῦτα ὑπάρχειν τοῖς μακαρίοις χρή. οὐδεὶς γὰρ ἂν φαίη μακάριον τὸν μηθὲν μόριον ἔχοντα ἀνδρείας μηδὲ σωφροσύνης μηδὲ δικαιοσύνης μηδὲ φρονήσεως, ἀλλὰ δεδιότα μὲν τὰς παραπετομένας μυίας, ἀπεχόμενον δὲ μηθενός, ἂν ἐπιθυμήσῃ τοῦ φαγεῖν ἢ πιεῖν, τῶν ἐσχάτων, ἔνεκα δὲ τεταρτημορίου διαφθείροντα τοὺς φιλτάτους φίλους, ὁμοίως δὲ καὶ τὰ περὶ τὴν διάνοιαν οὕτως ἄφρονα καὶ διεψευσμένον ὥσπερ τι παιδίον ἢ μαινόμενον. ἀλλὰ ταῦτα μὲν λεγόμενα ὥσπερ πάντες ἂν συγχωρήσειαν, διαφέρονται δ' ἐν τῷ ποσῷ καὶ ταῖς ὑπεροχαῖς. τῆς μὲν γὰρ ἀρετῆς ἔχειν ἱκανὸν εἶναι νομίζουσιν ὅποσονοῦν, πλούτου δὲ καὶ χρημάτων καὶ δυνάμεως καὶ δόξης καὶ πάντων τῶν τοιούτων εἰς ἅπειρον ζητοῦσι τὴν ὑπερβολήν. ἡμεῖς δὲ αὐτοῖς ἐροῦμεν ὅτι ῥᾶδιον μὲν περὶ τούτων καὶ διὰ τῶν ἔργων λαμβάνειν τὴν πίστιν, ὁρῶντας ὅτι κτῶνται καὶ φυλάττουσιν οὐ τὰς ἀρετὰς τοῖς ἐκτὸς ἀλλ' ἐκεῖνα ταύταις, [1323b] καὶ τὸ ζῆν εὐδαιμόνως, εἴτ' ἐν τῷ χαίρειν ἐστὶν εἴτ' ἐν ἀρετῇ τοῖς ἀνθρώποις εἴτ' ἐν ἀμφοῖν, ὅτι μᾶλλον ὑπάρχει τοῖς τὸ ἥθος μὲν καὶ τὴν διάνοιαν κεκοσμημένοις εἰς ὑπερβολήν, περὶ δὲ τὴν ἔξω κτῆσιν τῶν ἀγαθῶν μετριάζουσιν, ἢ τοῖς ἐκεῖνα μὲν κεκτημένοις πλείω τῶν χρησίμων, ἐν δὲ τούτοις ἐλλείπουσιν· οὐ μὲν ἀλλὰ καὶ κατὰ τὸν λόγον σκοπούμενοις εὐσύνοπτόν ἐστιν. τὰ μὲν γὰρ ἐκτὸς ἔχει πέρας, ὥσπερ ὄργανόν τι, πᾶν τε τὸ χρήσιμον εἷς τι· ὦν τὴν ὑπερβολὴν ἢ βλάπτειν ἀναγκαῖον ἢ μηθὲν ὄφελος εἶναι τοῖς ἔχουσιν, τῶν δὲ περὶ ψυχὴν ἕκαστον ἀγαθῶν, ὅσω περ ἂν ὑπερβάλλῃ, τοσούτῳ μᾶλλον χρήσιμον εἶναι, εἰ δεῖ καὶ τούτοις ἐπιλέγειν μὴ μόνον τὸ καλὸν ἀλλὰ καὶ τὸ χρήσιμον. ὅλως τε δῆλον ὡς ἀκολουθεῖν φήσομεν τὴν διάθεσιν τὴν ἀρίστην ἐκάστου πράγματος πρὸς ἄλληλα κατὰ τὴν ὑπεροχὴν ἥπερ εἴληχε ταῦτα ὦν φαμεν αὐτὰς εἶναι διαθέσεις [ταύτας]. ὥστ' εἴπερ ἐστὶν ἡ ψυχὴ καὶ τῆς κτήσεως καὶ τοῦ σώματος τιμώτερον καὶ ἀπλῶς καὶ ἡμῖν, ἀνάγκη καὶ τὴν διάθεσιν τὴν ἀρίστην ἐκάστου ἀνάλογον τούτων

ἔχειν. ἔτι δὲ τῆς ψυχῆς ἔνεκεν ταῦτα πέφυκεν αἰρετὰ καὶ δεῖ πάντας αἰρεῖσθαι τοὺς εὖ φρονοῦντας, ἀλλ' οὐκ ἐκείνων ἔνεκεν τὴν ψυχὴν.

ὅτι μὲν οὖν ἐκάστω τῆς εὐδαιμονίας ἐπιβάλλει τοσοῦτον ὅσον περ ἀρετῆς καὶ φρονήσεως καὶ τοῦ πράττειν κατὰ ταύτας, ἔστω συνωμολογημένον ἡμῖν, μάρτυρι τῷ θεῷ χρωμένοις, ὃς εὐδαίμων μὲν ἐστὶ καὶ μακάριος, δι' οὐθὲν δὲ τῶν ἐξωτερικῶν ἀγαθῶν ἀλλὰ δι' αὐτὸν αὐτὸς καὶ τῷ ποιός τις εἶναι τὴν φύσιν, ἐπεὶ καὶ τὴν εὐτυχίαν τῆς εὐδαιμονίας διὰ ταῦτ' ἀναγκαῖον ἑτέραν εἶναι (τῶν μὲν γὰρ ἐκτὸς ἀγαθῶν τῆς ψυχῆς αἴτιον ταυτόματον καὶ ἡ τύχη, δίκαιος δ' οὐδεὶς οὐδὲ σώφρων ἀπὸ τύχης οὐδὲ διὰ τὴν τύχην ἐστίν)· ἐχόμενον δ' ἐστὶ καὶ τῶν αὐτῶν λόγων δεόμενον καὶ πόλιν εὐδαίμονα τὴν ἀρίστην εἶναι καὶ πράττουσαν καλῶς. ἀδύνατον δὲ καλῶς πράττειν τοῖς μὴ τὰ καλὰ πράττουσιν· οὐθὲν δὲ καλὸν ἔργον οὗτ' ἀνδρὸς οὔτε πόλεως χωρὶς ἀρετῆς καὶ φρονήσεως· ἀνδρεία δὲ πόλεως καὶ δικαιοσύνη καὶ φρόνησις «καὶ σωφροσύνη» τὴν αὐτὴν ἔχει δύναμιν καὶ μορφήν ὧν μετασχὼν ἕκαστος τῶν ἀνθρώπων λέγεται «ἀνδρεῖος καὶ» δίκαιος καὶ φρόνιμος καὶ σώφρων. ἀλλὰ γὰρ ταῦτα μὲν ἐπὶ τοσοῦτον ἔστω πεφροισμασμένα τῷ λόγῳ· οὔτε γὰρ μὴ θιγγάνειν αὐτῶν δυνατόν, οὔτε πάντας τοὺς οἰκείους ἐπεξελθεῖν ἐνδέχεται λόγους, ἑτέρας γὰρ ἐστὶν ἔργον σχολῆς ταῦτα· νῦν δὲ ὑποκείσθω τοσοῦτον, ὅτι βίος μὲν ἄριστος, καὶ χωρὶς ἐκάστω καὶ κοινῇ ταῖς πόλεσιν, ὁ μετ' ἀρετῆς κεχορηγημένης [1324a] ἐπὶ τοσοῦτον ὥστε μετέχειν τῶν κατ' ἀρετὴν πράξεων, πρὸς δὲ τοὺς ἀμφισβητοῦντας, ἔασαντας ἐπὶ τῆς νῦν μεθόδου, διασκεπτέον ὕστερον, εἴ τις τοῖς εἰρημένοις τυγχάνει μὴ πειθόμενος.

Πότερον δὲ τὴν εὐδαιμονίαν τὴν αὐτὴν εἶναι φατέον ἐνός τε ἐκάστου τῶν ἀνθρώπων καὶ πόλεως ἢ μὴ τὴν αὐτὴν, λοιπὸν ἐστὶν εἰπεῖν. φανερόν δὲ καὶ τοῦτο. πάντες γὰρ ἂν ὁμολογήσειαν εἶναι τὴν αὐτὴν. ὅσοι γὰρ ἐν πλούτῳ τὸ ζῆν εὖ τίθενται ἐφ' ἐνός, οὗτοι καὶ τὴν πόλιν ὅλην, ἐὰν ἡ πλουσία, μακαρίζουσιν· ὅσοι τε τὸν τυραννικὸν βίον μάλιστα τιμῶσιν, οὗτοι καὶ πόλιν τὴν πλείστων ἄρχουσιν εὐδαιμονεστάτην ἂν εἶναι φαῖεν· εἴ τέ τις τὸν ἕνα δι' ἀρετὴν ἀποδέχεται, καὶ πόλιν εὐδαιμονεστέραν φήσει τὴν σπουδαιοτέραν. ἀλλὰ ταῦτ' ἤδη δύο ἐστὶν ἃ δεῖται σκέψεως, ἐν μὲν πότερος αἰρετώτερος βίος, ὁ διὰ τοῦ συμπολιτεύεσθαι καὶ κοινωνεῖν πόλεως ἢ μᾶλλον ὁ ξενικὸς καὶ τῆς πολιτικῆς κοινωνίας ἀπολελυμένος, ἔτι δὲ τίνα πολιτείαν θετέον καὶ ποίαν διάθεσιν πόλεως ἀρίστην, εἴτε πᾶσιν ὄντος αἰρετοῦ «τοῦ» κοινωνεῖν πόλεως εἴτε καὶ τισὶ μὲν μὴ τοῖς δὲ πλείστοις. ἐπεὶ δὲ τῆς πολιτικῆς διανοίας καὶ θεωρίας τοῦτ' ἐστὶν ἔργον, ἀλλ' οὐ τὸ περὶ ἕκαστον αἰρετόν, ἡμεῖς δὲ ταύτην προηγήμεθα νῦν τὴν σκέψιν, ἐκεῖνο μὲν πάρεργον ἂν εἴη, τοῦτο δὲ ἔργον τῆς μεθόδου ταύτης. ὅτι μὲν οὖν ἀναγκαῖον εἶναι πολιτείαν ἀρίστην

ταύτην <τὴν> τάξιν καθ' ἣν καὶ ὅστισοῦν ἄριστα πράττοι καὶ ζῶη μακαρίως, φανερόν ἐστιν· ἀμφισβητεῖται δὲ παρ' αὐτῶν τῶν ὁμολογούντων τὸν μετ' ἀρετῆς εἶναι βίον αἰρετώτατον πότερον ὁ πολιτικὸς καὶ πρακτικὸς βίος αἰρετὸς ἢ μᾶλλον ὁ πάντων τῶν ἐκτὸς ἀπολελυμένος, οἷον θεωρητικὸς τις, ὃν μόνον τινὲς φασιν εἶναι φιλοσόφου. σχεδὸν γὰρ τούτους τοὺς δύο βίους τῶν ἀνθρώπων οἱ φιλοτιμότετοι πρὸς ἀρετὴν φαίνονται προαιρούμενοι, καὶ τῶν προτέρων καὶ τῶν νῦν· λέγω δὲ δύο τὸν τε πολιτικὸν καὶ τὸν φιλόσοφον. διαφέρει δὲ οὐ μικρὸν ποτέρως ἔχει τὸ ἀληθές· ἀνάγκη γὰρ τὸν γε εὖ φρονοῦντα πρὸς τὸν βελτίω σκοπὸν συντάττεσθαι, καὶ τῶν ἀνθρώπων ἕκαστον καὶ κοινῇ τὴν πολιτείαν. νομίζουσι δ' οἱ μὲν τὸ τῶν πέλας ἄρχειν δεσποτικῶς μὲν γιγνόμενον μετ' ἀδικίας τινὸς εἶναι τῆς μεγίστης, πολιτικῶς δὲ τὸ μὲν ἄδικον οὐκ ἔχειν, ἐμπόδιον δὲ ἔχειν τῇ περὶ αὐτὸν εὐημερίᾳ· τούτων δ' ὥσπερ ἐξ ἐναντίας ἕτεροι τυγχάνουσι δοξάζοντες· μόνον γὰρ ἀνδρὸς τὸν πρακτικὸν εἶναι βίον καὶ πολιτικόν· ἀφ' ἐκάστης γὰρ ἀρετῆς οὐκ εἶναι πράξεις μᾶλλον τοῖς ἰδιώταις [1324b] ἢ τοῖς τὰ κοινὰ πράττουσι καὶ πολιτευομένοις. οἱ μὲν οὖν οὕτως ὑπολαμβάνουσιν, οἱ δὲ τὸν δεσποτικὸν καὶ τυραννικὸν τρόπον τῆς πολιτείας εἶναι μόνον εὐδαίμονά φασιν. παρ' ἐνίοις δ' οὗτος καὶ τῶν νόμων καὶ τῆς πολιτείας ὅρος, ὅπως δεσπόζωσι τῶν πέλας. διὸ καὶ τῶν πλείστων νομίμων χύδην ὡς εἰπεῖν κειμένων παρὰ τοῖς πλείστοις, ὅμως εἴ πού τι πρὸς ἔν οἱ νόμοι βλέπουσι, τοῦ κρατεῖν στοχάζονται πάντες, ὥσπερ ἐν Λακεδαιμόνι καὶ Κρήτῃ πρὸς τοὺς πολέμους συντέτακται σχεδὸν ἢ τε παιδεία καὶ τὸ τῶν νόμων πλῆθος· ἔτι δ' ἐν τοῖς ἔθνεσι πᾶσι τοῖς δυναμένοις πλεονεκτεῖν ἢ τοιαύτη τετίμηται δύναμις, οἷον ἐν Σκύθαις καὶ Πέρσῃ καὶ Θραξί καὶ Κελτοῖς. ἐν ἐνίοις γὰρ καὶ νόμοι τινὲς εἰσι παροξύνοντες πρὸς τὴν ἀρετὴν ταύτην, καθάπερ ἐν Καρχηδόνι φασὶ τὸν ἐκ τῶν κρίκων κόσμον λαμβάνειν ὅσας ἂν στρατεύσωνται στρατείας· ἦν δὲ ποτε καὶ περὶ Μακεδονίαν νόμος τὸν μηθένα ἀπεκταγκότα πολέμιον ἄνδρα περιεζῶσθαι τὴν φορβειάν· ἐν δὲ Σκύθαις οὐκ ἐξῆν πίνειν ἐν ἐορτῇ τινι σκύφον περιφερόμενον τῷ μηθένα ἀπεκταγκότι πολέμιον· ἐν δὲ τοῖς Ἰβηρσιν, ἔθνει πολεμικῶ, τοσούτους τὸν ἀριθμὸν ὀβελίσκους καταπηγνύουσι περὶ τὸν τάφον ὅσους ἂν διαφθείρῃ τῶν πολεμίων· καὶ ἕτερα δὴ παρ' ἑτέροις ἔστι τοιαῦτα πολλά, τὰ μὲν νόμοις κατειλημμένα τὰ δὲ ἔθεσιν.

καίτοι δόξειεν ἂν ἄγαν ἄτοπον ἴσως εἶναι τοῖς βουλομένοις ἐπισκοπεῖν, εἰ τοῦτ' ἐστὶν ἔργον τοῦ πολιτικοῦ, τὸ δύνασθαι θεωρεῖν ὅπως ἄρχῃ καὶ δεσπόζῃ τῶν πλησίων, καὶ βουλομένων καὶ μὴ βουλομένων. πῶς γὰρ ἂν εἴη τοῦτο πολιτικὸν ἢ νομοθετικόν, ὃ γε μηδὲ νόμιμόν ἐστιν; οὐ νόμιμον δὲ τὸ μὴ μόνον δικαίως ἀλλὰ καὶ ἀδίκως ἄρχειν, κρατεῖν δ' ἔστι καὶ μὴ δικαίως. ἀλλὰ μὴν οὐδ' ἐν ταῖς ἄλλαις ἐπιστήμαις τοῦτο ὁρῶμεν· οὔτε γὰρ τοῦ ἱατροῦ οὔτε

τοῦ κυβερνήτου ἔργον ἐστὶ τὸ ἢ πεῖσαι ἢ βιάσασθαι τοῦ μὲν τοὺς θεραπευομένους τοῦ δὲ τοὺς πλωτῆρας. ἀλλ' ἐοίκασιν οἱ πολλοὶ τὴν δεσποτικὴν πολιτικὴν οἶεσθαι εἶναι, καὶ ὅπερ αὐτοῖς ἕκαστοι οὐ φασιν εἶναι δίκαιον οὐδὲ συμφέρον, τοῦτ' οὐκ αἰσχύνονται πρὸς τοὺς ἄλλους ἀσκοῦντες· αὐτοὶ μὲν γὰρ παρ' αὐτοῖς τὸ δικαίως ἄρχειν ζητοῦσι, πρὸς δὲ τοὺς ἄλλους οὐδὲν μέλει τῶν δικαίων. ἄτοπον δὲ εἰ μὴ φύσει τὸ μὲν δεσποστὸν ἐστὶ τὸ δὲ οὐ δεσποστὸν, ὥστε εἴπερ ἔχει τὸν τρόπον τοῦτον, οὐ δεῖ πάντων πειρᾶσθαι δεσπόζειν, ἀλλὰ τῶν δεσποστῶν, ὥσπερ οὐδὲ θηρεύειν ἐπὶ θοίνην ἢ θυσίαν ἀνθρώπους, ἀλλὰ τὸ πρὸς τοῦτο θηρευτόν· ἔστι δὲ θηρευτὸν ὃ ἂν ἄγριον ἢ ἐδεστὸν ζῷον. ἀλλὰ μὴν εἴη γ' ἂν καὶ [1325a] καθ' ἑαυτὴν μία πόλις εὐδαιμών, ἢ πολιτεύεται δηλονότι καλῶς, εἴπερ ἐνδέχεται πόλιν οἰκεῖσθαι που καθ' ἑαυτὴν νόμοις χρωμένῃ σπουδαίοις, ἥς τῆς πολιτείας ἢ σύνταξις οὐ πρὸς πόλεμον οὐδὲ πρὸς τὸ κρατεῖν ἔσται τῶν πολέμων· μηθὲν γὰρ ὑπαρχέτω τοιοῦτον. δῆλον ἄρα ὅτι πάσας τὰς πρὸς τὸν πόλεμον ἐπιμελείας καλὰς μὲν θετέον, οὐχ ὥς τέλος δὲ πάντων ἀκρότατον, ἀλλ' ἐκείνου χάριν ταύτας. τοῦ δὲ νομοθέτου τοῦ σπουδαίου ἐστὶ τὸ θεάσασθαι πόλιν καὶ γένος ἀνθρώπων καὶ πᾶσαν ἄλλην κοινωνίαν, ζωῆς ἀγαθῆς πῶς μετέξουσιν καὶ τῆς ἐνδεχομένης αὐτοῖς εὐδαιμονίας. διοίσει μέντοι τῶν ταττομένων ἕνια νομίμων· καὶ τοῦτο τῆς νομοθετικῆς ἐστὶν ἰδεῖν, ἐάν τινες ὑπάρχωσι γειννῶντες, ποῖα πρὸς ποίους ἀσκητέον καὶ πῶς τοῖς καθήκουσι πρὸς ἑκάστους χρηστέον. ἀλλὰ τοῦτο μὲν κἂν ὕστερον τύχοι τῆς προσηκούσης σκέψεως, πρὸς τί τέλος δεῖ τὴν ἀρίστην πολιτείαν συντείνειν·

πρὸς δὲ τοὺς ὁμολογοῦντας μὲν τὸν μετ' ἀρετῆς εἶναι βίον αἰρετώτατον, διαφορομένους δὲ περὶ τῆς χρήσεως αὐτοῦ, λεκτέον ἡμῖν πρὸς ἀμφοτέρους αὐτούς (οἱ μὲν γὰρ ἀποδοκιμάζουσι τὰς πολιτικὰς ἀρχάς, νομίζοντες τὸν τε τοῦ ἐλευθέρου βίον ἕτερόν τινα εἶναι τοῦ πολιτικοῦ καὶ πάντων αἰρετώτατον, οἱ δὲ τοῦτον ἄριστον· ἀδύνατον γὰρ τὸν μηθὲν πράττοντα πράττειν εὖ, τὴν δ' εὐπραγίαν καὶ τὴν εὐδαιμονίαν εἶναι ταυτόν) ὅτι τὰ μὲν ἀμφοτέροι λέγουσιν ὀρθῶς τὰ δὲ οὐκ ὀρθῶς, οἱ μὲν ὅτι ὁ τοῦ ἐλευθέρου βίος τοῦ δεσποτικοῦ ἀμείνων. τοῦτο γὰρ ἀληθές· οὐθὲν γὰρ τό γε δούλῳ ἢ δοῦλος χρῆσθαι σεμνόν· ἢ γὰρ ἐπίταξις ἢ περὶ τῶν ἀναγκαίων οὐδενὸς μετέχει τῶν καλῶν. τὸ μέντοι νομίζειν πᾶσαν ἀρχὴν εἶναι δεσποτείαν οὐκ ὀρθόν· οὐ γὰρ ἔλαττον διέστηκεν ἢ τῶν ἐλευθέρων ἀρχὴ τῆς τῶν δούλων ἢ αὐτὸ τὸ φύσει ἐλεύθερον τοῦ φύσει δούλου. διώριστα δὲ περὶ αὐτῶν ἱκανῶς ἐν τοῖς πρώτοις λόγοις. τὸ δὲ μᾶλλον ἐπαινεῖν τὸ ἀπρακτεῖν τοῦ πράττειν οὐκ ἀληθές· ἢ γὰρ εὐδαιμονία πρᾶξις ἐστίν, ἔτι δὲ πολλῶν καὶ καλῶν τέλος ἔχουσιν αἱ τῶν δικαίων καὶ σωφρόνων πράξεις.

καίτοι τάχ' ἂν ὑπολάβοι τις τούτων οὕτω διωρισμένων ὅτι τὸ κύριον εἶναι πάντων ἄριστον· οὕτω γὰρ ἂν πλείστων καὶ καλλίστων κύριος εἴη πράξεων. ὥστε οὐ δεῖ τὸν δυνάμενον ἄρχειν παριέναι τῷ πλησίον, ἀλλὰ μᾶλλον ἀφαιρεῖσθαι, καὶ μήτε πατέρα παίδων μήτε παῖδας πατρὸς μήθ' ὅλως φίλον φίλου μηθένα ὑπόλογον «ἔχειν» μηδὲ πρὸς τοῦτο φροντίζειν· τὸ γὰρ ἄριστον αἰρετώτατον, τὸ δ' εὖ πράττειν ἄριστον. τοῦτο μὲν οὖν ἀληθῶς ἴσως λέγουσιν, εἴπερ [1325b] ὑπάρξει τοῖς ἀποστεροῦσι καὶ βιαζομένοις τὸ τῶν ὄντων αἰρετώτατον· ἀλλ' ἴσως οὐχ οἷόν τε ὑπάρχειν, ἀλλ' ὑποτίθενται τοῦτο ψεῦδος. οὐ γὰρ ἔτι καλὰς τὰς πράξεις ἐνδέχεται εἶναι τῷ μὴ διαφέροντι τοσοῦτον ὅσον ἀνὴρ γυναικὸς ἢ πατὴρ τέκνων ἢ δεσπότης δούλων· ὥστε ὁ παραβαίνων οὐθὲν ἂν τηλικούτον κατορθώσειεν ὕστερον ὅσον ἤδη παρεκβέβηκε τῆς ἀρετῆς. τοῖς γὰρ ὁμοίοις τὸ καλὸν καὶ τὸ δίκαιον ἐν τῷ «ἐν» μέρει, τοῦτο γὰρ ἴσον καὶ ὅμοιον· τὸ δὲ μὴ ἴσον τοῖς ἴσοις καὶ τὸ μὴ ὅμοιον τοῖς ὁμοίοις παρὰ φύσιν, οὐδὲν δὲ τῶν παρὰ φύσιν καλόν. διὸ καὶ ἄλλος τις ἢ κρείττων κατ' ἀρετὴν καὶ κατὰ δύναμιν τὴν πρακτικὴν τῶν ἀρίστων, τούτῳ καλὸν ἀκολουθεῖν καὶ τούτῳ πείθεσθαι δίκαιον. δεῖ δ' οὐ μόνον ἀρετὴν ἀλλὰ καὶ δύναμιν ὑπάρχειν, καθ' ἣν ἔσται πρακτικός. ἀλλ' εἰ ταῦτα λέγεται καλῶς καὶ τὴν εὐδαιμονίαν εὐπραγίαν θετέον, καὶ κοινῇ πάσης πόλεως ἂν εἴη καὶ καθ' ἕκαστον ἄριστος βίος ὁ πρακτικός. ἀλλὰ τὸν πρακτικὸν οὐκ ἀναγκαῖον εἶναι πρὸς ἑτέρους, καθάπερ οἴονταί τινες, οὐδὲ τὰς διανοίας εἶναι μόνας ταύτας πρακτικάς, τὰς τῶν ἀποβαινόντων χάριν γιγνομένης ἐκ τοῦ πράττειν, ἀλλὰ πολὺ μᾶλλον τὰς αὐτοτελεῖς καὶ τὰς αὐτῶν ἔνεκεν θεωρίας καὶ διανοήσεις· ἡ γὰρ εὐπραγία τέλος, ὥστε καὶ πρᾶξις τις. μάλιστα δὲ καὶ πράττειν λέγομεν κυρίως καὶ τῶν ἐξωτερικῶν πράξεων τοὺς ταῖς διανοίαις ἀρχιτέκτονas. ἀλλὰ μὴν οὐδ' ἀπρακτεῖν ἀναγκαῖον τὰς καθ' αὐτὰς πόλεις ἰδρυμένας καὶ ζῆν οὕτω προηρημένας· ἐνδέχεται γὰρ κατὰ μέρη καὶ τοῦτο συμβαίνειν· πολλὰ γὰρ κοινωνίαι πρὸς ἄλληλα τοῖς μέρεσι τῆς πόλεως εἰσιν. ὁμοίως δὲ τοῦτο ὑπάρχει καὶ καθ' ἑνὸς ὁποιοῦν τῶν ἀνθρώπων· σχολῇ γὰρ ἂν ὁ θεὸς ἔχοι καλῶς καὶ πᾶς ὁ κόσμος, οἷς οὐκ εἰσὶν ἐξωτερικαὶ πράξεις παρὰ τὰς οἰκείας τὰς αὐτῶν. ὅτι μὲν οὖν τὸν αὐτὸν βίον ἀναγκαῖον εἶναι τὸν ἄριστον ἐκάστῳ τε τῶν ἀνθρώπων καὶ κοινῇ ταῖς πόλεσι καὶ τοῖς ἀνθρώποις, φανερόν ἐστιν.

Ἐπεὶ δὲ πεφροιμιάσται τὰ νῦν εἰρημένα περὶ αὐτῶν, καὶ περὶ τὰς ἄλλας πολιτείας ἡμῖν τεθεώρηται πρότερον, ἀρχὴ τῶν λοιπῶν εἰπεῖν πρῶτον ποίας τινὰς δεῖ τὰς ὑποθέσεις εἶναι περὶ τῆς μελλούσης κατ' εὐχὴν συνεστάναι πόλεως. οὐ γὰρ οἷόν τε πολιτείαν γενέσθαι τὴν ἀρίστην ἄνευ συμμέτρου χορηγίας. διὸ δεῖ πολλὰ προϋποθεθεῖσθαι καθάπερ εὐχομένους, εἶναι μέντοι μηθὲν τούτων ἀδύνατον· λέγω δὲ οἷον περὶ τε πλήθους πολιτῶν καὶ χώρας.



ὥσπερ γὰρ καὶ τοῖς ἄλλοις δημιουργοῖς, οἷον ὑφάντη καὶ ναυπηγῷ, δεῖ τὴν [1326a] ὕλην ὑπάρχειν ἐπιτηδεῖαν οὖσαν πρὸς τὴν ἐργασίαν (ὅσῳ γὰρ ἂν αὕτη τυγχάνη παρεσκευασμένη βέλτιον, ἀνάγκη καὶ τὸ γινόμενον ὑπὸ τῆς τέχνης εἶναι κάλλιον), οὕτω καὶ τῷ πολιτικῷ καὶ τῷ νομοθέτῃ δεῖ τὴν οἰκείαν ὕλην ὑπάρχειν ἐπιτηδεῖως ἔχουσιν.

ἔστι δὲ πολιτικῆς χορηγίας πρῶτον τό τε πλῆθος τῶν ἀνθρώπων, πόσους τε καὶ ποίους τινὰς ὑπάρχειν δεῖ φύσει, καὶ κατὰ τὴν χώραν ὡσαύτως, πόσῃν τε εἶναι καὶ ποίαν τινὰ ταύτην. οἷονται μὲν οὖν οἱ πλεῖστοι προσήκειν μεγάλην εἶναι τὴν εὐδαίμονα πόλιν· εἰ δὲ τοῦτ' ἀληθές, ἀγνοοῦσι ποία μεγάλη καὶ ποία μικρὰ πόλις. κατ' ἀριθμοῦ γὰρ πλῆθος τῶν ἐνοικούντων κρίνουσι τὴν μεγάλην, δεῖ δὲ μᾶλλον μὴ εἰς τὸ πλῆθος εἰς δὲ δύναμιν ἀποβλέπειν. ἔστι γάρ τι καὶ πόλεως ἔργον, ὥστε τὴν δυναμένην τοῦτο μάλιστ' ἀποτελεῖν, ταύτην οἰητέον εἶναι μεγίστην, οἷον Ἱπποκράτην οὐκ ἄνθρωπον ἀλλ' ἰατρὸν εἶναι μείζω φήσειεν ἂν τις τοῦ διαφέροντος κατὰ τὸ μέγεθος τοῦ σώματος. οὐ μὴν ἀλλὰ κἂν εἰ δεῖ κρίνειν πρὸς τὸ πλῆθος ἀποβλέποντας, οὐ κατὰ τὸ τυχὸν πλῆθος τοῦτο ποιητέον (ἀναγκαῖον γὰρ ἐν ταῖς πόλεσιν ἴσως ὑπάρχειν καὶ δούλων ἀριθμὸν πολλῶν καὶ μετοίκων καὶ ξένων), ἀλλ' ὅσοι πόλεως εἰσι μέρος καὶ ἐξ ὧν συνίσταται πόλις οἰκείων μορίων· ἡ γὰρ τούτων ὑπεροχὴ τοῦ πλήθους μεγάλης πόλεως σημεῖον, ἐξ ἧς δὲ βάνηται μὲν ἐξέρχονται πολλοὶ τὸν ἀριθμὸν ὀπλῖται δὲ ὀλίγοι, ταύτην ἀδύνατον εἶναι μεγάλην· οὐ γὰρ ταῦτόν ἐστι μεγάλη τε πόλις καὶ πολυάνθρωπος.

ἀλλὰ μὴν καὶ τοῦτό γε ἐκ τῶν ἔργων φανερόν, ὅτι χαλεπόν, ἴσως δ' ἀδύνατον, εὐνομεῖσθαι τὴν λίαν πολυάνθρωπον· τῶν γοῦν δοκουσῶν πολιτεύεσθαι καλῶς οὐδεμίαν ὁρῶμεν οὖσαν ἀνειμένην πρὸς τὸ πλῆθος. τοῦτο δὲ δῆλον καὶ διὰ τῆς τῶν λόγων πίστεως. ὅ τε γὰρ νόμος τάξις τίς ἐστι, καὶ τὴν εὐνομίαν ἀναγκαῖον εὐταξίαν εἶναι, ὃ δὲ λίαν ὑπερβάλλον ἀριθμὸς οὐ δύναται μετέχειν τάξεως· θείας γὰρ δὴ τοῦτο δυνάμεως ἔργον, ἥτις καὶ τότε συνέχει τὸ πᾶν· ἐπεὶ τό γε καλὸν ἐν πλήθει καὶ μεγέθει εἶωθε γίνεσθαι. διὸ καὶ πόλιν ἢ μετὰ μεγέθους ὃ λεχθεὶς ὅρος ὑπάρχει, ταύτην εἶναι καλλίστην ἀναγκαῖον. ἀλλ' ἔστι τι καὶ πόλεως μεγέθους μέτρον, ὥσπερ καὶ τῶν ἄλλων πάντων, ζώων φυτῶν ὀργάνων· καὶ γὰρ τούτων ἕκαστον οὔτε λίαν μικρὸν οὔτε κατὰ μέγεθος ὑπερβάλλον ἔξει τὴν αὐτοῦ δύναμιν, ἀλλ' ὅτε μὲν ὅλως ἐστερημένον ἔσται τῆς φύσεως ὅτε δὲ φαύλως ἔχον, οἷον πλοῖον σπιθαμιαῖον μὲν οὐκ ἔσται πλοῖον ὅλως, οὐδὲ δυοῖν σταδίοις, εἰς δὲ τὸ μέγεθος ἐλθὼν ὅτε μὲν διὰ σμικρότητα φαύλην ποιήσει τὴν ναυτιλίαν, ὅτε δὲ διὰ τὴν ὑπερβολήν· ὁμοίως δὲ καὶ πόλις ἢ μὲν ἐξ ὀλίγων λίαν οὐκ αὐτάρκης (ἢ δὲ πόλις αὐτάρκης), ἢ δὲ ἐκ πολλῶν ἄγαν ἐν μὲν τοῖς ἀναγκαίοις αὐτάρκης ὥσπερ

ἔθνος, ἀλλ' οὐ πόλις· πολιτείαν γὰρ οὐ ῥάδιον ὑπάρχειν· τίς γὰρ στρατηγὸς ἔσται τοῦ λίαν ὑπερβάλλοντος πλήθους, ἢ τίς κῆρυξ μὴ Στεντόρειος; διὸ πρῶτην μὲν εἶναι πόλιν ἀναγκαῖον τὴν ἐκ τοσούτου πλήθους ὃ πρῶτον πλήθος αὐτάρκες πρὸς τὸ εὖ ζῆν ἐστὶ κατὰ τὴν πολιτικὴν κοινωνίαν· ἐνδέχεται δὲ καὶ τὴν ταύτης ὑπερβάλλουσιν κατὰ πλήθος εἶναι μείζω πόλιν, ἀλλὰ τοῦτ' οὐκ ἔστιν, ὥσπερ εἵπομεν, ἀόριστον. τίς δ' ἐστὶν ὁ τῆς ὑπερβολῆς ὅρος, ἐκ τῶν ἔργων ἰδεῖν ῥάδιον. εἰσὶ γὰρ αἱ πράξεις τῆς πόλεως τῶν μὲν ἀρχόντων τῶν δ' ἀρχομένων, ἄρχοντος δ' ἐπίταξις καὶ κρίσις ἔργον· πρὸς δὲ τὸ κρίνειν περὶ τῶν δικαίων καὶ πρὸς τὸ τὰς ἀρχὰς διανέμειν κατ' ἀξίαν ἀναγκαῖον γνωρίζειν ἀλλήλους, ποιοὶ τινὲς εἰσὶ, τοὺς πολίτας, ὡς ὅπου τοῦτο μὴ συμβαίνει γίνεσθαι, φαύλως ἀνάγκη γίνεσθαι τὰ περὶ τὰς ἀρχὰς καὶ τὰς κρίσεις. περὶ ἀμφοτέρω γὰρ οὐ δίκαιον αὐτοσχεδιάζειν, ὅπερ ἐν τῇ πολυανθρωπίᾳ τῇ λίαν ὑπάρχει φανερώς. ἔτι δὲ ξένοις καὶ μετοίκους ῥάδιον μεταλαμβάνειν τῆς πολιτείας· οὐ γὰρ χαλεπὸν τὸ λανθάνειν διὰ τὴν ὑπερβολὴν τοῦ πλήθους. δῆλον τοίνυν ὡς οὗτός ἐστι πόλεως ὅρος ἄριστος, ἢ μεγίστη τοῦ πλήθους ὑπερβολὴ πρὸς αὐτάρκειαν ζωῆς εὐσύνοπτος. περὶ μὲν οὖν μεγέθους πόλεως διωρίσθω τὸν τρόπον τοῦτον.

Παραπλησίως δὲ καὶ τὰ περὶ τῆς χώρας ἔχει. περὶ μὲν γὰρ τοῦ ποίαν τινά, δῆλον ὅτι τὴν αὐτάρκεστάτην πᾶς τις ἂν ἐπαινέσειεν (τοιαύτην δ' ἀναγκαῖον εἶναι τὴν παντοφόρον· τὸ γὰρ πάντα ὑπάρχειν καὶ δεῖσθαι μηθενὸς αὐτάρκες)· πλήθει δὲ καὶ μεγέθει τοσαύτην ὥστε δύνασθαι τοὺς οἰκοῦντας ζῆν σχολάζοντας ἐλευθερίως ἅμα καὶ σωφρόνως. τοῦτον δὲ τὸν ὅρον εἰ καλῶς ἢ μὴ καλῶς λέγομεν, ὕστερον ἐπισκεπτέον ἀκριβέστερον, ὅταν ὅλως περὶ κτήσεως καὶ τῆς περὶ τὴν οὐσίαν εὐπορίας συμβαίνει ποιεῖσθαι μνείαν, πῶς δεῖ καὶ τίνα τρόπον ἔχειν πρὸς τὴν χρῆσιν αὐτῆς· πολλὰ γὰρ περὶ τὴν σκέψιν ταύτην εἰσὶν ἀμφισβητήσεις διὰ τοὺς ἔλκοντας ἐφ' ἑκατέραν τοῦ βίου τὴν ὑπερβολήν, τοὺς μὲν ἐπὶ τὴν γλισχρότητα τοὺς δὲ ἐπὶ τὴν τρυφήν. τὸ δ' εἶδος τῆς χώρας οὐ χαλεπὸν εἰπεῖν (δεῖ δ' ἔνια πείθεσθαι καὶ τοῖς περὶ τὴν στρατηγίαν ἐμπείροις), ὅτι χρὴ τοῖς μὲν πολεμίοις εἶναι δυσέμβολον αὐτοῖς δ' εὐέξοδον.

[1327a] ἔτι δ' ὥσπερ τὸ πλήθος τὸ τῶν ἀνθρώπων εὐσύνοπτον ἔφαμεν εἶναι δεῖν, οὕτω καὶ τὴν χώραν· τὸ δ' εὐσύνοπτον τὸ εὐβοήθητον εἶναι τὴν χώραν ἐστίν. τῆς δὲ πόλεως τὴν θέσιν εἰ χρὴ ποιεῖν κατ' εὐχήν, πρὸς τε τὴν θάλατταν προσήκει κεῖσθαι καλῶς πρὸς τε τὴν χώραν. εἷς μὲν <οὖν> ὁ λεχθεὶς ὅρος (δεῖ γὰρ πρὸς τὰς ἐκβοηθείας κοινὴν εἶναι τῶν τόπων ἀπάντων)· ὁ δὲ λοιπὸς πρὸς τὰς τῶν γινομένων καρπῶν παραπομπάς, ἔτι δὲ τῆς περὶ ξύλα ὕλης, κἂν εἴ τινα ἄλλην ἐργασίαν ἢ χώρα τυγχάνοι κεκτημένη τοιαύτην εὐπαρακόμιστον.

Περὶ δὲ τῆς πρὸς τὴν θάλατταν κοινωνίας, πότερον ὠφέλιμος ταῖς εὐνομουμέναις πόλεσιν ἢ βλαβερὰ, πολλὰ τυγχάνουσιν ἀμφισβητοῦντες· τό τε γὰρ ἐπιξενοῦσθαί τινας ἐν ἄλλοις τεθραμμένους νόμοις ἀσύμφορον εἶναι φασι πρὸς τὴν εὐνομίαν, καὶ τὴν πολυανθρωπίαν· γίνεσθαι μὲν γὰρ ἐκ τοῦ χρῆσθαι τῇ θαλάττῃ διαπέμποντας καὶ δεχομένους ἐμπόρων πλήθος, ὑπεναντίαν δ' εἶναι πρὸς τὸ πολιτεύεσθαι καλῶς. ὅτι μὲν οὖν, εἰ ταῦτα μὴ συμβαίνει, βέλτιον καὶ πρὸς ἀσφάλειαν καὶ πρὸς εὐπορίαν τῶν ἀναγκαίων μετέχειν τὴν πόλιν καὶ τὴν χώραν τῆς θαλάττης, οὐκ ἄδηλον. καὶ γὰρ πρὸς τὸ ῥᾶον φέρειν τοὺς πολέμους εὐβοηθήτους εἶναι δεῖ κατ' ἀμφοτέρα τοὺς σωθησομένους, καὶ κατὰ γῆν καὶ κατὰ θάλατταν, καὶ [πρὸς] τὸ βλάψαι τοὺς ἐπιτιθεμένους, εἰ μὴ κατ' ἄμφω δυνατόν, ἀλλὰ κατὰ θάτερον ὑπάρξει μᾶλλον ἀμφοτέρων μετέχουσιν. ὅσα τ' ἂν μὴ τυγχάνῃ παρ' αὐτοῖς ὄντα, δέξασθαι ταῦτα, καὶ τὰ πλεονάζοντα τῶν γιγνομένων ἐκπέμψασθαι τῶν ἀναγκαίων ἐστίν. αὐτῇ γὰρ ἐμπορικῇ, ἀλλ' οὐ τοῖς ἄλλοις, δεῖ εἶναι τὴν πόλιν· οἱ δὲ παρέχοντες σφᾶς αὐτοὺς πᾶσιν ἀγορὰν προσόδου χάριν ταῦτα πράττουσιν· ἦν δὲ μὴ δεῖ πόλιν τοιαύτης μετέχειν πλεονεξίας, οὐδ' ἐμπόριον δεῖ κεκτῆσθαι τοιοῦτον. ἐπεὶ δὲ καὶ νῦν ὀρώμεν πολλαῖς ὑπάρχοντα καὶ χώραις καὶ πόλεσιν ἐπίνεια καὶ λιμένας εὐφυῶς κείμενα πρὸς τὴν πόλιν, ὥστε μήτε τὸ αὐτὸ νέμειν ἄστὶ μήτε πόρρω λίαν, ἀλλὰ κρατεῖσθαι τείχεσι καὶ τοιούτοις ἄλλοις ἐρύμασι, φανερόν ὥς εἰ μὲν ἀγαθόν τι συμβαίνει γίνεσθαι διὰ τῆς κοινωνίας αὐτῶν, ὑπάρξει τῇ πόλει τοῦτο τὸ ἀγαθόν, εἰ δέ τι βλαβερόν, φυλάξασθαι ῥᾶδιον τοῖς νόμοις φράζοντας καὶ διορίζοντας τίνας οὐ δεῖ καὶ τίνας ἐπιμίσεσθαι δεῖ πρὸς ἀλλήλους.

περὶ δὲ τῆς ναυτικῆς δυνάμεως, ὅτι μὲν βέλτιστον ὑπάρχειν μέχρι τινὸς πλήθους, οὐκ ἄδηλον (οὐ γὰρ [1327b] μόνον αὐτοῖς ἀλλὰ καὶ τῶν πλησίον τισὶ δεῖ καὶ φοβεροὺς εἶναι καὶ δύνασθαι βοηθεῖν, ὥσπερ κατὰ γῆν, καὶ κατὰ θάλατταν)· περὶ δὲ πλήθους ἤδη καὶ μεγέθους τῆς δυνάμεως ταύτης πρὸς τὸν βίον ἀποσκεπτέον τῆς πόλεως. εἰ μὲν γὰρ ἡγεμονικὸν καὶ πολιτικὸν ζήσεται βίον, ἀναγκαῖον καὶ ταύτην τὴν δύναμιν ὑπάρχειν πρὸς τὰς πράξεις σύμμετρον. τὴν δὲ πολυανθρωπίαν τὴν γιγνομένην περὶ τὸν ναυτικὸν ὄχλον οὐκ ἀναγκαῖον ὑπάρχειν ταῖς πόλεσιν· οὐθὲν γὰρ αὐτοὺς μέρος εἶναι δεῖ τῆς πόλεως. τὸ μὲν γὰρ ἐπιβατικὸν ἐλεύθερον καὶ τῶν πεζευόντων ἐστίν, ὃ κύριόν ἐστι καὶ κρατεῖ τῆς ναυτιλίας· πλήθους δὲ ὑπάρχοντος περιοίκων καὶ τῶν τὴν χώραν γεωργούντων, ἀφθονίαν ἀναγκαῖον εἶναι καὶ ναυτῶν. ὀρώμεν δὲ τοῦτο καὶ νῦν ὑπάρχον τισίν, οἷον τῇ πόλει τῶν Ἡρακλεωτῶν· πολλὰς γὰρ ἐκπληροῦσι τριήρεις, κεκτημένοι τῷ μεγέθει πόλιν ἐτέρων ἐμμελεστέραν.

περὶ μὲν οὖν χώρας καὶ λιμένων καὶ πόλεων καὶ θαλάττης καὶ περὶ τῆς

ναυτικῆς δυνάμεως ἔστω διωρισμένα τὸν τρόπον τοῦτον· περὶ δὲ τοῦ πολιτικοῦ πλήθους, τίνα μὲν ὅρον ὑπάρχειν χρή, πρότερον εἵπομεν, ποίους δὲ τινὰς τὴν φύσιν εἶναι δεῖ, νῦν λέγωμεν. σχεδὸν δὲ κατανοήσκειν ἂν τις τοῦτό γε, βλέψας ἐπὶ τε τὰς πόλεις τὰς εὐδοκιμούσας τῶν Ἑλλήνων καὶ πρὸς πᾶσαν τὴν οἰκουμένην, ὡς διείληπται τοῖς ἔθνεσιν. τὰ μὲν γὰρ ἐν τοῖς ψυχροῖς τόποις ἔθνη καὶ τὰ περὶ τὴν Εὐρώπην θυμοῦ μὲν ἐστὶ πλήρη, διανοίας δὲ ἐνδεέστερα καὶ τέχνης, διόπερ ἐλεύθερα μὲν διατελεῖ μάλλον, ἀπολίτευτα δὲ καὶ τῶν πλησίον ἄρχειν οὐ δυνάμενα· τὰ δὲ περὶ τὴν Ἀσίαν διανοητικὰ μὲν καὶ τεχνικὰ τὴν ψυχὴν, ἄθυμα δέ, διόπερ ἀρχόμενα καὶ δουλεύοντα διατελεῖ· τὸ δὲ τῶν Ἑλλήνων γένος, ὥσπερ μεσεύει κατὰ τοὺς τόπους, οὕτως ἀμφοῖν μετέχει. καὶ γὰρ ἔνθυμον καὶ διανοητικόν ἐστίν· διόπερ ἐλεύθερόν τε διατελεῖ καὶ βέλτιστα πολιτευόμενον καὶ δυνάμενον ἄρχειν πάντων, μιᾷς τυγχάνον πολιτείας. τὴν αὐτὴν δ' ἔχει διαφορὰν καὶ τὰ τῶν Ἑλλήνων ἔθνη πρὸς ἄλληλα· τὰ μὲν γὰρ ἔχει τὴν φύσιν μονόκωλον, τὰ δὲ εὐ κέκραται πρὸς ἀμφοτέρας τὰς δυνάμεις ταύτας. φανερόν τοίνυν ὅτι δεῖ διανοητικούς τε εἶναι καὶ θυμοειδεῖς τὴν φύσιν τοὺς μέλλοντας εὐαγώγους ἔσεσθαι τῷ νομοθέτῃ πρὸς τὴν ἀρετὴν. ὅπερ γὰρ φασὶ τινες δεῖν ὑπάρχειν τοῖς φύλαξι, τὸ φιλητικοὺς μὲν εἶναι τῶν γνωρίμων πρὸς δὲ τοὺς ἀγνώτας ἀγρίους, ὁ θυμὸς ἐστὶν ὁ ποιῶν τὸ φιλητικόν· αὕτη γάρ ἐστὶν ἡ τῆς ψυχῆς [1328a] δύναμις ἣ φιλοῦμεν. σημεῖον δέ· πρὸς γὰρ τοὺς συνήθεις καὶ φίλους ὁ θυμὸς αἵρεται μάλλον ἢ πρὸς τοὺς ἀγνώτας, ὀλιγωρεῖσθαι νομίσας. διὸ καὶ Ἀρχίλοχος προσηκόντως τοῖς φίλοις ἐγκαλῶν διαλέγεται πρὸς τὸν θυμόν·

σὺ γὰρ δὴ παρὰ φίλων ἀπάγχειαι.

καὶ τὸ ἄρχον δὲ καὶ τὸ ἐλεύθερον ἀπὸ τῆς δυνάμεως ταύτης ὑπάρχει πᾶσιν· ἀρχικὸν γὰρ καὶ ἀήττητον ὁ θυμός. οὐ καλῶς δ' ἔχει λέγειν χαλεποὺς εἶναι πρὸς τοὺς ἀγνώτας· πρὸς οὐθέννα γὰρ εἶναι χρή τοιοῦτον, οὐδέ εἰσιν οἱ μεγαλόψυχοι τὴν φύσιν ἄγριοι, πλὴν πρὸς τοὺς ἀδικοῦντας. τοῦτο δὲ μάλλον ἔτι πρὸς τοὺς συνήθεις πάσχουσιν, ὅπερ εἴρηται πρότερον, ἂν ἀδικεῖσθαι νομίσωσιν. καὶ τοῦτο συμβαίνει κατὰ λόγον· παρ' οἷς γὰρ ὀφείλεσθαι τὴν εὐεργεσίαν ὑπολαμβάνουσι, πρὸς τῷ βλάβει καὶ ταύτης ἀποστερεῖσθαι νομίζουσιν· ὅθεν εἴρηται “χαλεποὶ πόλεμοι γὰρ ἀδελφῶν” καὶ “οἳ τοι πέρα στέρξαντες, οἶδε καὶ πέρα μισοῦσιν”.

περὶ μὲν οὖν τῶν πολιτευομένων, πόσους τε ὑπάρχειν δεῖ καὶ ποίους τινὰς τὴν φύσιν, ἔτι δὲ τὴν χώραν πόσῃν τέ τινα καὶ ποίαν τινά, διώρισται σχεδόν (οὐ γὰρ τὴν αὐτὴν ἀκρίβειαν δεῖ ζητεῖν ἐπὶ τε τῶν λόγων καὶ τῶν γιγνομένων διὰ τῆς αἰσθήσεως). Ἐπεὶ δ' ὥσπερ τῶν ἄλλων τῶν κατὰ φύσιν συνεστώτων οὐ

ταῦτά ἐστι μόρια τῆς ὅλης συστάσεως ὧν ἄνευ τὸ ὅλον οὐκ ἂν εἴη, δῆλον ὡς οὐδὲ πόλεως μέρη θετέον ὅσα ταῖς πόλεσιν ἀναγκαῖον ὑπάρχειν, οὐδ' ἄλλης κοινωνίας οὐδεμιᾶς ἐξ ἧς ἓν τι τὸ γένος (ἓν γάρ τι καὶ κοινὸν εἶναι δεῖ καὶ ταῦτὸ τοῖς κοινωνοῖς, ἂν τε ἴσον ἂν τε ἄνισον μεταλαμβάνωσιν)· οἷον εἴτε τροφή τοῦτό ἐστιν εἴτε χώρας πλῆθος εἴτ' ἄλλο τι τῶν τοιούτων ἐστίν. ὅταν δ' ἢ τὸ μὲν τούτου ἔνεκεν τὸ δ' οὐ ἔνεκεν, οὐθέν [ἔν] γε τούτοις κοινὸν ἄλλ' ἢ τῷ μὲν ποιῆσαι τῷ δὲ λαβεῖν· λέγω δ' οἷον ὀργάνῳ τε παντὶ πρὸς τὸ γιγνόμενον ἔργον καὶ τοῖς δημιουργοῖς· οἰκία γὰρ πρὸς οἰκοδόμον οὐθέν ἐστίν ὃ γίγνεται κοινόν, ἄλλ' ἐστὶ τῆς οἰκίας χάριν ἢ τῶν οἰκοδόμων τέχνη. διὸ κτήσεως μὲν δεῖ ταῖς πόλεσιν, οὐδὲν δ' ἐστὶν ἢ κτήσις μέρος τῆς πόλεως· πολλὰ δ' ἔμψυχα μέρη τῆς κτήσεως ἐστίν· ἢ δὲ πόλις κοινωνία τίς ἐστὶ τῶν ὁμοίων, ἔνεκεν δὲ ζωῆς τῆς ἐνδεχομένης ἀρίστης. ἐπεὶ δ' ἐστὶν εὐδαιμονία τὸ ἀριστον, αὕτη δὲ ἀρετῆς ἐνέργεια καὶ χρῆσις τις τέλειος, συμβέβηκε δὲ οὕτως ὥστε τοὺς μὲν ἐνδέχεσθαι μετέχειν αὐτῆς τοὺς δὲ μικρὸν ἢ μηδέν, δῆλον ὡς τοῦτ' αἴτιον τοῦ γίγνεσθαι πόλεως εἶδη καὶ διαφορὰς καὶ πολιτείας πλείους· ἄλλον γὰρ τρόπον καὶ δι' [1328b] ἄλλων ἕκαστοι τοῦτο θηρεύοντες τοὺς τε βίους ἑτέρους ποιοῦνται καὶ τὰς πολιτείας. ἐπισκεπτέον δὲ καὶ πόσα ταυτί ἐστὶν ὧν ἄνευ πόλις οὐκ ἂν εἴη· καὶ γὰρ ἃ λέγομεν εἶναι μέρη πόλεως ἐν τούτοις ἂν εἴη ἀναγκαῖον ὑπάρχειν. ληπτέον τοίνυν τῶν ἔργων τὸν ἀριθμόν· ἐκ τούτων γὰρ ἔσται δῆλον. πρῶτον μὲν οὖν ὑπάρχειν δεῖ τροφήν, ἔπειτα τέχνας (πολλῶν γὰρ ὀργάνων δεῖται τὸ ζῆν), τρίτον δὲ ὅπλα (τοὺς γὰρ κοινωνοῦντας ἀναγκαῖον καὶ ἐν αὐτοῖς ἔχειν ὅπλα πρὸς τε τὴν ἀρχήν, τῶν ἀπειθούντων χάριν, καὶ πρὸς τοὺς ἔξωθεν ἀδικεῖν ἐπιχειροῦντας), ἔτι χρημάτων τινὰ εὐπορίαν, ὅπως ἔχωσι καὶ πρὸς τὰς καθ' αὐτοὺς χρείας καὶ πρὸς <τὰς> πολεμικάς, πέμπτον δὲ καὶ πρῶτον τὴν περὶ τὸ θεῖον ἐπιμέλειαν, ἣν καλοῦσιν ἱερατείαν, ἕκτον δὲ τὸν ἀριθμόν καὶ πάντων ἀναγκαϊότατον κρίσιν περὶ τῶν συμφερόντων καὶ τῶν δικαίων τῶν πρὸς ἀλλήλους. τὰ μὲν οὖν ἔργα ταῦτ' ἐστὶν ὧν δεῖται πᾶσα πόλις ὡς εἰπεῖν (ἢ γὰρ πόλις πλῆθος ἐστὶν οὐ τὸ τυχὸν ἀλλὰ πρὸς ζωὴν αὐτάρκες, ὡς φαμεν, ἐὰν δέ τι τυγχάνῃ τούτων ἐκλείπον, ἀδύνατον ἀπλῶς αὐτάρκη τὴν κοινωνίαν εἶναι ταύτην)· ἀνάγκη τοίνυν κατὰ τὰς ἐργασίας ταύτας συνεστάναι πόλιν· δεῖ ἄρα γεωργῶν τ' εἶναι πλῆθος, οἱ παρασκευάσουσι τὴν τροφήν, καὶ τεχνίτας, καὶ τὸ μάχιμον, καὶ τὸ εὐπορον, καὶ ἱερεῖς, καὶ κριτὰς τῶν ἀναγκαίων καὶ συμφερόντων.

Διωρισμένων δὲ τούτων λοιπὸν σκέψασθαι πότερον πᾶσι κοινωνητέον πάντων τούτων (ἐνδέχεται γὰρ τοὺς αὐτοὺς ἅπαντας εἶναι καὶ γεωργοὺς καὶ τεχνίτας καὶ τοὺς βουλευομένους καὶ δικάζοντας), ἢ καθ' ἕκαστον ἔργον τῶν εἰρημένων ἄλλους ὑποθετέον, ἢ τὰ μὲν ἴδια τὰ δὲ κοινὰ τούτων ἐξ ἀνάγκης ἐστίν. οὐκ ἐν πάσῃ δὲ ταῦτὸ πολιτεία. καθάπερ γὰρ εἵπομεν, ἐνδέχεται καὶ

πάντας κοινωνεῖν πάντων καὶ μὴ πάντας πάντων ἀλλὰ τινὰς τινῶν. ταῦτα γὰρ καὶ ποιεῖ τὰς πολιτείας ἑτέρας· ἐν μὲν γὰρ ταῖς δημοκρατίαις μετέχουσι πάντες πάντων, ἐν δὲ ταῖς ὀλιγαρχίαις τὸναντίον. ἐπεὶ δὲ τυγχάνομεν σκοποῦντες περὶ τῆς ἀρίστης πολιτείας, αὕτη δ' ἐστὶ καθ' ἣν ἡ πόλις ἂν εἴη μάλιστ' εὐδαίμων, τὴν δ' εὐδαιμονίαν ὅτι χωρὶς ἀρετῆς ἀδύνατον ὑπάρχειν εἴρηται πρότερον, φανερὸν ἐκ τούτων ὡς ἐν τῇ κάλλιστα πολιτευομένῃ πόλει καὶ τῇ κεκτημένῃ δικαίους ἄνδρας ἀπλῶς, ἀλλὰ μὴ πρὸς τὴν ὑπόθεσιν, οὔτε βάνουσον βίον οὔτ' ἀγοραῖον δεῖ ζῆν τοὺς πολίτας (ἀγεγνής γὰρ ὁ τοιοῦτος βίος καὶ πρὸς ἀρετὴν ὑπεναντίος), οὐδὲ δὴ γεωργοὺς εἶναι τοὺς μέλλοντας [1329a] ἔσεσθαι (δεῖ γὰρ σχολῆς καὶ πρὸς τὴν γένεσιν τῆς ἀρετῆς καὶ πρὸς τὰς πράξεις τὰς πολιτικάς).

ἐπεὶ δὲ καὶ τὸ πολεμικὸν καὶ τὸ βουλευόμενον περὶ τῶν συμφερόντων καὶ κρῖνον περὶ τῶν δικαίων ἐνυπάρχει καὶ μέρη φαίνεται τῆς πόλεως μάλιστα ὄντα, πότερον <ἑτέροις> ἕτερα καὶ ταῦτα θετέον ἢ τοῖς αὐτοῖς ἀποδοτέον ἅμφω; φανερὸν δὲ καὶ τοῦτο, διότι τρόπον μὲν τινα τοῖς αὐτοῖς τρόπον δέ τινα καὶ ἑτέροις. ἢ μὲν γὰρ ἑτέρας ἀκμῆς ἑκάτερον τῶν ἔργων, καὶ τὸ μὲν δεῖται φρονήσεως τὸ δὲ δυνάμεως, ἑτέροις· ἢ δὲ τῶν ἀδυνάτων ἐστὶ τοὺς δυναμένους βιάζεσθαι καὶ κωλύειν, τούτους ὑπομένειν ἀρχομένους αἰεὶ, ταύτη δὲ τοῖς αὐτοῖς. οἱ γὰρ τῶν ὅπλων κύριοι καὶ <τοῦ> μένειν ἢ μὴ μένειν κύριοι τὴν πολιτείαν. λείπεται τοίνυν τοῖς αὐτοῖς μὲν ἀμφοτέρω ἀποδιδόναι τὴν πολιτείαν ταῦτα, μὴ ἅμα δέ, ἀλλ' ὥσπερ πέφυκεν ἢ μὲν δύναμις ἐν νεωτέροις, ἢ δὲ φρόνησις ἐν πρεσβυτέροις εἶναι· οὐκοῦν οὕτως ἀμφοῖν νενεμῆσθαι συμφέρει καὶ δίκαιόν ἐστιν· ἔχει γὰρ αὕτη ἡ διαίρεσις τὸ κατ' ἀξίαν. ἀλλὰ μὴν καὶ τὰς κτήσεις δεῖ εἶναι περὶ τούτους. ἀναγκαῖον γὰρ εὐπορίαν ὑπάρχειν τοῖς πολίταις, πολῖται δὲ οὗτοι. τὸ γὰρ βάνουσον οὐ μετέχει τῆς πόλεως, οὐδ' ἄλλο οὐθὲν γένος ὃ μὴ τῆς ἀρετῆς δημιουργόν ἐστιν. τοῦτο δὲ δῆλον ἐκ τῆς ὑποθέσεως· τὸ μὲν γὰρ εὐδαιμονεῖν ἀναγκαῖον ὑπάρχειν μετὰ τῆς ἀρετῆς, εὐδαίμονα δὲ πόλιν οὐκ εἰς μέρος τι βλέψαντας δεῖ λέγειν αὐτῆς, ἀλλ' εἰς πάντας τοὺς πολίτας. φανερὸν δὲ καὶ ὅτι δεῖ τὰς κτήσεις εἶναι τούτων, εἴπερ ἀναγκαῖον εἶναι τοὺς γεωργοὺς δούλους ἢ βαρβάρους [ἢ] περιοίκους. λοιπὸν δ' ἐκ τῶν καταριθμηθέντων τὸ τῶν ἱερέων γένος. φανερὰ δὲ καὶ ἡ τούτων τάξις. οὔτε γὰρ γεωργὸν οὔτε βάνουσον ἱερέα καταστατέον (ὑπὸ γὰρ τῶν πολιτῶν πρέπει τιμᾶσθαι τοὺς θεοὺς)· ἐπεὶ δὲ διήρηται τὸ πολιτικὸν εἰς δύο μέρη, τοῦτ' ἐστὶ τό τε ὀπλιτικὸν καὶ τὸ βουλευτικόν, πρέπει δὲ τὴν τε θεραπείαν ἀποδιδόναι τοῖς θεοῖς καὶ [τὴν] ἀνάπαυσιν ἔχειν [περὶ αὐτοὺς] τοὺς διὰ τὸν χρόνον ἀπειρηκότας, τούτοις ἂν εἴη τὰς <περὶ αὐτοὺς> ἱερωσύνας ἀποδοτέον.

ὧν μὲν τοίνυν ἄνευ πόλις οὐ συνίσταται καὶ ὅσα μέρη πόλεως, εἴρηται (γεωργοὺς μὲν γὰρ καὶ τεχνίτας καὶ πᾶν τὸ θητικὸν ἀναγκαῖον ὑπάρχειν ταῖς πόλεσιν, μέρη δὲ τῆς πόλεως τό τε ὀπλιτικὸν καὶ βουλευτικόν), καὶ κεχώρισται δὴ τούτων ἕκαστον, τὸ μὲν ἄει τὸ δὲ κατὰ μέρος.

Ἔοικε δὲ οὐ νῦν οὐδὲ νεωστὶ τοῦτ' εἶναι γνώριμον τοῖς περὶ πολιτείας φιλοσοφοῦσιν, ὅτι δεῖ διηρῆσθαι χωρὶς κατὰ γένη [1329b] τὴν πόλιν καὶ τό τε μάχιμον ἕτερον εἶναι καὶ τὸ γεωργοῦν. ἐν Αἰγύπτῳ τε γὰρ ἔχει τὸν τρόπον τοῦτον ἔτι καὶ νῦν, τὰ τε περὶ τὴν Κρήτην, τὰ μὲν οὖν περὶ Αἴγυπτον Σεσώστριος, ὡς φασιν, οὕτω νομοθετήσαντος, Μίνω δὲ τὰ περὶ Κρήτην. ἀρχαῖα δὲ ἔοικεν εἶναι καὶ τῶν συσσιτίων ἢ τάξις, τὰ μὲν περὶ Κρήτην γενόμενα περὶ τὴν Μίνω βασιλείαν, τὰ δὲ περὶ τὴν Ἰταλίαν πολλῶ παλαιότερα τούτων. φασὶ γὰρ οἱ λόγιοι τῶν ἐκεῖ κατοικούντων Ἰταλὸν τινα γενέσθαι βασιλέα τῆς Οἰνωτρίας, ἀφ' οὗ τό τε ὄνομα μεταβαλόντας Ἰταλοὺς ἀντ' Οἰνωτρῶν κληθῆναι καὶ τὴν ἀκτὴν ταύτην τῆς Εὐρώπης Ἰταλίαν τοῦνομα λαβεῖν, ὅση τετύχηκεν ἐντὸς οὕσα τοῦ κόλπου τοῦ Σκυλλητικοῦ καὶ τοῦ Λαμητικοῦ· ἀπέχει δὲ ταῦτα ἀπ' ἀλλήλων ὁδὸν ἡμισείας ἡμέρας. τοῦτον δὲ λέγουσι τὸν Ἰταλὸν νομάδας τοὺς Οἰνωτροὺς ὄντας ποιῆσαι γεωργοὺς, καὶ νόμους ἄλλους τε αὐτοῖς θέσθαι καὶ τὰ συσσίτια καταστῆσαι πρῶτον· διὸ καὶ νῦν ἔτι τῶν ἀπ' ἐκείνου τινὲς χρῶνται τοῖς συσσιτίοις καὶ τῶν νόμων ἐνίοις. ὥκουν δὲ τὸ μὲν πρὸς τὴν Τυρρηνίαν Ὀπικοὶ καὶ πρότερον καὶ νῦν καλούμενοι τὴν ἐπωνυμίαν Αὔσονες, τὸ δὲ πρὸς τὴν Ἰαπυγίαν καὶ τὸν Ἴόνιον Χῶνες, τὴν καλουμένην Σιρῖτιν· ἦσαν δὲ καὶ οἱ Χῶνες Οἰνωτροὶ τὸ γένος. ἡ μὲν οὖν τῶν συσσιτίων τάξις ἐντεῦθεν γέγονε πρῶτον, ὃ δὲ χωρισμὸς ὁ κατὰ γένος τοῦ πολιτικοῦ πλήθους ἐξ Αἰγύπτου· πολὺ γὰρ ὑπερτείνει τοῖς χρόνοις τὴν Μίνω βασιλείαν ἢ Σεσώστριος. σχεδὸν μὲν οὖν καὶ τὰ ἄλλα δεῖ νομίζειν εὐρῆσθαι πολλάκις ἐν τῷ πολλῷ χρόνῳ, μᾶλλον δ' ἀπειράκις. τὰ μὲν γὰρ ἀναγκαῖα τὴν χρεῖαν διδάσκειν εἰκὸς αὐτήν, τὰ δ' εἰς εὐσχημοσύνην καὶ περιουσίαν ὑπαρχόντων ἤδη τούτων εὐλογον λαμβάνειν τὴν αὔξησιν· ὥστε καὶ τὰ περὶ τὰς πολιτείας οἶεσθαι δεῖ τὸν αὐτὸν ἔχειν τρόπον. ὅτι δὲ πάντα ἀρχαῖα, σημεῖον τὰ περὶ Αἴγυπτον ἐστίν· οὗτοι γὰρ ἀρχαιότατοι μὲν δοκοῦσιν εἶναι, νόμων δὲ τετυχήκασιν «ἀεὶ» καὶ τάξεως πολιτικῆς. διὸ δεῖ τοῖς μὲν εὐρημένοις ἱκανῶς χρῆσθαι, τὰ δὲ παραλελειμμένα πειρᾶσθαι ζητεῖν.

ὅτι μὲν οὖν δεῖ τὴν χώραν εἶναι τῶν ὄπλα κεκτημένων καὶ τῶν τῆς πολιτείας μετεχόντων, εἴρηται πρότερον, καὶ διότι τοὺς γεωργοῦντας αὐτῶν ἐτέρους εἶναι δεῖ, καὶ πόσῃν τινὰ χρῆ καὶ ποίαν εἶναι τὴν χώραν· περὶ δὲ τῆς διανομῆς καὶ τῶν γεωργούντων, τίνας καὶ ποίους εἶναι χρῆ, λεκτέον πρῶτον, ἐπειδὴ οὔτε κοινὴν φάμεν εἶναι δεῖν τὴν [1330a] κτῆσιν ὥσπερ τινὲς

εἰρήκασιν, ἀλλὰ τῇ χρήσει φιλικῶς γινομένη κοινήν, οὗτ' ἀπορεῖν οὐθένα τῶν πολιτῶν τροφῆς. περὶ συσσιτίων τε συνδοκεῖ πᾶσι χρήσιμον εἶναι ταῖς εὖ κατεσκευασμέναις πόλεσιν ὑπάρχειν· δι' ἣν δ' αἰτίαν συνδοκεῖ καὶ ἡμῖν, ὕστερον ἐροῦμεν. δεῖ δὲ τούτων κοινωνεῖν πάντας τοὺς πολίτας, οὐ ῥάδιον δὲ τοὺς ἀπόρους ἀπὸ τῶν ἰδίων τε εἰσφέρειν τὸ συντεταγμένον καὶ διοικεῖν τὴν ἄλλην οἰκίαν. ἔτι δὲ τὰ πρὸς τοὺς θεοὺς δαπανήματα κοινὰ πάσης τῆς πόλεως ἐστίν. ἀναγκαῖον τοίνυν εἰς δύο μέρη διηρῆσθαι τὴν χώραν, καὶ τὴν μὲν εἶναι κοινήν τὴν δὲ τῶν ἰδιωτῶν, καὶ τούτων ἑκατέραν διηρῆσθαι δίχα πάλιν, τῆς μὲν κοινῆς τὸ μὲν ἕτερον μέρος εἰς τὰς πρὸς τοὺς θεοὺς λειτουργίας τὸ δὲ ἕτερον εἰς τὴν τῶν συσσιτίων δαπάνην, τῆς δὲ τῶν ἰδιωτῶν τὸ ἕτερον μέρος [τὸ] πρὸς τὰς ἐσχατίας, τὸ δὲ ἕτερον πρὸς πόλιν, ἵνα δύο κλήρων ἑκάστω νεμηθέντων ἀμφοτέρων τῶν τόπων πάντες μετέχωσιν. τό τε γὰρ ἴσον οὕτως ἔχει καὶ τὸ δίκαιον καὶ τὸ πρὸς τοὺς ἀστυγείτονας πολέμους ὁμοιοητικώτερον. ὅπου γὰρ μὴ τοῦτον ἔχει τὸν τρόπον, οἱ μὲν ὀλιγωροῦσι τῆς πρὸς τοὺς ὁμόρους ἔχθρας, οἱ δὲ λίαν φροντίζουν καὶ παρὰ τὸ καλόν. διὸ παρ' ἐνόμις νόμος ἐστὶ τοὺς γειννιώντας τοῖς ὁμόροις μὴ συμμετέχειν βουλῆς «περὶ» τῶν πρὸς αὐτοὺς πολέμων, ὥς διὰ τὸ ἴδιον οὐκ ἂν δυναμένους βουλευσασθαι καλῶς. τὴν μὲν οὖν χώραν ἀνάγκη διηρῆσθαι τὸν τρόπον τοῦτον διὰ τὰς προειρημένας αἰτίας· τοὺς δὲ γεωργήσοντας μάλιστα μὲν, εἰ δεῖ κατ' εὐχὴν, δούλους εἶναι, μήτε ὁμοφύλων πάντων «ὄντων» μήτε θυμοειδῶν (οὕτω γὰρ ἂν πρὸς τε τὴν ἐργασίαν εἶεν χρήσιμοι καὶ πρὸς τὸ μηδὲν νεωτερίζειν ἀσφαλεῖς), δεύτερον δὲ βαρβάρους, περιοίκους παραπλησίους τοῖς εἰρημένοις τὴν φύσιν, τούτων δὲ τοὺς μὲν ἐν τοῖς ἰδίοις εἶναι ἰδίους τῶν κεκτημένων τὰς οὐσίας, τοὺς δ' ἐπὶ τῇ κοινῇ γῇ κοινούς. τίνα δὲ δεῖ τρόπον χρῆσθαι δούλοις, καὶ διότι βέλτιον πᾶσι τοῖς δούλοις ἄθλον προκεῖσθαι τὴν ἐλευθερίαν, ὕστερον ἐροῦμεν.

Τὴν δὲ πόλιν ὅτι μὲν δεῖ κοινήν εἶναι τῆς ἡπείρου τε καὶ τῆς θαλάττης καὶ τῆς χώρας ἅπασης ὁμοίως ἐκ τῶν ἐνδεχομένων, εἴρηται πρότερον· αὐτῆς δὲ προσάντη εἶναι τὴν θέσιν εὐχεσθαι δεῖ κατ' εὐχὴν, πρὸς τέτταρα βλέποντας· πρῶτον μὲν ὥς ἀναγκαῖον πρὸς ὑγίειαν (αἱ τε γὰρ πρὸς ἕω τὴν ἔγκλισιν ἔχουσιν καὶ πρὸς τὰ πνεύματα τὰ πνέοντα ἀπὸ τῆς ἀνατολῆς ὑγιεινότεραι, δεύτερον δ' «αἱ» κατὰ βορέαν· εὐχείμεροι γὰρ αὗται μᾶλλον)· τῶν δὲ λοιπῶν [1330b] πρὸς τὸ τὰς πολιτικὰς πράξεις καὶ πολεμικὰς καλῶς ἔχειν. πρὸς μὲν οὖν τὰς πολεμικὰς αὐτοῖς μὲν εὐέξοδον εἶναι χρή, τοῖς δ' ἐναντίοις δυσπρόσοδον καὶ δυσπερίληπτον, ὑδάτων τε καὶ ναμάτων μάλιστα μὲν ὑπάρχειν πλῆθος οἰκεῖον, εἰ δὲ μή, τοῦτό γε εὐρηται διὰ τοῦ κατασκευάζειν ὑποδοχὰς ὁμβρίοις ὕδασι ἀφθόνους καὶ μεγάλας, ὥστε μηδέποτε ὑπολείπειν εἰργομένους τῆς χώρας διὰ πόλεμον· ἐπεὶ δὲ δεῖ περὶ ὑγιείας φροντίζειν τῶν



ἐνοικούντων, τοῦτο δ' ἐστὶν ἐν τῷ κεῖσθαι τὸν τόπον ἔν τε τοιούτῳ καὶ πρὸς τοιοῦτον καλῶς, δεύτερον δὲ ὕδασι νύγεινοις χρῆσθαι, καὶ τούτου τὴν ἐπιμέλειαν ἔχειν μὴ παρέργως. οἷς γὰρ πλείστοις χρώμεθα πρὸς τὸ σῶμα καὶ πλειστάκις, ταῦτα πλείστον συμβάλλεται πρὸς τὴν νύγειαν· ἡ δὲ τῶν ὑδάτων καὶ τοῦ πνεύματος δύναμις τοιαύτην ἔχει τὴν φύσιν. διόπερ ἐν ταῖς εὐφρονούσαις δεῖ διωρίσθαι πόλεσιν, ἐὰν μὴ πάνθ' ὅμοια μὴδ' ἀφθονία τοιούτων ἢ ναμάτων, χωρὶς τὰ τε εἰς τροφήν ὕδατα καὶ τὰ πρὸς τὴν ἄλλην χρεῖαν.

περὶ δὲ τόπων ἐρυμνῶν οὐ πάσαις ὁμοίως ἔχει τὸ συμφέρον ταῖς πολιτείαις· οἷον ἀκρόπολις ὀλιγαρχικὸν καὶ μοναρχικόν, δημοκρατικὸν δ' ὀμαλότης, ἀριστοκρατικὸν δὲ οὐδέτερον, ἀλλὰ μᾶλλον ἰσχυροὶ τόποι πλείους. ἡ δὲ τῶν ἰδίων οἰκήσεων διάθεσις ἡδίων μὲν νομίζεται καὶ χρησιμωτέρα πρὸς τὰς ἄλλας πράξεις, ἂν εὖτομος ἢ καὶ κατὰ τὸν νεώτερον καὶ τὸν Ἱπποδάμειον τρόπον, πρὸς δὲ τὰς πολεμικὰς ἀσφαλείας τούναντίον ὡς εἶχον κατὰ τὸν ἀρχαῖον χρόνον· δυσείσοδος γὰρ ἐκείνη τοῖς ξενικοῖς καὶ δυσεξερεύνητος [τοῖς] ἐπιτιθεμένοις. διὸ δεῖ τούτων ἀμφοτέρων μετέχειν (ἐνδέχεται γάρ, ἂν τις οὕτως κατασκευάζῃ καθάπερ ἐν τοῖς γεωργίαις ἃς καλοῦσιν τινες τῶν ἀμπέλων συστάδας), καὶ τὴν μὲν ὅλην μὴ ποιεῖν πόλιν εὖτομον, κατὰ μέρη δὲ καὶ τόπους· οὕτω γὰρ καὶ πρὸς ἀσφάλειαν καὶ πρὸς κόσμον ἔξει καλῶς.

περὶ δὲ τειχῶν, οἱ μὴ φάσκοντες δεῖν ἔχειν τὰς τῆς ἀρετῆς ἀντιποιουμένας πόλεις λίαν ἀρχαίως ὑπολαμβάνουσιν, καὶ ταῦθ' ὀρῶντες ἐλεγχόμενας ἔργῳ τὰς ἐκείνως καλλωπισάμενας. ἔστι δὲ πρὸς μὲν τοὺς ὁμοίους καὶ μὴ πολὺ τῷ πλήθει διαφέροντας οὐ καλὸν τὸ πειρᾶσθαι σώζεσθαι διὰ τῆς τῶν τειχῶν ἐρυμνότητος· ἐπεὶ δὲ καὶ συμβαίνειν ἐνδέχεται πλείω τὴν ὑπεροχὴν γίγνεσθαι τῶν ἐπιόντων καὶ τῆς ἀνθρωπίνης καὶ τῆς ἐν τοῖς ὀλίγοις ἀρετῆς, εἰ δεῖ σώζεσθαι καὶ μὴ πάσχειν κακῶς μὴδὲ ὑβρίζεσθαι, τὴν ἀσφαλεστάτην ἐρυμνότητα τῶν τειχῶν οἰητέον εἶναι πολεμικωτάτην, [1331a] ἄλλως τε καὶ νῦν εὐρημένων τῶν περὶ τὰ βέλη καὶ τὰς μηχανὰς εἰς ἀκρίβειαν πρὸς τὰς πολιορκίας. ὅμοιον γὰρ τὸ τεῖχος μὴ περιβάλλειν ταῖς πόλεσιν ἀξιοῦν καὶ τὸ τὴν χώραν εὐέμβολον ζητεῖν καὶ περιαιρεῖν τοὺς ὀρεινοὺς τόπους, ὁμοίως δὲ καὶ ταῖς οἰκήσεσι ταῖς ἰδίαις μὴ περιβάλλειν τοίχους ὡς ἀνάνδρων ἐσομένων τῶν κατοικούντων. ἀλλὰ μὴν οὐδὲ τοῦτό γε δεῖ λανθάνειν, ὅτι τοῖς μὲν περιβεβλημένοις τεῖχος περὶ τὴν πόλιν ἔξεστιν ἀμφοτέρως χρῆσθαι ταῖς πόλεσιν, καὶ ὡς ἐχούσαις τεῖχος καὶ ὡς μὴ ἐχούσαις, τοῖς δὲ μὴ κεκτημένοις οὐκ ἔξεστιν. εἰ δὴ τοῦτον ἔχει τὸν τρόπον, οὐχ ὅτι τεῖχος μόνον περιβλητέον, ἀλλὰ καὶ τούτων ἐπιμελητέον, ὅπως καὶ πρὸς κόσμον ἔχη τῇ πόλει πρεπόντως καὶ πρὸς τὰς πολεμικὰς χρεῖας, τὰς τε ἄλλας

καὶ τὰς νῦν ἐπεξευρημένας. ὥσπερ γὰρ τοῖς ἐπιτιθεμένοις ἐπιμελές ἐστι δι' ὧν τρόπων πλεονεκτήσουσιν, οὕτω τὰ μὲν εὖρηται τὰ δὲ δεῖ ζητεῖν καὶ φιλοσοφεῖν καὶ τοὺς φυλαττομένους· ἀρχὴν γὰρ οὐδ' ἐπιχειροῦσιν ἐπιτίθεσθαι τοῖς εὖ παρεσκευασμένοις.

Ἐπεὶ δὲ δεῖ τὸ μὲν πλῆθος τῶν πολιτῶν ἐν συσσιτίοις κατανεμεῖσθαι, τὰ δὲ τεῖχη διεληφθαι φυλακτηρίοις καὶ πύργοις κατὰ τόπους ἐπικαίρους, δῆλον ὡς ταῦτα προκαλεῖται παρασκευάζειν ἓν τῶν συσσιτίων ἐν τούτοις τοῖς φυλακτηρίοις. καὶ ταῦτα μὲν δὴ τοῦτον ἂν τις διακοσμήσειε τὸν τρόπον· τὰς δὲ τοῖς θείοις ἀποδεδομένας οἰκήσεις καὶ τὰ κυριώτατα τῶν ἀρχείων συσσίτια ἀρμόττει τόπον ἐπιτήδειόν τε ἔχειν καὶ τὸν αὐτόν, ὅσα μὴ τῶν ἱερῶν ὁ νόμος ἀφορίζει χωρὶς ἢ τι μαντεῖον ἄλλο πυθόχρηστον. εἴη δ' ἂν τοιοῦτος ὁ τόπος ὅστις ἐπιφάνειάν τε ἔχει πρὸς τὴν τῆς θέσεως ἀρετὴν ἱκανῶς καὶ πρὸς τὰ γειννιῶντα μέρη τῆς πόλεως ἐρυμνοτέρως. πρέπει δ' ὑπὸ μὲν τοῦτον τὸν τόπον τοιαύτης ἀγορᾶς εἶναι κατασκευὴν οἷαν καὶ περὶ Θετταλίαν νομίζουσιν, ἣν ἐλευθέραν καλοῦσιν, αὕτη δ' ἐστὶν ἣν δεῖ καθαρὰν εἶναι τῶν ὠνίων πάντων, καὶ μήτε βάνανυσον μήτε γεωργὸν μήτ' ἄλλον μηδένα τοιοῦτον παραβάλλειν μὴ καλούμενον ὑπὸ τῶν ἀρχόντων. εἴη δ' ἂν εὐχαρὶς ὁ τόπος, εἰ καὶ τὰ γυμνάσια τῶν πρεσβυτέρων ἔχοι τὴν τάξιν ἐνταῦθα· πρέπει γὰρ διηρῆσθαι κατὰ τὰς ἡλικίας καὶ τοῦτον τὸν κόσμον, καὶ παρὰ μὲν τοῖς νεωτέροις ἄρχοντάς τινας διατρίβειν, τοὺς δὲ πρεσβυτέρους παρὰ τοῖς ἄρχουσιν· ἡ γὰρ ἐν ὀφθαλμοῖς τῶν ἀρχόντων παρουσία μάλιστα ἐμποιεῖ τὴν ἀληθινὴν αἰδῶ καὶ τὸν τῶν ἐλευθέρων [1331b] φόβον. τὴν δὲ τῶν ὠνίων ἀγορὰν ἑτέραν τε δεῖ ταύτης εἶναι καὶ χωρὶς, ἔχουσιν τόπον εὐσυνάγωγον τοῖς τε ἀπὸ τῆς θαλάττης πεμπομένοις καὶ τοῖς ἀπὸ τῆς χώρας πᾶσιν.

Ἐπεὶ δὲ τὸ προεστὸς διαιρεῖται τῆς πόλεως εἰς ἱερεῖς καὶ ἄρχοντας, πρέπει καὶ τῶν ἱερέων συσσίτια περὶ τὴν τῶν ἱερῶν οἰκοδομημάτων ἔχειν τὴν τάξιν. τῶν δ' ἀρχείων ὅσα περὶ τὰ συμβόλαια ποιεῖται τὴν ἐπιμέλειαν, περί τε γραφᾶς δικῶν καὶ τὰς κλήσεις καὶ τὴν ἄλλην τὴν τοιαύτην διοίκησιν, ἔτι δὲ περὶ τὴν ἀγορανομίαν καὶ τὴν καλουμένην ἀστυνομίαν, πρὸς ἀγορᾶ μὲν δεῖ καὶ συνόδῳ τινὶ κοινῇ κατεσκευάσθαι, τοιοῦτος δ' ὁ περὶ τὴν ἀναγκαίαν ἀγορὰν ἐστὶ τόπος· ἐνσχολάζειν μὲν γὰρ τὴν ἄνω τίθεμεν, ταύτην δὲ πρὸς τὰς ἀναγκαίας πράξεις. νενεμῆσθαι δὲ χρὴ τὴν εἰρημένην τάξιν καὶ τὰ περὶ τὴν χώραν· καὶ γὰρ ἐκεῖ τοῖς ἄρχουσιν οὐς καλοῦσιν οἱ μὲν ὑλωροὺς οἱ δὲ ἀγρονόμους καὶ φυλακτήρια καὶ συσσίτια πρὸς φυλακὴν ἀναγκαῖον ὑπάρχειν, ἔτι δὲ ἱερὰ κατὰ τὴν χώραν εἶναι νενεμημένα, τὰ μὲν θεοῖς τὰ δὲ ἥρωσιν. ἀλλὰ τὸ διατρίβειν νῦν ἀκριβολογουμένους καὶ λέγοντας περὶ τῶν τοιούτων ἀργόν ἐστίν· οὐ γὰρ χαλεπὸν ἐστὶ τὰ τοιαῦτα νοῆσαι, ἀλλὰ ποιῆσαι μᾶλλον·

τὸ μὲν γὰρ λέγειν εὐχῆς ἔργον ἐστί, τὸ δὲ συμβῆναι τύχης. διὸ περὶ μὲν τῶν τοιούτων τό γε ἐπὶ πλεῖον ἀφείσθω τὰ νῦν.

Περὶ δὲ τῆς πολιτείας αὐτῆς, ἐκ τίνων καὶ ποίων δεῖ συνεστάναι τὴν μέλλουσιν ἔσεσθαι πόλιν μακαρίαν καὶ πολιτεύσεσθαι καλῶς, λεκτέον. Ἐπεὶ δὲ δύο ἐστὶν ἐν οἷς γίγνεται τὸ εὖ πᾶσι, τούτοις δ' ἐστὶν ἐν μὲν ἐν τῷ τὸν σκοπὸν κεῖσθαι καὶ τὸ τέλος τῶν πράξεων ὀρθῶς, ἐν δὲ τὰς πρὸς τὸ τέλος φερούσας πράξεις εὐρίσκειν (ἐνδέχεται γὰρ ταῦτα καὶ διαφωνεῖν ἀλλήλοις καὶ συμφωνεῖν· ἐνίστε γὰρ ὁ μὲν σκοπὸς ἔκκειται καλῶς, ἐν δὲ τῷ πράττειν τοῦ τυχεῖν αὐτοῦ διαμαρτάνουσιν, ὅτε δὲ τῶν μὲν πρὸς τὸ τέλος πάντων ἐπιτυγχάνουσιν, ἀλλὰ τὸ τέλος ἔθεντο φαῦλον, ὅτε δὲ ἐκατέρου διαμαρτάνουσιν, οἷον περὶ ἰατρικὴν· οὔτε γὰρ ποῖόν τι δεῖ τὸ ὑγιαῖνον εἶναι σῶμα κρίνουσιν ἐνίστε καλῶς, οὔτε πρὸς τὸν ὑποκείμενον αὐτοῖς ὅρον τυγχάνουσι τῶν ποιητικῶν· δεῖ δ' ἐν ταῖς τέχναις καὶ ἐπιστήμασι ταῦτα ἀμφοτέρωτερά κρατεῖσθαι, τὸ τέλος καὶ τὰς εἰς τὸ τέλος πράξεις), ὅτι μὲν οὖν τοῦ τε εὖ ζῆν καὶ τῆς εὐδαιμονίας ἐφίενται πάντες, φανερόν, ἀλλὰ τούτων τοῖς μὲν ἐξουσία τυγχάνει τοῖς δὲ οὐ, διὰ τινὰ τύχην ἢ φύσιν (δεῖται γὰρ καὶ χορηγίας [1332a] τινὸς τὸ ζῆν καλῶς, τούτου δὲ ἐλάττονος μὲν τοῖς ἄμεινον διακειμένοις, πλείονος δὲ τοῖς χεῖρον), οἱ δ' εὐθύς οὐκ ὀρθῶς ζητοῦσι τὴν εὐδαιμονίαν, ἐξουσίας ὑπαρχούσης. Ἐπεὶ δὲ τὸ προκείμενόν ἐστι τὴν ἀρίστην πολιτείαν ἰδεῖν, αὕτη δ' ἐστὶ καθ' ἣν ἄριστ' ἂν πολιτεύοιτο πόλις, ἄριστα δ' ἂν πολιτεύοιτο καθ' ἣν εὐδαιμονεῖν μάλιστα ἐνδέχεται τὴν πόλιν, δῆλον ὅτι τὴν εὐδαιμονίαν δεῖ, τί ἐστι, μὴ λανθάνειν.

φαμέν δὲ (καὶ διωρίσμεθα ἐν τοῖς ἠθικοῖς, εἴ τι τῶν λόγων ἐκείνων ὄφελος) ἐνέργειαν εἶναι καὶ χρῆσιν ἀρετῆς τελείαν, καὶ ταύτην οὐκ ἐξ ὑποθέσεως ἀλλ' ἀπλῶς. λέγω δ' ἐξ ὑποθέσεως τἀναγκαῖα, τὸ δ' ἀπλῶς τὸ καλῶς· οἷον τὰ περὶ τὰς δικαίας πράξεις· αἱ <γὰρ> δίκαιαι τιμωρίαι καὶ κολάσεις ἀπ' ἀρετῆς μὲν εἰσιν, ἀναγκαῖαι δέ, καὶ τὸ καλῶς ἀναγκαίως ἔχουσιν (αἰρετώτερον μὲν γὰρ μηδενὸς δεῖσθαι τῶν τοιούτων μήτε τὸν ἄνδρα μήτε τὴν πόλιν), αἱ δ' ἐπὶ τὰς τιμὰς καὶ τὰς εὐπορίας ἀπλῶς εἰσι κάλλισται πράξεις. τὸ μὲν γὰρ ἕτερον κακοῦ τινος ἀναίρεσις ἐστίν, αἱ τοιαῦται δὲ πράξεις τούναντίον· κατασκευαὶ γὰρ ἀγαθῶν εἰσι καὶ γεννήσεις. χρήσαιο δ' ἂν ὁ σπουδαῖος ἄνθρωπος καὶ πενία καὶ νόσος καὶ ταῖς ἄλλαις τύχαις ταῖς φαύλαις καλῶς· ἀλλὰ τὸ μακάριον ἐν τοῖς ἐναντίοις ἐστίν (καὶ γὰρ τοῦτο διώριστα κατὰ τοὺς ἠθικοὺς λόγους, ὅτι τοιοῦτός ἐστιν ὁ σπουδαῖος, ὃς διὰ τὴν ἀρετὴν [τὰ] ἀγαθὰ ἐστὶ τὰ ἀπλῶς ἀγαθὰ, δῆλον δ' ὅτι καὶ τὰς χρήσεις ἀναγκαῖον σπουδαίας καὶ καλὰς εἶναι ταύτας ἀπλῶς)· διὸ καὶ νομίζουσιν ἄνθρωποι τῆς εὐδαιμονίας αἷτια τὰ ἐκτὸς εἶναι τῶν ἀγαθῶν, ὥσπερ εἰ τοῦ κιθαρίζειν

λαμπρὸν καὶ καλῶς αἰτιῶντο τὴν λύραν μᾶλλον τῆς τέχνης.

ἀναγκαῖον τοίνυν ἐκ τῶν εἰρημένων τὰ μὲν ὑπάρχειν, τὰ δὲ παρασκευάσαι τὸν νομοθέτην. διὸ κατ' εὐχὴν εὐχόμεθα τῇ τῆς πόλεως συστάσει ὧν ἡ τύχη κυρία (κυρίαν γὰρ ὑπάρχειν τίθεμεν)· τὸ δὲ σπουδαίαν εἶναι τὴν πόλιν οὐκέτι τύχης ἔργον ἀλλ' ἐπιστήμης καὶ προαιρέσεως. ἀλλὰ μὴν σπουδαία γε πόλις ἐστὶ τῷ τοῦς πολίτας τοῦς μετέχοντας τῆς πολιτείας εἶναι σπουδαίους· ἡμῖν δὲ πάντες οἱ πολῖται μετέχουσι τῆς πολιτείας. τοῦτ' ἄρα σκεπτέον, πῶς ἀνὴρ γίνεται σπουδαῖος. καὶ γὰρ εἰ πάντας ἐνδέχεται σπουδαίους εἶναι, μὴ καθ' ἕκαστον δὲ τῶν πολιτῶν, οὕτως αἰρετώτερον· ἀκολουθεῖ γὰρ τῷ καθ' ἕκαστον καὶ τὸ πάντα. ἀλλὰ μὴν ἀγαθοί γε καὶ σπουδαῖοι γίνονται διὰ τριῶν. τὰ τρία δὲ ταῦτά ἐστι φύσις ἔθος λόγος. καὶ γὰρ φῦναι δεῖ πρῶτον, οἷον ἄνθρωπον ἀλλὰ μὴ τῶν ἄλλων τι ζώων· οὕτω καὶ ποιόν τινα τὸ σῶμα καὶ τὴν ψυχὴν. ἔνια δὲ οὐθὲν ὄφελος [1332b] φῦναι· τὰ γὰρ ἔθνη μεταβαλεῖν ποιεῖ· ἔνια γὰρ εἴσι, διὰ τῆς φύσεως ἐπαμφοτερίζοντα, διὰ τῶν ἐθῶν ἐπὶ τὸ χεῖρον καὶ τὸ βέλτιον. τὰ μὲν οὖν ἄλλα τῶν ζώων μάλιστα μὲν τῇ φύσει ζῇ, μικρὰ δ' ἔνια καὶ τοῖς ἔθεσιν, ἄνθρωπος δὲ καὶ λόγῳ· μόνος γὰρ ἔχει λόγον· ὥστε δεῖ ταῦτα συμφωνεῖν ἀλλήλοις. πολλὰ γὰρ παρὰ τοὺς ἐθισμοὺς καὶ τὴν φύσιν πράττουσι διὰ τὸν λόγον, ἐὰν πεισθῶσιν ἄλλως ἔχειν βέλτιον. τὴν μὲν τοίνυν φύσιν οἷους εἶναι δεῖ τοὺς μέλλοντας εὐχειρώτους ἔσεσθαι τῷ νομοθέτῃ, διωρίσμεθα πρότερον· τὸ δὲ λοιπὸν ἔργον ἤδη παιδείας. τὰ μὲν γὰρ ἐθιζόμενοι μανθάνουσι τὰ δ' ἀκούοντες.

Ἐπεὶ δὲ πᾶσα πολιτικὴ κοινωνία συνέστηκεν ἐξ ἀρχόντων καὶ ἀρχομένων, τοῦτο δὲ σκεπτέον, εἰ ἐτέρους εἶναι δεῖ τοὺς ἄρχοντας καὶ τοὺς ἀρχομένους ἢ τοὺς αὐτοὺς διὰ βίου· δῆλον γὰρ ὡς ἀκολουθεῖν δεήσει καὶ τὴν παιδείαν κατὰ τὴν διαίρεσιν ταύτην. εἰ μὲν τοίνυν εἴησαν τοσοῦτον διαφέροντες ἄτεροι τῶν ἄλλων ὅσον τοὺς θεοὺς καὶ τοὺς ἥρωας ἡγούμεθα τῶν ἀνθρώπων διαφέρειν, εὐθὺς πρῶτον κατὰ τὸ σῶμα πολλὴν ἔχοντας ὑπερβολήν, εἴτα κατὰ τὴν ψυχὴν, ὥστε ἀναμφισβήτητον εἶναι καὶ φανεράν τὴν ὑπεροχὴν τοῖς ἀρχομένοις τὴν τῶν ἀρχόντων, δῆλον ὅτι βέλτιον αἰεὶ τοὺς αὐτοὺς τοὺς μὲν ἄρχειν τοὺς δ' ἄρχεσθαι καθάπαξ· ἐπεὶ δὲ τοῦτ' οὐ ρᾶδιον λαβεῖν οὐδ' ἔστιν ὥσπερ ἐν Ἰνδοῖς φησι Σκύλαξ εἶναι τοὺς βασιλέας τοσοῦτον διαφέροντας τῶν ἀρχομένων, φανερόν ὅτι διὰ πολλὰς αἰτίας ἀναγκαῖον πάντας ὁμοίως κοινωνεῖν τοῦ κατὰ μέρος ἄρχειν καὶ ἄρχεσθαι. τό τε γὰρ ἴσον ταῦτόν τοῖς ὁμοίοις, καὶ χαλεπὸν μένειν τὴν πολιτείαν τὴν συνεστηκυῖαν παρὰ τὸ δίκαιον. μετὰ γὰρ τῶν ἀρχομένων ὑπάρχουσι νεωτερίζειν βουλόμενοι πάντες οἱ κατὰ τὴν χώραν, τοσοῦτους τε εἶναι τοὺς ἐν τῷ πολιτεύματι τὸ πλῆθος ὥστ' εἶναι κρείττους πάντων τούτων ἔν τι τῶν ἀδυνάτων ἐστίν. ἀλλὰ μὴν ὅτι γε δεῖ τοὺς

ἄρχοντας διαφέρειν τῶν ἀρχομένων, ἀναμφισβήτητον. πῶς οὖν ταῦτ' ἔσται καὶ πῶς μεθέξουσιν, δεῖ σκέψασθαι τὸν νομοθέτην. εἴρηται δὲ πρότερον περὶ αὐτοῦ. ἡ γὰρ φύσις δέδωκε τὴν αἵρεσιν, ποιήσασα αὐτὸ τὸ γένει ταῦτ' ὅτι μὲν νεώτερον τὸ δὲ πρεσβύτερον, ὧν τοῖς μὲν ἄρχεσθαι πρέπει τοῖς δ' ἄρχειν· ἀγανακτεῖ δὲ οὐδεὶς καθ' ἡλικίαν ἀρχόμενος, οὐδὲ νομίζει εἶναι κρείττων, ἄλλως τε καὶ μέλλων ἀντιλαμβάνειν τοῦτον τὸν ἔρانون ὅταν τύχη τῆς ἱκνουμένης ἡλικίας.

ἔστι μὲν ἄρα ὡς τοὺς αὐτοὺς ἄρχειν καὶ ἄρχεσθαι φατέον, ἔστι δὲ ὡς ἑτέρους. ὥστε καὶ τὴν [1333a] παιδείαν ἔστιν ὡς τὴν αὐτὴν ἀναγκαῖον, ἔστι δ' ὡς ἑτέραν εἶναι. τὸν [τε] γὰρ μέλλοντα καλῶς ἄρχειν ἀρχθῆναί φασιν δεῖν πρῶτον. (ἔστι δὲ ἀρχή, καθάπερ ἐν τοῖς πρώτοις εἴρηται λόγοις, ἡ μὲν τοῦ ἄρχοντος χάριν ἡ δὲ τοῦ ἀρχομένου. τούτων δὲ τὴν μὲν δεσποτικὴν εἶναί φασιν, τὴν δὲ τῶν ἐλευθέρων. διαφέρει δ' ἕνα τῶν ἐπιταττομένων οὐ τοῖς ἔργοις ἀλλὰ τῷ τίνος ἕνεκα. διὸ πολλὰ τῶν εἶναι δοκούντων διακονικῶν ἔργων καὶ τῶν νέων τοῖς ἐλευθέροις καλὸν διακονεῖν· πρὸς γὰρ τὸ καλὸν καὶ τὸ μὴ καλὸν οὐχ οὕτω διαφέρουσιν αἱ πράξεις καθ' αὐτὰς ὡς ἐν τῷ τέλει καὶ τῷ τίνος ἕνεκεν.) ἐπεὶ δὲ πολίτου καὶ ἄρχοντος τὴν αὐτὴν ἀρετὴν εἶναί φασιν καὶ τοῦ ἀρίστου ἀνδρός, τὸν δ' αὐτὸν ἀρχόμενόν τε δεῖν γίνεσθαι πρότερον καὶ ἄρχοντα ὕστερον, τοῦτ' ἂν εἴη τῷ νομοθέτῃ πραγματευτέον, ὅπως ἄνδρες ἀγαθοὶ γίνωνται, καὶ διὰ τίνων ἐπιτηδευμάτων, καὶ τί τὸ τέλος τῆς ἀρίστης ζωῆς.

διήρηται δὲ δύο μέρη τῆς ψυχῆς, ὧν τὸ μὲν ἔχει λόγον καθ' αὐτό, τὸ δ' οὐκ ἔχει μὲν καθ' αὐτό, λόγῳ δ' ὑπακούειν δυνάμενον· ὧν φασιν τὰς ἀρετὰς εἶναι καθ' ὅς ἄνθρωπος ἀγαθὸς λέγεται πως. τούτων δὲ ἐν ποτέρῳ μᾶλλον τὸ τέλος, τοῖς μὲν οὕτω διαιροῦσιν ὡς ἡμεῖς φασιν οὐκ ἄδηλον πῶς λεκτέον. αἰεὶ γὰρ τὸ χεῖρον τοῦ βελτίονός ἐστιν ἕνεκεν, καὶ τοῦτο φανερόν ὁμοίως ἐν τε τοῖς κατὰ τέχνην καὶ τοῖς κατὰ φύσιν· βέλτιον δὲ τὸ λόγον ἔχον. διήρηται τε διχῆ, καθ' ὅνπερ εἰώθαμεν τρόπον διαιρεῖν· ὁ μὲν γὰρ πρακτικὸς ἐστὶ λόγος ὁ δὲ θεωρητικὸς. ὡσαύτως οὖν ἀνάγκη διηρῆσθαι καὶ τοῦτο τὸ μέρος δηλονότι. καὶ τὰς πράξεις δ' ἀνάλογον ἐροῦμεν ἔχειν, καὶ δεῖ τὰς τοῦ φύσει βελτίονος αἰρετωτέρας εἶναι τοῖς δυναμένοις τυγχάνειν ἢ πασῶν ἢ τοῖν δυοῖν· αἰεὶ γὰρ ἐκάστῳ τοῦθ' αἰρετώτατον οὐ τυχεῖν ἔστιν ἀκροτάτου. διήρηται δὲ καὶ πᾶς ὁ βίος εἰς ἀσχολίαν καὶ σχολὴν καὶ εἰς πόλεμον καὶ εἰρήνην, καὶ τῶν πρακτικῶν τὰ μὲν [εἰς τὰ] ἀναγκαῖα καὶ χρήσιμα τὰ δὲ [εἰς τὰ] καλὰ. περὶ ὧν ἀνάγκη τὴν αὐτὴν αἵρεσιν εἶναι καὶ τοῖς τῆς ψυχῆς μέρεσι καὶ ταῖς πράξεσιν αὐτῶν, πόλεμον μὲν εἰρήνης χάριν, ἀσχολίαν δὲ σχολῆς, τὰ δ' ἀναγκαῖα καὶ χρήσιμα τῶν καλῶν ἕνεκεν. πρὸς πάντα μὲν τοίνυν τῷ πολιτικῷ βλέποντι

νομοθετητέον, καὶ κατὰ τὰ μέρη τῆς ψυχῆς καὶ κατὰ τὰς πράξεις αὐτῶν, μᾶλλον δὲ πρὸς τὰ βελτίω καὶ τὰ τέλη. τὸν αὐτὸν δὲ τρόπον καὶ περὶ τοὺς βίους καὶ τὰς τῶν πραγμάτων αἱρέσεις· δεῖ μὲν γὰρ ἀσχολεῖν δύνασθαι καὶ πολεμεῖν, [1333b] μᾶλλον δ' εἰρήνην ἄγειν καὶ σχολάζειν, καὶ τὰναγκαῖα καὶ τὰ χρήσιμα δὲ πράττειν, τὰ δὲ καλὰ δεῖ μᾶλλον. ὥστε πρὸς τούτους τοὺς σκοποὺς καὶ παῖδας ἔτι ὄντας παιδευτέον καὶ τὰς ἄλλας ἡλικίας, ὅσαι δέονται παιδείας.

οἱ δὲ νῦν ἄριστα δοκοῦντες πολιτεύεσθαι τῶν Ἑλλήνων, καὶ τῶν νομοθετῶν οἱ ταύτας καταστήσαντες τὰς πολιτείας, οὔτε πρὸς τὸ βέλτιστον τέλος φαίνονται συντάξαντες τὰ περὶ τὰς πολιτείας οὔτε πρὸς πάσας τὰς ἀρετὰς τοὺς νόμους καὶ τὴν παιδείαν, ἀλλὰ φορτικῶς ἀπέκλιναν πρὸς τὰς χρησίμους εἶναι δοκούσας καὶ πλεονεκτικωτέρας. παραπλησίως δὲ τούτοις καὶ τῶν ὕστερόν τινες γραψάντων ἀπεφάναντο τὴν αὐτὴν δόξαν· ἐπαινοῦντες γὰρ τὴν Λακεδαιμονίων πολιτείαν ἄγανται τοῦ νομοθέτου τὸν σκοπὸν, ὅτι πάντα πρὸς τὸ κρατεῖν καὶ πρὸς πόλεμον ἐνομοθέτησεν. ἃ καὶ κατὰ τὸν λόγον ἐστὶν εὐέλεγκτα καὶ τοῖς ἔργοις ἐξελέγκεται νῦν. ὥσπερ γὰρ οἱ πλεῖστοι τῶν ἀνθρώπων ζηλοῦσι τὸ πολλῶν δεσπόζειν, ὅτι πολλὴ χορηγία γίνεται τῶν εὐτυχημάτων, οὕτω καὶ Θίβρων ἀγάμενος φαίνεται τὸν τῶν Λακῶνων νομοθέτην, καὶ τῶν ἄλλων ἕκαστος τῶν γραφόντων περὶ <τῆς> πολιτείας αὐτῶν, ὅτι διὰ τὸ γεγυμνάσθαι πρὸς τοὺς κινδύνους πολλῶν ἦρχον· καίτοι δῆλον ὡς ἐπειδὴ νῦν γε οὐκέτι ὑπάρχει τοῖς Λάκωσι τὸ ἄρχειν, οὐκ εὐδαίμονες, οὐδ' ὁ νομοθέτης ἀγαθός. ἔτι δὲ τοῦτο γελοῖον, εἰ μένοντες ἐν τοῖς νόμοις αὐτοῦ, καὶ μηδενὸς ἐμποδίζοντος πρὸς τὸ χρῆσθαι τοῖς νόμοις, ἀποβεβλήκασι τὸ ζῆν καλῶς. οὐκ ὀρθῶς δ' ὑπολαμβάνουσιν οὐδὲ περὶ τῆς ἀρχῆς ἣν δεῖ τιμῶντα φαίνεσθαι τὸν νομοθέτην· τοῦ γὰρ δεσποτικῶς ἄρχειν ἢ τῶν ἐλευθέρων ἀρχὴ καλλίων καὶ μᾶλλον μετ' ἀρετῆς. ἔτι δὲ οὐ διὰ τοῦτο δεῖ τὴν πόλιν εὐδαίμονα νομίζειν καὶ τὸν νομοθέτην ἐπαινεῖν, ὅτι κρατεῖν ἤσκησεν ἐπὶ τὸ τῶν πέλας ἄρχειν· ταῦτα γὰρ μεγάλην ἔχει βλάβην. δῆλον γὰρ ὅτι καὶ τῶν πολιτῶν τῷ δυναμένῳ τοῦτο πειρατέον διώκειν, ὅπως δύνηται τῆς οἰκείας πόλεως ἄρχειν· ὅπερ ἐγκαλοῦσιν οἱ Λάκωνες Πausanías τῷ βασιλεῖ, καίπερ ἔχοντι τηλικαύτην τιμὴν.

οὔτε δὲ πολιτικὸς τῶν τοιούτων λόγων καὶ νόμων οὐθεὶς οὔτε ὠφέλιμος οὔτε ἀληθής ἐστιν. ταῦτά γὰρ ἄριστα καὶ ἰδίᾳ καὶ κοινῇ, τὸν <τε> νομοθέτην ἐμποιεῖν δεῖ ταῦτα ταῖς ψυχαῖς τῶν ἀνθρώπων· τὴν τε τῶν πολεμικῶν ἄσκησιν οὐ τούτου χάριν δεῖ μελετᾶν, ἵνα καταδουλώσωνται τοὺς ἀναξίους, ἀλλ' ἵνα πρῶτον μὲν αὐτοὶ μὴ δουλεύσωσιν ἑτέροις, ἔπειτα ὅπως ζητῶσι τὴν ἡγεμονίαν τῆς [1334a] ὠφελείας ἕνεκα τῶν ἀρχομένων, ἀλλὰ μὴ πάντων

δεσποτείας· τρίτον δὲ τὸ δεσπάζειν τῶν ἀξίων δουλεύειν. ὅτι δὲ δεῖ τὸν νομοθέτην μᾶλλον σπουδάζειν ὅπως καὶ τὴν περὶ τὰ πολεμικὰ καὶ τὴν ἄλλην νομοθεσίαν τοῦ σχολάζειν ἔνεκεν τάξῃ καὶ τῆς εἰρήνης, μαρτυρεῖ τὰ γινόμενα τοῖς λόγοις. αἱ γὰρ πλεῖσται τῶν τοιούτων πόλεων πολεμοῦσαι μὲν σώζονται, κατακτησάμεναι δὲ τὴν ἀρχὴν ἀπόλλυνται. τὴν γὰρ βαφὴν ἀνιᾶσιν, ὥσπερ ὁ σίδηρος, εἰρήνην ἄγοντες. αἴτιος δ' ὁ νομοθέτης οὐ παιδεύσας δύνασθαι σχολάζειν.

Ἐπεὶ δὲ τὸ αὐτὸ τέλος εἶναι φαίνεται καὶ κοινῇ καὶ ἰδίᾳ τοῖς ἀνθρώποις, καὶ τὸν αὐτὸν ὅρον ἀναγκαῖον εἶναι τῷ τε ἀρίστῳ ἀνδρὶ καὶ τῇ ἀρίστη πολιτείᾳ, φανερόν ὅτι δεῖ τὰς εἰς τὴν σχολὴν ἀρετὰς ὑπάρχειν· τέλος γάρ, ὥσπερ εἴρηται πολλάκις, εἰρήνη μὲν πολέμου σχολὴ δ' ἀσχολίας. χρήσιμοι δὲ τῶν ἀρετῶν εἰσι πρὸς τὴν σχολὴν καὶ διαγωγὴν ὧν τε ἐν τῇ σχολῇ τὸ ἔργον καὶ ὧν ἐν τῇ ἀσχολίᾳ. δεῖ γὰρ πολλὰ τῶν ἀναγκαίων ὑπάρχειν ὅπως ἐξῇ σχολάζειν· διὸ σῶφρονα τὴν πόλιν εἶναι προσήκει καὶ ἀνδρείαν καὶ καρτερικὴν· κατὰ γὰρ τὴν παροιμίαν, οὐ σχολὴ δούλοις, οἱ δὲ μὴ δυνάμενοι κινδυνεύειν ἀνδρείως δοῦλοι τῶν ἐπιόντων εἰσίν. ἀνδρείας μὲν οὖν καὶ καρτερίας δεῖ πρὸς τὴν ἀσχολίαν, φιλοσοφίας δὲ πρὸς τὴν σχολήν, σωφροσύνης δὲ καὶ δικαιοσύνης ἐν ἀμφοτέροις τοῖς χρόνοις, καὶ μᾶλλον εἰρήνην ἄγουσι καὶ σχολάζουσιν· ὁ μὲν γὰρ πόλεμος ἀναγκάζει δικαίους εἶναι καὶ σωφρονεῖν, ἡ δὲ τῆς εὐτυχίας ἀπόλαυσις καὶ τὸ σχολάζειν μετ' εἰρήνης ὑβριστὰς ποιεῖ μᾶλλον. πολλῆς οὖν δεῖ δικαιοσύνης καὶ πολλῆς σωφροσύνης «μετέχειν» τοὺς ἄριστα δοκοῦντας πράττειν καὶ πάντων τῶν μακαριζομένων ἀπολαύοντας, οἷον εἴ τινές εἰσιν, ὥσπερ οἱ ποιηταὶ φασιν, ἐν μακάρων νήσοις· μάλιστα γὰρ οὗτοι δεήσονται φιλοσοφίας καὶ σωφροσύνης καὶ δικαιοσύνης, ὅσω μᾶλλον σχολάζουσιν ἐν ἀφθονίᾳ τῶν τοιούτων ἀγαθῶν. διότι μὲν οὖν τὴν μέλλουσαν εὐδαιμονήσκειν καὶ σπουδαίαν ἔσεσθαι πόλιν τούτων δεῖ τῶν ἀρετῶν μετέχειν, φανερόν. αἰσχροῦ γὰρ ὄντος «τοῦ» μὴ δύνασθαι χρῆσθαι τοῖς ἀγαθοῖς, ἔτι μᾶλλον τὸ μὴ δύνασθαι ἐν τῷ σχολάζειν χρῆσθαι, ἀλλ' ἀσχολοῦντας μὲν καὶ πολεμοῦντας φαίνεσθαι ἀγαθούς, εἰρήνην δ' ἄγοντας καὶ σχολάζοντας ἀνδραποδώδεις. διὸ δεῖ μὴ καθάπερ ἡ Λακεδαιμονίων πόλις τὴν ἀρετὴν ἀσκεῖν. ἐκεῖνοι μὲν γὰρ οὐ ταύτῃ διαφέρουσι τῶν ἄλλων, [1334b] τῷ μὴ νομίζειν ταῦτά τοῖς ἄλλοις μέγιστα τῶν ἀγαθῶν, ἀλλὰ τῷ γίνεσθαι ταῦτα μᾶλλον διὰ τινὸς ἀρετῆς· ἐπεὶ δὲ μείζω τε ἀγαθὰ ταῦτα καὶ τὴν ἀπόλαυσιν τὴν τούτων ἢ τὴν τῶν ἀρετῶν. καὶ ὅτι δι' αὐτήν, φανερόν ἐκ τούτων· πῶς δὲ καὶ διὰ τίνων ἔσται, τοῦτο δὴ θεωρητέον.

τυγχάνομεν δὲ διηρημένοι πρότερον ὅτι φύσεως καὶ ἔθους καὶ λόγου δεῖ. τούτων δὲ ποίους μὲν τινὰς εἶναι χρὴ τὴν φύσιν, διώρισται πρότερον, λοιπὸν δὲ

θεωρῆσαι πότερον παιδευτέοι τῷ λόγῳ πρότερον ἢ τοῖς ἔθεσιν. ταῦτα γὰρ δεῖ πρὸς ἄλληλα συμφωνεῖν συμφωνίαν τὴν ἀρίστην· ἐνδέχεται γὰρ διημαρτηκέναι τὸν λόγον τῆς βελτίστης ὑποθέσεως, καὶ διὰ τῶν ἐθνῶν ὁμοίως ἦχθαι. φανερόν δὲ τοῦτό γε πρῶτον μὲν, καθάπερ ἐν τοῖς ἄλλοις, ὡς ἡ γένεσις ἀπ' ἀρχῆς ἐστὶ, καὶ τὸ τέλος ἀπὸ τινος ἀρχῆς «ἀρχὴ» ἄλλου τέλους, ὁ δὲ λόγος ἡμῖν καὶ ὁ νοῦς τῆς φύσεως τέλος, ὥστε πρὸς τούτους τὴν γένεσιν καὶ τὴν τῶν ἐθνῶν δεῖ παρασκευάζειν μελέτην· ἔπειτα ὥσπερ ψυχὴ καὶ σῶμα δύο ἐστίν, οὕτω καὶ τῆς ψυχῆς ὁρῶμεν δύο μέρη, τό τε ἄλογον καὶ τὸ λόγον ἔχον, καὶ τὰς ἕξεις τὰς τούτων δύο τὸν ἀριθμόν, ὧν τὸ μὲν ἐστὶν ὄρεξις τὸ δὲ νοῦς, ὥσπερ δὲ τὸ σῶμα πρότερον τῇ γενέσει τῆς ψυχῆς, οὕτω καὶ τὸ ἄλογον τοῦ λόγον ἔχοντος. φανερόν δὲ καὶ τοῦτο· θυμὸς γὰρ καὶ βούλησις, ἔτι δὲ ἐπιθυμία, καὶ γενομένοις εὐθὺς ὑπάρχει τοῖς παιδίοις, ὁ δὲ λογισμὸς καὶ ὁ νοῦς προῖοῦσιν ἐγγίγνεσθαι πέφυκεν. διὸ πρῶτον μὲν τοῦ σώματος τὴν ἐπιμέλειαν ἀναγκαῖον εἶναι προτέραν ἢ τὴν τῆς ψυχῆς, ἔπειτα τὴν τῆς ὀρέξεως, ἔνεκα μέντοι τοῦ νοῦ τὴν τῆς ὀρέξεως, τὴν δὲ τοῦ σώματος τῆς ψυχῆς.

Εἴπερ οὖν ἀπ' ἀρχῆς τὸν νομοθέτην ὁρᾶν δεῖ ὅπως βέλτιστα τὰ σώματα γένηται τῶν τρεφομένων, πρῶτον μὲν ἐπιμελητέον περὶ τὴν σύζευξιν, πότε καὶ ποίους τινὰς ὄντας χρὴ ποιεῖσθαι πρὸς ἀλλήλους τὴν γαμικὴν ὁμιλίαν. δεῖ δ' ἀποβλέποντα νομοθετεῖν ταύτην τὴν κοινωνίαν πρὸς αὐτούς τε καὶ τὸν τοῦ ζῆν χρόνον, ἵνα συγκαταβαίνωσι ταῖς ἡλικίαις ἐπὶ τὸν αὐτὸν καιρὸν καὶ μὴ διαφωνῶσιν αἱ δυνάμεις τοῦ μὲν ἔτι δυναμένου γεννᾶν τῆς δὲ μὴ δυναμένης, ἢ ταύτης μὲν τοῦ δ' ἀνδρὸς μή (ταῦτα γὰρ ποιεῖ καὶ στάσεις πρὸς ἀλλήλους καὶ διαφοράς)· ἔπειτα καὶ πρὸς τὴν τῶν τέκνων διαδοχὴν, δεῖ γὰρ οὔτε λίαν ὑπολείπεσθαι ταῖς ἡλικίαις τὰ τέκνα τῶν πατέρων (ἀνόνητος γὰρ τοῖς μὲν πρεσβυτέροις ἢ χάρις παρὰ τῶν τέκνων, ἢ δὲ παρὰ τῶν [1335a] πατέρων βοήθεια τοῖς τέκνοις), οὔτε λίαν πάρεγγυς εἶναι (πολλὴν γὰρ ἔχει δυσχέρειαν· ἢ τε γὰρ αἰδῶς ἥττον ὑπάρχει τοῖς τοιούτοις, ὥσπερ ἡλικιώταις, καὶ περὶ τὴν οἰκονομίαν ἐγκληματικὸν τὸ πάρεγγυς)· ἔτι δ', ὅθεν ἀρχόμενοι δεῦρο μετέβημεν, ὅπως τὰ σώματα τῶν γεννωμένων ὑπάρχη πρὸς τὴν τοῦ νομοθέτου βούλησιν.

σχεδὸν δὲ πάντα ταῦτα συμβαίνει κατὰ μίαν ἐπιμέλειαν. ἐπεὶ γὰρ ὥριστα τέλος τῆς γεννήσεως ὡς ἐπὶ τὸ πλεῖστον εἰπεῖν ἀνδράσι μὲν ὁ τῶν ἐβδομήκοντα ἐτῶν ἀριθμὸς ἔσχατος, πεντήκοντα δὲ γυναίξιν, δεῖ τὴν ἀρχὴν τῆς συζεύξεως κατὰ τὴν ἡλικίαν εἰς τοὺς χρόνους καταβαίνειν τούτους. ἔστι δ' ὁ τῶν νέων συνδυασμὸς φαῦλος πρὸς τὴν τεκνοποιίαν· ἐν γὰρ πᾶσι ζώοις ἀτελῇ τὰ τῶν νέων ἔκγονα, καὶ θηλυτόκα μᾶλλον καὶ μικρὰ τὴν μορφήν,



ὥστ' ἀναγκαῖον ταῦτὸ τοῦτο συμβαίνειν καὶ ἐπὶ τῶν ἀνθρώπων. τεκμήριον δέ· ἐν ὅσαις γὰρ τῶν πόλεων ἐπιχωριάζει τὸ νέους συζευγνύναι καὶ νέας, ἀτελεῖς καὶ μικροὶ τὰ σώματά εἰσιν. ἔτι δὲ ἐν τοῖς τόκοις αἱ νέαι πονοῦσιν τε μᾶλλον καὶ διαφθείρονται πλείους· διὸ καὶ τὸν χρησμὸν γενέσθαι τινές φασι διὰ τοιαύτην αἰτίαν τοῖς Τροιζηνίοις, ὥς πολλῶν διαφθειρομένων διὰ τὸ γαμίσκεσθαι τὰς νεωτέρας, ἀλλ' οὐ πρὸς τὴν τῶν καρπῶν κομιδὴν. ἔτι δὲ καὶ πρὸς σωφροσύνην συμφέρει τὰς ἐκδόσεις ποιεῖσθαι πρεσβυτέραις· ἀκολαστότεραι γὰρ εἶναι δοκοῦσι νέαι χρησάμεναι ταῖς συνουσίαις. καὶ τὰ τῶν ἀρρένων δὲ σώματα βλάπτεσθαι δοκεῖ πρὸς τὴν αὔξησιν, ἐὰν ἔτι τοῦ σπέρματος αὐξανομένου ποιῶνται τὴν συνουσίαν· καὶ γὰρ τούτου τις ὠρισμένος χρόνος, ὃν οὐχ ὑπερβαίνει πληθύνει ἔτι, <ἢ μικρόν>· διὸ τὰς μὲν ἀρμόττει περὶ τὴν τῶν ὀκτωκαίδεκα ἐτῶν ἡλικίαν συζευγνύναι, τοὺς δ' ἐπτὰ καὶ τριάκοντα [ἢ μικρόν]. ἐν τοσοῦτῳ γὰρ ἀκμάζουσιν τε τοῖς σώμασιν <ἢ> σύζευξις ἔσται, καὶ πρὸς τὴν παῦλαν τῆς τεκνοποιίας συγκαταβήσεται τοῖς χρόνοις εὐκαίρως· ἔτι δὲ ἡ διαδοχὴ τῶν τέκνων τοῖς μὲν ἀρχομένοις ἔσται τῆς ἀκμῆς, ἐὰν γίγνηται κατὰ λόγον εὐθύς ἢ γένεσις, τοῖς δὲ ἤδη καταλελυμένης τῆς ἡλικίας πρὸς τὸν τῶν ἐβδομήκοντα ἐτῶν ἀριθμόν.

περὶ μὲν οὖν τοῦ πότε δεῖ ποιεῖσθαι τὴν σύζευξιν εἴρηται, τοῖς δὲ περὶ τὴν ὥραν χρόνοις δεῖ χρῆσθαι οἷς οἱ πολλοὶ χρῶνται, καλῶς καὶ νῦν ὀρίσαντες χειμῶνος τὴν συναυλίαν ποιεῖσθαι ταύτην. δεῖ δὲ καὶ αὐτοὺς ἤδη θεωρεῖν πρὸς τὴν τεκνοποιίαν τὰ τε παρὰ τῶν ἰατρῶν λεγόμενα καὶ τὰ παρὰ τῶν φυσικῶν· οἳ τε γὰρ ἰατροὶ τοὺς καιροὺς τῶν σωμάτων ἱκανῶς λέγουσι, [1335b] καὶ περὶ τῶν πνευμάτων οἱ φυσικοί, τὰ βόρεια τῶν νοτίων ἐπαινοῦντες μᾶλλον. ποίων δέ τινων τῶν σωμάτων ὑπαρχόντων μάλιστ' ἂν ὄφελος εἴη τοῖς γεννωμένοις, ἐπιστήσασιν μὲν μᾶλλον λεκτέον ἐν τοῖς περὶ τῆς παιδονομίας, τύπῳ δὲ ἱκανὸν εἰπεῖν καὶ νῦν. οὔτε γὰρ ἡ τῶν ἀθλητῶν χρήσιμος ἔξις πρὸς πολιτικὴν εὐεξίαν οὐδὲ πρὸς ὑγίειαν καὶ τεκνοποιίαν, οὔτε ἡ θεραπευτικὴ καὶ κακοπονητικὴ λῖαν, ἀλλ' ἡ μέση τούτων. πεπονημένην μὲν οὖν ἔχειν δεῖ τὴν ἔξιν, πεπονημένην δὲ πόνοις μὴ βιαίοις, μηδὲ πρὸς ἓν μόνον, ὥσπερ ἡ τῶν ἀθλητῶν ἔξις, ἀλλὰ πρὸς τὰς τῶν ἐλευθερίων πράξεις. ὁμοίως δὲ δεῖ ταῦτα ὑπάρχειν ἀνδράσι καὶ γυναίξιν.

χρὴ δὲ καὶ τὰς ἐγκύους ἐπιμελεῖσθαι τῶν σωμάτων, μὴ ῥαθυμούσας μηδ' ἀραιᾶ τροφῇ χρωμένας. τοῦτο δὲ ῥάδιον τῷ νομοθέτῃ ποιῆσαι προστάξαντι καθ' ἡμέραν τινὰ ποιεῖσθαι πορείαν πρὸς θεῶν ἀποθεραπείαν τῶν εἰληχότων τὴν περὶ τῆς γενέσεως τιμήν. τὴν μέντοι διάνοιαν τοῦναντίον τῶν σωμάτων ῥαθυμοτέρως ἀρμόττει διάγειν· ἀπολαύοντα γὰρ φαίνεται τὰ γεννώμενα τῆς ἐχούσης ὥσπερ τὰ φυόμενα τῆς γῆς. περὶ δὲ ἀποθέσεως καὶ τροφῆς τῶν

γιγνομένων ἔστω νόμος μηδὲν πεπηρωμένον τρέφειν, διὰ δὲ πλῆθος τέκνων ἡ τάξις τῶν ἐθνῶν κελεύει μηδὲν ἀποτίθεσθαι τῶν γιγνομένων· ὀρισθῆναι δὲ δεῖ τῆς τεκνοποιίας τὸ πλῆθος, ἐὰν δέ τισι γίγνηται παρὰ ταῦτα συνδυασθέντων, πρὶν αἰσθησιν ἐγγενέσθαι καὶ ζωὴν ἐμποιεῖσθαι δεῖ τὴν ἄμβλωσιν· τὸ γὰρ ὅσιον καὶ τὸ μὴ διωρισμένον τῇ αἰσθήσει καὶ τῷ ζῆν ἔσται. ἐπεὶ δ' ἡ μὲν ἀρχὴ τῆς ἡλικίας ἀνδρὶ καὶ γυναικὶ διώρισταί, πότε ἄρχεσθαι χρὴ τῆς συζεύξεως, καὶ πόσον χρόνον λειτουργεῖν ἀρμόττει πρὸς τεκνοποιίαν ὠρίσθω. τὰ γὰρ τῶν πρεσβυτέρων ἔκγονα, καθάπερ τὰ τῶν νεωτέρων, ἀτελῆ γίνονται καὶ τοῖς σώμασι καὶ ταῖς διανοίαις, τὰ δὲ τῶν γεγηρακότων ἀσθενῆ· διὸ κατὰ τὴν τῆς διανοίας ἀκμὴν. αὕτη δ' ἐστὶν ἐν τοῖς πλείστοις ἥπερ τῶν ποιητῶν τινες εἰρήκασιν οἱ μετροῦντες ταῖς ἐβδομάσι τὴν ἡλικίαν, περὶ τὸν χρόνον τὸν τῶν πεντήκοντα ἐτῶν. ὥστε τέτταρσιν ἢ πέντε ἔτεσιν ὑπερβάλλοντα τὴν ἡλικίαν ταύτην ἀφεῖσθαι δεῖ τῆς εἰς τὸ φανερόν γεννήσεως· τὸ δὲ λοιπὸν ὑγιείας χάριν ἢ τινος ἄλλης τοιαύτης αἰτίας φαίνεσθαι δεῖ ποιουμένους τὴν ὁμιλίαν. περὶ δὲ τῆς πρὸς ἄλλην ἢ πρὸς ἄλλον, ἔστω μὲν ἀπλῶς μὴ καλὸν ἀπτόμενον φαίνεσθαι μηδαμῇ μηδαμῶς, ὅταν <ἀνὴρ> ἢ καὶ προσαγορευθῇ πόσις· περὶ δὲ τὸν χρόνον τὸν τῆς τεκνοποιίας [1336a] ἐὰν τις φαίνεται τοιοῦτόν τι δρῶν, ἀτιμίᾳ ζημιούσθω πρεπούσῃ πρὸς τὴν ἀμαρτίαν.

Γενομένων δὲ τῶν τέκνων οἶεσθαι <δεῖ> μεγάλην εἶναι διαφορὰν πρὸς τὴν τῶν σωμάτων δύναμιν τὴν τροφήν, ὅποια τις ἂν ᾗ. φαίνεται δὲ διὰ τε τῶν ἄλλων ζώων ἐπισκοποῦσι, καὶ διὰ τῶν ἐθνῶν οἷς ἐπιμελές ἐστὶν εἰσάγειν τὴν πολεμικὴν ἔξιν, ἢ τοῦ γάλακτος πλήθουσα τροφή μάλιστ' οἰκεία τοῖς σώμασιν, <ἡ> ἀοινοτέρα δὲ διὰ τὰ νοσήματα. ἔτι δὲ καὶ κινήσεις ὅσας ἐνδέχεται ποιεῖσθαι τηλικούτων συμφέρει. πρὸς δὲ τὸ μὴ διαστρέφεσθαι τὰ μέλη δι' ἀπαλότητα χρῶνται καὶ νῦν ἔνια τῶν ἐθνῶν ὀργάνοις τισὶ μηχανικοῖς, ἃ τὸ σῶμα ποιεῖ τῶν τοιούτων ἀστραβές. συμφέρει δ' εὐθύς καὶ πρὸς τὰ ψύχη συνεθίζειν ἐκ μικρῶν παίδων· τοῦτο γὰρ καὶ πρὸς ὑγίειαν καὶ πρὸς πολεμικὰς πράξεις εὐχρηστότατον. διὸ παρὰ πολλοῖς ἐστὶ τῶν βαρβάρων ἔθος τοῖς μὲν εἰς ποταμὸν ἀποβάπτειν τὰ γινόμενα ψυχρόν, τοῖς δὲ σκέπασμα μικρὸν ἀμπίσχειν, οἷον Κελτοῖς. πάντα γὰρ ὅσα δυνατόν ἐθίζειν, εὐθύς ἀρχομένων βέλτιον ἐθίζειν μὲν, ἐκ προσαγωγῆς δ' ἐθίζειν· εὐφυῆς δ' ἡ τῶν παίδων ἔξις διὰ θερμότητα πρὸς τὴν τῶν ψυχρῶν ἄσκησιν.

περὶ μὲν οὖν τὴν πρώτην συμφέρει ποιεῖσθαι τὴν ἐπιμέλειαν τοιαύτην τε καὶ τὴν ταύτη παραπλησίαν· τὴν δ' ἐχομένην ταύτης ἡλικίαν μέχρι πέντε ἐτῶν, ἣν οὔτε πῶ πρὸς μάθησιν καλῶς ἔχει προσάγειν οὐδεμίαν οὔτε πρὸς ἀναγκαίους πόνους, ὅπως μὴ τὴν αὔξησιν ἐμποδίζωσιν, δεῖ τοσαύτης τυγχάνειν κινήσεως ὥστε διαφεύγειν τὴν ἀργίαν τῶν σωμάτων· ἣν χρὴ

παρασκευάζειν καὶ δι' ἄλλων πράξεων καὶ διὰ τῆς παιδείας. δεῖ δὲ καὶ τὰς παιδείας εἶναι μήτε ἀνελευθέρους μήτε ἐπιπόνους μήτε ἀνειμένας. καὶ περὶ λόγων δὲ καὶ μύθων, ποίους τινὰς ἀκούειν δεῖ τοὺς τηλικούτους, ἐπιμελὲς ἔστω τοῖς ἄρχουσιν οὐς καλοῦσι παιδονόμους. πάντα γὰρ δεῖ τὰ τοιαῦτα προοδοποιεῖν πρὸς τὰς ὕστερον διατριβάς· διὸ τὰς παιδείας εἶναι δεῖ τὰς πολλὰς μιμήσεις τῶν ὕστερον σπουδαζομένων. τὰς δὲ διατάσεις τῶν παίδων καὶ τοὺς κλαυθμοὺς οὐκ ὀρθῶς ἀπαγορεύουσιν οἱ κωλύοντες ἐν τοῖς νόμοις· συμφέρουσι γὰρ πρὸς αὕξησιν· γίνεται γὰρ τρόπον τινὰ γυμνασία τοῖς σώμασιν· ἢ γὰρ τοῦ πνεύματος κάθεξις ποιεῖ τὴν ἰσχὺν τοῖς πονοῦσιν, ὃ συμβαίνει καὶ τοῖς παιδίοις διατεινομένοις.

ἐπισκεπτέον δὲ τοῖς παιδονόμοις τὴν τούτων διαγωγὴν, τὴν τ' ἄλλην καὶ ὅπως ὅτι ἥκιστα μετὰ δούλων ἔσται. ταύτην γὰρ τὴν ἡλικίαν, [1336b] καὶ μέχρι τῶν ἑπτὰ ἐτῶν, ἀναγκαῖον οἴκοι τὴν τροφὴν ἔχειν. εὐλογον οὖν ἀπολαύειν ἀπὸ τῶν ἀκουσμάτων καὶ τῶν ὁραμάτων ἀνελευθερίαν καὶ τηλικούτους ὄντας. ὅλως μὲν οὖν αἰσχρολογίαν ἐκ τῆς πόλεως, ὥσπερ ἄλλο τι, δεῖ τὸν νομοθέτην ἐξορίζειν (ἐκ τοῦ γὰρ εὐχερῶς λέγειν ὅτι οὖν τῶν αἰσchrῶν γίνεται καὶ τὸ ποιεῖν σύνεγγυς)· μάλιστα μὲν οὖν ἐκ τῶν νέων, ὅπως μήτε λέγωσι μήτε ἀκούωσι μηδὲν τοιοῦτον· ἐὰν δέ τις φαίνεται τι λέγων ἢ πράττων τῶν ἀπηγορευμένων, τὸν μὲν ἐλεύθερον μήπω δὲ κατακλίσεως ἡξιωμένον ἐν τοῖς συσσιτίοις ἀτιμίαις κολάζειν καὶ πληγαῖς, τὸν δὲ πρεσβύτερον τῆς ἡλικίας ταύτης ἀτιμίαις ἀνελευθέροις ἀνδραποδωδίας χάριν. ἐπεὶ δὲ τὸ λέγειν τι τῶν τοιούτων ἐξορίζομεν, φανερόν ὅτι καὶ τὸ θεωρεῖν ἢ γραφὰς ἢ λόγους ἀσχήμονας. ἐπιμελὲς μὲν οὖν ἔστω τοῖς ἄρχουσι μηθέν, μήτε ἄγαλμα μήτε γραφήν, εἶναι τοιούτων πράξεων μίμησιν, εἰ μὴ παρά τισι θεοῖς τοιούτοις οἷς καὶ τὸν τωθασμὸν ἀποδίδωσιν ὁ νόμος. πρὸς δὲ τούτοις ἀφίησιν ὁ νόμος τοὺς τὴν ἡλικίαν ἔχοντας [ἔτι] τὴν ἰκνουμένην καὶ ὑπὲρ αὐτῶν καὶ τέκνων καὶ γυναικῶν τιμαλφεῖν τοὺς θεούς· τοὺς δὲ νεωτέρους οὗτ' ἰάμβων οὗτε κωμωδίας θεατὰς θετέον, πρὶν ἢ τὴν ἡλικίαν λάβωσιν ἐν ἣ καὶ κατακλίσεως ὑπάρξει κοινωνεῖν ἤδη καὶ μέθης, καὶ τῆς ἀπὸ τῶν τοιούτων γιγνομένης βλάβης ἀπαθεῖς ἢ παιδεῖα ποιήσει πάντως.

νῦν μὲν οὖν ἐν παραδρομῇ τοῦτον πεποιήμεθα τὸν λόγον· ὕστερον δ' ἐπιστήσαντας δεῖ διορίσαι μᾶλλον, εἴτε μὴ δεῖ πρῶτον εἴτε δεῖ διαπορήσαντας, καὶ πῶς δεῖ· κατὰ δὲ τὸν παρόντα καιρὸν ἐμνήσθημεν ὅσον ἀναγκαῖον. ἴσως γὰρ οὐ κακῶς ἔλεγε τὸ τοιοῦτον Θεόδωρος ὁ τῆς τραγωδίας ὑποκριτής· οὐθενὶ γὰρ πώποτε παρήκεν ἑαυτοῦ προεισάγειν, οὐδὲ τῶν εὐτελῶν ὑποκριτῶν, ὥς οἰκείουμένων τῶν θεατῶν ταῖς πρώταις ἀκοαῖς· συμβαίνει δὲ ταῦτό τοῦτο καὶ πρὸς τὰς τῶν ἀνθρώπων ὁμιλίας καὶ πρὸς τὰς

τῶν πραγμάτων· πάντα γὰρ στέργομεν τὰ πρῶτα μᾶλλον. διὸ δεῖ τοῖς νέοις πάντα ποιεῖν ξένα τὰ φαῦλα, μάλιστα δ' αὐτῶν ὅσα ἔχει ἡ μοχθηρίαν ἢ δυσμένειαν. διελθόντων δὲ τῶν πέντε ἑτῶν τὰ δύο μέχρι τῶν ἑπτὰ δεῖ θεωροῦς ἤδη γίνεσθαι τῶν μαθήσεων ἃς δεήσει μανθάνειν αὐτούς. δύο δ' εἰσὶν ἡλικίαι πρὸς ἃς ἀναγκαῖον διηρῆσθαι τὴν παιδείαν, πρὸς τὴν ἀπὸ τῶν ἑπτὰ μέχρι ἡβης καὶ πάλιν πρὸς τὴν ἀφ' ἡβης μέχρι τῶν ἐνὸς καὶ εἴκοσιν ἑτῶν. οἱ γὰρ ταῖς ἑβδομάσι διαιροῦντες τὰς ἡλικίας ὥς ἐπὶ τὸ πολὺ λέγουσιν οὐ [1337a] κακῶς, δεῖ δὲ τῇ διαιρέσει τῆς φύσεως ἐπακολουθεῖν· πᾶσα γὰρ τέχνη καὶ παιδεία τὸ προσλεῖπον βούλεται τῆς φύσεως ἀναπληροῦν. πρῶτον μὲν οὖν σκεπτέον εἰ ποιητέον τάξιν τινὰ περὶ τοὺς παῖδας, ἔπειτα πότερον συμφέρει κοινῇ ποιεῖσθαι τὴν ἐπιμέλειαν αὐτῶν ἢ κατ' ἴδιον τρόπον (ὃ γίνεται καὶ νῦν ἐν ταῖς πλείσταις τῶν πόλεων), τρίτον δὲ ποίαν τινὰ δεῖ ταύτην εἶναι.



Ὅτι μὲν οὖν τῷ νομοθέτῃ μάλιστα πραγματευτέον περὶ τὴν τῶν νέων παιδείαν, οὐδεὶς ἂν ἀμφισβητήσῃ· καὶ γὰρ ἐν ταῖς πόλεσιν οὐ γιγνόμενον τοῦτο βλάπτει τὰς πολιτείας· δεῖ γὰρ πρὸς ἐκάστην παιδεύεσθαι· τὸ γὰρ ἦθος τῆς πολιτείας ἐκάστης τὸ οἰκεῖον καὶ φυλάττειν εἴωθε τὴν πολιτείαν καὶ καθίστησιν ἐξ ἀρχῆς, οἷον τὸ μὲν δημοκρατικὸν δημοκρατίαν τὸ δ' ὀλιγαρχικὸν ὀλιγαρχίαν· ἀεὶ δὲ τὸ βέλτιον ἦθος βελτίονος αἴτιον πολιτείας. ἔτι δὲ πρὸς πάσας δυνάμεις καὶ τέχνας ἔστιν ἃ δεῖ προπαιδεύεσθαι καὶ προεθίζεσθαι πρὸς τὰς ἐκάστων ἐργασίας, ὥστε δῆλον ὅτι καὶ πρὸς τὰς τῆς ἀρετῆς πράξεις· ἐπεὶ δ' ἐν τὸ τέλος τῇ πόλει πάσῃ, φανερόν ὅτι καὶ τὴν παιδείαν μίαν καὶ τὴν αὐτὴν ἀναγκαῖον εἶναι πάντων, καὶ ταύτης τὴν ἐπιμέλειαν εἶναι κοινὴν καὶ μὴ κατ' ἴδιαν, ὃν τρόπον νῦν ἕκαστος ἐπιμελεῖται τῶν αὐτοῦ τέκνων ἰδίᾳ τε καὶ μάθησιν ἰδίαν, ἣν ἂν δόξη, διδάσκων. δεῖ δὲ τῶν κοινῶν κοινὴν ποιεῖσθαι καὶ τὴν ἄσκησιν. ἅμα δὲ οὐδὲ χρὴ νομίζειν αὐτὸν αὐτοῦ τίνα εἶναι τῶν πολιτῶν, ἀλλὰ πάντας τῆς πόλεως, μόνον γὰρ ἕκαστος τῆς πόλεως· ἢ δ' ἐπιμέλεια πέφυκεν ἐκάστου μορίου βλέπειν πρὸς τὴν τοῦ ὅλου ἐπιμέλειαν. ἐπαινέσῃ δ' ἂν τις κατὰ τοῦτο Λακεδαιμονίους· καὶ γὰρ πλείστην ποιοῦνται σπουδὴν περὶ τοὺς παῖδας καὶ κοινῇ ταύτην.

Ὅτι μὲν οὖν νομοθετητέον περὶ παιδείας καὶ ταύτην κοινὴν ποιητέον, φανερόν· τίς δ' ἔσται ἡ παιδεία καὶ πῶς χρὴ παιδεύεσθαι, δεῖ μὴ λανθάνειν. νῦν γὰρ ἀμφισβητεῖται περὶ τῶν ἔργων. οὐ γὰρ ταῦτά πάντες ὑπολαμβάνουσι δεῖν μανθάνειν τοὺς νέους οὔτε πρὸς ἀρετὴν οὔτε πρὸς τὸν βίον τὸν ἄριστον, οὐδὲ φανερόν πότερον πρὸς τὴν διάνοιαν πρέπει μᾶλλον ἢ πρὸς τὸ τῆς ψυχῆς

ἦθος· ἔκ τε τῆς ἐμποδῶν παιδείας ταραχώδης ἡ σκέψις καὶ δῆλον οὐδὲν πότερον ἀσκεῖν δεῖ τὰ χρήσιμα πρὸς τὸν βίον ἢ τὰ τείνοντα πρὸς ἀρετὴν ἢ τὰ περιττά (πάντα γὰρ εἴληφε ταῦτα κριτὰς [1337b] τινας)· περί τε τῶν πρὸς ἀρετὴν οὐθέν ἐστιν ὁμολογούμενον (καὶ γὰρ τὴν ἀρετὴν οὐ τὴν αὐτὴν εὐθὺς πάντες τιμῶσιν, ὥστ' εὐλόγως διαφέρονται καὶ πρὸς τὴν ἄσκησιν αὐτῆς). ὅτι μὲν οὖν τὰ ἀναγκαῖα δεῖ διδάσκεσθαι τῶν χρησίμων, οὐκ ἄδηλον· ὅτι δὲ οὐ πάντα, διηρημένων τῶν τε ἐλευθερίων ἔργων καὶ τῶν ἀνελευθερίων φανερόν, «καὶ» ὅτι τῶν τοιούτων δεῖ μετέχειν ὅσα τῶν χρησίμων ποιήσει τὸν μετέχοντα μὴ βάνουσον. βάνουσον δ' ἔργον εἶναι δεῖ τοῦτο νομίζειν καὶ τέχνην ταύτην καὶ μάθησιν, ὅσαι πρὸς τὰς χρήσεις καὶ τὰς πράξεις τὰς τῆς ἀρετῆς ἄχρηστον ἀπεργάζονται τὸ σῶμα τῶν ἐλευθέρων [ἢ τὴν ψυχὴν] ἢ τὴν διάνοιαν. διὸ τὰς τε τοιαύτας τέχνας ὅσαι τὸ σῶμα παρασκευάζουσι χειρόν διακεῖσθαι βαναύσους καλοῦμεν, καὶ τὰς μισθαρνικὰς ἐργασίας· ἄσכולον γὰρ ποιοῦσι τὴν διάνοιαν καὶ ταπεινὴν. ἔστι δὲ καὶ τῶν ἐλευθερίων ἐπιστημῶν μέχρι μὲν τινὸς ἐνίων μετέχειν οὐκ ἀνελεύθερον, τὸ δὲ προσεδρεύειν λίαν πρὸς ἀκρίβειαν ἔνοχον ταῖς εἰρημέναις βλάβαις. ἔχει δὲ πολλὴν διαφορὰν καὶ τὸ τίνος ἔνεκεν πράττει τις ἢ μανθάνει· τὸ μὲν γὰρ αὐτοῦ χάριν ἢ φίλων ἢ δι' ἀρετὴν οὐκ ἀνελεύθερον, ὁ δὲ αὐτὸ τοῦτο πράττων δι' ἄλλους πολλάκις θητικὸν καὶ δουλικὸν δόξειεν ἂν πράττειν.

αἱ μὲν οὖν καταβεβλημέναι νῦν μαθήσεις, καθάπερ ἐλέχθη πρότερον, ἐπαμφοτερίζουσιν· ἔστι δὲ τέτταρα σχεδὸν ἃ παιδεύειν εἰώθασι, γράμματα καὶ γυμναστικὴν καὶ μουσικὴν καὶ τέταρτον ἔνιοι γραφικὴν, τὴν μὲν γραμματικὴν καὶ γραφικὴν ὡς χρησίμους πρὸς τὸν βίον οὖσας καὶ πολυχρήστους, τὴν δὲ γυμναστικὴν ὡς συντείνουσιν πρὸς ἀνδρείαν· τὴν δὲ μουσικὴν ἤδη διαπορήσειεν ἂν τις. νῦν μὲν γὰρ ὡς ἡδονῆς χάριν οἱ πλεῖστοι μετέχουσιν αὐτῆς· οἱ δ' ἐξ ἀρχῆς ἔταξαν ἐν παιδείᾳ διὰ τὸ τὴν φύσιν αὐτὴν ζητεῖν, ὅπερ πολλάκις εἴρηται, μὴ μόνον ἀσχολεῖν ὀρθῶς ἀλλὰ καὶ σχολάζειν δύνασθαι καλῶς. αὕτη γὰρ ἀρχὴ πάντων μία· καὶ πάλιν εἵπωμεν περὶ αὐτῆς. εἰ δ' ἄμφω μὲν δεῖ, μᾶλλον δὲ αἰρετόν τὸ σχολάζειν τῆς ἀσχολίας καὶ τέλος, ζητητέον ὅ τι δεῖ ποιοῦντας σχολάζειν. οὐ γὰρ δὴ παίζοντας· τέλος γὰρ ἀναγκαῖον εἶναι τοῦ βίου τὴν παιδίαν ἡμῖν. εἰ δὲ τοῦτο ἀδύνατον, καὶ μᾶλλον ἐν ταῖς ἀσχολίαις χρηστέον ταῖς παιδιαῖς (ὁ γὰρ πονῶν δεῖται τῆς ἀναπαύσεως, ἡ δὲ παιδιὰ χάριν ἀναπαύσεως ἐστίν· τὸ δ' ἀσχολεῖν συμβαίνει μετὰ πόνου καὶ συντονίας), διὰ τοῦτο δεῖ παιδιὰς εἰσάγεσθαι καιροφυλακοῦντας τὴν χρῆσιν, ὡς προσάγοντας φαρμακείας χάριν. ἄνεσις γὰρ ἡ τοιαύτη κίνησις τῆς ψυχῆς, [1338a] καὶ διὰ τὴν ἡδονὴν ἀνάπαυσις. τὸ δὲ σχολάζειν ἔχειν αὐτὸ δοκεῖ τὴν ἡδονὴν καὶ τὴν εὐδαιμονίαν καὶ τὸ ζῆν μακαρίως. τοῦτο δ' οὐ τοῖς ἀσχολοῦσιν ὑπάρχει ἀλλὰ τοῖς σχολάζουσιν· ὁ μὲν γὰρ ἀσכולῶν ἔνεκα τινος

ἀσχολεῖ τέλους ὡς οὐχ ὑπάρχοντος, ἡ δ' εὐδαιμονία τέλος ἐστίν, ἣν οὐ μετὰ λύπης ἀλλὰ μεθ' ἡδονῆς οἶονται πάντες εἶναι. ταύτην μέντοι τὴν ἡδονὴν οὐκέτι τὴν αὐτὴν τιθέασιν, ἀλλὰ καθ' ἑαυτοὺς ἕκαστος καὶ τὴν ἕξιν τὴν αὐτῶν, ὃ δ' ἄριστος τὴν ἀρίστην καὶ τὴν ἀπὸ τῶν καλλίστων. ὥστε φανερόν ὅτι δεῖ καὶ πρὸς τὴν ἐν τῇ διαγωγῇ σχολὴν μανθάνειν ἅττα καὶ παιδεύεσθαι, καὶ ταῦτα μὲν τὰ παιδεύματα καὶ ταύτας τὰς μαθήσεις ἑαυτῶν εἶναι χάριν, τὰς δὲ πρὸς τὴν ἀσχολίαν ὡς ἀναγκαίας καὶ χάριν ἄλλων. διὸ καὶ τὴν μουσικὴν οἱ πρότερον εἰς παιδείαν ἔταξαν οὐχ ὡς ἀναγκαῖον (οὐδὲν γὰρ ἔχει τοιοῦτον), οὐδ' ὡς χρήσιμον (ὥσπερ τὰ γράμματα πρὸς χρηματισμὸν καὶ πρὸς οἰκονομίαν καὶ πρὸς μάθησιν καὶ πρὸς πολιτικὰς πράξεις πολλὰς, δοκεῖ δὲ καὶ γραφικὴ χρήσιμος εἶναι πρὸς τὸ κρίνειν τὰ τῶν τεχνιτῶν ἔργα κάλλιον), οὐδ' αὖ καθάπερ ἡ γυμναστικὴ πρὸς ὑγίειαν καὶ ἀλκὴν (οὐδέτερον γὰρ τούτων ὀρῶμεν γινόμενον ἐκ τῆς μουσικῆς). λείπεται τοίνυν πρὸς τὴν ἐν τῇ σχολῇ διαγωγὴν, εἰς ὅπερ καὶ φαίνονται παράγοντες αὐτήν. ἦν γὰρ οἶονται διαγωγὴν εἶναι τῶν ἐλευθέρων, ἐν ταύτῃ τάττουσιν. διόπερ Ὅμηρος οὕτως ἐποίησεν

ἀλλ' οἶον μὲν ἐστι καλεῖν ἐπὶ δαῖτα θαλεῖην,

καὶ οὕτω προειπὼν ἑτέρους τινὰς “οἱ καλέουσιν ἁοιδόν” φησὶν, “ὃ κεν τέρπησιν ἅπαντας”. καὶ ἐν ἄλλοις δὲ φησιν <ὁ> Ὀδυσσεὺς ταύτην ἀρίστην εἶναι διαγωγὴν, ὅταν εὐφραινομένων τῶν ἀνθρώπων “δαιτυμόνες δ' ἀνὰ δώματ' ἀκουάζονται ἁοιδοῦ ἥμενοι ἐξεΐης”.

ὅτι μὲν τοίνυν ἔστι παιδεία τις ἣν οὐχ ὡς χρησίμην παιδευτέον τοὺς υἱεῖς οὐδ' ὡς ἀναγκαίαν ἀλλ' ὡς ἐλευθέριον καὶ καλήν, φανερόν ἐστιν· πότερον δὲ μία τὸν ἀριθμὸν ἢ πλείους, καὶ τίνες αὐταὶ καὶ πῶς, ὕστερον λεκτέον περὶ αὐτῶν. νῦν δὲ τοσοῦτον ἡμῖν εἶναι πρὸ ὁδοῦ γέγονεν, ὅτι καὶ παρὰ τῶν ἀρχαίων ἔχομέν τινα μαρτυρίαν ἐκ τῶν καταβεβλημένων παιδευμάτων· ἡ γὰρ μουσικὴ τοῦτο ποιεῖ δῆλον. ἔτι δὲ καὶ τῶν χρησίμων ὅτι δεῖ τινα παιδεύεσθαι τοὺς παῖδας οὐ μόνον διὰ τὸ χρήσιμον, οἶον τὴν τῶν γραμμάτων μάθησιν, ἀλλὰ καὶ διὰ τὸ πολλὰς ἐνδέχεσθαι γίνεσθαι δι' αὐτῶν μαθήσεις ἑτέρας, ὁμοίως δὲ καὶ τὴν γραφικὴν οὐχ ἵνα ἐν τοῖς ἰδίοις ὠνίοις μὴ διαμαρτάνωσιν ἀλλ' ὥσιν ἀνεξαπάτητοι πρὸς τὴν τῶν σκευῶν [1338b] ὠνήν τε καὶ πρᾶσιν, μᾶλλον δ' ὅτι ποιεῖ θεωρητικὸν τοῦ περὶ τὰ σώματα κάλλους. τὸ δὲ ζητεῖν πανταχοῦ τὸ χρήσιμον ἥκιστα ἀρμόττει τοῖς μεγαλοψύχοις καὶ τοῖς ἐλευθερίοις. ἐπεὶ δὲ φανερόν <τὸ> πρότερον τοῖς ἔθεσιν ἢ τῷ λόγῳ παιδευτέον εἶναι, καὶ περὶ τὸ σῶμα πρότερον ἢ τὴν διάνοιαν, δῆλον ἐκ τούτων ὅτι παραδοτέον τοὺς παῖδας γυμναστικῇ καὶ παιδοτριβικῇ· τούτων γὰρ ἡ μὲν

ποιάν τινα ποιεῖ τὴν ἔξιν τοῦ σώματος, ἢ δὲ τὰ ἔργα.

Νῦν μὲν οὖν αἱ μάλιστα δοκοῦσαι τῶν πόλεων ἐπιμελεῖσθαι τῶν παίδων αἱ μὲν ἀθλητικὴν ἔξιν ἐμποιοῦσι, λωβώμεναι τὰ τε εἶδη καὶ τὴν αὕξησιν τῶν σωμάτων, οἱ δὲ Λάκωνες ταύτην μὲν οὐχ ἡμαρτον τὴν ἀμαρτίαν, θηριώδεις δ' ἀπεργάζονται τοῖς πόνοις, ὥς τοῦτο πρὸς ἀνδρείαν μάλιστα συμφέρον. καίτοι, καθάπερ εἴρηται πολλάκις, οὔτε πρὸς μίαν οὔτε πρὸς μάλιστα ταύτην βλέποντα ποιητέον τὴν ἐπιμέλειαν· εἰ δὲ καὶ πρὸς ταύτην, οὐδὲ τοῦτο ἐξευρίσκουσιν. οὔτε γὰρ ἐν τοῖς ἄλλοις ζώοις οὔτε ἐπὶ τῶν ἐθνῶν ὀρώμεν τὴν ἀνδρείαν ἀκολουθοῦσαν τοῖς ἀγριωτάτοις, ἀλλὰ μᾶλλον τοῖς ἡμερωτέροις καὶ λεοντώδεσιν ἦθεσιν. πολλὰ δ' ἔστι τῶν ἐθνῶν ἃ πρὸς τὸ κτείνειν καὶ πρὸς τὴν ἀνθρωποφαγίαν εὐχερῶς ἔχει, καθάπερ τῶν περὶ τὸν Πόντον Ἀχαιοὶ τε καὶ Ἡνίοχοι καὶ τῶν ἡπειρωτικῶν ἐθνῶν ἕτερα, τὰ μὲν ὁμοίως τούτοις τὰ δὲ μᾶλλον, ἃ ληστρικὰ μὲν ἔστιν, ἀνδρείας δ' οὐ μετειλήφασιν. ἔτι δ' αὐτοὺς τοὺς Λάκωνας ἴσμεν, ἕως μὲν αὐτοὶ προσήδρευον ταῖς φιλοπονίαις, ὑπερέχοντας τῶν ἄλλων, νῦν δὲ κἂν τοῖς γυμνικοῖς ἀγῶσι κἂν τοῖς πολεμικοῖς λειπομένους ἑτέρων· οὐ γὰρ τῷ τοὺς νέους γυμνάζειν τὸν τρόπον τοῦτον διέφερον, ἀλλὰ τῷ μόνους μὴ πρὸς ἀσκοῦντας ἀσκεῖν. ὥστε τὸ καλὸν ἀλλ' οὐ τὸ θηριώδες δεῖ πρωταγωνιστεῖν· οὐδὲ γὰρ λύκος οὐδ' «οὐδὲν» τῶν ἄλλων θηρίων ἀγωνίσαιτο ἂν οὐθένα καλὸν κίνδυνον, ἀλλὰ μᾶλλον ἀνὴρ ἀγαθός, οἱ δὲ λίαν εἰς ταῦτα ἀνέντες τοὺς παῖδας, καὶ τῶν ἀναγκαίων ἀπαιδαγωγήτους ποιήσαντες, βαναύσους κατεργάζονται κατὰ γε τὸ ἀληθές, πρὸς ἓν τε μόνον ἔργον τῆς πολιτικῆς χρησίμους ποιήσαντες, καὶ πρὸς τοῦτο χεῖρον, ὥς φησιν ὁ λόγος, ἑτέρων. δεῖ δὲ οὐκ ἐκ τῶν προτέρων ἔργων κρίνειν, ἀλλ' ἐκ τῶν νῦν· ἀνταγωνιστὰς γὰρ τῆς παιδείας νῦν ἔχουσι, πρότερον δ' οὐκ εἶχον.

Ὅτι μὲν οὖν χρηστέον τῇ γυμναστικῇ, καὶ πῶς χρηστέον, ὁμολογούμενόν ἐστιν (μέχρι μὲν γὰρ ἥβης κουφότερα γυμνάσια προσοιστέον, τὴν βίαιον τροφήν καὶ τοὺς πρὸς ἀνάγκην πόνους ἀπείργοντας, ἵνα μηθὲν ἐμπόδιον ἦ πρὸς τὴν αὕξησιν· σημεῖον γὰρ οὐ [1339a] μικρὸν ὅτι δύνανται τοῦτο παρασκευάζειν, ἐν γὰρ τοῖς Ὀλυμπιονίκαις δύο τις ἂν ἢ τρεῖς εὔροι τοὺς αὐτοὺς νενικηκότας ἄνδρας τε καὶ παῖδας, διὰ τὸ νέους ἀσκοῦντας ἀφαιρεῖσθαι τὴν δύναμιν ὑπὸ τῶν ἀναγκαίων γυμνασίων· ὅταν δ' ἀφ' ἥβης ἔτη τρία πρὸς τοῖς ἄλλοις μαθήμασι γένωνται, τότε ἀρμόττει καὶ τοῖς πόνοις καὶ ταῖς ἀναγκοφαγίαις καταλαμβάνειν τὴν ἐχομένην ἡλικίαν· ἅμα γὰρ τῇ τε διανοίᾳ καὶ τῷ σώματι διαπονεῖν οὐ δεῖ, τὸνναντίον γὰρ ἑκάτερος ἀπεργάζεσθαι πέφυκε τῶν πόνων, ἐμποδίζων ὁ μὲν τοῦ σώματος πόνος τὴν διάνοιαν ὁ δὲ ταύτης τὸ σῶμα).

Περὶ δὲ μουσικῆς ἔνια μὲν διηπορήκαμεν τῷ λόγῳ καὶ πρότερον, καλῶς δ' ἔχει καὶ νῦν ἀναλαβόντας αὐτὰ προαγαγεῖν, ἵνα ὥσπερ ἐνδόσιμον γένηται τοῖς λόγοις οὓς ἂν τις εἴπειεν ἀποφαινόμενος περὶ αὐτῆς. οὔτε γὰρ τίνα ἔχει δύναμιν ῥάδιον περὶ αὐτῆς διελεῖν, οὔτε τίνος δεῖ χάριν μετέχειν αὐτῆς, πότερον παιδιᾶς ἔνεκα καὶ ἀναπαύσεως, καθάπερ ὕπνου καὶ μέθης (ταῦτα γὰρ καθ' αὐτὰ μὲν οὐδὲ τῶν σπουδαίων, ἀλλ' ἡδέα, καὶ ἅμα παύει μέριμναν, ὡς φησιν Εὐριπίδης· διὸ καὶ τάττουσιν αὐτὴν καὶ χρῶνται πᾶσι τούτοις ὁμοίως, ὕπνῳ καὶ μέθῃ καὶ μουσικῇ· τιθέασι δὲ καὶ τὴν ὄρχησιν ἐν τούτοις), ἢ μᾶλλον οἷητέον πρὸς ἀρετὴν τι τείνειν τὴν μουσικὴν, ὡς δυναμένην, καθάπερ ἡ γυμναστικὴ τὸ σῶμα ποίον τι παρασκευάζει, καὶ τὴν μουσικὴν τὸ ἦθος ποίον τι ποιεῖν, ἐθίζουσιν δύνασθαι χαίρειν ὀρθῶς, ἢ πρὸς διαγωγὴν τι συμβάλλεται καὶ πρὸς φρόνησιν (καὶ γὰρ τοῦτο τρίτον θετέον τῶν εἰρημένων). ὅτι μὲν οὖν δεῖ τοὺς νέους μὴ παιδιᾶς ἔνεκα παιδεύειν, οὐκ ἄδηλον (οὐ γὰρ παίζουσι μανθάνοντες· μετὰ λύπης γὰρ ἢ μάθησις)· ἀλλὰ μὴν οὐδὲ διαγωγὴν γε παισὶν ἀρμόττει καὶ ταῖς ἡλικίαις ἀποδιδόναι ταῖς τοιαύταις (οὐθενὶ γὰρ ἀτελεῖ προσήκει τέλος). ἀλλ' ἴσως ἂν δόξειεν ἡ τῶν παίδων σπουδὴ παιδιᾶς εἶναι χάριν ἀνδράσι γενομένοις καὶ τελειωθεῖσιν. ἀλλ' εἰ τοῦτ' ἐστὶ τοιοῦτον, τίνος ἂν ἔνεκα δέοι μανθάνειν αὐτούς, ἀλλὰ μὴ, καθάπερ οἱ τῶν Περσῶν καὶ Μήδων βασιλεῖς, δι' ἄλλων αὐτὸ ποιούντων μεταλαμβάνειν τῆς ἡδονῆς καὶ τῆς μαθήσεως; καὶ γὰρ ἀναγκαῖον βέλτιον ἀπεργάζεσθαι τοὺς αὐτὸ τοῦτο πεπονημένους ἔργον καὶ τέχνην τῶν τοσοῦτον χρόνον ἐπιμελουμένων ὅσον πρὸς μάθησιν μόνον. εἰ δὲ δεῖ τὰ τοιαῦτα διαπονεῖν αὐτούς, καὶ περὶ τὴν τῶν ὄψων πραγματείαν αὐτοὺς ἂν δέοι παρασκευάζειν· ἀλλ' ἄτοπον. τὴν δ' αὐτὴν ἀπορίαν ἔχει καὶ εἰ δύναται τὰ ἥθη βελτίῳ ποιεῖν· ταῦτα γὰρ τί δεῖ μανθάνειν αὐτούς, ἀλλ' [1339b] οὐχ ἑτέρων ἀκούοντας ὀρθῶς τε χαίρειν καὶ δύνασθαι κρίνειν, ὥσπερ οἱ Λάκωνες; ἐκεῖνοι γὰρ οὐ μανθάνοντες ὅμως δύνανται κρίνειν ὀρθῶς, ὡς φασι, τὰ χρηστὰ καὶ τὰ μὴ χρηστὰ τῶν μελῶν. ὁ δ' αὐτὸς λόγος κἂν εἰ πρὸς εὐημερίαν καὶ διαγωγὴν ἐλευθέριον χρηστότεον αὐτῇ· τί δεῖ μανθάνειν αὐτούς, ἀλλ' οὐχ ἑτέρων χρωμένων ἀπολαύειν; σκοπεῖν δ' ἔξεστι τὴν ὑπόληψιν ἣν ἔχομεν περὶ τῶν θεῶν· οὐ γὰρ ὁ Ζεὺς αὐτὸς ἀείδει καὶ κιθαρίζει τοῖς ποιηταῖς, ἀλλὰ καὶ βαναύσους καλοῦμεν τοὺς τοιούτους καὶ τὸ πράττειν οὐκ ἀνδρὸς μὴ μεθύοντος ἢ παίζοντος.

ἀλλ' ἴσως περὶ μὲν τούτων ὕστερον ἐπισκεπτέον· ἡ δὲ πρώτη ζητησίς ἐστι πότερον οὐ θετέον εἰς παιδείαν τὴν μουσικὴν ἢ θετέον, καὶ τί δύναται τῶν διαπορηθέντων τριῶν, πότερον παιδείαν ἢ παιδιᾶν ἢ διαγωγὴν. εὐλόγως δ' εἰς πάντα τάττεται καὶ φαίνεται μετέχειν. ἢ τε γὰρ παιδιὰ χάριν ἀναπαύσεως ἐστὶ, τὴν δ' ἀνάπαυσιν ἀναγκαῖον ἡδεῖαν εἶναι (τῆς γὰρ διὰ τῶν πόνων λύπης ἰατρεία τίς ἐστίν), καὶ τὴν διαγωγὴν ὁμολογουμένως δεῖ μὴ μόνον ἔχειν τὸ



καλὸν ἀλλὰ καὶ τὴν ἡδονὴν (τὸ γὰρ εὐδαιμονεῖν ἐξ ἀμφοτέρων τούτων ἐστίν)· τὴν δὲ μουσικὴν πάντες εἶναί φαμεν τῶν ἡδίστων, καὶ ψιλὴν οὖσαν καὶ μετὰ μελωδίας (φησὶ γοῦν καὶ Μουσαῖος εἶναι ‘βροτοῖς ἡδιστον ἀεῖδειν’· διὸ καὶ εἰς τὰς συνουσίας καὶ διαγωγὰς εὐλόγως παραλαμβάνουσιν αὐτὴν ὡς δυναμένην εὐφραίνειν), ὥστε καὶ ἐντεῦθεν ἂν τις ὑπολάβοι παιδεύεσθαι δεῖν αὐτὴν τοὺς νεωτέρους. ὅσα γὰρ ἀβλαβῆ τῶν ἡδέων, οὐ μόνον ἀρμόττει πρὸς τὸ τέλος ἀλλὰ καὶ πρὸς τὴν ἀνάπαυσιν· ἐπεὶ δ’ ἐν μὲν τῷ τέλει συμβαίνει τοῖς ἀνθρώποις ὀλιγάκις γίνεσθαι, πολλάκις δὲ ἀναπαύονται καὶ χρῶνται ταῖς παιδιαῖς οὐχ ὅσον ἐπὶ πλεον ἀλλὰ καὶ διὰ τὴν ἡδονὴν, χρήσιμον ἂν εἴη διαναπαύειν ἐν ταῖς ἀπὸ ταύτης ἡδοναῖς.

συμβέβηκε δὲ τοῖς ἀνθρώποις ποιεῖσθαι τὰς παιδιας τέλος· ἔχει γὰρ ἴσως ἡδονὴν τινα καὶ τὸ τέλος, ἀλλ’ οὐ τὴν τυχοῦσαν, ζητοῦντες δὲ ταύτην λαμβάνουσιν ὡς ταύτην ἐκείνην, διὰ τὸ τῷ τέλει τῶν πράξεων ἔχειν ὁμοίωμά τι. τό τε γὰρ τέλος οὐθενὸς τῶν ἐσομένων χάριν αἰρετόν, καὶ αἱ τοιαῦται τῶν ἡδονῶν οὐθενός εἰσι τῶν ἐσομένων ἔνεκεν, ἀλλὰ τῶν γεγονότων, οἷον πόνων καὶ λύπης. δι’ ἣν μὲν οὖν αἰτίαν ζητοῦσι τὴν εὐδαιμονίαν γίνεσθαι διὰ τούτων τῶν ἡδονῶν, ταύτην εἰκότως ἂν τις ὑπολάβοι τὴν αἰτίαν· περὶ δὲ τοῦ κοινωνεῖν τῆς μουσικῆς, <ὅτι> οὐ διὰ ταύτην μόνην, ἀλλὰ καὶ διὰ τὸ χρήσιμον εἶναι πρὸς τὰς ἀναπαύσεις, ὡς ἔοικεν. οὐ μὲν ἀλλὰ ζητητέον μή ποτε [1340a] τοῦτο μὲν συμβέβηκε, τιμιωτέρα δ’ αὐτῆς ἡ φύσις ἐστὶν ἢ κατὰ τὴν εἰρημένην χρεῖαν, καὶ δεῖ μὴ μόνον τῆς κοινῆς ἡδονῆς μετέχειν ἀπ’ αὐτῆς, ἥς ἔχουσι πάντες αἰσθησιν (ἔχει γὰρ ἡ μουσικὴ τιν’ ἡδονὴν φυσικὴν, διὸ πάσαις ἡλικίαις καὶ πᾶσιν ἥθεσιν ἢ χρήσις αὐτῆς ἐστὶ προσφιλέης), ἀλλ’ ὁρᾶν εἴ πῃ καὶ πρὸς τὸ ἥθος συντείνει καὶ πρὸς τὴν ψυχὴν. τοῦτο δ’ ἂν εἴη δῆλον, εἰ ποιοὶ τινες τὰ ἥθη γιγνόμεθα δι’ αὐτῆς. ἀλλὰ μὲν ὅτι γιγνόμεθα ποιοὶ τινες, φανερόν διὰ πολλῶν μὲν καὶ ἐτέρων, οὐχ ἥκιστα δὲ καὶ διὰ τῶν Ὀλύμπου μελῶν· ταῦτα γὰρ ὁμολογουμένως ποιεῖ τὰς ψυχὰς ἐνθουσιαστικάς, ὃ δ’ ἐνθουσιασμός τοῦ περὶ τὴν ψυχὴν ἥθους πάθος ἐστίν. ἔτι δὲ ἀκροώμενοι τῶν μιμήσεων γίνονται πάντες συμπαθεῖς, καὶ χωρὶς τῶν ῥυθμῶν καὶ τῶν μελῶν αὐτῶν.

ἐπεὶ δὲ συμβέβηκεν εἶναι τὴν μουσικὴν τῶν ἡδέων, τὴν δ’ ἀρετὴν περὶ τὸ χαίρειν ὀρθῶς καὶ φιλεῖν καὶ μισεῖν, δεῖ δηλονότι μανθάνειν καὶ συνεθίζεσθαι μηθὲν οὕτως ὡς τὸ κρίνειν ὀρθῶς καὶ τὸ χαίρειν τοῖς ἐπικεκῆσιν ἥθεσι καὶ ταῖς καλαῖς πράξεσιν· ἔστι δὲ ὁμοιώματα μάλιστα παρὰ τὰς ἀληθινὰς φύσεις ἐν τοῖς ῥυθμοῖς καὶ τοῖς μέλεσιν ὀργῆς καὶ πραότητος, ἔτι δ’ ἀνδρείας καὶ σωφροσύνης καὶ πάντων τῶν ἐναντίων τούτοις καὶ τῶν ἄλλων ἡθῶν (δῆλον δὲ ἐκ τῶν ἔργων· μεταβάλλομεν γὰρ τὴν ψυχὴν ἀκροώμενοι τοιούτων)· ὃ δ’

ἐν τοῖς ὁμοίοις ἐθισμὸς τοῦ λυπεῖσθαι καὶ χαίρειν ἐγγύς ἐστι τῷ πρὸς τὴν ἀλήθειαν τὸν αὐτὸν ἔχειν τρόπον (οἷον εἴ τις χαίρει τὴν εἰκόνα τινὸς θεώμενος μὴ δι' ἄλλην αἰτίαν ἀλλὰ διὰ τὴν μορφὴν αὐτὴν, ἀναγκαῖον τούτῳ καὶ αὐτοῦ ἐκείνου τὴν θεωρίαν, οὗ τὴν εἰκόνα θεωρεῖ, ἡδεῖαν εἶναι). συμβέβηκε δὲ τῶν αἰσθητῶν ἐν μὲν τοῖς ἄλλοις μηδὲν ὑπάρχειν ὁμοίωμα τοῖς ἡθεσιν, οἷον ἐν τοῖς ἀπτοῖς καὶ τοῖς γευστοῖς, ἀλλ' ἐν τοῖς ὁρατοῖς ἡρέμα (σχήματα γὰρ ἔστι τοιαῦτα, ἀλλ' ἐπὶ μικρόν, καὶ <οὐ> πάντες τῆς τοιαύτης αἰσθήσεως κοινωνοῦσιν· ἔτι δὲ οὐκ ἔστι ταῦτα ὁμοιώματα τῶν ἡθῶν, ἀλλὰ σημεῖα μᾶλλον τὰ γινόμενα σχήματα καὶ χρώματα τῶν ἡθῶν, καὶ ταῦτ' ἐστὶν ἐπίσημα ἐν τοῖς πάθεσιν· οὐ μὴν ἀλλ' ὅσον διαφέρει καὶ περὶ τὴν τούτων θεωρίαν, δεῖ μὴ τὰ Παύσωνος θεωρεῖν τοὺς νέους, ἀλλὰ τὰ Πολυγνώτου κἂν εἴ τις ἄλλος τῶν γραφέων ἢ τῶν ἀγαλματοποιῶν ἐστὶν ἡθικός), ἐν δὲ τοῖς μέλεσιν αὐτοῖς ἔστι μιμήματα τῶν ἡθῶν (καὶ τοῦτ' ἐστὶ φανερόν· εὐθὺς γὰρ ἡ τῶν ἁρμονιῶν διέστηκε φύσις, ὥστε ἀκούοντας ἄλλως διατίθεσθαι καὶ μὴ τὸν αὐτὸν ἔχειν τρόπον πρὸς ἐκάστην αὐτῶν, ἀλλὰ πρὸς μὲν ἐνίας ὀδυρτικώτερος [1340b] καὶ συνεστηκότως μᾶλλον, οἷον πρὸς τὴν μιξολυδιστὶ καλουμένην, πρὸς δὲ τὰς μαλακώτερος τὴν διάνοιαν, οἷον πρὸς τὰς ἀνειμένας, μέσως δὲ καὶ καθεστηκότως μάλιστα πρὸς ἑτέραν, οἷον δοκεῖ ποιεῖν ἢ δωριστὶ μόνῃ τῶν ἁρμονιῶν, ἐνθουσιαστικούς δ' ἢ φρυγιστί. ταῦτα γὰρ καλῶς λέγουσιν οἱ περὶ τὴν παιδεῖαν ταύτην πεφιλοσοφηκότες· λαμβάνουσι γὰρ τὰ μαρτύρια τῶν λόγων ἐξ αὐτῶν τῶν ἔργων). τὸν αὐτὸν δὲ τρόπον ἔχει καὶ τὰ περὶ τοὺς ῥυθμούς (οἱ μὲν γὰρ ἡθος ἔχουσι στασιμώτερον οἱ δὲ κινητικόν, καὶ τούτων οἱ μὲν φορτικώτερας ἔχουσι τὰς κινήσεις οἱ δὲ ἐλευθεριώτερας). ἐκ μὲν οὖν τούτων φανερόν ὅτι δύναται ποιοῦν τι τὸ τῆς ψυχῆς ἡθος ἢ μουσικὴ παρασκευάζειν, εἰ δὲ τοῦτο δύναται ποιεῖν, δῆλον ὅτι προσακτέον καὶ παιδευτέον ἐν αὐτῇ τοὺς νέους. ἔστι δὲ ἀρμόττουσα πρὸς τὴν φύσιν τὴν τηλικαύτην ἡ διδασκαλία τῆς μουσικῆς· οἱ μὲν γὰρ νέοι διὰ τὴν ἡλικίαν ἀνήδυντον οὐθὲν ὑπομένουσιν ἐκόντες, ἡ δὲ μουσικὴ φύσει τῶν ἡδυσμάτων ἐστίν. καὶ τις ἔοικε συγγένεια ταῖς ἁρμονίαις καὶ τοῖς ῥυθμοῖς εἶναι· διὸ πολλοὶ φασὶ τῶν σοφῶν οἱ μὲν ἁρμονίαν εἶναι τὴν ψυχὴν, οἱ δ' ἔχειν ἁρμονίαν.

Πότερον δὲ δεῖ μανθάνειν αὐτοὺς ἄδοντάς τε καὶ χειρουργοῦντας ἢ μή, καθάπερ ἡπορήθη πρότερον, νῦν λεκτέον οὐκ ἄδηλον δὴ ὅτι πολλὴν ἔχει διαφορὰν πρὸς τὸ γίνεσθαι ποιούς τινας, ἐάν τις αὐτὸς κοινωνῇ τῶν ἔργων· ἐν γάρ τι τῶν ἀδυνάτων ἢ χαλεπῶν ἐστὶ μὴ κοινωνήσαντας τῶν ἔργων κριτὰς γενέσθαι σπουδαίους. ἅμα δὲ καὶ δεῖ τοὺς παῖδας ἔχειν τινὰ διατριβήν, καὶ τὴν Ἀρχύτου πλαταγὴν οἷεσθαι γενέσθαι καλῶς, ἣν διδόασι τοῖς παιδίοις, ὅπως χρώμενοι ταύτῃ μηδὲν καταγνύωσι τῶν κατὰ τὴν οἰκίαν· οὐ γὰρ δύναται τὸ

νέον ἡσυχάζειν. αὕτη μὲν οὖν ἐστὶ τοῖς νηπίοις ἀρμόττουσα τῶν παιδίων, ἡ δὲ παιδεία πλαταγὴ τοῖς μείζοσι τῶν νέων. ὅτι μὲν οὖν παιδευτέον τὴν μουσικὴν οὕτως ὥστε καὶ κοινωνεῖν τῶν ἔργων, φανερόν ἐκ τῶν τοιούτων· τὸ δὲ πρέπον καὶ τὸ μὴ πρέπον ταῖς ἡλικίαις οὐ χαλεπὸν διορίσαι, καὶ λῦσαι πρὸς τοὺς φάσκοντας βάνανυσον εἶναι τὴν ἐπιμέλειαν. πρῶτον μὲν γάρ, ἐπεὶ τοῦ κρίνειν χάριν μετέχειν δεῖ τῶν ἔργων, διὰ τοῦτο χρὴ νέους μὲν ὄντας χρῆσθαι τοῖς ἔργοις, πρεσβυτέρους δὲ γενομένους τῶν μὲν ἔργων ἀφεῖσθαι, δύνασθαι δὲ τὰ καλὰ κρίνειν καὶ χαίρειν ὀρθῶς διὰ τὴν μάθησιν τὴν γενομένην ἐν τῇ νεότητι· περὶ δὲ τῆς ἐπιτιμήσεως ἦν τινες ἐπιτιμῶσιν ὥς ποιούσης τῆς μουσικῆς βαναύσους, οὐ χαλεπὸν λῦσαι σκεψαμένους μέχρι τε πόσου τῶν ἔργων κοινωνητέον τοῖς πρὸς ἀρετὴν [1341a] παιδευομένοις πολιτικὴν, καὶ ποίων μελῶν καὶ ποίων ῥυθμῶν κοινωνητέον, ἔτι δὲ ἐν ποίοις ὀργάνοις τὴν μάθησιν ποιητέον, καὶ γὰρ τοῦτο διαφέρειν εἰκός. ἐν τούτοις γὰρ ἡ λύσις ἐστὶ τῆς ἐπιτιμήσεως· οὐδὲν γὰρ κωλύει τρόπους τινὰς τῆς μουσικῆς ἀπεργάζεσθαι τὸ λεχθέν. φανερόν τοίνυν ὅτι δεῖ τὴν μάθησιν αὐτῆς μήτε ἐμποδίζειν πρὸς τὰς ὕστερον πράξεις, μήτε τὸ σῶμα ποιεῖν βάνανυσον καὶ ἄχρηστον πρὸς τὰς πολεμικὰς καὶ πολιτικὰς ἀσκήσεις, πρὸς μὲν τὰς μαθήσεις ἤδη, πρὸς δὲ τὰς χρήσεις ὕστερον.

συμβαίνοι δ' ἂν περὶ τὴν μάθησιν, εἰ μήτε τὰ πρὸς τοὺς ἀγῶνας τοὺς τεχνικοὺς συντείνοντα διαπονοῖεν, μήτε τὰ θαυμάσια καὶ περιττὰ τῶν ἔργων, ἃ νῦν ἐλήλυθεν εἰς τοὺς ἀγῶνας ἐκ δὲ τῶν ἀγώνων εἰς τὴν παιδείαν, ἀλλὰ τὰ «μὴ» τοιαῦτα μέχρι περ ἂν δύνωνται χαίρειν τοῖς καλοῖς μέλεσι καὶ ῥυθμοῖς, καὶ μὴ μόνον τῷ κοινῷ τῆς μουσικῆς, ὥσπερ καὶ τῶν ἄλλων ἔνια ζώων, ἔτι δὲ καὶ πλῆθος ἀνδραπόδων καὶ παιδίων. δῆλον δὲ ἐκ τούτων καὶ ποίοις ὀργάνοις χρηστέον. οὔτε γὰρ αὐλοὺς εἰς παιδείαν ἀκτέον οὔτ' ἄλλο τι τεχνικὸν ὄργανον, οἷον κιθάραν κἂν εἴ τι τοιοῦτον ἕτερον ἔστιν, ἀλλ' ὅσα ποιήσει τούτων ἀκροατὰς ἀγαθοὺς ἢ τῆς μουσικῆς παιδείας ἢ τῆς ἄλλης· ἔτι δὲ οὐκ ἔστιν ὁ αὐλὸς ἠθικὸν ἀλλὰ μᾶλλον ὀργιαστικόν, ὥστε πρὸς τοὺς τοιούτους αὐτῷ καιροὺς χρηστέον ἐν οἷς ἡ θεωρία κάθαρσιν μᾶλλον δύναται ἢ μάθησιν. προσθῶμεν δὲ ὅτι συμβέβηκεν ἐναντίον αὐτῷ πρὸς παιδείαν καὶ τὸ κωλύειν τῷ λόγῳ χρῆσθαι τὴν αὐλήσιν. διὸ καλῶς ἀπεδοκίμασαν οἱ πρότερον αὐτοῦ τὴν χρῆσιν ἐκ τῶν νέων καὶ τῶν ἐλευθέρων, καίπερ χρησάμενοι τὸ πρῶτον αὐτῷ. σχολαστικώτεροι γὰρ γιγνόμενοι διὰ τὰς εὐπορίας καὶ μεγαλοψυχότεροι πρὸς τὴν ἀρετὴν, ἔτι τε «καὶ» πρότερον καὶ μετὰ τὰ Μηδικὰ φρονηματισθέντες ἐκ τῶν ἔργων, πάσης ἥπτοντο μαθήσεως, οὐδὲν διακρίνοντας ἀλλ' ἐπιζητοῦντες. διὸ καὶ τὴν αὐλητικὴν ἥγαγον πρὸς τὰς μαθήσεις. καὶ γὰρ ἐν Λακεδαιμονί τις χορηγὸς αὐτὸς ἠΰλησε τῷ χορῷ, καὶ περὶ Ἀθήνας οὕτως ἐπεχωρίασεν ὥστε σχεδὸν οἱ πολλοὶ τῶν ἐλευθέρων

μετεῖχον αὐτῆς· δῆλον δὲ ἐκ τοῦ πίνακος ὃν ἀνέθηκε Θράσιππος Ἐκφαντίδῃ χορηγήσας. ὕστερον δ' ἀπεδοκιμάσθη διὰ τῆς πείρας αὐτῆς, βέλτιον δυναμένων κρίνειν τὸ πρὸς ἀρετὴν καὶ τὸ μὴ πρὸς ἀρετὴν συντεῖνον· ὁμοίως δὲ καὶ πολλὰ τῶν ὀργάνων τῶν ἀρχαίων, οἷον πηκτίδες καὶ βάρβιτοι καὶ τὰ πρὸς ἡδονὴν συντείνοντα τοῖς ἀκούουσι τῶν χρωμένων, ἐπτάγωνα καὶ τρίγωνα καὶ [1341b] σαμβῦκαι, καὶ πάντα τὰ δεόμενα χειρουργικῆς ἐπιστήμης. εὐλόγως δ' ἔχει καὶ τὸ περὶ τῶν αὐλῶν ὑπὸ τῶν ἀρχαίων μεμυθολογημένον. φασὶ γὰρ δὴ τὴν Ἀθηνᾶν εὐροῦσαν ἀποβαλεῖν τοὺς αὐλοὺς. οὐ κακῶς μὲν οὖν ἔχει φάναι καὶ διὰ τὴν ἀσχημοσύνην τοῦ προσώπου τοῦτο ποιῆσαι δυσχεράνασαν τὴν θεόν· οὐ μὴν ἀλλὰ μᾶλλον εἰκὸς ὅτι πρὸς τὴν διάνοιαν οὐθέν ἐστιν ἡ παιδεία τῆς αὐλήσεως, τῇ δὲ Ἀθηνᾷ τὴν ἐπιστήμην περιτίθεμεν καὶ τὴν τέχνην. ἐπεὶ δὲ τῶν τε ὀργάνων καὶ τῆς ἐργασίας ἀποδοκιμάζομεν τὴν τεχνικὴν παιδείαν (τεχνικὴν δὲ τίθεμεν τὴν πρὸς τοὺς ἀγῶνας· ἐν ταύτῃ γὰρ ὁ πρᾶττων οὐ τῆς αὐτοῦ μεταχειρίζεται χάριν ἀρετῆς, ἀλλὰ τῆς τῶν ἀκουόντων ἡδονῆς, καὶ ταύτης φορτικῆς, διόπερ οὐ τῶν ἐλευθέρων κρίνομεν εἶναι τὴν ἐργασίαν, ἀλλὰ θητικωτέραν· καὶ βαναύσους δὲ συμβαίνει γίνεσθαι· πονηρὸς γὰρ ὁ σκοπὸς πρὸς ὃν ποιοῦνται τὸ τέλος· ὁ γὰρ θεατῆς φορτικὸς ὢν μεταβάλλειν εἴωθε τὴν μουσικὴν, ὥστε καὶ τοὺς τεχνίτας τοὺς πρὸς αὐτὸν μελετῶντας αὐτοὺς τε ποιούς τινες ποιεῖ καὶ τὰ σώματα διὰ τὰς κινήσεις), σκεπτέον ἔτι περὶ τε τὰς ἀρμονίας καὶ τοὺς ῥυθμούς, καὶ πρὸς παιδείαν πότερον πάσαις χρηστέον ταῖς ἀρμονίαις καὶ πᾶσι τοῖς ῥυθμοῖς ἢ διαιρετέον, ἔπειτα τοῖς πρὸς παιδείαν διαπονοῦσι πότερον τὸν αὐτὸν διορισμὸν θήσομεν ἢ [τρίτον] δεῖ τινα ἕτερον. ἐπεὶ δὴ τὴν μὲν μουσικὴν ὀρῶμεν διὰ μελοποιίας καὶ ῥυθμῶν οὖσαν, τούτων δ' ἐκάτερον οὐ δεῖ λεληθέναι τίνα δύναμιν ἔχει πρὸς παιδείαν, καὶ πότερον προαιρετέον μᾶλλον τὴν εὐμελῆ μουσικὴν ἢ τὴν εὐῤυθμον, νομίσαντες οὖν πολλὰ καλῶς λέγειν περὶ τούτων τῶν τε νῦν μουσικῶν ἐνίους καὶ τῶν ἐκ φιλοσοφίας ὅσοι τυγχάνουσιν ἐμπείρως ἔχοντες τῆς περὶ τὴν μουσικὴν παιδείας, τὴν μὲν καθ' ἕκαστον ἀκριβολογίαν ἀποδώσομεν ζητεῖν τοῖς βουλομένοις παρ' ἐκείνων, νῦν δὲ νομικῶς διέλωμεν, τοὺς τύπους μόνον εἰπόντες περὶ αὐτῶν.

ἐπεὶ δὲ τὴν διαίρεσιν ἀποδεχόμεθα τῶν μελῶν ὥς διαιροῦσί τινες τῶν ἐν φιλοσοφίᾳ, τὰ μὲν ἠθικὰ τὰ δὲ πρακτικὰ τὰ δ' ἐνθουσιαστικὰ τιθέντες, καὶ τῶν ἀρμονιῶν τὴν φύσιν «τὴν» πρὸς ἕκαστα τούτων οἰκείαν, ἄλλην πρὸς ἄλλο μέλος, τιθέασι, φαμὲν δ' οὐ μιᾶς ἔνεκεν ὠφελείας τῇ μουσικῇ χρῆσθαι δεῖν ἀλλὰ καὶ πλειόνων χάριν (καὶ γὰρ παιδείας ἔνεκεν καὶ καθάρσεως - τί δὲ λέγομεν τὴν κάθαρσιν, νῦν μὲν ἀπλῶς, πάλιν δ' ἐν τοῖς περὶ ποιητικῆς ἐροῦμεν σαφέστερον - τρίτον δὲ πρὸς διαγωγὴν πρὸς ἄνεσιν τε καὶ πρὸς τὴν τῆς συντονίας ἀνάπαυσιν), [1342a] φανερόν ὅτι χρηστέον μὲν πάσαις ταῖς

ἁρμονίαις, οὐ τὸν αὐτὸν δὲ τρόπον πάσαις χρηστέον, ἀλλὰ πρὸς μὲν τὴν παιδείαν ταῖς ἠθικωτάταις, πρὸς δὲ ἀκρόασιν ἑτέρων χειρουργούντων καὶ ταῖς πρακτικαῖς καὶ ταῖς ἐνθουσιαστικαῖς. ὃ γὰρ περὶ ἐνίας συμβαίνει πάθος ψυχᾶς ἰσχυρῶς, τοῦτο ἐν πάσαις ὑπάρχει, τῷ δὲ ἥττον διαφέρει καὶ τῷ μᾶλλον, οἷον ἔλεος καὶ φόβος, ἔτι δ' ἐνθουσιασμός· καὶ γὰρ ὑπὸ ταύτης τῆς κινήσεως κατοκώχιμοί τινές εἰσιν, ἐκ τῶν δ' ἱερῶν μελῶν ὀρῶμεν τούτους, ὅταν χρήσονται τοῖς ἐξοργιάζουσι τὴν ψυχὴν μέλεσι, καθισταμένους ὥσπερ ἰατρείας τυχόντας καὶ καθάρσεως· ταῦτό δὲ τοῦτο ἀναγκαῖον πάσχειν καὶ τοὺς ἐλεήμονας καὶ τοὺς φοβητικούς καὶ τοὺς ὅλως παθητικούς, τοὺς δ' ἄλλους καθ' ὅσον ἐπιβάλλει τῶν τοιούτων ἑκάστω, καὶ πᾶσι γίγνεσθαι τινα κάθαρσιν καὶ κουφίζεσθαι μεθ' ἡδονῆς. ὁμοίως δὲ καὶ τὰ μέλη τὰ πρακτικὰ παρέχει χαρὰν ἀβλαβῇ τοῖς ἀνθρώποις· διὸ ταῖς μὲν τοιαύταις ἁρμονίαις καὶ τοῖς τοιούτοις μέλεσιν ἐάτεον «χρῆσθαι» τοὺς τὴν θεατρικὴν μουσικὴν μεταχειριζομένους ἀγωνιστάς· ἐπεὶ δ' ὁ θεατὴς διττός, ὁ μὲν ἐλεύθερος καὶ πεπαιδευμένος, ὁ δὲ φορτικὸς ἐκ βαναύσων καὶ θητῶν καὶ ἄλλων τοιούτων συγκεείμενος, ἀποδοτέον ἀγῶνας καὶ θεωρίας καὶ τοῖς τοιούτοις πρὸς ἀνάπαυσιν· εἰσὶ δὲ ὥσπερ αὐτῶν αἱ ψυχαὶ παρεστραμμέναι τῆς κατὰ φύσιν ἕξεως - οὕτω καὶ τῶν ἁρμονιῶν παρεκβάσεις εἰσὶ καὶ τῶν μελῶν τὰ σύντονα καὶ παρακεχρωσμένα, ποιεῖ δὲ τὴν ἡδονὴν ἑκάστοις τὸ κατὰ φύσιν οἰκεῖον, διόπερ ἀποδοτέον ἐξουσίαν τοῖς ἀγωνιζομένοις πρὸς τὸν θεατὴν τὸν τοιοῦτον τοιοῦτω τινὶ χρῆσθαι τῷ γένει τῆς μουσικῆς. πρὸς δὲ παιδείαν, ὥσπερ εἴρηται, τοῖς ἠθικοῖς τῶν μελῶν χρηστέον καὶ ταῖς ἁρμονίαις ταῖς τοιαύταις. τοιαύτη δ' ἡ δωριστί, καθάπερ εἴπομεν πρότερον· δέχεσθαι δὲ δεῖ κἄν τινα ἄλλην ἡμῖν δοκιμάζωσιν οἱ κοινωνοὶ τῆς ἐν φιλοσοφίᾳ διατριβῆς καὶ τῆς περὶ τὴν μουσικὴν παιδείας. ὁ δ' ἐν τῇ Πολιτείᾳ Σωκράτης οὐ καλῶς τὴν φρυγιστὴ μόνην καταλείπει μετὰ τῆς δωριστί, καὶ ταῦτα ἀποδοκιμάσας [1342b] τῶν ὀργάνων τὸν αὐλόν. ἔχει γὰρ τὴν αὐτὴν δύναμιν ἢ φρυγιστὴ τῶν ἁρμονιῶν ἢ περ αὐλὸς ἐν τοῖς ὀργάνοις· ἄμφω γὰρ ὀργιαστικὰ καὶ παθητικά· [δηλοῖ δ' ἡ ποίησις]. πᾶσα γὰρ βακχεία καὶ πᾶσα ἡ τοιαύτη κίνησις μάλιστα τῶν ὀργάνων ἐστὶν ἐν τοῖς αὐλοῖς, τῶν δ' ἁρμονιῶν ἐν τοῖς φρυγιστὴ μέλεσι λαμβάνει ταῦτα τὸ πρέπον. «δηλοῖ δ' ἡ ποίησις,» οἷον ὁ διθύραμβος ὁμολογουμένως εἶναι δοκεῖ Φρύγιον. καὶ τούτου πολλὰ παραδείγματα λέγουσιν οἱ περὶ τὴν σύνεσιν ταύτην, ἄλλα τε καὶ ὅτι Φιλόξενος ἐγχειρήσας ἐν τῇ δωριστὴ ποιῆσαι [διθύραμβον] τοὺς Μυσοὺς οὐχ οἷός τ' ἦν, ἀλλ' ὑπὸ τῆς φύσεως αὐτῆς ἐξέπεσεν εἰς τὴν φρυγιστὴ τὴν προσήκουσαν ἁρμονίαν πάλιν. περὶ δὲ τῆς δωριστὴ πάντες ὁμολογοῦσιν ὡς στασιμωτάτης οὔσης καὶ μάλιστα ἦθος ἐχούσης ἀνδρεῖον. ἔτι δὲ ἐπεὶ τὸ μέσον μὲν τῶν ὑπερβολῶν ἐπαινοῦμεν καὶ χρῆναι διώκειν φαμέν, ἡ δὲ δωριστὴ ταύτην ἔχει τὴν φύσιν πρὸς τὰς ἄλλας ἁρμονίας, φανερόν ὅτι τὰ Δῶρια μέλη πρέπει παιδεύεσθαι

μᾶλλον τοῖς νεωτέροις.

εἰσὶ δὲ δύο σκοποί, τό τε δυνατόν καὶ τὸ πρέπον· καὶ γὰρ τὰ δυνατὰ δεῖ μεταχειρίζεσθαι μᾶλλον καὶ τὰ πρέποντα ἐκάστους. ἔστι δὲ καὶ ταῦτα ὠρισμένα ταῖς ἡλικίαις, οἷον τοῖς ἀπειρηκόσι διὰ χρόνον οὐ ῥάδιον ἄδειν τὰς συντόνους ἁρμονίας, ἀλλὰ τὰς ἀνειμένας ἢ φύσις ὑποβάλλει τοῖς τηλικούτοις. διὸ καλῶς ἐπιτιμῶσι καὶ τοῦτο Σωκράτει τῶν περὶ τὴν μουσικὴν τινες, ὅτι τὰς ἀνειμένας ἁρμονίας ἀποδοκιμάσειεν εἰς τὴν παιδείαν, οὐ κατὰ τὴν τῆς μέθης δύναμιν, ὡς μεθυστικὰς λαμβάνων αὐτάς (βακχευτικὸν γὰρ ἢ γε μέθη ποιεῖ μᾶλλον), ἀλλ' ἀπειρηκυίας. ὥστε καὶ πρὸς τὴν ἐσομένην ἡλικίαν, τὴν τῶν πρεσβυτέρων, δεῖ καὶ τῶν τοιούτων ἁρμονιῶν ἄπτεσθαι καὶ τῶν μελῶν τῶν τοιούτων, ἔτι δ' εἴ τίς ἐστι τοιαύτη τῶν ἁρμονιῶν ἣ πρέπει τῇ τῶν παίδων ἡλικίᾳ διὰ τὸ δύνασθαι κόσμον τ' ἔχειν ἅμα καὶ παιδείαν, οἷον ἡ λυδιστὶ φαίνεται πεπονθέναι μάλιστα τῶν ἁρμονιῶν. δῆλον <οὖν> ὅτι τούτους ὄρους τρεῖς ποιητέον εἰς τὴν παιδείαν, τό τε μέσον καὶ τὸ δυνατόν καὶ τὸ πρέπον.

## Οἰκονομικά (1343a) Economics



### CONTENTS

[ΟΙΚΟΝΟΜΙΚΟΣ ΠΡΩΤΟΣ](#)

[ΟΙΚΟΝΟΜΙΚΟΣ ΔΕΥΤΕΡΟΣ](#)

### ΟΙΚΟΝΟΜΙΚΟΣ ΠΡΩΤΟΣ

[1343a] Ἡ οἰκονομικὴ καὶ <ἡ> πολιτικὴ διαφέρει οὐ μόνον τοσοῦτον ὅσον οἰκία καὶ πόλις (ταῦτα μὲν γὰρ αὐταῖς ἐστὶ τὰ ὑποκείμενα), ἀλλὰ καὶ ὅτι ἡ μὲν πολιτικὴ ἐκ πολλῶν ἀρχόντων ἐστίν, ἡ οἰκονομικὴ δὲ μοναρχία.

Ἔναι μὲν οὖν τῶν τεχνῶν διήρηται, καὶ οὐ τῆς αὐτῆς ἐστὶ ποιῆσαι καὶ χρῆσασθαι τῷ ποιηθέντι, ὥσπερ λύρα καὶ αὐλοῖς· τῆς δὲ πολιτικῆς ἐστὶ καὶ πόλιν ἐξ ἀρχῆς συστήσασθαι καὶ ὑπαρχούσῃ χρῆσασθαι καλῶς· ὥστε δῆλον ὅτι καὶ τῆς οἰκονομικῆς ἂν εἴη καὶ κτήσασθαι οἶκον καὶ χρῆσασθαι αὐτῷ.

Πόλις μὲν οὖν οἰκιῶν πλήθος ἐστὶ καὶ χώρας καὶ κτημάτων αὐτάρκες πρὸς τὸ εὖ ζῆν. Φανερόν δέ· ὅταν γὰρ μὴ δυνατοὶ ὦσι τούτου τυγχάνειν, διαλύεται καὶ ἡ κοινωνία. Ἔτι δὲ ἔνεκα τούτου συνέρχονται. Οὗ δὲ ἔνεκα ἕκαστόν ἐστι καὶ γέγονε, καὶ ἡ οὐσία αὐτοῦ τυγχάνει αὕτη οὕσα· ὥστε δῆλον ὅτι πρότερον γενέσκει ἡ οἰκονομικὴ <τῆς> πολιτικῆς ἐστὶ. Καὶ γὰρ τὸ ἔργον· μῦρον γὰρ οἰκία πόλεώς ἐστὶ.

Σκεπτέον οὖν περὶ τῆς οἰκονομικῆς καὶ τί τὸ ἔργον αὐτῆς.

Μέρη δὲ οἰκίας ἄνθρωπος τε καὶ κτῆσις ἐστίν. Ἐπεὶ δὲ πρῶτον ἐν τοῖς ἐλαχίστοις ἡ Φύσις ἐκάστου θεωρεῖται, καὶ περὶ οἰκίας ἂν ὁμοίως ἔχοι. Ὡστε καθ' Ἡσίοδον δεοὶ ἂν ὑπάρχειν

οἶκον μὲν πρώτιστα γυναῖκά τε βοῦν τ' ἄροτῆρα.

Τὸ μὲν γὰρ τῆς τροφῆς πρῶτον, τὸ δὲ τῶν ἐλευθέρων <δεύτερον>· ὥστε δεοὶ ἂν τὰ περὶ τὴν τῆς γυναικὸς ὁμιλίαν οἰκονομήσασθαι καλῶς· τοῦτο δὲ ἐστὶν ὁποῖαν τινὰ δεῖ ταύτην εἶναι παρασκευάσαι.

Κτήσεως δὲ πρώτη ἐπιμέλεια ἡ κατὰ φύσιν. Κατὰ φύσιν δὲ γεωργικὴ προτέρα, καὶ δεύτεραι ὅσαι ἀπὸ τῆς γῆς, οἷον μεταλλευτικὴ καὶ εἴ τις ἄλλη τοιαύτη. Ἡ δὲ γεωργικὴ μάλιστα, ὅτι δικαία· οὐ γὰρ ἀπ' ἀνθρώπων, οὐθ' ἐκόντων, ὥσπερ καπηλεία καὶ αἱ μισθαρνικαί, οὐτ' ἀκόντων, ὥσπερ αἱ πολεμικαί. Ἔτι δὲ καὶ τῶν κατὰ φύσιν· φύσει [1343b] γὰρ ἀπὸ τῆς μητρὸς ἡ τροφή πᾶσιν ἐστίν, ὥστε καὶ τοῖς ἀνθρώποις ἀπὸ τῆς γῆς.

Πρὸς δὲ τούτοις καὶ πρὸς ἀνδρείαν συμβάλλεται μέγала· οὐ γὰρ ὥσπερ αἱ βάνηυσοι τὰ σώματα ἀχρεῖα ποιοῦσιν, ἀλλὰ δυνάμενα θυραυλεῖν καὶ πονεῖν· ἔτι δὲ δυνάμενα κινδυνεύειν πρὸς τοὺς πολεμίους· μόνων γὰρ τούτων τὰ κτήματα ἔξω τῶν ἐρυμάτων ἐστίν.

Τῶν δὲ περὶ τοὺς ἀνθρώπους ἡ κατὰ γυναῖκα πρώτη ἐπιμέλεια. Κοινωνία γὰρ φύσει τῷ θήλει καὶ τῷ ἄρρενι μάλιστα ἐστίν. Ὑπόκειται γὰρ ἡμῖν ἐν ἄλλοις ὅτι πολλὰ τοιαῦτα ἡ φύσις ἐφίεται ἀπεργάζεσθαι, ὥσπερ καὶ τῶν ζώων ἕκαστον· ἀδύνατον δὲ τὸ θῆλυ ἄνευ τοῦ ἄρρενος ἢ τὸ ἄρρεν ἄνευ τοῦ θήλεος ἀποτελεῖν τοῦτο· ὥστ' ἐξ ἀνάγκης αὐτῶν ἡ κοινωνία συνέστηκεν.

Ἐν μὲν οὖν τοῖς ἄλλοις ζώοις ἀλόγως τοῦτο ὑπάρχει, καὶ ἐφ' ὅσον μετέχουσι τῆς φύσεως, ἐπὶ τοσοῦτον, καὶ τεκνοποιῆας μόνον χάριν· ἐν δὲ τοῖς ἡμέροις καὶ φρονιμωτέροις διήρθρωται μᾶλλον (φαίνονται γὰρ μᾶλλον

βοήθειαι γινόμεναι καὶ εὐνοιαί καὶ συνεργίαι ἀλλήλοις). Ἐν ἀνθρώπῳ δὲ μάλιστα, ὅτι οὐ μόνον τοῦ εἶναι, ἀλλὰ καὶ τοῦ εὖ εἶναι συνεργὰ ἀλλήλοις τὸ θῆλυ καὶ τὸ ἄρρεν ἐστί. Καὶ ἡ τῶν τέκνων κτῆσις οὐ λειτουργίας ἔνεκεν τῇ φύσει μόνον οὕσα τυγχάνει, ἀλλὰ καὶ ὠφελείας· ἃ γὰρ ἂν δυνάμενοι εἰς ἀδυνάτους πονήσωσι, πάλιν κομίζονται παρὰ δυναμένων ἀδυνατοῦντες ἐν τῷ γήρᾳ.

Ἄμα δὲ καὶ ἡ φύσις ἀναπληροῖ ταύτῃ τῇ περιόδῳ τὸ ἀεὶ εἶναι, ἐπεὶ κατ' ἀριθμὸν οὐ δύναται, ἀλλὰ κατὰ τὸ εἶδος. Οὕτω προωκονόμηται ὑπὸ τοῦ θεοῦ ἑκατέρου ἡ φύσις, τοῦ τε ἀνδρὸς καὶ τῆς γυναικός, πρὸς τὴν κοινωνίαν· διείληπται γὰρ τῷ μὴ ἐπὶ ταύτᾳ πάντα χρήσιμον ἔχειν τὴν δύναμιν, ἀλλ' ἕνια μὲν ἐπὶ τάναντία, εἰς ταύτῳ δὲ συντείνοντα· τὸ μὲν γὰρ ἰσχυρότερον, τὸ δ' ἀσθενέστερον ἐποίησεν, ἵνα [1344a] τὸ μὲν φυλακτικώτερον ἢ διὰ τὸν φόβον, τὸ δ' ἀμυντικώτερον διὰ τὴν ἀνδρείαν, καὶ τὸ μὲν πορίζῃ τὰ ἔξωθεν, τὸ δὲ σώζῃ τὰ ἔνδον· καὶ πρὸς τὴν ἐργασίαν τὸ μὲν δυνάμενον ἐδραῖον εἶναι, πρὸς δὲ τὰς ἔξωθεν θυραυλίας ἀσθενές, τὸ δὲ πρὸς μὲν τὰς ἡσυχίας χεῖρον, πρὸς δὲ τὰς κινήσεις ὑγιεινόν· καὶ περὶ τέκνων τὴν μὲν γένεσιν κοινήν, τὴν δὲ ὠφέλειαν ἴδιον· τῶν μὲν γὰρ τὸ θρέψαι, τῶν δὲ τὸ παιδεῦσαί ἐστιν.

Πρῶτον μὲν οὖν [νόμοι πρὸς γυναῖκα] [καὶ] τὸ μὴ ἀδικεῖν· οὕτως γὰρ ἂν οὐδ' αὐτὸς ἀδικοῖτο. Τοῦθ' ὑφηγεῖται δὲ [ὁ] καὶ ὁ κοινὸς νόμος· καθάπερ οἱ Πυθαγόρειοι λέγουσιν, ὥσπερ ἰκέτιν καὶ ἀφ' ἐστίας ἡγμένην ὡς ἥκιστα δεῖν [δοκεῖν] ἀδικεῖν· ἀδικία δὲ ἀνδρὸς αἰ θύραζε συνουσίαι γιγνόμεναι.

Περὶ δὲ ὁμιλίας μήθ' ὥστε <παρόντος> δεῖσθαι μήθ' ὡς ἀπόντος ἀδυνατεῖν [ἡσυχάζειν], ἀλλ' οὕτως ἐθίζειν ὥστε ἱκανῶς ἔχειν παρόντος καὶ μὴ παρόντος. Εὐ δ' ἔχει καὶ τὸ τοῦ Ἡσιόδου.

παρθενικὴν δὲ γαμεῖν, ἵνα ἡθεα κεδνὰ διδάξῃς.

Αἱ γὰρ ἀνομοιότητες τῶν ἡθῶν ἥκιστα φιλικόν.

Περὶ δὲ κοσμήσεως, ὥσπερ οὐδὲ τὰ ἡθῇ δεῖ ἀλαζονευομένους ἀλλήλοις πλησιάζειν, οὕτως οὐδὲ τὰ σώματα. Ἡ δὲ διὰ τῆς κοσμήσεως οὐδὲν διαφέρουσά ἐστι τῆς τῶν τραγωδῶν ἐν τῇ σκευῇ πρὸς ἀλλήλους ὁμιλία.

Τῶν δὲ κτημάτων πρῶτον μὲν καὶ ἀναγκαιότατον τὸ βέλτιστον καὶ οἰκονομικώτατον· τοῦτο δὲ ἦν ἄνθρωπος. Διὸ δεῖ πρῶτον δούλους παρασκευάζεσθαι σπουδαίους. Δούλων δὲ εἶδη δύο, ἐπίτροπος καὶ ἐργάτης. Ἐπεὶ δὲ ὁρῶμεν ὅτι αἰ παιδεῖται ποιοῦς τινὰς ποιοῦσι τοὺς νέους, ἀναγκαῖον



καὶ παρασκευασάμενον τρέφειν οἷς τὰ ἐλευθέρια τῶν ἔργων προστακτέον.

Ὅμιλία δὲ πρὸς δούλους ὡς μήτε ὑβρίζειν ἔαν μήτε ἀνιέναι· καὶ τοῖς μὲν ἐλευθεριωτέροις τιμῆς μεταδιδόναι, τοῖς δ' ἐργάταις τροφῆς πλῆθος. Καὶ ἐπειδὴ ἡ τοῦ οἴνου πόσις καὶ τοὺς ἐλευθέρους ὑβριστὰς ποιεῖ, καὶ πολλὰ ἔθνη ἀπέχεται καὶ τῶν ἐλευθέρων, οἷον Καρχηδόνιοι ἐπὶ στρατιᾶς, φανερόν ὅτι τούτου ἢ μηδὲν ἢ ὀλιγάκις μεταδοτέον.

Ὦντων δὲ τριῶν, ἔργου καὶ κολάσεως καὶ τροφῆς, τὸ μὲν μήτε κολάζεσθαι, μήτ' ἐργάζεσθαι, τροφήν δ' ἔχειν ὕβριν [1344b] ἐμποιεῖ· τὸ δὲ ἔργα μὲν ἔχειν καὶ κολάσεις, τροφήν δὲ μή, βίαιον καὶ ἀδυναμίαν ποιεῖ. Λείπεται δὴ ἔργα παρέχειν καὶ τροφήν ἱκανήν· ἀμίσθων γὰρ οὐχ οἷόν τε ἄρχειν, δούλῳ δὲ μισθὸς τροφή. Ὡς περ δὲ καὶ τοῖς ἄλλοις ὅταν μὴ γίνηται τοῖς βελτίοσι βέλτιον μηδὲ ἄθλα ἢ ἀρετῆς καὶ κακίας, γίνονται χεῖρους, οὕτω καὶ περὶ οἰκέτας.

Διόπερ δεῖ ποιεῖσθαι σκέπην καὶ διανέμειν τε καὶ ἀνιέναι κατ' ἀξίαν ἕκαστα, καὶ τροφήν καὶ ἐσθῆτα καὶ ἀργίαν καὶ κολάσεις λόγῳ καὶ ἔργῳ, μιμουμένους τὴν τῶν ἰατρῶν δύναμιν ἐν φαρμάκου λόγῳ, προσθεωροῦντας ὅτι ἡ τροφή οὐ φάρμακον διὰ τὸ συνεχές.

Γένη δὲ ἂν εἴη πρὸς τὰ ἔργα βέλτιστα <τὰ> μήτε δειλὰ μήτε ἀνδρεῖα ἄγαν. Ἀμφοτέρω γὰρ ἀδικοῦσι. Καὶ γὰρ οἱ ἄγαν δειλοὶ οὐχ ὑπομένουσι καὶ οἱ θυμοειδεῖς οὐκ εὐαρχοί. Χρὴ δὲ καὶ τέλος ὠρίσθαι πᾶσι· δίκαιον γὰρ καὶ συμφέρον τὴν ἐλευθερίαν κεῖσθαι ἄθλον. Βούλονται γὰρ πονεῖν, ὅταν ἡ ἄθλον καὶ ὁ χρόνος ὠρισμένος. Δεῖ δὲ καὶ ἐξομηρεῦν ταῖς τεκνοποιΐαις· καὶ μὴ κτᾶσθαι ὁμοεθνεῖς πολλούς, ὥς περ καὶ ἐν ταῖς πόλεσιν· καὶ τὰς θυσίας καὶ τὰς ἀπολαύσεις μᾶλλον τῶν δούλων ἔνεκα ποιεῖσθαι ἢ τῶν ἐλευθέρων· πλείονα γὰρ ἔχουσιν οὗτοι οὐπὲρ ἔνεκα τὰ τοιαῦτα ἐνομίσθη.

Εἶδη δὲ τοῦ οἰκονόμου τέτταρα <καθ'> ἃ δεῖ ἔχειν περὶ τὰ χρήματα. Καὶ γὰρ τὸ κτᾶσθαι δυνατόν χρὴ εἶναι, καὶ φυλάττειν (εἰ δὲ μή, οὐδὲν ὄφελος τοῦ κτᾶσθαι· τῷ γὰρ ἡθμῷ ἀντλεῖν τοῦτ' ἔστι, καὶ ὁ λεγόμενος τετρημένος πίθος)· ἔτι δὲ καὶ εἶναι κοσμητικὸν τῶν ὑπαρχόντων καὶ χρηστικόν· τούτων γὰρ ἔνεκα κάκεινων δεόμεθα.

Διηρῆσθαι δὲ δεῖ τούτων ἕκαστον, καὶ πλείω τὰ κάρπιμα εἶναι τῶν ἀκάρπων, καὶ τὰς ἐργασίας οὕτω νενεμῆσθαι ὅπως μὴ ἅμα κινδυνεύσωσιν ἅπασαι. Πρὸς δὲ φυλακὴν τοῖς τε Περσικοῖς συμφέρει χρῆσθαι καὶ τοῖς

Λακωνικοῖς. Καὶ ἡ Ἀττικὴ δὲ οἰκονομία χρήσιμος· ἀποδιδόμενοι γὰρ ὠνοῦνται, καὶ ἡ τοῦ ταμείου θέσις οὐκ ἔστιν ἐν ταῖς μικροτέραις οἰκονομίαις.

Περσικὰ δὲ ἦν τὸ πάντα ἐπιτάττειν καὶ <τὸ> πάντ' ἐφορᾶν αὐτόν, καθ' ὃ ἔλεγε Δίων περὶ Διονυσίου· οὐδεὶς γὰρ ἐπιμελεῖται ὁμοίως τῶν ἀλλοτριῶν καὶ τῶν οἰκείων, ὥστε ὅσα [1345a] ἐνδέχεται, δι' ἑαυτοῦ ποιεῖσθαι χρὴ τὴν ἐπιμέλειαν. Καὶ τὸ τοῦ Πέρσου καὶ τὸ τοῦ Λίβυος ἀπόφθεγμα εὖ ἂν ἔχοι. Ὁ μὲν γὰρ ἐρωτηθεὶς τί μάλιστα ἵππον παίνει, “ὁ τοῦ δεσπότης ὀφθαλμός” ἔφη· ὁ δὲ Λίβυς ἐρωτηθεὶς ποία κόπρος ἀρίστη, “τὰ τοῦ δεσπότης ἵχνη” ἔφη.

Ἐπισκεπτέον οὖν τὰ μὲν αὐτόν, τὰ δὲ τὴν γυναῖκα, ὡς ἑκατέροις διαιρεῖται τὰ ἔργα τῆς οἰκονομίας. Καὶ τοῦτο ποιητέον ἐν μικραῖς οἰκονομίαις ὀλιγάκις, ἐν δ' ἐπιτροπευομέναις πολλάκις. Οὐ γὰρ οἶόν τε μὴ καλῶς ὑποδεικνύντος καλῶς μιμεῖσθαι, οὔτ' ἐν τοῖς ἄλλοις, οὔτ' ἐν ἐπιτροπείᾳ, ὡς ἀδύνατον <ἂν> μὴ ἐπιμελῶν δεσποτῶν ἐπιμελεῖς εἶναι τοὺς ἐφεστῶτας.

Ἐπεὶ δὲ ταῦτα καὶ καλὰ πρὸς ἀρετὴν καὶ ὠφέλιμα πρὸς οἰκονομίαν, ἐγείρεσθαι χρὴ πρότερον δεσπότης οἰκετῶν καὶ καθεύδειν ὕστερον· καὶ μηδέποτε ἀφύλακτον <τὴν> οἰκίαν εἶναι, ὥσπερ πόλιν· ὅσα τε δεῖ ποιεῖν μήτε νυκτὸς μήτε ἡμέρας παριέναι· τό τε διανίστασθαι νύκτωρ· τοῦτο γὰρ καὶ πρὸς ὑγίειαν καὶ οἰκονομίαν καὶ φιλοσοφίαν χρήσιμον.

Ἐν μὲν οὖν ταῖς μικραῖς κτήσεσιν ὁ Ἀττικὸς τρόπος τῆς διαθέσεως τῶν ἐπικαρπιῶν χρήσιμος· ἐν δὲ ταῖς μεγάλαις, διαμερισθέντων καὶ τῶν πρὸς ἐνιαυτὸν καὶ τῶν κατὰ μῆνα δαπανωμένων, ὁμοίως δὲ καὶ περὶ σκευῶν χρήσεως τῶν καθ' ἡμέραν καὶ τῶν ὀλιγάκις, ταῦτα παραδοτέον τοῖς ἐφεστῶσιν. Ἐπὶ τούτοις καὶ τὴν ἐπίσκεψιν αὐτῶν διὰ τινος χρόνου ποιητέον, ἵνα μὴ λανθάνῃ τὸ σωζόμενον καὶ τὸ ἐλλεῖπον.

Οἰκίαν δὲ πρὸς τε τὰ κτήματα ἀποβλέποντα κατασκευαστέον καὶ πρὸς ὑγίειαν καὶ πρὸς εὐημερίαν αὐτῶν. Λέγω δὲ κτήματα μὲν, οἷον καρποῖς καὶ ἐσθῆτι ποία συμφέρει, καὶ τῶν καρπῶν ποία ξηροῖς καὶ ποία ὑγροῖς, καὶ τῶν ἄλλων κτημάτων ποία ἐμψύχοις καὶ ποία ἀψύχοις, καὶ δούλοις καὶ ἐλευθέροις, καὶ γυναξὶ καὶ ἀνδράσι, καὶ ξένοις καὶ ἀστοῖς. Καὶ πρὸς εὐημερίαν δὲ καὶ πρὸς ὑγίειαν δεῖ εἶναι εὐπνουν μὲν τοῦ θέρους, εὐήλιον δὲ τοῦ χειμῶνος. Εἴη δ' ἂν [ἡ] τοιαύτη κατάβωρος οὐσα καὶ μὴ ἰσοπλατής.

Δοκεῖ δὲ καὶ ἐν ταῖς μεγάλαις οἰκονομίαις χρήσιμος εἶναι θυρωρὸς ὃς ἂν ἢ ἄχρηστος τῶν ἄλλων ἔργων, πρὸς τὴν σωτηρίαν τῶν εἰσφερομένων [1345b]

καὶ ἐκφερομένων. Πρὸς εὐχρηστίαν δὲ σκευῶν τὸ Λακωνικόν· χρή γὰρ ἐν ἑκάστων ἐν τῇ αὐτοῦ χώρᾳ κεῖσθαι· οὕτω γὰρ ἂν ἔτοιμον ὄν οὐ ζητοῖτο.

## ΟΙΚΟΝΟΜΙΚΟΣ ΔΕΥΤΕΡΟΣ

Τὸν οἰκονομεῖν μέλλοντά τι κατὰ τρόπον τῶν τε τόπων, περὶ οὓς ἂν πραγματεύηται, μὴ ἀπείρως ἔχειν, καὶ τῇ φύσει εὐφυῆ εἶναι καὶ τῇ προαιρέσει φιλόπονόν τε καὶ δίκαιον· ὅ τι γὰρ ἂν ἀπῇ τούτων τῶν μερῶν, πολλὰ διαμαρτήσεται περὶ τὴν πραγματείαν ἣν μεταχειρίζεται. Οἰκονομίαι δέ εἰσι τέτταρες, ὡς ἐν τύπῳ διελέσθαι (τὰς γὰρ ἄλλας εἰς τοῦτο ἐμπίπτουσας εὐρήσομεν)· βασιλική, σατραπική, πολιτική, ἰδιωτική.

Τούτων δὲ μεγίστη μὲν καὶ ἀπλουστάτη ἡ βασιλική, <...>, ποικιλωτάτη δὲ καὶ ῥάστη ἡ πολιτική, ἐλαχίστη δὲ καὶ ποικιλωτάτη ἡ ἰδιωτική. Ἐπικοινωνεῖν μὲν τὰ πολλὰ ἀλλήλαις ἀναγκαῖόν ἐστιν· ὅσα δὲ μάλιστα δι' αὐτῶν ἐκάστη συμβαίνει, ταῦτα ἐπισκεπτέον ἡμῖν ἐστιν. Πρῶτον μὲν τοίνυν τὴν βασιλικὴν ἴδωμεν. Ἔστι δὲ αὕτη δυναμένη μὲν τὸ καθόλου, εἴδη δὲ ἔχουσα τέτταρα· περὶ <τὸ> νόμισμα, περὶ τὰ ἐξαγωγήμα, περὶ τὰ εἰσαγωγήμα, περὶ τὰ ἀναλώματα.

Τούτων δὲ ἕκαστον. Περὶ μὲν τὸ νόμισμα λέγω ποῖον καὶ πότε [τίμιον ἢ εὖωνον] ποιητέον· περὶ δὲ τὰ ἐξαγωγήμα καὶ εἰσαγωγήμα πότε καὶ τίνα παρὰ τῶν σατραπῶν ἐν τῇ ταγῇ ἐκλαβόντι αὐτῷ λυσιτελήσει διατίθεσθαι· περὶ δὲ τὰ ἀναλώματα τίνα περιαιρετέον καὶ πότε, καὶ πότερον δοτέον νόμισμα εἰς τὰς δαπάνας ἢ ἀντὶ νομίσματος ὦνια.

Δεύτερον δὲ τὴν σατραπικὴν. Ἔστι δὲ ταύτης εἴδη ἕξ τῶν προσόδων [ἀπὸ γῆς, ἀπὸ τῶν ἐν τῇ χώρᾳ ἰδίων γινομένων, ἀπὸ ἐμπορίων, ἀπὸ τελῶν, ἀπὸ βοσκημάτων, ἀπὸ τῶν ἄλλων]. Αὐτῶν δὲ τούτων πρώτη μὲν καὶ κρατίστη ἡ ἀπὸ τῆς γῆς· αὕτη δὲ ἐστὶν ἣν οἱ μὲν ἐκφόριον, οἱ δὲ δεκάτην προσαγορεύουσιν. Δευτέρα δὲ ἡ ἀπὸ τῶν ἰδίων γινομένη, οὗ μὲν χρυσίον, οὗ δὲ ἀργύριον, οὗ δὲ χαλκός, οὗ δὲ ὅποσα δύναται γίνεσθαι. Τρίτη δὲ καὶ ἡ ἀπὸ [1346a] τῶν ἐμπορίων. Τετάρτη δὲ καὶ ἡ ἀπὸ τῶν κατὰ γῆν τε καὶ ἀγοραίων τελῶν γινομένη. Πέμπτη δὲ ἡ ἀπὸ τῶν βοσκημάτων, ἐπικαρπία τε καὶ δεκάτη καλουμένη. Ἑκτη δὲ ἡ ἀπὸ τῶν ἀνθρώπων, ἐπικεφάλαιόν τε καὶ χειρωνάξιον προσαγορευομένη.

Τρίτον δὲ τὴν πολιτικὴν. Ταύτης δὲ κρατίστη μὲν πρόσοδος ἡ ἀπὸ τῶν ἰδίων ἐν τῇ χώρᾳ γινομένη. Εἴτα ἡ ἀπὸ τῶν ἐμπορίων καὶ διαγωγῶν. Εἴτα ἡ ἀπὸ τῶν ἐγκυκλίων.

Τέταρτον δὲ καὶ τελευταῖον τὴν ἰδιωτικὴν. Αὕτη δὲ ἐστὶν ἀνώματος μὲν διὰ τὸ δεῖν μὴ πρὸς ἓνα σκοπὸν οἰκονομεῖν, ἐλαχίστη δὲ διὰ τὸ καὶ τὰς προσόδους καὶ τὰ ἀναλώματα βραχέα γίνεσθαι. Αὐτῆς δὲ ταύτης κρατίστη μὲν πρόσοδος ἡ ἀπὸ γῆς γινομένη. Δευτέρα δὲ ἡ ἀπὸ τῶν ἄλλων ἐγκυκλημάτων. Τρίτη δὲ ἡ ἀπὸ ἀργυρίου. Χωρὶς δὲ τούτων ὃ πάσαις μὲν ἐπικοινωνεῖται ταῖς οἰκονομίαις (καὶ προσήκει σκοπεῖν αὐτὸ μὴ παρέργως), μάλιστα δὲ ταύτη, τὸ τὰ ἀναλώματα μὴ μείζω τῶν προσόδων γίνεσθαι.

Ἐπεὶ τοίνυν τὰς διαιρέσεις εἰρήκαμεν, μετὰ τοῦτο πάλιν νοητέον ἡμῖν ἡ σατραπεία, περὶ ἣν ἂν πραγματευώμεθα, ἡ πόλις, πότερον ἢ πάντα ἄρτι διειλόμεθα ἢ τὰ μέγιστα τούτων δυνατὴ φέρειν ἐστί· «εἰ δ' ἐστί,» τούτοις χρηστέον. Μετὰ δὲ τοῦτο ποῖαι τῶν προσόδων ἢ τὸ παράπαν οὐκ εἰσὶ, δυνατὰ δ' εἰσὶ γενέσθαι, ἢ μικρὰ νῦν οὔσαι μείζους οἶαί [τινες] «τε» κατασκευασθῆναι, ἢ τῶν ἀναλωμάτων τῶν νῦν ἀναλουμένων τίνα τε καὶ πόσα περιαιρεθέντα «τὰ» ὅλα μὴθὲν βλάψει.

Τὰ μὲν οὖν περὶ τὰς οἰκονομίας τε καὶ τὰ μέρη τὰ τούτων εἰρήκαμεν· ὅσα δὲ τινες τῶν πρότερον πεπράγασιν εἰς πόρον χρημάτων, εἴ «τε» τεχνικῶς τι διώκησαν, ἢ ὑπελαμβάνομεν ἀξιόλογα αὐτῶν εἶναι, συναγηγόχαμεν. Οὐδὲ γὰρ ταύτην τὴν ἱστορίαν ἀχρεῖον ὑπολαμβάνομεν εἶναι. Ἔστι γὰρ ὅτε τούτων ἐφαρμόσει τι οἷς ἂν αὐτὸς πραγματεύῃ.

Κύψελος [ὁ] Κορίνθιος εὐξάμενος τῷ Δίῃ, ἔὰν κύριος γένηται τῆς πόλεως, τὰ ὄντα Κορινθίοις πάντα ἀναθήσειν, [1346b] ἐκέλευσεν αὐτοὺς ἀπογράψασθαι. Ἀπογραψαμένων δὲ τούτων τὸ δέκατον μέρος παρὰ ἐκάστου ἔλαβε, τοῖς δὲ λοιποῖς ἐκέλευσεν ἐργάζεσθαι. Περιελθόντος δὲ τοῦ ἐνιαυτοῦ τὸ αὐτὸ τοῦτο ἐποίησεν, ὥστε συνέβαινεν ἐν δέκα ἔτεσι κεῖνόν τε ἅπαντα ἔχειν ἄπερ ἀνιέρωσε, τοὺς τε Κορινθίους ἕτερα κεκτῆσθαι.

Λύγδαμις Νάξιος ἐκβαλὼν φυγάδας, ἐπειδὴ τὰ κτήματα αὐτῶν οὐθεὶς ἠθέλησεν ἄλλ' ἢ βραχέος ἀγοράζειν, αὐτοῖς τοῖς φυγάσιν ἀπέδοτο· τὰ τε ἀναθήματα, ὅσα ἦν αὐτῶν ἐν τισιν ἐργαστηρίοις ἡμίεργα ἀνακείμενα, ἐπώλει τοῖς τε φυγάσι καὶ τῶν ἄλλων τῷ βουλομένῳ ὥστ' ἐπιγραφῆναι τὸ τοῦ πριαμένου ὄνομα.

Βυζάντιοι δὲ δεηθέντες χρημάτων τὰ τεμένη τὰ δημόσια ἀπέδοντο, τὰ μὲν κάρπιμα χρόνον τινά, τὰ δὲ ἄκαρπα ἀενάως· τὰ τε θιασωτικὰ καὶ τὰ πατριωτικὰ ὡσαύτως· καὶ ὅσα ἐν χωρίοις ἰδιωτικοῖς ἦν· ὠνοῦντο γὰρ πολλοῦ ὧν ἦν καὶ τὸ ἄλλο κτῆμα· τοῖς δὲ θιασώταις ἕτερα χωρία, τὰ δημόσια ὅσα ἦν

περὶ τὸ γυμνάσιον ἢ τὴν ἀγορὰν ἢ τὸν λιμένα· τοὺς τε τόπους τοὺς ἀγοραίους ἐν οἷς ἐπώλει τίς τι· καὶ τῆς θαλάττης τὴν ἀλιεΐαν· καὶ τὴν τῶν ἁλῶν ἁλατοπωλίαν· τῶν τ' ἐργαζομένων θαυματοποιῶν καὶ μάντεων καὶ φαρμακοπωλῶν καὶ τῶν ἄλλων τῶν τοιουτοτρόπων <...>, τὸ τρίτον δὲ μέρος τοῦ ἐργαζομένου ἀποτελεῖν ἔταξαν· τῶν τε νομισμάτων τὴν καταλλαγὴν ἀπέδοντο μιᾷ τραπέζῃ, ἑτέρῳ δὲ οὐκ ἦν οὐθενὶ οὔτε ἀποδόσθαι ἑτέρῳ οὔτε πρίασθαι παρ' ἑτέρου· εἰ δὲ μή, στέρησις ἦν.

Ὅντος δὲ νόμου αὐτοῖς μὴ εἶναι πολίτην ὃς ἂν μὴ ἐξ ἀστῶν ἀμφοτέρων ἦ, χρημάτων δεηθέντες ἐψηφίσαντο τὸν ἐξ ἐνὸς ὄντα ἀστοῦ καταβαλόντα μνᾶς τριάκοντα εἶναι πολίτην.

Ἐν σιτοδείᾳ δὲ γεγόμενοι καὶ ἀποροῦντες χρημάτων κατήγαγον τὰ πλοῖα τὰ ἐκ τοῦ Πόντου. Χρόνου δὲ γενομένου τῶν ἐμπόρων ἀγανακτούντων, ἐτέλουν αὐτοῖς τόκους ἐπιδεκάτους, τοῖς δ' ὠνούμενοις τι ἔταξαν χωρὶς τῆς τιμῆς διδόναι τὸ ἐπιδέκατον.

[1347a] Μετοίκων δὲ τινων ἐπιδεδανεικόντων ἐπὶ κτήμασιν, οὐκ οὔσης αὐτοῖς ἐγκτήσεως, ἐψηφίσαντο τὸ τρίτον μέρος εἰσφέροντα τοῦ δανείου τὸν βουλόμενον κυρίως ἔχειν τὸ κτῆμα.

Ἰππίας Ἀθηναῖος τὰ ὑπερέχοντα τῶν ὑπερώων εἰς τὰς δημοσίας ὁδοὺς καὶ τοὺς ἀναβαθμοὺς καὶ τὰ προφράγματα καὶ τὰς θύρας τὰς ἀνοιγομένας ἔξω ἐπώλησεν· ὠνοῦντο οὖν ὧν ἦν τὰ κτήματα καὶ συνελέγη χρήματα οὕτω συχνά.

Τό τε νόμισμα τὸ ὃν Ἀθηναίοις ἀδόκιμον ἐποίησε, τάξας δὲ τιμὴν ἐκέλευσε πρὸς αὐτὸν ἀνακομίζειν. Συνελθόντων δὲ ἐπὶ τῷ κόψαι ἕτερον χαρακτῆρα, ἐξέδωκε τὸ αὐτὸ ἀργύριον.

Ὅσοι τε τριηραρχεῖν ἢ φυλαρχεῖν ἢ χορηγεῖν ἢ τινα εἰς ἑτέραν λειτουργίαν τοιαύτην ἤμελλον δαπανᾶν, τίμημα τάξας μέτριον ἐκέλευσε τὸν βουλόμενον ἀποτείσαντα τοῦτο ἐγγράφεσθαι εἰς τοὺς λελειτουργηκότας.

Τῇ τε ἱερείᾳ τῇ τῆς Ἀθηνᾶς τῆς ἐν ἀκροπόλει ὑπὲρ τοῦ ἀποθανόντος φέρειν χοίνικα κριθῶν καὶ πυρῶν ἑτέραν καὶ ὀβολόν, καὶ ὅτῳ ἂν παιδάριον γένηται, τὸ αὐτὸ τοῦτο.

Ἀθηναῖοι δὲ οἱ ἐν Ποτιδαίᾳ οἰκοῦντες δεόμενοι χρημάτων εἰς τὸν πόλεμον ἀπογράψασθαι ἅπασιν συνέταξαν τὰς οὐσίας, μὴ ἀθρόας εἰς τὸν αὐτοῦ δῆμον

ἕκαστον, ἀλλὰ κατὰ κτῆμα ἐν ᾧ τόπῳ ἕκαστον εἴη, ἵνα οἱ πένητες δύνωνται ὑποτιμᾶσθαι· ὅτῳ δὲ μὴ ἦν κτῆμα μηθέν, τὸ σῶμα διμναῖον τιμήσασθαι. Ἀπὸ τούτων οὖν εἰσέφερον τὸ ἐπιγραφὲν ἕκαστος.

Σωσίπολις Ἀντισσαῖος, δεηθείσης τῆς πόλεως χρημάτων, εἰθισμένων δὲ αὐτῶν λαμπρῶς ἄγειν Διονύσια, ἐν οἷς ἄλλα τε πολλὰ ἀνήλiskon ἐξ ἐνιαυτοῦ παρασκευάζοντες καὶ ἱερεῖα πολυτελῆ, ὑπογύου δὲ οὔσης ταύτης τῆς ἐορτῆς, ἔπεισεν αὐτοὺς τῷ μὲν Διονύσῳ εὖξασθαι ἐς νέωτα ἀποδώσειν διπλάσια, ταῦτα δὲ συναγαγόντας ἀποδόσθαι. Συνελέγη οὖν αὐτοῖς χρήματα οὐκ ὀλίγα πρὸς τὴν χρεῖαν.

Λαμψακηνοὶ δὲ προσδοκίμων οὐσῶν τριηρῶν πολλῶν πρὸς αὐτούς, ὄντος <τοῦ> μεδίμνου τῶν ἀλφίτων τετραδράχμου, προσέταξαν τοῖς ἀγοραίοις πωλεῖν ἐξάδραχμον, καὶ τοῦ ἐλαίου τὸν χοᾶ ὄντα δραχμῶν <τριῶν> τεττάρων καὶ τριωβόλου, τοῦ τε οἴνου καὶ τῶν ἄλλων ὡσαύτως. Τὴν μὲν οὖν [1347b] ἀρχαίαν τιμὴν ἐλάμβανεν ὁ ἰδιώτης, τὸ δὲ πλεόν ἢ πόλις, καὶ εὐπόρησε χρημάτων.

Ἡρακλεῶται πέμποντες ναῦς τετταράκοντα ἐπὶ τοὺς ἐν Βοσπόρῳ τυράννους, οὐκ εὐπορούμενοι χρημάτων, παρὰ τῶν ἐμπόρων συνηγόρασαν τὸν τε σῖτον πάντα καὶ τὸ ἐλαιον καὶ τὸν οἶνον καὶ τὴν ἄλλην ἀγοράν, χρόνου δισταμένου ἐν ᾧ ἔμελλον ἀποδώσειν τὴν τιμὴν. Τοῖς δὲ δὴ ἐμπόροις καλῶς εἶχε μὴ κοτυλίζειν, ἀλλ' ἀθρόα τὰ φορτία πεπραῖσθαι. Ἐκεῖνοί τε διαδόντες διμήνου μισθὸν παρῆγον [ἀλλὰ] τὴν ἀγοράν ἐν ὀλκάσιν, ἄνδρα <τε> ταμίαν ἐπέστησαν ἐφ' ἐκάστη τῶν νεῶν. Ἀφικομένων δ' εἰς τὴν πολεμίαν αὐτῶν ἡγόραζον οἱ στρατιῶται παρὰ τούτων ἅπαντα. Πρότερον <οὖν> συλλεγέντι ἀργυρίῳ ἐδίδοσαν οἱ στρατηγοὶ πάλιν τὸν μισθόν, ὥστε συνέβαινε ταὐτὸ [τὸ] ἀργύριον δίδοσθαι ἕως εἰς οἶκον ἀπῆλθον.

Λακεδαιμόνιοι Σαμίων δεηθέντων χρήματα αὐτοῖς εἰς τὴν κάθοδον δοῦναι, ἐψηφίσαντο μίαν ἡμέραν καὶ αὐτοὺς καὶ τοὺς οἰκέτας καὶ τὰ ὑποζύγια νηστεῦσαι, ὅσον δὲ ἐδαπάνᾳ ἕκαστος, τοσοῦτον δοῦναι τοῖς Σαμίοις.

Χαλκηδόνιοι δέ, ξένων ἐν τῇ πόλει συχνῶν παρ' αὐτοῖς γινομένων, ὀφείλοντες αὐτοῖς μισθὸν οὐκ ἠδύναντο διαλῦσαι. Ἀνήγγειλαν οὖν, εἴ τις τῶν πολιτῶν ἢ μετοίκων σῦλον ἔχει κατὰ πόλεως ἢ ἰδιώτου καὶ βούλεται λαβεῖν, ἀπογράψασθαι. Ἀπογραψαμένων δὲ συχνῶν, τὰ πλοῖα τὰ πλέοντα εἰς τὸν Πόντον ἐσύλων μετὰ προφάσεως εὐλόγου. Ἔταξαν δὲ χρόνον ἐν ᾧ λόγον ὑπὲρ αὐτῶν ἔφασαν ποιήσασθαι. Συλλεγέντων δὲ χρημάτων συχνῶν, τοὺς μὲν

στρατιώτας ἀπήλλαξαν, ὑπὲρ δὲ τῶν σύλων διεδικάσαντο. Τοῖς δὲ μὴ δικαίως συληθεῖσιν ἡ πόλις ἀπὸ τῶν προσόδων ἀπεδίδου.

Κυζικηνοὶ δὲ στασιάσαντες πρὸς ἀλλήλους, ἐπικρατήσαντος τοῦ δήμου, τῶν δὲ πλουσίων συνειλημμένων, ὀφείλοντες χρήματα στρατιώταις ἐψηφίσαντο μὴ θανατῶσαι τοὺς συνειλημμένους, ἀλλὰ χρήματα πραξαμένους φυγαδεῦσαι.

Χῆροι δέ, νόμου ὄντος αὐτοῖς ἀπογράψασθαι τὰ χρέα εἰς τὸ δημόσιον, δεηθέντες χρημάτων ἐψηφίσαντο τοὺς [1348a] ὀφείλοντας μὲν ἀποδοῦναι τῇ πόλει τὰ δάνεια, τὴν δὲ πόλιν ἐκ τῶν προσόδων τοὺς τόκους τοῖς δεδανεικόσι καταφέρειν, ἕως ἄν καὶ τὸ ἀρχαῖον εὐπορήσωσιν.

Μαύσωλος ὁ Καρίας τύραννος, πέμποντος βασιλέως πρὸς αὐτὸν ἐπὶ τῷ τοὺς φόρους δοῦναι, συναγαγὼν τοὺς εὐπορωτάτους ἐν τῇ χώρᾳ ἔλεγεν ὅτι ὁ βασιλεὺς αἰτεῖ τοὺς φόρους, αὐτὸς δὲ οὐκ εὐπορεῖται. Κατασκευαστοὶ δ' ἄνδρες αὐτῷ εὐθέως ἐπηγγέλλοντο ὅσον εἰσοίσει ἕκαστος. Τούτων δὲ τοῦτο πραξάντων, οἱ εὐπορώτεροι τὰ μὲν αἰσχυνόμενοι, τὰ δὲ φοβούμενοι πολλῶ τούτων πλείω ἐπηγγέλλοντο καὶ εἰσέφερον.

Πάλιν <δὲ> δεηθεὶς χρημάτων ἐξεκκλησιάσας τοῖς Μυλασσεῦσιν, ἔλεγεν ὅτι μητρόπολις οὐσα ἡ πόλις αὐτοῦ αὕτη ἀτείχιστός ἐστιν, ὁ δὲ βασιλεὺς ἐπ' αὐτὸν στρατεύει. Ἐκέλευσεν οὖν τοὺς Μυλασσεῖς φέρειν ἕκαστον ὅτι πλεῖστα χρήματα, φάσκων αὐτοὺς τοῖς νῦν εἰσενεχθεῖσι καὶ τὰ λοιπὰ σώζειν. Εἰσενεχθέντων δὲ πολλῶν τὰ μὲν χρήματα εἶχε, τὸ δὲ τεῖχος οὐκ ἔφη τὸν θεὸν <ἔαν> ἐν τῷ παρόντι οἰκοδομεῖν.

Κόνδαλος Μαυσώλου ὕπαρχος, ὁπότε διαπορευομένῳ αὐτῷ διὰ τῆς χώρας προσενέγκοι τις πρόβατον ἢ ὕν ἢ μόσχον, ἀπογραψάμενος τὸν δόντα καὶ τὸν χρόνον, ἀπαγαγόντα εἰς οἶκον ἐκέλευε τρέφειν ἕως ἄν ἐπανέλθοι. ὁπότε δὲ δοκοίη χρόνος ἱκανὸς εἶναι, αὐτό τε τὸ τραφὲν καὶ τὴν ἐπικαρπίαν λογισάμενος ἀπῆτει.

Τῶν τε δένδρων τὰ ὑπερέχοντα ἢ πίπτοντα εἰς τὰς ὁδοὺς τὰς βασιλικὰς ἐπώλει <...> τὰς ἐπικαρπίας.

Τῶν δὲ στρατιωτῶν εἴ τις τελευτήσῃ, διαπύλιον ἀπῆτει δραχμὴν τοῦ σώματος· ἅμα τε οὖν ἐντεῦθεν καὶ ἀργύριον ἐλάμβανεν, ἅμα τε οἱ ἡγεμόνες οὐ παρεκρούοντο αὐτόν, πότε τετελεύτηκεν ὁ στρατιώτης.



Τούς τε Λυκίους ὁρῶν ἀγαπῶντας τὸ τρίχωμα φορεῖν, ἔφησε γράμματα ἥκειν παρὰ βασιλέως κόμας ἀποστεῖλαι εἰς προκόμια· προστετάχθαι οὖν αὐτῷ ὑπὸ Μαυσώλου ἀποκεῖραι αὐτούς. Ἔφησεν οὖν, εἰ βούλονται ἐπικεφάλαιον τακτὸν αὐτῷ δοῦναι, μεταπέμψασθαι ἐκ τῆς Ἑλλάδος κόμην· οἱ δὲ ἀσμένως ἔδοσαν ὃ ἦται, καὶ συνελέγη χρήματα πολλὰ ἀπὸ ὄχλου πολλοῦ.

Ἀριστοτέλης Ῥόδιος ἄρχων Φωκαίας, ἀπορῶν χρημάτων, ὁρῶν στάσεις οὔσας δύο τῶν Φωκαίων, λόγους ἐποιήσατο [1348b] πρὸς τὴν ἑτέραν στάσιν ἐν ἀπορρήτοις, φάσκων αὐτῷ διδόναι χρήματα τοὺς ἑτέρους ἐφ' ὃ αὐτοῖς τὰ πράγματα ἐγκλῖναι, αὐτὸς δὲ μᾶλλον βούλεσθαι παρὰ τούτων λαβεῖν καὶ τὰ περὶ τὴν πόλιν τούτοις διοικεῖν παραδοῦναι. Ἀκούσαντες δὲ ταῦτα εὐθέως τὰ χρήματα οἱ παρόντες πορίσαντες ὅσα ἐκέλευσεν ἔδωκαν· ὁ δὲ τοῖς ἑτέροις πάλιν ἔδειξεν ἃ εἰληφὼς εἶη παρὰ τῶν ἑτέρων· οἱ δὲ καὶ αὐτοὶ ἔφασαν οὐκ ἐλάττω δώσειν. Λαβὼν δὲ παρ' ἀμφοτέρων κατήλλαξεν αὐτούς πρὸς ἀλλήλους.

Τοῖς τε πολίταις κατιδὼν οὔσας δίκας πολλὰς καὶ μεγάλας, ἐκ πολλοῦ χρόνου ἀδικίας οὔσης διὰ πολέμου, δικαστήριον καθίσας προεῖπεν, ὅσοι ἂν μὴ δικάσωνται χρόνον ὃν προέθηκε, μηκέτι ἔσεσθαι ὑπὲρ τῶν προτέρων ἐγκλημάτων κρίσεις. Τότε δὴ παράβολον πολλῶν δικῶν <...> καὶ τὰς ἐκκλητήτους μετ' ἐπιτιμίων ἐφ' αὐτὸν ποιούμενος καὶ παρ' ἑκατέρων ἀργύριον δι' ἑτέρων λαμβάνων, συνήγαγεν οὐκ ὀλίγα χρήματα.

Κλαζομένοι δ' ἐν σιτοδείᾳ ὄντες χρημάτων τε ἀποροῦντες ἐψηφίσαντο παρ' οἷς ἔλαιόν ἐστι τῶν ἰδιωτῶν, δανεῖσαι τῇ πόλει ἐπὶ τόκῳ· γίνεται δὲ πολὺς οὗτος ὁ καρπὸς ἐν τῇ χώρᾳ αὐτῶν. Δανεισάντων δὲ μισθωσάμενοι πλοῖα ἀπέστειλαν εἰς τὰ ἐμπόρια, ὅθεν αὐτοῖς ἦκε σῖτος, ὑποθήκης γενομένης τῆς τοῦ ἐλαίου τιμῆς.

Ὀφείλοντές <τε> στρατιώταις μισθὸν εἴκοσι τάλαντα καὶ οὐ δυνάμενοι, τόκον ἔφερον τοῖς ἡγεμόσι τέτταρα τάλαντα τοῦ ἐνιαυτοῦ· ἐπεὶ δὲ τοῦ μὲν ἀρχαίου ἀπέκοπτον οὐθέν, ἀεὶ δὲ μάτην ἐδαπάνων, νόμισμα ἔκοψαν σιδηροῦν εἰς ἀργυρίου λόγον εἴκοσι ταλάντων, εἶτα διδόντες τοῖς εὐπορωτάτοις ἐν τῇ πόλει κατὰ λόγον ἐκάστω ἀργύριον παρ' ἐκείνων ἔλαβον ἴσον. Οἱ τε οὖν ἰδιῶται εἶχον εἰς τὰς καθ' ἡμέραν χρείας ἀναλίσκειν καὶ ἡ πόλις τοῦ χρέους ἀπηλλάγη. Δεύτερον δὲ ἐκ τῶν προσόδων ἐκείνοις τὸν τε τόκον <ὄν> κατέφερον ἀεὶ διαιροῦντες ἐκάστω πρὸς μέρος διεδίδοσαν, τοὺς δὲ σιδηροῦς ἐκομίζοντο.

Σηλυβριανοὶ δὲ δεηθέντες χρημάτων, νόμου ὄντος αὐτοῖς σίτου μὴ ἐξαγωγήν «εἶναι», [έν] λιμοῦ γενομένου, ἐκείνοις δὲ ὑπάρχοντος σίτου παλαιοῦ, ἐψηφίσαντο τῇ πόλει παραδοῦναι τοὺς ἰδιώτας τὸν σῖτον τῆς τεταγμένης τιμῆς, ὑπολειπόμενον ἕκαστον [1349a] ἐνιαυτοῦ τροφήν· εἴτα ἐξαγωγήν ἔδωκαν τῷ βουλομένῳ, τάξαντες τιμὴν ἣν ἐδόκει καλῶς ἔχειν αὐτοῖς.

Ἀβυδηνοὶ δέ, διὰ στασιασμόν τῆς χώρας ἄργοῦ γενομένης καὶ τῶν μετοίκων οὐ προἰεμένων αὐτοῖς οὐδὲν διὰ τὸ καὶ ἔτι ὀφείλειν, ἐψηφίσαντο τὸν βουλόμενον τοῖς γεωργοῖς δανεῖζειν ὡς ἐργάσωνται, ὡς πρώτοις αὐτοῖς ἐσομένης τῆς κομιδῆς ἐκ τοῦ καρποῦ, τοῖς δὲ ἄλλοις ἐκ τῶν λειπομένων.

Ἐφέσιοι δεηθέντες χρημάτων νόμον ἔθεντο μὴ φορεῖν χρυσὸν τὰς γυναῖκας, ὅσον δὲ νῦν ἔχουσι δανεῖσαι τῇ πόλει· τῶν τε κίωνων τῶν ἐν τῷ νεῷ τάξαντες ἀργύριον ὃ δεῖ καταβαλεῖν εἶων ἐπιγράφεσθαι τὸ ὄνομα τοῦ δόντος τὸ ἀργύριον ὡς ἀνατεθεικότος.

Διονύσιος Συρακούσιος βουλόμενος χρήματα συναγαγεῖν, ἐκκλησίαν ποιήσας ἔφησεν ἑωρακέσαι τὴν Δήμητραν, καὶ κελεύειν τὸν τῶν γυναικῶν κόσμον εἰς τὸ ἱερὸν ἀποκομίζειν· αὐτὸς μὲν οὖν τῶν παρ' αὐτῷ γυναικῶν τὸν κόσμον τοῦτο πεποιηκέσαι, ἡξίου δὲ καὶ τοὺς ἄλλους, μὴ τι μήνιμα παρὰ τῆς θεοῦ γένηται· τὸν δὲ μὴ τοῦτο ποιήσαντα ἔνοχον ἔφησεν ἱεροσυλίας ἔσεσθαι. Ἀνενεγκάντων δὲ πάντων ἃ εἶχον διὰ τε τὴν θεὸν καὶ δι' ἐκεῖνον, θύσας τῇ θεῷ τὸν κόσμον ἀπηνέγκατο ὡς παρὰ τῆς θεοῦ δεδανεισμένος. Προελθόντος δὲ χρόνου καὶ τῶν γυναικῶν πάλιν φορουσῶν, ἐκέλευσε τὴν βουλομένην χρυσοφορεῖν τάγμα τι ἀνατιθέναι ἐν τῷ ἱερῷ.

Τριηρεῖς τε ναυπηγεῖσθαι μέλλων ἦδει ὅτι δεήσοιτο χρημάτων. Ἐκκλησίαν οὖν συναγαγὼν ἔφη πόλιν αὐτῷ τινα προδίδοσθαι, εἰς ἣν δεῖσθαι χρημάτων, ἡξίου τε αὐτῷ τοὺς πολίτας εἰσενέγκαι δύο στατῆρας ἕκαστον· οἱ δ' εἰσήνεγκαν. Διαλιπὼν δὲ δύο ἢ τρεῖς ἡμέρας, ὡς διημαρτηκῶς τῆς πράξεως, ἐπαινέσας αὐτοὺς ἀπέδωκεν ἑκάστῳ ὃ εἰσήνεγκαν. Ποιήσας δὲ τοῦτο ἀνεκτήσατο τοὺς πολίτας. Εἴτα πάλιν, οἰόμενοι ἀπολήψεσθαι, εἰσήνεγκαν· ὃ δὲ λαβὼν εἶχεν εἰς τὴν ναυπηγίαν.

Οὐκ εὐπορῶν δὲ ἀργυρίου νόμισμα ἔκοψε καττιτέρου, καὶ συναγαγὼν ἐκκλησίαν πολλὰ τοῦ κεκομμένου νομίσματος ὑπερεῖπεν· οἱ δὲ ἐψηφίσαντο καὶ μὴ βουλόμενοι ἕκαστος ὃ ἂν εἴλετο ἔχειν ὡς ἀργυροῦν ἀλλὰ μὴ καττιτέρινον.

Πάλιν τε [1349b] δεηθεὶς χρημάτων ἡξίου τοὺς πολίτας εἰσενεγκεῖν αὐτῷ· οἱ δ' οὐκ ἔφασαν ἔχειν. Ἐξενέγκας οὖν τὰ σκεύη τὰ παρ' αὐτοῦ ἐπώλει, ὥς δὴ δι' ἀπορίαν τοῦτο ποιῶν· ἀγοραζόντων δὲ Συρακουσίων, ἀπεγράφετο τί ἕκαστος ἀγοράσειεν· ἐπεὶ δὲ τὴν τιμὴν κατέβαλον, ἐκέλευσε τὸ σκεῦος ἀναφέρειν ἕκαστον ὃ ἡγόρασεν.

Τῶν τε πολιτῶν διὰ τὰς εἰσφορὰς οὐ τρεφόντων βοσκήματα, εἶπεν ὅτι ἱκανὰ ἦν αὐτῷ πρὸς τοσοῦτον· τοὺς οὖν νῦν τι κτησαμένους ἀτελεῖς ἔσεσθαι. Πολλῶν δὲ ταχὺ κτησαμένων πολλὰ βοσκήματα ὥς ἀτελεῖ ἐξόντων, ἐπεὶ καιρὸν ὤετο εἶναι, τιμήσασθαι κελεύσας ἐπέβαλε τέλος. Οἱ οὖν πολῖται ἀγανακτήσαντες ἐπὶ τῷ ἐξηπατηῆσθαι, σφάζοντες ἐπώλουν. Ὡς δὲ πρὸς τοῦτο ἔταξε σφάζεσθαι ὅσα δεῖ τῆς ἡμέρας, οἱ δὲ πάλιν ἱερόθυτα ἐποιοῦν· ὃ δὲ ἀπεῖπε θῆλυ μὴ θύειν.

Πάλιν τε δεηθεὶς χρημάτων ἐκέλευσεν ἀπογράψασθαι [χρημάτων] πρὸς αὐτόν ὅσοι οἴκοι εἰσιν ὀρφανικοί. Απογραψαμένων δὲ ἄλλων τὰ τούτων χρήματα ἀπεχρᾶτο ἕως ἕκαστος εἰς ἡλικίαν ἔλθοι.

Ῥηγίον τε καταλαβὼν, ἐκκλησίαν συναγαγὼν εἶπε διότι δικαίως μὲν ἂν ἐξανδραποδισθεῖεν ὑπ' αὐτοῦ, νῦν μέντοι τὰ εἰς τὸν πόλεμον ἀνηλωμένα χρήματα κομισάμενος καὶ ὑπὲρ ἐκάστου σώματος τρεῖς μνᾶς ἀφήσειν αὐτούς. Οἱ δὲ Ῥηγῖνοι ὅσα ποτ' ἦν αὐτοῖς ἀποκεκρυμμένα ἐμφανῆ ἐποιοῦν καὶ οἱ ἄποροι παρὰ τῶν εὐπορωτέρων καὶ παρὰ τῶν ξένων δανειζόμενοι ἐπόρισαν ἃ ἐκέλευσε χρήματα. Λαβὼν δὲ ταῦτα παρ' αὐτῶν τὰ τε σώματα πάντα οὐδὲν ἦττον ἀπέδοτο τὰ τε σκεύη, ἃ τότε ἦν ἀποκεκρυμμένα, ἐμφανῆ ἅπαντα ἔλαβε.

Δανεισάμενός τε παρὰ τῶν πολιτῶν χρήματα ἐπ' ἀποδόσει, ὥς ἀπῆτουν αὐτόν, ἐκέλευσεν ἀναφέρειν ὅσον ἔχει τις ἀργύριον πρὸς αὐτόν· εἰ δὲ μὴ, θάνατον ἔταξε τὸ ἐπιτίμιον. Ἀνενεχθέντος δὲ τοῦ ἀργυρίου, ἐπικόψας χαρακτῆρα ἐξέδωκε τὴν δραχμὴν δύο δυναμένην δραχμᾶς καὶ τό τε ὀφειλόμενον πρότερον <...> ἀνήνεγκαν πρὸς αὐτόν.

Εἰς Τυρρηνίαν τε πλεύσας ναυσὶν ἑκατόν,

ἔλαβεν ἐκ τοῦ τῆς Λευκοθέας ἱεροῦ χρυσίον τε καὶ ἀργύριον πολὺ καὶ τὸν ἄλλον κόσμον οὐκ ὀλίγον. Εἰδὼς δὲ ὅτι καὶ οἱ ναῦται πολλὰ ἔχουσιν, κήρυγμα ἐποιήσατο τὰ ἡμίσεα [1350a] ὧν ἔχει ἕκαστος ἀναφέρειν πρὸς αὐτόν, τὰ δ' ἡμίσεα ἔχειν τὸν λαβόντα· τῷ δὲ μὴ ἀνενέγκαντι θάνατον ἔταξε τὸ ἐπιτίμιον. Ὑπολαβόντες δὲ οἱ ναῦται ἀνενεγκόντες τὰ ἡμίσεα τὰ

κατάλοιπα ἔχειν, ἀδεῶς ἀνήνεγκαν· ὁ δ' ἐπείπερ ἐκεῖνα ἔλαβεν, ἐκέλευσε πάλιν τὰ ἡμίσεα ἀναφέρειν.

Μενδαῖοι δὲ τὰ μὲν ἀπὸ λιμένων καὶ τῶν ἄλλων τελῶν αὐτοῖς προσπορευόμενα [ἐχρῶντο] εἰς διοίκησιν τῆς πόλεως, τὰ δὲ ἀπὸ τῆς γῆς καὶ οἰκιῶν τέλη οὐκ ἔπραττον, ἀλλ' ἀνέγραφον τοὺς ἔχοντας· ὁπότε δὲ δεηθεῖεν χρημάτων, ἀπεδίδουσιν <ὡς> ὀφείλοντες· ἐκέρδαινον οὖν τὸν παρεληλυθότα χρόνον ἀτόκοις τοῖς χρήμασιν ἀποκεχρημένοι.

Πολεμοῦντες <δὲ> πρὸς Ὀλυνθίους καὶ δεόμενοι χρημάτων, ὄντων αὐτοῖς ἀνδραπόδων, ἐψηφίσαντο καταλειπομένου ἐνὶ ἐκάστῳ θήλεος καὶ ἄρρενος τὰ ἄλλα ἀποδόσθαι τῇ πόλει ὡς ἐκδανεῖσαι τοὺς ἰδιώτας χρήματα.†

Καλλίστρατος <Ἀθηναῖος>, ἐν Μακεδονίᾳ πωλουμένου τοῦ ἐλλιμενίου ὡς ἐπὶ τὸ πολὺ εἴκοσι ταλάντων, ἐποίησεν εὐρεῖν τὸ διπλάσιον· κατιδὼν γὰρ ὠνούμενους τοὺς εὐπορωτέρους ἀεὶ διὰ τὸ δεῖν ταλαντιαίους καθιστάναι τοὺς ἐγγύους τῶν εἴκοσι ταλάντων, προεκήρυξεν ὠνεῖσθαι τὸν βουλόμενον καὶ τοὺς ἐγγύους καθιστάναι τοῦ τρίτου μέρους καὶ καθ' ὅποσον ἕκαστος δύνηται πείθειν. Τιμόθεος Ἀθηναῖος πολεμῶν πρὸς Ὀλυνθίους καὶ ἀπορούμενος ἀργυρίου, κόψας χαλκὸν διεδίδου τοῖς στρατιώταις. Ἀγανακτούντων δὲ τῶν στρατιωτῶν ἔφη αὐτοῖς τοὺς ἐμπόρους τε καὶ ἀγοραίους ἅπαντα ὡσαύτως πωλήσειν. Τοῖς δ' ἐμπόροις προεῖπεν ὃν ἂν τις λάβῃ χαλκόν, τούτου πάλιν ἀγοράζειν τὰ τ' ἐκ τῆς χώρας ὦνια καὶ τὰ ἐκ τῶν λειῶν ἀγόμενα· ὃς δ' ἂν περιλειφθῇ αὐτοῖς χαλκός, πρὸς αὐτὸν ἀναφέροντας ἀργύριον λαμβάνειν.

Περὶ Κέρκυραν δὲ πολεμῶν καὶ ἀπόρως διακείμενος καὶ τῶν στρατιωτῶν αἰτούντων τοὺς μισθοὺς καὶ ἀπειθούντων αὐτῷ καὶ πρὸς τοὺς ὑπεναντίους φασκόντων ἀποπορεύεσθαι, ἐκκλησίαν συναγαγὼν ἔφησεν οὐ δύνασθαι διὰ τοὺς χειμῶνας παραγενέσθαι αὐτῷ ἀργύριον, ἐπεὶ τοσαύτην εἶναι περὶ αὐτὸν εὐπορίαν, ὥστε τὴν προδεδομένην τριμήνου σιταρχίαν δωρεὰν αὐτοῖς διδόναι· οἱ [1350b] δὲ ὑπολαβόντες οὐκ ἂν ποτε προέσθαι τοσαῦτα χρήματα τὸν Τιμόθεον αὐτοῖς εἰ μὴ τῇ ἀληθείᾳ προσδόκιμα ἦν τὰ χρήματα πρὸς αὐτόν, ἡσυχίαν εἶχον ὑπὲρ τῶν μισθῶν ἕως ἐκεῖνος διωκήσατο ἃ ἐβούλετο.

Σάμον δὲ πολιορκῶν τοὺς καρποὺς καὶ τὰ ἐπὶ τῶν ἀγρῶν ἀπεδίδοδο αὐτοῖς τοῖς Σαμίοις, ὥστε εὐπόρησε χρημάτων εἰς μισθοὺς τοῖς στρατιώταις.

Τῶν τε ἐπιτηδείων ἐπεὶ σπάνις ἦν ἐν τῷ στρατοπέδῳ διὰ τοὺς εἰσαφικνουμένους, ἀπηγόρευσε μὴ πωλεῖν σῖτον ἀληλεσμένον μηδὲ μέτρον

ἔλαττον ἢ μέδιμνον, μηδὲ τῶν ὑγρῶν μηδὲν ἔλαττον ἢ μετρητήν. Οἱ μὲν οὖν ταξίαρχοί τε καὶ λοχαγοὶ ἀγοράζοντες ἀθρόα διεδίδοσαν τοῖς στρατιώταις, οἱ δὲ εἰσαφικνούμενοι ἤγον αὐτοῖς τὰ ἐπιτήδεια· ὁπότε δὲ ἀπαλλάττοντο, εἴ τι περίλοιπον εἶη αὐτοῖς, ἐπώλουν, ὥστε συνέβαινεν εὐπορεῖσθαι τοὺς στρατιώτας τῶν ἐπιτηδείων.

Δατάμης Πέρσης ἔχων στρατιώτας τὰ μὲν καθ' ἡμέραν πορίζειν ἐδύνατο ἐκ τῆς πολεμίας αὐτοῖς, νόμισμα δὲ οὐκ ἔχων διδόναι, ἀπαιτούμενος δὲ χρόνου γενομένου οὐ ὥφειλε, τεχνάζει τοιόνδε. Ἐκκλησίαν συναγαγὼν ἔφη οὐκ ἀπορεῖσθαι χρημάτων, ἀλλ' εἶναι αὐτῷ ἐν χωρίῳ τινί, λέγων ἐν ᾧ εἶη, καὶ ἀναζεύξας ἐβάδιζεν ἐπ' αὐτό. Εἴτα, ὡς ἐγγὺς τοῦ χωρίου ἐγένετο, προελθὼν εἰς αὐτὸ ἔλαβεν ἐκ τῶν ἐνόντων ἱερῶν ὅσος ἐνῆν κοῖλος ἄργυρος· εἴτ' ἐπισκευάσας τὰς ἡμιόλους ὡς ἀγούσας ἀργύριον παραφαινούσας τε ταῦτα ἐβάδιζεν. Ἰδόντες δὲ οἱ στρατιῶται καὶ νομίσαντες ἅπαντα εἶναι ἄργυρον τὰ ἀγόμενα, ἐθάρρησαν ὡς κομιούμενοι τὸν μισθόν. Ὁ δὲ ἔφη δεῖν εἰς Ἀμισὸν ἐλθόντας ἐπισημήνασθαι· ἦν δ' εἰς τὴν Ἀμισὸν ὁδὸς πολλῶν τε ἡμερῶν καὶ χειμέριος. Τὸν δὴ χρόνον τοῦτον ἀπεχρᾶτο τῷ στρατοπέδῳ τὰ ἐπιτήδεια μόνον διδούς.

Τοὺς <τε> τεχνίτας τοὺς ἐν τῷ στρατοπέδῳ αὐτὸς εἶχε καὶ τοὺς καπήλους τοὺς μεταβαλλομένους τι· ἄλλω δὲ οὐκ ἦν οὐθενὶ οὐθενὶ τούτων ποιεῖν.

Χαβρίας Ἀθηναῖος Ταῦ τῷ Αἰγυπτίων βασιλεῖ ἐκστρατεύοντι καὶ δεομένῳ χρημάτων συνεβούλευε τῶν τε ἱερῶν τινα καὶ τῶν ἱερέων τὸ πλῆθος φάναι πρὸς τοὺς ἱερεῖς δεῖν παραλυθῆναι διὰ τὴν δαπάνην. Ἀκούσαντες δὲ [1351a] οἱ ἱερεῖς καὶ τὸ ἱερὸν παρ' αὐτοῖς ἕκαστοι βουλόμενοι εἶναι καὶ εἶναι αὐτοὶ ἱερεῖς, ἐδίδοσαν χρήματα. Ἐπεὶ δὲ παρὰ πάντων εἰλήφει, προστάξαι αὐτοῖς ἐκέλευσεν εἰς μὲν τὸ ἱερὸν καὶ εἰς αὐτὸν τῆς δαπάνης ἥς πρότερον ἐποιοῦντο τὸ δέκατον μέρος ποιεῖσθαι, τὰ δὲ λοιπὰ αὐτῷ δανεῖσαι ἕως <ὁ> πόλεμος ὁ πρὸς βασιλέα διαλυθῇ. Ἀπ' οἰκίας δὲ ἐκάστης κελεῦσαι ἅπαντας εἰσενέγκαι τάξαντα ὃ δεῖ, καὶ ἀπὸ τοῦ σώματος ὡσαύτως. Τοῦ <δὲ> σίτου τοῦ πωλουμένου χωρὶς τῆς τιμῆς διδόναι τὸν πωλοῦντα καὶ ὠνούμενον ἀπὸ τῆς ἀρτάβης τὸν ὀβολόν. Ἀπὸ <τε> τῶν πλοίων καὶ ἐργαστηρίων καὶ τῶν ἄλλων τινὰ ἐργασίαν παρεχόντων τῆς ἐργασίας μέρος τὸ δέκατον κελεῦσαι ἀποτελεῖν.

Ἐκστρατεύειν δ' αὐτῷ μέλλοντι ἐκ τῆς χώρας, εἴ τις τι ἔχει ἄσημον ἀργύριον ἢ χρυσίον, κελεῦσαι ἐνέγκαι πρὸς αὐτόν· ἐνεγκάντων δὲ τῶν πλείστων, ἐκέλευσε τούτῳ μὲν ἐκεῖνον χρᾶσθαι, τοὺς δὲ δανείσαντας

συστήσαι τοῖς νομάρχαις ὥστ' ἐκ τῶν φόρων αὐτοῖς ἀποδοῦναι.

Ἰφικράτης Ἀθηναῖος, Κότυος συναγαγόντος στρατιώτας, ἐπόρισεν αὐτῷ χρήματα τρόπον τοιοῦτον. Ἐκέλευσε τῶν ἀνθρώπων ὧν ἦρχε προστάξει κατασπεῖραι αὐτῷ γῆν τριῶν μεδίμνων· τούτου δὲ πραχθέντος συνελέγη σίτου πολὺ πλῆθος. Καταγαγὼν οὖν ἐπὶ τὰ ἐμπόρια ἀπέδοτο καὶ εὐπόρησε χρημάτων.

Κότυς Θρᾷξ παρὰ Περινθίων ἐδανείζετο χρήματα εἰς τοὺς στρατιώτας [συναγαγεῖν], οἱ δὲ Περίνθιοι οὐκ ἐδίδουσιν αὐτῷ. Ἠξίωσεν οὖν αὐτοὺς ἄνδρας γε τῶν πολιτῶν φρουροὺς δοῦναι εἰς χωρία τινά, ἵνα τοῖς ἐκεῖ στρατιώταις νῦν φρουροῦσι σχῇ ἀποχρήσασθαι. Οἱ δὲ τοῦτο ταχέως ἐποίησαν, οἰόμενοι τῶν χωρίων κύριοι ἔσεσθαι. Ὁ δὲ Κότυς τοὺς ἀποσταλέντας εἰς φυλακὴν ποιήσας τὰ χρήματα αὐτοὺς ἐκέλευσεν ἀποσταλέντας, ἃ ἐδανείζετο παρ' αὐτῶν, κομίσασθαι. Μέντωρ Ῥόδιος Ἑρμείαν συλλαβὼν καὶ τὰ χωρία αὐτοῦ κατασχὼν τοὺς ἐπιμελητὰς εἶασε κατὰ χώραν τοὺς ὑπὸ τοῦ Ἑρμείου καθεστηκότας. Ἐπεὶ δὲ ἐθάρρησάν τε ἅπαντες καί, εἴ τί ποτ' ἦν αὐτοῖς ἀποκεκρυμμένον ἢ ὑπεκκείμενον, μεθ' αὐτῶν εἶχον, συλλαβὼν αὐτοὺς πάντα παρείλετο ἃ εἶχον.

[1351b] Μέμων Ῥόδιος κυριεύσας Λαμψάκου δεηθεὶς χρημάτων ἐπέγραψε τοῖς πλουσιωτάτοις αὐτῶν πλῆθος τι ἀργυρίου, τούτοις δὲ τὴν κομιδὴν ἔσεσθαι παρὰ τῶν ἄλλων πολιτῶν ἔφησεν. Ἐπεὶ δὲ οἱ ἄλλοι πολῖται εἰσήνεγκαν, ἐκέλευσε καὶ ταῦτα αὐτῷ δανεῖσαι [ἐν χρόνῳ] διειπάμενος ἐν ᾧ πάλιν αὐτοῖς ἀποδώσει.

Πάλιν τε δεηθεὶς χρημάτων ἠξίωσεν αὐτοὺς εἰσενέγκαι, κομίσασθαι δὲ ἐκ τῶν προσόδων· οἱ δ' εἰσήνεγκαν ὥς διὰ ταχέων αὐτοῖς ἐσομένης τῆς κομιδῆς. Ἐπεὶ δὲ καὶ αἱ καταβολαὶ τῶν προσόδων παρῆσαν, ἔφησεν ἐπ' αὐτῷ χρεῖαν εἶναι καὶ τούτων, ἐκείνοις δὲ ὕστερον ἀποδώσειν σὺν τόκῳ.

Τῶν τε στρατευομένων παρ' αὐτῷ παρηρεῖτο τὰς σιταρχίας καὶ τοὺς μισθοὺς ἕξ ἡμερῶν τὸν ἐνιαυτόν, φάσκων ταύταις ταῖς ἡμέραις οὔτε φυλακὴν αὐτοῖς οὐδεμίαν οὔτε πορείαν οὔτε δαπάνην ποιεῖσθαι, τὰς ἐξαιρεσίμους λέγων.

Τόν τε πρὸ τοῦ χρόνον διδοὺς τοῖς στρατιώταις τῇ δευτέρᾳ τῆς νουμηνίας τὴν σιταρχίαν, τῷ μὲν πρώτῳ μηνὶ παρέβη τρεῖς ἡμέρας, τῷ δ' ἐχομένῳ πέντε. Τοῦτον δὲ τὸν τρόπον προῆγεν, ἕως εἰς τὴν τριακάδα ἦλθεν.

Χαρίδημος Ὠρείτης ἔχων τῆς Αἰολίδος τινὰ χωρία, ἐπιστρατεύοντος ἐπ' αὐτὸν Ἀρταβάζου, χρημάτων ἐδεῖτο εἰς τοὺς στρατιώτας. Τὸ μὲν οὖν πρῶτον εἰσέφερον αὐτῷ, εἶτα οὐκέτι ἔφασαν ἔχειν. Ὁ δὲ Χαρίδημος, ὃ ὤετο χωρίον εὐπορώτατον εἶναι, ἐκέλευσεν [καὶ] εἴ τι νόμισμα ἔχουσιν ἢ τι ἄλλο σκεῦος ἀξιόλογον, εἰς ἕτερον χωρίον ἀποστέλλειν, παραπομπὴν δὲ δώσειν· ἅμα δὲ καὶ αὐτὸς τοῦτο ποιῶν φανερὸς ἦν. Πεισθέντων δὲ τῶν ἀνθρώπων, προαγαγὼν αὐτοὺς τῆς πόλεως μικρὸν καὶ ἐρευνήσας ἃ εἶχον, ἔλαβεν ὅσων ἐδεῖτο, ἐκείνους δὲ πάλιν εἰς τὸ χωρίον ἀπῆγεν.

Κήρυγμά τε ποιησάμενος ἐν ταῖς πόλεσιν ὧν ἦρχε, μηδένα μηδὲν ὄπλον κεκτῆσθαι ἐν τῇ οἰκίᾳ, εἰ δὲ μή, ἀποτείσειν ἀργύριον ὃ ἐπεκήρυξεν, ἡμέλει καὶ οὐδεμίαν ἐπιστροφὴν ἐποιεῖτο. Τῶν δὲ ἀνθρώπων οἰομένων τὸ κήρυγμα μάτην αὐτὸν πεποιῆσθαι, εἶχον ἃ ἔτυχον ἕκαστοι κεκτημένοι κατὰ χώραν. Ὁ δ' ἐρευναν ἐξαίφνης ποιησάμενος τῶν οἰκιῶν, παρ' οἷς εὗρεν ὄπλον τι, ἐπράττετο τὸ ἐπιτίμιον.

Φιλόξενός τις Μακεδὼν Καρίας σατραπέων δεηθεὶς χρημάτων Διονύσια ἔφασκε μέλλειν ἄγειν καὶ χοραγοὺς [1352a] προέγραψε τῶν Καρῶν τοὺς εὐπορωτάτους καὶ προσέταττεν αὐτοῖς ἃ δεῖ παρασκευάζειν. Ὁρῶν δ' αὐτοὺς δυσχεραίνοντας ὑποπέμπων τινὰς ἡρώτα τί βούλονται δόντες ἀπαλλαγῆναι τῆς λειτουργίας. Οἱ δὲ πολλῶ πλεον ἢ ὅσον ὥοντο ἀναλώσειν ἔφασαν δώσειν τοῦ μὴ ὀχλεῖσθαι καὶ ἀπὸ τῶν ιδίων ἀπεῖναι. Ὁ δὲ παρὰ τούτων λαβὼν ὃ ἐδίδοσαν, ἑτέρους κατέγραψεν, ἕως ἔλαβε παρὰ τοῦτο, ὃ ἠβούλετο, καὶ προσόν. παρ' ἐκάστης†

Εὐαίσης Σύρος Αἰγύπτου σατραπέων, ἀφίστασθαι μελλόντων τῶν νομαρχῶν ἀπ' αὐτοῦ αἰσθόμενος, καλέσας αὐτοὺς εἰς τὰ βασιλεια ἐκρέμασεν ἅπαντας, πρὸς δὲ τοὺς οἰκείους ἐκέλευσε λέγειν ὅτι ἐν φυλακῇ εἰσιν. Ἐκαστος οὖν τῶν οἰκείων ἔπραττον ὑπὲρ ἐκάστου καὶ χρημάτων ἐξεωνοῦντο τοὺς συνειλημμένους. Ὁ δὲ διομολογησάμενος ὑπὲρ ἐκάστου καὶ λαβὼν τὰ ὁμολογηθέντα ἀπέδωκεν ἐκάστοις τὸν νεκρόν.

Κλεομένης Ἀλεξανδρεὺς Αἰγύπτου σατραπέων, λιμοῦ γενομένου ἐν μὲν τοῖς ἄλλοις τόποις σφόδρα, ἐν Αἰγύπτῳ δὲ μετρίως, ἀπέκλεισε τὴν ἐξαγωγὴν τοῦ σίτου. Τῶν δὲ νομαρχῶν φασκόντων οὐ δυνήσεσθαι τοὺς φόρους ἀποδοῦναι τῷ μὴ ἐξάγεσθαι τὸν σῖτον, ἐξαγωγὴν μὲν ἐποίησε, τέλος δὲ πολὺ τῷ σίτῳ ἐπέβαλεν, ὥστε συνέβαινε αὐτῷ εἰ μὴ <...> ἐξαγομένου ὀλίγου πολὺ τέλος λαμβάνειν, αὐτοῦς τε [νομάρχας] πεπαῦσθαι τῆς προφάσεως.

Διαπλέοντος δ' αὐτοῦ τὸν νομόν, οὗ ἐστὶ θεὸς ὁ κροκόδειλος, ἡρπάσθη τις τῶν παίδων αὐτοῦ. Καλέσας οὖν τοὺς ἱερεῖς ἔφη πρότερος ἀδικηθεὶς ἀμύνεσθαι τοὺς κροκοδείλους, καὶ προσέταξε θηρεύειν αὐτούς. Οἱ δὲ ἱερεῖς, ἵνα μὴ ὁ θεὸς αὐτῶν καταφρονηθῇ, συναγαγόντες ὅσον ἡδύναντο χρυσίον ἔδωσαν αὐτῷ καὶ οὕτως ἐπαύσατο.

Ἀλεξάνδρου <τε> τοῦ βασιλέως ἐντειλαμένου αὐτῷ οἰκίσαι πόλιν πρὸς τῇ Φάρῳ καὶ τὸ ἐμπόριον τὸ πρότερον ὃν ἐπὶ τοῦ Κανώβου ἐνταῦθα ποιῆσαι, καταπλεύσας εἰς τὸν Κάνωβον πρὸς τοὺς ἱερεῖς καὶ τοὺς κτήματα ἔχοντας ἐκεῖ ἐπὶ τούτῳ ἦκειν ἔφη ὥστε μετοικίσαι αὐτούς. Οἱ <δὲ> ἱερεῖς καὶ οἱ κάτοικοι εἰσενέγκαντες χρήματα ἔδωκαν ἱν' ἐᾶ κατὰ χώραν αὐτοῖς τὸ ἐμπόριον. Ὁ δὲ λαβὼν τότε μὲν ἀπηλλάγη, εἴτα δὲ καταπλεύσας, ἐπεὶ ἦν εὐτρεπῇ αὐτῷ τὰ πρὸς τὴν οἰκοδομίαν, [1352b] ἤτει αὐτοὺς χρήματα ὑπερβάλλων τῷ πλήθει· τοῦτο γὰρ αὐτῷ τὸ διάφορον εἶναι, τὸ αὐτοῦ εἶναι τὸ ἐμπόριον καὶ μὴ ἐκεῖ. Ἐπεὶ δ' οὐκ ἂν ἔφασαν δύνασθαι δοῦναι, μετώκισεν αὐτούς.

Ἀποστείλας τέ τινα ἐπ' ἀγοράσματα καὶ αἰσθόμενος ὅτι εὐώνων ἐπιτετύχηκεν, αὐτῷ δὲ μέλλει ἐκτετιμημένα λογίζεσθαι, πρὸς τοὺς συνήθεις τοῦ ἀγοραστοῦ ἔλεγεν ὅτι ἀκηκοὺς εἶη τὰ ἀγοράσματα αὐτὸν ὑπερτίμια ἡγορακεῖν· αὐτὸς οὖν [οὐ] προσέξιν· καὶ ἅμα τὴν ἀβελτερίαν αὐτοῦ ἐλοιδόρει μετ' ὀργῆς προσποιητοῦ. Οἱ δὲ ταῦτα ἀκούοντες οὐκ ἔφασαν δεῖν πιστεύειν αὐτὸν τοῖς λέγουσί τι κατ' ἐκείνου, ἕως αὐτὸς παραγενόμενος τὸν λόγον αὐτῷ δῶ. Ἀφικομένου δὲ τοῦ ἀγοραστοῦ ἀπήγγειλαν αὐτῷ τὰ παρὰ τοῦ Κλεομένους· ὃ δ' ἐκείνοις τε βουλόμενος ἐνδείξασθαι καὶ τῷ Κλεομένει, ἀνήνεγκε τὰς τιμὰς ὥνπερ ἦν ἡγορακῶς.

Τοῦ τε σίτου πωλουμένου ἐν τῇ χώρᾳ δεκαδράχμου, καλέσας τοὺς ἐργαζομένους ἠρώτησε πῶς βούλονται αὐτῷ ἐργάζεσθαι· οἱ δ' ἔφασαν ἐλάττονος ἢ ὅσου ἂν τοῖς ἐμπόροις ἐπώλουν. Ὁ δ' ἐκείνους μὲν ἐκέλευσεν αὐτῷ παραδιδόναι ὅσουπερ ἐπώλουν τοῖς ἄλλοις, αὐτὸς δὲ τάξας τριάκοντα καὶ δύο δραχμὰς τοῦ σίτου τιμὴν οὕτως ἐπώλει.

Τοὺς τε ἱερεῖς καλέσας ἔφησε πολὺ τὸ ἀνάλωμα ἐν τῇ χώρᾳ γίνεσθαι εἰς τὰ ἱερά· δεῖν οὖν καὶ τῶν ἱερῶν τινα καὶ τῶν ἱερέων τὸ πλῆθος καταλυθῆναι. Οἱ δὲ ἱερεῖς καὶ ἰδίᾳ ἕκαστος καὶ κοινῇ τὰ ἱερά χρήματα ἐδίδωσαν, οἰόμενοί τε αὐτὸν τῇ ἀληθείᾳ τοῦτο ποιεῖν, καὶ ἕκαστος βουλόμενος τό τε ἱερὸν τὸ αὐτοῦ εἶναι κατὰ χώραν καὐτὸς ἱερεύς.



Ἀντιμένης Ῥόδιος ἡμιόλιος, γενομένου Ἀλεξάνδρου περὶ Βαβυλῶνα, ἐπόρισε χρήματα ὧδε. Νόμου ὄντος ἐν Βαβυλωνίᾳ παλαιοῦ δεκάτην εἶναι τῶν εἰσαγομένων, χρωμένου δὲ αὐτῷ οὐθενός, τηρήσας τοὺς τε σατράπας ἅπαντας προσδοκίμους ὄντας καὶ στρατιώτας οὐκ ὀλίγους [τε] καὶ πρέσβεις καὶ τεχνίτας κλητοὺς ἄλλους τοὺς ἄγοντας καὶ ἰδίᾳ ἀποδημοῦντας, καὶ δῶρα πολλὰ ἀναγόμενα, τὴν δεκάτην ἔπραττε κατὰ τὸν νόμον τὸν κείμενον.

Πάλιν τε πορίζων τὰνδράποδα τὰ ἐπὶ στρατοπέδῳ ὄντα ἐκέλευσε τὸν βουλόμενον ἀπογράφεσθαι ὅποσου θέλει, τελεῖν δὲ τοῦ ἐνιαυτοῦ ὀκτὼ δραχμὰς ἀποτίσαι, ἂν δὲ ἀποδρᾷ τὸ ἀνδράποδον, κομίζεσθαι τὴν τιμὴν [1353a] ἥς ἀνεγράψατο. Ἀπογραφέντων οὖν πολλῶν ἀνδραπόδων οὐκ ὀλίγον συνετέλει ἀργύριον. Εἰ δέ τι ἀποδραΐῃ ἀνδράποδον, ἐκέλευε τὸν σατράπην τῆς <...> ἐν ᾗ ἐστι τὸ στρατόπεδον, ἀνασώζειν <ἢ> τὴν τιμὴν τῷ κυρίῳ ἀποδοῦναι.

Ὀφέλας Ὀλύνθιος καταστήσας ἐπιμελητὴν εἰς τὸν νομὸν τὸν Ἀθριβίτην, ἐπεὶ προσελθόντες αὐτῷ οἱ νομάρχαι οἱ ἐκ τοῦ τόπου τούτου ἔφασαν βούλεσθαι πλείω αὐτοὶ πολὺ φέρειν, τὸν δ' ἐπιμελητὴν τὸν νῦν καθεστηκότα ἀπαλλάξαι αὐτὸν ἡξίου, ἐπερωτήσας αὐτοὺς εἰ δυνήσονται συντελεῖν ἄπερ ἐπαγγέλλονται, φησάντων αὐτῶν, τὸν μὲν ἐπιμελητὴν κατὰ χώραν εἶα, τοὺς δὲ φόρους πράττεσθαι ἐκέλευεν οὓς αὐτοὶ ὑπετιμήσαντο. Οὔτε οὖν ὃν κατέστησεν ἀτιμάσαι ἐδόκει οὗτ' ἐκείνοις πλείους φόρους ἐπιβαλεῖν ἢ αὐτοὶ ἐτάξαντο, χρήματα δὲ πολλαπλάσια αὐτὸς ἐλάμβανεν.

Πυθοκλῆς Ἀθηναῖος Ἀθηναίοις συνεβούλευσε τὸν μόλυβδον τὸν ἐκ τῶν Λαυρείων παραλαμβάνειν παρὰ τῶν ἰδιωτῶν τὴν πόλιν, ὥσπερ ἐπώλουν, δίδραχμον, εἶτα τάξαντας αὐτοὺς τιμὴν ἑξαδράχμου οὕτω πωλεῖν. Χαβρίας· πληρωμάτων τε κατειλεγμένων εἰς ἑκατὸν καὶ εἴκοσι ναῦς, τῷ δὲ Ταῷ ἐξήκοντα μόνον οὐσῶν χρείας, προστάξαι τοῖς ἐκ τῶν ἐξήκοντα νεῶν αὐτοῦ τῶν ὑπομενουσῶν τοὺς πλέοντας εἰς δίμηνον σιτηρεσιάσαι ἢ αὐτοὺς πλέειν. Οἱ δὲ βουλόμενοι ἐπὶ τῶν ἰδίων εἶναι ἔδωκαν ἃ προσέταξεν. Ἀντιμένης· τοὺς τε θησαυροὺς τοὺς παρὰ τὰς ὁδοὺς τὰς βασιλικὰς ἀναπληροῦν ἐκέλευε τοὺς σατράπας κατὰ τὸν νόμον τὸν τῆς χώρας· ὁπότε δὲ διαπορεύοιτο στρατόπεδον ἢ ἕτερος ὄχλος ἄνευ τοῦ βασιλέως, πέμψας τινὰ παρ' αὐτοῦ ἐπώλει τὰ ἐκ τῶν θησαυρῶν.

[1353b] Κλεομένης· προσπορευομένης τε τῆς νομηνίας καὶ δέον τοῖς στρατιώταις σιταρχίαν δοῦναι, κατέπλευσεν ἐξεπίτηδες· προπορευομένου δὲ τοῦ μηνὸς ἀναπλεύσας διέδωκε τὴν σιταρχίαν, εἶτα τοῦ εἰσιόντος μηνὸς διέλιπεν ἕως τῆς νομηνίας. Οἱ μὲν οὖν στρατιῶται διὰ τὸ νεωστὶ εἰληφέναι

τὴν σιταρχίαν ἡσυχίαν εἶχον, ἐκεῖνος δὲ παραλλάξας ἓνα μῆνα παρὰ τὸν ἐνιαυτὸν ἀφῆρει μισθὸν ἀεὶ μηνός. Σταβέλβιος ὁ Μυσῶν στρατιώταις μισθὸν συγκαλέσας ἔφησεν αὐτῷ τῶν μὲν ἰδιωτῶν οὐδεμίαν χρεῖαν εἶναι, τῶν δὲ ἡγεμόνων, ὅταν <δὲ> δέηται στρατιωτῶν, ἐκείνων ἐκάστω δοῦς ἀργύριον ἀποστέλλειν ἐπὶ ξενολογίαν, τοὺς τε μισθοὺς οὐς δεῖ ἐκείνοις δοῦναι, τοῖς ἡγεμόσιν ἂν ἥδιον διδόναι· ἐκέλευσεν οὖν αὐτοὺς ἀποστέλλειν ἕκαστον τοὺς αὐτῶν καταλόγους ἐκ τῆς χώρας.

Τῶν δὲ ἡγεμόνων ὑπολαβόντων χρηματισμὸν αὐτοῖς ἔσεσθαι, ἀπέστειλαν τοὺς στρατιώτας, καθάπερ ἐκεῖνος προσέταξε. Διαλιπὼν δὲ ὀλίγον χρόνον καὶ συναγαγὼν αὐτοὺς οὔτε ἀύλητὴν ἄνευ χοροῦ οὔτε ἡγεμόνας ἄνευ ἰδιωτῶν οὐδὲν ἔφη χρησίμους εἶναι· ἐκέλευεν οὖν αὐτοὺς ἀπαλλάττεσθαι ἐκ τῆς χώρας.

Διονύσιος· τὰ <τε> ἱερὰ περιπορευόμενος, εἰ μὲν τράπεζαν ἴδοι παρακειμένην χρυσῇν ἢ ἀργυρᾶν, ἀγαθοῦ δαίμονος κελεύσας ἐγγεῖαι ἐκέλευεν ἀφαιρεῖν· ὅσα δὲ τῶν ἀγαλμάτων φιάλην εἶχε προτετακότα, εἶπας ἂν ὅτι δέχομαι, ἐξαιρεῖν ἐκέλευε, [τὰ ἱμάτια] τὰ τε χρυσᾶ [καὶ τοὺς στεφάνους] περιήρει τῶν ἀγαλμάτων φάσκων αὐτὸς καὶ κουφότερα καὶ εὐωδέστερα δοῦναι· εἶτα ἱμάτια μὲν λευκά, στεφάνους δὲ λευκίνους περιετίθει.

## **Ρητορική και Ποιητική – Rhetoric and Poetics**

### **Ρητορικη (1354a) Rhetoric**



# CONTENTS

[A](#)

[B](#)

[Γ](#)

## A

[1354a] Ἡ ῥητορική ἐστὶν ἀντίστροφος τῇ διαλεκτικῇ· ἀμφότεραι γὰρ περὶ τοιούτων τινῶν εἰσὶν ἃ κοινὰ τρόπον τινὰ ἀπάντων ἐστὶ γνωρίζειν καὶ οὐδεμιᾶς ἐπιστήμης ἀφωρισμένης· διὸ καὶ πάντες τρόπον τινὰ μετέχουσιν ἀμφοῖν· πάντες γὰρ μέχρι τινὸς καὶ ἐξετάζειν καὶ ὑπέχειν λόγον καὶ ἀπολογεῖσθαι καὶ κατηγορεῖν ἐγχειροῦσιν. τῶν μὲν οὖν πολλῶν οἱ μὲν εἰκῇ ταῦτα δρῶσιν, οἱ δὲ διὰ συνήθειαν ἀπὸ ἕξεως· ἐπεὶ δ' ἀμφοτέρως ἐνδέχεται, δῆλον ὅτι εἴη ἂν αὐτὰ καὶ ὁδῶ ποιεῖν· δι' ὃ γὰρ ἐπιτυχάνουσιν οἱ τε διὰ συνήθειαν καὶ οἱ ἀπὸ τοῦ αὐτομάτου τὴν αἰτίαν θεωρεῖν ἐνδέχεται, τὸ δὲ τοιοῦτον ἤδη πάντες ἂν ὁμολογήσαιεν τέχνης ἔργον εἶναι. νῦν μὲν οὖν οἱ τὰς τέχνας τῶν λόγων συντιθέντες οὐδὲν ὥς εἰπεῖν πεπορίκασιν αὐτῆς μόριον (αἱ γὰρ πίστεις ἔντεχνόν εἰσι μόνον, τὰ δ' ἄλλα προσθῆκαι), οἱ δὲ περὶ μὲν ἐνθυμημάτων οὐδὲν λέγουσιν, ὅπερ ἐστὶ σῶμα τῆς πίστεως, περὶ δὲ τῶν ἕξω τοῦ πράγματος τὰ πλεῖστα πραγματεύονται· διαβολὴ γὰρ καὶ ἔλεος καὶ ὀργὴ καὶ τὰ τοιαῦτα πάθη τῆς ψυχῆς οὐ περὶ τοῦ πράγματός ἐστιν, ἀλλὰ πρὸς τὸν δικαστήν· ὥστ' εἰ περὶ πάσας ἦν τὰς κρίσεις καθάπερ ἐν ἐνίαις γε νῦν ἐστὶ τῶν πόλεων καὶ μάλιστα ταῖς εὐνομουμέναις, οὐδὲν ἂν εἶχον ὃ τι λέγωσιν· ἅπαντες γὰρ οἱ μὲν οἶονται δεῖν οὕτω τοὺς νόμους ἀγορεύειν, οἱ δὲ καὶ χρῶνται καὶ κωλύουσιν ἕξω τοῦ πράγματος λέγειν, καθάπερ καὶ ἐν Ἀρείῳ πάγῳ, ὀρθῶς τοῦτο νομίζοντες· οὐ γὰρ δεῖ τὸν δικαστὴν διαστρέφειν εἰς ὀργὴν προάγοντας ἢ φθόνον ἢ ἔλεον· ὅμοιον γὰρ κἂν εἴ τις ᾧ μέλλει χρῆσθαι κανόνι, τοῦτον ποιήσῃε στρεβλόν. ἔτι δὲ φανερόν ὅτι τοῦ μὲν ἀμφισβητοῦντος οὐδὲν ἐστὶν ἕξω τοῦ δεῖξαι τὸ πρᾶγμα ὅτι ἔστιν ἢ οὐκ ἔστιν, ἢ γέγονεν ἢ οὐ γέγονεν· εἰ δὲ μέγα ἢ μικρόν, ἢ δίκαιον ἢ ἀδίκον, ὅσα μὴ ὁ νομοθέτης διώρικεν, αὐτὸν δὴ πού τὸν δικαστὴν δεῖ γινώσκειν καὶ οὐ μανθάνειν παρὰ τῶν ἀμφισβητούντων.

μάλιστα μὲν οὖν προσήκει τοὺς ὀρθῶς κειμένους νόμους, ὅσα ἐνδέχεται, πάντα διορίζειν αὐτούς, καὶ ὅτι ἐλάχιστα καταλείπειν ἐπὶ τοῖς κρίνουσι, πρῶτον μὲν ὅτι ἓνα λαβεῖν καὶ ὀλίγους ῥᾶον ἢ πολλοὺς [1354b] εὐ φρονοῦντας καὶ δυναμένους νομοθετεῖν καὶ δικάζειν· ἔπειθ' αἱ μὲν νομοθεσίαι ἐκ πολλοῦ χρόνου σκεψαμένων γίνονται, αἱ δὲ κρίσεις ἐξ ὑπογυίου, ὥστε χαλεπὸν ἀποδιδόναι τὸ δίκαιον καὶ τὸ συμφέρον καλῶς τοὺς κρίνοντας. τὸ δὲ πάντων μέγιστον, ὅτι ἢ μὲν τοῦ νομοθέτου κρίσις οὐ κατὰ μέρος, ἀλλὰ περὶ μελλόντων τε καὶ καθόλου ἐστίν, ὃ δ' ἐκκλησιαστικῆς καὶ δικαστικῆς ἤδη περὶ παρόντων καὶ ἀφωρισμένων κρίνουσιν· πρὸς οὓς καὶ τὸ φιλεῖν ἤδη καὶ τὸ μισεῖν καὶ τὸ ἴδιον συμφέρον συνήρτηται πολλάκις, ὥστε μηκέτι δύνασθαι

θεωρεῖν ἱκανῶς τὸ ἀληθές, ἀλλ' ἐπισκοτεῖν τῇ κρίσει τὸ ἴδιον ἢ δὴ ἡ λυπηρόν. περὶ μὲν οὖν τῶν ἄλλων, ὥσπερ λέγομεν, δεῖ ὡς ἐλαχίστων ποιεῖν κύριον τὸν κριτὴν, περὶ δὲ τοῦ γεγονέναι ἢ μὴ γεγονέναι, ἢ ἔσεσθαι ἢ μὴ ἔσεσθαι, ἢ εἶναι ἢ μὴ εἶναι, ἀνάγκη ἐπὶ τοῖς κριταῖς καταλείπειν· οὐ γὰρ δυνατόν ταῦτα τὸν νομοθέτην προῖδεῖν. εἰ δὲ ταῦθ' οὕτως ἔχει, φανερόν ὅτι τὰ ἔξω τοῦ πράγματος τεχνολογοῦσιν ὅσοι τὰλλα διορίζουσιν, οἷον τί δεῖ τὸ προοίμιον ἢ τὴν διήγησιν ἔχειν, καὶ τῶν ἄλλων ἕκαστον μορίων· οὐδὲν γὰρ ἐν αὐτοῖς ἄλλο πραγματεύονται πλην ὅπως τὸν κριτὴν ποιόν τινα ποιήσωσιν, περὶ δὲ τῶν ἐντέχνων πίστεων οὐδὲν δεικνύουσιν, τοῦτο δ' ἐστὶν ὅθεν ἂν τις γένοιτο ἐνθυμηματικός. διὰ γὰρ τοῦτο τῆς αὐτῆς οὔσης μεθόδου περὶ τὰ δημηγορικὰ καὶ δικανικά, καὶ καλλίωνος καὶ πολιτικωτέρας τῆς δημηγορικῆς πραγματείας οὔσης ἢ τῆς περὶ τὰ συναλλάγματα, περὶ μὲν ἐκείνης οὐδὲν λέγουσι, περὶ δὲ τοῦ δικάζεσθαι πάντες πειρῶνται τεχνολογεῖν, ὅτι ἡττόν ἐστι πρὸ ἔργου τὰ ἔξω τοῦ πράγματος λέγειν ἐν τοῖς δημηγορικοῖς καὶ ἡττόν ἐστι κακοῦργον ἢ δημηγορία δικολογίας, ὅτι κοινότερον. ἐνταῦθα μὲν γὰρ ὁ κριτῆς περὶ οἰκείων κρίνει, ὥστ' οὐδὲν ἄλλο δεῖ πλην ἀποδείξαι ὅτι οὕτως ἔχει ὡς φησιν ὁ συμβουλευών· ἐν δὲ τοῖς δικανικοῖς οὐχ ἱκανὸν τοῦτο, ἀλλὰ πρὸ ἔργου ἐστὶν ἀναλαβεῖν τὸν ἀκροατὴν· περὶ ἀλλοτρίων γὰρ ἡ κρίσις, ὥστε πρὸς τὸ αὐτῶν σκοπούμενοι καὶ πρὸς χάριν ἀκροώμενοι διδόασιν τοῖς ἀμφισβητοῦσιν, [1355a] ἀλλ' οὐ κρίνουσιν. διὸ καὶ πολλαχοῦ, ὥσπερ πρότερον εἶπον, ὁ νόμος κωλύει λέγειν ἔξω τοῦ πράγματος· ἐκεῖ δ' αὐτοὶ οἱ κριταὶ τοῦτο τηροῦσιν ἱκανῶς. ἐπεὶ δὲ φανερόν ἐστιν ὅτι ἡ μὲν ἐντεχνος μέθοδος περὶ τὰς πίστες ἐστίν, ἡ δὲ πίστις ἀπόδειξις τις (τότε γὰρ πιστεύομεν μάλιστα ὅταν ἀποδεδείχθαι ὑπολάβωμεν), ἐστὶ δ' ἀπόδειξις ῥητορικὴ ἐνθύμημα, καὶ ἐστὶ τοῦτο ὡς εἰπεῖν ἀπλῶς κυριώτατον τῶν πίστεων, τὸ δ' ἐνθύμημα συλλογισμός τις, περὶ δὲ συλλογισμοῦ ὁμοίως ἅπαντος τῆς διαλεκτικῆς ἐστὶν ἰδεῖν, ἢ αὐτῆς ὅλης ἢ μέρους τινός, δῆλον ὅτι ὁ μάλιστα τοῦτο δυνάμενος θεωρεῖν, ἐκ τίνων καὶ πῶς γίνεται συλλογισμός, οὗτος καὶ ἐνθυμηματικός ἂν εἴη μάλιστα, προσλαβὼν περὶ ποῖά τέ ἐστὶ τὸ ἐνθύμημα καὶ τίνας ἔχει διαφορὰς πρὸς τοὺς λογικοὺς συλλογισμούς. τό τε γὰρ ἀληθές καὶ τὸ ὅμοιον τῷ ἀληθεῖ τῆς αὐτῆς ἐστὶ δυνάμεως ἰδεῖν, ἅμα δὲ καὶ οἱ ἄνθρωποι πρὸς τὸ ἀληθές πεφύκασιν ἱκανῶς καὶ τὰ πλείω τυγχάνουσι τῆς ἀληθείας· διὸ πρὸς τὰ ἐνδοξα στοχαστικῶς ἔχειν τοῦ ὁμοίως ἔχοντος καὶ πρὸς τὴν ἀλήθειάν ἐστιν.

ὅτι μὲν οὖν τὰ ἔξω τοῦ πράγματος οἱ ἄλλοι τεχνολογοῦσι, καὶ διότι μᾶλλον ἀπονενεύκασιν πρὸς τὸ δικολογεῖν, φανερόν· χρήσιμος δέ ἐστιν ἡ ῥητορικὴ διὰ τε τὸ φύσει εἶναι κρείττω τᾷ ἀληθεῖ καὶ τὰ δίκαια τῶν ἐναντίων, ὥστε ἐὰν μὴ κατὰ τὸ προσῆκον αἱ κρίσεις γίνωνται, ἀνάγκη δι' αὐτῶν

ἡττᾶσθαι, τοῦτο δ' ἐστὶν ἄξιον ἐπιτιμήσεως, ἔτι δὲ πρὸς ἐνίους οὐδ' εἰ τὴν ἀκριβεστάτην ἔχοιμεν ἐπιστήμην, ῥάδιον ἅπ' ἐκείνης πεῖσαι λέγοντας· διδασκαλίας γὰρ ἐστὶν ὁ κατὰ τὴν ἐπιστήμην λόγος, τοῦτο δὲ ἀδύνατον, ἀλλ' ἀνάγκη διὰ τῶν κοινῶν ποιεῖσθαι τὰς πίστεις καὶ τοὺς λόγους, ὥσπερ καὶ ἐν τοῖς Τοπικοῖς ἐλέγομεν περὶ τῆς πρὸς τοὺς πολλοὺς ἐντεύξεως. ἔτι δὲ τάναντία δεῖ δύνασθαι πείθιν, καθάπερ καὶ ἐν τοῖς συλλογισμοῖς, οὐχ ὅπως ἀμφοτέρω πράττωμεν (οὐ γὰρ δεῖ τὰ φαῦλα πείθιν), ἀλλ' ἵνα μὴ λανθάνῃ πῶς ἔχει, καὶ ὅπως ἄλλου χρωμένου τοῖς λόγοις μὴ δικαίως αὐτοῖς λύειν ἔχωμεν. τῶν μὲν οὖν ἄλλων τεχνῶν οὐδεμία τάναντία συλλογίζεται, ἡ δὲ διαλεκτικὴ καὶ ἡ ῥητορικὴ μόναι τοῦτο ποιοῦσιν· ὁμοίως γὰρ εἰσιν ἀμφοτέραι τῶν ἐναντίων. τὰ μέντοι ὑποκείμενα πράγματα οὐχ ὁμοίως ἔχει, ἀλλ' ἀεὶ τᾷ ἀληθεῖ καὶ τᾷ βελτίῳ τῇ φύσει εὐσυλλογιστότερα καὶ πιθανώτερα ὥς ἀπλῶς εἰπεῖν. πρὸς δὲ τούτοις ἄτοπον εἰ τῷ σώματι μὲν αἰσχροὺς μὴ δύνασθαι [1355b] βοηθεῖν ἑαυτῷ, λόγῳ δ' οὐκ αἰσχροῦ· ὁ μᾶλλον ἴδιόν ἐστιν ἀνθρώπου τῆς τοῦ σώματος χρείας. εἰ δ' ὅτι μεγάλα βλάψειεν ἂν ὁ χρώμενος ἀδίκως τῇ τοιαύτῃ δυνάμει τῶν λόγων, τοῦτό γε κοινόν ἐστὶ κατὰ πάντων τῶν ἀγαθῶν πλην ἀρετῆς, καὶ μάλιστα κατὰ τῶν χρησιμωτάτων, οἷον ἰσχύος ὑγιείας πλούτου στρατηγίας· τούτοις γὰρ ἂν τις ὠφελήσειεν τὰ μέγιστα χρώμενος δικαίως καὶ βλάψειεν ἀδίκως.

ὅτι μὲν οὖν οὐκ ἔστιν οὐθενός τινος γένους ἀφωρισμένου ἡ ῥητορικὴ, ἀλλὰ καθάπερ ἡ διαλεκτικὴ, καὶ ὅτι χρήσιμος, φανερόν, καὶ ὅτι οὐ τὸ πεῖσαι ἔργον αὐτῆς, ἀλλὰ τὸ ἰδεῖν τὰ ὑπάρχοντα πιθανὰ περὶ ἕκαστον, καθάπερ καὶ ἐν ταῖς ἄλλαις τέχναις πάσαις (οὐδὲ γὰρ ἰατρικῆς τὸ ὑγιᾶ ποιῆσαι, ἀλλὰ μέχρι οὗ ἐνδέχεται, μέχρι τούτου προαγαγεῖν· ἔστιν γὰρ καὶ τοὺς ἀδυνάτους μεταλαβεῖν ὑγιείας ὅμως θεραπεῦσαι καλῶς)· πρὸς δὲ τούτοις ὅτι τῆς αὐτῆς τό τε πιθανόν καὶ τὸ φαινόμενον ἰδεῖν πιθανόν, ὥσπερ καὶ ἐπὶ τῆς διαλεκτικῆς συλλογισμόν τε καὶ φαινόμενον συλλογισμόν· ἡ γὰρ σοφιστικὴ οὐκ ἐν τῇ δυνάμει ἀλλ' ἐν τῇ προαιρέσει· πλην ἐνταῦθα μὲν ἔσται ὁ μὲν κατὰ τὴν ἐπιστήμην ὁ δὲ κατὰ τὴν προαίρεσιν ῥήτωρ, ἐκεῖ δὲ σοφιστὴς μὲν κατὰ τὴν προαίρεσιν, διαλεκτικὸς δὲ οὐ κατὰ τὴν προαίρεσιν ἀλλὰ κατὰ τὴν δύναμιν.

περὶ δὲ αὐτῆς ἤδη τῆς μεθόδου πειρώμεθα λέγειν, πῶς τε καὶ ἐκ τίνων δυνησόμεθα τυγχάνειν τῶν προκειμένων. πάλιν οὖν οἷον ἐξ ὑπαρχῆς ὁρισάμενοι αὐτὴν τίς ἐστὶ, λέγωμεν τὰ λοιπά.

Ἐστω δὴ ἡ ῥητορικὴ δύναμις περὶ ἕκαστον τοῦ θεωρῆσαι τὸ ἐνδεχόμενον πιθανόν. τοῦτο γὰρ οὐδεμιᾶς ἐτέρας ἐστὶ τέχνης ἔργον· τῶν γὰρ ἄλλων

ἐκάστη περὶ τὸ αὐτῇ ὑποκείμενόν ἐστιν διδασκαλικὴ καὶ πειστικὴ, οἷον ἰατρικὴ περὶ ὑγιεινῶν καὶ νοσερῶν, καὶ γεωμετρία περὶ τὰ συμβεβηκότα πάθη τοῖς μεγέθεσι, καὶ ἀριθμητικὴ περὶ ἀριθμῶν, ὁμοίως δὲ καὶ αἱ λοιπαὶ τῶν τεχνῶν καὶ ἐπιστημῶν· ἡ δὲ ῥητορικὴ περὶ τοῦ δοθέντος ὡς εἰπεῖν δοκεῖ δύνασθαι θεωρεῖν τὸ πιθανόν, διὸ καὶ φαμεν αὐτὴν οὐ περὶ τι γένος ἴδιον ἀφωρισμένον ἔχειν τὸ τεχνικόν.

τῶν δὲ πίστεων αἱ μὲν ἄτεχνοί εἰσιν αἱ δ' ἔντεχνοι. ἄτεχνα δὲ λέγω ὅσα μὴ δι' ἡμῶν πεπόρισται ἀλλὰ προϋπῆρχεν, οἷον μάρτυρες βάσανοι συγγραφαὶ καὶ ὅσα τοιαῦτα, ἔντεχνα δὲ ὅσα διὰ τῆς μεθόδου καὶ δι' ἡμῶν κατασκευασθῆναι δυνατόν, ὥστε δεῖ τούτων τοῖς μὲν χρήσασθαι, τὰ δὲ εὐρεῖν.

[1356a] τῶν δὲ διὰ τοῦ λόγου ποριζομένων πίστεων τρία εἶδη ἔστιν· αἱ μὲν γάρ εἰσιν ἐν τῷ ἥθει τοῦ λέγοντος, αἱ δὲ ἐν τῷ τὸν ἀκροατὴν διαθεῖναι πῶς, αἱ δὲ ἐν αὐτῷ τῷ λόγῳ διὰ τοῦ δεικνύναι ἢ φαίνεσθαι δεικνύναι. διὰ μὲν οὖν τοῦ ἥθους, ὅταν οὕτω λεχθῇ ὁ λόγος ὥστε ἀξιόπιστον ποιῆσαι τὸν λέγοντα· τοῖς γὰρ ἐπαικέσι πιστεύομεν μᾶλλον καὶ θᾶττον, περὶ πάντων μὲν ἀπλῶς, ἐν οἷς δὲ τὸ ἀκριβὲς μὴ ἔστιν ἀλλὰ τὸ ἀμφιδοξεῖν, καὶ παντελῶς. δεῖ δὲ καὶ τοῦτο συμβαίνειν διὰ τοῦ λόγου, ἀλλὰ μὴ διὰ τοῦ προδεδοξάσθαι ποιόν τινα εἶναι τὸν λέγοντα· οὐ γάρ, ὥσπερ ἔνιοι τῶν τεχνολογούντων, <οὐ> τίθεμεν ἐν τῇ τέχνῃ καὶ τὴν ἐπείκειαν τοῦ λέγοντος, ὡς οὐδὲν συμβαλλομένην πρὸς τὸ πιθανόν, ἀλλὰ σχεδὸν ὡς εἰπεῖν κυριωτάτην ἔχει πίστιν τὸ ἥθος.

διὰ δὲ τῶν ἀκροατῶν, ὅταν εἰς πάθος ὑπὸ τοῦ λόγου προαχθῶσιν· οὐ γὰρ ὁμοίως ἀποδίδομεν τὰς κρίσεις λυπούμενοι καὶ χαίροντες, ἢ φιλοῦντες καὶ μισοῦντες· πρὸς ὃ καὶ μόνον πειρᾶσθαι φαμεν πραγματεύεσθαι τοὺς νῦν τεχνολογοῦντας. περὶ μὲν οὖν τούτων δηλωθήσεται καθ' ἕκαστον, ὅταν περὶ τῶν παθῶν λέγωμεν, διὰ δὲ τοῦ λόγου πιστεύουσιν, ὅταν ἀληθὲς ἢ φαινόμενον δείξωμεν ἐκ τῶν περὶ ἕκαστα πιθανῶν.

ἐπεὶ δ' αἱ πίστεις διὰ τούτων εἰσὶ, φανερόν ὅτι ταύτας ἐστὶ λαβεῖν τοῦ συλλογίσασθαι δυναμένου καὶ τοῦ θεωρῆσαι περὶ τὰ ἥθη καὶ περὶ τὰς ἀρετὰς καὶ τρίτον [τοῦ] περὶ τὰ πάθη, τί τε ἕκαστόν ἐστιν τῶν παθῶν καὶ ποῖόν τι, καὶ ἐκ τίνων ἐγγίνεται καὶ πῶς, ὥστε συμβαίνει τὴν ῥητορικὴν οἷον παραφυῆς τι τῆς διαλεκτικῆς εἶναι καὶ τῆς περὶ τὰ ἥθη πραγματείας, ἣν δίκαιόν ἐστι προσαγορεύειν πολιτικὴν. διὸ καὶ ὑποδύεται ὑπὸ τὸ σχῆμα τὸ τῆς πολιτικῆς ἢ ῥητορικῆς καὶ οἱ ἀντιποιούμενοι ταύτης τὰ μὲν δι' ἀπαιδευσίαν, τὰ δὲ δι' ἀλαζονείαν, τὰ δὲ καὶ δι' ἄλλας αἰτίας ἀνθρωπικάς· ἔστι γὰρ μόνιόν τι τῆς

διαλεκτικῆς καὶ ὁμοίωμα, καθάπερ καὶ ἀρχόμενοι εἵπομεν· περὶ οὐδενὸς γὰρ ὠρισμένου οὐδετέρα αὐτῶν ἐστὶν ἐπιστήμη πῶς ἔχει, ἀλλὰ δυνάμεις τινὲς τοῦ πορίσαι λόγους.

περὶ μὲν οὖν τῆς δυνάμεως αὐτῶν, καὶ πῶς ἔχουσι πρὸς ἀλλήλας, εἴρηται σχεδὸν ἱκανῶς· τῶν δὲ διὰ τοῦ δεικνύναι ἢ φαίνεσθαι δεικνύναι, καθάπερ καὶ ἐν τοῖς διαλεκτικοῖς [1356b] τὸ μὲν ἐπαγωγή ἐστὶν, τὸ δὲ συλλογισμός, τὸ δὲ φαινόμενος συλλογισμός, καὶ ἐνταῦθα ὁμοίως· ἔστιν γὰρ τὸ μὲν παράδειγμα ἐπαγωγή, τὸ δ' ἐνθύμημα συλλογισμός, τὸ δὲ φαινόμενον ἐνθύμημα φαινόμενος συλλογισμός. καλῶ δ' ἐνθύμημα μὲν ῥητορικὸν συλλογισμόν, παράδειγμα δὲ ἐπαγωγὴν ῥητορικὴν. πάντες δὲ τὰς πίστεις ποιοῦνται διὰ τοῦ δεικνύναι ἢ παραδείγματα λέγοντες ἢ ἐνθυμήματα, καὶ παρὰ ταῦτα οὐδέν· ὥστ' εἴπερ καὶ ὅλως ἀνάγκη ἢ συλλογιζόμενον ἢ ἐπάγοντα δεικνύναι ὅτι οὖν [ἢ ὄντινοῦν] (δῆλον δ' ἡμῖν τοῦτο ἐκ τῶν Ἀναλυτικῶν), ἀναγκαῖον ἐκάτερον αὐτῶν ἐκατέρω τούτων τὸ αὐτὸ εἶναι.

τίς δ' ἐστὶν διαφορὰ παραδείγματος καὶ ἐνθυμήματος, φανερόν ἐκ τῶν Τοπικῶν (ἐκεῖ γὰρ περὶ συλλογισμοῦ καὶ ἐπαγωγῆς εἴρηται πρότερον), ὅτι τὸ μὲν ἐπὶ πολλῶν καὶ ὁμοίων δείκνυσθαι ὅτι οὕτως ἔχει ἐκεῖ μὲν ἐπαγωγή ἐστὶν ἐνταῦθα δὲ παράδειγμα, τὸ δὲ τινῶν ὄντων ἕτερόν τι διὰ ταῦτα συμβαίνειν παρὰ ταῦτα τῷ ταῦτα εἶναι ἢ καθόλου ἢ ὥς ἐπὶ τὸ πολὺ ἐκεῖ μὲν συλλογισμὸς ἐνταῦθα δὲ ἐνθύμημα καλεῖται. φανερόν δὲ καὶ ὅτι ἐκάτερον ἔχει ἀγαθὸν τὸ εἶδος τῆς ῥητορείας· καθάπερ γὰρ καὶ ἐν τοῖς μεθοδικοῖς εἴρηται, καὶ ἐν τούτοις ὁμοίως ἔχει· εἰσὶν γὰρ αἱ μὲν παραδειγματώδεις ῥητορεῖαι αἱ δὲ ἐνθυμηματικαί, καὶ ῥήτορες ὁμοίως οἱ μὲν παραδειγματώδεις οἱ δὲ ἐνθυμηματικοί. πιθανοὶ μὲν οὖν οὐχ ἥττον οἱ λόγοι οἱ διὰ τῶν παραδειγμάτων, θορυβοῦνται δὲ μᾶλλον οἱ ἐνθυμηματικοί· τὴν δ' αἰτίαν [αὐτῶν], καὶ πῶς ἐκατέρω χρηστέον, ἐροῦμεν ὕστερον· νῦν δὲ περὶ αὐτῶν τούτων μᾶλλον διορίσωμεν καθαρῶς.

ἐπεὶ γὰρ τὸ πιθανὸν τινὲ πιθανόν ἐστι, καὶ τὸ μὲν εὐθὺς ὑπάρχει δι' αὐτὸ πιθανόν καὶ πιστόν τὸ δὲ τῷ δείκνυσθαι δοκεῖν διὰ τοιούτων, οὐδεμία δὲ τέχνη σκοπεῖ τὸ καθ' ἕκαστον, οἷον ἡ ἰατρικὴ τί Σωκράτει τὸ ὑγιεινόν ἐστὶν ἢ Καλλίᾳ, ἀλλὰ τί τῷ τοιῷδε ἢ τοῖς τοιοῖσδε (τοῦτο γὰρ ἔντεχνον, τὸ δὲ καθ' ἕκαστον ἄπειρον καὶ οὐκ ἐπιστητόν), οὐδὲ ἡ ῥητορικὴ τὸ καθ' ἕκαστον ἔνδοξον θεωρήσει, οἷον Σωκράτει ἢ Ἰππία, ἀλλὰ τὸ τοιοισδί, καθάπερ καὶ ἡ διαλεκτικὴ. καὶ γὰρ ἐκείνη συλλογίζεται οὐκ ἐξ ὧν ἔτυχεν (φαίνεται γὰρ ἅττα καὶ τοῖς παραληροῦσιν), ἀλλ' ἐκείνη μὲν ἐκ τῶν λόγου δεομένων, ἡ δὲ ῥητορικὴ ἐκ [1357a] τῶν ἤδη βουλευέσθαι εἰωθότων. ἔστιν δὲ τὸ ἔργον



αὐτῆς περί τε τοιούτων περί ὧν βουλευόμεθα καὶ τέχνας μὴ ἔχομεν, καὶ ἐν τοῖς τοιούτοις ἀκροαταῖς οἱ οὐ δύνανται διὰ πολλῶν συνορᾶν οὐδὲ λογίζεσθαι πόρρωθεν. βουλευόμεθα δὲ περί τῶν φαινομένων ἐνδέχεσθαι ἀμφοτέρως ἔχειν· περί γὰρ τῶν ἀδυνάτων ἄλλως ἢ γενέσθαι ἢ ἔσεσθαι ἢ ἔχειν οὐδεὶς βουλεύεται οὕτως ὑπολαμβάνων· οὐδὲν γὰρ πλέον.

ἐνδέχεται δὲ συλλογίζεσθαι καὶ συνάγειν τὰ μὲν ἐκ συλλελογισμένων πρότερον, τὰ δ' ἐξ ἀσυλλογίστων μὲν, δεομένων δὲ συλλογισμοῦ διὰ τὸ μὴ εἶναι ἔνδοξα, ἀνάγκη δὲ τούτων τὸ μὲν μὴ εἶναι εὐεπακολούθητον διὰ τὸ μῆκος (ὁ γὰρ κριτῆς ὑπόκειται εἶναι ἀπλοῦς), τὰ δὲ μὴ πιθανὰ διὰ τὸ μὴ ἐξ ὁμολογουμένων εἶναι μηδ' ἐνδόξων, ὥστ' ἀναγκαῖον τό τε ἐνθύμημα εἶναι καὶ τὸ παράδειγμα περί τε τῶν ἐνδεχομένων ὡς τὰ πολλὰ ἔχειν ἄλλως, τὸ μὲν παράδειγμα ἐπαγωγὴν τὸ δ' ἐνθύμημα συλλογισμόν, καὶ ἐξ ὀλίγων τε καὶ πολλάκις ἐλαττόνων ἢ ἐξ ὧν ὁ πρῶτος συλλογισμός· ἐὰν γὰρ ἦ τι τούτων γνῶριμον, οὐδὲ δεῖ λέγειν· αὐτὸς γὰρ τοῦτο προστίθῃσιν ὁ ἀκροατής, οἷον ὅτι Δωριεὺς στεφανίτην ἀγῶνα νενίκηκεν· ἱκανὸν γὰρ εἶπεῖν ὅτι Ὀλύμπια νενίκηκεν, τὸ δ' ὅτι στεφανίτης τὰ Ὀλύμπια οὐδὲ δεῖ προσθεῖναι· γινώσκουσι γὰρ πάντες.

ἐπεὶ δ' ἐστὶν ὀλίγα μὲν τῶν ἀναγκαίων ἐξ ὧν οἱ ῥητορικοὶ συλλογισμοὶ εἰσι (τὰ γὰρ πολλὰ περί ὧν αἱ κρίσεις καὶ αἱ σκέψεις ἐνδέχεται καὶ ἄλλως ἔχειν· περί ὧν μὲν γὰρ πράττουσι βουλεύονται καὶ σκοποῦσι, τὰ δὲ πραττόμενα πάντα τοιούτου γένους ἐστί, καὶ οὐδὲν ὡς ἔπος εἶπεῖν ἐξ ἀνάγκης τούτων, τὰ δ' ὡς ἐπὶ τὸ πολὺ συμβαίνοντα καὶ ἐνδεχόμενα ἐκ τοιούτων ἀνάγκη ἐτέρων συλλογίζεσθαι, τὰ δ' ἀναγκαῖα ἐξ ἀναγκαίων· δῆλον δ' ἡμῖν καὶ τοῦτο ἐκ τῶν Ἀναλυτικῶν), φανερόν ὅτι ἐξ ὧν τὰ ἐνθυμήματα λέγεται, τὰ μὲν ἀναγκαῖα ἔσται, τὰ δὲ πλεῖστα ὡς ἐπὶ τὸ πολὺ, τὰ δ' ἐνθυμήματα ἐξ εἰκότων καὶ ἐκ σημείων, ὥστε ἀνάγκη τούτων ἐκάτερον ἐκατέρῳ ταῦτο εἶναι.

τὸ μὲν γὰρ εἶκός ἐστι τὸ ὡς ἐπὶ τὸ πολὺ γινόμενον, οὐχ ἀπλῶς δὲ καθάπερ ὀρίζονται τινες, ἀλλὰ τὸ περί τὰ ἐνδεχόμενα ἄλλως ἔχειν, οὕτως ἔχον πρὸς ἐκεῖνο πρὸς ὃ εἶκός [1357b] ὡς τὸ καθόλου πρὸς τὸ κατὰ μέρος· τῶν δὲ σημείων τὸ μὲν οὕτως ἔχει ὡς τῶν καθ' ἕκαστόν τι πρὸς τὸ καθόλου, τὸ δὲ ὡς τῶν καθόλου τι πρὸς τὸ κατὰ μέρος. τούτων δὲ τὸ μὲν ἀναγκαῖον τεκμήριον, τὸ δὲ μὴ ἀναγκαῖον ἀνώνυμόν ἐστι κατὰ τὴν διαφοράν. ἀναγκαῖα μὲν οὖν λέγω ἐξ ὧν γίνεται συλλογισμός· διὸ καὶ τεκμήριον τὸ τοιοῦτον τῶν σημείων ἐστίν· ὅταν γὰρ μὴ ἐνδέχεσθαι οἴωνται λῦσαι τὸ λεχθέν, τότε φέρειν οἴονται τεκμήριον ὡς δεδειγμένον καὶ πεπερασμένον· τὸ γὰρ τέκμαρ καὶ πέρας

ταῦτόν ἐστι κατὰ τὴν ἀρχαίαν γλῶτταν. ἔστιν δὲ τῶν σημείων τὸ μὲν ὡς τὸ καθ' ἕκαστον πρὸς τὸ καθόλου ὧδε, οἷον εἴ τις εἴπειεν σημεῖον εἶναι ὅτι οἱ σοφοὶ δίκαιοι, Σωκράτης γὰρ σοφὸς ἦν καὶ δίκαιος. τοῦτο μὲν οὖν σημεῖον, λυτὸν δέ, κἂν ἀληθὲς ἢ τὸ εἰρημένον (ἀσυλλόγιστον γάρ), τὸ δέ, οἷον εἴ τις εἴπειεν σημεῖον ὅτι νοσεῖ, πυρέττει γάρ, ἢ τέτοκεν, ὅτι γάλα ἔχει, ἀναγκαῖον. ὅπερ τῶν σημείων τεκμήριον μόνον ἐστίν· μόνον γάρ, ἂν ἀληθὲς ἢ, ἄλυτόν ἐστιν. τὸ δὲ ὡς τὸ καθόλου πρὸς τὸ κατὰ μέρος ἔχον, οἷον εἴ τις εἴπειεν ὅτι πυρέττει σημεῖον εἶναι, πυκνὸν γάρ ἀναπνεῖ. λυτὸν δὲ καὶ τοῦτο, κἂν ἀληθὲς ἢ· ἐνδέχεται γάρ καὶ μὴ πυρέττοντα πνευστιᾶν.

τί μὲν οὖν εἰκὸς ἐστὶ καὶ τί σημεῖον καὶ τεκμήριον, καὶ τί διαφέρουσιν, εἴρηται μὲν καὶ νῦν, μᾶλλον δὲ φανερώς καὶ περὶ τούτων, καὶ διὰ τίν' αἰτίαν τὰ μὲν ἀσυλλόγιστα ἐστὶ τὰ δὲ συλλελογισμένα, ἐν τοῖς Ἀναλυτικοῖς διώριστα περὶ αὐτῶν.

παράδειγμα δὲ ὅτι μὲν ἐστὶν ἐπαγωγή καὶ περὶ ποῖα ἐπαγωγή, εἴρηται· ἔστι δὲ οὔτε ὡς μέρος πρὸς ὅλον οὔθ' ὡς ὅλον πρὸς μέρος οὔθ' ὡς ὅλον πρὸς ὅλον, ἀλλ' ὡς μέρος πρὸς μέρος, ὅμοιον πρὸς ὅμοιον - ὅταν ἄμφω μὲν ἢ ὑπὸ τὸ αὐτὸ γένος, γνωριμώτερον δὲ θάτερον ἢ θατέρου, παράδειγμά ἐστιν· οἷον ὅτι ἐπεβούλευε τυραννίδι Διονύσιος αἰτῶν τὴν φυλακὴν· καὶ γὰρ Πεισίστρατος πρότερον ἐπιβουλεύων ἦται φυλακὴν καὶ λαβὼν ἐτυράνησε, καὶ Θεαγένης ἐν Μεγάροις· καὶ ἄλλοι ὅσους ἴσασι, παράδειγμα πάντες γίνονται τοῦ Διονυσίου, ὃν οὐκ ἴσασιν πῶ εἰ διὰ τοῦτο αἰτεῖ. πάντα δὲ ταῦτα ὑπὸ τὸ αὐτὸ καθόλου, ὅτι ὁ ἐπιβουλεύων τυραννίδι φυλακὴν αἰτεῖ.

[1358a] ἔξ ὧν μὲν οὖν λέγονται αἱ δοκοῦσαι εἶναι πίστεις ἀποδεικτικαί, εἴρηται. τῶν δὲ ἐνθυμημάτων μεγίστη διαφορὰ καὶ μάλιστα λεληθυῖα σχεδὸν παρὰ πᾶσιν ἐστὶν ἥπερ καὶ περὶ τὴν διαλεκτικὴν μέθοδον τῶν συλλογισμῶν· τὰ μὲν γὰρ αὐτῶν ἐστὶ κατὰ τὴν ῥητορικὴν ὥσπερ καὶ κατὰ τὴν διαλεκτικὴν μέθοδον τῶν συλλογισμῶν, τὰ δὲ κατ' ἄλλας τέχνας καὶ δυνάμεις, τὰς μὲν οὔσας τὰς δ' οὔπω κατειλημμένας· διὸ καὶ λανθάνουσιν τε τοὺς ἀκροατὰς καὶ [μᾶλλον] ἀπτόμενοι κατὰ τρόπον μεταβαίνουσιν ἐξ αὐτῶν. μᾶλλον δὲ σαφὲς ἔσται τὸ λεγόμενον διὰ πλειόνων ῥηθέν. λέγω γὰρ διαλεκτικούς τε καὶ ῥητορικούς συλλογισμοὺς εἶναι περὶ ὧν τοὺς τόπους λέγομεν· οὔτοι δ' εἰσὶν οἱ κοινοὶ περὶ δικαίων καὶ φυσικῶν καὶ περὶ πολιτικῶν καὶ περὶ πολλῶν διαφερόντων εἶδει, οἷον ὁ τοῦ μᾶλλον καὶ ἥττον τρόπος· οὐδὲν γὰρ μᾶλλον ἔσται ἐκ τούτου συλλογίσασθαι ἢ ἐνθύμημα εἰπεῖν περὶ δικαίων ἢ περὶ φυσικῶν ἢ περὶ ὁτουοῦν· καίτοι ταῦτα εἶδει διαφέρει. ἴδια δὲ ὅσα ἐκ τῶν περὶ ἕκαστον εἶδος καὶ γένος προτάσεών ἐστίν, οἷον περὶ φυσικῶν εἰσι

προτάσεις ἐξ ὧν οὔτε ἐνθύμημα οὔτε συλλογισμὸς ἔστι περὶ τῶν ἠθικῶν, καὶ περὶ τούτων ἄλλαι ἐξ ὧν οὐκ ἔσται περὶ τῶν φυσικῶν· ὁμοίως δὲ τοῦτ' ἔχει ἐπὶ πάντων. κάκεῖνα μὲν οὐ ποιήσει περὶ οὐδὲν γένος ἔμφορνα· περὶ οὐδὲν γὰρ ὑποκείμενόν ἐστιν· ταῦτα δὲ ὅσω τις ἂν βέλτιον ἐκλέγηται [τὰς προτάσεις], λήσει ποιήσας ἄλλην ἐπιστήμην τῆς διαλεκτικῆς καὶ ῥητορικῆς· ἂν γὰρ ἐντύχη ἀρχαῖς, οὐκέτι διαλεκτικὴ οὐδὲ ῥητορικὴ ἀλλ' ἐκείνη ἔσται ἣς ἔχει τὰς ἀρχάς. ἔστι δὲ τὰ πλεῖστα τῶν ἐνθυμημάτων ἐκ τούτων τῶν εἰδῶν λεγόμενα, τῶν κατὰ μέρος καὶ ἰδίων, ἐκ δὲ τῶν κοινῶν ἐλάττω. καθάπερ οὖν καὶ ἐν τοῖς Τοπικοῖς, καὶ ἐνταῦθα διαιρετέον τῶν ἐνθυμημάτων τὰ τε εἶδη καὶ τοὺς τόπους ἐξ ὧν ληπτέον. λέγω δ' εἶδη μὲν τὰς καθ' ἑκάστον γένος ἰδίας προτάσεις, τόπους δὲ τοὺς κοινούς ὁμοίως πάντων. πρότερον οὖν εἵπωμεν περὶ τῶν εἰδῶν· πρῶτον δὲ λάβωμεν τὰ γένη τῆς ῥητορικῆς, ὅπως διελόμενοι πόσα ἐστίν, περὶ τούτων χωρὶς λαμβάνωμεν τὰ στοιχεῖα καὶ τὰς προτάσεις.

Ἔστιν δὲ τῆς ῥητορικῆς εἶδη τρία τὸν ἀριθμόν· τοσοῦτοι γὰρ καὶ οἱ ἀκροαταὶ τῶν λόγων ὑπάρχουσιν ὄντες. σύγκειται μὲν γὰρ ἐκ τριῶν ὁ λόγος, ἔκ τε τοῦ λέγοντος καὶ [1358b] περὶ οὗ λέγει καὶ πρὸς ὃν, καὶ τὸ τέλος πρὸς τοῦτόν ἐστιν, λέγω δὲ τὸν ἀκροατὴν. ἀνάγκη δὲ τὸν ἀκροατὴν ἢ θεωρὸν εἶναι ἢ κριτὴν, κριτὴν δὲ ἢ τῶν γεγενημένων ἢ τῶν μελλόντων. ἔστιν δ' ὁ μὲν περὶ τῶν μελλόντων κρίνων ὁ ἐκκλησιαστής, ὁ δὲ περὶ τῶν γεγενημένων [οἶον] ὁ δικαστής, ὁ δὲ περὶ τῆς δυνάμεως ὁ θεωρός, ὥστ' ἐξ ἀνάγκης ἂν εἴη τρία γένη τῶν λόγων τῶν ῥητορικῶν, συμβουλευτικόν, δικανικόν, ἐπιδεικτικόν.

συμβουλῆς δὲ τὸ μὲν προτροπή, τὸ δὲ ἀποτροπή· ἀεὶ γὰρ καὶ οἱ ἰδία συμβουλευόντες καὶ οἱ κοινῇ δημηγοροῦντες τούτων θάτερον ποιοῦσιν. δίκης δὲ τὸ μὲν κατηγορία, τὸ δ' ἀπολογία· τούτων γὰρ ὅποτερονοῦν ποιεῖν ἀνάγκη τοὺς ἀμφισβητοῦντας. ἐπιδεικτικοῦ δὲ τὸ μὲν ἔπαινος τὸ δὲ ψόγος. χρόνοι δὲ ἐκάστου τούτων εἰσὶ τῷ μὲν συμβουλευόντι ὁ μέλλων (περὶ γὰρ τῶν ἐσομένων συμβουλεύει ἢ προτρέπων ἢ ἀποτρέπων), τῷ δὲ δικαζομένῳ ὁ γενόμενος (περὶ γὰρ τῶν πεπραγμένων ἀεὶ ὁ μὲν κατηγορεῖ, ὁ δὲ ἀπολογεῖται), τῷ δ' ἐπιδεικτικῷ κυριώτατος μὲν ὁ παρών (κατὰ γὰρ τὰ ὑπάρχοντα ἐπαινοῦσιν ἢ ψέγουσιν πάντες), προσχρῶνται δὲ πολλάκις καὶ τὰ γενόμενα ἀναμνησκόντες καὶ τὰ μέλλοντα προεικάζοντες. τέλος δὲ ἐκάστοις τούτων ἕτερόν ἐστι, καὶ τρισὶν οὗσι τρία, τῷ μὲν συμβουλευόντι τὸ συμφέρον καὶ βλαβερόν· ὁ μὲν γὰρ προτρέπων ὥς βέλτιον συμβουλεύει, ὁ δὲ ἀποτρέπων ὥς χείρονος ἀποτρέπει, τὰ δ' ἄλλα πρὸς τοῦτο συμπαραλαμβάνει, ἢ δίκαιον ἢ ἀδικον, ἢ καλὸν ἢ αἰσχρόν· τοῖς δὲ δικαζομένοις τὸ δίκαιον καὶ

τὸ ἄδικον, τὰ δ' ἄλλα καὶ οὗτοι συμπαραλαμβάνουσι πρὸς ταῦτα· τοῖς δ' ἐπαινοῦσιν καὶ ψέγουσιν τὸ καλὸν καὶ τὸ αἰσχρόν, τὰ δ' ἄλλα καὶ οὗτοι πρὸς ταῦτα ἐπαναφέρουσιν.

σημεῖον δ' ὅτι τὸ εἰρημένον ἐκάστοις τέλος· περὶ μὲν γὰρ τῶν ἄλλων ἐνίοτε οὐκ ἂν ἀμφισβητήσαιεν, οἷον ὁ δικαζόμενος ὡς οὐ γέγονεν ἢ οὐκ ἔβλαψεν· ὅτι δ' ἀδικεῖ οὐδέποτ' ἂν ὁμολογήσαιεν· οὐδὲν γὰρ ἂν ἔδει δίκης. ὁμοίως δὲ καὶ οἱ συμβουλευόντες τὰ μὲν ἄλλα πολλάκις προΐενται, ὡς δὲ ἀσύμφορα συμβουλεύουσιν ἢ ἀπ' ὠφελίμων ἀποτρέπουσιν οὐκ ἂν ὁμολογήσαιεν· ὡς δ' [οὐκ] ἄδικον τοὺς ἀστυγείτονας καταδουλοῦσθαι καὶ τοὺς μηδὲν ἀδικοῦντας, πολλάκις οὐδὲν φροντίζουσιν. ὁμοίως δὲ καὶ οἱ ἐπαινοῦντες καὶ οἱ ψέγοντες οὐ σκοποῦσιν [1359a] εἰ συμφέροντα ἔπραξεν ἢ βλαβερὰ, ἀλλὰ καὶ ἐν ἐπαίνῳ πολλάκις τιθέασιν ὅτι ὀλιγορήσας τοῦ αὐτῷ λυσιτελοῦντος ἔπραξεν ὅ τι καλόν, οἷον Ἀχιλλέα ἐπαινοῦσιν ὅτι ἐβοήθησε τῷ ἐταίρῳ Πατρόκλῳ εἰδὼς ὅτι δεῖ αὐτὸν ἀποθανεῖν ἐξὸν ζῆν. τούτῳ δὲ ὁ μὲν τοιοῦτος θάνατος κάλλιον, τὸ δὲ ζῆν συμφέρον.

φανερὸν δὲ ἐκ τῶν εἰρημένων ὅτι ἀνάγκη περὶ τούτων ἔχειν πρῶτον τὰς προτάσεις· τὰ γὰρ τεκμήρια καὶ τὰ εἰκότα καὶ τὰ σημεῖα προτάσεις εἰσὶν ῥητορικά· ὅλως μὲν γὰρ συλλογισμὸς ἐκ προτάσεων ἐστίν, τὸ δ' ἐνθύμημα συλλογισμὸς ἐστὶ συνεστηκῶς ἐκ τῶν εἰρημένων προτάσεων.

ἐπεὶ δὲ οὔτε πραχθῆναι οἷόν τε οὔτε πεπρᾶχθαι τὰ ἀδύνατα ἀλλὰ τὰ δυνατά, οὐδὲ τὰ μὴ γενόμενα ἢ μὴ ἐσόμενα [οὐχ] οἷόν τε τὰ μὲν πεπρᾶχθαι, τὰ δὲ πραχθήσεσθαι, ἀναγκαῖον καὶ τῷ συμβουλευόντι καὶ τῷ δικαζομένῳ καὶ τῷ ἐπιδεικτικῷ ἔχειν προτάσεις περὶ δυνατοῦ καὶ ἀδυνάτου, καὶ εἰ γέγονεν ἢ μή, καὶ εἰ ἔσται ἢ μή. ἔτι δὲ ἐπεὶ ἅπαντες, καὶ ἐπαινοῦντες καὶ ψέγοντες, καὶ προτρέποντες καὶ ἀποτρέποντες, καὶ κατηγοροῦντες καὶ ἀπολογούμενοι, οὐ μόνον τὰ εἰρημένα δεικνύναι πειρῶνται, ἀλλὰ καὶ ὅτι μέγα ἢ μικρὸν τὸ ἀγαθὸν ἢ τὸ κακόν, ἢ τὸ καλόν ἢ τὸ αἰσχρόν, ἢ τὸ δίκαιον ἢ τὸ ἄδικον, ἢ καθ' αὐτὰ λέγοντες ἢ πρὸς ἄλληλα ἀντιπαραβάλλοντες, δῆλον ὅτι δέοι ἂν καὶ περὶ μεγέθους καὶ μικρότητος καὶ τοῦ μείζονος καὶ τοῦ ἐλάττονος προτάσεις ἔχειν, καὶ καθόλου καὶ περὶ ἐκάστου, οἷον τί μείζον ἀγαθὸν ἢ ἔλαττον ἢ ἀδίκημα ἢ δικαίωμα· ὁμοίως δὲ καὶ περὶ τῶν ἄλλων.

περὶ ὧν μὲν οὖν ἐξ ἀνάγκης δεῖ λαβεῖν τὰς προτάσεις, εἴρηται· μετὰ δὲ ταῦτα διαιρετέον ἰδίᾳ περὶ ἐκάστου τούτων, οἷον περὶ ὧν συμβουλή καὶ περὶ ὧν οἱ ἐπιδεικτικοὶ λόγοι, τρίτον δὲ περὶ ὧν αἱ δίκαι.

Πρῶτον μὲν οὖν ληπτέον περὶ ποῖα ἀγαθὰ ἢ κακὰ ὁ συμβουλευὼν συμβουλεύει, ἐπειδὴ οὐ περὶ ἅπαντα ἀλλ' ὅσα ἐνδέχεται καὶ γενέσθαι καὶ μὴ, ὅσα δὲ ἐξ ἀνάγκης ἢ ἔστιν ἢ ἔσται, ἢ ἀδύνατον ἢ εἶναι ἢ γενέσθαι, περὶ δὲ τούτων οὐκ ἔστι συμβουλή. οὐδὲ δὴ περὶ τῶν ἐνδεχομένων ἀπάντων· ἔστιν γὰρ καὶ φύσει ἔνια καὶ ἀπὸ τύχης γινόμενα ἀγαθὰ τῶν ἐνδεχομένων καὶ γίνεσθαι καὶ μὴ, περὶ ὧν οὐδὲν πρὸ ἔργου τὸ συμβουλεύειν· ἀλλὰ δῆλον ὅτι περὶ ὧν ἔστιν τὸ βουλεύεσθαι. τοιαῦτα δ' ἔστιν ὅσα πέφυκεν ἀνάγεσθαι εἰς ἡμᾶς, καὶ ὧν ἡ ἀρχὴ τῆς γενέσεως ἐφ' ἡμῖν ἔστιν· μέχρι γὰρ τούτου [1359b] σκοποῦμεν, ἕως ἂν εὕρωμεν εἰ ἡμῖν δυνατὰ ἢ ἀδύνατα πρᾶξαι.

καθ' ἕκαστον μὲν οὖν ἀκριβῶς διαριθμήσασθαι καὶ διαλαβεῖν εἰς εἶδη περὶ ὧν εἰώθασι χρηματίζειν, ἔτι δ' ὅσον ἐνδέχεται περὶ αὐτῶν διορίσαι κατὰ τὴν ἀλήθειαν, οὐ δεῖ κατὰ τὸν παρόντα καιρὸν ζητεῖν διὰ τὸ μήτε τῆς ῥητορικῆς εἶναι τέχνης, ἀλλ' ἐμφρονεστέρας καὶ μᾶλλον ἀληθινῆς, πολλῶ τε πλείω δεδόσθαι καὶ νῦν αὐτῇ τῶν οἰκείων θεωρημάτων· ὅπερ γὰρ καὶ πρότερον εἰρηκότες τυγχάνομεν ἀληθές ἔστιν, ὅτι ἡ ῥητορικὴ σύγκειται μὲν ἔκ τε τῆς ἀναλυτικῆς ἐπιστήμης καὶ τῆς περὶ τὰ ἥθη πολιτικῆς, ὁμοία δ' ἔστιν τὰ μὲν τῇ διαλεκτικῇ τὰ δὲ τοῖς σοφιστικοῖς λόγοις. ὅσω δ' ἂν τις ἢ τὴν διαλεκτικὴν ἢ ταύτην μὴ καθάπερ ἂν δυνάμεις ἀλλ' ἐπιστήμης πειράται κατασκευάζειν, λήσεται τὴν φύσιν αὐτῶν ἀφανίσας τῷ μεταβαίνειν ἐπισκευάζων εἰς ἐπιστήμης ὑποκειμένων τινῶν πραγμάτων, ἀλλὰ μὴ μόνον λόγων. ὅμως δὲ ὅσα πρὸ ἔργου μὲν ἔστι διελεῖν, ἔτι δ' ὑπολείπει σκέψιν τῇ πολιτικῇ ἐπιστήμῃ, εἵπωμεν καὶ νῦν.

σχεδὸν γάρ, περὶ ὧν βουλεύονται πάντες καὶ περὶ ὧν ἀγορεύουσιν οἱ συμβουλεύοντες, τὰ μέγιστα τυγχάνει πέντε τὸν ἀριθμὸν ὄντα· ταῦτα δ' ἔστιν περὶ τε πόρων, καὶ πολέμου καὶ εἰρήνης, ἔτι δὲ περὶ φυλακῆς τῆς χώρας, καὶ τῶν εἰσαγομένων καὶ ἐξαγομένων, καὶ νομοθεσίας· ὥστε περὶ μὲν πόρων τὸν μέλλοντα συμβουλεύειν δέοι ἂν τὰς προσόδους τῆς πόλεως εἰδέναι τίνες καὶ πόσαι, ὅπως εἴτε τις παραλείπεται προστεθῇ καὶ εἴ τις ἐλάττων ἀυξηθῇ, ἔτι δὲ τὰς δαπάνας τῆς πόλεως ἀπάσας, ὅπως εἴ τις περίεργος ἀφαιρεθῇ καὶ εἴ τις μείζων ἐλάττων γένηται· οὐ γὰρ μόνον πρὸς τὰ ὑπάρχοντα προστιθέντες πλουσιώτεροι γίνονται, ἀλλὰ καὶ ἀφαιροῦντες τῶν δαπανημάτων. ταῦτα δ' οὐ μόνον ἐκ τῆς περὶ τὰ ἴδια ἐμπειρίας ἐνδέχεται συνορᾶν, ἀλλ' ἀναγκαῖον καὶ τῶν παρὰ τοῖς ἄλλοις εὕρημένων ἱστορικὸν εἶναι πρὸς τὴν περὶ τούτων συμβουλήν.

περὶ δὲ πολέμου καὶ εἰρήνης τὴν δύναμιν εἰδέναι τῆς πόλεως, ὁπόση τε ὑπάρχει ἤδη καὶ πόσῃ ἐνδέχεται ὑπάρξαι, καὶ ποῖα τις ἢ τε ὑπάρχουσά ἐστιν

καὶ ἥτις ἐνδέχεται προσγενέσθαι, ἔτι δὲ πολέμους πῶς καὶ τίνας πεπολέμηκεν. οὐ μόνον δὲ τῆς οἰκείας πόλεως ἀλλὰ καὶ τῶν ὁμόρων ταῦτα ἀναγκαῖον εἰδέναι, καὶ πρὸς οὓς ἐπίδοξον πολεμεῖν, ὅπως πρὸς μὲν τοὺς κρείττους εἰρηνεύηται, [1360a] πρὸς δὲ τοὺς ἥττους ἐφ' αὐτοῖς ἢ τὸ πολεμεῖν, καὶ τὰς δυνάμεις, πότερον ὅμοιαι ἢ ἀνόμοιαι· ἔστιν γὰρ καὶ ταύτῃ πλεονεκτεῖν ἢ ἐλαττοῦσθαι. ἀναγκαῖον δὲ καὶ πρὸς ταῦτα μὴ μόνον τοὺς οἰκείους πολέμους τεθεωρηκέναι ἀλλὰ καὶ τοὺς τῶν ἄλλων, πῶς ἀποβαίνουσιν· ἀπὸ γὰρ τῶν ὁμοίων τὰ ὅμοια γίνεσθαι πέφυκεν.

ἔτι δὲ περὶ φυλακῆς τῆς χώρας μὴ λανθάνειν πῶς φυλάττεται, ἀλλὰ καὶ τὸ πλῆθος εἰδέναι τῆς φυλακῆς καὶ τὸ εἶδος καὶ τοὺς τόπους τῶν φυλακτηρίων (τοῦτο δ' ἀδύνατον μὴ ἔμπειρον ὄντα τῆς χώρας), ἵν' εἴ τ' ἐλάττων ἢ φυλακὴ προστεθῇ καὶ εἴ τις περίεργος ἀφαιρεθῇ καὶ τοὺς ἐπιτηδεῖους τόπους τηρῶσι μᾶλλον.

ἔτι δὲ περὶ τροφῆς, πόση [δαπάνη] ἱκανὴ τῇ πόλει καὶ ποία, ἢ αὐτοῦ τε γινομένη καὶ <ῆ> εἰσαγωγίμος, καὶ τίνων τ' ἐξαγωγῆς δέονται καὶ τίνων <καὶ παρὰ τίνων> εἰσαγωγῆς, ἵνα πρὸς τούτους καὶ συνθῇ καὶ συμβολαὶ γίνωνται· πρὸς δύο γὰρ διαφυλάττειν ἀναγκαῖον ἀνεγκλήτους τοὺς πολίτας, πρὸς τε τοὺς κρείττους καὶ πρὸς τοὺς εἰς ταῦτα χρησίμους.

εἰς δ' ἀσφάλειαν ἅπαντα μὲν ταῦτα ἀναγκαῖον δύνασθαι θεωρεῖν, οὐκ ἐλάχιστον δὲ περὶ νομοθεσίας ἐπαῖειν· ἐν γὰρ τοῖς νόμοις ἐστὶν ἡ σωτηρία τῆς πόλεως, ὥστ' ἀναγκαῖον εἰδέναι πόσα τέ ἐστὶ πολιτειῶν εἶδη, καὶ ποῖα συμφέρει ἐκάστη, καὶ ὑπὸ τίνων φθειρεσθαι πέφυκεν καὶ οἰκείων τῆς πολιτείας καὶ ἐναντίων. λέγω δὲ τὸ ὑπὸ οἰκείων φθειρεσθαι, ὅτι ἔξω τῆς βελτίστης πολιτείας αἱ ἄλλαι πᾶσαι καὶ ἀνιέμεναι καὶ ἐπιτεινόμεναι φθίρονται, οἷον δημοκρατία οὐ μόνον ἀνιεμένη ἀσθενεστέρα γίγνεται ὥστε τέλος ἥξει εἰς ὀλιγαρχίαν, ἀλλὰ καὶ ἐπιτεινομένη σφόδρα· ὥσπερ καὶ ἡ γρυπότης καὶ ἡ σιμότης οὐ μόνον ἀνιέμενα ἔρχεται εἰς τὸ μέσον, ἀλλὰ καὶ σφόδρα γρυπὰ γινόμενα ἢ σιμὰ οὕτως διατίθεται ὥστε μηδὲ μυκτῆρα δοκεῖν εἶναι. χρήσιμον δὲ πρὸς τὰς νομοθεσίας τὸ μὴ μόνον ἐπαῖειν τίς πολιτεία συμφέρει, ἐκ τῶν παρεληλυθότων θεωροῦντα, ἀλλὰ καὶ τὰς παρὰ τοῖς ἄλλοις εἰδέναι, αἱ ποῖαι τοῖς ποίοις ἀρμόττουσιν· ὥστε δῆλον ὅτι πρὸς μὲν τὴν νομοθεσίαν αἱ τῆς γῆς περίοδοι χρήσιμοι (ἐντεῦθεν γὰρ λαβεῖν ἔστιν τοὺς τῶν ἐθνῶν νόμους), πρὸς δὲ τὰς πολιτικὰς συμβουλὰς αἱ τῶν περὶ τὰς πράξεις γραφόντων ἱστορίαι· ἅπαντα δὲ ταῦτα πολιτικῆς ἀλλ' οὐ ῥητορικῆς ἔργον ἐστίν.

περὶ ὧν μὲν οὖν ἔχειν δεῖ <τὰς προτάσεις> τὸν μέλλοντα [1360b] συμβουλεύειν, τὰ μέγιστα τοσαῦτά ἐστιν· ἐξ ὧν δὲ δεῖ καὶ περὶ τούτων καὶ περὶ τῶν ἄλλων προτρέπειν ἢ ἀποτρέπειν λέγωμεν πάλιν.

Σχεδὸν δὲ καὶ ἰδίᾳ ἐκάστω καὶ κοινῇ πᾶσι σκοπὸς τις ἔστιν οὗ στοχαζόμενοι καὶ αἰροῦνται καὶ φεύγουσιν· καὶ τοῦτ' ἐστὶν ἐν κεφαλαίῳ εἰπεῖν ἢ τ' εὐδαιμονία καὶ τὰ μόρια αὐτῆς· ὥστε παραδείγματος χάριν λάβωμεν τί ἐστὶν ὡς ἀπλῶς εἰπεῖν ἢ εὐδαιμονία, καὶ ἐκ τίνων τὰ μόρια ταύτης· περὶ γὰρ ταύτης καὶ τῶν εἰς ταύτην συντεινόντων καὶ τῶν ἐναντίων ταύτῃ αἵ τε προτροπαὶ καὶ αἱ ἀποτροπαὶ πᾶσαί εἰσιν· τὰ μὲν γὰρ παρασκευάζοντα ταύτην ἢ τῶν μορίων τι, ἢ μεῖζον ἀντ' ἐλάττονος ποιοῦντα, δεῖ πράττειν, τὰ δὲ φθείροντα ἢ ἐμποδίζοντα ἢ τὰ ἐναντία ποιοῦντα μὴ πράττειν.

ἔστω δὴ εὐδαιμονία εὐπραξία μετ' ἀρετῆς, ἢ αὐτάρκεια ζωῆς, ἢ ὁ βίος ὁ μετὰ ἀσφαλείας ἡδιστος, ἢ εὐθενία κτημάτων καὶ σωμάτων μετὰ δυνάμεως φυλακτικῆς τε καὶ πρακτικῆς τούτων· σχεδὸν γὰρ τούτων ἐν ἡ πλείω τὴν εὐδαιμονίαν ὁμολογοῦσιν εἶναι ἅπαντες.

εἰ δὴ ἐστὶν ἡ εὐδαιμονία τοιοῦτον, ἀνάγκη αὐτῆς εἶναι μέρη εὐγένειαν, πολυφιλίαν, χρηστοφιλίαν, πλοῦτον, εὐτεκνίαν, πολυτεκνίαν, εὐγηνίαν· ἔτι τὰς τοῦ σώματος ἀρετάς (οἷον ὑγίειαν, κάλλος, ἰσχύν, μέγεθος, δύναμιν ἀγωνιστικὴν), δόξαν, τιμὴν, εὐτυχίαν, ἀρετὴν [ἢ καὶ τὰ μέρη αὐτῆς φρόνησιν, ἀνδρείαν, δικαιοσύνην, σωφροσύνην]· οὕτω γὰρ ἂν αὐταρκέστατός <τις> εἴη, εἰ ὑπάρχοι αὐτῷ τὰ τ' ἐν αὐτῷ καὶ τὰ ἐκτὸς ἀγαθὰ· οὐ γὰρ ἔστιν ἄλλα παρὰ ταῦτα· ἔστι δ' ἐν αὐτῷ μὲν τὰ περὶ ψυχὴν καὶ τὰ ἐν σώματι, ἔξω δὲ εὐγένεια καὶ φίλοι καὶ χρήματα καὶ τιμὴ, ἔτι δὲ προσήκειν οἴόμεθα δυνάμεις ὑπάρχειν καὶ τύχην· οὕτω γὰρ ἀσφαλέστατος ὁ βίος. λάβωμεν τοίνυν ὁμοίως καὶ τούτων ἕκαστον τί ἐστὶν.

εὐγένεια μὲν οὖν ἐστὶν ἔθνει μὲν καὶ πόλει τὸ αὐτόχθονας ἢ ἀρχαίους εἶναι, καὶ ἡγεμόνας τοὺς πρώτους ἐπιφανεῖς, καὶ πολλοὺς ἐπιφανεῖς γεγονέναι ἐξ αὐτῶν ἐπὶ τοῖς ζηλουμένοις· ἰδίᾳ δὲ εὐγένεια ἢ ἀπ' ἀνδρῶν ἢ ἀπὸ γυναικῶν, καὶ γνησιότης ἀπ' ἀμφοῖν, καί, ὥσπερ ἐπὶ πόλεως, <τὸ> τοὺς τε πρώτους γνωρίμους ἢ ἐπ' ἀρετῇ ἢ πλούτῳ ἢ ἄλλῳ τῷ τῶν τιμωμένων εἶναι, καὶ πολλοὺς ἐπιφανεῖς ἐκ τοῦ γένους καὶ ἄνδρας καὶ γυναῖκας καὶ νέους καὶ πρεσβυτέρους.

εὐτεκνία δὲ καὶ πολυτεκνία οὐκ ἄδηλα· ἔστιν δὲ τῷ κοινῷ [1361a] μὲν

[εὐτεκνία], νεότης ἂν ἢ πολλή καὶ ἀγαθή, ἀγαθὴ δὲ κατ' ἀρετὴν σώματος, οἶον μέγεθος, κάλλος, ἰσχύν, δύναμιν ἀγωνιστικήν· ψυχῆς δὲ σωφροσύνη καὶ ἀνδρεία νέου ἀρεταί· ἰδίᾳ δὲ εὐτεκνία καὶ πολυτεκνία τὸ τὰ ἴδια τέκνα πολλὰ καὶ τοιαῦτα εἶναι, καὶ θήλεα καὶ ἄρρενα· θηλειῶν δὲ ἀρετὴ σώματος μὲν κάλλος καὶ μέγεθος, ψυχῆς δὲ σωφροσύνη καὶ φιλεργία ἄνευ ἀνελευθερίας. ὁμοίως δὲ καὶ ἰδίᾳ καὶ κοινῇ, καὶ κατ' ἄνδρας καὶ κατὰ γυναῖκας, δεῖ ζητεῖν ἕκαστον ὑπάρχειν τῶν τοιούτων· ὅσοις γὰρ τὰ κατὰ γυναῖκας φαῦλα ὥσπερ Λακεδαιμονίοις, σχεδὸν κατὰ τὸ ἥμισυ οὐκ εὐδαιμονοῦσιν.

πλούτου δὲ μέρη νομίσματος πλῆθος <καὶ> γῆς, χωρίων κτῆσις πλήθει καὶ μεγέθει καὶ κάλλει διαφερόντων, ἔτι δὲ ἐπίπλων κτῆσις καὶ ἀνδραπόδων καὶ βοσκημάτων πλήθει καὶ κάλλει διαφερόντων, ταῦτα δὲ πάντα <οἰκεῖα> καὶ ἀσφαλῆ καὶ ἐλευθέρια καὶ χρήσιμα. ἔστιν δὲ χρήσιμα μὲν μᾶλλον τὰ κάρπιμα, ἐλευθέρια δὲ τὰ πρὸς ἀπόλαυσιν (κάρπιμα δὲ λέγω ἅφ' ὧν αἱ πρόσοδοι, ἀπολαυστικὰ δὲ ἅφ' ὧν μηδὲν παρὰ τὴν χρῆσιν γίγνεται ὅ τι καὶ ἄξιον). ὅρος δὲ ἀσφαλείας μὲν τὸ ἐνταῦθα καὶ οὕτω κεκτηῖσθαι ὥστ' ἐφ' αὐτῷ εἶναι τὴν χρῆσιν αὐτῶν, τοῦ δὲ οἰκεῖα εἶναι ἢ μὴ ὅταν ἐφ' αὐτῷ ἢ ἀπαλλοτριῶσαι· λέγω δὲ ἀπαλλοτριῶσιν δόσιν καὶ πρᾶσιν. ὅλως δὲ τὸ πλουτεῖν ἔστιν ἐν τῷ χρῆσθαι μᾶλλον ἢ ἐν τῷ κεκτηῖσθαι· καὶ γὰρ ἡ ἐνέργειά ἐστι τῶν τοιούτων καὶ ἡ χρῆσις πλοῦτος.

εὐδοξία δ' ἔστιν τὸ ὑπὸ πάντων σπουδαῖον ὑπολαμβάνεσθαι ἢ τοιοῦτόν τι ἔχειν οὐ πάντες ἐφίενται ἢ οἱ πολλοὶ ἢ οἱ ἀγαθοὶ ἢ οἱ φρόνιμοι.

τιμὴ δ' ἔστιν μὲν σημεῖον εὐεργετικῆς εὐδοξίας, τιμῶνται δὲ δικαίως μὲν καὶ μάλιστα οἱ εὐεργετηκότες, οὐ μὴν ἀλλὰ τιμᾶται καὶ ὁ δυνάμενος εὐεργετεῖν· εὐεργεσία δὲ ἢ εἰς σωτηρίαν καὶ ὅσα αἵτια τοῦ εἶναι, ἢ εἰς πλοῦτον, ἢ εἰς τι τῶν ἄλλων ἀγαθῶν, ὧν μὴ ῥαδία ἢ κτῆσις ἢ ὅλως ἢ ἐνταῦθα ἢ τότε· πολλοὶ γὰρ διὰ μικρὰ δοκοῦντα τιμῆς τυγχάνουσιν, ἀλλ' οἱ τόποι καὶ οἱ καιροὶ αἵτιοι. μέρη δὲ τιμῆς θυσίαι, μνηῆμαι ἐν μέτροις καὶ ἄνευ μέτρων, γέρα, τεμένη, προεδρίαι, τάφοι, εἰκόνες, τροφαὶ δημόσιαι, τὰ βαρβαρικά, οἶον προσκυνήσεις καὶ ἐκστάσεις, δῶρα τὰ παρ' ἑκάστοις τίμια. καὶ γὰρ τὸ δῶρόν ἐστι κτήματος δόσις καὶ τιμῆς σημεῖον, διὸ καὶ οἱ φιλοχρήματοι καὶ οἱ φιλότιμοι ἐφίενται αὐτῶν· ἀμφοτέροις [1361b] γὰρ ἔχει ὧν δέονται· καὶ γὰρ κτῆμά ἐστιν οὐ ἐφίενται οἱ φιλοχρήματοι, καὶ τιμὴν ἔχει οὐ οἱ φιλότιμοι.

σώματος δὲ ἀρετὴ ὑγίεια, αὕτη δὲ οὕτως ὥστε ἀνόσους εἶναι χρωμένους τοῖς σώμασιν· πολλοὶ γὰρ ὑγιαίνουσιν, ὥσπερ Ἡρόδικος λέγεται, οὓς οὐδεὶς



ἂν εὐδαιμονίσειε τῆς ὑγιείας διὰ τὸ πάντων ἀπέχεσθαι τῶν ἀνθρωπίνων ἢ τῶν πλείστων. κάλλος δὲ ἕτερον καθ' ἑκάστην ἡλικίαν ἐστίν. νέου μὲν οὖν κάλλος τὸ πρὸς τοὺς πόνους χρήσιμον ἔχειν τὸ σῶμα τοὺς τε πρὸς δρόμον καὶ πρὸς βίαν, ἡδὺν ὄντα ἰδεῖν πρὸς ἀπόλαυσιν· διὸ οἱ πένταθλοι κάλλιστοι, ὅτι πρὸς βίαν καὶ πρὸς τάχος ἅμα πεφύκασιν· ἀκμάζοντος δὲ πρὸς μὲν πόνους τοὺς πολεμικούς, ἡδὺν δ' εἶναι δοκεῖν μετὰ φοβερότητος· γέροντος δὲ πρὸς μὲν πόνους τοὺς ἀναγκαίους ἱκανόν, ἄλυπον δὲ διὰ τὸ μηδὲν ἔχειν ὧν τὸ γῆρας λωβᾶται. ἰσχύς δ' ἐστὶ μὲν δύναμις τοῦ κινεῖν ἕτερον ὡς βούλεται, ἀνάγκη δὲ κινεῖν ἕτερον ἢ ἔλκοντα ἢ ὠθοῦντα ἢ αἶροντα ἢ πιέζοντα ἢ συνθλίβοντα, ὥστε ὁ ἰσχυρὸς ἢ πᾶσιν ἢ τούτων τισὶν ἐστὶν ἰσχυρός. μεγέθους δὲ ἀρετὴ τὸ ὑπάρχειν κατὰ μῆκος καὶ βάθος καὶ πλάτος τῶν πολλῶν τοσοῦτω μείζον' ὥστε μὴ βραδυτέρας ποιεῖν τὰς κινήσεις διὰ τὴν ὑπερβολήν. ἀγωνιστικὴ δὲ σώματος ἀρετὴ σύγκειται ἐκ μεγέθους καὶ ἰσχύος καὶ τάχους (καὶ γὰρ ὁ ταχὺς ἰσχυρὸς ἐστίν)· ὁ γὰρ δυνάμενος τὰ σκέλη ρίπτειν πῶς καὶ κινεῖν ταχὺ καὶ πόρρω δρομικός, ὁ δὲ θλίβειν καὶ κατέχειν παλαιστικός, ὁ δὲ ὥσαι τῇ πληγῇ πυκτικός, ὁ δ' ἀμφοτέροις τούτοις παγκρατιαστικός, ὁ δὲ πᾶσι πένταθλος. εὐγηρία δ' ἐστὶ βραδυτῆς γήρωσ μετ' ἀλυπίας· οὔτε γὰρ εἰ ταχὺ γηράσκει, εὐγηρως, οὔτ' εἰ μόγις μὲν λυπηρῶς δέ. ἔστιν δὲ καὶ ἐκ τῶν τοῦ σώματος ἀρετῶν καὶ <ἐκ> τύχης· μὴ ἄνοσος γὰρ ὧν μηδὲ ἰσχυρὸς οὐκ ἔσται ἀπαθὴς οὐδ' ἄλυπος, καὶ πολυχρόνιος οὐκ ἄνευ τύχης διαμείνειεν ἄν. ἔστιν δὲ τις καὶ χωρὶς ἰσχύος καὶ ὑγιείας ἄλλη δύναμις μακροβιότητος· πολλοὶ γὰρ ἄνευ τῶν τοῦ σώματος ἀρετῶν μακρόβιοί εἰσιν· ἄλλ' οὐδὲν ἢ ἀκριβολογία χρήσιμος ἢ περὶ τούτων εἰς τὰ νῦν.

πολυφιλία δὲ καὶ χρηστοφιλία οὐκ ἄδηλα, τοῦ φίλου ὠρισμένου, ὅτι ἔστιν ὁ τοιοῦτος φίλος ὅστις ἃ οἶεται ἀγαθὰ εἶναι ἐκείνῳ, πρακτικός ἐστὶν αὐτῶν δι' ἐκεῖνον. ὧ δὲ πολλοὶ τοιοῦτοι, πολύφίλος, ὧ δὲ καὶ ἐπιεικεῖς ἄνδρες, χρηστόφίλος.

εὐτυχία δὲ ἐστίν, ὧν ἡ τύχη ἀγαθῶν αἰτία, ταῦτα [1362a] γίνεσθαι καὶ ὑπάρχειν ἢ πάντα ἢ τὰ πλεῖστα ἢ τὰ μέγιστα. αἰτία δ' ἐστὶν ἡ τύχη ἐνίων μὲν καὶ ὧν αἱ τέχναι, πολλῶν δὲ καὶ ἀτέχνων, οἷον ὅσων ἡ φύσις (ἐνδέχεται δὲ καὶ παρὰ φύσιν εἶναι)· ὑγιείας μὲν γὰρ τέχνη αἰτία, κάλλους δὲ καὶ μεγέθους φύσις. ὅλως δὲ τὰ τοιαῦτα τῶν ἀγαθῶν ἐστὶν ἀπὸ τύχης ἐφ' οἷς ἐστὶν ὁ φθόνος. ἔστιν δὲ καὶ τῶν παρὰ λόγον ἀγαθῶν αἰτία τύχη, οἷον εἰ οἱ ἄλλοι ἀδελφοὶ αἰσχροί, ὁ δὲ καλός, ἢ οἱ ἄλλοι μὴ εἶδον τὸν θησαυρόν, ὁ δ' εὔρεν, ἢ εἰ τοῦ πλησίον ἔτυχεν τὸ βέλος, τούτου δὲ μή, ἢ εἰ μὴ ἦλθε μόνος, ἀεὶ φοιτῶν, οἱ δὲ ἅπαξ ἐλθόντες διεφθάρησαν· πάντα γὰρ τὰ τοιαῦτα εὐτυχήματα δοκεῖ εἶναι.

περὶ δὲ ἀρετῆς ἐπεὶ περὶ οἰκειότατος ὁ περὶ τοὺς ἐπαίνους τόπος, ὅταν περὶ ἐπαίνου ποιῶμεθα τὸν λόγον, τότε διοριστέον.

Ὡν μὲν οὖν δεῖ στοχάζεσθαι προτρέποντα ὡς ἐσομένων ἢ ὑπαρχόντων, καὶ ὧν ἀποτρέποντα, φανερόν· τὰ γὰρ ἐναντία τούτων ἐστίν. ἐπεὶ δὲ πρόκειται τῷ συμβουλευόντι σκοπὸς τὸ συμφέρον (βουλεύονται γὰρ οὐ περὶ τοῦ τέλους, ἀλλὰ περὶ τῶν πρὸς τὸ τέλος, ταῦτα δ' ἐστὶ τὰ συμφέροντα κατὰ τὰς πράξεις, τὸ δὲ συμφέρον ἀγαθόν), ληπτέον ἂν εἴη τὰ στοιχεῖα περὶ ἀγαθοῦ καὶ συμφέροντος ἀπλῶς.

ἔστω δὴ ἀγαθὸν ὃ ἂν αὐτὸ ἐαυτοῦ ἔνεκα ἢ αἰρετόν, καὶ οὗ ἔνεκα ἄλλο αἰρούμεθα, καὶ οὗ ἐφίεται πάντα, ἢ πάντα τὰ αἰσθησιν ἔχοντα ἢ νοῦν ἢ εἰ λάβοι νοῦν, καὶ ὅσα ὁ νοῦς ἂν ἐκάστω ἀποδοίη, καὶ ὅσα ὁ περὶ ἕκαστον νοῦς ἀποδίδωσιν ἐκάστω· τοῦτό <γὰρ> ἐστὶν ἐκάστω ἀγαθόν, καὶ οὗ παρόντος εὖ διάκειται καὶ αὐτάρκως ἔχει, καὶ τὸ αὐτάρκες, καὶ τὸ ποιητικὸν ἢ φυλακτικὸν τῶν τοιούτων, καὶ ὧ ἀκολουθεῖ τὰ τοιαῦτα, καὶ τὰ κωλυτικὰ τῶν ἐναντίων καὶ τὰ φθαρτικά. ἀκολουθεῖ δὲ διχῶς (ἢ γὰρ ἅμα ἢ ὕστερον, οἷον τῷ μὲν μανθάνειν τὸ ἐπίστασθαι ὕστερον, τῷ δὲ ὑγιαίνειν τὸ ζῆν ἅμα), καὶ τὰ ποιητικὰ τριχῶς, τὰ μὲν ὡς τὸ ὑγιαίνειν ὑγιείας, τὰ δὲ ὡς σιτία ὑγιείας, τὰ δὲ ὡς τὸ γυμνάζεσθαι, ὅτι ὡς ἐπὶ τὸ πολὺ ποιεῖ ὑγίειαν. τούτων δὲ κειμένων ἀνάγκη τὰς τε λήψεις τῶν ἀγαθῶν ἀγαθὰς εἶναι καὶ τὰς τῶν κακῶν ἀποβολὰς· ἀκολουθεῖ γὰρ τῷ μὲν τὸ μὴ ἔχειν τὸ κακὸν ἅμα, τῷ δὲ τὸ ἔχειν τὸ ἀγαθὸν ὕστερον. καὶ ἡ ἀντ' ἐλάττονος ἀγαθοῦ μείζονος λῆψις καὶ ἀντὶ μείζονος κακοῦ ἐλάττονος· [1362b] ὧ γὰρ ὑπερέχει τὸ μείζον τοῦ ἐλάττονος, τούτῳ γίνεται τοῦ μὲν λῆψις τοῦ δ' ἀποβολή. καὶ τὰς ἀρετὰς δὲ ἀνάγκη ἀγαθὸν εἶναι (κατὰ γὰρ ταύτας εὖ τε διάκεινται οἱ ἔχοντες, καὶ ποιητικὰ τῶν ἀγαθῶν εἰσι καὶ πρακτικά· περὶ ἐκάστης δὲ καὶ τίς καὶ ποία χωρὶς ῥητέον), καὶ τὴν ἡδονὴν ἀγαθὸν εἶναι· πάντα γὰρ ἐφίεται τὰ ζῶα αὐτῆς τῇ φύσει· ὥστε καὶ τὰ ἡδέα καὶ τὰ καλὰ ἀνάγκη ἀγαθὰ εἶναι· τὰ μὲν γὰρ ἡδονῆς ποιητικά, τῶν δὲ καλῶν τὰ μὲν ἡδέα τὰ δὲ αὐτὰ καθ' ἑαυτὰ αἰρετά ἐστίν.

ὡς δὲ καθ' ἑν εἶπεῖν, ἀνάγκη ἀγαθὰ εἶναι τάδε. εὐδαιμονία· καὶ γὰρ καθ' αὐτὸ αἰρετόν καὶ αὐτάρκες, καὶ ἔνεκα αὐτῆς τᾶλλα αἰρούμεθα. δικαιοσύνη, ἀνδρεία, σωφροσύνη, μεγαλοψυχία, μεγαλοπρέπεια, καὶ αἱ ἄλλαι αἱ τοιαῦται ἔξεις· ἀρεταὶ γὰρ ψυχῆς. καὶ ὑγίεια καὶ κάλλος καὶ τὰ τοιαῦτα· ἀρεταὶ γὰρ σώματος καὶ ποιητικὰ πολλῶν, οἷον ὑγίεια καὶ ἡδονῆς καὶ τοῦ ζῆν, διὸ καὶ ἄριστον δοκεῖ εἶναι, ὅτι δύο τῶν τοῖς πολλοῖς τιμιωτάτων αἰτιόν ἐστιν, ἡδονῆς καὶ τοῦ ζῆν. πλοῦτος· ἀρετὴ γὰρ κτήσεως καὶ ποιητικὸν πολλῶν.

φίλος καὶ φιλία· καὶ γὰρ καθ’ αὐτὸν αἰρετὸς ὁ φίλος καὶ ποιητικὸς πολλῶν. τιμή, δόξα· καὶ γὰρ ἡδέα καὶ ποιητικὰ πολλῶν, καὶ ἀκολουθεῖ αὐταῖς ὡς ἐπὶ τὸ πολὺ τὸ ὑπάρχειν ἐφ’ οἷς τιμῶνται. δύναμις τοῦ λέγειν, τοῦ πράττειν· ποιητικὰ γὰρ πάντα τὰ τοιαῦτα ἀγαθῶν. ἔτι εὐφυΐα, μνήμη, εὐμάθεια, ἀγχίνοια, πάντα τὰ τοιαῦτα· ποιητικὰ γὰρ αὐταὶ ἀγαθῶν αἱ δυνάμεις εἰσίν. ὁμοίως δὲ καὶ αἱ ἐπιστῆμαι πᾶσαι καὶ αἱ τέχναι. καὶ τὸ ζῆν· εἰ γὰρ μηδὲν ἄλλο ἔποιτο ἀγαθόν, καθ’ αὐτὸ αἰρετόν ἐστιν. καὶ τὸ δίκαιον· συμφέρον γάρ τι κοινῇ ἐστιν.

ταῦτα μὲν οὖν σχεδὸν τὰ ὁμολογούμενα ἀγαθὰ ἐστίν· ἐν δὲ τοῖς ἀμφισβητησίμοις ἐκ τῶνδε οἱ συλλογισμοί. ὥ τὸ ἐναντίον κακόν, τοῦτ’ ἀγαθόν. καὶ οὗ τὸ ἐναντίον τοῖς ἐχθροῖς συμφέρει· οἷον εἰ τὸ δειλοὺς εἶναι μάλιστα συμφέρει τοῖς ἐχθροῖς, δῆλον ὅτι ἀνδρεία μάλιστα ὠφέλιμον τοῖς πολίταις. καὶ ὅλως ὁ οἱ ἐχθροὶ βούλονται ἢ ἐφ’ ὧ χαίρουσι, τοῦναντίον τούτου ὠφέλιμον φαίνεται· διὸ εἴρηται

ἢ κεν γηθήσαι Πριάμος.

ἔστι δ’ οὐκ ἀεὶ τοῦτο, ἀλλ’ ὡς ἐπὶ τὸ πολὺ· οὐδὲν γὰρ κωλύει ἐνίστε ταῦτο συμφέρειν τοῖς ἐναντίοις· ὅθεν λέγεται ὡς τὰ [1363a] κακὰ συνάγει τοὺς ἀνθρώπους, ὅταν ἢ ταῦτο βλαβερὸν ἀμφοῖν. καὶ οὗ μὴ ἔστιν ὑπερβολή, τοῦτο ἀγαθόν, ὃ δ’ ἂν ἢ μεῖζον ἢ δεῖ, κακόν. καὶ οὗ ἔνεκα πολλὰ πεπόνηται ἢ δεδαπάνηται· φαινόμενον γὰρ ἀγαθὸν ἦδη, καὶ ὡς τέλος τὸ τοιοῦτον ὑπολαμβάνεται, καὶ τέλος πολλῶν, τὸ δὲ τέλος ἀγαθόν. ὅθεν ταῦτ’ εἴρηται “κὰδ δέ κεν εὐχολῆν Πριάμῳ” καὶ “αἰσχρὸν τοι δηρὸν τε μένειν”. καὶ ἡ παροιμία δὲ τὸ ἐπὶ θύραις τὴν ὕδριαν. καὶ οὗ <οἱ> πολλοὶ ἐφίενται, καὶ τὸ περιμάχητον φαινόμενον· οὗ γὰρ πάντες ἐφίενται, τοῦτο ἀγαθὸν ἦν, οἱ δὲ πολλοὶ ὥσπερ πάντες φαίνονται. καὶ τὸ ἐπαινετόν· οὐδεὶς γὰρ τὸ μὴ ἀγαθὸν ἐπαινεῖ. καὶ ὁ οἱ ἐχθροὶ καὶ οἱ φαῦλοι ἐπαινοῦσιν· ὥσπερ γὰρ πάντες ἦδη ὁμολογοῦσιν, εἰ καὶ οἱ κακῶς πεπονθότες· διὰ γὰρ τὸ φανερόν ὁμολογοῦσιν ἄν, ὥσπερ καὶ φαῦλοι οὓς οἱ φίλοι ψέγουσι καὶ [ἀγαθοὶ] οὓς οἱ ἐχθροὶ μὴ ψέγουσιν (διὸ λελοιδोरῆσθαι ὑπέλαβον Κορίνθιοι ὑπὸ Σιμωνίδου ποιήσαντος

Κορινθίοις δ’ οὐ μέμφεται τὸ Ἴλιον).

καὶ ὁ τῶν φρονίμων τις ἢ τῶν ἀγαθῶν ἀνδρῶν ἢ γυναικῶν προέκρινεν, οἷον Ὀδυσσεᾶ Ἀθηναῖ καὶ Ἑλένην Θησεὺς καὶ Ἀλέξανδρον αἱ θεαὶ καὶ Ἀχιλλεῖα Ὀμηρος. καὶ ὅλως τὰ προαιρετά· προαιροῦνται δὲ πράττειν τὰ τε εἰρημένα καὶ τὰ τοῖς ἐχθροῖς κακὰ καὶ τὰ τοῖς φίλοις ἀγαθὰ καὶ τὰ δυνατά· ταῦτα δὲ

διχῶς ἐστίν, τά τε γενόμενα ἂν καὶ τὰ ῥαδίως γινόμενα· ῥάδια δὲ ὅσα ἢ ἄνευ λύπης ἢ ἐν ὀλίγῳ χρόνῳ· τὸ γὰρ χαλεπὸν ὀρίζεται ἢ λύπη ἢ πλήθει χρόνου. καὶ ἐὰν ὥς βούλονται· βούλονται δὲ ἢ μηδὲν κακὸν ἢ ἔλαττον τοῦ ἀγαθοῦ (τοῦτο δὲ ἔσται, ἐὰν ἢ λανθάνῃ ἢ ἡ τιμωρία μικρὰ ᾖ). καὶ τὰ ἴδια, καὶ ἃ μηδεὶς, καὶ τὰ περιττά· τιμὴ γὰρ οὕτω μᾶλλον. καὶ τὰ ἀρμόττοντα αὐτοῖς· τοιαῦτα δὲ τά τε προσήκοντα κατὰ γένος καὶ δύναμιν, καὶ ὧν ἐλλείπειν οἴονται καὶ ἂν μικρὰ ᾖ· οὐδὲν γὰρ ἥττον προαιροῦνται ταῦτα πράττειν. καὶ τὰ εὐκατέργαστα. δυνατὰ γὰρ καὶ ῥάδια· εὐκατέργαστα δὲ ἃ πάντες ἢ οἱ πολλοὶ ἢ οἱ ὅμοιοι ἢ οἱ ἥττους κατώρθωσαν. καὶ ἃ χαριοῦνται τοῖς φίλοις, ἢ ἃ ἀπεχθήσονται τοῖς ἐχθροῖς. καὶ ὅσα οὐς θαυμάζουσι προαιροῦνται πράττειν. καὶ πρὸς ἃ εὐφυεῖς εἰσιν καὶ ἔμπειροι· ῥᾶον γὰρ κατορθώσιν οἴονται. καὶ ἃ μηδεὶς φαῦλος· ἐπαινετὰ γὰρ μᾶλλον. καὶ ὧν ἐπιθυμοῦντες τυγχάνουσιν, οὐ γὰρ μόνον ἡδὺ ἀλλὰ καὶ βέλτιον φαίνεται. καὶ μάλιστα [1363b] ἕκαστοι πρὸς ἃ φιλοτοιοῦτοι, οἷον οἱ φιλόνικοι εἰ νίκη ἔσται, οἱ φιλότιμοι εἰ τιμὴ, οἱ φιλοχρήματοι εἰ χρήματα, καὶ οἱ ἄλλοι ὡσαύτως. περὶ μὲν οὖν ἀγαθοῦ καὶ τοῦ συμφέροντος ἐκ τούτων ληπτέον τὰς πίστεις.

Ἐπεὶ δὲ πολλάκις ὁμολογοῦντες ἄμφω συμφέρειν περὶ τοῦ μᾶλλον ἀμφισβητοῦσιν, ἐφεξῆς ἂν εἴη λεκτέον περὶ τοῦ μείζονος ἀγαθοῦ καὶ τοῦ μᾶλλον συμφέροντος. ἔστω δὴ ὑπερέχον μὲν τὸ τοσοῦτον καὶ ἔτι, ὑπερεχόμενον δὲ τὸ ἐνυπάρχον, καὶ μείζον μὲν ἀεὶ καὶ πλεῖον πρὸς ἔλαττον, μέγα δὲ καὶ μικρὸν καὶ πολὺ καὶ ὀλίγον πρὸς τὸ τῶν πολλῶν μέγεθος, καὶ ὑπερέχον μὲν τὸ μέγα, τὸ δὲ μικρὸν ἐλλείπον, καὶ πολὺ καὶ ὀλίγον ὡσαύτως.

ἐπεὶ οὖν ἀγαθὸν λέγομεν τό τε αὐτὸ αὐτοῦ ἔνεκα καὶ μὴ ἄλλου αἰρετόν, καὶ οὐ πάντ' ἐφίεται, καὶ ὃ νοῦν ἂν καὶ φρόνησιν λαβόντα ἔλοιτο, καὶ τὸ ποιητικὸν καὶ τὸ φυλακτικόν, ἢ ὧς ἔπεται τὰ τοιαῦτα, [τὸ δ' οὐ ἔνεκα τὸ τέλος ἐστίν,] τέλος δὲ ἐστίν οὗ ἔνεκα τὰ ἄλλα, αὐτῷ δὲ ἀγαθὸν τὸ πρὸς αὐτὸν ταῦτα πεπονθός, ἀνάγκη τά γε πλείω τοῦ ἐνὸς καὶ τῶν ἐλαττόνων, συναριθμουμένου τοῦ ἐνὸς ἢ τῶν ἐλαττόνων, μείζον ἀγαθὸν εἶναι· ὑπερέχει γάρ, τὸ δὲ ἐνυπάρχον ὑπερέχεται. καὶ ἐὰν τὸ μέγιστον τοῦ μεγίστου ὑπερέχη, καὶ αὐτὰ αὐτῶν· καὶ ὅσα αὐτὰ αὐτῶν, καὶ τὸ μέγιστον τοῦ μεγίστου· οἷον εἰ ὁ μέγιστος ἀνὴρ γυναικὸς τῆς μεγίστης μείζων, καὶ ὅλως οἱ ἄνδρες τῶν γυναικῶν μείζους, καὶ εἰ οἱ ἄνδρες ὅλως τῶν γυναικῶν μείζους, καὶ ἀνὴρ ὁ μέγιστος τῆς μεγίστης γυναικὸς μείζων· ἀνάλογον γὰρ ἔχουσιν αἱ ὑπεροχαὶ τῶν γενῶν καὶ τῶν μεγίστων ἐν αὐτοῖς. καὶ ὅταν τόδε μὲν τῷδε ἔπεται, ἐκεῖνο δὲ τούτῳ μὴ, ἔπεται δὲ ἢ τῷ ἅμα ἢ τῷ ἐφεξῆς ἢ τῇ δυνάμει· ἐνυπάρχει γὰρ ἢ χρήσις ἢ τοῦ ἐπομένου ἐν τῇ θατέρῳ. ἔπεται δὲ ἅμα μὲν τῷ ὑγιαίνειν τὸ ζῆν, τούτῳ δὲ ἐκεῖνο οὐ, ὕστερον δὲ τῷ μανθάνειν τὸ

ἐπίστασθαι, δυνάμει δὲ τῷ ἱεροσυλεῖν τὸ ἀποστερεῖν· ὁ γὰρ ἱεροσυλήσας κἂν ἀποστερήσειεν. καὶ τὰ ὑπερέχοντα τοῦ αὐτοῦ μείζονι μείζω· ἀνάγκη γὰρ ὑπερέχειν καὶ τοῦ μείονι. καὶ τὰ μείζονος ἀγαθοῦ ποιητικᾷ μείζω· τοῦτο γὰρ ἦν τὸ μείζονος ποιητικῶς εἶναι. καὶ οὗ τὸ ποιητικὸν μείζον, ὡσαύτως· εἰ γὰρ τὸ ὑγιεινὸν αἰρετώτερον τοῦ ἡδέος καὶ μείζον ἀγαθόν, καὶ ἡ ὑγίεια τῆς ἡδονῆς μείζων. καὶ [1364a] αἰρετώτερον τὸ καθ' αὐτὸ τοῦ μὴ καθ' αὐτό, οἷον ἰσχύς ὑγιεινοῦ· τὸ μὲν γὰρ οὐχ αὐτοῦ ἔνεκα, τὸ δὲ αὐτοῦ, ὅπερ ἦν τὸ ἀγαθόν. κἂν ἡ τὸ μὲν τέλος, τὸ δὲ μὴ τέλος· τὸ μὲν γὰρ ἄλλου ἔνεκα, τὸ δὲ αὐτοῦ, οἷον τὸ γυμνάζεσθαι τοῦ εὖ ἔχειν τὸ σῶμα. καὶ τὸ ἥττον προσδεόμενον θατέρου [ἡ] ἑτέρων· αὐταρκέστερον γάρ· ἥττον δὲ προσδεῖται τὸ ἐλαττόνων ἢ ῥαόνων προσδεόμενον. καὶ ὅταν τότε μὲν ἄνευ τοῦδε μὴ ἡ, ἡ μὴ δυνατὸν ἡ γενέσθαι, θάτερον δὲ ἄνευ τούτου, αὐταρκέστερον [δὲ] τὸ μὴ δεόμενον, ὥστε φαίνεται μείζον ἀγαθόν. κἂν ἡ ἀρχή, τὸ δὲ μὴ ἀρχή, κἂν ἡ αἴτιον, τὸ δ' οὐκ αἴτιον, διὰ τὸ αὐτό· ἄνευ γὰρ αἰτίου καὶ ἀρχῆς ἀδύνατον εἶναι ἡ γενέσθαι. καὶ δυοῖν ἀρχαῖν τὸ ἀπὸ τῆς μείζονος ἀρχῆς μείζον, καὶ δυοῖν αἰτίοι τὸ ἀπὸ τοῦ μείζονος αἰτίου μείζον. καὶ ἀνάπαλιν δὲ δυοῖν ἀρχαῖν ἡ τοῦ μείζονος ἀρχή μείζων, καὶ δυοῖν αἰτίοι τὸ τοῦ μείζονος αἴτιον μείζον. δῆλον οὖν ἐκ τῶν εἰρημένων ὅτι ἀμφοτέρως μείζον ἔστιν φαίνεσθαι· καὶ γὰρ εἰ ἀρχή, τὸ δὲ μὴ ἀρχή, δόξει μείζον εἶναι, καὶ εἰ μὴ ἀρχή, τὸ δὲ ἀρχή· τὸ γὰρ τέλος μείζον καὶ οὐχ <ἡ> ἀρχή, ὥσπερ ὁ Λεωδάμας κατηγορῶν ἔφη Καλλιστράτου τὸν βουλευσάντα τοῦ πράξαντος μᾶλλον ἀδικεῖν· οὐ γὰρ ἂν πραχθῆναι μὴ βουλευσάντος· πάλιν δὲ καὶ Χαβρίου, τὸν πράξαντα τοῦ βουλευσάντος· οὐ γὰρ ἂν γενέσθαι, εἰ μὴ ἦν ὁ πράξων· τούτου γὰρ ἔνεκα ἐπιβουλεύειν, ὅπως πράξωσιν. καὶ τὸ σπανιώτερον τοῦ ἀφθόνου, οἷον χρυσὸς σιδήρου, ἀχρηστότερος ὢν· μείζον γὰρ ἡ κτῆσις διὰ τὸ χαλεπωτέρα εἶναι. (ἄλλον δὲ τρόπον τὸ ἀφθονον τοῦ σπανίου, ὅτι ἡ χρῆσις ὑπερέχει· τὸ γὰρ πολλάκις τοῦ ὀλιγάκις ὑπερέχει, ὅθεν λέγεται

ἄριστον μὲν ὕδωρ.)

καὶ ὅλως τὸ χαλεπώτερον τοῦ ῥαόνος· σπανιώτερον γάρ· ἄλλον δὲ τρόπον τὸ ῥαόν τοῦ χαλεπωτέρου· ἔχει γὰρ ὡς βουλόμεθα. καὶ ὡ τὸ ἐναντίον μείζον, καὶ οὗ ἡ στέρησις μείζων. καὶ ἀρετὴ μὴ κακίας καὶ κακία μὴ ἀρετῆς μείζων· τὰ μὲν γὰρ τέλη, τὰ δ' οὐ τέλη. καὶ ὢν τὰ ἔργα καλλίω ἢ αἰσχύω, μείζω αὐτά, καὶ ὢν αἱ κακίαι καὶ αἱ ἀρεταὶ μείζους, καὶ τὰ ἔργα μείζω, ἐπεὶ ὡς τὰ αἵτια καὶ αἱ ἀρχαί, καὶ τὰ ἀποβαίνοντα, καὶ ὡς τὰ ἀποβαίνοντα, καὶ τὰ αἵτια καὶ αἱ ἀρχαί. καὶ ὢν ἡ ὑπεροχὴ αἰρετωτέρα ἢ καλλίων, οἷον τὸ ἀκριβῶς ὀρᾶν αἰρετώτερον τοῦ ὀσφραίνεσθαι (καὶ γὰρ ὅψις [1364b] ὀσφρήσεως), καὶ τὸ φιλειρώτερον εἶναι τοῦ φιλοχρηματώτερον [μᾶλλον] κάλλιον, ὥστε καὶ

φιλειταιρία φιλοχρηματίας. καὶ ἀντικειμένως δὲ τῶν βελτιόνων αἱ ὑπερβολαὶ βελτίους καὶ <αἱ> καλλιόνων καλλίους. καὶ ὧν αἱ ἐπιθυμίαι καλλίους ἢ βελτίους· αἱ γὰρ μείζους ὀρέξεις μειζόνων εἰσίν. καὶ τῶν καλλιόνων δὲ ἢ βελτιόνων αἱ ἐπιθυμίαι βελτίους καὶ καλλίους διὰ τὸ αὐτό. καὶ ὧν αἱ ἐπιστήμαι καλλίους ἢ σπουδαιότεραι, καὶ τὰ πράγματα καλλίω καὶ σπουδαιότερα· ὥς γὰρ ἔχει ἡ ἐπιστήμη, καὶ τὸ ἀληθές· κελεύει δὲ τὸ αὐτῆς ἑκάστη. καὶ τῶν σπουδαιωτέρων δὲ καὶ καλλιόνων αἱ ἐπιστήμαι ἀνάλογον διὰ τὸ αὐτό. καὶ ὃ κρίνειαν ἂν ἢ κεκρίκασιν οἱ φρόνιμοι ἢ πάντες ἢ οἱ πολλοὶ ἢ οἱ πλείους ἢ οἱ κράτιστοι ἀγαθὸν μείζον, ἀνάγκη οὕτως ἔχειν, ἢ ἀπλῶς ἢ ἢ κατὰ τὴν φρόνησιν ἔκριναν. ἔστι δὲ τοῦτο κοινὸν καὶ κατὰ τῶν ἄλλων· καὶ γὰρ τὸ καὶ ποσὸν καὶ ποιὸν οὕτως ἔχει ὥς ἂν ἡ ἐπιστήμη καὶ ἡ φρόνησις εἴποι. ἄλλ' ἐπ' ἀγαθῶν εἰρήκαμεν· ὠρίσται γὰρ ἀγαθὸν εἶναι ὃ λαβὼν [τὰ πράγματα] φρόνησιν ἔλοιτ' ἂν ἑκαστον· δῆλον οὖν ὅτι καὶ μείζον ὃ μᾶλλον ἢ φρόνησις λέγει. καὶ τὸ τοῖς βελτίοσιν ὑπάρχον, ἢ ἀπλῶς ἢ ἢ βελτίους, οἷον ἢ ἀνδρεία ἰσχύος. καὶ ὃ ἔλοιτ' ἂν ὁ βελτίων, ἢ ἀπλῶς ἢ ἢ βελτίων, οἷον τὸ ἀδικεῖσθαι μᾶλλον ἢ ἀδικεῖν· τοῦτο γὰρ ὁ δικαιότερος ἂν ἔλοιτο. καὶ τὸ ἥδιον τοῦ ἥττον ἡδέος· τὴν γὰρ ἡδονὴν πάντα διώκει, καὶ αὐτοῦ ἔνεκα τοῦ ἡδεσθαι ὀρέγονται, ὠρίσται δὲ τούτοις τὸ ἀγαθὸν καὶ τὸ τέλος· ἥδιον δὲ τό τε ἀλυπότερον καὶ τὸ πολυχρονιώτερον ἡδύ. καὶ τὸ κάλλιον τοῦ ἥττον καλοῦ· τὸ γὰρ καλὸν ἐστὶν ἥτοι τὸ ἡδὺ ἢ τὸ καθ' αὐτὸ αἰρετόν. καὶ ὅσων αὐτοὶ αὐτοῖς ἢ φίλοις βούλονται αἵτιοι εἶναι μᾶλλον, ταῦτα μείζω ἀγαθὰ, ὅσων δὲ ἥττον, μείζω κακά.

καὶ τὰ πολυχρονιώτερα τῶν ὀλιγοχρονιωτέρων καὶ τὰ βεβαιότερα τῶν ἀβεβαιωτέρων· ὑπερέχει γὰρ ἡ χρῆσις τῶν μὲν τῷ χρόνῳ τῶν δὲ τῇ βουλήσει· ὅταν γὰρ βούλωνται, ὑπάρχει μᾶλλον ἢ τοῦ βεβαίου. καὶ ὥς ἂν ἔν τῶν συστοίχων καὶ τῶν ὁμοίων πτώσεων, καὶ τὰλλ' ἀκολουθεῖ, οἷον εἰ τὸ ἀνδρείως κάλλιον καὶ αἰρετώτερον τοῦ σωφρόνως, καὶ ἀνδρεία σωφροσύνης αἰρετωτέρα καὶ τὸ ἀνδρεῖον εἶναι τοῦ σωφρονεῖν. καὶ ὃ πάντες αἰροῦνται τοῦ μὴ ὃ πάντες. καὶ ὃ οἱ πλείους ἢ ὃ οἱ ἐλάττους· [1365a] ἀγαθὸν γὰρ ἦν οὐ πάντες ἐφίενται, ὥστε καὶ μείζον οὐ μᾶλλον. καὶ ὃ οἱ ἀμφισβητοῦντες ἢ οἱ ἐχθροί, ἢ οἱ κρίνοντες ἢ οὓς οὕτοι κρίνουσιν· τὸ μὲν γὰρ ὥς ἂν εἰ πάντες φαῖέν ἐστι, τὸ δὲ οἱ κύριοι καὶ οἱ εἰδότες. καὶ ὅτε μὲν οὐ πάντες μετέχουσι μείζον· ἀτιμία γὰρ τὸ μὴ μετέχειν· ὅτε δὲ οὐ μὴδεῖς ἢ οὐ ὀλίγοι· σπανιώτερον γάρ. καὶ τὰ ἐπαινετώτερα· καλλίω γάρ. καὶ ὧν αἱ τιμαὶ μείζους, ὡσαύτως· ἢ γὰρ τιμὴ ὥσπερ ἀξία τίς ἐστίν. καὶ ὧν αἱ ζημίαι μείζους. καὶ τὰ τῶν ὁμολογουμένων ἢ φαινομένων μεγάλων μείζω. καὶ διαιρούμενα δὲ εἰς τὰ μέρη τὰ αὐτὰ μείζω φαίνεται. πλεῖον γὰρ ὑπερέχειν φαίνεται, ὅθεν καὶ ὁ ποιητὴς φησι πεῖσαι τὸν Μελέαγρον ἀναστῆναι

ὅσσα κάκ' ἀνθρώποισι πέλει τῶν ἄστυ ἀλώη·

λαοὶ μὲν φθινύθουσι, πόλιν δέ τε πῦρ ἀμαθύνει,

τέκνα δέ τ' ἄλλοι ἄγουσιν.

καὶ τὸ συντιθέναι δὲ καὶ ἐποικοδομεῖν, ὥσπερ Ἐπίχαρμος, διὰ τε τὸ αὐτὸ τῇ διαιρέσει (ἢ γὰρ σύνθεσις ὑπεροχὴν δείκνυσι πολλήν) καὶ ὅτι ἀρχὴ φαίνεται μεγάλων καὶ αἴτιον. ἐπεὶ δὲ τὸ χαλεπώτερον καὶ σπανιώτερον μεῖζον, καὶ οἱ καιροὶ καὶ αἱ ἡλικίαι καὶ οἱ τόποι καὶ οἱ χρόνοι καὶ αἱ δυνάμεις ποιοῦσι μεγάλα· εἰ γὰρ παρὰ δύναμιν καὶ παρὰ ἡλικίαν καὶ παρὰ τοὺς ὁμοίους, καὶ εἰ οὕτως ἢ ἐνταῦθα ἢ τότε, ἔξει μέγεθος καὶ καλῶν καὶ ἀγαθῶν καὶ δικαίων καὶ τῶν ἐναντίων, ὅθεν καὶ τὸ ἐπίγραμμα τῷ Ὀλυμπιονίκῃ·

πρόσθε μὲν ἄμφ' ὤμοισιν ἔχων τραχεῖαν ἄσιλλαν

ἰχθῦς ἐξ Ἄργους εἰς Τεγέαν ἔφερον,

καὶ ὁ Ἰφικράτης αὐτὸν ἐνεκωμιάζε λέγων ἐξ ὧν ὑπῆρξεν ταῦτα. καὶ τὸ αὐτοφυὲς τοῦ ἐπικτήτου· χαλεπώτερον γάρ. ὅθεν καὶ ὁ ποιητὴς φησιν “αὐτοδίδακτος δ' εἰμί.” καὶ τὸ μεγάλου μέγιστον μέρος, οἷον Περικλῆς τὸν ἐπιτάφιον λέγων, τὴν νεότητά ἐκ τῆς πόλεως ἀνηρῆσθαι ὥσπερ τὸ ἔαρ ἐκ τοῦ ἐνιαυτοῦ εἰ ἐξαίρεθείη. καὶ τὰ ἐν χρεῖα μεῖζονι χρήσιμα, οἷον τὰ ἐν γήρᾳ καὶ νόσοις. καὶ δυοῖν τὸ ἐγγύτερον τοῦ τέλους. καὶ τὸ αὐτῷ τοῦ ἀπλῶς. καὶ τὸ δυνατὸν τοῦ ἀδυνάτου· τὸ μὲν γὰρ αὐτῷ, τὸ δ' οὐ. καὶ τὰ ἐν τέλει τοῦ βίου· τέλη γὰρ μᾶλλον τὰ πρὸς τῷ τέλει. καὶ [1365b] τὰ πρὸς ἀλήθειαν τῶν πρὸς δόξαν· ὅρος δὲ τοῦ πρὸς δόξαν, ὃ λανθάνειν μέλλον οὐκ ἂν ἔλοιτο· διὸ καὶ τὸ εὖ πάσχειν τοῦ εὖ ποιεῖν δόξειεν ἂν αἰρετώτερον εἶναι· τὸ μὲν γὰρ κἂν λανθάνῃ αἰρήσεται, ποιεῖν δ' εὖ λανθάνων οὐ δοκεῖ ἂν ἐλέσθαι. καὶ ὅσα εἶναι μᾶλλον ἢ δοκεῖν βούλονται· πρὸς ἀλήθειαν γὰρ μᾶλλον· διὸ καὶ τὴν δικαιοσύνην φασὶ μικρὸν εἶναι, ὅτι δοκεῖν ἢ εἶναι αἰρετώτερον· τὸ δὲ ὑγιαίνειν οὐ. καὶ τὸ πρὸς πολλὰ χρησιμώτερον, οἷον τὸ πρὸς τὸ ζῆν καὶ εὖ ζῆν καὶ τὴν ἡδονὴν καὶ τὸ πράττειν τὰ καλά· διὸ ὁ πλοῦτος καὶ ἡ ὑγίεια μέγιστα δοκεῖ εἶναι· ἅπαντα γὰρ ἔχει ταῦτα. καὶ τὸ ἀλυπότερον καὶ μεθ' ἡδονῆς· πλείω γὰρ ἐνός, ὅτι ὑπάρχει καὶ ἡ ἡδονὴ [ἀγαθὸν] καὶ ἡ ἀλυπία. καὶ δυοῖν ὃ τῷ αὐτῷ προστιθέμενον μεῖζον τὸ ὅλον ποιεῖ. καὶ ἃ μὴ λανθάνει παρόντα ἢ ἃ λανθάνει· πρὸς ἀλήθειαν γὰρ τείνει ταῦτα· διὸ τὸ πλουτεῖν φανείη ἂν μεῖζον ἀγαθὸν τοῦ δοκεῖν. καὶ τὸ ἀγαπητόν, καὶ τοῖς μὲν μόνον <ὄν> τοῖς δὲ μετ' ἄλλων· διὸ καὶ οὐκ ἴση ζημία, ἂν τις τὸν ἐτερόφθαλμον

τυφλώση καὶ τὸν δύ' ἔχοντα· ἀγαπητὸν γὰρ ἀφήρηται. ἐκ τίνων μὲν οὖν δεῖ τὰς πίστεις φέρειν ἐν τῷ προτρέπειν καὶ ἀποτρέπειν, σχεδὸν εἴρηται.

Μέγιστον δὲ καὶ κυριώτατον ἀπάντων πρὸς τὸ δύνασθαι πείθειν καὶ καλῶς συμβουλεύειν <τὸ> τὰς πολιτείας ἀπάσας λαβεῖν καὶ τὰ ἐκάστης ἦθῃ καὶ νόμιμα καὶ συμφέροντα διελεῖν. πείθονται γὰρ ἅπαντες τῷ συμφέροντι, συμφέρει δὲ τὸ σῶζον τὴν πολιτείαν. ἔτι δὲ κυρία μὲν ἐστὶν ἡ τοῦ κυρίου ἀπόφανσις, τὰ δὲ κύρια διήρηται κατὰ τὰς πολιτείας· ὅσαι γὰρ αἱ πολιτεῖαι, τοσαῦτα καὶ τὰ κύρια ἐστὶν. εἰσὶν δὲ πολιτεῖαι τέτταρες, δημοκρατία, ὀλιγαρχία, ἀριστοκρατία, μοναρχία, ὥστε τὸ μὲν κύριον καὶ τὸ κρῖνον τούτων τι ἂν εἴη μόριον ἢ ὅλον τούτων.

ἔστιν δὲ δημοκρατία μὲν πολιτεία ἐν ἣ κλήρῳ διανέμονται τὰς ἀρχάς, ὀλιγαρχία δὲ ἐν ἣ οἱ ἀπὸ τιμημάτων, ἀριστοκρατία δὲ ἐν ἣ κατὰ τὴν παιδείαν· παιδείαν δὲ λέγω τὴν ὑπὸ τοῦ νόμου κειμένην. οἱ γὰρ ἐμμεμενηκότες ἐν τοῖς νομίμοις ἐν τῇ ἀριστοκρατίᾳ ἄρχουσιν. ἀνάγκη δὲ τούτους φαίνεσθαι ἀρίστους, ὅθεν καὶ τοῦνομα εἴληφεν τοῦτο. μοναρχία δ' ἐστὶν κατὰ [1366a] τοῦνομα ἐν ἣ εἷς ἀπάντων κύριός ἐστιν· τούτων δὲ ἡ μὲν κατὰ τάξιν τινὰ βασιλεία, ἡ δ' ἀόριστος τυραννίς. τὸ δὲ τέλος ἐκάστης πολιτείας οὐ δεῖ λανθάνειν· αἰροῦνται γὰρ τὰ πρὸς τὸ τέλος. ἔστι δὲ δημοκρατίας μὲν τέλος ἐλευθερία, ὀλιγαρχίας δὲ πλοῦτος, ἀριστοκρατίας δὲ τὰ περὶ παιδείαν καὶ τὰ νόμιμα, τυραννίδος δὲ φυλακή. δῆλον οὖν ὅτι τὰ πρὸς τὸ τέλος ἐκάστης ἦθῃ καὶ νόμιμα καὶ συμφέροντα διαιρετέον, εἴπερ αἰροῦνται πρὸς τοῦτο ἐπαναφέροντες. ἐπεὶ δὲ οὐ μόνον αἱ πίστεις γίνονται δι' ἀποδεικτικοῦ λόγου, ἀλλὰ καὶ δι' ἠθικοῦ (τῷ γὰρ ποιόν τινα φαίνεσθαι τὸν λέγοντα πιστεύομεν, τοῦτο δ' ἐστὶν ἂν ἀγαθὸς φαίνεται ἢ εὖνους ἢ ἄμωφ), δέοι ἂν τὰ ἦθῃ τῶν πολιτειῶν ἐκάστης ἔχειν ἡμᾶς· τὸ μὲν γὰρ ἐκάστης ἦθος πιθανώτατον ἀνάγκη πρὸς ἐκάστην εἶναι. ταῦτα δὲ ληφθήσεται διὰ τῶν αὐτῶν· τὰ μὲν γὰρ ἦθῃ φανερά κατὰ τὴν προαίρεσιν, ἡ δὲ προαίρεσις ἀναφέρεται πρὸς τὸ τέλος.

ὥν μὲν οὖν δεῖ ὀρέγεσθαι προτρέποντας ὡς ἐσομένων ἢ ὄντων, καὶ ἐκ τίνων δεῖ τὰς περὶ τοῦ συμφέροντος πίστεις λαμβάνειν, ἔτι δὲ τῶν περὶ τὰς πολιτείας ἠθῶν καὶ νομίμων διὰ τίνων τε καὶ πῶς εὐπορήσομεν, ἐφ' ὅσον ἦν τῷ παρόντι καιρῷ σύμμετρον, εἴρηται· διηκρίβωται γὰρ ἐν τοῖς Πολιτικοῖς περὶ τούτων.

μετὰ δὲ ταῦτα λέγωμεν περὶ ἀρετῆς καὶ κακίας καὶ καλοῦ καὶ αἰσχροῦ· οὗτοι γὰρ σκοποὶ τῷ ἐπαινοῦντι καὶ ψέγοντι· συμβήσεται γὰρ ἅμα περὶ



τούτων λέγοντας κάκεῖνα δηλοῦν ἐξ ὧν ποιοῖ τινες ὑποληφθησόμεθα κατὰ τὸ ἥθος, ἥπερ ἦν δευτέρα πίστις· ἐκ τῶν αὐτῶν γὰρ ἡμᾶς τε καὶ ἄλλον ἀξιόπιστον δυνησόμεθα ποιεῖν πρὸς ἀρετὴν. ἐπεὶ δὲ συμβαίνει καὶ χωρὶς σπουδῆς καὶ μετὰ σπουδῆς ἐπαινεῖν πολλάκις οὐ μόνον ἄνθρωπον ἢ θεὸν ἀλλὰ καὶ ἄψυχα καὶ τῶν ἄλλων ζώων τὸ τυχόν, τὸν αὐτὸν τρόπον καὶ περὶ τούτων ληπτέον τὰς προτάσεις, ὥστε ὅσον παραδείγματος χάριν εἵπωμεν καὶ περὶ τούτων.

καλὸν μὲν οὖν ἐστὶν ὃ ἂν δι' αὐτὸ αἰρετὸν ὃν ἐπαινετὸν ἦ, ἢ ὃ ἂν ἀγαθὸν ὃν ἡδὺ ἦ, ὅτι ἀγαθόν· εἰ δὲ τοῦτό ἐστὶ τὸ καλόν, ἀνάγκη τὴν ἀρετὴν καλὸν εἶναι· ἀγαθὸν γὰρ ὃν ἐπαινετὸν ἐστὶν. ἀρετὴ δ' ἐστὶ μὲν δύναμις ὡς δοκεῖ ποριστικὴ ἀγαθῶν καὶ φυλακτικὴ, καὶ δύναμις εὐεργετικὴ πολλῶν καὶ μεγάλων, καὶ πάντων [1366b] περὶ πάντα· μέρη δὲ ἀρετῆς δικαιοσύνη, ἀνδρεία, σωφροσύνη, μεγαλοπρέπεια, μεγαλοψυχία, ἐλευθεριότης, φρόνησις, σοφία. ἀνάγκη δὲ μεγίστας εἶναι ἀρετὰς τὰς τοῖς ἄλλοις χρησιμωτάτας, εἴπερ ἐστὶν ἡ ἀρετὴ δύναμις εὐεργετικὴ, «καὶ» διὰ τοῦτο τοὺς δικαίους καὶ ἀνδρείους μάλιστα τιμῶσιν· ἡ μὲν γὰρ ἐν πολέμῳ, ἡ δὲ καὶ ἐν πολέμῳ καὶ ἐν εἰρήνῃ χρήσιμος ἄλλοις. εἴτα ἐλευθεριότης· προΐενται γὰρ καὶ οὐκ ἀνταγωνίζονται περὶ τῶν χρημάτων, ὧν μάλιστα ἐφίενται ἄλλοι. ἔστι δὲ δικαιοσύνη μὲν ἀρετὴ δι' ἣν τὰ αὐτῶν ἕκαστοι ἔχουσι, καὶ ὡς ὁ νόμος· ἀδικία δὲ δι' ἣν τὰ ἀλλότρια, οὐχ ὡς ὁ νόμος. ἀνδρεία δὲ δι' ἣν πρακτικοὶ εἰσι τῶν καλῶν ἔργων ἐν τοῖς κινδύνοις, καὶ ὡς ὁ νόμος κελεύει, καὶ ὑπηρετικοὶ τῷ νόμῳ· δειλία δὲ τὸ ὑνάντιον. σωφροσύνη δὲ ἀρετὴ δι' ἣν πρὸς τὰς ἡδονὰς τὰς τοῦ σώματος οὕτως ἔχουσιν ὡς ὁ νόμος κελεύει· ἀκολασία δὲ τὸ ὑνάντιον. ἐλευθεριότης δὲ περὶ χρήματα εὐποιοιτικὴ, ἀνελευθερία δὲ τὸ ὑνάντιον. μεγαλοψυχία δὲ ἀρετὴ μεγάλων ποιητικὴ εὐεργετημάτων [μικροψυχία δὲ τὸ ὑνάντιον], μεγαλοπρέπεια δὲ ἀρετὴ ἐν δαπανήμασι μεγέθους ποιητικὴ, μικροψυχία δὲ καὶ μικροπρέπεια τάναντία. φρόνησις δ' ἐστὶν ἀρετὴ διανοίας καθ' ἣν εὖ βουλευέσθαι δύνανται περὶ ἀγαθῶν καὶ κακῶν τῶν εἰρημένων εἰς εὐδαιμονίαν.

περὶ μὲν οὖν ἀρετῆς καὶ κακίας καθόλου καὶ περὶ τῶν μορίων εἴρηται κατὰ τὸν ἐνεστῶτα καιρὸν ἱκανῶς, περὶ δὲ τῶν ἄλλων οὐ χαλεπὸν ἰδεῖν· φανερόν γὰρ ὅτι ἀνάγκη τὰ τε ποιητικὰ τῆς ἀρετῆς εἶναι καλὰ (πρὸς ἀρετὴν γάρ) καὶ τὰ ἀπ' ἀρετῆς γινόμενα, τοιαῦτα δὲ τὰ τε σημεῖα τῆς ἀρετῆς καὶ τὰ ἔργα· ἐπεὶ δὲ τὰ σημεῖα καὶ τὰ τοιαῦτα ἃ ἐστὶν ἀγαθοῦ ἔργα ἢ πάθη καλὰ, ἀνάγκη ὅσα τε ἀνδρείας ἔργα ἢ σημεῖα ἀνδρείας ἢ ἀνδρείως πέπρακται καλὰ εἶναι, καὶ τὰ δίκαια καὶ τὰ δικαίως ἔργα (πάθη δὲ οὐ· ἐν μόνῃ γὰρ ταύτῃ τῶν ἀρετῶν οὐκ αἰεὶ τὸ δικαίως καλόν, ἀλλ' ἐπὶ τοῦ ζημιοῦσθαι αἰσχροὺς τὸ

δικαίως μᾶλλον ἢ τὸ ἀδίκως), καὶ κατὰ τὰς ἄλλας δὲ ἀρετὰς ὡσαύτως. καὶ ἐφ' ὅσοις τὰ ἄθλα τιμῇ, καλὰ. καὶ ἐφ' ὅσοις τιμὴ μᾶλλον ἢ χρήματα. καὶ ὅσα μὴ αὐτοῦ ἔνεκα πράττει τις τῶν αἰρετῶν, καὶ τὰ ἀπλῶς ἀγαθὰ, ὅσα τε ὑπὲρ πατρίδος τις ἐποίησεν παριδὼν τὸ αὐτοῦ, καὶ τὰ τῇ φύσει ἀγαθὰ, καὶ ἃ μὴ αὐτῷ [1367a] ἀγαθὰ· αὐτοῦ γὰρ ἔνεκα τὰ τοιαῦτα. καὶ ὅσα τεθνεῶτι ἐνδέχεται ὑπάρχειν μᾶλλον ἢ ζῶντι· τὸ γὰρ αὐτοῦ ἔνεκα μᾶλλον ἔχει τὰ ζῶντι. καὶ ὅσα ἔργα τῶν ἄλλων ἔνεκα· ἦττον γὰρ αὐτοῦ. καὶ ὅσαι εὐπραγίαι περὶ ἄλλους ἀλλὰ μὴ περὶ αὐτόν, καὶ <αἱ> περὶ τοὺς εὖ ποιήσαντας· δίκαιον γάρ. καὶ τὰ εὐεργετήματα· οὐ γὰρ εἰς αὐτόν. καὶ τὰ ἐναντία ἢ ἐφ' οἷς αἰσχύνονται· τὰ γὰρ αἰσχρὰ αἰσχύνονται καὶ λέγοντες καὶ ποιοῦντες καὶ μέλλοντες, ὥσπερ καὶ Σαπφῶ πεποίηκεν, εἰπόντος τοῦ Ἀλκαίου

θέλω τι εἰπῆν, ἀλλὰ με κωλύει

αἰδώς,

αἱ δ' ἦχες ἐσθλῶν ἱμερον ἢ καλῶν

καὶ μή τι εἰπῆν γλῶσσ' ἐκύκα κακόν

αἰδώς κέν σε οὐκ εἶχεν ὄμματ',

ἀλλ' ἔλεγες περὶ τῷ δικαίῳ.

καὶ περὶ ὧν ἀγωνιῶσι μὴ φοβούμενοι· περὶ γὰρ τῶν πρὸς δόξαν φερόντων ἀγαθῶν τοῦτο πάσχουσιν. καὶ αἱ τῶν φύσει σπουδαιοτέρων ἀρετῶν καλλίους καὶ τὰ ἔργα, οἷον ἀνδρὸς ἢ γυναικός. καὶ αἱ ἀπολαυστικαὶ ἄλλοις μᾶλλον ἢ αὐτοῖς· διὸ τὸ δίκαιον καὶ ἡ δικαιοσύνη καλόν. καὶ τὸ τοὺς ἐχθροὺς τιμωρεῖσθαι καὶ μὴ καταλλάττεσθαι· τό τε γὰρ ἀνταποδιδόναι δίκαιον, τὸ δὲ δίκαιον καλόν, καὶ ἀνδρείου τὸ μὴ ἡττᾶσθαι. καὶ νίκη καὶ τιμὴ τῶν καλῶν· αἰρετά τε γὰρ ἄκαρπα ὄντα, καὶ ὑπεροχὴν ἀρετῆς δηλοῖ. καὶ τὰ μνημονευτά, καὶ τὰ μᾶλλον μᾶλλον. καὶ ἃ μὴ ζῶντι ἔπεται, καὶ οἷς τιμὴ ἀκολουθεῖ, καὶ τὰ περιττά, καὶ τὰ μόνῳ ὑπάρχοντα, καλλίω· εὐμνημονευτότερα γάρ. καὶ κτήματα ἄκαρπα· ἐλευθεριώτερα γάρ. καὶ τὰ παρ' ἐκάστοις δὲ ἴδια καλὰ, καὶ ὅσα σημεῖα ἐστὶν τῶν παρ' ἐκάστοις ἐπαινουμένων, οἷον ἐν Λακεδαιμόνι κομᾶν καλόν· ἐλευθέρου γὰρ σημεῖον· οὐ γάρ ἐστὶν κομῶντα ῥάδιον οὐδὲν ποιεῖν ἔργον θητικόν. καὶ τὸ μηδεμίαν ἐργάζεσθαι βάνανυσον τέχνην· ἐλευθέρου γὰρ τὸ μὴ πρὸς ἄλλον ζῆν. ληπτέον δὲ καὶ τὰ σύνεγγυς τοῖς ὑπάρχουσιν ὡς ταῦτα ὄντα καὶ πρὸς ἔπαινον καὶ πρὸς ψόγον, οἷον τὸν εὐλαβῆ ψυχρὸν καὶ ἐπίβουλον καὶ τὸν ἡλίθιον χρηστὸν ἢ τὸν ἀνάληπτον

πρῶτον, καὶ ἕκαστον δ' ἐκ τῶν παρακολουθούντων ἀεὶ κατὰ τὸ βέλτιστον, οἷον τὸν ὀργίλον καὶ τὸν μανικὸν ἀπλοῦν καὶ τὸν αὐθάδη [1367b] μεγαλοπρεπῆ καὶ σεμνόν, καὶ τοὺς ἐν ταῖς ὑπερβολαῖς ὡς ἐν ταῖς ἀρεταῖς ὄντας, οἷον τὸν θρασὺν ἀνδρεῖον καὶ τὸν ἄσωτον ἐλευθέριον· δόξει τε γὰρ τοῖς πολλοῖς, καὶ ἅμα παραλογιστικὸν [ἐκ] τῆς αἰτίας. εἰ γὰρ οὐ μὴ ἀνάγκη κινδυνευτικός, πολλῷ μᾶλλον ἂν δόξειεν ὅπου καλόν, καὶ εἰ προετικὸς τοῖς τυχοῦσι, καὶ τοῖς φίλοις· ὑπερβολὴ γὰρ ἀρετῆς τὸ πάντας εὖ ποιεῖν. σκοπεῖν δὲ καὶ παρ' οἷς ὁ ἔπαινος· ὥσπερ γὰρ ὁ Σωκράτης ἔλεγεν, οὐ χαλεπὸν Ἀθηναίους ἐν Ἀθηναίοις ἐπαινεῖν. δεῖ δὲ τὸ παρ' ἐκάστοις τίμιον ὃν λέγειν ὡς ὑπάρχει, οἷον ἐν Σκύθαις ἢ Λάκωσιν ἢ φιλοσόφοις. καὶ ὅλως δὲ τὸ τίμιον ἄγειν εἰς τὸ καλόν, ἐπεὶ περ γε δοκεῖ γειτνιαῖν. καὶ ὅσα κατὰ τὸ προσῆκον, οἷον εἰ ἄξια τῶν προγόνων καὶ τῶν προὑπηργμένων· εὐδαιμονικὸν γὰρ καὶ καλὸν καὶ τὸ προσεπικτᾶσθαι τιμὴν. καὶ εἰ παρὰ τὸ προσῆκον ἐπὶ δὲ τὸ βέλτιον καὶ τὸ κάλλιον, οἷον εἰ εὐτυχῶν μὲν μέτριος, ἀτυχῶν δὲ μεγαλόψυχος, ἢ μείζων γιγνόμενος βελτίων καὶ καταλλακτικώτερος. τοιοῦτον δὲ τὸ τοῦ Ἰφικράτους, “ἐξ οἷων εἰς οἷα”, καὶ τὸ τοῦ Ὀλυμπιονίκου

πρόσθε μὲν ἄμφ' ὥμοισιν ἔχων τραχεῖαν,

καὶ τὸ τοῦ Σιμωνίδου

ἢ πατρός τε καὶ ἀνδρὸς ἀδελφῶν τ' οὕσα τυράννων.

ἐπεὶ δ' ἐκ τῶν πράξεων ὁ ἔπαινος, ἴδιον δὲ τοῦ σπουδαίου τὸ κατὰ προαίρεσιν, πειρατέον δεικνύναι πράττοντα κατὰ προαίρεσιν, χρήσιμον δὲ τὸ πολλάκις φαίνεσθαι πεπραχότα· διὸ καὶ τὰ συμπτώματα καὶ τὰ ἀπὸ τύχης ὡς ἐν προαιρέσει ληπτέον· ἂν γὰρ πολλὰ καὶ ὅμοια προφέρηται, σημεῖον ἀρετῆς εἶναι δόξει καὶ προαιρέσεως.

ἔστιν δ' ἔπαινος λόγος ἐμφανίζων μέγεθος ἀρετῆς. δεῖ οὖν τὰς πράξεις ἐπιδεικνύναι ὡς τοιαῦται. τὸ δ' ἐγκώμιον τῶν ἔργων ἐστίν (τὰ δὲ κύκλῳ εἰς πίστιν, οἷον εὐγένεια καὶ παιδεία· εἰκὸς γὰρ ἐξ ἀγαθῶν ἀγαθοὺς καὶ τὸν οὕτω τραφέντα τοιοῦτον εἶναι), διὸ καὶ ἐγκωμιάζομεν πράξαντας. τὰ δ' ἔργα σημεῖα τῆς ἕξεως ἐστίν, ἐπεὶ ἐπαινοῖμεν ἂν καὶ μὴ πεπραγότα, εἰ πιστεύοιμεν εἶναι τοιοῦτον. μακαρισμὸς δὲ καὶ εὐδαιμονισμὸς αὐτοῖς μὲν ταῦτά, τούτοις δ' οὐ ταῦτά, ἀλλ' ὥσπερ ἢ εὐδαιμονία τὴν ἀρετὴν, καὶ ὁ εὐδαιμονισμὸς περιέχει ταῦτα.

ἔχει δὲ κοινὸν εἶδος ὁ ἔπαινος καὶ αἱ συμβουλαί. ἃ γὰρ ἐν τῷ

συμβουλευεῖν ὑπόθοιο ἄν, ταῦτα μετατεθέντα [1368a] τῇ λέξει ἐγκώμια γίνονται. Ἐπεὶ οὖν ἔχομεν ἃ δεῖ πράττειν καὶ ποῖόν τινα εἶναι δεῖ, ταῦτα ὡς ὑποθήκας λέγοντας τῇ λέξει μετατιθέναι δεῖ καὶ στρέφειν, οἷον ὅτι οὐ δεῖ μέγα φρονεῖν ἐπὶ τοῖς διὰ τύχην ἀλλὰ τοῖς δι' αὐτόν. οὕτω μὲν οὖν λεχθὲν ὑποθήκην δύναται, ὡδὲ δ' ἔπαινον “μέγα φρονῶν οὐκ <ἐπὶ> τοῖς διὰ τύχην ὑπάρχουσιν ἀλλὰ τοῖς δι' αὐτόν”. ὥστε ὅταν ἐπαινεῖν βούλῃ, ὅρα τί ἂν ὑπόθοιο· καὶ ὅταν ὑποθέσθαι, ὅρα τί ἂν ἐπαιnéσειας. ἡ δὲ λέξις ἔσται ἀντικειμένη ἐξ ἀνάγκης ὅταν τὸ μὲν κωλύον τὸ δὲ μὴ κωλύον μετατεθῇ.

χρηστέον δὲ καὶ τῶν αὐξητικῶν πολλοῖς, οἷον εἰ μόνος ἢ πρῶτος ἢ μετ' ὀλίγων ἢ καὶ [ὁ] μάλιστα πεποίηκεν· ἅπαντα γὰρ ταῦτα καλά. καὶ τῷ ἐκ τῶν χρόνων καὶ τῶν καιρῶν· τούτῳ δ' εἰ παρὰ τὸ προσῆκον. καὶ εἰ πολλάκις τὸ αὐτὸ κατῴρθωκεν· μέγα γὰρ καὶ οὐκ ἀπὸ τύχης ἀλλὰ δι' αὐτοῦ ἂν δόξειεν. καὶ εἰ τὰ προτρέποντα καὶ τιμῶντα διὰ τοῦτον εὕρηται καὶ κατεσκευάσθη, καὶ εἰς τοῦτον πρῶτον ἐγκώμιον ἐποιήθη, οἷον εἰς Ἰππόλοχον, καὶ <εἰς> Ἀρμόδιον καὶ Ἀριστογείτονα τὸ ἐν ἀγορᾷ σταθῆναι· ὁμοίως δὲ καὶ ἐπὶ τῶν ἐναντίων. κἂν μὴ καθ' αὐτὸν εὐπορήσῃ, πρὸς ἄλλους ἀντιπαραβάλλειν, ὅπερ Ἰσοκράτης ἐποίει διὰ τὴν ἀσυνήθειαν τοῦ δικολογεῖν. δεῖ δὲ πρὸς ἐνδόξους συγκρίνειν· αὐξητικὸν γὰρ καὶ καλόν, εἰ σπουδαίων βελτίων. πίπτει δ' εὐλόγως ἡ αὐξησις εἰς τοὺς ἐπαίνους· ἐν ὑπεροχῇ γάρ ἐστιν, ἡ δ' ὑπεροχὴ τῶν καλῶν· διὸ κἂν μὴ πρὸς τοὺς ἐνδόξους, ἀλλὰ πρὸς τοὺς ἄλλους δεῖ παραβάλλειν, ἐπεὶπερ ἡ ὑπεροχὴ δοκεῖ μὲν ἄρετήν. ὅλως δὲ τῶν κοινῶν εἰδὼν ἅπασιν τοῖς λόγοις ἡ μὲν αὐξησις ἐπιτηδειοτάτη τοῖς ἐπιδεικτικοῖς (τὰς γὰρ πράξεις ὁμολογουμένας λαμβάνουσιν, ὥστε λοιπὸν μέγεθος περιθεῖναι καὶ κάλλος)· τὰ δὲ παραδείγματα τοῖς συμβουλευτικοῖς (ἐκ γὰρ τῶν προγεγονότων τὰ μέλλοντα καταμαντευόμενοι κρίνομεν)· τὰ δ' ἐνθυμήματα τοῖς δικανικοῖς (αἰτίαν γὰρ καὶ ἀπόδειξιν μάλιστα δέχεται τὸ γεγονὸς διὰ τὸ ἀσαφές).

ἐκ τίνων μὲν οὖν οἱ ἔπαινοι καὶ οἱ ψόγοι λέγονται σχεδὸν πάντες, καὶ πρὸς ποῖα δεῖ βλέποντας ἐπαινεῖν καὶ ψέγειν, καὶ ἐκ τίνων τὰ ἐγκώμια γίνονται καὶ τὰ ὀνειδίη, ταῦτ' ἐστίν· ἐχομένων γὰρ τούτων τὰ ἐναντία τούτοις φανερά· ὁ γὰρ ψόγος ἐκ τῶν ἐναντίων ἐστίν.

[1368b] Περὶ δὲ κατηγορίας καὶ ἀπολογίας, ἐκ πόσων καὶ ποίων ποιεῖσθαι δεῖ τοὺς συλλογισμούς, ἐχόμενον ἂν εἶη λέγειν. δεῖ δὲ λαβεῖν τρία, ἐν μὲν τίνων καὶ πόσων ἔνεκα ἀδικοῦσι, δεύτερον δὲ πῶς αὐτοὶ διακείμενοι, τρίτον δὲ τοὺς ποίους καὶ πῶς ἔχοντας. διορισάμενοι οὖν τὸ ἀδικεῖν λέγωμεν ἐξῆς.

ἔστω δὲ τὸ ἀδικεῖν τὸ βλάπτειν ἐκόντα παρὰ τὸν νόμον. νόμος δ' ἐστὶν ὁ

μὲν ἴδιος ὁ δὲ κοινός· λέγω δὲ ἴδιον μὲν καθ' ὃν γεγραμμένον πολιτεύονται, κοινὸν δὲ ὅσα ἄγραφα παρὰ πᾶσιν ὁμολογεῖσθαι δοκεῖ. ἔκόντες δὲ ποιοῦσιν ὅσα εἰδότες καὶ μὴ ἀναγκαζόμενοι. ὅσα μὲν οὖν εἰδότες, οὐ πάντα προαιρούμενοι, ὅσα δὲ προαιρούμενοι, εἰδότες ἅπαντα· οὐδεὶς γὰρ ὁ προαιρεῖται ἀγνοεῖ. δι' ἃ δὲ προαιροῦνται βλάπτειν καὶ φαῦλα ποιεῖν παρὰ τὸν νόμον κακία ἐστὶν καὶ ἀκρασία· ἐὰν γάρ τινες ἔχωσιν μοχθηρίαν ἢ μίαν ἢ πλείους, περὶ τοῦτο ὁ μοχθηροὶ τυγχάνουσιν ὄντες καὶ ἄδικοί· οἷον ὁ μὲν ἀνελεύθερος περὶ χρήματα, ὁ δ' ἀκόλαστος περὶ τὰς τοῦ σώματος ἡδονάς, ὁ δὲ μαλακὸς περὶ τὰ ῥάθυμα, ὁ δὲ δειλὸς περὶ τοὺς κινδύνους (τοὺς γὰρ συγκινδυνεύοντας ἐγκαταλιμπάνουσι διὰ τὸν φόβον), ὁ δὲ φιλότιμος διὰ τιμὴν, ὁ δ' ὀξύθυμος δι' ὀργήν, ὁ δὲ φιλόνομος διὰ νίκην, ὁ δὲ πικρὸς διὰ τιμωρίαν, ὁ δ' ἄφρων διὰ τὸ ἀπατᾶσθαι περὶ τὸ δίκαιον καὶ ἄδικον, ὁ δ' ἀναίσχυντος δι' ὀλιγωρίαν δόξης· ὁμοίως δὲ καὶ τῶν ἄλλων ἕκαστος περὶ ἕκαστον τῶν ὑποκειμένων.

ἀλλὰ περὶ μὲν τούτων δῆλον, τὰ μὲν ἐκ τῶν περὶ τὰς ἀρετὰς εἰρημένων, τὰ δ' ἐκ τῶν περὶ τὰ πάθη ῥηθησομένων· λοιπὸν δ' εἰπεῖν τίνος ἔνεκα καὶ πῶς ἔχοντες ἀδικοῦσι καὶ τίνας.

πρῶτον μὲν οὖν διελώμεθα τίνων ὀρεγόμενοι καὶ ποῖα φεύγοντες ἐγχειροῦσιν ἀδικεῖν· δῆλον γὰρ ὡς τῷ μὲν κατηγοροῦντι πόσα καὶ ποῖα τούτων ὑπάρχει τῷ ἀντιδίκῳ σκεπτέον, ὧν ἐφιέμενοι πάντες τοὺς πλησίον ἀδικοῦσι, τῷ δὲ ἀπολογουμένῳ ποῖα καὶ πόσα τούτων οὐχ ὑπάρχει. πάντες δὴ πάντα πράττουσι τὰ μὲν οὐ δι' αὐτοὺς τὰ δὲ δι' αὐτούς. τῶν μὲν οὖν μὴ δι' αὐτοὺς τὰ μὲν διὰ τύχην πράττουσι τὰ δ' ἐξ ἀνάγκης, τῶν δ' ἐξ ἀνάγκης τὰ μὲν βία τὰ δὲ φύσει, ὥστε πάντα ὅσα μὴ δι' αὐτοὺς πράττουσι, τὰ μὲν ἀπὸ τύχης τὰ δὲ φύσει τὰ δὲ βία. ὅσα δὲ δι' αὐτούς, καὶ ὧν [1369a] αὐτοὶ αἵτιοι, τὰ μὲν δι' ἔθος τὰ δὲ δι' ὄρεξιν, τὰ μὲν διὰ λογιστικὴν ὄρεξιν τὰ δὲ δι' ἄλογον· ἔστιν δ' ἢ μὲν βούλησις ἀγαθοῦ ὄρεξις (οὐδεὶς γὰρ βούλεται ἄλλ' ἢ ὅταν οἰηθῇ εἶναι ἀγαθόν), ἄλογοι δ' ὀρέξεις ὀργὴ καὶ ἐπιθυμία· ὥστε πάντα ὅσα πράττουσιν ἀνάγκη πράττειν δι' αἰτίας ἐπτά, διὰ τύχην, διὰ φύσιν, διὰ βίαν, δι' ἔθος, διὰ λογισμόν, διὰ θυμόν, δι' ἐπιθυμίαν. τὸ δὲ προσδιαρεῖσθαι καθ' ἡλικίαν ἢ ἕξεις ἢ ἄλλ' ἅττα τὰ πραττόμενα περίεργον· εἰ γὰρ συμβέβηκεν τοῖς νέοις ὀργίλοις εἶναι ἢ ἐπιθυμητικοῖς, οὐ διὰ τὴν νεότητα πράττουσι τὰ τοιαῦτα ἀλλὰ δι' ὀργὴν καὶ ἐπιθυμίαν. οὐδὲ διὰ πλοῦτον καὶ πενίαν, ἀλλὰ συμβέβηκε τοῖς μὲν πένησι διὰ τὴν ἔνδειαν ἐπιθυμεῖν χρημάτων, τοῖς δὲ πλουσίοις διὰ τὴν ἐξουσίαν ἐπιθυμεῖν τῶν μὴ ἀναγκαίων ἡδονῶν· ἀλλὰ πράξουσι καὶ οὗτοι οὐ διὰ πλοῦτον καὶ πενίαν ἀλλὰ διὰ τὴν ἐπιθυμίαν. ὁμοίως δὲ καὶ οἱ δίκαιοι καὶ οἱ ἄδικοι, καὶ οἱ ἄλλοι οἱ λεγόμενοι κατὰ τὰς

ἔξεις πράττειν, διὰ ταῦτα πράξουσιν· ἢ γὰρ διὰ λογισμὸν ἢ διὰ πάθος· ἀλλ' οἱ μὲν διὰ ἡθῆ καὶ πάθη χρηστά, οἱ δὲ διὰ τάναντία. συμβαίνει μέντοι ταῖς μὲν τοιαύταις ἔξεσι τὰ τοιαῦτα ἀκολουθεῖν, ταῖς δὲ τοιαῖσδε τὰ τοιάδε· εὐθὺς γὰρ ἴσως τῷ μὲν σῶφρονι διὰ τὸ σῶφρονα εἶναι δόξαι τε καὶ ἐπιθυμίας χρησταὶ ἐπακολουθοῦσι περὶ τῶν ἡδέων, τῷ δ' ἀκολάστῳ αἰ ἐναντίαι περὶ τῶν αὐτῶν τούτων· διὸ τὰς μὲν τοιαύτας διαιρέσεις ἐατέον, σκεπτέον δὲ ποῖα ποίοις εἴωθεν ἔπεσθαι· εἰ μὲν γὰρ λευκὸς ἢ μέλας, ἢ μέγας ἢ μικρός, οὐδὲν τέτακται τῶν τοιούτων ἀκολουθεῖν, εἰ δὲ νέος ἢ πρεσβύτερος, ἢ δίκαιος ἢ ἄδικος, ἤδη διαφέρει· καὶ ὅλως ὅσα τῶν συμβαινόντων ποιεῖ διαφέρειν τὰ ἡθῆ τῶν ἀνθρώπων, οἷον πλουτεῖν δοκῶν ἑαυτῷ ἢ πένεσθαι διοίσει τι, καὶ εὐτυχεῖν ἢ ἀτυχεῖν. ταῦτα μὲν οὖν ὕστερον ἐροῦμεν, νῦν δὲ περὶ τῶν λοιπῶν εἰπώμεν πρῶτον.

ἔστι δ' ἀπὸ τύχης μὲν τὰ τοιαῦτα γινόμενα, ὧν ἢ τε αἰτία ἀόριστος καὶ μὴ ἕνεκά του γίνεσθαι καὶ μήτε ἀεὶ μήτε ὥς ἐπὶ τὸ πολὺ μήτε τεταγμένως (δῆλον δ' ἐκ τοῦ ὀρισμοῦ τῆς τύχης περὶ τούτων), φύσει δὲ ὧν ἢ τ' αἰτία [1369b] ἐν αὐτοῖς καὶ τεταγμένη· ἢ γὰρ ἀεὶ ἢ ὥς ἐπὶ τὸ πολὺ ὡσαύτως ἀποβαίνει. τὰ γὰρ παρὰ φύσιν οὐδὲν δεῖ ἀκριβολογεῖσθαι πότερα κατὰ φύσιν ἢ τινα ἄλλην αἰτίαν γίνεσθαι· δόξειε δ' ἂν καὶ ἡ τύχη αἰτία εἶναι τῶν τοιούτων. βία δὲ ὅσα παρ' ἐπιθυμίαν ἢ τοὺς λογισμοὺς γίνεσθαι [δι'] αὐτῶν τῶν πραττόντων. ἔθελον δὲ ὅσα διὰ τὸ πολλάκις πεποιηκέναι ποιοῦσιν. διὰ λογισμὸν δὲ τὰ δοκοῦντα συμφέρειν ἐκ τῶν εἰρημένων ἀγαθῶν ἢ ὥς τέλος ἢ ὥς πρὸς τὸ τέλος, ὅταν διὰ τὸ συμφέρειν πράττηται· ἕνια γὰρ καὶ οἱ ἀκόλαστοι συμφέροντα πράττουσιν, ἀλλ' οὐ διὰ τὸ συμφέρειν ἀλλὰ δι' ἡδονήν. διὰ θυμὸν δὲ καὶ ὀργὴν τὰ τιμωρητικά. διαφέρει δὲ τιμωρία καὶ κόλασις· ἡ μὲν γὰρ κόλασις τοῦ πάσχοντος ἕνεκά ἐστίν, ἡ δὲ τιμωρία τοῦ ποιοῦντος, ἵνα πληρωθῇ. τί μὲν οὖν ἐστίν ἡ ὀργή, δῆλον ἔσται ἐν τοῖς περὶ τῶν παθῶν. δι' ἐπιθυμίαν δὲ πράττεται ὅσα φαίνεται ἡδέα. ἔστιν δὲ καὶ τὸ σύννηδες καὶ τὸ ἐθιστὸν ἐν τοῖς ἡδέσιν· πολλὰ γὰρ καὶ τῶν φύσει μὴ ἡδέων, ὅταν συνεθισθῶσιν, ἡδέως ποιοῦσιν· ὥστε συλλαβόντι εἰπεῖν, ὅσα δι' αὐτοὺς πράττουσιν ἅπαντ' ἐστὶν ἢ ἀγαθὰ ἢ φαινόμενα ἀγαθὰ, ἢ ἡδέα ἢ φαινόμενα ἡδέα. ἐπεὶ δ' ὅσα δι' αὐτοὺς ἐκόντες πράττουσιν, οὐχ ἐκόντες δὲ ὅσα μὴ δι' αὐτούς, πάντ' ἂν εἴη ὅσα ἐκόντες πράττουσιν ἢ ἀγαθὰ ἢ φαινόμενα ἀγαθὰ, ἢ ἡδέα ἢ φαινόμενα ἡδέα· τίθημι γὰρ καὶ τὴν τῶν κακῶν ἢ φαινομένων κακῶν ἢ ἀπαλλαγὴν ἢ ἀντὶ μείζονος ἐλάττονος μετάληψιν ἐν τοῖς ἀγαθοῖς (αἶρετὰ γὰρ πως), καὶ τὴν τῶν λυπηρῶν ἢ φαινομένων «λυπηρῶν» ἢ ἀπαλλαγὴν ἢ μετάληψιν ἀντὶ μείζονος ἐλαττόνων ἐν τοῖς ἡδέσιν ὡσαύτως. ληπτέον ἄρα τὰ συμφέροντα καὶ τὰ ἡδέα, πόσα καὶ ποῖα. περὶ μὲν οὖν τοῦ συμφέροντος ἐν τοῖς συμβουλευτικοῖς εἴρηται πρότερον, περὶ δὲ τοῦ ἡδέος εἰπώμεν νῦν. δεῖ

δὲ νομίζειν ἱκανοὺς εἶναι τοὺς ὅρους ἔαν ὥσι περὶ ἐκάστου μήτε ἀσαφεῖς μήτε ἀκριβεῖς.

Ὑποκείσθω δὴ ἡμῖν εἶναι τὴν ἡδονὴν κίνησιν τινα τῆς ψυχῆς καὶ κατάστασιν ἀθρόαν καὶ αἰσθητὴν εἰς τὴν ὑπάρχουσαν φύσιν, λύπην δὲ τοῦναντίον. εἰ δ' ἐστὶν ἡδονὴ τὸ [1370a] τοιοῦτον, δῆλον ὅτι καὶ ἡδὺ ἐστὶ τὸ ποιητικὸν τῆς εἰρημένης διαθέσεως, τὸ δὲ φθαρτικὸν ἢ τῆς ἐναντίας καταστάσεως ποιητικὸν λυπηρόν. ἀνάγκη οὖν ἡδὺ εἶναι τό τε εἰς τὸ κατὰ φύσιν ἰέναι ὡς ἐπὶ τὸ πολὺ, καὶ μάλιστα ὅταν ἀπειληφότα ἢ τὴν ἑαυτῶν φύσιν τὰ κατ' αὐτὴν γιγνόμενα, καὶ τὰ ἔθῃ (καὶ γὰρ τὸ εἰθισμένον ὥσπερ πεφυκὸς ἤδη γίγνεται· ὅμοιον γάρ τι τὸ ἔθος τῇ φύσει· ἐγγὺς γὰρ καὶ τὸ πολλάκις τῷ ἀεί, ἔστιν δ' ἡ μὲν φύσις τοῦ ἀεί, τὸ δὲ ἔθος τοῦ πολλάκις), καὶ τὸ μὴ βίαιον (παρὰ φύσιν γὰρ ἡ βία, διὸ τὸ ἀναγκαῖον λυπηρόν, καὶ ὀρθῶς εἴρηται

πάν γὰρ ἀναγκαῖον πρᾶγμ' ἀνιάρων ἔφυ),

τὰς δ' ἐπιμελείας καὶ τὰς σπουδὰς καὶ τὰς συντονίας λυπηράς· ἀναγκαῖα γὰρ καὶ βίαια ταῦτα, ἔαν μὴ ἐθισθῶσιν· οὕτω δὲ τὸ ἔθος ποιεῖ ἡδὺ. τὰ δ' ἐναντία ἡδέα· διὸ αἱ ῥαθυμῖαι καὶ αἱ ἀπονῖαι καὶ αἱ ἀμέλειαί καὶ αἱ παιδιαὶ καὶ αἱ ἀναπαύσεις καὶ ὁ ὕπνος τῶν ἡδέων· οὐδὲν γὰρ πρὸς ἀνάγκην τούτων. καὶ οὐκ ἂν ἡ ἐπιθυμία ἐνῇ, ἅπαν ἡδὺ· ἡ γὰρ ἐπιθυμία τοῦ ἡδέος ἐστὶν ὄρεξις. τῶν δὲ ἐπιθυμιῶν αἱ μὲν ἄλογοί εἰσιν αἱ δὲ μετὰ λόγου. λέγω δὲ ἀλόγους ὅσας μὴ ἐκ τοῦ ὑπολαμβάνειν ἐπιθυμοῦσιν (εἰσὶν δὲ τοιαῦται ὅσαι εἶναι λέγονται φύσει, ὥσπερ αἱ διὰ τοῦ σώματος ὑπάρχουσαι, οἷον ἡ τροφῆς δίψα καὶ πείνα, καὶ καθ' ἕκαστον εἶδος τροφῆς εἶδος ἐπιθυμίας, καὶ αἱ περὶ τὰ γευστὰ καὶ ἀφροδίσια καὶ ὅλως τὰ ἀπτά, καὶ περὶ ὀσμὴν [εὐωδίας] καὶ ἀκοὴν καὶ ὄψιν), μετὰ λόγου δὲ ὅσας ἐκ τοῦ πεισθῆναι ἐπιθυμοῦσιν· πολλὰ γὰρ καὶ θεάσασθαι καὶ κτήσασθαι ἐπιθυμοῦσιν ἀκούσαντες καὶ πεισθέντες. ἐπεὶ δ' ἐστὶν τὸ ἡδεσθαι ἐν τῷ αἰσθάνεσθαι τινος πάθους, ἡ δὲ φαντασία ἐστὶν αἰσθησίς τις ἀσθενής, ἀεὶ ἐν τῷ μεμνημένῳ καὶ τῷ ἐλπίζοντι ἀκολουθοῖ ἂν φαντασία τις οὐ μέμνηται ἢ ἐλπίζει· εἰ δὲ τοῦτο, δῆλον ὅτι καὶ ἡδοναὶ ἅμα μεμνημένοις καὶ ἐλπίζουσιν, ἐπεὶ καὶ αἰσθησίς· ὥστ' ἀνάγκη πάντα τὰ ἡδέα ἢ ἐν τῷ αἰσθάνεσθαι εἶναι παρόντα ἢ ἐν τῷ μεμνηθῆναι γεγεννημένα ἢ ἐν τῷ ἐλπίζειν μέλλοντα· αἰσθάνονται μὲν γὰρ τὰ παρόντα, μέμνηται δὲ τὰ γεγεννημένα, ἐλπίζουσι δὲ τὰ μέλλοντα. τὰ [1370b] μὲν οὖν μνημονευτὰ ἡδέα ἐστὶν οὐ μόνον ὅσα ἐν τῷ παρόντι, ὅτε παρῇν, ἡδέα ἦν, ἀλλ' ἔνια καὶ οὐκ ἡδέα, ἂν ἢ ὕστερον καλὸν καὶ ἀγαθὸν τὸ μετὰ τοῦτο· ὅθεν καὶ τοῦτ' εἴρηται,

ἀλλ' ἡδύ τοι σωθέντα μεμνηῖσθαι πόνων,

καὶ

μετὰ γάρ τε καὶ ἄλγεσι τέρπεται ἀνὴρ

μνημένος ὅστις πολλὰ πάθη καὶ πολλὰ ἐόργη·

τούτου δ' αἴτιον ὅτι ἡδὺ καὶ τὸ μὴ ἔχειν κακόν· τὰ δ' ἐν ἐλπίδι ὅσα παρόντα ἢ εὐφραίνειν ἢ ὠφελεῖν φαίνεται μεγάλα, καὶ ἄνευ λύπης ὠφελεῖν. ὅλως δὲ ὅσα παρόντα εὐφραίνει, καὶ ἐλπίζοντας καὶ μεμνημένους ὥς ἐπὶ τὸ πολὺ· διὸ καὶ τὸ ὀργίζεσθαι ἡδύ, ὥσπερ καὶ Ὅμηρος ἐποίησε περὶ τοῦ θυμοῦ

ὅς τε πολὺ γλυκίων μέλιτος καταλειβομένοιο

(οὐθεὶς γὰρ ὀργίζεται τῷ ἀδυνάτῳ φαινομένῳ τιμωρίας τυχεῖν, τοῖς δὲ πολὺ ὑπὲρ αὐτοὺς τῇ δυνάμει ἢ οὐκ ὀργίζονται ἢ ἥττον)· καὶ ἐν ταῖς πλείστοις ἐπιθυμίαις ἀκολουθεῖ τις ἡδονή· ἢ γὰρ μεμνημένοι ὥς ἔτυχον ἢ ἐλπίζοντες ὥς τεύξονται χαίρουσιν τινὰ ἡδονήν, οἷον οἱ τ' ἐν τοῖς πυρετοῖς ἐχόμενοι ταῖς δίψαις καὶ μεμνημένοι ὥς ἔπιον καὶ ἐλπίζοντες πιεῖσθαι χαίρουσιν, καὶ οἱ ἐρῶντες καὶ διαλεγόμενοι καὶ γράφοντες καὶ ποιοῦντές τι ἀεὶ περὶ τοῦ ἐρωμένου χαίρουσιν· ἐν ἅπασιν γὰρ τοῖς τοιούτοις μεμνημένοι οἷον αἰσθάνεσθαι οἶονται τοῦ ἐρωμένου. καὶ ἀρχὴ δὲ τοῦ ἔρωτος αὕτη γίνεται πᾶσιν, ὅταν μὴ μόνον παρόντος χαίρωσιν ἀλλὰ καὶ ἀπόντος μεμνημένοις [ἐρῶσιν] λύπη προσγένηται τῷ μὴ παρεῖναι, καὶ ἐν πένθεσι καὶ θρήνοις ὡσαύτως ἐπιγίγνεται τις ἡδονή· ἢ μὲν γὰρ λύπη ἐπὶ τῷ μὴ ὑπάρχειν, ἡδονὴ δ' ἐν τῷ μεμνηῖσθαι καὶ ὁρᾶν πῶς ἐκεῖνον καὶ ἃ ἔπραττεν καὶ οἷος ἦν· διὸ καὶ τοῦτ' εἰκότως εἴρηται

ὥς φάτο, τοῖσι δὲ πᾶσιν ὑφ' ἱμερον ὥρσε γόοιο.

καὶ τὸ τιμωρεῖσθαι ἡδύ. οὗ γὰρ τὸ μὴ τυγχάνειν λυπηρόν, τὸ τυγχάνειν ἡδύ· οἱ δ' ὀργιζόμενοι λυποῦνται ἀνυπερβλήτως μὴ τιμωρούμενοι, ἐλπίζοντες δὲ χαίρουσιν. καὶ τὸ νικᾶν ἡδύ, οὐ μόνον τοῖς φιλονίκους ἀλλὰ πᾶσιν· φαντασία γὰρ ὑπεροχῆς γίγνεται, οὐ πάντες ἔχουσιν ἐπιθυμίαν ἢ ἡρέμα ἢ μάλα. ἐπεὶ δὲ τὸ νικᾶν ἡδύ, ἀνάγκη καὶ τὰς παιδιὰς ἡδείας εἶναι τὰς [1371a] μαχητικὰς καὶ τὰς ἐριστικὰς (πολλάκις γὰρ ἐν ταύταις γίγνεται τὸ νικᾶν), καὶ ἀστραγαλίσσεις καὶ σφαιρίσεις καὶ κυβείας καὶ πεττείας. καὶ περὶ τὰς ἐσπουδασμένας δὲ παιδιὰς ὁμοίως· αἱ μὲν γὰρ ἡδεῖαι γίνονται ἂν τις ᾗ συνήθης, αἱ δ' εὐθὺς ἡδεῖαι, οἷον κυνηγία καὶ πᾶσα θηρευτική· ὅπου γὰρ ἄμιλλα, ἐνταῦθα καὶ νίκη



ἔστιν· διὸ καὶ ἡ δίκαικὴ καὶ ἡ ἐριστικὴ ἡδέα τοῖς εἰθισμένοις καὶ δυναμένοις. καὶ τιμὴ καὶ εὐδοξία τῶν ἡδίστων διὰ τὸ γίνεσθαι φαντασίαν ἐκάστω ὅτι τοιοῦτος οἷος ὁ σπουδαῖος, καὶ μᾶλλον ὅταν φῶσιν οὐς οἴεται ἀληθεύειν. τοιοῦτοι δ' οἱ ἐγγὺς μᾶλλον τῶν πόρρω, καὶ οἱ συνήθεις καὶ οἱ πολῖται τῶν ἄπωθεν, καὶ οἱ ὄντες τῶν μελλόντων, καὶ οἱ φρόνιμοι ἀφρόνων, καὶ πολλοὶ ὀλίγων· μᾶλλον γὰρ εἰκὸς ἀληθεύειν τοὺς εἰρημένους τῶν ἐναντίων· ἐπεὶ ὧν τις πολὺ καταφρονεῖ, ὥσπερ παιδίων ἢ θηρίων, οὐδὲν μέλει τῆς τούτων τιμῆς ἢ τῆς δόξης αὐτῆς γε τῆς δόξης χάριν, ἀλλ' εἶπερ, δι' ἄλλο τι. καὶ ὁ φίλος τῶν ἡδέων· τό τε γὰρ φιλεῖν ἡδύ (οὐδεὶς γὰρ φίλοινος μὴ χαίρων οἶνω) καὶ τὸ φιλεῖσθαι ἡδύ· φαντασία γὰρ καὶ ἐνταῦθα τοῦ ὑπάρχειν αὐτῷ τὸ ἀγαθὸν εἶναι, οὗ πάντες ἐπιθυμοῦσιν οἱ αἰσθανόμενοι· τὸ δὲ φιλεῖσθαι ἀγαπᾶσθαι ἐστὶν αὐτὸν δι' αὐτόν. καὶ τὸ θαυμάζεσθαι ἡδὺ διὰ <τὸ> αὐτὸ τῷ τιμᾶσθαι. καὶ τὸ κολακεύεσθαι καὶ ὁ κόλαξ ἡδέα· φαινόμενος γὰρ θαυμαστῆς καὶ φαινόμενος φίλος ὁ κόλαξ ἐστίν. καὶ τὸ ταῦτά πράττειν πολλάκις ἡδύ· τὸ γὰρ σύνηθες ἡδὺ ἦν. καὶ τὸ μεταβάλλειν ἡδύ· εἰς φύσιν γὰρ γίγνεται <τὸ> μεταβάλλειν· τὸ γὰρ αὐτὸ ἀεὶ ὑπερβολὴν ποιεῖ τῆς καθεστῶσης ἕξεως, ὅθεν εἴρηται

μεταβολὴ πάντων γλυκύ.

διὰ τοῦτο γὰρ καὶ τὰ διὰ χρόνου ἡδέα ἐστίν, καὶ ἄνθρωποι καὶ πράγματα· μεταβολὴ γὰρ ἐκ τοῦ παρόντος ἐστίν, ἅμα δὲ καὶ σπάνιον τὸ διὰ χρόνου. καὶ τὸ μανθάνειν καὶ τὸ θαυμάζειν ἡδὺ ὥς ἐπὶ τὸ πολὺ· ἐν μὲν γὰρ τῷ θαυμάζειν τὸ ἐπιθυμεῖν μαθεῖν ἐστίν, ὥστε τὸ θαυμαστὸν ἐπιθυμητόν, ἐν δὲ τῷ μανθάνειν <τὸ> εἰς τὸ κατὰ φύσιν καθίστασθαι. καὶ τὸ εὖ ποιεῖν καὶ τὸ εὖ πάσχειν τῶν ἡδέων· τὸ μὲν γὰρ εὖ πάσχειν τυγχάνειν [1371b] ὧν ἐπιθυμοῦσι, τὸ δὲ εὖ ποιεῖν ἔχειν καὶ ὑπερέχειν, ὧν ἀμφοτέρων ἐφίενται. διὰ δὲ τὸ ἡδὺ εἶναι τὸ εὐποιοητικόν, καὶ τὸ ἐπανορθοῦν ἡδὺ τοῖς ἀνθρώποις ἐστὶν τοὺς πλησίον, καὶ τὸ τὰ ἐλλιπῆ ἐπιτελεῖν. ἐπεὶ δὲ τὸ μανθάνειν τε ἡδὺ καὶ τὸ θαυμάζειν, καὶ τὰ τοιάδε ἀνάγκη ἡδέα εἶναι, οἷον τό τε μιμούμενον, ὥσπερ γραφικὴ καὶ ἀνδριαντοποιία καὶ ποιητικὴ, καὶ πᾶν ὃ ἂν εὖ μεμιμημένον ἦ, καὶ ἢ μὴ ἡδὺ αὐτὸ τὸ μεμιμημένον· οὐ γὰρ ἐπὶ τούτῳ χαίρει, ἀλλὰ συλλογισμὸς ἐστὶν ὅτι τοῦτο ἐκεῖνο, ὥστε μανθάνειν τι συμβαίνει. καὶ αἱ περιπέτειαι καὶ τὸ παρὰ μικρὸν σώζεσθαι ἐκ τῶν κινδύνων· πάντα γὰρ θαυμαστὰ ταῦτα. καὶ ἐπεὶ τὸ κατὰ φύσιν ἡδύ, τὰ συγγενῇ δὲ κατὰ φύσιν ἀλλήλοις ἐστίν, πάντα τὰ συγγενῇ καὶ ὅμοια ἡδέα ὥς ἐπὶ τὸ πολὺ, οἷον ἄνθρωπος ἀνθρώπῳ καὶ ἵππος ἵπῳ καὶ νέος νέῳ, ὅθεν καὶ αἱ παροιμίαι εἴρηγται, [ὥς] “ἤλιξ ἤλικα τέρπει”, καὶ “ὥς αἰεὶ τὸν ὁμοῖον”, καὶ “ἔγνω δὲ θῆρ θῆρα”, “καὶ γὰρ κολιοὺς παρὰ κολιοῖον”, καὶ ὅσα ἄλλα τοιαῦτα.

ἐπεὶ δὲ τὸ ὅμοιον καὶ τὸ συγγενὲς ἑαυτῷ ἡδὺ ἅπαν, μάλιστα δὲ αὐτὸς πρὸς ἑαυτὸν ἕκαστος τοῦτο πέπονθεν, ἀνάγκη πάντας φιλαύτους εἶναι ἢ μᾶλλον ἢ ἥττον· πάντα γὰρ τὰ τοιαῦτα ὑπάρχει πρὸς αὐτὸν μάλιστα. ἐπεὶ δὲ φίλαυτοι πάντες, καὶ τὰ αὐτῶν ἀνάγκη ἡδέα εἶναι πᾶσιν, οἷον ἔργα καὶ λόγους· διὸ καὶ φιλοκόλακες ὥς ἐπὶ τὸ πολὺ καὶ φιλερασταὶ καὶ φιλόμαιμοι καὶ φιλότεκνοι· αὐτῶν γὰρ ἔργον τὰ τέκνα. καὶ τὸ τὰ ἐλλιπῇ ἐπιτελεῖν ἡδύ· αὐτῶν γὰρ ἔργον ἡδὴ γίγνεται. καὶ ἐπεὶ τὸ ἄρχειν ἡδιστον, καὶ τὸ σοφὸν δοκεῖν εἶναι ἡδύ· ἀρχικὸν γὰρ τὸ φρονεῖν, ἔστιν δ' ἡ σοφία πολλῶν καὶ θαυμαστῶν ἐπιστήμη. ἔτι ἐπεὶ φιλότιμοι ὥς ἐπὶ τὸ πολὺ, ἀνάγκη καὶ τὸ ἐπιτιμᾶν τοῖς πέλας ἡδὺ εἶναι καὶ τὸ ἄρχειν, καὶ τὸ ἐν ᾧ δοκεῖ βέλτιστος αὐτὸς αὐτοῦ εἶναι, ἐνταῦθα διατρίβειν, ὥσπερ καὶ ὁ ποιητὴς φησι κάπῃ τοῦτ' ἐπείγει,

νέμων ἑκάστης ἡμέρας πλεῖστον μέρος,

ἵν' αὐτὸς αὐτοῦ τυγχάνει βέλτιστος ὢν.

ὁμοίως δὲ καὶ ἐπεὶ ἡ παιδιὰ τῶν ἡδέων καὶ πᾶσα ἄνεσις, καὶ ὁ γέλως τῶν ἡδέων, ἀνάγκη καὶ τὰ γελοῖα ἡδέα εἶναι, καὶ [1372a] ἀνθρώπους καὶ λόγους καὶ ἔργα· διώρισται δὲ περὶ γελοίων χωρὶς ἐν τοῖς περὶ ποιητικῆς. περὶ μὲν οὖν ἡδέων εἰρήσθω ταῦτα, τὰ δὲ λυπηρὰ ἐκ τῶν ἐναντίων τούτοις φανερά.

Ὡν μὲν οὖν ἔνεκα ἀδικοῦσιν, ταῦτ' ἐστίν· πῶς δὲ ἔχοντες καὶ τίνας, λέγωμεν νῦν. αὐτοὶ μὲν οὖν ὅταν οἴωνται δυνατόν εἶναι τὸ πρᾶγμα πραχθῆναι καὶ αὐτοῖς δυνατόν, εἴτ' ἂν λαθεῖν πράξαντες, ἢ μὴ λαθόντες μὴ δοῦναι δίκην, ἢ δοῦναι μὲν ἄλλ' ἐλάττω τὴν ζημίαν εἶναι τοῦ κέρδους αὐτοῖς ἢ ὧν κήδονται. ποῖα μὲν οὖν δυνατὰ φαίνεται καὶ ποῖα ἀδύνατα, ἐν τοῖς ὕστερον ῥηθήσεται (κοινὰ γὰρ ταῦτα πάντων τῶν λόγων)· αὐτοὶ δ' οἴονται δυνατοὶ εἶναι μάλιστα ἀζήμιοι ἀδικεῖν οἱ εἰπεῖν δυνάμενοι καὶ οἱ πρακτικοὶ καὶ οἱ ἔμπειροι πολλῶν ἀγώνων, κἂν πολὺφιλοι ὦσιν, κἂν πλούσιοι. καὶ μάλιστα μὲν ἂν αὐτοὶ ὦσιν ἐν τοῖς εἰρημένοις οἴονται δύνασθαι, εἰ δὲ μὴ, κἂν ὑπάρχωσιν αὐτοῖς τοιοῦτοι φίλοι ἢ ὑπηρέται ἢ κοινωνοί· διὰ γὰρ ταῦτα δύνανται καὶ πράττειν καὶ λανθάνειν καὶ μὴ δοῦναι δίκην. καὶ ἔαν φίλοι ὦσιν τοῖς ἀδικουμένοις ἢ τοῖς κριταῖς· οἱ μὲν γὰρ φίλοι ἀφύλακτοί τε πρὸς τὸ ἀδικεῖσθαι καὶ προσκαταλλάττονται πρὶν ἐπεξελθεῖν, οἱ δὲ κριταὶ χαρίζονται οἷς ἂν φίλοι ὦσι, καὶ ἢ ὅλως ἀφιᾶσιν ἢ μικροῖς ζημιόουσιν. λαθητικὰ δ' εἰσὶν οἱ τ' ἐναντίοι τοῖς ἐγκλήμασιν, οἷον ἀσθενεῖς περὶ αἰκίας [καὶ] ὁ πένης καὶ ὁ αἰσχροὺς περὶ μοιχείας, καὶ τὰ λίαν ἐν φανερώ καὶ ἐν ὀφθαλμοῖς· ἀφύλακτα

γὰρ διὰ τὸ ὅλως μηδένα ἂν οἶσθαι. καὶ τὰ τηλικαῦτα καὶ τὰ τοιαῦτα οἷα μηδ' ἂν εἶς· ἀφύλακτα γὰρ καὶ ταῦτα· πάντες γὰρ τὰ εἰωθότα, ὥσπερ ἄρρωστήματα, φυλάττονται καὶ τὰδικήματα, ὃ δὲ μηδεὶς πω ἠρρώστηκεν, οὐδεὶς εὐλαβεῖται. καὶ οἷς μηδεὶς ἐχθρὸς ἢ πολλοί· οἱ μὲν γὰρ οἴονται λήσειν διὰ τὸ μὴ φυλάττεσθαι, οἱ δὲ λανθάνουσι διὰ τὸ μὴ δοκεῖν ἂν ἐπιχειρῆσαι φυλαττομένοις, καὶ διὰ τὸ ἀπολογίαν ἔχειν ὅτι οὐκ ἂν ἐνεχείρησαν. καὶ οἷς ὑπάρχει κρύψις ἢ τρόποις ἢ τόποις, ἢ διαθέσεις εὐποροὶ. καὶ ὅσοις μὴ λανθάνουσιν ἔστιν δίωσις δίκης ἢ ἀναβολὴ χρόνου ἢ διαφθορὰ κριτῶν. καὶ οἷς, ἐὰν γένηται ζημία, ἔστιν δίωσις τῆς ἐκτίσεως ἢ ἀναβολὴ χρόνιος. ἢ «εἰ» δι' ἀπορίαν μηδὲν ἔχει ὅ τι ἀπολέσει. καὶ οἷς τὰ μὲν κέρδη φανερὰ ἢ μεγάλα ἢ ἐγγύς, αἱ δὲ ζημίαι μικραὶ ἢ ἀφανεῖς [1372b] ἢ πόρρω. καὶ ὧ μὴ ἔστιν τιμωρία ἴση τῇ ὠφελείᾳ, οἷον δοκεῖ ἡ τυρρανίς. καὶ ὅσοις τὰ μὲν ἀδικήματα λήμματα, αἱ δὲ ζημίαι ὀνειδή μόνον. καὶ οἷς τοῦναντίον τὰ μὲν ἀδικήματα εἰς ἔπαινόν τινα, οἷον εἰ συνέβη ἅμα τιμωρῆσασθαι ὑπὲρ πατρὸς ἢ μητρός, ὥσπερ Ζήνωνι, αἱ δὲ ζημίαι εἰς χρήματα ἢ φυγὴν ἢ τοιοῦτόν τι· δι' ἀμφοτέρω γὰρ ἀδικοῦσι καὶ ἀμφοτέρως ἔχοντες, πλὴν οὐχ οἱ αὐτοὶ ἀλλ' οἱ ἐναντίοι τοῖς ἡθεσιν. καὶ οἱ πολλάκις ἢ λεληθότες ἢ μὴ ἐζημιωμένοι, καὶ οἱ πολλάκις ἀποτετυχηκότες (εἰσὶ γὰρ τινες καὶ ἐν τοῖς τοιούτοις, ὥσπερ ἐν τοῖς πολεμικοῖς, οἷοι ἀναμάχεσθαι). καὶ οἷς ἂν παραχρῆμα ἢ τὸ ἡδύ, τὸ δὲ λυπηρὸν ὕστερον, ἢ τὸ κέρδος, ἢ δὲ ζημία ὕστερον· οἱ γὰρ ἀκρατεῖς τοιοῦτοι, ἔστιν δὲ ἀκρασία περὶ πάντα ὅσων ὀρέγονται. καὶ οἷς ἂν τοῦναντίον τὸ μὲν λυπηρὸν ἤδη ἢ ἢ ἢ ζημία, τὸ δὲ ἡδύ καὶ «τὸ» ὠφέλιμον ὕστερα καὶ χρονιώτερα· οἱ γὰρ ἐγκρατεῖς καὶ φρονιμώτεροι τὰ τοιαῦτα διώκουσιν. καὶ οἷς ἂν ἐνδέχεται διὰ τύχην δόξαι πρᾶξαι ἢ δι' ἀνάγκην ἢ διὰ φύσιν ἢ δι' ἔθος, καὶ ὅλως ἀμαρτεῖν ἀλλὰ μὴ ἀδικεῖν. καὶ οἷς ἂν ἢ τοῦ ἐπεικοῦς τυχεῖν. καὶ ὅσοι ἂν ἐνδεεῖς ὦσιν· διχῶς δέ εἰσιν ἐνδεεῖς· ἢ γὰρ ὡς ἀναγκαίου, ὥσπερ οἱ πένητες, ἢ ὡς ὑπερβολῆς, ὥσπερ οἱ πλούσιοι. καὶ οἱ σφόδρα εὐδοκιμοῦντες καὶ οἱ σφόδρα ἀδοξοῦντες, οἱ μὲν ὡς οὐ δόξοντες, οἱ δ' ὡς οὐδὲν μᾶλλον ἀδοξοῦντες.

αὐτοὶ μὲν οὖν οὕτως ἔχοντες ἐπιχειροῦσιν «ἀδικεῖν», ἀδικοῦσι δὲ τοὺς τοιούτους καὶ τὰ τοιαῦτα, τοὺς ἔχοντας ὧν αὐτοὶ ἐνδεεῖς ἢ εἰς τὰναγκαῖα ἢ εἰς ὑπεροχὴν ἢ εἰς ἀπόλαυσιν, καὶ τοὺς πόρρω καὶ τοὺς ἐγγύς· τῶν μὲν γὰρ ἡ λῆψις ταχεῖα, τῶν δ' ἡ τιμωρία βραδεῖα, οἷον οἱ συλῶντες τοὺς Καρχηδονίους. καὶ τοὺς μὴ εὐλαβεῖς μηδὲ φυλακτικοὺς ἀλλὰ πιστευτικούς· ῥάδιον γὰρ πάντας λαθεῖν. καὶ τοὺς ῥαθύμους· ἐπιμελοῦς γὰρ τὸ ἐπεξελθεῖν. καὶ τοὺς αἰσχυνητλοῦς· οὐ γὰρ μαχητικοὶ περὶ κέρδους. καὶ τοὺς ὑπὸ πολλῶν ἀδικηθέντας καὶ μὴ ἐπεξελθόντας, ὡς ὄντας κατὰ τὴν παροιμίαν τούτους Μυσῶν λείαν. καὶ τοὺς μηδεπώποτε καὶ τοὺς πολλάκις· ἀμφοτέροι γὰρ

ἀφύλακτοι, οἱ μὲν ὥς οὐδέποτε, οἱ δ' ὥς οὐκ ἂν ἔτι. καὶ τοὺς διαβεβλημένους ἢ εὐδιαβόλους· οἱ τοιοῦτοι γὰρ οὔτε προαιροῦνται, φοβούμενοι τοὺς κριτάς, οὔτε δύνανται πείθιν, ὥς μισούμενοι καὶ φθονούμενοι. καὶ πρὸς οὓς [1373a] ἔχουσι πρόφασιν ἢ προγόνων ἢ αὐτῶν ἢ φίλων ἢ ποιησάντων κακῶς ἢ μελλησάντων, ἢ αὐτοὺς ἢ προγόνους ἢ ὧν κήδονται· ὥσπερ γὰρ ἡ παροιμία, προφάσεως δεῖται μόνον ἡ πονηρία. καὶ τοὺς ἐχθροὺς καὶ τοὺς φίλους· τοὺς μὲν γὰρ ῥάδιον, τοὺς δὲ ἡδύ. καὶ τοὺς ἀφίλους, καὶ τοὺς μὴ δεινοὺς εἰπεῖν ἢ πρᾶξαι· ἢ γὰρ οὐκ ἐγχειροῦσιν ἐπεξίεναι, ἢ καταλλάττονται, ἢ οὐδὲν περαίνουσιν. καὶ οἷς μὴ λυσιτελεῖ διατρίβειν ἐπιτηροῦσιν ἢ δίκην ἢ ἔκτισιν, οἷον οἱ ξένοι καὶ αὐτουργοί· ἐπὶ μικρῷ τε γὰρ διαλύονται καὶ ῥαδίως καταπαύονται. καὶ τοὺς πολλὰ ἡδικηκότας, ἢ τοιαῦτα οἷα ἀδικοῦνται· ἐγγὺς γάρ τι δοκεῖ τοῦ μὴ ἀδικεῖν εἶναι ὅταν τι τοιοῦτον ἀδικηθῇ τις οἷον εἰώθει καὶ αὐτὸς ἀδικεῖν· λέγω δ' οἷον εἴ τις τὸν εἰωθότα ὑβρίζειν αἰκίσαιτο. καὶ τοὺς ἢ πεποιηκότας κακῶς ἢ βουληθέντας ἢ βουλομένους ἢ ποιήσοντας· ἔχει γὰρ καὶ τὸ ἡδὺ καὶ τὸ καλόν, καὶ ἐγγὺς τοῦ μὴ ἀδικεῖν φαίνεται. καὶ οἷς χαριοῦνται ἢ φίλοις ἢ θαυμαζομένοις ἢ ἐρωμένοις ἢ κυρίοις ἢ ὅλως πρὸς οὓς ζῶσιν αὐτοί. καὶ πρὸς οὓς ἔστιν ἐπεικειάς τυχεῖν. καὶ οἷς ἂν ἐγκεκληκότες ὦσιν καὶ προδιακεχωρηκότες, οἷον Κάλλιππος ἐποίησεν τὰ περὶ Δίωνα· καὶ γὰρ τὰ τοιαῦτα ἐγγὺς τοῦ μὴ ἀδικεῖν φαίνεται. καὶ τοὺς ὑπ' ἄλλων μέλλοντας, ἂν μὴ αὐτοί, ὥς οὐκέτι ἐνδεχόμενον βουλευσασθαι, ὥσπερ λέγεται Αἰνεσίδημος Γέλωνι πέμψαι κοττάβια ἀνδραποδισαμένῳ < >, ὅτι ἔφθασεν, ὥς καὶ αὐτὸς μέλλων. καὶ οὓς ἀδικήσαντες δυνήσονται πολλὰ δίκαια πράττειν, ὥς ῥαδίως ἰασόμενοι, ὥσπερ ἔφη Ἰάσων ὁ Θετταλὸς δεῖν ἀδικεῖν ἔνια, ὅπως δύνηται καὶ δίκαια πολλὰ ποιεῖν. καὶ ἃ πάντες ἢ πολλοὶ ἀδικεῖν εἰώθασιν· συγγνώμης γὰρ οἷονται τεύξεσθαι. καὶ τὰ ῥάδια κρύψαι· τοιαῦτα δὲ ὅσα ταχὺ ἀναλίσκεται, οἷον τὰ ἐδώδιμα, ἢ τὰ εὐμετάβλητα σχήμασιν ἢ χρώμασιν ἢ κράσεσιν, ἢ ἃ πολλαχοῦ ἀφανίσαι εὐπορον· τοιαῦτα δὲ τὰ εὐβάστακτα καὶ ἐν μικροῖς τόποις ἀφανιζόμενα. καὶ οἷς ἀδιάφορα καὶ ὅμοια πολλὰ προὔπῃρχεν τῷ ἀδικοῦντι. καὶ ὅσα αἰσχύνονται οἱ ἀδικηθέντες λέγειν, οἷον γυναικῶν οἰκείων ὕβρεις ἢ εἰς αὐτοὺς ἢ εἰς υἱεῖς. καὶ ὅσα φιλοδικεῖν δόξειεν ἂν ὁ ἐπεξιὼν· τοιαῦτα δὲ τὰ μικρὰ καὶ ἐφ' οἷς συγγνώμη. ὥς μὲν οὖν ἔχοντες ἀδικοῦσι, καὶ ποῖα καὶ ποίους καὶ διὰ τί, σχεδὸν ταῦτ' ἐστίν.

[1373b] Τὰ δ' ἀδικήματα πάντα καὶ τὰ δικαιώματα διέλωμεν ἀρξάμενοι πρῶτον ἐντεῦθεν. ὠρίσται δὴ τὰ δίκαια καὶ τὰ ἄδικα πρὸς τε νόμους δύο καὶ πρὸς οὓς ἐστὶ διχῶς.

λέγω δὲ νόμον τὸν μὲν ἴδιον, τὸν δὲ κοινόν, ἴδιον μὲν τὸν ἐκάστοις

ὠρισμένον πρὸς αὐτούς, καὶ τοῦτον τὸν μὲν ἄγραφον, τὸν δὲ γεγραμμένον, κοινὸν δὲ τὸν κατὰ φύσιν. ἔστι γάρ τι ὃ μαντεύονται πάντες, φύσει κοινὸν δίκαιον καὶ ἄδικον, κἂν μηδεμία κοινωνία πρὸς ἀλλήλους ἢ μηδὲ συνθήκη, οἷον καὶ ἡ Σοφοκλέους Ἀντιγόνη φαίνεται λέγουσα, ὅτι δίκαιον ἀπειρημένου θάψαι τὸν Πολυνείκη, ὡς φύσει ὃν τοῦτο δίκαιον.

οὐ γάρ τι νῦν γε κᾶχθές, ἀλλ' αἰεί ποτε

ζῇ τοῦτο, κούδεις οἶδεν ἐξ ὅτου φάνη.

καὶ ὡς Ἐμπεδοκλῆς λέγει περὶ τοῦ μὴ κτείνειν τὸ ἔμψυχον· τοῦτο γὰρ οὐ τισὶ μὲν δίκαιον τισὶ δ' οὐ δίκαιον,

ἀλλὰ τὸ μὲν πάντων νόμιμον διὰ τ' εὐρυμέδοντος

αἰθέρος ἠνεκέως τέταται διὰ τ' ἀπλέτου αὐγῆς.

καὶ ὡς ἐν τῷ Μεσσηνιακῷ λέγει Ἀλκιδάμας, “ἐλευθέρους ἀφῆκε πάντας θεός, οὐδένα δοῦλον ἢ φύσις πεποίηκεν”. πρὸς οὓς δέ, διώρισταί δίχα· ὠρισταί γὰρ πρὸς τὸ κοινὸν ἢ πρὸς ἓνα τῶν κοινωνούντων ἃ δεῖ πράττειν καὶ μὴ πράττειν· διὸ καὶ τᾶδικήματα καὶ τὰ δικαιώματα διχῶς ἔστιν ἀδικεῖν καὶ δικαιοπραγεῖν· ἢ γὰρ πρὸς ἓνα καὶ ὠρισμένον ἢ πρὸς τὸ κοινόν· ὁ γὰρ μοιχεύων καὶ τύπτων ἀδικεῖ τινὰ τῶν ὠρισμένων, ὁ δὲ μὴ στρατευόμενος τὸ κοινόν.

ἀπάντων δὴ τῶν ἀδικημάτων διηρημένων, καὶ τῶν μὲν ὄντων πρὸς τὸ κοινὸν τῶν δὲ πρὸς ἄλλον ἢ πρὸς ἄλλους, ἀναλαμβάνοντες τί ἐστὶν τὸ ἀδικεῖσθαι λέγωμεν. ἔστι δὴ τὸ ἀδικεῖσθαι τὸ ὑπὸ ἐκόντος τὰ ἄδικα πάσχειν· τὸ γὰρ ἀδικεῖν ὠρισταί πρότερον ἐκούσιον εἶναι. ἐπεὶ δ' ἀνάγκη τὸν ἀδικούμενον βλάπτεσθαι καὶ ἐκουσίως βλάπτεσθαι, αἱ μὲν βλάβαι ἐκ τῶν πρότερον φανεραὶ εἰσιν· τὰ γὰρ ἀγαθὰ καὶ τὰ κακὰ εἴρηται καθ' αὐτὰ πρότερον καὶ τὰ ἐκούσια, ὅτι ἔστιν ὅσα εἰδότες, ὥστ' ἀνάγκη πάντα τὰ ἐγκλήματα ἢ πρὸς τὸ κοινὸν ἢ πρὸς τὸ ἴδιον εἶναι, καὶ ἡ ἀγνοοῦντος καὶ ἄκοντος ἢ ἐκόντος καὶ εἰδότος, καὶ τούτων τὰ μὲν προελομένου τὰ δὲ διὰ πάθος. περὶ μὲν οὖν θυμοῦ ῥηθήσεται ἐν τοῖς περὶ τὰ πάθη, ποῖα δὲ προαιροῦνται καὶ πῶς ἔχοντες εἴρηται πρότερον. ἐπεὶ δ' ὁμολογοῦντες πολλάκις [1374a] πεπραχέναι ἢ τὸ ἐπίγραμμα οὐχ ὁμολογοῦσιν ἢ περὶ ὃ τὸ ἐπίγραμμα, οἷον λαβεῖν μὲν ἄλλ' οὐ κλέψαι, καὶ πατάξαι πρότερον ἄλλ' οὐχ ὑβρίσαι, καὶ συγγενέσθαι ἄλλ' οὐ μοιχεῦσαι, ἢ κλέψαι μὲν ἄλλ' οὐχ ἱεροσυλῆσαι (οὐ γὰρ θεοῦ τι), ἢ ἐπεργάσασθαι μὲν ἄλλ' οὐ δημοσίαν, ἢ διειλέχθαι μὲν τοῖς πολεμίοις ἄλλ' οὐ προδοῦναι, διὰ ταῦτα δέοι ἂν καὶ περὶ

τούτων διωρίσθαι, τί κλοπή, τί ὕβρις, τί μοιχεία, ὅπως ἐάν τε ὑπάρχειν ἐάν τε μὴ ὑπάρχειν βουλόμεθα δεικνύναι ἔχωμεν ἐμφανίζειν τὸ δίκαιον. ἔστι δὲ πάντα τὰ τοιαῦτα περὶ τοῦ ἄδικον εἶναι καὶ φαῦλον ἢ μὴ ἄδικον [ἢ] ἀμφισβήτησις· ἐν γὰρ τῇ προαιρέσει ἢ μοχθηρία καὶ τὸ ἀδικεῖν, τὰ δὲ τοιαῦτα τῶν ὀνομάτων προσσημαίνει τὴν προαίρεσιν, οἷον ὕβρις καὶ κλοπή· οὐ γὰρ εἰ ἐπάταξεν πάντως ὕβρισεν, ἀλλ' εἰ ἔνεκά του, οἷον τοῦ ἀτιμάσαι ἐκεῖνον ἢ αὐτὸς ἡσθῆναι. οὐδὲ πάντως, εἰ λάθρα ἔλαβεν, ἔκλεψεν, ἀλλ' εἰ ἐπὶ βλάβῃ «τούτου ἀφ' οὗ ἔλαβε» καὶ σφετερισμῷ ἑαυτοῦ. ὁμοίως δὲ καὶ περὶ τῶν ἄλλων ἔχει ὥσπερ καὶ περὶ τούτων.

ἐπεὶ δὲ τῶν δικαίων καὶ τῶν ἀδίκων ἦν δύο εἶδη (τὰ μὲν γὰρ γεγραμμένα τὰ δ' ἀγραφα), περὶ ὧν μὲν οἱ νόμοι ἀγορεύουσιν εἴρηται, τῶν δ' ἀγράφων δύο ἔστιν εἶδη· ταῦτα δ' ἐστὶν τὰ μὲν καθ' ὑπερβολὴν ἀρετῆς καὶ κακίας, ἐφ' οἷς ὀνειδέη καὶ ἔπαινοι καὶ ἀτιμιαί, καὶ τιμαὶ καὶ δωρεαί (οἷον τὸ χάριν ἔχειν τῷ ποιήσαντι εὖ καὶ ἀντευποιεῖν τὸν εὖ ποιήσαντα, καὶ βοηθητικὸν εἶναι τοῖς φίλοις, καὶ ὅσα ἄλλα τοιαῦτα), τὰ δὲ τοῦ ἰδίου νόμου καὶ γεγραμμένου ἔλλειμμα. τὸ γὰρ ἐπαικὲς δοκεῖ δίκαιον εἶναι, ἔστιν δὲ ἐπαικὲς τὸ παρὰ τὸν γεγραμμένον νόμον δίκαιον. συμβαίνει δὲ τοῦτο τὰ μὲν ἐκόντων τὰ δὲ ἀκόντων τῶν νομοθετῶν, ἀκόντων μὲν ὅταν λάθῃ, ἐκόντων δ' ὅταν μὴ δύνωνται διορίσαι, ἀλλ' ἀναγκαῖον μὲν ἢ καθόλου εἰπεῖν, μὴ ἢ δέ, ἀλλ' ὥς ἐπὶ τὸ πολὺ, καὶ ὅσα μὴ ῥάδιον διορίσαι δι' ἀπειρίαν, οἷον τὸ τρῶσαι σιδήρῳ πηλίκῳ καὶ ποίῳ τινί· ὑπολείποι γὰρ ἂν ὁ αἰὼν διαριθμοῦντα. ἂν οὖν ἢ ἀόριστον, δέη δὲ νομοθετῆσαι, ἀνάγκη ἀπλῶς εἰπεῖν, ὥστε κἂν δακτύλιον ἔχων ἐπάρηται τὴν χεῖρα ἢ πατάξῃ, κατὰ μὲν τὸν γεγραμμένον νόμον ἔνοχος ἐστὶ καὶ ἀδικεῖ, [1374b] κατὰ δὲ τὸ ἀληθὲς οὐκ ἀδικεῖ, καὶ τὸ ἐπαικὲς τοῦτο ἐστίν. εἰ δὲ ἐστὶ τὸ εἰρημένον τὸ ἐπαικὲς, φανερόν ποῖά ἐστὶ τὰ ἐπαικῇ καὶ οὐκ ἐπαικῇ, καὶ ποῖοι οὐκ ἐπαικεῖς ἄνθρωποι· ἐφ' οἷς τε γὰρ δεῖ συγγνώμην ἔχειν, ἐπαικῇ ταῦτα, καὶ τὸ τὰ ἀμαρτήματα καὶ τὰ ἀδικήματα μὴ τοῦ ἴσου ἀξιοῦν, μηδὲ τὰ ἀμαρτήματα καὶ τὰ ἀτυχήματα· [ἔστιν] ἀτυχήματα μὲν «γὰρ» ὅσα παράλογα καὶ μὴ ἀπὸ μοχθηρίας, ἀμαρτήματα δὲ ὅσα μὴ παράλογα καὶ μὴ ἀπὸ πονηρίας, ἀδικήματα δὲ ὅσα μήτε παράλογα ἀπὸ πονηρίας τέ ἐστίν· τὰ γὰρ δι' ἐπιθυμίαν ἀπὸ πονηρίας. καὶ τὸ τοῖς ἀνθρώπινους συγγινώσκειν ἐπαικὲς. καὶ τὸ μὴ πρὸς τὸν νόμον ἀλλὰ πρὸς τὸν νομοθέτην, καὶ μὴ πρὸς τὸν λόγον ἀλλὰ πρὸς τὴν διάνοιαν τοῦ νομοθέτου σκοπεῖν, καὶ μὴ πρὸς τὴν πρᾶξιν ἀλλὰ πρὸς τὴν προαίρεσιν, καὶ μὴ πρὸς τὸ μέρος ἀλλὰ πρὸς τὸ ὅλον, μηδὲ ποῖός τις νῦν, ἀλλὰ ποῖός τις ἦν αἰεὶ ἢ ὥς ἐπὶ τὸ πολὺ. καὶ τὸ μνημονεύειν μᾶλλον ὧν ἔπαθεν ἀγαθῶν ἢ κακῶν, καὶ ἀγαθῶν ὧν ἔπαθε μᾶλλον ἢ «ῶν» ἐποίησεν. καὶ τὸ ἀνέχεσθαι ἀδικούμενον. καὶ τὸ μᾶλλον λόγῳ ἐθέλειν κρίνεσθαι ἢ ἔργῳ. καὶ τὸ εἰς δίκαιον μᾶλλον ἢ

εἰς δίκην βούλεσθαι ἵεναι· ὁ γὰρ διαιτητὴς τὸ ἐπικεῖν ὁρᾷ, ὁ δὲ δικαστὴς τὸν νόμον· καὶ τούτου ἕνεκα διαιτητὴς εὐρέθη, ὅπως τὸ ἐπικεῖν ἰσχύῃ.

περὶ μὲν οὖν τῶν ἐπικεῖν διωρίσθω τὸν τρόπον τοῦτον.

Ἀδίκημα δὲ μείζον, ὅσω ἂν ἀπὸ μείζονος ἢ ἀδικίας· διὸ τὰ ἐλάχιστα μέγιστα, οἷον ὁ Μελανώπου Καλλίστρατος κατηγορεῖ, ὅτι παρελογίσατο τρία ἡμιωβέλια ἱερὰ τοὺς ναοποιούς· ἐπὶ δικαιοσύνης δὲ τούναντίον. ἔστιν δὲ ταῦτα ἐκ τοῦ ἐνυπάρχειν τῇ δυνάμει· ὁ γὰρ τρία ἡμιωβέλια ἱερὰ κλέψας κἂν ὅτιοῦν ἀδικήσειεν. ὅτε μὲν δὴ οὕτω τὸ μείζον, ὅτε δ' ἐκ τοῦ βλάβους κρίνεται. καὶ οὐ μὴ ἔστιν ἴση τιμωρία, ἀλλὰ πᾶσα ἐλάττων. καὶ οὐ μὴ ἔστιν ἴσας· χαλεπὸν γὰρ καὶ ἀδύνατον. καὶ οὐ μὴ ἔστιν δίκην λαβεῖν τὸν παθόντα· ἀνίατον γάρ· ἢ γὰρ δίκη καὶ κόλασις καὶ ἴσας. καὶ εἰ ὁ παθὼν καὶ ἀδικηθεὶς αὐτὸς αὐτὸν μεγάλως ἐκόλασεν· ἔτι γὰρ μείζονι ὁ ποιήσας δίκαιος κολασθῆναι, οἷον Σοφοκλῆς ὑπὲρ Εὐκτῆμονος συνηγορῶν, ἐπεὶ ἀπέσφαξεν [1375a] ἑαυτὸν ὑβρισθεὶς, οὐ τιμήσειν ἔφη ἐλάττονος ἢ ὁ παθὼν ἑαυτῷ ἐτίμησεν. καὶ ὁ μόνος ἢ πρῶτος ἢ μετ' ὀλίγων πεποίηκεν. καὶ τὸ πολλάκις τὸ αὐτὸ ἀμαρτάνειν [μέγα]. καὶ δι' ὃ ἂν ζητηθῇ καὶ εὐρεθῇ τὰ κωλύοντα καὶ ζημιοῦντα, οἷον ἐν Ἀργεὶ ζημιοῦνται δι' ὃν ἂν νόμος τεθῇ καὶ δι' οὓς τὸ δεσμωτήριον ὠκοδομήθη. καὶ τὸ θηριωδέστερον ἀδίκημα μείζον. καὶ ὁ ἐκ προνοίας μᾶλλον. καὶ ὁ οἱ ἀκούοντες φοβοῦνται μᾶλλον ἢ ἐλεοῦσιν. καὶ τὰ μὲν ῥητορικά ἐστι τοιαῦτα, ὅτι πολλὰ ἀνήρηκεν ἢ ὑπερβέβηκεν, οἷον ὅρκους, δεξιὰς, πίστεις, ἐπιγαμίας· πολλῶν γὰρ ἀδικημάτων ὑπεροχή. καὶ τὸ ἐνταῦθα οὐ κολάζονται οἱ ἀδικοῦντες, ὅπερ ποιοῦσιν οἱ ψευδομαρτυροῦντες· ποῦ γὰρ οὐκ ἂν ἀδικήσαιεν, εἴ γε καὶ ἐν τῷ δικαστηρίῳ; καὶ ἐφ' οἷς αἰσχύνῃ μάλιστα. καὶ εἰ τοῦτον ὅφ' οὐ εὐ πέπονθεν· πλείω γὰρ ἀδικεῖ, ὅτι τε κακῶς ποιεῖ καὶ ὅτι οὐκ εὔ. καὶ ὁ παρὰ τὰ ἄγραφα δίκαια· ἀμείνωνος γὰρ μὴ δι' ἀνάγκην δίκαιον εἶναι· τὰ μὲν οὖν γεγραμμένα ἐξ ἀνάγκης, τὰ δ' ἄγραφα οὐ. ἄλλον δὲ τρόπον, εἰ παρὰ τὰ γεγραμμένα· ὁ γὰρ τὰ φοβερὰ ἀδικῶν καὶ τὰ ἐπιζήμια καὶ τὰ ἀζήμια ἀδικήσειεν ἂν. περὶ μὲν οὖν ἀδικήματος μείζονος καὶ ἐλάττονος εἴρηται.

Περὶ δὲ τῶν ἀτέχνων καλουμένων πίστεων ἐχόμενόν ἐστι τῶν εἰρημένων ἐπιδραμεῖν· ἴδιαι γὰρ αὗται τῶν δικανικῶν. εἰσὶν δὲ πέντε τὸν ἀριθμόν, νόμοι, μάρτυρες, συνθηκαί, βάσανοι, ὅρκοι. πρῶτον μὲν οὖν περὶ νόμων εἴπωμεν, πῶς χρηστέον καὶ προτρέποντα καὶ ἀποτρέποντα καὶ κατηγοροῦντα καὶ ἀπολογούμενον. φανερόν γὰρ ὅτι, ἐὰν μὲν ἐναντίος ἢ ὁ γεγραμμένος τῷ πράγματι, τῷ κοινῷ χρηστέον καὶ τοῖς ἐπικεστέροις καὶ δικαιοτέροις. καὶ ὅτι τὸ “γνώμη τῇ ἀρίστη” τοῦτ' ἐστίν, τὸ μὴ παντελῶς χρῆσθαι τοῖς

γεγραμμένοις. καὶ ὅτι τὸ μὲν ἐπεικὲς ἀεὶ μένει καὶ οὐδέποτε μεταβάλλει, οὐδ' ὁ κοινός (κατὰ φύσιν γὰρ ἐστίν), οἱ δὲ γεγραμμένοι πολλάκις, ὅθεν εἴρηται τὰ ἐν τῇ Σοφοκλέους Ἀντιγόνη· ἀπολογεῖται γὰρ ὅτι ἔθαψε παρὰ τὸν τοῦ Κρέοντος νόμον, ἀλλ' οὐ παρὰ τὸν ἄγραφον,

[1375b] οὐ γάρ τι νῦν γε κάχθές, ἀλλ' ἀεὶ ποτε ...

ταῦτ' οὖν ἐγὼ οὐκ ἔμελλον ἀνδρὸς οὐδενός ....

καὶ ὅτι τὸ δίκαιόν ἐστιν ἀληθές τε καὶ συμφέρον, ἀλλ' οὐ τὸ δοκοῦν, ὥστ' οὐ νόμος ὁ γεγραμμένος· οὐ γὰρ ποιεῖ τὸ ἔργον τὸ τοῦ νόμου. καὶ ὅτι ὥσπερ ἀργυρογνῶμων ὁ κριτής ἐστίν, ὅπως διακρίνη τὸ κίβδηλον δίκαιον καὶ τὸ ἀληθές. καὶ ὅτι βελτίονος ἀνδρὸς τὸ τοῖς ἀγράφοις ἢ τοῖς γεγραμμένοις χρῆσθαι καὶ ἐμμένειν. καὶ εἴ που ἐναντίος νόμῳ εὐδοκιμοῦντι ἢ καὶ αὐτὸς αὐτῷ, οἷον ἐνίοτε ὁ μὲν κελεύει κύρια εἶναι ἅττ' ἂν συνθῶνται, ὁ δ' ἀπαγορεύει μὴ συντίθεσθαι παρὰ τὸν νόμον. καὶ εἰ ἀμφίβολος, ὥστε στρέφειν καὶ ὁρᾶν ἐπὶ ποτέραν [τὴν] ἀγωγὴν ἢ τὸ δίκαιον ἐφαρμόσει ἢ τὸ συμφέρον, εἴτα τούτῳ χρῆσθαι. καὶ εἰ τὰ μὲν πράγματα ἐφ' οἷς ἐτέθη ὁ νόμος μηκέτι μένει, ὁ δὲ νόμος, πειρατέον τοῦτο δηλοῦν καὶ μάχεσθαι ταύτῃ πρὸς τὸν νόμον. ἐὰν δὲ ὁ γεγραμμένος ἢ πρὸς τὸ πρᾶγμα, τό τε “γνώμη τῇ ἀρίστῃ” λεκτέον ὅτι οὐ τοῦ παρὰ τὸν νόμον ἔνεκα δικάζειν ἐστίν, ἀλλ' ἵνα, ἐὰν ἀγνοήσῃ τί λέγει ὁ νόμος, μὴ ἐμπορκῇ. καὶ ὅτι οὐ τὸ ἀπλῶς ἀγαθὸν αἰρεῖται οὐδεὶς, ἀλλὰ τὸ αὐτῷ. καὶ ὅτι οὐδὲν διαφέρει ἢ μὴ κεῖσθαι ἢ μὴ χρῆσθαι. καὶ ὅτι ἐν ταῖς ἄλλαις τέχναις οὐ λυσιτελεῖ παρασοφίζεσθαι τὸν ἱατρόν· οὐ γὰρ τοσοῦτο βλάπτει ἢ ἁμαρτία τοῦ ἱατροῦ ὅσον τὸ ἐθίζεσθαι ἀπειθεῖν τῷ ἄρχοντι. καὶ ὅτι τὸ τῶν νόμων σοφώτερον ζητεῖν εἶναι, τοῦτ' ἐστὶν ὃ ἐν τοῖς ἐπαινουμένοις νόμοις ἀπαγορεύεται. καὶ περὶ μὲν τῶν νόμων οὕτως διωρίσθω· περὶ δὲ μαρτύρων, μάρτυρές εἰσιν διττοί, οἱ μὲν παλαιοὶ οἱ δὲ πρόσφατοι, καὶ τούτων οἱ μὲν μετέχοντες τοῦ κινδύνου οἱ δ' ἐκτός. λέγω δὲ παλαιοὺς μὲν τοὺς τε ποιητὰς καὶ ὅσων ἄλλων γνωρίμων εἰσὶν κρίσεις φανεραί, οἷον Ἀθηναῖοι Ὀμήρῳ μάρτυρι ἐχρήσαντο περὶ Σαλαμῖνος, καὶ Τενέδιοι Ἐναγχος Περιάνδρῳ τῷ Κορινθίῳ πρὸς Σιγειεῖς, καὶ Κλεοφῶν κατὰ Κριτίου τοῖς Σόλωνος ἐλεγείοις ἐχρήσατο, λέγων ὅτι πάλαι ἀσελγὴς ἡ οἰκία· οὐ γὰρ ἂν ποτε ἐποίησε Σόλων

εἰπεῖν μοι Κριτίᾳ πυρρότριχι πατρὸς ἀκούειν.

περὶ μὲν οὖν τῶν γενομένων οἱ τοιοῦτοι μάρτυρες, περὶ δὲ [1376a] τῶν ἐσομένων καὶ οἱ χρησμολόγοι, οἷον Θεμιστοκλῆς ὅτι ναυμαχητέον, τὸ ξύλινον



τεῖχος λέγων. ἔτι καὶ αἱ παροιμίαι, ὥσπερ εἴρηται, μαρτύριά εἰσιν, οἷον εἴ τις συμβουλεύει μὴ ποιεῖσθαι φίλον γέροντα, τούτῳ μαρτυρεῖ ἡ παροιμία,

μήποτ' εὖ ἔρδειν γέροντα,

καὶ τὸ τοὺς υἱοὺς ἀναιρεῖν ὧν καὶ τοὺς πατέρας,

νήπιος ὃς πατέρα κτείνας υἱοὺς καταλείπει.

πρόσφατοι δὲ ὅσοι γνώριμοί τι κεκρίκασιν· χρήσιμοι γὰρ αἱ τούτων κρίσεις τοῖς περὶ τῶν αὐτῶν ἀμφισβητοῦσιν, οἷον Εὐβουλος ἐν τοῖς δικαστηρίοις ἐχρήσατο κατὰ Χάρητος ὃ Πλάτων εἶπε πρὸς Ἀρχίβιον, ὅτι ἐπιδέδωκεν ἐν τῇ πόλει τὸ ὁμολογεῖν πονηροὺς εἶναι. καὶ οἱ μετέχοντες τοῦ κινδύνου, ἂν δόξωσι ψεύδεσθαι. οἱ μὲν οὖν τοιοῦτοι τούτων μόνον μάρτυρές εἰσιν, εἰ γέγονεν ἢ μή, εἰ ἔστιν ἢ μή, περὶ δὲ τοῦ ποῖον οὐ μάρτυρες, οἷον εἰ δίκαιον ἢ ἄδικον, εἰ συμφέρον ἢ ἀσύμφορον· οἱ δ' ἄπωθεν περὶ τούτων πιστότεροι, πιστότατοι δ' οἱ παλαιοί· ἀδιάφθοροι γάρ.

πιστώματα δὲ περὶ μαρτυριῶν μάρτυρας μὲν μὴ ἔχοντι, ὅτι ἐκ τῶν εἰκότων δεῖ κρίνειν καὶ τοῦτ' ἐστὶ τὸ “γνώμη τῇ ἀρίστη”, καὶ ὅτι οὐκ ἔστιν ἐξαπατῆσαι τὰ εἰκότα ἐπὶ ἀργυρίῳ, καὶ ὅτι οὐχ ἀλίσκεται τὰ εἰκότα ψευδομαρτυριῶν· ἔχοντι δὲ πρὸς μὴ ἔχοντα, ὅτι οὐχ ὑπόδικα τὰ εἰκότα, καὶ ὅτι οὐδὲν ἂν ἔδει μαρτυριῶν, εἰ ἐκ τῶν λόγων ἱκανὸν ἦν θεωρῆσαι.

εἰσὶ δὲ αἱ μαρτυρίαι αἱ μὲν περὶ αὐτοῦ αἱ δὲ περὶ τοῦ ἀμφισβητοῦντος, καὶ αἱ μὲν περὶ τοῦ πράγματος αἱ δὲ περὶ τοῦ ἥθους, ὥστε φανερόν ὅτι οὐδέποτ' ἔστιν ἀπορῆσαι μαρτυρίας χρησίμης· εἰ μὴ γὰρ κατὰ τοῦ πράγματος ἢ αὐτῷ ὁμολογουμένης ἢ τῷ ἀμφισβητοῦντι ἐναντίας, ἀλλὰ περὶ τοῦ ἥθους ἢ αὐτοῦ εἰς ἐπιείκειαν ἢ τοῦ ἀμφισβητοῦντος εἰς φαυλότητα. τὰ δ' ἄλλα περὶ μάρτυρος, ἢ φίλου ἢ ἐχθροῦ ἢ μεταξύ, ἢ εὐδοκιμοῦντος ἢ ἀδοξοῦντος ἢ μεταξύ, καὶ ὅσαι ἄλλαι τοιαῦται διαφοραί, ἐκ τῶν αὐτῶν τρόπων λεκτέον ἐξ οἷων περ καὶ τὰ ἐνθυμήματα λέγομεν.

περὶ δὲ τῶν συνθηκῶν τοσαύτη τῶν λόγων χρῆσις ἐστὶν ὅσον αὖξιν ἢ καθαιρεῖν, ἢ πιστὰς ποιεῖν ἢ ἀπίστους - ἐὰν [1376b] μὲν αὐτῷ ὑπάρχῃ, πιστὰς καὶ κυρίας, ἐπὶ δὲ τοῦ ἀμφισβητοῦντος τοῦναντίον. πρὸς μὲν οὖν τὸ πιστὰς ἢ ἀπίστους κατασκευάζειν οὐδὲν διαφέρει τῆς περὶ τοὺς μάρτυρας πραγματείας· ὅποιοι γὰρ ἂν τινες ὧσιν οἱ ἐπιγεγραμμένοι ἢ φυλάττοντες, τοιούτως αἱ συνθήκαι πισταὶ εἰσιν. ὁμολογουμένης δ' εἶναι τῆς συνθήκης,

οἰκείας μὲν οὕσης αὐξητέον· ἡ γὰρ συνθήκη νόμος ἐστὶν ἴδιος καὶ κατὰ μέρος, καὶ αἱ μὲν συνθῆκαι οὐ ποιοῦσι τὸν νόμον κύριον, οἱ δὲ νόμοι τὰς κατὰ νόμους συνθήκας, καὶ ὅλως αὐτὸς ὁ νόμος συνθήκη τίς ἐστίν, ὥστε ὅστις ἀπιστεῖ ἢ ἀναιρεῖ συνθήκην τοὺς νόμους ἀναιρεῖ. ἔτι δὲ πράττεται τὰ πολλὰ τῶν συναλλαγμάτων καὶ τὰ ἐκούσια κατὰ συνθήκας, ὥστε ἀκύρων γιγνομένων ἀναιρεῖται ἡ πρὸς ἀλλήλους χρεία τῶν ἀνθρώπων. καὶ τᾶλλα δὲ ὅσα ἀρμόττει ἐπιπολῆς ἰδεῖν ἔστιν. ἂν δ' ἐναντία ἡ, καὶ μετὰ τῶν ἀμφισβητούντων, πρῶτον μὲν, ἅπερ ἂν τις πρὸς νόμον ἐναντίον μαχέσαιοτο, ταῦτα ἀρμόττει· ἄτοπον γὰρ εἰ τοῖς μὲν νόμοις, ἂν μὴ ὀρθῶς κείμενοι ὥσιν ἄλλ' ἐξαμάρτωσιν οἱ τιθέμενοι, οὐκ οἰόμεθα δεῖν πείθεσθαι, ταῖς δὲ συνθήκαις ἀναγκαῖον. εἶτα ὅτι τοῦ δικαίου ἐστὶ βραβευτῆς ὁ δικαστής· οὐκ οὖν τοῦτο σκεπτέον, ἀλλ' ὥς δικαιότερον· καὶ τὸ μὲν δίκαιον οὐκ ἔστιν μεταστρέψαι οὔτ' ἀπάτη οὔτ' ἀνάγκη (πεφυκὸς γάρ ἐστιν), συνθῆκαι δὲ γίνονται καὶ ἐξαπατηθέντων καὶ ἀναγκασθέντων. πρὸς δὲ τούτοις σκοπεῖν εἰ ἐναντία ἐστὶ τινι τῶν γεγραμμένων νόμων ἢ τῶν κοινῶν, καὶ τῶν γεγραμμένων ἢ τοῖς οἰκείοις ἢ τοῖς ἀλλοτρίοις, ἔπειτα εἰ ἢ ἄλλαις συνθήκαις ὑστέραις ἢ προτέραις· ἡ γὰρ αἱ ὑστέραι κύριαι, ἄκυροι δ' αἱ πρότεραι, ἢ αἱ πρότεραι ὀρθαί, αἱ δ' ὑστέραι ἡπατήκασιν, ὁποτέρως ἂν ἡ χρήσιμον. ἔτι δὲ τὸ συμφέρον ὁρᾶν, εἴ που ἐναντιοῦται τοῖς κριταῖς, καὶ ὅσα ἄλλα τοιαῦτα· καὶ γὰρ ταῦτα εὐθεώρητα ὁμοίως.

αἱ δὲ βάσανοι μαρτυρίαι τινές εἰσιν, ἔχειν δὲ δοκοῦσι τὸ πιστόν, ὅτι ἀνάγκη τις πρόσεστιν. οὐκ οὖν χαλεπὸν οὐδὲ περὶ τούτων εἰπεῖν τὰ ἐνδεχόμενα, ἐξ ὧν ἐάν τε ὑπάρχωσιν οἰκεῖται αὐξεῖν ἔστιν, ὅτι ἀληθεῖς μόναι τῶν μαρτυριῶν εἰσιν [1377a] αὗται, ἐάν τε ὑπεναντία ὥσι καὶ μετὰ τοῦ ἀμφισβητοῦντος, διαλύοι ἂν τις τᾶληθῆ λέγων καθ' ὅλου τοῦ γένους τῶν βασάνων· οὐδὲν γὰρ ἦττον ἀναγκαζόμενοι τὰ ψευδῆ λέγουσιν ἢ τᾶληθῆ, καὶ διακαρτεροῦντες μὴ λέγειν τᾶληθῆ, καὶ ῥαδίως καταψευδόμενοι ὥς παυσόμενοι θᾶττον. δεῖ δὲ ἔχειν ἐπαναφέρειν ἐπὶ τοιαῦτα γεγενημένα παραδείγματα ἃ ἴσασιν οἱ κρίνοντες. δεῖ δὲ λέγειν ὥς οὐκ εἰσὶν ἀληθεῖς αἱ βάσανοι· πολλοὶ μὲν γὰρ παχύφρονες [οἱ] καὶ λιθόδερμοι καὶ ταῖς ψυχαῖς ὄντες δυνατοὶ γενναίως ἐγκαρτεροῦσι ταῖς ἀνάγκαις, οἱ δὲ δειλοὶ καὶ εὐλαβεῖς πρὸ τοῦ τὰς ἀνάγκας ἰδεῖν αὐτῶν καταθαρροῦσιν, ὥστε οὐδὲν ἔστι πιστόν ἐν βασάνοις.

περὶ δ' ὅρκων τετραχῶς ἔστι διελεῖν· ἡ γὰρ δίδωσι καὶ λαμβάνει, ἢ οὐδέτερον, ἢ τὸ μὲν τὸ δ' οὐ, καὶ τούτων ἡ δίδωσιν μὲν οὐ λαμβάνει δέ, ἢ λαμβάνει μὲν δίδωσιν δὲ οὐ. ἔτι ἄλλως παρὰ ταῦτα, εἰ ὁμώμοσται οὗτος ὑπ' αὐτοῦ ἢ ὑπ' ἐκείνου.

οὐ δίδωσιν μὲν οὖν, ὅτι ῥαδίως ἐπιπορκῶσιν, καὶ ὅτι ὁ μὲν ὁμόσας οὐκ ἀποδίδωσιν, τοὺς δὲ μὴ ὁμόσαντος οἴεται καταδικάσειν, καὶ [ὥς] οὗτος ὁ κίνδυνος κρείττων, ὁ ἐν τοῖς δικασταῖς· τοῖς μὲν γὰρ πιστεύει τῷ δ' οὗ.

οὐ λαμβάνει δ', ὅτι ἀντὶ χρημάτων ὅρκος, καὶ ὅτι εἰ ἦν φαῦλος, κατωμόσατο ἄν· κρεῖττον γὰρ ἂν <ἦν> ἔνεκά του φαῦλον εἶναι ἢ μηδενός· ὁμόσας μὲν οὖν ἔξει, μὴ ὁμόσας δ' οὐ· οὕτως δὲ δι' ἀρετὴν ἂν εἴη, ἄλλ' οὐ δι' ἐπιπορκίαν, τὸ μὴ. καὶ τὸ τοῦ Ξενοφάνους ἀρμόττει, ὅτι “οὐκ ἴση πρόκλησις αὕτη τάσεβεῖ πρὸς εὐσεβῇ”, ἄλλ' ὁμοία καὶ εἰ ἰσχυρὸς ἀσθενῇ πατάξει ἢ πληγῇναι προκαλέσαιο.

εἰ δὲ λαμβάνει, ὅτι πιστεύει αὐτῷ, ἐκείνῳ δ' οὗ. καὶ τὸ τοῦ Ξενοφάνους μεταστρέψαντα φατέον οὕτως ἴσον εἶναι ἂν ὁ μὲν ἀσεβῆς διδῶ, ὁ δ' εὐσεβῆς ὁμνύη· δεινόν τε τὸ μὴ θέλιν αὐτόν, ὑπὲρ ὧν ἐκείνους ἀξιοῖ ὁμόσαντας δικάζειν.

εἰ δὲ δίδωσιν, ὅτι εὐσεβὲς τὸ θέλιν τοῖς θεοῖς ἐπιτρέπειν, καὶ ὅτι οὐδὲν δεῖ αὐτὸν ἄλλων δικαστῶν δεῖσθαι (αὐτοῖς γὰρ δίδωσι κρίσιν), καὶ ὅτι ἄτοπον τὸ μὴ θέλιν ὁμνύναι περὶ ὧν ἄλλους ἀξιοῦσιν ὁμνύναι.

ἐπεὶ δὲ καθ' ἕκαστον δῆλον ὅπως λεκτέον, καὶ συνδυαζομένων πῶς λεκτέον δῆλον, οἷον εἰ αὐτὸς μὲν θέλει λαμβάνειν διδόναι δὲ μὴ, καὶ εἰ δίδωσι μὲν λαμβάνειν δὲ μὴ θέλει, καὶ εἰ λαμβάνειν καὶ διδόναι [1377b] θέλει εἴτε μηδέτερον· ἐκ γὰρ τῶν εἰρημένων ἀνάγκη συγκεῖσθαι, ὥστε καὶ τοὺς λόγους συγκεῖσθαι ἐκ τῶν εἰρημένων.

ἐὰν δὲ ἡ γεγενημένος ὑφ' αὐτοῦ καὶ ἐναντίος, ὅτι οὐκ ἐπιπορκία· ἐκούσιον γὰρ τὸ ἀδικεῖν, τὸ δ' ἐπιπορκεῖν ἀδικεῖν ἐστι, τὰ δὲ βία καὶ ἀπάτη ἀκούσια. ἐνταῦθα οὖν συνακτέον καὶ τὸ ἐπιπορκεῖν, ὅτι ἔστι τὸ τῇ διανοίᾳ ἄλλ' οὐ τῷ στόματι. ἐὰν δὲ τῷ ἀντιδίκῳ ἢ ὑπεναντίος καὶ ὁμωμοσμένος, ὅτι πάντα ἀναιρεῖ μὴ ἐμμένων οἷς ὤμοσεν· διὰ γὰρ τοῦτο καὶ τοῖς νόμοις χρῶνται ὁμόσαντες. καὶ “ὅμῃς μὲν ἀξιοῦσιν ἐμμένειν οἷς ὁμόσαντες δικάζετε, αὐτοὶ δὲ οὐκ ἐμμένουσιν”. καὶ ὅσα ἂν ἄλλα αὕξων τις εἴπειεν. περὶ μὲν οὖν τῶν ἀτέχνων πίστεων εἰρήσθω τοσαῦτα.

## B

Ἐκ τίνων μὲν οὖν δεῖ καὶ προτρέπειν καὶ ἀποτρέπειν, καὶ ἐπαινεῖν καὶ ψέγειν, καὶ κατηγορεῖν καὶ ἀπολογεῖσθαι, καὶ ποῖαι δόξαι καὶ προτάσεις

χρήσιμοι πρὸς τὰς τούτων πίστεις, ταῦτ' ἐστίν· περὶ γὰρ τούτων καὶ ἐκ τούτων τὰ ἐνθυμήματα, ὡς περὶ ἕκαστον εἶπεῖν ἰδίᾳ τὸ γένος τῶν λόγων.

Ἐπεὶ δὲ ἔνεκα κρίσεώς ἐστιν ἡ ῥητορική (καὶ γὰρ τὰς συμβουλὰς κρίνουσιν καὶ ἡ δίκη κρίσις ἐστίν), ἀνάγκη μὴ μόνον πρὸς τὸν λόγον ὄραῖν, ὅπως ἀποδεικτικὸς ἔσται καὶ πιστός, ἀλλὰ καὶ αὐτὸν ποιόν τινα καὶ τὸν κριτὴν κατασκευάζειν· πολὺ γὰρ διαφέρει πρὸς πίστιν, μάλιστα μὲν ἐν ταῖς συμβουλαῖς, εἴτα καὶ ἐν ταῖς δίκαις, τό τε ποιόν τινα φαίνεσθαι τὸν λέγοντα καὶ τὸ πρὸς αὐτοὺς ὑπολαμβάνειν πως διακεῖσθαι αὐτόν, πρὸς δὲ τούτοις ἔαν καὶ αὐτοὶ διακείμενοί πως τυγχάνωσιν. τὸ μὲν οὖν ποιόν τινα φαίνεσθαι τὸν λέγοντα χρησιμώτερον εἰς τὰς συμβουλὰς ἐστίν, τὸ δὲ διακεῖσθαι πως τὸν ἀκροατὴν εἰς τὰς δίκας· οὐ γὰρ ταῦτ' ἀφαίρεται φιλοῦσι καὶ μισοῦσιν, οὐδ' ὀργιζομένοις καὶ πράως ἔχουσιν, ἀλλ' ἢ τὸ παράπαν ἕτερα ἢ [1378a] κατὰ μέγεθος ἕτερα· τῷ μὲν γὰρ φιλοῦντι περὶ οὗ ποιεῖται τὴν κρίσιν ἢ οὐκ ἀδικεῖν ἢ μικρὰ δοκεῖ ἀδικεῖν, τῷ δὲ μισοῦντι τοῦναντίον· καὶ τῷ μὲν ἐπιθυμοῦντι καὶ εὐέλπιδι ὄντι, ἔαν ἢ τὸ ἐσόμενον ἡδύ, καὶ ἔσεσθαι καὶ ἀγαθὸν ἔσεσθαι φαίνεται, τῷ δ' ἀπαθεῖ <ἡ> καὶ δυσχεραίνοντι τοῦναντίον.

τοῦ μὲν οὖν αὐτοὺς εἶναι πιστοὺς τοὺς λέγοντας τρία ἐστὶ τὰ αἷτια· τοσαῦτα γὰρ ἐστὶ δι' ἃ πιστεύομεν ἔξω τῶν ἀποδείξεων. ἔστι δὲ ταῦτα φρόνησις καὶ ἀρετὴ καὶ εὐνοία· διαψεύδονται γὰρ περὶ ὧν λέγουσιν ἢ συμβουλεύουσιν ἢ δι' ἅπαντα ταῦτα ἢ διὰ τούτων τι· ἢ γὰρ δι' ἀφροσύνην οὐκ ὀρθῶς δοξάζουσιν, ἢ δοξάζοντες ὀρθῶς διὰ μοχθηρίαν οὐ τὰ δοκοῦντα λέγουσιν, ἢ φρόνιμοι μὲν καὶ ἐπεικεῖς εἰσιν ἀλλ' οὐκ εὖνοι, διόπερ ἐνδέχεται μὴ τὰ βέλτιστα συμβουλεύειν γινώσκοντας, καὶ παρὰ ταῦτα οὐδέν. ἀνάγκη ἄρα τὸν ἅπαντα δοκοῦντα ταῦτ' ἔχειν εἶναι τοῖς ἀκροωμένοις πιστόν. ὅθεν μὲν οὖν φρόνιμοι καὶ σπουδαῖοι φανεῖεν ἄν, ἐκ τῶν περὶ τὰς ἀρετὰς διηρημένων ληπτέον· ἐκ γὰρ τῶν αὐτῶν κἂν ἕτερόν τις κἂν ἑαυτὸν κατασκευάσειε τοιοῦτον· περὶ δ' εὐνοίας καὶ φιλίας ἐν τοῖς περὶ τὰ πάθη λεκτέον.

ἔστι δὲ τὰ πάθη δι' ὅσα μεταβάλλοντες διαφέρουσι πρὸς τὰς κρίσεις οἷς ἔπεται λύπη καὶ ἡδονή, οἷον ὀργὴ ἔλεος φόβος καὶ ὅσα ἄλλα τοιαῦτα, καὶ τὰ τούτοις ἐναντία. δεῖ δὲ διαιρεῖν περὶ ἕκαστον εἰς τρία, λέγω δ' οἷον περὶ ὀργῆς πῶς τε διακείμενοι ὀργίλοι εἰσὶ, καὶ τίσιν εἰώθασιν ὀργίζεσθαι, καὶ ἐπὶ ποίοις· εἰ γὰρ τὸ μὲν ἐν ἡ τὰ δύο ἔχοιμεν τούτων, ἅπαντα δὲ μή, ἀδύνατον ἂν εἶη τὴν ὀργὴν ἐμποιεῖν· ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. ὥσπερ οὖν καὶ ἐπὶ τῶν προειρημένων διεγράψαμεν τὰς προτάσεις, οὕτω καὶ περὶ τούτων ποιήσωμεν καὶ διέλωμεν τὸν εἰρημένον τρόπον.

Ἔστω δὴ ὀργὴ ὄρεξις μετὰ λύπης τιμωρίας [φαινομένης] διὰ φαινομένην ὀλιγωρίαν εἰς αὐτὸν ἢ <τι> τῶν αὐτοῦ, τοῦ ὀλιγωρεῖν μὴ προσήκοντος. εἰ δὴ τοῦτ' ἐστὶν ἢ ὀργή, ἀνάγκη τὸν ὀργιζόμενον ὀργίζεσθαι ἀεὶ τῶν καθ' ἕκαστόν τι, οἷον Κλέωνι ἄλλ' οὐκ ἀνθρώπῳ, καὶ ὅτι αὐτὸν ἢ τῶν αὐτοῦ τί [1378b] πεποίηκεν ἢ ἡμελλεν, καὶ πάσῃ ὀργῇ ἔπεσθαί τινα ἡδονήν, τὴν ἀπὸ τῆς ἐλπίδος τοῦ τιμωρήσασθαι· ἡδὺ μὲν γὰρ τὸ οἶεσθαι τεύξεσθαι ὧν ἐφίεται, οὐδεὶς δὲ τῶν φαινομένων ἀδυνάτων ἐφίεται αὐτῷ, ὁ δὲ ὀργιζόμενος ἐφίεται δυνατῶν αὐτῷ. διὸ καλῶς εἴρηται περὶ θυμοῦ.

Ὅς τε πολὺ γλυκίων μέλιτος καταλειβομένοιο

ἀνδρῶν ἐν στήθεσιν ἀέξεται·

ἀκολουθεῖ γὰρ καὶ ἡδονή τις διὰ τε τοῦτο καὶ διότι διατρίβουσιν ἐν τῷ τιμωρεῖσθαι τῇ διανοίᾳ· ἡ οὖν τότε γινομένη φαντασία ἡδονὴν ἐμποιεῖ, ὥσπερ ἡ τῶν ἐνυπνίων.

ἐπεὶ δὲ ἡ ὀλιγωρία ἐστὶν ἐνέργεια δόξης περὶ τὸ μηδενὸς ἄξιον φαινόμενον (καὶ γὰρ τὰ κακὰ καὶ τὰγαθὰ ἄξια οἴομεθα σπουδῆς εἶναι, καὶ τὰ συντείνοντα πρὸς αὐτά· ὅσα δὲ μηδέν τι ἢ μικρόν, οὐδενὸς ἄξια ὑπολαμβάνομεν), τρία ἐστὶν εἶδη ὀλιγωρίας, καταφρόνησίς τε καὶ ἐπηρεασμὸς καὶ ὕβρις· ὁ τε γὰρ καταφρονῶν ὀλιγωρεῖ (ὅσα γὰρ οἶονται μηδενὸς ἄξια, τούτων καταφρονοῦσιν, τῶν δὲ μηδενὸς ἄξιων ὀλιγωροῦσιν), καὶ ὁ ἐπηρεάζων φαίνεται ὀλιγωρεῖν. ἔστι γὰρ ὁ ἐπηρεασμὸς ἐμποδισμὸς ταῖς βουλήσεσιν μὴ ἵνα τι αὐτῷ ἄλλ' ἵνα μὴ ἐκείνῳ· ἐπεὶ οὖν οὐχ ἵνα αὐτῷ τι, ὀλιγωρεῖ· δῆλον γὰρ ὅτι οὔτε βλάψειν ὑπολαμβάνει, ἐφοβεῖτο γὰρ ἂν καὶ οὐκ ὀλιγώρει, οὔτ' ὠφελῆσαι ἂν οὐδὲν ἄξιον λόγου, ἐφρόντιζε γὰρ ἂν ὥστε φίλος εἶναι· καὶ ὁ ὑβρίζων δὲ ὀλιγωρεῖ· ἔστι γὰρ ὕβρις τὸ πράττειν καὶ λέγειν ἐφ' οἷς αἰσχύνῃ ἔστι τῷ πάσχοντι, μὴ ἵνα τι γίγνηται αὐτῷ ἄλλο ἢ ὅ τι ἐγένετο, ἄλλ' ὅπως ἡσθῇ· οἱ γὰρ ἀντιποιοῦντες οὐχ ὑβρίζουσιν ἀλλὰ τιμωροῦνται. αἵτιον δὲ τῆς ἡδονῆς τοῖς ὑβρίζουσιν, ὅτι οἶονται κακῶς δρῶντες αὐτοὶ ὑπερέχειν μᾶλλον (διὸ οἱ νέοι καὶ οἱ πλούσιοι ὑβρισταί· ὑπερέχειν γὰρ οἶονται ὑβρίζοντες)· ὕβρεως δὲ ἀτιμία, ὁ δ' ἀτιμάζων ὀλιγωρεῖ· τὸ γὰρ μηδενὸς ἄξιον οὐδεμίαν ἔχει τιμὴν, οὔτε ἀγαθοῦ οὔτε κακοῦ· διὸ λέγει ὀργιζόμενος ὁ Ἀχιλλεὺς

ἡτίμησεν· ἐλὼν γὰρ ἔχει γέρας αὐτὸς

καὶ

ὥς εἴ τιν' ἀτίμητον μετανάστην,

ὥς διὰ ταῦτα ὀργιζόμενος. προσήκειν δὲ οἶονται πολυωρεῖσθαι ὑπὸ τῶν ἡττόνων κατὰ γένος, κατὰ δύναμιν, κατ' ἀρετήν, [1379a] καὶ ὅλως ἐν ᾧ ἂν αὐτὸς ὑπερέχη πολύ, οἶον ἐν χρήμασιν ὁ πλούσιος πένητος καὶ ἐν τῷ λέγειν ῥητορικὸς ἀδυνάτου εἰπεῖν καὶ ἄρχων ἀρχομένου καὶ ἄρχειν ἄξιος [οἰόμενος] τοῦ ἄρχεσθαι ἀξίου· διὸ εἴρηται

θυμὸς δὲ μέγας ἐστὶ διοτρεφέων βασιλῶν

καὶ

ἀλλά τε καὶ μετόπισθεν ἔχει κότον·

ἀγανακτοῦσι γὰρ διὰ τὴν ὑπεροχὴν. ἔτι ὑφ' ὧν τις οἶεται εὖ πάσχειν δεῖν· οὗτοι δ' εἰσὶν οὓς εὖ πεποίηκεν ἢ ποιεῖ, αὐτὸς ἢ δι' αὐτόν τις ἢ τῶν αὐτοῦ τις, ἢ βούλεται ἢ ἐβουλήθη.

φανερὸν οὖν ἐκ τούτων ἤδη πῶς τε ἔχοντες ὀργίζονται αὐτοὶ καὶ τίσιν καὶ διὰ ποῖα. αὐτοὶ μὲν γάρ, ὅταν λυπῶνται· ἐφίεται γάρ τινος ὁ λυπούμενος· ἐάν τε οὖν κατ' εὐθυωρίαν ὀτιοῦν ἀντικρούσῃ τις, οἶον τῷ διψῶντι πρὸς τὸ πιεῖν, ἐάν τε μή, ὁμοίως ταῦτ' φαίνεται ποιεῖν· καὶ ἐάν τε ἀντιπράττῃ τις ἐάν τε μὴ συμπράττῃ ἐάν τε ἄλλο τι ἐνοχλῇ οὕτως ἔχοντα, πᾶσιν ὀργίζεται· διὸ κάμνοντες, πενόμενοι, «πολεμοῦντες,» ἐρῶντες, διψῶντες, ὅλως ἐπιθυμοῦντες καὶ μὴ κατορθοῦντες ὀργίλοι εἰσὶ καὶ εὐπαρόρμητοι, μάλιστα μὲν πρὸς τοὺς τοῦ παρόντος ὀλιγωροῦντας, οἶον κάμνων μὲν τοῖς πρὸς τὴν νόσον, πενόμενος δὲ τοῖς πρὸς τὴν πενίαν, πολεμῶν δὲ τοῖς πρὸς τὸν πόλεμον, ἐρῶν δὲ τοῖς πρὸς τὸν ἔρωτα, ὁμοίως δὲ καὶ τοῖς ἄλλοις «εἰ δὲ μή, κἂν ὀτιοῦν ἄλλο ὀλιγορῇ τις»· προοδοποιεῖται γὰρ ἕκαστος πρὸς τὴν ἐκάστου ὀργὴν ὑπὸ τοῦ ὑπάρχοντος πάθους· ἔτι δ' ἐάν τάναντία τύχῃ προσδεχόμενος· λυπεῖ γὰρ μᾶλλον τὸ πολὺ παρὰ δόξαν, ὥσπερ καὶ τέρπει τὸ πολὺ παρὰ δόξαν, ἐάν γένηται ὃ βούλεται· διὸ καὶ ὥραι καὶ χρόνοι καὶ διαθέσεις καὶ ἡλικίαι ἐκ τούτων φανεραί, ποῖαι εὐκίνητοι πρὸς ὀργὴν καὶ ποῦ καὶ πότε, καὶ ὅτε μᾶλλον ἐν τούτοις εἰσὶ, μᾶλλον καὶ εὐκίνητοι.

αὐτοὶ μὲν οὖν οὕτως ἔχοντες εὐκίνητοι πρὸς ὀργὴν, ὀργίζονται δὲ τοῖς τε καταγελῶσι καὶ χλευάζουσιν καὶ σκώπτουσιν (ὑβρίζουσι γάρ), καὶ τοῖς τὰ τοιαῦτα βλάπτουσιν ὅσα ὑβρεως σημεῖα· ἀνάγκη δὲ τοιαῦτα εἶναι ἢ μήτε ἀντί τινος μήτ' ὠφέλιμα τοῖς ποιοῦσιν· ἤδη γὰρ δοκεῖ δι' ὑβριν. καὶ τοῖς κακῶς λέγουσι καὶ καταφρονοῦσι περὶ ὧν αὐτοὶ μάλιστα σπουδάζουσιν, οἶον οἱ ἐπὶ

φιλοσοφία φιλοτιμούμενοι ἔάν τις εἰς τὴν φιλοσοφίαν, οἱ δ' ἐπὶ τῇ ἰδέᾳ ἔάν τις εἰς τὴν ἰδέαν, ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ταῦτα δὲ πολλῶ μάλλον, ἔάν ὑποπτεύσωσι μὴ ὑπάρχειν αὐτοῖς, ἢ ὅλως ἢ μὴ ἰσχυρῶς, ἢ [1379b] μὴ δοκεῖν· ἐπειδὴν γὰρ σφόδρα οἴωνται ὑπερέχειν ἐν τούτοις ἐν οἷς σκώπτονται, οὐ φροντίζουσιν. καὶ τοῖς φίλοις μάλλον ἢ τοῖς μὴ φίλοις· οἴονται γὰρ προσήκειν μάλλον πάσχειν εὐ ὑπ' αὐτῶν ἢ μή. καὶ τοῖς εἰθισμένοις τιμᾶν ἢ φροντίζειν, ἔάν πάλιν μὴ οὕτως ὁμιλῶσιν· καὶ γὰρ ὑπὸ τούτων οἴονται καταφρονεῖσθαι· ταῦτά γὰρ ἂν ποιεῖν. καὶ τοῖς μὴ ἀντιποιοῦσιν εὖ μηδὲ τὴν ἴσην ἀνταποδιδούσιν. καὶ τοῖς τάναντία ποιοῦσιν αὐτοῖς, ἔάν ἥττους ᾖσιν. καταφρονεῖν γὰρ πάντες οἱ τοιοῦτοι φαίνονται, καὶ οἱ μὲν ὡς ἡττόνων οἱ δ' ὡς παρὰ ἡττόνων. καὶ τοῖς ἐν μηδενὶ λόγῳ οὖσιν, ἂν τι ὀλιγωρῶσι, μάλλον· ὑπόκειται γὰρ ἡ ὀργὴ τῆς ὀλιγωρίας πρὸς τοὺς μὴ προσήκοντας, προσήκει δὲ τοῖς ἥττοσι μὴ ὀλιγωρεῖν· τοῖς δὲ φίλοις, ἔάν τε μὴ εὖ λέγῳσιν ἢ ποιῶσιν, καὶ ἔτι μάλλον ἔάν τάναντία, καὶ ἔάν μὴ αἰσθάνωνται δεομένων, ὥσπερ ὁ Ἀντιφῶντος Πλήξιππος τῷ Μελεάγρῳ· ὀλιγωρίας γὰρ τὸ μὴ αἰσθάνεσθαι σημεῖον· ὧν γὰρ φροντίζομεν οὐ λανθάνει. καὶ τοῖς ἐπιχαίρουσι ταῖς ἀτυχίαις καὶ ὅλως εὐθυμουμένοις ἐν ταῖς αὐτῶν ἀτυχίαις· ἢ γὰρ ἐχθροῦ ἢ ὀλιγωροῦντος σημεῖον. καὶ τοῖς μὴ φροντίζουσιν ἔάν λυπήσωσιν· διὸ καὶ τοῖς κακὰ ἀγγέλλουσιν ὀργίζονται. καὶ τοῖς ἢ ἀκούουσι περὶ αὐτῶν ἢ θεωμένοις τὰ αὐτῶν φαῦλα· ὅμοιοι γὰρ εἰσιν ἢ ὀλιγωροῦσιν ἢ ἐχθροῖς· οἱ γὰρ φίλοι συναλγοῦσιν, θεώμενοι δὲ τὰ οἰκεῖα φαῦλα πάντες ἀλγοῦσιν. ἔτι τοῖς ὀλιγωροῦσι πρὸς πέντε, πρὸς οὓς φιλοτιμοῦνται, [πρὸς] οὓς θαυμάζουσιν, ὑφ' ὧν βούλονται θαυμάζεσθαι, ἢ οὓς αἰσχύνονται, ἢ ἐν τοῖς αἰσχυνομένοις αὐτούς· ἂν τις ἐν τούτοις ὀλιγορῇ, ὀργίζονται μάλλον. καὶ τοῖς εἰς τὰ τοιαῦτα ὀλιγωροῦσιν ὑπὲρ ὧν αὐτοῖς αἰσχρὸν μὴ βοηθεῖν, οἶον γονεῖς, τέκνα, γυναικας, ἀρχομένους. καὶ τοῖς χάριν μὴ ἀποδιδούσιν· παρὰ τὸ προσῆκον γὰρ ἡ ὀλιγωρία. καὶ τοῖς εἰρωνευομένοις πρὸς σπουδάζοντας· καταφρονητικὸν γὰρ ἡ εἰρωνεία. καὶ τοῖς τῶν ἄλλων εὐποητικοῖς, ἔάν μὴ καὶ αὐτῶν· καὶ γὰρ τοῦτο καταφρονητικόν, τὸ μὴ ἀξιοῦν, ὧν πάντας, καὶ αὐτόν. ποιητικὸν δ' ὀργῆς καὶ ἡ λήθη, οἶον καὶ ἡ τῶν ὀνομάτων, οὕτως οὖσα περὶ μικρόν· ὀλιγωρίας γὰρ δοκεῖ καὶ ἡ λήθη σημεῖον εἶναι· δι' ἀμέλειαν μὲν γὰρ ἡ λήθη γίγνεται, ἢ δ' ἀμέλεια ὀλιγωρία τίς ἐστίν.

[1380a] οἷς μὲν οὖν ὀργίζονται καὶ ὡς ἔχοντες καὶ διὰ ποῖα, ἅμα εἴρηται· δῆλον δ' ὅτι δέοι ἂν κατασκευάζειν τῷ λόγῳ τοιούτους οἷοι ὄντες ὀργίλως ἔχουσιν, καὶ τοὺς ἐναντίους τούτοις ἐνόχους ὄντας ἐφ' οἷς ὀργίζονται, καὶ τοιούτους οἷοις ὀργίζονται.

Ἐπεὶ δὲ τὸ ὀργίζεσθαι ἐναντίον τῷ πραῦνεσθαι καὶ ὀργὴ πραότητι,

ληπτέον πῶς ἔχοντες πρᾶοί εἰσι καὶ πρὸς τίνας πράως ἔχουσι καὶ διὰ τίνων πραῦνονται. ἔστω δὲ πράυνσις κατάστασις καὶ ἡρέμησις ὀργῆς. εἰ οὖν ὀργίζονται τοῖς ὀλιγωροῦσιν, ὀλιγωρία δ' ἐκούσιον, φανερόν ὅτι καὶ τοῖς μηδὲν τούτων ποιοῦσιν ἢ ἀκουσίως ποιοῦσιν ἢ φαινομένοις τοιούτοις πρᾶοί εἰσιν. καὶ τοῖς τάναντία ὧν ἐποίησαν βουλομένοις. καὶ ὅσοι καὶ αὐτοὶ εἰς αὐτοὺς τοιοῦτοι· οὐδεὶς γὰρ αὐτὸς αὐτοῦ δοκεῖ ὀλιγωρεῖν. καὶ τοῖς ὁμολογοῦσι καὶ μεταμελομένοις· ὥς γὰρ ἔχοντες δίκην τὸ λυπεῖσθαι ἐπὶ τοῖς πεπονημένοις παύονται τῆς ὀργῆς· σημεῖον δὲ ἐπὶ τῆς τῶν οἰκετῶν κολάσεως· τοὺς μὲν γὰρ ἀντιλέγοντας καὶ ἄρνούμενους μᾶλλον κολάζομεν, πρὸς δὲ τοὺς ὁμολογοῦντας δικαίως κολάζεσθαι παύομεθα θυμούμενοι· αἴτιον δ' ὅτι ἀναισχυντία τὸ τὰ φανερά ἄρνεῖσθαι, ἢ δ' ἀναισχυντία ὀλιγωρία καὶ καταφρόνησις· ὧν γοῦν πολὺ καταφρονοῦμεν, οὐκ αἰσχυνόμεθα. καὶ τοῖς ταπεινουμένοις πρὸς αὐτοὺς καὶ μὴ ἀντιλέγουσιν· φαίνονται γὰρ ὁμολογεῖν ἥττους εἶναι, οἱ δ' ἥττους φοβοῦνται, φοβούμενος δὲ οὐδεὶς ὀλιγωρεῖ· ὅτι δὲ πρὸς τοὺς ταπεινουμένους παύεται ἡ ὀργή, καὶ οἱ κύνες δηλοῦσιν οὐ δάκνοντες τοὺς καθίζοντας. καὶ τοῖς σπουδάζουσι πρὸς [τοὺς] σπουδάζοντας· δοκεῖ γὰρ σπουδάζεσθαι ἄλλ' οὐ καταφρονεῖσθαι. καὶ τοῖς μείζω κεχαρισμένοις. καὶ τοῖς δεομένοις καὶ παραιτουμένοις· ταπεινότεροι γάρ. καὶ τοῖς μὴ ὑβρισταῖς μηδὲ χλευασταῖς μηδ' ὀλιγώροις εἰς μηδένα ἢ μὴ εἰς χρηστοὺς μηδ' εἰς τοιούτους οἷοί περ αὐτοί· ὅλως δ' ἐκ τῶν ἐναντίων δεῖ σκοπεῖν τὰ πραῦνοντα. καὶ οὐς φοβοῦνται ἢ αἰσχύνονται, ἕως ἂν οὕτως ἔχωσιν, οὐκ ὀργίζονται· ἀδύνατον γὰρ ἅμα φοβεῖσθαι καὶ ὀργίζεσθαι. καὶ τοῖς δι' ὀργὴν ποιήσασιν ἢ οὐκ ὀργίζονται ἢ ἥττον ὀργίζονται· οὐ γὰρ δι' ὀλιγωρίαν φαίνονται πρᾶξα· οὐδεὶς γὰρ ὀργιζόμενος ὀλιγωρεῖ· ἢ μὲν γὰρ ὀλιγωρία ἄλυπον, [1380b] ἢ δ' ὀργὴ μετὰ λύπης. καὶ τοῖς αἰσχυνομένοις αὐτούς.

καὶ ἔχοντες δὲ ἐναντίως τῷ ὀργίζεσθαι δῆλον ὅτι πρᾶοί εἰσιν, οἷον ἐν παιδιᾷ, ἐν γέλωτι, ἐν ἐορτῇ, ἐν εὐημερίᾳ, ἐν κατορθώσει, ἐν πληρώσει, ὅλως ἐν ἀλυπία καὶ ἡδονῇ μὴ ὑβριστικῇ καὶ ἐν ἐλπίδι ἐπαικεῖ. ἔτι κεχρονικότες καὶ μὴ ὑπόγυιοι τῇ ὀργῇ ὄντες· παύει γὰρ ὀργὴν ὁ χρόνος· παύει δὲ καὶ ἐτέρου ὀργὴν μείζω ἢ παρ' ἄλλου ληφθεῖσα τιμωρία πρότερον· διὸ εὖ Φιλοκράτης, εἰπόντος τινός, ὀργιζομένου τοῦ δήμου, “Τί οὐκ ἀπολογεῖ;”, “Οὐπω γε”, ἔφη. “Ἀλλὰ πότε;” “Ὅταν ἴδω ἄλλον διαβεβλημένον”· πρᾶοι γὰρ γίνονται ὅταν εἰς ἄλλον τὴν ὀργὴν ἀναλώσωσιν, ὃ συνέβη ἐπὶ Ἐργοφίλου· μᾶλλον γὰρ χαλεπαίνοντες ἢ Καλλισθένι ἀφεῖσαν διὰ τὸ Καλλισθένους τῇ προτεραίᾳ καταγνῶναι θάνατον. καὶ ἐὰν ἔλωσιν. καὶ ἐὰν μείζον κακὸν πεπονθότες ὦσιν ἢ ὁ ὀργιζόμενος ἂν ἔδρασαν· ὥσπερ εἰληφέναι γὰρ οἶονται τιμωρίαν. καὶ ἐὰν ἀδικεῖν οἶωνται αὐτοὶ καὶ δικαίως πάσχειν, οὐ γίγνεται [ἡ]



ὀργή πρὸς τὸ δίκαιον· οὐ γὰρ ἔτι παρὰ τὸ προσῆκον νομίζουσι πάσχειν, ἢ δ' ὀργή τοῦτο ἦν· διὸ δεῖ τῷ λόγῳ προκολάζειν· ἀγανακτοῦσιν γὰρ ἦττον κολαζόμενοι καὶ οἱ δοῦλοι. καὶ ἔὰν μὴ αἰσθήσεσθαι οἴωνται ὅτι δι' αὐτοὺς καὶ ἀνθ' ὧν ἔπαθον· ἢ γὰρ ὀργή πρὸς τὸν καθ' ἑκαστόν ἐστιν· δῆλον δ' ἐκ τοῦ ὀρισμοῦ· διὸ ὀρθῶς πεποιήται

φάσθαι Ὀδυσσῆα πτολιπόρθιον,

ὥς οὐ τετιμωρημένος εἰ μὴ ἦσθετο καὶ ὑφ' ὅτου καὶ ἀνθ' ὅτου· ὥστε οὔτε τοῖς ἄλλοις ὅσοι μὴ αἰσθάνονται ὀργίζονται, οὔτε τοῖς τεθνεῶσιν ἔτι, ὥς πεπονθόσι τε τὸ ἔσχατον καὶ οὐκ ἀλγήσουσιν οὐδ' αἰσθησομένοις, οὐ οἱ ὀργιζόμενοι ἐφίενται· διὸ εὖ περὶ τοῦ Ἑκτορος ὁ ποιητής, παῦσαι βουλόμενος τὸν Ἀχιλλέα τῆς ὀργῆς τεθνεῶτος,

κωφὴν γὰρ δὴ γαῖαν ἀεικίζει μενεαίνων.

δῆλον οὖν ὅτι τοῖς καταπραῦνειν βουλομένοις ἐκ τούτων τῶν τόπων λεκτέον, αὐτοὺς μὲν παρασκευάζουσι τοιούτους, οἷς δ' ὀργίζονται ἢ φοβεροὺς ἢ αἰσχύνῃς ἀξίους ἢ κεχαρισμένους ἢ ἄκοντας ἢ ὑπεραλγοῦντας τοῖς πεπονημένοις.

Τίνας δὲ φιλοῦσι καὶ μισοῦσι, καὶ διὰ τί, τὴν φιλίαν καὶ τὸ φιλεῖν ὀρισάμενοι λέγωμεν. ἔστω δὴ τὸ φιλεῖν τὸ βούλεσθαι τινι ἃ οἴεται ἀγαθὰ, ἐκείνου ἔνεκα ἀλλὰ μὴ αὐτοῦ, καὶ τὸ [1381a] κατὰ δύναμιν πρακτικὸν εἶναι τούτων. φίλος δέ ἐστιν ὁ φιλῶν καὶ ἀντιφιλούμενος· οἶονται δὲ φίλοι εἶναι οἱ οὕτως ἔχειν οἰόμενοι πρὸς ἀλλήλους. τούτων δὲ ὑποκειμένων ἀνάγκη φίλον εἶναι τὸν συνηδόμενον τοῖς ἀγαθοῖς καὶ συναλγοῦντα τοῖς λυπηροῖς μὴ διὰ τι ἕτερον ἀλλὰ δι' ἐκεῖνον· γιγνομένων γὰρ ὧν βούλονται χαίρουσιν πάντες, τῶν ἐναντίων δὲ λυποῦνται, ὥστε τῆς βουλήσεως σημεῖον αἱ λῦπαι καὶ αἱ ἡδοναί. καὶ οἷς δὴ ταῦτ' ἀγαθὰ καὶ κακὰ, καὶ οἱ τοῖς αὐτοῖς φίλοι καὶ οἱ τοῖς αὐτοῖς ἐχθροί· ταῦτ' γὰρ τούτοις βούλεσθαι ἀνάγκη, ὥστε ἅπερ αὐτῷ καὶ ἄλλῳ βουλόμενος τούτῳ φαίνεται φίλος εἶναι. καὶ τοὺς πεποιηκότας εὖ φιλοῦσιν, ἢ αὐτοὺς ἢ ὧν κήδονται, ἢ εἰ μεγάλα, ἢ εἰ προθύμως, ἢ εἰ ἐν τοιούτοις καιροῖς, καὶ αὐτῶν ἔνεκα, ἢ οὓς ἂν οἴωνται βούλεσθαι ποιεῖν εὖ. καὶ τοὺς τῶν φίλων φίλους καὶ φιλοῦντας οὓς αὐτοὶ φιλοῦσιν. καὶ τοὺς φιλουμένους ὑπὸ τῶν φιλουμένων αὐτοῖς. καὶ τοὺς τοῖς αὐτοῖς ἐχθροὺς καὶ μισοῦντας οὓς αὐτοὶ μισοῦσιν, καὶ τοὺς μισουμένους ὑπὸ τῶν αὐτοῖς μισουμένων· πᾶσιν γὰρ τούτοις τὰ αὐτὰ ἀγαθὰ φαίνεται εἶναι καὶ αὐτοῖς, ὥστε βούλεσθαι τὰ αὐτοῖς ἀγαθὰ, ὅπερ ἦν τοῦ φίλου. ἔτι τοὺς εὐποιοητικοὺς εἰς χρήματα καὶ εἰς

σωτηρίαν· διὸ τοὺς ἐλευθερίους καὶ ἀνδρείους τιμῶσι καὶ τοὺς δικαίους· τοιούτους δ' ὑπολαμβάνουσι τοὺς μὴ ἀφ' ἑτέρων ζῶντας· τοιοῦτοι δ' οἱ ἀπὸ τοῦ ἐργάζεσθαι, καὶ τούτων οἱ ἀπὸ γεωργίας, καὶ τῶν ἄλλων οἱ αὐτουργοὶ μάλιστα. καὶ τοὺς σὺφρονας, ὅτι οὐκ ἄδικοι. καὶ τοὺς ἀπράγμονας διὰ τὸ αὐτό. καὶ οἷς βουλόμεθα φίλοι εἶναι, ἃν φαίνωνται βουλόμενοι· εἰσὶ δὲ τοιοῦτοι οἱ τ' ἀγαθοὶ κατ' ἀρετὴν καὶ οἱ εὐδόκιμοι ἢ ἐν ἅπασιν ἢ ἐν τοῖς βελτίστοις ἢ ἐν τοῖς θαυμαζομένοις ὑφ' αὐτῶν ἢ ἐν τοῖς θαυμάζουσιν αὐτούς. ἔτι τοὺς ἡδεῖς συνδιαγαγεῖν καὶ συνδιημερεῦσαι· τοιοῦτοι δ' οἱ εὐκόλοι καὶ μὴ ἐλεγκτικοὶ τῶν ἀμαρτανομένων καὶ μὴ φιλόνικοι μηδὲ δυσέριδες (πάντες γὰρ οἱ τοιοῦτοι μαχητικοί, οἱ δὲ μαχόμενοι τάναντία φαίνονται βούλεσθαι), καὶ οἱ ἐπιδέξιοι καὶ τῷ τωθάσαι καὶ τῷ ὑπομεῖναι· ἐπὶ ταῦτόν γὰρ ἀμφοτέρως σπεύδουσι τῷ πλησίον, δυνάμενοί τε σκώπτεσθαι καὶ ἐμμελῶς σκώπτοντες. καὶ τοὺς ἐπαινοῦντας τὰ ὑπάρχοντα ἀγαθὰ, καὶ τούτων μάλιστα ἃ φοβοῦνται μὴ ὑπάρχειν [1381b] αὐτοῖς. καὶ τοὺς καθαρείους περὶ ὄψιν, περὶ ἀμπεχόνην, περὶ ὅλον τὸν βίον. καὶ τοὺς μὴ ὀνειδιστὰς μήτε τῶν ἀμαρτημάτων μήτε τῶν εὐεργετημάτων· ἀμφοτέροι γὰρ ἐλεγκτικοί. καὶ τοὺς μὴ μνησικακοῦντας, μηδὲ φυλακτικοὺς τῶν ἐγκλημάτων, ἀλλ' εὐκαταλλάκτους· οἷους γὰρ ἂν ὑπολαμβάνωσιν εἶναι πρὸς τοὺς ἄλλους, καὶ πρὸς αὐτοὺς οἶονται. καὶ τοὺς μὴ κακολόγους μηδὲ εἰδότας μήτε τὰ τῶν πλησίον κακὰ μήτε τὰ αὐτῶν, ἀλλὰ τάγαθὰ· ὁ γὰρ ἀγαθὸς ταῦτα δρᾷ. καὶ τοὺς μὴ ἀντιτείνοντας τοῖς ὀργιζομένοις ἢ σπουδάζουσιν· μαχητικοὶ γὰρ οἱ τοιοῦτοι. καὶ τοὺς πρὸς αὐτοὺς σπουδαίως πως ἔχοντας, οἷον θαυμάζοντας αὐτοὺς καὶ σπουδαίους ὑπολαμβάνοντας καὶ χαίροντας αὐτοῖς, καὶ ταῦτα μάλιστα πεπονθότας περὶ ἃ μάλιστα βούλονται αὐτοὶ ἢ θαυμάζεσθαι ἢ σπουδαῖοι δοκεῖν εἶναι ἢ ἡδεῖς. καὶ τοὺς ὁμοίους καὶ ταῦτ' ἐπιτηδεύοντας, ἐὰν μὴ παρενοχλῶσι μηδ' ἀπὸ ταύτου ἢ ὁ βίος· γίγνεται γὰρ οὕτω τὸ “κεραμεὺς κεραμεῖ”. καὶ τοὺς τῶν αὐτῶν ἐπιθυμοῦντας, ὧν ἐνδέχεται ἅμα μετέχειν αὐτούς· εἰ δὲ μή, ταῦτόν καὶ οὕτω συμβαίνει. καὶ πρὸς οὓς οὕτως ἔχουσιν ὥστε μὴ αἰσχύνεσθαι τὰ πρὸς δόξαν, μὴ καταφρονοῦντες. καὶ πρὸς οὓς αἰσχύνονται τὰ πρὸς ἀλήθειαν. καὶ πρὸς οὓς φιλοτιμοῦνται, ἢ ὑφ' ὧν ζηλοῦσθαι βούλονται καὶ μὴ φθονεῖσθαι, τούτους ἢ φιλοῦσιν ἢ βούλονται φίλοι εἶναι. καὶ οἷς ἂν τάγαθὰ συμπράττωσιν, ἐὰν μὴ μέλλῃ αὐτοῖς ἔσεσθαι μείζω κακά. καὶ οἱ ὁμοίως καὶ τοὺς ἀπόντας καὶ τοὺς παρόντας φιλοῦσιν· διὸ καὶ τοὺς περὶ τοὺς τεθνεῶτας τοιούτους πάντες φιλοῦσιν. καὶ ὅλως τοὺς σφόδρα φιλοφίλους καὶ μὴ ἐγκαταλείποντας· μάλιστα γὰρ φιλοῦσι τῶν ἀγαθῶν τοὺς φιλεῖν ἀγαθοὺς. καὶ τοὺς μὴ πλαττομένους πρὸς αὐτούς· τοιοῦτοι δὲ οἱ καὶ τὰ φαῦλα τὰ ἑαυτῶν λέγοντες· εἴρηται γὰρ ὅτι πρὸς τοὺς φίλους τὰ πρὸς δόξαν οὐκ αἰσχυρόμεθα· εἰ οὖν ὁ αἰσχυρόμενος μὴ φιλεῖ, ὁ μὴ αἰσχυρόμενος φιλοῦντι ἔοικεν. καὶ τοὺς μὴ φοβερούς, καὶ οὓς θαρροῦμεν· οὐδεὶς γὰρ ὃν φοβεῖται φιλεῖ.

εἶδη δὲ φιλίας ἔταιρεία οἰκειότης συγγένεια καὶ ὅσα τοιαῦτα. ποιητικὰ δὲ φιλίας χάρις καὶ τὸ μὴ δεηθέντος ποιῆσαι καὶ τὸ ποιήσαντα μὴ δηλῶσαι· αὐτοῦ γὰρ οὕτως ἔνεκα φαίνεται καὶ οὐ διὰ τι ἕτερον.

[1382a] περὶ δ' ἔχθρας καὶ τοῦ μισεῖν φανερόν ὡς ἐκ τῶν ἐναντίων ἔστι θεωρεῖν. ποιητικὰ δὲ ἔχθρας ὀργή, ἐπηρεασμός, διαβολή. ὀργὴ μὲν οὖν ἔστιν ἐκ τῶν πρὸς αὐτόν, ἔχθρα δὲ καὶ ἄνευ τοῦ πρὸς αὐτόν· ἂν γὰρ ὑπολαμβάνωμεν εἶναι τοιόνδε, μισοῦμεν. καὶ ἡ μὲν ὀργὴ ἀεὶ περὶ τὰ καθ' ἕκαστα, οἷον Καλλία ἢ Σωκράτει, τὸ δὲ μῖσος καὶ πρὸς τὰ γένη· τὸν γὰρ κλέπτην μισεῖ καὶ τὸν συκοφάντην ἅπας. καὶ τὸ μὲν ἰατὸν χρόνῳ, τὸ δ' ἀνίατον. καὶ τὸ μὲν λύπης ἔφεσις, τὸ δὲ κακοῦ· αἰσθῆσθαι γὰρ βούλεται ὁ ὀργιζόμενος, τῷ δ' οὐδὲν διαφέρει. ἔστι δὲ τὰ μὲν λυπηρὰ αἰσθητὰ πάντα, τὰ δὲ μάλιστα κακὰ ἥκιστα αἰσθητά, ἀδικία καὶ ἀφροσύνη· οὐδὲν γὰρ λυπεῖ ἡ παρουσία τῆς κακίας. καὶ τὸ μὲν μετὰ λύπης, τὸ δ' οὐ μετὰ λύπης· ὁ μὲν γὰρ ὀργιζόμενος λυπεῖται, ὁ δὲ μισῶν οὔ. καὶ ὁ μὲν πολλῶν ἂν γενομένων ἐλεήσειεν, ὁ δ' οὐδενός· ὁ μὲν γὰρ ἀντιπαθεῖν βούλεται ὥ ὀργίζεται, ὁ δὲ μὴ εἶναι.

φανερόν οὖν ἐν τούτων ὅτι ἐνδέχεται ἐχθροὺς καὶ φίλους καὶ ὄντας ἀποδεικνύειν καὶ μὴ ὄντας ποιεῖν καὶ φάσκοντας διαλύειν, καὶ δι' ὀργὴν ἢ δι' ἔχθραν ἀμφισβητοῦντας ἐφ' ὁποτέραν ἂν προαιρῇται τις ἄγειν.

Ποῖα δὲ φοβοῦνται καὶ τίνας καὶ πῶς ἔχοντες, ὧδ' ἔσται φανερόν. ἔστω δὴ ὁ φόβος λύπη τις ἢ ταραχὴ ἐκ φαντασίας μέλλοντος κακοῦ φθαρτικοῦ ἢ λυπηροῦ· οὐ γὰρ πάντα τὰ κακὰ φοβοῦνται, οἷον εἰ ἔσται ἄδικος ἢ βραδύς, ἀλλ' ὅσα λύπας μεγάλας ἢ φθορὰς δύναται, καὶ ταῦτα ἐὰν μὴ πόρρῳ ἀλλὰ σύνεγγυς φαίνεται ὥστε μέλλειν. τὰ γὰρ πόρρῳ σφόδρα οὐ φοβοῦνται· ἴσασι γὰρ πάντες ὅτι ἀποθανοῦνται, ἀλλ' ὅτι οὐκ ἐγγύς, οὐδὲν φροντίζουσιν. εἰ δὴ ὁ φόβος τοῦτ' ἐστίν, ἀνάγκη τὰ τοιαῦτα φοβερὰ εἶναι ὅσα φαίνεται δύναμιν ἔχειν μεγάλην τοῦ φθεῖρειν ἢ βλάπτειν βλάβας εἰς λύπην μεγάλην συντεινούσας· διὸ καὶ τὰ σημεῖα τῶν τοιούτων φοβερὰ· ἐγγύς γὰρ φαίνεται τὸ φοβερόν· τοῦτο γάρ ἐστι κίνδυνος, φοβεροῦ πλησιασμός.

τοιαῦτα δὲ ἔχθρα τε καὶ ὀργὴ δυναμένων ποιεῖν τι (δῆλον γὰρ ὅτι βούλονται τε καὶ δύνανται, ὥστε ἐγγύς εἰσιν τοῦ ποιεῖν), καὶ ἀδικία δύναμιν ἔχουσα· τῷ προαιρεῖσθαι γὰρ ὁ [1382b] ἄδικος ἄδικος. καὶ ἀρετὴ ὑβριζομένη δύναμιν ἔχουσα (δῆλον γὰρ ὅτι προαιρεῖται μὲν ὅταν ὑβρίζηται, ἀεὶ, δύναται δὲ νῦν), καὶ φόβος τῶν δυναμένων τι ποιῆσαι· ἐν παρασκευῇ γὰρ ἀνάγκη εἶναι καὶ τὸν τοιοῦτον· ἐπεὶ δ' οἱ πολλοὶ χείρους καὶ ἥττους τοῦ κερδαίνειν

καὶ δειλοὶ ἐν τοῖς κινδύνοις, φοβερὸν ὥς ἐπὶ τὸ πολὺ τὸ ἐπ’ ἄλλω αὐτὸν εἶναι, ὥστε οἱ συνειδότες πεποιηκότι τι δεινὸν φοβεροὶ ἢ κατελπίζουν ἢ ἐγκαταλιπεῖν. καὶ οἱ δυνάμενοι ἀδικεῖν τοῖς δυναμένοις ἀδικεῖσθαι· ὥς γὰρ ἐπὶ τὸ πολὺ ἀδικοῦσιν οἱ ἄνθρωποι ὅταν δύνωνται. καὶ οἱ ἡδικημένοι ἢ νομίζοντες ἀδικεῖσθαι· ἀεὶ γὰρ τηροῦσι καιρόν. καὶ οἱ ἡδίκηκοί, ἂν δύναμιν ἔχωσι, φοβεροὶ, δεδιότες τὸ ἀντιπαθεῖν· ὑπέκειτο γὰρ τὸ τοιοῦτο φοβερὸν. καὶ οἱ τῶν αὐτῶν ἀνταγωνισταί, ὅσα μὴ ἐνδέχεται ἅμα ὑπάρχειν ἀμφοῖν· ἀεὶ γὰρ πολεμοῦσι πρὸς τοὺς τοιούτους. καὶ οἱ τοῖς κρείττοσιν αὐτῶν φοβεροὶ· μᾶλλον γὰρ ἂν δύναιτο βλάπτειν αὐτούς, εἰ καὶ τοὺς κρείττους. καὶ οὖς φοβοῦνται οἱ κρείττους αὐτῶν, διὰ ταῦτό. καὶ οἱ τοὺς κρείττους αὐτῶν ἀνηρηκότες, καὶ οἱ τοῖς ἡττοσιν αὐτῶν ἐπιτιθέμενοι· ἢ γὰρ ἤδη φοβεροὶ ἢ αὐξηθέντες. καὶ τῶν ἡδικημένων καὶ ἐχθρῶν ἢ ἀντιπάλων οὐχ οἱ ὀξύθυμοι καὶ παρρησιαστικοί, ἀλλὰ οἱ πρᾶοι καὶ εἴρωνες καὶ πανοῦργοι· ἄδελφοι γὰρ εἰ ἐγγύς, ὥστε οὐδέποτε φανεροὶ ὅτι πόρρω. πάντα δὲ τὰ φοβερά φοβερώτερα ὅσα ἀμαρτάνουσιν ἐπανορθώσασθαι μὴ ἐνδέχεται, ἀλλ’ ἢ ὅλως ἀδύνατα, ἢ μὴ ἐπ’ αὐτοῖς ἀλλ’ ἐπὶ τοῖς ἐναντίοις. καὶ ὧν βοήθεια μὴ εἰσιν ἢ μὴ ῥάδια. ὥς δ’ ἀπλῶς εἰπεῖν, φοβερά ἐστὶν ὅσα ἐφ’ ἐτέρων γινόμενα ἢ μέλλοντα ἔλκειν ἐστὶν.

τὰ μὲν οὖν φοβερά καὶ ἃ φοβοῦνται σχεδὸν ὥς εἰπεῖν τὰ μέγιστα ταῦτ’ ἐστίν, ὥς δὲ διακείμενοι αὐτοὶ φοβοῦνται, νῦν λέγωμεν. εἰ δὴ ἐστὶν ὁ φόβος μετὰ προσδοκίας τινὸς τοῦ πείσεσθαι τι φθαρτικὸν πάθος, φανερόν ὅτι οὐδεὶς φοβεῖται τῶν οἰομένων μηδὲν ἂν παθεῖν, οὐδὲ ταῦτα ἃ μὴ οἶονται «ἂν» παθεῖν οὐδὲ τούτους ὑφ’ ὧν μὴ οἶονται, οὐδὲ τότε ὅτε μὴ οἶονται. ἀνάγκη τοίνυν φοβεῖσθαι τοὺς οἰομένους τι παθεῖν ἂν, καὶ τοὺς ὑπὸ τούτων καὶ ταῦτα καὶ τότε. οὐκ οἶονται δὲ παθεῖν [1383a] ἂν οὔτε οἱ ἐν εὐτυχίαις μεγάλας ὄντες καὶ δοκοῦντες (διὸ ὑβρισταί καὶ ὀλίγωροι καὶ θρασεῖς, ποιεῖ δὲ τοιούτους πλοῦτος ἰσχυρὸς πολυφιλία δύναμις), οὔτε οἱ ἤδη πεπονθέναι πάντα νομίζοντες τὰ δεινὰ καὶ ἀπεψυγμένοι πρὸς τὸ μέλλον, ὥσπερ οἱ ἀποτυμπανιζόμενοι ἤδη· ἀλλὰ δεῖ τινα ἐλπίδα ὑπεῖναι σωτηρίας, περὶ οὗ ἀγωνιῶσιν. σημεῖον δέ· ὁ γὰρ φόβος βουλευτικοὺς ποιεῖ, καίτοι οὐδεὶς βουλεύεται περὶ τῶν ἀνελπίστων· ὥστε δεῖ τοιούτους παρασκευάζειν, ὅταν ἢ βέλτιον τὸ φοβεῖσθαι αὐτούς, ὅτι τοιοῦτοί εἰσιν οἷον παθεῖν (καὶ γὰρ ἄλλοι μείζους ἔπαθον), καὶ τοὺς τοιούτους δεικνύναι πάσχοντας ἢ πεπονθότας, καὶ ὑπὸ τοιούτων ὑφ’ ὧν οὐκ ὥοντο, καὶ ταῦτα «ἃ» καὶ τότε ὅτε οὐκ ὥοντο.

ἐπεὶ δὲ περὶ φόβου φανερόν τί ἐστὶν, καὶ τῶν φοβερῶν, καὶ ὥς ἕκαστοι ἔχοντες δεδίασι, φανερόν ἐκ τούτων καὶ τὸ θαρρεῖν τί ἐστὶ, καὶ περὶ ποῖα θαρραλέοι εἰσὶ καὶ πῶς διακείμενοι θαρραλέοι εἰσὶν· τό τε γὰρ θάρσος τὸ

ἐναντίον τῷ «φόβῳ, καὶ τὸ θαρραλέον τῷ» φοβερῷ, ὥστε μετὰ φαντασίας ἢ ἐλπίς τῶν σωτηρίων ὡς ἐγγὺς ὄντων, τῶν δὲ φοβερῶν «ὡς» ἢ μὴ ὄντων ἢ πόρρῳ ὄντων. ἔστι δὲ θαρραλέα τὰ τε δεινὰ πόρρῳ ὄντα καὶ τὰ σωτήρια ἐγγύς, καὶ ἐπανορθώσεις ἂν ὥσι καὶ βοήθειαι πολλαὶ ἢ μεγάλαι ἢ ἄμφω, καὶ μήτε ἡδικημένοι μήτε ἡδικηκότες ὥσιν, ἀνταγωνισταί τε ἢ μὴ ὥσιν ὅλως, ἢ μὴ ἔχωσιν δύναμιν, ἢ δύναμιν ἔχοντες ὥσι φίλοι ἢ πεποιηκότες εὖ ἢ πεπονθότες, ἢ ἂν πλείους ὥσιν οἷς ταῦτὰ συμφέρει, ἢ κρείττους, ἢ ἄμφω.

αὐτοὶ δ' οὕτως ἔχοντες θαρραλέοι εἰσίν, ἂν πολλὰ κατωρθωκέναι οἴωνται καὶ μὴ πεπονθέναι, ἢ ἐὰν πολλάκις ἐληλυθότες εἰς τὰ δεινὰ καὶ διαπεφευγότες ὥσι· διχῶς γὰρ ἀπαθεῖς γίνονται οἱ ἄνθρωποι, ἢ τῷ μὴ πεπειρᾶσθαι ἢ τῷ βοηθείας ἔχειν, ὥσπερ ἐν τοῖς κατὰ θάλατταν κινδύνοις οἱ τε ἄπειροι χειμῶνος θαρροῦσι τὰ μέλλοντα καὶ οἱ βοηθείας ἔχοντες διὰ τὴν ἐμπειρίαν. καὶ ὅταν τοῖς ὁμοίοις φοβερὸν μὴ ἦ, μηδὲ τοῖς ἥττοσι καὶ ὧν κρείττους οἴονται εἶναι· οἴονται δὲ ὧν κεκρατήκασιν ἢ αὐτῶν ἢ τῶν κρειπτόνων ἢ τῶν ὁμοίων. καὶ ἂν ὑπάρχειν αὐτοῖς οἴωνται πλείω καὶ μείζω, οἷς ὑπερέχοντες φοβεροί εἰσιν· [1383b] ταῦτα δὲ ἔστι πλῆθος χρημάτων καὶ ἰσχύς σωμάτων καὶ φίλων καὶ χώρας καὶ τῶν πρὸς πόλεμον παρασκευῶν, ἢ πασῶν ἢ τῶν μεγίστων. καὶ ἐὰν μὴ ἡδικηκότες ὥσιν μηδένα ἢ μὴ πολλοὺς ἢ μὴ τούτους παρ' ὧν φοβοῦνται, καὶ ὅλως ἂν τὰ πρὸς τοὺς θεοὺς αὐτοῖς καλῶς ἔχῃ, τὰ τε ἄλλα καὶ τὰ ἀπὸ σημείων καὶ λογίων· θαρραλέον γὰρ ἢ ὀργή, τὸ δὲ μὴ ἀδικεῖν ἀλλ' ἀδικεῖσθαι ὀργῆς ποιητικόν, τὸ δὲ θεῖον ὑπολαμβάνεται βοηθεῖν τοῖς ἀδικουμένοις. καὶ ὅταν ἐπιχειροῦντες ἢ μηδὲν ἂν παθεῖν [μηδὲ πείσεσθαι] ἢ κατορθώσιν οἴωνται. καὶ περὶ μὲν τῶν φοβερῶν καὶ θαρραλέων εἴρηται.

Ποῖα δ' αἰσχύνονται καὶ ἀναισχυντοῦσιν, καὶ πρὸς τίνας καὶ πῶς ἔχοντες, ἐκ τῶνδε δῆλον. ἔστω δὴ αἰσχύνη λύπη τις ἢ ταραχὴ περὶ τὰ εἰς ἀδοξίαν φαινόμενα φέρειν τῶν κακῶν, ἢ παρόντων ἢ γεγονότων ἢ μελλόντων, ἢ δ' ἀναισχυντία ὀλιγωρία τις καὶ ἀπάθεια περὶ τὰ αὐτὰ ταῦτα. εἰ δὴ ἔστιν αἰσχύνη ἢ ὀρισθεῖσα, ἀνάγκη αἰσχύνεσθαι ἐπὶ τοῖς τοιούτοις τῶν κακῶν ὅσα αἰσchrὰ δοκεῖ εἶναι ἢ αὐτῷ ἢ ὧν φροντίζει· τοιαῦτα δ' ἐστὶν ὅσα ἀπὸ κακίας ἔργα ἐστίν, οἷον τὸ ἀποβαλεῖν ἀσπίδα ἢ φυγεῖν· ἀπὸ δειλίας γάρ. καὶ τὸ ἀποστερῆσαι παρακαταθήκην [ἢ ἀδικῆσαι]· ἀπὸ ἀδικίας γάρ. καὶ τὸ συγγενέσθαι αἷς οὐ δεῖ ἢ οὐ οὐ δεῖ ἢ ὅτε οὐ δεῖ· ἀπὸ ἀκολασίας γάρ. καὶ τὸ κερδαίνειν ἀπὸ μικρῶν ἢ αἰσchrῶν ἢ ἀπὸ ἀδυνάτων, οἷον πενήτων ἢ τεθνεώτων, ὅθεν καὶ ἡ παροιμία τὸ ἀπὸ νεκροῦ φέρειν· ἀπὸ αἰσχροκερδείας γάρ καὶ ἀνελευθερίας. καὶ τὸ μὴ βοηθεῖν, δυνάμενον, εἰς χρήματα, ἢ ἥττον βοηθεῖν. καὶ τὸ βοηθεῖσθαι παρὰ τῶν ἥττον εὐπόρων, καὶ δανείζεσθαι ὅτε

δόξει αἰτεῖν, καὶ αἰτεῖν ὅτε ἀπαιτεῖν, καὶ ἀπαιτεῖν ὅτε αἰτεῖν, καὶ ἐπαινεῖν ἃ δόξει αἰτεῖν, καὶ τὸ ἀποτετυχηκότα μηδὲν ἦττον· πάντα γὰρ ἀνελευθερίας ταῦτα σημεῖα, τὸ δ' ἐπαινεῖν παρόντας κολακείας, καὶ τὸ τὰγαθὰ μὲν ὑπερεπαινεῖν τὰ δὲ φαῦλα συναλείφειν, καὶ τὸ ὑπεραλγεῖν ἀλγοῦντι παρόντα, καὶ τὰλλα πάντα ὅσα τοιαῦτα· κολακείας γὰρ σημεῖα. καὶ τὸ μὴ ὑπομένειν πόνους οὓς οἱ πρεσβύτεροι [1384a] ἢ τρυφῶντες ἢ ἐν ἐξουσίᾳ μᾶλλον ὄντες ἢ ὅλως οἱ ἀδυνατώτεροι· πάντα γὰρ μαλακίας σημεῖα. καὶ τὸ ὑφ' ἑτέρου εὖ πάσχειν, καὶ τὸ πολλάκις, καὶ ὃ εὖ ἐποίησεν ὀνειδίζειν· μικροψυχίας γὰρ πάντα καὶ ταπεινότητος σημεῖα. καὶ τὸ περὶ αὐτοῦ πάντα λέγειν καὶ ἐπαγγέλλεσθαι, καὶ τὸ τὰλλότρια αὐτοῦ φάσκειν· ἀλαζονείας γάρ. ὁμοίως δὲ καὶ ἀπὸ τῶν ἄλλων ἐκάστης τῶν τοῦ ἥθους κακιῶν τὰ ἔργα καὶ τὰ σημεῖα καὶ τὰ ὅμοια· αἰσchrὰ γὰρ καὶ ἀναίσχυντα. καὶ ἐπὶ τούτοις τὸ τῶν καλῶν ὧν πάντες μετέχουσιν, ἢ οἱ ὅμοιοι πάντες ἢ οἱ πλεῖστοι, μὴ μετέχειν - ὁμοίους δὲ λέγω ὁμοεθνεῖς, πολίτας, ἡλικιώτας, συγγενεῖς, ὅλως τοὺς ἐξ ἴσου - αἰσchrὸν γὰρ ἤδη τὸ μὴ μετέχειν οἶον παιδεύσεως ἐπὶ τοσοῦτον, καὶ τῶν ἄλλων ὁμοίως. πάντα δὲ ταῦτα μᾶλλον, ἂν δι' ἑαυτὸν φαίνεται· οὕτω γὰρ ἤδη ἀπὸ κακίας μᾶλλον, ἂν αὐτὸς ἢ αἷτιος τῶν ὑπαρξάντων ἢ ὑπαρχόντων ἢ μελλόντων. πάσχοντες δὲ ἢ πεπονθότες ἢ πεισόμενοι τὰ τοιαῦτα αἰσchrύνονται ὅσα εἰς ἀτιμίαν φέρει καὶ ὀνειδῇ· ταῦτα δ' ἐστὶ τὰ εἰς ὑπηρετήσεις ἢ σώματος ἢ ἔργων αἰσchrῶν, ὧν ἐστὶν τὸ ὑβρίζεσθαι. καὶ τὰ μὲν εἰς ἀκολασίαν καὶ ἐκόντα καὶ ἄκοντα, τὰ δ' εἰς βίαν ἄκοντα· ἀπὸ ἀνανδρίας γὰρ ἢ δειλίας ἢ ὑπομονῇ καὶ τὸ μὴ ἀμύνεσθαι.

ἃ μὲν οὖν αἰσchrύνονται, ταῦτ' ἐστὶ καὶ τὰ τοιαῦτα· ἐπεὶ δὲ περὶ ἀδοξίας φαντασία ἐστὶν ἡ αἰσchrύνη, καὶ ταύτης αὐτῆς χάριν ἀλλὰ μὴ τῶν ἀποβαινόντων, οὐδεὶς δὲ τῆς δόξης φροντίζει ἀλλ' ἢ διὰ τοὺς δοξάζοντας, ἀνάγκη τούτους αἰσchrύνεσθαι ὧν λόγον ἔχει· λόγον δὲ ἔχει τῶν θαυμαζόντων, καὶ οὓς θαυμάζει, καὶ ὑφ' ὧν βούλεται θαυμάζεσθαι, καὶ πρὸς οὓς φιλοτιμεῖται, καὶ ὧν μὴ καταφρονεῖ τῆς δόξης· θαυμάζεσθαι μὲν οὖν βούλονται ὑπὸ τούτων καὶ θαυμάζουσι τούτους ὅσοι τι ἔχουσιν ἀγαθὸν τῶν τιμίων, ἢ παρ' ὧν τυγχάνουσιν δεόμενοι σφόδρα τινὸς ὧν ἐκεῖνοι κύριοι, οἶον οἱ ἐρῶντες· φιλοτιμοῦνται δὲ πρὸς τοὺς ὁμοίους· φροντίζουσι δ' ὡς ἀληθευόντων τῶν φρονίμων, τοιοῦτοι δ' οἱ τε πρεσβύτεροι καὶ οἱ πεπαιδευμένοι. καὶ τὰ ἐν ὀφθαλμοῖς καὶ τὰ ἐν φανερώ μᾶλλον (ὅθεν καὶ ἡ παροιμία τὸ ἐν ὀφθαλμοῖς εἶναι αἰδῶ)· διὰ τοῦτο τοὺς αἰεὶ παρεσομένους μᾶλλον αἰσchrύνονται καὶ τοὺς [1384b] προσέχοντας αὐτοῖς, διὰ τὸ ἐν ὀφθαλμοῖς ἀμφότερα. καὶ τοὺς μὴ περὶ ταῦτ' ἐνόχους· δῆλον γὰρ ὅτι τάναντία δοκεῖ τούτοις. καὶ τοὺς μὴ συγγνωμονικοὺς τοῖς φαινομένοις ἀμαρτάνειν· ἃ γὰρ τις αὐτὸς ποιεῖ, ταῦτα λέγεται τοῖς πέλας οὐ νεμεσᾶν,

ὥστε ἂ μὴ ποιεῖ, δῆλον ὅτι νεμεσᾷ. καὶ τοὺς ἐξαγγελτικοὺς πολλοῖς· οὐδὲν γὰρ διαφέρει μὴ δοκεῖν ἢ μὴ ἐξαγγέλλειν· ἐξαγγελτικοὶ δὲ οἱ τε ἡδικοημένοι, διὰ τὸ παρατηρεῖν, καὶ οἱ κακολόγοι· εἴπερ γὰρ καὶ τοὺς μὴ ἁμαρτάνοντας, ἔτι μᾶλλον τοὺς ἁμαρτάνοντας. καὶ οἷς ἡ διατριβὴ ἐπὶ ταῖς τῶν πέλας ἁμαρτίαις, οἷον χλευασταῖς καὶ κωμωδοποιοῖς· κακολόγοι γὰρ πως οὗτοι καὶ ἐξαγγελτικοί. καὶ ἐν οἷς μηδὲν ἀποτετυχήκασιν· ὥσπερ γὰρ θαυμαζόμενοι διάκεινται· διὸ καὶ τοὺς πρῶτον δεηθέντας τι αἰσχύνονται ὥς οὐδὲν πω ἡδοξηκότες ἐν αὐτοῖς· τοιοῦτοι δὲ οἱ ἄρτι βουλόμενοι φίλοι εἶναι (τὰ γὰρ βέλτιστα τεθέανται· διὸ εὖ ἔχει ἡ τοῦ Εὐριπίδου ἀπόκρισις πρὸς τοὺς Συρακοσίους), καὶ τῶν πάλαι γνωρίμων οἱ μηδὲν συνειδότες. αἰσχύνονται δὲ οὐ μόνον αὐτὰ τὰ ῥηθέντα αἰσχυνητὰ ἀλλὰ καὶ τὰ σημεῖα, οἷον οὐ μόνον ἀφροδισιάζοντες ἀλλὰ καὶ τὰ σημεῖα αὐτοῦ, καὶ οὐ μόνον ποιοῦντες τὰ αἰσχρά, ἀλλὰ καὶ λέγοντες. ὁμοίως δὲ οὐ τοὺς εἰρημένους μόνον αἰσχύνονται, ἀλλὰ καὶ τοὺς δηλώσοντας αὐτοῖς, οἷον θεράποντας καὶ φίλους τούτων. ὅλως δὲ οὐκ αἰσχύνονται οὐθ' ὧν πολὺ καταφρονοῦσι τῆς δόξης τοῦ ἀληθεύειν (οὐδεῖς γὰρ παιδία καὶ θηρία αἰσχύνεται), οὔτε ταῦτά τοὺς γνωρίμους καὶ τοὺς ἀγνώτας, ἀλλὰ τοὺς μὲν γνωρίμους τὰ πρὸς ἀλήθειαν δοκοῦντα τοὺς δ' ἄπωθεν τὰ πρὸς τὸν νόμον.

αὐτοὶ δὲ ὧδε διακείμενοι αἰσχυνηθεῖεν ἄν, πρῶτον μὲν εἰ ὑπάρχοιεν πρὸς αὐτοὺς ἔχοντες οὕτως τινὲς οἷους ἔφαμεν εἶναι οὓς αἰσχύνονται. ἦσαν δ' οὗτοι ἢ <οἱ> θαυμαζόμενοι ἢ θαυμάζοντες ἢ ὑφ' ὧν βούλονται θαυμάζεσθαι, ἢ ὧν δέονταί τινα χρεῖαν ἥς μὴ τεύξονται ἄδοξοι ὄντες, καὶ οὗτοι ἢ ὀρῶντες (ὥσπερ Κυδίας περὶ τῆς Σάμου κληρουχίας ἐδημηγόρησεν· ἡξίου γὰρ ὑπολαβεῖν τοὺς Ἀθηναίους περιεστάναι κύκλῳ τοὺς Ἑλληνας, ὡς ὀρῶντας καὶ μὴ μόνον ἀκουσομένους ἂ ἂν ψηφίσωνται), ἢ ἂν πλησίον ὧσιν οἱ τοιοῦτοι, ἢ μέλλωσιν αἰσθήσεσθαι· διὸ καὶ ὀρᾶσθαι ἀτυχοῦντες ὑπὸ τῶν ζηλούντων [1385a] ποτὲ οὐ βούλονται· θαυμασταὶ γὰρ οἱ ζηλωταί. καὶ ὅταν ἔχωσιν ἂ κατασχύνουσιν ἔργα καὶ πράγματα ἢ αὐτῶν ἢ προγόνων ἢ ἄλλων τινῶν πρὸς οὓς ὑπάρχει αὐτοῖς ἀγχιστεία τις. καὶ ὅλως ὑπὲρ ὧν αἰσχύνονται αὐτοί· εἰσὶ δ' οὗτοι οἱ εἰρημένοι καὶ οἱ εἰς αὐτοὺς ἀναφερόμενοι, ἢ ὧν διδάσκαλοι ἢ σύμβουλοι γεγόνασιν, ἢ ἐὰν ὧσιν ἕτεροι ὅμοιοι πρὸς οὓς φιλοτιμοῦνται· πολλὰ γὰρ αἰσχυνόμενοι διὰ τοὺς τοιούτους καὶ ποιοῦσι καὶ οὐ ποιοῦσιν. καὶ μέλλοντες ὀρᾶσθαι καὶ ἐν φανερώ ἀναστρέφεσθαι τοῖς συνειδόσιν αἰσχυνητοῖ μᾶλλον εἰσίν· ὅθεν καὶ Ἀντιφῶν ὁ ποιητής, μέλλων ἀποτυμπανίζεσθαι ὑπὸ Διονυσίου, εἶπεν, ἰδὼν τοὺς συναποθνήσκειν μέλλοντας ἐγκαλυπτομένους ὡς ἦσαν διὰ τῶν πυλῶν, “τί ἐγκαλύπτεσθε;” ἔφη· “ἢ μὴ αὐριόν τις ὑμᾶς ἴδῃ τούτων;”

περὶ μὲν οὖν αἰσχύνης ταῦτα· περὶ δὲ ἀναισχυντίας δῆλον ὡς ἐκ τῶν ἐναντίων εὐπορήσομεν.

Τίσιν δὲ χάριν ἔχουσι καὶ ἐπὶ τίσιν καὶ πῶς αὐτοὶ ἔχοντες, ὀρισμένοις τὴν χάριν δῆλον ἔσται. ἔστω δὲ χάρις, καθ' ἣν ὁ ἔχων λέγεται χάριν ἔχειν, ὑπουργία τῷ δεομένῳ μὴ ἀντί τινος, μηδ' ἵνα τι αὐτῷ τῷ ὑπουργοῦντι ἀλλ' ἵνα τι ἐκείνῳ· μεγάλη δὲ ἂν ἢ σφόδρα δεόμενος, ἢ μεγάλων καὶ χαλεπῶν, ἢ ἐν καιροῖς τοιούτοις, ἢ μόνος ἢ πρῶτος ἢ μάλιστα. δεήσεις δὲ εἰσιν αἱ ὀρέξεις, καὶ τούτων μάλιστα αἱ μετὰ λύπης τοῦ μὴ γιγνομένου. τοιαῦται δὲ αἱ ἐπιθυμίαι, οἷον ἔρως, καὶ αἱ ἐν ταῖς τοῦ σώματος κακώσεσιν καὶ ἐν κινδύνοις· καὶ γὰρ ὁ κινδυνεύων ἐπιθυμεῖ καὶ ὁ λυπούμενος· διὸ οἱ ἐν πενίᾳ παριστάμενοι καὶ φυγαῖς, κἂν μικρὰ ὑπηρετήσωσιν, διὰ τὸ μέγεθος τῆς δεήσεως καὶ τὸν καιρὸν κεχαρισμένοι, οἷον ὁ ἐν Λυκείῳ τὸν φορμὸν δούς. ἀνάγκη οὖν μάλιστα μὲν εἰς ταῦτά ἔχειν τὴν ὑπουργίαν, εἰ δὲ μή, εἰς ἴσα ἢ μείζω· ὥστε ἐπεὶ φανερόν καὶ οἷς καὶ ἐφ' οἷς γίνεται χάρις καὶ πῶς ἔχουσι, δῆλον ὅτι ἐκ τούτων παρασκευαστέον, τοὺς μὲν δεικνύοντας ἢ ὄντας ἢ γεγεννημένους ἐν τοιαύτῃ λύπῃ καὶ δεήσει, τοὺς δὲ ὑπηρετηκότας ἐν τοιαύτῃ χρεῖα τοιοῦτόν τι ἢ ὑπηρετοῦντας. φανερόν δὲ καὶ ὅθεν ἀφαιρεῖσθαι ἐνδέχεται τὴν χάριν καὶ ποιεῖν [1385b] ἀχαρίστους· ἢ γὰρ ὅτι αὐτῶν ἔνεκα ὑπηρετοῦσιν ἢ ὑπηρετήσαν (τοῦτο δ' οὐκ ἦν χάρις), ἢ ὅτι ἀπὸ τύχης συνέπεσεν ἢ συνηναγκάσθησαν, ἢ ὅτι ἀπέδωκαν ἀλλ' οὐκ ἔδωκαν, εἴτε εἰδότες εἴτε μή· ἀμφοτέρως γὰρ τὸ ἀντί τινος, ὥστε οὐδ' οὕτως ἂν εἴη χάρις. καὶ περὶ ἀπάσας τὰς κατηγορίας σκεπτέον· ἢ γὰρ χάρις ἐστὶν ἢ ὅτι τοδὶ ἢ τοσόνδε ἢ τοιόνδε ἢ πότε ἢ ποῦ. σημεῖον δὲ εἰ ἔλαττον μὴ ὑπηρετήσαν, καὶ εἰ τοῖς ἐχθροῖς ἢ ταῦτά ἢ ἴσα ἢ μείζω· δῆλον γὰρ ὅτι οὐδὲ ταῦτα ἡμῶν ἔνεκα. ἢ εἰ φαῦλα εἰδώς· οὐδεὶς γὰρ ὁμολογεῖ δεῖσθαι φαύλων.

Καὶ περὶ μὲν τοῦ χαρίζεσθαι καὶ ἀχαριστεῖν εἴρηται· ποῖα δ' ἐλεεινὰ καὶ τίνας ἐλεοῦσι, καὶ πῶς αὐτοὶ ἔχοντες, λέγωμεν. ἔστω δὲ ἔλεος λύπη τις ἐπὶ φαινομένῳ κακῷ φθαρτικῷ ἢ λυπηρῷ τοῦ ἀναξίου τυγχάνειν, ὃ κἂν αὐτὸς προσδοκῇσιν ἂν παθεῖν ἢ τῶν αὐτοῦ τίνα, καὶ τοῦτο ὅταν πλησίον φαίνεται· δῆλον γὰρ ὅτι ἀνάγκη τὸν μέλλοντα ἐλεήσειν ὑπάρχειν τοιοῦτον οἷον οἴεσθαι παθεῖν ἂν τι κακὸν ἢ αὐτὸν ἢ τῶν αὐτοῦ τίνα, καὶ τοιοῦτο κακὸν οἷον εἴρηται ἐν τῷ ὅρῳ ἢ ὅμοιον ἢ παραπλήσιον· διὸ οὔτε οἱ παντελῶς ἀπολωλότες ἐλεοῦσιν (οὐδὲν γὰρ ἂν ἔτι παθεῖν οἴονται· πεπόνθασι γάρ), οὔτε οἱ ὑπερευδαιμονεῖν οἰόμενοι, ἀλλ' ὑβρίζουσιν· εἰ γὰρ ἅπαντα οἴονται ὑπάρχειν τᾶγαθὰ, δῆλον ὅτι καὶ τὸ μὴ ἐνδέχεσθαι παθεῖν μηδὲν κακόν· καὶ γὰρ τοῦτο τῶν ἀγαθῶν. εἰσὶ δὲ τοιοῦτοι οἷοι νομίζειν παθεῖν ἂν, οἳ τε πεπονθότες ἤδη καὶ διαπεφευγότες, καὶ οἱ πρεσβύτεροι καὶ διὰ τὸ φρονεῖν καὶ



δι' ἐμπειρίαν, καὶ οἱ ἀσθενεῖς, καὶ οἱ δειλότεροι μᾶλλον, καὶ οἱ πεπαιδευμένοι· εὐλόγιστοι γάρ. καὶ οἷς ὑπάρχουσι γονεῖς ἢ τέκνα ἢ γυναῖκες· αὐτοῦ τε γὰρ ταῦτα, καὶ οἷα παθεῖν τὰ εἰρημένα. καὶ οἱ μήτε ἐν ἀνδρείας πάθει ὄντες, οἷον ἐν ὀργῇ ἢ θάρρει (ἀλόγιστα γὰρ τοῦ ἐσομένου ταῦτα), μήτε ἐν ὑβριστικῇ διαθέσει (καὶ γὰρ οὗτοι ἀλόγιστοι τοῦ πείσεσθαί τι), ἀλλ' οἱ μεταξὺ τούτων, μήτ' αὖ φοβούμενοι σφόδρα· οὐ γὰρ ἐλεοῦσιν οἱ ἐκπεπληγμένοι, διὰ τὸ εἶναι πρὸς τῷ οἰκείῳ πάθει. κἂν οἶωνται τινὰς εἶναι τῶν ἐπικεικῶν· ὁ γὰρ μηδένα οἰόμενος [1386a] πάντας οἰήσεται ἀξιούς εἶναι κακοῦ. καὶ ὅλως δὴ ὅταν ἔχη οὕτως ὥστ' ἀναμνησθῆναι τοιαῦτα συμβεβηκότα ἢ αὐτῷ ἢ <τῷ> τῶν αὐτοῦ, ἢ ἐλπίσαι γενέσθαι αὐτῷ ἢ τῷ τῶν αὐτοῦ.

ὥς μὲν οὖν ἔχοντες ἐλεοῦσιν εἴρηται, ἃ δ' ἐλεοῦσιν ἐκ τοῦ ὀρισμοῦ δῆλον· ὅσα τε γὰρ τῶν λυπηρῶν καὶ ὀδυνηρῶν φθαρτικά, πάντα ἐλεεινά, καὶ ὅσα ἀναιρετικά, καὶ ὅσων ἡ τύχη αἰτία κακῶν μέγεθος ἐχόντων. ἔστι δὲ ὀδυνηρὰ μὲν καὶ φθαρτικὰ θάνατοι καὶ αἰκία σώματων καὶ κακώσεις καὶ γῆρας καὶ νόσοι καὶ τροφῆς ἔνδεια, ὧν δ' ἡ τύχη αἰτία κακῶν ἀφιλία, ὀλιγοφιλία (διὸ καὶ τὸ διασπᾶσθαι ἀπὸ φίλων καὶ συνήθων ἐλεεινόν), αἰσχος, ἀσθένεια, ἀναπηρία, καὶ τὸ ὅθεν προσῆκεν ἀγαθόν τι ὑπάρξει κακόν τι συμβῆναι, καὶ τὸ πολλάκις τοιοῦτον, καὶ τὸ πεπονθότος γενέσθαι τι ἀγαθόν, οἷον Διοπεῖθει τὰ παρὰ βασιλέως τεθνεῶτι κατεπέμφθη, καὶ τὸ ἢ μηδὲν γεγενῆσθαι ἀγαθόν ἢ γενομένων μὴ εἶναι ἀπόλαυσιν.

ἐφ' οἷς μὲν οὖν ἐλεοῦσι, ταῦτα καὶ τὰ τοιαῦτά ἐστιν· ἐλεοῦσι δὲ τοὺς τε γνωρίμους, ἂν μὴ σφόδρα ἐγγὺς ὣσιν οἰκειότητι (περὶ δὲ τούτους ὥσπερ περὶ αὐτοὺς μέλλοντας ἔχουσιν· διὸ καὶ ὁ Ἀμάσιος ἐπὶ μὲν τῷ υἱεῖ ἀγομένῳ ἐπὶ τὸ ἀποθανεῖν οὐκ ἐδάκρυσεν, ὡς φασίν, ἐπὶ δὲ τῷ φίλῳ προσαιτοῦντι· τοῦτο μὲν γὰρ ἐλεεινόν, ἐκεῖνο δὲ δεινόν· τὸ γὰρ δεινὸν ἕτερον τοῦ ἐλεεινοῦ καὶ ἐκκρουστικὸν τοῦ ἐλέου καὶ πολλάκις τῷ ἐναντίῳ χρήσιμον· <οὐ γὰρ> ἔτι ἐλεοῦσιν ἐγγὺς αὐτοῖς τοῦ δεινοῦ ὄντος), καὶ τοὺς ὁμοίους ἐλεοῦσιν κατὰ ἡλικίαν, κατὰ ἥθη, κατὰ ἔξεις, κατὰ ἀξιώματα, κατὰ γένη· ἐν πᾶσι γὰρ τούτοις μᾶλλον φαίνεται καὶ αὐτῷ ἂν ὑπάρξει· ὅλως γὰρ καὶ ἐνταῦθα δεῖ λαβεῖν ὅτι ὅσα ἐφ' αὐτῶν φοβοῦνται, ταῦτα ἐπ' ἄλλων γιγνόμενα ἐλεοῦσιν. ἐπεὶ δ' ἐγγὺς φαινόμενα τὰ πάθη ἐλεεινά ἐστιν, τὰ δὲ μυριοστὸν ἔτος γενόμενα ἢ ἐσόμενα οὔτε ἐλπίζοντες οὔτε μεμνημένοι ἢ ὅλως οὐκ ἐλεοῦσιν ἢ οὐχ ὁμοίως, ἀνάγκη τοὺς συναπεργαζομένους σχήμασι καὶ φωναῖς καὶ ἐσθῆσι καὶ ὅλως ὑποκρίσει ἐλεεινότερους εἶναι (ἐγγὺς γὰρ ποιοῦσι φαίνεσθαι τὸ κακόν, πρὸ ὁμμάτων ποιοῦντες ἢ ὡς μέλλοντα ἢ ὡς γεγονότα· καὶ τὰ γεγονότα ἄρτι ἢ μέλλοντα [1386b] διὰ ταχέων ἐλεεινότερα), <καὶ> διὰ τοῦτο

καὶ τὰ σημεῖα, οἷον ἐσθῆτάς τε τῶν πεπονθότων καὶ ὅσα τοιαῦτα, καὶ τὰς πράξεις καὶ λόγους καὶ ὅσα ἄλλα τῶν ἐν τῷ πάθει ὄντων, οἷον ἥδη τελευτώντων. καὶ μάλιστα τὸ σπουδαίους εἶναι ἐν τοῖς τοιούτοις καιροῖς ὄντας ἐλεεινόν· ἅπαντα γὰρ ταῦτα διὰ τὸ ἐγγὺς φαίνεσθαι μᾶλλον ποιεῖ τὸν ἔλεον, καὶ ὡς ἀναξίου ὄντος καὶ ἐν ὀφθαλμοῖς φαινομένου τοῦ πάθους.

Ἀντίκειται δὲ τῷ ἐλεεῖν μάλιστα μὲν ὃ καλοῦσι νεμεσᾶν· τῷ γὰρ λυπεῖσθαι ἐπὶ ταῖς ἀναξίαις κακοπραγίαις ἀντικείμενόν ἐστι τρόπον τινὰ καὶ ἀπὸ τοῦ αὐτοῦ ἥθους τὸ λυπεῖσθαι ἐπὶ ταῖς ἀναξίαις εὐπραγίαις. καὶ ἄμφω τὰ πάθη ἥθους χρηστοῦ· δεῖ γὰρ ἐπὶ μὲν τοῖς ἀναξίως πράττουσι κακῶς συνάχθεσθαι καὶ ἐλεεῖν, τοῖς δὲ εὖ νεμεσᾶν· ἄδικον γὰρ τὸ παρὰ τὴν ἀξίαν γιγνόμενον· διὸ καὶ τοῖς θεοῖς ἀποδίδομεν τὸ νεμεσᾶν.

δόξειε δ' ἂν καὶ ὁ φθόνος τῷ ἐλεεῖν τὸν αὐτὸν ἀντικεῖσθαι τρόπον, ὡς σύνεγγυς ὢν καὶ ταῦτόν τῷ νεμεσᾶν, ἔστι δ' ἕτερον· λύπη μὲν γὰρ ταραχώδης καὶ ὁ φθόνος ἐστὶν καὶ ἐπὶ εὐπραγία, ἀλλ' οὐ τοῦ ἀναξίου ἀλλὰ τοῦ ἴσου καὶ ὁμοίου. τὸ δὲ μὴ ὅτι αὐτῷ τι συμβήσεται ἕτερον, ἀλλὰ δι' αὐτὸν τὸν πλησίον, ἅπασιν ὁμοίως δεῖ ὑπάρχειν· οὐ γὰρ ἔτι ἔσται τὸ μὲν φθόνος, τὸ δὲ νέμεσις, ἀλλὰ φόβος, ἐὰν διὰ τοῦτο ἡ λύπη ὑπάρχη καὶ ἡ ταραχή, ὅτι αὐτῷ τι ἔσται φαῦλον ἀπὸ τῆς ἐκείνου εὐπραξίας.

φανερὸν δ' ὅτι ἀκολουθήσει καὶ τὰ ἐναντία πάθη τούτοις· ὁ μὲν γὰρ λυπούμενος ἐπὶ τοῖς ἀναξίως κακοπραγοῦσιν ἡσθήσεται ἢ ἄλυπος ἔσται ἐπὶ τοῖς ἐναντίως κακοπραγοῦσιν, οἷον τοὺς πατραλοίας καὶ μαιφόνους, ὅταν τύχῃσι τιμωρίας, οὐδείς ἂν λυπηθεῖν χρηστός· δεῖ γὰρ χαίρειν ἐπὶ τοῖς τοιούτοις, ὡς δ' αὐτῶς καὶ ἐπὶ τοῖς εὖ πράττουσι κατ' ἀξίαν· ἄμφω γὰρ δίκαια, καὶ ποιεῖ χαίρειν τὸν ἐπικτῆ· ἀνάγκη γὰρ ἐλπίζειν ὑπάρξαι ἂν ἄπερ τῷ ὁμοίῳ, καὶ αὐτῷ. καὶ ἔστιν τοῦ αὐτοῦ ἥθους ἅπαντα ταῦτα, τὰ δ' ἐναντία τοῦ ἐναντίου· ὁ γὰρ αὐτός ἐστιν ἐπικταίερος καὶ [1387a] φθονερός· ἐφ' ᾧ γάρ τις λυπεῖται γιγνομένῳ καὶ ὑπάρχοντι, ἀναγκαῖον τοῦτον ἐπὶ τῇ στερήσει καὶ τῇ φθορᾷ τῇ τούτου χαίρειν· διὸ κωλυτικὰ μὲν ἐλέου πάντα ταῦτ' ἐστί, διαφέρει δὲ διὰ τὰς εἰρημένας αἰτίας, ὥστε πρὸς τὸ μὴ ἐλεεινὰ ποιεῖν ἅπαντα ὁμοίως χρήσιμα.

πρῶτον μὲν οὖν περὶ τοῦ νεμεσᾶν λέγωμεν, τίσιν τε νεμεσῶσι καὶ ἐπὶ τίσι καὶ πῶς ἔχοντες αὐτοί, εἴτα μετὰ ταῦτα περὶ τῶν ἄλλων. φανερὸν δ' ἐκ τῶν εἰρημένων· εἰ γὰρ ἐστὶ τὸ νεμεσᾶν λυπεῖσθαι ἐπὶ τῷ φαινομένῳ ἀναξίως εὐπραγεῖν, πρῶτον μὲν δῆλον ὅτι οὐχ οἷόν τ' ἐπὶ πᾶσι τοῖς ἀγαθοῖς νεμεσᾶν· οὐ γὰρ εἰ δίκαιος ἢ ἀνδρεῖος, ἢ εἰ ἀρετὴν λήψεται, νεμεσήσει τούτῳ (οὐδὲ

γὰρ ἔλθοι ἐπὶ τοῖς ἐναντίοις τούτων εἰσίν), ἀλλὰ ἐπὶ πλούτῳ καὶ δυνάμει καὶ τοῖς τοιούτοις, ὅσων ὡς ἀπλῶς εἶπεῖν ἄξιοι εἰσιν οἱ ἀγαθοὶ καὶ οἱ τὰ φύσει ἔχοντες ἀγαθὰ, οἷον εὐγένειαν καὶ κάλλος καὶ ὅσα τοιαῦτα. ἐπεὶ δὲ τὸ ἀρχαῖον ἐγγύς τι φαίνεται τοῦ φύσει, ἀνάγκη τοῖς ταῦτ' ἔχουσιν ἀγαθόν, ἐὰν νεωστὶ ἔχοντες τυγχάνωσι καὶ διὰ τοῦτο εὐπραγῶσι, μᾶλλον νεμεσῶν· μᾶλλον γὰρ λυποῦσιν οἱ νεωστὶ πλουτοῦντες τῶν πάλαι καὶ διὰ γένος· ὁμοίως δὲ καὶ ἄρχοντες καὶ δυνάμενοι καὶ πολύφιλοι καὶ εὐτεκνοὶ καὶ ὁτιοῦν τῶν τοιούτων. καὶ ἂν διὰ ταῦτα ἄλλο τι ἀγαθὸν γίγνηται αὐτοῖς, ὡσαύτως· καὶ γὰρ ἐνταῦθα μᾶλλον λυποῦσιν οἱ νεόπλουτοι ἄρχοντες διὰ τὸν πλοῦτον ἢ οἱ ἀρχαιοπλουτοὶ. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων. αἴτιον δ' ὅτι οἱ μὲν δοκοῦσι τὰ αὐτῶν ἔχειν οἱ δ' οὐ· τὸ γὰρ αἰεὶ οὕτω φαινόμενον ἔχειν ἀληθὲς δοκεῖ, ὥστε οἱ ἕτεροι οὐ τὰ αὐτῶν ἔχειν. καὶ ἐπεὶ ἕκαστον τῶν ἀγαθῶν οὐ τοῦ τυχόντος ἄξιον, ἀλλὰ τις ἔστιν ἀναλογία καὶ τι ἀρμόττον, οἷον ὅπλων κάλλος οὐ τῷ δικαίῳ ἀρμόττει ἀλλὰ τῷ ἀνδρείῳ, καὶ γάμοι διαφέροντες οὐ τοῖς νεωστὶ πλουσίοις ἀλλὰ τοῖς εὐγενέσιν· ἂν οὖν ἀγαθὸς ὢν μὴ τοῦ ἀρμόττοντος τυγχάνῃ, νεμεσητόν. καὶ <τὸ> τὸν ἥττω τῷ κρείττονι ἀμφισβητεῖν, μάλιστα μὲν οὖν τοὺς ἐν τῷ αὐτῷ, ὅθεν καὶ τοῦτ' εἴρηται,

Αἴαντος δ' ἀλέεινε μάχην Τελαμωνιάδαο·

Ζεὺς γὰρ οἱ νεμέσασχ', ὅτ' ἀμείνονι φωτὶ μάχοιτο·

[1387b] εἰ δὲ μή, κἂν ὁπωσοῦν ὁ ἥττων τῷ κρείττονι, οἷον εἰ ὁ μουσικὸς τῷ δικαίῳ· βέλτιον γὰρ ἢ δικαιοσύνη τῆς μουσικῆς.

οἷς μὲν οὖν νεμεσῶσι καὶ διὰ τί, ἐκ τούτων δῆλον· ταῦτα γὰρ καὶ τὰ τοιαῦτά ἐστιν. αὐτοὶ δὲ νεμεσητικοὶ εἰσιν, ἐὰν ἄξιοι τυγχάνωσιν ὄντες τῶν μεγίστων ἀγαθῶν καὶ ταῦτα κεκτημένοι· τὸ γὰρ τῶν ὁμοίων ἡξιῶσθαι τοὺς μὴ ὁμοίους οὐ δίκαιον. δεύτερον δέ, ἂν ὄντες ἀγαθοὶ καὶ σπουδαῖοι τυγχάνωσιν· κρίνουσί τε γὰρ εὖ, καὶ τὰ ἄδικα μισοῦσι. καὶ ἐὰν φιλότιμοι καὶ ὀρεγόμενοί τινων πραγμάτων, καὶ μάλιστ' <ἂν> περὶ ταῦτα φιλότιμοι ὣσιν ὢν ἕτεροι ἀνάξιοι ὄντες τυγχάνουσιν. καὶ ὅλως οἱ ἀξιοῦντες αὐτοὶ αὐτοὺς ὢν ἑτέρους μὴ ἀξιοῦσι, νεμεσητικοὶ τούτοις καὶ τούτων· διὸ καὶ οἱ ἀνδραποδώδεις καὶ φαῦλοι καὶ ἀφιλότιμοι οὐ νεμεσητικοί· οὐδὲν γὰρ ἔστιν οὗ ἑαυτοὺς οἷονται ἀξίους εἶναι.

φανερὸν δ' ἐκ τούτων ἐπὶ ποίοις ἀτυχοῦσι καὶ κακοπραγοῦσιν ἢ μὴ τυγχάνουσι χαίρειν ἢ ἀλύπως ἔχειν δεῖ· ἐκ γὰρ τῶν εἰρημένων τὰ ἀντικείμενά ἐστι δῆλα, ὥστ' ἐὰν τοὺς τε κριτὰς τοιούτους παρασκευάσῃ ὁ λόγος, καὶ τοὺς

ἀξιοῦντας ἐλεεῖσθαι, καὶ ἐφ’ οἷς ἐλεεῖσθαι, δείξει ἀναξίους ὄντας τυγχάνειν ἀξίους δὲ μὴ τυγχάνειν, ἀδύνατον ἐλεεῖν.

Δῆλον δὲ καὶ ἐπὶ τίσι φθονοῦσι καὶ τίσι καὶ πῶς ἔχοντες, εἴπερ ἐστὶν ὁ φθόνος λύπη τις ἐπὶ εὐπραγία φαινομένη τῶν εἰρημένων ἀγαθῶν περὶ τοὺς ὁμοίους, μὴ ἵνα τι αὐτῷ, ἀλλὰ δι’ ἐκείνους· φθονήσουσι μὲν γὰρ οἱ τοιοῦτοι οἷς εἰσὶ τινες ὅμοιοι ἢ φαίνονται· ὁμοίους δὲ λέγω κατὰ γένος, κατὰ συγγένειαν, καθ’ ἡλικίας, κατὰ ἔξεις, κατὰ δόξαν, κατὰ τὰ ὑπάρχοντα. καὶ οἷς μικρὸν ἐλλείπει τοῦ μὴ πάντα ὑπάρχειν (διὸ οἱ μεγάλα πράττοντες καὶ οἱ εὐτυχοῦντες φθονεροὶ εἰσιν)· πάντας γὰρ οἷονται τὰ αὐτῶν φέρειν. καὶ οἱ τιμώμενοι ἐπὶ τινι διαφερόντως, καὶ μάλιστα ἐπὶ σοφίᾳ ἢ εὐδαιμονίᾳ. καὶ οἱ φιλότιμοι φθονερώτεροι τῶν ἀφιλοτίμων. καὶ οἱ δοξόσοφοι· φιλότιμοι γὰρ ἐπὶ σοφίᾳ. καὶ ὅλως οἱ φιλόδοξοι περὶ τι φθονεροὶ περὶ τοῦτο. καὶ οἱ μικρόψυχοι· πάντα γὰρ μεγάλα δοκεῖ αὐτοῖς εἶναι. ἐφ’ οἷς δὲ φθονοῦσι, τὰ μὲν ἀγαθὰ εἴρηται· [1388a] ἐφ’ οἷς γὰρ φιλοδοξοῦσι καὶ φιλοτιμοῦνται ἔργοις ἢ κτήμασι καὶ ὀρέγονται δόξης, καὶ ὅσα εὐτυχήματά ἐστιν, σχεδὸν περὶ πάντα φθόνος ἔστι, καὶ μάλιστα ὧν αὐτοὶ ἢ ὀρέγονται ἢ οἷονται δεῖν αὐτοὺς ἔχειν, ἢ ὧν τῇ κτήσει μικρῷ ὑπερέχουσιν ἢ μικρῷ ἐλλείπουσιν. φανερόν δὲ καὶ οἷς φθονοῦσιν· ἅμα γὰρ εἴρηται· τοῖς γὰρ ἐγγὺς καὶ χρόνῳ καὶ τόπῳ καὶ ἡλικίᾳ καὶ δόξῃ φθονοῦσιν· ὅθεν εἴρηται

τὸ συγγενὲς γὰρ καὶ φθονεῖν ἐπίσταται.

καὶ πρὸς οὓς φιλοτιμοῦνται· φιλοτιμοῦνται γὰρ πρὸς τοὺς εἰρημένους, πρὸς δὲ τοὺς μυριοστὸν ἔτος ὄντας ἢ πρὸς τοὺς ἐσομένους ἢ τεθνεώτας οὐδεῖς, οὐδὲ πρὸς τοὺς ἐφ’ Ἡρακλείαις στήλαις. οὐδ’ ὧν πολὺ οἷονται παρ’ αὐτοῖς ἢ παρὰ τοῖς ἄλλοις λείπεσθαι, οὐδ’ ὧν πολὺ ὑπερέχειν, ὡσαύτως καὶ πρὸς τούτους καὶ περὶ τὰ τοιαῦτα. ἐπεὶ δὲ πρὸς τοὺς ἀνταγωνιστὰς καὶ ἀντεραστὰς καὶ ὅλως τοὺς τῶν αὐτῶν ἐφιεμένους φιλοτιμοῦνται, ἀνάγκη μάλιστα τούτοις φθονεῖν, διόπερ εἴρηται

καὶ κεραμεὺς κεραμεῖ.

καὶ ὧν ἡ κεκτημένων ἢ κατορθούντων ὄνειδος αὐτοῖς (εἰσὶν δὲ καὶ οὗτοι <οἱ> ἐγγὺς καὶ ὅμοιοι)· δῆλον γὰρ ὅτι παρ’ αὐτοὺς οὐ τυγχάνουσι τοῦ ἀγαθοῦ, ὥστε τοῦτο λυποῦν ποιεῖ τὸν φθόνον. καὶ τοῖς ἢ ἔχουσι ταῦτα ἢ κεκτημένοις ὅσα αὐτοῖς προσῆκεν ἢ ἐκέκτηντό ποτε· διὸ πρεσβύτεροί τε νεωτέροις καὶ οἱ πολλὰ δαπανήσαντες εἰς ταῦτο τοῖς ὀλίγα φθονοῦσιν. καὶ τοῖς ταχὺ οἱ ἢ μόλις τυχόντες ἢ μὴ τυχόντες φθονοῦσιν. δῆλον δὲ καὶ ἐφ’ οἷς χαίρουσιν οἱ

τοιοῦτοι καὶ ἐπὶ τίσι καὶ πῶς ἔχοντες· ὥς γὰρ ἔχοντες λυποῦνται, οὕτως ἔχοντες ἐπὶ τοῖς ἐναντίοις ἡσθήσονται. ὥστε ἂν αὐτοὶ μὲν παρασκευασθῶσιν οὕτως ἔχειν, οἱ δ' ἐλεεῖσθαι ἢ τυγχάνειν τινὸς ἀγαθοῦ ἀξιοῦντες ὥσιν οἱοὶ οἱ εἰρημένοι, δῆλον ὥς οὐ τεύζονται ἐλέου παρὰ τῶν κυρίων.

Πῶς δὲ ἔχοντες ζηλοῦσι καὶ τὰ ποῖα καὶ ἐπὶ τίσιν, ἐνθένδ' ἐστὶ δῆλον· εἰ γὰρ ἐστὶν ζῆλος λύπη τις ἐπὶ φαινομένῃ παρουσίᾳ ἀγαθῶν ἐντίμων καὶ ἐνδεχομένων αὐτῷ λαβεῖν περὶ τοὺς ὁμοίους τῇ φύσει, οὐχ ὅτι ἄλλω ἄλλ' ὅτι οὐχὶ καὶ αὐτῷ ἔστιν (διὸ καὶ ἐπαικὲς ἐστὶν ὁ ζῆλος καὶ ἐπαικῶν, τὸ δὲ φθονεῖν φαῦλον καὶ φαύλων· ὁ μὲν γὰρ αὐτὸν παρασκευάζει διὰ τὸν ζῆλον τυγχάνειν τῶν ἀγαθῶν, ὁ δὲ τὸν πλησίον μὴ ἔχειν διὰ τὸν φθόνον), ἀνάγκη δὴ ζηλωτικοὺς μὲν εἶναι τοὺς [1388b] ἀξιοῦντας αὐτοὺς ἀγαθῶν ὧν μὴ ἔχουσιν, «ἐνδεχομένων αὐτοῖς λαβεῖν»· οὐδεὶς γὰρ ἀξιοῖ τὰ φαινόμενα ἀδύνατα (διὸ οἱ νέοι καὶ οἱ μεγαλόψυχοι τοιοῦτοι). καὶ οἷς ὑπάρχει τοιαῦτα ἀγαθὰ ἃ τῶν ἐντίμων ἄξιά ἐστὶν ἀνδρῶν· ἔστι δὲ ταῦτα πλοῦτος καὶ πολυφιλία καὶ ἀρχαὶ καὶ ὅσα τοιαῦτα· ὥς γὰρ προσῆκον αὐτοῖς ἀγαθοῖς εἶναι, οἷα προσήκει τοῖς ἀγαθῶς ἔχουσι, ζηλοῦσι τὰ τοιαῦτα τῶν ἀγαθῶν. καὶ οὐς οἱ ἄλλοι ἀξιοῦσιν. καὶ ὧν πρόγονοι ἢ συγγενεῖς ἢ οἰκεῖοι ἢ τὸ ἔθνος ἢ ἡ πόλις ἐντιμοί, ζηλωτικοὶ περὶ ταῦτα· οἰκεῖα γὰρ οἶονται αὐτοῖς εἶναι, καὶ ἄξιοι «εἶναι» τούτων. εἰ δ' ἐστὶν ζηλωτὰ τὰ ἐντιμα ἀγαθὰ, ἀνάγκη τὰς τε ἀρετὰς εἶναι τοιαύτας, καὶ ὅσα τοῖς ἄλλοις ὠφέλιμα καὶ εὐεργετικά (τιμῶσι γὰρ τοὺς εὐεργετοῦντας καὶ τοὺς ἀγαθούς), καὶ ὅσων ἀγαθῶν ἀπόλαυσις τοῖς πλησίον ἔστιν, οἷον πλοῦτος καὶ κάλλος μᾶλλον ὑγείας. φανερόν δὲ καὶ οἱ ζηλωτοὶ τίνες· οἱ γὰρ ταῦτα καὶ τὰ τοιαῦτα κεκτημένοι ζηλωτοί· ἔστι δὲ ταῦτα τὰ εἰρημένα, οἷον ἀνδρεία σοφία ἀρχή (οἱ γὰρ ἄρχοντες πολλοὺς δύνανται εὖ ποιεῖν), στρατηγοί, ῥήτορες, πάντες οἱ τὰ τοιαῦτα δυνάμενοι. καὶ οἷς πολλοὶ ὅμοιοι βούλονται εἶναι, ἢ πολλοὶ γνώριμοι, ἢ φίλοι πολλοί, ἢ οὐς πολλοὶ θαυμάζουσιν, ἢ οὐς αὐτοὶ θαυμάζουσιν. καὶ ὧν ἔπαινοι καὶ ἐγκώμια λέγονται ἢ ὑπὸ ποιητῶν ἢ ὑπὸ λογογράφων. καταφρονοῦσιν δὲ τῶν ἐναντίων· ἐναντίον γὰρ ζῆλῳ καταφρόνησις ἐστὶ, καὶ τῷ ζηλοῦν τὸ καταφρονεῖν. ἀνάγκη δὲ τοὺς οὕτως ἔχοντας ὥστε ζηλῶσαί τινας ἢ ζηλοῦσθαι καταφρονητικοὺς εἶναι τούτων τε καὶ ἐπὶ τούτοις ὅσοι τὰ ἐναντία κακὰ ἔχουσι τῶν ἀγαθῶν τῶν ζηλωτῶν· διὸ πολλάκις καταφρονοῦσιν τῶν εὐτυχούντων, ὅταν ἄνευ τῶν ἐντίμων ἀγαθῶν ὑπάρχη αὐτοῖς ἡ τύχη.

δι' ὧν μὲν οὖν τὰ πάθη ἐγγίγνεται καὶ διαλύεται, ἐξ ὧν αἱ πίστεις γίνονται περὶ αὐτῶν, εἴρηται.

τὰ δὲ ἦθη ποῖοί τινες κατὰ τὰ πάθη καὶ τὰς ἔξεις καὶ τὰς ἡλικίας καὶ τὰς

τύχας, διέλθωμεν μετὰ ταῦτα. λέγω δὲ πάθη μὲν ὀργὴν ἐπιθυμίαν καὶ τὰ τοιαῦτα περὶ ὧν εἰρήκαμεν [πρότερον], ἔξεις δὲ ἀρετὰς καὶ κακίας, εἴρηται δὲ περὶ τούτων πρότερον, καὶ ποῖα προαιροῦνται ἕκαστοι, καὶ ποίων πρακτικοί. ἡλικίαί δέ εἰσι νεότης καὶ ἀκμὴ καὶ γῆρας. τύχην δὲ [1389a] λέγω εὐγένειαν καὶ πλοῦτον καὶ δυνάμεις καὶ τάναντία τούτοις καὶ ὅλως εὐτυχίαν καὶ δυστυχίαν.

οἱ μὲν οὖν νέοι τὰ ἥθη εἰσὶν ἐπιθυμητικοί, καὶ οἷοι ποιεῖν ὧν ἂν ἐπιθυμήσωσι. καὶ τῶν περὶ τὸ σῶμα ἐπιθυμιῶν μάλιστα ἀκολουθητικοί εἰσι τῇ περὶ τὰ ἀφροδίσια καὶ ἀκρατεῖς ταύτης, εὐμετάβολοι δὲ καὶ ἀψίκοροι πρὸς τὰς ἐπιθυμίας, καὶ σφόδρα μὲν ἐπιθυμοῦσι ταχέως δὲ παύονται (ὀξεῖαι γὰρ αἱ βουλήσεις καὶ οὐ μεγάλαι, ὥσπερ αἱ τῶν καμνόντων δίψαι καὶ πείναι), καὶ θυμικοὶ καὶ ὀξύθυμοι καὶ οἷοι ἀκολουθεῖν τῇ ὀργῇ. καὶ ἥττους εἰσὶ τοῦ θυμοῦ· διὰ γὰρ φιλοτιμίαν οὐκ ἀνέχονται ὀλιγωρούμενοι, ἀλλ' ἀγανακτοῦσιν ἂν οἴωνται ἀδικοῦσθαι. καὶ φιλότιμοι μὲν εἰσιν, μᾶλλον δὲ φιλόνικοι (ὑπεροχῆς γὰρ ἐπιθυμεῖ ἡ νεότης, ἡ δὲ νίκη ὑπεροχὴ τις), καὶ ἄμφω ταῦτα μᾶλλον ἢ φιλοχρήματοι (φιλοχρήματοι δὲ ἥκιστα διὰ τὸ μήπω ἐνδείας πεπειρᾶσθαι, ὥσπερ τὸ Πιττακοῦ ἔχει ἀπόφθεγμα εἰς Ἀμφιάραον), καὶ οὐ κακοήθεις ἀλλ' εὐήθεις διὰ τὸ μήπω τεθεωρηκέναι πολλὰς πονηρίας, καὶ εὐπιστοι διὰ τὸ μήπω πολλὰ ἐξηπατῆσθαι, καὶ εὐέλπιδες· ὥσπερ γὰρ οἱ οἴνωμένοι, οὕτω διάθερμοί εἰσιν οἱ νέοι ὑπὸ τῆς φύσεως· ἅμα δὲ καὶ διὰ τὸ μὴ πολλὰ ἀποτετυχηκέναι. καὶ ζῶσι τὰ πλεῖστα ἐλπίδι· ἡ μὲν γὰρ ἐλπίς τοῦ μέλλοντός ἐστιν ἡ δὲ μνήμη τοῦ παροιχομένου, τοῖς δὲ νέοις τὸ μὲν μέλλον πολὺ τὸ δὲ παρεληλυθὸς βραχύ· τῇ γὰρ πρώτη ἡμέρᾳ μεμνησθαι μὲν οὐδὲν οἷόν τε, ἐλπίζειν δὲ πάντα. καὶ εὐεξαπάτητοί εἰσι διὰ τὸ εἰρημένον (ἐλπίζουσι γὰρ ῥαδίως), καὶ ἀνδρειότεροι (θυμώδεις γὰρ καὶ εὐέλπιδες, ὧν τὸ μὲν μὴ φοβεῖσθαι τὸ δὲ θαρρεῖν ποιεῖ· οὔτε γὰρ ὀργιζόμενος οὐδεὶς φοβεῖται, τό τε ἐλπίζειν ἀγαθόν τι θαρραλέον ἐστίν), καὶ αἰσχυνηλοί (οὐ γὰρ πω καλὰ ἕτερα ὑπολαμβάνουσιν, ἀλλὰ πεπαίδευνται ὑπὸ τοῦ νόμου μόνον), καὶ μεγαλόψυχοι (οὐ γὰρ ὑπὸ τοῦ βίου πω τεταπείνωνται, ἀλλὰ τῶν ἀναγκαίων ἄπειροί εἰσιν, καὶ τὸ ἀξιοῦν αὐτὸν μεγάλων μεγαλοψυχία· τοῦτο δ' εὐέλπιδος). καὶ μᾶλλον αἰροῦνται πράττειν τὰ καλὰ τῶν συμφερόντων· τῷ γὰρ ἥθει ζῶσι μᾶλλον ἢ τῷ λογισμῷ, ἔστι δὲ ὁ μὲν λογισμὸς τοῦ συμφέροντος ἡ δὲ ἀρετὴ τοῦ καλοῦ. καὶ φιλόφιλοι καὶ φιλέταιροι μᾶλλον τῶν [1389b] ἄλλων ἡλικιῶν διὰ τὸ χαίρειν τῷ συζῆν καὶ μήπω πρὸς τὸ συμφέρον κρίνειν μηδέν, ὥστε μηδὲ τοὺς φίλους. καὶ ἅπαντα ἐπὶ τὸ μᾶλλον καὶ σφοδρότερον ἀμαρτάνουσι, παρὰ τὸ Χιλώνειον (πάντα γὰρ ἄγαν πράττουσιν· φιλοῦσι γὰρ ἄγαν καὶ μισοῦσιν ἄγαν καὶ τᾶλλα πάντα ὁμοίως), καὶ εἰδέναι ἅπαντα οἴονται καὶ δισχυρίζονται (τοῦτο γὰρ αἴτιόν ἐστιν καὶ τοῦ πάντα ἄγαν), καὶ τὰ ἀδικήματα ἀδικοῦσιν

εἰς ὕβριν, οὐ κακουργίαν. καὶ ἐλεητικοὶ διὰ τὸ πάντας χρηστοὺς καὶ βελτίους ὑπολαμβάνειν (τῇ γὰρ αὐτῶν ἀκακία τοὺς πέλας μετροῦσιν, ὥστε ἀνάξια πάσχειν ὑπολαμβάνουσιν αὐτούς), καὶ φιλογέλωτες, διὸ καὶ φιλευτράπελοι· ἡ γὰρ εὐτραπελία πεπαιδευμένη ὕβρις ἐστίν.

Τὸ μὲν οὖν τῶν νέων τοιοῦτόν ἐστιν ἦθος, οἱ δὲ πρεσβύτεροι καὶ παρηκμακότες σχεδὸν ἐκ τῶν ἐναντίων τούτοις τὰ πλεῖστα ἔχουσιν ἦθη· διὰ γὰρ τὸ πολλὰ ἔτη βεβιωκέναι καὶ πλείω ἐξηπατῆσθαι καὶ ἐξημαρτηκέναι, καὶ τὰ πλείω φαῦλα εἶναι τῶν πραγμάτων, οὔτε διαβεβαιοῦνται οὐδέν, ἡττόν τε ἄγανται πάντα ἢ δεῖ. καὶ οἷονται, ἴσασι δ' οὐδέν, καὶ ἀμφιδοδοῦντες προστιθέασιν ἀεὶ τὸ ἴσως καὶ τάχα, καὶ πάντα λέγουσιν οὕτως, παγίως δ' οὐδέν. καὶ κακοήθεις εἰσίν· ἔστι γὰρ κακοήθεια τὸ ἐπὶ τὸ χεῖρον ὑπολαμβάνειν πάντα. ἔτι δὲ καχύποπτοί εἰσι διὰ τὴν ἀπιστίαν, ἄπιστοι δὲ δι' ἐμπειρίαν. καὶ οὔτε φιλοῦσιν σφόδρα οὔτε μισοῦσι διὰ ταῦτα, ἀλλὰ κατὰ τὴν Βίαντος ὑποθήκην καὶ φιλοῦσιν ὥς μισήσοντες καὶ μισοῦσιν ὥς φιλήσοντες. καὶ μικρόψυχοι διὰ τὸ τεταπεινωῖσθαι ὑπὸ τοῦ βίου· οὐδενὸς γὰρ μεγάλου οὐδὲ περιττοῦ ἀλλὰ τῶν πρὸς τὸν βίον ἐπιθυμοῦσι. καὶ ἀνελεύθεροι· ἔν γάρ τι τῶν ἀναγκαίων ἢ οὐσία, ἅμα δὲ καὶ διὰ τὴν ἐμπειρίαν ἴσασι ὥς χαλεπὸν τὸ κτήσασθαι καὶ ῥάδιον τὸ ἀποβαλεῖν. καὶ δειλοὶ καὶ πάντα προφοβητικοί· ἐναντίως γὰρ διάκεινται τοῖς νέοις· κατεψυγμένοι γὰρ εἰσιν, οἱ δὲ θερμοί, ὥστε προωδοπεποίηκε τὸ γῆρας τῇ δειλίᾳ· καὶ γὰρ ὁ φόβος κατάψυξις τίς ἐστίν. καὶ φιλόζωοι, καὶ μᾶλλον ἐπὶ τῇ τελευταίᾳ ἡμέρᾳ διὰ τὸ τοῦ ἀπόντος εἶναι τὴν ἐπιθυμίαν, καὶ οὐ ἐνδεεῖς, τούτου μάλιστα ἐπιθυμεῖν. καὶ φίλαυτοι μᾶλλον ἢ δεῖ· μικροψυχία γάρ τις καὶ αὕτη. καὶ πρὸς τὸ συμφέρον ζῶσιν, ἀλλ' οὐ πρὸς τὸ καλόν, μᾶλλον ἢ δεῖ, διὰ τὸ φίλαυτοι εἶναι· τὸ μὲν γὰρ [1390a] συμφέρον αὐτῷ ἀγαθόν ἐστι, τὸ δὲ καλὸν ἀπλῶς. καὶ ἀναίσχυντοι μᾶλλον ἢ αἰσχυνητοί· διὰ γὰρ τὸ μὴ φροντίζειν ὁμοίως τοῦ καλοῦ καὶ τοῦ συμφέροντος ὀλιγωροῦσι τοῦ δοκεῖν. καὶ δυσέλπιδες διὰ τὴν ἐμπειρίαν (τὰ γὰρ πλείω τῶν γιγνομένων φαῦλά ἐστιν· ἀποβαίνει γὰρ τὰ πολλὰ ἐπὶ τὸ χεῖρον), καὶ ἔτι διὰ τὴν δειλίαν. καὶ ζῶσι τῇ μνήμῃ μᾶλλον ἢ τῇ ἐλπίδι· τοῦ γὰρ βίου τὸ μὲν λοιπὸν ὀλίγον τὸ δὲ παρεληλυθὸς πολὺ, ἔστι δὲ ἢ μὲν ἐλπίς τοῦ μέλλοντος ἢ δὲ μνήμη τῶν παροιχομένων· ὅπερ αἴτιον καὶ τῆς ἀδολεσχίας αὐτοῖς· διατελοῦσι γὰρ τὰ γενόμενα λέγοντες· ἀναμνησκόμενοι γὰρ ἡδοναί. καὶ οἱ θυμοὶ ὀξεῖς μὲν ἀσθενεῖς δὲ εἰσιν, καὶ αἱ ἐπιθυμίαι αἱ μὲν ἐκλελοίπασιν αἱ δὲ ἀσθενεῖς εἰσιν, ὥστε οὔτ' ἐπιθυμητικοὶ οὔτε πρακτικοὶ κατὰ τὰς ἐπιθυμίας, ἀλλὰ κατὰ τὸ κέρδος· διὸ σωφρονικοὶ φαίνονται οἱ τηλικοῦτοι· αἱ τε γὰρ ἐπιθυμίαι ἀνείκασιν καὶ δουλεύουσι τῷ κέρδει. καὶ μᾶλλον ζῶσι κατὰ λογισμὸν ἢ κατὰ τὸ ἦθος· ὁ μὲν γὰρ λογισμὸς τοῦ συμφέροντος τὸ δ' ἦθος τῆς ἀρετῆς ἐστίν. καὶ τὰ δίκαια ἀδικοῦσιν εἰς

κακουργίαν, οὐκ εἰς ὕβριν. ἔλεητικοὶ δὲ καὶ οἱ γέροντές εἰσιν, ἀλλ' οὐ διὰ ταῦτ' αὖ τοῖς νέοις· οἱ μὲν γὰρ διὰ φιλανθρωπίαν, οἱ δὲ δι' ἀσθένειαν· πάντα γὰρ οἴονται ἐγγὺς εἶναι αὐτοῖς παθεῖν, τοῦτο δ' ἦν ἐλεητικόν· ὅθεν ὀδυρτικοὶ εἰσι, καὶ οὐκ εὐτράπελοι οὐδὲ φιλογέλοιοι· ἐναντίον γὰρ τὸ ὀδυρτικὸν τῷ φιλογέλῳ.

τῶν μὲν οὖν νέων καὶ τῶν πρεσβυτέρων τὰ ἥθη τοιαῦτα, ὥστ' ἐπεὶ ἀποδέχονται πάντες τοὺς τῷ σφετέρῳ ἥθει λεγομένους λόγους καὶ τοὺς ὁμοίους, οὐκ ἄδηλον πῶς χρώμενοι τοῖς λόγοις τοιοῦτοι φανοῦνται καὶ αὐτοὶ καὶ οἱ λόγοι.

Οἱ δ' ἀκμάζοντες φανερόν ὅτι μεταξὺ τούτων τὸ ἥθος ἔσσονται ἐκατέρων, ἀφαιροῦντες τὴν ὑπερβολήν, καὶ οὔτε σφόδρα θαρροῦντες (θρασύτης γὰρ τὸ τοιοῦτον) οὔτε λίαν φοβούμενοι, καλῶς δὲ πρὸς ἄμφω ἔχοντες, οὔτε πᾶσι πιστεύοντες οὔτε πᾶσιν ἀπιστοῦντες, ἀλλὰ κατὰ τὸ ἀληθὲς κρίνοντες μᾶλλον, καὶ οὔτε πρὸς τὸ καλὸν ζῶντες μόνον οὔτε πρὸς τὸ συμφέρον [1390b] ἀλλὰ πρὸς ἄμφω, καὶ οὔτε πρὸς φειδῶ οὔτε πρὸς ἀσωτίαν ἀλλὰ πρὸς τὸ ἀρμόττον, ὁμοίως δὲ καὶ πρὸς θυμὸν καὶ πρὸς ἐπιθυμίαν, καὶ σώφρονες μετ' ἀνδρείας καὶ ἀνδρεῖοι μετὰ σωφροσύνης. ἐν γὰρ τοῖς νέοις καὶ τοῖς γέροισι διήρηται ταῦτα· εἰσὶν γὰρ οἱ μὲν νέοι ἀνδρεῖοι καὶ ἀκόλαστοι, οἱ δὲ πρεσβύτεροι σώφρονες καὶ δειλοί. ὥς δὲ καθόλου εἰπεῖν, ὅσα μὲν διήρηται ἡ νεότης καὶ τὸ γῆρας τῶν ὠφελίμων, ταῦτα ἄμφω ἔχουσιν, ὅσα δὲ ὑπερβάλλουσιν ἢ ἐλλείπουσιν, τούτων τὸ μέτριον καὶ τὸ ἀρμόττον. ἀκμάζει δὲ τὸ μὲν σῶμα ἀπὸ τῶν τριάκοντα ἔτων μέχρι τῶν πέντε καὶ τριάκοντα, ἡ δὲ ψυχὴ περὶ τὰ ἑνὸς δεῖν πενήκοντα.

περὶ μὲν οὖν νεότητος καὶ γήρως καὶ ἀκμῆς, ποίων ἡθῶν ἕκαστόν ἐστιν, εἰρήσθω τοσαῦτα.

Περὶ δὲ τῶν ἀπὸ τύχης γιγνομένων ἀγαθῶν, δι' ὅσα αὐτῶν καὶ τὰ ἥθη ποιά ἄττα συμβαίνει τοῖς ἀνθρώποις, λέγωμεν ἐφεξῆς. εὐγενείας μὲν οὖν ἥθος ἐστὶ τὸ φιλοτιμότερον εἶναι τὸν κεκτημένον αὐτήν· ἅπαντες γάρ, ὅταν ὑπάρχη τι, πρὸς τοῦτο σωρεύειν εἰώθασιν, ἡ δ' εὐγένεια ἐντιμότης προγόνων ἐστίν. καὶ καταφρονητικὸν καὶ τῶν ὁμοίων ἐστὶν τοῖς προγόνοις αὐτῶν, διότι πόρρω ταῦτα μᾶλλον ἢ ἐγγὺς γιγνόμενα ἐντιμότερα καὶ εὐαλαζόνευστα. ἔστι δὲ εὐγενὲς μὲν κατὰ τὴν τοῦ γένους ἀρετήν, γενναῖον δὲ κατὰ τὸ μὴ ἐξίστασθαι τῆς φύσεως· ὅπερ ὥς ἐπὶ τὸ πολὺ οὐ συμβαίνει τοῖς εὐγενέσιν, ἀλλ' εἰσὶν οἱ πολλοὶ εὐτελεῖς· φορὰ γὰρ τίς ἐστὶν ἐν τοῖς γένεσιν ἀνδρῶν ὥσπερ ἐν τοῖς κατὰ τὰς χώρας γιγνομένοις, καὶ ἐνίοτε ἂν ἡ ἀγαθὸν τὸ γένος, ἐγγίνονται διὰ



τινος χρόνου ἄνδρες περιττοί, κ᾿πεῖτα πάλιν ἀναδίδωσιν. ἐξίσταται δὲ τὰ μὲν εὐφυᾶ γένη εἰς μανικώτερα ἥθη, οἷον οἱ ἀπ’ Ἀλκιβιάδου καὶ οἱ ἀπὸ Διονυσίου τοῦ προτέρου, τὰ δὲ στάσιμα εἰς ἀβελτερίαν καὶ νωθρότητα, οἷον οἱ ἀπὸ Κίμωνος καὶ Περικλέους καὶ Σωκράτους.

Τῷ δὲ πλούτῳ ἃ ἔπεται ἥθη, ἐπιπολῆς ἔστιν ἰδεῖν ἅπασιν· ὑβρισταὶ γὰρ καὶ ὑπερήφανοι, πάσχοντές τι ὑπὸ τῆς κτήσεως τοῦ πλούτου (ὥσπερ γὰρ ἔχοντες ἅπαντα τάγαθὰ οὕτω διάκεινται· [1391a] ὁ δὲ πλοῦτος οἷον τιμὴ τις τῆς ἀξίας τῶν ἄλλων, διὸ φαίνεται ὥνια ἅπαντα εἶναι αὐτοῦ), καὶ τρυφεροὶ καὶ σαλάκωνες, τρυφεροὶ μὲν διὰ τὴν τροφήν καὶ τὴν ἔνδειξιν τῆς εὐδαιμονίας, σαλάκωνες δὲ καὶ σόλοικοι διὰ τὸ πάντας εἰωθέναι διατρίβειν περὶ τὸ ἐρώμενον καὶ θαυμαζόμενον ὑπ’ αὐτῶν. καὶ τὸ οἶεσθαι ζηλοῦν τοὺς ἄλλους ἃ καὶ αὐτοί. ἅμα δὲ καὶ εἰκότως τοῦτο πάσχουσιν (πολλοὶ γὰρ εἰσιν οἱ δεόμενοι τῶν ἐχόντων· ὅθεν καὶ τὸ Σιμωνίδου εἴρηται περὶ τῶν σοφῶν καὶ πλουσίων πρὸς τὴν γυναῖκα τὴν Ἰέρωνος ἐρομένην πότερον γενέσθαι κρεῖττον πλούσιον ἢ σοφόν· “πλούσιον” εἶπεῖν· τοὺς σοφοὺς γὰρ ἔφη ὄρᾶν ἐπὶ ταῖς τῶν πλουσίων θύραις διατρίβοντας), καὶ τὸ οἶεσθαι ἀξιούς εἶναι ἄρχειν· ἔχειν γὰρ οἷονται ὧν ἔνεκεν ἄρχειν ἄξιον. καὶ ὥς ἐν κεφαλαίῳ, ἀνοήτου εὐδαίμονος ἥθος <ἥθος> πλούτου ἐστίν. διαφέρει δὲ τοῖς νεωστὶ κεκτημένοις καὶ τοῖς πάλαι τὰ ἥθη τῷ ἅπαντα μᾶλλον καὶ φαυλότερα τὰ κακὰ ἔχειν τοὺς νεοπλούτους (ὥσπερ γὰρ ἀπαιδευσία πλούτου ἐστὶ τὸ νεόπλουτον εἶναι), καὶ ἀδικήματα ἀδικοῦσιν οὐ κακουργικά, ἀλλὰ τὰ μὲν ὑβριστικά τὰ δὲ ἀκρατευτικά, οἷον εἰς αἰκίαν καὶ μοιχείαν.

Ὅμοίως δὲ καὶ περὶ δυνάμεως σχεδὸν τὰ πλεῖστα φανερά ἐστιν ἥθη. τὰ μὲν γὰρ τὰ αὐτὰ ἔχει δύναμις τῷ πλούτῳ τὰ δὲ βελτίῳ· φιλοτιμότεροι γὰρ καὶ ἀνδρωδέστεροί εἰσιν τὰ ἥθη οἱ δυνάμενοι τῶν πλουσίων διὰ τὸ ἐφίεσθαι ἔργων ὅσα ἐξουσία αὐτοῖς πράττειν διὰ τὴν δύναμιν, καὶ σπουδαστικώτεροι διὰ τὸ ἐν ἐπιμελείᾳ εἶναι, ἀναγκαζόμενοι σκοπεῖν τὰ περὶ τὴν δύναμιν, καὶ σεμνότεροι ἢ βαρύτεροι· ποιεῖ γὰρ σεμνοτέρους τὸ ἀξίωμα, διὸ μετριάζουσιν, ἔστι δὲ ἡ σεμνότης μαλακὴ καὶ εὐσχήμων βαρύτης· κἂν ἀδικῶσιν, οὐ μικραδικηταὶ εἰσιν ἀλλὰ μεγαλάδικοι.

ἡ δ’ εὐτυχία κατὰ μόριά τε τῶν εἰρημένων ἔχει τὰ ἥθη (εἰς γὰρ ταῦτα συντείνουσιν αἱ μέγιστα δοκοῦσαι εἶναι εὐτυχίαι), καὶ ἔτι εἰς εὐτεκνίαν καὶ τὰ κατὰ τὸ σῶμα ἀγαθὰ παρασκευάζει ἡ εὐτυχία πλεονεκτεῖν. ὑπερηφανώτεροι μὲν οὖν καὶ [1391b] ἀλογιστότεροι διὰ τὴν εὐτυχίαν εἰσίν, ἐν δὲ ἀκολουθεῖ βέλτιστον ἥθος τῇ εὐτυχίᾳ, ὅτι φιλόθεοί εἰσι καὶ ἔχουσιν πρὸς τὸ θεῖόν πως, πιστεύοντες διὰ τὰ γινόμενα ἀπὸ τῆς τύχης.

περὶ μὲν οὖν τῶν καθ' ἡλικίαν καὶ τύχην ἡθῶν εἴρηται· τὰ γὰρ ἐναντία τῶν εἰρημένων ἐκ τῶν ἐναντίων φανερά ἐστιν, οἷον πένητος καὶ ἀτυχοῦς ἦθος καὶ ἀδυνάτου.

Ἐπεὶ δὲ ἡ τῶν πιθανῶν λόγων χρῆσις πρὸς κρίσιν ἐστί (περὶ ὧν γὰρ ἴσμεν καὶ κεκρίκαμεν οὐδὲν ἔτι δεῖ λόγου), ἔστι δ' ἐάν τε πρὸς ἓνα τις τῶ λόγῳ χρώμενος προτρέπη ἢ ἀποτρέπη, οἷον οἱ νουθετοῦντες ποιοῦσιν ἢ πείθοντες (οὐδὲν γὰρ ἦττον κριτῆς ὁ εἷς· ὃν γὰρ δεῖ πείσαι, οὗτός ἐστιν ὡς εἰπεῖν ἀπλῶς κριτῆς), ἐάν τε πρὸς ἀμφισβητοῦντας, ἐάν τε πρὸς ὑπόθεσιν λέγῃ τις, ὁμοίως (τῶ γὰρ λόγῳ ἀνάγκη χρῆσθαι καὶ ἀναιρεῖν τὰ ἐναντία, πρὸς ἃ ὥσπερ ἀμφισβητοῦντα τὸν λόγον ποιεῖται), ὡσαύτως δὲ καὶ ἐν τοῖς ἐπιδεικτικοῖς (ὥσπερ γὰρ πρὸς κριτὴν τὸν θεωρὸν ὁ λόγος συνέστηκεν, ὅλως δὲ μόνος ἐστὶν ἀπλῶς κριτῆς ἐν τοῖς πολιτικοῖς ἀγῶσιν ὁ τὰ ζητούμενα κρίνων· τὰ τε γὰρ ἀμφισβητούμενα ζητεῖται πῶς ἔχει, καὶ περὶ ὧν βουλευόνται), περὶ δὲ τῶν κατὰ τὰς πολιτείας ἡθῶν ἐν τοῖς συμβουλευτικοῖς εἴρηται πρότερον - ὥστε διωρισμένον ἂν εἴη πῶς τε καὶ διὰ τίνων τοὺς λόγους ἠθικοὺς ποιητέον.

ἐπεὶ δὲ περὶ ἕκαστον μὲν γένος τῶν λόγων ἕτερον ἦν τὸ τέλος, περὶ ἀπάντων δ' αὐτῶν εἰλημμέναι δόξαι καὶ προτάσεις εἰσὶν ἐξ ὧν τὰς πίστεις φέρουσιν καὶ συμβουλευόντες καὶ ἐπιδεικνύμενοι καὶ ἀμφισβητοῦντες, ἔτι δὲ ἐξ ὧν ἠθικοὺς τοὺς λόγους ἐνδέχεται ποιεῖν, καὶ περὶ τούτων διώρισται, λοιπὸν ἡμῖν διελθεῖν περὶ τῶν κοινῶν. πᾶσι γὰρ ἀναγκαῖον τῶ περὶ τοῦ δυνατοῦ καὶ ἀδυνάτου προσχρῆσθαι ἐν τοῖς λόγοις, καὶ τοὺς μὲν ὡς ἔσται τοὺς δὲ ὡς γέγονε πειρᾶσθαι δεικνύναι. ἔτι δὲ <τὸ> περὶ μεγέθους κοινὸν ἀπάντων ἐστί τῶν λόγων· χρῶνται γὰρ πάντες τῶ μειοῦν καὶ αὖξιν καὶ συμβουλευόντες καὶ ἐπαινοῦντες ἢ ψέγοντες καὶ κατηγοροῦντες ἢ ἀπολογούμενοι. [1392a] τούτων δὲ διορισθέντων περὶ τῶν ἐνθυμημάτων κοινῇ πειραθῶμεν εἰπεῖν, εἴ τι ἔχομεν, καὶ περὶ παραδειγμάτων, ὅπως τὰ λοιπὰ προσθέντες ἀποδῶμεν τὴν ἐξ ἀρχῆς πρόθεσιν. ἔστιν δὲ τῶν κοινῶν τὸ μὲν αὖξιν οἰκειότατον τοῖς ἐπιδεικτικοῖς, ὥσπερ εἴρηται, τὸ δὲ γεγονὸς τοῖς δικανικοῖς (περὶ τούτων γὰρ ἡ κρίσις), τὸ δὲ δυνατόν καὶ ἐσόμενον τοῖς συμβουλευτικοῖς.

Πρῶτον μὲν οὖν περὶ δυνατοῦ καὶ ἀδυνάτου λέγωμεν. ἂν δὴ τὸ ἐναντίον ἢ δυνατόν ἢ εἶναι ἢ γενέσθαι, καὶ τὸ ἐναντίον δόξειεν ἂν εἶναι δυνατόν, οἷον εἰ δυνατόν ἄνθρωπον ὑγιασθῆναι, καὶ νοσήσαι· ἡ γὰρ αὐτὴ δύναμις τῶν ἐναντίων ἢ ἐναντία. καὶ εἰ τὸ ὅμοιον δυνατόν, καὶ τὸ ὅμοιον· καὶ εἰ τὸ χαλεπώτερον δυνατόν, καὶ τὸ ῥᾶον· καὶ εἰ τὸ σπουδαῖον καὶ καλὸν γενέσθαι

δυνατόν, καὶ ὅλως δυνατόν γενέσθαι· χαλεπώτερον γὰρ καλὴν οἰκίαν ἢ οἰκίαν εἶναι. καὶ οὐ ἡ ἀρχὴ δύναται γενέσθαι, καὶ τὸ τέλος· οὐδὲν γὰρ γίγνεται οὐδ' ἄρχεται γίνεσθαι τῶν ἀδυνάτων, οἷον τὸ σύμμετρον τὴν διάμετρον εἶναι οὐτ' ἂν ἄρξαιτο γίνεσθαι οὔτε γίγνεται. καὶ οὐ τὸ τέλος, καὶ ἡ ἀρχὴ δυνατή· ἅπαντα γὰρ ἐξ ἀρχῆς γίγνεται. καὶ εἰ τὸ ὕστερον τῇ οὐσίᾳ ἢ τῇ γενέσει δυνατόν γενέσθαι, καὶ τὸ πρότερον, οἷον εἰ ἄνδρα γενέσθαι δυνατόν, καὶ παῖδα (πρότερον γὰρ ἐκεῖνο γίγνεται), καὶ εἰ παῖδα, καὶ ἄνδρα (καὶ ἀρχὴ γὰρ ἐκείνη). καὶ ὧν ἡ ἔρως ἢ ἐπιθυμία φύσει ἐστίν· οὐδεὶς γὰρ ἀδυνάτων ἐρᾷ οὐδὲ ἐπιθυμεῖ ὥς ἐπὶ τὸ πολὺ. καὶ ὧν ἐπιστῆμαί εἰσι καὶ τέχναι, δυνατόν ταῦτα καὶ εἶναι καὶ γίνεσθαι. καὶ ὅσων ἡ ἀρχὴ τῆς γενέσεως ἐν τούτοις ἐστὶν ἃ ἡμεῖς ἀναγκάσαιμεν ἂν ἢ πείσαιμεν· ταῦτα δ' ἐστὶν ὧν κρείττους ἢ κύριοι ἢ φίλοι. καὶ ὧν τὰ μέρη δυνατά, καὶ τὸ ὅλον, καὶ ὧν τὸ ὅλον δυνατόν, καὶ τὰ μέρη ὥς ἐπὶ τὸ πολὺ· εἰ γὰρ πρόσχισμα καὶ κεφαλὴς καὶ χιτῶν δύναται γενέσθαι, καὶ ὑποδήματα δυνατόν γενέσθαι, καὶ εἰ ὑποδήματα, καὶ πρόσχισμα καὶ κεφαλὴς καὶ χιτῶν. καὶ εἰ τὸ [1392b] γένος ὅλον τῶν δυνατῶν γενέσθαι, καὶ τὸ εἶδος, καὶ εἰ τὸ εἶδος, καὶ τὸ γένος, οἷον εἰ πλοῖον γενέσθαι δυνατόν, καὶ τριήρη, καὶ εἰ τριήρη, καὶ πλοῖον. καὶ εἰ θάτερον τῶν πρὸς ἄλληλα πεφυκότων, καὶ θάτερον, οἷον εἰ διπλάσιον, καὶ ἥμισυ, καὶ εἰ ἥμισυ, διπλάσιον. καὶ εἰ ἄνευ τέχνης καὶ παρασκευῆς δυνατόν γίνεσθαι, μᾶλλον διὰ τέχνης καὶ ἐπιμελείας δυνατόν, ὅθεν καὶ Ἀγάθωνι εἴρηται

καὶ μὴν τὰ μὲν γε τῆς τέχνης πράσσειν, τὰ δὲ

ἡμῖν ἀνάγκη καὶ τύχῃ προσγίγνεται.

καὶ εἰ τοῖς χείροσι καὶ ἥττοσι καὶ ἀφρονεστέροις δυνατόν, καὶ τοῖς ἐναντίοις μᾶλλον, ὥσπερ καὶ Ἰσοκράτης ἔφη δεινὸν εἶναι εἰ ὁ μὲν Εὐθύνορος ἔμαθεν, αὐτὸς δὲ μὴ δυνήσεται εὐρεῖν. περὶ δὲ ἀδυνάτου δῆλον ὅτι ἐκ τῶν ἐναντίων τοῖς εἰρημένοις ὑπάρχει.

εἰ δὲ γέγονεν, ἐκ τῶνδε σκεπτέον. πρῶτον μὲν γάρ, εἰ τὸ ἥττον γίνεσθαι πεφυκὸς γέγονεν, γεγονὸς ἂν εἴη καὶ τὸ μᾶλλον. καὶ εἰ τὸ ὕστερον εἰωθὸς γίνεσθαι γέγονεν, καὶ τὸ πρότερον γέγονεν, οἷον εἰ ἐπιλέλησται, καὶ ἔμαθέ ποτε τοῦτο. καὶ εἰ ἐδύνατο καὶ ἐβούλετο, πέπραχε· πάντες γάρ, ὅταν δυνάμενοι βουλευθῶσι, πράττουσιν· ἐμποδὼν γὰρ οὐδέν. ἔτι εἰ ἐβούλετο καὶ μηδὲν τῶν ἔξω ἐκώλυεν, καὶ εἰ ἐδύνατο καὶ ὠργίζετο, καὶ εἰ ἐδύνατο καὶ ἐπεθύμει· ὥς γὰρ ἐπὶ τὸ πολὺ ὧν ὀρέγονται, ἂν δύνωνται, ποιοῦσιν, οἱ μὲν φαῦλοι δι' ἀκρασίαν, οἱ δ' ἐπεικεῖς ὅτι τῶν ἐπεικῶν ἐπιθυμοῦσιν. καὶ εἰ ἔμελλε [γίνεσθαι], καὶ ποιεῖν· εἰκὸς γὰρ τὸν μέλλοντα καὶ ποιῆσαι. καὶ εἰ γέγονεν

ὅσα ἢ πέφυκε πρὸ ἐκείνου ἢ ἔνεκα ἐκείνου, οἷον εἰ ἥστραψε, καὶ ἐβρόντησεν, καὶ εἰ ἐπείρασεν, καὶ ἔπραξεν. καὶ εἰ ὅσα ὕστερον πέφυκε γίνεσθαι ἢ οὐ ἔνεκα γίνεσθαι γέγονε, καὶ τὸ πρότερον καὶ τὸ τούτου ἔνεκα γέγονεν, οἷον εἰ ἐβρόντησε, καὶ ἥστραψεν, καὶ εἰ ἔπραξεν, ἐπείρασεν. ἔστι δὲ τούτων ἀπάντων τὰ μὲν ἐξ ἀνάγκης τὰ δ' ὡς ἐπὶ τὸ πολὺ οὕτως ἔχοντα. περὶ δὲ τοῦ μὴ γεγονέναι φανερόν ὅτι ἐκ τῶν ἐναντίων τοῖς εἰρημένοις.

[1393a] καὶ περὶ τοῦ ἐσομένου ἐκ τῶν αὐτῶν δῆλον· τό τε γὰρ ἐν δυνάμει καὶ ἐν βουλήσει ὃν ἔσται, καὶ τὰ ἐν ἐπιθυμίᾳ καὶ ὀργῇ καὶ λογισμῷ μετὰ δυνάμεως ὄντα, ταῦτα καὶ ἐν ὁρμῇ τοῦ ποιεῖν ἢ μελλήσει ἔσται· ὡς γὰρ ἐπὶ τὸ πολὺ γίνεσθαι μᾶλλον τὰ μέλλοντα ἢ τὰ μὴ μέλλοντα. καὶ εἰ προέγινετο ὅσα πρότερον πέφυκε γίνεσθαι, οἷον εἰ συνεφεῖ, εἰκὸς ὕσαι. καὶ εἰ τὸ ἔνεκα τούτου γέγονε, καὶ τοῦτο εἰκὸς γενέσθαι, οἷον εἰ θεμέλιος, καὶ οἰκία.

περὶ δὲ μεγέθους καὶ μικρότητος τῶν πραγμάτων καὶ μείζονός τε καὶ ἐλάττονος καὶ ὅλως μεγάλων καὶ μικρῶν ἐκ τῶν προειρημένων ἡμῖν ἐστὶν φανερόν. εἴρηται γὰρ ἐν τοῖς συμβουλευτικοῖς περὶ τε μεγέθους ἀγαθῶν καὶ περὶ τοῦ μείζονος ἀπλῶς καὶ ἐλάττονος, ὥστε ἐπεὶ καθ' ἕκαστον τῶν λόγων τὸ προκείμενον τέλος ἀγαθόν ἐστὶν, οἷον τὸ συμφέρον καὶ τὸ καλὸν καὶ τὸ δίκαιον, φανερόν ὅτι δι' ἐκείνων ληπτέον τὰς αὐξήσεις πᾶσιν. τὸ δὲ παρὰ ταῦτα ἔτι ζητεῖν περὶ μεγέθους ἀπλῶς καὶ ὑπεροχῆς κενολογεῖν ἐστὶν· κυριώτερα γὰρ ἐστὶν πρὸς τὴν χρεῖαν τῶν καθόλου τὰ καθ' ἕκαστα τῶν πραγμάτων.

περὶ μὲν οὖν δυνατοῦ καὶ ἀδυνάτου, καὶ πότερον γέγονεν ἢ οὐ γέγονεν καὶ ἔσται ἢ οὐκ ἔσται, ἔτι δὲ περὶ μεγέθους καὶ μικρότητος τῶν πραγμάτων, εἰρήσθω ταῦτα.

Λοιπὸν δὲ περὶ τῶν κοινῶν πίστεων ἅπασιν εἰπεῖν, ἐπεὶ εἴρηται περὶ τῶν ἰδίων. εἰσὶ δ' αἱ κοιναὶ πίστεις δύο τῷ γένει, παράδειγμα καὶ ἐνθύμημα· ἡ γὰρ γνώμη μέρος ἐνθυμήματός ἐστιν. πρῶτον μὲν οὖν περὶ παραδείγματος λέγωμεν· ὁμοιον γὰρ ἐπαγωγῇ τὸ παράδειγμα, ἡ δ' ἐπαγωγὴ ἀρχή.

παραδειγμάτων δὲ εἶδη δύο· ἓν μὲν γὰρ ἐστὶν παραδείγματος εἶδος τὸ λέγειν πράγματα προγενομένα, ἓν δὲ τὸ αὐτὸν ποιεῖν. τούτου δὲ ἓν μὲν παραβολὴ ἓν δὲ λόγοι, οἷον οἱ Αἰσώπειοι καὶ Λιβυκοί.

ἔστιν δὲ τὸ μὲν πράγματα λέγειν τοιόνδε τι, ὥσπερ εἴ τις λέγοι ὅτι δεῖ πρὸς βασιλέα παρασκευάζεσθαι καὶ μὴ ἔαν Αἴγυπτον χειρώσασθαι· καὶ γὰρ

πρότερον Δαρεῖος [1393b] οὐ πρότερον διέβη πρὶν Αἴγυπτον ἔλαβεν, λαβὼν δὲ διέβη, καὶ πάλιν Ξέρξης οὐ πρότερον ἐπεχείρησεν πρὶν ἔλαβεν, λαβὼν δὲ διέβη, ὥστε καὶ οὗτος ἐὰν λάβῃ, διαβήσεται, διὸ οὐκ ἐπιτρεπτόν.

παραβολὴ δὲ τὰ Σωκρατικά, οἷον εἴ τις λέγοι ὅτι οὐ δεῖ κληρωτοὺς ἄρχειν· ὅμοιον γὰρ ὥσπερ ἂν εἴ τις τοὺς ἀθλητὰς κληροίῃ μὴ οἷ δύνανται ἀγωνίζεσθαι ἀλλ' οἷ ἂν λάχωσιν, ἢ τῶν πλωτῆρων ὄντινα δεῖ κυβερνᾶν κληρώσειεν, ὡς δέον τὸν λαχόντα ἀλλὰ μὴ τὸν ἐπιστάμενον.

λόγος δέ, οἷος ὁ Στησιχόρου περὶ Φαλάριδος καὶ <ὁ> Αἰσώπου ὑπὲρ τοῦ δημαγωγοῦ. Στησίχορος μὲν γὰρ ἐλομένων στρατηγὸν αὐτοκράτορα τῶν Ἱμεραίων Φάλαριν καὶ μελλόντων φυλακὴν διδόναι τοῦ σώματος, τᾶλλα διαλεχθεὶς εἶπεν αὐτοῖς λόγον ὡς ἵππος κατεῖχε λειμῶνα μόνος, ἐλθόντος δ' ἐλάφου καὶ διαφθείροντος τὴν νομὴν βουλόμενος τιμωρήσασθαι τὸν ἔλαφον ἡρώτα τινὰ ἄνθρωπον εἰ δύναται ἂν μετ' αὐτοῦ τιμωρήσασθαι τὸν ἔλαφον, ὁ δ' ἔφησεν, ἐὰν λάβῃ χαλινὸν καὶ αὐτὸς ἀναβῇ ἐπ' αὐτὸν ἔχων ἀκόντια· συνομολογήσας δὲ καὶ ἀναβάντος ἀντὶ τοῦ τιμωρήσασθαι αὐτὸς ἐδούλευσε τῷ ἀνθρώπῳ. “οὕτω δὲ καὶ ὑμεῖς”, ἔφη, “ὁρᾶτε μὴ βουλόμενοι τοὺς πολεμίους τιμωρήσασθαι τὸ αὐτὸ πάθητε τῷ ἵππῳ· τὸν μὲν γὰρ χαλινὸν ἔχετε ἤδη, ἐλόμενοι στρατηγὸν αὐτοκράτορα· ἐὰν δὲ φυλακὴν δῶτε καὶ ἀναβῆναι ἐάσητε, δουλεύσετε ἤδη Φαλάριδι”. Αἰσώπος δὲ ἐν Σάμῳ δημηγορῶν κρινομένου δημαγωγοῦ περὶ θανάτου ἔφη ἀλώπεκα διαβαίνουσιν ποταμὸν ἀπωσθῆναι εἰς φάραγγα, οὐ δυναμένην δὲ ἐκβῆναι πολὺν χρόνον κακοπαθεῖν καὶ κυνοραιστὰς πολλοὺς ἔχεσθαι αὐτῆς, ἐχῖνον δὲ πλανώμενον, ὡς εἶδεν αὐτήν, κατοικτεῖραντα ἐρωτᾶν εἰ ἀφέλοι αὐτῆς τοὺς κυνοραιστὰς, τὴν δὲ οὐκ ἐᾶν· ἐρομένου δὲ διὰ τί, “ὅτι οὗτοι μὲν” φάναι “ἤδη μου πλήρεις εἰσὶ καὶ ὀλίγον ἔλκουσιν αἶμα, ἐὰν δὲ τούτους ἀφέλῃτε, ἕτεροι ἐλθόντες πεινῶντες ἐκπιοῦνταί μου τὸ λοιπὸν αἶμα”. “ἀτὰρ καὶ ὑμεῖς, ἄνδρες Σάμιοι, οὗτος μὲν οὐδὲν ἔτι βλάψει (πλούσιος γάρ ἐστιν), ἐὰν δὲ τοῦτον ἀποκτείνῃτε, ἕτεροι [1394a] ἥξουσι πένητες, οἷ ὑμεῖς ἀναλώσουσι τὰ λοιπὰ κλέπτοντες.”

εἰσὶ δ' οἷ λόγοι δημηγορικοί, καὶ ἔχουσιν ἀγαθὸν τοῦτο, ὅτι πράγματα μὲν εὐρεῖν ὅμοια γεγεννημένα χαλεπὸν, λόγους δὲ ῥᾶον· ποιῆσαι γὰρ δεῖ ὥσπερ καὶ παραβολάς, ἂν τις δύνηται τὸ ὅμοιον ὁρᾶν, ὅπερ ῥᾶόν ἐστιν ἐκ φιλοσοφίας. ῥᾶω μὲν οὖν πορίσασθαι τὰ διὰ τῶν λόγων, χρησιμώτερα δὲ πρὸς τὸ βουλεύσασθαι τὰ διὰ τῶν πραγμάτων· ὅμοια γὰρ ὡς ἐπὶ τὸ πολὺ τὰ μέλλοντα τοῖς γεγονόσιν.

δεῖ δὲ χρῆσθαι τοῖς παραδείγμασι οὐκ ἔχοντα μὲν ἐνθυμήματα ὡς

ἀποδείξεσιν (ἡ γὰρ πίστις διὰ τούτων), ἔχοντα δὲ ὡς μαρτυρίοις, ἐπιλόγῳ χρώμενον τοῖς ἐνθυμήμασιν· προτιθέμενα μὲν γὰρ ἔοικεν ἐπαγωγῇ, τοῖς δὲ ῥητορικοῖς οὐκ οἰκεῖον ἐπαγωγὴ πλὴν ἐν ὀλίγοις, ἐπιλεγόμενα δὲ μαρτυρίοις, ὁ δὲ μάρτυς πανταχοῦ πιθανός· διὸ καὶ προτιθέντι μὲν ἀνάγκη πολλὰ λέγειν, ἐπιλέγοντι δὲ καὶ ἐν ἱκανόν· μάρτυς γὰρ χρηστὸς καὶ εἰς χρήσιμος.

πόσα μὲν οὖν εἶδη παραδειγμάτων, καὶ πῶς αὐτοῖς καὶ πότε χρηστέον, εἴρηται.

Περὶ δὲ γνωμολογίας, ῥηθέντος τί ἐστὶν γνώμη μάλιστ' ἂν γένοιτο φανερόν περὶ ποίων τε καὶ πότε καὶ τίσιν ἀρμόττει χρῆσθαι τῷ γνωμολογεῖν ἐν τοῖς λόγοις. ἔστι δὴ γνώμη ἀπόφανσις, οὐ μέντοι οὔτε περὶ τῶν καθ' ἕκαστον, οἷον ποῖός τις Ἰφικράτης, ἀλλὰ καθόλου, οὔτε περὶ πάντων, οἷον ὅτι τὸ εὐθὺ τῷ καμπύλῳ ἐναντίον, ἀλλὰ περὶ ὅσων αἱ πράξεις εἰσὶ, καὶ <ἃ> αἰρετὰ ἢ φευκτὰ ἐστὶ πρὸς τὸ πράττειν, ὥστ' ἐπεὶ τὸ ἐνθύμημα ὁ περὶ τοιούτων συλλογισμὸς ἐστὶν, σχεδὸν τὰ συμπεράσματα τῶν ἐνθυμημάτων καὶ αἱ ἀρχαὶ ἀφαιρεθέντος τοῦ συλλογισμοῦ γινώμαί εἰσιν, οἷον

χρὴ δ' οὐ ποθ' ὅστις ἀρτίφρων πέφυκ' ἀνὴρ

παῖδας περισσῶς ἐκδιδάσκεσθαι σοφούς.

τοῦτο μὲν οὖν γνώμη· προστεθείσης δὲ τῆς αἰτίας καὶ τοῦ διὰ τί ἐνθύμημά ἐστιν τὸ ἅπαν, οἷον

χωρὶς γὰρ ἄλλης ἥς ἔχουσιν ἀργίας,

φθόνον παρ' ἀστῶν ἀλφάνουσι δυσμενῇ,

[1394b] καὶ τὸ

οὐκ ἔστιν ὅστις πάντ' ἀνὴρ εὐδαιμονεῖ,

καὶ τὸ

οὐκ ἔστιν ἀνδρῶν ὅστις ἔστ' ἐλεύθερος

γνώμη, πρὸς δὲ τῷ ἐχομένῳ ἐνθύμημα,

ἢ χρημάτων γὰρ δοῦλός ἐστιν ἢ τύχης.

εἰ δὴ ἐστὶν γνώμη τὸ εἰρημένον, ἀνάγκη τέτταρα εἶδη εἶναι γνώμης· ἢ γὰρ μετ' ἐπιλόγου ἔσται ἢ ἄνευ ἐπιλόγου. ἀποδείξεως μὲν οὖν δεόμεναί εἰσιν ὅσαι παράδοξόν τι λέγουσιν ἢ ἀμφισβητούμενον· ὅσαι δὲ μηδὲν παράδοξον, ἄνευ ἐπιλόγου. τούτων δ' ἀνάγκη τὰς μὲν διὰ τὸ προεγνώσθαι μηδὲν δεῖσθαι ἐπιλόγου, οἷον

ἀνδρὶ δ' ὑγιαίνειν ἄριστόν ἐστιν, ὥς γ' ἐμὶν δοκεῖ

(φαίνεται μὲν γὰρ τοῖς πολλοῖς οὕτω), τὰς δ' ἅμα λεγομένας δήλας εἶναι ἐπιβλέψασιν, οἷον

οὐδεὶς ἐραστῆς ὅστις οὐκ ἀεὶ φιλεῖ.

τῶν δὲ μετ' ἐπιλόγου αἱ μὲν ἐνθυμήματος μέρος εἰσὶν, ὥσπερ

χρὴ δ' οὗ ποθ' ὅστις ἀρτίφρων,

αἱ δ' ἐνθυμηματικά μὲν, οὐκ ἐνθυμήματος δὲ μέρος· αἵπερ καὶ μάλιστ' εὐδοκιμοῦσιν. εἰσὶν δ' αὗται ἐν ὅσαις ἐμφαίνεται τοῦ λεγομένου τὸ αἶτιον, οἷον ἐν τῷ

ἀθάνατον ὀργὴν μὴ φύλασσε θνητὸς ὢν·

τὸ μὲν γὰρ φάναι “μὴ δεῖν φυλάττειν” γνώμη, τὸ δὲ προσκείμενον “θνητὸν ὄντα” τὸ διὰ τί. ὁμοίως δὲ καὶ

θνατὰ χρὴ τὸν θνατόν, οὐκ ἀθάνατα τὸν θνατὸν φρονεῖν.

φανερὸν οὖν ἐκ τῶν εἰρημένων πόσα τε εἶδη γνώμης, καὶ περὶ ποῖον ἕκαστον ἀρμόττει· περὶ μὲν γὰρ τῶν ἀμφισβητούμενων ἢ παραδόξων μὴ ἄνευ ἐπιλόγου, ἀλλ' ἢ προθέντα τὸν ἐπίλογον γνώμη χρῆσθαι τῷ συμπεράσματι (οἷον εἴ τις εἴποι “ἐγὼ μὲν οὖν, ἐπειδὴ οὐτε φθονεῖσθαι δεῖ οὐτ' ἀργὸν εἶναι, οὗ φημι χρῆναι παιδεύεσθαι”), ἢ τοῦτο προειπόντα ἐπειπεῖν τὰ ἔμπροσθεν· περὶ δὲ τῶν μὴ παραδόξων ἀδήλων δὲ προστιθέντα τὸ διότι στρογγυλώτατα. ἀρμόττει δ' ἐν τοῖς τοιούτοις καὶ τὰ Λακωνικὰ ἀποφθέγματα καὶ τὰ αἰνιγματώδη, οἷον εἴ [1395a] τις λέγει ὅπερ Στησίχορος ἐν Λοκροῖς εἶπεν, ὅτι οὐ δεῖ ὑβριστὰς εἶναι, ὅπως μὴ οἱ τέττιγες χαμόθεν ἄδωσιν.

ἀρμόττει δὲ γνωμολογεῖν ἡλικία μὲν πρεσβυτέρων, περὶ δὲ τούτων ὢν ἔμπειρός τις ἐστίν, ὥστε τὸ μὲν μὴ τηλικοῦτον ὄντα γνωμολογεῖν ἀπρεπὲς

ὥσπερ καὶ τὸ μυθολογεῖν, περὶ δὲ ὧν ἄπειρος, ἡλίθιον καὶ ἀπαίδευτον. σημείον δὲ ἱκανόν· οἱ γὰρ ἀγροῖκοι μάλιστα γνωμοτύποι εἰσὶ καὶ ῥαδίως ἀποφαίνονται.

καθόλου δὲ μὴ ὄντος καθόλου εἰπεῖν μάλιστα ἀρμόττει ἐν σχετλιασμῷ καὶ δεινώσει, καὶ ἐν τούτοις ἢ ἀρχόμενον ἢ ἀποδείξαντα. χρῆσθαι δὲ δεῖ καὶ ταῖς τεθρυλημέναις καὶ κοιναῖς γνώμαις, ἐὰν ὧσι χρήσιμοι· διὰ γὰρ τὸ εἶναι κοιναί, ὡς ὁμολογούντων πάντων, ὀρθῶς ἔχειν δοκοῦσιν, οἷον παρακαλοῦντι ἐπὶ τὸ κινδυνεύειν μὴ θυσαμένους

εἷς οἰωνὸς ἄριστος ἀμύνεσθαι περὶ πάτρης,

καὶ ἐπὶ τὸ ἥττους ὄντας

ξυνὸς Ἐνυάλιος,

καὶ ἐπὶ τὸ ἀναιρεῖν τῶν ἐχθρῶν τὰ τέκνα καὶ μηδὲν ἀδικοῦντα

νήπιος ὃς πατέρα κτείνας παῖδας καταλείπει.

ἔτι ἔναια τῶν παροιμιῶν καὶ γνώμαί εἰσιν, οἷον παροιμία “Ἀττικὸς πάροικος”. δεῖ δὲ τὰς γνώμας λέγειν καὶ παρὰ τὰ δεδημοσιευμένα (λέγω δὲ δεδημοσιευμένα οἷον τὸ “γνώθι σαυτὸν” καὶ τὸ “μηδὲν ἄγαν”), ὅταν ἢ τὸ ἦθος φαίνεσθαι μέλλῃ βέλτιον ἢ παθητικῶς εἰρημένῃ. ἔστι δὲ παθητικὴ μὲν οἷον εἴ τις ὀργιζόμενος φαίη ψεῦδος εἶναι ὡς δεῖ γινώσκειν αὐτόν· οὗτος γοῦν εἰ ἐγίγνωσκεν ἑαυτόν, οὐκ ἂν ποτε στρατηγεῖν ἠξίωσε· τὸ δὲ ἦθος βέλτιον, ὅτι οὐ δεῖ, ὥσπερ φασίν, φιλεῖν ὡς μισήσοντας, ἀλλὰ μᾶλλον μισεῖν ὡς φιλήσοντας. δεῖ δὲ τῇ λέξει τὴν προαίρεσιν συνδηλοῦν, εἰ δὲ μή, τὴν αἰτίαν ἐπιλέγειν, οἷον οὕτως εἰπόντα, ὅτι “δεῖ δὲ φιλεῖν οὐχ ὥσπερ φασίν, ἀλλ’ ὡς ἀεὶ φιλήσοντα· ἐπιβούλου γὰρ θάτερον”, ἢ ὥδε, “οὐκ ἀρέσκει δέ μοι τὸ λεγόμενον· δεῖ γὰρ τὸν ἀληθινὸν φίλον ὡς φιλήσοντα ἀεὶ φιλεῖν”, καὶ “οὐδὲ τὸ μηδὲν ἄγαν· δεῖ γὰρ τοὺς γε κακοὺς ἄγαν μισεῖν”.

[1395b] ἔχουσι δ’ εἰς τοὺς λόγους βοήθειαν μεγάλην μίαν μὲν διὰ τὴν φορτικότητα τῶν ἀκροατῶν· χαίρουσι γὰρ ἐάν τις καθόλου λέγων ἐπιτύχῃ τῶν δοξῶν ἃς ἐκεῖνοι κατὰ μέρος ἔχουσιν. ὃ δὲ λέγω δῆλον ἔσται ὥδε, ἅμα δὲ καὶ πῶς δεῖ αὐτὰς θηρεύειν. ἡ μὲν γὰρ γνώμη, ὥσπερ εἴρηται, ἀπόφανσις καθόλου ἐστίν, χαίρουσι δὲ καθόλου λεγομένου ὃ κατὰ μέρος προὑπολαμβάνοντες τυγχάνουσι· οἷον εἴ τις γείτοσι τύχοι κεχρημένος ἢ τέκνοις φαύλοις, ἀποδέξαιτ’ ἂν τοῦ εἰπόντος ὅτι οὐδὲν γειτονίας χαλεπώτερον ἢ ὅτι



οὐδὲν ἡλιθιώτερον τεκνοποιίας, ὥστε δεῖ στοχάζεσθαι ποῖα τυγχάνουσι προϋπολαμβάνοντες, εἴθ' οὕτως περὶ τούτων καθόλου λέγειν. ταύτην τε δὴ ἔχει μίαν χρῆσιν τὸ γνωμολογεῖν, καὶ ἑτέραν κρείττω· ἠθικοὺς γὰρ ποιεῖ τοὺς λόγους. ἦθος δὲ ἔχουσιν οἱ λόγοι ἐν ὅσοις δῆλη ἡ προαίρεσις· αἱ δὲ γινώμαι πᾶσαι τοῦτο ποιοῦσιν διὰ τὸ ἀποφαίνεσθαι τὸν τὴν γνώμην λέγοντα καθόλου περὶ τῶν προαιρέσεων, ὥστε, ἂν χρησταὶ ὦσιν αἱ γινώμαι, καὶ χρηστοθήη φαίνεσθαι ποιοῦσι τὸν λέγοντα.

περὶ μὲν οὖν γνώμης, καὶ τί ἐστὶ καὶ πόσα εἶδη ταύτης καὶ πῶς χρηστέον αὐτῇ καὶ τίνα ὠφέλειαν ἔχει, εἰρήσθω ταῦτα.

Περὶ δ' ἐνθυμημάτων καθόλου τε εἰπώμεν τίνα τρόπον δεῖ ζητεῖν, καὶ μετὰ ταῦτα τοὺς τόπους· ἄλλο γὰρ εἶδος ἐκάτερον τούτων ἐστίν. ὅτι μὲν οὖν τὸ ἐνθύμημα συλλογισμός ἐστίν, εἴρηται πρότερον, καὶ πῶς συλλογισμός, καὶ τί διαφέρει τῶν διαλεκτικῶν· οὔτε γὰρ πόρρωθεν οὔτε πάντα δεῖ λαμβάνοντας συνάγειν· τὸ μὲν γὰρ ἀσαφές διὰ τὸ μῆκος, τὸ δὲ ἀδολεσχία διὰ τὸ φανερά λέγειν. τοῦτο γὰρ αἴτιον καὶ τοῦ πιθανωτέρους εἶναι τοὺς ἀπαιδεύτους τῶν πεπαιδευμένων ἐν τοῖς ὄχλοις, ὥσπερ φασὶν οἱ ποιηταὶ τοὺς ἀπαιδεύτους παρ' ὄχλῳ μουσικωτέρως λέγειν· οἱ μὲν γὰρ τὰ κοινὰ καὶ καθόλου λέγουσιν, οἱ δ' ἐξ ὧν ἴσασι, καὶ τὰ ἐγγύς· ὥστ' οὐκ ἐξ ἀπάντων τῶν δοκούντων ἀλλ' ἐκ τῶν ὠρισμένων λεκτέον, οἷον ἢ τοῖς κρίνουσιν [1396a] ἢ οὖς ἀποδέχονται, καὶ τοῦτο διότι οὕτως φαίνεται δῆλον εἶναι ἅπασιν ἢ τοῖς πλείστοις· καὶ μὴ μόνον συνάγειν ἐκ τῶν ἀναγκαίων, ἀλλὰ καὶ ἐκ τῶν ὡς ἐπὶ τὸ πολὺ.

πρῶτον μὲν οὖν δεῖ λαβεῖν ὅτι περὶ οὗ δεῖ λέγειν καὶ συλλογίζεσθαι εἴτε πολιτικῶ συλλογισμῶ εἴθ' ὁποιοῦν, ἀναγκαῖον κατὰ τούτου ἔχειν τὰ ὑπάρχοντα, ἢ πάντα ἢ ἕνια· μηδὲν γὰρ ἔχων ἐξ οὐδενὸς ἂν ἔχοις συνάγειν. λέγω δ' οἷον πῶς ἂν δυναίμεθα συμβουλευεῖν Ἀθηναίοις εἰ πολεμητέον ἢ μὴ πολεμητέον, μὴ ἔχοντες τίς ἡ δύναμις αὐτῶν, πότερον ναυτικὴ ἢ πεζικὴ ἢ ἄμφω, καὶ αὕτη πόση, καὶ πρόσοδοι τίνες ἢ φίλοι καὶ ἐχθροί, εἴτα τίνας πολέμους πεπολεμήκασιν καὶ πῶς, καὶ τᾶλλα τὰ τοιαῦτα· ἢ ἐπαινεῖν, εἰ μὴ ἔχοιμεν τὴν ἐν Σαλαμῖνι ναυμαχίαν ἢ τὴν ἐν Μαραθῶνι μάχην ἢ τὰ ὑπὸ τῶν Ἡρακλειδῶν πραχθέντα ἢ ἄλλο τι τῶν τοιούτων. ἐκ γὰρ τῶν ὑπαρχόντων ἢ δοκούντων ὑπάρχειν καλῶν ἐπαινοῦσι πάντες. ὁμοίως δὲ καὶ ψέγουσιν ἐκ τῶν ἐναντίων, σκοποῦντες τί ὑπάρχει τοιοῦτον αὐτοῖς ἢ δοκεῖ ὑπάρχειν, οἷον ὅτι τοὺς Ἕλληνας κατεδουλώσαντο, καὶ τοὺς πρὸς τὸν βάρβαρον συμμαχεσάμενους καὶ ἀριστεύσαντας ἠνδραποδίσαντο, Αἰγινήτας καὶ Ποτιδιαάτας, καὶ ὅσα ἄλλα τοιαῦτα, [καὶ] εἴ τι ἄλλο τοιοῦτον ἀμάρτημα ὑπάρχει αὐτοῖς. ὥς δ' αὕτως καὶ οἱ κατηγοροῦντες καὶ οἱ ἀπολογούμενοι ἐκ

τῶν ὑπαρχόντων σκοπούμενοι κατηγοροῦσι καὶ ἀπολογοῦνται.

οὐδὲν δὲ διαφέρει περὶ Ἀθηναίων ἢ Λακεδαιμονίων, ἢ ἀνθρώπου ἢ θεοῦ, τὸ αὐτὸ τοῦτο δρᾶν· καὶ γὰρ συμβουλευόντα τῷ Ἀχιλλεῖ, καὶ ἐπαινοῦντα καὶ ψέγοντα, καὶ κατηγοροῦντα καὶ ἀπολογούμενον ὑπὲρ αὐτοῦ, τὰ ὑπάρχοντα ἢ δοκοῦντα ὑπάρχειν ληπτέον, ἴν' ἐκ τούτων λέγωμεν, ἐπαινοῦντες ἢ ψέγοντες εἴ τι καλὸν ἢ αἰσχρὸν ὑπάρχει, κατηγοροῦντες δ' ἢ ἀπολογούμενοι εἴ τι δίκαιον ἢ ἄδικον, συμβουλευόντες δ' εἴ τι συμφέρον ἢ βλαβερὸν. ὁμοίως δὲ τούτοις καὶ περὶ πράγματος ὁπουοῦν, οἷον περὶ δικαιοσύνης, εἰ ἀγαθὸν ἢ μὴ ἀγαθόν, ἐκ τῶν ὑπαρχόντων τῇ δικαιοσύνῃ καὶ τῷ ἀγαθῷ· ὥστ' ἐπειδὴ καὶ πάντες οὕτω φαίνονται ἀποδεικνύντες, ἐάν τε ἀκριβέστερον ἐάν τε μαλακώτερον συλλογίζονται [1396b] (οὐ γὰρ ἐξ ἀπάντων λαμβάνουσιν ἀλλ' ἐκ τῶν περὶ ἕκαστον ὑπαρχόντων), καὶ διὰ τοῦ λόγου δῆλον ὅτι ἀδύνατον ἄλλως δεικνύναι, φανερόν ὅτι ἀναγκαῖον, ὥσπερ ἐν τοῖς Τοπικοῖς, πρῶτον περὶ ἕκαστον ἔχειν ἐξελεγμένα περὶ τῶν ἐνδεχομένων καὶ τῶν ἐπικαιροτάτων, περὶ δὲ τῶν ἐξ ὑπογίου γιγνομένων ζητεῖν τὸν αὐτὸν τρόπον, ἀποβλέποντα μὴ εἰς ἀόριστα ἀλλ' εἰς τὰ ὑπάρχοντα περὶ ὧν ὁ λόγος, καὶ περιγράφοντα ὅ τι πλεῖστα καὶ ἐγγύτατα τοῦ πράγματος· ὅσω μὲν γὰρ ἂν πλείω ἔχη τῶν ὑπαρχόντων, τοσοῦτω ῥᾶον δεικνύναι, ὅσω δ' ἐγγύτερον, τοσοῦτω οἰκειότερα καὶ ἥττον κοινά. λέγω δὲ κοινὰ μὲν τὸ ἐπαινεῖν τὸν Ἀχιλλέα ὅτι ἄνθρωπος καὶ ὅτι τῶν ἡμιθέων καὶ ὅτι ἐπὶ τὸ Ἴλιον ἐστρατεύσατο· ταῦτα γὰρ καὶ ἄλλοις ὑπάρχει πολλοῖς, ὥστε οὐδὲν μᾶλλον ὁ τοιοῦτος τὸν Ἀχιλλέα ἐπαινεῖ ἢ Διομήδην· ἴδια δὲ ἃ μηδενὶ ἄλλῳ συμβέβηκεν ἢ τῷ Ἀχιλλεῖ, οἷον τὸ ἀποκτεῖναι τὸν Ἑκτορα τὸν ἄριστον τῶν Τρώων καὶ τὸν Κύκνον, ὃς ἐκώλυσεν ἅπαντας ἀποβαίνειν ἄτρωτος ὢν, καὶ ὅτι νεώτατος καὶ οὐκ ἔνορκος ὢν ἐστράτευσεν, καὶ ὅσα ἄλλα τοιαῦτα.

εἷς μὲν οὖν τρόπος τῆς ἐκλογῆς πρῶτος οὗτος ὁ τοπικός,

τὰ δὲ στοιχεῖα τῶν ἐνθυμημάτων λέγωμεν· στοιχεῖον δὲ λέγω καὶ τόπον ἐνθυμήματος τὸ αὐτό. πρῶτον δὲ εἵπωμεν περὶ ὧν ἀναγκαῖον εἰπεῖν πρῶτον. ἔστιν γὰρ τῶν ἐνθυμημάτων εἶδη δύο· τὰ μὲν γὰρ δεικτικά ἐστίν ὅτι ἔστιν ἢ οὐκ ἔστιν, τὰ δ' ἐλεγκτικά, καὶ διαφέρει ὥσπερ ἐν τοῖς διαλεκτικοῖς ἔλεγχος καὶ συλλογισμός. ἔστι δὲ τὸ μὲν δεικτικὸν ἐνθύμημα τὸ ἐξ ὁμολογουμένων συνάγειν, τὸ δὲ ἐλεγκτικὸν τὸ τὰ ἀνομολογούμενα συνάγειν.

σχεδὸν μὲν οὖν ἡμῖν περὶ ἕκαστον τῶν εἰδῶν τῶν χρησίμων καὶ ἀναγκαίων ἔχονται οἱ τόποι· ἐξελεγμένοι γὰρ αἱ προτάσεις περὶ ἕκαστόν εἰσιν, ὥστε ἐξ ὧν δεῖ φέρειν τὰ ἐνθυμήματα τόπων περὶ ἀγαθοῦ ἢ κακοῦ, ἢ

καλοῦ ἢ αἰσχροῦ, ἢ δικαίου ἢ ἀδίκου, καὶ περὶ τῶν ἡθῶν καὶ παθημάτων καὶ ἔξεων ὡσαύτως, εἰλημμένοι ἡμῖν ὑπάρχουσι πρότερον οἱ τόποι.

[1397a] ἔτι δὲ ἄλλον τρόπον καθόλου περὶ ἀπάντων λάβωμεν, καὶ λέγωμεν παρασημαινόμενοι τοὺς ἐλεγκτικούς καὶ τοὺς ἀποδεικτικούς, καὶ τοὺς τῶν φαινομένων ἐνθυμημάτων, οὐκ ὄντων δὲ ἐνθυμημάτων, ἐπεὶ περ οὐδὲ συλλογισμῶν. δηλωθέντων δὲ τούτων περὶ τῶν λύσεων καὶ ἐνστάσεων διορίσωμεν, πόθεν δεῖ πρὸς τὰ ἐνθυμήματα φέρειν.

Ἔστι δὲ εἷς μὲν τόπος τῶν δεικτικῶν ἐκ τῶν ἐναντίων· δεῖ γὰρ σκοπεῖν εἰ τῷ ἐναντίῳ τὸ ἐναντίον ὑπάρχει, ἀναιροῦντα μὲν εἰ μὴ ὑπάρχει, κατασκευάζοντα δὲ εἰ ὑπάρχει, οἷον ὅτι τὸ σωφρονεῖν ἀγαθόν· τὸ γὰρ ἀκολασταίνειν βλαβερόν. ἢ ὡς ἐν τῷ Μεσσηνιακῷ· “εἰ γὰρ ὁ πόλεμος αἴτιος τῶν παρόντων κακῶν, μετὰ τῆς εἰρήνης δεῖ ἐπανορθώσασθαι”.

εἴ περ γὰρ οὐδὲ τοῖς κακῶς δεδρακόσιν

ἀκουσίως δίκαιον εἰς ὀργὴν πεσεῖν,

οὐδ’ ἂν ἀναγκασθεῖς τις εὖ δράσῃ τινά,

προσῆκον εἶναι τῷδ’ ὀφείλεσθαι χάριν.

ἀλλ’ εἴ περ ἔστιν ἐν βροτοῖς ψευδηγορεῖν

πιθανά, νομίζειν χρή σε καὶ τοῦναντίον,

ἄπιστ’ ἀληθῆ πολλὰ συμβαίνειν βροτοῖς.

ἄλλος ἐκ τῶν ὁμοίων πτώσεων· ὁμοίως γὰρ δεῖ ὑπάρχειν ἢ μὴ ὑπάρχειν, οἷον ὅτι τὸ δίκαιον οὐ πᾶν ἀγαθόν· καὶ γὰρ ἂν τὸ δικαίως, νῦν δ’ οὐχ αἰρετὸν τὸ δικαίως ἀποθανεῖν.

ἄλλος ἐκ τῶν πρὸς ἄλληλα· εἰ γὰρ θατέρῳ ὑπάρχει τὸ καλῶς ἢ δικαίως ποιῆσαι, θατέρῳ τὸ πεπονθέναι, καὶ εἰ <τὸ> κελεῖσθαι, καὶ τὸ πεποιηκέναι, οἷον ὡς ὁ τελώνης Διομέδων περὶ τῶν τελῶν, “εἰ γὰρ μηδ’ ὑμῖν αἰσchrὸν τὸ πωλεῖν, οὐδ’ ἡμῖν τὸ ὠνεῖσθαι”. καὶ εἰ τῷ πεπονθότι τὸ καλῶς ἢ δικαίως ὑπάρχει, καὶ τῷ ποιήσαντι. ἔστι δ’ ἐν τούτῳ παραλογίσασθαι· εἰ γὰρ δικαίως ἔπαθέν τι, [δικαίως πέπονθεν,] ἀλλ’ ἴσως οὐχ ὑπὸ σοῦ· διὸ δεῖ σκοπεῖν χωρὶς εἰ ἄξιος ὁ παθὼν παθεῖν καὶ ὁ [1397b] ποιήσας ποιῆσαι, εἴτα χρῆσθαι

ὁποτέρως ἀρμόττει· ἐνίοτε γὰρ διαφωνεῖ τὸ τοιοῦτον καὶ οὐδὲν κωλύει, ὥσπερ ἐν τῷ Ἀλκμαίῳ τῷ Θεοδέκτου “μητέρα δὲ τὴν σὴν οὐ τις ἐστύγει βροτῶν;” φησὶ δὲ ἀποκρινόμενος “ἀλλὰ διαλαβόντα χρὴ σκοπεῖν”. ἐρομένης δὲ τῆς Ἀλφειβοίας πῶς, ὑπολαβὼν φησιν

τὴν μὲν θανεῖν ἔκριναν, ἐμὲ δὲ μὴ κτανεῖν.

καὶ ἡ περὶ Δημοσθένους δίκη καὶ τῶν ἀποκτεινάντων Νικάνορα· ἐπεὶ γὰρ δικαίως ἐκρίθησαν ἀποκτεῖναι, δικαίως ἔδοξεν ἀποθανεῖν. καὶ περὶ τοῦ Θήβησιν ἀποθανόντος, περὶ οὗ κελεύει κρίνεσθαι εἰ δίκαιος ἦν ἀποθανεῖν, ὡς οὐκ ἄδικον ὂν τὸ ἀποκτεῖναι τὸν δικαίως ἀποθανόντα.

ἄλλος ἐκ τοῦ μᾶλλον καὶ ἥττον, οἷον “εἰ μὴδ’ οἱ θεοὶ πάντα ἴσασι, σχολῇ οἷ γε ἄνθρωποι”. τοῦτο γὰρ ἐστὶν “εἰ ὥ μᾶλλον ἂν ὑπάρχοι μὴ ὑπάρχει, δῆλον ὅτι οὐδ’ ὥ ἥττον”. τὸ δ’ ὅτι τοὺς πλησίον τύπτει ὅς γε καὶ τὸν πατέρα ἐκ τοῦ “εἰ τὸ ἥττον <ὑπάρχον> ὑπάρχει, καὶ τὸ μᾶλλον ὑπάρχει”. τοὺς γὰρ πατέρας ἥττον τύπτουσιν ἢ τοὺς πλησίον· ἢ δὴ οὕτως γε ἢ εἰ ὥ μᾶλλον ὑπάρχει μὴ ὑπάρχει, ἢ εἰ ὥ ἥττον ὑπάρχει <ὑπάρχει>, ὁπότερον δεῖ δεῖξαι, εἴθ’ ὅτι ὑπάρχει εἴθ’ ὅτι οὐ. ἔτι εἰ μήτε μᾶλλον μήτε ἥττον, ὅθεν εἴρηται

καὶ σὸς μὲν οἰκτρὸς παῖδας ἀπολέσας πατήρ·

Οἶνεὺς δ’ ἄρ’ οὐχὶ [τὸν Ἑλλάδος] κλεινὸν ἀπολέσας γόνον;

καὶ ὅτι, εἰ μὴδὲ Θησεὺς ἠδίκησεν, οὐδ’ Ἀλέξανδρος, καὶ εἰ μὴδ’ οἱ Τυνδαρίδαι, οὐδ’ Ἀλέξανδρος, καὶ εἰ Πάτροκλον Ἑκτωρ, καὶ Ἀχιλλέα Ἀλέξανδρος. καὶ εἰ μὴδ’ ἄλλοι τεχνῖται φαῦλοι, οὐδ’ οἱ φιλόσοφοι. καὶ εἰ μὴδ’ οἱ στρατηγοὶ φαῦλοι ὅτι θανατοῦνται πολλάκις, οὐδ’ οἱ σοφισταί. καὶ ὅτι “εἰ δεῖ τὸν ἰδιώτην τῆς ὑμετέρας δόξης ἐπιμελεῖσθαι, καὶ ὑμᾶς τῆς τῶν Ἑλλήνων”.

ἄλλος ἐκ τοῦ τὸν χρόνον σκοπεῖν, οἷον ὡς Ἰφικράτης ἐν τῇ πρὸς Ἀρμόδιον, ὅτι “εἰ πρὶν ποιῆσαι ἡξίου τῆς εἰκόνης τυχεῖν ἔαν ποιήσω, ἔδοτε ἂν· ποιήσαντι δ’ ἄρ’ οὐ δώσετε; μὴ τοίνυν μέλλοντες μὲν ὑπισχνεῖσθε, παθόντες δ’ ἀφαιρεῖσθε”. καὶ πάλιν πρὸς τὸ Θηβαίους διέναι Φίλιππον εἰς [1398a] τὴν Ἀττικὴν, ὅτι εἰ πρὶν βοηθῆσαι εἰς Φωκεῖς ἡξίου, ὑπέσχοντο ἂν· ἄτοπον οὖν εἰ διότι προεῖτο καὶ ἐπίστευσεν μὴ διήσουσιν.

ἄλλος ἐκ τῶν εἰρημένων καθ’ αὐτοῦ πρὸς τὸν εἰπόντα, οἷον ἐν τῷ Τεύκρῳ. διαφέρει δὲ ὁ τρόπος ὥ ἐχρήσατο Ἰφικράτης πρὸς Ἀριστοφῶντα,

ἐπερόμενος εἰ προδοίῃ ἂν τὰς ναῦς ἐπὶ χρήμασιν· οὐ φάσκοντος δέ, εἴτα εἶπεν “σὺ μὲν ὦν Ἀριστοφῶν οὐκ ἂν προδοίης, ἐγὼ δ’ ὦν Ἰφικράτης;” δεῖ δὲ ὑπάρχειν μᾶλλον ἂν δοκοῦντα ἀδικῆσαι ἐκεῖνον· εἰ δὲ μή, γελοῖον ἂν φανείη, <οῖον> εἰ πρὸς Ἀριστείδην κατηγοροῦντα τοῦτό τις [ἂν] εἶπειεν ἄλλος πρὸς ἀπιστίαν τοῦ κατηγοροῦ· ὅλως γὰρ βούλεται ὁ κατηγορῶν βελτίων εἶναι τοῦ φεύγοντος· τοῦτ’ οὖν ἐξελέγχειν δεῖ. καθόλου δὲ ἄτοπός ἐστιν, ὅταν τις ἐπιτιμᾷ ἄλλοις ἢ αὐτὸς ποιεῖ ἢ ποιήσειεν ἂν, ἢ προτρέπη ποιεῖν ἢ αὐτὸς μὴ ποιεῖ μηδὲ ποιήσειεν ἂν.

ἄλλος ἐξ ὀρισμοῦ, οἷον τί τὸ δαιμόνιον ἐστιν· “ἄρα θεὸς ἢ θεοῦ ἔργον; καίτοι ὅστις οἶται θεοῦ ἔργον εἶναι, τοῦτον ἀνάγκη οἶσθαι καὶ θεοὺς εἶναι.” καὶ ὡς Ἰφικράτης, ὅτι γενναιότατος ὁ βέλτιστος· καὶ γὰρ Ἀρμοδίῳ καὶ Ἀριστογείτονι οὐδὲν πρότερον ὑπῆρχεν γενναῖον πρὶν γενναῖόν τι πρᾶξαι. καὶ ὅτι συγγενέστερος αὐτός· “τὰ γοῦν ἔργα συγγενέστερά ἐστι τὰ ἐμὰ τοῖς Ἀρμοδίου καὶ Ἀριστογείτονος ἢ τὰ σά”. καὶ ὡς ἐν τῷ Ἀλεξάνδρῳ ὅτι πάντες ἂν ὁμολογήσειαν τοὺς μὴ κοσμίους οὐχ ἐνὸς σώματος ἀγαπᾶν ἀπόλαυσιν. καὶ δι’ ὃ Σωκράτης οὐκ ἔφη βαδίζειν ὡς Ἀρχέλαον· ὕβριν γὰρ ἔφη εἶναι τὸ μὴ δύνασθαι ἀμύνασθαι ὁμοίως καὶ εὖ παθόντας ὥσπερ καὶ κακῶς. πάντες γὰρ οὗτοι ὀρισάμενοι καὶ λαβόντες τὸ τί ἐστι συλλογίζονται περὶ ὧν λέγουσιν.

ἄλλος ἐκ τοῦ ποσαχῶς, οἷον ἐν τοῖς Τοπικοῖς περὶ τοῦ ὀρθῶς.

ἄλλος ἐκ διαιρέσεως, οἷον εἰ πάντες τριῶν ἔνεκεν ἀδικοῦσιν (ἢ τοῦδε γὰρ ἔνεκα ἢ τοῦδε ἢ τοῦδε), καὶ διὰ μὲν τὰ δύο ἀδύνατον, διὰ δὲ τὸ τρίτον οὐδ’ αὐτοί φασιν.

ἄλλος ἐξ ἐπαγωγῆς, οἷον ἐκ τῆς Πεπαρηθίας, ὅτι περὶ [1398b] τῶν τέκνων αἱ γυναῖκες πανταχοῦ διορίζουσι τάληθές· τοῦτο μὲν γὰρ Ἀθήνησι Μαντία τῷ ῥήτορι ἀμφισβητοῦντι πρὸς τὸν υἱὸν ἀπέφηνεν ἢ μήτηρ, τοῦτο δὲ Θήβησιν Ἴσμηνίου καὶ Στίλβωνος ἀμφισβητούντων ἢ Δωδωνὶς ἀπέδειξεν Ἴσμηνίου τὸν υἱόν, καὶ διὰ τοῦτο Θετταλίσκον Ἴσμηνίου ἐνόμιζον. καὶ πάλιν ἐκ τοῦ Νόμου τοῦ Θεοδέκτου, “εἰ τοῖς κακῶς ἐπιμεληθεῖσι τῶν ἀλλοτρίων ἵππων οὐ παραδιδόασι τοὺς οἰκείους, οὐδὲ τοῖς ἀνατρέψασι τὰς ἀλλοτρίας ναῦς <τὰς οἰκείας>, οὐκοῦν εἰ ὁμοίως ἐφ’ ἀπάντων, καὶ τοῖς κακῶς φυλάξασι τὴν ἀλλοτρίαν οὐ χρηστέον ἐστὶν εἰς τὴν οἰκείαν σωτηρίαν”. καὶ ὡς Ἀλκιδάμας, ὅτι πάντες τοὺς σοφοὺς τιμῶσιν· “Πάριοι γοῦν Ἀρχίλοχον καίπερ βλάσφημον ὄντα τετιμήκασι, καὶ Χῖοι Ὅμηρον οὐκ ὄντα πολίτην, καὶ Μυτιληναῖοι Σαπφῶ καίπερ γυναῖκα οὔσαν, καὶ Λακεδαιμόνιοι Χίλωνα καὶ τῶν γερόντων ἐποίησαν ἥκιστα φιλόλογοι ὄντες, καὶ Ἰταλιῶται Πυθαγόραν, καὶ Λαμψακηνοὶ

Ἀναξαγόραν ξένον ὄντα ἔθαψαν καὶ τιμῶσι ἔτι καὶ νῦν, καὶ Ἀθηναῖοι τοῖς Σόλωνος νόμοις χρησάμενοι εὐδαιμόνησαν καὶ Λακεδαιμόνιοι τοῖς Λυκούργου, καὶ Θήβησιν ἅμα οἱ προστάται φιλόσοφοι ἐγένοντο καὶ εὐδαιμόνησεν ἡ πόλις”.

ἄλλος ἐκ κρίσεως περὶ τοῦ αὐτοῦ ἢ ὁμοίου ἢ ἐναντίου, μάλιστα μὲν εἰ πάντες καὶ ἀεὶ, εἰ δὲ μή, ἀλλ’ οἳ γε πλεῖστοι, ἢ σοφοὶ ἢ πάντες ἢ οἱ πλεῖστοι, ἢ ἀγαθοί, ἢ εἰ αὐτοὶ οἱ κρίνοντες, ἢ οὖς ἀποδέχονται οἱ κρίνοντες, ἢ οἷς μὴ οἷόν τε ἐναντίον κρίνειν, οἷον τοῖς κυρίοις, ἢ οἷς μὴ καλὸν ἐναντίον κρίνειν, οἷον θεοῖς ἢ πατρὶ ἢ διδασκάλοις, ὥσπερ ὃ εἰς Μιξιδημίδην εἶπεν Αὐτοκλῆς, [εἰ] ταῖς μὲν σεμναῖς θεαῖς καλῶς εἶχεν ἐν Ἀρείῳ πάγῳ δοῦναι τὰ δίκαια, Μιξιδημίδη δ’ οὐ. ἢ ὥσπερ Σαπφώ, ὅτι τὸ ἀποθνήσκειν κακόν· οἱ θεοὶ γὰρ οὕτω κεκρίκασιν· ἀπέθνησκον γὰρ ἄν. ἢ ὥσπερ Ἀρίστιππος πρὸς Πλάτωνα ἐπαγγελτικώτερόν τι εἰπόντα, ὡς ὤετο· “ἀλλὰ μὴν ὃ γ’ ἐταῖρος ἡμῶν”, ἔφη, “οὐθὲν τοιοῦτον”, λέγων τὸν Σωκράτη, καὶ Ἡγησίπολις ἐν Δελφοῖς ἡρώτα τὸν θεόν, πρότερον κεχηρμένος Ὀλυμπίασιν, εἰ αὐτῷ τὰ αὐτὰ δοκεῖ [1399a] ἅπερ τῷ πατρὶ, ὡς αἰσχροὺς ὄντας τὰναντία εἶπεῖν, καὶ περὶ τῆς Ἑλένης ὡς Ἰσοκράτης ἔγραψεν ὅτι σπουδαία, εἶπερ Θησεὺς ἔκρινεν, καὶ περὶ Ἀλεξάνδρου, ὅτι αἱ θεαὶ προέκριναν, καὶ περὶ Εὐαγόρου, ὅτι σπουδαῖος, ὥσπερ Ἰσοκράτης φησὶν· “Κόνων γοῦν δυστυχῆσας, πάντας τοὺς ἄλλους παραλιπὼν, ὡς Εὐαγόραν ἦλθεν”.

ἄλλος ἐκ τῶν μερῶν, ὥσπερ ἐν τοῖς Τοπικοῖς ποία κίνησις ἡ ψυχὴ· ἦδε γὰρ ἢ ἡδε. παράδειγμα ἐκ τοῦ Σωκράτους τοῦ Θεοδέκτου· “εἰς ποῖον ἱερὸν ἡσέβηκεν; τίνας θεῶν οὐ τετίμηκεν ὧν ἡ πόλις νομίζει;”

ἄλλος, ἐπειδὴ ἐπὶ τῶν πλείστων συμβαίνει ὥστε ἔπεσθαί τι τῷ αὐτῷ ἀγαθὸν καὶ κακόν, ἐκ τοῦ ἀκολουθοῦντος προτρέπειν ἢ ἀποτρέπειν, καὶ κατηγορεῖν ἢ ἀπολογεῖσθαι, καὶ ἐπαινεῖν ἢ ψέγειν, οἷον “τῇ παιδεύσει τὸ φθονεῖσθαι ἀκολουθεῖ κακὸν <ὄν>, τὸ δὲ σοφὸν εἶναι ἀγαθόν· οὐ τοίνυν δεῖ παιδεύεσθαι, φθονεῖσθαι γὰρ οὐ δεῖ· δεῖ μὲν οὖν παιδεύεσθαι, σοφὸν γὰρ εἶναι δεῖ”. ὁ τόπος οὗτός ἐστιν ἡ Καλλίππου τέχνη, προσλαβοῦσα τὸ δυνατόν καὶ τὰλλα ὡς εἴρηται.

ἄλλος, ὅταν περὶ δυοῖν καὶ ἀντικειμένοι ἢ προτρέπειν ἢ ἀποτρέπειν δέη, [καὶ] τῷ πρότερον εἰρημένῳ τρόπῳ ἐπ’ ἀμφοῖν χρῆσθαι. διαφέρει δέ, ὅτι ἐκεῖ μὲν τὰ τυχόντα ἀντιτίθεται, ἐνταῦθα δὲ τὰναντία· οἷον ἰέρεια οὐκ εἶα τὸν υἱὸν δημηγορεῖν· “ἐὰν μὲν γάρ”, ἔφη, “τὰ δίκαια λέγῃς, οἱ ἄνθρωποι σε μισήσουσιν, ἐὰν δὲ τὰ ἄδικα, οἱ θεοὶ· δεῖ μὲν οὖν δημηγορεῖν· ἐὰν μὲν γὰρ

τὰ δίκαια λέγῃς, οἱ θεοὶ σε φιλήσουσιν, ἐὰν δὲ τὰ ἄδικα, οἱ ἄνθρωποι”. τοῦτο δ’ ἐστὶ ταὐτὸ τῷ λεγομένῳ, τὸ ἕλος πρίασθαι καὶ τοὺς ἄλλας· καὶ ἡ βλαίσωσις τοῦτο ἐστίν, ὅταν δυοῖν ἐναντίοι ἐκατέρῳ ἀγαθὸν καὶ κακὸν ἔπηται, ἐναντία ἐκάτερα ἐκατέροις.

ἄλλος, ἐπειδὴ οὐ ταῦτ’ ἀφανῶς ἐπαινοῦσι καὶ ἀφανῶς, ἀλλὰ φανερώς μὲν τὰ δίκαια καὶ τὰ καλὰ ἐπαινοῦσι μάλιστα, ἰδίᾳ δὲ τὰ συμφέροντα μᾶλλον βούλονται, ἐκ τούτων πειρᾶσθαι συνάγειν θάτερον· τῶν γὰρ παραδόξων οὗτος ὁ τόπος κυριώτατός ἐστιν.

ἄλλος ἐκ τοῦ ἀνάλογον ταῦτα συμβαίνειν, οἷον ὁ Ἰφικράτης, τὸν υἱὸν αὐτοῦ, νεώτερον ὄντα τῆς ἡλικίας, ὅτι μέγας ἦν λειτουργεῖν ἀναγκαζόντων, εἶπεν ὅτι εἰ τοὺς μεγάλους τῶν παίδων ἄνδρας νομίζουσι, τοὺς μικροὺς τῶν ἀνδρῶν [1399b] παῖδας εἶναι ψηφιοῦνται, καὶ Θεοδέκτης ἐν τῷ Νόμῳ, ὅτι “πολίτας μὲν ποιεῖσθε τοὺς μισθοφόρους, οἷον Στράβακα καὶ Χαρίδημον, διὰ τὴν ἐπιείκειαν· φυγάδας δ’ οὐ ποιήσεσθε τοὺς ἐν τοῖς μισθοφόροις ἀνήκεστα διαπεπραγμένους;”

ἄλλος ἐκ τοῦ τὸ συμβαῖνον ἐὰν ἢ ταῦτόν, ὅτι καὶ ἐξ ὧν συμβαίνει ταῦτά· οἷον Ξενοφάνης ἔλεγεν ὅτι ὁμοίως ἀσεβοῦσιν οἱ γενέσθαι φάσκογτες τοὺς θεοὺς τοῖς ἀποθανεῖν λέγουσιν· ἀμφοτέρως γὰρ συμβαίνει μὴ εἶναι τοὺς θεοὺς ποτε. καὶ ὅλως δὲ τὸ συμβαῖνον ἐξ ἐκάστου λαμβάνειν ὡς τὸ αὐτὸ ἀεὶ· “μέλλετε δὲ κρίνειν οὐ περὶ Ἰσοκράτους ἀλλὰ περὶ ἐπιτηδεύματος, εἰ χρὴ φιλοσοφεῖν”. καὶ ὅτι τὸ διδόναι γῆν καὶ ὕδωρ δουλεύειν ἐστίν, καὶ τὸ μετέχειν τῆς κοινῆς εἰρήνης ποιεῖν τὸ προσταττόμενον. ληπτέον δ’ ὁπότερον ἂν ἢ χρήσιμον.

ἄλλος ἐκ τοῦ μὴ ταὐτὸ ἀεὶ αἰρεῖσθαι ὕστερον καὶ πρότερον, ἀλλ’ ἀνάπαλιν, οἷον τόδε τὸ ἐνθύμημα, “ἢ φεύγοντες μὲν ἐμαχόμεθα ὅπως κατέλθωμεν, κατελθόντες δὲ φευξόμεθα ὅπως μὴ μαχώμεθα;” ὅτε μὲν γὰρ τὸ μένειν ἀντὶ τοῦ μάχεσθαι ἡροῦντο, ὅτε δὲ τὸ μὴ μάχεσθαι ἀντὶ τοῦ μὴ μένειν.

ἄλλος τὸ οὐ ἔνεκ’ ἂν εἴη ἢ γένοιτο, τούτου ἔνεκα φάναι

εἶναι ἢ γεγενῆσθαι, οἷον εἰ δοίη [ἄν] τίς τινι ἴν’ ἀφελόμενος λυπήσῃ, ὅθεν καὶ τοῦτ’ εἴρηται,

πολλοῖς ὁ δαίμων οὐ κατ’ εὐνοίαν φέρων

μεγάλα δίδωσιν εὐτυχήματ', ἀλλ' ἵνα

τὰς συμφορὰς λάβωσιν ἐπιφανεστέρας.

καὶ τὸ ἐκ τοῦ Μελεάγρου τοῦ Ἀντιφῶντος,

οὐχ ὥς κτάνωσι θῆρ', ὅπως δὲ μάρτυρες

ἀρετῆς γένωνται Μελεάγρῳ πρὸς Ἑλλάδα.

καὶ τὸ ἐκ τοῦ Αἴαντος τοῦ Θεοδέκτου, ὅτι ὁ Διομήδης προείλετο Ὀδυσσέα οὐ τιμῶν, ἀλλ' ἵνα ἦττων ᾗ ὁ ἀκολουθῶν· ἐνδέχεται γὰρ τούτου ἔνεκα ποιῆσαι.

ἄλλος, κοινὸς καὶ τοῖς ἀμφισβητοῦσιν καὶ τοῖς συμβουλευούσι, σκοπεῖν τὰ προτρέποντα καὶ ἀποτρέποντα, καὶ ὧν ἔνεκα καὶ πράττουσι καὶ φεύγουσιν· ταῦτα γὰρ ἐστὶν ἃ ἐὰν μὲν ὑπάρχη δεῖ πράττειν, ἐὰν δὲ μὴ ὑπάρχη, μὴ πράττειν, οἷον, εἰ δυνατὸν καὶ ῥάδιον καὶ ὠφέλιμον ἢ αὐτῷ ἢ φίλοις ἢ βλαβερὸν ἐχθροῖς, κἂν ἢ ἐπιζήμιον, εἰ ἐλάττων ἢ ζημία τοῦ πράγματος, καὶ προτρέπονται [δ'] ἐκ τούτων καὶ [1400a] ἀποτρέπονται ἐκ τῶν ἐναντίων. ἐκ δὲ τῶν αὐτῶν τούτων καὶ κατηγοροῦσι καὶ ἀπολογοῦνται· ἐκ μὲν τῶν ἀποτρεπόντων ἀπολογοῦνται, ἐκ δὲ τῶν προτρεπόντων κατηγοροῦσιν. ἔστι δ' ὁ τόπος οὗτος ὅλη τέχνη ἢ τε Παμφίλου καὶ ἡ Καλλίππου.

ἄλλος ἐκ τῶν δοκούντων μὲν γίνεσθαι ἀπίστων δέ, ὅτι οὐκ ἂν ἔδοξαν, εἰ μὴ ἦν ἢ ἐγγὺς ἦν, καὶ ὅτι μᾶλλον· ἢ γὰρ τὰ ὄντα ἢ τὰ εἰκότα ὑπολαμβάνουσιν· εἰ οὖν ἄπιστον καὶ μὴ εἰκός, ἀληθὲς ἂν εἴη· οὐ γὰρ διὰ γε τὸ εἰκὸς καὶ πιθανὸν δοκεῖ οὕτως· οἷον Ἀνδροκλῆς ἔλεγεν ὁ Πιτθεὺς κατηγορῶν τοῦ νόμου, ἐπεὶ ἐθอรύβησαν αὐτῷ εἰπόντι, “δέονται οἱ νόμοι νόμου τοῦ διορθώσοντος, καὶ γὰρ οἱ ἰχθύες ἄλός, καίτοι οὐκ εἰκὸς οὐδὲ πιθανὸν ἐν ἄλμῃ τρεφομένους δεῖσθαι ἄλός, καὶ τὰ στέμφυλα ἐλαίου, καίτοι ἄπιστον, ἐξ ὧν ἔλαιον γίγνεται, ταῦτα δεῖσθαι ἐλαίου”. ἄλλος ἐλεγκτικός, τὸ τὰ ἀνομολογούμενα σκοπεῖν, εἴ τι ἀνομολογούμενον ἐκ τόπων καὶ χρόνων καὶ πράξεων καὶ λόγων, χωρὶς μὲν ἐπὶ τοῦ ἀμφισβητοῦντος, οἷον “καὶ φησὶ μὲν φιλεῖν ὑμᾶς, συνώμοσεν δὲ τοῖς τριάκοντα”, χωρὶς δ' ἐπ' αὐτοῦ, “καὶ φησὶ μὲν εἶναί με φιλόδικον, οὐκ ἔχει δὲ ἀποδεῖξαι δεδικασμένον οὐδεμίαν δίκην”, χωρὶς δ' ἐπ' αὐτοῦ καὶ τοῦ ἀμφισβητοῦντος, “καὶ οὗτος μὲν οὐ δεδάνεικε πώποτε οὐδέν, ἐγὼ δὲ καὶ πολλοὺς λέλυμαι ὑμῶν”.

ἄλλος τοῖς προδιαβεβλημένοις καὶ ἀνθρώποις καὶ πράγμασιν, ἢ δοκοῦσι, τὸ λέγειν τὴν αἰτίαν τοῦ παραδόξου· ἔστιν γὰρ τι δι' ὃ φαίνεται· οἷον,



ὑποβεβλημένης τινὸς τὸν αὐτῆς υἱόν, διὰ τὸ ἀσπάζεσθαι ἐδόκει συνεῖναι τῷ μεираκίῳ, λεχθέντος δὲ τοῦ αἰτίου ἐλύθη ἡ διαβολή· καὶ οἷον ἐν τῷ Αἴαντι τῷ Θεοδέκτου Ὀδυσσεὺς λέγει πρὸς τὸν Αἴαντα διότι ἀνδρειότερος ὢν τοῦ Αἴαντος οὐ δοκεῖ.

ἄλλος ἀπὸ τοῦ αἰτίου, ἂν τε ὑπάρχη, ὅτι ἔστι, καὶ μὴ ὑπάρχη, ὅτι οὐκ ἔστιν· ἅμα γὰρ τὸ αἴτιον καὶ οὐ αἴτιον, καὶ ἄνευ αἰτίου οὐθὲν ἔστιν, οἷον Λεωδάμας ἀπολογούμενος ἔλεγε, κατηγορήσαντος Θρασυβούλου ὅτι ἦν στηλῖτης γεγωνὼς ἐν τῇ ἀκροπόλει, ἀλλ’ ἐκκέκοπται ἐπὶ τῶν τριάκοντα· οὐκ ἐνδέχεσθαι ἔφη· μᾶλλον γὰρ ἂν πιστεύειν αὐτῷ τοὺς τριάκοντα ἐγγεγραμμένης τῆς ἔχθρας πρὸς τὸν δῆμον.

ἄλλος, εἰ ἐνεδέχετο βέλτιον ἄλλως, ἢ ἐνδέχεται, ὢν ἢ συμβουλεύει ἢ πράττει ἢ πέπραχε σκοπεῖν· φανερόν γὰρ ὅτι, [1400b] εἰ [μὴ] οὕτως ἔχει, οὐ πέπραχεν· οὐδεὶς γὰρ ἐκὼν τὰ φαῦλα καὶ γινώσκων προαιρεῖται. ἔστιν δὲ τοῦτο ψεῦδος· πολλάκις γὰρ ὕστερον γίνεται δῆλον πῶς ἦν πρᾶξαι βέλτιον, πρότερον δὲ ἄδηλον.

ἄλλος, ὅταν τι ἐναντίον μέλλῃ πράττεσθαι τοῖς πεπραγμένοις, ἅμα σκοπεῖν, οἷον Ξενοφάνης Ἐλεάταις ἐρωτῶσιν εἰ θύωσι τῇ Λευκοθέᾳ καὶ θρηνῶσιν ἢ μή, συνεβούλευεν, εἰ μὲν θεὸν ὑπολαμβάνουσιν, μὴ θρηνεῖν, εἰ δ’ ἄνθρωπον, μὴ θύειν.

ἄλλος τόπος τὸ ἐκ τῶν ἀμαρτηθέντων κατηγορεῖν ἢ ἀπολογεῖσθαι, οἷον ἐν τῇ Καρκίνου Μηδείᾳ οἱ μὲν κατηγοροῦσιν ὅτι τοὺς παῖδας ἀπέκτεινεν, οὐ φαίνεσθαι γοῦν αὐτούς (ἤμαρτε γὰρ ἡ Μήδεια περὶ τὴν ἀποστολὴν τῶν παίδων), ἢ δ’ ἀπολογεῖται ὅτι οὐ [ἂν] τοὺς παῖδας ἀλλὰ τὸν Ἰάσονα ἂν ἀπέκτεινεν· τοῦτο γὰρ ἤμαρτεν ἂν μὴ ποιήσασα, εἴπερ καὶ θάτερον ἐποίησεν. ἔστι δ’ ὁ τόπος οὗτος τοῦ ἐνθυμήματος καὶ τὸ εἶδος ὅλη ἢ πρότερον Θεοδώρου τέχνη.

ἄλλος ἀπὸ τοῦ ὀνόματος, οἷον ὡς ὁ Σοφοκλῆς

σαφῶς σιδήρῳ καὶ φοροῦσα τοῦνομα,

καὶ ὡς ἐν τοῖς τῶν θεῶν ἐπαίνοις εἰώθασι λέγειν, καὶ ὡς Κόνων Θρασύβουλον θρασύβουλον ἐκάλει, καὶ Ἡρόδικος Θρασύμαχον “ἀεὶ θρασύμαχος εἶ”, καὶ Πῶλον “ἀεὶ σὺν πῶλος εἶ”, καὶ Δράκοντα τὸν νομοθέτην, ὅτι οὐκ [ἂν] ἀνθρώπου οἱ νόμοι ἀλλὰ δράκοντος (χαλεποὶ γάρ)· καὶ ὡς ἡ Εὐριπίδου Ἐκάβη εἰς τὴν Ἀφροδίτην “καὶ τοῦνομ’ ὀρθῶς ἀφροσύνης ἄρχει

θεᾶς”, καὶ ὡς Χαιρήμων Πενθεὺς ἔσομένης συμφορᾶς ἐπώνυμος.

εὐδοκιμεῖ δὲ μᾶλλον τῶν ἐνθυμημάτων τὰ ἐλεγκτικὰ τῶν ἀποδεικτικῶν διὰ τὸ συναγωγὴν μὲν ἐναντίων εἶναι ἐν μικρῷ τὸ ἐλεγκτικὸν ἐνθύμημα, παρ’ ἄλληλα δὲ φανερὰ εἶναι τῷ ἀκροατῇ μᾶλλον. πάντων δὲ καὶ τῶν ἐλεγκτικῶν καὶ τῶν δεικτικῶν συλλογισμῶν θορυβεῖται μάλιστα τὰ τοιαῦτα ὅσα ἀρχόμενα προορῶσι μὴ ἐπιπολῆς εἶναι (ἅμα γὰρ καὶ αὐτοὶ ἐφ’ αὐτοῖς χαίρουσι προαισθανόμενοι), καὶ ὅσων τοσοῦτον ὑστερίζουσιν ὥσθ’ ἅμα εἰρημένων γνωρίζειν.

Ἐπεὶ δ’ ἐνδέχεται τὸν μὲν εἶναι συλλογισμόν, τὸν δὲ μὴ εἶναι μὲν φαίνεσθαι δέ, ἀνάγκη καὶ ἐνθύμημα τὸ μὲν εἶναι, τὸ δὲ μὴ εἶναι ἐνθύμημα φαίνεσθαι δέ, ἐπεὶπερ τὸ ἐνθύμημα συλλογισμός [1401a] τις. τόποι δ’ εἰσὶ τῶν φαινομένων ἐνθυμημάτων εἰς μὲν ὁ παρὰ τὴν λέξιν, καὶ τούτου ἐν μὲν μέρος, ὥσπερ ἐν τοῖς διαλεκτικοῖς, τὸ μὴ συλλογισάμενον συμπερασματικῶς τὸ τελευταῖον εἰπεῖν, “οὐκ ἄρα τὸ καὶ τό, ἀνάγκη ἄρα τὸ καὶ τό”, ἐν τοῖς ἐνθυμήμασι τὸ συνεστραμμένως καὶ ἀντικειμένως εἰπεῖν φαίνεται ἐνθύμημα (ἢ γὰρ τοιαύτη λέξις χώρα ἐστὶν ἐνθυμήματος)· καὶ ἔοικε τὸ τοιοῦτον εἶναι παρὰ τὸ σχῆμα τῆς λέξεως. ἔστι δὲ εἰς τὸ τῇ λέξει συλλογιστικῶς λέγειν χρήσιμον τὸ συλλογισμῶν πολλῶν κεφάλαια λέγειν, ὅτι τοὺς μὲν ἔσωσε, τοῖς δ’ ἑτέροις ἐτιμώρησε, τοὺς δ’ Ἑλλήνας ἡλευθέρωσε· ἕκαστον μὲν γὰρ τούτων ἐξ ἄλλων ἀπεδείχθη, συντεθέντων δὲ φαίνεται καὶ ἐκ τούτων τι γίνεσθαι.

ἐν δὲ τὸ παρὰ τὴν ὁμωνυμίαν, τὸ φάναι σπουδαῖον εἶναι μῦν, ἀφ’ οὗ γ’ ἐστὶν ἡ τιμιωτάτη πασῶν τελετή· τὰ γὰρ μυστήρια πασῶν τιμιωτάτη τελετή. ἢ εἴ τις κύνα ἐγκωμιάζων τὸν ἐν τῷ οὐρανῷ συμπαραλαμβάνοι, ἢ τὸν Πᾶνα, ὅτι Πίνδαρος ἔφησεν

ὦ μάκαρ, ὃν τε μεγάλας θεοῦ κύνα παντοδαπὸν

καλέουσιν Ὀλύμπιοι,

ἢ ὅτι τὸ μηδένα εἶναι κύν’ ἀτιμότατόν ἐστιν, ὥστε τὸ κύνα δῆλον ὅτι τίμιον. καὶ τὸ κοινωνικὸν φάναι τὸν Ἑρμῆν εἶναι μάλιστα τῶν θεῶν· μόνος γὰρ καλεῖται κοινὸς Ἑρμῆς. καὶ τὸ τὸν λόγον εἶναι σπουδαιότατον, ὅτι οἱ ἀγαθοὶ ἄνδρες οὐ χρημάτων ἀλλὰ λόγου εἰσὶν ἄξιοι· τὸ γὰρ λόγου ἄξιον οὐχ ἀπλῶς λέγεται. ἄλλος τὸ <τὸ> διηρημένον συντιθέντα λέγειν ἢ τὸ συγκείμενον διαροῦντα· ἐπεὶ γὰρ ταῦτόν δοκεῖ εἶναι οὐκ ὃν ταῦτό πολλάκις, ὁπότερον χρησιμώτερον, τοῦτο δεῖ ποιεῖν. ἔστι δὲ τοῦτο Εὐθυδήμου λόγος, οἷον τὸ

εἰδέναι ὅτι τριήρης ἐμ Πειραεῖ ἐστίν· ἕκαστον γὰρ οἶδεν. καὶ τὸν τὰ στοιχεῖα ἐπιστάμενον ὅτι τὸ ἔπος οἶδεν· τὸ γὰρ ἔπος τὸ αὐτό ἐστίν. καὶ ἐπεὶ τὸ δις τοσοῦτον νοσῶδες, μηδὲ τὸ ἐν φάναι ὑγιεινὸν εἶναι· ἄτοπον γὰρ εἰ τὰ δύο ἀγαθὰ ἐν κακόν ἐστιν. οὕτω μὲν οὖν ἐλεγκτικόν, ὥδε δὲ δεικτικόν· οὐ γὰρ ἐστὶν ἐν ἀγαθὸν δύο κακά· ὅλος δὲ ὁ τόπος παραλογιστικός. πάλιν τὸ Πολυκράτους εἰς Θρασύβουλον, ὅτι τριάκοντα τυράννους κατέλυσε· συντίθησι γάρ. ἢ τὸ ἐν τῷ Ὁρέστη τῷ Θεοδέκτου· ἐκ διαιρέσεως γάρ ἐστιν·

δίκαιόν ἐστιν, ἥτις ἂν κτείνῃ πόσιν,

ἀποθνήσκειν ταύτην, καὶ τῷ πατρί γε τιμωρεῖν τὸν υἱόν, [1401b] οὐκοῦν καὶ ταῦτα ἃ πέπρακται· συντεθέντα γὰρ ἴσως οὐκέτι δίκαιον. εἴη δ' ἂν καὶ παρὰ τὴν ἔλλειψιν· ἀφαιρεῖ γὰρ τὸ ὑπὸ τίνος.

ἄλλος δὲ τόπος τὸ δεινώσει κατασκευάζειν ἢ ἀνασκευάζειν· τοῦτο δ' ἐστὶν ὅταν, μὴ δείξας ὅτι ἐποίησεν «μηδ' ὅτι οὐκ ἐποίησεν», αὐξήσῃ τὸ πρᾶγμα· ποιεῖ γὰρ φαίνεσθαι ἢ ὡς οὐ πεποίηκεν, ὅταν ὁ τὴν αἰτίαν ἔχων αὕξη, ἢ ὡς πεποίηκεν, ὅταν ὁ κατηγορῶν αὕξη. οὐκ οὖν ἐστὶν ἐνθύμημα· παραλογίζεται γὰρ ὁ ἀκροατὴς ὅτι ἐποίησεν ἢ οὐκ ἐποίησεν, οὐ δεδειγμένον.

ἄλλος τὸ ἐκ σημείου· ἀσυλλόγιστον γὰρ καὶ τοῦτο· οἶον εἴ τις λέγοι “ταῖς πόλεσι συμφέρουσιν οἱ ἐρῶντες· ὁ γὰρ Ἀρμοδίου καὶ Ἀριστογείτονος ἔρως κατέλυσε τὸν τύραννον Ἰππαρχον”, ἢ εἴ τις λέγοι ὅτι κλέπτης Διονύσιος· πονηρὸς γάρ· ἀσυλλόγιστον γὰρ δὴ τοῦτο· οὐ γὰρ πᾶς πονηρὸς κλέπτης, ἀλλὰ κλέπτης πᾶς πονηρός.

ἄλλος διὰ τὸ συμβεβηκός, οἶον ὃ λέγει Πολυκράτης εἰς τοὺς μῦς, ὅτι ἐβοήθησαν διατραγόντες τὰς νευράς· ἢ εἴ τις φαίη τὸ ἐπὶ δεῖπνον κληθῆναι τιμώτατον· διὰ γὰρ τὸ μὴ κληθῆναι ὁ Ἀχιλλεὺς ἐμήνισε τοῖς Ἀχαιοῖς ἐν Τενέδῳ· ὁ δ' ὡς ἀτιμαζόμενος ἐμήνισεν, συνέβη δὲ τοῦτο διὰ τὸ μὴ κληθῆναι.

ἄλλος τὸ παρὰ τὸ ἐπόμενον, οἶον ἐν τῷ Ἀλεξάνδρῳ, ὅτι μεγαλόψυχος· ὑπεριδὼν γὰρ τὴν πολλῶν ὁμιλίαν ἐν τῇ Ἰδῇ διέτριβεν καθ' αὐτόν· ὅτι γὰρ οἱ μεγαλόψυχοι τοιοῦτοι, καὶ οὗτος μεγαλόψυχος δόξειεν ἂν. καὶ ἐπεὶ καλλωπιστὴς καὶ νύκτωρ πλανᾶται, μοιχός· τοιοῦτοι γάρ. ὅμοιον δὲ καὶ ὅτι ἐν τοῖς ἱεροῖς οἱ πτωχοὶ καὶ ἄδουσι καὶ ὀρχοῦνται, καὶ ὅτι τοῖς φυγάσιν ἔξεστιν οἰκεῖν ὅπου ἂν θέλωσιν· ὅτι γὰρ τοῖς δοκοῦσιν εὐδαιμονεῖν ὑπάρχει ταῦτα, καὶ οἷς ταῦτα ὑπάρχει δόξαιεν ἂν εὐδαιμονεῖν, διαφέρει δὲ τῷ πῶς· διὸ καὶ

εἰς τὴν ἔλλειψιν ἐμπίπτει.

ἄλλος παρὰ τὸ ἀναίτιον ὡς αἴτιον, οἷον τῷ ἅμα ἢ μετὰ τοῦτο γεγονέναι· τὸ γὰρ μετὰ τοῦτο ὡς διὰ τοῦτο λαμβάνουσιν, καὶ μάλιστα οἱ ἐν ταῖς πολιτείαις, οἷον ὁ Δημάδης τὴν Δημοσθένους πολιτείαν πάντων τῶν κακῶν αἰτίαν· μετ’ ἐκείνην γὰρ συνέβη ὁ πόλεμος.

ἄλλος παρὰ τὴν ἔλλειψιν τοῦ πότε καὶ πῶς, οἷον ὅτι δικαίως Ἀλέξανδρος ἔλαβε τὴν Ἑλένην· αἴρεσις γὰρ αὐτῇ ἐδόθη παρὰ τοῦ πατρός. οὐ γὰρ αἰεὶ ἴσως, ἀλλὰ τὸ [1402a] πρῶτον· καὶ γὰρ ὁ πατὴρ μέχρι τούτου κύριος. ἢ εἴ τις φαίη τὸ τύπτειν τοὺς ἐλευθέρους ὕβριν εἶναι· οὐ γὰρ πάντως, ἀλλ’ ὅταν ἄρχῃ χειρῶν ἀδίκων.

ἔτι ὥσπερ ἐν τοῖς ἐριστικοῖς παρὰ τὸ ἀπλῶς καὶ μὴ ἀπλῶς, ἀλλὰ τί, γίνεταί φαινόμενος συλλογισμός, οἷον ἐν μὲν τοῖς διαλεκτικοῖς ὅτι ἔστι τὸ μὴ ὄν [ὄν], ἔστι γὰρ τὸ μὴ ὄν μὴ ὄν, καὶ ὅτι ἐπιστητὸν τὸ ἄγνωστον, ἔστιν γὰρ ἐπιστητὸν τὸ ἄγνωστον ὅτι ἄγνωστον, οὕτως καὶ ἐν τοῖς ῥητορικοῖς ἔστιν φαινόμενον ἐνθύμημα παρὰ τὸ μὴ ἀπλῶς εἰκὸς ἀλλὰ τὶ εἰκός. ἔστιν δὲ τοῦτο οὐ καθόλου, ὥσπερ καὶ Ἀγάθων λέγει

τάχ’ ἂν τις εἰκὸς αὐτὸ τοῦτ’ εἶναι λέγοι,

βροτοῖσι πολλὰ τυγχάνειν οὐκ εἰκότα.

γίνεται γὰρ τὸ παρὰ τὸ εἰκός, ὥστε εἰκὸς καὶ τὸ παρὰ τὸ εἰκός, εἰ δὲ τοῦτο, ἔσται τὸ μὴ εἰκὸς εἰκός. ἀλλ’ οὐχ ἀπλῶς, ἀλλ’ ὥσπερ καὶ ἐπὶ τῶν ἐριστικῶν τὸ κατὰ τί καὶ πρὸς τί καὶ πῇ οὐ προστιθέμενα ποιεῖ τὴν συκοφαντίαν, καὶ ἐνταῦθα παρὰ τὸ εἰκὸς εἶναι μὴ ἀπλῶς ἀλλὰ τὶ εἰκός. ἔστι δ’ ἐκ τούτου τοῦ τόπου ἡ Κόρακος τέχνη συγκειμένη· “ἂν τε γὰρ μὴ ἔνοχος ἢ τῇ αἰτίᾳ, οἷον ἀσθενὴς ὢν αἰκίας φεύγει (οὐ γὰρ εἰκός), κἂν ἔνοχος ἢ, οἷον ἰσχυρὸς ὢν (οὐ γὰρ εἰκός, ὅτι εἰκὸς ἔμελλε δόξαι)”. ὁμοίως δὲ καὶ ἐπὶ τῶν ἄλλων· ἢ γὰρ ἔνοχον ἀνάγκη ἢ μὴ ἔνοχον εἶναι τῇ αἰτίᾳ· φαίνεται μὲν οὖν ἀμφοτέρω εἰκότα, ἔστι δὲ τὸ μὲν εἰκός, τὸ δὲ οὐχ ἀπλῶς ἀλλ’ ὥσπερ εἴρηται· καὶ τὸ τὸν ἥττω δὲ λόγον κρείττω ποιεῖν τοῦτ’ ἔστιν. καὶ ἐντεῦθεν δικαίως ἐδυσχέρανον οἱ ἄνθρωποι τὸ Πρωταγόρου ἐπάγγελμα· ψευδὸς τε γὰρ ἔστιν, καὶ οὐκ ἀληθὲς ἀλλὰ φαινόμενον εἰκός, καὶ ἐν οὐδεμιᾷ τέχνῃ ἀλλ’ ἢ ἐν ῥητορικῇ καὶ ἐριστικῇ.

Καὶ περὶ μὲν ἐνθυμημάτων, καὶ τῶν ὄντων καὶ τῶν φαινομένων, εἴρηται, περὶ δὲ λύσεως ἐχόμενόν ἐστιν τῶν εἰρημένων εἰπεῖν. ἔστιν δὲ λύειν ἢ

Ἐπεὶ δὲ τὰ ἐνθυμήματα λέγεται ἐκ τεττάρων, τὰ δὲ τέτταρα ταῦτ' ἐστίν, εἰκὸς παράδειγμα τεκμηρίον σημεῖον, ἔστι δὲ τὰ μὲν ἐκ τῶν ὥς ἐπὶ τὸ πολὺ ἢ ὄντων ἢ δοκούντων συνηγμένα ἐνθυμήματα ἐκ τῶν εἰκότων, τὰ δὲ δι' ἐπαγωγῆς ἐκ τοῦ ὁμοίου, ἢ ἐνὸς ἢ πλειόνων, ὅταν λαβὼν τὸ καθόλου εἴτα συλλογίσηται τὰ κατὰ μέρος, διὰ παραδείγματος, τὰ δὲ διὰ ἀναγκαίου καὶ «ἀεὶ» ὄντος διὰ τεκμηρίου, τὰ δὲ διὰ τοῦ καθόλου [ἢ] τοῦ ἐν μέρει ὄντος, ἐάν τε ὄν ἐάν τε μή, διὰ σημείων, τὸ δὲ εἰκὸς οὐ τὸ ἀεὶ ἀλλὰ τὸ ὥς ἐπὶ τὸ πολὺ, φανερόν ὅτι τὰ τοιαῦτα μὲν τῶν ἐνθυμημάτων ἀεὶ ἔστι λύειν φέροντα ἔνστασιν, ἢ δὲ λύσις φαινομένη ἀλλ' οὐκ ἀληθῆς ἀεὶ· οὐ γὰρ ὅτι οὐκ εἰκὸς λύει ὁ ἐνιστάμενος, ἀλλ' ὅτι οὐκ ἀναγκαῖον· διὸ καὶ ἀεὶ ἔστι πλεονεκτεῖν ἀπολογούμενον μᾶλλον ἢ κατηγοροῦντα διὰ τοῦτον τὸν παραλογισμόν· Ἐπεὶ γὰρ ὁ μὲν κατηγορῶν διὰ εἰκότων ἀποδείκνυσιν, ἔστι δὲ οὐ ταῦτ' οὐ λῦσαι ἢ ὅτι οὐκ εἰκὸς ἢ ὅτι οὐκ ἀναγκαῖον, ἀεὶ δ' ἔχει ἔνστασιν τὸ ὥς ἐπὶ τὸ πολὺ (οὐ γὰρ ἂν ἢ ἅμ' ἀεὶ εἰκὸς, ἀεὶ καὶ ἀναγκαῖον), ὁ δὲ κριτῆς οἶεται, ἂν οὕτω λυθῇ, ἢ οὐκ εἰκὸς εἶναι ἢ οὐχ αὐτῷ κριτέον, παραλογιζόμενος, ὥσπερ ἐλέγομεν (οὐ γὰρ ἐκ τῶν ἀναγκαίων δεῖ αὐτὸν μόνον κρίνειν, ἀλλὰ καὶ ἐκ

τῶν εἰκότων· τοῦτο γάρ ἐστι τὸ γνώμη τῇ ἀρίστη κρίνειν), οὐκ οὐκ ἱκανὸν ἂν λύσῃ, ὅτι οὐκ ἀναγκαῖον, ἀλλὰ δεῖ λύειν ὅτι οὐκ εἰκός. τοῦτο δὲ συμβήσεται ἐάν ἢ ἡ ἔνστασις μᾶλλον ὥς ἐπὶ τὸ πολὺ. ἐνδέχεται δὲ εἶναι τοιαύτην διχῶς, ἢ τῷ χρόνῳ ἢ τοῖς πράγμασιν, κυριώτατα δὲ εἰ ἀμφοῖν· εἰ γὰρ τὰ «πλείω καὶ» [1403a] πλεονάκις οὕτως, τοῦτ' ἐστὶν εἰκὸς μᾶλλον.

λύεται δὲ καὶ τὰ σημεία καὶ τὰ διὰ σημείου ἐνθυμήματα εἰρημένα, κἂν ἢ ὑπάρχοντα, ὥσπερ ἐλέχθη ἐν τοῖς πρώτοις· ὅτι γὰρ ἀσυλλόγιστόν ἐστιν πᾶν σημεῖον, δῆλον ἡμῖν ἐκ τῶν Ἀναλυτικῶν.

πρὸς δὲ τὰ παραδειγματώδη ἢ αὐτὴ λύσις καὶ τὰ εἰκότα· ἐάν τε γὰρ ἔχωμεν «ἐν» τι οὐχ οὕτω, λέλυται, ὅτι οὐκ ἀναγκαῖον, εἰ καὶ τὰ πλείω ἢ πλεονάκις ἄλλως, ἐάν τε καὶ τὰ πλείω καὶ τὰ πλεονάκις οὕτω, μαχετέον ἢ ὅτι τὸ παρὸν οὐχ ὅμοιον ἢ οὐχ ὁμοίως, ἢ διαφορὰν γέ τινα ἔχει.

τὰ δὲ τεκμήρια καὶ τεκμηριώδη ἐνθυμήματα κατὰ μὲν τὸ ἀσυλλόγιστον οὐκ ἔσται λῦσαι (δῆλον δὲ καὶ τοῦθ' ἡμῖν ἐκ τῶν Ἀναλυτικῶν), λείπεται δ' ὥς οὐχ ὑπάρχει τὸ λεγόμενον δεικνύναι. εἰ δὲ φανερόν καὶ ὅτι ὑπάρχει καὶ ὅτι τεκμήριον, ἄλυτον ἤδη γίγνεται τοῦτο· πάντα γὰρ γίγνεται ἀπόδειξις ἤδη φανερά.

Τὸ δ' αὖξιν καὶ μειοῦν οὐκ ἔστιν ἐνθυμήματος στοιχεῖον· τὸ γὰρ αὐτὸ λέγω στοιχεῖον καὶ τόπον· ἔστιν γὰρ στοιχεῖον καὶ τόπος εἰς ὃ πολλὰ ἐνθυμήματα ἐμπίπτει. τὸ δ' αὖξιν καὶ μειοῦν ἐστὶν ἐνθυμήματα πρὸς τὸ δεῖξαι ὅτι μέγα ἢ μικρόν, ὥσπερ καὶ ὅτι ἀγαθὸν ἢ κακόν, ἢ δίκαιον ἢ ἀδικον, καὶ τῶν ἄλλων ὁτιοῦν. ταῦτα δ' ἐστὶν πάντα περὶ ἃ οἱ συλλογισμοὶ καὶ τὰ ἐνθυμήματα, ὥστ' εἰ μηδὲ τούτων ἕκαστον ἐνθυμήματος τόπος, οὐδὲ τὸ αὖξιν καὶ μειοῦν. οὐδὲ τὰ λυτικὰ ἐνθυμήματος εἰδὸς τί ἐστιν [ἄλλο τῶν κατασκευαστικῶν]· δῆλον γὰρ ὅτι λύει μὲν ἢ δείξας ἢ ἔνστασιν ἐνεγκών, ἀνταποδείκνυσι δὲ τὸ ἀντικείμενον, οἷον εἰ ἔδειξε ὅτι γέγονεν, οὗτος ὅτι οὐ γέγονεν, εἰ δὲ ὅτι οὐ γέγονεν, οὗτος ὅτι γέγονεν· ὥστε αὕτη μὲν οὐκ ἂν εἴη [ἢ] διαφορὰ (τοῖς αὐτοῖς γὰρ χρῶνται ἀμφοτέροι· ὅτι γὰρ οὐκ ἔστιν ἢ ἔστιν, ἐνθυμήματα φέρουσιν)· ἢ δ' ἔνστασις οὐκ ἔστιν ἐνθύμημα, ἀλλά, καθάπερ ἐν τοῖς Τοπικοῖς, τὸ εἰπεῖν δόξαν τινὰ ἐξ ἧς ἔσται δῆλον ὅτι οὐ συλλελόγισται ἢ ὅτι ψευδὸς τι εἴληφεν.

ἐπεὶ δὲ τρία ἔστιν ἃ δεῖ πραγματευθῆναι περὶ τὸν λόγον, ὑπὲρ μὲν παραδειγμάτων καὶ γνωμῶν καὶ ἐνθυμημάτων καὶ [1403b] ὅλως τῶν περὶ τὴν διάνοιαν, ὅθεν τε εὐπορήσομεν καὶ ὥς αὐτὰ λύσομεν, εἰρήσθω ἡμῖν τοσαῦτα,

λοιπὸν δὲ διελθεῖν περὶ λέξεως καὶ τάξεως.

## Γ

Ἐπειδὴ τρία ἐστὶν ἃ δεῖ πραγματευθῆναι περὶ τὸν λόγον, ἐν μὲν ἐκ τίνων αἱ πίστεις ἔσονται, δεύτερον δὲ περὶ τὴν λέξιν, τρίτον δὲ πῶς χρὴ τάξαι τὰ μέρη τοῦ λόγου, περὶ μὲν τῶν πίστεων εἴρηται, καὶ ἐκ πόσων, ὅτι ἐκ τριῶν εἰσὶ, καὶ ταῦτα ποῖα, καὶ διὰ τί τοσαῦτα μόνα (ἢ γὰρ τῷ αὐτοῖ τι πεπονθέναι οἱ κρίνοντες, ἢ τῷ ποιούς τινας ὑπολαμβάνειν τοὺς λέγοντας, ἢ τῷ ἀποδεδεῖχθαι, πείθονται πάντες), εἴρηται δὲ καὶ τὰ ἐνθυμήματα, πόθεν δεῖ πορίζεσθαι (ἔστι γὰρ τὰ μὲν εἶδη τῶν ἐνθυμημάτων, τὰ δὲ τόποι)· περὶ δὲ τῆς λέξεως ἐχόμενόν ἐστιν εἰπεῖν· οὐ γὰρ ἀπόχρη τὸ ἔχειν ἃ δεῖ λέγειν, ἀλλ' ἀνάγκη καὶ ταῦτα ὡς δεῖ εἰπεῖν, καὶ συμβάλλεται πολλὰ πρὸς τὸ φανῆναι ποιόν τινα τὸν λόγον. τὸ μὲν οὖν πρῶτον ἐζητήθη κατὰ φύσιν ὅπερ πέφυκε πρῶτον, αὐτὰ τὰ πράγματα ἐκ τίνων ἔχει τὸ πιθανόν, δεύτερον δὲ τὸ ταῦτα τῇ λέξει διαθέσθαι, τρίτον δὲ τούτων ὃ δύναμιν μὲν ἔχει μεγίστην, οὐπω δ' ἐπικεχείρηται, τὰ περὶ τὴν ὑπόκρισιν. καὶ γὰρ εἰς τὴν τραγικὴν καὶ ῥαψωδίαν ὁψὲ παρῆλθεν· ὑπεκρίνοντο γὰρ αὐτοὶ τὰς τραγωδίας οἱ ποιηταὶ τὸ πρῶτον. δῆλον οὖν ὅτι καὶ περὶ τὴν ῥητορικὴν ἐστὶ τὸ τοιοῦτον ὥσπερ καὶ περὶ τὴν ποιητικὴν, ὅπερ ἕτεροὶ «τέ» τινες ἐπραγματεύθησαν καὶ Γλαύκων ὁ Τήσιος. ἔστιν δὲ αὕτη μὲν ἐν τῇ φωνῇ, πῶς αὐτῇ δεῖ χρῆσθαι πρὸς ἕκαστον πάθος, οἷον πότε μεγάλη καὶ πότε μικρὰ καὶ μέση, καὶ πῶς τοῖς τόνοις, οἷον ὀξεῖα καὶ βαρεῖα καὶ μέση, καὶ ῥυθμοῖς τίσι πρὸς ἕκαστα. τρία γὰρ ἐστὶν περὶ ἃ σκοποῦσιν· ταῦτα δ' ἐστὶ μέγεθος ἁρμονία ῥυθμός. τὰ μὲν οὖν ἄθλα σχεδὸν ἐκ τῶν ἀγώνων οὗτοι λαμβάνουσιν, καὶ καθάπερ ἐκεῖ μείζον δύνανται νῦν τῶν ποιητῶν οἱ ὑποκριταί, καὶ κατὰ τοὺς πολιτικοὺς ἀγῶνας, διὰ τὴν μοχθηρίαν τῶν πολιτῶν. οὐπω δὲ σύγκειται τέχνη περὶ αὐτῶν, ἐπεὶ καὶ τὸ περὶ τὴν λέξιν ὁψὲ προῆλθεν· καὶ δοκεῖ φορτικὸν εἶναι, [1404a] καλῶς ὑπολαμβανόμενον. ἀλλ' ὅλης οὔσης πρὸς δόξαν τῆς πραγματείας τῆς περὶ τὴν ῥητορικὴν, οὐχ ὡς ὀρθῶς ἔχοντος ἀλλ' ὡς ἀναγκαίου τὴν ἐπιμέλειαν ποιητέον, ἐπεὶ τό γε δίκαιόν «ἐστι» μηδὲν πλέον ζητεῖν περὶ τὸν λόγον ἢ ὥστε μήτε λυπεῖν μήτ' εὐφραίνειν· δίκαιον γὰρ αὐτοῖς ἀγωνίζεσθαι τοῖς πράγμασιν, ὥστε τᾶλλα ἔξω τοῦ ἀποδεῖξαι περίεργα ἐστίν· ἀλλ' ὅμως μέγα δύναται, καθάπερ εἴρηται, διὰ τὴν τοῦ ἀκροατοῦ μοχθηρίαν. τὸ μὲν οὖν τῆς λέξεως ὅμως ἔχει τι μικρὸν ἀναγκαῖον ἐν πάσῃ διδασκαλίᾳ· διαφέρει γάρ τι πρὸς τὸ δηλῶσαι ὡδὶ ἢ ὡδὶ εἰπεῖν, οὐ μέντοι τοσοῦτον, ἀλλ' ἅπαντα φαντασία ταῦτ' ἐστί, καὶ πρὸς τὸν ἀκροατὴν· διὸ οὐδεὶς οὕτω γεωμετρεῖν διδάσκει. ἐκείνη μὲν οὖν ὅταν ἔλθῃ ταῦτὸ ποιήσει τῇ ὑποκριτικῇ, ἐγκεχειρήκασιν δὲ ἐπ' ὀλίγον περὶ αὐτῆς εἰπεῖν τινές, οἷον Θρασύμαχος ἐν τοῖς Ἑλέοις· καὶ ἔστιν φύσεως τὸ ὑποκριτικὸν εἶναι, καὶ ἀτεχνότερον, περὶ δὲ τὴν λέξιν ἔντεχνον.



διὸ καὶ τοῖς τοῦτο δυναμένοις γίνεται πάλιν ἄθλα, καθάπερ καὶ τοῖς κατὰ τὴν ὑπόκρισιν ῥήτορσιν· οἱ γὰρ γραφόμενοι λόγοι μεῖζον ἰσχύουσι διὰ τὴν λέξιν ἢ διὰ τὴν διάνοιαν.

ἤρξαντο μὲν οὖν κινῆσαι τὸ πρῶτον, ὥσπερ πέφυκεν, οἱ ποιηταί· τὰ γὰρ ὀνόματα μιμήματα ἐστίν, ὑπῆρξεν δὲ καὶ ἡ φωνὴ πάντων μιμητικώτατον τῶν μορίων ἡμῖν· διὸ καὶ αἱ τέχναι συνέστησαν ἢ τε ῥαψωδία καὶ ἡ ὑποκριτικὴ καὶ ἄλλαι γε. ἐπεὶ δ' οἱ ποιηταί, λέγοντες εὐήθη, διὰ τὴν λέξιν ἐδόκουν πορίσασθαι τὴν δόξαν, διὰ τοῦτο ποιητικὴ πρώτη ἐγένετο λέξις, οἷον ἡ Γοργίου, καὶ νῦν ἔτι οἱ πολλοὶ τῶν ἀπαιδευτῶν τοὺς τοιούτους οἶονται διαλέγεσθαι κάλλιστα. τοῦτο δ' οὐκ ἔστιν, ἀλλ' ἑτέρα λόγου καὶ ποιήσεως λέξις ἐστίν. δηλοῖ δὲ τὸ συμβαῖνον· οὐδὲ γὰρ οἱ τὰς τραγωδίας ποιοῦντες ἔτι χρῶνται τὸν αὐτὸν πρόπον, ἀλλ' ὥσπερ καὶ ἐκ τῶν τετραμέτρων εἰς τὸ ἱαμβεῖον μετέβησαν διὰ τὸ τῷ λόγῳ τοῦτο τῶν μέτρων ὁμοιώτατον εἶναι τῶν ἄλλων, οὕτω καὶ τῶν ὀνομάτων ἀφείκασιν ὅσα παρὰ τὴν διάλεκτόν ἐστιν, οἷς [δ'] οἱ πρῶτοι ἐκόσμου, καὶ ἔτι νῦν οἱ τὰ ἐξάμετρα ποιοῦντες [ἀφείκασιν]. διὸ γελοῖον μιμεῖσθαι τούτους οἱ αὐτοὶ οὐκέτι χρῶνται ἐκείνῳ τῷ τρόπῳ, ὥστε φανερόν ὅτι οὐχ ἅπαντα ὅσα περὶ λέξεως ἔστιν εἰπεῖν ἀκριβολογητέον ἡμῖν, ἀλλ' ὅσα περὶ τοιαύτης οἷας λέγομεν. περὶ δ' ἐκείνης εἴρηται ἐν τοῖς περὶ ποιητικῆς.

[1404b] Ἔστω οὖν ἐκεῖνα τεθεωρημένα καὶ ὠρίσθω λέξεως ἀρετὴ σαφῆ εἶναι (σημεῖον γὰρ τι ὁ λόγος ὦν, ἐὰν μὴ δηλοῖ οὐ ποιήσει τὸ ἑαυτοῦ ἔργον), καὶ μήτε ταπεινὴν μήτε ὑπὲρ τὸ ἀξίωμα, ἀλλὰ πρέπουσαν· ἡ γὰρ ποιητικὴ ἴσως οὐ ταπεινὴ, ἀλλ' οὐ πρέπουσα λόγῳ. τῶν δ' ὀνομάτων καὶ ῥημάτων σαφῆ μὲν ποιεῖ τὰ κύρια, μὴ ταπεινὴν δὲ ἀλλὰ κεκοσμημένην τὰλλα ὀνόματα ὅσα εἴρηται ἐν τοῖς περὶ ποιητικῆς· τὸ γὰρ ἐξαλλάξαι ποιεῖ φαίνεσθαι σεμνοτέραν· ὥσπερ γὰρ πρὸς τοὺς ξένους οἱ ἄνθρωποι καὶ πρὸς τοὺς πολίτας, τὸ αὐτὸ πάσχουσιν καὶ πρὸς τὴν λέξιν· διὸ δεῖ ποιεῖν ξένην τὴν διάλεκτον· θαυμασταὶ γὰρ τῶν ἀπόντων εἰσίν, ἡδὺ δὲ τὸ θαυμαστόν ἐστιν. ἐπὶ μὲν οὖν τῶν μέτρων πολλὰ τε ποιεῖται οὕτω καὶ ἀρμόττει ἐκεῖ (πλέον γὰρ ἐξέστηκεν περὶ ἧ καὶ περὶ οὗς ὁ λόγος), ἐν δὲ τοῖς ψιλοῖς λόγοις πολλῶν ἐλάττω· ἡ γὰρ ὑπόθεσις ἐλάττων, ἐπεὶ καὶ ἐνταῦθα, εἰ δοῦλος καλλιεποῖτο ἢ λίαν νέος, ἀπρεπέστερον, ἢ περὶ λίαν μικρῶν· ἀλλ' ἔστι καὶ ἐν τούτοις ἐπισυστελλόμενον καὶ αὐξανόμενον τὸ πρέπον· διὸ δεῖ λανθάνειν ποιοῦντας, καὶ μὴ δοκεῖν λέγειν πεπλασμένως ἀλλὰ πεφυκότως (τοῦτο γὰρ πιθανόν, ἐκεῖνο δὲ τοῦναντίον· ὥς γὰρ πρὸς ἐπιβουλεύοντα διαβάλλονται, καθάπερ πρὸς τοὺς οἶνους τοὺς μεμιγμένους), καὶ οἷον ἡ Θεοδώρου φωνὴ πέπονθε πρὸς τὴν τῶν ἄλλων ὑποκριτῶν· ἡ μὲν γὰρ τοῦ λέγοντος ἔοικεν εἶναι, αἱ δ' ἁλλότρια. κλέπτεται δ'

εὔ, ἐάν τις ἐκ τῆς εἰωθυίας διαλέκτου ἐκλέγων συντιθῇ· ὅπερ Εὐριπίδης ποιεῖ καὶ ὑπέδειξε πρῶτος.

ὄντων δ' ὀνομάτων καὶ ῥημάτων ἐξ ὧν ὁ λόγος συνέστηκεν, τῶν δὲ ὀνομάτων τοσαῦτ' ἐχόντων εἶδη ὅσα τεθεώρηται ἐν τοῖς περὶ ποιήσεως, τούτων γλώτταις μὲν καὶ διπλοῖς ὀνόμασι καὶ πεποιημένοις ὀλιγάκις καὶ ὀλιγαχοῦ χρηστέον (ὅπου δέ, ὕστερον ἐροῦμεν, τό τε διὰ τί εἴρηται· ἐπὶ τὸ μεῖζον γὰρ ἐξαλλάττει τοῦ πρέποντος), τὸ δὲ κύριον καὶ τὸ οἰκεῖον καὶ μεταφορὰ μόνον χρήσιμα πρὸς τὴν τῶν ψιλῶν λόγων λέξιν. σημεῖον δ' ὅτι τούτοις μόνοις πάντες χρῶνται· πάντες γὰρ μεταφοραῖς διαλέγονται καὶ τοῖς οἰκείοις καὶ τοῖς κυρίοις, ὥστε δῆλον ὡς ἂν εὔ ποιῇ τις, ἔσται τε ξενικὸν καὶ λανθάνειν ἐνδέξεται καὶ σαφηνιεῖ· αὕτη δ' ἦν ἡ τοῦ ῥητορικοῦ λόγου ἀρετή. τῶν δ' ὀνομάτων τῷ μὲν σοφιστῇ ὁμωνυμῖαι χρήσιμοι (παρὰ ταύτας γὰρ κακουργεῖ), τῷ ποιητῇ δὲ συνωνυμῖαι, λέγω δὲ κύρια τε καὶ συνώνυμα [1405a] οἷον τὸ πορεύεσθαι καὶ τὸ βαδίζειν· ταῦτα γὰρ ἀμφοτέρω καὶ κύρια καὶ συνώνυμα ἀλλήλοις.

τί μὲν οὖν τούτων ἕκαστόν ἐστι, καὶ πόσα εἶδη μεταφορᾶς, καὶ ὅτι τοῦτο πλεῖστον δύναται καὶ ἐν ποιήσει καὶ ἐν λόγοις, [αἱ μεταφοραί,] εἴρηται, καθάπερ ἐλέγομεν, ἐν τοῖς περὶ ποιητικῆς· τοσοῦτω δ' ἐν λόγῳ δεῖ μᾶλλον φιλοπονεῖσθαι περὶ αὐτῶν, ὅσω ἐξ ἐλαττόνων βοηθημάτων ὁ λόγος ἐστὶ τῶν μέτρων· καὶ τὸ σαφὲς καὶ τὸ ἡδὺ καὶ τὸ ξενικὸν ἔχει μάλιστα ἢ μεταφορά, καὶ λαβεῖν οὐκ ἔστιν αὐτὴν παρ' ἄλλου. δεῖ δὲ καὶ τὰ ἐπίθετα καὶ τὰς μεταφορὰς ἀρμοττούσας λέγειν. τοῦτο δ' ἔσται ἐκ τοῦ ἀνάλογον· εἰ δὲ μή, ἀπρεπὲς φανεῖται διὰ τὸ παρ' ἄλληλα τὰ ἐναντία μάλιστα φαίνεσθαι. ἀλλὰ δεῖ σκοπεῖν, ὡς νέω φοινίκις, οὕτω γέροντι τί (οὐ γὰρ ἡ αὐτὴ πρέπει ἐσθῆς), καὶ ἐάν τε κοσμεῖν βούλῃ, ἀπὸ τῶν βελτίστων τῶν ἐν ταύτῳ γένει φέρειν τὴν μεταφοράν, ἐάν τε ψέγειν, ἀπὸ τῶν χειρόνων· λέγω δ' οἷον, ἐπεὶ τὰ ἐναντία ἐν τῷ αὐτῷ γένει, τὸ φάναι τὸν μὲν πτωχεύοντα εὐχεσθαι τὸν δὲ εὐχόμενον πτωχεύειν, ὅτι ἄμφω αἰτήσεις, τὸ εἰρημένον ἐστὶ ποιεῖν, ὡς καὶ Ἰφικράτης Καλλίαν μητραγύρτην ἄλλ' οὐ δαδοῦχον, ὃ δὲ ἔφη ἀμύητον αὐτὸν εἶναι· οὐ γὰρ ἂν μητραγύρτην αὐτὸν καλεῖν, ἀλλὰ δαδοῦχον· ἄμφω γὰρ περὶ θεόν, ἀλλὰ τὸ μὲν τίμιον τὸ δὲ ἄτιμον. καὶ ὁ μὲν διονυσοκόλακας, αὐτοὶ δ' αὐτοὺς τεχνίτας καλοῦσιν (ταῦτα δ' ἄμφω μεταφορά, ἢ μὲν ῥυπαινόντων ἢ δὲ τούναντίον), καὶ οἱ μὲν ληστὰς αὐτοὺς ποριστὰς καλοῦσι νῦν (διὸ ἔξεστι λέγειν τὸν ἀδίκησαντα μὲν ἁμαρτάνειν, τὸν δ' ἁμαρτάνοντα ἀδικῆσαι, καὶ τὸν κλέψαντα καὶ λαβεῖν καὶ πορίσασθαι). τὸ δὲ ὡς ὁ Τήλεφος Εὐριπίδου φησὶν,

κώπης ἀνάσσω· ἀποβὰς εἰς Μυσίαν,

ἀπρεπές, ὅτι μεῖζον τὸ ἀνάσσειν ἢ κατ' ἀξίαν· οὐ κέκλεπται οὖν. ἔστιν δὲ καὶ ἐν ταῖς συλλαβαῖς ἀμαρτία, ἐὰν μὴ ἡδείας ἢ σημεῖα φωνῆς, οἷον Διονύσιος προσαγορεύει ὁ χαλκοῦς ἐν τοῖς ἐλεγείοις κραυγὴν Καλλιόπης τὴν ποιήσιν, ὅτι ἄμφω φωναί· φαύλη δὲ ἡ μεταφορὰ ταῖς ἀσήμεοις φωναῖς. ἔτι δὲ οὐ πόρρωθεν δεῖ ἀλλ' ἐκ τῶν συγγενῶν καὶ τῶν ὁμοειδῶν μεταφέρειν <ἐπὶ> τὰ ἀνώνυμα ὠνομασμένως ὃ λεχθὲν δῆλόν ἐστιν ὅτι συγγενές (οἷον ἐν τῷ αἰνίγματι τῷ εὐδοκιμοῦντι

[1405b] ἄνδρ' εἶδον πυρὶ χαλκὸν ἐπ' ἀνέρι κολλήσαντα·

ἀνώνυμον γὰρ τὸ πάθος, ἔστι δ' ἄμφω πρόσθεσίς τις· κόλλησιν τοίνυν εἶπε τὴν τῆς σικύας προσβολήν), καὶ ὅλως ἐκ τῶν εὐ ἠνιγμένων ἔστι μεταφορὰς λαβεῖν ἐπεικεῖς· μεταφοραὶ γὰρ αἰνίττονται, ὥστε δῆλον ὅτι εὐ μετενήνεκται. καὶ ἀπὸ καλῶν· κάλλος δὲ ὀνόματος τὸ μὲν ὥσπερ Λικύμνιος λέγει, ἐν τοῖς ψόφοις ἢ τῷ σημαινομένῳ, καὶ αἴσχος δὲ ὡσαύτως. ἔτι δὲ τρίτον ὃ λύει τὸν σοφιστικὸν λόγον· οὐ γὰρ ὡς ἔφη Βρύσων οὐθένα αἰσχρολογεῖν, εἴπερ τὸ αὐτὸ σημαίνει τόδε ἀντὶ τοῦδε εἰπεῖν· τοῦτο γὰρ ἐστὶν ψεῦδος· ἔστιν γὰρ ἄλλο ἄλλου κυριώτερον καὶ ὠμιομένον μᾶλλον καὶ οἰκειότερον, τῷ ποιεῖν τὸ πρᾶγμα πρὸ ὁμμάτων. ἔτι οὐχ ὁμοίως ἔχον σημαίνει τόδε καὶ τόδε, ὥστε καὶ οὕτως ἄλλου ἄλλο κάλλιον καὶ αἴσχιον θετέον· ἄμφω μὲν γὰρ τὸ καλὸν ἢ τὸ αἴσχρὸν σημαίνουσι, ἀλλ' οὐχ ἢ καλὸν ἢ οὐχ ἢ αἴσχρὸν· ἢ ταῦτα μὲν, ἀλλὰ μᾶλλον καὶ ἥττον. τὰς δὲ μεταφορὰς ἐντεῦθεν οἰστέον, ἀπὸ καλῶν ἢ τῇ φωνῇ ἢ τῇ δυνάμει ἢ τῇ ὄψει ἢ ἄλλῃ τινὶ αἰσθήσει. διαφέρει δ' εἰπεῖν, οἷον ῥοδοδάκτυλος ἠὼς μᾶλλον ἢ φοινικοδάκτυλος, ἢ ἔτι φαυλότερον ἐρυθροδάκτυλος. καὶ ἐν τοῖς ἐπιθέτοις ἔστιν μὲν τὰς ἐπιθέσεις ποιεῖσθαι ἀπὸ φαύλου ἢ αἰσχροῦ, οἷον ὁ μητροφόντης, ἔστι δ' ἀπὸ τοῦ βελτίονος, οἷον ὁ πατρὸς ἀμύντωρ· καὶ ὁ Σιμωνίδης, ὅτε μὲν ἐδίδου μισθὸν ὀλίγον αὐτῷ ὁ νικήσας τοῖς ὀρεῦσιν, οὐκ ἤθελε ποιεῖν, ὡς δυσχεραίνων εἰς ἡμιόνους ποιεῖν, ἐπεὶ δ' ἱκανὸν ἔδωκεν, ἐποίησε

χαίρετ' ἀελλοπόδων θύγατρες ἵππων·

καίτοι καὶ τῶν ὄνων θυγατέρες ἦσαν. ἔστιν αὖ τὸ ὑποκορίζεσθαι· ἔστιν δὲ ὁ ὑποκορισμὸς ὃ ἔλαττον ποιεῖ καὶ τὸ κακὸν καὶ τὸ ἀγαθόν, ὥσπερ καὶ Ἀριστοφάνης σκώπτει ἐν τοῖς Βαβυλωνίοις, ἀντὶ μὲν χρυσίου χρυσιδάριον, ἀντὶ δ' ἱματίου ἱματιδάριον, ἀντὶ δὲ λαιδορίας λαιδορημάτιον καὶ ἀντὶ νοσήματος νοσημάτιον. εὐλαβεῖσθαι δὲ δεῖ καὶ παρατηρεῖν ἐν ἀμφοῖν τὸ

μέτριον.

Τὰ δὲ ψυχρὰ ἐν τέτταρσι γίνεται κατὰ τὴν λέξιν, ἔν τε τοῖς διπλοῖς ὀνόμασιν, οἷον Λυκόφρων “τὸν πολυπρόσωπον οὐρανὸν τῆς μεγαλοκορύφου γῆς”, καὶ “ἀκτὴν δὲ στενοπόρον”, καὶ ὡς Γοργίας ὠνόμαζεν “πτωχομουσοκόλοκας ἐπιорκήσαντας [1406a] κατ’ εὐορκήσαντος”, καὶ ὡς Ἀλκιδάμας “μένους μὲν τὴν ψυχὴν πληρουμένην, πυρίχρων δὲ τὴν ὄψιν γιγνομένην”, καὶ “τελεσφόρον” ὥήθη τὴν προθυμίαν αὐτῶν γενήσεσθαι, καὶ “τελεσφόρον” τὴν πειθῶ τῶν λόγων κατέστησεν, καὶ “κυανόχρων” τὸ τῆς θαλάττης ἔδαφος· πάντα ταῦτα γὰρ ποιητικὰ διὰ τὴν δίπλωσιν φαίνεται. μία μὲν οὖν αὕτη αἰτία, μία δὲ τὸ χρῆσθαι γλώτταις, οἷον Λυκόφρων Ξέρξην “πέλωρον ἄνδρα”, καὶ Σκίρων “σίνις ἀνὴρ”, καὶ Ἀλκιδάμας “ἄθυρμα τῇ ποιήσει”, καὶ “τὴν τῆς φύσεως ἀτασθαλίαν”, καὶ “ἀκράτῳ τῆς διανοίας ὀργῇ τεθηγμένον”. τρίτον δ’ ἐν τοῖς ἐπιθέτοις τὸ ἢ μακροῖς ἢ ἀκαίροις ἢ πυκνοῖς χρῆσθαι· ἐν μὲν γὰρ ποιήσει πρέπει “γάλα λευκὸν” εἰπεῖν, ἐν δὲ λόγῳ τὰ μὲν ἀπρεπέστερα· τὰ δέ, ἂν ἢ κατακορῇ, ἐξελέγχει καὶ ποιεῖ φανερόν ὅτι ποιήσις ἐστίν, ἐπεὶ δεῖ γε χρῆσθαι αὐτοῖς (ἐξαλλάττει γὰρ τὸ εἰωθὸς καὶ ξενικὴν ποιεῖ τὴν λέξιν), ἀλλὰ δεῖ στοχάζεσθαι τοῦ μετρίου, ἐπεὶ μείζον ποιεῖ κακὸν τοῦ εἰκῇ λέγειν· ἢ μὲν γὰρ οὐκ ἔχει τὸ εὖ, ἢ δὲ τὸ κακῶς. διὸ τὰ Ἀλκιδάμαντος ψυχρὰ φαίνεται· οὐ γὰρ ὡς ἡδύσματι χρῆται ἄλλ’ ὡς ἐδέσματι τοῖς ἐπιθέτοις <τοῖς> οὕτω πυκνοῖς καὶ μείζονσι καὶ ἐπιδήλοις, οἷον οὐχ ἰδρῶτα ἀλλὰ τὸν ὑγρὸν ἰδρῶτα, καὶ οὐκ εἰς Ἴσθμια ἀλλ’ εἰς τὴν τῶν Ἴσθμίων πανήγυριν, καὶ οὐχὶ νόμους ἀλλὰ τοὺς τῶν πόλεων βασιλεῖς νόμους, καὶ οὐ δρόμῳ ἀλλὰ δρομαίᾳ τῇ τῆς ψυχῆς ὀρμῇ, καὶ οὐχὶ μουσεῖον ἀλλὰ τὸ τῆς φύσεως παραλαβὼν μουσεῖον, καὶ σκυθρωπὸν τὴν φροντίδα τῆς ψυχῆς, καὶ οὐ χάριτος ἀλλὰ πανδήμου χάριτος δημιουργός, καὶ οἰκονόμος τῆς τῶν ἀκουόντων ἡδονῆς, καὶ οὐ κλάδοις ἀλλὰ τοῖς τῆς ὕλης κλάδοις ἀπέκρυσεν, καὶ οὐ τὸ σῶμα παρήμπισχεν ἀλλὰ τὴν τοῦ σώματος αἰσχύνην, καὶ ἀντίμιμον τὴν τῆς ψυχῆς ἐπιθυμίαν (τοῦτο δ’ ἅμα καὶ διπλοῦν καὶ ἐπίθετον, ὥστε ποίημα γίνεται), καὶ οὕτως ἔξεδρον τὴν τῆς μοχθηρίας ὑπερβολήν. διὸ ποιητικῶς λέγοντες τῇ ἀπρεπείᾳ τὸ γελοῖον καὶ τὸ ψυχρὸν ἐμποιοῦσι, καὶ τὸ ἀσαφὲς διὰ τὴν ἀδολεσχίαν· ὅταν γὰρ γινώσκοντι ἐπεμβάλλῃ, διαλύει τὸ σαφὲς τῷ ἐπισκοτεῖν. οἱ δ’ ἄνθρωποι τοῖς διπλοῖς χρῶνται ὅταν ἀνώνυμον ἢ καὶ ὁ λόγος εὐσύνθετος, οἷον τὸ χρονοτριβεῖν· [1406b] ἀλλ’ ἂν πολὺ, πάντως ποιητικόν· διὸ χρησιμωτάτη ἡ διπλῇ λέξις τοῖς διθυραμβοποιοῖς (οὗτοι γὰρ ψοφώδεις), αἱ δὲ γλώτταις τοῖς ἐποποιοῖς (σεμνὸν γὰρ καὶ αὐθαδές), ἢ δὲ μεταφορὰ τοῖς ἱαμβείοις (τούτοις γὰρ νῦν χρῶνται, ὥσπερ εἴρηται). καὶ ἔτι τέταρτον τὸ ψυχρὸν ἐν ταῖς μεταφοραῖς γίνεται· εἰσὶν γὰρ καὶ μεταφοραὶ ἀπρεπεῖς, αἱ μὲν διὰ τὸ γελοῖον (χρῶνται γὰρ καὶ οἱ κωμωδοποιοὶ

μεταφοραῖς), αἱ δὲ διὰ τὸ σεμνὸν ἄγαν καὶ τραγικόν· ἀσαφεῖς δέ, ἂν πόρρωθεν, οἷον Γοργίας “χλωρὰ καὶ ἄναιμα τὰ πράγματα”, “σὺ δὲ ταῦτα αἰσχρῶς μὲν ἔσπειρας κακῶς δὲ ἐθέρισας”· ποιητικῶς γὰρ ἄγαν. καὶ ὡς Ἀλκιδάμας τὴν φιλοσοφίαν “ἐπιτείχισμα τῷ νόμῳ”, καὶ τὴν Ὀδύσσειαν “καλὸν ἀνθρωπίνου βίου κάτοπτρον”, καὶ “οὐδὲν τοιοῦτον ἄθυρμα τῇ ποιήσει προσφέρων”. ἅπαντα γὰρ ταῦτα ἀπίθانا διὰ τὰ εἰρημένα. τὸ δὲ Γοργίου εἰς τὴν χελιδόνα, ἐπεὶ κατ’ αὐτοῦ πετομένη ἀφῆκε τὸ περίττωμα, ἄριστα ἔχει τῶν τραγικῶν· εἶπε γὰρ “αἰσχρὸν γε, ὦ Φιλομήλα”. ὄρνιθι μὲν γάρ, εἰ ἐποίησεν, οὐκ αἰσχρὸν, παρθένῳ δὲ αἰσχρὸν. εὖ οὖν ἐλοιδόρησεν εἰπὼν ὃ ἦν, ἀλλ’ οὐχ ὃ ἔστιν.

Ἔστιν δὲ καὶ ἡ εἰκὼν μεταφορά· διαφέρει γὰρ μικρόν· ὅταν μὲν γὰρ εἴπῃ [τὸν Ἀχιλλέα] “ὡς δὲ λέων ἐπόρουσεν”, εἰκὼν ἔστιν, ὅταν δὲ “λέων ἐπόρουσε”, μεταφορά· διὰ γὰρ τὸ ἄμφω ἀνδρείους εἶναι, προσηγόρευσεν μετενέγκας λέοντα τὸν Ἀχιλλέα. χρήσιμον δὲ ἡ εἰκὼν καὶ ἐν λόγῳ, ὀλιγάκις δέ· ποιητικὸν γάρ. οἷστέα δὲ ὥσπερ αἱ μεταφοραὶ· μεταφοραὶ γὰρ εἰσι, διαφέρουσιν τῷ εἰρημένῳ.

εἰσὶν δ’ εἰκόνες οἷον ἦν Ἀνδροτίων εἰς Ἰδριέα, ὅτι ὅμοιος τοῖς ἐκ τῶν δεσμῶν κυνιδίοις· ἐκεῖνά τε γὰρ προσπίπτοντα δάκνειν, καὶ Ἰδριέα λυθέντα ἐκ τῶν δεσμῶν εἶναι χαλεπόν. καὶ ὡς Θεοδάμας εἵκαζεν Ἀρχίδαμον Εὐξένῳ γεωμετρεῖν οὐκ ἐπισταμένῳ ἐν τῷ ἀνάλογόν· ἔστιν· ἔσται γὰρ καὶ ὁ Εὐξενὸς Ἀρχίδαμος γεωμετρικός. καὶ τὸ ἐν τῇ Πολιτείᾳ τῇ Πλάτωνος, ὅτι οἱ τοὺς τεθνεῶτας σκυλεύοντες ἐοίκασιν τοῖς κυνιδίοις ἃ τοὺς λίθους δάκνει, τοῦ βάλλοντος οὐχ ἀπτόμενα, καὶ ἡ εἰς τὸν δῆμον, ὅτι ὅμοιος ναυκλήρῳ ἰσχυρῷ μὲν ὑποκώφῳ δέ, καὶ ἡ εἰς τὰ μέτρα τῶν ποιητῶν, ὅτι ἔοικε τοῖς [1407a] ἄνευ κάλλους ὠραίοις· οἱ μὲν γὰρ ἀπανθήσαντες, τὰ δὲ διαλυθέντα οὐχ ὅμοια φαίνεται. καὶ ἡ Περικλέους εἰς Σαμίους, εοικέναι αὐτοὺς τοῖς παιδίοις ἃ τὸν ψωμὸν δέχεται μὲν, κλαίοντα δέ, καὶ εἰς Βοιωτοὺς, ὅτι ὅμοιοι τοῖς πρίνοις· τοὺς τε γὰρ πρίνους ὑφ’ αὐτῶν κατακόπτεσθαι, καὶ τοὺς Βοιωτοὺς πρὸς ἀλλήλους μαχομένους. καὶ ὁ Δημοσθένης <εἰς> τὸν δῆμον, ὅτι ὅμοιός ἐστιν τοῖς ἐν τοῖς πλοίοις ναυτιῶσιν. καὶ ὡς Δημοκράτης εἵκασεν τοὺς ῥήτορας ταῖς τίτθαις αἱ τὸ ψώμισμα καταπίνουσιν τῷ σιάλῳ τὰ παιδιά παραλείφουσιν. καὶ ὡς Ἀντισθένης Κηφισόδοτον τὸν λεπτὸν λιβανωτῷ εἵκασεν, ὅτι ἀπολλύμενος εὐφραίνει. πάσας δὲ ταύτας καὶ ὡς εἰκόνας καὶ ὡς μεταφορὰς ἔξεστι λέγειν, ὥστε ὅσαι ἂν εὐδοκιμῶσιν ὡς μεταφοραὶ λεχθεῖσαι, δῆλον ὅτι αὗται καὶ εἰκόνες ἔσονται, καὶ αἱ εἰκόνες μεταφοραὶ λόγου δεόμεναι. ἀεὶ δὲ δεῖ τὴν μεταφορὰν τὴν ἐκ τοῦ ἀνάλογον ἀνταποδιδόναι καὶ ἐπὶ θάτερα [καὶ ἐπὶ] τῶν ὁμογενῶν, οἷον εἰ ἡ φιάλη ἀσπίς Διονύσου, καὶ τὴν ἀσπίδα ἀρμόττει

λέγεσθαι φιάλην Ἄρεως.

Ὁ μὲν οὖν λόγος συντίθεται ἐκ τούτων, ἔστι δ' ἀρχὴ τῆς λέξεως τὸ ἐλληνίζειν· τοῦτο δ' ἐστὶν ἐν πέντε, πρῶτον μὲν ἐν τοῖς συνδέσμοις, ἂν ἀποδιδῶ τις ὡς πεφύκασι πρότεροι καὶ ὕστεροι γίνεσθαι ἀλλήλων, οἷον ἔνιοι ἀπαιτοῦσιν, ὥσπερ ὁ μὲν καὶ ὁ ἐγὼ μὲν ἀπαιτεῖ τὸν δέ καὶ τὸν ὁ δέ. δεῖ δὲ ἕως μέμνηται ἀνταποδιδόναι ἀλλήλοις, καὶ μήτε μακρὰν ἀπαρτᾶν μήτε σύνδεσμον πρὸ συνδέσμου ἀποδιδόναι τοῦ ἀναγκαίου· ὀλιγαχοῦ γὰρ ἀρμόττει. “ἐγὼ μὲν, ἐπεὶ μοι εἶπεν (ἦλθε γὰρ Κλέων δεόμενός τε καὶ ἀξιῶν), ἐπορευόμην παραλαβὼν αὐτούς”. ἐν τούτοις γὰρ πολλοὶ πρὸ τοῦ ἀποδοθησομένου συνδέσμου προεμβέβληνται σύνδεσμοι· ἐὰν δὲ πολὺ τὸ μεταξὺ γένηται τοῦ ἐπορευόμην, ἀσαφές. Ἐν μὲν δὴ τὸ εὖ ἐν τοῖς συνδέσμοις, δεύτερον δὲ τὸ τοῖς ἰδίους ὀνόμασι λέγειν καὶ μὴ τοῖς περιέχουσιν. τρίτον μὴ ἀμφιβόλοις. τοῦτο δ' ἂν μὴ τάναντία προαιρῆται, ὅπερ ποιοῦσιν ὅταν μηδὲν μὲν ἔχωσι λέγειν, προσποιῶνται δέ τι λέγειν· οἱ γὰρ τοιοῦτοι ἐν ποιήσει λέγουσιν ταῦτα, οἷον Ἐμπεδοκλῆς· φενακίζει γὰρ τὸ κύκλῳ πολὺ ὄν, καὶ πάσχουσιν οἱ ἀκροαταὶ ὅπερ οἱ πολλοὶ παρὰ τοῖς μάντεσιν· ὅταν γὰρ λέγωσιν ἀμφίβολα, συμπαρανεύουσιν -

Κροῖσος Ἄλυν διαβάς μεγάλην ἀρχὴν καταλύσει

[1407b] - καὶ διὰ τὸ ὅλως ἔλαττον εἶναι ἀμάρτημα διὰ τῶν γενῶν τοῦ πράγματος λέγουσιν οἱ μάντιες· τύχοι γὰρ ἂν τις μᾶλλον ἐν τοῖς ἀρτιασμοῖς ἄρτια ἢ περισσὰ εἰπὼν μᾶλλον ἢ πόσα ἔχει, καὶ τὸ ὅτι ἔσται ἢ τὸ πότε, διὸ οἱ χρησμολόγοι οὐ προσορίζονται τὸ πότε. ἅπαντα δὴ ταῦτα ὅμοια, ὥστ' ἂν μὴ τοιούτου τινὸς ἕνεκα, φευκτέον. τέταρτον, ὡς Πρωταγόρας τὰ γένη τῶν ὀνομάτων διήρει, ἄρρενα καὶ θήλεα καὶ σκεύη· δεῖ γὰρ ἀποδιδόναι καὶ ταῦτα ὀρθῶς· “ἢ δ' ἐλθοῦσα καὶ διαλεχθεῖσα ὥχετο”. πέμπτον ἐν τῷ τὰ πολλὰ καὶ ὀλίγα καὶ ἐν ὀρθῶς ὀνομάζειν· “οἱ δ' ἐλθόντες ἔτυπτόν με”.

ὅλως δὲ δεῖ εὐανάγνωστον εἶναι τὸ γεγραμμένον καὶ εὐφραστον· ἔστιν δὲ τὸ αὐτό· ὅπερ οἱ πολλοὶ σύνδεσμοι οὐκ ἔχουσιν, οὐδ' ἂ μὴ ῥάδιον διαστίξαι, ὥσπερ τὰ Ἡρακλείτου. τὰ γὰρ Ἡρακλείτου διαστίξαι ἔργον διὰ τὸ ἄδηλον εἶναι ποτέρῳ πρόσκειται, τῷ ὕστερον ἢ τῷ πρότερον, οἷον ἐν τῇ ἀρχῇ αὐτῇ τοῦ συγγράμματος· φησὶ γὰρ “τοῦ λόγου τοῦδ' ἐόντος ἀεὶ ἀξύνετοι ἄνθρωποι γίνονται”· ἄδηλον γὰρ τὸ ἀεὶ, πρὸς ποτέρῳ <δεῖ> διαστίξαι. ἔτι τότε ποιεῖ σολοικίζειν, τὸ μὴ ἀποδιδόναι, ἐὰν μὴ ἐπιζευγνύης ὃ ἀμφοῖν ἀρμόττει, οἷον [ἦ] ψόφῳ καὶ χρώματι τὸ μὲν ἰδὼν οὐ κοινόν, τὸ δ' αἰσθόμενος κοινόν· ἀσαφὴ δὲ ἂν μὴ προθεῖς εἵπης, μέλλων πολλὰ μεταξὺ ἐμβάλλειν, οἷον

“ἔμελλον γὰρ διαλεχθεὶς ἐκείνῳ τάδε καὶ τάδε καὶ ὧδε πορεύεσθαι”, ἀλλὰ μὴ “ἔμελλον γὰρ διαλεχθεὶς πορεύεσθαι, εἴτα τάδε καὶ τάδε καὶ ὧδε ἐγένετο”.

Εἰς ὄγκον δὲ τῆς λέξεως συμβάλλεται τάδε, τὸ λόγῳ χρῆσθαι ἀντ’ ὀνόματος, οἷον μὴ κύκλον, ἀλλ’ ἐπίπεδον τὸ ἐκ τοῦ μέσου ἴσον· εἰς δὲ συντομίαν τὸ ἐναντίον, ἀντὶ τοῦ λόγου ὄνομα. καὶ ἐὰν αἰσchrὸν ἢ ἀπρεπές, ἐὰν μὲν ἐν τῷ λόγῳ ἢ <τὸ> αἰσchrὸν, τοῦνομα λέγειν, ἐὰν δ’ ἐν τῷ ὀνόματι, τὸν λόγον. καὶ μεταφορᾷ δηλοῦν καὶ τοῖς ἐπιθέτοις, εὐλαβούμενον τὸ ποιητικόν. καὶ τὸ ἐν πολλὰ ποιεῖν, ὅπερ οἱ ποιηταὶ ποιοῦσιν· ἐνὸς ὄντος λιμένος ὅμως λέγουσι

λιμένας εἰς Ἀχαϊκούς

καὶ

δέλτου μὲν αἶδε πολύθυροι διαπτυχαί.

καὶ μὴ ἐπιζευγνύναι, ἀλλ’ ἐκατέρῳ ἐκάτερον, “τῆς γυναικὸς τῆς ἡμετέρας”· ἐὰν δὲ συντόμως, τοῦναντίον, “τῆς ἡμετέρας γυναικός”. καὶ μετὰ συνδέσμου λέγειν· ἐὰν δὲ συντόμως, ἄνευ μὲν συνδέσμου, μὴ ἀσύνδετα δέ, οἷον “πορευθεὶς καὶ δια[1408a]λεχθεὶς”, “πορευθεὶς διελέχθην”. καὶ τὸ Ἀντιμάχου χρήσιμον, ἐξ ὧν μὴ ἔχει λέγειν, ὃ ἐκεῖνος ποιεῖ ἐπὶ τοῦ Τευμησοῦ,

ἔστι τις ἡνεμόεις ὀλίγος λόφος·

αὕξεται γὰρ οὕτως εἰς ἄπειρον. ἔστι δὲ τοῦτο καὶ ἐπὶ ἀγαθῶν καὶ κακῶν, ὅπως οὐκ ἔχει, ὁποτέρως ἂν ἢ χρήσιμον, ὅθεν καὶ τὰ ὀνόματα οἱ ποιηταὶ φέρουσιν, τὸ ἄχορδον καὶ τὸ ἄλυρον μέλος· ἐκ τῶν στερήσεων γὰρ ἐπιφέρουσιν· εὐδοκιμεῖ γὰρ τοῦτο ἐν ταῖς μεταφοραῖς λεγόμενον ταῖς ἀνάλογον, οἷον τὸ φάναι τὴν σάλπιγγα ἰέναι μέλος ἄλυρον.

Τὸ δὲ πρέπον ἔξει ἢ λέξις, ἐὰν ἢ παθητικὴ τε καὶ ἠθικὴ καὶ τοῖς ὑποκειμένοις πράγμασιν ἀνάλογον. τὸ δ’ ἀνάλογόν ἐστιν ἐὰν μήτε περὶ εὐόγκων αὐτοκαβδάλως λέγηται μήτε περὶ εὐτελῶν σεμνῶς, μηδ’ ἐπὶ τῷ εὐτελεῖ ὀνόματι ἐπὶ κόσμος· εἰ δὲ μή, κωμωδία φαίνεται, οἷον ποιεῖ Κλεοφῶν· ὁμοίως γὰρ ἔνια ἔλεγε καὶ εἰ εἴπειεν [ἂν] “πότνια συκῇ”. παθητικὴ δέ, ἐὰν μὲν ἢ ὕβρις, ὀργιζομένου λέξις, ἐὰν δὲ ἀσεβῇ καὶ αἰσchrά, δυσχεραίνοντος καὶ εὐλαβουμένου καὶ λέγειν, ἐὰν δὲ ἐπαινετά, ἀγαμένως, ἐὰν δὲ ἐλεεινά, ταπεινῶς, καὶ ἐπὶ τῶν ἄλλων δὲ ὁμοίως. πιθανοῖ δὲ τὸ πρᾶγμα καὶ ἢ οἰκεία λέξεις· παραλογίζεται τε γὰρ ἢ ψυχὴ ὡς ἀληθῶς λέγοντος,

ὅτι ἐπὶ τοῖς τοιοῦτοις οὕτως ἔχουσιν, ὥστ' οἶονται, εἰ καὶ μὴ οὕτως ἔχει ὡς <λέγει> ὁ λέγων, τὰ πράγματα οὕτως ἔχειν, καὶ συνομοπαθεῖ ὁ ἀκούων ἀεὶ τῷ παθητικῶς λέγοντι, κἂν μὴθὲν λέγῃ. διὸ πολλοὶ καταπλήττουσι τοὺς ἀκροατὰς θορυβοῦντες. καὶ ἠθικὴ δὲ αὕτη ἢ ἐκ τῶν σημείων δεῖξις, ὅτε ἀκολουθεῖ ἢ ἀρμόττουσα ἐκάστω γένει καὶ ἕξει. λέγω δὲ γένος μὲν καθ' ἡλικίαν, οἶον παῖς ἢ ἀνὴρ ἢ γέρων, καὶ γυνὴ ἢ ἀνὴρ, καὶ Λάκων ἢ Θετταλός, ἕξεις δέ, καθ' ἃς ποίος τις τῷ βίῳ· οὐ γὰρ καθ' ἅπασαν ἕξιν οἱ βίοι ποιοῖ τινες. ἐὰν οὖν καὶ τὰ ὀνόματα οἰκεῖα λέγῃ τῇ ἕξει, ποιήσει τὸ ἥθος· οὐ γὰρ ταῦτά οὐδ' ὡσαύτως ἀγροῖκος ἂν καὶ πεπαιδευμένος εἴπειεν. πάσχουσι δέ τι οἱ ἀκροαταὶ καὶ ὧ κατακόρως χρῶνται οἱ λογογράφοι, “τίς δ' οὐκ οἶδεν;”, “ἅπαντες ἴσασιν”. ὁμολογεῖ γὰρ ὁ ἀκούων αἰσχυρόμενος, ὅπως μετέχῃ οὐπὲρ καὶ οἱ ἄλλοι πάντες.

[1408b] τὸ δ' εὐκαίρως ἢ μὴ εὐκαίρως χρῆσθαι κοινὸν ἀπάντων τῶν εἰδῶν ἐστίν. ἄκος δ' ἐπὶ πάσῃ ὑπερβολῇ τὸ θρυλούμενον· δεῖ γὰρ αὐτὸν αὐτῷ προσεπιπλήττειν· δοκεῖ γὰρ ἀληθὲς εἶναι, ἐπεὶ οὐ λανθάνει γε ὃ ποιεῖ τὸν λέγοντα. ἔτι τοῖς ἀνάλογον μὴ πᾶσιν ἅμα χρήσασθαι (οὕτω γὰρ κλέπεται ὁ ἀκροατής)· λέγω δὲ οἶον ἐὰν τὰ ὀνόματα σκληρὰ ἦ, μὴ καὶ τῇ φωνῇ καὶ τῷ προσώπῳ [καὶ] τοῖς ἀρμόττουσιν· εἰ δὲ μή, φανερόν γίνεται ἕκαστον ὃ ἐστίν. ἐὰν δὲ τὸ μὲν τὸ δὲ μή, λανθάνει ποιῶν τὸ αὐτό. ἐὰν οὖν τὰ μαλακὰ σκληρῶς καὶ τὰ σκληρὰ μαλακῶς λέγηται, πθανὸν γίνεται. τὰ δὲ ὀνόματα τὰ διπλᾶ καὶ [τὰ] ἐπίθετα πλείω καὶ τὰ ξένα μάλιστα ἀρμόττει λέγοντι παθητικῶς· συγγνώμη γὰρ ὀργιζομένῳ κακὸν φάναι οὐρανόμηκες, ἢ πελώριον εἰπεῖν, καὶ ὅταν ἔχῃ ἤδη τοὺς ἀκροατὰς καὶ ποιήσῃ ἐνθουσιάσαι ἢ ἐπαίνοισι ἢ ψόγοις ἢ ὀργῇ ἢ φιλίᾳ, οἶον καὶ Ἰσοκράτης ποιεῖ ἐν τῷ Πανηγυρικῷ ἐπὶ τέλει “φήμην δὲ καὶ μνήμην” καὶ “οἵτινες ἔτλησαν”. φθέγγονται γὰρ τὰ τοιαῦτα ἐνθουσιάζοντες, ὥστε καὶ ἀποδέχονται δηλονότι ὁμοίως ἔχοντες. διὸ καὶ τῇ ποιήσει ἤρμοσεν· ἐνθεον γὰρ ἢ ποιήσις. ἢ δὴ οὕτως δεῖ, ἢ μετ' εἰρωνείας, ὥσπερ Γοργίας ἐποίει καὶ τὰ ἐν τῷ Φαίδρῳ.

Τὸ δὲ σχῆμα τῆς λέξεως δεῖ μῆτε ἔμμετρον εἶναι μῆτε ἄρρυθμον· τὸ μὲν γὰρ ἀπίθανον (πεπλάσθαι γὰρ δοκεῖ), καὶ ἅμα καὶ ἐξίστησι· προσέχειν γὰρ ποιεῖ τῷ ὁμοίῳ, πότε πάλιν ἥξει· ὥσπερ οὖν τῶν κηρύκων προλαμβάνουσι τὰ παιδιά τὸ “τίνα αἰρεῖται ἐπίτροπον ὁ ἀπελευθερούμενος;”, “Κλέωνα”. τὸ δὲ ἄρρυθμον ἀπέραντον, δεῖ δὲ πεπεράνθαι μὲν, μὴ μέτρῳ δέ· ἀηδὲς γὰρ καὶ ἄγνωστον τὸ ἄπειρον. περαίνεται δὲ ἀριθμῷ πάντα· ὁ δὲ τοῦ σχήματος τῆς λέξεως ἀριθμὸς ῥυθμός ἐστιν, οὐ καὶ τὰ μέτρα τμήματα· διὸ ῥυθμὸν δεῖ ἔχειν τὸν λόγον, μέτρον δὲ μή· ποίημα γὰρ ἔσται. ῥυθμὸν δὲ μὴ ἀκριβῶς· τοῦτο δὲ ἔσται ἐὰν μέχρι τοῦ ἦ. τῶν δὲ ῥυθμῶν ὁ μὲν ἡρῶος σεμνῆς ἄλλ' οὐ λεκτικῆς



ἁρμονίας δεόμενος, ὁ δ' ἱαμβος αὐτὴ ἐστὶν ἢ λέξις ἢ τῶν πολλῶν (διὸ μάλιστα πάντων τῶν μέτρων ἱαμβεῖα φθέγγονται λέγοντες), δεῖ δὲ σεμνότητα γενέσθαι καὶ ἐκστῆσαι. ὁ δὲ τροχαῖος κορδακικώτερος· δηλοῖ δὲ [1409a] τὰ τετράμετρα· ἔστι γὰρ τροχερὸς ῥυθμὸς τὰ τετράμετρα. λείπεται δὲ παιάν, ὃ ἔχρῳντο μὲν ἀπὸ Θρασυμάχου ἀρξάμενοι, οὐκ εἶχον δὲ λέγειν τίς ἦν. ἔστι δὲ τρίτος ὁ παιάν, καὶ ἐχόμενος τῶν εἰρημένων· τρία γὰρ πρὸς δύο ἐστίν, ἐκείνων δὲ ὁ μὲν ἓν πρὸς ἓν, ὁ δὲ δύο πρὸς ἓν, ἔχεται δὲ τῶν λόγων τούτων ὁ ἡμιόλιος· οὗτος δ' ἐστὶν ὁ παιάν. οἱ μὲν οὖν ἄλλοι διὰ τε τὰ εἰρημένα ἀφετέοι, καὶ διότι μετρικοί· ὁ δὲ παιάν ληπτέος· ἀπὸ μόνου γὰρ οὐκ ἔστι μέτρον τῶν ῥηθέντων ῥυθμῶν, ὥστε μάλιστα λανθάνειν. νῦν μὲν οὖν χρῶνται τῷ ἐνὶ παιᾶνι καὶ ἀρχόμενοι «καὶ τελευτῶντες», δεῖ δὲ διαφέρειν τὴν τελευτὴν τῆς ἀρχῆς. ἔστιν δὲ παιᾶνος δύο εἶδη ἀντικείμενα ἀλλήλοις, ὧν τὸ μὲν ἐν ἀρχῇ ἀρμόττει, ὥσπερ καὶ χρῶνται· οὗτος δ' ἐστὶν οὗ ἄρχει μὲν ἢ μακρά, τελευτῶσιν δὲ τρεῖς βραχεῖαι, “Δαλογενὲς εἴτε Λυκίαν”, καὶ “Χρυσεοκόμα Ἑκατε παῖ Διός”. ἕτερος δ' ἐξ ἐναντίας, οὗ βραχεῖαι ἄρχουσιν τρεῖς, ἢ δὲ μακρὰ τελευταία·

μετὰ δὲ γὰν ὕδατά τ' ὠκεανὸν ἠφάνισε νύξ.

οὗτος δὲ τελευτὴν ποιεῖ· ἢ γὰρ βραχεῖα διὰ τὸ ἀτελὲς εἶναι ποιεῖ κολοβόν. ἀλλὰ δεῖ τῇ μακρᾷ ἀποκόπτεσθαι, καὶ δήλην εἶναι τὴν τελευτὴν μὴ διὰ τὸν γραφέα, μηδὲ διὰ τὴν παραγραφὴν, ἀλλὰ διὰ τὸν ῥυθμόν.

ὅτι μὲν οὖν εὐρυθμον δεῖ εἶναι τὴν λέξιν καὶ μὴ ἄρρυθμον, καὶ τίνες εὐρυθμον ποιοῦσι ῥυθμοὶ καὶ πῶς ἔχοντες, εἴρηται· τὴν δὲ λέξιν ἀνάγκη εἶναι ἢ εἰρομένην καὶ τῷ συνδέσμῳ μίαν, ὥσπερ αἱ ἐν τοῖς διθυράμβοις ἀναβολαί, ἢ κατεστραμμένην καὶ ὁμοίαν ταῖς τῶν ἀρχαίων ποιητῶν ἀντιστροφῆς. ἢ μὲν οὖν εἰρομένη λέξις ἢ ἀρχαία ἐστίν [“Ἡροδότου Θουρίου ἡδ' ἱστορίας ἀπόδειξις”] (ταύτη γὰρ πρότερον μὲν ἅπαντες, νῦν δὲ οὐ πολλοὶ χρῶνται)· λέγω δὲ εἰρομένην ἢ οὐδὲν ἔχει τέλος καθ' αὐτήν, ἂν μὴ τὸ πρᾶγμα «τὸ» λεγόμενον τελειωθῇ. ἔστι δὲ ἀηδὴς διὰ τὸ ἄπειρον· τὸ γὰρ τέλος πάντες βούλονται καθορᾶν· διόπερ ἐπὶ τοῖς καμπτήρσιν ἐκπνέουσιν καὶ ἐκλύονται· προορῶντες γὰρ τὸ πέρας οὐ κάμνουσι πρότερον. ἢ μὲν οὖν εἰρομένη [τῆς λέξεώς] ἐστὶν ἡδε, κατεστραμμένη δὲ ἢ ἐν περιόδοις· λέγω δὲ περίοδον λέξιν ἔχουσαν ἀρχὴν καὶ τελευτὴν αὐτὴν καθ' αὐτήν καὶ [1409b] μέγεθος εὐσύνοπτον. ἡδεῖα δ' ἢ τοιαύτη καὶ εὐμαθής, ἡδεῖα μὲν διὰ τὸ ἐναντίως ἔχειν τῷ ἀπεράντῳ, καὶ ὅτι ἀεὶ τί οἴεται ἔχειν ὁ ἀκροατὴς καὶ πεπεράνθαι τι αὐτῷ, τὸ δὲ μηδὲν προνοεῖν μηδὲ ἀνύειν ἀηδές· εὐμαθὴς δὲ ὅτι εὐμνημόνευτος, τοῦτο δὲ ὅτι ἀριθμὸν ἔχει ἢ ἐν περιόδοις λέξις, ὃ πάντων εὐμνημονευτότατον.

διὸ καὶ τὰ μέτρα πάντες μνημονεύουσιν μᾶλλον τῶν χύδην· ἀριθμὸν γὰρ ἔχει ὧς μετρεῖται. δεῖ δὲ τὴν περίοδον καὶ τῇ διανοίᾳ τετελειῶσθαι, καὶ μὴ διακόπτεσθαι ὥσπερ τὰ Σοφοκλέους ἰαμβεῖα,

Καλυδῶν μὲν ἦδε γαῖα· Πελοπίας χθονός·

τοῦναντίον γὰρ ἔστιν ὑπολαβεῖν τῷ διαιρεῖσθαι, ὥσπερ καὶ ἐπὶ τοῦ εἰρημένου τὴν Καλυδῶνα εἶναι τῆς Πελοποννήσου.

περίοδος δὲ ἡ μὲν ἐν κώλοις ἡ δ' ἀφελής. ἔστιν δ' ἐν κώλοις μὲν λέξεις ἡ τετελειωμένη τε καὶ διηρημένη καὶ εὐανάπνευστος, μὴ ἐν τῇ διαιρέσει ὥσπερ καὶ ἡ περίοδος, ἄλλ' ὅλη (κῶλον δ' ἐστὶν τὸ ἕτερον μόριον ταύτης)· ἀφελῇ δὲ λέγω τὴν μονόκωλον. δεῖ δὲ καὶ τὰ κῶλα καὶ τὰς περιόδους μήτε μούρους εἶναι μήτε μακράς. τὸ μὲν γὰρ μικρὸν προσπταίνει πολλάκις ποιεῖ τὸν ἀκροατὴν (ἀνάγκη γὰρ ὅταν, ἔτι ὁρμῶν ἐπὶ τὸ πόρρω καὶ τὸ μέτρον οὐ ἔχει ἐν ἑαυτῷ ὅρον, ἀντισπασθῇ παυσαμένου, οἷον πρόσπταισιν γίνεσθαι διὰ τὴν ἀντίκρουσιν)· τὰ δὲ μακρὰ ἀπολείπεσθαι ποιεῖ, ὥσπερ οἱ ἐξωτέρω ἀποκάμπτοντες τοῦ τέρματος· ἀπολείπουσι γὰρ καὶ οὗτοι τοὺς συμπεριπατοῦντας, ὁμοίως δὲ καὶ αἱ περίοδοι αἱ μακραὶ οὖσαι λόγος γίνεται καὶ ἀναβολῇ ὅμοιον, ὥστε γίνεται ὃ ἔσκωψεν Δημόκριτος ὁ Χῖος εἰς Μελανιππίδην ποιήσαντα ἀντὶ τῶν ἀντιστροφῶν ἀναβολάς

οἷ τ' αὐτῷ κακὰ τεύχει ἀνὴρ ἄλλω κακὰ τεύχων,

ἡ δὲ μακρὰ ἀναβολὴ τῷ ποιήσαντι κακίστη·

ἄρμόττει γὰρ τὸ τοιοῦτον καὶ εἰς τὰς μακροκώλους λέγειν. αἶ τε λίαν βραχύκωλοι οὐ περίοδος γίνεται· προπετὴ οὖν ἄγει τὸν ἀκροατὴν.

τῆς δὲ ἐν κώλοις λέξεως ἡ μὲν διηρημένη ἐστὶν ἡ δὲ ἀντικειμένη, διηρημένη μὲν, οἷον “πολλάκις ἐθαύμασα τῶν τὰς πανηγύρεις συναγαγόντων καὶ τοὺς γυμνικοὺς ἀγῶνας καταστησάντων”, ἀντικειμένη δὲ ἐν ἣ ἐκατέρω τῷ κώλῳ ἢ [1410a] πρὸς ἐναντίῳ ἐναντίον σύγκειται ἢ ταὐτὸ ἐπέζευκται τοῖς ἐναντίοις, οἷον “ἀμφοτέρους δ' ὤνησαν, καὶ τοὺς ὑπομείναντας καὶ τοὺς ἀκολουθήσαντας· τοῖς μὲν γὰρ πλείω τῆς οἴκοι προσεκτῆσαντο, τοῖς δ' ἱκανὴν τὴν οἴκοι κατέλιπον”. ἐναντία ὑπομονὴ ἀκολούθησις, ἱκανὸν πλεῖον. “ὥστε καὶ τοῖς χρημάτων δεομένοις καὶ τοῖς ἀπολαῦσαι βουλομένοις”· ἀπόλαυσις κτήσεται ἀντίκειται. καὶ ἔτι “συμβαίνει πολλάκις ἐν ταύταις καὶ τοὺς φρονίμους ἀτυχεῖν καὶ τοὺς ἄφρονες κατορθοῦν”. “εὐθὺς μὲν τῶν ἀριστείων ἡξιώθησαν, οὐ πολὺ δὲ ὕστερον τὴν ἀρχὴν τῆς θαλάττης ἔλαβον”. “πλεῦσαι

μὲν διὰ τῆς ἡπείρου, πεζεῦσαι δὲ διὰ τῆς θαλάττης, τὸν μὲν Ἑλλήσποντον ζεύξας, τὸν δ' Ἄθω διορύξας.” “καὶ φύσει πολίτας ὄντας νόμῳ τῆς πόλεως στέρεσθαι.” “οἱ μὲν γὰρ αὐτῶν κακῶς ἀπώλοντο, οἱ δ' αἰσchrῶς ἐσώθησαν.” “καὶ ἰδίᾳ μὲν τοῖς βαρβάροις οἰκέταις χρῆσθαι, κοινῇ δὲ πολλοὺς τῶν συμμάχων περιορᾶν δουλεύοντας.” “ἢ ζῶντας ἔξιν ἢ τελευτήσαντας καταλείψειν.” καὶ ὁ εἰς Πειθόλαόν τις εἶπεν καὶ Λυκόφρονα ἐν τῷ δικαστηρίῳ, “οὗτοι δ' ὑμᾶς οἴκοι μὲν ὄντες ἐπώλουν, ἐλθόντες δ' ὥς ὑμᾶς ἐώνηνται”. ἅπαντα γὰρ ταῦτα ποιεῖ τὸ εἰρημένον. ἡδεῖα δὲ ἐστὶν ἡ τοιαύτη λέξις, ὅτι τάναντία γνωριμώτατα καὶ παρ' ἄλληλα μᾶλλον γνώριμα, καὶ ὅτι ἔοικεν συλλογισμῷ· ὁ γὰρ ἔλεγχος συναγωγὴ τῶν ἀντικειμένων ἐστίν.

ἀντίθεσις μὲν οὖν τὸ τοιοῦτον ἐστίν, παρίσωσις δ' ἐὰν ἴσα τὰ κῶλα, παρομοίωσις δὲ ἐὰν ὅμοια τὰ ἔσχατα ἔχη ἐκάτερον τὸ κῶλον· ἀνάγκη δὲ ἢ ἐν ἀρχῇ ἢ ἐπὶ τελευτῆς ἔχειν, καὶ ἐν ἀρχῇ μὲν αἰετὰ ὀνόματα, ἐπὶ δὲ τελευτῆς τὰς ἐσχάτας συλλαβὰς ἢ τοῦ αὐτοῦ ὀνόματος πτώσεις ἢ τὸ αὐτὸ ὄνομα· ἐν ἀρχῇ μὲν τὰ τοιαῦτα, “ἀργὸν γὰρ ἔλαβεν ἀργὸν παρ' αὐτοῦ”,

δωρητοὶ τ' ἐπέλοντο παράρρητοὶ τ' ἐπέεσσιν·

ἐπὶ τελευτῆς δὲ “ὥθηθης ἂν αὐτὸν <οὐ> παιδίον τετοκέσαι, ἀλλ' αὐτὸν παιδίον γεγονέναι”, “ἐν πλείσταις δὲ φροντίσι καὶ ἐν ἐλαχίσταις ἐλπίσιν”. πτώσεις δὲ ταῦτο “ἀξιοῖ δὲ σταθῆναι χαλκοῦς, οὐκ ἄξιος ὢν χαλκοῦ;” ταῦτο δ' ὄνομα “σὺ δ' αὐτὸν καὶ ζῶντα ἔλεγες κακῶς καὶ νῦν γράφεις κακῶς”. ἀπὸ συλλαβῆς δὲ “τί ἂν ἔπαθες δεινόν, εἰ ἄνδρ' εἶδες ἀργόν;”

[1410b] ἔστιν δὲ ἅμα πάντα ἔχειν ταῦτό, καὶ ἀντίθεσιν εἶναι τὸ αὐτὸ καὶ πάρισον καὶ ὁμοιοτέλευτον. αἱ δ' ἀρχαὶ τῶν περιόδων σχεδὸν ἐν τοῖς Θεοδεκτείοις ἐξηρίθμηνται. εἰσὶν δὲ καὶ ψευδεῖς ἀντιθέσεις, οἷον καὶ Ἐπίχαρμος ἐποίει,

τόκα μὲν ἐν τήνων ἐγὼν ἦν, τόκα δὲ παρὰ τήνοις ἐγὼν.

Ἐπεὶ δὲ διώρισται περὶ τούτων, πόθεν λέγεται τὰ ἀστεῖα καὶ τὰ εὐδοκιμοῦντα λεκτέον. ποιεῖν μὲν οὖν ἐστὶν τοῦ εὐφυοῦς ἢ τοῦ γεγυμνασμένου, δεῖξαι δὲ τῆς μεθόδου ταύτης. εἰπώμεν οὖν καὶ διαριθμησώμεθα· ἀρχὴ δ' ἔστω ἡμῖν αὕτη. τὸ γὰρ μανθάνειν ῥαδίως ἢ δὴ φύσει πᾶσιν ἐστί, τὰ δὲ ὀνόματα σημαίνει τι, ὥστε ὅσα τῶν ὀνομάτων ποιεῖ ἡμῖν μάθησιν, ἡδιστα. αἱ μὲν οὖν γλῶτται ἀγνώστες, τὰ δὲ κύρια ἴσμεν· ἡ δὲ μεταφορὰ ποιεῖ τοῦτο μάλιστα· ὅταν γὰρ εἴπη τὸ γῆρας καλάμην, ἐποίησεν

μάθησιν καὶ γνῶσιν διὰ τοῦ γένους· ἄμφω γὰρ ἀπηγνηκότα. ποιοῦσιν μὲν οὖν καὶ αἱ τῶν ποιητῶν εἰκόνες τὸ αὐτό· διόπερ ἂν εὖ, ἀστεῖον φαίνεται. ἔστιν γὰρ ἡ εἰκὼν, καθάπερ εἴρηται πρότερον, μεταφορὰ διαφέρουσα προθέσει· διὸ ἦττον ἡδύ, ὅτι μακροτέρως· καὶ οὐ λέγει ὡς τοῦτο ἐκεῖνο· οὐκοῦν οὐδὲ ζητεῖ τοῦτο ἡ ψυχὴ. ἀνάγκη δὴ καὶ λέξιν καὶ ἐνθυμήματα ταῦτ' εἶναι ἀστεῖα ὅσα ποιεῖ ἡμῖν μάθησιν ταχεῖαν· διὸ οὔτε τὰ ἐπιπόλαια τῶν ἐνθυμημάτων εὐδοκιμεῖ (ἐπιπόλαια γὰρ λέγομεν τὰ παντὶ δῆλα, καὶ ἃ μηδὲν δεῖ ζητῆσαι), οὔτε ὅσα εἰρημένα ἀγνοοῦμεν, ἀλλ' ὅσων ἢ ἅμα λεγομένων ἡ γνῶσις γίνεται, καὶ εἰ μὴ πρότερον ὑπῆρχεν, ἢ μικρὸν ὑστερίζει ἡ διάνοια· γίγνεται γὰρ οἶον μάθησις, ἐκείνων δὲ οὐδετέρου. κατὰ μὲν οὖν τὴν διάνοιαν τοῦ λεγομένου τὰ τοιαῦτα εὐδοκιμεῖ τῶν ἐνθυμημάτων, κατὰ δὲ τὴν λέξιν τῷ μὲν σχήματι, ἐὰν ἀντικειμένως λέγηται, οἶον “καὶ τὴν τοῖς ἄλλοις κοινὴν εἰρήνην νομιζόντων τοῖς αὐτῶν ἰδίοις πόλεμον”. ἀντίκειται πόλεμος εἰρήνῃ· τοῖς δ' ὀνόμασιν, ἐὰν ἔχη μεταφοράν, καὶ ταύτην μὴτ' ἄλλοτρίαν, χαλεπὸν γὰρ συνιδεῖν, μὴτ' ἐπιπόλαιον, οὐδὲν γὰρ ποιεῖ πάσχειν. ἔτι εἰ πρὸ ὁμμάτων ποιεῖ· ὁρᾶν γὰρ δεῖ [τὰ] πραττόμενα μᾶλλον ἢ μέλλοντα. δεῖ ἄρα τούτων στοχάζεσθαι τριῶν, μεταφορᾶς ἀντιθέσεως ἐνεργείας.

[1411a] τῶν δὲ μεταφορῶν τεττάρων οὐσῶν εὐδοκιμοῦσι μάλιστα αἱ κατ' ἀναλογίαν, ὥσπερ Περικλῆς ἔφη τὴν νεότητά τὴν ἀπολομένην ἐν τῷ πολέμῳ οὕτως ἠφανίσθαι ἐκ τῆς πόλεως ὥσπερ εἴ τις τὸ ἔαρ ἐκ τοῦ ἐνιαυτοῦ ἐξέλκοι. καὶ Λεπτίνης περὶ Λακεδαιμονίων, οὐκ ἂν περιδεῖν τὴν Ἑλλάδα ἑτερόφθαλμον γενομένην. καὶ Κηφισόδοτος, σπουδάζοντος Χάρητος εὐθύνας δοῦναι περὶ τὸν Ὀλυνθιακὸν πόλεμον, ἡγανάκτει, φάσκων εἰς πνῖγμα τὸν δῆμον ἄγχοντα τὰς εὐθύνας πειρᾶσθαι δοῦναι. καὶ παρακαλῶν ποτὲ τοὺς Ἀθηναίους εἰς Εὐβοίαν ἐπισιτισαμένους ἔφη δεῖν ἐξιέναι τὸ Μιλτιάδου ψήφισμα. καὶ Ἰφικράτης σπείσαμένων Ἀθηναίων πρὸς Ἐπίδauρον καὶ τὴν παραλίαν ἡγανάκτει, φάσκων αὐτοὺς τὰ ἐφόδια τοῦ πολέμου παρηρηῆσθαι. καὶ Πειθόλαος τὴν πάραλον ῥόπαλον τοῦ δήμου, Σηστὸν δὲ τηλίαν τοῦ Πειραιέως. καὶ Περικλῆς τὴν Αἴγινα ἀφελεῖν ἐκέλευσε, τὴν λήμνην τοῦ Πειραιέως. καὶ Μοιροκλῆς οὐθὲν ἔφη πονηρότερος εἶναι, ὀνομάσας τινὰ τῶν ἐπαικῶν· ἐκεῖνον μὲν γὰρ ἐπιτρίτων τόκων πονηρεύεσθαι, αὐτὸς δὲ ἐπιδεκάτων. καὶ τὸ Ἀναξανδρίδου ἱαμβεῖον ὑπὲρ τῶν θυγατέρων πρὸς τὸν γάμον ἐγχρονιζουσῶν “ὑπερήμεροί μοι τῶν γάμων αἱ παρθένοι”. καὶ τὸ Πολυεύκτου εἰς ἀποπληκτικὸν τινα Σπεύσιππον, τὸ μὴ δύνασθαι ἡσυχίαν ἄγειν ὑπὸ τῆς τύχης ἐν πεντεσυρίγγῳ νόσῳ δεδεμένον. καὶ Κηφισόδοτος τὰς τριήρεις ἐκάλει μύλωνας ποικίλους, ὁ Κύων δὲ τὰ καπηλεῖα τὰ Ἀττικὰ φιδίτια· Αἰσίων δέ, ὅτι εἰς Σικελίαν τὴν πόλιν ἐξέχεαν· τοῦτο γὰρ μεταφορὰ καὶ πρὸ ὁμμάτων. καὶ “ὥστε βοῆσαι τὴν Ἑλλάδα”, καὶ τοῦτο τρόπον τινὰ μεταφορὰ καὶ πρὸ

ὀμμάτων. καὶ ὥσπερ Κηφισόδοτος εὐλαβεῖσθαι ἐκέλευεν μὴ πολλὰς ποιήσωσιν τὰς συνδρομάς [ἐκκλησίας]. καὶ Ἰσοκράτης πρὸς τοὺς συντρέχοντας ἐν ταῖς πανηγύρεσιν. καὶ οἷον ἐν τῷ ἐπιταφίῳ, διότι ἄξιον ἦν ἐπὶ τῷ τάφῳ τῷ τῶν ἐν Σαλαμῖνι τελευτησάντων κείρασθαι τὴν Ἑλλάδα ὡς συγκαταθαπτομένης τῇ ἀρετῇ αὐτῶν τῆς ἐλευθερίας· εἰ μὲν γὰρ εἶπεν ὅτι ἄξιον δακρῦσαι συγκαταθαπτομένης τῆς ἀρετῆς, μεταφορὰ καὶ πρὸ ὀμμάτων, τὸ δὲ “τῇ ἀρετῇ [1411b] τῆς ἐλευθερίας” ἀντίθεσιν τινα ἔχει. καὶ ὡς Ἰφικράτης εἶπεν “ἡ γὰρ ὁδὸς μοι τῶν λόγων διὰ μέσων τῶν Χάρητι πεπραγμένων ἐστίν” μεταφορὰ κατ’ ἀναλογίαν, καὶ τὸ διὰ μέσου πρὸ ὀμμάτων ποιεῖ. καὶ τὸ φάναι παρακαλεῖν τοὺς κινδύνους τοῖς κινδύνους βοηθήσοντας, πρὸ ὀμμάτων <καὶ> μεταφορὰ. καὶ Λυκολέων ὑπὲρ Χαβρίου “οὐδὲ τὴν ἱκετηρίαν αἰσχυρθέντες αὐτοῦ, τὴν εἰκόνα τὴν χαλκῇν”· μεταφορὰ γὰρ ἐν τῷ παρόντι, ἀλλ’ οὐκ ἀεὶ, ἀλλὰ πρὸ ὀμμάτων· κινδυνεύοντος γὰρ αὐτοῦ ἱκετεύει ἡ εἰκὼν, τὸ “ἔμψυχον δὴ ἄψυχον”, τὸ ὑπόμνημα τῶν τῆς πόλεως ἔργων. καὶ “πάντα τρόπον μικρὸν φρονεῖν μελετῶντες”· τὸ γὰρ μελετᾶν αὖξιν τι ἐστίν. καὶ ὅτι “τὸν νοῦν ὁ θεὸς φῶς ἀνῆψεν ἐν τῇ ψυχῇ”· ἄμφω γὰρ δηλοῖ τι. “οὐ γὰρ διαλυόμεθα τοὺς πολέμους ἀλλ’ ἀναβαλλόμεθα”· ἄμφω γὰρ ἐστὶν μέλλοντα, καὶ ἡ ἀναβολὴ καὶ ἡ τοιαύτη εἰρήνη. καὶ τὸ τὰς συνθήκας φάναι τρόπιον εἶναι πολὺ κάλλιον τῶν ἐν τοῖς πολέμοις γινομένων· τὰ μὲν γὰρ ὑπὲρ μικρῶν καὶ μιᾶς τύχης, αὐταὶ δ’ ὑπὲρ παντὸς τοῦ πολέμου· ἄμφω γὰρ νίκης σημεῖα. καὶ ὅτι αἱ πόλεις τῷ ψόγῳ τῶν ἀνθρώπων μεγάλας εὐθύνας διδόασιν· ἡ γὰρ εὐθυνα βλάβη τις δικαία ἐστίν.

Ὅτι μὲν οὖν τὰ ἀστεῖα ἐκ μεταφορᾶς τε τῆς ἀνάλογον λέγεται καὶ τῷ πρὸ ὀμμάτων ποιεῖν, εἴρηται· λεκτέον δὲ τί λέγομεν πρὸ ὀμμάτων, καὶ τί ποιοῦσι γίγνεται τοῦτο. λέγω δὴ πρὸ ὀμμάτων ταῦτα ποιεῖν ὅσα ἐνεργοῦντα σημαίνει, οἷον τὸν ἀγαθὸν ἄνδρα φάναι εἶναι τετράγωνον μεταφορὰ, (ἄμφω γὰρ τέλεια), ἀλλ’ οὐ σημαίνει ἐνέργειαν· ἀλλὰ τὸ “ἀνθοῦσαν ἔχοντος τὴν ἀκμήν” ἐνέργεια, καὶ τὸ “σὲ δ’ ὥσπερ ἄφετον” [ἐλεύθερον] ἐνέργεια, καὶ

«τοῦντεῦθεν οὖν» Ἑλληνες ἄξαντες ποσίν·

τὸ ἄξαντες ἐνέργεια καὶ μεταφορὰ· ταχὺ γὰρ λέγει. καὶ ὡς κέχρηται πολλαχοῦ Ὅμηρος, τὸ τὰ ἄψυχα ἔμψυχα ποιεῖν διὰ τῆς μεταφορᾶς. ἐν πᾶσι δὲ τῷ ἐνέργειαν ποιεῖν εὐδοκιμεῖ, οἷον ἐν τοῖσδε, “αὐτὶς ἐπὶ δάπεδόνδε κυλίνδετο λᾶας ἀναιδής”, καὶ [1412a] “ἔπτατ’ οἰστός”, καὶ “ἐπιπτέσθαι μενεαίνων”, καὶ “ἐν γαίῃ ἴσταντο λιλαϊόμενα χροὸς ἄσαι”, καὶ “αἶχμῃ δὲ στέρνοιο διέσσυτο μαιμώωσα”. ἐν πᾶσι γὰρ τούτοις διὰ τὸ ἔμψυχα εἶναι ἐνεργοῦντα φαίνεται· τὸ ἀναισχυντεῖν γὰρ καὶ μαιμᾶν καὶ τὰ ἄλλα ἐνέργεια. ταῦτα δὲ προσῆψε διὰ

τῆς κατ' ἀναλογίαν μεταφοῶς· ὡς γὰρ ὁ λίθος πρὸς τὸν Σίσυφον, ὁ ἀναισχυντῶν πρὸς τὸν ἀναισχυντούμενον. ποιεῖ δὲ καὶ ἐν ταῖς εὐδοκιμούσαις εἰκόσιν ἐπὶ τῶν ἀψύχων ταῦτά·

“κυρτά, φαληριόωντα· πρὸ μὲν τ' ἄλλ', αὐτὰρ ἐπ' ἄλλα”· κινούμενα γὰρ καὶ ζῶντα ποιεῖ πάντα, ἢ δ' ἐνέργεια κίνησις.

δεῖ δὲ μεταφέρειν, καθάπερ εἴρηται πρότερον, ἀπὸ οἰκείων καὶ μὴ φανερῶν, οἷον καὶ ἐν φιλοσοφίᾳ τὸ ὅμοιον καὶ ἐν πολὺ διέχουσι θεωρεῖν εὐστόχου, ὥσπερ Ἀρχύτας ἔφη ταῦτόν εἶναι διαιτητὴν καὶ βωμόν· ἐπ' ἄμφω γὰρ τὸν ἀδικούμενον καταφεύγειν. ἢ εἴ τις φαίη ἄγκυραν καὶ κρεμάθραν τὸ αὐτὸ εἶναι· ἄμφω γὰρ ταῦτό τι, ἀλλὰ διαφέρει τῷ ἄνωθεν καὶ κάτωθεν. καὶ τὸ ἀνωμαλίσθαι τὰς πόλεις ἐν πολὺ διέχουσιν ταῦτό, ἐν ἐπιφανείᾳ καὶ δυνάμεσι τὸ ἴσον.

ἔστιν δὲ καὶ τὰ ἀστεῖα τὰ πλεῖστα διὰ μεταφοῶς καὶ ἐκ τοῦ προσεξαπατᾶν· μᾶλλον γὰρ γίγνεται δῆλον ὅτι τι ἔμαθε παρὰ τὸ ἐναντίως ἔχειν, καὶ ἔοικεν λέγειν ἢ ψυχὴν “ὡς ἀληθῶς, ἐγὼ δὲ ἤμαρτον”. καὶ τῶν ἀποφθεγμάτων δὲ τὰ ἀστεῖά ἐστιν ἐκ τοῦ μὴ ὅφρῃσι λέγειν, οἷον τὸ Στησιχόρου, ὅτι οἱ τέττιγες ἑαυτοῖς χαμόθεν ἄσονται. καὶ τὰ εὖ ἠνιγμένα διὰ τὸ αὐτὸ ἡδέα (μάθησις γάρ ἐστι καὶ μεταφορά), καὶ (ὃ λέγει Θεόδωρος) τὸ καινὰ λέγειν. γίγνεται δὲ ὅταν παράδοξον ἦ, καὶ μὴ, ὡς ἐκεῖνος λέγει, πρὸς τὴν ἔμπροσθεν δόξαν, ἀλλ' ὥσπερ ἐν τοῖς γελοίοις τὰ παραπεποιημένα (ὅπερ δύναται καὶ τὰ παρὰ γράμμα σκώμματα· ἐξαπατᾶ γάρ), καὶ ἐν τοῖς μέτροις· οὐ γὰρ ὥσπερ ὁ ἀκούων ὑπέλαβεν· “ἔστειχε δ' ἔχων ὑπὸ ποσσὶ χίμεθλα”. ὁ δ' ὦετο πέδιλα ἔρεῖν. τούτου δ' ἅμα λεγομένου δεῖ δῆλον εἶναι. τὰ δὲ παρὰ γράμμα ποιεῖ οὐχ ὃ λέγει λέγειν, ἀλλ' ὃ μεταστρέφει ὄνομα, οἷον τὸ Θεοδώρου εἰς Νίκωνα τὸν κιθαρῳδὸν “θράξει σε”, προσποιεῖται γὰρ λέγειν τὸ [1412b] “Θρᾶξ εἰ σύ” καὶ ἐξαπατᾶ· ἄλλο γὰρ λέγει. διὸ μαθόντι ἡδύ, ἐπεὶ εἰ μὴ ὑπολαμβάνει Θρᾶκα εἶναι, οὐ δόξει ἀστεῖον εἶναι. καὶ τὸ “βούλει αὐτὸν πέρσαι”. δεῖ δὲ ἀμφοτέρω προσηκόντως λεχθῆναι. οὕτω δὲ καὶ τὰ ἀστεῖα, οἷον τὸ φάναι Ἀθηναίοις τὴν τῆς θαλάττης ἀρχὴν μὴ ἀρχὴν εἶναι τῶν κακῶν· ὄνασθαι γάρ. ἢ ὥσπερ Ἰσοκράτης τὴν ἀρχὴν τῇ πόλει ἀρχὴν εἶναι τῶν κακῶν. ἀμφοτέρως γὰρ ὃ οὐκ ἂν ὠήθη τις ἔρεῖν, τοῦτ' εἴρηται, καὶ ἐγνώσθη ὅτι ἀληθές· τό τε γὰρ τὴν ἀρχὴν φάναι ἀρχὴν εἶναι οὐθὲν σοφόν, ἀλλ' οὐχ οὕτω λέγει ἀλλ' ἄλλως, καὶ ἀρχὴν οὐχ ὃ εἶπεν ἀπόφησιν, ἀλλ' ἄλλως. ἐν ἅπασιν δὲ τούτοις, ἔαν προσηκόντως τὸ ὄνομα ἐνέγκῃ ὁμωνυμία ἢ μεταφοῶς, τότε τὸ εὖ. οἷον “Ἀνάσχετος οὐκ ἀνασχετός” ὁμωνυμία ἀπέφησε, ἀλλὰ προσηκόντως, εἰ ἀηδής. καὶ “οὐκ ἂν γένοιο μᾶλλον ἢ σε δεῖ ξένος”. “ξένος” <γὰρ> “οὐ μᾶλλον

ἢ σε δεῖ” τὸ αὐτὸ καὶ “οὐ δεῖ τὸν ξένον ξένον ἀεὶ εἶναι”· ἀλλότριον γὰρ καὶ τοῦτο. τὸ αὐτὸ καὶ τὸ Ἀναξανδρίδου τὸ ἐπαινούμενον,

καλὸν γ’ ἀποθανεῖν πρὶν θανάτου δρᾶν ἄξιον·

ταὐτὸ γάρ ἐστι τῷ εἰπεῖν “ἄξιόν γ’ ἀποθανεῖν μὴ ὄντα ἄξιον ἀποθανεῖν”, ἢ “ἄξιόν γ’ ἀποθανεῖν μὴ θανάτου ἄξιον ὄντα”, ἢ “μὴ ποιοῦντα θανάτου ἄξια”. τὸ μὲν οὖν εἶδος τὸ αὐτὸ τῆς λέξεως τούτων· ἀλλ’ ὅσω ἂν <ἐν> ἐλάττονι καὶ ἀντικειμένως λεχθῇ, τοσούτῳ εὐδοκιμεῖ μᾶλλον. τὸ δ’ αἵτιον ὅτι ἡ μάθησις διὰ μὲν τὸ ἀντικεῖσθαι μᾶλλον, διὰ δὲ τὸ ἐν ὀλίγῳ θᾶττον γίνεται. δεῖ δ’ ἀεὶ προσεῖναι [ἦ] τὸ πρὸς ὃν λέγεται [ἦ] ὀρθῶς λέγεσθαι, εἰ τὸ λεγόμενον ἀληθές καὶ μὴ ἐπιπόλαιον <ἔσται>· ἔστιν γὰρ ταῦτα χωρὶς ἔχειν, οἷον “ἀποθνήσκειν δεῖ μὴτὲν ἀμαρτάνοντα” [ἀλλ’ οὐκ ἀστεῖον], “τὴν ἀξίαν δεῖ γαμεῖν τὸν ἄξιον”, ἀλλ’ οὐκ ἀστεῖον, ἀλλ’ <ἦ> ἐὰν ἅμα ἅμφω ἔχη· “ἄξιόν γ’ ἀποθανεῖν μὴ ἄξιον ὄντα τοῦ ἀποθανεῖν”. ὅσω δ’ ἂν πλείω ἔχη, τοσούτῳ ἀστειότερον φαίνεται, οἷον εἰ καὶ τὰ ὀνόματα μεταφορὰ εἴη καὶ μεταφορὰ τοιαδὶ καὶ ἀντίθεσις καὶ παρίστωσις, καὶ ἔχοι ἐνέργειαν.

εἰσὶν δὲ καὶ αἱ εἰκόνες, ὥσπερ εἴρηται καὶ ἐν τοῖς ἄνω, αἱ εὐδοκιμοῦσαι τρόπον τινὰ μεταφοραί· ἀεὶ γὰρ ἐκ δυοῖν λέγονται, ὥσπερ ἡ ἀνάλογον μεταφορὰ, οἷον “ἡ ἀσπίς”, φαμέν, [1413a] “ἔστι φιάλη Ἄρεως”, καὶ “<τὸ> τόξον φόρμιγξ ἄχορδος”. οὕτω μὲν οὖν λέγουσιν οὐχ ἀπλοῦν, τὸ δ’ εἰπεῖν τὸ τόξον φόρμιγγα ἢ τὴν ἀσπίδα φιάλην ἀπλοῦν. καὶ εἰκάζουσιν δὲ οὕτως, οἷον πιθήκῳ αὐλητήν, λύχνῳ ψακαζομένῳ [εἰς] μύωπα· ἅμφω γὰρ συνάγεται. τὸ δὲ εὖ ἐστὶν ὅταν μεταφορὰ ᾗ· ἔστιν γὰρ εἰκάσαι τὴν ἀσπίδα φιάλη Ἄρεως καὶ τὸ ἐρείπιον ῥάκει οἰκίας, καὶ τὸ τὸν Νικήρατον φάναι Φιλοκτήτην εἶναι δεδηγμένον ὑπὸ Πράτυος, ὥσπερ εἶκασεν Θρασύμαχος ἰδὼν τὸν Νικήρατον ἡττημένον ὑπὸ Πράτυος ῥαψωδοῦντα, κομῶντα δὲ καὶ αὐχμηρὸν ἔτι. ἐν οἷς μάλιστα τ’ ἐκπίπτουσιν οἱ ποιηταὶ ἐὰν μὴ εὖ, καὶ ἐὰν εὖ, εὐδοκιμοῦσιν· λέγω δ’ ὅταν ἀποδιδώσιν·

“ὥσπερ σέλινον οὔλα τὰ σκέλη φορεῖ.”

“ὥσπερ Φιλάμμων ζυγομαχῶν τῷ κωρύκῳ.”

καὶ τὰ τοιαῦτα πάντ’ εἰκόνες εἰσὶν. αἱ δ’ εἰκόνες ὅτι μεταφοραί, εἴρηται πολλάκις.

καὶ αἱ παροιμίαι δὲ μεταφοραὶ ἀπ’ εἰδους ἐπ’ εἶδος εἰσὶν·

οἷον ἂν τις ὡς ἀγαθὸν πεισόμενος αὐτὸς ἐπαγάγηται, εἴτα βλαβῇ, “ὡς ὁ Καρπάθιος”, φασιν, “τὸν λαγῶ”. ἄμφω γὰρ τὸ εἰρημένον πεπόνθασιν. ὅθεν μὲν οὖν τὰ ἀστεῖα λέγεται καὶ διότι, σχεδὸν εἴρηται τὸ αἷτιον· εἰσὶν δὲ καὶ <αἷ> εὐδοκίμοῦσαι ὑπερβολαὶ μεταφοραί, οἷον εἰς ὑπωπιασμένον “ὠήθητε δ’ ἂν αὐτὸν εἶναι συκαμίνων κάλαθον”. ἐρυθρὸν γάρ τι τὸ ὑπώπιον, ἀλλὰ τοῦτο πολὺ σφόδρα. τὸ δὲ “ὥσπερ τὸ καὶ τὸ” ὑπερβολὴ τῇ λέξει διαφέρουσα. “ὥσπερ Φιλάμμων ζυγομαχῶν τῷ κωρύκῳ”, “ὠήθης δ’ ἂν αὐτὸν Φιλάμμωνα εἶναι μαχόμενον τῷ κωρύκῳ”.

“ὥσπερ σέλινον οὕλα τὰ σκέλη φορεῖν”,

“ὠήθης δ’ ἂν οὐ σκέλη ἀλλὰ σέλινά ἔχειν, οὕτως οὕλα”. εἰσὶ δ’ αἱ ὑπερβολαὶ μεираκιώδεις· σφοδρότητα γὰρ δηλοῦσιν. διὸ ὀργιζόμενοι λέγουσιν μάλιστα·

οὐδ’ εἴ μοι τόσα δοίη ὅσα ψάμαθός τε κόνις τε.

κούρην δ’ οὐ γαμέω Ἀγαμέμνωνος Ἀτρεΐδαο,

οὐδ’ εἰ χρυσεῖη Ἀφροδίτῃ κάλλος ἐρίζοι,

ἔργα δ’ Ἀθηναίῃ·

[1413b]διὸ πρεσβυτέρῳ λέγειν ἀπρεπές· χρώνται δὲ μάλιστα τούτῳ Ἀττικοὶ ῥήτορες.

Δεῖ δὲ μὴ λεληθέναι ὅτι ἄλλη ἐκάστω γένει ἀρμόττει λέξις. οὐ γὰρ ἡ αὐτὴ γραφικὴ καὶ ἀγωνιστικὴ, οὐδὲ δημηγορικὴ καὶ δικανικὴ. ἄμφω δὲ ἀνάγκη εἶδέναι· τὸ μὲν γὰρ ἐστὶν ἐλληνίζειν ἐπίστασθαι, τὸ δὲ μὴ ἀναγκάζεσθαι κατασιωπᾶν ἂν τι βούληται μεταδοῦναι τοῖς ἄλλοις, ὅπερ πάσχουσιν οἱ μὴ ἐπιστάμενοι γράφειν. ἔστι δὲ λέξις γραφικὴ μὲν ἢ ἀκριβεστάτη, ἀγωνιστικὴ δὲ ἢ ὑποκριτικωτάτη (ταύτης δὲ δύο εἶδη· ἢ μὲν γὰρ ἠθικὴ ἢ δὲ παθητικὴ)· διὸ καὶ οἱ ὑποκριταὶ τὰ τοιαῦτα τῶν δραμάτων διώκουσι, καὶ οἱ ποιηταὶ τοὺς τοιούτους. βαστάζονται δὲ οἱ ἀναγνώστικοί, οἷον Χαιρήμων (ἀκριβὴς γὰρ ὥσπερ λογογράφος), καὶ Λικύμνιος τῶν διθυραμβοποιῶν. καὶ παραβαλλόμενοι οἱ μὲν τῶν γραφέων <λόγοι> ἐν τοῖς ἀγῶσι στενοὶ φαίνονται, οἱ δὲ τῶν ῥητόρων, εὖ λεχθέντες, ἰδιωτικοὶ ἐν ταῖς χερσίν. αἷτιον δ’ ὅτι ἐν τῷ ἀγῶνι ἀρμόττει τὰ ὑποκριτικά· διὸ καὶ ἀφηρημένης τῆς ὑποκρίσεως οὐ ποιοῦντα τὸ αὐτῶν ἔργον φαίνεται εὐήθη, οἷον τὰ τε ἀσύνδετα καὶ τὸ πολλάκις τὸ αὐτὸ εἰπεῖν ἐν τῇ γραφικῇ ὀρθῶς



ἀποδοκιμάζεται, ἐν δὲ ἀγωνιστικῇ οὐ, καὶ οἱ ῥήτορες χρῶνται· ἔστι γὰρ ὑποκριτική. ἀνάγκη δὲ μεταβάλλειν τὸ αὐτὸ λέγοντας, ὅπερ ὥσπερ ὁδοποιεῖ τῷ ὑποκρίνεσθαι· “οὗτός ἐστιν ὁ κλέψας ὑμῶν, οὗτός ἐστιν ὁ ἐξαπατήσας, οὗτος ὁ τὸ ἔσχατον προδοῦναι ἐπιχειρήσας”, οἷον καὶ Φιλήμων ὁ ὑποκριτὴς ἐποίει ἐν τε τῇ Ἀναξανδρίδου Γεροντομαχίᾳ, ὅτε λέγοι “Ραδάμανθους καὶ Παλαμήδης”, καὶ ἐν τῷ προλόγῳ τῶν Εὐσεβῶν τὸ “ἐγώ”. ἐὰν γάρ τις τὰ τοιαῦτα μὴ ὑποκρίνηται, γίγνεται “ὁ τὴν δοκὸν φέρων”. καὶ τὰ ἀσύνδετα ὡσαύτως· “ἦλθον, ἀπήντησα, ἐδεόμην.” ἀνάγκη γὰρ ὑποκρίνεσθαι καὶ μὴ ὡς ἐν λέγοντα τῷ αὐτῷ ἦθαι καὶ τόνῳ εἰπεῖν. ἔτι ἔχει ἴδιόν τι τὰ ἀσύνδετα· ἐν ἴσῳ γὰρ χρόνῳ πολλὰ δοκεῖ εἰρῆσθαι· ὁ γὰρ σύνδεσμος ἐν ποιεῖ τὰ πολλὰ, ὥστε ἐὰν ἐξαιρεθῇ, δῆλον ὅτι τούναντίον ἔσται τὸ ἐν πολλὰ. ἔχει οὖν αὖξησιν· “ἦλθον, [1414a] διελέχθην, ἰκέτευσα” (πολλὰ δοκεῖ), “ὑπερεῖδεν ὅσα εἶπον”. τοῦτο δὲ βούλεται ποιεῖν καὶ Ὅμηρος ἐν τῷ

“Νιρεὺς αὖ Σύμηθεν”, “Νιρεὺς Ἀγλαΐης”, “Νιρεὺς ὃς κάλλιστος”.

περὶ οὗ γὰρ πολλὰ λέγεται, ἀνάγκη καὶ πολλάκις εἰρῆσθαι· εἰ οὖν [καὶ] πολλάκις, καὶ πολλὰ δοκεῖ, ὥστε ἠὔξηκεν, ἅπαξ μνησθεῖς, διὰ τὸν παραλογισμόν, καὶ μνήμην πεποίηκεν, οὐδαμοῦ ὕστερον αὐτοῦ λόγον ποιησάμενος.

ἡ μὲν οὖν δημηγορικὴ λέξις καὶ παντελῶς ἔοικεν τῇ σκιαγραφίᾳ· ὅσω γὰρ ἂν πλείων ἢ ὁ ὄχλος, πορρώτερον ἢ θέα, διὸ τὰ ἀκριβῆ περιέργα καὶ χεῖρω φαίνεται ἐν ἀμφοτέροις· ἡ δὲ δικανικὴ ἀκριβεστέρα. ἔτι δὲ μᾶλλον ἢ <ἐν> ἐνὶ κριτῇ· ἐλάχιστον γὰρ ἔνεστι ῥητορικῆς· εὐσύνοπτον γὰρ μᾶλλον τὸ οἰκεῖον τοῦ πράγματος καὶ τὸ ἀλλότριον, καὶ ὁ ἀγὼν ἄπεστιν, ὥστε καθαρὰ ἡ κρίσις. διὸ οὐχ οἱ αὐτοὶ ἐν πᾶσιν τούτοις εὐδοκιμοῦσιν ῥήτορες· ἀλλ’ ὅπου μάλιστα ὑπόκρισις, ἐνταῦθα ἥκιστα ἀκρίβεια ἐνι. τοῦτο δὲ ὅπου φωνῆς, καὶ μάλιστα ὅπου μεγάλης.

ἡ μὲν οὖν ἐπιδεικτικὴ λέξις γραφικωτάτη· τὸ γὰρ ἔργον αὐτῆς ἀνάγνωσις· δευτέρα δὲ ἡ δικανικὴ. τὸ δὲ προσδιαιρεῖσθαι τὴν λέξιν, ὅτι ἠδεῖαν δεῖ εἶναι καὶ μεγαλοπρεπῆ, περιέργον· τί γὰρ μᾶλλον ἢ σώφρονα καὶ ἐλευθέριον καὶ εἶ τις ἄλλη ἦθους ἀρετὴ; τὸ δὲ ἠδεῖαν εἶναι ποιήσει δηλονότι τὰ εἰρημένα, εἶπερ ὀρθῶς ὠρίσται ἡ ἀρετὴ τῆς λέξεως· τίνας γὰρ ἔνεκα δεῖ σαφῆ καὶ μὴ ταπεινὴν εἶναι ἀλλὰ πρέπουσαν; ἂν τε γὰρ ἀδολεσχή, οὐ σαφής, οὐδὲ ἂν σύντομος, ἀλλὰ δῆλον ὅτι τὸ μέσον ἀρμόττει. καὶ τὸ ἠδεῖαν τὰ εἰρημένα ποιήσει, ἂν εὖ μιχθῇ, τὸ εἰωθὸς καὶ <τὸ> ξενικόν, καὶ ὁ ῥυθμός, καὶ τὸ πιθανὸν ἐκ τοῦ πρέποντος.

περὶ μὲν οὖν τῆς λέξεως εἴρηται, καὶ κοινῇ περὶ πάντων καὶ ἰδίᾳ περὶ ἑκάστου γένους· λοιπὸν δὲ περὶ τάξεως εἰπεῖν. ἔστι δὲ τοῦ λόγου δύο μέρη· ἀναγκαῖον γὰρ τό τε πρᾶγμα εἰπεῖν περὶ οὗ, καὶ τοῦτ' ἀποδείξαι. διὸ εἰπόντα μὴ ἀποδείξαι ἢ ἀποδείξαι μὴ προειπόντα ἀδύνατον· ὅ τε γὰρ ἀποδεικνύων τι ἀποδείκνυσι, καὶ ὁ προλέγων ἔνεκα τοῦ ἀποδείξαι προλέγει. τούτων δὲ τὸ μὲν πρόθεσις ἐστὶ τὸ δὲ πίστις, ὥσπερ ἂν εἴ τις διέλοι ὅτι τὸ μὲν πρόβλημα τὸ δὲ ἀπόδειξις. νῦν δὲ διαιροῦσι γελοίως· διήγησις γάρ που τοῦ δικανικοῦ μόνου λόγου ἐστίν, ἐπιδεικτικοῦ δὲ καὶ δημηγορικοῦ πῶς ἐνδέχεται εἶναι διήγησιν οἷαν λέγουσιν, [1414b] ἢ τὰ πρὸς τὸν ἀντίδικον, ἢ ἐπίλογον τῶν ἀποδεικτικῶν; προοίμιον δὲ καὶ ἀντιπαραβολὴ καὶ ἐπάνοδος ἐν ταῖς δημηγορίαις τότε γίνεται ὅταν ἀντιλογία ᾖ. καὶ γὰρ ἡ κατηγορία καὶ ἡ ἀπολογία πολλάκις, ἀλλ' οὐχ ἡ συμβουλή· ἀλλ' ὁ ἐπίλογος ἔτι οὐδὲ δικανικοῦ παντός, οἷον ἐὰν μικρὸς ὁ λόγος ἢ τὸ πρᾶγμα εὐμνημόνευτον· συμβαίνει γὰρ τοῦ μήκους ἀφαιρεῖσθαι. ἀναγκαῖα ἄρα μόρια πρόθεσις καὶ πίστις. ἴδια μὲν οὖν ταῦτα, τὰ δὲ πλεῖστα προοίμιον πρόθεσις πίστις ἐπίλογος· τὰ γὰρ πρὸς τὸν ἀντίδικον τῶν πίστεων ἐστὶ, καὶ ἡ ἀντιπαραβολὴ αὐξησις τῶν αὐτοῦ, ὥστε μέρος τι τῶν πίστεων (ἀποδείκνυσι γὰρ τι ὁ ποιῶν τοῦτο), ἀλλ' οὐ τὸ προοίμιον, οὐδ' ὁ ἐπίλογος, ἀλλ' ἀναμνήσκει. ἔσται οὖν, ἂν τις τὰ τοιαῦτα διαιρῇ, ὅπερ ἐποιοῦν οἱ περὶ Θεόδωρον, διήγησις ἕτερον καὶ [ἡ] ἐπιδιήγησις καὶ προδιήγησις, καὶ ἔλεγχος καὶ ἐπεξέλεγχος. δεῖ δὲ εἶδός τι λέγοντα καὶ διαφορᾶ ὄνομα τίθεσθαι· εἰ δὲ μή, γίνεται κενὸν καὶ ληρῶδες, οἷον Λικύμνιος ποιεῖ ἐν τῇ τέχνῃ, ἐπούρωσιν ὀνομάζων καὶ ἀποπλάνησιν καὶ ὄζους.

Τὸ μὲν οὖν προοίμιόν ἐστὶν ἀρχὴ λόγου, ὅπερ ἐν ποιήσει πρόλογος καὶ ἐν αὐλήσει προαύλιον· πάντα γὰρ ἀρχαὶ ταῦτ' εἰσὶ, καὶ οἷον ὁδοποιήσις τῷ ἐπώντι. τὸ μὲν οὖν προαύλιον ὅμοιον τῷ τῶν ἐπιδεικτικῶν προοιμίῳ· καὶ γὰρ οἱ αὐληταί, ὅ τι ἂν εὖ ἔχωσιν αὐλῆσαι, τοῦτο προαυλήσαντες συνῆψαν τῷ ἐνδοσίμῳ, καὶ ἐν τοῖς ἐπιδεικτικοῖς λόγοις δεῖ οὕτως γράφειν, ὅ τι [γὰρ] ἂν βούληται εὐθὺ εἰπόντα ἐνδοῦναι καὶ συνάψαι, ὅπερ πάντες ποιοῦσιν. παράδειγμα τὸ τῆς Ἰσοκράτους Ἑλένης προοίμιον· οὐθὲν γὰρ κοινὸν ὑπάρχει τοῖς ἐριστικοῖς καὶ Ἑλένῃ. ἅμα δὲ καὶ ἐὰν ἐκτοπίσῃ, ἀρμόττει, καὶ μὴ ὅλον τὸν λόγον ὁμοειδῆ εἶναι. λέγεται δὲ τὰ τῶν ἐπιδεικτικῶν προοίμια ἐξ ἐπαίνου ἢ ψόγου (οἷον Γοργίας μὲν ἐν τῷ Ὀλυμπικῷ λόγῳ “ὑπὸ πολλῶν ἄξιοι θαυμάζεσθαι, ὧ ἄνδρες Ἕλληνες”· ἐπαινεῖ γὰρ τοὺς τὰς πανηγύρεις συνάγοντας· Ἰσοκράτης δὲ ψέγει ὅτι τὰς μὲν τῶν σωμάτων ἀρετὰς δωρεαῖς ἐτίμησαν, τοῖς δ' εὖ φρονοῦσιν οὐθὲν ἄθλον ἐποίησαν), καὶ ἀπὸ συμβουλῆς (οἷον ὅτι δεῖ τοὺς ἀγαθοὺς τιμᾶν, διὸ καὶ αὐτὸς Ἀριστείδην ἐπαινεῖ, ἢ τοὺς τοιούτους οἱ μήτε εὐδοκιμοῦσιν μήτε φαῦλοι, ἀλλ' ὅσοι ἀγαθοὶ ὄντες ἄδελτοι,

ὥσπερ Ἀλέξανδρος ὁ Πριάμου· οὗτος γὰρ συμβουλεύει· ἔτι δ' ἐκ τῶν [1415a] δικανικῶν προοιμίων· τοῦτο δ' ἐστὶν ἐκ τῶν πρὸς τὸν ἄκροατὴν, εἰ περὶ παραδόξου λόγος ἢ περὶ χαλεποῦ ἢ περὶ τεθρυλημένου πολλοῖς, ὥστε συγγνώμην ἔχειν, οἷον Χοιρίλος

νῦν δ' ὅτε πάντα δέδασται.

τὰ μὲν οὖν τῶν ἐπιδεικτικῶν λόγων προοίμια ἐκ τούτων, ἐξ ἐπαίνου, ἐκ ψόγου, ἐκ προτροπῆς, ἐξ ἀποτροπῆς, ἐκ τῶν πρὸς τὸν ἄκροατὴν· δεῖ δὲ ἢ ξένα ἢ οἰκεῖα εἶναι τὰ ἐνδόσιμα τῷ λόγῳ. τὰ δὲ τοῦ δικανικοῦ προοίμια δεῖ λαβεῖν ὅτι ταῦτο δύναται ὅπερ τῶν δραμάτων οἱ πρόλογοι καὶ τῶν ἐπῶν τὰ προοίμια· τὰ μὲν γὰρ τῶν διθυράμβων ὅμοια τοῖς ἐπιδεικτικοῖς· “διὰ σὲ καὶ τεὰ δῶρα εἴτε σκυῖλα”. ἐν δὲ προλόγοις καὶ ἔπεσι δεῖγμά ἐστὶν τοῦ λόγου, ἵνα προειδῶσι περὶ οὗ [ἢ] ὁ λόγος καὶ μὴ κρέμῃται ἢ διάνοια· τὸ γὰρ ἀόριστον πλανᾷ· ὁ δούς οὖν ὥσπερ εἰς τὴν χεῖρα τὴν ἀρχὴν ποιεῖ ἐχόμενον ἀκολουθεῖν τῷ λόγῳ. διὰ τοῦτο

“μῆνιν ἄειδε, θεά”. “ἄνδρα μοι ἔννεπε, μοῦσα.”

“ἤγεό μοι λόγον ἄλλον, ὅπως Ἀσίας ἀπὸ γαίης

ἦλθεν ἐς Εὐρώπην πόλεμος μέγας.”

καὶ οἱ τραγικοὶ δηλοῦσι περὶ <οὔ> τὸ δρᾶμα, κἂν μὴ εὐθὺς ὥσπερ Εὐριπίδης ἐν τῷ προλόγῳ, ἀλλὰ πού γε, ὥσπερ [καὶ] Σοφοκλῆς

“ἐμοὶ πατὴρ ἦν Πόλυβος”. καὶ ἡ κωμωδία ὡσαύτως. τὸ μὲν οὖν ἀναγκαιότατον ἔργον τοῦ προοιμίου καὶ ἴδιον τοῦτο, δηλῶσαι τί ἐστὶν τὸ τέλος οὗ ἔνεκα ὁ λόγος (διόπερ ἂν δῆλον ἢ καὶ μικρὸν τὸ πρᾶγμα, οὐ χρηστὸν προοιμίῳ)· τὰ δὲ ἄλλα εἶδη οἷς χρῶνται, ἰατρεύματα καὶ κοινά. λέγεται δὲ ταῦτα ἔκ τε τοῦ λέγοντος καὶ τοῦ ἀκροατοῦ καὶ τοῦ πράγματος καὶ τοῦ ἐναντίου περὶ αὐτοῦ μὲν καὶ τοῦ ἀντιδίκου οἷά περ διαβολὴν λῦσαι καὶ ποιῆσαι (ἔστιν δὲ οὐχ ὁμοίως· ἀπολογουμένῳ μὲν γὰρ πρῶτον τὰ πρὸς διαβολὴν, κατηγοροῦντι δ' ἐν τῷ ἐπιλόγῳ· δι' ὃ δέ, οὐκ ἄδηλον· τὸν μὲν γὰρ ἀπολογούμενον, ὅταν μέλλῃ εἰσάξειν αὐτόν, ἀναγκαῖον ἀνελεῖν τὰ κωλύοντα, ὥστε λυτέον πρῶτον τὴν διαβολήν· τῷ δὲ διαβάλλοντι ἐν τῷ ἐπιλόγῳ διαβλητέον, ἵνα μνημονεύσωσι μᾶλλον). τὰ δὲ πρὸς τὸν ἄκροατὴν ἔκ τε τοῦ εὖνουν ποιῆσαι καὶ ἐκ τοῦ ὀργίσαι, καὶ ἐνίοτε τὸ προσεκτικὸν ἢ τὸ ὑναντίον· οὐ γὰρ ἀεὶ συμφέρει ποιεῖν προσεκτικόν, διὸ πολλοὶ εἰς γέλωτα

πειρῶνται προάγειν. εἰς δὲ εὐμάθειαν ἅπαντα ἀνάξει, ἐάν τις βούληται, καὶ τὸ ἐπεικῇ φαίνεσθαι· προσέχουσι γὰρ [1415b] μᾶλλον τούτοις. προσεκτικοὶ δὲ τοῖς μεγάλοις, τοῖς ἰδίοις, τοῖς θαυμαστοῖς, τοῖς ἡδέσιν· διὸ δεῖ ἐμποιεῖν ὡς περὶ τοιούτων ὁ λόγος· ἐὰν δὲ μὴ προσεκτικούς, ὅτι μικρόν, ὅτι οὐδὲν πρὸς ἐκείνους, ὅτι λυπηρόν. δεῖ δὲ μὴ λανθάνειν ὅτι πάντα ἔξω τοῦ λόγου τὰ τοιαῦτα· πρὸς φαῦλον γὰρ ἀκροατὴν καὶ τὰ ἔξω τοῦ πράγματος ἀκούοντα· ἐπεὶ ἂν μὴ τοιοῦτος ᾖ, οὐθὲν δεῖ προοιμίου, ἀλλ' ἢ ὅσον τὸ πρᾶγμα εἰπεῖν κεφαλαιωδῶς, ἵνα ἔχῃ ὥσπερ σῶμα κεφαλὴν. ἔτι τὸ προσεκτικὸς ποιεῖν πάντων τῶν μερῶν κοινόν, ἐὰν δέη· πανταχοῦ γὰρ ἀνιᾶσι μᾶλλον ἢ ἀρχόμενοι· διὸ γελοῖον ἐν ἀρχῇ τάττειν, ὅτε μάλιστα πάντες προσέχοντες ἀκροῶνται· ὥστε ὅπου ἂν ᾖ καιρός, λεκτέον “καὶ μοι προσέχετε τὸν νοῦν· οὐθὲν γὰρ μᾶλλον ἐμὸν ἢ ὑμέτερον”, καὶ “ἐρῶ γὰρ ὑμῖν οἶον οὐδεπώποτε ἀκηκόατε δεινὸν ἢ οὕτω θαυμαστόν”. τοῦτο δ' ἐστίν, ὥσπερ ἔφη Πρόδικος, ὅτε νυστάζοιεν οἱ ἀκροαταί, παρεμβάλλειν <τι> τῆς πεντηκονταδράχμου αὐτοῖς. ὅτι δὲ πρὸς τὸν ἀκροατὴν οὐχ ἥπερ [ὁ] ἀκροατῆς, δῆλον· πάντες γὰρ ἢ διαβάλλουσιν ἢ φόβους ἀπολύονται ἐν τοῖς προοιμίοις·

ἄναξ, ἐρῶ μὲν οὐχ ὅπως σπουδῆς ὑπο,

τί φροιμιάζη;

καὶ οἱ πονηρὸν τὸ πρᾶγμα ἔχοντες ἢ δοκοῦντες· πανταχοῦ γὰρ βέλτιον διατρίβειν ἢ ἐν τῷ πράγματι, διὸ οἱ δοῦλοι οὐ τὰ ἐρωτώμενα λέγουσιν ἀλλὰ τὰ κύκλω, καὶ φροιμιάζονται. πόθεν δ' εὖνους δεῖ ποιεῖν, εἴρηται, καὶ τῶν ἄλλων ἕκαστον τῶν τοιούτων. ἐπεὶ δ' εὖ λέγεται

δός μ' ἐς Φαίηκας φίλον ἐλθεῖν ἢ δ' ἐλεεινόν,

τούτων δεῖ δύο στοχάζεσθαι. ἐν δὲ τοῖς ἐπιδεικτικοῖς οἴεσθαι δεῖ ποιεῖν συνεπαινέσθαι τὸν ἀκροατὴν, ἢ αὐτὸν ἢ γένος ἢ ἐπιτηδεύματ' αὐτοῦ ἢ ἄλλως γέ πως· ὃ γὰρ λέγει Σωκράτης ἐν τῷ ἐπιταφίῳ, ἀληθές, ὅτι οὐ χαλεπὸν Ἀθηναίους ἐν Ἀθηναίοις ἐπαινεῖν, ἀλλ' ἐν Λακεδαιμονίοις.

τὰ δὲ τοῦ δημηγορικοῦ ἐκ τῶν τοῦ δικανικοῦ λόγου ἐστίν, φύσει δὲ ἥκιστα ἔχει· καὶ γὰρ καὶ περὶ οὗ ἴσασι, καὶ οὐδὲν δεῖται τὸ πρᾶγμα προοιμίου, ἀλλ' ἢ δι' αὐτὸν ἢ τοὺς ἀντιλέγοντας, ἢ ἐὰν μὴ ἡλίκον βούλει ὑπολαμβάνωσιν, ἀλλ' ἢ μεῖζον ἢ ἔλαττον, διὸ ἢ διαβάλλειν ἢ ἀπολύεσθαι ἀνάγκη, καὶ ἢ αὐξῆσαι ἢ μειῶσαι. τούτων δὲ ἔνεκα προοιμίου δεῖται, ἢ κόσμου χάριν, ὡς αὐτοκάβδαλα [1416a] φαίνεται ἐὰν μὴ ἔχῃ. τοιοῦτον γὰρ τὸ

Γοργίου ἐγκώμιον εἰς Ἡλείους· οὐδὲν γὰρ προεξαγκωνίσας οὐδὲ προανακινήσας εὐθὺς ἄρχεται “Ἥλις, πόλις εὐδαίμων”.

Περὶ δὲ διαβολῆς ἔν μὲν τὸ ἐξ ὧν ἄν τις ὑπόληψιν δυσχερῇ ἀπολύσαιτο (οὐθὲν γὰρ διαφέρει εἴτε εἰπόντος τινὸς εἴτε μή, ὥστε τοῦτο καθόλου)· ἄλλος τόπος ὥστε πρὸς τὰ ἀμφισβητούμενα ἀπαντᾶν, ἢ ὡς οὐκ ἔστιν, ἢ ὡς οὐ βλαβερὸν ἢ οὐ τούτῳ, ἢ ὡς οὐ τηλικούτον, ἢ οὐκ ἄδικον ἢ οὐ μέγα, ἢ οὐκ αἰσχρὸν ἢ οὐκ ἔχον μέγεθος· περὶ γὰρ τοιούτων ἡ ἀμφισβήτησις, ὥσπερ Ἰφικράτης πρὸς Ναυσικράτην· ἔφη γὰρ ποιῆσαι ὃ ἔλεγεν καὶ βλάψαι, ἀλλ’ οὐκ ἀδικεῖν. ἢ ἀντικαταλλάττεσθαι ἀδικοῦντα, εἰ βλαβερὸν, ἀλλ’ οὖν καλόν, εἰ λυπηρόν, ἀλλ’ ὠφέλιμον, ἢ τι ἄλλο τοιοῦτον. ἄλλος τόπος ὡς ἐστὶν ἀμάρτημα ἢ ἀτύχημα ἢ ἀναγκαῖον, οἷον Σοφοκλῆς ἔφη τρέμειν οὐχ ὡς ὁ διαβάλλων ἔφη, ἵνα δοκῇ γέρων, ἀλλ’ ἐξ ἀνάγκης· οὐ γὰρ ἐκόντι εἶναι αὐτῷ ἔτη ὀγδοήκοντα. καὶ ἀντικαταλλάττεσθαι τὸ οὐ ἔνεκα, ὅτι οὐ βλάψαι ἐβούλετο ἀλλὰ τόδε, καὶ οὐ τοῦτο ὃ διεβάλλετο ποιῆσαι, συνέβη δὲ βλαβῆναι· “δίκαιον δὲ μισεῖν, εἰ ὅπως τοῦτο γένηται ἐποίουν.” ἄλλος, εἰ ἐμπεριεὶληπται ὁ διαβάλλων, ἢ νῦν ἢ πρότερον, ἢ αὐτὸς ἢ τῶν ἐγγύς τις. ἄλλος, εἰ ἄλλοι ἐμπεριλαμβάνονται οὐς ὁμολογοῦσιν μὴ ἐνόχους εἶναι τῇ διαβολῇ, οἷον εἰ, ὅτι καθάριος, ὁ <δεῖνα> μοιχός, καὶ ὁ δεῖνα ἄρα. ἄλλος, εἰ ἄλλους διέβαλεν ἢ ἄλλος <ἢ> αὐτός, ἢ ἄνευ διαβολῆς ὑπελαμβάνοντο ὥσπερ αὐτὸς νῦν, οἱ πεφήνασιν οὐκ ἔνοχοι. ἄλλος ἐκ τοῦ ἀντιδιαβάλλειν τὸν διαβάλλοντα· ἄτοπον γὰρ εἰ ὃς αὐτὸς ἄπιστος, οἱ τούτου λόγοι ἔσονται πιστοί. ἄλλος, εἰ γέγονεν κρίσις, ὥσπερ Εὐριπίδης πρὸς Ὑγιαίνοντα ἐν τῇ ἀντιδόσει κατηγοροῦντα ὡς ἀσεβής, ὅς γ’ ἐποίησε κελεύων ἐπιорκεῖν,

ἡ γλῶσσο’ ὁμώμοχ’, ἡ δὲ φρὴν ἀνώμοτος.

ἔφη γὰρ αὐτὸν ἀδικεῖν τὰς ἐκ τοῦ Διονυσιακοῦ ἀγῶνος κρίσεις εἰς τὰ δικαστήρια ἄγοντα· ἐκεῖ γὰρ αὐτῶν δεδωκέναι λόγον, ἢ δώσειν εἰ βούλεται κατηγορεῖν. ἄλλος ἐκ τοῦ διαβολῆς κατηγορεῖν, ἡλίκον, καὶ τοῦτο, ὅτι ἄλλας κρίσεις ποιεῖ, καὶ ὅτι οὐ πιστεύει τῷ πράγματι.

κοινὸς [1416b] δ’ ἀμφοῖν [ὁ] τόπος τὸ σύμβολα λέγειν, οἷον ἐν τῷ Τεύκρῳ ὁ Ὀδυσσεὺς ὅτι οἰκέϊος τῷ Πριάμῳ· ἡ γὰρ Ἡσιόνη ἀδελφή· ὁ δὲ ὅτι ὁ πατὴρ ἐχθρὸς τῷ Πριάμῳ, ὁ Τελαμών, καὶ ὅτι οὐ κατεῖπε τῶν κατασκόπων.

ἄλλος τῷ διαβάλλοντι, τὸ ἐπαινοῦντα μικρὸν μακρῶς ψέξαι μέγα συντόμως, ἢ πολλὰ ἀγαθὰ προθέντα, ὃ εἰς τὸ πρᾶγμα προφέρει ἐν ψέξαι. τοιοῦτοι δὲ οἱ τεχνικώτατοι καὶ ἀδικώτατοι· τοῖς ἀγαθοῖς γὰρ βλάπτειν

πειρῶνται, μιγνύντες αὐτὰ τῷ κακῷ.

κοινὸν δὲ τῷ διαβάλλοντι καὶ τῷ ἀπολυομένῳ, ἐπειδὴ τὸ αὐτὸ ἐνδέχεται πλειόνων ἔνεκα πραχθῆναι, τῷ μὲν διαβάλλοντι κακοηθιστέον ἐπὶ τὸ χεῖρον ἐκλαμβάνοντι, τῷ δὲ ἀπολυομένῳ ἐπὶ τὸ βέλτιον, οἷον ὅτι ὁ Διομήδης τὸν Ὀδυσσεά προεῖλετο, τῷ μὲν ὅτι διὰ τὸ ἄριστον ὑπολαμβάνειν τὸν Ὀδυσσεά, τῷ δ' ὅτι οὐ, ἀλλὰ διὰ τὸ μόνον μὴ ἀνταγωνιστεῖν ὡς φαῦλον.

Καὶ περὶ μὲν διαβολῆς εἰρήσθω τοσαῦτα, διήγησις δ' ἐν μὲν τοῖς ἐπιδεικτικοῖς ἐστὶν οὐκ ἐφεξῆς ἀλλὰ κατὰ μέρος· δεῖ μὲν γὰρ τὰς πράξεις διελθεῖν ἐξ ὧν ὁ λόγος· σύγκειται γὰρ ἔχων ὁ λόγος τὸ μὲν ἄτεχνον (οὐθὲν γὰρ αἴτιος ὁ λέγων τῶν πράξεων), τὸ δ' ἐκ τῆς τέχνης· τοῦτο δ' ἐστὶν ἢ ὅτι ἔστι δεῖξαι, ἐὰν ἢ ἄπιστον, ἢ ὅτι ποιόν, ἢ ὅτι ποσόν, ἢ καὶ ἅπαντα. διὰ δὲ τοῦτ' ἐνίστε οὐκ ἐφεξῆς δεῖ διηγεῖσθαι πάντα, ὅτι δυσμνημόνευτον τὸ δεικνύναι οὕτως· ἐκ μὲν οὖν τούτων ἀνδρεῖος, ἐκ δὲ τῶνδε σοφὸς ἢ δίκαιος. καὶ ἀπλούστερος ὁ λόγος οὗτος, ἐκεῖνος δὲ ποικίλος καὶ οὐ λιτός. δεῖ δὲ τὰς μὲν γνωρίμους ἀναμνήσκειν· διὸ οἱ πολλοὶ οὐδὲν δέονται διηγήσεως, οἷον εἰ θέλεις Ἀχιλλέα ἐπαινεῖν (ἴσασι γὰρ πάντες τὰς πράξεις), ἀλλὰ χρῆσθαι αὐταῖς δεῖ. ἐὰν δὲ Κριτίαν, δεῖ· οὐ γὰρ πολλοὶ ἴσασιν .... νῦν δὲ γελοίως τὴν διήγησιν φασὶ δεῖν εἶναι ταχεῖαν. καίτοι ὥσπερ [ὁ] τῷ μάττοντι ἐρομένῳ πότερον σκληρὰν ἢ μαλακὴν μάξῃ “τί δ’”, ἔφη <τις>, “εὐ ἀδύνατον;”, καὶ ἐνταῦθα ὁμοίως· δεῖ γὰρ μὴ μακρῶς διηγεῖσθαι ὥσπερ οὐδὲ προοιμιάζεσθαι μακρῶς, οὐδὲ τὰς πίστεις λέγειν. οὐδὲ γὰρ ἐνταῦθα ἐστὶ τὸ εὖ [ἢ] τὸ ταχὺ ἢ τὸ συντόμως, ἀλλὰ τὸ μετρίως· τοῦτο δ' ἐστὶ τὸ λέγειν ὅσα δηλώσει τὸ πρᾶγμα, [1417a] ἢ ὅσα ποιήσει ὑπολαβεῖν γεγονέναι ἢ βεβλαφέναι ἢ ἡδίκηκέναι, ἢ τηλικαῦτα ἡλίκα βούλει, τῷ δὲ ἐναντίῳ τὰ ἐναντία· παραδιηγεῖσθαι δὲ ὅσα εἰς τὴν σὴν ἀρετὴν φέρει (οἷον “ἐγὼ δ' ἐνουθέτουν, ἀεὶ τὰ δίκαια λέγων, μὴ τὰ τέκνα ἐγκαταλείπειν”), ἢ θατέρου κακίαν· “ὁ δὲ ἀπεκρίνατό μοι ὅτι, οὐ ἂν ἦ αὐτός, ἔσται ἄλλα παιδία”, ὃ τοὺς ἀφισταμένους Αἰγυπτίους ἀποκρίνασθαί φησιν ὁ Ἡρόδοτος· ἢ ὅσα ἡδέα τοῖς δικασταῖς. ἀπολογουμένῳ δὲ ἐλάττων ἢ διήγησις· αἱ γὰρ ἀμφισβητήσεις ἢ μὴ γεγονέναι ἢ μὴ βλαβερόν εἶναι ἢ μὴ ἄδικον ἢ μὴ τηλικούτον, ὥστε περὶ τὸ ὁμολογούμενον οὐ διατριπτέον, ἐὰν μὴ τι εἰς ἐκεῖνο συντείνῃ, οἷον εἰ πέπρακται, ἀλλ' οὐκ ἄδικον. ἔτι πεπραγμένα δεῖ λέγειν ὅσα μὴ πραττόμενα ἢ οἴκτον ἢ δεινῶσιν φέρει· παράδειγμα ὁ Ἀλκίνοῦ ἀπόλογος, ὃς πρὸς τὴν Πηνελόπην ἐν ἐξήκοντα ἔπεσιν πεποίηται, καὶ ὡς Φάϋλλος τὸν κύκλον, καὶ ὁ ἐν τῷ Οἶνεϊ πρόλογος. ἡθικὴν δὲ χρὴ τὴν διήγησιν εἶναι· ἔσται δὲ τοῦτο, ἂν εἰδῶμεν τί ἦθος ποιεῖ. ἐν μὲν δὴ τὸ προαίρεσιν δηλοῦν, ποιὸν δὲ τὸ ἦθος τῷ ποιᾶν ταύτην, ἢ δὲ προαίρεσις ποιᾶ τῷ τέλει· διὰ τοῦτο <δ> οὐκ ἔχουσιν οἱ

μαθηματικοὶ λόγοι ἦθη, ὅτι οὐδὲ προαίρεσιν (τὸ γὰρ οὐ ἔνεκα οὐκ ἔχουσιν), ἀλλ' οἱ Σωκρατικοί· περὶ τοιούτων γὰρ λέγουσιν. ἄλλα δ' ἠθικὰ τὰ ἐπόμενα ἐκάστω ἦθει, οἷον ὅτι ἅμα λέγων ἐβάδιζεν· δηλοῖ γὰρ θρασύτητα καὶ ἀγροικίαν ἦθους. καὶ μὴ ὡς ἀπὸ διανοίας λέγειν, ὥσπερ οἱ νῦν, ἀλλ' ὡς ἀπὸ προαιρέσεως· “ἐγὼ δὲ ἐβουλόμην· καὶ προειλόμην γὰρ τοῦτο· ἀλλ' εἰ μὴ ὠνήμην, βέλτιον”· τὸ μὲν γὰρ φρονίμου τὸ δὲ ἀγαθοῦ· φρονίμου μὲν γὰρ ἐν τῷ τὸ ὠφέλιμον δίδκειν, ἀγαθοῦ δ' ἐν τῷ τὸ καλόν. ἂν δ' ἄπιστον ἦ, τότε τὴν αἰτίαν ἐπιλέγειν, ὥσπερ Σοφοκλῆς ποιεῖ· παράδειγμα τὸ ἐκ τῆς Ἀντιγόνης, ὅτι μᾶλλον τοῦ ἀδελφοῦ ἐκήδετο ἢ ἀνδρὸς ἢ τέκνων· τὰ μὲν γὰρ ἂν γενέσθαι ἀπολομένων,

μητρὸς δ' ἐν Ἄιδου καὶ πατρὸς βεβηκότων

οὐκ ἔστ' ἀδελφὸς ὅς τις ἂν βλάστοι ποτέ.

ἐὰν δὲ μὴ ἔχῃς αἰτίαν, ἀλλ' ὅτι οὐκ ἀγνοεῖς ἄπιστα λέγων, ἀλλὰ φύσει τοιοῦτος εἶ· ἄπιστοῦσι γὰρ ἄλλο τι πράττειν ἐκόντα πλὴν τὸ συμφέρον. ἔτι ἐκ τῶν παθητικῶν λέγε διηγούμενος καὶ τὰ ἐπόμενα [καὶ] ἃ ἴσασι, καὶ τὰ ἴδια ἢ σεαυτῷ ἢ ἐκείνῳ προσόντα· “ὁ δ' ὥχεται με ὑποβλέψας”.

[1417b] καὶ ὡς περὶ Κρατύλου Αἰσχίνης, ὅτι διασίζων, τοῖν χειροῖν διασείων· πιθανὰ γάρ, διότι σύμβολα γίνονται ταῦτα ἃ ἴσασιν ἐκείνων ὧν οὐκ ἴσασιν. πλεῖστα δὲ τοιαῦτα λαβεῖν ἐξ Ὁμήρου ἔστιν·

ὥς ἄρ' ἔφη, γρῆυς δὲ κατέσχετο χερσὶ πρόσωπα·

οἱ γὰρ δακρύειν ἀρχόμενοι ἐπιλαμβάνονται τῶν ὀφθαλμῶν. καὶ εὐθὺς εἴσαγε καὶ σεαυτὸν ποιόν τινα, ἵνα ὡς τοιοῦτον θεωρῶσιν, καὶ τὸν ἀντίδικον· λανθάνων δὲ ποίει. ὅτι δὲ ῥάδιον, ὅρα ἐκ τῶν ἀπαγγελλόντων· περὶ ὧν γὰρ μὴθὲν ἴσμεν, ὅμως λαμβάνομεν ὑπόληψιν τινά. πολλαχοῦ δὲ δεῖ διηγεῖσθαι, καὶ ἐνίοτε οὐκ ἐν ἀρχῇ.

ἐν δὲ δημηγορίᾳ ἥκιστα διήγησις ἔστιν, ὅτι περὶ τῶν μελλόντων οὐθεὶς διηγεῖται· ἀλλ' ἐὰν περ διήγησις ἦ, τῶν γενομένων ἔστω, ἵνα ἀναμνησθέντες ἐκείνων βέλτιον βουλευσώνται περὶ τῶν ὕστερον, ἢ διαβάλλοντος ἢ ἐπαινοῦντος· ἀλλὰ τότε οὐτὸ τοῦ συμβούλου ποιεῖ ἔργον. ἂν δ' ἢ ἄπιστον, ὑπισχνεῖσθαι δεῖ καὶ αἰτίαν λέγειν εὐθὺς καὶ διατάττειν ὡς βούλονται, οἷον ἡ Ἰοκάστη ἢ Καρκίνου ἐν τῷ Οἰδίποδι ἀεὶ ὑπισχνεῖται πυνθανομένου τοῦ ζητοῦντος τὸν υἱόν, καὶ ὁ Αἴμων ὁ Σοφοκλέους.

Τὰς δὲ πίστεις δεῖ ἀποδεικτικὰς εἶναι· ἀποδεικνύναι δὲ χρή, ἐπεὶ περ τεττάρων ἢ ἀμφισβήτησις, περὶ τοῦ ἀμφισβητουμένου φέροντα τὴν ἀπόδειξιν, οἶον, εἰ ὅτι οὐ γέγονεν ἀμφισβητεῖται, ἐν τῇ κρίσει δεῖ τούτου μάλιστα τὴν ἀπόδειξιν φέρειν, εἰ δ' ὅτι οὐκ ἔβλαψεν, τούτου, καὶ ὅτι οὐ τοσόνδε ἢ ὅτι δικαίως, ὡσαύτως καὶ εἰ περὶ τοῦ γενέσθαι τοῦτο ἢ ἀμφισβήτησις. μὴ λανθανέτω δ' ὅτι ἀναγκαῖον ἐν ταύτῃ τῇ ἀμφισβήτησει μόνῃ τὸν ἕτερον εἶναι πονηρόν· οὐ γάρ ἐστιν ἄγνοια αἰτία, ὡσπερ ἂν εἴ τινες περὶ τοῦ δικαίου ἀμφισβητοῖεν, ὥστ' ἐν τούτῳ χρονιστέον, ἐν δὲ τοῖς ἄλλοις οὔ. ἐν δὲ τοῖς ἐπιδεικτικοῖς τὸ πολὺ ὅτι καλὰ καὶ ὠφέλιμα ἢ αὐξήσις ἔστω· τὰ γὰρ πράγματα δεῖ πιστεῦεσθαι· ὀλιγάκις γὰρ καὶ τούτων ἀποδείξεις φέρουσιν, ἐὰν ἄπιστα ἢ ἢ ἐὰν ἄλλος αἰτίαν ἔχῃ. ἐν δὲ τοῖς δημηγορικοῖς ἢ ὡς οὐκ ἔσται ἀμφισβητήσειεν ἂν τις, ἢ ὡς ἔσται μὲν <ποιοῦσιν> ἃ κελεύει, ἀλλ' οὐ δίκαια ἢ οὐκ ὠφέλιμα ἢ οὐ τηλικαῦτα. δεῖ δὲ καὶ ὁρᾶν εἴ τι ψεύδεται ἐκτὸς τοῦ πράγματος· τεκμήρια γὰρ ταῦτα φαίνεται [1418a] καὶ τῶν ἄλλων ὅτι ψεύδεται. ἔστιν δὲ τὰ μὲν παραδείγματα δημηγορικώτερα, τὰ δ' ἐνθυμήματα δικανικώτερα· ἢ μὲν γὰρ περὶ τὸ μέλλον, ὥστ' ἐκ τῶν γενομένων ἀνάγκη παραδείγματα λέγειν, ἢ δὲ περὶ ὄντων ἢ μὴ ὄντων, οὗ μᾶλλον ἀπόδειξις ἐστὶ καὶ ἀνάγκη· ἔχει γὰρ τὸ γεγονὸς ἀνάγκην. οὐ δεῖ δὲ ἐφεξῆς λέγειν τὰ ἐνθυμήματα, ἀλλ' ἀναμιγνύναι· εἰ δὲ μή, καταβλάπτει ἄλληλα. ἔστιν γὰρ καὶ τοῦ ποσοῦ ὅρος.

ὦ φίλ', ἐπεὶ τόσα εἶπες ὅσ' ἂν πεπνυμένος ἀνὴρ,

ἀλλ' οὐ τοιαῦτα. καὶ μὴ περὶ πάντων ἐνθυμήματα ζητεῖ· εἰ δὲ μή, ποιήσεις ὅπερ ἔνιοι ποιοῦσι τῶν φιλοσοφούντων, οἱ συλλογίζονται τὰ γνωριμώτερα καὶ πιστότερα ἢ ἐξ ὧν λέγουσιν. καὶ ὅταν πάθος ποιῆς, μὴ λέγε ἐνθύμημα (ἢ γὰρ ἐκκρούσει τὸ πάθος ἢ μάτην εἰρημένον ἔσται τὸ ἐνθύμημα· ἐκκρούουσι γὰρ αἱ κινήσεις ἀλλήλας αἱ ἅμα, καὶ ἢ ἀφανίζουσιν ἢ ἀσθενεῖς ποιοῦσιν), οὐδ' ὅταν ἠθικὸν τὸν λόγον, οὐ δεῖ ἐνθύμημά τι ζητεῖν ἅμα· οὐ γὰρ ἔχει οὔτε ἦθος οὔτε προαίρεσιν ἢ ἀπόδειξις. γνώμαις δὲ χρηστέον καὶ ἐν διηγήσει καὶ ἐν πίστει· ἠθικὸν γὰρ “καὶ ἐγὼ δέδωκα, καὶ ταῦτ' εἰδὼς ὡς οὐ δεῖ πιστεῦειν”· ἐὰν δὲ παθητικῶς, “καὶ οὐ μεταμέλει μοι καίπερ ἡδικομένῳ· τούτῳ μὲν γὰρ περίεστιν τὸ κέρδος, ἐμοὶ δὲ τὸ δίκαιον.”

τὸ δὲ δημηγορεῖν χαλεπώτερον τοῦ δικάζεσθαι, εἰκότως, διότι περὶ τὸ μέλλον, ἐκεῖ δὲ περὶ τὸ γεγονός, ὃ ἐπιστητὸν ἤδη καὶ τοῖς μάντεσιν, ὡς ἔφη Ἐπιμενίδης ὁ Κρής (ἐκεῖνος γὰρ περὶ τῶν ἐσομένων οὐκ ἐμαντεύετο, ἀλλὰ περὶ τῶν γεγονότων μὲν ἀδήλων δέ), καὶ ὁ νόμος ὑπόθεσις ἐν τοῖς δικανικοῖς· ἔχοντα δὲ ἀρχὴν ῥᾶον εὐρεῖν ἀπόδειξιν. καὶ οὐκ ἔχει πολλὰς διατριβάς, οἶον



πρὸς ἀντίδικον ἢ περὶ αὐτοῦ, ἢ παθητικὸν ποιεῖν, ἀλλ' ἥκιστα πάντων, ἐὰν μὴ ἐξιστῇ. δεῖ οὖν ἀποροῦντα τοῦτο ποιεῖν ὅπερ οἱ Ἀθήνησι ρήτορες ποιοῦσι καὶ Ἰσοκράτης· καὶ γὰρ συμβουλευὼν κατηγορεῖ, οἷον Λακεδαιμονίων μὲν ἐν τῷ πανηγυρικῷ, Χάρητος δ' ἐν τῷ συμμαχικῷ. ἐν δὲ τοῖς ἐπιδεικτικοῖς δεῖ τὸν λόγον ἐπεισοδιοῦν ἐπαίνοις, οἷον Ἰσοκράτης ποιεῖ· ἀεὶ γὰρ τινα εἰσάγει. καὶ ὃ ἔλεγεν Γοργίας, ὅτι οὐχ ὑπολείπει αὐτὸν ὁ λόγος, ταῦτό ἐστιν· εἰ γὰρ Ἀχιλλέα λέγει Πηλέα ἐπαινεῖ, εἶτα Αἰακόν, εἶτα τὸν θεόν, ὁμοίως δὲ καὶ ἀνδρείαν, ἢ τὰ καὶ τὰ ποιεῖ ἢ τοιόνδε ἐστίν.

ἔχοντα μὲν οὖν ἀποδείξεις καὶ ἠθικῶς λεκτέον καὶ ἀποδεικτικῶς, ἐὰν δὲ μὴ ἔχῃς ἐνθυμήματα, ἠθικῶς· καὶ μᾶλλον τῷ ἐπικεῖ ἄρμόττει χρηστὸν φαίνεσθαι [1418b] ἢ τὸν λόγον ἀκριβῆ. τῶν δὲ ἐνθυμημάτων τὰ ἐλεγκτικὰ μᾶλλον εὐδοκιμεῖ τῶν δεικτικῶν, ὅτι ὅσα ἔλεγχον ποιεῖ, μᾶλλον δῆλον ὅτι συλλελόγισται· παρ' ἄλληλα γὰρ μᾶλλον τὰναντία γνωρίζεται.

τὰ δὲ πρὸς τὸν ἀντίδικον οὐχ ἕτερόν τι εἶδος, ἀλλὰ τῶν πίστεων ἐστὶ <τὸ> τὰ μὲν λῦσαι ἐνστάσει τὰ δὲ συλλογισμῷ. δεῖ δὲ καὶ ἐν συμβουλῇ καὶ ἐν δίκῃ ἀρχόμενον μὲν λέγειν τὰς ἐαυτοῦ πίστεις πρότερον, ὕστερον δὲ πρὸς τὰναντία ἀπαντᾶν λύοντα καὶ προδιασύροντα. ἂν δὲ πολύχους ἢ ἡ ἐναντίωσις, πρότερον τὰ ἐναντία, οἷον ἐποίησε Καλλίστρατος ἐν τῇ Μεσσηνιακῇ ἐκκλησίᾳ· ἃ γὰρ ἐροῦσι προανελὼν οὕτως τότε αὐτὸς εἶπεν. ὕστερον δὲ λέγοντα πρῶτον πρὸς τὸν ἐναντίον λόγον λεκτέον, λύοντα καὶ ἀντισυλλογιζόμενον, καὶ μάλιστα ἂν εὐδοκιμηκότα ἢ· ὥσπερ γὰρ ἄνθρωπον προδιαβεβλημένον οὐ δέχεται ἡ ψυχὴ, τὸν αὐτὸν τρόπον οὐδὲ λόγον, ἐὰν ὁ ἐναντίος εὖ δοκῇ εἰρηκέναι. δεῖ οὖν χώραν ποιεῖν ἐν τῷ ἀκροατῇ τῷ μέλλοντι λόγῳ· ἔσται δὲ ἂν ἀνέλῃς· διὸ ἢ πρὸς πάντα ἢ τὰ μέγιστα ἢ τὰ εὐδοκιμοῦντα ἢ τὰ εὐέλεγκτα μαχεσάμενον οὕτω τὰ αὐτοῦ πιστὰ ποιητέον.

ταῖς θεαῖσι πρῶτα σύμμαχος γενήσομαι·

ἐγὼ γὰρ Ἦραν·

ἐν τούτοις ἦψατο πρῶτον τοῦ εὐηθεστάτου.

περὶ μὲν οὖν πίστεων ταῦτα. εἰς δὲ τὸ ἦθος, ἐπειδὴ ἔνια περὶ αὐτοῦ λέγειν ἢ ἐπίφθονον ἢ μακρολογίαν ἢ ἀντιλογίαν ἔχει, καὶ περὶ ἄλλου ἢ λοιδορίαν ἢ ἀγροικίαν, ἕτερον χρὴ λέγοντα ποιεῖν, ὅπερ Ἰσοκράτης ποιεῖ ἐν τῷ Φιλίππῳ καὶ ἐν τῇ Ἀντιδόσει, καὶ ὡς Ἀρχίλοχος ψέγει· ποιεῖ γὰρ τὸν πατέρα λέγοντα περὶ τῆς θυγατρὸς ἐν τῷ ἰάμβῳ

χρημάτων δ' ἄελπτον οὐθέν ἐστιν οὐδ' ἀπώμοτον,  
καὶ τὸν Χάρωνα τὸν τέκτονα ἐν τῷ ἰάμβῳ οὗ ἀρχὴ

οὗ μοι τὰ Γύγεω,

καὶ ὡς Σοφοκλῆς τὸν Αἴμονα ὑπὲρ τῆς Ἀντιγόνης πρὸς τὸν πατέρα ὡς  
λεγόντων ἑτέρων.

δεῖ δὲ καὶ μεταβάλλειν τὰ ἐνθυμήματα καὶ γνώμας ποιεῖν ἐνίοτε, οἷον  
“χρὴ δὲ τὰς διαλλαγὰς ποιεῖν τοὺς νοῦν ἔχοντας εὐτυχοῦντας· οὕτω γὰρ ἂν  
μέγιστα πλεονεκτοῖεν,” ἐνθυμηματικῶς δὲ “εἰ γὰρ δεῖ, ὅταν ὠφελιμώταται  
ὥσιν καὶ πλεονεκτικώταται αἱ καταλλαγαί, τότε καταλλάττεσθαι, εὐτυχοῦντας  
δεῖ καταλλάττεσθαι.”

Περὶ δὲ ἐρωτήσεως, εὐκαιρόν ἐστι ποιεῖσθαι μάλιστα [1419a] μὲν ὅταν τὸ  
ἕτερον εἰρηκῶς ᾖ, ὥστε ἐνὸς προσερωτηθέντος συμβαίνει τὸ ἄτοπον, οἷον  
Περικλῆς Λάμπωνα ἐπῆρετο περὶ τῆς τελετῆς τῶν τῆς σωτείας ἱερῶν,  
εἰπόντος δὲ ὅτι οὐχ οἷόν τε ἀτέλεστον ἀκούειν, ἦρετο εἰ οἶδεν αὐτός,  
φάσκοντος δὲ “καὶ πῶς, ἀτέλεστος ὢν;” δεύτερον δὲ ὅταν τὸ μὲν φανερόν ᾖ,  
τὸ δὲ ἐρωτήσαντι δῆλον ᾖ ὅτι δώσει· πυθόμενον μὲν γὰρ δεῖ τὴν μίαν  
πρότασιν μὴ προσερωτᾶν τὸ φανερόν ἀλλὰ τὸ συμπέρασμα εἰπεῖν, οἷον  
Σωκράτης, Μελήτου οὐ φάσκοντος αὐτὸν θεοὺς νομίζειν, εἰρηκότος δὲ ὡς  
δαίμονιόν τι λέγοι, ἦρετο εἰ οὐχ οἱ δαίμονες ἦτοι θεῶν παῖδες εἶεν ἢ θεῶν τι,  
φήσαντος δὲ “ἔστιν οὖν”, ἔφη, “ὅστις θεῶν μὲν παῖδας οἶεται εἶναι, θεοὺς δὲ  
οὐ;” ἔτι ὅταν μέλλῃ ἢ ἐναντία λέγοντα δείξειν ἢ παράδοξον. τέταρτον δὲ ὅταν  
μὴ ἐνῇ ἄλλ' ἢ σοφιστικῶς ἀποκρινάμενον λῦσαι· ἐὰν γὰρ οὕτως  
ἀποκρίνηται, ὅτι ἔστι μὲν ἔστι δ' οὐ, ἢ τὰ μὲν τὰ δ' οὐ, ἢ πῇ μὲν πῇ δ' οὐ,  
θορυβοῦσιν ὡς ἀποροῦντος. ἄλλως δὲ μὴ ἐγχείρει. ἐὰν γὰρ ἐνστῇ,  
κεκρατῆσθαι δόξεις· οὐ γὰρ οἷόν τε πολλὰ ἐρωτᾶν, διὰ τὴν ἀσθένειαν τοῦ  
ἀκροατοῦ· διὸ καὶ τὰ ἐνθυμήματα ὅτι μάλιστα συστρέφειν δεῖ.

ἀποκρίνασθαι δὲ δεῖ πρὸς μὲν τὰ ἀμφίβολα διαιροῦντα λόγῳ καὶ μὴ  
συντόμως, πρὸς δὲ τὰ δοκοῦντα ἐναντία τὴν λύσιν φέροντα εὐθὺς τῇ  
ἀποκρίσει, πρὶν ἐπερωτῆσαι τὸ ἐπὶ τὸν ἢ συλλογίσασθαι· οὐ γὰρ χαλεπὸν  
προορᾶν ἐν τίνι ὁ λόγος. φανερόν δ' ἡμῖν ἐστιν ἐκ τῶν Τοπικῶν καὶ τοῦτο  
καὶ αἱ λύσεις. καὶ συμπεραινομένου, ἐὰν ἐρώτημα ποιῇ τὸ συμπέρασμα, τὴν  
αἰτίαν εἰπεῖν, οἷον Σοφοκλῆς, ἐρωτώμενος ὑπὸ Πεισάνδρου εἰ ἔδοξεν αὐτῷ,  
ὥσπερ καὶ τοῖς ἄλλοις προβούλοις, καταστῆσαι τοὺς τετρακοσίους, ἔφη “τί δέ;

οὐ πονηρά σοι ταῦτα ἐδόκει εἶναι;” ἔφη. “οὐκοῦν σὺ ταῦτα ἔπραξας τὰ πονηρά;” “ναὶ”, ἔφη, “οὐ γὰρ ἦν ἄλλα βελτίω”. καὶ ὡς ὁ Λάκων εὐθυνόμενος τῆς ἐφορίας, ἐρωτώμενος εἰ δοκοῦσιν αὐτῷ δικαίως ἀπολωλέναι ἄτεροι, ἔφη. ὁ δὲ “οὐκοῦν σὺ τούτοις ταῦτ’ ἔθου;” καὶ ὅς ἔφη. “οὐκοῦν δικαίως ἄν”, ἔφη, “καὶ σὺ ἀπόλοιο;” “οὐ δῆτα”, ἔφη, “οἱ μὲν γὰρ χρήματα λαβόντες ταῦτα ἔπραξαν, ἐγὼ δὲ οὐ, ἀλλὰ γνώμη.” διὸ [1419b] οὔτε ἐπερωτᾷν δεῖ μετὰ τὸ συμπέρασμα, οὔτε τὸ συμπέρασμα ἐπερωτᾷν, ἐὰν μὴ τὸ πολὺ περιῇ τοῦ ἀληθοῦς.

περὶ δὲ τῶν γελοίων, ἐπειδὴ τινα δοκεῖ χρῆσιν ἔχειν ἐν τοῖς ἀγῶσι, καὶ δεῖν ἔφη Γοργίας τὴν μὲν σπουδὴν διαφθεῖρειν τῶν ἐναντίων γέλωτι τὸν δὲ γέλωτα σπουδῇ, ὀρθῶς λέγων, εἴρηται πόσα εἶδη γελοίων ἔστιν ἐν τοῖς περὶ ποιητικῆς, ὧν τὸ μὲν ἀρμόττει ἐλευθέρῳ τὸ δ’ οὐ, ὅπως τὸ ἀρμόττον αὐτῷ λήψεται. ἔστι δ’ ἡ εἰρωνεία τῆς βωμολοχίας ἐλευθεριώτερον· ὁ μὲν γὰρ αὐτοῦ ἔνεκα ποιεῖ τὸ γελοῖον, ὁ δὲ βωμολόχος ἑτέρου.

Ὁ δ’ ἐπίλογος σύγκειται ἐκ τεττάρων, ἕκ τε τοῦ πρὸς ἑαυτὸν κατασκευάσαι εὐ τὸν ἀκροατὴν καὶ τὸν ἐναντίον φαύλως, καὶ ἐκ τοῦ αὐξῆσαι καὶ ταπεινῶσαι, καὶ ἐκ τοῦ εἰς τὰ πάθη τὸν ἀκροατὴν καταστῆσαι, καὶ ἐξ ἀναμνήσεως. πέφυκε γάρ, μετὰ τὸ ἀποδεῖξαι αὐτὸν μὲν ἀληθῆ τὸν δὲ ἐναντίον ψευδῆ, οὕτω τὸ ἐπαινεῖν καὶ ψέγειν καὶ ἐπιχαλκεύειν. δυοῖν δὲ θατέρου δεῖ στοχάζεσθαι, ἢ ὅτι τούτοις ἀγαθὸς ἢ ὅτι ἀπλῶς, ὁ δ’ ὅτι κακὸς τούτοις ἢ ὅτι ἀπλῶς. ἐξ ὧν δὲ δεῖ τοῦτο κατασκευάζειν [δεῖ], εἴρηνται οἱ τόποι πόθεν σπουδαίους δεῖ κατασκευάζειν καὶ φαύλους. τὸ δὲ μετὰ τοῦτο, δεδειγμένων ἤδη, αὖξιν ἐστὶν κατὰ φύσιν ἢ ταπεινοῦν· δεῖ γὰρ τὰ πεπραγμένα ὁμολογεῖσθαι, εἰ μέλλει τὸ ποσὸν ἐρεῖν· καὶ γὰρ ἡ τῶν σωμάτων αὖξιν ἐκ προϋπαρχόντων ἐστίν. ὅθεν δὲ δεῖ αὖξιν καὶ ταπεινοῦν ἔκκεινται οἱ τόποι πρότερον. μετὰ δὲ ταῦτα, δήλων ὄντων καὶ οἷα καὶ ἡλίκας, εἰς τὰ πάθη ἄγειν τὸν ἀκροατὴν. ταῦτα δ’ ἐστὶν ἔλεος καὶ δεινώσεις καὶ ὀργὴ καὶ μίσος καὶ φθόνος καὶ ζῆλος καὶ ἔρις. εἴρηνται δὲ καὶ τούτων οἱ τόποι πρότερον, ὥστε λοιπὸν ἀναμνησάμενα τὰ προειρημένα. τοῦτο δὲ ἀρμόττει ποιεῖν οὐχ ὥσπερ φασὶν ἐν τοῖς προοιμίοις, οὐκ ὀρθῶς λέγοντες. ἵνα γὰρ εὐμαθὲς ἦ, κελεύουσι πολλάκις εἰπεῖν. ἐκεῖ μὲν οὖν δεῖ τὸ πρᾶγμα εἰπεῖν, ἵνα μὴ λανθάνῃ περὶ οὗ ἡ κρίσις, ἐνταῦθα δὲ δι’ ὧν δέδεικται, κεφαλαιωδῶς. ἀρχὴ δὲ διότι ἃ ὑπέσχετο ἀποδέδωκεν, ὥστε ἃ τε καὶ δι’ ὃ λεκτέον. λέγεται δὲ ἐξ ἀντιπαραβολῆς τοῦ ἐναντίου. παραβάλλειν δὲ [ἢ] ὅσα περὶ τὸ αὐτὸ ἄμφω εἶπον, ἢ [μὴ] καταντικρύ (“ἀλλ’ οὗτος [1420a] μὲν τάδε περὶ τούτου, ἐγὼ δὲ ταδί, καὶ διὰ ταῦτα”), ἢ ἐξ εἰρωνείας (οἷον “οὗτος γὰρ τάδ’ εἶπεν, ἐγὼ δὲ ταδί”, καὶ “τί ἂν ἐποίει, εἰ τάδε ἔδειξεν, ἀλλὰ μὴ ταδί”), ἢ ἐξ ἐρωτήσεως (“τί

οὐδὲν δέδεικται;” ἢ “οὗτος τί ἔδειξεν;”). ἢ δὲ οὕτως [ἢ] ἐκ παραβολῆς ἢ κατὰ φύσιν ὥς ἐλέχθη, οὕτως τὰ αὐτοῦ, καὶ πάλιν, ἐὰν βούλη, χωρὶς τὰ τοῦ ἐναντίου λόγου. τελευτὴ δὲ τῆς λέξεως ἀρμόττει ἢ ἀσύνδετος, ὅπως ἐπίλογος ἀλλὰ μὴ λόγος ἢ· “εἴρηκα, ἀκηκόατε, ἔχετε, κρίνατε”.